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ANALYTICAL REPORT

Job Number: 280-159137-1

Job Description: Cornhusker (CHAAP)

For:
Brice Environmental Services, Corp
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Anchorage, AK 99503

Attention: Corey Schwabenlander



Approved for release.
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Client Service Manager
3/18/2022 4:58 AM

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The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

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Qualifiers

GC VOA

Qualifier	Qualifier Description
D	The reported value is from a dilution.
U	Undetected at the Limit of Detection.

HPLC/IC

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

General Chemistry

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
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: Brice Environmental Services, Corp

Project: Cornhusker (CHAAP)

Report Number: 280-159137-1

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 2/26/2022 11:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.2º C and 0.8º C.

DISSOLVED GASES (GC)
Samples EW7-PM29B-8-35 (280-159137-1), EW7-PM25A-8-25 (280-159137-2), EW7-PM25B-8-35 (280-159137-3), EW7-PM26A-8-25 (280-159137-4) and EW7-PM26B-8-35 (280-159137-5) were analyzed for Dissolved Gases (GC) in accordance with RSK_175. The samples were analyzed on 03/02/2022, 03/03/2022 and 03/08/2022.

Sample EW7-PM25A-8-25 (280-159137-2)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The following sample(s) was collected in a properly preserved vial; however, the pH was 7 and outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: EW7-PM26A-8-25 (280-159137-4).

The method requirement for no headspace was not met. The container (s) used for reanalysis of the following sample contained significant headspace: EW7-PM25A-8-25 (280-159137-2). Significant headspace is defined as a bubble greater than 6 mm in diameter.

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

NITROAROMATICS AND NITRAMINES (HPLC)
Samples EW7-PM29B-8-35 (280-159137-1), EW7-PM25A-8-25 (280-159137-2), EW7-PM25B-8-35 (280-159137-3), EW7-PM26A-8-25 (280-159137-4) and EW7-PM26B-8-35 (280-159137-5) were analyzed for Nitroaromatics and Nitramines (HPLC) in accordance with 8330A. The samples were prepared on 03/01/2022 and analyzed on 03/02/2022 and 03/04/2022.

The %RPD between the primary and confirmation column exceeded 40% for HMX for the following sample: EW7-PM26A-8-25 (280-159137-4) in preparation batch 280-567330 and analytical batch 280-567371. The results from both columns has been qualified and reported in accordance with the laboratory's QAS.

The laboratory control sample (LCS) for preparation batch 280-567330 and analytical batch 280-567371 recovered outside control limits for the following analytes:m-Nitrotoluene(73-125%R) at 67%R and 4-Amino-2,6-dinitrotoluene(73-125%R) at 74%R. The associated samples are impacted: EW7-PM29B-8-35 (280-159137-1), EW7-PM25A-8-25 (280-159137-2), EW7-PM25B-8-35 (280-159137-3), EW7-PM26A-8-25 (280-159137-4) and EW7-PM26B-8-35 (280-159137-5). 4-Amino-2,6-dinitrotoluene recovered within control limit in the MS/MSD and the confirmation instrument. m-Nitrotoluene recovered within within control limit in the confirmation instrument. Confirmation instrument confirmed the ND result in primary instrument.

Surrogate recovery for the following sample in preparation batch 280-567330 and analytical batch 280-567371 was outside the upper control limits: EW7-PM29B-8-35 (280-159137-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. Surrogate recovered within control limit in the confirmation instrument.

The following samples from preparation batch 280-567330 required filtration to reduce matrix interferences: EW7-PM29B-8-35 (280-159137-1), EW7-PM25A-8-25 (280-159137-2), EW7-PM25B-8-35 (280-159137-3), EW7-PM26A-8-25 (280-159137-4) and EW7-PM26B-8-35 (280-159137-5).

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

ALKALINITY
Samples EW7-PM29B-8-35 (280-159137-1), EW7-PM25A-8-25 (280-159137-2), EW7-PM25B-8-35 (280-159137-3), EW7-PM26A-8-25 (280-159137-4) and EW7-PM26B-8-35 (280-159137-5) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 03/01/2022.

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

AMMONIA
Samples EW7-PM29B-8-35 (280-159137-1), EW7-PM25A-8-25 (280-159137-2), EW7-PM25B-8-35 (280-159137-3), EW7-PM26A-8-25 (280-159137-4) and EW7-PM26B-8-35 (280-159137-5) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 03/15/2022.

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

TOTAL KJELDAHL NITROGEN
Samples EW7-PM29B-8-35 (280-159137-1), EW7-PM25A-8-25 (280-159137-2), EW7-PM25B-8-35 (280-159137-3), EW7-PM26A-8-25 (280-159137-4) and EW7-PM26B-8-35 (280-159137-5) were analyzed for total kjeldahl nitrogen in accordance with EPA Method 351.2. The samples were prepared on 03/07/2022 and analyzed on 03/09/2022.

Nitrogen, Total Kjeldahl failed the recovery criteria high for the MS of sample EW7-PM26A-8-25MS (280-159137-4) in batch 280-568207.

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

NITRATE-NITRITE AS NITROGEN
Samples EW7-PM29B-8-35 (280-159137-1), EW7-PM25A-8-25 (280-159137-2), EW7-PM25B-8-35 (280-159137-3), EW7-PM26A-8-25 (280-159137-4) and EW7-PM26B-8-35 (280-159137-5) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 02/27/2022.

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

SULFIDE
Samples EW7-PM29B-8-35 (280-159137-1), EW7-PM25A-8-25 (280-159137-2), EW7-PM25B-8-35 (280-159137-3), EW7-PM26A-8-25 (280-159137-4) and EW7-PM26B-8-35 (280-159137-5) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were prepared and analyzed on 03/03/2022 and 03/04/2022.

During the preparation for this batch, formaldehyde was not added to the scrubber solutions. The samples were distilled and none of the samples detected above the reporting limit and QC (LCS, MS, MSD) passed, so data will be reported.

During the preparation for this batch, formaldehyde was not added to the scrubber solutions. The samples were distilled and none of the samples detected above the reporting limit and QC (LCS, MS, MSD) passed, so data will be reported.

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

ANIONS (28 DAYS)
Samples EW7-PM29B-8-35 (280-159137-1), EW7-PM25A-8-25 (280-159137-2), EW7-PM25B-8-35 (280-159137-3), EW7-PM26A-8-25 (280-159137-4) and EW7-PM26B-8-35 (280-159137-5) were analyzed for anions (28 days) in accordance with 9056A (28 Days). The samples were analyzed on 03/15/2022.

Sulfate failed the recovery criteria high for the MS of sample EW7-PM29B-8-35MS (280-159137-1) in batch 280-568663. Sulfate failed the recovery criteria high for the MSD of sample EW7-PM29B-8-35MSD (280-159137-1) in batch 280-568663.

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

DISSOLVED ORGANIC CARBON
Samples EW7-PM29B-8-35 (280-159137-1), EW7-PM25A-8-25 (280-159137-2), EW7-PM25B-8-35 (280-159137-3), EW7-PM26A-8-25 (280-159137-4) and EW7-PM26B-8-35 (280-159137-5) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 03/11/2022.

The following samples were improperly preserved in the field: EW7-PM29B-8-35 (280-159137-1), EW7-PM25A-8-25 (280-159137-2), EW7-PM25B-8-35 (280-159137-3), EW7-PM26A-8-25 (280-159137-4), EW7-PM26B-8-35 (280-159137-5), (280-159137-D-1-B MS) and (280-159137-D-1-C MSD). The pH measured at the bench was >2, it was reduced to <2 using concentrated Sulfuric acid after filtration prior to analysis.

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

Detection Summary

Client: Brice Environmental Services, Corp
Project/Site: Cornhusker (CHAAP)

Job ID: 280-159137-1

Client Sample ID: EW7-PM29B-8-35 — Lab Sample ID: 280-159137-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	4.2		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	2.8		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	4.9		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	140	M J1	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	350		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	5.6		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM25A-8-25 — Lab Sample ID: 280-159137-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	9.3	D	0.010	0.0026	0.0013	mg/L	2		RSK-175	Total/NA
Ammonia	2.2		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	6.4		5.0	5.0	3.4	mg/L	1		351.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	5.5	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	680		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	25		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM25B-8-35 — Lab Sample ID: 280-159137-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	19		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	2.9		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	5.5		1.3	1.3	0.86	mg/L	1		351.2	Total/NA
Sulfate	94		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	430		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	13		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM26A-8-25 — Lab Sample ID: 280-159137-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	17		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
2,4,6-Trinitrotoluene	1.1	M	0.11	0.10	0.045	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	2.7	M	0.11	0.10	0.051	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	3.0	M Q	0.15	0.12	0.058	ug/L	1		8330A	Total/NA
HMX	0.85	M J1	0.21	0.20	0.087	ug/L	1		8330A	Total/NA
HMX	1.4	M J1	0.21	0.20	0.087	ug/L	1		8330A	Total/NA
RDX	0.77	M	0.21	0.20	0.051	ug/L	1		8330A	Total/NA
Ammonia	0.62		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	9.9		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	120	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	430		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	5.5		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Brice Environmental Services, Corp
Project/Site: Cornhusker (CHAAP)

Job ID: 280-159137-1

Client Sample ID: EW7-PM26B-8-35

Lab Sample ID: 280-159137-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	11		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	2.1		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	4.6		1.3	1.3	0.86	mg/L	1		351.2	Total/NA
Sulfate	79	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	470		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	11		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: EW7-PM29B-8-35
Lab Sample ID: 280-159137-1

Date Collected: 02/24/22 15:40
Matrix: Water
Date Received: 02/26/22 11:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**4.2**		0.0050	0.0013	0.00063	mg/L		03/02/22 18:35	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U Q	0.22	0.21	0.087	ug/L		03/02/22 10:27	1
1,3-Dinitrobenzene	0.10	U M Q	0.11	0.10	0.038	ug/L		03/02/22 10:27	1
2,4,6-Trinitrotoluene	0.10	U Q	0.11	0.10	0.047	ug/L		03/02/22 10:27	1
2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028	ug/L		03/04/22 01:10	1
2,6-Dinitrotoluene	0.083	U M Q	0.10	0.083	0.042	ug/L		03/02/22 10:27	1
2-Amino-4,6-dinitrotoluene	0.10	U Q	0.11	0.10	0.053	ug/L		03/02/22 10:27	1
2-Nitrotoluene	0.21	U M Q	0.22	0.21	0.089	ug/L		03/02/22 10:27	1
3-Nitrotoluene	0.41	U M Q	0.41	0.41	0.20	ug/L		03/02/22 10:27	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.16	0.12	0.060	ug/L		03/02/22 10:27	1
4-Nitrotoluene	0.41	U M Q	0.42	0.41	0.10	ug/L		03/02/22 10:27	1
HMX	0.21	U Q	0.22	0.21	0.091	ug/L		03/02/22 10:27	1
MNX	0.41	U M	2.1	0.41	0.16	ug/L		03/02/22 10:27	1
Nitrobenzene	0.21	U	0.22	0.21	0.094	ug/L		03/04/22 01:10	1
RDX	0.21	U M Q	0.22	0.21	0.053	ug/L		03/02/22 10:27	1
Tetryl	0.10	U M Q	0.11	0.10	0.033	ug/L		03/02/22 10:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*137*	*Q*	*83 - 119*	*03/01/22 11:26*	*03/02/22 10:27*	*1*
1,2-Dinitrobenzene	*119*		*83 - 119*	*03/01/22 11:26*	*03/04/22 01:10*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.8**		0.10	0.050	0.022	mg/L		03/15/22 12:37	1
Nitrogen, Total Kjeldahl	**4.9**		1.0	1.0	0.69	mg/L		03/09/22 17:53	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		02/27/22 16:33	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		03/03/22 16:17	1
Sulfate	**140**	**M J1**	5.0	2.5	1.0	mg/L		03/15/22 15:11	1
Total Alkalinity as CaCO3	**350**		10	6.4	3.1	mg/L		03/01/22 14:29	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**5.6**		1.0	0.80	0.35	mg/L		03/11/22 01:01	1

Client Sample ID: EW7-PM25A-8-25
Lab Sample ID: 280-159137-2

Date Collected: 02/25/22 10:10
Matrix: Water
Date Received: 02/26/22 11:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**9.3**	**D**	0.010	0.0026	0.0013	mg/L		03/08/22 14:45	2

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U M	0.22	0.21	0.087	ug/L		03/02/22 10:50	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038	ug/L		03/02/22 10:50	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.047	ug/L		03/02/22 10:50	1
2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028	ug/L		03/02/22 10:50	1

Client Sample ID: EW7-PM25A-8-25
Lab Sample ID: 280-159137-2
Date Collected: 02/25/22 10:10
Matrix: Water
Date Received: 02/26/22 11:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042	ug/L		03/02/22 10:50	1
2-Amino-4,6-dinitrotoluene	0.10	U M	0.11	0.10	0.053	ug/L		03/02/22 10:50	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.089	ug/L		03/02/22 10:50	1
3-Nitrotoluene	0.42	U Q	0.42	0.42	0.20	ug/L		03/02/22 10:50	1
4-Amino-2,6-dinitrotoluene	0.12	U M Q	0.16	0.12	0.060	ug/L		03/02/22 10:50	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.10	ug/L		03/02/22 10:50	1
HMX	0.21	U	0.22	0.21	0.091	ug/L		03/02/22 10:50	1
MNX	0.42	U M	2.1	0.42	0.16	ug/L		03/02/22 10:50	1
Nitrobenzene	0.21	U	0.22	0.21	0.094	ug/L		03/04/22 01:45	1
RDX	0.21	U M	0.22	0.21	0.053	ug/L		03/02/22 10:50	1
Tetryl	0.10	U M	0.11	0.10	0.033	ug/L		03/02/22 10:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*119*	*M*	*83 - 119*	*03/01/22 11:26*	*03/02/22 10:50*	*1*
1,2-Dinitrobenzene	*89*	*M*	*83 - 119*	*03/01/22 11:26*	*03/04/22 01:45*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.2**		0.10	0.050	0.022	mg/L		03/15/22 12:39	1
Nitrogen, Total Kjeldahl	**6.4**		5.0	5.0	3.4	mg/L		03/09/22 17:53	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		02/27/22 16:57	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		03/04/22 15:54	1
Sulfate	**5.5**	**M**	5.0	2.5	1.0	mg/L		03/15/22 16:20	1
Total Alkalinity as CaCO3	**680**		10	6.4	3.1	mg/L		03/01/22 14:39	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**25**		1.0	0.80	0.35	mg/L		03/11/22 02:00	1

Client Sample ID: EW7-PM25B-8-35
Lab Sample ID: 280-159137-3
Date Collected: 02/25/22 12:05
Matrix: Water
Date Received: 02/26/22 11:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**19**		0.0050	0.0013	0.00063	mg/L		03/02/22 19:01	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.085	ug/L		03/02/22 11:13	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.037	ug/L		03/02/22 11:13	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046	ug/L		03/02/22 11:13	1
2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028	ug/L		03/02/22 11:13	1
2,6-Dinitrotoluene	0.081	U M	0.10	0.081	0.041	ug/L		03/02/22 11:13	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		03/02/22 11:13	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.087	ug/L		03/02/22 11:13	1
3-Nitrotoluene	0.41	U Q	0.41	0.41	0.20	ug/L		03/02/22 11:13	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.058	ug/L		03/02/22 11:13	1
4-Nitrotoluene	0.41	U M	0.42	0.41	0.10	ug/L		03/02/22 11:13	1
HMX	0.20	U	0.21	0.20	0.089	ug/L		03/02/22 11:13	1
MNX	0.41	U M	2.0	0.41	0.16	ug/L		03/02/22 11:13	1

Client Sample ID: EW7-PM25B-8-35
Lab Sample ID: 280-159137-3

Date Collected: 02/25/22 12:05
Matrix: Water
Date Received: 02/26/22 11:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrobenzene	0.20	U	0.21	0.20	0.092	ug/L		03/04/22 02:20	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		03/04/22 02:20	1
Tetryl	0.10	U M	0.11	0.10	0.032	ug/L		03/02/22 11:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*117*	*M*	*83 - 119*	*03/01/22 11:26*	*03/02/22 11:13*	*1*
1,2-Dinitrobenzene	*90*	*M*	*83 - 119*	*03/01/22 11:26*	*03/04/22 02:20*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.9**		0.10	0.050	0.022	mg/L		03/15/22 12:41	1
Nitrogen, Total Kjeldahl	**5.5**		1.3	1.3	0.86	mg/L		03/09/22 17:54	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		02/27/22 16:59	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/04/22 15:54	1
Sulfate	**94**		5.0	2.5	1.0	mg/L		03/15/22 16:36	1
Total Alkalinity as CaCO3	**430**		10	6.4	3.1	mg/L		03/01/22 14:47	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**13**		1.0	0.80	0.35	mg/L		03/11/22 02:21	1

Client Sample ID: EW7-PM26A-8-25
Lab Sample ID: 280-159137-4

Date Collected: 02/25/22 13:25
Matrix: Water
Date Received: 02/26/22 11:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**17**		0.0050	0.0013	0.00063	mg/L		03/02/22 19:14	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084	ug/L		03/04/22 02:55	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		03/04/22 02:55	1
2,4,6-Trinitrotoluene	**1.1**	**M**	0.11	0.10	0.045	ug/L		03/02/22 11:36	1
2,4-Dinitrotoluene	0.080	U M	0.10	0.080	0.027	ug/L		03/02/22 11:36	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		03/02/22 11:36	1
2-Amino-4,6-dinitrotoluene	**2.7**	**M**	0.11	0.10	0.051	ug/L		03/02/22 11:36	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.085	ug/L		03/02/22 11:36	1
3-Nitrotoluene	0.40	U Q	0.40	0.40	0.19	ug/L		03/02/22 11:36	1
4-Amino-2,6-dinitrotoluene	**3.0**	**M Q**	0.15	0.12	0.058	ug/L		03/02/22 11:36	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		03/04/22 02:55	1
HMX	**0.85**	**M J1**	0.21	0.20	0.087	ug/L		03/02/22 11:36	1
HMX	**1.4**	**M J1**	0.21	0.20	0.087	ug/L		03/04/22 02:55	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		03/02/22 11:36	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		03/04/22 02:55	1
RDX	**0.77**	**M**	0.21	0.20	0.051	ug/L		03/02/22 11:36	1
Tetryl	0.10	U M	0.11	0.10	0.032	ug/L		03/02/22 11:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*99*		*83 - 119*	*03/01/22 11:26*	*03/02/22 11:36*	*1*
1,2-Dinitrobenzene	*99*	*M*	*83 - 119*	*03/01/22 11:26*	*03/04/22 02:55*	*1*

Client Sample ID: EW7-PM26A-8-25
Lab Sample ID: 280-159137-4
Date Collected: 02/25/22 13:25
Matrix: Water
Date Received: 02/26/22 11:20

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.62**		0.10	0.050	0.022	mg/L		03/15/22 12:43	1
Nitrogen, Total Kjeldahl	1.0	U J1	1.0	1.0	0.69	mg/L		03/09/22 17:56	1
Nitrate Nitrite as N	**9.9**		0.10	0.050	0.019	mg/L		02/27/22 17:09	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/04/22 15:54	1
Sulfate	**120**	**M**	5.0	2.5	1.0	mg/L		03/15/22 16:52	1
Total Alkalinity as CaCO3	**430**		10	6.4	3.1	mg/L		03/01/22 14:56	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**5.5**		1.0	0.80	0.35	mg/L		03/11/22 02:39	1

Client Sample ID: EW7-PM26B-8-35
Lab Sample ID: 280-159137-5
Date Collected: 02/25/22 15:05
Matrix: Water
Date Received: 02/26/22 11:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**11**		0.0050	0.0013	0.00063	mg/L		03/03/22 15:30	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.084	ug/L		03/02/22 11:59	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.037	ug/L		03/02/22 11:59	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		03/02/22 11:59	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		03/02/22 11:59	1
2,6-Dinitrotoluene	0.080	U M	0.10	0.080	0.040	ug/L		03/02/22 11:59	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		03/02/22 11:59	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		03/02/22 11:59	1
3-Nitrotoluene	0.40	U Q	0.40	0.40	0.20	ug/L		03/02/22 11:59	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.058	ug/L		03/02/22 11:59	1
4-Nitrotoluene	0.40	U M	0.41	0.40	0.10	ug/L		03/02/22 11:59	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		03/02/22 11:59	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		03/04/22 03:30	1
Nitrobenzene	0.20	U M	0.21	0.20	0.091	ug/L		03/04/22 03:30	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		03/04/22 03:30	1
Tetryl	0.10	U M	0.11	0.10	0.032	ug/L		03/02/22 11:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*105*	*M*	*83 - 119*	*03/01/22 11:26*	*03/02/22 11:59*	*1*
1,2-Dinitrobenzene	*101*	*M*	*83 - 119*	*03/01/22 11:26*	*03/04/22 03:30*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.1**		0.10	0.050	0.022	mg/L		03/15/22 12:51	1
Nitrogen, Total Kjeldahl	**4.6**		1.3	1.3	0.86	mg/L		03/09/22 17:54	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		02/27/22 17:11	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/04/22 15:54	1
Sulfate	**79**	**M**	5.0	2.5	1.0	mg/L		03/15/22 17:09	1
Total Alkalinity as CaCO3	**470**		10	6.4	3.1	mg/L		03/01/22 15:04	1

Client Sample ID: EW7-PM26B-8-35
Lab Sample ID: 280-159137-5

Date Collected: 02/25/22 15:05
Matrix: Water
Date Received: 02/26/22 11:20

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	11		1.0	0.80	0.35	mg/L		03/11/22 02:56	1

Default Detection Limits

Client: Brice Environmental Services, Corp
Project/Site: Cornhusker (CHAAP)

Job ID: 280-159137-1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	LOQ	DL	Units
Methane	0.0050	0.00063	mg/L

Method: 8330A - 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-Dinitrotoluene	0.10	0.027	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-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
HMX	0.21	0.088	ug/L
MNX	2.0	0.15	ug/L
Nitrobenzene	0.21	0.091	ug/L
RDX	0.21	0.052	ug/L
Tetryl	0.11	0.032	ug/L

General Chemistry

Analyte	LOQ	DL	Units
Ammonia	0.10	0.022	mg/L
Nitrate Nitrite as N	0.10	0.019	mg/L
Sulfate	5.0	1.0	mg/L
Total Alkalinity as CaCO3	10	3.1	mg/L

General Chemistry

Prep: 351.2

Analyte	LOQ	DL	Units
Nitrogen, Total Kjeldahl	1.0	0.69	mg/L

General Chemistry

Prep: 9030B

Analyte	LOQ	DL	Units
Sulfide	4.0	0.79	mg/L

General Chemistry - Dissolved

Analyte	LOQ	DL	Units
Dissolved Organic Carbon - Quad	1.0	0.35	mg/L

Surrogate Summary

Client: Brice Environmental Services, Corp
Project/Site: Cornhusker (CHAAP)

Job ID: 280-159137-1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	12DNB1 (83-119)
280-159137-1	EW7-PM29B-8-35	137 Q
280-159137-2	EW7-PM25A-8-25	119 M
280-159137-3	EW7-PM25B-8-35	117 M
280-159137-4	EW7-PM26A-8-25	99
280-159137-5	EW7-PM26B-8-35	105 M
LCS 280-567330/2-A	Lab Control Sample	86
LCS 280-567330/3-A	Lab Control Sample	111
MB 280-567330/1-A	Method Blank	95

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	12DNB2 (83-119)
280-159137-1	EW7-PM29B-8-35	119
280-159137-2	EW7-PM25A-8-25	89 M
280-159137-3	EW7-PM25B-8-35	90 M
280-159137-4	EW7-PM26A-8-25	99 M
280-159137-5	EW7-PM26B-8-35	101 M

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 280-567496/5
Matrix: Water
Analysis Batch: 567496

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0013	U	0.0050	0.0013	0.00063	mg/L		03/02/22 15:19	1

Lab Sample ID: LCS 280-567496/3
Matrix: Water
Analysis Batch: 567496

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	0.0657	0.0676		mg/L		103	73 - 125

Lab Sample ID: LCSD 280-567496/4
Matrix: Water
Analysis Batch: 567496

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
Methane	0.0657	0.0673		mg/L		102	73 - 125	0	20

Lab Sample ID: MB 280-567659/5
Matrix: Water
Analysis Batch: 567659

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0013	U	0.0050	0.0013	0.00063	mg/L		03/03/22 15:17	1

Lab Sample ID: LCS 280-567659/3
Matrix: Water
Analysis Batch: 567659

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	0.0657	0.0667		mg/L		101	73 - 125

Lab Sample ID: LCSD 280-567659/4
Matrix: Water
Analysis Batch: 567659

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
Methane	0.0657	0.0646		mg/L		98	73 - 125	3	20

Lab Sample ID: MB 280-567999/3
Matrix: Water
Analysis Batch: 567999

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0013	U	0.0050	0.0013	0.00063	mg/L		03/08/22 14:07	1

Lab Sample ID: LCS 280-567999/4
Matrix: Water
Analysis Batch: 567999

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methane	0.0657	0.0648		mg/L		99	73 - 125

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: LCSD 280-567999/5
Matrix: Water
Analysis Batch: 567999

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
Methane	0.0657	0.0649		mg/L		99	73 - 125	0	20

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-567330/1-A
Matrix: Water
Analysis Batch: 567371

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 567330

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084	ug/L		03/02/22 04:43	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		03/02/22 04:43	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		03/02/22 04:43	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		03/02/22 04:43	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		03/02/22 04:43	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		03/02/22 04:43	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		03/02/22 04:43	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		03/02/22 04:43	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		03/02/22 04:43	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		03/02/22 04:43	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		03/02/22 04:43	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		03/02/22 04:43	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		03/02/22 04:43	1
RDX	0.20	U M	0.21	0.20	0.052	ug/L		03/02/22 04:43	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		03/02/22 04:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*		*83 - 119*	*03/01/22 11:26*	*03/02/22 04:43*	*1*

Lab Sample ID: LCS 280-567330/2-A
Matrix: Water
Analysis Batch: 567371

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 567330

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	2.00	1.95		ug/L		97	73 - 125
1,3-Dinitrobenzene	2.00	1.87		ug/L		94	78 - 120
2,4,6-Trinitrotoluene	2.00	1.86		ug/L		93	71 - 123
2,4-Dinitrotoluene	2.00	1.74		ug/L		87	78 - 120
2,6-Dinitrotoluene	2.00	1.79		ug/L		90	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.64		ug/L		82	79 - 120
2-Nitrotoluene	2.00	1.41		ug/L		70	70 - 127
3-Nitrotoluene	2.00	1.34	Q	ug/L		67	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.48	Q	ug/L		74	76 - 125
4-Nitrotoluene	2.00	1.54		ug/L		77	71 - 127
HMX	2.00	1.88		ug/L		94	65 - 135
Nitrobenzene	2.00	1.62		ug/L		81	65 - 134
RDX	2.00	1.99		ug/L		100	68 - 130
Tetryl	2.00	1.79		ug/L		90	64 - 128

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

Lab Sample ID: LCS 280-567330/2-A
Matrix: Water
Analysis Batch: 567371

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 567330

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

Lab Sample ID: LCS 280-567330/3-A
Matrix: Water
Analysis Batch: 567371

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 567330

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
MNX			2.33	2.54	M	ug/L		109	57 - 132		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dinitrobenzene	*111*		*83 - 119*

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-568711/20
Matrix: Water
Analysis Batch: 568711

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		03/15/22 11:31	1

Lab Sample ID: MB 280-568711/59
Matrix: Water
Analysis Batch: 568711

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		03/15/22 12:49	1

Lab Sample ID: LCS 280-568711/18
Matrix: Water
Analysis Batch: 568711

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia			2.50	2.54		mg/L		101	90 - 110		

Lab Sample ID: LCS 280-568711/57
Matrix: Water
Analysis Batch: 568711

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia			2.50	2.43		mg/L		97	90 - 110		

Lab Sample ID: LCSD 280-568711/19
Matrix: Water
Analysis Batch: 568711

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
Ammonia			2.50	2.53		mg/L		101	90 - 110	0	10

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCSD 280-568711/58
Matrix: Water
Analysis Batch: 568711

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
Ammonia			2.50	2.45		mg/L		98	90 - 110	1	10

Lab Sample ID: 280-159137-5 MS
Matrix: Water
Analysis Batch: 568711

Client Sample ID: EW7-PM26B-8-35
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia	2.1		1.00	3.10		mg/L		97	90 - 110		

Lab Sample ID: 280-159137-5 MSD
Matrix: Water
Analysis Batch: 568711

Client Sample ID: EW7-PM26B-8-35
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	2.1		1.00	3.07		mg/L		94	90 - 110	1	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-567921/2-A
Matrix: Water
Analysis Batch: 568207

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 567921

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		03/09/22 17:48	1

Lab Sample ID: LCS 280-567921/1-A
Matrix: Water
Analysis Batch: 568207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 567921

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrogen, Total Kjeldahl			6.00	5.82		mg/L		97	90 - 110		

Lab Sample ID: MB 280-567922/2-A
Matrix: Water
Analysis Batch: 568207

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 567922

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		03/09/22 17:56	1

Lab Sample ID: LCS 280-567922/1-A
Matrix: Water
Analysis Batch: 568207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 567922

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrogen, Total Kjeldahl			6.00	5.81		mg/L		97	90 - 110		

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: 280-159137-4 MS — **Client Sample ID: EW7-PM26A-8-25**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 568207 — **Prep Batch: 567922**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Total Kjeldahl	1.0	U J1	3.00	3.36	J1	mg/L		112	90 - 110

Lab Sample ID: 280-159137-4 MSD — **Client Sample ID: EW7-PM26A-8-25**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 568207 — **Prep Batch: 567922**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Total Kjeldahl	1.0	U J1	3.00	3.17		mg/L		106	90 - 110	6	25

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-567204/23 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567204

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		02/27/22 16:23	1

Lab Sample ID: LCS 280-567204/21 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567204

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	5.00	5.04		mg/L		101	90 - 110

Lab Sample ID: LCSD 280-567204/22 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567204

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	5.00	5.02		mg/L		100	90 - 110	0	10

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

Lab Sample ID: MB 280-567649/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567676 — **Prep Batch: 567649**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/03/22 16:17	1

Lab Sample ID: LCS 280-567649/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567676 — **Prep Batch: 567649**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	24.3	21.6		mg/L		89	44 - 110

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

Lab Sample ID: 280-159137-1 MS — **Client Sample ID: EW7-PM29B-8-35**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567676 — **Prep Batch: 567649**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	0.80	J	24.3	22.4		mg/L		89	44 - 110

Lab Sample ID: 280-159137-1 MSD — **Client Sample ID: EW7-PM29B-8-35**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567676 — **Prep Batch: 567649**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	0.80	J	24.3	21.2		mg/L		84	44 - 110	6	20

Lab Sample ID: MB 280-567743/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567780 — **Prep Batch: 567743**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/04/22 15:54	1

Lab Sample ID: LCS 280-567743/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567780 — **Prep Batch: 567743**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	24.1	17.6		mg/L		73	44 - 110

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 280-568663/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 568663

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		03/15/22 11:16	1

Lab Sample ID: LCS 280-568663/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 568663

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	100	95.8		mg/L		96	87 - 112

Lab Sample ID: LCSD 280-568663/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 568663

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	100	95.9	M	mg/L		96	87 - 112	0	10

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

Lab Sample ID: MRL 280-568663/3
Matrix: Water
Analysis Batch: 568663

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			5.00	4.19	J M	mg/L		84	50 - 150		

Lab Sample ID: 280-159137-1 MS
Matrix: Water
Analysis Batch: 568663

Client Sample ID: EW7-PM29B-8-35
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	140	M J1	50.0	202	M J1	mg/L		123	87 - 112		

Lab Sample ID: 280-159137-1 MSD
Matrix: Water
Analysis Batch: 568663

Client Sample ID: EW7-PM29B-8-35
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	140	M J1	50.0	202	M J1	mg/L		123	87 - 112	0	10

Lab Sample ID: 280-159137-1 DU
Matrix: Water
Analysis Batch: 568663

Client Sample ID: EW7-PM29B-8-35
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	140	M J1		140	M	mg/L				0.2	10

Method: 9060A - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 280-568304/2-A
Matrix: Water
Analysis Batch: 568404

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	0.80	U	1.0	0.80	0.35	mg/L		03/11/22 00:47	1

Lab Sample ID: LCS 280-568304/1-A
Matrix: Water
Analysis Batch: 568404

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Dissolved Organic Carbon - Quad			25.0	25.2		mg/L		101	88 - 112		

Lab Sample ID: 280-159137-1 MS
Matrix: Water
Analysis Batch: 568404

Client Sample ID: EW7-PM29B-8-35
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Dissolved Organic Carbon - Quad	5.6		25.0	32.1		mg/L		106	88 - 112		

Method: 9060A - Organic Carbon, Dissolved (DOC) (Continued)

Lab Sample ID: 280-159137-1 MSD
Matrix: Water
Analysis Batch: 568404

Client Sample ID: EW7-PM29B-8-35
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dissolved Organic Carbon - Quad	5.6		25.0	32.6		mg/L		108	88 - 112	2	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-567460/6
Matrix: Water
Analysis Batch: 567460

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Alkalinity as CaCO3	6.4	U	10	6.4	3.1	mg/L		03/01/22 13:53	1

Lab Sample ID: LCS 280-567460/4
Matrix: Water
Analysis Batch: 567460

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Alkalinity as CaCO3	200	197		mg/L		98	89 - 109

Lab Sample ID: LCSD 280-567460/5
Matrix: Water
Analysis Batch: 567460

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
Total Alkalinity as CaCO3	200	197		mg/L		99	89 - 109	0	10

GC VOA

Analysis Batch: 567496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159137-1	EW7-PM29B-8-35	Total/NA	Water	RSK-175	
280-159137-3	EW7-PM25B-8-35	Total/NA	Water	RSK-175	
280-159137-4	EW7-PM26A-8-25	Total/NA	Water	RSK-175	
MB 280-567496/5	Method Blank	Total/NA	Water	RSK-175	
LCS 280-567496/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-567496/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 567659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159137-5	EW7-PM26B-8-35	Total/NA	Water	RSK-175	
MB 280-567659/5	Method Blank	Total/NA	Water	RSK-175	
LCS 280-567659/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-567659/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 567999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159137-2	EW7-PM25A-8-25	Total/NA	Water	RSK-175	
MB 280-567999/3	Method Blank	Total/NA	Water	RSK-175	
LCS 280-567999/4	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-567999/5	Lab Control Sample Dup	Total/NA	Water	RSK-175	

HPLC/IC

Prep Batch: 567330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159137-1	EW7-PM29B-8-35	Total/NA	Water	3535	
280-159137-2	EW7-PM25A-8-25	Total/NA	Water	3535	
280-159137-3	EW7-PM25B-8-35	Total/NA	Water	3535	
280-159137-4	EW7-PM26A-8-25	Total/NA	Water	3535	
280-159137-5	EW7-PM26B-8-35	Total/NA	Water	3535	
MB 280-567330/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-567330/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-567330/3-A	Lab Control Sample	Total/NA	Water	3535	

Analysis Batch: 567371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159137-1	EW7-PM29B-8-35	Total/NA	Water	8330A	567330
280-159137-2	EW7-PM25A-8-25	Total/NA	Water	8330A	567330
280-159137-3	EW7-PM25B-8-35	Total/NA	Water	8330A	567330
280-159137-4	EW7-PM26A-8-25	Total/NA	Water	8330A	567330
280-159137-5	EW7-PM26B-8-35	Total/NA	Water	8330A	567330
MB 280-567330/1-A	Method Blank	Total/NA	Water	8330A	567330
LCS 280-567330/2-A	Lab Control Sample	Total/NA	Water	8330A	567330
LCS 280-567330/3-A	Lab Control Sample	Total/NA	Water	8330A	567330

Analysis Batch: 567645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159137-1	EW7-PM29B-8-35	Total/NA	Water	8330A	567330
280-159137-2	EW7-PM25A-8-25	Total/NA	Water	8330A	567330
280-159137-3	EW7-PM25B-8-35	Total/NA	Water	8330A	567330
280-159137-4	EW7-PM26A-8-25	Total/NA	Water	8330A	567330

HPLC/IC (Continued)

Analysis Batch: 567645 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159137-5	EW7-PM26B-8-35	Total/NA	Water	8330A	567330

General Chemistry

Analysis Batch: 567204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159137-1	EW7-PM29B-8-35	Total/NA	Water	353.2	
280-159137-2	EW7-PM25A-8-25	Total/NA	Water	353.2	
280-159137-3	EW7-PM25B-8-35	Total/NA	Water	353.2	
280-159137-4	EW7-PM26A-8-25	Total/NA	Water	353.2	
280-159137-5	EW7-PM26B-8-35	Total/NA	Water	353.2	
MB 280-567204/23	Method Blank	Total/NA	Water	353.2	
LCS 280-567204/21	Lab Control Sample	Total/NA	Water	353.2	
LCSD 280-567204/22	Lab Control Sample Dup	Total/NA	Water	353.2	

Analysis Batch: 567460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159137-1	EW7-PM29B-8-35	Total/NA	Water	SM 2320B	
280-159137-2	EW7-PM25A-8-25	Total/NA	Water	SM 2320B	
280-159137-3	EW7-PM25B-8-35	Total/NA	Water	SM 2320B	
280-159137-4	EW7-PM26A-8-25	Total/NA	Water	SM 2320B	
280-159137-5	EW7-PM26B-8-35	Total/NA	Water	SM 2320B	
MB 280-567460/6	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-567460/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-567460/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	

Prep Batch: 567649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159137-1	EW7-PM29B-8-35	Total/NA	Water	9030B	
MB 280-567649/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-567649/1-A	Lab Control Sample	Total/NA	Water	9030B	
280-159137-1 MS	EW7-PM29B-8-35	Total/NA	Water	9030B	
280-159137-1 MSD	EW7-PM29B-8-35	Total/NA	Water	9030B	

Analysis Batch: 567676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159137-1	EW7-PM29B-8-35	Total/NA	Water	9034	567649
MB 280-567649/2-A	Method Blank	Total/NA	Water	9034	567649
LCS 280-567649/1-A	Lab Control Sample	Total/NA	Water	9034	567649
280-159137-1 MS	EW7-PM29B-8-35	Total/NA	Water	9034	567649
280-159137-1 MSD	EW7-PM29B-8-35	Total/NA	Water	9034	567649

Prep Batch: 567743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159137-2	EW7-PM25A-8-25	Total/NA	Water	9030B	
280-159137-3	EW7-PM25B-8-35	Total/NA	Water	9030B	
280-159137-4	EW7-PM26A-8-25	Total/NA	Water	9030B	
280-159137-5	EW7-PM26B-8-35	Total/NA	Water	9030B	
MB 280-567743/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-567743/1-A	Lab Control Sample	Total/NA	Water	9030B	

General Chemistry

Analysis Batch: 567780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159137-2	EW7-PM25A-8-25	Total/NA	Water	9034	567743
280-159137-3	EW7-PM25B-8-35	Total/NA	Water	9034	567743
280-159137-4	EW7-PM26A-8-25	Total/NA	Water	9034	567743
280-159137-5	EW7-PM26B-8-35	Total/NA	Water	9034	567743
MB 280-567743/2-A	Method Blank	Total/NA	Water	9034	567743
LCS 280-567743/1-A	Lab Control Sample	Total/NA	Water	9034	567743

Prep Batch: 567921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159137-1	EW7-PM29B-8-35	Total/NA	Water	351.2	
280-159137-2	EW7-PM25A-8-25	Total/NA	Water	351.2	
280-159137-3	EW7-PM25B-8-35	Total/NA	Water	351.2	
280-159137-5	EW7-PM26B-8-35	Total/NA	Water	351.2	
MB 280-567921/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-567921/1-A	Lab Control Sample	Total/NA	Water	351.2	

Prep Batch: 567922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159137-4	EW7-PM26A-8-25	Total/NA	Water	351.2	
MB 280-567922/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-567922/1-A	Lab Control Sample	Total/NA	Water	351.2	
280-159137-4 MS	EW7-PM26A-8-25	Total/NA	Water	351.2	
280-159137-4 MSD	EW7-PM26A-8-25	Total/NA	Water	351.2	

Analysis Batch: 568207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159137-1	EW7-PM29B-8-35	Total/NA	Water	351.2	567921
280-159137-2	EW7-PM25A-8-25	Total/NA	Water	351.2	567921
280-159137-3	EW7-PM25B-8-35	Total/NA	Water	351.2	567921
280-159137-4	EW7-PM26A-8-25	Total/NA	Water	351.2	567922
280-159137-5	EW7-PM26B-8-35	Total/NA	Water	351.2	567921
MB 280-567921/2-A	Method Blank	Total/NA	Water	351.2	567921
MB 280-567922/2-A	Method Blank	Total/NA	Water	351.2	567922
LCS 280-567921/1-A	Lab Control Sample	Total/NA	Water	351.2	567921
LCS 280-567922/1-A	Lab Control Sample	Total/NA	Water	351.2	567922
280-159137-4 MS	EW7-PM26A-8-25	Total/NA	Water	351.2	567922
280-159137-4 MSD	EW7-PM26A-8-25	Total/NA	Water	351.2	567922

Filtration Batch: 568304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159137-1	EW7-PM29B-8-35	Dissolved	Water	FILTRATION	
280-159137-2	EW7-PM25A-8-25	Dissolved	Water	FILTRATION	
280-159137-3	EW7-PM25B-8-35	Dissolved	Water	FILTRATION	
280-159137-4	EW7-PM26A-8-25	Dissolved	Water	FILTRATION	
280-159137-5	EW7-PM26B-8-35	Dissolved	Water	FILTRATION	
MB 280-568304/2-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-568304/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
280-159137-1 MS	EW7-PM29B-8-35	Dissolved	Water	FILTRATION	
280-159137-1 MSD	EW7-PM29B-8-35	Dissolved	Water	FILTRATION	

General Chemistry

Analysis Batch: 568404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159137-1	EW7-PM29B-8-35	Dissolved	Water	9060A	568304
280-159137-2	EW7-PM25A-8-25	Dissolved	Water	9060A	568304
280-159137-3	EW7-PM25B-8-35	Dissolved	Water	9060A	568304
280-159137-4	EW7-PM26A-8-25	Dissolved	Water	9060A	568304
280-159137-5	EW7-PM26B-8-35	Dissolved	Water	9060A	568304
MB 280-568304/2-A	Method Blank	Dissolved	Water	9060A	568304
LCS 280-568304/1-A	Lab Control Sample	Dissolved	Water	9060A	568304
280-159137-1 MS	EW7-PM29B-8-35	Dissolved	Water	9060A	568304
280-159137-1 MSD	EW7-PM29B-8-35	Dissolved	Water	9060A	568304

Analysis Batch: 568663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159137-1	EW7-PM29B-8-35	Total/NA	Water	9056A	
280-159137-2	EW7-PM25A-8-25	Total/NA	Water	9056A	
280-159137-3	EW7-PM25B-8-35	Total/NA	Water	9056A	
280-159137-4	EW7-PM26A-8-25	Total/NA	Water	9056A	
280-159137-5	EW7-PM26B-8-35	Total/NA	Water	9056A	
MB 280-568663/6	Method Blank	Total/NA	Water	9056A	
LCS 280-568663/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-568663/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-568663/3	Lab Control Sample	Total/NA	Water	9056A	
280-159137-1 MS	EW7-PM29B-8-35	Total/NA	Water	9056A	
280-159137-1 MSD	EW7-PM29B-8-35	Total/NA	Water	9056A	
280-159137-1 DU	EW7-PM29B-8-35	Total/NA	Water	9056A	

Analysis Batch: 568711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159137-1	EW7-PM29B-8-35	Total/NA	Water	350.1	
280-159137-2	EW7-PM25A-8-25	Total/NA	Water	350.1	
280-159137-3	EW7-PM25B-8-35	Total/NA	Water	350.1	
280-159137-4	EW7-PM26A-8-25	Total/NA	Water	350.1	
280-159137-5	EW7-PM26B-8-35	Total/NA	Water	350.1	
MB 280-568711/20	Method Blank	Total/NA	Water	350.1	
MB 280-568711/59	Method Blank	Total/NA	Water	350.1	
LCS 280-568711/18	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-568711/57	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-568711/19	Lab Control Sample Dup	Total/NA	Water	350.1	
LCSD 280-568711/58	Lab Control Sample Dup	Total/NA	Water	350.1	
280-159137-5 MS	EW7-PM26B-8-35	Total/NA	Water	350.1	
280-159137-5 MSD	EW7-PM26B-8-35	Total/NA	Water	350.1	

Client Sample ID: EW7-PM29B-8-35

Date Collected: 02/24/22 15:40
Date Received: 02/26/22 11:20

Lab Sample ID: 280-159137-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	567496	03/02/22 18:35	CAS	TAL DEN
Total/NA	Prep	3535			482.5 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567371	03/02/22 10:27	JZ	TAL DEN
Total/NA	Prep	3535			482.5 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567645	03/04/22 01:10	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568711	03/15/22 12:37	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	567921	03/07/22 15:58	SVC	TAL DEN
Total/NA	Analysis	351.2		1			568207	03/09/22 17:53	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	567204	02/27/22 16:33	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567649	03/03/22 13:20	JJM	TAL DEN
Total/NA	Analysis	9034		1			567676	03/03/22 16:17	JJM	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	568663	03/15/22 15:11	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568304	03/10/22 13:45	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568404	03/11/22 01:01	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			567460	03/01/22 14:29	KEG	TAL DEN

Client Sample ID: EW7-PM25A-8-25

Date Collected: 02/25/22 10:10
Date Received: 02/26/22 11:20

Lab Sample ID: 280-159137-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		2	20 mL	20 mL	567999	03/08/22 14:45	CAS	TAL DEN
Total/NA	Prep	3535			481.9 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567371	03/02/22 10:50	JZ	TAL DEN
Total/NA	Prep	3535			481.9 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567645	03/04/22 01:45	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568711	03/15/22 12:39	MMP	TAL DEN
Total/NA	Prep	351.2			5 mL	25 mL	567921	03/07/22 15:58	SVC	TAL DEN
Total/NA	Analysis	351.2		1			568207	03/09/22 17:53	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	567204	02/27/22 16:57	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567743	03/04/22 11:13	JJM	TAL DEN
Total/NA	Analysis	9034		1			567780	03/04/22 15:54	JJM	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	568663	03/15/22 16:20	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568304	03/10/22 13:45	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568404	03/11/22 02:00	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			567460	03/01/22 14:39	KEG	TAL DEN

Client Sample ID: EW7-PM25B-8-35

Date Collected: 02/25/22 12:05
Date Received: 02/26/22 11:20

Lab Sample ID: 280-159137-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	567496	03/02/22 19:01	CAS	TAL DEN

Client Sample ID: EW7-PM25B-8-35
Lab Sample ID: 280-159137-3

Date Collected: 02/25/22 12:05
Matrix: Water
Date Received: 02/26/22 11:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			493.5 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567371	03/02/22 11:13	JZ	TAL DEN
Total/NA	Prep	3535			493.5 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567645	03/04/22 02:20	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568711	03/15/22 12:41	MMP	TAL DEN
Total/NA	Prep	351.2			20 mL	25 mL	567921	03/07/22 15:58	SVC	TAL DEN
Total/NA	Analysis	351.2		1			568207	03/09/22 17:54	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	567204	02/27/22 16:59	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567743	03/04/22 11:13	JJM	TAL DEN
Total/NA	Analysis	9034		1			567780	03/04/22 15:54	JJM	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	568663	03/15/22 16:36	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568304	03/10/22 13:45	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568404	03/11/22 02:21	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			567460	03/01/22 14:47	KEG	TAL DEN

Client Sample ID: EW7-PM26A-8-25
Lab Sample ID: 280-159137-4

Date Collected: 02/25/22 13:25
Matrix: Water
Date Received: 02/26/22 11:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	567496	03/02/22 19:14	CAS	TAL DEN
Total/NA	Prep	3535			501.6 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567371	03/02/22 11:36	JZ	TAL DEN
Total/NA	Prep	3535			501.6 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567645	03/04/22 02:55	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568711	03/15/22 12:43	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	567922	03/07/22 16:01	SVC	TAL DEN
Total/NA	Analysis	351.2		1			568207	03/09/22 17:56	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	567204	02/27/22 17:09	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567743	03/04/22 11:13	JJM	TAL DEN
Total/NA	Analysis	9034		1			567780	03/04/22 15:54	JJM	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	568663	03/15/22 16:52	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568304	03/10/22 13:45	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568404	03/11/22 02:39	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			567460	03/01/22 14:56	KEG	TAL DEN

Client Sample ID: EW7-PM26B-8-35
Lab Sample ID: 280-159137-5

Date Collected: 02/25/22 15:05
Matrix: Water
Date Received: 02/26/22 11:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	567659	03/03/22 15:30	CAS	TAL DEN
Total/NA	Prep	3535			498.4 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567371	03/02/22 11:59	JZ	TAL DEN

Lab Chronicle

Client: Brice Environmental Services, Corp
Project/Site: Cornhusker (CHAAP)

Job ID: 280-159137-1

Client Sample ID: EW7-PM26B-8-35

Date Collected: 02/25/22 15:05
Date Received: 02/26/22 11:20

Lab Sample ID: 280-159137-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			498.4 mL	5 mL	567330	03/01/22 11:26	ARC	TAL DEN
Total/NA	Analysis	8330A		1			567645	03/04/22 03:30	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568711	03/15/22 12:51	MMP	TAL DEN
Total/NA	Prep	351.2			20 mL	25 mL	567921	03/07/22 15:58	SVC	TAL DEN
Total/NA	Analysis	351.2		1			568207	03/09/22 17:54	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	567204	02/27/22 17:11	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567743	03/04/22 11:13	JJM	TAL DEN
Total/NA	Analysis	9034		1			567780	03/04/22 15:54	JJM	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	568663	03/15/22 17:09	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568304	03/10/22 13:45	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568404	03/11/22 02:56	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			567460	03/01/22 15:04	KEG	TAL DEN

Laboratory References:

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

Accreditation/Certification Summary

Client: Brice Environmental Services, Corp
Job ID: 280-159137-1
Project/Site: Cornhusker (CHAAP)

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: Brice Environmental Services, Corp
Project/Site: Cornhusker (CHAAP)

Job ID: 280-159137-1

Method	Method Description	Protocol	Laboratory
RSK-175	Dissolved Gases (GC)	RSK	TAL DEN
8330A	Nitroaromatics and Nitramines (HPLC)	EPA	TAL DEN
350.1	Nitrogen, Ammonia	MCAWW	TAL DEN
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL DEN
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL DEN
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	TAL DEN
9056A	Anions, Ion Chromatography	SW846	TAL DEN
9060A	Organic Carbon, Dissolved (DOC)	SW846	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL DEN
3535	Solid-Phase Extraction (SPE)	SW846	TAL DEN
9030B	Sulfide, Distillation (Acid Soluble and Insoluble)	SW846	TAL DEN
FILTRATION	Sample Filtration	None	TAL DEN

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

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:

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

Sample Summary

Client: Brice Environmental Services, Corp
Project/Site: Cornhusker (CHAAP)

Job ID: 280-159137-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-159137-1	EW7-PM29B-8-35	Water	02/24/22 15:40	02/26/22 11:20
280-159137-2	EW7-PM25A-8-25	Water	02/25/22 10:10	02/26/22 11:20
280-159137-3	EW7-PM25B-8-35	Water	02/25/22 12:05	02/26/22 11:20
280-159137-4	EW7-PM26A-8-25	Water	02/25/22 13:25	02/26/22 11:20
280-159137-5	EW7-PM26B-8-35	Water	02/25/22 15:05	02/26/22 11:20

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 550959

Lab Sample ID: IC 280-550959/2 Client Sample ID:

Date Analyzed: 09/24/21 13:28 Lab File ID: 004F0201.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.29	Peak assignment corrected	sciannac	09/24/21 13:54
Ethane	1.56	Peak assignment corrected	sciannac	09/24/21 13:54
Ethylene	1.86	Peak assignment corrected	sciannac	09/24/21 13:54
Acetylene	4.18	Peak assignment corrected	sciannac	09/24/21 13:55

Lab Sample ID: IC 280-550959/2 Client Sample ID:

Date Analyzed: 09/24/21 13:28 Lab File ID: 004F0201.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.69	Peak assignment corrected	sciannac	09/24/21 13:54
Ethylene	2.61	Peak assignment corrected	sciannac	09/24/21 13:54
Acetylene	2.76	Peak assignment corrected	sciannac	09/24/21 13:55
Ethane	3.03	Peak assignment corrected	sciannac	09/24/21 13:54

Lab Sample ID: IC 280-550959/4 Client Sample ID:

Date Analyzed: 09/24/21 13:54 Lab File ID: 006F0401.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.23	Peak assignment corrected	sciannac	09/24/21 15:50

Lab Sample ID: IC 280-550959/4 Client Sample ID:

Date Analyzed: 09/24/21 13:54 Lab File ID: 006F0401.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.75	Peak assignment corrected	sciannac	09/24/21 15:50

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 550959

Lab Sample ID: IC 280-550959/5 Client Sample ID:

Date Analyzed: 09/24/21 14:07 Lab File ID: 007F0501.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.23	Split Peak	sciannac	09/24/21 15:50

Lab Sample ID: IC 280-550959/5 Client Sample ID:

Date Analyzed: 09/24/21 14:07 Lab File ID: 007F0501.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.75	Split Peak	sciannac	09/24/21 15:50
Ethane	3.03	Split Peak	sciannac	09/24/21 15:50

Lab Sample ID: IC 280-550959/6 Client Sample ID:

Date Analyzed: 09/24/21 14:20 Lab File ID: 008F0601.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.23	Peak assignment corrected	sciannac	09/24/21 15:44

Lab Sample ID: IC 280-550959/6 Client Sample ID:

Date Analyzed: 09/24/21 14:20 Lab File ID: 008F0601.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.68	Baseline Smoothing	sciannac	09/29/21 09:21
Acetylene	2.75	Peak assignment corrected	sciannac	09/24/21 15:44

Lab Sample ID: IC 280-550959/7 Client Sample ID:

Date Analyzed: 09/24/21 14:33 Lab File ID: 009F0701.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.23	Peak assignment corrected	sciannac	09/24/21 15:46

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 550959

Lab Sample ID: IC 280-550959/7 Client Sample ID:

Date Analyzed: 09/24/21 14:33 Lab File ID: 009F0701.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.75	Peak assignment corrected	sciannac	09/24/21 15:46

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 567496

Lab Sample ID: CCV 280-567496/45 Client Sample ID:

Date Analyzed: 03/02/22 18:22 Lab File ID: 019F1901.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.22	Peak assignment corrected	sciannac	03/03/22 11:11

Lab Sample ID: CCV 280-567496/45 Client Sample ID:

Date Analyzed: 03/02/22 18:22 Lab File ID: 019F1901.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.73	Split Peak	sciannac	03/03/22 11:11

Lab Sample ID: CCV 280-567496/57 Client Sample ID:

Date Analyzed: 03/02/22 20:58 Lab File ID: 031F3101.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.21	Peak not integrated	sciannac	03/03/22 10:46

Lab Sample ID: CCV 280-567496/57 Client Sample ID:

Date Analyzed: 03/02/22 20:58 Lab File ID: 031F3101.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.74	Split Peak	sciannac	03/03/22 10:46

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 567659

Lab Sample ID: CCV 280-567659/17 Client Sample ID:

Date Analyzed: 03/03/22 17:53 Lab File ID: 017F1701.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.21	Peak assignment corrected	sciannac	03/07/22 12:57

Lab Sample ID: CCV 280-567659/17 Client Sample ID:

Date Analyzed: 03/03/22 17:53 Lab File ID: 017F1701.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	2.73	Peak assignment corrected	sciannac	03/07/22 12:57

Lab Sample ID: CCV 280-567659/31 Client Sample ID:

Date Analyzed: 03/03/22 20:56 Lab File ID: 031F3101.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.22	Peak not integrated	sciannac	03/07/22 13:03

Lab Sample ID: CCV 280-567659/31 Client Sample ID:

Date Analyzed: 03/03/22 20:56 Lab File ID: 031F3101.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.59	Split Peak	sciannac	03/07/22 13:04
Acetylene	2.73	Split Peak	sciannac	03/07/22 13:04

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 562503

Lab Sample ID: IC 280-562503/11 Client Sample ID:

Date Analyzed: 01/04/22 18:28 Lab File ID: 01040011.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	01/04/22 19:18

Lab Sample ID: IC 280-562503/12 Client Sample ID:

Date Analyzed: 01/04/22 18:51 Lab File ID: 01040012.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	01/04/22 19:18

Lab Sample ID: IC 280-562503/18 Client Sample ID:

Date Analyzed: 01/04/22 21:08 Lab File ID: 01040018.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.61	Baseline	zhangji	01/05/22 12:01
Picric acid	7.95	Baseline	zhangji	01/05/22 12:02
PETN	14.74	Baseline	zhangji	01/05/22 12:01

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 562503

Lab Sample ID: IC 280-562503/19 Client Sample ID:

Date Analyzed: 01/04/22 21:31 Lab File ID: 01040019.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	01/05/22 11:59
RDX	7.60	Baseline	zhangji	01/05/22 12:00
Picric acid	7.94	Baseline	zhangji	01/05/22 12:00
2,4,6-Trinitrotoluene	10.95	Baseline	zhangji	01/05/22 12:00
4-Amino-2,6-dinitrotoluene	11.15	Baseline	zhangji	01/05/22 12:00
2-Amino-4,6-dinitrotoluene	11.41	Baseline	zhangji	01/05/22 12:00
2,6-Dinitrotoluene	11.58	Baseline	zhangji	01/05/22 12:00
2,4-Dinitrotoluene	11.75	Baseline	zhangji	01/05/22 12:00
PETN	14.71	Baseline	zhangji	01/05/22 12:00

Lab Sample ID: ICV 280-562503/20 Client Sample ID:

Date Analyzed: 01/04/22 21:54 Lab File ID: 01040020.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.60	Baseline	zhangji	01/05/22 11:59
Picric acid	7.92	Baseline	zhangji	01/05/22 11:59

Lab Sample ID: IC 280-562503/30 Client Sample ID:

Date Analyzed: 01/05/22 01:43 Lab File ID: 01040030.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	zhangji	01/05/22 12:05
DNX	6.79	Baseline	zhangji	01/05/22 12:07
MNX	7.22	Baseline	zhangji	01/05/22 12:07

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 562503

Lab Sample ID: IC 280-562503/31 Client Sample ID:

Date Analyzed: 01/05/22 02:06 Lab File ID: 01040031.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:07
DNX	6.80	Baseline	zhangji	01/05/22 12:07
MNX	7.22	Baseline	zhangji	01/05/22 12:07

Lab Sample ID: IC 280-562503/32 Client Sample ID:

Date Analyzed: 01/05/22 02:29 Lab File ID: 01040032.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:07
DNX	6.80	Baseline	zhangji	01/05/22 12:07
MNX	7.22	Baseline	zhangji	01/05/22 12:08

Lab Sample ID: IC 280-562503/33 Client Sample ID:

Date Analyzed: 01/05/22 02:52 Lab File ID: 01040033.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:07
DNX	6.80	Baseline	zhangji	01/05/22 12:07
MNX	7.22	Baseline	zhangji	01/05/22 12:08

Lab Sample ID: IC 280-562503/34 Client Sample ID:

Date Analyzed: 01/05/22 03:15 Lab File ID: 01040034.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:08
DNX	6.80	Baseline	zhangji	01/05/22 12:08
MNX	7.22	Baseline	zhangji	01/05/22 12:08

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 562503

Lab Sample ID: IC 280-562503/35 Client Sample ID:

Date Analyzed: 01/05/22 03:38 Lab File ID: 01040035.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:08
DNX	6.80	Baseline	zhangji	01/05/22 12:08
MNX	7.22	Baseline	zhangji	01/05/22 12:08

Lab Sample ID: IC 280-562503/36 Client Sample ID:

Date Analyzed: 01/05/22 04:01 Lab File ID: 01040036.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:09
DNX	6.80	Baseline	zhangji	01/05/22 12:09
MNX	7.22	Baseline	zhangji	01/05/22 12:09

Lab Sample ID: IC 280-562503/37 Client Sample ID:

Date Analyzed: 01/05/22 04:24 Lab File ID: 01040037.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:09
DNX	6.80	Baseline	zhangji	01/05/22 12:09
MNX	7.22	Baseline	zhangji	01/05/22 12:09

Lab Sample ID: ICV 280-562503/38 Client Sample ID:

Date Analyzed: 01/05/22 04:47 Lab File ID: 01040038.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	01/05/22 12:09
DNX	6.80	Baseline	zhangji	01/05/22 12:09
MNX	7.22	Baseline	zhangji	01/05/22 12:09

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 567371

Lab Sample ID: CCV 280-567371/41 Client Sample ID:

Date Analyzed: 03/02/22 03:57 Lab File ID: 03010041.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	03/02/22 12:41

Lab Sample ID: CCV 280-567371/42 Client Sample ID:

Date Analyzed: 03/02/22 04:20 Lab File ID: 03010042.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	03/02/22 12:41
DNX	6.79	Baseline	zhangji	03/02/22 12:41
MNX	7.21	Baseline	zhangji	03/02/22 12:41

Lab Sample ID: MB 280-567330/1-A Client Sample ID:

Date Analyzed: 03/02/22 04:43 Lab File ID: 03010043.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX		Invalid Compound ID	zhangji	03/02/22 12:41
RDX		Invalid Compound ID	zhangji	03/02/22 12:41

Lab Sample ID: LCS 280-567330/3-A Client Sample ID:

Date Analyzed: 03/02/22 05:29 Lab File ID: 03010045.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.20	Baseline	zhangji	03/02/22 12:42

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 567371

Lab Sample ID: CCV 280-567371/53 Client Sample ID:

Date Analyzed: 03/02/22 08:32 Lab File ID: 03010053.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	03/02/22 12:46

Lab Sample ID: CCV 280-567371/54 Client Sample ID:

Date Analyzed: 03/02/22 08:55 Lab File ID: 03010054.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	zhangji	03/02/22 12:46
DNX	6.79	Baseline	zhangji	03/02/22 12:46
MNX	7.21	Baseline	zhangji	03/02/22 12:46

Lab Sample ID: 280-159137-1 Client Sample ID: EW7-PM29B-8-35

Date Analyzed: 03/02/22 10:27 Lab File ID: 03010058.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrobenzene	9.64	Baseline	zhangji	03/02/22 12:53
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	03/02/22 12:53
2,6-Dinitrotoluene		Invalid Compound ID	zhangji	03/02/22 12:53
2-Nitrotoluene		Invalid Compound ID	zhangji	03/02/22 12:53
3-Nitrotoluene		Invalid Compound ID	zhangji	03/02/22 12:53
4-Nitrotoluene		Invalid Compound ID	zhangji	03/02/22 12:53
MNX		Invalid Compound ID	zhangji	03/02/22 12:53
RDX		Invalid Compound ID	zhangji	03/02/22 12:53
Tetryl		Invalid Compound ID	zhangji	03/02/22 12:53
2,4-Dinitrotoluene	11.60	Baseline	zhangji	03/02/22 12:53

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 567371

Lab Sample ID: 280-159137-2 Client Sample ID: EW7-PM25A-8-25

Date Analyzed: 03/02/22 10:50 Lab File ID: 03010059.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.51	Baseline	zhangji	03/02/22 12:53
Nitrobenzene	9.63	Baseline	zhangji	03/02/22 12:54
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	03/02/22 12:53
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	03/02/22 12:53
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	03/02/22 12:53
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	03/02/22 12:53
MNX		Invalid Compound ID	zhangji	03/02/22 12:53
RDX		Invalid Compound ID	zhangji	03/02/22 12:53
Tetryl		Invalid Compound ID	zhangji	03/02/22 12:53

Lab Sample ID: 280-159137-3 Client Sample ID: EW7-PM25B-8-35

Date Analyzed: 03/02/22 11:13 Lab File ID: 03010060.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.60	Baseline	zhangji	03/02/22 12:54
1,2-Dinitrobenzene	8.52	Baseline	zhangji	03/02/22 12:54
Nitrobenzene	9.63	Baseline	zhangji	03/02/22 12:54
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	03/02/22 12:54
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	03/02/22 12:54
2,6-Dinitrotoluene		Invalid Compound ID	zhangji	03/02/22 12:54
4-Nitrotoluene		Invalid Compound ID	zhangji	03/02/22 12:54
MNX		Invalid Compound ID	zhangji	03/02/22 12:54
Tetryl		Invalid Compound ID	zhangji	03/02/22 12:54

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 567371

Lab Sample ID: 280-159137-4 Client Sample ID: EW7-PM26A-8-25

Date Analyzed: 03/02/22 11:36 Lab File ID: 03010061.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.58	Baseline	zhangji	03/02/22 12:54
RDX	7.58	Baseline	zhangji	03/02/22 12:54
1,3,5-Trinitrobenzene	8.64	Baseline	zhangji	03/02/22 12:55
2,4-Dinitrotoluene		Baseline	zhangji	03/02/22 12:55
MNX		Invalid Compound ID	zhangji	03/02/22 12:54
Tetryl		Invalid Compound ID	zhangji	03/02/22 12:55
2,4,6-Trinitrotoluene	10.87	Baseline	zhangji	03/02/22 12:55
4-Amino-2,6-dinitrotoluene	11.05	Baseline	zhangji	03/02/22 12:55
2-Amino-4,6-dinitrotoluene	11.30	Baseline	zhangji	03/02/22 12:55

Lab Sample ID: 280-159137-5 Client Sample ID: EW7-PM26B-8-35

Date Analyzed: 03/02/22 11:59 Lab File ID: 03010062.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.24	Baseline	zhangji	03/02/22 12:55
RDX	7.60	Baseline	zhangji	03/02/22 12:55
1,2-Dinitrobenzene	8.51	Baseline	zhangji	03/02/22 12:56
Nitrobenzene	9.64	Baseline	zhangji	03/02/22 12:56
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	03/02/22 12:55
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	03/02/22 12:55
2,6-Dinitrotoluene		Invalid Compound ID	zhangji	03/02/22 12:55
4-Nitrotoluene		Invalid Compound ID	zhangji	03/02/22 12:55
Tetryl		Invalid Compound ID	zhangji	03/02/22 12:55

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 567371

Lab Sample ID: CCV 280-567371/65 Client Sample ID:

Date Analyzed: 03/02/22 13:08 Lab File ID: 03010065.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	03/02/22 13:36

Lab Sample ID: CCV 280-567371/66 Client Sample ID:

Date Analyzed: 03/02/22 13:31 Lab File ID: 03010066.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	zhangji	03/02/22 13:58
DNX	6.79	Baseline	zhangji	03/02/22 13:58
MNX	7.21	Baseline	zhangji	03/02/22 13:58

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 567560

Lab Sample ID: IC 280-567560/10 Client Sample ID:

Date Analyzed: 03/02/22 21:22 Lab File ID: 03020010.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	18.73	Unspecified		
1,3,5-Trinitrobenzene	18.85	Split Peak	zhangji	03/03/22 12:08

Lab Sample ID: IC 280-567560/15 Client Sample ID:

Date Analyzed: 03/03/22 00:17 Lab File ID: 03020015.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.21	Baseline Smoothing	zhangji	03/03/22 12:12

Lab Sample ID: IC 280-567560/16 Client Sample ID:

Date Analyzed: 03/03/22 00:53 Lab File ID: 03020016.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	16.07	Baseline Smoothing	zhangji	03/03/22 12:12
PETN	26.22	Baseline Smoothing	zhangji	03/03/22 12:12

Lab Sample ID: IC 280-567560/17 Client Sample ID:

Date Analyzed: 03/03/22 01:28 Lab File ID: 03020017.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	16.06	Baseline Smoothing	zhangji	03/03/22 12:12
2-Amino-4,6-dinitrotoluene	18.76	Baseline Smoothing	zhangji	03/03/22 12:10
1,3,5-Trinitrobenzene	18.96	Baseline Smoothing	zhangji	03/03/22 12:10
PETN	26.22	Baseline Smoothing	zhangji	03/03/22 12:12

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 567560

Lab Sample ID: IC 280-567560/18 Client Sample ID:

Date Analyzed: 03/03/22 02:03 Lab File ID: 03020018.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	16.05	Baseline Smoothing	zhangji	03/03/22 12:12
2-Amino-4,6-dinitrotoluene	18.75	Baseline Smoothing	zhangji	03/03/22 12:11
1,3,5-Trinitrobenzene	18.95	Baseline Smoothing	zhangji	03/03/22 12:11
PETN	26.22	Baseline Smoothing	zhangji	03/03/22 12:11

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 567645

Lab Sample ID: 280-159137-2 Client Sample ID: EW7-PM25A-8-25

Date Analyzed: 03/04/22 01:45 Lab File ID: 03030026.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	03/04/22 12:09
HMX		Invalid Compound ID	zhangji	03/04/22 12:09
1,2-Dinitrobenzene	13.29	Baseline Smoothing	zhangji	03/04/22 12:09

Lab Sample ID: 280-159137-3 Client Sample ID: EW7-PM25B-8-35

Date Analyzed: 03/04/22 02:20 Lab File ID: 03030027.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	zhangji	03/04/22 12:15
1,2-Dinitrobenzene	13.30	Baseline Smoothing	zhangji	03/04/22 12:15
2-Nitrotoluene	16.79	Baseline Smoothing	zhangji	03/04/22 12:15

Lab Sample ID: 280-159137-4 Client Sample ID: EW7-PM26A-8-25

Date Analyzed: 03/04/22 02:55 Lab File ID: 03030028.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.89	Baseline Smoothing	zhangji	03/04/22 12:16
RDX	9.11	Baseline Smoothing	zhangji	03/04/22 12:16
MNX		Invalid Compound ID	zhangji	03/04/22 12:15
1,2-Dinitrobenzene	13.29	Baseline Smoothing	zhangji	03/04/22 12:16

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 567645

Lab Sample ID: 280-159137-5 Client Sample ID: EW7-PM26B-8-35

Date Analyzed: 03/04/22 03:30 Lab File ID: 03030029.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitrobenzene		Invalid Compound ID	zhangji	03/04/22 12:16
1,2-Dinitrobenzene	13.29	Baseline Smoothing	zhangji	03/04/22 12:17
2-Nitrotoluene	16.78	Baseline Smoothing	zhangji	03/04/22 12:17

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Batch Number: 568008

Lab Sample ID: STD 280-568008/2 IC Client Sample ID:

Date Analyzed: 03/08/22 14:13 Lab File ID: 0004.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.53	Baseline Smoothing	foxr	03/09/22 11:13
Chloride	3.68	Baseline Smoothing	jindaratc	03/08/22 15:44
Sulfate	10.06	Baseline Smoothing	foxr	03/09/22 11:14

Lab Sample ID: STD 280-568008/3 IC Client Sample ID:

Date Analyzed: 03/08/22 14:29 Lab File ID: 0005.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.53	Baseline Smoothing	jindaratc	03/08/22 15:44
Sulfate	10.05	Baseline Smoothing	foxr	03/09/22 11:18

Lab Sample ID: STD 280-568008/4 IC Client Sample ID:

Date Analyzed: 03/08/22 14:46 Lab File ID: 0006.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.53	Baseline Smoothing	jindaratc	03/08/22 15:44
Bromide	5.38	Baseline Smoothing	foxr	03/09/22 11:19
Sulfate	10.05	Baseline Smoothing	foxr	03/09/22 11:19

Lab Sample ID: STD 280-568008/5 IC Client Sample ID:

Date Analyzed: 03/08/22 15:02 Lab File ID: 0007.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.53	Baseline Smoothing	foxr	03/08/22 16:01
Sulfate	10.11	Baseline Smoothing	foxr	03/09/22 11:20

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Batch Number: 568008

Lab Sample ID: STD 280-568008/6 IC Client Sample ID:

Date Analyzed: 03/08/22 15:19 Lab File ID: 0008.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.17	Baseline Smoothing	foxr	03/09/22 11:21

Lab Sample ID: STD 280-568008/7 IC Client Sample ID:

Date Analyzed: 03/08/22 15:35 Lab File ID: 0009.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.24	Baseline Smoothing	foxr	03/09/22 11:21

Lab Sample ID: ICV 280-568008/8 Client Sample ID:

Date Analyzed: 03/08/22 15:51 Lab File ID: 0010.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.13	Baseline Smoothing	foxr	03/09/22 11:22

Lab Sample ID: ICB 280-568008/9 Client Sample ID:

Date Analyzed: 03/08/22 16:08 Lab File ID: 0011.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.01	Baseline Smoothing	foxr	03/09/22 11:23

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Batch Number: 568663

Lab Sample ID: CCV 280-568663/1 Client Sample ID:

Date Analyzed: 03/15/22 09:54 Lab File ID: 0001.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.13	Baseline Smoothing	foxr	03/16/22 10:40

Lab Sample ID: CCB 280-568663/2 Client Sample ID:

Date Analyzed: 03/15/22 10:10 Lab File ID: 0002.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.00	Baseline Smoothing	foxr	03/16/22 10:41

Lab Sample ID: MRL 280-568663/3 Client Sample ID:

Date Analyzed: 03/15/22 10:27 Lab File ID: 0003.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.05	Baseline Smoothing	foxr	03/16/22 10:40

Lab Sample ID: LCSD 280-568663/5 Client Sample ID:

Date Analyzed: 03/15/22 10:59 Lab File ID: 0005.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.10	Baseline Smoothing	foxr	03/16/22 10:42

Lab Sample ID: MB 280-568663/6 Client Sample ID:

Date Analyzed: 03/15/22 11:16 Lab File ID: 0006.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.99	Baseline Smoothing	foxr	03/16/22 10:43

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Batch Number: 568663

Lab Sample ID: 280-159137-1 Client Sample ID: EW7-PM29B-8-35

Date Analyzed: 03/15/22 15:11 Lab File ID: 0007.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.18	Baseline Smoothing	foxr	03/16/22 10:43

Lab Sample ID: 280-159137-1 DU Client Sample ID: EW7-PM29B-8-35 DU

Date Analyzed: 03/15/22 15:27 Lab File ID: 0008.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.19	Baseline Smoothing	foxr	03/16/22 10:43

Lab Sample ID: 280-159137-1 MS Client Sample ID: EW7-PM29B-8-35 MS

Date Analyzed: 03/15/22 15:44 Lab File ID: 0009.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.23	Baseline Smoothing	foxr	03/16/22 10:44

Lab Sample ID: 280-159137-1 MSD Client Sample ID: EW7-PM29B-8-35 MSD

Date Analyzed: 03/15/22 16:00 Lab File ID: 0010.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.23	Baseline Smoothing	foxr	03/16/22 10:45

Lab Sample ID: 280-159137-2 Client Sample ID: EW7-PM25A-8-25

Date Analyzed: 03/15/22 16:20 Lab File ID: 0011.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.13	Baseline Smoothing	foxr	03/16/22 10:45

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Batch Number: 568663

Lab Sample ID: 280-159137-4 Client Sample ID: EW7-PM26A-8-25

Date Analyzed: 03/15/22 16:52 Lab File ID: 0013.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.16	Baseline Smoothing	foxr	03/16/22 10:46

Lab Sample ID: 280-159137-5 Client Sample ID: EW7-PM26B-8-35

Date Analyzed: 03/15/22 17:09 Lab File ID: 0014.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.14	Baseline Smoothing	foxr	03/16/22 10:46

Lab Sample ID: CCV 280-568663/17 Client Sample ID:

Date Analyzed: 03/15/22 17:58 Lab File ID: 0017.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.10	Baseline Smoothing	foxr	03/16/22 10:47

Lab Sample ID: CCB 280-568663/18 Client Sample ID:

Date Analyzed: 03/15/22 18:15 Lab File ID: 0018.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.03	Baseline Smoothing	foxr	03/16/22 10:47

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
350.1 cal_00524	03/17/22	03/10/22	Di Water, Lot na	100 mL	NH3 CAL STD_00034	10 mL	Ammonia	100 mg/L
.NH3 CAL STD_00034	04/30/23		Ricca, Lot 4008G09		(Purchased Reagent)		Ammonia	1000 mg/L
350.1 ICV_00508	03/17/22	03/10/22	na, Lot na	100 mL	NH3 ICV STD_00032	10 mL	Ammonia	100.2 mg/L
.NH3 ICV STD_00032	08/01/22		Inorganic Ventures, Lot N2-NH669544		(Purchased Reagent)		Ammonia	1002 mg/L
8330 DMT_00010	04/30/22	12/02/21	Acetonitrile, Lot 211161	5 mL	MNX,TNX,DNX_00057	1 mL	DNX	20.02 ug/mL
							MNX	23.34 ug/mL
							TNX	20.02 ug/mL
.MNX,TNX,DNX_00057	04/30/22		Agilent, Lot 0006594482		(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330 LCS_00111	05/12/22	11/12/21	Acetonitrile, Lot Acetonitrile_00059	100 mL	8330LCSMix1_00129	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_00028	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
.8330LCSMix1_00129	04/30/26		Restek, Lot A0163590		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.8330LCSmix2_00028	04/30/26		Restek, Lot A0171368		(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
8330 LCS_00112	05/12/22	01/27/22	Acetonitrile, Lot Acetonitrile_00059	100 mL	8330_NG_Stk_00095	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00099	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00109	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00118	1 mL	PETN	100 ug/mL
					8330LCSMix1_00130	1 mL	1,3,5-Trinitrobenzene	10 ug/mL

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dinitrobenzene	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_00027	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_00099	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG_Stk_00095	06/30/23		Restek, Lot A0161480		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00099	06/30/23		Restek, Lot A0161480		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00109	05/31/24		Restek, Lot A0172687		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00118	05/31/24		Restek, Lot A0172687		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00130	04/30/26		Restek, Lot A0163590		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.8330LCSmix2_00027	04/30/26		Restek, Lot A0171368		(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_00099	11/30/25		Restek, Lot A0166597		(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
8330_OP_DMT_00012	04/30/22	09/23/21	Acetonitrile, Lot Acetonitrile 00056	10 mL	MNX,TNX,DNX_00063	1 mL	MNX	11.67 ug/mL
.MNX,TNX,DNX_00063	04/30/22		Agilent, Lot 0006599273		(Purchased Reagent)		MNX	116.7 ug/mL
8330_OP_DMT_00013	04/30/22	02/15/22	Acetonitrile, Lot Acetonitrile_00055	10 mL	MNX,TNX,DNX_00062	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.01 ug/mL
.MNX,TNX,DNX_00062	04/30/22		Agilent, Lot 0006599273		(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330IntermStk_00070	03/31/22	01/04/22	Acetonitrile, Lot ACN_238	10 mL	8330_NG1000_00006	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN1000_00006	1 mL	PETN	100 ug/mL
					8330ICALStock_00032	1 mL	1,3,5-Trinitrobenzene	10.02 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dinitrobenzene	10.02 ug/mL
							2,4,6-Trinitrotoluene	10.04 ug/mL
							2,4-Dinitrotoluene	10.04 ug/mL
							2,6-Dinitrotoluene	10.04 ug/mL
							2-Amino-4,6-dinitrotoluene	10.04 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10.01 ug/mL
							4-Amino-2,6-dinitrotoluene	10.01 ug/mL
							4-Nitrotoluene	10.02 ug/mL
							HMX	10 ug/mL
							Nitrobenzene	10.04 ug/mL
							RDX	10 ug/mL
							Tetryl	10.02 ug/mL
							1,2-Dinitrobenzene	10 ug/mL
					8330PAStkPS_00067	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG1000_00006	01/04/23	Restek, Lot A0175997			(Purchased Reagent)		Nitroglycerin	1000 ug/mL
.8330_PETN1000_00006	01/04/23	Restek, Lot A0175907			(Purchased Reagent)		PETN	1000 ug/mL
.8330ICALStock_00032	03/31/22	01/04/22	Acetonitrile, Lot ACN_238	10 mL	8330 Stock_TS_00019	1 mL	1,3,5-Trinitrobenzene	100.2 ug/mL
							1,3-Dinitrobenzene	100.2 ug/mL
							2,4,6-Trinitrotoluene	100.4 ug/mL
							2,4-Dinitrotoluene	100.4 ug/mL
							2,6-Dinitrotoluene	100.4 ug/mL
							2-Amino-4,6-dinitrotoluene	100.4 ug/mL
							2-Nitrotoluene	100 ug/mL
							3-Nitrotoluene	100.1 ug/mL
							4-Amino-2,6-dinitrotoluene	100.1 ug/mL
							4-Nitrotoluene	100.2 ug/mL
							HMX	100 ug/mL
							Nitrobenzene	100.4 ug/mL
							RDX	100 ug/mL
							Tetryl	100.2 ug/mL
					8330SurrStock_00169	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00019	03/31/22	Ultra Scientific, Lot CT-0801			(Purchased Reagent)		1,3,5-Trinitrobenzene	1002 ug/mL
							1,3-Dinitrobenzene	1002 ug/mL
							2,4,6-Trinitrotoluene	1004 ug/mL
							2,4-Dinitrotoluene	1004 ug/mL
							2,6-Dinitrotoluene	1004 ug/mL
							2-Amino-4,6-dinitrotoluene	1004 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1001 ug/mL
							4-Amino-2,6-dinitrotoluene	1001 ug/mL
							4-Nitrotoluene	1002 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1004 ug/mL
							RDX	1000 ug/mL
							Tetryl	1002 ug/mL
..8330SurrStock_00169	01/04/23	AccuStandard, Lot 219051500			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.8330PAStkPS_00067	07/08/22	AccuStandard, Lot 218031154-02			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330Surrogate_00127	05/16/22	11/16/21	Acetonitrile, Lot Acetonitrile_00059	500 mL	8330SurrStkSS_00203	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00204	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00207	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00211	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00212	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00203	05/30/26	Restek, Lot A0172684			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00204	05/30/26	Restek, Lot A0172684			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00207	05/30/26	Restek, Lot A0172684			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00211	05/30/26	Restek, Lot A0172684			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00212	05/30/26	Restek, Lot A0172684			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
Alk daily lcs_01027	03/08/22	03/01/22	Di Water, Lot na	1000 mL	Alk stk std_00022	4 mL	Total Alkalinity as CaCO3	200 mg/L
.Alk stk std_00022	10/30/22	SPEX, Lot 2-85BT			(Purchased Reagent)		Total Alkalinity as CaCO3	50 g/L
IC CAL cl/so4_00409	03/09/22	03/02/22	Di Water, Lot na	100 mL	IC CL cal_00071	25 mL	Chloride	250 mg/L
					IC SO4 Cal_00003	25 mL	Sulfate	250 mg/L
.IC CL cal_00071	11/30/22	SPEX CertiPrep, Lot 5-67CL-2x			(Purchased Reagent)		Chloride	1000 mg/L
.IC SO4 Cal_00003	11/30/22	SPEX CertiPrep, Lot 5-118SO49-2X			(Purchased Reagent)		Sulfate	1000 mg/L
IC CAL cl/so4_00410	03/16/22	03/09/22	Di Water, Lot na	100 mL	IC SO4 Cal_00003	25 mL	Sulfate	250 mg/L
.IC SO4 Cal_00003	11/30/22	SPEX CertiPrep, Lot 5-118SO49-2X			(Purchased Reagent)		Sulfate	1000 mg/L
IC Cal low_00625	03/09/22	03/02/22	Di Water, Lot NA	100 mL	IC BR ICV_00021	5 mL	Bromide	50 mg/L
					IC FL cal_00019	5 mL	Fluoride	50 mg/L
.IC BR ICV_00021	04/01/22	ricca, Lot 4010N41			(Purchased Reagent)		Bromide	1000 mg/L
.IC FL cal_00019	01/31/23	Ricca, Lot 4108A94			(Purchased Reagent)		Fluoride	1000 mg/L
IC LCS_01862	03/16/22	03/09/22	Di Water, Lot 27	200 mL	IC SO4 Cal_00003	20 mL	Sulfate	100 mg/L as N
.IC SO4 Cal_00003	11/30/22	SPEX CertiPrep, Lot 5-118SO49-2X			(Purchased Reagent)		Sulfate	1000 mg/L
IC SO4 ICV_00022	07/06/22	ERA, Lot 060720m			(Purchased Reagent)		Sulfate	1000 mg/L
ICMS/MSD WEEK_00747	03/16/22	03/09/22	Di Water, Lot NA	10 mL	IC SPK 6 ANIO_00025	5 mL	Sulfate	5000.51 mg/L
.IC SPK 6 ANIO_00025	10/12/22	10/12/21	Di Water, Lot NA	1000 mL	IC MS/MSD S04_00006	18.1408 g	Sulfate	10001 mg/L
..IC MS/MSD S04_00006	09/29/23	FISHER, Lot 147276			(Purchased Reagent)		Sulfate	0.5513 g/g
NXN CAL INT_00612	03/01/22	02/22/22	Di Water, Lot NA	100 mL	NOXT Cal STD_00025	10 mL	Nitrate Nitrite as N	100 mg/L
.NOXT Cal STD_00025	10/31/22	RICCA, Lot 2104e50			(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L
NXN ICV INT_00588	03/01/22	02/22/22	Di Water, Lot NA	100 mL	NOXT ICV STD_00028	10 mL	Nitrate Nitrite as N	100 mg/L
.NOXT ICV STD_00028	01/20/23	ERA, Lot 420121m			(Purchased Reagent)		Nitrate Nitrite as N	1000 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
RSK175methane_00010	04/16/22	Supelco Analytical, Lot 160-401480003-1			(Purchased Reagent)		Methane	650500 ug/L
RSK7gasMathes_00031	03/09/22	Matheson, Lot DL0396162			(Purchased Reagent)		Acetylene	10667 ug/L
							Ethane	12317 ug/L
							Ethylene	11490 ug/L
							Methane	6570.3 ug/L
RSK7gasMathes_00034	03/22/23	Matheson, Lot 9301615705			(Purchased Reagent)		Methane	6570.3 ug/L
SFD ICV INT_02087	05/08/22	02/08/22	Di Water, Lot N/A	500 mL	50% NaOH_00022	2 mL	Sodium Hydroxide	2000 mg/L
					SFD ICV STK_00008	4.5544 g	Sulfide	1216.02 mg/L
.50% NaOH_00022	06/30/23	RICCA, Lot 1006F87			(Purchased Reagent)		Sodium Hydroxide	50 %
.SFD ICV STK_00008	04/03/24	Acros, Lot A0412804			(Purchased Reagent)		Sulfide	0.1335 g/g
SFD ICV INT_02088	05/08/22	02/08/22	Di Water, Lot N/A	500 mL	50% NaOH_00022	2 mL	Sodium Hydroxide	2000 mg/L
					SFD ICV STK_00008	4.5207 g	Sulfide	1207.03 mg/L
.50% NaOH_00022	06/30/23	RICCA, Lot 1006F87			(Purchased Reagent)		Sodium Hydroxide	50 %
.SFD ICV STK_00008	04/03/24	Acros, Lot A0412804			(Purchased Reagent)		Sulfide	0.1335 g/g
TKN 25ppm_00829	03/24/22	02/21/22	Di Water, Lot 1	100 mL	TKN 100PPM_00142	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN 100PPM_00142	03/24/22	02/21/22	Di Water, Lot 1	500 mL	TKN CAL STD_00019	50 mL	Nitrogen, Total Kjeldahl	100 mg/L
..TKN CAL STD_00019	08/31/24	nsi lab solutions, Lot 200817			(Purchased Reagent)		Nitrogen, Total Kjeldahl	1000 mg/L
TKN ICV 25_00115	03/24/22	02/21/22	DI water, Lot 1	100 mL	TKN ICV 100_00104	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN ICV 100_00104	03/24/22	02/21/22	Di Water, Lot 1	500 mL	TKN ICV_00013	50 mL	Nitrogen, Total Kjeldahl	100 mg/L
..TKN ICV_00013	07/02/22	ERA, Lot 200220m			(Purchased Reagent)		Nitrogen, Total Kjeldahl	1000 mg/L
TOC ICV Std_00049	01/31/23	Ricca, Lot 1201B45			(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 ppm
							DOC Result 1	1000 ppm
							DOC Result 2	1000 ppm
							DOC Result 3	1000 ppm
							DOC Result 4	1000 ppm
TOC LCS Std_00053	12/31/23	Agilent, Lot 0006645841			(Purchased Reagent)		Dissolved Organic Carbon - Quad	1001 ppm
							DOC Result 1	1001 ppm
							DOC Result 2	1001 ppm
							DOC Result 3	1001 ppm
							DOC Result 4	1001 ppm

Reagent

50% NaOH_00022

RICCA CHEMICAL COMPANY®

448 West Fork Dr
Arlington, TX 76012
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customerservice@riccachemical.com

Certificate of Analysis

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

Lot Number: 1006F87 **Product Number:** 7291

Manufacture Date: JUN 23, 2020
Expiration Date: JUN 2023

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 %	0.004 %	
Nickel (Ni)	max 5 ppm	0.04 ppm	3136
Nitrogen Compounds (as N)	max 5 ppm	< 5 ppm	
Phosphate (PO_4)	max 5 ppm	< 5 ppm	
Potassium (K)	max 0.01 %	0.001 %	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)
7291-16	500 mL natural poly	36 months
7291-5HP	20 L Ropak™	36 months

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



Israel Alamudun (06/23/2020)
Quality Control Supervisor
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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

Reagent

8330 LCS_00111

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20211112-106450.b\LCS111.D

Lims ID: LCS111 Inj. Date: 12-Nov-2021 17:18:59

Worklist ID: 280-0106450-021 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535
4 HMX	0.5000	0.4991	99.8	65-135
8 RDX	0.5000	0.4595	91.9	68-130
9 2,4,6-Trinitrophenol	0.5000	0.4794	95.9	73-124
11 1,3,5-Trinitrobenzene	0.5000	0.4892	97.8	73-125
12 1,3-Dinitrobenzene	0.5000	0.4864	97.3	78-120
13 Nitrobenzene	0.5000	0.4870	97.4	65-134
15 Tetryl	0.5000	0.4805	96.1	64-128
16 Nitroglycerin	5.00	4.94	98.9	74-127
17 2,4,6-Trinitrotoluene	0.5000	0.4933	98.7	71-123
18 4AMD	0.5000	0.4752	95.0	76-125
19 2-Amino-4,6-dinitrotolu	0.5000	0.4783	95.7	79-120
20 2,6-Dinitrotoluene	0.5000	0.4939	98.8	77-127
21 2,4-Dinitrotoluene	0.5000	0.4820	96.4	78-120
22 o-Nitrotoluene	0.5000	0.4819	96.4	70-127
23 p-Nitrotoluene	0.5000	0.4905	98.1	71-127
24 m-Nitrotoluene	0.5000	0.4585	91.7	73-125
25 PETN	5.00	4.87	97.5	73-127

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

280-155295-A-3-A 280-155295-B-7-A

Reagent

8330 LCS_00112

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20220127-108200.b\01270006.D

Lims ID: C18column:B16162 Inj. Date: 27-Jan-2022 16:00:33

Worklist ID: 280-0108200-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_	Limits 2 0B_Sonc_
4 HMX	0.5000	0.4889	97.8	65-135	
8 RDX	0.5000	0.4749	95.0	68-130	
9 2,4,6-Trinitrophenol	0.5000	0.5053	101.1	80-120	73-124
11 1,3,5-Trinitrobenzene	0.5000	0.4962	99.2	73-125	
12 1,3-Dinitrobenzene	0.5000	0.5119	102.4	78-120	
13 Nitrobenzene	0.5000	0.4982	99.6	65-134	
15 Tetryl	0.5000	0.4978	99.6	64-128	
16 Nitroglycerin	5.00	5.13	102.5	74-127	
17 2,4,6-Trinitrotoluene	0.5000	0.4982	99.6	71-123	
18 4AMD	0.5000	0.4863	97.3	76-125	
19 2-Amino-4,6-dinitrotolu	0.5000	0.4895	97.9	79-120	
20 2,6-Dinitrotoluene	0.5000	0.4962	99.2	77-127	
21 2,4-Dinitrotoluene	0.5000	0.4865	97.3	78-120	
22 o-Nitrotoluene	0.5000	0.4832	96.6	70-127	
23 p-Nitrotoluene	0.5000	0.5183	103.7	71-127	
24 m-Nitrotoluene	0.5000	0.4566	91.3	73-125	
25 PETN	5.00	5.08	101.6	73-127	

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

410-70411-D-1-A 410-70411-E-2-A 410-70411-E-3-A
410-70411-D-4-A 410-70411-D-5-A 410-70411-E-6-A
410-70411-D-7-A 410-70411-D-8-A 410-70411-E-9-A
410-70411-D-10-A 410-70411-D-11-A

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

680-210367-E-1-C 680-210367-E-2-A 680-210367-E-3-A
680-210367-D-4-A 680-210367-E-5-A 680-210367-E-6-A
680-210367-E-7-A

Reagent

8330 Stock_TS_00019

Agilent

Certificate of Analysis
ISO Guide 34

Stock Standard

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

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

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

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

Matrix: acetonitrile

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

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

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

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

ANAB ACCREDITED TESTING LABORATORY
ISO17025 Cert No. AT-1937

Certificate of Analysis
ISO Guide 34

Stock Standard

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

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

Analyte	CAS#	Analyte Lot	True Value

Monica Bourgeois
QMS Representative

ISO Guide 34 Cert No.
AR-1936

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

ISO17025 Cert No.
AT-1937

Reagent

8330_NG_Stk_00095

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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0161840

Description : Custom Nitroglycerin Standard

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

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

Expiration Date : June 30, 2023 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin	5,032.0 µg/mL	+/- 46.7949	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 200507JLM)		+/- 278.0096	µg/mL	Unstressed
	Purity 99%		+/- 323.4663	µg/mL	Stressed

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_NG_Stk_00099

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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.:** A0161840

Description : Custom Nitroglycerin Standard

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

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

Expiration Date : June 30, 2023 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Nitroglycerin	5,032.0 µg/mL	+/- 46.7949	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 200507JLM)		+/- 278.0096	µg/mL	Unstressed
	Purity 99%		+/- 323.4663	µg/mL	Stressed

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified 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_00006

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

Description : Nitroglycerin Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_OP_DMT_00012

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20210923-104924.b\09230005.D

Lims ID: DMT LCS 12 Inj. Date: 23-Sep-2021 17:32:02

Worklist ID: 280-0104924-005 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
2 TNX	0.5005	0.5409	108.1	50-150
5 DNX	0.5005	0.5315	106.2	50-150
6 MNX	0.5835	0.6076	104.1	50-150

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

410-54924-B-2-B 410-54924-B-4-B 410-54924-B-6-D

410-54924-B-8-D 410-54873-B-2-F 410-54873-B-4-B

410-54873-B-6-B

Reagent

8330_OP_DMT_00013

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20220216-108600.b\02160011.D

Lims ID: 8330_OP_DMT13 Inj. Date: 16-Feb-2022 15:39:01

Worklist ID: 280-0108600-011 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535
3 TNX	0.5005	0.5150	102.9	50-150		
6 DNX	0.5005	0.5095	101.8	50-150	66-119	
7 MNX	0.5835	0.6021	103.2	68-123	57-132	

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

280-158694-A-1-A 280-158695-B-1-A

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

280-158618-A-1-A 280-158618-A-2-A 280-158653-A-1-A
280-158653-B-2-A 280-158653-A-3-A 280-158653-A-4-A
280-158653-B-5-A 280-158653-A-6-A 280-158593-B-1-A
280-158593-B-2-A 280-158593-A-3-A 280-158593-B-4-A
280-158593-B-5-A 280-158593-B-6-A 280-158593-A-7-A

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

860-20476-C-1-A

Reagent

8330_PETN_Stk_00109

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568872 **Lot No.:** A0172687

Description : Custom PETN Standard

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

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

Expiration Date : May 31, 2024 **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	5,032.0 µg/mL	+/- 46.7949	µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 278.0096	µg/mL	Unstressed
	Purity 99%		+/- 323.4663	µg/mL	Stressed

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

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

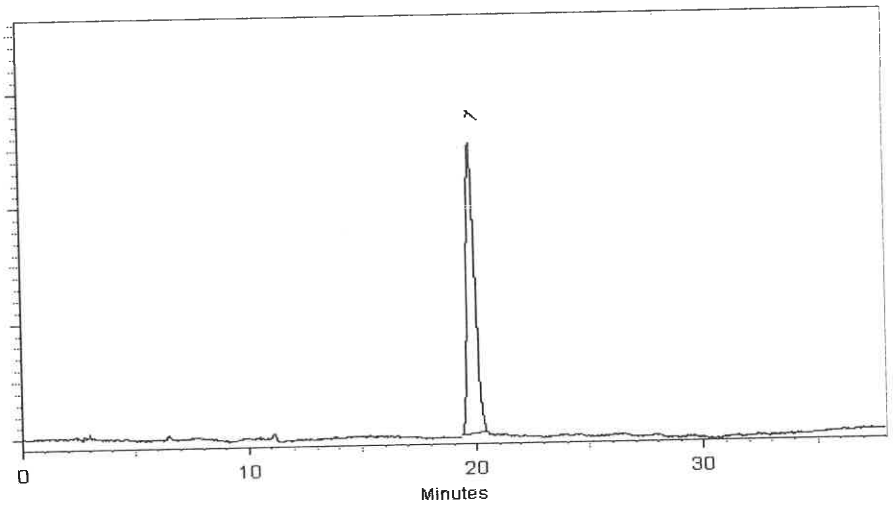
Flow Rate:
1.0 ml/min.

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.

Katelyn McGinni - Operations Tech I

Date Mixed: 24-May-2021 **Balance:** 1128353505

Marlina Cowan - Operations Tech I

Date Passed: 27-May-2021

REVIEWED
By Jennifer Polimo at 2:38 pm, May 27, 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:

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

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0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

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Manufacturing Notes:

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Handling Notes:

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Reagent

8330_PETN_Stk_00118

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Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

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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.:** A0172687

Description : Custom PETN Standard

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

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

Expiration Date : May 31, 2024 **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 **CAS #** 78-11-5 **Purity** 99% (Lot 051108JLM)	5,032.0 µg/mL	+/- 46.7949 µg/mL +/- 278.0096 µg/mL +/- 323.4663 µg/mL		Gravimetric Unstressed Stressed

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

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

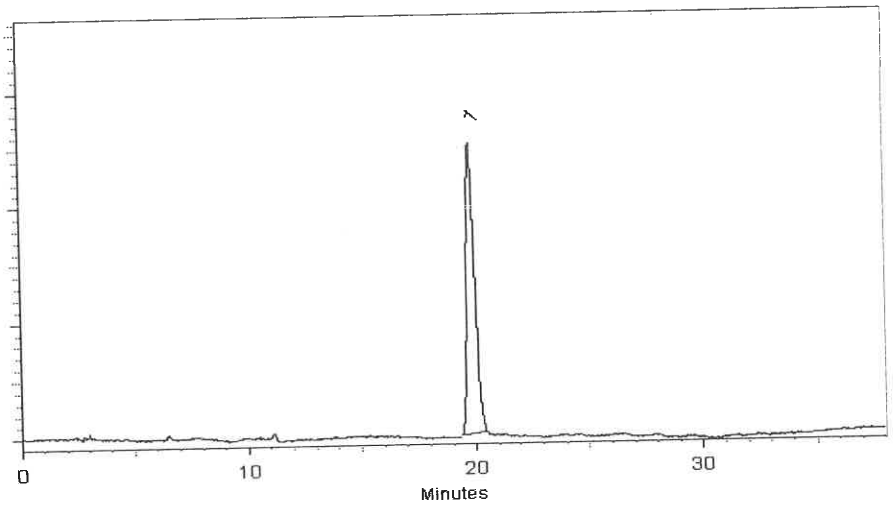
Flow Rate:
1.0 ml/min.

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 McGinni - Operations Tech I

Date Mixed: 24-May-2021 **Balance:** 1128353505

Marlina Cowan - Operations Tech I

Date Passed: 27-May-2021

REVIEWED
By Jennifer Polimo at 2:38 pm, May 27, 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:

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- Purity values are rounded to the nearest whole number.

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

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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_00006

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Certificate of Analysis

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Certificate #3222.01

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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. : 31600 **Lot No.:** A0175907

Description : PETN Standard

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

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

Expiration Date : August 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	PETN		1,006.8 µg/mL	+/- 10.1422	µg/mL	Gravimetric
	CAS # 78-11-5	(Lot 051108JLM)		+/- 55.7605	µg/mL	Unstressed
	Purity 99%			+/- 64.8363	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.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified 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:

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

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- 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:

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Handling Notes:

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Reagent

8330LCSMix1_00129

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0171502

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, 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	HMX **CAS #** 2691-41-0 **Purity** 99% (Lot 210324JLM)	1,002.0 µg/mL	+/- 5.9516 +/- 54.8926 +/- 64.0101	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	RDX **CAS #** 121-82-4 **Purity** 99% (Lot 080220JLM)	1,003.0 µg/mL	+/- 5.9575 +/- 54.9474 +/- 64.0740	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	1,3,5-Trinitrobenzene **CAS #** 99-35-4 **Purity** 99% (Lot A6TDK)	1,004.0 µg/mL	+/- 5.9635 +/- 55.0021 +/- 64.1379	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Dinitrobenzene **CAS #** 99-65-0 **Purity** 99% (Lot 1-DXX-24-1)	1,000.0 µg/mL	+/- 5.9397 +/- 54.7830 +/- 63.8824	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene **CAS #** 98-95-3 **Purity** 99% (Lot MKCK4267)	1,010.0 µg/mL	+/- 5.9991 +/- 55.3308 +/- 64.5212	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	2,4,6-Trinitrotoluene **CAS #** 118-96-7 **Purity** 99% (Lot D10587700)	1,000.0 µg/mL	+/- 5.9397 +/- 54.7830 +/- 63.8824	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene **CAS #** 121-14-2 **Purity** 99% (Lot MKAA0690)	1,004.0 µg/mL	+/- 5.9635 +/- 55.0021 +/- 64.1379	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

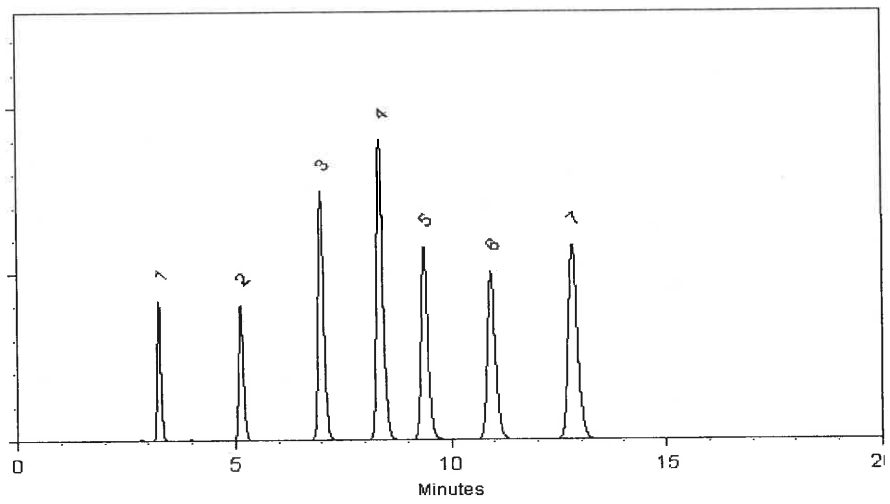
Flow Rate:
1.0 ml/min.

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.

Lane Kibe - Mix Technician

Date Mixed: 20-Apr-2021 **Balance:** 1127510105

Alexis Shelow - Operations Tech I

Date Passed: 23-Apr-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.
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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:

- 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_00027

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** A0171368

Description : 8330 Calibration Mix #2

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Tetryl		1,008.0 µg/mL	+/- 5.9872 µg/mL		Gravimetric
	CAS # 479-45-8	(Lot 091120JLM)		+/- 55.2213 µg/mL		Unstressed
	Purity 99%			+/- 64.3934 µg/mL		Stressed
2	4-Amino-2,6-dinitrotoluene		1,002.0 µg/mL	+/- 5.9516 µg/mL		Gravimetric
	CAS # 19406-51-0	(Lot ER070908-01)		+/- 54.8926 µg/mL		Unstressed
	Purity 99%			+/- 64.0101 µg/mL		Stressed
3	2-Amino-4,6-dinitrotoluene		1,006.0 µg/mL	+/- 5.9753 µg/mL		Gravimetric
	CAS # 35572-78-2	(Lot 29550-55)		+/- 55.1117 µg/mL		Unstressed
	Purity 99%			+/- 64.2657 µg/mL		Stressed
4	2,6-Dinitrotoluene		1,008.0 µg/mL	+/- 5.9872 µg/mL		Gravimetric
	CAS # 606-20-2	(Lot 1437483V)		+/- 55.2213 µg/mL		Unstressed
	Purity 99%			+/- 64.3934 µg/mL		Stressed
5	2-Nitrotoluene		1,010.0 µg/mL	+/- 5.9991 µg/mL		Gravimetric
	CAS # 88-72-2	(Lot BCBZ7826)		+/- 55.3308 µg/mL		Unstressed
	Purity 99%			+/- 64.5212 µg/mL		Stressed
6	4-Nitrotoluene		1,010.0 µg/mL	+/- 5.9991 µg/mL		Gravimetric
	CAS # 99-99-0	(Lot FAU01)		+/- 55.3308 µg/mL		Unstressed
	Purity 99%			+/- 64.5212 µg/mL		Stressed
7	3-Nitrotoluene		1,000.0 µg/mL	+/- 5.9397 µg/mL		Gravimetric
	CAS # 99-08-1	(Lot 07329LG)		+/- 54.7830 µg/mL		Unstressed
	Purity 99%			+/- 63.8824 µg/mL		Stressed

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

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

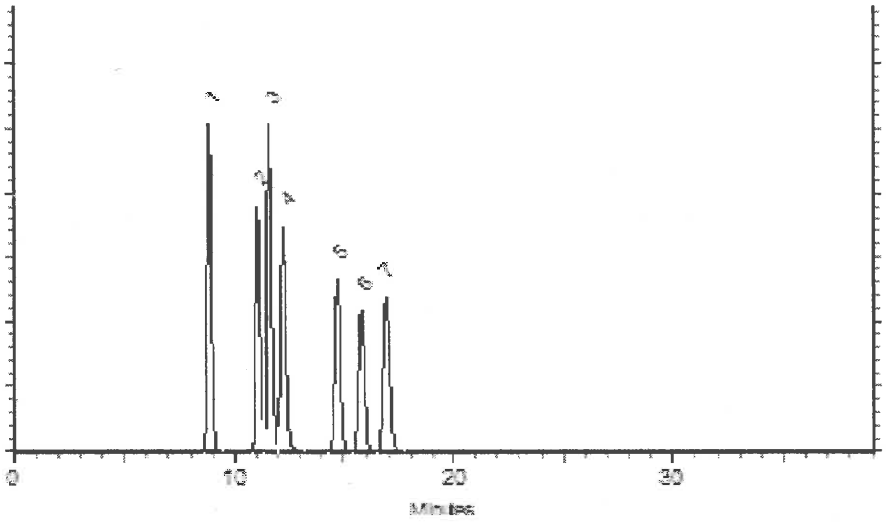
Flow Rate:
1.0 ml/min.

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.

Cory Meyer - Operations Tech I

Date Mixed: 15-Apr-2021 **Balance:** 1128342314

Alexis Shelow - Operations Tech I

Date Passed: 20-Apr-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

8330LCSmix2_00028

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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. : 31451 **Lot No.:** A0171368

Description : 8330 Calibration Mix #2

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Tetryl **CAS #** 479-45-8 **Purity** 99%	(Lot 091120JLM)	1,008.0 µg/mL	+/- 5.9872 µg/mL +/- 55.2213 µg/mL +/- 64.3934 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)	1,006.0 µg/mL	+/- 5.9753 µg/mL +/- 55.1117 µg/mL +/- 64.2657 µg/mL	Gravimetric Unstressed Stressed
4	2,6-Dinitrotoluene **CAS #** 606-20-2 **Purity** 99%	(Lot 1437483V)	1,008.0 µg/mL	+/- 5.9872 µg/mL +/- 55.2213 µg/mL +/- 64.3934 µg/mL	Gravimetric Unstressed Stressed
5	2-Nitrotoluene **CAS #** 88-72-2 **Purity** 99%	(Lot BCBZ7826)	1,010.0 µg/mL	+/- 5.9991 µg/mL +/- 55.3308 µg/mL +/- 64.5212 µg/mL	Gravimetric Unstressed Stressed
6	4-Nitrotoluene **CAS #** 99-99-0 **Purity** 99%	(Lot FAU01)	1,010.0 µg/mL	+/- 5.9991 µg/mL +/- 55.3308 µg/mL +/- 64.5212 µg/mL	Gravimetric Unstressed Stressed
7	3-Nitrotoluene **CAS #** 99-08-1 **Purity** 99%	(Lot 07329LG)	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)

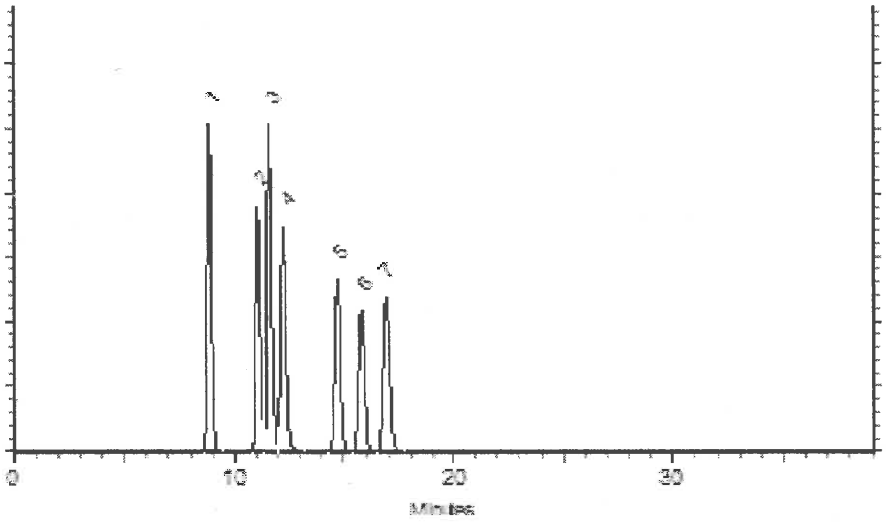
Flow Rate:
1.0 ml/min.

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.

Cory Meyer - Operations Tech I

Date Mixed: 15-Apr-2021 **Balance:** 1128342314

Alexis Shelow - Operations Tech I

Date Passed: 20-Apr-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

8330PAStkPS_00067

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: 218031154-02
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Jun 8, 2020
Expiration: Jul 8, 2022
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED AR-1463 ANAB ACCREDITED AT-1339 ilac-MRA

Component	CAS #	Purity % (HPLC)	Prepared Concentration[2] (µg/mL)	Certified Analyte Concentration[1] (µg/mL)
Picric acid	88-89-1	99.1	100.1	99.2

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

[2] All weights are traceable through NIST, Test No. 822-275872-11

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

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

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

Page 1 of 1

For use in routine laboratory analysis.

Reagent

8330Surrogate_00127

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20211116-106552.b\071-0801.D

Lims ID: Surr127 Inj. Date: 16-Nov-2021 17:37:51

Worklist ID: 280-0106552-072 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535
$ 10 1,2-Dinitrobenzene	0.5000	0.5055	101.1	83-119

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

280-155547-B-1-A

Reagent

8330SurrStkSS_00203

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Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0172684

Description : 8330 Surrogate Mix

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

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

Expiration Date : May 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,2-Dinitrobenzene	1,002.0 µg/mL	+/- 5.9516 µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.1943 µg/mL	Unstressed
	Purity 99%		+/- 57.5086 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

8330SurrStkSS_00204

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Fax: (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.:** A0172684

Description : 8330 Surrogate Mix

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

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

Expiration Date : May 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,2-Dinitrobenzene	1,002.0 µg/mL	+/- 5.9516 µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.1943 µg/mL	Unstressed
	Purity 99%		+/- 57.5086 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.
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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified 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:

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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
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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:

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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

8330SurrStkSS_00207

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

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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.:** A0172684

Description : 8330 Surrogate Mix

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

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

Expiration Date : May 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,2-Dinitrobenzene	1,002.0 µg/mL	+/- 5.9516 µg/mL	Gravimetric
	CAS # 528-29-0 (Lot MKCH6067)		+/- 56.1943 µg/mL	Unstressed
	Purity 99%		+/- 57.5086 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

8330SurrStkSS_00211

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

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Expiration Date : May 31, 2026 **Storage:** 10°C or colder

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CERTIFIED VALUES

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Solvent: Methanol
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- Purity values are rounded to the nearest whole number.

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

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- 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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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_00212

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
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- 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:

- 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

8330SurrStock_00169

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

ANAB ACCREDITED TESTING LABORATORY AT-1339

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

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

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

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

QR-ORG/INO-001
Rev. 5/18

Reagent

Alk stk std_00022

spex certiprep

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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.:** 2-85BT

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 - - 2021

Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

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Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001 (certified by DQS), ISO/IEC 17025 (accredited by A2LA) and ISO 17034 (accredited by A2LA) quality system consistent with the following guides:

- ISO 9001: Quality management systems – Requirements
- ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories
- ISO 17034: General requirements for the competence of reference material producers
- ISO Guide 30: Reference Materials – Selected terms and definitions
- ISO Guide 31: Reference Materials – Contents of certificates, labels, and accompanying documentation
- ISO Guide 35: Reference Materials – Guidance for characterization and assessment of homogeneity and stability
- Guide to the Expression of Uncertainty in Measurement, 2008
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurement – Third Edition
- NIST Technical Note 1297

Material Source:
All analytes and matrix materials are obtained and verified by Spex CertiPrep from pre-qualified vendors as per ISO 9001, ISO/IEC 17025 and ISO 17034 guidelines. Vendor identifications are proprietary; however, sources of all materials used in the preparation and testing of Spex CertiPrep CRMs are tracked and documented. For further assistance, please contact Sales Support at CRMSales@spex.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 CRMSales@spex.com.

Legal Notice:
Spex CertiPrep reference materials are not for any cosmetic, drug or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against Spex CertiPrep, LLC. of any kind whatsoever, whether based on breach of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall Spex CertiPrep, LLC. be liable for any loss of profits or any incidental, special, or consequential damages.

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Reagent

IC BR ICV_00021

RICCA CHEMICAL COMPANY®

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

Certificate of Analysis

Bromide Standard, 1000 ppm Br^-

Lot Number: 4010N41 **Product Number:** 1180

Manufacture Date: OCT 26, 2020
Expiration Date: APR 2022

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

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

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

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

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1180-16	500 mL natural poly	18 months
1180-4	120 mL natural poly	18 months

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

Chris Collins (10/26/2020)
Quality Control Supervisor

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

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

Reagent

IC CL cal_00071

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Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: AS-CL9-2X **Lot No.** 5-67CL-2X

Description: 1000 µg/mL Chloride

Matrix: H_2O

This **Ion Chromatography** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for ion chromatography instrumentation. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Value: 998 µg/mL ±5 µg/mL

Certified Value is Traceable to: 3182*

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available) ‡ - prepared gravimetrically

The CRM is prepared gravimetrically using high purity Sodium Chloride, Lot# 09141H. The certified value listed is the average of values obtained by classical wet assay and ion chromatography analysis.

Refer to side 2 for details of measurement uncertainties.

Classical Wet Assay: 998 µg/mL

Method: Precipitation using Silver Nitrate. Filter, dry and weigh as AgCl.

Instrumental Analysis by Ion Chromatography: 997 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br^-	<0.01	NO_3^-	<0.06
F^-	<0.05	$PO4^{-3}$	<0.03
NO_2^-	<0.05	$SO4^{-2}$	<0.08

Balances are calibrated regularly with weight sets traceable to NIST #32856, #32867 and others. This CRM is guaranteed stable and accurate to +/- 0.5% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: NOV - - 2021 Certifying Officer: Katherine Cullinan, QC Manager

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Reagent

IC FL cal_00019

RICCA CHEMICAL COMPANY®

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Batesville, IN 47006
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Certificate of Analysis

Fluoride Standard, 1000 ppm F^-

Lot Number: 4108A94 **Product Number:** 3173

Manufacture Date: AUG 04, 2021

Expiration Date: JAN 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.
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)

Karen Bodewes (08/04/2021)

Quality Control

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

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Reagent

IC MS/MSD S04_00006

Fisher Scientific

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

Certificate of Analysis

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

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

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

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



Lab Manager Fair Lawn

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

Reagent

IC SO4 Cal_00003

Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: AS-SO49-2X **Lot No.** 5-118SO49-2X

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: 999 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: 998 µg/mL

Method: Precipitation using Barium Chloride. Filter, ignite, and weigh as BaSO4.

Instrumental Analysis by Ion Chromatography: 999 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br^-	<0.01	NO_2^-	<0.01
Cl^-	<0.03	NO_3^-	<0.02
F^-	<0.003	$PO4^{-3}$	<0.08

Balances are calibrated regularly with weight sets traceable to NIST #32856, #32867 and others. This CRM is guaranteed stable and accurate to +/- 0.5% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, and short-term and long-term stability. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: NOV - - 2021 Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

© 2020 SPEX CertiPrep, LLC

Reagent

IC SO4 ICV_00022

ERA
A Waters Company

Certified Reference Material

▪ Certificate of Analysis ▪

Product:	1000 mg/L Sulfate
Catalog Number:	062-125mL, 995-500mL
Lot No.	060720m
Starting Material:	Potassium Sulfate (K_2SO_4)
Matrix:	18 megohm deionized water
Density:	1.0001 ± 0.0010 mg/L at 21.2 °C and 755 mm Hg
Verification Method:	Ion Chromatography
Certificate Issue Date:	July 13, 2020
Expiration Date:	July 6, 2022
Revision Number:	Original

CERTIFICATION

Parameter	Certified Value[1]	Uncertainty[2]	NIST Traceability	
	mg/L	%	SRM Number[3]	Recovery %
Sulfate	1000	0.984	3181	97.7

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

Reagent

MNX,TNX,DNX_00057

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984 **Lot Issue Date:** 10-Mar-2021

Lot Number: 0006594482 **Expiration Date:** 30-Apr-2022

Description:
This analytical reference material (RM) 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 below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	99.7 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.1 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	116.7 ± 0.6 µg/mL

Matrix: acetonitrile

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

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 RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM 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.

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.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with the LRQA registered ISO 9001:2015 Quality Management System. Cert # 10303760

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED TESTING LABORATORY
ISO 17025 Cert No. AT-1937

250 Smith Street North Kingstown, Rhode Island 02852 www.agilent.com/quality

Certificate of Analysis

Product Number: CUS-23984 **Lot Number:** 0006594482

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER
ISO 17034 Cert
No. AR-1936

RM was produced in accordance with the LRQA registered ISO 9001:2015 Quality Management System. Cert # 10303760
Page: 2 of 2
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CSD-QA-015.1

ANAB ACCREDITED TESTING LABORATORY
ISO 17025 Cert
No. AT-1937

Reagent

MNX,TNX,DNX_00062

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984

Lot Number: 0006599273

Lot Issue Date: 02-Apr-2021

Expiration Date: 30-Apr-2022

Description:
This analytical reference material (RM) 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 below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.4 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.1 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	116.7 ± 0.6 µg/mL

Matrix: acetonitrile

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

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 RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM 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.

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.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with the LRQA registered ISO 9001:2015 Quality Management System. Cert # 10303760

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED TESTING LABORATORY
ISO 17025 Cert No. AT-1937

250 Smith Street North Kingstown, Rhode Island 02852 www.agilent.com/quality

Certificate of Analysis

Product Number: CUS-23984 **Lot Number:** 0006599273

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert
No. AR-1936

RM was produced in accordance with the LRQA registered ISO 9001:2015 Quality Management System. Cert # 10303760
Page: 2 of 2
www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert
No. AT-1937

Reagent

MNX,TNX,DNX_00063

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984

Lot Number: 0006599273

Lot Issue Date: 02-Apr-2021

Expiration Date: 30-Apr-2022

Description:
This analytical reference material (RM) 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 below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.4 ± 0.5 µg/mL
1-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.1 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	116.7 ± 0.6 µg/mL

Matrix: acetonitrile

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

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 RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM 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.

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.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with the LRQA registered ISO 9001:2015 Quality Management System. Cert # 10303760

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CSD-QA-015.1

ANAB ACCREDITED TESTING LABORATORY
ISO 17025 Cert No. AT-1937

250 Smith Street North Kingstown, Rhode Island 02852 www.agilent.com/quality

Certificate of Analysis

Product Number: CUS-23984 **Lot Number:** 0006599273

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert
No. AR-1936

RM was produced in accordance with the LRQA registered ISO 9001:2015 Quality Management System. Cert # 10303760
Page: 2 of 2
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CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert
No. AT-1937

Reagent

NH3 ICV STD_00032

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (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:	N2-NH669544
Matrix:	H2O
Value / Analyte(s):	1 000 µg/mL ea: Ammonium as N
Starting Material:	Ammonium chloride
Starting Material Lot#:	1736
Starting Material Purity:	99.0000%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 3 µg/mL

Density: 0.999 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **1005 ± 3 µg/mL**
IC Assay NIST SRM 194a Lot Number: 194a

Assay Method #2 **997 ± 3 µg/mL**
Fajans NIST SRM 999c Lot Number: 999c

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{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:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{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.

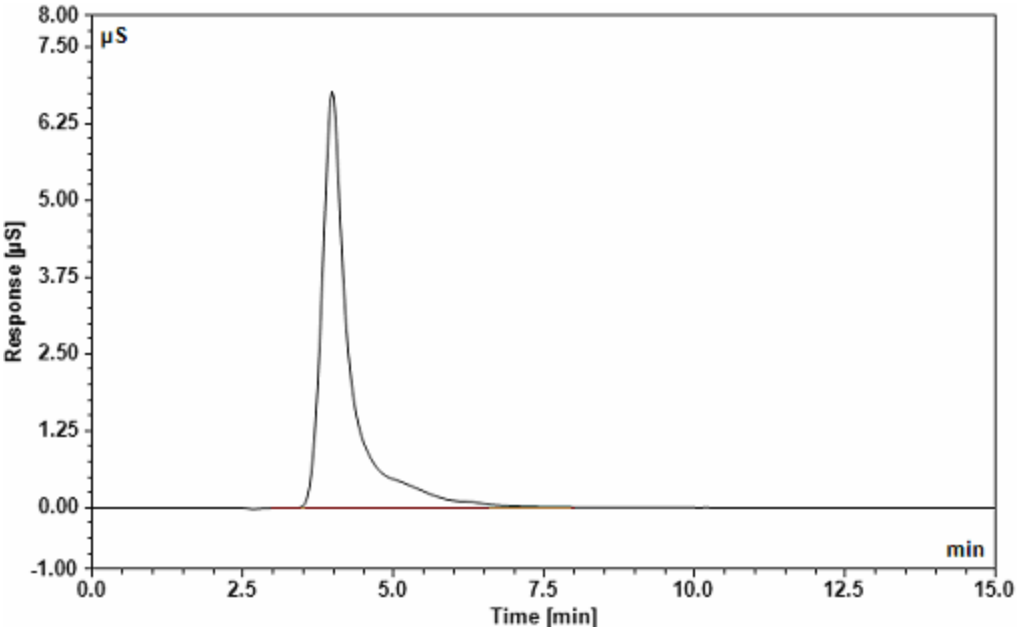
4.2 Balance Calibration

- 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:**	35 °C
		Cell Temp:	35 °C
Cation Self Regen Suppressor/ Chemical Suppression:	CERS 500 2mm	**Scale X-Axis:**	minutes
		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 Guide 34 "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

August 01, 2018

- 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

- **August 01, 2022**

- 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:

James King Jr
Chemist, Technical Manager



Certificate Approved By:

Michael Booth
Supervisor, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



Reagent

NOXT Cal STD_00025

RICCA CHEMICAL COMPANY®

1841 Broad Street
Pocomoke City, MD 21851
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

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

Lot Number: 2104E50 **Product Number:** 5459

Manufacture Date: APR 19, 2021
Expiration Date: OCT 2022

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
5459-4	120 mL natural poly	18 months

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

Kerry Kingsbury (04/19/2021)
Quality Control Supervisor
This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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

Reagent

PicricARestek_00099

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.:** A0166597

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 : November 30, 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	Picric Acid	1,002.0 µg/mL	+/- 5.9516	µg/mL	Gravimetric
	CAS # 88-89-1 (Lot 06130CU)		+/- 54.8926	µg/mL	Unstressed
	Purity 99%		+/- 64.0101	µg/mL	Stressed

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

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

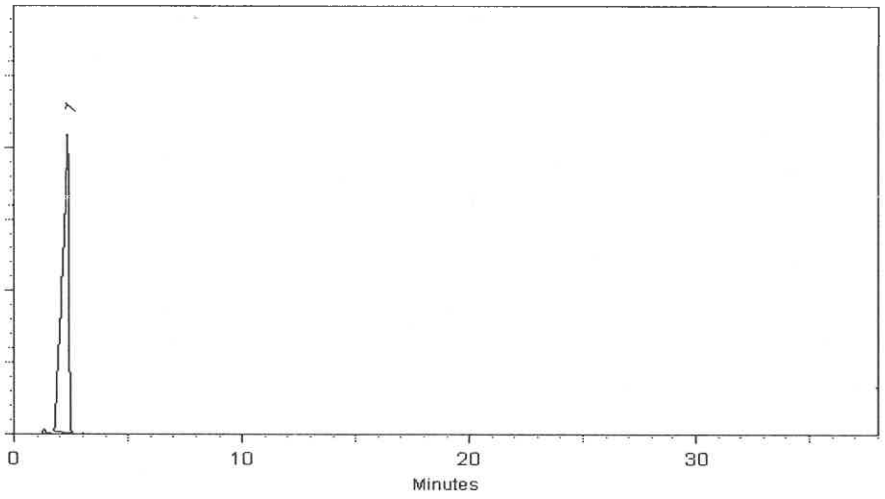
Flow Rate:
1.0 ml/min.

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.

Kylie Struble - Operations Technician I

Date Mixed: 22-Nov-2020 **Balance:** B251644995

Marlina Cowan - Operations Tech I

Date Passed: 24-Nov-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

RSK175methane_00010

Airgas
an Air Liquide company

Airgas Specialty Gases
Airgas USA, LLC
6141 Easton Road
Bldg 1
Plumsteadville, PA 18949
Airgas.com

CERTIFICATE OF BATCH ANALYSIS

Grade of Product: CP

Customer:	SIGMA-ALDRICH		
Part Number:	ME CPP14C514	Reference Number:	160-401480003-1
Cylinder Analyzed:	ST0000198540	Cylinder Volume:	14.0 LG
Laboratory:	124 - Plumsteadville - PA	Cylinder Pressure:	240 PSIG
Analysis Date:	Apr 16, 2019	Valve Outlet:	160
Lot Number:	160-401480003-1		

Expiration Date: Apr 16, 2022

ANALYTICAL RESULTS

Component	Requested Purity	Certified Concentration
METHANE	> 99.0 %	> 99.0 %

Cylinders in Batch:

ST0000198540, ST0000198541, ST0000198542, ST0000198543

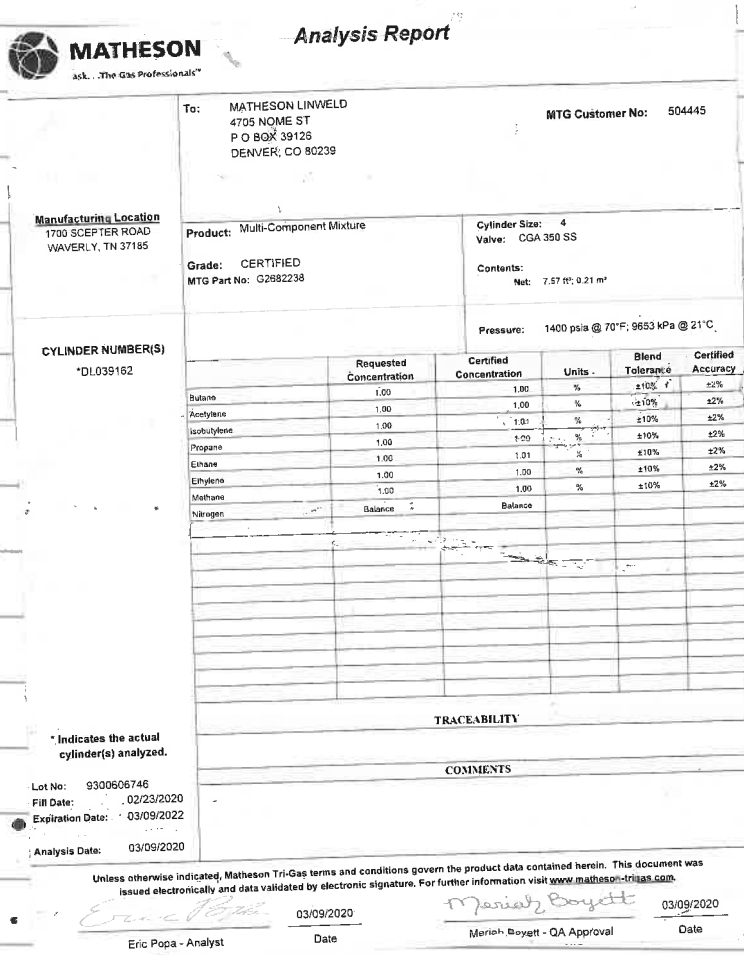
Notes:MANUFACTURE DATE 4-16-2019
PO# P481562
P/N 22562

Impurities verified against analytical standards traceable to NIST by weight and/or analysis.

Approved for Release

Reagent

RSK7gasMathes_00031



MATHESON
ask. . .The Gas Professionals™

Analysis Report

To: MATHESON LINWELD
4705 NOME ST
P O BOX 39126
DENVER, CO 80239

MTG Customer No: 504445

Manufacturing Location
1700 SCEPTER ROAD
WAVERLY, TN 37185

Product: Multi-Component Mixture
Grade: CERTIFIED
MTG Part No: G2682238

Cylinder Size: 4
Valve: CGA 350 SS
Contents:
Net: 7.57 ft³; 0.21 m³

Pressure: 1400 psia @ 70°F; 9653 kPa @ 21°C

CYLINDER NUMBER(S)
*DL039162

	Requested Concentration	Certified Concentration	Units -	Blend Tolerance	Certified Accuracy
Butane	1.00	1.00	%	±10%	±2%
Acetylene	1.00	1.00	%	±10%	±2%
Isobutylene	1.00	1.01	%	±10%	±2%
Propane	1.00	1.00	%	±10%	±2%
Ethane	1.00	1.01	%	±10%	±2%
Ethylene	1.00	1.00	%	±10%	±2%
Methane	1.00	1.00	%	±10%	±2%
Nitrogen	Balance	Balance			

TRACEABILITY

COMMENTS

* Indicates the actual cylinder(s) analyzed.

Lot No: 9300606746
Fill Date: 02/23/2020
Expiration Date: 03/09/2022
Analysis Date: 03/09/2020

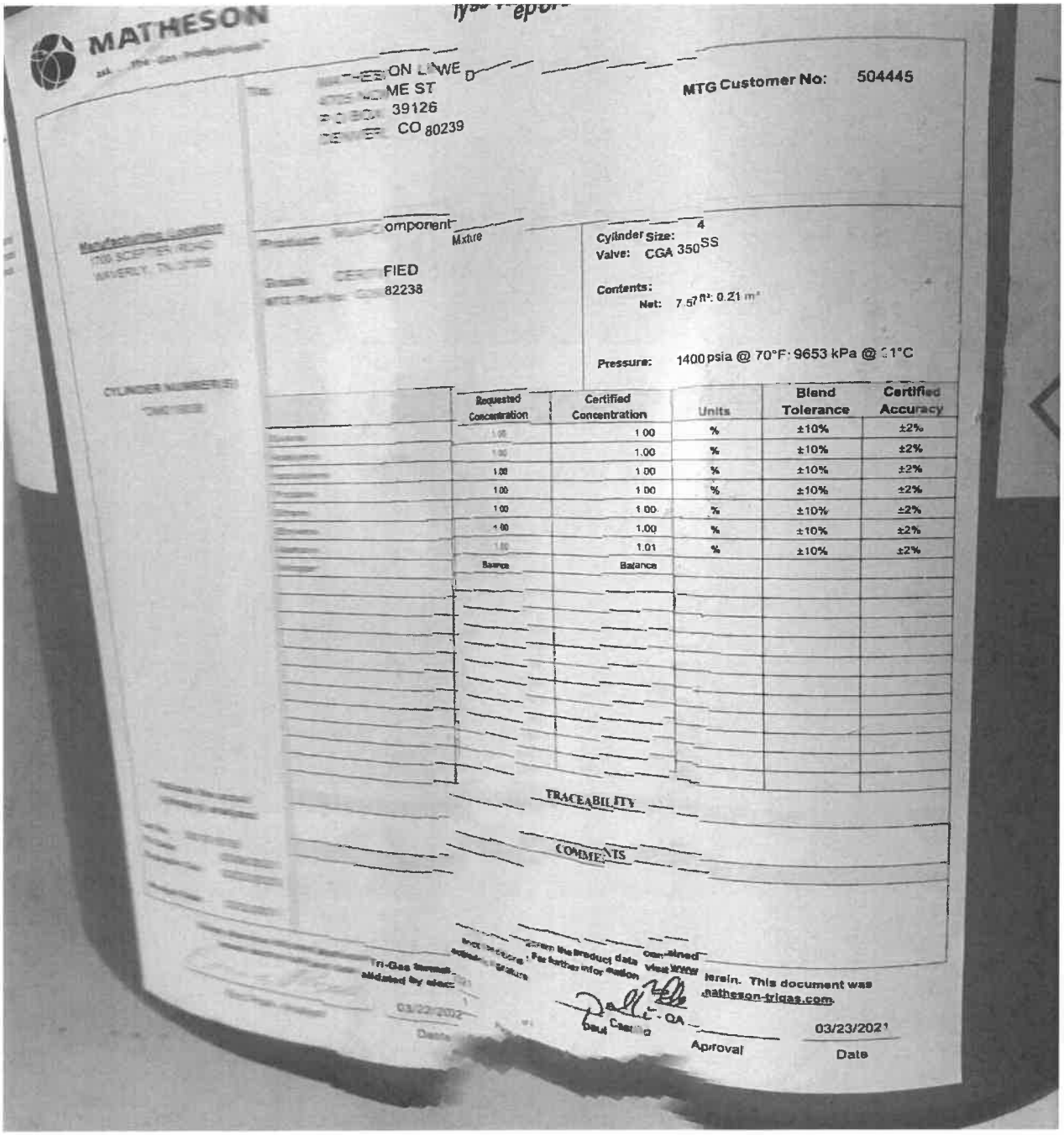
Unless otherwise indicated, Matheson Tri-Gas terms and conditions govern the product data contained herein. This document was issued electronically and data validated by electronic signature. For further information visit www.matheson-trigas.com.

Eric Popa - Analyst — 03/09/2020 Date

Meriah Boyett - QA Approval — 03/09/2020 Date

Reagent

RSK7gasMathes_00034


MATHESON
MTG Customer No: 504445
Cylinder Size: 4
Valve: CGA 350 SS
Contents:
Net: 7.57 ft³: 0.21 m³
Pressure: 1400 psia @ 70°F: 9653 kPa @ 21°C
Requested Concentration
Certified Concentration
Units
Blend Tolerance
Certified Accuracy
1.00 % ±10% ±2%
1.00 % ±10% ±2%
1.00 % ±10% ±2%
1.00 % ±10% ±2%
1.00 % ±10% ±2%
1.00 % ±10% ±2%
1.01 % ±10% ±2%
Balance Balance
TRACEABILITY
COMMENTS
03/22/2021
QA
Approval
03/23/2021
Date

MTG Part No: [illegible]

Net: [illegible]

Pressure: 1400 psia @ 70°F; 9653 kPa @ 21°C

CYLINDER NUMBER(S)

*DM019038

	Requested Concentration	Certified Concentration	Units	Blend Tolerance	Certified Accuracy
Butane	1.00	1.00	%	±10%	±2%
Acetylene	1.00	1.00	%	±10%	±2%
Isobutylene	1.00	1.00	%	±10%	±2%
Propane	1.00	1.00	%	±10%	±2%
Ethane	1.00	1.00	%	±10%	±2%
Ethylene	1.00	1.00	%	±10%	±2%
Methane	1.00	1.01	%	±10%	±2%
Nitrogen	Balance	Balance			

TRACEABILITY

COMMENTS

*** indicates the actual cylinder(s) analyzed.**

Lot No: 9301615705
Fill Date: 03/08/2021
Expiration Date: 03/22/2023

Analysis Date: 03/22/2021

Unless otherwise indicated, Matheson Tri-Gas terms and conditions govern the product data contained herein. This document was issued electronically and data validated by electronic signature. For further information visit www.matheson-trigas.com.

Eric Popa - Analyst — 03/22/2021 (Date)

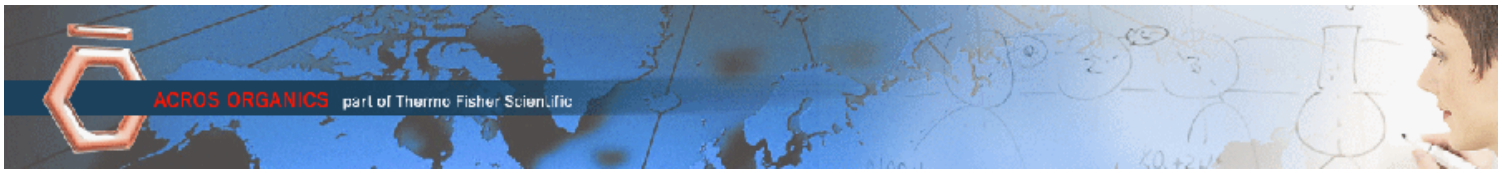
Paul Castillo - QA Approval — 03/23/2021 (Date)

Page 1 of 1

[redacted]

Reagent

SFD ICV STK_00008



Version	1
Molecular weight	240.18
Molecular formula	Na2 S . 9 H2 O
CAS No	1313-84-4
Linear formula	Na2S.9H2O
Flash point (°C)	

Certificate of Analysis

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Acros Organics expressly disclaims all warranties,expressed or implied, including the implied

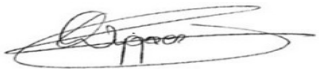
warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to human or animals. It is the responsiblity of the purchaser, formulator or those performing further manufacturing to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	38706	**Quality Test / Release Date**	22 April 2021
Lot Number	A0412804	**Suggested Retest Date**	April 2024
Description	Sodium sulfide nonahydrate,98+%,extra pure		
Country of Origin	INDIA		
Declaration of Origin	synthetic		

Origin Comment	

Result Name	Specifications	Test Value
Appearance (Color)	Colorless to light yellow	Light yellow
Appearance (Form)	Adhering crystals and/or chunks	Adhering crystals
Titration Iodimetric	32.0 to 38.0 % (Na2S)	32.3 % (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: 27 April 2021

Acros Organics
ENA23, zone 1, nr 1350, Janssen Pharmaceuticalaan 3a, B-2440 Geel, Belgium
Tel +32 14/57.52.11 - Fax +32 14/59.34.34 Internet: http://www.acros.com
1 Reagent Lane, Fair Lawn, NJ 07410,USA Fax 201-796-1329

Reagent

TKN CAL STD_00019

nsi lab solutions
protect more. test more.
7212 ACC Blvd. | Raleigh, NC 27617 | 800.234.7837

Certificate of Analysis

TKN Calibration Standard - 1000 mg/L

Catalog Number: IS-009, IS-009-500
Lot Number: 200817
Manufacture Date: 08/17/20
Certified Date: 08/17/20

Expiration: 08/31/2024
Matrix: Water
Hazards: Irritant
(See MSDS)

Bulk Number	Analyte	CAS #	Purity	Certified Concentration (mg/L TKN)
W-1477-30	TKN from Glycine	56-40-6	99.8%	1000 ± 4.60

Packaging, Storage, Instructions For Use

Store at room temperature (15-30°C). After opening, this solution should be stored tightly capped at 2-8°C.

This certified reference material (CRM) is packaged in low density polyethylene. Allow to equilibrate to room temperature before use. Small aliquots should be poured out of the bottle rather than directly pipetted out of bottle in order to prevent contamination or premature degradation. A 1 mL sample size is recommended. Smaller sample volumes may negatively affect estimated uncertainty.

Traceability Information

Analyte Source Materials: The highest purity analyte source materials are used in the manufacture of this CRM. The actual purity is referenced above. Analyte source material purity and associated uncertainty has been analytically verified against appropriate NIST SRMs, if available.

Method: Certified concentration confirmed by HPLC analysis against an independent reference standard with n=3.

Balance: All analytical balances are calibrated on a semiannual basis by an ISO 17025 accredited calibration laboratory and are traceable to NIST. Traceable Calibration Certificate available upon request.

All balances are checked daily by an in-house standard operating procedure. The weights used for this daily verification are calibrated annually by an ISO 17025 accredited calibration laboratory and are certified traceable to NIST. Certificate of Calibration and Traceability available upon request.

Thermometer: All thermometers are NIST traceable through thermometers that are calibrated annually by an ISO 17025 accredited calibration laboratory.

Glassware: All glassware used in the manufacture of our CRMs is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an ISO 17025 accredited calibration laboratory.

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7212 ACC Blvd. | Raleigh, NC 27617 | 800.234.7837

Catalog Number: IS-009, IS-009-500
Lot Number: 200817

Intended Uses

- Calibration of analytical instruments
- Validation of analytical methods
- Preparation of working level reference materials, i.e. "check standards"
- Detection limit studies

Uncertainty

The ± uncertainty associated with the certified concentration is the expanded uncertainty at 95% confidence interval (CI) with K=2. This expanded uncertainty incorporates contributions from manufacturing, homogeneity, and stability.

Homogeneity

This CRM was thoroughly mixed in production. Batch homogeneity was established through analysis of samples chosen at random. A minimum 1 mL sample size is recommended.

Stability/Expiration

The stability of this CRM is based on short-term and long-term monitoring of the certified concentration. The expiration date is guaranteed to be valid from the manufacture date and is based on results of long-term monitoring.

Ewart Morris

Ewart Morris, Inorganics Technical Manager

Mark Hammersla

Mark Hammersla, President

Reagent

TKN ICV_00013

ERA

A Waters Company

Certificate of Analysis

PRODUCT:	1000 mg/L Total Kjeldahl Nitrogen (TKN)
CATALOG NUMBER:	043 -125 mL; 996 - 500 mL
LOT NUMBER:	200220m
ISSUE DATE:	March 20, 2020
REVISION DATE:	Original
STARTING MATERIAL:	Glycine (NH_2CH_2COOH)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	6.1%
MATRIX:	18 megohm deionized water and 1% (v/v) HCl
DENSITY:	0.9966 ± 0.0020 g/mL at 19.4°C and 753 mm Hg
TRACEABILITY[3]:	98.3%
NIST/SRM:	194a Ammonium Dihydrogen Phosphate
VERIFICATION METHOD:	Ion Selective Electrode (ISE)
STORAGE:	Store at 20-25°C

1. The **Certified Concentration** is the actual made-to concentration confirmed by ERA analytical verification.

2. The stated **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation of the product and includes uncertainty related to the starting material used and the volumetric and gravimetric measurements made. The method of calculating uncertainty is taken from the ISO Guide to the Expression of Uncertainty in Measurement (current version). The uncertainty applies to the product as supplied and does not take into account any required or optional dilutions and/or preparations the laboratory may perform while using this product.

3. Traceability ((% Recovery Certified Standard)/(% Recovery NIST SRM))* 100.

   The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs. Where a NIST SRM is not available, the product is metrologically traceable through an unbroken chain of calibrations to NIST weights, each having stated uncertainties and utilizing measurement standards that are appropriate for the physical and/or chemical property being measured.

This standard **expires 02/07/2022.** The certified values are monitored and 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.

This product is intended to be used as either a calibration standard or a quality control check of the entire analytical process for the analytes/matrix included in the standard.

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

Certifying Officer: Brian Miller - Product Line Manager

ISO/IEC GUIDE 34:2009

ACCREDITED

REFERENCE MATERIAL PRODUCER
CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005

ACCREDITED

CHEMICAL TESTING LABORATORY
CERTIFICATE NO. 1539.02

16341 Table Mtn Pkwy, Golden, CO 80403 800-372-0122 fax: 303-421-0159 www.eraqc.com

Reagent

TOC ICV Std_00049

RICCA CHEMICAL COMPANY®

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

Certificate of Analysis

Organic Carbon Standard, 1000 ppm C

Lot Number: 1201B45 **Product Number:** 1847

Manufacture Date: JAN 24, 2022
Expiration Date: JAN 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

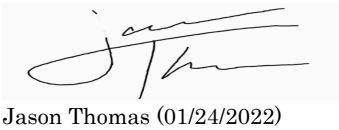
Test	Specification	Result
Appearance	Colorless liquid	Passed
Carbon (C)	995-1005 ppm	1000 ppm

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
1847-4	120 mL amber glass	12 months

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



Jason Thomas (01/24/2022)

Operations Manager

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

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

Reagent

TOC LCS Std_00053

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: Total Organic Carbon (TOC) Standard
Product Number: IQC-106
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006645841
Lot Issue Date: 12-Nov-2021
Expiration Date: 31-Dec-2023

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
potassium hydrogen phthalate (KHP) (as TOC)	1002	± 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.

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

RSK_175_DOD5

Dissolved Gases (GC)

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 003F0301.D

Lab ID: LCS 280-567496/3 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0657	0.0676	103	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 003F0301.D

Lab ID: LCS 280-567659/3 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0657	0.0667	101	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 002F0201.D

Lab ID: LCS 280-567999/4 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0657	0.0648	99	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 004F0401.D

Lab ID: LCSD 280-567496/4 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0657	0.0673	102	0	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 004F0401.D

Lab ID: LCSD 280-567659/4 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0657	0.0646	98	3	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 003F0301.D

Lab ID: LCSD 280-567999/5 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0657	0.0649	99	0	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: MB 280-567496/5

Matrix: Water Date Extracted:

Lab File ID:(1) 005F0501.D Lab File ID:(2) 005F0501.D

Date Analyzed:(1) 03/02/2022 15:19 Date Analyzed:(2) 03/02/2022 15:19

Instrument ID:(1) VGC_J Instrument ID:(2) VGC_J

GC Column:(1) HP-Plot Q ID: 0.53(mm) GC Column:(2) Rt-Alumina K ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-567496/3	03/02/2022 14:53	03/02/2022 14:53
	LCSD 280-567496/4	03/02/2022 15:06	03/02/2022 15:06
EW7-PM29B-8-35	280-159137-1	03/02/2022 18:35	03/02/2022 18:35
EW7-PM25B-8-35	280-159137-3	03/02/2022 19:01	03/02/2022 19:01
EW7-PM26A-8-25	280-159137-4	03/02/2022 19:14	03/02/2022 19:14

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: MB 280-567659/5

Matrix: Water Date Extracted:

Lab File ID:(1) 005F0501.D Lab File ID:(2) 005F0501.D

Date Analyzed:(1) 03/03/2022 15:17 Date Analyzed:(2) 03/03/2022 15:17

Instrument ID:(1) VGC_J Instrument ID:(2) VGC_J

GC Column:(1) HP-Plot Q ID: 0.53(mm) GC Column:(2) Rt-Alumina K ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-567659/3	03/03/2022 14:51	03/03/2022 14:51
	LCSD 280-567659/4	03/03/2022 15:04	03/03/2022 15:04
EW7-PM26B-8-35	280-159137-5	03/03/2022 15:30	03/03/2022 15:30

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: MB 280-567999/3

Matrix: Water Date Extracted:

Lab File ID:(1) 001F0101.D Lab File ID:(2) 001F0101.D

Date Analyzed:(1) 03/08/2022 14:07 Date Analyzed:(2) 03/08/2022 14:07

Instrument ID:(1) VGC_J Instrument ID:(2) VGC_J

GC Column:(1) HP-Plot Q ID: 0.53(mm) GC Column:(2) Rt-Alumina K ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-567999/4	03/08/2022 14:20	03/08/2022 14:20
	LCSD 280-567999/5	03/08/2022 14:32	03/08/2022 14:32
EW7-PM25A-8-25	280-159137-2	03/08/2022 14:45	03/08/2022 14:45

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM29B-8-35 Lab Sample ID: 280-159137-1

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/02/2022 18:35 Date Analyzed (2): 03/02/2022 18:35

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.63	1.71	4.2		10.1
	2		1.25	1.22	1.30	4.7		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM25A-8-25 Lab Sample ID: 280-159137-2

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/08/2022 14:45 Date Analyzed (2): 03/08/2022 14:45

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.62	1.70	9.3		9.2
	2		1.26	1.22	1.30	10		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM25B-8-35 Lab Sample ID: 280-159137-3

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/02/2022 19:01 Date Analyzed (2): 03/02/2022 19:01

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.63	1.71	19		9.2
	2		1.26	1.22	1.30	20		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM26A-8-25 Lab Sample ID: 280-159137-4

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/02/2022 19:14 Date Analyzed (2): 03/02/2022 19:14

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.65	1.63	1.71	17		7.7
	2		1.25	1.22	1.30	19		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM26B-8-35 Lab Sample ID: 280-159137-5

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/03/2022 15:30 Date Analyzed (2): 03/03/2022 15:30

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.63	1.71	11		9.8
	2		1.26	1.22	1.30	12		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-567496/3

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/02/2022 14:53 Date Analyzed (2): 03/02/2022 14:53

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.63	1.71	0.0676		2.3
	2		1.26	1.22	1.30	0.0691		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-567496/4

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/02/2022 15:06 Date Analyzed (2): 03/02/2022 15:06

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.63	1.71	0.0673		2.8
	2		1.26	1.22	1.30	0.0692		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-567659/3

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/03/2022 14:51 Date Analyzed (2): 03/03/2022 14:51

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.63	1.71	0.0667		3.0
	2		1.26	1.22	1.30	0.0687		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-567659/4

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/03/2022 15:04 Date Analyzed (2): 03/03/2022 15:04

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.63	1.71	0.0646		3.2
	2		1.26	1.22	1.30	0.0667		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-567999/4

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/08/2022 14:20 Date Analyzed (2): 03/08/2022 14:20

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.62	1.70	0.0648		3.6
	2		1.26	1.22	1.30	0.0671		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-567999/5

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/08/2022 14:32 Date Analyzed (2): 03/08/2022 14:32

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.62	1.70	0.0649		3.7
	2		1.25	1.22	1.30	0.0674		

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM29B-8-35 | Lab Sample ID: 280-159137-1

Matrix: Water | Lab File ID: 020F2001.D

Analysis Method: RSK-175 | Date Collected: 02/24/2022 15:40

Sample wt/vol: 20(mL) | Date Analyzed: 03/02/2022 18:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567496 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	4.2		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\020F2001.D
Lims ID: 280-159137-H-1
Client ID: EW7-PM29B-8-35
Sample Type: Client
Inject. Date: 02-Mar-2022 18:35:12 ALS Bottle#: 20 Worklist Smp#: 46
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159137-H-1
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Mar-2022 11:19:41 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1669

First Level Reviewer: sciannac Date: 03-Mar-2022 11:13:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.254	1.262	-0.008	164446829	4673.8	
2	1.658	1.670	-0.012	152539247	4223.4	
					RPD = 10.12	
3 Ethane						
1		1.517			ND	
2		3.022				
4 Ethylene						
1		1.789			ND	
2		2.604				
5 Propane						
1		2.545			ND	
2		4.927				
6 Acetylene						
1		4.050			ND	
2		2.750				
7 Butane						
1		4.412			ND	
2		6.427				
8 isobutylene						
1		5.314			ND	
2		6.269				

QC Flag Legend

Processing Flags

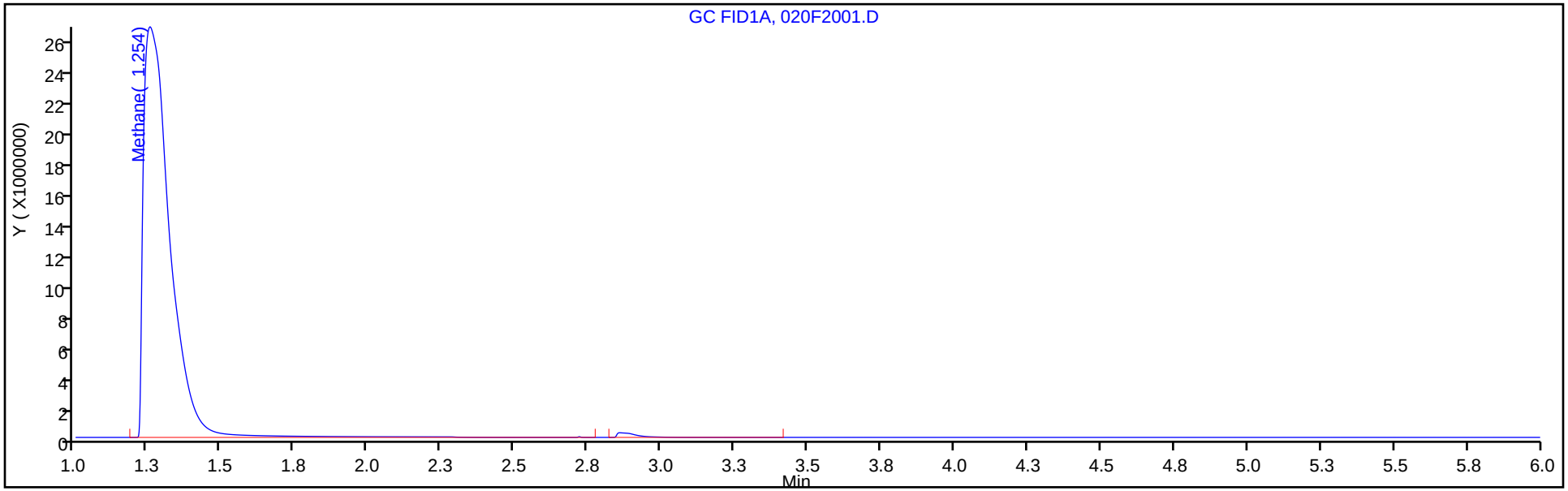
Report Date: 03-Mar-2022 11:19:42 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

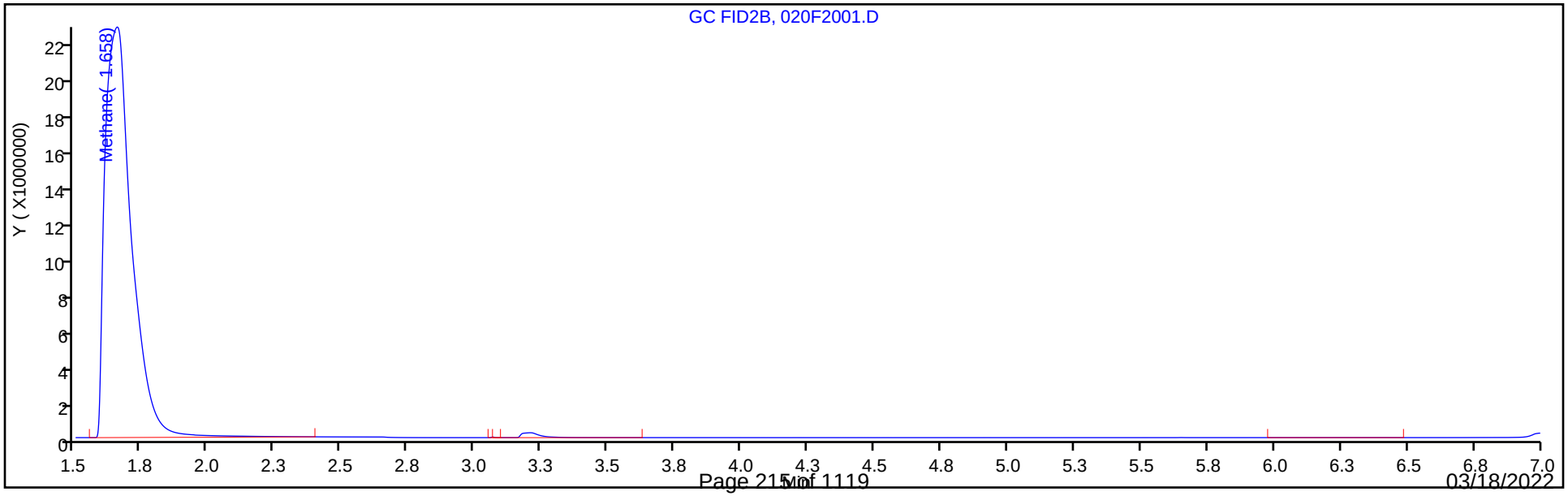
Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\020F2001.D

Injection Date:	02-Mar-2022 18:35:12	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159137-H-1	Lab Sample ID:	280-159137-1	Worklist Smp#:	46
Client ID:	EW7-PM29B-8-35				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM25A-8-25 | Lab Sample ID: 280-159137-2

Matrix: Water | Lab File ID: 006F0401.D

Analysis Method: RSK-175 | Date Collected: 02/25/2022 10:10

Sample wt/vol: 20(mL) | Date Analyzed: 03/08/2022 14:45

Soil Aliquot Vol: | Dilution Factor: 2

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567999 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	9.3	D	0.010	0.0026	0.0013

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\006F0401.D
Lims ID: 280-159137-I-2
Client ID: EW7-PM25A-8-25
Sample Type: Client
Inject. Date: 08-Mar-2022 14:45:55 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 2.0000
Sample Info: 280-159137-I-2
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Mar-2022 13:35:04 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1645

First Level Reviewer: sciannac Date: 09-Mar-2022 13:02:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.255	1.258	-0.003	179409414	5099.2	
2	1.659	1.663	-0.004	167909702	4649.1	
					RPD = 9.23	
3 Ethane						
1		1.523			ND	
2		3.018				
4 Ethylene						
1		1.818			ND	
2		2.598				
5 Propane						
1		2.611			ND	
2		4.926				
6 Acetylene						
1		4.175			ND	
2		2.745				
7 Butane						
1		4.491			ND	
2		6.426				
8 isobutylene						
1		5.391			ND	
2		6.268				

QC Flag Legend

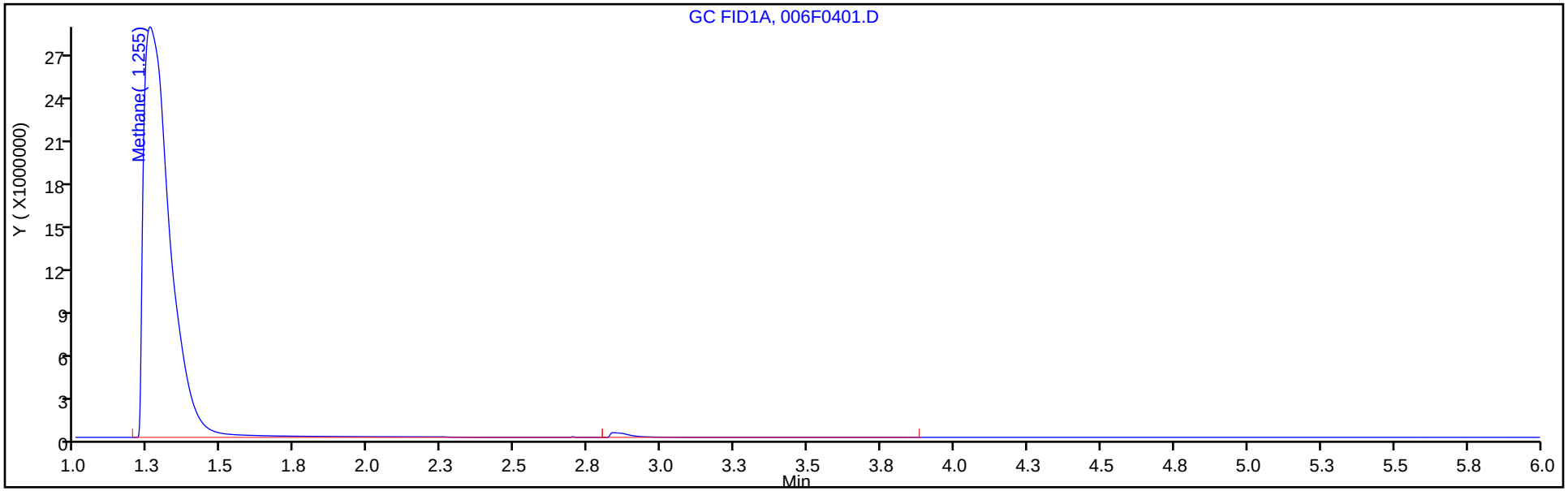
Processing Flags

Report Date: 09-Mar-2022 13:35:07 Chrom Revision: 2.3 16-Feb-2022 17:52:00

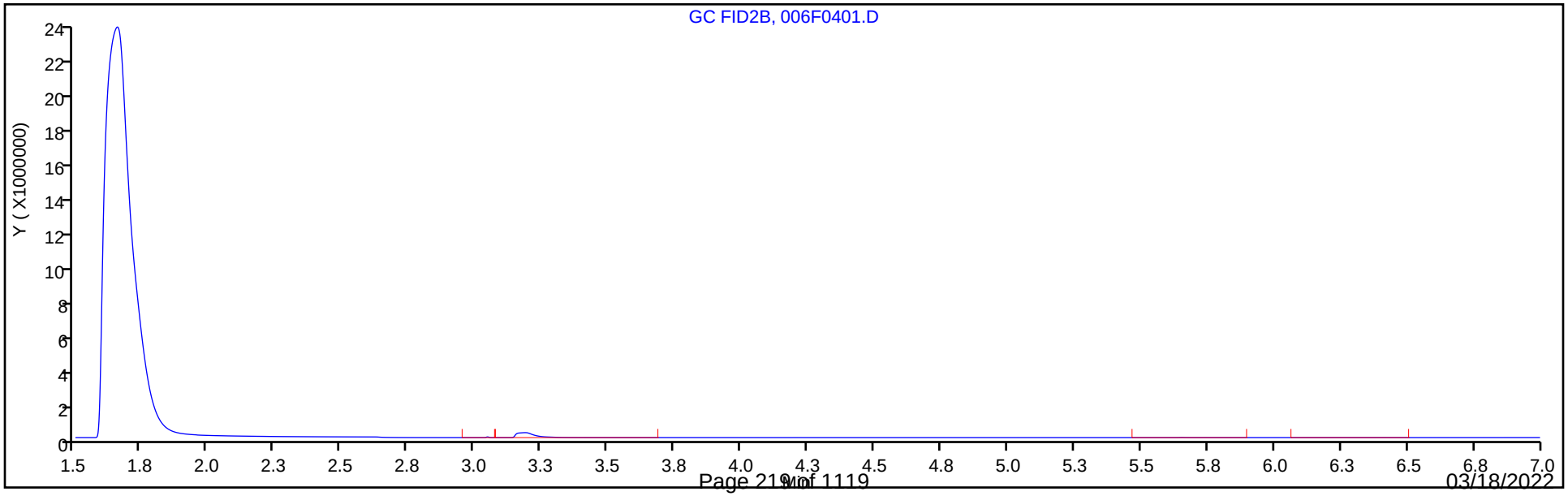
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\006F0401.D				
Injection Date:	08-Mar-2022 14:45:55	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159137-I-2	Lab Sample ID:	280-159137-2	Worklist Smp#:	6
Client ID:	EW7-PM25A-8-25				
Purge Vol:	18.000 mL	Dil. Factor:	2.0000	ALS Bottle#:	6
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM25B-8-35 | Lab Sample ID: 280-159137-3

Matrix: Water | Lab File ID: 022F2201.D

Analysis Method: RSK-175 | Date Collected: 02/25/2022 12:05

Sample wt/vol: 20(mL) | Date Analyzed: 03/02/2022 19:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567496 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	19		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\022F2201.D
Lims ID: 280-159137-I-3
Client ID: EW7-PM25B-8-35
Sample Type: Client
Inject. Date: 02-Mar-2022 19:01:35 ALS Bottle#: 22 Worklist Smp#: 48
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159137-I-3
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Mar-2022 11:19:41 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1669

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						E
1	1.255	1.262	-0.007	716534664	20371	E
2	1.655	1.670	-0.015	670635457	18574	
					RPD = 9.23	
3 Ethane						
1		1.517			ND	
2		3.022				
4 Ethylene						
1		1.789			ND	
2		2.604				
5 Propane						
1		2.545			ND	
2		4.927				
6 Acetylene						
1		4.050			ND	
2		2.750				
7 Butane						
1		4.412			ND	
2		6.427				
8 isobutylene						
1		5.314			ND	
2		6.269				

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

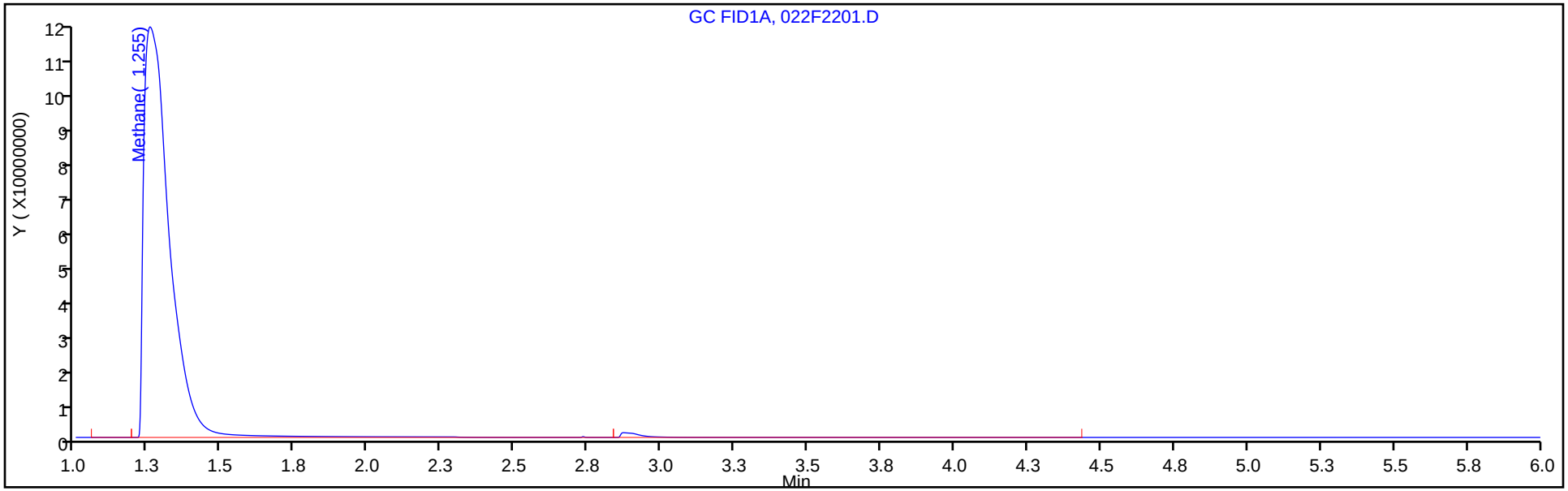
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Eurofins Denver

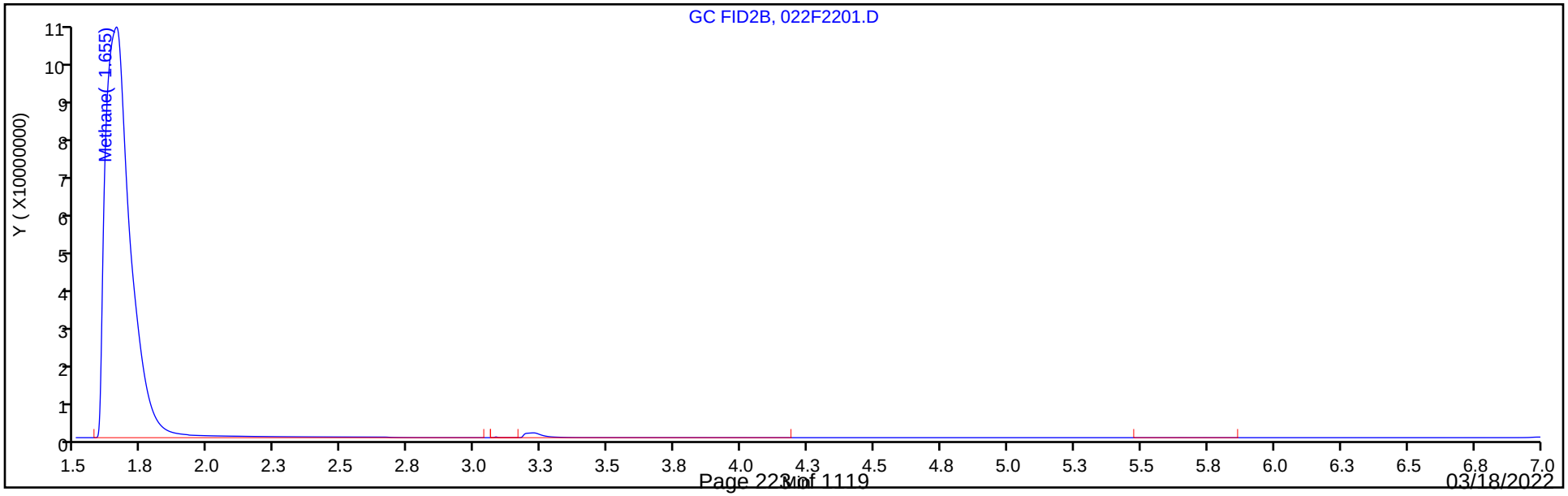
Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\022F2201.D

Injection Date:	02-Mar-2022 19:01:35	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159137-I-3	Lab Sample ID:	280-159137-3	Worklist Smp#:	48
Client ID:	EW7-PM25B-8-35				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM26A-8-25 | Lab Sample ID: 280-159137-4

Matrix: Water | Lab File ID: 023F2301.D

Analysis Method: RSK-175 | Date Collected: 02/25/2022 13:25

Sample wt/vol: 20(mL) | Date Analyzed: 03/02/2022 19:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567496 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	17		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\023F2301.D
Lims ID: 280-159137-I-4
Client ID: EW7-PM26A-8-25
Sample Type: Client
Inject. Date: 02-Mar-2022 19:14:47 ALS Bottle#: 23 Worklist Smp#: 49
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159137-I-4
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Mar-2022 11:19:41 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1669

First Level Reviewer: sciannac Date: 03-Mar-2022 11:15:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.253	1.262	-0.009	656514979	18665	
2	1.653	1.670	-0.017	623896324	17279	
					RPD = 7.71	
3 Ethane						
1		1.517			ND	
2		3.022				
4 Ethylene						
1		1.789			ND	
2		2.604				
5 Propane						
1		2.545			ND	
2		4.927				
6 Acetylene						
1		4.050			ND	
2		2.750				
7 Butane						
1		4.412			ND	
2		6.427				
8 isobutylene						
1		5.314			ND	
2		6.269				

QC Flag Legend

Processing Flags

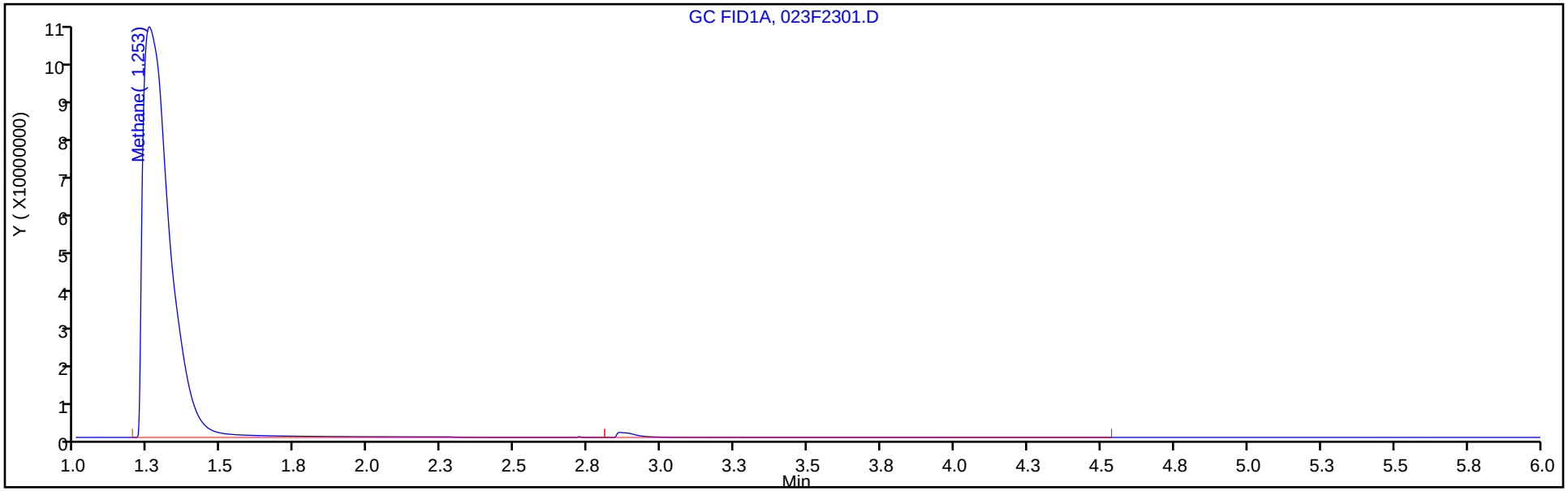
Report Date: 03-Mar-2022 11:19:43 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

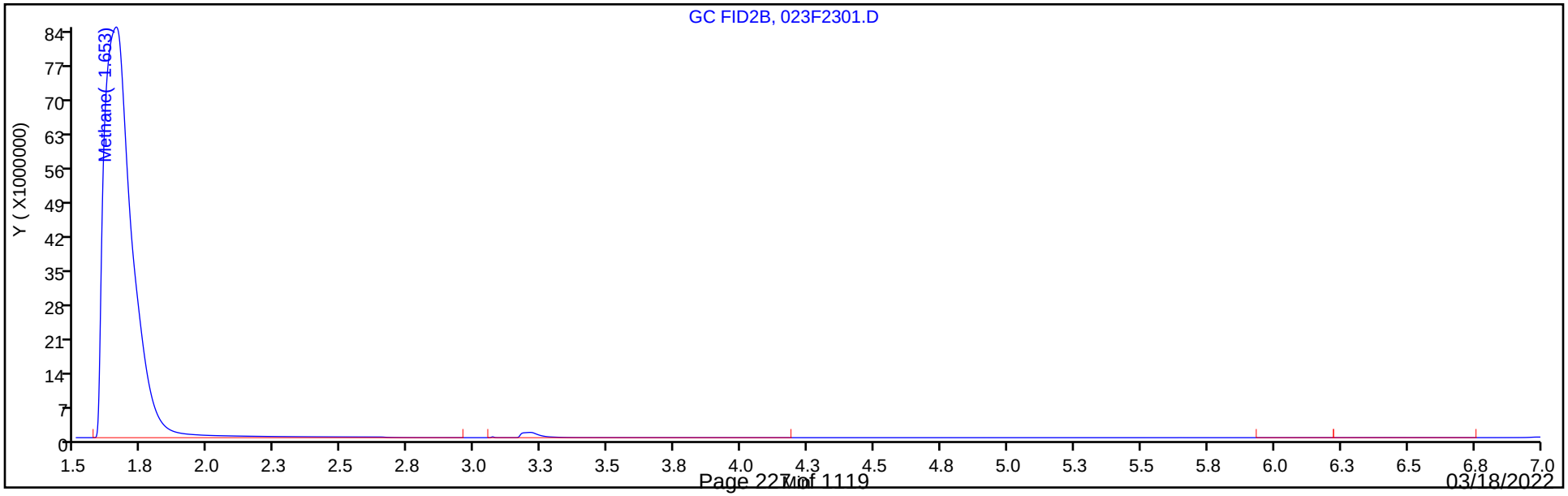
Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\023F2301.D

Injection Date:	02-Mar-2022 19:14:47	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159137-I-4	Lab Sample ID:	280-159137-4	Worklist Smp#:	49
Client ID:	EW7-PM26A-8-25				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM26B-8-35 | Lab Sample ID: 280-159137-5

Matrix: Water | Lab File ID: 006F0601.D

Analysis Method: RSK-175 | Date Collected: 02/25/2022 15:05

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 15:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	11		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\006F0601.D
Lims ID: 280-159137-H-5
Client ID: EW7-PM26B-8-35
Sample Type: Client
Inject. Date: 03-Mar-2022 15:30:00 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159137-H-5
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:54:31

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.257	1.262	-0.005	407859130	11595	
2	1.659	1.669	-0.010	379554318	10511	
					RPD = 9.80	
3 Ethane						
1		1.524			ND	
2		3.022				
4 Ethylene						
1		1.809			ND	
2		2.604				
5 Propane						
1		2.587			ND	
2		4.927				
6 Acetylene						
1		4.102			ND	
2		2.751				
7 Butane						
1		4.449			ND	
2		6.427				
8 isobutylene						
1		5.350			ND	
2		6.269				

QC Flag Legend

Processing Flags

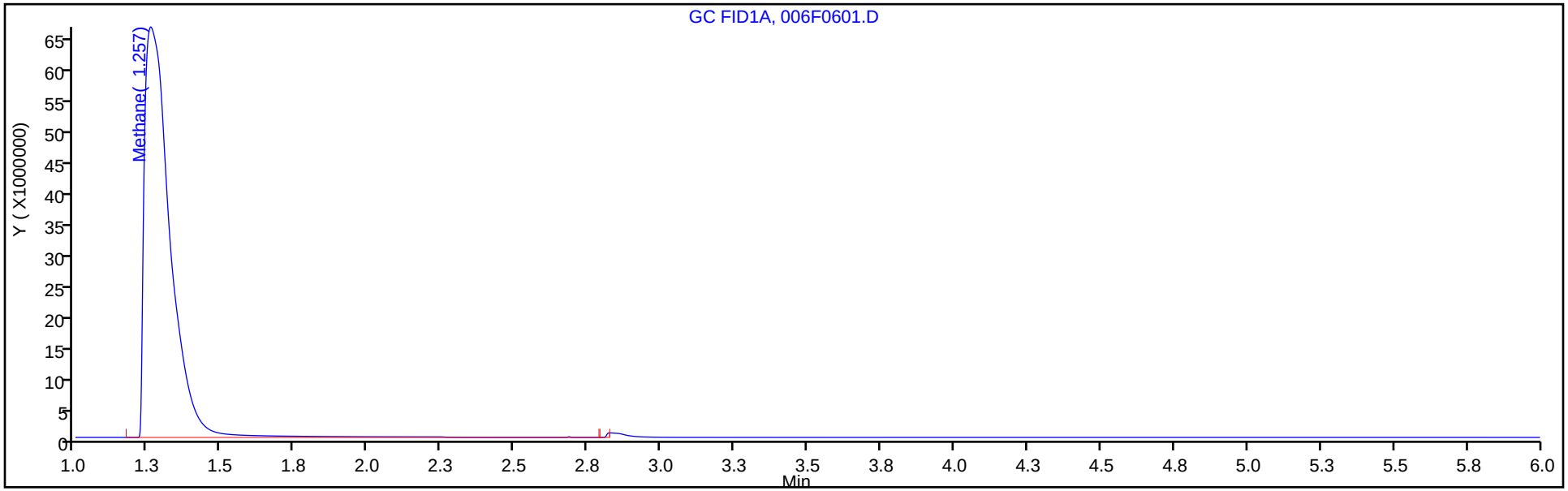
Report Date: 07-Mar-2022 13:05:11 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

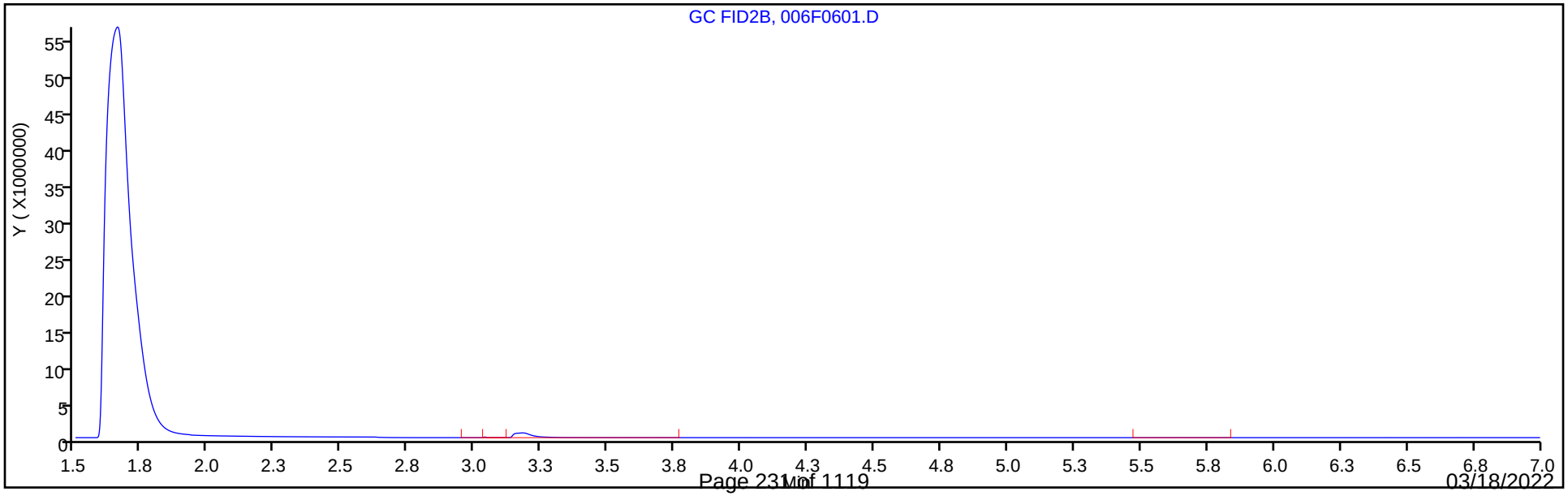
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\006F0601.D

Injection Date:	03-Mar-2022 15:30:00	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159137-H-5	Lab Sample ID:	280-159137-5	Worklist Smp#:	6
Client ID:	EW7-PM26B-8-35				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1 Analy Batch No.: 550959

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2021 13:28 Calibration End Date: 09/24/2021 15:12 Calibration ID: 58237

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-550959/2	004F0201.D
Level 2	IC 280-550959/3	005F0301.D
Level 3	IC 280-550959/4	006F0401.D
Level 4	IC 280-550959/5	007F0501.D
Level 5	IC 280-550959/6	008F0601.D
Level 6	IC 280-550959/7	009F0701.D
Level 7	IC 280-550959/9	010F0801.D
Level 8	IC 280-550959/10	011F0901.D
Level 9	IC 280-550959/11	012F1001.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9		RT WINDOW	AVG RT
Methane	1.292	1.293	1.293	1.295	1.295	1.294	1.293	1.292	1.288		1.259 - 1.339	1.293
Ethane	1.559	1.562	1.561	1.561	1.560	1.561					1.506 - 1.606	1.561
Ethylene	1.859	1.867	1.870	1.870	1.873	1.873					1.794 - 1.894	1.869
Acetylene	4.184	4.213	4.226	4.230	4.230	4.228					4.150 - 4.310	4.219

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-159137-1 Analy Batch No.: 550959

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2021 13:28 Calibration End Date: 09/24/2021 15:12 Calibration ID: 58237

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-550959/2	004F0201.D
Level 2	IC 280-550959/3	005F0301.D
Level 3	IC 280-550959/4	006F0401.D
Level 4	IC 280-550959/5	007F0501.D
Level 5	IC 280-550959/6	008F0601.D
Level 6	IC 280-550959/7	009F0701.D
Level 7	IC 280-550959/9	010F0801.D
Level 8	IC 280-550959/10	011F0901.D
Level 9	IC 280-550959/11	012F1001.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	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								
Methane	113753 36593 34286	77207 30893	37613 37193	37343 37763	Lin2	65341.4749	35170.8362							0.9950		0.9900
Ethane	30155 35527	35278 30441	32231	35816	Ave		33241.2722				7.9		20.0			
Ethylene	33189 37346	37318 31937	33977	37589	Ave		35225.9675				7.1		20.0			
Acetylene	26445 29412	29909 25729	27524	29815	Ave		28139.0195				6.5		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-159137-1 Analy Batch No.: 550959

SDG No.:

Instrument ID: VGC_J GC Column: Rt-Alumina ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2021 13:28 Calibration End Date: 09/24/2021 15:12 Calibration ID: 58237

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-550959/2	004F0201.D
Level 2	IC 280-550959/3	005F0301.D
Level 3	IC 280-550959/4	006F0401.D
Level 4	IC 280-550959/5	007F0501.D
Level 5	IC 280-550959/6	008F0601.D
Level 6	IC 280-550959/7	009F0701.D
Level 7	IC 280-550959/9	010F0801.D
Level 8	IC 280-550959/10	011F0901.D
Level 9	IC 280-550959/11	012F1001.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Methane	Lin2	93424 8118988	126818 60484705	494257 245647963	2453548 669092603	4808571	0.821 263	1.64 1626	13.1 6505	65.7 19515	131
Ethane	Ave	46427 14997572	108631	793971	4411499	8751636	1.54 493	3.08	24.6	123	246
Ethylene	Ave	47667 14678124	107197	780792	4318968	8582166	1.44 460	2.87	23.0	115	230
Acetylene	Ave	35261 10977943	79761	587204	3180347	6274725	1.33 427	2.67	21.3	107	213

Curve Type Legend

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Sep-2021 13:28:57 ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:12 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 13:57:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.292	1.299	-0.007	93424	0.8213	0.7985	a
2	1.689	1.686	0.003	91227	0.8213	0.7920	a
						RPD = 0.81	
3 Ethane							a
1	1.559	1.556	0.003	46427	1.54	1.40	a
2	3.032	3.028	0.004	46984	1.54	1.41	a
						RPD = 0.77	
4 Ethylene							a
1	1.859	1.844	0.015	47667	1.44	1.35	a
2	2.612	2.609	0.003	41226	1.44	1.33	a
						RPD = 1.67	
5 Propane							a
1	2.682	2.721	-0.039	76526	2.26	2.13	a
2	4.937	4.929	0.008	73050	2.26	2.09	a
						RPD = 1.83	
6 Acetylene							a
1	4.184	4.230	-0.046	35261	1.33	1.25	a
2	2.759	2.746	0.013	41503	1.33	1.21	a
						RPD = 3.15	
7 Butane							Ma
1	4.555	4.528	0.027	101912	2.98	2.80	a
2	6.435	6.426	0.009	95155	2.98	2.71	M
						RPD = 3.27	
8 isobutylene							Ma
1	5.437	5.403	0.034	92868	2.87	2.57	M
2	6.277	6.274	0.003	91569	2.87	2.76	a
						RPD = 7.02	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 2.50 Units: uL

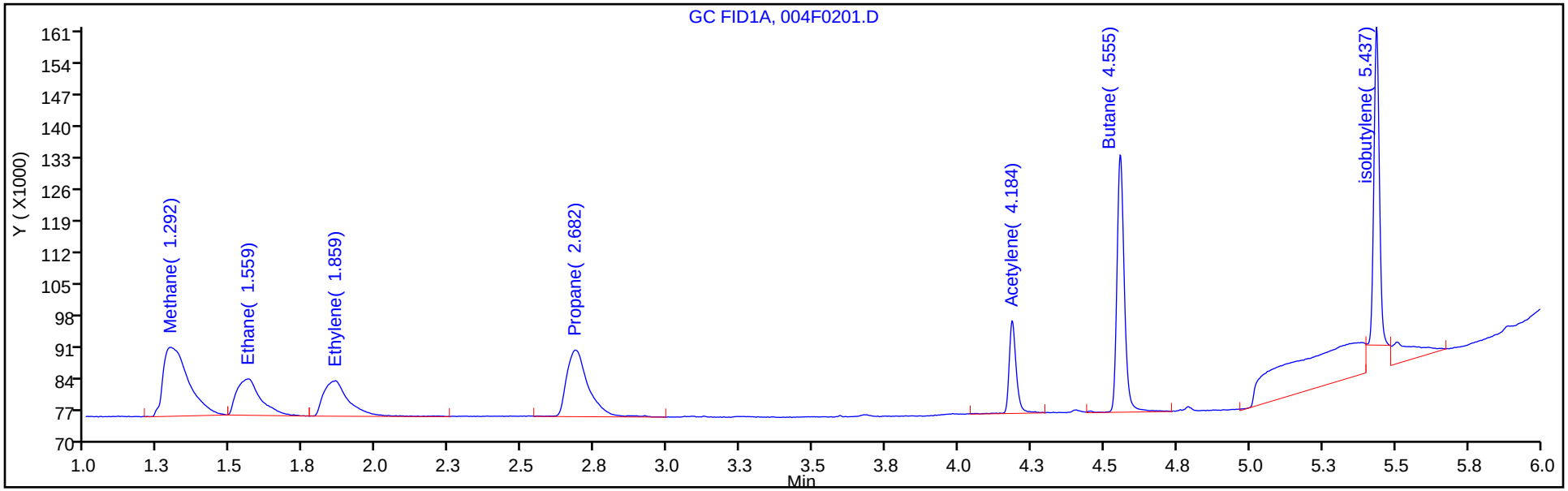
Report Date: 29-Sep-2021 10:55:12 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

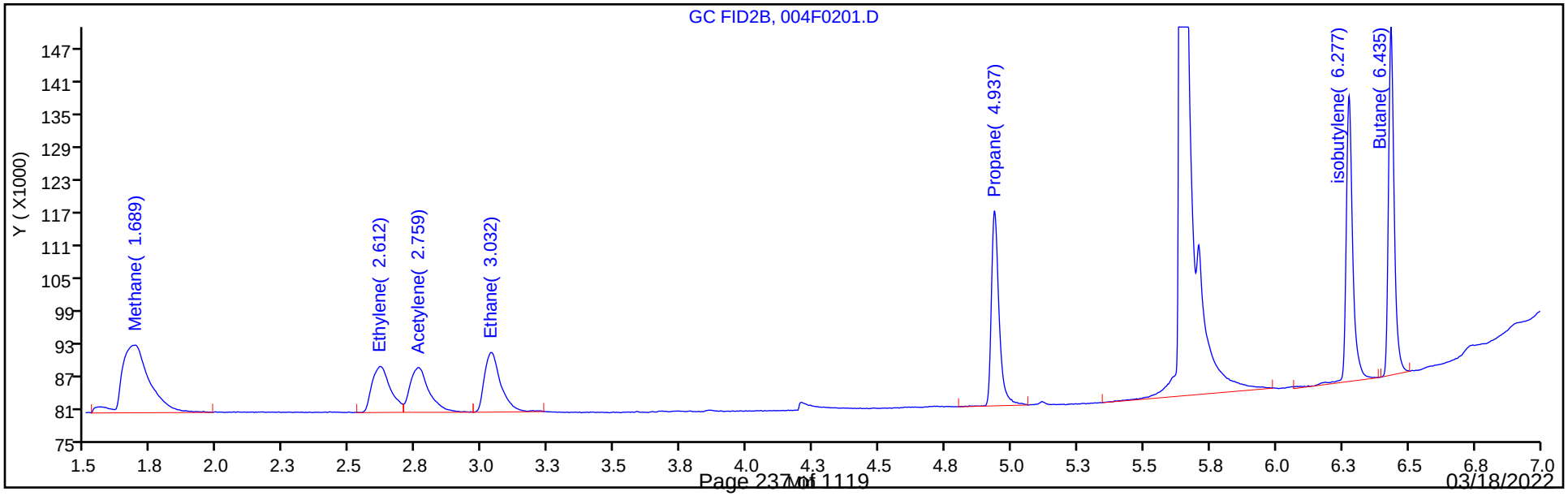
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Injection Date:	24-Sep-2021 13:28:57	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

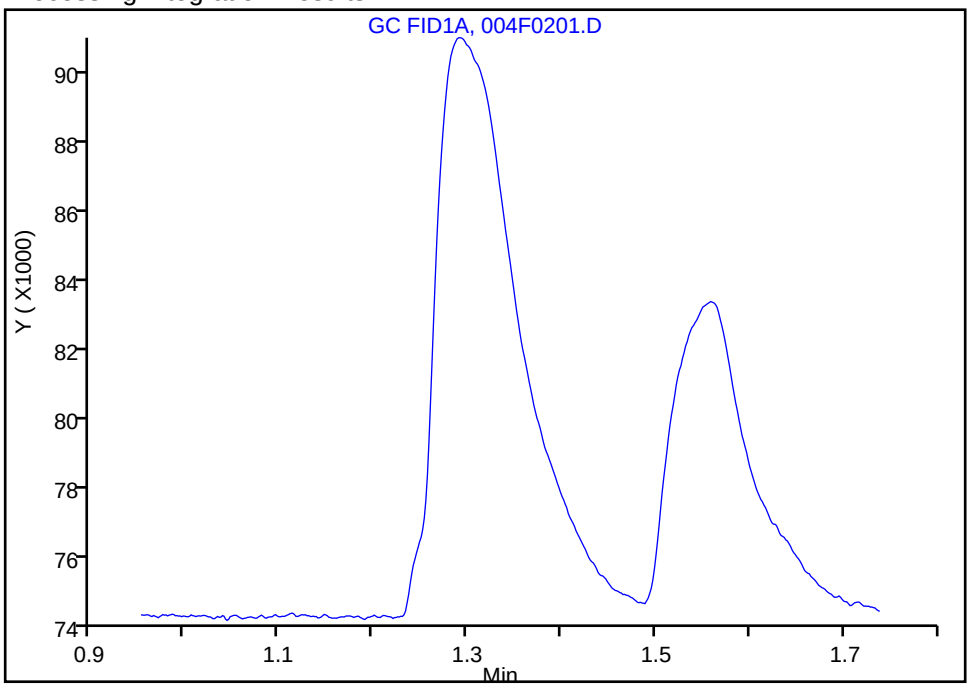
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D				
Injection Date:	24-Sep-2021 13:28:57	Instrument ID:	VGC_J		
Lims ID:	ic				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	4	Worklist Smp#:	2
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

2 Methane, CAS: 74-82-8

Signal: 1

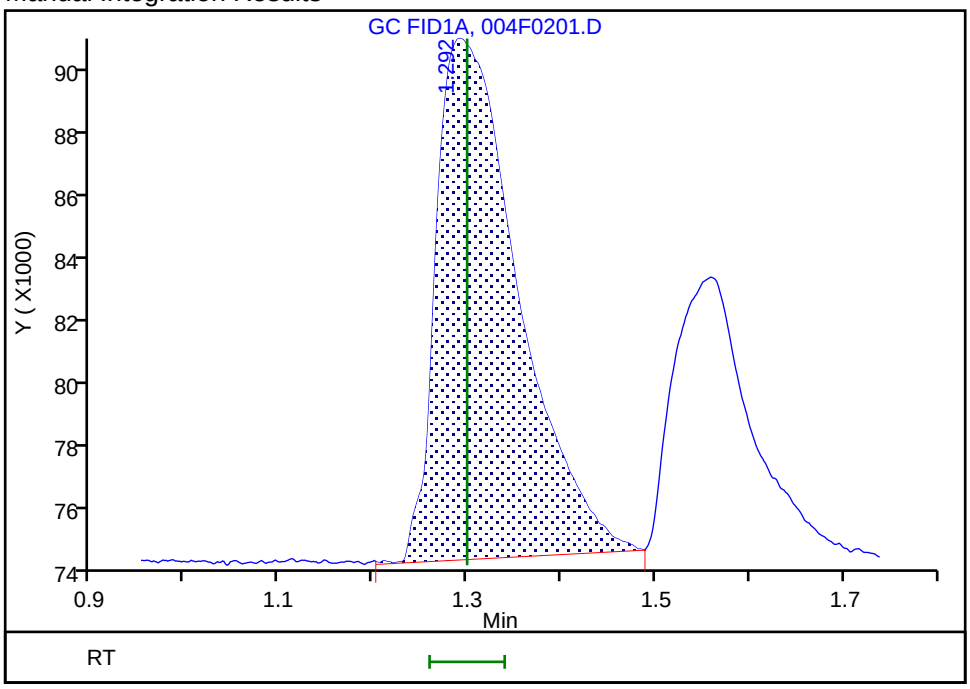
Not Detected
Expected RT: 1.30

Processing Integration Results



Manual Integration Results

RT: 1.29
Area: 93424
Amount: 0.798461
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:54:22
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

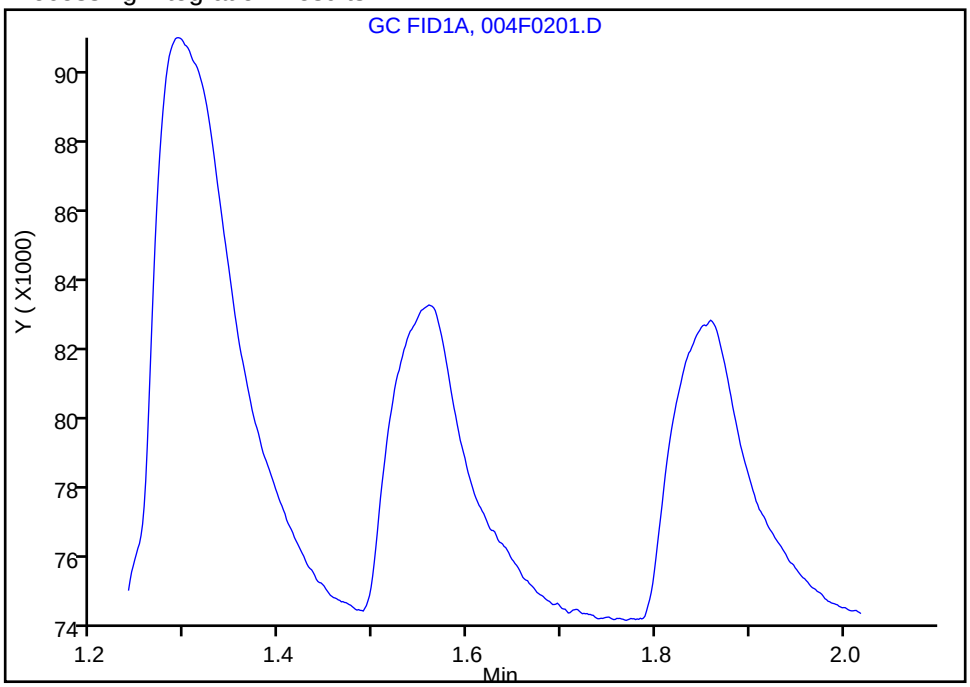
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

3 Ethane, CAS: 74-84-0

Signal: 1

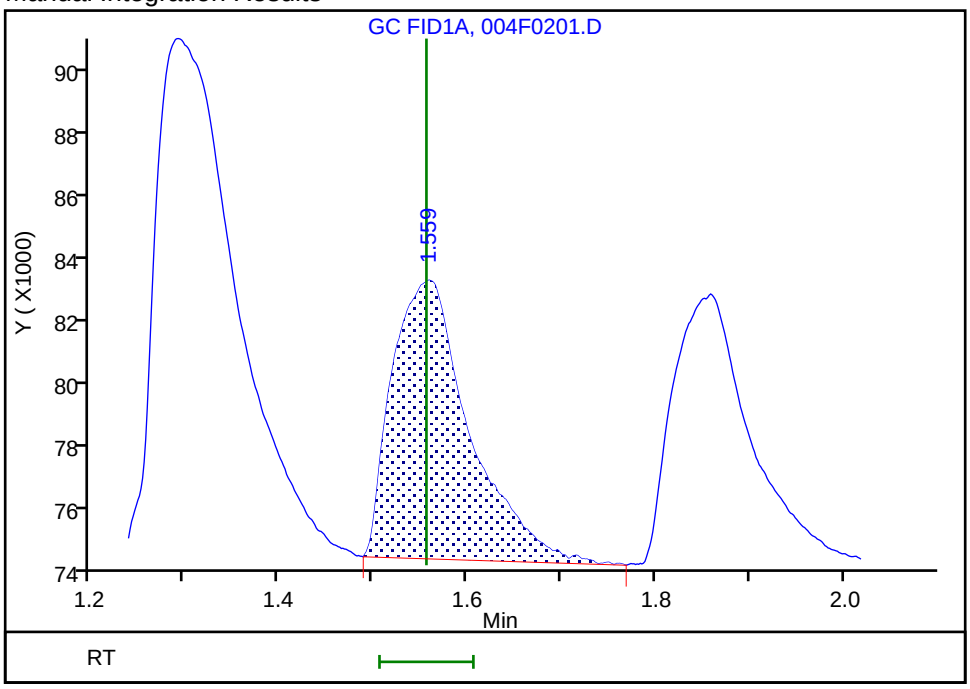
Not Detected
Expected RT: 1.56

Processing Integration Results



Manual Integration Results

RT: 1.56
Area: 46427
Amount: 1.396667
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:54:28
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

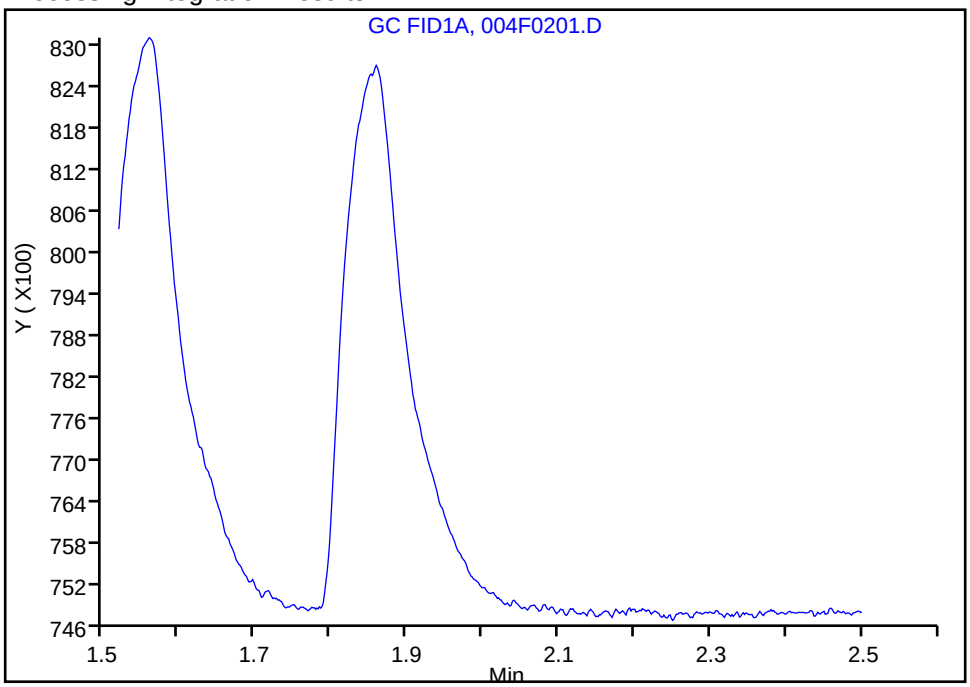
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

4 Ethylene, CAS: 74-85-1

Signal: 1

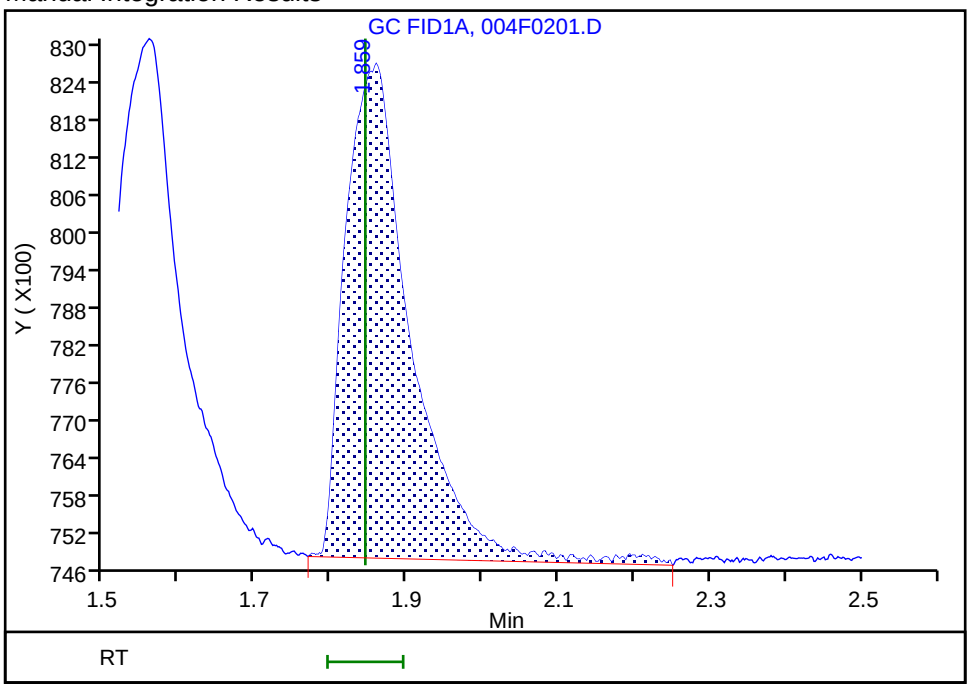
Not Detected
Expected RT: 1.84

Processing Integration Results



Manual Integration Results

RT: 1.86
Area: 47667
Amount: 1.353178
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:54:47
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

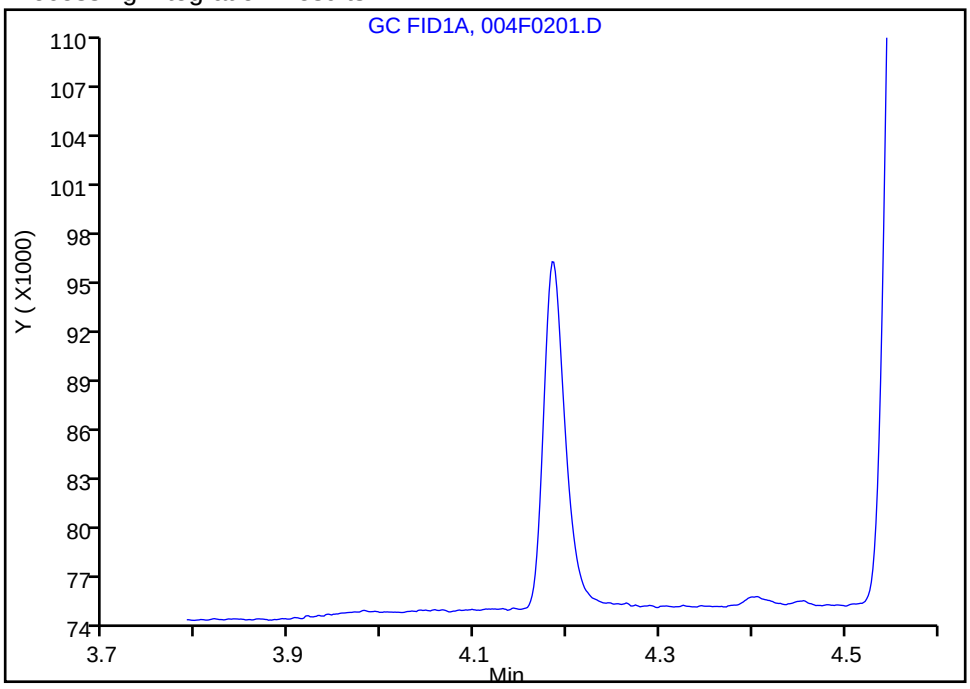
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

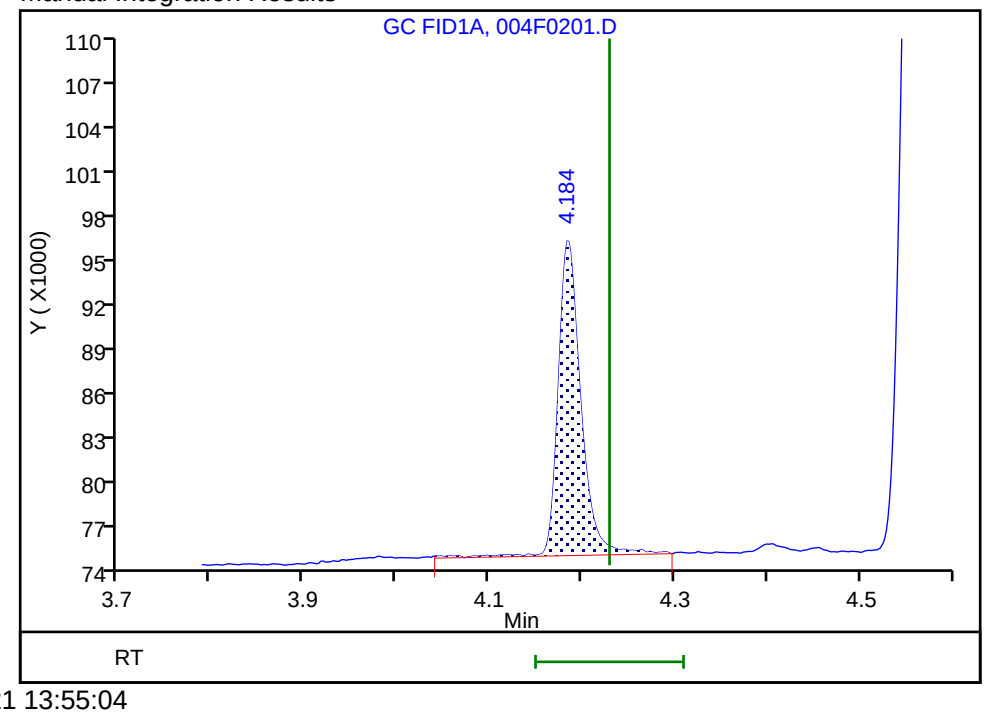
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.18
Area: 35261
Amount: 1.253100
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:55:04
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\005F0301.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Sep-2021 13:41:52 ALS Bottle#: 5 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:13 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 13:58:34

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.293	1.299	-0.006	126818	1.64	1.75	
2	1.686	1.686	0.000	126529	1.64	1.77	
						RPD = 1.24	
3 Ethane							
1	1.562	1.556	0.006	108631	3.08	3.27	
2	3.031	3.028	0.003	107446	3.08	3.22	
						RPD = 1.52	
4 Ethylene							
1	1.867	1.844	0.023	107197	2.87	3.04	
2	2.613	2.609	0.004	95159	2.87	3.07	
						RPD = 0.93	
5 Propane							
1	2.700	2.721	-0.021	174390	4.52	4.84	
2	4.935	4.929	0.006	170185	4.52	4.86	
						RPD = 0.37	
6 Acetylene							
1	4.213	4.230	-0.017	79761	2.67	2.83	
2	2.756	2.746	0.010	94797	2.67	2.77	
						RPD = 2.17	
7 Butane							Ma
1	4.575	4.528	0.047	232737	5.95	6.39	a
2	6.435	6.426	0.009	221865	5.95	6.31	M
						RPD = 1.20	
8 isobutylene							Ma
1	5.457	5.403	0.054	232885	5.75	6.45	
2	6.276	6.274	0.002	200266	5.75	6.03	M
						RPD = 6.65	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 5.00 Units: uL

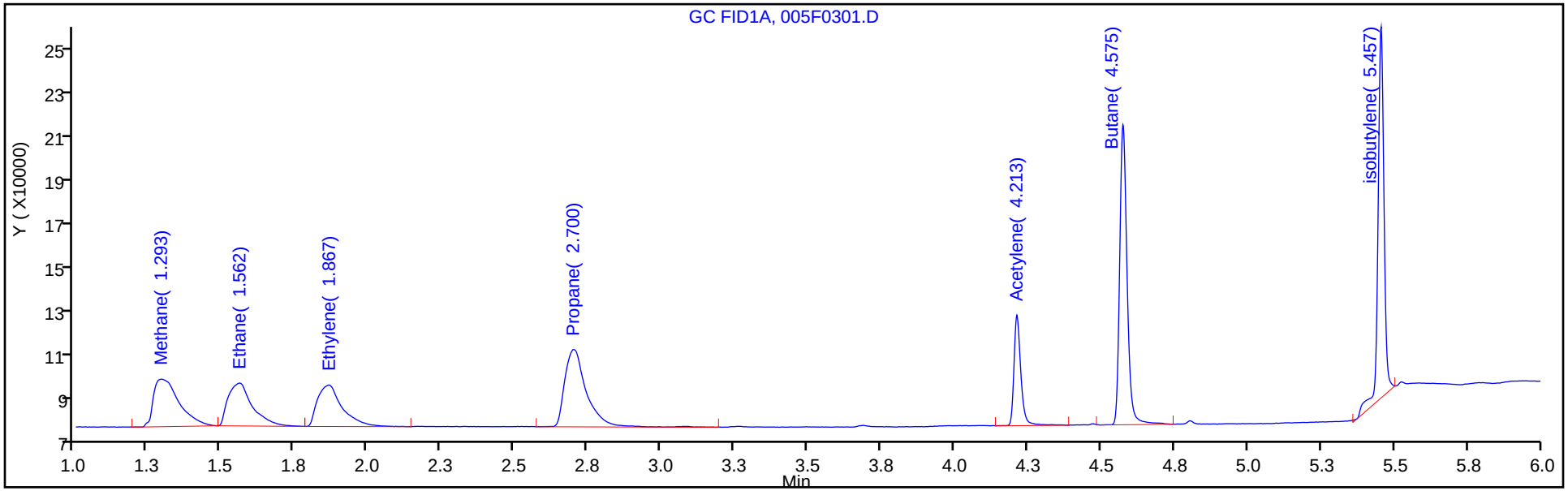
Report Date: 29-Sep-2021 10:55:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

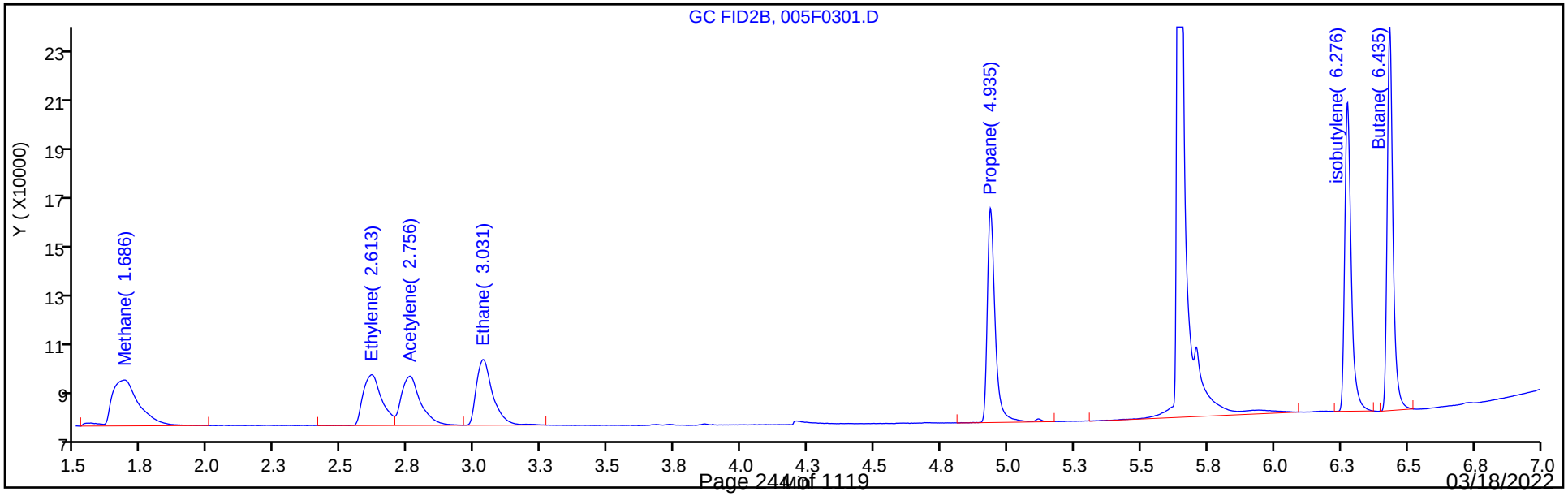
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\005F0301.D

Injection Date:	24-Sep-2021 13:41:52	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	3
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 24-Sep-2021 13:54:46 ALS Bottle#: 6 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:14 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:51:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.293	1.299	-0.006	494257	13.1	12.2	
2	1.684	1.686	-0.002	509129	13.1	12.4	
						RPD = 1.40	
3 Ethane							
1	1.561	1.556	0.005	793971	24.6	23.9	
2	3.029	3.028	0.001	803791	24.6	24.1	
						RPD = 0.81	
4 Ethylene							
1	1.870	1.844	0.026	780792	23.0	22.2	
2	2.609	2.609	0.000	687818	23.0	22.2	
						RPD = 0.16	
5 Propane							
1	2.711	2.721	-0.010	1259121	36.1	35.0	
2	4.934	4.929	0.005	1221976	36.1	34.9	
						RPD = 0.18	
6 Acetylene							a
1	4.226	4.230	-0.004	587204	21.3	20.9	a
2	2.753	2.746	0.007	713476	21.3	20.9	a
						RPD = 0.03	
7 Butane							Ma
1	4.586	4.528	0.058	1686797	47.6	46.3	a
2	6.433	6.426	0.007	1612366	47.6	45.9	M
						RPD = 0.93	
8 isobutylene							Ma
1	5.465	5.403	0.062	1589725	46.0	44.0	
2	6.274	6.274	0.000	1464027	46.0	44.1	M
						RPD = 0.20	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 40.00 Units: uL

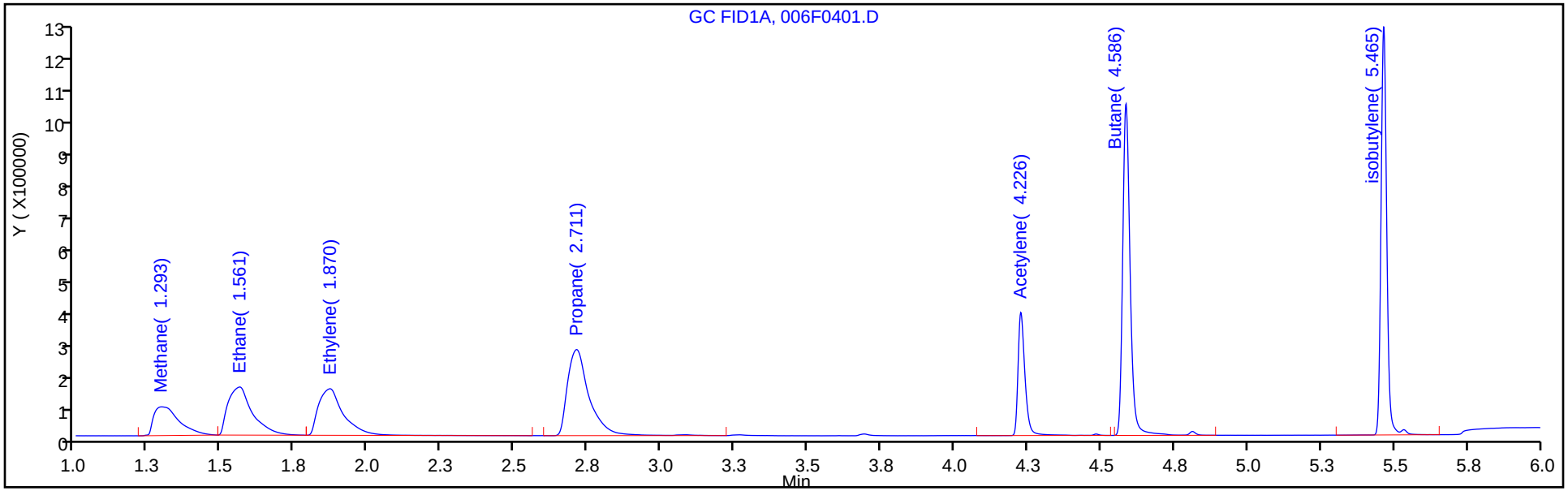
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

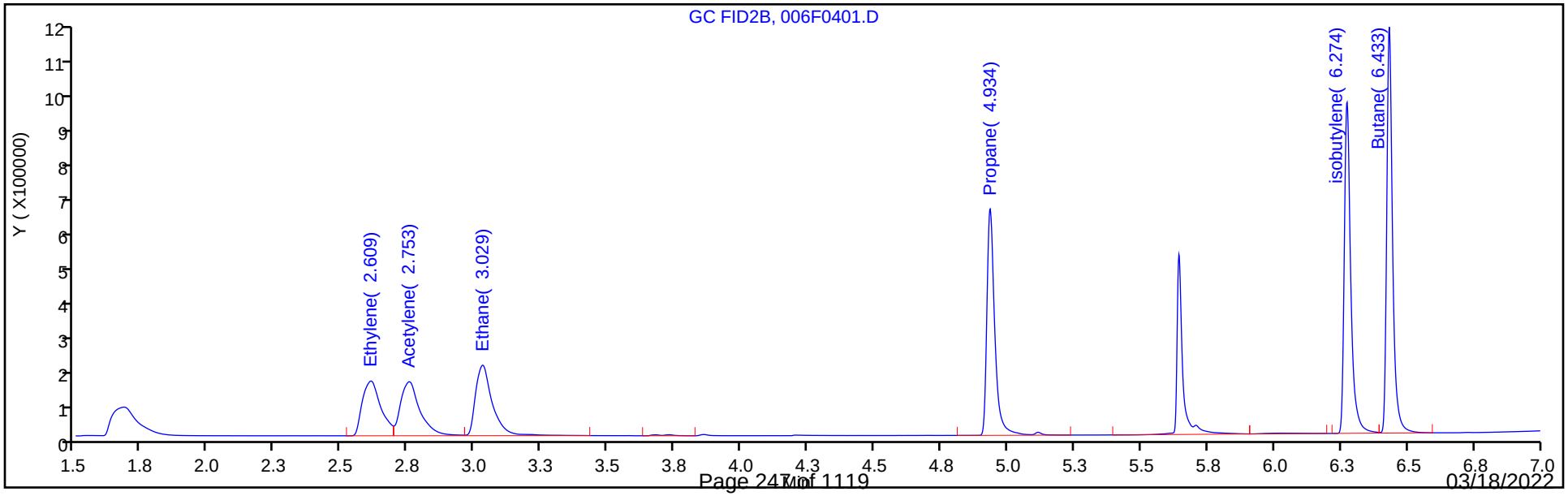
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D

Injection Date:	24-Sep-2021 13:54:46	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

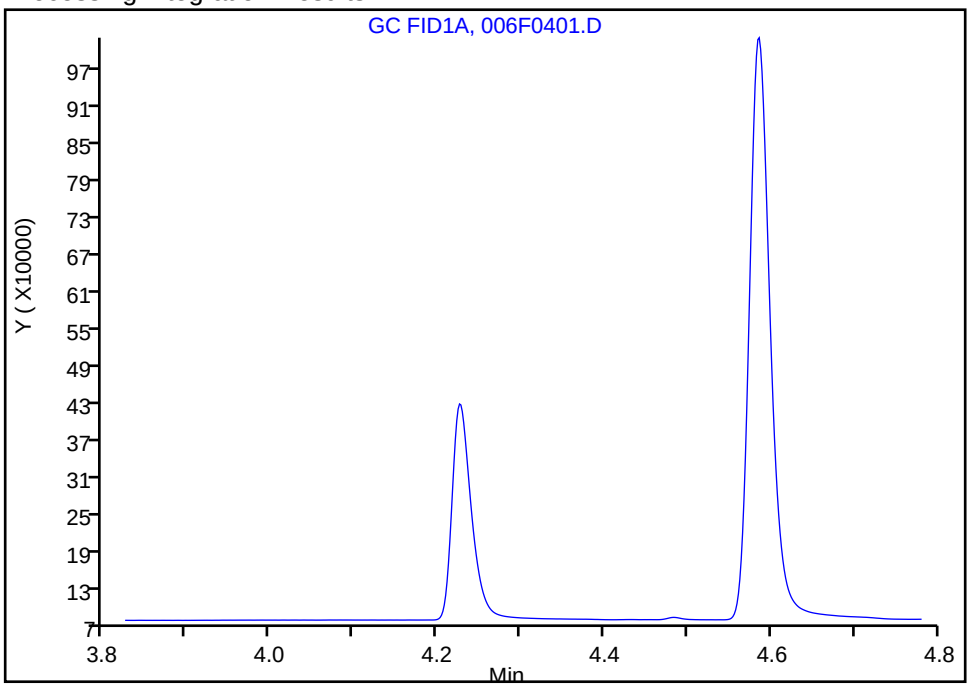
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D
Injection Date: 24-Sep-2021 13:54:46 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 6 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

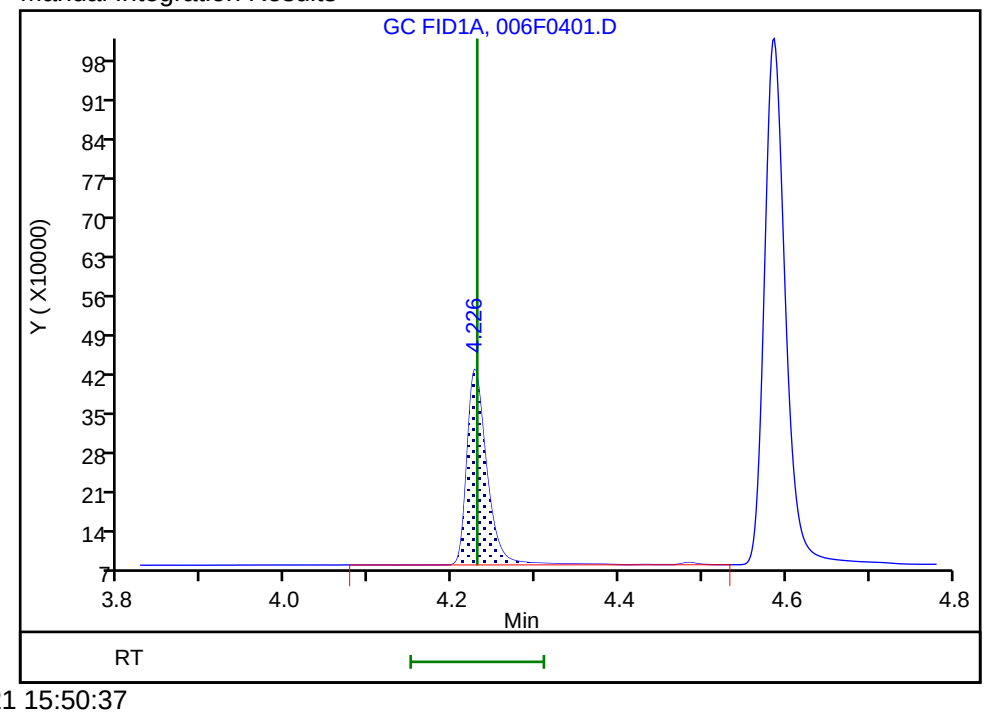
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 587204
Amount: 20.867962
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:50:37
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 24-Sep-2021 14:07:45 ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:14 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:50:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.295	1.295	0.000	2453548	65.7	67.9	
2	1.681	1.681	0.000	2553566	65.7	69.0	
						RPD = 1.60	
3 Ethane							Ma
1	1.561	1.561	0.000	4411499	123.2	132.7	
2	3.026	3.026	0.000	4450065	123.2	133.3	M
						RPD = 0.45	
4 Ethylene							
1	1.870	1.870	0.000	4318968	114.9	122.6	
2	2.608	2.608	0.000	3812973	114.9	123.1	
						RPD = 0.38	
5 Propane							
1	2.716	2.716	0.000	6962772	180.6	193.4	
2	4.933	4.933	0.000	6754582	180.6	192.9	
						RPD = 0.22	
6 Acetylene							a
1	4.230	4.230	0.000	3180347	106.7	113.0	a
2	2.751	2.751	0.000	3899802	106.7	114.1	a
						RPD = 0.95	
7 Butane							
1	4.590	4.590	0.000	9255328	238.1	254.1	
2	6.430	6.430	0.000	8939530	238.1	254.4	
						RPD = 0.11	
8 isobutylene							
1	5.468	5.468	0.000	8777969	229.8	243.0	
2	6.271	6.271	0.000	8052089	229.8	242.5	
						RPD = 0.20	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

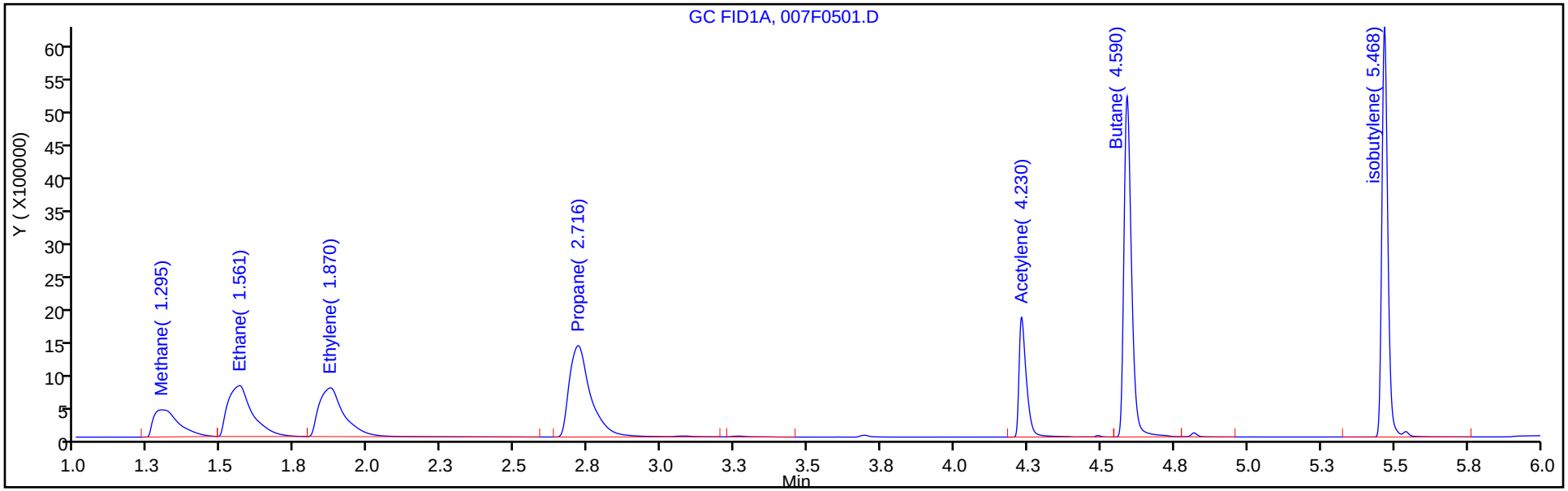
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

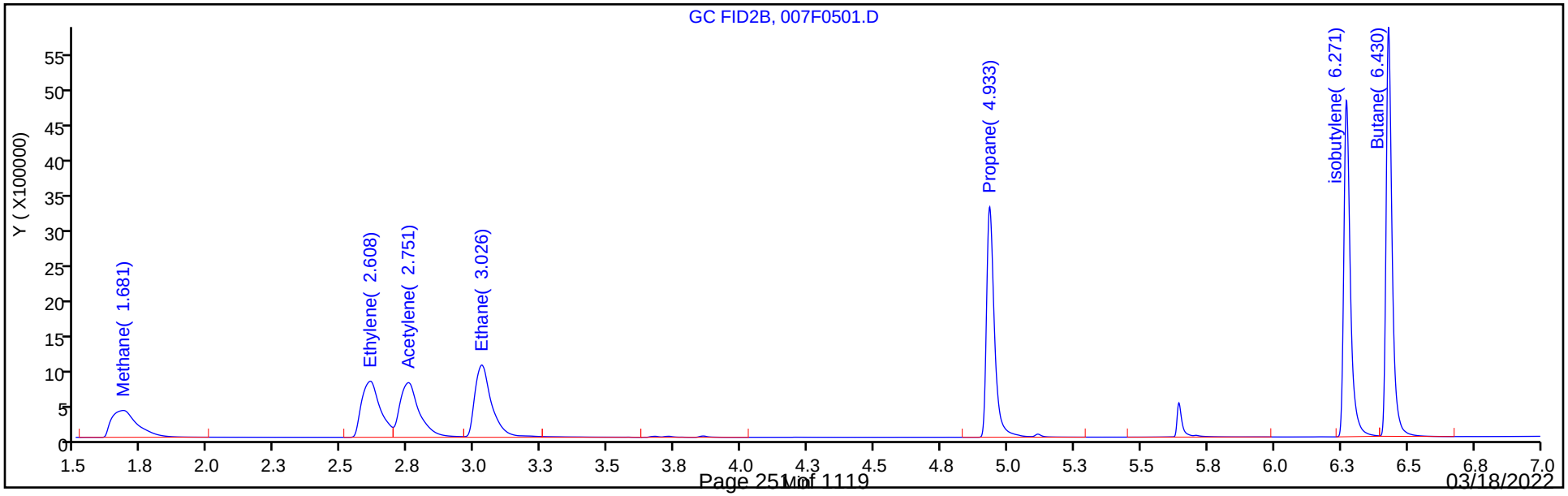
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D

Injection Date:	24-Sep-2021 14:07:45	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	5
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

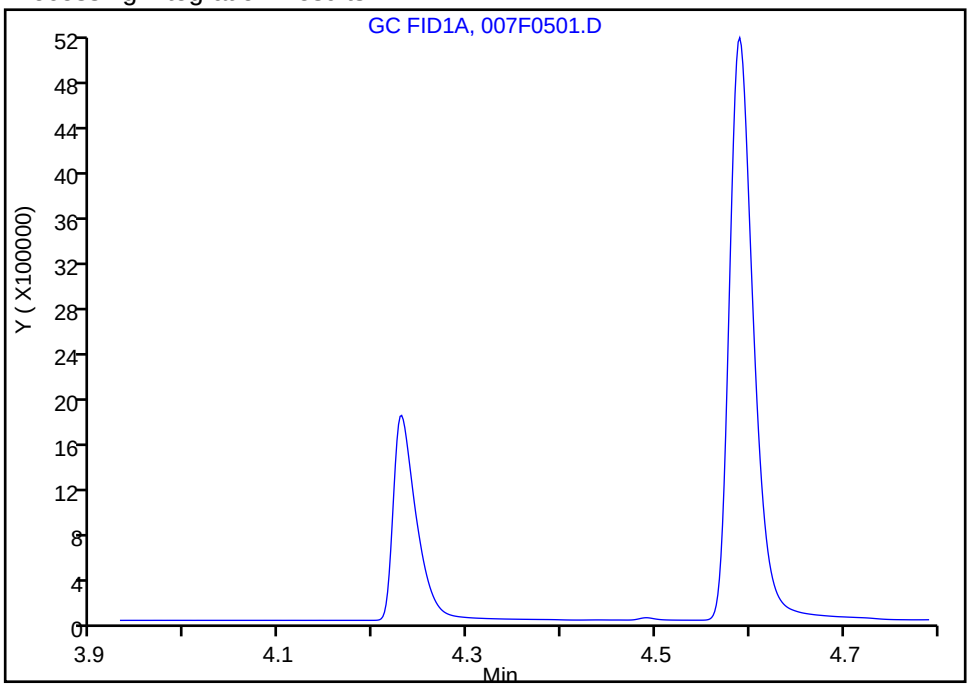
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

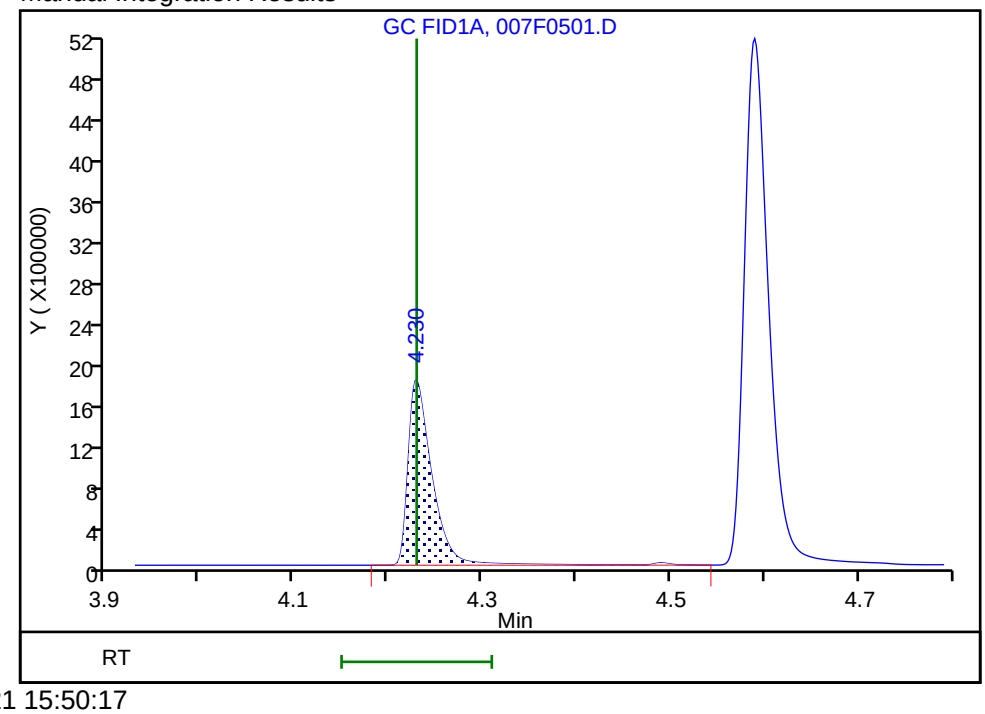
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 3180347
Amount: 113.0227
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:50:17
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-Sep-2021 14:20:44 ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:15 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:46:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							M
1	1.295	1.295	0.000	4808571	131.4	134.9	
2	1.678	1.678	0.000	5065048	131.4	138.6	M
						RPD = 2.70	
3 Ethane							
1	1.560	1.560	0.000	8751636	246.3	263.3	
2	3.023	3.023	0.000	8976911	246.3	268.9	
						RPD = 2.12	
4 Ethylene							
1	1.873	1.873	0.000	8582166	229.8	243.6	
2	2.603	2.603	0.000	7548044	229.8	243.6	
						RPD = 0.00	
5 Propane							M
1	2.721	2.721	0.000	13578180	361.3	377.1	M
2	4.929	4.929	0.000	13344347	361.3	381.1	
						RPD = 1.08	
6 Acetylene							a
1	4.230	4.230	0.000	6274725	213.3	223.0	a
2	2.746	2.746	0.000	7865310	213.3	230.1	a
						RPD = 3.15	
7 Butane							Ma
1	4.591	4.591	0.000	18468578	476.1	507.1	a
2	6.426	6.426	0.000	17766895	476.1	505.6	M
						RPD = 0.29	
8 isobutylene							Ma
1	5.468	5.468	0.000	17314841	459.7	479.3	
2	6.269	6.269	0.000	15966351	459.7	480.9	M
						RPD = 0.33	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 400.00 Units: uL

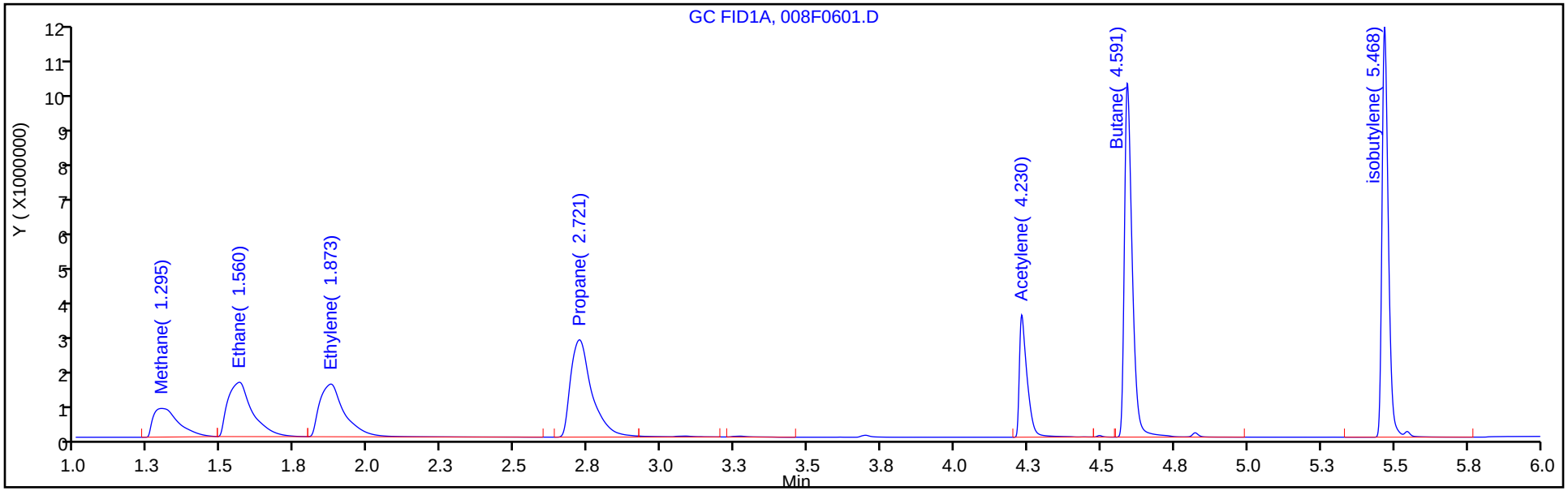
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

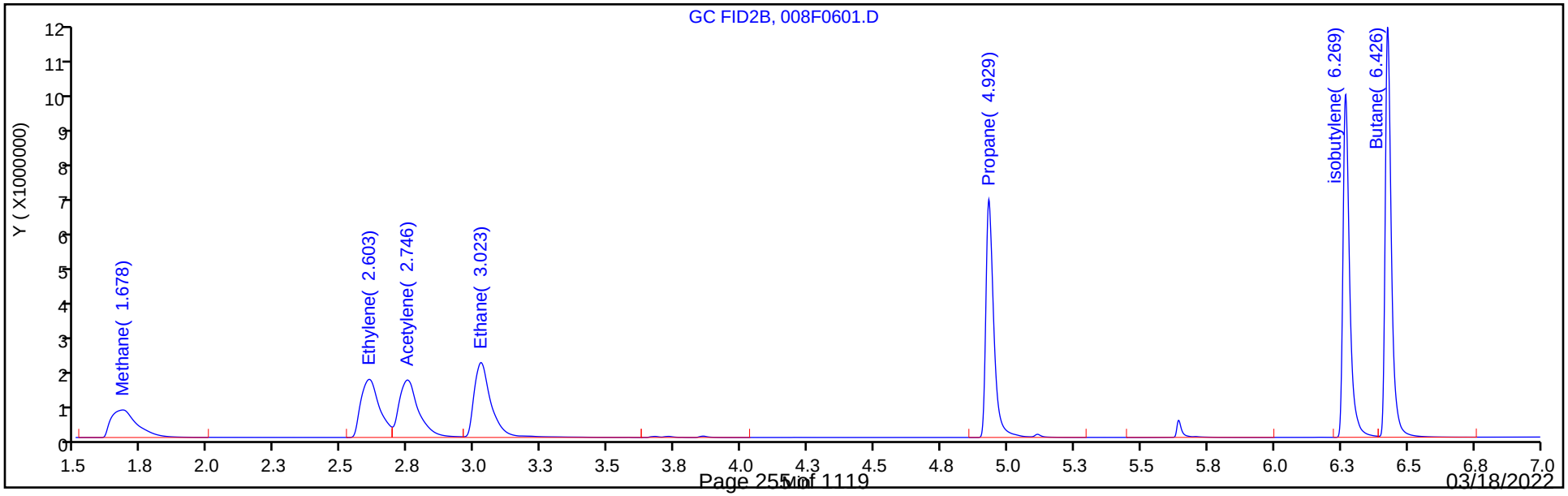
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D

Injection Date:	24-Sep-2021 14:20:44	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	6
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

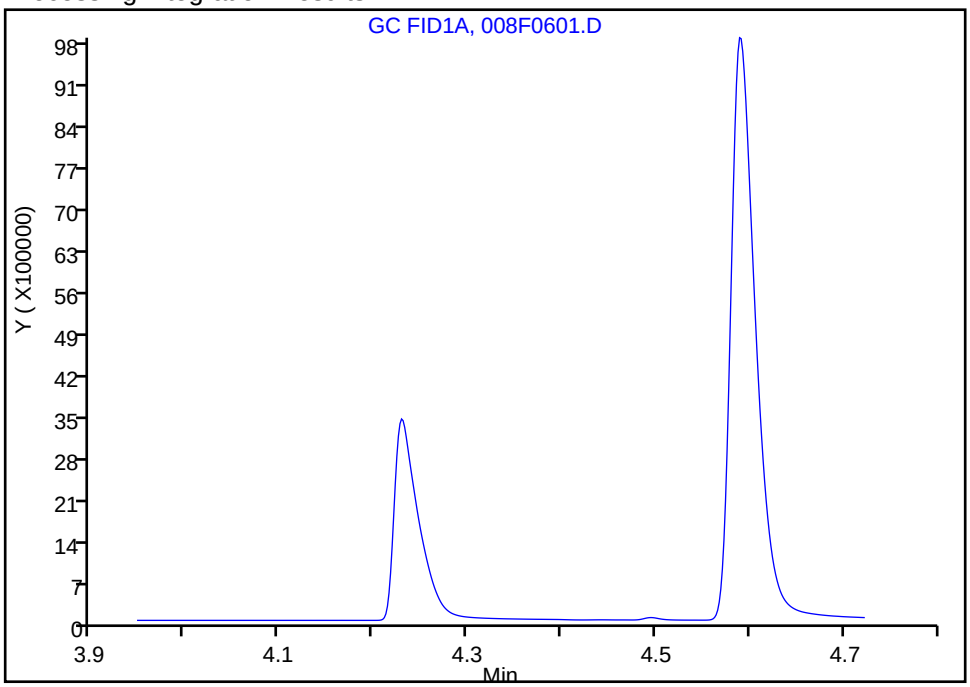
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Injection Date: 24-Sep-2021 14:20:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

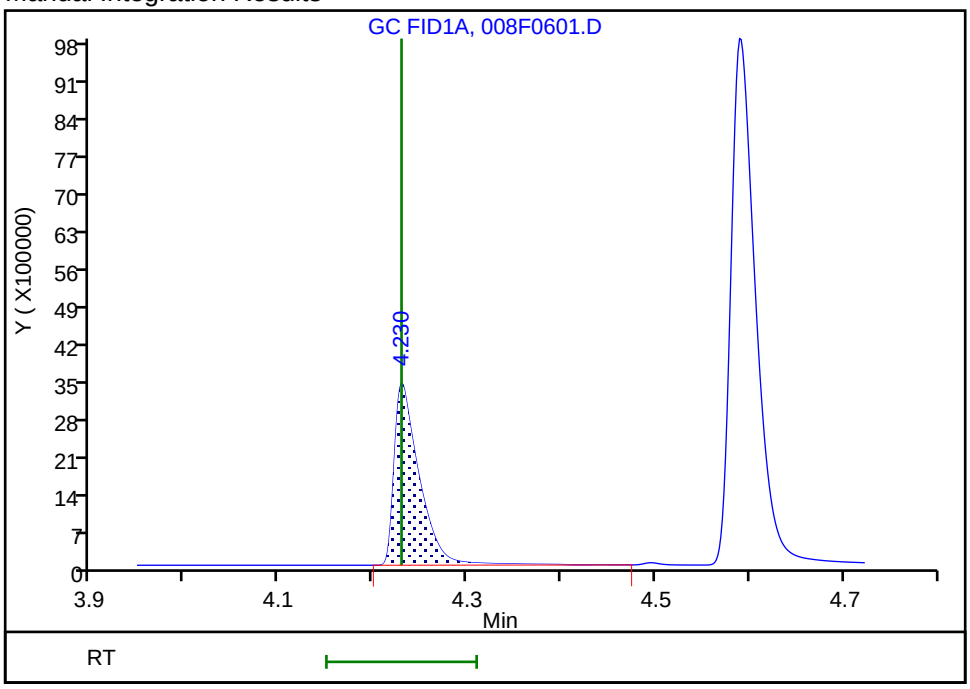
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 6274725
Amount: 222.9902
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:44:55
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-Sep-2021 14:33:44 ALS Bottle#: 9 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:16 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:47:03

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.294	1.295	-0.001	8118988	262.8	229.0	
2	1.678	1.678	0.000	8455607	262.8	232.5	
						RPD = 1.51	
3 Ethane							
1	1.561	1.560	0.001	14997572	492.7	451.2	
2	3.021	3.023	-0.002	14625440	492.7	438.1	
						RPD = 2.94	
4 Ethylene							
1	1.873	1.873	0.000	14678124	459.6	416.7	
2	2.602	2.603	-0.001	12909086	459.6	416.7	
						RPD = 0.00	
5 Propane							
1	2.723	2.721	0.002	23539538	722.6	653.7	
2	4.926	4.929	-0.003	23034734	722.6	657.9	
						RPD = 0.65	
6 Acetylene							a
1	4.228	4.230	-0.002	10977943	426.7	390.1	a
2	2.746	2.746	0.000	13452620	426.7	393.6	a
						RPD = 0.88	
7 Butane							Ma
1	4.588	4.591	-0.003	30555104	952.3	838.9	a
2	6.423	6.426	-0.003	31281741	952.3	890.2	M
						RPD = 5.93	
8 isobutylene							Ma
1	5.466	5.468	-0.002	30754275	919.4	851.3	
2	6.266	6.269	-0.003	28385241	919.4	854.9	M
						RPD = 0.42	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 800.00 Units: uL

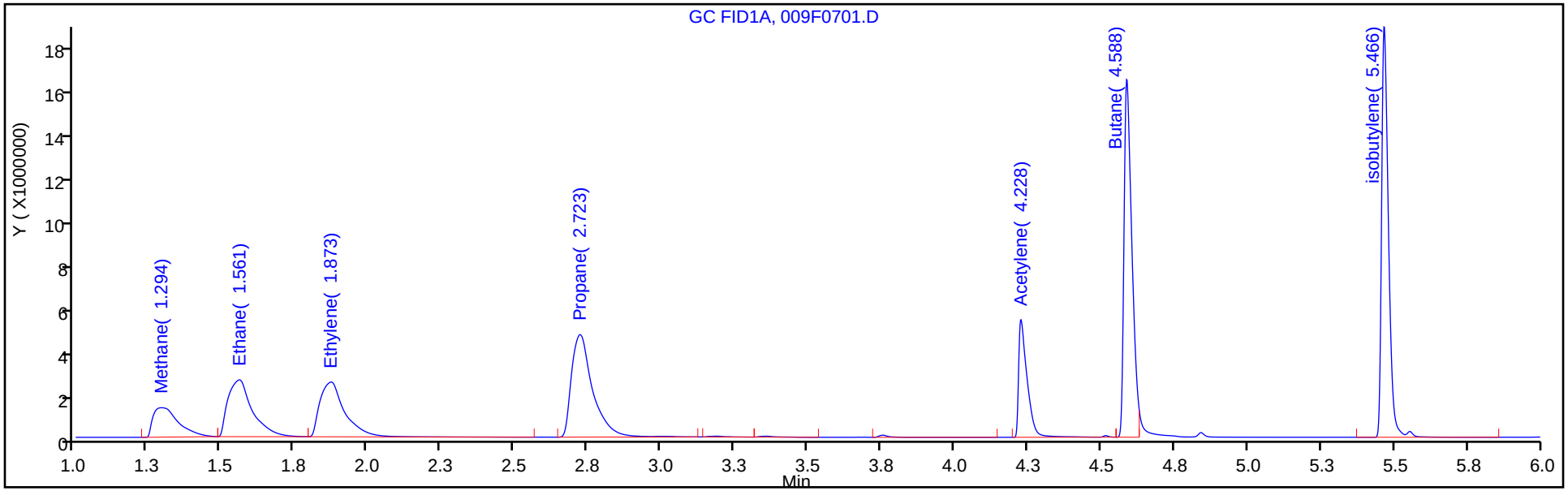
Report Date: 29-Sep-2021 10:55:16 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

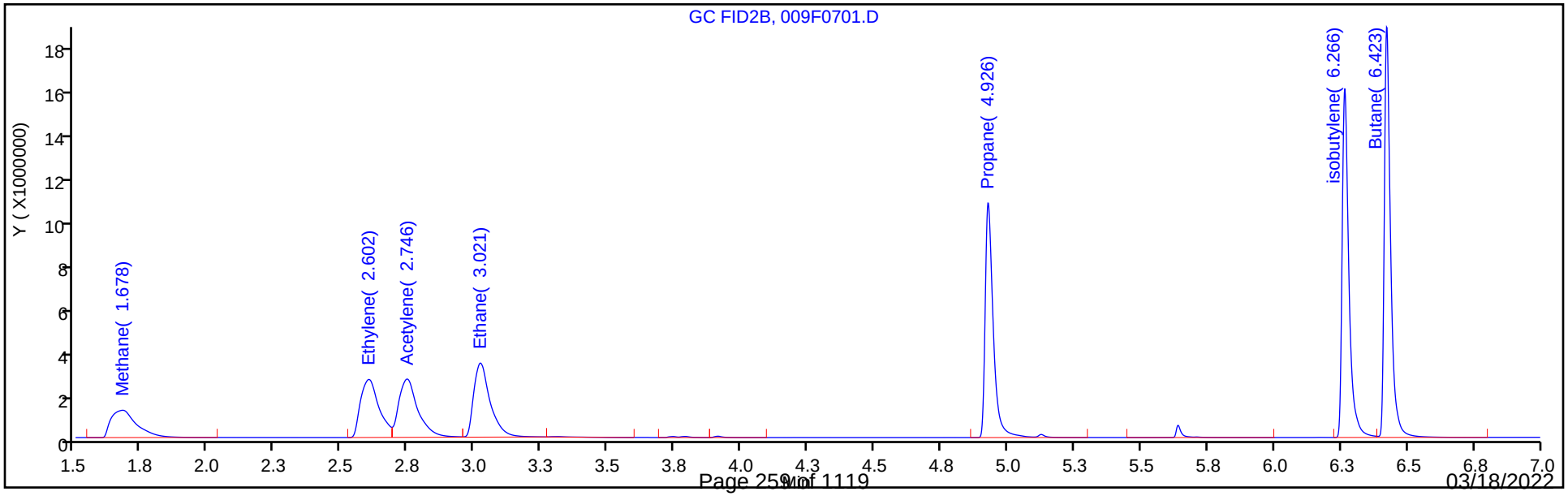
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D

Injection Date:	24-Sep-2021 14:33:44	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	7
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

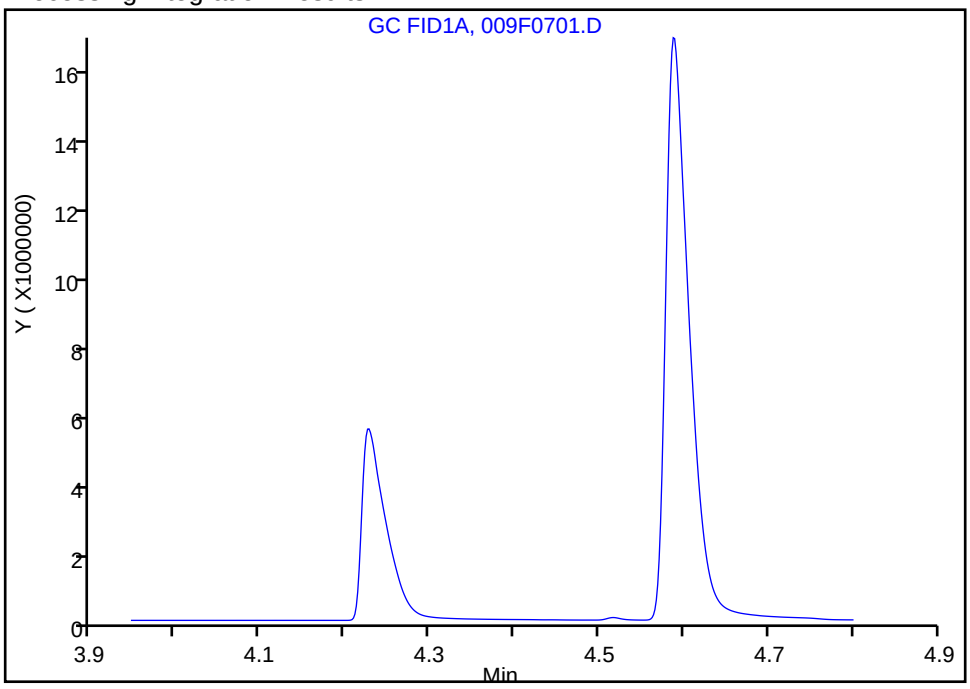
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D
Injection Date: 24-Sep-2021 14:33:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 9 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

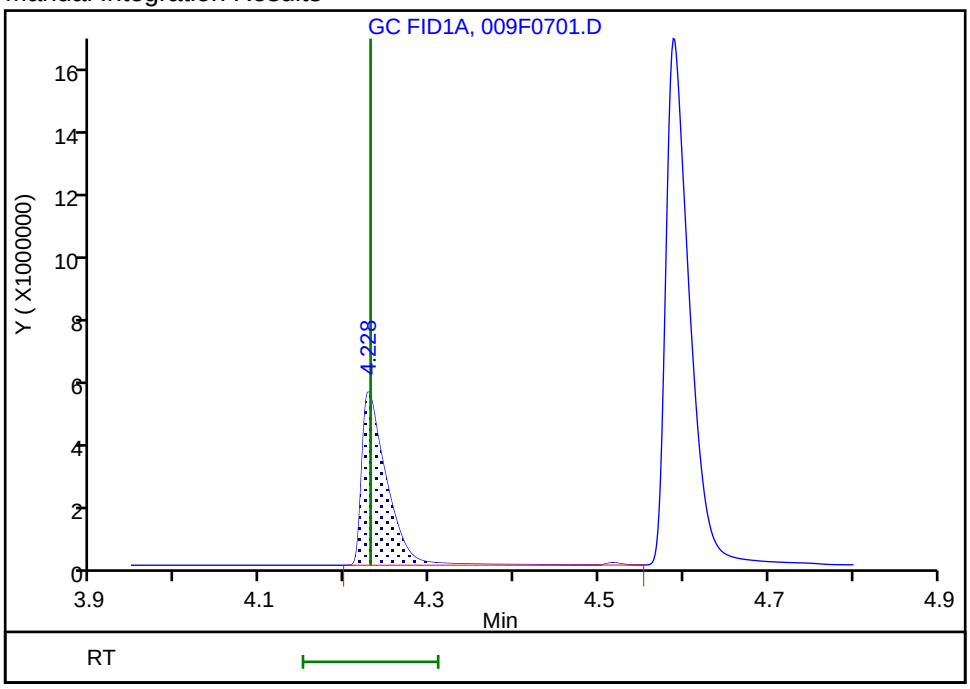
Not Detected
Expected RT: 4.23

Processing Integration Results



Manual Integration Results

RT: 4.23
Area: 10977943
Amount: 390.1324
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:46:29
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\010F0801.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 24-Sep-2021 14:46:48 ALS Bottle#: 10 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:17 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:48:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.293	1.295	-0.002	60484705	1626.3	1717.9	
2	1.676	1.678	-0.002	59798125	1626.3	1654.6	
						RPD = 3.75	

QC Flag Legend
Processing Flags

Reagents:
RSK175methane_00010 Amount Added: 50.00 Units: uL

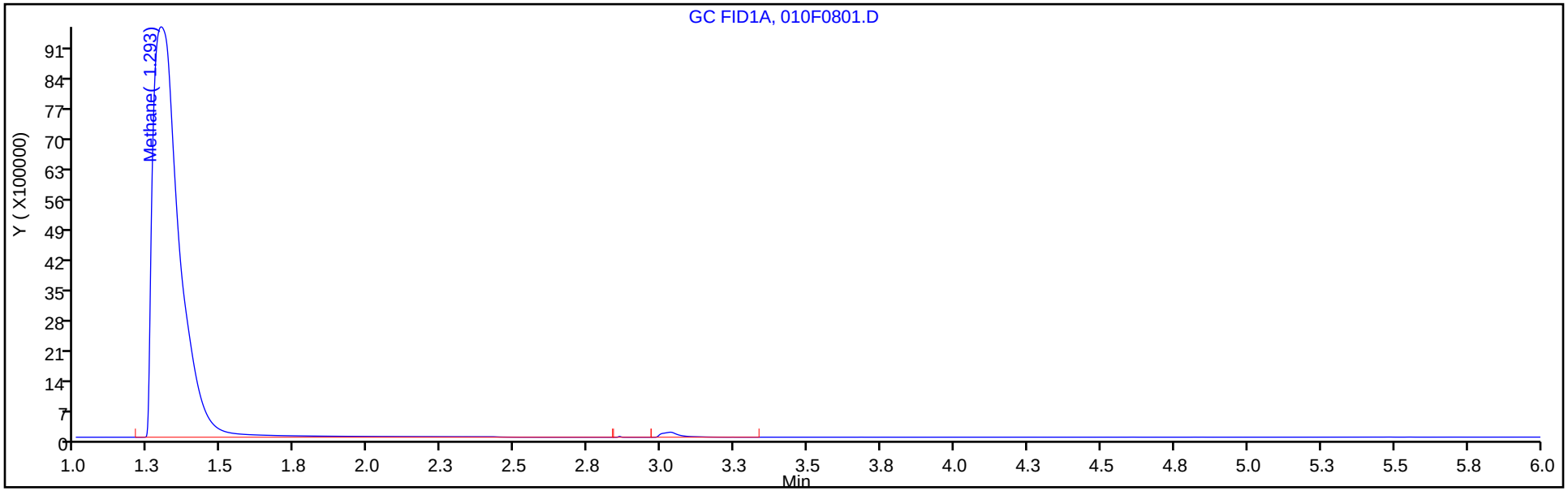
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

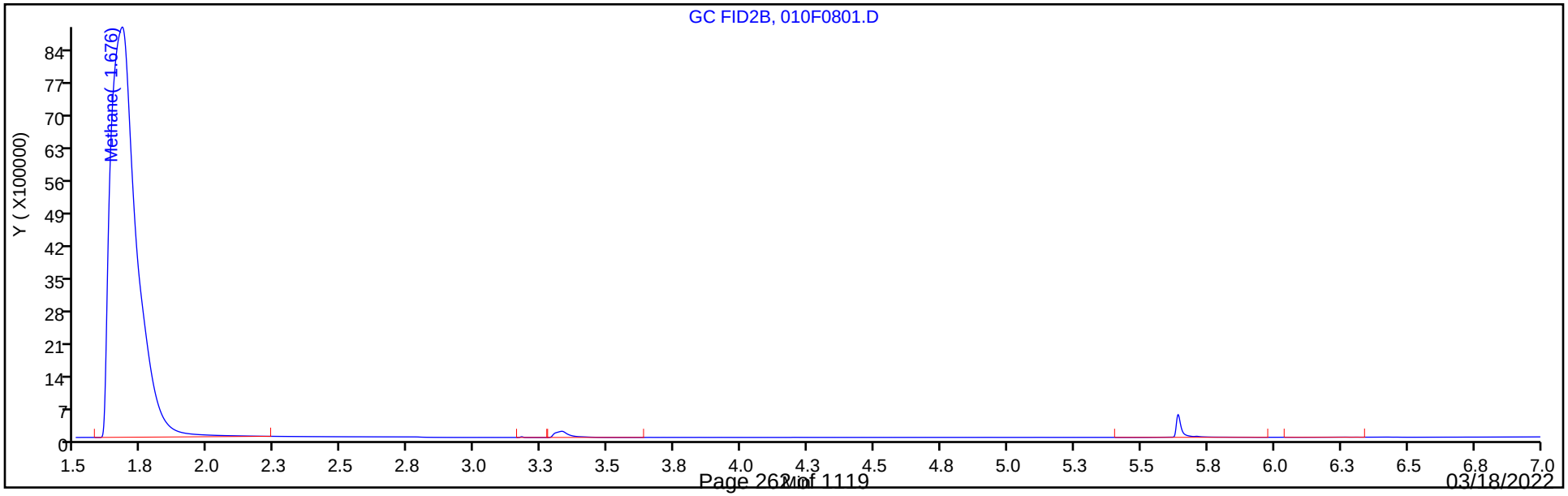
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\010F0801.D

Injection Date:	24-Sep-2021 14:46:48	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\011F0901.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 24-Sep-2021 14:59:53 ALS Bottle#: 11 Worklist Smp#: 10
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:17 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:48:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.292	1.295	-0.003	245647963	6505.0	6982.6	
2	1.673	1.678	-0.005	247051774	6505.0	6841.2	
						RPD = 2.04	

QC Flag Legend

Processing Flags

Reagents:

RSK175methane_00010 Amount Added: 200.00 Units: uL

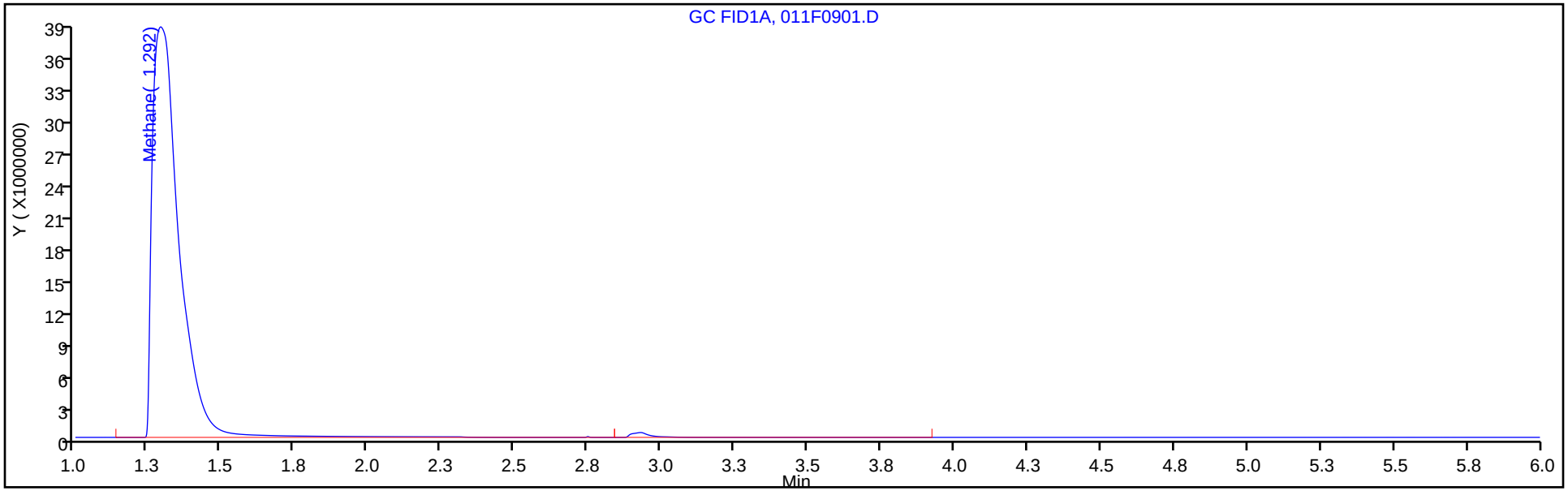
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

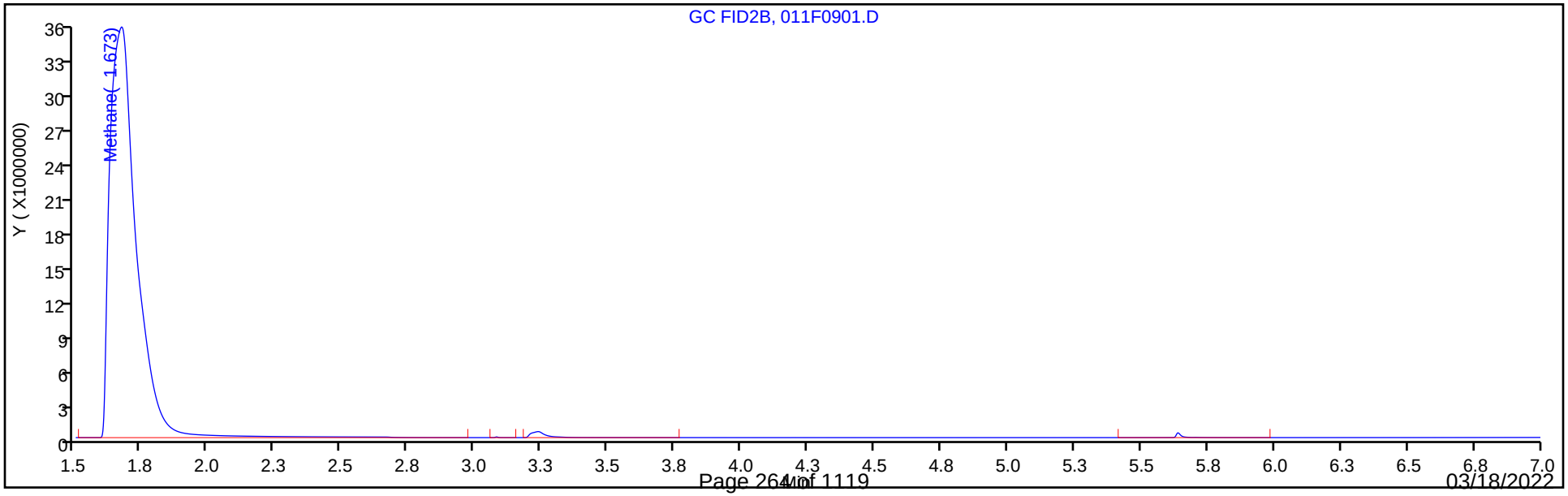
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\011F0901.D

Injection Date:	24-Sep-2021 14:59:53	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	10		
Inject. Date:	24-Sep-2021 15:12:55	ALS Bottle#:	12	Worklist Smp#:	11
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	ic				
Operator ID:	sciannac	Instrument ID:	VGC_J		
Sublist:	chrom-RSK_J*sub5				
Method:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	29-Sep-2021 10:55:18	Calib Date:	24-Sep-2021 15:12:55		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX1655				

First Level Reviewer: sciannac Date: 24-Sep-2021 15:48:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.288	1.295	-0.007	669092603	19515	19022	
2	1.669	1.678	-0.009	675608539	19515	18712	
						RPD = 1.65	

QC Flag Legend

Processing Flags

Reagents:

RSK175methane_00010 Amount Added: 600.00 Units: uL

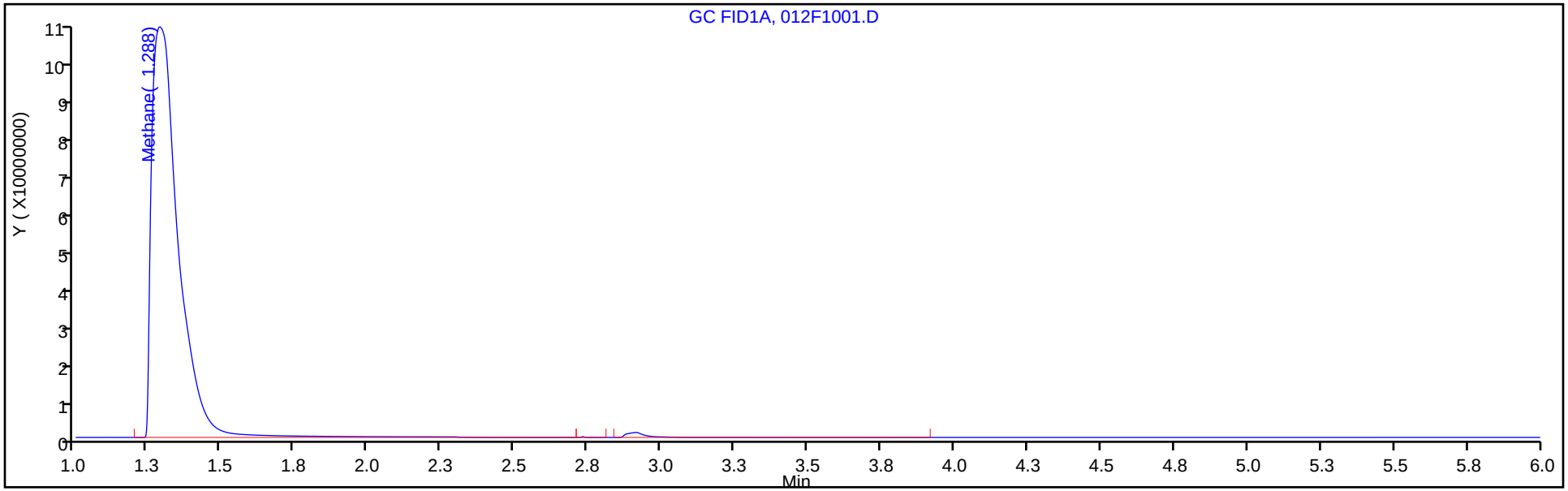
Report Date: 29-Sep-2021 10:55:18 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

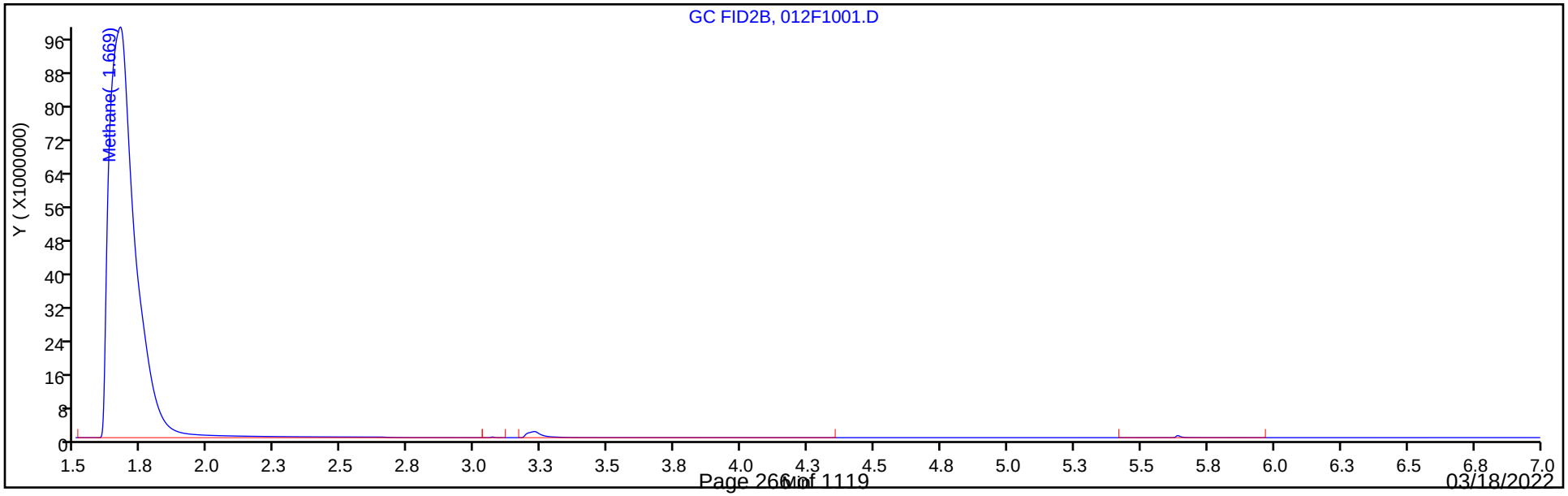
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Injection Date:	24-Sep-2021 15:12:55	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	11
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Calibration / Methane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

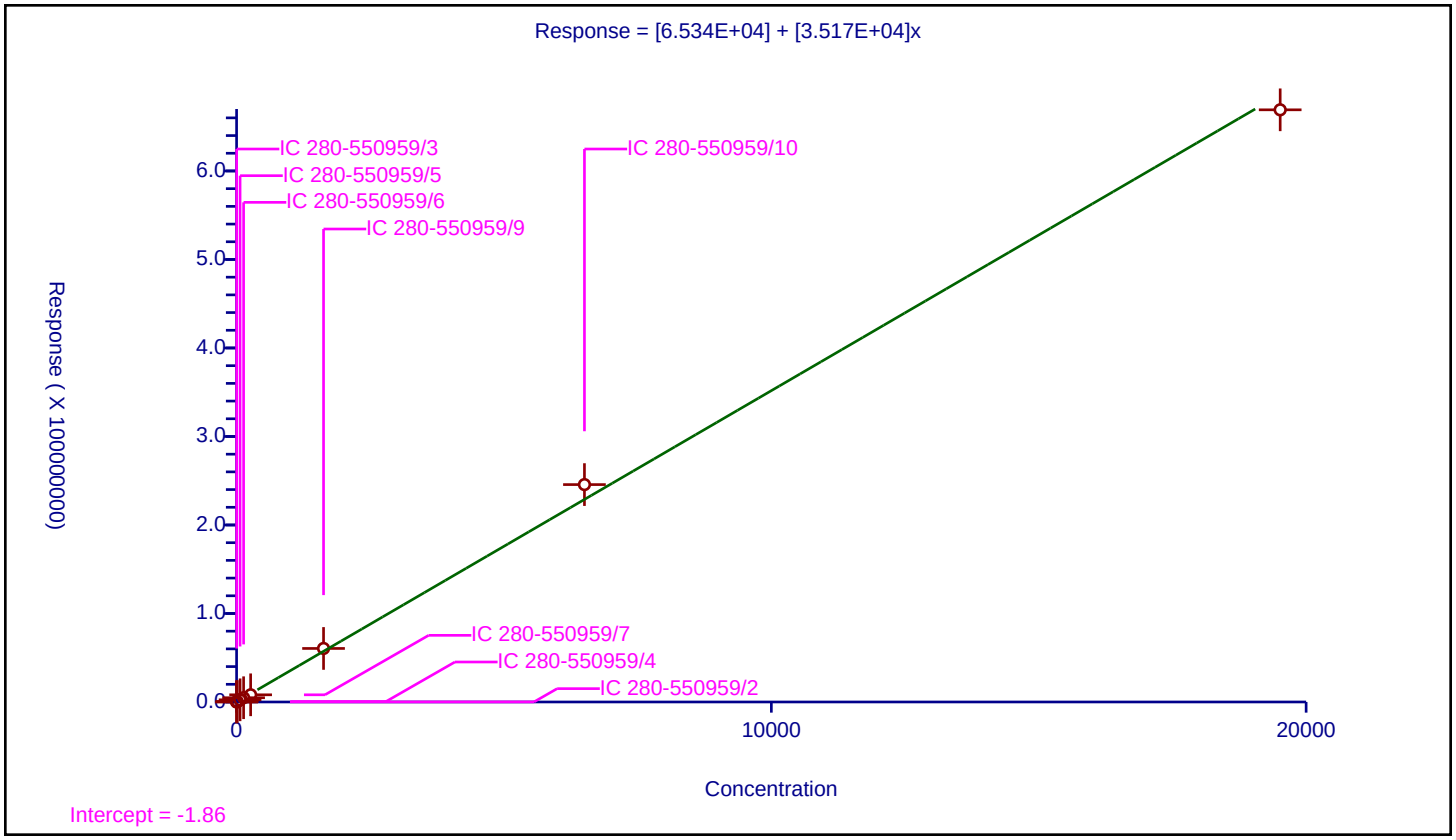
Curve Coefficients

Intercept:	6.534E+04
Slope:	3.517E+04

Error Coefficients

Standard Error:	9210000
Relative Standard Error:	7.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	0.821288	93424.0			113753.101076	Y
2	IC 280-550959/3	1.642575	126818.0			77206.82465	Y
3	IC 280-550959/4	13.1406	494257.0			37612.970488	Y
4	IC 280-550959/5	65.703	2453548.0			37343.013257	Y
5	IC 280-550959/6	131.406	4808571.0			36593.237752	Y
6	IC 280-550959/7	262.812	8118988.0			30892.759844	Y
7	IC 280-550959/9	1626.25	60484705.0			37192.747118	Y
8	IC 280-550959/10	6505.0	245647963.0			37762.945888	Y
9	IC 280-550959/11	19515.0	669092603.0			34286.067282	Y



Calibration / Ethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

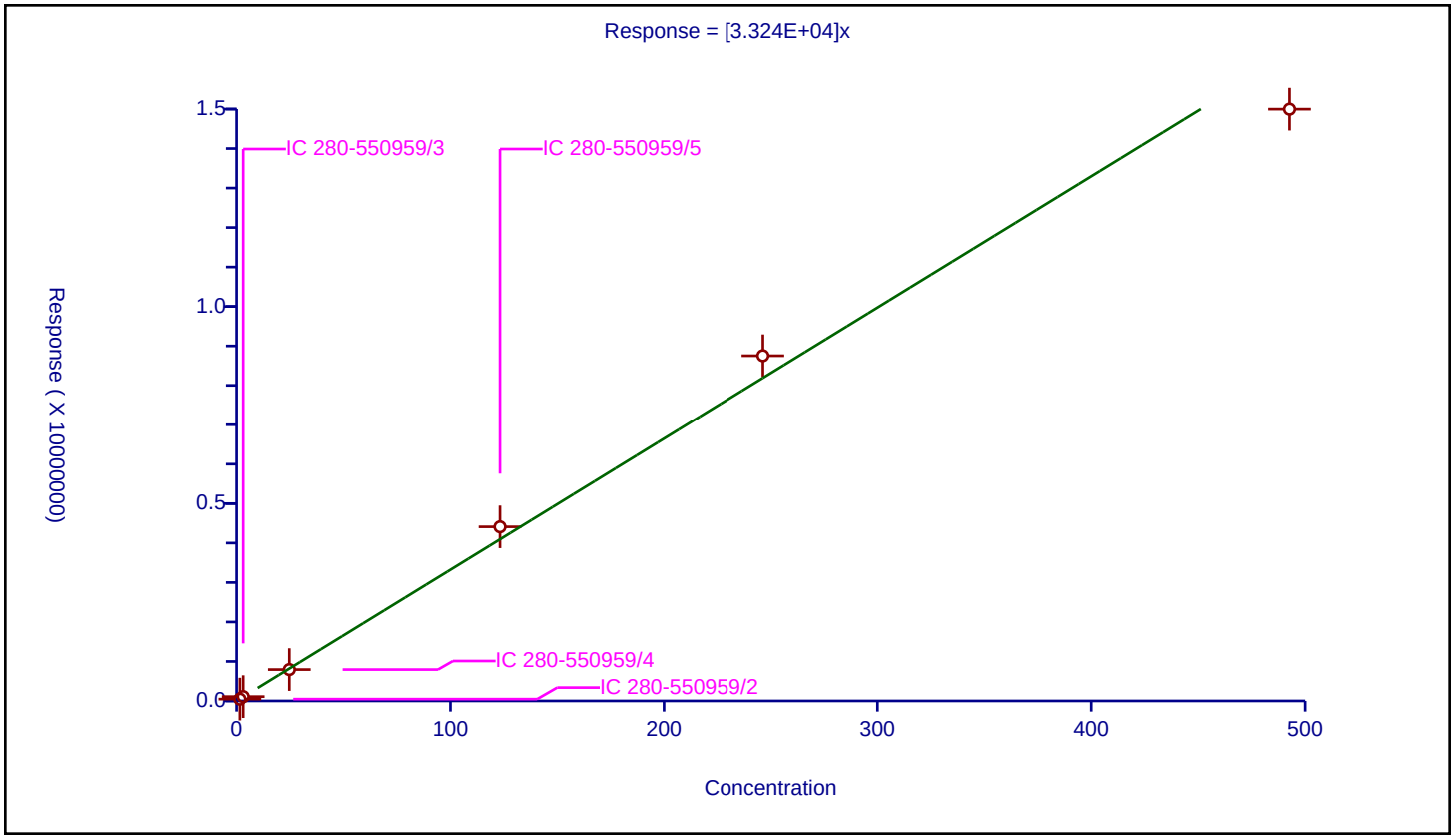
Curve Coefficients

Intercept:	0
Slope:	3.324E+04

Error Coefficients

Standard Error:	681000
Relative Standard Error:	7.9
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	1.539625	46427.0			30154.745474	Y
2	IC 280-550959/3	3.07925	108631.0			35278.395713	Y
3	IC 280-550959/4	24.634	793971.0			32230.69741	Y
4	IC 280-550959/5	123.17	4411499.0			35816.343265	Y
5	IC 280-550959/6	246.34	8751636.0			35526.654218	Y
6	IC 280-550959/7	492.68	14997572.0			30440.797272	Y



Calibration / Ethylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

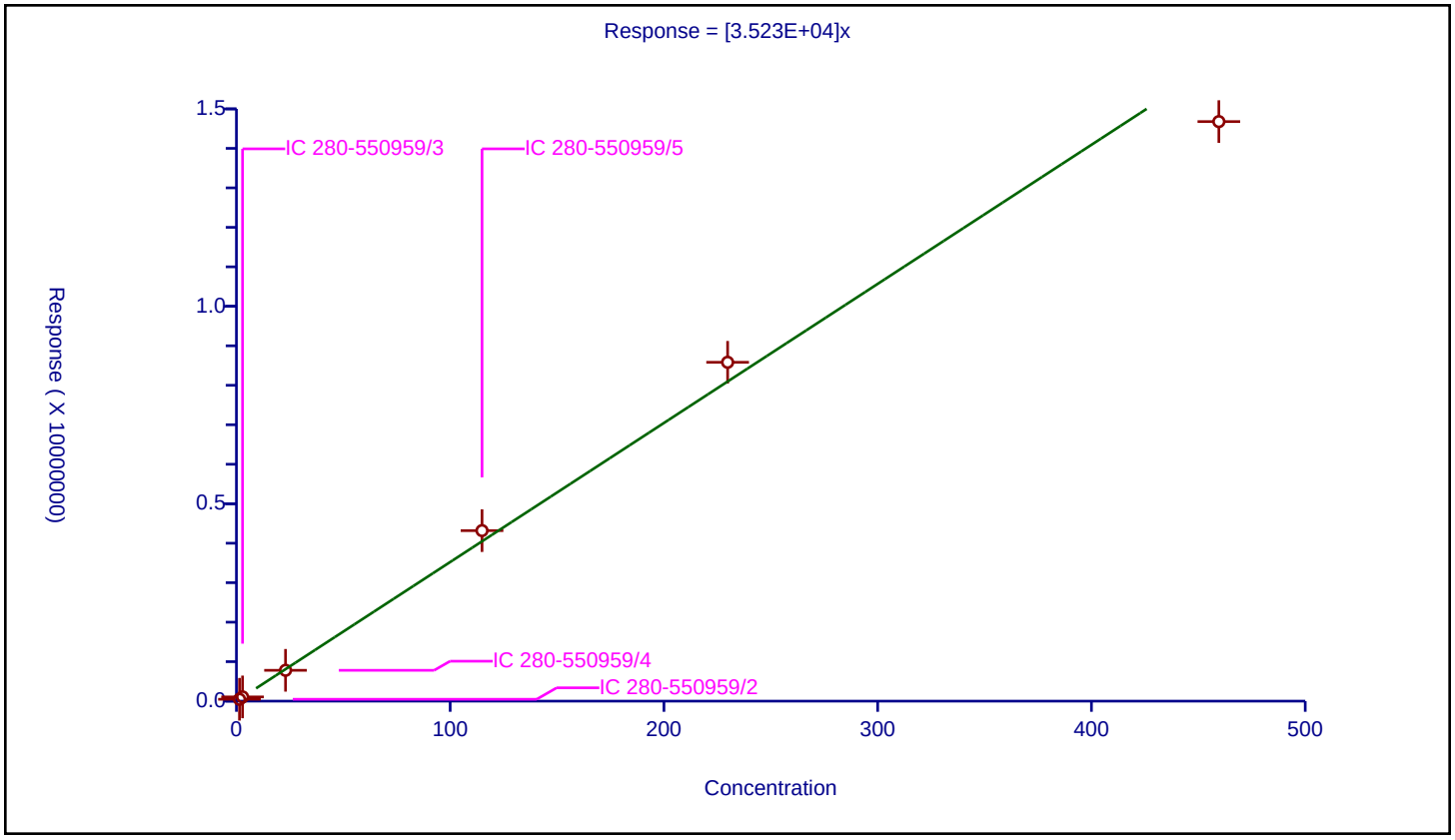
Curve Coefficients

Intercept:	0
Slope:	3.523E+04

Error Coefficients

Standard Error:	721000
Relative Standard Error:	7.1
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	1.43625	47667.0			33188.511749	Y
2	IC 280-550959/3	2.8725	107197.0			37318.363795	Y
3	IC 280-550959/4	22.98	780792.0			33977.023499	Y
4	IC 280-550959/5	114.9	4318968.0			37588.929504	Y
5	IC 280-550959/6	229.8	8582166.0			37346.240209	Y
6	IC 280-550959/7	459.6	14678124.0			31936.736292	Y



Calibration / Acetylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

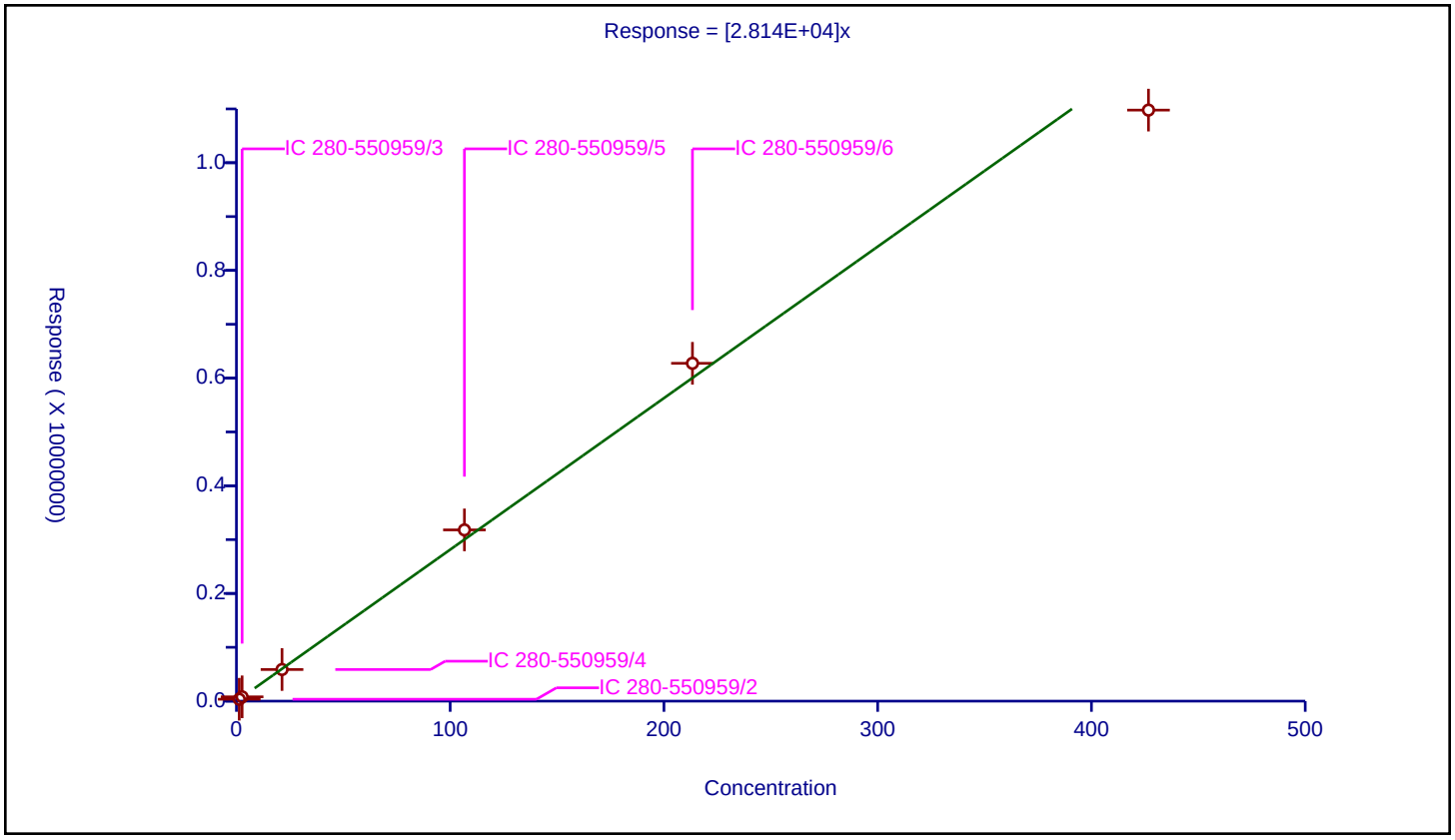
Curve Coefficients

Intercept:	0
Slope:	2.814E+04

Error Coefficients

Standard Error:	482000
Relative Standard Error:	6.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	1.333375	35261.0			26444.923596	Y
2	IC 280-550959/3	2.66675	79761.0			29909.44033	Y
3	IC 280-550959/4	21.334	587204.0			27524.327365	Y
4	IC 280-550959/5	106.67	3180347.0			29814.821412	Y
5	IC 280-550959/6	213.34	6274725.0			29411.854317	Y
6	IC 280-550959/7	426.68	10977943.0			25728.749883	Y



FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1 Analy Batch No.: 550959

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2021 13:28 Calibration End Date: 09/24/2021 15:12 Calibration ID: 58238

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-550959/2	004F0201.D
Level 2	IC 280-550959/3	005F0301.D
Level 3	IC 280-550959/4	006F0401.D
Level 4	IC 280-550959/5	007F0501.D
Level 5	IC 280-550959/6	008F0601.D
Level 6	IC 280-550959/7	009F0701.D
Level 7	IC 280-550959/9	010F0801.D
Level 8	IC 280-550959/10	011F0901.D
Level 9	IC 280-550959/11	012F1001.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8	LVL 9		RT WINDOW	AVG RT
Methane	1.689	1.686	1.684	1.681	1.678	1.678	1.676	1.673	1.669		1.646 - 1.726	1.679
Ethylene	2.612	2.613	2.609	2.608	2.603	2.602					2.559 - 2.659	2.608
Acetylene	2.759	2.756	2.753	2.751	2.746	2.746					2.666 - 2.826	2.752
Ethane	3.032	3.031	3.029	3.026	3.023	3.021					2.978 - 3.078	3.027

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-159137-1 Analy Batch No.: 550959

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2021 13:28 Calibration End Date: 09/24/2021 15:12 Calibration ID: 58238

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-550959/2	004F0201.D
Level 2	IC 280-550959/3	005F0301.D
Level 3	IC 280-550959/4	006F0401.D
Level 4	IC 280-550959/5	007F0501.D
Level 5	IC 280-550959/6	008F0601.D
Level 6	IC 280-550959/7	009F0701.D
Level 7	IC 280-550959/9	010F0801.D
Level 8	IC 280-550959/10	011F0901.D
Level 9	IC 280-550959/11	012F1001.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	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								
Methane	111078 38545 34620	77031 32174	38745 36771	38865 37979	Lin2	62633.7795	36102.9355							0.9950		0.9900
Ethylene	28704 32846	33128 28088	29931	33185	Ave		30980.2676				7.6		20.0			
Acetylene	31126 36867	35548 31529	33443	36560	Ave		34178.7944				7.4		20.0			
Ethane	30517 36441	34894 29685	32629	36129	Ave		33382.5817				8.6		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-159137-1 Analy Batch No.: 550959

SDG No.:

Instrument ID: VGC_J GC Column: HP-Plot Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/24/2021 13:28 Calibration End Date: 09/24/2021 15:12 Calibration ID: 58238

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-550959/2	004F0201.D
Level 2	IC 280-550959/3	005F0301.D
Level 3	IC 280-550959/4	006F0401.D
Level 4	IC 280-550959/5	007F0501.D
Level 5	IC 280-550959/6	008F0601.D
Level 6	IC 280-550959/7	009F0701.D
Level 7	IC 280-550959/9	010F0801.D
Level 8	IC 280-550959/10	011F0901.D
Level 9	IC 280-550959/11	012F1001.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
Methane	Lin2	91227 8455607	126529 59798125	509129 247051774	2553566 675608539	5065048	0.821 263	1.64 1626	13.1 6505	65.7 19515	131
Ethylene	Ave	41226 12909086	95159	687818	3812973	7548044	1.44 460	2.87	23.0	115	230
Acetylene	Ave	41503 13452620	94797	713476	3899802	7865310	1.33 427	2.67	21.3	107	213
Ethane	Ave	46984 14625440	107446	803791	4450065	8976911	1.54 493	3.08	24.6	123	246

Curve Type Legend

Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Sep-2021 13:28:57 ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:12 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 13:57:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							a
1	1.292	1.299	-0.007	93424	0.8213	0.7985	a
2	1.689	1.686	0.003	91227	0.8213	0.7920	a
						RPD = 0.81	
3 Ethane							a
1	1.559	1.556	0.003	46427	1.54	1.40	a
2	3.032	3.028	0.004	46984	1.54	1.41	a
						RPD = 0.77	
4 Ethylene							a
1	1.859	1.844	0.015	47667	1.44	1.35	a
2	2.612	2.609	0.003	41226	1.44	1.33	a
						RPD = 1.67	
5 Propane							a
1	2.682	2.721	-0.039	76526	2.26	2.13	a
2	4.937	4.929	0.008	73050	2.26	2.09	a
						RPD = 1.83	
6 Acetylene							a
1	4.184	4.230	-0.046	35261	1.33	1.25	a
2	2.759	2.746	0.013	41503	1.33	1.21	a
						RPD = 3.15	
7 Butane							Ma
1	4.555	4.528	0.027	101912	2.98	2.80	a
2	6.435	6.426	0.009	95155	2.98	2.71	M
						RPD = 3.27	
8 isobutylene							Ma
1	5.437	5.403	0.034	92868	2.87	2.57	M
2	6.277	6.274	0.003	91569	2.87	2.76	a
						RPD = 7.02	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 2.50 Units: uL

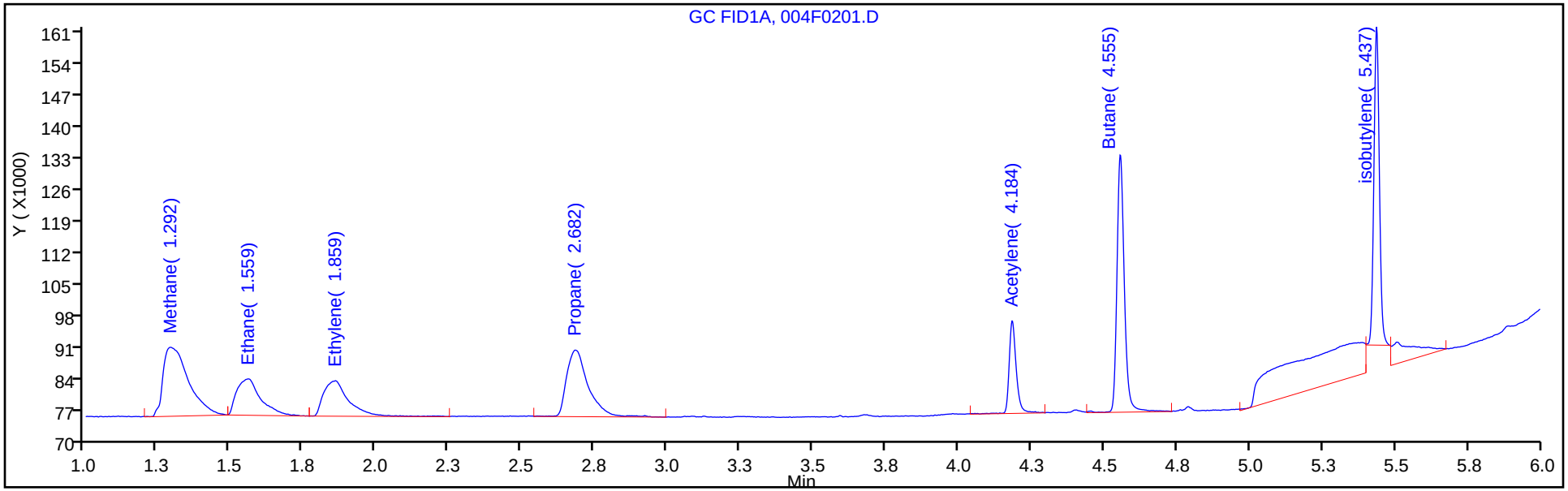
Report Date: 29-Sep-2021 10:55:12 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

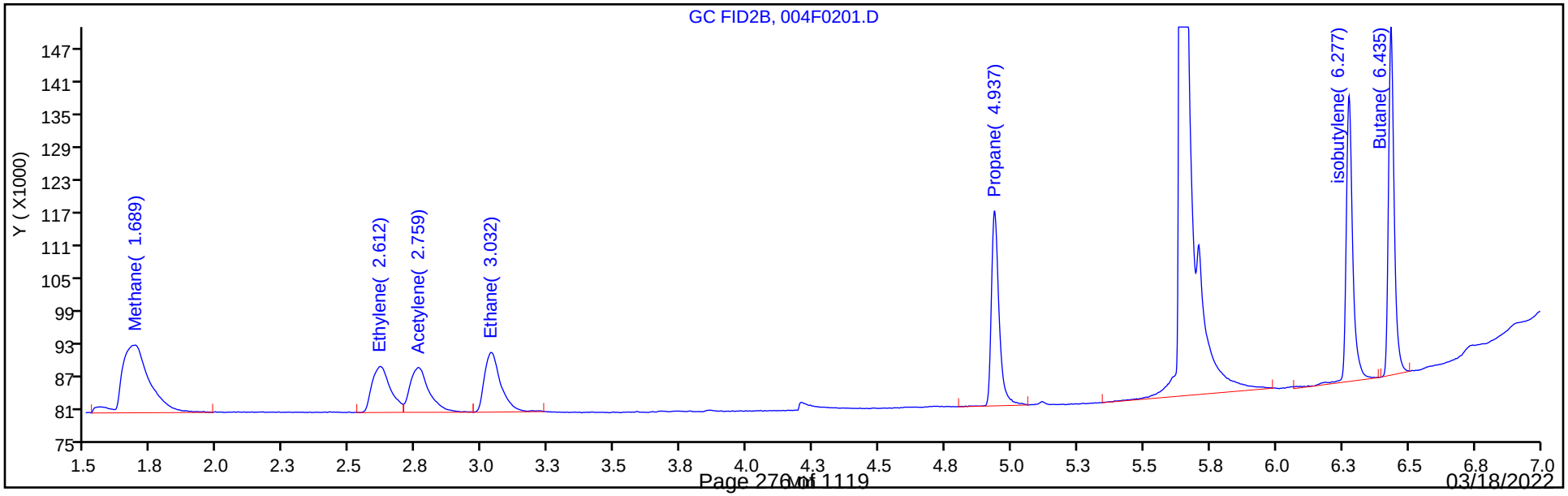
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Injection Date:	24-Sep-2021 13:28:57	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

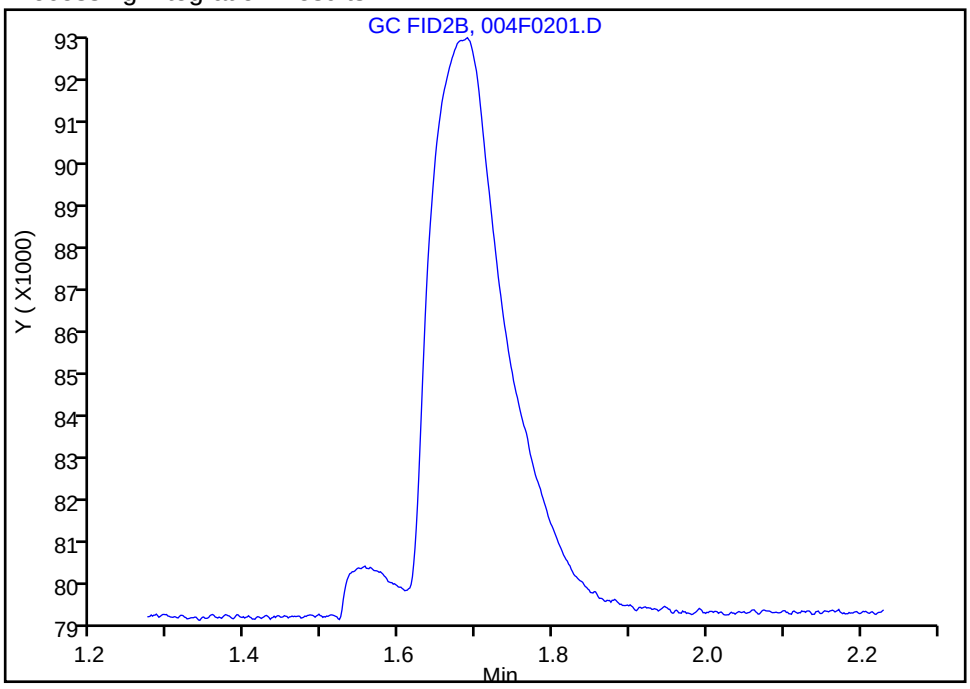
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Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

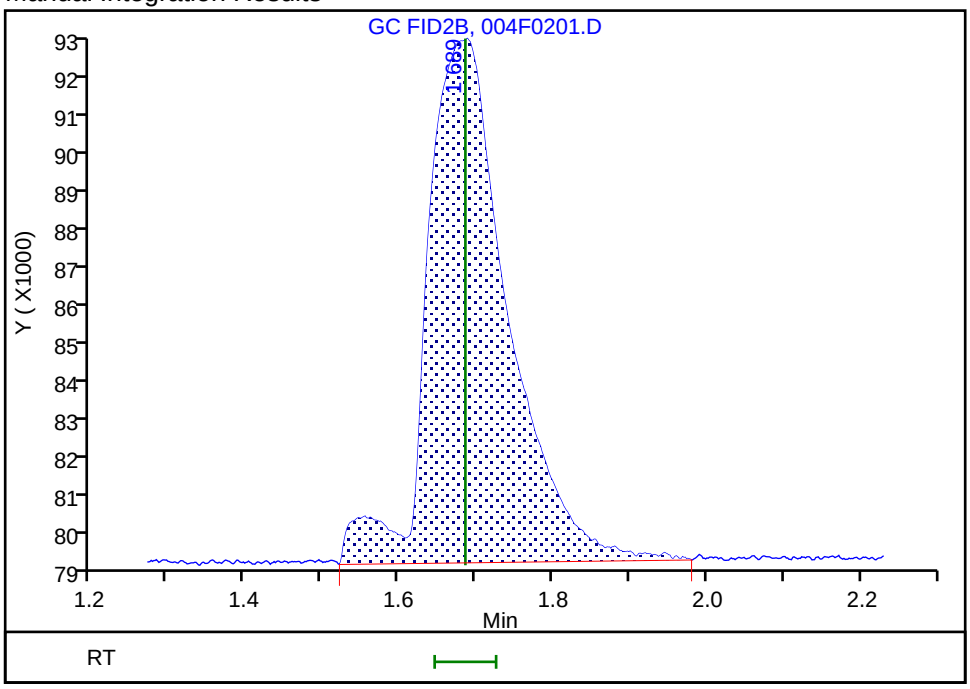
Not Detected
Expected RT: 1.69

Processing Integration Results



Manual Integration Results

RT: 1.69
Area: 91227
Amount: 0.791992
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:54:25
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

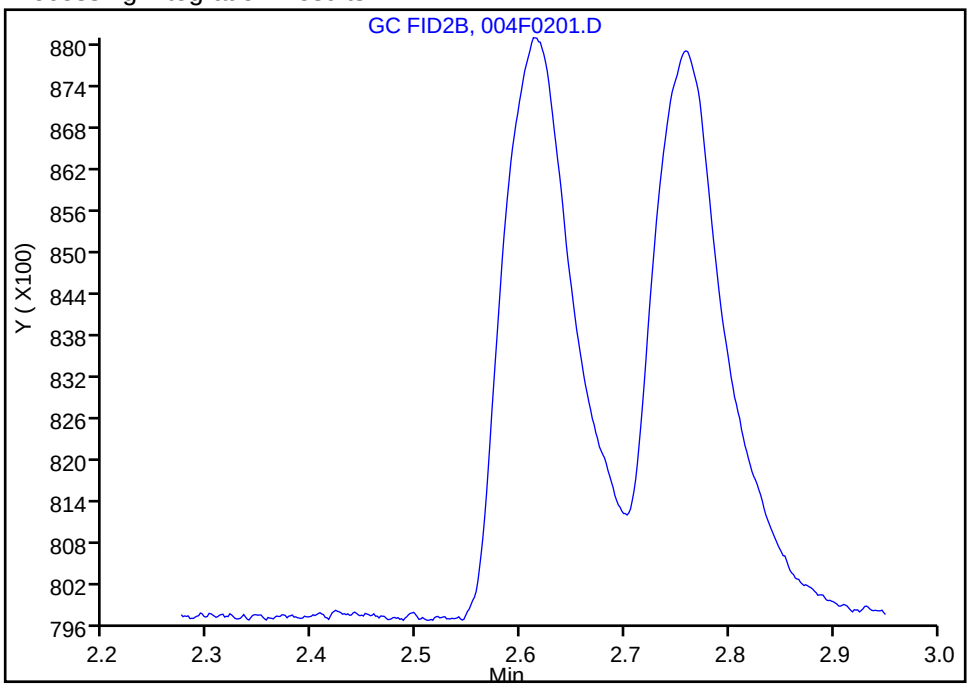
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Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

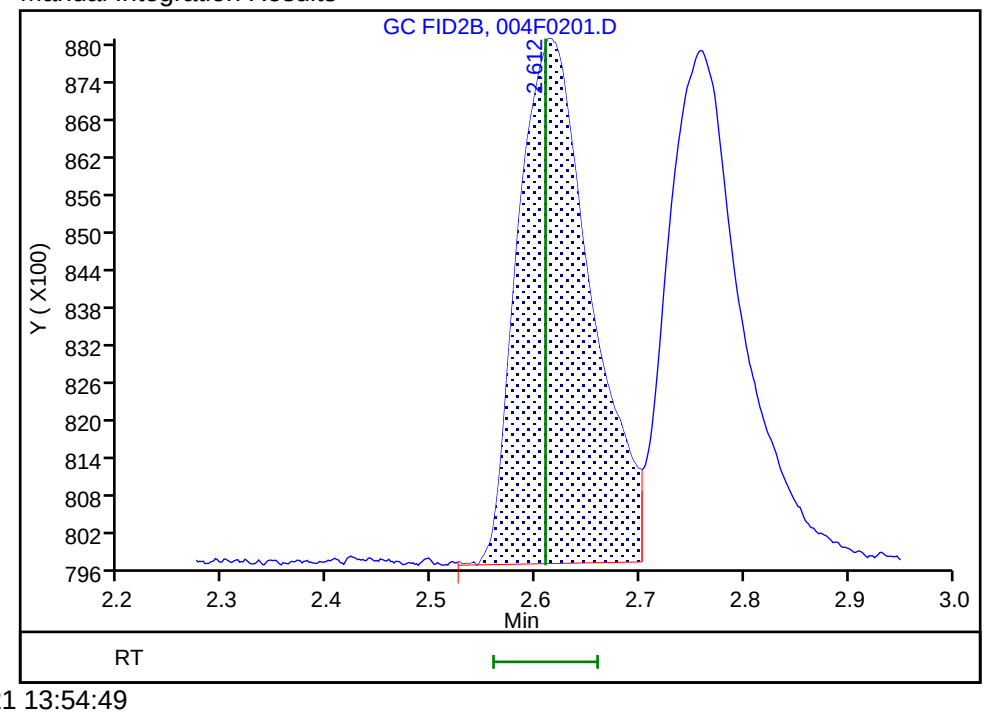
Not Detected
Expected RT: 2.61

Processing Integration Results



Manual Integration Results

RT: 2.61
Area: 41226
Amount: 1.330718
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:54:49
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

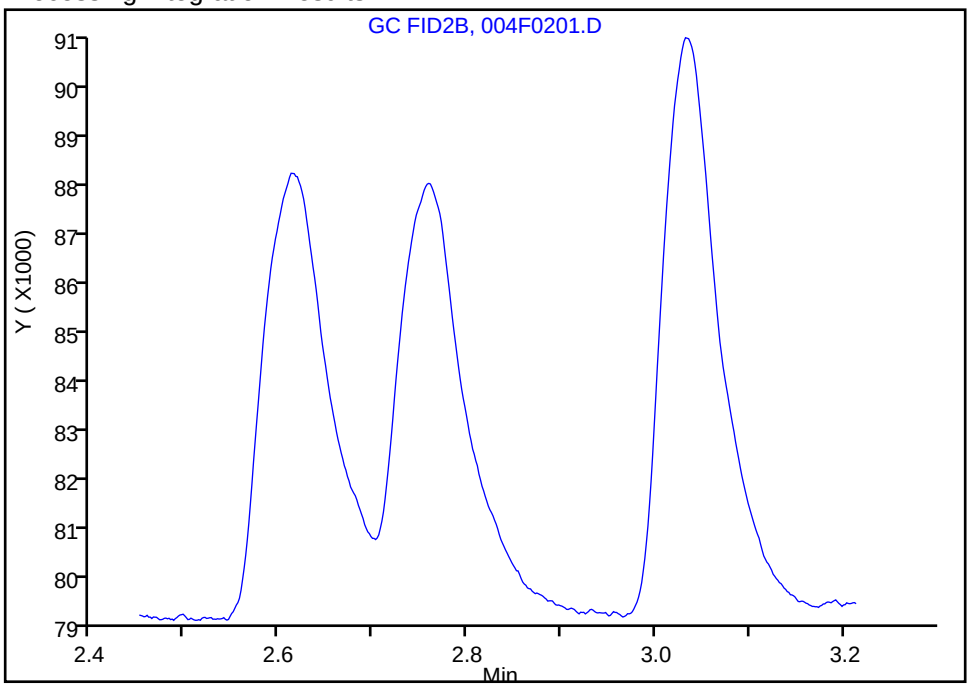
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Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

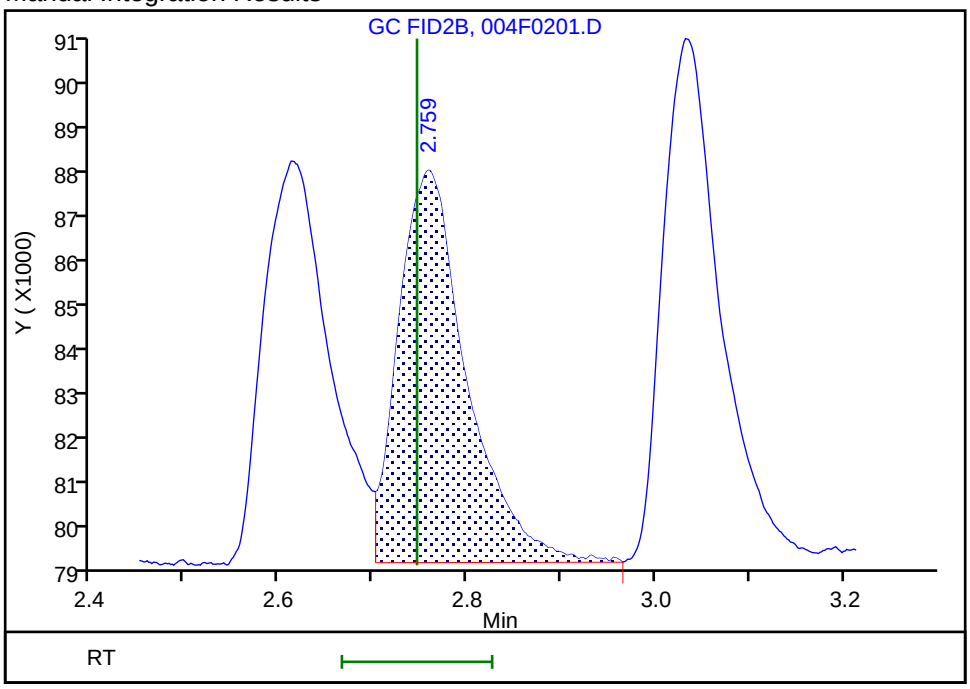
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.76
Area: 41503
Amount: 1.214291
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:55:02
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

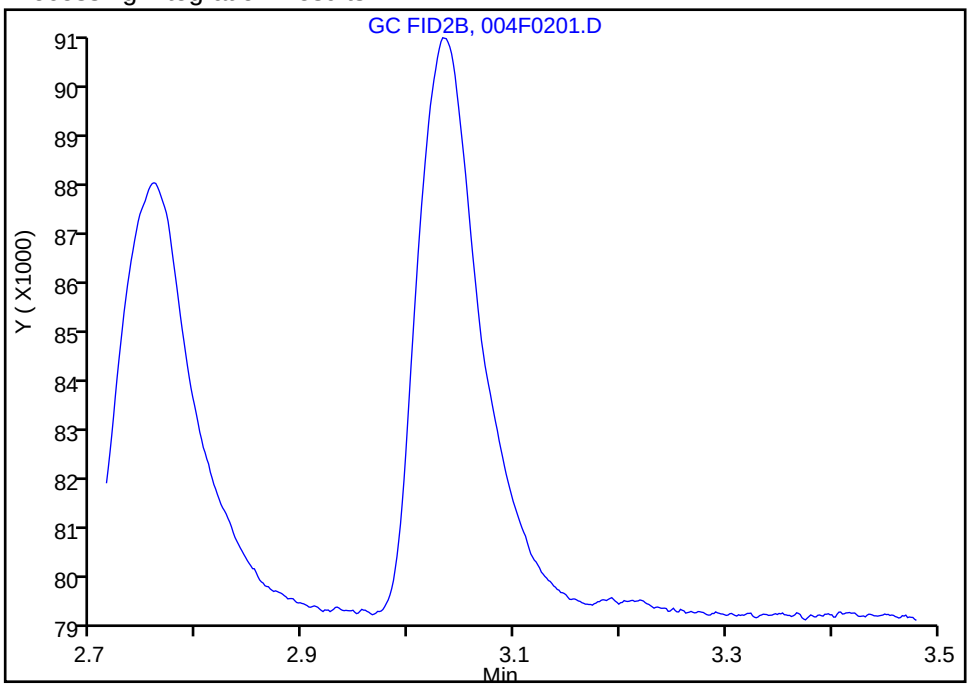
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

3 Ethane, CAS: 74-84-0

Signal: 2

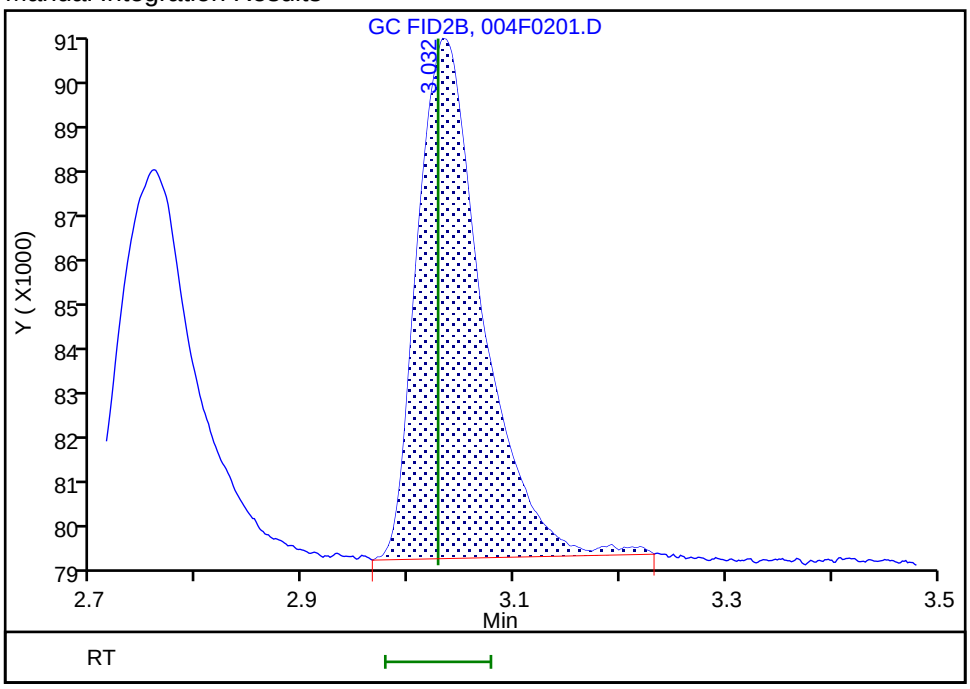
Not Detected
Expected RT: 3.03

Processing Integration Results



Manual Integration Results

RT: 3.03
Area: 46984
Amount: 1.407441
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 13:54:34
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\005F0301.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Sep-2021 13:41:52 ALS Bottle#: 5 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:13 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 13:58:34

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.293	1.299	-0.006	126818	1.64	1.75	
2	1.686	1.686	0.000	126529	1.64	1.77	
						RPD = 1.24	
3 Ethane							
1	1.562	1.556	0.006	108631	3.08	3.27	
2	3.031	3.028	0.003	107446	3.08	3.22	
						RPD = 1.52	
4 Ethylene							
1	1.867	1.844	0.023	107197	2.87	3.04	
2	2.613	2.609	0.004	95159	2.87	3.07	
						RPD = 0.93	
5 Propane							
1	2.700	2.721	-0.021	174390	4.52	4.84	
2	4.935	4.929	0.006	170185	4.52	4.86	
						RPD = 0.37	
6 Acetylene							
1	4.213	4.230	-0.017	79761	2.67	2.83	
2	2.756	2.746	0.010	94797	2.67	2.77	
						RPD = 2.17	
7 Butane							Ma
1	4.575	4.528	0.047	232737	5.95	6.39	a
2	6.435	6.426	0.009	221865	5.95	6.31	M
						RPD = 1.20	
8 isobutylene							Ma
1	5.457	5.403	0.054	232885	5.75	6.45	
2	6.276	6.274	0.002	200266	5.75	6.03	M
						RPD = 6.65	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 5.00 Units: uL

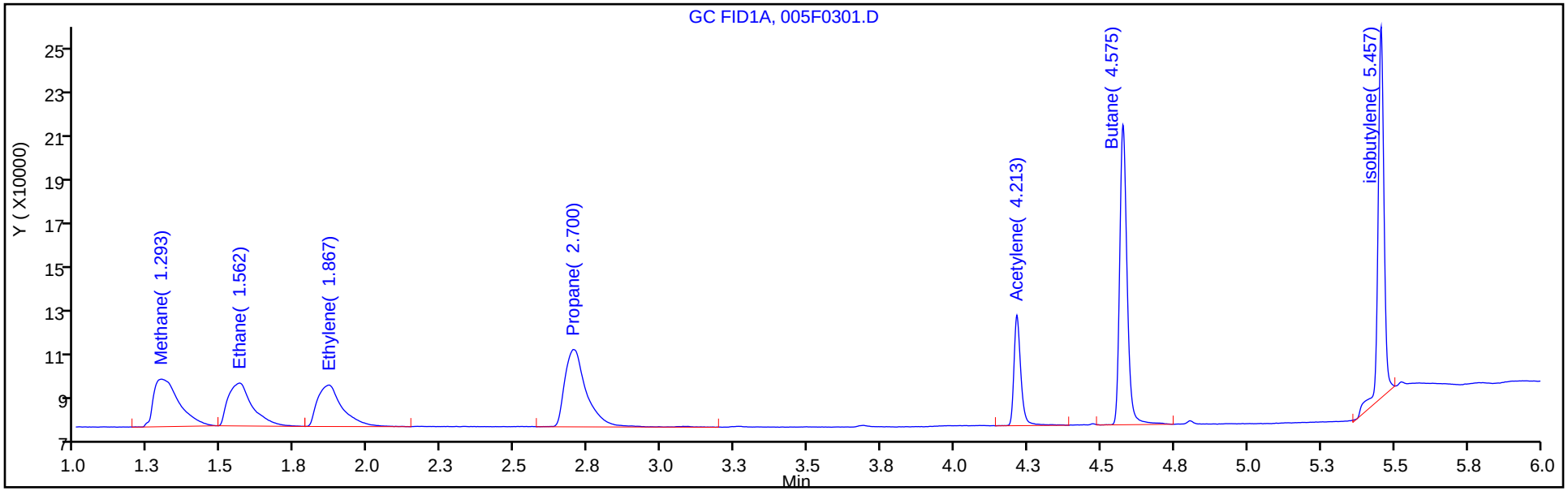
Report Date: 29-Sep-2021 10:55:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

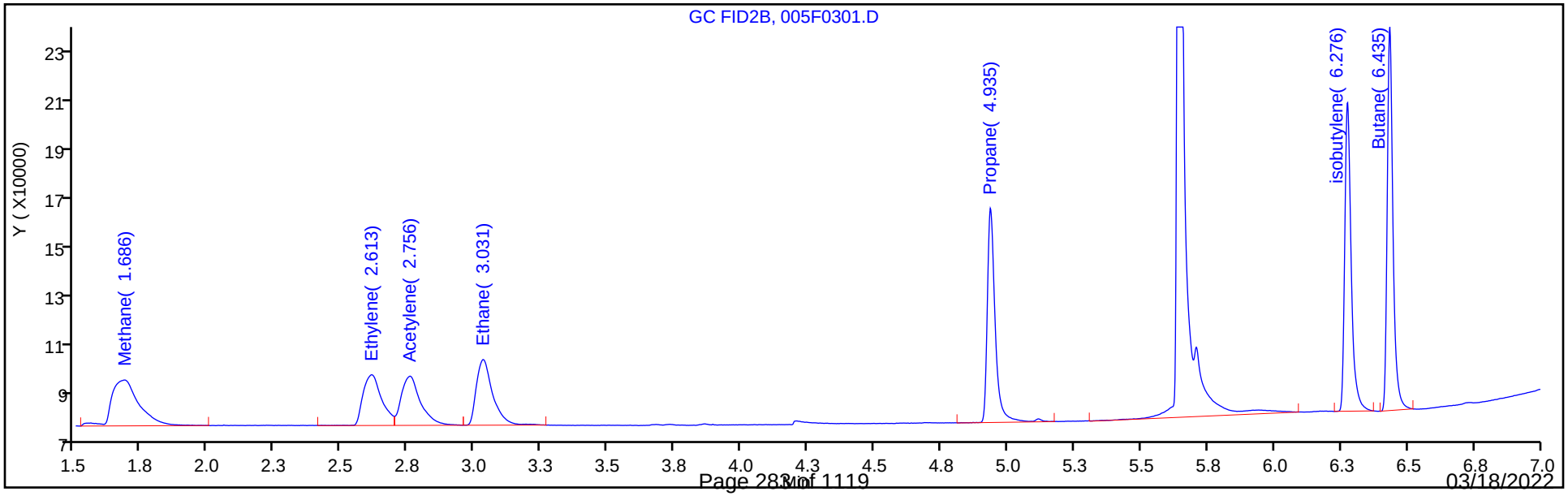
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Injection Date:	24-Sep-2021 13:41:52	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	3
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 24-Sep-2021 13:54:46 ALS Bottle#: 6 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:14 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:51:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.293	1.299	-0.006	494257	13.1	12.2	
2	1.684	1.686	-0.002	509129	13.1	12.4	
						RPD = 1.40	
3 Ethane							
1	1.561	1.556	0.005	793971	24.6	23.9	
2	3.029	3.028	0.001	803791	24.6	24.1	
						RPD = 0.81	
4 Ethylene							
1	1.870	1.844	0.026	780792	23.0	22.2	
2	2.609	2.609	0.000	687818	23.0	22.2	
						RPD = 0.16	
5 Propane							
1	2.711	2.721	-0.010	1259121	36.1	35.0	
2	4.934	4.929	0.005	1221976	36.1	34.9	
						RPD = 0.18	
6 Acetylene							a
1	4.226	4.230	-0.004	587204	21.3	20.9	a
2	2.753	2.746	0.007	713476	21.3	20.9	a
						RPD = 0.03	
7 Butane							Ma
1	4.586	4.528	0.058	1686797	47.6	46.3	a
2	6.433	6.426	0.007	1612366	47.6	45.9	M
						RPD = 0.93	
8 isobutylene							Ma
1	5.465	5.403	0.062	1589725	46.0	44.0	
2	6.274	6.274	0.000	1464027	46.0	44.1	M
						RPD = 0.20	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 40.00 Units: uL

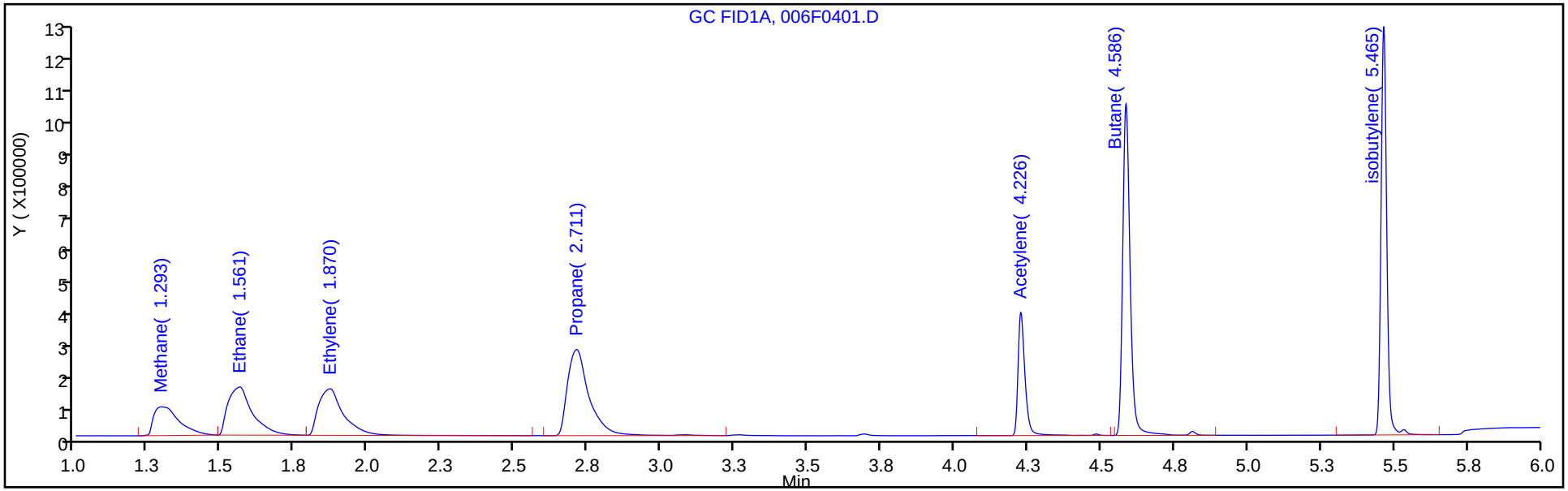
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

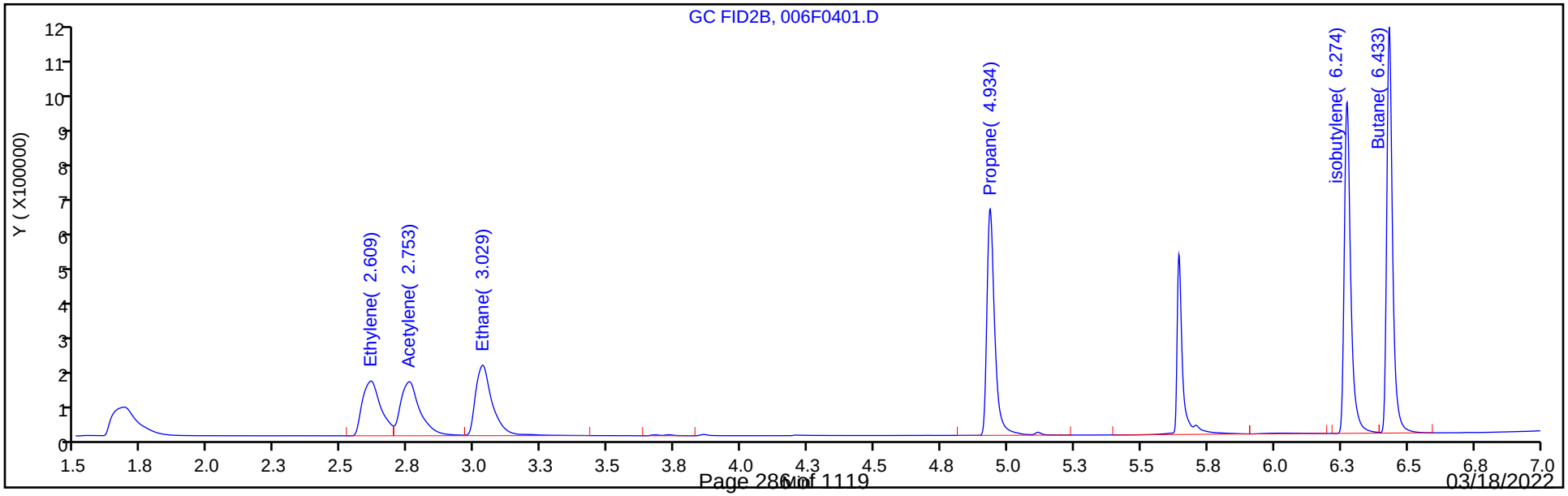
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D

Injection Date:	24-Sep-2021 13:54:46	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

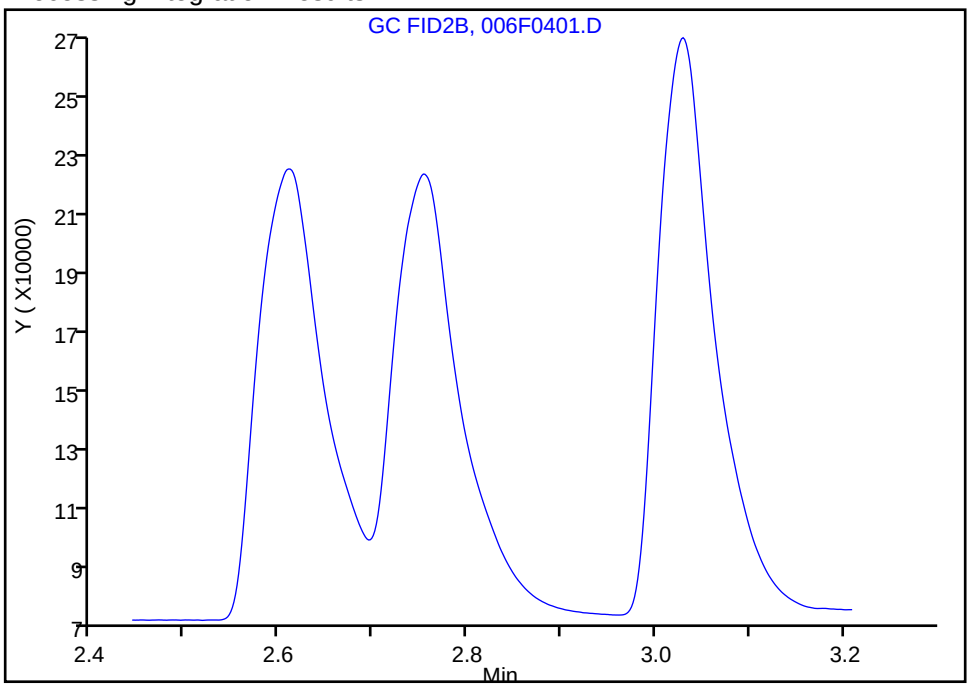
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D
Injection Date: 24-Sep-2021 13:54:46 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 6 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

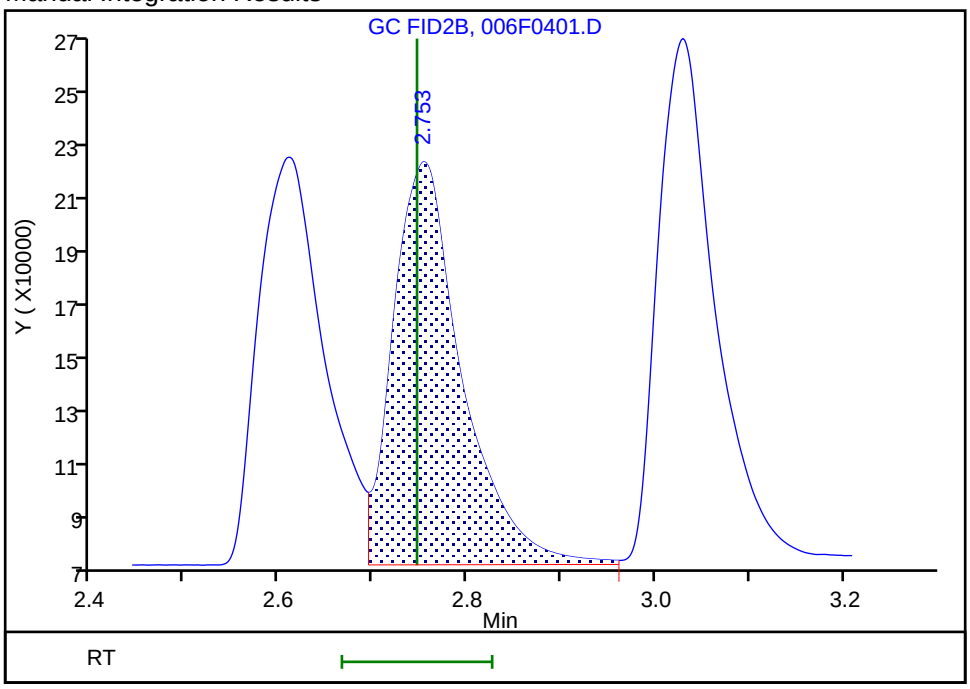
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 713476
Amount: 20.874815
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:50:39
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 24-Sep-2021 14:07:45 ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:14 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:50:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.295	1.295	0.000	2453548	65.7	67.9	
2	1.681	1.681	0.000	2553566	65.7	69.0	
						RPD = 1.60	
3 Ethane							Ma
1	1.561	1.561	0.000	4411499	123.2	132.7	
2	3.026	3.026	0.000	4450065	123.2	133.3	M
						RPD = 0.45	
4 Ethylene							
1	1.870	1.870	0.000	4318968	114.9	122.6	
2	2.608	2.608	0.000	3812973	114.9	123.1	
						RPD = 0.38	
5 Propane							
1	2.716	2.716	0.000	6962772	180.6	193.4	
2	4.933	4.933	0.000	6754582	180.6	192.9	
						RPD = 0.22	
6 Acetylene							a
1	4.230	4.230	0.000	3180347	106.7	113.0	a
2	2.751	2.751	0.000	3899802	106.7	114.1	a
						RPD = 0.95	
7 Butane							
1	4.590	4.590	0.000	9255328	238.1	254.1	
2	6.430	6.430	0.000	8939530	238.1	254.4	
						RPD = 0.11	
8 isobutylene							
1	5.468	5.468	0.000	8777969	229.8	243.0	
2	6.271	6.271	0.000	8052089	229.8	242.5	
						RPD = 0.20	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 200.00 Units: uL

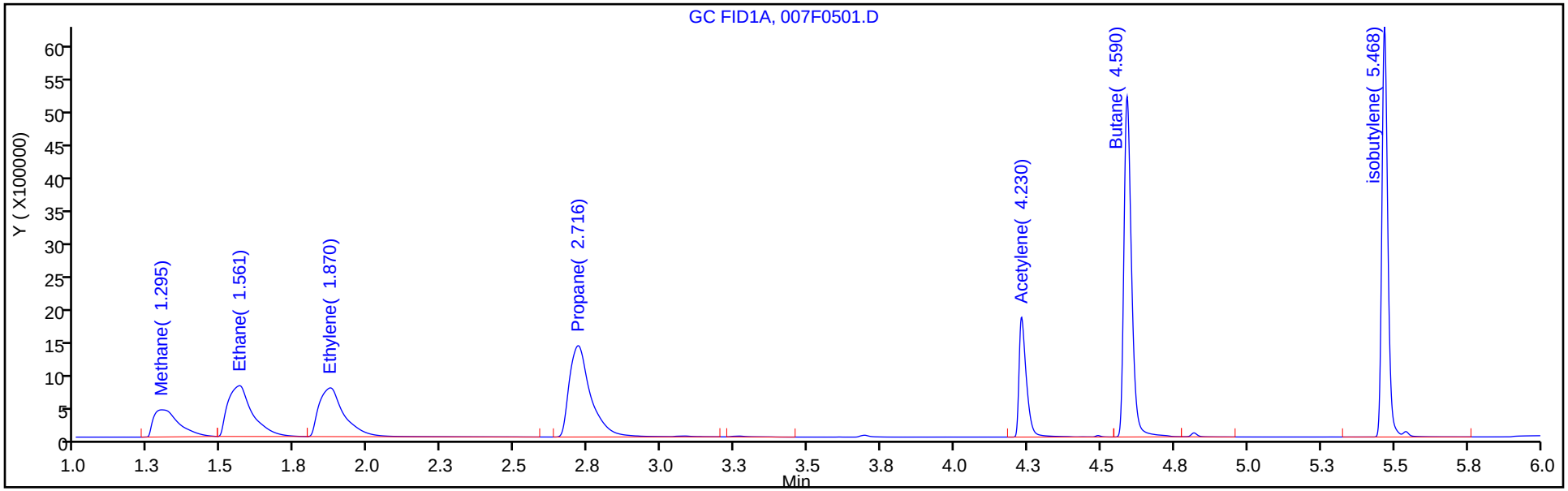
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

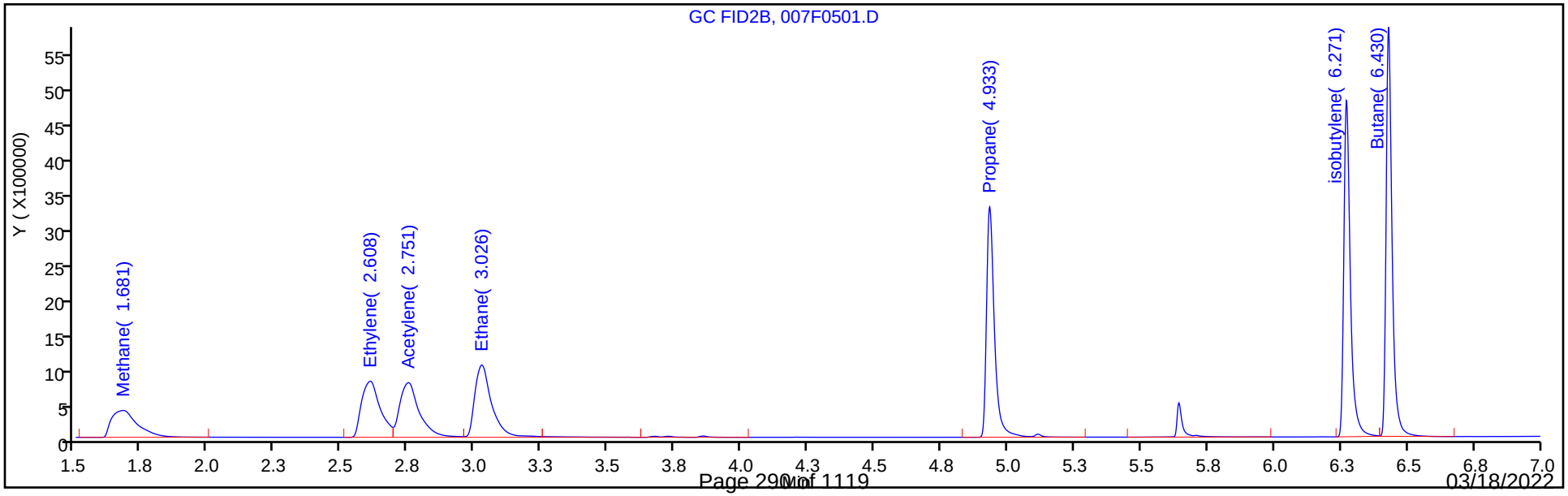
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D

Injection Date:	24-Sep-2021 14:07:45	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	5
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

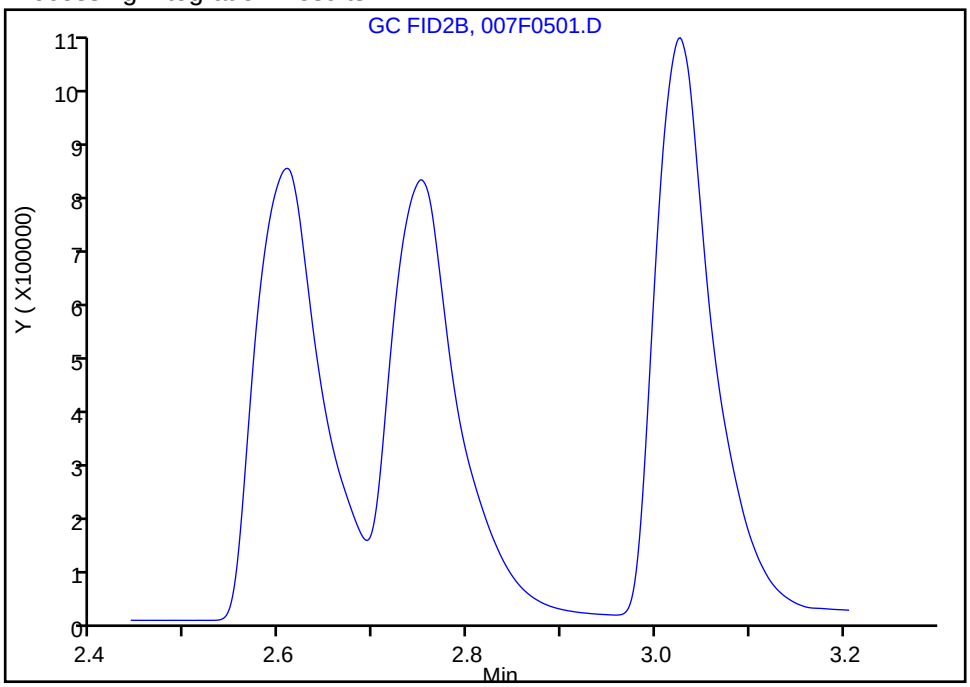
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

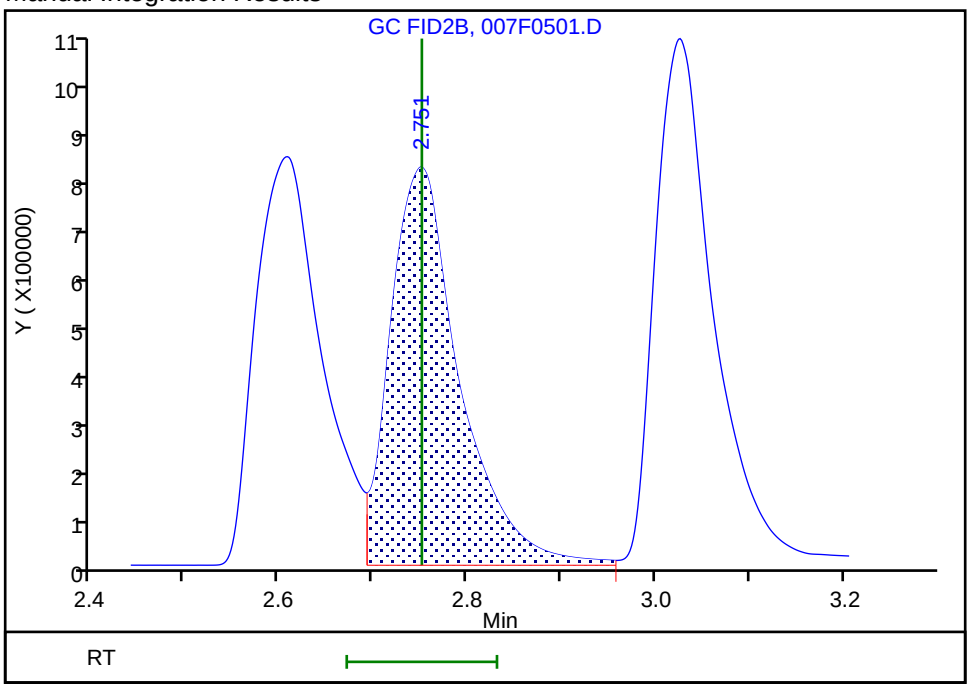
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 3899802
Amount: 114.1000
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:50:19
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

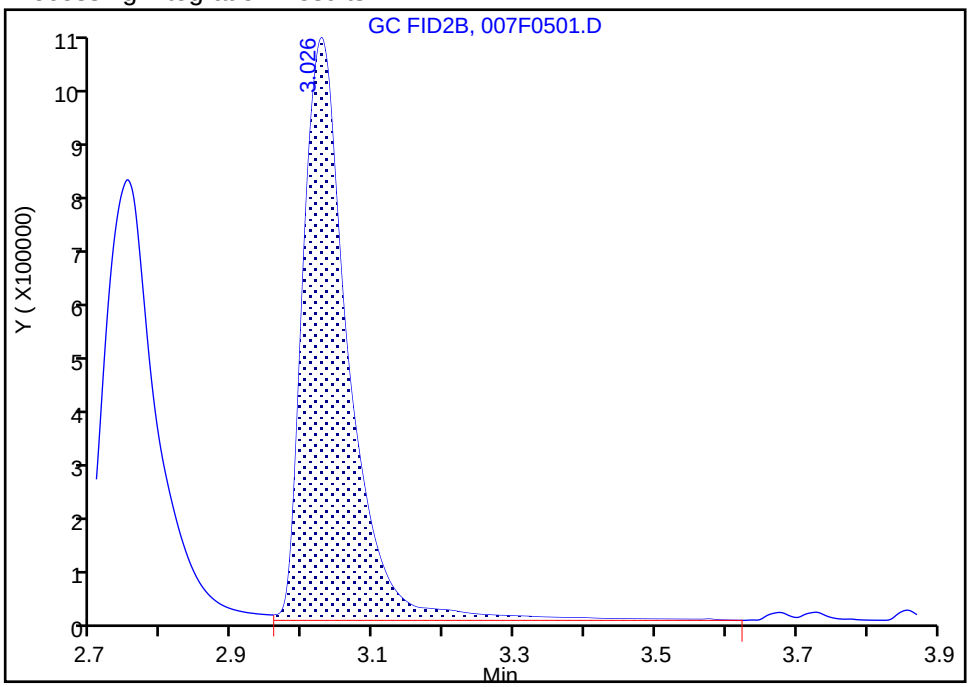
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

3 Ethane, CAS: 74-84-0

Signal: 2

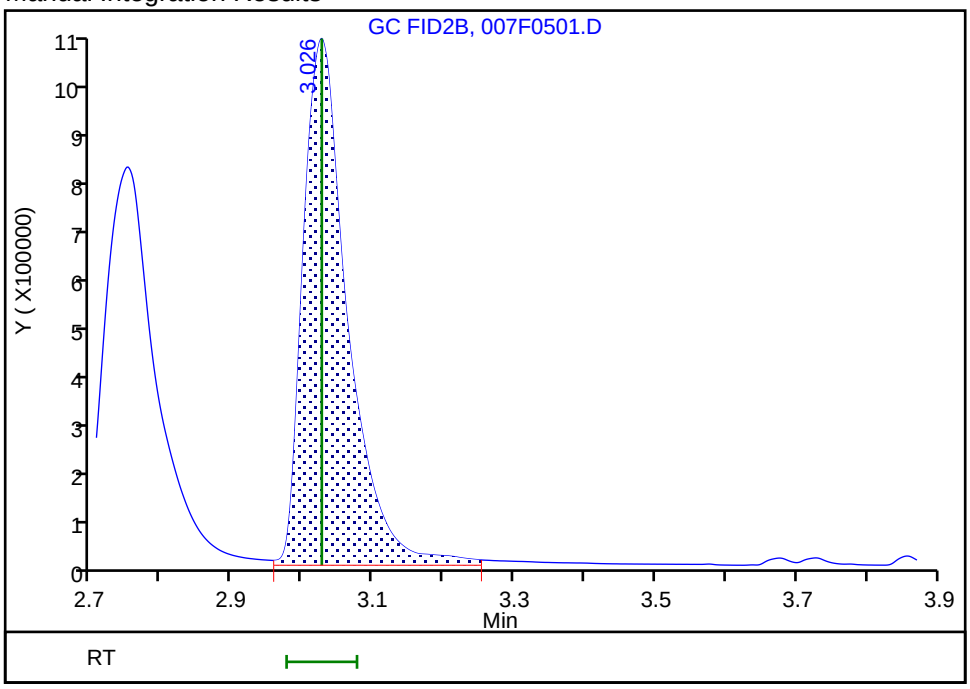
Processing Integration Results

RT: 3.03
Area: 4534073
Amount: 134.6635
Amount Units: ug/l



Manual Integration Results

RT: 3.03
Area: 4450065
Amount: 133.3050
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:50:09
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-Sep-2021 14:20:44 ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:15 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:46:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							M
1	1.295	1.295	0.000	4808571	131.4	134.9	
2	1.678	1.678	0.000	5065048	131.4	138.6	M
						RPD = 2.70	
3 Ethane							
1	1.560	1.560	0.000	8751636	246.3	263.3	
2	3.023	3.023	0.000	8976911	246.3	268.9	
						RPD = 2.12	
4 Ethylene							
1	1.873	1.873	0.000	8582166	229.8	243.6	
2	2.603	2.603	0.000	7548044	229.8	243.6	
						RPD = 0.00	
5 Propane							M
1	2.721	2.721	0.000	13578180	361.3	377.1	M
2	4.929	4.929	0.000	13344347	361.3	381.1	
						RPD = 1.08	
6 Acetylene							a
1	4.230	4.230	0.000	6274725	213.3	223.0	a
2	2.746	2.746	0.000	7865310	213.3	230.1	a
						RPD = 3.15	
7 Butane							Ma
1	4.591	4.591	0.000	18468578	476.1	507.1	a
2	6.426	6.426	0.000	17766895	476.1	505.6	M
						RPD = 0.29	
8 isobutylene							Ma
1	5.468	5.468	0.000	17314841	459.7	479.3	
2	6.269	6.269	0.000	15966351	459.7	480.9	M
						RPD = 0.33	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 400.00 Units: uL

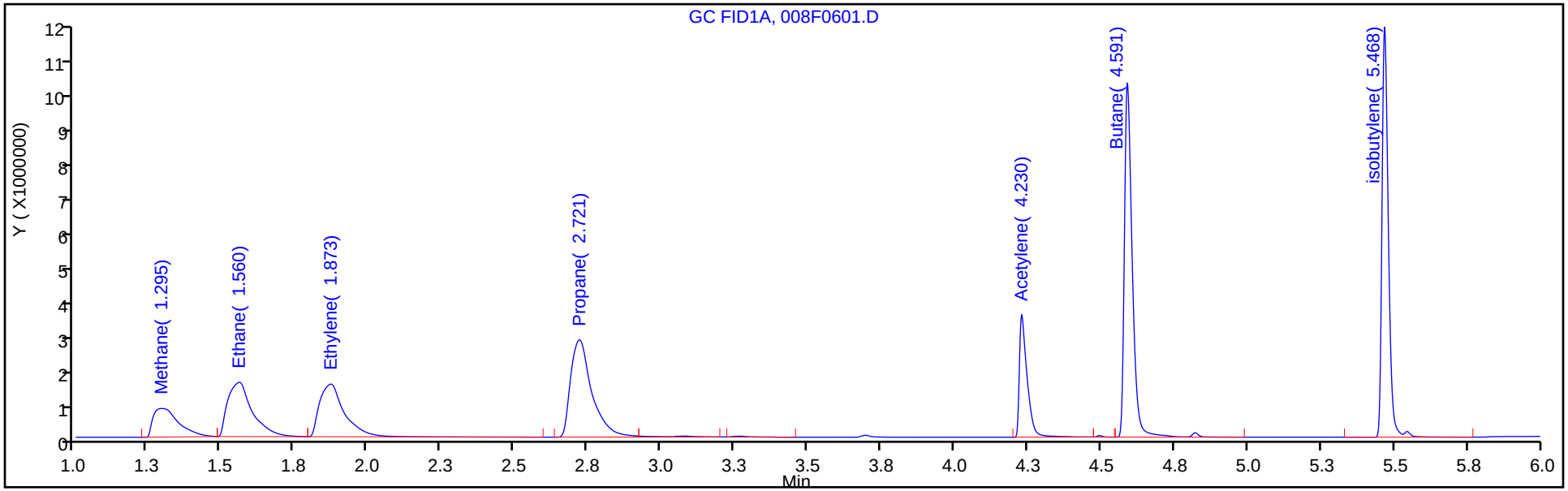
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

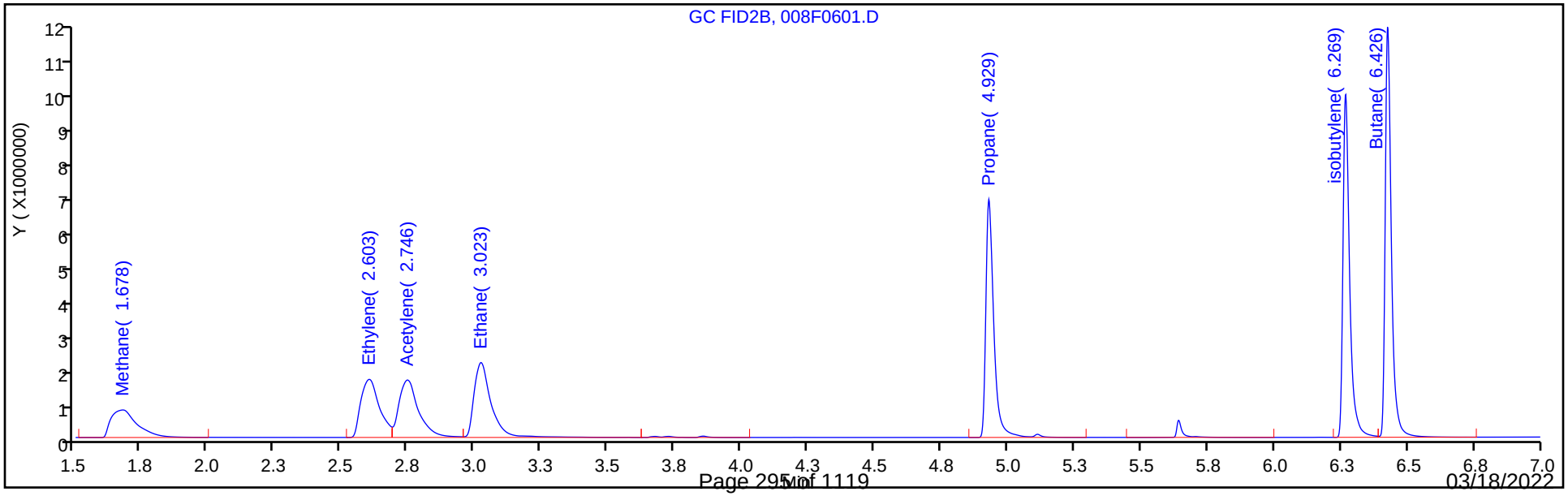
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D

Injection Date:	24-Sep-2021 14:20:44	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	6
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

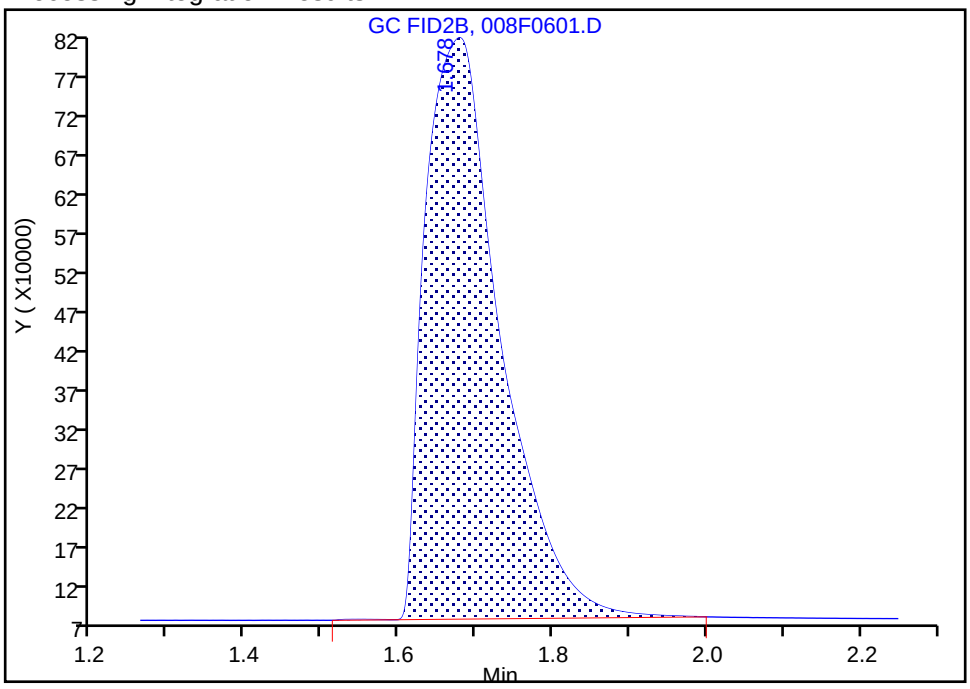
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Injection Date: 24-Sep-2021 14:20:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

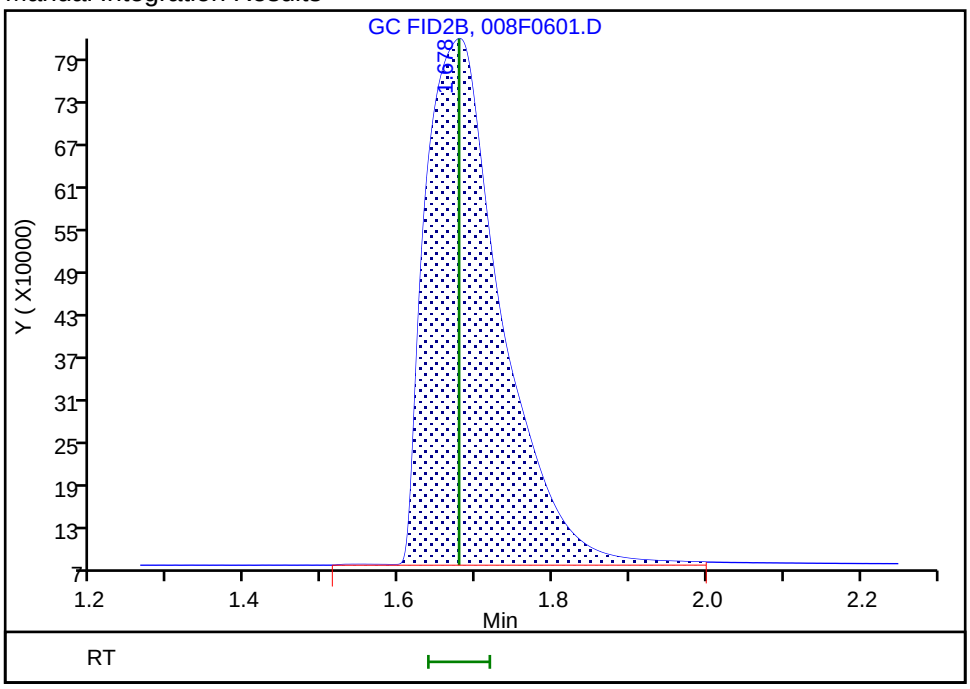
Processing Integration Results

RT: 1.68
Area: 5002633
Amount: 137.0848
Amount Units: ug/l



Manual Integration Results

RT: 1.68
Area: 5065048
Amount: 138.5598
Amount Units: ug/l



Reviewer: sciannac, 29-Sep-2021 09:21:50
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

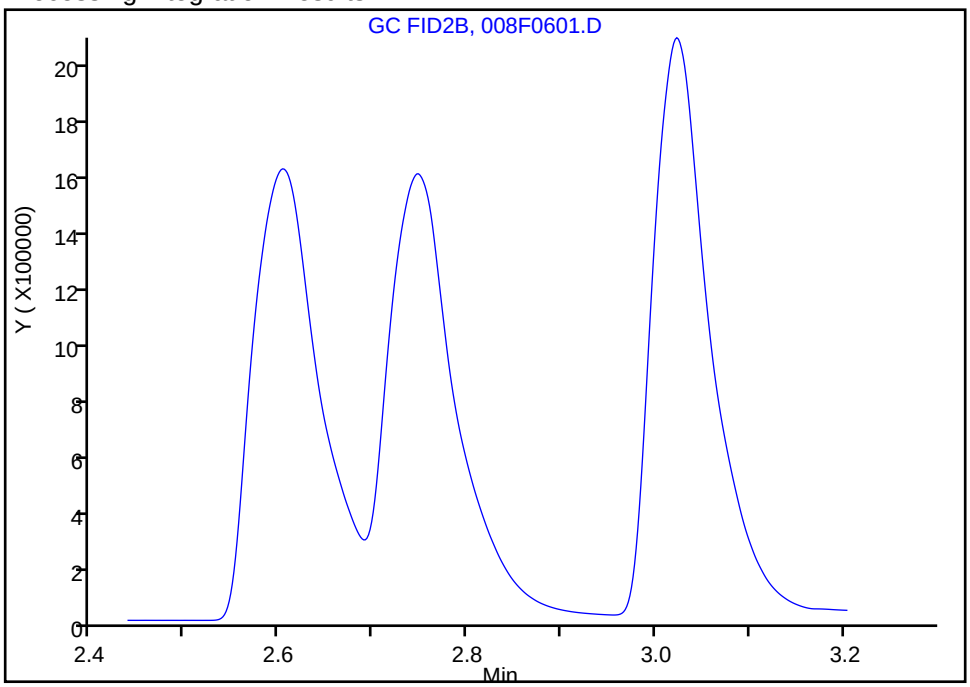
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Injection Date: 24-Sep-2021 14:20:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

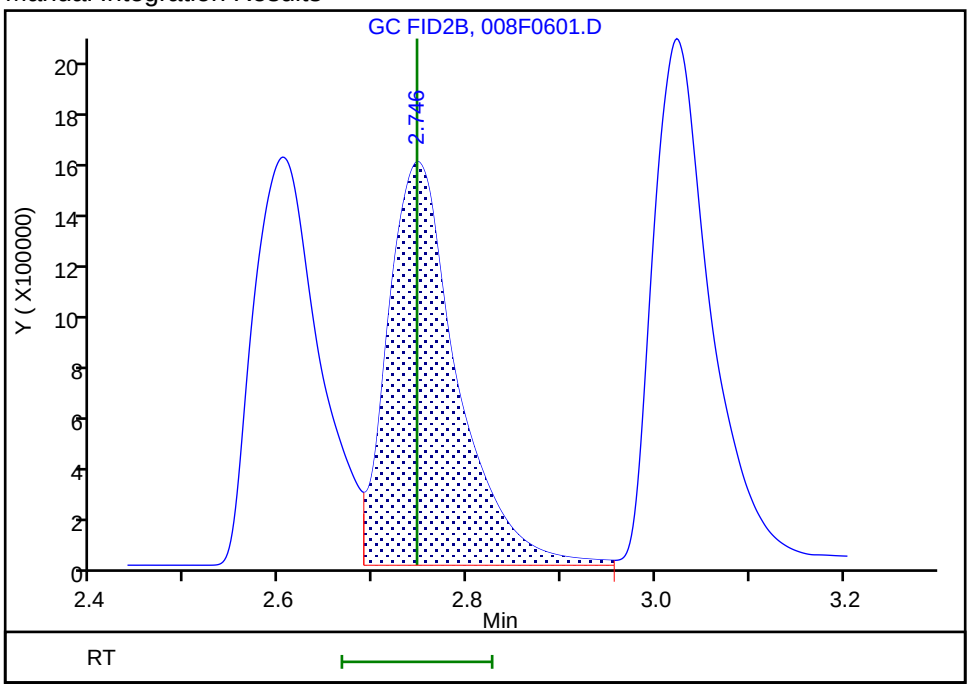
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 7865310
Amount: 230.1225
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:44:53
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-Sep-2021 14:33:44 ALS Bottle#: 9 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:16 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:47:03

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.294	1.295	-0.001	8118988	262.8	229.0	
2	1.678	1.678	0.000	8455607	262.8	232.5	
						RPD = 1.51	
3 Ethane							
1	1.561	1.560	0.001	14997572	492.7	451.2	
2	3.021	3.023	-0.002	14625440	492.7	438.1	
						RPD = 2.94	
4 Ethylene							
1	1.873	1.873	0.000	14678124	459.6	416.7	
2	2.602	2.603	-0.001	12909086	459.6	416.7	
						RPD = 0.00	
5 Propane							
1	2.723	2.721	0.002	23539538	722.6	653.7	
2	4.926	4.929	-0.003	23034734	722.6	657.9	
						RPD = 0.65	
6 Acetylene							a
1	4.228	4.230	-0.002	10977943	426.7	390.1	a
2	2.746	2.746	0.000	13452620	426.7	393.6	a
						RPD = 0.88	
7 Butane							Ma
1	4.588	4.591	-0.003	30555104	952.3	838.9	a
2	6.423	6.426	-0.003	31281741	952.3	890.2	M
						RPD = 5.93	
8 isobutylene							Ma
1	5.466	5.468	-0.002	30754275	919.4	851.3	
2	6.266	6.269	-0.003	28385241	919.4	854.9	M
						RPD = 0.42	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00031 Amount Added: 800.00 Units: uL

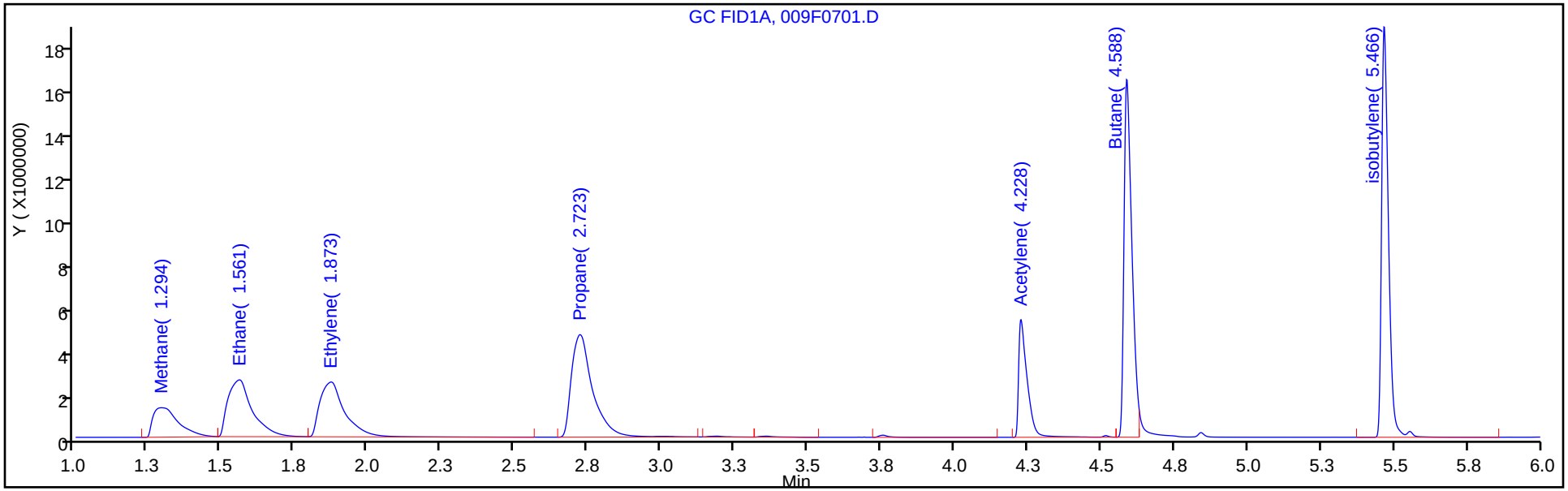
Report Date: 29-Sep-2021 10:55:16 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

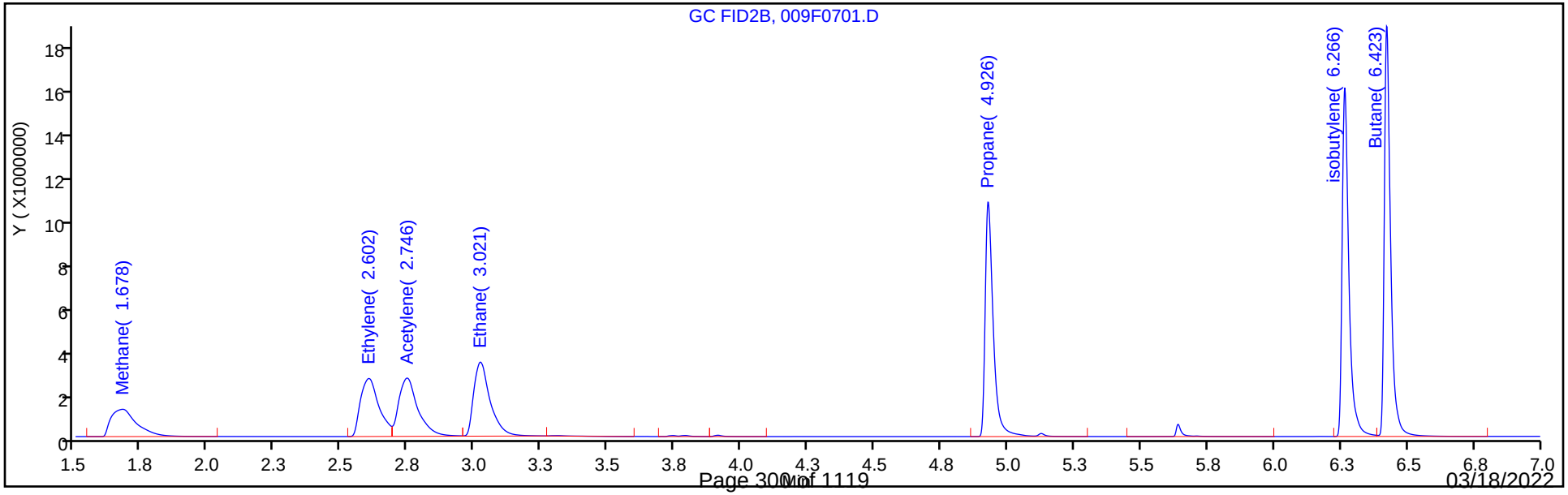
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D

Injection Date:	24-Sep-2021 14:33:44	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	7
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

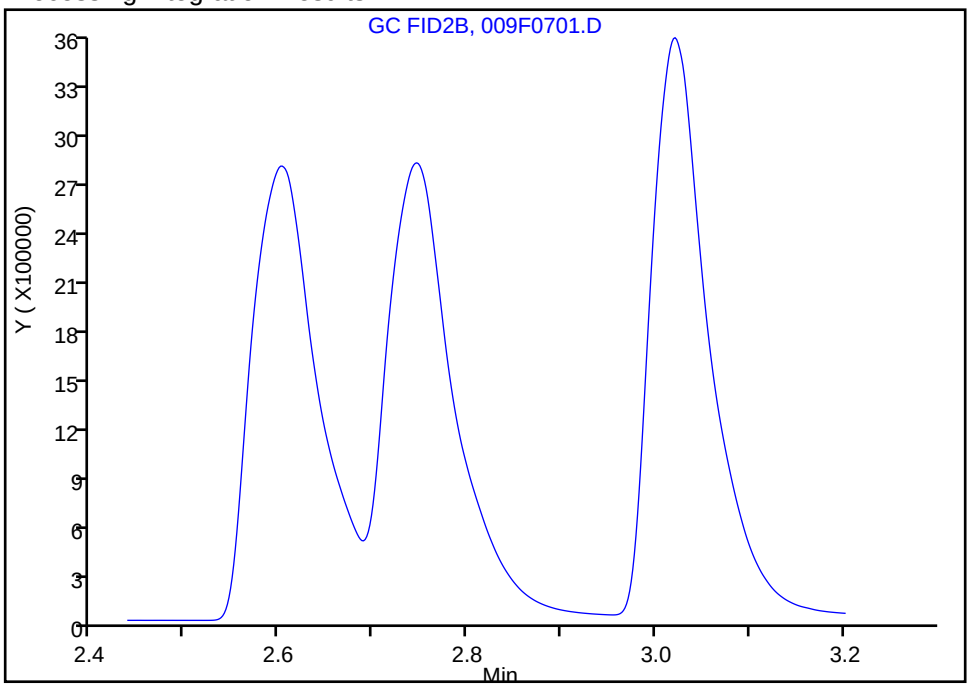
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D
Injection Date: 24-Sep-2021 14:33:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 9 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

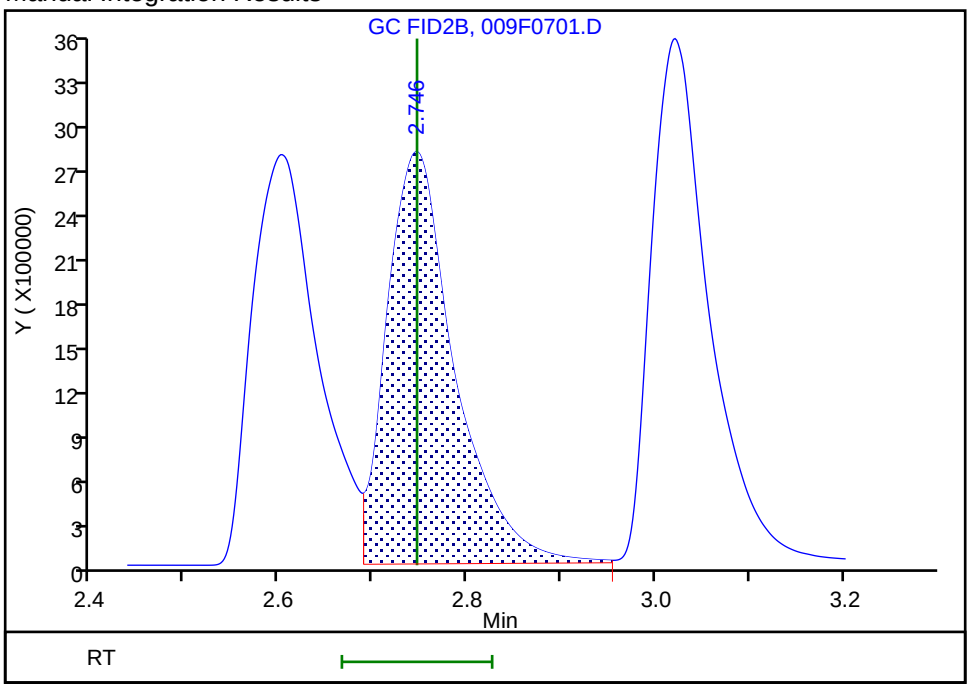
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 13452620
Amount: 393.5955
Amount Units: ug/l



Reviewer: sciannac, 24-Sep-2021 15:46:30
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\010F0801.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 24-Sep-2021 14:46:48 ALS Bottle#: 10 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:17 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:48:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.293	1.295	-0.002	60484705	1626.3	1717.9	
2	1.676	1.678	-0.002	59798125	1626.3	1654.6	
						RPD = 3.75	

QC Flag Legend
Processing Flags

Reagents:
RSK175methane_00010 Amount Added: 50.00 Units: uL

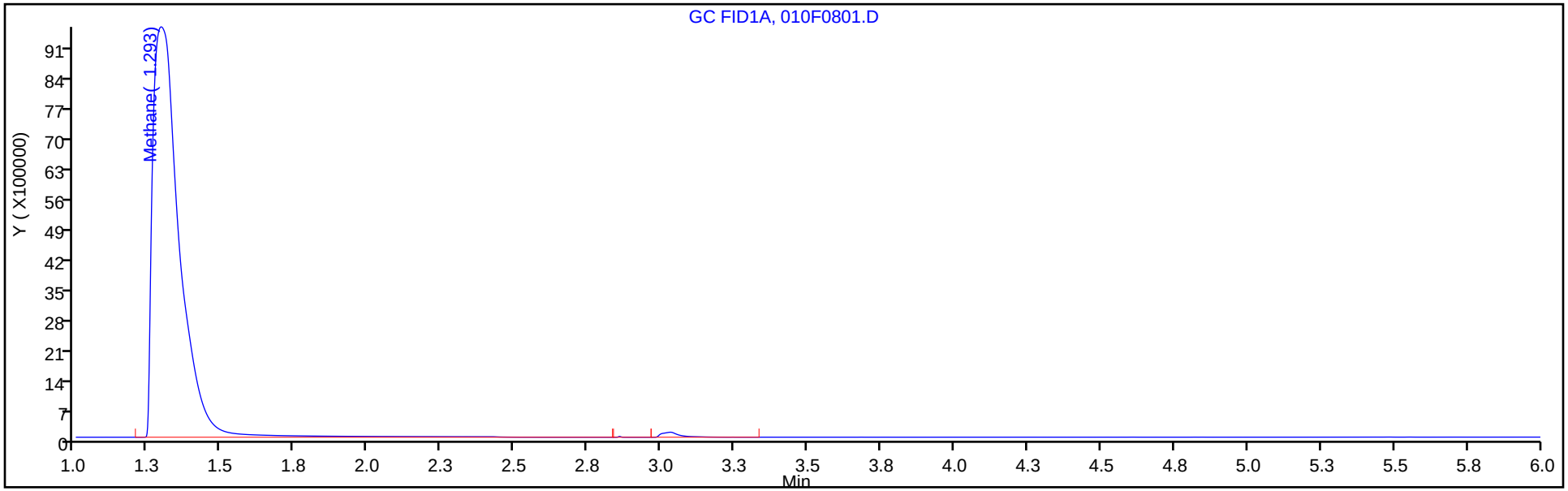
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

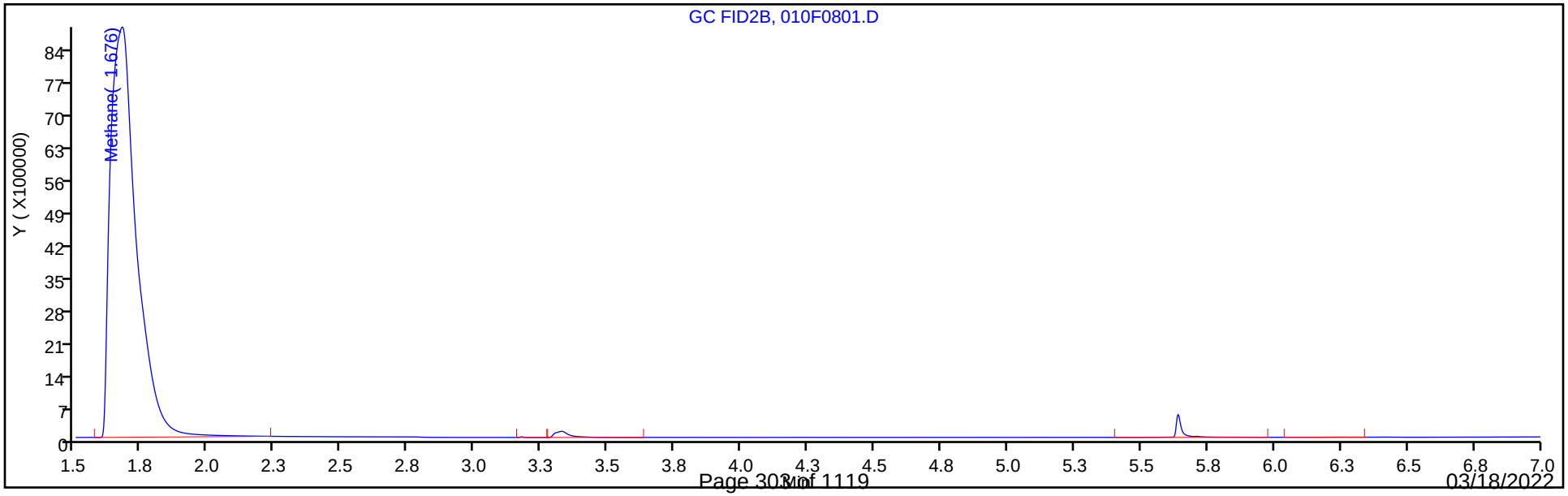
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\010F0801.D

Injection Date:	24-Sep-2021 14:46:48	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\011F0901.D				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	9		
Inject. Date:	24-Sep-2021 14:59:53	ALS Bottle#:	11	Worklist Smp#:	10
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	ic				
Operator ID:	sciannac	Instrument ID:	VGC_J		
Sublist:	chrom-RSK_J*sub5				
Method:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	29-Sep-2021 10:55:17	Calib Date:	24-Sep-2021 15:12:55		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX1655				

First Level Reviewer: sciannac Date: 24-Sep-2021 15:48:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.292	1.295	-0.003	245647963	6505.0	6982.6	
2	1.673	1.678	-0.005	247051774	6505.0	6841.2	
						RPD = 2.04	

QC Flag Legend

Processing Flags

Reagents:

RSK175methane_00010 Amount Added: 200.00 Units: uL

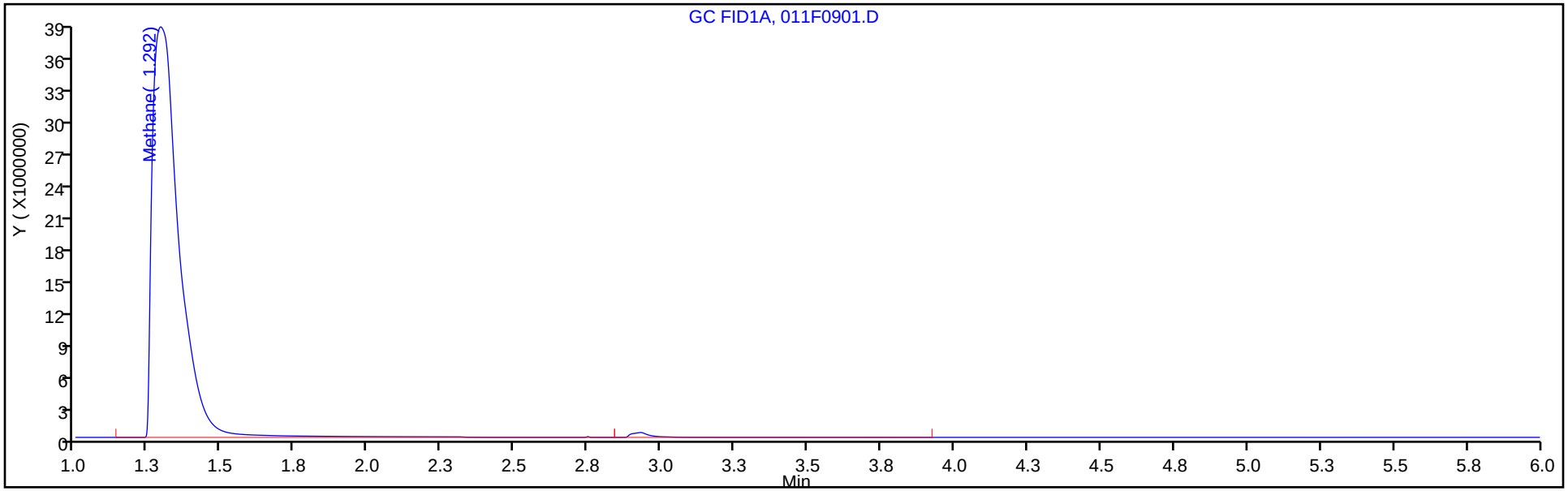
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

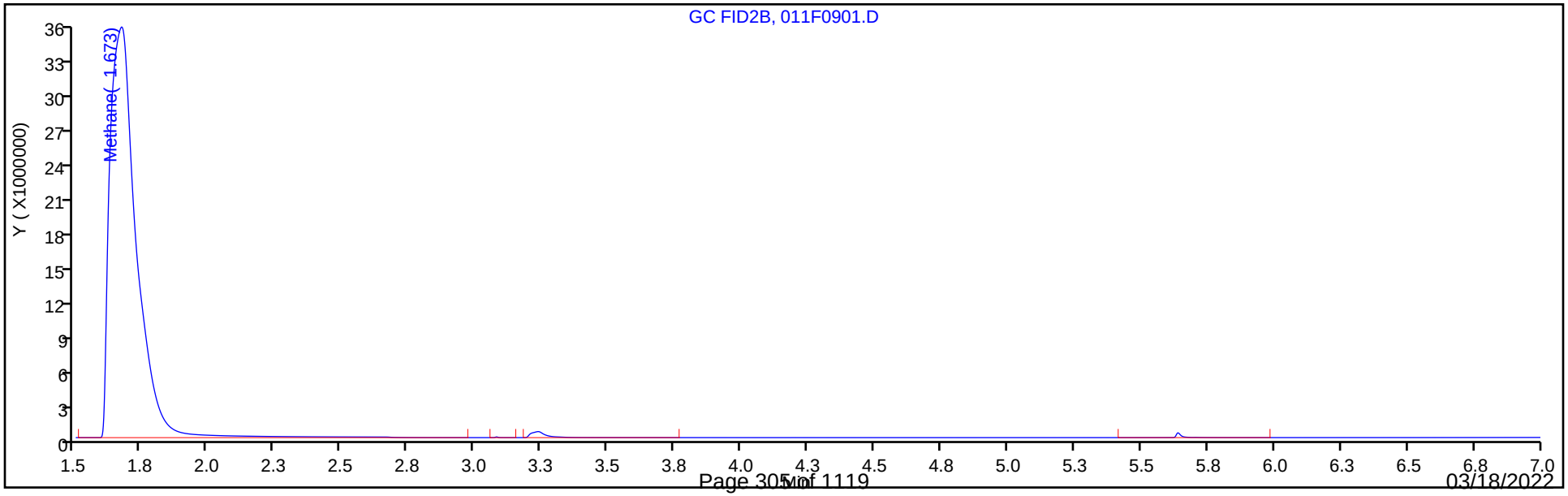
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\011F0901.D

Injection Date:	24-Sep-2021 14:59:53	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 10
Inject. Date: 24-Sep-2021 15:12:55 ALS Bottle#: 12 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ic
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:55:18 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:48:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.288	1.295	-0.007	669092603	19515	19022	
2	1.669	1.678	-0.009	675608539	19515	18712	
						RPD = 1.65	

QC Flag Legend
Processing Flags

Reagents:
RSK175methane_00010 Amount Added: 600.00 Units: uL

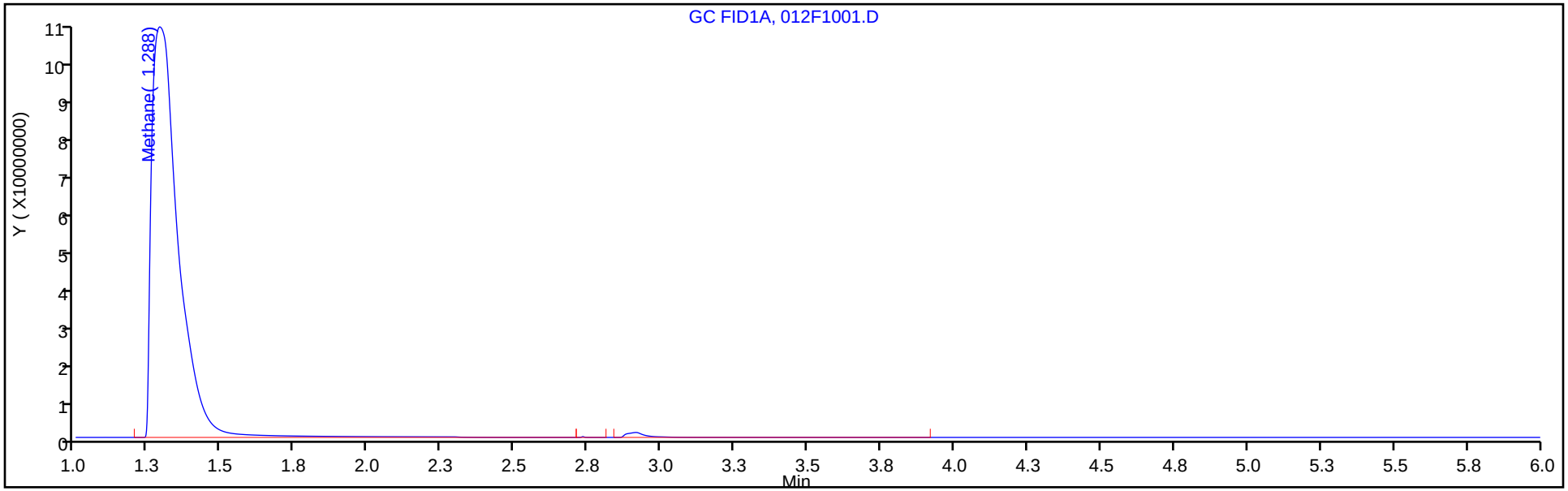
Report Date: 29-Sep-2021 10:55:18 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

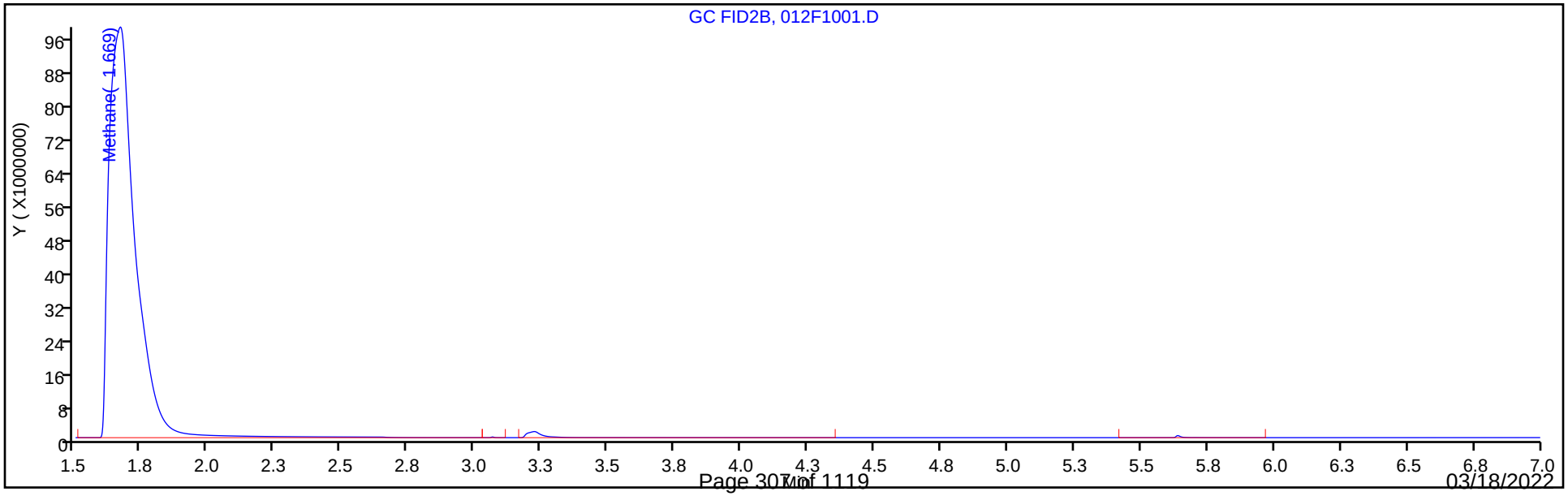
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Injection Date:	24-Sep-2021 15:12:55	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ic			Worklist Smp#:	11
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Calibration / Methane

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

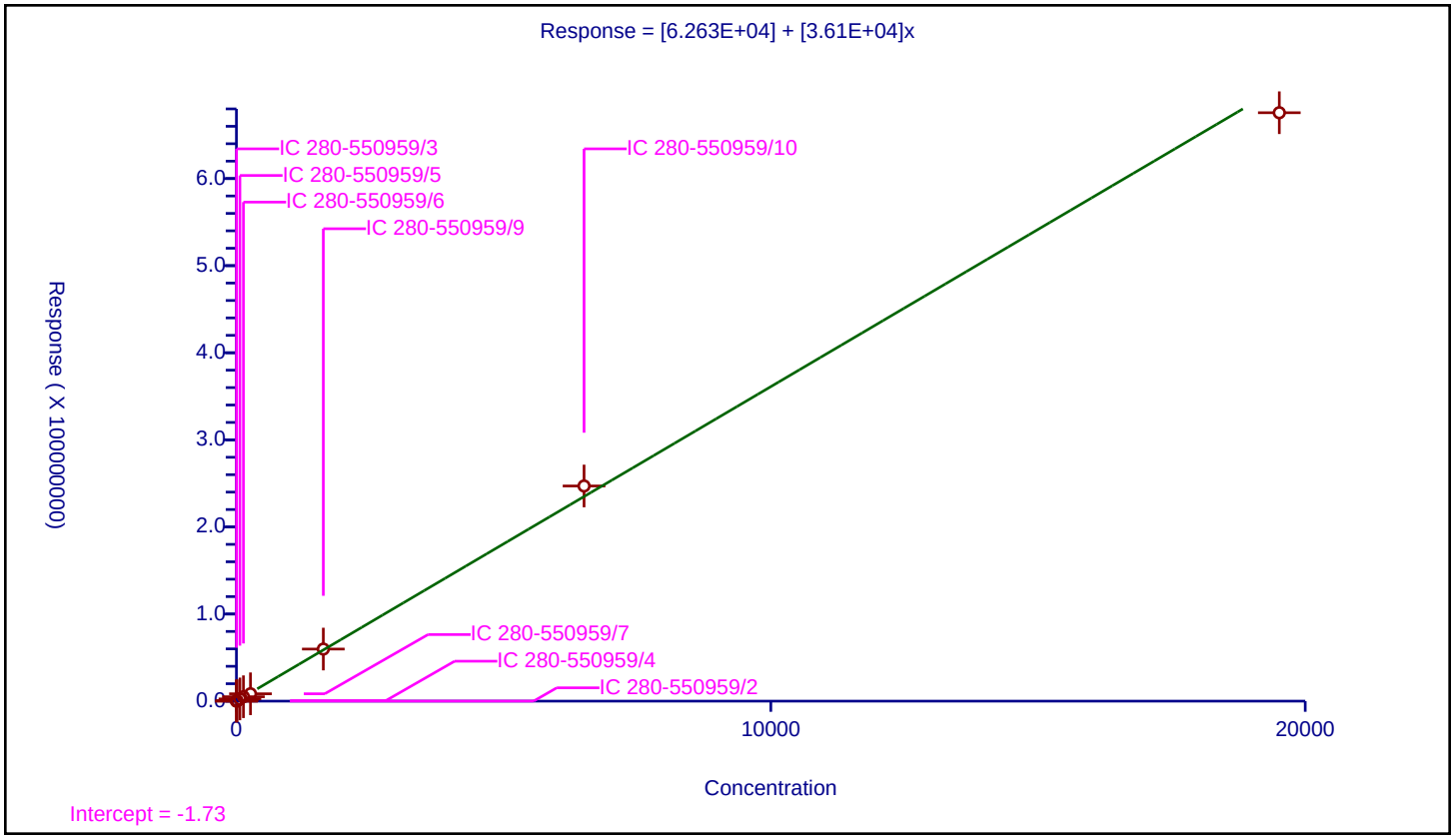
Curve Coefficients

Intercept:	6.263E+04
Slope:	3.61E+04

Error Coefficients

Standard Error:	11900000
Relative Standard Error:	7.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	0.821288	91227.0			111078.032967	Y
2	IC 280-550959/3	1.642575	126529.0			77030.88139	Y
3	IC 280-550959/4	13.1406	509129.0			38744.730073	Y
4	IC 280-550959/5	65.703	2553566.0			38865.287734	Y
5	IC 280-550959/6	131.406	5065048.0			38545.028385	Y
6	IC 280-550959/7	262.812	8455607.0			32173.595574	Y
7	IC 280-550959/9	1626.25	59798125.0			36770.561107	Y
8	IC 280-550959/10	6505.0	247051774.0			37978.750807	Y
9	IC 280-550959/11	19515.0	675608539.0			34619.961004	Y



Calibration / Ethylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

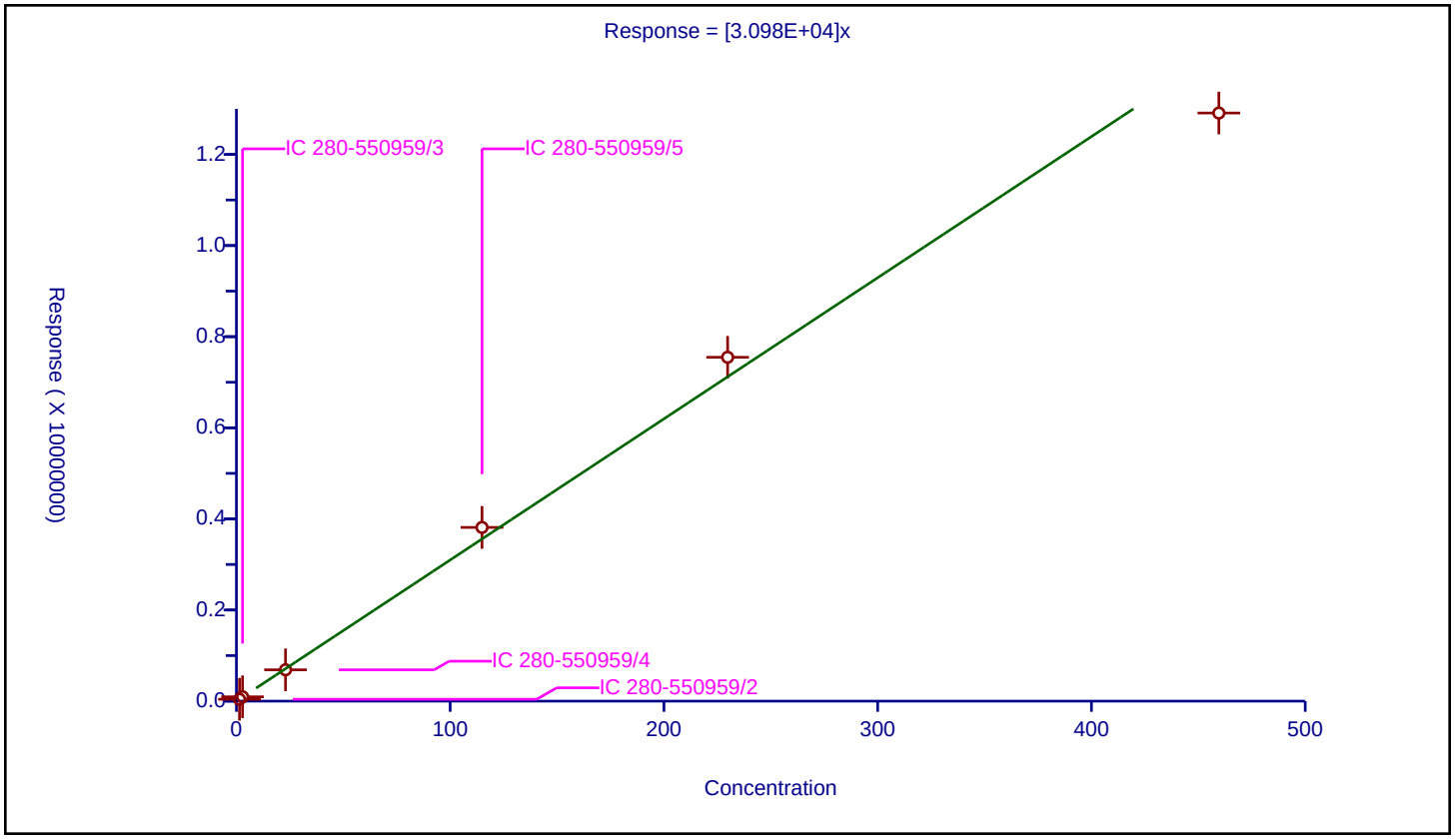
Curve Coefficients

Intercept:	0
Slope:	3.098E+04

Error Coefficients

Standard Error:	635000
Relative Standard Error:	7.6
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	1.43625	41226.0			28703.916449	Y
2	IC 280-550959/3	2.8725	95159.0			33127.589208	Y
3	IC 280-550959/4	22.98	687818.0			29931.157528	Y
4	IC 280-550959/5	114.9	3812973.0			33185.143603	Y
5	IC 280-550959/6	229.8	7548044.0			32846.144473	Y
6	IC 280-550959/7	459.6	12909086.0			28087.654482	Y



Calibration / Acetylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

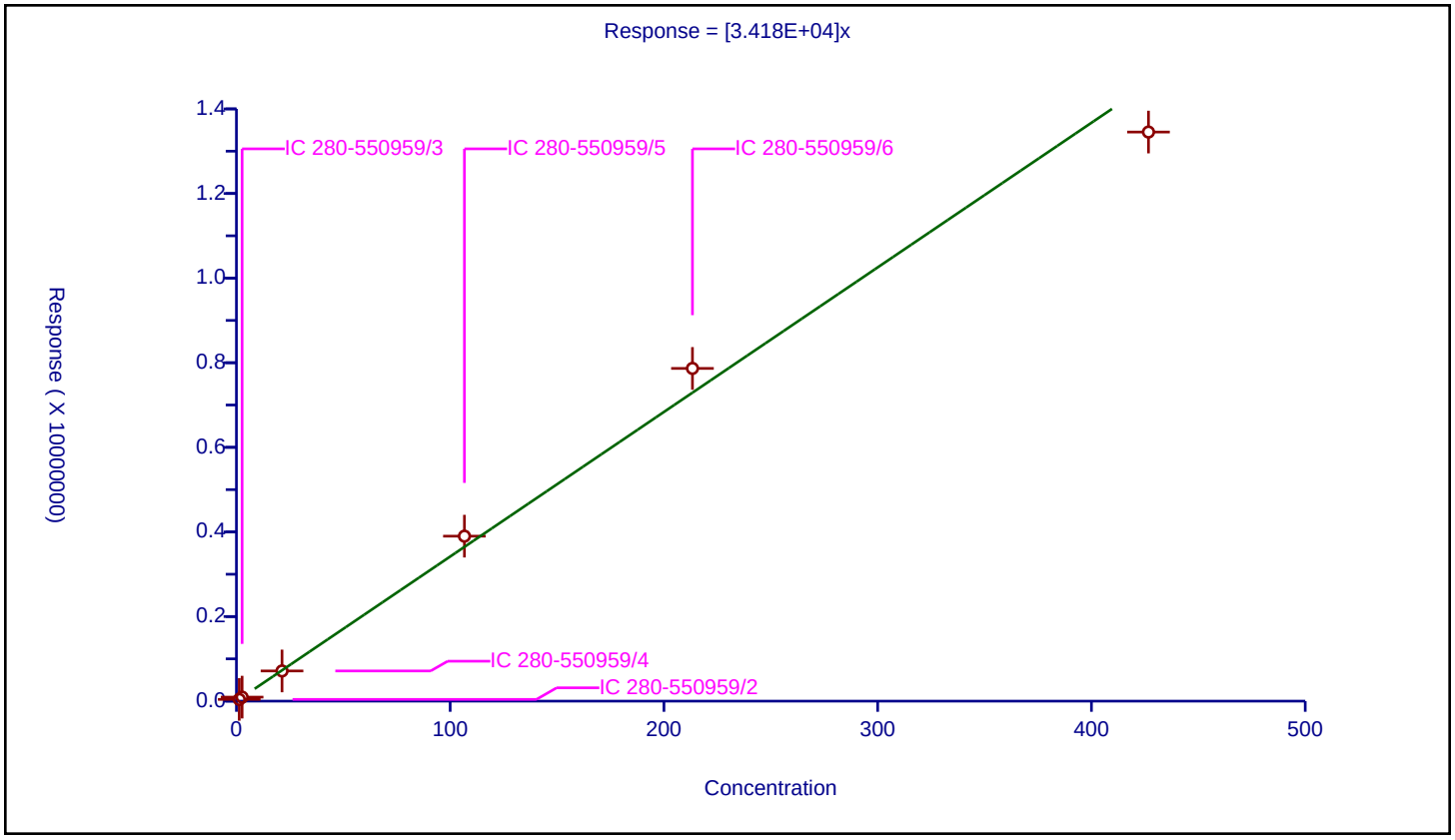
Curve Coefficients

Intercept:	0
Slope:	3.418E+04

Error Coefficients

Standard Error:	578000
Relative Standard Error:	7.4
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	1.333375	41503.0			31126.277304	Y
2	IC 280-550959/3	2.66675	94797.0			35547.764132	Y
3	IC 280-550959/4	21.334	713476.0			33443.142402	Y
4	IC 280-550959/5	106.67	3899802.0			36559.501266	Y
5	IC 280-550959/6	213.34	7865310.0			36867.488516	Y
6	IC 280-550959/7	426.68	13452620.0			31528.592856	Y



Calibration / Ethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

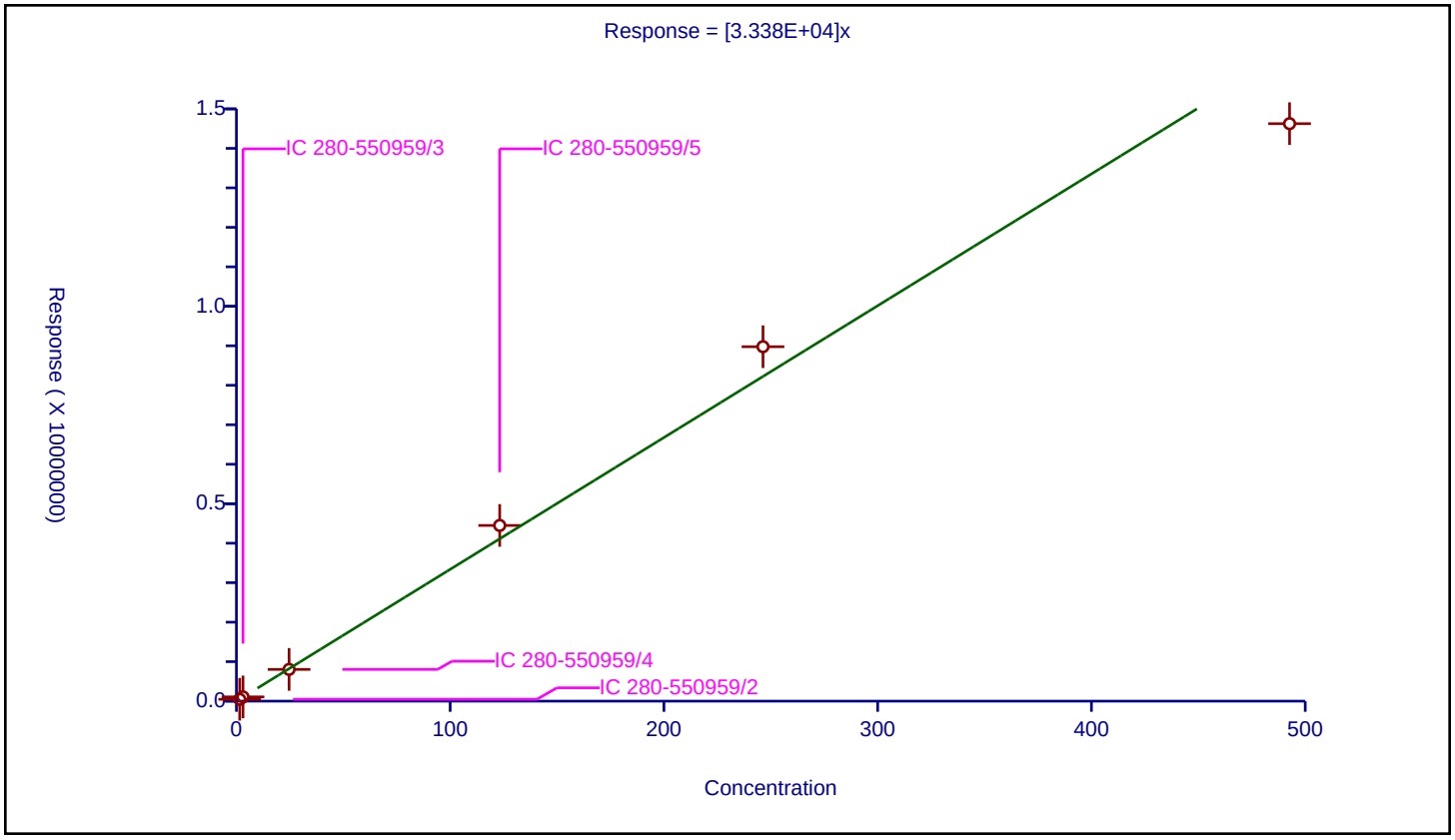
Curve Coefficients

Intercept:	0
Slope:	3.338E+04

Error Coefficients

Standard Error:	894000
Relative Standard Error:	8.6
Correlation Coefficient:	0.987
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-550959/2	1.539625	46984.0			30516.52188	Y
2	IC 280-550959/3	3.07925	107446.0			34893.561744	Y
3	IC 280-550959/4	24.634	803791.0			32629.333442	Y
4	IC 280-550959/5	123.17	4450065.0			36129.455224	Y
5	IC 280-550959/6	246.34	8976911.0			36441.142324	Y
6	IC 280-550959/7	492.68	14625440.0			29685.475359	Y



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: ICV 280-550959/13 Calibration Date: 09/24/2021 15:38

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 014F1201.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37179		67.6	65.7	2.9	20.0
Ethane	Ave	33241	36496		135	123	9.8	20.0
Ethylene	Ave	35226	37757		123	115	7.2	20.0
Acetylene	Ave	28139	30719		116	107	9.2	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: ICV 280-550959/13 Calibration Date: 09/24/2021 15:38

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 014F1201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.29	1.26	1.34
Ethane	1.56	1.51	1.61
Ethylene	1.87	1.79	1.89
Acetylene	4.24	4.15	4.31

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\014F1201.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 24-Sep-2021 15:38:59 ALS Bottle#: 14 Worklist Smp#: 13
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: icv
Operator ID: sciannac Instrument ID: VGC_J
Sublist:

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:58:12 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:54:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.289	1.299	-0.010	2442793	65.7	67.6	
2	1.676	1.686	-0.010	2535074	65.7	68.5	
						RPD = 1.30	
3 Ethane							
1	1.559	1.556	0.003	4495267	123.2	135.2	
2	3.018	3.028	-0.010	4535642	123.2	135.9	
						RPD = 0.47	
4 Ethylene							
1	1.874	1.844	0.030	4338329	114.9	123.2	
2	2.598	2.609	-0.011	3828020	114.9	123.6	
						RPD = 0.33	
5 Propane							
1	2.726	2.721	0.005	7114360	180.6	197.6	
2	4.928	4.929	-0.001	6799509	180.6	194.2	
						RPD = 1.71	
6 Acetylene							
1	4.243	4.230	0.013	3276773	106.7	116.4	
2	2.741	2.746	-0.005	4007122	106.7	117.2	
						RPD = 0.68	
7 Butane							Ma
1	4.599	4.528	0.071	9349199	238.1	256.7	a
2	6.426	6.426	0.000	8946550	238.1	254.6	M
						RPD = 0.82	
8 isobutylene							Ma
1	5.479	5.403	0.076	8850386	229.8	245.0	
2	6.268	6.274	-0.006	8132396	229.8	244.9	M
						RPD = 0.03	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

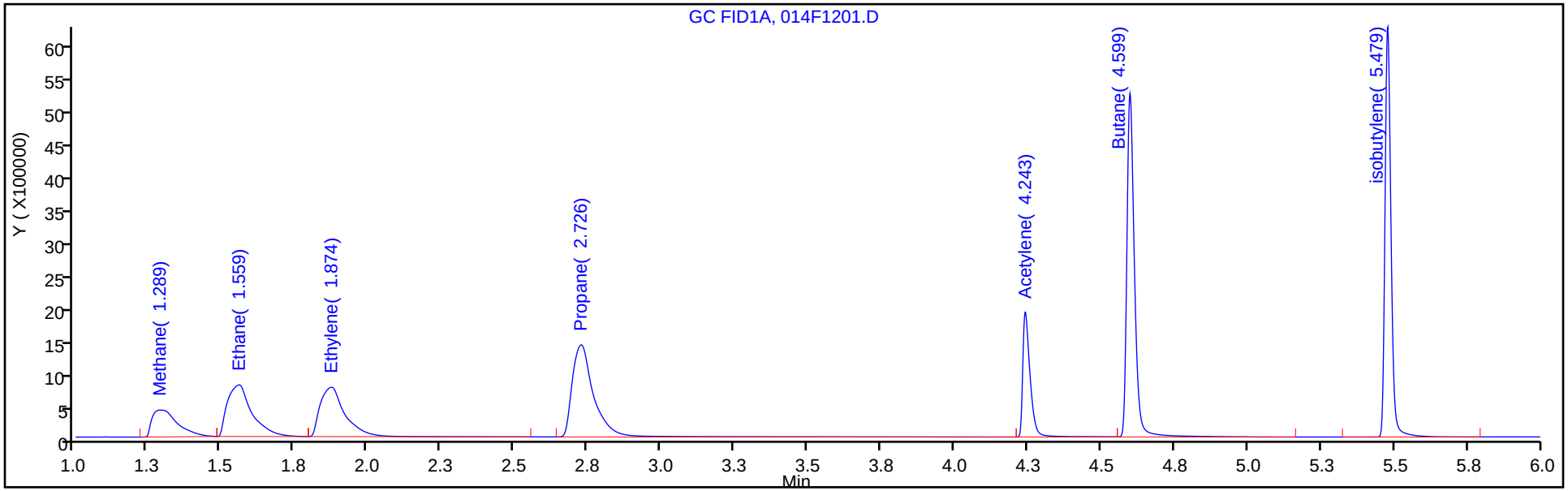
Report Date: 29-Sep-2021 10:58:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

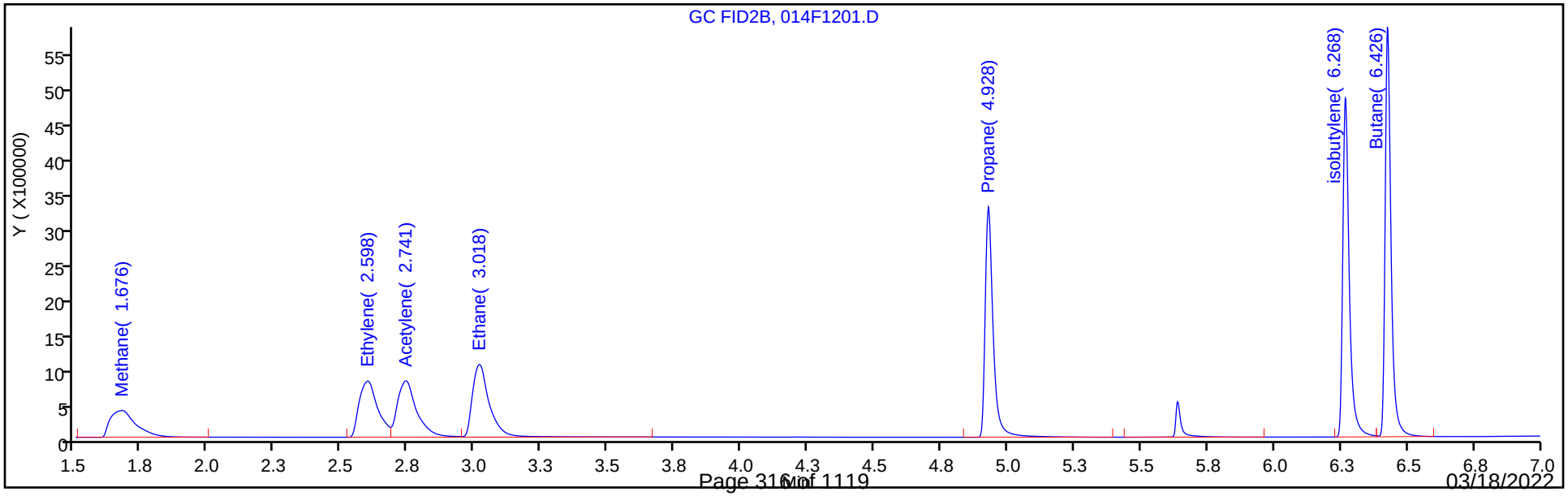
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\014F1201.D

Injection Date:	24-Sep-2021 15:38:59	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ICV			Worklist Smp#:	13
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: ICV 280-550959/13 Calibration Date: 09/24/2021 15:38

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 014F1201.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		38584		68.5	65.7	4.2	20.0
Ethylene	Ave	30980	33316		124	115	7.5	20.0
Acetylene	Ave	34179	37566		117	107	9.9	20.0
Ethane	Ave	33383	36824		136	123	10.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: ICV 280-550959/13 Calibration Date: 09/24/2021 15:38

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 014F1201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.68	1.65	1.73
Ethylene	2.60	2.56	2.66
Acetylene	2.74	2.67	2.83
Ethane	3.02	2.98	3.08

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\014F1201.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 24-Sep-2021 15:38:59 ALS Bottle#: 14 Worklist Smp#: 13
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: icv
Operator ID: sciannac Instrument ID: VGC_J
Sublist:

Method: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 29-Sep-2021 10:58:12 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1655

First Level Reviewer: sciannac Date: 24-Sep-2021 15:54:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.289	1.299	-0.010	2442793	65.7	67.6	
2	1.676	1.686	-0.010	2535074	65.7	68.5	
						RPD = 1.30	
3 Ethane							
1	1.559	1.556	0.003	4495267	123.2	135.2	
2	3.018	3.028	-0.010	4535642	123.2	135.9	
						RPD = 0.47	
4 Ethylene							
1	1.874	1.844	0.030	4338329	114.9	123.2	
2	2.598	2.609	-0.011	3828020	114.9	123.6	
						RPD = 0.33	
5 Propane							
1	2.726	2.721	0.005	7114360	180.6	197.6	
2	4.928	4.929	-0.001	6799509	180.6	194.2	
						RPD = 1.71	
6 Acetylene							
1	4.243	4.230	0.013	3276773	106.7	116.4	
2	2.741	2.746	-0.005	4007122	106.7	117.2	
						RPD = 0.68	
7 Butane							Ma
1	4.599	4.528	0.071	9349199	238.1	256.7	a
2	6.426	6.426	0.000	8946550	238.1	254.6	M
						RPD = 0.82	
8 isobutylene							Ma
1	5.479	5.403	0.076	8850386	229.8	245.0	
2	6.268	6.274	-0.006	8132396	229.8	244.9	M
						RPD = 0.03	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

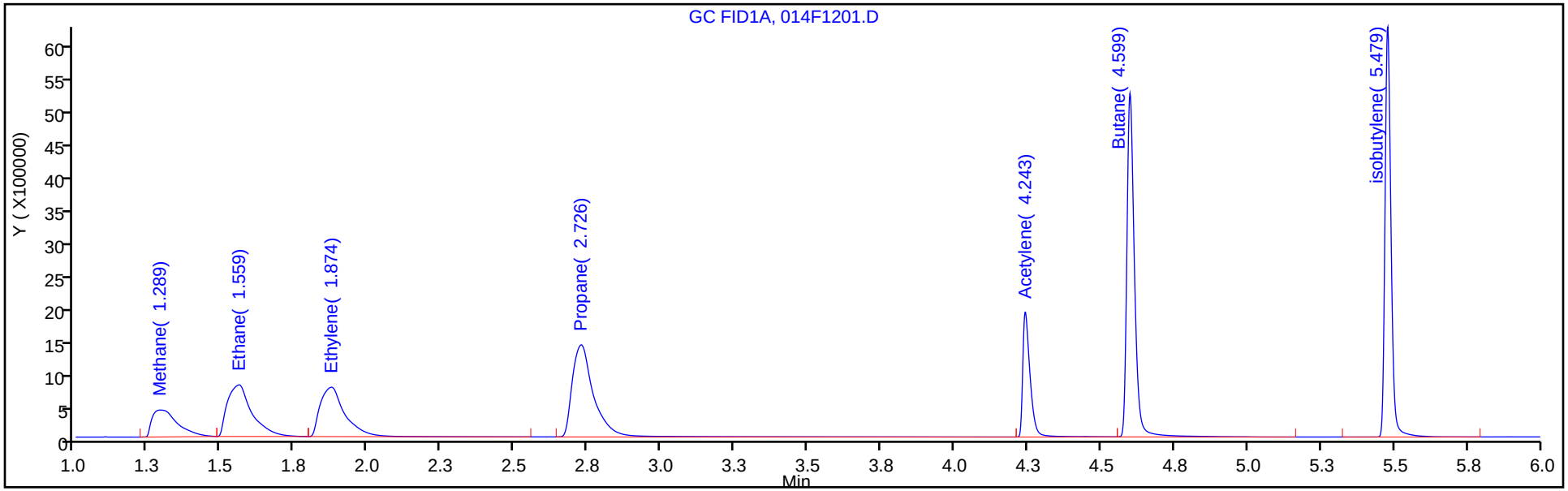
Report Date: 29-Sep-2021 10:58:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

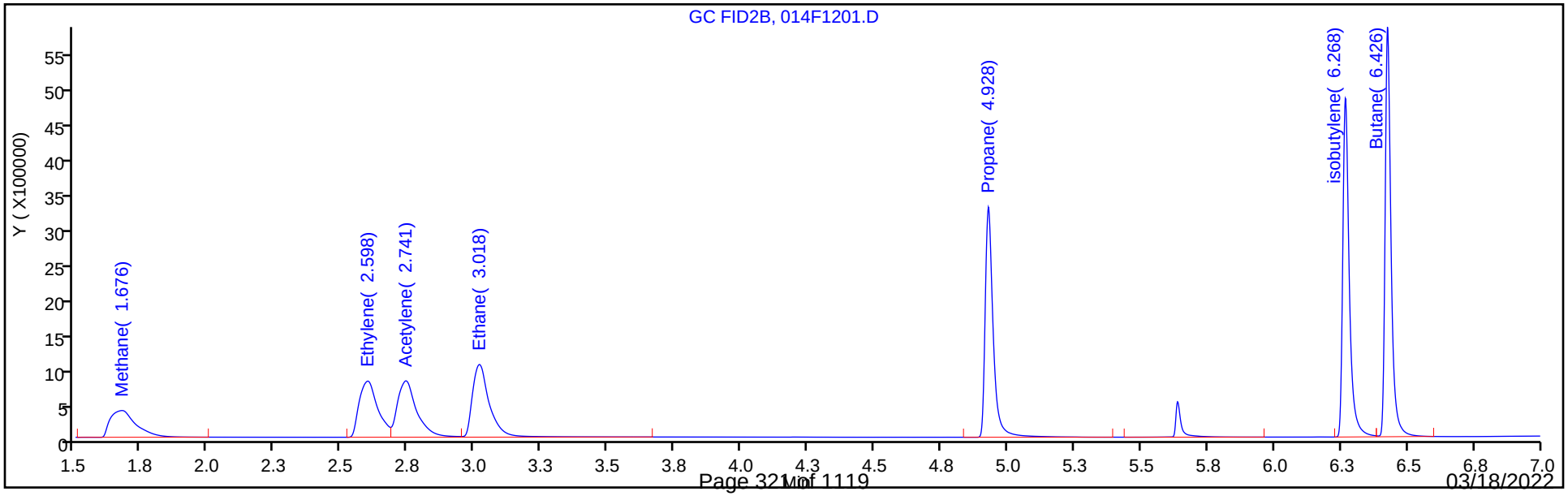
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Injection Date:	24-Sep-2021 15:38:59	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ICV			Worklist Smp#:	13
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCVRT 280-567496/2 Calibration Date: 03/02/2022 14:39

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37754		68.7	65.7	4.5	20.0
Ethane	Ave	33241	34861		129	123	4.9	20.0
Ethylene	Ave	35226	37221		121	115	5.7	20.0
Acetylene	Ave	28139	31048		118	107	10.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCVRT 280-567496/2 Calibration Date: 03/02/2022 14:39

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.22	1.30
Ethane	1.52	1.47	1.57
Ethylene	1.79	1.74	1.84
Acetylene	4.05	3.97	4.13

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\002F0201.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 02-Mar-2022 14:39:54 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Mar-2022 11:19:32 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1669

First Level Reviewer: sciannac Date: 03-Mar-2022 10:52:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.262	1.262	0.000	2480583	65.7	68.7	
2	1.670	1.670	0.000	2495959	65.7	67.4	
						RPD = 1.87	
3 Ethane							
1	1.517	1.517	0.000	4293847	123.2	129.2	
2	3.022	3.022	0.000	4435737	123.2	132.9	
						RPD = 2.83	
4 Ethylene							
1	1.789	1.789	0.000	4276652	114.9	121.4	
2	2.604	2.604	0.000	3764927	114.9	121.5	
						RPD = 0.10	
5 Propane							
1	2.545	2.545	0.000	6863357	180.6	190.6	
2	4.927	4.927	0.000	6580616	180.6	188.0	
						RPD = 1.39	
6 Acetylene							
1	4.050	4.050	0.000	3311936	106.7	117.7	
2	2.750	2.750	0.000	4076157	106.7	119.3	
						RPD = 1.32	
7 Butane							Ma
1	4.412	4.412	0.000	9366658	238.1	257.2	a
2	6.427	6.427	0.000	8805174	238.1	250.6	M
						RPD = 2.60	
8 isobutylene							Ma
1	5.314	5.314	0.000	8882472	229.8	245.9	
2	6.269	6.269	0.000	7951261	229.8	239.5	M
						RPD = 2.64	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

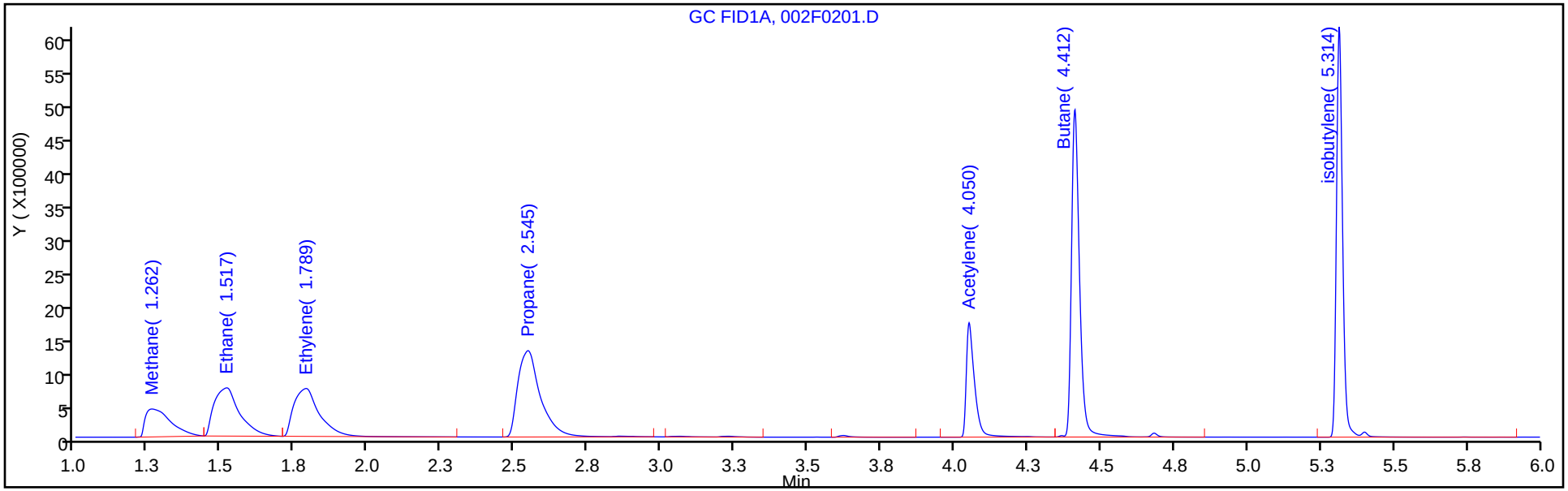
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Eurofins Denver

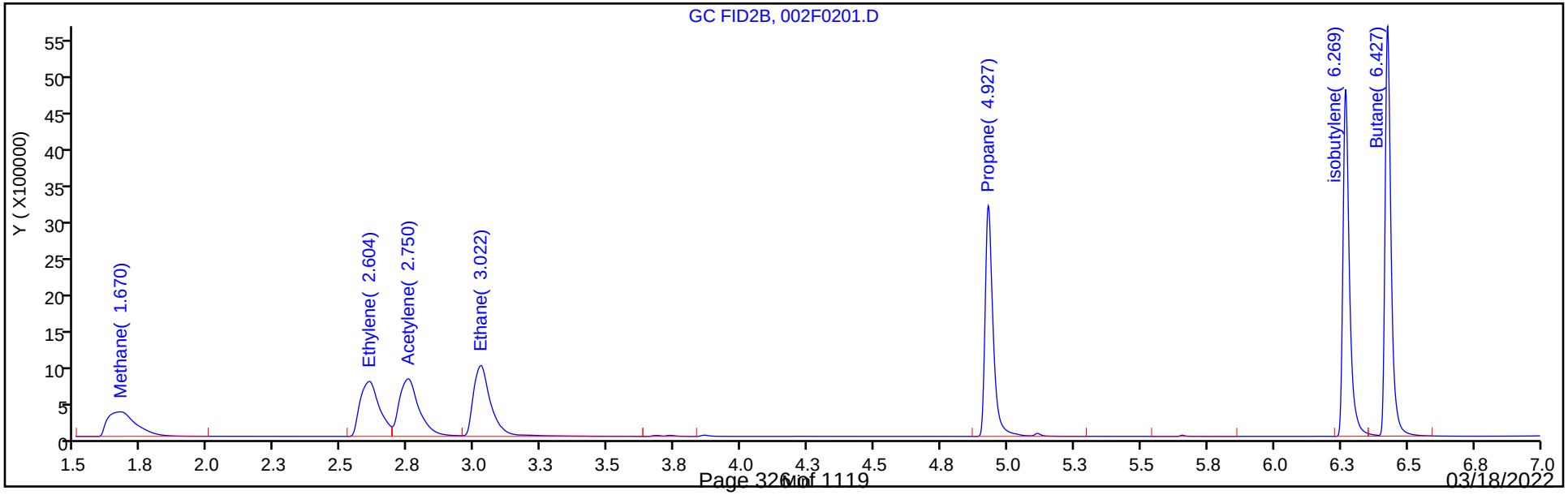
Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\002F0201.D

Injection Date:	02-Mar-2022 14:39:54	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCVRT 280-567496/2 Calibration Date: 03/02/2022 14:39

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37989		67.4	65.7	2.6	20.0
Ethylene	Ave	30980	32767		122	115	5.8	20.0
Acetylene	Ave	34179	38213		119	107	11.8	20.0
Ethane	Ave	33383	36013		133	123	7.9	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCVRT 280-567496/2 Calibration Date: 03/02/2022 14:39

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.63	1.71
Ethylene	2.60	2.55	2.65
Acetylene	2.75	2.67	2.83
Ethane	3.02	2.97	3.07

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\002F0201.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 02-Mar-2022 14:39:54 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Mar-2022 11:19:32 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1669

First Level Reviewer: sciannac Date: 03-Mar-2022 10:52:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.262	1.262	0.000	2480583	65.7	68.7	
2	1.670	1.670	0.000	2495959	65.7	67.4	
						RPD = 1.87	
3 Ethane							
1	1.517	1.517	0.000	4293847	123.2	129.2	
2	3.022	3.022	0.000	4435737	123.2	132.9	
						RPD = 2.83	
4 Ethylene							
1	1.789	1.789	0.000	4276652	114.9	121.4	
2	2.604	2.604	0.000	3764927	114.9	121.5	
						RPD = 0.10	
5 Propane							
1	2.545	2.545	0.000	6863357	180.6	190.6	
2	4.927	4.927	0.000	6580616	180.6	188.0	
						RPD = 1.39	
6 Acetylene							
1	4.050	4.050	0.000	3311936	106.7	117.7	
2	2.750	2.750	0.000	4076157	106.7	119.3	
						RPD = 1.32	
7 Butane							Ma
1	4.412	4.412	0.000	9366658	238.1	257.2	a
2	6.427	6.427	0.000	8805174	238.1	250.6	M
						RPD = 2.60	
8 isobutylene							Ma
1	5.314	5.314	0.000	8882472	229.8	245.9	
2	6.269	6.269	0.000	7951261	229.8	239.5	M
						RPD = 2.64	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

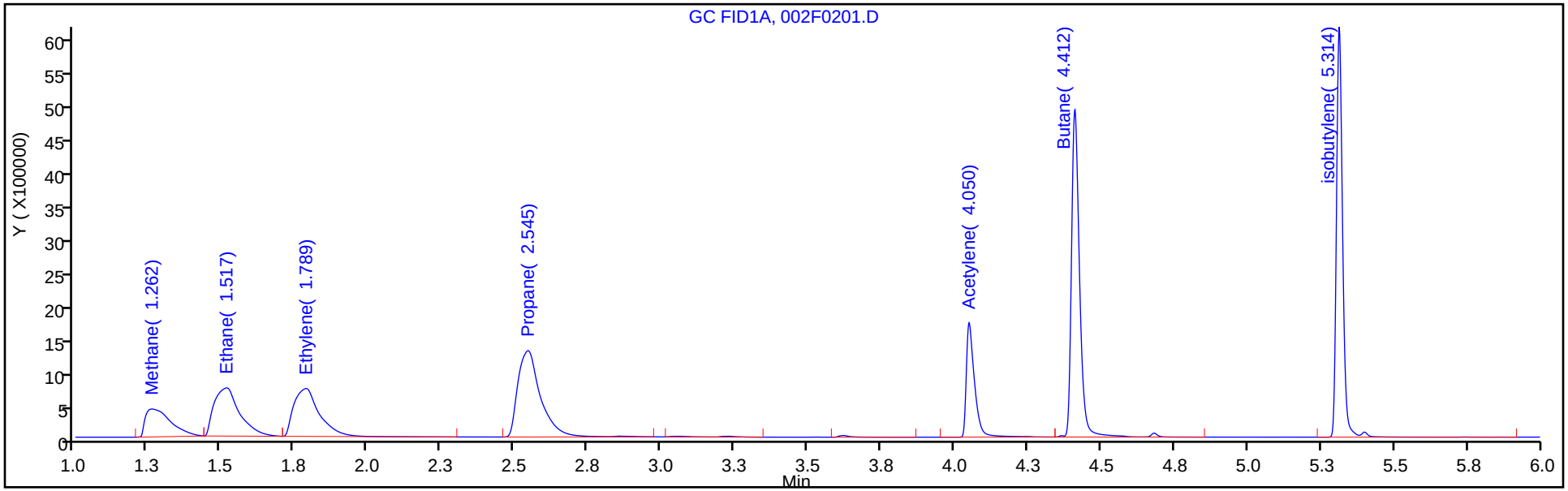
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Eurofins Denver

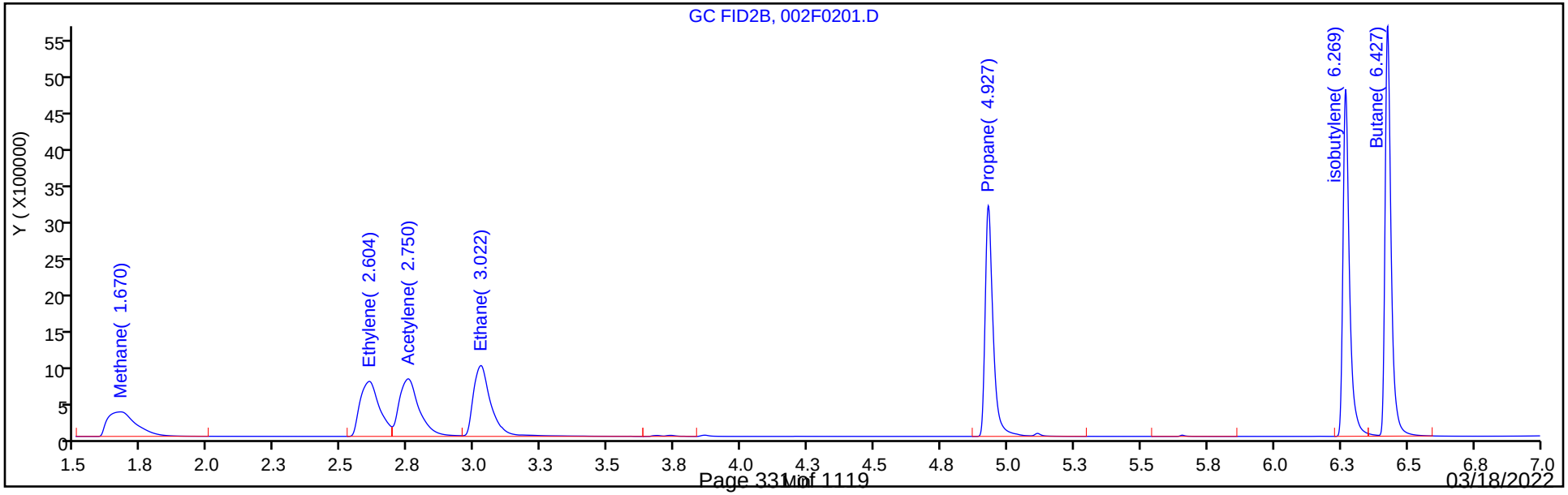
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Injection Date:	02-Mar-2022 14:39:54	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567496/45 Calibration Date: 03/02/2022 18:22

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 019F1901.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37890		68.9	65.7	4.9	20.0
Ethane	Ave	33241	34425		128	123	3.6	20.0
Ethylene	Ave	35226	36472		119	115	3.5	20.0
Acetylene	Ave	28139	27784		105	107	-1.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567496/45 Calibration Date: 03/02/2022 18:22

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 019F1901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.22	1.30
Ethane	1.52	1.47	1.57
Ethylene	1.83	1.74	1.84
Acetylene	4.22	3.97	4.13

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\019F1901.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 02-Mar-2022 18:22:02 ALS Bottle#: 19 Worklist Smp#: 45
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Mar-2022 11:19:41 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1669

First Level Reviewer: sciannac Date: 03-Mar-2022 09:28:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.252	1.262	-0.010	2489519	65.7	68.9	
2	1.657	1.670	-0.013	2466666	65.7	66.6	
						RPD = 3.45	
3 Ethane							
1	1.523	1.517	0.006	4240159	123.2	127.6	
2	3.005	3.022	-0.017	4313313	123.2	129.2	
						RPD = 1.29	
4 Ethylene							
1	1.830	1.789	0.041	4190682	114.9	119.0	
2	2.587	2.604	-0.017	3641038	114.9	117.5	
						RPD = 1.22	
5 Propane							a
1	2.645	2.545	0.100	6640929	180.6	184.4	a
2	4.920	4.927	-0.007	6295186	180.6	179.8	a
						RPD = 2.53	
6 Acetylene							Ma
1	4.215	4.050	0.165	2963704	106.7	105.3	a
2	2.732	2.750	-0.018	3701089	106.7	108.3	M
						RPD = 2.77	
7 Butane							Ma
1	4.525	4.412	0.113	8482399	238.1	232.9	a
2	6.422	6.427	-0.005	8048082	238.1	229.0	M
						RPD = 1.67	
8 isobutylene							Ma
1	5.425	5.314	0.111	8100026	229.8	224.2	a
2	6.264	6.269	-0.005	7302620	229.8	219.9	M
						RPD = 1.93	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

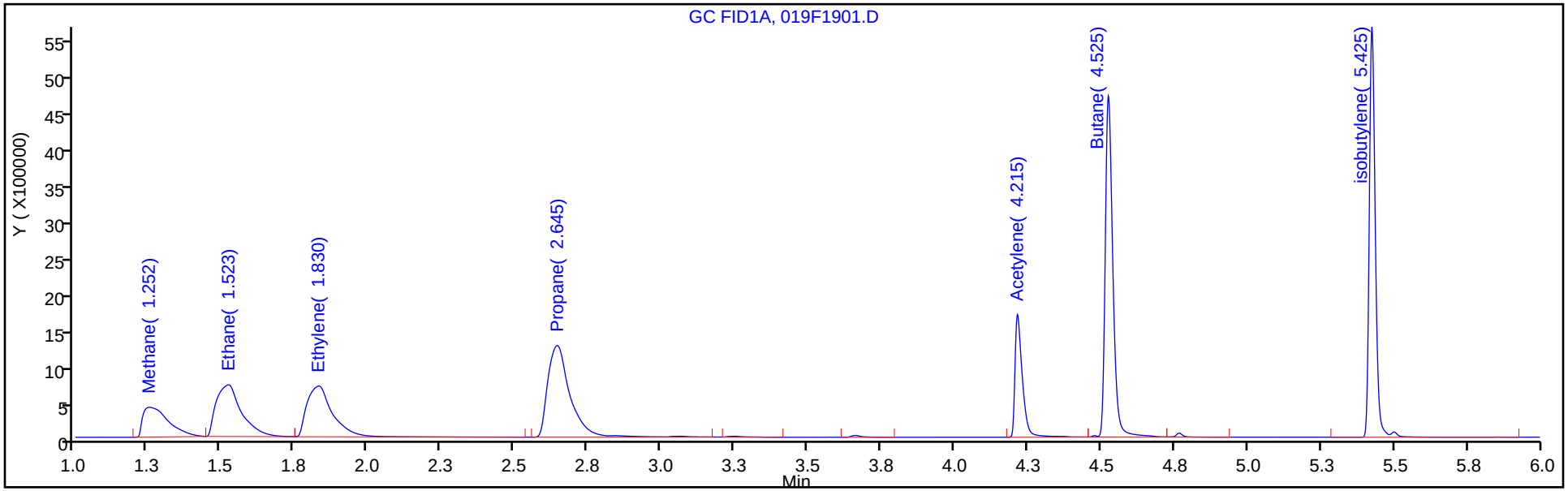
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Eurofins Denver

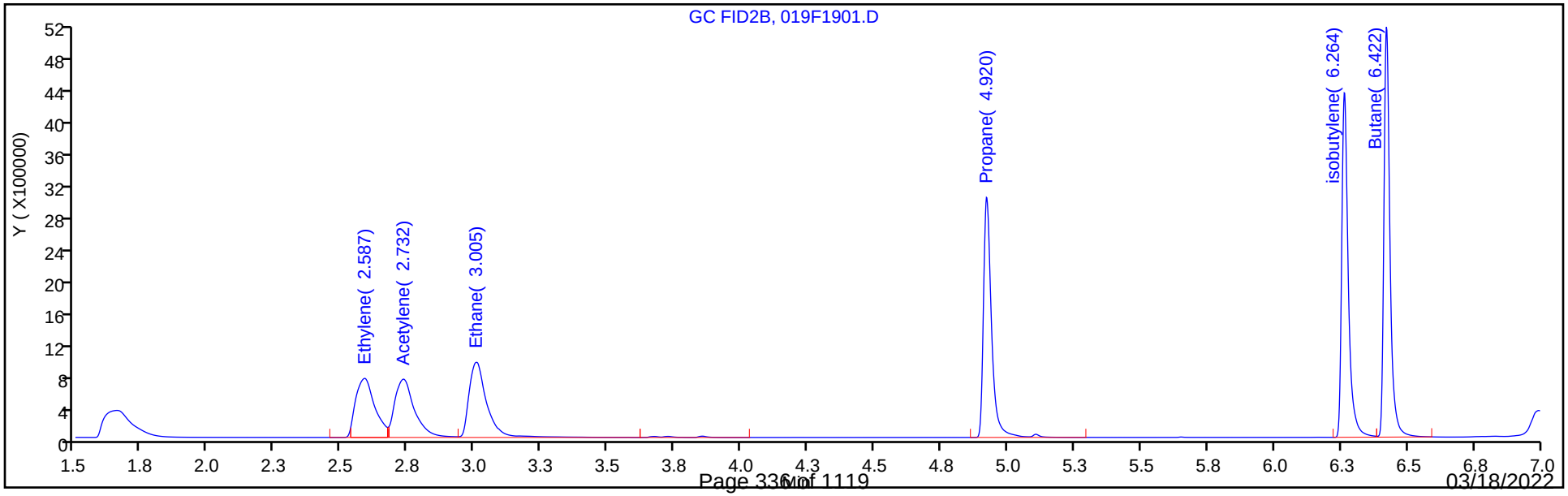
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Injection Date:	02-Mar-2022 18:22:02	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	45
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

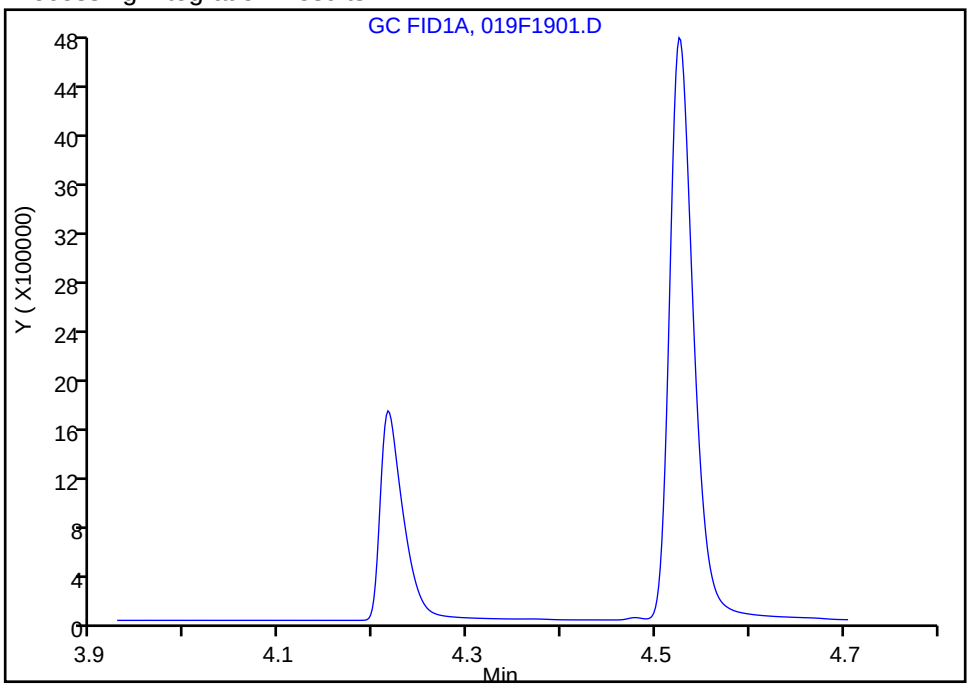
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Injection Date:	02-Mar-2022 18:22:02	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	19	Worklist Smp#:	45
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

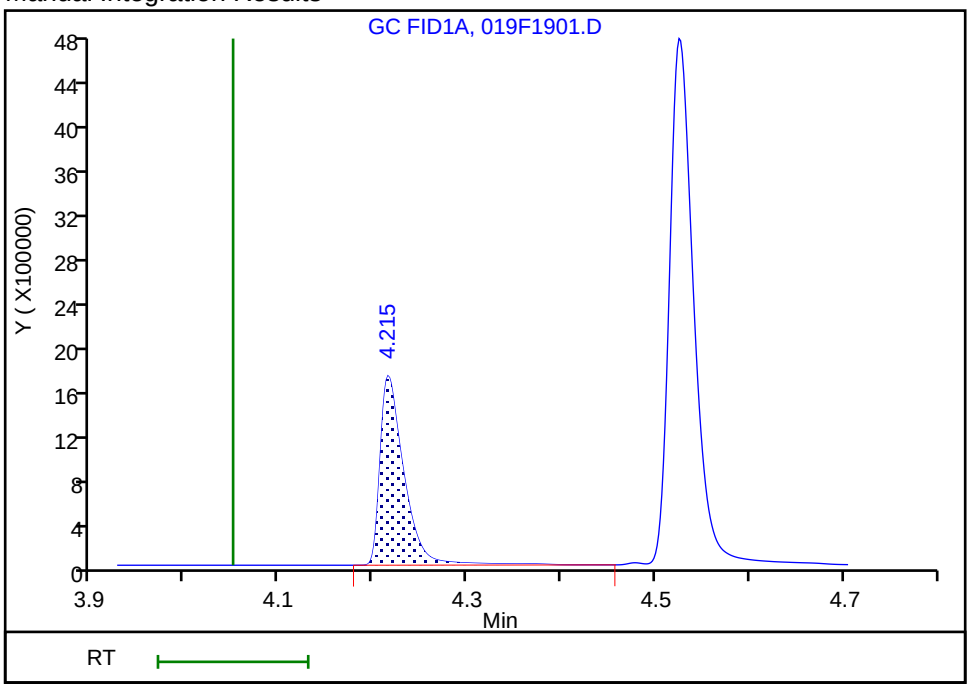
Not Detected
Expected RT: 4.05

Processing Integration Results



Manual Integration Results

RT: 4.22
Area: 2963704
Amount: 105.3236
Amount Units: ug/l



Reviewer: sciannac, 03-Mar-2022 11:11:17
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567496/45 Calibration Date: 03/02/2022 18:22

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 019F1901.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37543		66.6	65.7	1.3	20.0
Ethylene	Ave	30980	31689		118	115	2.3	20.0
Acetylene	Ave	34179	34697		108	107	1.5	20.0
Ethane	Ave	33383	35019		129	123	4.9	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567496/45 Calibration Date: 03/02/2022 18:22

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 019F1901.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.66	1.63	1.71
Ethylene	2.59	2.55	2.65
Acetylene	2.73	2.67	2.83
Ethane	3.01	2.97	3.07

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\019F1901.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 02-Mar-2022 18:22:02 ALS Bottle#: 19 Worklist Smp#: 45
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Mar-2022 11:19:41 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1669

First Level Reviewer: sciannac Date: 03-Mar-2022 09:28:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.252	1.262	-0.010	2489519	65.7	68.9	
2	1.657	1.670	-0.013	2466666	65.7	66.6	
						RPD = 3.45	
3 Ethane							
1	1.523	1.517	0.006	4240159	123.2	127.6	
2	3.005	3.022	-0.017	4313313	123.2	129.2	
						RPD = 1.29	
4 Ethylene							
1	1.830	1.789	0.041	4190682	114.9	119.0	
2	2.587	2.604	-0.017	3641038	114.9	117.5	
						RPD = 1.22	
5 Propane							a
1	2.645	2.545	0.100	6640929	180.6	184.4	a
2	4.920	4.927	-0.007	6295186	180.6	179.8	a
						RPD = 2.53	
6 Acetylene							Ma
1	4.215	4.050	0.165	2963704	106.7	105.3	a
2	2.732	2.750	-0.018	3701089	106.7	108.3	M
						RPD = 2.77	
7 Butane							Ma
1	4.525	4.412	0.113	8482399	238.1	232.9	a
2	6.422	6.427	-0.005	8048082	238.1	229.0	M
						RPD = 1.67	
8 isobutylene							Ma
1	5.425	5.314	0.111	8100026	229.8	224.2	a
2	6.264	6.269	-0.005	7302620	229.8	219.9	M
						RPD = 1.93	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

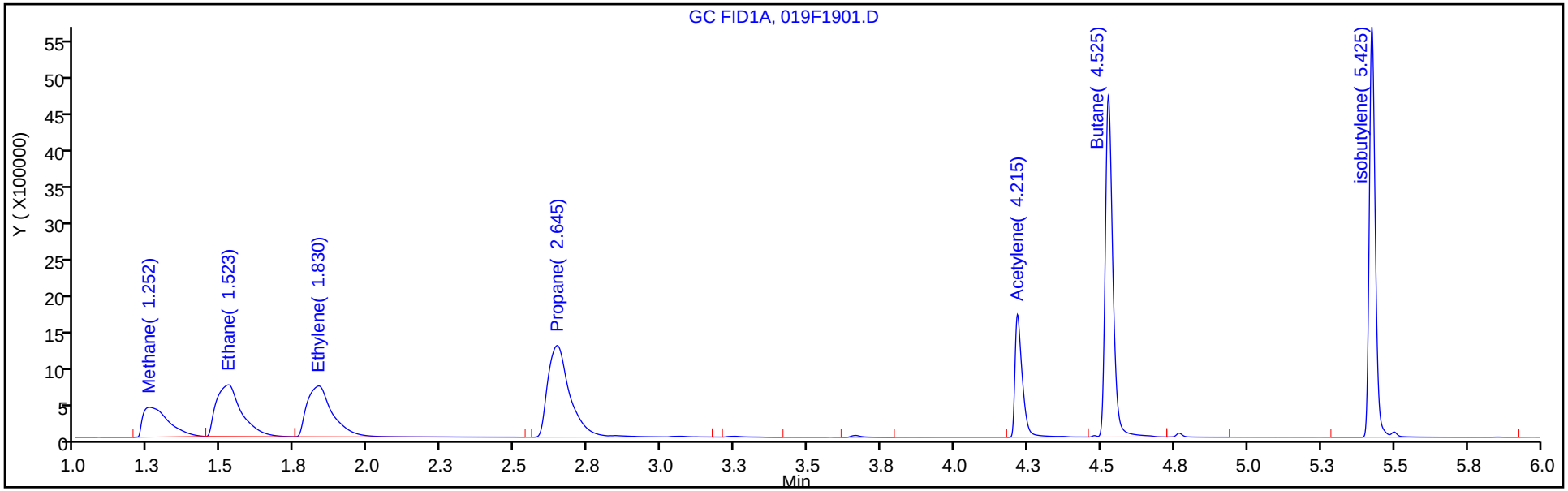
Report Date: 03-Mar-2022 11:19:41 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

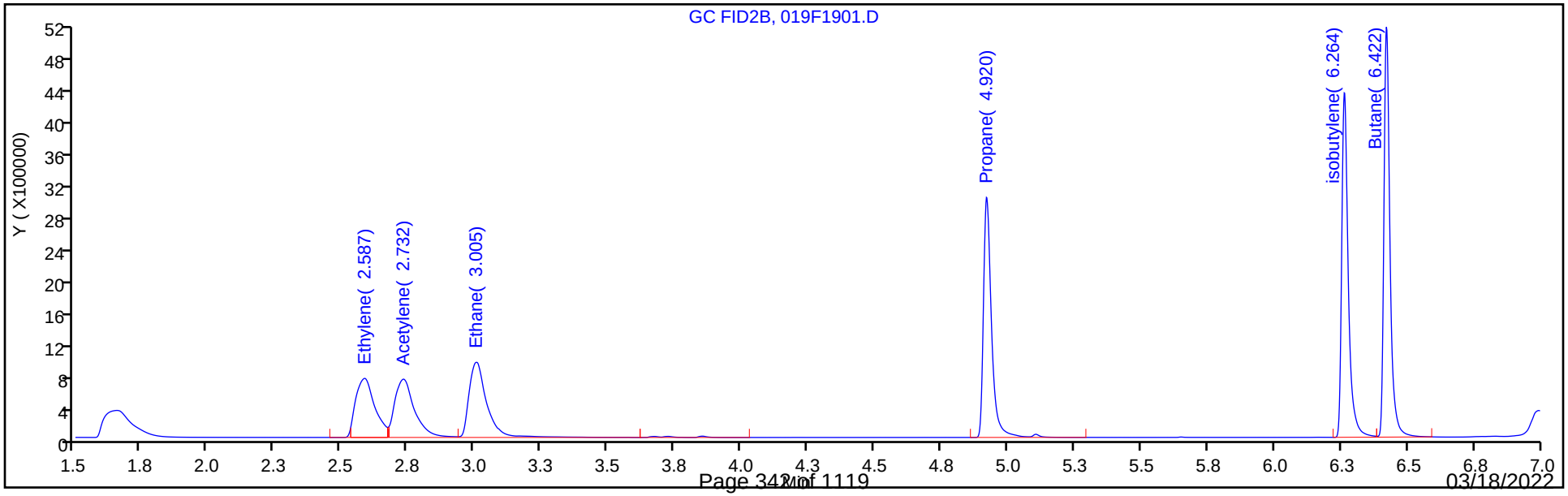
Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\019F1901.D

Injection Date:	02-Mar-2022 18:22:02	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	45
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

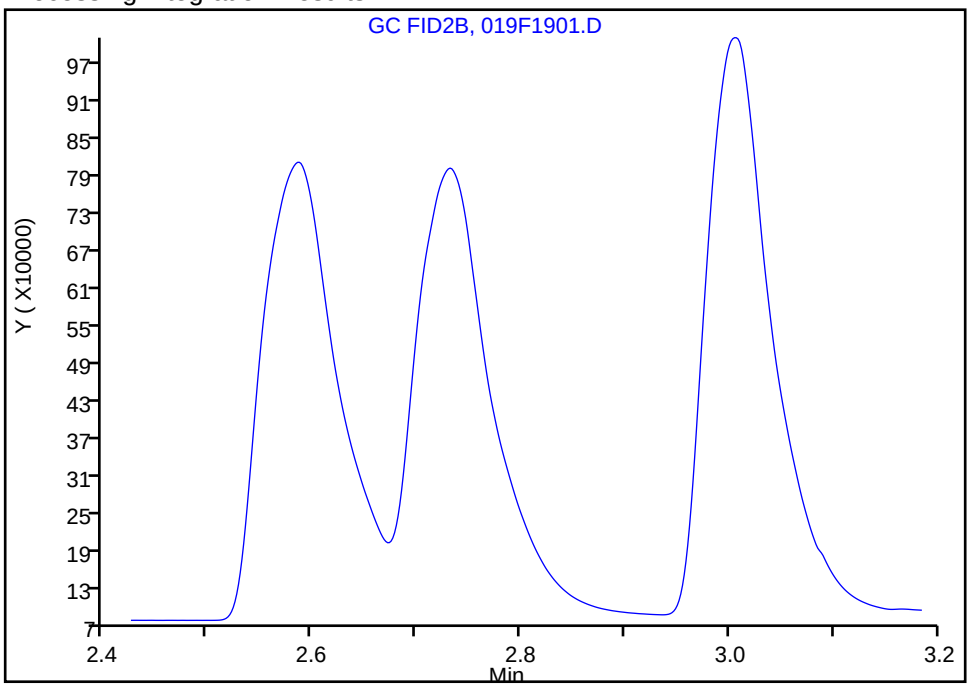
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Injection Date:	02-Mar-2022 18:22:02	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	19	Worklist Smp#:	45
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

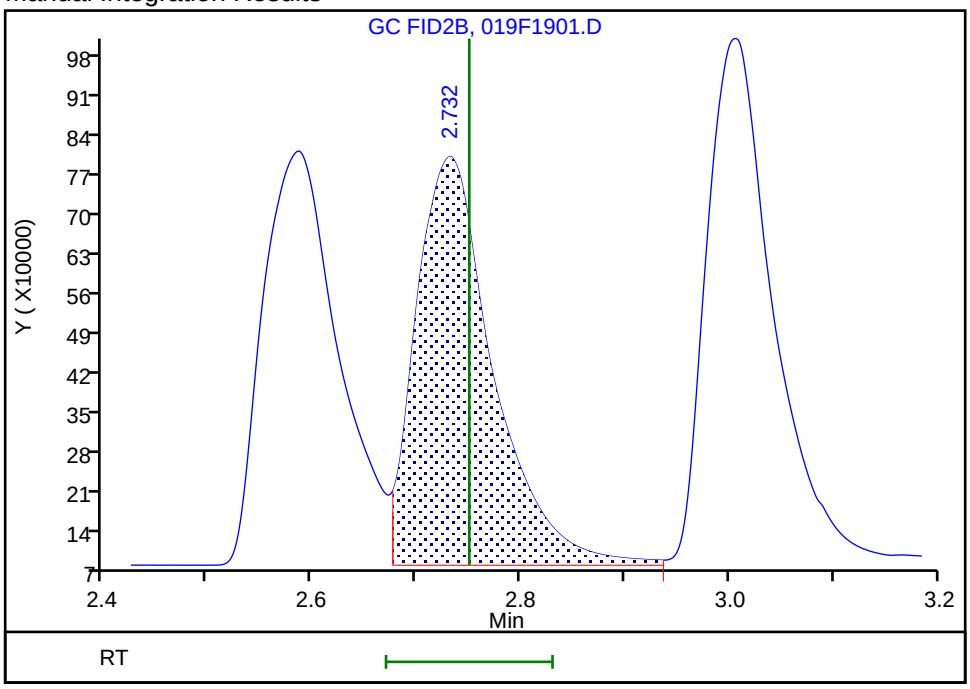
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.73
Area: 3701089
Amount: 108.2861
Amount Units: ug/l



Reviewer: sciannac, 03-Mar-2022 11:11:46
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567496/57 Calibration Date: 03/02/2022 20:58

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 031F3101.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		38251		69.6	65.7	5.9	20.0
Ethane	Ave	33241	34818		129	123	4.7	20.0
Ethylene	Ave	35226	36367		119	115	3.2	20.0
Acetylene	Ave	28139	26407		100	107	-6.2	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567496/57 Calibration Date: 03/02/2022 20:58

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 031F3101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.22	1.30
Ethane	1.52	1.47	1.57
Ethylene	1.83	1.74	1.84
Acetylene	4.21	3.97	4.13

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\031F3101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 02-Mar-2022 20:58:49 ALS Bottle#: 31 Worklist Smp#: 57
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Mar-2022 11:19:46 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1669

First Level Reviewer: sciannac Date: 03-Mar-2022 10:48:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.253	1.262	-0.009	2513218	65.7	69.6	
2	1.658	1.670	-0.012	2475740	65.7	66.8	
						RPD = 4.05	
3 Ethane							
1	1.524	1.517	0.007	4288592	123.2	129.0	
2	3.008	3.022	-0.014	4246519	123.2	127.2	
						RPD = 1.41	
4 Ethylene							
1	1.833	1.789	0.044	4178625	114.9	118.6	
2	2.588	2.604	-0.016	3633423	114.9	117.3	
						RPD = 1.14	
5 Propane							a
1	2.648	2.545	0.103	6898657	180.6	191.6	a
2	4.921	4.927	-0.006	6469750	180.6	184.8	a
						RPD = 3.60	
6 Acetylene							Ma
1	4.214	4.050	0.164	2816794	106.7	100.1	M
2	2.735	2.750	-0.015	3518615	106.7	102.9	M
						RPD = 2.80	
7 Butane							Ma
1	4.526	4.412	0.114	9027821	238.1	247.9	a
2	6.421	6.427	-0.006	8561215	238.1	243.6	M
						RPD = 1.72	
8 isobutylene							Ma
1	5.424	5.314	0.110	8368715	229.8	231.7	a
2	6.265	6.269	-0.004	7539675	229.8	227.1	M
						RPD = 2.00	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

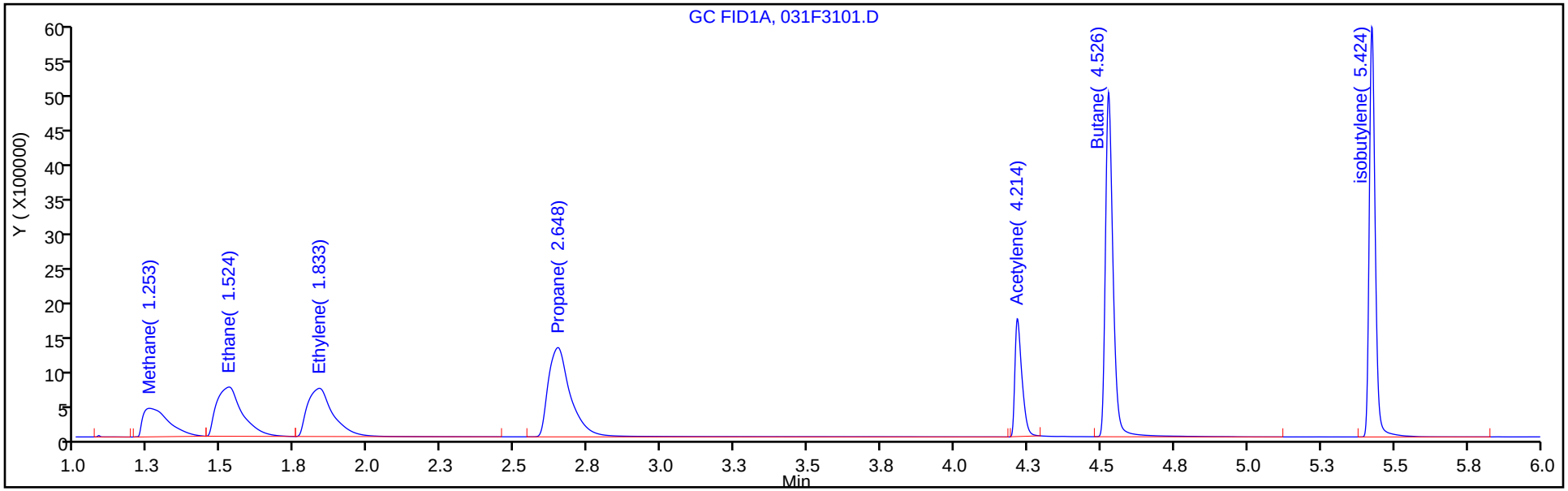
Report Date: 03-Mar-2022 11:19:46 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

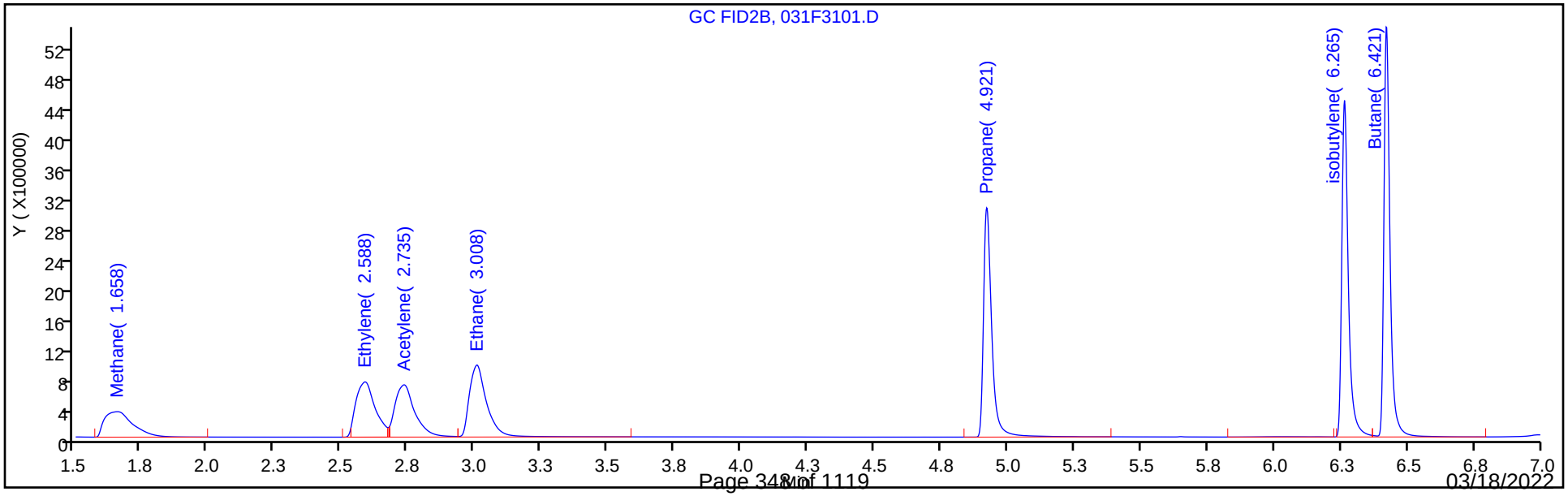
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Injection Date:	02-Mar-2022 20:58:49	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	57
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

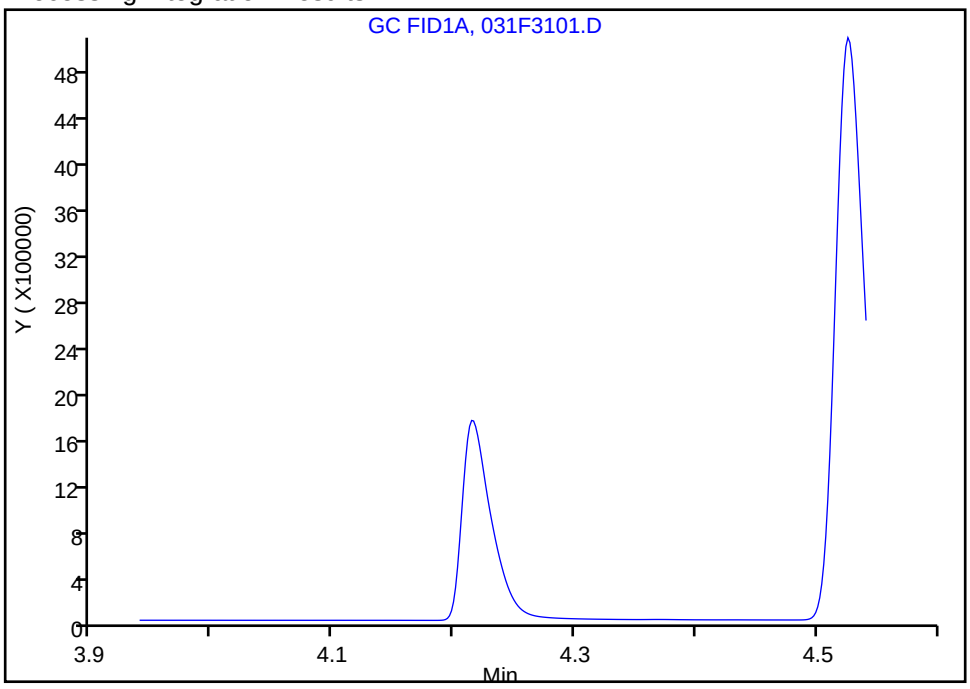
Data File:	\\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\031F3101.D				
Injection Date:	02-Mar-2022 20:58:49	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	31	Worklist Smp#:	57
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

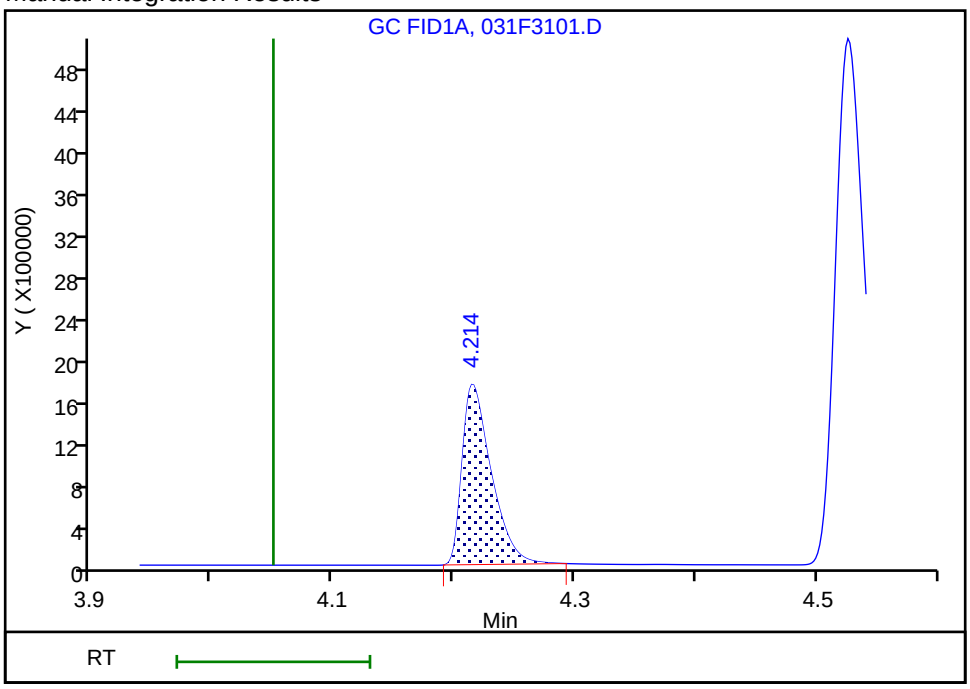
Not Detected
Expected RT: 4.05

Processing Integration Results



Manual Integration Results

RT: 4.21
Area: 2816794
Amount: 100.1028
Amount Units: ug/l



Reviewer: sciannac, 03-Mar-2022 10:46:01
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567496/57 Calibration Date: 03/02/2022 20:58

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 031F3101.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37681		66.8	65.7	1.7	20.0
Ethylene	Ave	30980	31622		117	115	2.1	20.0
Acetylene	Ave	34179	32986		103	107	-3.5	20.0
Ethane	Ave	33383	34477		127	123	3.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567496/57 Calibration Date: 03/02/2022 20:58

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 031F3101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.66	1.63	1.71
Ethylene	2.59	2.55	2.65
Acetylene	2.74	2.67	2.83
Ethane	3.01	2.97	3.07

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\031F3101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 02-Mar-2022 20:58:49 ALS Bottle#: 31 Worklist Smp#: 57
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Mar-2022 11:19:46 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1669

First Level Reviewer: sciannac Date: 03-Mar-2022 10:48:37

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.253	1.262	-0.009	2513218	65.7	69.6	
2	1.658	1.670	-0.012	2475740	65.7	66.8	
						RPD = 4.05	
3 Ethane							
1	1.524	1.517	0.007	4288592	123.2	129.0	
2	3.008	3.022	-0.014	4246519	123.2	127.2	
						RPD = 1.41	
4 Ethylene							
1	1.833	1.789	0.044	4178625	114.9	118.6	
2	2.588	2.604	-0.016	3633423	114.9	117.3	
						RPD = 1.14	
5 Propane							a
1	2.648	2.545	0.103	6898657	180.6	191.6	a
2	4.921	4.927	-0.006	6469750	180.6	184.8	a
						RPD = 3.60	
6 Acetylene							Ma
1	4.214	4.050	0.164	2816794	106.7	100.1	M
2	2.735	2.750	-0.015	3518615	106.7	102.9	M
						RPD = 2.80	
7 Butane							Ma
1	4.526	4.412	0.114	9027821	238.1	247.9	a
2	6.421	6.427	-0.006	8561215	238.1	243.6	M
						RPD = 1.72	
8 isobutylene							Ma
1	5.424	5.314	0.110	8368715	229.8	231.7	a
2	6.265	6.269	-0.004	7539675	229.8	227.1	M
						RPD = 2.00	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

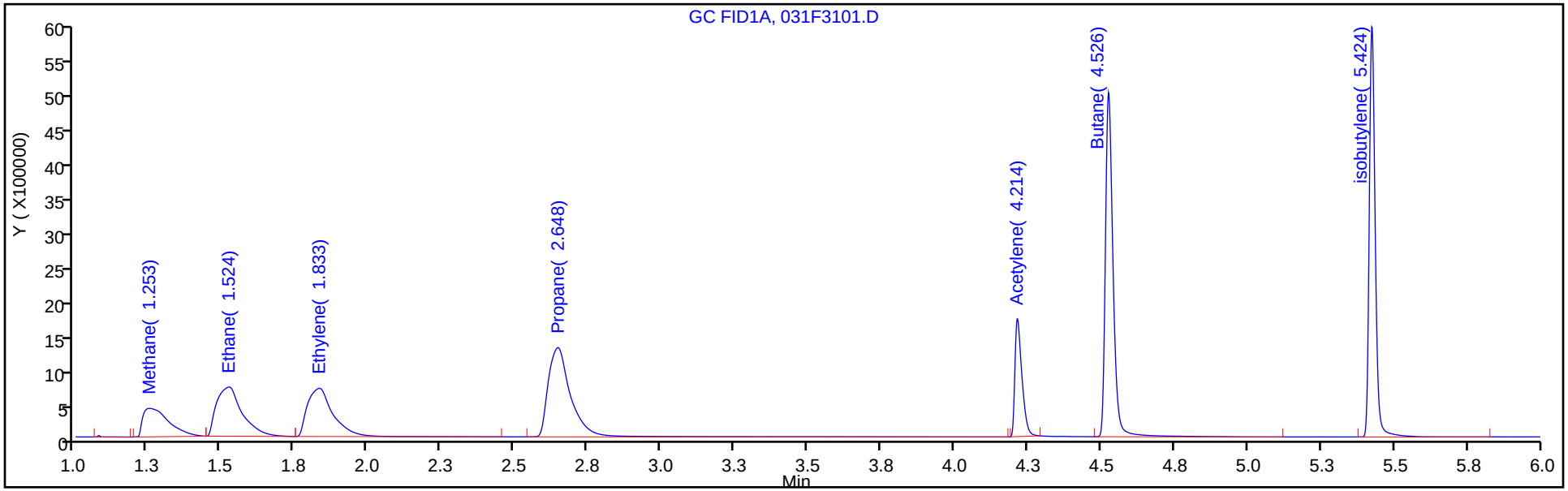
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Eurofins Denver

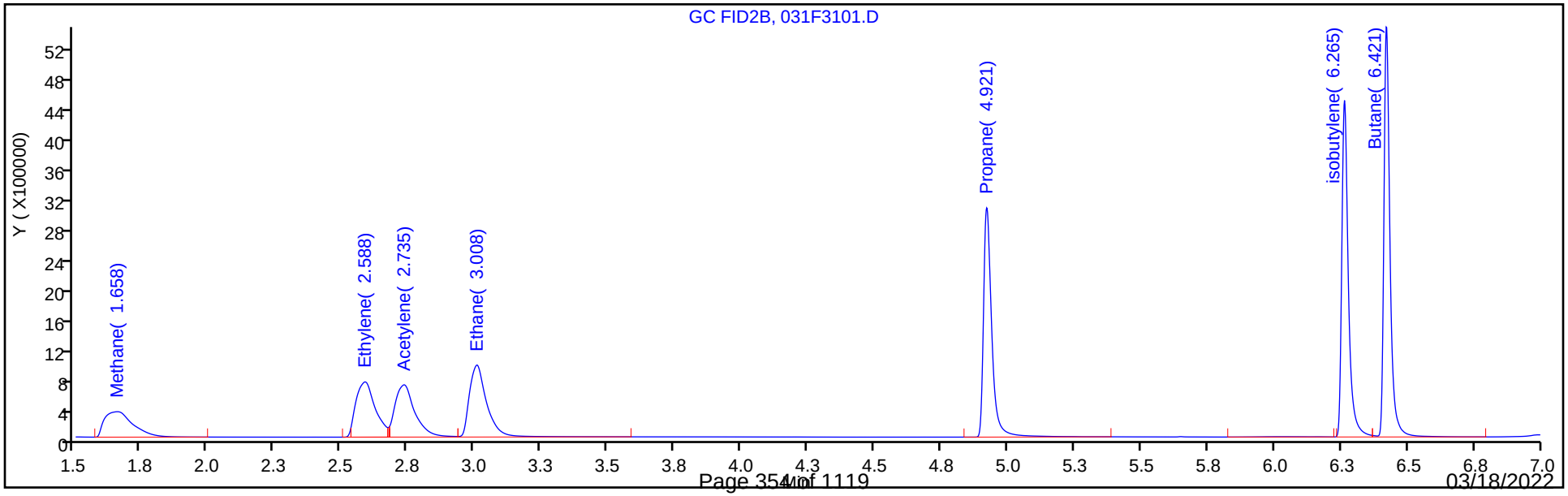
Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\031F3101.D

Injection Date:	02-Mar-2022 20:58:49	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	57
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

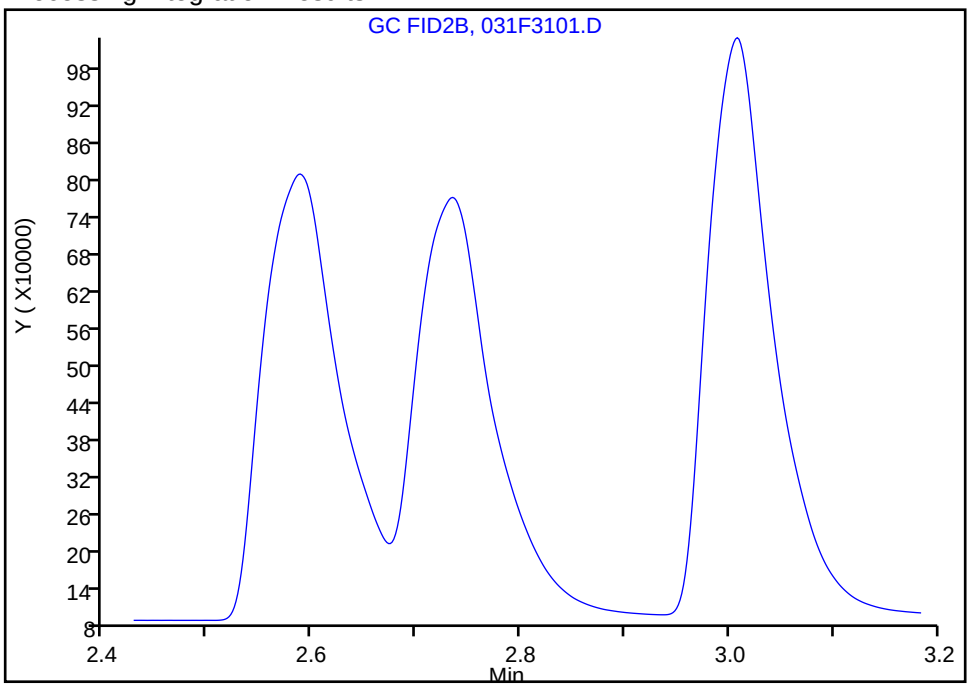
Data File:	\\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\031F3101.D				
Injection Date:	02-Mar-2022 20:58:49	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	31	Worklist Smp#:	57
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

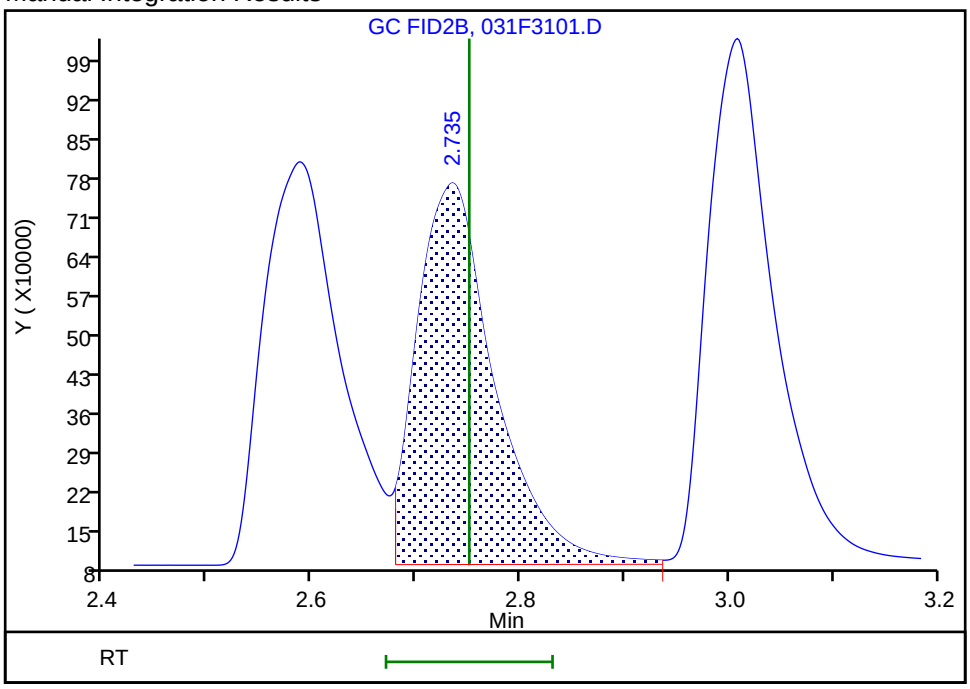
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.73
Area: 3518615
Amount: 102.9473
Amount Units: ug/l



Reviewer: sciannac, 03-Mar-2022 10:46:21
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCVRT 280-567659/2 Calibration Date: 03/03/2022 14:38

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37641		68.5	65.7	4.2	20.0
Ethane	Ave	33241	34529		128	123	3.9	20.0
Ethylene	Ave	35226	37200		121	115	5.6	20.0
Acetylene	Ave	28139	33510		127	107	19.1	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCVRT 280-567659/2 Calibration Date: 03/03/2022 14:38

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.22	1.30
Ethane	1.52	1.47	1.57
Ethylene	1.81	1.76	1.86
Acetylene	4.10	4.02	4.18

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\002F0201.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 03-Mar-2022 14:38:18 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:51:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.262	1.262	0.000	2473110	65.7	68.5	
2	1.669	1.669	0.000	2467010	65.7	66.6	
						RPD = 2.76	
3 Ethane							
1	1.524	1.524	0.000	4252993	123.2	127.9	
2	3.022	3.022	0.000	4340350	123.2	130.0	
						RPD = 1.61	
4 Ethylene							
1	1.809	1.809	0.000	4274242	114.9	121.3	
2	2.604	2.604	0.000	3727265	114.9	120.3	
						RPD = 0.85	
5 Propane							
1	2.587	2.587	0.000	6688251	180.6	185.7	
2	4.927	4.927	0.000	6399530	180.6	182.8	
						RPD = 1.60	
6 Acetylene							
1	4.102	4.102	0.000	3574492	106.7	127.0	
2	2.751	2.751	0.000	4424440	106.7	129.4	
						RPD = 1.89	
7 Butane							Ma
1	4.449	4.449	0.000	8997975	238.1	247.1	a
2	6.427	6.427	0.000	8632256	238.1	245.7	M
						RPD = 0.56	
8 isobutylene							Ma
1	5.350	5.350	0.000	8639180	229.8	239.1	
2	6.269	6.269	0.000	7817090	229.8	235.4	M
						RPD = 1.56	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

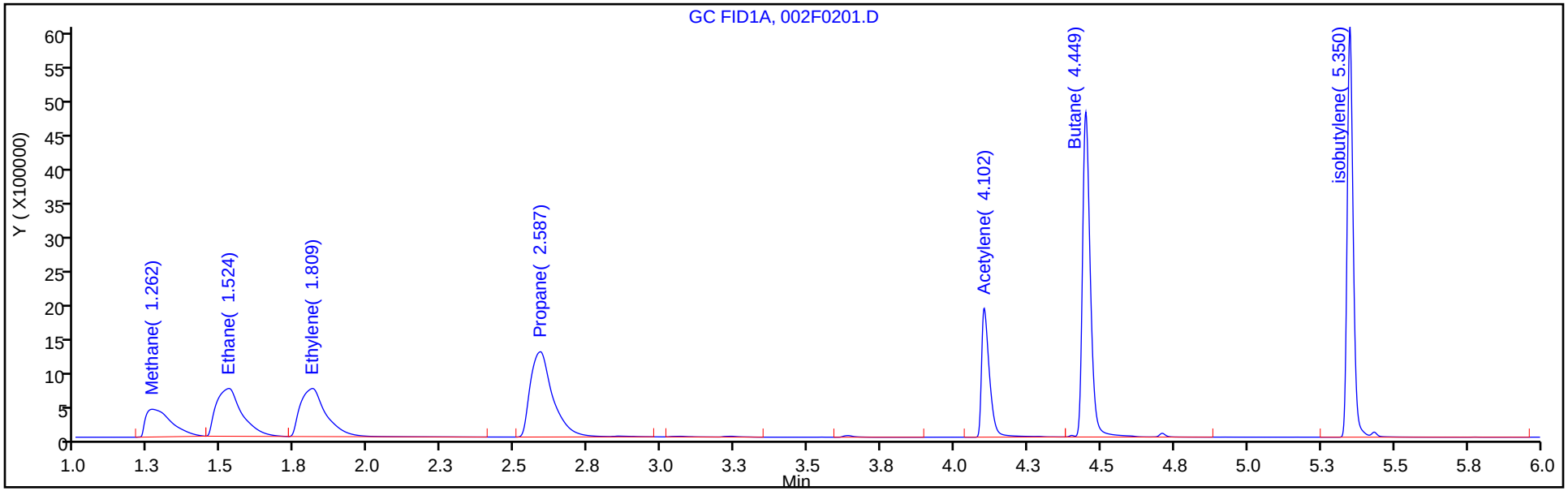
Report Date: 07-Mar-2022 13:05:09 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

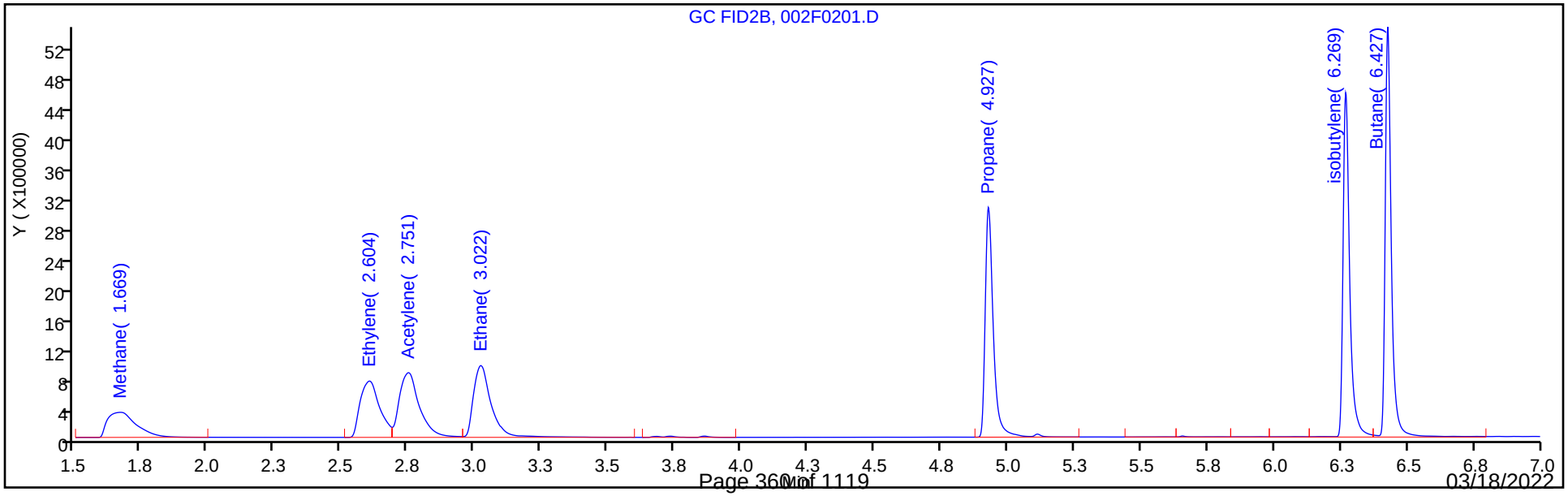
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\002F0201.D

Injection Date:	03-Mar-2022 14:38:18	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCVRT 280-567659/2 Calibration Date: 03/03/2022 14:38

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37548		66.6	65.7	1.4	20.0
Ethylene	Ave	30980	32439		120	115	4.7	20.0
Acetylene	Ave	34179	41478		129	107	21.4*	20.0
Ethane	Ave	33383	35239		130	123	5.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCVRT 280-567659/2 Calibration Date: 03/03/2022 14:38

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.63	1.71
Ethylene	2.60	2.55	2.65
Acetylene	2.75	2.67	2.83
Ethane	3.02	2.97	3.07

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\002F0201.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 03-Mar-2022 14:38:18 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:51:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.262	1.262	0.000	2473110	65.7	68.5	
2	1.669	1.669	0.000	2467010	65.7	66.6	
						RPD = 2.76	
3 Ethane							
1	1.524	1.524	0.000	4252993	123.2	127.9	
2	3.022	3.022	0.000	4340350	123.2	130.0	
						RPD = 1.61	
4 Ethylene							
1	1.809	1.809	0.000	4274242	114.9	121.3	
2	2.604	2.604	0.000	3727265	114.9	120.3	
						RPD = 0.85	
5 Propane							
1	2.587	2.587	0.000	6688251	180.6	185.7	
2	4.927	4.927	0.000	6399530	180.6	182.8	
						RPD = 1.60	
6 Acetylene							
1	4.102	4.102	0.000	3574492	106.7	127.0	
2	2.751	2.751	0.000	4424440	106.7	129.4	
						RPD = 1.89	
7 Butane							Ma
1	4.449	4.449	0.000	8997975	238.1	247.1	a
2	6.427	6.427	0.000	8632256	238.1	245.7	M
						RPD = 0.56	
8 isobutylene							Ma
1	5.350	5.350	0.000	8639180	229.8	239.1	
2	6.269	6.269	0.000	7817090	229.8	235.4	M
						RPD = 1.56	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

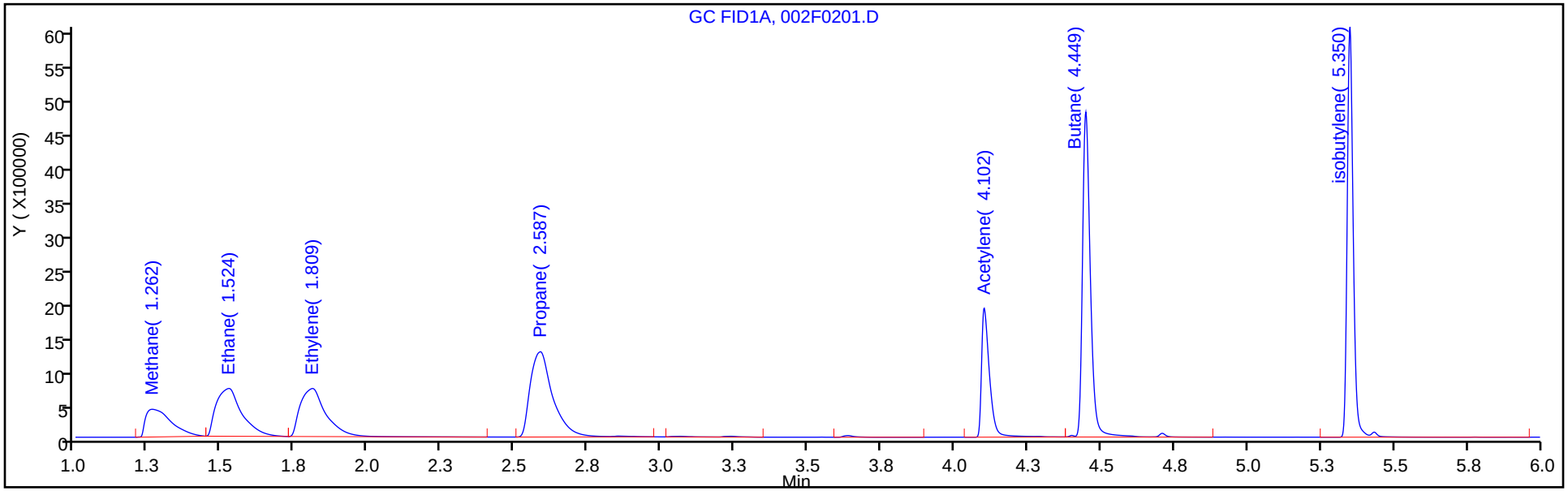
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Eurofins Denver

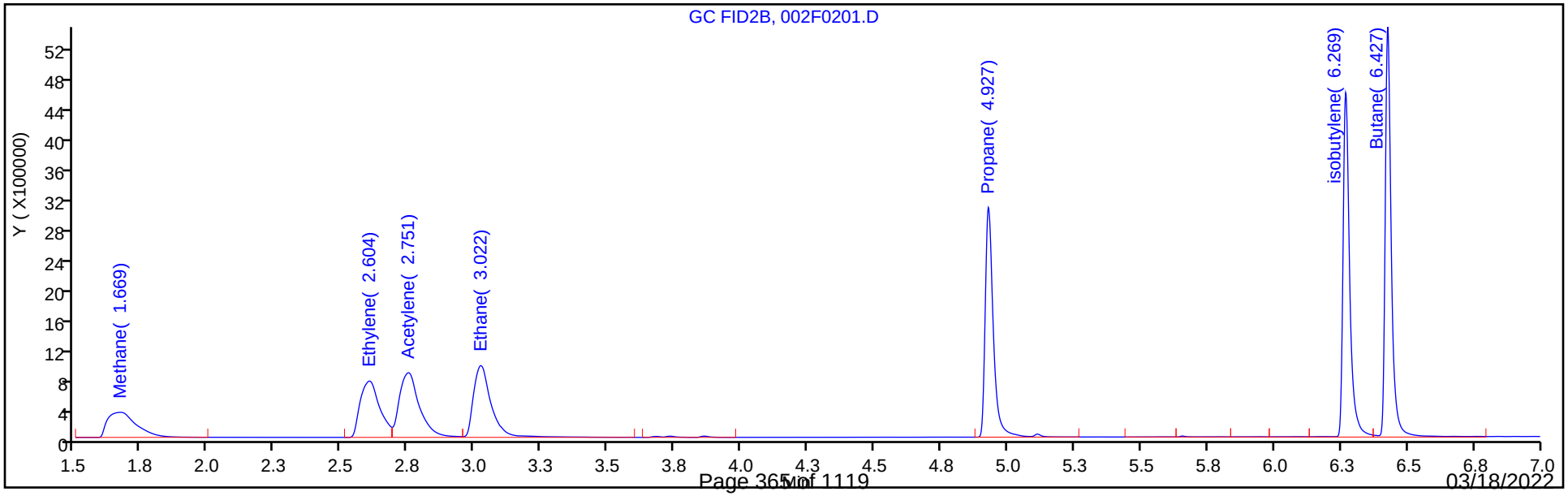
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\002F0201.D

Injection Date:	03-Mar-2022 14:38:18	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567659/17 Calibration Date: 03/03/2022 17:53

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 017F1701.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37741		68.6	65.7	4.5	20.0
Ethane	Ave	33241	33894		126	123	2.0	20.0
Ethylene	Ave	35226	35763		117	115	1.5	20.0
Acetylene	Ave	28139	26864		102	107	-4.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567659/17 Calibration Date: 03/03/2022 17:53

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 017F1701.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.22	1.30
Ethane	1.52	1.47	1.57
Ethylene	1.83	1.76	1.86
Acetylene	4.21	4.02	4.18

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\017F1701.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 03-Mar-2022 17:53:12 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:15 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:58:11

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.253	1.262	-0.009	2479674	65.7	68.6	
2	1.654	1.669	-0.015	2450557	65.7	66.1	
						RPD = 3.72	
3 Ethane							
1	1.523	1.524	-0.001	4174750	123.2	125.6	
2	3.006	3.022	-0.016	4182273	123.2	125.3	
						RPD = 0.24	
4 Ethylene							
1	1.831	1.809	0.022	4109138	114.9	116.7	
2	2.588	2.604	-0.016	3555582	114.9	114.8	
						RPD = 1.63	
5 Propane							
1	2.644	2.587	0.057	6471025	180.6	179.7	
2	4.921	4.927	-0.006	6114328	180.6	174.6	
						RPD = 2.85	
6 Acetylene							a
1	4.214	4.102	0.112	2865611	106.7	101.8	a
2	2.733	2.751	-0.018	3565529	106.7	104.3	a
						RPD = 2.41	
7 Butane							a
1	4.524	4.449	0.075	8089680	238.1	222.1	a
2	6.423	6.427	-0.004	7606345	238.1	216.5	a
						RPD = 2.57	
8 isobutylene							
1	5.424	5.350	0.074	7655781	229.8	211.9	
2	6.264	6.269	-0.005	6839226	229.8	206.0	
						RPD = 2.84	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

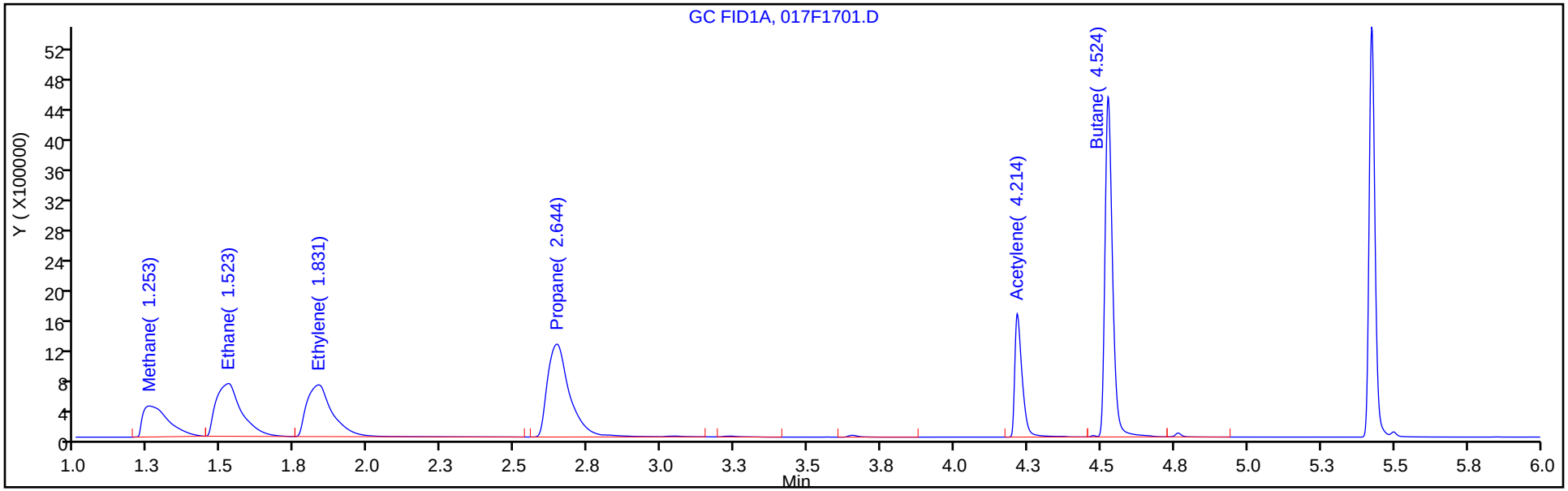
Report Date: 07-Mar-2022 13:05:15 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

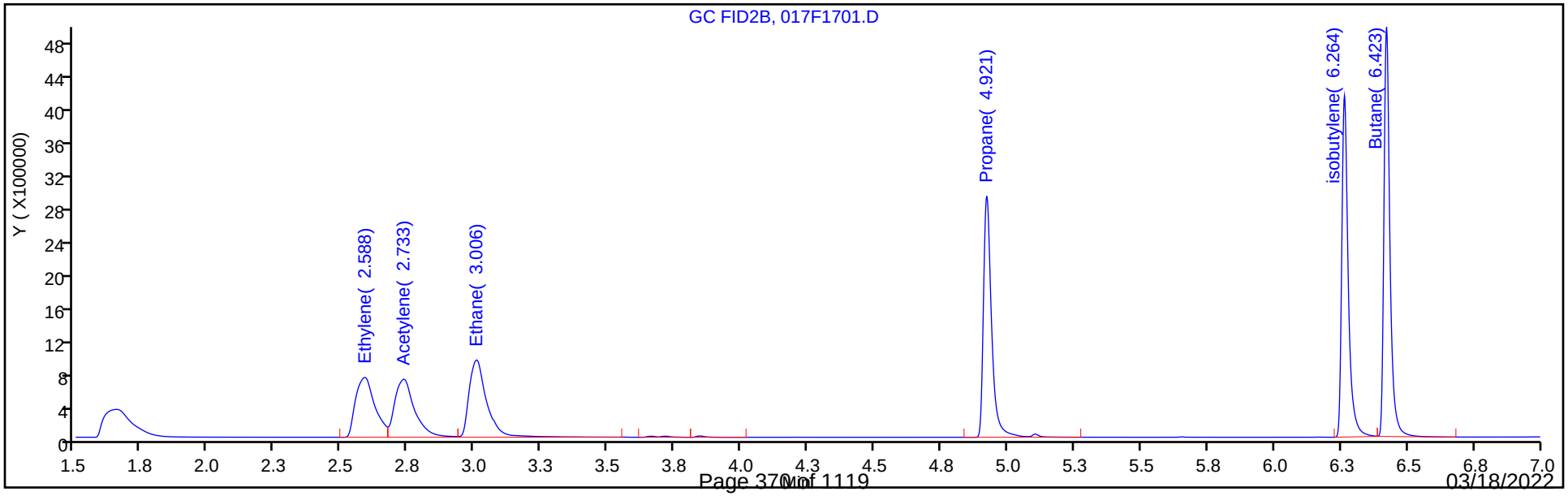
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Injection Date:	03-Mar-2022 17:53:12	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

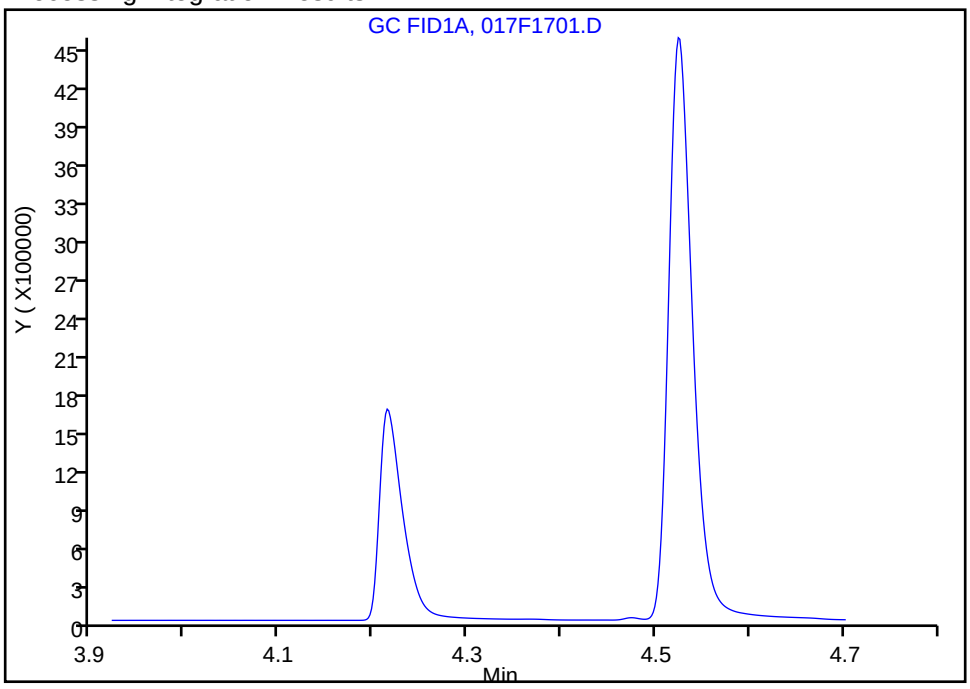
Data File:	\\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\017F1701.D				
Injection Date:	03-Mar-2022 17:53:12	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

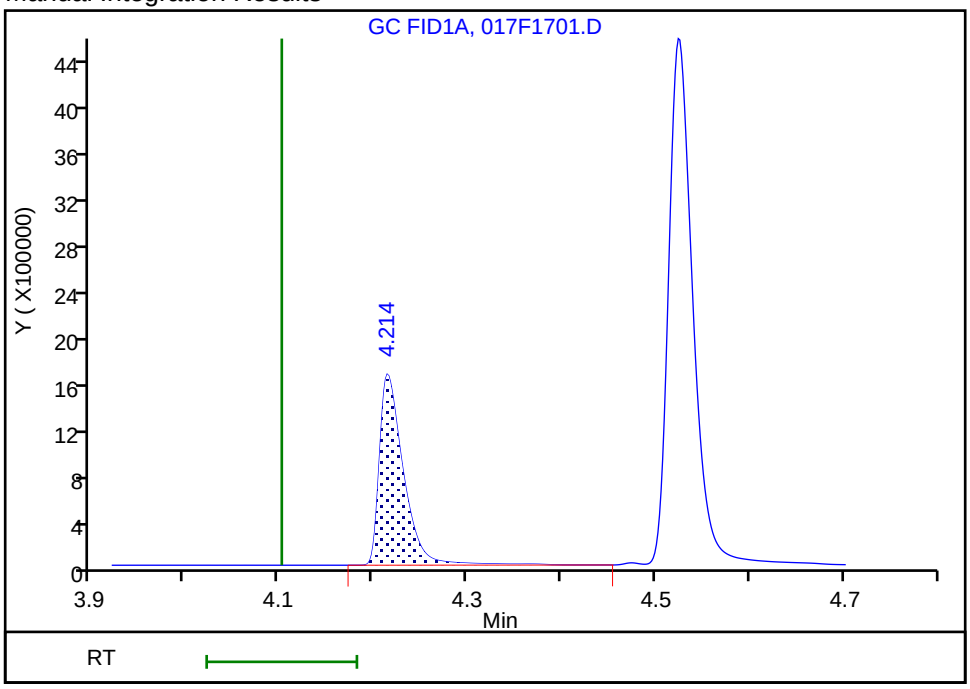
Not Detected
Expected RT: 4.10

Processing Integration Results



Manual Integration Results

RT: 4.21
Area: 2865611
Amount: 101.8376
Amount Units: ug/l



Reviewer: sciannac, 07-Mar-2022 12:57:56
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567659/17 Calibration Date: 03/03/2022 17:53

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 017F1701.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37297		66.1	65.7	0.7	20.0
Ethylene	Ave	30980	30945		115	115	-0.1	20.0
Acetylene	Ave	34179	33426		104	107	-2.2	20.0
Ethane	Ave	33383	33955		125	123	1.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567659/17 Calibration Date: 03/03/2022 17:53

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 017F1701.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.65	1.63	1.71
Ethylene	2.59	2.55	2.65
Acetylene	2.73	2.67	2.83
Ethane	3.01	2.97	3.07

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\017F1701.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 03-Mar-2022 17:53:12 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:15 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:58:11

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.253	1.262	-0.009	2479674	65.7	68.6	
2	1.654	1.669	-0.015	2450557	65.7	66.1	
						RPD = 3.72	
3 Ethane							
1	1.523	1.524	-0.001	4174750	123.2	125.6	
2	3.006	3.022	-0.016	4182273	123.2	125.3	
						RPD = 0.24	
4 Ethylene							
1	1.831	1.809	0.022	4109138	114.9	116.7	
2	2.588	2.604	-0.016	3555582	114.9	114.8	
						RPD = 1.63	
5 Propane							
1	2.644	2.587	0.057	6471025	180.6	179.7	
2	4.921	4.927	-0.006	6114328	180.6	174.6	
						RPD = 2.85	
6 Acetylene							a
1	4.214	4.102	0.112	2865611	106.7	101.8	a
2	2.733	2.751	-0.018	3565529	106.7	104.3	a
						RPD = 2.41	
7 Butane							a
1	4.524	4.449	0.075	8089680	238.1	222.1	a
2	6.423	6.427	-0.004	7606345	238.1	216.5	a
						RPD = 2.57	
8 isobutylene							
1	5.424	5.350	0.074	7655781	229.8	211.9	
2	6.264	6.269	-0.005	6839226	229.8	206.0	
						RPD = 2.84	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

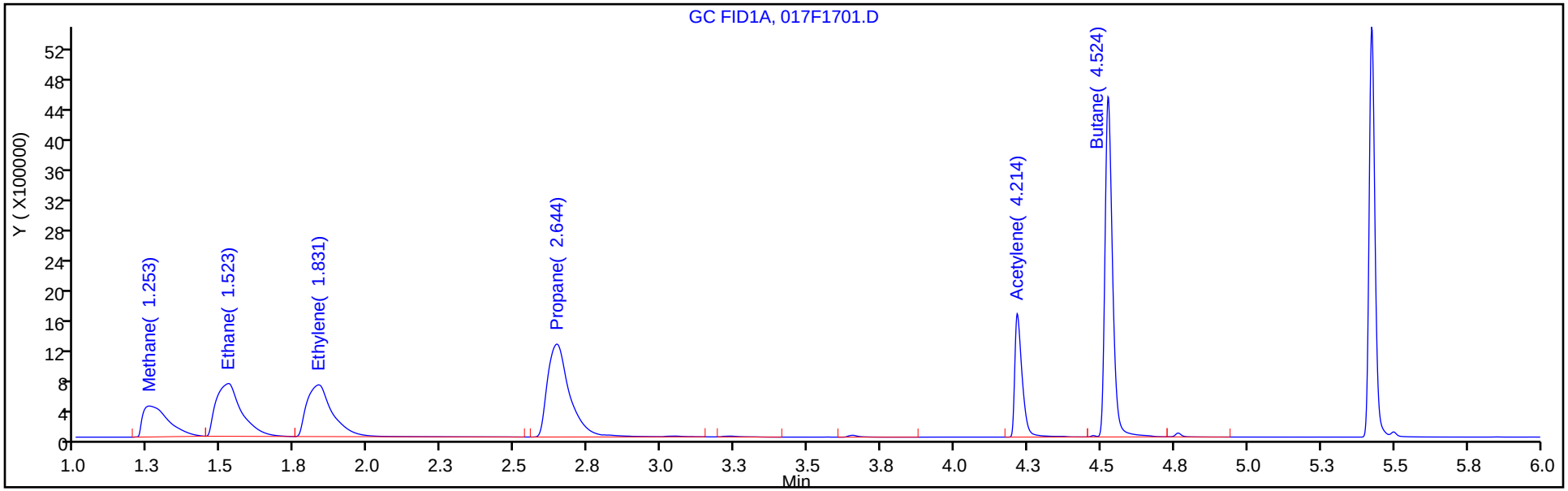
Report Date: 07-Mar-2022 13:05:16 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

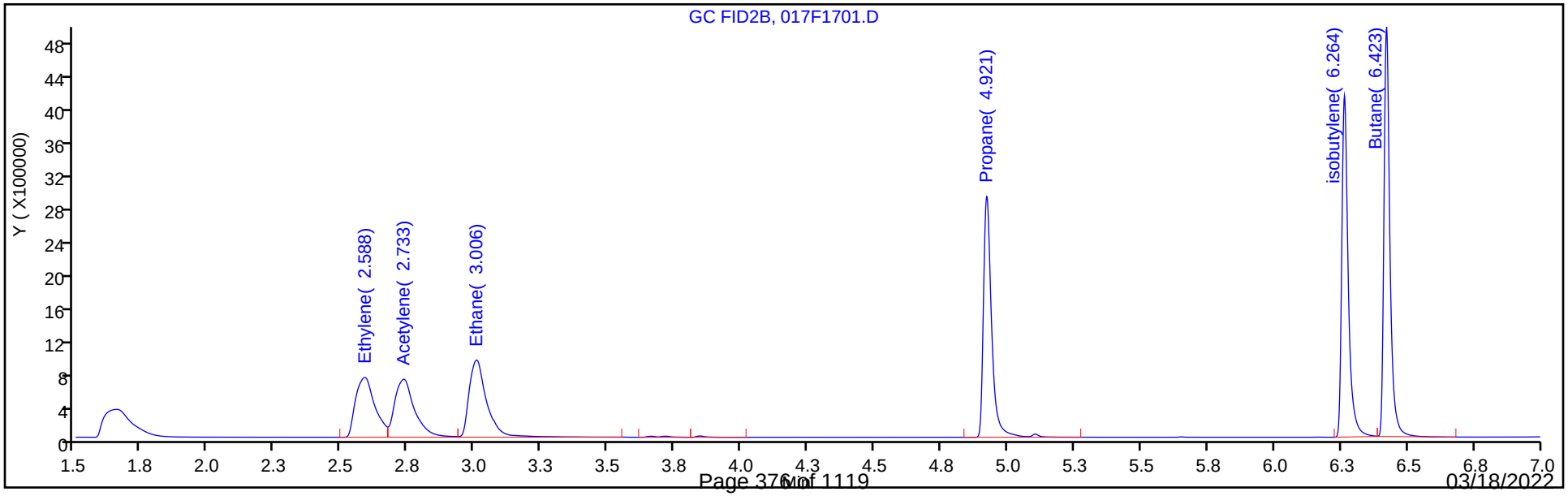
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Injection Date:	03-Mar-2022 17:53:12	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

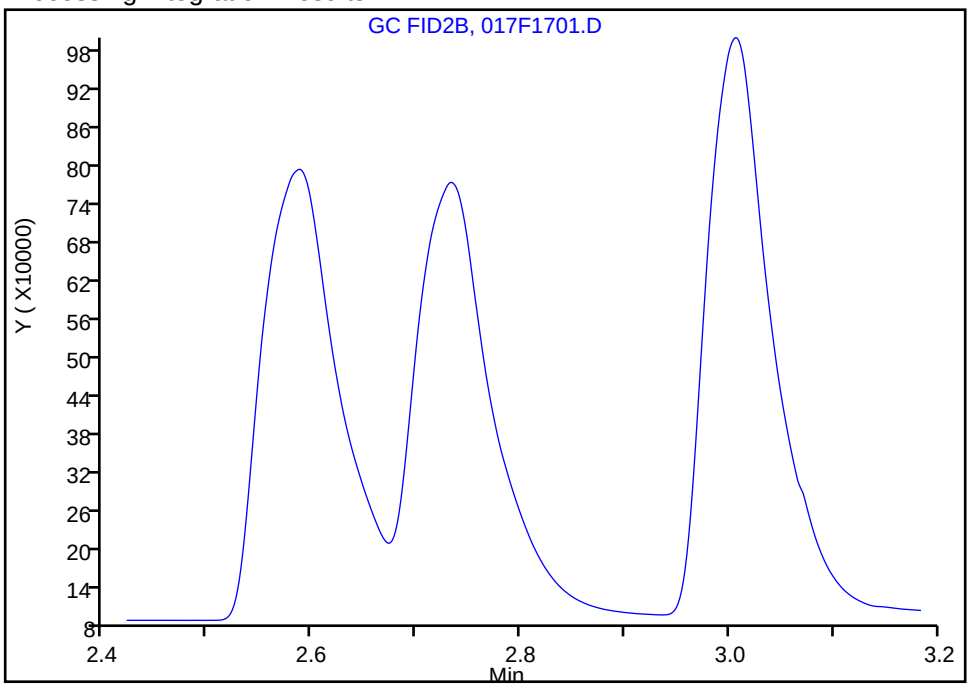
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Injection Date: 03-Mar-2022 17:53:12 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

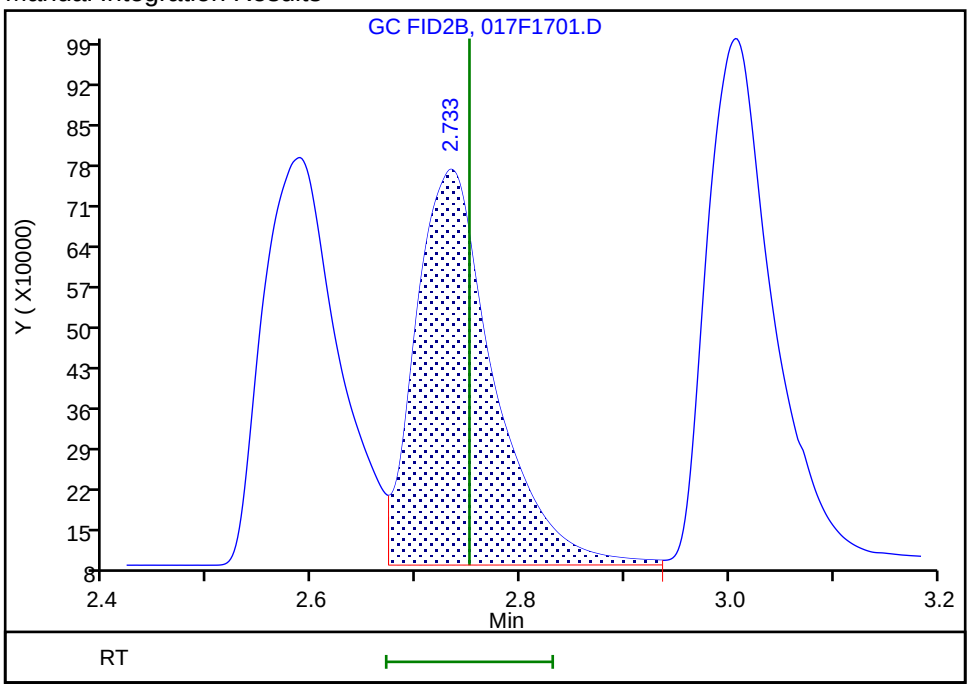
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.73
Area: 3565529
Amount: 104.3199
Amount Units: ug/l



Reviewer: sciannac, 07-Mar-2022 12:57:54
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567659/31 Calibration Date: 03/03/2022 20:56

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 031F3101.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37627		68.4	65.7	4.2	20.0
Ethane	Ave	33241	34349		127	123	3.3	20.0
Ethylene	Ave	35226	35939		117	115	2.0	20.0
Acetylene	Ave	28139	26062		98.8	107	-7.4	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567659/31 Calibration Date: 03/03/2022 20:56

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 031F3101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.22	1.30
Ethane	1.52	1.47	1.57
Ethylene	1.83	1.76	1.86
Acetylene	4.22	4.02	4.18

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\031F3101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 03-Mar-2022 20:56:20 ALS Bottle#: 31 Worklist Smp#: 31
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:22 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 13:04:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.252	1.262	-0.010	2472230	65.7	68.4	
2	1.657	1.669	-0.012	2441651	65.7	65.9	
						RPD = 3.78	
3 Ethane							
1	1.524	1.524	0.000	4230737	123.2	127.3	
2	3.007	3.022	-0.015	4193368	123.2	125.6	
						RPD = 1.31	
4 Ethylene							Ma
1	1.834	1.809	0.025	4129402	114.9	117.2	
2	2.586	2.604	-0.018	3570318	114.9	115.2	M
						RPD = 1.70	
5 Propane							
1	2.647	2.587	0.060	6782587	180.6	188.3	
2	4.921	4.927	-0.006	6338892	180.6	181.1	
						RPD = 3.95	
6 Acetylene							Ma
1	4.217	4.102	0.115	2780071	106.7	98.8	M
2	2.734	2.751	-0.017	3597669	106.7	105.3	M
						RPD = 6.33	
7 Butane							Ma
1	4.527	4.449	0.078	8804406	238.1	241.7	a
2	6.422	6.427	-0.005	8295684	238.1	236.1	M
						RPD = 2.37	
8 isobutylene							Ma
1	5.427	5.350	0.077	8205285	229.8	227.1	
2	6.264	6.269	-0.005	7353399	229.8	221.5	M
						RPD = 2.53	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

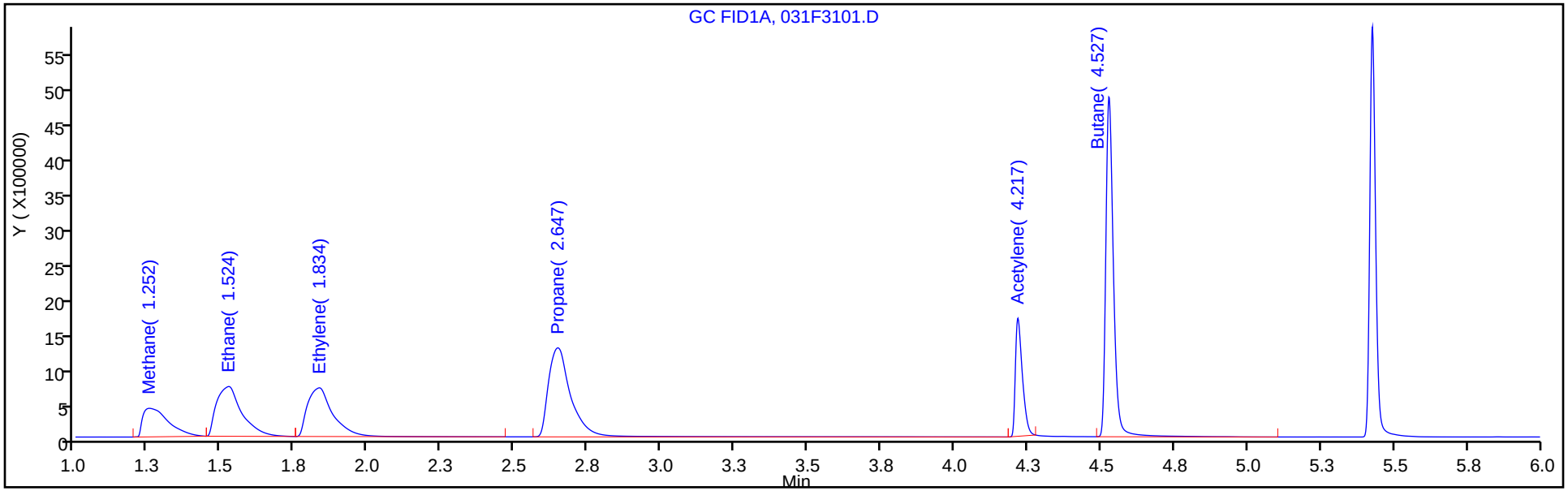
Report Date: 07-Mar-2022 13:05:22 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

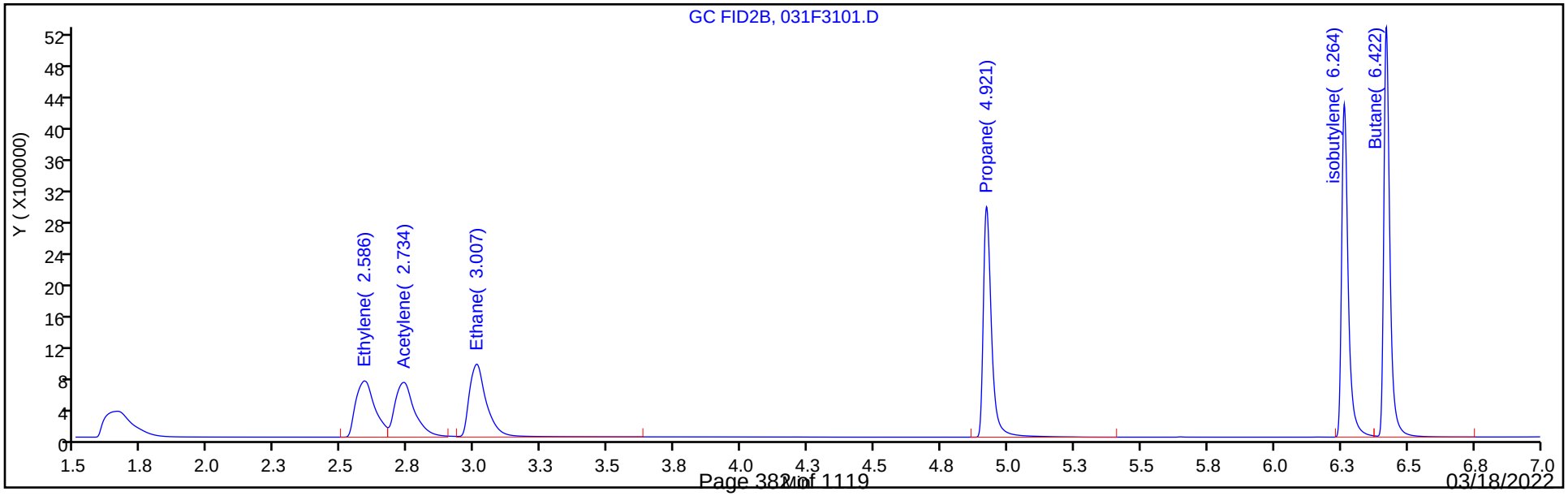
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\031F3101.D

Injection Date:	03-Mar-2022 20:56:20	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	31
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

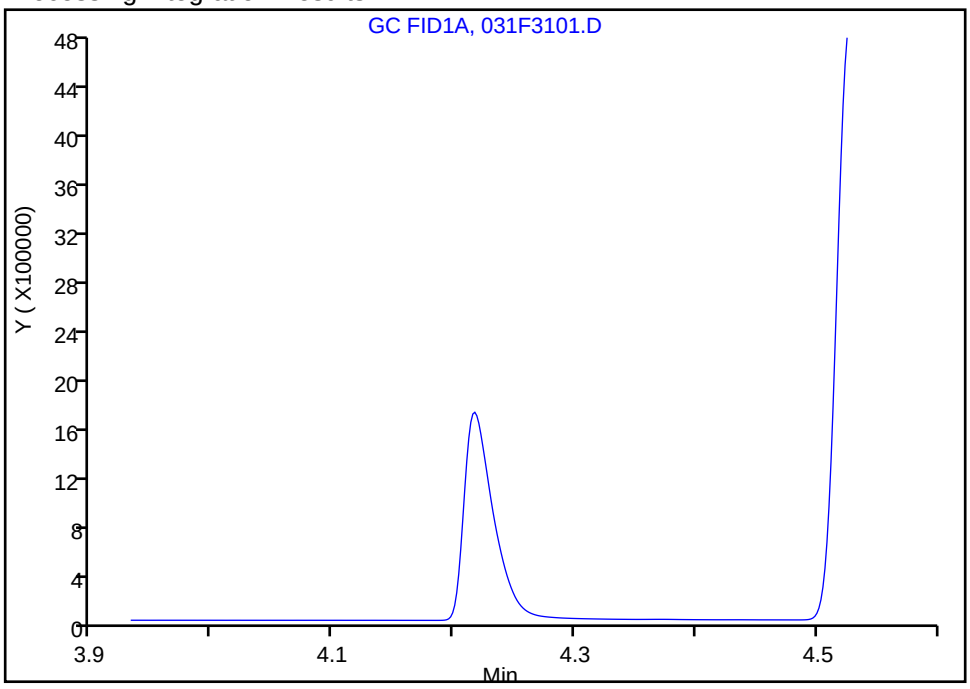
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\031F3101.D
Injection Date: 03-Mar-2022 20:56:20 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 31 Worklist Smp#: 31
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

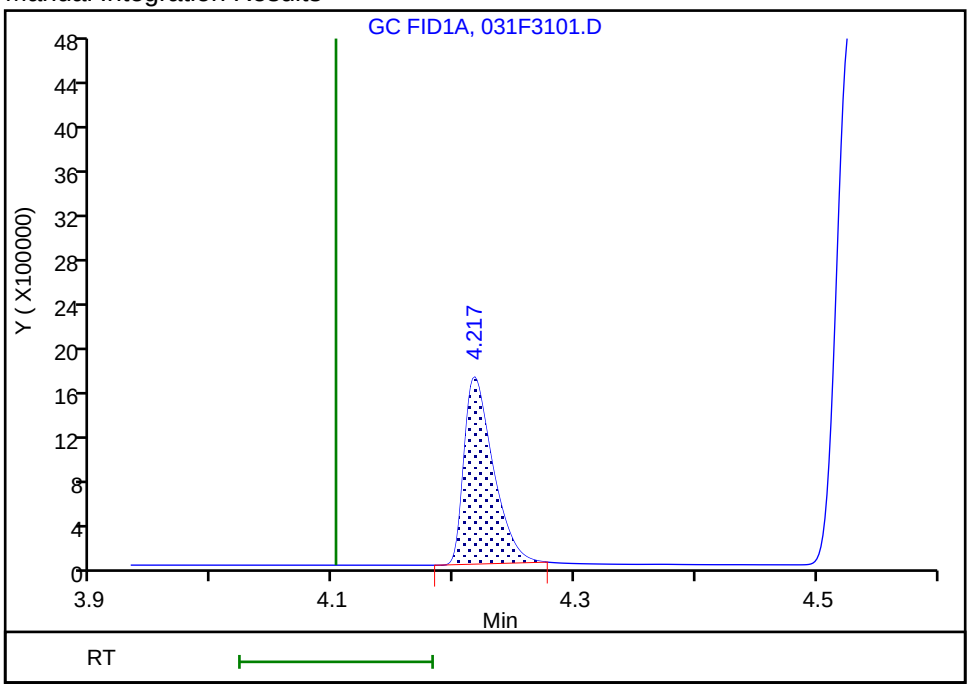
Not Detected
Expected RT: 4.10

Processing Integration Results



Manual Integration Results

RT: 4.22
Area: 2780071
Amount: 98.797721
Amount Units: ug/l



Reviewer: sciannac, 07-Mar-2022 13:03:48
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567659/31 Calibration Date: 03/03/2022 20:56

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 031F3101.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37162		65.9	65.7	0.3	20.0
Ethylene	Ave	30980	31073		115	115	0.3	20.0
Acetylene	Ave	34179	33727		105	107	-1.3	20.0
Ethane	Ave	33383	34045		126	123	2.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567659/31 Calibration Date: 03/03/2022 20:56

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 031F3101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.66	1.63	1.71
Ethylene	2.59	2.55	2.65
Acetylene	2.73	2.67	2.83
Ethane	3.01	2.97	3.07

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\031F3101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 03-Mar-2022 20:56:20 ALS Bottle#: 31 Worklist Smp#: 31
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:22 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 13:04:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.252	1.262	-0.010	2472230	65.7	68.4	
2	1.657	1.669	-0.012	2441651	65.7	65.9	
						RPD = 3.78	
3 Ethane							
1	1.524	1.524	0.000	4230737	123.2	127.3	
2	3.007	3.022	-0.015	4193368	123.2	125.6	
						RPD = 1.31	
4 Ethylene							Ma
1	1.834	1.809	0.025	4129402	114.9	117.2	
2	2.586	2.604	-0.018	3570318	114.9	115.2	M
						RPD = 1.70	
5 Propane							
1	2.647	2.587	0.060	6782587	180.6	188.3	
2	4.921	4.927	-0.006	6338892	180.6	181.1	
						RPD = 3.95	
6 Acetylene							Ma
1	4.217	4.102	0.115	2780071	106.7	98.8	M
2	2.734	2.751	-0.017	3597669	106.7	105.3	M
						RPD = 6.33	
7 Butane							Ma
1	4.527	4.449	0.078	8804406	238.1	241.7	a
2	6.422	6.427	-0.005	8295684	238.1	236.1	M
						RPD = 2.37	
8 isobutylene							Ma
1	5.427	5.350	0.077	8205285	229.8	227.1	
2	6.264	6.269	-0.005	7353399	229.8	221.5	M
						RPD = 2.53	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

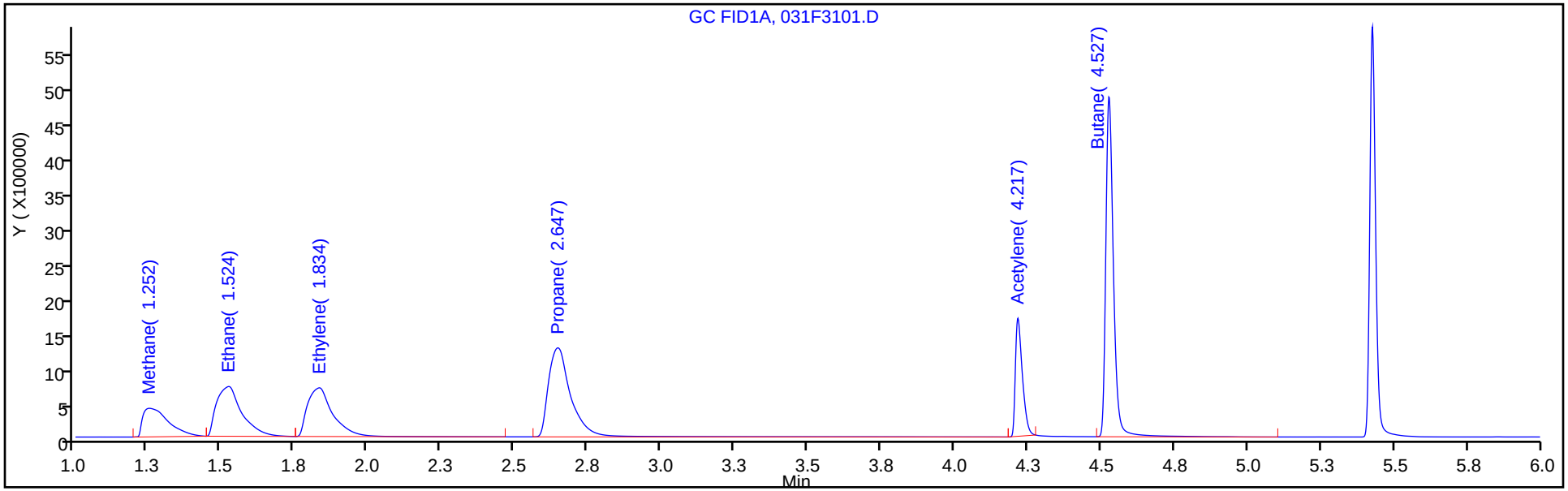
Report Date: 07-Mar-2022 13:05:22 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

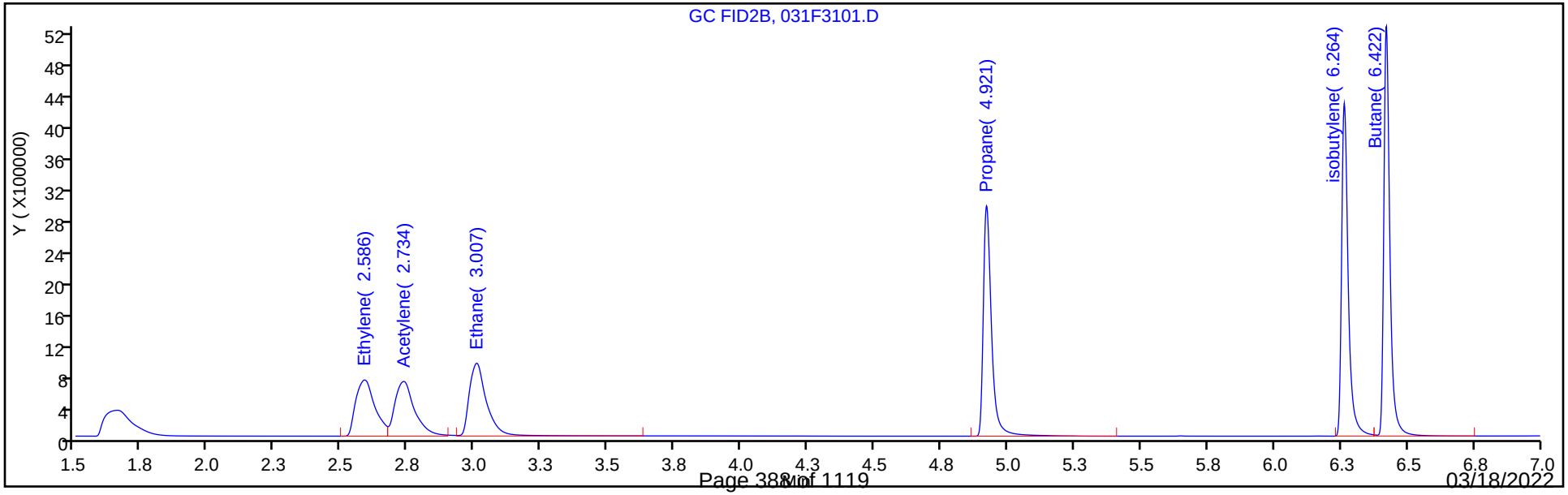
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\031F3101.D

Injection Date:	03-Mar-2022 20:56:20	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	31
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

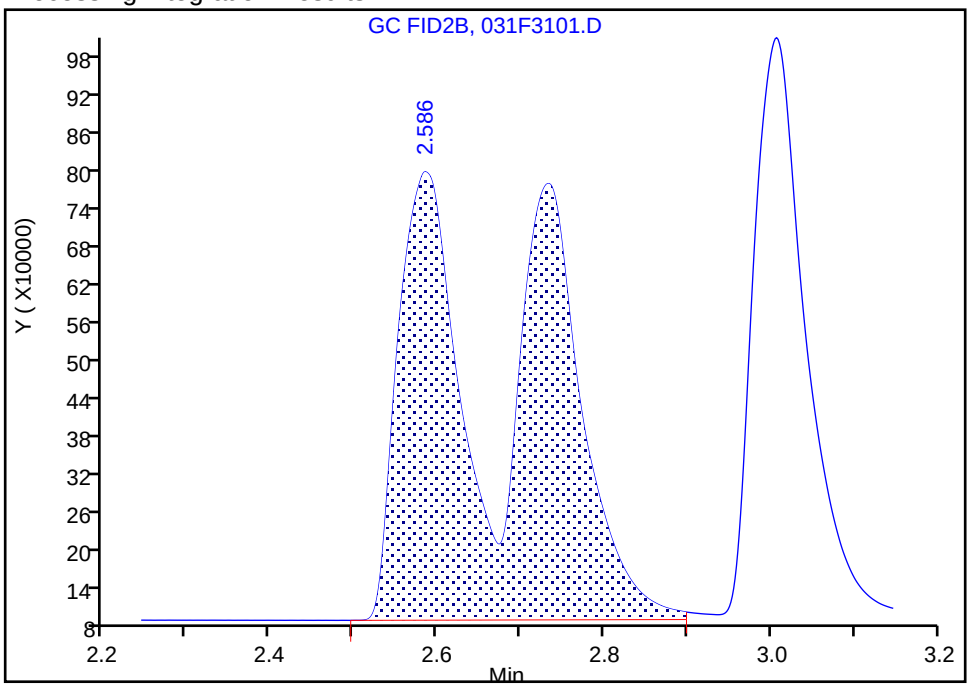
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\031F3101.D
Injection Date: 03-Mar-2022 20:56:20 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 31 Worklist Smp#: 31
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

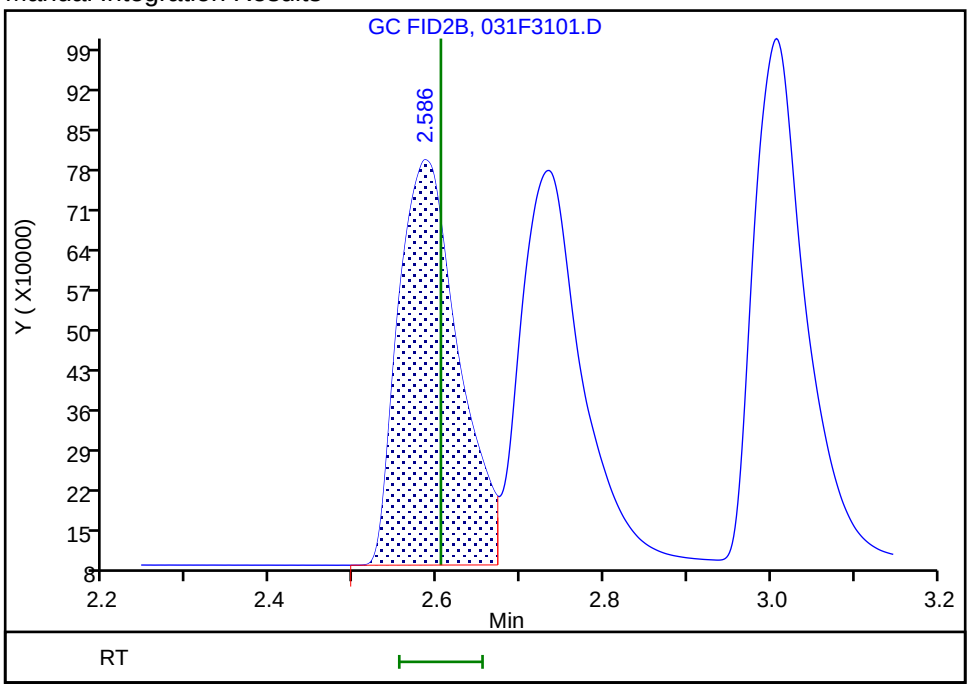
Processing Integration Results

RT: 2.59
Area: 7167983
Amount: 231.3725
Amount Units: ug/l



Manual Integration Results

RT: 2.59
Area: 3570318
Amount: 115.2449
Amount Units: ug/l



Reviewer: sciannac, 07-Mar-2022 13:04:41
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

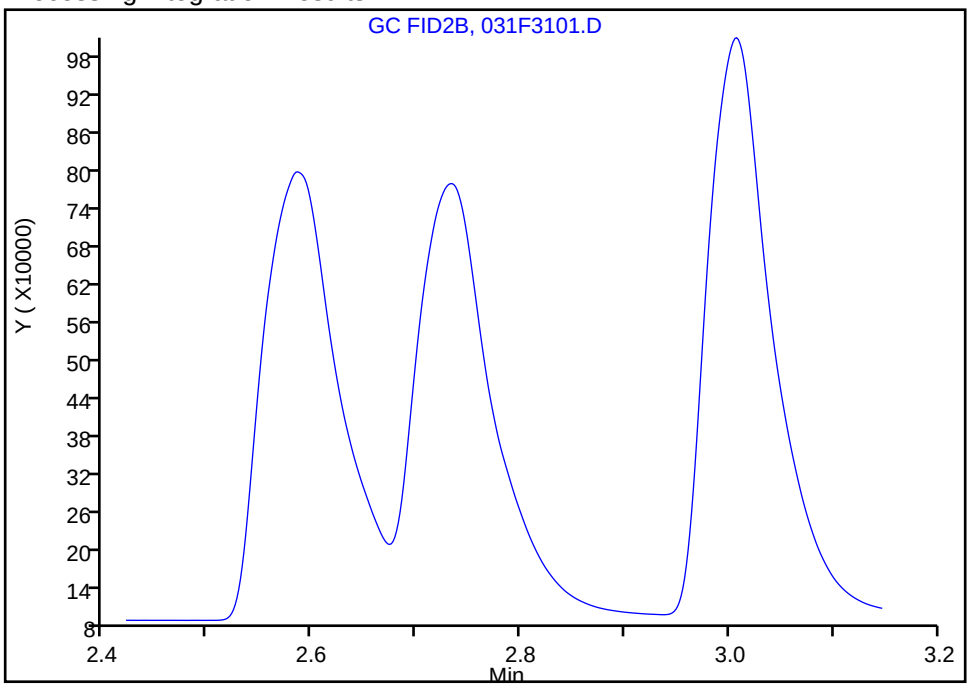
Data File:	\\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\031F3101.D				
Injection Date:	03-Mar-2022 20:56:20	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	31	Worklist Smp#:	31
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

6 Acetylene, CAS: 74-86-2

Signal: 2

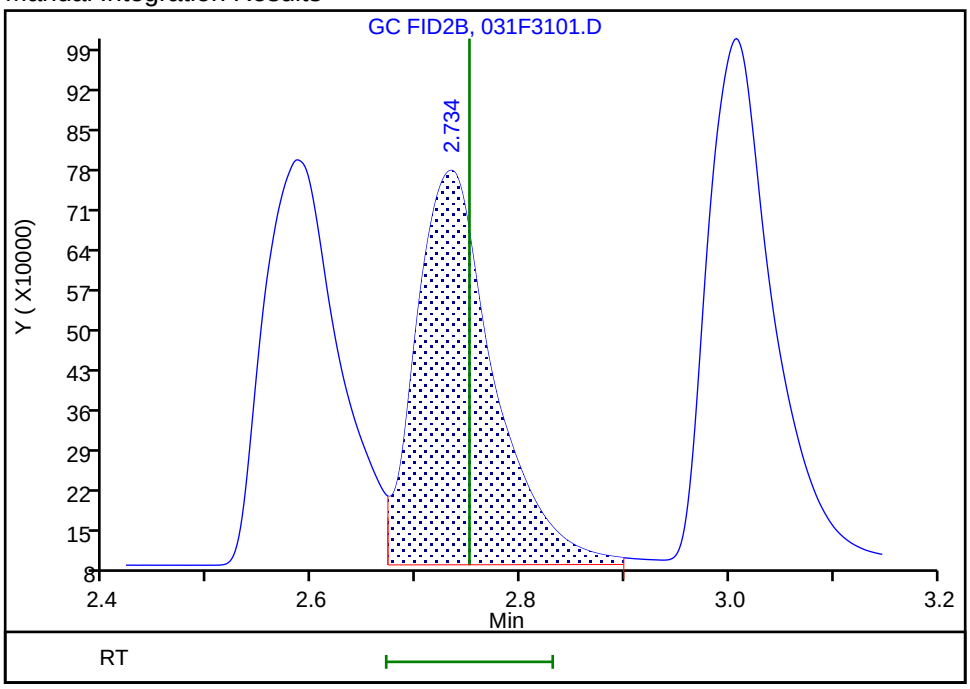
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.73
Area: 3597669
Amount: 105.2603
Amount Units: ug/l



Reviewer: sciannac, 07-Mar-2022 13:04:47
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCVRT 280-567999/2 Calibration Date: 03/08/2022 13:54

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 030822f01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		36565		66.4	65.7	1.1	20.0
Ethane	Ave	33241	33683		125	123	1.3	20.0
Ethylene	Ave	35226	36028		118	115	2.3	20.0
Acetylene	Ave	28139	30661		116	107	9.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCVRT 280-567999/2 Calibration Date: 03/08/2022 13:54

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 030822f01.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.22	1.30
Ethane	1.52	1.47	1.57
Ethylene	1.82	1.77	1.87
Acetylene	4.18	4.10	4.26

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\030822f01.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 08-Mar-2022 13:54:13 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Mar-2022 13:35:04 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1645

First Level Reviewer: sciannac Date: 08-Mar-2022 15:27:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.258	1.258	0.000	2402425	65.7	66.4	
2	1.663	1.663	0.000	2382769	65.7	64.3	
						RPD = 3.34	
3 Ethane							
1	1.523	1.523	0.000	4148680	123.2	124.8	
2	3.018	3.018	0.000	4227340	123.2	126.6	
						RPD = 1.45	
4 Ethylene							
1	1.818	1.818	0.000	4139628	114.9	117.5	
2	2.598	2.598	0.000	3603410	114.9	116.3	
						RPD = 1.03	
5 Propane							
1	2.611	2.611	0.000	6541399	180.6	181.7	
2	4.926	4.926	0.000	6251791	180.6	178.6	
						RPD = 1.71	
6 Acetylene							
1	4.175	4.175	0.000	3270605	106.7	116.2	
2	2.745	2.745	0.000	4011693	106.7	117.4	
						RPD = 0.98	
7 Butane							
1	4.491	4.491	0.000	8903447	238.1	244.5	
2	6.426	6.426	0.000	8310198	238.1	236.5	
						RPD = 3.31	
8 isobutylene							
1	5.391	5.391	0.000	8492113	229.8	235.1	
2	6.268	6.268	0.000	7613338	229.8	229.3	
						RPD = 2.49	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

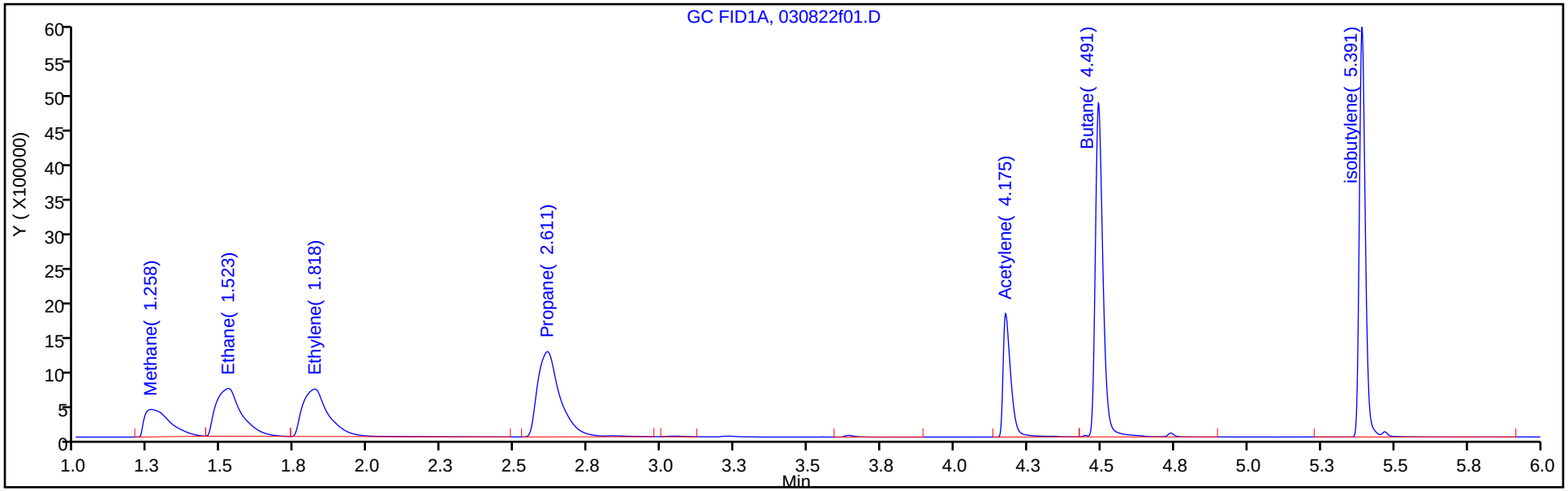
Report Date: 09-Mar-2022 13:35:04 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

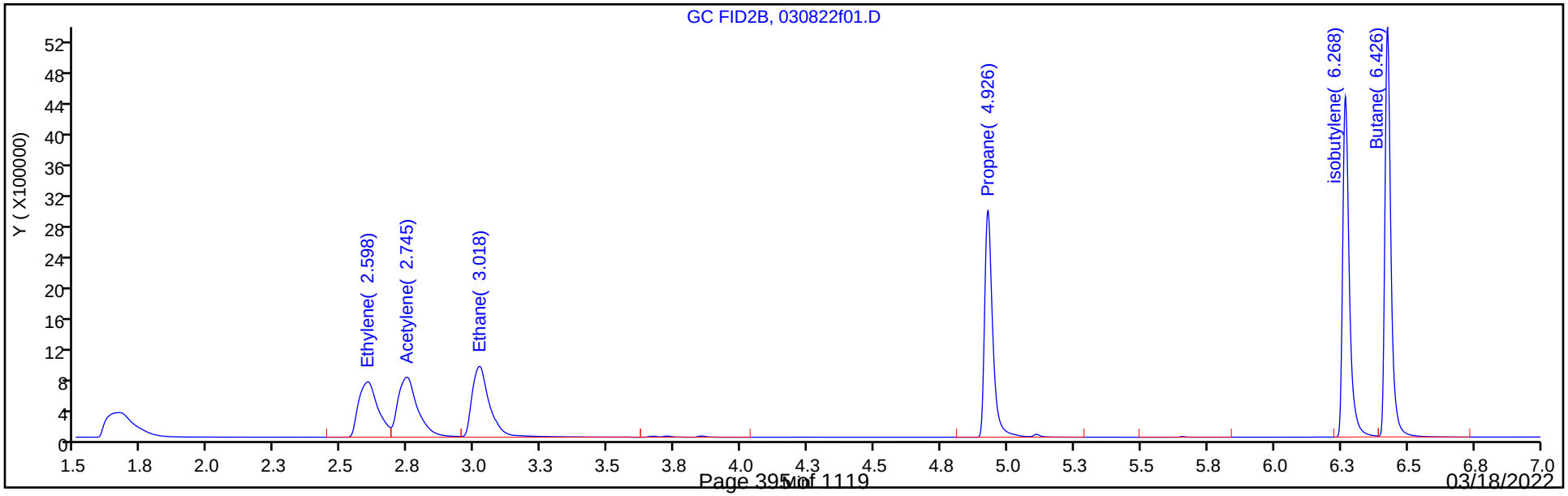
Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\030822f01.D

Injection Date:	08-Mar-2022 13:54:13	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCVRT 280-567999/2 Calibration Date: 03/08/2022 13:54

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 030822f01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		36266		64.3	65.7	-2.2	20.0
Ethylene	Ave	30980	31361		116	115	1.2	20.0
Acetylene	Ave	34179	37608		117	107	10.0	20.0
Ethane	Ave	33383	34321		127	123	2.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCVRT 280-567999/2 Calibration Date: 03/08/2022 13:54

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 030822f01.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.66	1.62	1.70
Ethylene	2.60	2.55	2.65
Acetylene	2.75	2.67	2.83
Ethane	3.02	2.97	3.07

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\030822f01.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 08-Mar-2022 13:54:13 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Mar-2022 13:35:04 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1645

First Level Reviewer: sciannac Date: 08-Mar-2022 15:27:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.258	1.258	0.000	2402425	65.7	66.4	
2	1.663	1.663	0.000	2382769	65.7	64.3	
						RPD = 3.34	
3 Ethane							
1	1.523	1.523	0.000	4148680	123.2	124.8	
2	3.018	3.018	0.000	4227340	123.2	126.6	
						RPD = 1.45	
4 Ethylene							
1	1.818	1.818	0.000	4139628	114.9	117.5	
2	2.598	2.598	0.000	3603410	114.9	116.3	
						RPD = 1.03	
5 Propane							
1	2.611	2.611	0.000	6541399	180.6	181.7	
2	4.926	4.926	0.000	6251791	180.6	178.6	
						RPD = 1.71	
6 Acetylene							
1	4.175	4.175	0.000	3270605	106.7	116.2	
2	2.745	2.745	0.000	4011693	106.7	117.4	
						RPD = 0.98	
7 Butane							
1	4.491	4.491	0.000	8903447	238.1	244.5	
2	6.426	6.426	0.000	8310198	238.1	236.5	
						RPD = 3.31	
8 isobutylene							
1	5.391	5.391	0.000	8492113	229.8	235.1	
2	6.268	6.268	0.000	7613338	229.8	229.3	
						RPD = 2.49	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

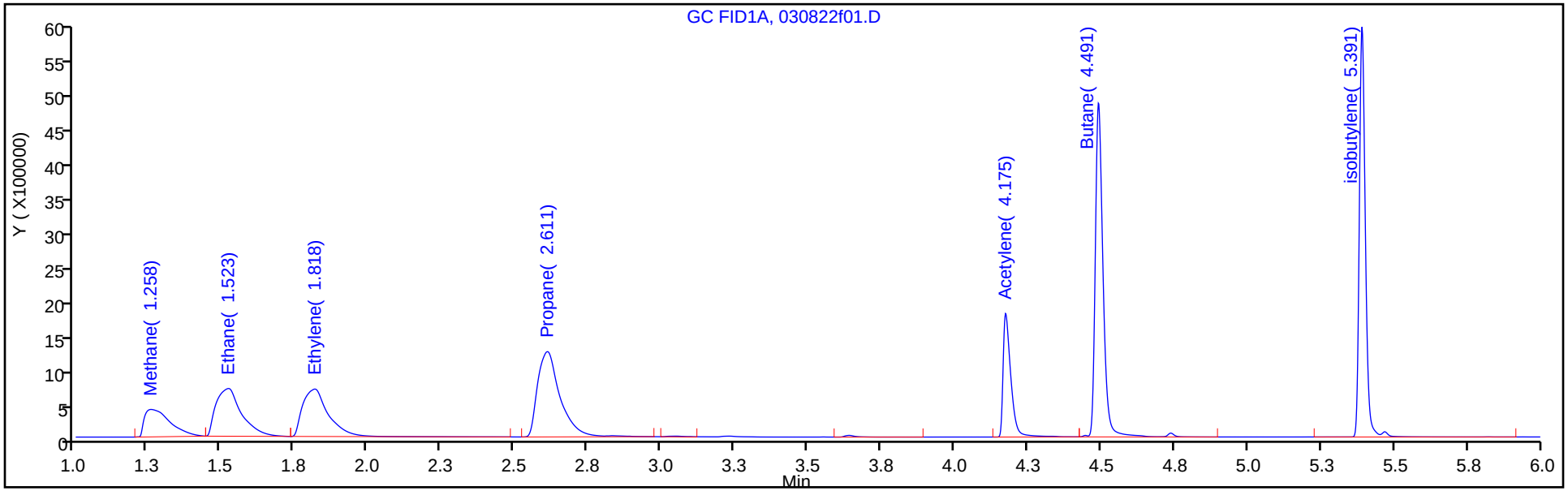
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Eurofins Denver

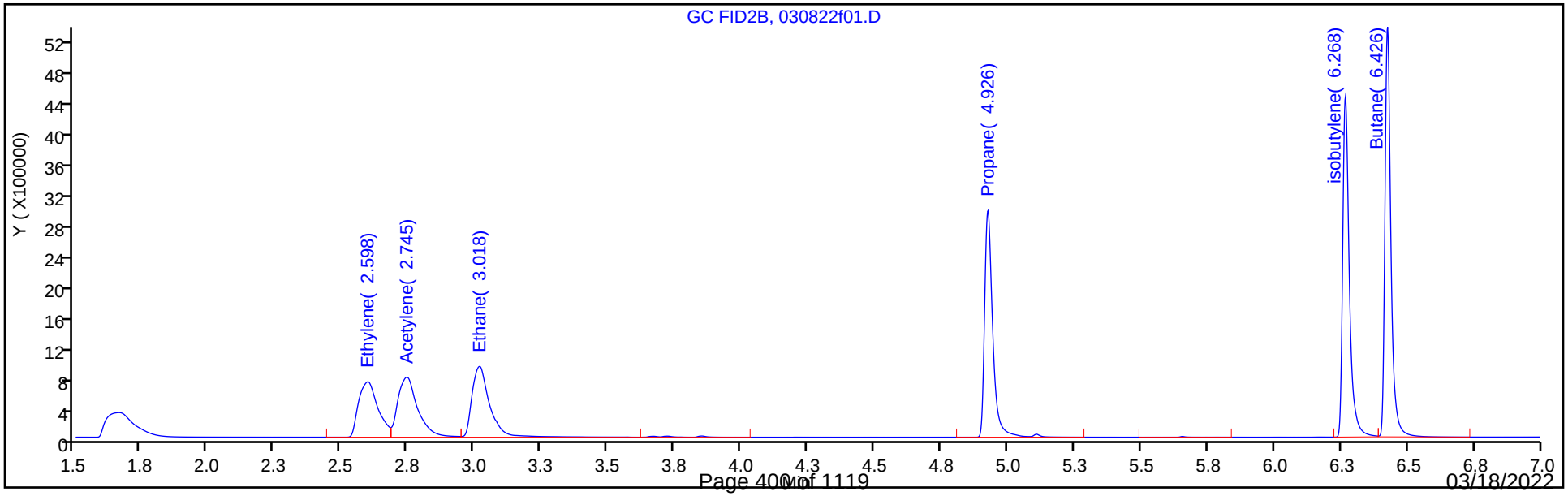
Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\030822f01.D

Injection Date:	08-Mar-2022 13:54:13	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567999/17 Calibration Date: 03/08/2022 17:09

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 019F1501.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37036		67.3	65.7	2.5	20.0
Ethane	Ave	33241	33527		124	123	0.9	20.0
Ethylene	Ave	35226	35724		117	115	1.4	20.0
Acetylene	Ave	28139	28657		109	107	1.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567999/17 Calibration Date: 03/08/2022 17:09

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 019F1501.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.22	1.30
Ethane	1.52	1.47	1.57
Ethylene	1.83	1.77	1.87
Acetylene	4.22	4.10	4.26

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\019F1501.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 08-Mar-2022 17:09:18 ALS Bottle#: 19 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Mar-2022 13:49:27 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1645

First Level Reviewer: sciannac Date: 09-Mar-2022 12:33:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.252	1.258	-0.006	2433386	65.7	67.3	
2	1.654	1.663	-0.009	2396656	65.7	64.6	
						RPD = 4.06	
3 Ethane							
1	1.522	1.523	-0.001	4129561	123.2	124.2	
2	3.004	3.018	-0.014	4137368	123.2	123.9	
						RPD = 0.24	
4 Ethylene							
1	1.830	1.818	0.012	4104713	114.9	116.5	
2	2.584	2.598	-0.014	3547871	114.9	114.5	
						RPD = 1.74	
5 Propane							
1	2.644	2.611	0.033	6451107	180.6	179.1	
2	4.921	4.926	-0.005	6076538	180.6	173.6	
						RPD = 3.17	
6 Acetylene							
1	4.217	4.175	0.042	3056871	106.7	108.6	
2	2.732	2.745	-0.013	3771648	106.7	110.4	
						RPD = 1.57	
7 Butane							Ma
1	4.525	4.491	0.034	8255239	238.1	226.7	a
2	6.421	6.426	-0.005	7824885	238.1	222.7	M
						RPD = 1.77	
8 isobutylene							Ma
1	5.424	5.391	0.033	7918984	229.8	219.2	
2	6.262	6.268	-0.006	7096475	229.8	213.7	M
						RPD = 2.53	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

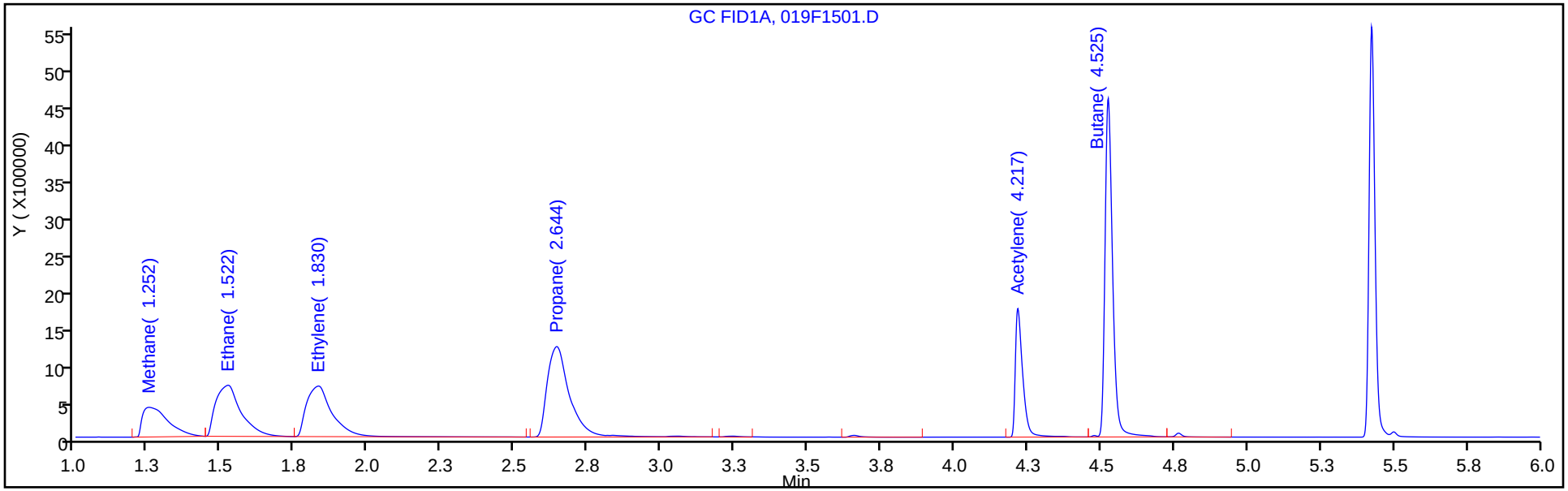
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Eurofins Denver

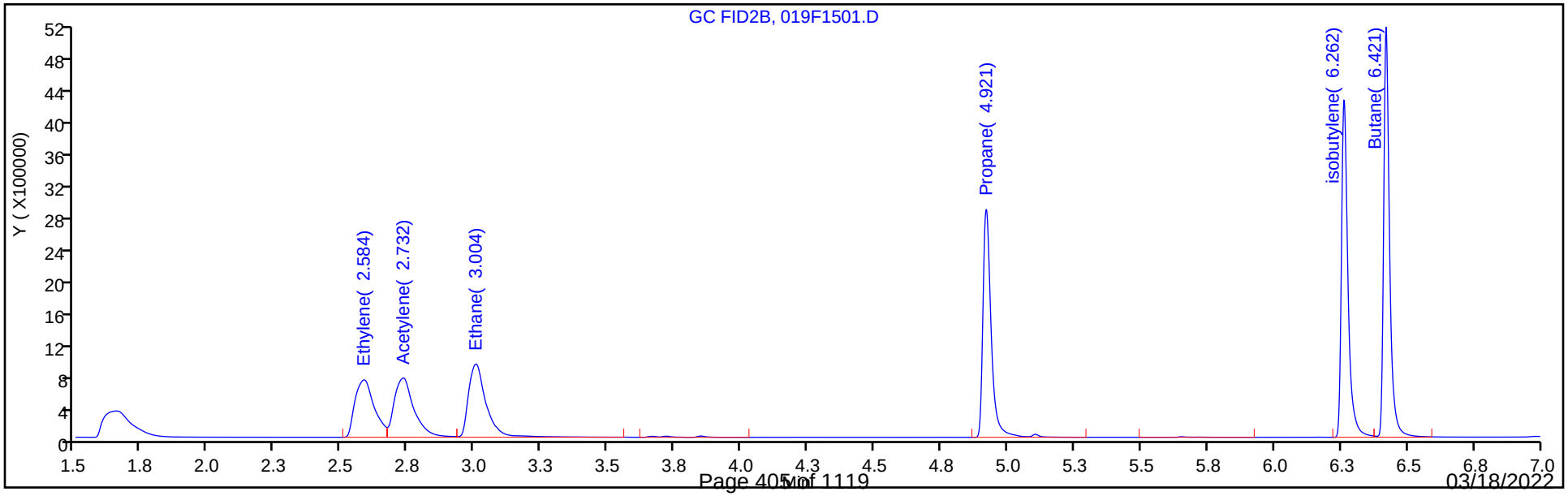
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Injection Date:	08-Mar-2022 17:09:18	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567999/17 Calibration Date: 03/08/2022 17:09

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 019F1501.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		36477		64.6	65.7	-1.6	20.0
Ethylene	Ave	30980	30878		115	115	-0.3	20.0
Acetylene	Ave	34179	35358		110	107	3.5	20.0
Ethane	Ave	33383	33591		124	123	0.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567999/17 Calibration Date: 03/08/2022 17:09

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 019F1501.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.65	1.62	1.70
Ethylene	2.58	2.55	2.65
Acetylene	2.73	2.67	2.83
Ethane	3.00	2.97	3.07

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\019F1501.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 08-Mar-2022 17:09:18 ALS Bottle#: 19 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Mar-2022 13:49:27 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1645

First Level Reviewer: sciannac Date: 09-Mar-2022 12:33:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.252	1.258	-0.006	2433386	65.7	67.3	
2	1.654	1.663	-0.009	2396656	65.7	64.6	
						RPD = 4.06	
3 Ethane							
1	1.522	1.523	-0.001	4129561	123.2	124.2	
2	3.004	3.018	-0.014	4137368	123.2	123.9	
						RPD = 0.24	
4 Ethylene							
1	1.830	1.818	0.012	4104713	114.9	116.5	
2	2.584	2.598	-0.014	3547871	114.9	114.5	
						RPD = 1.74	
5 Propane							
1	2.644	2.611	0.033	6451107	180.6	179.1	
2	4.921	4.926	-0.005	6076538	180.6	173.6	
						RPD = 3.17	
6 Acetylene							
1	4.217	4.175	0.042	3056871	106.7	108.6	
2	2.732	2.745	-0.013	3771648	106.7	110.4	
						RPD = 1.57	
7 Butane							Ma
1	4.525	4.491	0.034	8255239	238.1	226.7	a
2	6.421	6.426	-0.005	7824885	238.1	222.7	M
						RPD = 1.77	
8 isobutylene							Ma
1	5.424	5.391	0.033	7918984	229.8	219.2	
2	6.262	6.268	-0.006	7096475	229.8	213.7	M
						RPD = 2.53	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

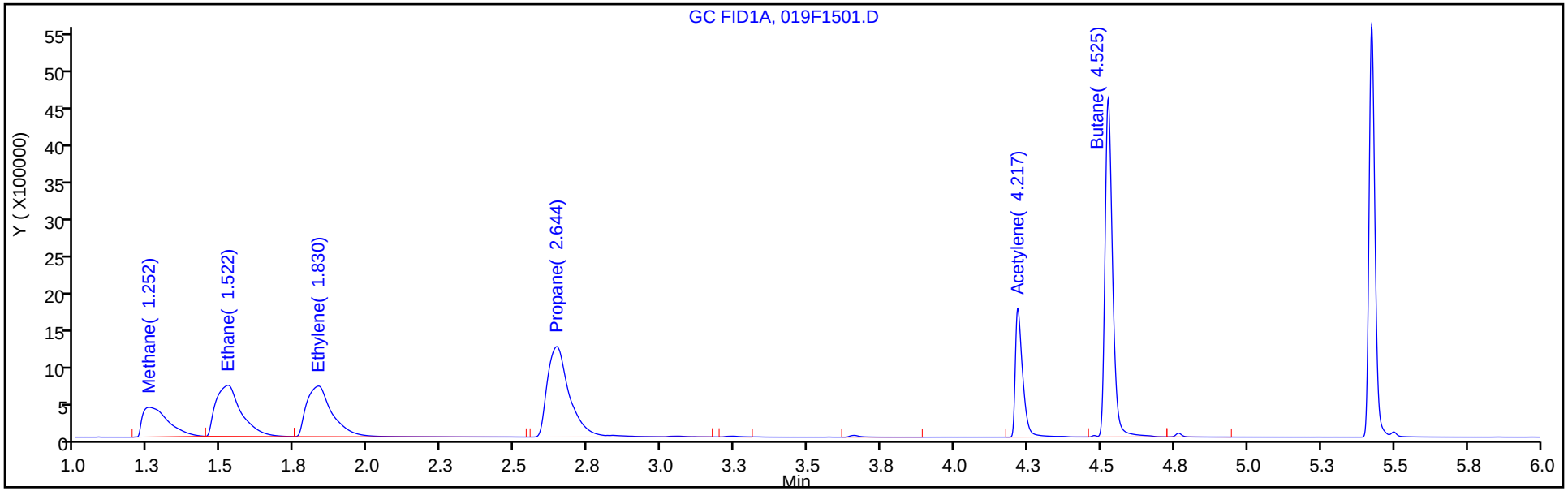
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Eurofins Denver

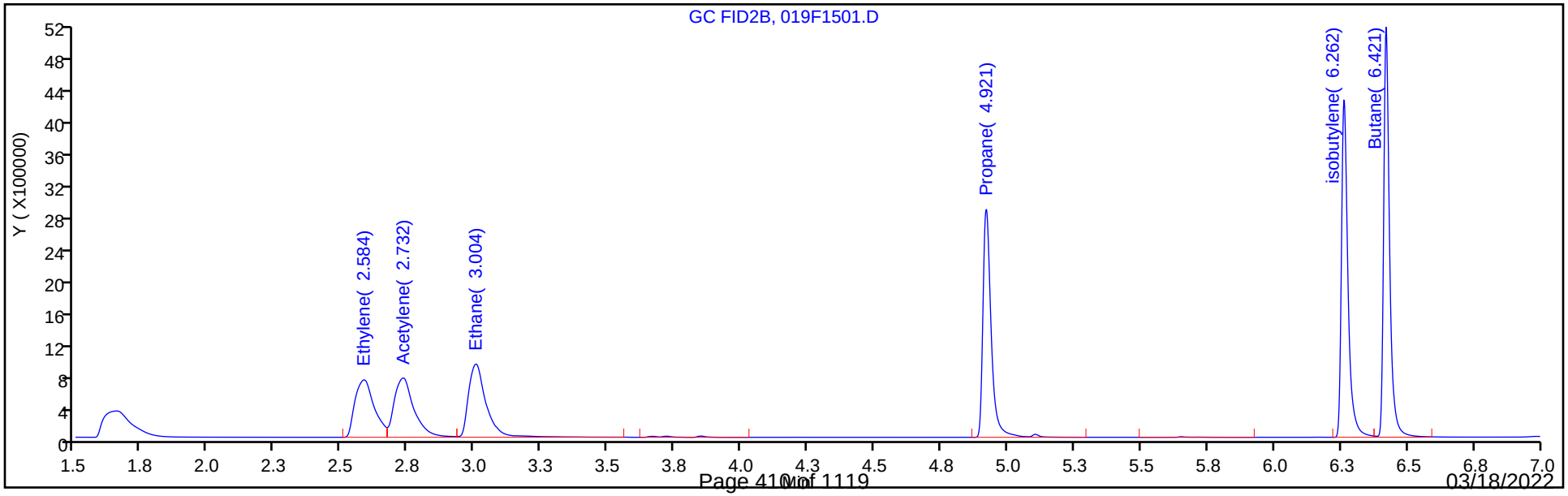
Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\019F1501.D

Injection Date:	08-Mar-2022 17:09:18	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-567496/5

Matrix: Water | Lab File ID: 005F0501.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 03/02/2022 15:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567496 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U	0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\005F0501.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 02-Mar-2022 15:19:09 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Mar-2022 11:19:32 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1669

First Level Reviewer: sciannac Date: 03-Mar-2022 10:54:33

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.362				ND	
2		5.458					
2 Methane							7
1		1.262				ND	
2		1.670					
3 Ethane							
1		1.517				ND	
2		3.022					
4 Ethylene							
1		1.789				ND	
2		2.604					
5 Propane							
1		2.545				ND	
2		4.927					
6 Acetylene							
1		4.050				ND	
2		2.750					
7 Butane							
1		4.412				ND	
2		6.427					
8 isobutylene							
1		5.314				ND	
2		6.269					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

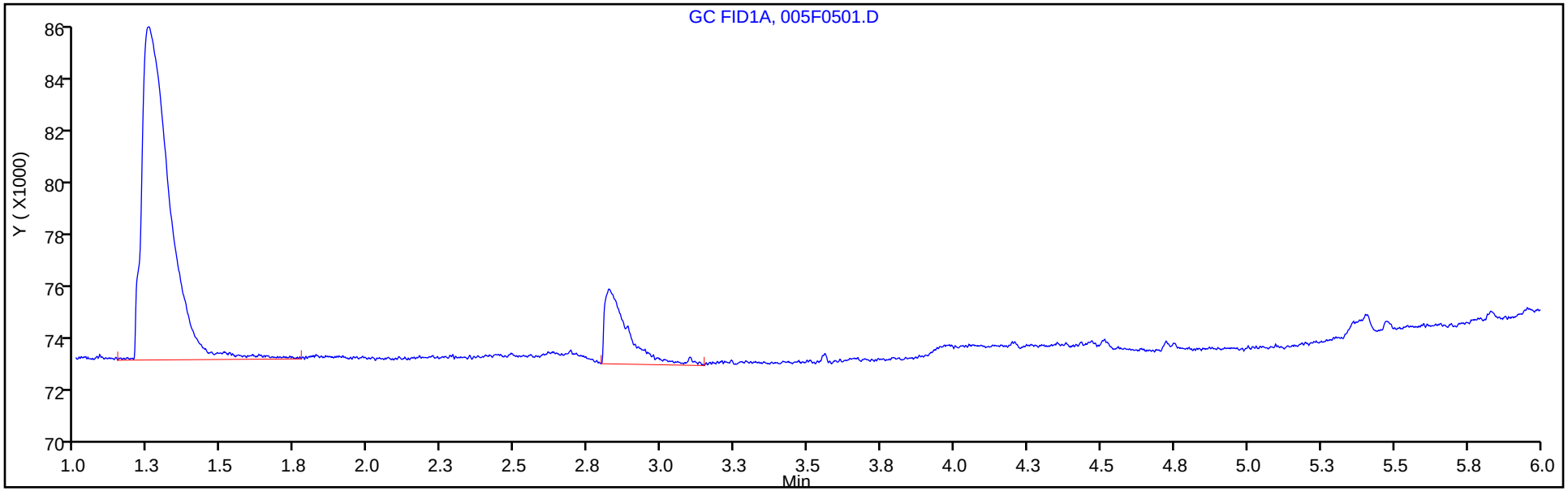
Report Date: 03-Mar-2022 11:19:34 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

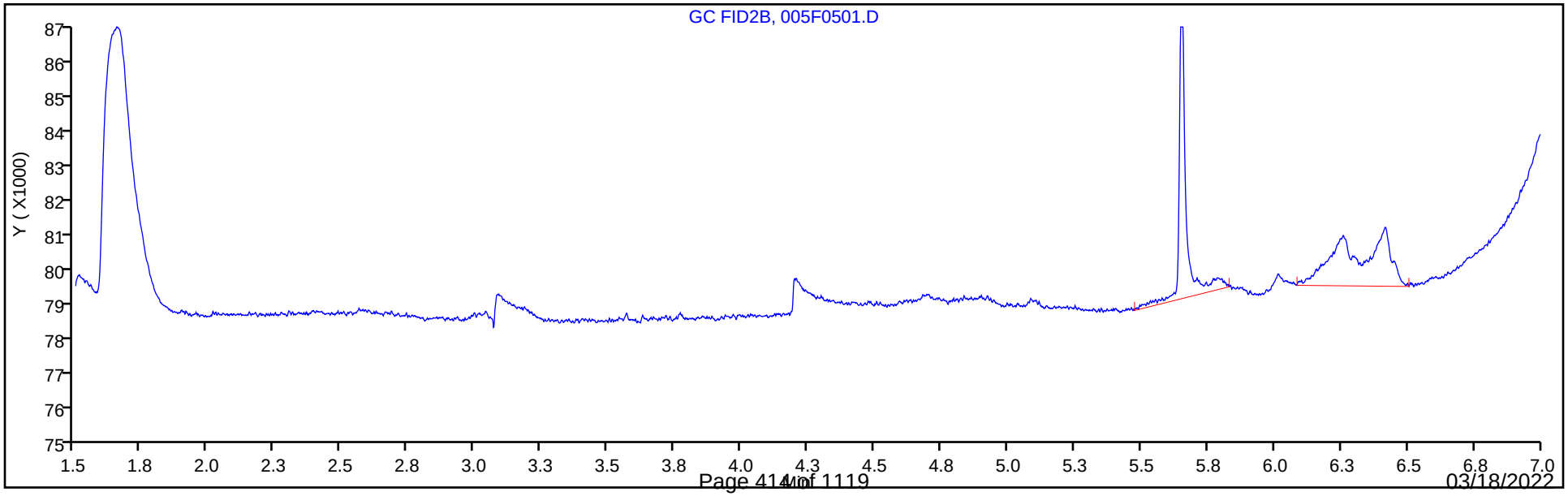
Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\005F0501.D

Injection Date:	02-Mar-2022 15:19:09	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	mb			Worklist Smp#:	5
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-567659/5

Matrix: Water | Lab File ID: 005F0501.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 15:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U	0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\005F0501.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 03-Mar-2022 15:17:04 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:54:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.362				ND	
2		5.458					
2 Methane							7
1		1.262				ND	
2		1.669					
3 Ethane							
1		1.524				ND	
2		3.022					
4 Ethylene							
1		1.809				ND	
2		2.604					
5 Propane							
1		2.587				ND	
2		4.927					
6 Acetylene							
1		4.102				ND	
2		2.751					
7 Butane							
1		4.449				ND	
2		6.427					
8 isobutylene							
1		5.350				ND	
2		6.269					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

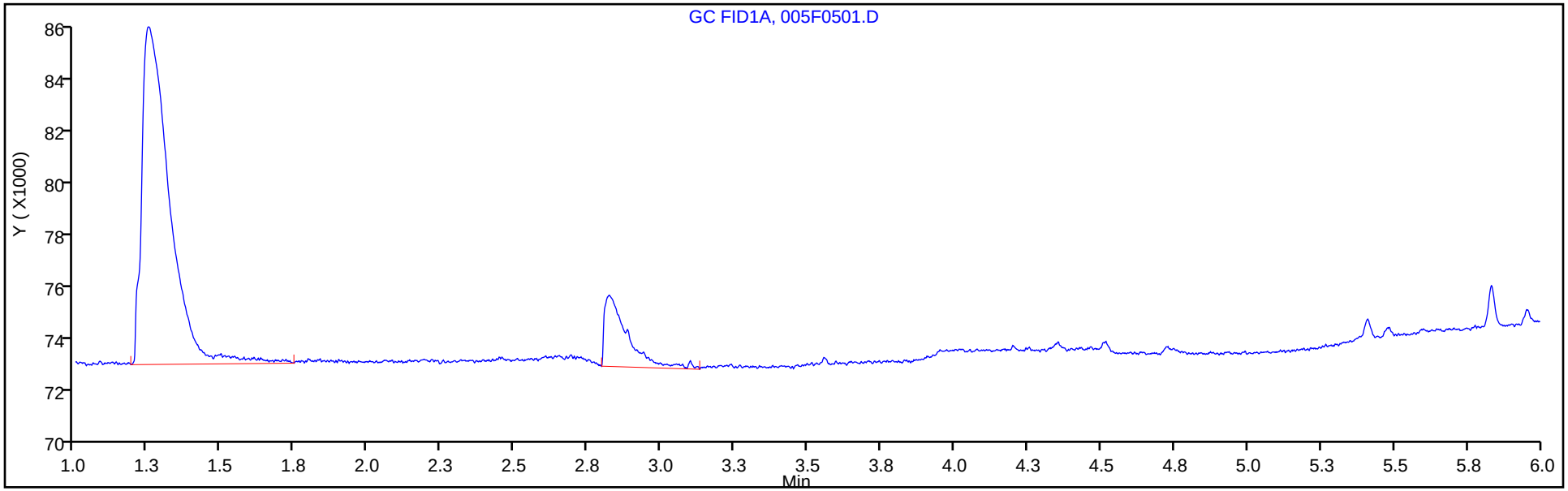
Report Date: 07-Mar-2022 13:05:11 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

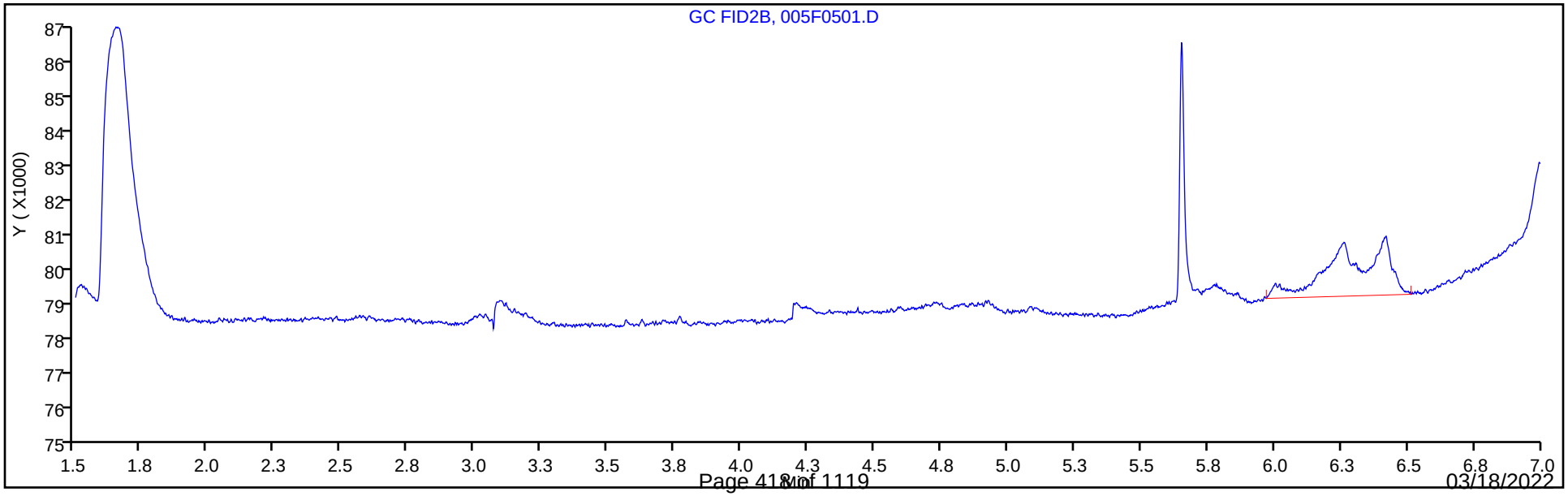
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\005F0501.D

Injection Date:	03-Mar-2022 15:17:04	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	mb			Worklist Smp#:	5
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-567999/3

Matrix: Water Lab File ID: 001F0101.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 03/08/2022 14:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 567999 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U	0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\001F0101.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 08-Mar-2022 14:07:08 ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Mar-2022 13:35:04 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1645

First Level Reviewer: sciannac Date: 08-Mar-2022 15:34:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.362				ND	
2		5.458					
2 Methane							7
1		1.258				ND	
2		1.663					
3 Ethane							
1		1.523				ND	
2		3.018					
4 Ethylene							
1		1.818				ND	
2		2.598					
5 Propane							
1		2.611				ND	
2		4.926					
6 Acetylene							
1		4.175				ND	
2		2.745					
7 Butane							
1		4.491				ND	
2		6.426					
8 isobutylene							
1		5.391				ND	
2		6.268					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

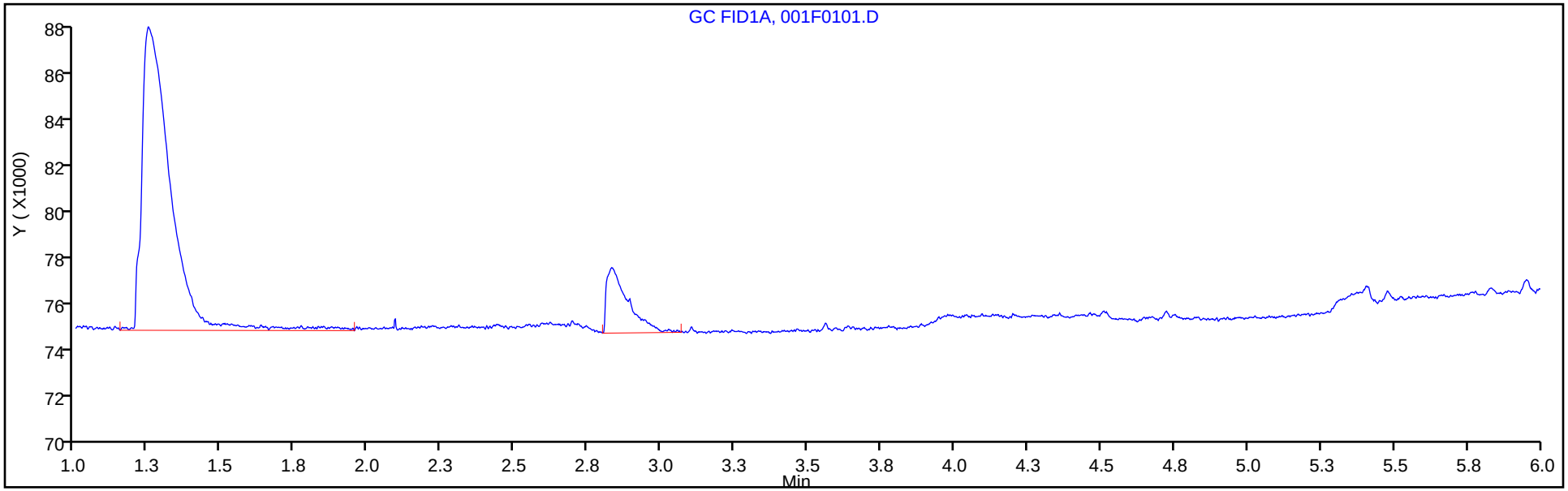
Report Date: 09-Mar-2022 13:35:05 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

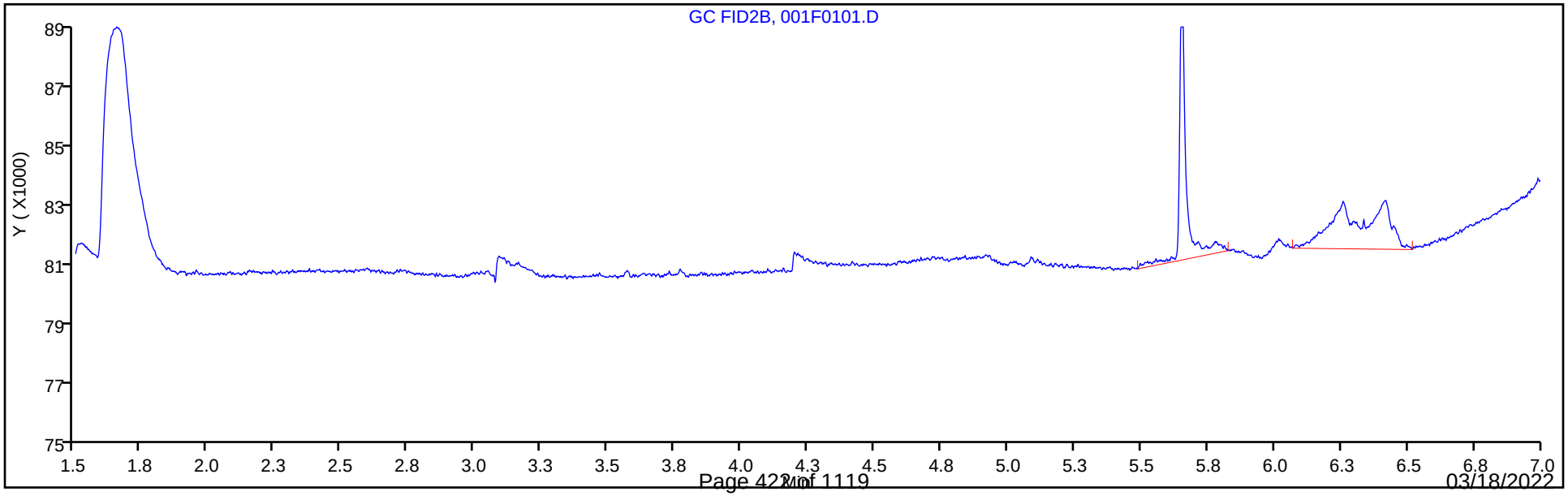
Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\001F0101.D

Injection Date:	08-Mar-2022 14:07:08	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	mb			Worklist Smp#:	3
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-567496/3

Matrix: Water | Lab File ID: 003F0301.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 03/02/2022 14:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567496 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0676		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\003F0301.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 02-Mar-2022 14:53:05 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Mar-2022 11:19:32 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1669

First Level Reviewer: sciannac Date: 03-Mar-2022 10:53:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.259	1.262	-0.003	2497048	65.7	69.1	
2	1.666	1.670	-0.004	2501421	65.7	67.6	
						RPD = 2.32	
3 Ethane							
1	1.517	1.517	0.000	4329556	123.2	130.2	
2	3.018	3.022	-0.004	4444764	123.2	133.1	
						RPD = 2.20	
4 Ethylene							M
1	1.801	1.789	0.012	4318835	114.9	122.6	
2	2.598	2.604	-0.006	3534849	114.9	114.1	M
						RPD = 7.19	
5 Propane							
1	2.581	2.545	0.036	6864603	180.6	190.6	
2	4.926	4.927	-0.001	6581658	180.6	188.0	
						RPD = 1.39	
6 Acetylene							a
1	4.131	4.050	0.081	3421317	106.7	121.6	a
2	2.746	2.750	-0.004	4217605	106.7	123.4	a
						RPD = 1.48	
7 Butane							
1	4.462	4.412	0.050	9353607	238.1	256.8	
2	6.426	6.427	-0.001	8801397	238.1	250.5	
						RPD = 2.50	
8 isobutylene							
1	5.362	5.314	0.048	8898794	229.8	246.3	
2	6.268	6.269	-0.001	8049094	229.8	242.4	
						RPD = 1.60	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

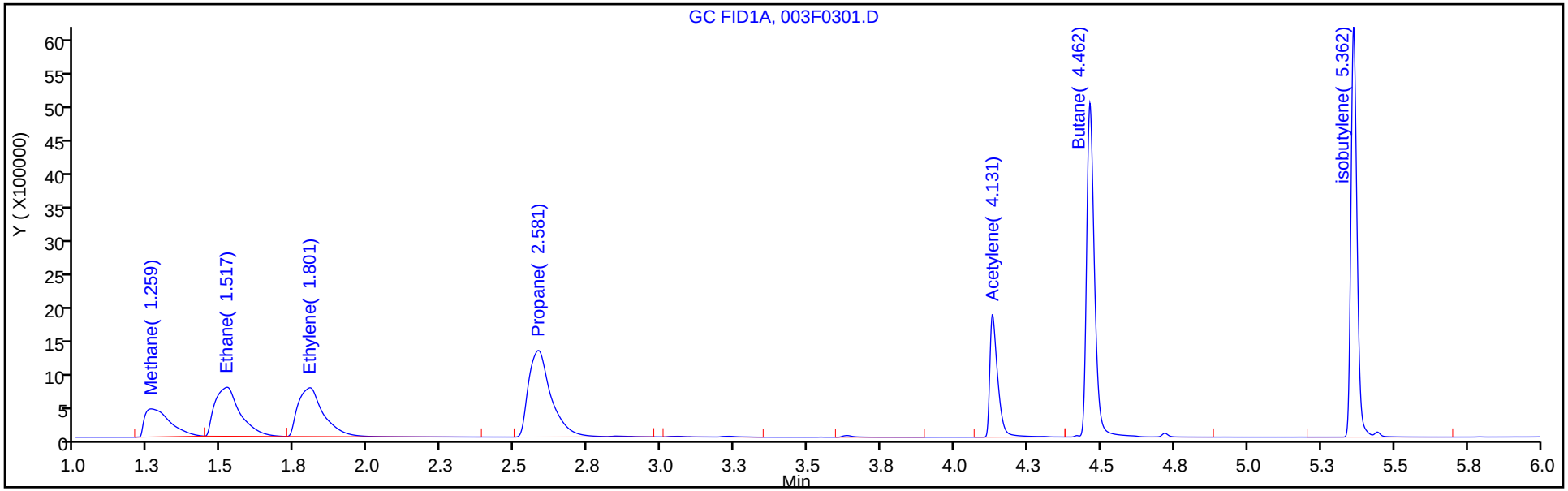
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Eurofins Denver

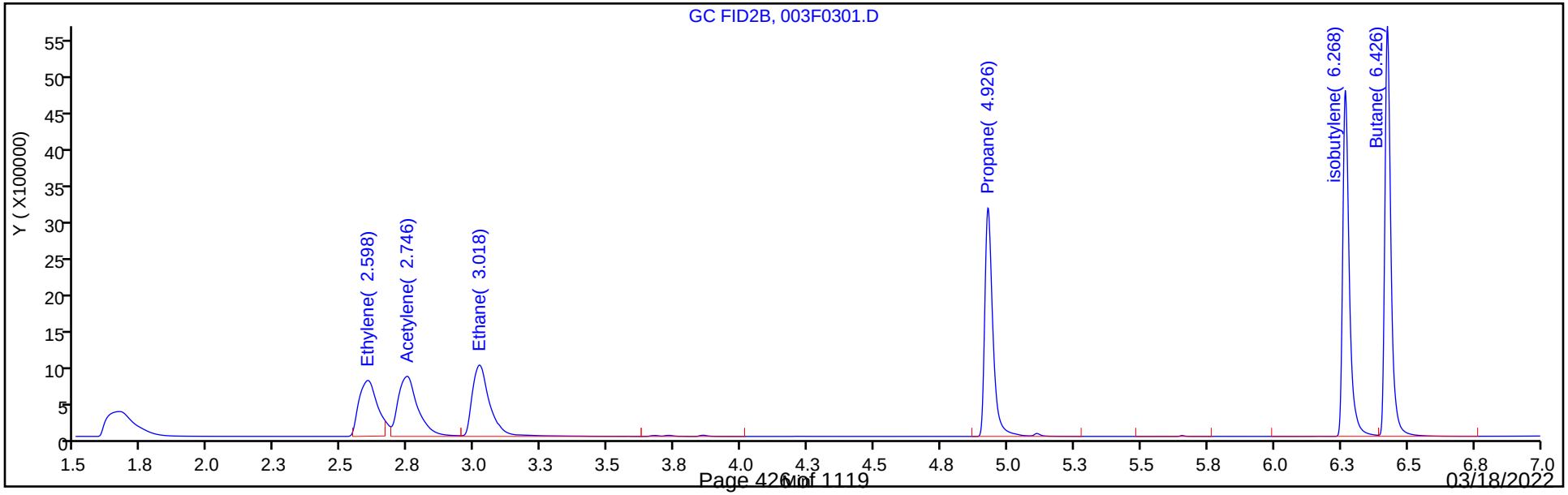
Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\003F0301.D

Injection Date:	02-Mar-2022 14:53:05	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcs			Worklist Smp#:	3
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-567659/3

Matrix: Water | Lab File ID: 003F0301.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 14:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0667		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\003F0301.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 03-Mar-2022 14:51:14 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:52:18

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.259	1.262	-0.003	2480446	65.7	68.7	
2	1.666	1.669	-0.003	2469636	65.7	66.7	
						RPD = 2.95	
3 Ethane							
1	1.522	1.524	-0.002	4286335	123.2	128.9	
2	3.019	3.022	-0.003	4374857	123.2	131.1	
						RPD = 1.62	
4 Ethylene							
1	1.811	1.809	0.002	4271671	114.9	121.3	
2	2.599	2.604	-0.005	1677880	114.9	54.2	
						RPD = 76.51	
5 Propane							
1	2.599	2.587	0.012	6767537	180.6	187.9	
2	4.926	4.927	-0.001	6474110	180.6	184.9	
						RPD = 1.62	
6 Acetylene							
1	4.147	4.102	0.045	3323679	106.7	118.1	
2	2.746	2.751	-0.005	4121279	106.7	120.6	
						RPD = 2.06	
7 Butane							Ma
1	4.476	4.449	0.027	9090833	238.1	249.6	a
2	6.424	6.427	-0.003	8653047	238.1	246.3	M
						RPD = 1.35	
8 isobutylene							Ma
1	5.374	5.350	0.024	8741764	229.8	242.0	
2	6.268	6.269	-0.001	7856958	229.8	236.6	M
						RPD = 2.24	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

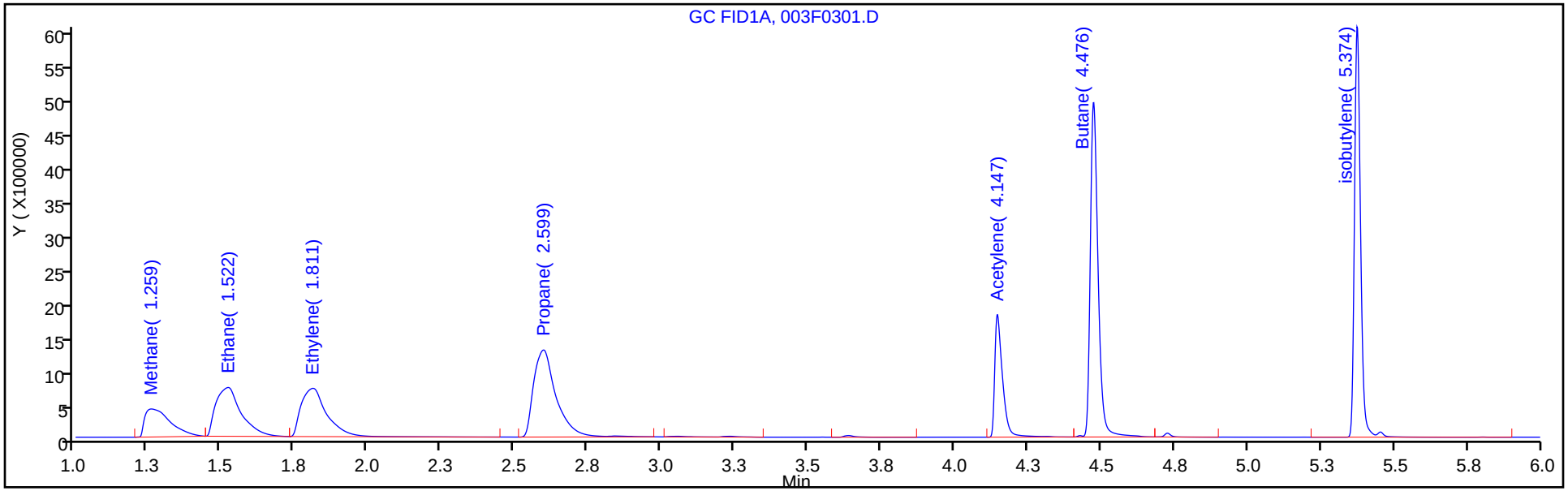
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Eurofins Denver

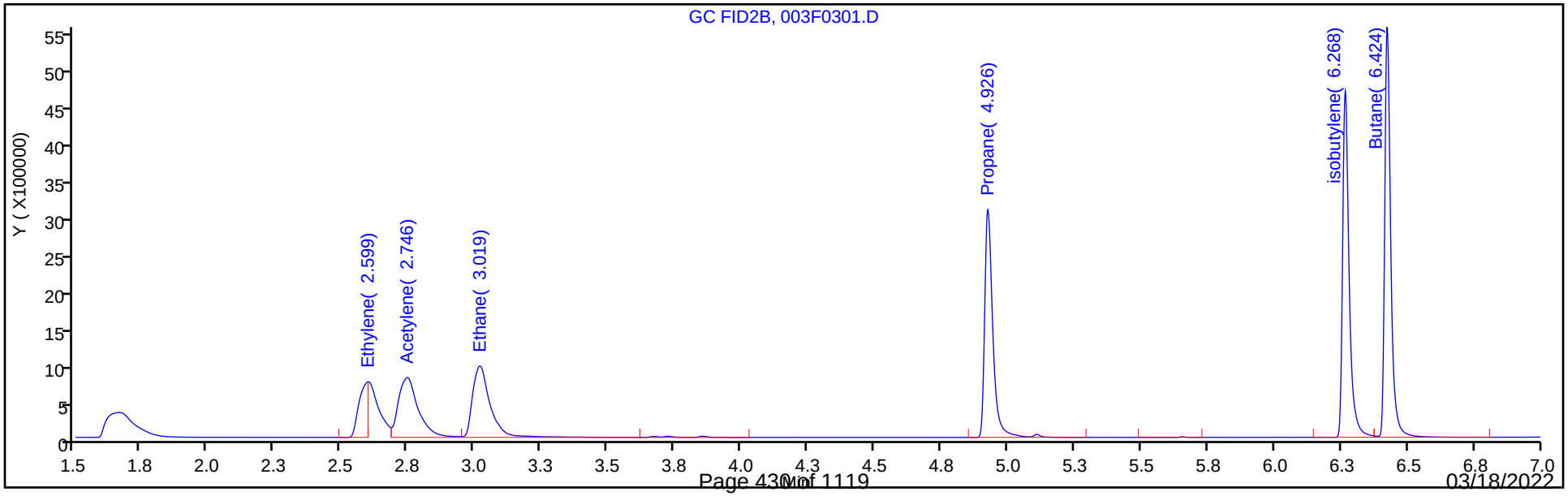
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\003F0301.D

Injection Date:	03-Mar-2022 14:51:14	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcs			Worklist Smp#:	3
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-567999/4

Matrix: Water | Lab File ID: 002F0201.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 03/08/2022 14:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567999 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0648		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\002F0201.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 08-Mar-2022 14:20:04 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Mar-2022 13:35:04 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1645

First Level Reviewer: sciannac Date: 08-Mar-2022 15:35:10

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.255	1.258	-0.003	2426108	65.7	67.1	
2	1.659	1.663	-0.004	2401148	65.7	64.8	
						RPD = 3.56	
3 Ethane							
1	1.522	1.523	-0.001	4181320	123.2	125.8	
2	3.012	3.018	-0.006	4248774	123.2	127.3	
						RPD = 1.18	
4 Ethylene							Ma
1	1.825	1.818	0.007	4167904	114.9	118.3	
2	2.592	2.598	-0.006	3784593	114.9	122.2	M
						RPD = 3.20	
5 Propane							
1	2.632	2.611	0.021	6625101	180.6	184.0	
2	4.924	4.926	-0.002	6258850	180.6	178.8	
						RPD = 2.87	
6 Acetylene							Ma
1	4.202	4.175	0.027	3233395	106.7	114.9	
2	2.739	2.745	-0.006	3562867	106.7	104.2	M
						RPD = 9.73	
7 Butane							Ma
1	4.512	4.491	0.021	8824227	238.1	242.3	a
2	6.424	6.426	-0.002	8309042	238.1	236.5	M
						RPD = 2.43	
8 isobutylene							Ma
1	5.410	5.391	0.019	8397630	229.8	232.5	
2	6.267	6.268	-0.001	7522383	229.8	226.6	M
						RPD = 2.57	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

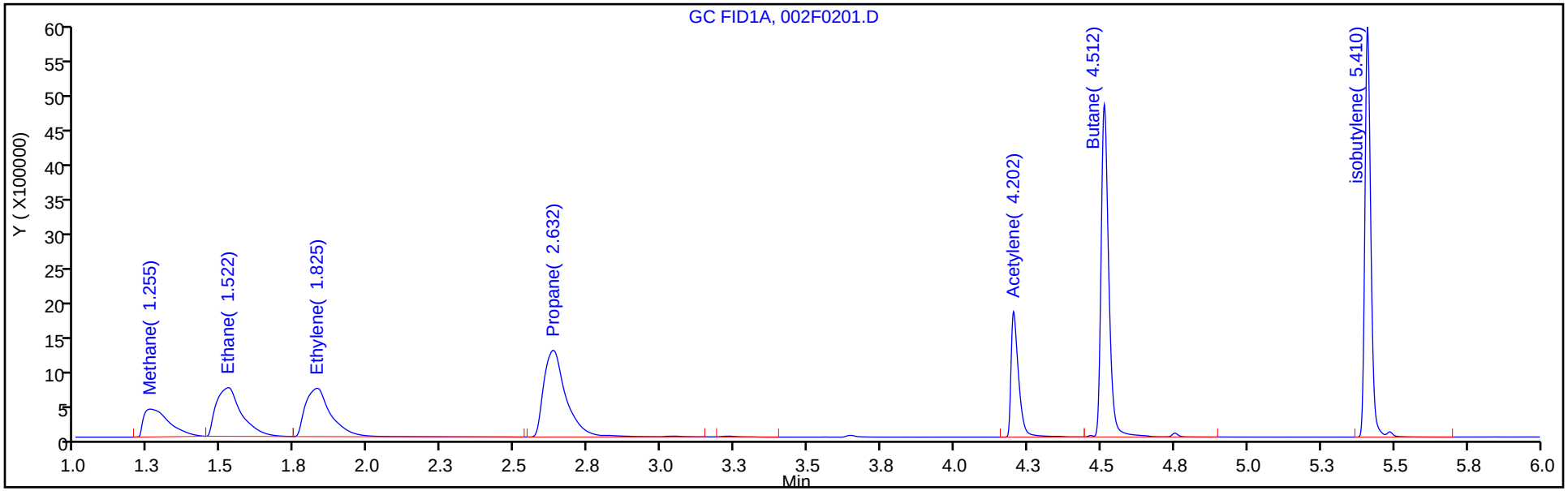
Report Date: 09-Mar-2022 13:35:06 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

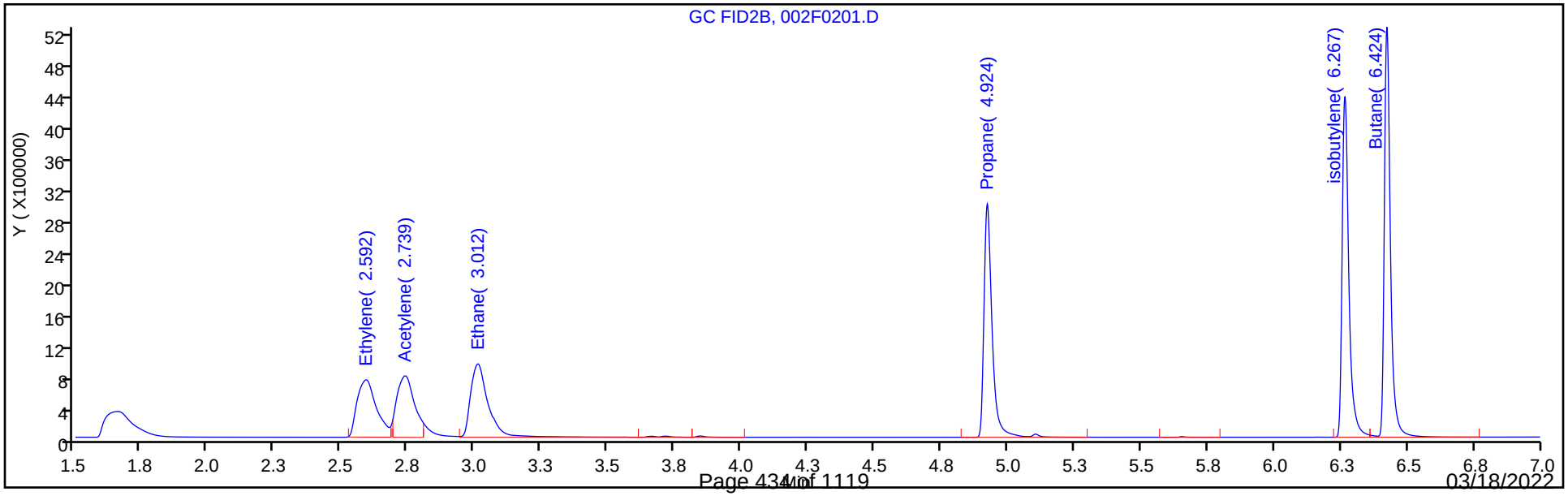
Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\002F0201.D

Injection Date:	08-Mar-2022 14:20:04	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcs			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-567496/4

Matrix: Water | Lab File ID: 004F0401.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 03/02/2022 15:06

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567496 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0673		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\004F0401.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 02-Mar-2022 15:06:15 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcsd
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 03-Mar-2022 11:33:12 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1669

First Level Reviewer: sciannac Date: 03-Mar-2022 11:33:12

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.256	1.262	-0.006	2500291	65.7	69.2	
2	1.662	1.670	-0.008	2492442	65.7	67.3	
						RPD = 2.83	
3 Ethane							
1	1.521	1.517	0.004	4328945	123.2	130.2	
2	3.015	3.022	-0.007	4426562	123.2	132.6	
						RPD = 1.81	
4 Ethylene							
1	1.816	1.789	0.027	4297994	114.9	122.0	
2	2.595	2.604	-0.009	3746914	114.9	120.9	
						RPD = 0.88	
5 Propane							a
1	2.611	2.545	0.066	6916189	180.6	192.1	a
2	4.925	4.927	-0.002	6554217	180.6	187.2	a
						RPD = 2.56	
6 Acetylene							a
1	4.173	4.050	0.123	3260064	106.7	115.9	a
2	2.742	2.750	-0.008	4036907	106.7	118.1	a
						RPD = 1.93	
7 Butane							Ma
1	4.491	4.412	0.079	9298991	238.1	255.3	a
2	6.425	6.427	-0.002	8750693	238.1	249.0	M
						RPD = 2.49	
8 isobutylene							Ma
1	5.391	5.314	0.077	8804560	229.8	243.7	
2	6.267	6.269	-0.002	7912724	229.8	238.3	M
						RPD = 2.25	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

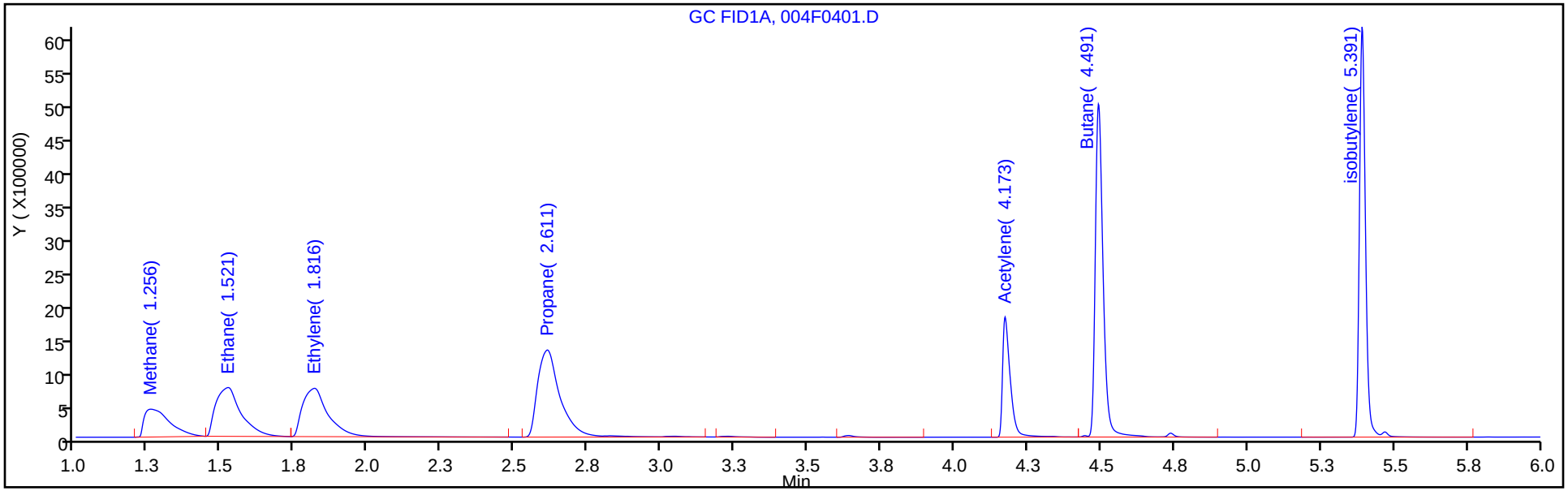
Report Date: 03-Mar-2022 11:33:15 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

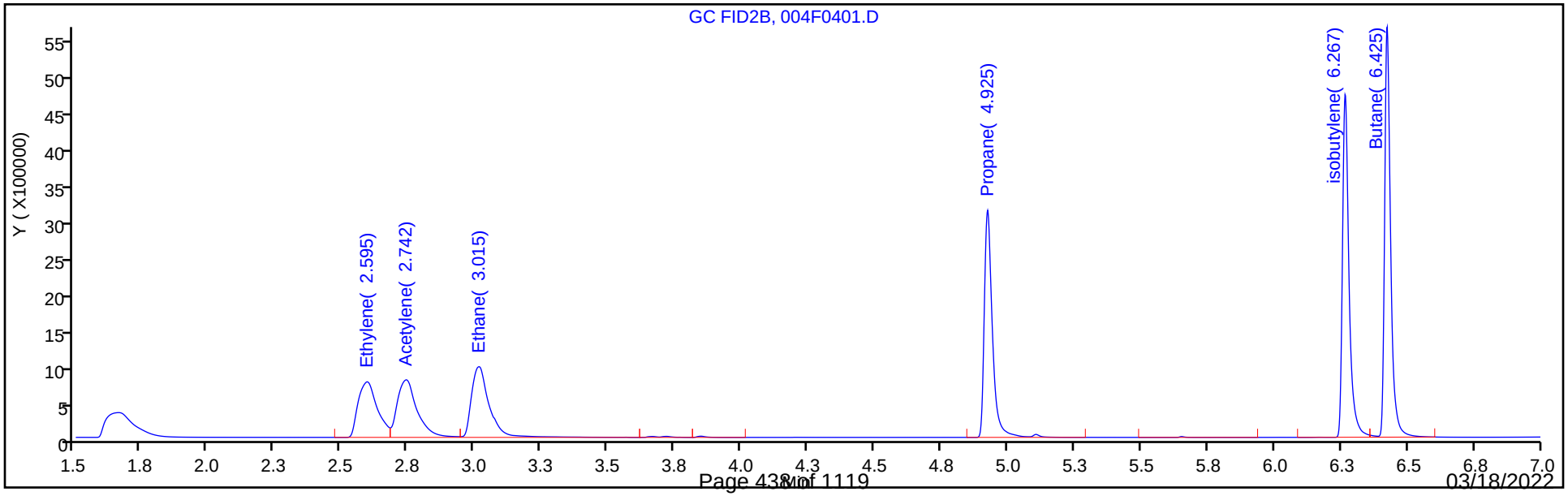
Data File: \\chromfs\Denver\ChromData\VGC_J\20220302-108940.b\004F0401.D

Injection Date:	02-Mar-2022 15:06:15	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcsd			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-567659/4

Matrix: Water | Lab File ID: 004F0401.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 15:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0646		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\004F0401.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 03-Mar-2022 15:04:10 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcsd
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:54:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.258	1.262	-0.004	2412792	65.7	66.7	
2	1.662	1.669	-0.007	2395887	65.7	64.6	
						RPD = 3.22	
3 Ethane							
1	1.522	1.524	-0.002	4169871	123.2	125.4	
2	3.015	3.022	-0.007	4199701	123.2	125.8	
						RPD = 0.29	
4 Ethylene							
1	1.818	1.809	0.009	4148930	114.9	117.8	
2	2.597	2.604	-0.007	3596381	114.9	116.1	
						RPD = 1.45	
5 Propane							
1	2.613	2.587	0.026	6653965	180.6	184.8	
2	4.923	4.927	-0.004	6286237	180.6	179.5	
						RPD = 2.87	
6 Acetylene							
1	4.175	4.102	0.073	3194530	106.7	113.5	
2	2.743	2.751	-0.008	3956968	106.7	115.8	
						RPD = 1.96	
7 Butane							Ma
1	4.495	4.449	0.046	8949273	238.1	245.7	a
2	6.425	6.427	-0.002	8421652	238.1	239.7	M
						RPD = 2.49	
8 isobutylene							M
1	5.393	5.350	0.043	8498479	229.8	235.3	
2	6.268	6.269	-0.001	7618555	229.8	229.5	M
						RPD = 2.50	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

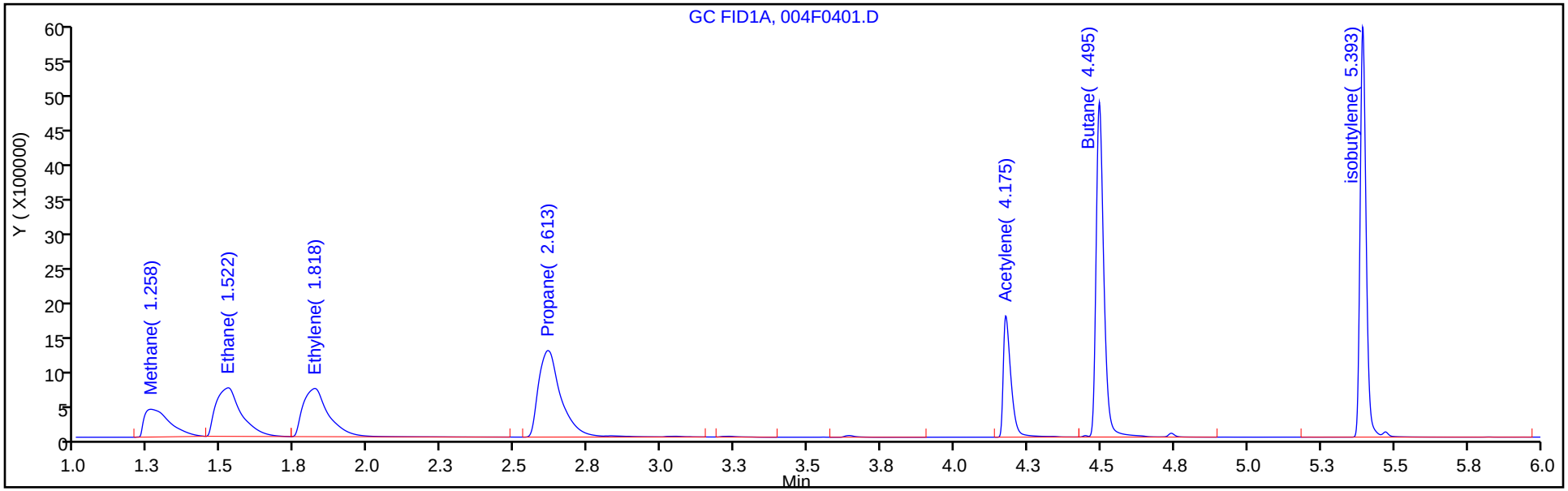
Report Date: 07-Mar-2022 13:05:10 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

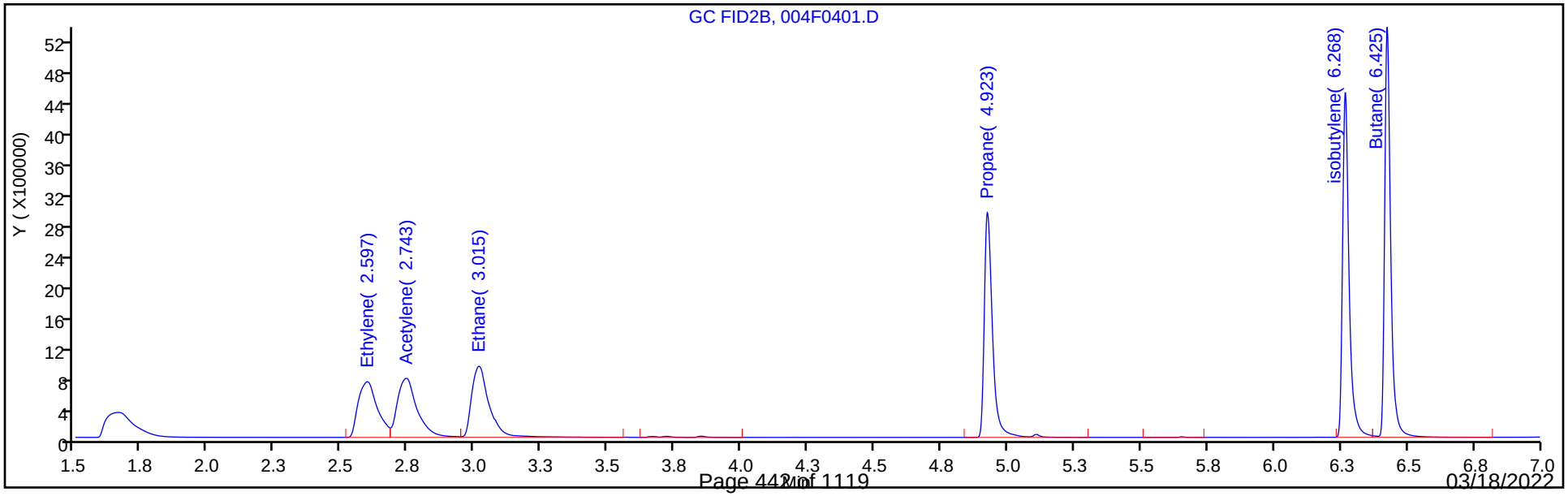
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\004F0401.D

Injection Date:	03-Mar-2022 15:04:10	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcsd			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-567999/5

Matrix: Water | Lab File ID: 003F0301.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 03/08/2022 14:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567999 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0649		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\003F0301.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 08-Mar-2022 14:32:58 ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcsd
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Mar-2022 13:35:04 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1645

First Level Reviewer: sciannac Date: 08-Mar-2022 15:36:07

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.254	1.258	-0.004	2435059	65.7	67.4	
2	1.658	1.663	-0.005	2407106	65.7	64.9	
						RPD = 3.69	
3 Ethane							
1	1.523	1.523	0.000	4192782	123.2	126.1	
2	3.010	3.018	-0.008	4214363	123.2	126.2	
						RPD = 0.09	
4 Ethylene							
1	1.828	1.818	0.010	4193979	114.9	119.1	
2	2.590	2.598	-0.008	3628597	114.9	117.1	
						RPD = 1.64	
5 Propane							
1	2.634	2.611	0.023	6645224	180.6	184.5	
2	4.923	4.926	-0.003	6273229	180.6	179.2	
						RPD = 2.95	
6 Acetylene							
1	4.206	4.175	0.031	3355168	106.7	119.2	
2	2.738	2.745	-0.007	4119188	106.7	120.5	
						RPD = 1.07	
7 Butane							
1	4.514	4.491	0.023	8875771	238.1	243.7	
2	6.423	6.426	-0.003	8270543	238.1	235.4	
						RPD = 3.48	
8 isobutylene							
1	5.414	5.391	0.023	8468868	229.8	234.4	
2	6.265	6.268	-0.003	7586893	229.8	228.5	
						RPD = 2.56	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

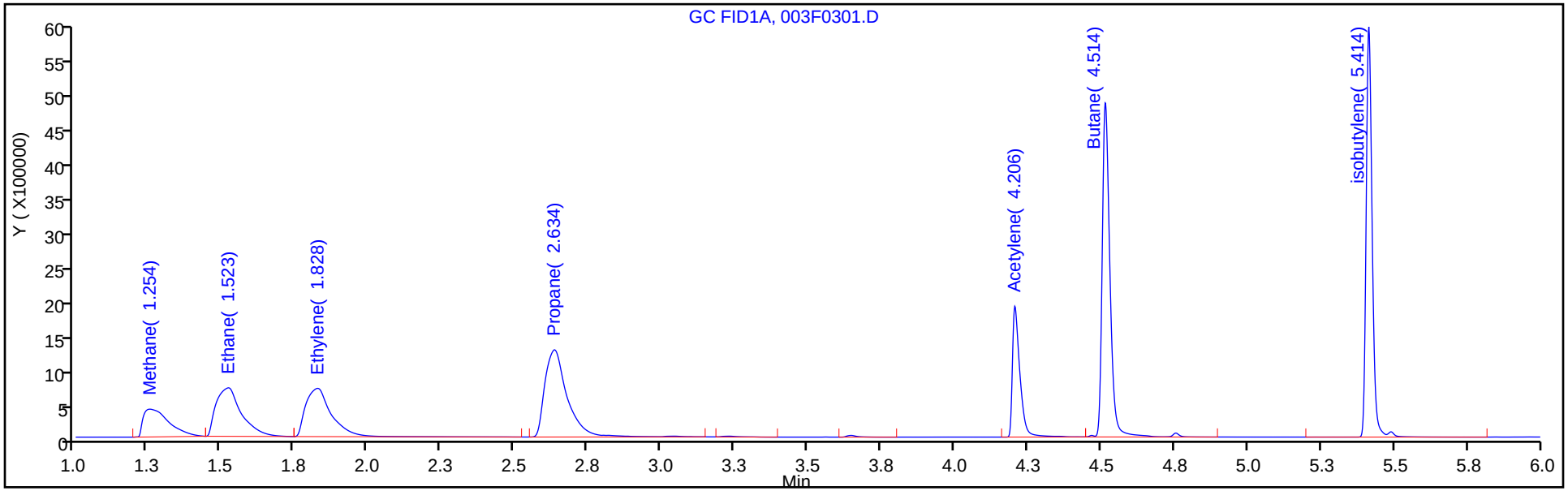
Report Date: 09-Mar-2022 13:35:06 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

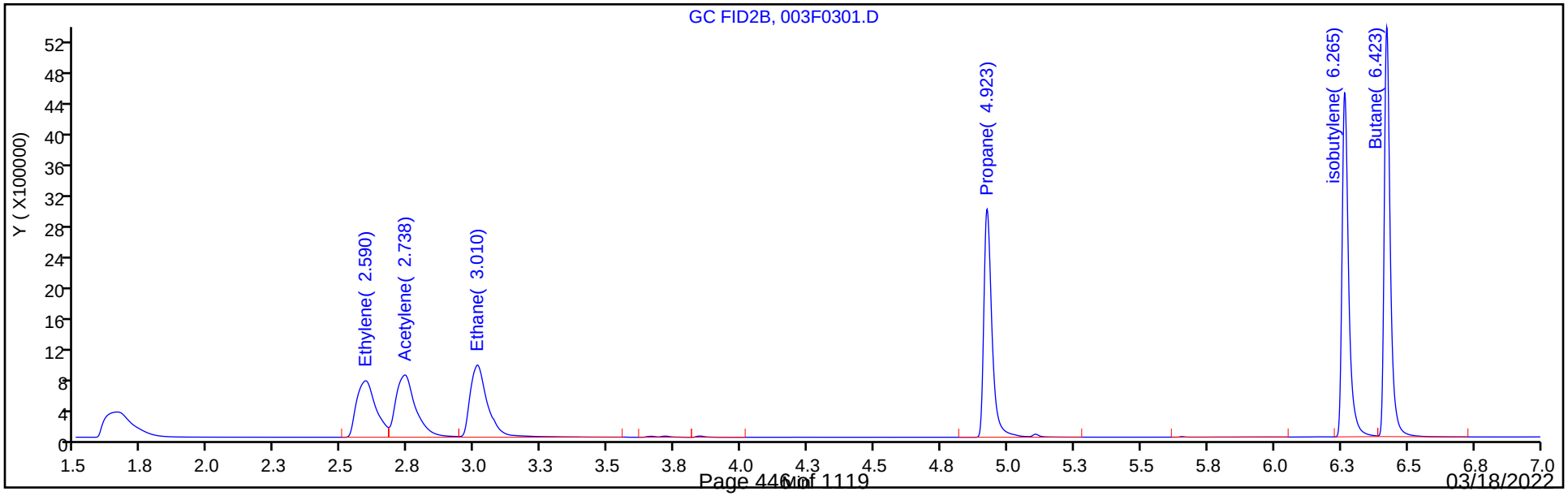
Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\003F0301.D

Injection Date:	08-Mar-2022 14:32:58	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcsd			Worklist Smp#:	5
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: VGC_J Start Date: 09/24/2021 13:16

Analysis Batch Number: 550959 End Date: 09/24/2021 15:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
RTC 280-550959/1		09/24/2021 13:16	1		Rt-Alumina KCl 0.53(mm)
RTC 280-550959/1		09/24/2021 13:16	1		HP-Plot Q 0.53(mm)
IC 280-550959/2		09/24/2021 13:28	1	004F0201.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/2		09/24/2021 13:28	1	004F0201.D	HP-Plot Q 0.53(mm)
IC 280-550959/3		09/24/2021 13:41	1	005F0301.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/3		09/24/2021 13:41	1	005F0301.D	HP-Plot Q 0.53(mm)
IC 280-550959/4		09/24/2021 13:54	1	006F0401.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/4		09/24/2021 13:54	1	006F0401.D	HP-Plot Q 0.53(mm)
IC 280-550959/5		09/24/2021 14:07	1	007F0501.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/5		09/24/2021 14:07	1	007F0501.D	HP-Plot Q 0.53(mm)
IC 280-550959/6		09/24/2021 14:20	1	008F0601.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/6		09/24/2021 14:20	1	008F0601.D	HP-Plot Q 0.53(mm)
IC 280-550959/7		09/24/2021 14:33	1	009F0701.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/7		09/24/2021 14:33	1	009F0701.D	HP-Plot Q 0.53(mm)
IC 280-550959/9		09/24/2021 14:46	1	010F0801.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/9		09/24/2021 14:46	1	010F0801.D	HP-Plot Q 0.53(mm)
IC 280-550959/10		09/24/2021 14:59	1	011F0901.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/10		09/24/2021 14:59	1	011F0901.D	HP-Plot Q 0.53(mm)
IC 280-550959/11		09/24/2021 15:12	1	012F1001.D	Rt-Alumina KCl 0.53(mm)
IC 280-550959/11		09/24/2021 15:12	1	012F1001.D	HP-Plot Q 0.53(mm)
ZZZZZ		09/24/2021 15:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		09/24/2021 15:25	1		HP-Plot Q 0.53(mm)
ICV 280-550959/13		09/24/2021 15:38	1	014F1201.D	Rt-Alumina KCl 0.53(mm)
ICV 280-550959/13		09/24/2021 15:38	1	014F1201.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: VGC_J Start Date: 03/02/2022 14:39

Analysis Batch Number: 567496 End Date: 03/02/2022 20:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-567496/2		03/02/2022 14:39	1	002F0201.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-567496/2		03/02/2022 14:39	1	002F0201.D	HP-Plot Q 0.53(mm)
LCS 280-567496/3		03/02/2022 14:53	1	003F0301.D	Rt-Alumina KCl 0.53(mm)
LCS 280-567496/3		03/02/2022 14:53	1	003F0301.D	HP-Plot Q 0.53(mm)
LCSD 280-567496/4		03/02/2022 15:06	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-567496/4		03/02/2022 15:06	1	004F0401.D	HP-Plot Q 0.53(mm)
MB 280-567496/5		03/02/2022 15:19	1	005F0501.D	Rt-Alumina KCl 0.53(mm)
MB 280-567496/5		03/02/2022 15:19	1	005F0501.D	HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 15:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/02/2022 15:32	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 15:45	2		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/02/2022 15:45	2		HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 15:58	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/02/2022 15:58	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 16:11	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/02/2022 16:11	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 16:24	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/02/2022 16:24	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 16:37	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/02/2022 16:37	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 16:50	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/02/2022 16:50	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 17:03	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/02/2022 17:03	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 17:16	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/02/2022 17:16	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 17:29	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/02/2022 17:29	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 17:42	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/02/2022 17:42	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 17:55	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/02/2022 17:55	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 18:08	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/02/2022 18:08	1		HP-Plot Q 0.53(mm)
CCV 280-567496/45		03/02/2022 18:22	1	019F1901.D	Rt-Alumina KCl 0.53(mm)
CCV 280-567496/45		03/02/2022 18:22	1	019F1901.D	HP-Plot Q 0.53(mm)
280-159137-1	EW7-PM29B-8-35	03/02/2022 18:35	1	020F2001.D	Rt-Alumina KCl 0.53(mm)
280-159137-1	EW7-PM29B-8-35	03/02/2022 18:35	1	020F2001.D	HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 18:48	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/02/2022 18:48	1		HP-Plot Q 0.53(mm)
280-159137-3	EW7-PM25B-8-35	03/02/2022 19:01	1	022F2201.D	Rt-Alumina KCl 0.53(mm)
280-159137-3	EW7-PM25B-8-35	03/02/2022 19:01	1	022F2201.D	HP-Plot Q 0.53(mm)
280-159137-4	EW7-PM26A-8-25	03/02/2022 19:14	1	023F2301.D	Rt-Alumina KCl 0.53(mm)
280-159137-4	EW7-PM26A-8-25	03/02/2022 19:14	1	023F2301.D	HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 19:27	1		Rt-Alumina KCl 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: VGC_J Start Date: 03/02/2022 14:39

Analysis Batch Number: 567496 End Date: 03/02/2022 20:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		03/02/2022 19:27	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 19:40	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/02/2022 19:40	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 19:53	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/02/2022 19:53	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 20:06	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/02/2022 20:06	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 20:19	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/02/2022 20:19	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 20:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/02/2022 20:32	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/02/2022 20:45	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/02/2022 20:45	1		HP-Plot Q 0.53(mm)
CCV 280-567496/57		03/02/2022 20:58	1	031F3101.D	Rt-Alumina KCl 0.53(mm)
CCV 280-567496/57		03/02/2022 20:58	1	031F3101.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: VGC_J Start Date: 03/03/2022 14:38

Analysis Batch Number: 567659 End Date: 03/03/2022 20:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-567659/2		03/03/2022 14:38	1	002F0201.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-567659/2		03/03/2022 14:38	1	002F0201.D	HP-Plot Q 0.53(mm)
LCS 280-567659/3		03/03/2022 14:51	1	003F0301.D	Rt-Alumina KCl 0.53(mm)
LCS 280-567659/3		03/03/2022 14:51	1	003F0301.D	HP-Plot Q 0.53(mm)
LCSD 280-567659/4		03/03/2022 15:04	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-567659/4		03/03/2022 15:04	1	004F0401.D	HP-Plot Q 0.53(mm)
MB 280-567659/5		03/03/2022 15:17	1	005F0501.D	Rt-Alumina KCl 0.53(mm)
MB 280-567659/5		03/03/2022 15:17	1	005F0501.D	HP-Plot Q 0.53(mm)
280-159137-5	EW7-PM26B-8-35	03/03/2022 15:30	1	006F0601.D	Rt-Alumina KCl 0.53(mm)
280-159137-5	EW7-PM26B-8-35	03/03/2022 15:30	1	006F0601.D	HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 15:42	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 15:42	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 15:55	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 15:55	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 16:08	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 16:08	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 16:22	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 16:22	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 16:35	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 16:35	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 16:48	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 16:48	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 17:01	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 17:01	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 17:14	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 17:14	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 17:27	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 17:27	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 17:40	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 17:40	1		HP-Plot Q 0.53(mm)
CCV 280-567659/17		03/03/2022 17:53	1	017F1701.D	Rt-Alumina KCl 0.53(mm)
CCV 280-567659/17		03/03/2022 17:53	1	017F1701.D	HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 18:06	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 18:06	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 18:19	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 18:19	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 18:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 18:32	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 18:45	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 18:45	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 18:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 18:59	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 19:12	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 19:12	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 19:25	1		Rt-Alumina KCl 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: VGC_J Start Date: 03/03/2022 14:38

Analysis Batch Number: 567659 End Date: 03/03/2022 20:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		03/03/2022 19:25	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 19:37	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 19:37	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 19:50	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 19:50	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 20:03	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 20:03	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 20:16	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 20:16	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 20:29	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 20:29	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 20:43	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 20:43	1		HP-Plot Q 0.53(mm)
CCV 280-567659/31		03/03/2022 20:56	1	031F3101.D	Rt-Alumina KCl 0.53(mm)
CCV 280-567659/31		03/03/2022 20:56	1	031F3101.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: VGC_J Start Date: 03/08/2022 13:54

Analysis Batch Number: 567999 End Date: 03/08/2022 19:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-567999/2		03/08/2022 13:54	1	030822f01.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-567999/2		03/08/2022 13:54	1	030822f01.D	HP-Plot Q 0.53(mm)
MB 280-567999/3		03/08/2022 14:07	1	001F0101.D	Rt-Alumina KCl 0.53(mm)
MB 280-567999/3		03/08/2022 14:07	1	001F0101.D	HP-Plot Q 0.53(mm)
LCS 280-567999/4		03/08/2022 14:20	1	002F0201.D	Rt-Alumina KCl 0.53(mm)
LCS 280-567999/4		03/08/2022 14:20	1	002F0201.D	HP-Plot Q 0.53(mm)
LCSD 280-567999/5		03/08/2022 14:32	1	003F0301.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-567999/5		03/08/2022 14:32	1	003F0301.D	HP-Plot Q 0.53(mm)
280-159137-2	EW7-PM25A-8-25	03/08/2022 14:45	2	006F0401.D	Rt-Alumina KCl 0.53(mm)
280-159137-2	EW7-PM25A-8-25	03/08/2022 14:45	2	006F0401.D	HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 14:58	2		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 14:58	2		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 15:11	2		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 15:11	2		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 15:25	2		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 15:25	2		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 15:38	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 15:38	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 15:51	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 15:51	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 16:04	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 16:04	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 16:17	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 16:17	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 16:30	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 16:30	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 16:43	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 16:43	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 16:56	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 16:56	1		HP-Plot Q 0.53(mm)
CCV 280-567999/17		03/08/2022 17:09	1	019F1501.D	Rt-Alumina KCl 0.53(mm)
CCV 280-567999/17		03/08/2022 17:09	1	019F1501.D	HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 17:22	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 17:22	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 17:35	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 17:35	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 17:48	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 17:48	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 18:01	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 18:01	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 18:14	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 18:14	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 18:27	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 18:27	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 18:40	1		Rt-Alumina KCl 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: VGC_J Start Date: 03/08/2022 13:54

Analysis Batch Number: 567999 End Date: 03/08/2022 19:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		03/08/2022 18:40	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 18:53	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 18:53	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 19:06	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 19:06	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 19:19	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 19:19	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 19:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 19:32	1		HP-Plot Q 0.53(mm)
CCV 280-567999/29		03/08/2022 19:45	1		Rt-Alumina KCl 0.53(mm)
CCV 280-567999/29		03/08/2022 19:45	1		HP-Plot Q 0.53(mm)

GC VOA BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Batch Number: 567496 Batch Start Date: 03/02/22 14:39 Batch Analyst: Scianna, Charles A

Batch Method: RSK-175 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	RSK7gasMathes 00034		
CCVRT 280-567496/2		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCS 280-567496/3		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCSD 280-567496/4		RSK-175		20 mL	20 mL	5 SU	200 uL		
MB 280-567496/5		RSK-175		20 mL	20 mL	5 SU			
CCV 280-567496/45		RSK-175		20 mL	20 mL	5 SU	200 uL		
280-159137-H-1	EW7-PM29B-8-35	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159137-I-3	EW7-PM25B-8-35	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159137-I-4	EW7-PM26A-8-25	RSK-175	T	20 mL	20 mL	7 SU			
CCV 280-567496/57		RSK-175		20 mL	20 mL	5 SU	200 uL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC VOA BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Batch Number: 567659 Batch Start Date: 03/03/22 14:38 Batch Analyst: Scianna, Charles A

Batch Method: RSK-175 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	RSK7gasMathes 00034		
CCVRT 280-567659/2		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCS 280-567659/3		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCSD 280-567659/4		RSK-175		20 mL	20 mL	5 SU	200 uL		
MB 280-567659/5		RSK-175		20 mL	20 mL	5 SU			
280-159137-H-5	EW7-PM26B-8-35	RSK-175	T	20 mL	20 mL	< 2 SU			
CCV 280-567659/17		RSK-175		20 mL	20 mL	5 SU	200 uL		
CCV 280-567659/31		RSK-175		20 mL	20 mL	5 SU	200 uL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC VOA BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Batch Number: 567999 Batch Start Date: 03/08/22 13:54 Batch Analyst: Scianna, Charles A

Batch Method: RSK-175 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	RSK7gasMathes 00034		
CCVRT 280-567999/2		RSK-175		20 mL	20 mL	5 SU	200 uL		
MB 280-567999/3		RSK-175		20 mL	20 mL	5 SU			
LCS 280-567999/4		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCSD 280-567999/5		RSK-175		20 mL	20 mL	5 SU	200 uL		
280-159137-I-2	EW7-PM25A-8-25	RSK-175	T	20 mL	20 mL	< 2 SU			
CCV 280-567999/17		RSK-175		20 mL	20 mL	5 SU	200 uL		

Batch Notes	

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.

8330A_DOD5

Nitroaromatics and Nitramines (HPLC)

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159137-1

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 #
EW7-PM29B-8-35	280-159137-1	137 Q	
EW7-PM29B-8-35	280-159137-1		119
EW7-PM25A-8-25	280-159137-2	119 M	
EW7-PM25A-8-25	280-159137-2		89 M
EW7-PM25B-8-35	280-159137-3	117 M	
EW7-PM25B-8-35	280-159137-3		90 M
EW7-PM26A-8-25	280-159137-4	99	
EW7-PM26A-8-25	280-159137-4		99 M
EW7-PM26B-8-35	280-159137-5	105 M	
EW7-PM26B-8-35	280-159137-5		101 M
	MB 280-567330/1-A	95	
	LCS 280-567330/2-A	86	
	LCS 280-567330/3-A	111	

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

Column to be used to flag recovery values

FORM II 8330A

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03010044.D

Lab ID: LCS 280-567330/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	1.95	97	73-125	
1,3-Dinitrobenzene	2.00	1.87	94	78-120	
2,4,6-Trinitrotoluene	2.00	1.86	93	71-123	
2,4-Dinitrotoluene	2.00	1.74	87	78-120	
2,6-Dinitrotoluene	2.00	1.79	90	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.64	82	79-120	
2-Nitrotoluene	2.00	1.41	70	70-127	
3-Nitrotoluene	2.00	1.34	67	73-125	Q
4-Amino-2,6-dinitrotoluene	2.00	1.48	74	76-125	Q
4-Nitrotoluene	2.00	1.54	77	71-127	
HMX	2.00	1.88	94	65-135	
Nitrobenzene	2.00	1.62	81	65-134	
RDX	2.00	1.99	100	68-130	
Tetryl	2.00	1.79	90	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03010045.D

Lab ID: LCS 280-567330/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
MNX	2.33	2.54	109	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: MB 280-567330/1-A

Matrix: Water Date Extracted: 03/01/2022 11:26

Lab File ID:(1) 03010043.D Lab File ID:(2)

Date Analyzed:(1) 03/02/2022 04:43 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 280-567330/2-A	03/02/2022 05:06	
	LCS 280-567330/3-A	03/02/2022 05:29	
EW7-PM29B-8-35	280-159137-1	03/02/2022 10:27	03/04/2022 01:10
EW7-PM25A-8-25	280-159137-2	03/02/2022 10:50	03/04/2022 01:45
EW7-PM25B-8-35	280-159137-3	03/02/2022 11:13	03/04/2022 02:20
EW7-PM26A-8-25	280-159137-4	03/02/2022 11:36	03/04/2022 02:55
EW7-PM26B-8-35	280-159137-5	03/02/2022 11:59	03/04/2022 03:30

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM26A-8-25 Lab Sample ID: 280-159137-4

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

Date Analyzed (1): 03/02/2022 11:36 Date Analyzed (2): 03/04/2022 02:55

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		6.58	6.44	6.74	0.85		52.2
	2		6.89	6.77	7.07	1.4		
RDX	1		7.58	7.43	7.73	0.77		13.0
	2		9.11	9.00	9.30	0.68		
2,4,6-Trinitrotoluene	1		10.87	10.76	10.96	1.1		5.9
	2		25.29	25.18	25.48	1.2		
4-Amino-2,6-dinitrotoluene	1		11.05	10.94	11.14	3.0		3.0
	2		17.78	17.67	17.97	3.1		
2-Amino-4,6-dinitrotoluene	1		11.30	11.19	11.39	2.7		33.8
	2		18.78	18.69	18.99	3.8		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM29B-8-35 | Lab Sample ID: 280-159137-1

Matrix: Water | Lab File ID: 03010058.D

Analysis Method: 8330A | Date Collected: 02/24/2022 15:40

Extraction Method: 3535 | Date Extracted: 03/01/2022 11:26

Sample wt/vol: 482.5(mL) | Date Analyzed: 03/02/2022 10:27

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

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

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

Analysis Batch No.: 567371 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U Q	0.22	0.21	0.087
99-65-0	1,3-Dinitrobenzene	0.10	U M Q	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.10	U Q	0.11	0.10	0.047
606-20-2	2,6-Dinitrotoluene	0.083	U M Q	0.10	0.083	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U Q	0.11	0.10	0.053
88-72-2	2-Nitrotoluene	0.21	U M Q	0.22	0.21	0.089
99-08-1	3-Nitrotoluene	0.41	U M Q	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.16	0.12	0.060
99-99-0	4-Nitrotoluene	0.41	U M Q	0.42	0.41	0.10
2691-41-0	HMX	0.21	U Q	0.22	0.21	0.091
5755-27-1	MNX	0.41	U M	2.1	0.41	0.16
121-82-4	RDX	0.21	U M Q	0.22	0.21	0.053
479-45-8	Tetryl	0.10	U M Q	0.11	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	137	Q	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010058.D
Lims ID: 280-159137-A-1-A
Client ID: EW7-PM29B-8-35
Sample Type: Client
Inject. Date: 02-Mar-2022 10:27:27 ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159137-A-1-A
Misc. Info.: 280-0108907-058
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Mar-2022 13:06:29 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:53:30

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.588			ND	
7 MNX	1		7.206			ND	U
8 RDX	1		7.575			ND	U
$ 10 1,2-Dinitrobenzene	1	8.515	8.515	0.000	34101	0.2735	
11 1,3,5-Trinitrobenzene	1		8.642			ND	
12 1,3-Dinitrobenzene	1		9.262			ND	U
13 Nitrobenzene	1	9.635	9.648	-0.013	46199	0.2407	M
15 Tetryl	1		9.955			ND	U
17 2,4,6-Trinitrotoluene	1		10.862			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.042			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.288			ND	
20 2,6-Dinitrotoluene	1		11.462			ND	U
21 2,4-Dinitrotoluene	1	11.602	11.635	-0.033	685	0.002367	7M
22 o-Nitrotoluene	1		12.475			ND	U
23 p-Nitrotoluene	1		12.895			ND	U
24 m-Nitrotoluene	1		13.462			ND	U

QC Flag Legend

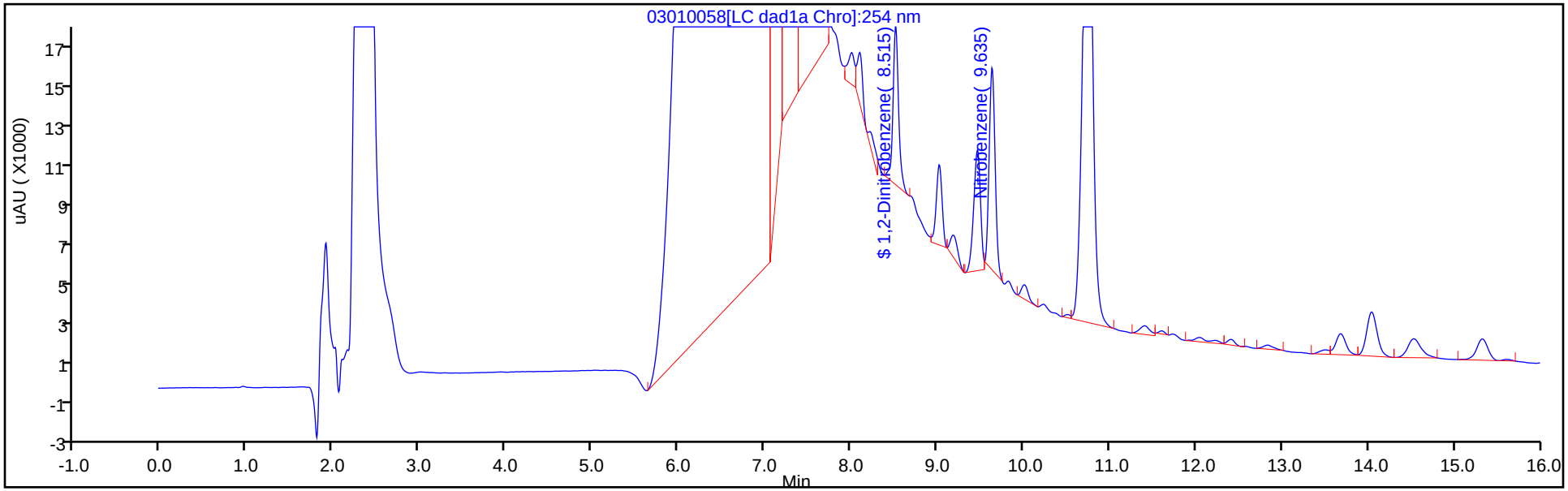
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 02-Mar-2022 13:06:32 Chrom Revision: 2.3 16-Feb-2022 17:52:00

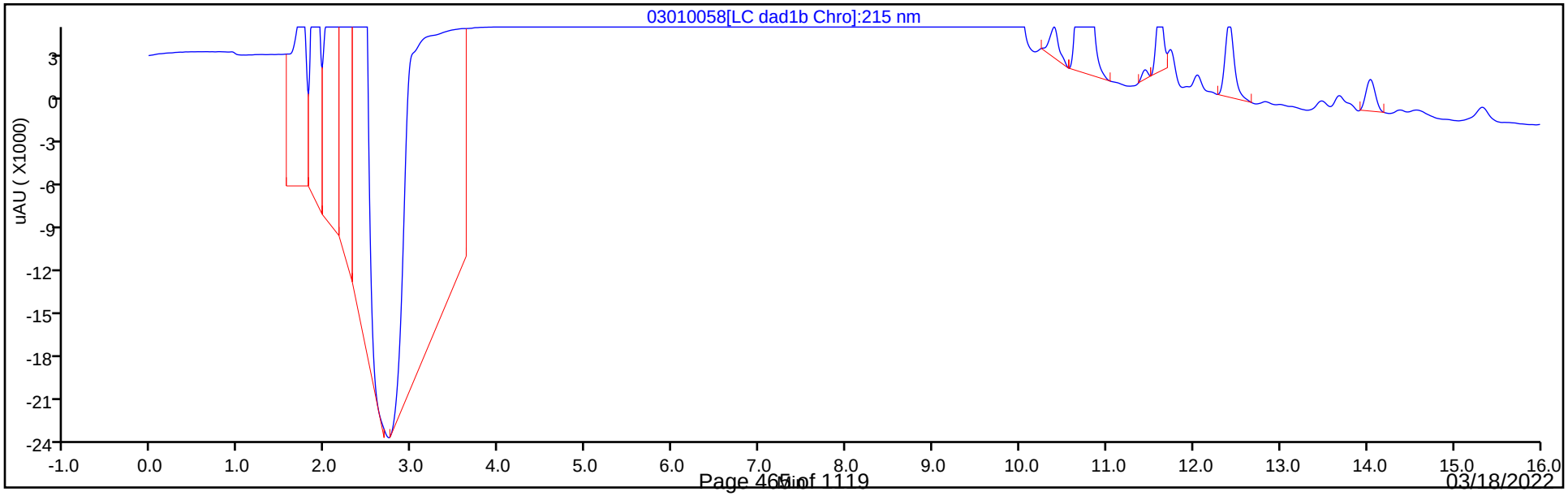
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010058.d				
Injection Date:	02-Mar-2022 10:27:27	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159137-A-1-A	Lab Sample ID:	280-159137-1	Worklist Smp#:	58
Client ID:	EW7-PM29B-8-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	58
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010058.D				
Lims ID:	280-159137-A-1-A				
Client ID:	EW7-PM29B-8-35				
Sample Type:	Client				
Inject. Date:	02-Mar-2022 10:27:27	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159137-A-1-A				
Misc. Info.:	280-0108907-058				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Mar-2022 13:06:29	Calib Date:	05-Jan-2022 04:24:15		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1635				

First Level Reviewer: zhangji Date: 02-Mar-2022 12:53:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2735	136.73

User Disabled Compound Report

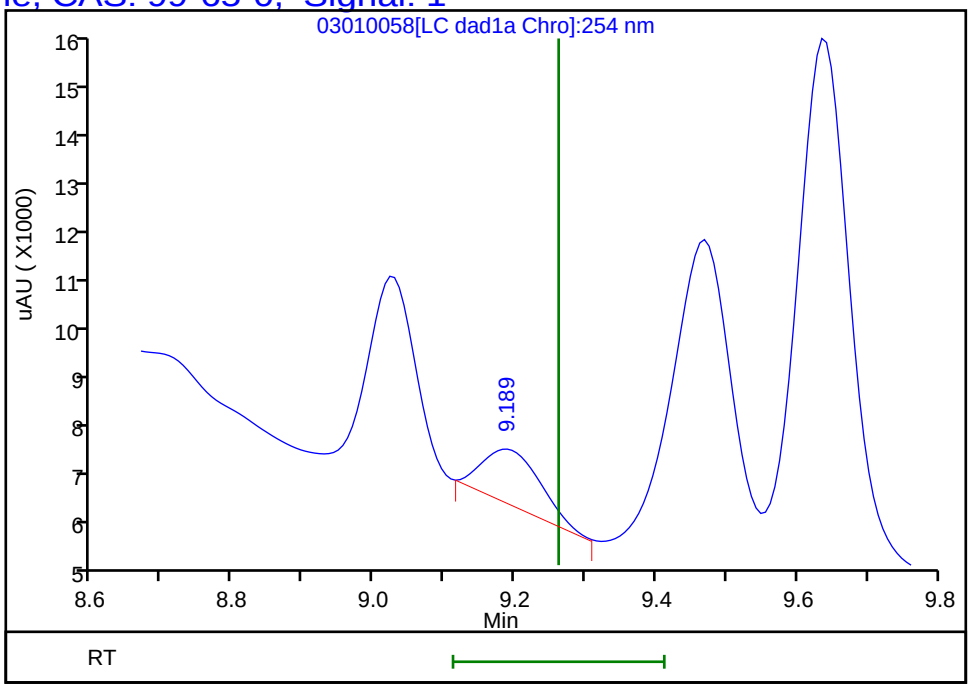
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010058.d
Injection Date: 02-Mar-2022 10:27:27 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-1-A Lab Sample ID: 280-159137-1
Client ID: EW7-PM29B-8-35
Operator ID: JZ ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 9.19
Response: 6152
Amount: 0.021331



Reviewer: zhangji, 02-Mar-2022 12:53:30
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

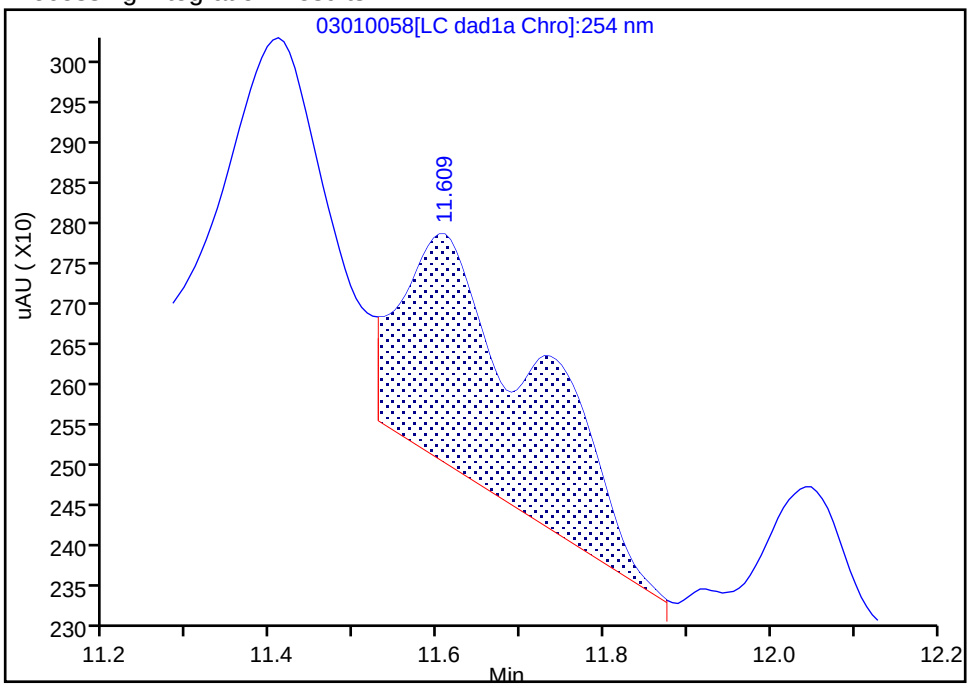
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Injection Date:	02-Mar-2022 10:27:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159137-A-1-A	Lab Sample ID:	280-159137-1		
Client ID:	EW7-PM29B-8-35				
Operator ID:	JZ	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

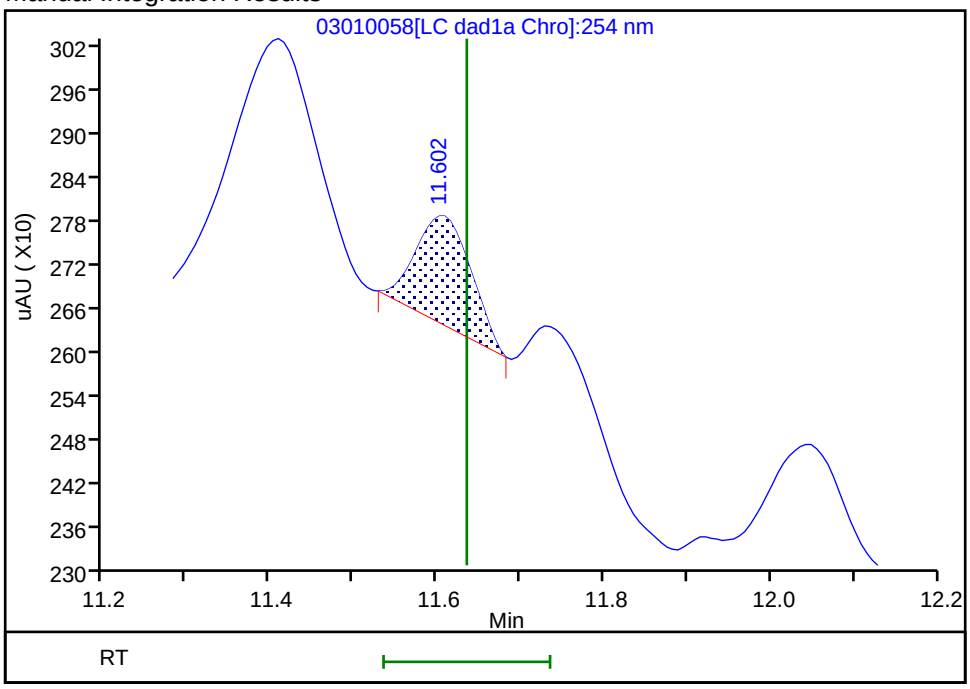
Processing Integration Results

RT: 11.61
Area: 3305
Amount: 0.011422
Amount Units: ug/mL



Manual Integration Results

RT: 11.60
Area: 685
Amount: 0.002367
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:53:21

Audit Action: Manually Integrated Audit Reason: Baseline

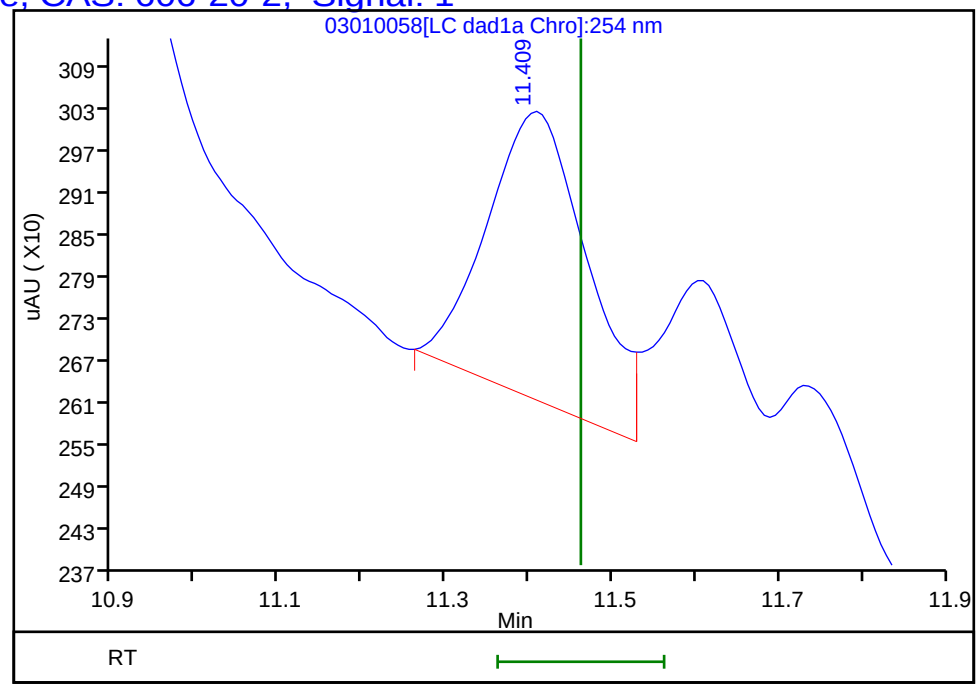
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010058.d				
Injection Date:	02-Mar-2022 10:27:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159137-A-1-A	Lab Sample ID:	280-159137-1		
Client ID:	EW7-PM29B-8-35				
Operator ID:	JZ	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

20 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 11.41
Response: 3474
Amount: 0.024274



Reviewer: zhangji, 02-Mar-2022 12:53:30
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

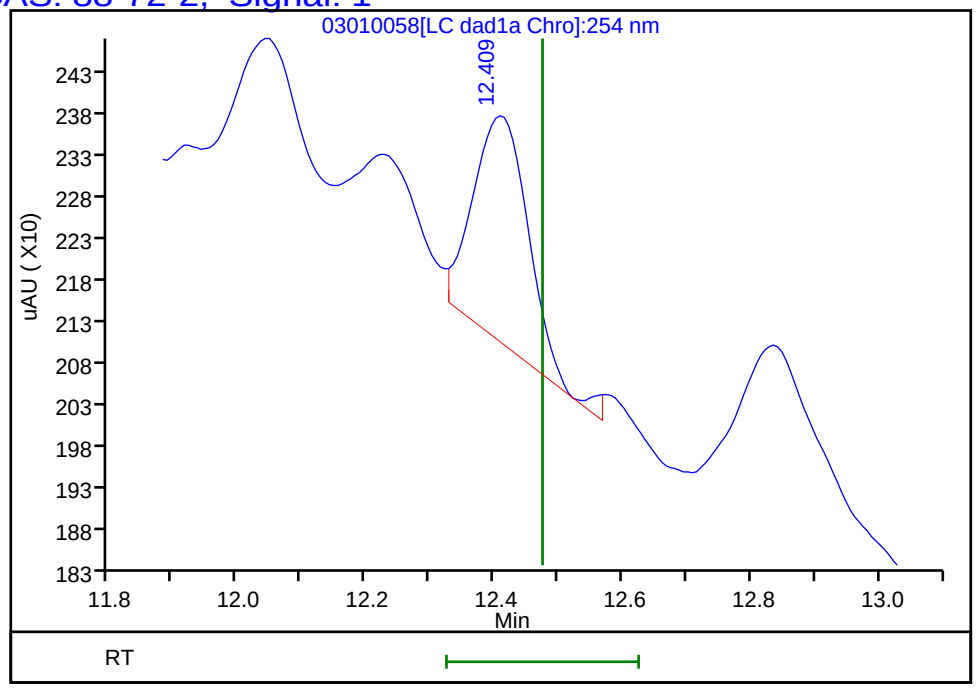
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010058.d
Injection Date: 02-Mar-2022 10:27:27 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-1-A Lab Sample ID: 280-159137-1
Client ID: EW7-PM29B-8-35
Operator ID: JZ ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 12.41
Response: 1634
Amount: 0.012804



Reviewer: zhangji, 02-Mar-2022 12:53:30
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

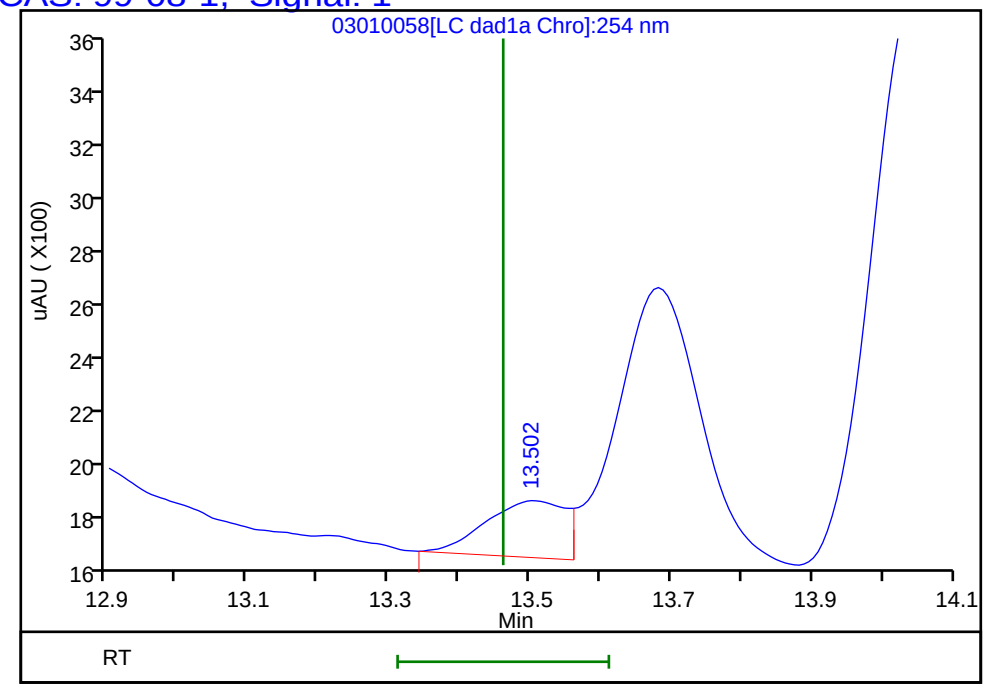
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010058.d
Injection Date: 02-Mar-2022 10:27:27 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-1-A Lab Sample ID: 280-159137-1
Client ID: EW7-PM29B-8-35
Operator ID: JZ ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

24 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.50
Response: 1610
Amount: 0.011316



Reviewer: zhangji, 02-Mar-2022 12:53:30
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

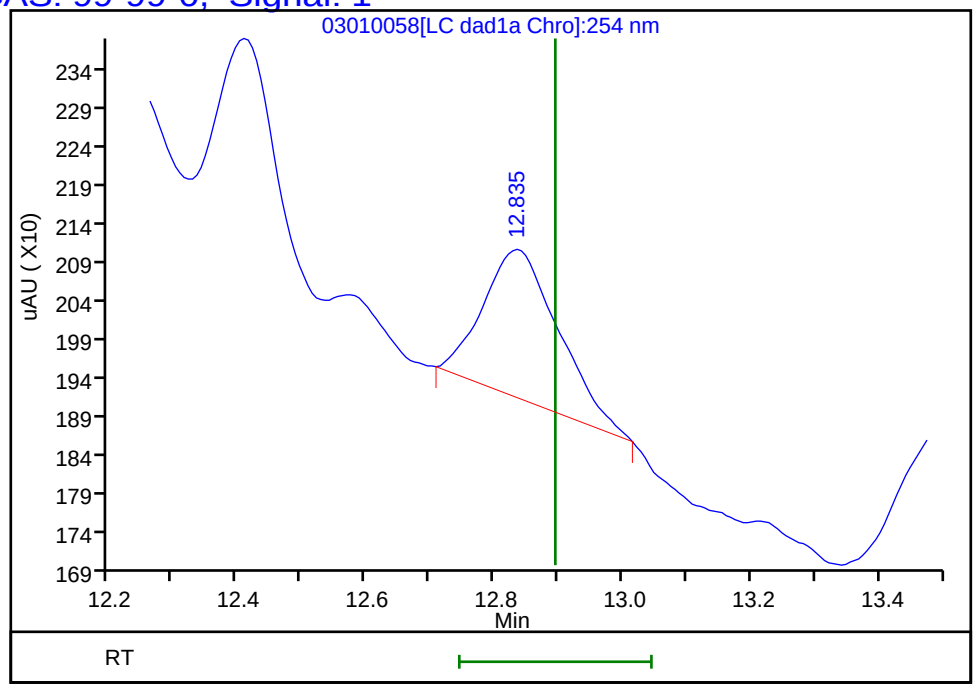
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010058.d
Injection Date: 02-Mar-2022 10:27:27 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-1-A Lab Sample ID: 280-159137-1
Client ID: EW7-PM29B-8-35
Operator ID: JZ ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 12.84
Response: 1581
Amount: 0.014882



Reviewer: zhangji, 02-Mar-2022 12:53:30
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

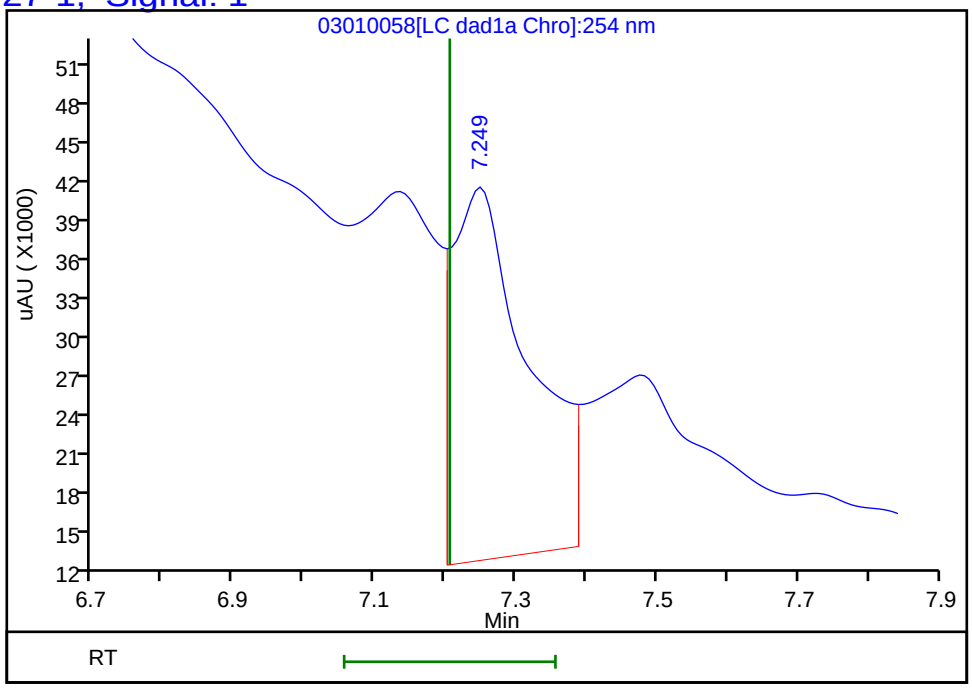
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010058.d
Injection Date: 02-Mar-2022 10:27:27 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-1-A Lab Sample ID: 280-159137-1
Client ID: EW7-PM29B-8-35
Operator ID: JZ ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.25
Response: 206420
Amount: 1.638314



Reviewer: zhangji, 02-Mar-2022 12:53:30
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

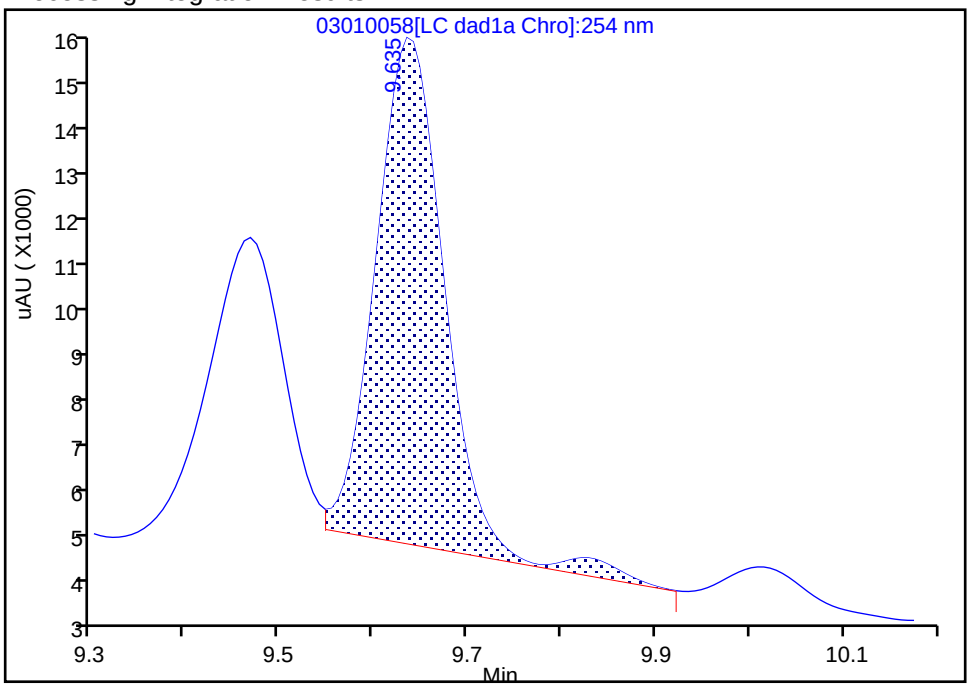
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010058.d				
Injection Date:	02-Mar-2022 10:27:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159137-A-1-A	Lab Sample ID:	280-159137-1		
Client ID:	EW7-PM29B-8-35				
Operator ID:	JZ	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

13 Nitrobenzene, CAS: 98-95-3

Signal: 1

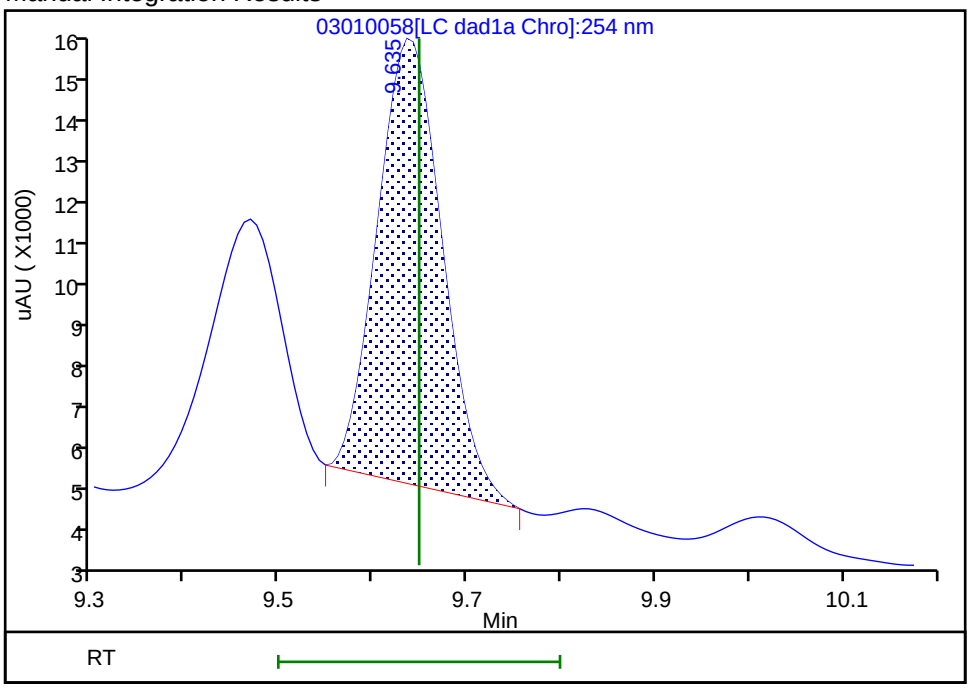
Processing Integration Results

RT: 9.64
Area: 50885
Amount: 0.265091
Amount Units: ug/mL



Manual Integration Results

RT: 9.64
Area: 46199
Amount: 0.240678
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:53:26

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

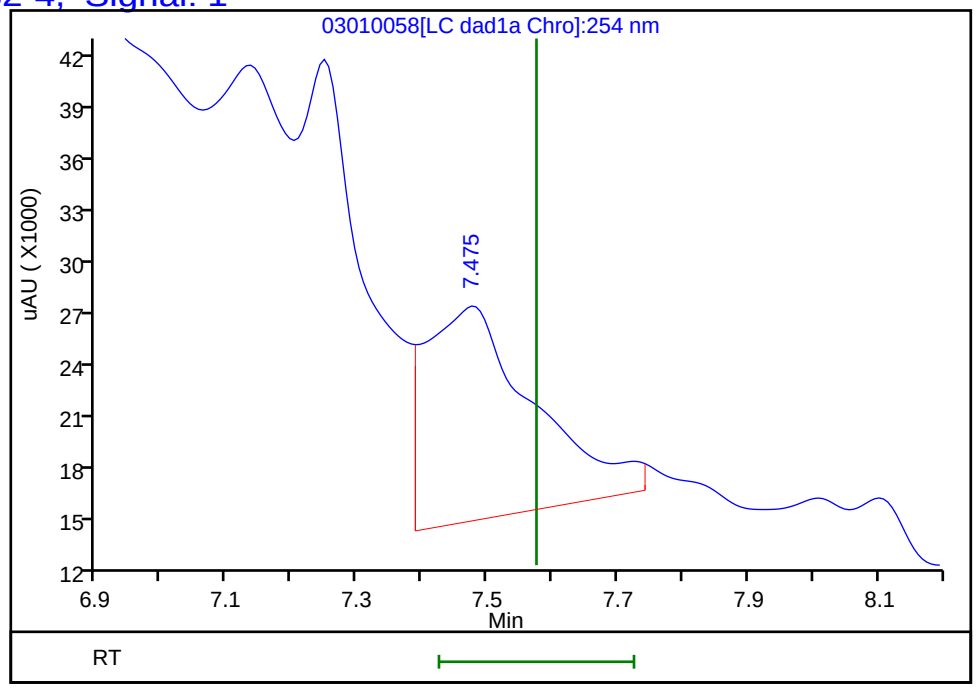
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010058.d
Injection Date: 02-Mar-2022 10:27:27 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-1-A Lab Sample ID: 280-159137-1
Client ID: EW7-PM29B-8-35
Operator ID: JZ ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

8 RDX, CAS: 121-82-4, Signal: 1

RT: 7.48
Response: 140577
Amount: 1.356800



Reviewer: zhangji, 02-Mar-2022 12:53:30
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

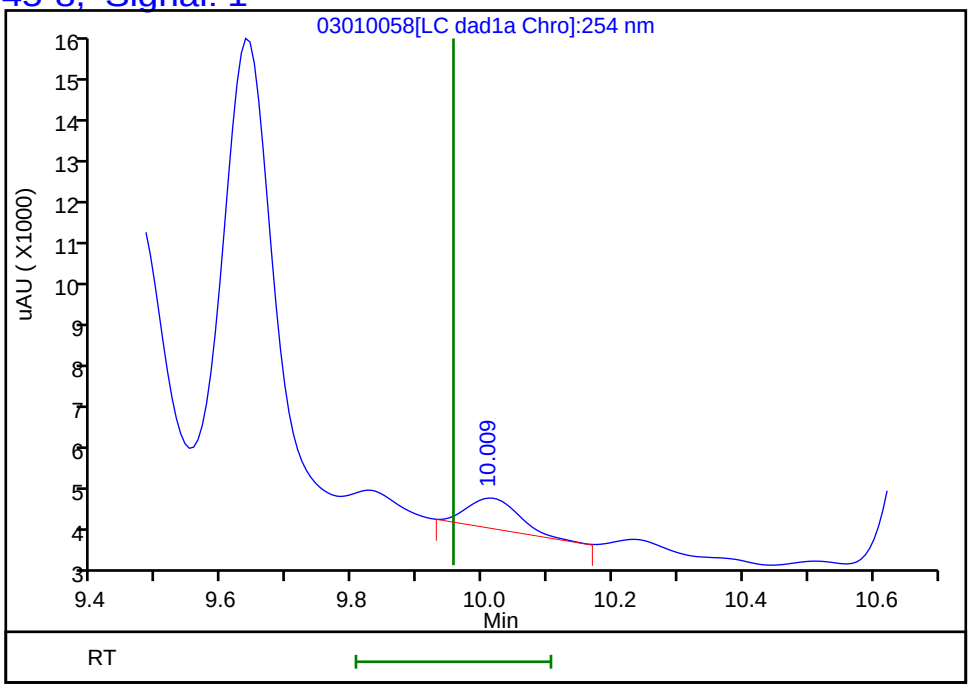
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010058.d
Injection Date: 02-Mar-2022 10:27:27 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-1-A Lab Sample ID: 280-159137-1
Client ID: EW7-PM29B-8-35
Operator ID: JZ ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 10.01
Response: 3742
Amount: 0.021939



Reviewer: zhangji, 02-Mar-2022 12:53:30
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM29B-8-35 | Lab Sample ID: 280-159137-1

Matrix: Water | Lab File ID: 03030025.D

Analysis Method: 8330A | Date Collected: 02/24/2022 15:40

Extraction Method: 3535 | Date Extracted: 03/01/2022 11:26

Sample wt/vol: 482.5(mL) | Date Analyzed: 03/04/2022 01:10

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

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

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

Analysis Batch No.: 567645 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
121-14-2	2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.094

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030025.D
Lims ID: 280-159137-A-1-A
Client ID: EW7-PM29B-8-35
Sample Type: Client
Inject. Date: 04-Mar-2022 01:10:08 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159137-A-1-A
Misc. Info.: 280-0108978-025
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-Mar-2022 12:18:26 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1659

First Level Reviewer: zhangji Date: 04-Mar-2022 12:09:13

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1		6.916			ND	
6 MNX	1		7.649			ND	
8 RDX	1	9.090	9.150	-0.060	18703	0.0962	
9 Nitrobenzene	1		12.083			ND	
$ 10 1,2-Dinitrobenzene	1	13.289	13.323	-0.034	59424	0.2379	
12 1,3-Dinitrobenzene	1	15.623	15.683	-0.060	3833	0.006705	
14 o-Nitrotoluene	1	16.783	16.863	-0.080	16136	0.0688	
16 p-Nitrotoluene	1		17.176			ND	
17 4-Amino-2,6-dinitrotoluene	1		17.823			ND	
18 m-Nitrotoluene	1		18.150			ND	
19 2-Amino-4,6-dinitrotoluene	1		18.843			ND	
20 1,3,5-Trinitrobenzene	1		18.996			ND	
21 2,6-Dinitrotoluene	1		20.316			ND	
22 2,4-Dinitrotoluene	1		20.836			ND	
23 Tetryl	1		24.583			ND	
24 2,4,6-Trinitrotoluene	1		25.330			ND	

QC Flag Legend
Processing Flags

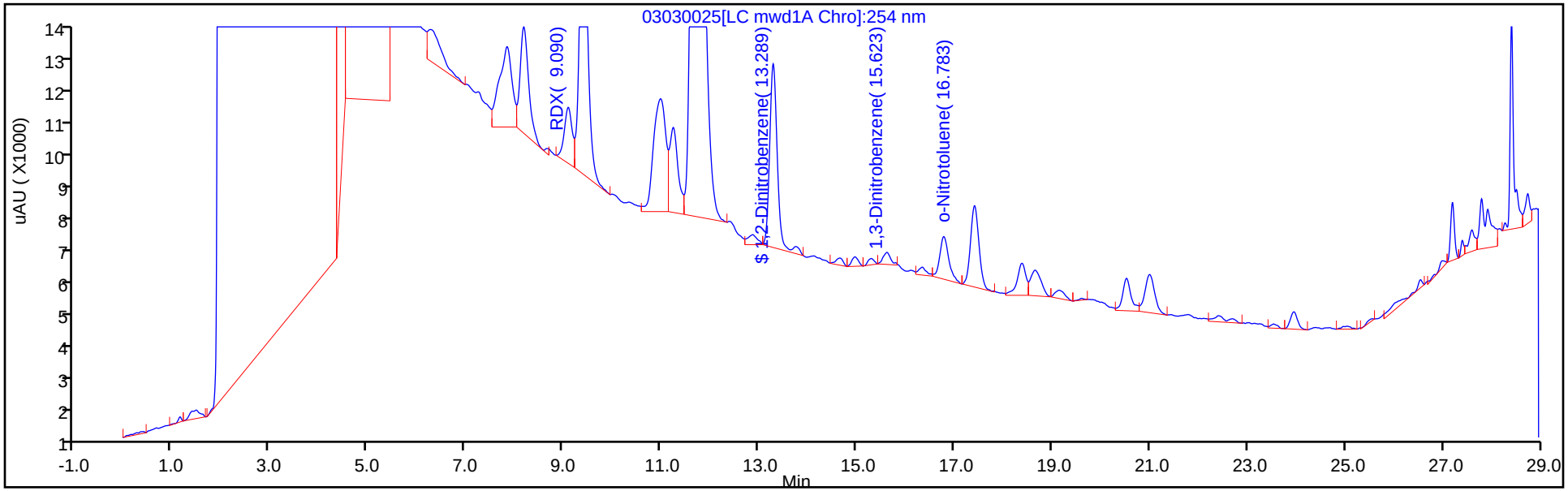
Report Date: 04-Mar-2022 12:18:28 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

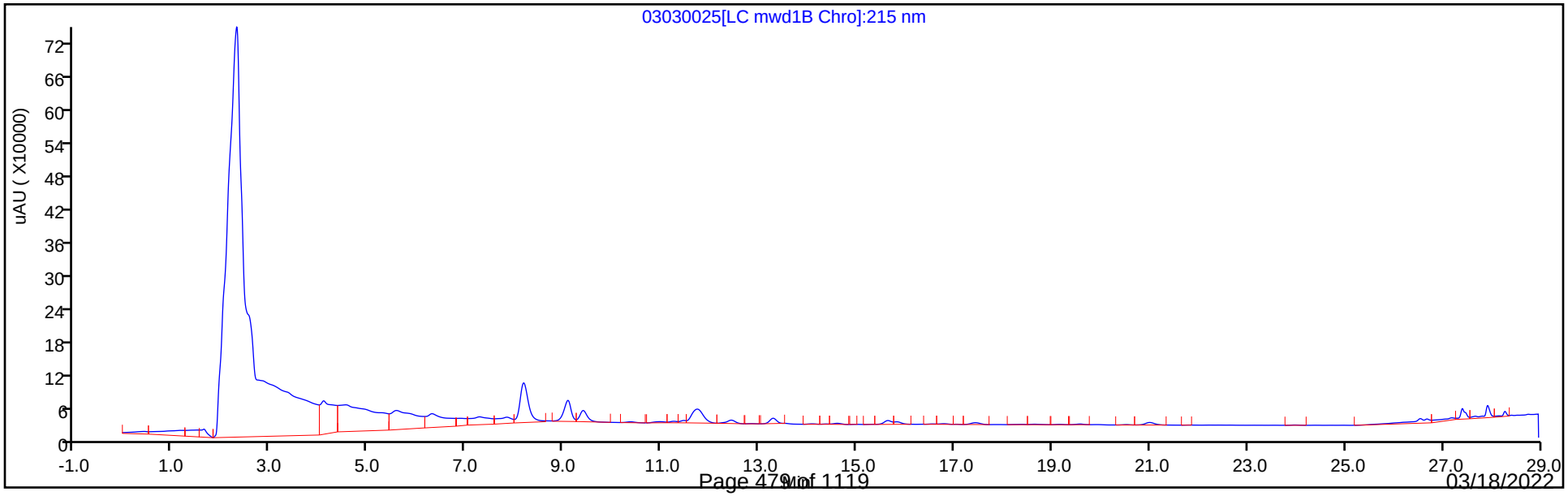
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Injection Date:	04-Mar-2022 01:10:08	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159137-A-1-A	Lab Sample ID:	280-159137-1	Worklist Smp#:	25
Client ID:	EW7-PM29B-8-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030025.D				
Lims ID:	280-159137-A-1-A				
Client ID:	EW7-PM29B-8-35				
Sample Type:	Client				
Inject. Date:	04-Mar-2022 01:10:08	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159137-A-1-A				
Misc. Info.:	280-0108978-025				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	04-Mar-2022 12:18:26	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1659				
First Level Reviewer: zhangji		Date:	04-Mar-2022 12:09:13		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2379	118.97

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM25A-8-25 | Lab Sample ID: 280-159137-2

Matrix: Water | Lab File ID: 03010059.D

Analysis Method: 8330A | Date Collected: 02/25/2022 10:10

Extraction Method: 3535 | Date Extracted: 03/01/2022 11:26

Sample wt/vol: 481.9(mL) | Date Analyzed: 03/02/2022 10:50

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

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

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

Analysis Batch No.: 567371 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U M	0.22	0.21	0.087
99-65-0	1,3-Dinitrobenzene	0.10	U M	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 M	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	0.42	U Q	0.42	0.42	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U M Q	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	0.22	0.21	0.091
5755-27-1	MNX	0.42	U M	2.1	0.42	0.16
121-82-4	RDX	0.21	U M	0.22	0.21	0.053
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.033

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010059.D
Lims ID: 280-159137-B-2-A
Client ID: EW7-PM25A-8-25
Sample Type: Client
Inject. Date: 02-Mar-2022 10:50:23 ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159137-B-2-A
Misc. Info.: 280-0108907-059
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Mar-2022 13:06:29 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:54:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.588			ND	
7 MNX	1		7.206			ND	U
8 RDX	1		7.575			ND	U
$ 10 1,2-Dinitrobenzene	1	8.512	8.515	-0.003	29791	0.2389	M
11 1,3,5-Trinitrobenzene	1		8.642			ND	U
12 1,3-Dinitrobenzene	1		9.262			ND	U
13 Nitrobenzene	1	9.632	9.648	-0.016	39762	0.2071	M
15 Tetryl	1		9.955			ND	U
17 2,4,6-Trinitrotoluene	1		10.862			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.042			ND	U
19 2-Amino-4,6-dinitrotoluene	1		11.288			ND	U
20 2,6-Dinitrotoluene	1		11.462			ND	
21 2,4-Dinitrotoluene	1		11.635			ND	
22 o-Nitrotoluene	1		12.475			ND	
23 p-Nitrotoluene	1		12.895			ND	
24 m-Nitrotoluene	1		13.462			ND	

QC Flag Legend

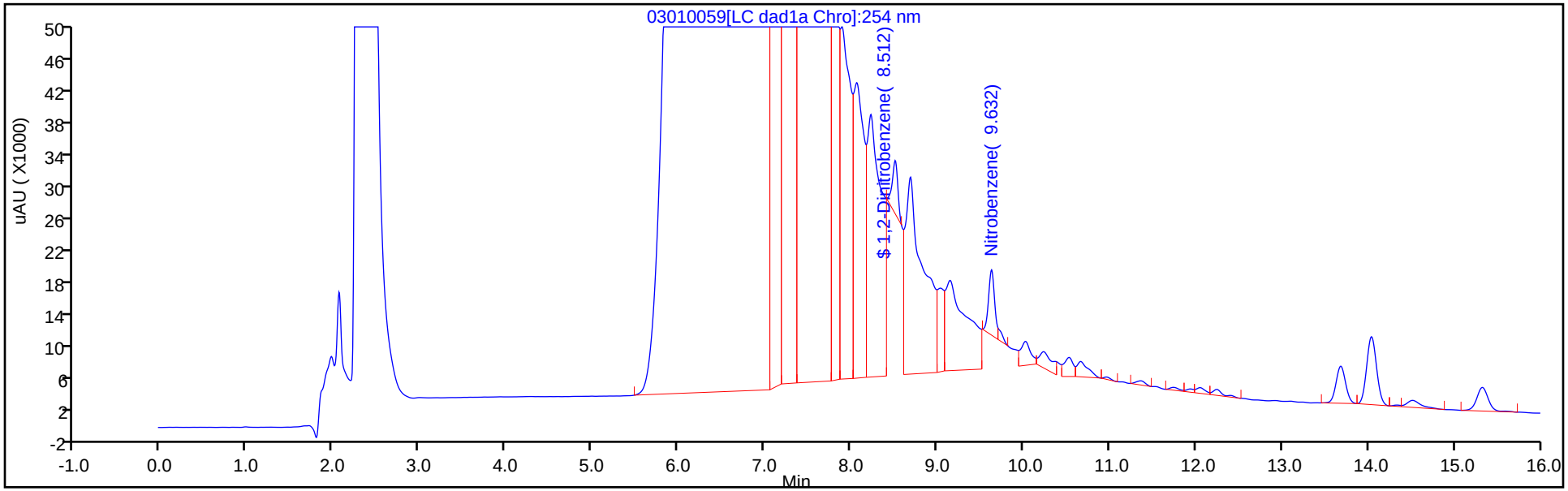
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 02-Mar-2022 13:06:33 Chrom Revision: 2.3 16-Feb-2022 17:52:00

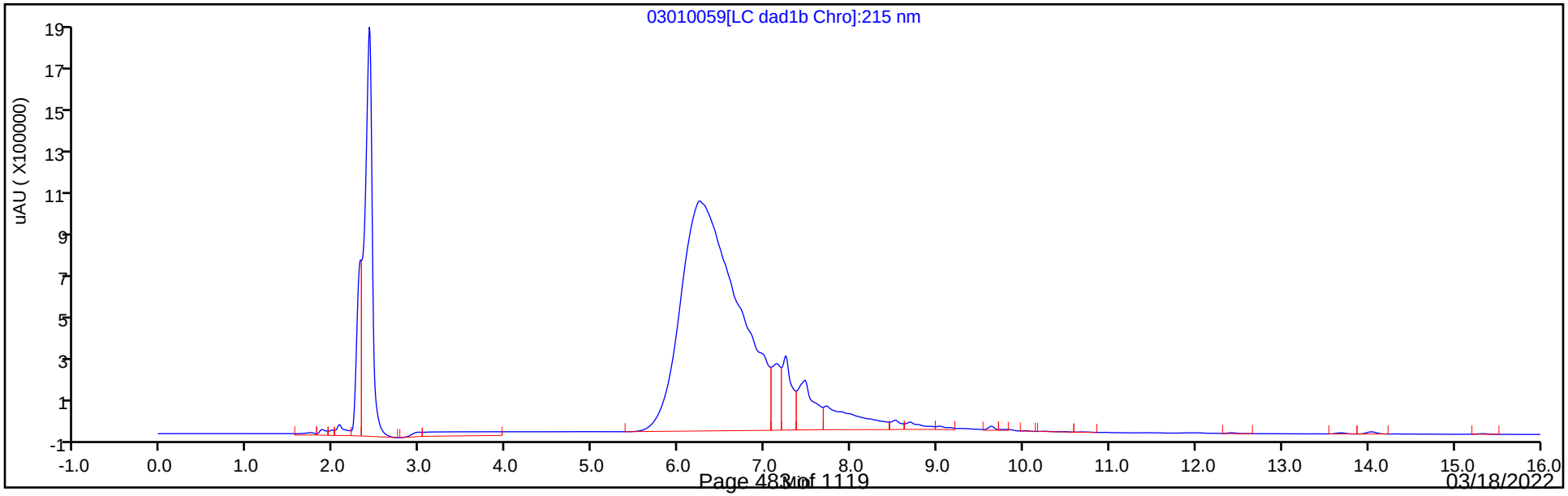
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010059.d				
Injection Date:	02-Mar-2022 10:50:23	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159137-B-2-A	Lab Sample ID:	280-159137-2	Worklist Smp#:	59
Client ID:	EW7-PM25A-8-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	59
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010059.D				
Lims ID:	280-159137-B-2-A				
Client ID:	EW7-PM25A-8-25				
Sample Type:	Client				
Inject. Date:	02-Mar-2022 10:50:23	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159137-B-2-A				
Misc. Info.:	280-0108907-059				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Mar-2022 13:06:29	Calib Date:	05-Jan-2022 04:24:15		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1635				

First Level Reviewer: zhangji Date: 02-Mar-2022 12:54:04

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2389	119.45

Manual Integration/User Assign Peak Report

Eurofins Denver

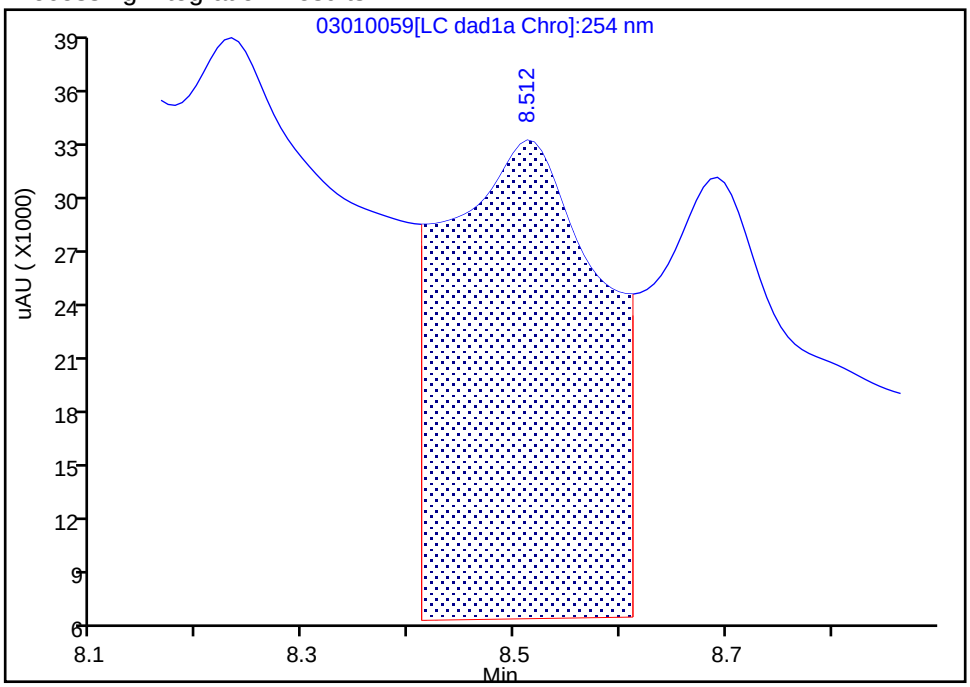
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Lims ID:	280-159137-B-2-A	Lab Sample ID:	280-159137-2		
Client ID:	EW7-PM25A-8-25				
Operator ID:	JZ	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

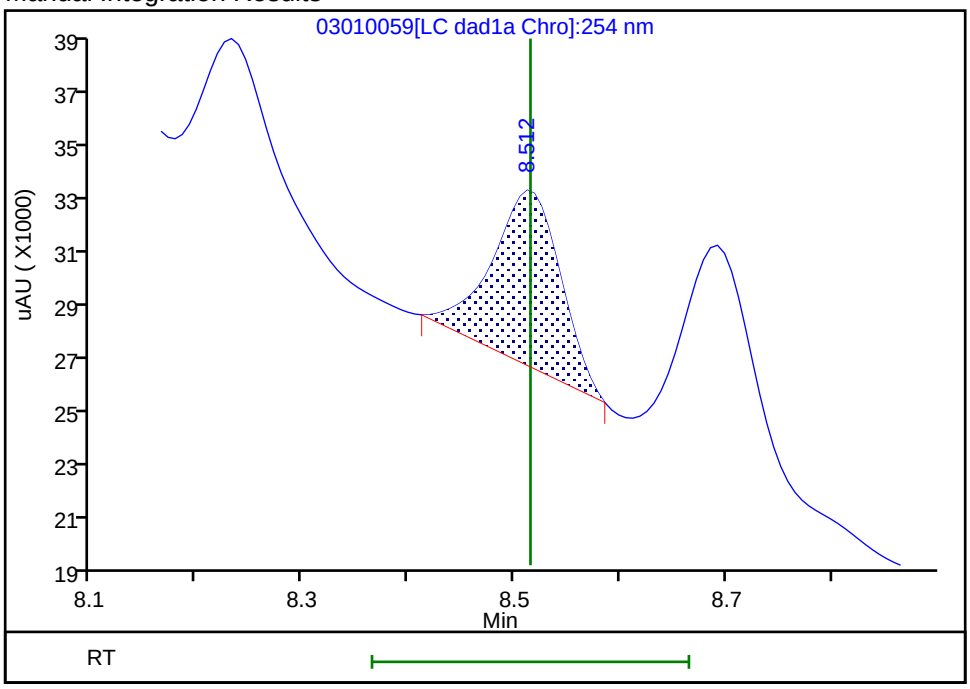
Processing Integration Results

RT: 8.51
Area: 270699
Amount: 2.170842
Amount Units: ug/mL



Manual Integration Results

RT: 8.51
Area: 29791
Amount: 0.238906
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:53:56
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

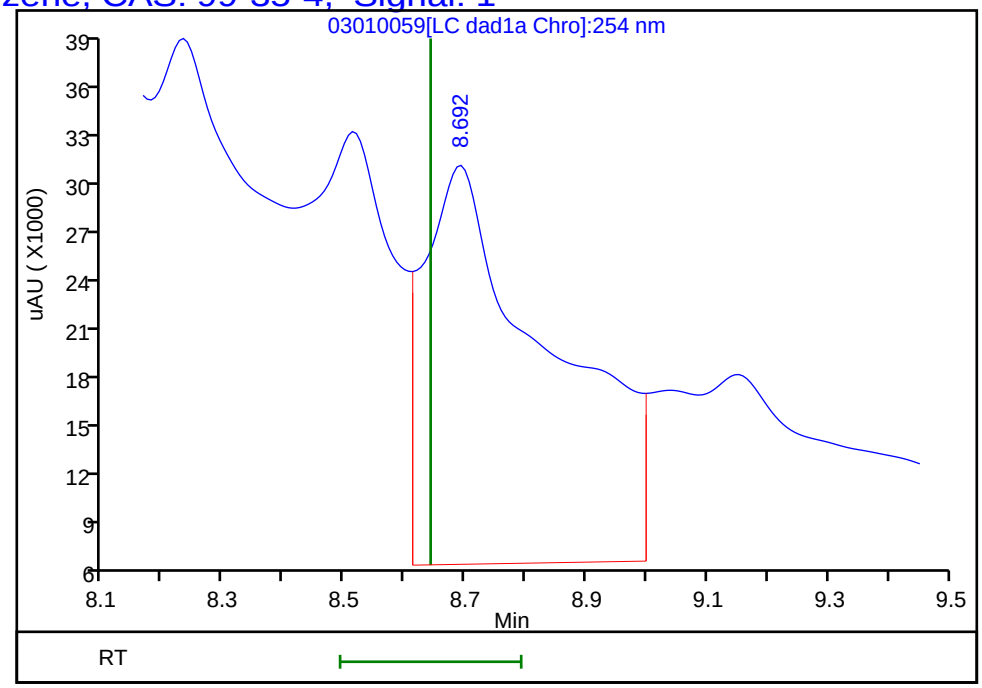
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010059.d
Injection Date: 02-Mar-2022 10:50:23 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-B-2-A Lab Sample ID: 280-159137-2
Client ID: EW7-PM25A-8-25
Operator ID: JZ ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 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: 8.69
Response: 359699
Amount: 1.649273



Reviewer: zhangji, 02-Mar-2022 12:54:04
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

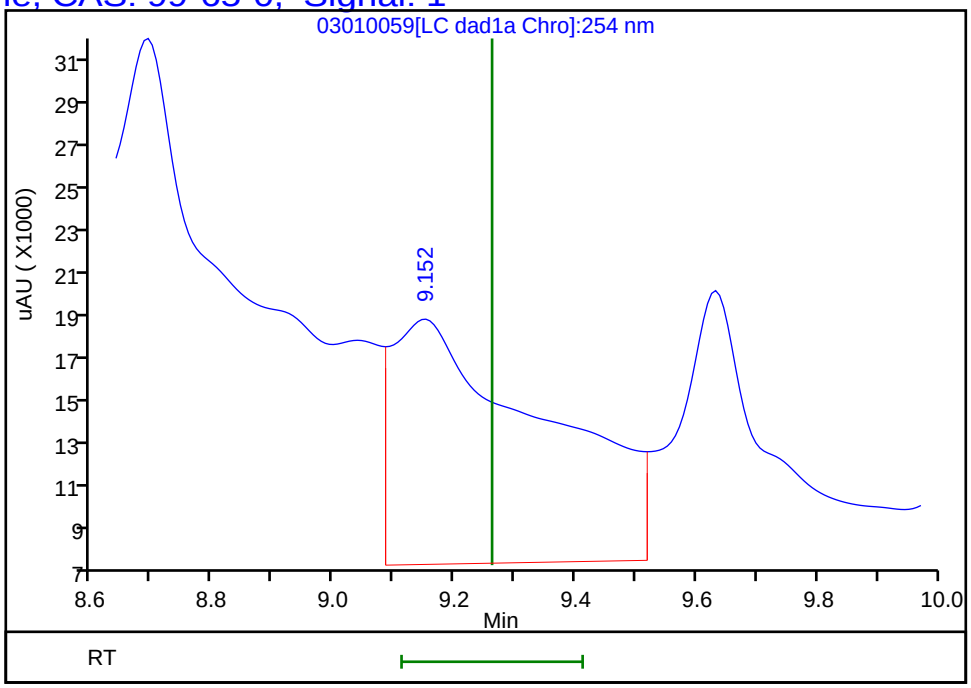
Eurofins Denver

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Injection Date: 02-Mar-2022 10:50:23 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-B-2-A Lab Sample ID: 280-159137-2
Client ID: EW7-PM25A-8-25
Operator ID: JZ ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 9.15
Response: 196905
Amount: 0.682746



Reviewer: zhangji, 02-Mar-2022 12:54:04
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

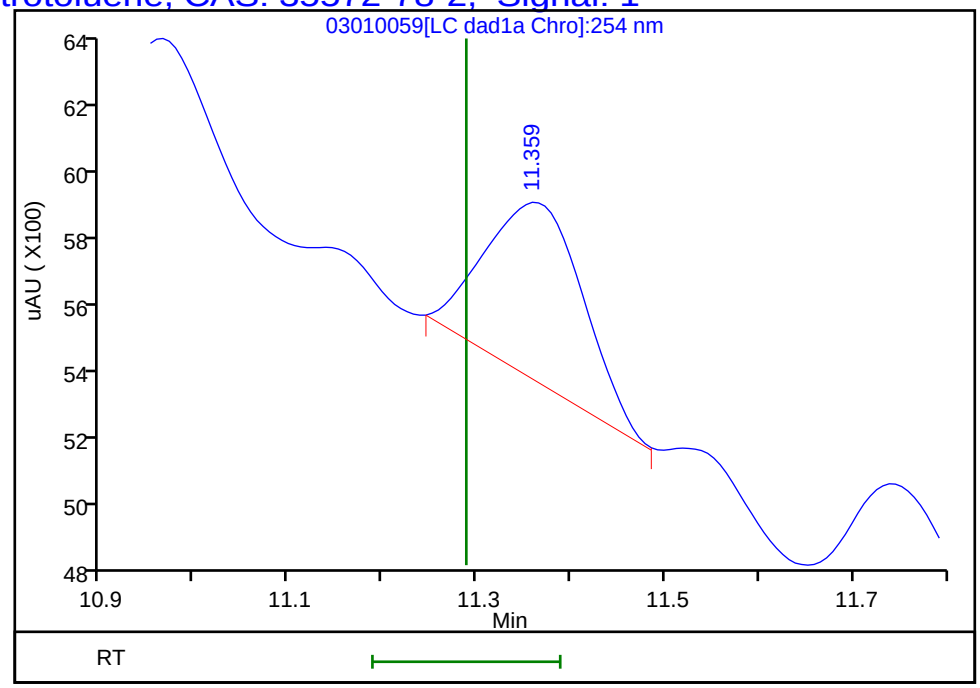
User Disabled Compound Report

Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010059.d
Injection Date: 02-Mar-2022 10:50:23 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-B-2-A Lab Sample ID: 280-159137-2
Client ID: EW7-PM25A-8-25
Operator ID: JZ ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.36
Response: 3744
Amount: 0.018519



Reviewer: zhangji, 02-Mar-2022 12:54:04
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

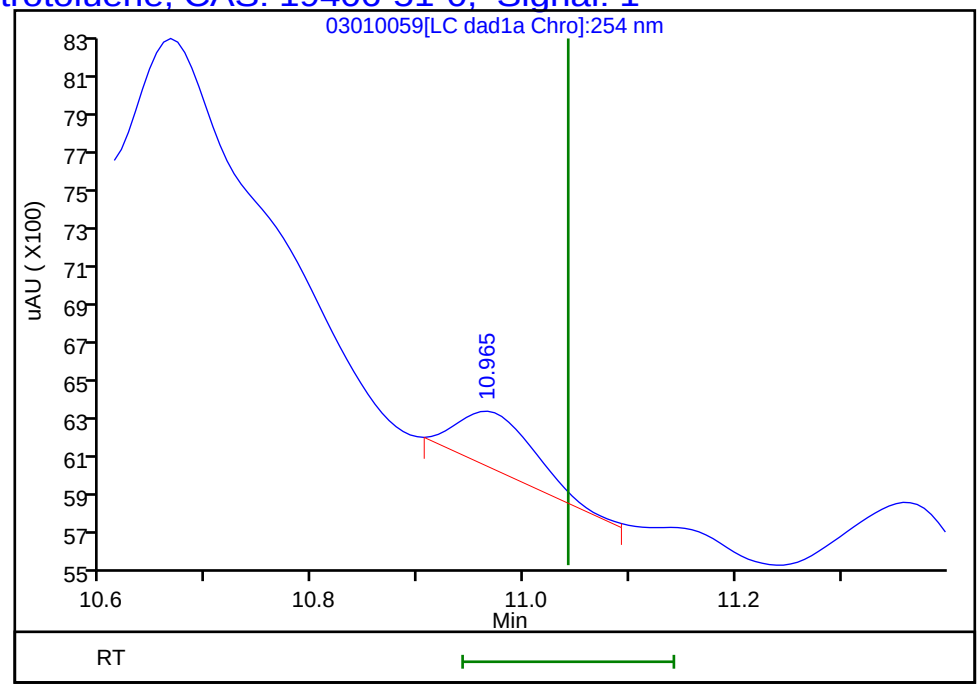
Eurofins Denver

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Injection Date: 02-Mar-2022 10:50:23 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-B-2-A Lab Sample ID: 280-159137-2
Client ID: EW7-PM25A-8-25
Operator ID: JZ ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

18 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0, Signal: 1

RT: 10.97
Response: 1510
Amount: 0.010001



Reviewer: zhangji, 02-Mar-2022 12:54:04
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

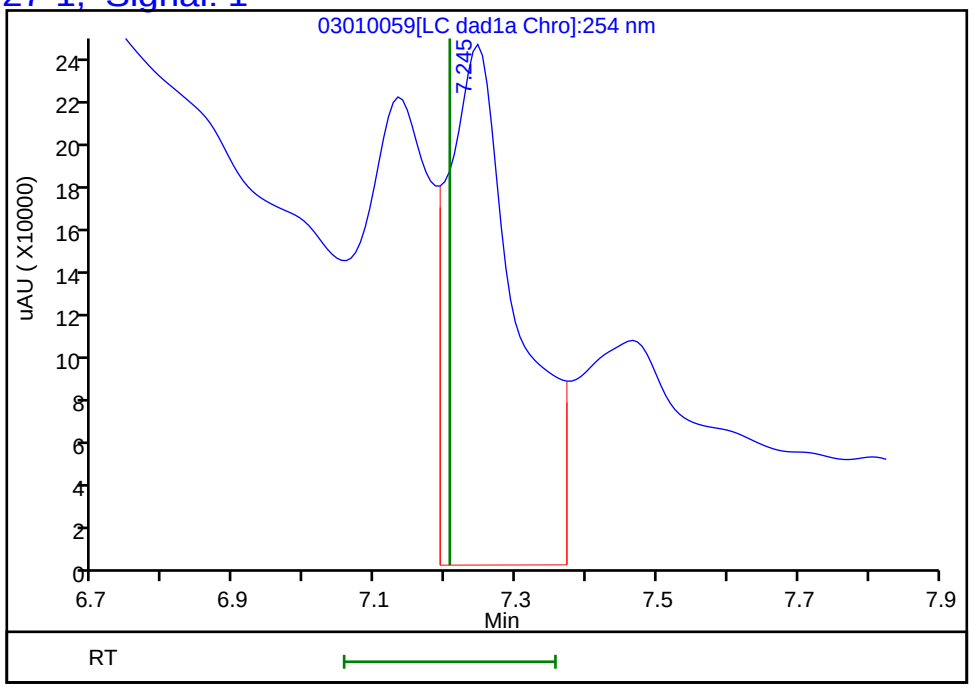
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010059.d
Injection Date: 02-Mar-2022 10:50:23 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-B-2-A Lab Sample ID: 280-159137-2
Client ID: EW7-PM25A-8-25
Operator ID: JZ ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.25
Response: 1642488
Amount: 13.036093



Reviewer: zhangji, 02-Mar-2022 12:54:04
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

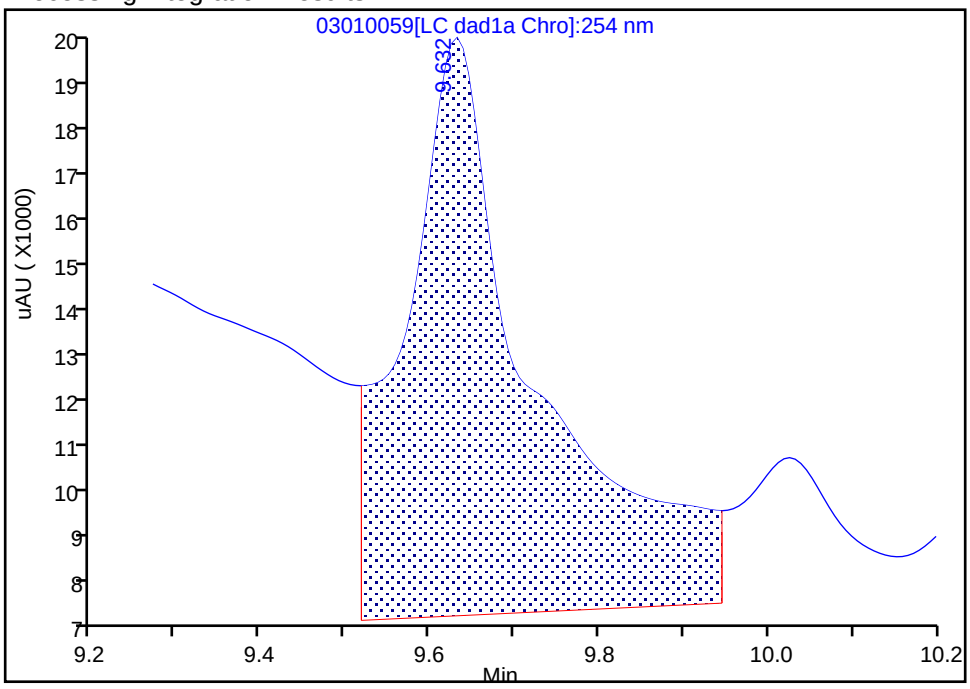
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010059.d				
Injection Date:	02-Mar-2022 10:50:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159137-B-2-A	Lab Sample ID:	280-159137-2		
Client ID:	EW7-PM25A-8-25				
Operator ID:	JZ	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

13 Nitrobenzene, CAS: 98-95-3

Signal: 1

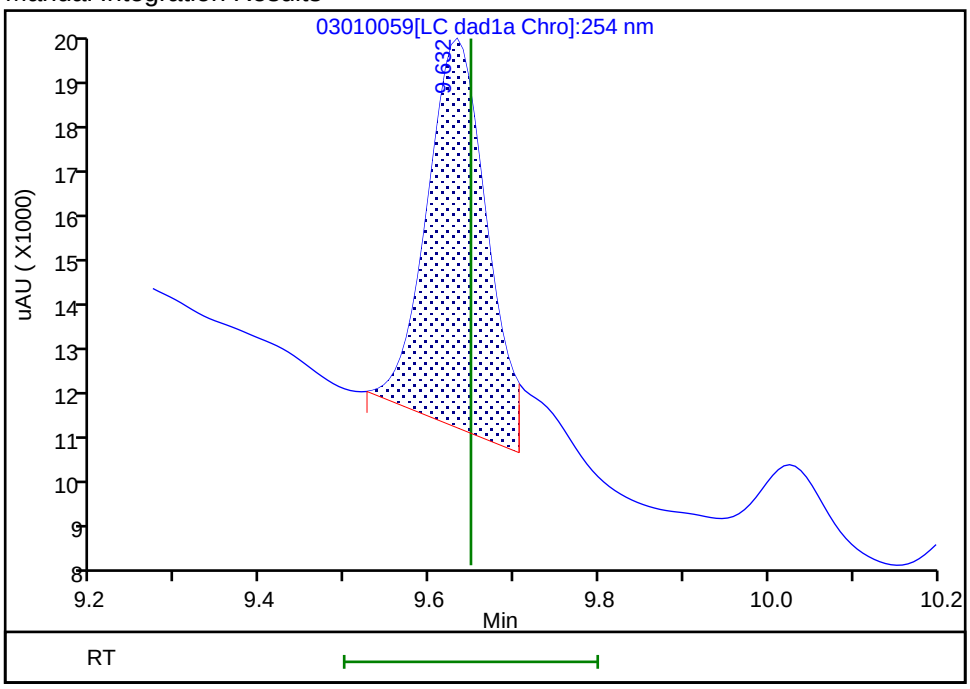
Processing Integration Results

RT: 9.63
Area: 130501
Amount: 0.679858
Amount Units: ug/mL



Manual Integration Results

RT: 9.63
Area: 39762
Amount: 0.207144
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:54:03
Audit Action: Split an Integrated Peak Audit Reason: Baseline

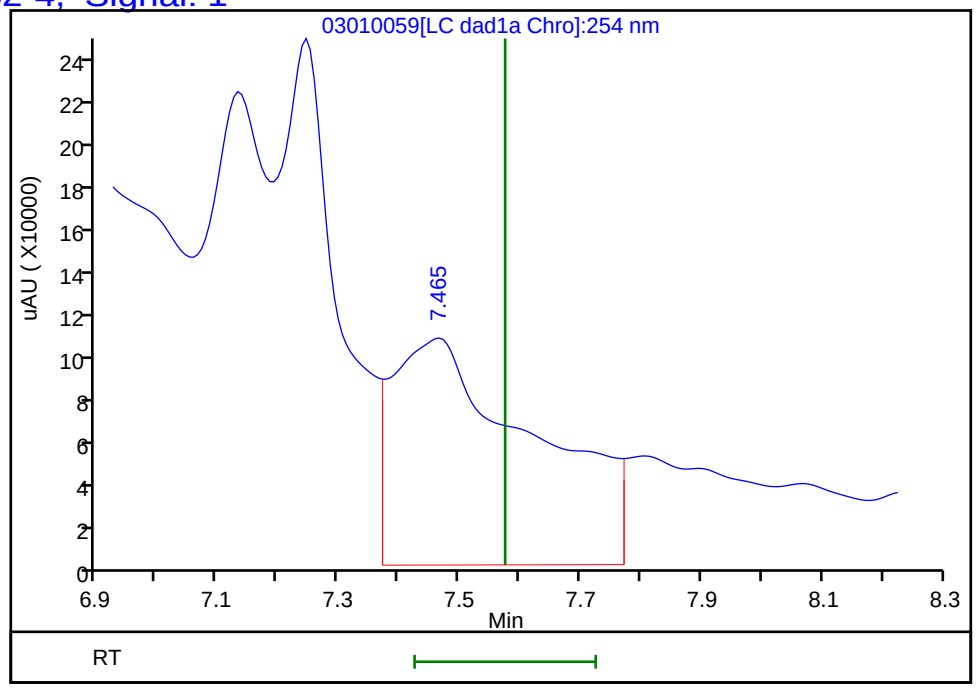
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010059.d				
Injection Date:	02-Mar-2022 10:50:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159137-B-2-A	Lab Sample ID:	280-159137-2		
Client ID:	EW7-PM25A-8-25				
Operator ID:	JZ	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 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: 7.47
Response: 1699724
Amount: 16.405146



Reviewer: zhangji, 02-Mar-2022 12:54:04
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

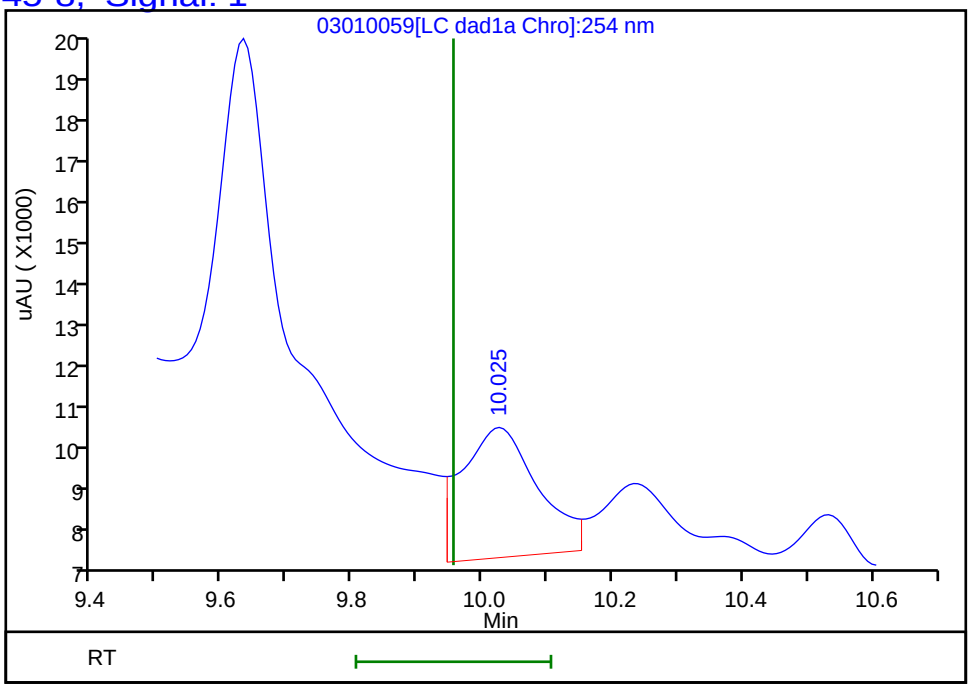
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010059.d
Injection Date: 02-Mar-2022 10:50:23 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-B-2-A Lab Sample ID: 280-159137-2
Client ID: EW7-PM25A-8-25
Operator ID: JZ ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 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: 10.03
Response: 23967
Amount: 0.140514



Reviewer: zhangji, 02-Mar-2022 12:54:04
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM25A-8-25 | Lab Sample ID: 280-159137-2

Matrix: Water | Lab File ID: 03030026.D

Analysis Method: 8330A | Date Collected: 02/25/2022 10:10

Extraction Method: 3535 | Date Extracted: 03/01/2022 11:26

Sample wt/vol: 481.9(mL) | Date Analyzed: 03/04/2022 01:45

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

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

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

Analysis Batch No.: 567645 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.094

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	89	*M*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030026.D
Lims ID: 280-159137-B-2-A
Client ID: EW7-PM25A-8-25
Sample Type: Client
Inject. Date: 04-Mar-2022 01:45:14 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159137-B-2-A
Misc. Info.: 280-0108978-026
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-Mar-2022 12:18:26 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1659

First Level Reviewer: zhangji Date: 04-Mar-2022 12:09:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1		6.916			ND	U
6 MNX	1		7.649			ND	
8 RDX	1		9.150			ND	7
9 Nitrobenzene	1		12.083			ND	
$ 10 1,2-Dinitrobenzene	1	13.294	13.323	-0.029	44472	0.1781	M
12 1,3-Dinitrobenzene	1		15.683			ND	
14 o-Nitrotoluene	1	16.787	16.863	-0.076	69919	0.2979	
16 p-Nitrotoluene	1		17.176			ND	
17 4-Amino-2,6-dinitrotoluene	1		17.823			ND	
18 m-Nitrotoluene	1		18.150			ND	
19 2-Amino-4,6-dinitrotoluene	1		18.843			ND	
20 1,3,5-Trinitrobenzene	1		18.996			ND	U
21 2,6-Dinitrotoluene	1		20.316			ND	
22 2,4-Dinitrotoluene	1		20.836			ND	
23 Tetryl	1		24.583			ND	
24 2,4,6-Trinitrotoluene	1		25.330			ND	

QC Flag Legend

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

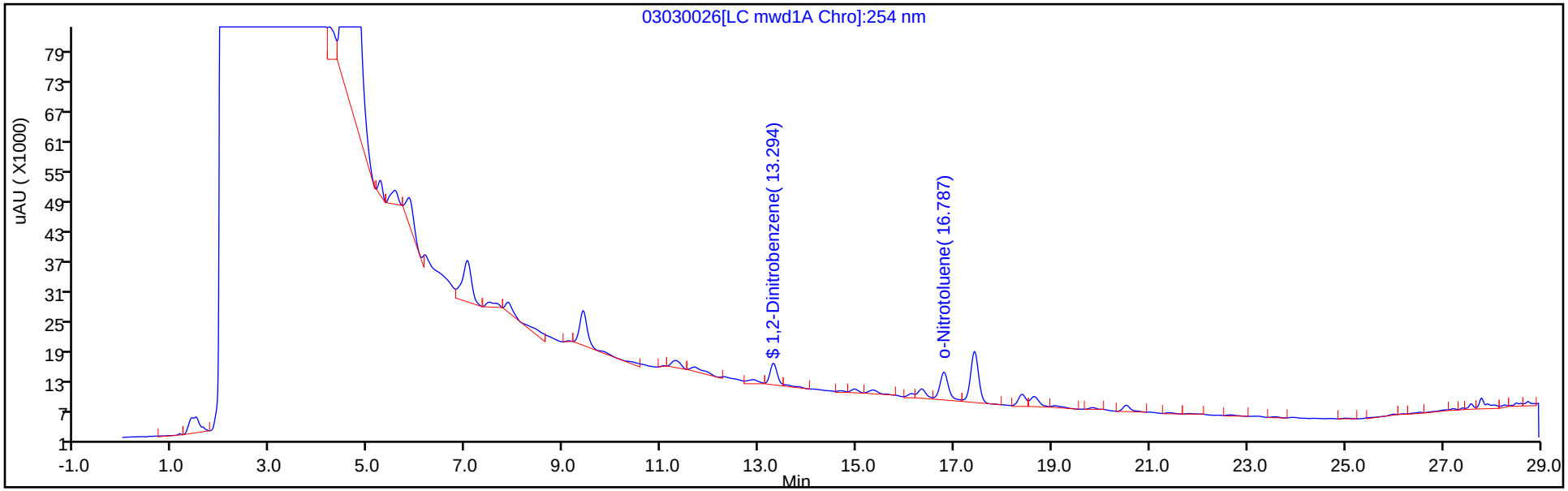
Report Date: 04-Mar-2022 12:18:29 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

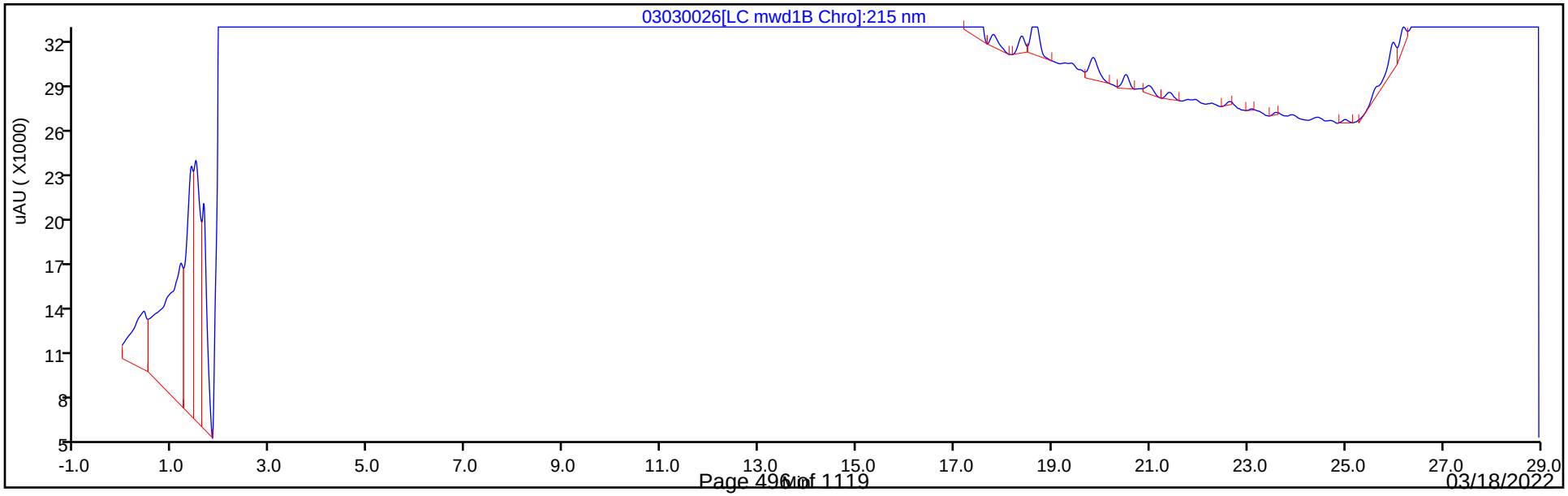
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Injection Date:	04-Mar-2022 01:45:14	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159137-B-2-A	Lab Sample ID:	280-159137-2	Worklist Smp#:	26
Client ID:	EW7-PM25A-8-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030026.D				
Lims ID:	280-159137-B-2-A				
Client ID:	EW7-PM25A-8-25				
Sample Type:	Client				
Inject. Date:	04-Mar-2022 01:45:14	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159137-B-2-A				
Misc. Info.:	280-0108978-026				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	04-Mar-2022 12:18:26	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1659				
First Level Reviewer: zhangji		Date:	04-Mar-2022 12:09:22		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1781	89.03

Manual Integration/User Assign Peak Report

Eurofins Denver

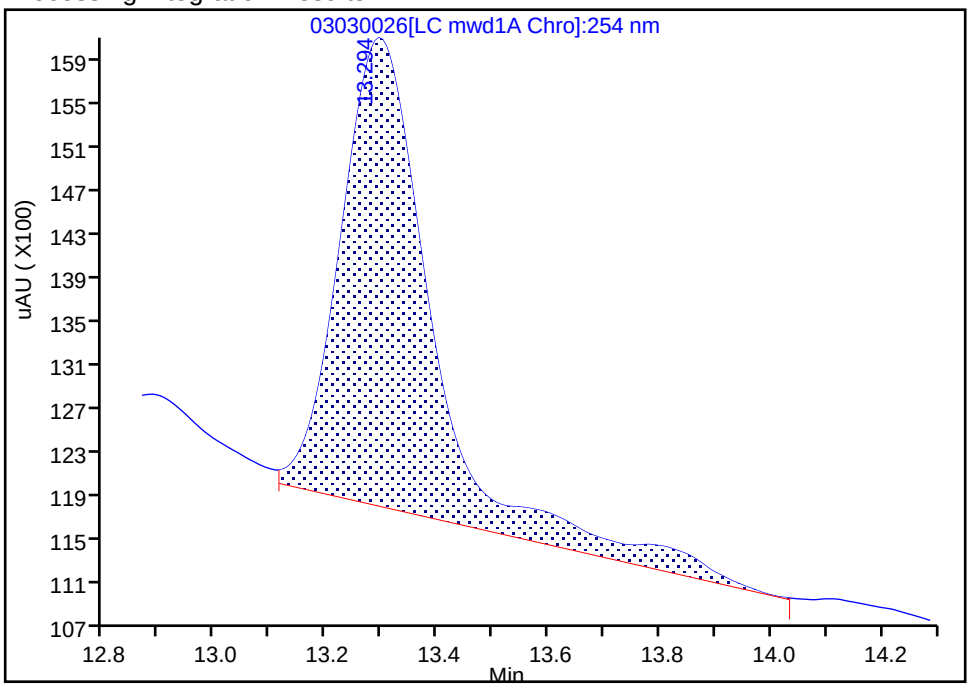
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030026.D				
Injection Date:	04-Mar-2022 01:45:14	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159137-B-2-A	Lab Sample ID:	280-159137-2		
Client ID:	EW7-PM25A-8-25				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

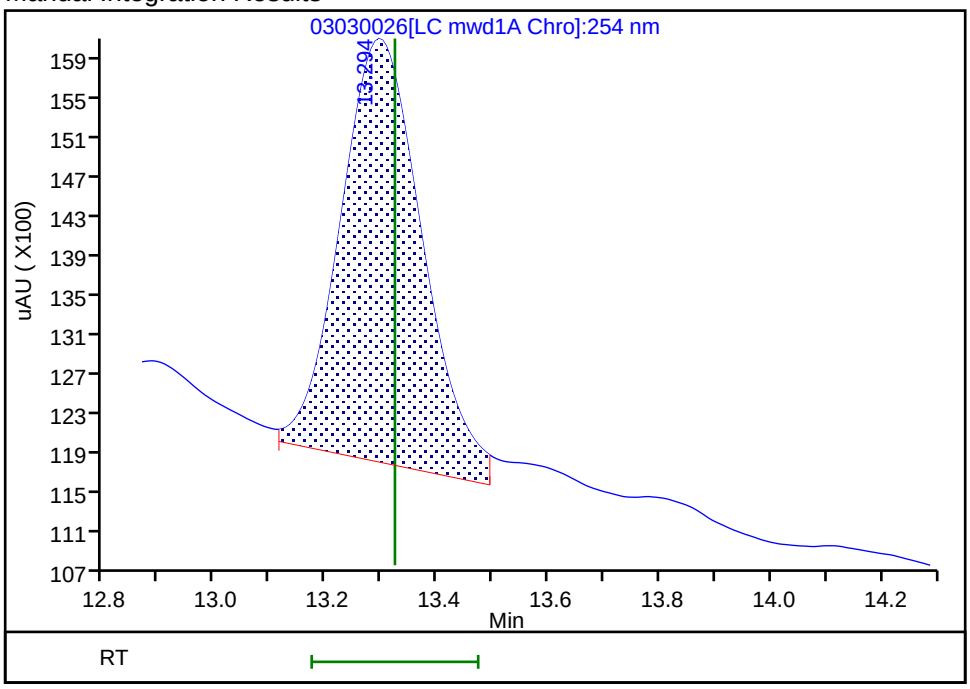
Processing Integration Results

RT: 13.29
Area: 50155
Amount: 0.200818
Amount Units: ug/ml



Manual Integration Results

RT: 13.29
Area: 44472
Amount: 0.178064
Amount Units: ug/ml



Reviewer: zhangji, 04-Mar-2022 12:09:45

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

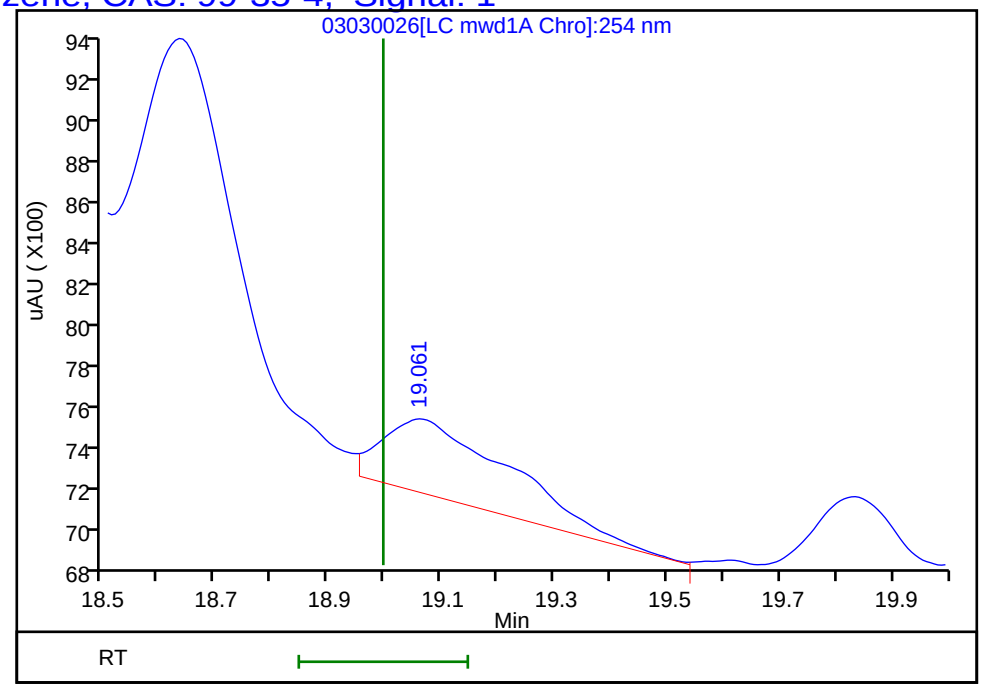
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030026.D				
Injection Date:	04-Mar-2022 01:45:14	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159137-B-2-A	Lab Sample ID:	280-159137-2		
Client ID:	EW7-PM25A-8-25				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4, Signal: 1

RT: 19.06
Response: 5863
Amount: 0.014112



Reviewer: zhangji, 04-Mar-2022 12:09:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

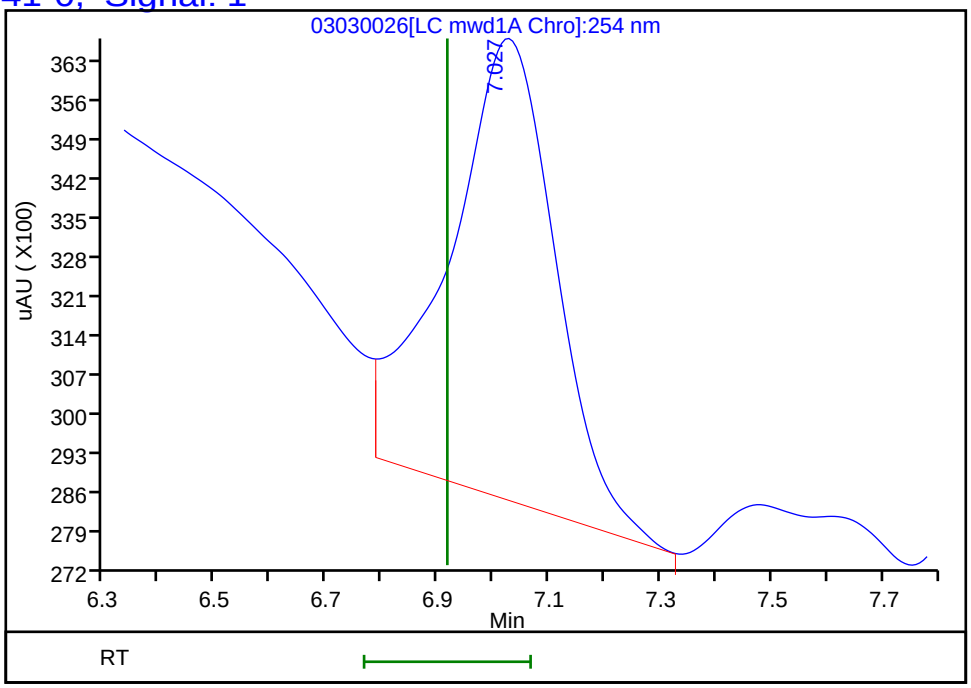
User Disabled Compound Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030026.D
Injection Date: 04-Mar-2022 01:45:14 Instrument ID: CHHPLC_X5
Lims ID: 280-159137-B-2-A Lab Sample ID: 280-159137-2
Client ID: EW7-PM25A-8-25
Operator ID: JZ ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

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

RT: 7.03
Response: 111439
Amount: 0.670773



Reviewer: zhangji, 04-Mar-2022 12:09:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM25B-8-35 | Lab Sample ID: 280-159137-3

Matrix: Water | Lab File ID: 03010060.D

Analysis Method: 8330A | Date Collected: 02/25/2022 12:05

Extraction Method: 3535 | Date Extracted: 03/01/2022 11:26

Sample wt/vol: 493.5(mL) | Date Analyzed: 03/02/2022 11:13

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

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

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

Analysis Batch No.: 567371 | 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	0.085
99-65-0	1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	0.081	U M	0.10	0.081	0.041
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	0.087
99-08-1	3-Nitrotoluene	0.41	U Q	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.41	U M	0.42	0.41	0.10
2691-41-0	HMX	0.20	U	0.21	0.20	0.089
5755-27-1	MNX	0.41	U M	2.0	0.41	0.16
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	117	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010060.D
Lims ID: 280-159137-A-3-A
Client ID: EW7-PM25B-8-35
Sample Type: Client
Inject. Date: 02-Mar-2022 11:13:25 ALS Bottle#: 60 Worklist Smp#: 60
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159137-A-3-A
Misc. Info.: 280-0108907-060
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Mar-2022 13:06:29 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:54:34

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.588			ND	
7 MNX	1		7.206			ND	U
8 RDX	1	7.599	7.575	0.024	10478	0.1011	M
$ 10 1,2-Dinitrobenzene	1	8.519	8.515	0.004	29287	0.2349	M
11 1,3,5-Trinitrobenzene	1		8.642			ND	U
12 1,3-Dinitrobenzene	1		9.262			ND	U
13 Nitrobenzene	1	9.632	9.648	-0.016	68285	0.3557	M
15 Tetryl	1		9.955			ND	U
17 2,4,6-Trinitrotoluene	1		10.862			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.042			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.288			ND	
20 2,6-Dinitrotoluene	1		11.462			ND	U
21 2,4-Dinitrotoluene	1		11.635			ND	
22 o-Nitrotoluene	1		12.475			ND	
23 p-Nitrotoluene	1		12.895			ND	U
24 m-Nitrotoluene	1		13.462			ND	

QC Flag Legend

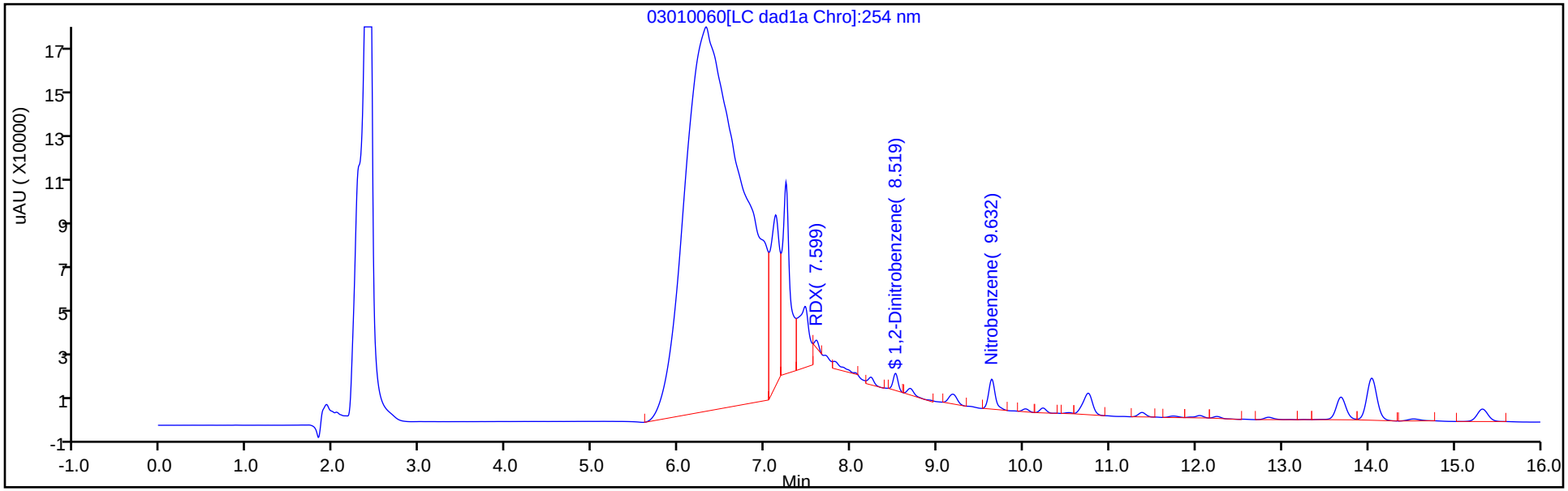
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 02-Mar-2022 13:06:34 Chrom Revision: 2.3 16-Feb-2022 17:52:00

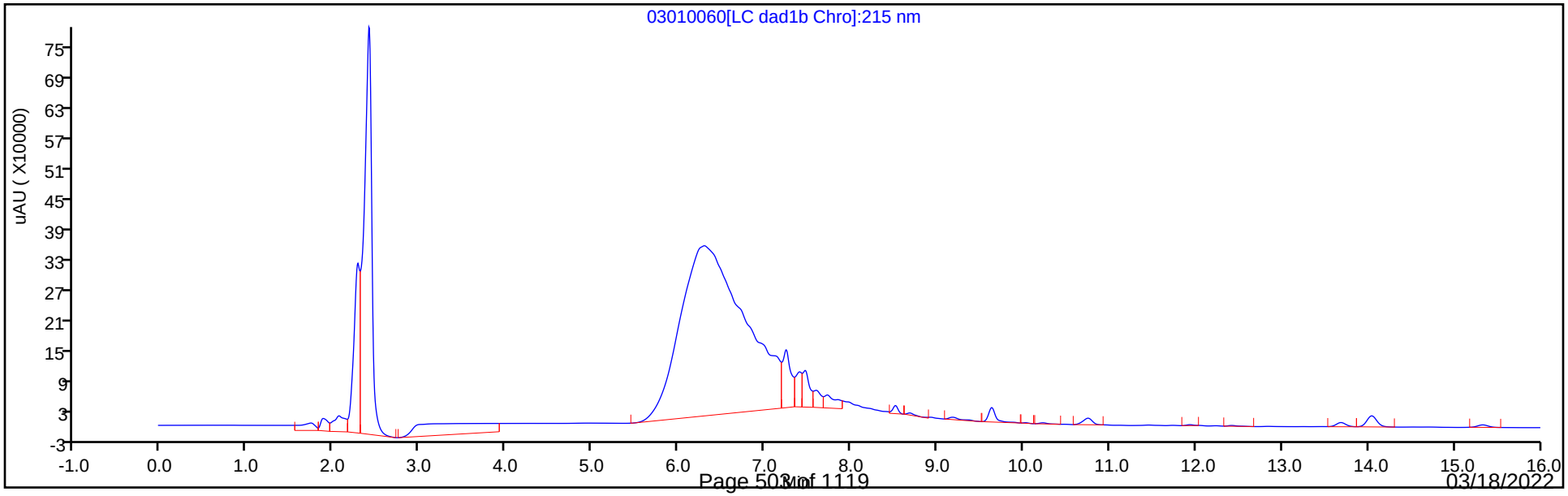
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010060.d				
Injection Date:	02-Mar-2022 11:13:25	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159137-A-3-A	Lab Sample ID:	280-159137-3	Worklist Smp#:	60
Client ID:	EW7-PM25B-8-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	60
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010060.D				
Lims ID:	280-159137-A-3-A				
Client ID:	EW7-PM25B-8-35				
Sample Type:	Client				
Inject. Date:	02-Mar-2022 11:13:25	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159137-A-3-A				
Misc. Info.:	280-0108907-060				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Mar-2022 13:06:29	Calib Date:	05-Jan-2022 04:24:15		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1635				

First Level Reviewer: zhangji Date: 02-Mar-2022 12:54:34

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2349	117.43

Manual Integration/User Assign Peak Report

Eurofins Denver

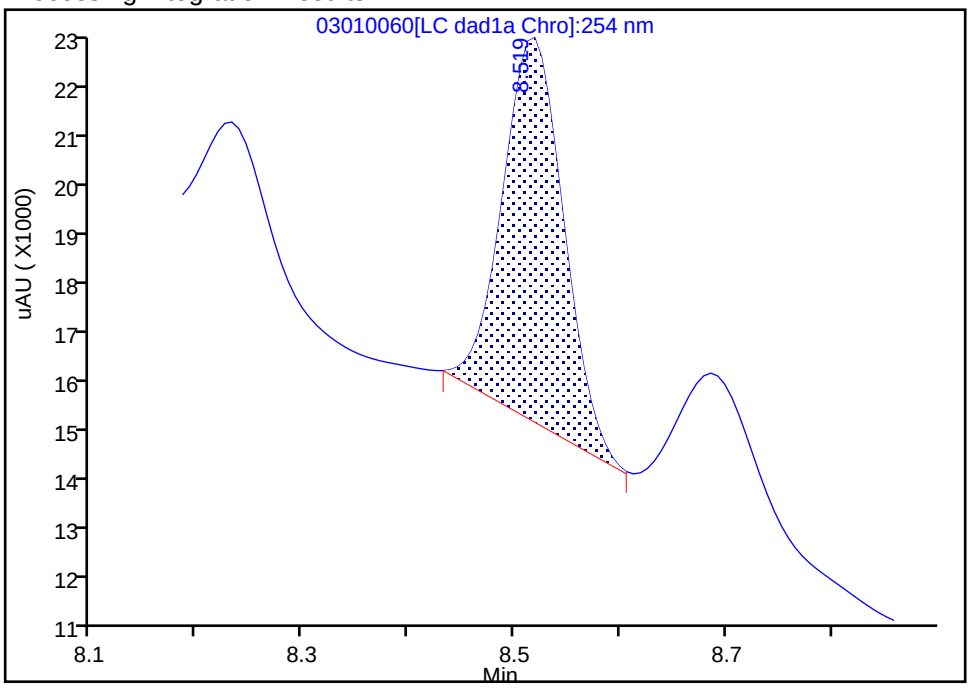
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010060.d				
Injection Date:	02-Mar-2022 11:13:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159137-A-3-A	Lab Sample ID:	280-159137-3		
Client ID:	EW7-PM25B-8-35				
Operator ID:	JZ	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 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

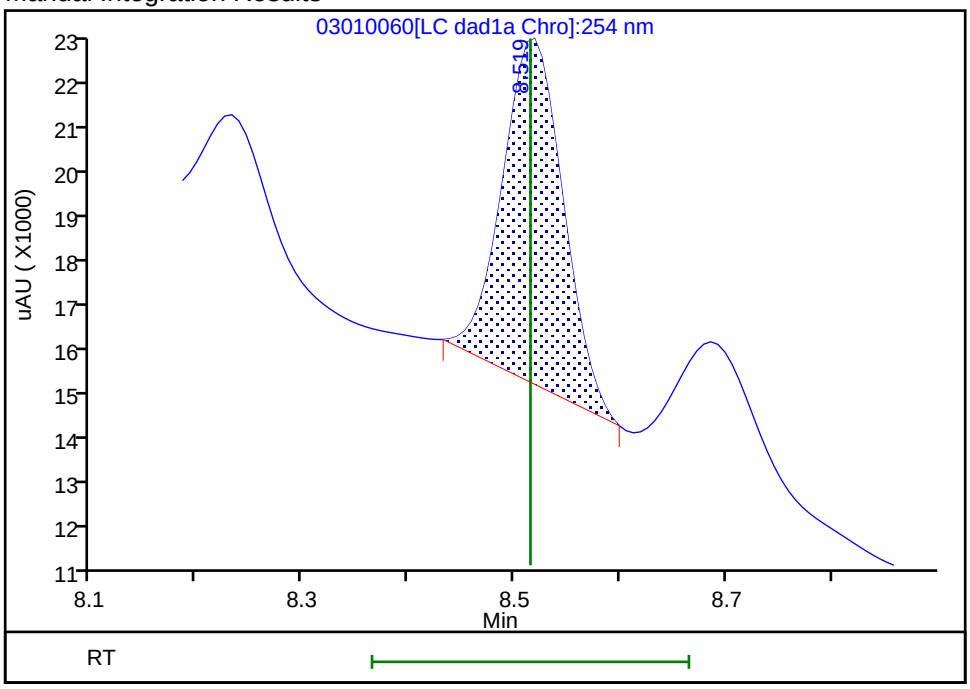
Processing Integration Results

RT: 8.52
Area: 29685
Amount: 0.238056
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 29287
Amount: 0.234864
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:54:29

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

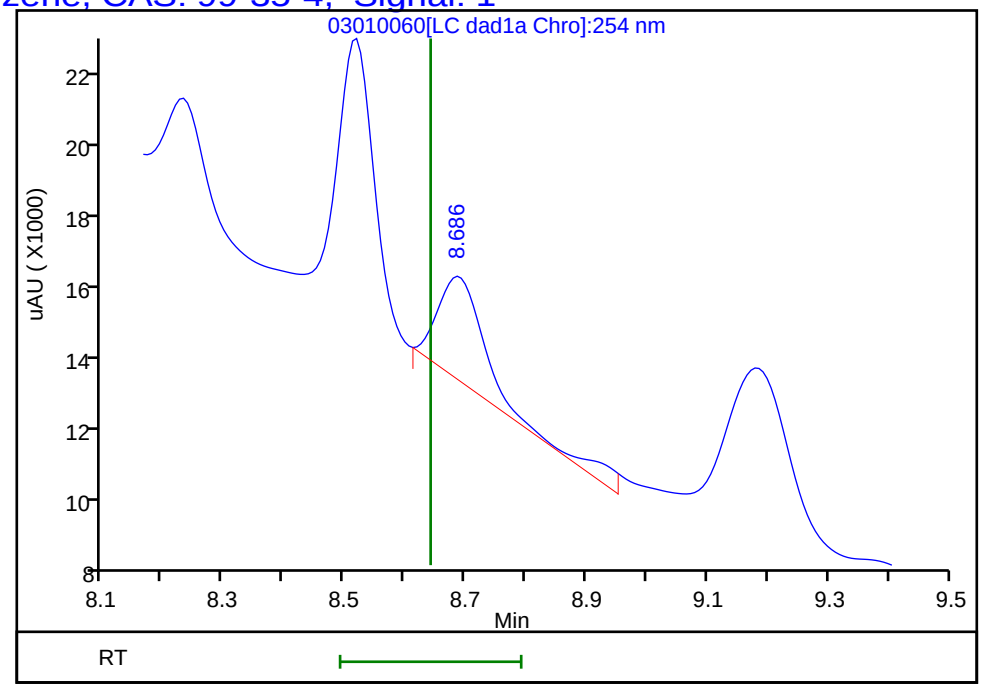
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010060.d
Injection Date: 02-Mar-2022 11:13:25 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-3-A Lab Sample ID: 280-159137-3
Client ID: EW7-PM25B-8-35
Operator ID: JZ ALS Bottle#: 60 Worklist Smp#: 60
Injection Vol: 100.0 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: 8.69
Response: 16530
Amount: 0.075792



Reviewer: zhangji, 02-Mar-2022 12:54:34
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

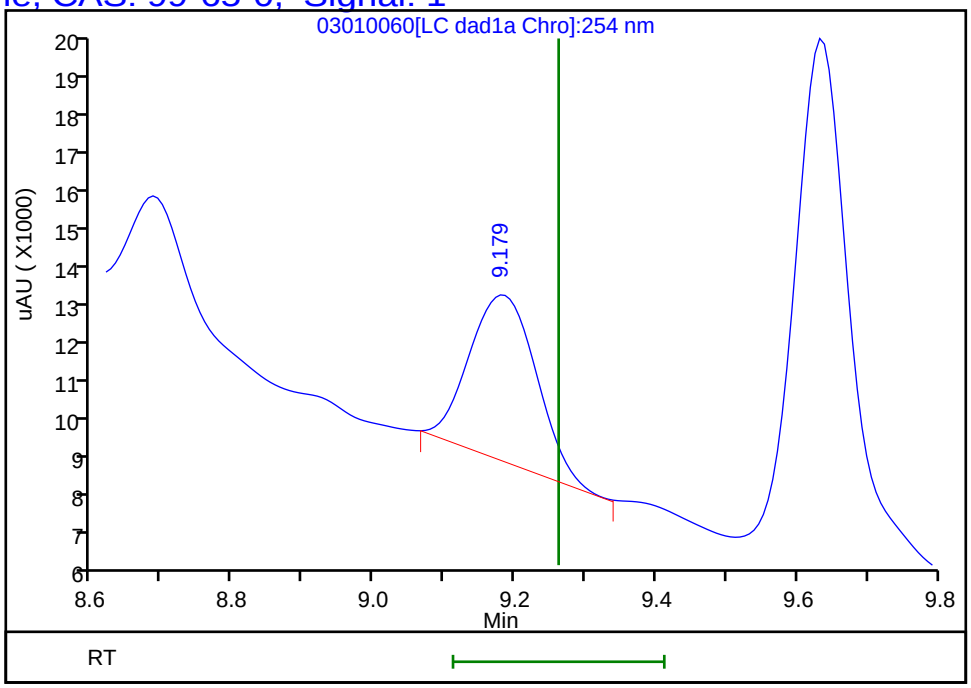
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010060.d
Injection Date: 02-Mar-2022 11:13:25 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-3-A Lab Sample ID: 280-159137-3
Client ID: EW7-PM25B-8-35
Operator ID: JZ ALS Bottle#: 60 Worklist Smp#: 60
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 9.18
Response: 27716
Amount: 0.096102



Reviewer: zhangji, 02-Mar-2022 12:54:34
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

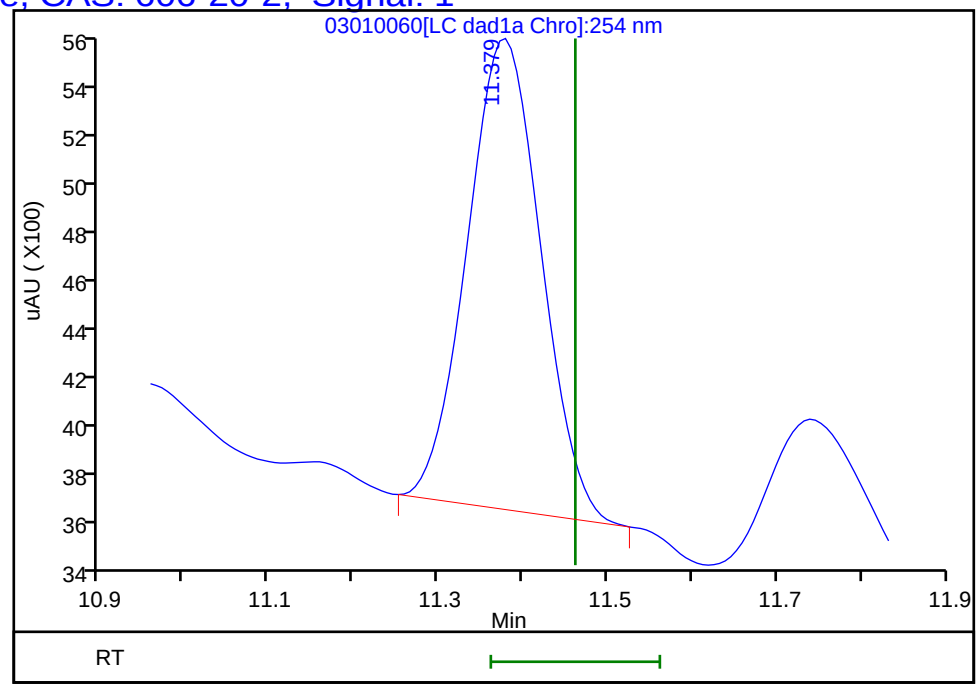
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010060.d
Injection Date: 02-Mar-2022 11:13:25 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-3-A Lab Sample ID: 280-159137-3
Client ID: EW7-PM25B-8-35
Operator ID: JZ ALS Bottle#: 60 Worklist Smp#: 60
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

20 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 11.38
Response: 11528
Amount: 0.080550



Reviewer: zhangji, 02-Mar-2022 12:54:34
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

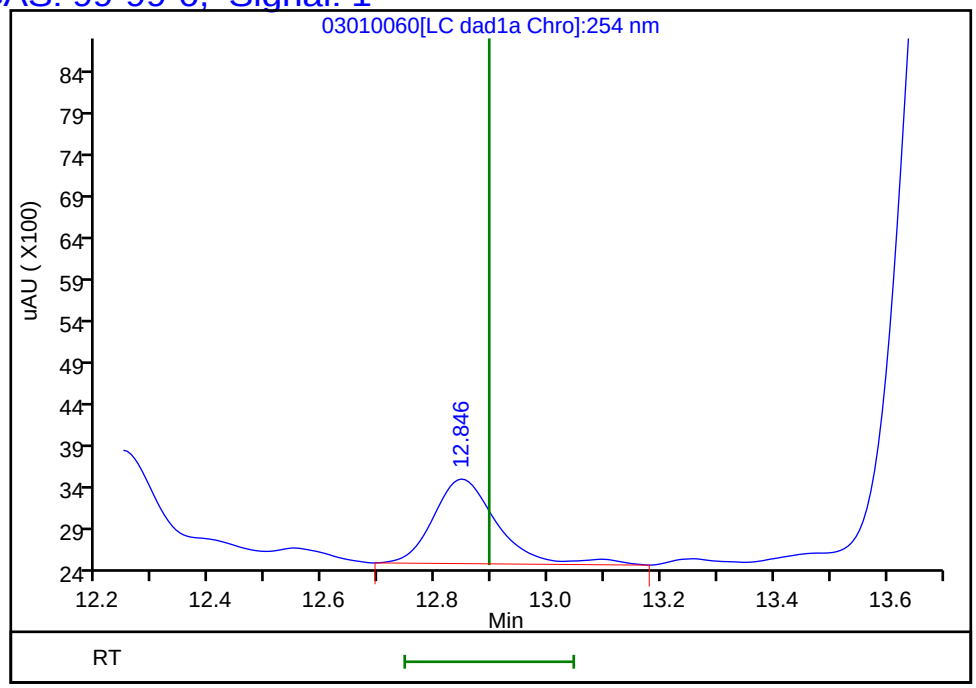
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010060.d
Injection Date: 02-Mar-2022 11:13:25 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-3-A Lab Sample ID: 280-159137-3
Client ID: EW7-PM25B-8-35
Operator ID: JZ ALS Bottle#: 60 Worklist Smp#: 60
Injection Vol: 100.0 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: 12.85
Response: 8032
Amount: 0.075606



Reviewer: zhangji, 02-Mar-2022 12:54:34
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

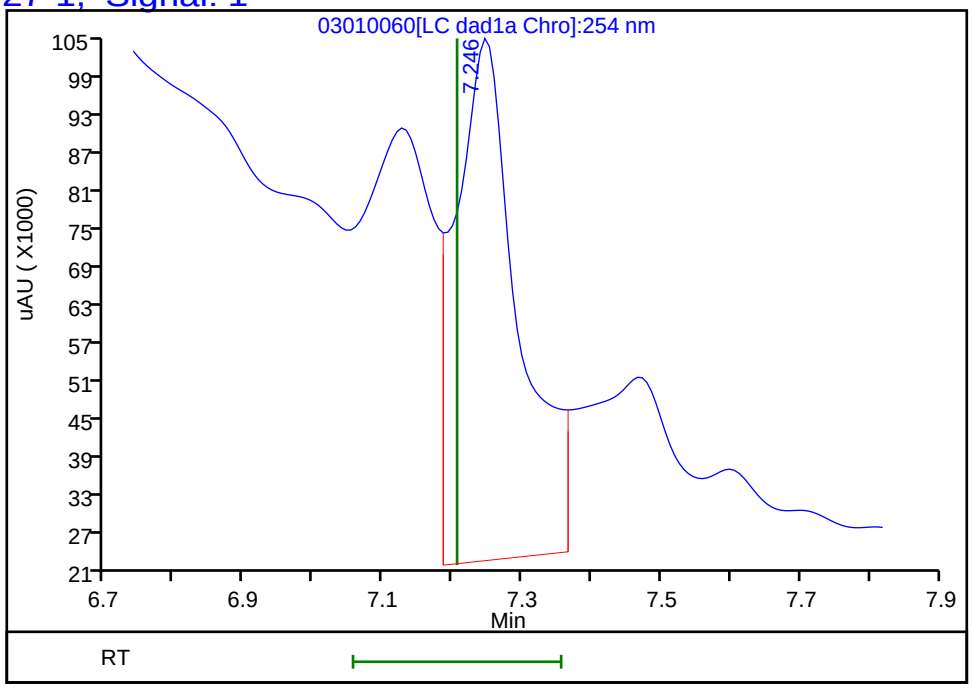
User Disabled Compound Report

Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010060.d
Injection Date: 02-Mar-2022 11:13:25 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-3-A Lab Sample ID: 280-159137-3
Client ID: EW7-PM25B-8-35
Operator ID: JZ ALS Bottle#: 60 Worklist Smp#: 60
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.25
Response: 516434
Amount: 4.098832



Reviewer: zhangji, 02-Mar-2022 12:54:34
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

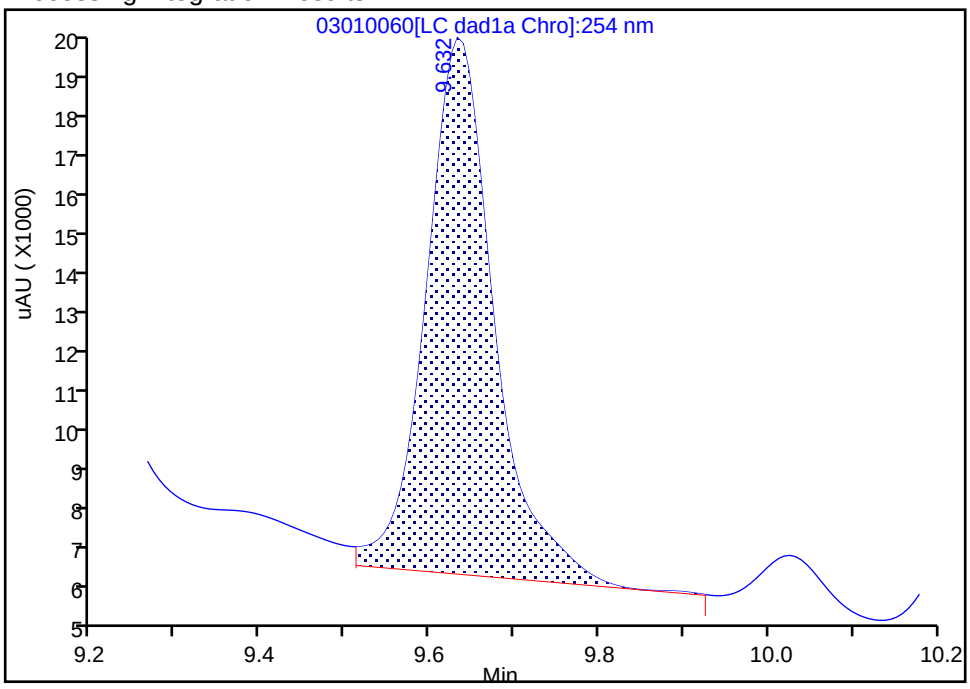
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010060.d				
Injection Date:	02-Mar-2022 11:13:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159137-A-3-A	Lab Sample ID:	280-159137-3		
Client ID:	EW7-PM25B-8-35				
Operator ID:	JZ	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

13 Nitrobenzene, CAS: 98-95-3

Signal: 1

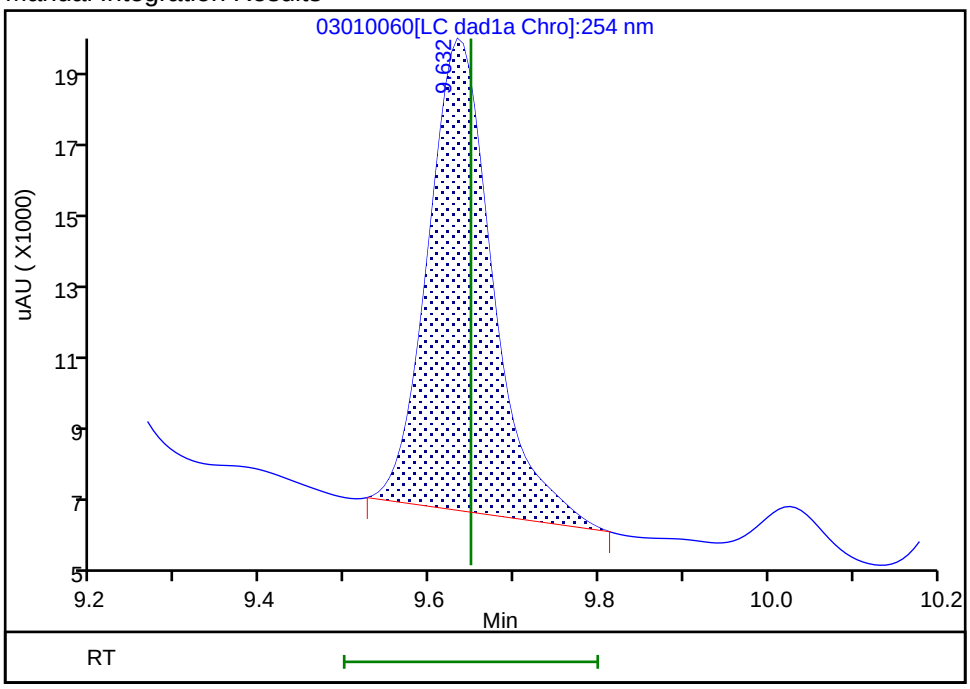
Processing Integration Results

RT: 9.63
Area: 74081
Amount: 0.385933
Amount Units: ug/mL



Manual Integration Results

RT: 9.63
Area: 68285
Amount: 0.355738
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:54:32
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

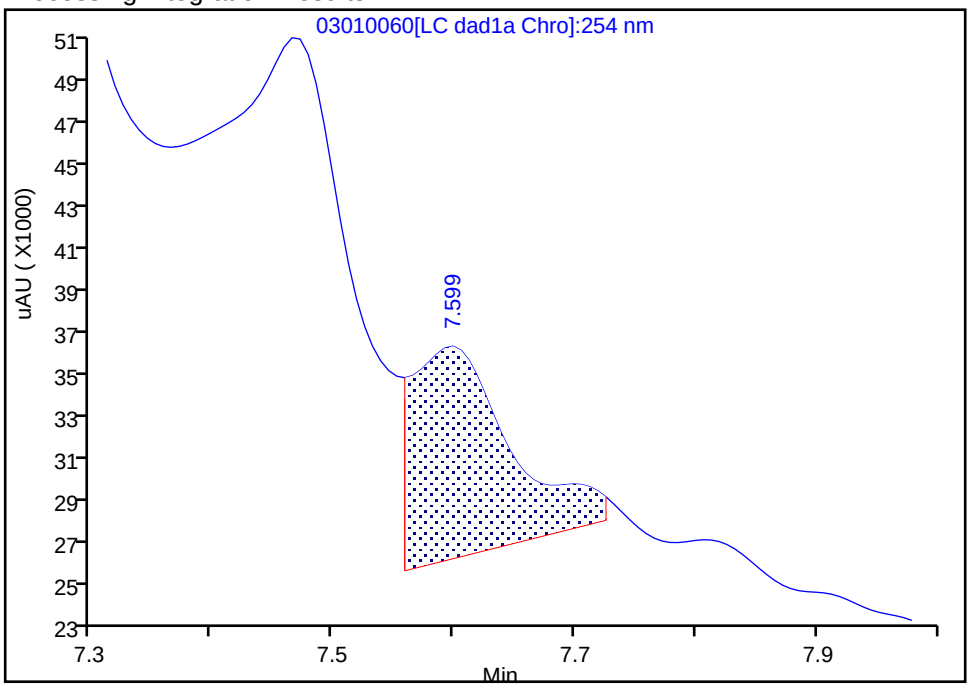
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010060.d				
Injection Date:	02-Mar-2022 11:13:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159137-A-3-A	Lab Sample ID:	280-159137-3		
Client ID:	EW7-PM25B-8-35				
Operator ID:	JZ	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

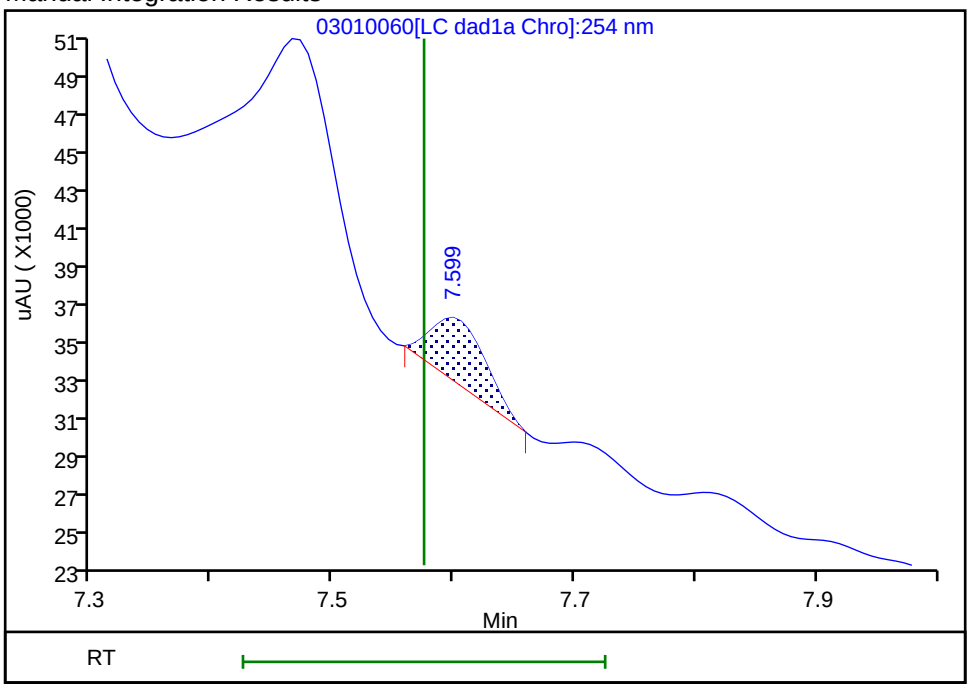
Processing Integration Results

RT: 7.60
Area: 55626
Amount: 0.536883
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 10478
Amount: 0.101130
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:54:25

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

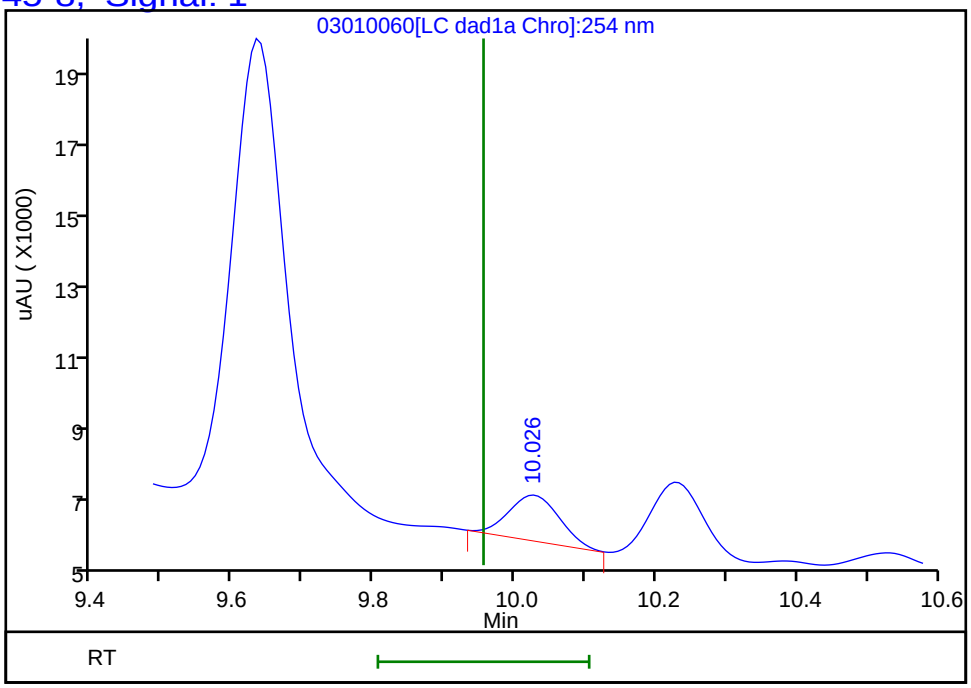
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010060.d
Injection Date: 02-Mar-2022 11:13:25 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-3-A Lab Sample ID: 280-159137-3
Client ID: EW7-PM25B-8-35
Operator ID: JZ ALS Bottle#: 60 Worklist Smp#: 60
Injection Vol: 100.0 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: 10.03
Response: 6412
Amount: 0.037592



Reviewer: zhangji, 02-Mar-2022 12:54:34
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM25B-8-35 | Lab Sample ID: 280-159137-3

Matrix: Water | Lab File ID: 03030027.D

Analysis Method: 8330A | Date Collected: 02/25/2022 12:05

Extraction Method: 3535 | Date Extracted: 03/01/2022 11:26

Sample wt/vol: 493.5(mL) | Date Analyzed: 03/04/2022 02:20

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

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

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

Analysis Batch No.: 567645 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.092
121-82-4	RDX	0.20	U	0.21	0.20	0.052

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	90	*M*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030027.D
Lims ID: 280-159137-A-3-A
Client ID: EW7-PM25B-8-35
Sample Type: Client
Inject. Date: 04-Mar-2022 02:20:31 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159137-A-3-A
Misc. Info.: 280-0108978-027
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-Mar-2022 12:18:26 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1659

First Level Reviewer: zhangji Date: 04-Mar-2022 12:15:47

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1		6.916			ND	U
	6 MNX	1		7.649			ND	
	8 RDX	1		9.150			ND	
	9 Nitrobenzene	1		12.083			ND	
$	10 1,2-Dinitrobenzene	1	13.299	13.323	-0.024	44707	0.1790	M
	12 1,3-Dinitrobenzene	1		15.683			ND	
	14 o-Nitrotoluene	1	16.793	16.863	-0.070	105466	0.4494	M
	16 p-Nitrotoluene	1		17.176			ND	
	17 4-Amino-2,6-dinitrotoluene	1		17.823			ND	
	18 m-Nitrotoluene	1		18.150			ND	
	19 2-Amino-4,6-dinitrotoluene	1		18.843			ND	
	20 1,3,5-Trinitrobenzene	1		18.996			ND	
	21 2,6-Dinitrotoluene	1		20.316			ND	
	22 2,4-Dinitrotoluene	1		20.836			ND	
	23 Tetryl	1		24.583			ND	7
	24 2,4,6-Trinitrotoluene	1		25.330			ND	

QC Flag Legend

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

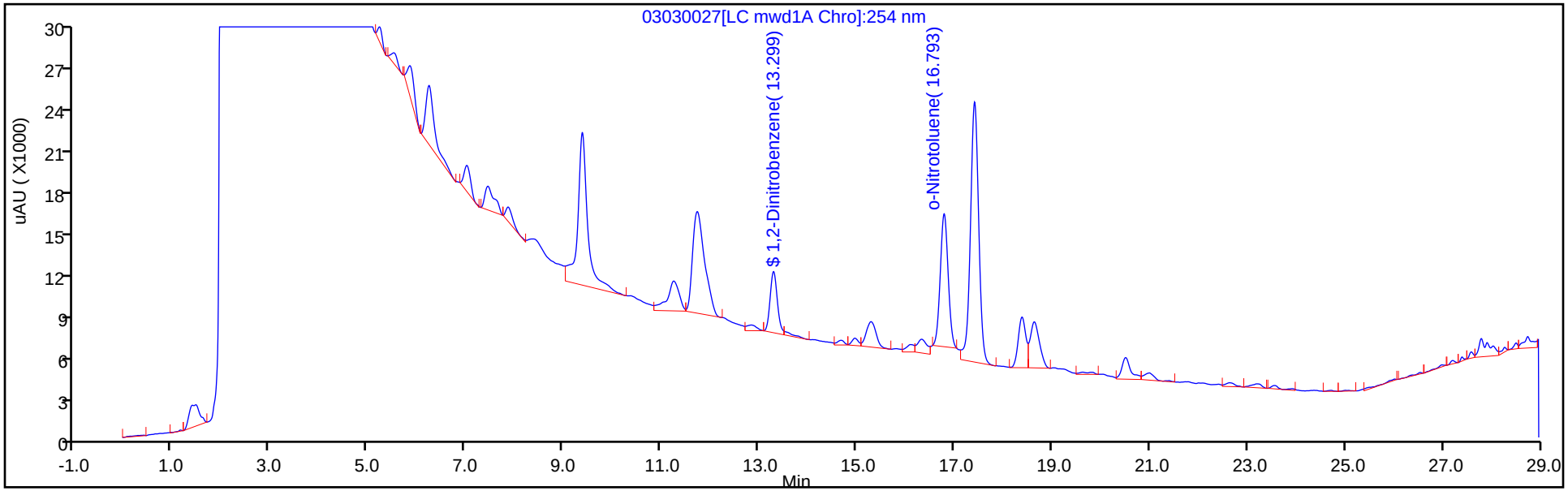
Report Date: 04-Mar-2022 12:18:29 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

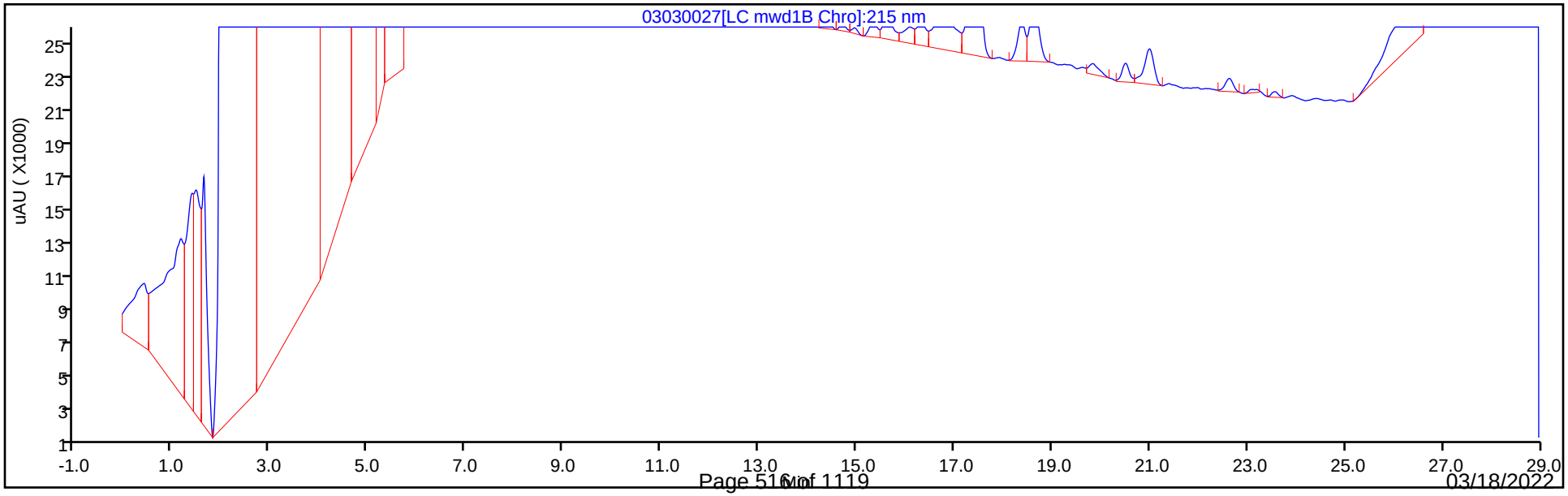
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030027.D

Injection Date:	04-Mar-2022 02:20:31	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159137-A-3-A	Lab Sample ID:	280-159137-3	Worklist Smp#:	27
Client ID:	EW7-PM25B-8-35				
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: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030027.D				
Lims ID:	280-159137-A-3-A				
Client ID:	EW7-PM25B-8-35				
Sample Type:	Client				
Inject. Date:	04-Mar-2022 02:20:31	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159137-A-3-A				
Misc. Info.:	280-0108978-027				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	04-Mar-2022 12:18:26	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1659				
First Level Reviewer: zhangji		Date:	04-Mar-2022 12:15:47		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1790	89.50

Manual Integration/User Assign Peak Report

Eurofins Denver

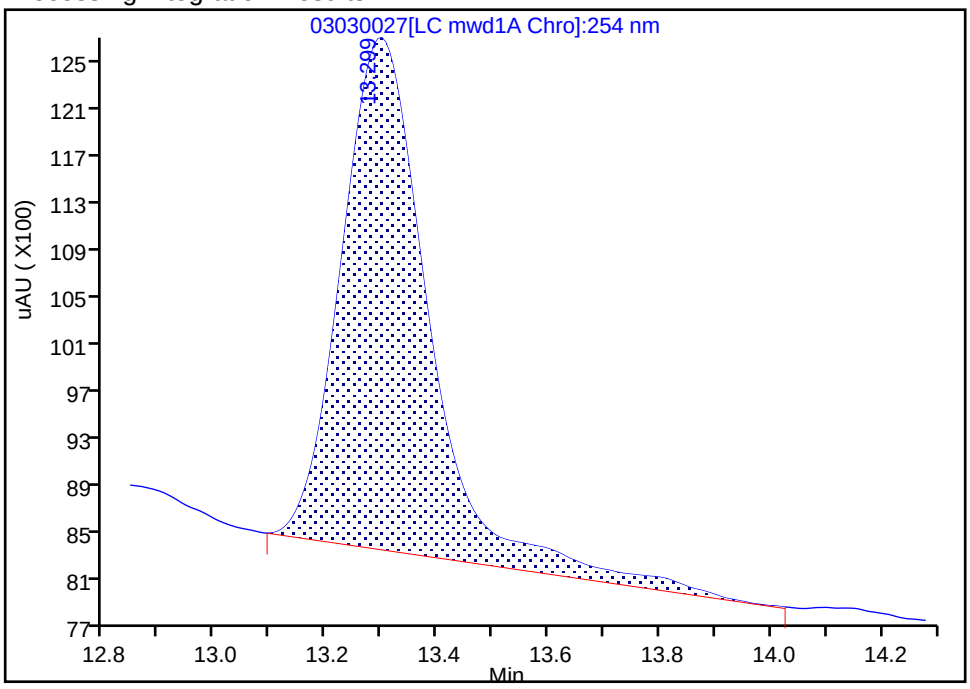
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030027.D				
Injection Date:	04-Mar-2022 02:20:31	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159137-A-3-A	Lab Sample ID:	280-159137-3		
Client ID:	EW7-PM25B-8-35				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

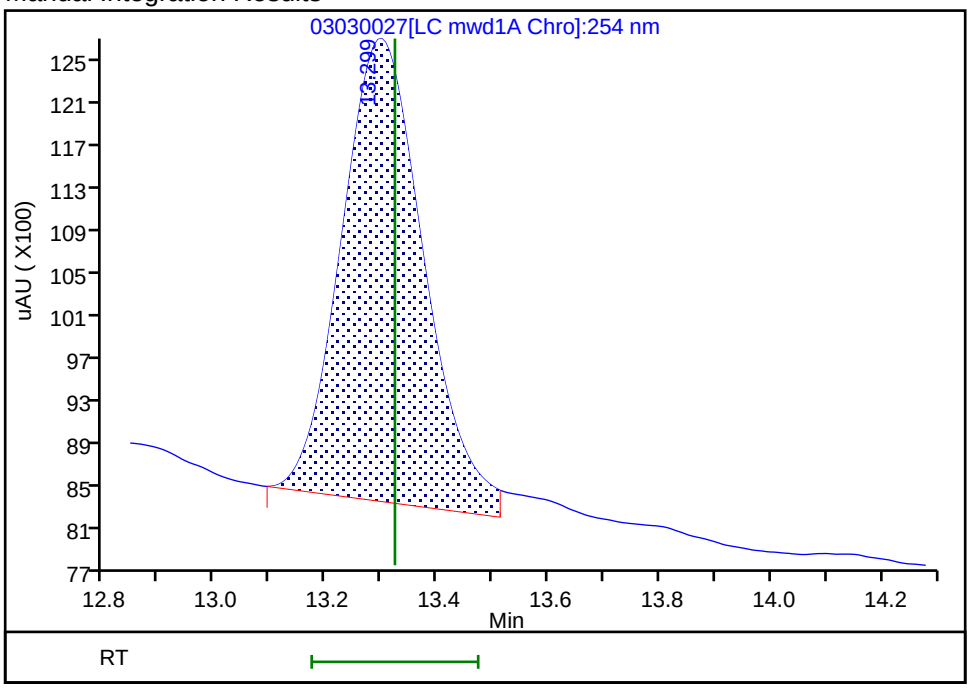
Processing Integration Results

RT: 13.30
Area: 47938
Amount: 0.191942
Amount Units: ug/ml



Manual Integration Results

RT: 13.30
Area: 44707
Amount: 0.179005
Amount Units: ug/ml



Reviewer: zhangji, 04-Mar-2022 12:15:39

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

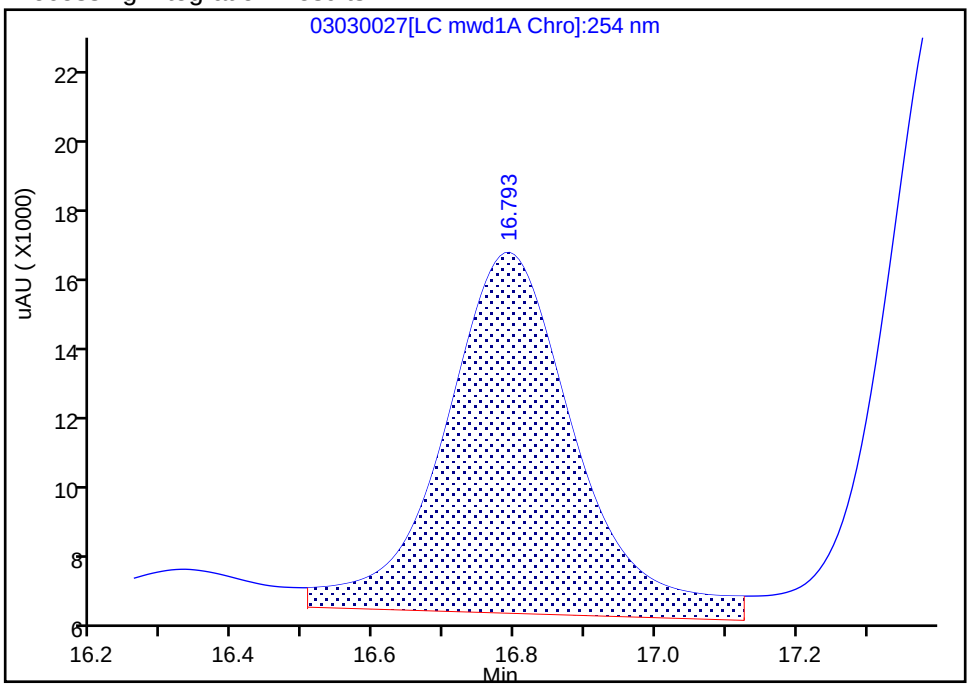
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030027.D				
Injection Date:	04-Mar-2022 02:20:31	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159137-A-3-A	Lab Sample ID:	280-159137-3		
Client ID:	EW7-PM25B-8-35				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

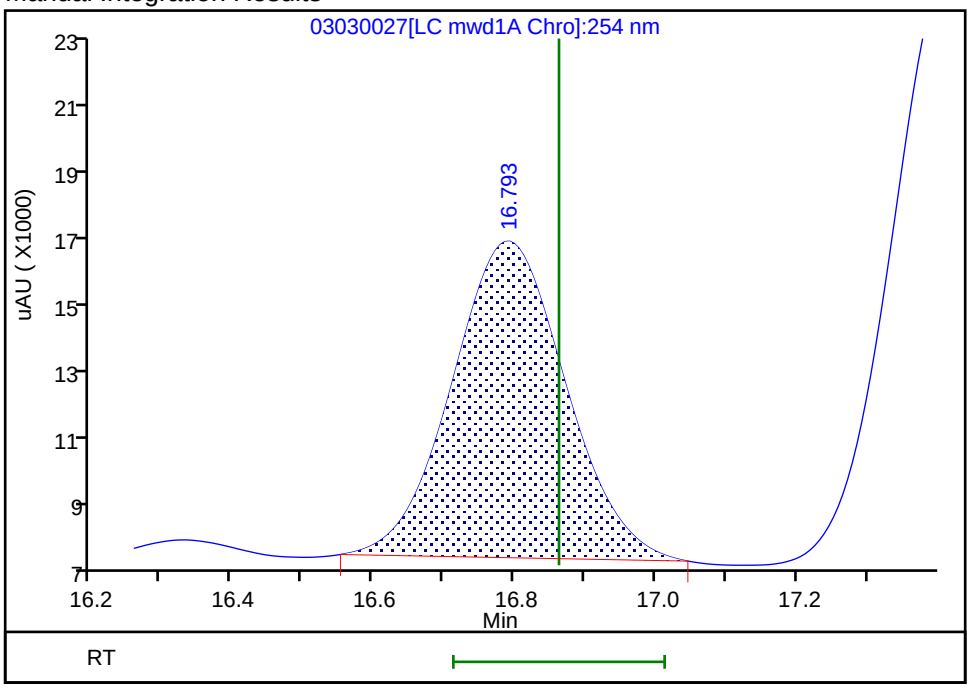
Processing Integration Results

RT: 16.79
Area: 131293
Amount: 0.559474
Amount Units: ug/ml



Manual Integration Results

RT: 16.79
Area: 105466
Amount: 0.449418
Amount Units: ug/ml



Reviewer: zhangji, 04-Mar-2022 12:15:45
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

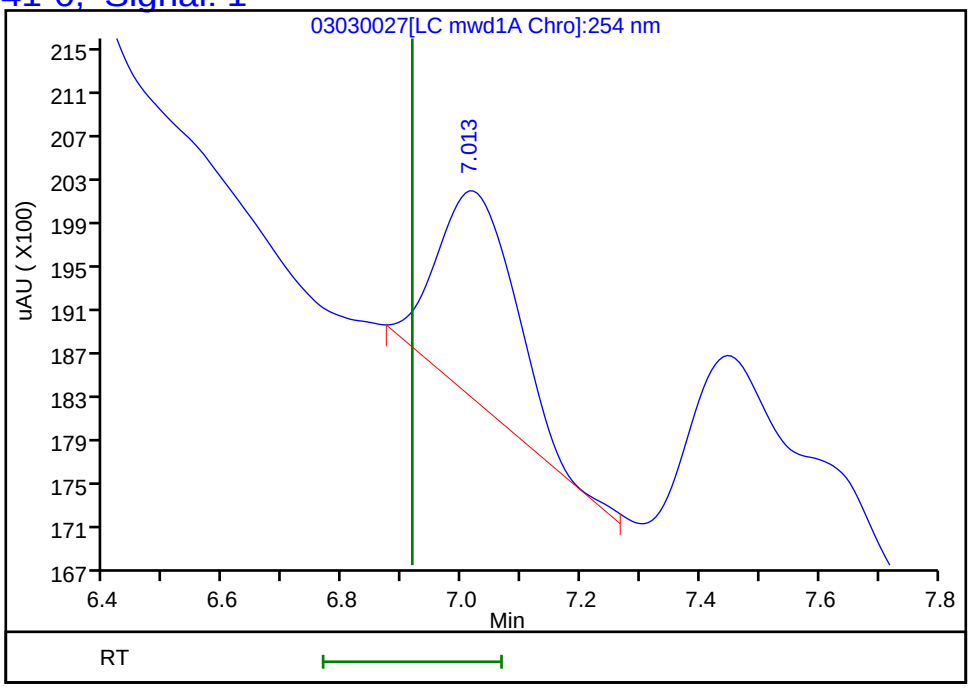
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030027.D				
Injection Date:	04-Mar-2022 02:20:31	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159137-A-3-A	Lab Sample ID:	280-159137-3		
Client ID:	EW7-PM25B-8-35				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

RT: 7.01
Response: 17381
Amount: 0.104620



Reviewer: zhangji, 04-Mar-2022 12:15:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM26A-8-25 | Lab Sample ID: 280-159137-4

Matrix: Water | Lab File ID: 03010061.D

Analysis Method: 8330A | Date Collected: 02/25/2022 13:25

Extraction Method: 3535 | Date Extracted: 03/01/2022 11:26

Sample wt/vol: 501.6(mL) | Date Analyzed: 03/02/2022 11:36

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

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

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

Analysis Batch No.: 567371 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	1.1	M	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	0.080	U M	0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	2.7	M	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.085
99-08-1	3-Nitrotoluene	0.40	U Q	0.40	0.40	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	3.0	M Q	0.15	0.12	0.058
2691-41-0	HMX	0.85	M J1	0.21	0.20	0.087
5755-27-1	MNX	0.40	U M	2.0	0.40	0.15
121-82-4	RDX	0.77	M	0.21	0.20	0.051
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	99		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010061.D
Lims ID: 280-159137-A-4-A
Client ID: EW7-PM26A-8-25
Sample Type: Client
Inject. Date: 02-Mar-2022 11:36:22 ALS Bottle#: 61 Worklist Smp#: 61
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159137-A-4-A
Misc. Info.: 280-0108907-061
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Mar-2022 13:06:29 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:55:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.582	6.588	-0.006	7128	0.0850	M
7 MNX	1		7.206			ND	U
8 RDX	1	7.575	7.575	0.000	8028	0.0775	M
$ 10 1,2-Dinitrobenzene	1	8.522	8.515	0.007	24725	0.1983	
11 1,3,5-Trinitrobenzene	1	8.642	8.642	0.000	11443	0.0525	M
12 1,3-Dinitrobenzene	1	9.241	9.262	-0.021	2552	0.008849	
13 Nitrobenzene	1	9.641	9.648	-0.007	24679	0.1286	
15 Tetryl	1		9.955			ND	U
17 2,4,6-Trinitrotoluene	1	10.868	10.862	0.006	22886	0.1129	M
18 4-Amino-2,6-dinitrotoluene	1	11.048	11.042	0.006	46139	0.3056	M
19 2-Amino-4,6-dinitrotoluene	1	11.295	11.288	0.007	54972	0.2719	M
20 2,6-Dinitrotoluene	1		11.462			ND	
21 2,4-Dinitrotoluene	1		11.635			ND	MU
22 o-Nitrotoluene	1		12.475			ND	
23 p-Nitrotoluene	1	12.888	12.895	-0.007	1239	0.0117	
24 m-Nitrotoluene	1		13.462			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

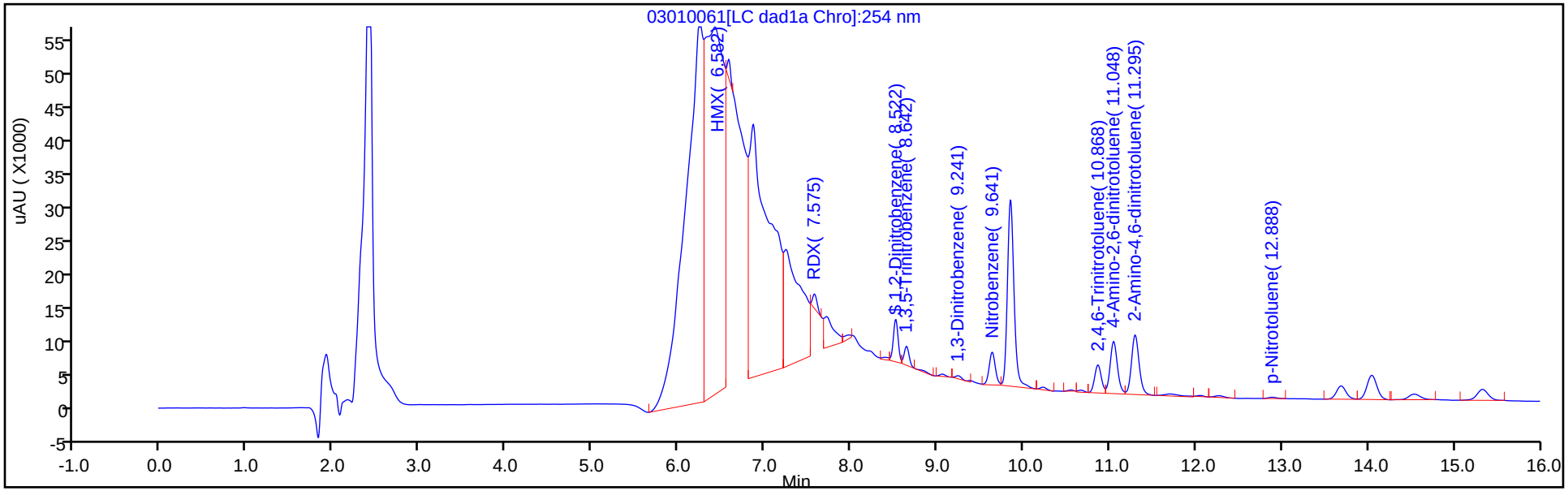
Report Date: 02-Mar-2022 13:06:34 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

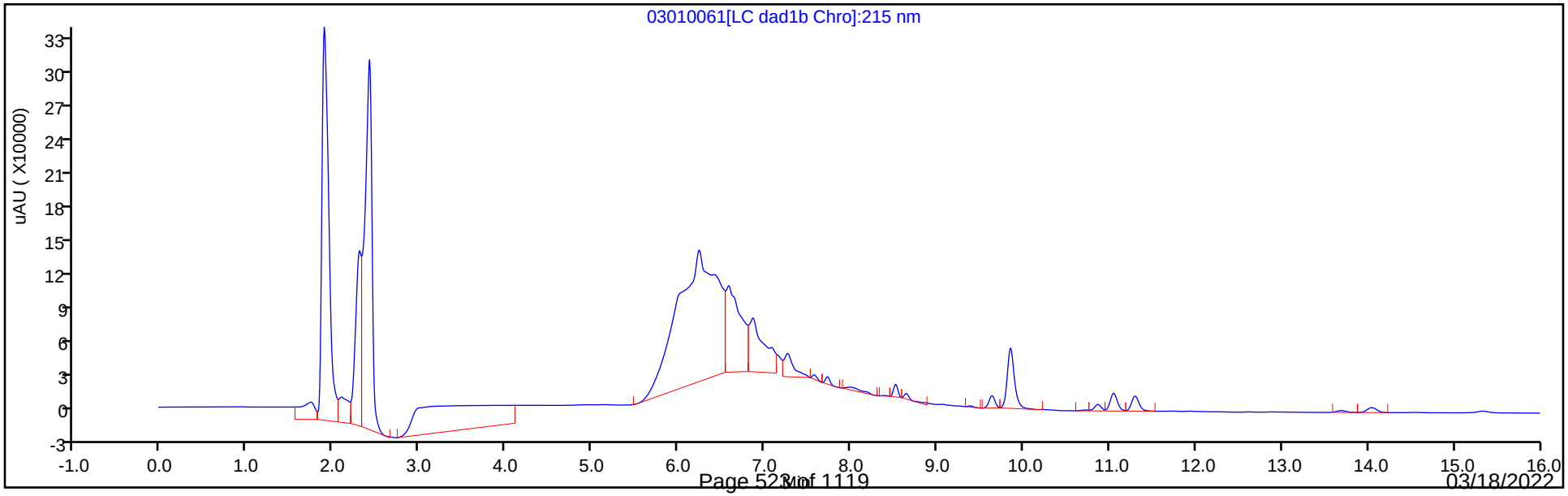
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Injection Date:	02-Mar-2022 11:36:22	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159137-A-4-A	Lab Sample ID:	280-159137-4	Worklist Smp#:	61
Client ID:	EW7-PM26A-8-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	61
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010061.D				
Lims ID:	280-159137-A-4-A				
Client ID:	EW7-PM26A-8-25				
Sample Type:	Client				
Inject. Date:	02-Mar-2022 11:36:22	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159137-A-4-A				
Misc. Info.:	280-0108907-061				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Mar-2022 13:06:29	Calib Date:	05-Jan-2022 04:24:15		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1635				

First Level Reviewer: zhangji Date: 02-Mar-2022 12:55:25

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1983	99.14

Manual Integration/User Assign Peak Report

Eurofins Denver

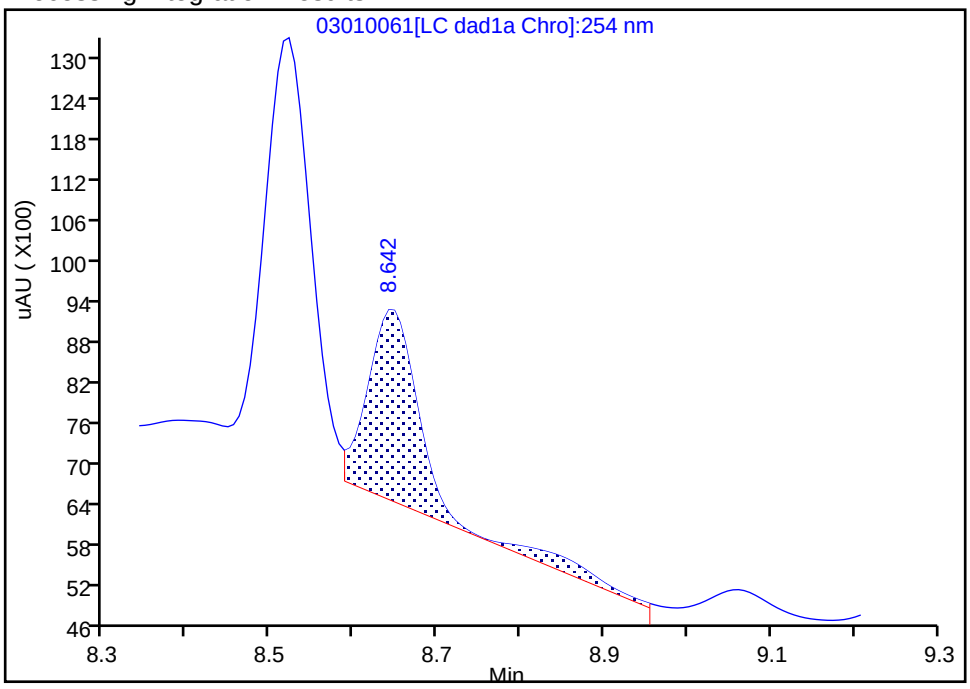
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Injection Date:	02-Mar-2022 11:36:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159137-A-4-A	Lab Sample ID:	280-159137-4		
Client ID:	EW7-PM26A-8-25				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

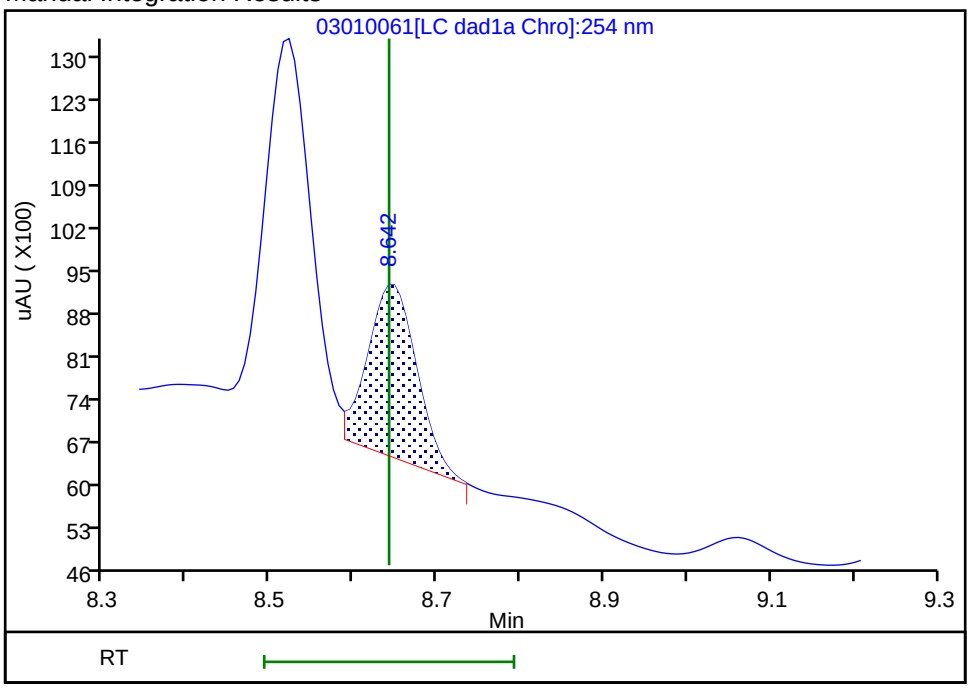
Processing Integration Results

RT: 8.64
Area: 12941
Amount: 0.059336
Amount Units: ug/mL



Manual Integration Results

RT: 8.64
Area: 11443
Amount: 0.052468
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:55:01

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

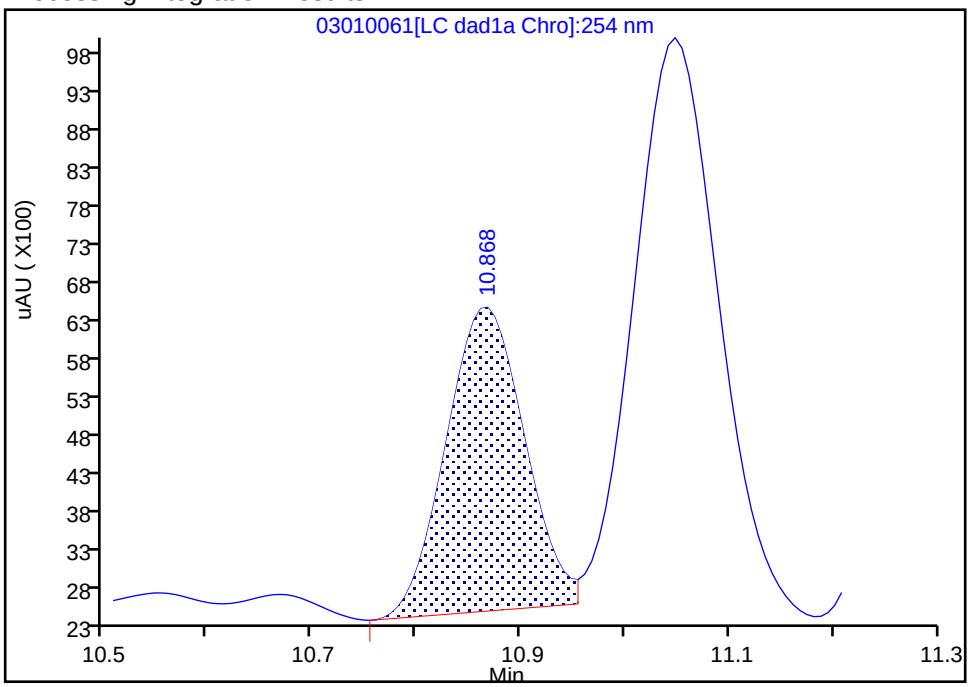
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Injection Date:	02-Mar-2022 11:36:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159137-A-4-A	Lab Sample ID:	280-159137-4		
Client ID:	EW7-PM26A-8-25				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

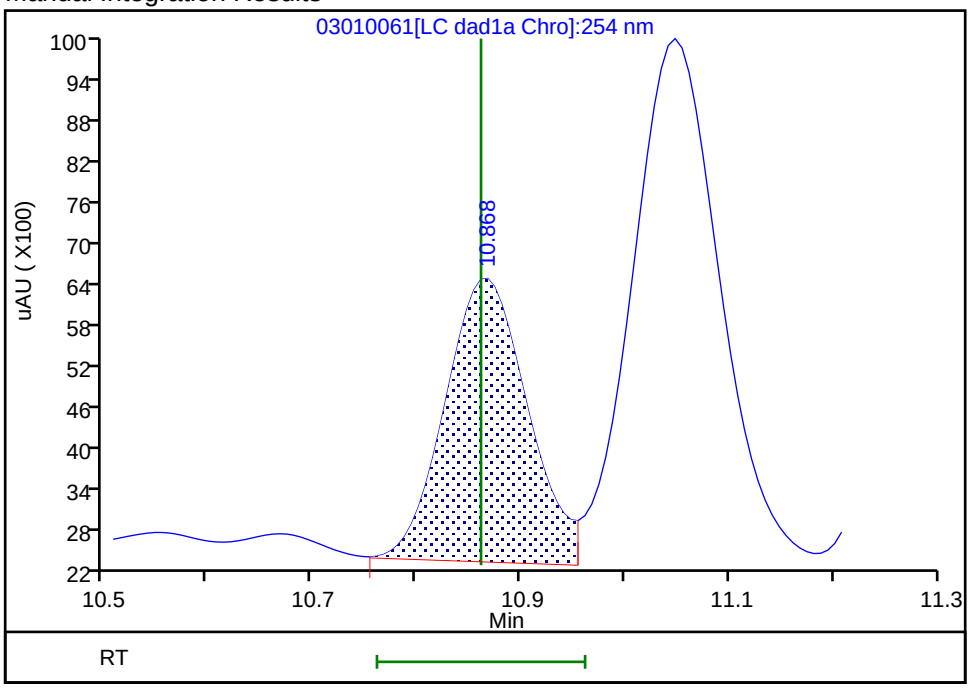
Processing Integration Results

RT: 10.87
Area: 20768
Amount: 0.102444
Amount Units: ug/mL



Manual Integration Results

RT: 10.87
Area: 22886
Amount: 0.112891
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:55:23

Audit Action: Assigned New Baseline Audit Reason: Baseline

User Disabled Compound Report

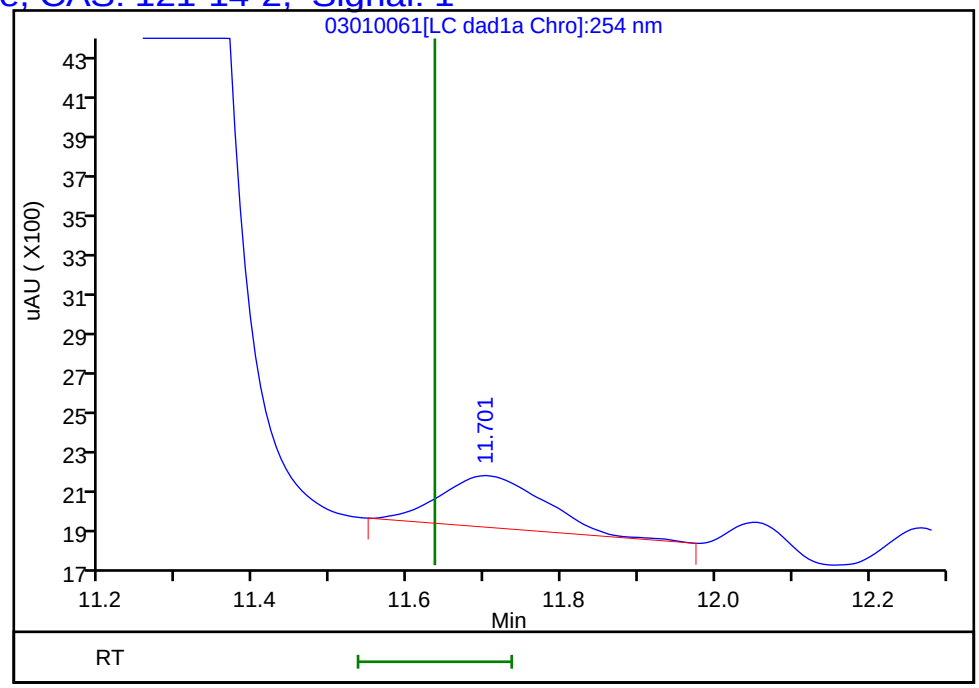
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010061.d
Injection Date: 02-Mar-2022 11:36:22 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-4-A Lab Sample ID: 280-159137-4
Client ID: EW7-PM26A-8-25
Operator ID: JZ ALS Bottle#: 61 Worklist Smp#: 61
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 11.70
Response: 2430
Amount: 0.008398



Reviewer: zhangji, 02-Mar-2022 12:55:25
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

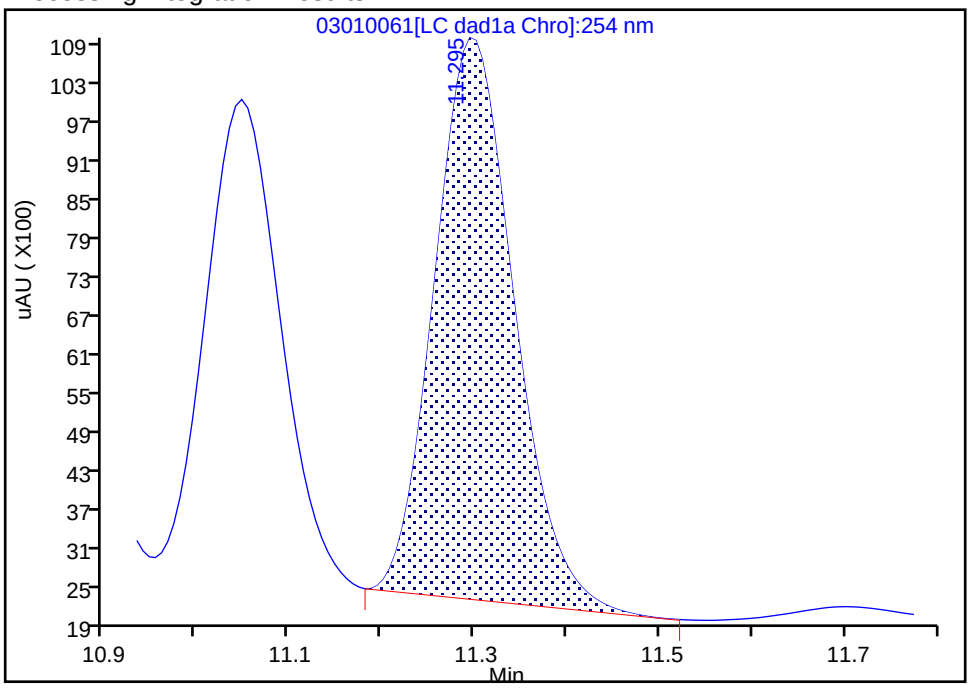
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Injection Date:	02-Mar-2022 11:36:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159137-A-4-A	Lab Sample ID:	280-159137-4		
Client ID:	EW7-PM26A-8-25				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

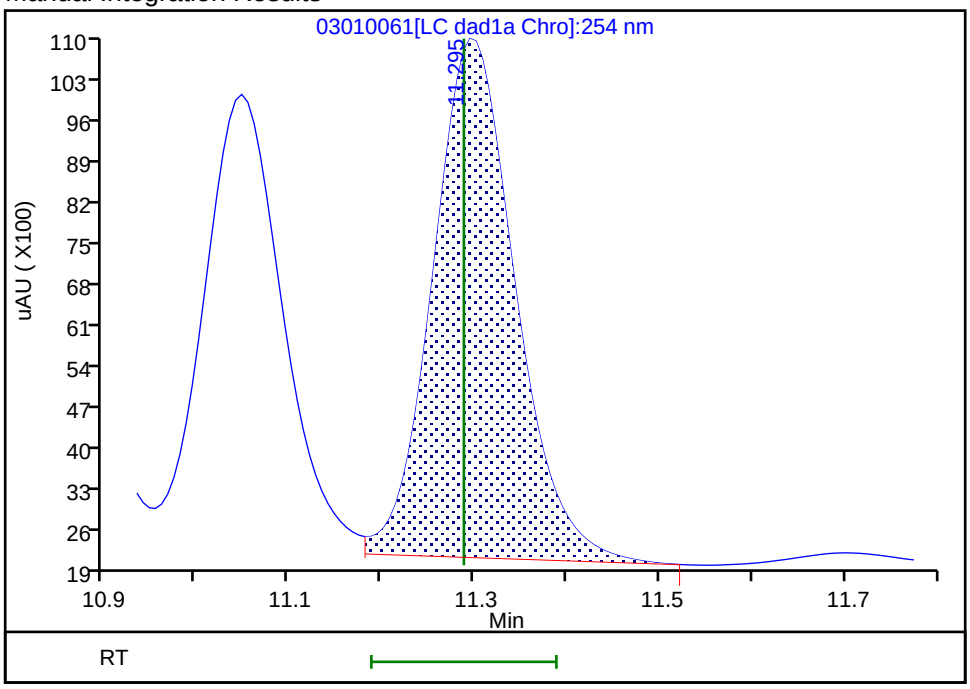
Processing Integration Results

RT: 11.29
Area: 52045
Amount: 0.257430
Amount Units: ug/mL



Manual Integration Results

RT: 11.29
Area: 54972
Amount: 0.271908
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:55:23

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

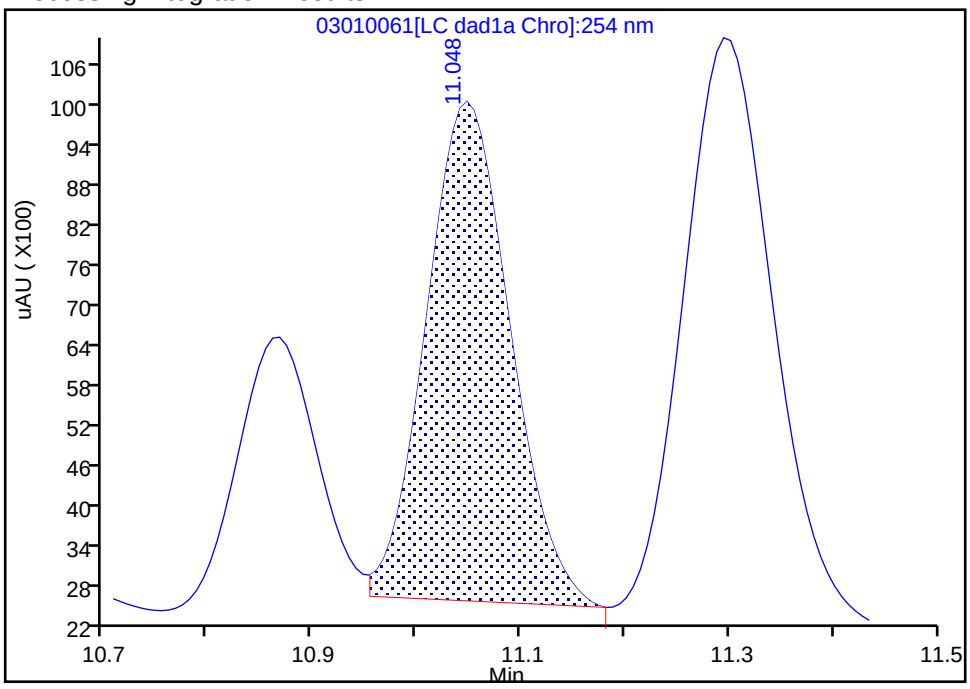
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Injection Date:	02-Mar-2022 11:36:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159137-A-4-A	Lab Sample ID:	280-159137-4		
Client ID:	EW7-PM26A-8-25				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

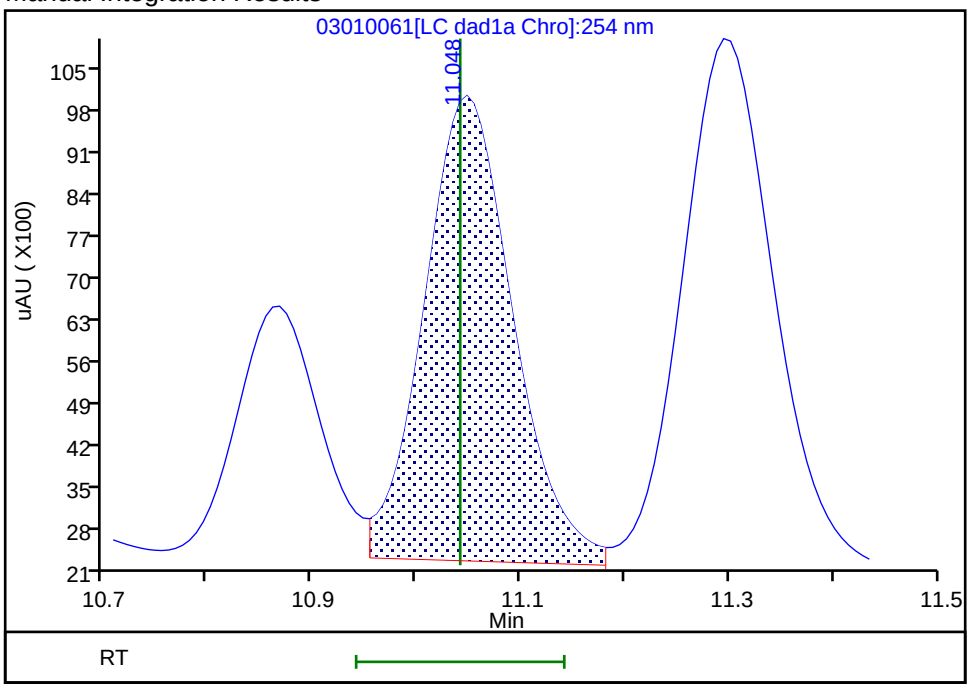
Processing Integration Results

RT: 11.05
Area: 41835
Amount: 0.277080
Amount Units: ug/mL



Manual Integration Results

RT: 11.05
Area: 46139
Amount: 0.305586
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:55:23
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

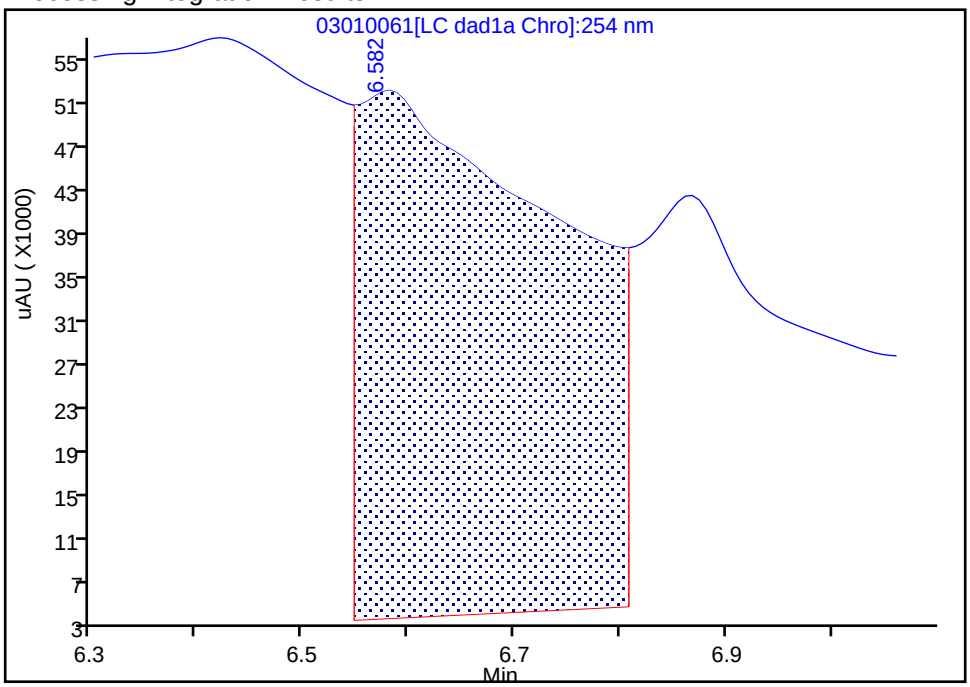
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010061.d				
Injection Date:	02-Mar-2022 11:36:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159137-A-4-A	Lab Sample ID:	280-159137-4		
Client ID:	EW7-PM26A-8-25				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

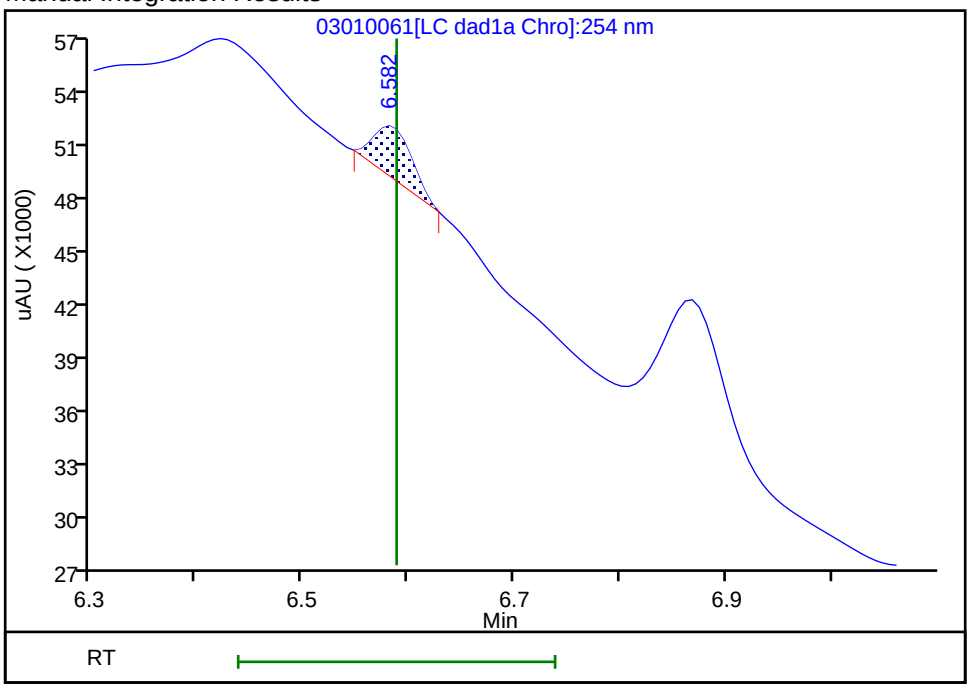
Processing Integration Results

RT: 6.58
Area: 633458
Amount: 7.556712
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 7128
Amount: 0.085032
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:54:46
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

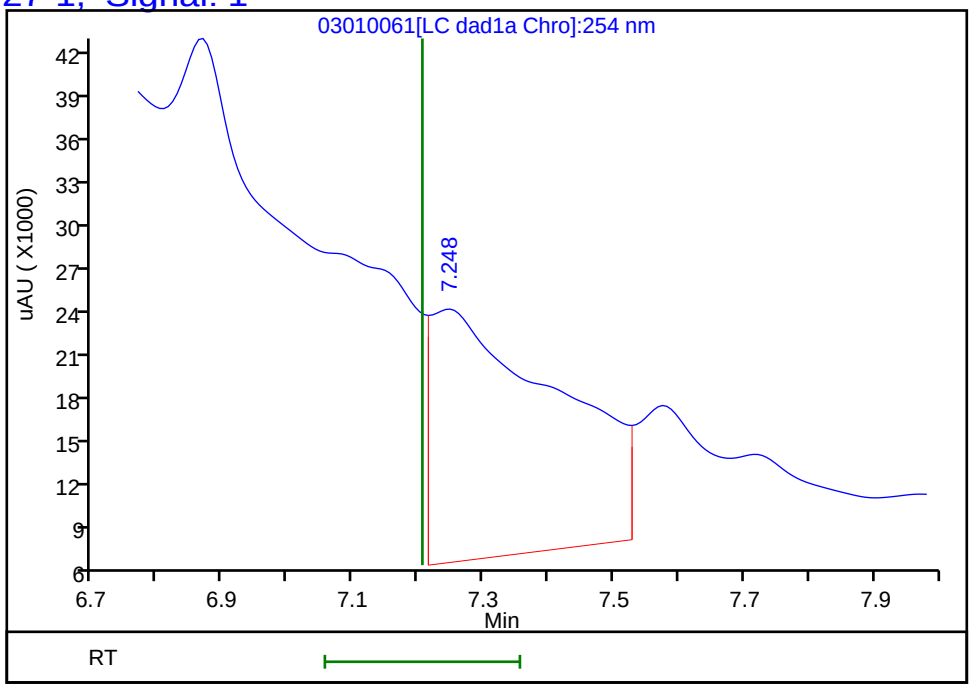
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010061.d
Injection Date: 02-Mar-2022 11:36:22 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-4-A Lab Sample ID: 280-159137-4
Client ID: EW7-PM26A-8-25
Operator ID: JZ ALS Bottle#: 61 Worklist Smp#: 61
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.25
Response: 234349
Amount: 1.859980



Reviewer: zhangji, 02-Mar-2022 12:55:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

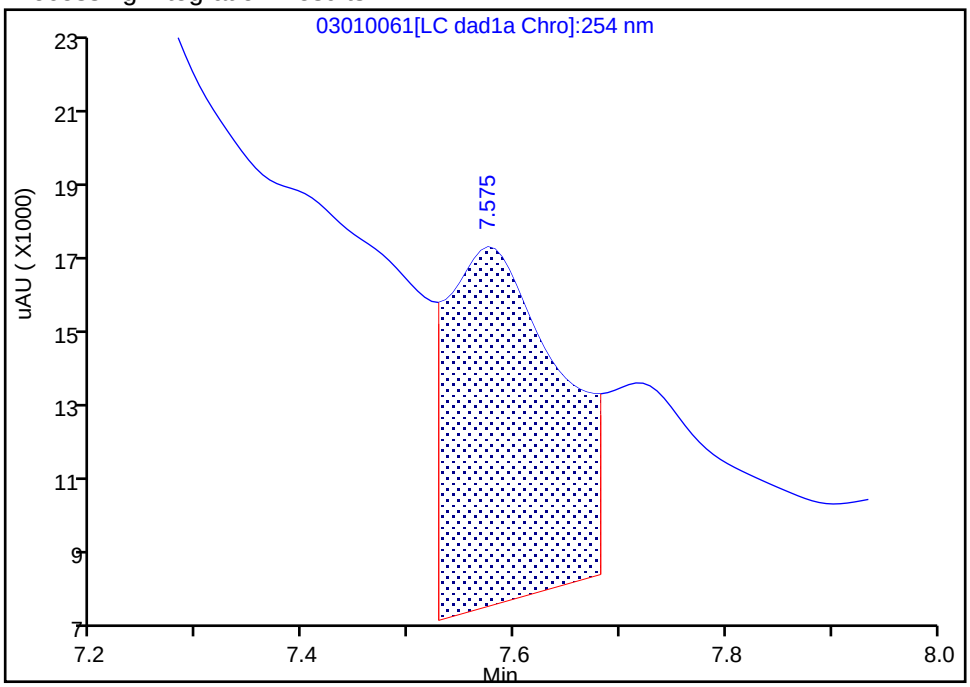
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010061.d				
Injection Date:	02-Mar-2022 11:36:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159137-A-4-A	Lab Sample ID:	280-159137-4		
Client ID:	EW7-PM26A-8-25				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

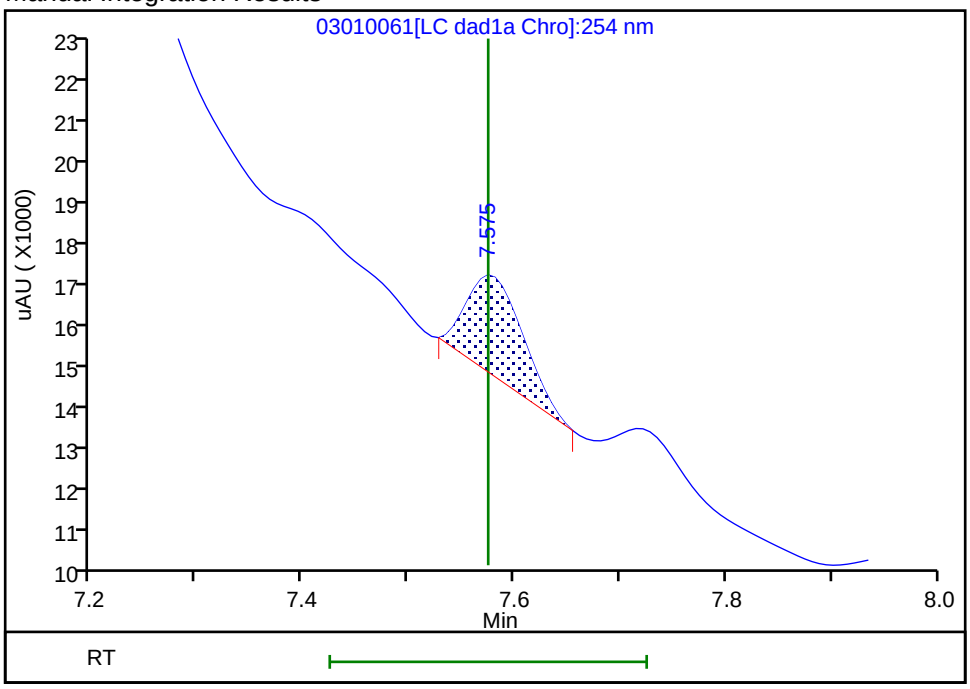
Processing Integration Results

RT: 7.57
Area: 64010
Amount: 0.617802
Amount Units: ug/mL



Manual Integration Results

RT: 7.57
Area: 8028
Amount: 0.077483
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:54:56
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

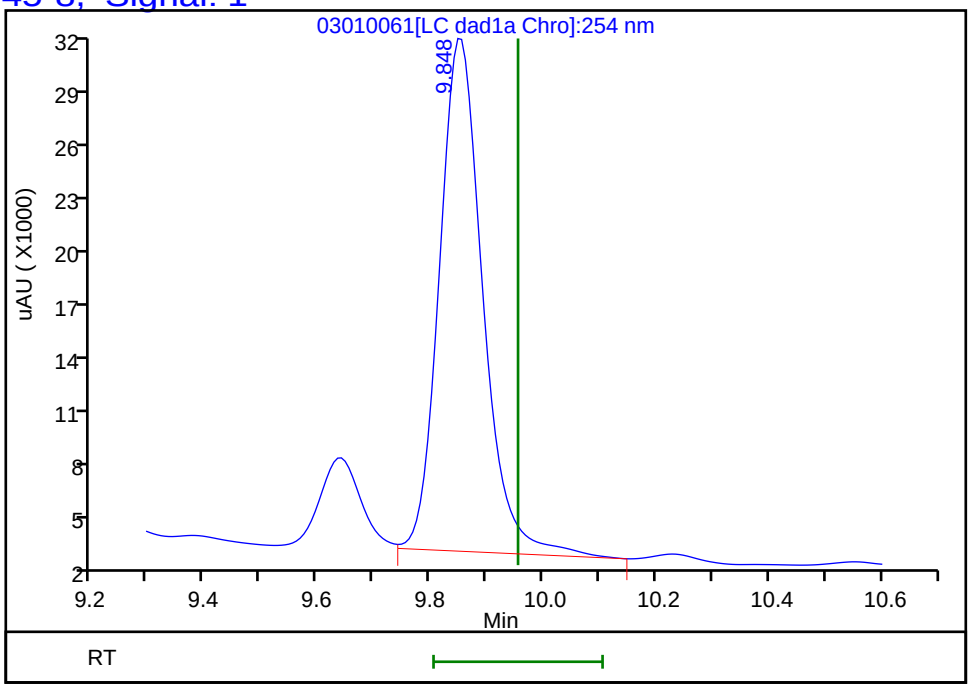
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010061.d
Injection Date: 02-Mar-2022 11:36:22 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-4-A Lab Sample ID: 280-159137-4
Client ID: EW7-PM26A-8-25
Operator ID: JZ ALS Bottle#: 61 Worklist Smp#: 61
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 9.85
Response: 149029
Amount: 0.873728



Reviewer: zhangji, 02-Mar-2022 12:55:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM26A-8-25 | Lab Sample ID: 280-159137-4

Matrix: Water | Lab File ID: 03030028.D

Analysis Method: 8330A | Date Collected: 02/25/2022 13:25

Extraction Method: 3535 | Date Extracted: 03/01/2022 11:26

Sample wt/vol: 501.6(mL) | Date Analyzed: 03/04/2022 02:55

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

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

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

Analysis Batch No.: 567645 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
99-99-0	4-Nitrotoluene	0.40	U	0.41	0.40	0.10
2691-41-0	*HMX*	*1.4*	*M J1*	*0.21*	0.20	*0.087*
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.091

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	99	*M*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030028.D
Lims ID: 280-159137-A-4-A
Client ID: EW7-PM26A-8-25
Sample Type: Client
Inject. Date: 04-Mar-2022 02:55:38 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159137-A-4-A
Misc. Info.: 280-0108978-028
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-Mar-2022 12:18:26 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1659

First Level Reviewer: zhangji Date: 04-Mar-2022 12:16:24

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.887	6.916	-0.029	24098	0.1451	M
	6 MNX	1		7.649			ND	U
	8 RDX	1	9.113	9.150	-0.037	13223	0.0680	M
	9 Nitrobenzene	1		12.083			ND	
$	10 1,2-Dinitrobenzene	1	13.287	13.323	-0.036	49277	0.1973	M
	12 1,3-Dinitrobenzene	1		15.683			ND	
	14 o-Nitrotoluene	1	16.787	16.863	-0.076	31266	0.1332	
	16 p-Nitrotoluene	1		17.176			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.780	17.823	-0.043	84108	0.3150	
	18 m-Nitrotoluene	1		18.150			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.780	18.843	-0.063	137885	0.3824	
	20 1,3,5-Trinitrobenzene	1		18.996			ND	
	21 2,6-Dinitrotoluene	1		20.316			ND	
	22 2,4-Dinitrotoluene	1		20.836			ND	
	23 Tetryl	1		24.583			ND	
	24 2,4,6-Trinitrotoluene	1	25.293	25.330	-0.037	44228	0.1198	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

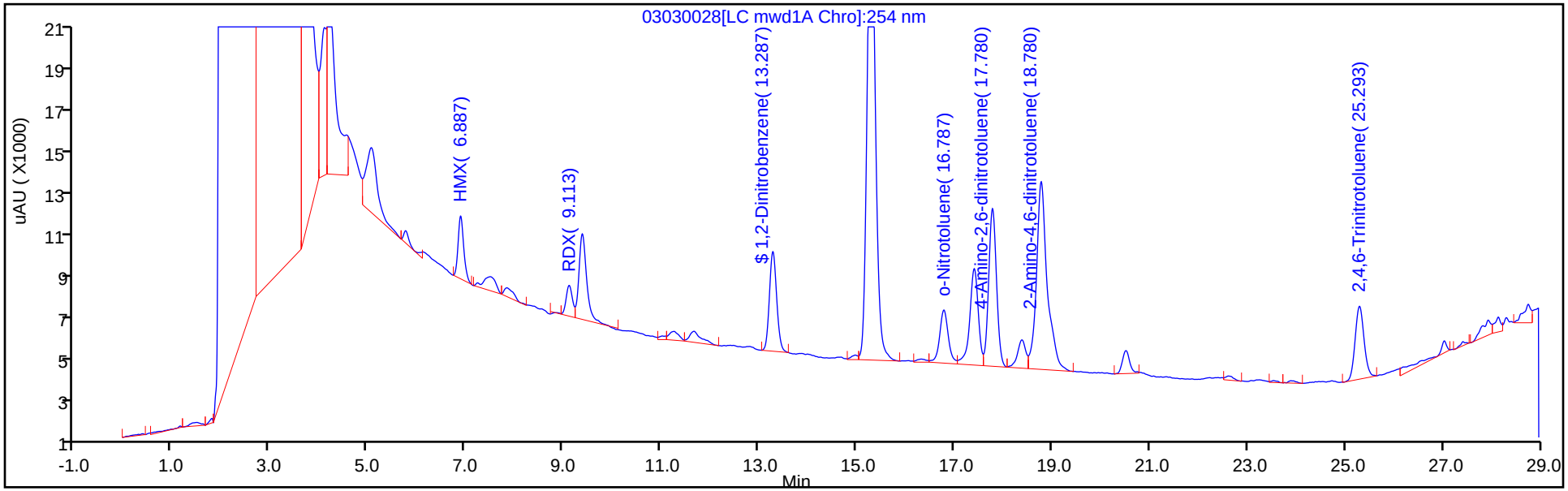
Report Date: 04-Mar-2022 12:18:30 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

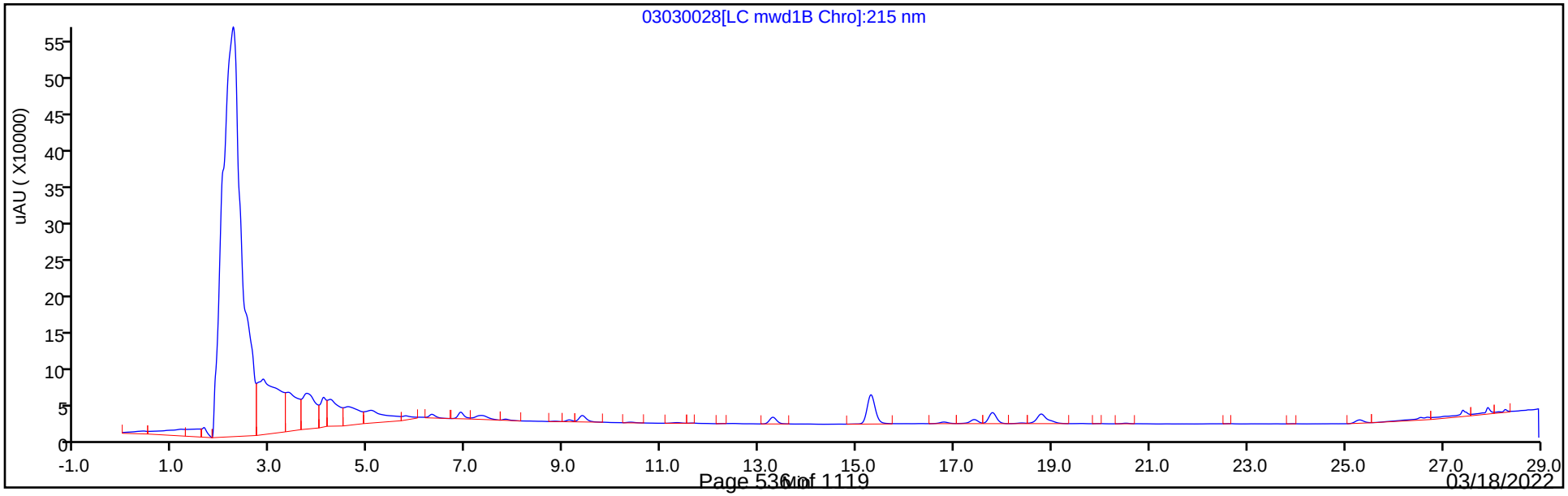
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Injection Date:	04-Mar-2022 02:55:38	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159137-A-4-A	Lab Sample ID:	280-159137-4	Worklist Smp#:	28
Client ID:	EW7-PM26A-8-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030028.D				
Lims ID:	280-159137-A-4-A				
Client ID:	EW7-PM26A-8-25				
Sample Type:	Client				
Inject. Date:	04-Mar-2022 02:55:38	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159137-A-4-A				
Misc. Info.:	280-0108978-028				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	04-Mar-2022 12:18:26	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1659				
First Level Reviewer: zhangji		Date:	04-Mar-2022 12:16:24		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1973	98.65

Manual Integration/User Assign Peak Report

Eurofins Denver

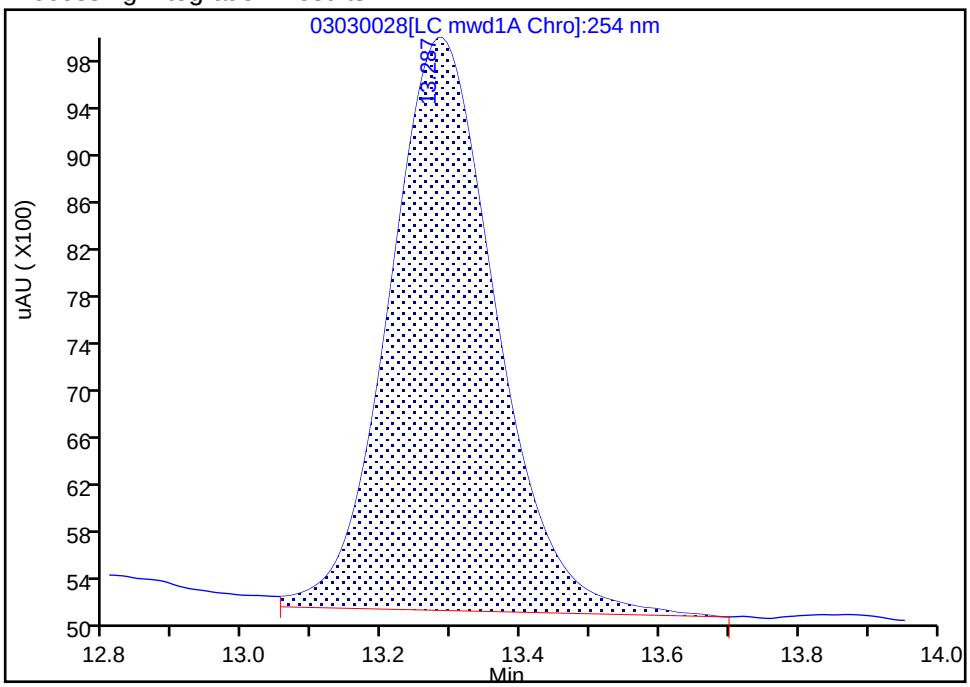
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Injection Date:	04-Mar-2022 02:55:38	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159137-A-4-A	Lab Sample ID:	280-159137-4		
Client ID:	EW7-PM26A-8-25				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

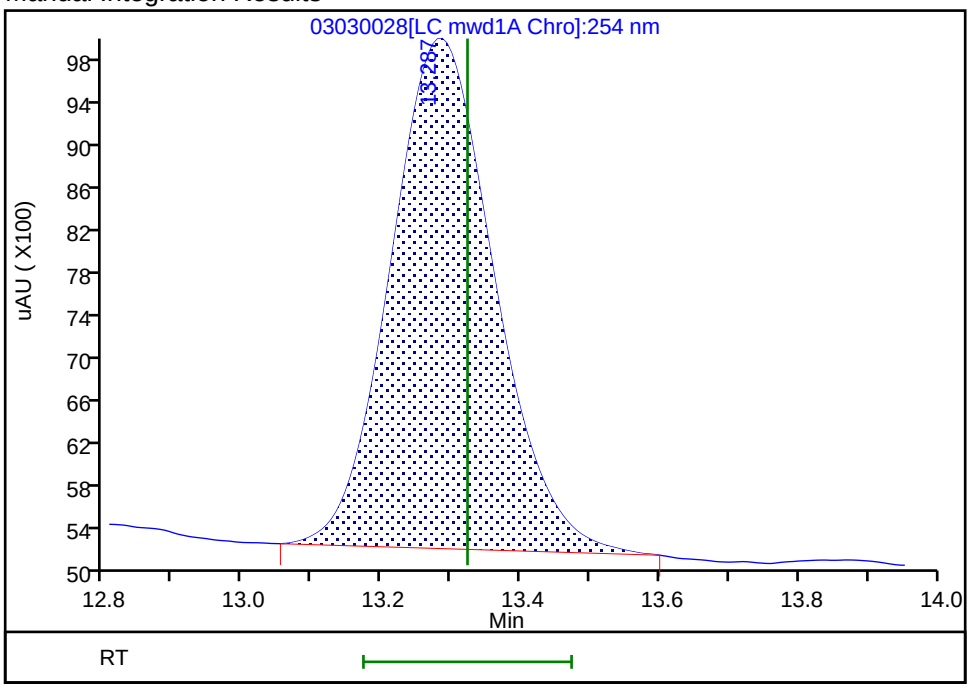
Processing Integration Results

RT: 13.29
Area: 51639
Amount: 0.206760
Amount Units: ug/ml



Manual Integration Results

RT: 13.29
Area: 49277
Amount: 0.197303
Amount Units: ug/ml



Reviewer: zhangji, 04-Mar-2022 12:16:17

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

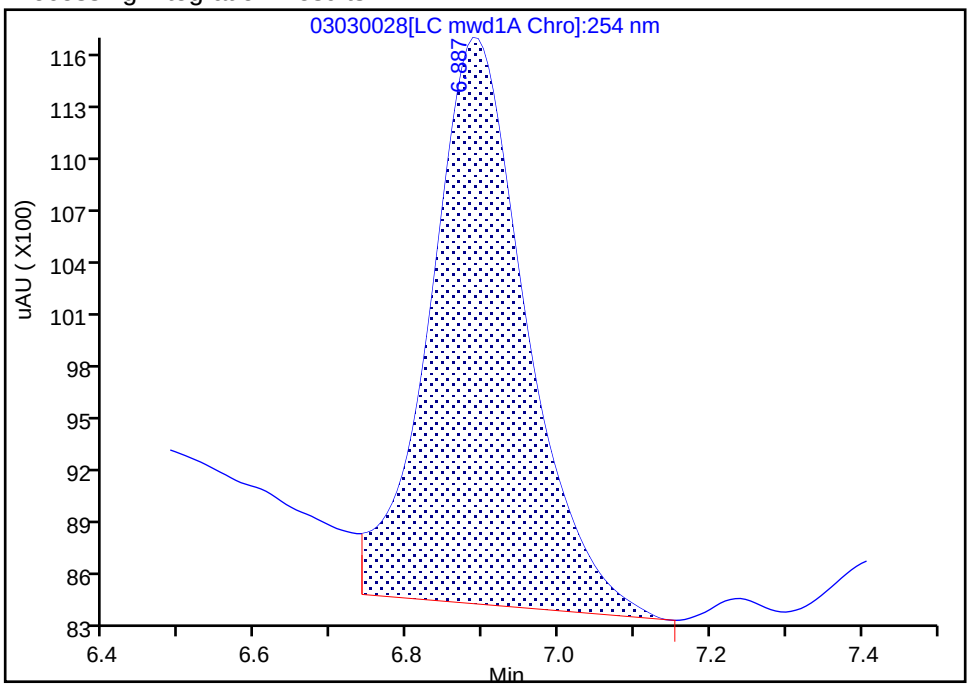
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030028.D				
Injection Date:	04-Mar-2022 02:55:38	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159137-A-4-A	Lab Sample ID:	280-159137-4		
Client ID:	EW7-PM26A-8-25				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

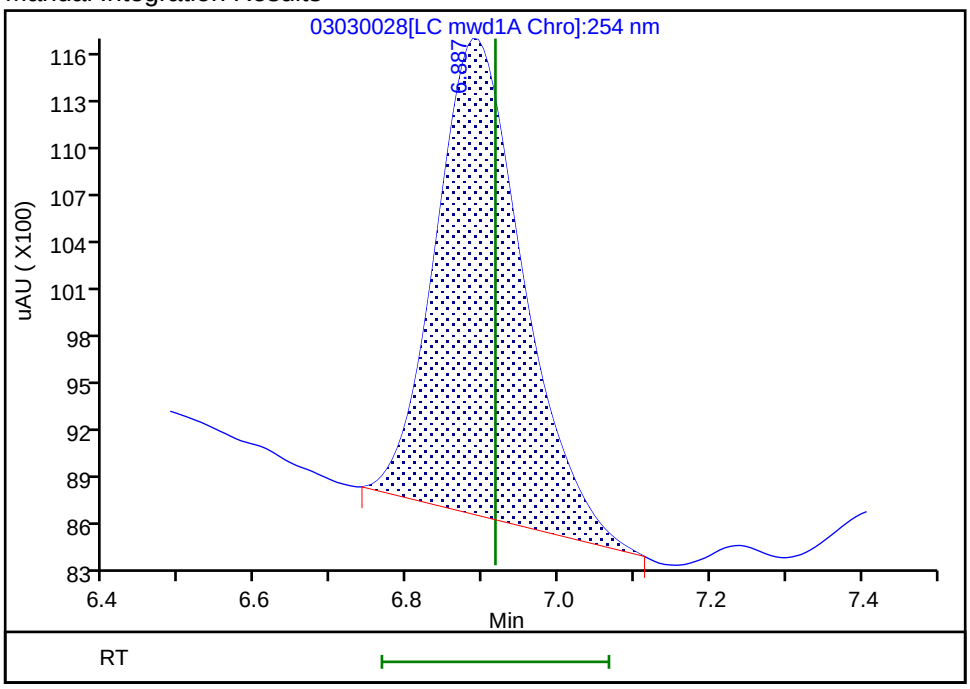
Processing Integration Results

RT: 6.89
Area: 28435
Amount: 0.171156
Amount Units: ug/ml



Manual Integration Results

RT: 6.89
Area: 24098
Amount: 0.145050
Amount Units: ug/ml



Reviewer: zhangji, 04-Mar-2022 12:16:01

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

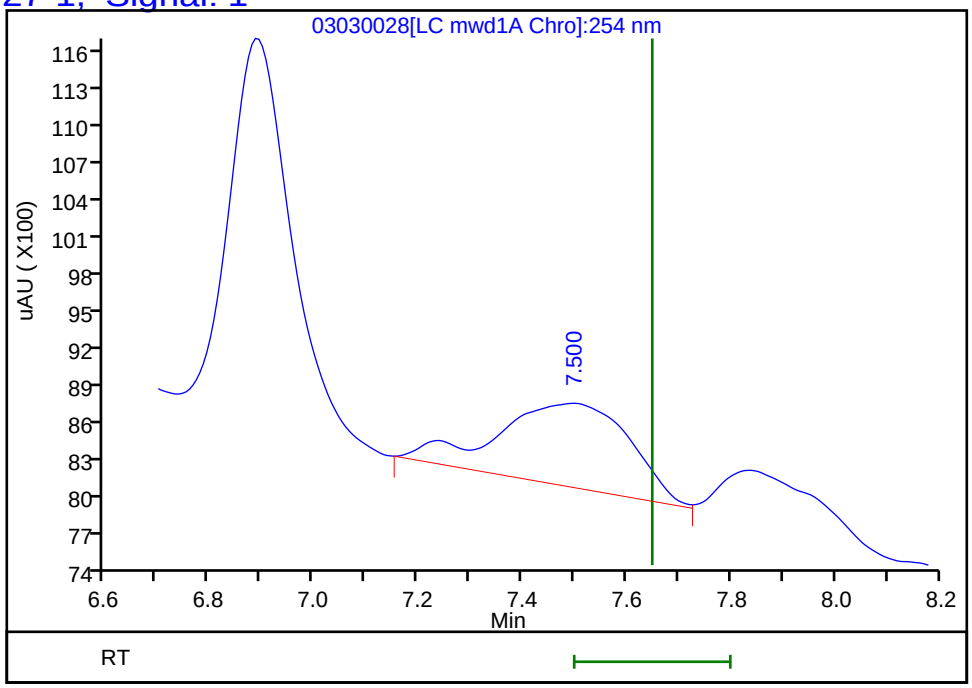
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030028.D				
Injection Date:	04-Mar-2022 02:55:38	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159137-A-4-A	Lab Sample ID:	280-159137-4		
Client ID:	EW7-PM26A-8-25				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.50
Response: 11681
Amount: 0.046709



Reviewer: zhangji, 04-Mar-2022 12:16:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

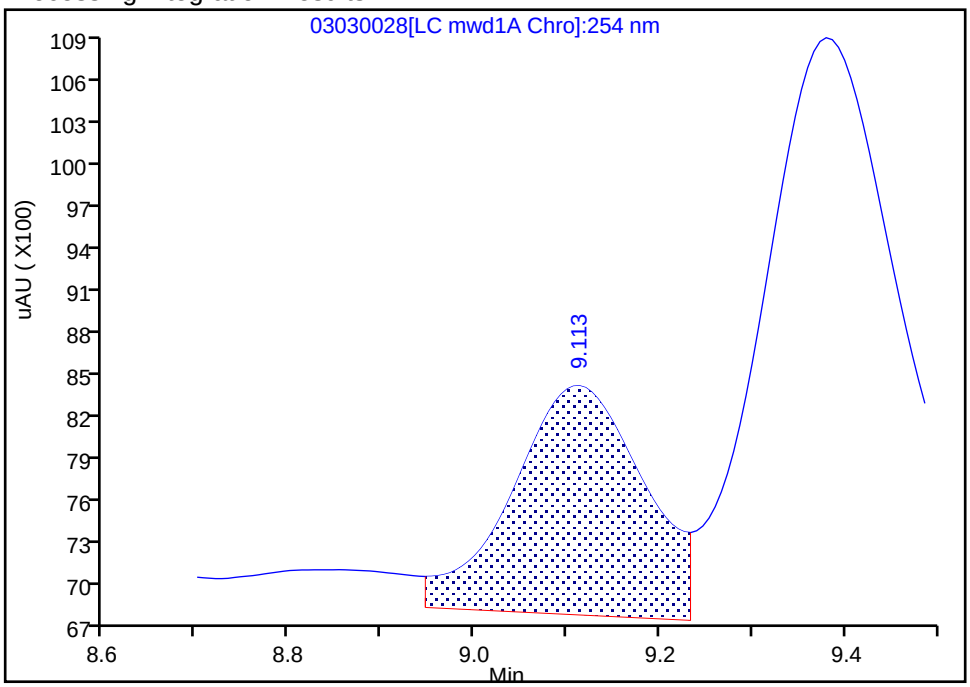
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Injection Date:	04-Mar-2022 02:55:38	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159137-A-4-A	Lab Sample ID:	280-159137-4		
Client ID:	EW7-PM26A-8-25				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

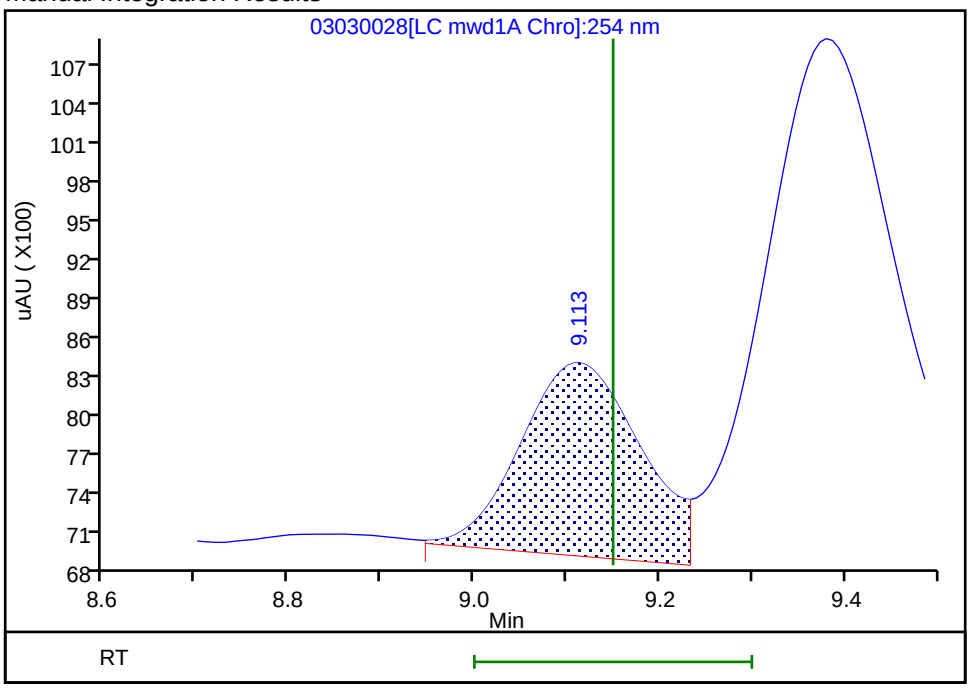
Processing Integration Results

RT: 9.11
Area: 15940
Amount: 0.082025
Amount Units: ug/ml



Manual Integration Results

RT: 9.11
Area: 13223
Amount: 0.068044
Amount Units: ug/ml



Reviewer: zhangji, 04-Mar-2022 12:16:09
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM26B-8-35 | Lab Sample ID: 280-159137-5

Matrix: Water | Lab File ID: 03010062.D

Analysis Method: 8330A | Date Collected: 02/25/2022 15:05

Extraction Method: 3535 | Date Extracted: 03/01/2022 11:26

Sample wt/vol: 498.4(mL) | Date Analyzed: 03/02/2022 11:59

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

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

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

Analysis Batch No.: 567371 | 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 M	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	0.080	U M	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
99-08-1	3-Nitrotoluene	0.40	U Q	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U M	0.41	0.40	0.10
2691-41-0	HMX	0.20	U	0.21	0.20	0.088
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	105	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010062.D
Lims ID: 280-159137-A-5-A
Client ID: EW7-PM26B-8-35
Sample Type: Client
Inject. Date: 02-Mar-2022 11:59:15 ALS Bottle#: 62 Worklist Smp#: 62
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159137-A-5-A
Misc. Info.: 280-0108907-062
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Mar-2022 13:36:21 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 13:58:27

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.588			ND	
7 MNX	1	7.240	7.206	0.034	213115	1.69	M
8 RDX	1	7.600	7.575	0.025	11358	0.1096	M
$ 10 1,2-Dinitrobenzene	1	8.513	8.515	-0.002	26210	0.2102	M
11 1,3,5-Trinitrobenzene	1		8.642			ND	U
12 1,3-Dinitrobenzene	1		9.262			ND	U
13 Nitrobenzene	1	9.640	9.648	-0.008	40013	0.2085	M
15 Tetryl	1		9.955			ND	U
17 2,4,6-Trinitrotoluene	1		10.862			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.042			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.288			ND	
20 2,6-Dinitrotoluene	1		11.462			ND	U
21 2,4-Dinitrotoluene	1		11.635			ND	
22 o-Nitrotoluene	1		12.475			ND	
23 p-Nitrotoluene	1		12.895			ND	U
24 m-Nitrotoluene	1		13.462			ND	

QC Flag Legend

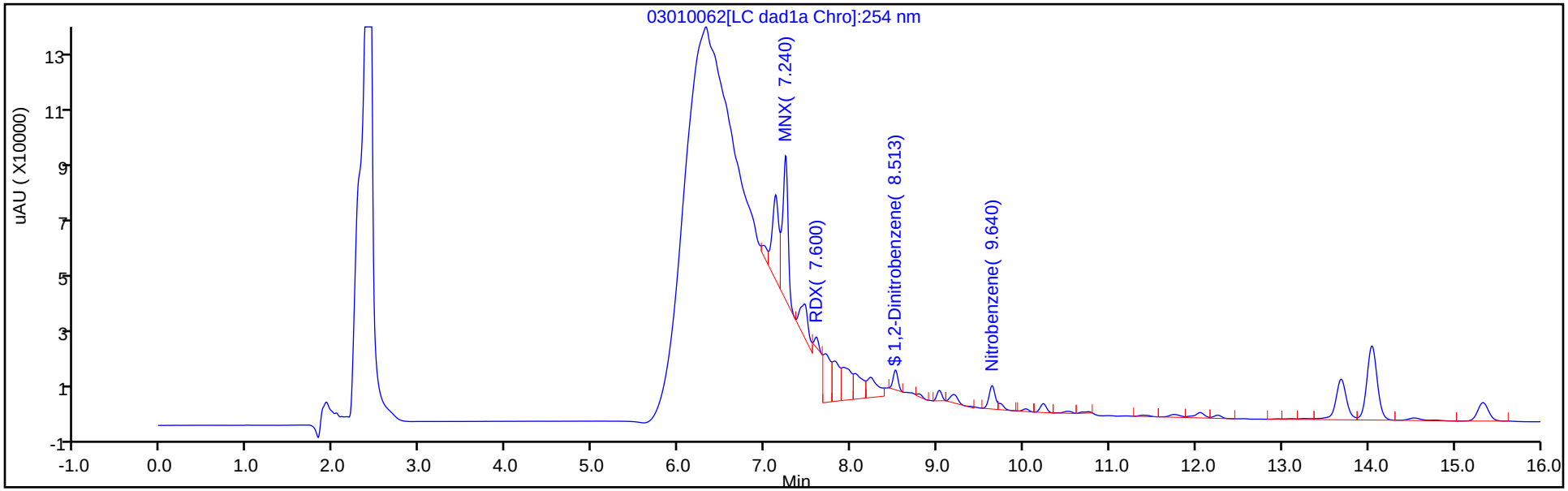
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 02-Mar-2022 13:58:27 Chrom Revision: 2.3 16-Feb-2022 17:52:00

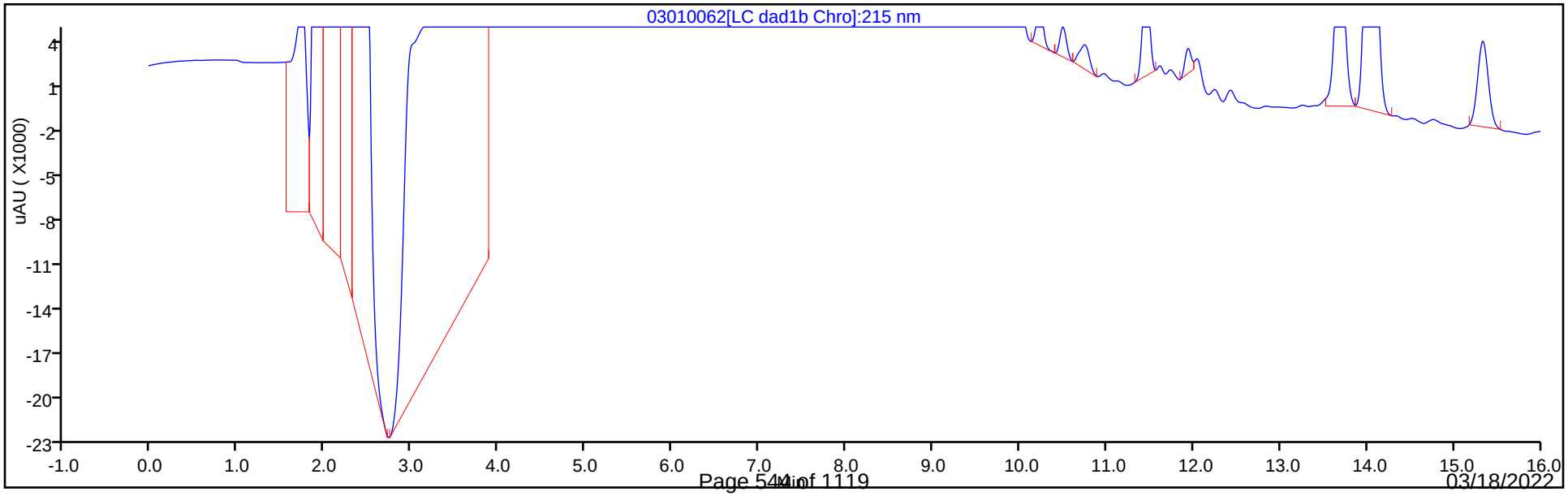
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010062.d				
Injection Date:	02-Mar-2022 11:59:15	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159137-A-5-A	Lab Sample ID:	280-159137-5	Worklist Smp#:	62
Client ID:	EW7-PM26B-8-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	62
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010062.D				
Lims ID:	280-159137-A-5-A				
Client ID:	EW7-PM26B-8-35				
Sample Type:	Client				
Inject. Date:	02-Mar-2022 11:59:15	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159137-A-5-A				
Misc. Info.:	280-0108907-062				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Mar-2022 13:36:21	Calib Date:	05-Jan-2022 04:24:15		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1635				

First Level Reviewer: zhangji Date: 02-Mar-2022 13:58:27

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2102	105.09

Manual Integration/User Assign Peak Report

Eurofins Denver

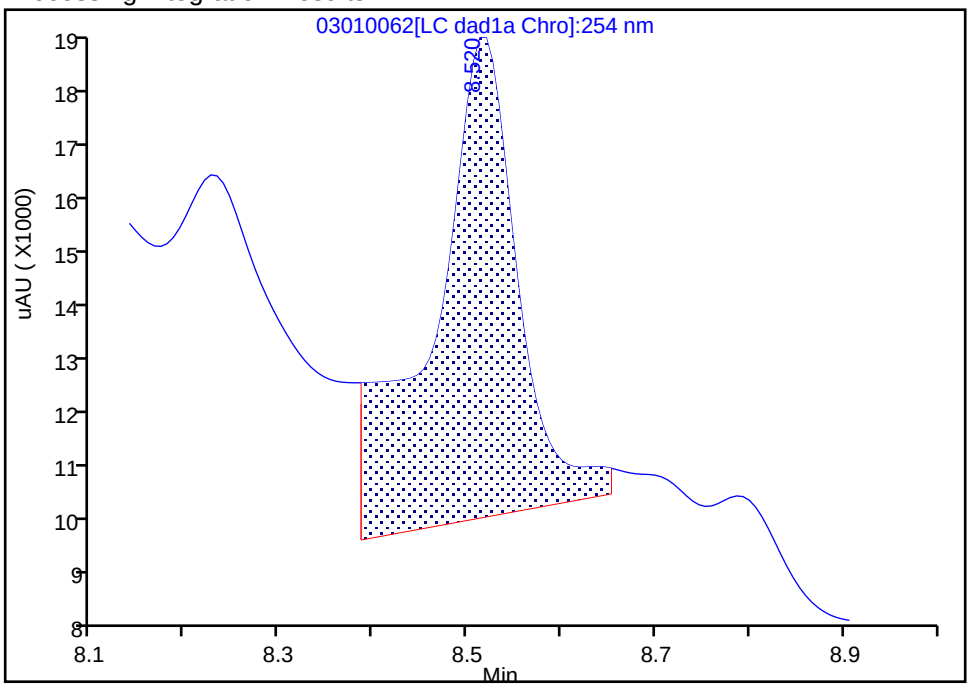
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Injection Date:	02-Mar-2022 11:59:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159137-A-5-A	Lab Sample ID:	280-159137-5		
Client ID:	EW7-PM26B-8-35				
Operator ID:	JZ	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

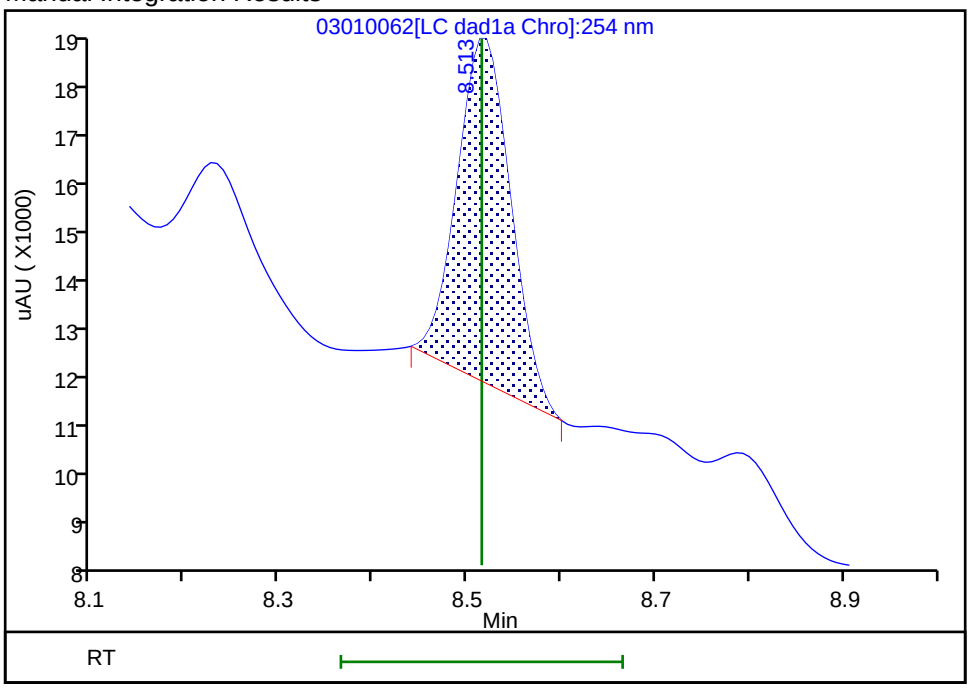
Processing Integration Results

RT: 8.52
Area: 52967
Amount: 0.424763
Amount Units: ug/mL



Manual Integration Results

RT: 8.51
Area: 26210
Amount: 0.210188
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:56:01

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

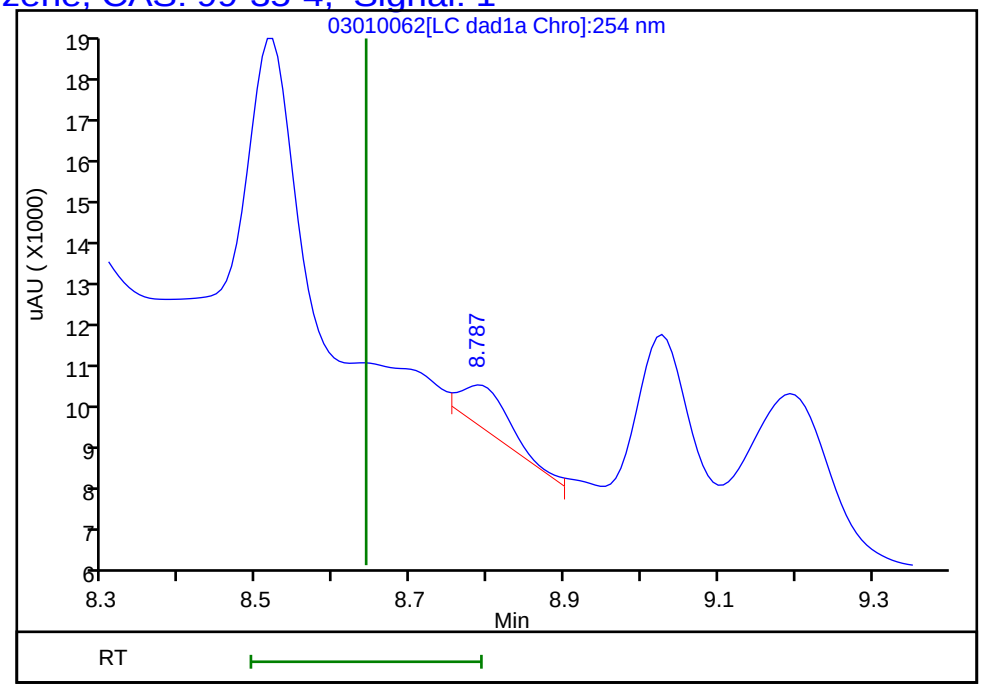
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010062.d
Injection Date: 02-Mar-2022 11:59:15 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-5-A Lab Sample ID: 280-159137-5
Client ID: EW7-PM26B-8-35
Operator ID: JZ ALS Bottle#: 62 Worklist Smp#: 62
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 8.79
Response: 4211
Amount: 0.019308



Reviewer: zhangji, 02-Mar-2022 12:56:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

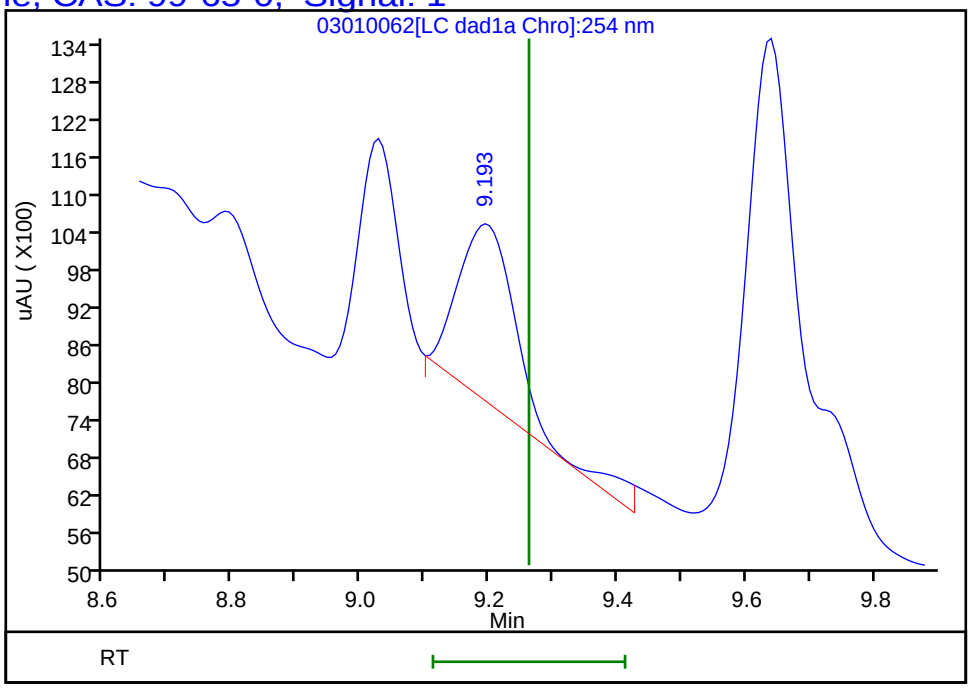
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010062.d
Injection Date: 02-Mar-2022 11:59:15 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-5-A Lab Sample ID: 280-159137-5
Client ID: EW7-PM26B-8-35
Operator ID: JZ ALS Bottle#: 62 Worklist Smp#: 62
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 9.19
Response: 18439
Amount: 0.063935



Reviewer: zhangji, 02-Mar-2022 12:56:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

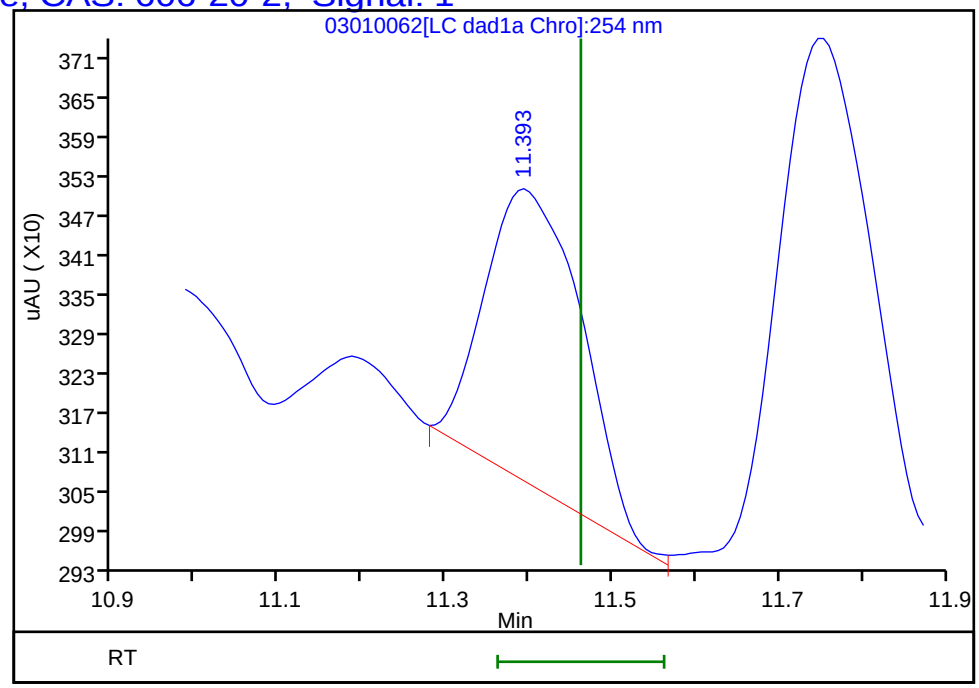
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010062.d
Injection Date: 02-Mar-2022 11:59:15 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-5-A Lab Sample ID: 280-159137-5
Client ID: EW7-PM26B-8-35
Operator ID: JZ ALS Bottle#: 62 Worklist Smp#: 62
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

20 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 11.39
Response: 3624
Amount: 0.025322



Reviewer: zhangji, 02-Mar-2022 12:56:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

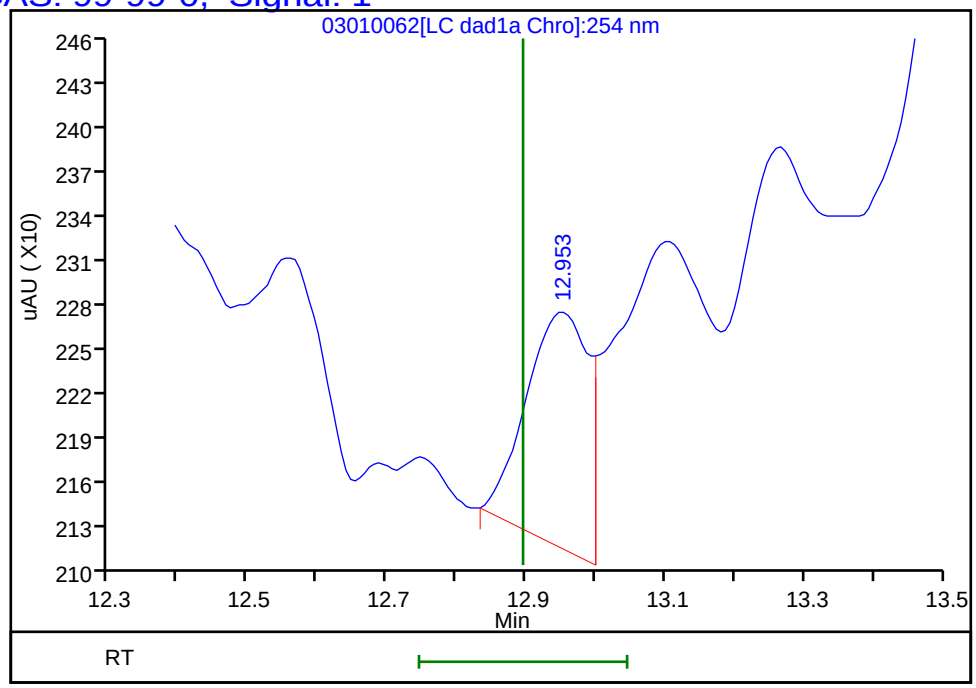
User Disabled Compound Report

Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010062.d
Injection Date: 02-Mar-2022 11:59:15 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-5-A Lab Sample ID: 280-159137-5
Client ID: EW7-PM26B-8-35
Operator ID: JZ ALS Bottle#: 62 Worklist Smp#: 62
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

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

RT: 12.95
Response: 973
Amount: 0.009159



Reviewer: zhangji, 02-Mar-2022 12:56:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

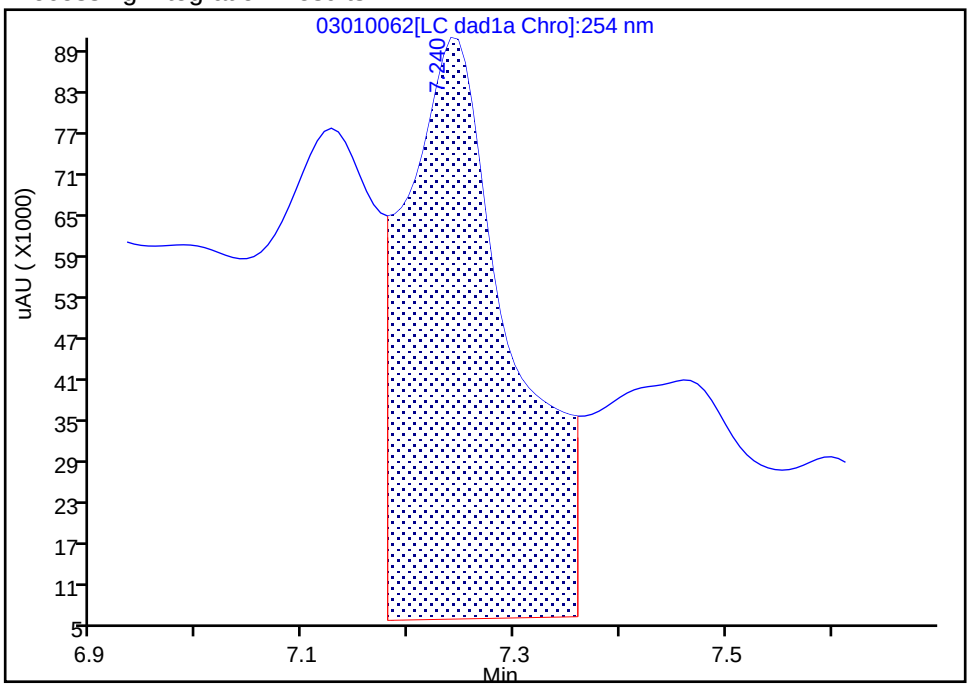
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010062.d				
Injection Date:	02-Mar-2022 11:59:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159137-A-5-A	Lab Sample ID:	280-159137-5		
Client ID:	EW7-PM26B-8-35				
Operator ID:	JZ	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

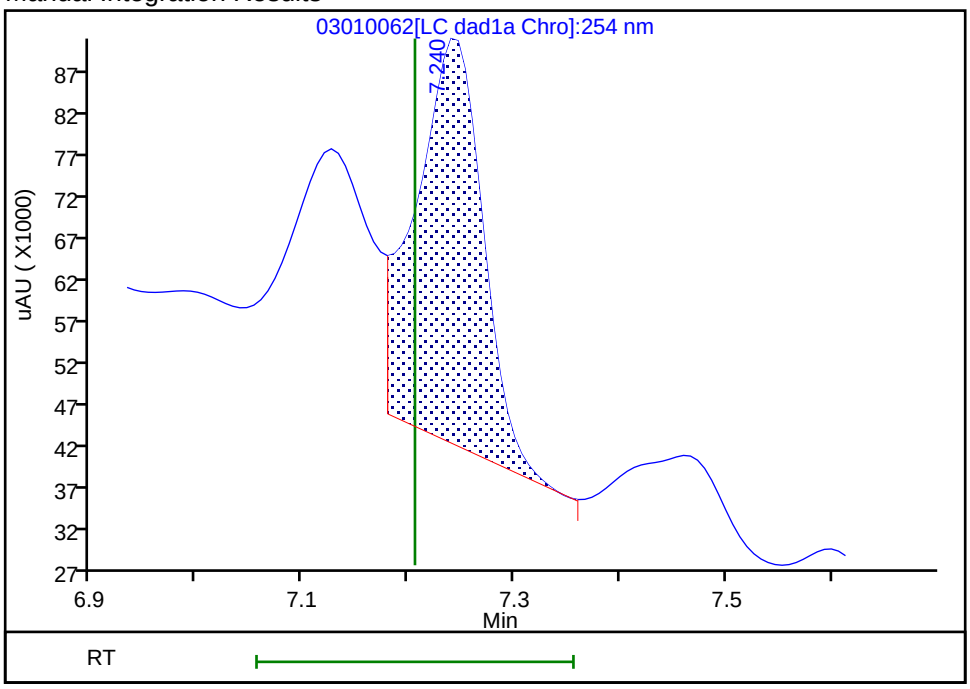
Processing Integration Results

RT: 7.24
Area: 585526
Amount: 4.647201
Amount Units: ug/mL



Manual Integration Results

RT: 7.24
Area: 213115
Amount: 1.691450
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:55:49
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

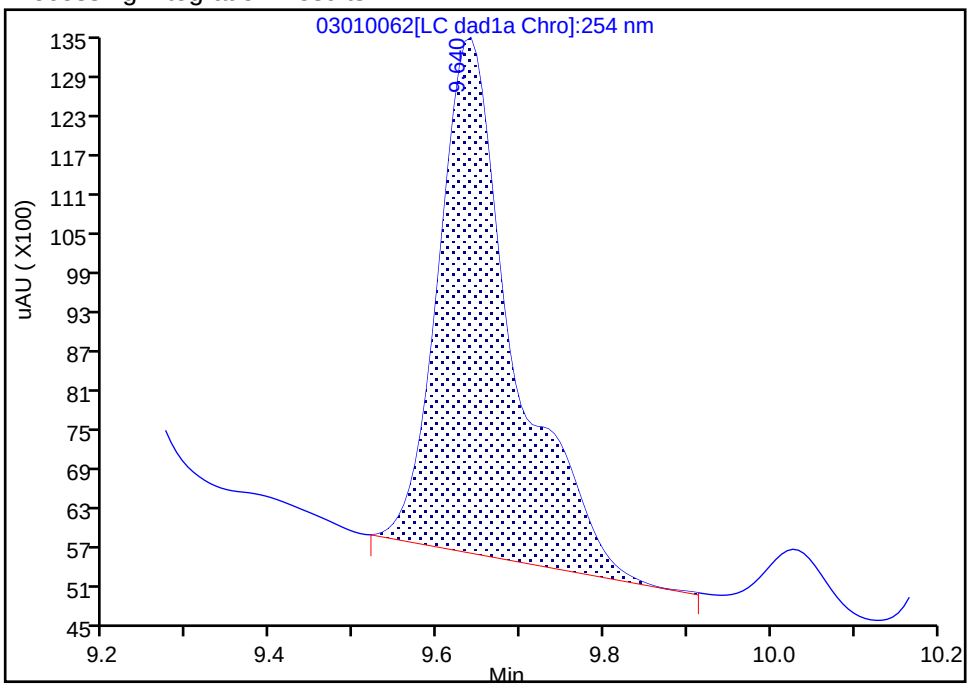
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010062.d				
Injection Date:	02-Mar-2022 11:59:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159137-A-5-A	Lab Sample ID:	280-159137-5		
Client ID:	EW7-PM26B-8-35				
Operator ID:	JZ	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

13 Nitrobenzene, CAS: 98-95-3

Signal: 1

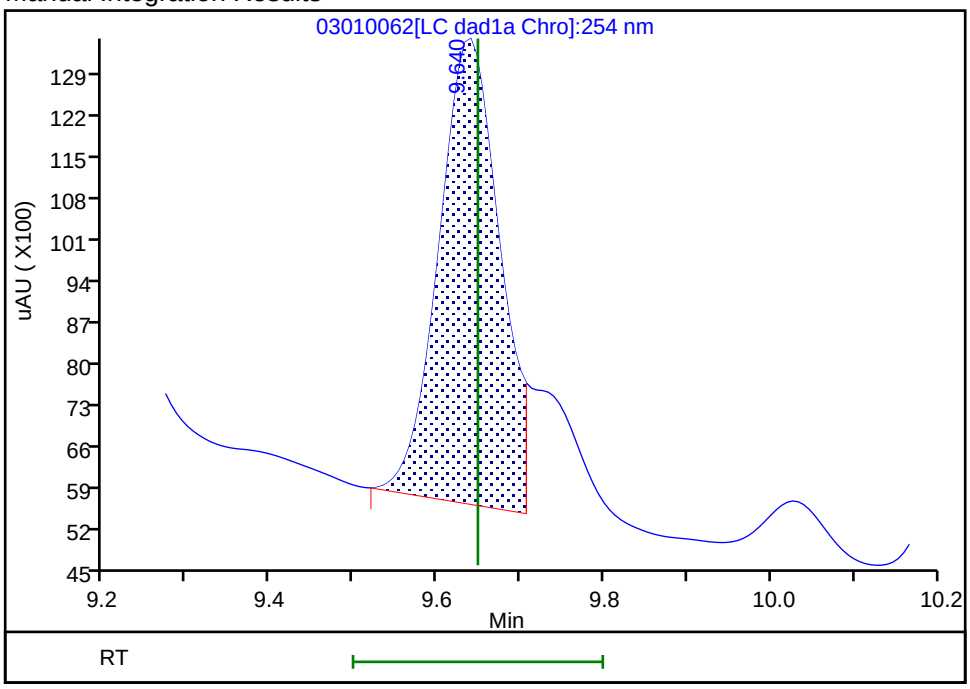
Processing Integration Results

RT: 9.64
Area: 49279
Amount: 0.256724
Amount Units: ug/mL



Manual Integration Results

RT: 9.64
Area: 40013
Amount: 0.208452
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:56:06

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

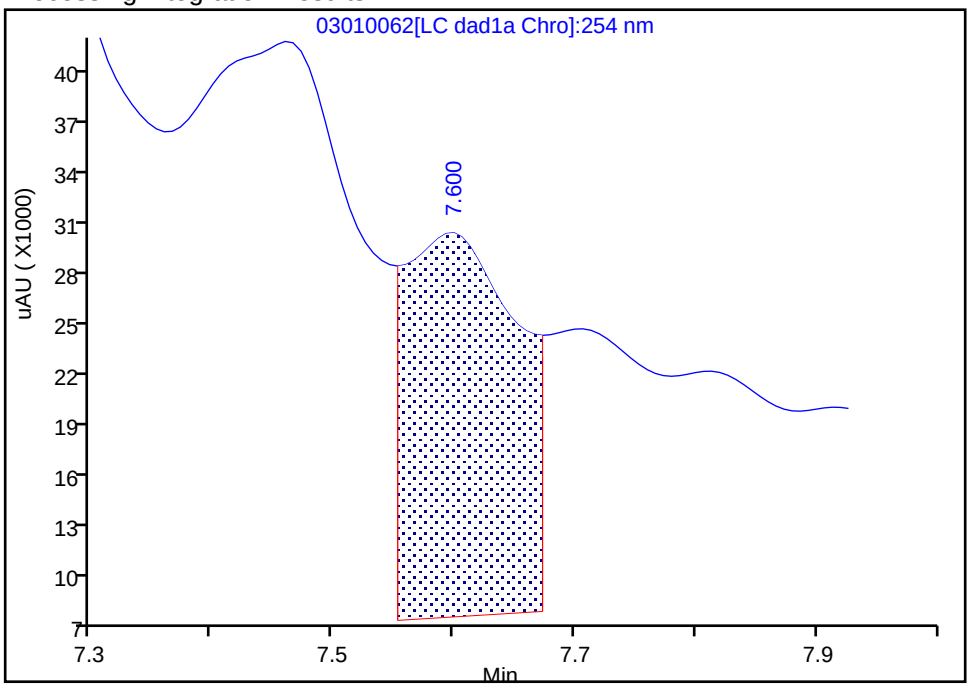
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010062.d				
Injection Date:	02-Mar-2022 11:59:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159137-A-5-A	Lab Sample ID:	280-159137-5		
Client ID:	EW7-PM26B-8-35				
Operator ID:	JZ	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

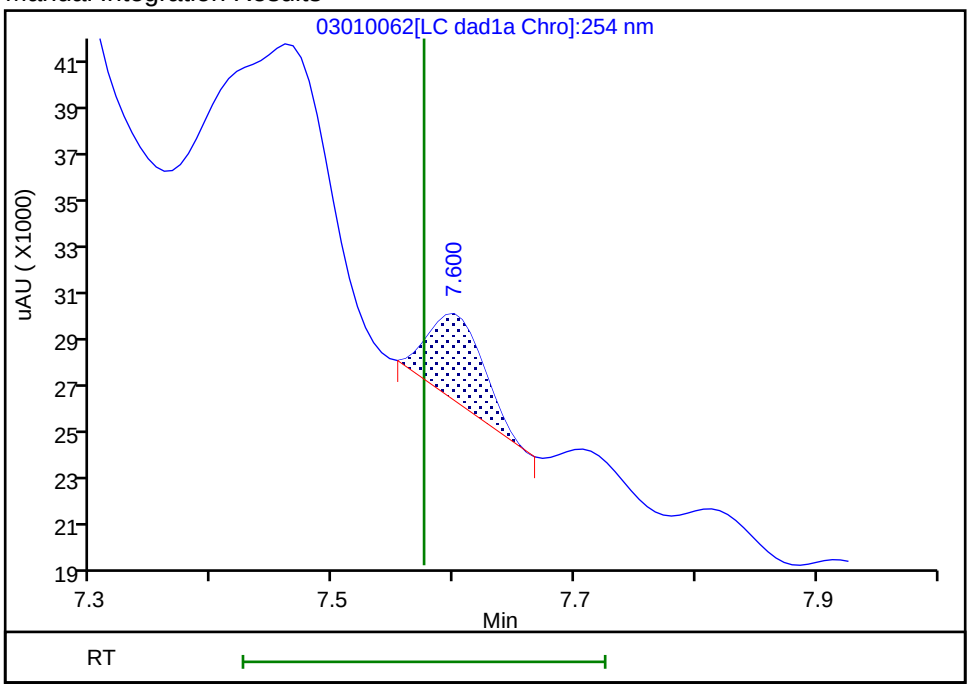
Processing Integration Results

RT: 7.60
Area: 143438
Amount: 1.384414
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 11358
Amount: 0.109623
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:55:57
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

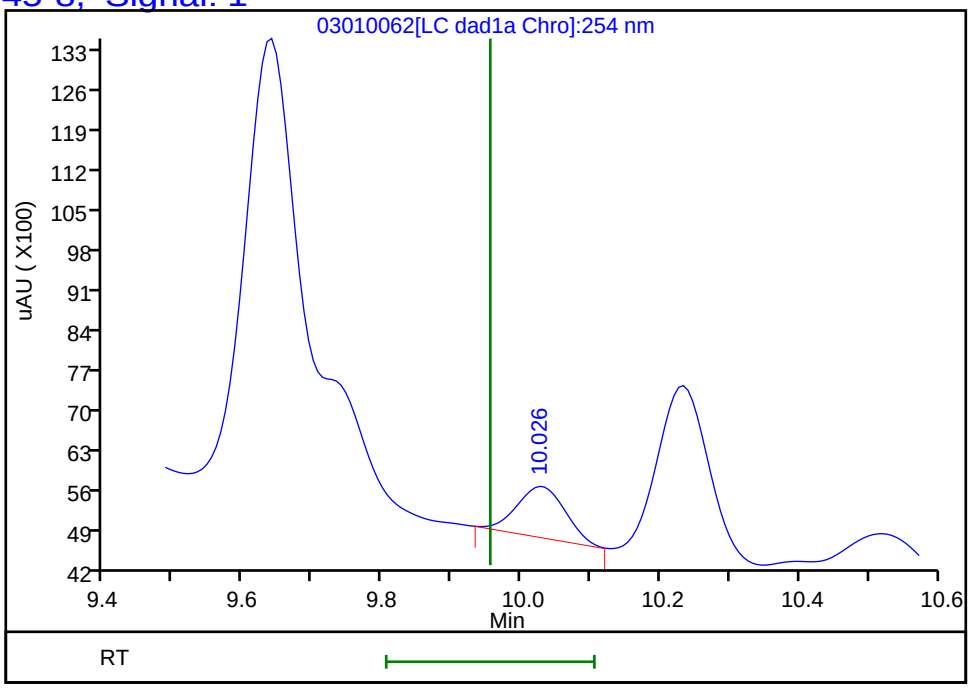
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010062.d
Injection Date: 02-Mar-2022 11:59:15 Instrument ID: CHHPLC_X3
Lims ID: 280-159137-A-5-A Lab Sample ID: 280-159137-5
Client ID: EW7-PM26B-8-35
Operator ID: JZ ALS Bottle#: 62 Worklist Smp#: 62
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 10.03
Response: 4326
Amount: 0.025363



Reviewer: zhangji, 02-Mar-2022 12:56:13
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: EW7-PM26B-8-35 | Lab Sample ID: 280-159137-5

Matrix: Water | Lab File ID: 03030029.D

Analysis Method: 8330A | Date Collected: 02/25/2022 15:05

Extraction Method: 3535 | Date Extracted: 03/01/2022 11:26

Sample wt/vol: 498.4(mL) | Date Analyzed: 03/04/2022 03:30

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

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

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

Analysis Batch No.: 567645 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	0.40	U	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U M	0.21	0.20	0.091
121-82-4	RDX	0.20	U	0.21	0.20	0.052

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	101	*M*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030029.D
Lims ID: 280-159137-A-5-A
Client ID: EW7-PM26B-8-35
Sample Type: Client
Inject. Date: 04-Mar-2022 03:30:53 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159137-A-5-A
Misc. Info.: 280-0108978-029
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-Mar-2022 12:18:26 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1659

First Level Reviewer: zhangji Date: 04-Mar-2022 12:17:12

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1		6.916			ND	
6 MNX	1		7.649			ND	
8 RDX	1		9.150			ND	
9 Nitrobenzene	1		12.083			ND	U
$ 10 1,2-Dinitrobenzene	1	13.290	13.323	-0.033	50255	0.2012	M
12 1,3-Dinitrobenzene	1		15.683			ND	
14 o-Nitrotoluene	1	16.784	16.863	-0.079	182072	0.7759	M
16 p-Nitrotoluene	1		17.176			ND	
17 4-Amino-2,6-dinitrotoluene	1		17.823			ND	
18 m-Nitrotoluene	1		18.150			ND	
19 2-Amino-4,6-dinitrotoluene	1		18.843			ND	
20 1,3,5-Trinitrobenzene	1		18.996			ND	
21 2,6-Dinitrotoluene	1		20.316			ND	
22 2,4-Dinitrotoluene	1		20.836			ND	
23 Tetryl	1		24.583			ND	7
24 2,4,6-Trinitrotoluene	1		25.330			ND	

QC Flag Legend

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

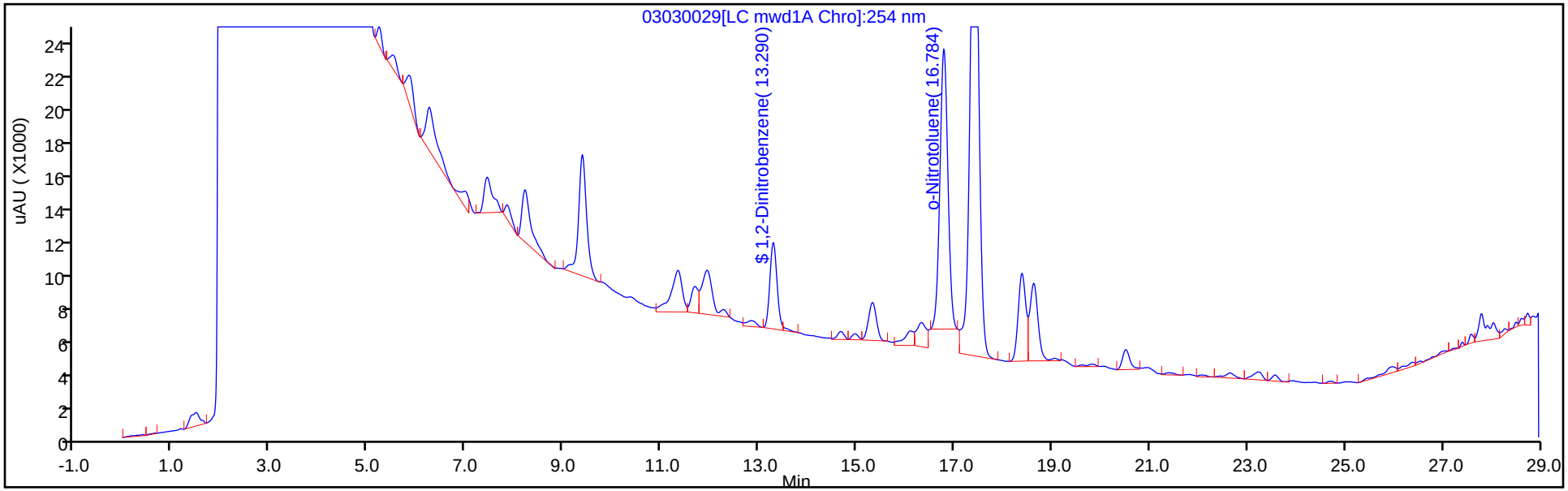
Report Date: 04-Mar-2022 12:18:31 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

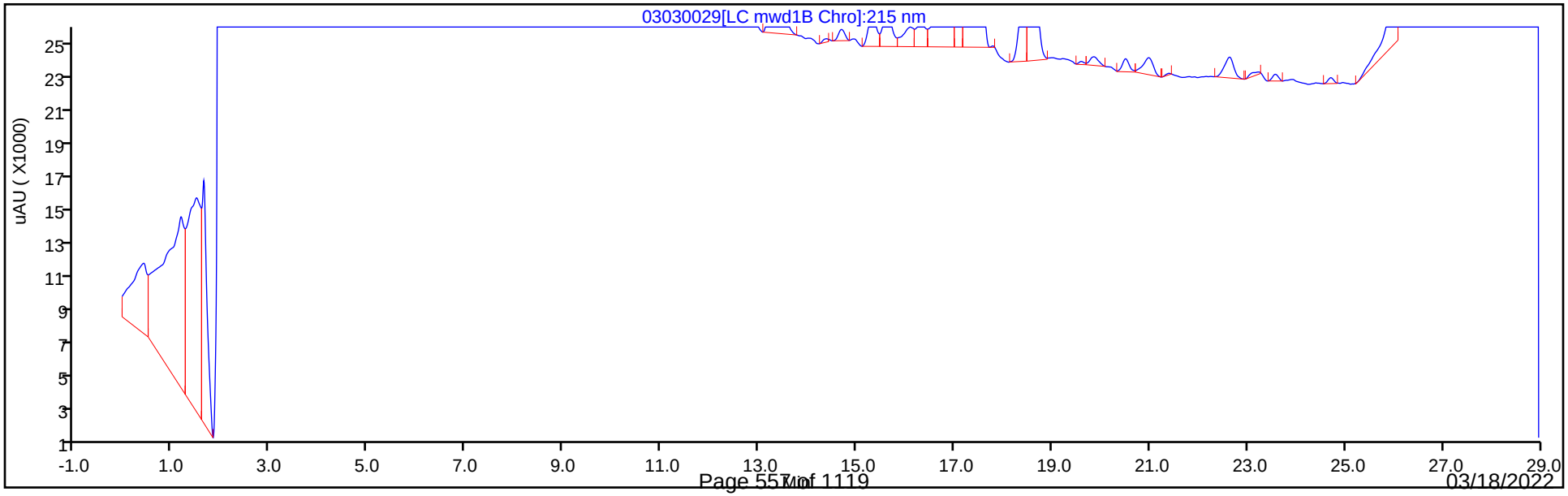
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030029.D

Injection Date:	04-Mar-2022 03:30:53	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159137-A-5-A	Lab Sample ID:	280-159137-5	Worklist Smp#:	29
Client ID:	EW7-PM26B-8-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
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: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030029.D				
Lims ID:	280-159137-A-5-A				
Client ID:	EW7-PM26B-8-35				
Sample Type:	Client				
Inject. Date:	04-Mar-2022 03:30:53	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159137-A-5-A				
Misc. Info.:	280-0108978-029				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	04-Mar-2022 12:18:26	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1659				
First Level Reviewer: zhangji		Date:	04-Mar-2022 12:17:12		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2012	100.61

Manual Integration/User Assign Peak Report

Eurofins Denver

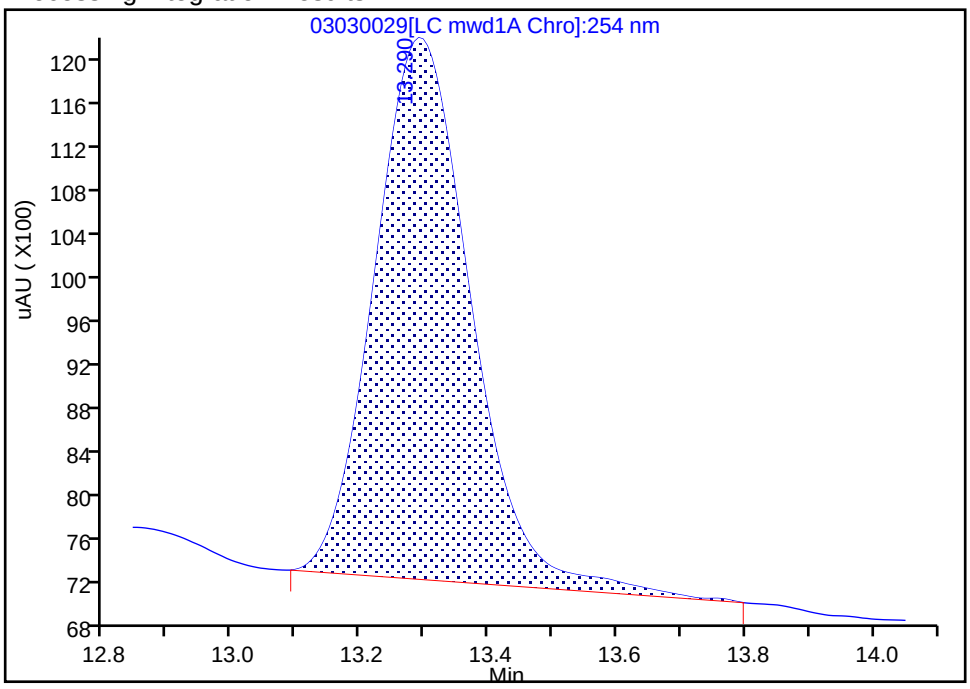
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Injection Date:	04-Mar-2022 03:30:53	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159137-A-5-A	Lab Sample ID:	280-159137-5		
Client ID:	EW7-PM26B-8-35				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

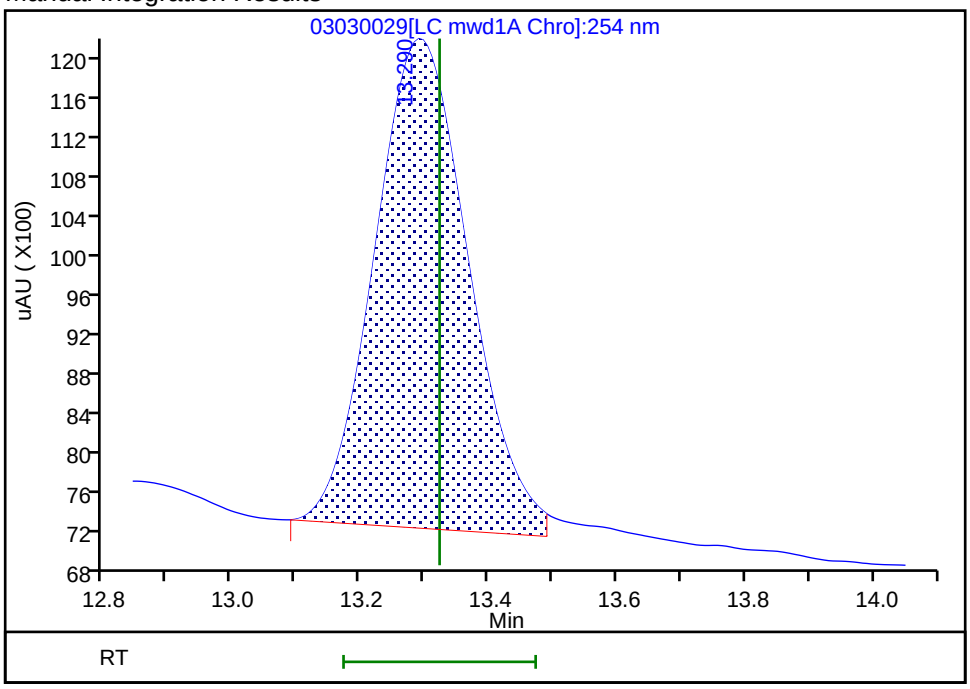
Processing Integration Results

RT: 13.29
Area: 51741
Amount: 0.207169
Amount Units: ug/ml



Manual Integration Results

RT: 13.29
Area: 50255
Amount: 0.201219
Amount Units: ug/ml



Reviewer: zhangji, 04-Mar-2022 12:17:05

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

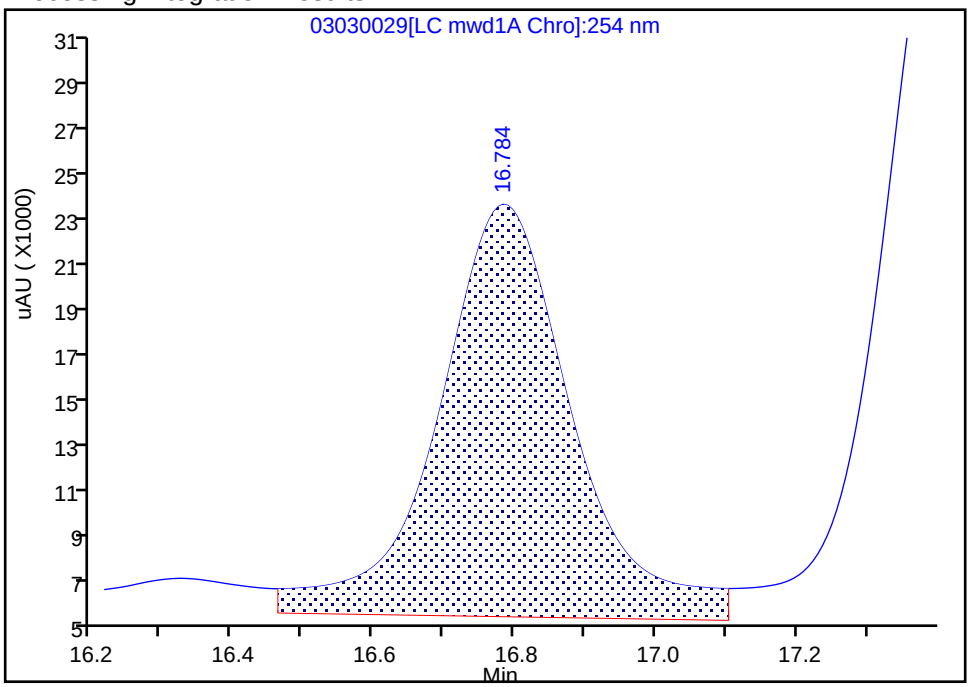
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030029.D				
Injection Date:	04-Mar-2022 03:30:53	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159137-A-5-A	Lab Sample ID:	280-159137-5		
Client ID:	EW7-PM26B-8-35				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

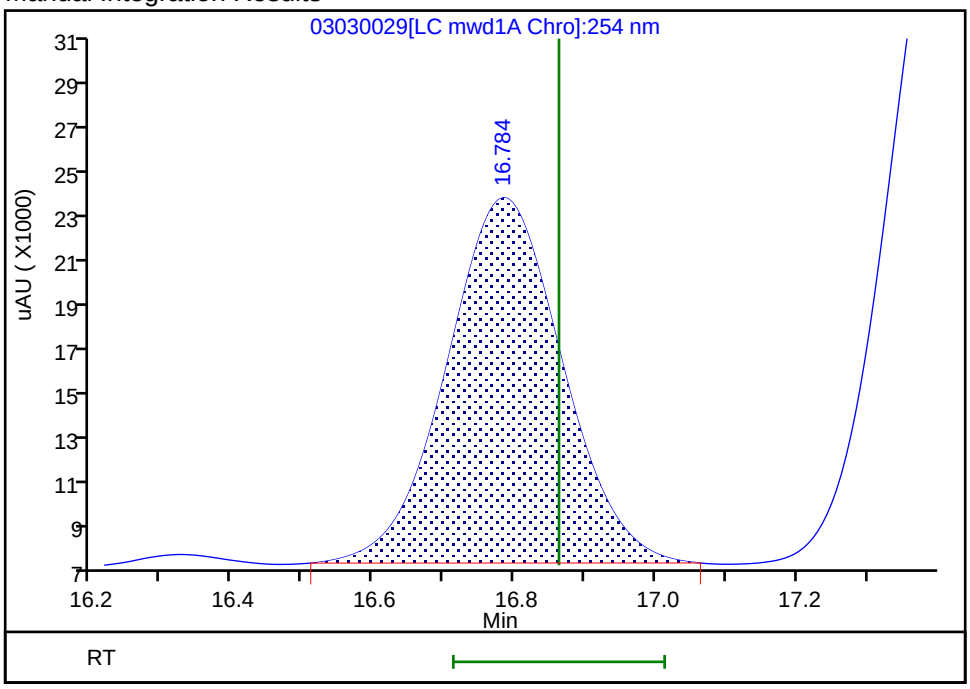
Processing Integration Results

RT: 16.78
Area: 228946
Amount: 0.975599
Amount Units: ug/ml



Manual Integration Results

RT: 16.78
Area: 182072
Amount: 0.775856
Amount Units: ug/ml



Reviewer: zhangji, 04-Mar-2022 12:17:11

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

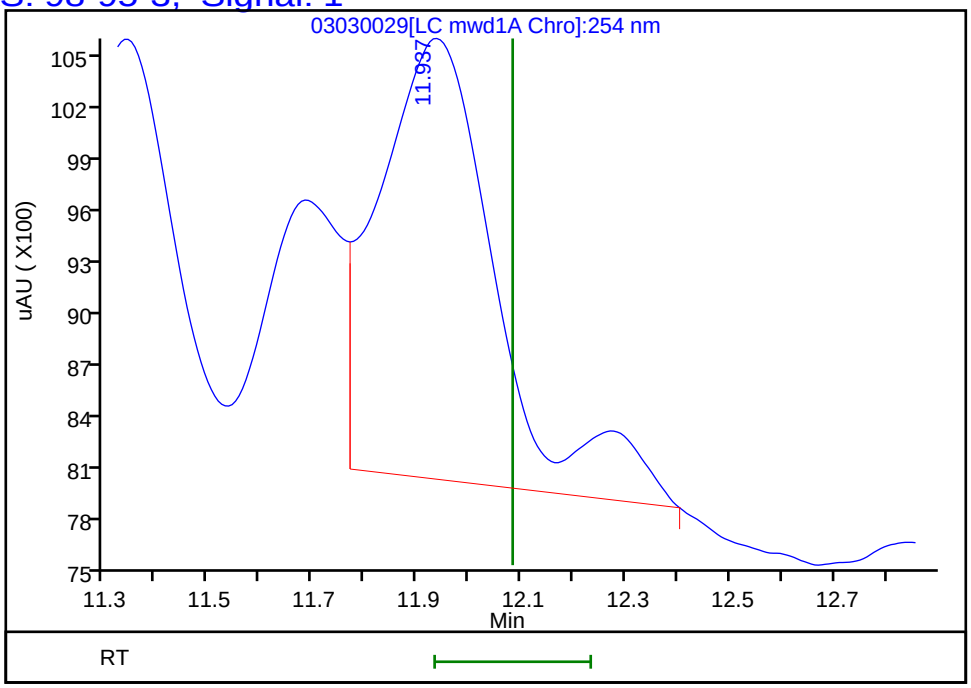
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030029.D				
Injection Date:	04-Mar-2022 03:30:53	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159137-A-5-A	Lab Sample ID:	280-159137-5		
Client ID:	EW7-PM26B-8-35				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

RT: 11.94
Response: 39468
Amount: 0.107165



Reviewer: zhangji, 04-Mar-2022 12:17:12
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.: 280-159137-1 Analy Batch No.: 562503

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2022 18:28 Calibration End Date: 01/04/2022 21:31 Calibration ID: 61345

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-562503/19	01040019.D
Level 2	IC 280-562503/18	01040018.D
Level 3	IC 280-562503/17	01040017.D
Level 4	IC 280-562503/16	01040016.D
Level 5	IC 280-562503/15	01040015.D
Level 6	IC 280-562503/14	01040014.D
Level 7	IC 280-562503/13	01040013.D
Level 8	IC 280-562503/12	01040012.D
Level 9	IC 280-562503/11	01040011.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	6.601	6.595	6.600	6.598	6.601	6.601	6.599	6.598	6.593		6.448 - 6.748	6.598
RDX	7.601	7.608	7.607	7.605	7.601	7.607	7.606	7.604	7.600		7.455 - 7.755	7.604
Picric acid	7.941	7.948	7.947	7.945	7.934	7.927	7.913	7.904	7.860		7.795 - 8.095	7.924
1,3,5-Trinitrobenzene	8.688	8.695	8.693	8.692	8.687	8.694	8.693	8.691	8.687		8.542 - 8.842	8.691
1,3-Dinitrobenzene	9.321	9.328	9.327	9.331	9.327	9.327	9.326	9.324	9.320		9.181 - 9.481	9.326
Nitrobenzene	9.714	9.722	9.727	9.725	9.720	9.727	9.726	9.717	9.713		9.575 - 9.875	9.721
Tetryl	10.041	10.055	10.060	10.058	10.054	10.061	10.053	10.051	10.046		9.908 - 10.208	10.053
Nitroglycerin	10.501	10.515	10.513	10.518	10.514	10.514	10.513	10.504	10.500		10.368 - 10.668	10.510
2,4,6-Trinitrotoluene	10.954	10.968	10.973	10.971	10.967	10.967	10.966	10.964	10.960		10.871 - 11.071	10.966
4-Amino-2,6-dinitrotoluene	11.154	11.175	11.173	11.171	11.167	11.174	11.173	11.164	11.160		11.071 - 11.271	11.168
2-Amino-4,6-dinitrotoluene	11.408	11.428	11.427	11.425	11.420	11.421	11.419	11.417	11.413		11.325 - 11.525	11.420
2,6-Dinitrotoluene	11.581	11.595	11.593	11.598	11.594	11.594	11.593	11.591	11.586		11.498 - 11.698	11.592
2,4-Dinitrotoluene	11.748	11.762	11.767	11.765	11.760	11.767	11.766	11.757	11.753		11.665 - 11.865	11.761
2-Nitrotoluene	12.614	12.642	12.640	12.638	12.634	12.634	12.633	12.631	12.620		12.488 - 12.788	12.632
4-Nitrotoluene	13.054	13.075	13.067	13.071	13.060	13.067	13.066	13.057	13.053		12.921 - 13.221	13.063
3-Nitrotoluene	13.634	13.655	13.653	13.651	13.647	13.647	13.646	13.644	13.633		13.501 - 13.801	13.646
PETN	14.708	14.735	14.733	14.738	14.727	14.734	14.733	14.724	14.713		14.588 - 14.888	14.727
1,2-Dinitrobenzene	8.561	8.575	8.573	8.572	8.567	8.574	8.573	8.571	8.567		8.422 - 8.722	8.570

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-159137-1 Analy Batch No.: 562503

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2022 18:28 Calibration End Date: 01/04/2022 21:31 Calibration ID: 61345

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-562503/19	01040019.D
Level 2	IC 280-562503/18	01040018.D
Level 3	IC 280-562503/17	01040017.D
Level 4	IC 280-562503/16	01040016.D
Level 5	IC 280-562503/15	01040015.D
Level 6	IC 280-562503/14	01040014.D
Level 7	IC 280-562503/13	01040013.D
Level 8	IC 280-562503/12	01040012.D
Level 9	IC 280-562503/11	01040011.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	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	90100 81580 81292	86750 82313	84600 81626	84890 81295	Ave		83827.2016				3.6		20.0			
RDX	115200 98540 100273	104200 97815	114300 98669	104470 99016	Ave		103609.197				6.5		20.0			
Picric acid	71600 74240 80484	77700 76623	80580 76297	78550 77279	Ave		77039.1825				3.7		20.0			
1,3,5-Trinitrobenzene	219261 209936 225698	212026 217802	213792 221958	218124 224262	Ave		218095.534				2.5		20.0			
1,3-Dinitrobenzene	262774 281713 296660	291068 291824	293074 292328	291567 294606	Ave		288401.481				3.6		20.0			
Nitrobenzene	205876 184653 193838	191484 188466	185837 191771	192102 193551	Ave		191953.206				3.2		20.0			
Tetryl	177445 163545 172217	174551 166432	165968 169313	172036 173594	Ave		170566.759				2.7		20.0			
Nitroglycerin	63480 60791 64852	60040 64322	61302 64183	63595 64770	Ave		63037.2862				2.9		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-159137-1 Analy Batch No.: 562503

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2022 18:28 Calibration End Date: 01/04/2022 21:31 Calibration ID: 61345

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5 LVL 9	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4 LVL 8		B	M1	M2								
2,4,6-Trinitrotoluene	211753 195486 202459	210508 199081	203227 198317	203267 200435	Ave		202725.952				2.7		20.0			
4-Amino-2,6-dinitrotoluene	171628 142434 147171	157343 146076	152967 145091	149600 146556	Ave		150985.194				5.9		20.0			
2-Amino-4,6-dinitrotoluene	227789 193171 199435	213247 197134	191235 196207	201992 199332	Ave		202171.240				5.7		20.0			
2,6-Dinitrotoluene	154482 136163 144227	149054 142460	137610 141928	141773 140340	Ave		143115.218				4.0		20.0			
2,4-Dinitrotoluene	303486 281295 293182	293327 286355	277550 285832	292380 290749	Ave		289350.655				2.6		20.0			
2-Nitrotoluene	138700 121120 126002	137150 123750	126280 123333	127770 124418	Ave		127613.606				4.8		20.0			
4-Nitrotoluene	108084 103090 108687	107335 105826	103054 106012	106936 107095	Ave		106235.483				1.9		20.0			
3-Nitrotoluene	176224 132507 139283	149301 136601	134525 135465	139890 136664	Ave		142273.338				9.6		20.0			
PETN	87840 71710 74726	78525 73771	70168 73720	74208 74427	Lin2	1383.22998	72545.1478							0.9990		0.9900
1,2-Dinitrobenzene	118800 123244 127495	125150 124888	122540 125351	127800 127011	Ave		124697.681				2.3		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-159137-1 Analy Batch No.: 562503

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2022 18:28 Calibration End Date: 01/04/2022 21:31 Calibration ID: 61345

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-562503/19	01040019.D
Level 2	IC 280-562503/18	01040018.D
Level 3	IC 280-562503/17	01040017.D
Level 4	IC 280-562503/16	01040016.D
Level 5	IC 280-562503/15	01040015.D
Level 6	IC 280-562503/14	01040014.D
Level 7	IC 280-562503/13	01040013.D
Level 8	IC 280-562503/12	01040012.D
Level 9	IC 280-562503/11	01040011.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	901 32925	1735 57138	4230 81295	8489 203229	20395	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	1152 39126	2084 69068	5715 99016	10447 250683	24635	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	716 30649	1554 53408	4029 77279	7855 201210	18560	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3,5-Trinitrobenzene	Ave	2197 87295	4249 155681	10711 224711	21856 565374	52589	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
1,3-Dinitrobenzene	Ave	2633 116963	5833 205039	14683 295195	29215 743133	70569	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
Nitrobenzene	Ave	2067 75688	3845 134777	9329 194325	19287 486534	46348	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
Tetryl	Ave	1778 66706	3498 118756	8315 173941	17238 431404	40968	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
Nitroglycerin	Ave	6348 257287	12008 449283	30651 647703	63595 1621311	151977	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2,4,6-Trinitrotoluene	Ave	2126 79951	4227 139377	10202 201237	20408 508173	49067	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
4-Amino-2,6-dinitrotoluene	Ave	1718 58489	3150 101665	7656 146703	14975 368296	35644	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	2287 79169	4282 137894	9600 200129	20280 500581	48486	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
2,6-Dinitrotoluene	Ave	1551 57212	2993 99747	6908 140901	14234 362011	34177	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
2,4-Dinitrotoluene	Ave	3047	5890	13933	29355	70605	0.0100	0.0201	0.0502	0.100	0.251

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-159137-1 Analy Batch No.: 562503

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/04/2022 18:28 Calibration End Date: 01/04/2022 21:31 Calibration ID: 61345

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
		115000	200883	291912	735887		0.402	0.703	1.00	2.51	
2-Nitrotoluene	Ave	1387	2743	6314	12777	30280	0.0100	0.0200	0.0500	0.100	0.250
		49500	86333	124418	315004		0.400	0.700	1.00	2.50	
4-Nitrotoluene	Ave	1083	2151	5163	10715	25824	0.0100	0.0200	0.0501	0.100	0.251
		42415	74357	107309	272262		0.401	0.701	1.00	2.51	
3-Nitrotoluene	Ave	1764	2989	6733	14003	33160	0.0100	0.0200	0.0501	0.100	0.250
		54695	94920	136801	348555		0.400	0.701	1.00	2.50	
PETN	Lin2	8784	15705	35084	74208	179275	0.100	0.200	0.500	1.00	2.50
		295082	516042	744274	1868141		4.00	7.00	10.0	25.0	
1,2-Dinitrobenzene	Ave	1188	2503	6127	12780	30811	0.0100	0.0200	0.0500	0.100	0.250
		49955	87746	127011	318738		0.400	0.700	1.00	2.50	

Curve Type Legend
Ave = Average
Lin2 = Linear 1/conc^2

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040011.D
Lims ID: IC INT 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 04-Jan-2022 18:28:10 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 9
Misc. Info.: 280-0107731-011
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Jan-2022 20:05:10 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1641

First Level Reviewer: zhangji Date: 04-Jan-2022 19:18:32

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.593	6.598	-0.005	203229	2.50	2.42	M
8 RDX	1	7.600	7.605	-0.005	250683	2.50	2.42	
9 2,4,6-Trinitrophenol	1	7.860	7.945	-0.085	201210	2.50	2.61	
$ 10 1,2-Dinitrobenzene	1	8.567	8.572	-0.005	318738	2.50	2.56	
11 1,3,5-Trinitrobenzene	1	8.687	8.692	-0.005	565374	2.51	2.59	
12 1,3-Dinitrobenzene	1	9.320	9.331	-0.011	743133	2.51	2.58	
13 Nitrobenzene	1	9.713	9.725	-0.012	486534	2.51	2.53	
15 Tetryl	1	10.046	10.058	-0.012	431404	2.51	2.53	
16 Nitroglycerin	2	10.500	10.518	-0.018	1621311	25.0	25.7	
17 2,4,6-Trinitrotoluene	1	10.960	10.971	-0.011	508173	2.51	2.51	
18 4-Amino-2,6-dinitrotoluene	1	11.160	11.171	-0.011	368296	2.50	2.44	
19 2-Amino-4,6-dinitrotoluene	1	11.413	11.425	-0.012	500581	2.51	2.48	
20 2,6-Dinitrotoluene	1	11.586	11.598	-0.012	362011	2.51	2.53	
21 2,4-Dinitrotoluene	1	11.753	11.765	-0.012	735887	2.51	2.54	
22 o-Nitrotoluene	1	12.620	12.638	-0.018	315004	2.50	2.47	
23 p-Nitrotoluene	1	13.053	13.071	-0.018	272262	2.51	2.56	
24 m-Nitrotoluene	1	13.633	13.651	-0.018	348555	2.50	2.45	
25 PETN	2	14.713	14.738	-0.025	1868141	25.0	25.7	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070 Amount Added: 250.00 Units: uL

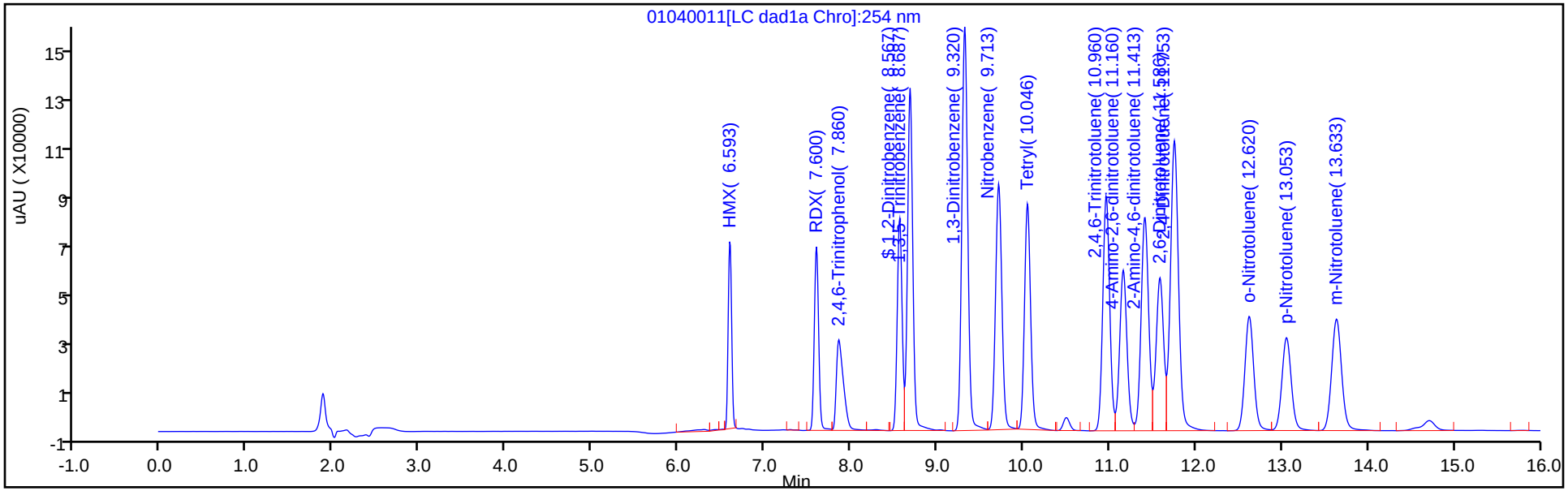
Report Date: 06-Jan-2022 20:05:10 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

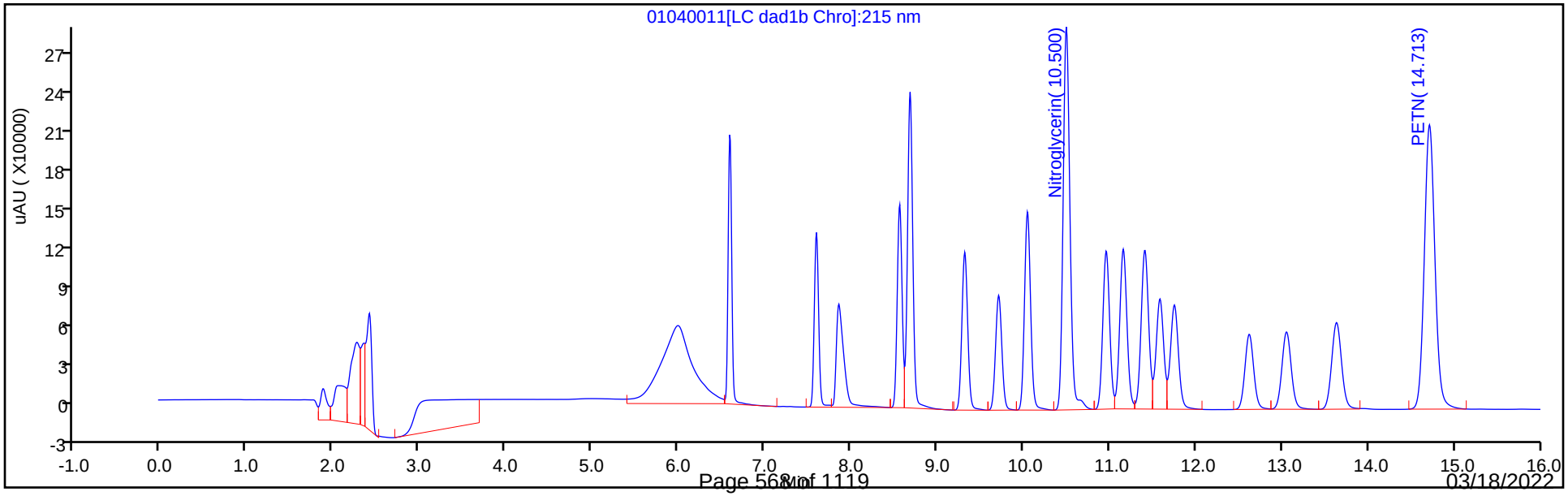
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040011.d

Injection Date:	04-Jan-2022 18:28:10	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

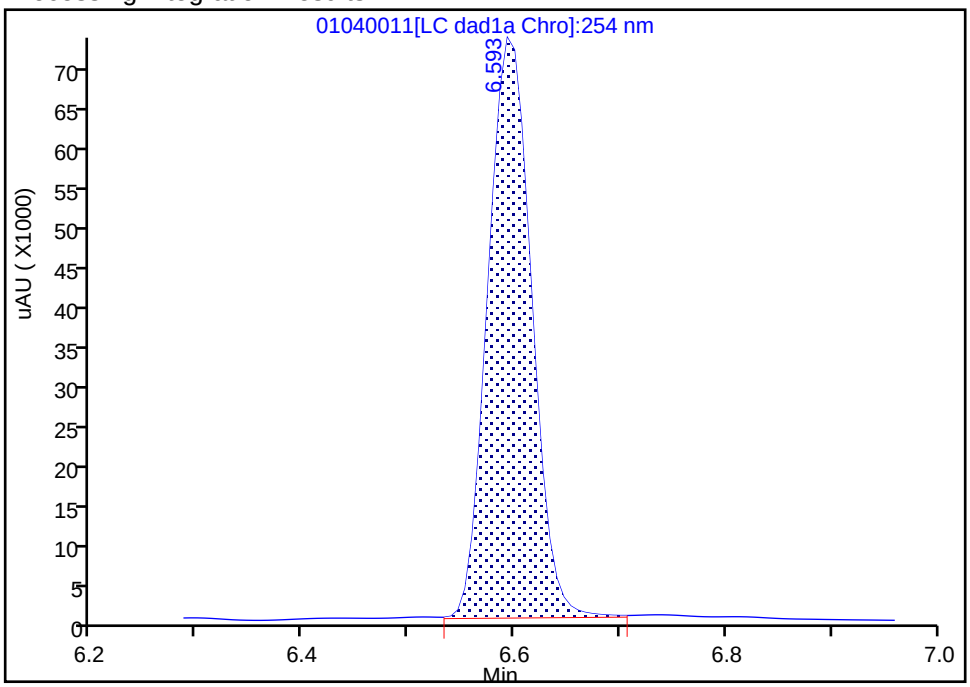
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Injection Date:	04-Jan-2022 18:28:10	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

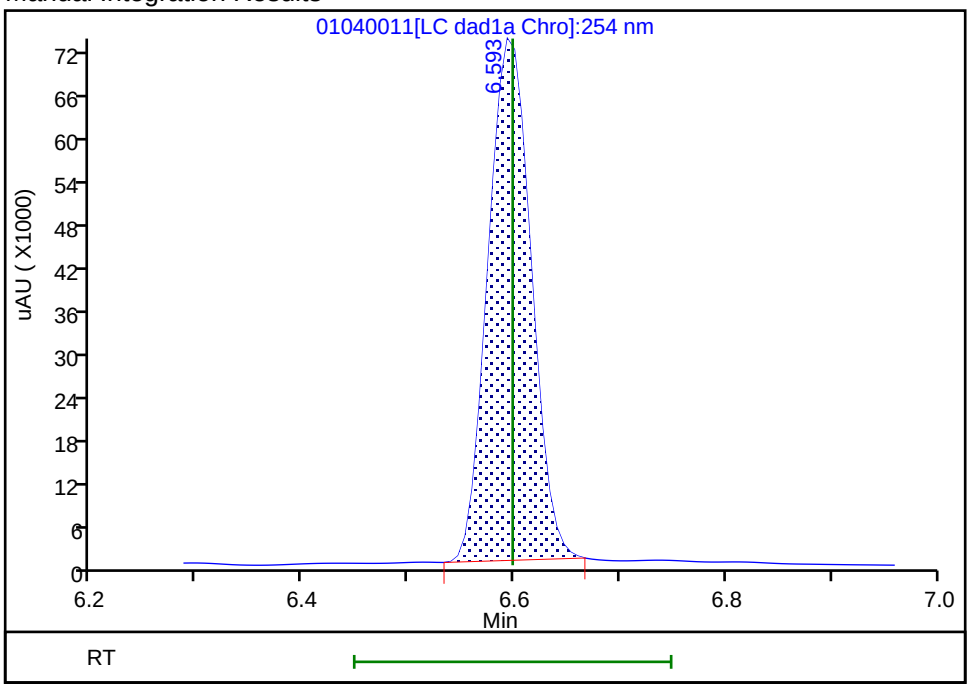
Processing Integration Results

RT: 6.59
Area: 207225
Amount: 2.498192
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 203229
Amount: 2.424380
Amount Units: ug/mL



Reviewer: zhangji, 04-Jan-2022 19:18:30

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040012.D
Lims ID: IC INT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 04-Jan-2022 18:51:00 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 8
Misc. Info.: 280-0107731-012
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Jan-2022 20:05:11 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1641

First Level Reviewer: zhangji Date: 04-Jan-2022 19:18:25

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.598	6.598	0.000	81295	1.00	0.9698	M
8 RDX	1	7.604	7.605	-0.001	99016	1.00	0.9557	
9 2,4,6-Trinitrophenol	1	7.904	7.945	-0.041	77279	1.00	1.00	
$ 10 1,2-Dinitrobenzene	1	8.571	8.572	-0.001	127011	1.00	1.02	
11 1,3,5-Trinitrobenzene	1	8.691	8.692	-0.001	224711	1.00	1.03	
12 1,3-Dinitrobenzene	1	9.324	9.331	-0.007	295195	1.00	1.02	
13 Nitrobenzene	1	9.717	9.725	-0.008	194325	1.00	1.01	
15 Tetryl	1	10.051	10.058	-0.007	173941	1.00	1.02	
16 Nitroglycerin	2	10.504	10.518	-0.014	647703	10.0	10.3	
17 2,4,6-Trinitrotoluene	1	10.964	10.971	-0.007	201237	1.00	0.99	
18 4-Amino-2,6-dinitrotoluene	1	11.164	11.171	-0.007	146703	1.00	0.9716	
19 2-Amino-4,6-dinitrotoluene	1	11.417	11.425	-0.008	200129	1.00	0.9899	
20 2,6-Dinitrotoluene	1	11.591	11.598	-0.007	140901	1.00	0.9845	
21 2,4-Dinitrotoluene	1	11.757	11.765	-0.008	291912	1.00	1.01	
22 o-Nitrotoluene	1	12.631	12.638	-0.007	124418	1.00	0.9750	
23 p-Nitrotoluene	1	13.057	13.071	-0.014	107309	1.00	1.01	
24 m-Nitrotoluene	1	13.644	13.651	-0.007	136801	1.00	0.9615	
25 PETN	2	14.724	14.738	-0.014	744274	10.0	10.2	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

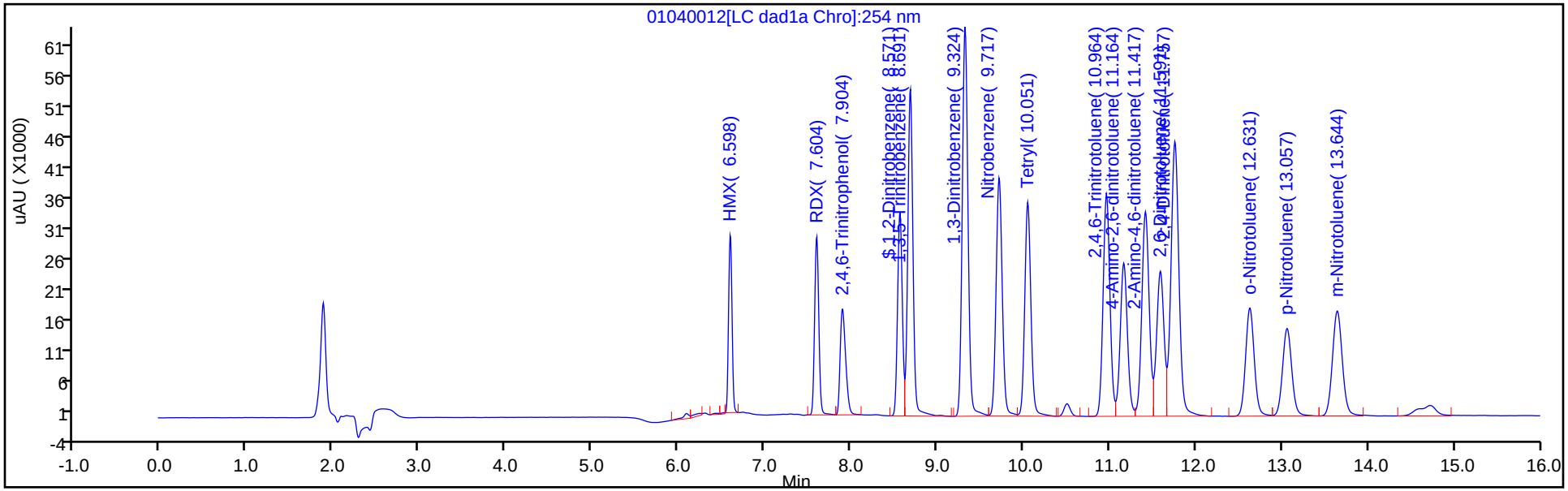
8330IntermStk_00070 Amount Added: 100.00 Units: uL

Report Date: 06-Jan-2022 20:05:11 Chrom Revision: 2.3 03-Jan-2022 17:03:12

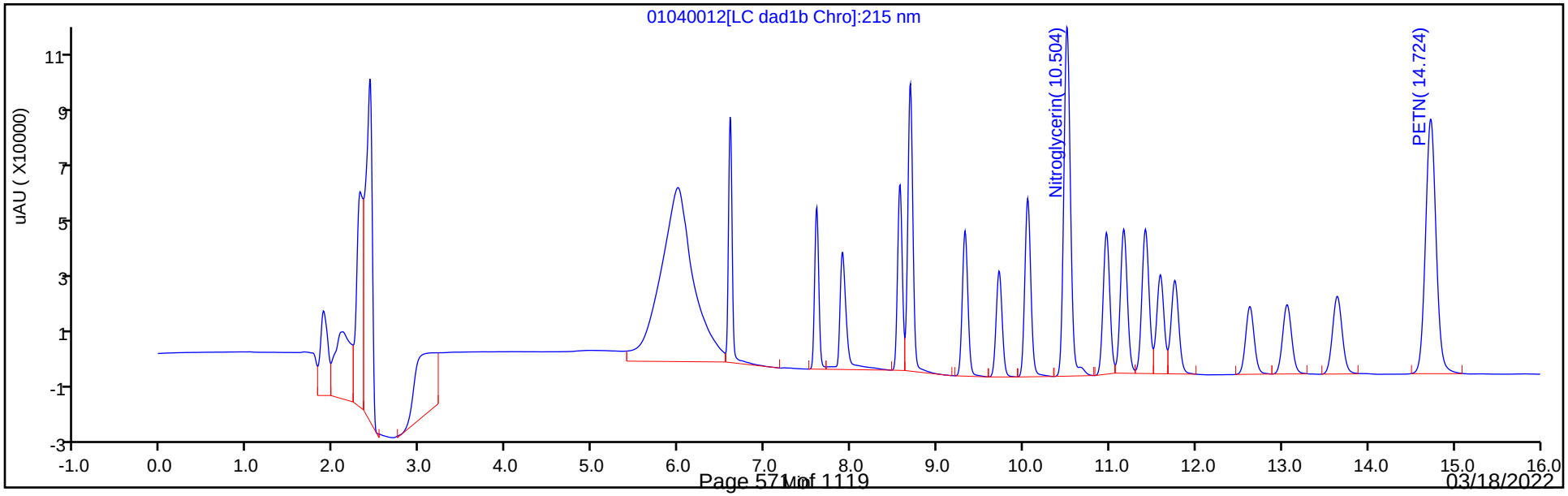
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040012.d				
Injection Date:	04-Jan-2022 18:51:00	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

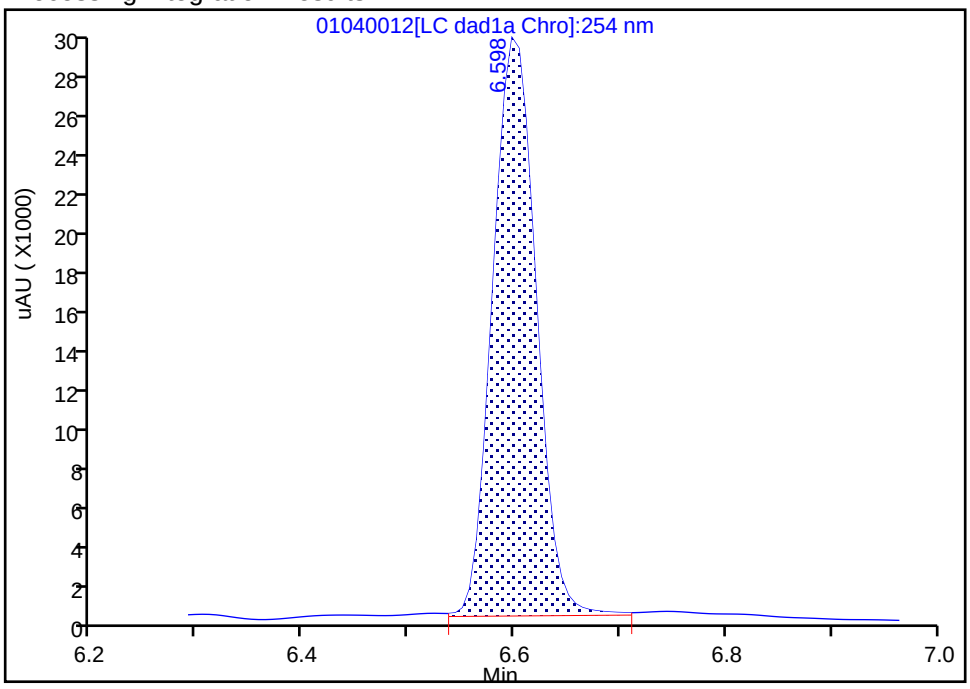
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Injection Date:	04-Jan-2022 18:51:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

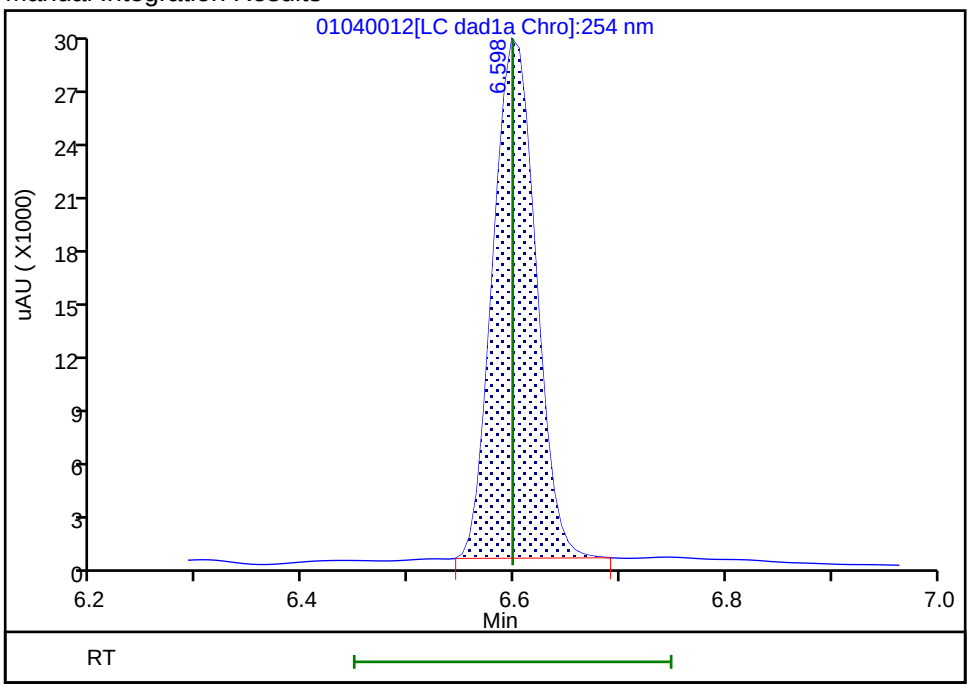
Processing Integration Results

RT: 6.60
Area: 83010
Amount: 1.010459
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 81295
Amount: 0.969793
Amount Units: ug/mL



Reviewer: zhangji, 04-Jan-2022 19:18:46
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040013.D
Lims ID: IC INT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 04-Jan-2022 19:13:53 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 7
Misc. Info.: 280-0107731-013
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Jan-2022 20:05:11 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1641

First Level Reviewer: zhangji Date: 04-Jan-2022 19:38:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.599	6.598	0.001	57138	0.7000	0.6816	
8 RDX	1	7.606	7.605	0.001	69068	0.7000	0.6666	
9 2,4,6-Trinitrophenol	1	7.913	7.945	-0.032	53408	0.7000	0.6933	
$ 10 1,2-Dinitrobenzene	1	8.573	8.572	0.001	87746	0.7000	0.7037	
11 1,3,5-Trinitrobenzene	1	8.693	8.692	0.001	155681	0.7014	0.7138	
12 1,3-Dinitrobenzene	1	9.326	9.331	-0.005	205039	0.7014	0.7109	
13 Nitrobenzene	1	9.726	9.725	0.001	134777	0.7028	0.7021	
15 Tetryl	1	10.053	10.058	-0.005	118756	0.7014	0.6962	
16 Nitroglycerin	2	10.513	10.518	-0.005	449283	7.00	7.13	
17 2,4,6-Trinitrotoluene	1	10.966	10.971	-0.005	139377	0.7028	0.6875	
18 4-Amino-2,6-dinitrotoluene	1	11.173	11.171	0.002	101665	0.7007	0.6733	
19 2-Amino-4,6-dinitrotoluene	1	11.419	11.425	-0.006	137894	0.7028	0.6821	
20 2,6-Dinitrotoluene	1	11.593	11.598	-0.005	99747	0.7028	0.6970	
21 2,4-Dinitrotoluene	1	11.766	11.765	0.001	200883	0.7028	0.6943	
22 o-Nitrotoluene	1	12.633	12.638	-0.005	86333	0.7000	0.6765	
23 p-Nitrotoluene	1	13.066	13.071	-0.005	74357	0.7014	0.6999	
24 m-Nitrotoluene	1	13.646	13.651	-0.005	94920	0.7007	0.6672	
25 PETN	2	14.733	14.738	-0.005	516042	7.00	7.09	

QC Flag Legend
Processing Flags

Reagents:
8330IntermStk_00070 Amount Added: 70.00 Units: uL

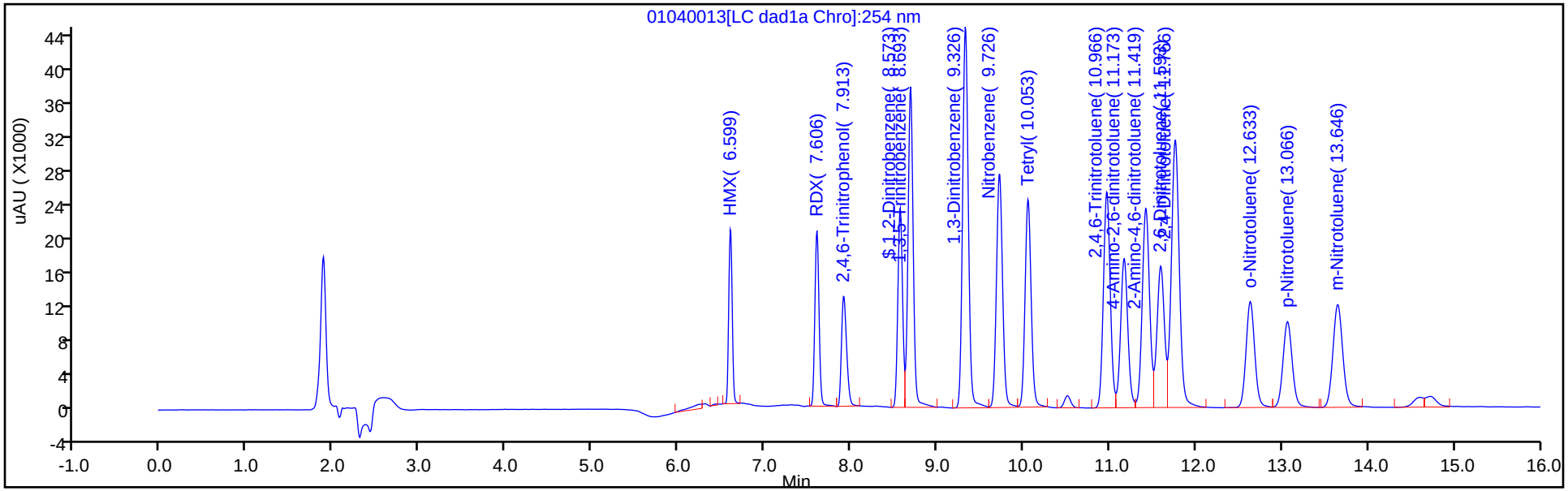
Report Date: 06-Jan-2022 20:05:11 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

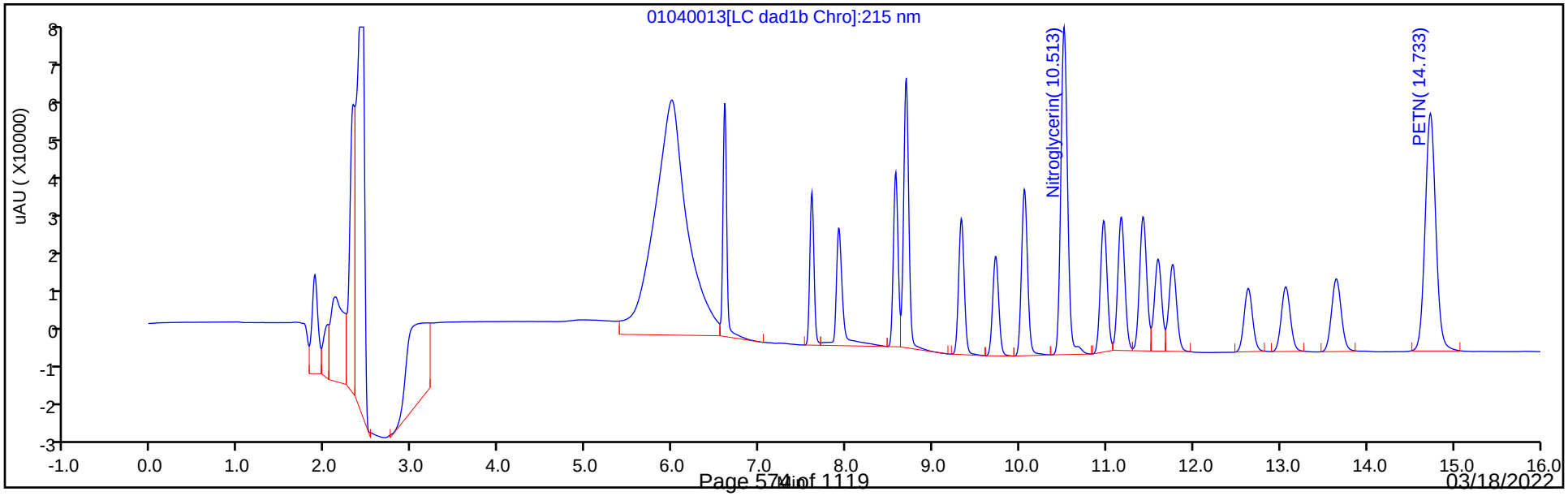
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040013.d

Injection Date:	04-Jan-2022 19:13:53	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040014.D
Lims ID: IC INT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 04-Jan-2022 19:36:46 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 6
Misc. Info.: 280-0107731-014
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Jan-2022 20:05:12 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1641

First Level Reviewer: zhangji Date: 04-Jan-2022 20:03:49

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.601	6.598	0.003	32925	0.4000	0.3928	
8 RDX	1	7.607	7.605	0.002	39126	0.4000	0.3776	
9 2,4,6-Trinitrophenol	1	7.927	7.945	-0.018	30649	0.4000	0.3978	
$ 10 1,2-Dinitrobenzene	1	8.574	8.572	0.002	49955	0.4000	0.4006	
11 1,3,5-Trinitrobenzene	1	8.694	8.692	0.002	87295	0.4008	0.4003	
12 1,3-Dinitrobenzene	1	9.327	9.331	-0.004	116963	0.4008	0.4056	
13 Nitrobenzene	1	9.727	9.725	0.002	75688	0.4016	0.3943	
15 Tetryl	1	10.061	10.058	0.003	66706	0.4008	0.3911	
16 Nitroglycerin	2	10.514	10.518	-0.004	257287	4.00	4.08	
17 2,4,6-Trinitrotoluene	1	10.967	10.971	-0.004	79951	0.4016	0.3944	
18 4-Amino-2,6-dinitrotoluene	1	11.174	11.171	0.003	58489	0.4004	0.3874	
19 2-Amino-4,6-dinitrotoluene	1	11.421	11.425	-0.004	79169	0.4016	0.3916	
20 2,6-Dinitrotoluene	1	11.594	11.598	-0.004	57212	0.4016	0.3998	
21 2,4-Dinitrotoluene	1	11.767	11.765	0.002	115000	0.4016	0.3974	
22 o-Nitrotoluene	1	12.634	12.638	-0.004	49500	0.4000	0.3879	
23 p-Nitrotoluene	1	13.067	13.071	-0.004	42415	0.4008	0.3993	
24 m-Nitrotoluene	1	13.647	13.651	-0.004	54695	0.4004	0.3844	
25 PETN	2	14.734	14.738	-0.004	295082	4.00	4.05	

QC Flag Legend
Processing Flags

Reagents:
8330IntermStk_00070 Amount Added: 40.00 Units: uL

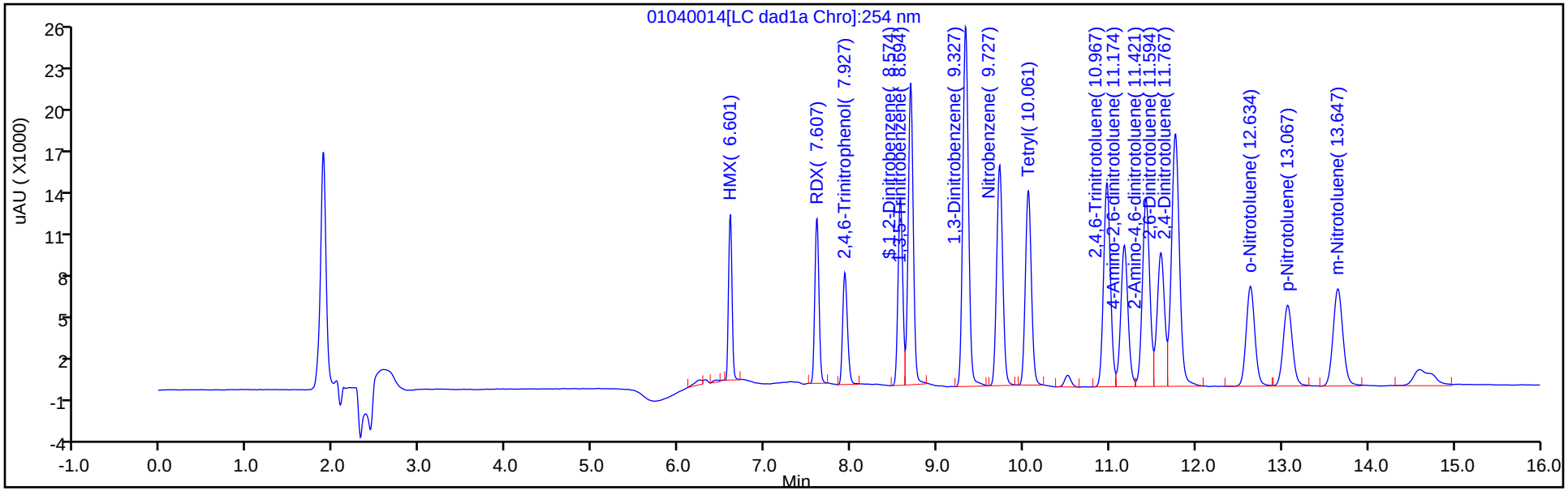
Report Date: 06-Jan-2022 20:05:12 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

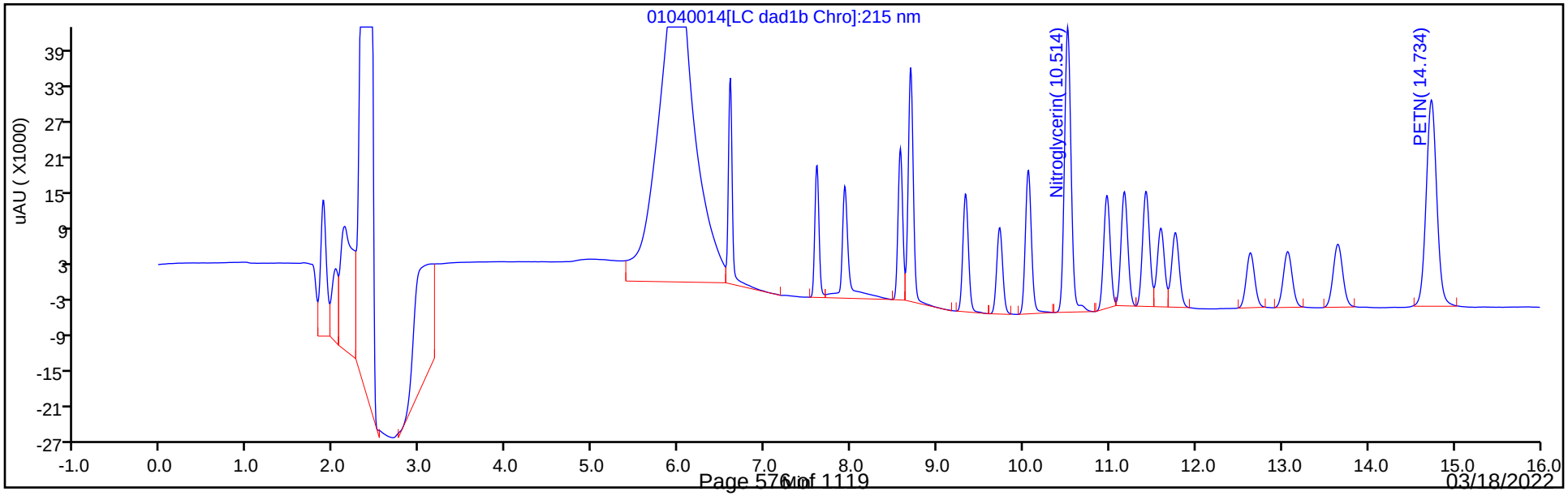
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040014.d

Injection Date:	04-Jan-2022 19:36:46	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040015.D
Lims ID: IC INT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 04-Jan-2022 19:59:42 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 5
Misc. Info.: 280-0107731-015
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Jan-2022 20:05:12 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1641

First Level Reviewer: zhangji Date: 04-Jan-2022 20:30:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.601	6.598	0.003	20395	0.2500	0.2433	
8 RDX	1	7.601	7.605	-0.004	24635	0.2500	0.2378	
9 2,4,6-Trinitrophenol	1	7.934	7.945	-0.011	18560	0.2500	0.2409	
$ 10 1,2-Dinitrobenzene	1	8.567	8.572	-0.005	30811	0.2500	0.2471	
11 1,3,5-Trinitrobenzene	1	8.687	8.692	-0.005	52589	0.2505	0.2411	
12 1,3-Dinitrobenzene	1	9.327	9.331	-0.004	70569	0.2505	0.2447	
13 Nitrobenzene	1	9.720	9.725	-0.005	46348	0.2510	0.2415	
15 Tetryl	1	10.054	10.058	-0.004	40968	0.2505	0.2402	
16 Nitroglycerin	2	10.514	10.518	-0.004	151977	2.50	2.41	
17 2,4,6-Trinitrotoluene	1	10.967	10.971	-0.004	49067	0.2510	0.2420	
18 4-Amino-2,6-dinitrotoluene	1	11.167	11.171	-0.004	35644	0.2503	0.2361	
19 2-Amino-4,6-dinitrotoluene	1	11.420	11.425	-0.005	48486	0.2510	0.2398	
20 2,6-Dinitrotoluene	1	11.594	11.598	-0.004	34177	0.2510	0.2388	
21 2,4-Dinitrotoluene	1	11.760	11.765	-0.005	70605	0.2510	0.2440	
22 o-Nitrotoluene	1	12.634	12.638	-0.004	30280	0.2500	0.2373	
23 p-Nitrotoluene	1	13.060	13.071	-0.011	25824	0.2505	0.2431	
24 m-Nitrotoluene	1	13.647	13.651	-0.004	33160	0.2503	0.2331	
25 PETN	2	14.727	14.738	-0.011	179275	2.50	2.45	

QC Flag Legend
Processing Flags

Reagents:
8330IntermStk_00070 Amount Added: 25.00 Units: uL

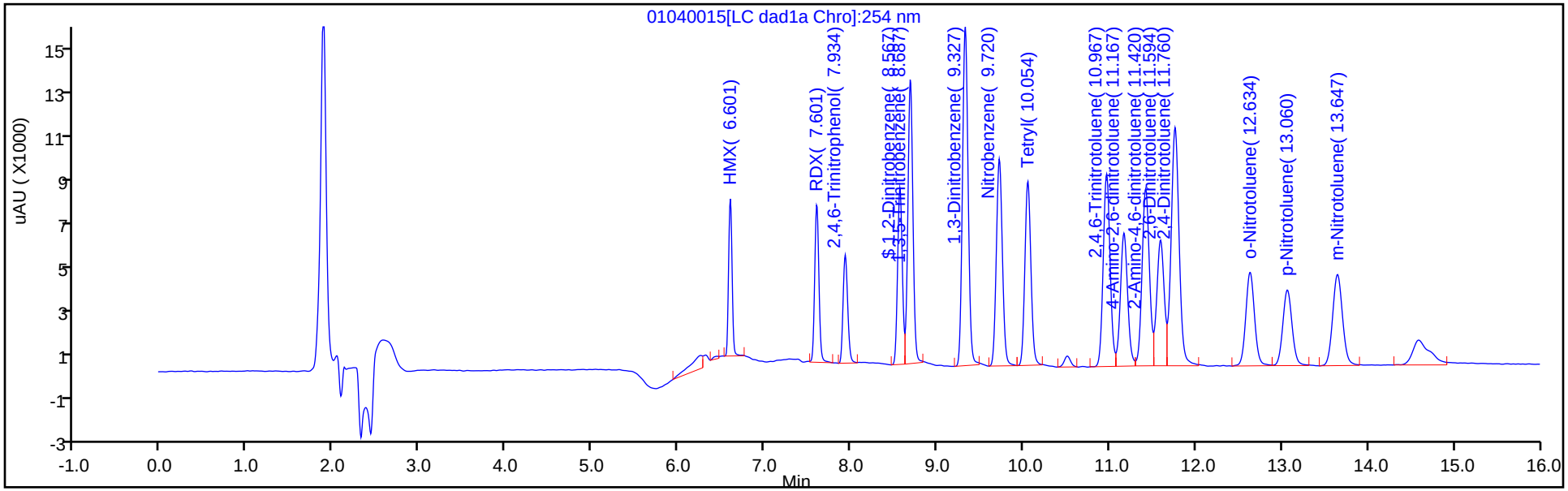
Report Date: 06-Jan-2022 20:05:12 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

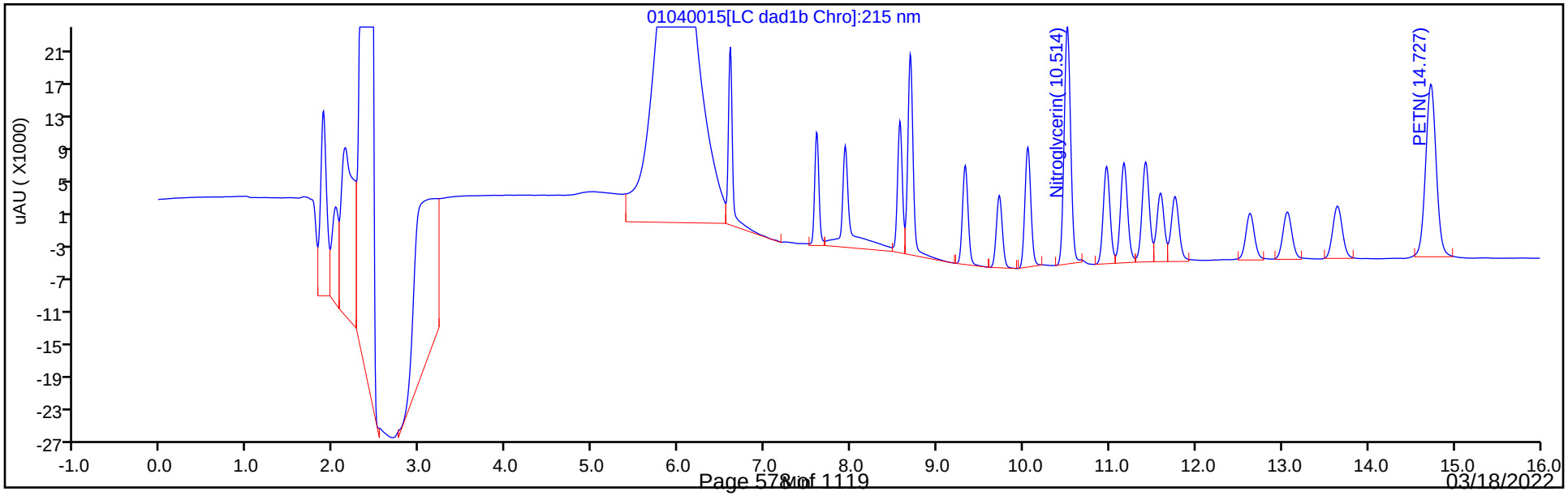
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040015.d

Injection Date:	04-Jan-2022 19:59:42	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040016.D
Lims ID: IC INT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 04-Jan-2022 20:22:36 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 4
Misc. Info.: 280-0107731-016
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Jan-2022 20:05:12 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1641

First Level Reviewer: zhangji Date: 04-Jan-2022 20:49:54

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.598	6.598	0.000	8489	0.1000	0.1013	
8 RDX	1	7.605	7.605	0.000	10447	0.1000	0.1008	
9 2,4,6-Trinitrophenol	1	7.945	7.945	0.000	7855	0.1000	0.1020	
$ 10 1,2-Dinitrobenzene	1	8.572	8.572	0.000	12780	0.1000	0.1025	
11 1,3,5-Trinitrobenzene	1	8.692	8.692	0.000	21856	0.1002	0.1002	
12 1,3-Dinitrobenzene	1	9.331	9.331	0.000	29215	0.1002	0.1013	
13 Nitrobenzene	1	9.725	9.725	0.000	19287	0.1004	0.1005	
15 Tetryl	1	10.058	10.058	0.000	17238	0.1002	0.1011	
16 Nitroglycerin	2	10.518	10.518	0.000	63595	1.00	1.01	
17 2,4,6-Trinitrotoluene	1	10.971	10.971	0.000	20408	0.1004	0.1007	
18 4-Amino-2,6-dinitrotoluene	1	11.171	11.171	0.000	14975	0.1001	0.0992	
19 2-Amino-4,6-dinitrotoluene	1	11.425	11.425	0.000	20280	0.1004	0.1003	
20 2,6-Dinitrotoluene	1	11.598	11.598	0.000	14234	0.1004	0.0995	
21 2,4-Dinitrotoluene	1	11.765	11.765	0.000	29355	0.1004	0.1015	
22 o-Nitrotoluene	1	12.638	12.638	0.000	12777	0.1000	0.1001	
23 p-Nitrotoluene	1	13.071	13.071	0.000	10715	0.1002	0.1009	
24 m-Nitrotoluene	1	13.651	13.651	0.000	14003	0.1001	0.0984	
25 PETN	2	14.738	14.738	0.000	74208	1.00	1.00	

QC Flag Legend
Processing Flags

Reagents:
8330IntermStk_00070 Amount Added: 10.00 Units: uL

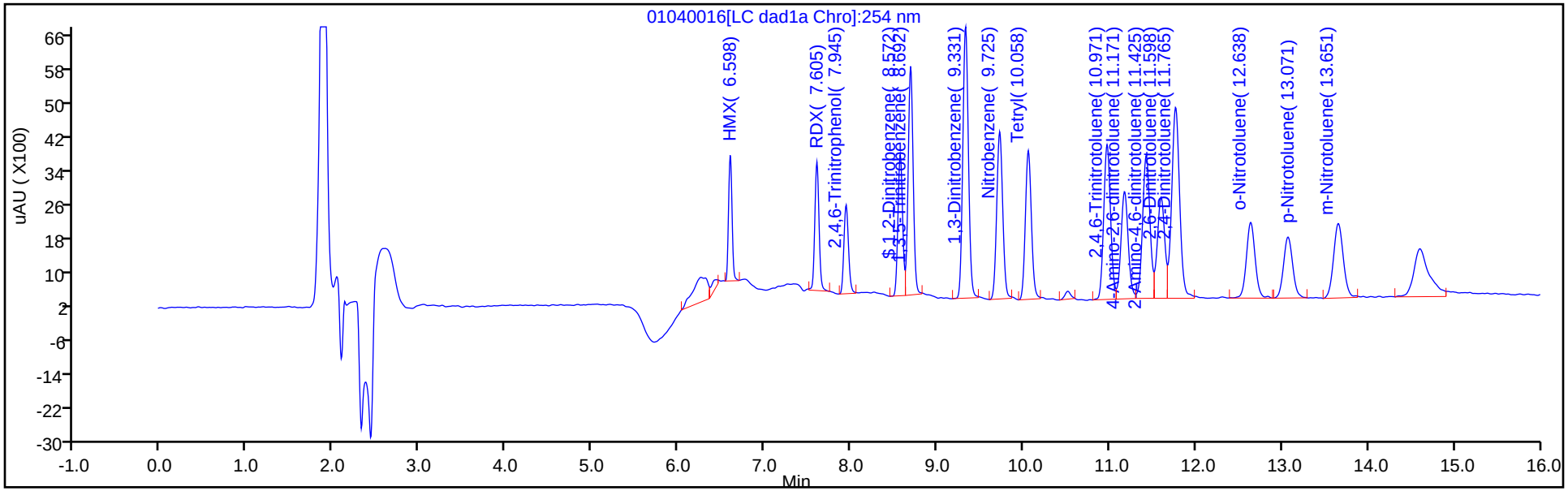
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Eurofins TestAmerica, Denver

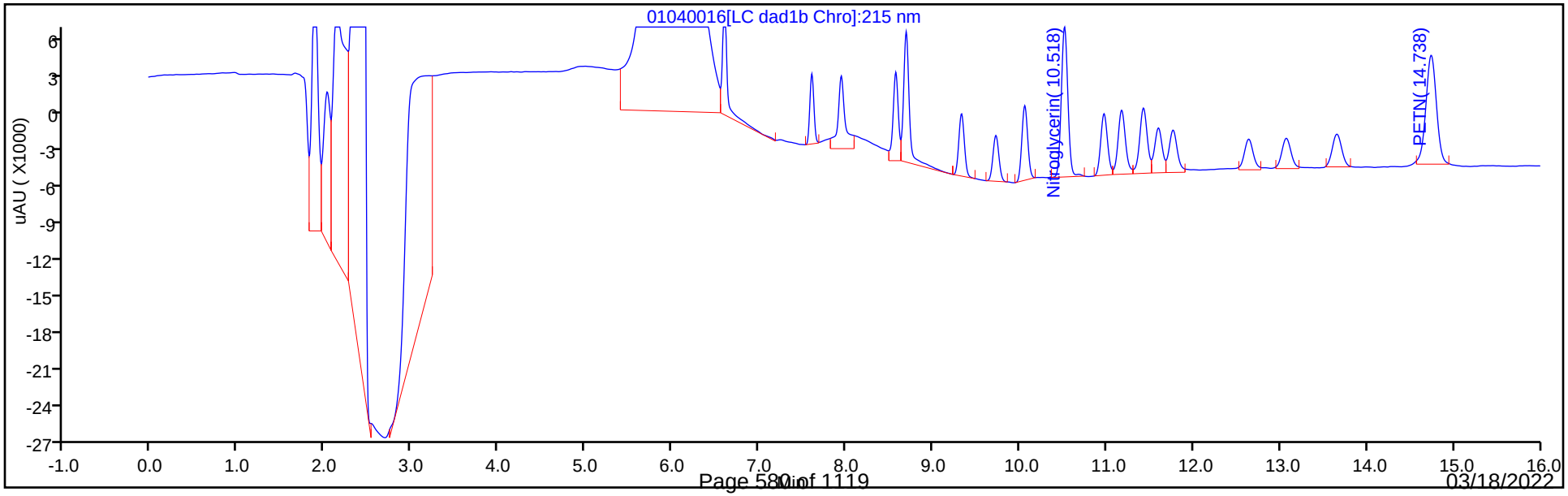
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040016.d

Injection Date:	04-Jan-2022 20:22:36	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040017.D
Lims ID: IC INT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 04-Jan-2022 20:45:29 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 3
Misc. Info.: 280-0107731-017
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Jan-2022 20:05:13 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1641

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	4 HMX	1	6.600	6.598	0.002	4230	0.0500	0.0505	
	8 RDX	1	7.607	7.605	0.002	5715	0.0500	0.0552	
	9 2,4,6-Trinitrophenol	1	7.947	7.945	0.002	4029	0.0500	0.0523	
$	10 1,2-Dinitrobenzene	1	8.573	8.572	0.001	6127	0.0500	0.0491	
	11 1,3,5-Trinitrobenzene	1	8.693	8.692	0.001	10711	0.0501	0.0491	
	12 1,3-Dinitrobenzene	1	9.327	9.331	-0.004	14683	0.0501	0.0509	
	13 Nitrobenzene	1	9.727	9.725	0.002	9329	0.0502	0.0486	
	15 Tetryl	1	10.060	10.058	0.002	8315	0.0501	0.0487	
	16 Nitroglycerin	2	10.513	10.518	-0.005	30651	0.5000	0.4862	
	17 2,4,6-Trinitrotoluene	1	10.973	10.971	0.002	10202	0.0502	0.0503	
	18 4-Amino-2,6-dinitrotoluene	1	11.173	11.171	0.002	7656	0.0501	0.0507	
	19 2-Amino-4,6-dinitrotoluene	1	11.427	11.425	0.002	9600	0.0502	0.0475	
	20 2,6-Dinitrotoluene	1	11.593	11.598	-0.005	6908	0.0502	0.0483	
	21 2,4-Dinitrotoluene	1	11.767	11.765	0.002	13933	0.0502	0.0482	
	22 o-Nitrotoluene	1	12.640	12.638	0.002	6314	0.0500	0.0495	
	23 p-Nitrotoluene	1	13.067	13.071	-0.004	5163	0.0501	0.0486	
	24 m-Nitrotoluene	1	13.653	13.651	0.002	6733	0.0501	0.0473	
	25 PETN	2	14.733	14.738	-0.005	35084	0.5000	0.4645	

Reagents:

8330IntermStk_00070 Amount Added: 5.00 Units: uL

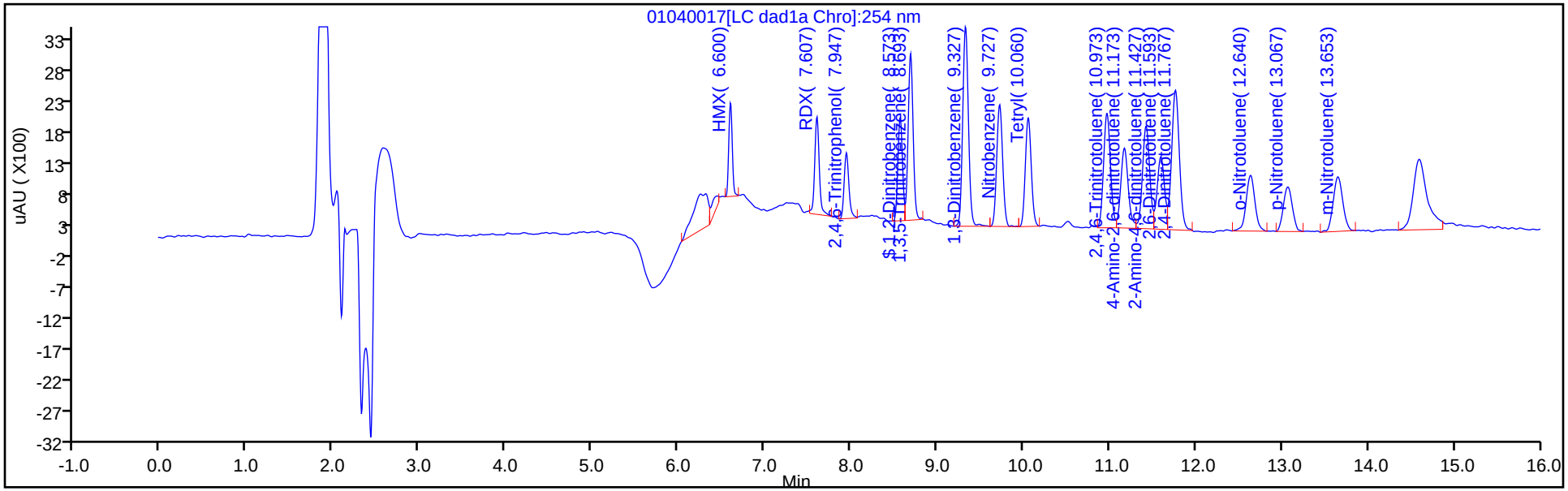
Report Date: 06-Jan-2022 20:05:13 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

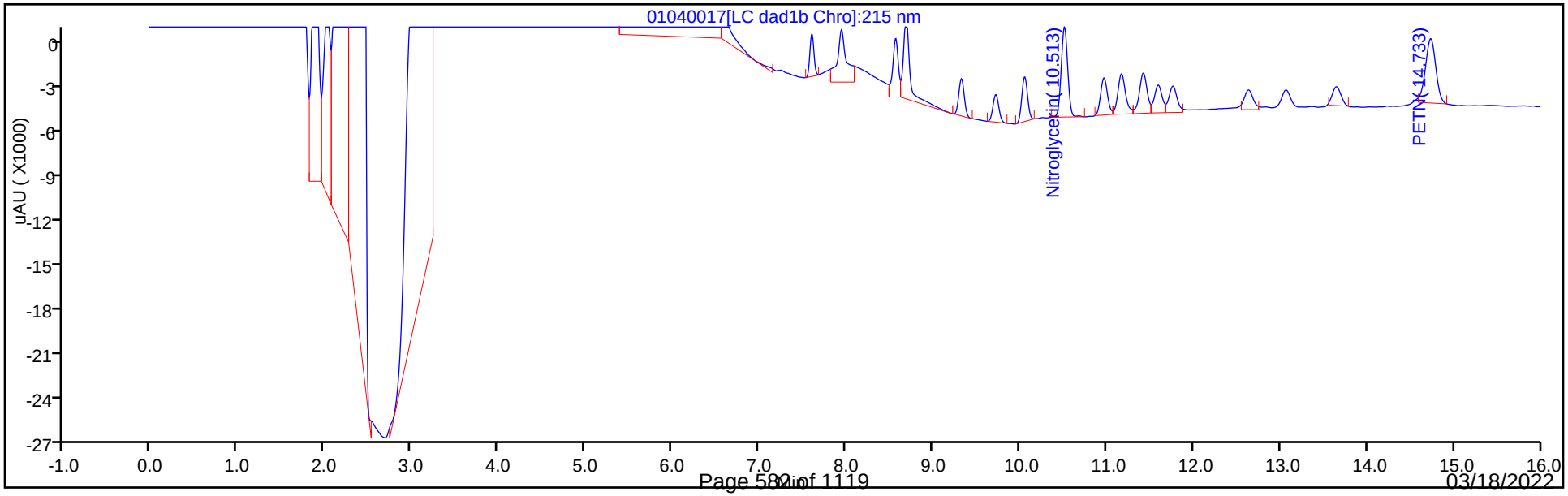
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Injection Date:	04-Jan-2022 20:45:29	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC INT 3			Worklist Smp#:	17
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040018.D
Lims ID: IC INT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 04-Jan-2022 21:08:26 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 2
Misc. Info.: 280-0107731-018
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Jan-2022 20:05:13 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1641

First Level Reviewer: zhangji Date: 05-Jan-2022 12:01:28

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.595	6.598	-0.003	1735	0.0200	0.0207	
8 RDX	1	7.608	7.605	0.003	2084	0.0200	0.0201	M
9 2,4,6-Trinitrophenol	1	7.948	7.945	0.003	1554	0.0200	0.0202	M
$ 10 1,2-Dinitrobenzene	1	8.575	8.572	0.003	2503	0.0200	0.0201	
11 1,3,5-Trinitrobenzene	1	8.695	8.692	0.003	4249	0.0200	0.0195	
12 1,3-Dinitrobenzene	1	9.328	9.331	-0.003	5833	0.0200	0.0202	
13 Nitrobenzene	1	9.722	9.725	-0.003	3845	0.0201	0.0200	
15 Tetryl	1	10.055	10.058	-0.003	3498	0.0200	0.0205	
16 Nitroglycerin	2	10.515	10.518	-0.003	12008	0.2000	0.1905	
17 2,4,6-Trinitrotoluene	1	10.968	10.971	-0.003	4227	0.0201	0.0209	
18 4-Amino-2,6-dinitrotoluene	1	11.175	11.171	0.004	3150	0.0200	0.0209	
19 2-Amino-4,6-dinitrotoluene	1	11.428	11.425	0.003	4282	0.0201	0.0212	
20 2,6-Dinitrotoluene	1	11.595	11.598	-0.003	2993	0.0201	0.0209	
21 2,4-Dinitrotoluene	1	11.762	11.765	-0.003	5890	0.0201	0.0204	
22 o-Nitrotoluene	1	12.642	12.638	0.004	2743	0.0200	0.0215	
23 p-Nitrotoluene	1	13.075	13.071	0.004	2151	0.0200	0.0202	
24 m-Nitrotoluene	1	13.655	13.651	0.004	2989	0.0200	0.0210	
25 PETN	2	14.735	14.738	-0.003	15705	0.2000	0.1974	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070 Amount Added: 2.00 Units: uL

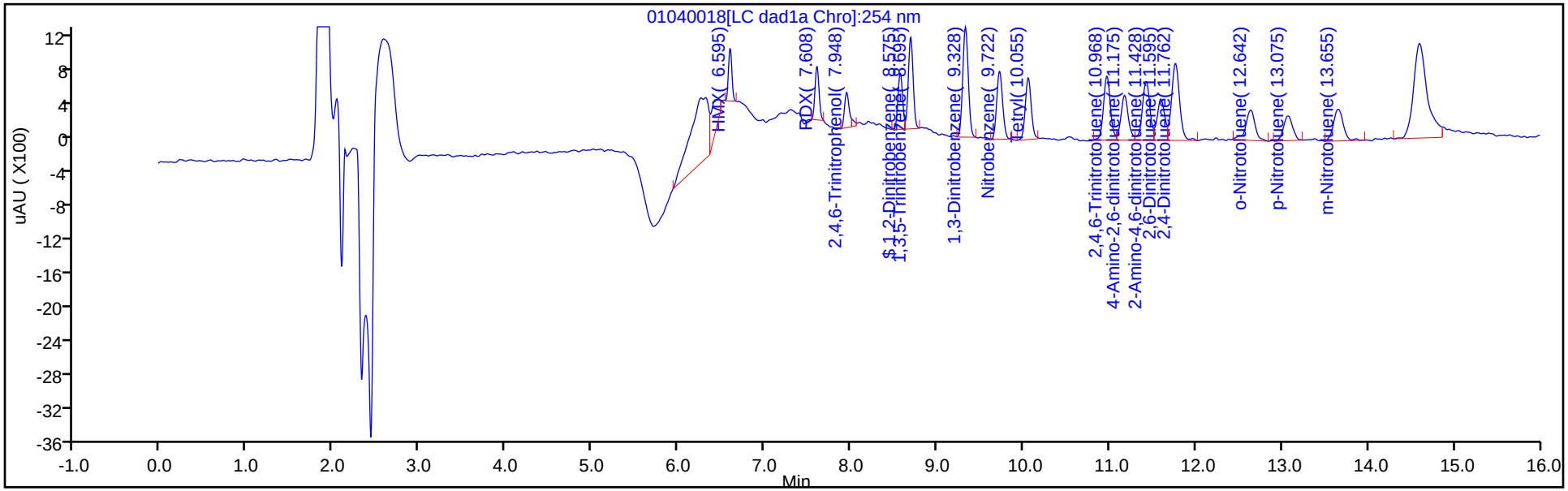
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Eurofins TestAmerica, Denver

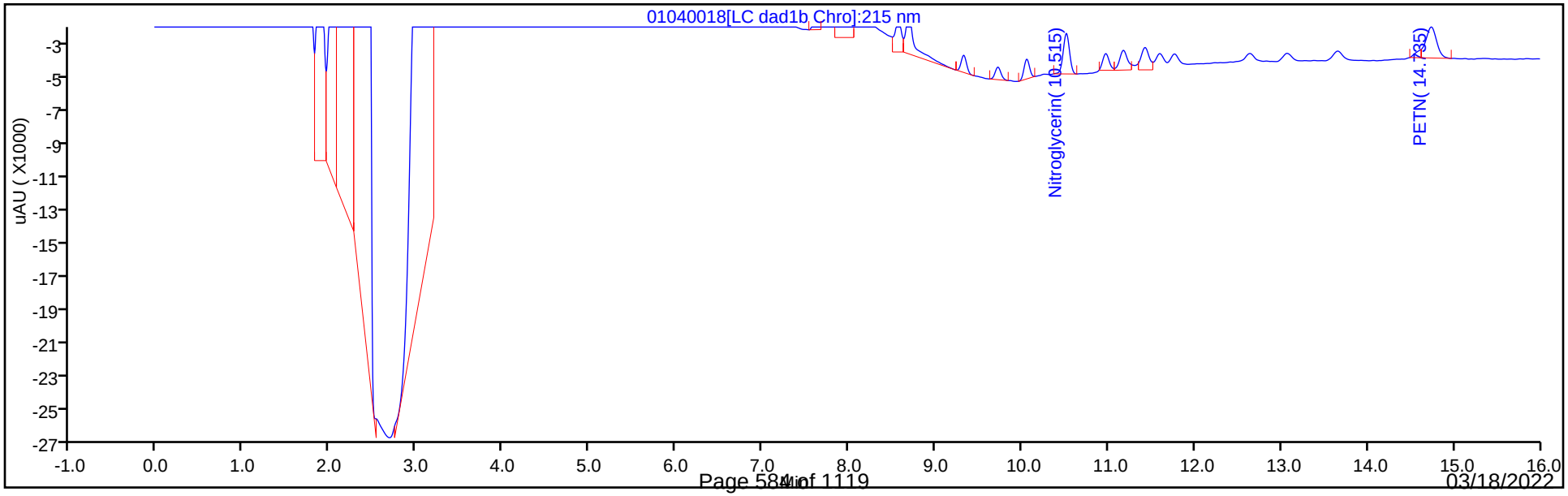
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040018.d

Injection Date:	04-Jan-2022 21:08:26	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

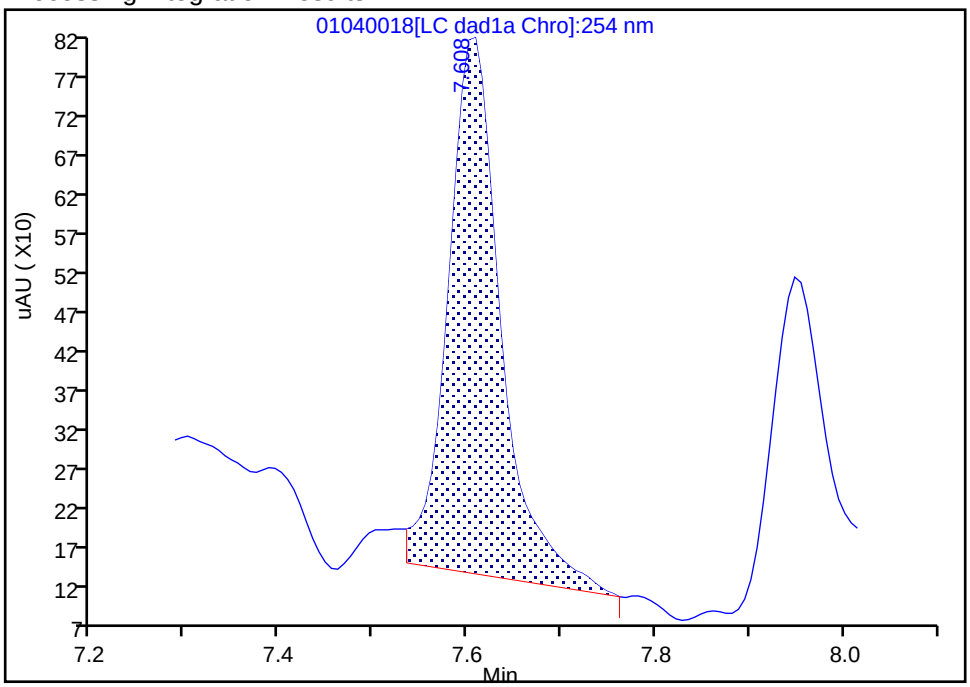
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Injection Date:	04-Jan-2022 21:08:26	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

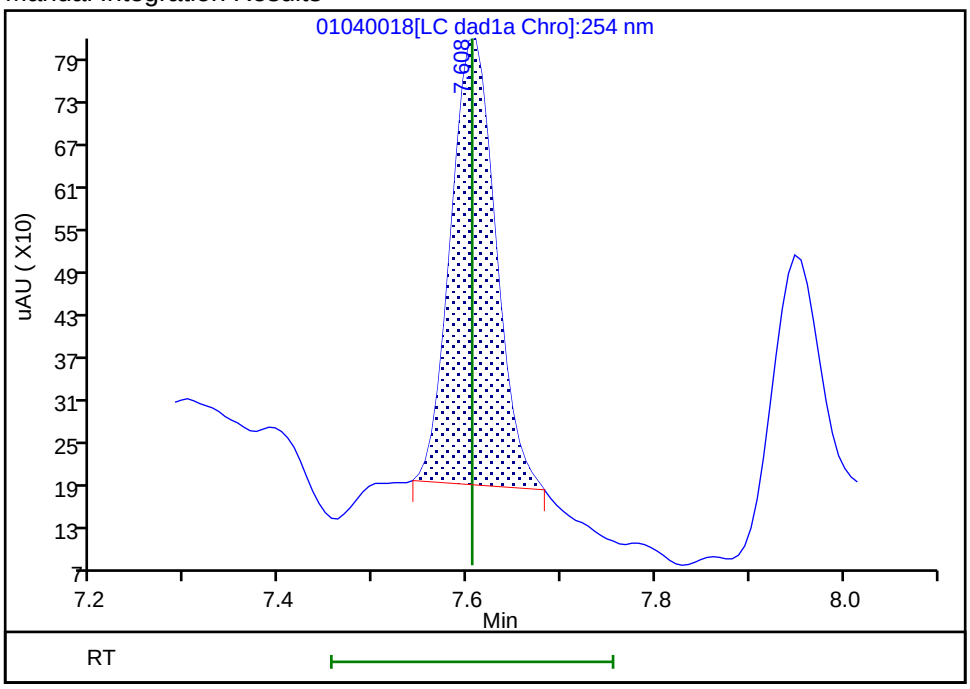
Processing Integration Results

RT: 7.61
Area: 2668
Amount: 0.024969
Amount Units: ug/mL



Manual Integration Results

RT: 7.61
Area: 2084
Amount: 0.020114
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:01:55

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

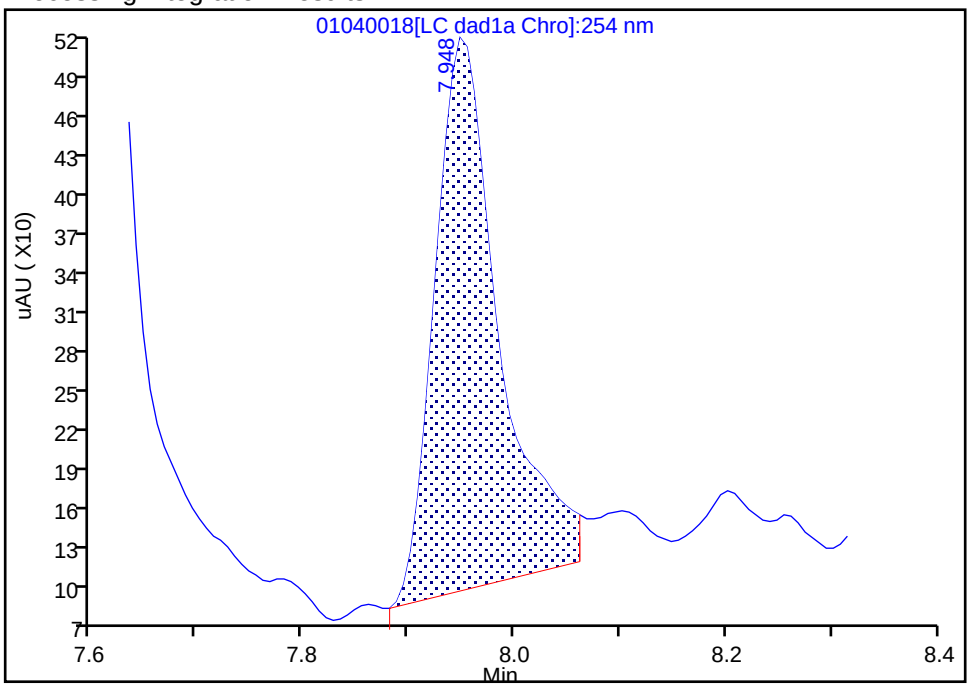
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Injection Date:	04-Jan-2022 21:08:26	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

9 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

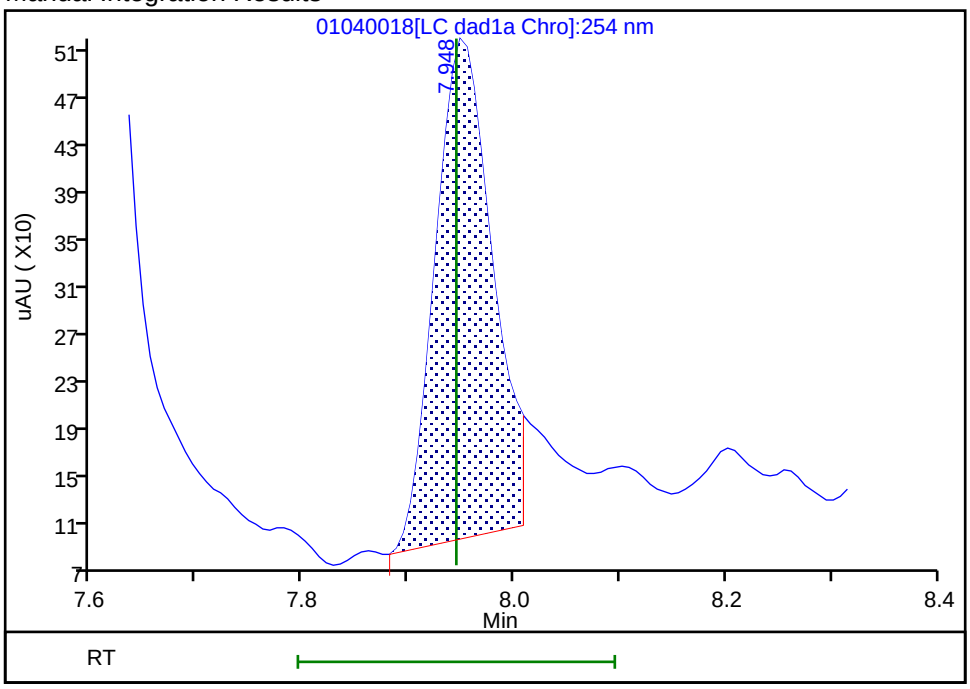
Processing Integration Results

RT: 7.95
Area: 1744
Amount: 0.022332
Amount Units: ug/mL



Manual Integration Results

RT: 7.95
Area: 1554
Amount: 0.020172
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:02:02

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

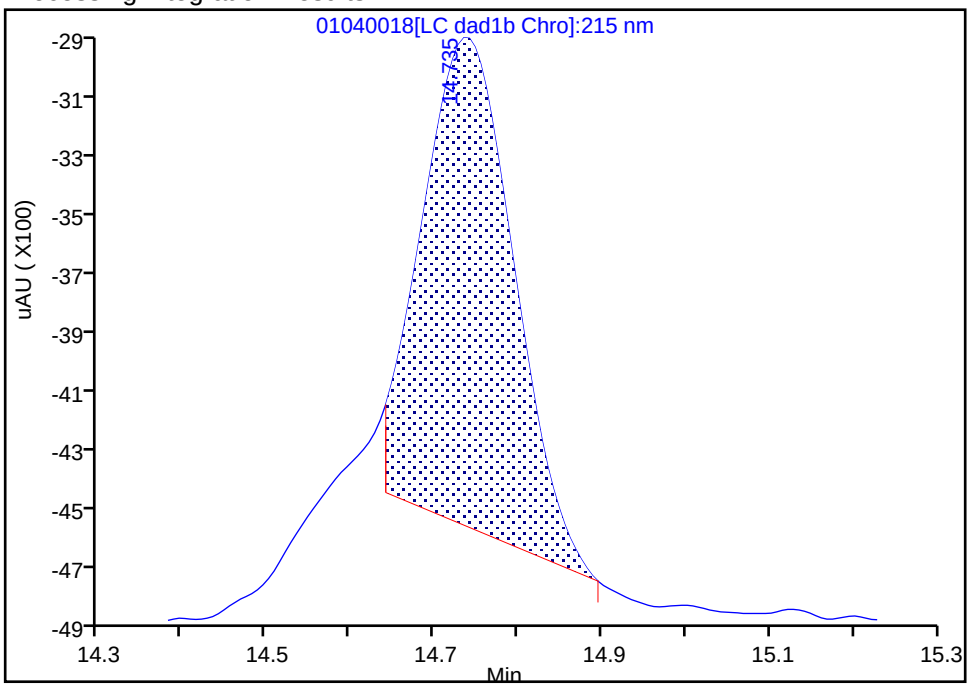
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040018.d
Injection Date: 04-Jan-2022 21:08:26 Instrument ID: CHHPLC_X3
Lims ID: IC INT 2
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

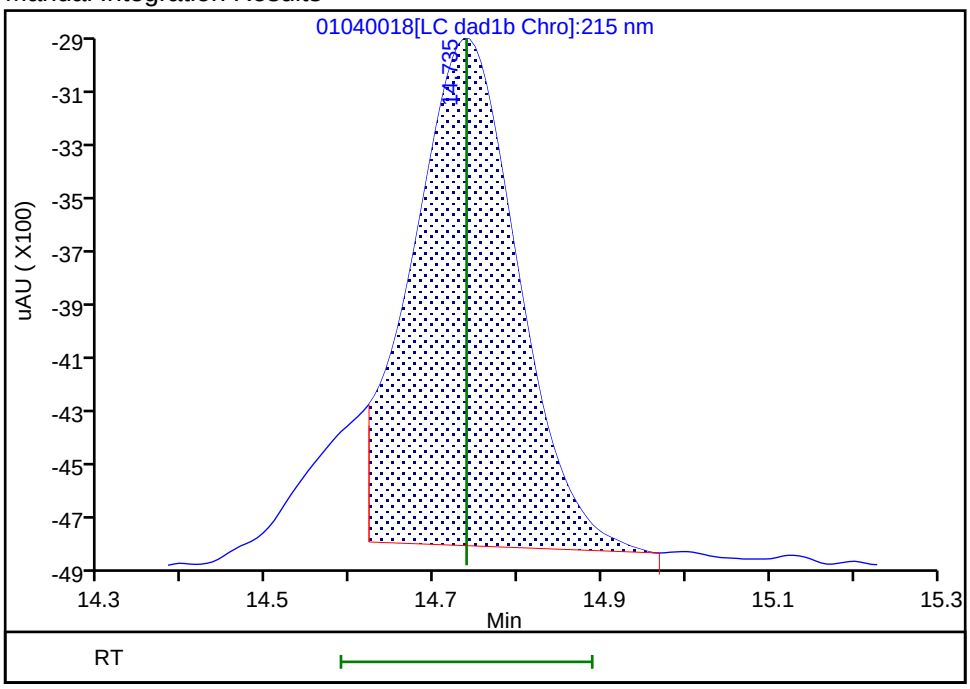
Processing Integration Results

RT: 14.73
Area: 11890
Amount: 0.166241
Amount Units: ug/mL



Manual Integration Results

RT: 14.73
Area: 15705
Amount: 0.197419
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:01:38
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040019.D
Lims ID: IC INT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 04-Jan-2022 21:31:24 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 1
Misc. Info.: 280-0107731-019
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Jan-2022 20:05:14 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1641

First Level Reviewer: zhangji Date: 06-Jan-2022 20:05:03

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.601	6.598	0.003	901	0.0100	0.0107	M
8 RDX	1	7.601	7.605	-0.004	1152	0.0100	0.0111	M
9 2,4,6-Trinitrophenol	1	7.941	7.945	-0.004	716	0.0100	0.009294	M
$ 10 1,2-Dinitrobenzene	1	8.561	8.572	-0.011	1188	0.0100	0.009527	
11 1,3,5-Trinitrobenzene	1	8.688	8.692	-0.004	2197	0.0100	0.0101	
12 1,3-Dinitrobenzene	1	9.321	9.331	-0.010	2633	0.0100	0.009130	
13 Nitrobenzene	1	9.714	9.725	-0.011	2067	0.0100	0.0108	
15 Tetryl	1	10.041	10.058	-0.017	1778	0.0100	0.0104	
16 Nitroglycerin	2	10.501	10.518	-0.017	6348	0.1000	0.1007	
17 2,4,6-Trinitrotoluene	1	10.954	10.971	-0.017	2126	0.0100	0.0105	M
18 4-Amino-2,6-dinitrotoluene	1	11.154	11.171	-0.017	1718	0.0100	0.0114	M
19 2-Amino-4,6-dinitrotoluene	1	11.408	11.425	-0.017	2287	0.0100	0.0113	M
20 2,6-Dinitrotoluene	1	11.581	11.598	-0.017	1551	0.0100	0.0108	M
21 2,4-Dinitrotoluene	1	11.748	11.765	-0.017	3047	0.0100	0.0105	M
22 o-Nitrotoluene	1	12.614	12.638	-0.024	1387	0.0100	0.0109	
23 p-Nitrotoluene	1	13.054	13.071	-0.017	1083	0.0100	0.0102	
24 m-Nitrotoluene	1	13.634	13.651	-0.017	1764	0.0100	0.0124	
25 PETN	2	14.708	14.738	-0.030	8784	0.1000	0.1020	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070 Amount Added: 1.00 Units: uL

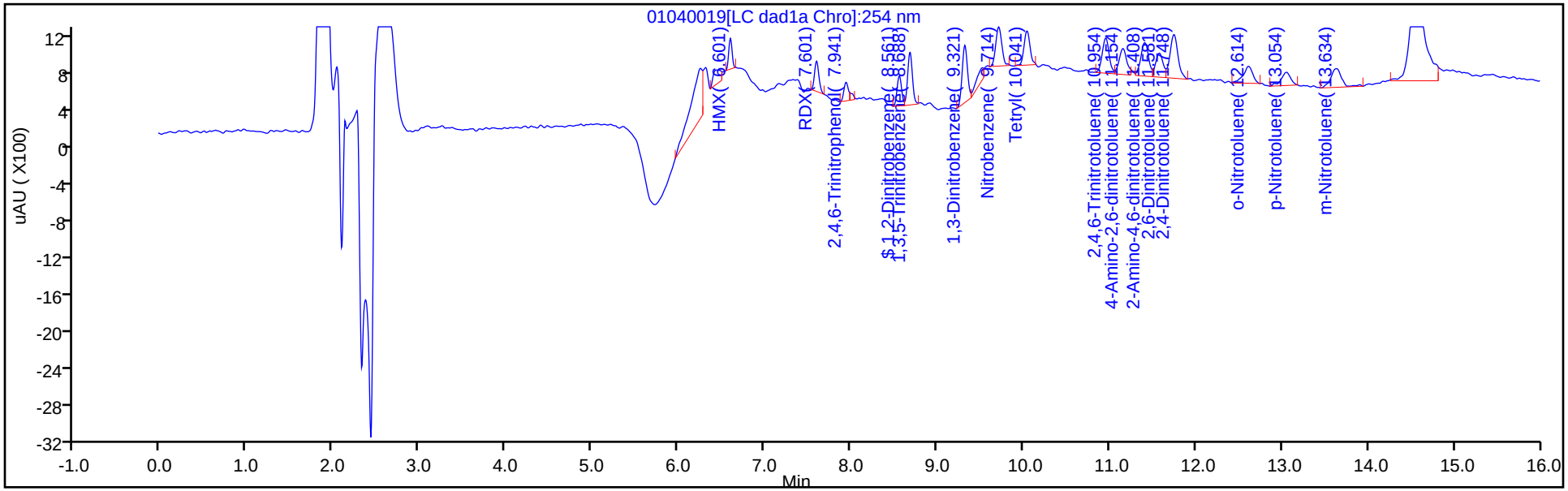
Report Date: 06-Jan-2022 20:05:14 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

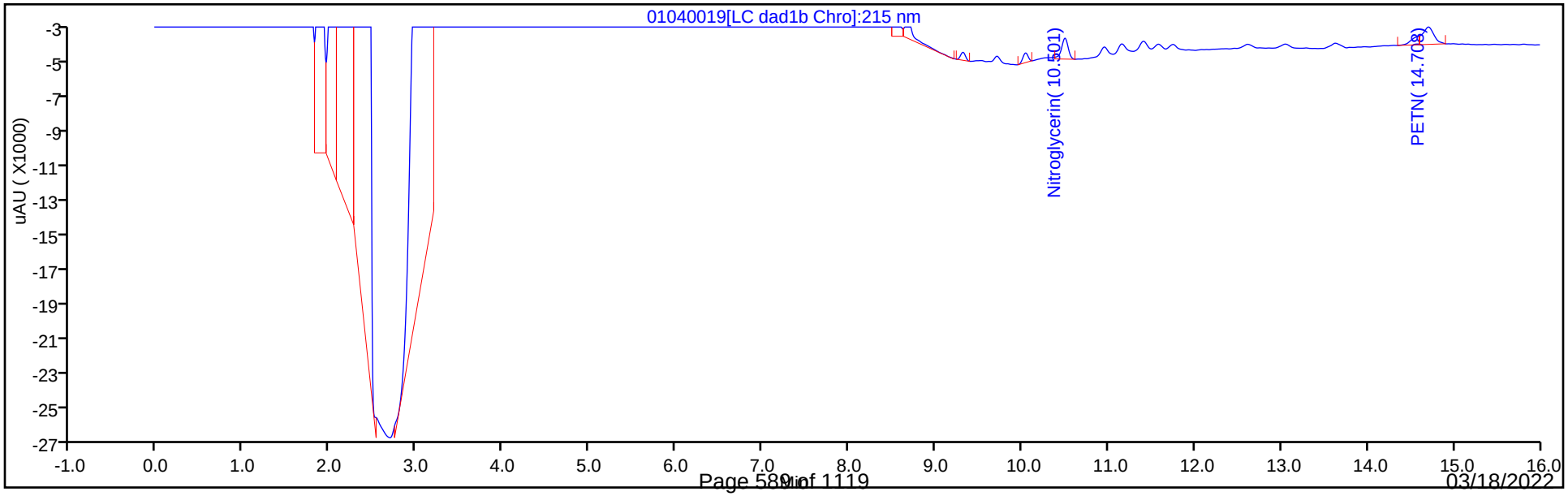
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d

Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver

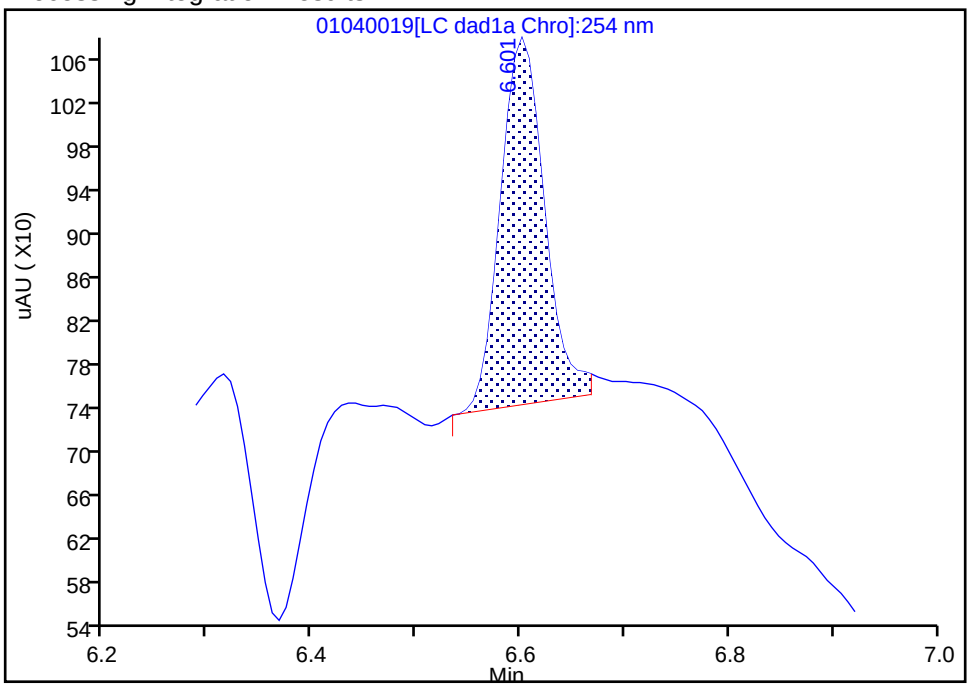
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Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

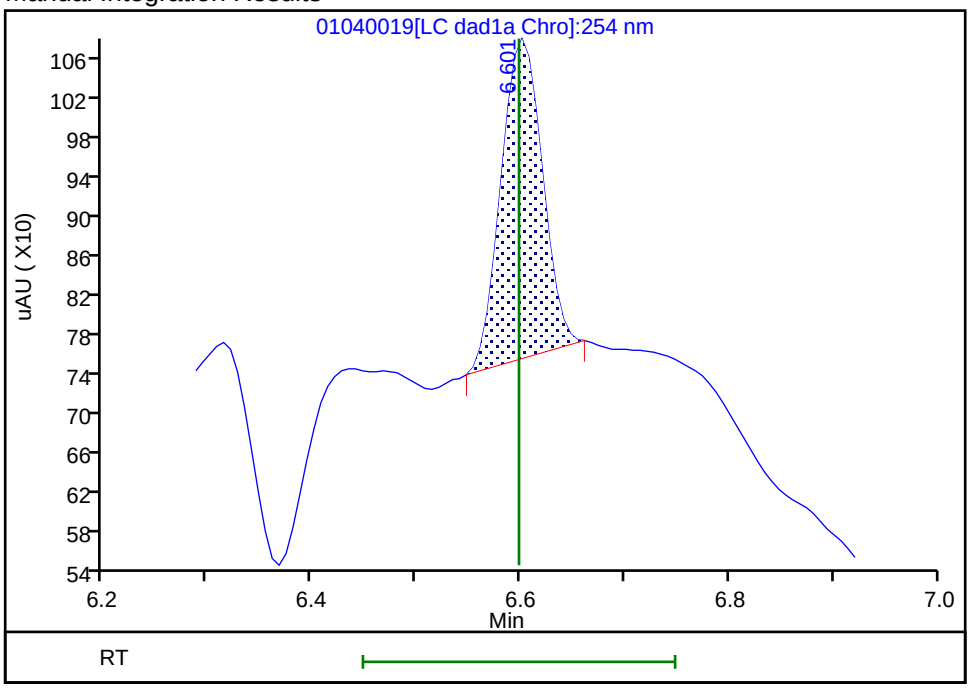
Processing Integration Results

RT: 6.60
Area: 995
Amount: 0.011724
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 901
Amount: 0.010748
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 11:59:58
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

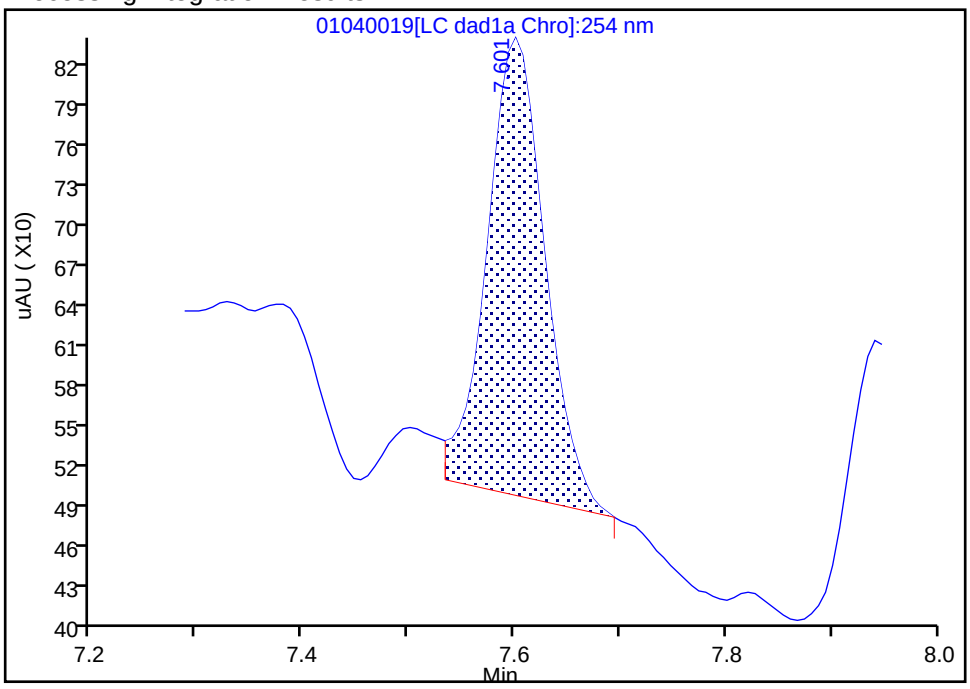
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

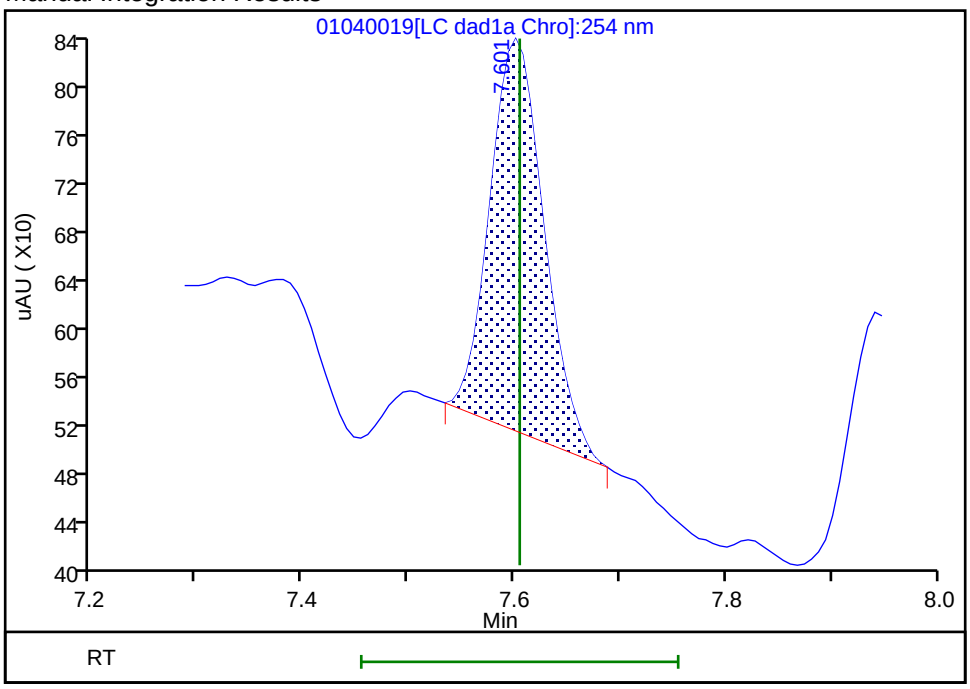
Processing Integration Results

RT: 7.60
Area: 1299
Amount: 0.011974
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 1152
Amount: 0.011119
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:04
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

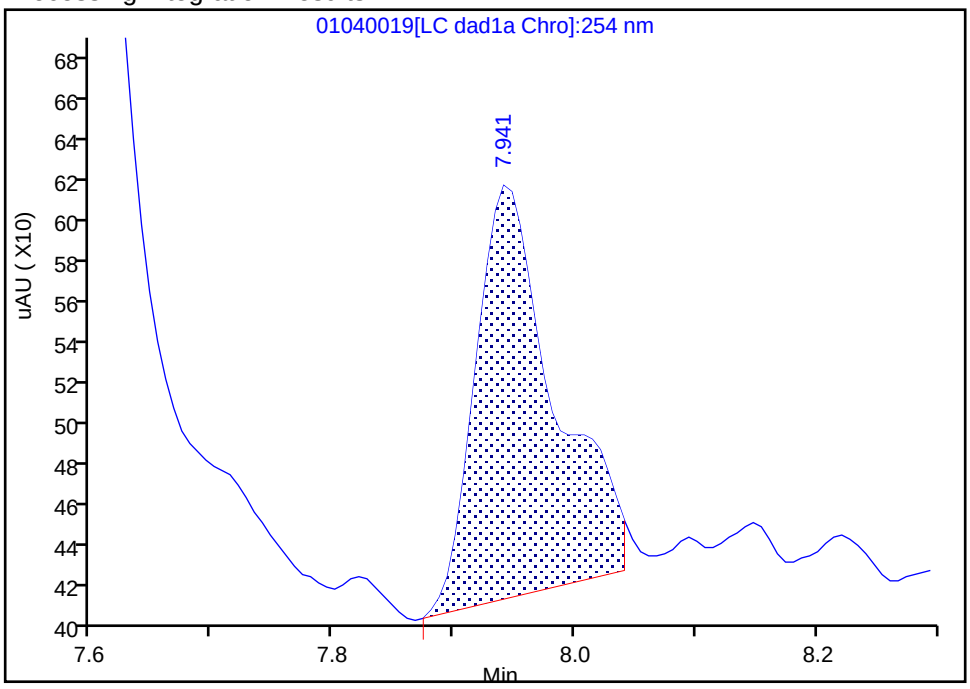
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

9 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

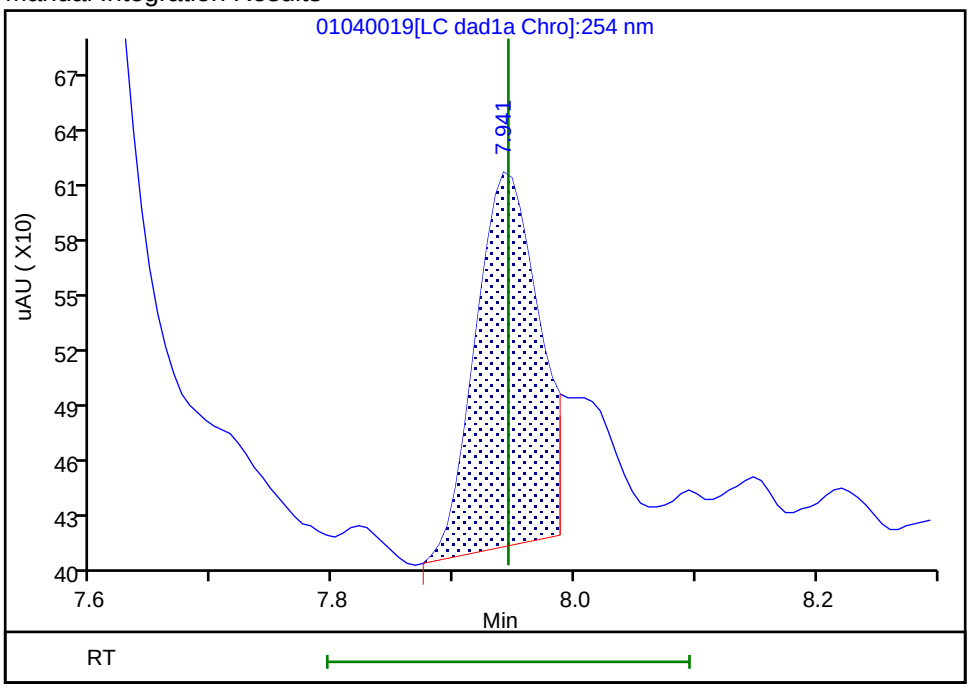
Processing Integration Results

RT: 7.94
Area: 903
Amount: 0.011263
Amount Units: ug/mL



Manual Integration Results

RT: 7.94
Area: 716
Amount: 0.009294
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:13
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

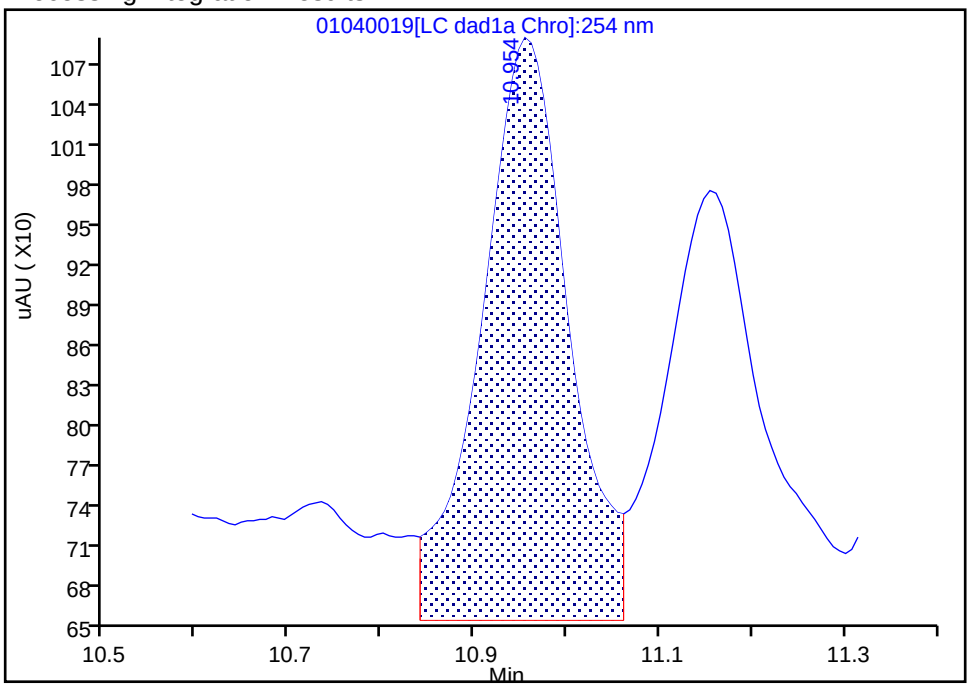
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

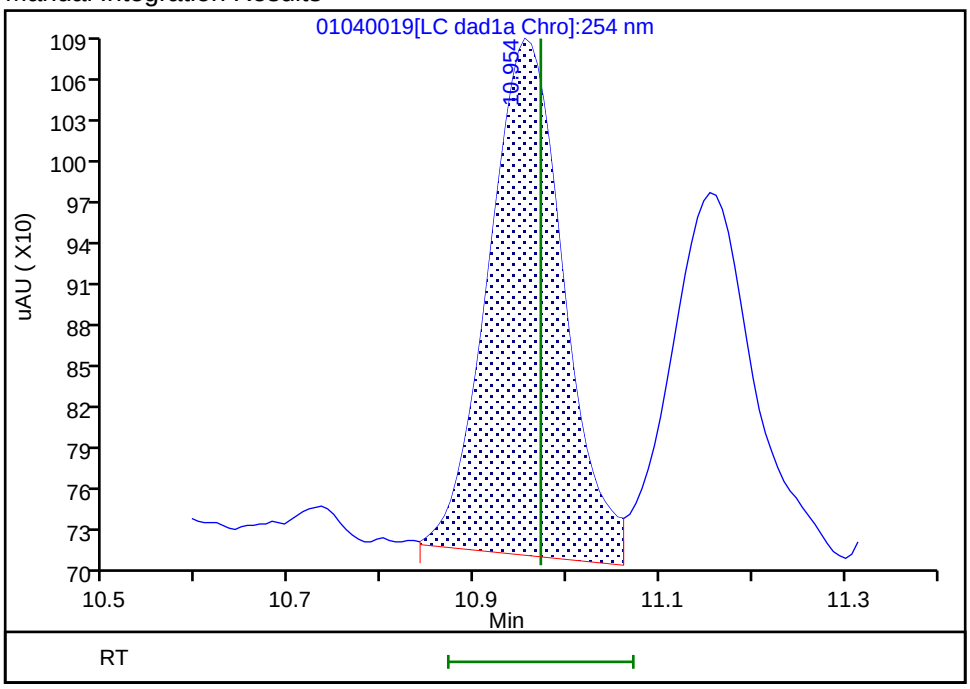
Processing Integration Results

RT: 10.95
Area: 2806
Amount: 0.013346
Amount Units: ug/mL



Manual Integration Results

RT: 10.95
Area: 2126
Amount: 0.010487
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:35
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

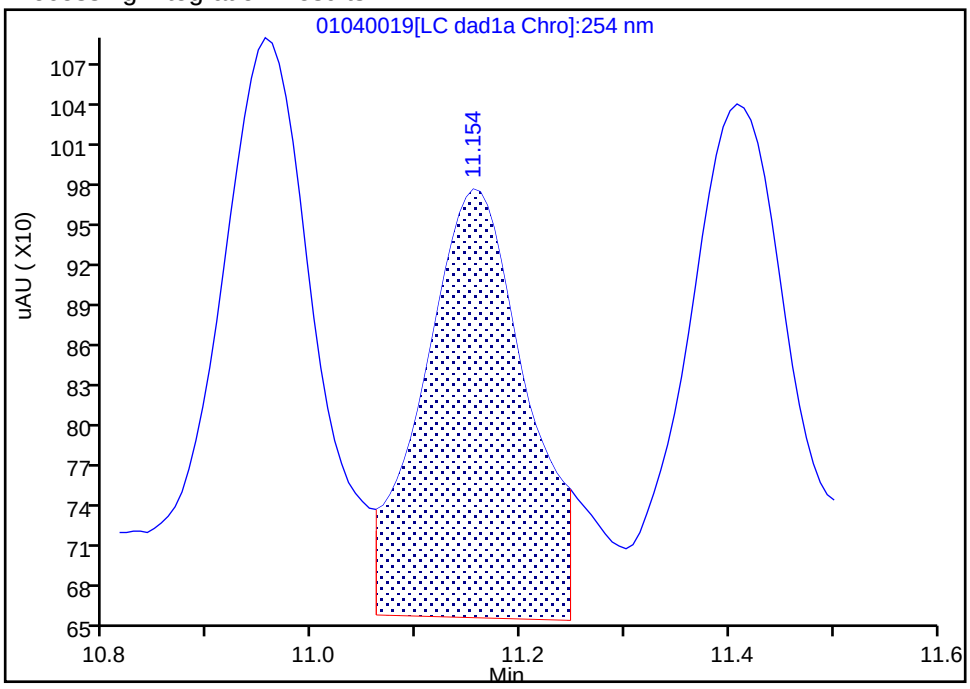
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

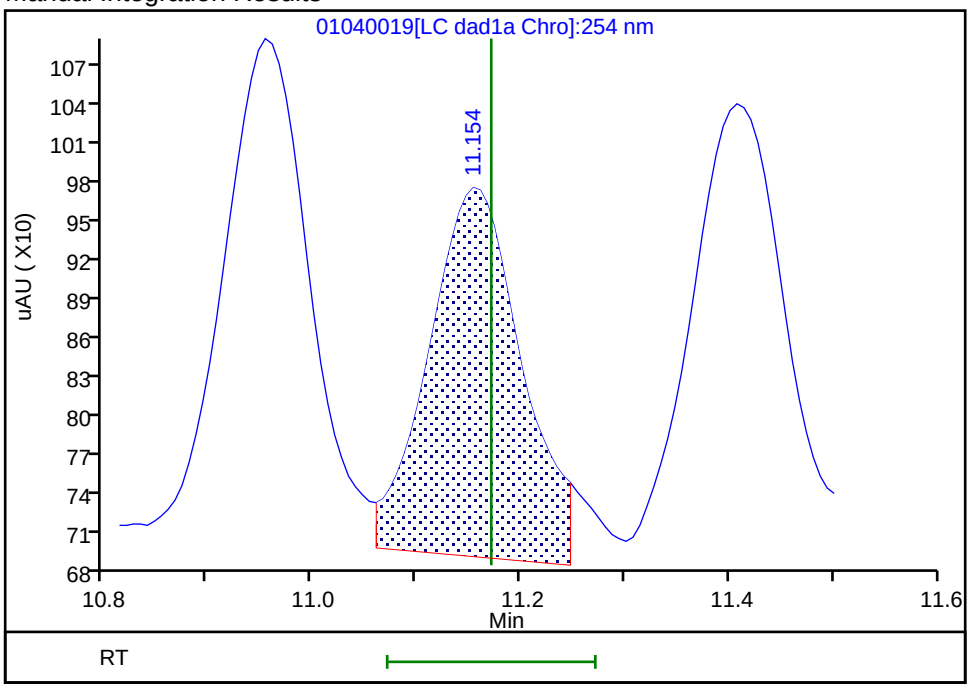
Processing Integration Results

RT: 11.15
Area: 2160
Amount: 0.013856
Amount Units: ug/mL



Manual Integration Results

RT: 11.15
Area: 1718
Amount: 0.011379
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:35

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

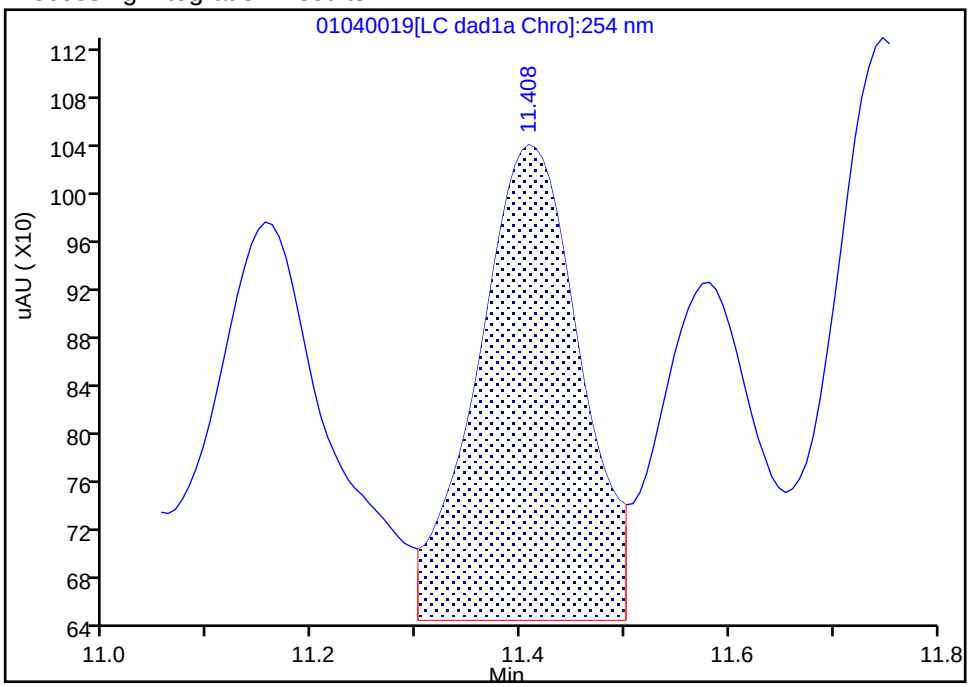
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

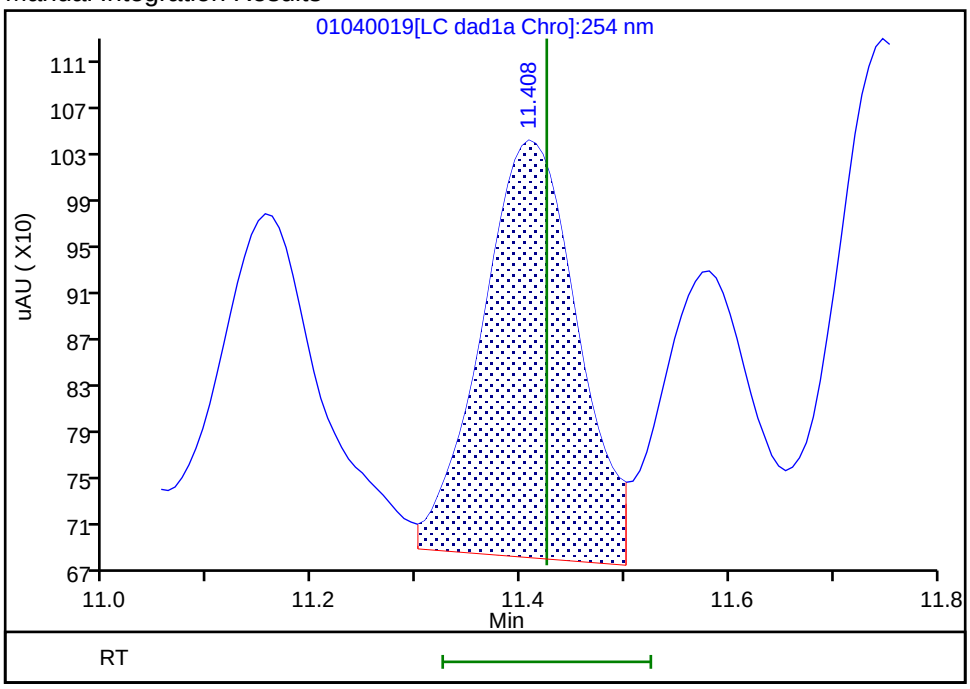
Processing Integration Results

RT: 11.41
Area: 2647
Amount: 0.012840
Amount Units: ug/mL



Manual Integration Results

RT: 11.41
Area: 2287
Amount: 0.011312
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:35
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

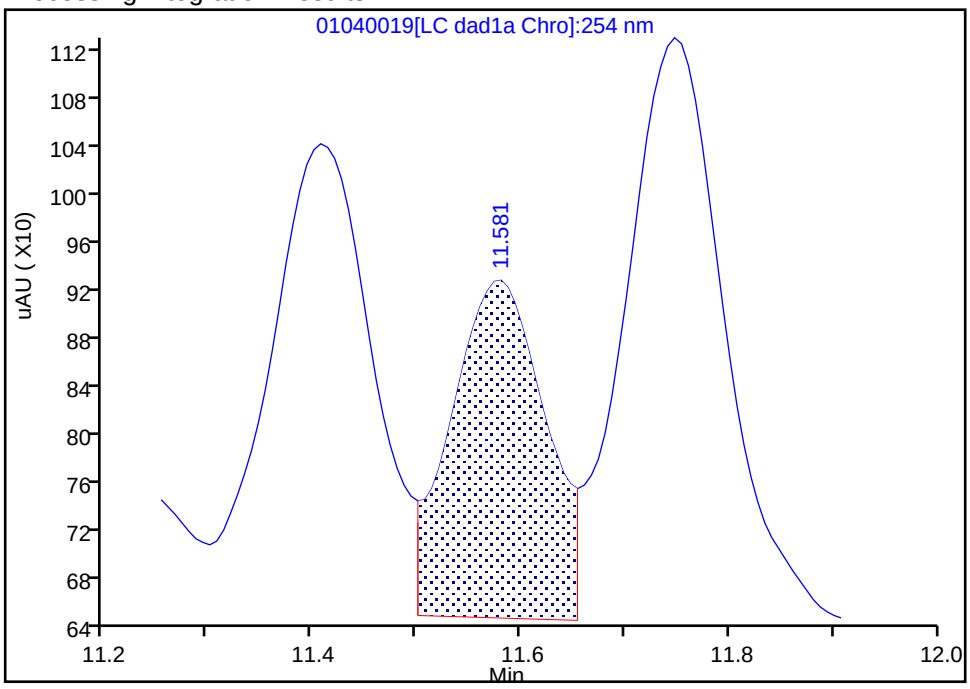
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

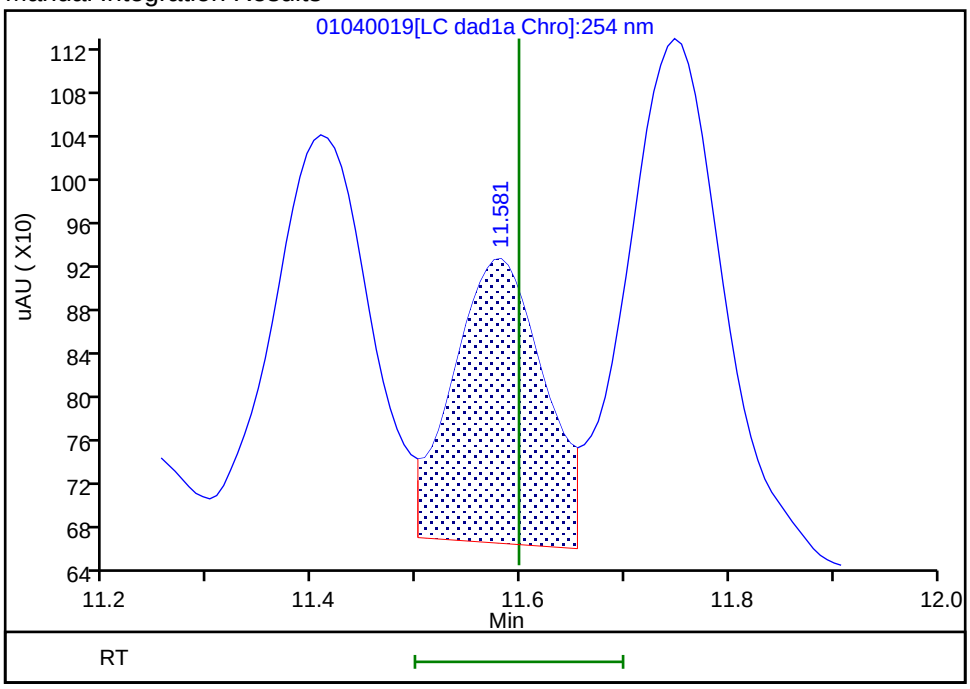
Processing Integration Results

RT: 11.58
Area: 1735
Amount: 0.011953
Amount Units: ug/mL



Manual Integration Results

RT: 11.58
Area: 1551
Amount: 0.010837
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:35
Audit Action: Assigned New Baseline Audit Reason: Baseline

Eurofins TestAmerica, Denver

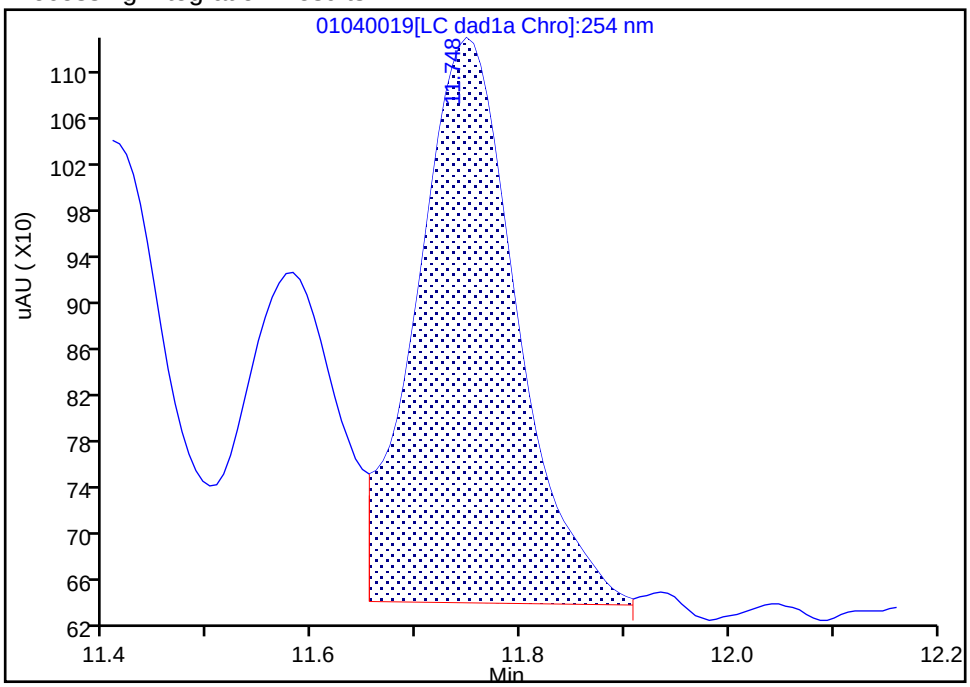
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

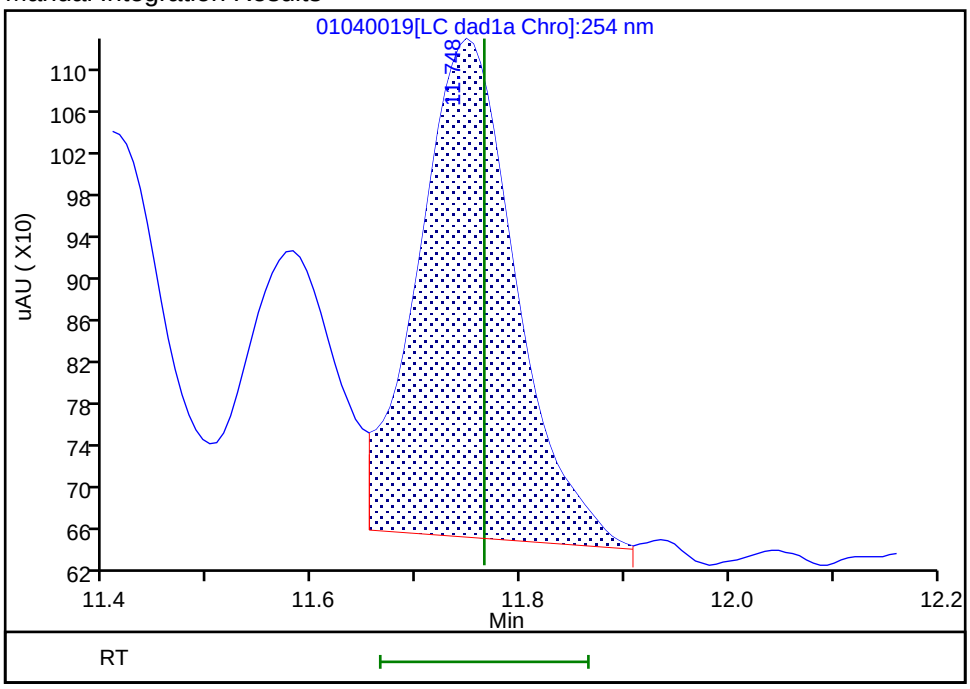
Processing Integration Results

RT: 11.75
Area: 3191
Amount: 0.010968
Amount Units: ug/mL



Manual Integration Results

RT: 11.75
Area: 3047
Amount: 0.010530
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:35
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

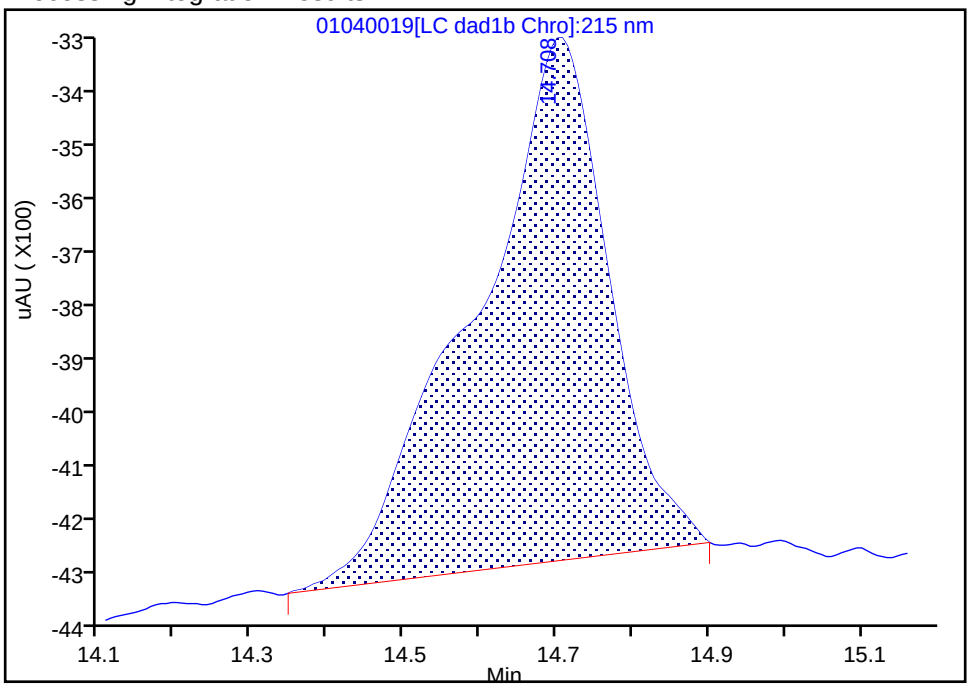
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d
Injection Date: 04-Jan-2022 21:31:24 Instrument ID: CHHPLC_X3
Lims ID: IC INT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

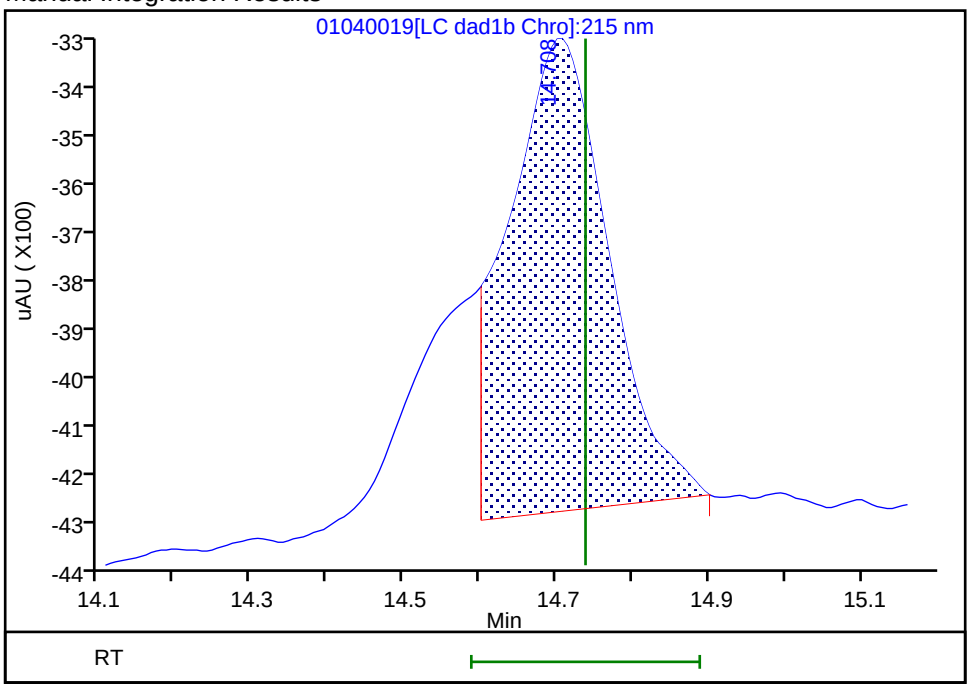
Processing Integration Results

RT: 14.71
Area: 11771
Amount: 0.142232
Amount Units: ug/mL



Manual Integration Results

RT: 14.71
Area: 8784
Amount: 0.102016
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:00:58
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Calibration / HMX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

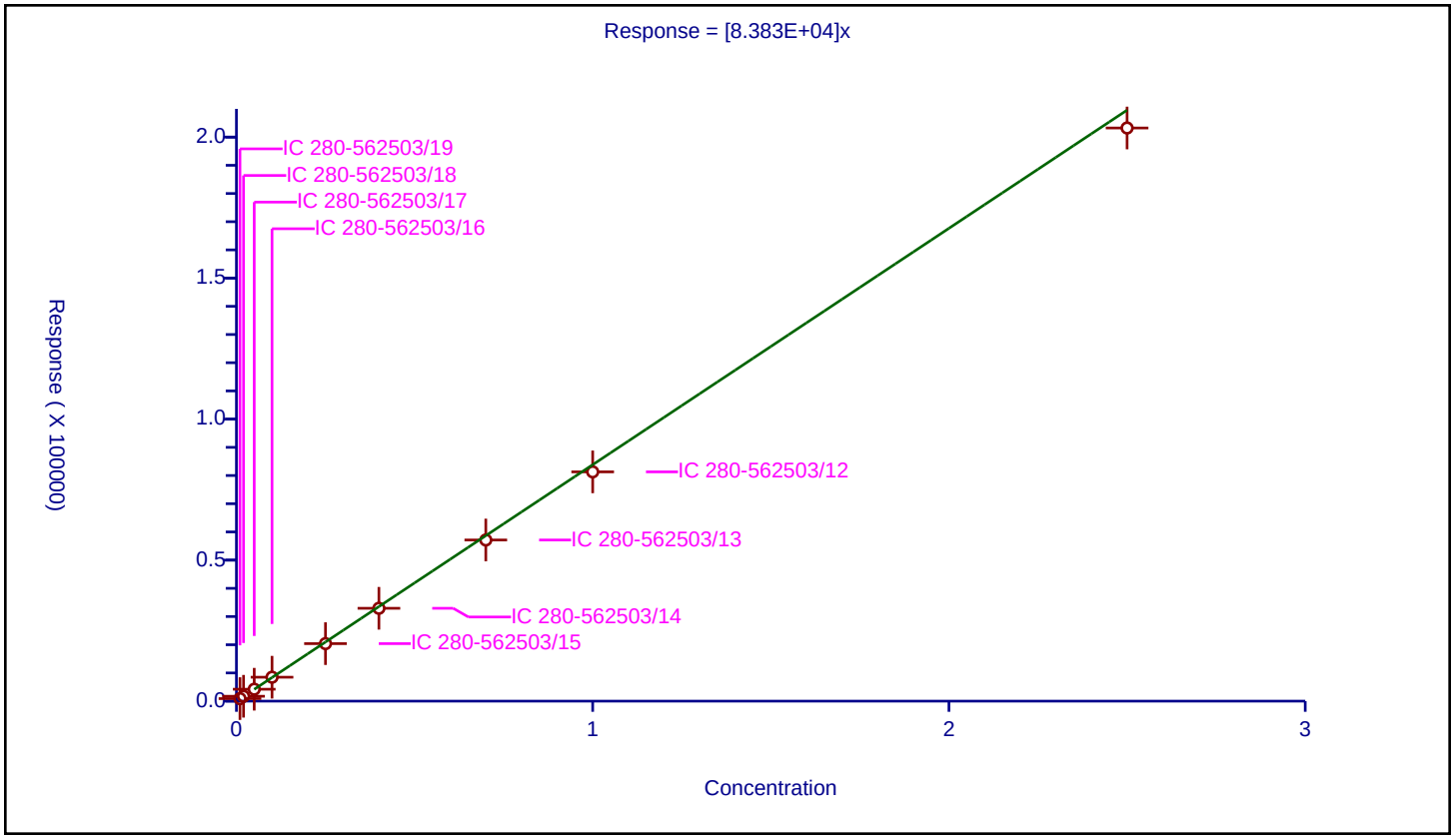
Curve Coefficients

Intercept:	0
Slope:	8.383E+04

Error Coefficients

Standard Error:	2490
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01	901.0			90100.0	Y
2	IC 280-562503/18	0.02	1735.0			86750.0	Y
3	IC 280-562503/17	0.05	4230.0			84600.0	Y
4	IC 280-562503/16	0.1	8489.0			84890.0	Y
5	IC 280-562503/15	0.25	20395.0			81580.0	Y
6	IC 280-562503/14	0.4	32925.0			82312.5	Y
7	IC 280-562503/13	0.7	57138.0			81625.714286	Y
8	IC 280-562503/12	1.0	81295.0			81295.0	Y
9	IC 280-562503/11	2.5	203229.0			81291.6	Y



Calibration / RDX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

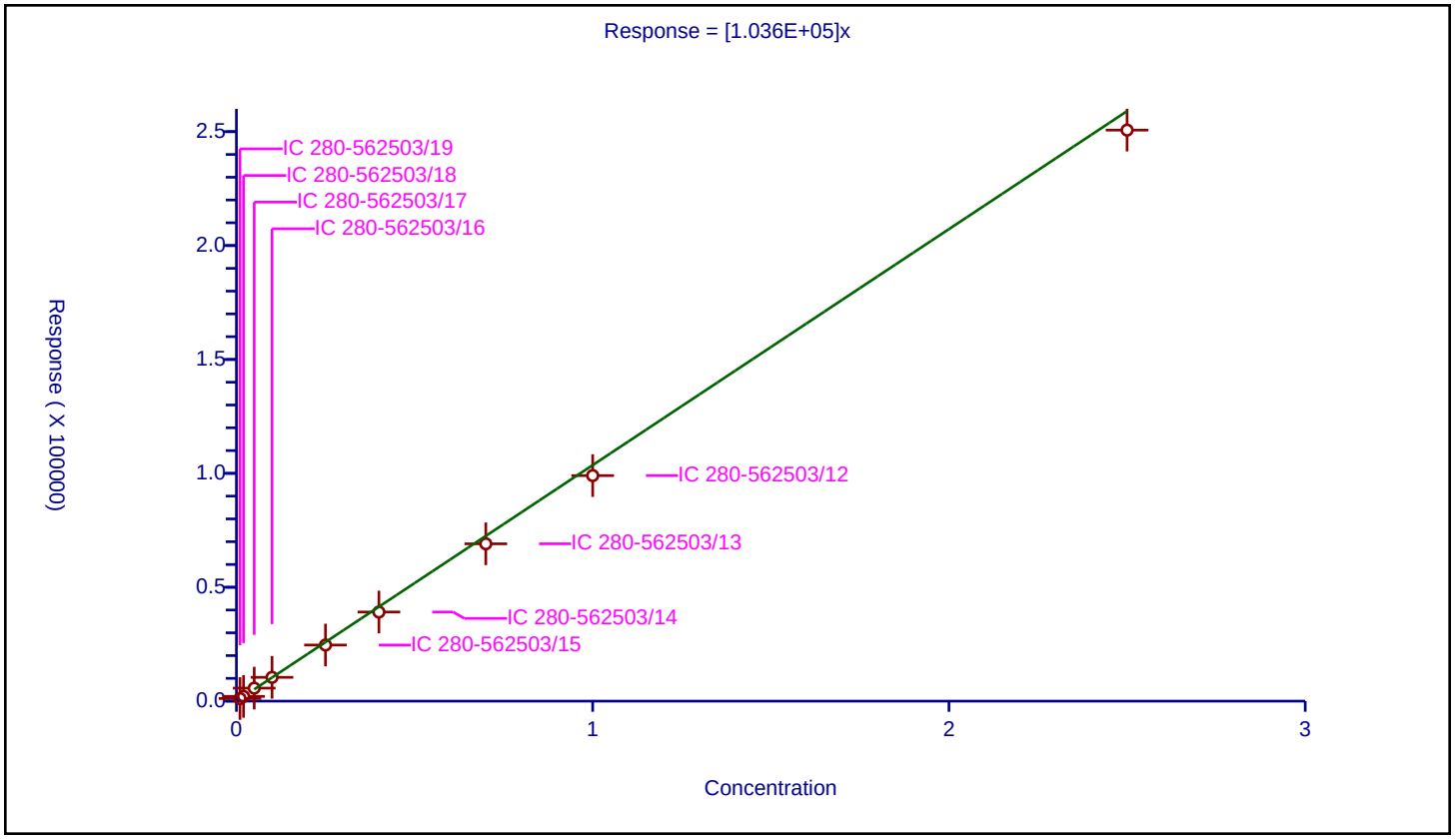
Curve Coefficients

Intercept:	0
Slope:	1.036E+05

Error Coefficients

Standard Error:	3710
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01	1152.0			115200.0	Y
2	IC 280-562503/18	0.02	2084.0			104200.0	Y
3	IC 280-562503/17	0.05	5715.0			114300.0	Y
4	IC 280-562503/16	0.1	10447.0			104470.0	Y
5	IC 280-562503/15	0.25	24635.0			98540.0	Y
6	IC 280-562503/14	0.4	39126.0			97815.0	Y
7	IC 280-562503/13	0.7	69068.0			98668.571429	Y
8	IC 280-562503/12	1.0	99016.0			99016.0	Y
9	IC 280-562503/11	2.5	250683.0			100273.2	Y



Calibration / 2,4,6-Trinitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

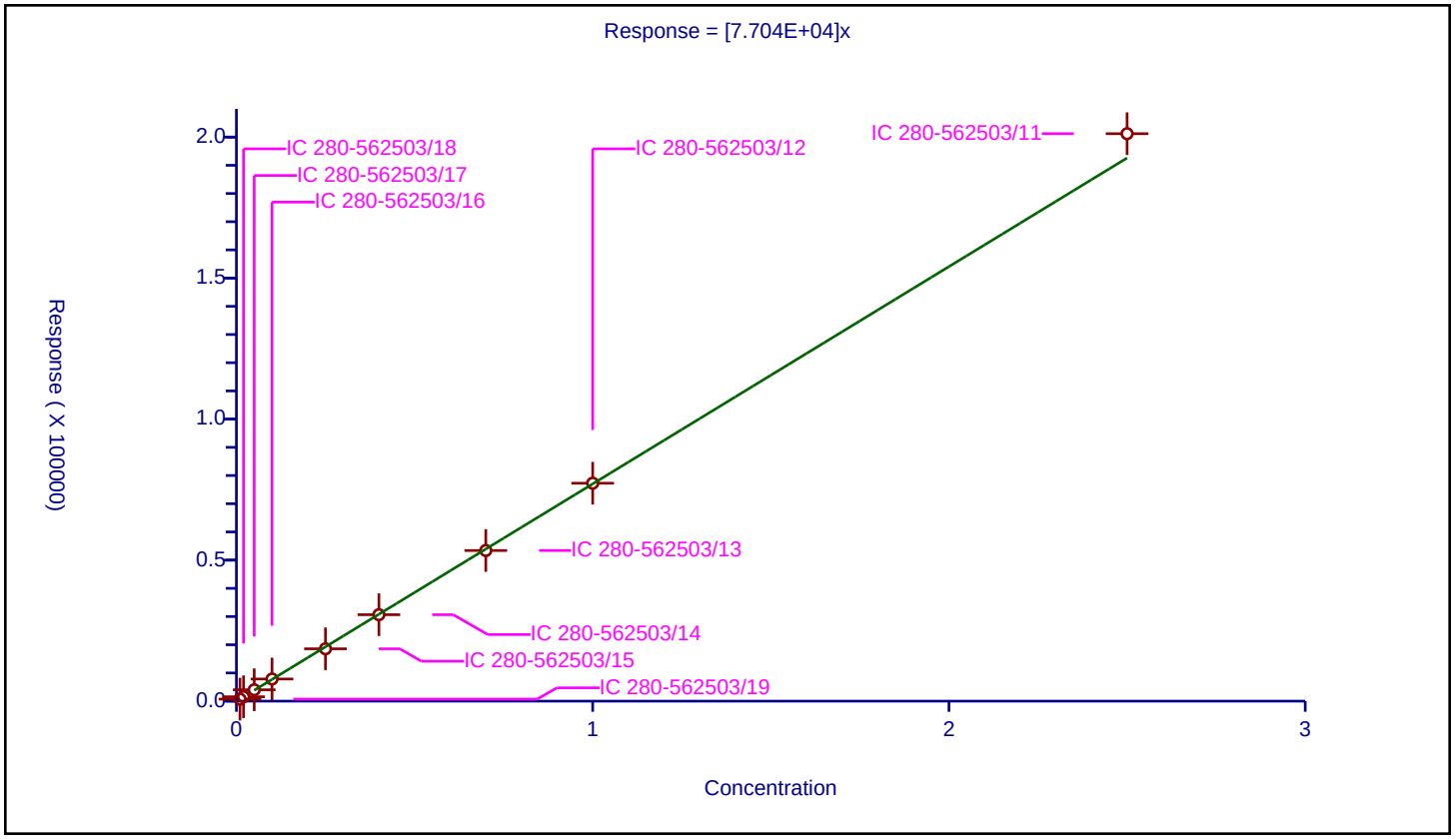
Curve Coefficients

Intercept:	0
Slope:	7.704E+04

Error Coefficients

Standard Error:	3060
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01	716.0			71600.0	Y
2	IC 280-562503/18	0.02	1554.0			77700.0	Y
3	IC 280-562503/17	0.05	4029.0			80580.0	Y
4	IC 280-562503/16	0.1	7855.0			78550.0	Y
5	IC 280-562503/15	0.25	18560.0			74240.0	Y
6	IC 280-562503/14	0.4	30649.0			76622.5	Y
7	IC 280-562503/13	0.7	53408.0			76297.142857	Y
8	IC 280-562503/12	1.0	77279.0			77279.0	Y
9	IC 280-562503/11	2.5	201210.0			80484.0	Y



Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

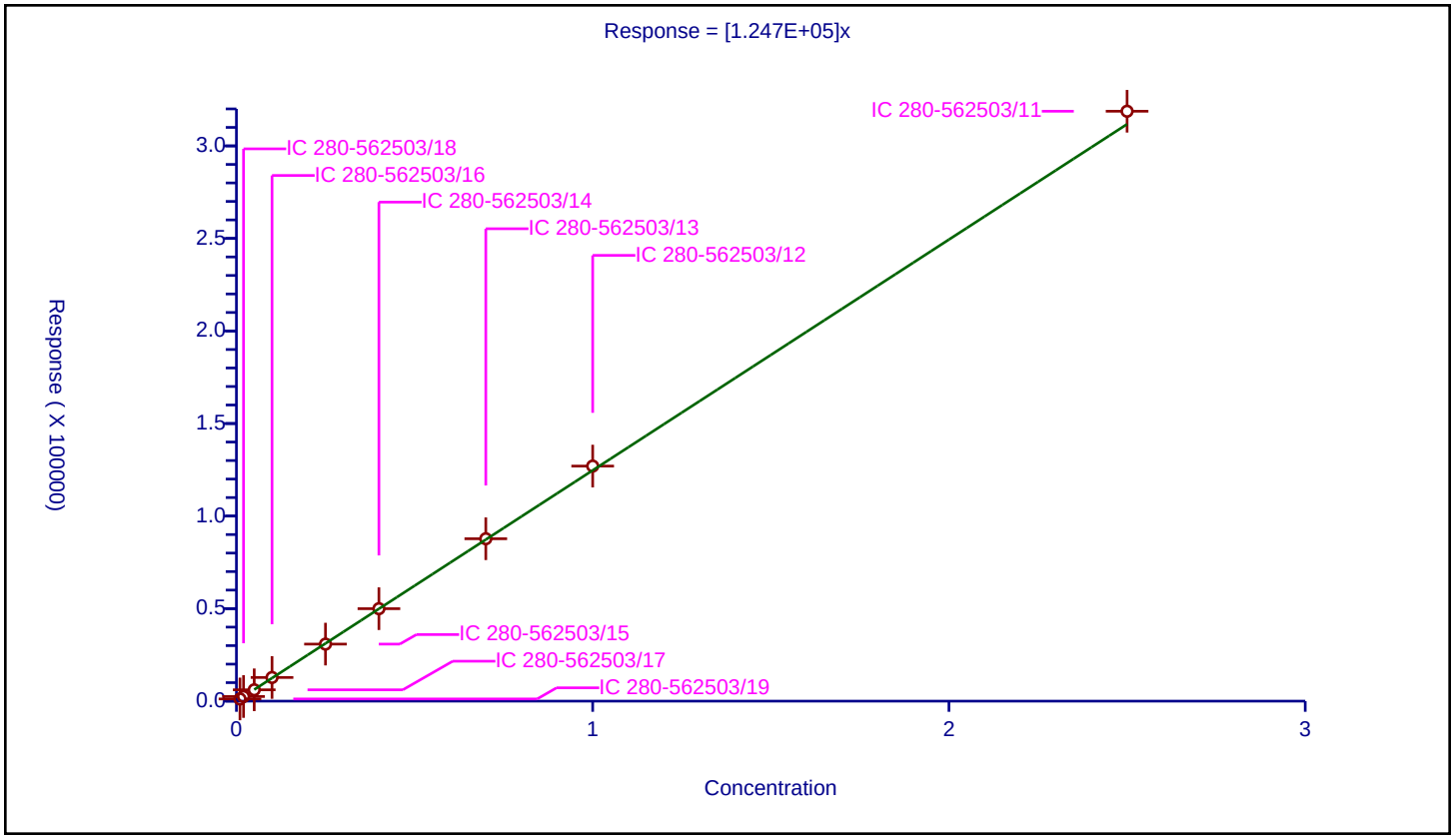
Curve Coefficients

Intercept:	0
Slope:	1.247E+05

Error Coefficients

Standard Error:	2620
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 280-562503/19	0.01	1188.0			118800.0	Y
2	IC 280-562503/18	0.02	2503.0			125150.0	Y
3	IC 280-562503/17	0.05	6127.0			122540.0	Y
4	IC 280-562503/16	0.1	12780.0			127800.0	Y
5	IC 280-562503/15	0.25	30811.0			123244.0	Y
6	IC 280-562503/14	0.4	49955.0			124887.5	Y
7	IC 280-562503/13	0.7	87746.0			125351.428571	Y
8	IC 280-562503/12	1.0	127011.0			127011.0	Y
9	IC 280-562503/11	2.5	318738.0			127495.2	Y



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

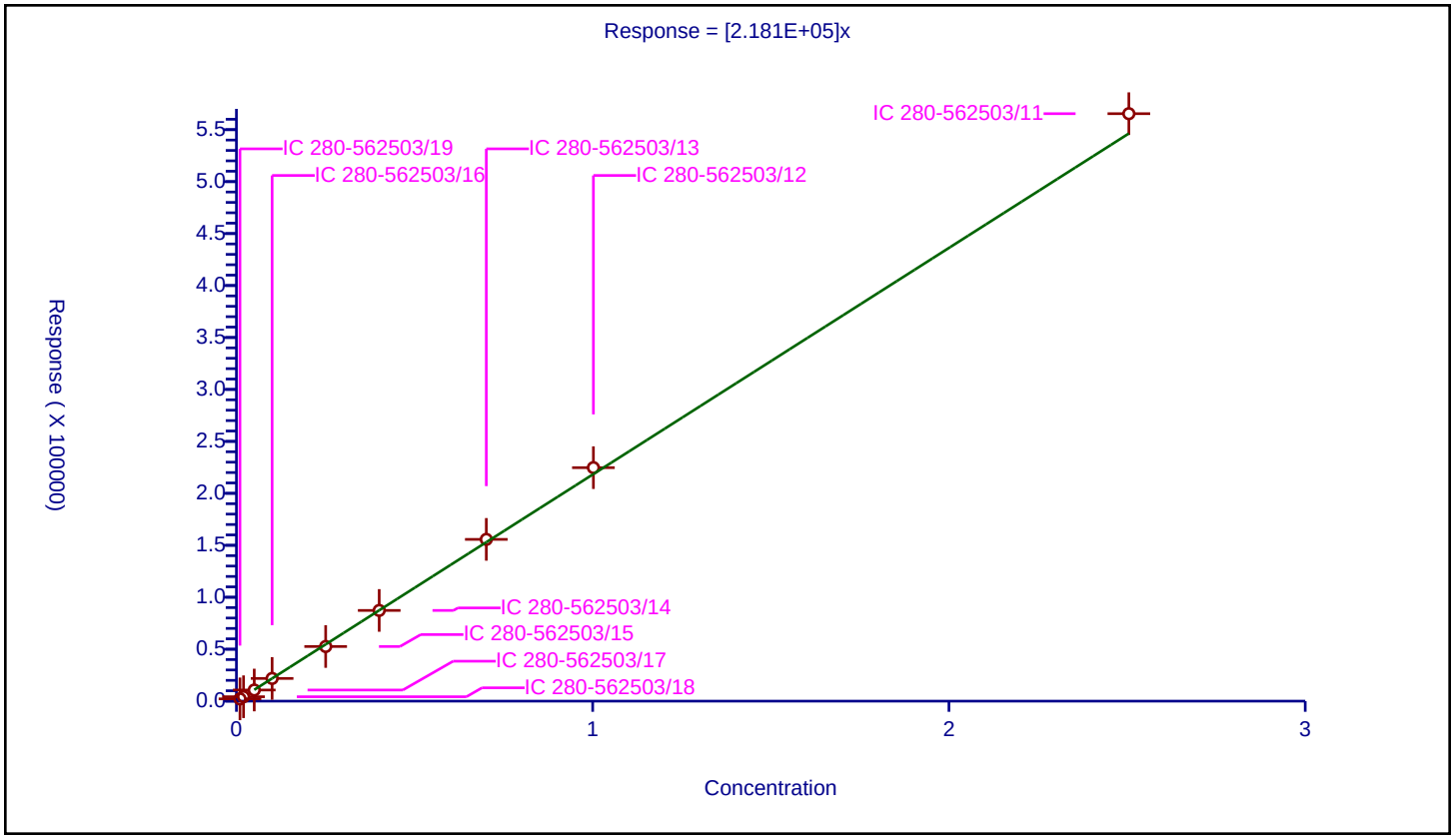
Curve Coefficients

Intercept:	0
Slope:	2.181E+05

Error Coefficients

Standard Error:	7180
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 280-562503/19	0.01002	2197.0			219261.477046	Y
2	IC 280-562503/18	0.02004	4249.0			212025.948104	Y
3	IC 280-562503/17	0.0501	10711.0			213792.41517	Y
4	IC 280-562503/16	0.1002	21856.0			218123.752495	Y
5	IC 280-562503/15	0.2505	52589.0			209936.127745	Y
6	IC 280-562503/14	0.4008	87295.0			217801.896208	Y
7	IC 280-562503/13	0.7014	155681.0			221957.513544	Y
8	IC 280-562503/12	1.002	224711.0			224262.47505	Y
9	IC 280-562503/11	2.505	565374.0			225698.203593	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

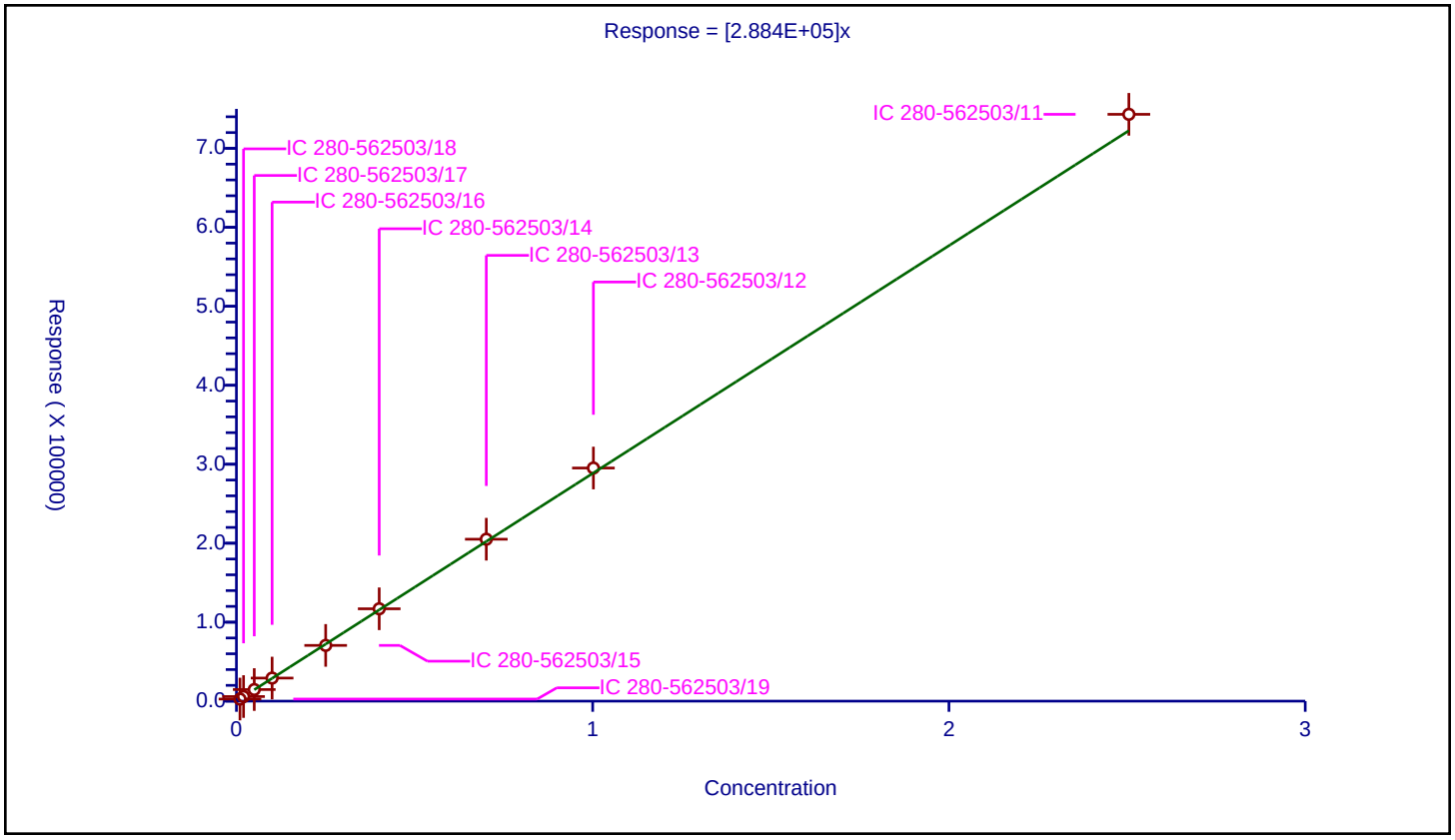
Curve Coefficients

Intercept:	0
Slope:	2.884E+05

Error Coefficients

Standard Error:	7740
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01002	2633.0			262774.451098	Y
2	IC 280-562503/18	0.02004	5833.0			291067.864271	Y
3	IC 280-562503/17	0.0501	14683.0			293073.852295	Y
4	IC 280-562503/16	0.1002	29215.0			291566.866267	Y
5	IC 280-562503/15	0.2505	70569.0			281712.57485	Y
6	IC 280-562503/14	0.4008	116963.0			291823.852295	Y
7	IC 280-562503/13	0.7014	205039.0			292328.200741	Y
8	IC 280-562503/12	1.002	295195.0			294605.788423	Y
9	IC 280-562503/11	2.505	743133.0			296659.88024	Y



Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

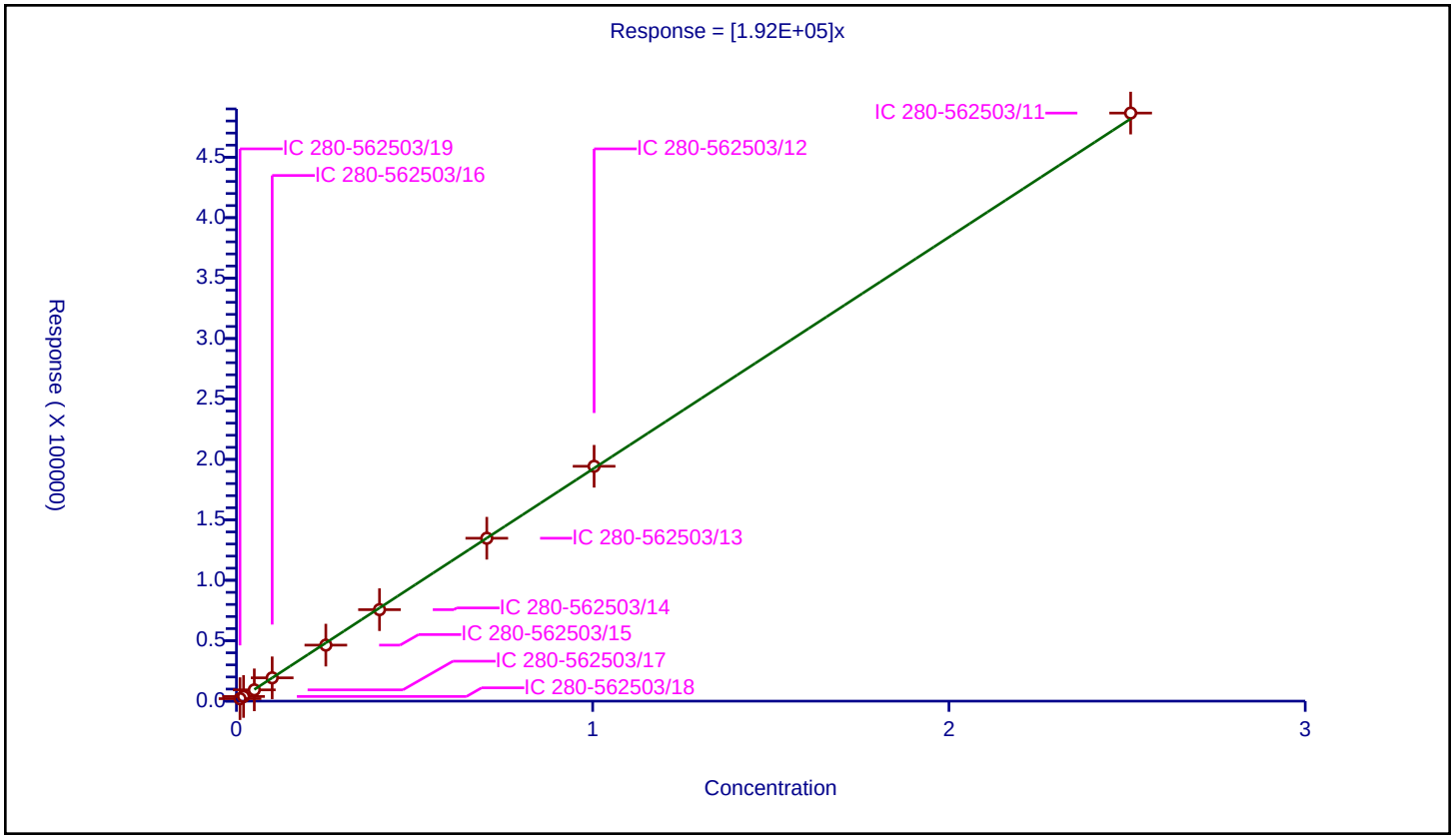
Curve Coefficients

Intercept:	0
Slope:	1.92E+05

Error Coefficients

Standard Error:	1950
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01004	2067.0			205876.494024	Y
2	IC 280-562503/18	0.02008	3845.0			191484.063745	Y
3	IC 280-562503/17	0.0502	9329.0			185836.653386	Y
4	IC 280-562503/16	0.1004	19287.0			192101.593625	Y
5	IC 280-562503/15	0.251	46348.0			184653.386454	Y
6	IC 280-562503/14	0.4016	75688.0			188466.135458	Y
7	IC 280-562503/13	0.7028	134777.0			191771.485487	Y
8	IC 280-562503/12	1.004	194325.0			193550.796813	Y
9	IC 280-562503/11	2.51	486534.0			193838.247012	Y



Calibration / Tetryl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

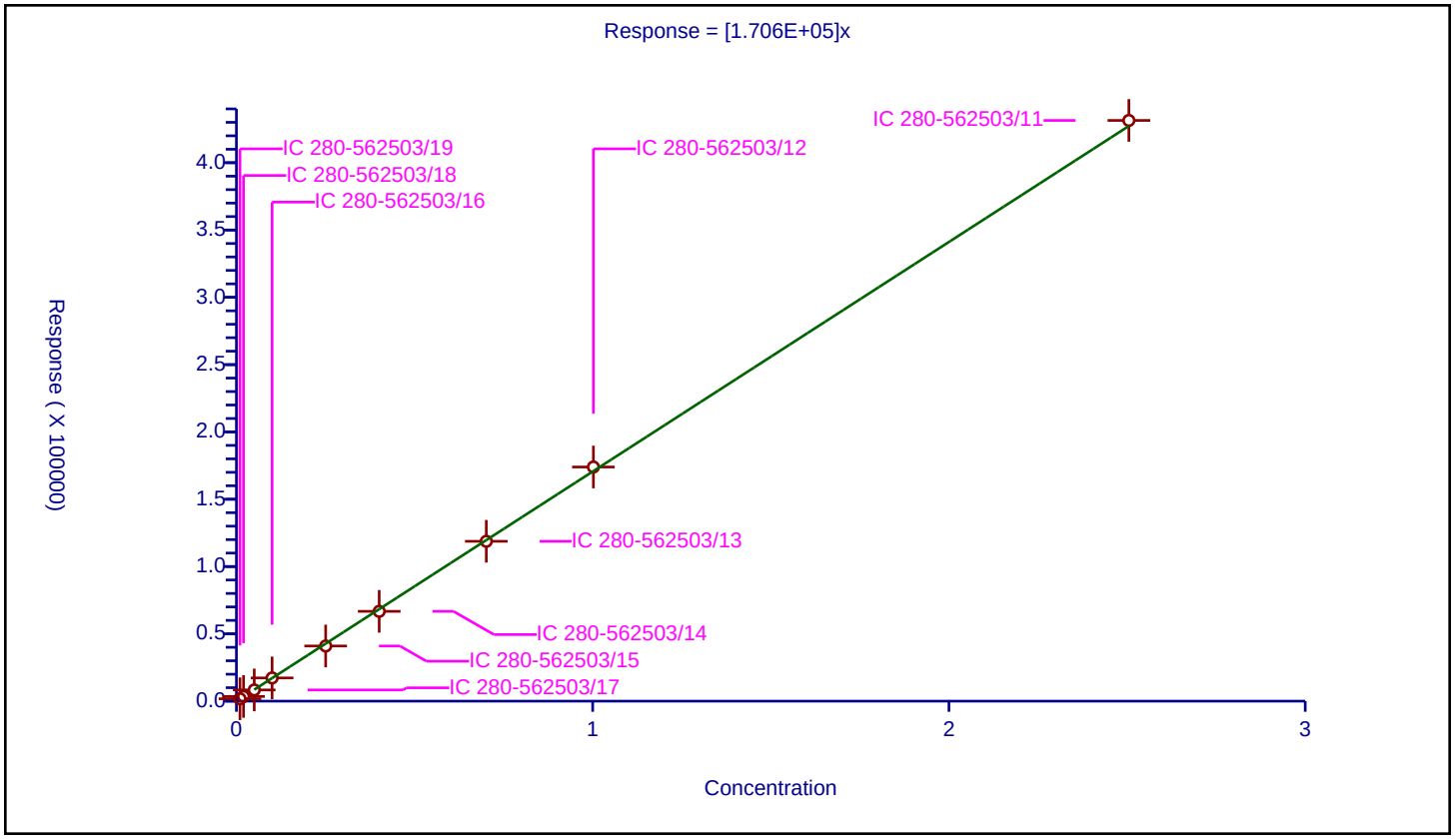
Curve Coefficients

Intercept:	0
Slope:	1.706E+05

Error Coefficients

Standard Error:	2030
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01002	1778.0			177445.10978	Y
2	IC 280-562503/18	0.02004	3498.0			174550.898204	Y
3	IC 280-562503/17	0.0501	8315.0			165968.063872	Y
4	IC 280-562503/16	0.1002	17238.0			172035.928144	Y
5	IC 280-562503/15	0.2505	40968.0			163544.91018	Y
6	IC 280-562503/14	0.4008	66706.0			166432.135729	Y
7	IC 280-562503/13	0.7014	118756.0			169312.802965	Y
8	IC 280-562503/12	1.002	173941.0			173593.812375	Y
9	IC 280-562503/11	2.505	431404.0			172217.165669	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

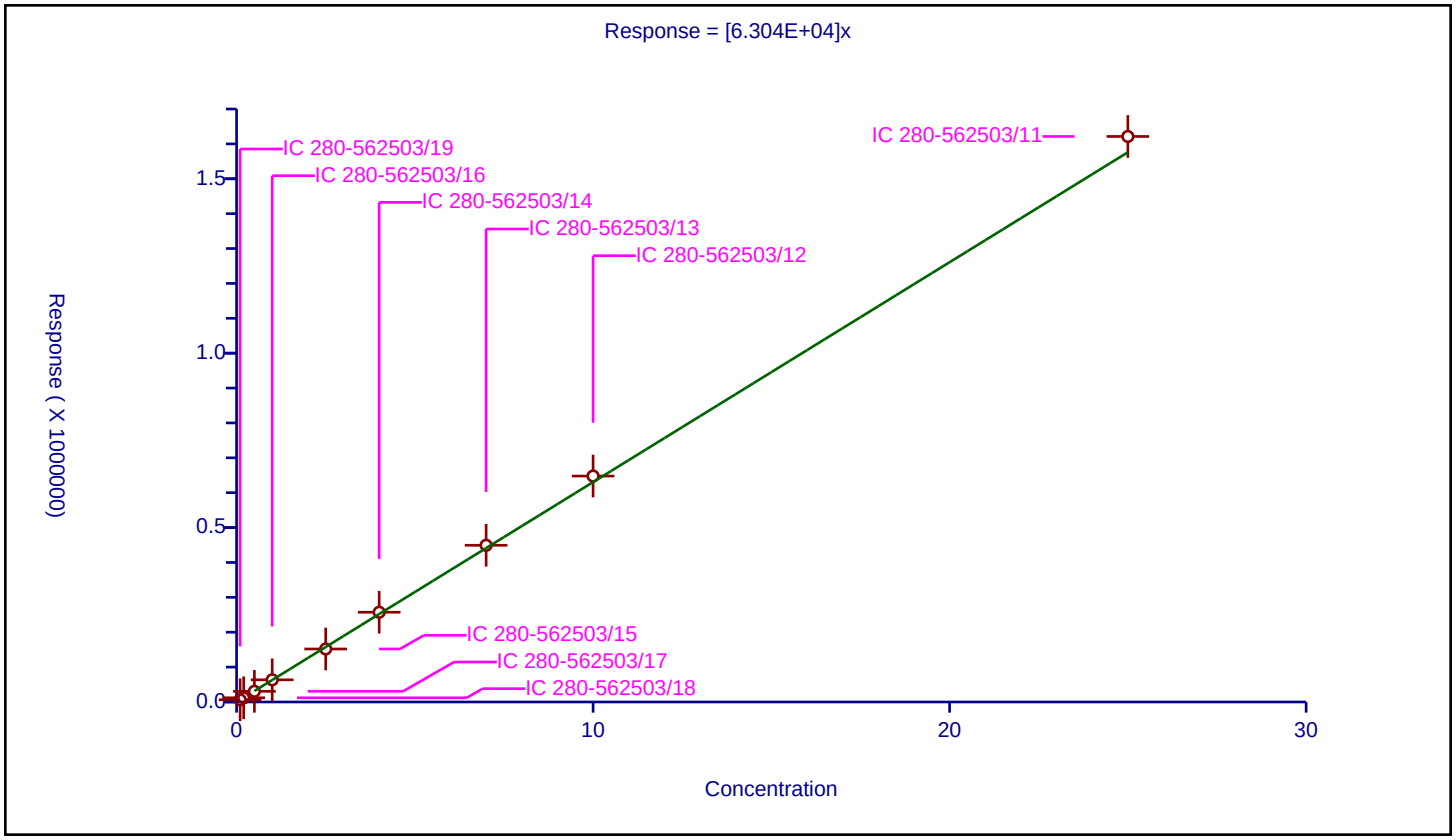
Curve Coefficients

Intercept:	0
Slope:	6.304E+04

Error Coefficients

Standard Error:	17600
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 280-562503/19	0.1	6348.0			63480.0	Y
2	IC 280-562503/18	0.2	12008.0			60040.0	Y
3	IC 280-562503/17	0.5	30651.0			61302.0	Y
4	IC 280-562503/16	1.0	63595.0			63595.0	Y
5	IC 280-562503/15	2.5	151977.0			60790.8	Y
6	IC 280-562503/14	4.0	257287.0			64321.75	Y
7	IC 280-562503/13	7.0	449283.0			64183.285714	Y
8	IC 280-562503/12	10.0	647703.0			64770.3	Y
9	IC 280-562503/11	25.0	1621311.0			64852.44	Y



Calibration / 2,4,6-Trinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

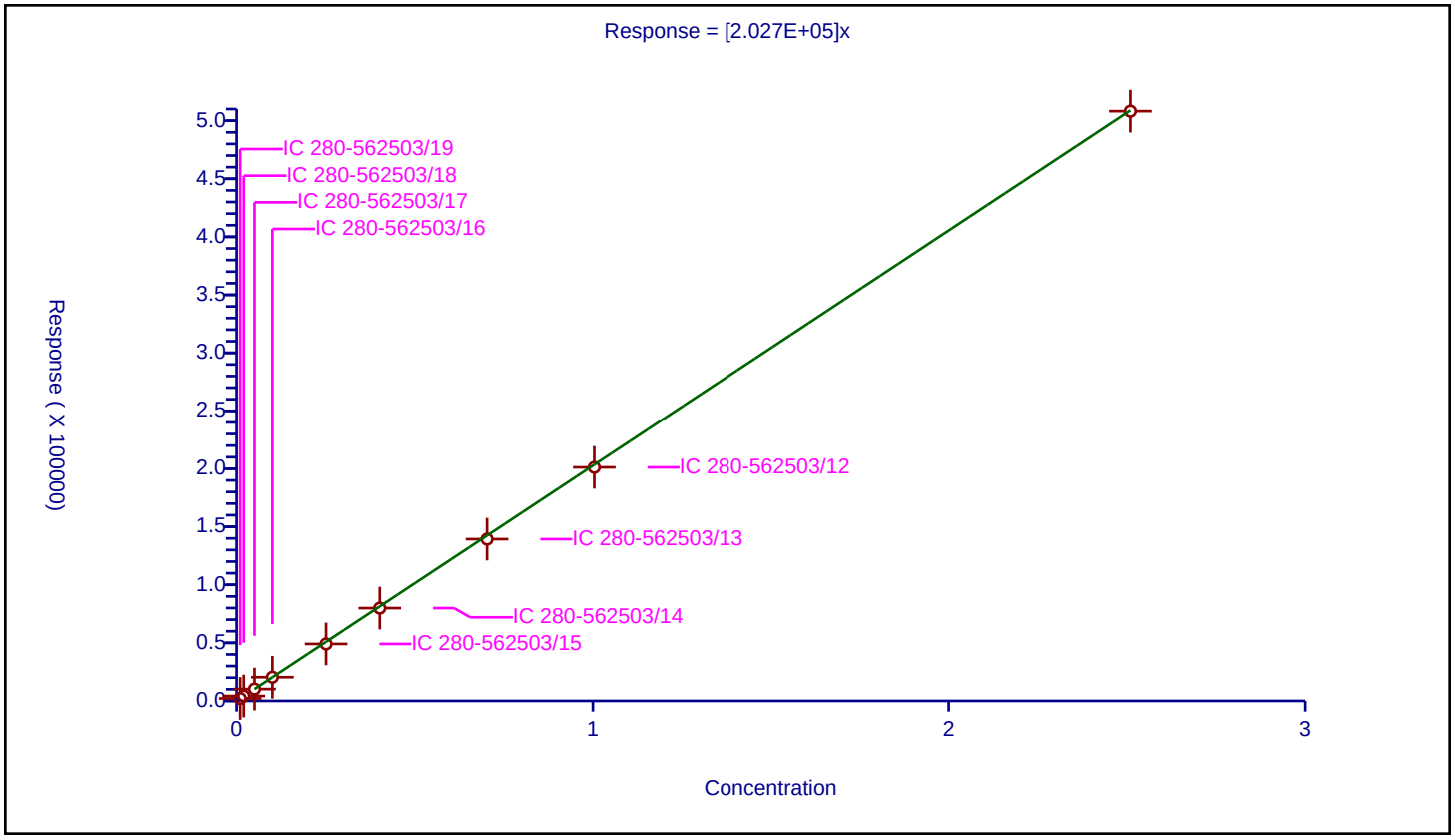
Curve Coefficients

Intercept:	0
Slope:	2.027E+05

Error Coefficients

Standard Error:	1610
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01004	2126.0			211752.988048	Y
2	IC 280-562503/18	0.02008	4227.0			210507.968127	Y
3	IC 280-562503/17	0.0502	10202.0			203227.091633	Y
4	IC 280-562503/16	0.1004	20408.0			203266.932271	Y
5	IC 280-562503/15	0.251	49067.0			195486.055777	Y
6	IC 280-562503/14	0.4016	79951.0			199081.175299	Y
7	IC 280-562503/13	0.7028	139377.0			198316.733068	Y
8	IC 280-562503/12	1.004	201237.0			200435.258964	Y
9	IC 280-562503/11	2.51	508173.0			202459.36255	Y



Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

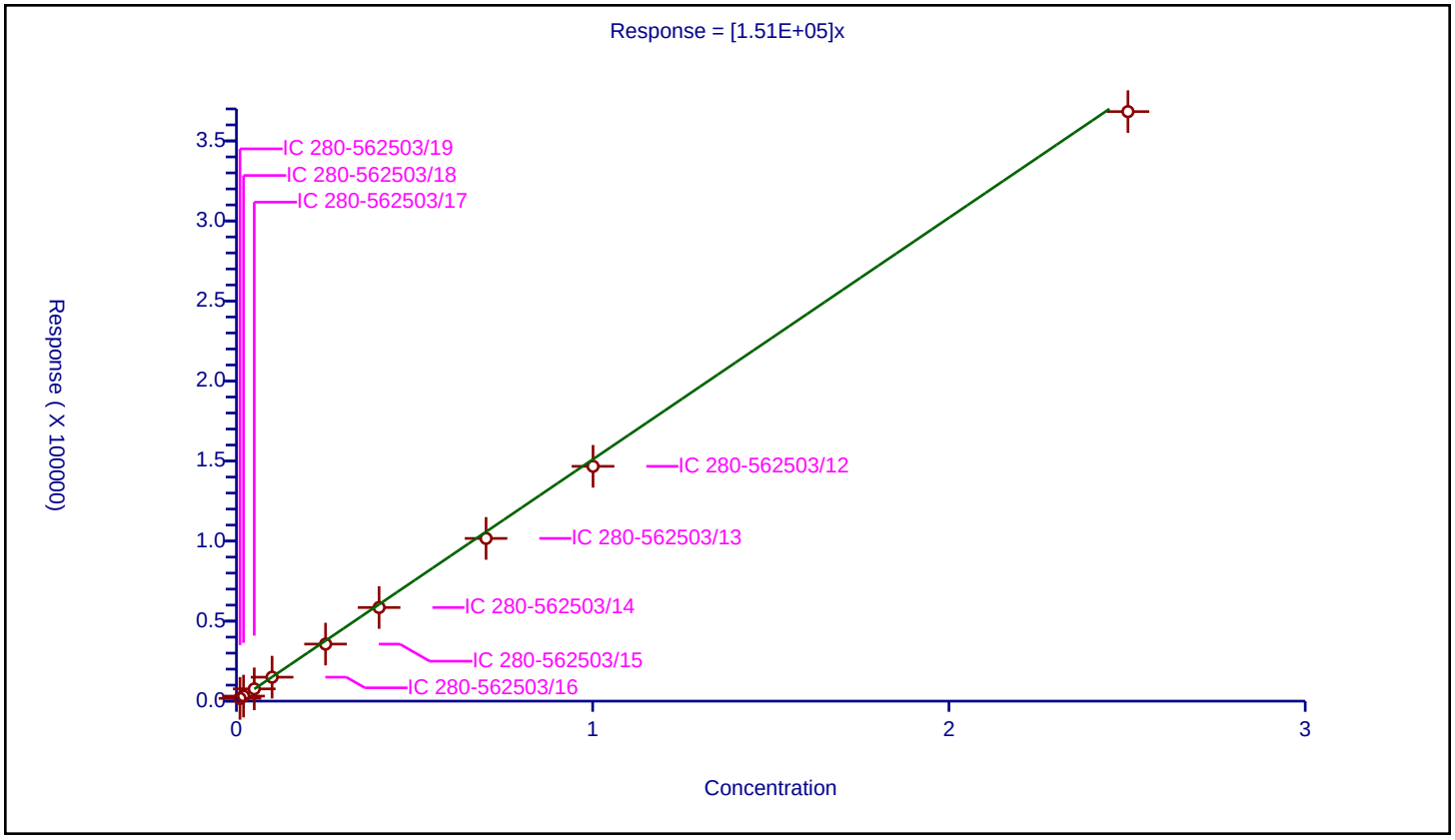
Curve Coefficients

Intercept:	0
Slope:	1.51E+05

Error Coefficients

Standard Error:	4130
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 280-562503/19	0.01001	1718.0			171628.371628	Y
2	IC 280-562503/18	0.02002	3150.0			157342.657343	Y
3	IC 280-562503/17	0.05005	7656.0			152967.032967	Y
4	IC 280-562503/16	0.1001	14975.0			149600.3996	Y
5	IC 280-562503/15	0.25025	35644.0			142433.566434	Y
6	IC 280-562503/14	0.4004	58489.0			146076.423576	Y
7	IC 280-562503/13	0.7007	101665.0			145090.623662	Y
8	IC 280-562503/12	1.001	146703.0			146556.443556	Y
9	IC 280-562503/11	2.5025	368296.0			147171.228771	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

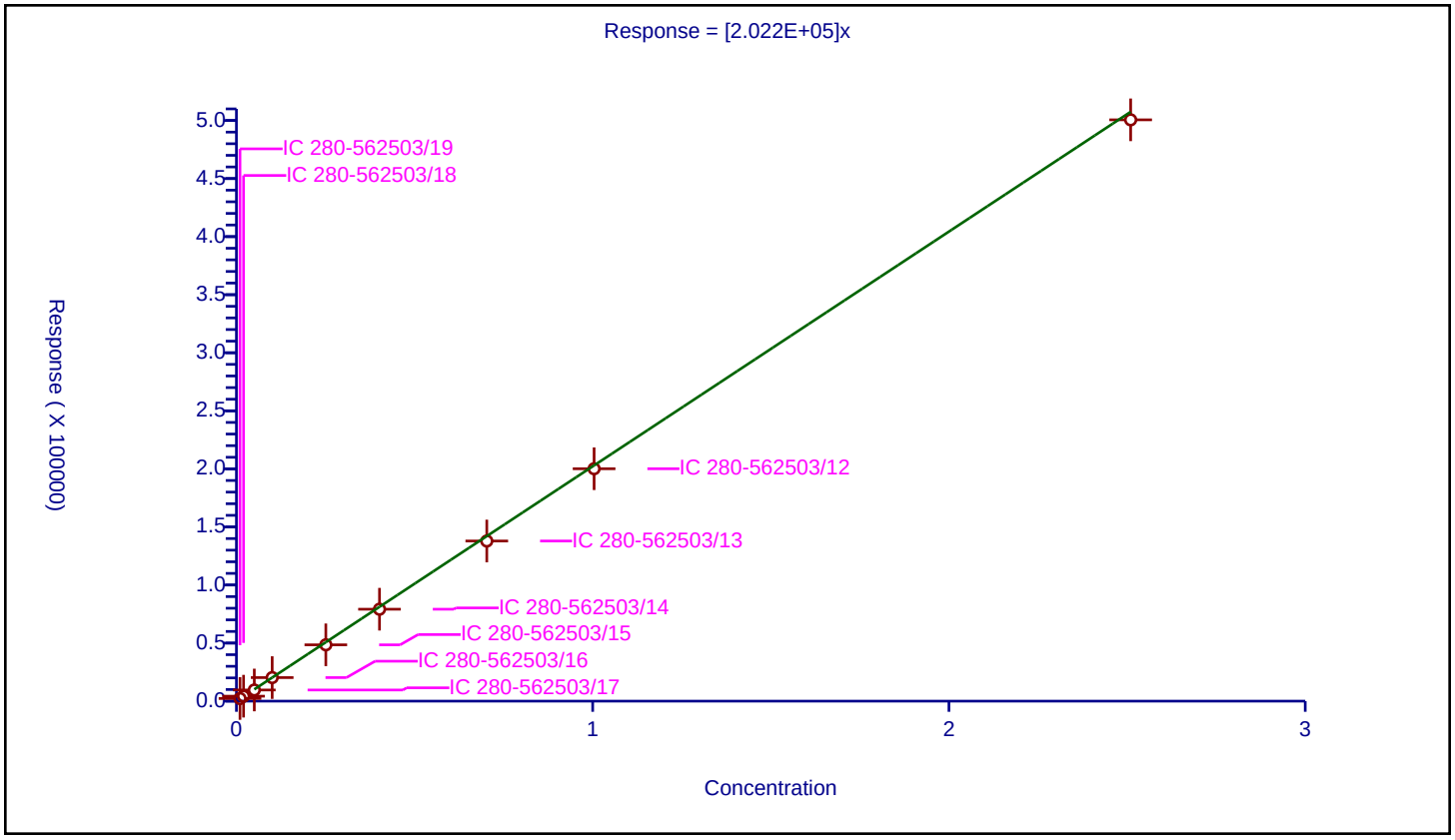
Curve Coefficients

Intercept:	0
Slope:	2.022E+05

Error Coefficients

Standard Error:	3210
Relative Standard Error:	5.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01004	2287.0			227788.844622	Y
2	IC 280-562503/18	0.02008	4282.0			213247.011952	Y
3	IC 280-562503/17	0.0502	9600.0			191235.059761	Y
4	IC 280-562503/16	0.1004	20280.0			201992.031873	Y
5	IC 280-562503/15	0.251	48486.0			193171.314741	Y
6	IC 280-562503/14	0.4016	79169.0			197133.964143	Y
7	IC 280-562503/13	0.7028	137894.0			196206.602163	Y
8	IC 280-562503/12	1.004	200129.0			199331.673307	Y
9	IC 280-562503/11	2.51	500581.0			199434.661355	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

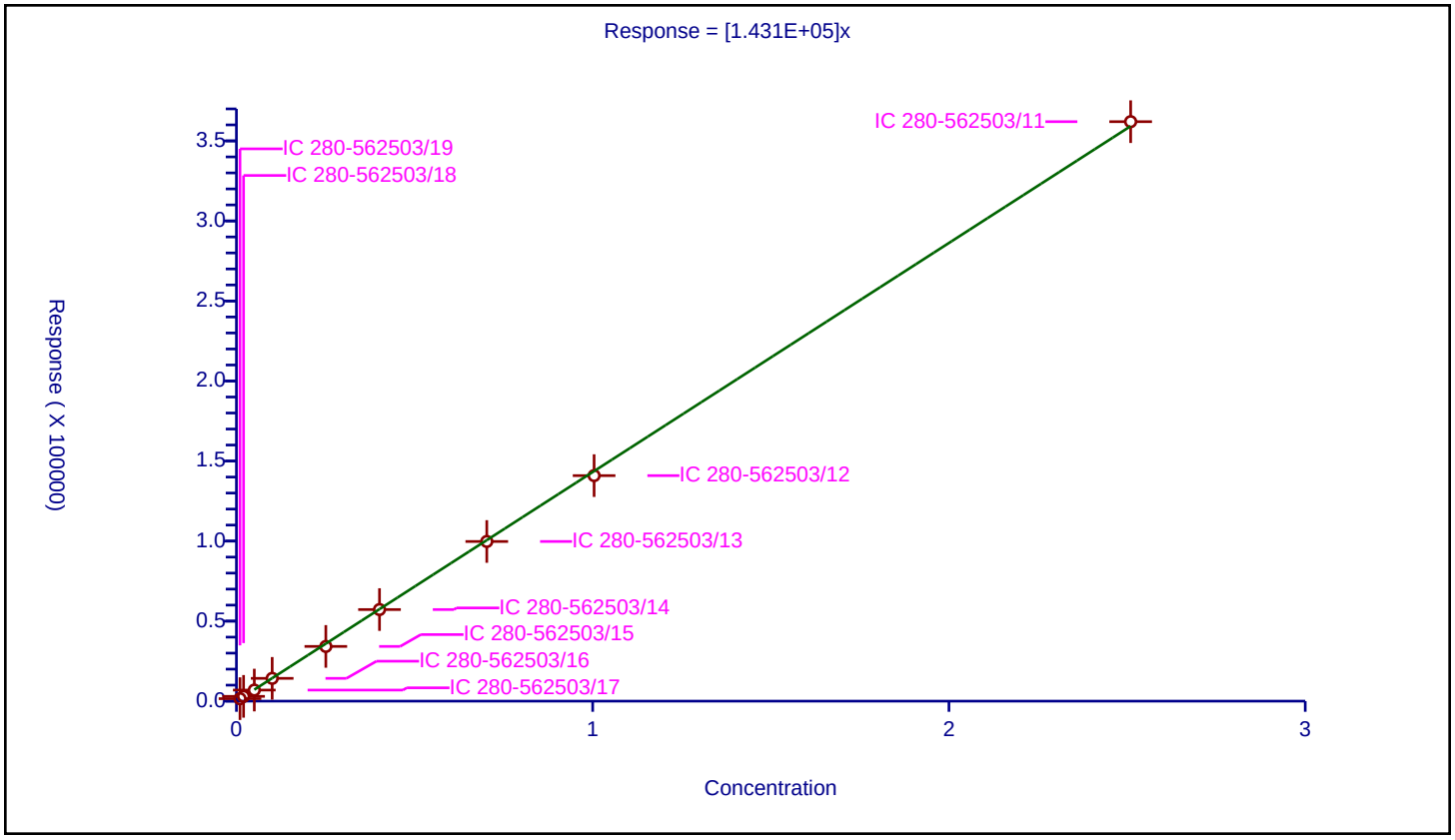
Curve Coefficients

Intercept:	0
Slope:	1.431E+05

Error Coefficients

Standard Error:	1560
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01004	1551.0			154482.071713	Y
2	IC 280-562503/18	0.02008	2993.0			149053.784861	Y
3	IC 280-562503/17	0.0502	6908.0			137609.561753	Y
4	IC 280-562503/16	0.1004	14234.0			141772.908367	Y
5	IC 280-562503/15	0.251	34177.0			136163.346614	Y
6	IC 280-562503/14	0.4016	57212.0			142460.159363	Y
7	IC 280-562503/13	0.7028	99747.0			141928.002277	Y
8	IC 280-562503/12	1.004	140901.0			140339.641434	Y
9	IC 280-562503/11	2.51	362011.0			144227.49004	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

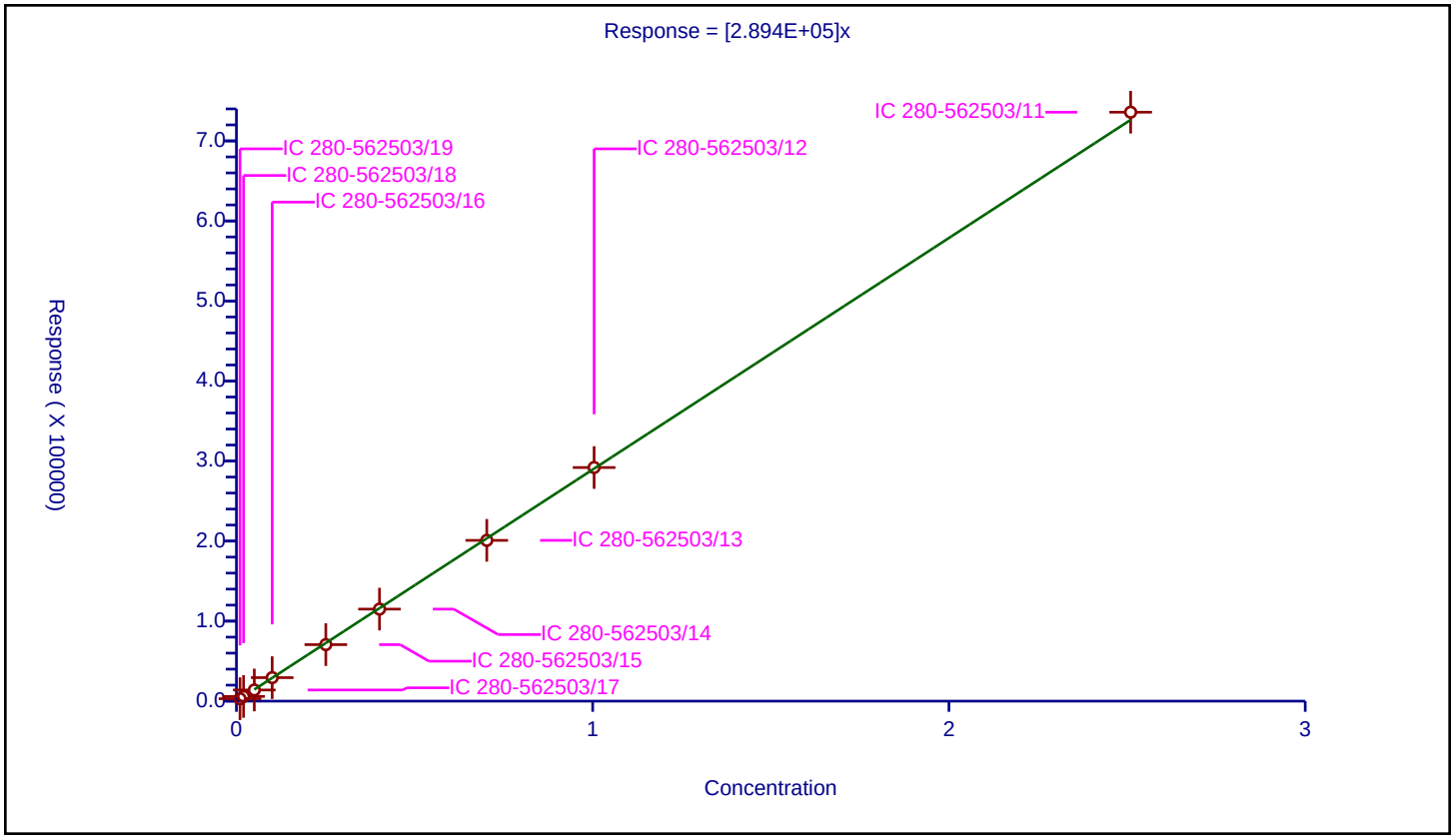
Curve Coefficients

Intercept:	0
Slope:	2.894E+05

Error Coefficients

Standard Error:	3650
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01004	3047.0			303486.055777	Y
2	IC 280-562503/18	0.02008	5890.0			293326.693227	Y
3	IC 280-562503/17	0.0502	13933.0			277549.800797	Y
4	IC 280-562503/16	0.1004	29355.0			292380.478088	Y
5	IC 280-562503/15	0.251	70605.0			281294.820717	Y
6	IC 280-562503/14	0.4016	115000.0			286354.581673	Y
7	IC 280-562503/13	0.7028	200883.0			285832.384747	Y
8	IC 280-562503/12	1.004	291912.0			290749.003984	Y
9	IC 280-562503/11	2.51	735887.0			293182.071713	Y



Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

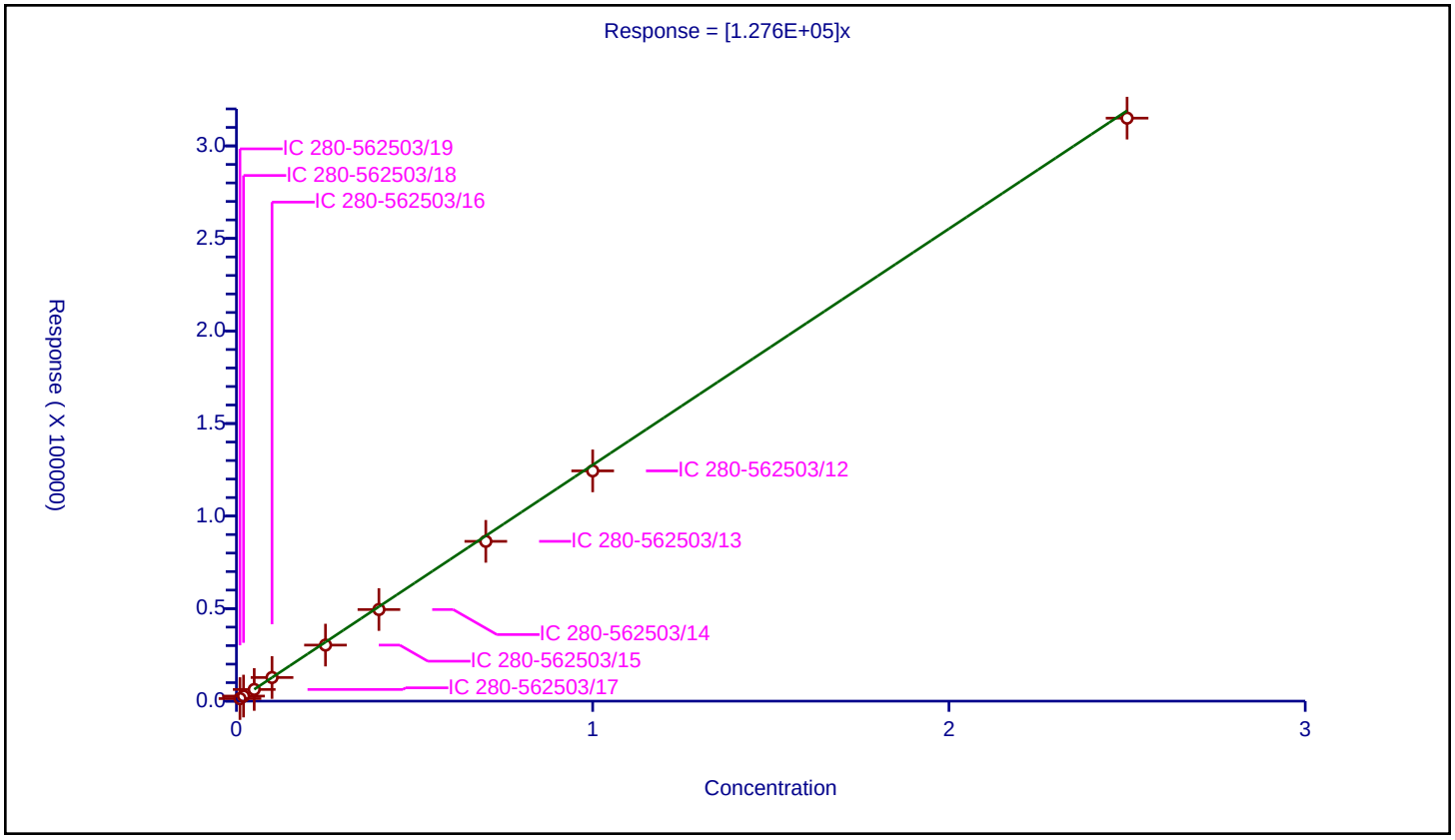
Curve Coefficients

Intercept:	0
Slope:	1.276E+05

Error Coefficients

Standard Error:	2250
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 280-562503/19	0.01	1387.0			138700.0	Y
2	IC 280-562503/18	0.02	2743.0			137150.0	Y
3	IC 280-562503/17	0.05	6314.0			126280.0	Y
4	IC 280-562503/16	0.1	12777.0			127770.0	Y
5	IC 280-562503/15	0.25	30280.0			121120.0	Y
6	IC 280-562503/14	0.4	49500.0			123750.0	Y
7	IC 280-562503/13	0.7	86333.0			123332.857143	Y
8	IC 280-562503/12	1.0	124418.0			124418.0	Y
9	IC 280-562503/11	2.5	315004.0			126001.6	Y



Calibration / p-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

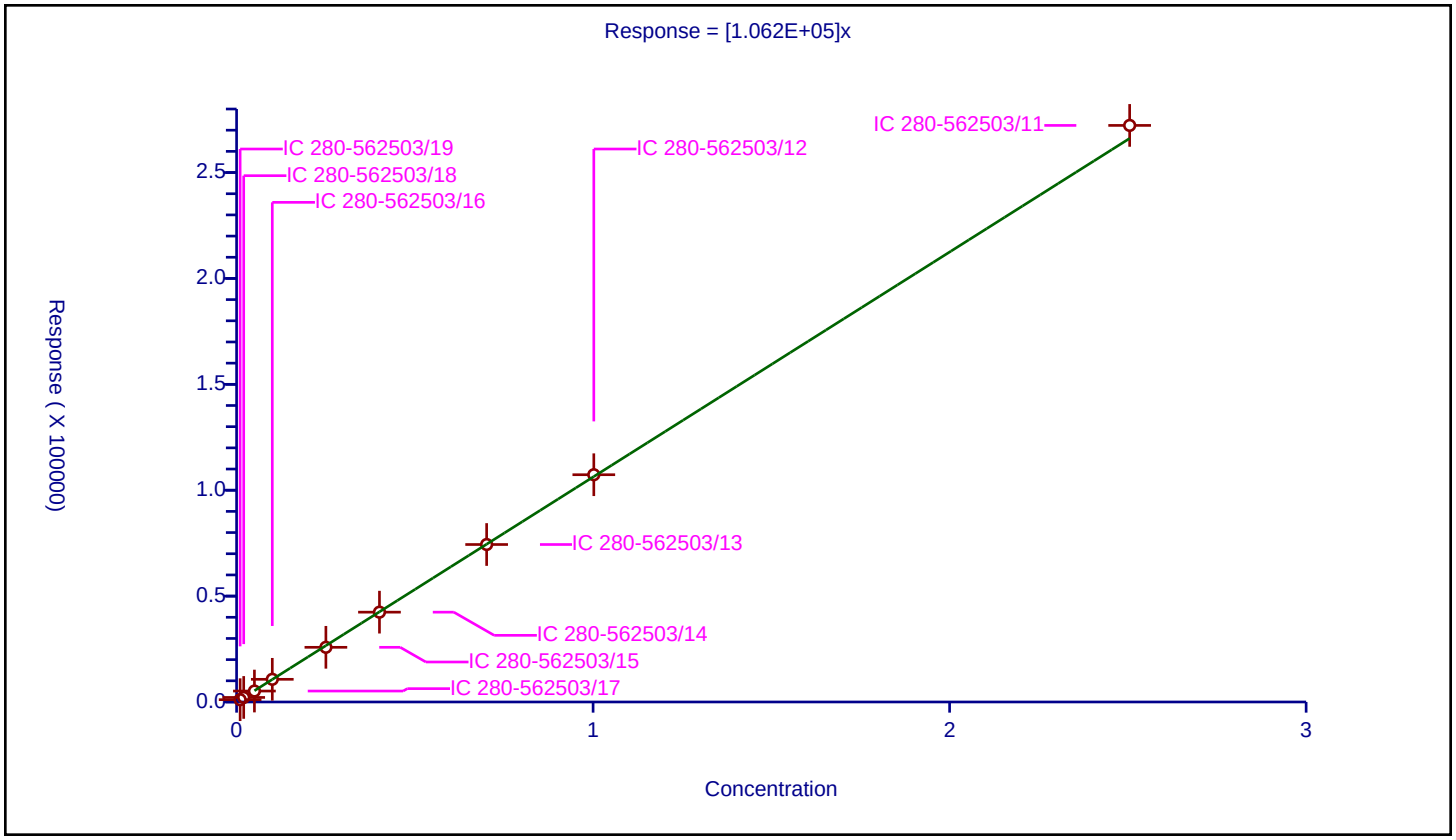
Curve Coefficients

Intercept:	0
Slope:	1.062E+05

Error Coefficients

Standard Error:	2210
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01002	1083.0			108083.832335	Y
2	IC 280-562503/18	0.02004	2151.0			107335.329341	Y
3	IC 280-562503/17	0.0501	5163.0			103053.892216	Y
4	IC 280-562503/16	0.1002	10715.0			106936.127745	Y
5	IC 280-562503/15	0.2505	25824.0			103089.820359	Y
6	IC 280-562503/14	0.4008	42415.0			105825.848303	Y
7	IC 280-562503/13	0.7014	74357.0			106012.261192	Y
8	IC 280-562503/12	1.002	107309.0			107094.810379	Y
9	IC 280-562503/11	2.505	272262.0			108687.42515	Y



Calibration / m-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

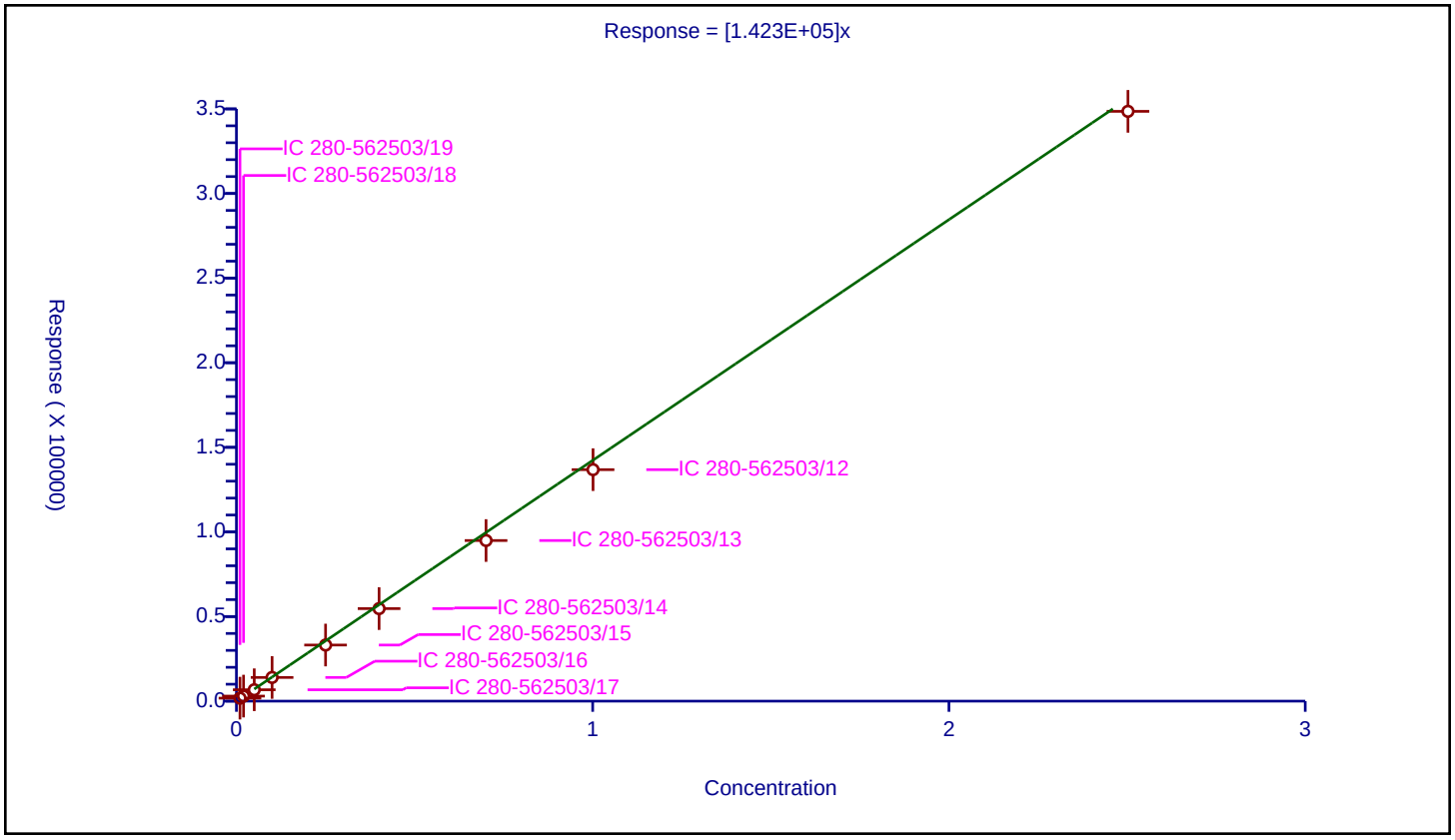
Curve Coefficients

Intercept:	0
Slope:	1.423E+05

Error Coefficients

Standard Error:	3900
Relative Standard Error:	9.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01001	1764.0			176223.776224	Y
2	IC 280-562503/18	0.02002	2989.0			149300.699301	Y
3	IC 280-562503/17	0.05005	6733.0			134525.474525	Y
4	IC 280-562503/16	0.1001	14003.0			139890.10989	Y
5	IC 280-562503/15	0.25025	33160.0			132507.492507	Y
6	IC 280-562503/14	0.4004	54695.0			136600.899101	Y
7	IC 280-562503/13	0.7007	94920.0			135464.535465	Y
8	IC 280-562503/12	1.001	136801.0			136664.335664	Y
9	IC 280-562503/11	2.5025	348555.0			139282.717283	Y



Calibration / PETN

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

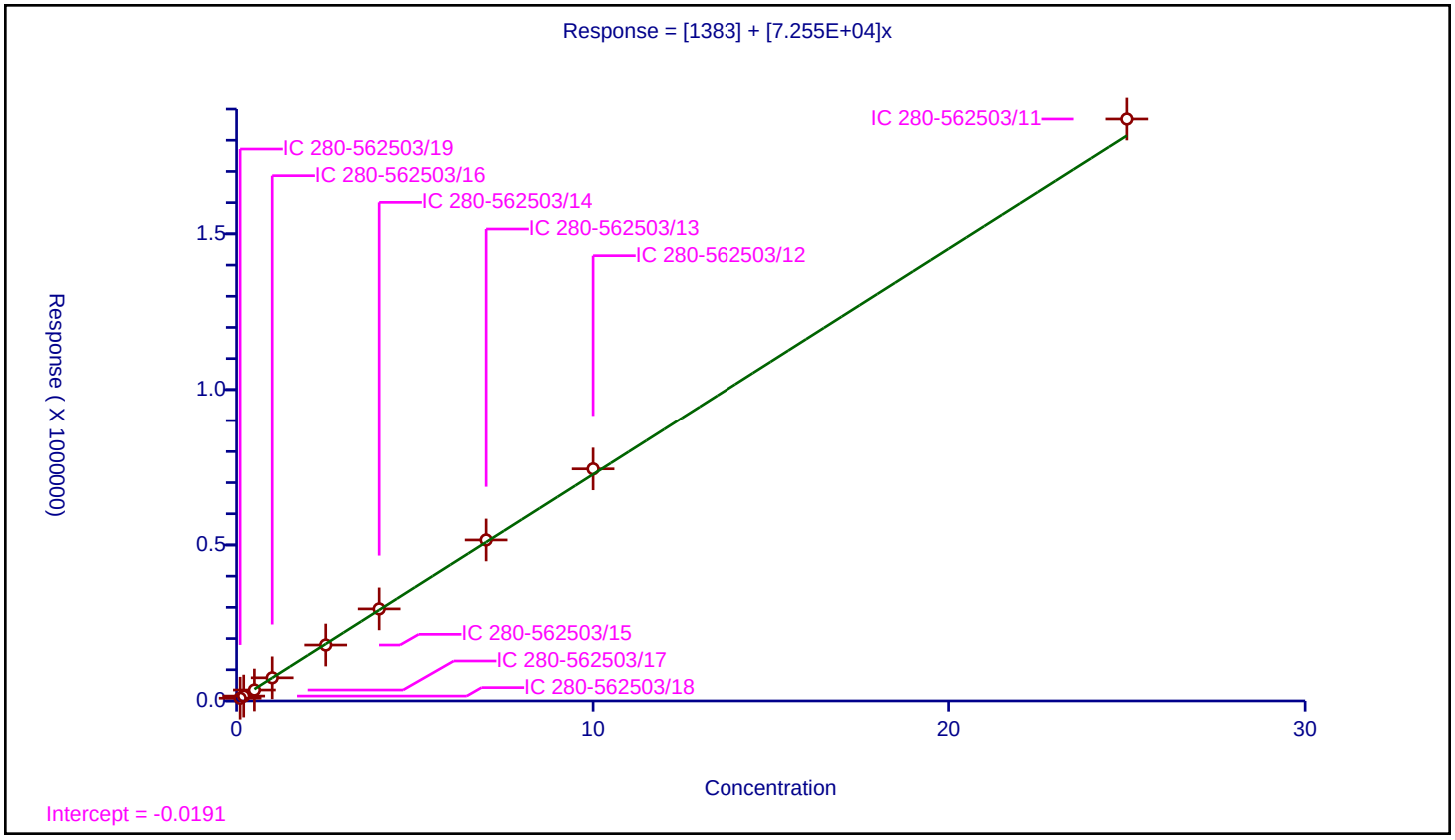
Curve Coefficients

Intercept:	1383
Slope:	7.255E+04

Error Coefficients

Standard Error:	21400
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.1	8784.0			87840.0	Y
2	IC 280-562503/18	0.2	15705.0			78525.0	Y
3	IC 280-562503/17	0.5	35084.0			70168.0	Y
4	IC 280-562503/16	1.0	74208.0			74208.0	Y
5	IC 280-562503/15	2.5	179275.0			71710.0	Y
6	IC 280-562503/14	4.0	295082.0			73770.5	Y
7	IC 280-562503/13	7.0	516042.0			73720.285714	Y
8	IC 280-562503/12	10.0	744274.0			74427.4	Y
9	IC 280-562503/11	25.0	1868141.0			74725.64	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1 Analy Batch No.: 562503

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/05/2022 01:43 Calibration End Date: 01/05/2022 04:24 Calibration ID: 61347

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-562503/37	01040037.D
Level 2	IC 280-562503/36	01040036.D
Level 3	IC 280-562503/35	01040035.D
Level 4	IC 280-562503/34	01040034.D
Level 5	IC 280-562503/33	01040033.D
Level 6	IC 280-562503/32	01040032.D
Level 7	IC 280-562503/31	01040031.D
Level 8	IC 280-562503/30	01040030.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	6.479	6.478	6.483	6.484	6.483	6.477	6.478	6.472			6.384 - 6.584	6.479
DNX	6.799	6.798	6.796	6.797	6.803	6.797	6.798	6.792			6.697 - 6.897	6.798
MNX	7.219	7.224	7.223	7.224	7.223	7.217	7.218	7.218			7.074 - 7.374	7.221

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-159137-1 Analy Batch No.: 562503

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/05/2022 01:43 Calibration End Date: 01/05/2022 04:24 Calibration ID: 61347

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-562503/37	01040037.D
Level 2	IC 280-562503/36	01040036.D
Level 3	IC 280-562503/35	01040035.D
Level 4	IC 280-562503/34	01040034.D
Level 5	IC 280-562503/33	01040033.D
Level 6	IC 280-562503/32	01040032.D
Level 7	IC 280-562503/31	01040031.D
Level 8	IC 280-562503/30	01040030.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	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	179820 181618	180440 185306	179710 183906	170821 188038	Ave		181207.471				2.8		20.0			
DNX	140709 139048	139620 138881	139141 137206	129534 140763	Ave		138112.950				2.6		20.0			
MNX	130334 127284	125073 127309	123719 126586	118458 129201	Ave		125995.416				2.9		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-159137-1 Analy Batch No.: 562503

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 01/05/2022 01:43 Calibration End Date: 01/05/2022 04:24 Calibration ID: 61347

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-562503/37	01040037.D
Level 2	IC 280-562503/36	01040036.D
Level 3	IC 280-562503/35	01040035.D
Level 4	IC 280-562503/34	01040034.D
Level 5	IC 280-562503/33	01040033.D
Level 6	IC 280-562503/32	01040032.D
Level 7	IC 280-562503/31	01040031.D
Level 8	IC 280-562503/30	01040030.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	3600 129844	9031 184090	17989 470565	42748	72720	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	2817 97314	6988 137343	13928 352260	32416	55675	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	3042 103999	7298 147726	14438 376943	34560	59416	0.0233 0.817	0.0584 1.17	0.117 2.92	0.292	0.467

Curve Type Legend
Ave = Average

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

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Lims ID:	IC DMT 8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	05-Jan-2022 01:43:42	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 8				
Misc. Info.:	280-0107731-030				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jan-2022 12:10:05	Calib Date:	05-Jan-2022 04:24:15		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1613				
First Level Reviewer: zhangji		Date:	05-Jan-2022 12:07:13		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.472	6.484	-0.012	470565	2.50	2.60	M
6 DNX	1	6.792	6.797	-0.005	352260	2.50	2.55	M
7 MNX	1	7.218	7.224	-0.006	376943	2.92	2.99	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 125.00 Units: uL

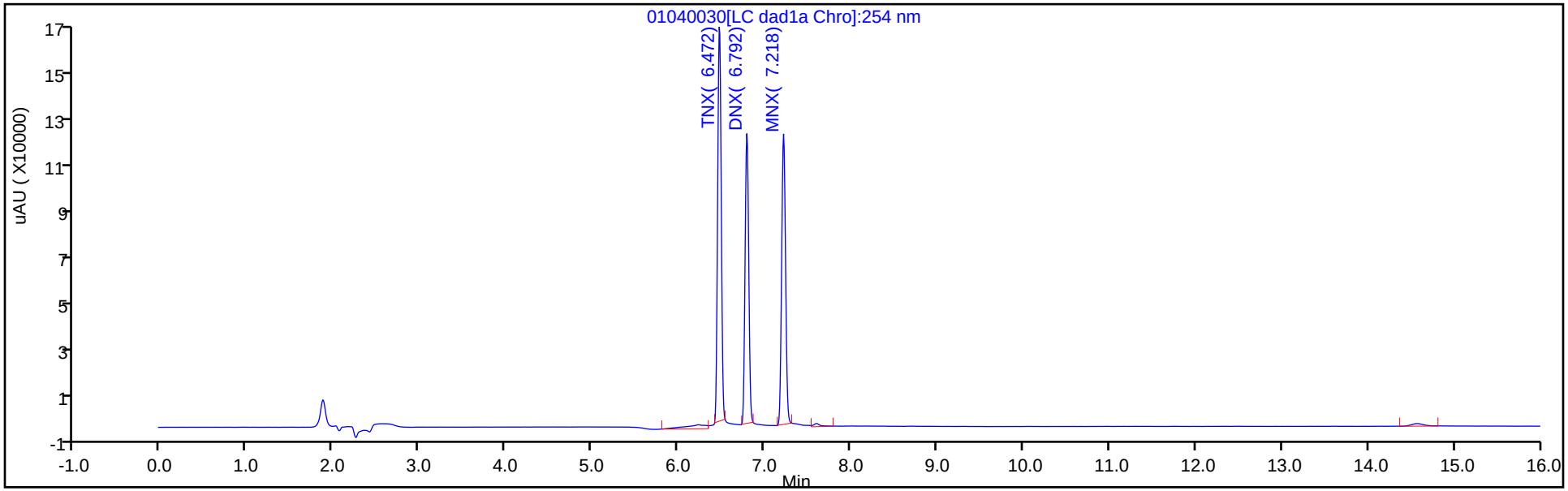
Report Date: 05-Jan-2022 12:10:05 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

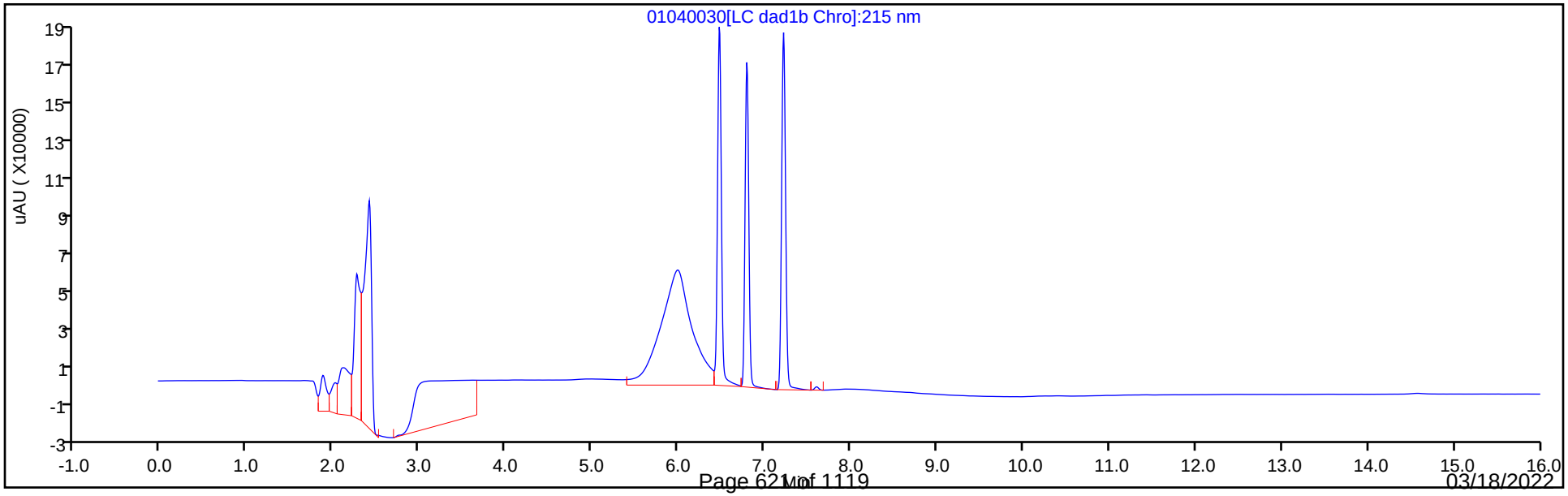
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040030.d

Injection Date:	05-Jan-2022 01:43:42	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC DMT 8			Worklist Smp#:	30
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

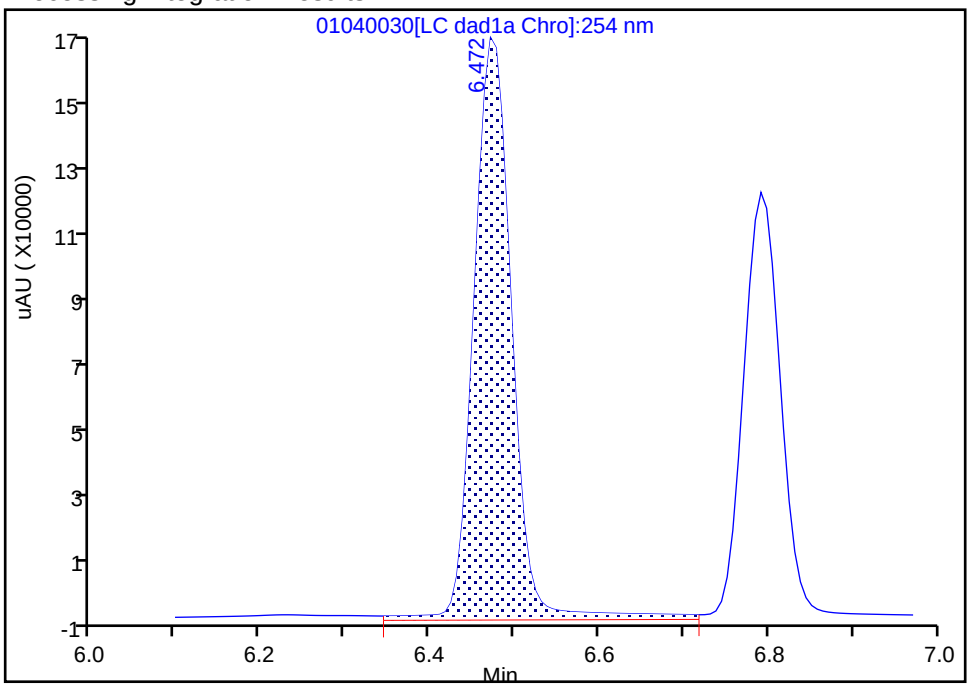
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040030.d				
Injection Date:	05-Jan-2022 01:43:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

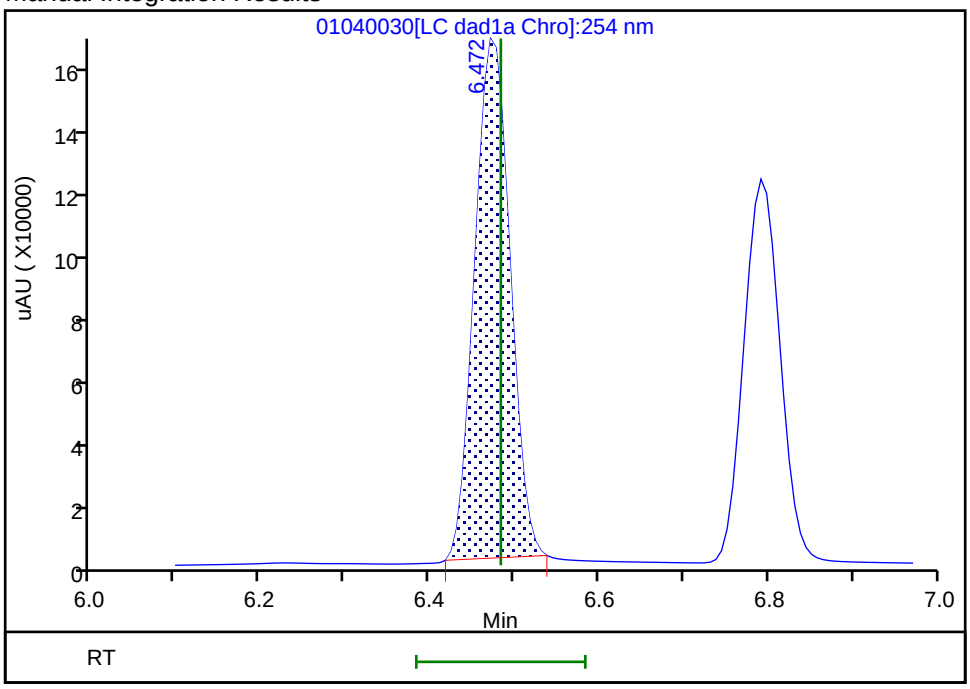
Processing Integration Results

RT: 6.47
Area: 518954
Amount: 2.391054
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 470565
Amount: 2.596830
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:05:51
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

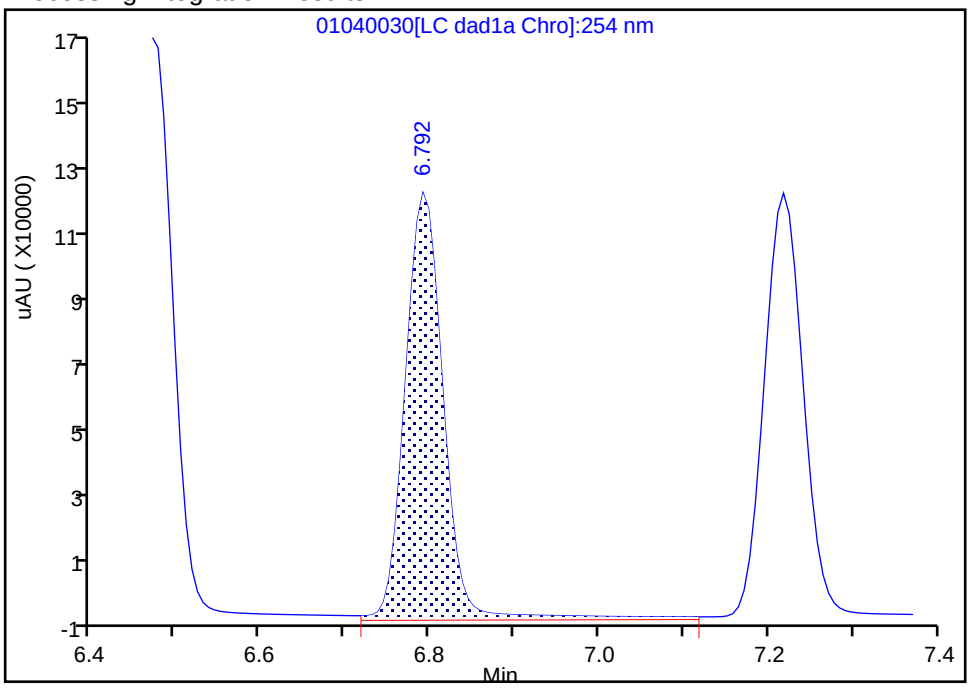
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040030.d				
Injection Date:	05-Jan-2022 01:43:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

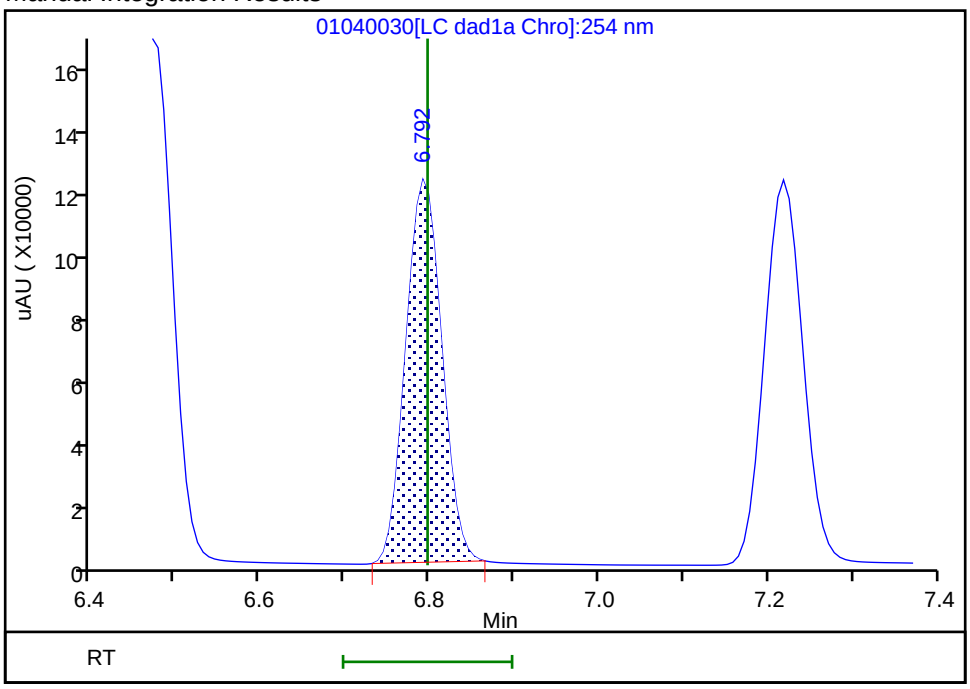
Processing Integration Results

RT: 6.79
Area: 385621
Amount: 2.575003
Amount Units: ug/mL



Manual Integration Results

RT: 6.79
Area: 352260
Amount: 2.550521
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:07:08
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

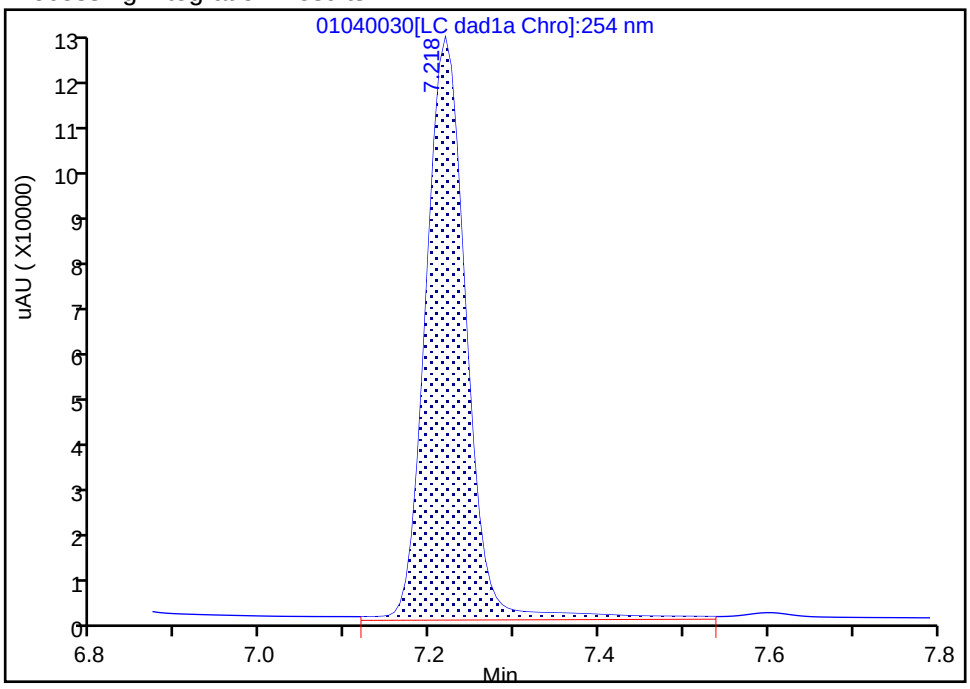
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040030.d				
Injection Date:	05-Jan-2022 01:43:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

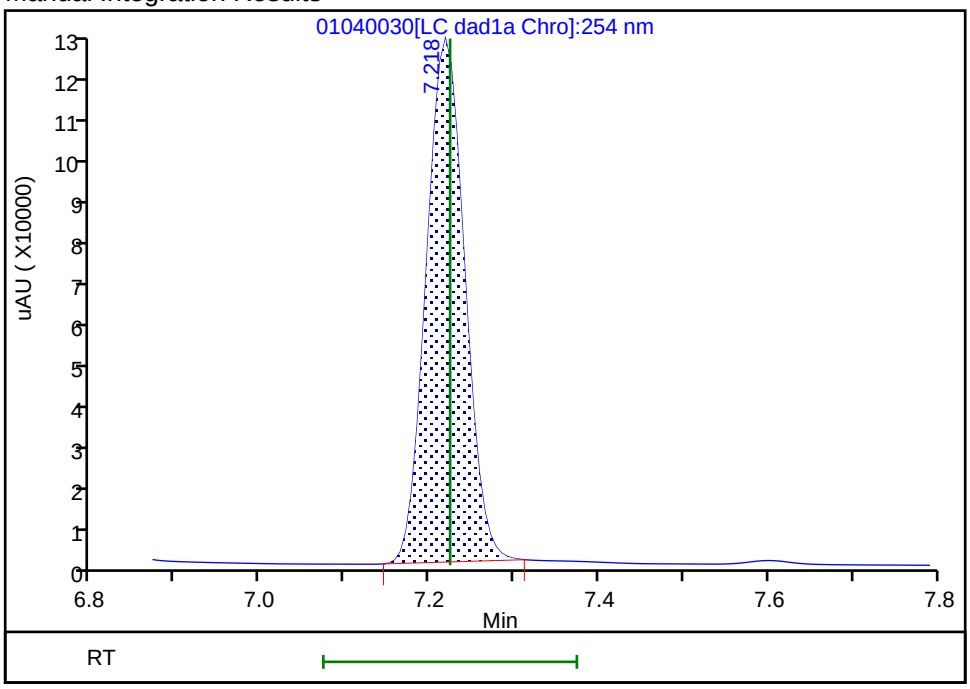
Processing Integration Results

RT: 7.22
Area: 403714
Amount: 3.070267
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 376943
Amount: 2.991720
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:07:12
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040031.D				
Lims ID:	IC DMT 7				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	05-Jan-2022 02:06:41	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 7				
Misc. Info.:	280-0107731-031				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jan-2022 12:10:06	Calib Date:	05-Jan-2022 04:24:15		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1613				
First Level Reviewer: zhangji		Date:	05-Jan-2022 12:07:30		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.478	6.484	-0.006	184090	1.00	1.02	M
6 DNX	1	6.798	6.797	0.001	137343	1.00	0.99	M
7 MNX	1	7.218	7.224	-0.006	147726	1.17	1.17	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 50.00 Units: uL

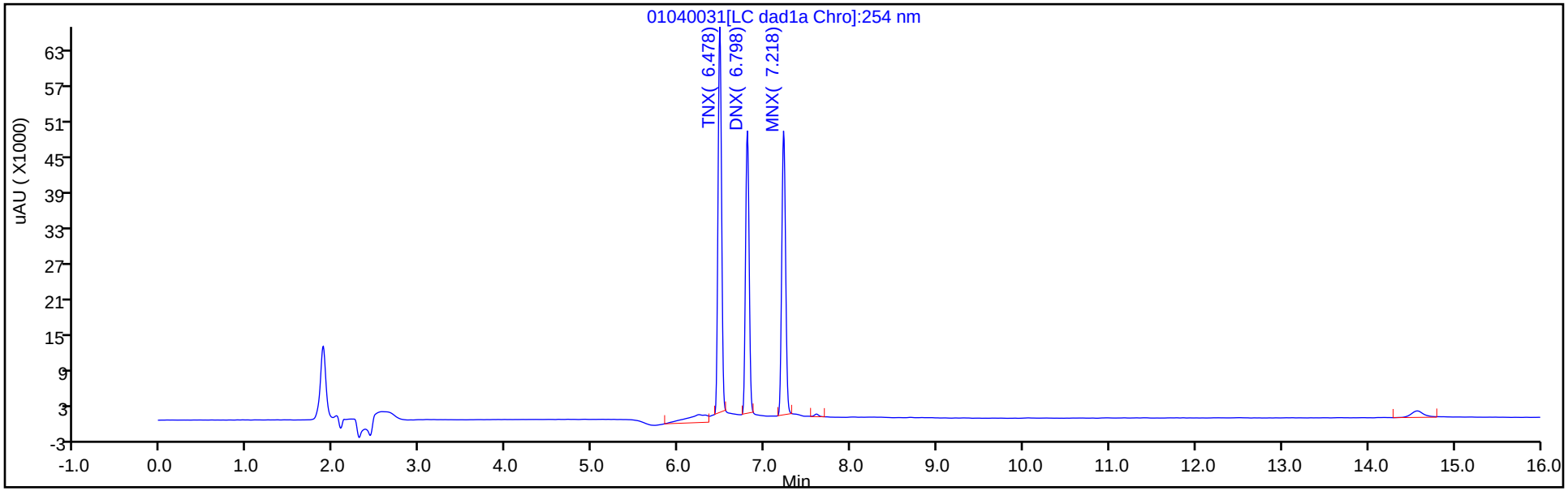
Report Date: 05-Jan-2022 12:10:06 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

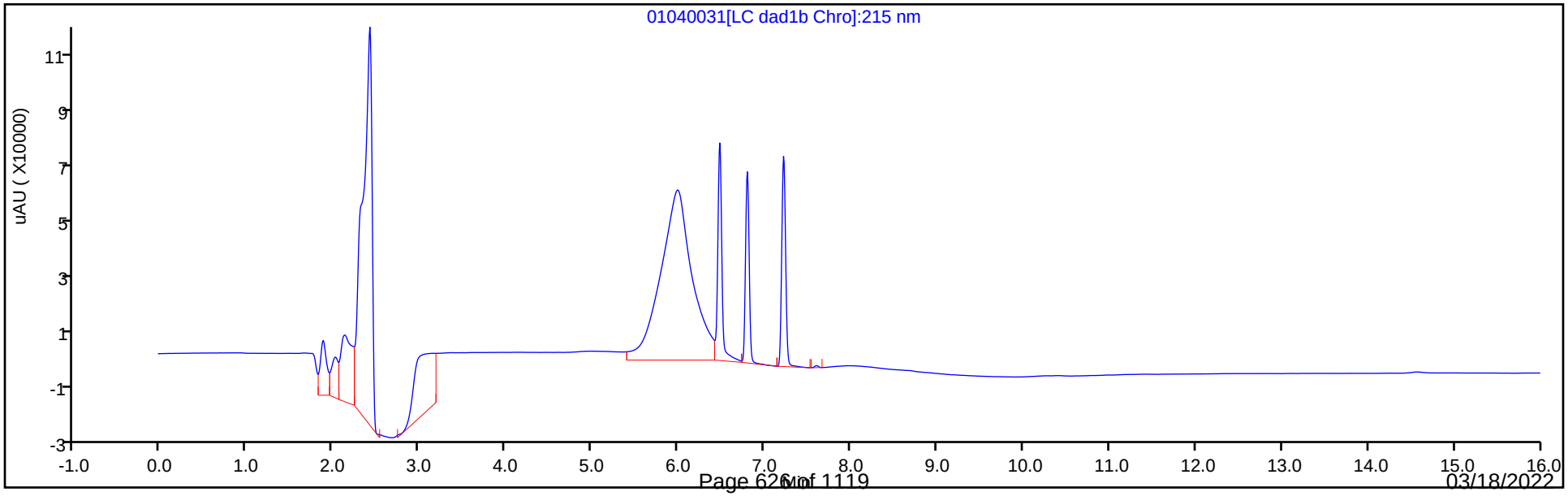
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040031.d

Injection Date:	05-Jan-2022 02:06:41	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC DMT 7			Worklist Smp#:	31
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

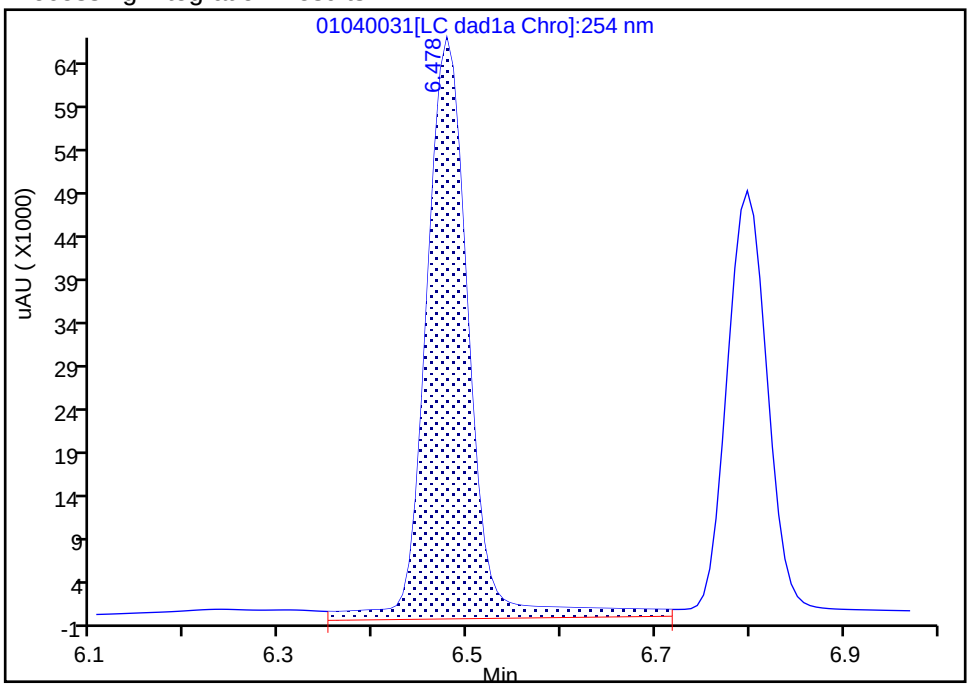
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040031.d				
Injection Date:	05-Jan-2022 02:06:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

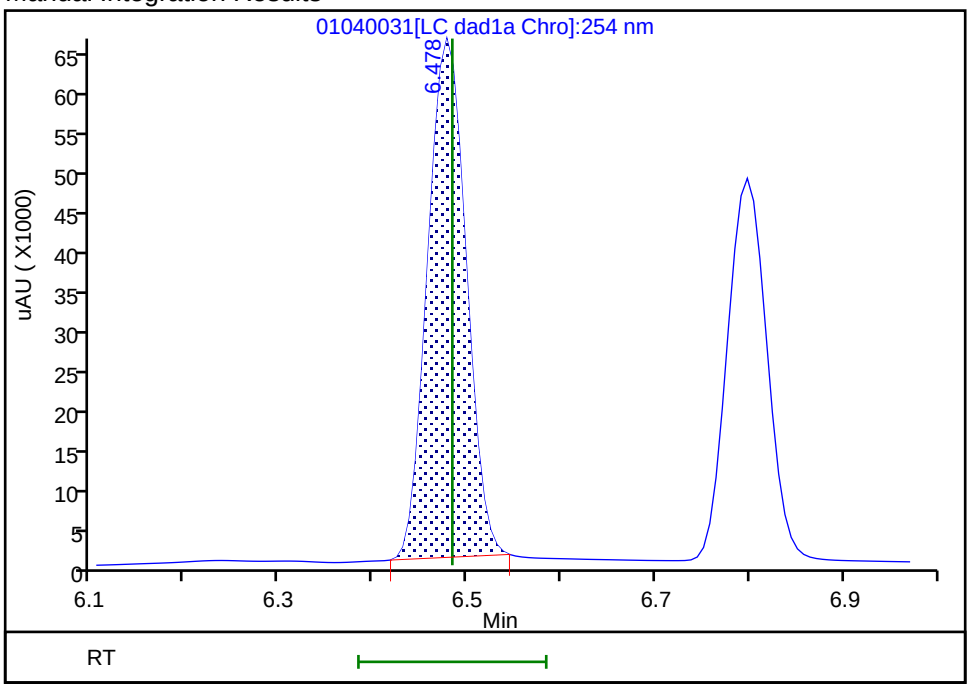
Processing Integration Results

RT: 6.48
Area: 210952
Amount: 0.982896
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 184090
Amount: 1.015907
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:07:22

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

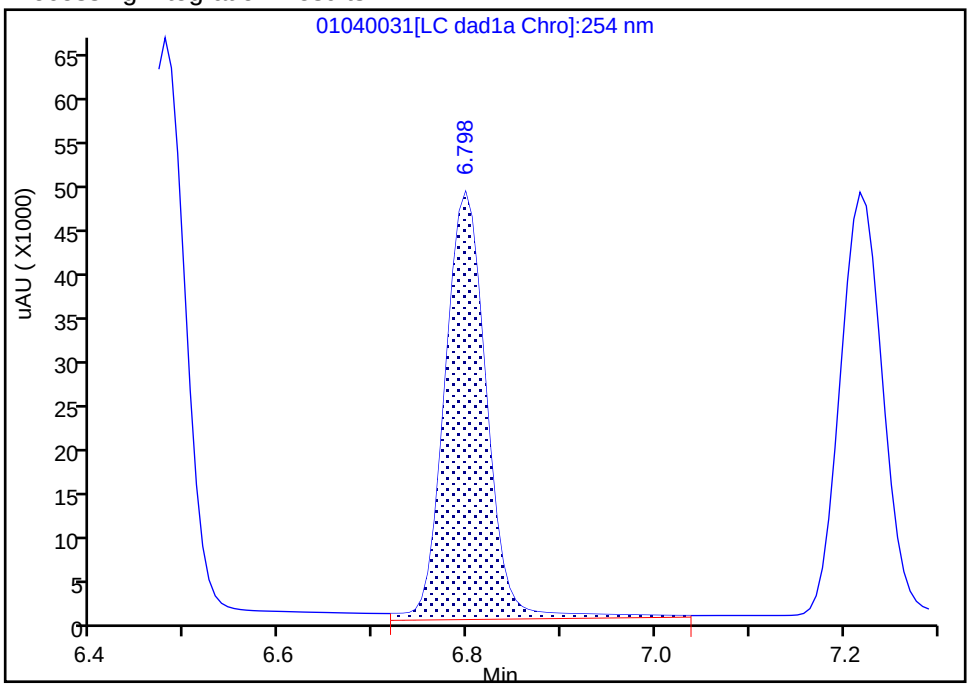
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040031.d				
Injection Date:	05-Jan-2022 02:06:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

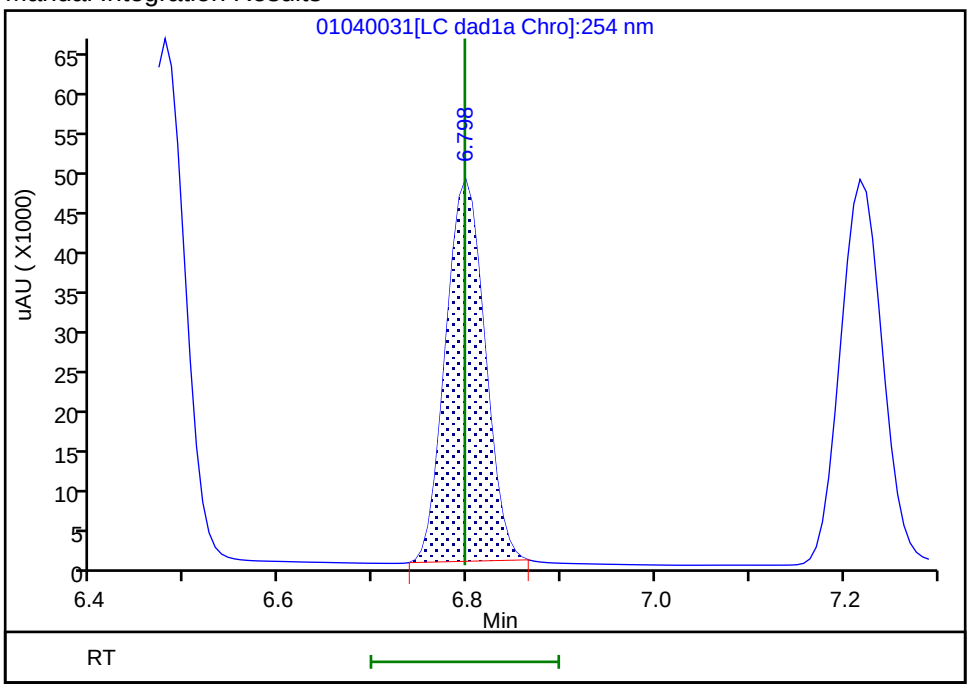
Processing Integration Results

RT: 6.80
Area: 149885
Amount: 1.012127
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 137343
Amount: 0.994425
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:07:25

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

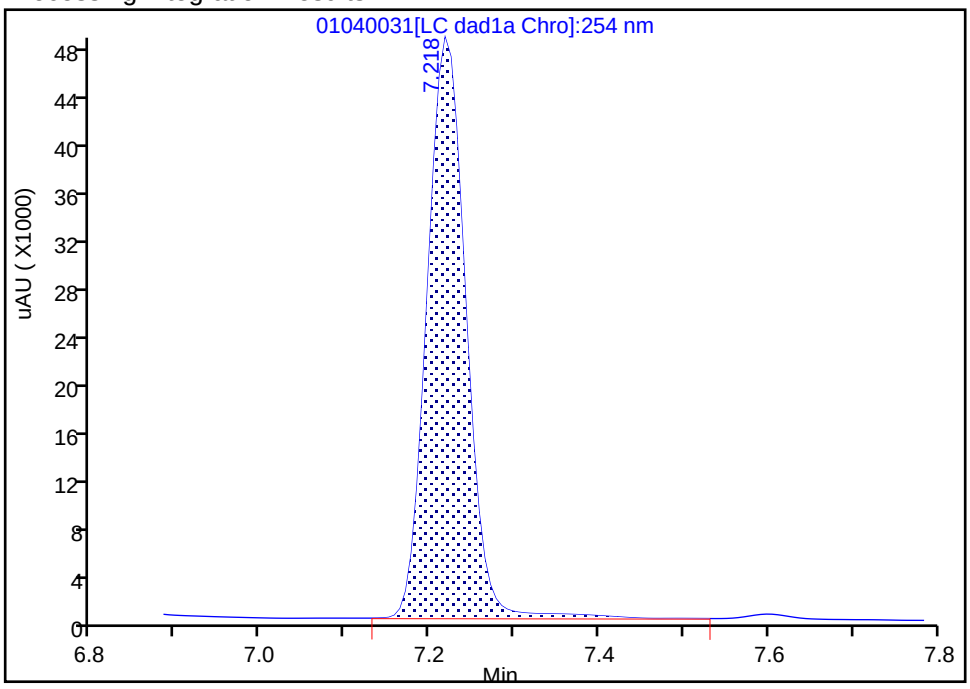
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040031.d				
Injection Date:	05-Jan-2022 02:06:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

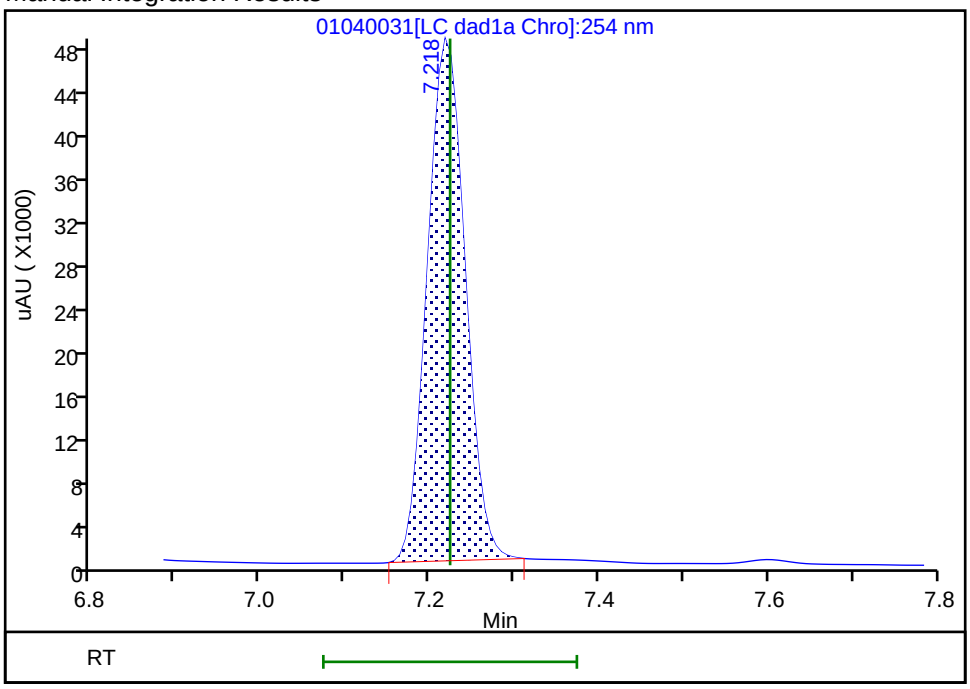
Processing Integration Results

RT: 7.22
Area: 153452
Amount: 1.177280
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 147726
Amount: 1.172471
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:07:29

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040032.D
Lims ID: IC DMT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 05-Jan-2022 02:29:42 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 6
Misc. Info.: 280-0107731-032
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jan-2022 12:10:06 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1613

First Level Reviewer: zhangji Date: 05-Jan-2022 12:07:46

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.477	6.484	-0.007	129844	0.7007	0.7165	M
6 DNX	1	6.797	6.797	0.000	97314	0.7007	0.7046	M
7 MNX	1	7.217	7.224	-0.007	103999	0.8169	0.8254	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 35.00 Units: uL

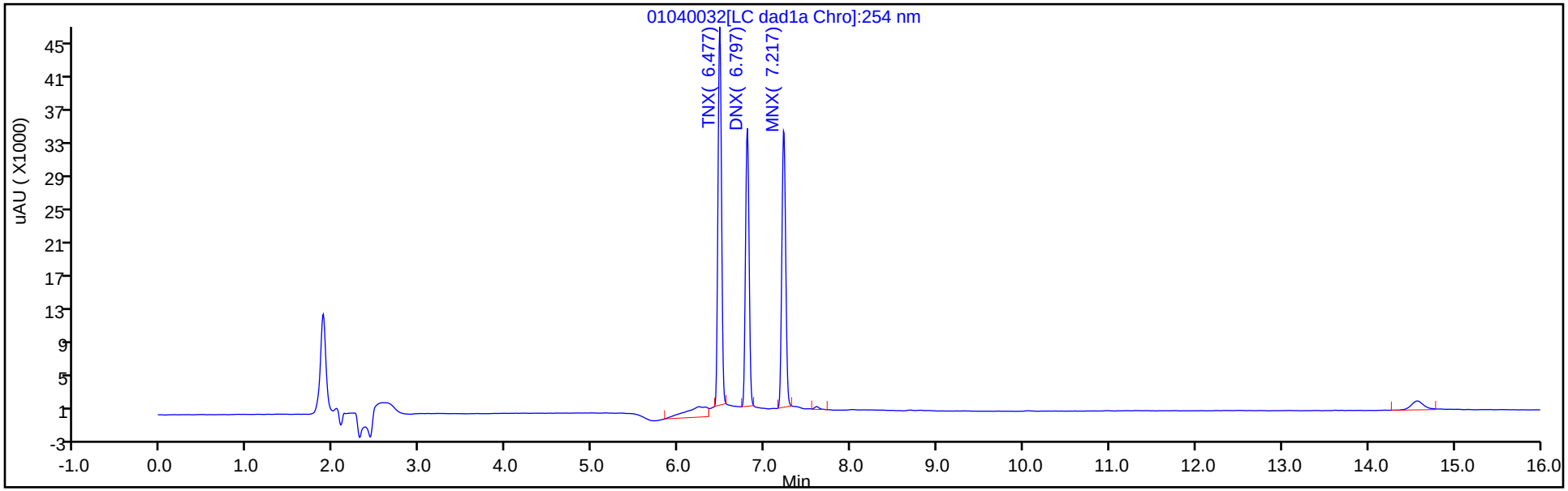
Report Date: 05-Jan-2022 12:10:06 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

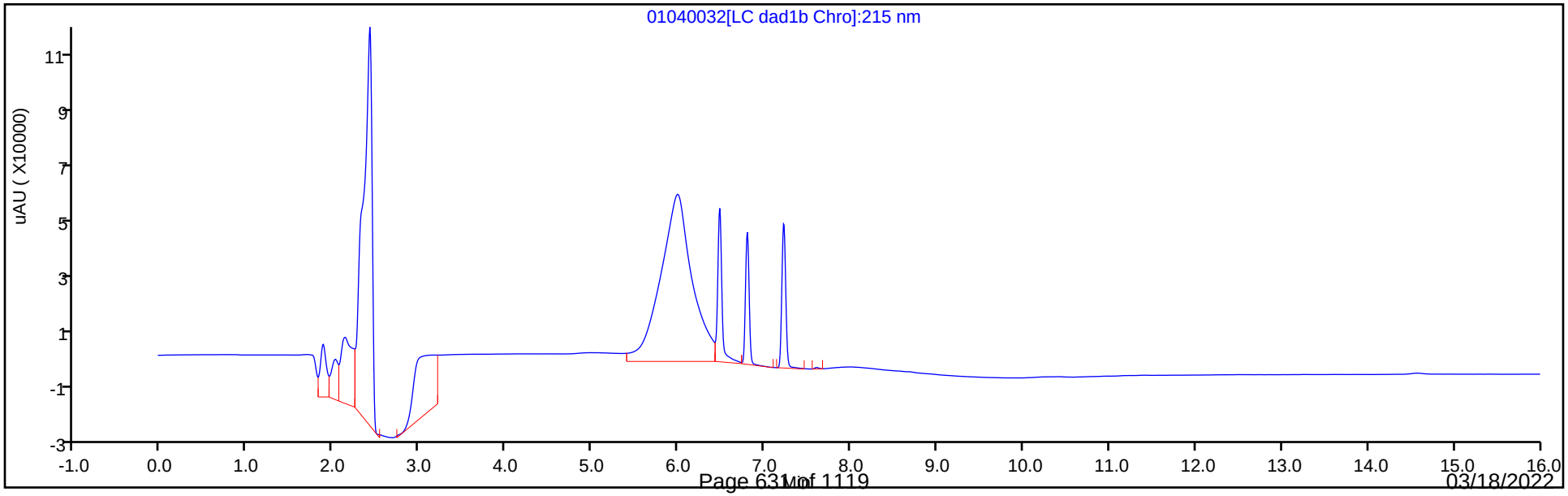
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040032.d

Injection Date:	05-Jan-2022 02:29:42	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC DMT 6			Worklist Smp#:	32
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

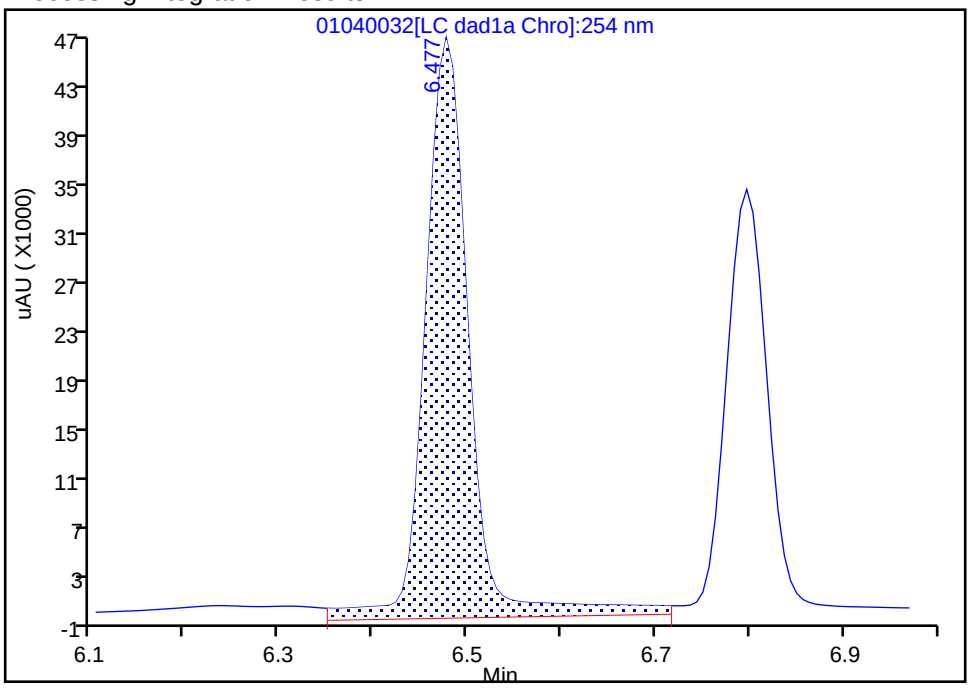
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040032.d				
Injection Date:	05-Jan-2022 02:29:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

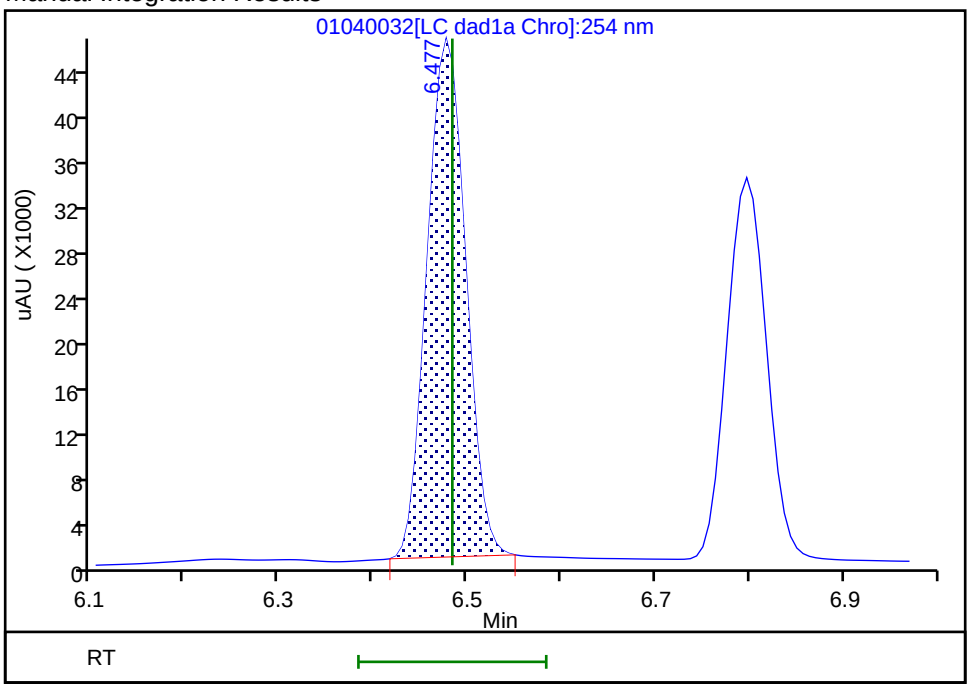
Processing Integration Results

RT: 6.48
Area: 152631
Amount: 0.722450
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 129844
Amount: 0.716549
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:07:40

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

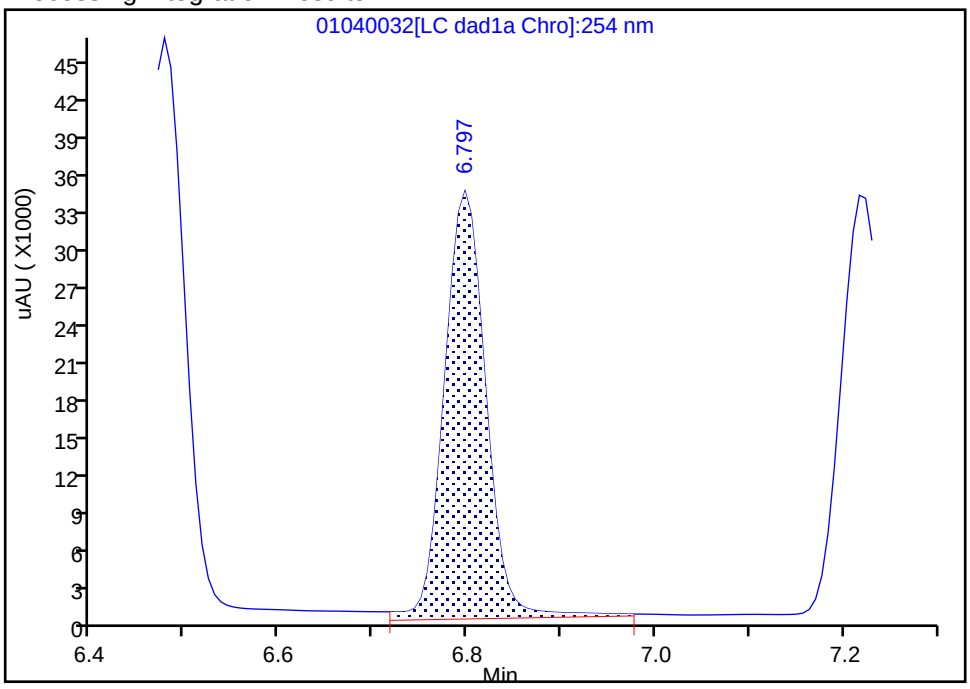
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040032.d				
Injection Date:	05-Jan-2022 02:29:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

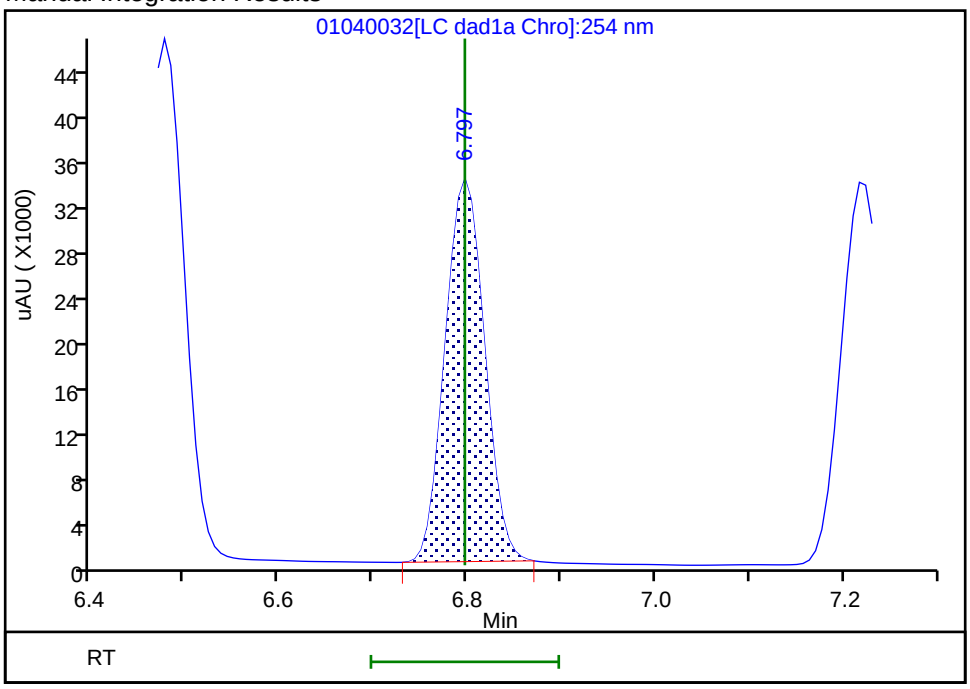
Processing Integration Results

RT: 6.80
Area: 105159
Amount: 0.717696
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 97314
Amount: 0.704597
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:07:43

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

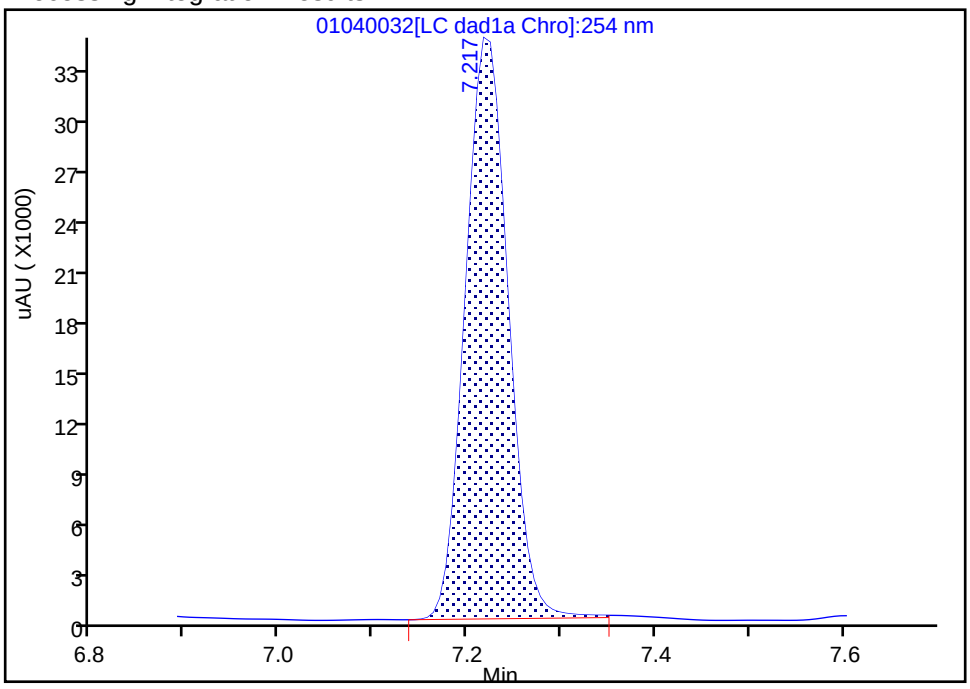
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040032.d				
Injection Date:	05-Jan-2022 02:29:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

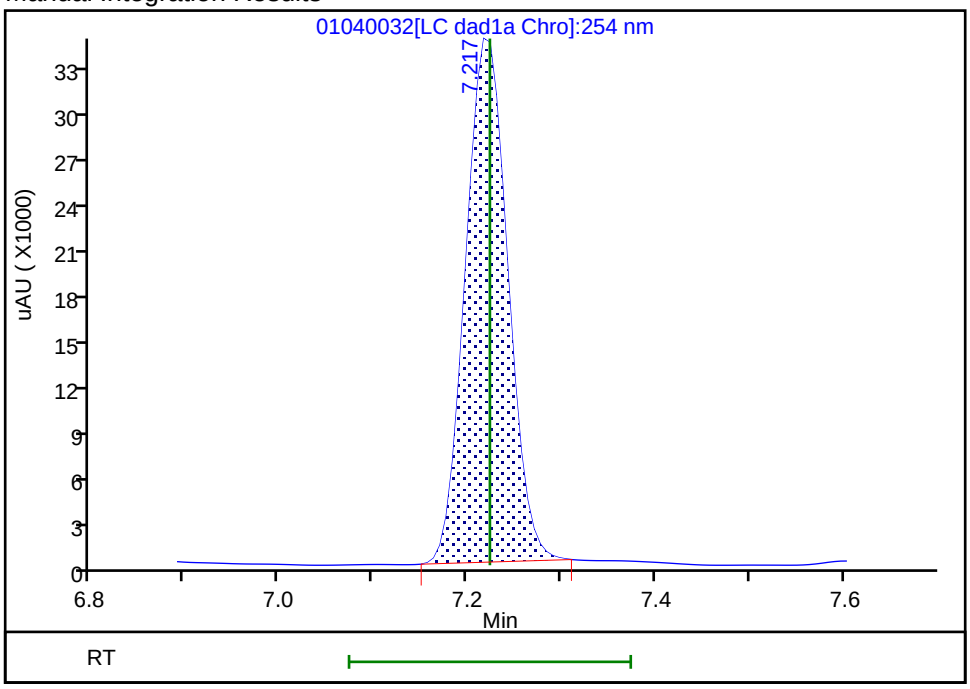
Processing Integration Results

RT: 7.22
Area: 105581
Amount: 0.816470
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 103999
Amount: 0.825419
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:26

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040033.D
Lims ID: IC DMT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 05-Jan-2022 02:52:35 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 5
Misc. Info.: 280-0107731-033
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jan-2022 12:10:07 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1613

First Level Reviewer: zhangji Date: 05-Jan-2022 12:08:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.483	6.484	-0.001	72720	0.4004	0.4013	M
6 DNX	1	6.803	6.797	0.006	55675	0.4004	0.4031	M
7 MNX	1	7.223	7.224	-0.001	59416	0.4668	0.4716	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 20.00 Units: uL

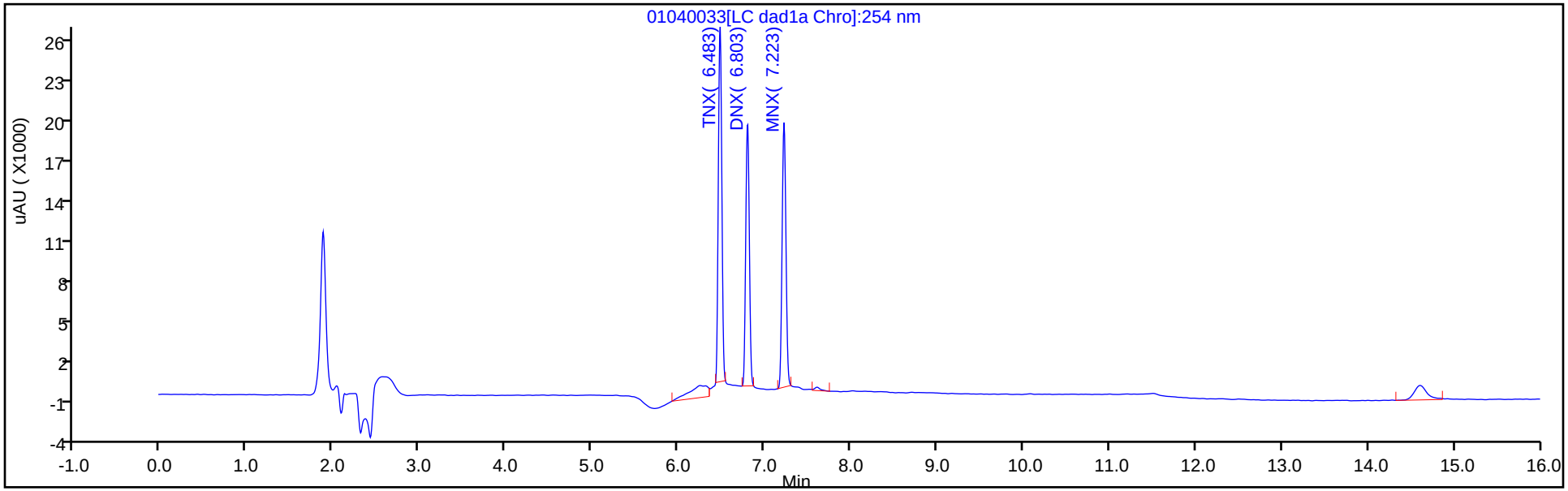
Report Date: 05-Jan-2022 12:10:07 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

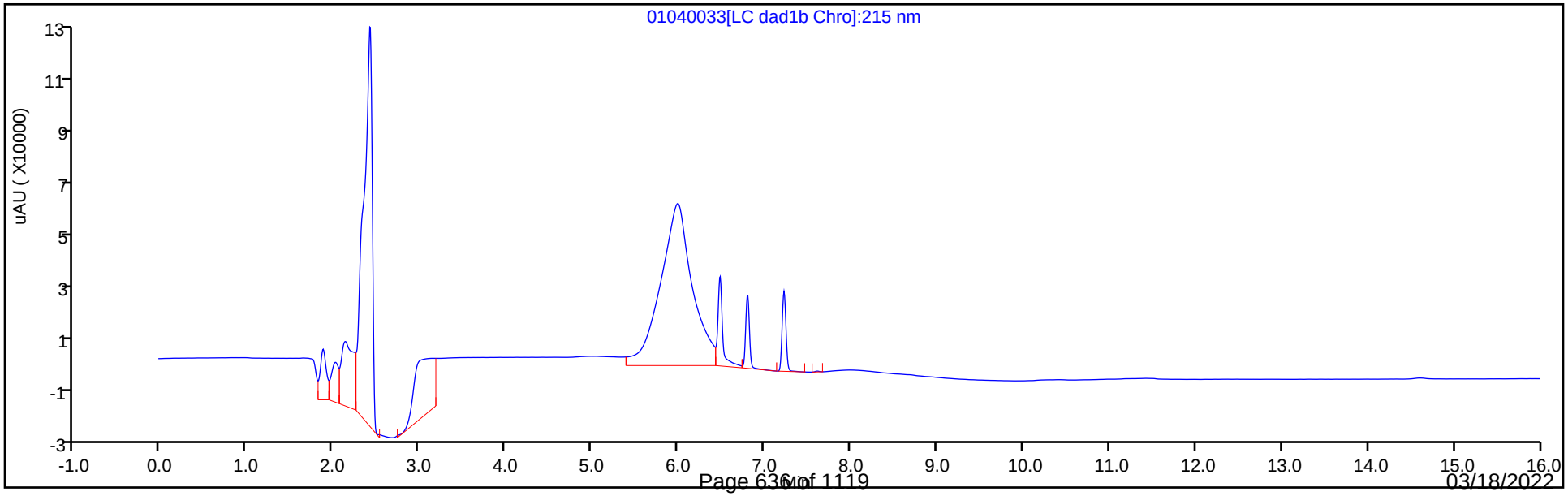
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040033.d

Injection Date:	05-Jan-2022 02:52:35	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC DMT 5			Worklist Smp#:	33
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

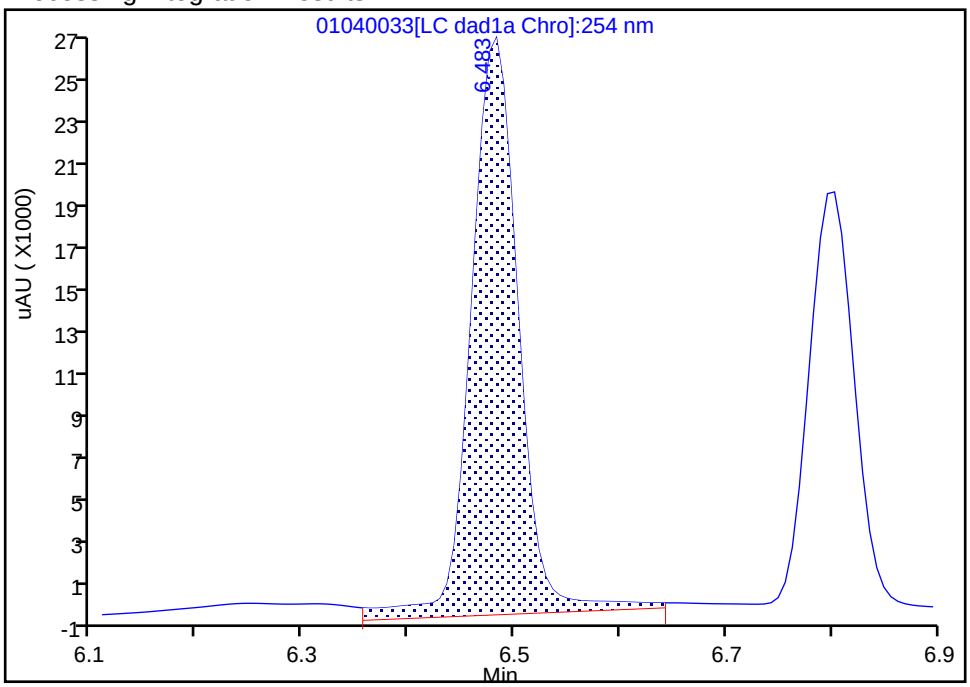
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040033.d				
Injection Date:	05-Jan-2022 02:52:35	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

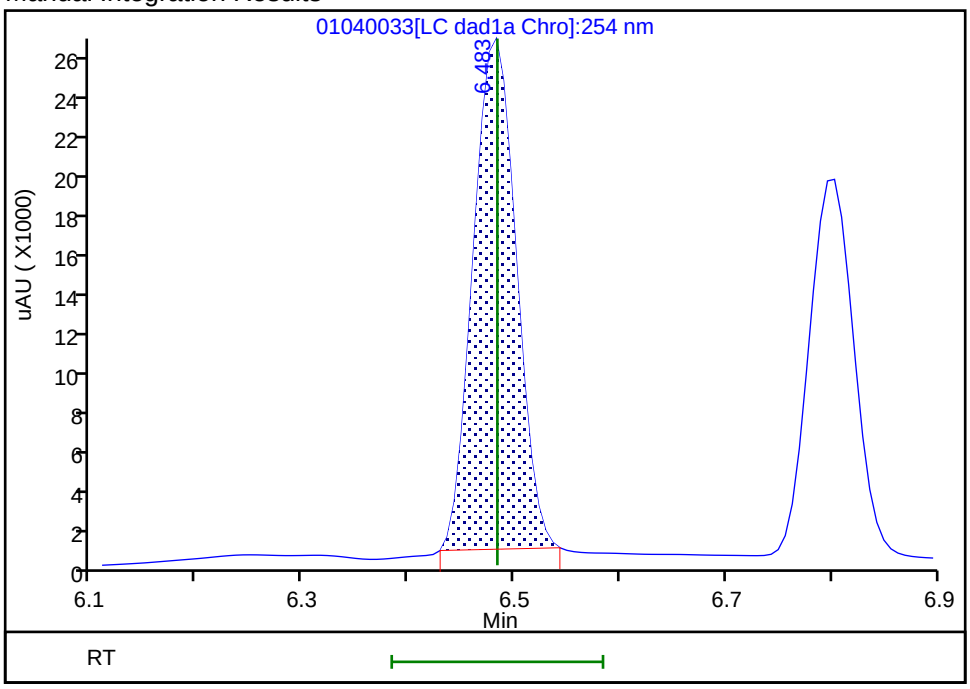
Processing Integration Results

RT: 6.48
Area: 83275
Amount: 0.401900
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 72720
Amount: 0.401308
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:07:54
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

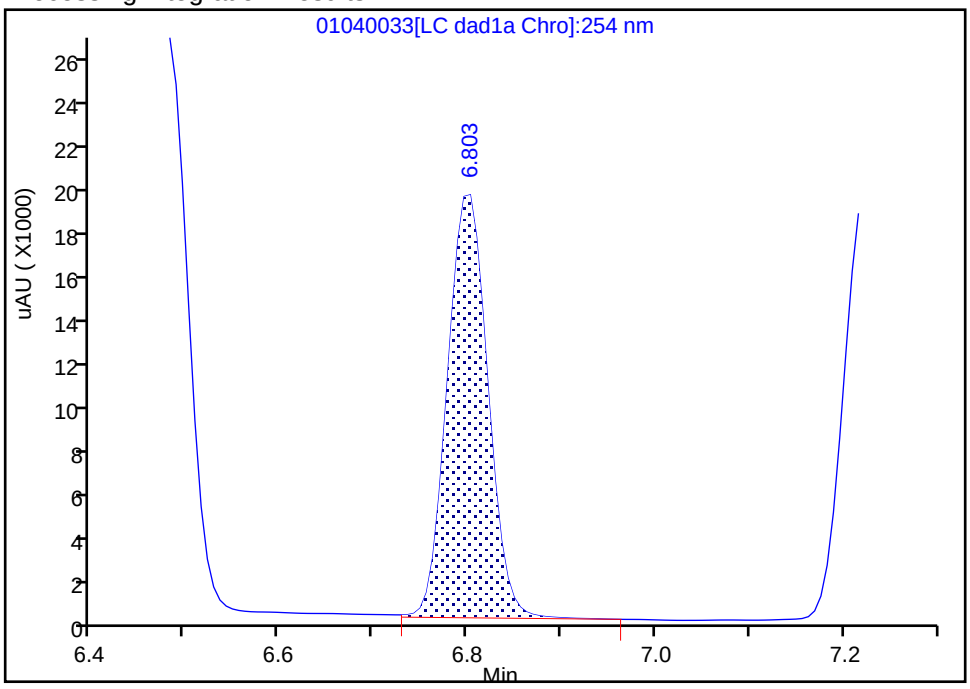
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040033.d				
Injection Date:	05-Jan-2022 02:52:35	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

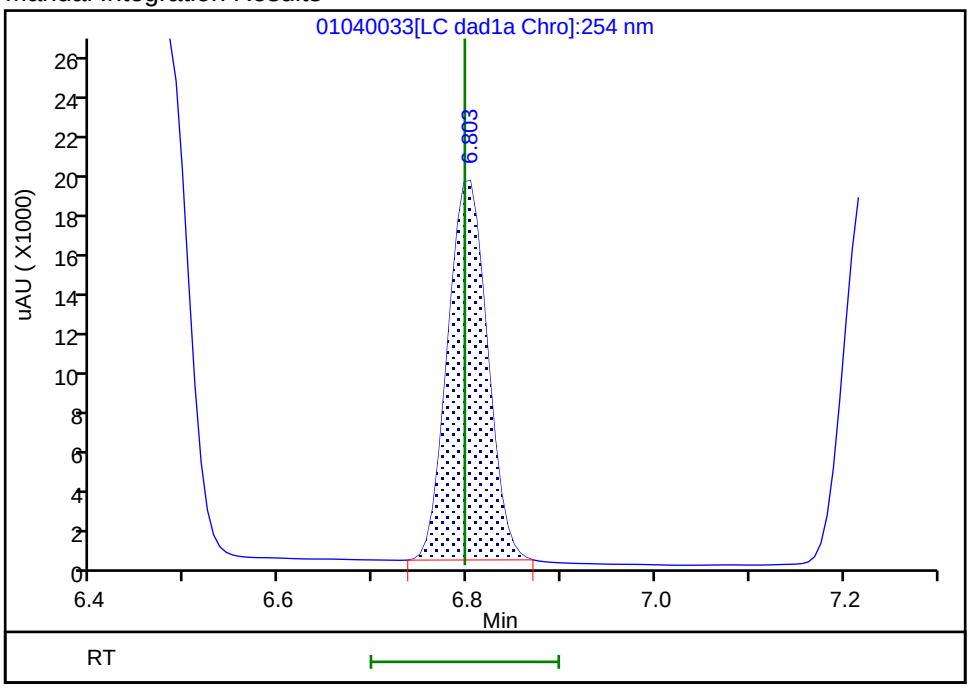
Processing Integration Results

RT: 6.80
Area: 57132
Amount: 0.393678
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 55675
Amount: 0.403112
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:07:58

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

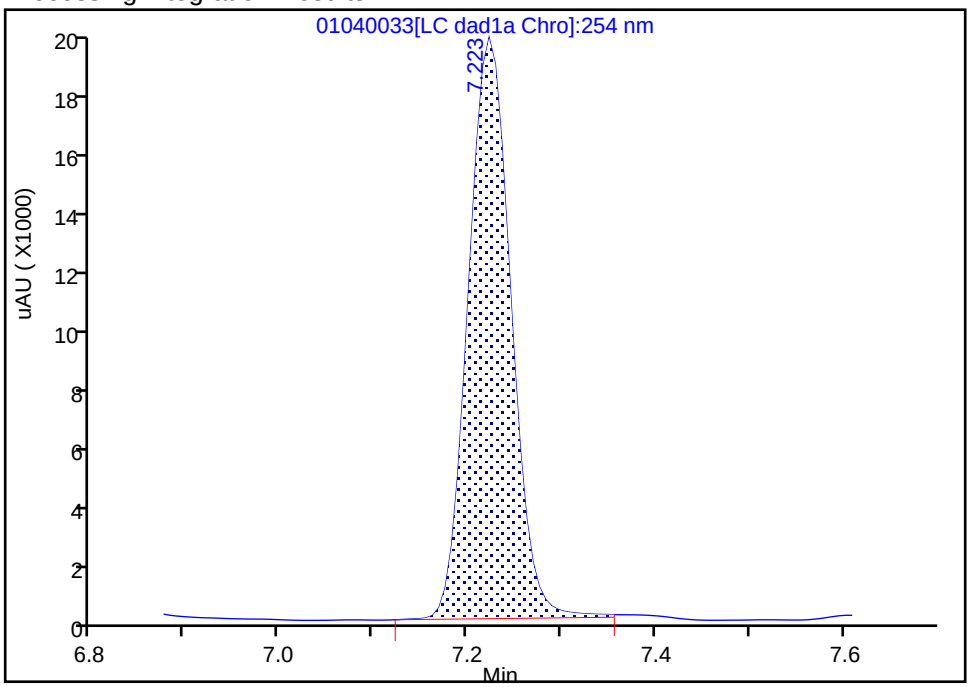
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040033.d				
Injection Date:	05-Jan-2022 02:52:35	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

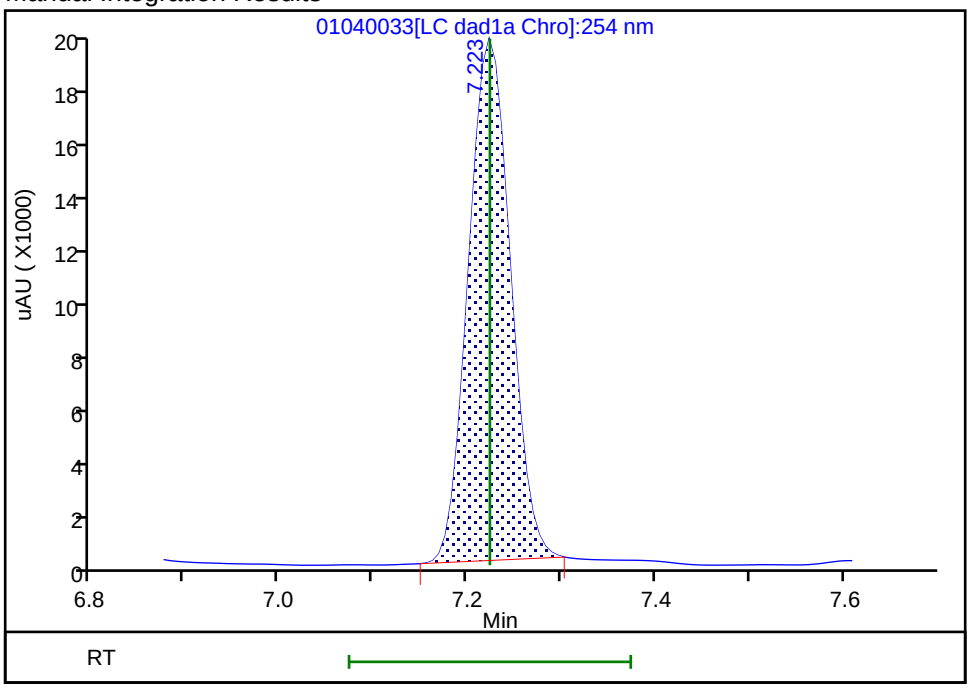
Processing Integration Results

RT: 7.22
Area: 60974
Amount: 0.470003
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 59416
Amount: 0.471573
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:17
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040034.D				
Lims ID:	IC DMT 4				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	05-Jan-2022 03:15:30	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 4				
Misc. Info.:	280-0107731-034				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jan-2022 12:10:07	Calib Date:	05-Jan-2022 04:24:15		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1613				
First Level Reviewer: zhangji		Date:	05-Jan-2022 12:08:44		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.484	6.484	0.000	42748	0.2503	0.2359	M
6 DNX	1	6.797	6.797	0.000	32416	0.2503	0.2347	M
7 MNX	1	7.224	7.224	0.000	34560	0.2918	0.2743	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

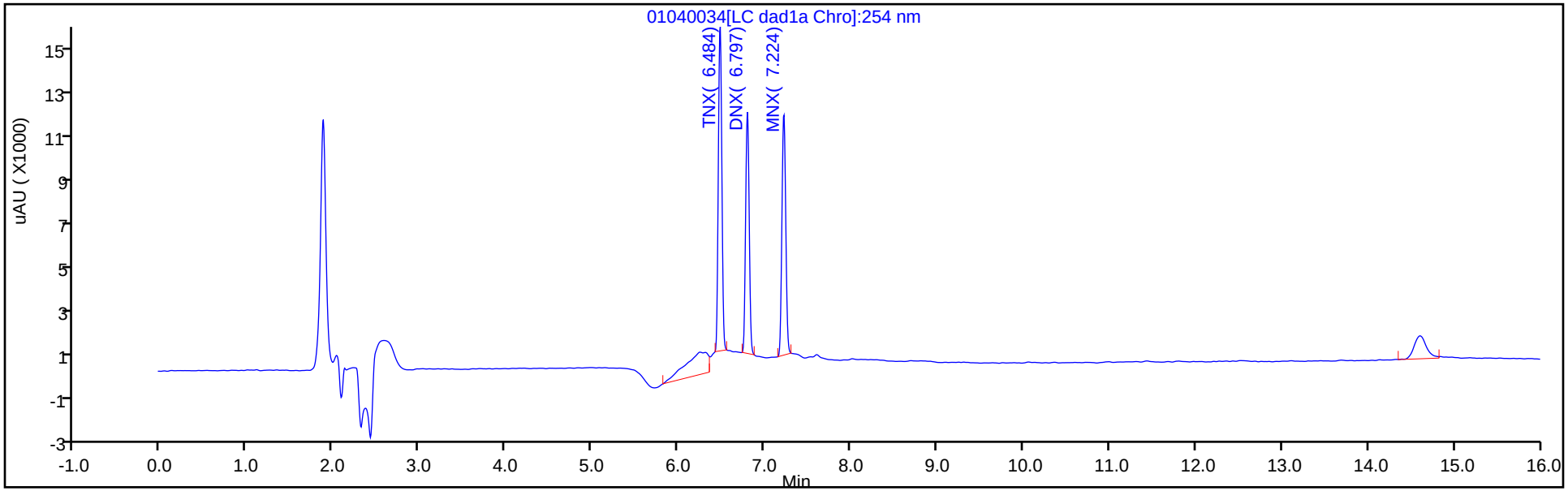
Report Date: 05-Jan-2022 12:10:07 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

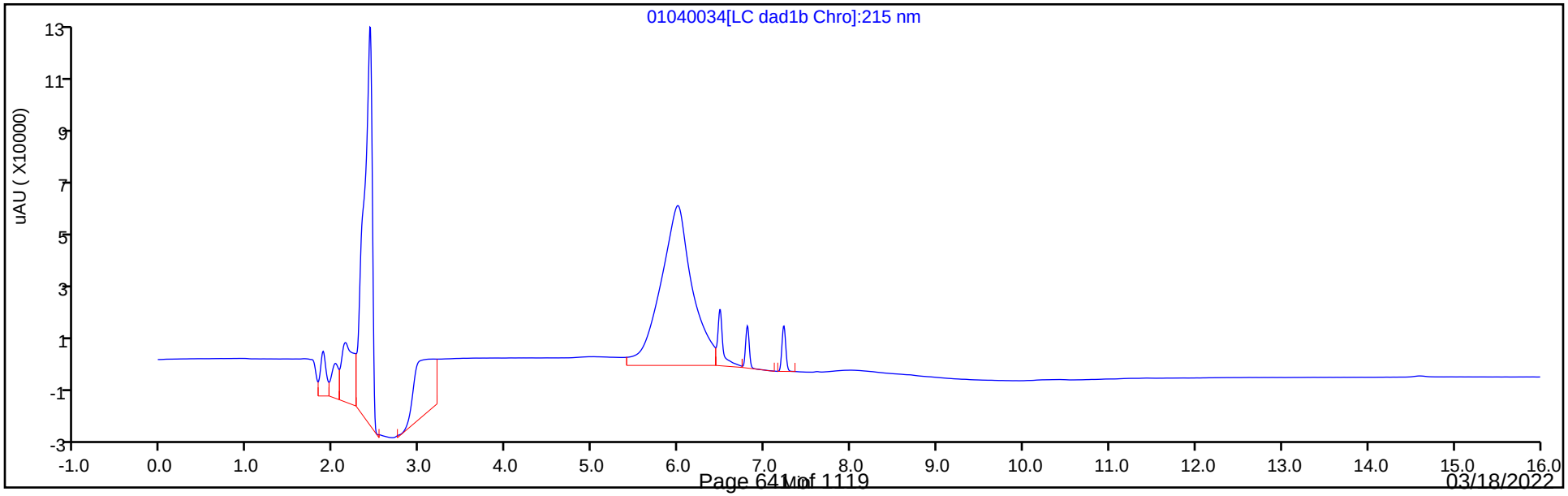
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040034.d

Injection Date:	05-Jan-2022 03:15:30	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC DMT 4			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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

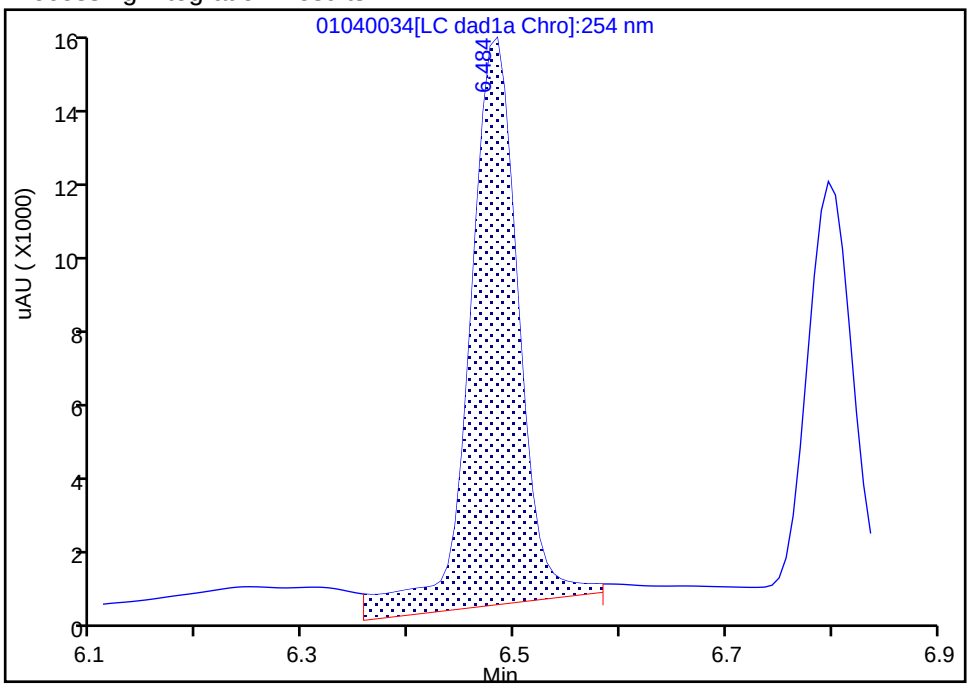
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040034.d				
Injection Date:	05-Jan-2022 03:15:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

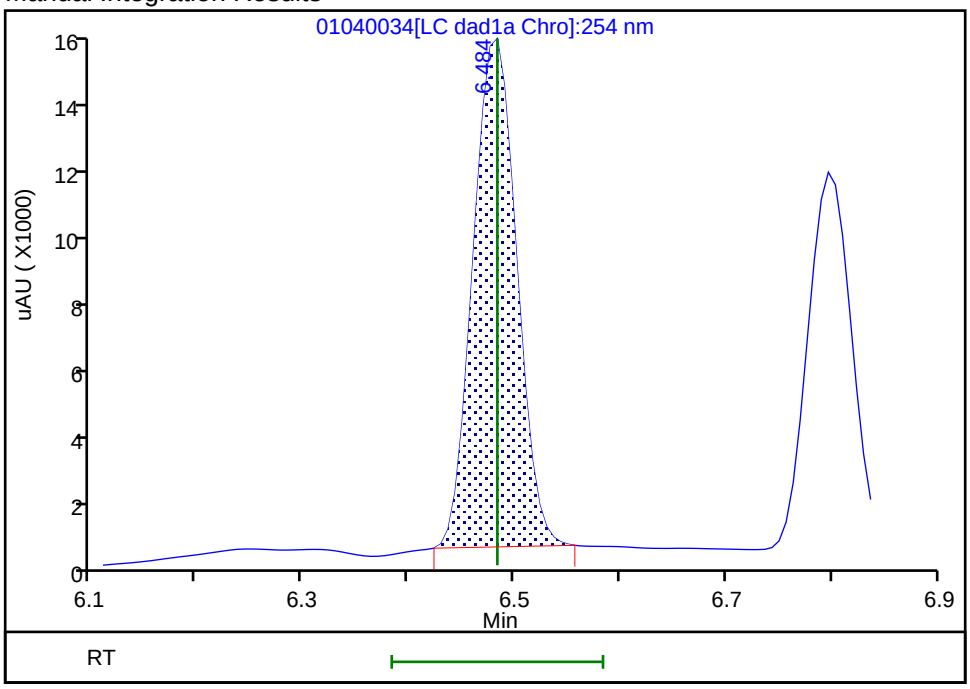
Processing Integration Results

RT: 6.48
Area: 50220
Amount: 0.246287
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 42748
Amount: 0.235906
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:35

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

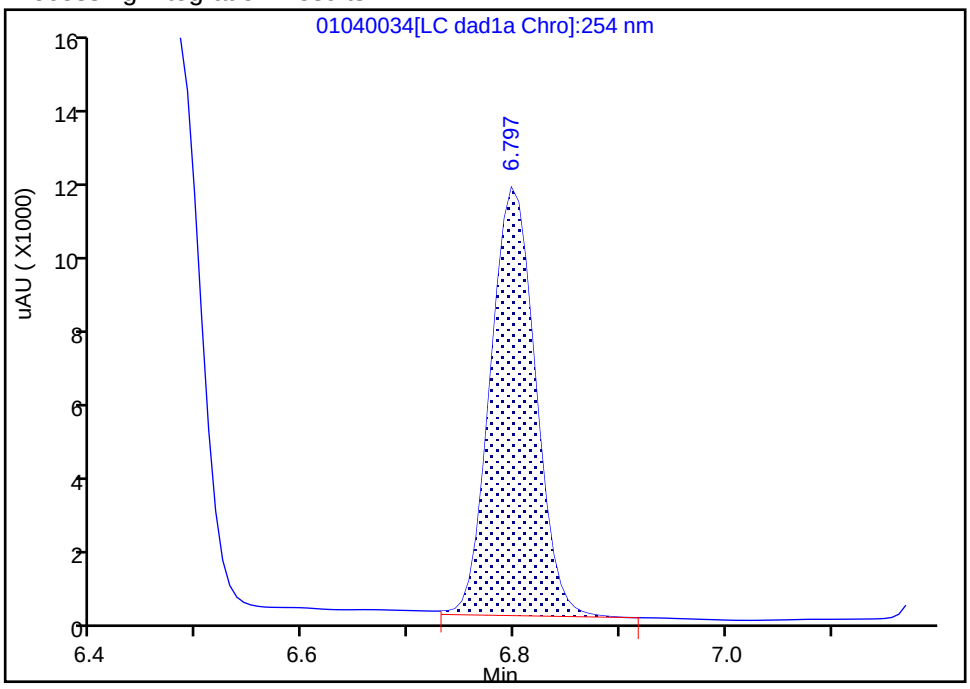
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040034.d				
Injection Date:	05-Jan-2022 03:15:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

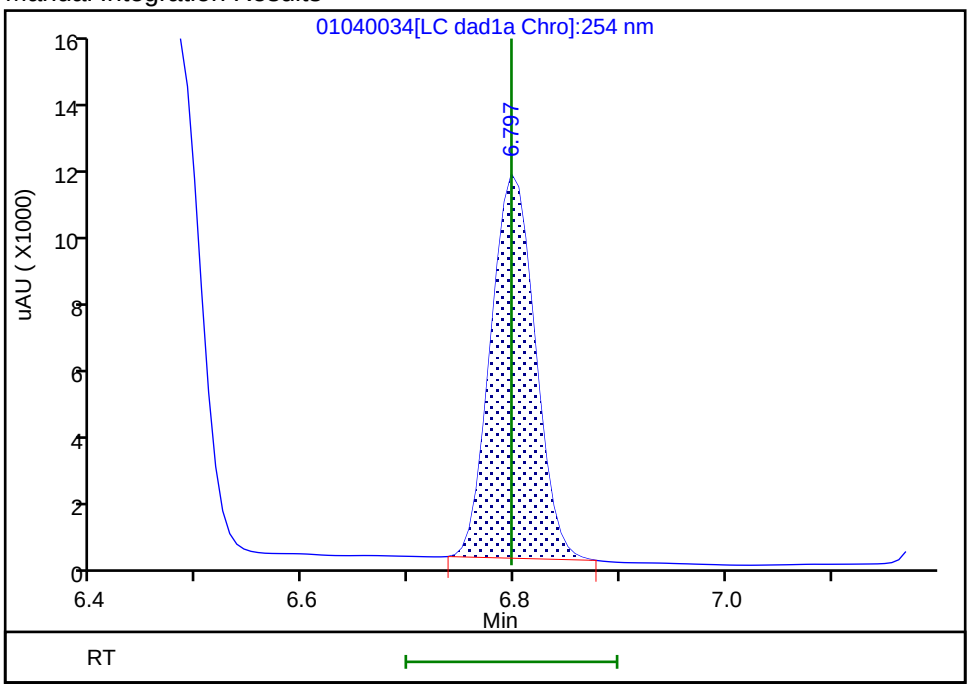
Processing Integration Results

RT: 6.80
Area: 33123
Amount: 0.228958
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 32416
Amount: 0.234706
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:39

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

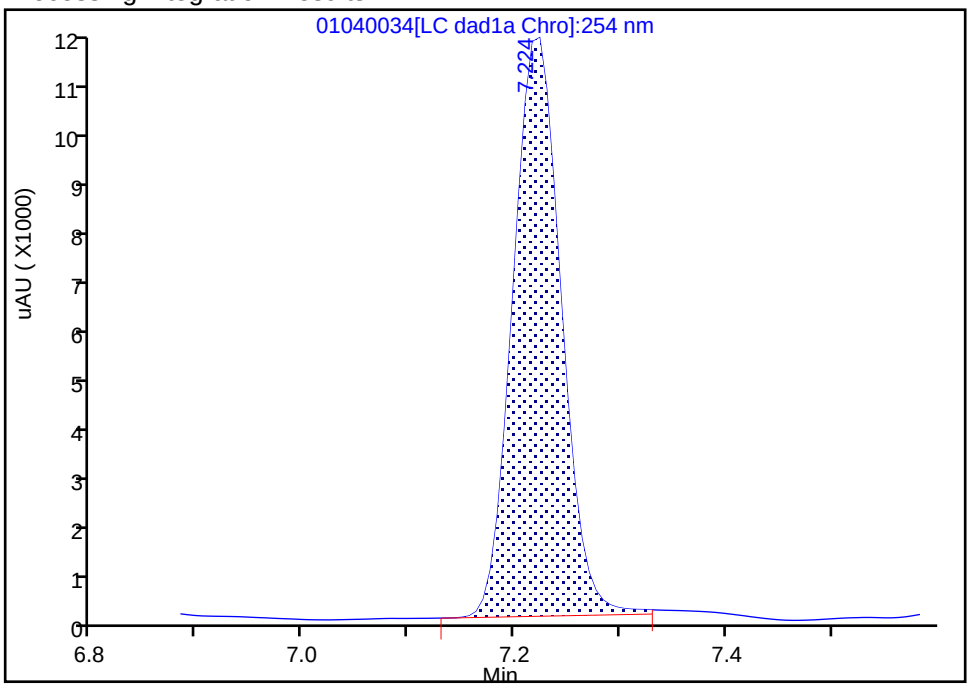
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040034.d				
Injection Date:	05-Jan-2022 03:15:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

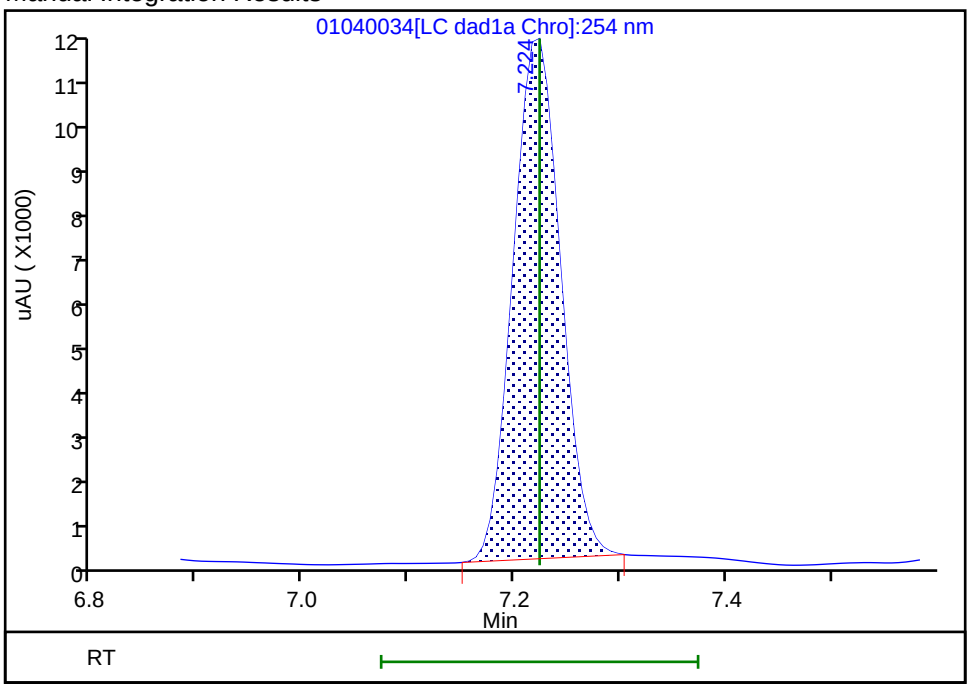
Processing Integration Results

RT: 7.22
Area: 35288
Amount: 0.273398
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 34560
Amount: 0.274296
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:43

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040035.D
Lims ID: IC DMT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 05-Jan-2022 03:38:24 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 3
Misc. Info.: 280-0107731-035
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jan-2022 12:10:07 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1613

First Level Reviewer: zhangji Date: 05-Jan-2022 12:08:58

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.483	6.484	-0.001	17989	0.1001	0.0993	M
6 DNX	1	6.796	6.797	-0.001	13928	0.1001	0.1008	M
7 MNX	1	7.223	7.224	-0.001	14438	0.1167	0.1146	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 5.00 Units: uL

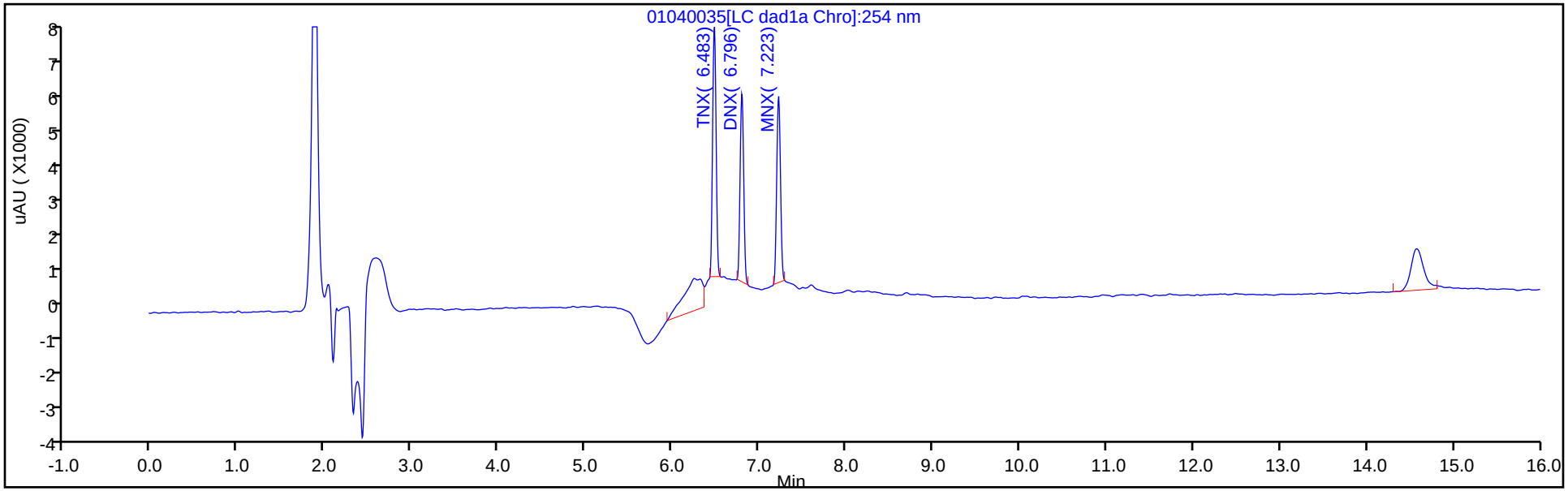
Report Date: 05-Jan-2022 12:10:08 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

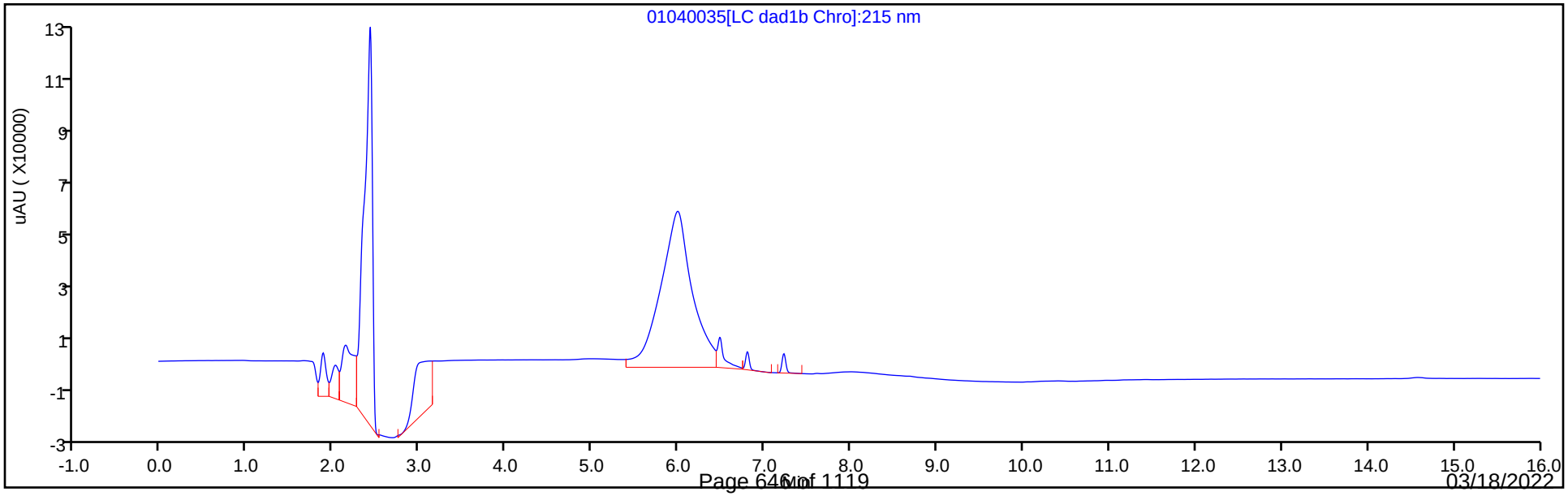
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040035.d

Injection Date:	05-Jan-2022 03:38:24	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC DMT 3			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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

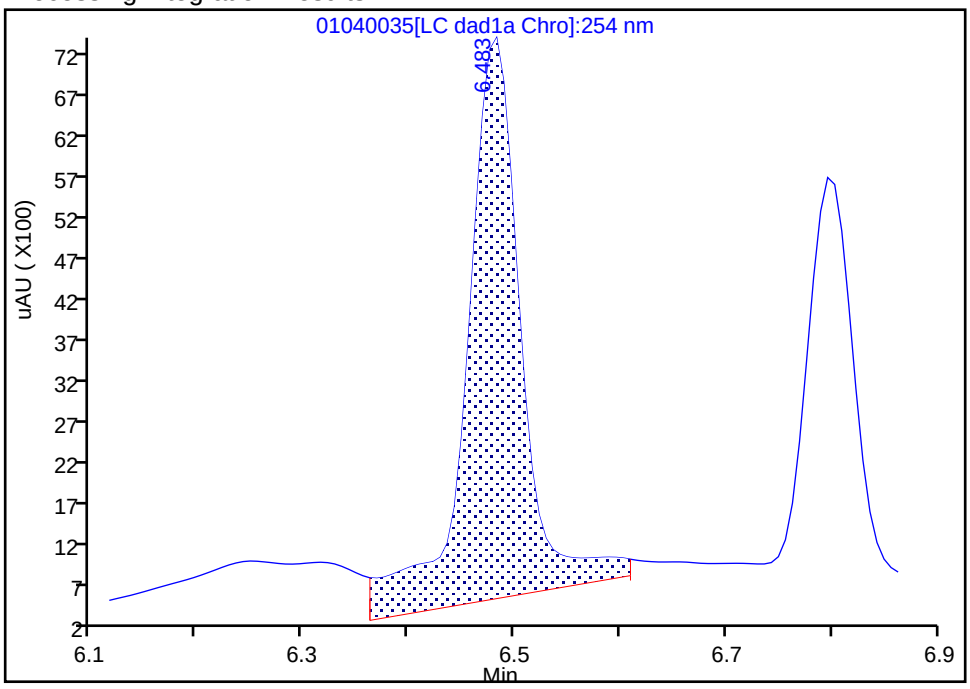
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040035.d				
Injection Date:	05-Jan-2022 03:38:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

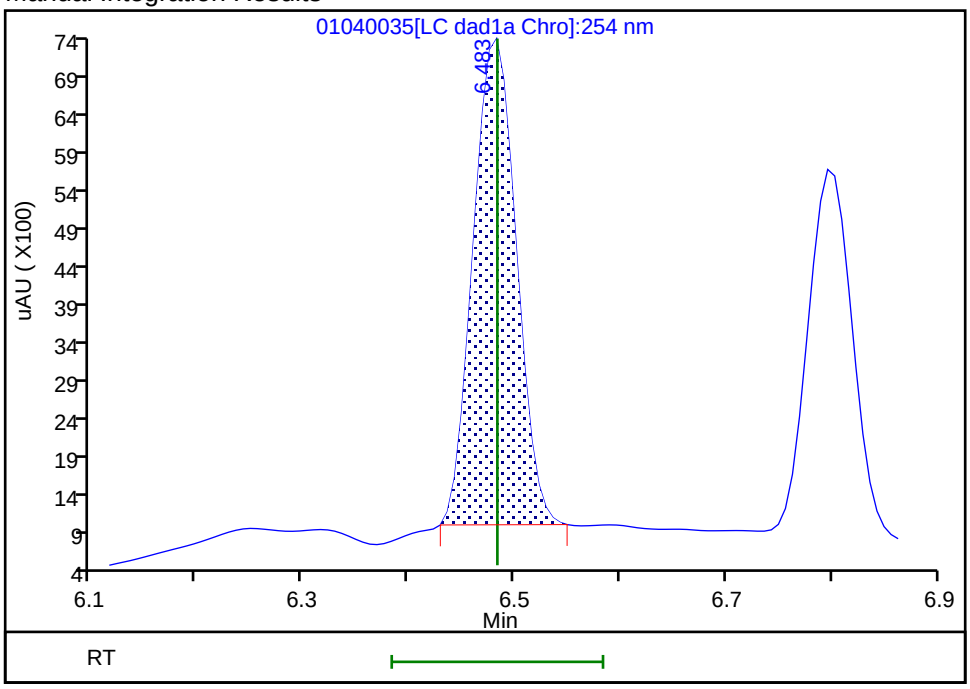
Processing Integration Results

RT: 6.48
Area: 24762
Amount: 0.123701
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 17989
Amount: 0.099273
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:50
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

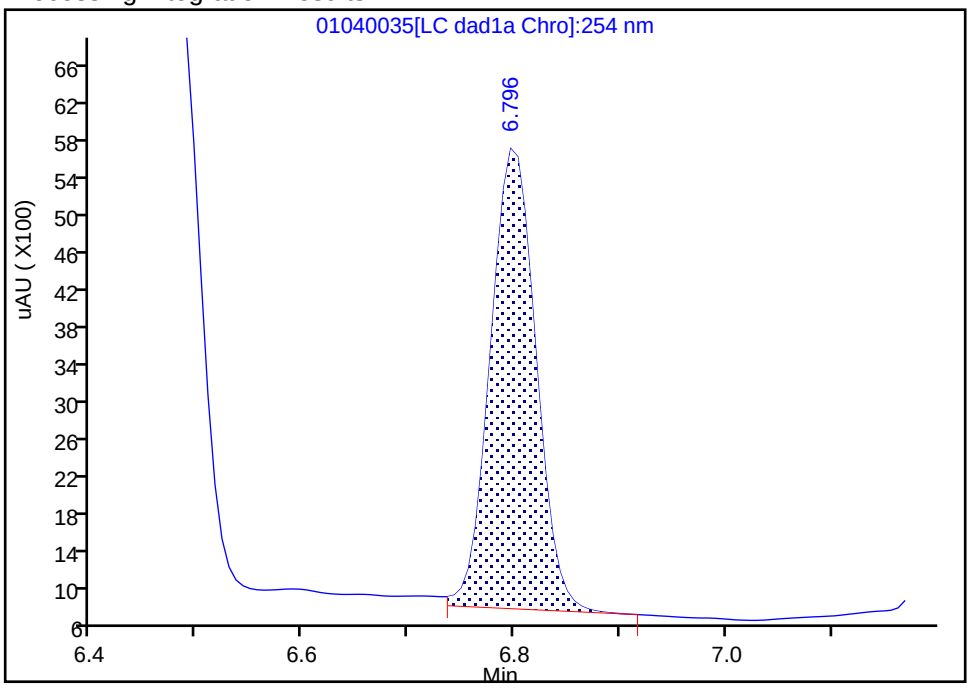
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040035.d				
Injection Date:	05-Jan-2022 03:38:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

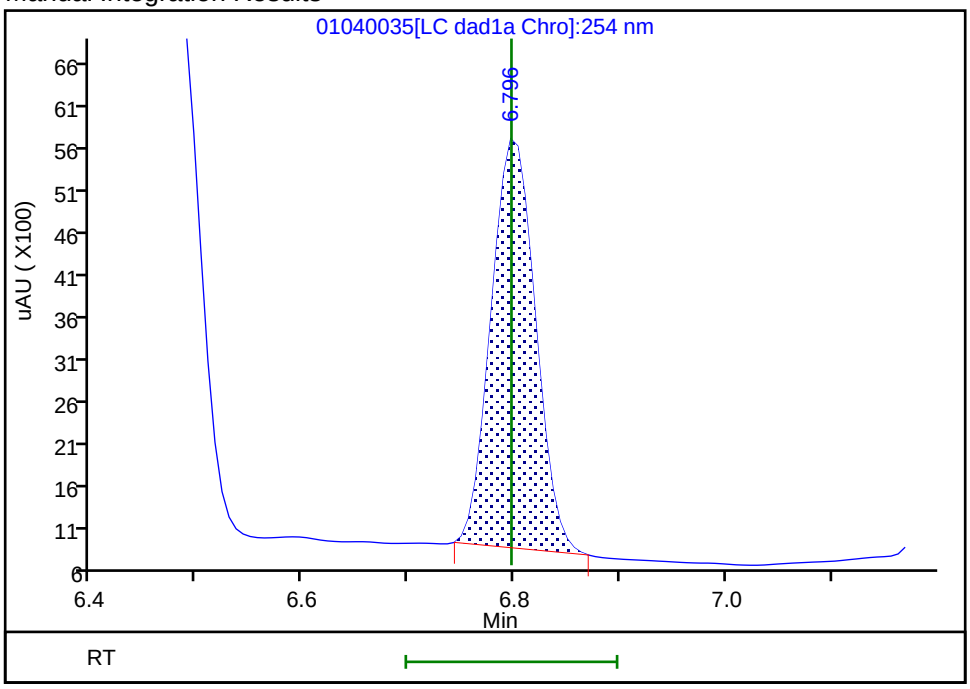
Processing Integration Results

RT: 6.80
Area: 14564
Amount: 0.100918
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 13928
Amount: 0.100845
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:53
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

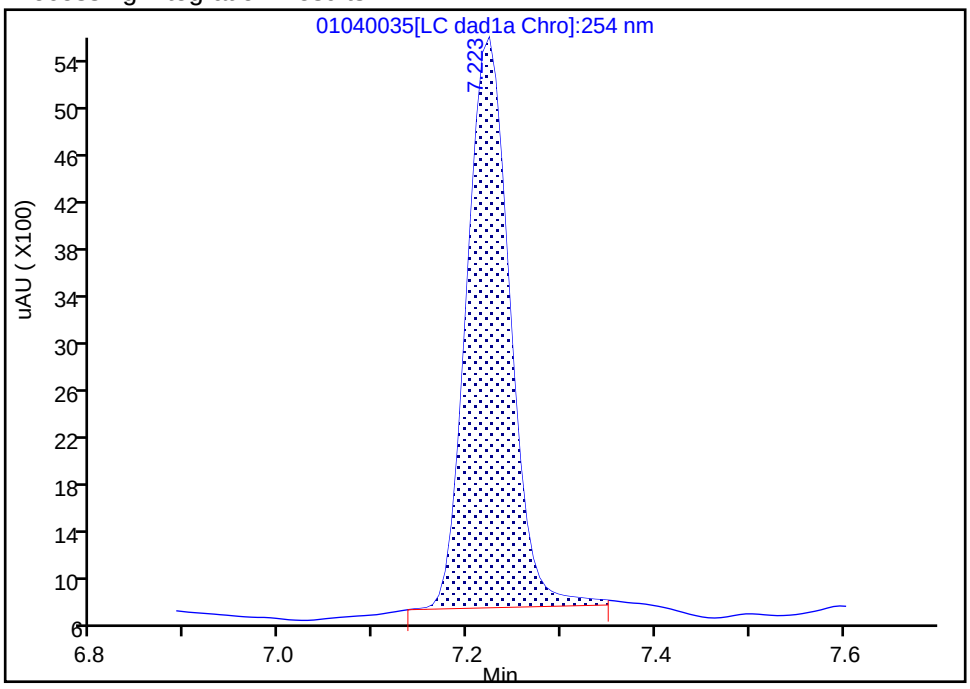
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040035.d				
Injection Date:	05-Jan-2022 03:38:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

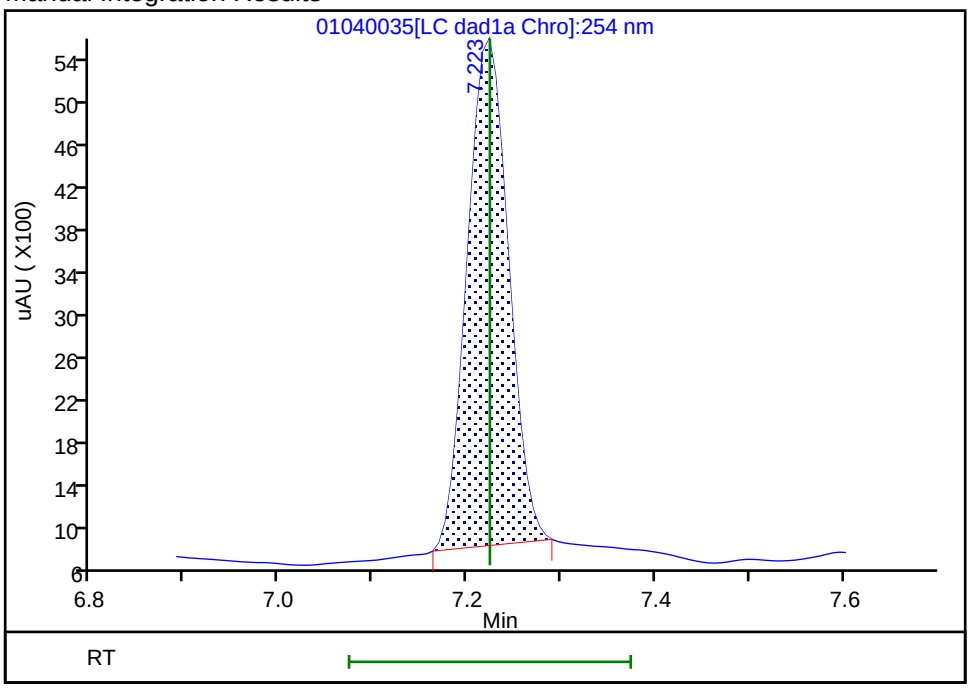
Processing Integration Results

RT: 7.22
Area: 15316
Amount: 0.118950
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 14438
Amount: 0.114591
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:08:56

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040036.D
Lims ID: IC DMT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 05-Jan-2022 04:01:20 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 2
Misc. Info.: 280-0107731-036
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jan-2022 12:10:08 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1613

First Level Reviewer: zhangji Date: 05-Jan-2022 12:09:13

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.478	6.484	-0.006	9031	0.0501	0.0498	M
6 DNX	1	6.798	6.797	0.001	6988	0.0501	0.0506	M
7 MNX	1	7.224	7.224	0.000	7298	0.0584	0.0579	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 2.50 Units: uL

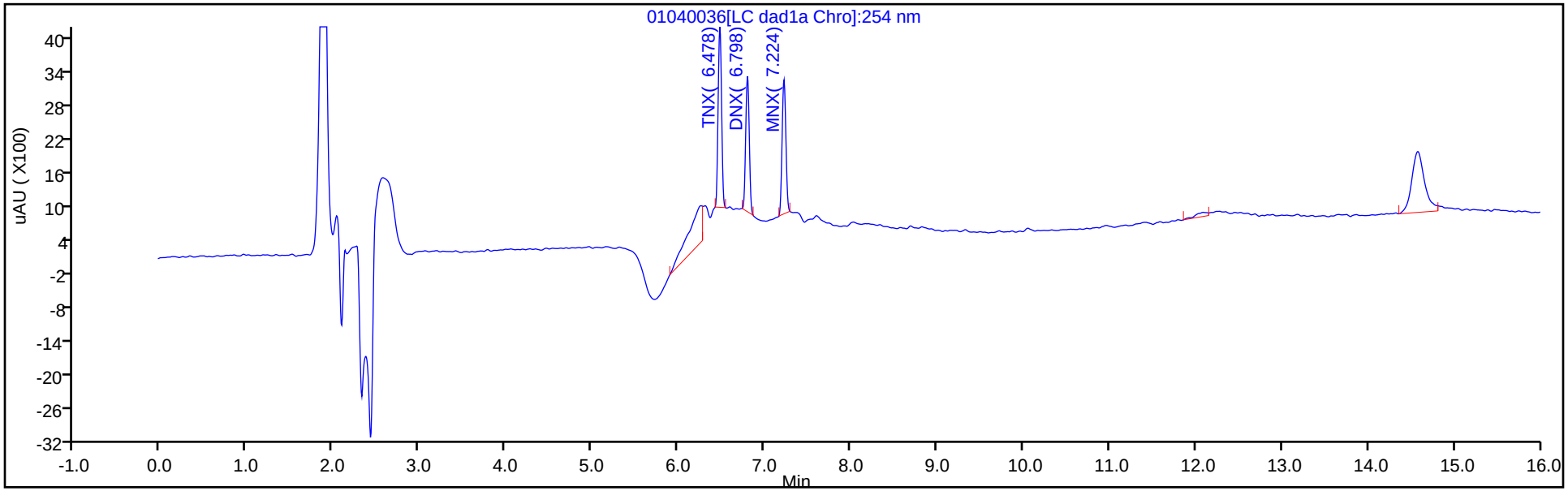
Report Date: 05-Jan-2022 12:10:08 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

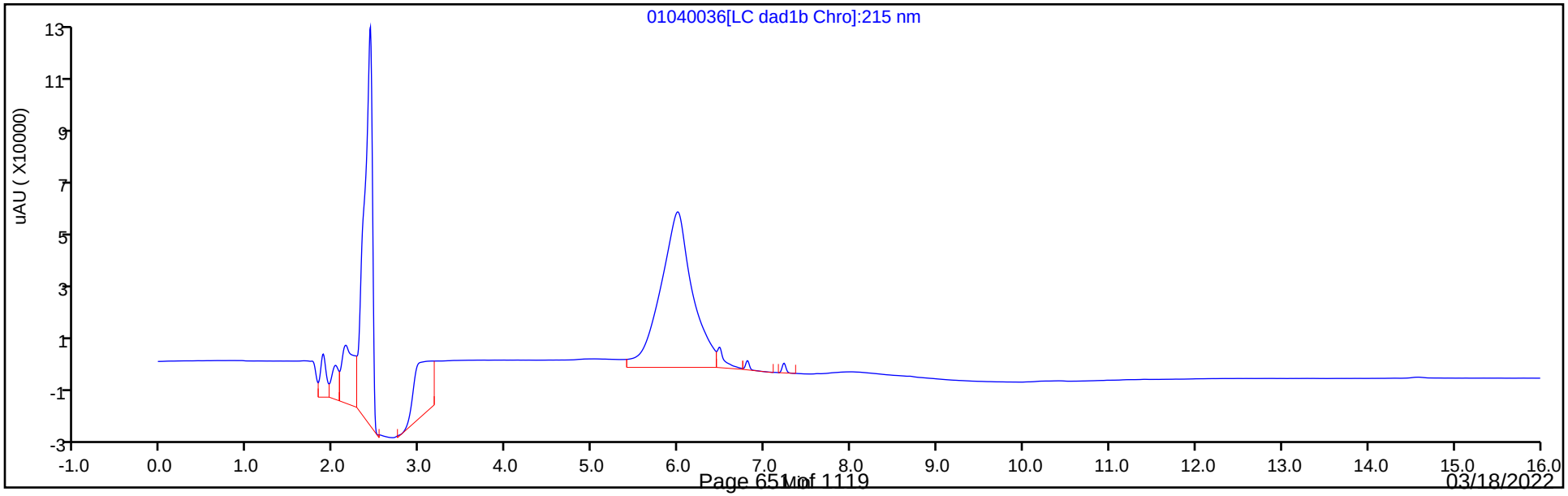
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040036.d

Injection Date:	05-Jan-2022 04:01:20	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC DMT 2			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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

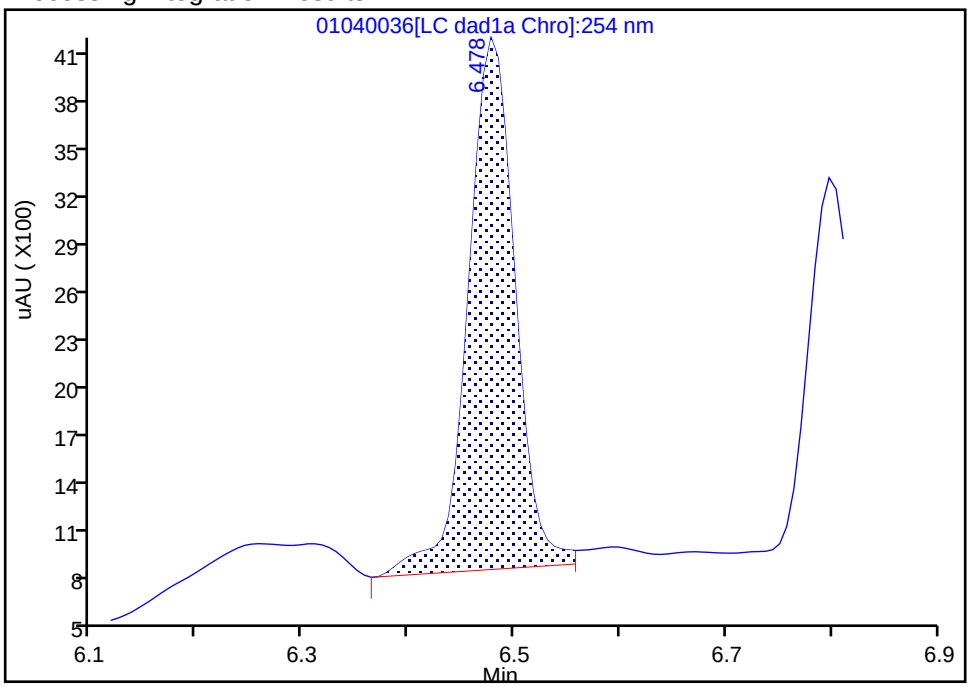
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040036.d				
Injection Date:	05-Jan-2022 04:01:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

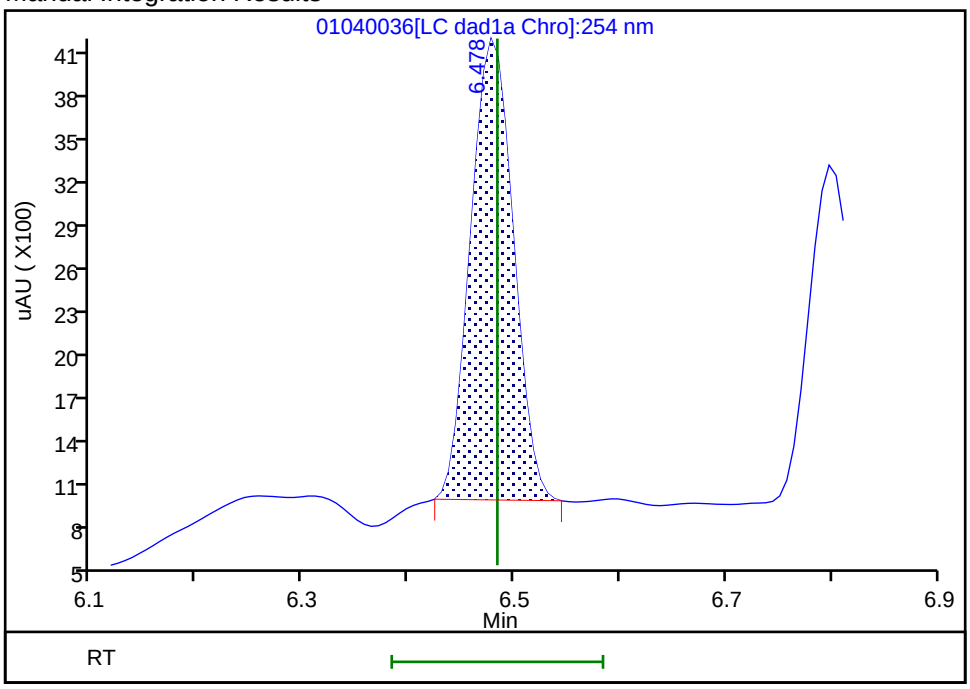
Processing Integration Results

RT: 6.48
Area: 10352
Amount: 0.053996
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 9031
Amount: 0.049838
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:04
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

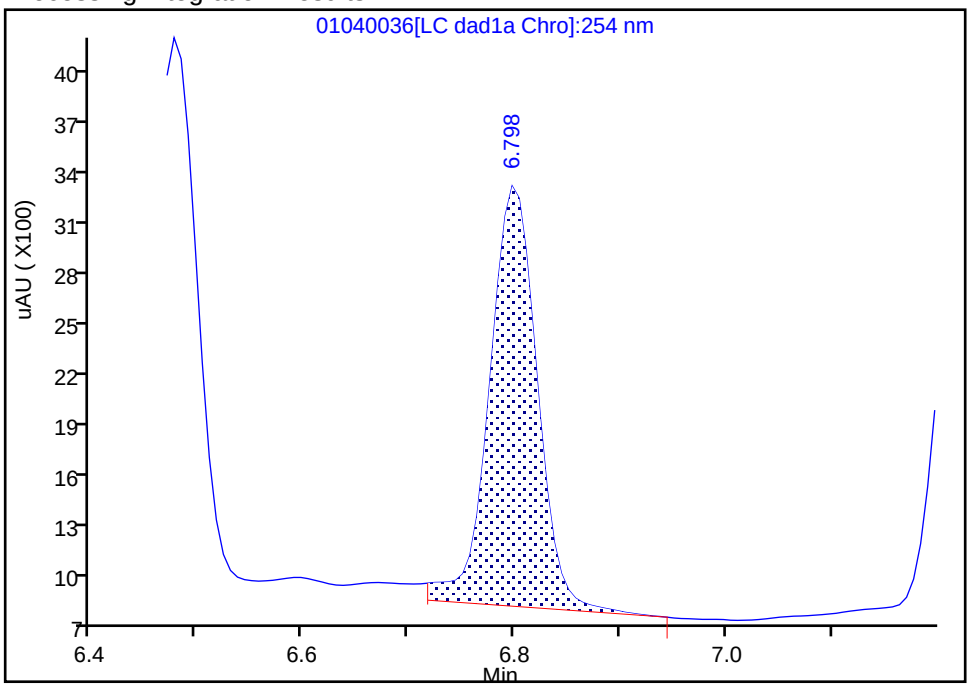
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040036.d				
Injection Date:	05-Jan-2022 04:01:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

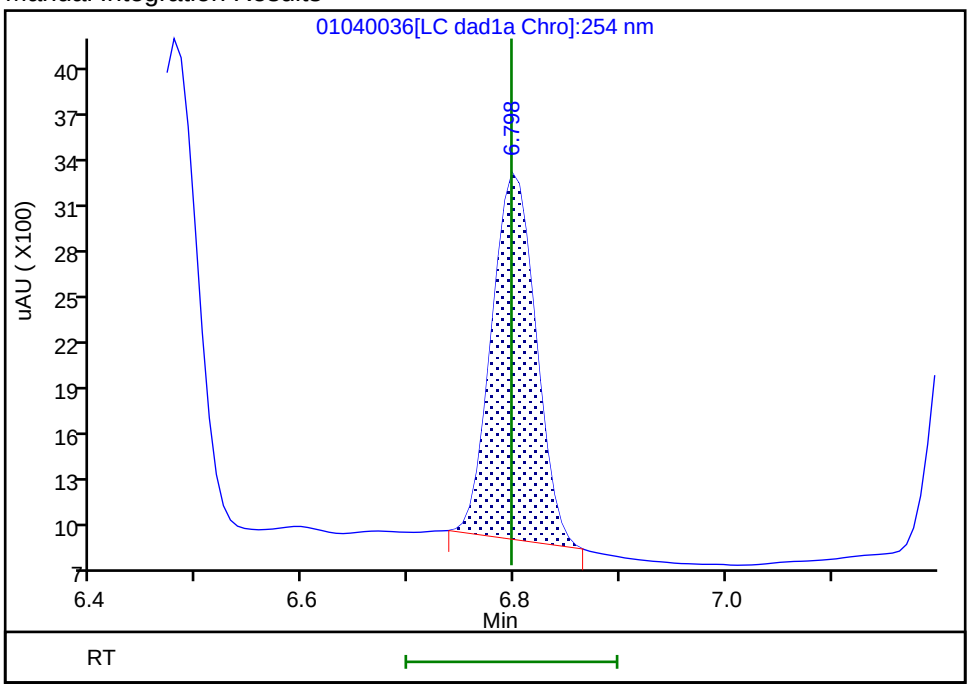
Processing Integration Results

RT: 6.80
Area: 7841
Amount: 0.054633
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 6988
Amount: 0.050596
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:07
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

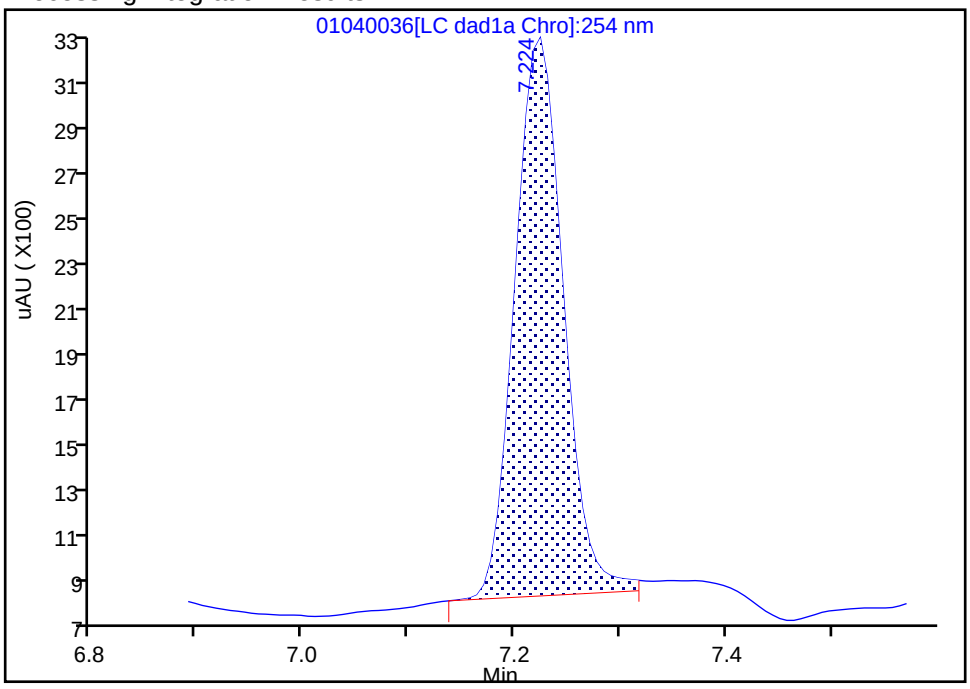
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040036.d				
Injection Date:	05-Jan-2022 04:01:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

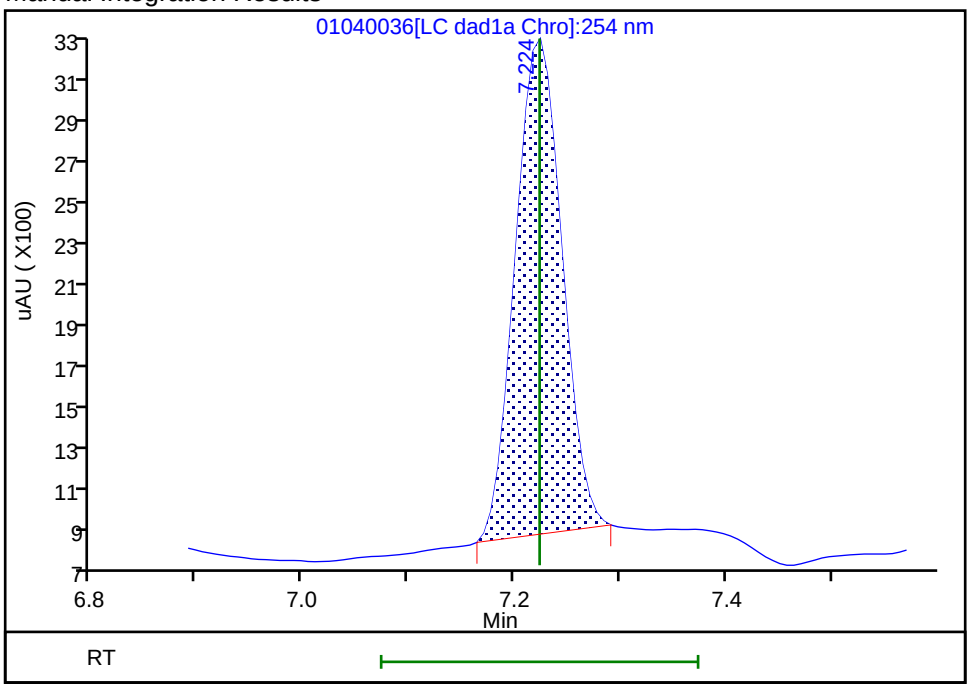
Processing Integration Results

RT: 7.22
Area: 7737
Amount: 0.060531
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 7298
Amount: 0.057923
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:11

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D				
Lims ID:	IC DMT 1				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	05-Jan-2022 04:24:15	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 1				
Misc. Info.:	280-0107731-037				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Jan-2022 12:10:08	Calib Date:	05-Jan-2022 04:24:15		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1613				
First Level Reviewer: zhangji		Date:	05-Jan-2022 12:09:28		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.479	6.484	-0.005	3600	0.0200	0.0199	M
6 DNX	1	6.799	6.797	0.002	2817	0.0200	0.0204	M
7 MNX	1	7.219	7.224	-0.005	3042	0.0233	0.0241	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 1.00 Units: uL

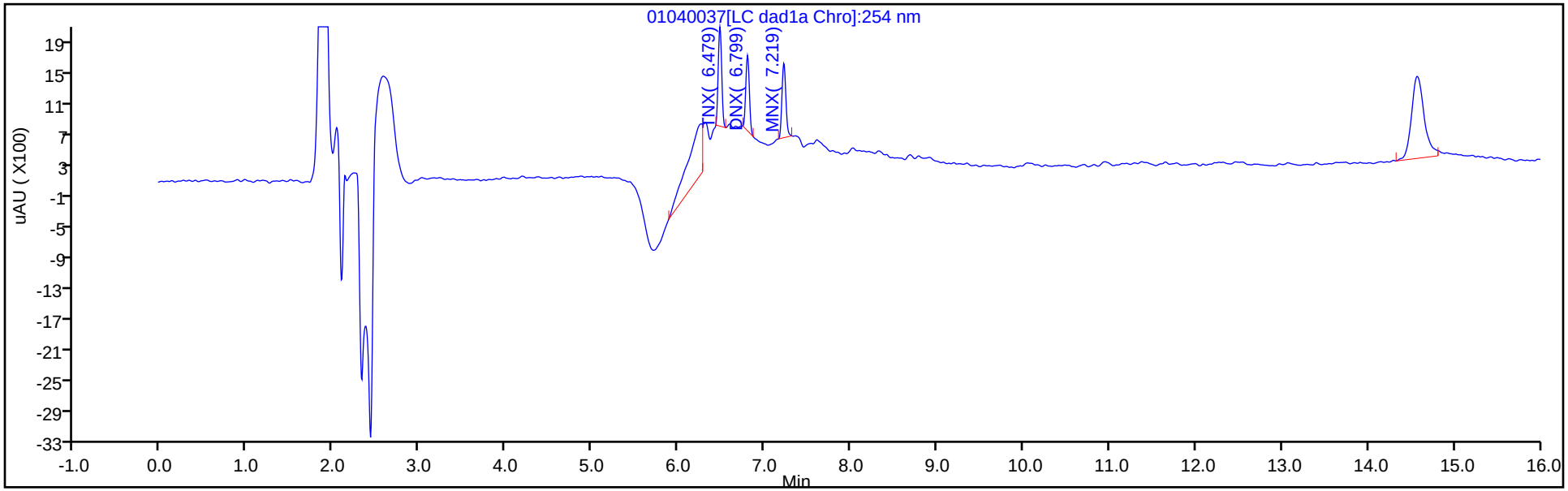
Report Date: 05-Jan-2022 12:10:09 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

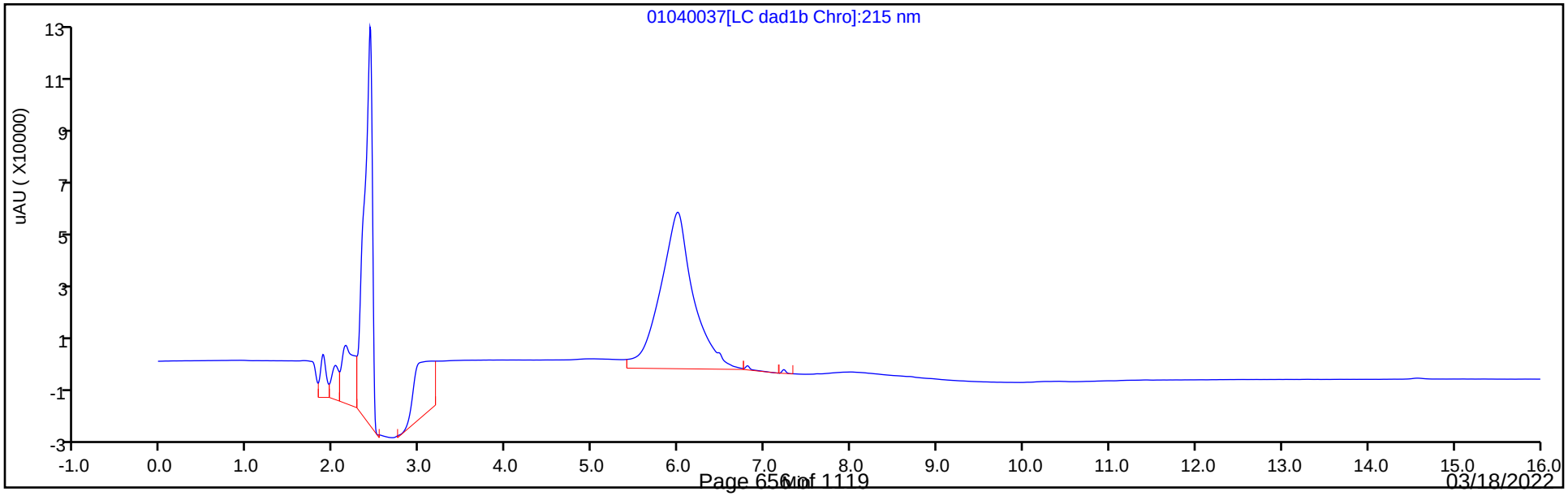
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040037.d

Injection Date:	05-Jan-2022 04:24:15	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	IC DMT 1			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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

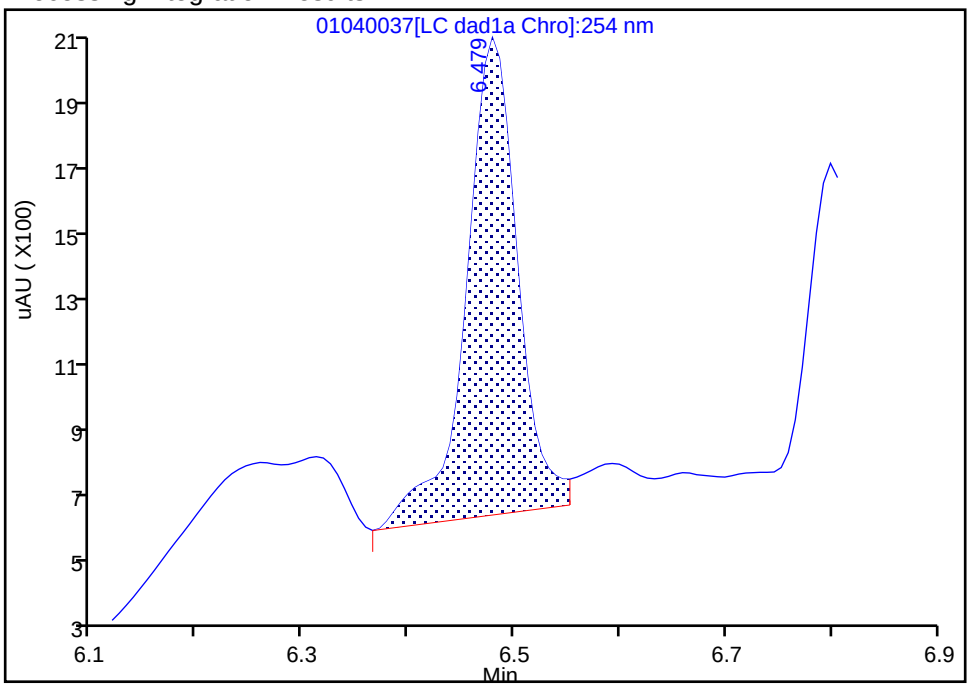
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040037.d				
Injection Date:	05-Jan-2022 04:24:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

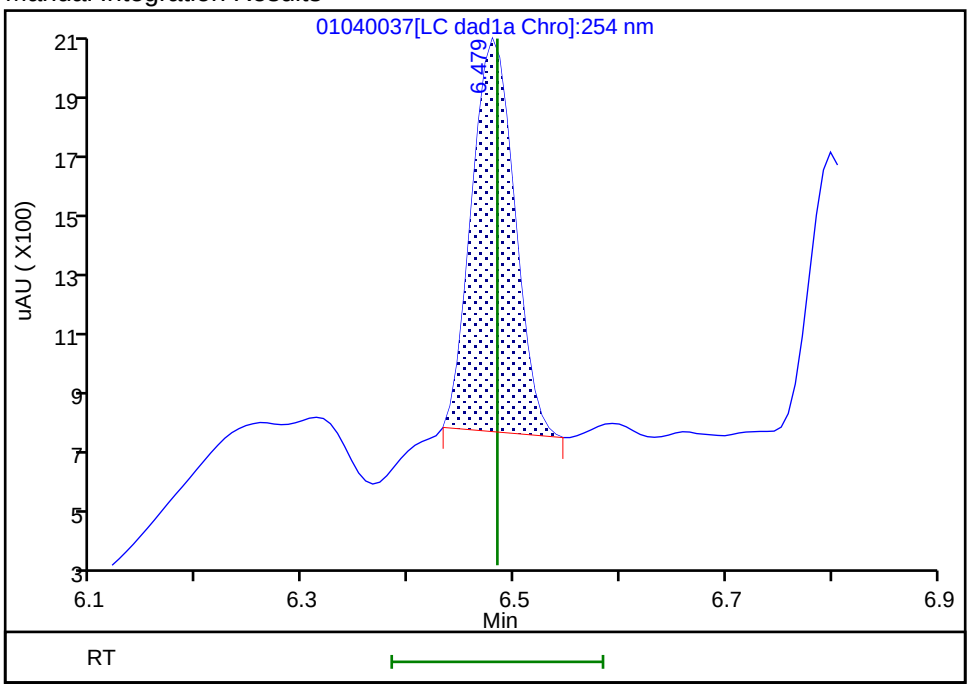
Processing Integration Results

RT: 6.48
Area: 4755
Amount: 0.025236
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 3600
Amount: 0.019867
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:20

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

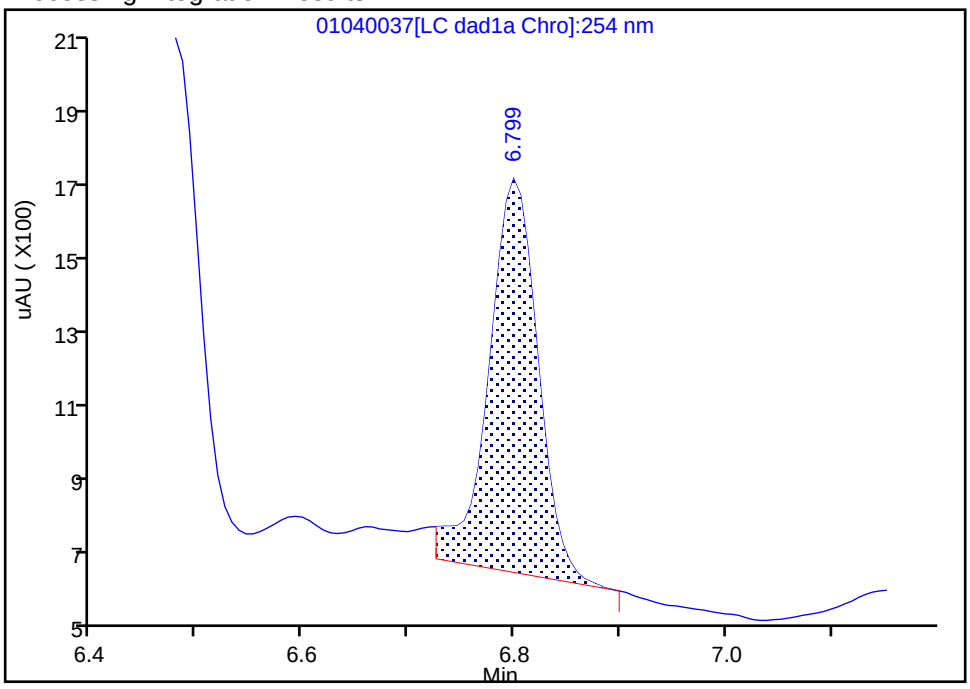
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040037.d				
Injection Date:	05-Jan-2022 04:24:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

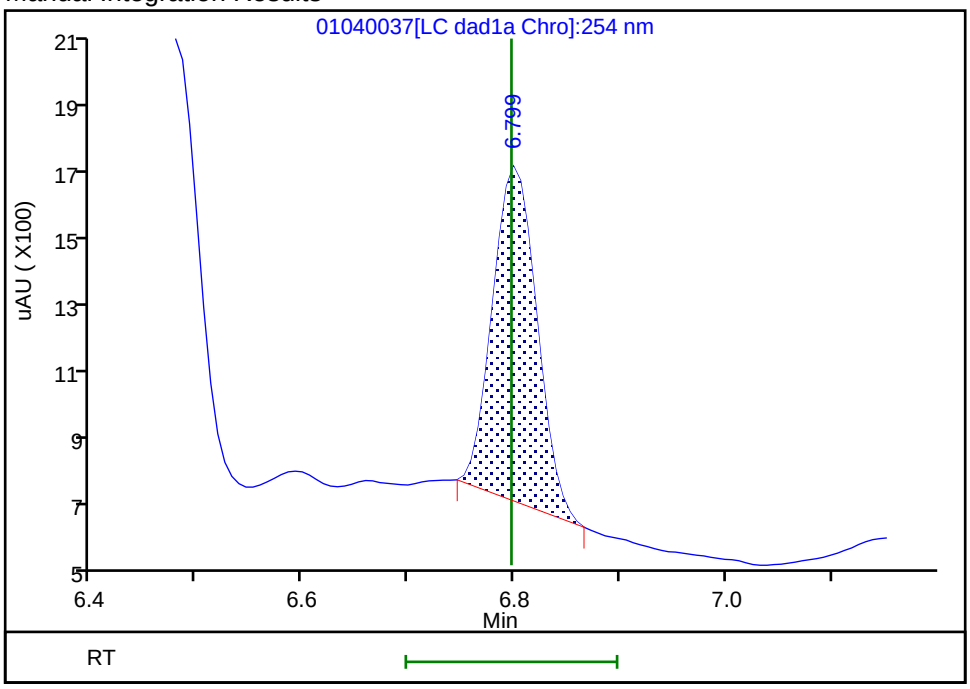
Processing Integration Results

RT: 6.80
Area: 3342
Amount: 0.023637
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 2817
Amount: 0.020396
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:23

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

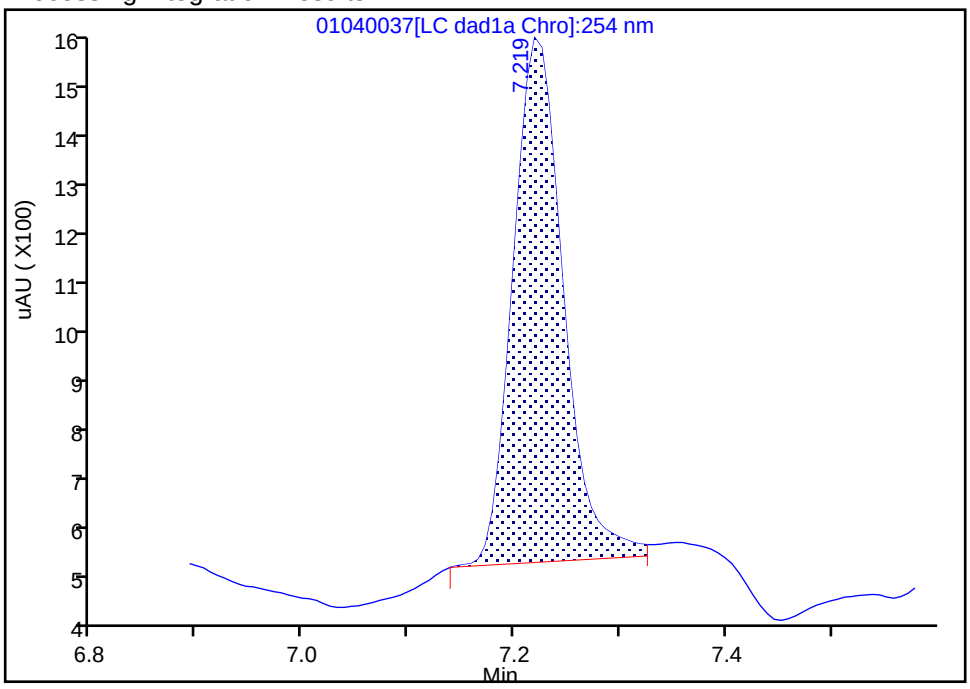
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040037.d				
Injection Date:	05-Jan-2022 04:24:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

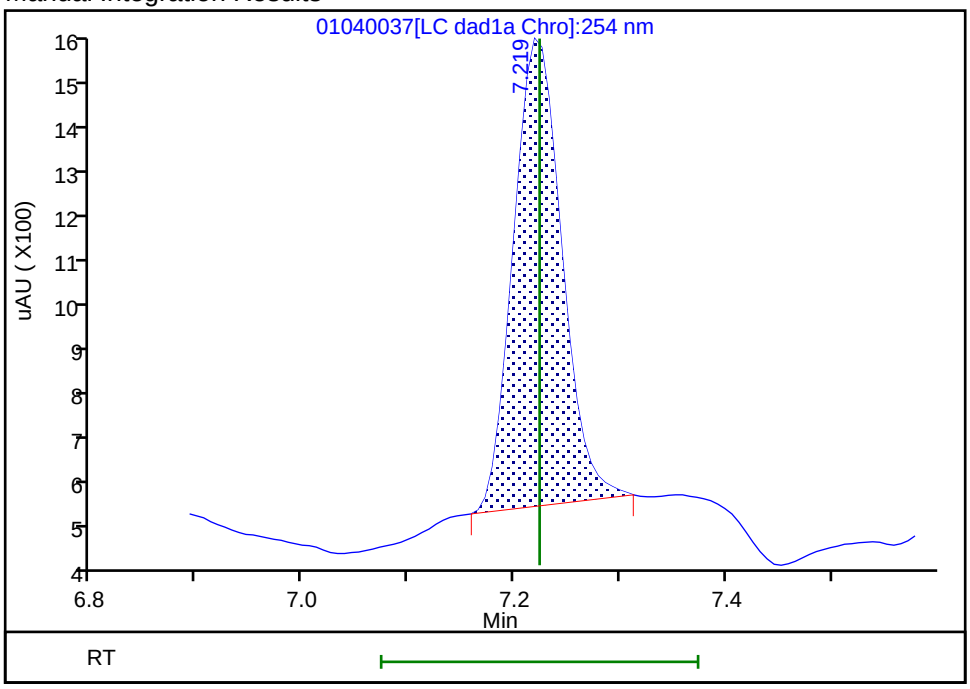
Processing Integration Results

RT: 7.22
Area: 3207
Amount: 0.025276
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 3042
Amount: 0.024144
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:26

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

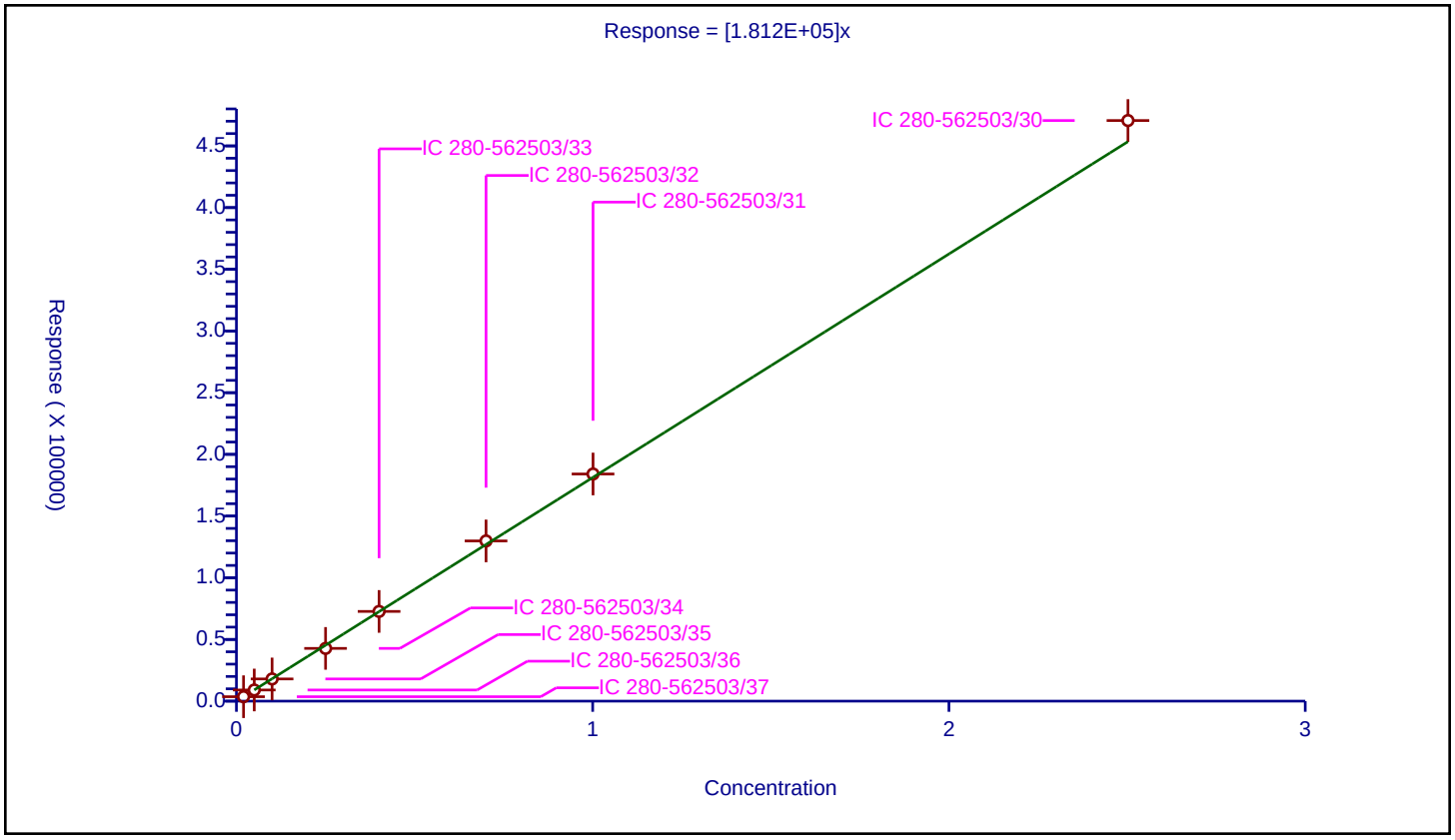
Curve Coefficients

Intercept:	0
Slope:	1.812E+05

Error Coefficients

Standard Error:	6700
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/37	0.02002	3600.0			179820.17982	Y
2	IC 280-562503/36	0.05005	9031.0			180439.56044	Y
3	IC 280-562503/35	0.1001	17989.0			179710.28971	Y
4	IC 280-562503/34	0.25025	42748.0			170821.178821	Y
5	IC 280-562503/33	0.4004	72720.0			181618.381618	Y
6	IC 280-562503/32	0.7007	129844.0			185306.122449	Y
7	IC 280-562503/31	1.001	184090.0			183906.093906	Y
8	IC 280-562503/30	2.5025	470565.0			188037.962038	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

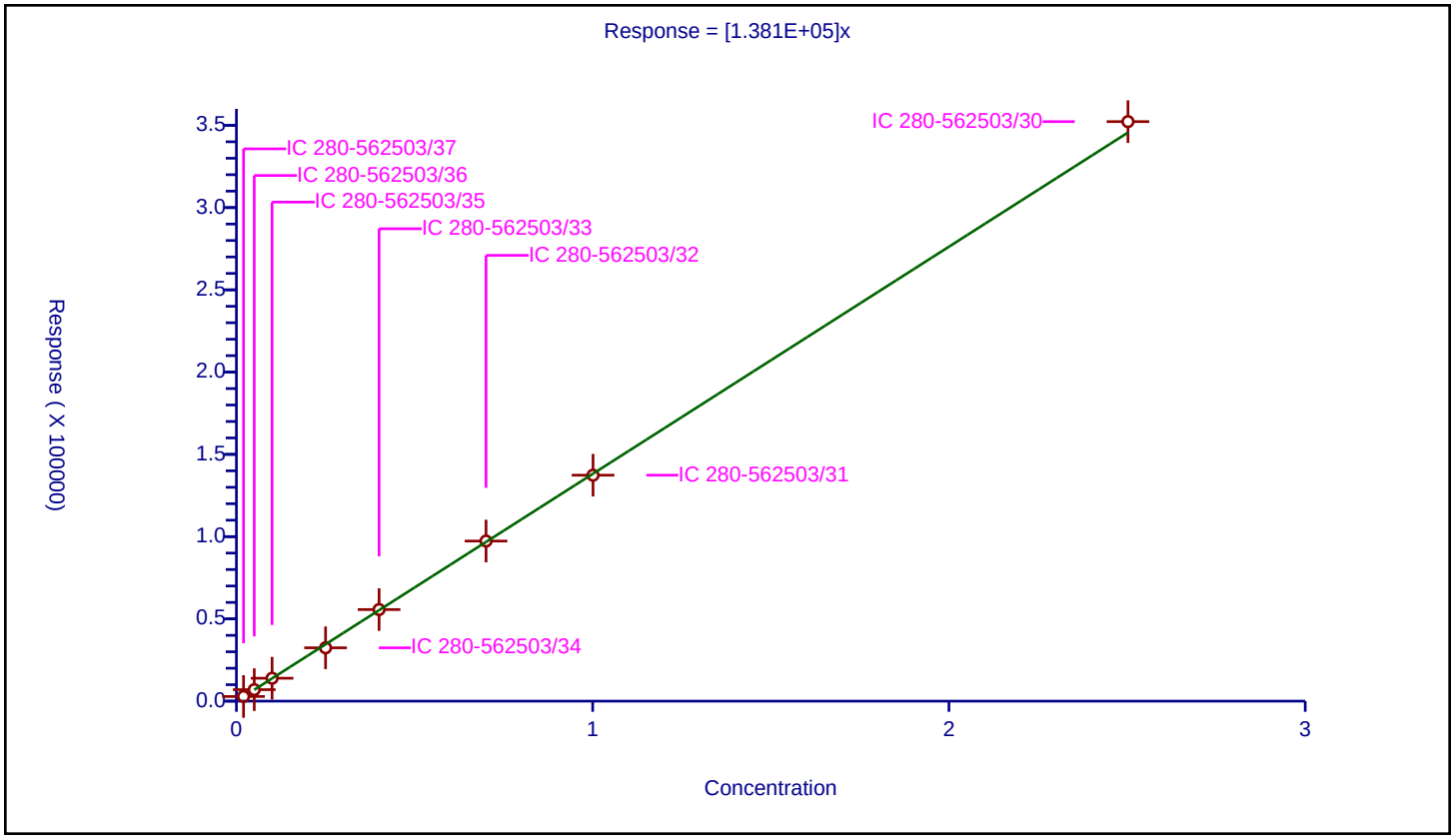
Curve Coefficients

Intercept:	0
Slope:	1.381E+05

Error Coefficients

Standard Error:	2670
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/37	0.02002	2817.0			140709.290709	Y
2	IC 280-562503/36	0.05005	6988.0			139620.37962	Y
3	IC 280-562503/35	0.1001	13928.0			139140.859141	Y
4	IC 280-562503/34	0.25025	32416.0			129534.465534	Y
5	IC 280-562503/33	0.4004	55675.0			139048.451548	Y
6	IC 280-562503/32	0.7007	97314.0			138881.118881	Y
7	IC 280-562503/31	1.001	137343.0			137205.794206	Y
8	IC 280-562503/30	2.5025	352260.0			140763.236763	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

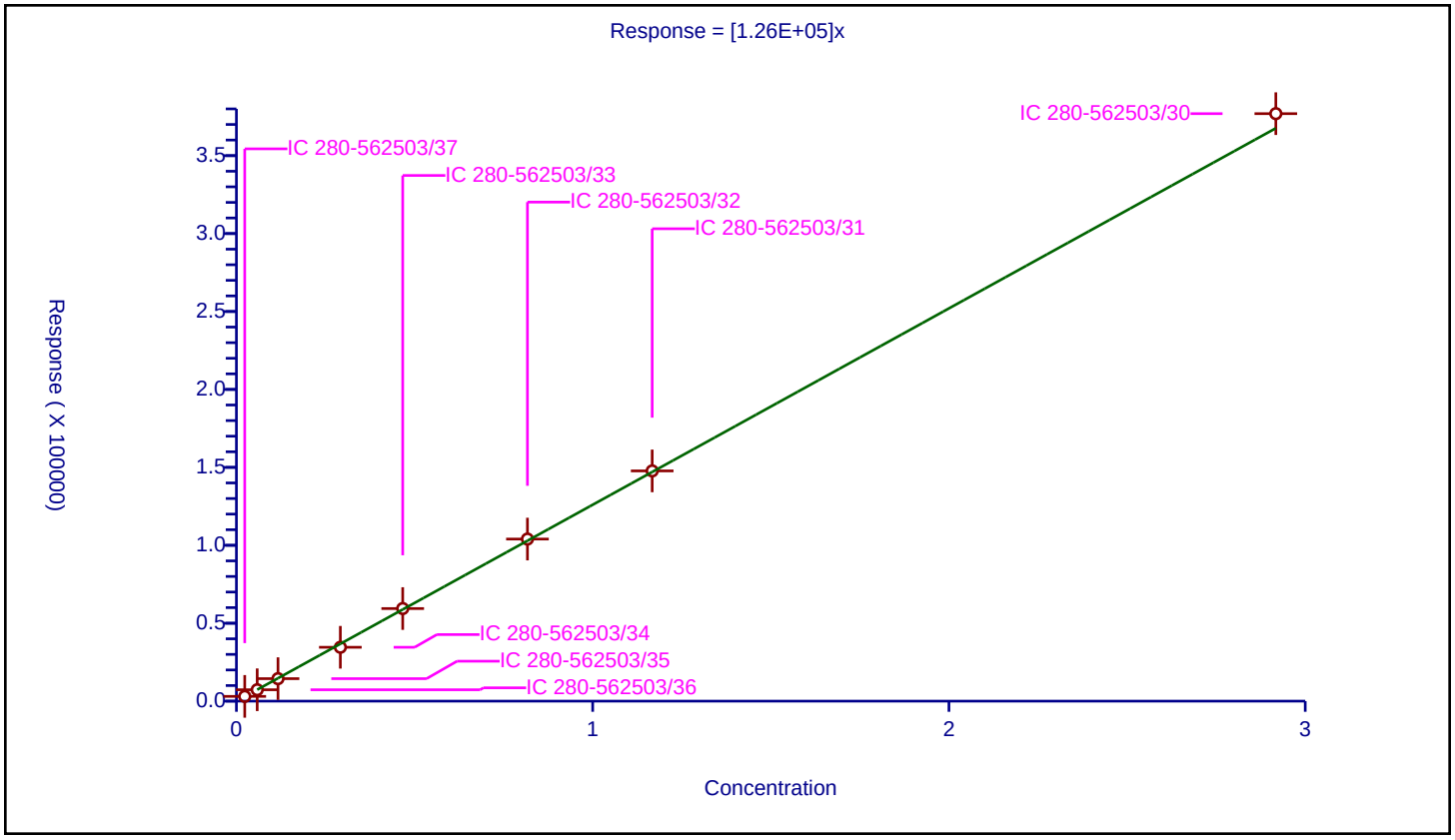
Curve Coefficients

Intercept:	0
Slope:	1.26E+05

Error Coefficients

Standard Error:	3670
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 280-562503/37	0.02334	3042.0			130334.190231	Y
2	IC 280-562503/36	0.05835	7298.0			125072.836332	Y
3	IC 280-562503/35	0.1167	14438.0			123718.937446	Y
4	IC 280-562503/34	0.29175	34560.0			118457.583548	Y
5	IC 280-562503/33	0.4668	59416.0			127283.633248	Y
6	IC 280-562503/32	0.8169	103999.0			127309.340189	Y
7	IC 280-562503/31	1.167	147726.0			126586.118252	Y
8	IC 280-562503/30	2.9175	376943.0			129200.685518	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1 Analy Batch No.: 567560

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2022 21:22 Calibration End Date: 03/03/2022 02:03 Calibration ID: 62762

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-567560/18	03020018.D
Level 2	IC 280-567560/17	03020017.D
Level 3	IC 280-567560/16	03020016.D
Level 4	IC 280-567560/15	03020015.D
Level 5	IC 280-567560/14	03020014.D
Level 6	IC 280-567560/13	03020013.D
Level 7	IC 280-567560/12	03020012.D
Level 8	IC 280-567560/11	03020011.D
Level 9	IC 280-567560/10	03020010.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	6.887	6.896	6.894	6.896	6.889	6.880	6.863	6.860	6.791		6.739 - 7.039	6.873
Picric acid		7.863	7.767	7.696	7.602	7.527	7.430	7.346	7.231		7.452 - 7.752	7.558
RDX	9.114	9.129	9.120	9.129	9.115	9.100	9.083	9.066	8.985		8.965 - 9.265	9.093
Nitrobenzene	12.047	12.069	12.073	12.069	12.062	12.060	12.036	12.020	11.925		11.912 - 12.212	12.040
1,3-Dinitrobenzene	15.627	15.642	15.647	15.642	15.635	15.627	15.616	15.600	15.525		15.485 - 15.785	15.618
Nitroglycerin	16.054	16.062	16.073	16.062	16.055	16.054	16.050	16.033	15.971		15.905 - 16.205	16.046
2-Nitrotoluene	16.807	16.829	16.833	16.829	16.822	16.820	16.810	16.793	16.725		16.672 - 16.972	16.808
4-Nitrotoluene	17.147	17.129	17.147	17.136	17.129	17.127	17.123	17.100	17.018		16.979 - 17.279	17.117
4-Amino-2,6-dinitrotoluene	17.734	17.756	17.773	17.756	17.755	17.747	17.736	17.720	17.651		17.605 - 17.905	17.736
3-Nitrotoluene	18.094	18.116	18.120	18.109	18.102	18.100	18.090	18.073	18.005		17.952 - 18.252	18.090
2-Amino-4,6-dinitrotoluene	18.754	18.762	18.773	18.749	18.742	18.740	18.730	18.706	18.725		18.592 - 18.892	18.742
1,3,5-Trinitrobenzene	18.947	18.956	18.973	18.956	18.949	18.947	18.936	18.920	18.851		18.799 - 19.099	18.937
2,6-Dinitrotoluene	20.260	20.262	20.267	20.256	20.255	20.254	20.243	20.233	20.171		20.105 - 20.405	20.245
2,4-Dinitrotoluene	20.674	20.716	20.767	20.756	20.762	20.760	20.750	20.733	20.671		20.612 - 20.912	20.732
Tetryl	24.514	24.496	24.500	24.483	24.489	24.494	24.483	24.466	24.425		24.339 - 24.639	24.483
2,4,6-Trinitrotoluene	25.274	25.269	25.274	25.256	25.262	25.267	25.257	25.246	25.198		25.112 - 25.412	25.256
PETN	26.220	26.223	26.220	26.209	26.215	26.220	26.217	26.206	26.185		26.065 - 26.365	26.213
1,2-Dinitrobenzene	13.260	13.282	13.287	13.282	13.282	13.274	13.256	13.240	13.158		13.132 - 13.432	13.258

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-159137-1 Analy Batch No.: 567560

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2022 21:22 Calibration End Date: 03/03/2022 02:03 Calibration ID: 62762

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-567560/18	03020018.D
Level 2	IC 280-567560/17	03020017.D
Level 3	IC 280-567560/16	03020016.D
Level 4	IC 280-567560/15	03020015.D
Level 5	IC 280-567560/14	03020014.D
Level 6	IC 280-567560/13	03020013.D
Level 7	IC 280-567560/12	03020012.D
Level 8	IC 280-567560/11	03020011.D
Level 9	IC 280-567560/10	03020010.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	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	204000 153272 187359	156350 157048	161060 156446	161090 158593	Ave		166135.268				10.5		20.0			
Picric acid	 137152 100000	115050 145895	127120 147056	140090 150719	Ave		132885.214				13.3		20.0			
RDX	209700 185668 192949	185950 191778	200560 191473	197500 193402	Ave		194331.017				3.8		20.0			
Nitrobenzene	387450 359546 376404	332968 370117	381454 369358	371225 366118	Ave		368293.361				4.2		20.0			
1,3-Dinitrobenzene	594910 544854 583320	531088 563411	602415 562742	594182 568076	Ave		571666.383				4.2		20.0			
Nitroglycerin	106640 123863 126320	108750 129921	119788 126936	133241 127202	Ave		122517.801				7.5		20.0			
2-Nitrotoluene	249100 224884 232108	230350 232660	241140 230763	238570 232476	Ave		234672.317				3.1		20.0			
4-Nitrotoluene	219860 201816 215781	203493 209224	211477 208958	215818 210922	Ave		210816.657				2.8		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver Job No.: 280-159137-1 Analy Batch No.: 567560

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2022 21:22 Calibration End Date: 03/03/2022 02:03 Calibration ID: 62762

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	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								
4-Amino-2,6-dinitrotoluene	260739 258018 268817	263287 267340	268232 265560	271888 269422	Lin2	-62.900141	267244.423							1.0000		0.9900
3-Nitrotoluene	254046 256344 271648	240010 266386	267473 265219	269510 267544	Lin2	-189.49318	266002.360							0.9990		0.9900
2-Amino-4,6-dinitrotoluene	369024 350637 335952	343576 365448	369761 366702	370299 373422	Ave		360535.698				3.8		20.0			
1,3,5-Trinitrobenzene	393912 409485 468023	347804 424182	425928 421012	424291 424539	Ave		415464.126				7.7		20.0			
2,6-Dinitrotoluene	269323 256928 267124	260608 264846	274044 264869	265807 267408	Ave		265661.838				1.8		20.0			
2,4-Dinitrotoluene	1185259 555279 545162	839791 549871	675657 543624	639313 546924	Lin2	6399.59049	541564.591							0.9990		0.9900
Tetryl	471257 308379 316049	345958 315734	361477 313195	331218 316267	Ave		342170.507				15.0		20.0			
2,4,6-Trinitrotoluene	370518 363896 385306	324054 376581	369641 378025	370568 384024	Ave		369179.221				5.0		20.0			
PETN	108420 131804 136767	109615 136247	134164 135887	134076 136984	Ave		129329.182				9.0		20.0			
1,2-Dinitrobenzene	246100 244792 252426	240450 249510	257280 250511	254990 251717	Ave		249752.937				2.1		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-159137-1 Analy Batch No.: 567560

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2022 21:22 Calibration End Date: 03/03/2022 02:03 Calibration ID: 62762

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-567560/18	03020018.D
Level 2	IC 280-567560/17	03020017.D
Level 3	IC 280-567560/16	03020016.D
Level 4	IC 280-567560/15	03020015.D
Level 5	IC 280-567560/14	03020014.D
Level 6	IC 280-567560/13	03020013.D
Level 7	IC 280-567560/12	03020012.D
Level 8	IC 280-567560/11	03020011.D
Level 9	IC 280-567560/10	03020010.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	2040 62819	3127 109512	8053 158593	16109 468398	38318	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	 58358	2301 102939	6356 150719	14009 250000	34288	 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	2097 76711	3719 134031	10028 193402	19750 482372	46417	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	3890 148639	6686 259585	19149 367582	37271 944774	90246	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
1,3-Dinitrobenzene	Ave	5961 225815	10643 394707	30181 569212	59537 1461217	136486	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
Nitroglycerin	Ave	10664 519683	21750 888552	59894 1272015	133241 3158004	309657	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2-Nitrotoluene	Ave	2491 93064	4607 161534	12057 232476	23857 580270	56221	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Ave	2203 83857	4078 146563	10595 211344	21625 540531	50555	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
4-Amino-2,6-dinitrotoluene	Lin2	2610 107043	5271 186078	13425 269691	27216 672715	64569	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
3-Nitrotoluene	Lin2	2543 106661	4805 185839	13387 267812	26978 679800	64150	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	3705 146764	6899 257718	18562 374916	37178 843240	88010	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
1,3,5-Trinitrobenzene	Ave	3947 170012	6970 295298	21339 425388	42514 1172398	102576	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
2,6-Dinitrotoluene	Ave	2704	5233	13757	26687	64489	0.0100	0.0201	0.0502	0.100	0.251

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-159137-1 Analy Batch No.: 567560

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2022 21:22 Calibration End Date: 03/03/2022 02:03 Calibration ID: 62762

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
		106362	186150	268478	670482		0.402	0.703	1.00	2.51	
2,4-Dinitrotoluene	Lin2	11900 220828	16863 382059	33918 549112	64187 1368356	139375	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
Tetryl	Ave	4722 126546	6933 219675	18110 316900	33188 791703	77249	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
2,4,6-Trinitrotoluene	Ave	3720 151235	6507 265676	18556 385560	37205 967117	91338	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
PETN	Ave	10842 544987	21923 951206	67082 1369840	134076 3419168	329509	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Ave	2461 99804	4809 175358	12864 251717	25499 631065	61198	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250

Curve Type Legend
Ave = Average
Lin2 = Linear 1/conc^2

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020010.D
Lims ID: IC INT/ADD 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 02-Mar-2022 21:22:03 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 9
Misc. Info.: 280-0108949-010
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:12 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:05:51

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.071	4.142	-0.071	1053484	2.50	2.59	M
2 2,4-diamino-6-nitrotoluene	1	4.698	4.669	0.029	475027	2.50	2.09	M
5 HMX	1	6.791	6.889	-0.098	468398	2.50	2.82	
7 2,4,6-Trinitrophenol	1	7.231	7.602	-0.371	250000	2.50	1.88	
8 RDX	1	8.985	9.115	-0.130	482372	2.50	2.48	
9 Nitrobenzene	1	11.925	12.062	-0.137	944774	2.51	2.57	
$ 10 1,2-Dinitrobenzene	1	13.158	13.282	-0.124	631065	2.50	2.53	
11 3,5-Dinitroaniline	1	15.151	15.269	-0.118	1039131	2.50	2.53	
12 1,3-Dinitrobenzene	1	15.525	15.635	-0.110	1461217	2.51	2.56	
13 Nitroglycerin	2	15.971	16.055	-0.084	3158004	25.0	25.8	
14 o-Nitrotoluene	1	16.725	16.822	-0.097	580270	2.50	2.47	
16 p-Nitrotoluene	1	17.018	17.129	-0.111	540531	2.51	2.56	
17 4-Amino-2,6-dinitrotoluene	1	17.651	17.755	-0.104	672715	2.50	2.52	
18 m-Nitrotoluene	1	18.005	18.102	-0.097	679800	2.50	2.56	
19 2-Amino-4,6-dinitrotoluene	1	18.725	18.742	-0.017	843240	2.51	2.34	M
20 1,3,5-Trinitrobenzene	1	18.851	18.949	-0.098	1172398	2.51	2.82	M
21 2,6-Dinitrotoluene	1	20.171	20.255	-0.084	670482	2.51	2.52	
22 2,4-Dinitrotoluene	1	20.671	20.762	-0.091	1368356	2.51	2.51	
23 Tetryl	1	24.425	24.489	-0.064	791703	2.51	2.31	
24 2,4,6-Trinitrotoluene	1	25.198	25.262	-0.064	967117	2.51	2.62	
25 PETN	2	26.185	26.215	-0.030	3419168	25.0	26.4	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070	Amount Added: 250.00	Units: uL
8330_ADDs_00031	Amount Added: 125.00	Units: uL

Report Date: 03-Mar-2022 12:49:12 Chrom Revision: 2.3 16-Feb-2022 17:52:00

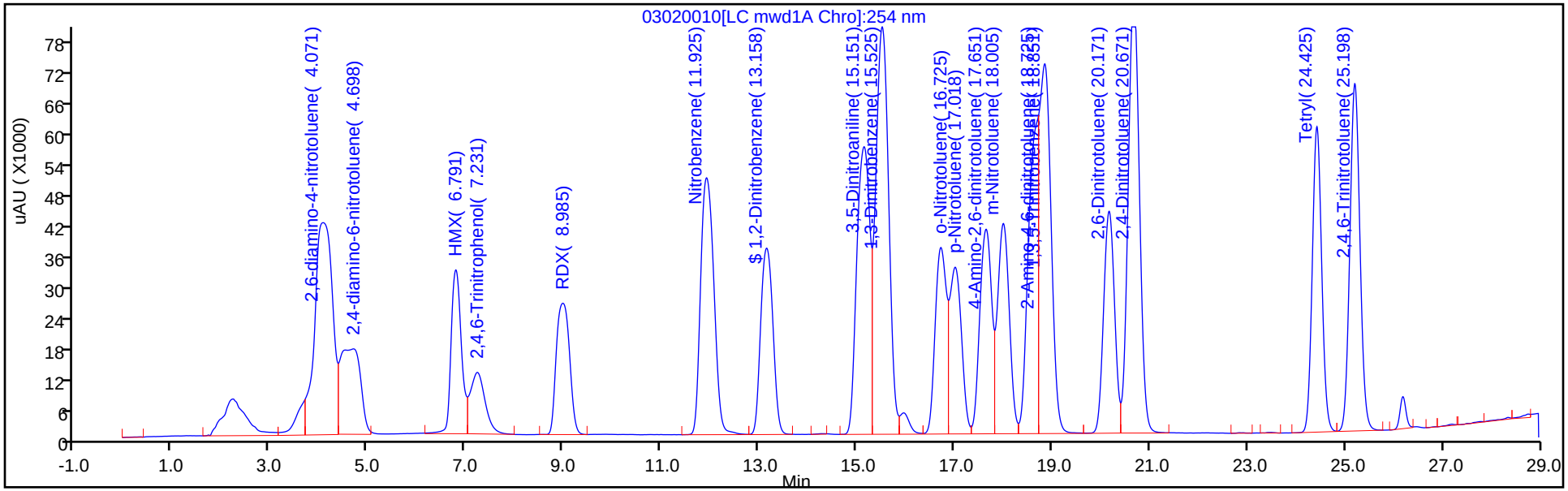
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020010.D

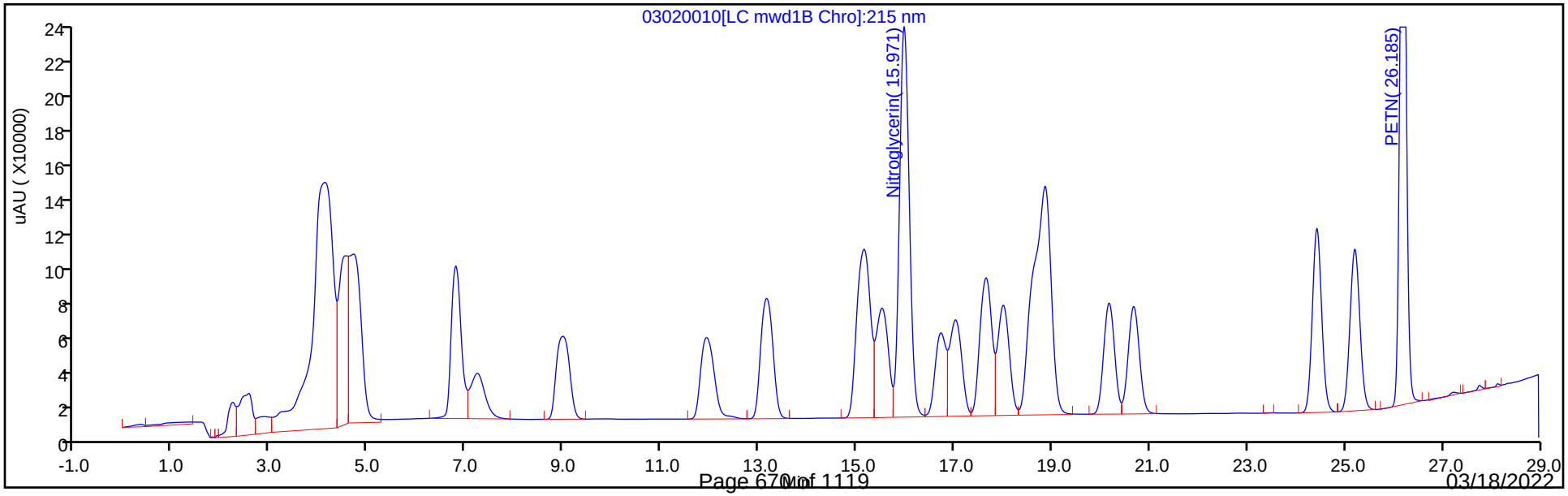
Injection Date:	02-Mar-2022 21:22:03	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 9			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Denver

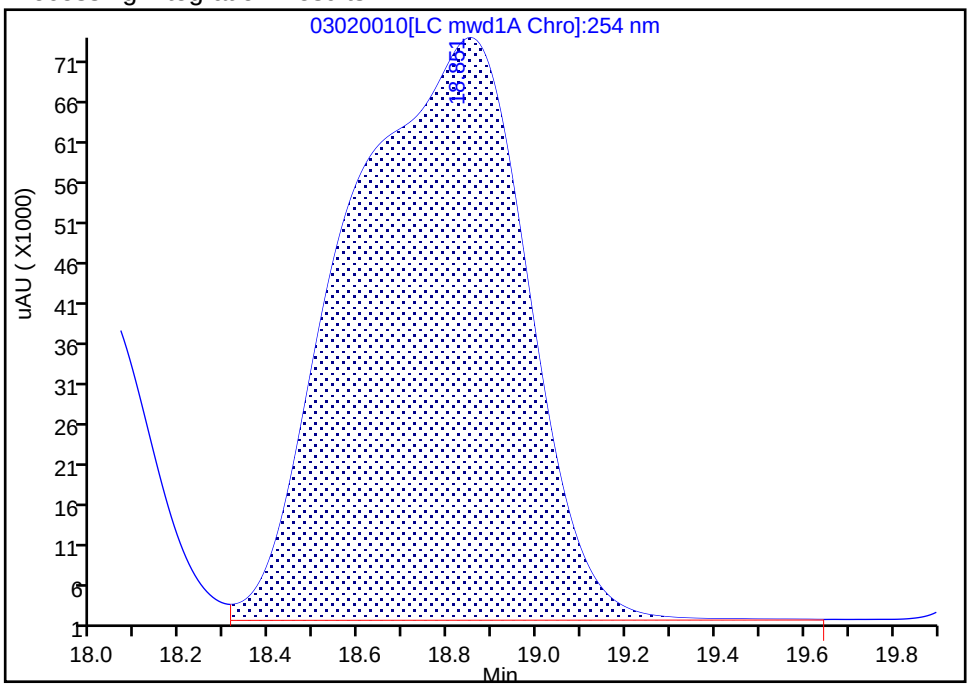
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020010.D
Injection Date: 02-Mar-2022 21:22:03 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 9
Client ID:
Operator ID: JZ ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

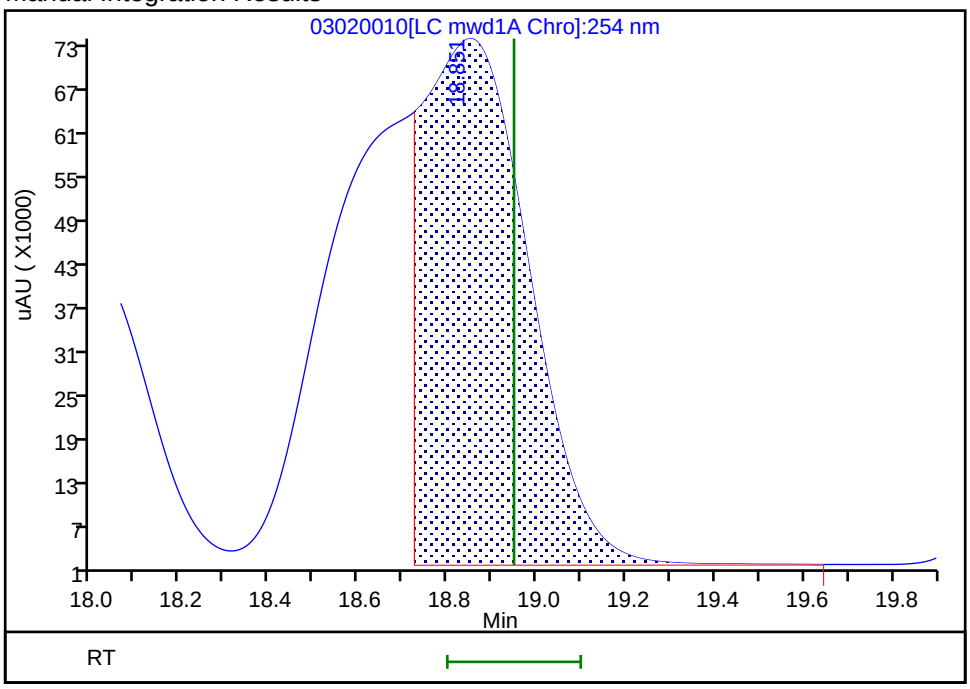
Processing Integration Results

RT: 18.85
Area: 2015640
Amount: 4.231891
Amount Units: ug/ml



Manual Integration Results

RT: 18.85
Area: 1172398
Amount: 2.821899
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:08:36
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020011.D
Lims ID: IC INT/ADD 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 02-Mar-2022 21:57:13 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 8
Misc. Info.: 280-0108949-011
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:13 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:09:27

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	4.093	4.142	-0.049	386260	1.00	0.9503	M
2 2,4-diamino-6-nitrotoluene	1	4.713	4.669	0.044	247885	1.00	1.09	M
5 HMX	1	6.860	6.889	-0.029	158593	1.00	0.9546	
7 2,4,6-Trinitrophenol	1	7.346	7.602	-0.256	150719	1.00	1.13	
8 RDX	1	9.066	9.115	-0.049	193402	1.00	1.00	
9 Nitrobenzene	1	12.020	12.062	-0.042	367582	1.00	1.00	
$ 10 1,2-Dinitrobenzene	1	13.240	13.282	-0.042	251717	1.00	1.01	
11 3,5-Dinitroaniline	1	15.226	15.269	-0.043	419224	1.00	1.02	
12 1,3-Dinitrobenzene	1	15.600	15.635	-0.035	569212	1.00	1.00	
13 Nitroglycerin	2	16.033	16.055	-0.022	1272015	10.0	10.4	
14 o-Nitrotoluene	1	16.793	16.822	-0.029	232476	1.00	0.99	
16 p-Nitrotoluene	1	17.100	17.129	-0.029	211344	1.00	1.00	
17 4-Amino-2,6-dinitrotoluene	1	17.720	17.755	-0.035	269691	1.00	1.01	
18 m-Nitrotoluene	1	18.073	18.102	-0.029	267812	1.00	1.01	
19 2-Amino-4,6-dinitrotoluene	1	18.706	18.742	-0.036	374916	1.00	1.04	
20 1,3,5-Trinitrobenzene	1	18.920	18.949	-0.029	425388	1.00	1.02	
21 2,6-Dinitrotoluene	1	20.233	20.255	-0.022	268478	1.00	1.01	
22 2,4-Dinitrotoluene	1	20.733	20.762	-0.029	549112	1.00	1.00	
23 Tetryl	1	24.466	24.489	-0.023	316900	1.00	0.9261	
24 2,4,6-Trinitrotoluene	1	25.246	25.262	-0.016	385560	1.00	1.04	
25 PETN	2	26.206	26.215	-0.009	1369840	10.0	10.6	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070	Amount Added: 100.00	Units: uL
8330_ADDs_00031	Amount Added: 50.00	Units: uL

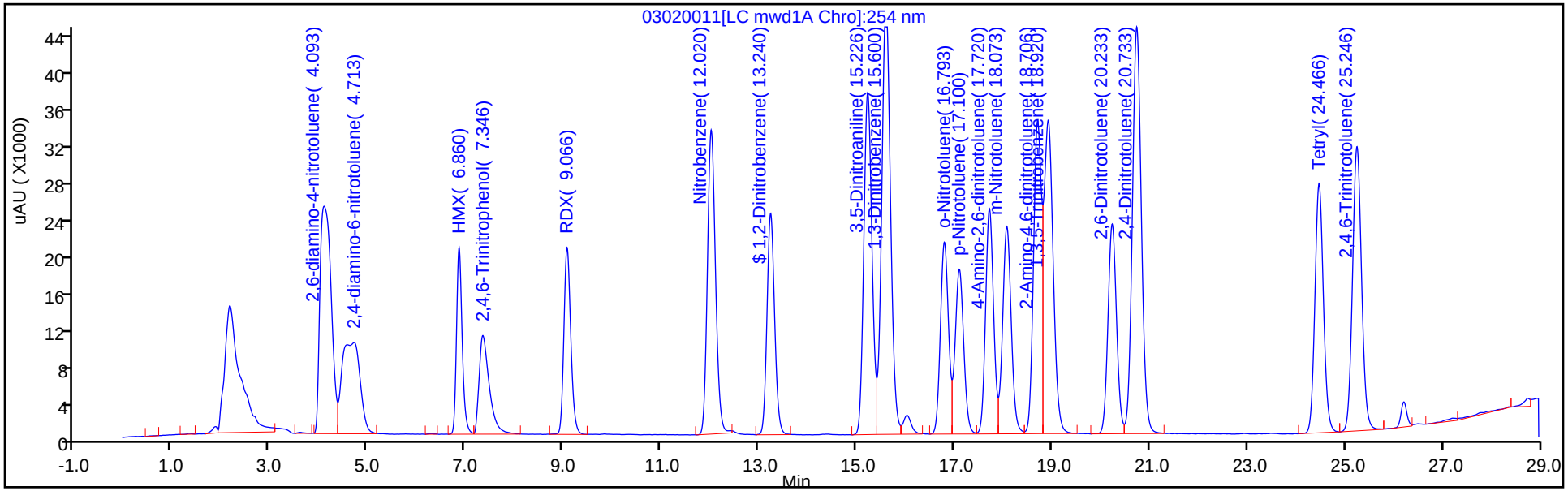
Report Date: 03-Mar-2022 12:49:13 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

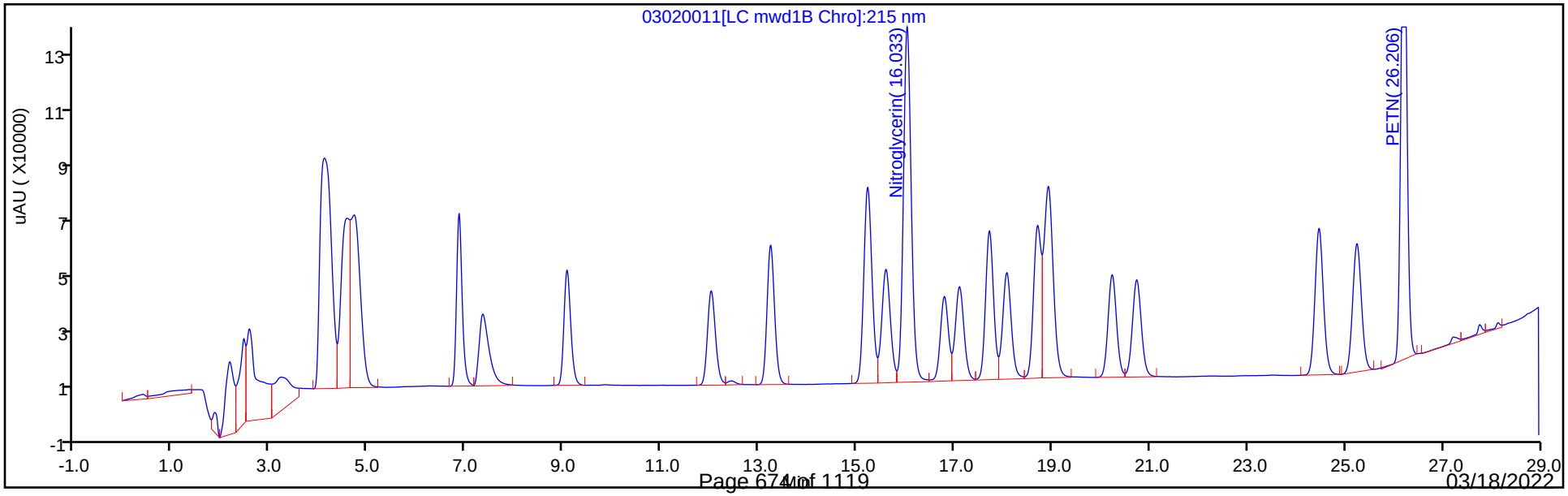
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020011.D

Injection Date:	02-Mar-2022 21:57:13	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 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: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020012.D
Lims ID: IC INT/ADD 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 02-Mar-2022 22:32:16 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 7
Misc. Info.: 280-0108949-012
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:14 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:09:45

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	4.110	4.142	-0.032	273235	0.7000	0.6722	M
2 2,4-diamino-6-nitrotoluene	1	4.710	4.669	0.041	172644	0.7000	0.7557	M
5 HMX	1	6.863	6.889	-0.026	109512	0.7000	0.6592	
7 2,4,6-Trinitrophenol	1	7.430	7.602	-0.172	102939	0.7000	0.7746	
8 RDX	1	9.083	9.115	-0.032	134031	0.7000	0.6897	
9 Nitrobenzene	1	12.036	12.062	-0.026	259585	0.7028	0.7048	
$ 10 1,2-Dinitrobenzene	1	13.256	13.282	-0.026	175358	0.7000	0.7021	
11 3,5-Dinitroaniline	1	15.243	15.269	-0.026	294648	0.7000	0.7162	
12 1,3-Dinitrobenzene	1	15.616	15.635	-0.019	394707	0.7014	0.6904	
13 Nitroglycerin	2	16.050	16.055	-0.005	888552	7.00	7.25	
14 o-Nitrotoluene	1	16.810	16.822	-0.012	161534	0.7000	0.6883	
16 p-Nitrotoluene	1	17.123	17.129	-0.006	146563	0.7014	0.6952	
17 4-Amino-2,6-dinitrotoluene	1	17.736	17.755	-0.019	186078	0.7007	0.6965	
18 m-Nitrotoluene	1	18.090	18.102	-0.012	185839	0.7007	0.6993	
19 2-Amino-4,6-dinitrotoluene	1	18.730	18.742	-0.012	257718	0.7028	0.7148	
20 1,3,5-Trinitrobenzene	1	18.936	18.949	-0.013	295298	0.7014	0.7108	
21 2,6-Dinitrotoluene	1	20.243	20.255	-0.012	186150	0.7028	0.7007	
22 2,4-Dinitrotoluene	1	20.750	20.762	-0.012	382059	0.7028	0.6937	
23 Tetryl	1	24.483	24.489	-0.006	219675	0.7014	0.6420	
24 2,4,6-Trinitrotoluene	1	25.257	25.262	-0.005	265676	0.7028	0.7196	
25 PETN	2	26.217	26.215	0.002	951206	7.00	7.35	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070	Amount Added:	70.00	Units: uL
8330_ADDs_00031	Amount Added:	35.00	Units: uL

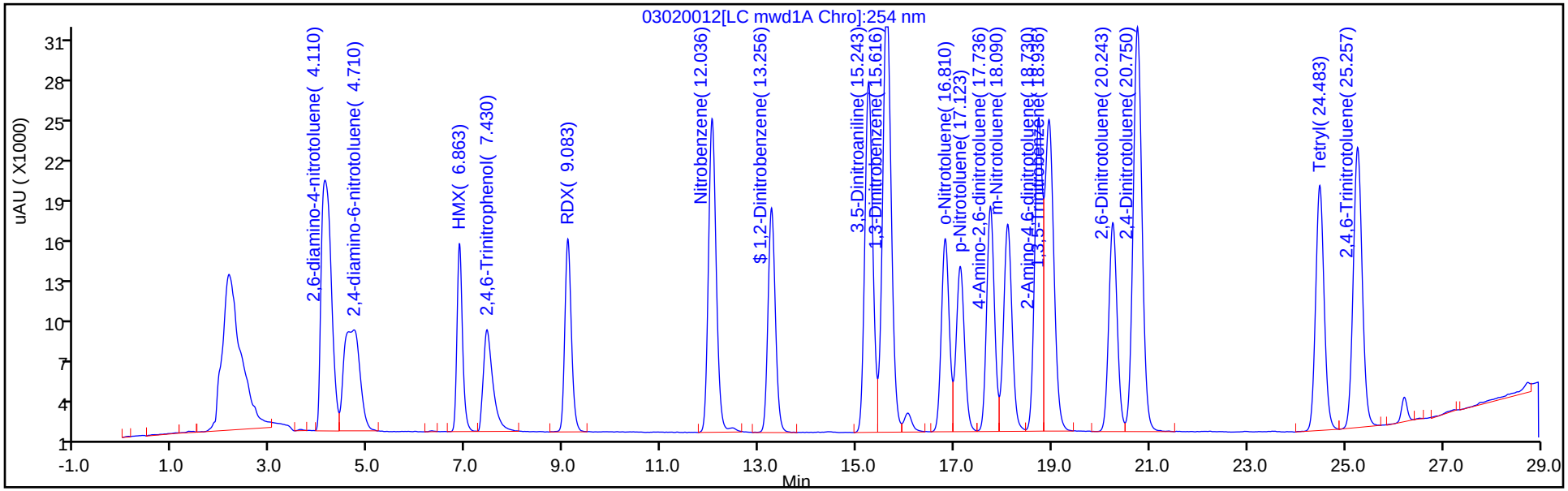
Report Date: 03-Mar-2022 12:49:14 Chrom Revision: 2.3 16-Feb-2022 17:52:00

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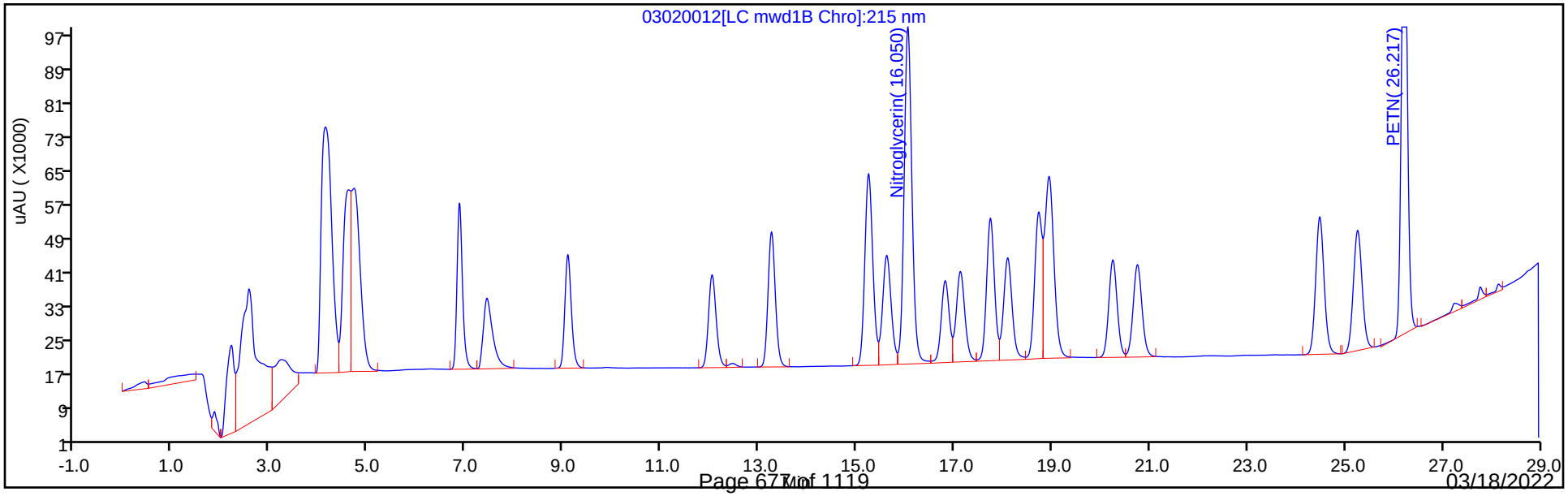
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020012.D

Injection Date:	02-Mar-2022 22:32:16	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 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: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020013.D
Lims ID: IC INT/ADD 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-Mar-2022 23:07:23 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 6
Misc. Info.: 280-0108949-013
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:14 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

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	4.127	4.142	-0.015	147662	0.4000	0.3633	
2 2,4-diamino-6-nitrotoluene	1	4.700	4.669	0.031	93419	0.4000	0.4055	
5 HMX	1	6.880	6.889	-0.009	62819	0.4000	0.3781	
7 2,4,6-Trinitrophenol	1	7.527	7.602	-0.075	58358	0.4000	0.4392	
8 RDX	1	9.100	9.115	-0.015	76711	0.4000	0.3947	
9 Nitrobenzene	1	12.060	12.062	-0.002	148639	0.4016	0.4036	
$ 10 1,2-Dinitrobenzene	1	13.274	13.282	-0.008	99804	0.4000	0.3996	
11 3,5-Dinitroaniline	1	15.260	15.269	-0.009	157805	0.4000	0.3835	
12 1,3-Dinitrobenzene	1	15.627	15.635	-0.008	225815	0.4008	0.3950	
13 Nitroglycerin	2	16.054	16.055	-0.001	519683	4.00	4.24	
14 o-Nitrotoluene	1	16.820	16.822	-0.002	93064	0.4000	0.3966	
16 p-Nitrotoluene	1	17.127	17.129	-0.002	83857	0.4008	0.3978	
17 4-Amino-2,6-dinitrotoluene	1	17.747	17.755	-0.008	107043	0.4004	0.4008	
18 m-Nitrotoluene	1	18.100	18.102	-0.002	106661	0.4004	0.4017	
19 2-Amino-4,6-dinitrotoluene	1	18.740	18.742	-0.002	146764	0.4016	0.4071	
20 1,3,5-Trinitrobenzene	1	18.947	18.949	-0.002	170012	0.4008	0.4092	
21 2,6-Dinitrotoluene	1	20.254	20.255	-0.001	106362	0.4016	0.4004	
22 2,4-Dinitrotoluene	1	20.760	20.762	-0.002	220828	0.4016	0.3959	
23 Tetryl	1	24.494	24.489	0.005	126546	0.4008	0.3698	
24 2,4,6-Trinitrotoluene	1	25.267	25.262	0.005	151235	0.4016	0.4097	
25 PETN	2	26.220	26.215	0.005	544987	4.00	4.21	

Reagents:

8330IntermStk_00070 Amount Added: 40.00 Units: uL
8330_ADDs_00031 Amount Added: 20.00 Units: uL

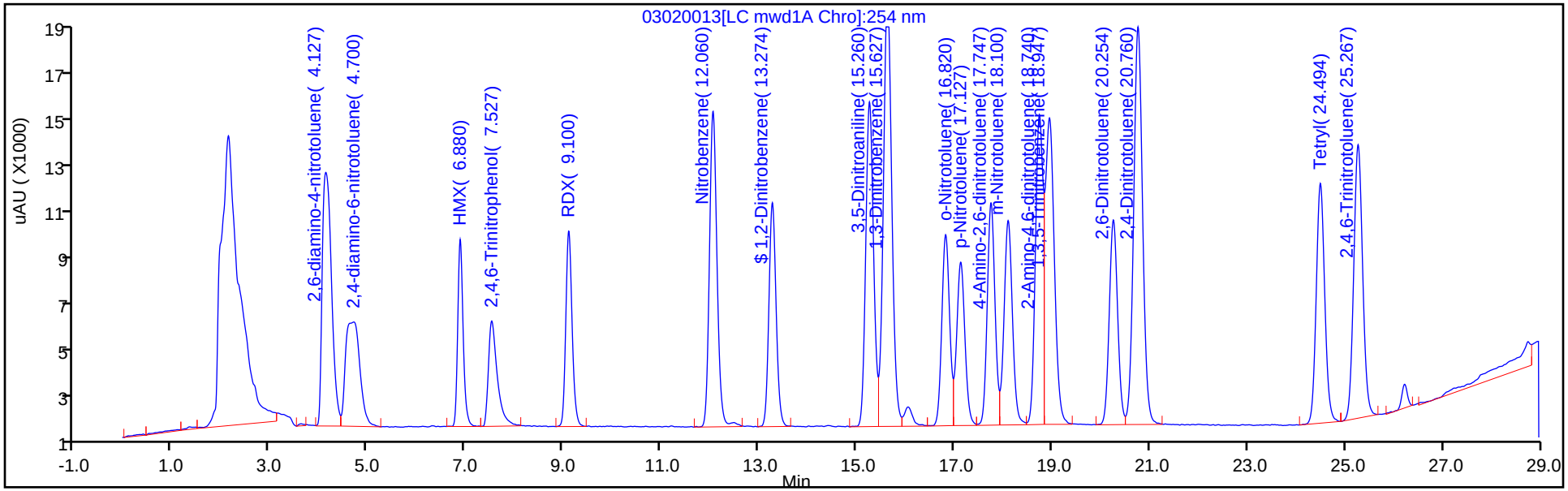
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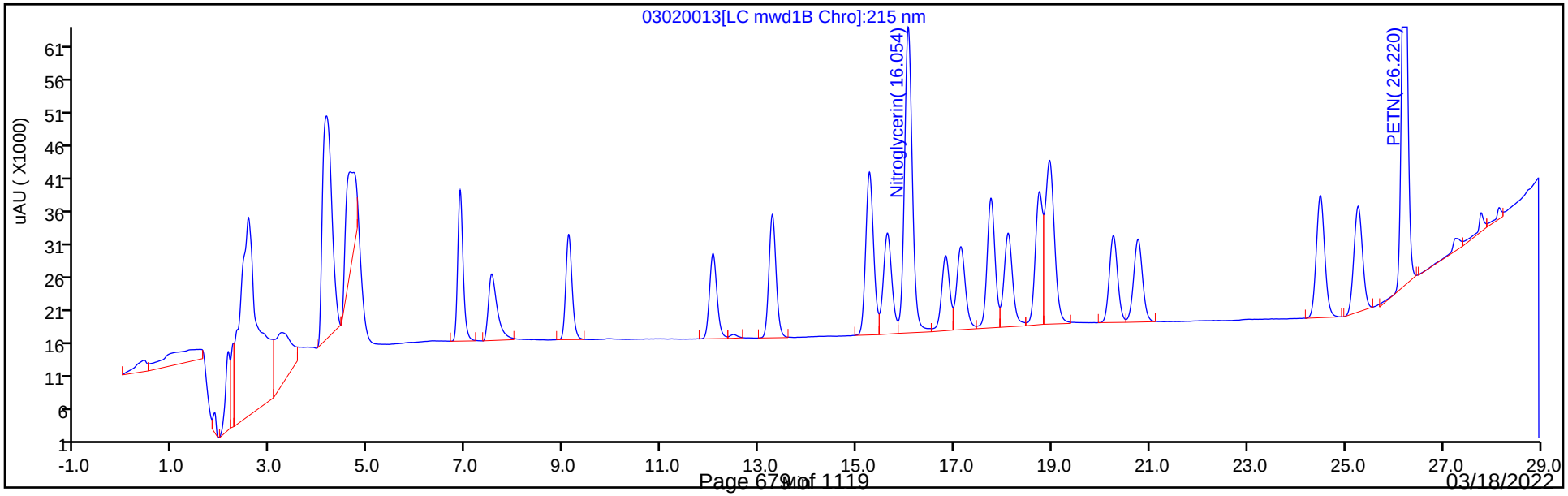
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Injection Date:	02-Mar-2022 23:07:23	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 6			Worklist Smp#:	13
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020014.D
Lims ID: IC INT/ADD 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 02-Mar-2022 23:42:39 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 5
Misc. Info.: 280-0108949-014
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:15 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:06:29

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	4.142	4.142	0.000	96596	0.2500	0.2377	
2 2,4-diamino-6-nitrotoluene	1	4.669	4.669	0.000	59944	0.2500	0.2576	
5 HMX	1	6.889	6.889	0.000	38318	0.2500	0.2306	
7 2,4,6-Trinitrophenol	1	7.602	7.602	0.000	34288	0.2500	0.2580	
8 RDX	1	9.115	9.115	0.000	46417	0.2500	0.2389	
9 Nitrobenzene	1	12.062	12.062	0.000	90246	0.2510	0.2450	
$ 10 1,2-Dinitrobenzene	1	13.282	13.282	0.000	61198	0.2500	0.2450	
11 3,5-Dinitroaniline	1	15.269	15.269	0.000	102787	0.2500	0.2497	
12 1,3-Dinitrobenzene	1	15.635	15.635	0.000	136486	0.2505	0.2388	
13 Nitroglycerin	2	16.055	16.055	0.000	309657	2.50	2.53	
14 o-Nitrotoluene	1	16.822	16.822	0.000	56221	0.2500	0.2396	
16 p-Nitrotoluene	1	17.129	17.129	0.000	50555	0.2505	0.2398	
17 4-Amino-2,6-dinitrotoluene	1	17.755	17.755	0.000	64569	0.2503	0.2418	
18 m-Nitrotoluene	1	18.102	18.102	0.000	64150	0.2503	0.2419	
19 2-Amino-4,6-dinitrotoluene	1	18.742	18.742	0.000	88010	0.2510	0.2441	
20 1,3,5-Trinitrobenzene	1	18.949	18.949	0.000	102576	0.2505	0.2469	
21 2,6-Dinitrotoluene	1	20.255	20.255	0.000	64489	0.2510	0.2427	
22 2,4-Dinitrotoluene	1	20.762	20.762	0.000	139375	0.2510	0.2455	
23 Tetryl	1	24.489	24.489	0.000	77249	0.2505	0.2258	
24 2,4,6-Trinitrotoluene	1	25.262	25.262	0.000	91338	0.2510	0.2474	
25 PETN	2	26.215	26.215	0.000	329509	2.50	2.55	

QC Flag Legend
Processing Flags

Reagents:

8330IntermStk_00070	Amount Added:	25.00	Units: uL
8330_ADDs_00031	Amount Added:	12.50	Units: uL

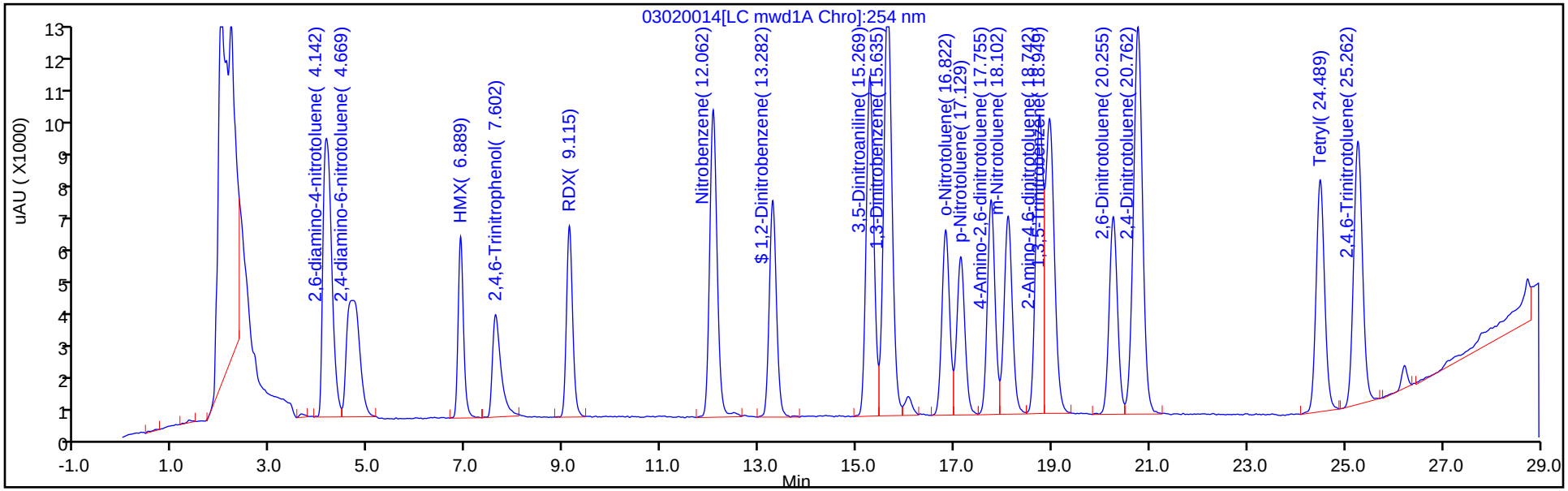
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Eurofins Denver

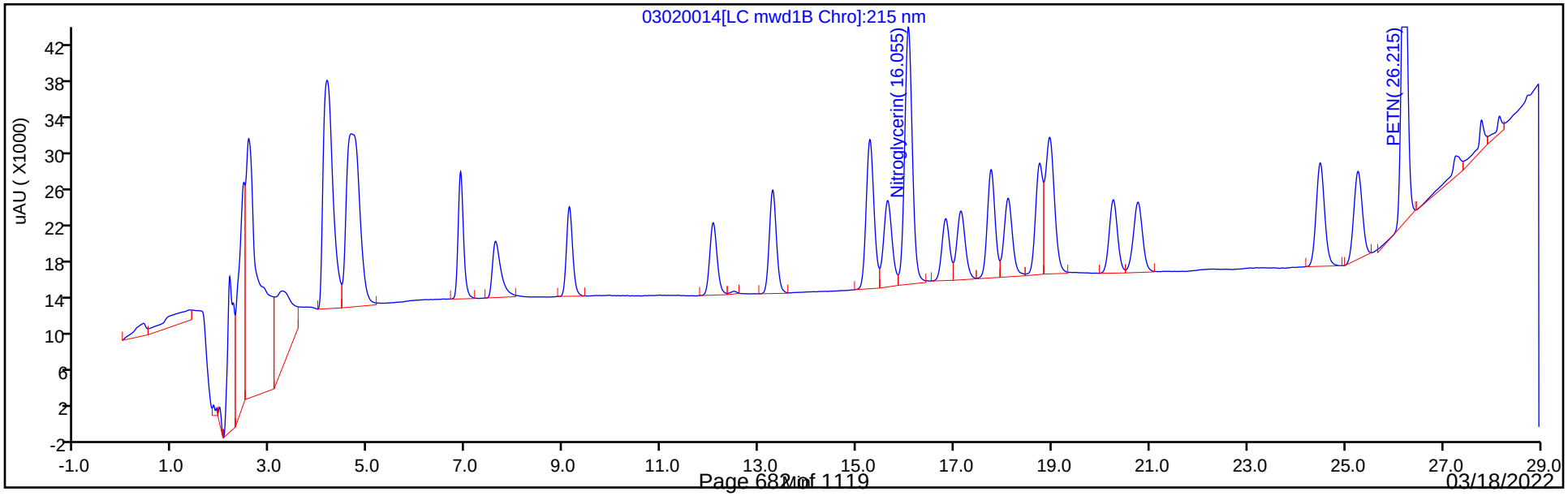
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Injection Date:	02-Mar-2022 23:42:39	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 5			Worklist Smp#:	14
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020015.D
Lims ID: IC INT/ADD 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Mar-2022 00:17:55 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 4
Misc. Info.: 280-0108949-015
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:16 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:12:37

	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	4.149	4.142	0.007	41030	0.1000	0.1009	
	2 2,4-diamino-6-nitrotoluene	1	4.669	4.669	0.000	24932	0.1000	0.1028	
	5 HMX	1	6.896	6.889	0.007	16109	0.1000	0.0970	
	7 2,4,6-Trinitrophenol	1	7.696	7.602	0.094	14009	0.1000	0.1054	
	8 RDX	1	9.129	9.115	0.014	19750	0.1000	0.1016	
	9 Nitrobenzene	1	12.069	12.062	0.007	37271	0.1004	0.1012	
$	10 1,2-Dinitrobenzene	1	13.282	13.282	0.000	25499	0.1000	0.1021	
	11 3,5-Dinitroaniline	1	15.276	15.269	0.007	42107	0.1000	0.1022	
	12 1,3-Dinitrobenzene	1	15.642	15.635	0.007	59537	0.1002	0.1041	
	13 Nitroglycerin	2	16.062	16.055	0.007	133241	1.00	1.09	
	14 o-Nitrotoluene	1	16.829	16.822	0.007	23857	0.1000	0.1017	
	16 p-Nitrotoluene	1	17.136	17.129	0.007	21625	0.1002	0.1026	
	17 4-Amino-2,6-dinitrotoluene	1	17.756	17.755	0.001	27216	0.1001	0.1021	
	18 m-Nitrotoluene	1	18.109	18.102	0.007	26978	0.1001	0.1021	
	19 2-Amino-4,6-dinitrotoluene	1	18.749	18.742	0.007	37178	0.1004	0.1031	
	20 1,3,5-Trinitrobenzene	1	18.956	18.949	0.007	42514	0.1002	0.1023	
	21 2,6-Dinitrotoluene	1	20.256	20.255	0.001	26687	0.1004	0.1005	
	22 2,4-Dinitrotoluene	1	20.756	20.762	-0.006	64187	0.1004	0.1067	
	23 Tetryl	1	24.483	24.489	-0.006	33188	0.1002	0.0970	
	24 2,4,6-Trinitrotoluene	1	25.256	25.262	-0.006	37205	0.1004	0.1008	
	25 PETN	2	26.209	26.215	-0.006	134076	1.00	1.04	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070	Amount Added:	10.00	Units: uL
8330_ADDs_00031	Amount Added:	5.00	Units: uL

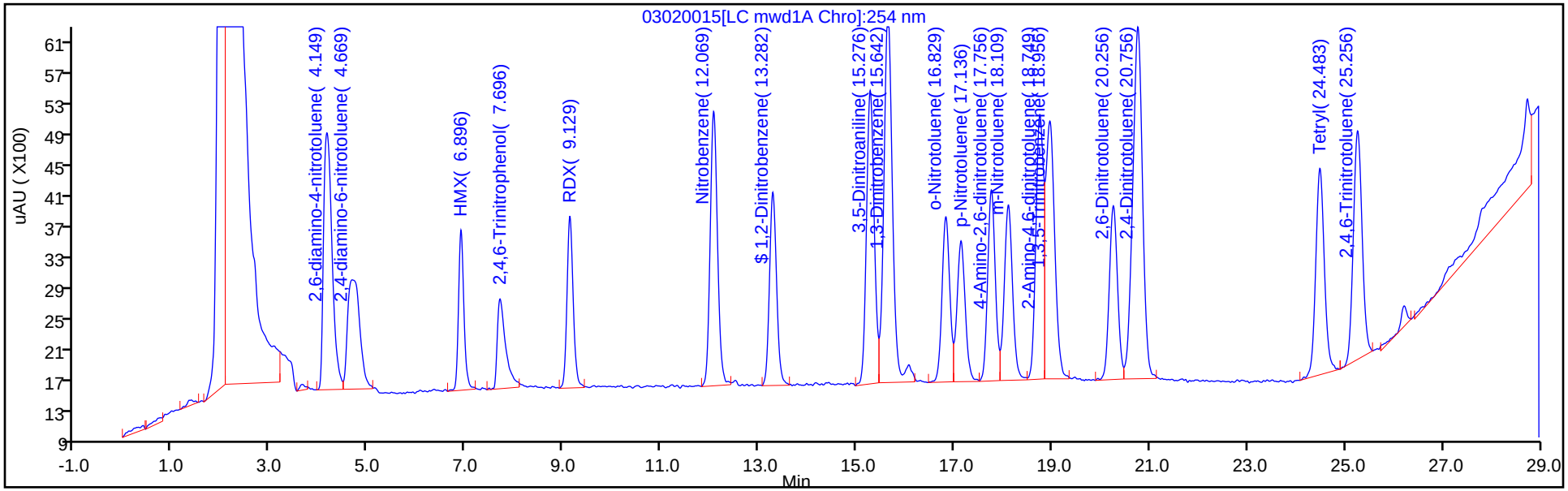
Report Date: 03-Mar-2022 12:49:16 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

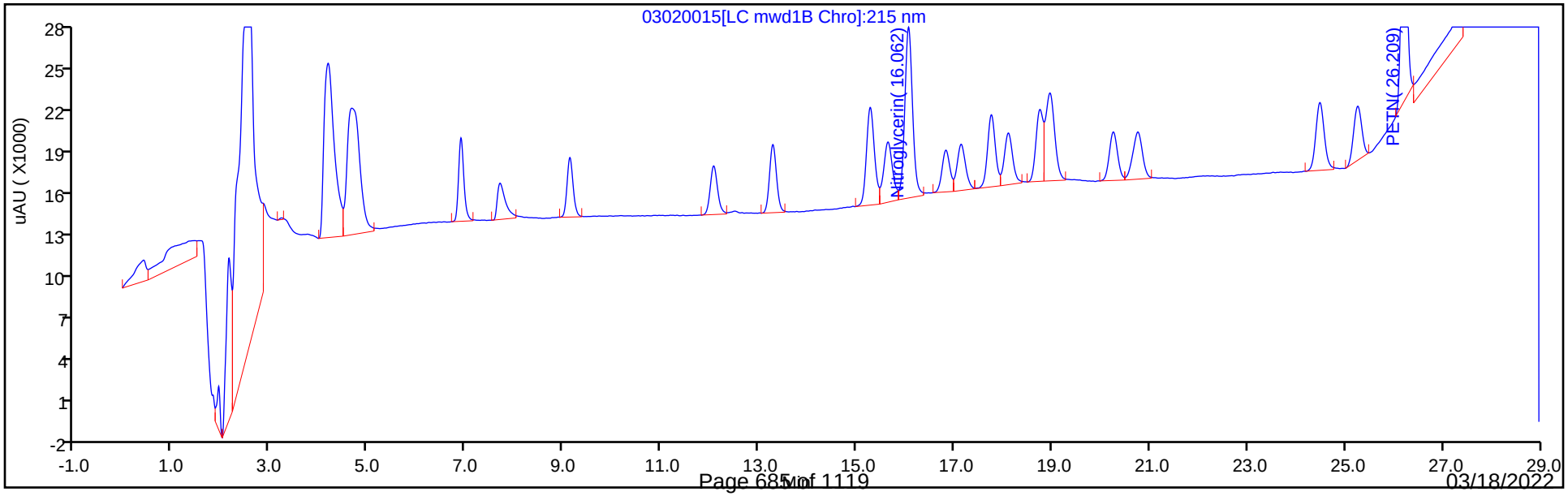
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Injection Date:	03-Mar-2022 00:17:55	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 4			Worklist Smp#:	15
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Denver

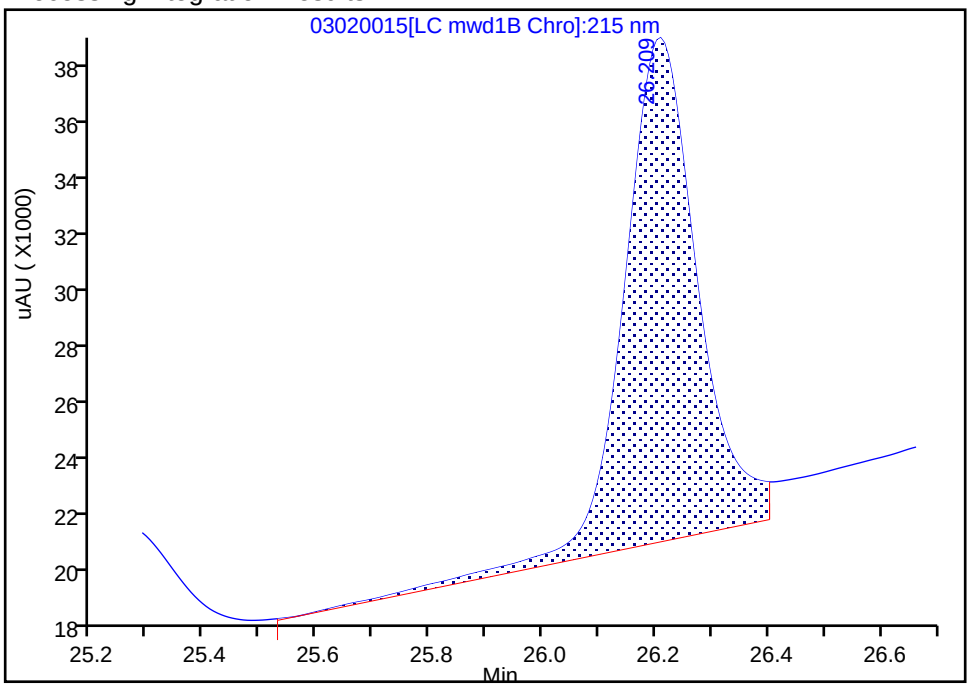
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Injection Date: 03-Mar-2022 00:17:55 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 4
Client ID:
Operator ID: JZ ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

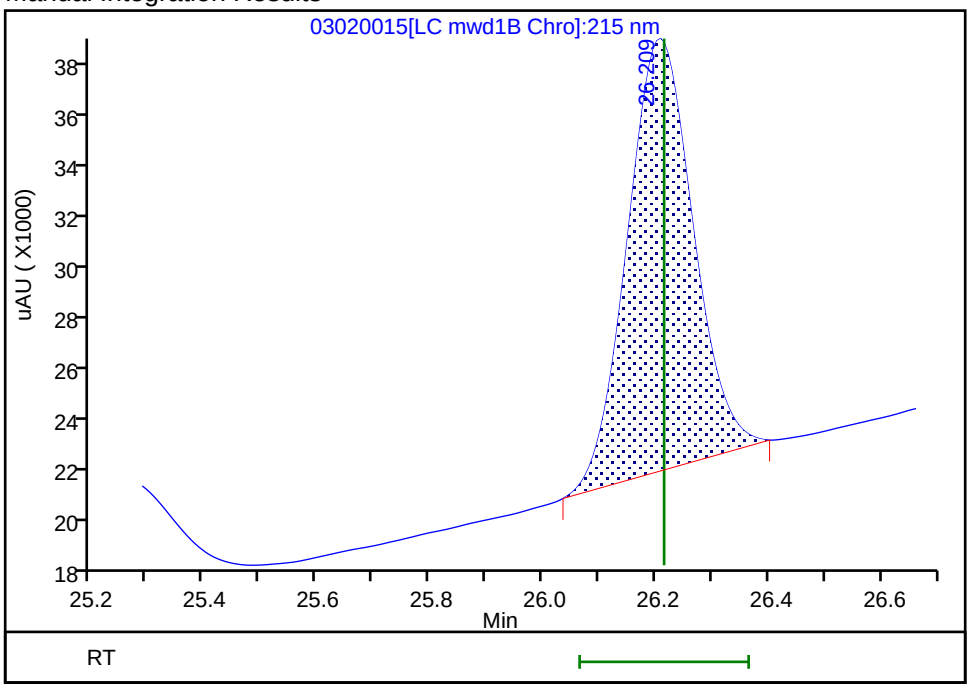
Processing Integration Results

RT: 26.21
Area: 159234
Amount: 1.166681
Amount Units: ug/ml



Manual Integration Results

RT: 26.21
Area: 134076
Amount: 1.036703
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:12:35
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020016.D
Lims ID: IC INT/ADD 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Mar-2022 00:53:03 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 3
Misc. Info.: 280-0108949-016
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:16 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:09:56

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	4.154	4.142	0.012	21526	0.0500	0.0530	
2 2,4-diamino-6-nitrotoluene	1	4.674	4.669	0.005	12869	0.0500	0.0495	
5 HMX	1	6.894	6.889	0.005	8053	0.0500	0.0485	
7 2,4,6-Trinitrophenol	1	7.767	7.602	0.165	6356	0.0500	0.0478	
8 RDX	1	9.120	9.115	0.005	10028	0.0500	0.0516	
9 Nitrobenzene	1	12.073	12.062	0.011	19149	0.0502	0.0520	
$ 10 1,2-Dinitrobenzene	1	13.287	13.282	0.005	12864	0.0500	0.0515	
11 3,5-Dinitroaniline	1	15.287	15.269	0.018	20966	0.0500	0.0508	
12 1,3-Dinitrobenzene	1	15.647	15.635	0.012	30181	0.0501	0.0528	
13 Nitroglycerin	2	16.073	16.055	0.018	59894	0.5000	0.4889	M
14 o-Nitrotoluene	1	16.833	16.822	0.011	12057	0.0500	0.0514	
16 p-Nitrotoluene	1	17.147	17.129	0.018	10595	0.0501	0.0503	
17 4-Amino-2,6-dinitrotoluene	1	17.773	17.755	0.018	13425	0.0501	0.0505	
18 m-Nitrotoluene	1	18.120	18.102	0.018	13387	0.0501	0.0510	
19 2-Amino-4,6-dinitrotoluene	1	18.773	18.742	0.031	18562	0.0502	0.0515	
20 1,3,5-Trinitrobenzene	1	18.973	18.949	0.024	21339	0.0501	0.0514	
21 2,6-Dinitrotoluene	1	20.267	20.255	0.012	13757	0.0502	0.0518	
22 2,4-Dinitrotoluene	1	20.767	20.762	0.005	33918	0.0502	0.0508	
23 Tetryl	1	24.500	24.489	0.011	18110	0.0501	0.0529	
24 2,4,6-Trinitrotoluene	1	25.274	25.262	0.012	18556	0.0502	0.0503	
25 PETN	2	26.220	26.215	0.005	67082	0.5000	0.5187	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070	Amount Added:	5.00	Units: uL
8330_ADDs_00031	Amount Added:	2.50	Units: uL

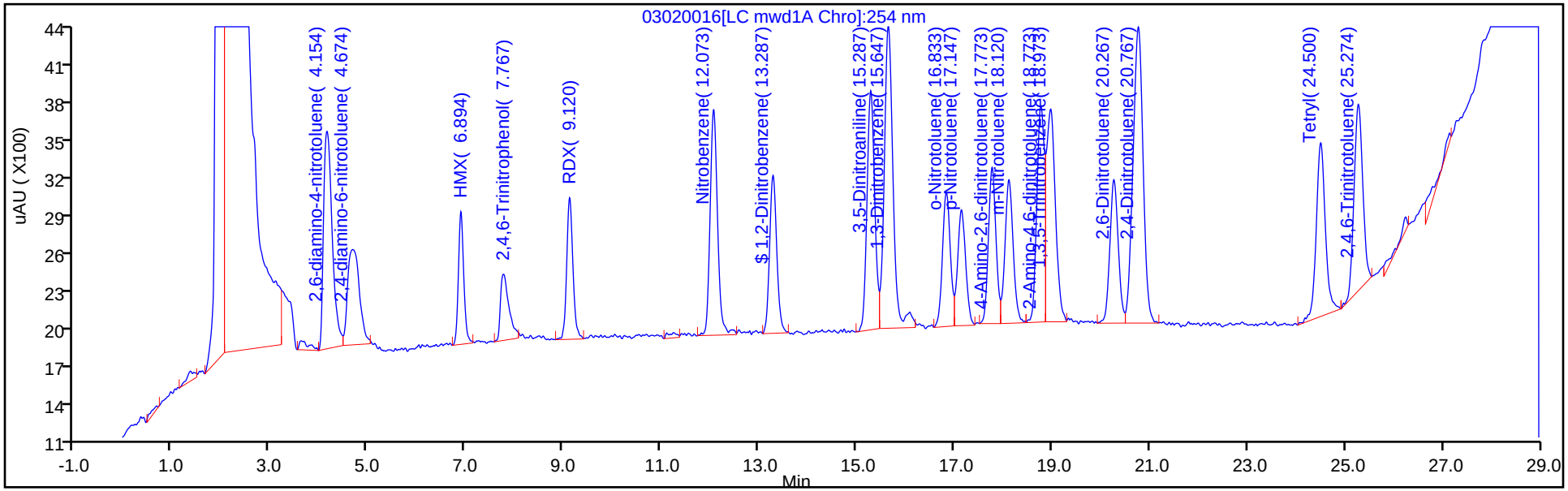
Report Date: 03-Mar-2022 12:49:17 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

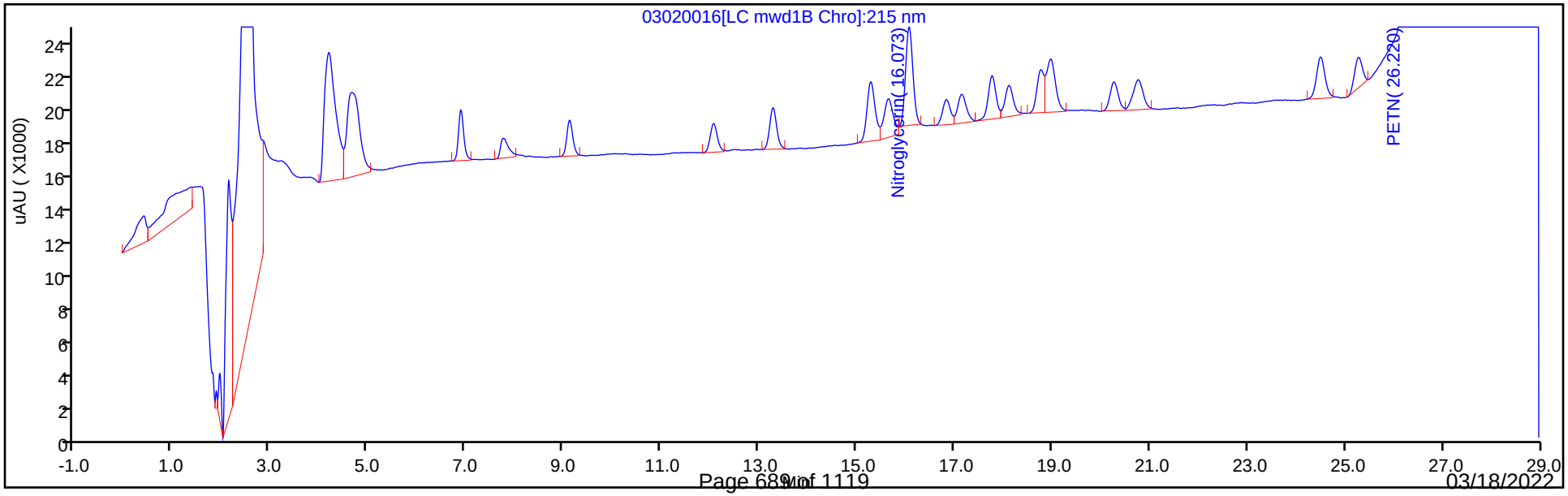
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Injection Date:	03-Mar-2022 00:53:03	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 3			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Denver

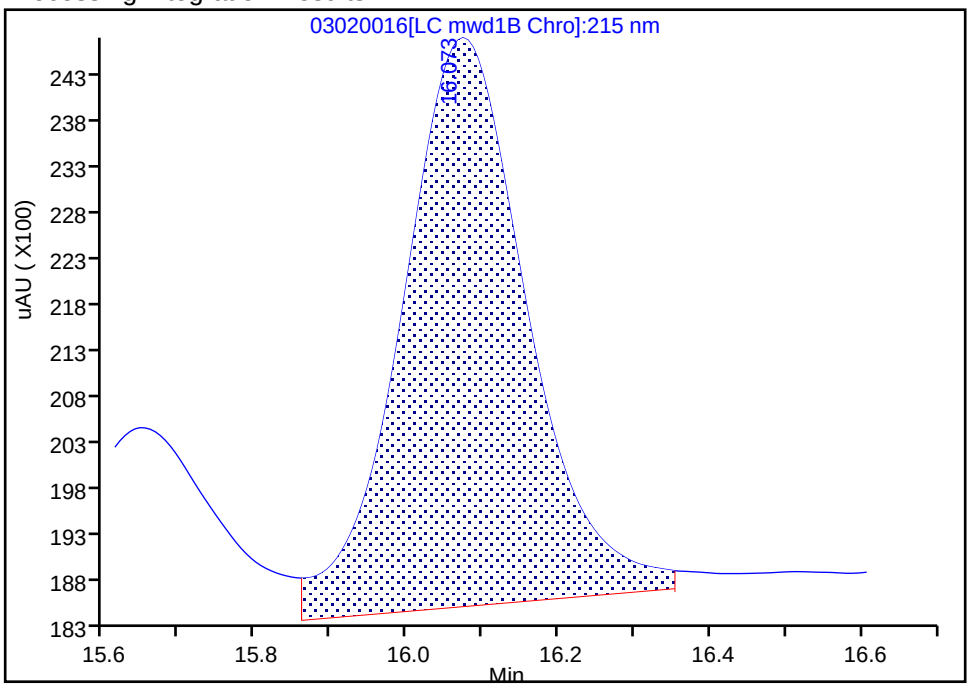
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Injection Date: 03-Mar-2022 00:53:03 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 3
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

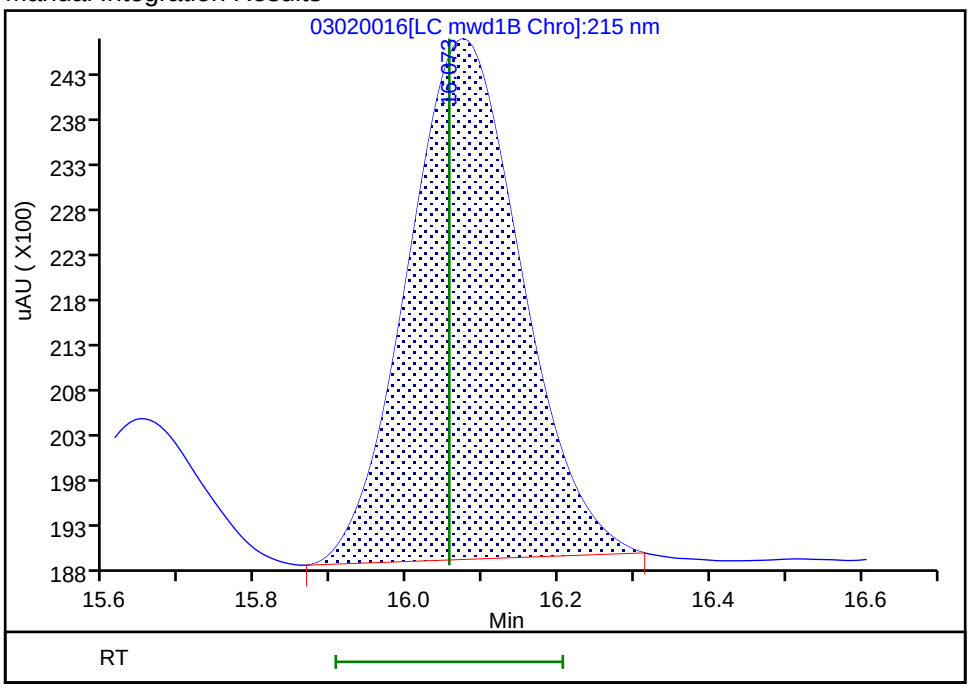
Processing Integration Results

RT: 16.07
Area: 70358
Amount: 0.563571
Amount Units: ug/ml



Manual Integration Results

RT: 16.07
Area: 59894
Amount: 0.488860
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:12:24
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

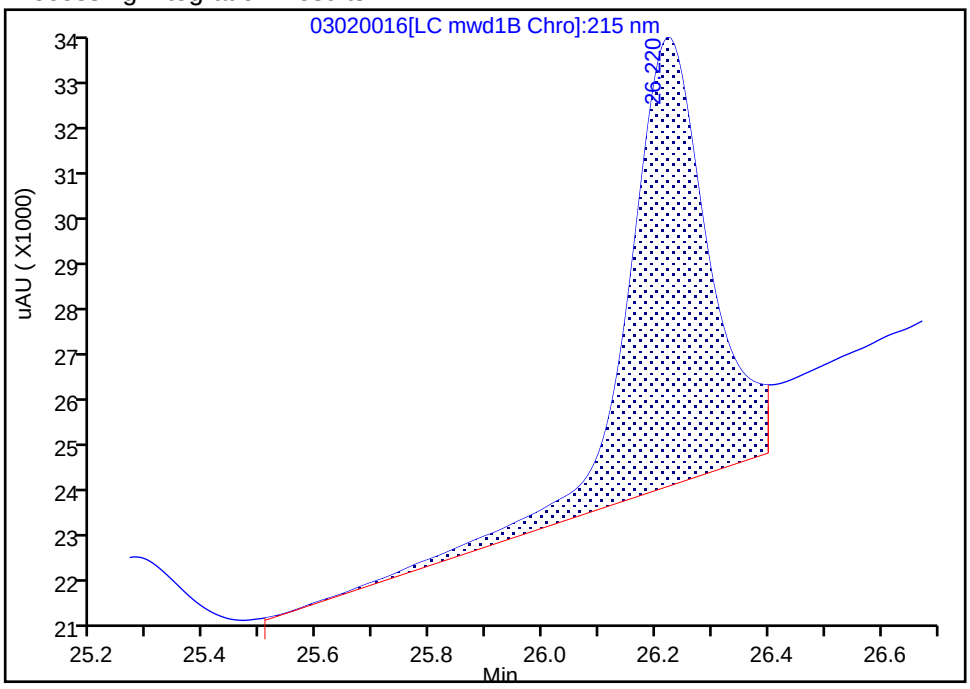
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Injection Date: 03-Mar-2022 00:53:03 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 3
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

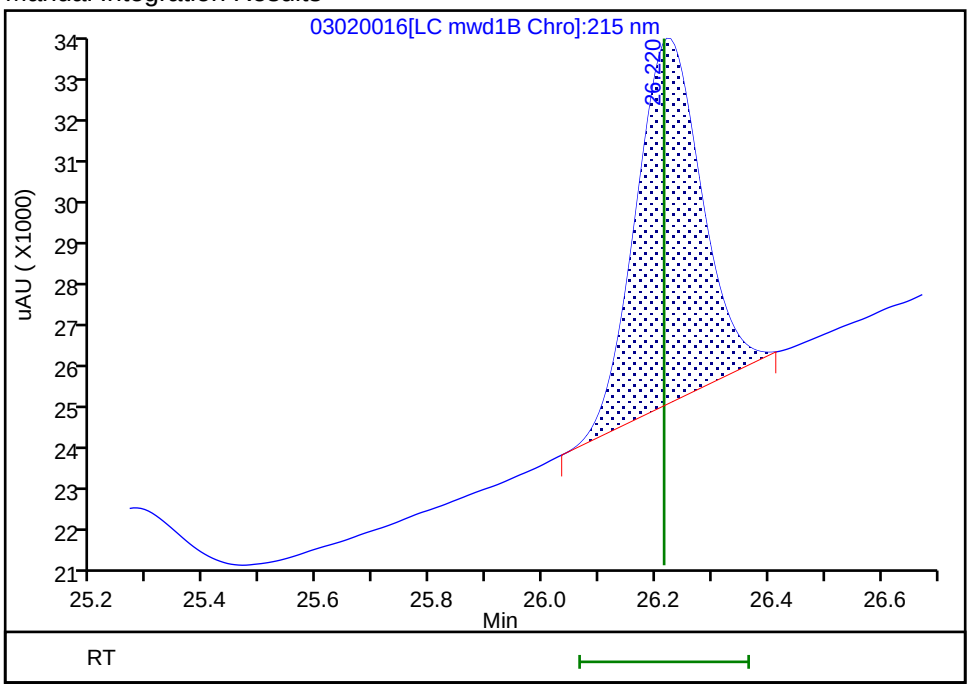
Processing Integration Results

RT: 26.22
Area: 91339
Amount: 0.654475
Amount Units: ug/ml



Manual Integration Results

RT: 26.22
Area: 67082
Amount: 0.518692
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:12:20
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D
Lims ID: IC INT/ADD 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 03-Mar-2022 01:28:22 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 2
Misc. Info.: 280-0108949-017
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:17 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:10:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.169	4.142	0.027	9145	0.0200	0.0225	
2 2,4-diamino-6-nitrotoluene	1	4.716	4.669	0.047	5618	0.0200	0.0175	
5 HMX	1	6.896	6.889	0.007	3127	0.0200	0.0188	
7 2,4,6-Trinitrophenol	1	7.863	7.602	0.261	2301	0.0200	0.0173	
8 RDX	1	9.129	9.115	0.014	3719	0.0200	0.0191	
9 Nitrobenzene	1	12.069	12.062	0.007	6686	0.0201	0.0182	
$ 10 1,2-Dinitrobenzene	1	13.282	13.282	0.000	4809	0.0200	0.0193	
11 3,5-Dinitroaniline	1	15.282	15.269	0.013	7621	0.0200	0.0183	
12 1,3-Dinitrobenzene	1	15.642	15.635	0.007	10643	0.0200	0.0186	
13 Nitroglycerin	2	16.062	16.055	0.007	21750	0.2000	0.1775	M
14 o-Nitrotoluene	1	16.829	16.822	0.007	4607	0.0200	0.0196	
16 p-Nitrotoluene	1	17.129	17.129	0.000	4078	0.0200	0.0193	
17 4-Amino-2,6-dinitrotoluene	1	17.756	17.755	0.001	5271	0.0200	0.0200	
18 m-Nitrotoluene	1	18.116	18.102	0.014	4805	0.0200	0.0188	
19 2-Amino-4,6-dinitrotoluene	1	18.762	18.742	0.020	6899	0.0201	0.0191	M
20 1,3,5-Trinitrobenzene	1	18.956	18.949	0.007	6970	0.0200	0.0168	M
21 2,6-Dinitrotoluene	1	20.262	20.255	0.007	5233	0.0201	0.0197	
22 2,4-Dinitrotoluene	1	20.716	20.762	-0.046	16863	0.0201	0.0193	
23 Tetryl	1	24.496	24.489	0.007	6933	0.0200	0.0203	
24 2,4,6-Trinitrotoluene	1	25.269	25.262	0.007	6507	0.0201	0.0176	
25 PETN	2	26.223	26.215	0.008	21923	0.2000	0.1695	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070	Amount Added:	2.00	Units: uL
8330_ADDs_00031	Amount Added:	1.00	Units: uL

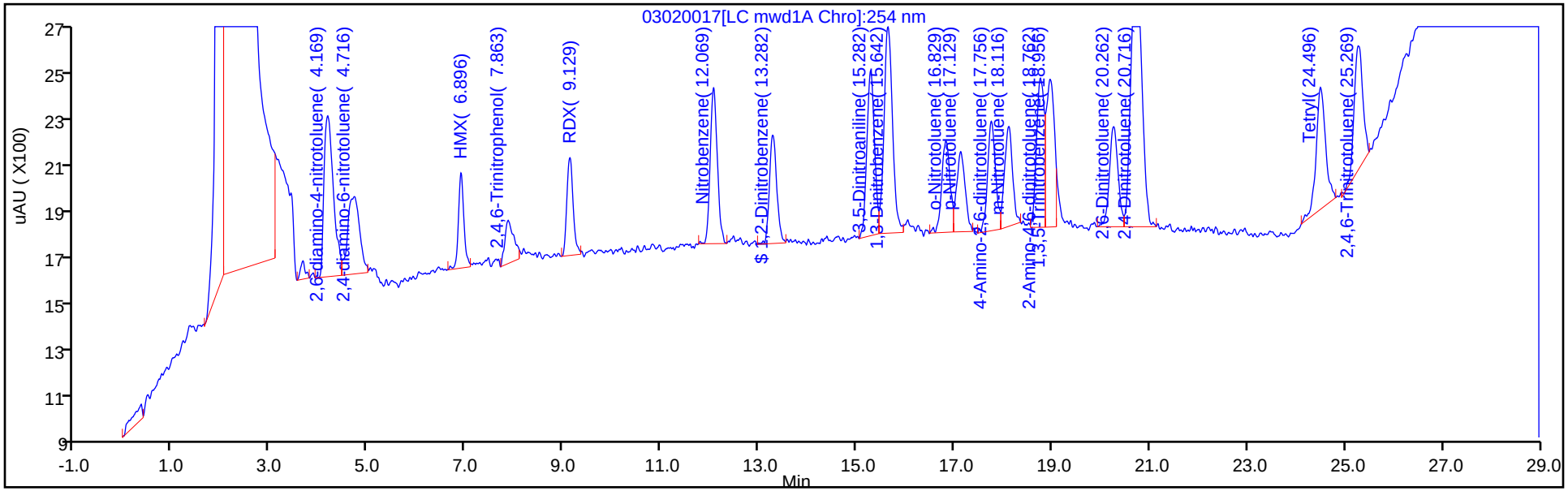
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Eurofins Denver

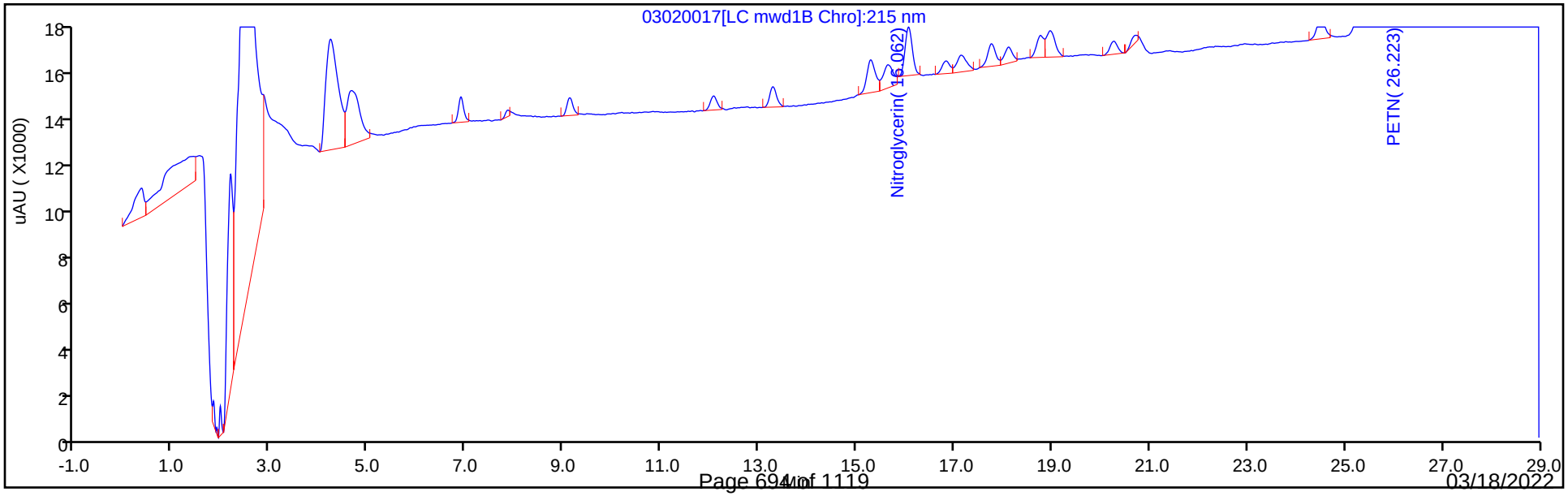
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D

Injection Date:	03-Mar-2022 01:28:22	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 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: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Denver

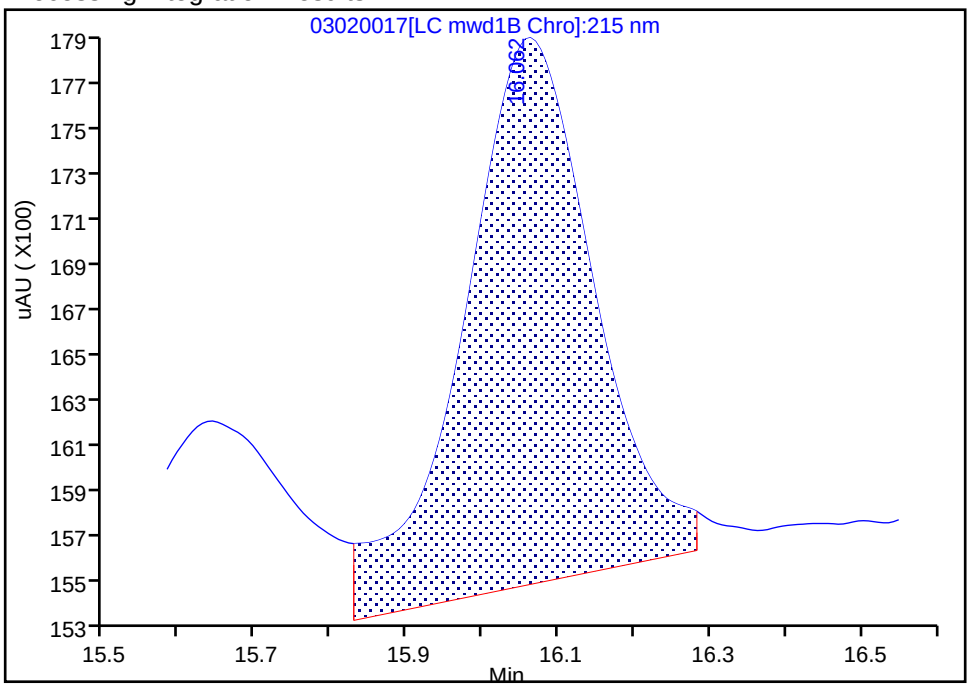
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Injection Date: 03-Mar-2022 01:28:22 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 2
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

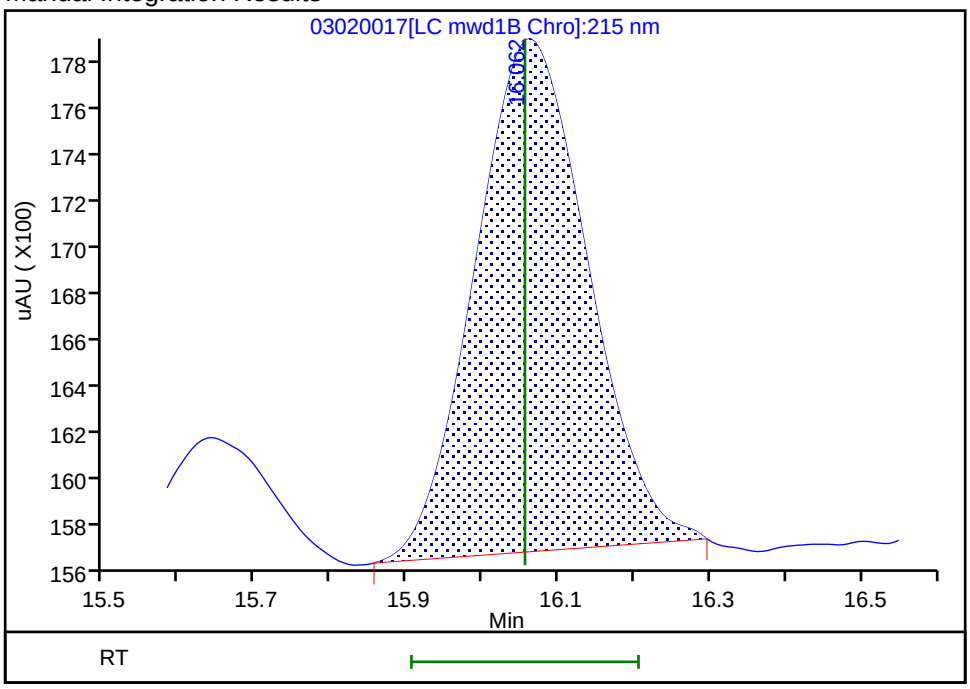
Processing Integration Results

RT: 16.06
Area: 28042
Amount: 0.218500
Amount Units: ug/ml



Manual Integration Results

RT: 16.06
Area: 21750
Amount: 0.177525
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:12:09
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

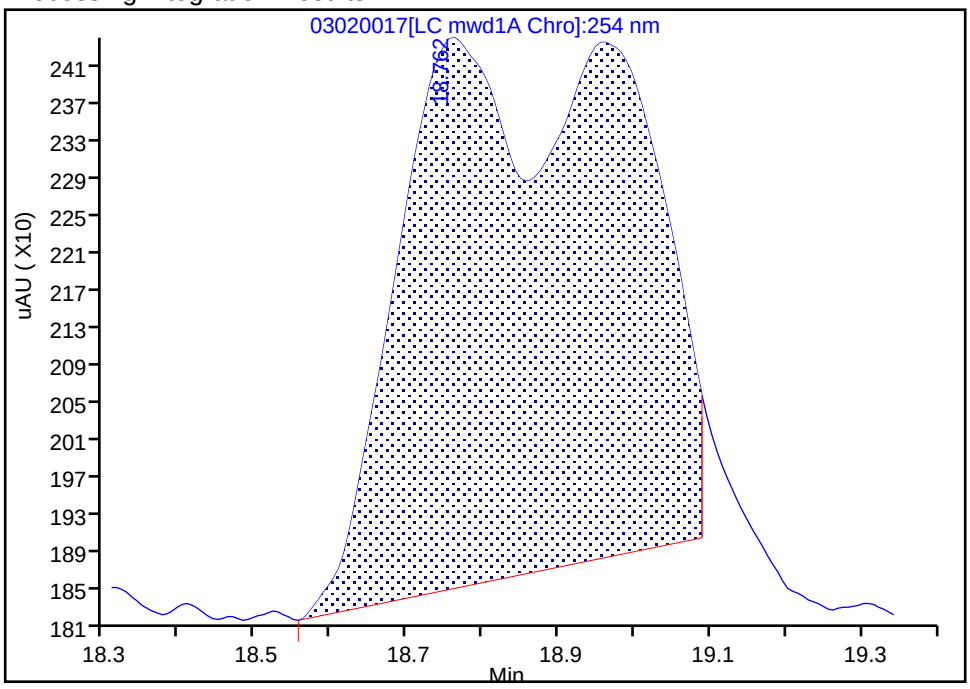
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D				
Injection Date:	03-Mar-2022 01:28:22	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

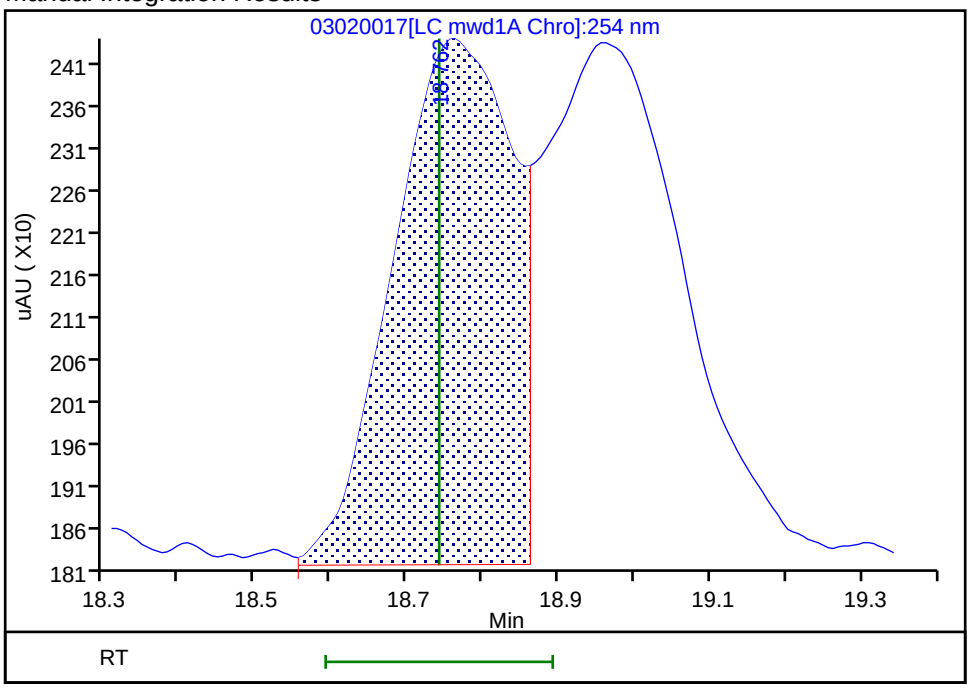
Processing Integration Results

RT: 18.76
Area: 12210
Amount: 0.025658
Amount Units: ug/ml



Manual Integration Results

RT: 18.76
Area: 6899
Amount: 0.019135
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:10:14
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

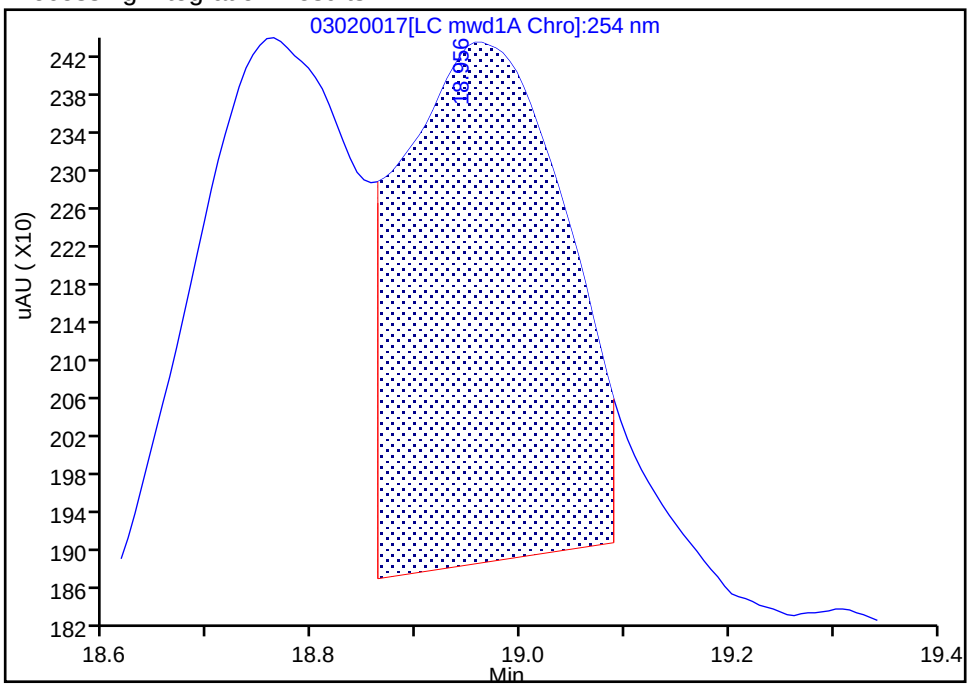
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D
Injection Date: 03-Mar-2022 01:28:22 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 2
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

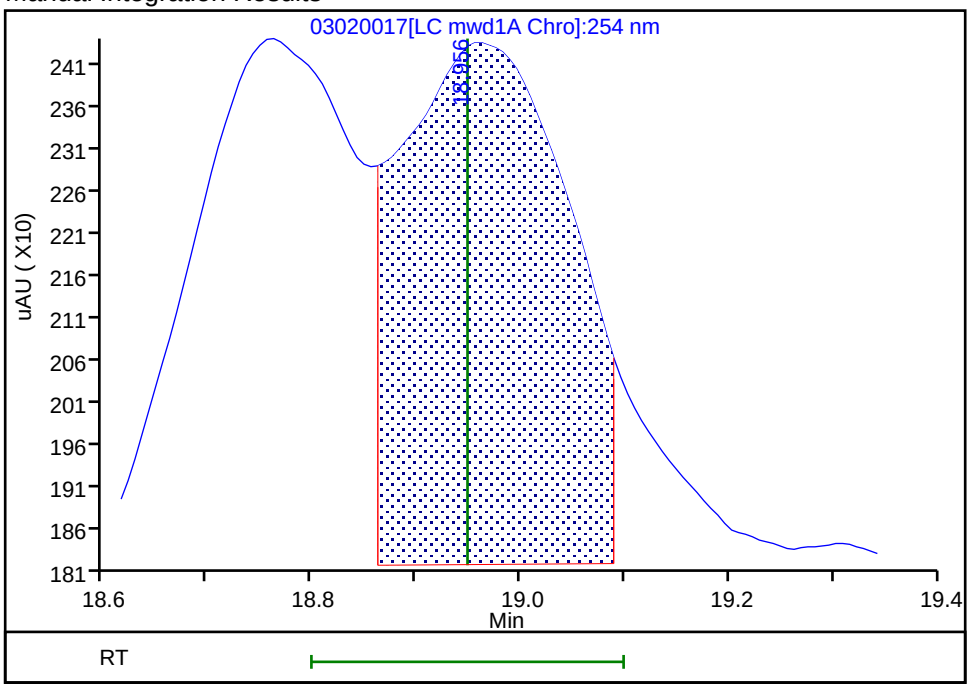
Processing Integration Results

RT: 18.96
Area: 5936
Amount: 0.014418
Amount Units: ug/ml



Manual Integration Results

RT: 18.96
Area: 6970
Amount: 0.016776
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:10:14
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

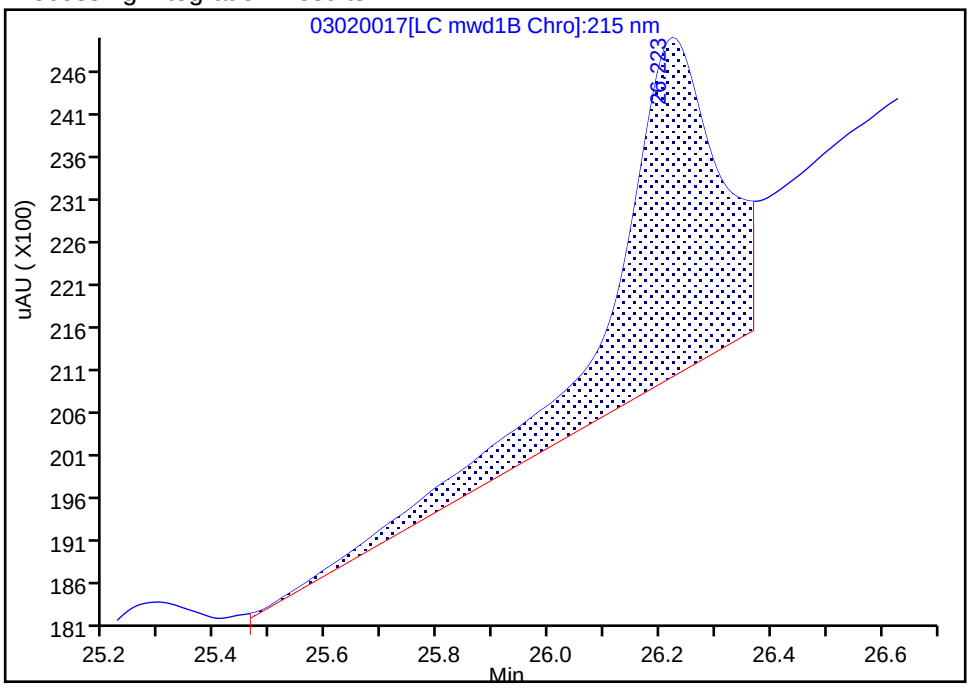
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D
Injection Date: 03-Mar-2022 01:28:22 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 2
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

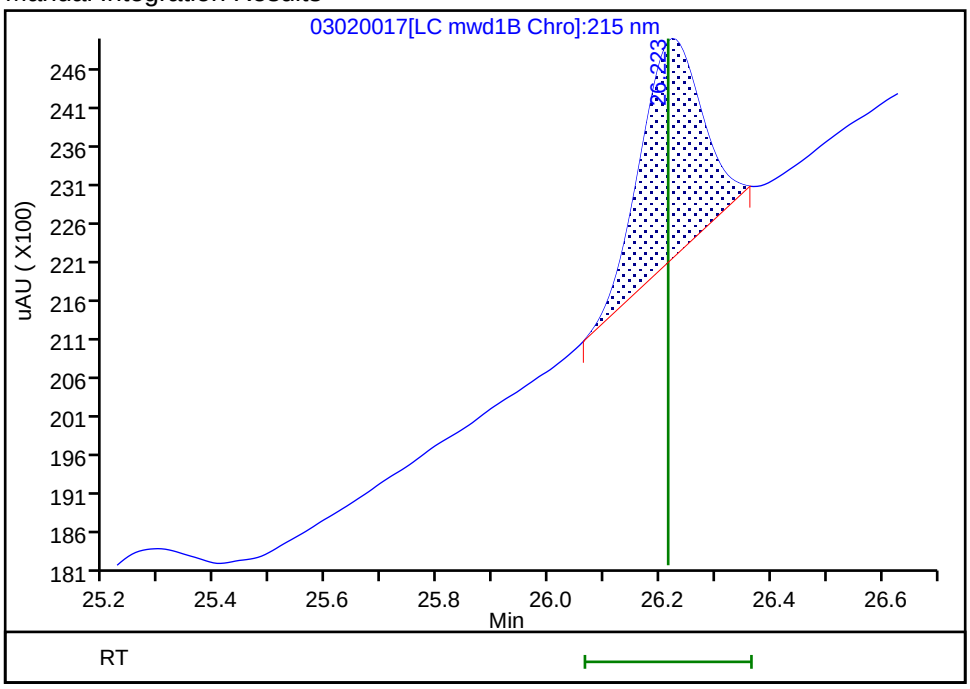
Processing Integration Results

RT: 26.22
Area: 51157
Amount: 0.330478
Amount Units: ug/ml



Manual Integration Results

RT: 26.22
Area: 21923
Amount: 0.169513
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:12:13
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D
Lims ID: IC INT/ADD 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Mar-2022 02:03:29 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 1
Misc. Info.: 280-0108949-018
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:18 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:07:10

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.174	4.142	0.032	6283	0.0100	0.0155	
2 2,4-diamino-6-nitrotoluene	1	4.714	4.669	0.045	4064	0.0100	0.0106	
5 HMX	1	6.887	6.889	-0.002	2040	0.0100	0.0123	
7 2,4,6-Trinitrophenol	1		7.602			ND	ND	
8 RDX	1	9.114	9.115	-0.001	2097	0.0100	0.0108	
9 Nitrobenzene	1	12.047	12.062	-0.015	3890	0.0100	0.0106	
$ 10 1,2-Dinitrobenzene	1	13.260	13.282	-0.022	2461	0.0100	0.009854	
11 3,5-Dinitroaniline	1	15.287	15.269	0.018	4362	0.0100	0.0104	
12 1,3-Dinitrobenzene	1	15.627	15.635	-0.008	5961	0.0100	0.0104	
13 Nitroglycerin	2	16.054	16.055	-0.001	10664	0.1000	0.0870	M
14 o-Nitrotoluene	1	16.807	16.822	-0.015	2491	0.0100	0.0106	
16 p-Nitrotoluene	1	17.147	17.129	0.018	2203	0.0100	0.0104	
17 4-Amino-2,6-dinitrotoluene	1	17.734	17.755	-0.021	2610	0.0100	0.0100	
18 m-Nitrotoluene	1	18.094	18.102	-0.008	2543	0.0100	0.0103	
19 2-Amino-4,6-dinitrotoluene	1	18.754	18.742	0.012	3705	0.0100	0.0103	M
20 1,3,5-Trinitrobenzene	1	18.947	18.949	-0.002	3947	0.0100	0.009500	Ma
21 2,6-Dinitrotoluene	1	20.260	20.255	0.005	2704	0.0100	0.0102	
22 2,4-Dinitrotoluene	1	20.674	20.762	-0.088	11900	0.0100	0.0102	
23 Tetryl	1	24.514	24.489	0.025	4722	0.0100	0.0138	
24 2,4,6-Trinitrotoluene	1	25.274	25.262	0.012	3720	0.0100	0.0101	
25 PETN	2	26.220	26.215	0.005	10842	0.1000	0.0838	M

QC Flag Legend

Processing Flags
ND - Not Detected or Marked ND

Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00070	Amount Added:	1.00	Units: uL
8330_ADDs_00031	Amount Added:	0.50	Units: uL

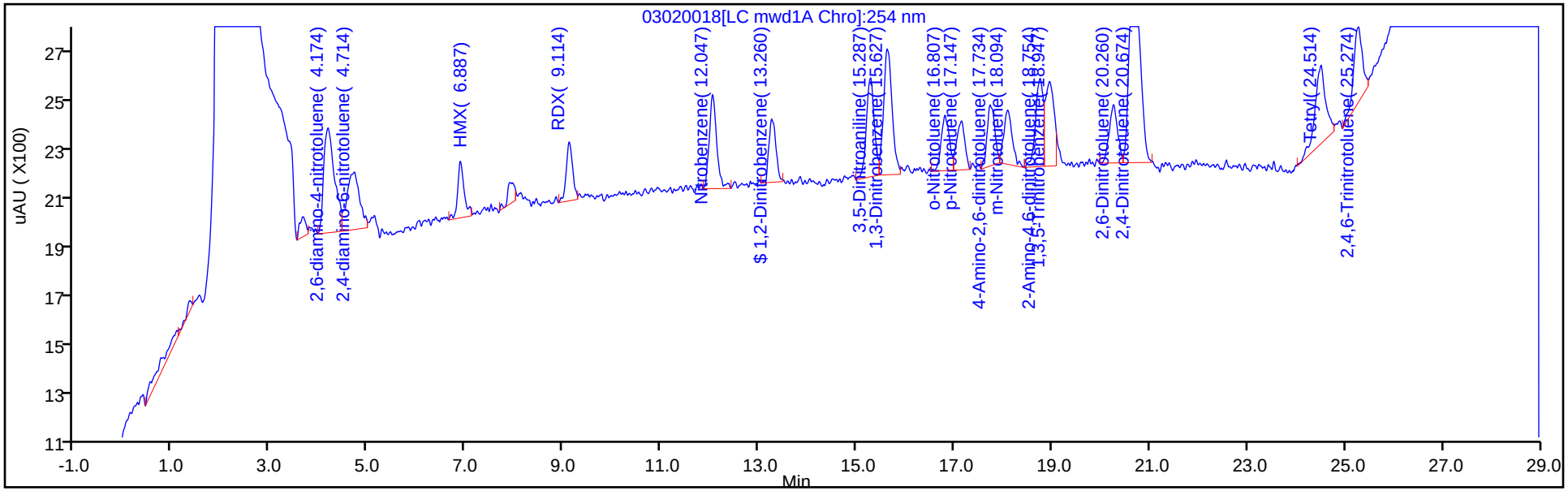
Report Date: 03-Mar-2022 12:49:18 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

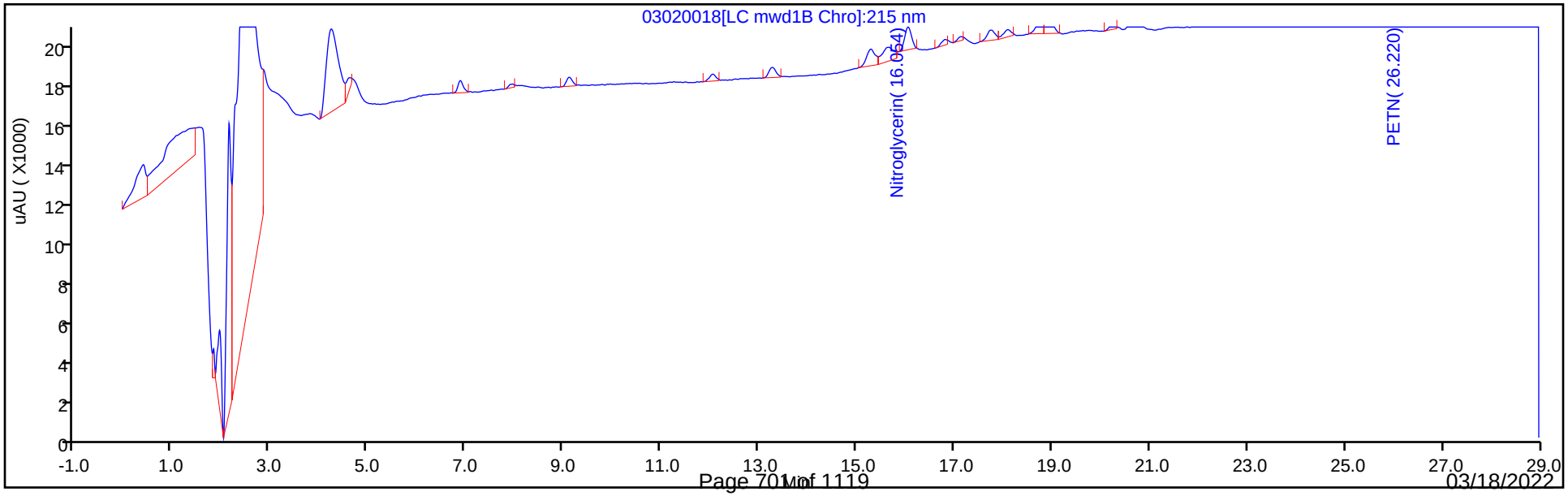
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D

Injection Date:	03-Mar-2022 02:03:29	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 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: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Denver

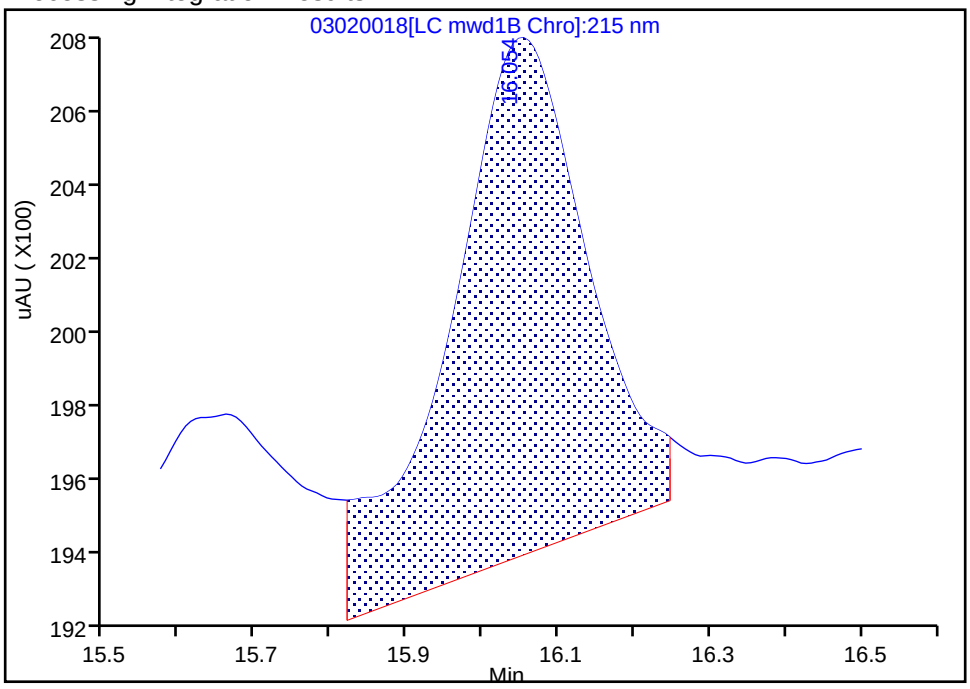
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D
Injection Date: 03-Mar-2022 02:03:29 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 1
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

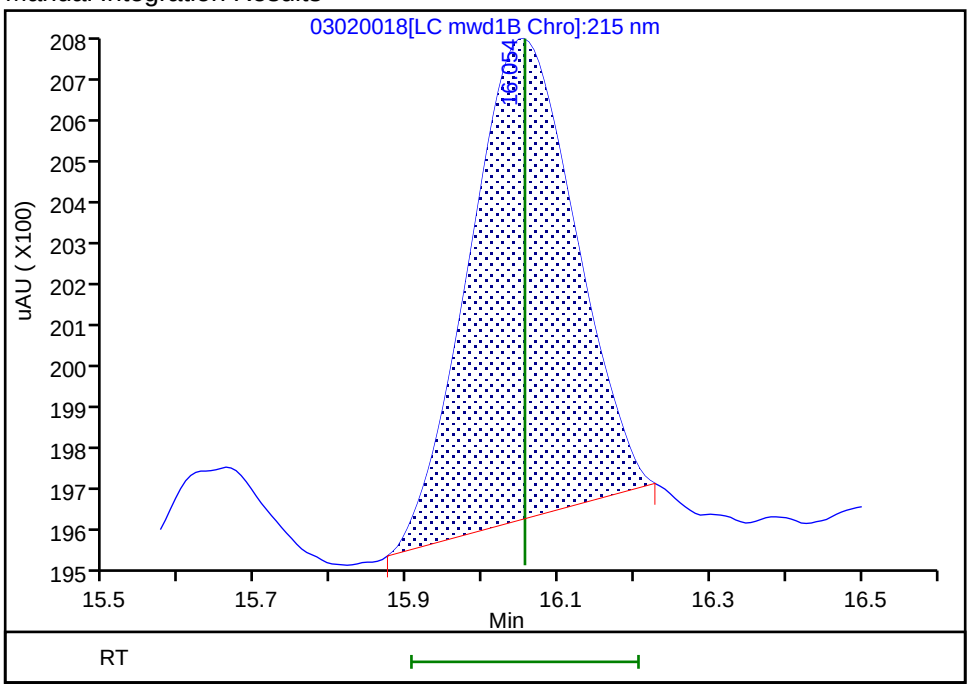
Processing Integration Results

RT: 16.05
Area: 17086
Amount: 0.126120
Amount Units: ug/ml



Manual Integration Results

RT: 16.05
Area: 10664
Amount: 0.087040
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:12:01
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

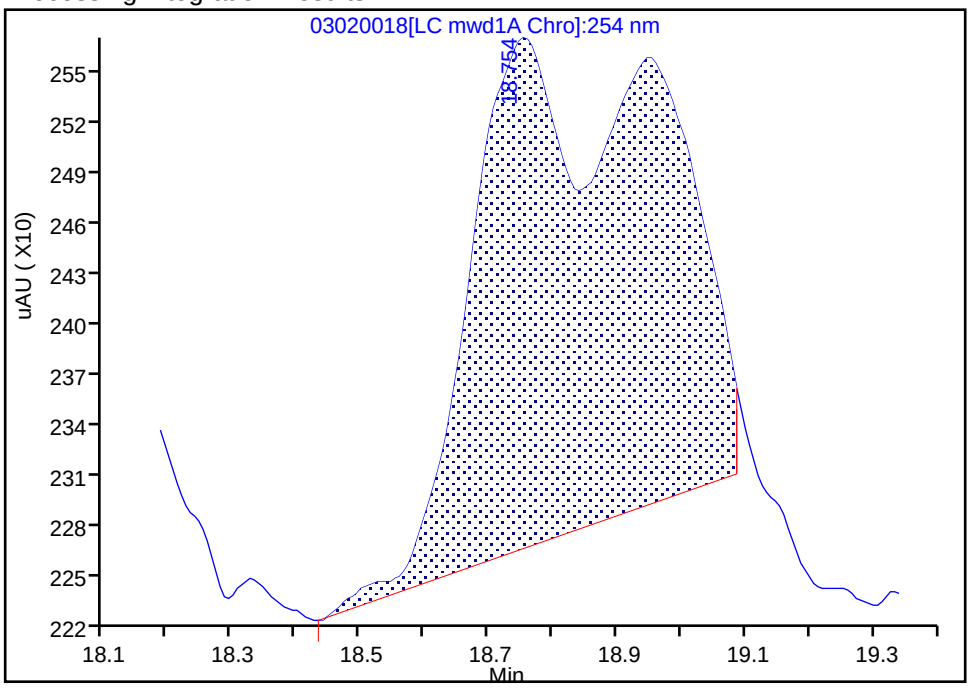
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D
Injection Date: 03-Mar-2022 02:03:29 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 1
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

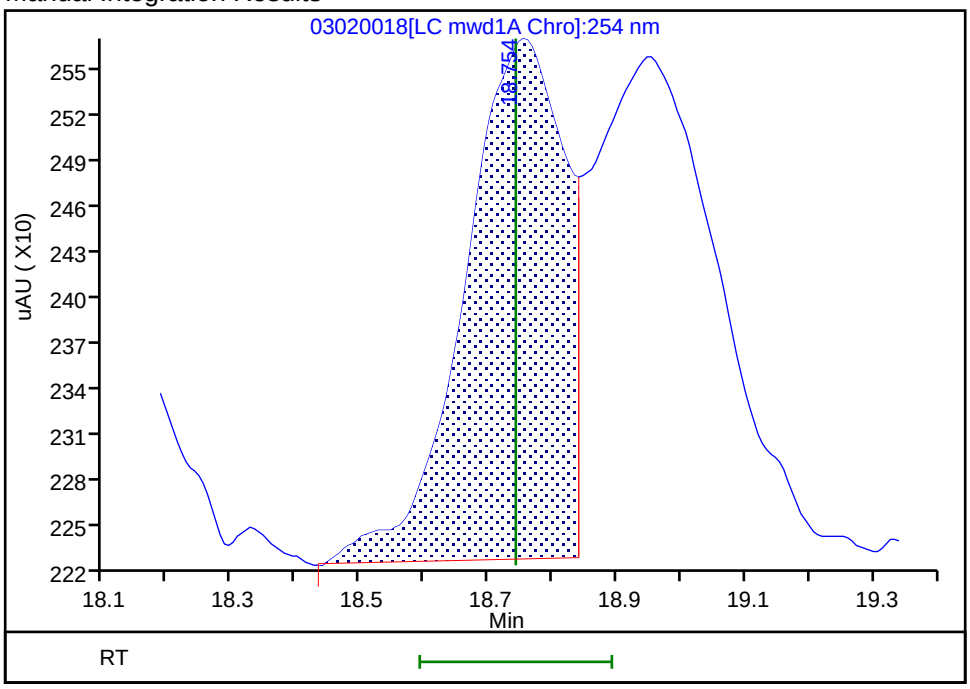
Processing Integration Results

RT: 18.75
Area: 6109
Amount: 0.012300
Amount Units: ug/ml



Manual Integration Results

RT: 18.75
Area: 3705
Amount: 0.010276
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:11:46
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

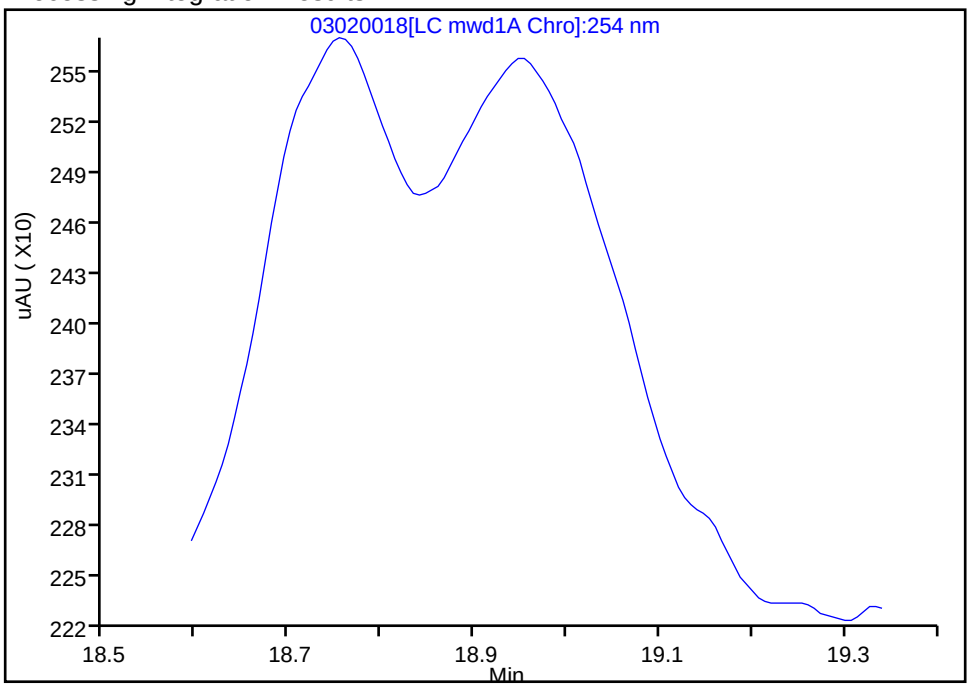
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D				
Injection Date:	03-Mar-2022 02:03:29	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

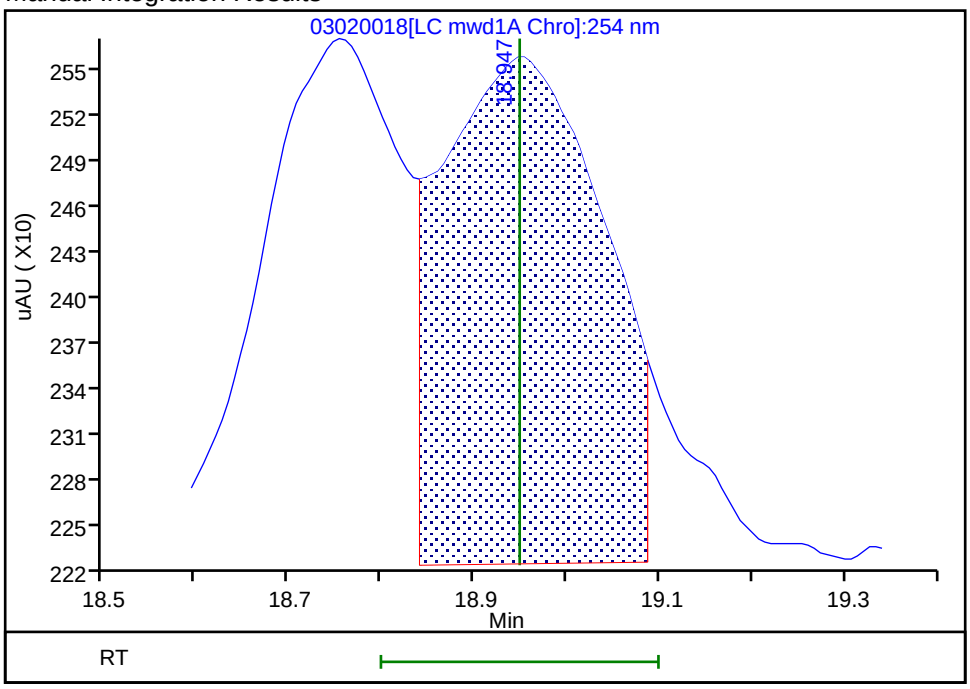
Not Detected
Expected RT: 18.95

Processing Integration Results



Manual Integration Results

RT: 18.95
Area: 3947
Amount: 0.009500
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:11:46
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

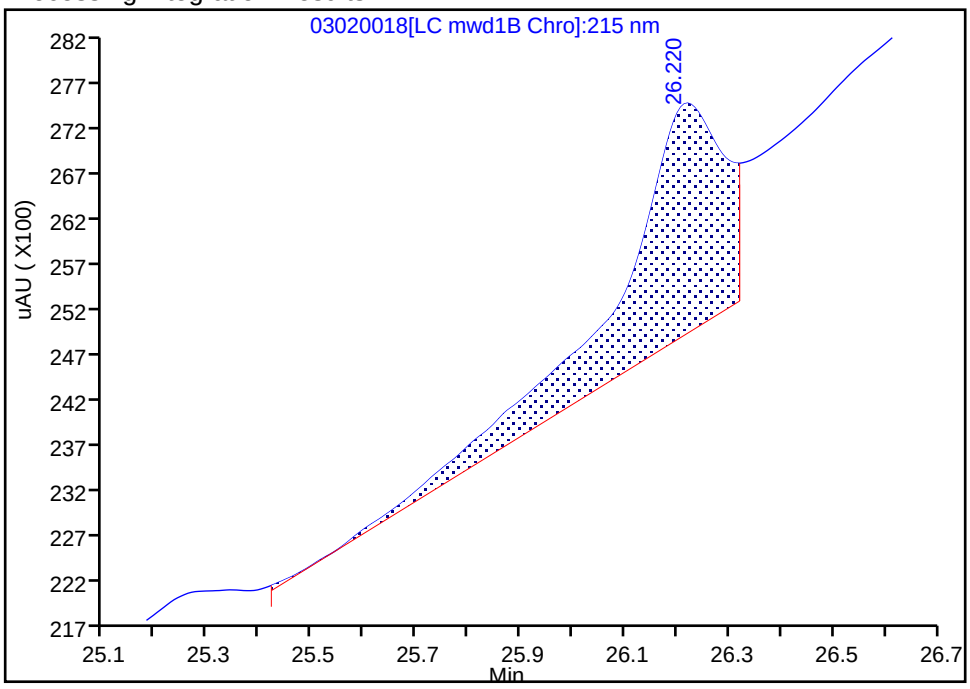
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D
Injection Date: 03-Mar-2022 02:03:29 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 1
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

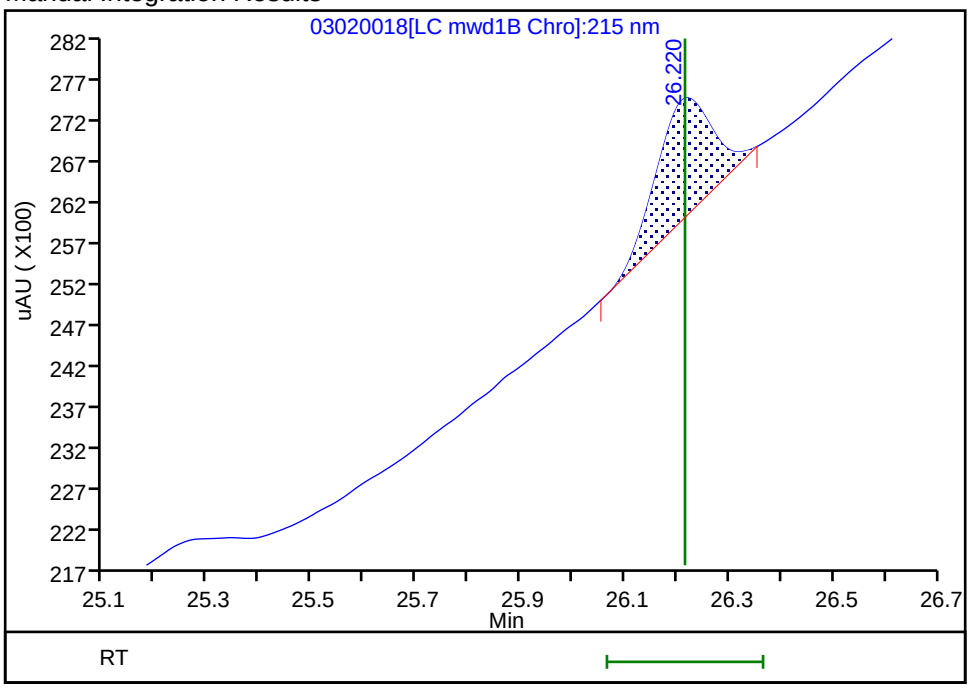
Processing Integration Results

RT: 26.22
Area: 35507
Amount: 0.096197
Amount Units: ug/ml



Manual Integration Results

RT: 26.22
Area: 10842
Amount: 0.083833
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:11:57
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Calibration / HMX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

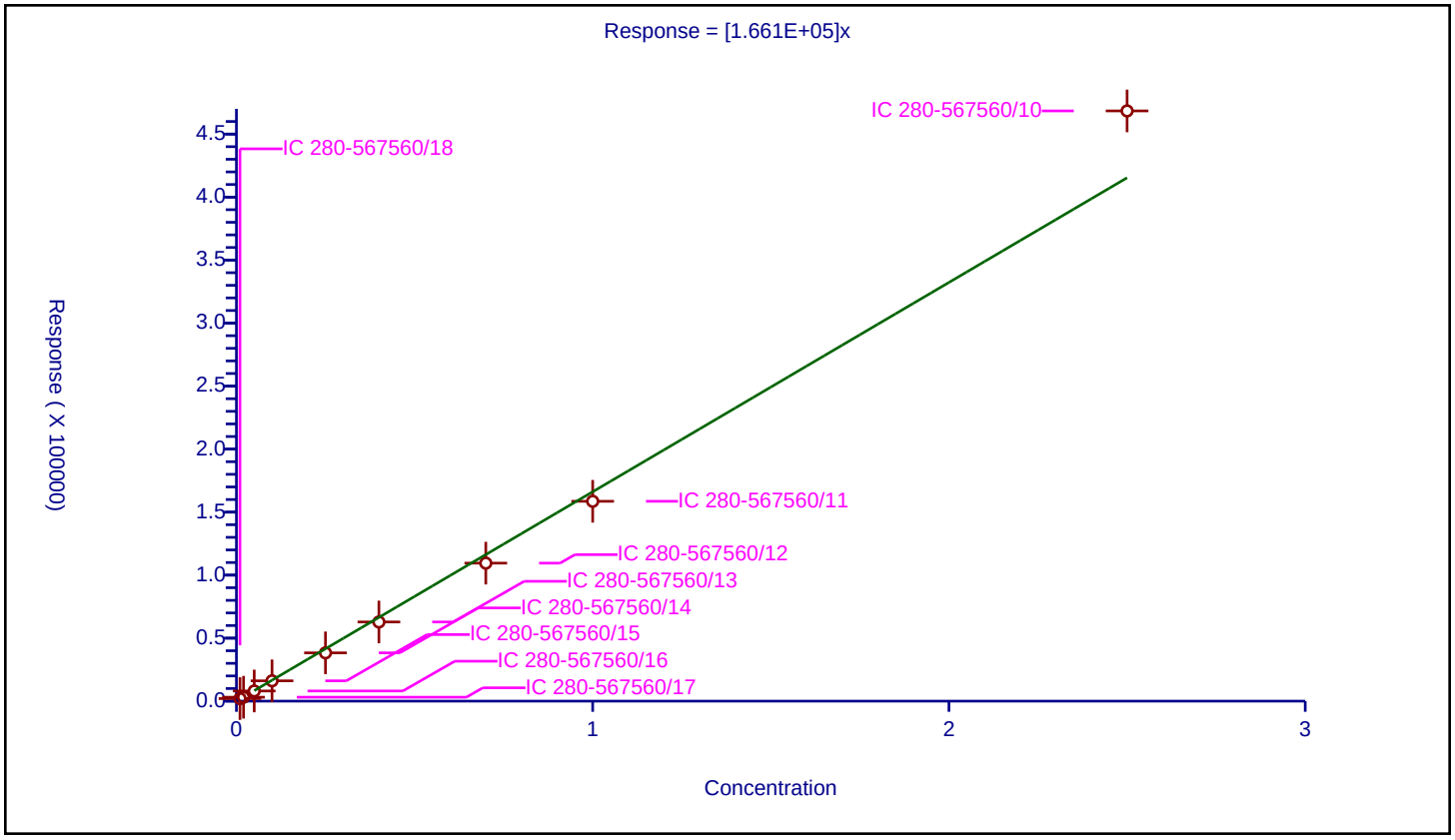
Curve Coefficients

Intercept:	0
Slope:	1.661E+05

Error Coefficients

Standard Error:	19200
Relative Standard Error:	10.5
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01	2040.0			204000.0	Y
2	IC 280-567560/17	0.02	3127.0			156350.0	Y
3	IC 280-567560/16	0.05	8053.0			161060.0	Y
4	IC 280-567560/15	0.1	16109.0			161090.0	Y
5	IC 280-567560/14	0.25	38318.0			153272.0	Y
6	IC 280-567560/13	0.4	62819.0			157047.5	Y
7	IC 280-567560/12	0.7	109512.0			156445.714286	Y
8	IC 280-567560/11	1.0	158593.0			158593.0	Y
9	IC 280-567560/10	2.5	468398.0			187359.2	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

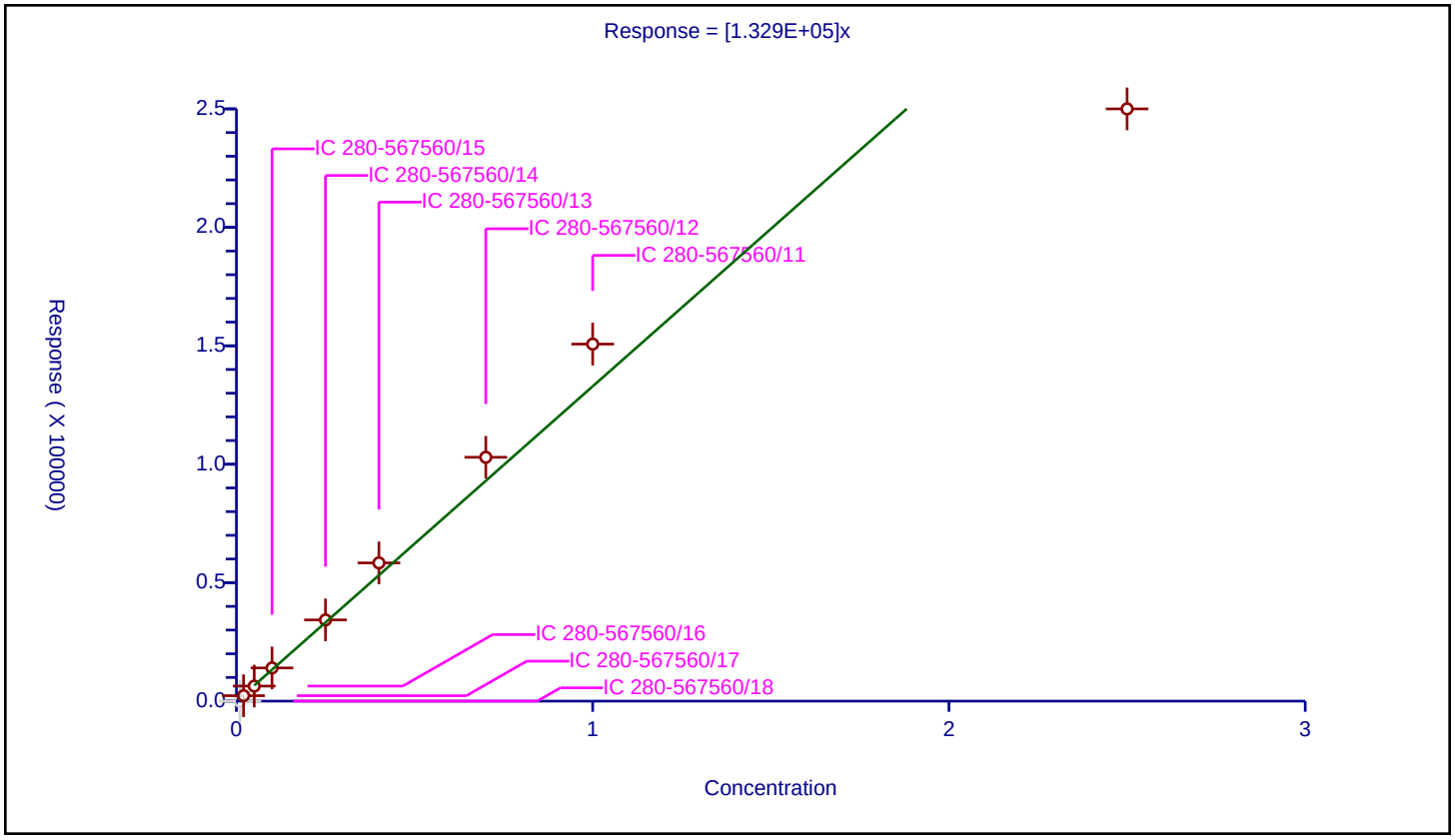
Curve Coefficients

Intercept:	0
Slope:	1.329E+05

Error Coefficients

Standard Error:	32100
Relative Standard Error:	13.3
Correlation Coefficient:	0.955
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01	0.0			0.0	N
2	IC 280-567560/17	0.02	2301.0			115050.0	Y
3	IC 280-567560/16	0.05	6356.0			127120.0	Y
4	IC 280-567560/15	0.1	14009.0			140090.0	Y
5	IC 280-567560/14	0.25	34288.0			137152.0	Y
6	IC 280-567560/13	0.4	58358.0			145895.0	Y
7	IC 280-567560/12	0.7	102939.0			147055.714286	Y
8	IC 280-567560/11	1.0	150719.0			150719.0	Y
9	IC 280-567560/10	2.5	250000.0			100000.0	Y



Calibration / RDX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

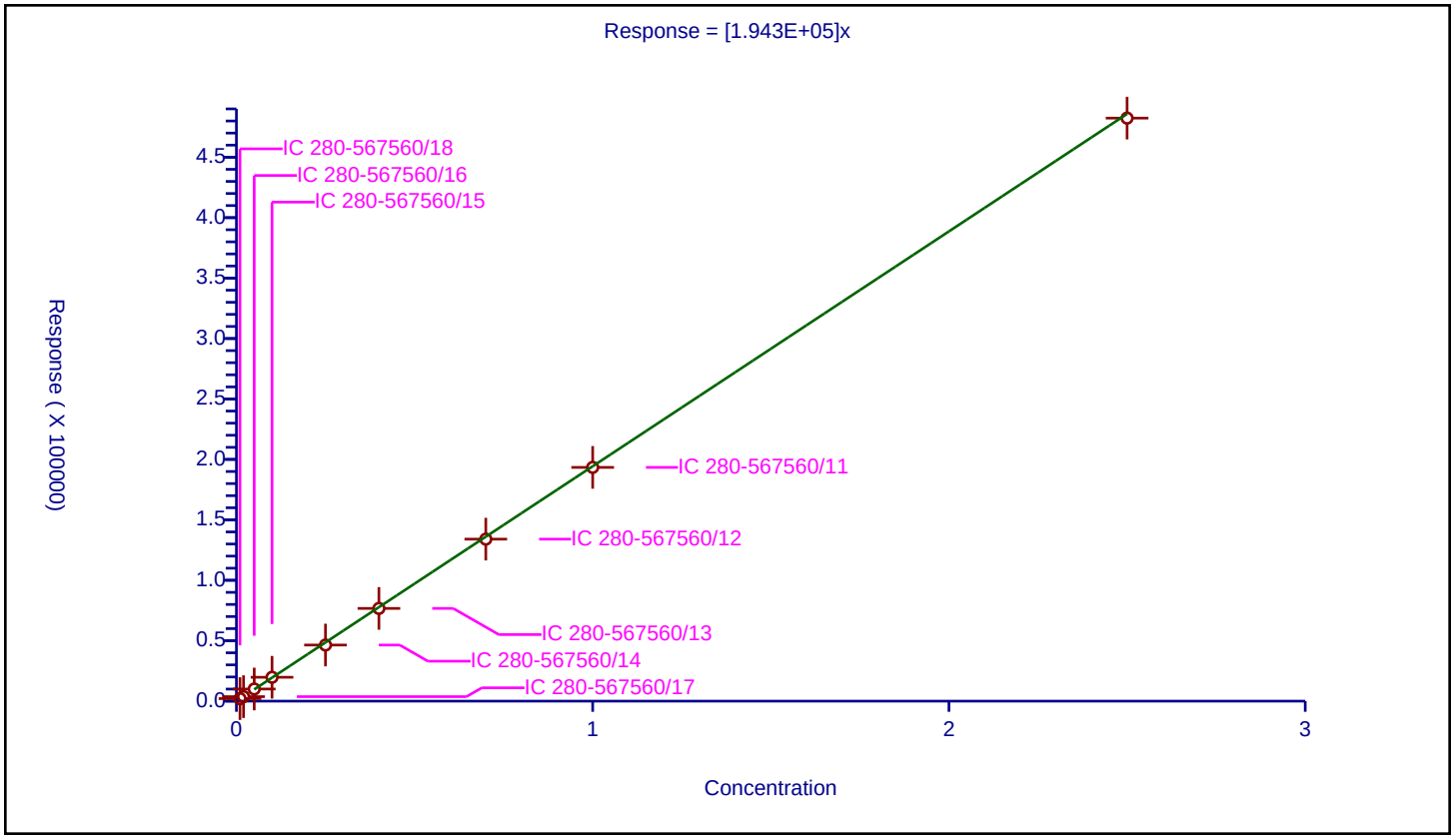
Curve Coefficients

Intercept:	0
Slope:	1.943E+05

Error Coefficients

Standard Error:	1690
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01	2097.0			209700.0	Y
2	IC 280-567560/17	0.02	3719.0			185950.0	Y
3	IC 280-567560/16	0.05	10028.0			200560.0	Y
4	IC 280-567560/15	0.1	19750.0			197500.0	Y
5	IC 280-567560/14	0.25	46417.0			185668.0	Y
6	IC 280-567560/13	0.4	76711.0			191777.5	Y
7	IC 280-567560/12	0.7	134031.0			191472.857143	Y
8	IC 280-567560/11	1.0	193402.0			193402.0	Y
9	IC 280-567560/10	2.5	482372.0			192948.8	Y



Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

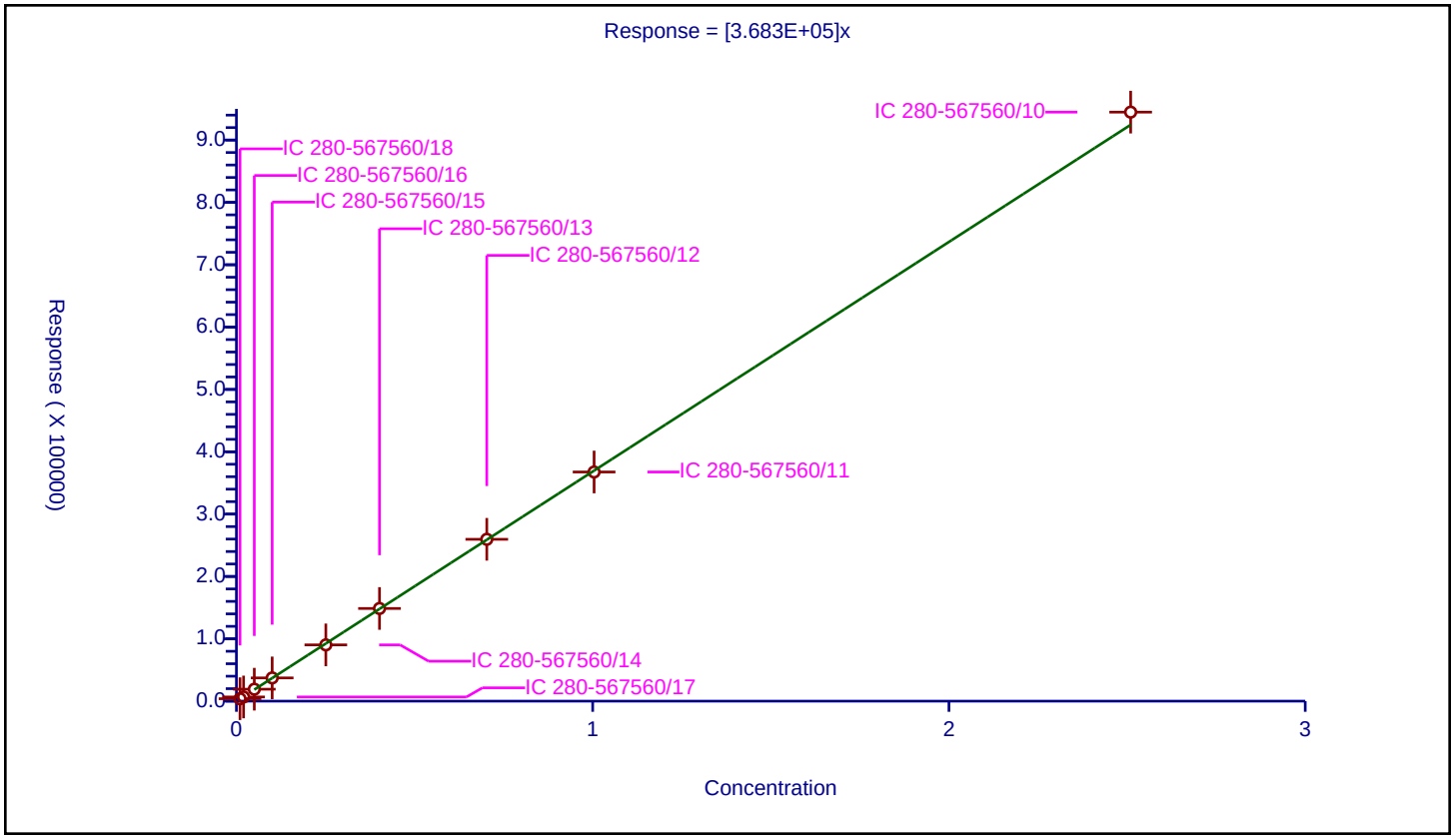
Curve Coefficients

Intercept:	0
Slope:	3.683E+05

Error Coefficients

Standard Error:	7300
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01004	3890.0			387450.199203	Y
2	IC 280-567560/17	0.02008	6686.0			332968.12749	Y
3	IC 280-567560/16	0.0502	19149.0			381454.183267	Y
4	IC 280-567560/15	0.1004	37271.0			371225.099602	Y
5	IC 280-567560/14	0.251	90246.0			359545.816733	Y
6	IC 280-567560/13	0.4016	148639.0			370117.031873	Y
7	IC 280-567560/12	0.7028	259585.0			369358.281161	Y
8	IC 280-567560/11	1.004	367582.0			366117.52988	Y
9	IC 280-567560/10	2.51	944774.0			376403.984064	Y



Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

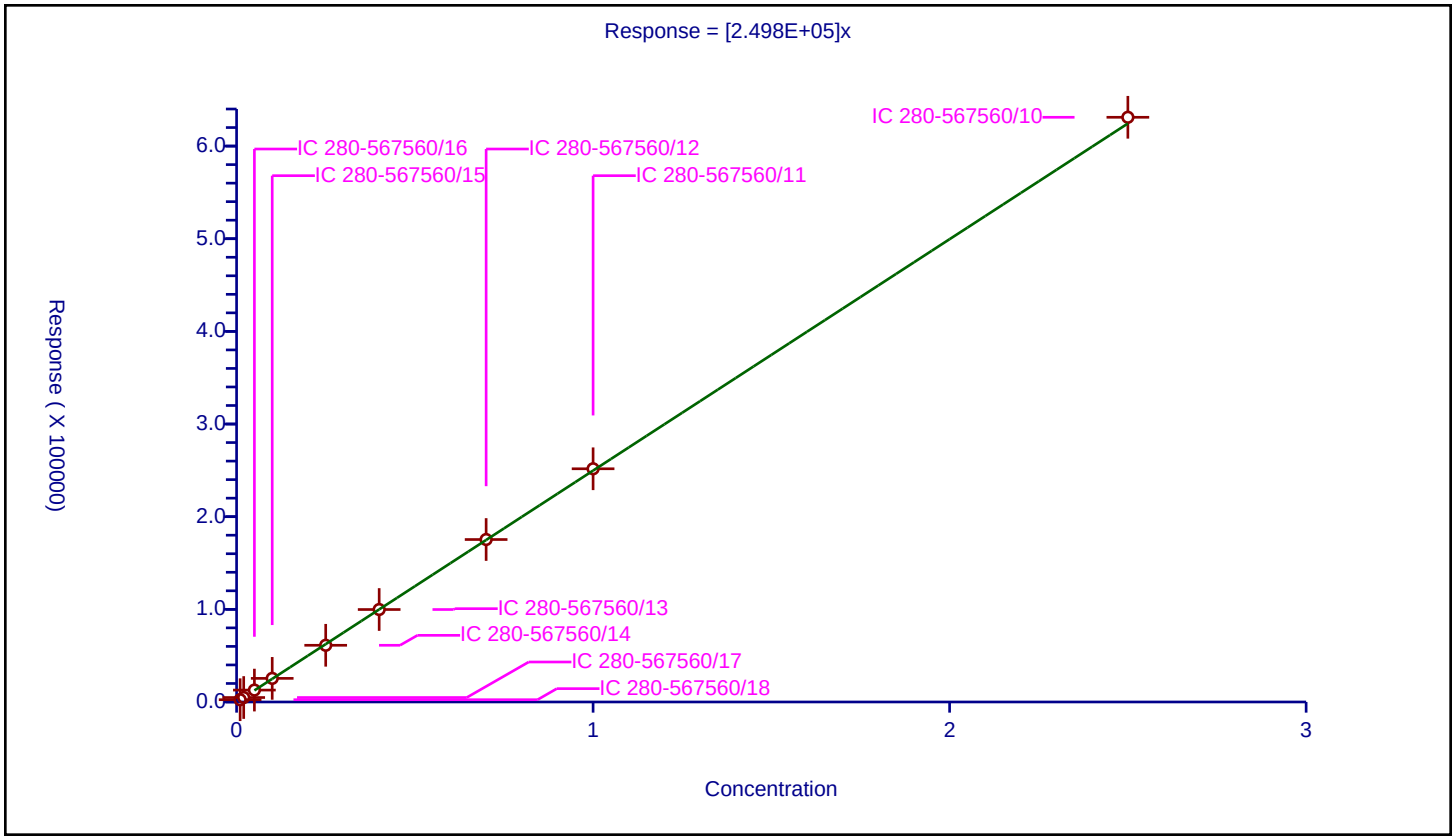
Curve Coefficients

Intercept:	0
Slope:	2.498E+05

Error Coefficients

Standard Error:	2520
Relative Standard Error:	2.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01	2461.0			246100.0	Y
2	IC 280-567560/17	0.02	4809.0			240450.0	Y
3	IC 280-567560/16	0.05	12864.0			257280.0	Y
4	IC 280-567560/15	0.1	25499.0			254990.0	Y
5	IC 280-567560/14	0.25	61198.0			244792.0	Y
6	IC 280-567560/13	0.4	99804.0			249510.0	Y
7	IC 280-567560/12	0.7	175358.0			250511.428571	Y
8	IC 280-567560/11	1.0	251717.0			251717.0	Y
9	IC 280-567560/10	2.5	631065.0			252426.0	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

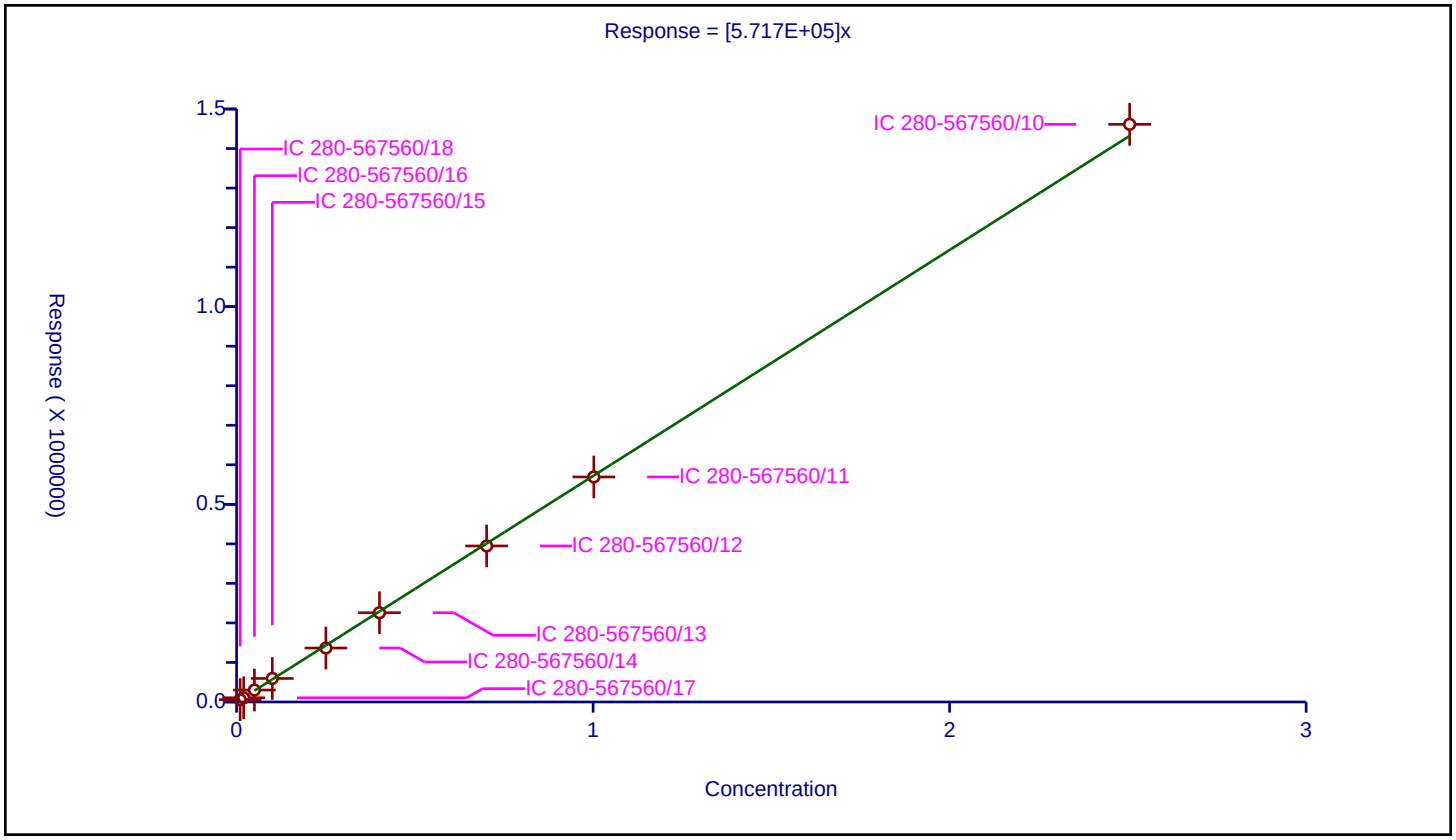
Curve Coefficients

Intercept:	0
Slope:	5.717E+05

Error Coefficients

Standard Error:	11000
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01002	5961.0			594910.179641	Y
2	IC 280-567560/17	0.02004	10643.0			531087.824351	Y
3	IC 280-567560/16	0.0501	30181.0			602415.169661	Y
4	IC 280-567560/15	0.1002	59537.0			594181.636727	Y
5	IC 280-567560/14	0.2505	136486.0			544854.291417	Y
6	IC 280-567560/13	0.4008	225815.0			563410.678643	Y
7	IC 280-567560/12	0.7014	394707.0			562741.659538	Y
8	IC 280-567560/11	1.002	569212.0			568075.848303	Y
9	IC 280-567560/10	2.505	1461217.0			583320.159681	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

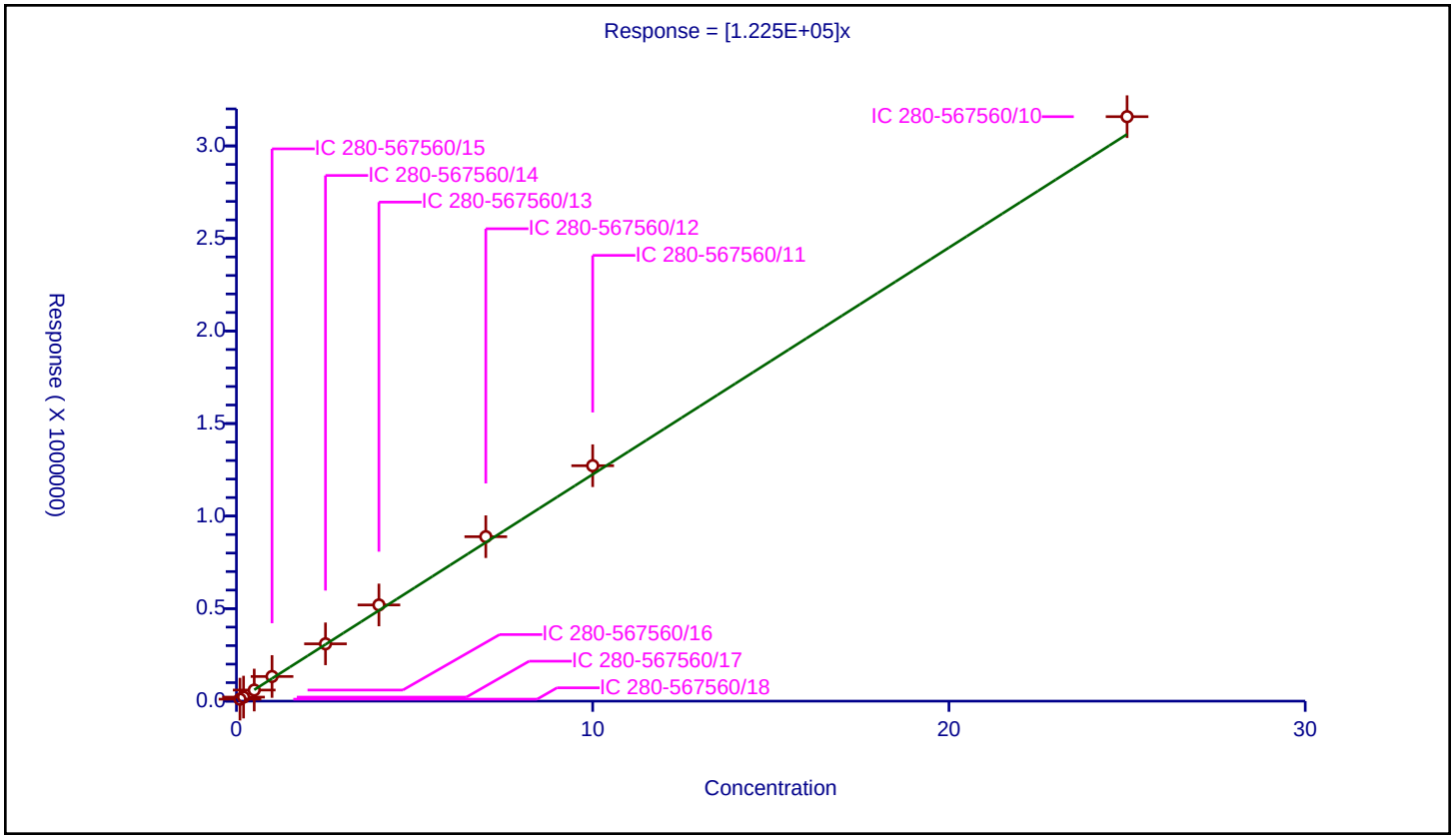
Curve Coefficients

Intercept:	0
Slope:	1.225E+05

Error Coefficients

Standard Error:	40600
Relative Standard Error:	7.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.1	10664.0			106640.0	Y
2	IC 280-567560/17	0.2	21750.0			108750.0	Y
3	IC 280-567560/16	0.5	59894.0			119788.0	Y
4	IC 280-567560/15	1.0	133241.0			133241.0	Y
5	IC 280-567560/14	2.5	309657.0			123862.8	Y
6	IC 280-567560/13	4.0	519683.0			129920.75	Y
7	IC 280-567560/12	7.0	888552.0			126936.0	Y
8	IC 280-567560/11	10.0	1272015.0			127201.5	Y
9	IC 280-567560/10	25.0	3158004.0			126320.16	Y



Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

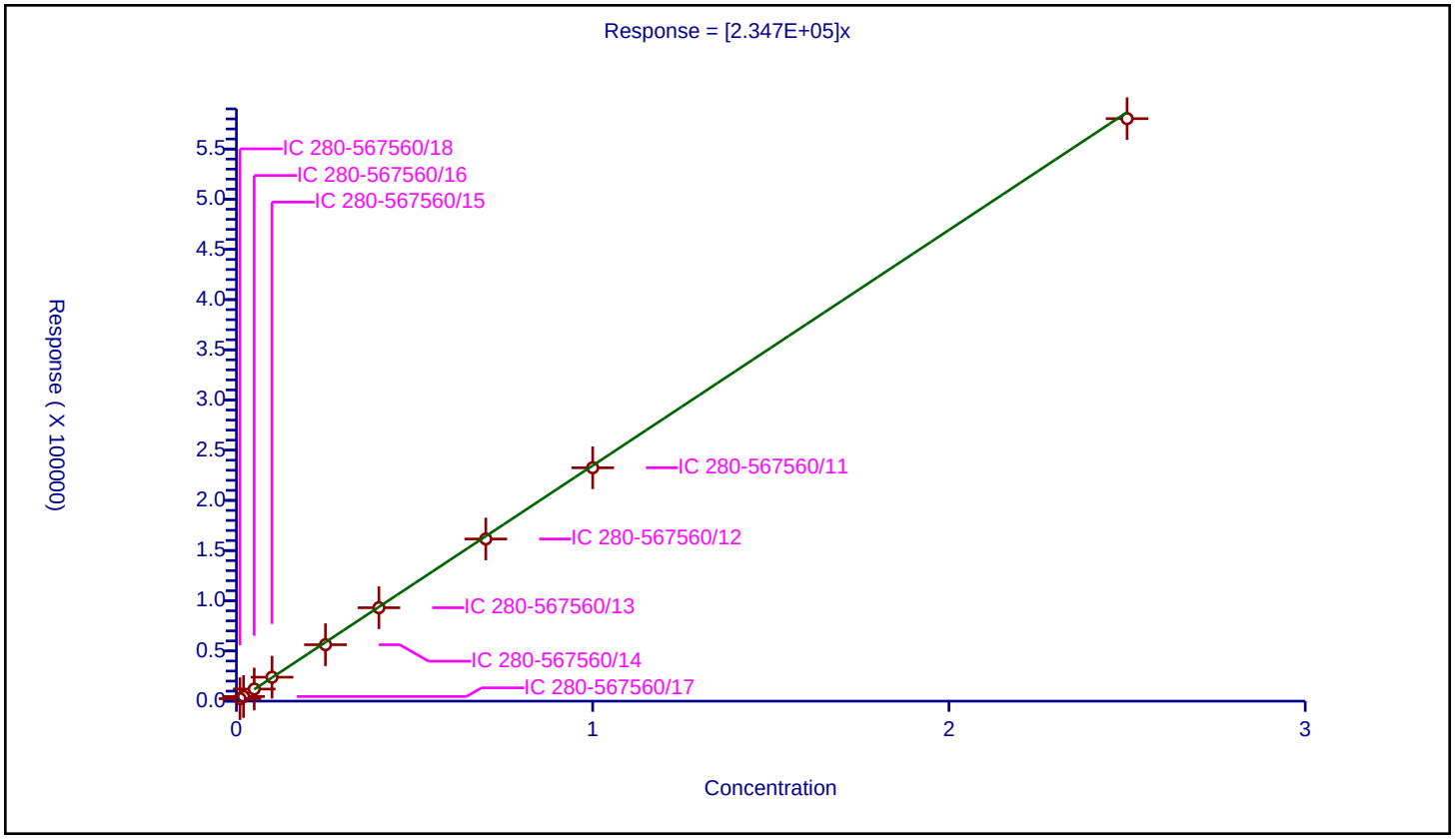
Curve Coefficients

Intercept:	0
Slope:	2.347E+05

Error Coefficients

Standard Error:	2750
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01	2491.0			249100.0	Y
2	IC 280-567560/17	0.02	4607.0			230350.0	Y
3	IC 280-567560/16	0.05	12057.0			241140.0	Y
4	IC 280-567560/15	0.1	23857.0			238570.0	Y
5	IC 280-567560/14	0.25	56221.0			224884.0	Y
6	IC 280-567560/13	0.4	93064.0			232660.0	Y
7	IC 280-567560/12	0.7	161534.0			230762.857143	Y
8	IC 280-567560/11	1.0	232476.0			232476.0	Y
9	IC 280-567560/10	2.5	580270.0			232108.0	Y



Calibration / p-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

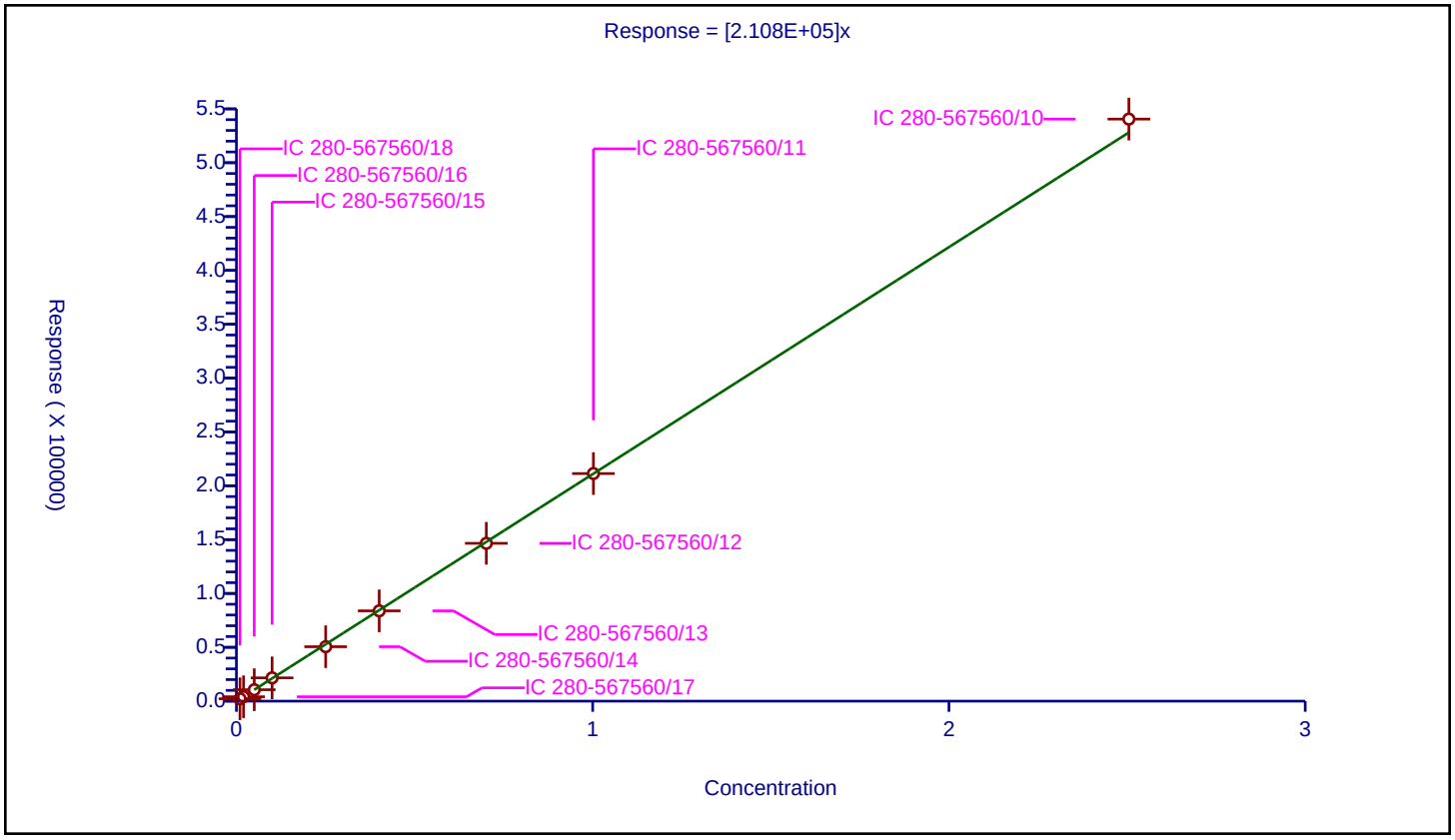
Curve Coefficients

Intercept:	0
Slope:	2.108E+05

Error Coefficients

Standard Error:	4500
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01002	2203.0			219860.279441	Y
2	IC 280-567560/17	0.02004	4078.0			203493.013972	Y
3	IC 280-567560/16	0.0501	10595.0			211477.045908	Y
4	IC 280-567560/15	0.1002	21625.0			215818.363273	Y
5	IC 280-567560/14	0.2505	50555.0			201816.367265	Y
6	IC 280-567560/13	0.4008	83857.0			209224.051896	Y
7	IC 280-567560/12	0.7014	146563.0			208957.798688	Y
8	IC 280-567560/11	1.002	211344.0			210922.155689	Y
9	IC 280-567560/10	2.505	540531.0			215780.838323	Y



Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

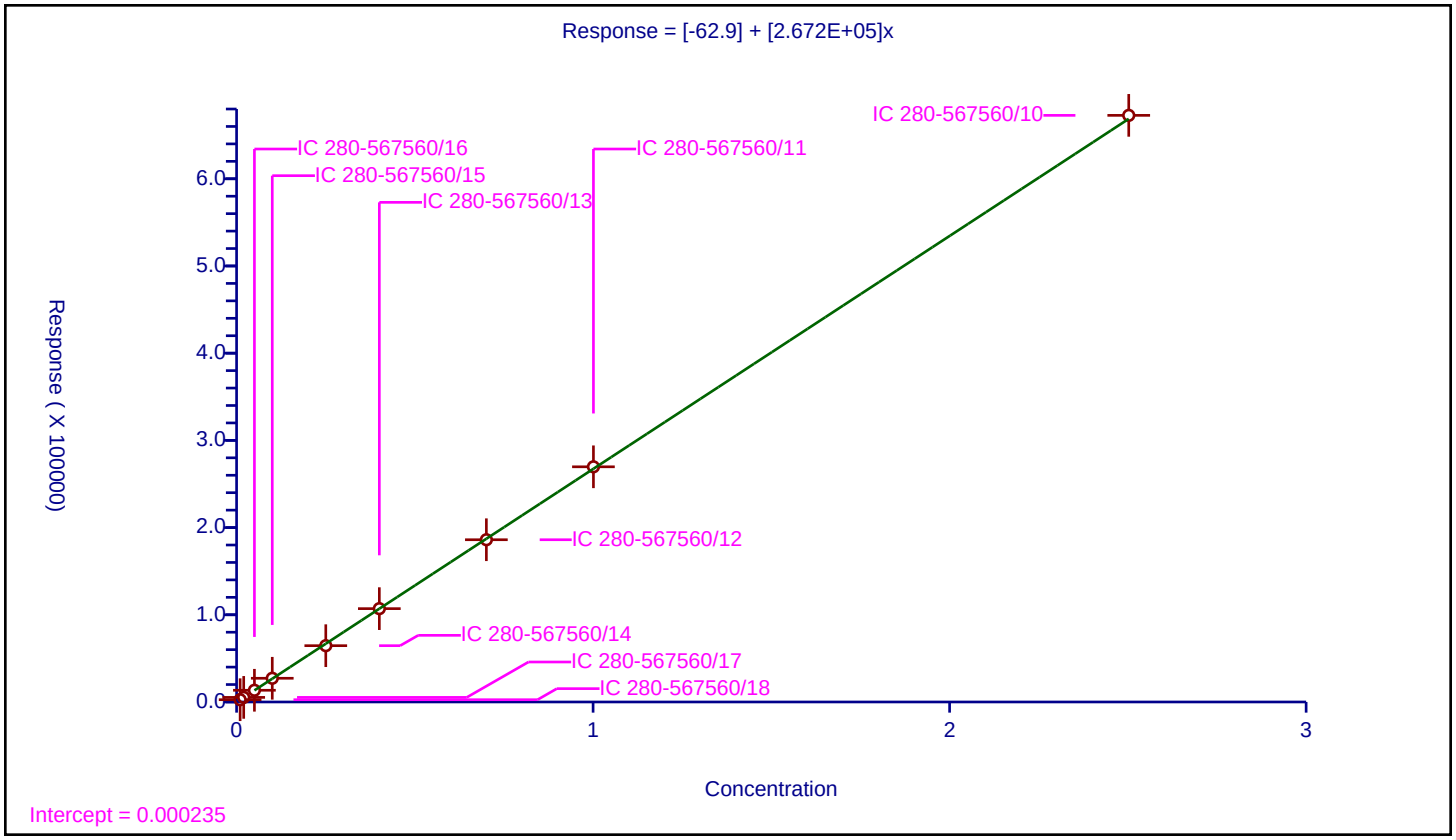
Curve Coefficients

Intercept:	-62.9
Slope:	2.672E+05

Error Coefficients

Standard Error:	1990
Relative Standard Error:	1.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01001	2610.0			260739.260739	Y
2	IC 280-567560/17	0.02002	5271.0			263286.713287	Y
3	IC 280-567560/16	0.05005	13425.0			268231.768232	Y
4	IC 280-567560/15	0.1001	27216.0			271888.111888	Y
5	IC 280-567560/14	0.25025	64569.0			258017.982018	Y
6	IC 280-567560/13	0.4004	107043.0			267340.15984	Y
7	IC 280-567560/12	0.7007	186078.0			265560.154132	Y
8	IC 280-567560/11	1.001	269691.0			269421.578422	Y
9	IC 280-567560/10	2.5025	672715.0			268817.182817	Y



Calibration / m-Nitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

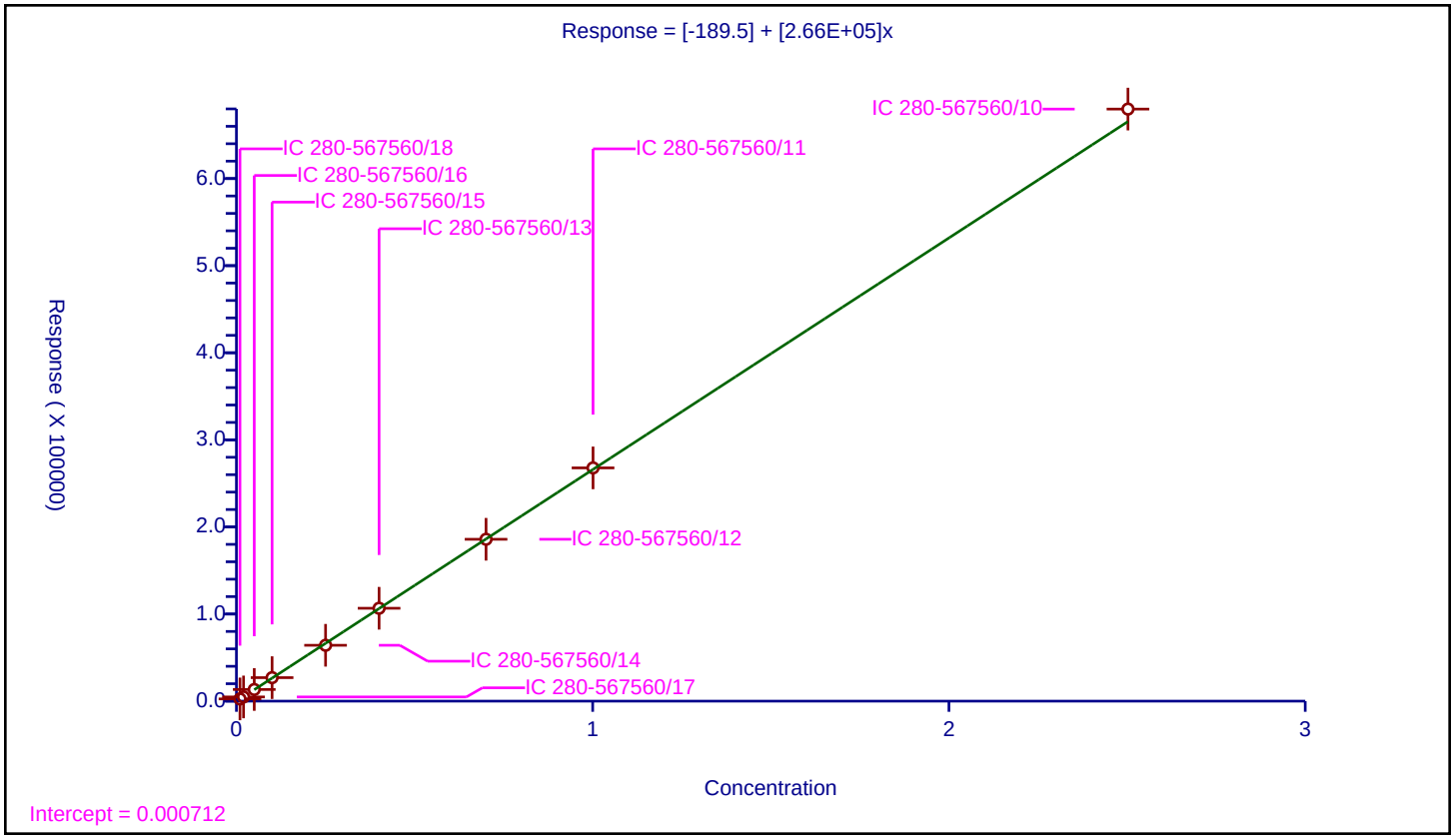
Curve Coefficients

Intercept:	-189.5
Slope:	2.66E+05

Error Coefficients

Standard Error:	5530
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01001	2543.0			254045.954046	Y
2	IC 280-567560/17	0.02002	4805.0			240009.99001	Y
3	IC 280-567560/16	0.05005	13387.0			267472.527473	Y
4	IC 280-567560/15	0.1001	26978.0			269510.48951	Y
5	IC 280-567560/14	0.25025	64150.0			256343.656344	Y
6	IC 280-567560/13	0.4004	106661.0			266386.113886	Y
7	IC 280-567560/12	0.7007	185839.0			265219.066648	Y
8	IC 280-567560/11	1.001	267812.0			267544.455544	Y
9	IC 280-567560/10	2.5025	679800.0			271648.351648	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

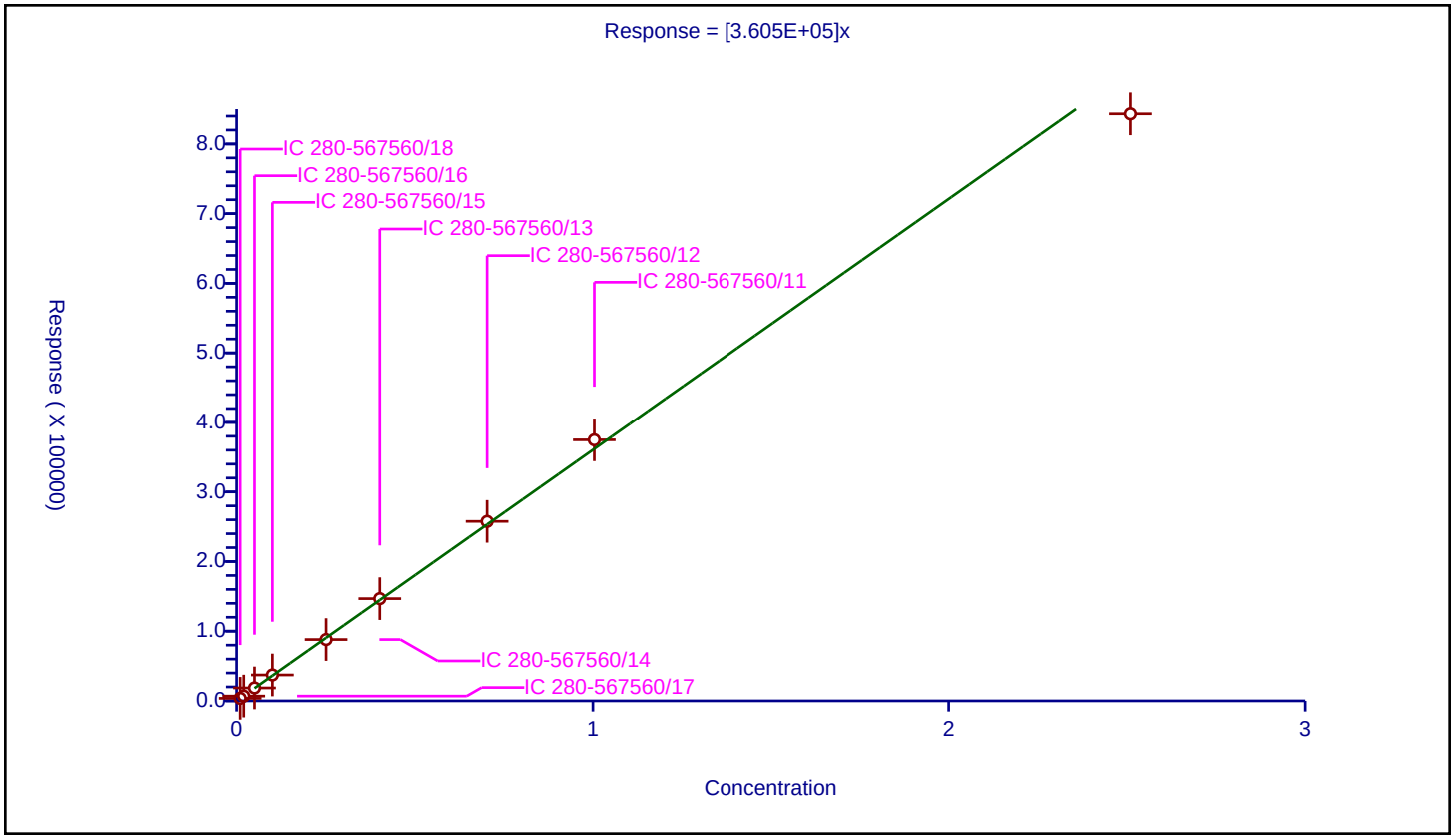
Curve Coefficients

Intercept:	0
Slope:	3.605E+05

Error Coefficients

Standard Error:	22400
Relative Standard Error:	3.8
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01004	3705.0			369023.904382	Y
2	IC 280-567560/17	0.02008	6899.0			343575.697211	Y
3	IC 280-567560/16	0.0502	18562.0			369760.956175	Y
4	IC 280-567560/15	0.1004	37178.0			370298.804781	Y
5	IC 280-567560/14	0.251	88010.0			350637.450199	Y
6	IC 280-567560/13	0.4016	146764.0			365448.207171	Y
7	IC 280-567560/12	0.7028	257718.0			366701.764371	Y
8	IC 280-567560/11	1.004	374916.0			373422.310757	Y
9	IC 280-567560/10	2.51	843240.0			335952.191235	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

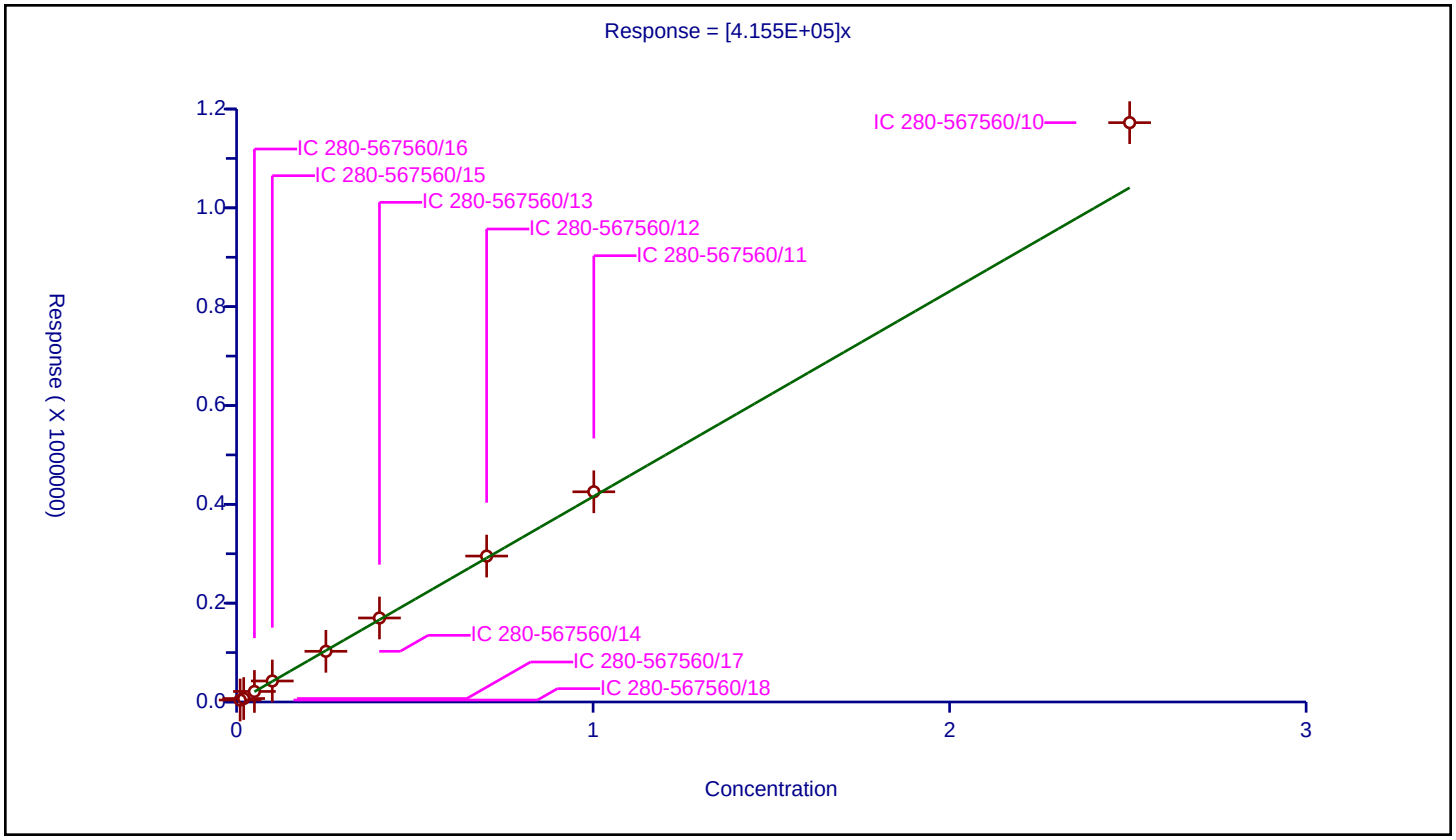
Curve Coefficients

Intercept:	0
Slope:	4.155E+05

Error Coefficients

Standard Error:	46700
Relative Standard Error:	7.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01002	3947.0			393912.175649	Y
2	IC 280-567560/17	0.02004	6970.0			347804.391218	Y
3	IC 280-567560/16	0.0501	21339.0			425928.143713	Y
4	IC 280-567560/15	0.1002	42514.0			424291.417166	Y
5	IC 280-567560/14	0.2505	102576.0			409485.02994	Y
6	IC 280-567560/13	0.4008	170012.0			424181.636727	Y
7	IC 280-567560/12	0.7014	295298.0			421012.261192	Y
8	IC 280-567560/11	1.002	425388.0			424538.922156	Y
9	IC 280-567560/10	2.505	1172398.0			468023.153693	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

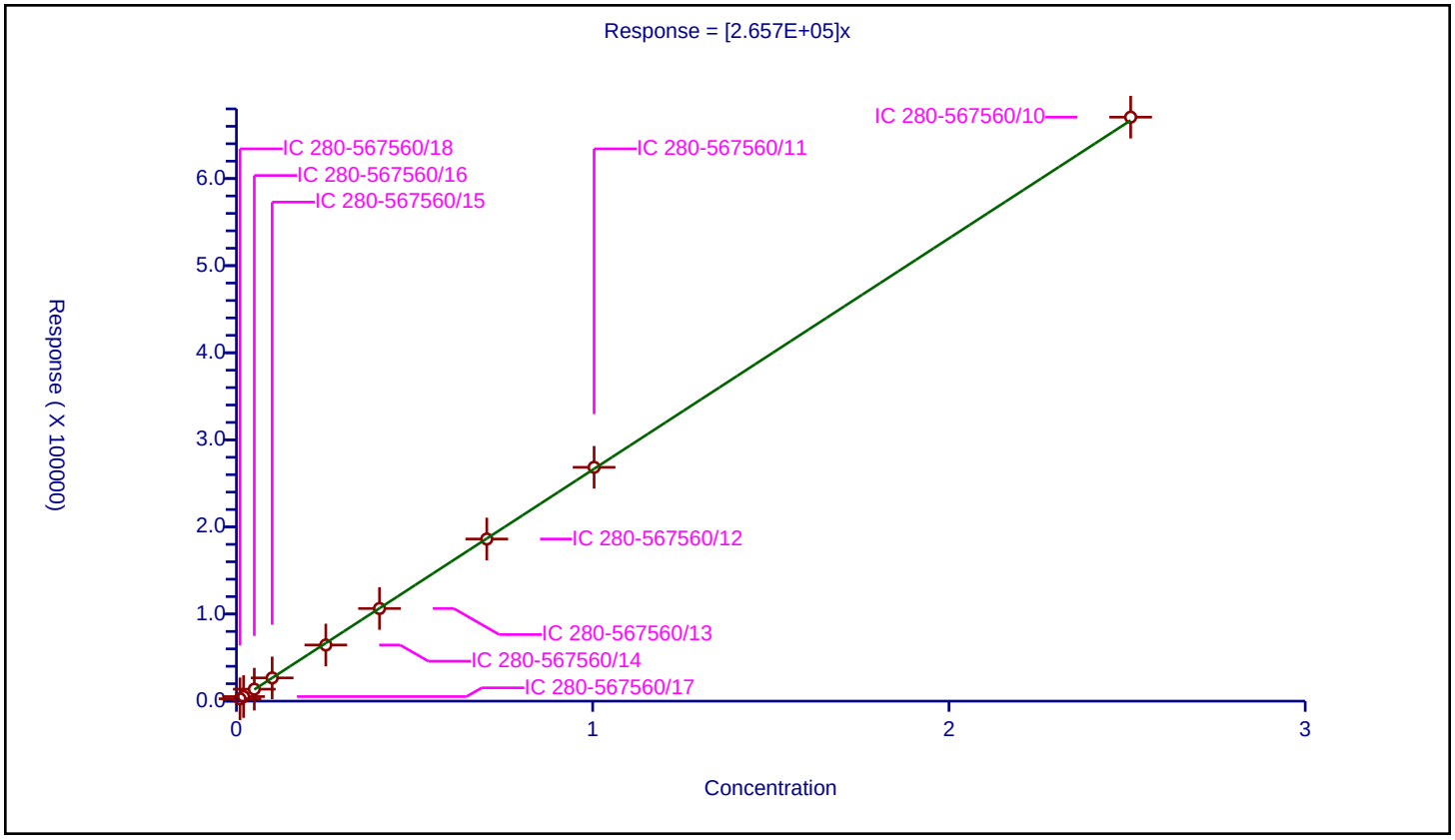
Curve Coefficients

Intercept:	0
Slope:	2.657E+05

Error Coefficients

Standard Error:	1660
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01004	2704.0			269322.709163	Y
2	IC 280-567560/17	0.02008	5233.0			260607.569721	Y
3	IC 280-567560/16	0.0502	13757.0			274043.824701	Y
4	IC 280-567560/15	0.1004	26687.0			265806.772908	Y
5	IC 280-567560/14	0.251	64489.0			256928.286853	Y
6	IC 280-567560/13	0.4016	106362.0			264845.61753	Y
7	IC 280-567560/12	0.7028	186150.0			264869.095048	Y
8	IC 280-567560/11	1.004	268478.0			267408.366534	Y
9	IC 280-567560/10	2.51	670482.0			267124.302789	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

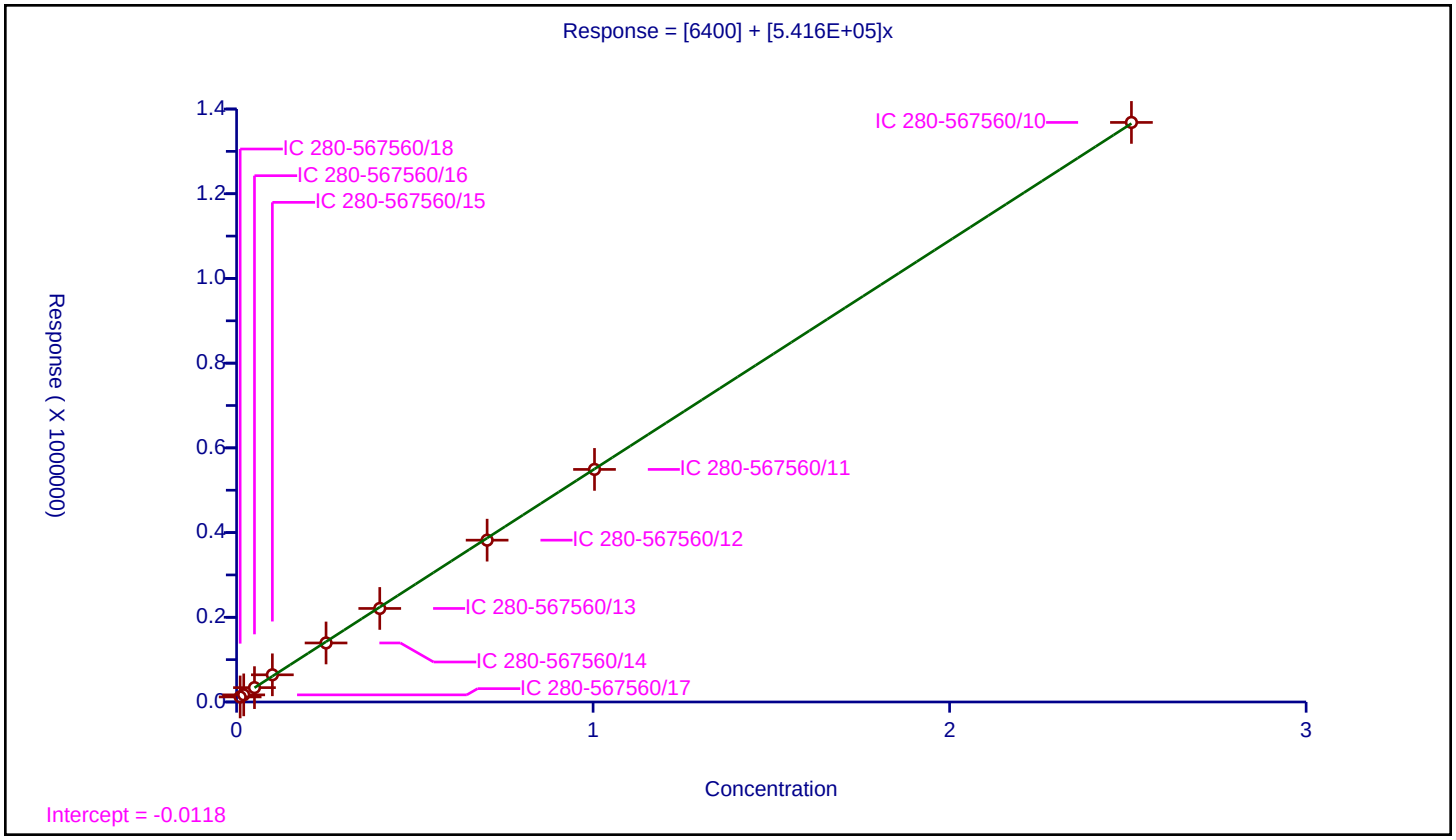
Curve Coefficients

Intercept:	6400
Slope:	5.416E+05

Error Coefficients

Standard Error:	2990
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 280-567560/18	0.01004	11900.0			1185258.964143	Y
2	IC 280-567560/17	0.02008	16863.0			839790.836653	Y
3	IC 280-567560/16	0.0502	33918.0			675657.370518	Y
4	IC 280-567560/15	0.1004	64187.0			639312.749004	Y
5	IC 280-567560/14	0.251	139375.0			555278.884462	Y
6	IC 280-567560/13	0.4016	220828.0			549870.517928	Y
7	IC 280-567560/12	0.7028	382059.0			543624.075128	Y
8	IC 280-567560/11	1.004	549112.0			546924.302789	Y
9	IC 280-567560/10	2.51	1368356.0			545161.752988	Y



Calibration / Tetryl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

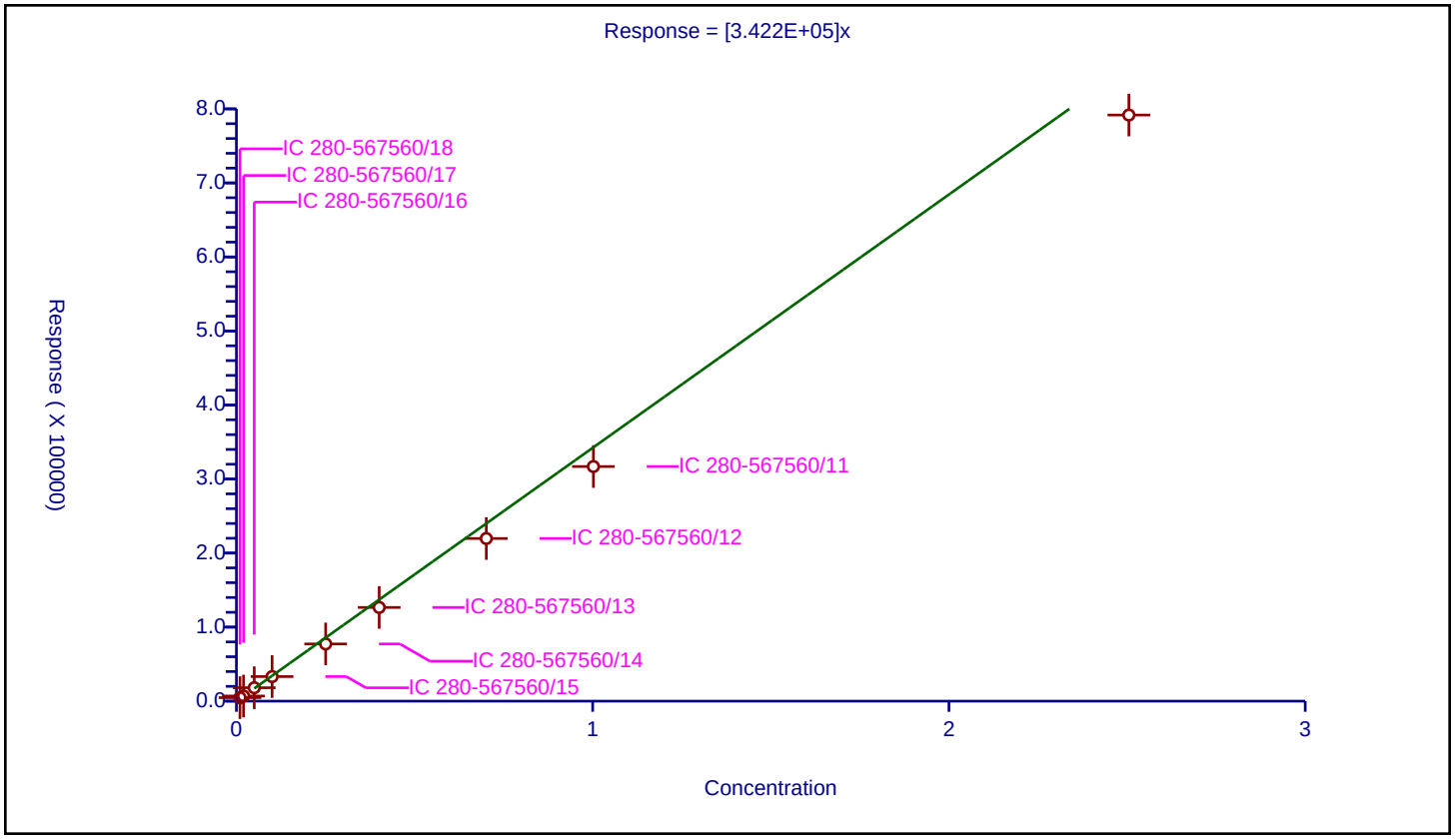
Curve Coefficients

Intercept:	0
Slope:	3.422E+05

Error Coefficients

Standard Error:	26400
Relative Standard Error:	15.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.965

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01002	4722.0			471257.48503	Y
2	IC 280-567560/17	0.02004	6933.0			345958.083832	Y
3	IC 280-567560/16	0.0501	18110.0			361477.045908	Y
4	IC 280-567560/15	0.1002	33188.0			331217.56487	Y
5	IC 280-567560/14	0.2505	77249.0			308379.241517	Y
6	IC 280-567560/13	0.4008	126546.0			315733.532934	Y
7	IC 280-567560/12	0.7014	219675.0			313195.038494	Y
8	IC 280-567560/11	1.002	316900.0			316267.46507	Y
9	IC 280-567560/10	2.505	791703.0			316049.101796	Y



Calibration / 2,4,6-Trinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

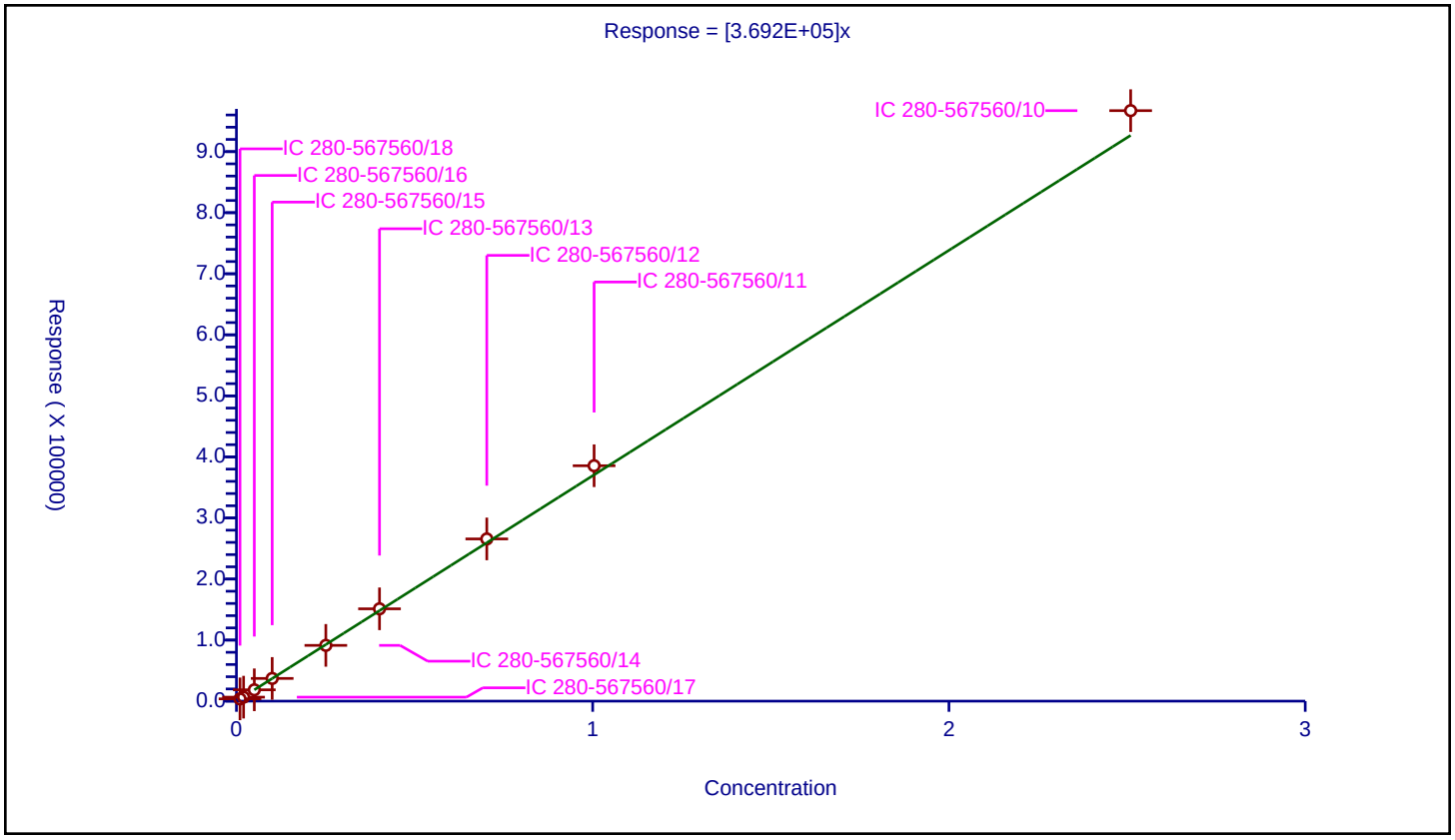
Curve Coefficients

Intercept:	0
Slope:	3.692E+05

Error Coefficients

Standard Error:	15500
Relative Standard Error:	5.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.01004	3720.0			370517.928287	Y
2	IC 280-567560/17	0.02008	6507.0			324053.784861	Y
3	IC 280-567560/16	0.0502	18556.0			369641.434263	Y
4	IC 280-567560/15	0.1004	37205.0			370567.729084	Y
5	IC 280-567560/14	0.251	91338.0			363896.414343	Y
6	IC 280-567560/13	0.4016	151235.0			376581.175299	Y
7	IC 280-567560/12	0.7028	265676.0			378025.042686	Y
8	IC 280-567560/11	1.004	385560.0			384023.904382	Y
9	IC 280-567560/10	2.51	967117.0			385305.577689	Y



Calibration / PETN

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

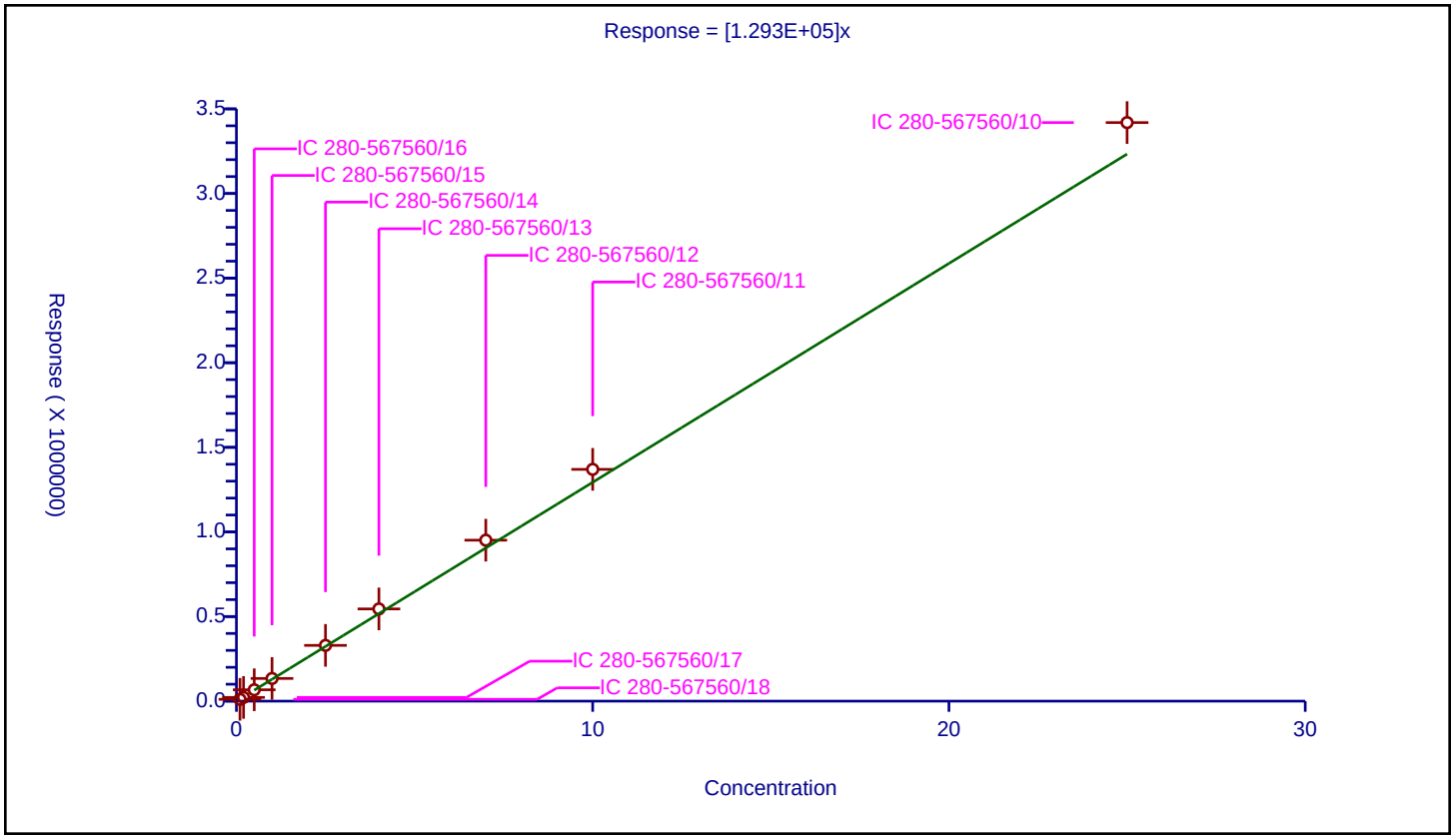
Curve Coefficients

Intercept:	0
Slope:	1.293E+05

Error Coefficients

Standard Error:	73600
Relative Standard Error:	9.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/18	0.1	10842.0			108420.0	Y
2	IC 280-567560/17	0.2	21923.0			109615.0	Y
3	IC 280-567560/16	0.5	67082.0			134164.0	Y
4	IC 280-567560/15	1.0	134076.0			134076.0	Y
5	IC 280-567560/14	2.5	329509.0			131803.6	Y
6	IC 280-567560/13	4.0	544987.0			136246.75	Y
7	IC 280-567560/12	7.0	951206.0			135886.571429	Y
8	IC 280-567560/11	10.0	1369840.0			136984.0	Y
9	IC 280-567560/10	25.0	3419168.0			136766.72	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1 Analy Batch No.: 567560

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2022 03:13 Calibration End Date: 03/03/2022 07:19 Calibration ID: 62763

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-567560/27	03020027.D
Level 2	IC 280-567560/26	03020026.D
Level 3	IC 280-567560/25	03020025.D
Level 4	IC 280-567560/24	03020024.D
Level 5	IC 280-567560/23	03020023.D
Level 6	IC 280-567560/22	03020022.D
Level 7	IC 280-567560/21	03020021.D
Level 8	IC 280-567560/20	03020020.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	5.170	5.168	5.172	5.164	5.171	5.157	5.156	5.140			5.021 - 5.321	5.162
DNX	6.030	6.028	6.032	6.024	6.031	6.017	6.016	6.000			5.881 - 6.181	6.022
MNX	7.624	7.621	7.625	7.617	7.625	7.610	7.602	7.593			7.475 - 7.775	7.615

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Denver | Job No.: 280-159137-1 | Analy Batch No.: 567560

SDG No.:

Instrument ID: CHHPLC_X5 | GC Column: Luna-phenyl ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2022 03:13 | Calibration End Date: 03/03/2022 07:19 | Calibration ID: 62763

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-567560/27	03020027.D
Level 2	IC 280-567560/26	03020026.D
Level 3	IC 280-567560/25	03020025.D
Level 4	IC 280-567560/24	03020024.D
Level 5	IC 280-567560/23	03020023.D
Level 6	IC 280-567560/22	03020022.D
Level 7	IC 280-567560/21	03020021.D
Level 8	IC 280-567560/20	03020020.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	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	349201 351611	355385 355367	353267 354987	350933 361808	Ave		354069.850				1.1		20.0			
DNX	317133 267552	289031 269316	277622 267891	269419 271146	Ave		278638.900				6.2		20.0			
MNX	257326 246598	252785 247481	254053 246929	246461 249015	Ave		250081.020				1.6		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver | Job No.: 280-159137-1 | Analy Batch No.: 567560

SDG No.:

Instrument ID: CHHPLC_X5 | GC Column: Luna-phenyl ID: 4.6(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 03/03/2022 03:13 | Calibration End Date: 03/03/2022 07:19 | Calibration ID: 62763

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-567560/27	03020027.D
Level 2	IC 280-567560/26	03020026.D
Level 3	IC 280-567560/25	03020025.D
Level 4	IC 280-567560/24	03020024.D
Level 5	IC 280-567560/23	03020023.D
Level 6	IC 280-567560/22	03020022.D
Level 7	IC 280-567560/21	03020021.D
Level 8	IC 280-567560/20	03020020.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	6991 249006	17787 355342	35362 905425	87821	140785	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	6349 188710	14466 268159	27790 678544	67422	107128	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	6006 202167	14750 288166	29648 726501	71905	115112	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_X5\20220302-108949.b\03020020.D				
Lims ID:	IC DMT 8				
Client ID:					
Sample Type:	IC	Calib Level:	8		
Inject. Date:	03-Mar-2022 03:13:58	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 8				
Misc. Info.:	280-0108949-020				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2022 12:49:18	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1618				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.140	5.171	-0.031	905425	2.50	2.56	
4 DNX	1	6.000	6.031	-0.031	678544	2.50	2.44	
6 MNX	1	7.593	7.625	-0.032	726501	2.92	2.91	

Reagents:

8330 DMT_00010 Amount Added: 125.00 Units: uL

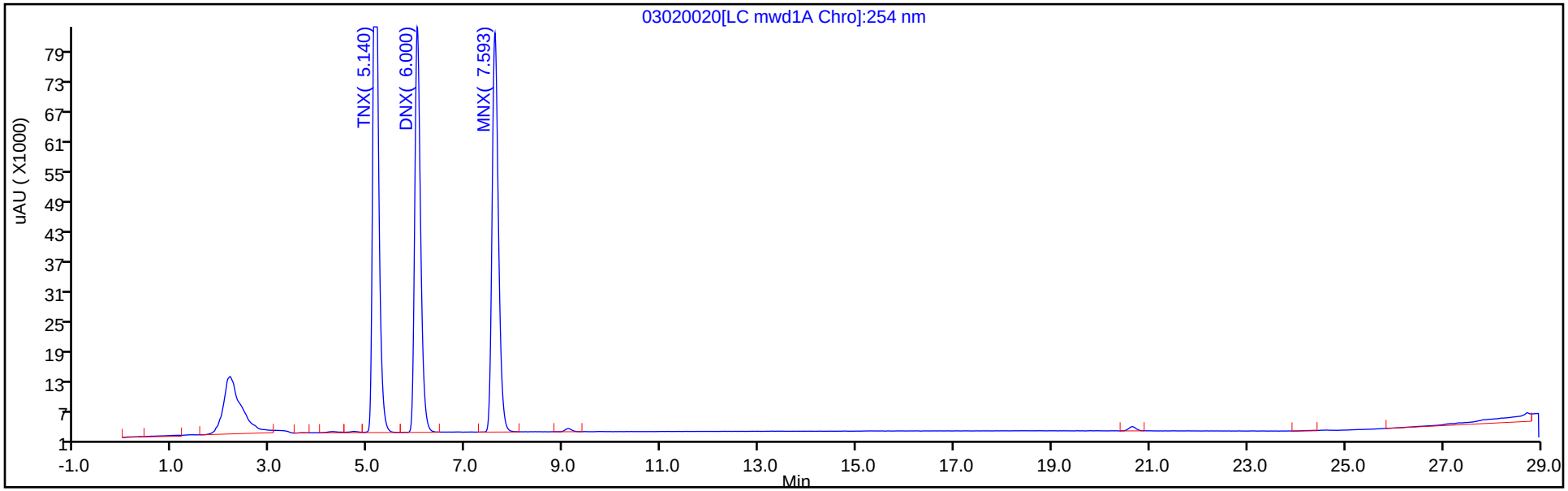
Report Date: 03-Mar-2022 12:49:19 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

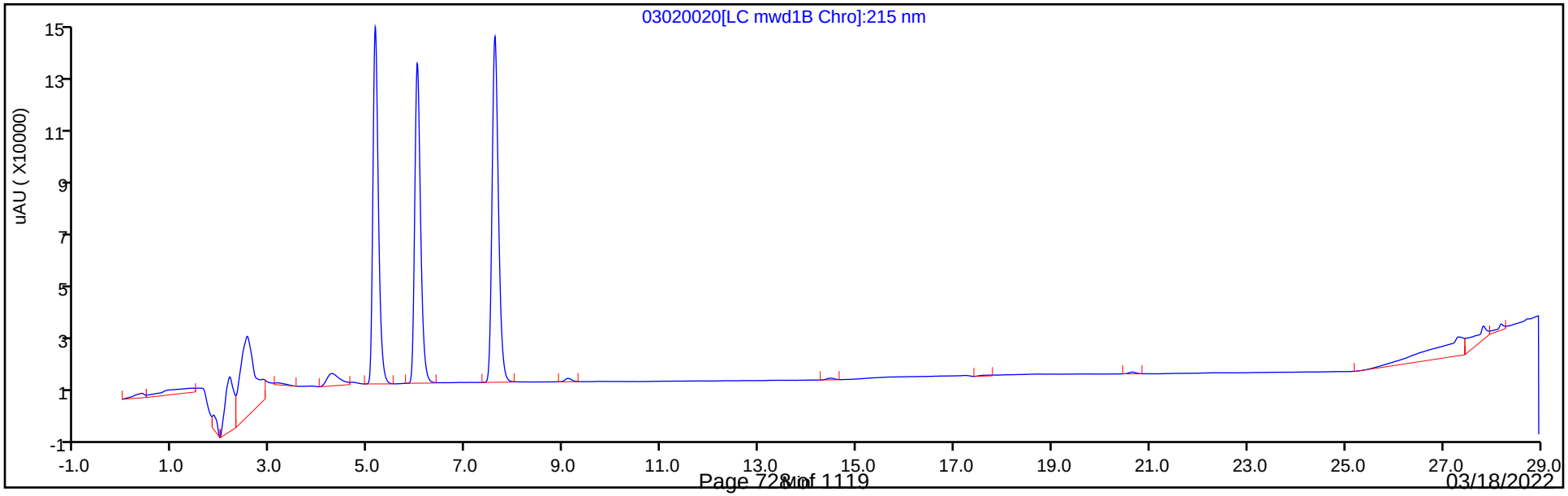
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020020.D

Injection Date:	03-Mar-2022 03:13:58	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC DMT 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: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020021.D				
Lims ID:	IC DMT 7				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	03-Mar-2022 03:49:08	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 7				
Misc. Info.:	280-0108949-021				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2022 12:49:19	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1618				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.156	5.171	-0.015	355342	1.00	1.00	
4 DNX	1	6.016	6.031	-0.015	268159	1.00	0.9624	
6 MNX	1	7.602	7.625	-0.023	288166	1.17	1.15	

Reagents:

8330 DMT_00010 Amount Added: 50.00 Units: uL

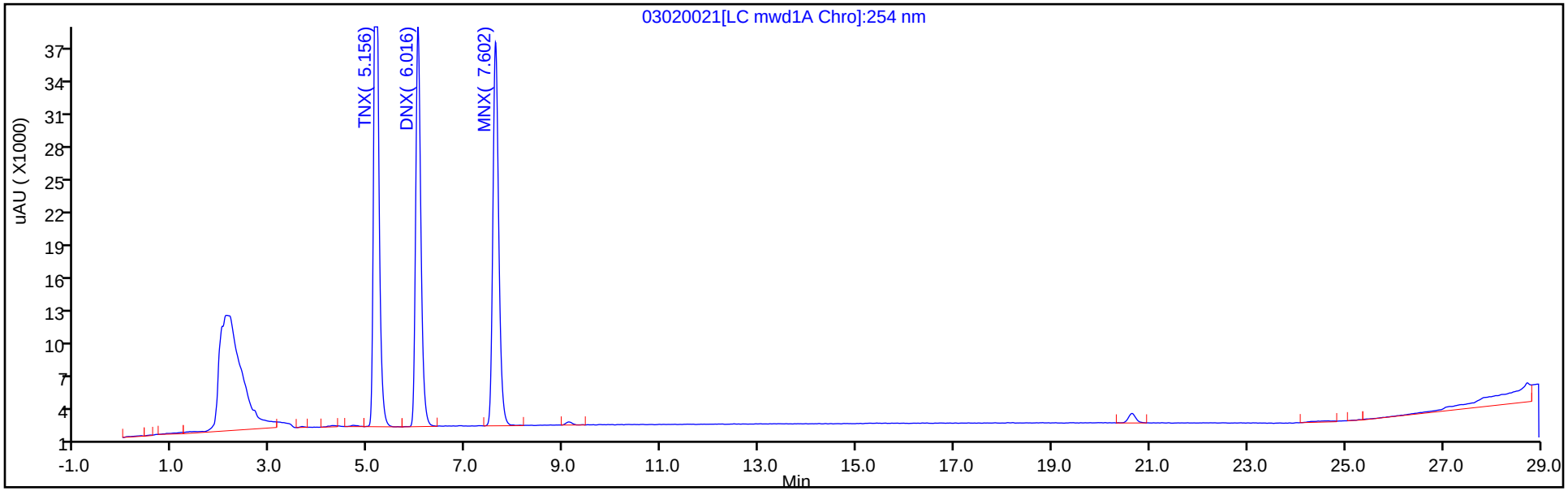
Report Date: 03-Mar-2022 12:49:19 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

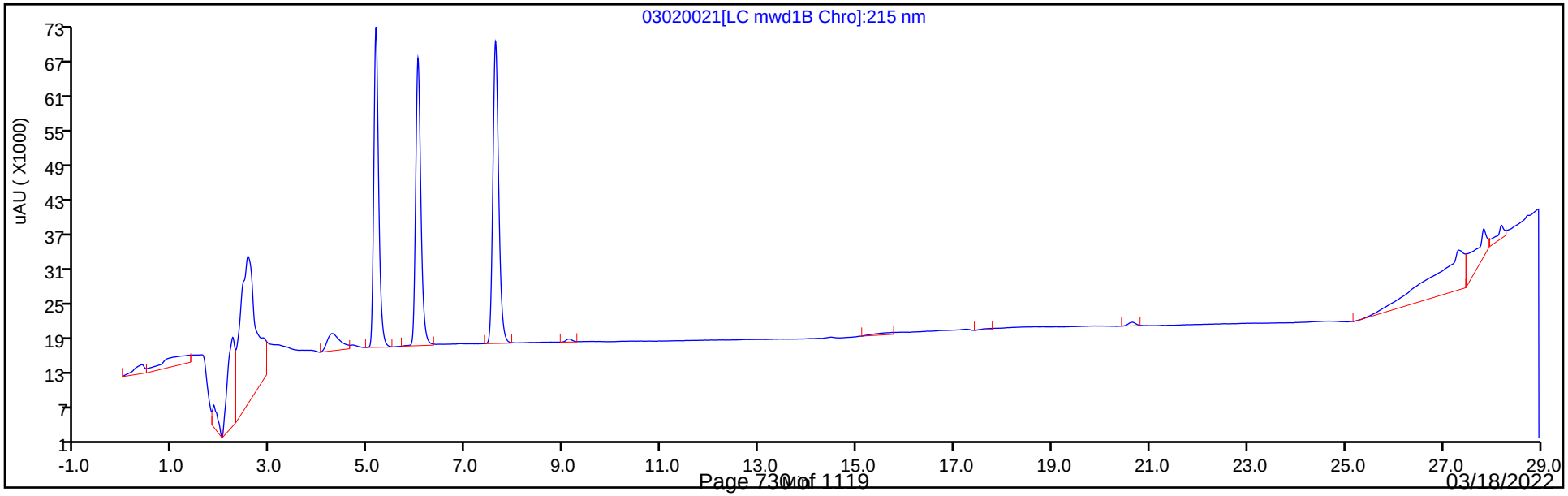
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020021.D

Injection Date:	03-Mar-2022 03:49:08	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC DMT 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: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020022.D				
Lims ID:	IC DMT 6				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	03-Mar-2022 04:24:13	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 6				
Misc. Info.:	280-0108949-022				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2022 12:49:19	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1618				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.157	5.171	-0.014	249006	0.7007	0.7033	
4 DNX	1	6.017	6.031	-0.014	188710	0.7007	0.6773	
6 MNX	1	7.610	7.625	-0.015	202167	0.8169	0.8084	

Reagents:

8330 DMT_00010 Amount Added: 35.00 Units: uL

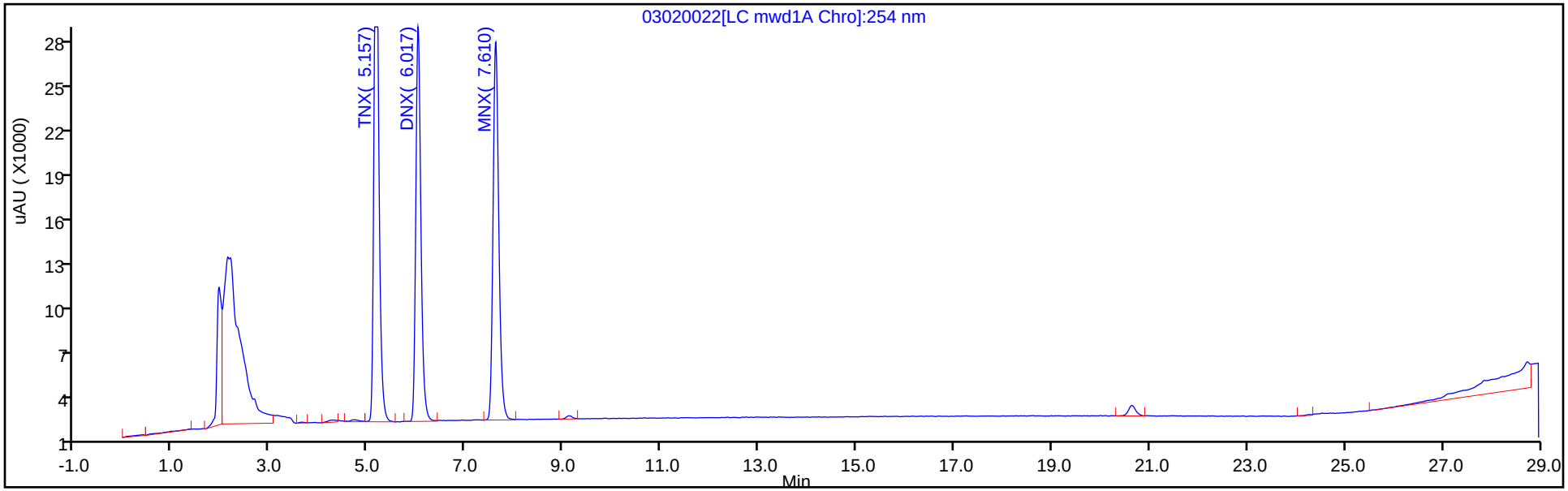
Report Date: 03-Mar-2022 12:49:19 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

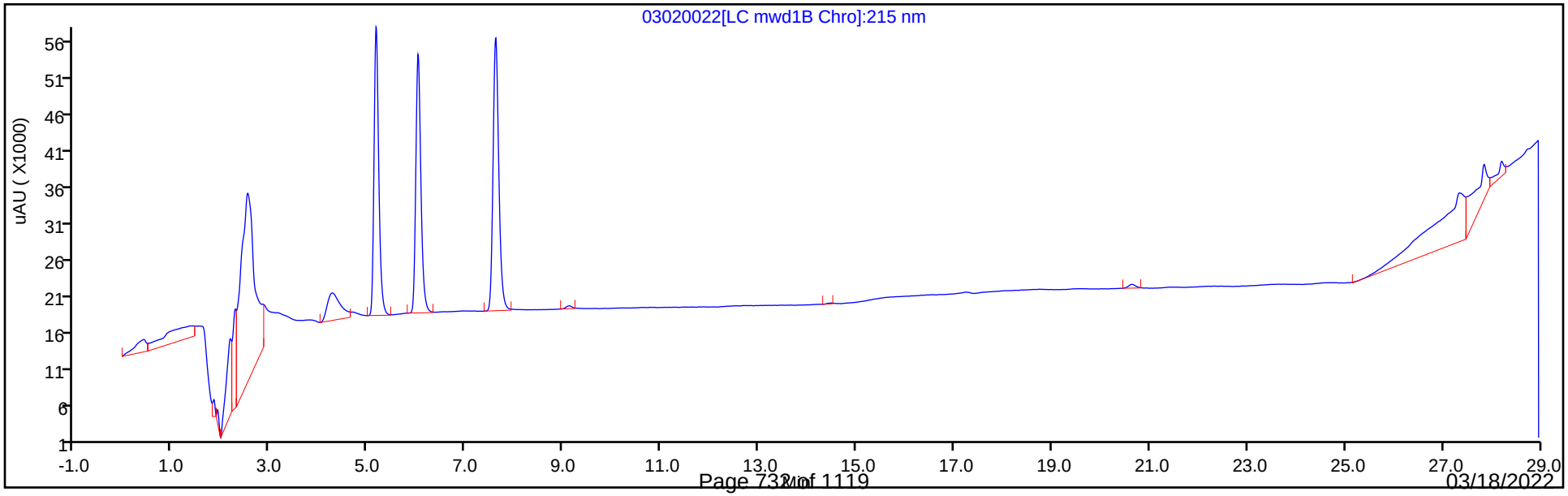
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020022.D

Injection Date:	03-Mar-2022 04:24:13	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC DMT 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: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020023.D				
Lims ID:	IC DMT 5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	03-Mar-2022 04:59:22	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 5				
Misc. Info.:	280-0108949-023				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2022 12:49:20	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1618				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.171	5.171	0.000	140785	0.4004	0.3976	
4 DNX	1	6.031	6.031	0.000	107128	0.4004	0.3845	
6 MNX	1	7.625	7.625	0.000	115112	0.4668	0.4603	

Reagents:

8330 DMT_00010 Amount Added: 20.00 Units: uL

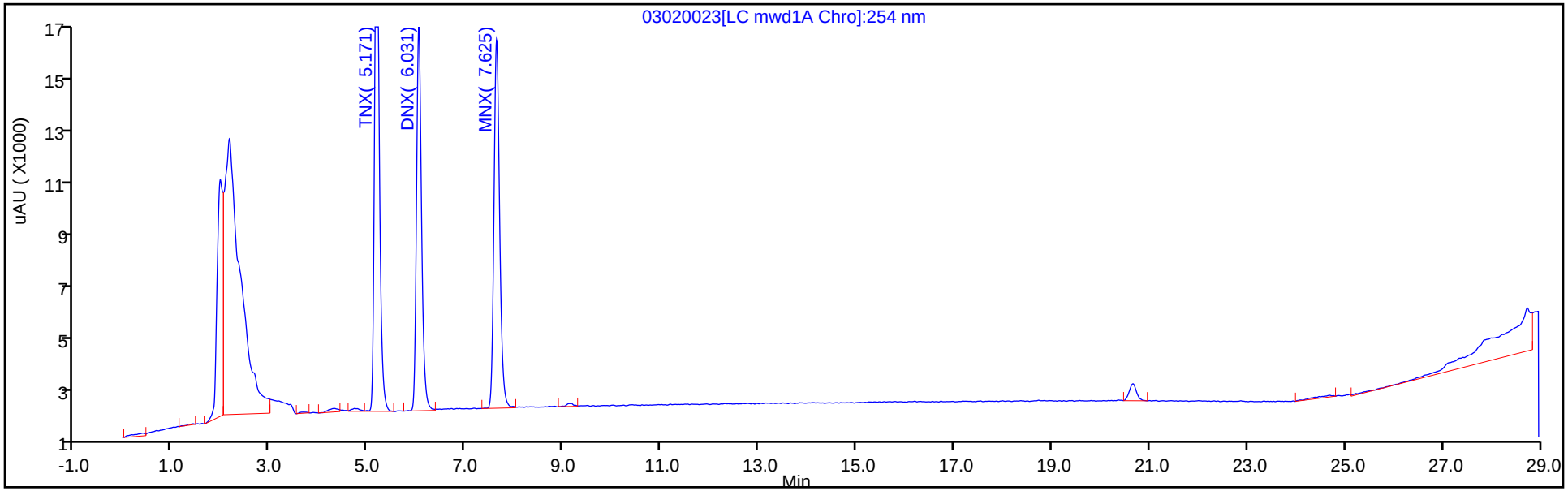
Report Date: 03-Mar-2022 12:49:20 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

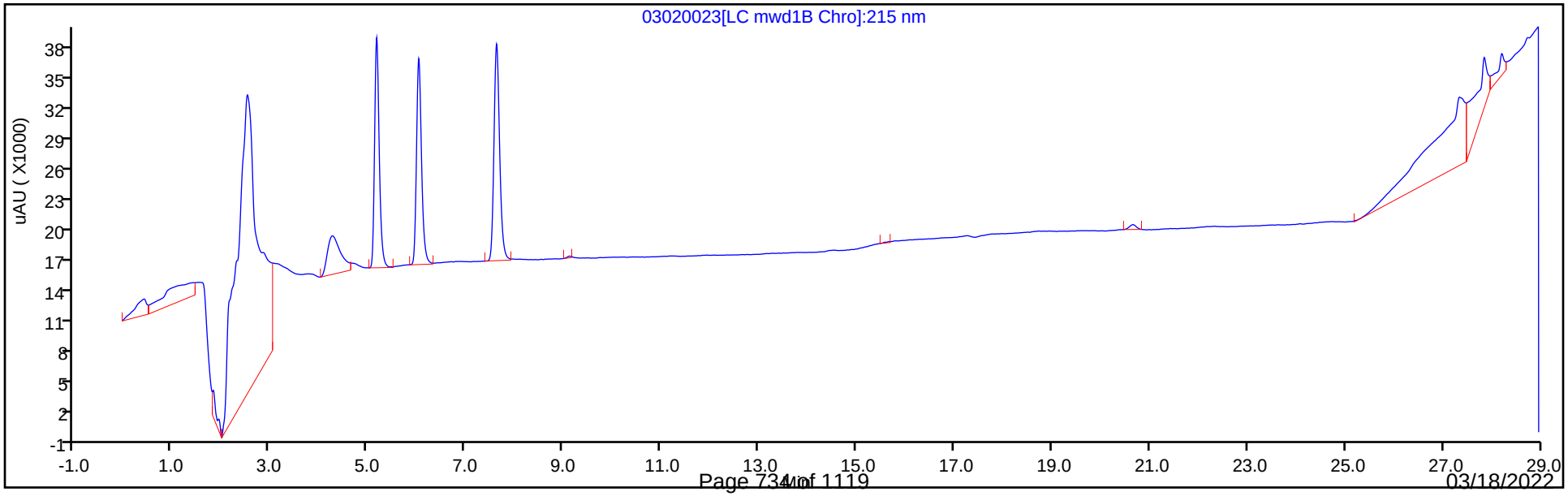
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Injection Date:	03-Mar-2022 04:59:22	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC DMT 5			Worklist Smp#:	23
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020024.D
Lims ID: IC DMT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Mar-2022 05:34:27 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 4
Misc. Info.: 280-0108949-024
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub2

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:20 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.164	5.171	-0.007	87821	0.2503	0.2480	
4 DNX	1	6.024	6.031	-0.007	67422	0.2503	0.2420	
6 MNX	1	7.617	7.625	-0.008	71905	0.2918	0.2875	

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

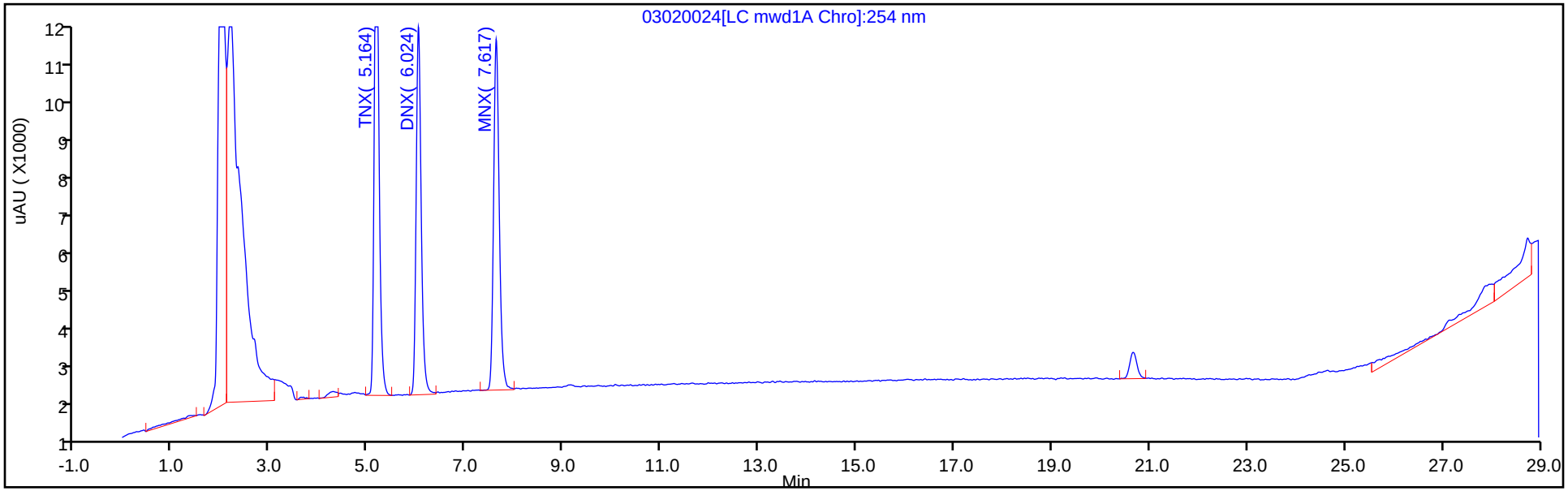
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Eurofins Denver

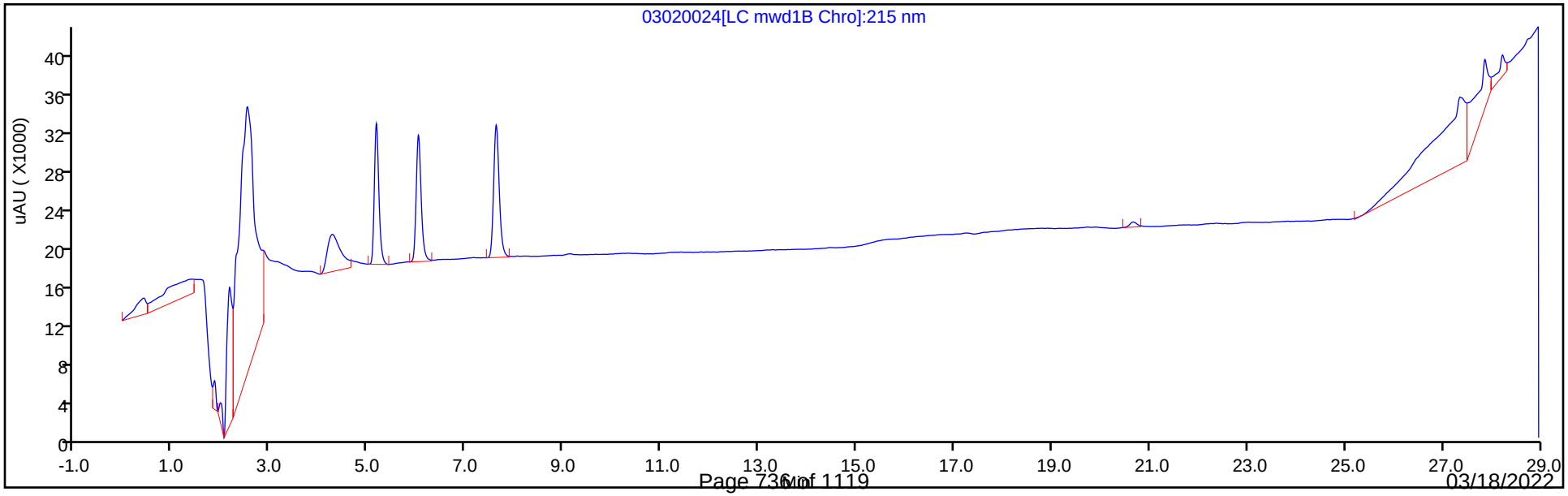
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Injection Date:	03-Mar-2022 05:34:27	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC DMT 4			Worklist Smp#:	24
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020025.D				
Lims ID:	IC DMT 3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	03-Mar-2022 06:09:35	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 3				
Misc. Info.:	280-0108949-025				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2022 12:49:21	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1618				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.172	5.171	0.001	35362	0.1001	0.0999	
4 DNX	1	6.032	6.031	0.001	27790	0.1001	0.0997	
6 MNX	1	7.625	7.625	0.000	29648	0.1167	0.1186	

Reagents:

8330 DMT_00010 Amount Added: 5.00 Units: uL

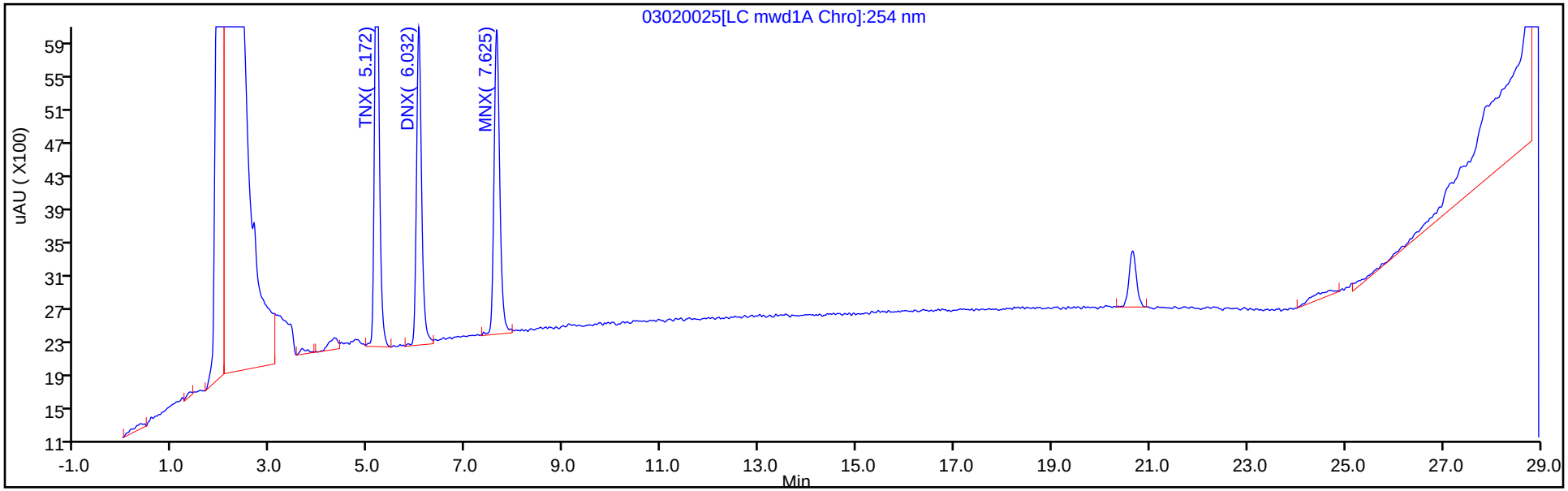
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Eurofins Denver

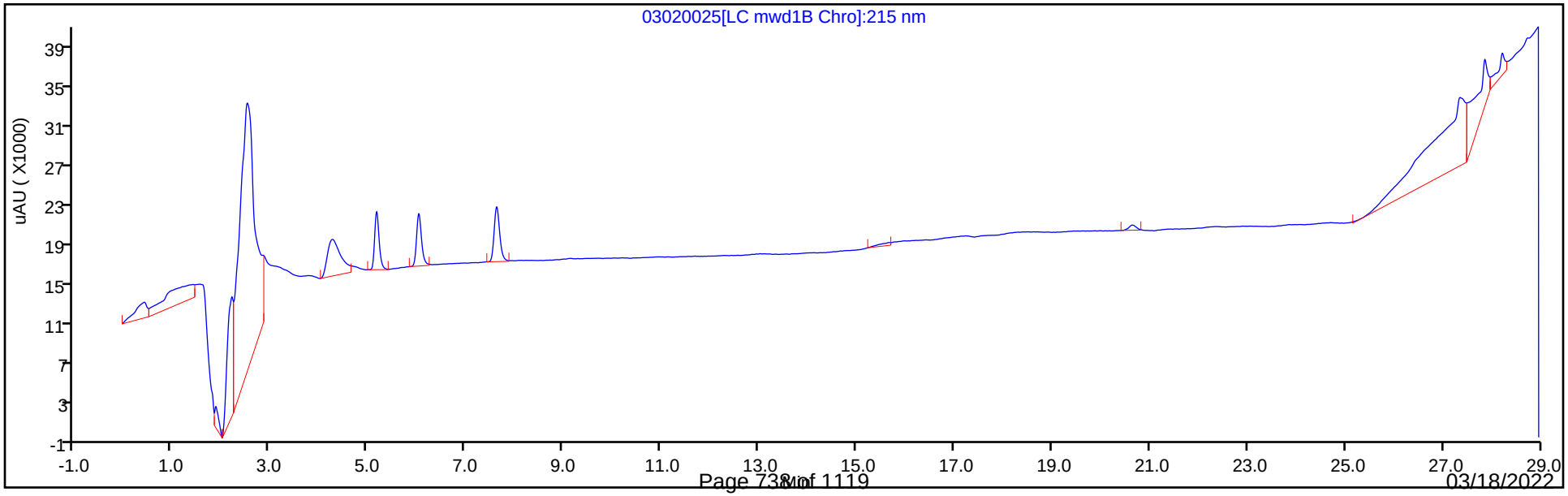
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020025.D

Injection Date:	03-Mar-2022 06:09:35	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC DMT 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: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020026.D				
Lims ID:	IC DMT 2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	03-Mar-2022 06:44:40	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 2				
Misc. Info.:	280-0108949-026				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2022 12:49:21	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1618				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.168	5.171	-0.003	17787	0.0501	0.0502	
4 DNX	1	6.028	6.031	-0.003	14466	0.0501	0.0519	
6 MNX	1	7.621	7.625	-0.004	14750	0.0584	0.0590	

Reagents:

8330 DMT_00010 Amount Added: 2.50 Units: uL

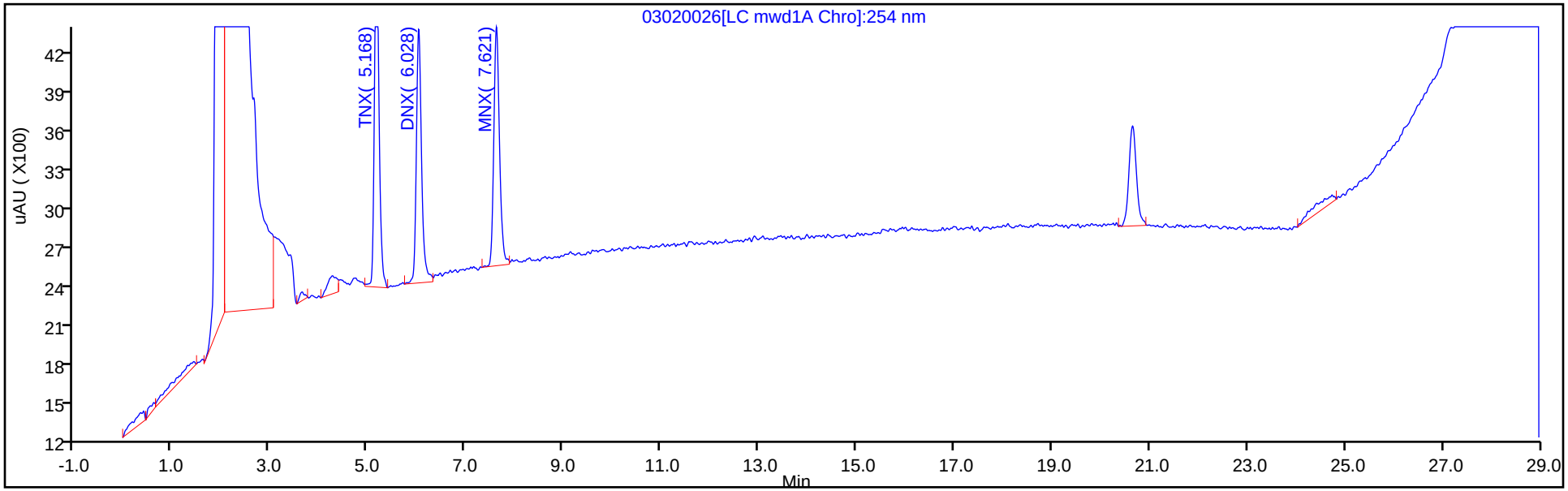
Report Date: 03-Mar-2022 12:49:21 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

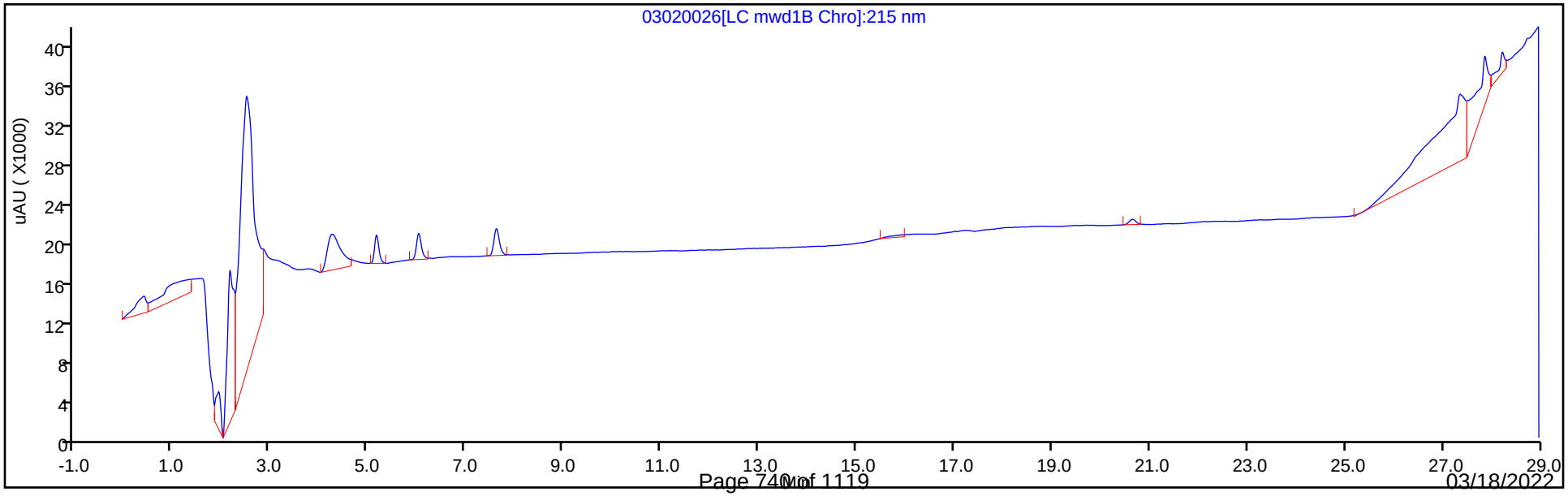
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020026.D

Injection Date:	03-Mar-2022 06:44:40	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC DMT 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: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Lims ID:	IC DMT 1				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	03-Mar-2022 07:19:48	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 1				
Misc. Info.:	280-0108949-027				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2022 12:49:22	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1618				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.170	5.171	-0.001	6991	0.0200	0.0197	
4 DNX	1	6.030	6.031	-0.001	6349	0.0200	0.0228	
6 MNX	1	7.624	7.625	-0.001	6006	0.0233	0.0240	

Reagents:

8330 DMT_00010 Amount Added: 1.00 Units: uL

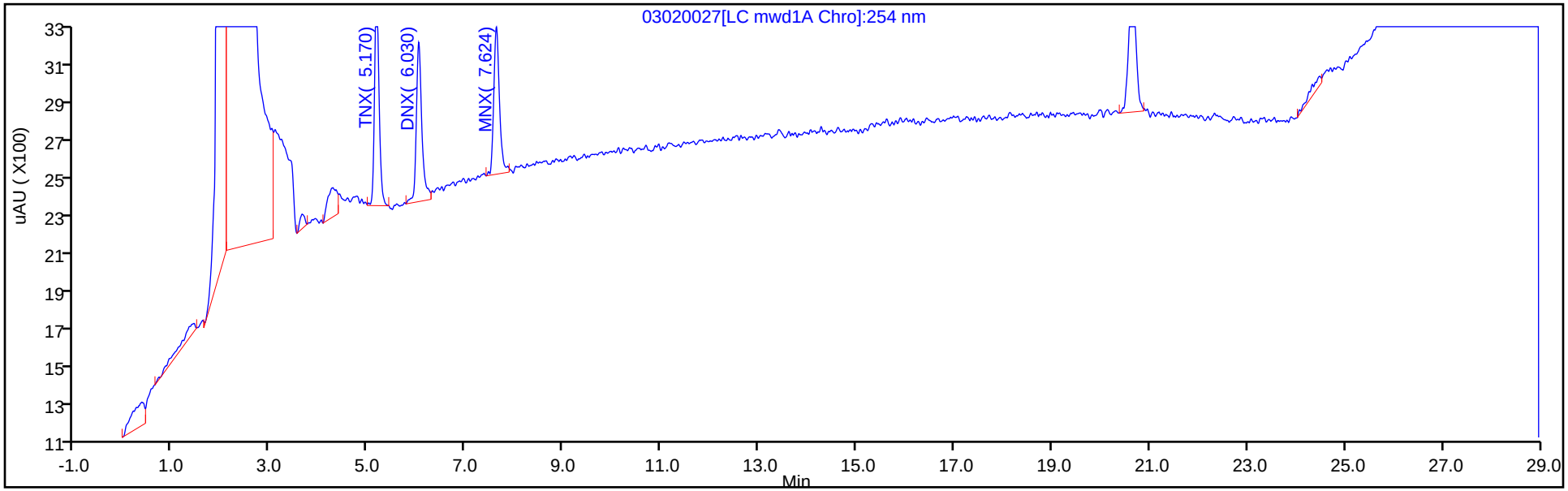
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Eurofins Denver

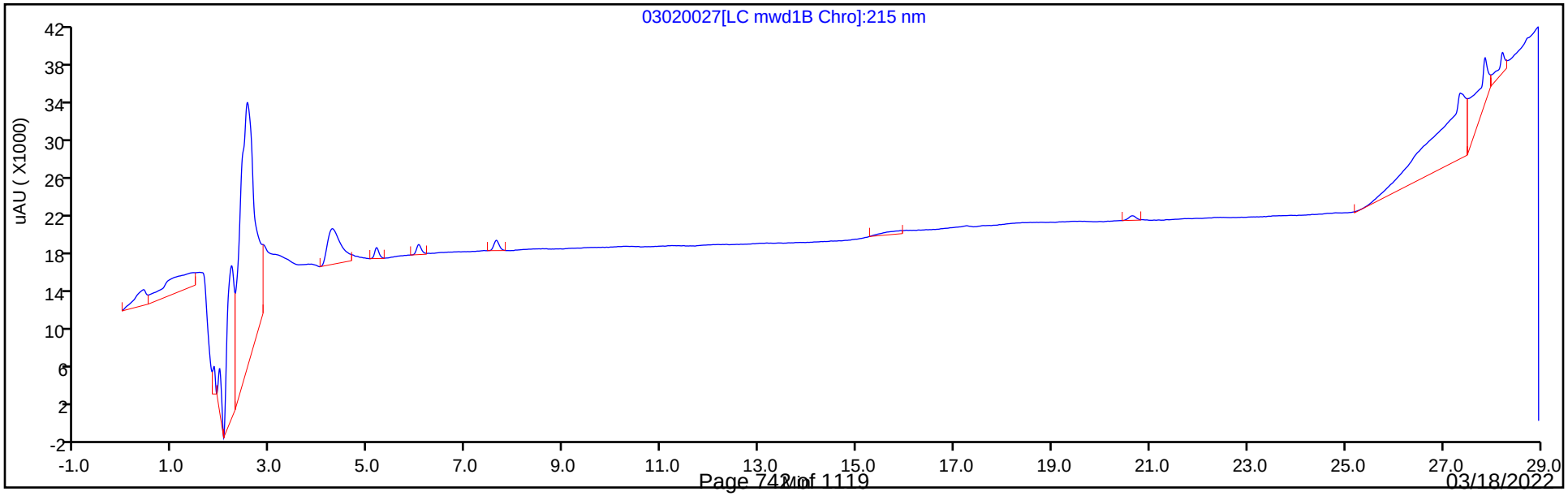
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Injection Date:	03-Mar-2022 07:19:48	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC DMT 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: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

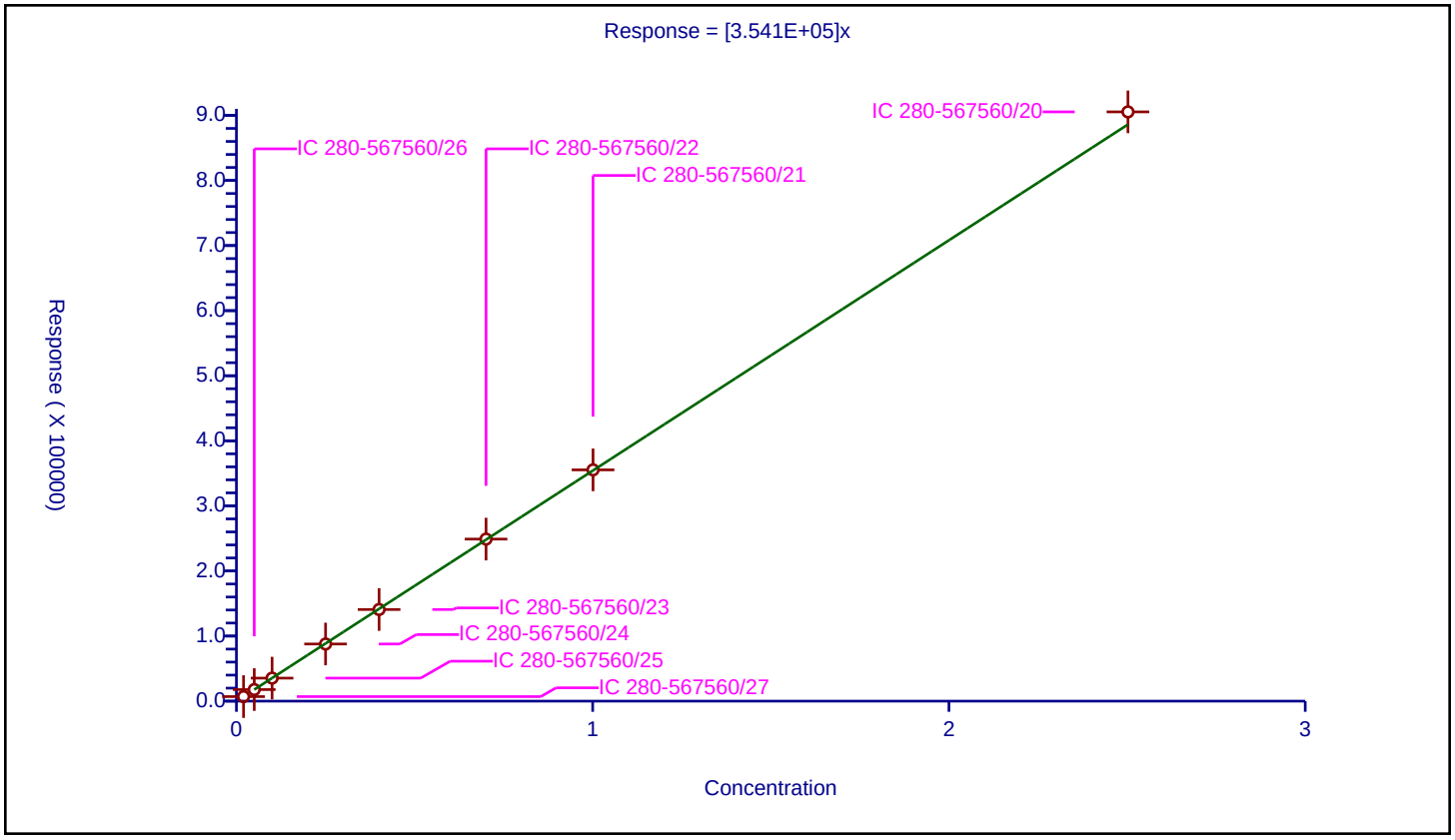
Curve Coefficients

Intercept:	0
Slope:	3.541E+05

Error Coefficients

Standard Error:	7350
Relative Standard Error:	1.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/27	0.02002	6991.0			349200.799201	Y
2	IC 280-567560/26	0.05005	17787.0			355384.615385	Y
3	IC 280-567560/25	0.1001	35362.0			353266.733267	Y
4	IC 280-567560/24	0.25025	87821.0			350933.066933	Y
5	IC 280-567560/23	0.4004	140785.0			351610.889111	Y
6	IC 280-567560/22	0.7007	249006.0			355367.489653	Y
7	IC 280-567560/21	1.001	355342.0			354987.012987	Y
8	IC 280-567560/20	2.5025	905425.0			361808.191808	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

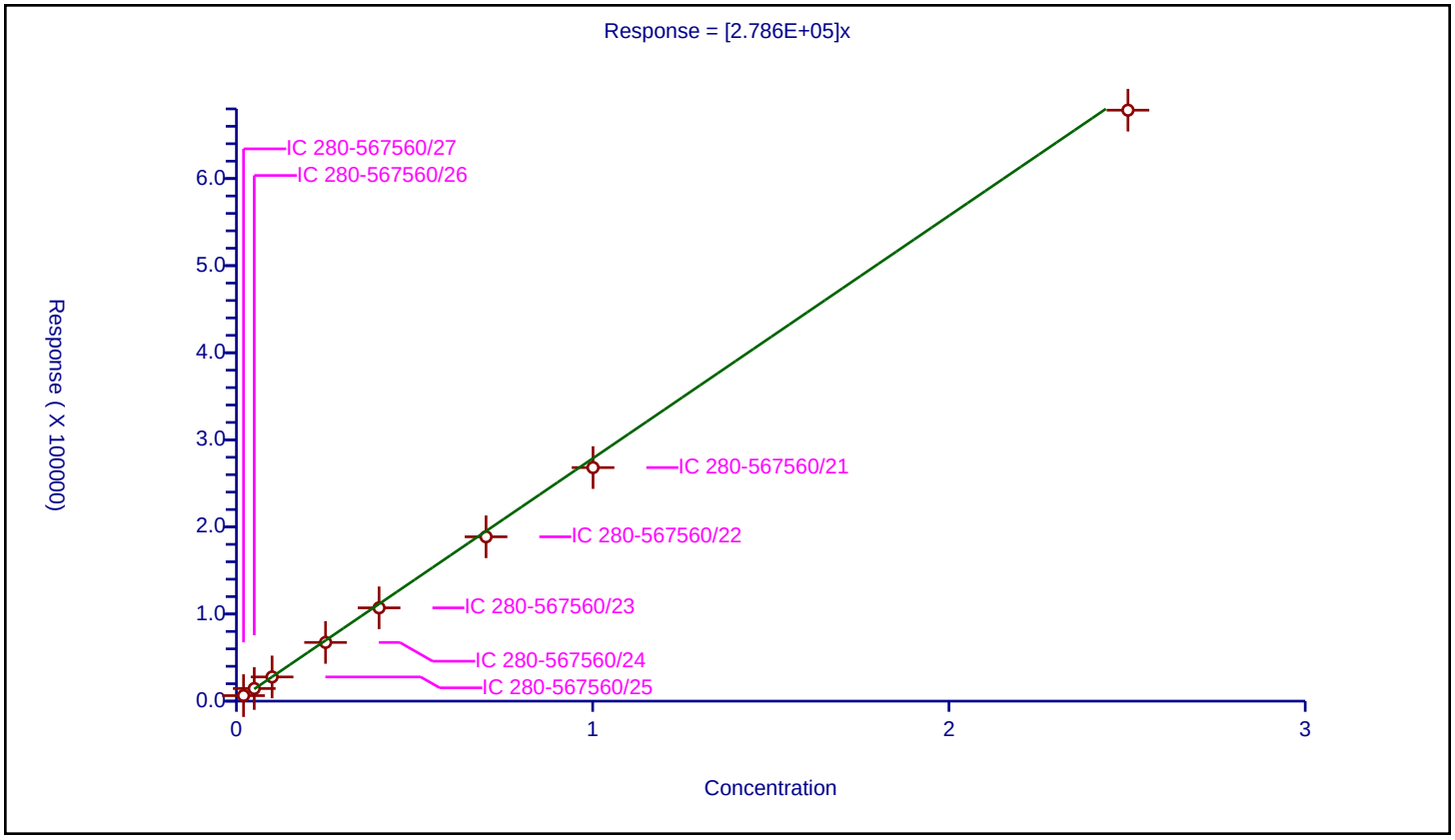
Curve Coefficients

Intercept:	0
Slope:	2.786E+05

Error Coefficients

Standard Error:	8750
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/27	0.02002	6349.0			317132.867133	Y
2	IC 280-567560/26	0.05005	14466.0			289030.969031	Y
3	IC 280-567560/25	0.1001	27790.0			277622.377622	Y
4	IC 280-567560/24	0.25025	67422.0			269418.581419	Y
5	IC 280-567560/23	0.4004	107128.0			267552.447552	Y
6	IC 280-567560/22	0.7007	188710.0			269316.397888	Y
7	IC 280-567560/21	1.001	268159.0			267891.108891	Y
8	IC 280-567560/20	2.5025	678544.0			271146.453546	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

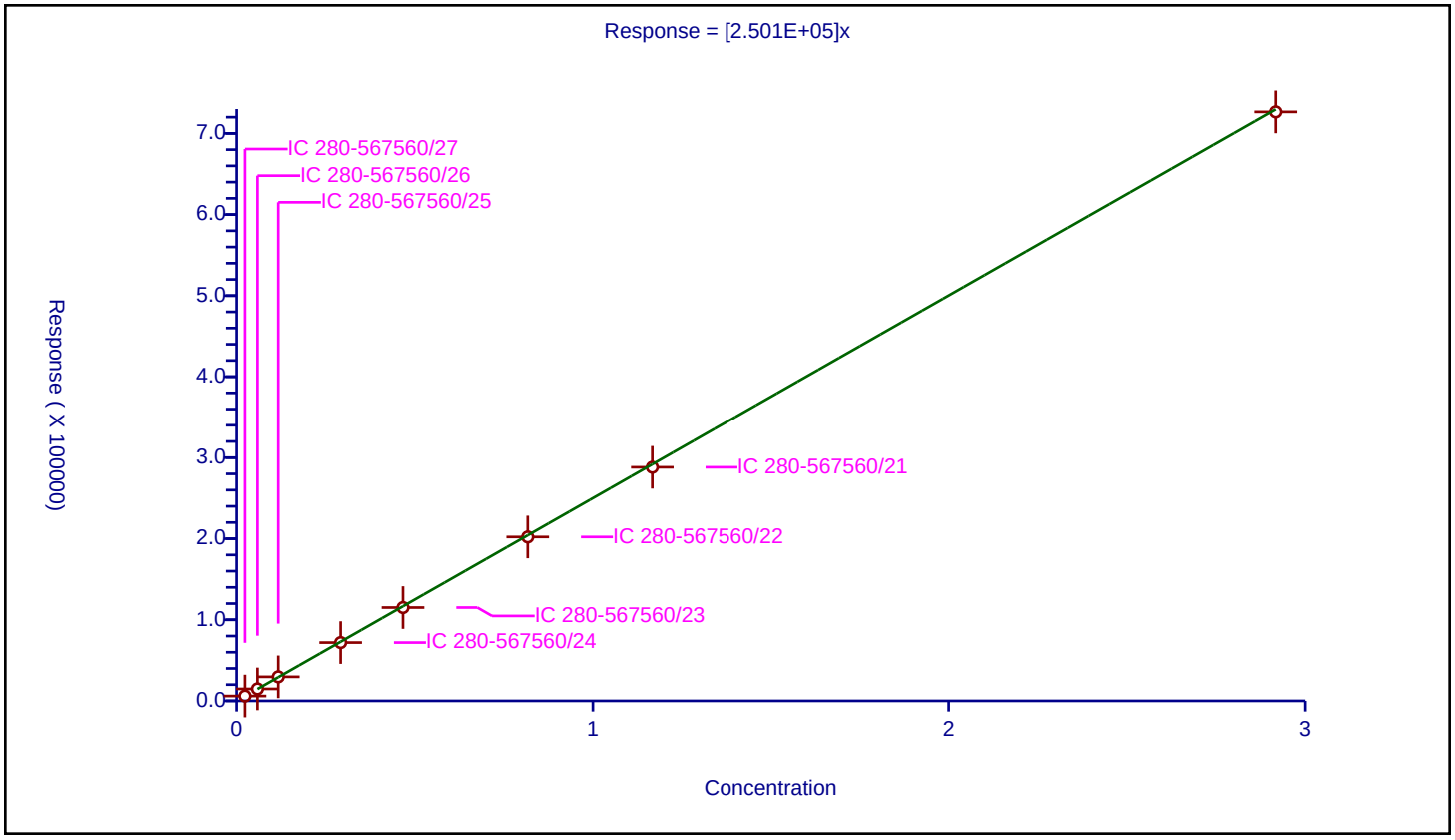
Curve Coefficients

Intercept:	0
Slope:	2.501E+05

Error Coefficients

Standard Error:	2130
Relative Standard Error:	1.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-567560/27	0.02334	6006.0			257326.478149	Y
2	IC 280-567560/26	0.05835	14750.0			252784.918595	Y
3	IC 280-567560/25	0.1167	29648.0			254053.127678	Y
4	IC 280-567560/24	0.29175	71905.0			246461.01114	Y
5	IC 280-567560/23	0.4668	115112.0			246598.114824	Y
6	IC 280-567560/22	0.8169	202167.0			247480.719794	Y
7	IC 280-567560/21	1.167	288166.0			246928.877464	Y
8	IC 280-567560/20	2.9175	726501.0			249014.910026	Y



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: ICV 280-562503/20 Calibration Date: 01/04/2022 21:54

Instrument ID: CHHPLC_X3 Calib Start Date: 01/04/2022 18:28

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/04/2022 21:31

Lab File ID: 01040020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	81972		489	500	-2.2	15.0
RDX	Ave	103609	97016		468	500	-6.4	15.0
Picric acid	Ave	77039	79050		513	500	2.6	15.0
1,3,5-Trinitrobenzene	Ave	218096	225924		518	500	3.6	15.0
1,3-Dinitrobenzene	Ave	288401	300348		521	500	4.1	15.0
Nitrobenzene	Ave	191953	197872		515	500	3.1	15.0
Tetryl	Ave	170567	173346		508	500	1.6	15.0
Nitroglycerin	Ave	63037	66420		5270	5000	5.4	15.0
2,4,6-Trinitrotoluene	Ave	202726	207174		511	500	2.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	149862		496	500	-0.7	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	202042		500	500	-0.0	15.0
2,6-Dinitrotoluene	Ave	143115	146810		513	500	2.6	15.0
2,4-Dinitrotoluene	Ave	289351	286440		495	500	-1.0	15.0
2-Nitrotoluene	Ave	127614	127510		500	500	-0.0	15.0
4-Nitrotoluene	Ave	106235	113254		533	500	6.6	15.0
3-Nitrotoluene	Ave	142273	134496		473	500	-5.5	15.0
PETN	Lin2		76139		5230	5000	4.6	15.0
1,2-Dinitrobenzene	Ave	124698	132072		530	500	5.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: ICV 280-562503/20 Calibration Date: 01/04/2022 21:54

Instrument ID: CHHPLC_X3 Calib Start Date: 01/04/2022 18:28

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/04/2022 21:31

Lab File ID: 01040020.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.45	6.75
RDX	7.60	7.46	7.76
Picric acid	7.92	7.80	8.10
1,3,5-Trinitrobenzene	8.68	8.54	8.84
1,3-Dinitrobenzene	9.32	9.18	9.48
Nitrobenzene	9.71	9.58	9.88
Tetryl	10.04	9.91	10.21
Nitroglycerin	10.50	10.37	10.67
2,4,6-Trinitrotoluene	10.96	10.87	11.07
4-Amino-2,6-dinitrotoluene	11.16	11.07	11.27
2-Amino-4,6-dinitrotoluene	11.41	11.33	11.53
2,6-Dinitrotoluene	11.58	11.50	11.70
2,4-Dinitrotoluene	11.75	11.67	11.87
2-Nitrotoluene	12.62	12.49	12.79
4-Nitrotoluene	13.05	12.92	13.22
3-Nitrotoluene	13.63	13.50	13.80
PETN	14.72	14.59	14.89
1,2-Dinitrobenzene	8.56	8.42	8.72

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040020.D
Lims ID: ICV INT
Client ID:
Sample Type: ICV
Inject. Date: 04-Jan-2022 21:54:19 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT
Misc. Info.: 280-0107731-020
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 06-Jan-2022 20:07:47 Calib Date: 04-Jan-2022 21:31:24
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040019.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1641

First Level Reviewer: zhangji Date: 06-Jan-2022 20:07:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.602	6.598	0.004	40986	0.5000	0.4889	
8 RDX	1	7.602	7.605	-0.003	48508	0.5000	0.4682	M
9 2,4,6-Trinitrophenol	1	7.915	7.945	-0.030	39525	0.5000	0.5131	M
$ 10 1,2-Dinitrobenzene	1	8.562	8.572	-0.010	66036	0.5000	0.5296	
11 1,3,5-Trinitrobenzene	1	8.682	8.692	-0.010	112962	0.5000	0.5179	
12 1,3-Dinitrobenzene	1	9.315	9.331	-0.016	150174	0.5000	0.5207	
13 Nitrobenzene	1	9.708	9.725	-0.017	98936	0.5000	0.5154	
15 Tetryl	1	10.042	10.058	-0.016	86673	0.5000	0.5081	
16 Nitroglycerin	2	10.502	10.518	-0.016	332100	5.00	5.27	
17 2,4,6-Trinitrotoluene	1	10.955	10.971	-0.016	103587	0.5000	0.5110	
18 4-Amino-2,6-dinitrotoluene	1	11.155	11.171	-0.016	74931	0.5000	0.4963	
19 2-Amino-4,6-dinitrotoluene	1	11.408	11.425	-0.017	101021	0.5000	0.4997	
20 2,6-Dinitrotoluene	1	11.582	11.598	-0.016	73405	0.5000	0.5129	
21 2,4-Dinitrotoluene	1	11.748	11.765	-0.017	143220	0.5000	0.4950	
22 o-Nitrotoluene	1	12.615	12.638	-0.023	63755	0.5000	0.4996	
23 p-Nitrotoluene	1	13.048	13.071	-0.023	56627	0.5000	0.5330	
24 m-Nitrotoluene	1	13.628	13.651	-0.023	67248	0.5000	0.4727	
25 PETN	2	14.715	14.738	-0.023	380697	5.00	5.23	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330Surrogate_00127 Amount Added: 50.00 Units: uL
8330 LCS_00111 Amount Added: 50.00 Units: uL

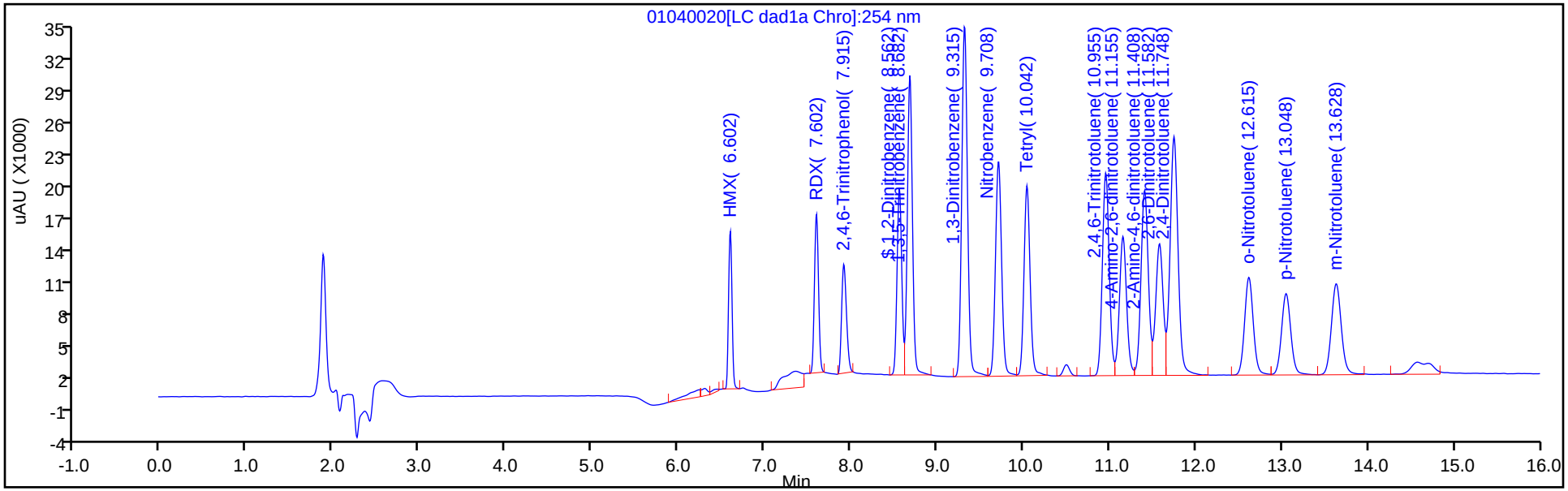
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Eurofins TestAmerica, Denver

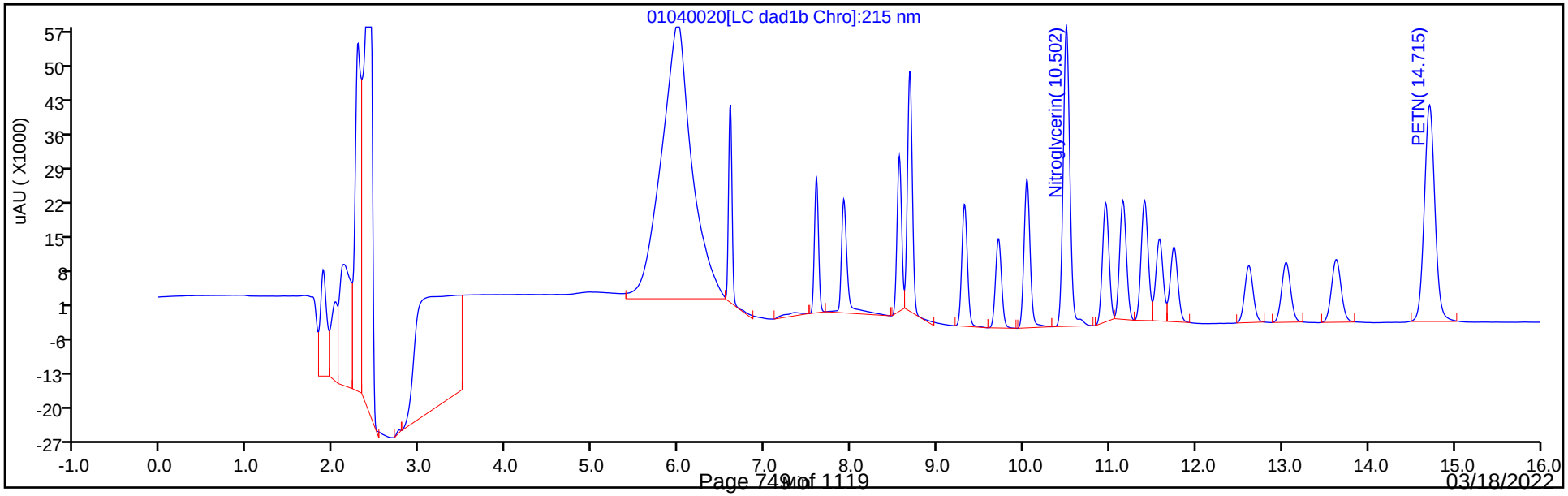
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Injection Date:	04-Jan-2022 21:54:19	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	ICV INT			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

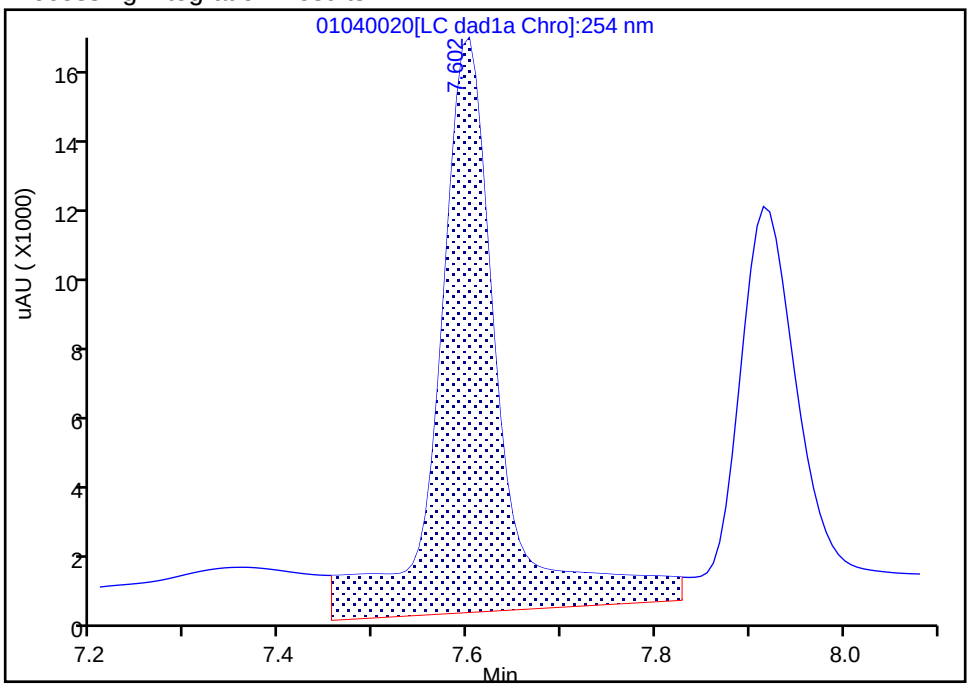
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Injection Date:	04-Jan-2022 21:54:19	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

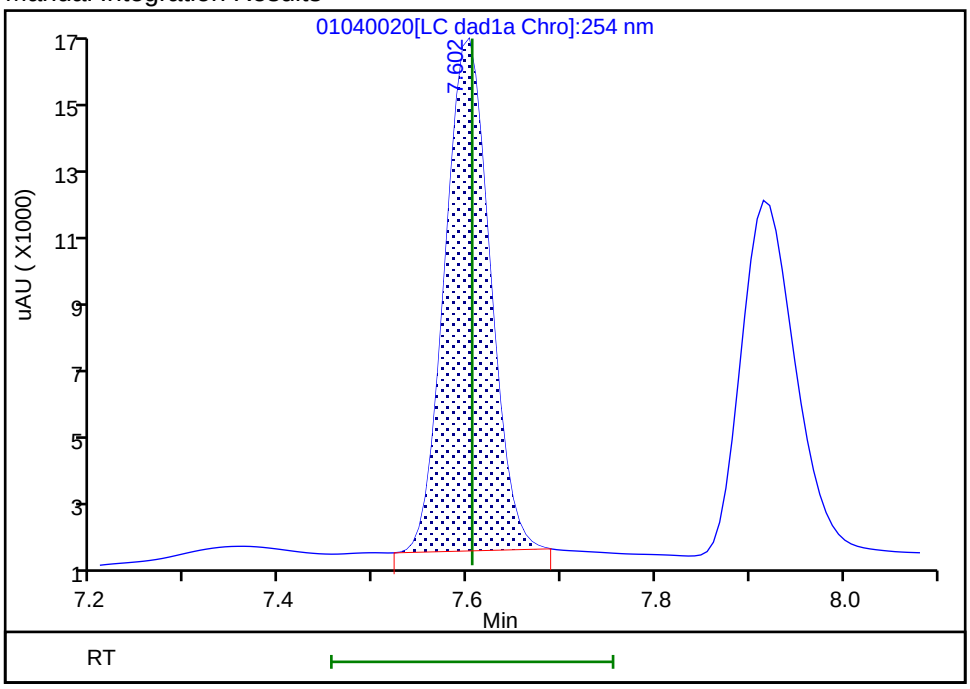
Processing Integration Results

RT: 7.60
Area: 71144
Amount: 0.655784
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 48508
Amount: 0.468182
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 11:59:11

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

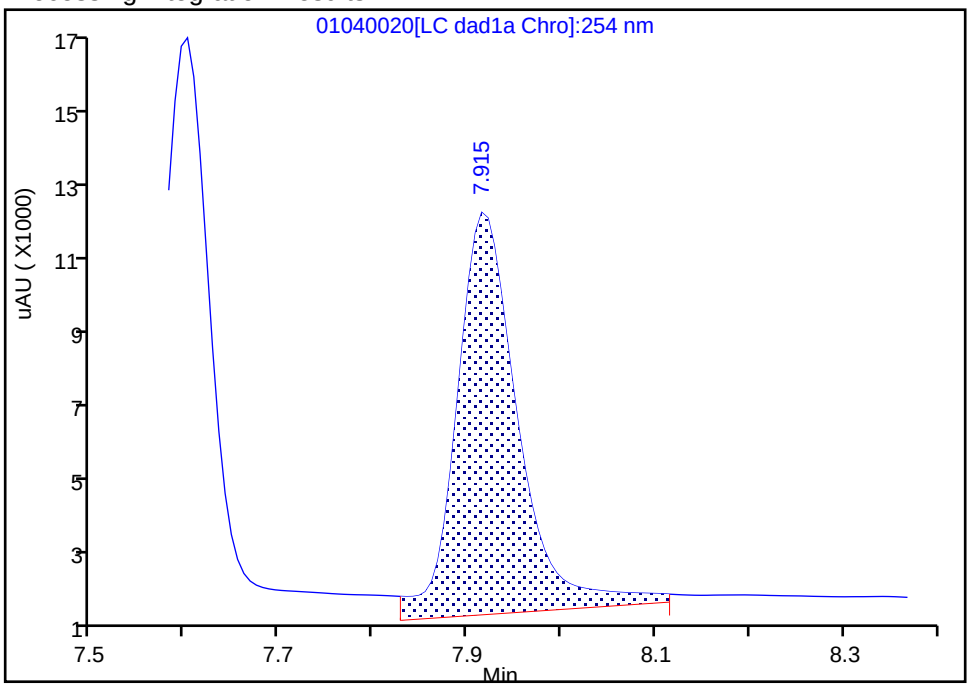
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040020.d				
Injection Date:	04-Jan-2022 21:54:19	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

9 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

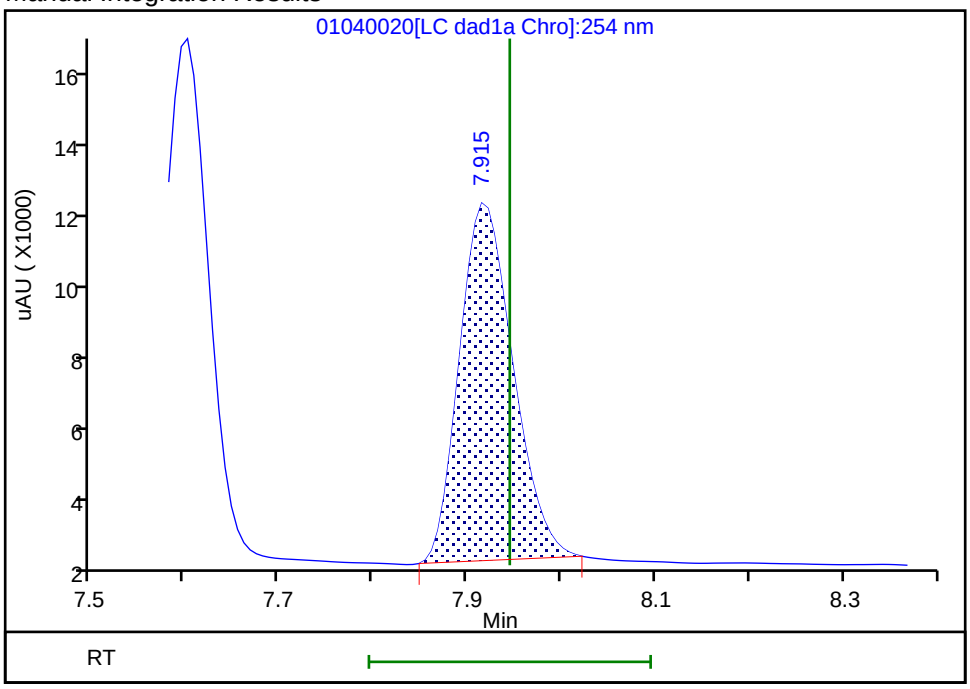
Processing Integration Results

RT: 7.92
Area: 48188
Amount: 0.601054
Amount Units: ug/mL



Manual Integration Results

RT: 7.92
Area: 39525
Amount: 0.513051
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 11:59:15

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: ICV 280-562503/38 Calibration Date: 01/05/2022 04:47

Instrument ID: CHHPLC_X3 Calib Start Date: 01/05/2022 01:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/05/2022 04:24

Lab File ID: 01040038.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	178414		493	501	-1.5	15.0
DNX	Ave	138113	139363		505	501	0.9	15.0
MNX	Ave	125995	128593		596	584	2.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: ICV 280-562503/38 Calibration Date: 01/05/2022 04:47

Instrument ID: CHHPLC_X3 Calib Start Date: 01/05/2022 01:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/05/2022 04:24

Lab File ID: 01040038.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.38	6.58
DNX	6.80	6.70	6.90
MNX	7.22	7.07	7.37

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040038.D
Lims ID: ICV DMT
Client ID:
Sample Type: ICV
Inject. Date: 05-Jan-2022 04:47:17 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV DMT
Misc. Info.: 280-0107731-038
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Jan-2022 12:18:54 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1613

First Level Reviewer: zhangji Date: 05-Jan-2022 12:09:42

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.482	6.484	-0.002	89296	0.5005	0.4928	M
6 DNX	1	6.796	6.797	-0.001	69751	0.5005	0.5050	M
7 MNX	1	7.222	7.224	-0.002	75034	0.5835	0.5955	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_OP_DMT_00012 Amount Added: 50.00 Units: uL

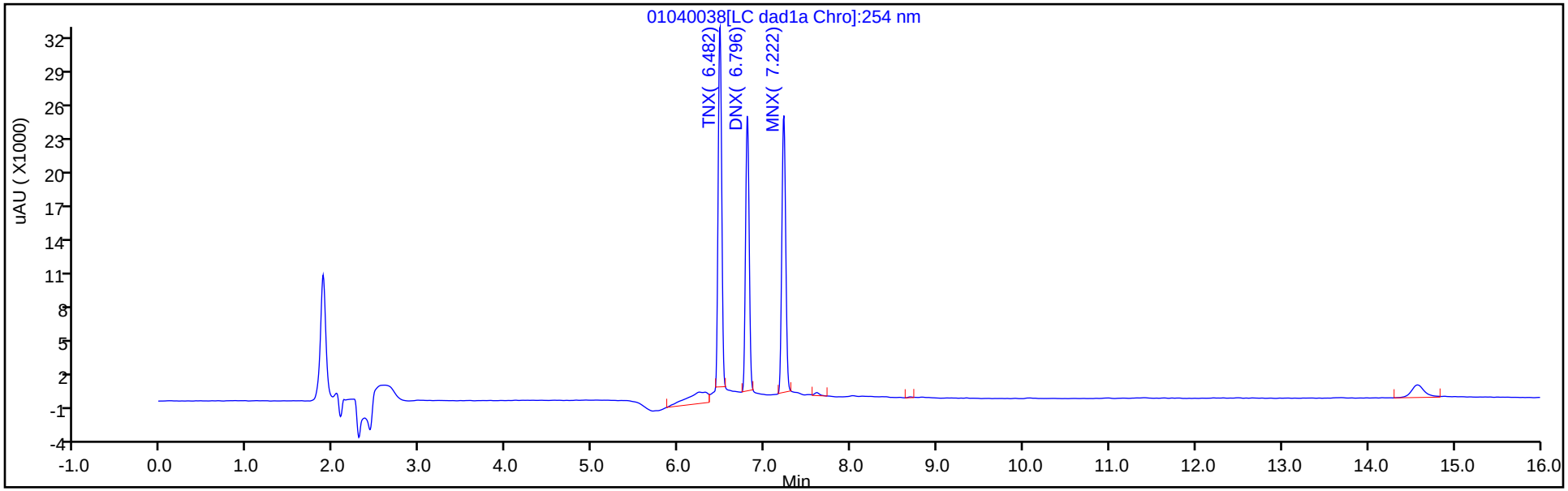
Report Date: 05-Jan-2022 12:19:19 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

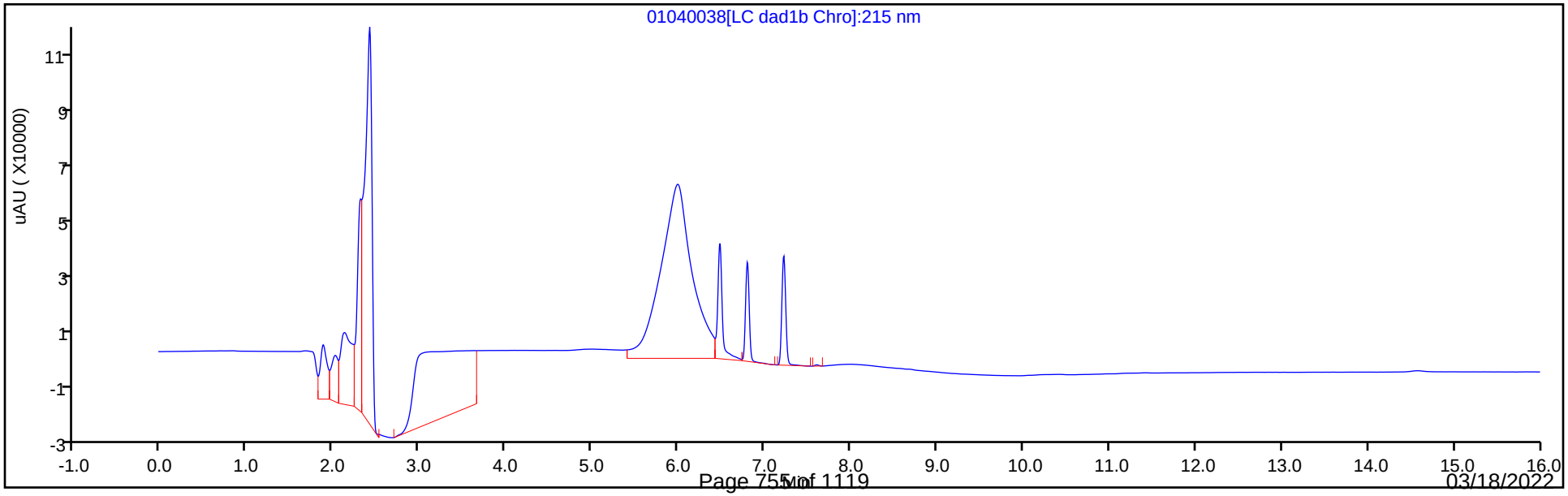
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Injection Date:	05-Jan-2022 04:47:17	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	ICV DMT			Worklist Smp#:	38
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

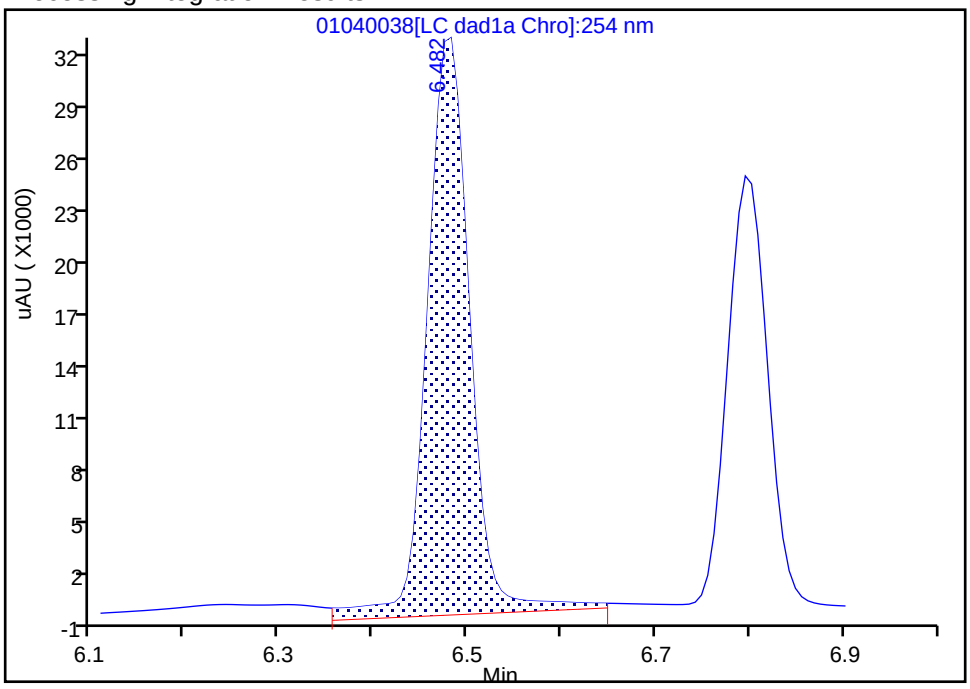
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040038.d
Injection Date: 05-Jan-2022 04:47:17 Instrument ID: CHHPLC_X3
Lims ID: ICV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

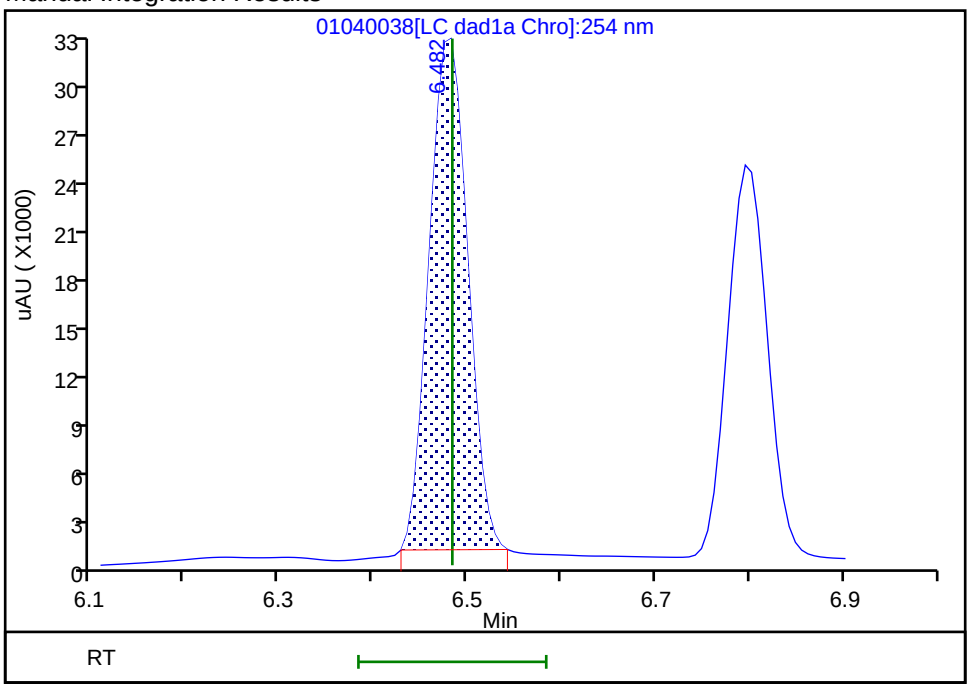
Processing Integration Results

RT: 6.48
Area: 102738
Amount: 0.566963
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 89296
Amount: 0.492783
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:35
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

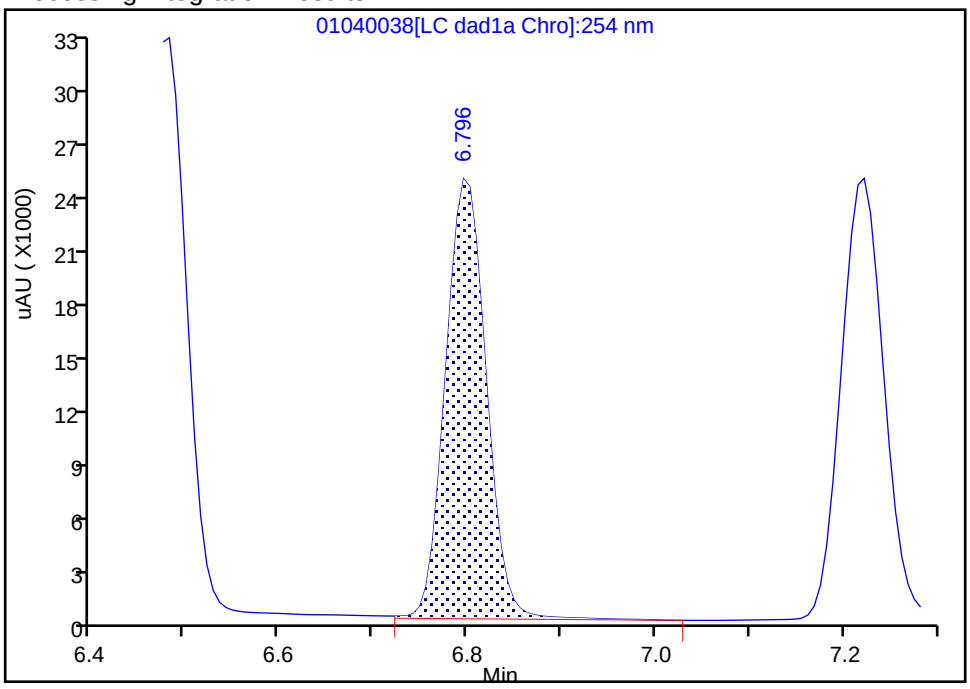
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040038.d				
Injection Date:	05-Jan-2022 04:47:17	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

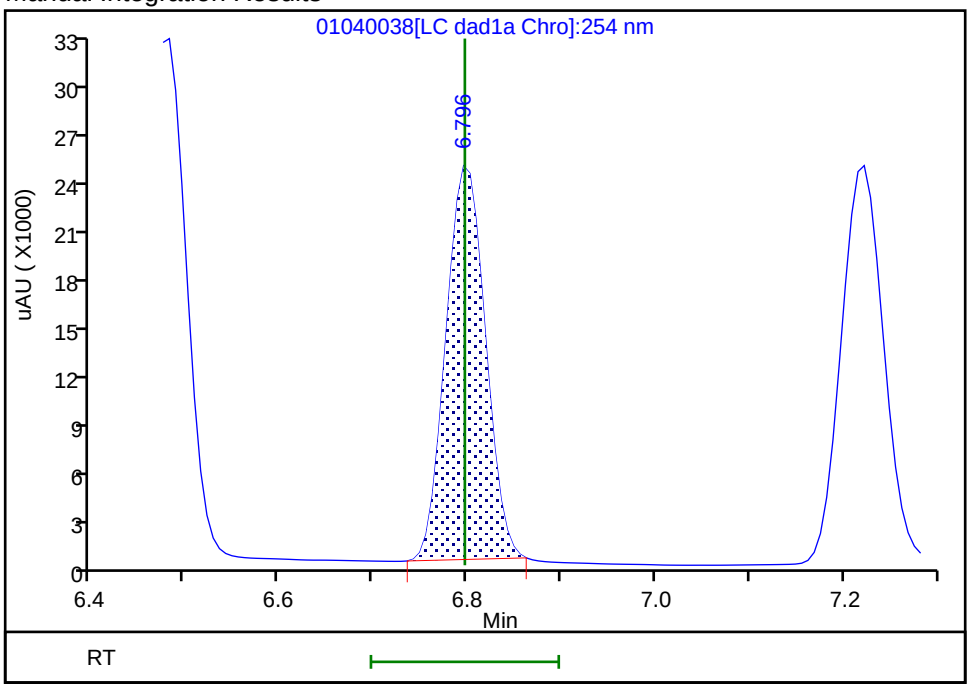
Processing Integration Results

RT: 6.80
Area: 72644
Amount: 0.525975
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 69751
Amount: 0.505029
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:38

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

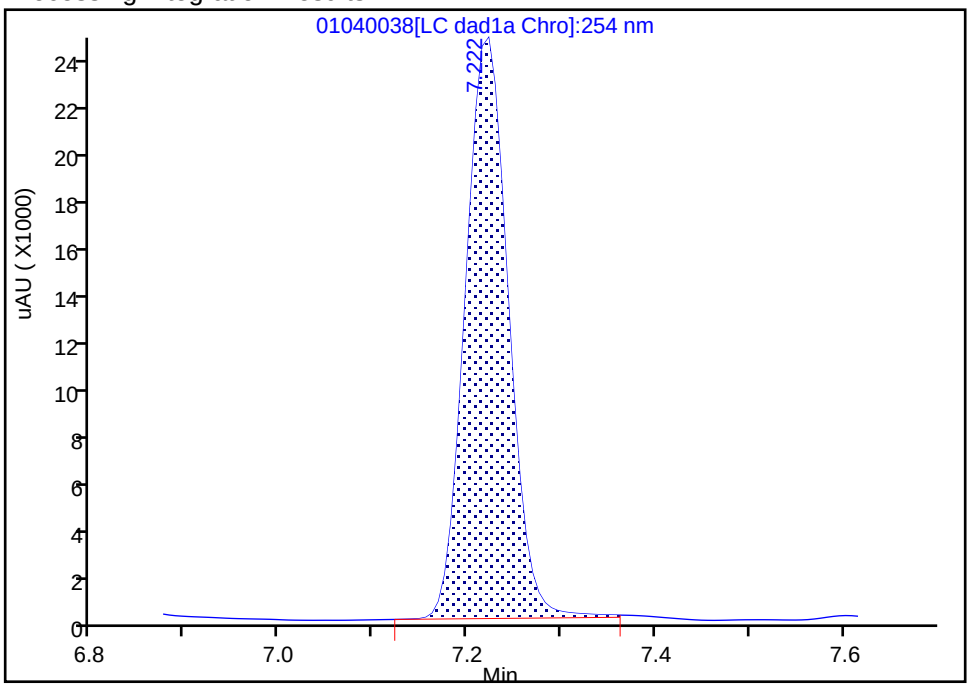
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040038.d				
Injection Date:	05-Jan-2022 04:47:17	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

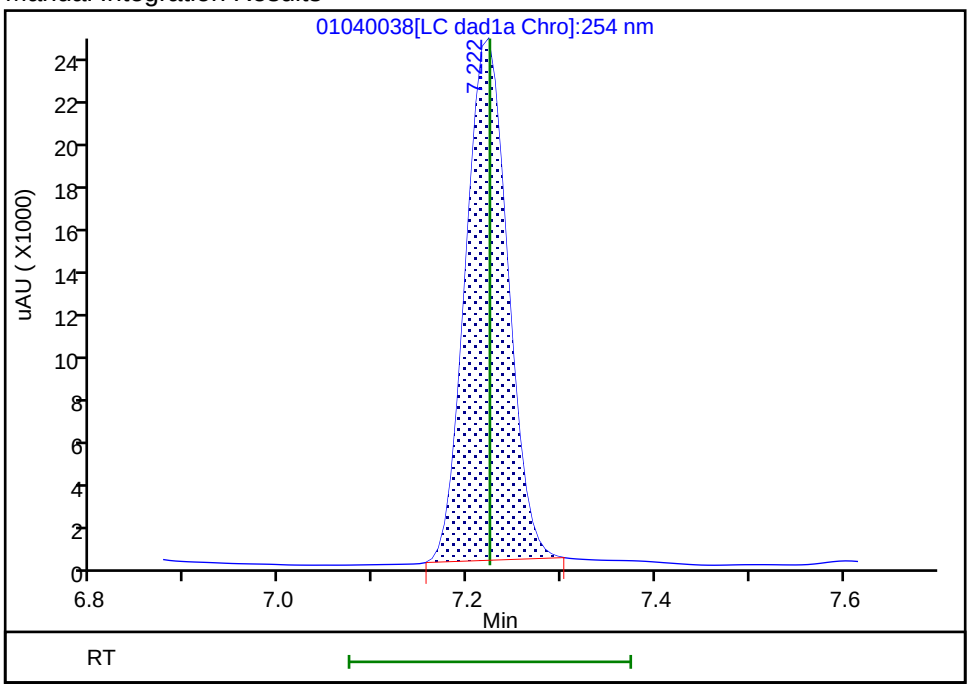
Processing Integration Results

RT: 7.22
Area: 76990
Amount: 0.611054
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 75034
Amount: 0.595530
Amount Units: ug/mL



Reviewer: zhangji, 05-Jan-2022 12:09:41

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567371/41 Calibration Date: 03/02/2022 03:57

Instrument ID: CHHPLC_X3 Calib Start Date: 01/04/2022 18:28

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/04/2022 21:31

Lab File ID: 03010041.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	81848		244	250	-2.4	15.0
RDX	Ave	103609	105360		254	250	1.7	15.0
Picric acid	Ave	77039	77940		253	250	1.2	15.0
1,3,5-Trinitrobenzene	Ave	218096	224152		257	251	2.8	15.0
1,3-Dinitrobenzene	Ave	288401	300128		261	251	4.1	15.0
Nitrobenzene	Ave	191953	187462		245	251	-2.3	15.0
Tetryl	Ave	170567	168291		247	251	-1.3	15.0
Nitroglycerin	Ave	63037	66101		2620	2500	4.9	15.0
2,4,6-Trinitrotoluene	Ave	202726	202869		251	251	0.0	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	148839		247	250	-1.4	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	197896		246	251	-2.1	15.0
2,6-Dinitrotoluene	Ave	143115	146825		258	251	2.6	15.0
2,4-Dinitrotoluene	Ave	289351	293964		255	251	1.6	15.0
2-Nitrotoluene	Ave	127614	119768		235	250	-6.1	15.0
4-Nitrotoluene	Ave	106235	105357		248	251	-0.8	15.0
3-Nitrotoluene	Ave	142273	132176		232	250	-7.1	15.0
PETN	Lin2		77345		2650	2500	5.9	15.0
1,2-Dinitrobenzene	Ave	124698	128184		257	250	2.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567371/41 Calibration Date: 03/02/2022 03:57

Instrument ID: CHHPLC_X3 Calib Start Date: 01/04/2022 18:28

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/04/2022 21:31

Lab File ID: 03010041.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.44	6.74
RDX	7.58	7.43	7.73
Picric acid	7.91	7.75	8.05
1,3,5-Trinitrobenzene	8.65	8.49	8.79
1,3-Dinitrobenzene	9.27	9.11	9.41
Nitrobenzene	9.66	9.50	9.80
Tetryl	9.96	9.81	10.11
Nitroglycerin	10.42	10.26	10.56
2,4,6-Trinitrotoluene	10.87	10.76	10.96
4-Amino-2,6-dinitrotoluene	11.05	10.94	11.14
2-Amino-4,6-dinitrotoluene	11.30	11.19	11.39
2,6-Dinitrotoluene	11.47	11.36	11.56
2,4-Dinitrotoluene	11.64	11.54	11.74
2-Nitrotoluene	12.48	12.33	12.63
4-Nitrotoluene	12.90	12.75	13.05
3-Nitrotoluene	13.47	13.31	13.61
PETN	14.50	14.34	14.64
1,2-Dinitrobenzene	8.52	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010041.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 02-Mar-2022 03:57:34 ALS Bottle#: 7 Worklist Smp#: 41
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0108907-041
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Mar-2022 13:06:21 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:41:19

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.596	6.588	0.008	20462	0.2500	0.2441	M
8 RDX	1	7.576	7.575	0.001	26340	0.2500	0.2542	
9 2,4,6-Trinitrophenol	1	7.910	7.895	0.015	19485	0.2500	0.2529	
$ 10 1,2-Dinitrobenzene	1	8.523	8.515	0.008	32046	0.2500	0.2570	
11 1,3,5-Trinitrobenzene	1	8.650	8.642	0.008	56150	0.2505	0.2575	
12 1,3-Dinitrobenzene	1	9.270	9.262	0.008	75182	0.2505	0.2607	
13 Nitrobenzene	1	9.656	9.648	0.008	47053	0.2510	0.2451	
15 Tetryl	1	9.963	9.955	0.008	42157	0.2505	0.2472	
16 Nitroglycerin	2	10.416	10.408	0.008	165252	2.50	2.62	
17 2,4,6-Trinitrotoluene	1	10.870	10.862	0.008	50920	0.2510	0.2512	
18 4-Amino-2,6-dinitrotoluene	1	11.050	11.042	0.008	37247	0.2503	0.2467	
19 2-Amino-4,6-dinitrotoluene	1	11.303	11.288	0.015	49672	0.2510	0.2457	
20 2,6-Dinitrotoluene	1	11.470	11.462	0.008	36853	0.2510	0.2575	
21 2,4-Dinitrotoluene	1	11.636	11.635	0.001	73785	0.2510	0.2550	
22 o-Nitrotoluene	1	12.483	12.475	0.008	29942	0.2500	0.2346	
23 p-Nitrotoluene	1	12.903	12.895	0.008	26392	0.2505	0.2484	
24 m-Nitrotoluene	1	13.470	13.462	0.008	33077	0.2503	0.2325	
25 PETN	2	14.503	14.488	0.015	193363	2.50	2.65	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070 Amount Added: 25.00 Units: uL

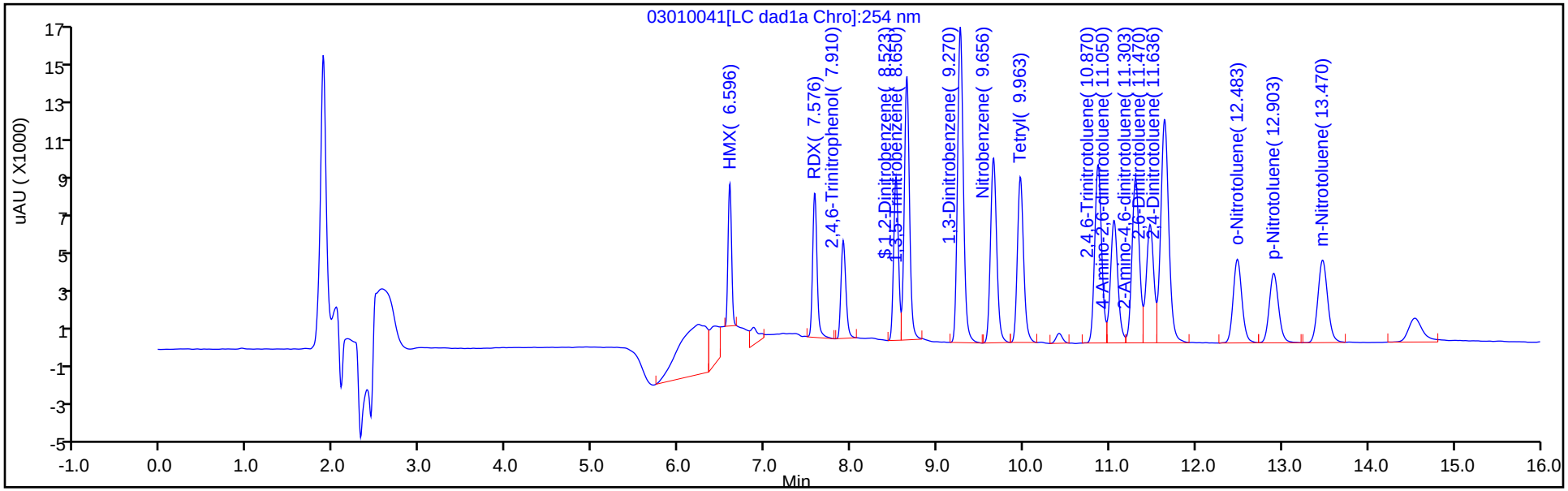
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Eurofins Denver

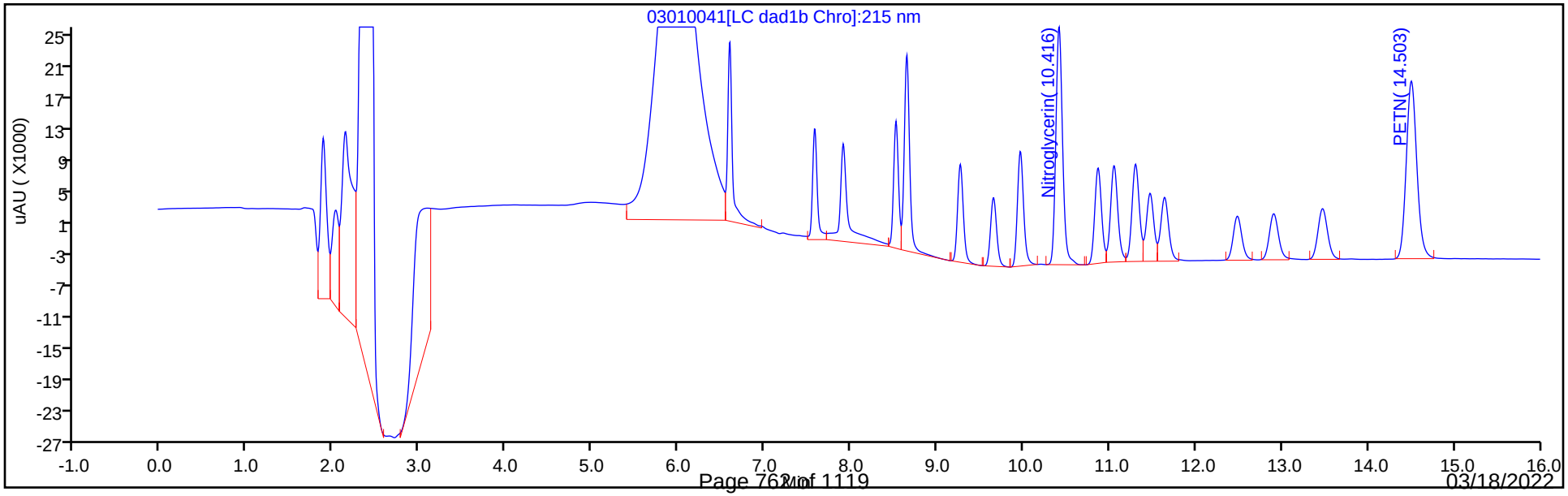
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Injection Date:	02-Mar-2022 03:57:34	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	41
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

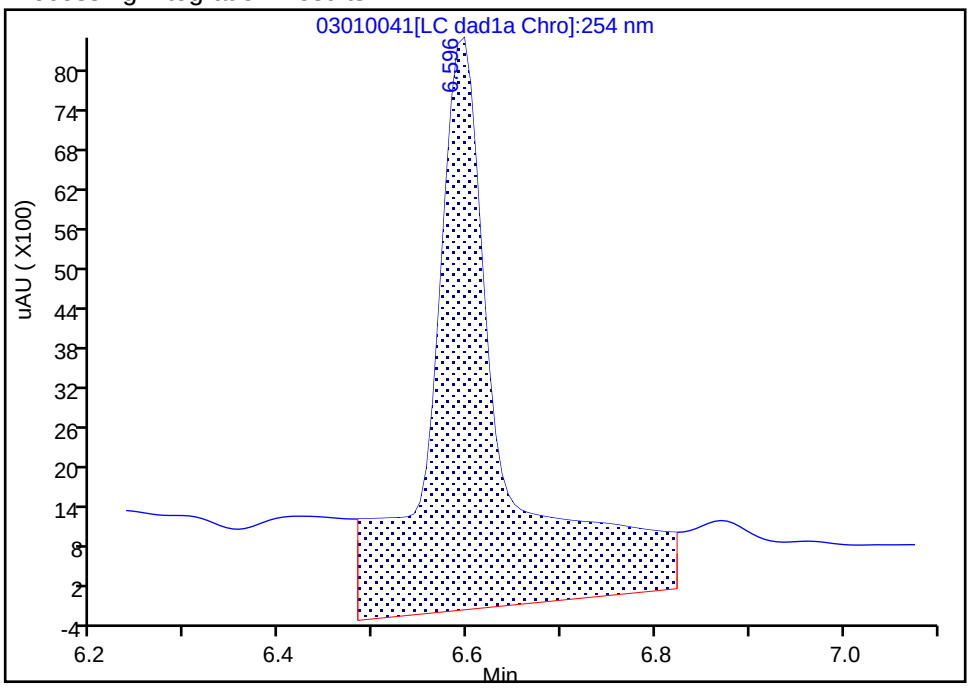
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010041.d				
Injection Date:	02-Mar-2022 03:57:34	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

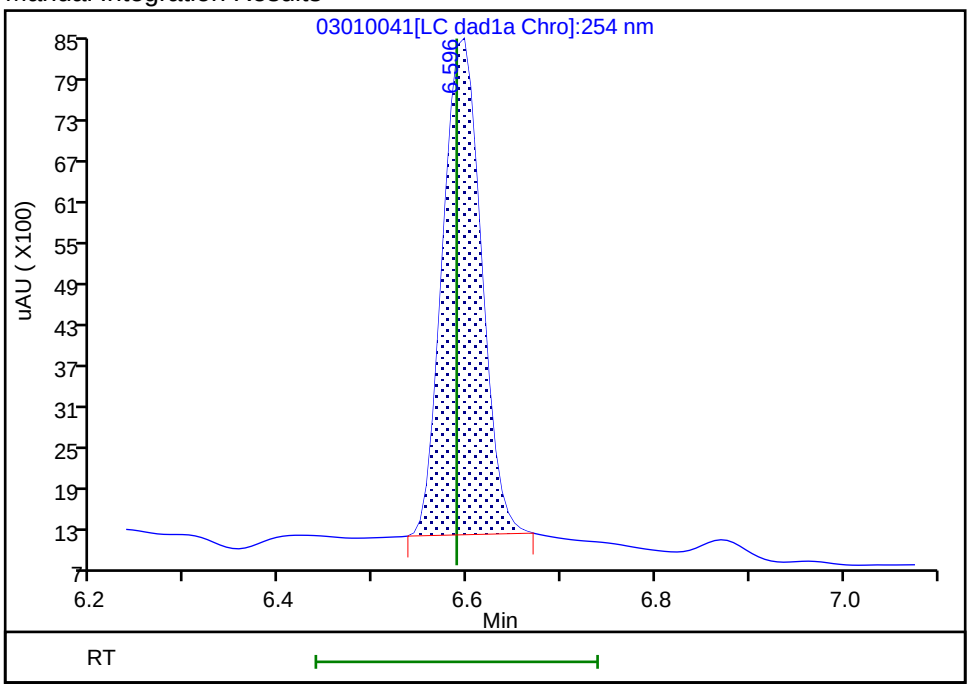
Processing Integration Results

RT: 6.60
Area: 46427
Amount: 0.553842
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 20462
Amount: 0.244097
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:41:18
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567371/42 Calibration Date: 03/02/2022 04:20

Instrument ID: CHHPLC_X3 Calib Start Date: 01/05/2022 01:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/05/2022 04:24

Lab File ID: 03010042.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	173355		239	250	-4.3	15.0
DNX	Ave	138113	134641		244	250	-2.5	15.0
MNX	Ave	125995	123685		286	292	-1.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567371/42 Calibration Date: 03/02/2022 04:20

Instrument ID: CHHPLC_X3 Calib Start Date: 01/05/2022 01:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/05/2022 04:24

Lab File ID: 03010042.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.37	6.57
DNX	6.79	6.69	6.89
MNX	7.21	7.06	7.36

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010042.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	02-Mar-2022 04:20:31	ALS Bottle#:	9	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0108907-042				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Mar-2022 13:06:22	Calib Date:	05-Jan-2022 04:24:15		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1635				
First Level Reviewer: zhangji		Date:	02-Mar-2022 12:41:36		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.475	6.472	0.003	43382	0.2503	0.2394	M
6 DNX	1	6.788	6.792	-0.004	33694	0.2503	0.2440	M
7 MNX	1	7.208	7.206	0.002	36085	0.2918	0.2864	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

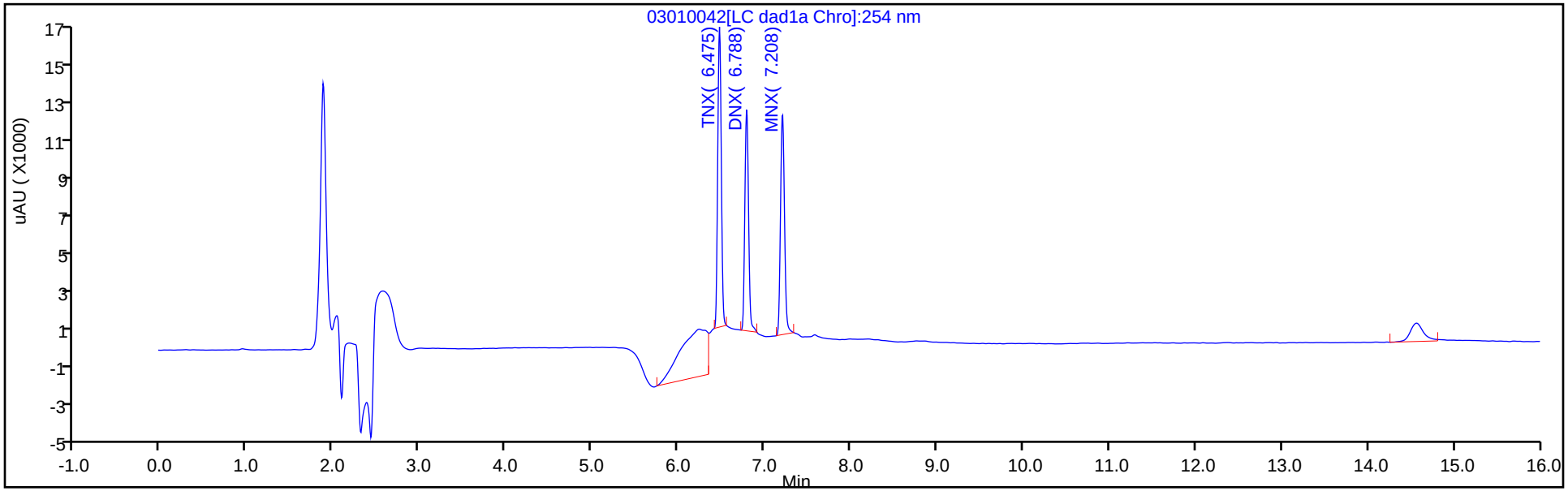
Report Date: 02-Mar-2022 13:06:22 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

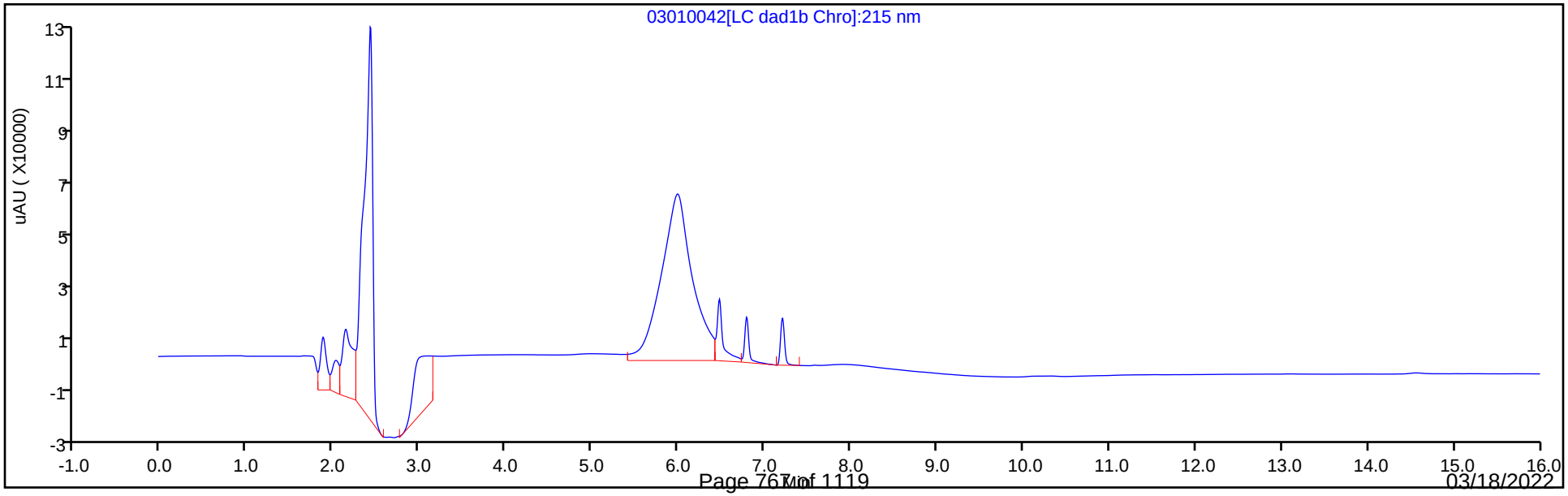
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Injection Date:	02-Mar-2022 04:20:31	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	42
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

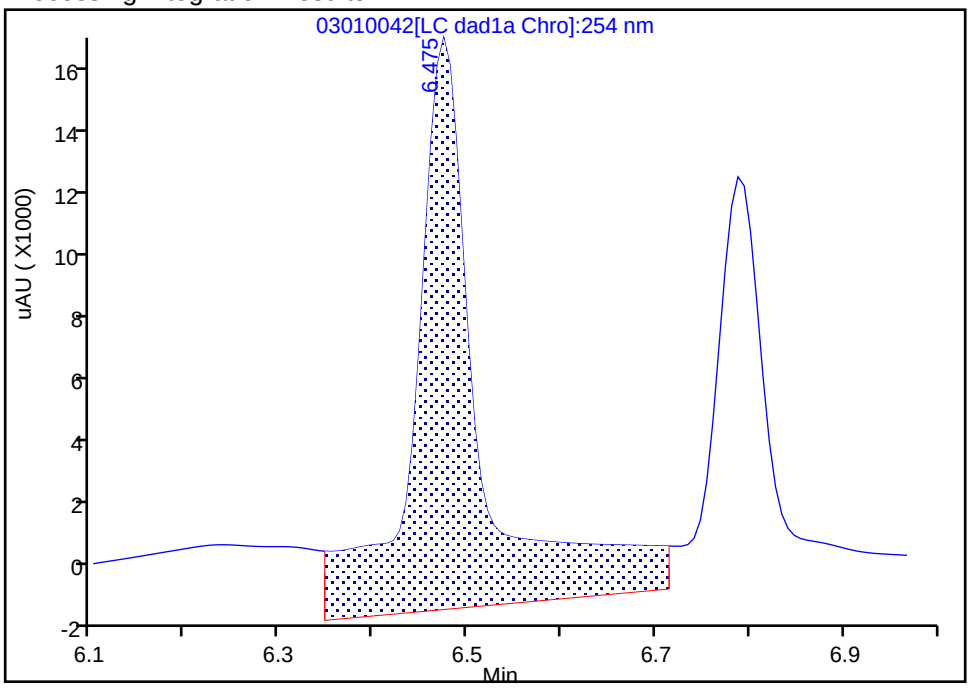
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Injection Date:	02-Mar-2022 04:20:31	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

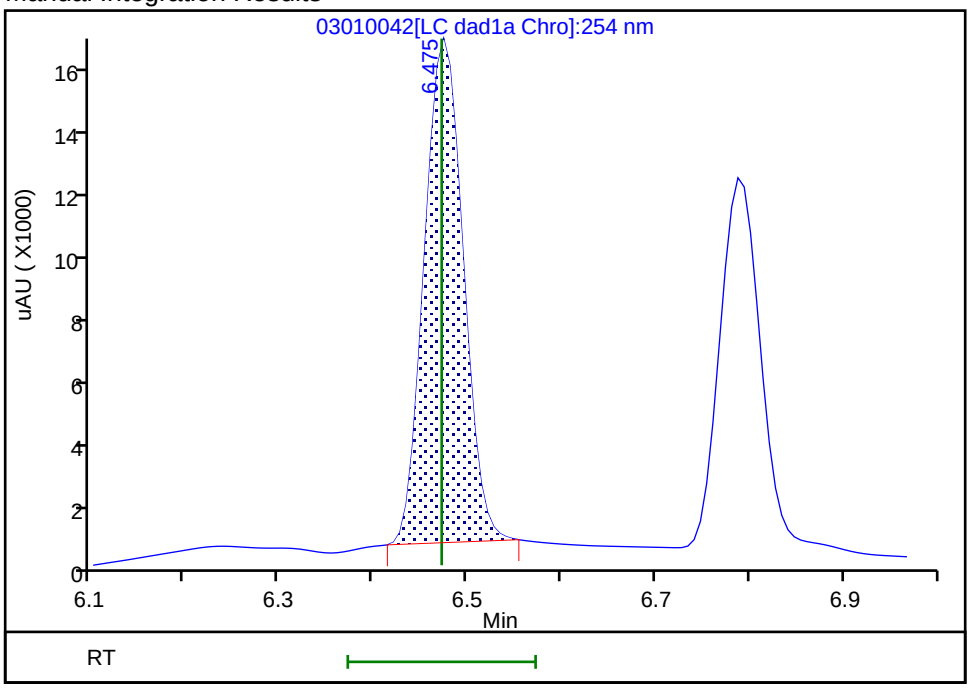
Processing Integration Results

RT: 6.47
Area: 83941
Amount: 0.463231
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 43382
Amount: 0.239405
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:41:27
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

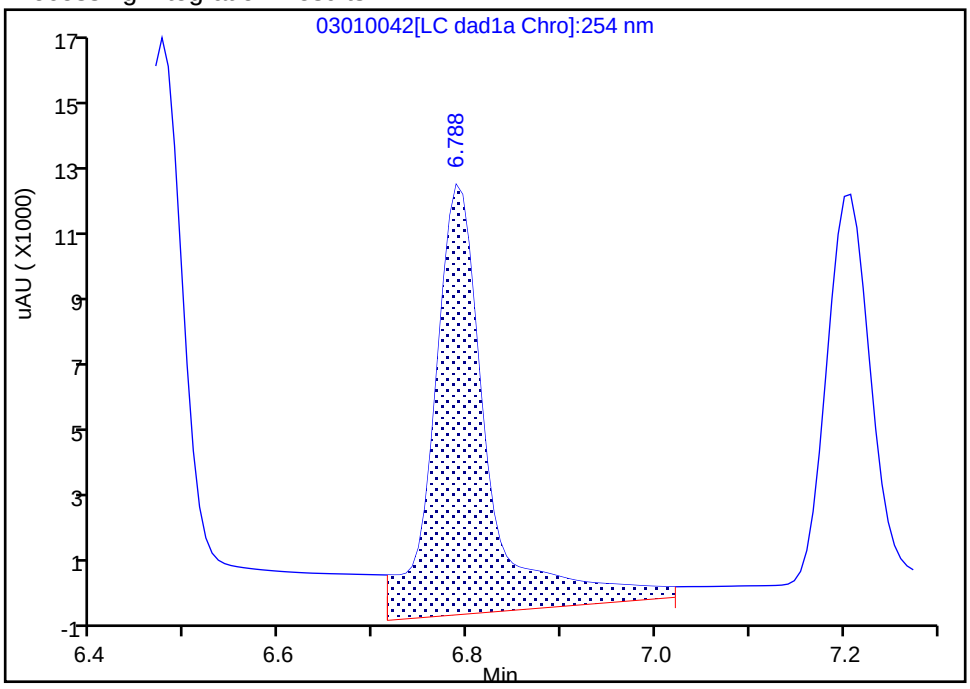
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Injection Date:	02-Mar-2022 04:20:31	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

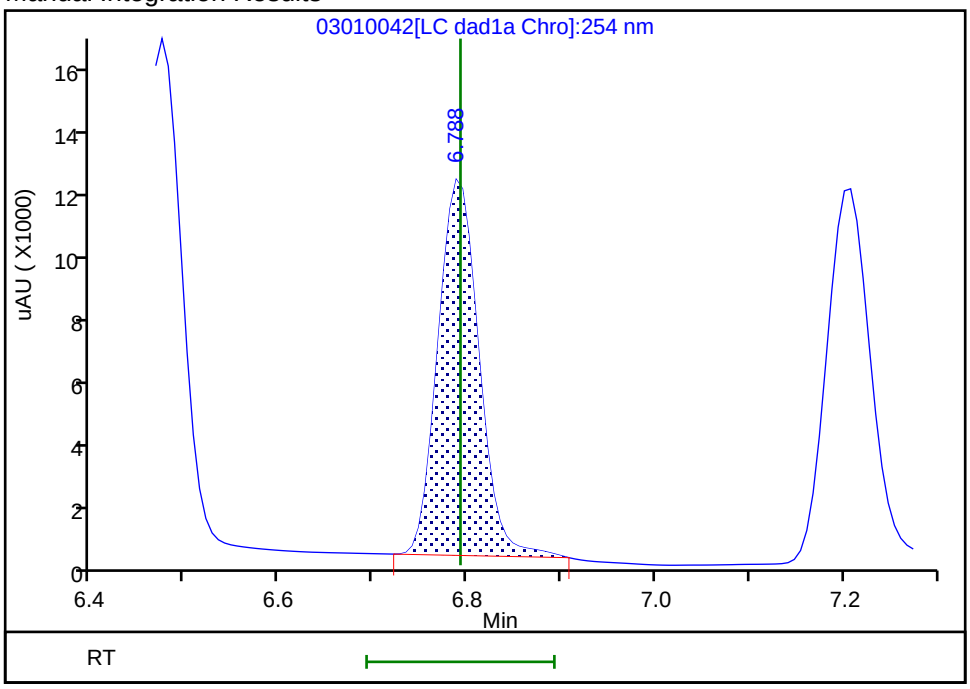
Processing Integration Results

RT: 6.79
Area: 48952
Amount: 0.354435
Amount Units: ug/mL



Manual Integration Results

RT: 6.79
Area: 33694
Amount: 0.243960
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:41:30
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

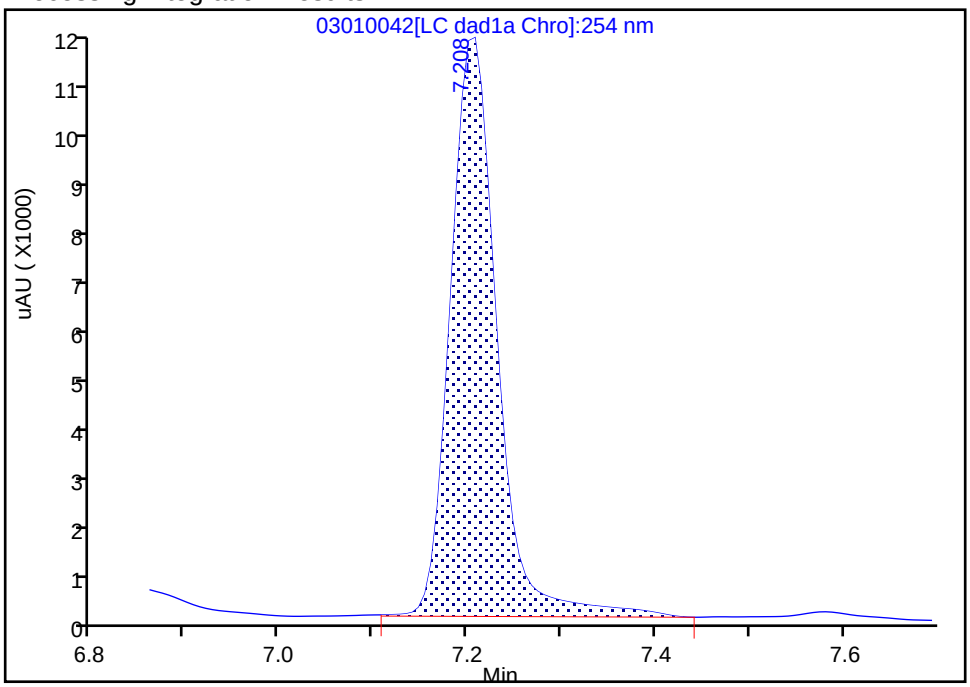
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Injection Date: 02-Mar-2022 04:20:31 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

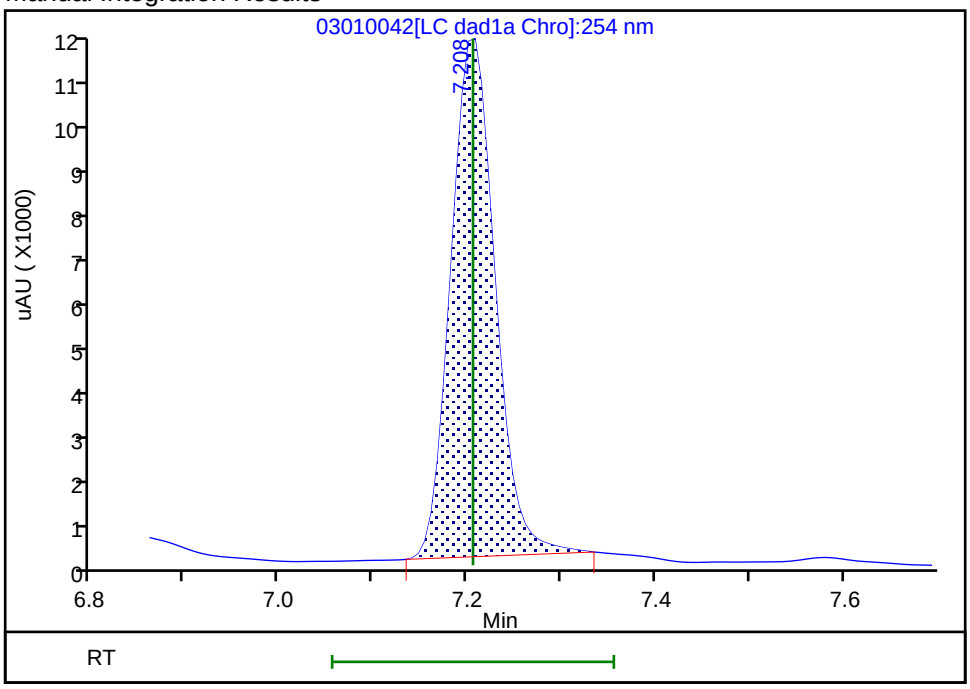
Processing Integration Results

RT: 7.21
Area: 38382
Amount: 0.304630
Amount Units: ug/mL



Manual Integration Results

RT: 7.21
Area: 36085
Amount: 0.286399
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:41:35
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567371/53 Calibration Date: 03/02/2022 08:32

Instrument ID: CHHPLC_X3 Calib Start Date: 01/04/2022 18:28

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/04/2022 21:31

Lab File ID: 03010053.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	81296		242	250	-3.0	15.0
RDX	Ave	103609	105100		254	250	1.4	15.0
Picric acid	Ave	77039	78300		254	250	1.6	15.0
1,3,5-Trinitrobenzene	Ave	218096	224551		258	251	3.0	15.0
1,3-Dinitrobenzene	Ave	288401	300687		261	251	4.3	15.0
Nitrobenzene	Ave	191953	183470		240	251	-4.4	15.0
Tetryl	Ave	170567	168068		247	251	-1.5	15.0
Nitroglycerin	Ave	63037	66333		2630	2500	5.2	15.0
2,4,6-Trinitrotoluene	Ave	202726	201287		249	251	-0.7	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	149495		248	250	-1.0	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	198769		247	251	-1.7	15.0
2,6-Dinitrotoluene	Ave	143115	146398		257	251	2.3	15.0
2,4-Dinitrotoluene	Ave	289351	295908		257	251	2.3	15.0
2-Nitrotoluene	Ave	127614	117528		230	250	-7.9	15.0
4-Nitrotoluene	Ave	106235	103525		244	251	-2.6	15.0
3-Nitrotoluene	Ave	142273	130314		229	250	-8.4	15.0
PETN	Lin2		77664		2660	2500	6.3	15.0
1,2-Dinitrobenzene	Ave	124698	128660		258	250	3.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567371/53 Calibration Date: 03/02/2022 08:32

Instrument ID: CHHPLC_X3 Calib Start Date: 01/04/2022 18:28

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/04/2022 21:31

Lab File ID: 03010053.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.59	6.44	6.74
RDX	7.57	7.43	7.73
Picric acid	7.90	7.75	8.05
1,3,5-Trinitrobenzene	8.65	8.49	8.79
1,3-Dinitrobenzene	9.27	9.11	9.41
Nitrobenzene	9.65	9.50	9.80
Tetryl	9.96	9.81	10.11
Nitroglycerin	10.41	10.26	10.56
2,4,6-Trinitrotoluene	10.87	10.76	10.96
4-Amino-2,6-dinitrotoluene	11.05	10.94	11.14
2-Amino-4,6-dinitrotoluene	11.30	11.19	11.39
2,6-Dinitrotoluene	11.47	11.36	11.56
2,4-Dinitrotoluene	11.64	11.54	11.74
2-Nitrotoluene	12.48	12.33	12.63
4-Nitrotoluene	12.91	12.75	13.05
3-Nitrotoluene	13.47	13.31	13.61
PETN	14.51	14.34	14.64
1,2-Dinitrobenzene	8.52	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010053.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 02-Mar-2022 08:32:47 ALS Bottle#: 7 Worklist Smp#: 53
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0108907-053
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Mar-2022 13:06:29 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:46:16

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.586	6.588	-0.002	20324	0.2500	0.2425	M
8 RDX	1	7.573	7.575	-0.002	26275	0.2500	0.2536	
9 2,4,6-Trinitrophenol	1	7.899	7.895	0.004	19575	0.2500	0.2541	
$ 10 1,2-Dinitrobenzene	1	8.519	8.515	0.004	32165	0.2500	0.2579	
11 1,3,5-Trinitrobenzene	1	8.646	8.642	0.004	56250	0.2505	0.2579	
12 1,3-Dinitrobenzene	1	9.266	9.262	0.004	75322	0.2505	0.2612	
13 Nitrobenzene	1	9.653	9.648	0.005	46051	0.2510	0.2399	
15 Tetryl	1	9.959	9.955	0.004	42101	0.2505	0.2468	
16 Nitroglycerin	2	10.413	10.408	0.005	165833	2.50	2.63	
17 2,4,6-Trinitrotoluene	1	10.866	10.862	0.004	50523	0.2510	0.2492	
18 4-Amino-2,6-dinitrotoluene	1	11.046	11.042	0.004	37411	0.2503	0.2478	
19 2-Amino-4,6-dinitrotoluene	1	11.299	11.288	0.011	49891	0.2510	0.2468	
20 2,6-Dinitrotoluene	1	11.466	11.462	0.004	36746	0.2510	0.2568	
21 2,4-Dinitrotoluene	1	11.639	11.635	0.004	74273	0.2510	0.2567	
22 o-Nitrotoluene	1	12.479	12.475	0.004	29382	0.2500	0.2302	
23 p-Nitrotoluene	1	12.906	12.895	0.011	25933	0.2505	0.2441	
24 m-Nitrotoluene	1	13.473	13.462	0.011	32611	0.2503	0.2292	
25 PETN	2	14.506	14.488	0.018	194160	2.50	2.66	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070 Amount Added: 25.00 Units: uL

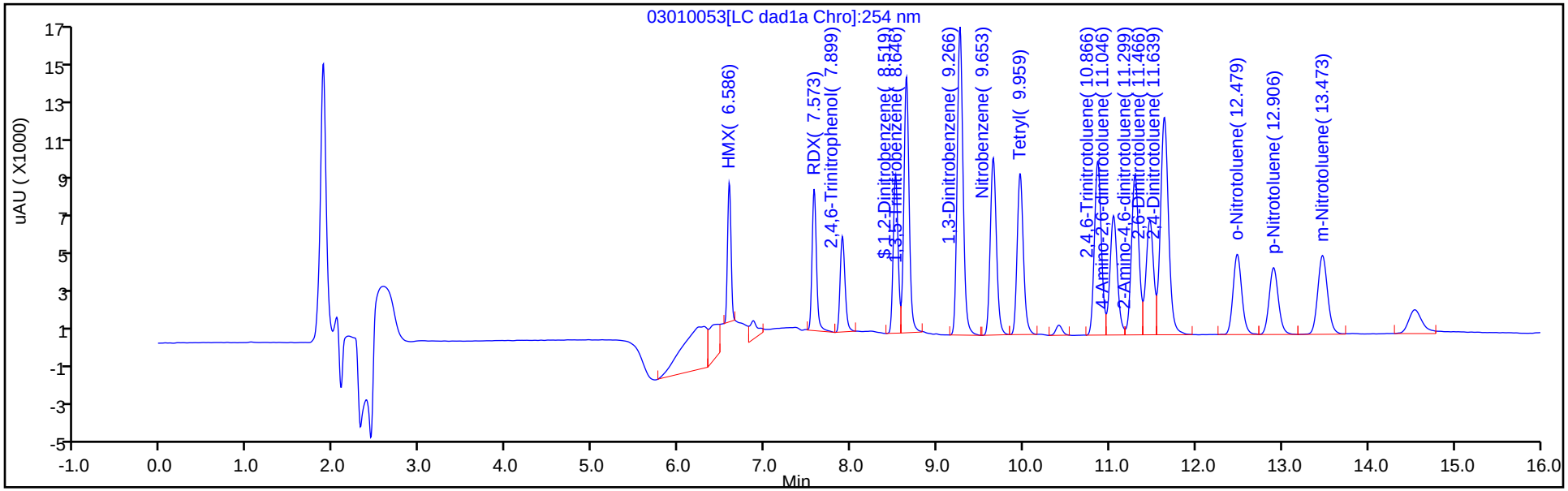
Report Date: 02-Mar-2022 13:06:29 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

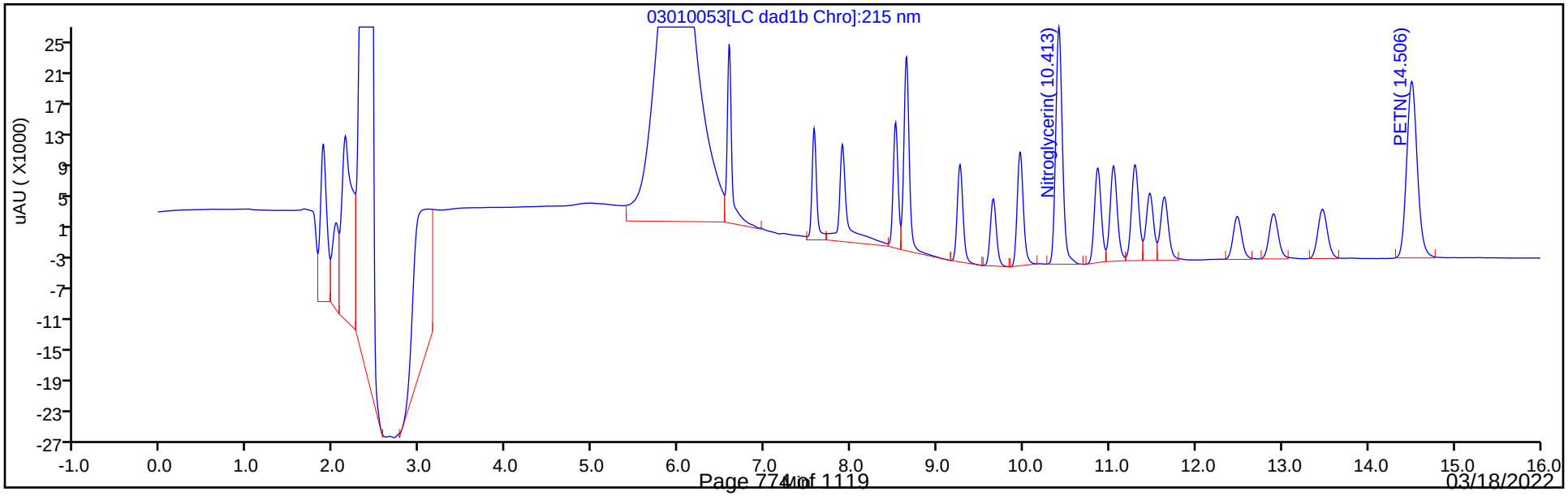
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Injection Date:	02-Mar-2022 08:32:47	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	53
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

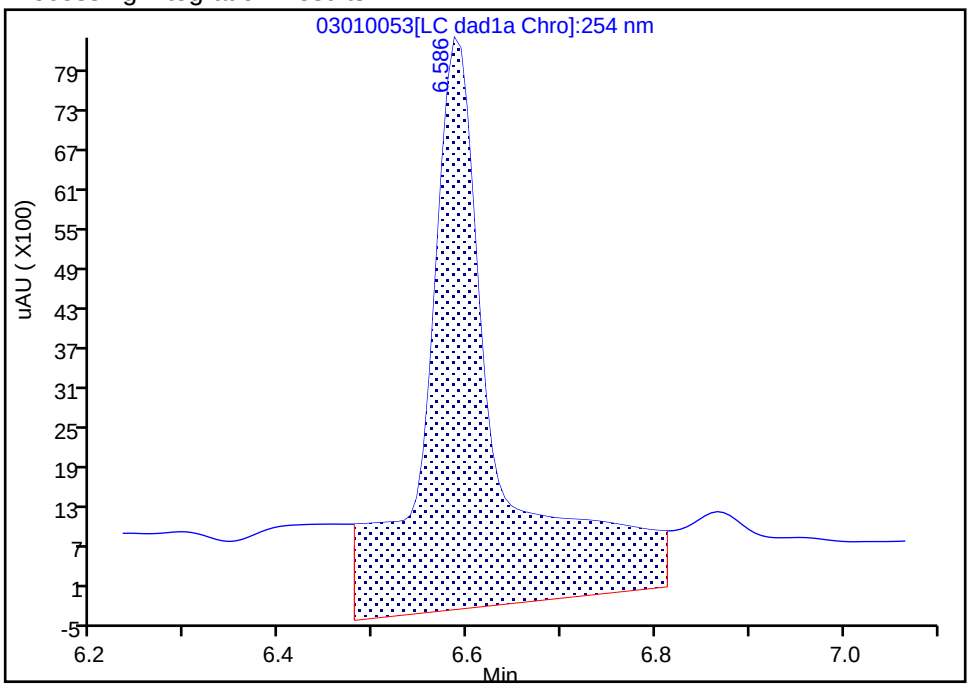
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Injection Date:	02-Mar-2022 08:32:47	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

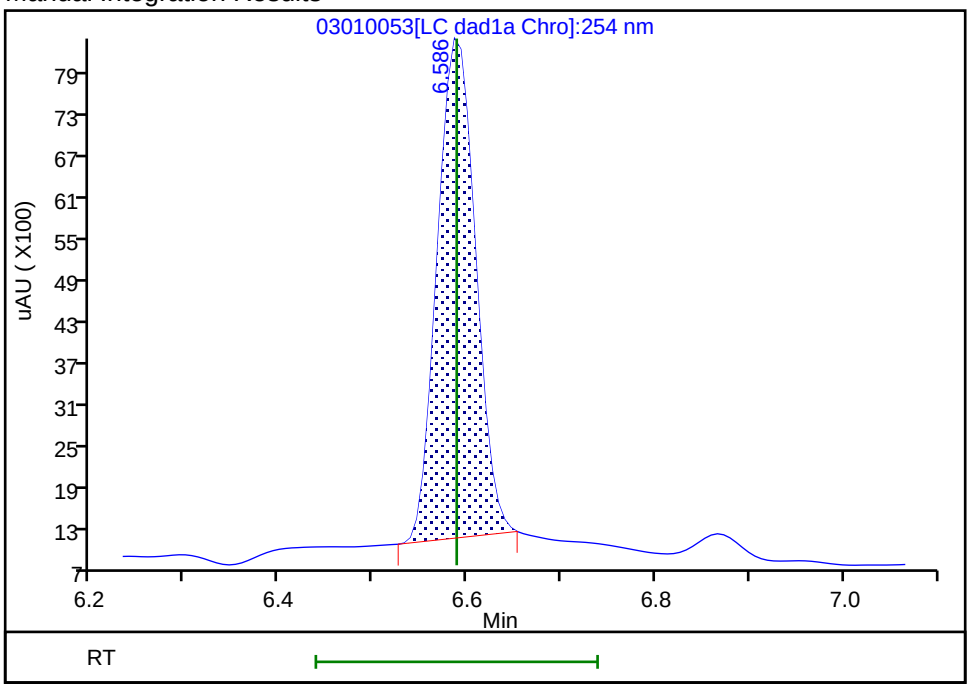
Processing Integration Results

RT: 6.59
Area: 45694
Amount: 0.545098
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 20324
Amount: 0.242451
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:46:15
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567371/54 Calibration Date: 03/02/2022 08:55

Instrument ID: CHHPLC_X3 Calib Start Date: 01/05/2022 01:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/05/2022 04:24

Lab File ID: 03010054.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	166709		230	250	-8.0	15.0
DNX	Ave	138113	126801		230	250	-8.2	15.0
MNX	Ave	125995	123369		286	292	-2.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567371/54 Calibration Date: 03/02/2022 08:55

Instrument ID: CHHPLC_X3 Calib Start Date: 01/05/2022 01:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/05/2022 04:24

Lab File ID: 03010054.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.47	6.37	6.57
DNX	6.79	6.69	6.89
MNX	7.21	7.06	7.36

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010054.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	02-Mar-2022 08:55:46	ALS Bottle#:	9	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0108907-054				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Mar-2022 13:06:29	Calib Date:	05-Jan-2022 04:24:15		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1635				
First Level Reviewer: zhangji		Date:	02-Mar-2022 12:46:32		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.471	6.472	-0.001	41719	0.2503	0.2302	M
6 DNX	1	6.785	6.792	-0.007	31732	0.2503	0.2298	M
7 MNX	1	7.205	7.206	-0.001	35993	0.2918	0.2857	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

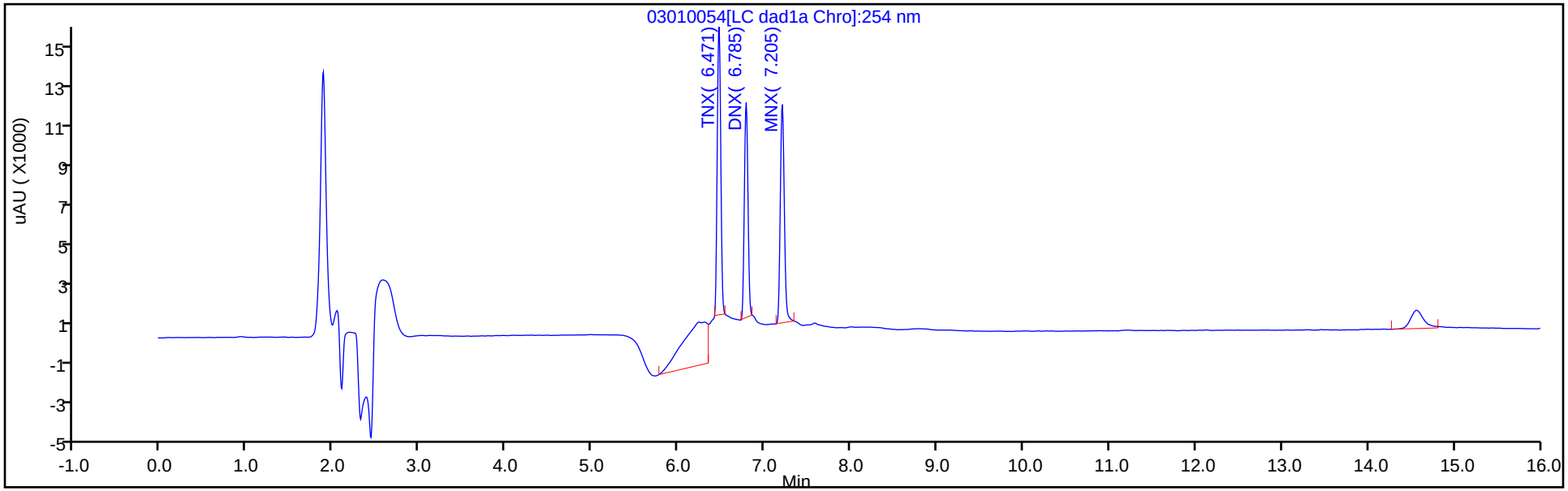
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Eurofins Denver

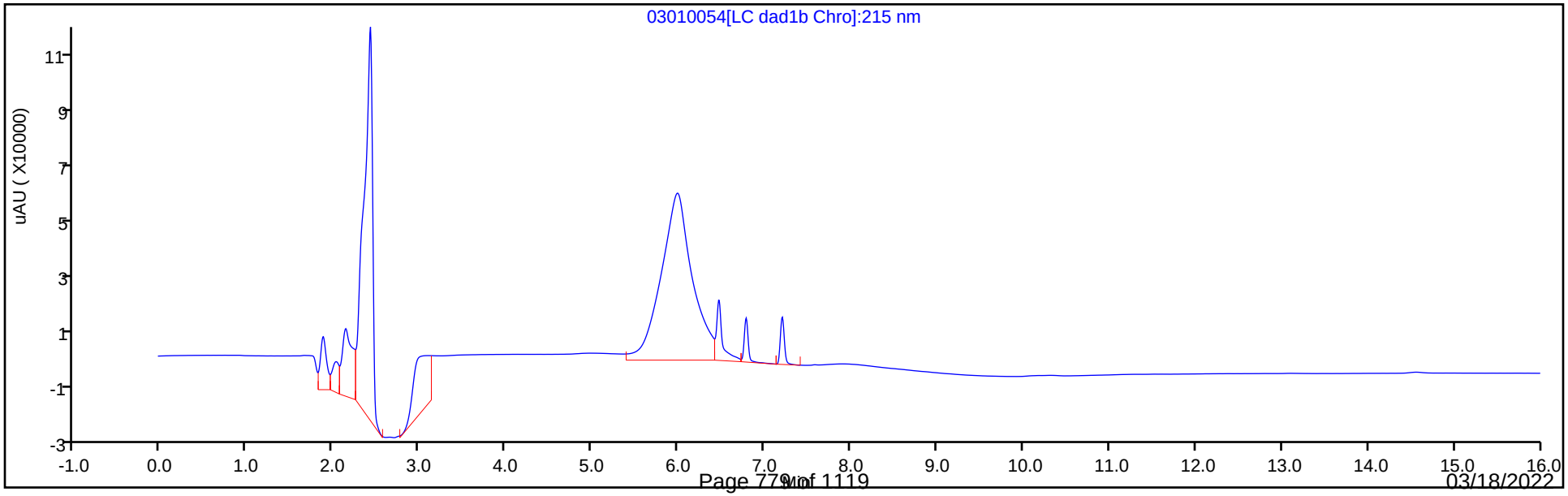
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Injection Date:	02-Mar-2022 08:55:46	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	54
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

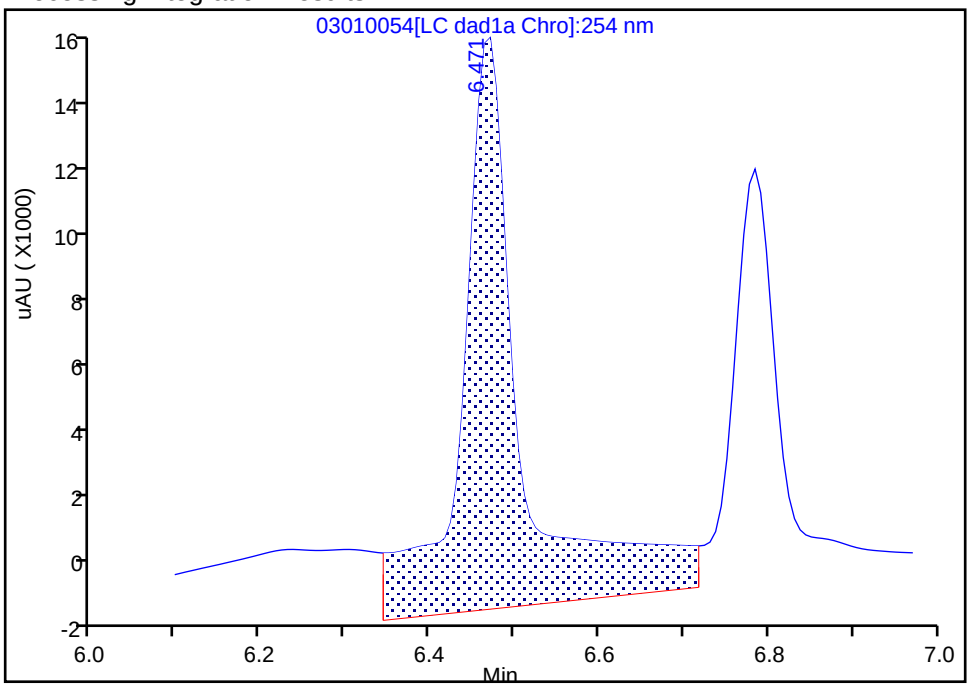
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Injection Date: 02-Mar-2022 08:55:46 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 54
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

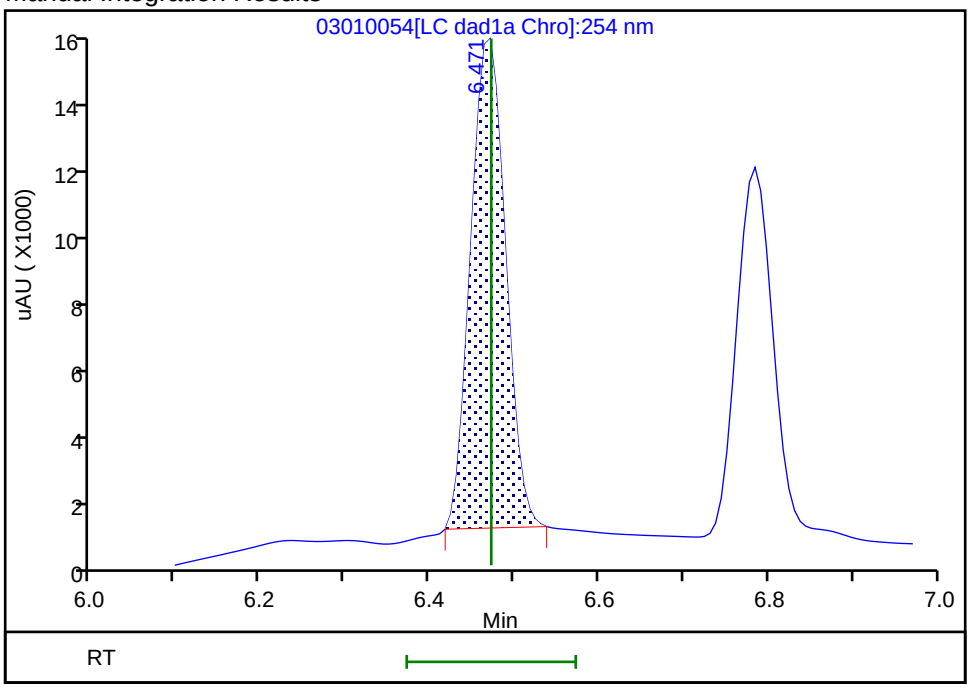
Processing Integration Results

RT: 6.47
Area: 82527
Amount: 0.455428
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 41719
Amount: 0.230228
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:46:22
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

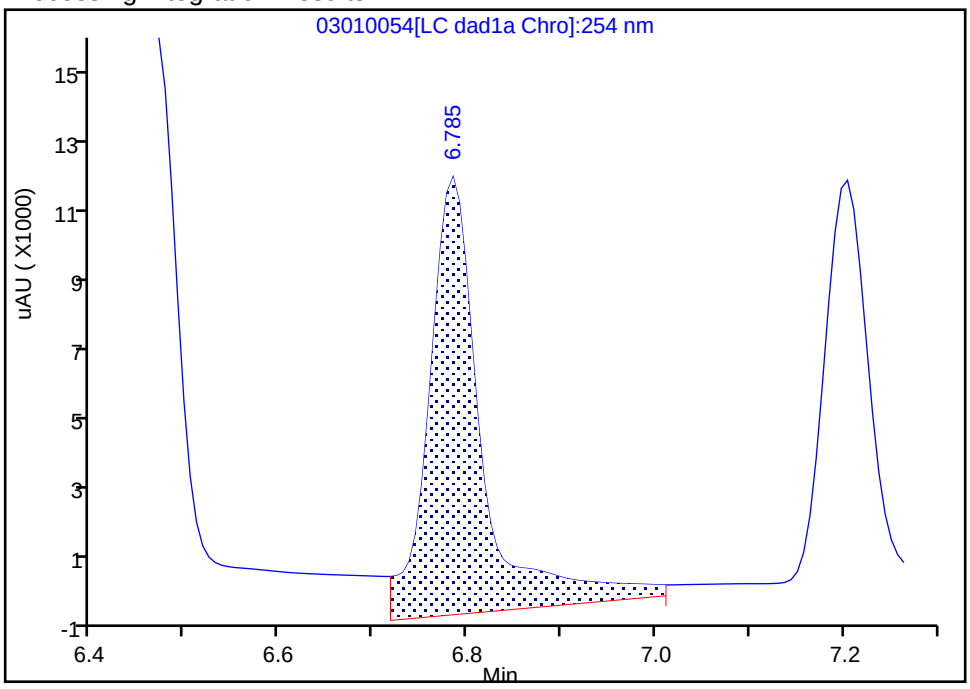
Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010054.d
Injection Date: 02-Mar-2022 08:55:46 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 54
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

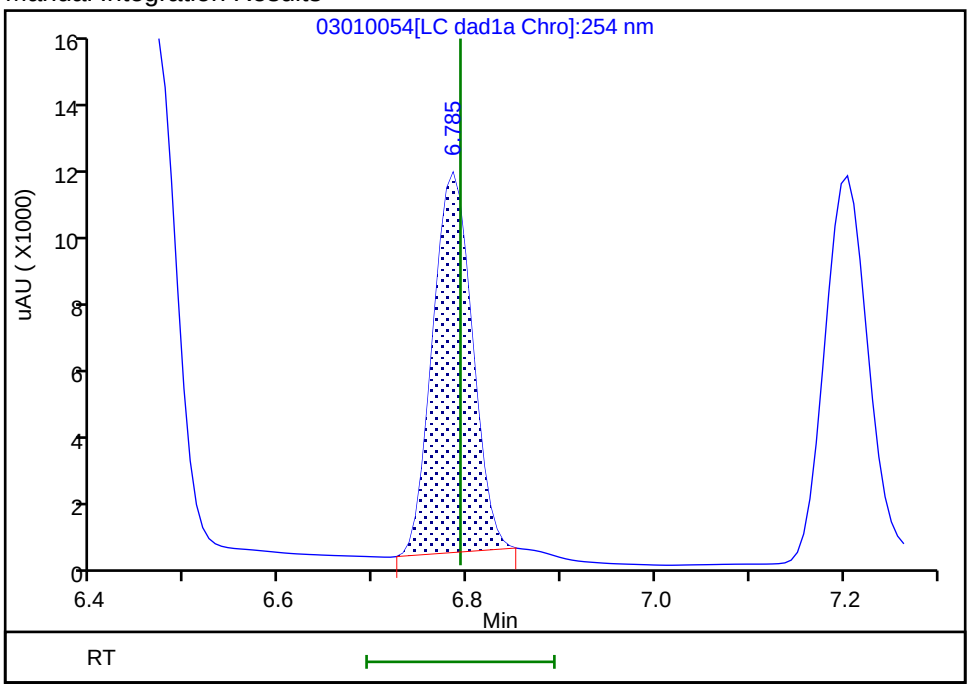
Processing Integration Results

RT: 6.78
Area: 47432
Amount: 0.343429
Amount Units: ug/mL



Manual Integration Results

RT: 6.78
Area: 31732
Amount: 0.229754
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:46:26
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

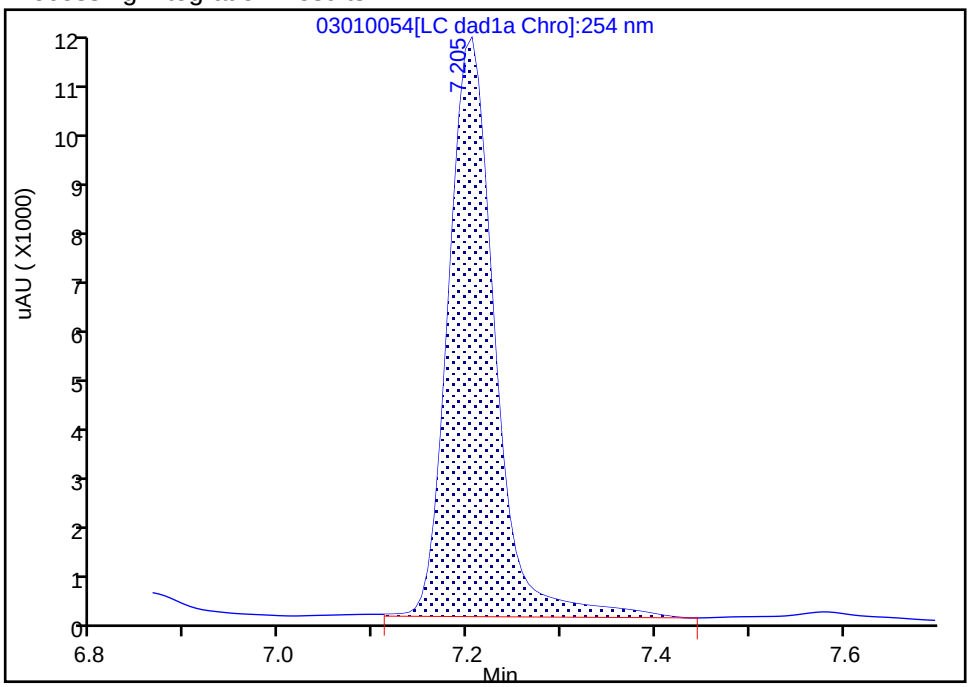
Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010054.d
Injection Date: 02-Mar-2022 08:55:46 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 54
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

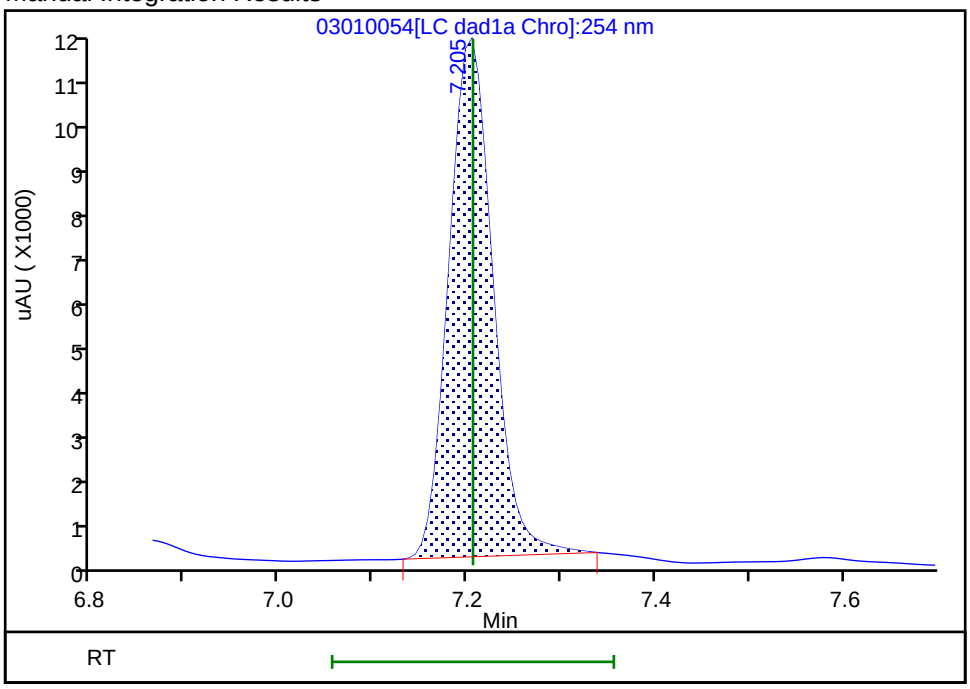
Processing Integration Results

RT: 7.20
Area: 38310
Amount: 0.304059
Amount Units: ug/mL



Manual Integration Results

RT: 7.20
Area: 35993
Amount: 0.285669
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:46:31
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567371/65 Calibration Date: 03/02/2022 13:08

Instrument ID: CHHPLC_X3 Calib Start Date: 01/04/2022 18:28

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/04/2022 21:31

Lab File ID: 03010065.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	82388		246	250	-1.7	15.0
RDX	Ave	103609	105704		255	250	2.0	15.0
Picric acid	Ave	77039	78576		255	250	2.0	15.0
1,3,5-Trinitrobenzene	Ave	218096	225717		259	251	3.5	15.0
1,3-Dinitrobenzene	Ave	288401	301792		262	251	4.6	15.0
Nitrobenzene	Ave	191953	180880		237	251	-5.8	15.0
Tetryl	Ave	170567	168798		248	251	-1.0	15.0
Nitroglycerin	Ave	63037	66368		2630	2500	5.3	15.0
2,4,6-Trinitrotoluene	Ave	202726	202223		250	251	-0.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	148384		246	250	-1.7	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	197542		245	251	-2.3	15.0
2,6-Dinitrotoluene	Ave	143115	146904		258	251	2.6	15.0
2,4-Dinitrotoluene	Ave	289351	297438		258	251	2.8	15.0
2-Nitrotoluene	Ave	127614	114592		224	250	-10.2	15.0
4-Nitrotoluene	Ave	106235	102643		242	251	-3.4	15.0
3-Nitrotoluene	Ave	142273	127988		225	250	-10.0	15.0
PETN	Lin2		77777		2660	2500	6.4	15.0
1,2-Dinitrobenzene	Ave	124698	128964		259	250	3.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567371/65 Calibration Date: 03/02/2022 13:08

Instrument ID: CHHPLC_X3 Calib Start Date: 01/04/2022 18:28

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/04/2022 21:31

Lab File ID: 03010065.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.59	6.44	6.74
RDX	7.57	7.43	7.73
Picric acid	7.90	7.75	8.05
1,3,5-Trinitrobenzene	8.65	8.49	8.79
1,3-Dinitrobenzene	9.27	9.11	9.41
Nitrobenzene	9.65	9.50	9.80
Tetryl	9.96	9.81	10.11
Nitroglycerin	10.41	10.26	10.56
2,4,6-Trinitrotoluene	10.87	10.76	10.96
4-Amino-2,6-dinitrotoluene	11.05	10.94	11.14
2-Amino-4,6-dinitrotoluene	11.30	11.19	11.39
2,6-Dinitrotoluene	11.47	11.36	11.56
2,4-Dinitrotoluene	11.64	11.54	11.74
2-Nitrotoluene	12.49	12.33	12.63
4-Nitrotoluene	12.91	12.75	13.05
3-Nitrotoluene	13.47	13.31	13.61
PETN	14.51	14.34	14.64
1,2-Dinitrobenzene	8.52	8.37	8.67

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010065.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 02-Mar-2022 13:08:13 ALS Bottle#: 7 Worklist Smp#: 65
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0108907-065
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Mar-2022 13:56:57 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 13:36:21

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.593	6.588	0.005	20597	0.2500	0.2457	M
8 RDX	1	7.573	7.575	-0.002	26426	0.2500	0.2551	
9 2,4,6-Trinitrophenol	1	7.900	7.895	0.005	19644	0.2500	0.2550	
$ 10 1,2-Dinitrobenzene	1	8.520	8.515	0.005	32241	0.2500	0.2586	
11 1,3,5-Trinitrobenzene	1	8.646	8.642	0.004	56542	0.2505	0.2593	
12 1,3-Dinitrobenzene	1	9.266	9.262	0.004	75599	0.2505	0.2621	
13 Nitrobenzene	1	9.653	9.648	0.005	45401	0.2510	0.2365	
15 Tetryl	1	9.960	9.955	0.005	42284	0.2505	0.2479	
16 Nitroglycerin	2	10.413	10.408	0.005	165919	2.50	2.63	
17 2,4,6-Trinitrotoluene	1	10.866	10.862	0.004	50758	0.2510	0.2504	
18 4-Amino-2,6-dinitrotoluene	1	11.046	11.042	0.004	37133	0.2503	0.2459	
19 2-Amino-4,6-dinitrotoluene	1	11.300	11.288	0.012	49583	0.2510	0.2453	
20 2,6-Dinitrotoluene	1	11.466	11.462	0.004	36873	0.2510	0.2576	
21 2,4-Dinitrotoluene	1	11.640	11.635	0.005	74657	0.2510	0.2580	
22 o-Nitrotoluene	1	12.486	12.475	0.011	28648	0.2500	0.2245	
23 p-Nitrotoluene	1	12.906	12.895	0.011	25712	0.2505	0.2420	
24 m-Nitrotoluene	1	13.473	13.462	0.011	32029	0.2503	0.2251	
25 PETN	2	14.506	14.488	0.018	194442	2.50	2.66	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070 Amount Added: 25.00 Units: uL

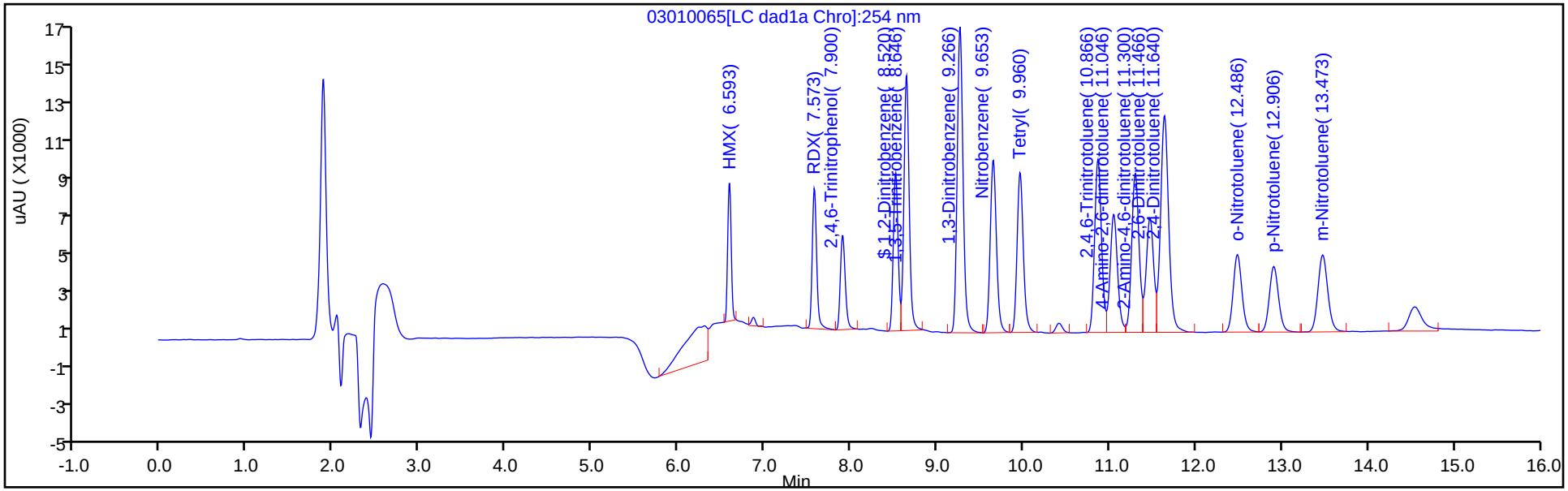
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Eurofins Denver

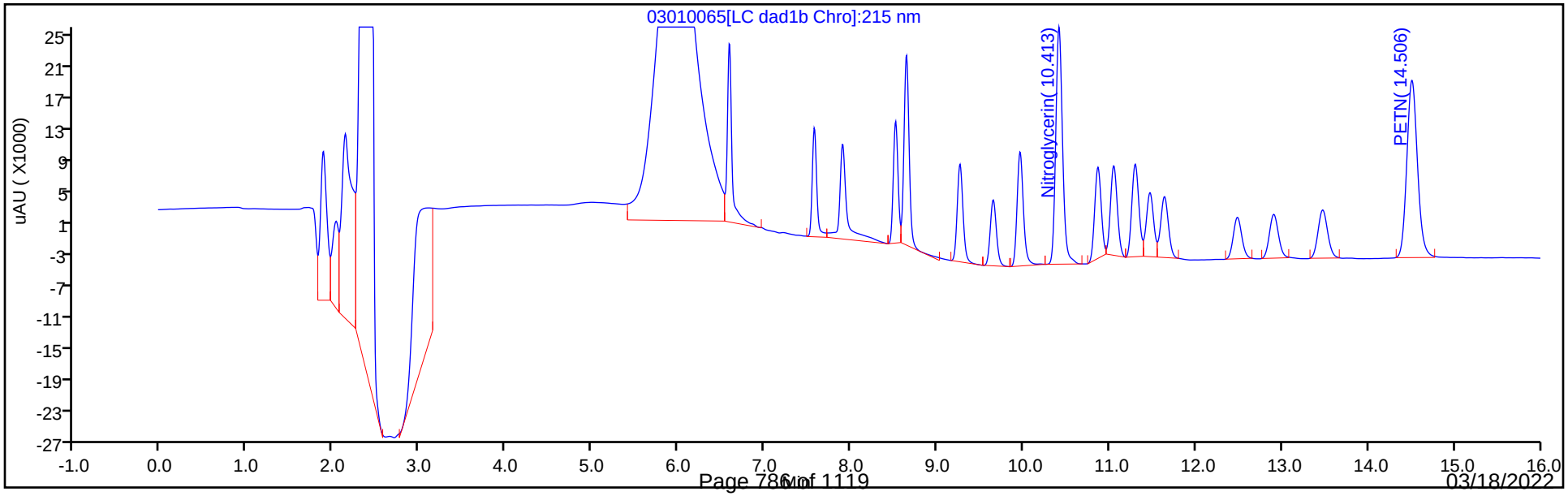
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Injection Date:	02-Mar-2022 13:08:13	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	65
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

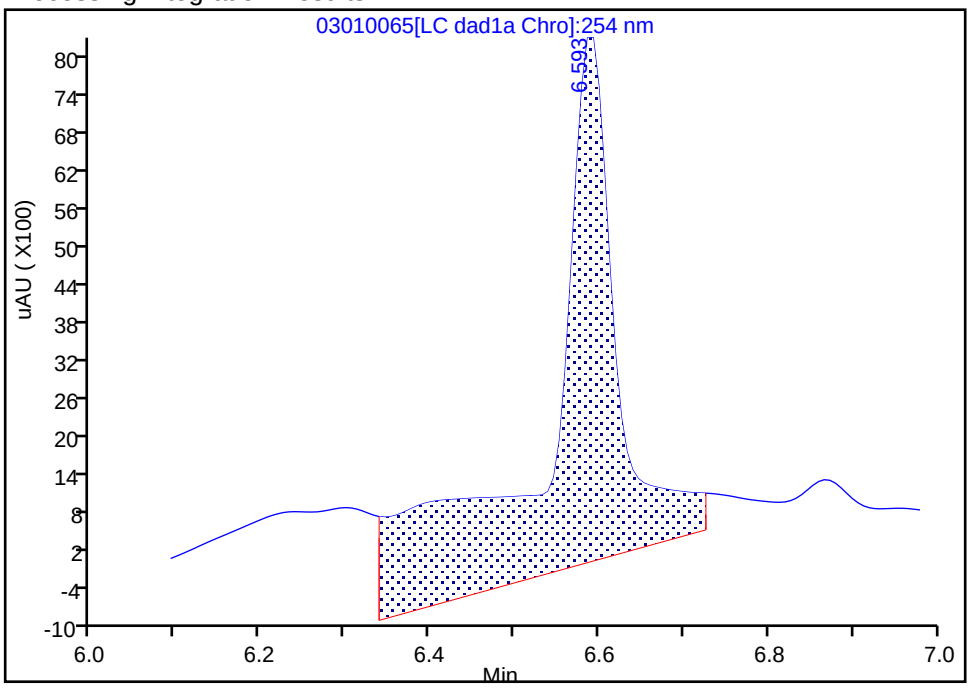
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Injection Date:	02-Mar-2022 13:08:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	65
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

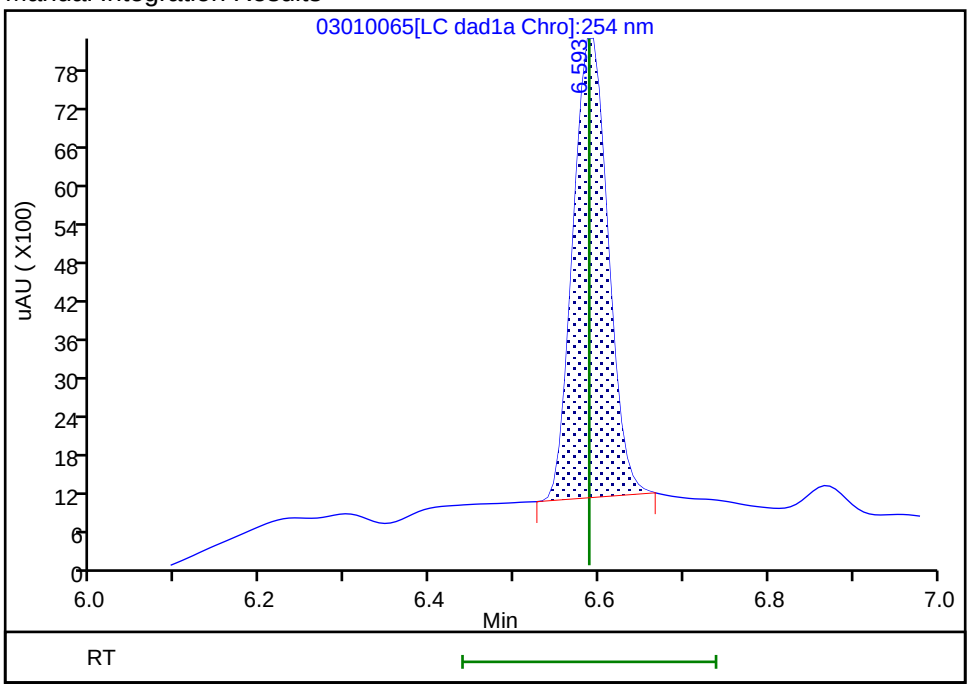
Processing Integration Results

RT: 6.59
Area: 49361
Amount: 0.588842
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 20597
Amount: 0.245708
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 13:36:20
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567371/66 Calibration Date: 03/02/2022 13:31

Instrument ID: CHHPLC_X3 Calib Start Date: 01/05/2022 01:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/05/2022 04:24

Lab File ID: 03010066.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	165471		229	250	-8.7	15.0
DNX	Ave	138113	124659		226	250	-9.7	15.0
MNX	Ave	125995	119458		277	292	-5.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567371/66 Calibration Date: 03/02/2022 13:31

Instrument ID: CHHPLC_X3 Calib Start Date: 01/05/2022 01:43

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 01/05/2022 04:24

Lab File ID: 03010066.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.47	6.37	6.57
DNX	6.79	6.69	6.89
MNX	7.21	7.06	7.36

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010066.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	02-Mar-2022 13:31:06	ALS Bottle#:	9	Worklist Smp#:	66
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0108907-066				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Mar-2022 15:13:37	Calib Date:	05-Jan-2022 04:24:15		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1635				
First Level Reviewer: zhangji		Date:	02-Mar-2022 13:58:44		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.473	6.472	0.001	41409	0.2503	0.2285	M
6 DNX	1	6.793	6.792	0.001	31196	0.2503	0.2259	M
7 MNX	1	7.206	7.206	0.000	34852	0.2918	0.2766	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

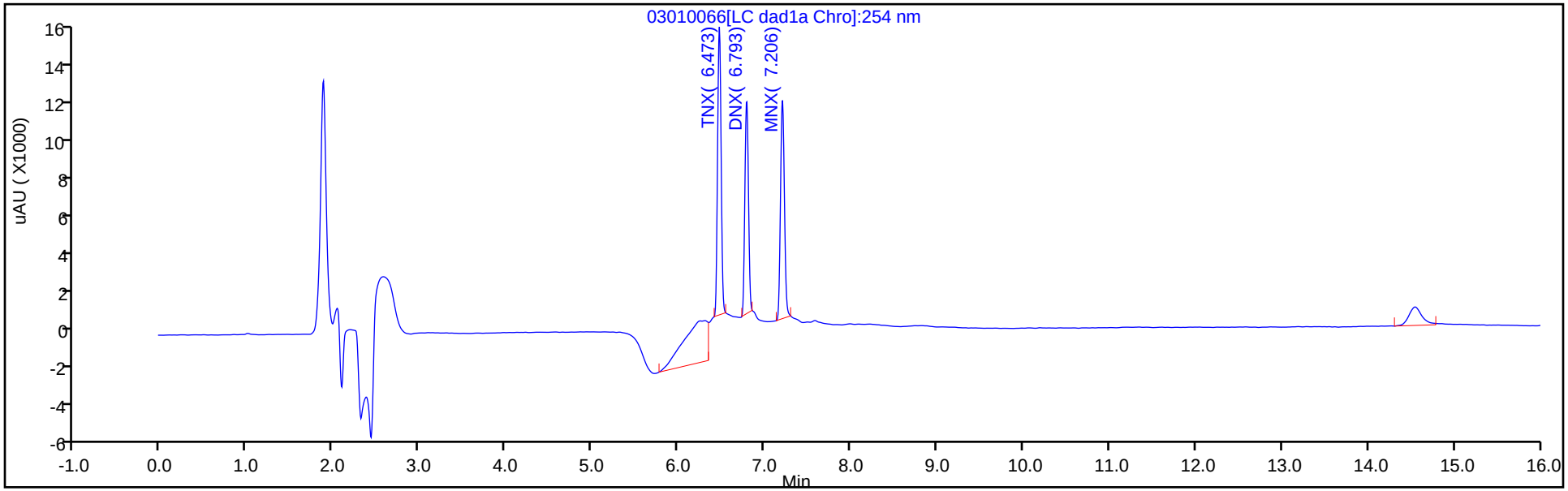
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Eurofins Denver

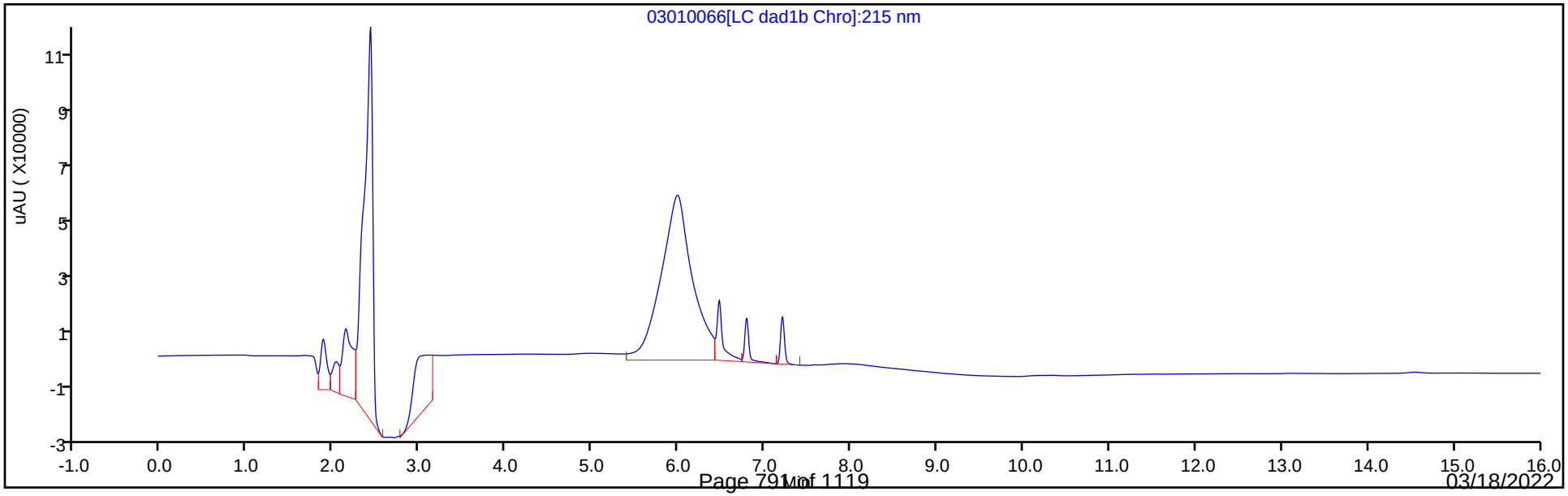
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Injection Date:	02-Mar-2022 13:31:06	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	66
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

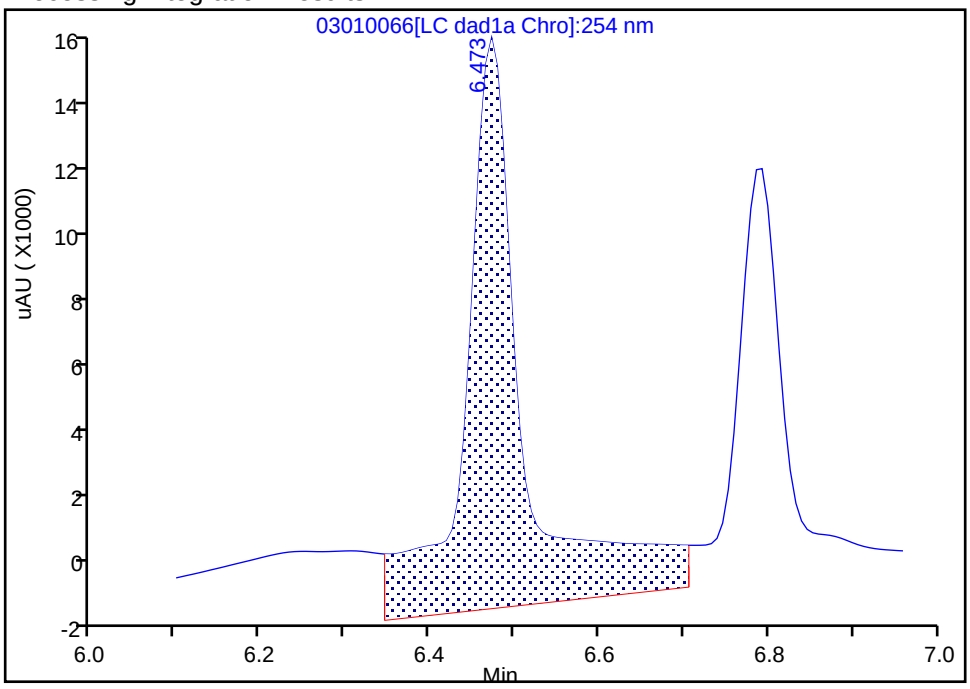
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Injection Date:	02-Mar-2022 13:31:06	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	66
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

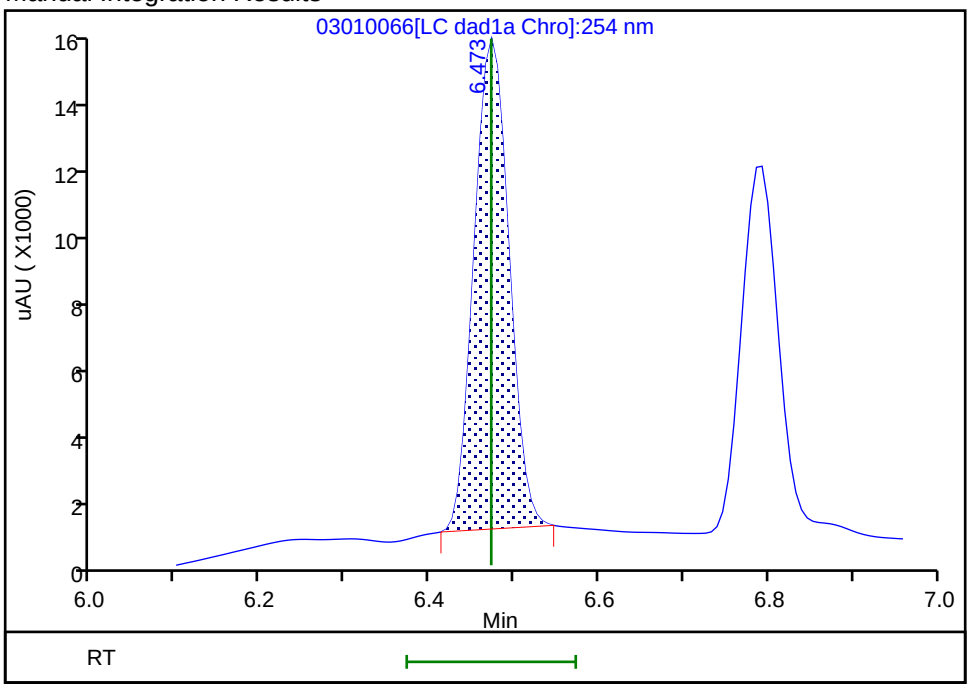
Processing Integration Results

RT: 6.47
Area: 79054
Amount: 0.436262
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 41409
Amount: 0.228517
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 13:58:33
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

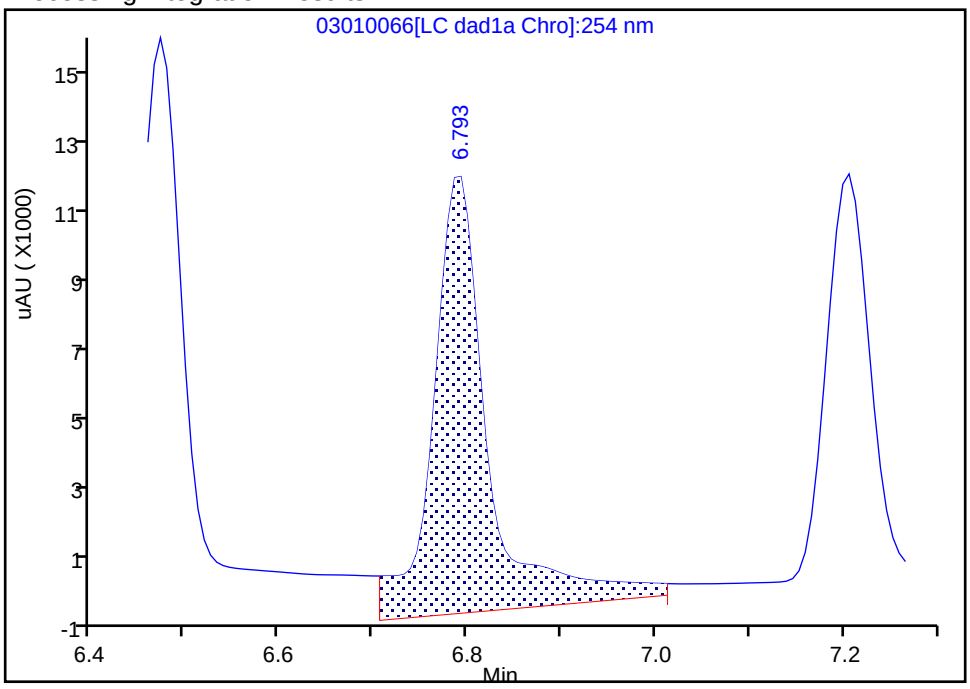
Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010066.d
Injection Date: 02-Mar-2022 13:31:06 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 66
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

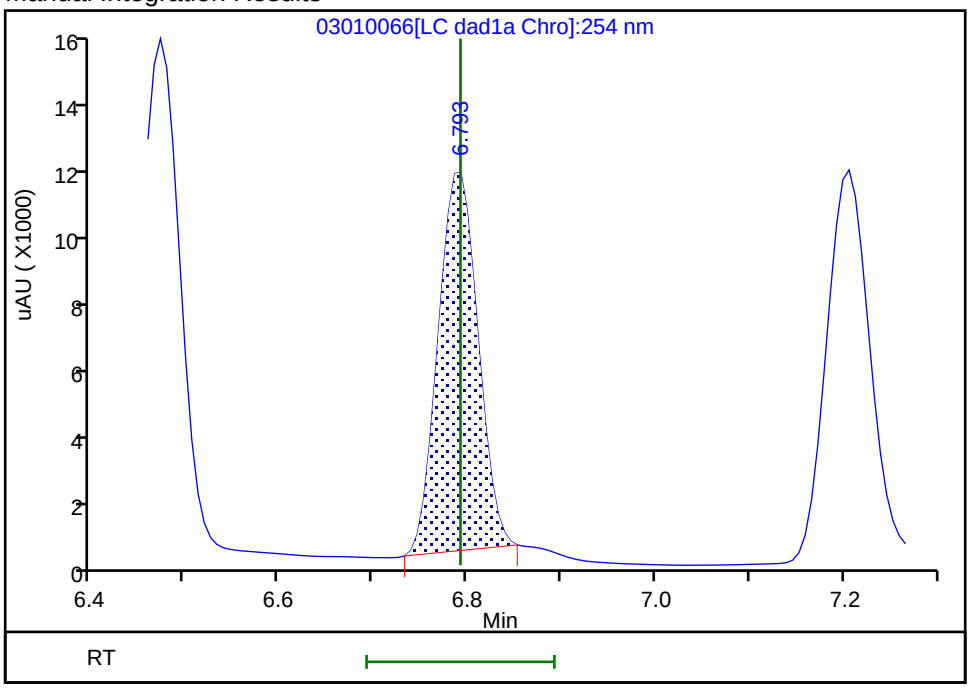
Processing Integration Results

RT: 6.79
Area: 48290
Amount: 0.349641
Amount Units: ug/mL



Manual Integration Results

RT: 6.79
Area: 31196
Amount: 0.225873
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 13:58:36
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

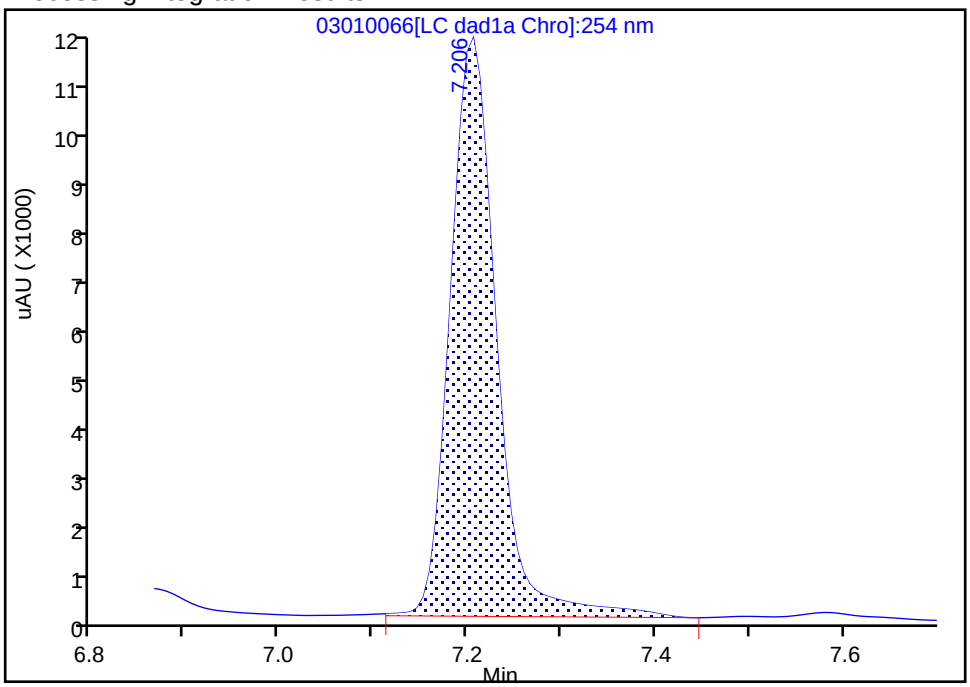
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010066.d				
Injection Date:	02-Mar-2022 13:31:06	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	66
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

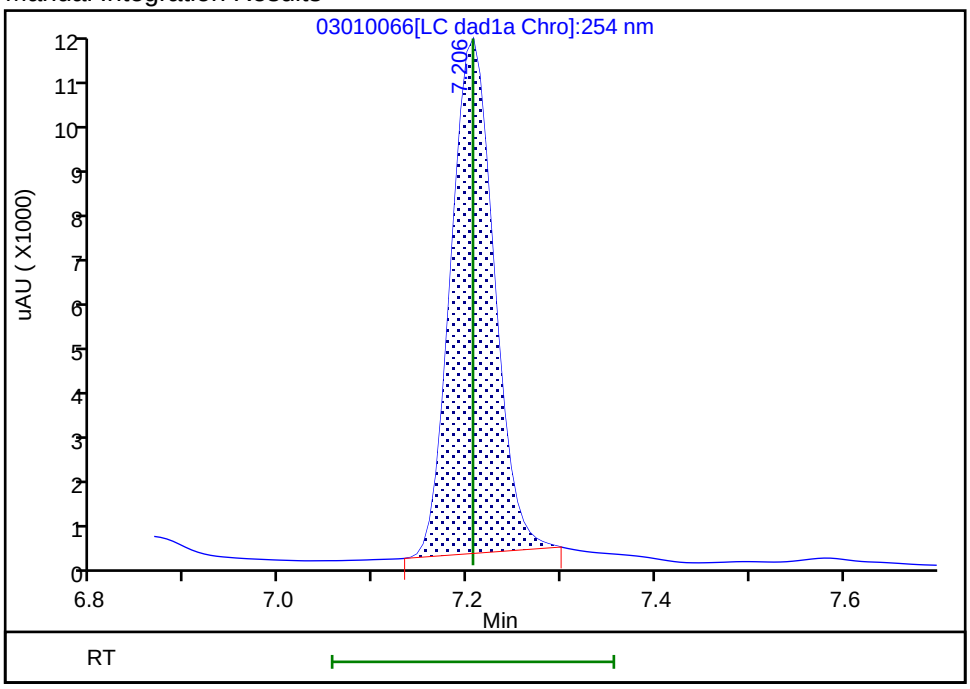
Processing Integration Results

RT: 7.21
Area: 38016
Amount: 0.301725
Amount Units: ug/mL



Manual Integration Results

RT: 7.21
Area: 34852
Amount: 0.276613
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 13:58:42

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: ICV 280-567560/19 Calibration Date: 03/03/2022 02:38

Instrument ID: CHHPLC_X5 Calib Start Date: 03/02/2022 21:22

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 02:03

Lab File ID: 03020019.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	166135	152908		460	500	-8.0	15.0
Picric acid	Ave	132885	149388		562	500	12.4	15.0
RDX	Ave	194331	186788		481	500	-3.9	15.0
Nitrobenzene	Ave	368293	368460		500	500	0.0	15.0
1,3-Dinitrobenzene	Ave	571666	563218		493	500	-1.5	15.0
Nitroglycerin	Ave	122518	128779		5260	5000	5.1	15.0
2-Nitrotoluene	Ave	234672	232836		496	500	-0.8	15.0
4-Nitrotoluene	Ave	210817	216650		514	500	2.8	15.0
4-Amino-2,6-dinitrotoluene	Lin2		269688		505	500	1.0	15.0
3-Nitrotoluene	Lin2		254816		480	500	-4.1	15.0
2-Amino-4,6-dinitrotoluene	Ave	360536	361200		501	500	0.2	15.0
1,3,5-Trinitrobenzene	Ave	415464	433072		521	500	4.2	15.0
2,6-Dinitrotoluene	Ave	265662	266814		502	500	0.4	15.0
2,4-Dinitrotoluene	Lin2		522322		470	500	-5.9	15.0
Tetryl	Ave	342171	323254		472	500	-5.5	15.0
2,4,6-Trinitrotoluene	Ave	369179	384614		521	500	4.2	15.0
PETN	Ave	129329	137808		5330	5000	6.6	15.0
1,2-Dinitrobenzene	Ave	249753	254466		509	500	1.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: ICV 280-567560/19 Calibration Date: 03/03/2022 02:38

Instrument ID: CHHPLC_X5 Calib Start Date: 03/02/2022 21:22

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 02:03

Lab File ID: 03020019.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.87	6.74	7.04
Picric acid	7.62	7.45	7.75
RDX	9.08	8.97	9.27
Nitrobenzene	12.01	11.91	12.21
1,3-Dinitrobenzene	15.60	15.49	15.79
Nitroglycerin	16.04	15.91	16.21
2-Nitrotoluene	16.78	16.67	16.97
4-Nitrotoluene	17.08	16.98	17.28
4-Amino-2,6-dinitrotoluene	17.72	17.61	17.91
3-Nitrotoluene	18.06	17.95	18.25
2-Amino-4,6-dinitrotoluene	18.72	18.59	18.89
1,3,5-Trinitrobenzene	18.92	18.80	19.10
2,6-Dinitrotoluene	20.22	20.11	20.41
2,4-Dinitrotoluene	20.73	20.61	20.91
Tetryl	24.48	24.34	24.64
2,4,6-Trinitrotoluene	25.24	25.11	25.41
PETN	26.21	26.07	26.37
1,2-Dinitrobenzene	13.24	13.13	13.43

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020019.D
Lims ID: ICV INT
Client ID:
Sample Type: ICV
Inject. Date: 03-Mar-2022 02:38:50 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT
Misc. Info.: 280-0108949-019
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:52:22 Calib Date: 03-Mar-2022 02:03:29
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:42:44
Second Level Reviewer: zhangji Date: 03-Mar-2022 12:52:22

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.143	4.142	0.001	223893	0.5000	0.5509	
	2 2,4-diamino-6-nitrotoluene	1	4.749	4.669	0.080	110582	0.5000	0.4814	M
	5 HMX	1	6.869	6.889	-0.020	76454	0.5000	0.4602	
	7 2,4,6-Trinitrophenol	1	7.623	7.602	0.021	74694	0.5000	0.5621	
	8 RDX	1	9.076	9.115	-0.039	93394	0.5000	0.4806	
	9 Nitrobenzene	1	12.009	12.062	-0.053	184230	0.5000	0.5002	
$	10 1,2-Dinitrobenzene	1	13.236	13.282	-0.046	127233	0.5000	0.5094	
	11 3,5-Dinitroaniline	1	15.229	15.269	-0.040	225413	0.5000	0.5479	
	12 1,3-Dinitrobenzene	1	15.596	15.635	-0.039	281609	0.5000	0.4926	
	13 Nitroglycerin	2	16.036	16.055	-0.019	643894	5.00	5.26	
	14 o-Nitrotoluene	1	16.776	16.822	-0.046	116418	0.5000	0.4961	
	16 p-Nitrotoluene	1	17.083	17.129	-0.046	108325	0.5000	0.5138	
	17 4-Amino-2,6-dinitrotoluene	1	17.716	17.755	-0.039	134844	0.5000	0.5048	
	18 m-Nitrotoluene	1	18.056	18.102	-0.046	127408	0.5000	0.4797	
	19 2-Amino-4,6-dinitrotoluene	1	18.716	18.742	-0.026	180600	0.5000	0.5009	
	20 1,3,5-Trinitrobenzene	1	18.916	18.949	-0.033	216536	0.5000	0.5212	
	21 2,6-Dinitrotoluene	1	20.223	20.255	-0.032	133407	0.5000	0.5022	
	22 2,4-Dinitrotoluene	1	20.729	20.762	-0.033	261161	0.5000	0.4704	
	23 Tetryl	1	24.476	24.489	-0.013	161627	0.5000	0.4724	
	24 2,4,6-Trinitrotoluene	1	25.243	25.262	-0.019	192307	0.5000	0.5209	
	25 PETN	2	26.209	26.215	-0.006	689039	5.00	5.33	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 LCS_00111	Amount Added:	50.00	Units: uL
8330Surrogate_00127	Amount Added:	50.00	Units: uL
3,5-DNA LCS_00040	Amount Added:	50.00	Units: uL
8330DiaminLCS_00047	Amount Added:	50.00	Units: uL

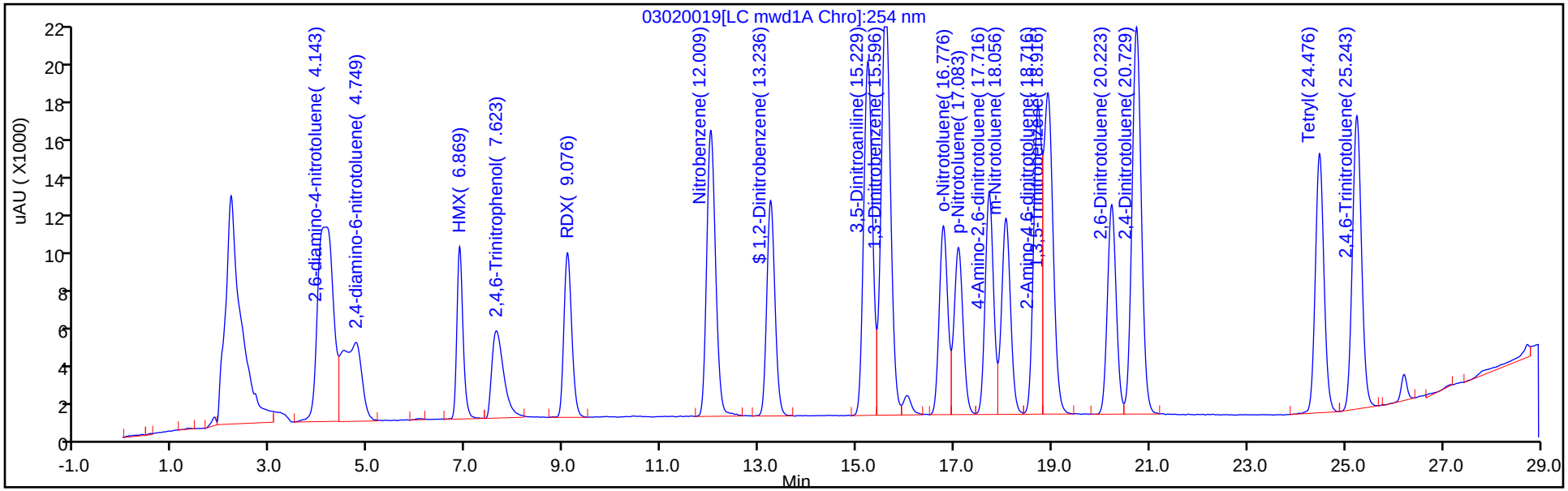
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Eurofins Denver

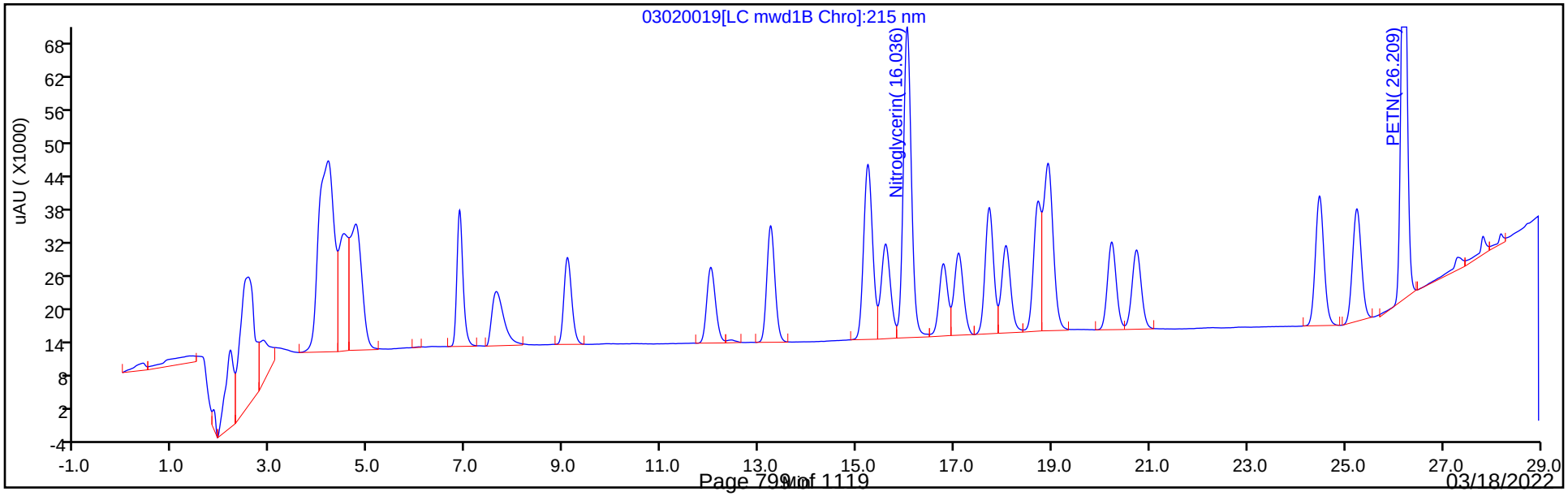
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Injection Date:	03-Mar-2022 02:38:50	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	ICV INT			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: ICV 280-567560/28 Calibration Date: 03/03/2022 07:54

Instrument ID: CHHPLC_X5 Calib Start Date: 03/03/2022 03:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 07:19

Lab File ID: 03020028.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	354070	354839		502	501	0.2	15.0
DNX	Ave	278639	276448		497	501	-0.8	15.0
MNX	Ave	250081	253925		592	584	1.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: ICV 280-567560/28 Calibration Date: 03/03/2022 07:54

Instrument ID: CHHPLC_X5 Calib Start Date: 03/03/2022 03:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 07:19

Lab File ID: 03020028.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.16	5.02	5.32
DNX	6.02	5.88	6.18
MNX	7.61	7.48	7.78

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020028.D				
Lims ID:	ICV DMT				
Client ID:					
Sample Type:	ICV				
Inject. Date:	03-Mar-2022 07:54:47	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	ICV DMT				
Misc. Info.:	280-0108949-028				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:					
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2022 13:02:36	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1618				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.157	5.171	-0.014	177597	0.5005	0.5016	
4 DNX	1	6.017	6.031	-0.014	138362	0.5005	0.4966	
6 MNX	1	7.610	7.625	-0.015	148165	0.5835	0.5925	

Reagents:

8330_OP_DMT_00012 Amount Added: 50.00 Units: uL

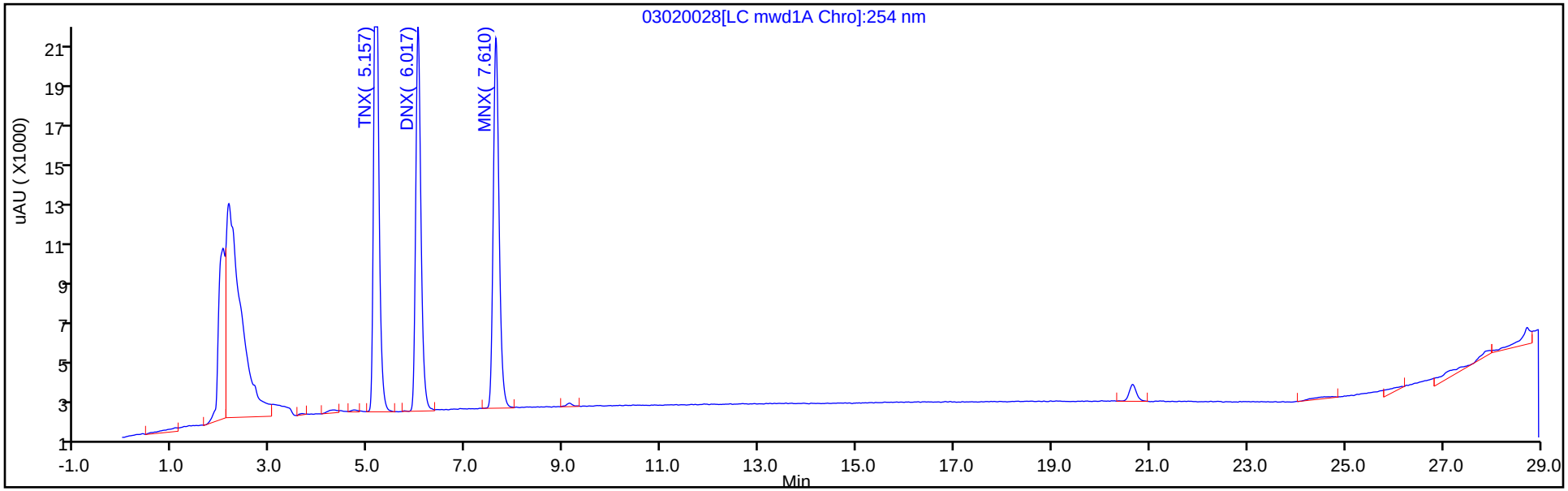
Report Date: 03-Mar-2022 13:02:44 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

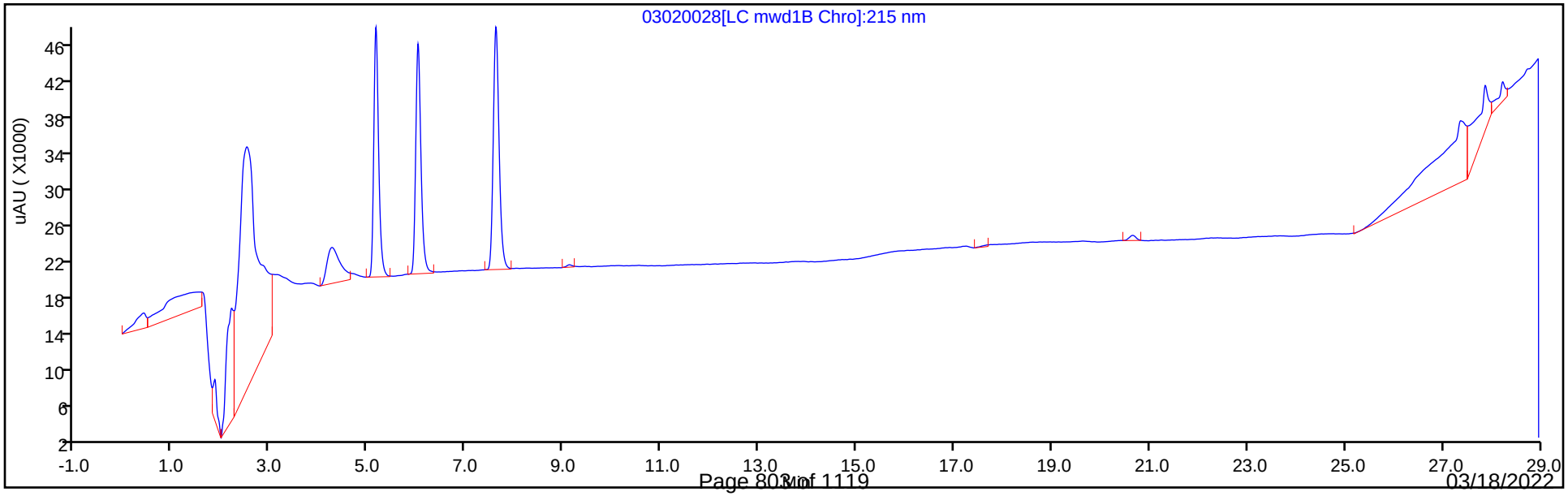
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Injection Date:	03-Mar-2022 07:54:47	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	ICV DMT			Worklist Smp#:	28
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567645/20 | Calibration Date: 03/03/2022 22:14

Instrument ID: CHHPLC_X5 | Calib Start Date: 03/02/2022 21:22

GC Column: Luna-phenylhex ID: 4.60(mm) | Calib End Date: 03/03/2022 02:03

Lab File ID: 03030020.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	166135	165736		249	250	-0.2	15.0
Picric acid	Ave	132885	148552		279	250	11.8	15.0
RDX	Ave	194331	196180		252	250	1.0	15.0
Nitrobenzene	Ave	368293	390235		266	251	6.0	15.0
1,3-Dinitrobenzene	Ave	571666	575665		252	251	0.7	15.0
Nitroglycerin	Ave	122518	132188		2700	2500	7.9	15.0
2-Nitrotoluene	Ave	234672	231548		247	250	-1.3	15.0
4-Nitrotoluene	Ave	210817	208850		248	251	-0.9	15.0
4-Amino-2,6-dinitrotoluene	Lin2		271556		255	250	1.7	15.0
3-Nitrotoluene	Lin2		269558		254	250	1.6	15.0
2-Amino-4,6-dinitrotoluene	Ave	360536	372064		259	251	3.2	15.0
1,3,5-Trinitrobenzene	Ave	415464	435553		263	251	4.8	15.0
2,6-Dinitrotoluene	Ave	265662	286737		271	251	7.9	15.0
2,4-Dinitrotoluene	Lin2		552319		244	251	-2.7	15.0
Tetryl	Ave	342171	320691		235	251	-6.3	15.0
2,4,6-Trinitrotoluene	Ave	369179	379394		258	251	2.8	15.0
PETN	Ave	129329	138142		2670	2500	6.8	15.0
1,2-Dinitrobenzene	Ave	249753	258900		259	250	3.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567645/20 Calibration Date: 03/03/2022 22:14

Instrument ID: CHHPLC_X5 Calib Start Date: 03/02/2022 21:22

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 02:03

Lab File ID: 03030020.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.91	6.77	7.07
Picric acid	8.01	7.91	8.21
RDX	9.13	9.00	9.30
Nitrobenzene	12.07	11.93	12.23
1,3-Dinitrobenzene	15.66	15.53	15.83
Nitroglycerin	16.09	15.96	16.26
2-Nitrotoluene	16.84	16.71	17.01
4-Nitrotoluene	17.15	17.03	17.33
4-Amino-2,6-dinitrotoluene	17.79	17.67	17.97
3-Nitrotoluene	18.13	18.00	18.30
2-Amino-4,6-dinitrotoluene	18.80	18.69	18.99
1,3,5-Trinitrobenzene	18.97	18.85	19.15
2,6-Dinitrotoluene	20.28	20.17	20.47
2,4-Dinitrotoluene	20.79	20.69	20.99
Tetryl	24.53	24.43	24.73
2,4,6-Trinitrotoluene	25.29	25.18	25.48
PETN	26.24	26.12	26.42
1,2-Dinitrobenzene	13.31	13.17	13.47

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030020.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 03-Mar-2022 22:14:33 ALS Bottle#: 7 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0108978-020
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-Mar-2022 12:18:25 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1659

First Level Reviewer: zhangji Date: 04-Mar-2022 12:08:17

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.148	4.136	0.012	88240	0.2500	0.2171	
2 2,4-diamino-6-nitrotoluene	1	4.668	4.730	-0.062	30286	0.2500	0.1265	
5 HMX	1	6.908	6.916	-0.008	41434	0.2500	0.2494	
7 2,4,6-Trinitrophenol	1	8.008	8.063	-0.055	37138	0.2500	0.2795	
8 RDX	1	9.134	9.150	-0.016	49045	0.2500	0.2524	
9 Nitrobenzene	1	12.074	12.083	-0.009	97949	0.2510	0.2660	
$ 10 1,2-Dinitrobenzene	1	13.308	13.323	-0.015	64725	0.2500	0.2592	
11 3,5-Dinitroaniline	1	15.314	15.336	-0.022	101713	0.2500	0.2471	
12 1,3-Dinitrobenzene	1	15.661	15.683	-0.022	144204	0.2505	0.2523	
13 Nitroglycerin	2	16.094	16.110	-0.016	330469	2.50	2.70	
14 o-Nitrotoluene	1	16.841	16.863	-0.022	57887	0.2500	0.2467	
16 p-Nitrotoluene	1	17.154	17.176	-0.022	52317	0.2505	0.2482	
17 4-Amino-2,6-dinitrotoluene	1	17.794	17.823	-0.029	67957	0.2503	0.2545	
18 m-Nitrotoluene	1	18.128	18.150	-0.022	67457	0.2503	0.2543	
19 2-Amino-4,6-dinitrotoluene	1	18.801	18.843	-0.042	93388	0.2510	0.2590	
20 1,3,5-Trinitrobenzene	1	18.968	18.996	-0.028	109106	0.2505	0.2626	
21 2,6-Dinitrotoluene	1	20.281	20.316	-0.035	71971	0.2510	0.2709	
22 2,4-Dinitrotoluene	1	20.794	20.836	-0.042	138632	0.2510	0.2442	
23 Tetryl	1	24.534	24.583	-0.049	80333	0.2505	0.2348	
24 2,4,6-Trinitrotoluene	1	25.288	25.330	-0.042	95228	0.2510	0.2579	
25 PETN	2	26.241	26.270	-0.029	345356	2.50	2.67	

QC Flag Legend
Processing Flags

Reagents:

8330IntermStk_00070	Amount Added:	25.00	Units: uL
8330_ADDs_00031	Amount Added:	12.50	Units: uL

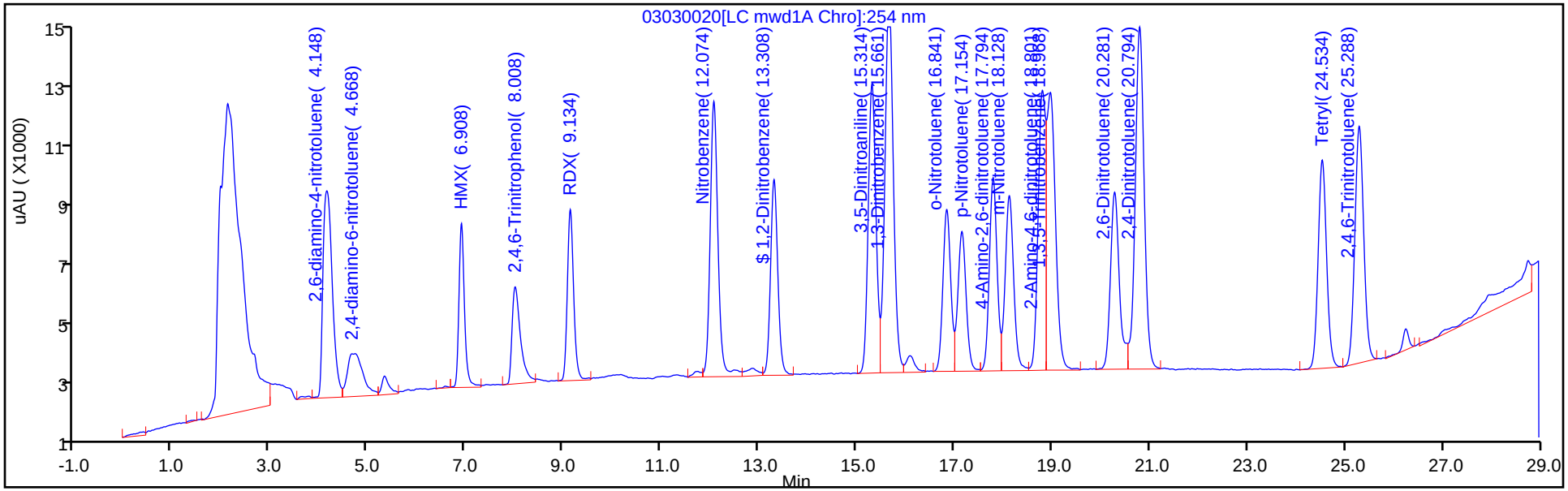
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Eurofins Denver

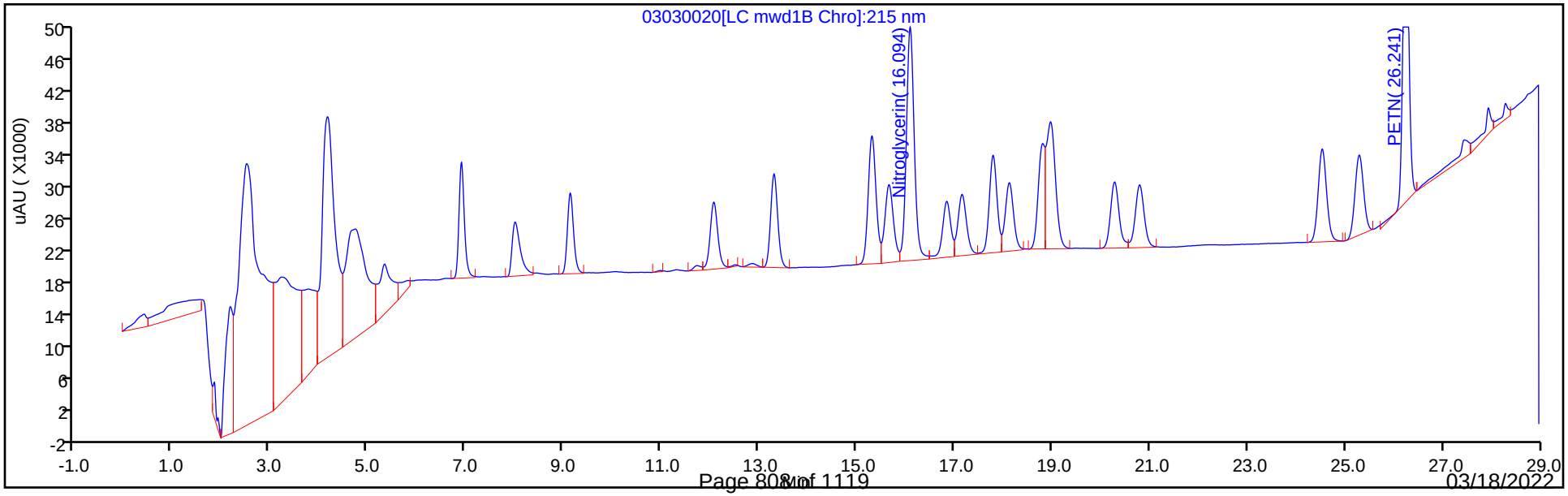
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Injection Date:	03-Mar-2022 22:14:33	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567645/21 Calibration Date: 03/03/2022 22:49

Instrument ID: CHHPLC_X5 Calib Start Date: 03/03/2022 03:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 07:19

Lab File ID: 03030021.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	354070	355101		251	250	0.3	15.0
DNX	Ave	278639	269510		242	250	-3.3	15.0
MNX	Ave	250081	244562		285	292	-2.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567645/21 Calibration Date: 03/03/2022 22:49

Instrument ID: CHHPLC_X5 Calib Start Date: 03/03/2022 03:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 07:19

Lab File ID: 03030021.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.17	5.03	5.33
DNX	6.03	5.90	6.20
MNX	7.63	7.50	7.80

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030021.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	03-Mar-2022 22:49:32	ALS Bottle#:	8	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0108978-021				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	04-Mar-2022 12:18:26	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1659				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.173	5.183	-0.010	88864	0.2503	0.2510	
4 DNX	1	6.033	6.049	-0.016	67445	0.2503	0.2421	
6 MNX	1	7.626	7.649	-0.023	71351	0.2918	0.2853	

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

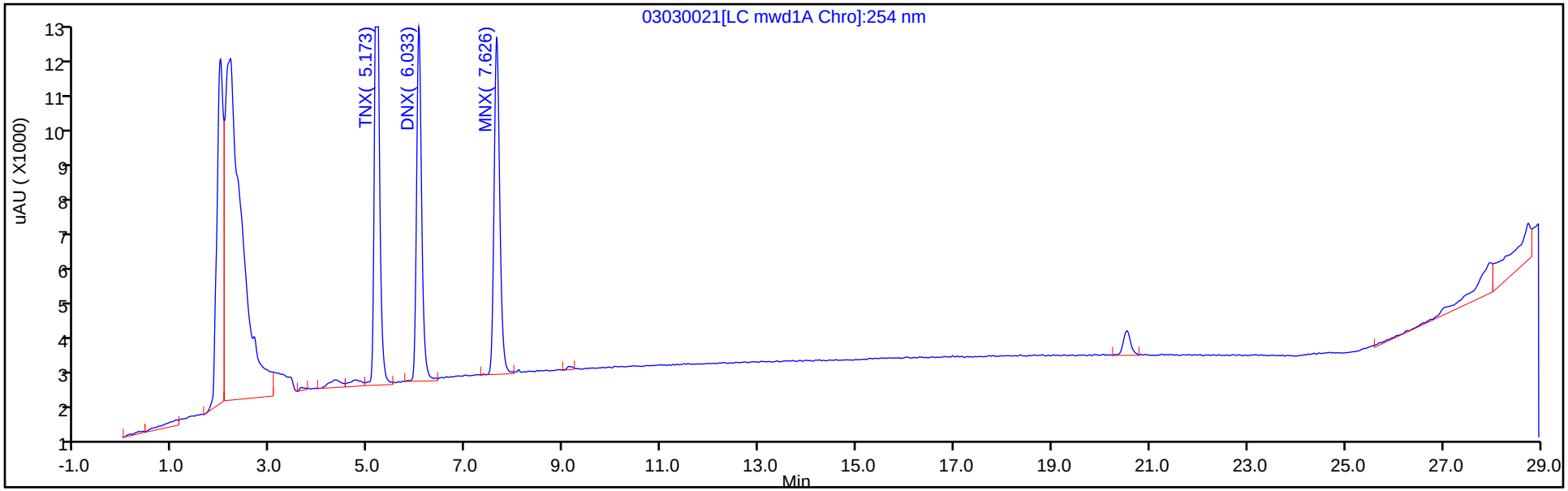
Report Date: 04-Mar-2022 12:18:26 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

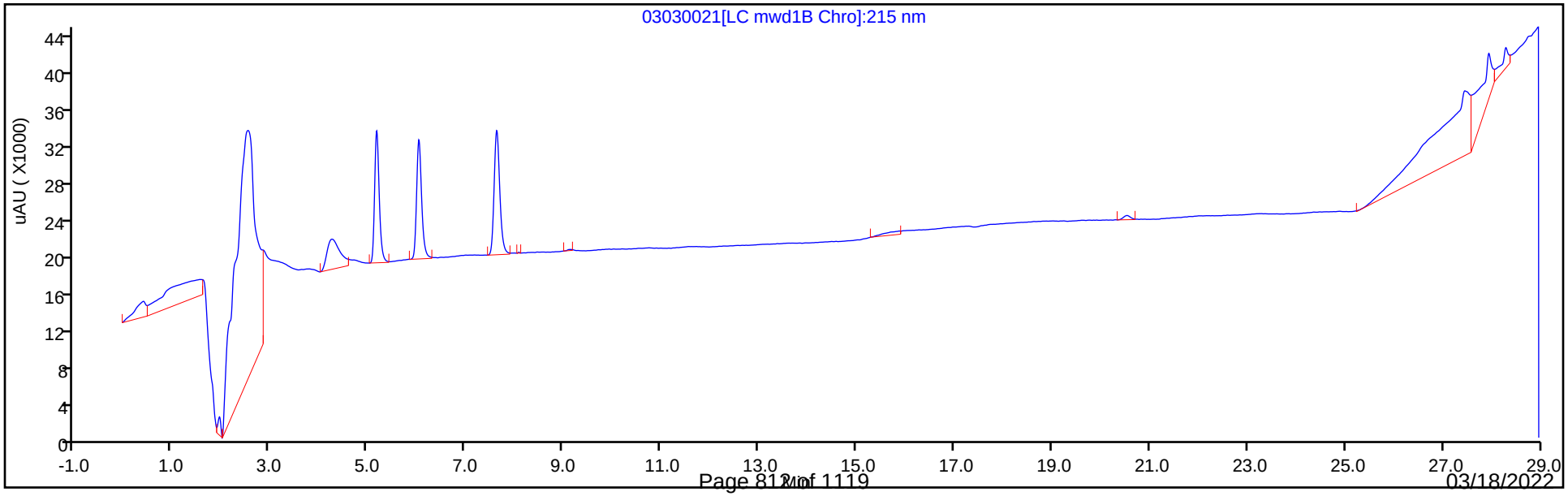
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Injection Date:	03-Mar-2022 22:49:32	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567645/32 Calibration Date: 03/04/2022 05:16

Instrument ID: CHHPLC_X5 Calib Start Date: 03/02/2022 21:22

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 02:03

Lab File ID: 03030032.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	166135	162452		244	250	-2.2	15.0
Picric acid	Ave	132885	148164		279	250	11.5	15.0
RDX	Ave	194331	196636		253	250	1.2	15.0
Nitrobenzene	Ave	368293	358100		244	251	-2.8	15.0
1,3-Dinitrobenzene	Ave	571666	577796		253	251	1.1	15.0
Nitroglycerin	Ave	122518	129259		2640	2500	5.5	15.0
2-Nitrotoluene	Ave	234672	227896		243	250	-2.9	15.0
4-Nitrotoluene	Ave	210817	206519		245	251	-2.0	15.0
4-Amino-2,6-dinitrotoluene	Lin2		273099		256	250	2.3	15.0
3-Nitrotoluene	Lin2		260671		246	250	-1.7	15.0
2-Amino-4,6-dinitrotoluene	Ave	360536	374378		261	251	3.8	15.0
1,3,5-Trinitrobenzene	Ave	415464	430970		260	251	3.7	15.0
2,6-Dinitrotoluene	Ave	265662	290502		274	251	9.4	15.0
2,4-Dinitrotoluene	Lin2		550291		243	251	-3.1	15.0
Tetryl	Ave	342171	321313		235	251	-6.1	15.0
2,4,6-Trinitrotoluene	Ave	369179	382159		260	251	3.5	15.0
PETN	Ave	129329	138363		2670	2500	7.0	15.0
1,2-Dinitrobenzene	Ave	249753	254896		255	250	2.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567645/32 Calibration Date: 03/04/2022 05:16

Instrument ID: CHHPLC_X5 Calib Start Date: 03/02/2022 21:22

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 02:03

Lab File ID: 03030032.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.91	6.77	7.07
Picric acid	8.03	7.91	8.21
RDX	9.14	9.00	9.30
Nitrobenzene	12.07	11.93	12.23
1,3-Dinitrobenzene	15.66	15.53	15.83
Nitroglycerin	16.08	15.96	16.26
2-Nitrotoluene	16.84	16.71	17.01
4-Nitrotoluene	17.14	17.03	17.33
4-Amino-2,6-dinitrotoluene	17.79	17.67	17.97
3-Nitrotoluene	18.12	18.00	18.30
2-Amino-4,6-dinitrotoluene	18.80	18.69	18.99
1,3,5-Trinitrobenzene	18.96	18.85	19.15
2,6-Dinitrotoluene	20.28	20.17	20.47
2,4-Dinitrotoluene	20.79	20.69	20.99
Tetryl	24.54	24.43	24.73
2,4,6-Trinitrotoluene	25.29	25.18	25.48
PETN	26.24	26.12	26.42
1,2-Dinitrobenzene	13.30	13.17	13.47

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030032.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 04-Mar-2022 05:16:21 ALS Bottle#: 7 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0108978-032
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-Mar-2022 12:18:32 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1659

	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	4.137	4.136	0.001	93067	0.2500	0.2290	
	2 2,4-diamino-6-nitrotoluene	1	4.677	4.730	-0.053	45052	0.2500	0.1918	
	5 HMX	1	6.910	6.916	-0.006	40613	0.2500	0.2445	
	7 2,4,6-Trinitrophenol	1	8.030	8.063	-0.033	37041	0.2500	0.2787	
	8 RDX	1	9.137	9.150	-0.013	49159	0.2500	0.2530	
	9 Nitrobenzene	1	12.070	12.083	-0.013	89883	0.2510	0.2441	
$	10 1,2-Dinitrobenzene	1	13.303	13.323	-0.020	63724	0.2500	0.2551	
	11 3,5-Dinitroaniline	1	15.310	15.336	-0.026	101613	0.2500	0.2469	
	12 1,3-Dinitrobenzene	1	15.657	15.683	-0.026	144738	0.2505	0.2532	
	13 Nitroglycerin	2	16.083	16.110	-0.027	323147	2.50	2.64	
	14 o-Nitrotoluene	1	16.837	16.863	-0.026	56974	0.2500	0.2428	
	16 p-Nitrotoluene	1	17.143	17.176	-0.033	51733	0.2505	0.2454	
	17 4-Amino-2,6-dinitrotoluene	1	17.790	17.823	-0.033	68343	0.2503	0.2560	
	18 m-Nitrotoluene	1	18.117	18.150	-0.033	65233	0.2503	0.2459	
	19 2-Amino-4,6-dinitrotoluene	1	18.797	18.843	-0.046	93969	0.2510	0.2606	
	20 1,3,5-Trinitrobenzene	1	18.957	18.996	-0.039	107958	0.2505	0.2598	
	21 2,6-Dinitrotoluene	1	20.277	20.316	-0.039	72916	0.2510	0.2745	
	22 2,4-Dinitrotoluene	1	20.790	20.836	-0.046	138123	0.2510	0.2432	
	23 Tetryl	1	24.537	24.583	-0.046	80489	0.2505	0.2352	
	24 2,4,6-Trinitrotoluene	1	25.290	25.330	-0.040	95922	0.2510	0.2598	
	25 PETN	2	26.237	26.270	-0.033	345908	2.50	2.67	

Reagents:

8330IntermStk_00070 Amount Added: 25.00 Units: uL
8330_ADDs_00031 Amount Added: 12.50 Units: uL

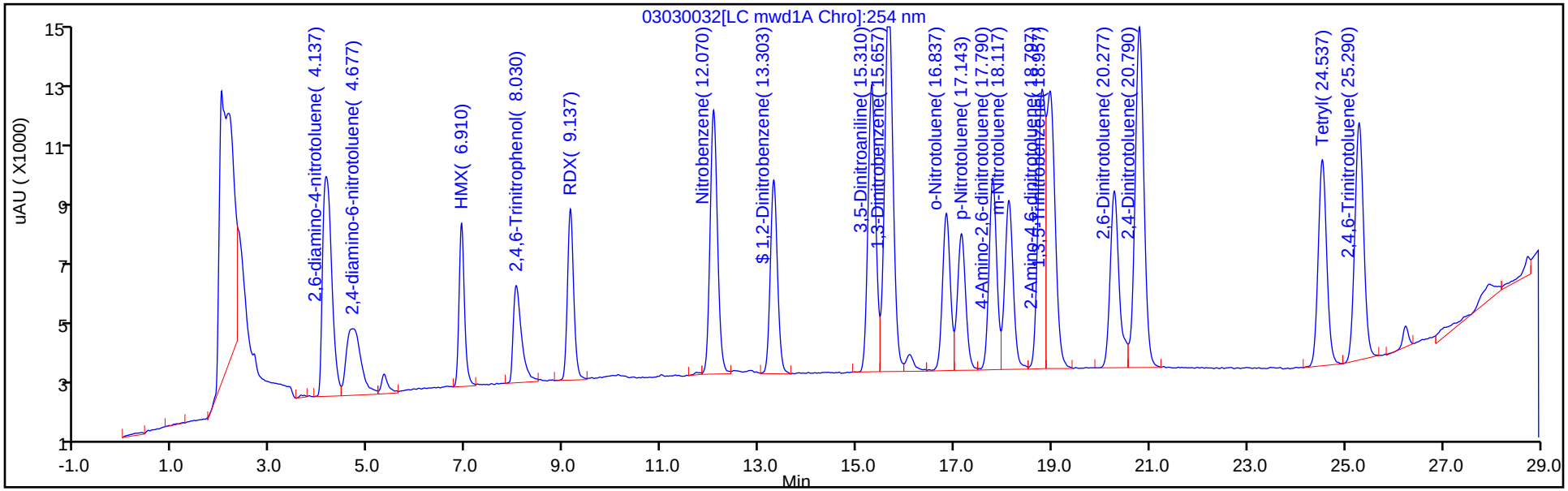
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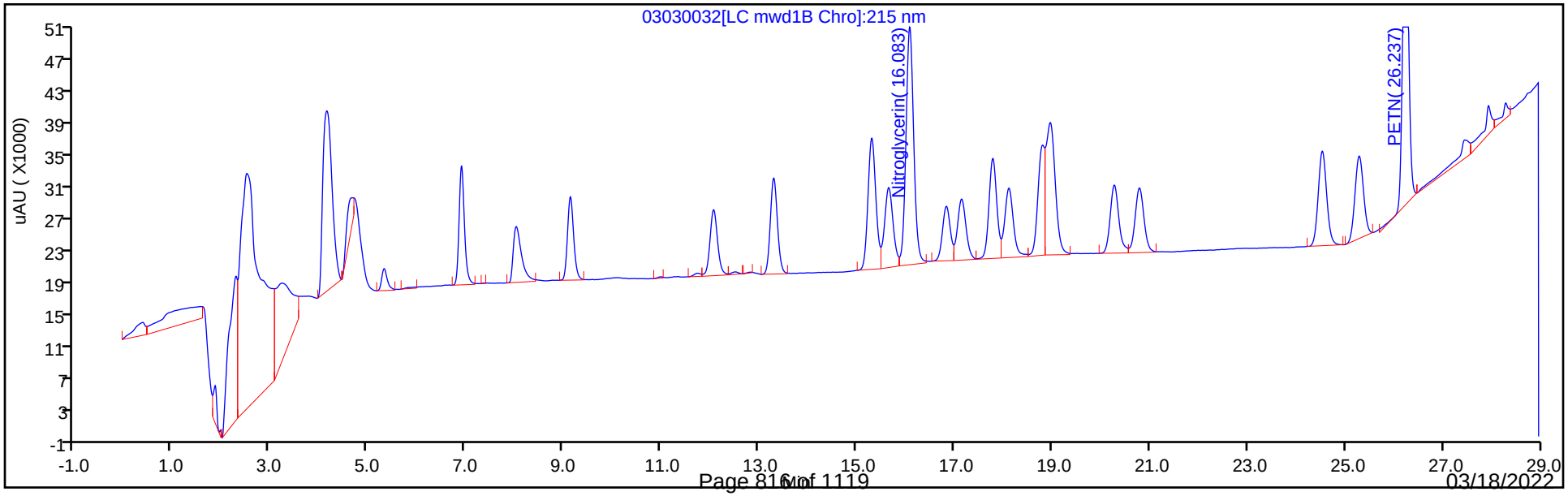
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Injection Date:	04-Mar-2022 05:16:21	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	32
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567645/33 Calibration Date: 03/04/2022 05:51

Instrument ID: CHHPLC_X5 Calib Start Date: 03/03/2022 03:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 07:19

Lab File ID: 03030033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	354070	346458		245	250	-2.1	15.0
DNX	Ave	278639	265107		238	250	-4.9	15.0
MNX	Ave	250081	244089		285	292	-2.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Lab Sample ID: CCV 280-567645/33 Calibration Date: 03/04/2022 05:51

Instrument ID: CHHPLC_X5 Calib Start Date: 03/03/2022 03:13

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 03/03/2022 07:19

Lab File ID: 03030033.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.17	5.03	5.33
DNX	6.04	5.90	6.20
MNX	7.64	7.50	7.80

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\03030033.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	04-Mar-2022 05:51:28	ALS Bottle#:	8	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0108978-033				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220303-108978.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	04-Mar-2022 12:18:33	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1659				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.170	5.183	-0.013	86701	0.2503	0.2449	
4 DNX	1	6.037	6.049	-0.012	66343	0.2503	0.2381	
6 MNX	1	7.637	7.649	-0.012	71213	0.2918	0.2848	

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

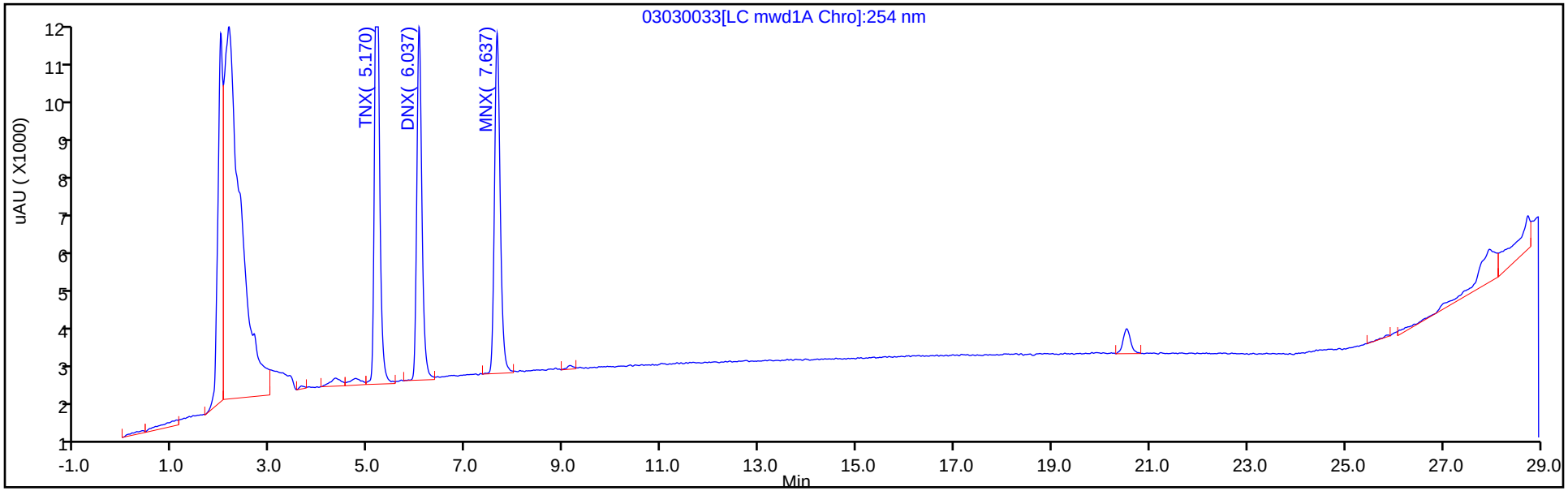
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Eurofins Denver

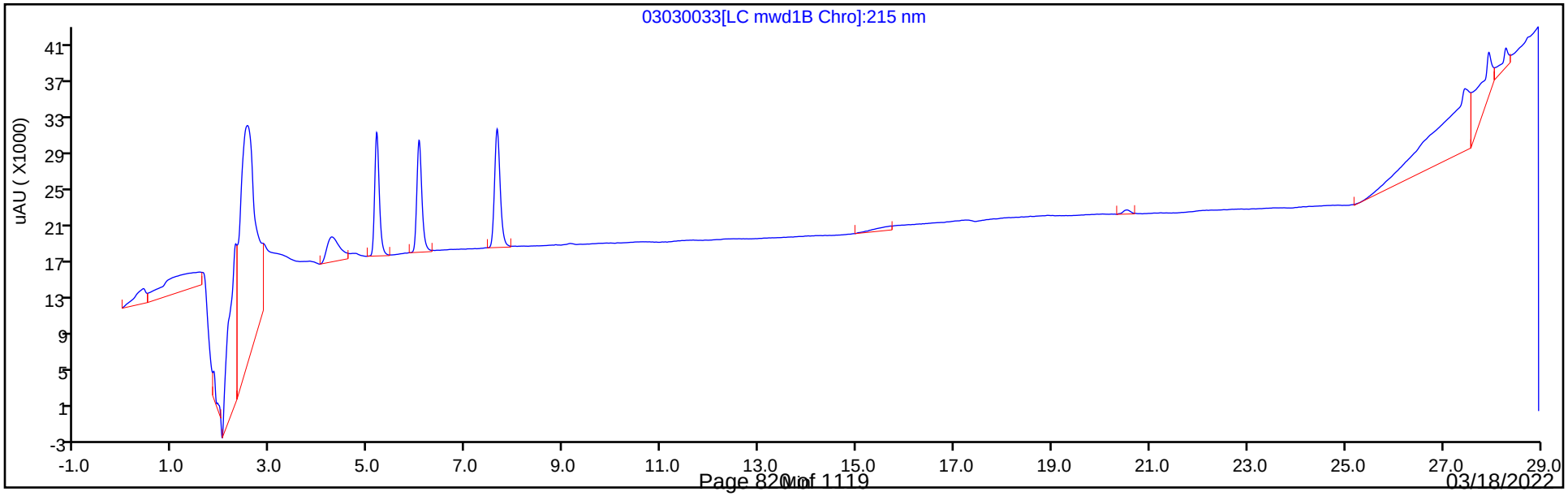
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Lims ID:	CCV DMT			Worklist Smp#:	33
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-567330/1-A

Matrix: Water | Lab File ID: 03010043.D

Analysis Method: 8330A | Date Collected:

Extraction Method: 3535 | Date Extracted: 03/01/2022 11:26

Sample wt/vol: 500(mL) | Date Analyzed: 03/02/2022 04:43

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

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

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

Analysis Batch No.: 567371 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027
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
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	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
2691-41-0	HMX	0.20	U	0.21	0.20	0.088
5755-27-1	MNX	0.40	U M	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.091
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

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010043.D
Lims ID: MB 280-567330/1-A
Client ID:
Sample Type: MB
Inject. Date: 02-Mar-2022 04:43:32 ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-567330/1-
Misc. Info.: 280-0108907-043
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:41:44

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
1 Triamine Trinitrobenzene	1		2.447				ND	
2 2,6-diamino-4-nitrotoluene	1		6.464				ND	U
3 TNX	1		6.472				ND	
4 HMX	1		6.588				ND	
5 2,4-diamino-6-nitrotoluene	1		6.650				ND	
6 DNX	1		6.792				ND	
7 MNX	1		7.206				ND	U
8 RDX	1		7.575				ND	U
9 2,4,6-Trinitrophenol	1		7.895				ND	
$ 10 1,2-Dinitrobenzene	1	8.522	8.515	0.007	23569	0.2000	0.1890	
11 1,3,5-Trinitrobenzene	1		8.642				ND	
12 1,3-Dinitrobenzene	1		9.262				ND	
13 Nitrobenzene	1		9.648				ND	
14 3,5-Dinitroaniline	1		9.877				ND	
15 Tetryl	1		9.955				ND	
16 Nitroglycerin	2		10.408				ND	
17 2,4,6-Trinitrotoluene	1		10.862				ND	
18 4-Amino-2,6-dinitrotoluene	1		11.042				ND	
19 2-Amino-4,6-dinitrotoluene	1		11.288				ND	
20 2,6-Dinitrotoluene	1		11.462				ND	
21 2,4-Dinitrotoluene	1		11.635				ND	
22 o-Nitrotoluene	1		12.475				ND	
23 p-Nitrotoluene	1		12.895				ND	
24 m-Nitrotoluene	1		13.462				ND	
25 PETN	2		14.488				ND	
26 Ammonium Picrate	1		0.000				ND	

QC Flag Legend
Processing Flags

Review Flags
U - Marked Undetected

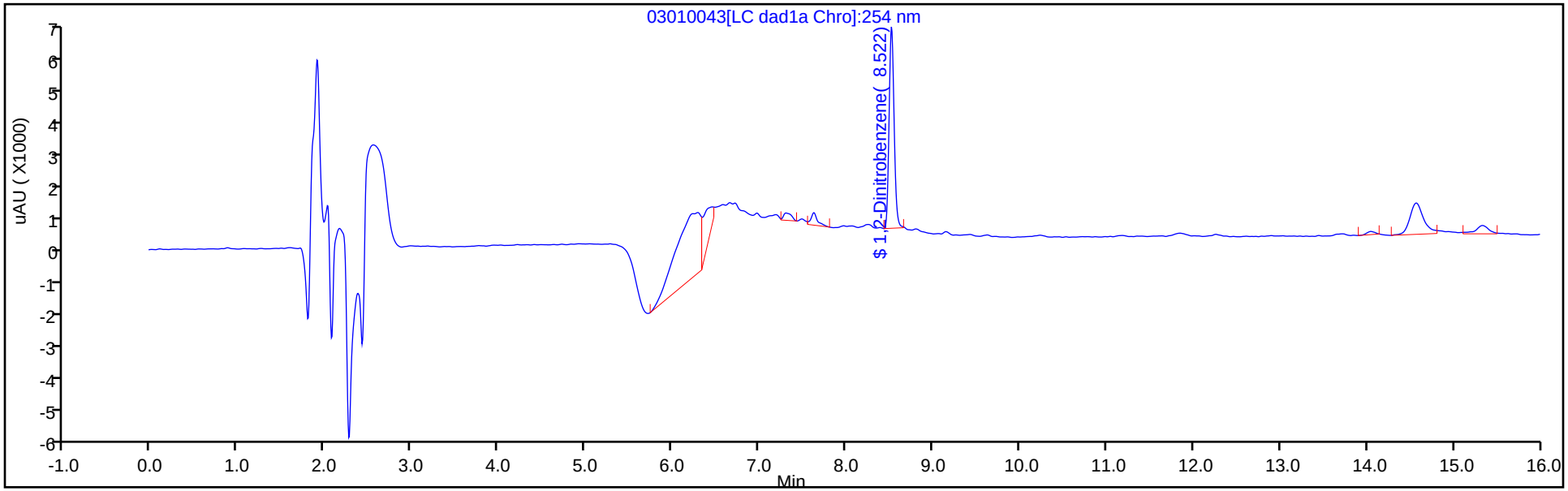
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Eurofins Denver

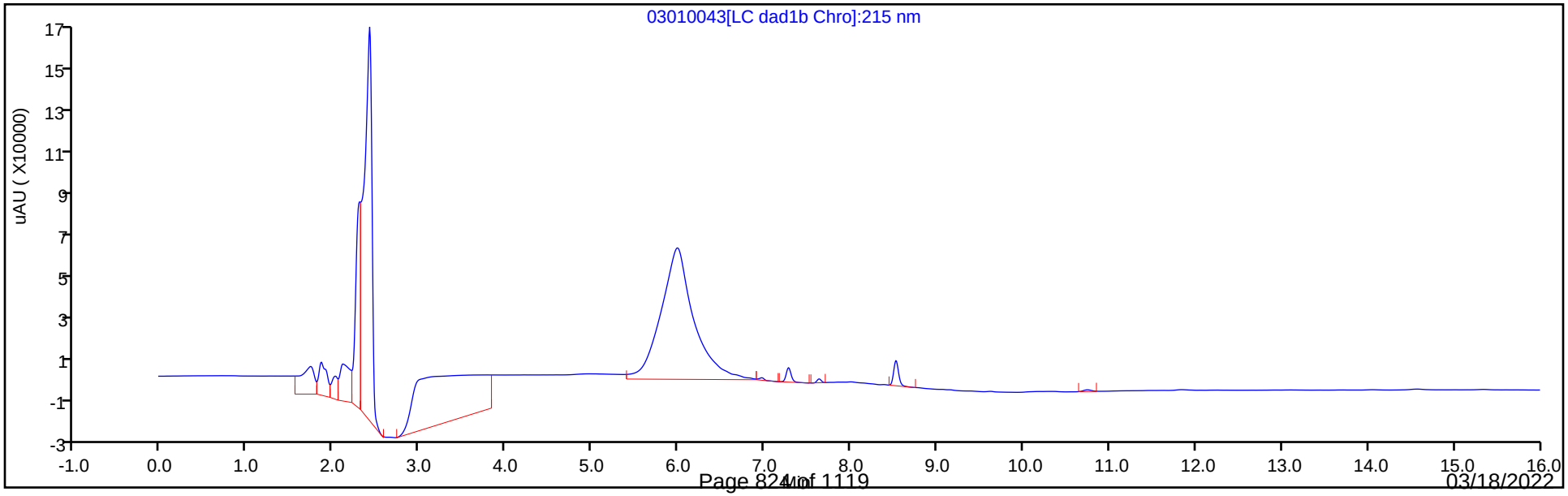
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Injection Date:	02-Mar-2022 04:43:32	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	MB 280-567330/1-A			Worklist Smp#:	43
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010043.D				
Lims ID:	MB 280-567330/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	02-Mar-2022 04:43:32	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-567330/1-				
Misc. Info.:	280-0108907-043				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Mar-2022 13:06:22	Calib Date:	05-Jan-2022 04:24:15		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1635				

First Level Reviewer: zhangji Date: 02-Mar-2022 12:41:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1890	94.50

User Disabled Compound Report

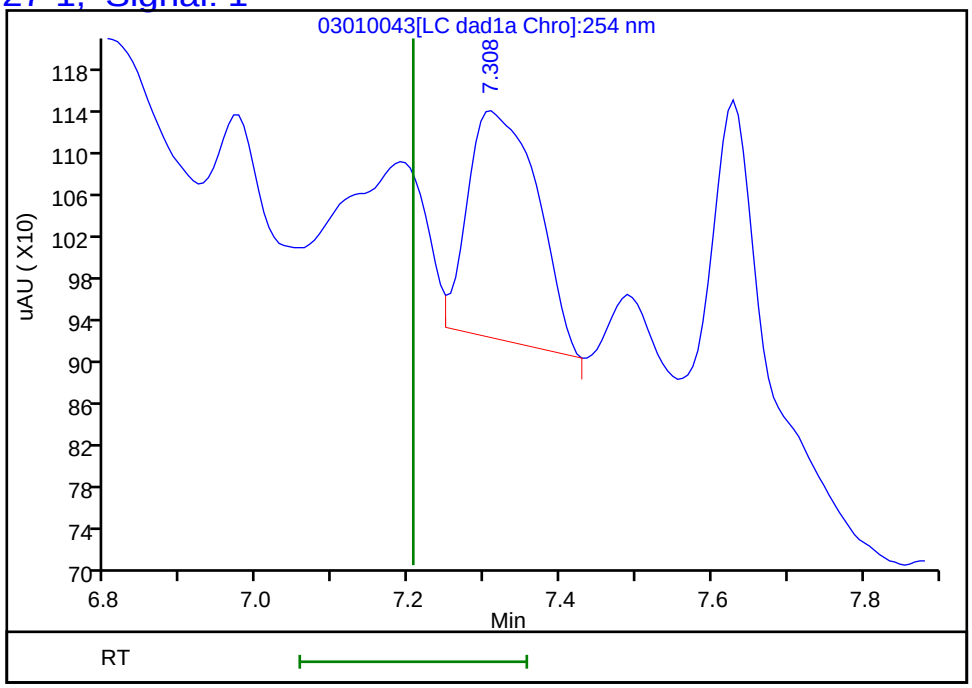
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010043.d
Injection Date: 02-Mar-2022 04:43:32 Instrument ID: CHHPLC_X3
Lims ID: MB 280-567330/1-A
Client ID:
Operator ID: JZ 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

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.31
Response: 1376
Amount: 0.010921



Reviewer: zhangji, 02-Mar-2022 12:41:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

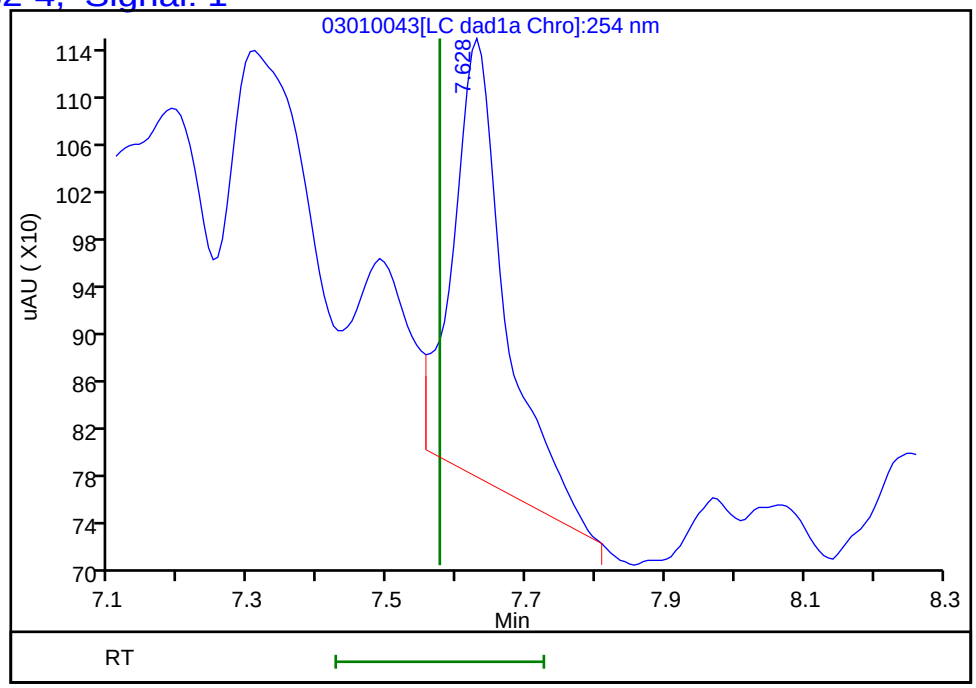
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010043.d
Injection Date: 02-Mar-2022 04:43:32 Instrument ID: CHHPLC_X3
Lims ID: MB 280-567330/1-A
Client ID:
Operator ID: JZ 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

8 RDX, CAS: 121-82-4, Signal: 1

RT: 7.63
Response: 1916
Amount: 0.018493



Reviewer: zhangji, 02-Mar-2022 12:41:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-567330/2-A

Matrix: Water | Lab File ID: 03010044.D

Analysis Method: 8330A | Date Collected:

Extraction Method: 3535 | Date Extracted: 03/01/2022 11:26

Sample wt/vol: 500(mL) | Date Analyzed: 03/02/2022 05:06

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

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

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

Analysis Batch No.: 567371 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.95		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.87		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.86		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.74		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.79		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.64		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.41		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.34	Q	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.48	Q	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.54		0.41	0.40	0.10
2691-41-0	HMX	1.88		0.21	0.20	0.088
98-95-3	Nitrobenzene	1.62		0.21	0.20	0.091
121-82-4	RDX	1.99		0.21	0.20	0.052
479-45-8	Tetryl	1.79		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	86		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010044.D
Lims ID: LCS 280-567330/2-A
Client ID:
Sample Type: LCS
Inject. Date: 02-Mar-2022 05:06:27 ALS Bottle#: 44 Worklist Smp#: 44
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-567330/2
Misc. Info.: 280-0108907-044
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:42:35

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.590	6.588	0.002	15770	0.2000	0.1881	
8 RDX	1	7.576	7.575	0.001	20657	0.2000	0.1994	
9 2,4,6-Trinitrophenol	1	7.896	7.895	0.001	14957	0.2000	0.1941	
$ 10 1,2-Dinitrobenzene	1	8.523	8.515	0.008	21456	0.2000	0.1721	
11 1,3,5-Trinitrobenzene	1	8.643	8.642	0.001	42477	0.2000	0.1948	
12 1,3-Dinitrobenzene	1	9.270	9.262	0.008	53965	0.2000	0.1871	
13 Nitrobenzene	1	9.650	9.648	0.002	31083	0.2000	0.1619	
15 Tetryl	1	9.963	9.955	0.008	30600	0.2000	0.1794	
16 Nitroglycerin	2	10.416	10.408	0.008	125683	2.00	1.99	
17 2,4,6-Trinitrotoluene	1	10.870	10.862	0.008	37622	0.2000	0.1856	
18 4-Amino-2,6-dinitrotoluene	1	11.050	11.042	0.008	22372	0.2000	0.1482	
19 2-Amino-4,6-dinitrotoluene	1	11.303	11.288	0.015	33230	0.2000	0.1644	
20 2,6-Dinitrotoluene	1	11.470	11.462	0.008	25673	0.2000	0.1794	
21 2,4-Dinitrotoluene	1	11.636	11.635	0.001	50301	0.2000	0.1738	
22 o-Nitrotoluene	1	12.483	12.475	0.008	17933	0.2000	0.1405	
23 p-Nitrotoluene	1	12.903	12.895	0.008	16342	0.2000	0.1538	
24 m-Nitrotoluene	1	13.476	13.462	0.014	19018	0.2000	0.1337	
25 PETN	2	14.510	14.488	0.022	145730	2.00	1.99	

QC Flag Legend

Processing Flags

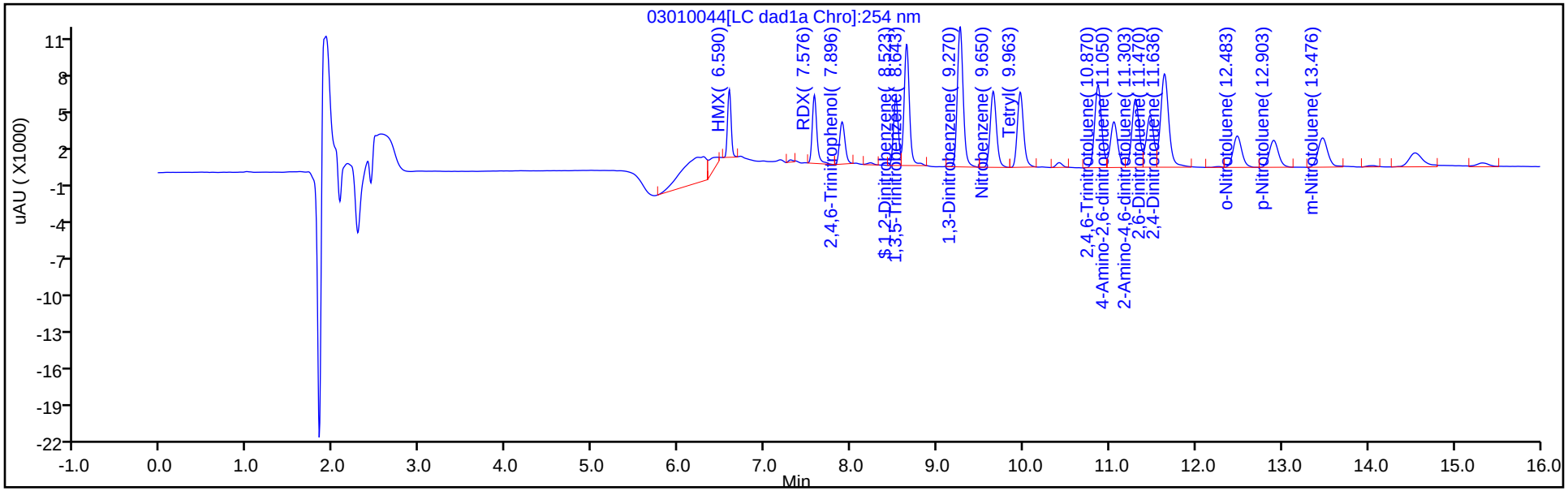
Report Date: 02-Mar-2022 13:06:23 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

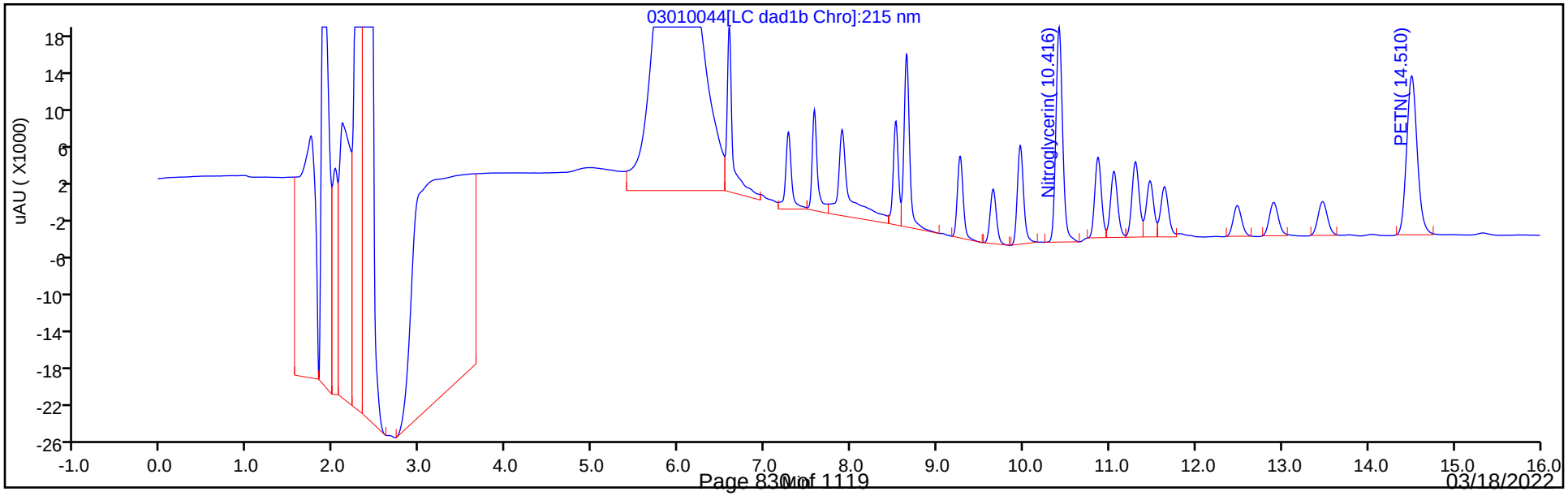
Data File: \\chromfs\denver\chromdata\chhplc_x\20220301-108907.b\03010044.d

Injection Date:	02-Mar-2022 05:06:27	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-567330/2-A			Worklist Smp#:	44
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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010044.D
Lims ID: LCS 280-567330/2-A
Client ID:
Sample Type: LCS
Inject. Date: 02-Mar-2022 05:06:27 ALS Bottle#: 44 Worklist Smp#: 44
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-567330/2
Misc. Info.: 280-0108907-044
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:42:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1721	86.03

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-567330/3-A

Matrix: Water | Lab File ID: 03010045.D

Analysis Method: 8330A | Date Collected:

Extraction Method: 3535 | Date Extracted: 03/01/2022 11:26

Sample wt/vol: 500(mL) | Date Analyzed: 03/02/2022 05:29

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

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

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

Analysis Batch No.: 567371 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.54	M	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	111		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010045.D
Lims ID: LCS 280-567330/3-A
Client ID:
Sample Type: LCS
Inject. Date: 02-Mar-2022 05:29:23 ALS Bottle#: 45 Worklist Smp#: 45
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-567330/3
Misc. Info.: 280-0108907-045
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 02-Mar-2022 13:06:22 Calib Date: 05-Jan-2022 04:24:15
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1635

First Level Reviewer: zhangji Date: 02-Mar-2022 12:42:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.470	6.472	-0.002	37453	0.2002	0.2067	M
6 DNX	1	6.790	6.792	-0.002	29376	0.2002	0.2127	M
7 MNX	1	7.204	7.206	-0.002	31943	0.2334	0.2535	M
$ 10 1,2-Dinitrobenzene	1	8.517	8.515	0.002	27617	0.2000	0.2215	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

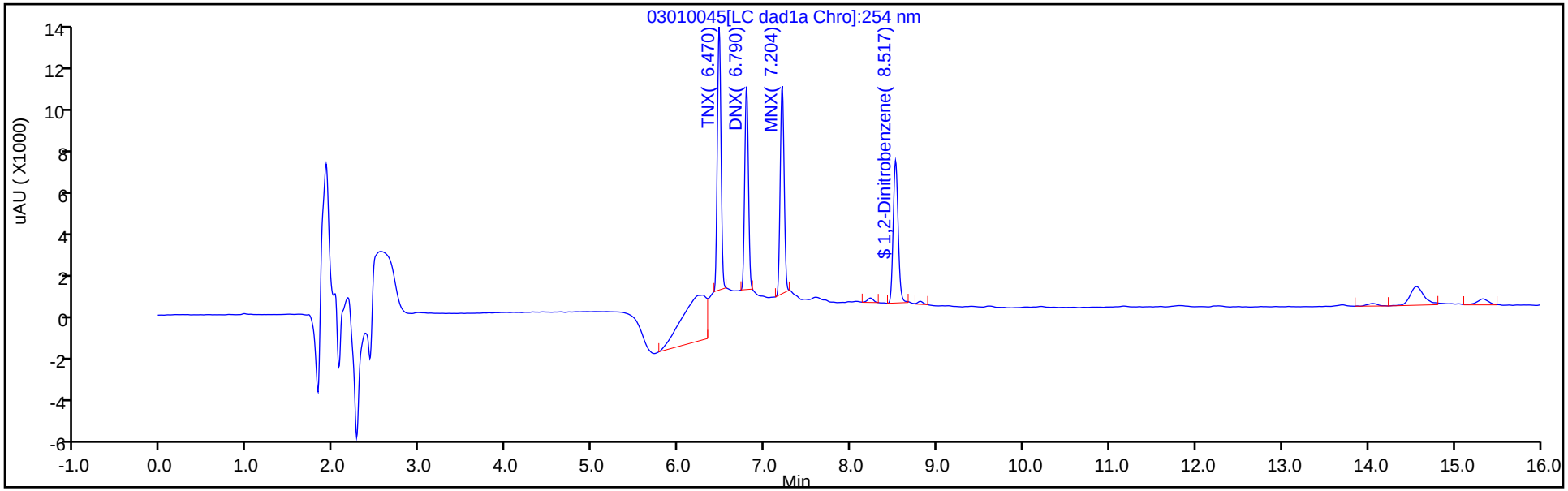
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Eurofins Denver

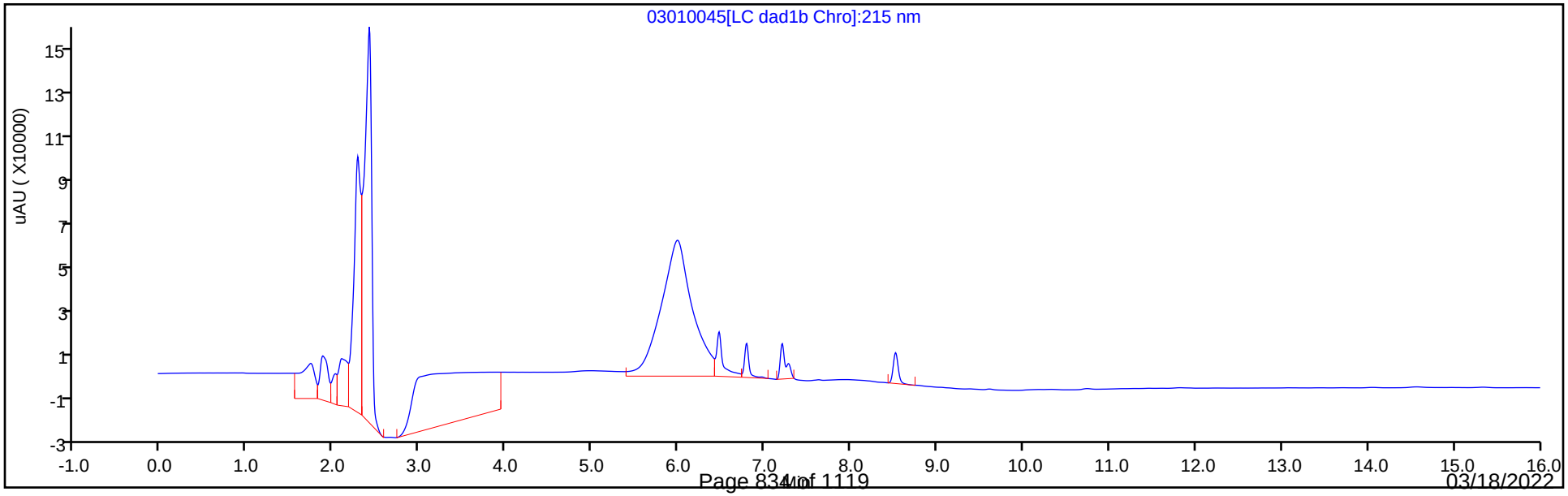
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Injection Date:	02-Mar-2022 05:29:23	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-567330/3-A			Worklist Smp#:	45
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	45
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\03010045.D				
Lims ID:	LCS 280-567330/3-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	02-Mar-2022 05:29:23	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-567330/3				
Misc. Info.:	280-0108907-045				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	02-Mar-2022 13:06:22	Calib Date:	05-Jan-2022 04:24:15		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040037.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1635				

First Level Reviewer: zhangji Date: 02-Mar-2022 12:42:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2215	110.74

Manual Integration/User Assign Peak Report

Eurofins Denver

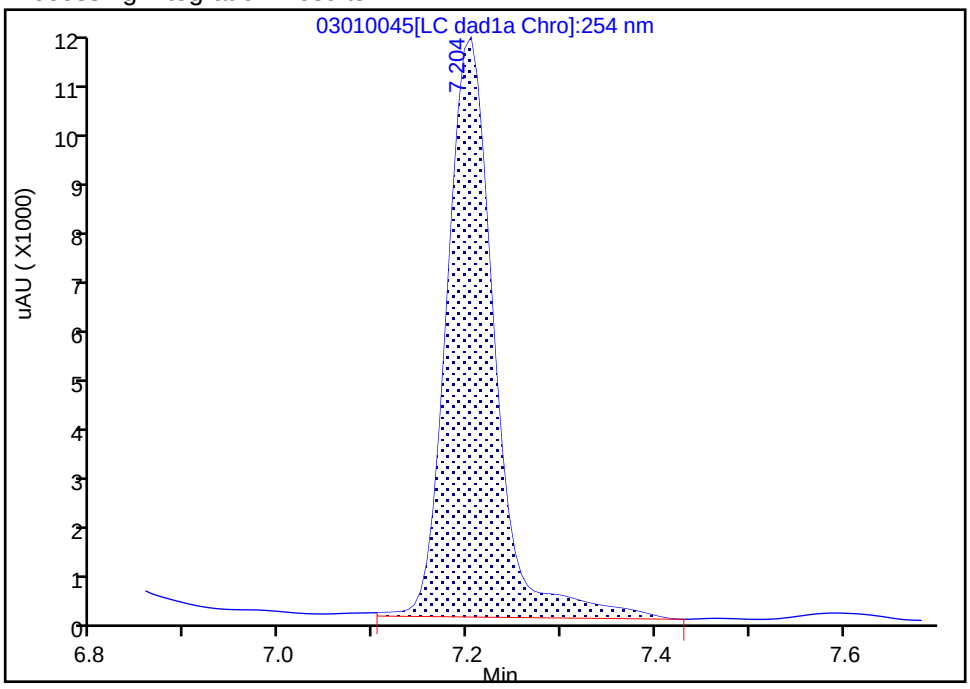
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Injection Date: 02-Mar-2022 05:29:23 Instrument ID: CHHPLC_X3
Lims ID: LCS 280-567330/3-A
Client ID:
Operator ID: JZ ALS Bottle#: 45 Worklist Smp#: 45
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

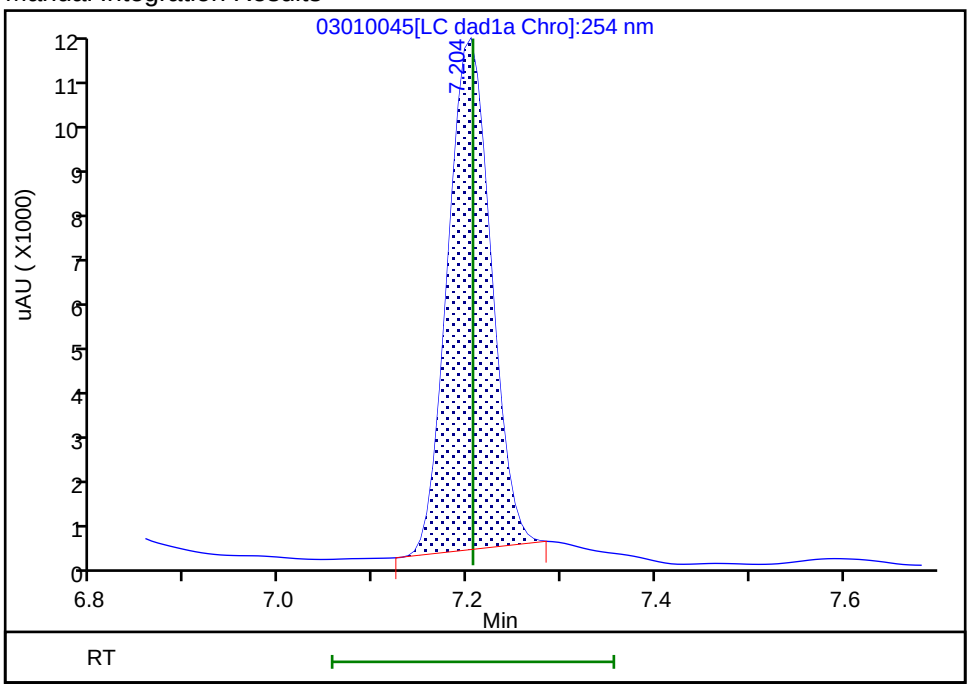
Processing Integration Results

RT: 7.20
Area: 36179
Amount: 0.287145
Amount Units: ug/mL



Manual Integration Results

RT: 7.20
Area: 31943
Amount: 0.253525
Amount Units: ug/mL



Reviewer: zhangji, 02-Mar-2022 12:42:48
Audit Action: Manually Integrated Audit Reason: Baseline

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 01/04/2022 18:28

Analysis Batch Number: 562503 End Date: 01/05/2022 04:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-562503/11		01/04/2022 18:28	1	01040011.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/12		01/04/2022 18:51	1	01040012.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/13		01/04/2022 19:13	1	01040013.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/14		01/04/2022 19:36	1	01040014.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/15		01/04/2022 19:59	1	01040015.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/16		01/04/2022 20:22	1	01040016.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/17		01/04/2022 20:45	1	01040017.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/18		01/04/2022 21:08	1	01040018.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/19		01/04/2022 21:31	1	01040019.D	UltraCarb5uODS 4.6(mm)
ICV 280-562503/20		01/04/2022 21:54	1	01040020.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/21		01/04/2022 22:17	1		UltraCarb5uODS 4.6(mm)
IC 280-562503/22		01/04/2022 22:40	1		UltraCarb5uODS 4.6(mm)
IC 280-562503/23		01/04/2022 23:03	1		UltraCarb5uODS 4.6(mm)
IC 280-562503/24		01/04/2022 23:26	1		UltraCarb5uODS 4.6(mm)
IC 280-562503/25		01/04/2022 23:49	1		UltraCarb5uODS 4.6(mm)
IC 280-562503/26		01/05/2022 00:11	1		UltraCarb5uODS 4.6(mm)
IC 280-562503/27		01/05/2022 00:34	1		UltraCarb5uODS 4.6(mm)
IC 280-562503/28		01/05/2022 00:57	1		UltraCarb5uODS 4.6(mm)
ICV 280-562503/29		01/05/2022 01:20	1		UltraCarb5uODS 4.6(mm)
IC 280-562503/30		01/05/2022 01:43	1	01040030.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/31		01/05/2022 02:06	1	01040031.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/32		01/05/2022 02:29	1	01040032.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/33		01/05/2022 02:52	1	01040033.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/34		01/05/2022 03:15	1	01040034.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/35		01/05/2022 03:38	1	01040035.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/36		01/05/2022 04:01	1	01040036.D	UltraCarb5uODS 4.6(mm)
IC 280-562503/37		01/05/2022 04:24	1	01040037.D	UltraCarb5uODS 4.6(mm)
ICV 280-562503/38		01/05/2022 04:47	1	01040038.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 03/02/2022 03:57

Analysis Batch Number: 567371 End Date: 03/02/2022 14:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-567371/41		03/02/2022 03:57	1	03010041.D	UltraCarb5uODS 4.6(mm)
CCV 280-567371/42		03/02/2022 04:20	1	03010042.D	UltraCarb5uODS 4.6(mm)
MB 280-567330/1-A		03/02/2022 04:43	1	03010043.D	UltraCarb5uODS 4.6(mm)
LCS 280-567330/2-A		03/02/2022 05:06	1	03010044.D	UltraCarb5uODS 4.6(mm)
LCS 280-567330/3-A		03/02/2022 05:29	1	03010045.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		03/02/2022 05:52	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/02/2022 06:15	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/02/2022 06:38	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/02/2022 07:01	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/02/2022 07:23	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/02/2022 07:46	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/02/2022 08:09	1		UltraCarb5uODS 4.6(mm)
CCV 280-567371/53		03/02/2022 08:32	1	03010053.D	UltraCarb5uODS 4.6(mm)
CCV 280-567371/54		03/02/2022 08:55	1	03010054.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		03/02/2022 09:18	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/02/2022 09:41	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/02/2022 10:04	1		UltraCarb5uODS 4.6(mm)
280-159137-1	EW7-PM29B-8-35	03/02/2022 10:27	1	03010058.D	UltraCarb5uODS 4.6(mm)
280-159137-2	EW7-PM25A-8-25	03/02/2022 10:50	1	03010059.D	UltraCarb5uODS 4.6(mm)
280-159137-3	EW7-PM25B-8-35	03/02/2022 11:13	1	03010060.D	UltraCarb5uODS 4.6(mm)
280-159137-4	EW7-PM26A-8-25	03/02/2022 11:36	1	03010061.D	UltraCarb5uODS 4.6(mm)
280-159137-5	EW7-PM26B-8-35	03/02/2022 11:59	1	03010062.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		03/02/2022 12:22	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/02/2022 12:45	1		UltraCarb5uODS 4.6(mm)
CCV 280-567371/65		03/02/2022 13:08	1	03010065.D	UltraCarb5uODS 4.6(mm)
CCV 280-567371/66		03/02/2022 13:31	1	03010066.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		03/02/2022 13:54	5		UltraCarb5uODS 4.6(mm)
CCV 280-567371/69		03/02/2022 14:16	1		UltraCarb5uODS 4.6(mm)
CCV 280-567371/70		03/02/2022 14:39	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 03/02/2022 21:22

Analysis Batch Number: 567560 End Date: 03/03/2022 07:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-567560/10		03/02/2022 21:22	1	03020010.D	Luna-phenylhex 4.6(mm)
IC 280-567560/11		03/02/2022 21:57	1	03020011.D	Luna-phenylhex 4.6(mm)
IC 280-567560/12		03/02/2022 22:32	1	03020012.D	Luna-phenylhex 4.6(mm)
IC 280-567560/13		03/02/2022 23:07	1	03020013.D	Luna-phenylhex 4.6(mm)
IC 280-567560/14		03/02/2022 23:42	1	03020014.D	Luna-phenylhex 4.6(mm)
IC 280-567560/15		03/03/2022 00:17	1	03020015.D	Luna-phenylhex 4.6(mm)
IC 280-567560/16		03/03/2022 00:53	1	03020016.D	Luna-phenylhex 4.6(mm)
IC 280-567560/17		03/03/2022 01:28	1	03020017.D	Luna-phenylhex 4.6(mm)
IC 280-567560/18		03/03/2022 02:03	1	03020018.D	Luna-phenylhex 4.6(mm)
ICV 280-567560/19		03/03/2022 02:38	1	03020019.D	Luna-phenylhex 4.6(mm)
IC 280-567560/20		03/03/2022 03:13	1	03020020.D	Luna-phenylhex 4.6(mm)
IC 280-567560/21		03/03/2022 03:49	1	03020021.D	Luna-phenylhex 4.6(mm)
IC 280-567560/22		03/03/2022 04:24	1	03020022.D	Luna-phenylhex 4.6(mm)
IC 280-567560/23		03/03/2022 04:59	1	03020023.D	Luna-phenylhex 4.6(mm)
IC 280-567560/24		03/03/2022 05:34	1	03020024.D	Luna-phenylhex 4.6(mm)
IC 280-567560/25		03/03/2022 06:09	1	03020025.D	Luna-phenylhex 4.6(mm)
IC 280-567560/26		03/03/2022 06:44	1	03020026.D	Luna-phenylhex 4.6(mm)
IC 280-567560/27		03/03/2022 07:19	1	03020027.D	Luna-phenylhex 4.6(mm)
ICV 280-567560/28		03/03/2022 07:54	1	03020028.D	Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 03/03/2022 15:13

Analysis Batch Number: 567645 End Date: 03/04/2022 07:36

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-567645/7		03/03/2022 15:13	1		Luna-phenylhex 4.6(mm)
CCV 280-567645/8		03/03/2022 15:48	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/03/2022 16:23	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/03/2022 16:58	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/03/2022 17:34	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/03/2022 18:09	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/03/2022 18:44	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/03/2022 19:19	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/03/2022 19:54	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/03/2022 20:29	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/03/2022 21:04	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/03/2022 21:39	1		Luna-phenylhex 4.6(mm)
CCV 280-567645/20		03/03/2022 22:14	1	03030020.D	Luna-phenylhex 4.6(mm)
CCV 280-567645/21		03/03/2022 22:49	1	03030021.D	Luna-phenylhex 4.6(mm)
ZZZZZ		03/03/2022 23:24	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/03/2022 23:59	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2022 00:35	1		Luna-phenylhex 4.6(mm)
280-159137-1	EW7-PM29B-8-35	03/04/2022 01:10	1	03030025.D	Luna-phenylhex 4.6(mm)
280-159137-2	EW7-PM25A-8-25	03/04/2022 01:45	1	03030026.D	Luna-phenylhex 4.6(mm)
280-159137-3	EW7-PM25B-8-35	03/04/2022 02:20	1	03030027.D	Luna-phenylhex 4.6(mm)
280-159137-4	EW7-PM26A-8-25	03/04/2022 02:55	1	03030028.D	Luna-phenylhex 4.6(mm)
280-159137-5	EW7-PM26B-8-35	03/04/2022 03:30	1	03030029.D	Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2022 04:06	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2022 04:41	1		Luna-phenylhex 4.6(mm)
CCV 280-567645/32		03/04/2022 05:16	1	03030032.D	Luna-phenylhex 4.6(mm)
CCV 280-567645/33		03/04/2022 05:51	1	03030033.D	Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2022 06:26	5		Luna-phenylhex 4.6(mm)
CCV 280-567645/35		03/04/2022 07:01	1		Luna-phenylhex 4.6(mm)
CCV 280-567645/36		03/04/2022 07:36	1		Luna-phenylhex 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Batch Number: 567330 Batch Start Date: 03/01/22 11:26 Batch Analyst: Cook, Ashleigh R

Batch Method: 3535 Batch End Date: 03/01/22 14:49

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00112	8330_OP_DMT 00013
MB 280-567330/1		3535, 8330A				500 mL	5 mL		
LCS 280-567330/2		3535, 8330A				500 mL	5 mL	0.1 mL	
LCS 280-567330/3		3535, 8330A				500 mL	5 mL		0.1 mL
280-159137-A-1	EW7-PM29B-8-35	3535, 8330A	T	769.4 g	286.9 g	482.5 mL	5 mL		
280-159137-B-2	EW7-PM25A-8-25	3535, 8330A	T	769.8 g	287.9 g	481.9 mL	5 mL		
280-159137-A-3	EW7-PM25B-8-35	3535, 8330A	T	781.9 g	288.4 g	493.5 mL	5 mL		
280-159137-A-4	EW7-PM26A-8-25	3535, 8330A	T	789.9 g	288.3 g	501.6 mL	5 mL		
280-159137-A-5	EW7-PM26B-8-35	3535, 8330A	T	784.6 g	286.2 g	498.4 mL	5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00127					
MB 280-567330/1		3535, 8330A		0.1 mL					
LCS 280-567330/2		3535, 8330A		0.1 mL					
LCS 280-567330/3		3535, 8330A		0.1 mL					
280-159137-A-1	EW7-PM29B-8-35	3535, 8330A	T	0.1 mL					
280-159137-B-2	EW7-PM25A-8-25	3535, 8330A	T	0.1 mL					
280-159137-A-3	EW7-PM25B-8-35	3535, 8330A	T	0.1 mL					
280-159137-A-4	EW7-PM26A-8-25	3535, 8330A	T	0.1 mL					
280-159137-A-5	EW7-PM26B-8-35	3535, 8330A	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.: 280-159137-1

SDG No.:

Batch Number: 567330 Batch Start Date: 03/01/22 11:26 Batch Analyst: Cook, Ashleigh R

Batch Method: 3535 Batch End Date: 03/01/22 14:49

Batch Notes	
First Start time	03/01/2022 11:40
First End time	03/01/2022 14:00
SPE Cartridge Type	Porapak RDX
SPE Cartridge Lot ID	004838C18A
Balance ID	24350888
Pipette/Syringe/Dispenser ID	JiJi, Soot, DOD
Solvent Name	Acetonitrile
Solvent Lot #	Acetonitrile_0055
Rinse Solvent Name	0.1%AAinACN
Rinse Solvent Lot	0.1%AAinACN_00178
Acid Name	Ca2Cl
Acid ID	Ca2Cl_Sol_00079
Analyst ID - Spike Analyst	ARC
Analyst ID - Spike Witness Analyst	Reviewer: SMQ
Batch Comment	DV-OP-0017; Mantel: A

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: 280-159137-1

SDG No.:

Project: Cornhusker (CHAAP)

Client Sample ID	Lab Sample ID
EW7-PM29B-8-35	280-159137-1
EW7-PM25A-8-25	280-159137-2
EW7-PM25B-8-35	280-159137-3
EW7-PM26A-8-25	280-159137-4
EW7-PM26B-8-35	280-159137-5

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM29B-8-35 Lab Sample ID: 280-159137-1

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG ID.:

Matrix: Water Date Sampled: 02/24/2022 15:40

Reporting Basis: WET Date Received: 02/26/2022 11:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.8	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	4.9	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	140	5.0	2.5	1.0	mg/L		M J1	1	9056A
Total Alkalinity as CaCO3	350	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM29B-8-35 Lab Sample ID: 280-159137-1

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG ID.:

Matrix: Water Date Sampled: 02/24/2022 15:40

Reporting Basis: WET Date Received: 02/26/2022 11:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	5.6	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM25A-8-25 Lab Sample ID: 280-159137-2

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG ID.:

Matrix: Water Date Sampled: 02/25/2022 10:10

Reporting Basis: WET Date Received: 02/26/2022 11:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.2	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	6.4	5.0	5.0	3.4	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	5.5	5.0	2.5	1.0	mg/L		M	1	9056A
Total Alkalinity as CaCO3	680	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM25A-8-25 Lab Sample ID: 280-159137-2

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG ID.:

Matrix: Water Date Sampled: 02/25/2022 10:10

Reporting Basis: WET Date Received: 02/26/2022 11:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	25	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM25B-8-35 Lab Sample ID: 280-159137-3

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG ID.:

Matrix: Water Date Sampled: 02/25/2022 12:05

Reporting Basis: WET Date Received: 02/26/2022 11:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.9	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	5.5	1.3	1.3	0.86	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	94	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	430	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM25B-8-35 Lab Sample ID: 280-159137-3

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG ID.:

Matrix: Water Date Sampled: 02/25/2022 12:05

Reporting Basis: WET Date Received: 02/26/2022 11:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	13	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM26A-8-25 Lab Sample ID: 280-159137-4

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG ID.:

Matrix: Water Date Sampled: 02/25/2022 13:25

Reporting Basis: WET Date Received: 02/26/2022 11:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.62	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U	J1	1	351.2
Nitrate Nitrite as N	9.9	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	120	5.0	2.5	1.0	mg/L		M	1	9056A
Total Alkalinity as CaCO3	430	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM26A-8-25 Lab Sample ID: 280-159137-4

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG ID.:

Matrix: Water Date Sampled: 02/25/2022 13:25

Reporting Basis: WET Date Received: 02/26/2022 11:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	5.5	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM26B-8-35 Lab Sample ID: 280-159137-5

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG ID.:

Matrix: Water Date Sampled: 02/25/2022 15:05

Reporting Basis: WET Date Received: 02/26/2022 11:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.1	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	4.6	1.3	1.3	0.86	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	79	5.0	2.5	1.0	mg/L		M	1	9056A
Total Alkalinity as CaCO3	470	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM26B-8-35 Lab Sample ID: 280-159137-5

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG ID.:

Matrix: Water Date Sampled: 02/25/2022 15:05

Reporting Basis: WET Date Received: 02/26/2022 11:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	11	1.0	0.80	0.35	mg/L			1	9060A

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Analyst: MMP Batch Start Date: 03/15/2022

Reporting Units: mg/L Analytical Batch No.: 568711

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	11:19	Ammonia	0.486	0.501	97	90-110		350.1 ICV_00508
15	ICV	11:21	Ammonia	2.52	2.51	100	90-110		350.1 ICV_00508
16	ICB	11:23	Ammonia	0.050				U	
34	CCV	11:59	Ammonia	2.63	2.50	105	90-110		350.1 cal_00524
35	CCB	12:01	Ammonia	0.050				U	
49	CCVL	12:29	Ammonia	0.514	0.500	103	90-110		350.1 cal_00524
50	CCV	12:31	Ammonia	2.55	2.50	102	90-110		350.1 cal_00524
51	CCB	12:33	Ammonia	0.050				U	
65	CCVL	13:01	Ammonia	0.466	0.500	93	90-110		350.1 cal_00524
66	CCV	13:03	Ammonia	2.37	2.50	95	90-110		350.1 cal_00524
67	CCB	13:05	Ammonia	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.: 280-159137-1

SDG No.:

Analyst: SVC Batch Start Date: 03/09/2022

Reporting Units: mg/L Analytical Batch No.: 568207

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
7	ICV	17:48	Nitrogen, Total Kjeldahl	5.28	5.00	106	90-110		TKN ICV 25_00115
8	ICB	17:48	Nitrogen, Total Kjeldahl	1.0				U	
21	CCV	17:53	Nitrogen, Total Kjeldahl	5.39	5.00	108	90-110		TKN 25ppm_00829
22	CCB	17:53	Nitrogen, Total Kjeldahl	1.0				U	
33	CCV	17:59	Nitrogen, Total Kjeldahl	5.41	5.00	108	90-110		TKN 25ppm_00829
34	CCB	17:59	Nitrogen, Total Kjeldahl	1.0				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.: 280-159137-1

SDG No.:

Analyst: SVC Batch Start Date: 02/27/2022

Reporting Units: mg/L Analytical Batch No.: 567204

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	ICV	16:11	Nitrate Nitrite as N	5.16	5.00	103	90-110		NXN ICV INT_00588
18	ICVL	16:13	Nitrate Nitrite as N	2.15	2.00	107	90-110		NXN ICV INT_00588
19	ICB	16:15	Nitrate Nitrite as N	0.050				U	
36	CCV	16:49	Nitrate Nitrite as N	5.02	5.00	100	90-110		NXN CAL INT_00612
37	CCVL	16:51	Nitrate Nitrite as N	1.04	1.00	104	90-110		NXN CAL INT_00612
38	CCB	16:53	Nitrate Nitrite as N	0.050				U	
52	CCV	17:21	Nitrate Nitrite as N	5.00	5.00	100	90-110		NXN CAL INT_00612
53	CCVL	17:23	Nitrate Nitrite as N	1.03	1.00	103	90-110		NXN CAL INT_00612
54	CCB	17:25	Nitrate Nitrite 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.: 280-159137-1

SDG No.:

Analyst: RAF Batch Start Date: 03/08/2022

Reporting Units: mg/L Analytical Batch No.: 568008

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICV	15:51	Sulfate	80.3	80.0	100	90-110		IC SO4 ICV_00022
9	ICB	16:08	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.: 280-159137-1

SDG No.:

Analyst: RAF Batch Start Date: 03/15/2022

Reporting Units: mg/L Analytical Batch No.: 568663

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	09:54	Sulfate	96.2	100	96	90-110		IC LCS_01862
2	CCB	10:10	Sulfate	2.5				U	
17	CCV	17:58	Sulfate	98.9	100	99	90-110		IC LCS_01862
18	CCB	18:15	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.: 280-159137-1

SDG No.:

Analyst: ABW Batch Start Date: 03/10/2022

Reporting Units: mg/L Analytical Batch No.: 568404

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	16:40	Dissolved Organic Carbon - Quad	20.2	20.0	101	90-110		TOC ICV Std_00049
2	ICB	16:56	Dissolved Organic Carbon - Quad	0.80				U	
27	CCV	23:55	Dissolved Organic Carbon - Quad	25.1	25.0	100	90-110		TOC LCS Std_00053
28	CCB	00:13	Dissolved Organic Carbon - Quad	0.80				U	
39	CCV	03:31	Dissolved Organic Carbon - Quad	26.2	25.0	105	90-110		TOC LCS Std_00053
40	CCB	03:46	Dissolved Organic Carbon - Quad	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.: 280-159137-1

SDG No.:

Analyst: KEG Batch Start Date: 03/01/2022

Reporting Units: mg/L Analytical Batch No.: 567460

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	CCV	15:11	Total Alkalinity as CaCO3	198	200	99	90-110		Alk daily lcs 01027
18	CCB	15:17	Total Alkalinity as CaCO3	6.4				U	

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.: 280-159137-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 568711 Date: 03/15/2022 11:31							
350.1	MB 280-568711/20	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 568711 Date: 03/15/2022 12:49							
350.1	MB 280-568711/59	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 568207 Date: 03/09/2022 17:48 Prep Batch: 567921 Date: 03/07/2022 15:58							
351.2	MB 280-567921/2-A	Nitrogen, Total Kjeldahl	1.0	U	mg/L	1.0	1
Batch ID: 568207 Date: 03/09/2022 17:56 Prep Batch: 567922 Date: 03/07/2022 16:01							
351.2	MB 280-567922/2-A	Nitrogen, Total Kjeldahl	1.0	U	mg/L	1.0	1
Batch ID: 567204 Date: 02/27/2022 16:23							
353.2	MB 280-567204/23	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 567676 Date: 03/03/2022 16:17 Prep Batch: 567649 Date: 03/03/2022 13:20							
9034	MB 280-567649/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 567780 Date: 03/04/2022 15:54 Prep Batch: 567743 Date: 03/04/2022 11:13							
9034	MB 280-567743/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 568663 Date: 03/15/2022 11:16							
9056A	MB 280-568663/6	Sulfate	2.5	U M	mg/L	5.0	1
Batch ID: 568404 Date: 03/11/2022 00:47							
9060A	MB 280-568304/2-A	Dissolved Organic Carbon - Quad	0.80	U	mg/L	1.0	1
Batch ID: 567460 Date: 03/01/2022 13:53							
SM 2320B	MB 280-567460/6	Total Alkalinity as CaCO3	6.4	U	mg/L	10	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 568711	Date: 03/15/2022 12:53										
350.1	280-159137-5	Ammonia	2.1		mg/L						
350.1	280-159137-5 MS	Ammonia	3.10		mg/L	1.00	97	90-110			
Batch ID: 568207	Date: 03/09/2022 17:56	Prep Batch: 567922	Date: 03/07/2022 16:01								
351.2	280-159137-4	Nitrogen, Total Kjeldahl	1.0	U	mg/L						J1
351.2	280-159137-4 MS	Nitrogen, Total Kjeldahl	3.36		mg/L	3.00	112	90-110			J1
Batch ID: 567676	Date: 03/03/2022 16:17	Prep Batch: 567649	Date: 03/03/2022 13:20								
9034	280-159137-1	Sulfide	0.80	J	mg/L						
9034	280-159137-1 MS	Sulfide	22.4		mg/L	24.3	89	44-110			
Batch ID: 568663	Date: 03/15/2022 15:44										
9056A	280-159137-1	Sulfate	140		mg/L						M J1
9056A	280-159137-1 MS	Sulfate	202		mg/L	50.0	123	87-112			M J1
Batch ID: 568404	Date: 03/11/2022 01:24										
9060A	280-159137-1	Dissolved Organic Carbon - Quad	5.6		mg/L						
9060A	280-159137-1 MS	Dissolved Organic Carbon - Quad	32.1		mg/L	25.0	106	88-112			

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

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 568711 Date: 03/15/2022 12:55											
350.1	280-159137-5 MSD	Ammonia	3.07		mg/L	1.00	94	90-110	1	10	
Batch ID: 568207 Date: 03/09/2022 17:57 Prep Batch: 567922 Date: 03/07/2022 16:01											
351.2	280-159137-4 MSD	Nitrogen, Total Kjeldahl	3.17		mg/L	3.00	106	90-110	6	25	
Batch ID: 567676 Date: 03/03/2022 16:17 Prep Batch: 567649 Date: 03/03/2022 13:20											
9034	280-159137-1 MSD	Sulfide	21.2		mg/L	24.3	84	44-110	6	20	
Batch ID: 568663 Date: 03/15/2022 16:00											
9056A	280-159137-1 MSD	Sulfate	202		mg/L	50.0	123	87-112	0	10	M J1
Batch ID: 568404 Date: 03/11/2022 01:43											
9060A	280-159137-1 MSD	Dissolved Organic Carbon - Quad	32.6		mg/L	25.0	108	88-112	2	15	

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

FORM V-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 568663 Date: 03/15/2022 15:27								
9056A	EW7-PM29B-8-35	280-159137-1	Sulfate	140	mg/L			
9056A	EW7-PM29B-8-35	280-159137-1 DU	Sulfate	140	mg/L	0.2	10	M

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

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 568711	Date: 03/15/2022 11:27										
						LCS Source: 350.1 cal_00524					
350.1	LCS 280-568711/18	Ammonia	2.54		mg/L	2.50	101	90-110	0	10	
Batch ID: 568711	Date: 03/15/2022 12:45										
						LCS Source: 350.1 cal_00524					
350.1	LCS 280-568711/57	Ammonia	2.43		mg/L	2.50	97	90-110	1	10	
Batch ID: 568207	Date: 03/09/2022 17:48	Prep Batch: 567921	Date: 03/07/2022 15:58								
						LCS Source: TKN 25ppm_00829					
351.2	LCS 280-567921/1-A	Nitrogen, Total Kjeldahl	5.82		mg/L	6.00	97	90-110			
Batch ID: 568207	Date: 03/09/2022 17:56	Prep Batch: 567922	Date: 03/07/2022 16:01								
						LCS Source: TKN 25ppm_00829					
351.2	LCS 280-567922/1-A	Nitrogen, Total Kjeldahl	5.81		mg/L	6.00	97	90-110			
Batch ID: 567204	Date: 02/27/2022 16:19										
						LCS Source: NXN CAL INT_00612					
353.2	LCS 280-567204/21	Nitrate Nitrite as N	5.04		mg/L	5.00	101	90-110	0	10	
Batch ID: 567676	Date: 03/03/2022 16:17	Prep Batch: 567649	Date: 03/03/2022 13:20								
						LCS Source: SFD ICV INT_02087					
9034	LCS 280-567649/1-A	Sulfide	21.6		mg/L	24.3	89	44-110			
Batch ID: 567780	Date: 03/04/2022 15:54	Prep Batch: 567743	Date: 03/04/2022 11:13								
						LCS Source: SFD ICV INT_02088					
9034	LCS 280-567743/1-A	Sulfide	17.6		mg/L	24.1	73	44-110			
Batch ID: 568663	Date: 03/15/2022 10:43										
						LCS Source: IC LCS_01862					
9056A	LCS 280-568663/4	Sulfate	95.8		mg/L	100	96	87-112	0	10	
Batch ID: 568404	Date: 03/11/2022 00:28										
						LCS Source: TOC LCS Std_00053					
9060A	LCS 280-568304/1-A	Dissolved Organic Carbon - Quad	25.2		mg/L	25.0	101	88-112			
Batch ID: 567460	Date: 03/01/2022 13:41										
						LCS Source: Alk daily lcs_01027					
SM 2320B	LCS 280-567460/4	Total Alkalinity as CaCO3	197		mg/L	200	98	89-109	0	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.: 280-159137-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 568711	Date: 03/15/2022 11:29										
						LCSD Source: 350.1 cal_00524					
350.1	LCSD 280-568711/19	Ammonia	2.53		mg/L	2.50	101	90-110	0	10	
Batch ID: 568711	Date: 03/15/2022 12:47										
						LCSD Source: 350.1 cal_00524					
350.1	LCSD 280-568711/58	Ammonia	2.45		mg/L	2.50	98	90-110	1	10	
Batch ID: 567204	Date: 02/27/2022 16:21										
						LCSD Source: NXN CAL INT_00612					
353.2	LCSD 280-567204/22	Nitrate Nitrite as N	5.02		mg/L	5.00	100	90-110	0	10	
Batch ID: 568663	Date: 03/15/2022 10:59										
						LCSD Source: IC LCS_01862					
9056A	LCSD 280-568663/5	Sulfate	95.9		mg/L	100	96	87-112	0	10	M
Batch ID: 567460	Date: 03/01/2022 13:48										
						LCSD Source: Alk daily lcs_01027					
SM 2320B	LCSD 280-567460/5	Total Alkalinity as CaCO3	197		mg/L	200	99	89-109	0	10	

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

FORM VIIA-IN

7A-IN
METHOD REPORTING LIMIT CHECK
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 568663	Date: 03/15/2022 10:27										
						LCS Source: IC CAL cl/so4_00410					
9056A	MRL 280-568663/3	Sulfate	4.19	J	mg/L	5.00	84	50-150			M

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

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-159137-1

SDG Number:

Matrix: Water Instrument ID: WC_Alp 4

Method: 350.1 DL Date: 03/28/2011 13:26

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Ammonia		0.1	0.022

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-159137-1

SDG Number:

Matrix: Water Instrument ID: WC_Alp 4

Method: 350.1 XMDL Date: 03/28/2011 13:26

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Ammonia		0.1	0.0225

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-159137-1

SDG Number:

Matrix: Water Instrument ID: WC_GAL1

Method: 351.2 DL Date: 02/03/2019 00:00

Prep Method: 351.2

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Nitrogen, Total Kjeldahl		1	0.687

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-159137-1

SDG Number:

Matrix: Water Instrument ID: WC_GAL1

Method: 351.2 XMDL Date: 02/03/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrogen, Total Kjeldahl		1	0.687

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-159137-1

SDG Number:

Matrix: Water Instrument ID: WC_Alp 2

Method: 353.2 DL Date: 12/16/2011 09:50

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Nitrate Nitrite as N		0.1	0.019

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-159137-1

SDG Number:

Matrix: Water Instrument ID: WC_Alp 2

Method: 353.2 XMDL Date: 05/16/2011 11:21

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Nitrate Nitrite as N		0.1	0.0191

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-159137-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: 9034 DL Date: 03/28/2011 13:37

Prep Method: 9030B

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Sulfide		4	0.793

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-159137-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: 9034 XMDL Date: 03/28/2011 13:37

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfide		4	0.793

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-159137-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom11

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: 280-159137-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom11

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 - DISSOLVED

Lab Name: Eurofins Denver Job Number: 280-159137-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI3

Method: 9060A DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Dissolved Organic Carbon - Quad		1	0.345

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins Denver Job Number: 280-159137-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI3

Method: 9060A XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Dissolved Organic Carbon - Quad		1	0.345

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-159137-1

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)
Total Alkalinity as CaCO3		10	3.08

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-159137-1

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)
Total Alkalinity as CaCO3		10	3.08

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Prep Method: 351.2

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-567921/1-A	03/07/2022 15:58	567921		25	25
MB 280-567921/2-A	03/07/2022 15:58	567921		25	25
280-159137-1	03/07/2022 15:58	567921		25	25
280-159137-2	03/07/2022 15:58	567921		5	25
280-159137-3	03/07/2022 15:58	567921		20	25
280-159137-5	03/07/2022 15:58	567921		20	25

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Prep Method: 351.2

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-567922/1-A	03/07/2022 16:01	567922		25	25
MB 280-567922/2-A	03/07/2022 16:01	567922		25	25
280-159137-4	03/07/2022 16:01	567922		25	25
280-159137-4 MS	03/07/2022 16:01	567922		25	25
280-159137-4 MSD	03/07/2022 16:01	567922		25	25

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-567649/1-A	03/03/2022 13:20	567649		50	50
MB 280-567649/2-A	03/03/2022 13:20	567649		50	50
280-159137-1	03/03/2022 13:20	567649		50	50
280-159137-1 MS	03/03/2022 13:20	567649		50	50
280-159137-1 MSD	03/03/2022 13:20	567649		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-567743/1-A	03/04/2022 11:13	567743		50	50
MB 280-567743/2-A	03/04/2022 11:13	567743		50	50
280-159137-2	03/04/2022 11:13	567743		50	50
280-159137-3	03/04/2022 11:13	567743		50	50
280-159137-4	03/04/2022 11:13	567743		50	50
280-159137-5	03/04/2022 11:13	567743		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 03/15/2022 10:53 End Date: 03/15/2022 14:03

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			10:53																									
ZZZZZZ			10:55																									
ZZZZZZ			10:57																									
IC 280-568711/4			10:59	X																								
IC 280-568711/5			11:01	X																								
IC 280-568711/6			11:03	X																								
IC 280-568711/7			11:05	X																								
IC 280-568711/8			11:07	X																								
IC 280-568711/9			11:09	X																								
IC 280-568711/10			11:11	X																								
IC 280-568711/11			11:13	X																								
ZZZZZZ			11:15																									
ZZZZZZ			11:17																									
ICVL 280-568711/14	1		11:19	X																								
ICV 280-568711/15	1		11:21	X																								
ICB 280-568711/16	1		11:23	X																								
ZZZZZZ			11:25																									
LCS 280-568711/18	1	T	11:27	X																								
LCSD 280-568711/19	1	T	11:29	X																								
MB 280-568711/20	1	T	11:31	X																								
ZZZZZZ			11:33																									
ZZZZZZ			11:35																									
ZZZZZZ			11:37																									
ZZZZZZ			11:39																									
ZZZZZZ			11:41																									
ZZZZZZ			11:43																									
ZZZZZZ			11:45																									
ZZZZZZ			11:47																									
ZZZZZZ			11:49																									
ZZZZZZ			11:51																									
ZZZZZZ			11:53																									
ZZZZZZ			11:55																									
CCVL 280-568711/33			11:57																									
CCV 280-568711/34	1		11:59	X																								
CCB 280-568711/35	1		12:01	X																								
ZZZZZZ			12:03																									
ZZZZZZ			12:05																									
ZZZZZZ			12:07																									
ZZZZZZ			12:09																									
ZZZZZZ			12:11																									
ZZZZZZ			12:13																									

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 03/15/2022 10:53 End Date: 03/15/2022 14:03

Lab Sample Id	D/F	Type	Time	Analytes
				NH3
ZZZZZZ			12:15	
ZZZZZZ			12:17	
ZZZZZZ			12:19	
ZZZZZZ			12:21	
ZZZZZZ			12:23	
ZZZZZZ			12:25	
ZZZZZZ			12:27	
CCVL 280-568711/49	1		12:29	X
CCV 280-568711/50	1		12:31	X
CCB 280-568711/51	1		12:33	X
ZZZZZZ			12:35	
280-159137-1	1	T	12:37	X
280-159137-2	1	T	12:39	X
280-159137-3	1	T	12:41	X
280-159137-4	1	T	12:43	X
LCS 280-568711/57	1	T	12:45	X
LCSD 280-568711/58	1	T	12:47	X
MB 280-568711/59	1	T	12:49	X
280-159137-5	1	T	12:51	X
280-159137-5 MS	1	T	12:53	X
280-159137-5 MSD	1	T	12:55	X
ZZZZZZ			12:57	
ZZZZZZ			12:59	
CCVL 280-568711/65	1		13:01	X
CCV 280-568711/66	1		13:03	X
CCB 280-568711/67	1		13:05	X
ZZZZZZ			13:16	
ZZZZZZ			13:18	
ZZZZZZ			13:20	
ZZZZZZ			13:22	
ZZZZZZ			13:24	
ZZZZZZ			13:26	
ZZZZZZ			13:28	
ZZZZZZ			13:30	
ZZZZZZ			13:42	
ZZZZZZ			13:44	
ZZZZZZ			13:46	
ZZZZZZ			13:48	
ZZZZZZ			13:50	
ZZZZZZ			13:52	
ZZZZZZ			13:57	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 03/15/2022 10:53 End Date: 03/15/2022 14:03

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			13:59																									
ZZZZZZ			14:01																									
ZZZZZZ			14:03																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_GAL1 Analysis Method: 351.2

Start Date: 02/22/2022 16:21 End Date: 03/09/2022 18:38

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
IC 280-566632/15-A			16:21	X																								
IC 280-566632/16-A			16:22	X																								
IC 280-566632/17-A			16:22	X																								
IC 280-566632/18-A			16:23	X																								
IC 280-566632/19-A			16:23	X																								
IC 280-566632/20-A			16:23	X																								
ICV 280-566632/21-A	1		17:48	X																								
ICB 280-566632/22-A	1		17:48	X																								
LCS 280-567921/1-A	1	T	17:48	X																								
MB 280-567921/2-A	1	T	17:48	X																								
ZZZZZZ			17:49																									
ZZZZZZ			17:49																									
ZZZZZZ			17:49																									
ZZZZZZ			17:49																									
ZZZZZZ			17:51																									
ZZZZZZ			17:51																									
ZZZZZZ			17:52																									
ZZZZZZ			17:52																									
280-159137-1	1	T	17:53	X																								
280-159137-2	1	T	17:53	X																								
CCV 280-566632/23-A	1		17:53	X																								
CCB 280-566632/24-A	1		17:53	X																								
280-159137-3	1	T	17:54	X																								
280-159137-5	1	T	17:54	X																								
LCS 280-567922/1-A	1	T	17:56	X																								
MB 280-567922/2-A	1	T	17:56	X																								
280-159137-4	1	T	17:56	X																								
280-159137-4 MS	1	T	17:56	X																								
280-159137-4 MSD	1	T	17:57	X																								
ZZZZZZ			17:57																									
ZZZZZZ			17:57																									
ZZZZZZ			17:58																									
CCV 280-566632/23-A	1		17:59	X																								
CCB 280-566632/24-A	1		17:59	X																								
ZZZZZZ			18:00																									
ZZZZZZ			18:00																									
ZZZZZZ			18:01																									
ZZZZZZ			18:01																									
ZZZZZZ			18:01																									
ZZZZZZ			18:01																									
ZZZZZZ			18:02																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_GAL1 Analysis Method: 351.2

Start Date: 02/22/2022 16:21 End Date: 03/09/2022 18:38

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
ZZZZZZ			18:02																									
ZZZZZZ			18:03																									
ZZZZZZ			18:03																									
CCV 280-566632/23-A			18:05																									
CCB 280-566632/24-A			18:05																									
ZZZZZZ			18:05																									
ZZZZZZ			18:05																									
ZZZZZZ			18:06																									
ZZZZZZ			18:06																									
ZZZZZZ			18:08																									
CCV 280-566632/23-A			18:09																									
CCB 280-566632/24-A			18:09																									
ZZZZZZ			18:19																									
ZZZZZZ			18:20																									
ZZZZZZ			18:21																									
CCV 280-566632/23-A			18:38																									
CCB 280-566632/24-A			18:38																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver | Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_Alp 2 | Analysis Method: 353.2

Start Date: 02/27/2022 15:39 | End Date: 02/27/2022 18:27

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			15:39	
ZZZZZZ			15:41	
ZZZZZZ			15:43	
ZZZZZZ			15:45	
IC 280-567204/5			15:47	X
IC 280-567204/6			15:49	X
IC 280-567204/7			15:51	X
IC 280-567204/8			15:53	X
IC 280-567204/9			15:55	X
IC 280-567204/10			15:57	X
IC 280-567204/11			15:59	X
IC 280-567204/12			16:01	X
IC 280-567204/13			16:03	X
ZZZZZZ			16:05	
ZZZZZZ			16:07	
ZZZZZZ			16:09	
ICV 280-567204/17	1		16:11	X
ICVL 280-567204/18	1		16:13	X
ICB 280-567204/19	1		16:15	X
ZZZZZZ			16:17	
LCS 280-567204/21	1	T	16:19	X
LCSD 280-567204/22	1	T	16:21	X
MB 280-567204/23	1	T	16:23	X
ZZZZZZ			16:25	
ZZZZZZ			16:27	
ZZZZZZ			16:29	
ZZZZZZ			16:31	
280-159137-1	1	T	16:33	X
ZZZZZZ			16:35	
ZZZZZZ			16:37	
ZZZZZZ			16:39	
ZZZZZZ			16:41	
ZZZZZZ			16:43	
RINSE 280-567204/34			16:45	
ZZZZZZ			16:47	
CCV 280-567204/36	1		16:49	X
CCVL 280-567204/37	1		16:51	X
CCB 280-567204/38	1		16:53	X
ZZZZZZ			16:55	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 02/27/2022 15:39 End Date: 02/27/2022 18:27

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
280-159137-2	1	T	16:57	X
280-159137-3	1	T	16:59	X
ZZZZZZ			17:01	
ZZZZZZ			17:03	
ZZZZZZ			17:05	
ZZZZZZ			17:07	
280-159137-4	1	T	17:09	X
280-159137-5	1	T	17:11	X
ZZZZZZ			17:13	
ZZZZZZ			17:15	
RINSE 280-567204/50			17:17	
ZZZZZZ			17:19	
CCV 280-567204/52	1		17:21	X
CCVL 280-567204/53	1		17:23	X
CCB 280-567204/54	1		17:25	X
ZZZZZZ			17:27	
ZZZZZZ			17:29	
ZZZZZZ			17:31	
ZZZZZZ			17:33	
ZZZZZZ			17:35	
ZZZZZZ			17:37	
ZZZZZZ			17:39	
ZZZZZZ			17:41	
ZZZZZZ			17:43	
ZZZZZZ			17:45	
ZZZZZZ			17:47	
ZZZZZZ			17:49	
RINSE 280-567204/67			17:51	
ZZZZZZ			17:53	
CCV 280-567204/69			17:55	
CCVL 280-567204/70			17:57	
CCB 280-567204/71			17:59	
ZZZZZZ			18:01	
ZZZZZZ			18:03	
ZZZZZZ			18:05	
ZZZZZZ			18:07	
ZZZZZZ			18:09	
ZZZZZZ			18:11	
ZZZZZZ			18:13	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 02/27/2022 15:39 End Date: 02/27/2022 18:27

Lab Sample Id	D/F	Type	Time	Analytes																								
				NNO32																								
ZZZZZZ			18:15																									
RINSE 280-567204/80			18:17																									
ZZZZZZ			18:19																									
CCV 280-567204/82			18:21																									
CCVL 280-567204/83			18:23																									
CCB 280-567204/84			18:25																									
ZZZZZZ			18:27																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 03/03/2022 16:17 End Date: 03/03/2022 16:17

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-567649/1-A	1	T	16:17	X																								
MB 280-567649/2-A	1	T	16:17	X																								
280-159137-1	1	T	16:17	X																								
280-159137-1 MS	1	T	16:17	X																								
280-159137-1 MSD	1	T	16:17	X																								

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 03/04/2022 15:54 End Date: 03/04/2022 15:54

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-567743/1-A	1	T	15:54	X																								
MB 280-567743/2-A	1	T	15:54	X																								
ZZZZZZ			15:54																									
ZZZZZZ			15:54																									
ZZZZZZ			15:54																									
280-159137-2	1	T	15:54	X																								
280-159137-3	1	T	15:54	X																								
280-159137-4	1	T	15:54	X																								
280-159137-5	1	T	15:54	X																								
ZZZZZZ			15:54																									
ZZZZZZ			15:54																									
ZZZZZZ			15:54																									
ZZZZZZ			15:54																									
ZZZZZZ			15:54																									
ZZZZZZ			15:54																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Method: 9056A

Start Date: 03/08/2022 14:13 End Date: 03/09/2022 09:06

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
STD 280-568008/2 IC	1		14:13	X																								
STD 280-568008/3 IC	1		14:29	X																								
STD 280-568008/4 IC	1		14:46	X																								
STD 280-568008/5 IC	1		15:02	X																								
STD 280-568008/6 IC	1		15:19	X																								
STD 280-568008/7 IC	1		15:35	X																								
ICV 280-568008/8	1		15:51	X																								
ICB 280-568008/9	1		16:08	X																								
ZZZZZZ			16:24																									
ZZZZZZ			16:41																									
ZZZZZZ			16:57																									
ZZZZZZ			17:14																									
ZZZZZZ			17:30																									
ZZZZZZ			17:46																									
ZZZZZZ			18:03																									
ZZZZZZ			18:19																									
ZZZZZZ			18:36																									
ZZZZZZ			18:52																									
ZZZZZZ			19:08																									
ZZZZZZ			19:25																									
ZZZZZZ			19:41																									
ZZZZZZ			19:58																									
CCV 280-568008/24			20:14																									
CCB 280-568008/25			20:30																									
ZZZZZZ			20:47																									
ZZZZZZ			21:03																									
ZZZZZZ			21:20																									
ZZZZZZ			21:36																									
ZZZZZZ			21:53																									
ZZZZZZ			22:09																									
ZZZZZZ			22:25																									
ZZZZZZ			22:42																									
ZZZZZZ			22:58																									
ZZZZZZ			23:15																									
CCV 280-568008/36			23:31																									
CCB 280-568008/37			23:47																									
ZZZZZZ			00:04																									
ZZZZZZ			00:20																									
ZZZZZZ			00:37																									
ZZZZZZ			00:53																									
ZZZZZZ			01:10																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Method: 9056A

Start Date: 03/08/2022 14:13 End Date: 03/09/2022 09:06

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			01:26																									
ZZZZZZ			01:42																									
ZZZZZZ			01:59																									
ZZZZZZ			02:15																									
CCV 280-568008/47			02:32																									
CCB 280-568008/48			09:06																									

Prep Types:
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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Method: 9056A

Start Date: 03/15/2022 09:54 End Date: 03/16/2022 00:49

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCV 280-568663/1	1		09:54	X																								
CCB 280-568663/2	1		10:10	X																								
MRL 280-568663/3	1	T	10:27	X																								
LCS 280-568663/4	1	T	10:43	X																								
LCSD 280-568663/5	1	T	10:59	X																								
MB 280-568663/6	1	T	11:16	X																								
280-159137-1	1	T	15:11	X																								
280-159137-1 DU	1	T	15:27	X																								
280-159137-1 MS	1	T	15:44	X																								
280-159137-1 MSD	1	T	16:00	X																								
280-159137-2	1	T	16:20	X																								
280-159137-3	1	T	16:36	X																								
280-159137-4	1	T	16:52	X																								
280-159137-5	1	T	17:09	X																								
ZZZZZZ			17:25																									
ZZZZZZ			17:42																									
CCV 280-568663/17	1		17:58	X																								
CCB 280-568663/18	1		18:15	X																								
ZZZZZZ			18:31																									
ZZZZZZ			18:47																									
ZZZZZZ			19:04																									
ZZZZZZ			19:20																									
ZZZZZZ			19:37																									
ZZZZZZ			19:53																									
ZZZZZZ			20:09																									
ZZZZZZ			20:26																									
ZZZZZZ			20:42																									
ZZZZZZ			20:59																									
CCV 280-568663/29			21:15																									
CCB 280-568663/30			21:32																									
ZZZZZZ			21:48																									
ZZZZZZ			22:04																									
ZZZZZZ			22:21																									
ZZZZZZ			22:37																									
ZZZZZZ			22:54																									
ZZZZZZ			23:10																									
ZZZZZZ			23:26																									
ZZZZZZ			23:43																									
ZZZZZZ			23:59																									
ZZZZZZ			00:16																									
CCV 280-568663/41			00:32																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Method: 9056A

Start Date: 03/15/2022 09:54 End Date: 03/16/2022 00:49

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCB 280-568663/42			00:49																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 03/10/2022 16:40 End Date: 03/11/2022 09:51

Lab Sample Id	D/F	Type	Time	Analytes
				DOCQ
ICV 280-568404/1	1		16:40	X
ICB 280-568404/2	1		16:56	X
ZZZZZZ			17:13	
ZZZZZZ			17:32	
ZZZZZZ			17:46	
ZZZZZZ			18:01	
ZZZZZZ			18:20	
ZZZZZZ			18:34	
ZZZZZZ			18:49	
ZZZZZZ			19:12	
ZZZZZZ			19:26	
ZZZZZZ			19:45	
ZZZZZZ			20:06	
ZZZZZZ			20:22	
CCV 280-568404/15			20:37	
CCB 280-568404/16			20:51	
ZZZZZZ			21:06	
ZZZZZZ			21:29	
ZZZZZZ			21:48	
ZZZZZZ			22:02	
ZZZZZZ			22:21	
ZZZZZZ			22:38	
ZZZZZZ			22:54	
ZZZZZZ			23:11	
ZZZZZZ			23:25	
ZZZZZZ			23:40	
CCV 280-568404/27	1		23:55	X
CCB 280-568404/28	1		00:13	X
LCS 280-568304/1-A	1	D	00:28	X
MB 280-568304/2-A	1	D	00:47	X
280-159137-1	1	D	01:01	X
280-159137-1 MS	1	D	01:24	X
280-159137-1 MSD	1	D	01:43	X
280-159137-2	1	D	02:00	X
280-159137-3	1	D	02:21	X
280-159137-4	1	D	02:39	X
280-159137-5	1	D	02:56	X
ZZZZZZ			03:12	
CCV 280-568404/39	1		03:31	X
CCB 280-568404/40	1		03:46	X

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 03/10/2022 16:40 End Date: 03/11/2022 09:51

Lab Sample Id	D/F	Type	Time	Analytes																									
				DOCQ																									
ZZZZZZ			04:00																										
ZZZZZZ			04:15																										
ZZZZZZ			04:30																										
ZZZZZZ			04:47																										
ZZZZZZ			05:03																										
ZZZZZZ			05:18																										
ZZZZZZ			05:32																										
ZZZZZZ			05:51																										
ZZZZZZ			06:06																										
ZZZZZZ			06:20																										
CCV 280-568404/51			06:35																										
CCB 280-568404/52			06:54																										
ZZZZZZ			07:11																										
ZZZZZZ			07:31																										
ZZZZZZ			07:50																										
ZZZZZZ			08:05																										
ZZZZZZ			08:23																										
ZZZZZZ			08:38																										
ZZZZZZ			08:59																										
ZZZZZZ			09:16																										
CCV 280-568404/61			09:36																										
CCB 280-568404/62			09:51																										

Prep Types:
D = Dissolved

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 03/01/2022 13:21 End Date: 03/01/2022 19:32

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
RINSE 280-567460/1			13:21																									
ZZZZZZ			13:28																									
ZZZZZZ			13:34																									
LCS 280-567460/4	1	T	13:41	X																								
LCSD 280-567460/5	1	T	13:48	X																								
MB 280-567460/6	1	T	13:53	X																								
ZZZZZZ			13:59																									
ZZZZZZ			14:04																									
ZZZZZZ			14:09																									
ZZZZZZ			14:16																									
ZZZZZZ			14:21																									
280-159137-1	1	T	14:29	X																								
280-159137-2	1	T	14:39	X																								
280-159137-3	1	T	14:47	X																								
280-159137-4	1	T	14:56	X																								
280-159137-5	1	T	15:04	X																								
CCV 280-567460/17	1		15:11	X																								
CCB 280-567460/18	1		15:17	X																								
ZZZZZZ			15:32																									
ZZZZZZ			15:38																									
ZZZZZZ			15:49																									
ZZZZZZ			15:56																									
ZZZZZZ			16:01																									
ZZZZZZ			16:08																									
ZZZZZZ			16:15																									
ZZZZZZ			16:21																									
ZZZZZZ			16:28																									
ZZZZZZ			16:35																									
CCV 280-567460/29			16:42																									
CCB 280-567460/30			16:48																									
ZZZZZZ			16:56																									
ZZZZZZ			17:01																									
ZZZZZZ			17:10																									
ZZZZZZ			17:18																									
ZZZZZZ			17:23																									
ZZZZZZ			17:30																									
ZZZZZZ			17:39																									
ZZZZZZ			17:47																									
ZZZZZZ			17:53																									
ZZZZZZ			17:58																									
ZZZZZZ			18:04																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 03/01/2022 13:21 End Date: 03/01/2022 19:32

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			18:14																									
CCV 280-567460/43			18:21																									
CCB 280-567460/44			18:27																									
ZZZZZZ			18:34																									
ZZZZZZ			18:41																									
ZZZZZZ			18:49																									
ZZZZZZ			18:59																									
ZZZZZZ			19:09																									
ZZZZZZ			19:20																									
CCV 280-567460/51			19:27																									
CCB 280-567460/52			19:32																									

Prep Types:
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Batch Number: 568711 Batch Start Date: 03/15/22 10:53 Batch Analyst: Peterson, McKenzy M

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00524	350.1 ICV 00508
ICVL 280-568711/14		350.1		no	100 mL	100 mL	<2 SU		0.5 mL
ICV 280-568711/15		350.1		no	100 mL	100 mL	<2 SU		2.5 mL
ICB 280-568711/16		350.1		no	10 mL	10 mL	<2 SU		
LCS 280-568711/18		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
LCSD 280-568711/19		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
MB 280-568711/20		350.1		no	10 mL	10 mL	<2 SU		
CCV 280-568711/34		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
CCB 280-568711/35		350.1		no	10 mL	10 mL	<2 SU		
CCVL 280-568711/49		350.1		no	100 mL	100 mL	<2 SU	0.5 mL	
CCV 280-568711/50		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
CCB 280-568711/51		350.1		no	10 mL	10 mL	<2 SU		
280-159137-C-1	EW7-PM29B-8-35	350.1	T	no	10 mL	10 mL	<2 SU		
280-159137-C-2	EW7-PM25A-8-25	350.1	T	no	10 mL	10 mL	<2 SU		
280-159137-C-3	EW7-PM25B-8-35	350.1	T	no	10 mL	10 mL	<2 SU		
280-159137-C-4	EW7-PM26A-8-25	350.1	T	no	10 mL	10 mL	<2 SU		
LCS 280-568711/57		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
LCSD 280-568711/58		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
MB 280-568711/59		350.1		no	10 mL	10 mL	<2 SU		
280-159137-C-5	EW7-PM26B-8-35	350.1	T	no	10 mL	10 mL	<2 SU		
280-159137-C-5 MS	EW7-PM26B-8-35	350.1	T	no	10 mL	10 mL	<2 SU	0.1 mL	
280-159137-C-5 MSD	EW7-PM26B-8-35	350.1	T	no	10 mL	10 mL	<2 SU	0.1 mL	
CCVL 280-568711/65		350.1		no	100 mL	100 mL	<2 SU	0.5 mL	
CCV 280-568711/66		350.1		no	100 mL	100 mL	<2 SU	2.5 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.: 280-159137-1

SDG No.:

Batch Number: 568711 Batch Start Date: 03/15/22 10:53 Batch Analyst: Peterson, McKenzy M

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00524	350.1 ICV 00508
CCB 280-568711/67		350.1		no	10 mL	10 mL	<2 SU		

Batch Notes	
Acid used for pH adjustment	SulfuricAcid_00264
Sodium Nitroprusside ID	350.1 color_00277
Hypochlorite ID	350.1 bleach_01585
Carrier Identification	350.1 complex_00603
Sodium Salicylate ID	Sodium Sal_00023
Pipette/Syringe/Dispenser ID	SAH5000, 1000INTERCESSOR, 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.: 280-159137-1

SDG No.:

Batch Number: 566632 Batch Start Date: 02/21/22 15:30 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	TKN 25ppm 00829	TKN ICV 25 00115	
ICV 280-566632/21		351.2, 351.2		<2	25 mL	25 mL		5 mL	
ICB 280-566632/22		351.2, 351.2		<2	25 mL	25 mL			
CCV 280-566632/23		351.2, 351.2		<2	25 mL	25 mL	5 mL		
CCB 280-566632/24		351.2, 351.2		<2	25 mL	25 mL			

Batch Notes	
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00145
Oven, Bath or Block Temperature 1	160 Degrees C
Block Digestion Temperature Start Date	02/21/2022 16:30
Oven, Bath or Block Temperature 2	380 Degrees C
Bl;ock Digestion Temperature End Date	02/21/2022 22:30
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
pH Indicator ID	hc902937

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Batch Number: 567921 Batch Start Date: 03/07/22 15:58 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	TKN 25ppm 00829		
LCS 280-567921/1		351.2, 351.2			25 mL	25 mL	6 mL		
MB 280-567921/2		351.2, 351.2			25 mL	25 mL			
280-159137-C-1	EW7-PM29B-8-35	351.2, 351.2	T	<2	25 mL	25 mL			
280-159137-C-2	EW7-PM25A-8-25	351.2, 351.2	T	<2	5 mL	25 mL			
280-159137-C-3	EW7-PM25B-8-35	351.2, 351.2	T	<2	20 mL	25 mL			
280-159137-C-5	EW7-PM26B-8-35	351.2, 351.2	T	<2	20 mL	25 mL			

Batch Notes	
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00146
Oven, Bath or Block Temperature 1	160 Degrees C
Block Digestion Temperature Start Date	03/07/2022 16:30
Oven, Bath or Block Temperature 2	380 Degrees C
Bl;ock Digestion Temperature End Date	03/07/2022 22:30
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
pH Indicator ID	hc902937

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.: 280-159137-1

SDG No.:

Batch Number: 567922 Batch Start Date: 03/07/22 16:01 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	TKN 25ppm 00829		
LCS 280-567922/1		351.2, 351.2			25 mL	25 mL	6 mL		
MB 280-567922/2		351.2, 351.2			25 mL	25 mL			
280-159137-C-4	EW7-PM26A-8-25	351.2, 351.2	T	<2	25 mL	25 mL			
280-159137-C-4 MS	EW7-PM26A-8-25	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-159137-C-4 MSD	EW7-PM26A-8-25	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		

Batch Notes	
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00146
Oven, Bath or Block Temperature 1	160 Degrees C
Block Digestion Temperature Start Date	03/07/2022 16:30
Oven, Bath or Block Temperature 2	380 Degrees C
Bl;ock Digestion Temperature End Date	03/07/2022 22:30
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
pH Indicator ID	hc902937

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.: 280-159137-1

SDG No.:

Batch Number: 568207 Batch Start Date: 02/22/22 16:21 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount					
ICV 280-566632/21-A		351.2		2 mL					
ICB 280-566632/22-A		351.2		2 mL					
LCS 280-567921/1-A		351.2		2 mL					
MB 280-567921/2-A		351.2		2 mL					
280-159137-C-1-A	EW7-PM29B-8-35	351.2	T	2 mL					
280-159137-C-2-A	EW7-PM25A-8-25	351.2	T	2 mL					
CCV 280-566632/23-A		351.2		2 mL					
CCB 280-566632/24-A		351.2		2 mL					
280-159137-C-3-A	EW7-PM25B-8-35	351.2	T	2 mL					
280-159137-C-5-A	EW7-PM26B-8-35	351.2	T	2 mL					
LCS 280-567922/1-A		351.2		2 mL					
MB 280-567922/2-A		351.2		2 mL					
280-159137-C-4-A	EW7-PM26A-8-25	351.2	T	2 mL					
280-159137-C-4-B MS	EW7-PM26A-8-25	351.2	T	2 mL					
280-159137-C-4-C MSD	EW7-PM26A-8-25	351.2	T	2 mL					
CCV 280-566632/23-A		351.2		2 mL					
CCB 280-566632/24-A		351.2		2 mL					

Batch Notes	
Hypochlorite ID	TKN hypo_00676
Buffer Reagent ID	TKN buffer_00133
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
Sodium Nitroprusside ID	sodium nitro_00108

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.: 280-159137-1

SDG No.:

Batch Number: 568207 Batch Start Date: 02/22/22 16:21 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Batch Number: 567204 Batch Start Date: 02/27/22 15:39 Batch Analyst: Cherry, Scott V

Batch Method: 353.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	NXN CAL INT 00612	NXN ICV INT 00588		
ICV 280-567204/17		353.2		100 mL	100 mL		5 mL		
ICVL 280-567204/18		353.2		100 mL	100 mL		2 mL		
ICB 280-567204/19		353.2		100 mL	100 mL				
LCS 280-567204/21		353.2		100 mL	100 mL	5 mL			
LCSD 280-567204/22		353.2		100 mL	100 mL	5 mL			
MB 280-567204/23		353.2		100 mL	100 mL				
280-159137-C-1	EW7-PM29B-8-35	353.2	T	100 mL	100 mL				
CCV 280-567204/36		353.2		100 mL	100 mL	5 mL			
CCVL 280-567204/37		353.2		100 mL	100 mL	1 mL			
CCB 280-567204/38		353.2		100 mL	100 mL				
280-159137-C-2	EW7-PM25A-8-25	353.2	T	100 mL	100 mL				
280-159137-C-3	EW7-PM25B-8-35	353.2	T	100 mL	100 mL				
280-159137-C-4	EW7-PM26A-8-25	353.2	T	100 mL	100 mL				
280-159137-C-5	EW7-PM26B-8-35	353.2	T	100 mL	100 mL				
CCV 280-567204/52		353.2		100 mL	100 mL	5 mL			
CCVL 280-567204/53		353.2		100 mL	100 mL	1 mL			
CCB 280-567204/54		353.2		100 mL	100 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.: 280-159137-1

SDG No.:

Batch Number: 567204 Batch Start Date: 02/27/22 15:39 Batch Analyst: Cherry, Scott V

Batch Method: 353.2 Batch End Date:

Batch Notes	
pH Indicator ID	hc155968
Buffer Reagent ID	NOXT Buffer_00223
Color Reagent ID	NOXT CR_00122
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
Cadmium Column Lot ID	q11513937102
Copper Sulfate ID	CuSO4 NOXT_0015
Hydrochloric Acid ID	0.5N HCl_0085

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.: 280-159137-1

SDG No.:

Batch Number: 567649 Batch Start Date: 03/03/22 13:30 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 03/03/22 15:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-567649/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
MB 280-567649/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-159137-E-1	EW7-PM29B-8-35	9030B, 9034	T	50 mL	50 mL	3	>9 SU	<2 SU	5 mL
280-159137-E-1 MS	EW7-PM29B-8-35	9030B, 9034	T	50 mL	50 mL	4	>9 SU	<2 SU	5 mL
280-159137-E-1 MSD	EW7-PM29B-8-35	9030B, 9034	T	50 mL	50 mL	5	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 02087					
LCS 280-567649/1		9030B, 9034		1 mL					
MB 280-567649/2		9030B, 9034							
280-159137-E-1	EW7-PM29B-8-35	9030B, 9034	T						
280-159137-E-1 MS	EW7-PM29B-8-35	9030B, 9034	T	1 mL					
280-159137-E-1 MSD	EW7-PM29B-8-35	9030B, 9034	T	1 mL					

Batch Notes	
Formaldehyde ID	form_00120
Zinc Acetate Buffer ID	znac_00121
Pipette/Syringe/Dispenser ID	5Hz4, ARM1000
Sulfuric Acid Reagent ID Number	SulfuricAcid_00288
pH Indicator ID	HC157843
Oven, Bath or Block Temperature 1	80 Degrees C
Distillation Start Time	03/03/2022 13:30
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	03/03/2022 15:00
Batch Comment	JM training MG

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.: 280-159137-1

SDG No.:

Batch Number: 567649 Batch Start Date: 03/03/22 13:30 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 03/03/22 15:00

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.: 280-159137-1

SDG No.:

Batch Number: 567676 Batch Start Date: 03/03/22 15:00 Batch Analyst: Mitchell, Jacob J

Batch Method: 9034 Batch End Date: 03/03/22 15:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-567649/1-A		9034		0.0 mL	2.3 mL	5 mL	2.3 mL	50 mL	
MB 280-567649/2-A		9034		2.3 mL	3.3 mL	1 mL	1 mL	50 mL	
280-159137-E-1-A	EW7-PM29B-8-35	9034	T	3.3 mL	4.2 mL	1 mL	0.9 mL	50 mL	
280-159137-E-1-B MS	EW7-PM29B-8-35	9034	T	4.2 mL	6.4 mL	5 mL	2.2 mL	50 mL	
280-159137-E-1-C MSD	EW7-PM29B-8-35	9034	T	6.4 mL	8.75 mL	5 mL	2.35 mL	50 mL	

Batch Notes	
Normality of First Titrant	0.025 N
Normality of Iodine Solution	0.025 N
Iodine ID	WCIODINE_01326
Hydrochloric Acid ID	HCl Sol_00197
Sodium Thiosulfate ID	Na Thio_00177
Starch Reagent ID	Starch Ind_00067
Pipette/Syringe/Dispenser ID	5Hz4, ARM1000
Batch Comment	JM training MG

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.: 280-159137-1

SDG No.:

Batch Number: 567743 Batch Start Date: 03/04/22 11:30 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 03/04/22 13:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-567743/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
MB 280-567743/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-159137-E-2	EW7-PM25A-8-25	9030B, 9034	T	50 mL	50 mL	6	>9 SU	<2 SU	5 mL
280-159137-E-3	EW7-PM25B-8-35	9030B, 9034	T	50 mL	50 mL	7	>9 SU	<2 SU	5 mL
280-159137-E-4	EW7-PM26A-8-25	9030B, 9034	T	50 mL	50 mL	8	>9 SU	<2 SU	5 mL
280-159137-E-5	EW7-PM26B-8-35	9030B, 9034	T	50 mL	50 mL	9	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 02088					
LCS 280-567743/1		9030B, 9034		1 mL					
MB 280-567743/2		9030B, 9034							
280-159137-E-2	EW7-PM25A-8-25	9030B, 9034	T						
280-159137-E-3	EW7-PM25B-8-35	9030B, 9034	T						
280-159137-E-4	EW7-PM26A-8-25	9030B, 9034	T						
280-159137-E-5	EW7-PM26B-8-35	9030B, 9034	T						

Batch Notes	
Formaldehyde ID	none, see NCM
Zinc Acetate Buffer ID	znac_00121
Pipette/Syringe/Dispenser ID	5Hz4, ARM1000
Sulfuric Acid Reagent ID Number	SulfuricAcid_00288
pH Indicator ID	HC157843
Oven, Bath or Block Temperature 1	80 Degrees C
Distillation Start Time	03/04/2022 11:30
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	03/04/2022 13:00
Batch Comment	JM training MG

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.: 280-159137-1

SDG No.:

Batch Number: 567743 Batch Start Date: 03/04/22 11:30 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 03/04/22 13:00

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.: 280-159137-1

SDG No.:

Batch Number: 567780 Batch Start Date: 03/04/22 11:30 Batch Analyst: Mitchell, Jacob J

Batch Method: 9034 Batch End Date: 03/04/22 13:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-567743/1-A		9034		0 mL	2.8 mL	5 mL	2.8 mL	50 mL	
MB 280-567743/2-A		9034		2.8 mL	3.8 mL	1 mL	1 mL	50 mL	
280-159137-E-2-A	EW7-PM25A-8-25	9034	T	9.6 mL	10.5 mL	1 mL	0.9 mL	50 mL	
280-159137-E-3-A	EW7-PM25B-8-35	9034	T	10.5 mL	11.5 mL	1 mL	1 mL	50 mL	
280-159137-E-4-A	EW7-PM26A-8-25	9034	T	11.5 mL	12.5 mL	1 mL	1 mL	50 mL	
280-159137-E-5-A	EW7-PM26B-8-35	9034	T	12.5 mL	13.5 mL	1 mL	1 mL	50 mL	

Batch Notes	
Normality of First Titrant	0.025 N
Normality of Iodine Solution	0.025 N
Iodine ID	WCIODINE_01326
Hydrochloric Acid ID	HCl Sol_00197
Sodium Thiosulfate ID	Na Thio_00177
Starch Reagent ID	Starch Ind_00067
Pipette/Syringe/Dispenser ID	5Hz4, ARM1000
Batch Comment	JM training MG

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.: 280-159137-1

SDG No.:

Batch Number: 568008 Batch Start Date: 03/08/22 14:13 Batch Analyst: Fox, Regan A

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Cl ICV Std 00002	IC CAL cl/so4 00409	IC Cal low 00625	IC ICV 5 00353
STD 280-568008/2 IC		9056A		5 mL	5 mL		0.02 mL	0.02 mL	
STD 280-568008/3 IC		9056A		5 mL	5 mL		0.05 mL	0.05 mL	
STD 280-568008/4 IC		9056A		5 mL	5 mL		0.1 mL	0.1 mL	
STD 280-568008/5 IC		9056A		5 mL	5 mL		1.2 mL	0.4 mL	
STD 280-568008/6 IC		9056A		5 mL	5 mL		2.4 mL	0.8 mL	
STD 280-568008/7 IC		9056A		5 mL	5 mL		4 mL	1 mL	
ICV 280-568008/8		9056A		5 mL	5 mL	0.4 mL			0.4 mL
ICB 280-568008/9		9056A		5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00022					
STD 280-568008/2 IC		9056A							
STD 280-568008/3 IC		9056A							
STD 280-568008/4 IC		9056A							
STD 280-568008/5 IC		9056A							
STD 280-568008/6 IC		9056A							
STD 280-568008/7 IC		9056A							
ICV 280-568008/8		9056A		0.4 mL					
ICB 280-568008/9		9056A							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Batch Number: 568008 Batch Start Date: 03/08/22 14:13 Batch Analyst: Fox, Regan A

Batch Method: 9056A Batch End Date:

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, BMF1000, 200CJ, IC100
Sufficient Volume for Batch QC	yes
Eluent 1 ID	AS14 Eluent_00021
Batch Comment	Run and reviewed by RAF, RAF in training

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Batch Number: 568663 Batch Start Date: 03/15/22 09:54 Batch Analyst: Fox, Regan A

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00410	IC Cal low 00626	IC LCS 01862	ICMS/MSD WEEK 00747
CCV 280-568663/1		9056A		5 mL	5 mL			10 mL	
CCB 280-568663/2		9056A		5 mL	5 mL				
MRL 280-568663/3		9056A		5 mL	5 mL	0.2 mL	0.1 mL		
LCS 280-568663/4		9056A		5 mL	5 mL			10 mL	
LCSD 280-568663/5		9056A		5 mL	5 mL			10 mL	
MB 280-568663/6		9056A		5 mL	5 mL				
280-159137-F-1	EW7-PM29B-8-35	9056A	T	5 mL	5 mL				
280-159137-F-1 DU	EW7-PM29B-8-35	9056A	T	5 mL	5 mL				
280-159137-F-1 MS	EW7-PM29B-8-35	9056A	T	5 mL	5 mL				0.05 mL
280-159137-F-1 MSD	EW7-PM29B-8-35	9056A	T	5 mL	5 mL				0.05 mL
280-159137-F-2	EW7-PM25A-8-25	9056A	T	5 mL	5 mL				
280-159137-F-3	EW7-PM25B-8-35	9056A	T	5 mL	5 mL				
280-159137-F-4	EW7-PM26A-8-25	9056A	T	5 mL	5 mL				
280-159137-F-5	EW7-PM26B-8-35	9056A	T	5 mL	5 mL				
CCV 280-568663/17		9056A		5 mL	5 mL			5 mL	
CCB 280-568663/18		9056A		5 mL	5 mL				

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, HEX1000, 200CJ, IC100
Sufficient Volume for Batch QC	yes
Eluent 1 ID	AS14 Eluent_00021
Batch Comment	RAF

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.: 280-159137-1

SDG No.:

Batch Number: 568663 Batch Start Date: 03/15/22 09:54 Batch Analyst: Fox, Regan A

Batch Method: 9056A Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Batch Number: 568403 Batch Start Date: 03/10/22 16:40 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC LCS Std 00053	AnalysisComment
LCS 280-568304/1-A		9060A		200 mL	200 mL	<2 SU	<2 SU	5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
MB 280-568304/2-A		9060A		20 mL	20 mL	<2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159137-D-1-A	EW7-PM29B-8-35	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159137-D-1-B MS	EW7-PM29B-8-35	9060A	D	50 mL	50 mL	>2 SU	<2 SU	1.25 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159137-D-1-C MSD	EW7-PM29B-8-35	9060A	D	50 mL	50 mL	>2 SU	<2 SU	1.25 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159137-D-2-A	EW7-PM25A-8-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159137-D-3-A	EW7-PM25B-8-35	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Batch Number: 568403 Batch Start Date: 03/10/22 16:40 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC LCS Std 00053	AnalysisComment
280-159137-D-4-A	EW7-PM26A-8-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159137-D-5-A	EW7-PM26B-8-35	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.

Batch Notes	
Acid ID	0.2% H2SO4_00421, H2SO4_00210
Combustion Catylyst ID	19003D-03
Pipette/Syringe/Dispenser ID	BWH 5000, 1000 MS, 9086953
pH Paper ID	HC169501
Filter ID	17233826
Batch Comment	Run and reviewed by ABW

Basis	Basis Description
D	Dissolved

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.: 280-159137-1

SDG No.:

Batch Number: 568404 Batch Start Date: 03/10/22 16:40 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC ICV Std 00049	TOC LCS Std 00053
ICV 280-568404/1		9060A		50 mL	50 mL	<2 SU	<2 SU	1 mL	
ICB 280-568404/2		9060A		20 mL	20 mL	<2 SU	<2 SU		
CCV 280-568404/27		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-568404/28		9060A		20 mL	20 mL	<2 SU	<2 SU		
LCS 280-568304/1-A		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
MB 280-568304/2-A		9060A		20 mL	20 mL	<2 SU	<2 SU		
280-159137-D-1-A	EW7-PM29B-8-35	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-159137-D-1-B MS	EW7-PM29B-8-35	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL
280-159137-D-1-C MSD	EW7-PM29B-8-35	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL
280-159137-D-2-A	EW7-PM25A-8-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-159137-D-3-A	EW7-PM25B-8-35	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-159137-D-4-A	EW7-PM26A-8-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-159137-D-5-A	EW7-PM26B-8-35	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
CCV 280-568404/39		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-568404/40		9060A		20 mL	20 mL	<2 SU	<2 SU		

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
ICV 280-568404/1		9060A		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.: 280-159137-1

SDG No.:

Batch Number: 568404 Batch Start Date: 03/10/22 16:40 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
ICB 280-568404/2		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-568404/27		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-568404/28		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
LCS 280-568304/1-A		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
MB 280-568304/2-A		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159137-D-1-A	EW7-PM29B-8-35	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159137-D-1-B MS	EW7-PM29B-8-35	9060A	D	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.: 280-159137-1

SDG No.:

Batch Number: 568404 Batch Start Date: 03/10/22 16:40 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-159137-D-1-C MSD	EW7-PM29B-8-35	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159137-D-2-A	EW7-PM25A-8-25	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159137-D-3-A	EW7-PM25B-8-35	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159137-D-4-A	EW7-PM26A-8-25	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159137-D-5-A	EW7-PM26B-8-35	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-568404/39		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-568404/40		9060A		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.: 280-159137-1

SDG No.:

Batch Number: 568404 Batch Start Date: 03/10/22 16:40 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060A Batch End Date:

Batch Notes	
Acid ID	0.2% H2SO4_00421, H2SO4_00210
Combustion Catylyst ID	19003D-03
Pipette/Syringe/Dispenser ID	BWH 5000, 1000 MS, 9086953
Filter ID	17233826
pH Paper ID	HC169501
Batch Comment	Run and reviewed by ABW

Basis	Basis Description
D	Dissolved

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.: 280-159137-1

SDG No.:

Batch Number: 567460 Batch Start Date: 03/01/22 13:21 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 01027				
LCS 280-567460/4		SM 2320B		InitialAmount is blank	10 mL				
LCSD 280-567460/5		SM 2320B		InitialAmount is blank	10 mL				
MB 280-567460/6		SM 2320B		InitialAmount is blank					
280-159137-F-1	EW7-PM29B-8-35	SM 2320B	T	InitialAmount is blank					
280-159137-F-2	EW7-PM25A-8-25	SM 2320B	T	InitialAmount is blank					
280-159137-F-3	EW7-PM25B-8-35	SM 2320B	T	InitialAmount is blank					
280-159137-F-4	EW7-PM26A-8-25	SM 2320B	T	InitialAmount is blank					
280-159137-F-5	EW7-PM26B-8-35	SM 2320B	T	InitialAmount is blank					
CCV 280-567460/17		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-567460/18		SM 2320B		InitialAmount is blank					

Batch Notes	
Nominal Amount Used	10 mL
Acid ID	0.02 H2SO4_00293
Normality of First Titrant	0.02 N
Sodium Carbonate ID	Alk Stk Std_00022
pH Buffer 1 ID	pH 2.0 buffer_00095
pH Buffer 2 ID	pH 4.0 buffer_00202
pH Buffer 3 ID	pH 7.0 buffer_00309
pH Buffer 4 ID	pH 10 buffer_00159
pH Buffer 5 ID	pH 12 buffer_00179
pH Buffer 6 ID	pH 7.0 buffer_00310
Probe ID	PCE 80 pH 1200D_8918
Batch Comment	KG

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159137-1

SDG No.:

Batch Number: 567460 Batch Start Date: 03/01/22 13:21 Batch Analyst: Guillen, Kristela E

Batch Method: SM 2320B Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 15-Mar-22

Cup	Name	Type	R	Dil	Wt	Vial	Comment
106	Sync	SYNC	1	1	1		
0	Carry Over	CO	1	1	1		
0	Blank	BLNK	1	1	1		
101	Cal 0 ppb	C	1	1	1		
102	Cal 25 ppb	C	1	1	1		
103	Cal 50 ppb	C	1	1	1		
104	Cal 100 ppb	C	1	1	1		
105	Cal 500 ppb	C	1	1	1		
106	Cal 1000 ppb	C	1	1	1		
107	Cal 2500 ppb	C	1	1	1		
108	Cal 5000 ppb	C	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
109	ICVL 500.0 ppb	U	1	1	1		
110	ICV 2500.0 ppb	U	1	1	1		
111	ICB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS	U	1	1	1		
107	LCSD	U	1	1	1		
111	MB	U	1	1	1		
201	280-159113-C-3	U	1	1	1		pH<2, Cl- non-detect
202	ms 280-159113-C-3	U	1	1	1		pH<2, Cl- non-detect
203	msd 280-159113-C-3	U	1	1	1		pH<2, Cl- non-detect
204	280-159113-C-5	U	1	1	1		pH<2, Cl- non-detect
205	280-159113-C-6	U	1	1	1		pH<2, Cl- non-detect
206	280-159113-C-7	U	1	1	1		pH<2, Cl- non-detect
207	280-159427-D-2	U	1	1	1		pH<2, Cl- non-detect
208	240-163242-AI-5	U	1	1	1		pH<2, Cl- non-detect (Composite 1-4)
209	280-159464-E-2	U	1	1	1		pH<2, Cl- non-detect
210	280-159219-B-1	U	1	1	1		pH<2, Cl- non-detect
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
211	280-159058-A-18	U	1	1	1		pH<2, Cl- non-detect
212	280-159058-A-10	U	1	1	1		pH<2, Cl- non-detect
213	280-159058-A-3	U	1	1	1		pH<2, Cl- non-detect
214	ms 280-159058-A-3	U	1	1	1		pH<2, Cl- non-detect
215	msd 280-159058-A-3	U	1	1	1		pH<2, Cl- non-detect
216	590-17030-E-1	U	1	10	1		pH<2, Cl- non-detect
217	590-17031-D-1	U	1	1	1		pH<2, Cl- non-detect
218	void 590-17032-D-1	U	1	1	1		pH<2, Cl- non-detect
219	590-17033-D-1	U	1	1	1		pH<2, Cl- non-detect
220	590-17034-D-1	U	1	10	1		pH<2, Cl- non-detect
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
221	280-159137-C-1	U	1	1	1		pH<2, Cl- non-detect
222	280-159137-C-2	U	1	1	1		pH<2, Cl- non-detect
223	280-159137-C-3	U	1	1	1		pH<2, Cl- non-detect
224	280-159137-C-4	U	1	1	1		pH<2, Cl- non-detect
107	LCS	U	1	1	1		
107	LCSD	U	1	1	1		
111	MB	U	1	1	1		
225	280-159137-C-5	U	1	1	1		pH<2, Cl- non-detect
226	ms 280-159137-C-5	U	1	1	1		pH<2, Cl- non-detect

Cup	Name	Type	R	Dil	Wt	Vial	Comment
227	msd 280-159137-C-5 U		1	1	1	1	pH<2, Cl- non-detect
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
228	590-17032-D-1	U	1	10	1		pH<2, Cl- non-detect
229	280-159223-G-1	U	1	20	1		pH<2, Cl- non-detect
230	280-159223-I-2	U	1	200	1		pH<2, Cl- non-detect
231	280-159223-J-3	U	1	100	1		pH<2, Cl- non-detect
232	280-159466-H-1	U	1	1	1		pH<2, Cl- non-detect
233	280-159466-H-2	U	1	1	1		pH<2, Cl- non-detect
234	280-159466-G-3	U	1	1	1		pH<2, Cl- non-detect
235	280-159470-G-1	U	1	200	1		pH<2, Cl- non-detect
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		

Peak Table:NH3

File name: C:\FLOW_4\031522.RST
Date: 15-Mar-22
Operator: mp

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	106	Sync	1	SYNC	1	1	14287	1000.450317	
2	0	Carry Over	1	CO	1	1	93	-11.280754	LO
3	0	Blank	1	BLNK	1	1	78	-12.339307	LO
4	101	Cal 0 ppb	1	C	1	1	219	-2.406348	LO
5	102	Cal 25 ppb	1	C	1	1	595	24.043785	
6	103	Cal 50 ppb	1	C	1	1	923	47.167347	
7	104	Cal 100 ppb	1	C	1	1	1601	95.022346	
8	105	Cal 500 ppb	1	C	1	1	7382	505.181610	
9	106	Cal 1000 ppb	1	C	1	1	14495	1015.453735	
10	107	Cal 2500 ppb	1	C	1	1	34554	2488.205811	
11	108	Cal 5000 ppb	1	C	1	1	67337	5002.333008	HI
12	0	Blank	1	BLNK	1	1	-321	-40.435863	LO
B	0	Read Baseline	1	RB	1	1	0	-17.837456	BL
14	109	ICVL 500.0 ppb	1	U	1	1	7119	486.422852	
15	110	ICV 2500.0 ppb	1	U	1	1	34933	2516.552979	
16	111	ICB	1	U	1	1	-53	-21.548832	LO
B	0	read baseline	1	RB	1	1	0	-17.837456	BL
18	107	LCS	1	U	1	1	35201	2536.557861	
19	107	LCSD	1	U	1	1	35125	2530.858398	
20	111	MB	1	U	1	1	109	-10.144534	LO
21	201	280-159113-C-3	1	U	1	1	11	-17.054071	LO
22	202	ms 280-159113-C-3	1	U	1	1	14694	1029.847656	
23	203	msd 280-159113-C-3	1	U	1	1	15077	1057.500000	
24	204	280-159113-C-5	1	U	1	1	-65	-22.408699	LO
25	205	280-159113-C-6	1	U	1	1	442	13.314490	
26	206	280-159113-C-7	1	U	1	1	102	-10.656198	LO
27	207	280-159427-D-2	1	U	1	1	4927	330.456940	
28	208	240-163242-AI-5	1	U	1	1	4290	285.294739	
29	209	280-159464-E-2	1	U	1	1	224	-2.065980	LO
30	210	280-159219-B-1	1	U	1	1	35803	2581.576172	
31	0	Blank	1	BLNK	1	1	-164	-29.368259	LO
B	0	Read Baseline	1	RB	1	1	0	-17.837456	BL
33	105	CCVL 500.0 ppb	1	U	1	1	7593	520.196838	
34	107	CCV 2500.0 ppb	1	U	1	1	36415	2627.386719	
35	111	CCB	1	U	1	1	37	-15.267804	LO
B	0	read baseline	1	RB	1	1	0	-17.837456	BL
37	211	280-159058-A-18	1	U	1	1	1186	65.761894	
38	212	280-159058-A-10	1	U	1	1	4244	282.005920	
39	213	280-159058-A-3	1	U	1	1	4283	284.777405	
40	214	ms 280-159058-A-3	1	U	1	1	19390	1370.260498	
41	215	msd 280-159058-A-3	1	U	1	1	21587	1530.502808	
42	216	590-17030-E-1	1	U	10	1	28028	20036.111328	
43	217	590-17031-D-1	1	U	1	1	335	5.726530	
44	218	void 590-17032-D-1	1	U	1	1	243579	20795.638672	HI
45	219	590-17033-D-1	1	U	1	1	19231	1358.716675	FL
46	220	590-17034-D-1	1	U	10	1	12837	8959.604492	FL
47	0	Blank	1	BLNK	1	1	165	-6.211566	LO
B	0	Read Baseline	1	RB	1	1	0	-17.837456	BL
49	105	CCVL 500.0 ppb	1	U	1	1	7502	513.722290	
50	107	CCV 2500.0 ppb	1	U	1	1	35336	2546.626709	
51	111	CCB	1	U	1	1	-16	-18.942799	LO
B	0	read baseline	1	RB	1	1	0	-17.837456	BL
53	221	280-159137-C-1	1	U	1	1	38212	2762.163818	
54	222	280-159137-C-2	1	U	1	1	30150	2160.602783	
55	223	280-159137-C-3	1	U	1	1	40645	2945.311279	
56	224	280-159137-C-4	1	U	1	1	9006	621.119690	
57	107	LCS	1	U	1	1	33785	2430.824707	
58	107	LCSD	1	U	1	1	33980	2445.398193	
59	111	MB	1	U	1	1	21	-16.367100	LO
60	225	280-159137-C-5	1	U	1	1	29742	2130.408447	
61	226	ms 280-159137-C-5	1	U	1	1	42749	3104.189941	
62	227	msd 280-159137-C-5	1	U	1	1	42237	3065.511475	
63	0	Blank	1	BLNK	1	1	-274	-37.135033	LO
B	0	Read Baseline	1	RB	1	1	0	-17.837456	BL
65	105	CCVL 500.0 ppb	1	U	1	1	6840	466.492676	
66	107	CCV 2500.0 ppb	1	U	1	1	32915	2366.016357	
67	111	CCB	1	U	1	1	83	-11.998397	LO
68	228	590-17032-D-1	1	U	10	1	25224	17969.976562	
69	229	280-159223-G-1	1	U	20	1	29329	41995.984375	
70	230	280-159223-I-2	1	U	200	1	16962	238774.140625	

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	231	280-159223-J-3	1	U	100	1	27348	195339.343750	
72	232	280-159466-H-1	1	U	1	1	3117	202.197998	
73	233	280-159466-H-2	1	U	1	1	4129	273.829681	
74	234	280-159466-G-3	1	U	1	1	14687	1029.339600	
75	235	280-159470-G-1	1	U	200	1	15396	216099.656250	
76	0	Blank	1	BLNK	1	1	38	-15.147488	LO
B	0	Read Baseline	1	RB	1	1	0	-17.837456	BL
78	105	CCVL 500.0 ppb	1	U	1	1	6534	444.728607	
79	107	CCV 2500.0 ppb	1	U	1	1	30896	2215.952881	
80	111	CCB	1	U	1	1	-20	-19.217165	LO
B	0	read baseline	1	RB	1	1	0	-17.837456	BL
82	105	CCVL 500.0 ppb	1	U	1	1	6396	434.930847	
83	107	CCV 2500.0 ppb	1	U	1	1	31070	2228.840820	
84	111	CCB	1	U	1	1	-17	-19.059040	LO
B	0	read baseline	1	RB	1	1	0	-17.837456	BL

NH3:Calibration 1: Peak 4-85

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Date: 15-Mar-22
Operator: mp

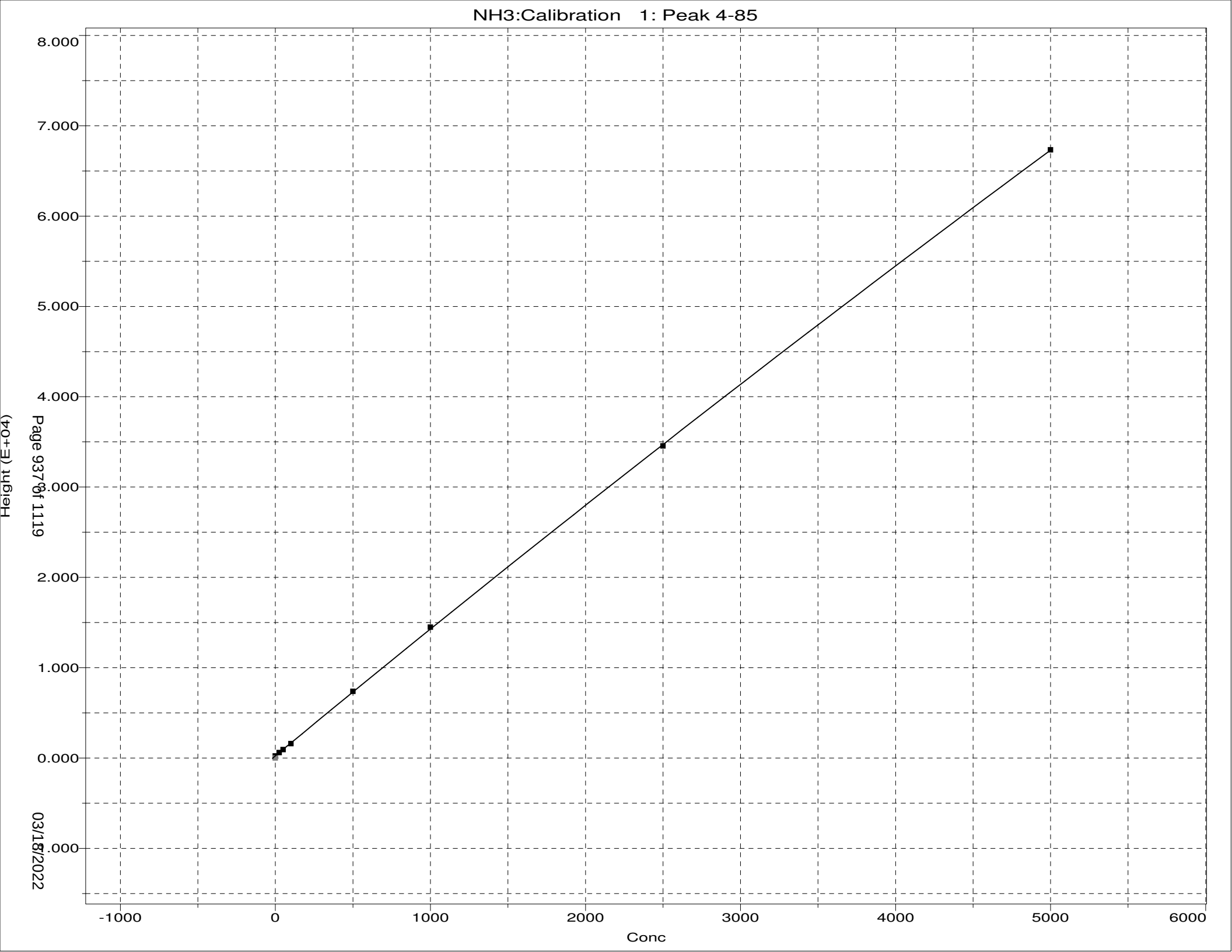
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*	Cal 50 ppb	50.000000	922.755005
*	Cal 100 ppb	100.000000	1601.112305
*	Cal 500 ppb	500.000000	7382.498535
*	Cal 1000 ppb	1000.000000	14495.102539
*	Cal 2500 ppb	2500.000000	34553.886719
*	Cal 5000 ppb	5000.000000	67337.414062

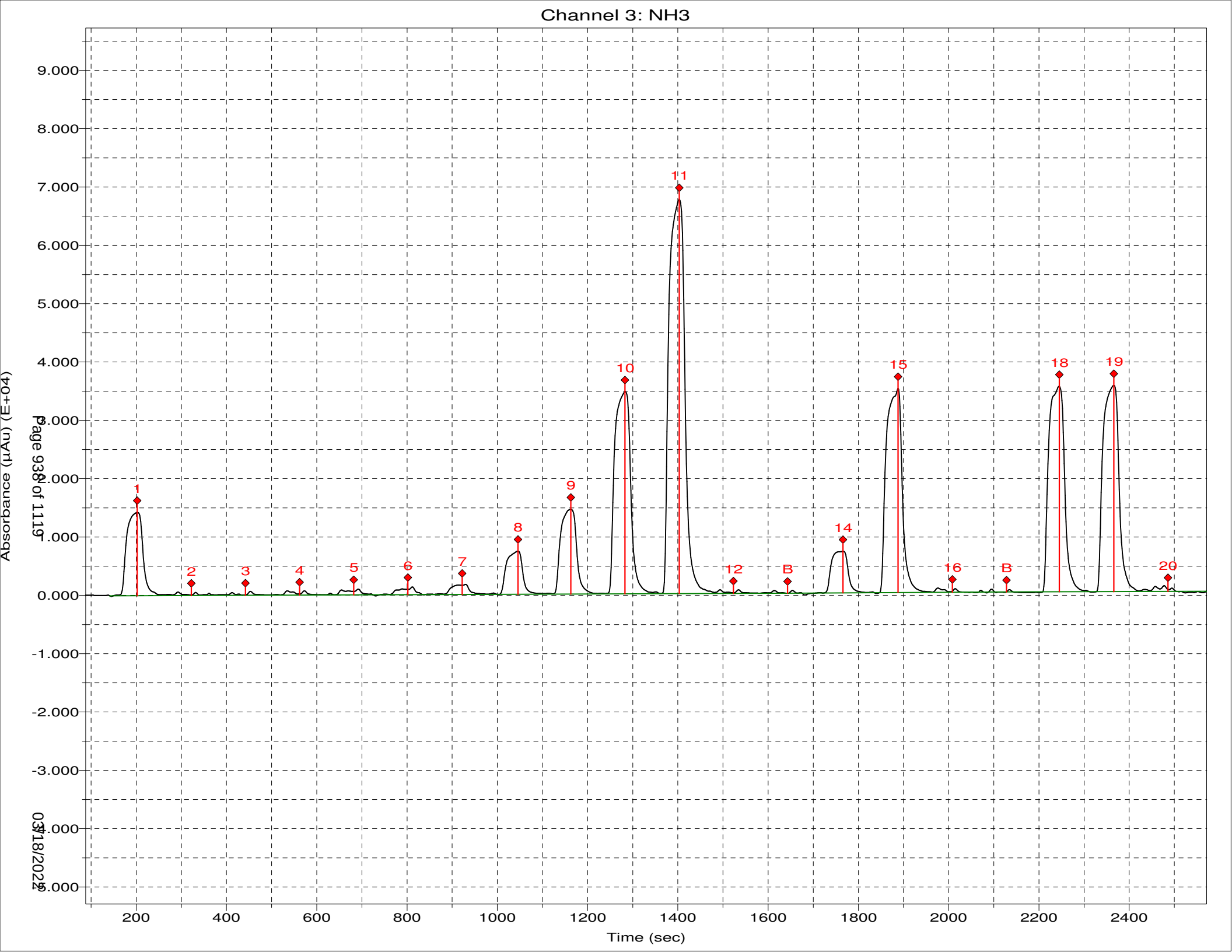
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b: 7.0389e-02
c: 6.1824e-08

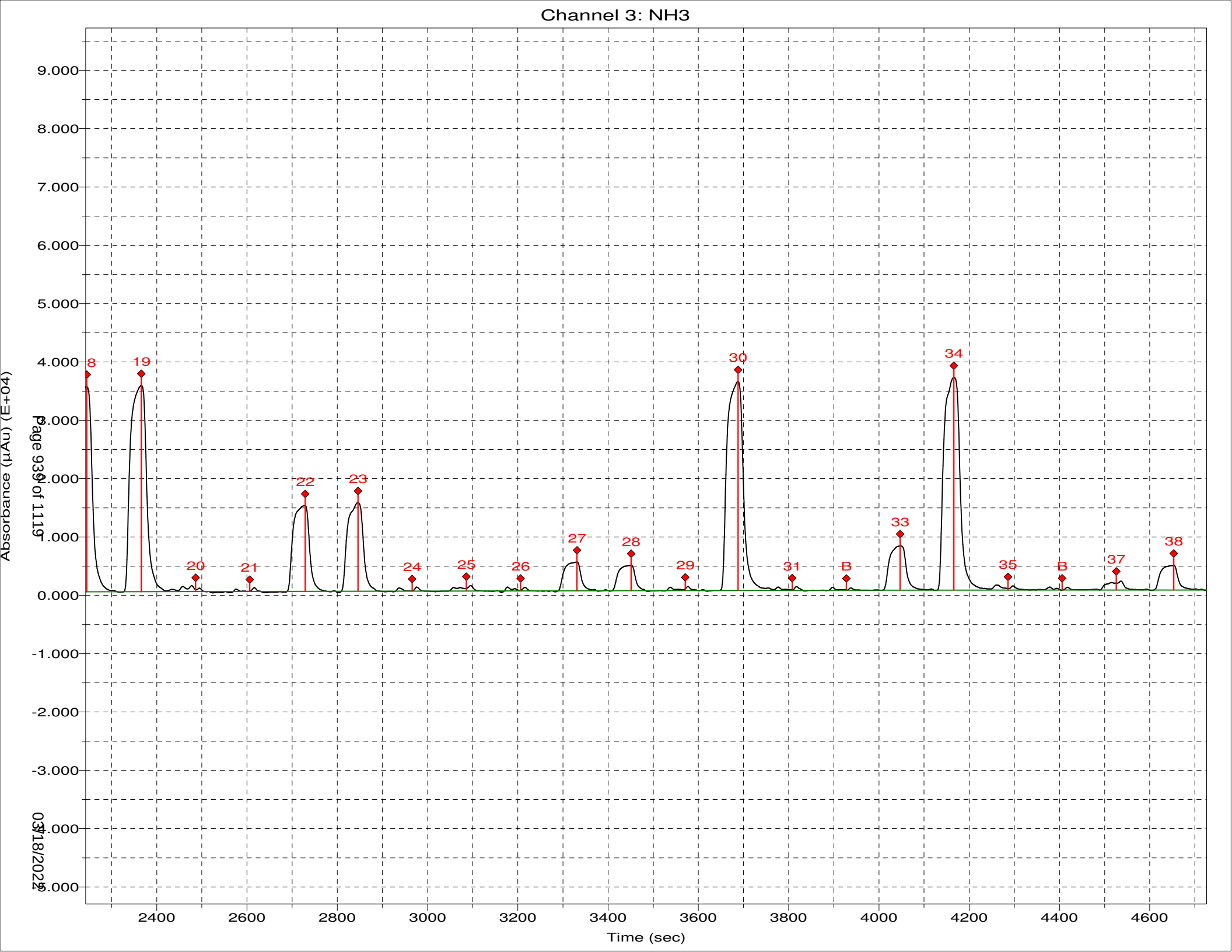
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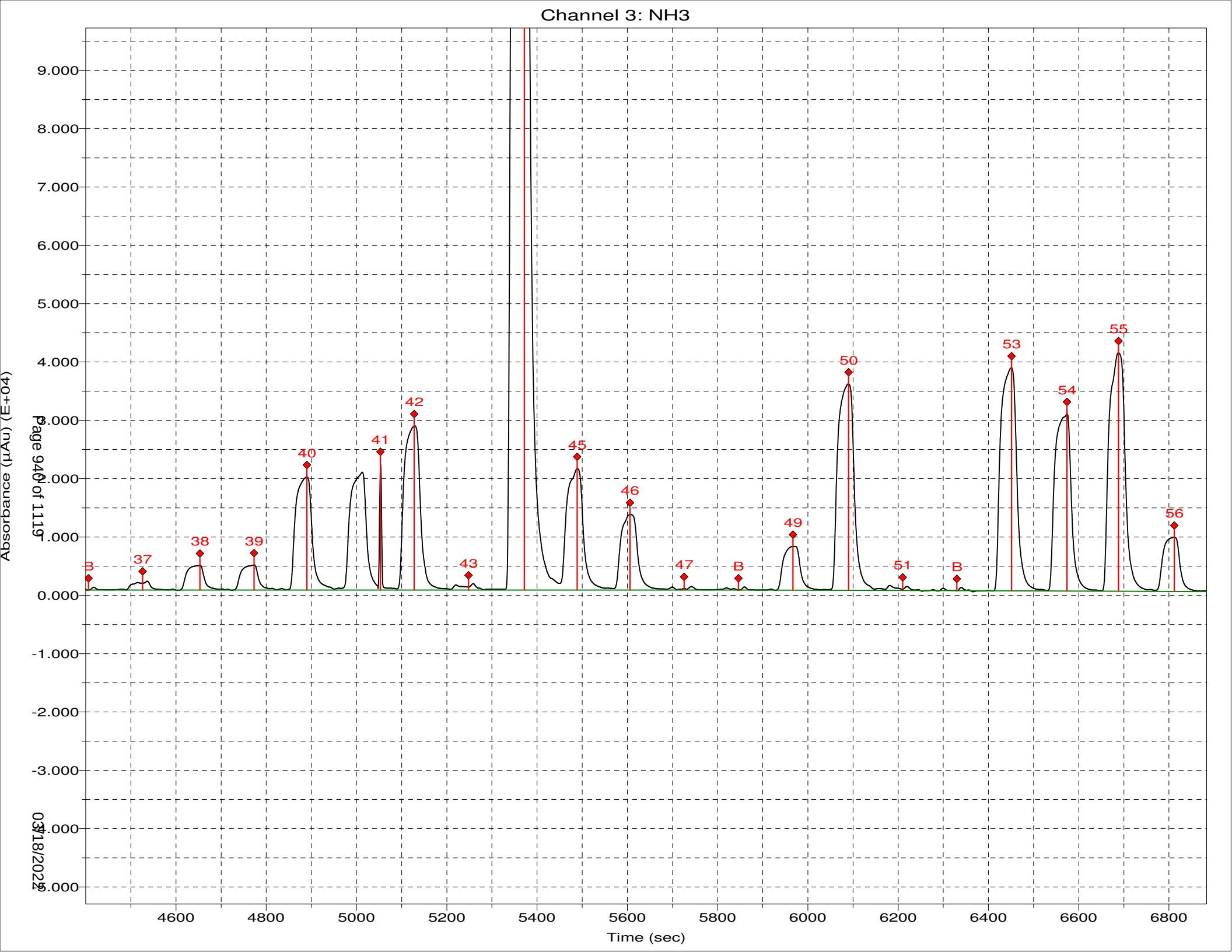
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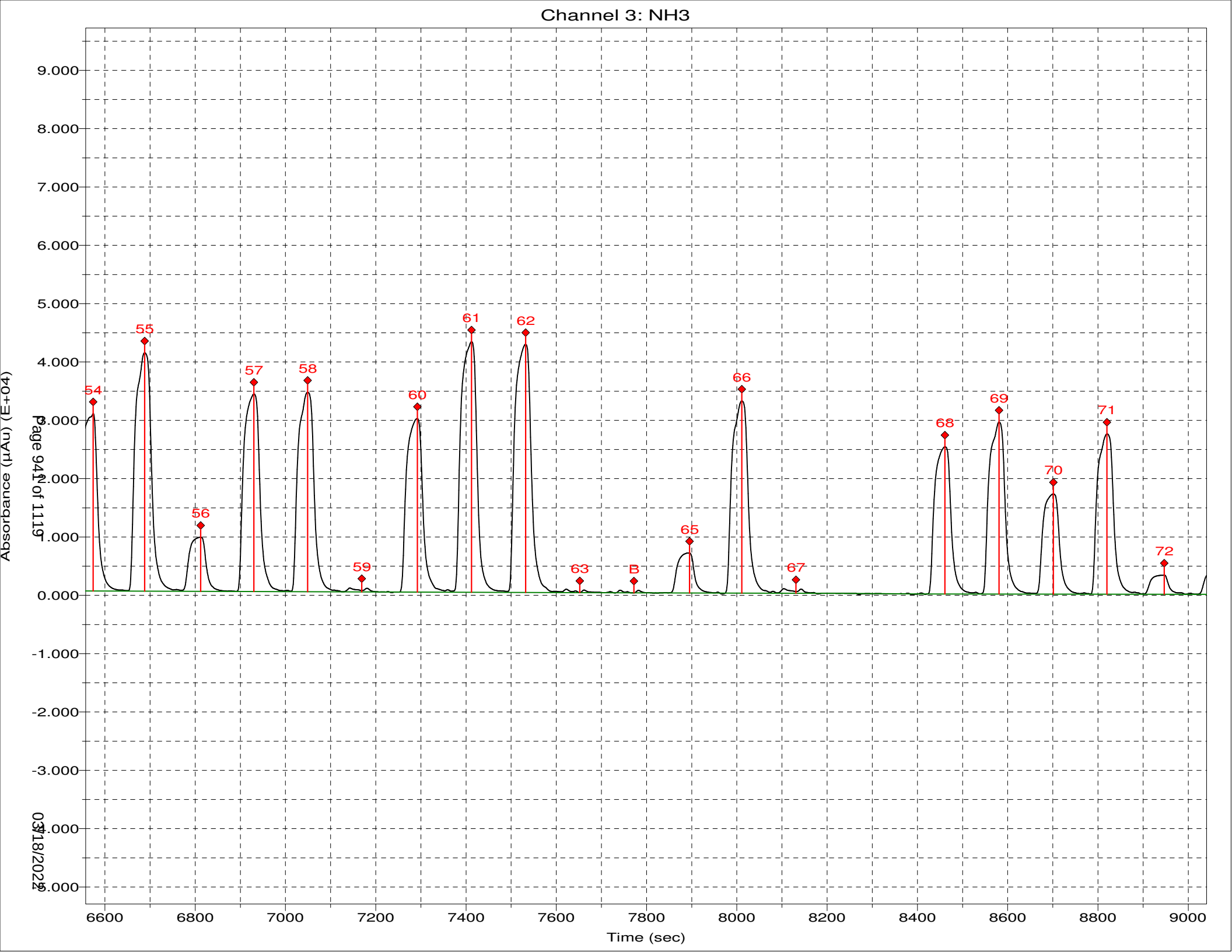
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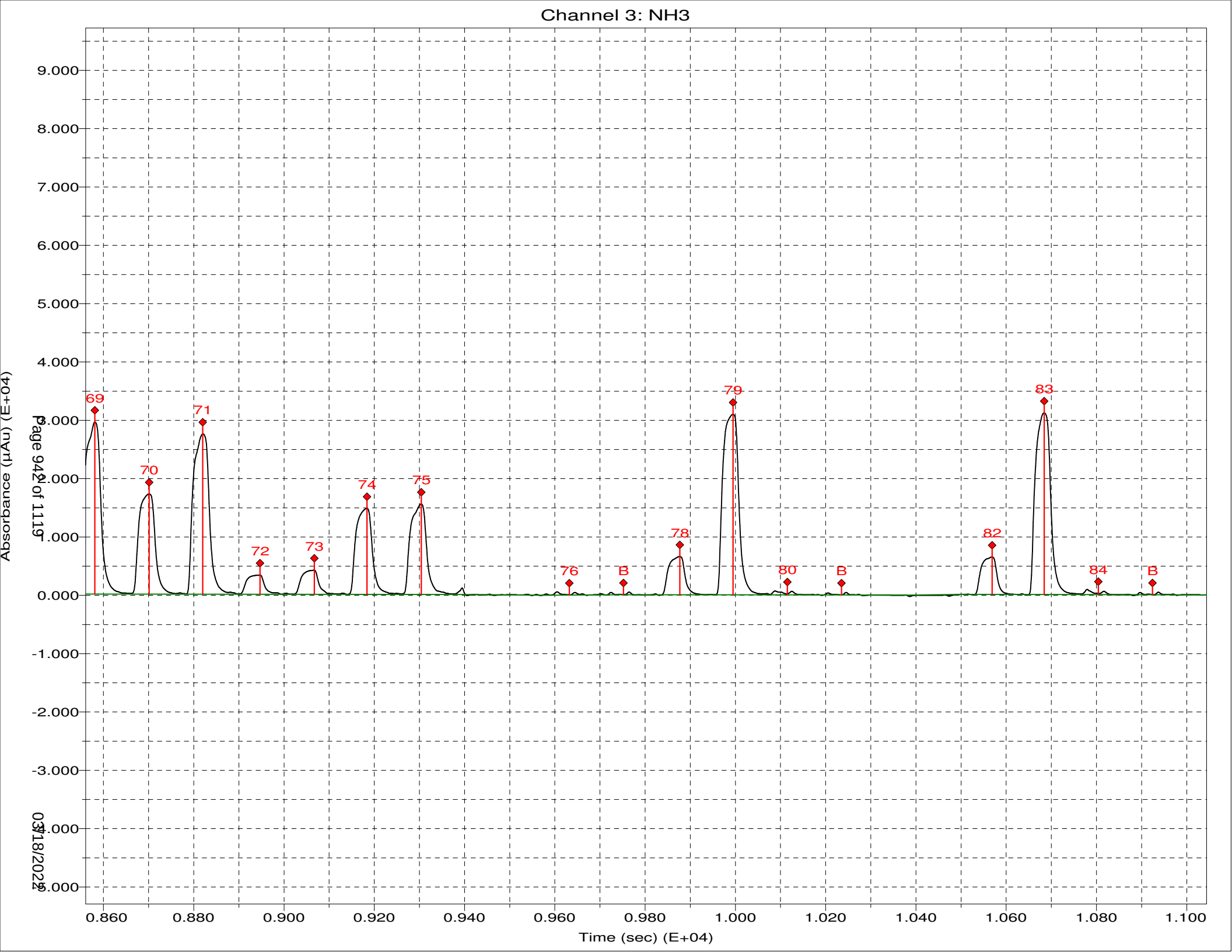

NH3:Calibration 1: Peak 4-85
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
-1.000
Height (E+04)
-1000
0
1000
2000
3000
4000
5000
6000
Conc


Channel 3: NH3
Absorbance (µAu) (E+04)
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
-1.000
-2.000
-3.000
-4.000
-5.000
1
2
3
4
5
6
7
8
9
10
11
12
B
14
15
16
B
18
19
20
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
Time (sec)
Page 938 of 1119
03/18/2025


Channel 3: NH3
Absorbance (µAu) (E+04)
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
-1.000
-2.000
-3.000
-4.000
-5.000
8
19
20
21
22
23
24
25
26
27
28
29
30
31
B
33
34
35
B
37
38
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
4600
Time (sec)
Page 939 of 1119
03/18/2025


Channel 3: NH3
Absorbance (µAu) (E+04)
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
-1.000
-2.000
-3.000
-4.000
-5.000
4600
4800
5000
5200
5400
5600
5800
6000
6200
6400
6600
6800
Time (sec)
B
37
38
39
40
41
42
43
45
46
47
B
49
50
51
B
53
54
55
56
Page 940 of 1119
03/18/2025


Channel 3: NH3
Absorbance (µAu) (E+04)
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
-1.000
-2.000
-3.000
-4.000
-5.000
54
55
56
57
58
59
60
61
62
63
B
65
66
67
68
69
70
71
72
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
Time (sec)
Page 941 of 1119
03/18/2025


Channel 3: NH3
Absorbance (µAu) (E+04)
9.000
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
-1.000
-2.000
-3.000
-4.000
-5.000
69
70
71
72
73
74
75
76
B
78
79
80
B
82
83
84
B
0.860
0.880
0.900
0.920
0.940
0.960
0.980
1.000
1.020
1.040
1.060
1.080
1.100
Time (sec) (E+04)
Page 942 of 1119
03/18/2022

TestAmerica Calibration Spreadsheet, Work Instruction No. CA-Q-WI-13; dated 8/10/2011

Method		350.1
Analyte/Da	NH3	3/15/2022

Input Calibration Data

Amount	Response	ISTD Amt	ISTD Resp	Response
0.000	219.183			219.18300
25.000	594.683			594.68300
50.000	922.755			922.75500
100.000	1601.112			1601.11200
500.000	7382.499			7382.49850
1000.000	14495.103			14495.10300
2500.000	34553.887			34553.88700
5000.000	67337.414			67337.41400
				0.00000
				0.00000

Relative Errors in X

	Average	Linear (1/x2)	Linear (1/X)	Linear Forced	Linear	Quadratic
	#DIV/0!	#DIV/0!	#DIV/0!	70.54%	-22.62%	9.72%
	#DIV/0!	#DIV/0!	#DIV/0!	32.31%	-13.64%	-0.18%
	#DIV/0!	#DIV/0!	#DIV/0!	14.79%	-7.54%	-3.53%
	#DIV/0!	#DIV/0!	#DIV/0!	5.86%	2.49%	-0.49%
	#DIV/0!	#DIV/0!	#DIV/0!	3.92%	2.92%	0.22%
	#DIV/0!	#DIV/0!	#DIV/0!	-0.91%	-0.55%	-0.01%
	#DIV/0!	#DIV/0!	#DIV/0!	-3.44%	-2.64%	5.08%
RSE in X:	#DIV/0!	#DIV/0!	#DIV/0!	32.4%	12.5%	5.8%

Curve Fit Statistics

	Constant	1ST Degree Coefficient	2ND Degree Coefficient	X-Intercept	r²	r
Weighted (1/Amt^2)						
Average		#DIV/0!		0	#DIV/0!	#DIV/0!
Linear	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!
Weighted (1/Amt)						
Linear	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!	#DIV/0!
Unweighted						
Forced Zero		1.3948E+01		0	0.99891	0.99945
Linear	3.2838E+02	1.3765E+01		-23.86	0.99910	0.99955
Quadratic	1.9388E+02	1.4622E+01	-3.5061E-04	-13.26	0.99803	0.99901
	c	b	a			

Sample Results

	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Instrum.Responses:	594.683	7,382.499			
IS Response:					
Avg RF Result:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Linear(1/x2) Result:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Linear(1/x) Result:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Linear Forced:	42.636	529.292	0.000	0.000	0.000
Linear Result:	19.346	512.453	-23.855	-23.855	-23.855
Quad Result (no IS):	27.430	497.572	-13.255	-13.255	-13.255
Quad Result (with IS):					

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 15-Mar-22

Cup	Name	Type	R	Dil	Wt	Vial	Comment
106	Sync	SYNC	1	1	1		
0	Carry Over	CO	1	1	1		
0	Blank	BLNK	1	1	1		
101	Cal 0 ppb	C	1	1	1		
102	Cal 25 ppb	C	1	1	1		
103	Cal 50 ppb	C	1	1	1		
104	Cal 100 ppb	C	1	1	1		
105	Cal 500 ppb	C	1	1	1		
106	Cal 1000 ppb	C	1	1	1		
107	Cal 2500 ppb	C	1	1	1		
108	Cal 5000 ppb	C	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
109	ICVL 500.0 ppb	U	1	1	1		
110	ICV 2500.0 ppb	U	1	1	1		
111	ICB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	LCS	U	1	1	1		
107	LCSD	U	1	1	1		
111	MB	U	1	1	1		
201	280-159113-C-3	U	1	1	1		pH<2, Cl- non-detect
202	ms 280-159113-C-3	U	1	1	1		pH<2, Cl- non-detect
203	msd 280-159113-C-3	U	1	1	1		pH<2, Cl- non-detect
204	280-159113-C-5	U	1	1	1		pH<2, Cl- non-detect
205	280-159113-C-6	U	1	1	1		pH<2, Cl- non-detect
206	280-159113-C-7	U	1	1	1		pH<2, Cl- non-detect
207	280-159427-D-2	U	1	1	1		pH<2, Cl- non-detect
208	240-163242-AI-5	U	1	1	1		pH<2, Cl- non-detect (Composite 1-4)
209	280-159464-E-2	U	1	1	1		pH<2, Cl- non-detect
210	280-159219-B-1	U	1	1	1		pH<2, Cl- non-detect
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
211	280-159058-A-18	U	1	1	1		pH<2, Cl- non-detect
212	280-159058-A-10	U	1	1	1		pH<2, Cl- non-detect
213	280-159058-A-3	U	1	1	1		pH<2, Cl- non-detect
214	ms 280-159058-A-3	U	1	1	1		pH<2, Cl- non-detect
215	msd 280-159058-A-3	U	1	1	1		pH<2, Cl- non-detect
216	590-17030-E-1	U	1	10	1		pH<2, Cl- non-detect
217	590-17031-D-1	U	1	1	1		pH<2, Cl- non-detect
X218	void 590-17032-D-1	U	1	1	1		pH<2, Cl- non-detect
219	590-17033-D-1	U	1	1	1		pH<2, Cl- non-detect
220	590-17034-D-1	U	1	10	1		pH<2, Cl- non-detect
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
221	280-159137-C-1	U	1	1	1		pH<2, Cl- non-detect
222	280-159137-C-2	U	1	1	1		pH<2, Cl- non-detect
223	280-159137-C-3	U	1	1	1		pH<2, Cl- non-detect
224	280-159137-C-4	U	1	1	1		pH<2, Cl- non-detect

350.1 color_00277
350.1 complex_00603
350.1 bleach_01585

SAH 5000
1000 INTERCESSOR
BWH 200

MP 3-15-22

Cup	Name	Type	R	Dil	Wt	Vial	Comment
107	LCS	U	1	1	1		
107	LCSD	U	1	1	1		
111	MB	U	1	1	1		
225	280-159137-C-5	U	1	1	1		pH<2, Cl- non-detect
226	ms 280-159137-C-5	U	1	1	1		pH<2, Cl- non-detect
227	msd 280-159137-C-5	U	1	1	1		pH<2, Cl- non-detect
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
228	590-17032-D-1	U	1	10	1		pH<2, Cl- non-detect
229	280-159223-G-1	U	1	20	1		pH<2, Cl- non-detect
230	280-159223-I-2	U	1	200	1		pH<2, Cl- non-detect
231	280-159223-J-3	U	1	100	1		pH<2, Cl- non-detect
232	280-159466-H-1	U	1	1	1		pH<2, Cl- non-detect
233	280-159466-H-2	U	1	1	1		pH<2, Cl- non-detect
234	280-159466-G-3	U	1	1	1		pH<2, Cl- non-detect
235	280-159470-G-1	U	1	200	1		pH<2, Cl- non-detect
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		

Calibration results

TKN Version number 1.5 WC_GAL1

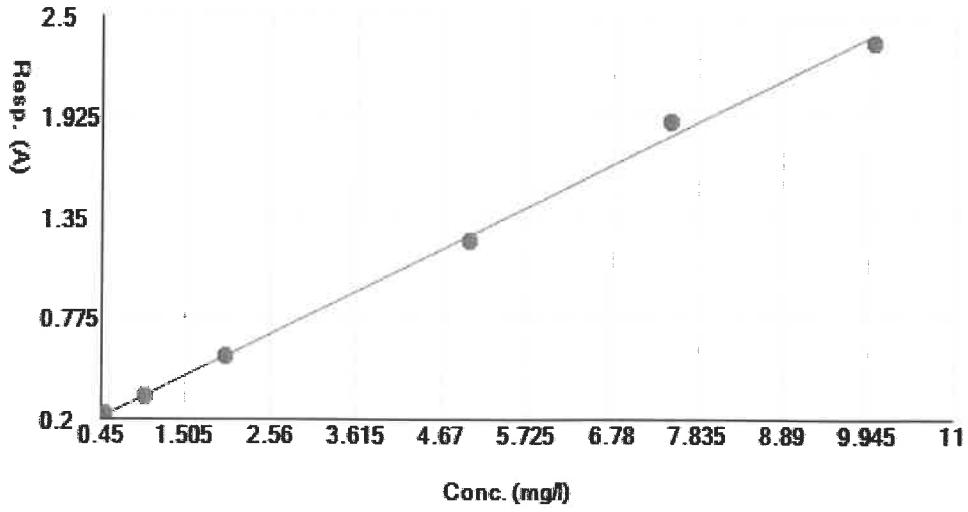
Date 3/9/2022 **User** Dealer

Time 6:47:27PM **Software version: 7.0**

Analyzer name WC_GAL1

Test	TKN	**Coeff. of deter.**	0.997758
Status	Accepted	**Total factor**	4.396
Accepted	2/22/2022 4:32 PM		
Checked	2/22/2022 4:32 PM		
User name	Dealer		
Comment			
Errors			
Factor	4.396		
Bias	0.107		

Cal/Ctrl	Response	Calc. conc.	Given conc.	Lot	Errors
TKN 10.0	0.231	0.54543910	0.50000000	Default	
TKN 10.0	0.330	0.97760830	1.00000000	Default	
TKN 10.0	0.554	1.96398400	2.00000000	Default	
TKN 10.0	1.209	4.84515700	5.00000000	Default	
TKN 7.5	1.889	7.83287700	7.50000000	Default	
TKN 10.0	2.344	9.83493300	10.00000000	Default	



Test results report

WC_GAL1

Test name TKN

Date 3/9/2022 **User** Dealer

Time 6:46:55PM **Software version: 7.0**

Test TKN **Group ID** [All] **Acceptance** Not accepted

Sample ID [All] **Group name** [All] **Request type** All

Test	Sample/ctrl ID	Test version	Result	Unit	Note	Dil. 1 +	Status	Errors
TKN	icv	1.5	5.2813410	mg/l		0.0	calc	
TKN	icb	1.5	-0.0426786	mg/l		0.0	calc	
TKN	LCS 280-567921/1-A	1.5	5.8193750	mg/l		0.0	calc	
TKN	MB 280-567921/2-A	1.5	0.0168167	mg/l		0.0	calc	
TKN	280-159276-B-2 -A	1.5	-0.1853955	mg/l		0.0	calc	
TKN	280-159276-B-2 -B MS	1.5	2.8914300	mg/l		0.0	calc	
TKN	280-159276-B-2 -C MSD	1.5	2.8867380	mg/l		0.0	calc	
TKN	280-159276-B-3 -A	1.5	-0.1822735	mg/l		0.0	calc	
TKN	280-159276-B-4 -A	1.5	-0.1568315	mg/l		0.0	calc	
TKN	280-159276-A-5 -A	1.5	1.2117180	mg/l		0.0	calc	
TKN	280-159238-A-1 -A	1.5	0.7866580	mg/l		0.0	calc	
TKN	280-159238-A-2 -A	1.5	0.6356659	mg/l		0.0	calc	
TKN	280-159137-C-1 -A	1.5	4.9063100	mg/l		0.0	calc	
TKN	280-159137-C-2 -A	1.5	1.2810520	mg/l		0.0	calc	
TKN	ccv1	1.5	5.3872030	mg/l		0.0	calc	
TKN	ccb1	1.5	-0.0401795	mg/l		0.0	calc	
TKN	280-159137-C-3 -A	1.5	4.4082520	mg/l		0.0	calc	
TKN	280-159137-C-5 -A	1.5	3.7091820	mg/l		0.0	calc	
TKN	LCS 280-567922/1-A	1.5	5.8123660	mg/l		0.0	calc	
TKN	MB 280-567922/2-A	1.5	-0.0422915	mg/l		0.0	calc	
TKN	280-159137-C-4 -A	1.5	0.3517995	mg/l		0.0	calc	

Test	Sample/ctrl ID	Test version	Result	Unit	Note	Dil. 1 +	Status	Errors
TKN	280-159137-C-4-B MS	1.5	3.3619640	mg/l		0.0	calc	
TKN	280-159137-C-4-C MSD	1.5	3.1719500	mg/l		0.0	calc	
TKN	280-159234-L-1-A	1.5	-0.1755505	mg/l		0.0	calc	
TKN	280-159234-L-2-A	1.5	2.7271940	mg/l		0.0	calc	
TKN	280-159234-L-3-A	1.5	1.5001120	mg/l		0.0	calc	
TKN	ccv2	1.5	5.4080130	mg/l		0.0	calc	
TKN	ccb2	1.5	-0.0349609	mg/l		0.0	calc	
TKN	280-159234-L-4-A	1.5	0.3030049	mg/l		0.0	calc	
TKN	280-159234-L-5-A	1.5	-0.1781853	mg/l		0.0	calc	
TKN	280-159234-L-6-A	1.5	2.4608030	mg/l		0.0	calc	
TKN	280-159234-L-8-A	1.5	1.5647870	mg/l		0.0	calc	
TKN	280-159234-L-9-A	1.5	-0.1814324	mg/l		0.0	calc	
TKN	280-159234-L-10-A	1.5	-0.1672794	mg/l		0.0	calc	
TKN	280-159234-L-7-A	1.5	0.2962740	mg/l		0.0	calc	
TKN	280-159234-L-7-B MS	1.5	3.5799680	mg/l		0.0	calc	
TKN	280-159234-L-7-C MSD	1.5	3.5870990	mg/l		0.0	calc	
TKN	590-17015-A-3-A	1.5	5.3685830	mg/l		0.0	calc	
TKN	ccv3	1.5	5.3912520	mg/l		0.0	calc	
TKN	ccb3	1.5	-0.0377098	mg/l		0.0	calc	
TKN	280-159235-H-3-A	1.5	7.3555740	mg/l		0.0	calc	
TKN	280-159235-H-4-A	1.5	6.9277790	mg/l		0.0	calc	
TKN	240-163242-AK-5-A	1.5	2.2162320	mg/l		0.0	calc	
TKN	590-17031-D-1-A	1.5	5.0603960	mg/l		0.0	calc	
TKN	590-17034-D-1-A	1.5	9.4529630	mg/l		0.0	calc	
TKN	ccv4	1.5	5.3834370	mg/l		0.0	calc	
TKN	ccb4	1.5	-0.0294369	mg/l		0.0	calc	
TKN	590-17030-E-1-A	1.5	41.7501400	mg/l		4.0	calc	

Test	Sample/ctrl ID	Test version	Result	Unit	Note	Dil. 1 +	Status	Errors
TKN	590-17032-D-1-A	1.5	43.6246100	mg/l		4.0	calc	
TKN	590-17033-D-1-A	1.5	31.5328800	mg/l		4.0	calc	
TKN	ccv5	1.5	5.3235230	mg/l		0.0	calc	
TKN	ccb5	1.5	-0.0431287	mg/l		0.0	calc	

Run Results Report

Facility Name
Facility Location
Department
Operator Name svc
Operator ID svc
Platform FS III/IV/3100
Software Rev Code 240
Data system ID 54

Result path C:\FLOW_4\022722.RST
Sample table path C:\FLOW_4\022722.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 27-Feb-22
Time acquired 18:34

Date	Time	Cup	Name
27-Feb-22	15:39	109	SYNC
27-Feb-22	15:41	0	Carryover
27-Feb-22	15:43	0	Carryover (Statistics)
27-Feb-22	15:45	0	read baseline
27-Feb-22	15:47	101	Cal 0.00 ppb
27-Feb-22	15:49	102	Cal 50.0 ppb
27-Feb-22	15:51	103	Cal 100 ppb
27-Feb-22	15:53	104	Cal 500 ppb
27-Feb-22	15:55	105	Cal 1000 ppb
27-Feb-22	15:57	106	Cal 2500 ppb
27-Feb-22	15:59	107	Cal 5000 ppb
27-Feb-22	16:01	108	Cal 7500 ppb
27-Feb-22	16:03	109	Cal 10000 ppb
27-Feb-22	16:05	0	Blank
27-Feb-22	16:07	0	Read Baseline
27-Feb-22	16:09	110	5000 PPB NO2
27-Feb-22	16:11	111	ICV 5000 PPB
27-Feb-22	16:13	112	ICV 2000 PPB
27-Feb-22	16:15	0	ICB
27-Feb-22	16:17	0	Read Baseline
27-Feb-22	16:19	107	LCS
27-Feb-22	16:21	107	LCSD
27-Feb-22	16:23	0	MB
27-Feb-22	16:25	113	280-158849-A-3
27-Feb-22	16:27	114	ms 280-158849-A-3
27-Feb-22	16:29	115	msd 280-158849-A-3
27-Feb-22	16:31	116	280-158849-A-10
27-Feb-22	16:33	117	280-159137-C-1
27-Feb-22	16:35	118	280-158839-B-2
27-Feb-22	16:37	119	280-158977-A-1
27-Feb-22	16:39	120	280-158977-B-2
27-Feb-22	16:41	121	280-158977-B-3
27-Feb-22	16:43	122	280-158977-B-4
27-Feb-22	16:45	0	Rinse
27-Feb-22	16:47	0	Read Baseline
27-Feb-22	16:49	107	CCV 5000 ppb
27-Feb-22	16:51	105	CCVL 1000 ppb
27-Feb-22	16:53	0	CCB
27-Feb-22	16:55	0	Read Baseline
27-Feb-22	16:57	123	280-159137-C-2
27-Feb-22	16:59	124	280-159137-C-3
27-Feb-22	17:01	125	280-158861-A-3
27-Feb-22	17:03	126	ms 280-158861-A-3
27-Feb-22	17:05	127	msd 280-158861-A-3

Result path	C:\FLOW_4\022722.RST
Sample table path	C:\FLOW_4\022722.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	27-Feb-22
Time acquired	18:34

Date	Time	Cup	Name
27-Feb-22	17:07	128	280-158861-A-10
27-Feb-22	17:09	129	280-159137-C-4
27-Feb-22	17:11	130	280-159137-C-5
27-Feb-22	17:13	131	280-159091-G-1
27-Feb-22	17:15	132	280-159091-G-2
27-Feb-22	17:17	0	Rinse
27-Feb-22	17:19	0	Read Baseline
27-Feb-22	17:21	107	CCV 5000 ppb
27-Feb-22	17:23	105	CCVL 1000 ppb
27-Feb-22	17:25	0	CCB
27-Feb-22	17:27	0	Read Baseline
27-Feb-22	17:29	133	280-159091-H-3
27-Feb-22	17:31	134	280-159091-H-4
27-Feb-22	17:33	135	280-159091-G-5
27-Feb-22	17:35	136	280-159091-G-6
27-Feb-22	17:37	107	LCS
27-Feb-22	17:39	107	LCSD
27-Feb-22	17:41	0	MB
27-Feb-22	17:43	137	280-158866-A-3
27-Feb-22	17:45	138	ms 280-158866-A-3
27-Feb-22	17:47	139	msd 280-158866-A-3
27-Feb-22	17:49	140	280-158866-A-10
27-Feb-22	17:51	0	Rinse
27-Feb-22	17:53	0	Read Baseline
27-Feb-22	17:55	107	CCV 5000 ppb
27-Feb-22	17:57	105	CCVL 1000 ppb
27-Feb-22	17:59	0	CCB
27-Feb-22	18:01	0	Read Baseline
27-Feb-22	18:03	141	280-159091-H-7
27-Feb-22	18:05	142	280-158862-A-3
27-Feb-22	18:07	143	ms 280-158862-A-3
27-Feb-22	18:09	144	msd 280-158862-A-3
27-Feb-22	18:11	145	280-158862-A-10
27-Feb-22	18:13	146	d
27-Feb-22	18:15	147	d
27-Feb-22	18:17	0	Rinse
27-Feb-22	18:19	0	Read Baseline
27-Feb-22	18:21	107	CCV 5000 ppb
27-Feb-22	18:23	105	CCVL 1000 ppb
27-Feb-22	18:25	0	CCB
27-Feb-22	18:27	0	Read Baseline

Run Results Report

Facility Name	
Facility Location	
Department	
Operator Name	svc
Operator ID	svc
Platform	FS III/IV/3100
Software Rev Code	240
Data system ID	54
Result path	C:\FLOW_4\022722.RST
Sample table path	C:\FLOW_4\022722.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	27-Feb-22
Time acquired	18:34

	Nitrate as N					
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	
SYNC	2639497	10019.038	HI			
Carryover	2655	-4.154	LO			
Carryover	321	-13.026	LO			
(Statistics)				1488	-8.590	N
read baseline	0	-14.246	BL			
Cal 0.00 ppb	722	-11.500	LO			
Cal 50.0 ppb	14665	41.498				
Cal 100 ppb	29135	96.501				
Cal 500 ppb	135791	501.925				
Cal 1000 ppb	274139	1027.815				
Cal 2500 ppb	683346	2583.295				
Cal 5000 ppb	1295054	4908.528				
Cal 7500 ppb	1955576	7419.309				
Cal 10000 ppb	2656226	10082.630	HI			
Blank	-247	-15.185	LO			
Read Baseline	0	-14.246	BL			
5000 PPB NO2	1350088	5117.722				
ICV 5000 PPB	1361935	5162.756				
ICV 2000 PPB	568375	2146.268				
ICB	-18	-14.314	LO			
Read Baseline	0	-14.246	BL			
LCS	1330625	5043.741				
LCSD	1324271	5019.586				
MB	-1538	-20.091	LO			
280-158849-A-3	3359	-1.477	LO			
ms 280-158849-A-3	1058440	4009.106				
msd 280-158849-A-3	1056508	4001.766				
280-158849-A-10	101009	369.710				
280-159137-C-1	1906	-7.001	LO			
280-158839-B-2	55200	195.580				
280-158977-A-1	17860	53.642				
280-158977-B-2	1968398	74680.516				
280-158977-B-3	1904349	72245.867				
280-158977-B-4	1946837	73860.922				
Rinse	-148	-14.807	LO			
Read Baseline	0	-14.246	BL			
CCV 5000 ppb	1324562	5020.694				
CCVL 1000 ppb	276910	1038.349				
CCB	824	-11.115	LO			
Read Baseline	0	-14.246	BL			
280-159137-C-2	4866	4.252				
280-159137-C-3	4311	2.141				
280-158861-A-3	166	-13.614	LO			
ms 280-158861-A-3	987989	3741.308				
msd 280-158861-A-3	998006	3779.384				

Result path C:\FLOW_4\022722.RST
Sample table path C:\FLOW_4\022722.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 27-Feb-22
Time acquired 18:34

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
280-158861-A-10	117432	432.138			
280-159137-C-4	2597320	9858.716			
280-159137-C-5	4361	2.330			
280-159091-G-1	47824	167.542			
280-159091-G-2	11512	29.513			
Rinse	278	-13.189	LO		
Read Baseline	0	-14.246	BL		
CCV 5000 ppb	1318998	4999.543			
CCVL 1000 ppb	275982	1034.822			
CCB	-279	-15.304	LO		
Read Baseline	0	-14.246	BL		
280-159091-H-3	53530	189.234			
280-159091-H-4	3151	-2.268	LO		
280-159091-G-5	28584	94.408			
280-159091-G-6	63342	226.529			
LCS	1265822	4797.411			
LCSD	1273386	4826.161			
MB	-233	-15.132	LO		
280-158866-A-3	377	-12.814	LO		
ms 280-158866-A-3	1026466	3887.566			
msd 280-158866-A-3	1018185	3856.090			
280-158866-A-10	-97	-14.616	LO		
Rinse	128	-13.758	LO		
Read Baseline	0	-14.246	BL		
CCV 5000 ppb	1272358	4822.253			
CCVL 1000 ppb	273292	1024.596			
CCB	16	-14.184	LO		
Read Baseline	0	-14.246	BL		
280-159091-H-7	45393	158.302			
280-158862-A-3	762463	2884.035			
ms 280-158862-A-3	1697536	6438.447			
msd 280-158862-A-3	1700342	6449.114			
280-158862-A-10	-797	-17.274	LO		
d	-693	-16.880	LO		
d	1071	-10.174	LO		
Rinse	115	-13.810	LO		
Read Baseline	0	-14.246	BL		
CCV 5000 ppb	1306063	4950.374			
CCVL 1000 ppb	272502	1021.590			
CCB	-5	-14.265	LO		
Read Baseline	0	-14.246	BL		

Peak Table:Nitrate as N

File name: C:\FLOW_4\022722.RST
Date: 27-Feb-22
Operator: svc

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	109	SYNC	1	SYNC	1	1	2639497	10019.038086	HI
2	0	Carryover	1	CO	1	1	2655	-4.154396	LO
3	0	Carryover	2	CO	1	1	321	-13.025857	LO
B	0	read baseline	1	RB	1	1	0	-14.245681	BL
5	101	Cal 0.00 ppb	1	C	1	1	722	-11.500376	LO
6	102	Cal 50.0 ppb	1	C	1	1	14665	41.497955	
7	103	Cal 100 ppb	1	C	1	1	29135	96.501381	
8	104	Cal 500 ppb	1	C	1	1	135791	501.924896	
9	105	Cal 1000 ppb	1	C	1	1	274139	1027.814697	
10	106	Cal 2500 ppb	1	C	1	1	683346	2583.294922	
11	107	Cal 5000 ppb	1	C	1	1	1295054	4908.527832	
12	108	Cal 7500 ppb	1	C	1	1	1955576	7419.308594	
13	109	Cal 10000 ppb	1	C	1	1	2656226	10082.629883	HI
14	0	Blank	1	BLNK	1	1	-247	-15.185069	LO
B	0	Read Baseline	1	RB	1	1	0	-14.245681	BL
16	110	5000 PPB NO2	1	U	1	1	1350088	5117.721680	
17	111	ICV 5000 PPB	1	CCV	1	1	1361935	5162.755859	
18	112	ICV 2000 PPB	1	CCV	1	1	568375	2146.268311	
19	0	ICB	1	U	1	1	-18	-14.313970	LO
B	0	Read Baseline	1	RB	1	1	0	-14.245681	BL
21	107	LCS	1	U	1	1	1330625	5043.740723	
22	107	LCSD	1	U	1	1	1324271	5019.586426	
23	0	MB	1	U	1	1	-1538	-20.091089	LO
24	113	280-158849-A-3	1	U	1	1	3359	-1.477330	LO
25	114	ms 280-158849-A-3	1	U	1	1	1058440	4009.105957	
26	115	msd 280-158849-A-3	1	U	1	1	1056508	4001.765625	
27	116	280-158849-A-10	1	U	1	1	101009	369.709625	
28	117	280-159137-C-1	1	U	1	1	1906	-7.001473	LO
29	118	280-158839-B-2	1	U	1	1	55200	195.580460	
30	119	280-158977-A-1	1	U	1	1	17860	53.642151	
31	120	280-158977-B-2	1	U	10	1	1968398	74680.515625	
32	121	280-158977-B-3	1	U	10	1	1904349	72245.867188	
33	122	280-158977-B-4	1	U	10	1	1946837	73860.921875	
34	0	Rinse	1	U	1	1	-148	-14.806829	LO
B	0	Read Baseline	1	RB	1	1	0	-14.245681	BL
36	107	CCV 5000 ppb	1	CCV	1	1	1324562	5020.693848	
37	105	CCVL 1000 ppb	1	CCV	1	1	276910	1038.348633	
38	0	CCB	1	U	1	1	824	-11.114940	LO
B	0	Read Baseline	1	RB	1	1	0	-14.245681	BL
40	123	280-159137-C-2	1	U	1	1	4866	4.251970	
41	124	280-159137-C-3	1	U	1	1	4311	2.141185	
42	125	280-158861-A-3	1	U	1	1	166	-13.614202	LO
43	126	ms 280-158861-A-3	1	U	1	1	987989	3741.308350	
44	127	msd 280-158861-A-3	1	U	1	1	998006	3779.384033	
45	128	280-158861-A-10	1	U	1	1	117432	432.138306	
46	129	280-159137-C-4	1	U	1	1	2597320	9858.715820	
47	130	280-159137-C-5	1	U	1	1	4361	2.330495	
48	131	280-159091-G-1	1	U	1	1	47824	167.541672	
49	132	280-159091-G-2	1	U	1	1	11512	29.513239	
50	0	Rinse	1	U	1	1	278	-13.188653	LO
B	0	Read Baseline	1	RB	1	1	0	-14.245681	BL
52	107	CCV 5000 ppb	1	CCV	1	1	1318998	4999.542969	
53	105	CCVL 1000 ppb	1	CCV	1	1	275982	1034.821533	
54	0	CCB	1	U	1	1	-279	-15.304487	LO
B	0	Read Baseline	1	RB	1	1	0	-14.245681	BL
56	133	280-159091-H-3	1	U	1	1	53530	189.234375	
57	134	280-159091-H-4	1	U	1	1	3151	-2.268178	LO
58	135	280-159091-G-5	1	U	1	1	28584	94.408363	
59	136	280-159091-G-6	1	U	1	1	63342	226.529251	
60	107	LCS	1	U	1	1	1265822	4797.410645	
61	107	LCSD	1	U	1	1	1273386	4826.160645	
62	0	MB	1	U	1	1	-233	-15.131706	LO
63	137	280-158866-A-3	1	U	1	1	377	-12.813594	LO
64	138	ms 280-158866-A-3	1	U	1	1	1026466	3887.565918	
65	139	msd 280-158866-A-3	1	U	1	1	1018185	3856.090332	
66	140	280-158866-A-10	1	U	1	1	-97	-14.615511	LO
67	0	Rinse	1	U	1	1	128	-13.757811	LO
B	0	Read Baseline	1	RB	1	1	0	-14.245681	BL
69	107	CCV 5000 ppb	1	CCV	1	1	1272358	4822.252930	
70	105	CCVL 1000 ppb	1	CCV	1	1	273292	1024.595825	

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	0	CCB	1	U	1	1	16	-14.183938	LO
B	0	Read Baseline	1	RB	1	1	0	-14.245681	BL
73	141	280-159091-H-7	1	U	1	1	45393	158.301834	
74	142	280-158862-A-3	1	U	1	1	762463	2884.034912	
75	143	ms 280-158862-A-3	1	U	1	1	1697536	6438.446777	
76	144	msd 280-158862-A-3	1	U	1	1	1700342	6449.113770	
77	145	280-158862-A-10	1	U	1	1	-797	-17.274397	LO
78	146	d	1	U	1	1	-693	-16.880230	LO
79	147	d	1	U	1	1	1071	-10.174474	LO
80	0	Rinse	1	U	1	1	115	-13.810270	LO
B	0	Read Baseline	1	RB	1	1	0	-14.245681	BL
82	107	CCV 5000 ppb	1	CCV	1	1	1306063	4950.373535	
83	105	CCVL 1000 ppb	1	CCV	1	1	272502	1021.589966	
84	0	CCB	1	U	1	1	-5	-14.265172	LO
B	0	Read Baseline	1	RB	1	1	0	-14.245681	BL

Nitrate as N:Calibration 1: Peak 5-85

File name: C:\FLOW_4\022722.RST
Date: 27-Feb-22
Operator: svc

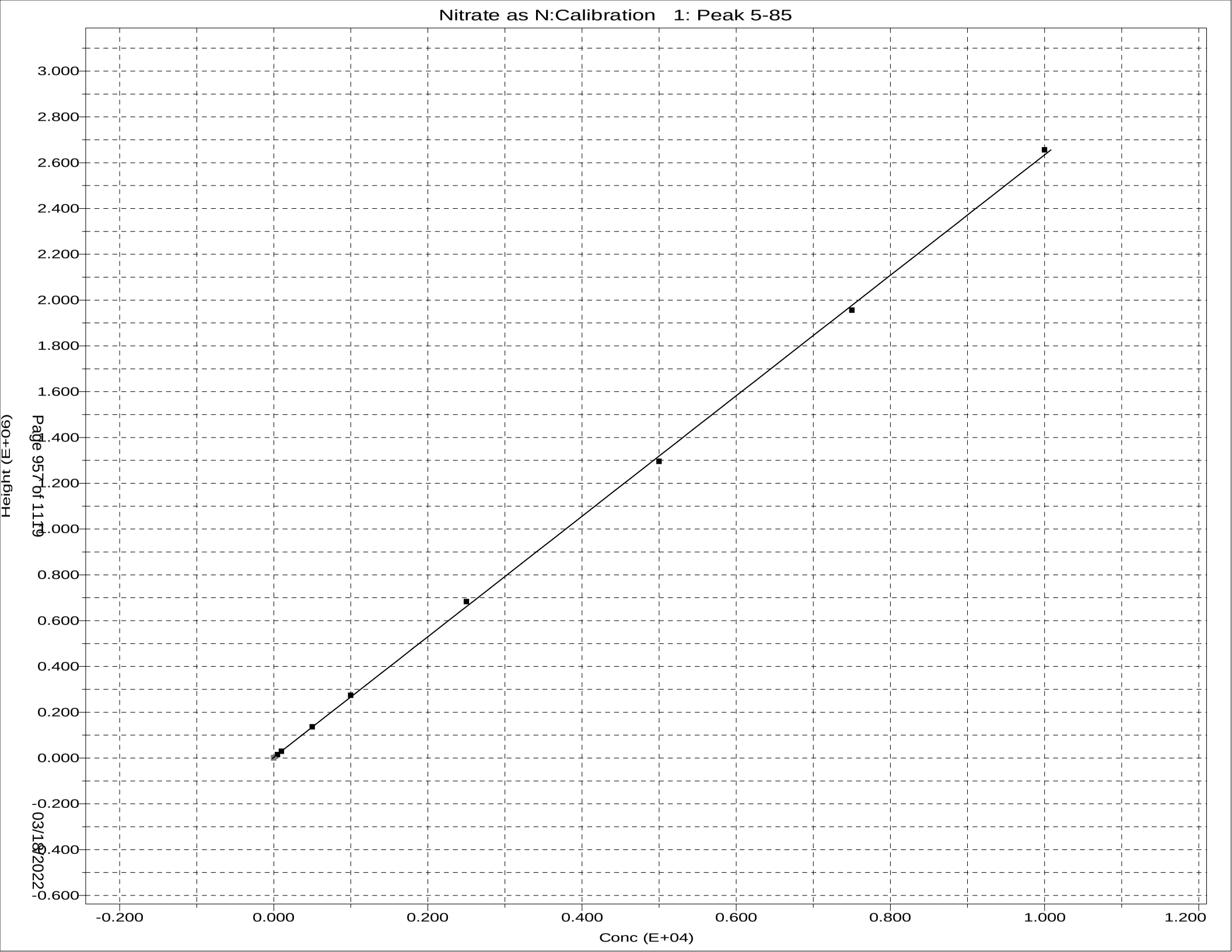
*	Name	Conc	Height
*	Cal 0.00 ppb	0.000000	722.218567
*	Cal 50.0 ppb	50.000000	14664.707031
*	Cal 100 ppb	100.000000	29134.683594
*	Cal 500 ppb	500.000000	135791.109375
*	Cal 1000 ppb	1000.000000	274139.093750
*	Cal 2500 ppb	2500.000000	683345.625000
*	Cal 5000 ppb	5000.000000	1295054.250000
*	Cal 7500 ppb	7500.000000	1955575.625000
*	Cal 10000 ppb	10000.000000	2656226.500000

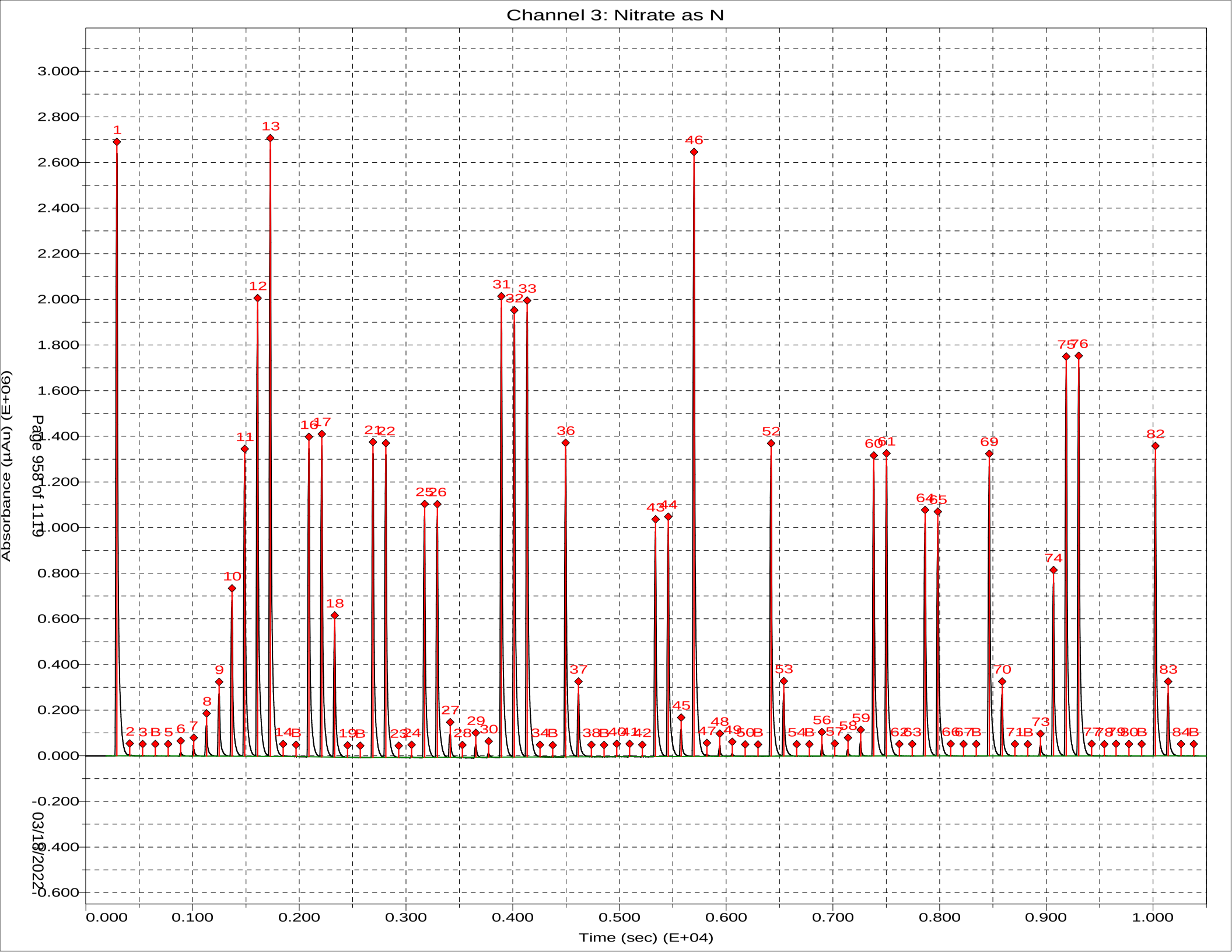
Calib Coef:
y=bx+a
a: (intercept) 3.7477e+03
b: 2.6307e+02

Corr Coef: 0.999865

Carryover: 0.101%

No Drift Peaks


Nitrate as N:Calibration 1: Peak 5-85
Height (E+06)
3.000
2.800
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
-0.400
-0.600
-0.200
0.000
0.200
0.400
0.600
0.800
1.000
1.200
Conc (E+04)
Page 957 of 1119
03/18/2022


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec) (E+04)
Page 958 of 1119
03/18/2022

Sample Table - 022722.tbl

File name: C:\FLOW_4\022722.TBL
Date: 27-Feb-22

Cup	Name	Type	R	Dil	Wt	Vial	Comment
109	SYNC	SYNC	1	1	1		
0	Carryover	CO	1	1	1		
0	Carryover	CO	1	1	1		
0	read baseline	RB	1	1	1		
101	Cal 0.00 ppb	C	1	1	1		
102	Cal 50.0 ppb	C	1	1	1		
103	Cal 100 ppb	C	1	1	1		
104	Cal 500 ppb	C	1	1	1		
105	Cal 1000 ppb	C	1	1	1		
106	Cal 2500 ppb	C	1	1	1		
107	Cal 5000 ppb	C	1	1	1		
108	Cal 7500 ppb	C	1	1	1		
109	Cal 10000 ppb	C	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
110	5000 PPB NO2	U	1	1	1		
111	ICV 5000 PPB	CCV	1	1	1		
112	ICV 2000 PPB	CCV	1	1	1		
0	ICB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	LCS	U	1	1	1		pH
107	LCSD	U	1	1	1		
0	MB	U	1	1	1		
113	280-158849-A-3	U	1	1	1		∠2
114	ms 280-158849-A-3	U	1	1	1		∠2
115	msd 280-158849-A-3	U	1	1	1		∠2
116	280-158849-A-10	U	1	1	1		∠2
117	280-159137-C-1	U	1	1	1		∠2
118	280-158839-B-2	U	1	1	1		∠2
119	280-158977-A-1	U	1	1	1		∠2
120	280-158977-B-2	U	1	10	1		∠2
121	280-158977-B-3	U	1	10	1		∠2
122	280-158977-B-4	U	1	10	1		∠2
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
123	280-159137-C-2	U	1	1	1		∠2
124	280-159137-C-3	U	1	1	1		∠2
125	280-158861-A-3	U	1	1	1		∠2
126	ms 280-158861-A-3	U	1	1	1		∠2
127	msd 280-158861-A-3	U	1	1	1		∠2
128	280-158861-A-10	U	1	1	1		∠2
129	280-159137-C-4	U	1	1	1		∠2
130	280-159137-C-5	U	1	1	1		∠2
131	280-159091-G-1	U	1	1	1		7 Yellow color
132	280-159091-G-2	U	1	1	1		∠2 Yellow color
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
133	280-159091-H-3	U	1	1	1		∠2 brown color

Cup	Name	Type	R	Dil	Wt	Vial	Comment
134	280-159091-H-4	U	1	1	1	7	brown color
135	280-159091-G-5	U	1	1	1	7	brown color
136	280-159091-G-6	U	1	1	1	7	brown color
107	LCS	U	1	1	1		
107	LCSD	U	1	1	1		
0	MB	U	1	1	1		
137	280-158866-A-3	U	1	1	1	<2	
138	ms 280-158866-A-3	U	1	1	1	<2	
139	msd 280-158866-A-3	U	1	1	1	<2	
140	280-158866-A-10	U	1	1	1	<2	
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
141	280-159091-H-7	U	1	1	1	<2	Yellow color
142	280-158862-A-3	U	1	1	1	<2	
143	ms 280-158862-A-3	U	1	1	1	<2	
144	msd 280-158862-A-3	U	1	1	1	<2	
145	280-158862-A-10	U	1	1	1	<2	
146	d	U	1	1	1		
147	d	U	1	1	1		
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		

General Chemistry Raw Data Report

Job ID: 280-159137-1

Batch: 567676 **Analyst Initials: JJM**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-567649/1-A **Analysis Date: Mar 03, 2022 16:17**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	21.6	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-567649/2-A **Analysis Date: Mar 03, 2022 16:17**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-159137-E-1-A **Analysis Date: Mar 03, 2022 16:17**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-159137-E-1-B MS **Analysis Date: Mar 03, 2022 16:17**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	22.4	mg/L	50 mL	50 mL

Lab Sample ID: 280-159137-E-1-C MSD **Analysis Date: Mar 03, 2022 16:17**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	21.2	mg/L	50 mL	50 mL

Sulfide by Titration

Analyst:	JM	SOP Information:	
Date:	3/3/2022	Number:	91
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_0209
TALS ID	WCIODINE_01326	Prep Date:	2/8/2022
Normality:	0.025	Made By:	MMP
Solution 2:	sodium thiosulfate	Concentration:	1176
TALS ID	Na Thio_00176	Expiration Date:	5/8/2022
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch IND_00067		

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	5.20	20	5.20	1184.000
CAL	5	5.20	10.60	20	5.40	1168.000

ICV Information	
Source/Ver-Lot#:	INT_0204
Prep Date:	2/8/2022
Made By:	MMP
Concentration:	1216
Expiration Date:	5/8/2022

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	4.60	20	4.60	1232.000
ICV	5	4.60	9.60	20	5.00	1200.000

Titration Data Review Checklist

LIMS Batch Number: 567676	**Method (circle one):**	**QC Type (circle):**
Analyst/1st Reviewer: JM & MG	2310B 2320B 2340C	Standard DoD QAPP Other
Date: 3/3/22	4500 S2 F 4500 SO3 B 9030B/9034	
Matrix (circle): Water Solid	**Automated or Manual (circle one)**	**Instrument ID (circle one if applicable):** AT2 AT3

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
A. Sample Storage and Pretreatment				
1. Is sample pH verified and documented prior to analysis? (if required)	✓		Y	
2. For samples requiring pH adjustment is the amount of acid/base used documented?	N/A		✓	If no, list details:
3. Are samples analyzed within the required hold time?	✓		Y	NCM:
4. Pre-treatment reagents used to remove interferences are documented.	N/A		✓	
B. Calibration / Instrument				
5. Was the normality of the titrant verified and found acceptable?	✓		Y	Comments:
6. For potentiometric titration, the pH meter is calibrated with 5 buffers bracketing range of samples and QC.	N/A		✓	Comments:
7. Calibration standards are analyzed at the beginning and end of the analytical sequence and after every 10 sample analyses. (samples/dilutions/reanalyses).	N/A		✓	Comments:
8. Calibrations standards (ICV/CCV) are within 90-110% recovery.	N/A		✓	
C. Sample and Batch QC				
9. Blanks are analyzed at the beginning, end and after every 10 sample analyses in the sequence.	✓		Y	
10. Results of blank analyses (MB, ICB, CCB) are < ½ RL (<RL for alkalinity unless DoD)	✓		Y	□ No analyte > ½ RL in associated samples □ Sample results >10x blank
11. A standard from a second source (SRM, CRM, LCS) is included in the analytical sequence.	✓		Y	
12. The recovery of the 2nd source material falls within 90-110% or manufacturer's limits.	✓		Y	
13. Samples analyses are bracketing by acceptable CCV/CCBs.	N/A		✓	□ No analyte > RL in associated samples □ Sample results >10x blank □ Sample results qualified
14. MS/MSD analyzed at required frequency and recoveries within limits. (If recoveries out of limits, verify not due to lab error) (Required for 2340C, 4500 S2 F, 9030B/9034)	✓		Y	□ Non-conformance (NCM) added □ Sample results >4X spike conc.
15. Duplicate analyzed at required frequency and RPD within limits. (Required for 2310B, 2320B, 4500 SO3 B)	N/A		✓	□ Non-conformance (NCM) added □ Sample results ND or <2X RL

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
16. Are all MS/MSD RPDs <50%? Note: Excessive RPDs (>50%) require evaluation, correction or explanation.	✓		✓	☐ Non-conformance (NCM) added
D. Raw Data & TALS Data Entry				
17. Raw Data				
a. Unused data is clearly identified with reason	✓		✓	
b. All crossed out data is initialed and dated	✓		✓	
c. Out of control QC is clearly identified	✓		✓	
d. Any data that has a qualifier is commented on with appropriate action taken	✓		✓	
e. The first page of the run includes the filename, instrument, and analyst initials/signature	✓		✓	
f. 100% of manual calculations are verified.	✓		✓	
18. TALS Samples Tab				
a. LIMS Sample IDs / Containers are correct	✓		✓	
b. Method and matrix are correct	✓		✓	
c. Date and time match raw data	✓		✓	
d. Dilutions are correct	✓		✓	
e. Correct suffix designated (where applicable)	✓		✓	
19. TALS Worksheet Tab is complete and correct	✓		✓	
20. TALS Reagent Tab is complete and correct	✓		✓	
21. TALS QC Links Tab is correct	✓		✓	
22. TALS Sample Results Tab	✓			
a. All unused data are marked Rejected or Accepted	✓		✓	
b. All reported analytes are marked Primary or Secondary	✓		✓	
c. Data manually transcribed from benchsheet into TALS verified 100% including significant figures SM 4500 SO3 B).	✓		✓	
d. TALS Batch Information Screen documentation is complete	✓		✓	
e. TALS Status set to appropriate review level	✓		✓	
E. Final Report and NCMs (2nd level review only)				
f. Were all job/project requirements met?	✓		✓	
g. Results for samples and QC correct on final report?	✓		✓	
h. Are all necessary scanned documents in TALS?	✓		✓	
i. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?	✓		✓	

Comments: _____

_____

_____

2nd Reviewer: MB **Review Date:** 3/8/22

TALS Raw Data Report

Job Number: 280-159137-1
LIMS Batch: 567676
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-567649/1-A** Inj Date: 3/3/2022 4:17:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt		% RPD	RPD Lmt
Sulfide		21.6 mg/L	mg/L	89	44	110		
Sulfide as H2S		22.95 mg/L	mg/L					

RS# 2 Lab ID: **MB 280-567649/2-A** Inj Date: 3/3/2022 4:17:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt		% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L					
Sulfide as H2S		0 mg/L	2.0 U mg/L					

RS# 3 Lab ID: **280-159137-E-1-A** Inj Date: 3/3/2022 4:17:00PM 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	0.80 J mg/L					
Sulfide as H2S		0.85 mg/L	0.85 J mg/L					

RS# 4 Lab ID: **280-159137-E-1-B MS** Inj Date: 3/3/2022 4:17:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt		% RPD	RPD Lmt
Sulfide		22.4 mg/L	mg/L	89	44	110		
Sulfide as H2S		23.8 mg/L	mg/L					

RS# 5 Lab ID: **280-159137-E-1-C MSD** Inj Date: 3/3/2022 4:17:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt		% RPD	RPD Lmt
Sulfide		21.2 mg/L	mg/L	84	44	110	6	20
Sulfide as H2S		22.525 mg/L	mg/L					

General Chemistry Raw Data Report

Job ID: 280-159137-1

Batch: 567780 **Analyst Initials: JJM**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-567743/1-A **Analysis Date: Mar 04, 2022 15:54**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	17.6	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-567743/2-A **Analysis Date: Mar 04, 2022 15:54**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-159137-E-2-A **Analysis Date: Mar 04, 2022 15:54**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-159137-E-3-A **Analysis Date: Mar 04, 2022 15:54**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-159137-E-4-A **Analysis Date: Mar 04, 2022 15:54**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-159137-E-5-A **Analysis Date: Mar 04, 2022 15:54**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Sulfide by Titration

Analyst:	JM	SOP Information:	
Date:	3/4/2022	Number:	91
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_0209
TALS ID	WCIODINE_01326	Prep Date:	2/8/2022
Normality:	0.025	Made By:	MMP
Solution 2:	sodium thiosulfate	Concentration:	1189
TALS ID	Na Thio_00176	Expiration Date:	5/8/2022
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch IND_00067		

ICV Information	
Source/Ver-Lot#:	INT_0204
Prep Date:	2/8/2022
Made By:	MMP
Concentration:	1207
Expiration Date:	5/8/2022

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	4.92	10.10	20	5.18	1185.600
CAL	5	10.10	15.20	20	5.10	1192.000

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	4.90	20	4.90	1208.000
ICV	5	0.00	4.92	20	4.92	1206.400

TALS Raw Data Report

Job Number: 280-159137-1
LIMS Batch: 567780
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-567743/1-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		17.6 mg/L	mg/L	73	44 110		
Sulfide as H2S		18.7 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-567743/2-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-159190-E-16-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-159190-E-16-B MS** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		21.6 mg/L	mg/L	89	44 110		
Sulfide as H2S		22.95 mg/L	mg/L				

RS# 5 Lab ID: **280-159190-E-16-C MSD** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		20 mg/L	mg/L	83	44 110	8	20
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 6 Lab ID: **280-159137-E-2-A** Inj Date: 3/4/2022 3:54:00PM 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	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 7 Lab ID: **280-159137-E-3-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 8 Lab ID: **280-159137-E-4-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 9 Lab ID: **280-159137-E-5-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

TALS Raw Data Report

Job Number: 280-159190-1
LIMS Batch: 567780
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-567743/1-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		17.6 mg/L	mg/L	73	44 110		
Sulfide as H2S		18.7 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-567743/2-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-159190-E-16-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-159190-E-16-B MS** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		21.6 mg/L	mg/L	89	44 110		
Sulfide as H2S		22.95 mg/L	mg/L				

RS# 5 Lab ID: **280-159190-E-16-C MSD** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		20 mg/L	mg/L	83	44 110	8	20
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 10 Lab ID: **280-159190-E-4-A** Inj Date: 3/4/2022 3:54:00PM 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	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 11 Lab ID: **280-159190-E-5-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 12 Lab ID: **280-159190-E-13-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 13 Lab ID: **280-159190-E-14-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 14 Lab ID: **280-159190-E-15-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		999999968 mg/L	0.80 J mg/L				
Sulfide as H2S		999999966 mg/L	0.85 J mg/L				

TALS Raw Data Report

RS# 15 Lab ID: **280-159190-E-1-A** Inj Date: 3/4/2022 3:54:00PM 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	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

Titration Data Review Checklist

LIMS Batch Number: 567780	**Method (circle one):**	**QC Type (circle):**
Analyst/1st Reviewer: SM	2310B 2320B 2340C	Standard DoD QAPP Other
Date: 3/12/22	4500 S2 F 4500 SO3 B 9030B/9034	
Matrix (circle): Water Solid	**Automated or Manual (circle one)**	**Instrument ID (circle one if applicable):** AT2 AT3

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
A. Sample Storage and Pretreatment				
1. Is sample pH verified and documented prior to analysis? (if required)	√		✓	
2. For samples requiring pH adjustment is the amount of acid/base used documented?	N/A		✓	If no, list details:
3. Are samples analyzed within the required hold time?	√		✓	NCM:
4. Pre-treatment reagents used to remove interferences are documented.	N/A		✓	
B. Calibration / Instrument				
5. Was the normality of the titrant verified and found acceptable?	√		✓	Comments:
6. For potentiometric titration, the pH meter is calibrated with 5 buffers bracketing range of samples and QC.	N/A		✓	Comments:
7. Calibration standards are analyzed at the beginning and end of the analytical sequence and after every 10 sample analyses. (samples/dilutions/reanalyses).	N/A		✓	Comments:
8. Calibrations standards (ICV/CCV) are within 90-110% recovery.	N/A		✓	
C. Sample and Batch QC				
9. Blanks are analyzed at the beginning, end and after every 10 sample analyses in the sequence.	√		✓	
10. Results of blank analyses (MB, ICB, CCB) are < ½ RL (<RL for alkalinity unless DoD)	√		✓	□ No analyte > ½ RL in associated samples □ Sample results >10x blank
11. A standard from a second source (SRM, CRM, LCS) is included in the analytical sequence.	√		✓	
12. The recovery of the 2nd source material falls within 90-110% or manufacturer's limits.	√		✓	
13. Samples analyses are bracketing by acceptable CCV/CCBs.	N/A		✓	□ No analyte > RL in associated samples □ Sample results >10x blank □ Sample results qualified
14. MS/MSD analyzed at required frequency and recoveries within limits. (If recoveries out of limits, verify not due to lab error) (Required for 2340C, 4500 S2 F, 9030B/9034)	√		✓	□ Non-conformance (NCM) added □ Sample results >4X spike conc.
15. Duplicate analyzed at required frequency and RPD within limits. (Required for 2310B, 2320B, 4500 SO3 B)	N/A		✓	□ Non-conformance (NCM) added □ Sample results ND or <2X RL

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
16. Are all MS/MSD RPDs <50%? Note: Excessive RPDs (>50%) require evaluation, correction or explanation.	✓		✓	□ Non-conformance (NCM) added
D. Raw Data & TALS Data Entry				
17. Raw Data			✓	
a. Unused data is clearly identified with reason	✓		✓	
b. All crossed out data is initialed and dated	✓		✓	
c. Out of control QC is clearly identified	✓		✓	
d. Any data that has a qualifier is commented on with appropriate action taken	✓		✓	
e. The first page of the run includes the filename, instrument, and analyst initials/signature	✓		✓	
f. 100% of manual calculations are verified.	✓		✓	
18. TALS Samples Tab			✓	
a. LIMS Sample IDs / Containers are correct	✓		✓	
b. Method and matrix are correct	✓		✓	
c. Date and time match raw data	✓		✓	
d. Dilutions are correct	✓		✓	
e. Correct suffix designated (where applicable)	✓		✓	
19. TALS Worksheet Tab is complete and correct	✓		✓	
20. TALS Reagent Tab is complete and correct	✓		✓	
21. TALS QC Links Tab is correct	✓		✓	
22. TALS Sample Results Tab			✓	
a. All unused data are marked Rejected or Accepted	✓		✓	
b. All reported analytes are marked Primary or Secondary	✓		✓	
c. Data manually transcribed from benchsheet into TALS verified 100% including significant figures SM 4500 SO3 B).	✓		✓	
d. TALS Batch Information Screen documentation is complete	✓		✓	
e. TALS Status set to appropriate review level	✓		✓	
E. Final Report and NCMs (2nd level review only)				
f. Were all job/project requirements met?			✓	
g. Results for samples and QC correct on final report?			✓	
h. Are all necessary scanned documents in TALS?			✓	
i. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?			✓	

Comments: _____

_____

_____

2nd Reviewer: SAH **Review Date:** 03/14/22

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0004.d
Lims ID: std L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 08-Mar-2022 14:13:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109076-002
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 09-Mar-2022 11:31:17 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1639

First Level Reviewer: jindaratc Date: 08-Mar-2022 15:44:15

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.534	2.534	0.000	1646666	0.2000	0.1767	M
2 Chloride	3.675	3.675	0.000	11341567	1.00	1.32	M
3 Nitrite as N	4.459	4.459	0.000	5094673	NC	NC	M
4 Bromide	5.384	5.384	0.000	952446	0.2000	0.2138	
5 Nitrate as N	6.067	6.067	0.000	5701638	NC	NC	M
7 Orthophosphate as P	9.209	9.209	0.000	1483080	NC	NC	
6 Sulfate	10.059	10.059	0.000	8014777	1.00	1.33	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

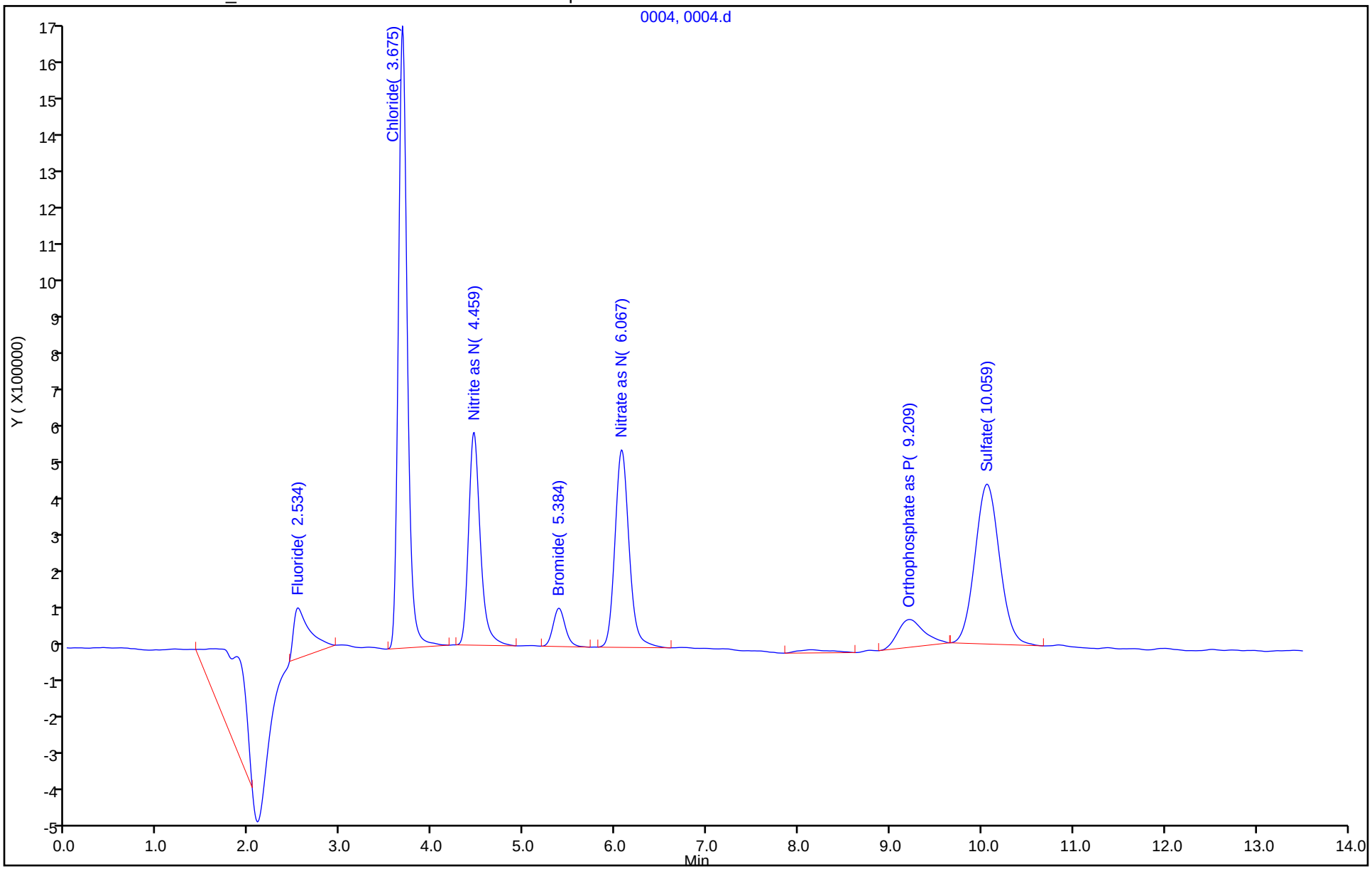
IC Cal low_00625 Amount Added: 0.02 Units: mL
IC CAL cl/so4_00409 Amount Added: 0.02 Units: mL

Report Date: 09-Mar-2022 11:31:17 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0004.d

Injection Date:	08-Mar-2022 14:13:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	std L1			Worklist Smp#:	2
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

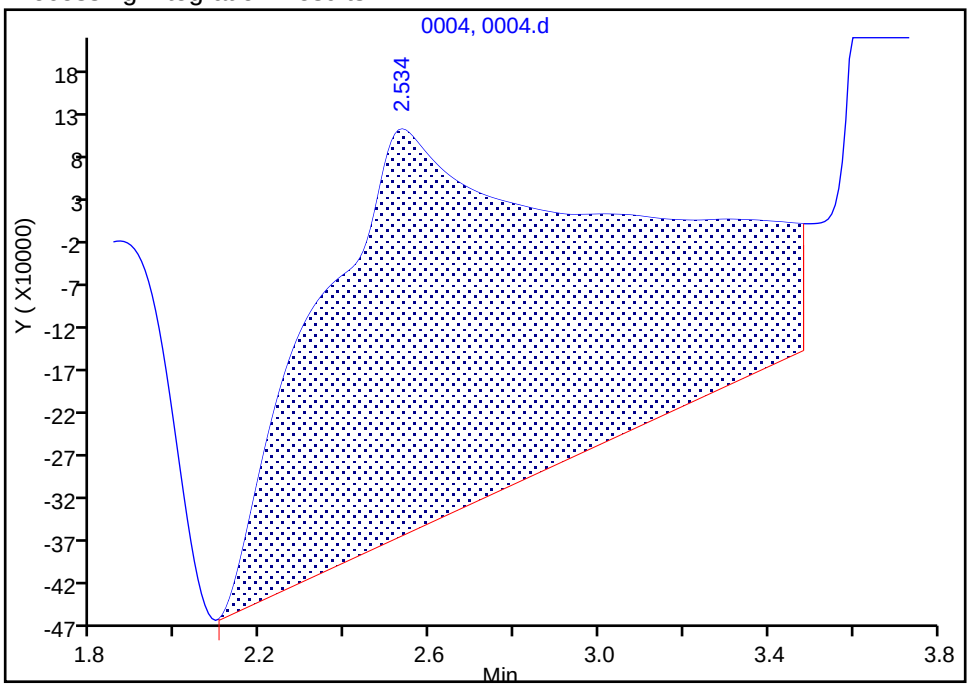
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0004.d				
Injection Date:	08-Mar-2022 14:13:00	Instrument ID:	WC_IonChrom11		
Lims ID:	std L1				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

1 Fluoride, CAS: 16984-48-8

Signal: 1

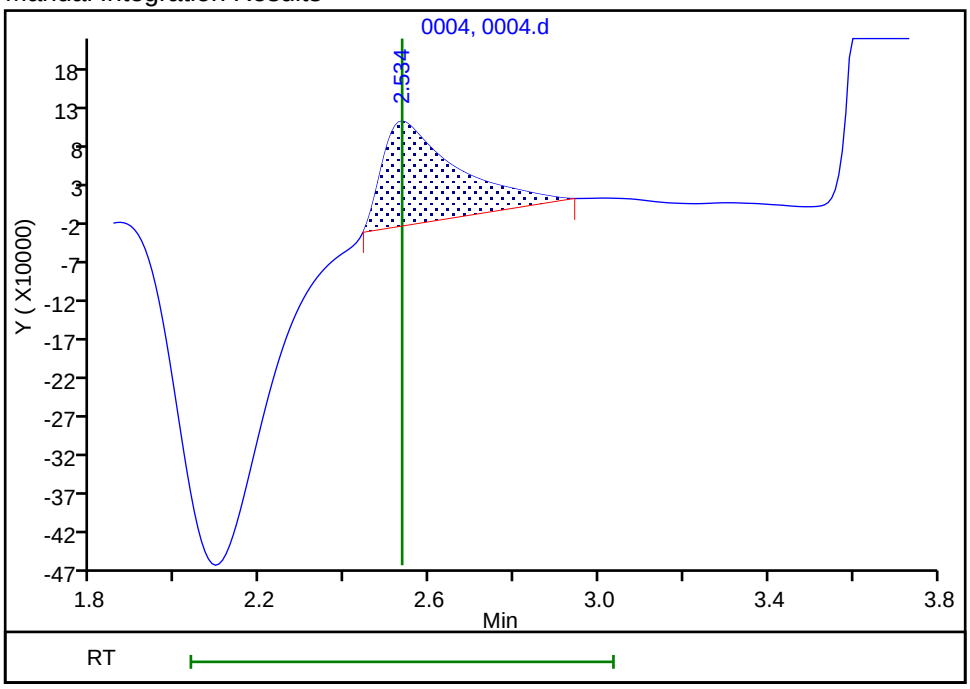
Processing Integration Results

RT: 2.53
Area: 22790097
Amount: 0.350640
Amount Units: ug/ml



Manual Integration Results

RT: 2.53
Area: 1646666
Amount: 0.176654
Amount Units: ug/ml



Reviewer: foxr, 09-Mar-2022 11:13:26
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

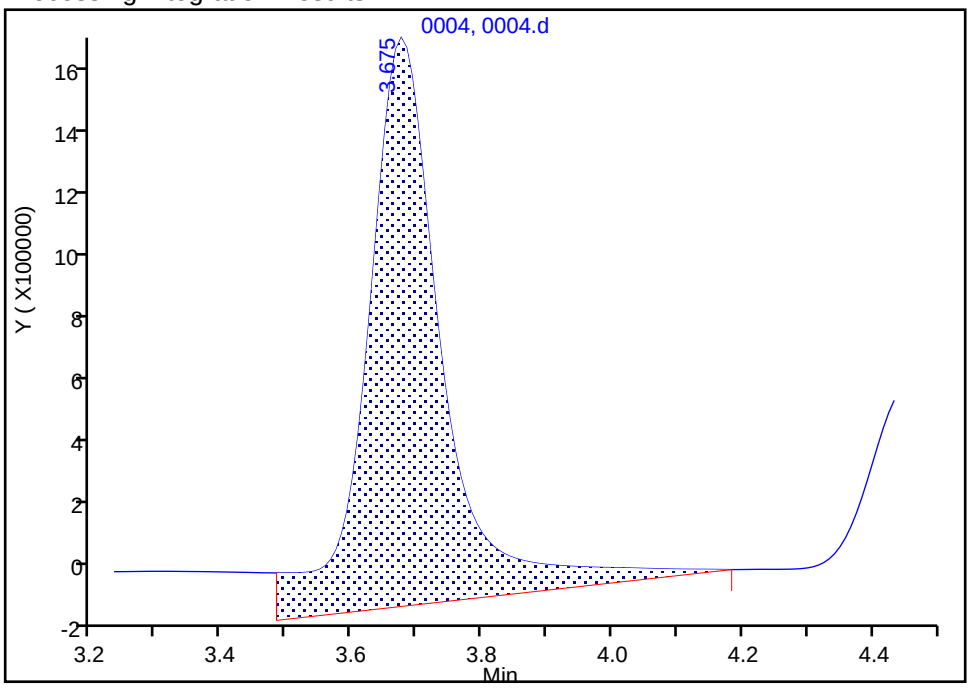
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0004.d
Injection Date: 08-Mar-2022 14:13:00 Instrument ID: WC_IonChrom11
Lims ID: std L1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

2 Chloride, CAS: 16887-00-6

Signal: 1

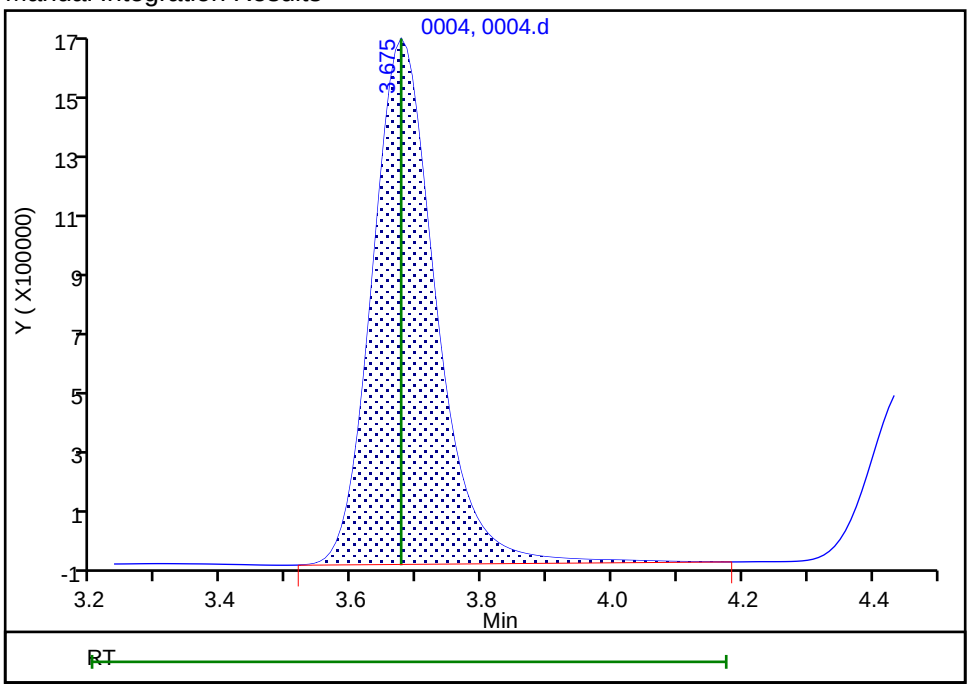
Processing Integration Results

RT: 3.68
Area: 14439673
Amount: 1.047151
Amount Units: ug/ml



Manual Integration Results

RT: 3.68
Area: 11341567
Amount: 1.323186
Amount Units: ug/ml



Reviewer: jindaratc, 08-Mar-2022 15:44:10
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

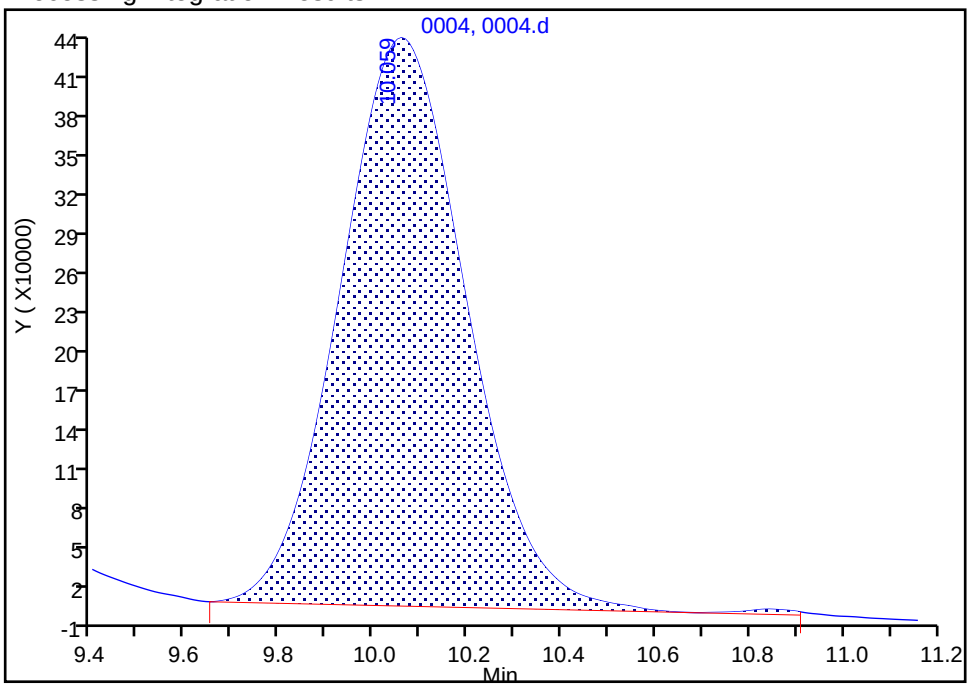
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0004.d				
Injection Date:	08-Mar-2022 14:13:00	Instrument ID:	WC_IonChrom11		
Lims ID:	std L1				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

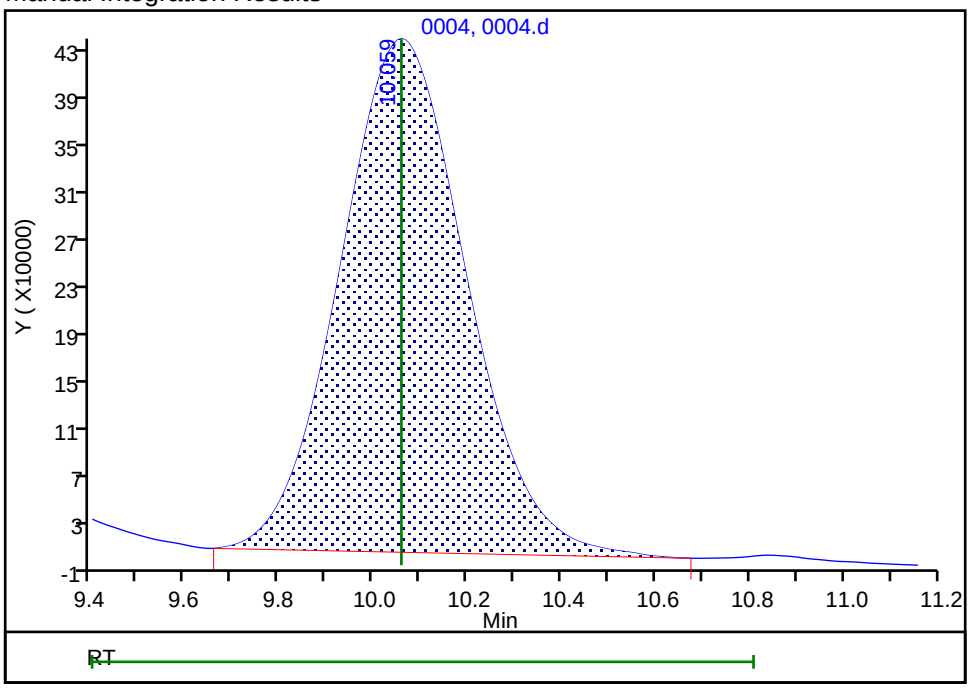
Processing Integration Results

RT: 10.06
Area: 8044694
Amount: 1.332642
Amount Units: ug/ml



Manual Integration Results

RT: 10.06
Area: 8014777
Amount: 1.334690
Amount Units: ug/ml



Reviewer: foxr, 09-Mar-2022 11:14:00
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0005.d
Lims ID: std L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 08-Mar-2022 14:29:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109076-003
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 09-Mar-2022 11:31:17 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1639

First Level Reviewer: jindaratc Date: 08-Mar-2022 15:44:31

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.525	2.525	0.000	7024294	0.5000	0.5652	M
2 Chloride	3.675	3.675	0.000	28064265	2.50	2.27	
3 Nitrite as N	4.450	4.450	0.000	12662706	NC	NC	M
4 Bromide	5.375	5.375	0.000	2392640	0.5000	0.5011	
5 Nitrate as N	6.059	6.059	0.000	13833916	NC	NC	M
7 Orthophosphate as P	9.192	9.192	0.000	3340262	NC	NC	
6 Sulfate	10.050	10.050	0.000	19383975	2.50	2.32	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

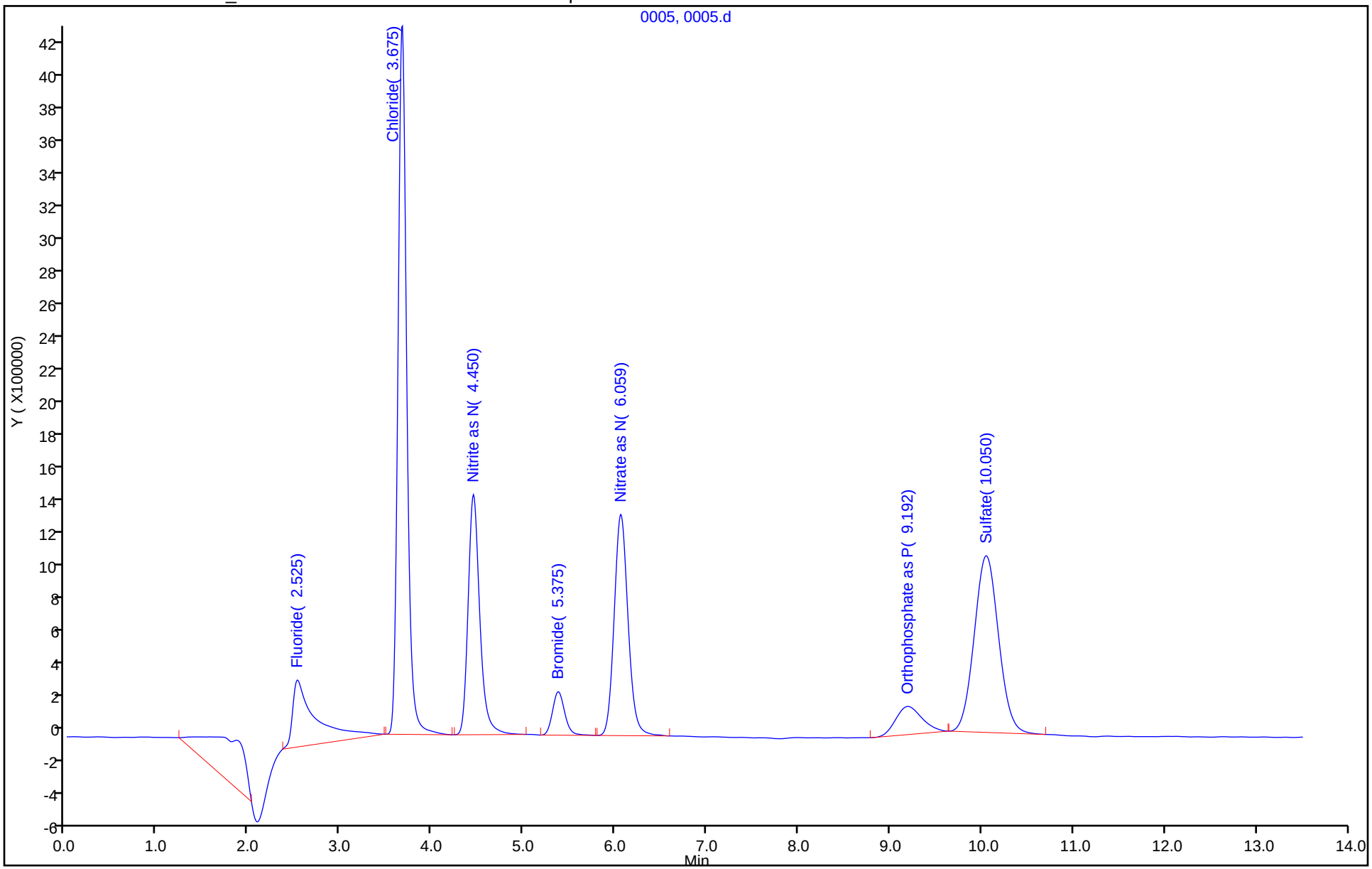
IC Cal low_00625 Amount Added: 0.05 Units: mL
IC CAL cl/so4_00409 Amount Added: 0.05 Units: mL

Report Date: 09-Mar-2022 11:31:17 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0005.d

Injection Date:	08-Mar-2022 14:29:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	std L2			Worklist Smp#:	3
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

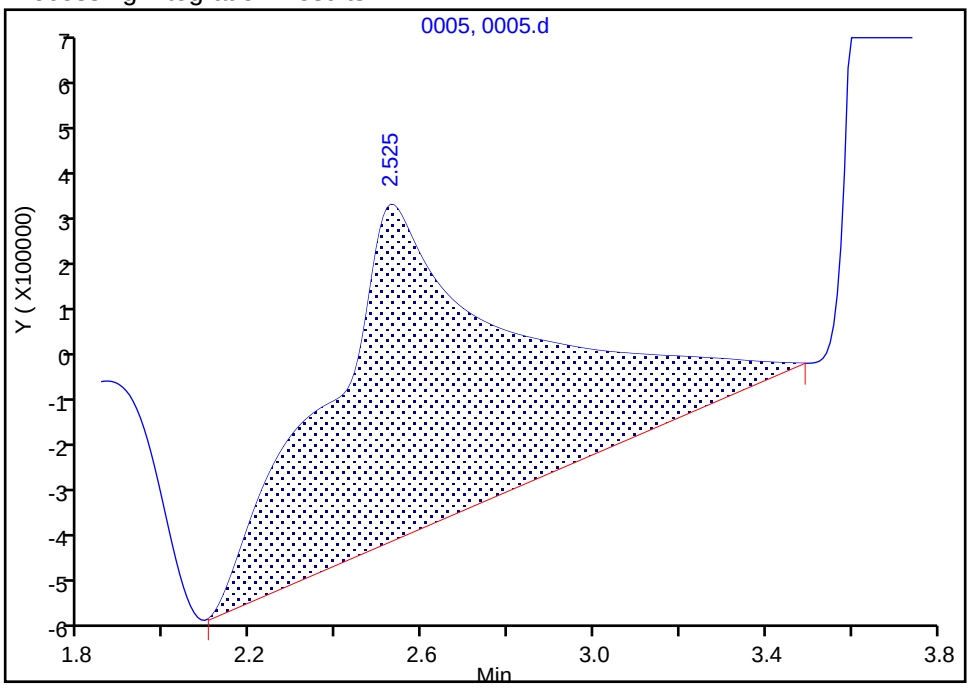
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0005.d
Injection Date: 08-Mar-2022 14:29:00 Instrument ID: WC_IonChrom11
Lims ID: std L2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

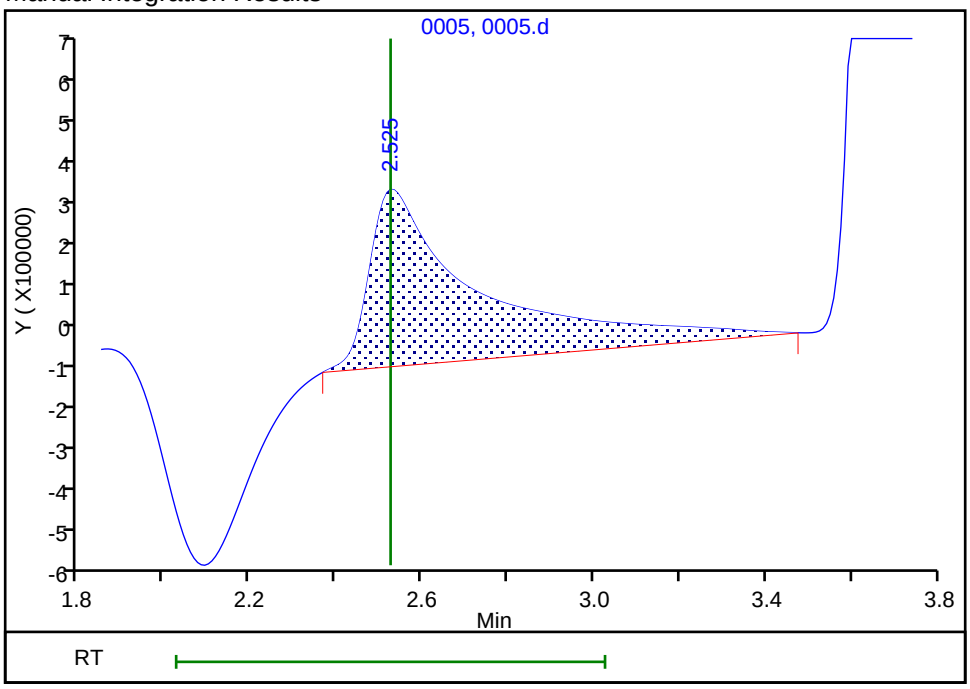
Processing Integration Results

RT: 2.53
Area: 21469742
Amount: 0.710501
Amount Units: ug/ml



Manual Integration Results

RT: 2.53
Area: 7024294
Amount: 0.565222
Amount Units: ug/ml



Reviewer: jindaratc, 08-Mar-2022 15:44:26
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

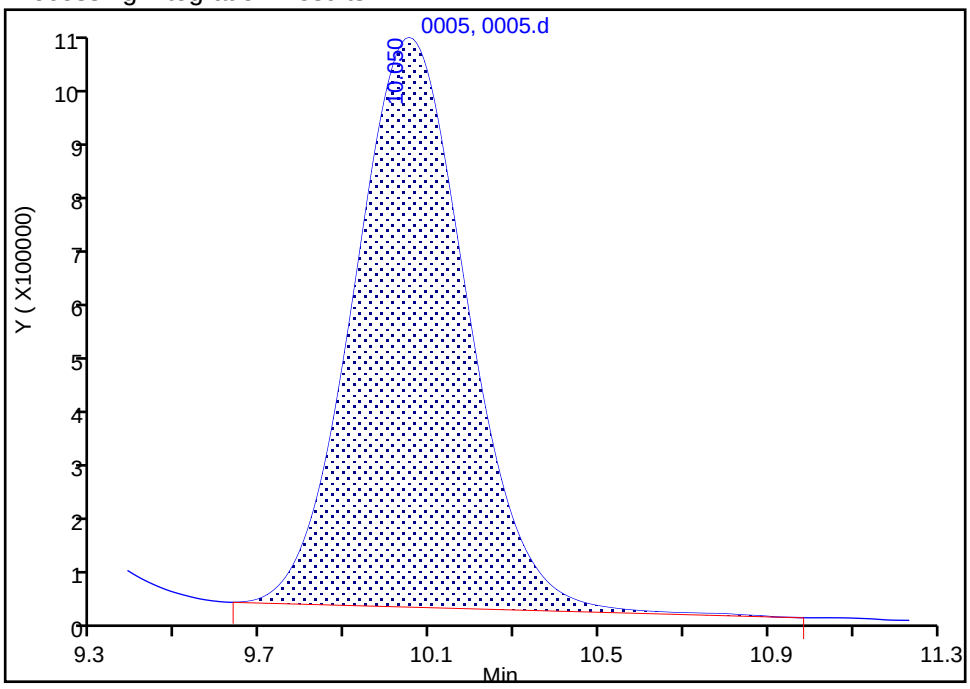
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0005.d
Injection Date: 08-Mar-2022 14:29:00 Instrument ID: WC_IonChrom11
Lims ID: std L2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

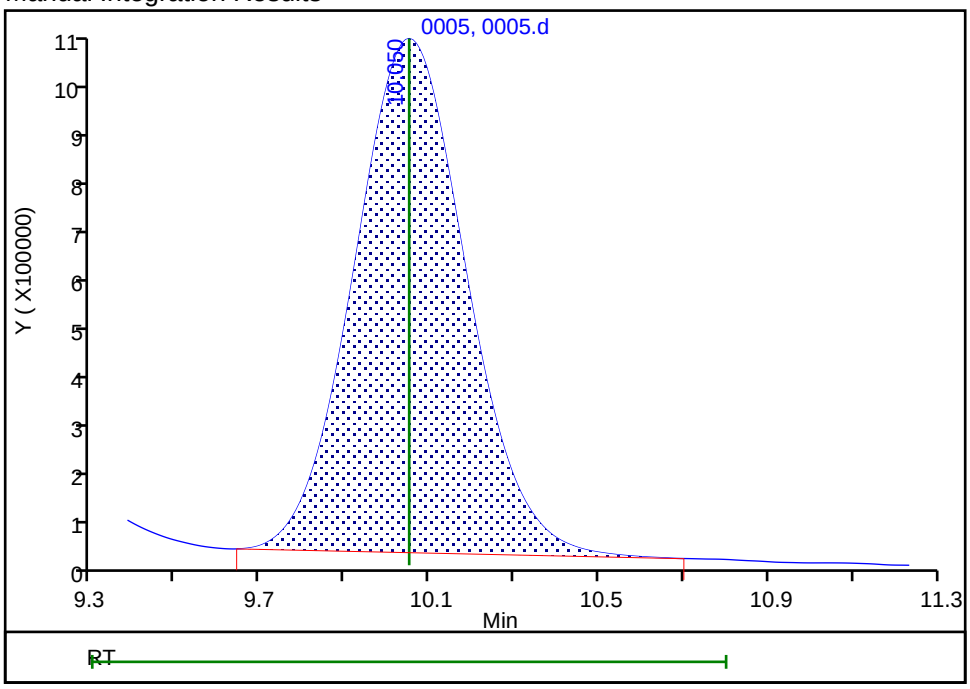
Processing Integration Results

RT: 10.05
Area: 19511199
Amount: 2.329131
Amount Units: ug/ml



Manual Integration Results

RT: 10.05
Area: 19383975
Amount: 2.321534
Amount Units: ug/ml



Reviewer: foxr, 09-Mar-2022 11:18:40
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0006.d
Lims ID: std L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 08-Mar-2022 14:46:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109076-004
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 09-Mar-2022 11:31:18 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1639

First Level Reviewer: jindaratc Date: 08-Mar-2022 15:44:47

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.534	2.534	0.000	13388194	1.00	1.03	M
2 Chloride	3.675	3.675	0.000	58563476	5.00	3.99	
3 Nitrite as N	4.459	4.459	0.000	25870651	NC	NC	M
4 Bromide	5.375	5.375	0.000	4606452	1.00	0.9428	M
5 Nitrate as N	6.059	6.059	0.000	28097540	NC	NC	M
7 Orthophosphate as P	9.192	9.192	0.000	7048847	NC	NC	
6 Sulfate	10.050	10.050	0.000	39343151	5.00	4.05	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

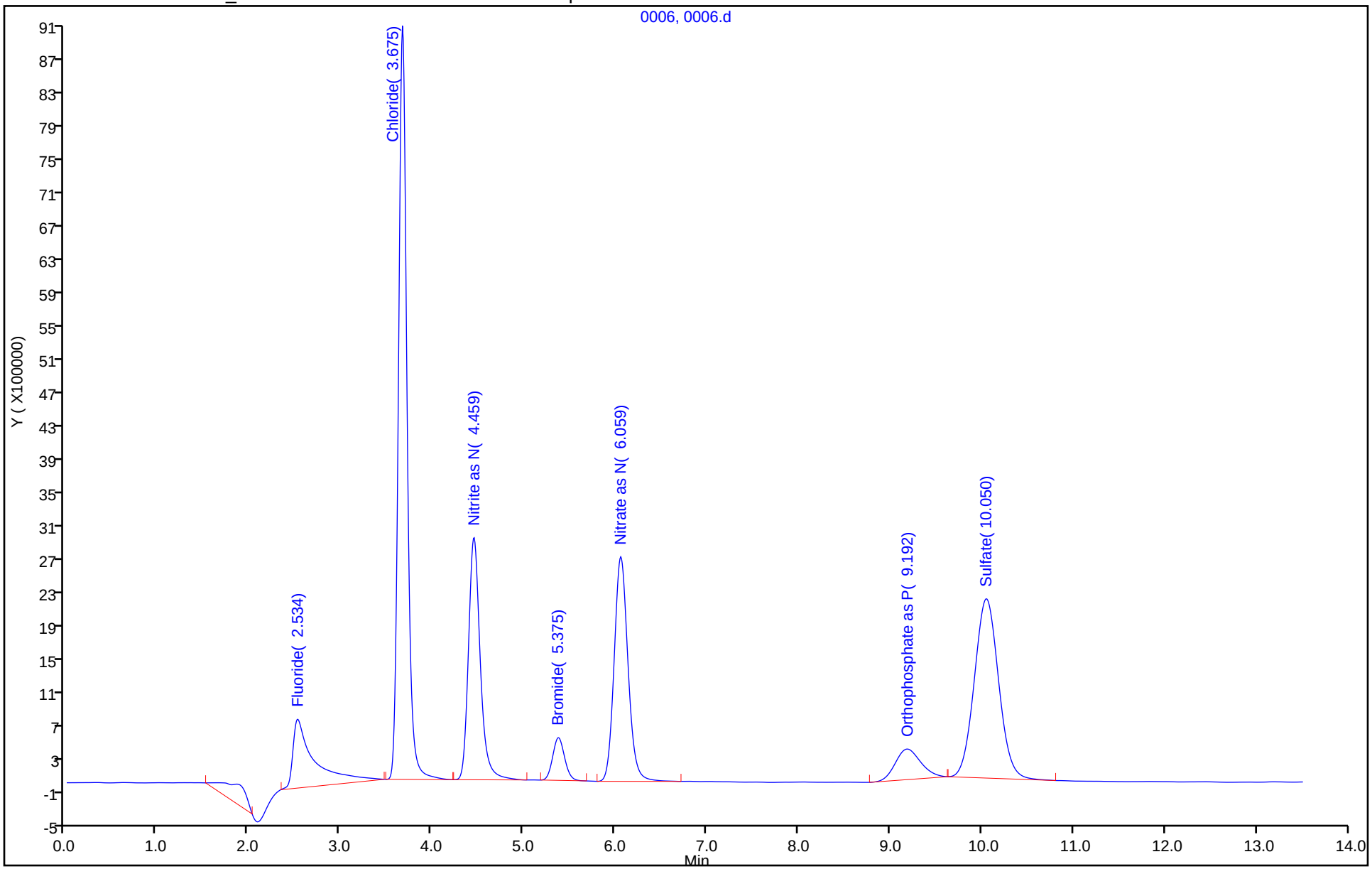
IC Cal low_00625 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00409 Amount Added: 0.10 Units: mL

Report Date: 09-Mar-2022 11:31:18 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0006.d

Injection Date:	08-Mar-2022 14:46:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	std L3			Worklist Smp#:	4
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

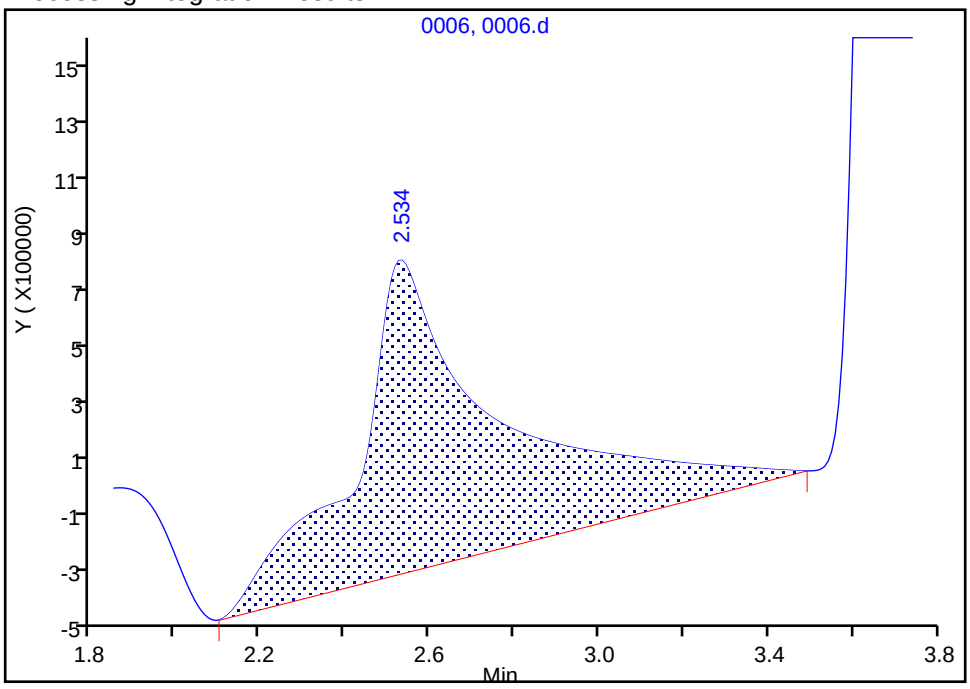
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0006.d				
Injection Date:	08-Mar-2022 14:46:00	Instrument ID:	WC_IonChrom11		
Lims ID:	std L3				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	4
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

1 Fluoride, CAS: 16984-48-8

Signal: 1

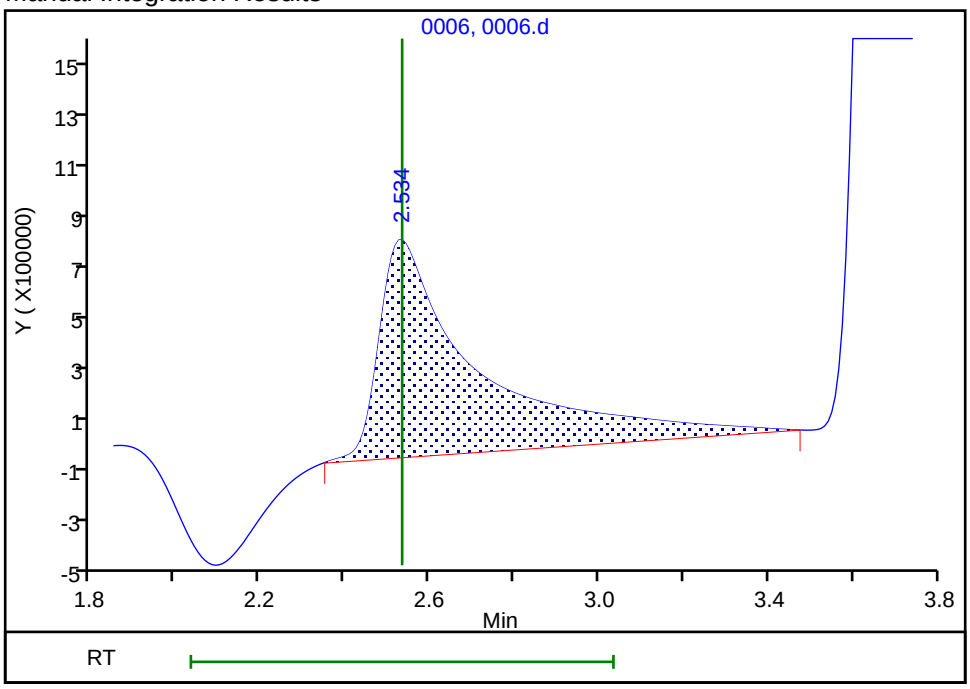
Processing Integration Results

RT: 2.53
Area: 25998570
Amount: 1.074827
Amount Units: ug/ml



Manual Integration Results

RT: 2.53
Area: 13388194
Amount: 1.025055
Amount Units: ug/ml



Reviewer: jindaratc, 08-Mar-2022 15:44:42

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

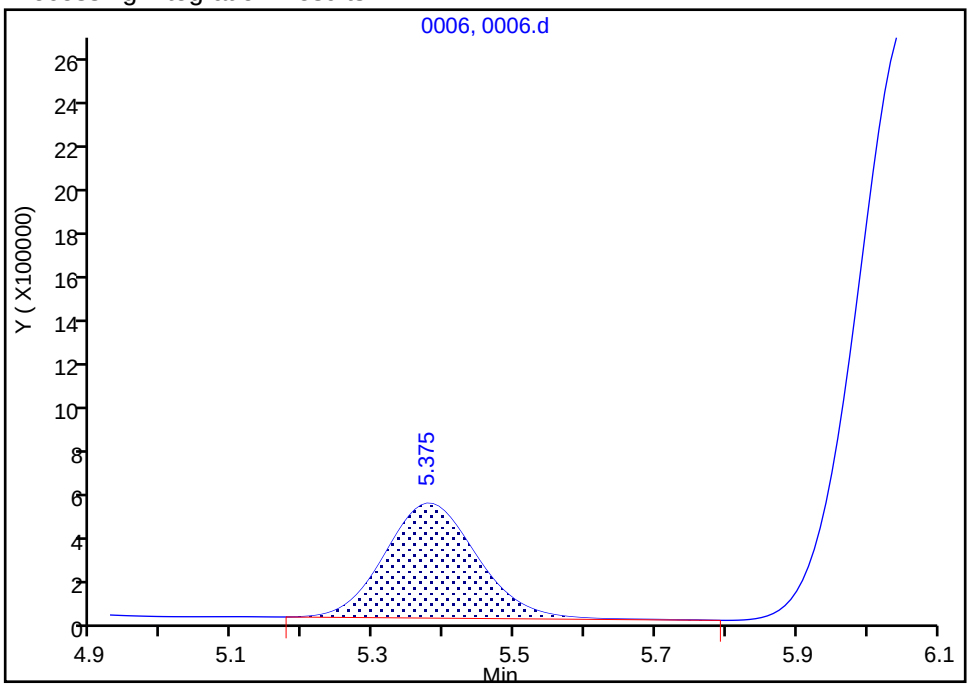
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0006.d
Injection Date: 08-Mar-2022 14:46:00 Instrument ID: WC_IonChrom11
Lims ID: std L3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

4 Bromide, CAS: 24959-67-9

Signal: 1

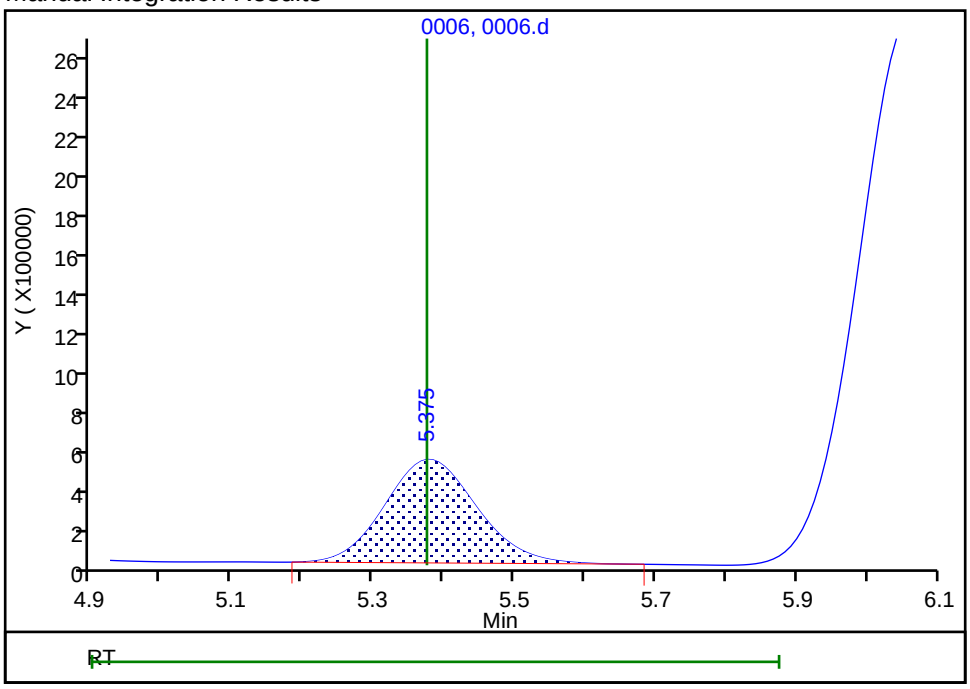
Processing Integration Results

RT: 5.38
Area: 4661697
Amount: 0.952475
Amount Units: ug/ml



Manual Integration Results

RT: 5.38
Area: 4606452
Amount: 0.942794
Amount Units: ug/ml



Reviewer: foxr, 09-Mar-2022 11:19:23
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

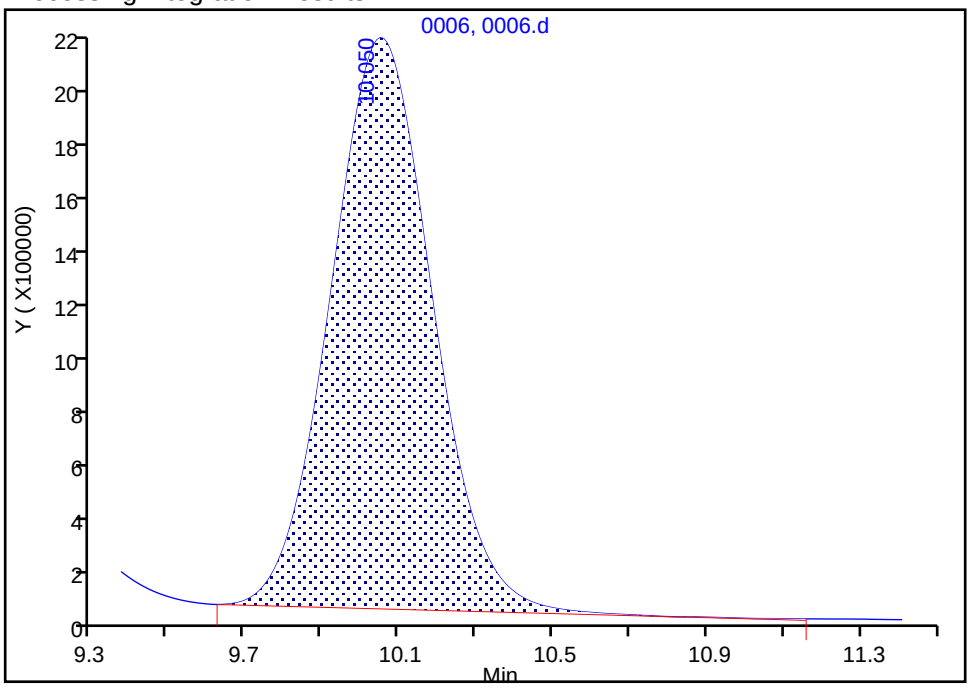
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0006.d
Injection Date: 08-Mar-2022 14:46:00 Instrument ID: WC_IonChrom11
Lims ID: std L3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

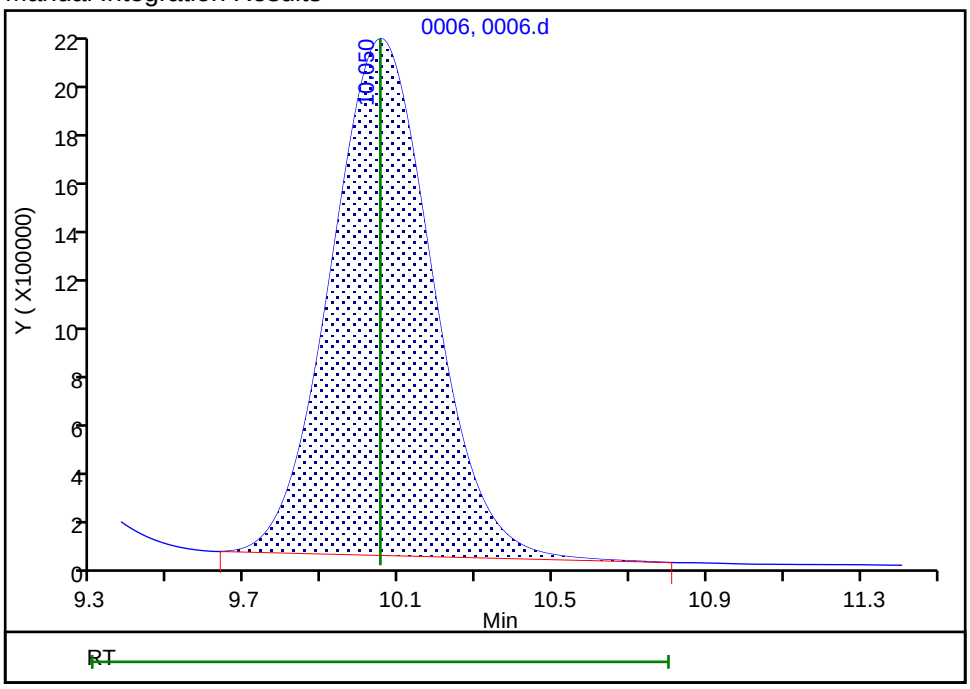
Processing Integration Results

RT: 10.05
Area: 39401244
Amount: 4.057525
Amount Units: ug/ml



Manual Integration Results

RT: 10.05
Area: 39343151
Amount: 4.053988
Amount Units: ug/ml



Reviewer: foxr, 09-Mar-2022 11:19:38
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0007.d
Lims ID: std L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 08-Mar-2022 15:02:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109076-005
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 09-Mar-2022 11:31:18 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1639

First Level Reviewer: foxr Date: 08-Mar-2022 16:01:22

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.534	2.534	0.000	51621142	4.00	3.79	M
2 Chloride	3.734	3.734	0.000	998570762	60.0	57.2	
3 Nitrite as N	4.475	4.475	0.000	112259404	NC	NC	
4 Bromide	5.375	5.375	0.000	19297450	4.00	3.87	
5 Nitrate as N	6.042	6.042	0.000	124364709	NC	NC	M
7 Orthophosphate as P	9.150	9.150	0.000	33293978	NC	NC	
6 Sulfate	10.109	10.109	0.000	612727524	60.0	53.8	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

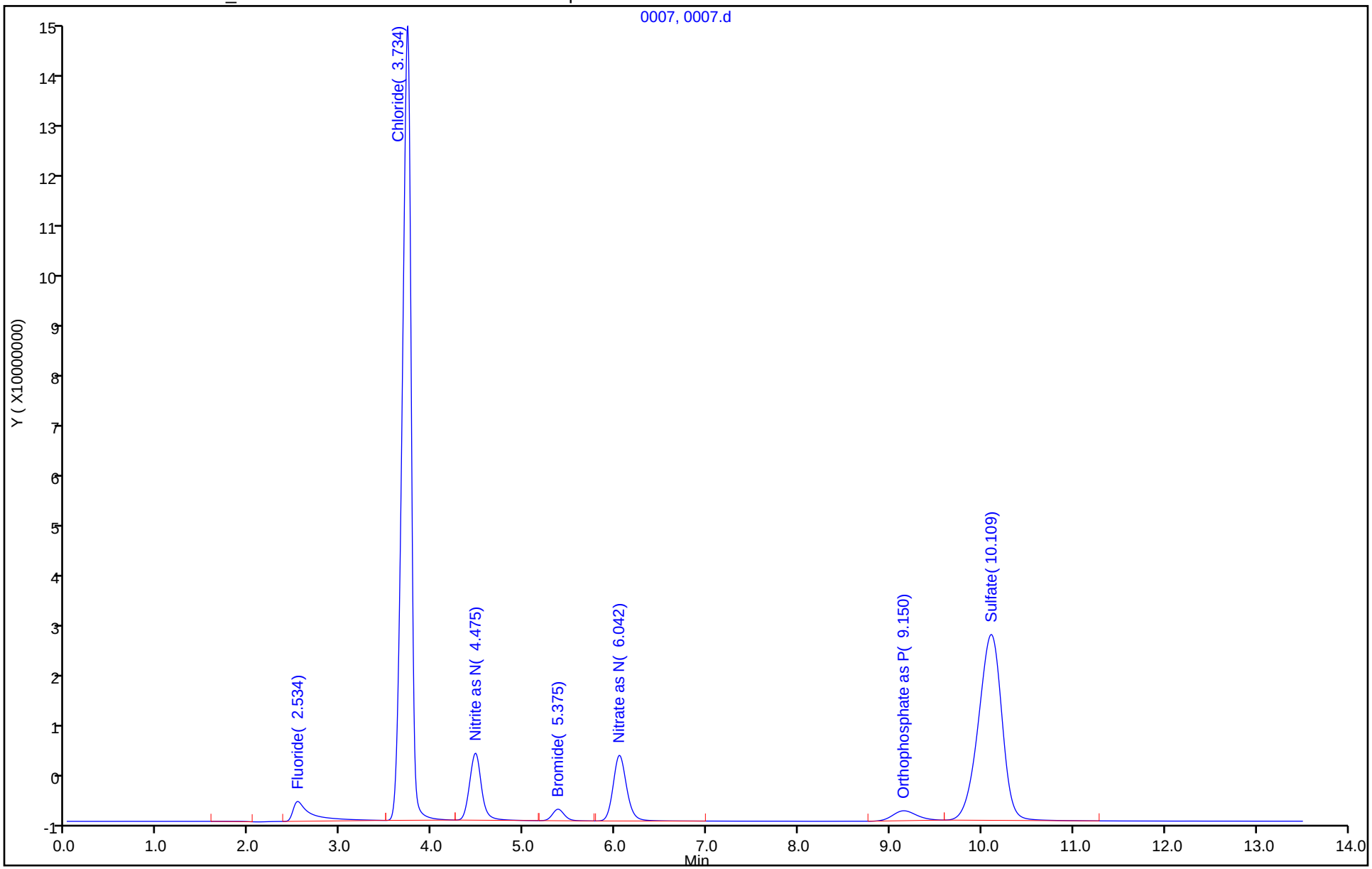
IC Cal low_00625 Amount Added: 0.40 Units: mL
IC CAL cl/so4_00409 Amount Added: 1.20 Units: mL

Report Date: 09-Mar-2022 11:31:18 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0007.d

Injection Date:	08-Mar-2022 15:02:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	std L4			Worklist Smp#:	5
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

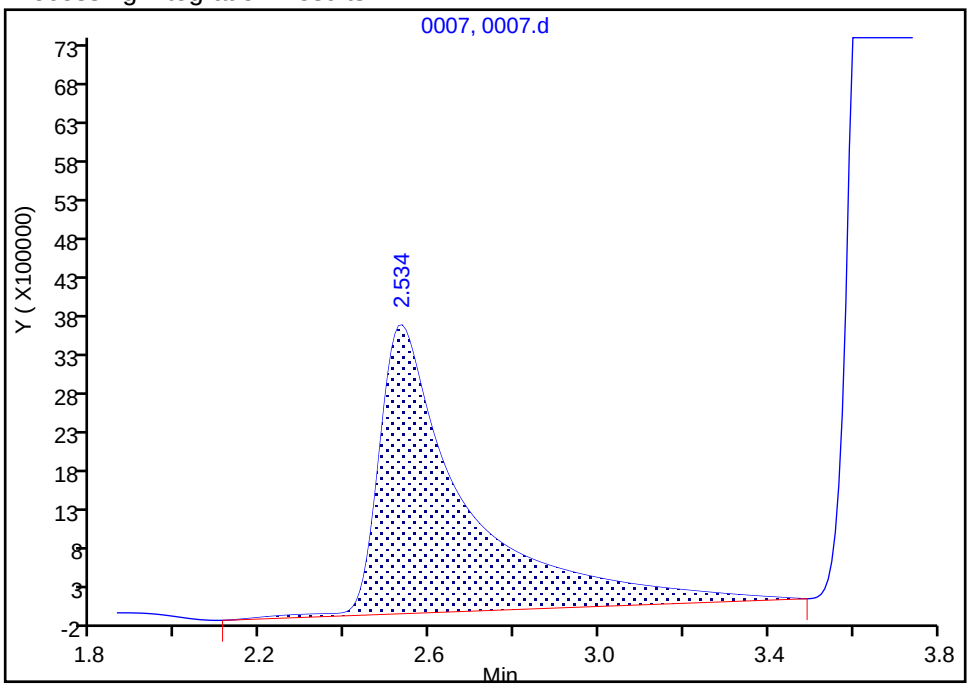
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0007.d				
Injection Date:	08-Mar-2022 15:02:00	Instrument ID:	WC_IonChrom11		
Lims ID:	std L4				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

1 Fluoride, CAS: 16984-48-8

Signal: 1

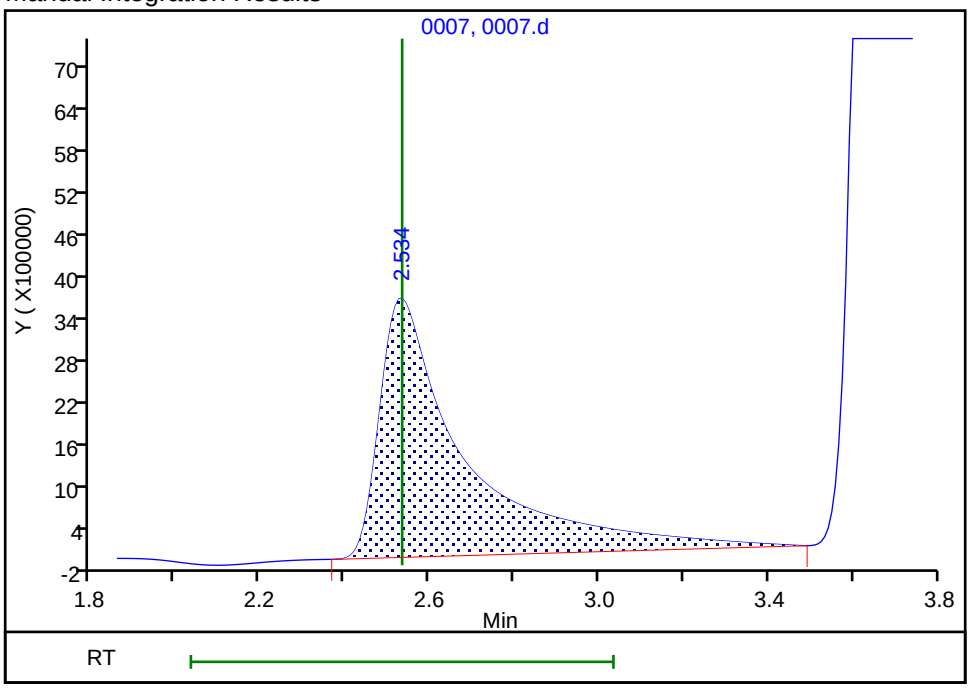
Processing Integration Results

RT: 2.53
Area: 53003247
Amount: 3.865466
Amount Units: ug/ml



Manual Integration Results

RT: 2.53
Area: 51621142
Amount: 3.787631
Amount Units: ug/ml



Reviewer: foxr, 08-Mar-2022 16:01:14
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

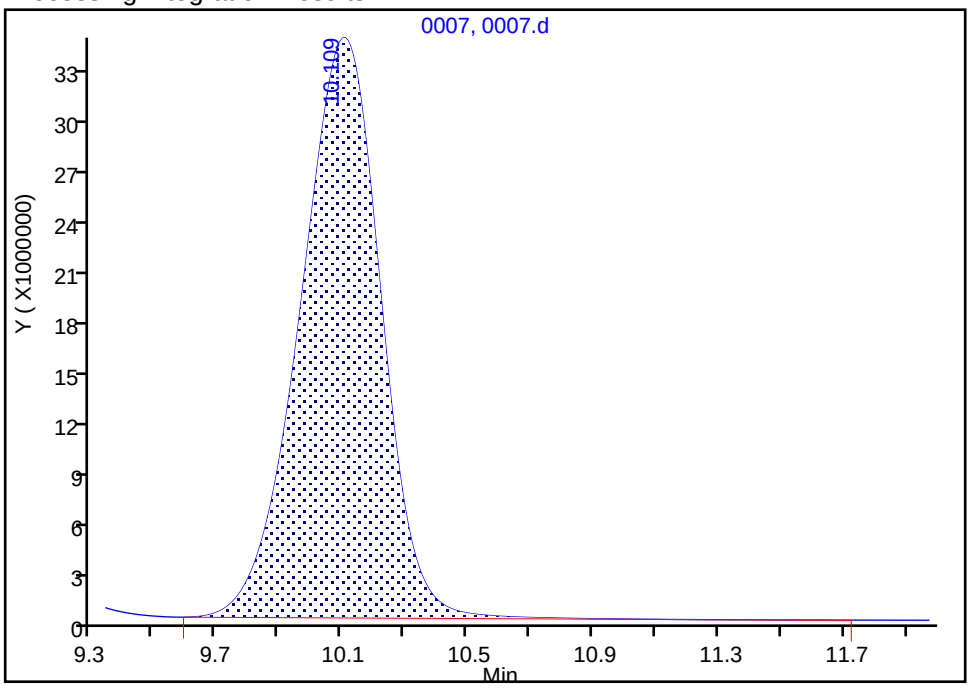
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0007.d
Injection Date: 08-Mar-2022 15:02:00 Instrument ID: WC_IonChrom11
Lims ID: std L4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

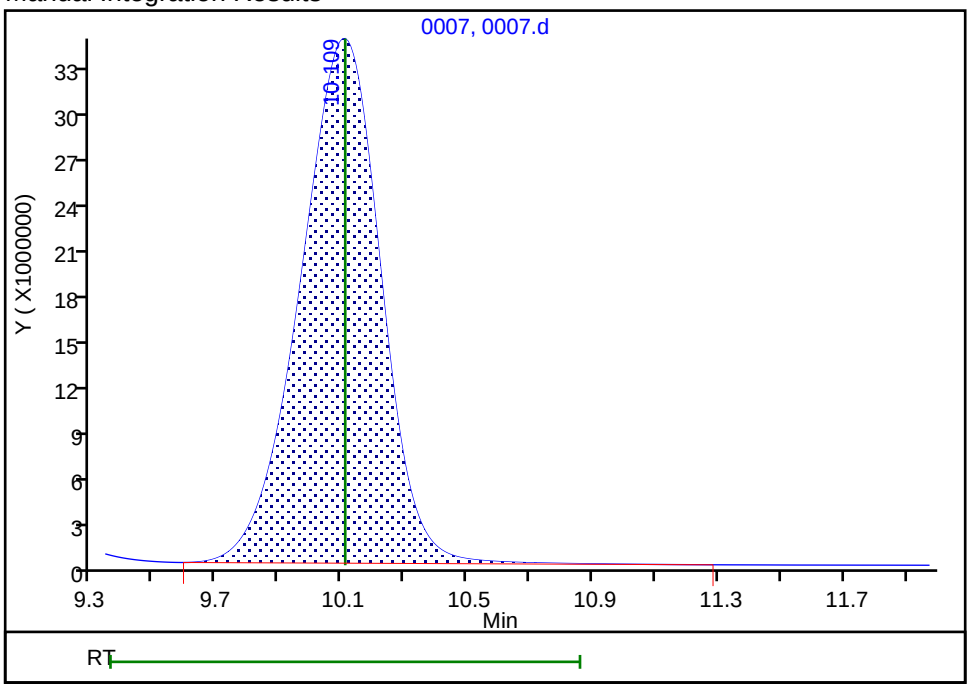
Processing Integration Results

RT: 10.11
Area: 612876229
Amount: 53.813182
Amount Units: ug/ml



Manual Integration Results

RT: 10.11
Area: 612727524
Amount: 53.823674
Amount Units: ug/ml



Reviewer: foxr, 09-Mar-2022 11:20:22
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0008.d
Lims ID: std L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 08-Mar-2022 15:19:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109076-006
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 09-Mar-2022 11:31:19 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1639

First Level Reviewer: foxr Date: 09-Mar-2022 11:21:07

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.534	2.534	0.000	109795474	8.00	7.99	
2 Chloride	3.775	3.775	0.000	2103914382	120.0	119.7	
3 Nitrite as N	4.492	4.492	0.000	238601878	NC	NC	
4 Bromide	5.367	5.367	0.000	40085540	8.00	8.02	
5 Nitrate as N	6.025	6.025	0.000	275281788	NC	NC	M
7 Orthophosphate as P	9.117	9.117	0.000	75213800	NC	NC	
6 Sulfate	10.167	10.167	0.000	1354416160	120.0	118.2	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

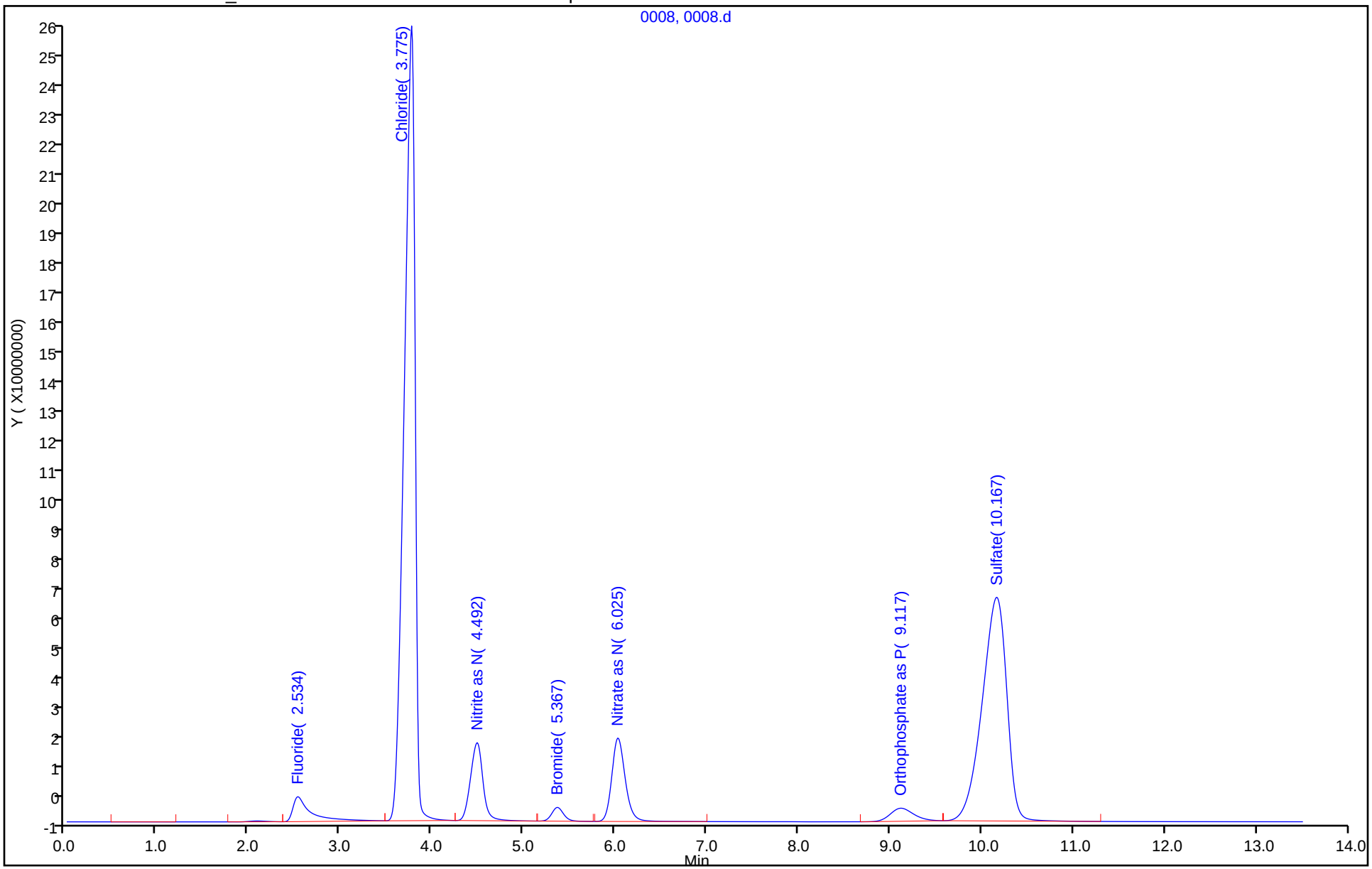
IC Cal low_00625 Amount Added: 0.80 Units: mL
IC CAL cl/so4_00409 Amount Added: 2.40 Units: mL

Report Date: 09-Mar-2022 11:31:19 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0008.d

Injection Date:	08-Mar-2022 15:19:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	std L5			Worklist Smp#:	6
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

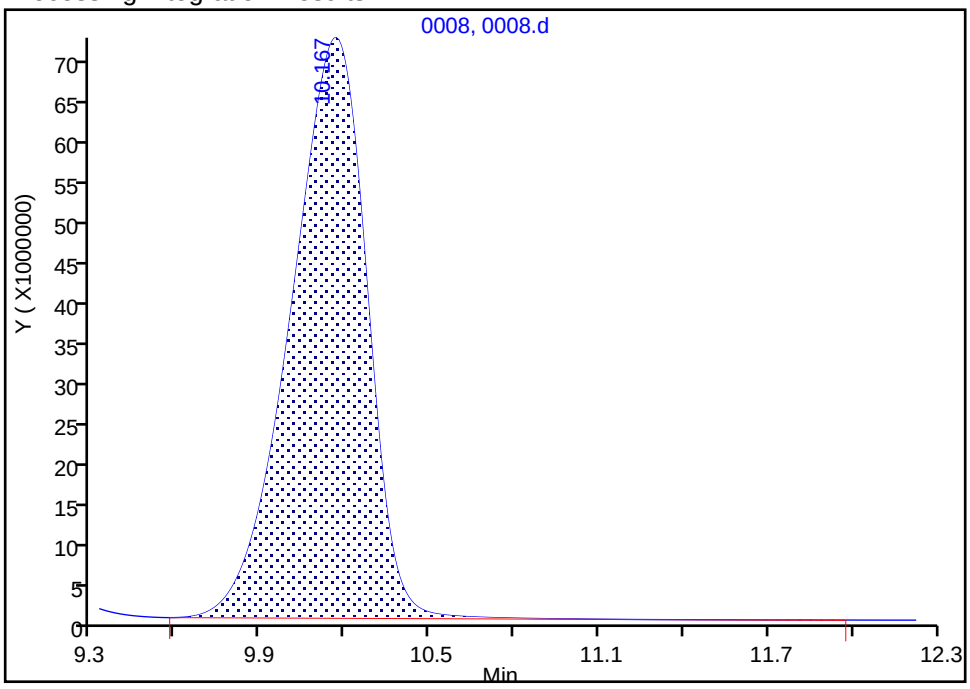
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0008.d				
Injection Date:	08-Mar-2022 15:19:00	Instrument ID:	WC_IonChrom11		
Lims ID:	std L5				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

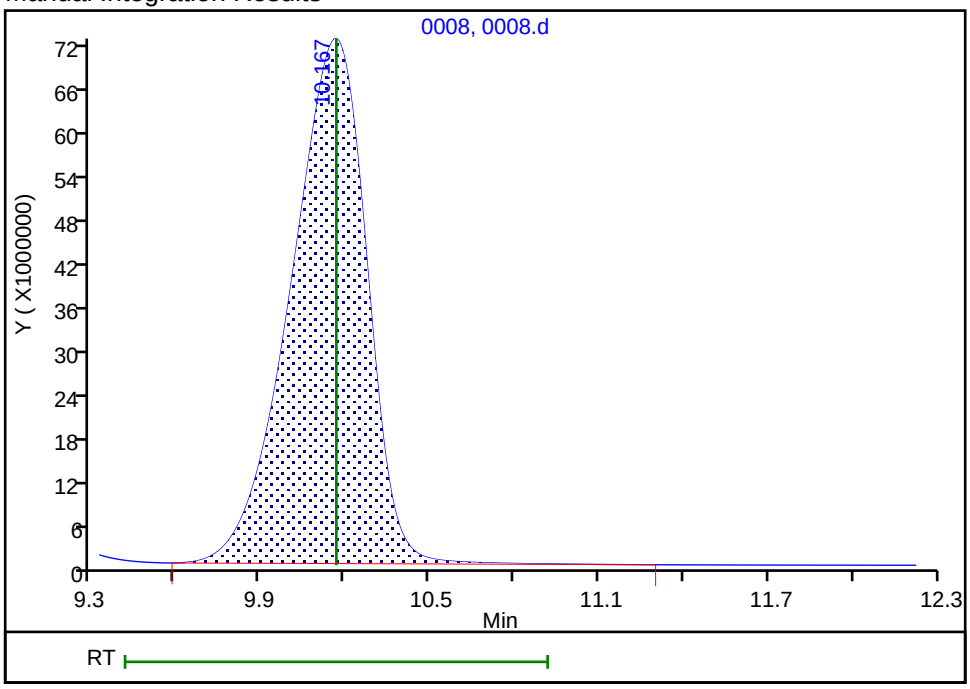
Processing Integration Results

RT: 10.17
Area: 1354987494
Amount: 118.2031
Amount Units: ug/ml



Manual Integration Results

RT: 10.17
Area: 1354416160
Amount: 118.2021
Amount Units: ug/ml



Reviewer: foxr, 09-Mar-2022 11:21:03
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d
Lims ID: std L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 08-Mar-2022 15:35:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109076-007
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 09-Mar-2022 11:31:19 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1639

First Level Reviewer: foxr Date: 09-Mar-2022 11:21:53

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.534	2.534	0.000	139733828	10.0	10.2	
2 Chloride	3.825	3.825	0.000	3595975763	200.0	204.1	
3 Nitrite as N	4.500	4.500	0.000	304414034	NC	NC	
4 Bromide	5.367	5.367	0.000	50747249	10.0	10.1	
5 Nitrate as N	6.025	6.025	0.000	354275020	NC	NC	M
7 Orthophosphate as P	9.109	9.109	0.000	97428311	NC	NC	M
6 Sulfate	10.242	10.242	0.000	2397756746	200.0	208.8	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

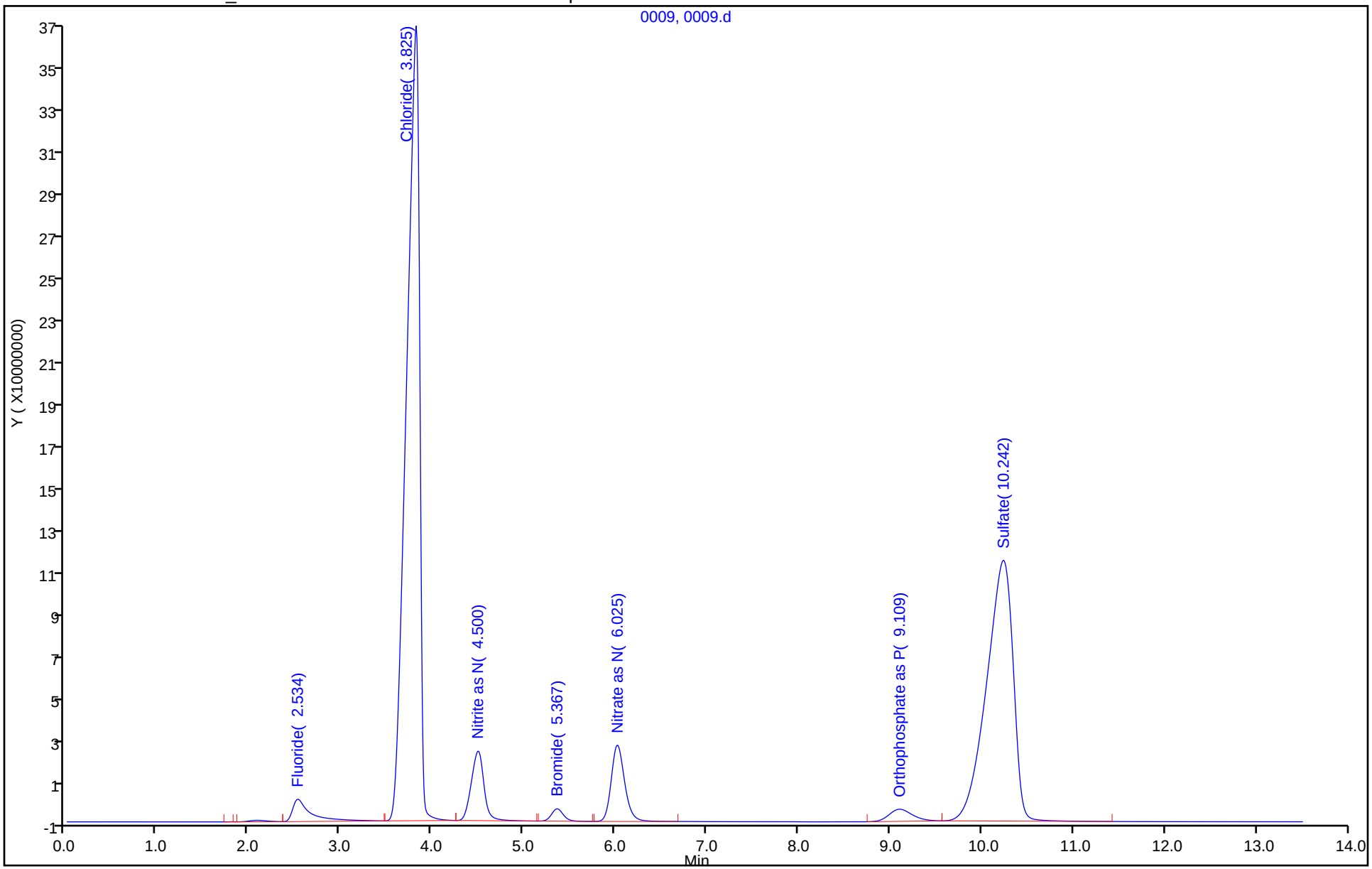
IC Cal low_00625 Amount Added: 1.00 Units: mL
IC CAL cl/so4_00409 Amount Added: 4.00 Units: mL

Report Date: 09-Mar-2022 11:31:19 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Injection Date:	08-Mar-2022 15:35:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	std L6			Worklist Smp#:	7
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

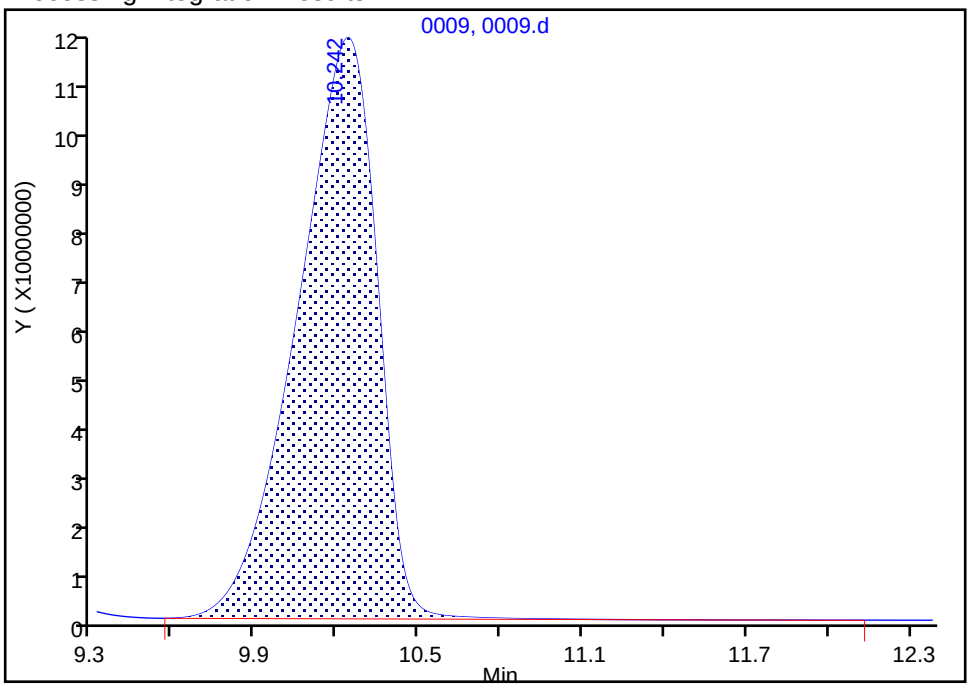
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d
Injection Date: 08-Mar-2022 15:35:00 Instrument ID: WC_IonChrom11
Lims ID: std L6
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

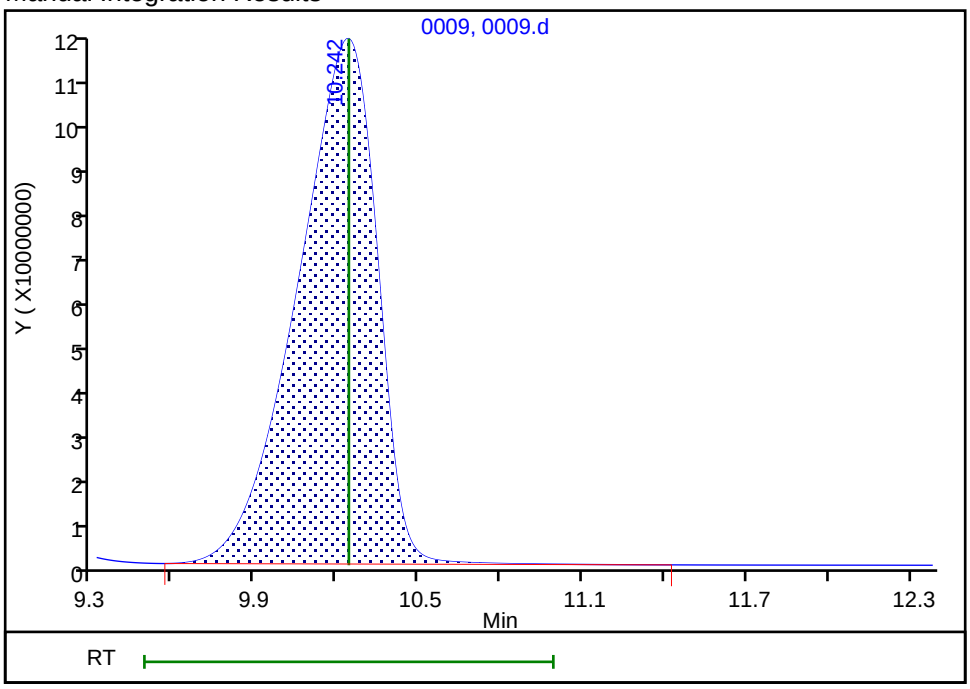
Processing Integration Results

RT: 10.24
Area: 2398996237
Amount: 208.8121
Amount Units: ug/ml



Manual Integration Results

RT: 10.24
Area: 2397756746
Amount: 208.7640
Amount Units: ug/ml



Reviewer: foxr, 09-Mar-2022 11:21:42
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

IC Instrument Information

WL: 109076 **Inst ID:** IC11 **Analysis Date:** 3-08-22 **Analyst:** RF

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	158860	3	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	158895	2	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	158899	3	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	158900	2	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	159346	3	F (Cl) NO2 Br NO3 PO4 SO4	MS/D	
☐	159155	1	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	157444	1	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
860	2	F (Cl) NO2 Br NO3 PO4 (SO4)	10X	test strip
895	2	F (Cl) NO2 Br NO3 PO4 (SO4)	5X 20X	test strip
899	2	F (Cl) NO2 Br NO3 PO4 (SO4)	10X 20X	test strip
900	2	F (Cl) NO2 Br NO3 PO4 (SO4)	5X 20X	test strip
346	3	F (Cl) NO2 Br NO3 PO4 SO4	5X	test strip
155	1	F Cl NO2 Br NO3 PO4 (SO4)	5X	RERUN
444	1	F Cl NO2 Br NO3 PO4 (SO4)	10X	test strip
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		

Eurofins Environment Testing America
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	09-Mar-2022 11:32:17

No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b
Inj Date : 08-Mar-2022 14:13:00, Sublist: chrom-Anions_IC11*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-798158	138396(		0.999
2 Chloride					-120525'	176801(		1.000
3 Nitrite as N	-171601'	2992402		0.999				
4 Bromide					-119376	5012575		1.000
5 Nitrate as N	-254783.	3446589		0.998				
7 Orthophosphate as P	-938543	9427828		0.995				
6 Sulfate					-736185(	1152075		0.996

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	09-Mar-2022 11:32:17

No.Compounds:7
Sublist: chrom-Anions_IC11*sub1
Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0004.d		
	Inj Date: 08-Mar-2022 14:13:00	Worklist: 109076	Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0005.d		
	Inj Date: 08-Mar-2022 14:29:00	Worklist: 109076	Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0006.d		
	Inj Date: 08-Mar-2022 14:46:00	Worklist: 109076	Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0007.d		
	Inj Date: 08-Mar-2022 15:02:00	Worklist: 109076	Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0008.d		
	Inj Date: 08-Mar-2022 15:19:00	Worklist: 109076	Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d		
	Inj Date: 08-Mar-2022 15:35:00	Worklist: 109076	Sample#: 7

Start Cal Date: 08-Mar-2022 13:57:00 End Cal Date: 08-Mar-2022 15:35:00

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					
25473365	25325412	25870651	28064851	29825235	30441403	-1716017			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		29924027		
M5094673	M12662706	M25870651	112259404	238601878	304414034				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				
5 Nitrate as N				Signal: 1					
Error: CorrCoef									
28508190	27667832	28097540	31091177	34410224	35427502	-2547832			0.998
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		34465890		
M5701638	M13833916	M28097540	M124364709	M275281788	M354275020				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				
7 Orthophosphate as P				Signal: 1					
7415400	6680524	7048847	8323495	9401725	9742831	-938543			0.995
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		9427828		
1483080	3340262	7048847	33293978	75213800	M97428311				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	09-Mar-2022 11:32:17

No.Compounds:7
Sublist: chrom-Anions_IC11*sub1
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0004.d		
	Inj Date: 08-Mar-2022 14:13:00	Worklist: 109076	Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0005.d		
	Inj Date: 08-Mar-2022 14:29:00	Worklist: 109076	Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0006.d		
	Inj Date: 08-Mar-2022 14:46:00	Worklist: 109076	Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0007.d		
	Inj Date: 08-Mar-2022 15:02:00	Worklist: 109076	Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0008.d		
	Inj Date: 08-Mar-2022 15:19:00	Worklist: 109076	Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d		
	Inj Date: 08-Mar-2022 15:35:00	Worklist: 109076	Sample#: 7

Start Cal Date: 08-Mar-2022 13:57:00 End Cal Date: 08-Mar-2022 15:35:00

Individual Compound Calibration Parameters

Quant Method: ESTD	RF Calibration: Replace	
Rule Name: Linear1	Curve: Linear	Weighting: Conc
Origin: None	Error: CorrCoef	Error Limit: 1.00
RF %Dif: 0.0	SPCC Limit: 0.0	CCC Limit: 0.0
Dependent Variable: Resp		

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
Error: raw_COD									
8233330	14048588	13388194	12905286	13724434	13973383	-798158			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		13839601		
M1646666	M7024294	M13388194	M51621142	109795474	139733828				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				
2 Chloride				Signal: 1					
11341567	11225706	11712695	16642846	17532620	17979879	-12052578			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		17680169		
M11341567	28064265	58563476	998570762	2103914382	3595975763				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				
4 Bromide				Signal: 1					
4762230	4785280	4606452	4824363	5010693	5074725	-119376			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		5012575		
952446	2392640	M4606452	19297450	40085540	50747249				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				
6 Sulfate				Signal: 1					
Error: raw_COD									
8014777	7753590	7868630	10212125	11286801	11988784	-7361856			0.996
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		11520755		
M8014777	M19383975	M39343151	M612727524	M1354416160	M2397756746				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0010.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 08-Mar-2022 15:51:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109076-008
Misc. Info.: 10
Operator ID: Instrument ID: WC_IonChrom11
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 09-Mar-2022 12:41:24 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1639

First Level Reviewer: foxr Date: 08-Mar-2022 16:13:58

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.534	2.534	0.000	51012589	4.00	3.74	
2 Chloride	3.750	3.750	0.000	1443605729	80.0	82.3	
3 Nitrite as N	4.475	4.475	0.000	112277946	NC	NC	
4 Bromide	5.375	5.375	0.000	19912278	4.00	4.00	
5 Nitrate as N	6.042	6.042	0.000	128038278	NC	NC	M
7 Orthophosphate as P	9.150	9.150	0.000	33508065	NC	NC	M
6 Sulfate	10.134	10.134	0.000	917570809	80.0	80.3	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

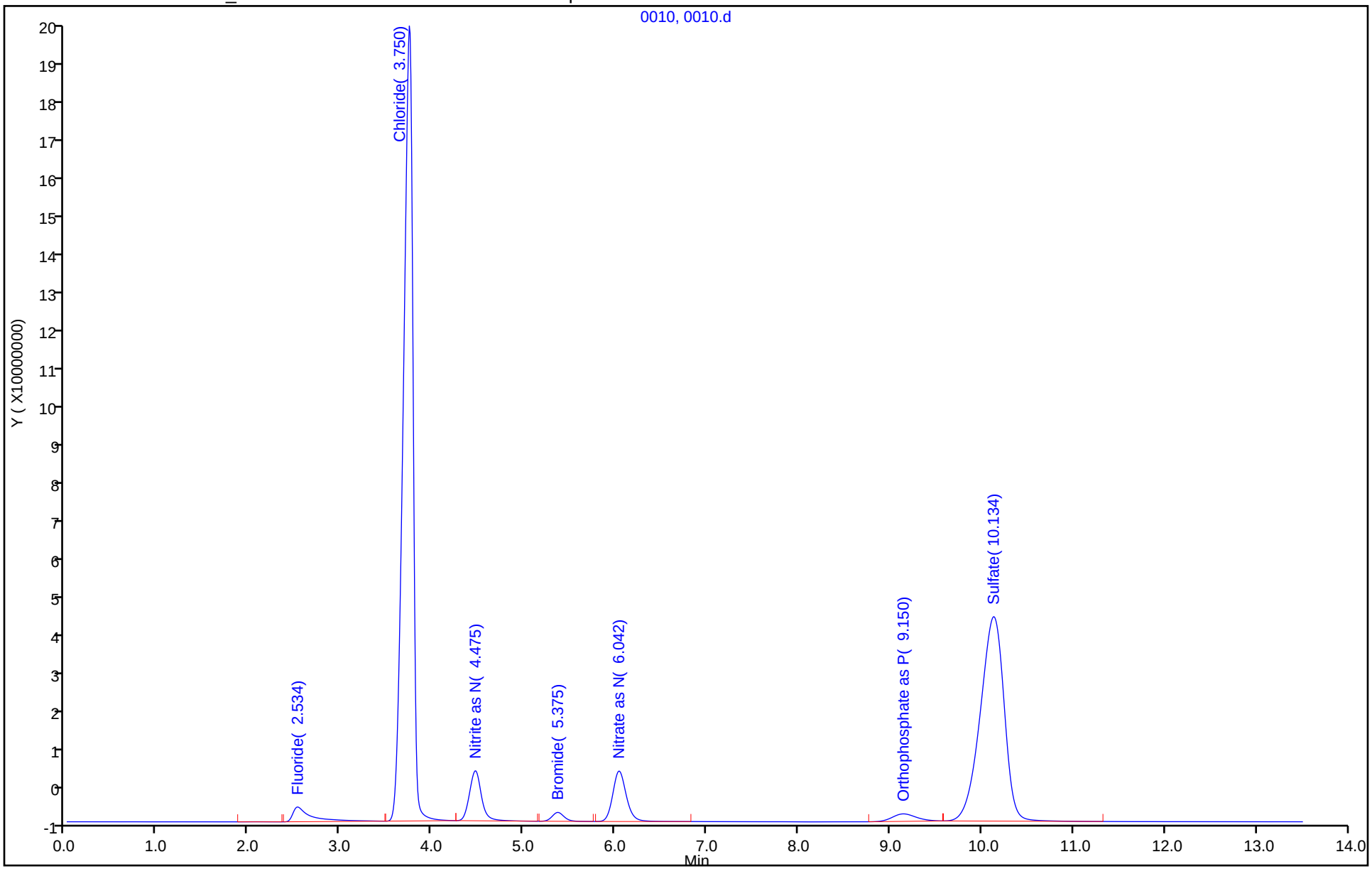
IC SO4 ICV_00022	Amount Added:	0.40	Units: mL
Cl ICV Std_00002	Amount Added:	0.40	Units: mL
IC ICV 5_00353	Amount Added:	0.40	Units: mL

Report Date: 09-Mar-2022 12:41:24 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0010.d

Injection Date:	08-Mar-2022 15:51:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ICV			Worklist Smp#:	8
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

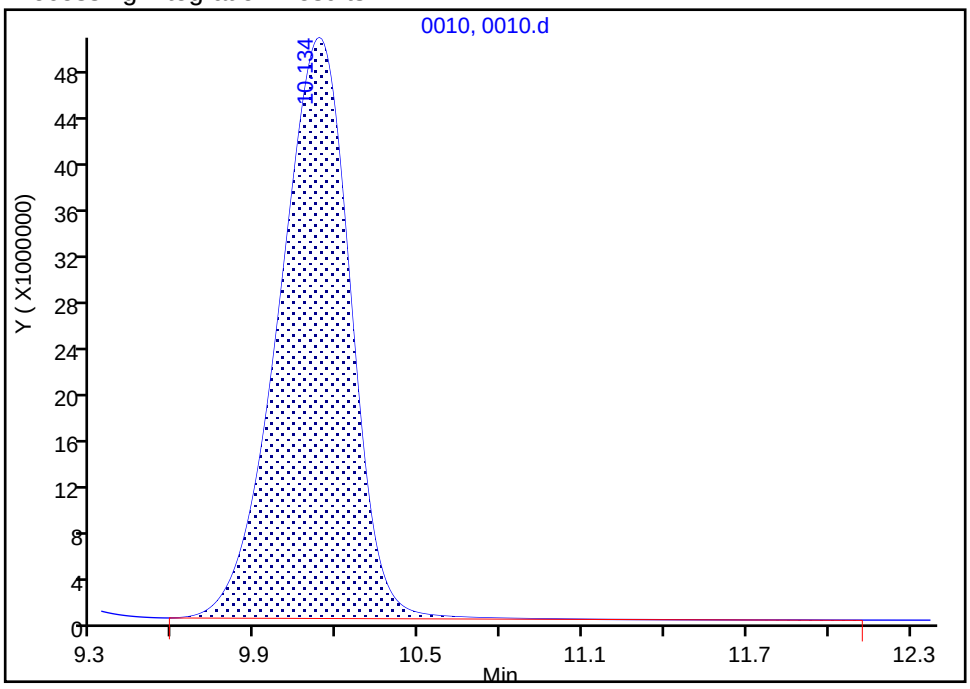
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0010.d
Injection Date: 08-Mar-2022 15:51:00 Instrument ID: WC_IonChrom11
Lims ID: ICV
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

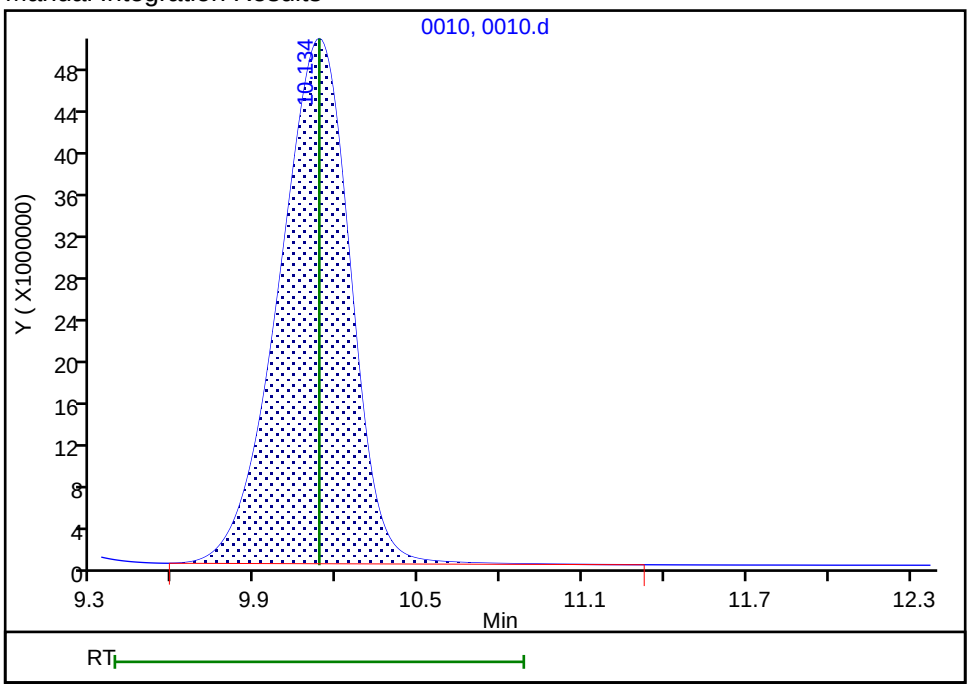
Processing Integration Results

RT: 10.13
Area: 918109132
Amount: 80.330756
Amount Units: ug/ml



Manual Integration Results

RT: 10.13
Area: 917570809
Amount: 80.284029
Amount Units: ug/ml



Reviewer: foxr, 09-Mar-2022 11:22:35
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0011.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 08-Mar-2022 16:08:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109076-009
Misc. Info.: 11
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 09-Mar-2022 12:41:24 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1639

First Level Reviewer: foxr Date: 09-Mar-2022 11:23:33

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.534				ND	U
2 Chloride	3.675	3.750	-0.075	210728		0.6936	M
3 Nitrite as N	4.467	4.475	-0.008	81068		NC	M
4 Bromide		5.375				ND	U
5 Nitrate as N	6.075	6.042	0.033	80089		NC	M
7 Orthophosphate as P	9.209	9.150	0.059	354632		NC	M
6 Sulfate	10.009	10.134	-0.125	201253		0.6565	M

QC Flag Legend

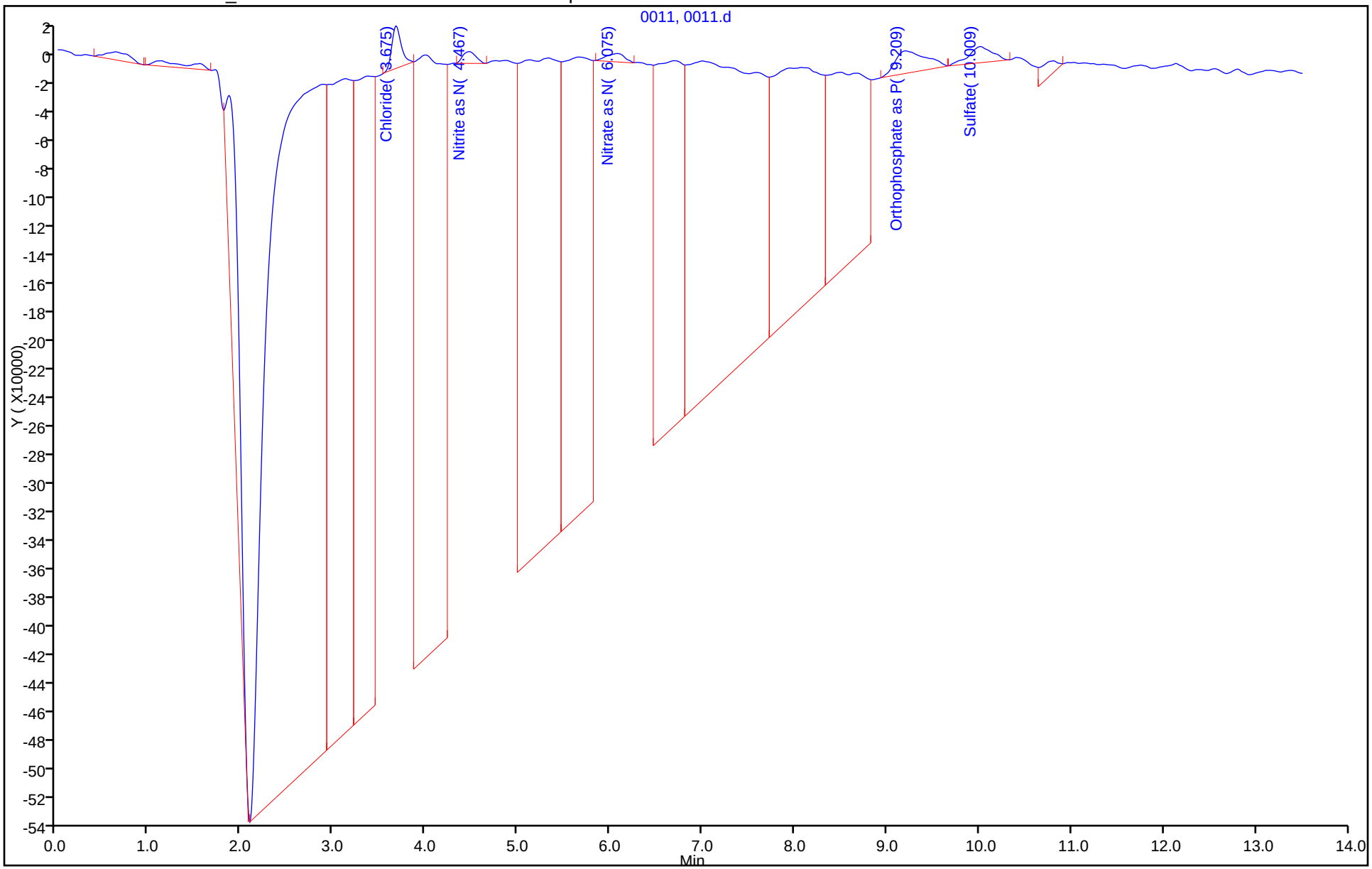
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 09-Mar-2022 12:41:25 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0011.d

Injection Date:	08-Mar-2022 16:08:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ICB			Worklist Smp#:	9
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

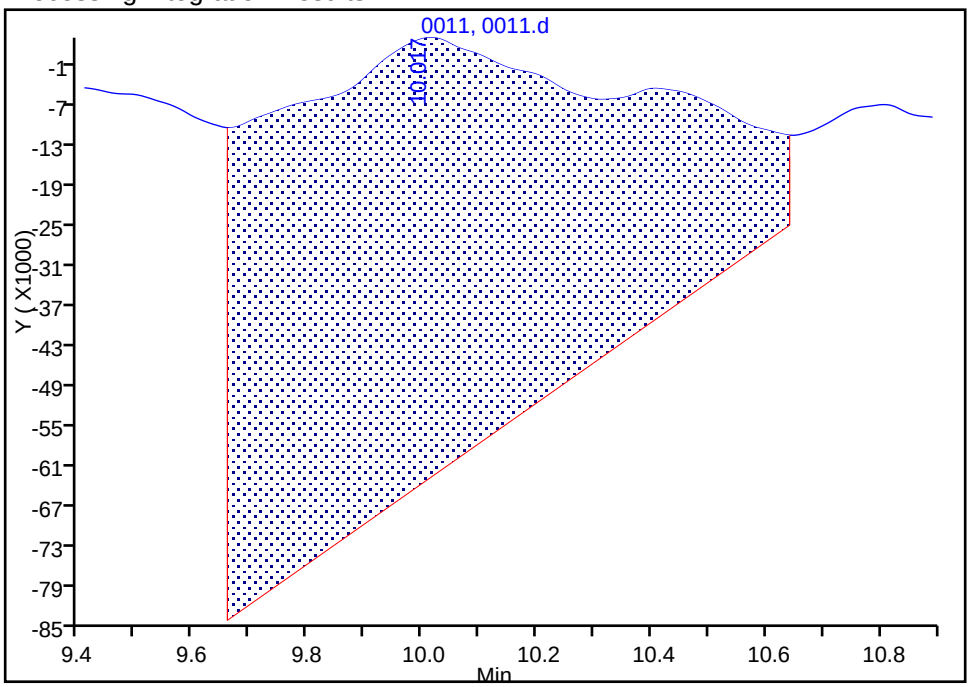
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0011.d
Injection Date: 08-Mar-2022 16:08:00 Instrument ID: WC_IonChrom11
Lims ID: ICB
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

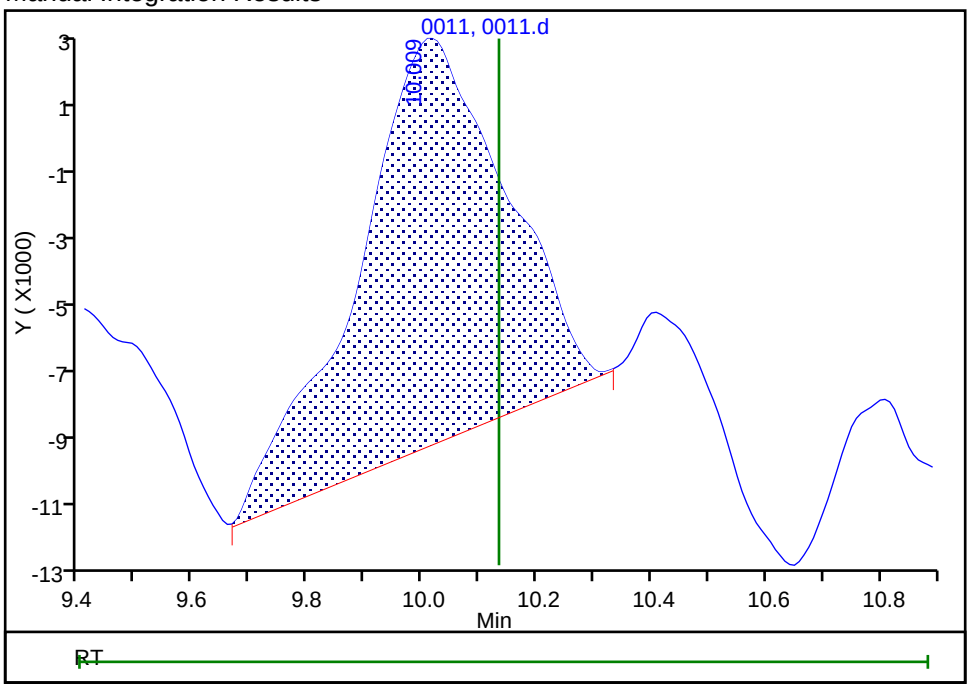
RT: 10.02
Area: 2918704
Amount: 0.892351
Amount Units: ug/ml

Processing Integration Results



RT: 10.01
Area: 201253
Amount: 0.656477
Amount Units: ug/ml

Manual Integration Results



Reviewer: foxr, 09-Mar-2022 11:23:22
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

IC Instrument Information

WL: 109245 **Inst ID:** IC11 **Analysis Date:** 3-15-22 **Analyst:** RF

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	159137	5	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	159058	2	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	159221	2	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	163230	1	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	159300	1	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	159461	1	F (Cl) NO2 Br NO3 PO4 SO4	MS/D	
☐	159452	5	F (Cl) NO2 (Br) NO3 PO4 (SO4)	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
058	2	F (Cl) NO2 Br NO3 PO4 (SO4)	5X	test
221	2	F Cl NO2 Br NO3 PO4 (SO4)	20X	rerun
230	1	F (Cl) NO2 Br NO3 PO4 (SO4)	100X	rerun
300	1	F Cl NO2 Br NO3 PO4 (SO4)	10X	test
461	1	F (Cl) NO2 Br NO3 PO4 SO4	50X	rerun
452	5	F (Cl) NO2 (Br) NO3 PO4 (SO4)	5x10x20X	test
		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 Summary Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	09-Mar-2022 11:32:17

No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b
Inj Date : 08-Mar-2022 14:13:00, Sublist: chrom-Anions_IC11*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-798158	138396(		0.999
2 Chloride					-120525'	176801(		1.000
3 Nitrite as N	-171601'	2992402		0.999				
4 Bromide					-119376	5012575		1.000
5 Nitrate as N	-254783.	3446589		0.998				
7 Orthophosphate as P	-938543	9427828		0.995				
6 Sulfate					-736185(	1152075		0.996

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	09-Mar-2022 11:32:17
No.Compounds:	7		
Sublist:	chrom-Anions_IC11*sub1		
Limit Group:	Wet - Anions		

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0004.d		
	Inj Date: 08-Mar-2022 14:13:00	Worklist: 109076	Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0005.d		
	Inj Date: 08-Mar-2022 14:29:00	Worklist: 109076	Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0006.d		
	Inj Date: 08-Mar-2022 14:46:00	Worklist: 109076	Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0007.d		
	Inj Date: 08-Mar-2022 15:02:00	Worklist: 109076	Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0008.d		
	Inj Date: 08-Mar-2022 15:19:00	Worklist: 109076	Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d		
	Inj Date: 08-Mar-2022 15:35:00	Worklist: 109076	Sample#: 7

Start Cal Date: 08-Mar-2022 13:57:00 End Cal Date: 08-Mar-2022 15:35:00

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					
25473365	25325412	25870651	28064851	29825235	30441403	-1716017			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		29924027		
M5094673	M12662706	M25870651	112259404	238601878	304414034				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				
5 Nitrate as N				Signal: 1					
Error: CorrCoef									
28508190	27667832	28097540	31091177	34410224	35427502	-2547832			0.998
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		34465890		
M5701638	M13833916	M28097540	M124364709	M275281788	M354275020				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				
7 Orthophosphate as P				Signal: 1					
7415400	6680524	7048847	8323495	9401725	9742831	-938543			0.995
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		9427828		
1483080	3340262	7048847	33293978	75213800	M97428311				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	09-Mar-2022 11:32:17

No.Compounds:7
Sublist: chrom-Anions_IC11*sub1
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0004.d		
	Inj Date: 08-Mar-2022 14:13:00	Worklist: 109076	Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0005.d		
	Inj Date: 08-Mar-2022 14:29:00	Worklist: 109076	Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0006.d		
	Inj Date: 08-Mar-2022 14:46:00	Worklist: 109076	Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0007.d		
	Inj Date: 08-Mar-2022 15:02:00	Worklist: 109076	Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0008.d		
	Inj Date: 08-Mar-2022 15:19:00	Worklist: 109076	Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d		
	Inj Date: 08-Mar-2022 15:35:00	Worklist: 109076	Sample#: 7

Start Cal Date: 08-Mar-2022 13:57:00 End Cal Date: 08-Mar-2022 15:35:00

Individual Compound Calibration Parameters

Quant Method: ESTD	RF Calibration: Replace	
Rule Name: Linear1	Curve: Linear	Weighting: Conc
Origin: None	Error: CorrCoef	Error Limit: 1.00
RF %Dif: 0.0	SPCC Limit: 0.0	CCC Limit: 0.0
Dependent Variable: Resp		

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
Error: raw_COD									
8233330	14048588	13388194	12905286	13724434	13973383	-798158			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		13839601		
M1646666	M7024294	M13388194	M51621142	109795474	139733828				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				
2 Chloride				Signal: 1					
11341567	11225706	11712695	16642846	17532620	17979879	-12052578			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		17680169		
M11341567	28064265	58563476	998570762	2103914382	3595975763				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				
4 Bromide				Signal: 1					
4762230	4785280	4606452	4824363	5010693	5074725	-119376			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		5012575		
952446	2392640	M4606452	19297450	40085540	50747249				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				
6 Sulfate				Signal: 1					
Error: raw_COD									
8014777	7753590	7868630	10212125	11286801	11988784	-7361856			0.996
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		11520755		
M8014777	M19383975	M39343151	M612727524	M1354416160	M2397756746				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0001.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 15-Mar-2022 09:54:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109245-001
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Mar-2022 11:02:40 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1665

First Level Reviewer: jindaratc Date: 15-Mar-2022 12:23:06

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.517	2.517	0.000	60715847	5.00	4.44	a
2 Chloride	3.742	3.742	0.000	1730514738	100.0	98.6	
3 Nitrite as N	4.459	4.459	0.000	141004682	NC	NC	
4 Bromide	5.351	5.351	0.000	23550758	5.00	4.72	
5 Nitrate as N	6.017	6.017	0.000	152056339	NC	NC	M
7 Orthophosphate as P	9.076	9.076	0.000	42673910	NC	NC	
6 Sulfate	10.134	10.134	0.000	1100639417	100.0	96.2	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

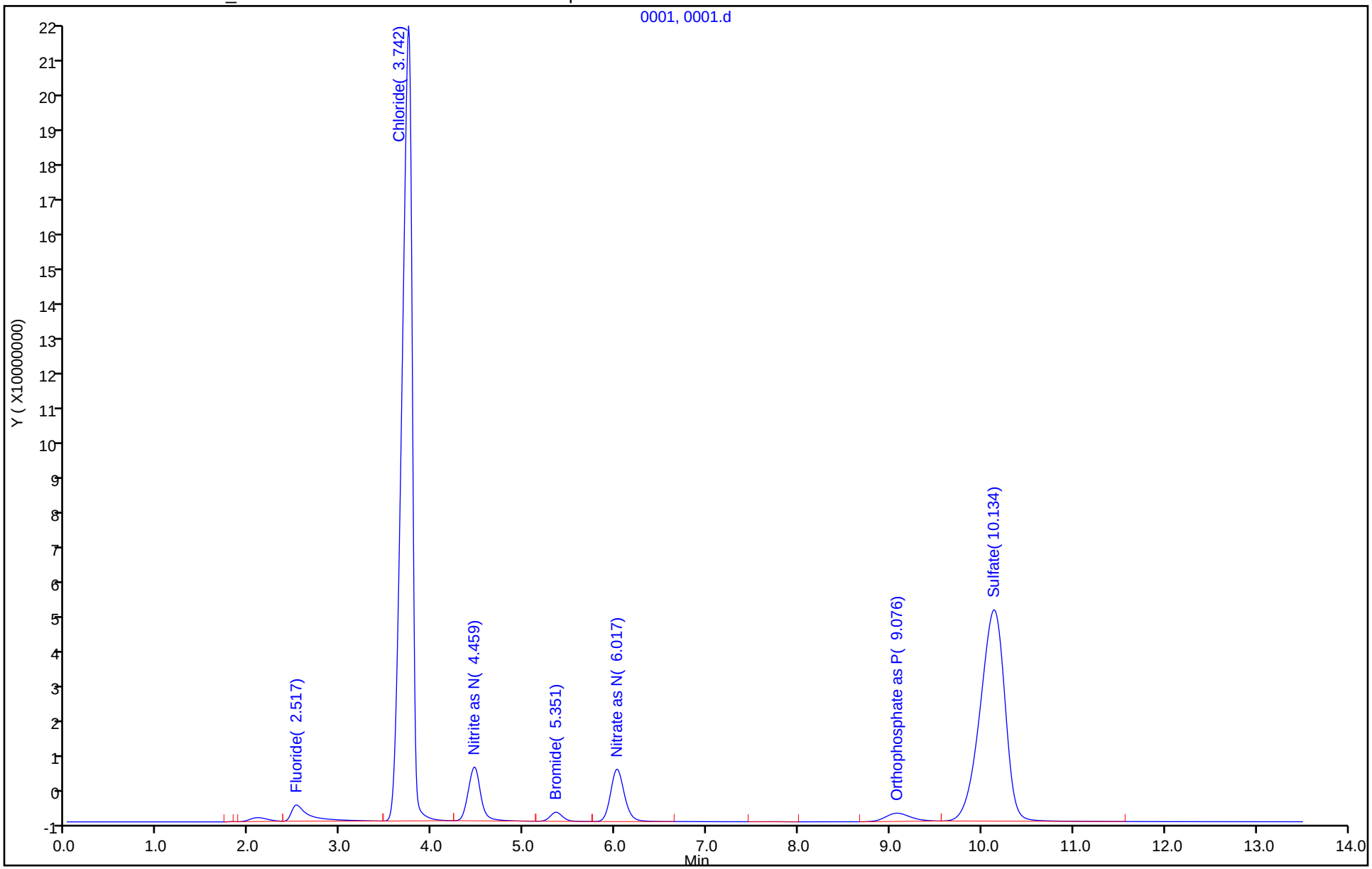
IC LCS_01862 Amount Added: 10.00 Units: mL

Report Date: 16-Mar-2022 11:02:41 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0001.d

Injection Date:	15-Mar-2022 09:54:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	CCV			Worklist Smp#:	1
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

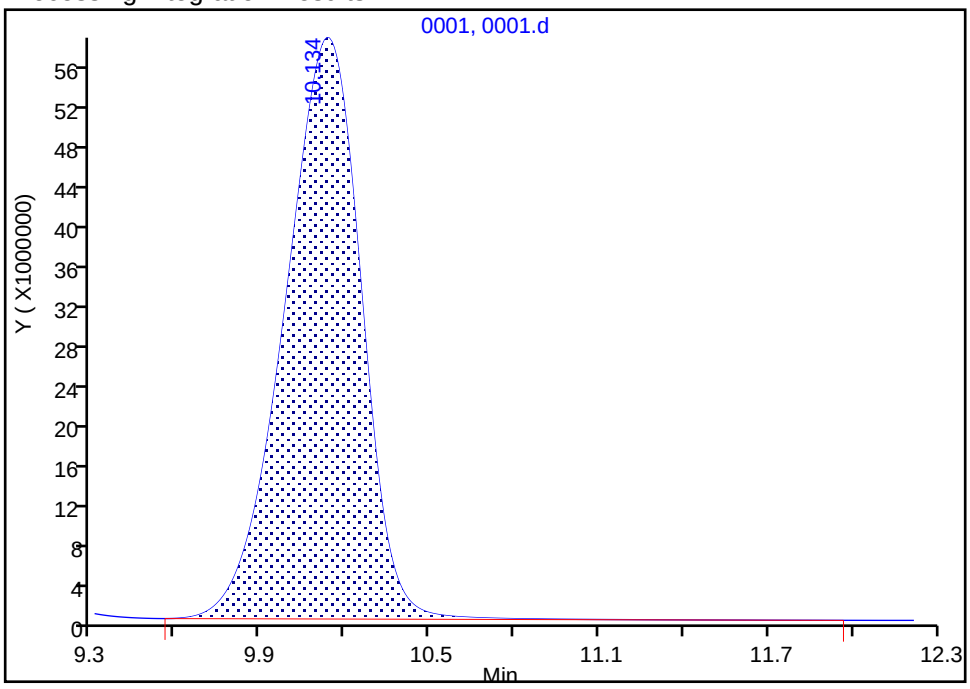
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0001.d
Injection Date: 15-Mar-2022 09:54:00 Instrument ID: WC_IonChrom11
Lims ID: CCV
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

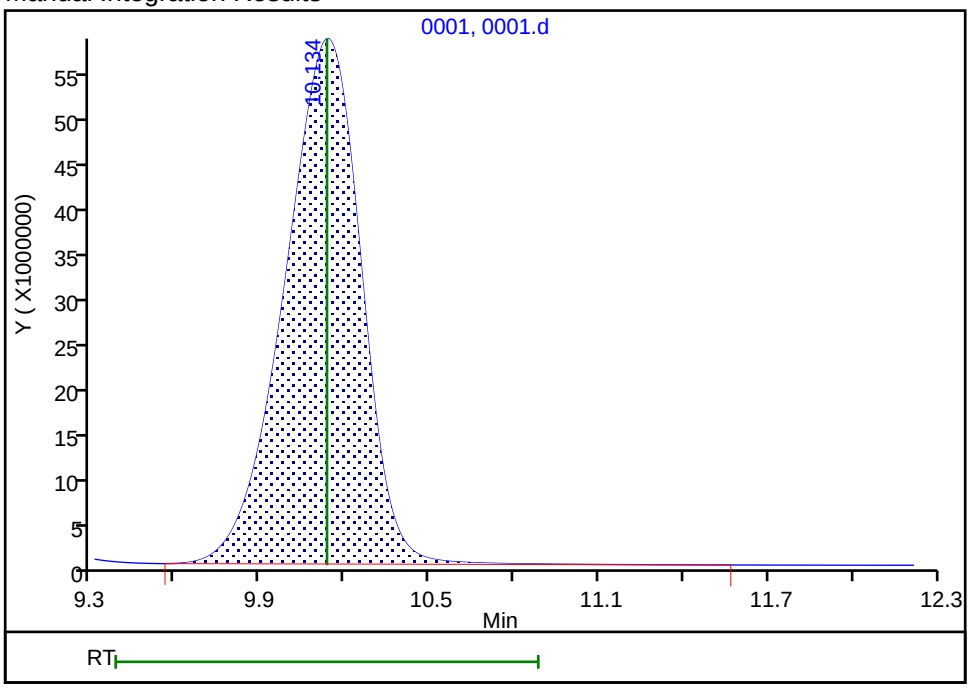
Processing Integration Results

RT: 10.13
Area: 1100770683
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.13
Area: 1100639417
Amount: 96.174360
Amount Units: ug/ml



Reviewer: foxr, 16-Mar-2022 10:40:11
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0002.d
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 15-Mar-2022 10:10:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109245-002
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Mar-2022 11:02:41 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1665

First Level Reviewer: foxr Date: 16-Mar-2022 10:41:38

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.100	2.100	0.000	9464808		0.7416	M
2 Chloride	3.659	3.659	0.000	362247		0.7022	M
3 Nitrite as N		4.459				ND	
4 Bromide		5.351				ND	
5 Nitrate as N		6.017				ND	
7 Orthophosphate as P	9.134	9.134	0.000	510195		NC	
6 Sulfate	10.000	10.000	0.000	281133		0.6634	M

QC Flag Legend

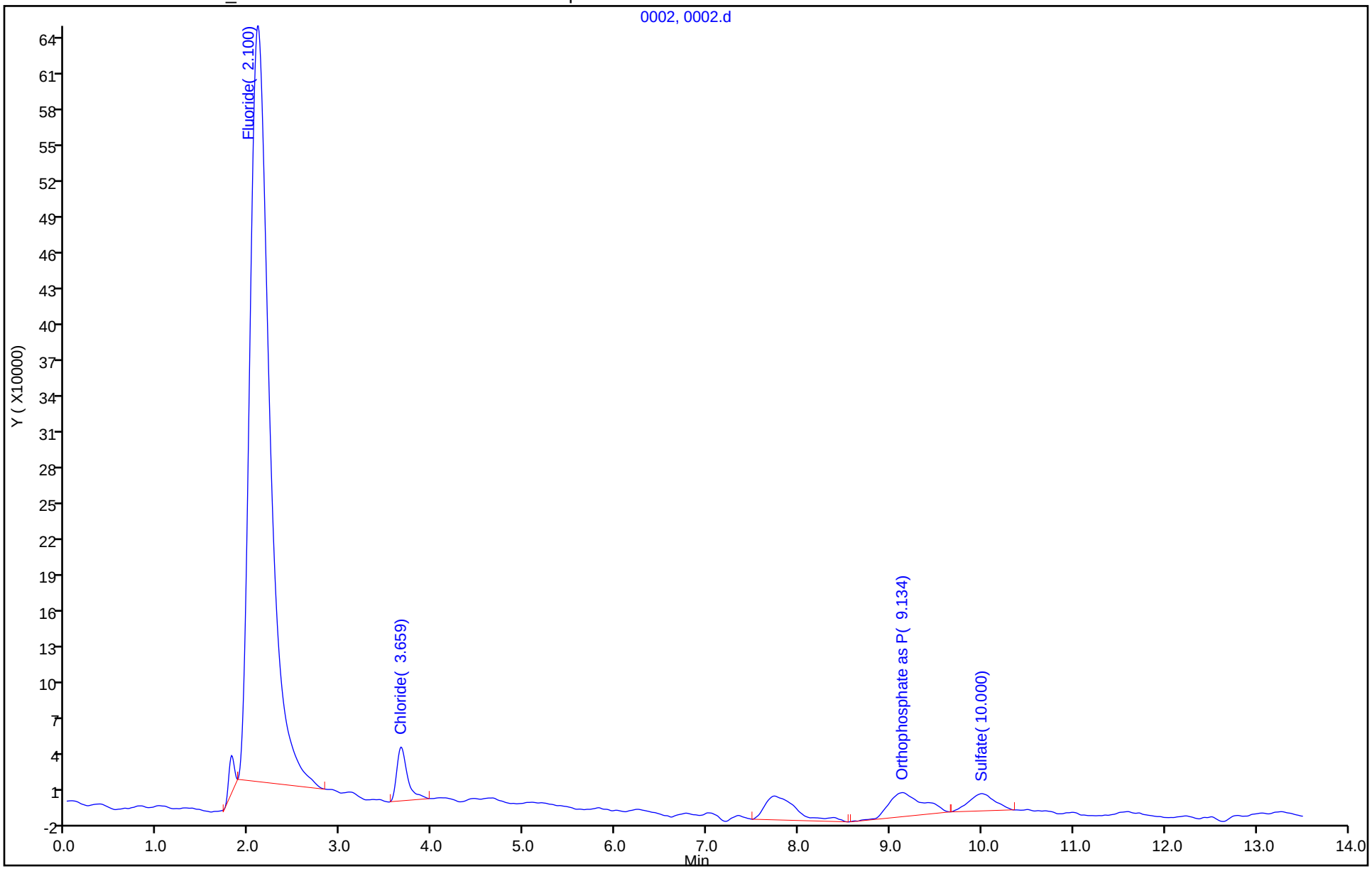
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 16-Mar-2022 11:02:41 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0002.d

Injection Date:	15-Mar-2022 10:10:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	CCB			Worklist Smp#:	2
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

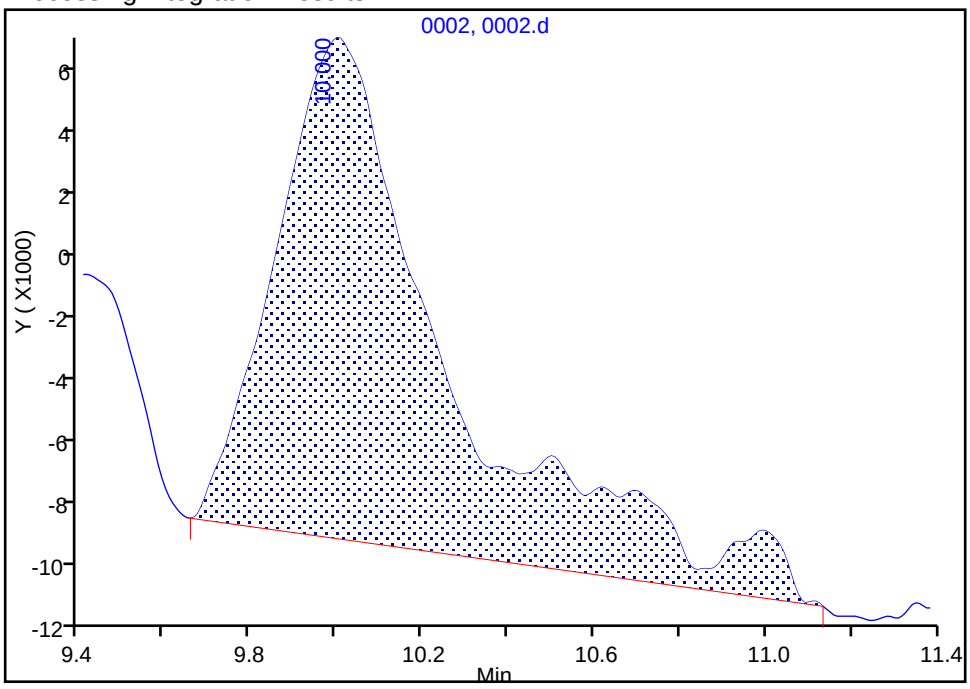
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0002.d
Injection Date: 15-Mar-2022 10:10:00 Instrument ID: WC_IonChrom11
Lims ID: CCB
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

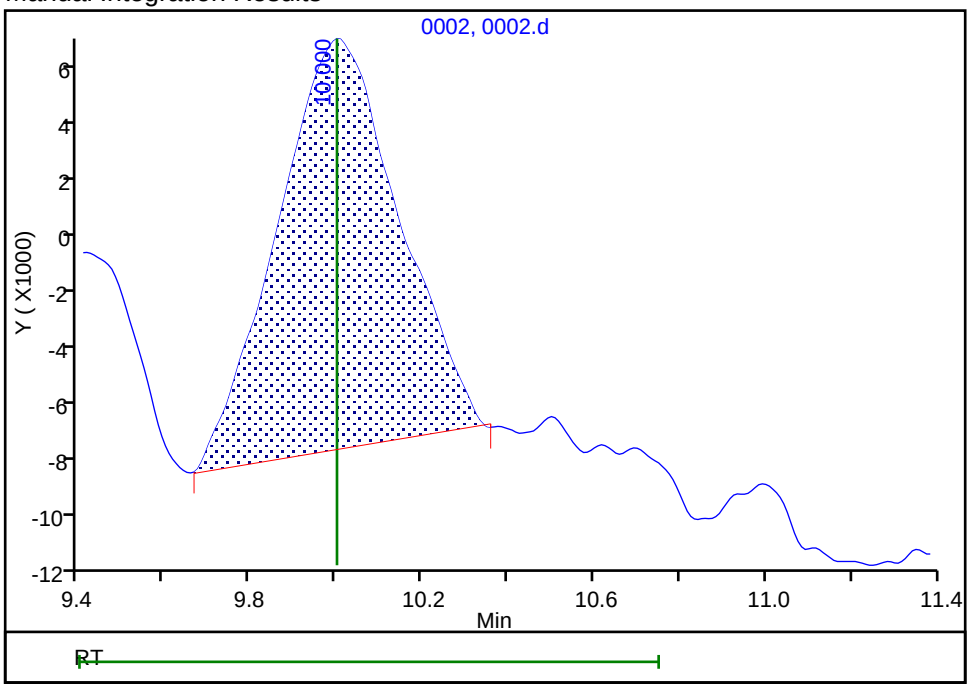
Processing Integration Results

RT: 10.00
Area: 438630
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.00
Area: 281133
Amount: 0.663410
Amount Units: ug/ml



Reviewer: foxr, 16-Mar-2022 10:41:35
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0003.d
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 15-Mar-2022 10:27:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109245-003
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Mar-2022 11:02:41 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1665

First Level Reviewer: foxr Date: 16-Mar-2022 10:40:50

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.525	2.525	0.000	5186454	0.5000	0.4324	M
2 Chloride	3.675	3.675	0.000	59714400	5.00	4.06	
3 Nitrite as N	4.442	4.442	0.000	12784282	NC	NC	
4 Bromide	5.367	5.367	0.000	2315525	0.5000	0.4858	
5 Nitrate as N	6.042	6.042	0.000	13584249	NC	NC	
7 Orthophosphate as P	9.134	9.134	0.000	3306690	NC	NC	
6 Sulfate	10.050	10.050	0.000	40870243	5.00	4.19	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

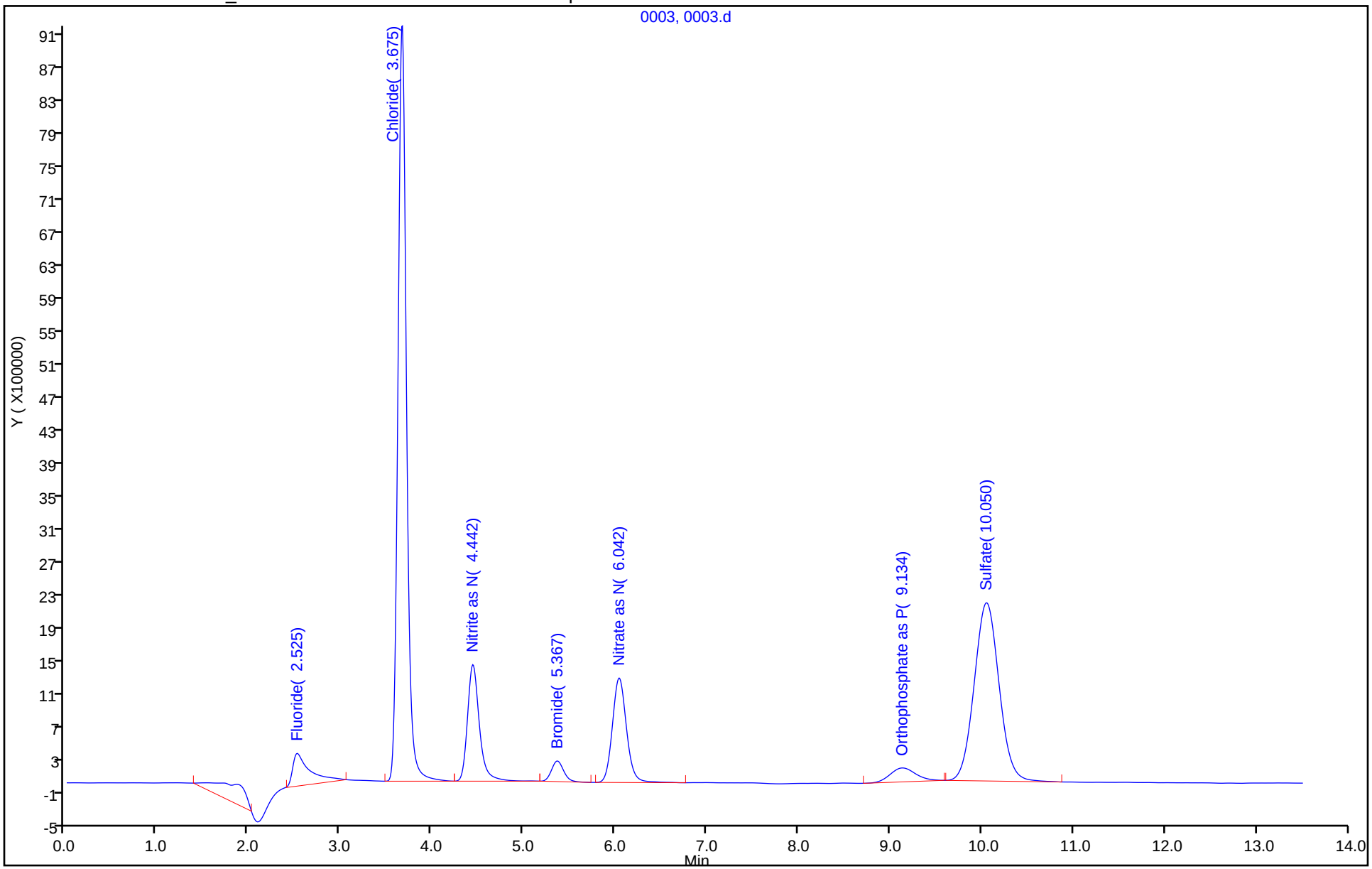
IC CAL cl/so4_00410 Amount Added: 0.20 Units: mL
IC Cal low_00626 Amount Added: 0.10 Units: mL

Report Date: 16-Mar-2022 11:02:42 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0003.d

Injection Date:	15-Mar-2022 10:27:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	MRL			Worklist Smp#:	3
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

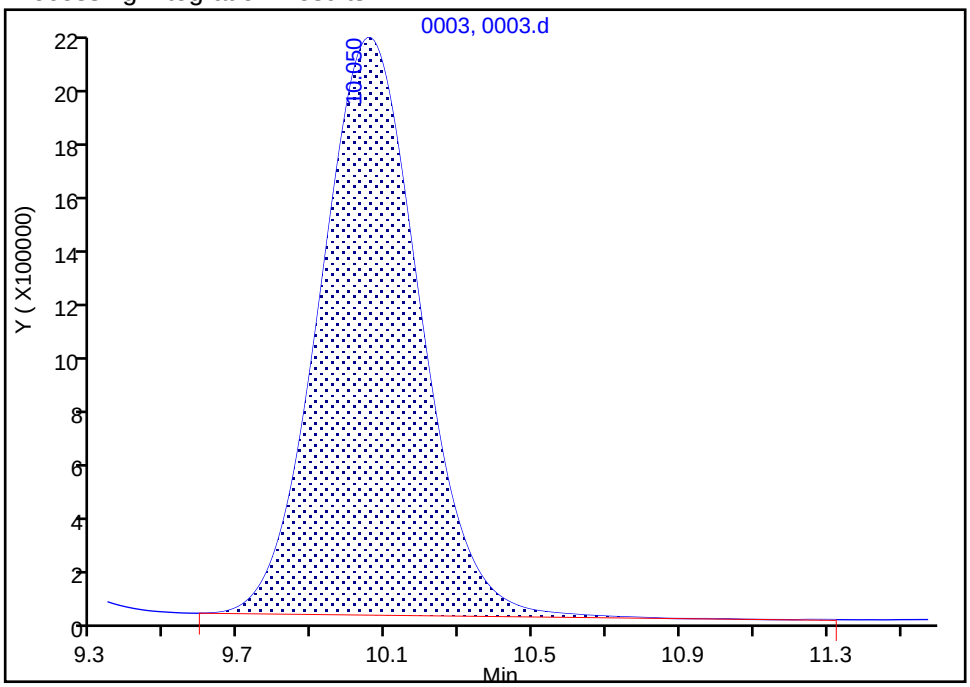
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0003.d
Injection Date: 15-Mar-2022 10:27:00 Instrument ID: WC_IonChrom11
Lims ID: MRL
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

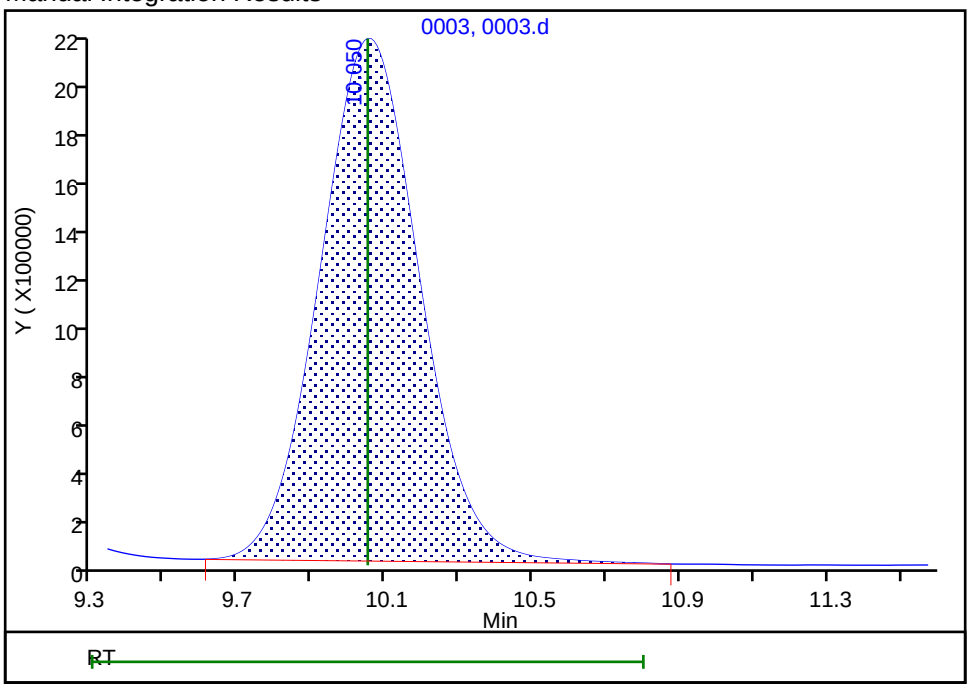
Processing Integration Results

RT: 10.05
Area: 40866685
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.05
Area: 40870243
Amount: 4.186540
Amount Units: ug/ml



Reviewer: foxr, 16-Mar-2022 10:40:48
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0004.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 15-Mar-2022 10:43:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109245-004
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Mar-2022 11:02:42 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1665

First Level Reviewer: foxr Date: 15-Mar-2022 13:38:37

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.517	2.517	0.000	60009264	5.00	4.39	
2 Chloride	3.742	3.742	0.000	1723977486	100.0	98.2	
3 Nitrite as N	4.459	4.459	0.000	141199677	NC	NC	
4 Bromide	5.351	5.351	0.000	23526310	5.00	4.72	
5 Nitrate as N	6.017	6.017	0.000	151188700	NC	NC	M
7 Orthophosphate as P	9.076	9.076	0.000	42935383	NC	NC	
6 Sulfate	10.134	10.134	0.000	1096443311	100.0	95.8	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

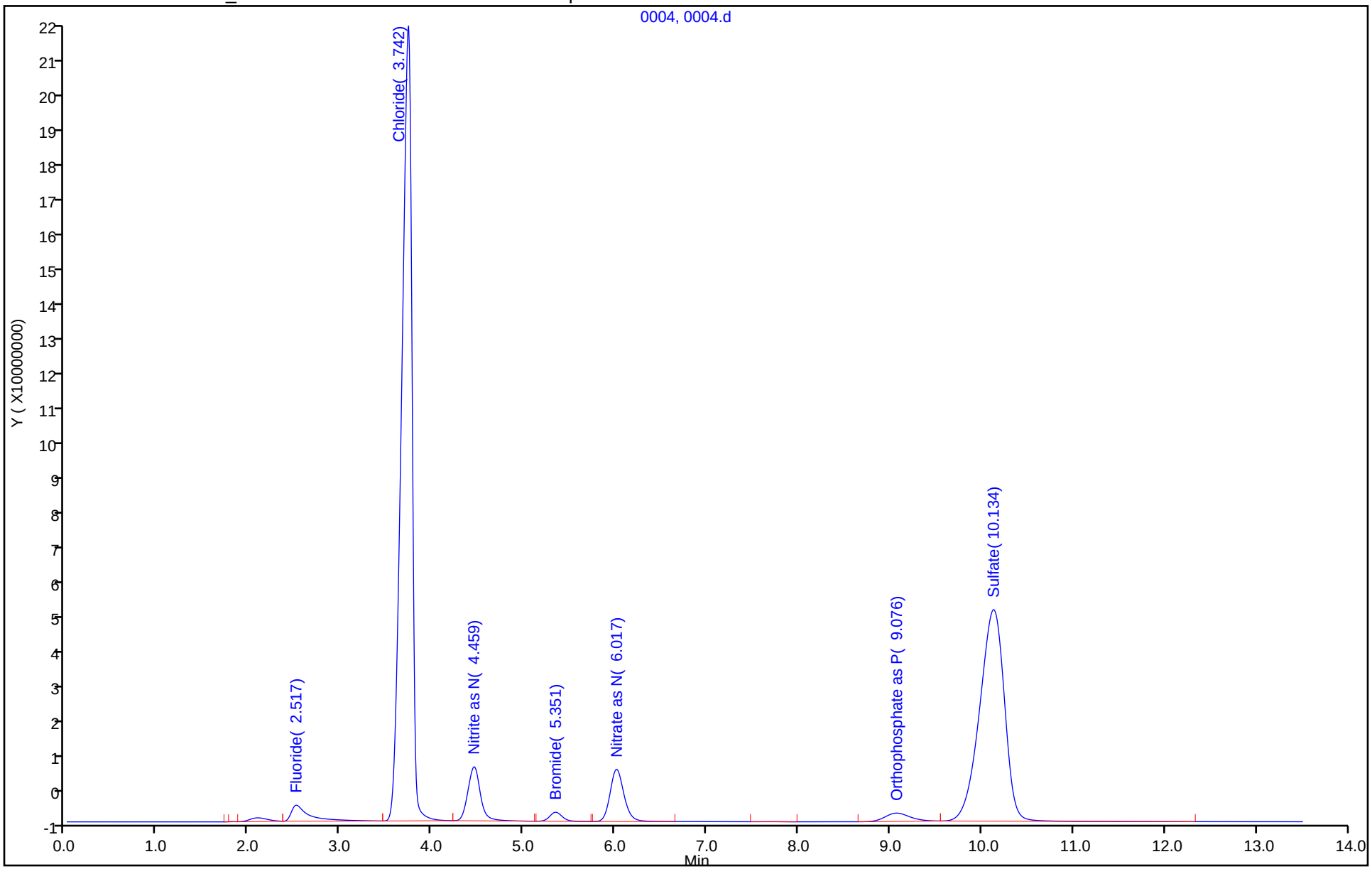
IC LCS_01862 Amount Added: 10.00 Units: mL

Report Date: 16-Mar-2022 11:02:42 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0004.d

Injection Date:	15-Mar-2022 10:43:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0005.d
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 15-Mar-2022 10:59:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109245-005
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Mar-2022 11:02:42 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1665

First Level Reviewer: foxr Date: 15-Mar-2022 13:39:16

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.517	2.517	0.000	61162898	5.00	4.48	
2 Chloride	3.742	3.742	0.000	1728158621	100.0	98.4	
3 Nitrite as N	4.459	4.459	0.000	141779495	NC	NC	
4 Bromide	5.342	5.342	0.000	23491330	5.00	4.71	
5 Nitrate as N	6.009	6.009	0.000	151903955	NC	NC	M
7 Orthophosphate as P	9.059	9.059	0.000	42911648	NC	NC	
6 Sulfate	10.101	10.101	0.000	1098043260	100.0	95.9	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

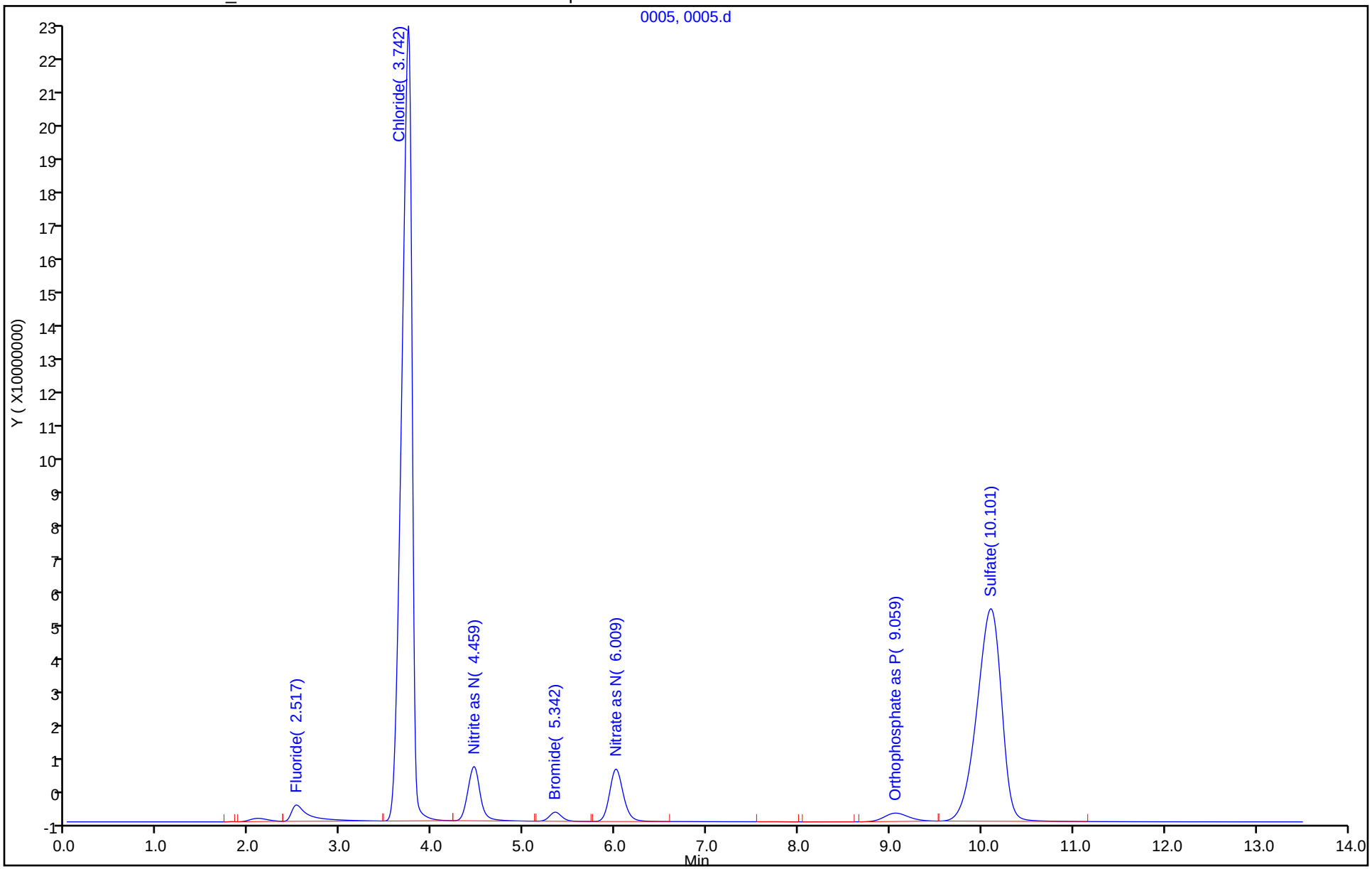
IC LCS_01862 Amount Added: 10.00 Units: mL

Report Date: 16-Mar-2022 11:02:43 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0005.d

Injection Date:	15-Mar-2022 10:59:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

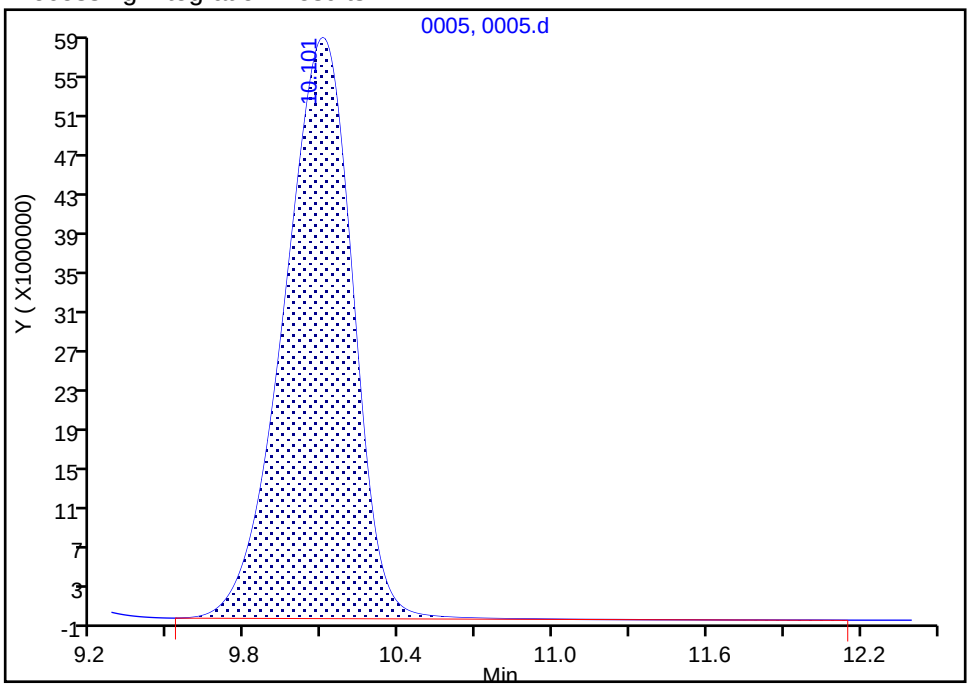
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0005.d
Injection Date: 15-Mar-2022 10:59:00 Instrument ID: WC_IonChrom11
Lims ID: LCSD
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

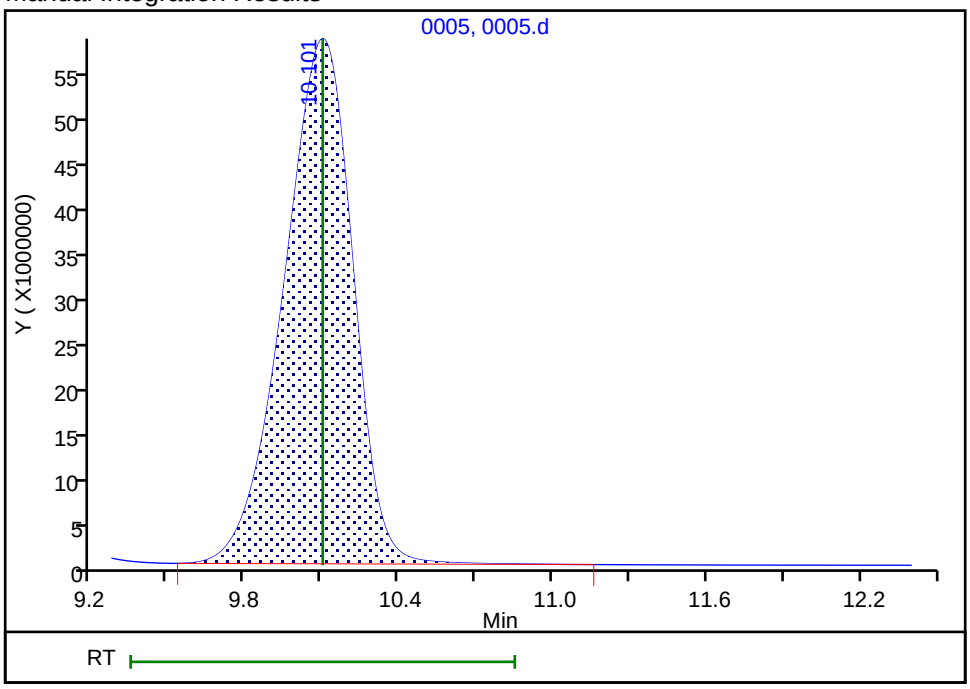
Processing Integration Results

RT: 10.10
Area: 1098896879
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.10
Area: 1098043260
Amount: 95.949014
Amount Units: ug/ml



Reviewer: foxr, 16-Mar-2022 10:42:31
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0006.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 15-Mar-2022 11:16:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109245-006
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Mar-2022 11:02:43 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1665

First Level Reviewer: foxr Date: 16-Mar-2022 10:43:05

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.092	2.092	0.000	4651131		0.3937	M
2 Chloride	3.651	3.651	0.000	350309		0.7015	M
3 Nitrite as N		4.459				ND	
4 Bromide		5.342				ND	
5 Nitrate as N		6.009				ND	U
7 Orthophosphate as P	9.142	9.142	0.000	397235		NC	
6 Sulfate	9.992	9.992	0.000	298102		0.6649	M

QC Flag Legend

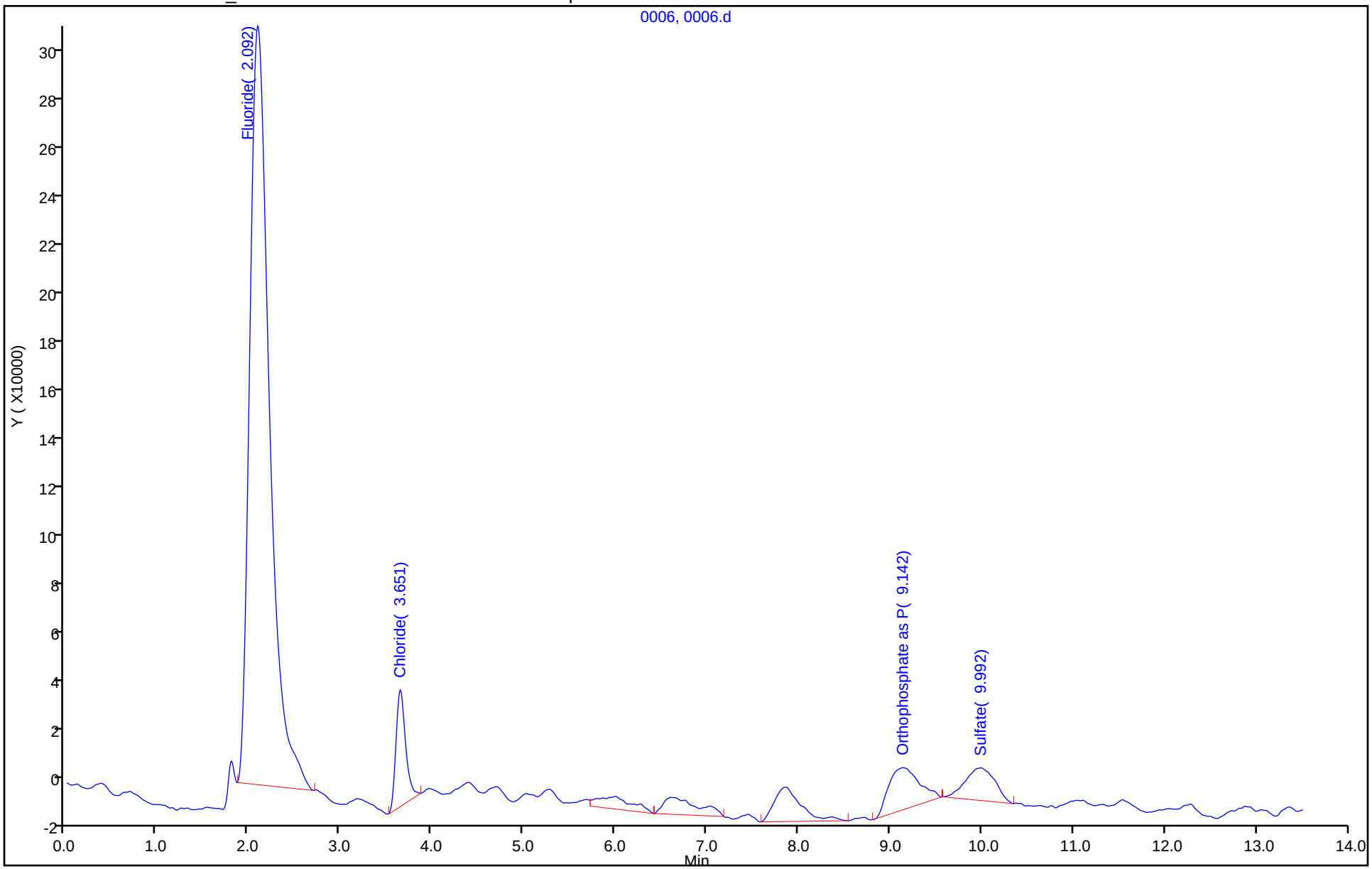
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 16-Mar-2022 11:02:43 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0006.d

Injection Date:	15-Mar-2022 11:16:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

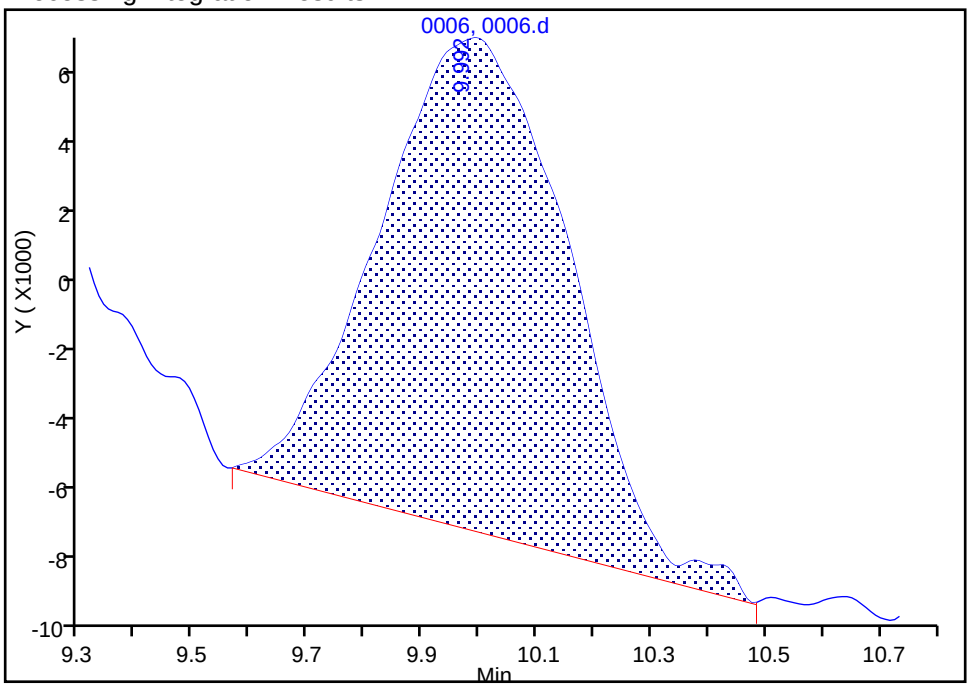
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0006.d
Injection Date: 15-Mar-2022 11:16:00 Instrument ID: WC_IonChrom11
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

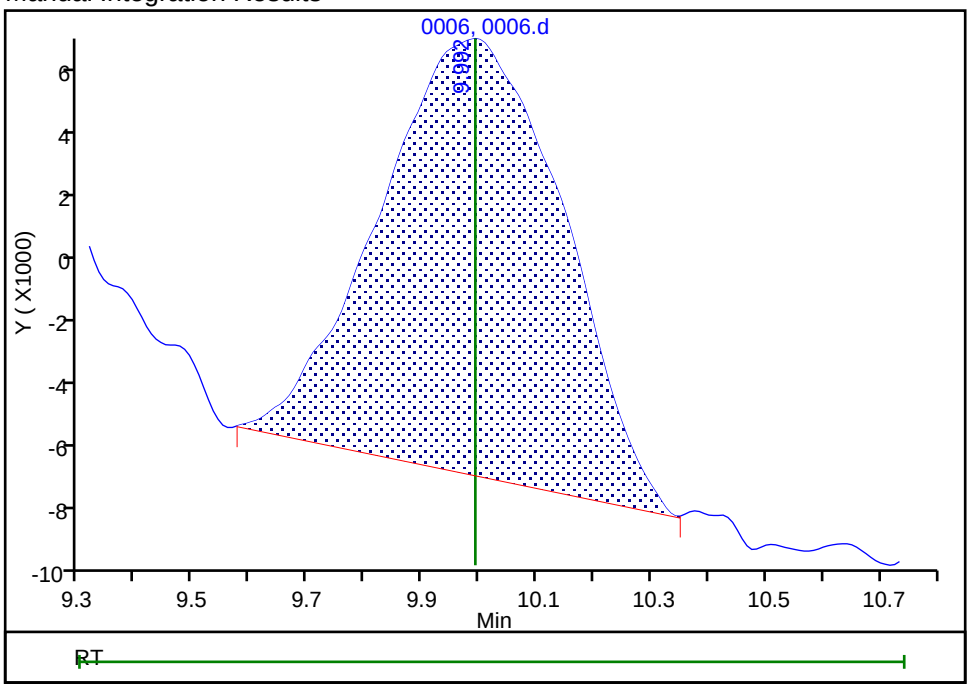
Processing Integration Results

RT: 9.99
Area: 314773
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 9.99
Area: 298102
Amount: 0.664883
Amount Units: ug/ml



Reviewer: foxr, 16-Mar-2022 10:43:03
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0007.d
Lims ID: 280-159137-F-1
Client ID: EW7-PM29B-8-35
Sample Type: Client
Inject. Date: 15-Mar-2022 15:11:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109245-007
Misc. Info.: 27948
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Mar-2022 11:02:43 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1665

First Level Reviewer: foxr Date: 16-Mar-2022 10:43:30

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.517	2.092	0.425	1632371	0.1756	
2 Chloride	3.717	3.651	0.066	574390461	33.2	
3 Nitrite as N	4.434	4.459	-0.025	844388	NC	
4 Bromide	5.542	5.342	0.200	1154223	0.2541	
5 Nitrate as N	6.225	6.009	0.216	800441	NC	
7 Orthophosphate as P		9.142			ND	
6 Sulfate	10.184	9.992	0.192	1608267766	140.2	M

QC Flag Legend

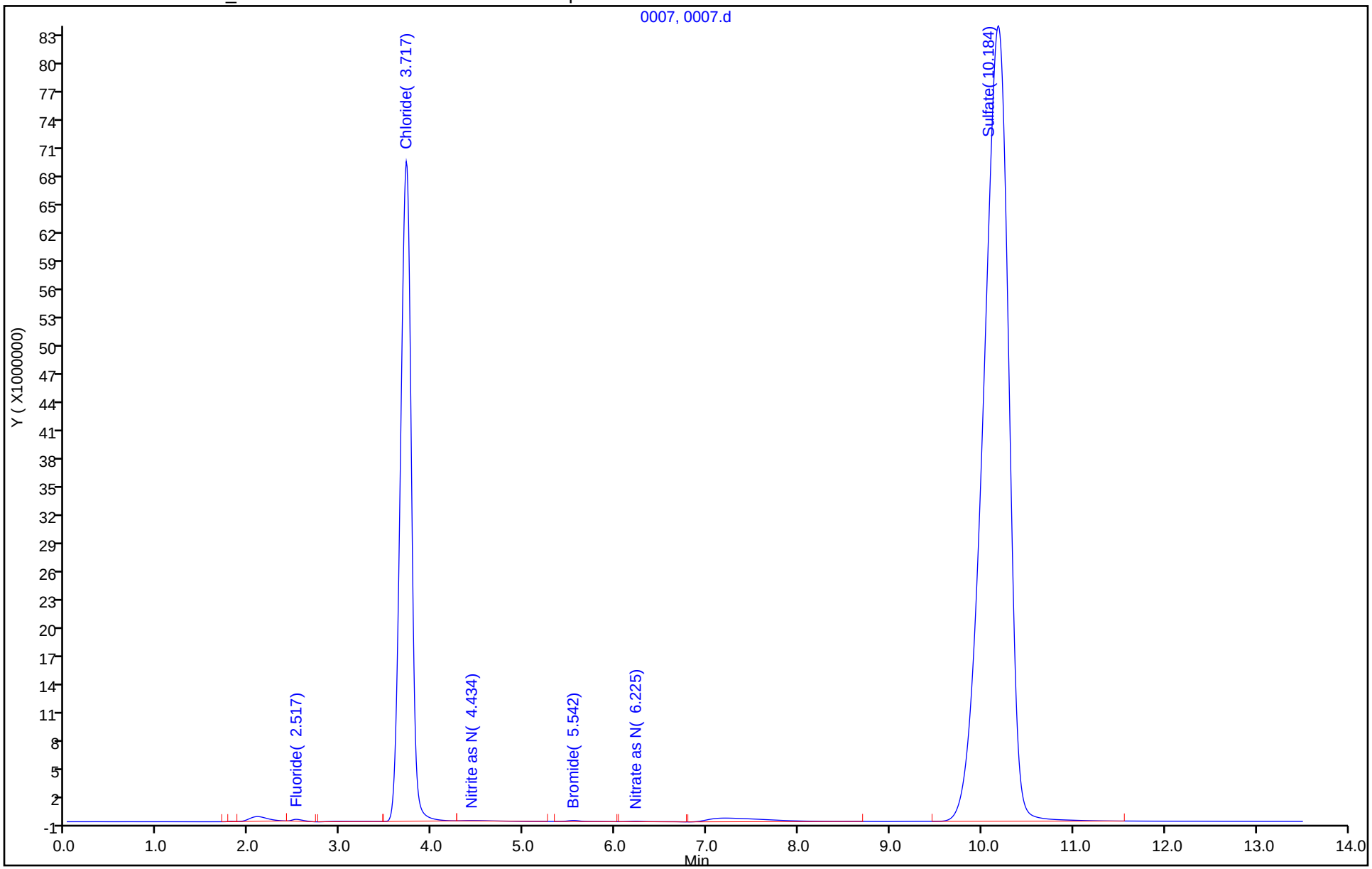
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 16-Mar-2022 11:02:43 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0007.d

Injection Date:	15-Mar-2022 15:11:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-159137-F-1	Lab Sample ID:	280-159137-1	Worklist Smp#:	7
Client ID:	EW7-PM29B-8-35				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

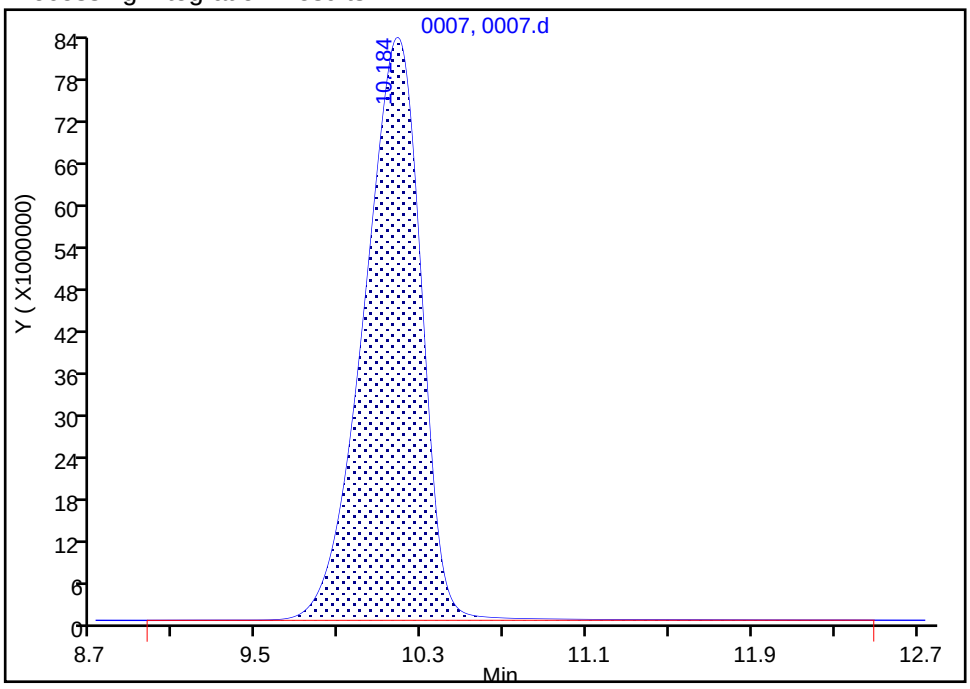
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0007.d
Injection Date: 15-Mar-2022 15:11:00 Instrument ID: WC_IonChrom11
Lims ID: 280-159137-F-1 Lab Sample ID: 280-159137-1
Client ID: EW7-PM29B-8-35
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

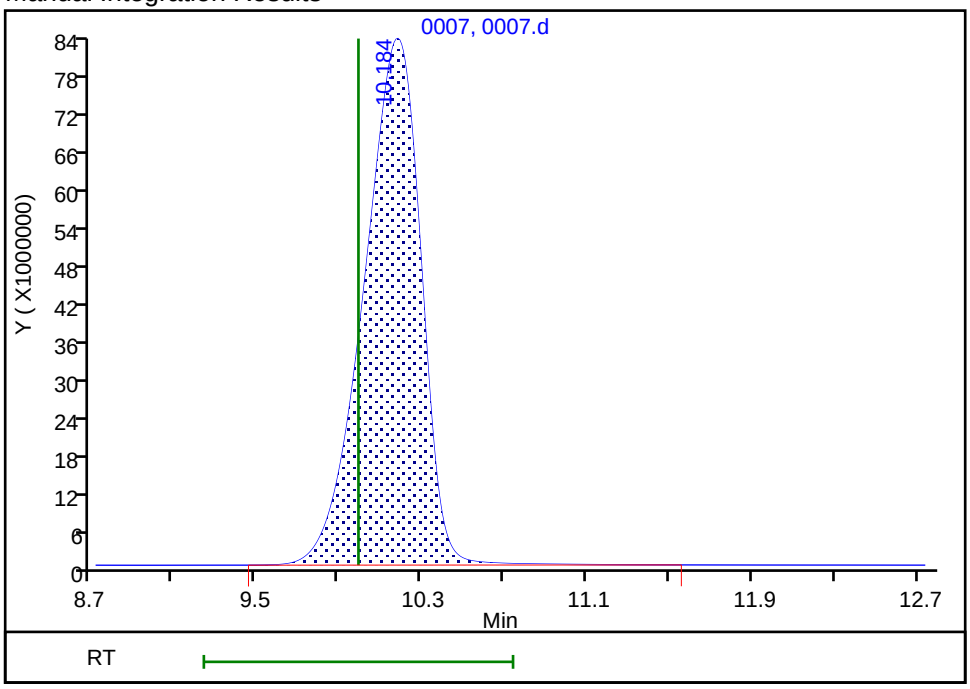
Processing Integration Results

RT: 10.18
Area: 1611989725
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.18
Area: 1608267766
Amount: 140.2364
Amount Units: ug/ml



Reviewer: foxr, 16-Mar-2022 10:43:27
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0008.d
Lims ID: 280-159137-F-1 DU
Client ID:
Sample Type: DU
Inject. Date: 15-Mar-2022 15:27:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109245-008
Misc. Info.: 5741
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Mar-2022 11:02:43 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1665

First Level Reviewer: foxr Date: 16-Mar-2022 10:43:58

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.517	2.092	0.425	1649736		0.1769	
2 Chloride	3.717	3.651	0.066	574134050		33.2	
3 Nitrite as N	4.409	4.459	-0.050	802273		NC	
4 Bromide	5.542	5.342	0.200	1047077		0.2327	
5 Nitrate as N	6.209	6.009	0.200	582339		NC	
7 Orthophosphate as P	8.809	9.142	-0.333	1087830		NC	
6 Sulfate	10.192	9.992	0.200	1611274676		140.5	M

QC Flag Legend

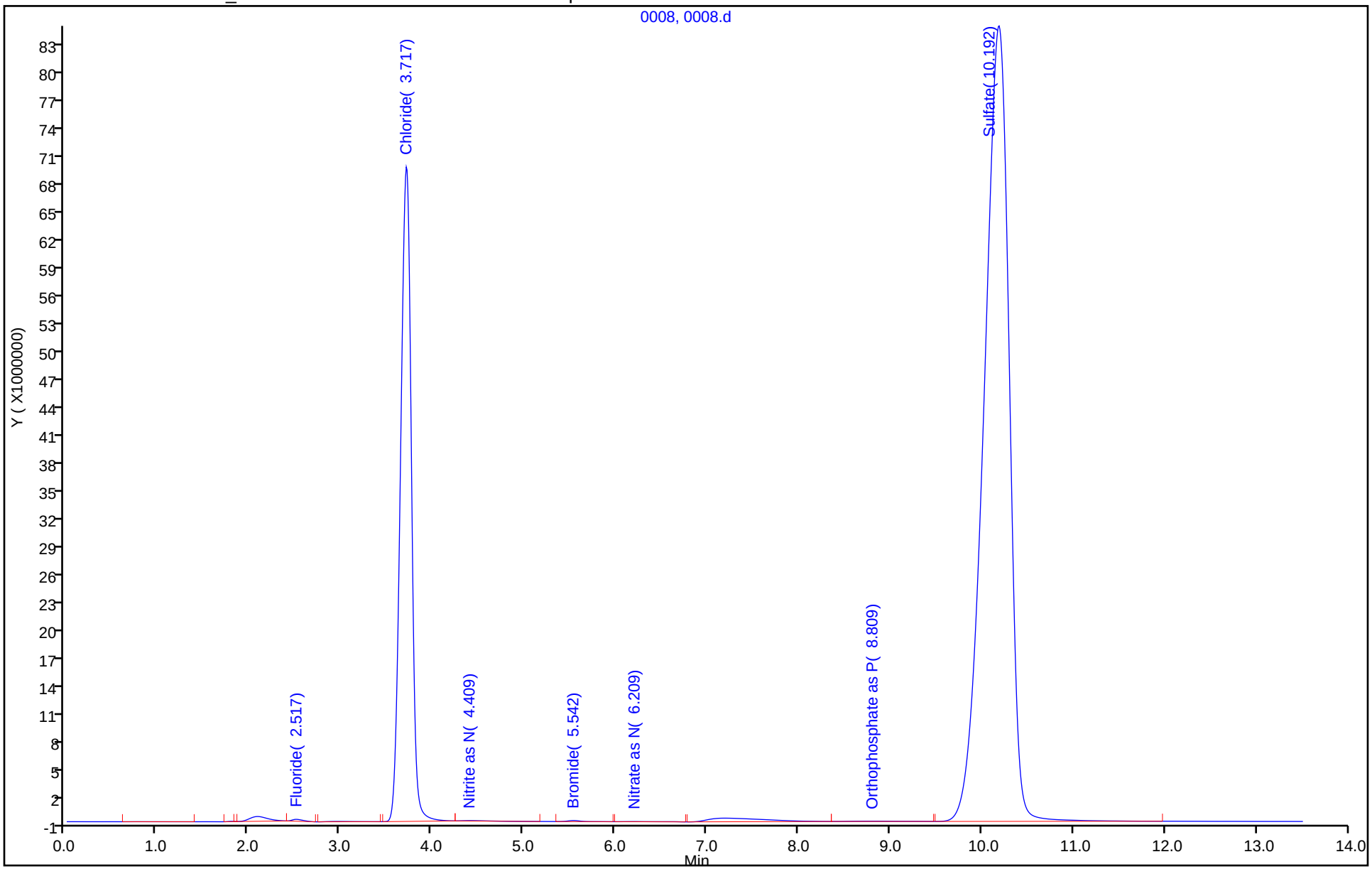
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 16-Mar-2022 11:02:44 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0008.d

Injection Date:	15-Mar-2022 15:27:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-159137-F-1 DU			Worklist Smp#:	8
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

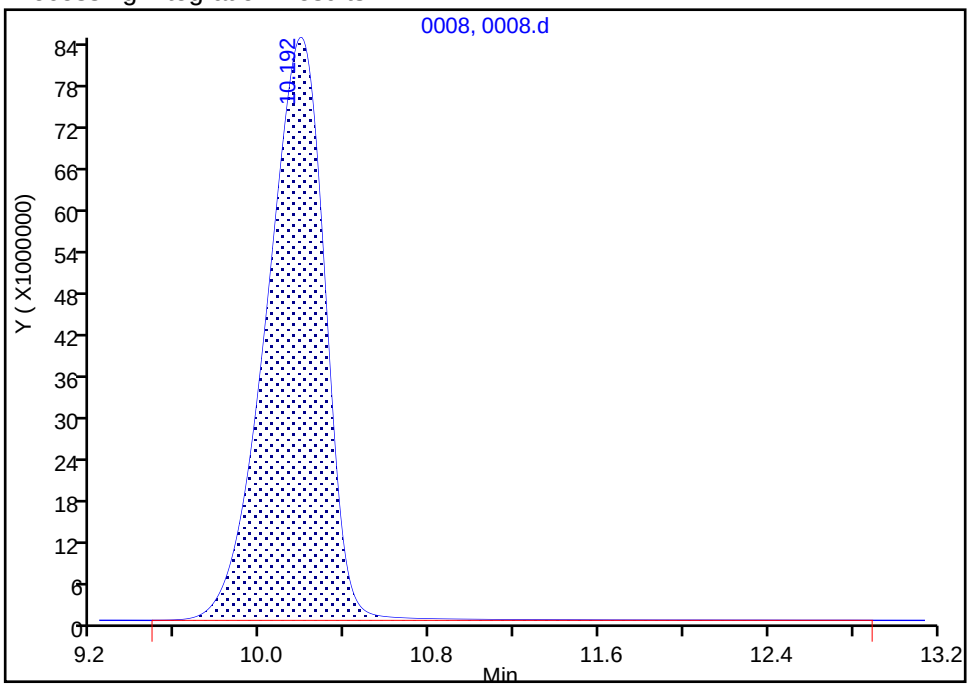
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0008.d
Injection Date: 15-Mar-2022 15:27:00 Instrument ID: WC_IonChrom11
Lims ID: 280-159137-F-1 DU
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

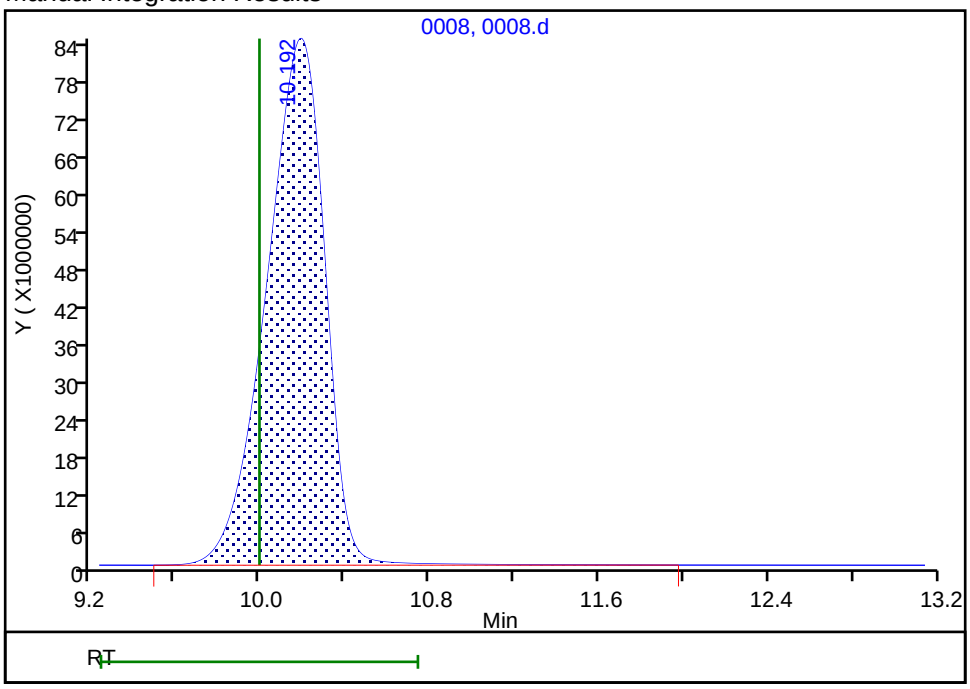
Processing Integration Results

RT: 10.19
Area: 1613357587
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.19
Area: 1611274676
Amount: 140.4974
Amount Units: ug/ml



Reviewer: foxr, 16-Mar-2022 10:43:54
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0009.d
Lims ID: 280-159137-F-1 MS
Client ID:
Sample Type: MS
Inject. Date: 15-Mar-2022 15:44:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109245-009
Misc. Info.: 15803
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Mar-2022 11:02:43 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1665

First Level Reviewer: foxr Date: 16-Mar-2022 10:44:57

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.525	2.092	0.433	71731273	5.00	5.24	
2 Chloride	3.750	3.651	0.099	1612563644	50.0	91.9	
3 Nitrite as N	4.559	4.459	0.100	149018445	NC	NC	
4 Bromide	5.534	5.342	0.192	27541182	5.00	5.52	
5 Nitrate as N	6.175	6.009	0.166	173075463	NC	NC	M
7 Orthophosphate as P	9.134	9.142	-0.008	55120878	NC	NC	
6 Sulfate	10.234	9.992	0.242	2315859481	50.0	201.7	EM

QC Flag Legend

Processing Flags
NC - Not Calibrated
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated

Reagents:

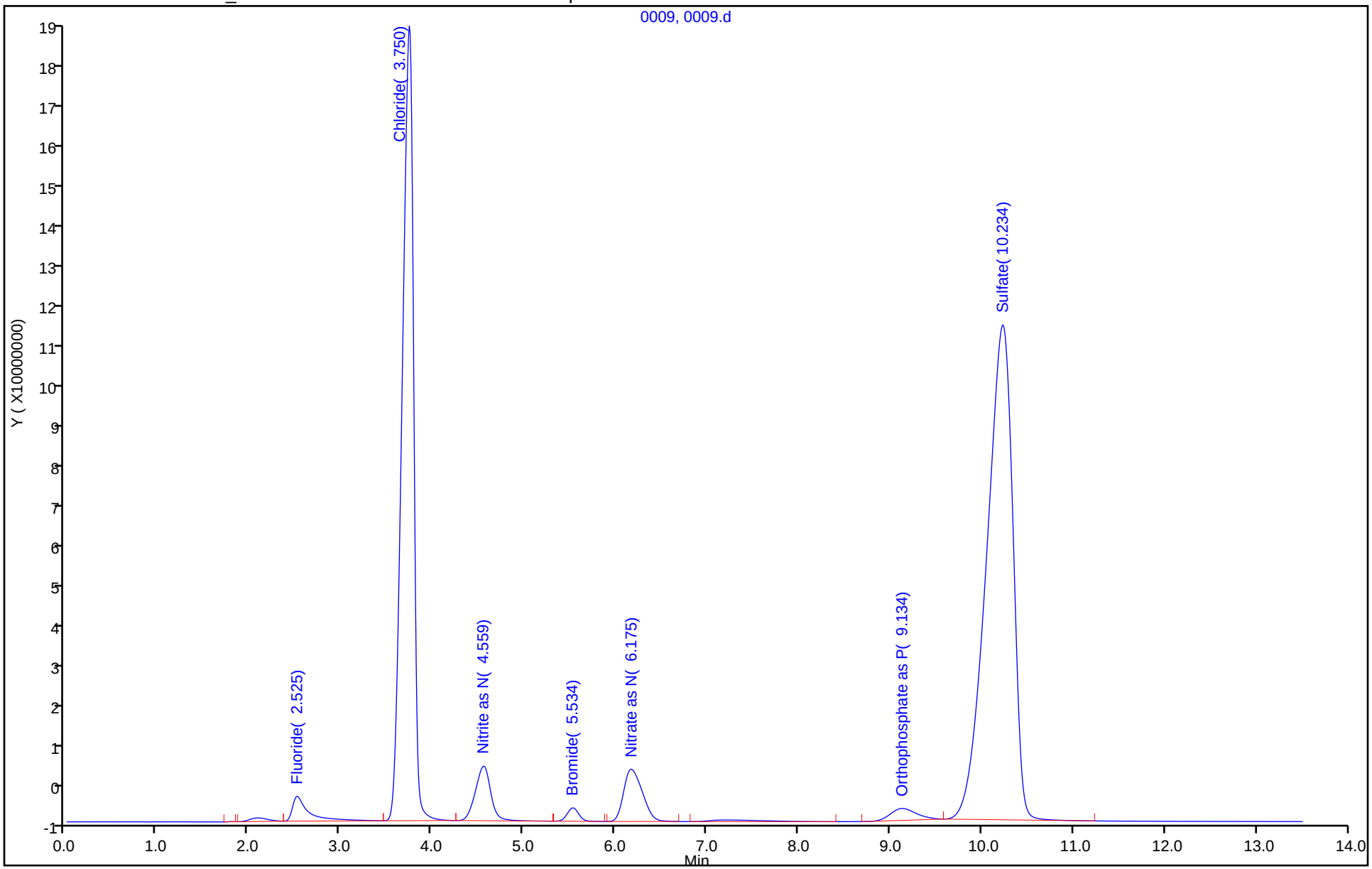
ICMS/MSD WEEK_00747 Amount Added: 0.05 Units: mL

Report Date: 16-Mar-2022 11:02:44 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0009.d

Injection Date:	15-Mar-2022 15:44:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-159137-F-1 MS			Worklist Smp#:	9
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

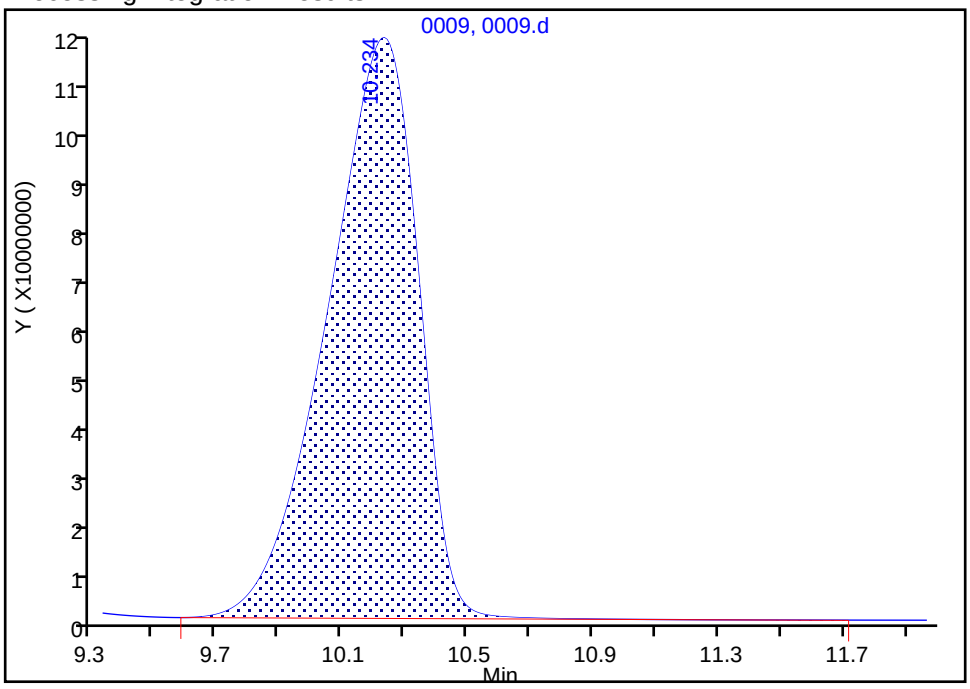
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0009.d
Injection Date: 15-Mar-2022 15:44:00 Instrument ID: WC_IonChrom11
Lims ID: 280-159137-F-1 MS
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

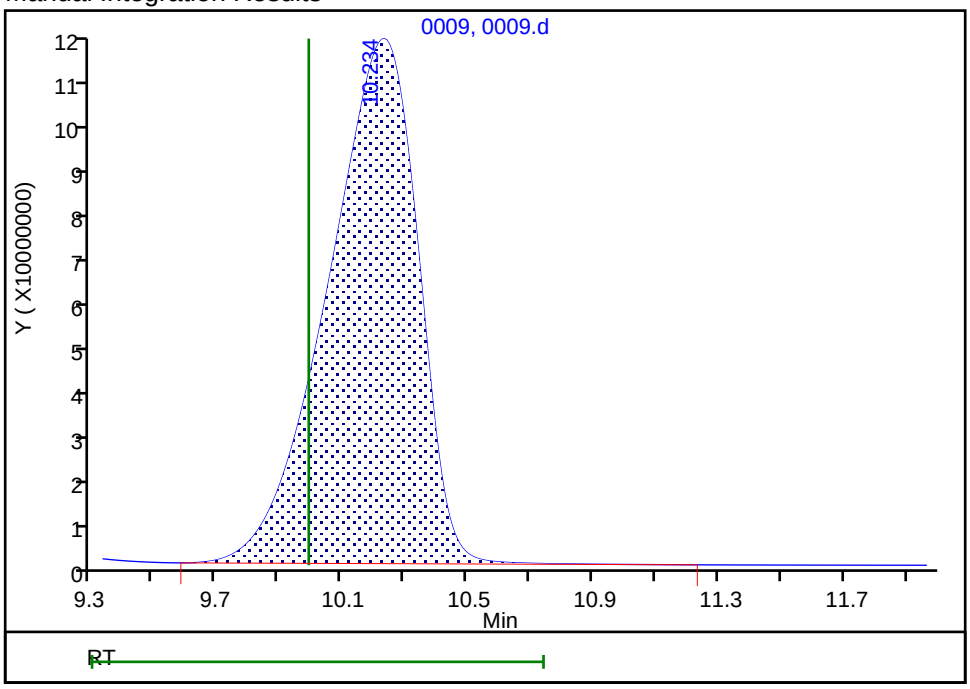
Processing Integration Results

RT: 10.23
Area: 2316592238
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.23
Area: 2315859481
Amount: 201.6553
Amount Units: ug/ml



Reviewer: foxr, 16-Mar-2022 10:44:44
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0010.d
Lims ID: 280-159137-F-1 MSD
Client ID:
Sample Type: MSD
Inject. Date: 15-Mar-2022 16:00:00 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109245-010
Misc. Info.: 6539
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Mar-2022 11:02:43 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1665

First Level Reviewer: foxr Date: 16-Mar-2022 10:45:22

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.525	2.092	0.433	72604751	5.00	5.30	
2 Chloride	3.750	3.651	0.099	1610147913	50.0	91.8	
3 Nitrite as N	4.567	4.459	0.108	148365234	NC	NC	
4 Bromide	5.534	5.342	0.192	27496259	5.00	5.51	
5 Nitrate as N	6.175	6.009	0.166	173292482	NC	NC	
7 Orthophosphate as P	9.134	9.142	-0.008	56780780	NC	NC	
6 Sulfate	10.234	9.992	0.242	2317645360	50.0	201.8	EM

QC Flag Legend

Processing Flags
NC - Not Calibrated
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated

Reagents:

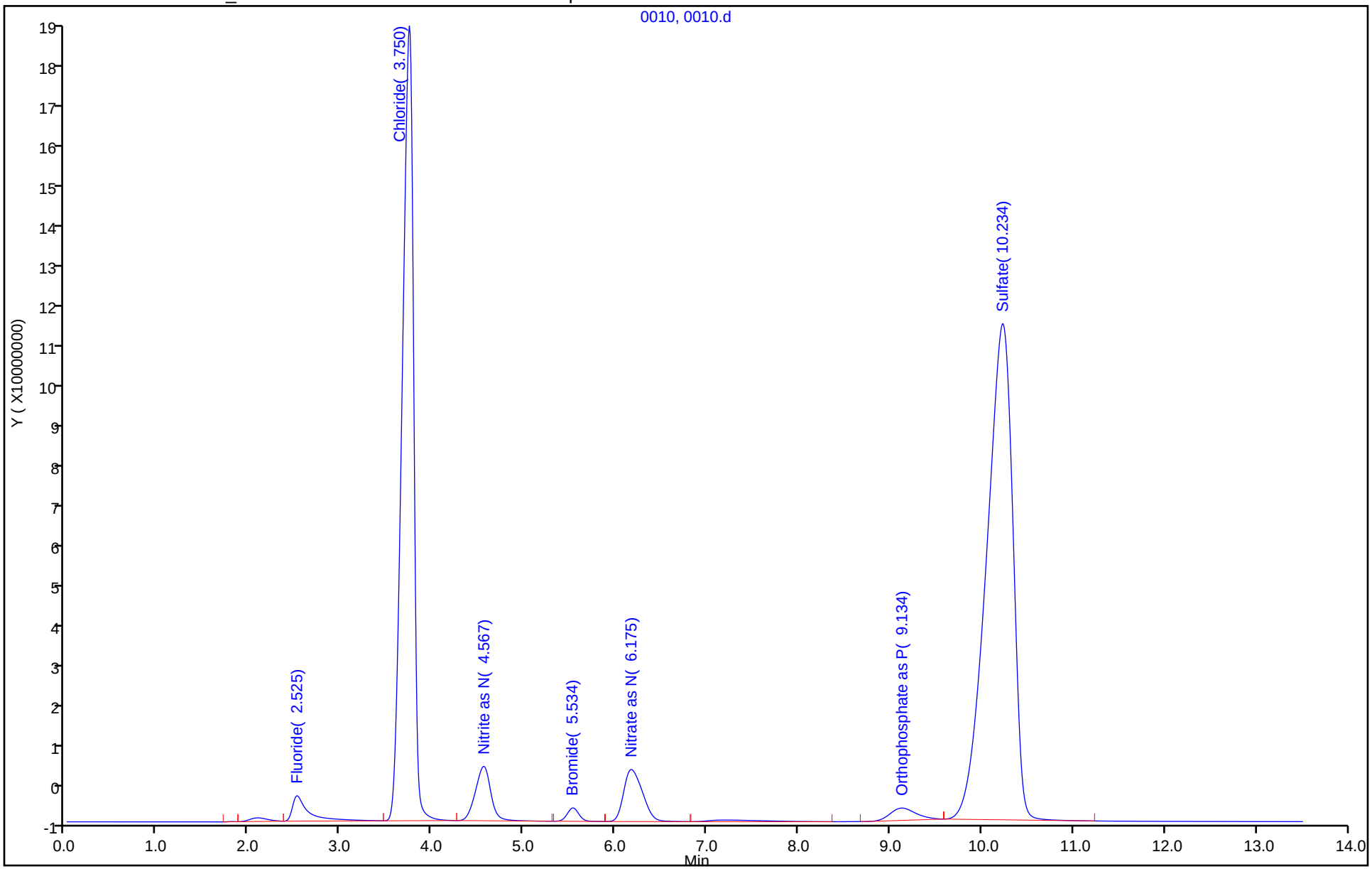
ICMS/MSD WEEK_00747 Amount Added: 0.05 Units: mL

Report Date: 16-Mar-2022 11:02:45 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0010.d

Injection Date:	15-Mar-2022 16:00:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-159137-F-1 MSD			Worklist Smp#:	10
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

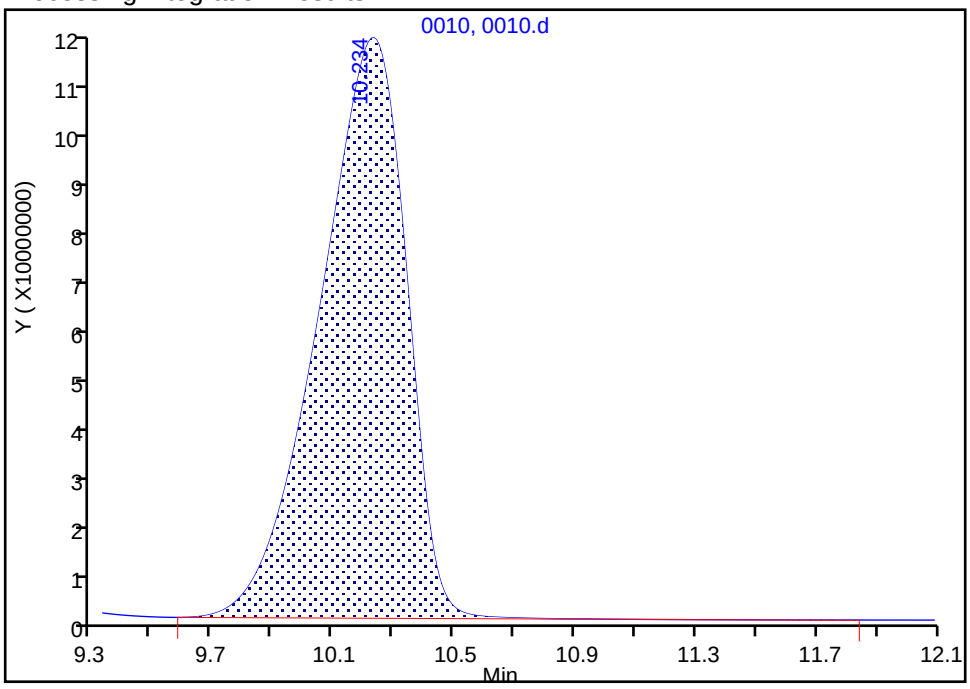
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0010.d
Injection Date: 15-Mar-2022 16:00:00 Instrument ID: WC_IonChrom11
Lims ID: 280-159137-F-1 MSD
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

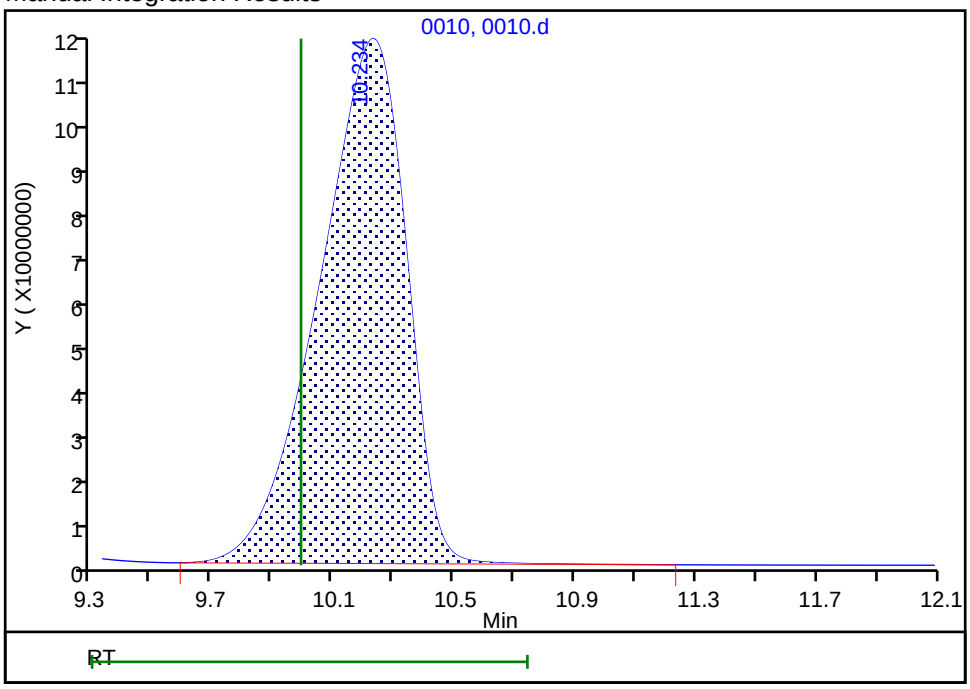
Processing Integration Results

RT: 10.23
Area: 2318717592
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.23
Area: 2317645360
Amount: 201.8103
Amount Units: ug/ml



Reviewer: foxr, 16-Mar-2022 10:45:19
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0011.d
Lims ID: 280-159137-F-2
Client ID: EW7-PM25A-8-25
Sample Type: Client
Inject. Date: 15-Mar-2022 16:20:00 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109245-011
Misc. Info.: 8222
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Mar-2022 11:02:43 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1665

First Level Reviewer: foxr Date: 16-Mar-2022 10:45:38

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.092	0.417	2070475	0.2073	
2 Chloride	3.751	3.651	0.100	921971941	52.8	
3 Nitrite as N	4.484	4.459	0.025	5283881	NC	
4 Bromide		5.342			ND	
5 Nitrate as N	6.001	6.009	-0.008	1566100	NC	
7 Orthophosphate as P	9.301	9.142	0.159	2270646	NC	
6 Sulfate	10.126	9.992	0.134	55647009	5.47	M

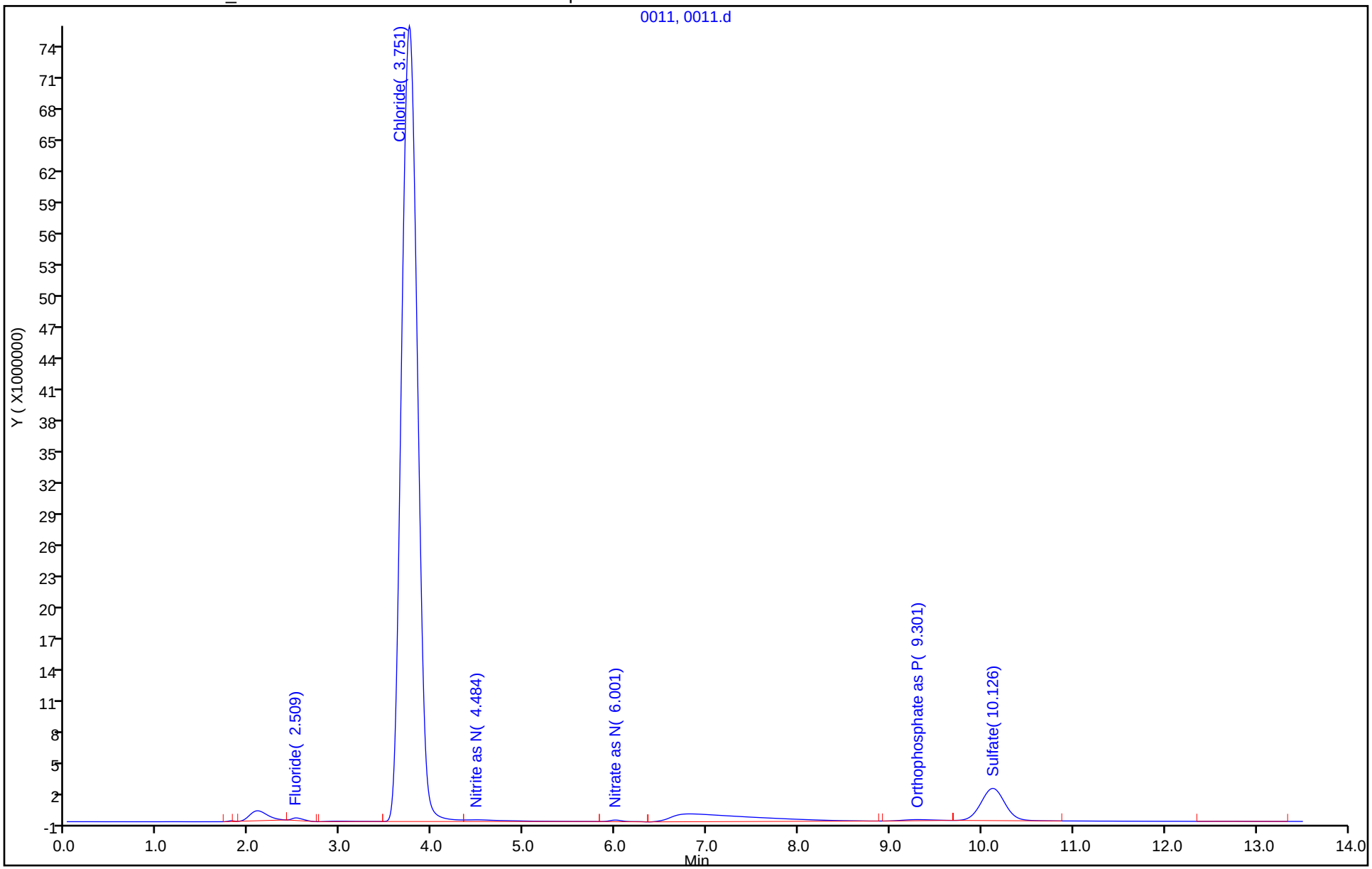
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 16-Mar-2022 11:02:45 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0011.d				
Injection Date:	15-Mar-2022 16:20:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-159137-F-2	Lab Sample ID:	280-159137-2	Worklist Smp#:	11
Client ID:	EW7-PM25A-8-25				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

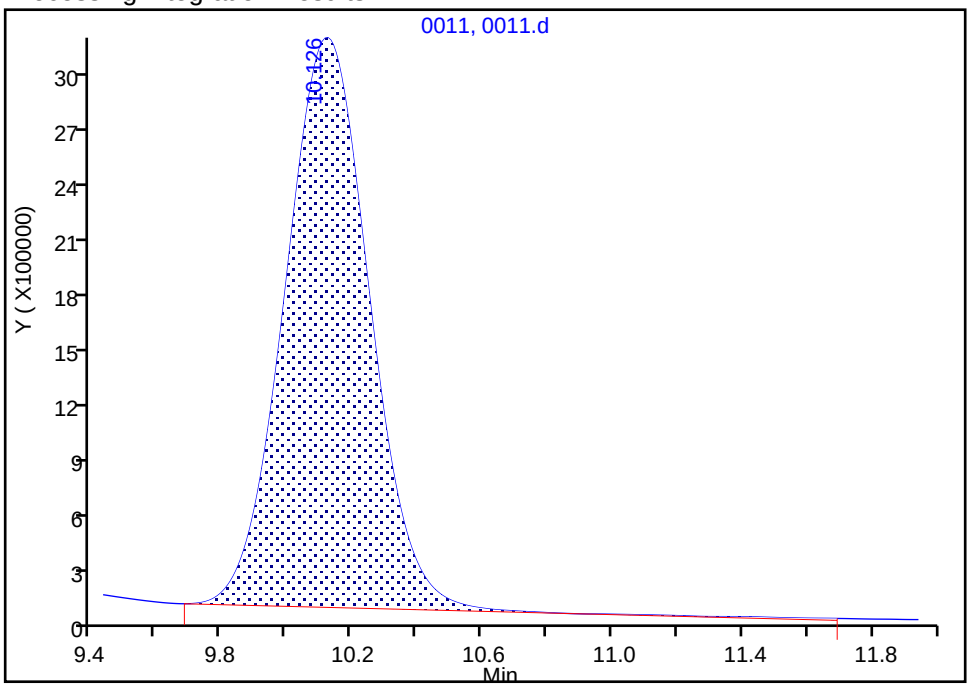
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0011.d				
Injection Date:	15-Mar-2022 16:20:00	Instrument ID:	WC_IonChrom11		
Lims ID:	280-159137-F-2	Lab Sample ID:	280-159137-2		
Client ID:	EW7-PM25A-8-25				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	11
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

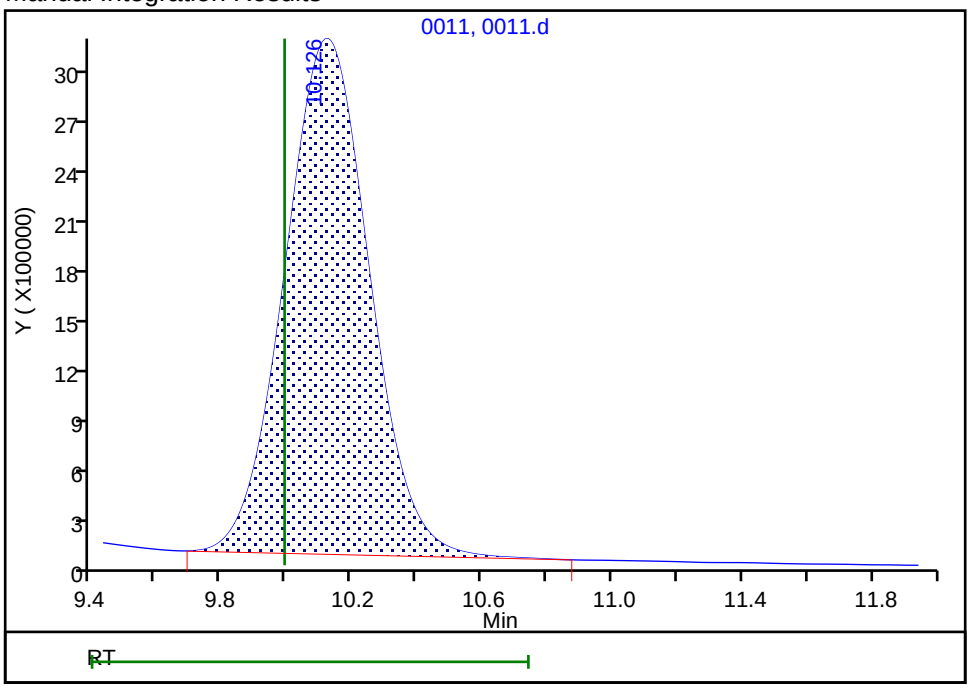
Processing Integration Results

RT: 10.13
Area: 55822456
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.13
Area: 55647009
Amount: 5.469161
Amount Units: ug/ml



Reviewer: foxr, 16-Mar-2022 10:45:35
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0012.d
Lims ID: 280-159137-F-3
Client ID: EW7-PM25B-8-35
Sample Type: Client
Inject. Date: 15-Mar-2022 16:36:00 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109245-012
Misc. Info.: 20687
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Mar-2022 11:02:43 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1665

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.517	2.092	0.425	2046132	0.2055	
2 Chloride	3.734	3.651	0.083	740869445	42.6	
3 Nitrite as N	4.417	4.459	-0.042	4575553	NC	
4 Bromide	5.684	5.342	0.342	1143088	0.2519	
5 Nitrate as N	6.317	6.009	0.308	578270	NC	
7 Orthophosphate as P	9.342	9.142	0.200	334199	NC	
6 Sulfate	10.167	9.992	0.175	1076241678	94.1	

QC Flag Legend

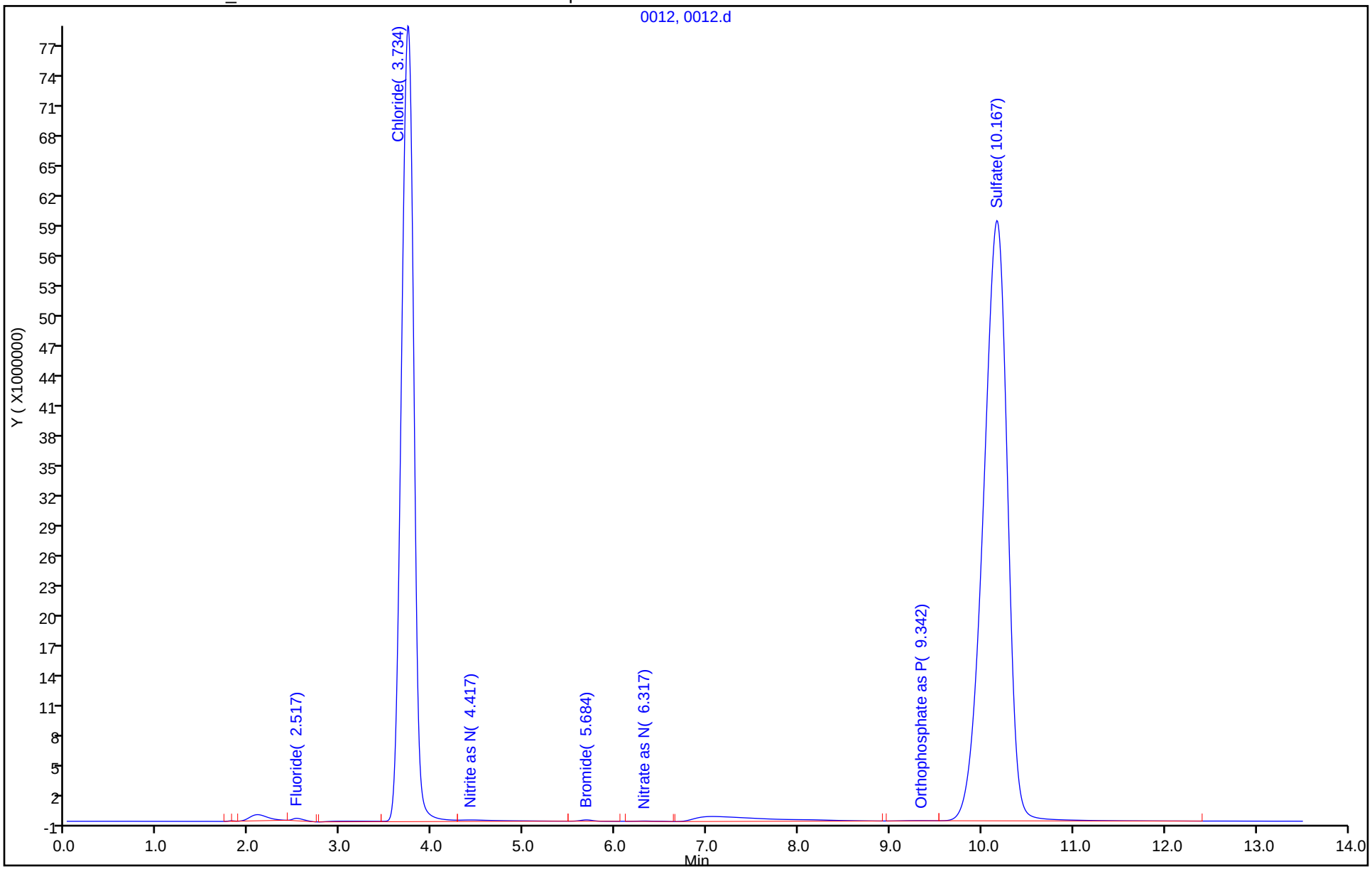
Processing Flags
NC - Not Calibrated

Report Date: 16-Mar-2022 11:02:46 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0012.d

Injection Date:	15-Mar-2022 16:36:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-159137-F-3	Lab Sample ID:	280-159137-3	Worklist Smp#:	12
Client ID:	EW7-PM25B-8-35				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0013.d
Lims ID: 280-159137-F-4
Client ID: EW7-PM26A-8-25
Sample Type: Client
Inject. Date: 15-Mar-2022 16:52:00 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109245-013
Misc. Info.: 31278
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Mar-2022 11:02:43 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1665

First Level Reviewer: foxr Date: 16-Mar-2022 10:46:04

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.092	0.417	2564271	0.2430	
2 Chloride	3.709	3.651	0.058	488202889	28.3	
3 Nitrite as N	4.542	4.459	0.083	902203	NC	
4 Bromide	5.534	5.342	0.192	967896	0.2169	
5 Nitrate as N	6.134	6.009	0.125	363502812	NC	
7 Orthophosphate as P	9.334	9.142	0.192	916793	NC	
6 Sulfate	10.159	9.992	0.167	1380101916	120.4	M

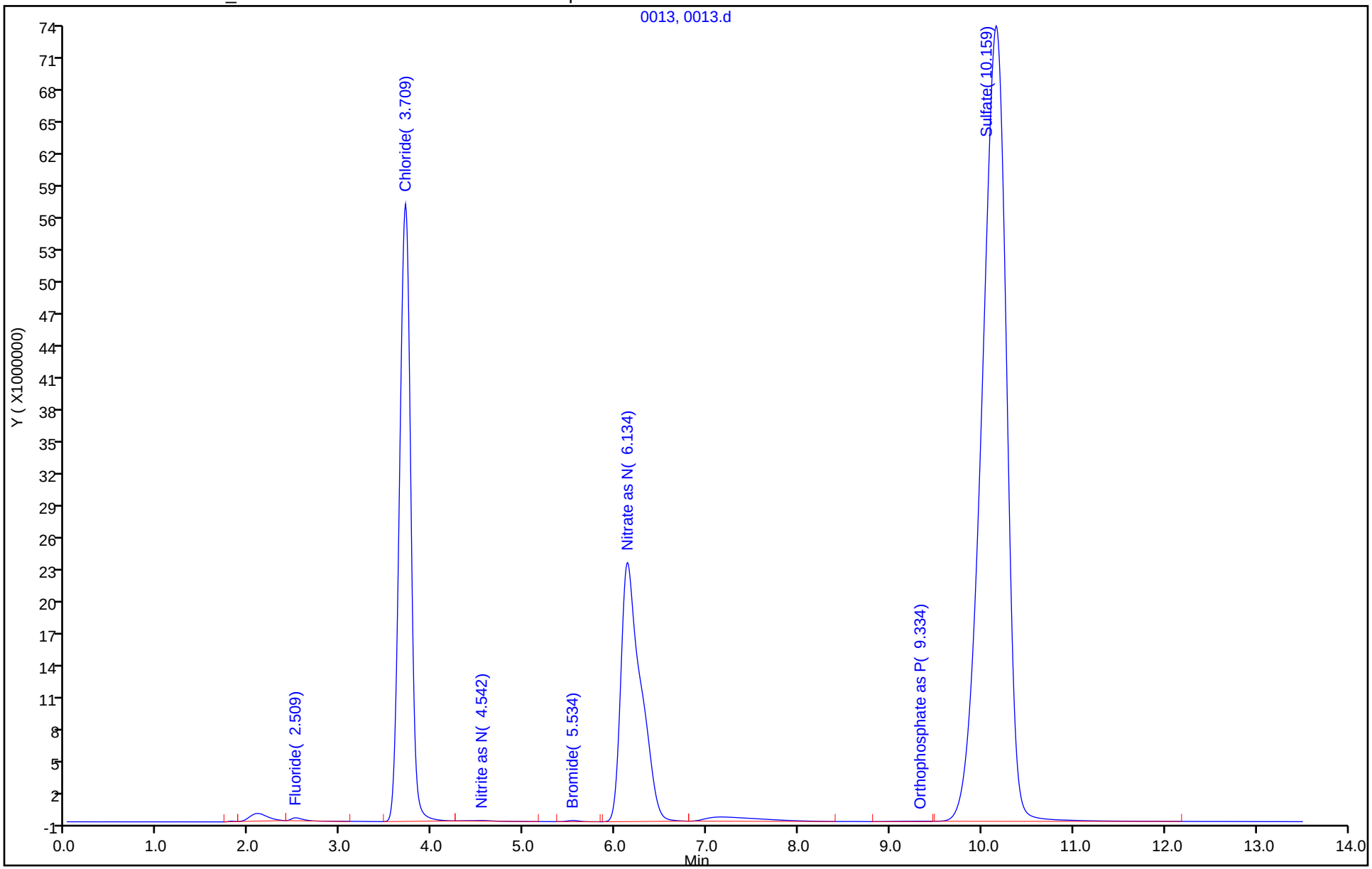
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 16-Mar-2022 11:02:46 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0013.d				
Injection Date:	15-Mar-2022 16:52:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-159137-F-4	Lab Sample ID:	280-159137-4	Worklist Smp#:	13
Client ID:	EW7-PM26A-8-25				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

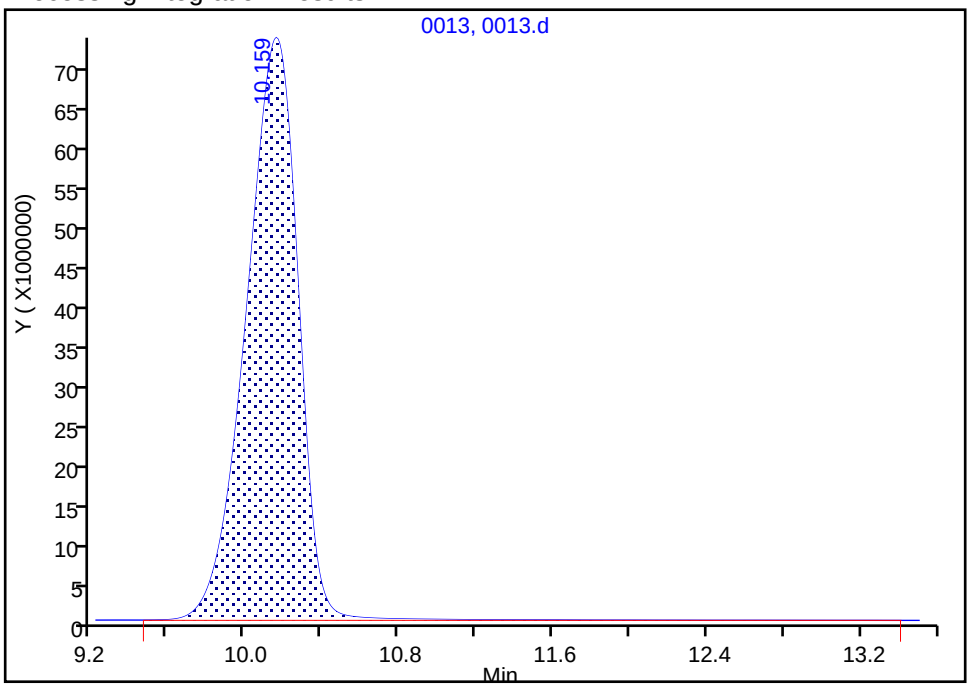
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0013.d				
Injection Date:	15-Mar-2022 16:52:00	Instrument ID:	WC_IonChrom11		
Lims ID:	280-159137-F-4	Lab Sample ID:	280-159137-4		
Client ID:	EW7-PM26A-8-25				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	13
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

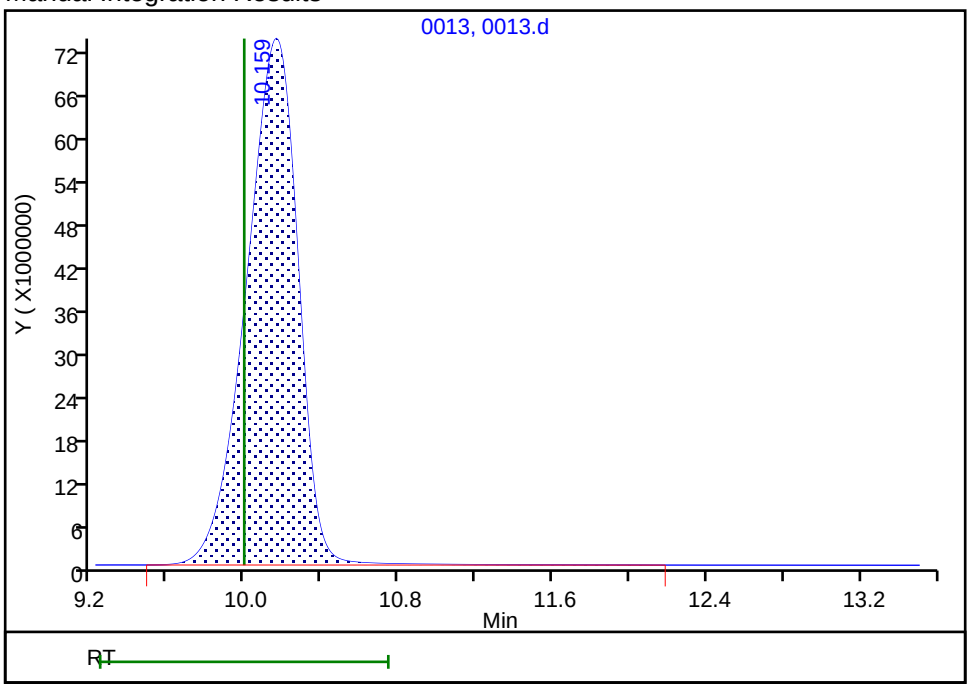
Processing Integration Results

RT: 10.16
Area: 1385053383
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.16
Area: 1380101916
Amount: 120.4317
Amount Units: ug/ml



Reviewer: foxr, 16-Mar-2022 10:46:00
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0014.d
Lims ID: 280-159137-F-5
Client ID: EW7-PM26B-8-35
Sample Type: Client
Inject. Date: 15-Mar-2022 17:09:00 ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109245-014
Misc. Info.: 29101
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Mar-2022 11:02:43 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1665

First Level Reviewer: foxr Date: 16-Mar-2022 10:46:18

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.092	0.417	1780712	0.1863	
2 Chloride	3.734	3.651	0.083	719779150	41.4	
3 Nitrite as N	4.409	4.459	-0.050	3871639	NC	
4 Bromide	5.667	5.342	0.325	1105595	0.2444	
5 Nitrate as N	6.309	6.009	0.300	517000	NC	
7 Orthophosphate as P	9.259	9.142	0.117	1110239	NC	
6 Sulfate	10.142	9.992	0.150	903370871	79.1	M

QC Flag Legend

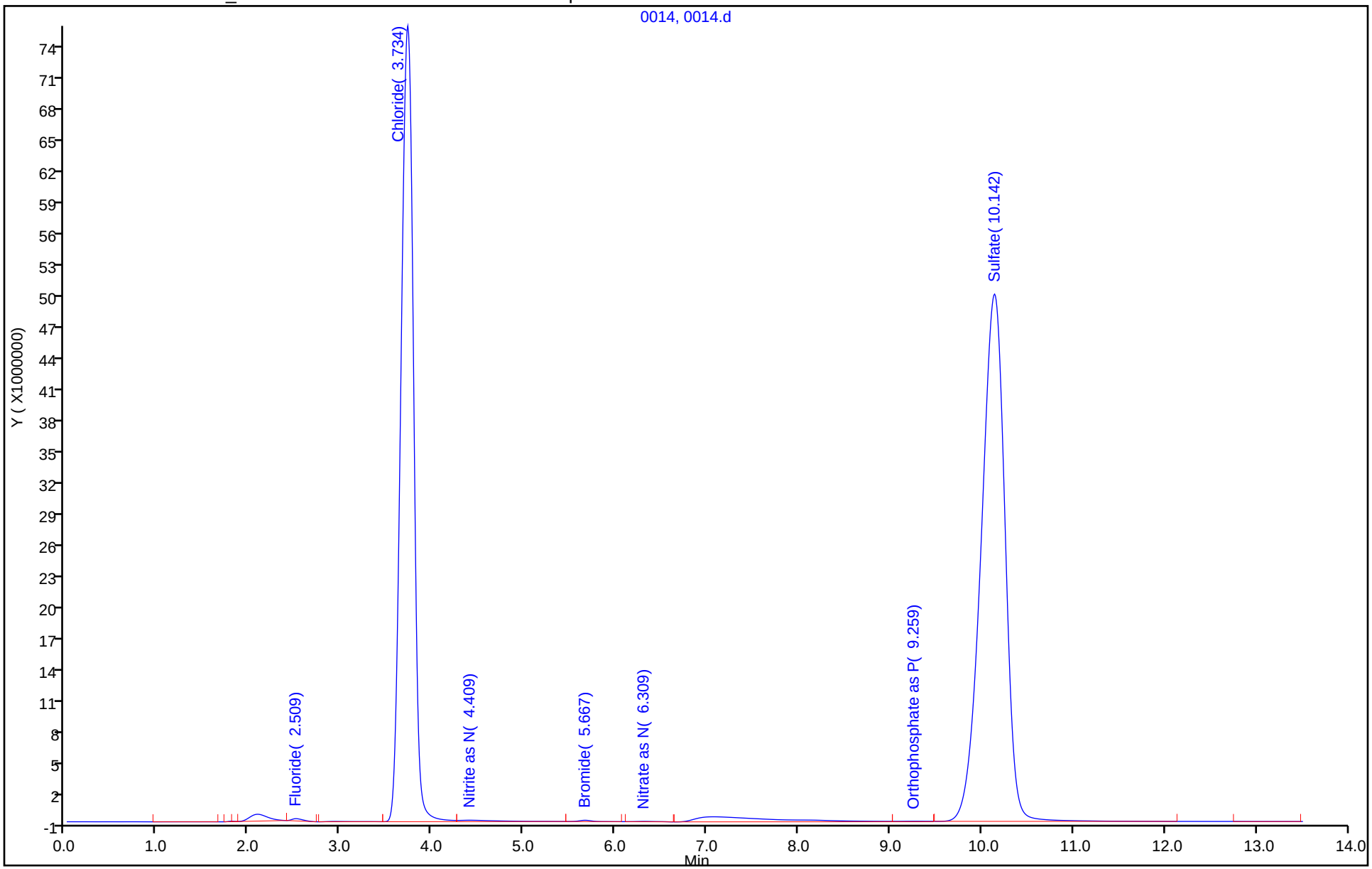
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 16-Mar-2022 11:02:46 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0014.d

Injection Date:	15-Mar-2022 17:09:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-159137-F-5	Lab Sample ID:	280-159137-5	Worklist Smp#:	14
Client ID:	EW7-PM26B-8-35				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

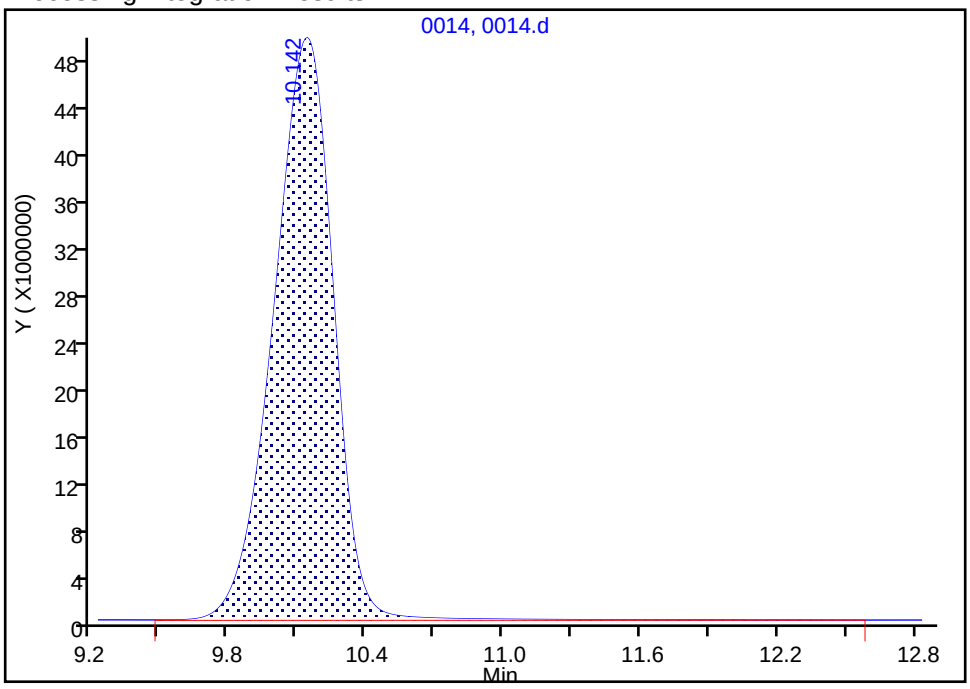
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0014.d
Injection Date: 15-Mar-2022 17:09:00 Instrument ID: WC_IonChrom11
Lims ID: 280-159137-F-5 Lab Sample ID: 280-159137-5
Client ID: EW7-PM26B-8-35
Operator ID: ALS Bottle#: 0 Worklist Smp#: 14
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

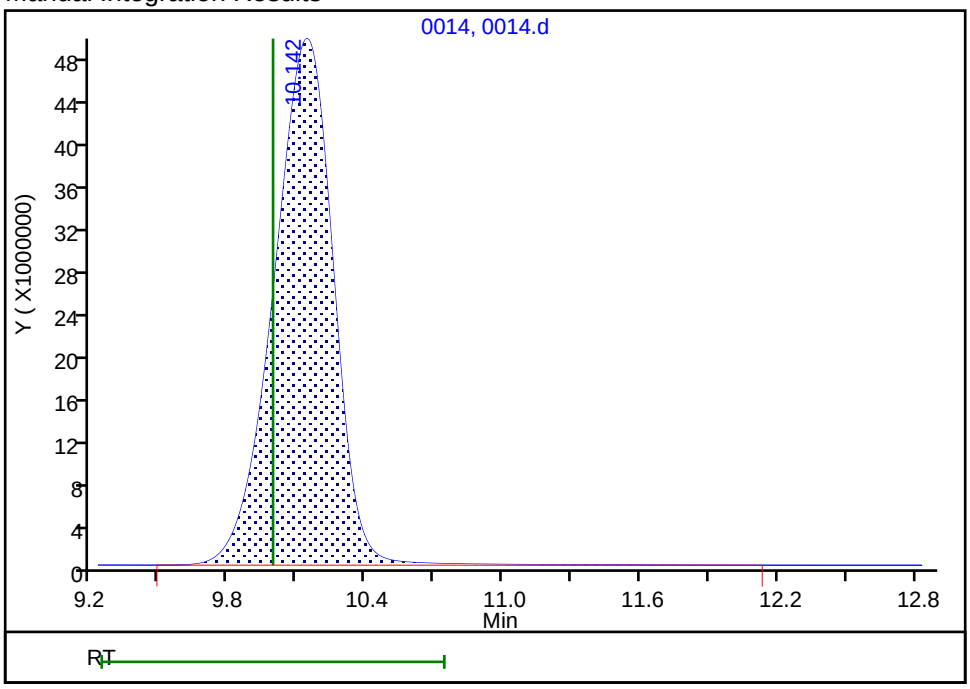
Processing Integration Results

RT: 10.14
Area: 908166855
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.14
Area: 903370871
Amount: 79.051477
Amount Units: ug/ml



Reviewer: foxr, 16-Mar-2022 10:46:14
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0017.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 15-Mar-2022 17:58:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109245-017
Misc. Info.: 8770
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Mar-2022 11:02:47 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1665

First Level Reviewer: foxr Date: 16-Mar-2022 10:47:25

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.526	2.092	0.434	67619293	5.00	4.94	
2 Chloride	3.759	3.651	0.108	1780839906	100.0	101.4	
3 Nitrite as N	4.476	4.459	0.017	144674298	NC	NC	
4 Bromide	5.367	5.342	0.025	24223194	5.00	4.86	
5 Nitrate as N	6.026	6.009	0.017	158339347	NC	NC	
7 Orthophosphate as P	9.076	9.142	-0.066	45471992	NC	NC	
6 Sulfate	10.101	9.992	0.109	1132128759	100.0	98.9	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

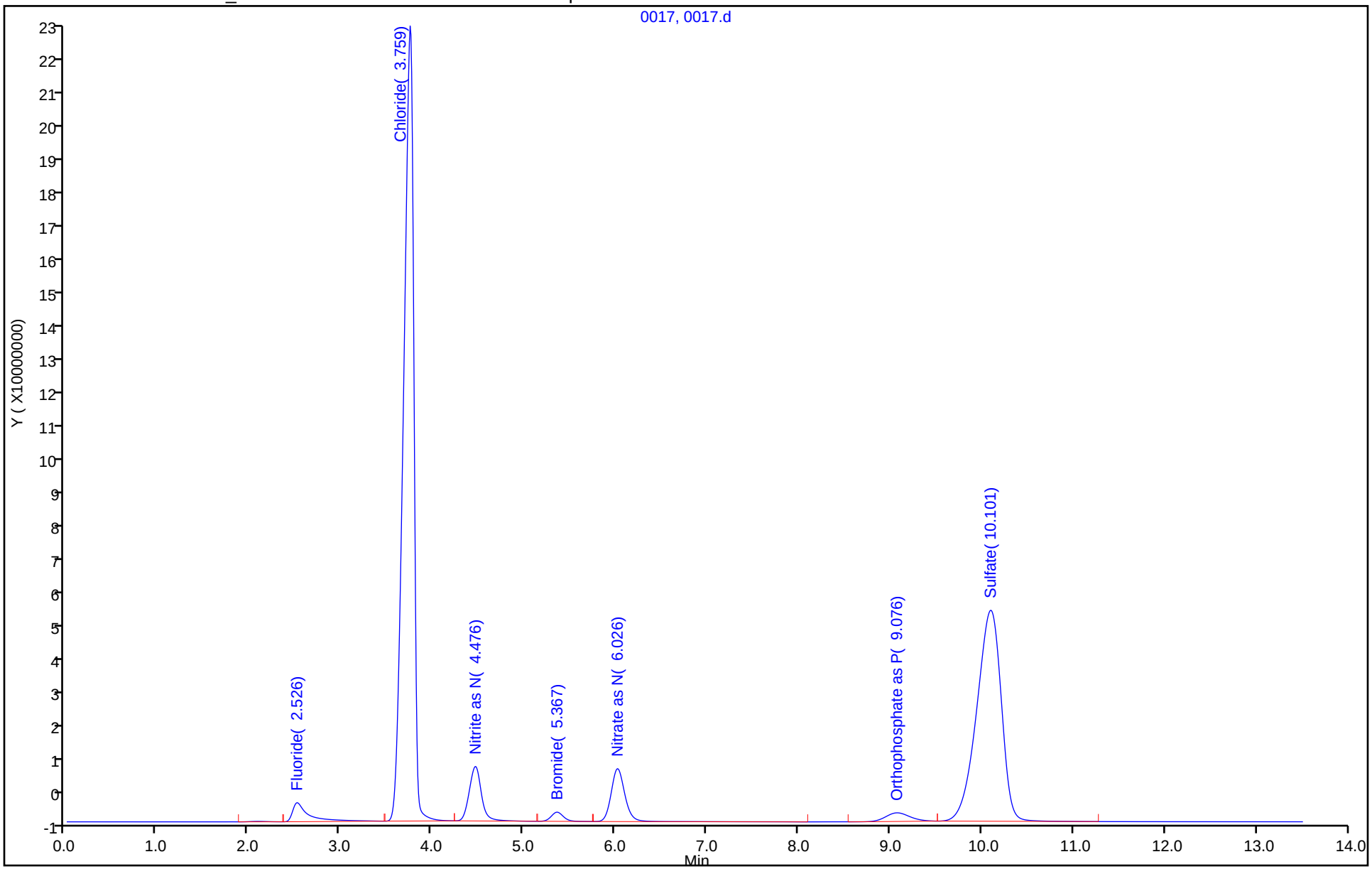
IC LCS_01862 Amount Added: 5.00 Units: mL

Report Date: 16-Mar-2022 11:02:48 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0017.d

Injection Date:	15-Mar-2022 17:58:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

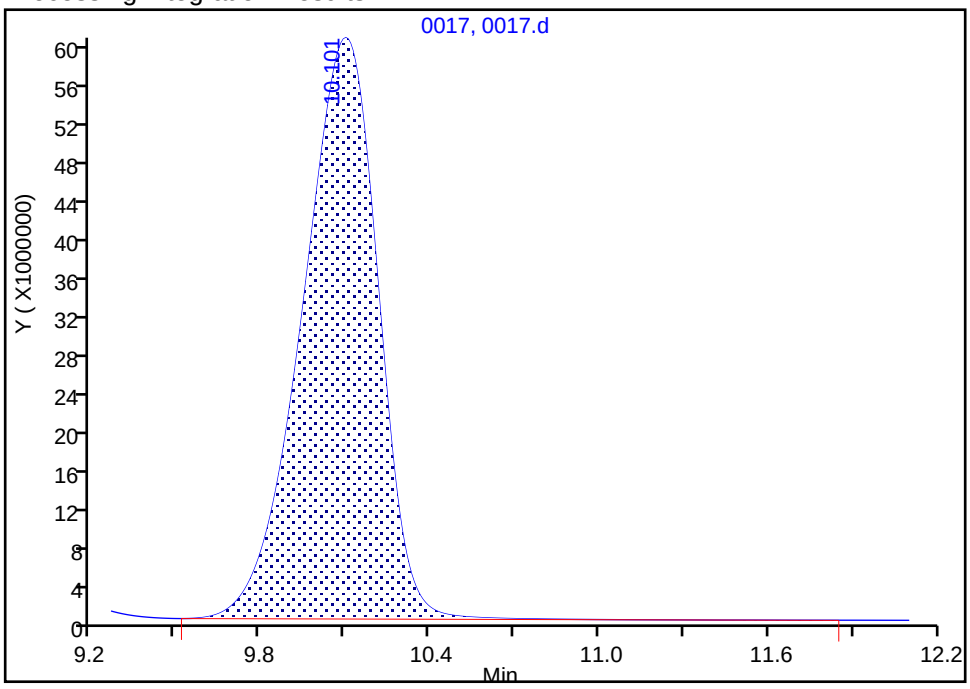
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0017.d
Injection Date: 15-Mar-2022 17:58:00 Instrument ID: WC_IonChrom11
Lims ID: ccv
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

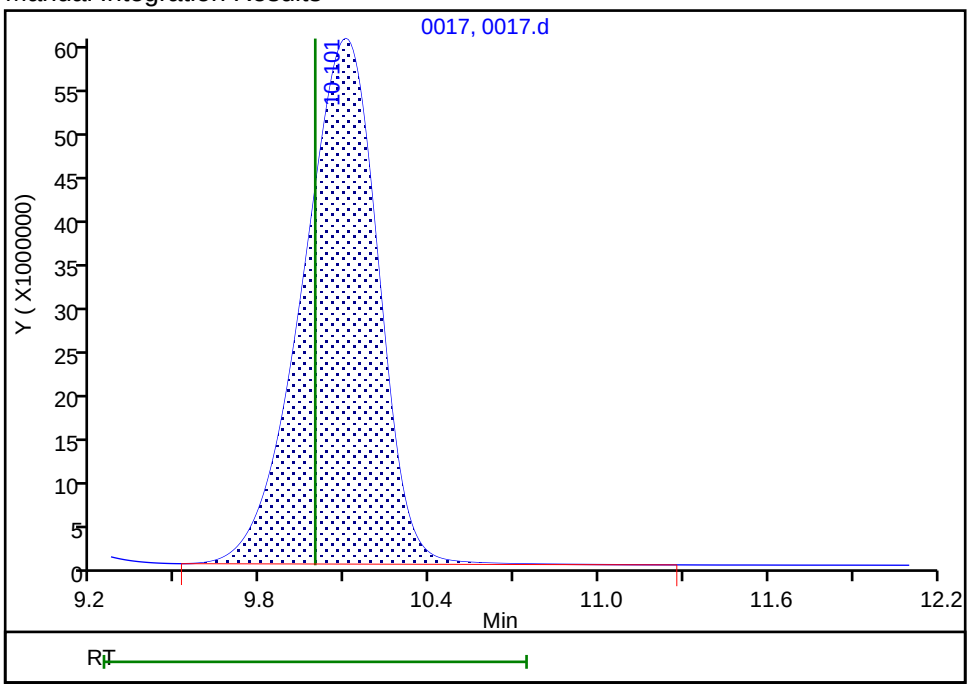
Processing Integration Results

RT: 10.10
Area: 1132597598
Amount: 98.948325
Amount Units: ug/ml



Manual Integration Results

RT: 10.10
Area: 1132128759
Amount: 98.907630
Amount Units: ug/ml



Reviewer: foxr, 16-Mar-2022 10:47:23
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0018.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 15-Mar-2022 18:15:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109245-018
Misc. Info.: 20046
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Mar-2022 11:02:47 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1665

First Level Reviewer: foxr Date: 16-Mar-2022 10:47:52

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.092				ND	
2 Chloride	3.675	3.651	0.024	197610		0.6929	M
3 Nitrite as N		4.459				ND	U
4 Bromide		5.342				ND	
5 Nitrate as N		6.009				ND	U
7 Orthophosphate as P	9.125	9.142	-0.017	385736		NC	
6 Sulfate	10.025	9.992	0.033	144475		0.6515	M

QC Flag Legend

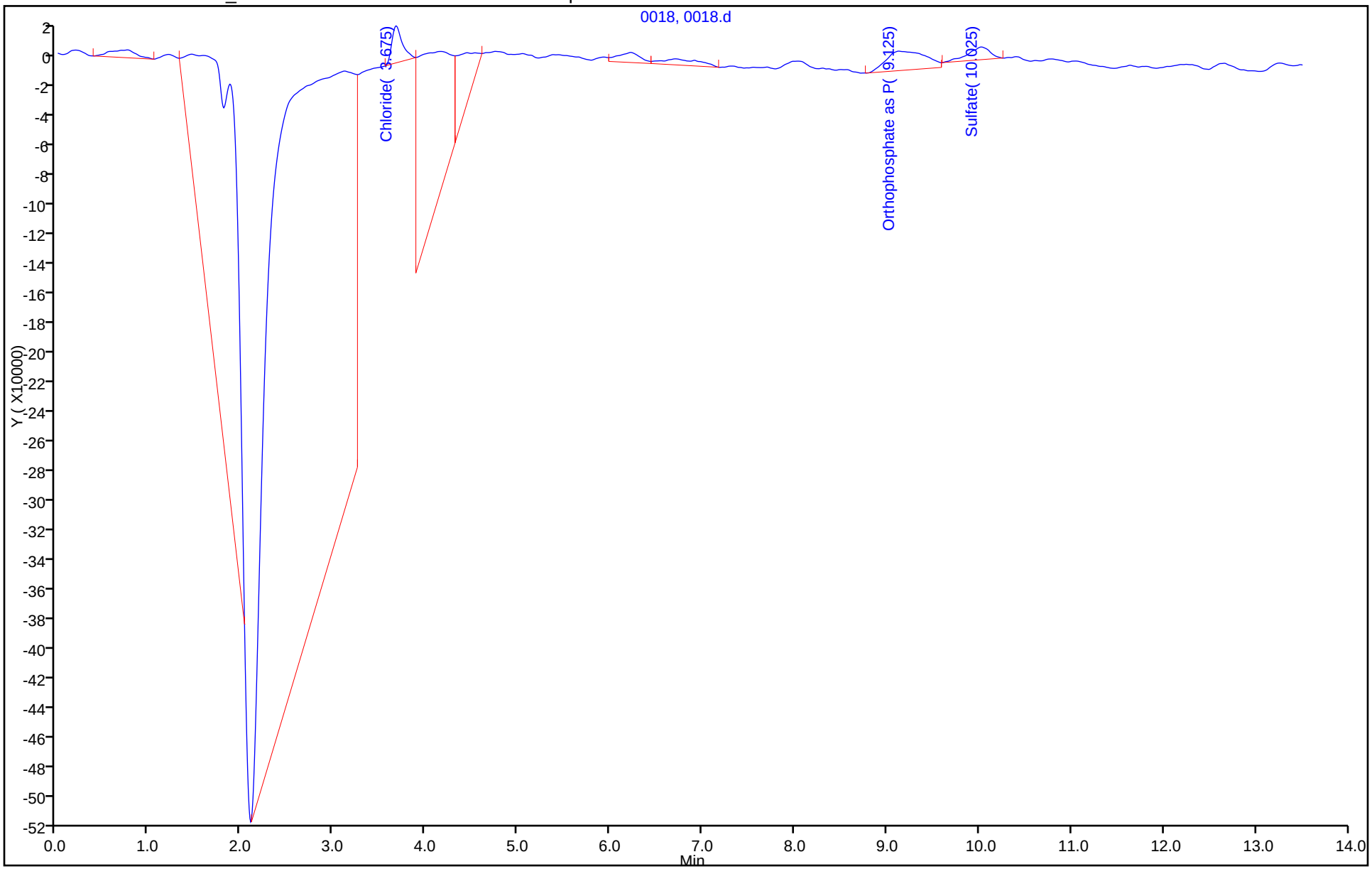
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 16-Mar-2022 11:02:48 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0018.d

Injection Date:	15-Mar-2022 18:15:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	18
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

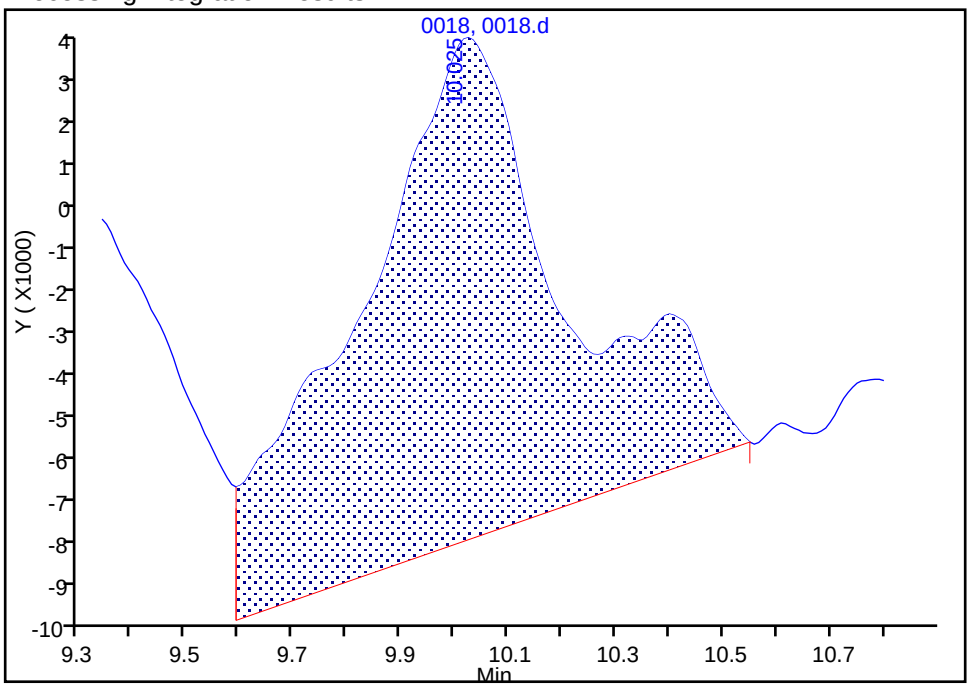
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220315-109245.b\0018.d
Injection Date: 15-Mar-2022 18:15:00 Instrument ID: WC_IonChrom11
Lims ID: ccb
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

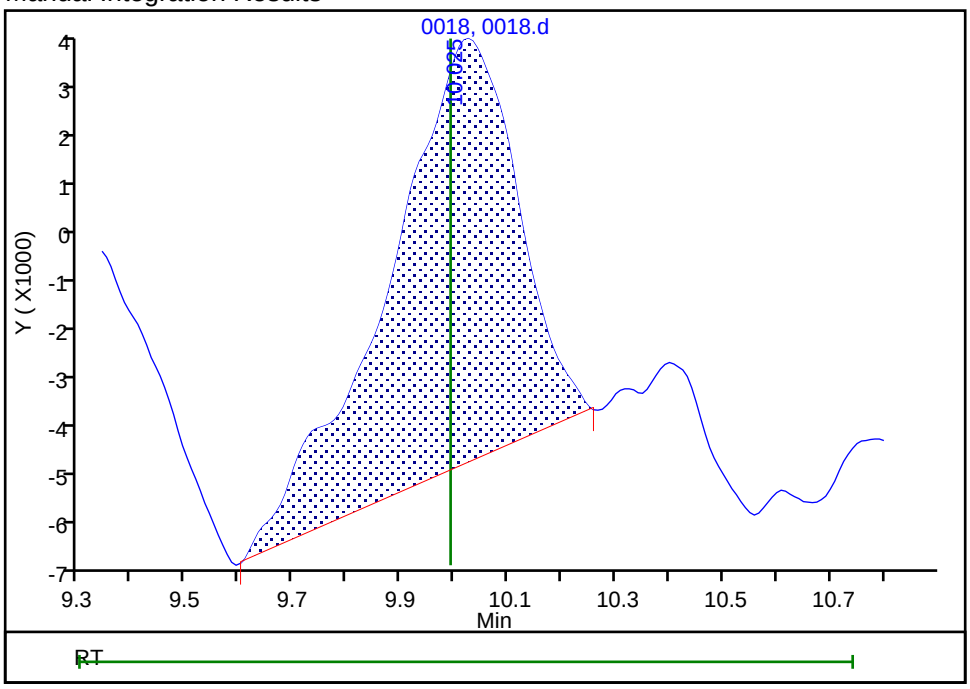
RT: 10.03
Area: 321739
Amount: 0.666935
Amount Units: ug/ml

Processing Integration Results



RT: 10.03
Area: 144475
Amount: 0.651548
Amount Units: ug/ml

Manual Integration Results



Reviewer: foxr, 16-Mar-2022 10:47:50
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

	Type	Analysis	Sample Name	Sa	ObjectID	Origin	Manual Dil	Result	N	Status
1	Unknown	NPOC	ICV		0A-1031	NPOC.met	1.000	NPOC:20.23mg/L		Completed
2	Unknown	NPOC	ICB		0A-1031	NPOC.met	1.000	NPOC:0.03020mg/L		Completed
3	Unknown	NPOC	LCS		0A-1031	NPOC.met	1.000	NPOC:24.89mg/L		Completed
4	Unknown	NPOC	MB		0A-1031	NPOC.met	1.000	NPOC:0.02199mg/L		Completed
5	Unknown	NPOC	TIC		0A-1031	NPOC.met	1.000	NPOC:0.03992mg/L		Completed
6	Unknown	NPOC	280-159149-b-5		0A-1031	NPOC.met	1.000	NPOC:10.27mg/L		Completed
7	Unknown	NPOC	MS280-159149-b-5		0A-1031	NPOC.met	1.000	NPOC:35.84mg/L		Completed
8	Unknown	NPOC	MSD 280-159149-b-5		0A-1031	NPOC.met	1.000	NPOC:35.59mg/L		Completed
9	Unknown	NPOC	280-159149-b-6		0A-1031	NPOC.met	1.000	NPOC:1.260mg/L		Completed
10	Unknown	NPOC	280-159149-b-7		0A-1031	NPOC.met	1.000	NPOC:5.864mg/L		Completed
11	Unknown	NPOC	280-159149-b-8		0A-1031	NPOC.met	1.000	NPOC:1.676mg/L		Completed
12	Unknown	NPOC	280-159149-b-9		0A-1031	NPOC.met	1.000	NPOC:4.179mg/L		Completed
13	Unknown	NPOC	280-159149-b-10		0A-1031	NPOC.met	1.000	NPOC:2.965mg/L		Completed
14	Unknown	NPOC	280-159149-b-11		0A-1031	NPOC.met	1.000	NPOC:1.503mg/L		Completed
15	Unknown	NPOC	CCV		0A-1031	NPOC.met	1.000	NPOC:25.05mg/L		Completed
16	Unknown	NPOC	CCB		0A-1031	NPOC.met	1.000	NPOC:-0.00883mg/		Completed
17	Unknown	NPOC	280-159122-c-3		0A-1031	NPOC.met	1.000	NPOC:0.8250mg/L		Completed
18	Unknown	NPOC	280-159161-b-3		0A-1031	NPOC.met	10.00	NPOC:306.2mg/L		Completed
19	Unknown	NPOC	280-159161-b-2		0A-1031	NPOC.met	1.000	NPOC:2.707mg/L		Completed
20	Unknown	NPOC	280-159161-b-1		0A-1031	NPOC.met	1.000	NPOC:3.245mg/L		Completed
21	Unknown	NPOC	MS 280-159161-b-1		0A-1031	NPOC.met	1.000	NPOC:29.98mg/L		Completed
22	Unknown	NPOC	MSD 280-159161-b-1		0A-1031	NPOC.met	1.000	NPOC:29.58mg/L		Completed
23	Unknown	NPOC	280-159161-b-4		0A-1031	NPOC.met	1.000	NPOC:2.955mg/L		Completed
24	Unknown	NPOC	280-159473-e-4		0A-1031	NPOC.met	1.000	NPOC:0.3776mg/L		Completed
25	Unknown	NPOC	280-159473-e-5		0A-1031	NPOC.met	1.000	NPOC:0.4167mg/L		Completed
26	Unknown	NPOC	280-159473-e-6		0A-1031	NPOC.met	1.000	NPOC:0.4737mg/L		Completed
27	Unknown	NPOC	CCV		0A-1031	NPOC.met	1.000	NPOC:25.11mg/L		Completed
28	Unknown	NPOC	CCB		0A-1031	NPOC.met	1.000	NPOC:0.03096mg/L		Completed
29	Unknown	NPOC	lcs 280-568304/1-a		0A-1031	NPOC.met	1.000	NPOC:25.21mg/L		Completed
30	Unknown	NPOC	mb 280-568304/2-a		0A-1031	NPOC.met	1.000	NPOC:0.05756mg/L		Completed
31	Unknown	NPOC	280-159137-d-1-a		0A-1031	NPOC.met	1.000	NPOC:5.641mg/L		Completed
32	Unknown	NPOC	280-159137-d-1-b ms		0A-1031	NPOC.met	1.000	NPOC:32.08mg/L		Completed
33	Unknown	NPOC	280-159137-d-1-c ms		0A-1031	NPOC.met	1.000	NPOC:32.58mg/L		Completed
34	Unknown	NPOC	280-159137-d-2-a		0A-1031	NPOC.met	1.000	NPOC:24.68mg/L		Completed
35	Unknown	NPOC	280-159137-d-3-a		0A-1031	NPOC.met	1.000	NPOC:12.53mg/L		Completed
36	Unknown	NPOC	280-159137-d-4-a		0A-1031	NPOC.met	1.000	NPOC:5.548mg/L		Completed
37	Unknown	NPOC	280-159137-d-5-a		0A-1031	NPOC.met	1.000	NPOC:11.02mg/L		Completed
38	Unknown	NPOC	LCS		0A-1031	NPOC.met	1.000	NPOC:25.60mg/L		Completed
39	Unknown	NPOC	CCV		0A-1031	NPOC.met	1.000	NPOC:26.21mg/L		Completed
40	Unknown	NPOC	CCB		0A-1031	NPOC.met	1.000	NPOC:0.04387mg/L		Completed
41	Unknown	NPOC	MB		0A-1031	NPOC.met	1.000	NPOC:0.03639mg/L		Completed
42	Unknown	NPOC	TIC		0A-1031	NPOC.met	1.000	NPOC:0.05069mg/L		Completed
43	Unknown	NPOC	280-159219-b-1		0A-1031	NPOC.met	1.000	NPOC:1.365mg/L		Completed
44	Unknown	NPOC	MS 280-159219-b-1		0A-1031	NPOC.met	1.000	NPOC:27.09mg/L		Completed
45	Unknown	NPOC	MSD 280-159219-b-1		0A-1031	NPOC.met	1.000	NPOC:26.51mg/L		Completed
46	Unknown	NPOC	280-163242-a-5-a		0A-1031	NPOC.met	1.000	NPOC:13.82mg/L		Completed
47	Unknown	NPOC	280-159282-C-1		0A-1031	NPOC.met	1.000	NPOC:5.098mg/L		Completed
48	Unknown	NPOC	280-159282-C-2		0A-1031	NPOC.met	1.000	NPOC:5.941mg/L		Completed
49	Unknown	NPOC	280-159512-B-1		0A-1031	NPOC.met	1.000	NPOC:0.06294mg/L		Completed
50	Unknown	NPOC	580-111042-A-1		0A-1031	NPOC.met	1.000	NPOC:4.283mg/L		Completed
51	Unknown	NPOC	CCV		0A-1031	NPOC.met	1.000	NPOC:25.27mg/L		Completed
52	Unknown	NPOC	CCB		0A-1031	NPOC.met	1.000	NPOC:0.04364mg/L		Completed
53	Unknown	NPOC	280-159223-J-1		0A-1031	NPOC.met	5.000	NPOC:68.99mg/L		Completed

	Date / Time	Vial
1	3/10/2022 4:48:18 PM	1
2	3/10/2022 5:04:54 PM	2
3	3/10/2022 5:23:38 PM	3
4	3/10/2022 5:38:11 PM	4
5	3/10/2022 5:52:51 PM	5
6	3/10/2022 6:11:36 PM	6
7	3/10/2022 6:26:10 PM	7
8	3/10/2022 6:40:49 PM	8
9	3/10/2022 6:59:35 PM	9
10	3/10/2022 7:18:14 PM	10
11	3/10/2022 7:34:50 PM	11
12	3/10/2022 7:53:34 PM	12
13	3/10/2022 8:12:13 PM	13
14	3/10/2022 8:28:49 PM	14
15	3/10/2022 8:43:27 PM	15
16	3/10/2022 8:58:07 PM	16
17	3/10/2022 9:16:53 PM	17
18	3/10/2022 9:35:35 PM	18
19	3/10/2022 9:54:14 PM	19
20	3/10/2022 10:08:47 PM	20
21	3/10/2022 10:27:33 PM	21
22	3/10/2022 10:44:09 PM	22
23	3/10/2022 11:02:53 PM	23
24	3/10/2022 11:17:26 PM	24
25	3/10/2022 11:32:05 PM	25
26	3/10/2022 11:46:44 PM	26
27	3/11/2022 12:05:29 AM	27
28	3/11/2022 12:20:02 AM	28
29	3/11/2022 12:38:48 AM	29
30	3/11/2022 12:53:21 AM	30
31	3/11/2022 1:12:07 AM	31
32	3/11/2022 1:31:06 AM	32
33	3/11/2022 1:49:46 AM	33
34	3/11/2022 2:08:31 AM	34
35	3/11/2022 2:27:11 AM	35
36	3/11/2022 2:45:51 AM	36
37	3/11/2022 3:04:31 AM	37
38	3/11/2022 3:19:05 AM	38
39	3/11/2022 3:37:51 AM	39
40	3/11/2022 3:52:25 AM	40
41	3/11/2022 4:07:05 AM	41
42	3/11/2022 4:21:45 AM	42
43	3/11/2022 4:36:25 AM	43
44	3/11/2022 4:55:12 AM	44
45	3/11/2022 5:09:46 AM	45
46	3/11/2022 5:24:26 AM	46
47	3/11/2022 5:39:06 AM	47
48	3/11/2022 5:57:51 AM	48
49	3/11/2022 6:12:26 AM	49
50	3/11/2022 6:27:06 AM	50
51	3/11/2022 6:45:57 AM	51
52	3/11/2022 7:00:31 AM	52
53	3/11/2022 7:19:17 AM	53

	Type	Analysis	Sample Name	Sa	ObjectID	Origin	Manual Dil	Result	N	Status
54	Unknown	NPOC	280-159223-J-2		0A-1031	NPOC.met	10.00	NPOC:176.6mg/L		Completed
55	Unknown	NPOC	LCS 280-568305/1-A		0A-1031	NPOC.met	1.000	NPOC:26.51mg/L		Completed
56	Unknown	NPOC	MB 280-568305/2-A		0A-1031	NPOC.met	1.000	NPOC:0.05955mg/L		Completed
57	Unknown	NPOC	280-159282-I-1-D		0A-1031	NPOC.met	1.000	NPOC:4.856mg/L		Completed
58	Unknown	NPOC	280-159282-I-1-E MS		0A-1031	NPOC.met	1.000	NPOC:32.92mg/L		Completed
59	Unknown	NPOC	280-159282-I-1-F MS		0A-1031	NPOC.met	1.000	NPOC:33.66mg/L		Completed
60	Unknown	NPOC	280-159282-h-2-a		0A-1031	NPOC.met	1.000	NPOC:5.401mg/L		Completed
61	Unknown	NPOC	CCV		0A-1031	NPOC.met	1.000	NPOC:26.29mg/L		Completed
62	Unknown	NPOC	CCB		0A-1031	NPOC.met	1.000	NPOC:0.05368mg/L		Completed

	Date / Time	Vial
54	3/11/2022 7:37:56 AM	54
55	3/11/2022 7:56:37 AM	55
56	3/11/2022 8:11:12 AM	56
57	3/11/2022 8:29:59 AM	57
58	3/11/2022 8:46:53 AM	58
59	3/11/2022 9:05:39 AM	59
60	3/11/2022 9:24:18 AM	60
61	3/11/2022 9:42:59 AM	61
62	3/11/2022 9:57:34 AM	62

TOC-V Cal Curve Information
C:¥TOC3201¥CalCurves¥TOC3.2021_12_07_11_32_20.cal

Date of Creation 12:36:09 PM 12/7/2021
User
System TOC-V cpn 3

Cal. Curve

Sample Name: CAL 110716
Sample ID: Untitled
Object ID 0A-103108-04335027-13466071B919-0000
Cal. Curve: TOC3.2021_12_07_11_32_20.cal
Status Completed
Comment:

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.6248	50uL	1	*******		12/7/2021 11:40:11 A
2	0.5787	50uL	1	*******		12/7/2021 11:42:14 A

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 0.6018
SD Area 0.03260
CV Area 5.42%
Vial 1

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	2.583	50uL	1	*******		12/7/2021 11:50:58 A
2	2.619	50uL	1	*******		12/7/2021 11:53:01 A

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 2.601
SD Area 0.02546
CV Area 0.98%
Vial 2

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	11.75	50uL	1	*******		12/7/2021 12:01:46 P
2	11.60	50uL	1	*******		12/7/2021 12:03:48 P

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 11.68
SD Area 0.1061
CV Area 0.91%
Vial 3

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	23.27	50uL	1	*******		12/7/2021 12:12:33 P
2	23.01	50uL	1	*******		12/7/2021 12:14:36 P

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 23.14
SD Area 0.1838
CV Area 0.79%
Vial 4

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	57.10	50uL	1	*******		12/7/2021 12:23:19 P
2	56.62	50uL	1	*******		12/7/2021 12:25:22 P

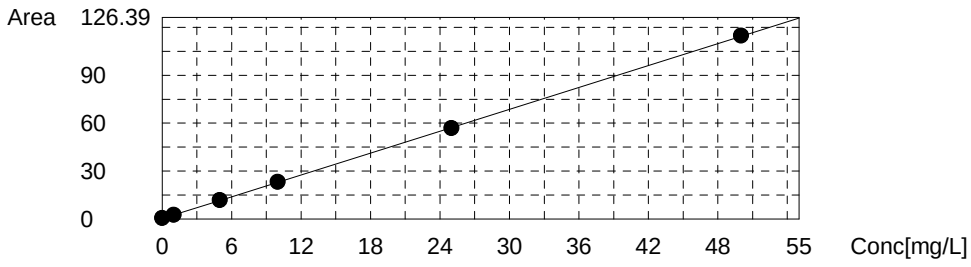
Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 56.86
SD Area 0.3394
CV Area 0.60%
Vial 5

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	115.7	50uL	1	*******		12/7/2021 12:34:07 P
2	114.1	50uL	1	*******		12/7/2021 12:36:09 P

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 114.9
SD Area 1.131
CV Area 0.98%
Vial 6

Slope: 2.286
Intercept 0.2877
r^2 0.9999
r 1.0000
Zero Shift No



Instr.Information

System TOC-V cpn 3
Instrument Options TOC/ASI/
Catalyst Regular Sensitivity

Sample

Sample Name: ICV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

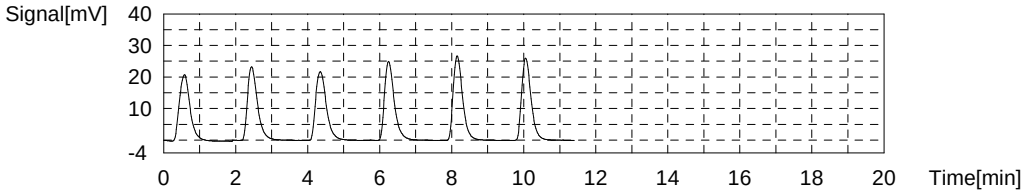
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.23mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	43.79	19.03mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 4:38:03 PM
2	45.17	19.63mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 4:40:06 PM
3	45.43	19.74mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 4:42:09 PM
4	47.73	20.75mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 4:44:12 PM
5	49.20	21.39mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 4:46:15 PM
6	47.85	20.80mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 4:48:18 PM

Mean Area 46.54
Mean Conc. 20.23mg/L



Sample

Sample Name: ICB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

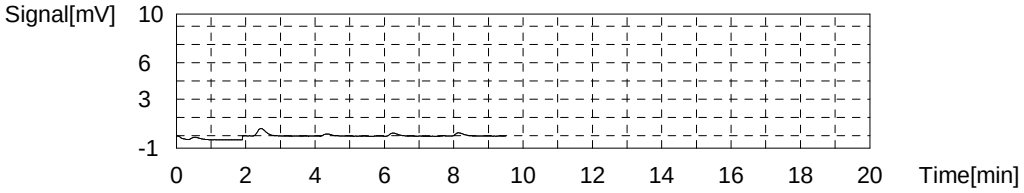
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.03020mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3038	0.00703mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 4:56:42 PM
2	1.045	0.3312mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 4:58:45 PM
3	0.2975	0.00427mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 5:00:48 PM
4	0.4365	0.06507mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 5:02:51 PM
5	0.3893	0.04443mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 5:04:54 PM

Mean Area 0.3568
Mean Conc. 0.03020mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

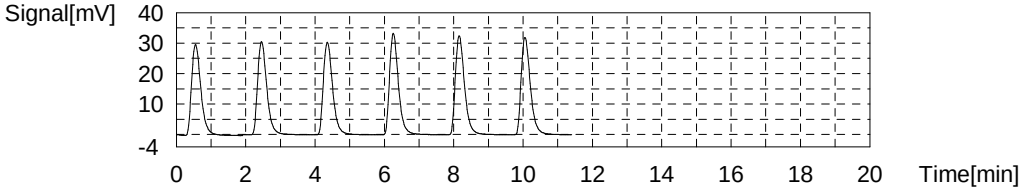
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.89mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.24	24.47mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 5:13:23 PM
2	56.38	24.53mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 5:15:26 PM
3	56.70	24.67mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 5:17:29 PM
4	59.76	26.01mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 5:19:32 PM
5	60.01	26.12mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 5:21:35 PM
6	59.46	25.88mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 5:23:38 PM

Mean Area 57.20
Mean Conc. 24.89mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

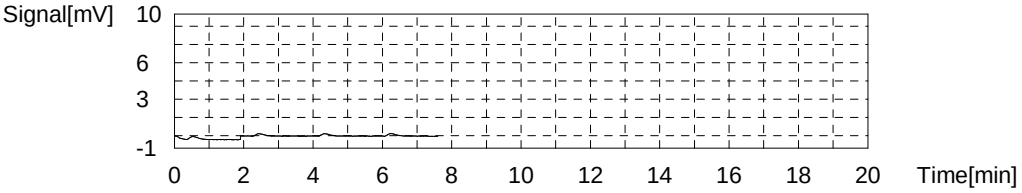
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.02199mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3635	0.03314mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 5:32:02 PM
2	0.3224	0.01517mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 5:34:05 PM
3	0.3120	0.01062mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 5:36:08 PM
4	0.3541	0.02903mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 5:38:11 PM

Mean Area 0.3380
Mean Conc. 0.02199mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

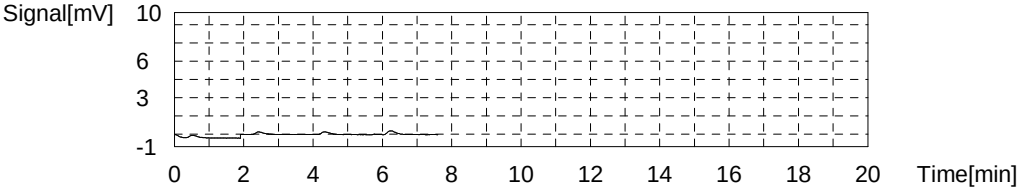
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.03992mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3058	0.00790mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 5:46:42 PM
2	0.3369	0.02151mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 5:48:45 PM
3	0.3607	0.03192mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 5:50:48 PM
4	0.5126	0.09836mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 5:52:51 PM

Mean Area 0.3790
Mean Conc. 0.03992mg/L



Sample

Sample Name: 280-159149-b-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

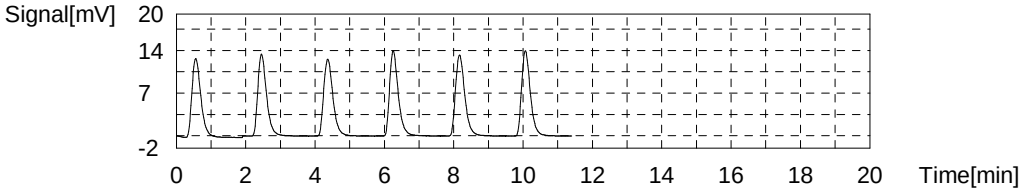
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.27mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	23.52	10.16mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 6:01:21 PM
2	23.54	10.17mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 6:03:24 PM
3	23.51	10.16mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 6:05:27 PM
4	24.50	10.59mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 6:07:30 PM
5	24.92	10.77mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 6:09:33 PM
6	24.73	10.69mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 6:11:36 PM

Mean Area 23.77
Mean Conc. 10.27mg/L



Sample

Sample Name: MS280-159149-b-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

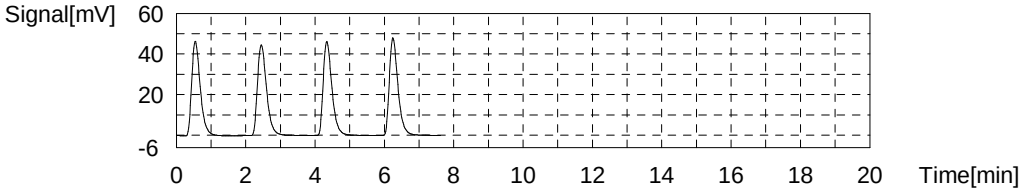
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:35.84mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.38	35.47mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 6:20:00 PM
2	81.76	35.64mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 6:22:03 PM
3	81.52	35.53mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 6:24:06 PM
4	84.25	36.72mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 6:26:10 PM

Mean Area 82.23
Mean Conc. 35.84mg/L



Sample

Sample Name: MSD 280-159149-b-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

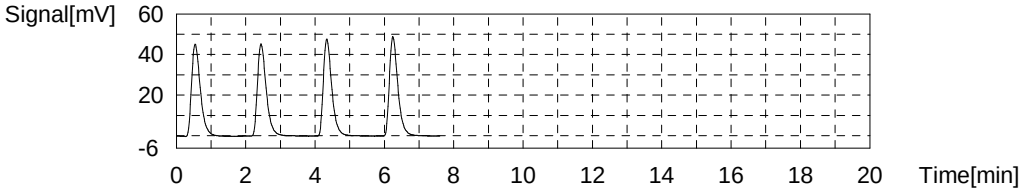
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:35.59mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	80.89	35.25mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 6:34:40 PM
2	80.44	35.06mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 6:36:43 PM
3	81.30	35.43mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 6:38:46 PM
4	83.95	36.59mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 6:40:49 PM

Mean Area 81.64
Mean Conc. 35.59mg/L



Sample

Sample Name: 280-159149-b-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

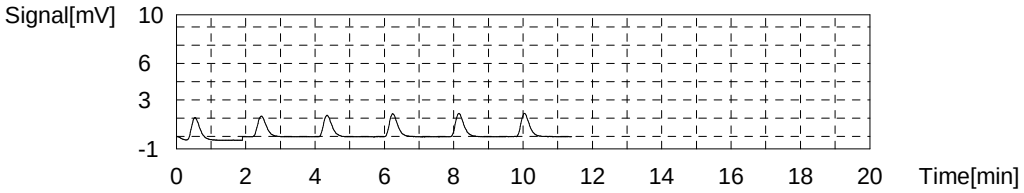
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.260mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.033	1.201mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 6:49:20 PM
2	2.951	1.165mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 6:51:23 PM
3	2.920	1.151mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 6:53:26 PM
4	3.170	1.261mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 6:55:29 PM
5	3.260	1.300mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 6:57:32 PM
6	3.213	1.279mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 6:59:35 PM

Mean Area 3.169
Mean Conc. 1.260mg/L



Sample

Sample Name: 280-159149-b-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

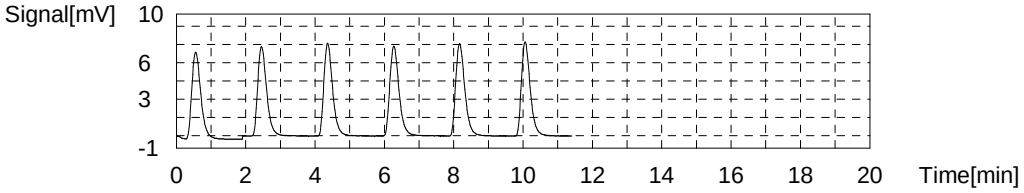
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.864mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.95	5.538mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 7:07:59 PM
2	13.16	5.630mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 7:10:02 PM
3	13.40	5.735mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 7:12:05 PM
4	13.73	5.880mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 7:14:08 PM
5	13.95	5.976mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 7:16:11 PM
6	13.70	5.866mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 7:18:14 PM

Mean Area 13.70
Mean Conc. 5.864mg/L



Sample

Sample Name: 280-159149-b-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

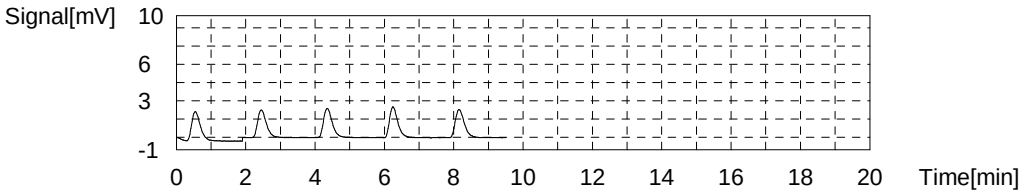
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.676mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.029	1.636mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 7:26:38 PM
2	3.910	1.584mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 7:28:41 PM
3	4.200	1.711mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 7:30:44 PM
4	4.132	1.681mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 7:32:47 PM
5	4.117	1.675mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 7:34:50 PM

Mean Area 4.120
Mean Conc. 1.676mg/L



Sample

Sample Name: 280-159149-b-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

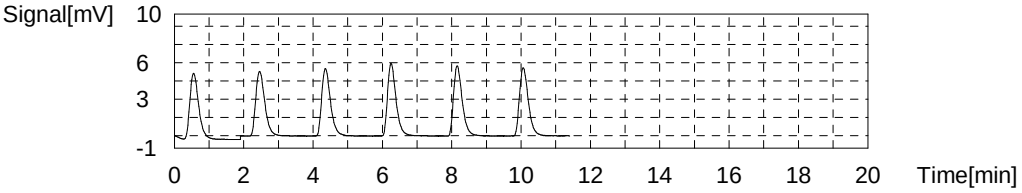
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.179mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.484	4.022mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 7:43:19 PM
2	9.676	4.106mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 7:45:22 PM
3	9.786	4.154mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 7:47:25 PM
4	10.23	4.349mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 7:49:28 PM
5	10.01	4.252mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 7:51:31 PM
6	9.896	4.203mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 7:53:34 PM

Mean Area 9.842
Mean Conc. 4.179mg/L



Sample

Sample Name: 280-159149-b-10
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

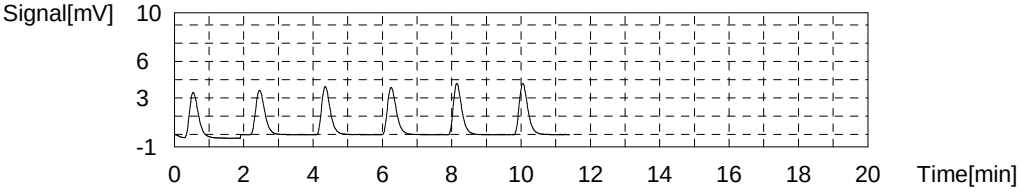
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.965mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.567	2.747mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 8:01:58 PM
2	6.634	2.776mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 8:04:01 PM
3	6.843	2.867mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 8:06:04 PM
4	7.030	2.949mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 8:08:07 PM
5	7.101	2.980mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 8:10:10 PM
6	7.291	3.063mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 8:12:13 PM

Mean Area 7.066
Mean Conc. 2.965mg/L



Sample

Sample Name: 280-159149-b-11
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

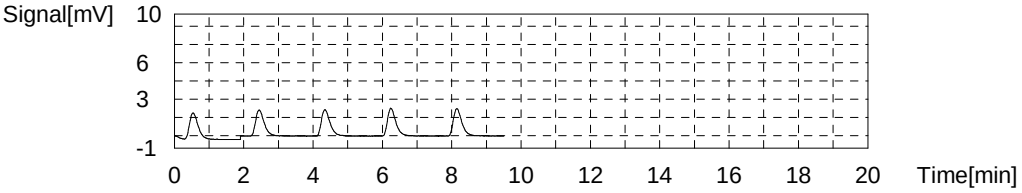
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.503mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.554	1.429mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 8:20:37 PM
2	3.635	1.464mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 8:22:40 PM
3	3.656	1.473mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 8:24:43 PM
4	3.801	1.537mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 8:26:46 PM
5	3.807	1.539mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 8:28:49 PM

Mean Area 3.725
Mean Conc. 1.503mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

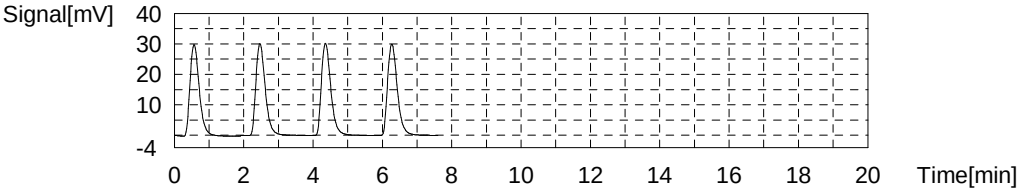
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.05mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.52	24.60mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 8:37:18 PM
2	56.99	24.80mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 8:39:21 PM
3	57.78	25.15mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 8:41:24 PM
4	58.96	25.66mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 8:43:27 PM

Mean Area 57.56
Mean Conc. 25.05mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

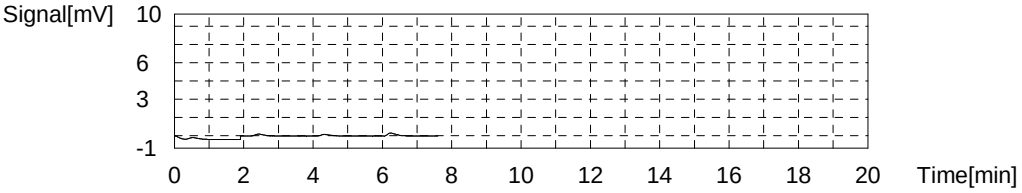
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.00883mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2183	-0.03037mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 8:51:58 PM
2	0.2628	-0.01090mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 8:54:01 PM
3	0.2257	-0.02713mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 8:56:04 PM
4	0.3634	0.03310mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 8:58:07 PM

Mean Area 0.2676
Mean Conc. -0.00883mg/L



Sample

Sample Name: 280-159122-c-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

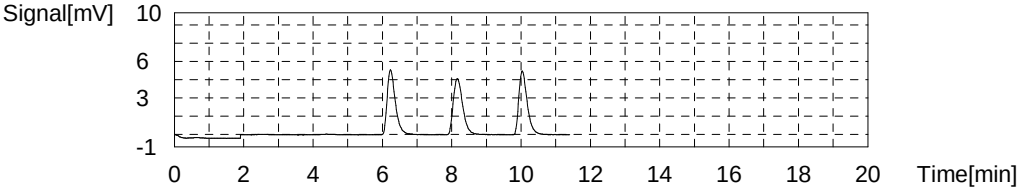
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8250mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	-0.1259mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 9:06:38 PM
2	0.000	-0.1259mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 9:08:41 PM
3	0.000	-0.1259mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 9:10:44 PM
4	8.847	3.744mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 9:12:47 PM
5	8.696	3.678mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 9:14:50 PM
6	8.813	3.729mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 9:16:53 PM

Mean Area 2.174
Mean Conc. 0.8250mg/L



Sample

Sample Name: 280-159161-b-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

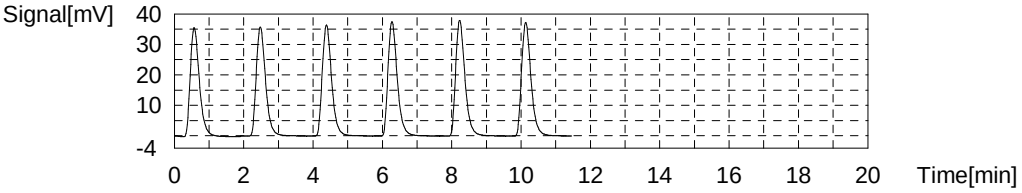
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:306.2mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	66.28	288.6mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 9:25:17 PM
2	67.05	292.0mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 9:27:20 PM
3	68.64	299.0mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 9:29:23 PM
4	70.63	307.7mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 9:31:29 PM
5	70.98	309.2mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 9:33:32 PM
6	70.92	308.9mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 9:35:35 PM

Mean Area 70.29
Mean Conc. 306.2mg/L



Sample

Sample Name: 280-159161-b-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

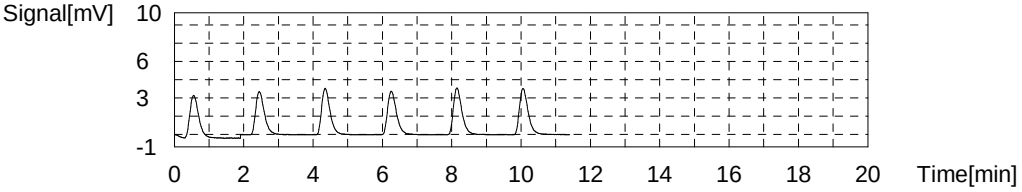
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.707mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.116	2.549mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 9:43:59 PM
2	6.178	2.576mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 9:46:02 PM
3	6.367	2.659mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 9:48:05 PM
4	6.397	2.672mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 9:50:08 PM
5	6.569	2.747mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 9:52:11 PM
6	6.572	2.749mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 9:54:14 PM

Mean Area 6.476
Mean Conc. 2.707mg/L



Sample

Sample Name: 280-159161-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

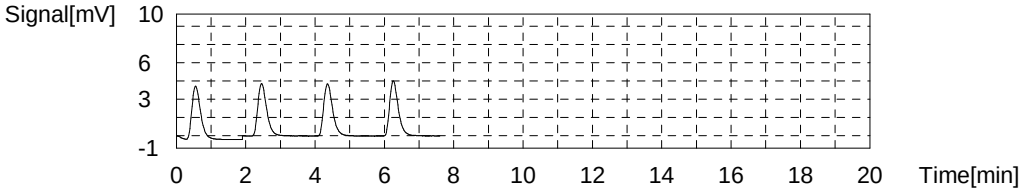
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.245mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.563	3.182mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 10:02:38 PM
2	7.642	3.217mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 10:04:41 PM
3	7.736	3.258mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 10:06:44 PM
4	7.887	3.324mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 10:08:47 PM

Mean Area 7.707
Mean Conc. 3.245mg/L



Sample

Sample Name: MS 280-159161-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

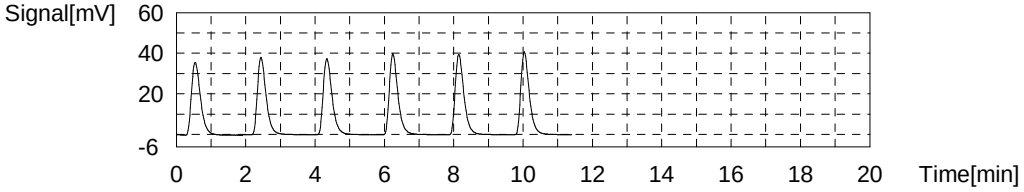
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.98mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	65.83	28.67mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 10:17:18 PM
2	66.44	28.93mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 10:19:21 PM
3	66.93	29.15mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 10:21:24 PM
4	69.07	30.08mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 10:23:27 PM
5	69.69	30.36mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 10:25:30 PM
6	69.62	30.33mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 10:27:33 PM

Mean Area 68.83
Mean Conc. 29.98mg/L



Sample

Sample Name: MSD 280-159161-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

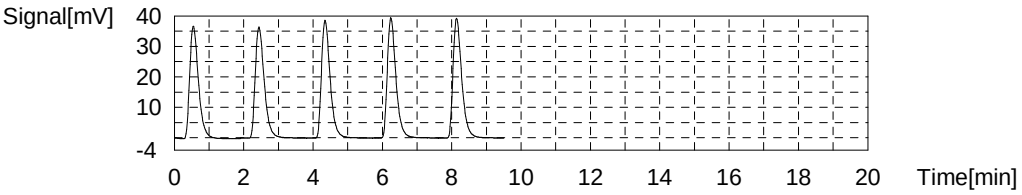
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.58mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	65.41	28.48mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 10:35:57 PM
2	66.15	28.81mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 10:38:00 PM
3	67.62	29.45mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 10:40:03 PM
4	68.75	29.94mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 10:42:06 PM
5	69.18	30.13mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 10:44:09 PM

Mean Area 67.93
Mean Conc. 29.58mg/L



Sample

Sample Name: 280-159161-b-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

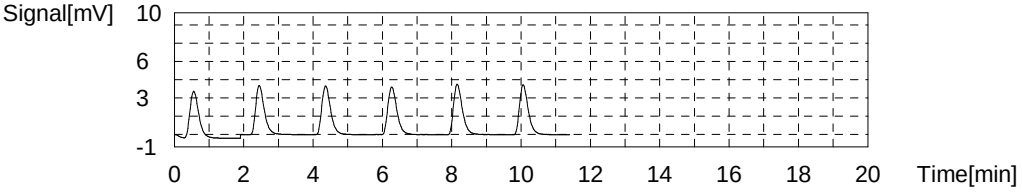
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.955mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.762	2.832mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 10:52:38 PM
2	6.916	2.899mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 10:54:41 PM
3	7.007	2.939mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 10:56:44 PM
4	7.103	2.981mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 10:58:47 PM
5	7.333	3.082mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/10/2022 11:00:50 PM
6	7.151	3.002mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 11:02:53 PM

Mean Area 7.044
Mean Conc. 2.955mg/L



Sample

Sample Name: 280-159473-e-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

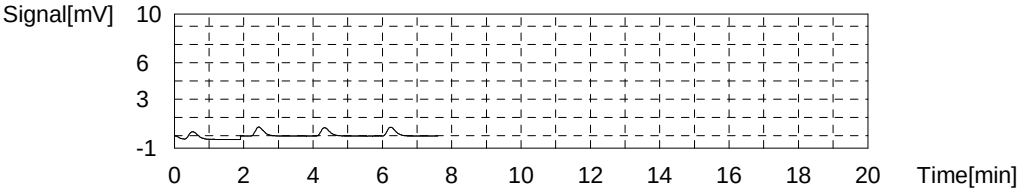
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3776mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.028	0.3238mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 11:11:17 PM
2	1.210	0.4034mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 11:13:20 PM
3	1.129	0.3680mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 11:15:23 PM
4	1.237	0.4152mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 11:17:26 PM

Mean Area 1.151
Mean Conc. 0.3776mg/L



Sample

Sample Name: 280-159473-e-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

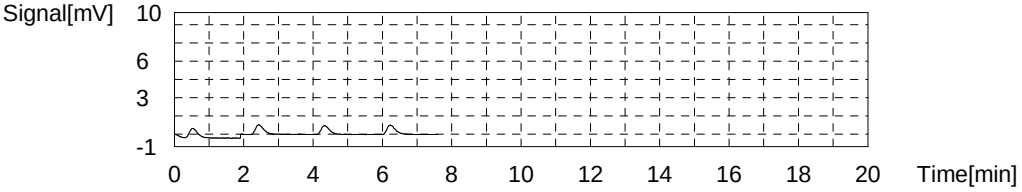
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4167mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.183	0.3916mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 11:25:56 PM
2	1.286	0.4366mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 11:27:59 PM
3	1.193	0.3960mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 11:30:02 PM
4	1.300	0.4428mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 11:32:05 PM

Mean Area 1.241
Mean Conc. 0.4167mg/L



Sample

Sample Name: 280-159473-e-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

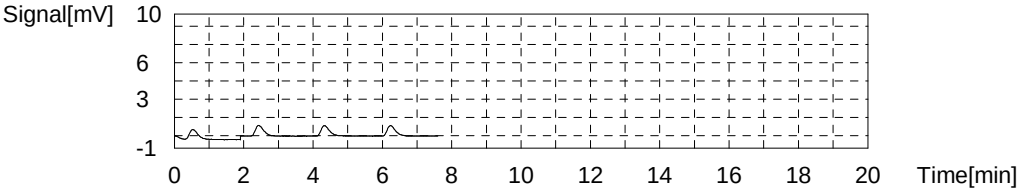
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4737mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.250	0.4209mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 11:40:35 PM
2	1.447	0.5071mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 11:42:38 PM
3	1.366	0.4716mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 11:44:41 PM
4	1.420	0.4952mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 11:46:44 PM

Mean Area 1.371
Mean Conc. 0.4737mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

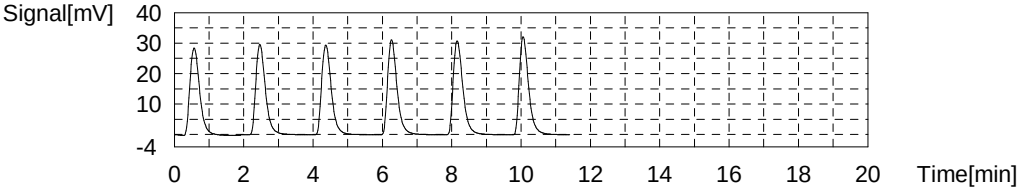
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.11mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.54	24.60mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 11:55:14 PM
2	57.32	24.95mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 11:57:17 PM
3	57.54	25.04mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/10/2022 11:59:20 PM
4	59.41	25.86mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 12:01:23 AM
5	60.29	26.24mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 12:03:26 AM
6	60.09	26.16mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 12:05:29 AM

Mean Area 57.70
Mean Conc. 25.11mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

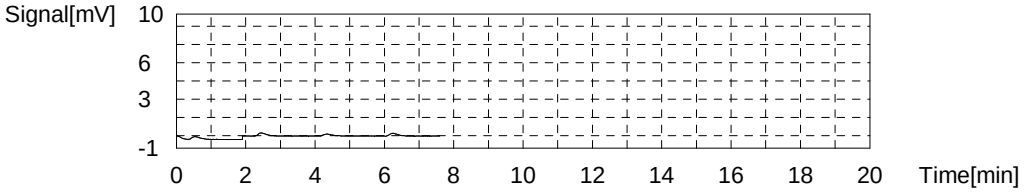
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.03096mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3632	0.03301mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 12:13:53 AM
2	0.4199	0.05781mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 12:15:56 AM
3	0.2568	-0.01353mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 12:17:59 AM
4	0.3941	0.04653mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 12:20:02 AM

Mean Area 0.3585
Mean Conc. 0.03096mg/L



Sample

Sample Name: lcs 280-568304/1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

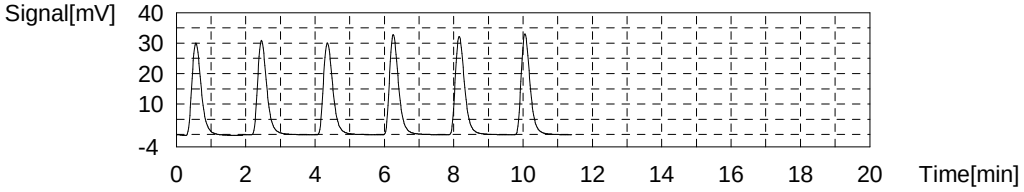
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.21mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	57.37	24.97mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 12:28:33 AM
2	57.21	24.90mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 12:30:36 AM
3	57.58	25.06mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 12:32:39 AM
4	60.20	26.21mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 12:34:42 AM
5	60.65	26.40mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 12:36:45 AM
6	59.55	25.92mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 12:38:48 AM

Mean Area 57.93
Mean Conc. 25.21mg/L



Sample

Sample Name: mb 280-568304/2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

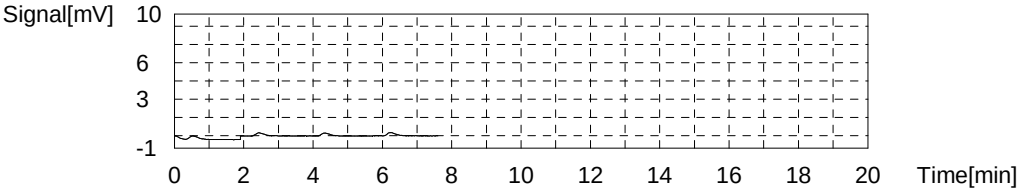
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.05756mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4150	0.05567mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 12:47:12 AM
2	0.4051	0.05134mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 12:49:15 AM
3	0.4039	0.05081mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 12:51:18 AM
4	0.4533	0.07242mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 12:53:21 AM

Mean Area 0.4193
Mean Conc. 0.05756mg/L



Sample

Sample Name: 280-159137-d-1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

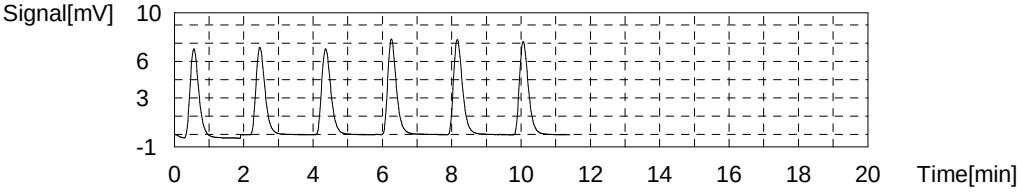
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.641mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.91	5.521mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 1:01:52 AM
2	12.99	5.556mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 1:03:55 AM
3	13.11	5.608mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 1:05:58 AM
4	13.73	5.880mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 1:08:01 AM
5	14.12	6.050mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 1:10:04 AM
6	13.86	5.936mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 1:12:07 AM

Mean Area 13.18
Mean Conc. 5.641mg/L



Sample

Sample Name: 280-159137-d-1-b ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

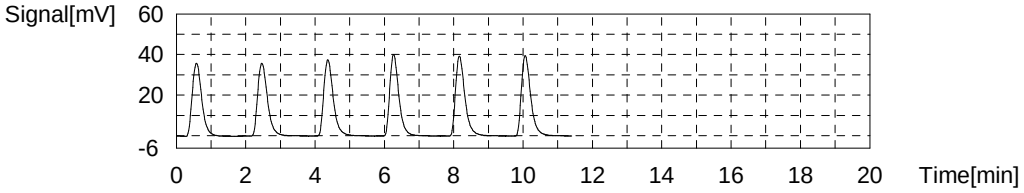
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:32.08mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	70.18	30.57mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 1:20:51 AM
2	70.82	30.85mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 1:22:54 AM
3	72.09	31.41mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 1:24:57 AM
4	73.60	32.07mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 1:27:00 AM
5	74.38	32.41mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 1:29:03 AM
6	74.44	32.43mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 1:31:06 AM

Mean Area 73.63
Mean Conc. 32.08mg/L



Sample

Sample Name: 280-159137-d-1-c msd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

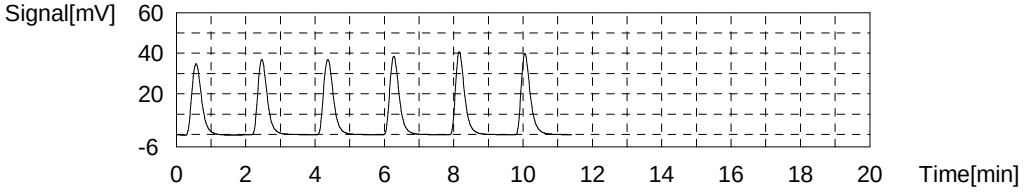
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:32.58mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	70.55	30.73mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 1:39:31 AM
2	70.69	30.79mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 1:41:34 AM
3	73.77	32.14mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 1:43:37 AM
4	74.23	32.34mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 1:45:40 AM
5	76.55	33.36mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 1:47:43 AM
6	74.53	32.47mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 1:49:46 AM

Mean Area 74.77
Mean Conc. 32.58mg/L



Sample

Sample Name: 280-159137-d-2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

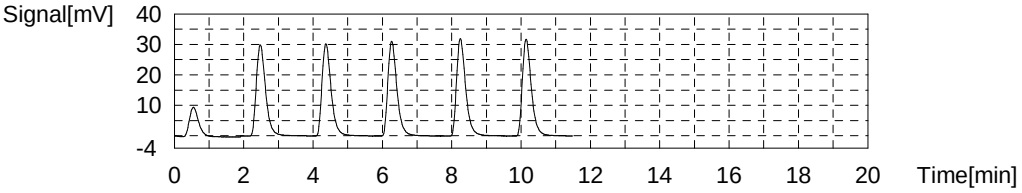
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.68mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.86	7.686mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 1:58:11 AM
2	55.99	24.36mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 2:00:14 AM
3	55.90	24.32mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 2:02:17 AM
4	57.26	24.92mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 2:04:25 AM
5	58.54	25.48mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 2:06:28 AM
6	57.71	25.12mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 2:08:31 AM

Mean Area 56.72
Mean Conc. 24.68mg/L



Sample

Sample Name: 280-159137-d-3-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

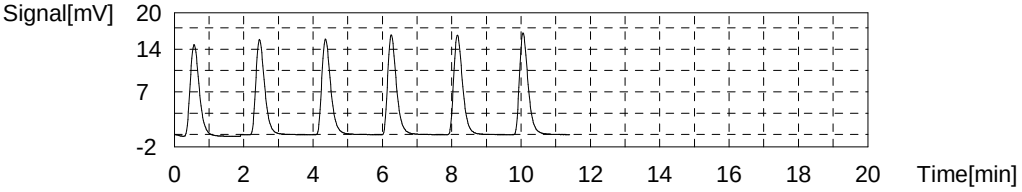
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:12.53mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	27.79	12.03mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 2:16:56 AM
2	27.62	11.95mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 2:18:59 AM
3	28.27	12.24mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 2:21:02 AM
4	29.02	12.57mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 2:23:05 AM
5	29.33	12.70mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 2:25:08 AM
6	29.11	12.61mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 2:27:11 AM

Mean Area 28.93
Mean Conc. 12.53mg/L



Sample

Sample Name: 280-159137-d-4-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

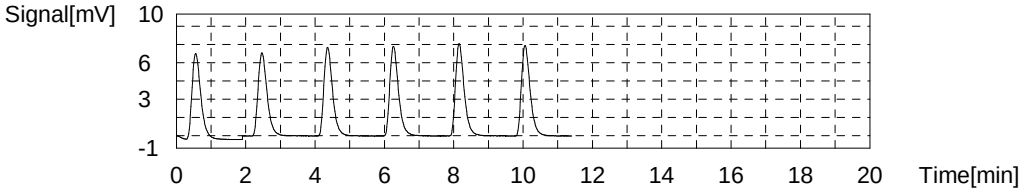
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.548mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.51	5.346mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 2:35:36 AM
2	12.32	5.263mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 2:37:39 AM
3	12.67	5.416mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 2:39:42 AM
4	12.99	5.556mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 2:41:45 AM
5	13.13	5.617mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 2:43:48 AM
6	13.10	5.604mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 2:45:51 AM

Mean Area 12.97
Mean Conc. 5.548mg/L



Sample

Sample Name: 280-159137-d-5-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

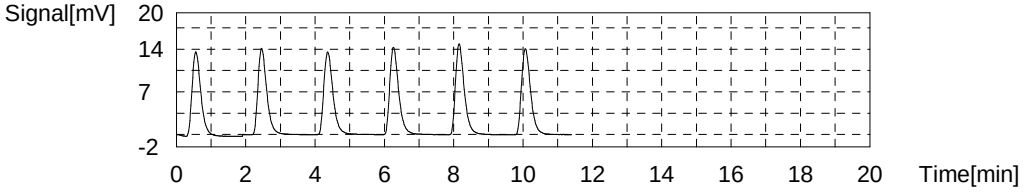
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.02mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	24.36	10.53mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 2:54:16 AM
2	25.00	10.81mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 2:56:19 AM
3	25.11	10.86mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 2:58:22 AM
4	25.92	11.21mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 3:00:25 AM
5	26.42	11.43mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 3:02:28 AM
6	25.93	11.22mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 3:04:31 AM

Mean Area 25.49
Mean Conc. 11.02mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

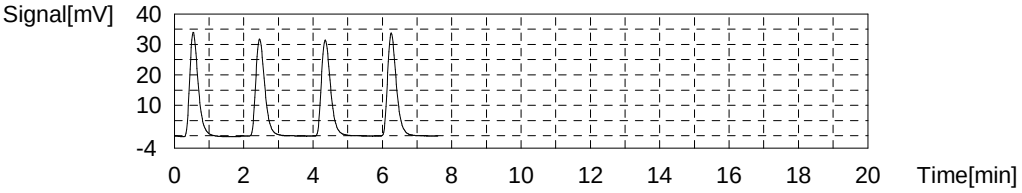
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.60mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	58.93	25.65mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 3:12:56 AM
2	57.80	25.16mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 3:14:59 AM
3	58.34	25.39mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 3:17:02 AM
4	60.24	26.22mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 3:19:05 AM

Mean Area 58.83
Mean Conc. 25.60mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

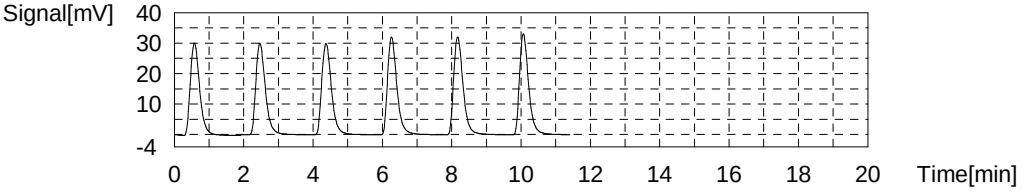
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.21mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	57.39	24.98mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 3:27:36 AM
2	57.48	25.02mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 3:29:39 AM
3	58.65	25.53mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 3:31:42 AM
4	60.51	26.34mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 3:33:45 AM
5	60.92	26.52mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 3:35:48 AM
6	60.78	26.46mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 3:37:51 AM

Mean Area 60.22
Mean Conc. 26.21mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

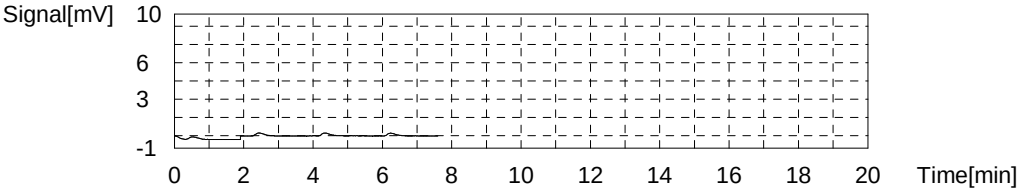
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.04387mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3382	0.02208mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 3:46:16 AM
2	0.4282	0.06144mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 3:48:19 AM
3	0.3836	0.04193mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 3:50:22 AM
4	0.4021	0.05003mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 3:52:25 AM

Mean Area 0.3880
Mean Conc. 0.04387mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

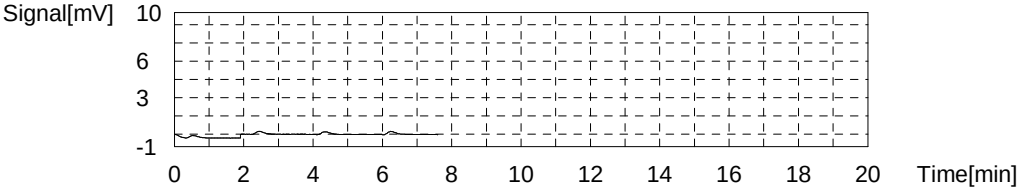
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.03639mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2887	0.00043mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 4:00:56 AM
2	0.4035	0.05064mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 4:02:59 AM
3	0.3774	0.03922mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 4:05:02 AM
4	0.4141	0.05527mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 4:07:05 AM

Mean Area 0.3709
Mean Conc. 0.03639mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

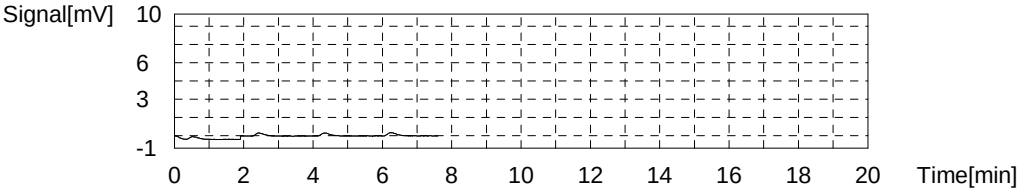
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.05069mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3327	0.01967mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 4:15:36 AM
2	0.4139	0.05519mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 4:17:39 AM
3	0.4082	0.05269mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 4:19:42 AM
4	0.4597	0.07522mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 4:21:45 AM

Mean Area 0.4036
Mean Conc. 0.05069mg/L



Sample

Sample Name: 280-159219-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

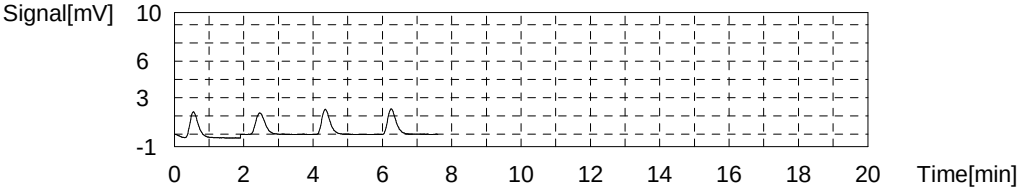
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.365mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.387	1.356mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 4:30:16 AM
2	3.299	1.317mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 4:32:19 AM
3	3.413	1.367mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 4:34:22 AM
4	3.534	1.420mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 4:36:25 AM

Mean Area 3.408
Mean Conc. 1.365mg/L



Sample

Sample Name: MS 280-159219-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

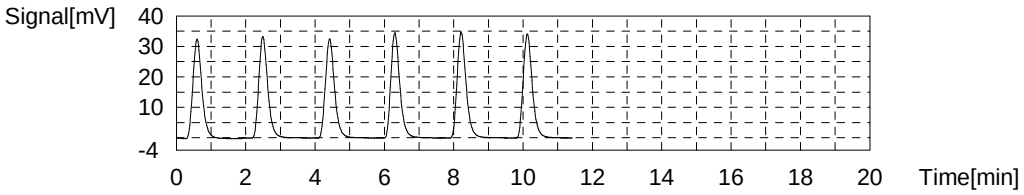
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:27.09mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	59.62	25.95mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 4:44:56 AM
2	60.18	26.20mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 4:47:00 AM
3	59.92	26.08mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 4:49:03 AM
4	62.74	27.32mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 4:51:06 AM
5	63.13	27.49mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 4:53:09 AM
6	62.81	27.35mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 4:55:12 AM

Mean Area 62.22
Mean Conc. 27.09mg/L



Sample

Sample Name: MSD 280-159219-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

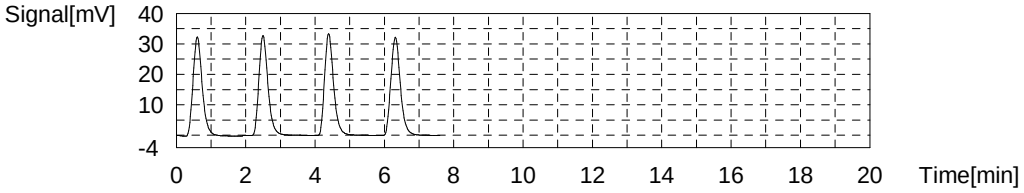
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.51mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	60.39	26.29mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:03:37 AM
2	60.01	26.12mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:05:40 AM
3	60.87	26.50mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:07:43 AM
4	62.28	27.11mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:09:46 AM

Mean Area 60.89
Mean Conc. 26.51mg/L



Sample

Sample Name: 280-163242-a-5-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

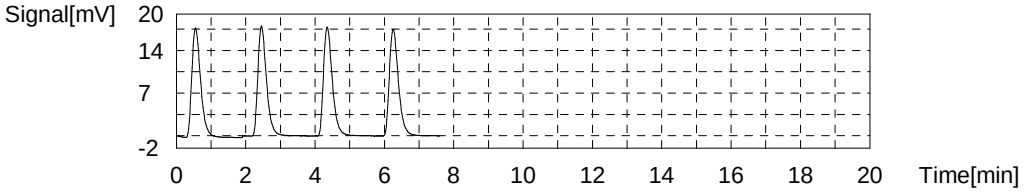
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:13.82mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.08	13.91mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:18:17 AM
2	31.39	13.60mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:20:20 AM
3	31.81	13.79mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:22:23 AM
4	32.28	13.99mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:24:26 AM

Mean Area 31.89
Mean Conc. 13.82mg/L



Sample

Sample Name: 280-159282-C-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

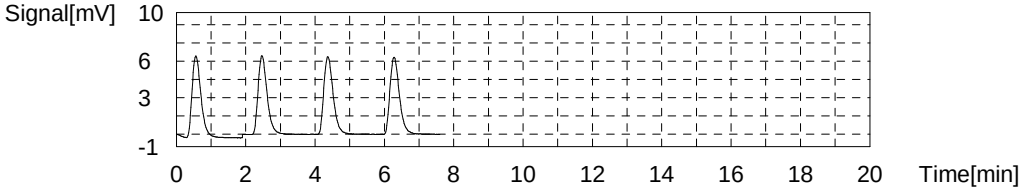
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.098mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.95	5.101mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:32:57 AM
2	11.71	4.996mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:35:00 AM
3	12.02	5.132mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:37:03 AM
4	12.09	5.162mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:39:06 AM

Mean Area 11.94
Mean Conc. 5.098mg/L



Sample

Sample Name: 280-159282-C-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

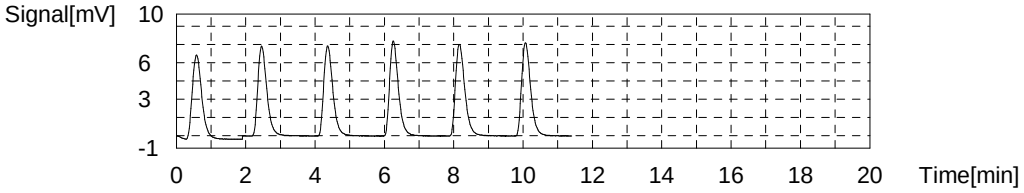
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.941mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.06	5.586mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:47:37 AM
2	13.36	5.718mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:49:40 AM
3	13.56	5.805mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:51:43 AM
4	13.90	5.954mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:53:46 AM
5	14.10	6.041mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:55:49 AM
6	13.92	5.963mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:57:51 AM

Mean Area 13.87
Mean Conc. 5.941mg/L



Sample

Sample Name: 280-159512-B-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

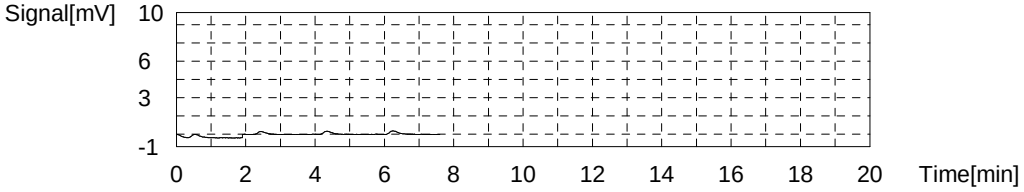
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06294mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4336	0.06380mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:06:17 AM
2	0.3790	0.03992mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:08:20 AM
3	0.4335	0.06376mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:10:23 AM
4	0.4804	0.08427mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:12:26 AM

Mean Area 0.4316
Mean Conc. 0.06294mg/L



Sample

Sample Name: 580-111042-A-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

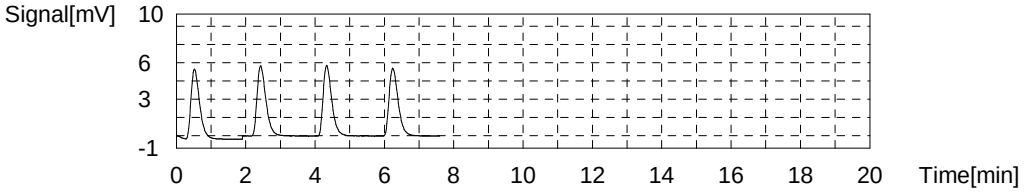
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.283mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.879	4.195mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:20:57 AM
2	10.22	4.344mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:23:00 AM
3	10.05	4.270mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:25:03 AM
4	10.17	4.322mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:27:06 AM

Mean Area 10.08
Mean Conc. 4.283mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

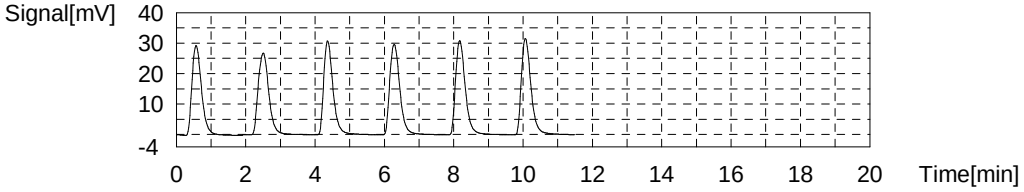
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.27mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	57.05	24.83mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:35:37 AM
2	57.26	24.92mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:37:40 AM
3	57.58	25.06mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:39:43 AM
4	60.49	26.33mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:41:46 AM
5	60.34	26.27mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:43:49 AM
6	61.50	26.77mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:45:57 AM

Mean Area 58.06
Mean Conc. 25.27mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

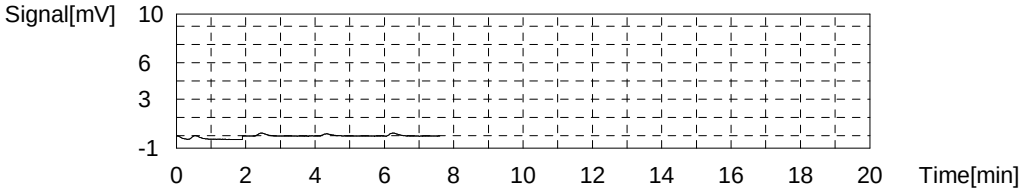
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.04364mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4533	0.07242mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:54:22 AM
2	0.3851	0.04259mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:56:25 AM
3	0.2838	-0.00172mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:58:28 AM
4	0.4278	0.06127mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:00:31 AM

Mean Area 0.3875
Mean Conc. 0.04364mg/L



Sample

Sample Name: 280-159223-J-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

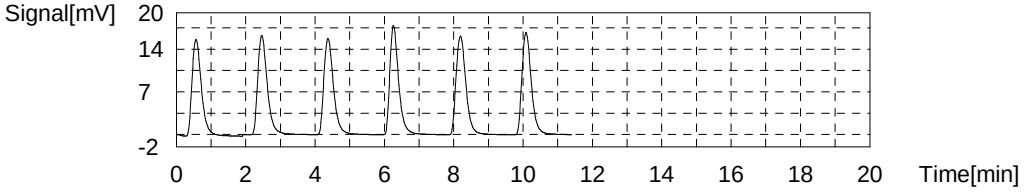
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:68.99mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	30.21	65.44mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:09:02 AM
2	31.41	68.06mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:11:05 AM
3	30.68	66.47mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:13:08 AM
4	31.99	69.33mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:15:11 AM
5	32.07	69.51mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:17:14 AM
6	31.86	69.05mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:19:17 AM

Mean Area 31.83
Mean Conc. 68.99mg/L



Sample

Sample Name: 280-159223-J-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

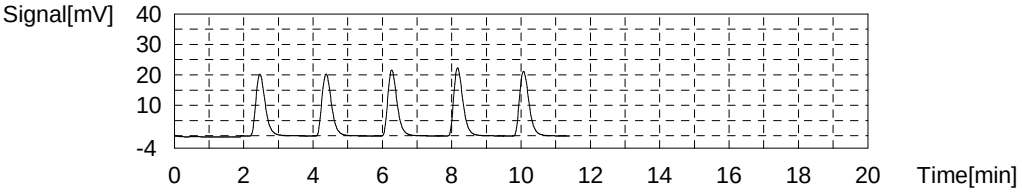
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:176.6mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	-1.259mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:27:42 AM
2	38.64	167.7mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:29:45 AM
3	39.56	171.8mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:31:48 AM
4	40.55	176.1mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:33:51 AM
5	41.60	180.7mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:35:54 AM
6	40.98	178.0mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:37:56 AM

Mean Area 40.67
Mean Conc. 176.6mg/L



Sample

Sample Name: LCS 280-568305/1-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

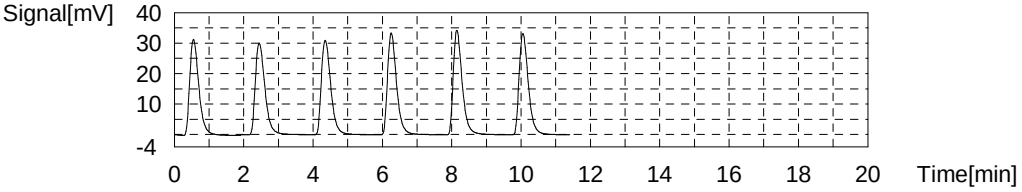
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.51mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	58.18	25.32mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:46:22 AM
2	58.16	25.31mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:48:25 AM
3	59.10	25.72mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:50:28 AM
4	60.93	26.52mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:52:31 AM
5	61.92	26.96mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:54:34 AM
6	61.65	26.84mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:56:37 AM

Mean Area 60.90
Mean Conc. 26.51mg/L



Sample

Sample Name: MB 280-568305/2-A
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

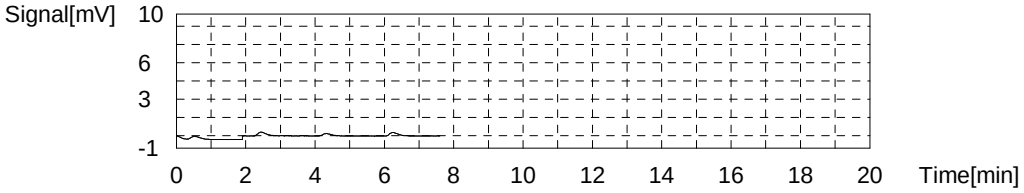
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.05955mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3550	0.02942mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:05:03 AM
2	0.5258	0.1041mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:07:06 AM
3	0.3239	0.01582mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:09:09 AM
4	0.4908	0.08882mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:11:12 AM

Mean Area 0.4239
Mean Conc. 0.05955mg/L



Sample

Sample Name: 280-159282-I-1-D
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

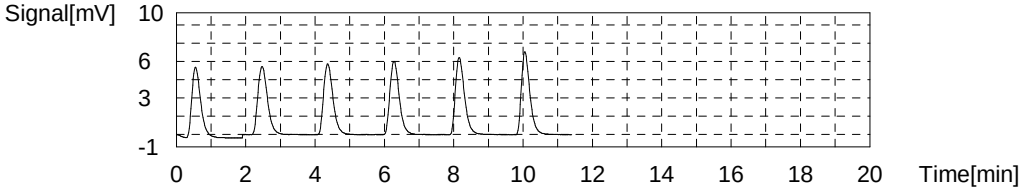
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.856mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.28	4.371mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:19:44 AM
2	10.91	4.646mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:21:47 AM
3	11.00	4.685mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:23:50 AM
4	11.34	4.834mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:25:53 AM
5	11.65	4.970mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:27:56 AM
6	11.57	4.935mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:29:59 AM

Mean Area 11.39
Mean Conc. 4.856mg/L



Sample

Sample Name: 280-159282-I-1-E MS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

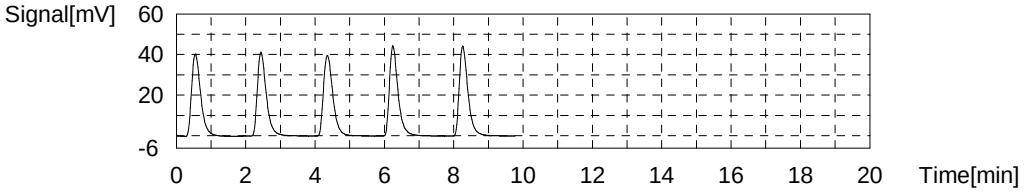
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:32.92mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.92	32.64mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:38:25 AM
2	74.30	32.37mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:40:28 AM
3	75.30	32.81mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:42:31 AM
4	78.01	34.00mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:44:41 AM
5	77.73	33.87mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:46:53 AM

Mean Area 75.56
Mean Conc. 32.92mg/L



Sample

Sample Name: 280-159282-I-1-F MSD
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

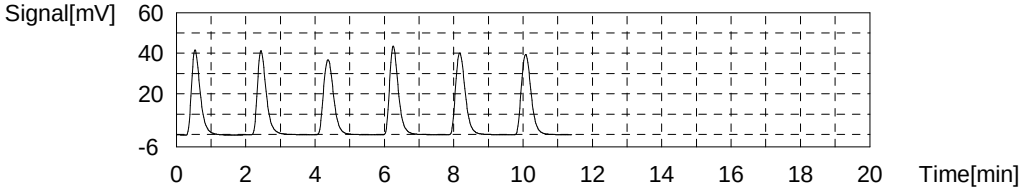
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:33.66mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	73.87	32.18mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:55:24 AM
2	73.89	32.19mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:57:27 AM
3	74.99	32.67mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:59:30 AM
4	77.42	33.74mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:01:33 AM
5	78.46	34.19mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:03:36 AM
6	78.09	34.03mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:05:39 AM

Mean Area 77.24
Mean Conc. 33.66mg/L



Sample

Sample Name: 280-159282-h-2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

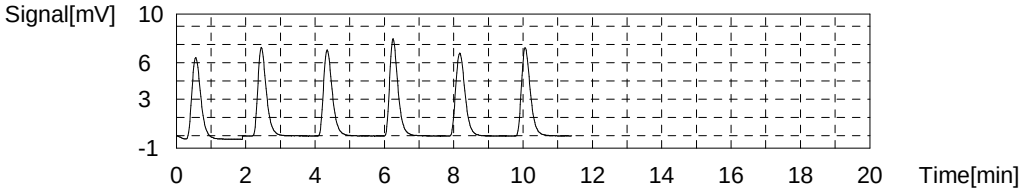
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.401mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.09	5.162mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:14:04 AM
2	12.30	5.254mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:16:07 AM
3	12.50	5.342mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:18:10 AM
4	13.30	5.691mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:20:13 AM
5	12.84	5.490mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:22:16 AM
6	12.90	5.517mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:24:18 AM

Mean Area 12.64
Mean Conc. 5.401mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

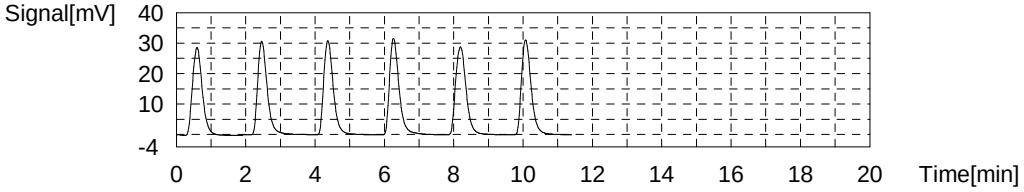
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.29mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	57.42	24.99mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:32:45 AM
2	58.24	25.35mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:34:48 AM
3	59.27	25.80mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:36:51 AM
4	60.76	26.45mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:38:54 AM
5	61.01	26.56mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:40:57 AM
6	60.57	26.37mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:42:59 AM

Mean Area 60.40
Mean Conc. 26.29mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

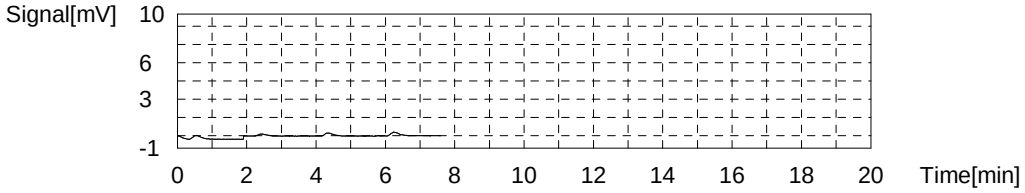
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.05368mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4821	0.08502mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:51:25 AM
2	0.2852	-0.00111mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:53:28 AM
3	0.4056	0.05156mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:55:31 AM
4	0.4689	0.07924mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:57:34 AM

Mean Area	0.4105
Mean Conc.	0.05368mg/L



FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

03/18/2022

Batch Number: 280-568304

Analyst: Wondimu, Akewak B

Batch Open: 3/10/2022 1:45:00PM

Batch End:

Sample Filtration

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	LCS~280-568304/1 N/A	N/A				N/A	N/A	N/A		LCS 280-568304/1-A
2	MB~280-568304/2 N/A	N/A				N/A	N/A	N/A		MB 280-568304/2-A
3	280-159137-D-1 (9060A_Diss)	N/A (280-159137-1)	Water			3/18/22	18_Days	4		280-159137-D-1-A
4	280-159137-D-1~MS (9060A_Diss)	N/A (280-159137-1)	Water			3/18/22	18_Days	4		280-159137-D-1-B MS
5	280-159137-D-1~MSD (9060A_Diss)	N/A (280-159137-1)	Water			3/18/22	18_Days	4		280-159137-D-1-C MSD
6	280-159137-D-2 (9060A_Diss)	N/A (280-159137-1)	Water			3/18/22	18_Days	4		280-159137-D-2-A
7	280-159137-D-3 (9060A_Diss)	N/A (280-159137-1)	Water			3/18/22	18_Days	4		280-159137-D-3-A
8	280-159137-D-4 (9060A_Diss)	N/A (280-159137-1)	Water			3/18/22	18_Days	4		280-159137-D-4-A
9	280-159137-D-5 (9060A_Diss)	N/A (280-159137-1)	Water			3/18/22	18_Days	4		280-159137-D-5-A

Page 1101 of 1119

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-568304 Analyst: Wondimu, Akewak B Batch Open: 3/10/2022 1:45:00PM

Batch End:

Batch Notes

Pipette/Syringe/Dispenser ID	9086953
Filter ID	17233826
Nitric Acid ID	N/A
Batch Comment	DOC Filtration

Comments

280-159137-D-1	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159137-D-1~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159137-D-1~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159137-D-2	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159137-D-3	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159137-D-4	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159137-D-5	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

03/18/2022

Batch Number: 280-568304

Analyst: Wondimu, Akewak B

Batch Open: 3/10/2022 1:45:00PM

Batch End:

Reagent Additions Worksheet

Lab ID	Reagent Code	Amount Added	Final Amount	By	Witness

Other Reagents:

Reagent	Amount/Units	Lot#:

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-568305

Analyst: Wondimu, Akewak B

Batch Open: 3/10/2022 1:49:00PM

Batch End:

03/18/2022

Sample Filtration

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	LCS~280-568305/1 N/A	N/A				N/A	N/A	N/A		
2	MB~280-568305/2 N/A	N/A				N/A	N/A	N/A		
3	280-159282-I-1 (SM5310_DOC_B)	N/A (280-159282-1)	Water			3/16/22	8_Days	2		
4	280-159282-I-1~MS (SM5310_DOC_B)	N/A (280-159282-1)	Water			3/16/22	8_Days	2		
5	280-159282-I-1~MSD (SM5310_DOC_B)	N/A (280-159282-1)	Water			3/16/22	8_Days	2		
6	280-159282-H-2 (SM5310_DOC_B)	N/A (280-159282-1)	Water			3/16/22	8_Days	2		

Page 1105 of 1119

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-568305

Analyst: Wondimu, Akewak B

Batch Open: 3/10/2022 1:49:00PM

Batch End:

Batch Notes

Pipette/Syringe/Dispenser ID	9086953
Filter ID	17233826
Nitric Acid ID	N/A
Batch Comment	DOC Filtration

Comments

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

03/18/2022

Batch Number: 280-568305

Analyst: Wondimu, Akewak B

Batch Open: 3/10/2022 1:49:00PM

Batch End:

Reagent Additions Worksheet

Lab ID	Reagent Code	Amount Added	Final Amount	By	Witness

Other Reagents:

Reagent	Amount/Units	Lot#:

5hi 3

9060A

	Type	A	Sample Name	S	C	M	Result	Notes	S	Da	Vi
1*	Unknown	N	ICV		C	1	✓		D		1
2*	Unknown	N	ICB		C	1	✓		D		2
3*	Unknown	N	LCS		C	1	✓		D		3
4*	Unknown	N	MB		C	1	✓		D		4
5*	Unknown	N	TIC		C	1	✓		D		5
6*	Unknown	N	280-159149-b-5		C	1	✓		D		6
7*	Unknown	N	MS280-159149-b-5		C	1	✓		D		7
8*	Unknown	N	MSD 280-159149-b-5		C	1	✓		D		8
9*	Unknown	N	280-159149-b-6		C	1	✓		D		9
10*	Unknown	N	280-159149-b-7		C	1	✓		D		1
11*	Unknown	N	280-159149-b-8		C	1	✓		D		1
12*	Unknown	N	280-159149-b-9		C	1	✓		D		1
13*	Unknown	N	280-159149-b-10		C	1	✓		D		1
14*	Unknown	N	280-159149-b-11		C	1	✓		D		1
15*	Unknown	N	CCV		C	1	✓		D		1
16*	Unknown	N	CCB		C	1	✓		D		1
17*	Unknown	N	280-159122-c-3		C	1	✓		D		1
18*	Unknown	N	280-159161-b-3		C	1	✓	10x dil color	D		1
19*	Unknown	N	280-159161-b-2		C	1	✓		D		1
20*	Unknown	N	280-159161-b-1		C	1	✓		D		2
21*	Unknown	N	MS 280-159161-b-1		C	1	✓		D		2
22*	Unknown	N	MSD 280-159161-b-1		C	1	✓		D		2
23*	Unknown	N	280-159161-b-4		C	1	✓		D		2
24*	Unknown	N	280-159473-e-4		C	1	✓		D		2
25*	Unknown	N	280-159473-e-5		C	1	✓		D		2
26*	Unknown	N	280-159473-e-6		C	1	✓		D		2
27*	Unknown	N	CCV		C	1	✓		D		2
28*	Unknown	N	CCB		C	1	✓		D		2
29*	Unknown	N	lcs 280-568304/1-a		C	1	✓		D		2
30*	Unknown	N	mb 280-568304/2-a		C	1	✓		D		3
31*	Unknown	N	280-159137-d-1-a		C	1	>2		D		3
32*	Unknown	N	280-159137-d-1-b ms		C	1	>2	Filtration DOC	D		3
33*	Unknown	N	280-159137-d-1-c ms		C	1	>2		D		3
34*	Unknown	N	280-159137-d-2-a		C	1	>2		D		3
35*	Unknown	N	280-159137-d-3-a		C	1	>2		D		3
36*	Unknown	N	280-159137-d-4-a		C	1	>2		D		3
37*	Unknown	N	280-159137-d-5-a		C	1	>2		D		3
38*	Unknown	N	LCS		C	1	✓		D		3
39*	Unknown	N	CCV		C	1	✓		D		3
40*	Unknown	N	CCB		C	1	✓		D		4
41*	Unknown	N	MB		C	1	✓		D		4
42*	Unknown	N	TIC		C	1	✓		D		4
43*	Unknown	N	280-159219-b-1		C	1	✓		D		4
44*	Unknown	N	MS 280-159219-b-1		C	1	✓		D		4
45*	Unknown	N	MSD 280-159219-b-1		C	1	✓		D		4
46*	Unknown	N	280-163242-a-5-a		C	1	✓		D		4
47*	Unknown	N	280-159282-C-1		C	1	✓		D		4
48*	Unknown	N	280-159282-C-2		C	1	✓		D		4
49*	Unknown	N	280-159512-B-1		C	1	✓		D		4
50*	Unknown	N	580-111042-A-1		C	1	✓	HCL preserved	D		5
51*	Unknown	N	CCV		C	1	✓		D		5

5310B

Shi 3

5310B

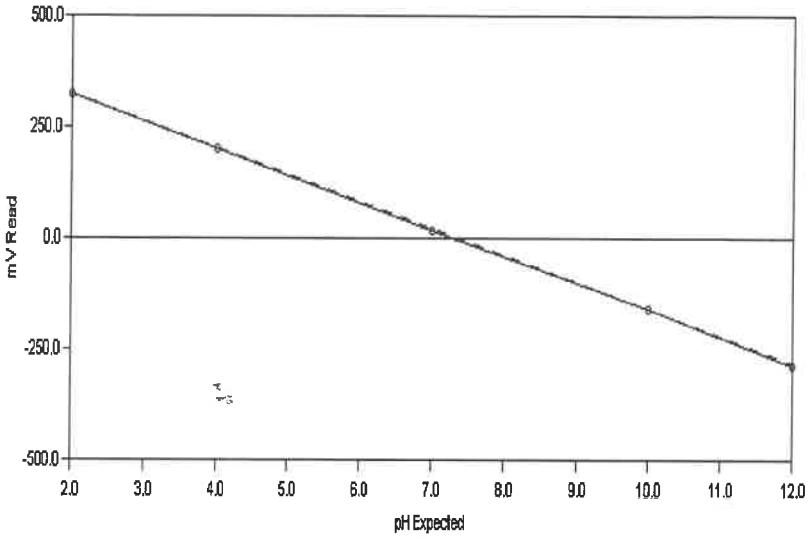
	Type	A	Sample Name	S	C	M	Result	Notes	S	Da	Vi
52*	Unknown	N	CCB		C	1	✓		D		5
53*	Unknown	N	280-159223-J-1		C	1	✓	5x Dil Odor color	D		5
54*	Unknown	N	280-159223-J-2		C	1	✓	& 10x Dil Color Odor	D		5
55*	Unknown	N	LCS 280-568305/1-A		C	1	✓		D		5
56*	Unknown	N	MB 280-568305/2-A		C	1	✓		D		5
57*	Unknown	N	280-159282-I-1-D		C	1	>2		D		5
58*	Unknown	N	280-159282-I-1-E MS		C	1	>2	Filtration DOC	D		5
59*	Unknown	N	280-159282-I-1-F MS		C	1	>2		D		5
60*	Unknown	N	280-159282-h-2-a		C	1	>2		D		6
61*	Unknown	N	CCV		C	1			D		6
62*	Unknown	N	CCB		C	1			D		6

BWH 5000

MANTECH INC.

Calibration Report

Calibration Record # 468



Calibration Settings

Calibration ID	PH	Date	3/1/2022	
Channel	1	Time	10:19 AM	
Probe Type	pH	Temperature	296.53 K	23.38 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit	

Calibration Results

Slope	-60.698	CorrCoeff	1.0000
Intercept	19.044	Equation:	Y = (-60.698) X + (19.044)

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-60.698	-65.00	-53.00
Intercept	19.044	-100.00	100.00
Correlation Coefficient	1.0000	0.99	1.00

Note: "True" means the calibration was within the specified ranges
"False" means the calibration was NOT within the specified ranges

Calibration Data	Standard	Reading
	2.00	322.99
	4.00	200.56
	7.00	17.70
	10.00	-159.66
	12.00	-286.37

Test America
Water Analysis Report

AT4 Analyst:_____

03/18/2022

Run Number 1382 **Order Number** 20220301-2

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	3/1/2022	1:21 PM	23.84	-1.00	5.32	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
INITIAL CHECK	3/1/2022	1:28 PM	23.12	-1.00	10.69	104.29	192.27	.00	175.96	16.31	1.04	1.92	-1.00	.02
BUFFER 7	3/1/2022	1:34 PM	22.63	-1.00	7.03	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
LCS	3/1/2022	1:41 PM	22.63	-1.00	10.72	104.21	196.80	.00	185.18	11.62	1.04	1.97	-1.00	.02
LCSD	3/1/2022	1:48 PM	22.67	-1.00	10.72	106.07	197.39	.00	182.64	14.75	1.06	1.97	-1.00	.02
MB	3/1/2022	1:53 PM	22.83	-1.00	7.87	.00	.97	.97	.00	.00	.00	.03	.05	.02
280-159052-a-2	3/1/2022	1:59 PM	22.31	-1.00	6.42	.00	66.22	66.22	.00	.00	.00	.66	-1.00	.02
DU 280-159052-a-2	3/1/2022	2:04 PM	22.02	-1.00	6.43	.00	66.58	66.58	.00	.00	.00	.67	-1.00	.02
280-159052-a-10	3/1/2022	2:09 PM	21.87	-1.00	6.39	.00	89.76	89.76	.00	.00	.00	.90	-1.00	.02
280-159058-a-2	3/1/2022	2:16 PM	22.25	-1.00	6.80	.00	168.51	168.51	.00	.00	.00	1.69	-1.00	.02
280-159058-a-17	3/1/2022	2:21 PM	22.75	-1.00	6.66	.00	104.30	104.30	.00	.00	.00	1.04	-1.00	.02
280-159137-f-1	3/1/2022	2:29 PM	22.49	-1.00	6.92	.00	348.47	348.47	.00	.00	.00	3.48	-1.00	.02
280-159137-f-2	3/1/2022	2:39 PM	22.20	-1.00	6.66	.00	677.00	677.00	.00	.00	.00	6.77	-1.00	.02
280-159137-f-3	3/1/2022	2:47 PM	22.16	-1.00	6.76	.00	430.07	430.07	.00	.00	.00	4.30	-1.00	.02
280-159137-f-4	3/1/2022	2:56 PM	22.22	-1.00	7.05	.00	434.21	434.21	.00	.00	.00	4.34	-1.00	.02
280-159137-f-5	3/1/2022	3:04 PM	22.23	-1.00	6.71	.00	472.02	472.02	.00	.00	.00	4.72	-1.00	.02
CCV	3/1/2022	3:11 PM	21.96	-1.00	10.65	103.07	197.96	.00	189.77	8.19	1.03	1.98	-1.00	.02
CCB	3/1/2022	3:17 PM	22.28	-1.00	7.89	.00	1.21	1.21	.00	.00	.00	.03	.05	.02
280-159091-C-8	3/1/2022	3:32 PM	22.23	-1.00	7.32	.00	1,340.89	1,340.89	.00	.00	.00	13.41	-1.00	.02
280-159058-a-9	3/1/2022	3:38 PM	22.14	-1.00	6.82	.00	169.77	169.77	.00	.00	.00	1.70	-1.00	.02
280-159062-a-1	3/1/2022	3:49 PM	22.39	-1.00	7.88	.00	753.60	753.60	.00	.00	.00	7.54	-1.00	.02
280-159113-b-2	3/1/2022	3:56 PM	22.66	-1.00	7.99	.00	197.82	197.82	.00	.00	.00	1.98	-1.00	.02
280-159113-b-3	3/1/2022	4:01 PM	22.95	-1.00	6.43	.00	1.14	1.14	.00	.00	.00	.03	.04	.02
280-159113-a-4	3/1/2022	4:08 PM	22.61	-1.00	7.92	.00	230.77	230.77	.00	.00	.00	2.31	-1.00	.02
280-159113-a-5	3/1/2022	4:15 PM	22.35	-1.00	7.88	.00	152.07	152.07	.00	.00	.00	1.52	-1.00	.02
280-159113-a-6	3/1/2022	4:21 PM	22.23	-1.00	7.88	.00	151.79	151.79	.00	.00	.00	1.52	-1.00	.02
280-159113-b-7	3/1/2022	4:28 PM	22.16	-1.00	7.92	.00	180.92	180.92	.00	.00	.00	1.81	-1.00	.02

PC-TitratION PLUS by Man-Tech Associates, Inc.

GENERAL RESULTS REPORT.SRW

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Run Number 1382 **Order Number** 20220301-2

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)
280-159161-a-1	3/1/2022	4:35 PM	22.14	-1.00	7.67	.00	229.12	229.12	.00	.00	.00	2.29	-1.00	.02
CCV	3/1/2022	4:42 PM	22.05	-1.00	10.63	101.18	196.44	.00	190.52	5.93	1.01	1.96	-1.00	.02
CCB	3/1/2022	4:48 PM	22.28	-1.00	7.74	.00	1.49	1.49	.00	.00	.00	.03	.05	.02
LCS	3/1/2022	4:56 PM	22.28	-1.00	10.62	100.90	195.66	.00	189.52	6.15	1.01	1.96	-1.00	.02
MB	3/1/2022	5:01 PM	22.39	-1.00	7.89	.00	.95	.95	.00	.00	.00	.03	.04	.02
280-159161-a-2	3/1/2022	5:10 PM	22.49	-1.00	7.35	.00	424.52	424.52	.00	.00	.00	4.25	-1.00	.02
DU 280-159161-a-2	3/1/2022	5:18 PM	22.66	-1.00	7.56	.00	430.70	430.70	.00	.00	.00	4.31	-1.00	.02
280-159161-a-3	3/1/2022	5:23 PM	22.74	-1.00	5.02	.00	40.93	40.93	.00	.00	.00	.41	-1.00	.02
280-159161-a-4	3/1/2022	5:30 PM	22.54	-1.00	7.44	.00	300.30	300.30	.00	.00	.00	3.00	-1.00	.02
280-159149-A-1	3/1/2022	5:39 PM	22.49	-1.00	7.12	.00	398.83	398.83	.00	.00	.00	3.99	-1.00	.02
280-159149-A-2	3/1/2022	5:47 PM	22.45	-1.00	7.24	.00	399.66	399.66	.00	.00	.00	4.00	-1.00	.02
280-159149-A-3	3/1/2022	5:53 PM	22.39	-1.00	7.17	.00	1.43	1.43	.00	.00	.00	.03	.05	.02
280-159149-A-4	3/1/2022	5:58 PM	22.42	-1.00	5.81	.00	.39	.39	.00	.00	.00	.02	.04	.02
280-159149-A-5	3/1/2022	6:04 PM	22.46	-1.00	6.99	.00	226.64	226.64	.00	.00	.00	2.27	-1.00	.02
280-159149-A-6	3/1/2022	6:14 PM	22.57	-1.00	7.38	.00	598.35	598.35	.00	.00	.00	5.98	-1.00	.02
CCV	3/1/2022	6:21 PM	22.51	-1.00	10.57	100.63	199.77	.00	198.28	1.49	1.01	2.00	-1.00	.02
CCB	3/1/2022	6:27 PM	22.66	-1.00	7.59	.00	1.09	1.09	.00	.00	.00	.03	.04	.02
280-159149-A-7	3/1/2022	6:34 PM	22.78	-1.00	7.60	.00	328.71	328.71	.00	.00	.00	3.29	-1.00	.02
280-159149-A-8	3/1/2022	6:41 PM	23.11	-1.00	7.83	.00	243.07	243.07	.00	.00	.00	2.43	-1.00	.02
280-159149-A-9	3/1/2022	6:49 PM	22.99	-1.00	7.73	.00	319.18	319.18	.00	.00	.00	3.19	-1.00	.02
280-159149-A-10	3/1/2022	6:59 PM	22.90	-1.00	7.54	.00	665.23	665.23	.00	.00	.00	6.65	-1.00	.02
280-159149-A-11	3/1/2022	7:09 PM	22.83	-1.00	7.67	.00	574.02	574.02	.00	.00	.00	5.74	-1.00	.02
280-159002-b-1	3/1/2022	7:20 PM	22.78	-1.00	7.55	.00	808.65	808.65	.00	.00	.00	8.09	-1.00	.02
CCV	3/1/2022	7:27 PM	22.58	-1.00	10.55	103.05	204.66	.00	203.22	1.44	1.03	2.05	-1.00	.02
CCB	3/1/2022	7:32 PM	22.83	-1.00	7.45	.00	1.17	1.17	.00	.00	.00	.03	.05	.02

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Shipping and Receiving Documents

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): KD BE BN	

Bill to: Brice Engineering

Remarks: standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)	
2-24-22	1540		x	EW7-PM24B-8-35	AQ	9	A,B,C,D,E,F	x	x	x	x	x	x	6°C
2-25-22	1010		x	EW7-PM25A-8-25	AQ	9	ABCDEF	x	x	x	x	x	x	
2-25-22	1205		x	EW7-PM25B-8-35	AQ	9	ABCDEF	x	x	x	x	x	x	

280-159137 Chain of Custody

Page 1115 of 1119

Signatures	Date	Time
Relinquished by:	2-25-22	1600
Received by:	2/26/22	1120
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number: 535539785684

Lab Address:
TestAmerica Lab, Inc.
Attn: Patrick McEntee
4955 Yarrow St.
Arvada, CO 80002
(303) 736-0107

Special Instructions

* Filter groundwater sample before analyzing for DOC

(A) (2) 500mL Ambers (Explosives)
(B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3)
(C) (1) 250mL HDPE (SO_4, Alkalinity)
(D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide)
(E) (1) 250mL Amber (DOC)*
(F) (3) 40 mL VOA w/ HCl (Methane)

TAL/Brice Project #: 28017805

03/28/2022

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

0.4, 1.0 CF-0.2 JR13

2020603

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse

Sampler(s): KD BE BN

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
2-25-22	1325		X	EW7-PM26A-8-25	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
2-25-22	1505		X	EW7-PM26B-8-35	AQ	9	ABCDEF	X	X	X	X	X	X		✓

Analytical Parameters

Bill to: Brice Engineering

standard TAT

Signatures	Date	Time
Relinquished by:	2-25-22	1600
Received by:	2/26/22	1120
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number: 535539785673

Lab Address:
TestAmerica Lab, Inc.
Attn: Patrick McEntee
4955 Yarrow St.
Arvada, CO 80002
(303) 736-0107

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TAL/Brice Project #: 28017805

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

03/18/2022

2020604



280-159137 Waybill


eurofins
Environment Testing
TestAmerica
#159470-434 RIT2 EXP 07/22
ORIGIN ID:PHDA (308) 379-7542
GARY CARSON
BRICE ENGINEERING (WATER TREATMENT
7502 WEST 13TH STREET
GRAND ISLAND, NE 68803
UNITED STATES US
SHIP DATE: 19OCT21
ACTWGT: 10.00 LB MAN
CAD: 5682071/CAFE3507
TO
EUROFINS TESTAMERICA DENV
4955 YARROW STREET
ARVADA CO 800024517
(303) 736-0100
REF: S280-113339
RMA:
1.0
1657509
1657510
FedEx
Express
FedEx
TRK# 0221 5355 3978 5684
SATURDAY 12:00P
PRIORITY OVERNIGHT
XO LAAA
80002
CO-US DEN
W3676756 02/25 56DJ2/027C/FE4A
#156297-435 RRDE EXP 12/22

Login Sample Receipt Checklist

Client: Brice Environmental Services, Corp

Job Number: 280-159137-1

Login Number: 159137
List Number: 1
Creator: Rystrom, Joshua R

List Source: Eurofins Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	