ANALYTICAL REPORT

Job Number: 280-159332-1

Job Description: Cornhusker (CHAAP)

For:
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Attention: Corey Schwabenlander



Approved for release.
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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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Table of Contents

Cover Title Page 1

Data Summaries 5

- Definitions 5
- Case Narrative 7
- Detection Summary 10
- Client Sample Results 15
- Default Detection Limits 27
- Surrogate Summary 28
- QC Sample Results 29
- QC Association 40
- Chronicle 47
- Certification Summary 54
- Method Summary 55
- Sample Summary 56
- Manual Integration Summary 57
- Reagent Traceability 93
  - COAs 98

Organic Sample Data 231

- GC VOA 231
  - RSK_175_DOD5 231
    - RSK_175_DOD5 QC Summary 232
    - RSK_175_DOD5 Sample Data 251
    - Standards Data 304
      - RSK_175_DOD5 ICAL Data 304
      - RSK_175_DOD5 CCAL Data 384
    - Raw QC Data 428

Table of Contents

RSK_175_DOD5 Blank Data 428

RSK_175_DOD5 LCS/LCSD Data 432

RSK_175_DOD5 MS/MSD Data 440

RSK_175_DOD5 Duplicate/Triplicate Data 448

RSK_175_DOD5 Run Logs 452

RSK_175_DOD5 Prep Data 455

HPLC/IC 457

8330A_DOD5 457

8330A_DOD5 QC Summary 458

8330A_DOD5 Sample Data 480

Standards Data 716

8330A_DOD5 ICAL Data 716

8330A_DOD5 CCAL Data 900

Raw QC Data 1037

8330A_DOD5 Blank Data 1037

8330A_DOD5 LCS/LCSD Data 1043

8330A_DOD5 MS/MSD Data 1053

8330A_DOD5 Run Logs 1081

8330A_DOD5 Prep Data 1087

Inorganic Sample Data 1090

General Chemistry Data 1090

Gen Chem Cover Page 1091

Gen Chem Sample Data 1092

Gen Chem QC Data 1118

Gen Chem ICV/CCV 1118

Gen Chem Blanks 1127

Table of Contents

Gen Chem MS/MSD/PDS 1128

Gen Chem Duplicates 1130

Gen Chem LCS/LCSD 1131

Gen Chem MDL 1135

Gen Chem Preparation Log 1149

Gen Chem Analysis Run Log 1153

Gen Chem Prep Data 1179

Gen Chem Raw Data 1211

Shipping and Receiving Documents 1496

Client Chain of Custody 1497

Sample Receipt Checklist 1502

Qualifiers

GC VOA

Qualifier	Qualifier Description
M	Manual integrated compound.
U	Undetected at the Limit of Detection.

HPLC/IC

Qualifier	Qualifier Description
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
D	The reported value is from a dilution.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

General Chemistry

Qualifier	Qualifier Description
D	The reported value is from a dilution.
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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: 280-159332-1

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 3/3/2022 9:25 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 0.9º C, 1.2º C, 1.6º C, 2.7º C and 4.7º C.

DISSOLVED GASES (GC)
Samples G0081-8 (280-159332-1), G0082-8 (280-159332-2), G0024-8 (280-159332-3), G0096-8 (280-159332-4), G0296-8 (280-159332-5), PZ020-8 (280-159332-6), G0077-8 (280-159332-7), G0078-8 (280-159332-8), G0094-8 (280-159332-9), PZ018-8 (280-159332-10), PZ017R-8 (280-159332-11), PZ021-8 (280-159332-12) and PZ019-8 (280-159332-13) were analyzed for Dissolved Gases (GC) in accordance with RSK_175. The samples were analyzed on 03/10/2022.

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

NITROAROMATICS AND NITRAMINES (HPLC)
Samples G0081-8 (280-159332-1), G0082-8 (280-159332-2), G0024-8 (280-159332-3), G0096-8 (280-159332-4), G0296-8 (280-159332-5), PZ020-8 (280-159332-6), G0077-8 (280-159332-7), G0078-8 (280-159332-8), G0094-8 (280-159332-9), PZ018-8 (280-159332-10), PZ017R-8 (280-159332-11), PZ021-8 (280-159332-12) and PZ019-8 (280-159332-13) were analyzed for Nitroaromatics and Nitramines (HPLC) in accordance with 8330A. The samples were prepared on 03/08/2022 and analyzed on 03/11/2022, 03/12/2022, 03/15/2022 and 03/16/2022.

Samples G0096-8 (280-159332-4)[5X], G0296-8 (280-159332-5)[5X] and G0094-8 (280-159332-9)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Surrogate recovery for the following sample was outside the upper control limit: PZ019-8 (280-159332-13). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

The %RPD between the primary and confirmation column exceeded 40% for MNX, RDX, 1,3-Dinitrobenzene and HMX for the following samples: G0096-8 (280-159332-4), G0296-8 (280-159332-5), G0077-8 (280-159332-7), G0094-8 (280-159332-9) and PZ021-8 (280-159332-12) in preparation batch 280-567953 and analytical batch 280-568287. The results from both columns has been qualified and reported in accordance with the laboratory's QAS.

The following samples from preparation batch 280-567953 required filtration to reduce matrix interferences: G0096-8 (280-159332-4), G0296-8 (280-159332-5), PZ018-8 (280-159332-10), PZ017R-8 (280-159332-11) and PZ021-8 (280-159332-12).

The following sample from preparation batch 280-567953 : G0081-8 (280-159332-1), G0082-8 (280-159332-2), G0024-8 (280-159332-3), PZ020-8 (280-159332-6), G0094-8 (280-159332-9) and PZ017R-8 (280-159332-11) were decanted prior to preparation.

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

ALKALINITY
Samples G0081-8 (280-159332-1), G0082-8 (280-159332-2), G0024-8 (280-159332-3), G0096-8 (280-159332-4), G0296-8 (280-159332-5), PZ020-8 (280-159332-6), G0077-8 (280-159332-7), G0078-8 (280-159332-8), G0094-8 (280-159332-9), PZ018-8 (280-159332-10), PZ017R-8 (280-159332-11), PZ021-8 (280-159332-12) and PZ019-8 (280-159332-13) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 03/08/2022.

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

AMMONIA
Samples G0081-8 (280-159332-1), G0082-8 (280-159332-2), G0024-8 (280-159332-3), G0096-8 (280-159332-4), G0296-8 (280-159332-5), PZ020-8 (280-159332-6), G0077-8 (280-159332-7), G0078-8 (280-159332-8), G0094-8 (280-159332-9), PZ018-8 (280-159332-10), PZ017R-8 (280-159332-11), PZ021-8 (280-159332-12) and PZ019-8 (280-159332-13) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 03/18/2022 and 03/19/2022.

Samples PZ018-8 (280-159332-10)[10X] and PZ021-8 (280-159332-12)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

TOTAL KJELDAHL NITROGEN
Samples G0081-8 (280-159332-1), G0082-8 (280-159332-2), G0024-8 (280-159332-3), G0096-8 (280-159332-4), G0296-8 (280-159332-5), PZ020-8 (280-159332-6), G0077-8 (280-159332-7), G0078-8 (280-159332-8), G0094-8 (280-159332-9), PZ018-8 (280-159332-10), PZ017R-8 (280-159332-11), PZ021-8 (280-159332-12) and PZ019-8 (280-159332-13) were analyzed for total kjeldahl nitrogen in accordance with EPA Method 351.2. The samples were prepared on 03/10/2022 and analyzed on 03/14/2022.

Nitrogen, Total Kjeldahl failed the recovery criteria low for the MS of sample PZ019-8MS (280-159332-13) in batch 280-568623. Nitrogen, Total Kjeldahl failed the recovery criteria low for the MSD of sample PZ019-8MSD (280-159332-13) in batch 280-568623.

Sample PZ017R-8 (280-159332-11)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

NITRATE-NITRITE AS NITROGEN
Samples G0081-8 (280-159332-1), G0082-8 (280-159332-2), G0024-8 (280-159332-3), G0096-8 (280-159332-4), G0296-8 (280-159332-5), PZ020-8 (280-159332-6), G0077-8 (280-159332-7), G0078-8 (280-159332-8), G0094-8 (280-159332-9), PZ018-8 (280-159332-10), PZ017R-8 (280-159332-11), PZ021-8 (280-159332-12) and PZ019-8 (280-159332-13) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 03/15/2022 and 03/20/2022.

Nitrate Nitrite as N failed the recovery criteria low for the MS of sample PZ021-8MS (280-159332-12) in batch 280-568761. Nitrate Nitrite as N failed the recovery criteria low for the MSD of sample PZ021-8MSD (280-159332-12) in batch 280-568761.

Samples G0024-8 (280-159332-3)[5X], PZ020-8 (280-159332-6)[5X], G0077-8 (280-159332-7)[5X], G0094-8 (280-159332-9)[2X] and PZ019-8 (280-159332-13)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

SULFIDE
Samples G0081-8 (280-159332-1), G0082-8 (280-159332-2), G0024-8 (280-159332-3), G0096-8 (280-159332-4), G0296-8 (280-159332-5), PZ020-8 (280-159332-6), G0077-8 (280-159332-7), G0078-8 (280-159332-8), G0094-8 (280-159332-9), PZ018-8 (280-159332-10), PZ017R-8 (280-159332-11), PZ021-8 (280-159332-12) and PZ019-8 (280-159332-13) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were prepared and analyzed on 03/07/2022 and 03/08/2022.

Sulfide was detected in method blank MB 280-568018/2-A at a level that was below one half the LOQ.

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

ANIONS (28 DAYS)
Samples G0081-8 (280-159332-1), G0082-8 (280-159332-2), G0024-8 (280-159332-3), G0096-8 (280-159332-4), G0296-8 (280-159332-5), PZ020-8 (280-159332-6), G0077-8 (280-159332-7), G0078-8 (280-159332-8), G0094-8 (280-159332-9), PZ018-8 (280-159332-10), PZ017R-8 (280-159332-11), PZ021-8 (280-159332-12) and PZ019-8 (280-159332-13) were analyzed for anions (28 days) in accordance with 9056A (28 Days). The samples were analyzed on 03/18/2022.

Sample G0078-8 (280-159332-8)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

DISSOLVED ORGANIC CARBON
Samples G0081-8 (280-159332-1), G0082-8 (280-159332-2), G0024-8 (280-159332-3), G0096-8 (280-159332-4), G0296-8 (280-159332-5), PZ020-8 (280-159332-6), G0077-8 (280-159332-7), G0078-8 (280-159332-8), G0094-8 (280-159332-9), PZ018-8 (280-159332-10), PZ017R-8 (280-159332-11), PZ021-8 (280-159332-12) and PZ019-8 (280-159332-13) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 03/14/2022 and 03/15/2022.

The following samples were improperly preserved in the field: G0081-8 (280-159332-1), G0082-8 (280-159332-2), G0024-8 (280-159332-3), G0096-8 (280-159332-4), G0296-8 (280-159332-5), PZ020-8 (280-159332-6), G0077-8 (280-159332-7), G0078-8 (280-159332-8), G0094-8 (280-159332-9), PZ018-8 (280-159332-10), PZ017R-8 (280-159332-11), PZ021-8 (280-159332-12), PZ019-8 (280-159332-13), PZ019-8 (280-159332-13[MS]), PZ019-8 (280-159332-13[MSD]), (280-159332-D-1-B MS) and (280-159332-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: 280-159332-1

Client Sample ID: G0081-8 — Lab Sample ID: 280-159332-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.92		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	0.53	M	0.22	0.21	0.088	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	0.11		0.11	0.10	0.047	ug/L	1		8330A	Total/NA
Ammonia	0.48		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	4.0		1.0	0.80	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.064	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	170	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	320		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	5.9		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0082-8 — Lab Sample ID: 280-159332-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.14		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
2-Amino-4,6-dinitrotoluene	0.13		0.12	0.11	0.055	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.14	J	0.16	0.13	0.062	ug/L	1		8330A	Total/NA
HMX	0.41	M	0.23	0.22	0.095	ug/L	1		8330A	Total/NA
RDX	0.59	M	0.23	0.22	0.056	ug/L	1		8330A	Total/NA
Ammonia	0.034	J	0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	1.6		1.0	0.80	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	4.4		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	160	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	300		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.8		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0024-8 — Lab Sample ID: 280-159332-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.66		0.11	0.10	0.047	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	1.5		0.11	0.10	0.053	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.82		0.16	0.12	0.060	ug/L	1		8330A	Total/NA
Ammonia	0.040	J	0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	1.1		1.0	0.80	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	11		0.50	0.25	0.095	mg/L	5		353.2	Total/NA
Sulfate	54	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	210		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.6		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0096-8 — Lab Sample ID: 280-159332-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	9.3		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
4-Amino-2,6-dinitrotoluene	0.61		0.15	0.12	0.059	ug/L	1		8330A	Total/NA
MNX	2.8	M J1	2.0	0.41	0.16	ug/L	1		8330A	Total/NA
MNX	4.4	J1	2.0	0.41	0.16	ug/L	1		8330A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0096-8 (Continued) — Lab Sample ID: 280-159332-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
HMX - DL	27	D M	1.1	1.0	0.45	ug/L	5		8330A	Total/NA
RDX - DL	47	D M	1.1	1.0	0.26	ug/L	5		8330A	Total/NA
Ammonia	2.5		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	2.8		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	110	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	400		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	6.1		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0296-8 — Lab Sample ID: 280-159332-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	7.5		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
4-Amino-2,6-dinitrotoluene	0.62		0.15	0.12	0.056	ug/L	1		8330A	Total/NA
MNX	6.1	M J1	1.9	0.39	0.15	ug/L	1		8330A	Total/NA
MNX	3.8	M J1	1.9	0.39	0.15	ug/L	1		8330A	Total/NA
HMX - DL	29	D M	1.0	0.97	0.43	ug/L	5		8330A	Total/NA
RDX - DL	49	D M	1.0	0.97	0.25	ug/L	5		8330A	Total/NA
Ammonia	2.6		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	0.82	J	1.0	0.80	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	3.3		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	110	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	400		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	6.3		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: PZ020-8 — Lab Sample ID: 280-159332-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trinitrobenzene	2.7		0.22	0.21	0.089	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	4.8		0.12	0.11	0.047	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	2.8		0.12	0.11	0.054	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	1.7		0.16	0.13	0.061	ug/L	1		8330A	Total/NA
HMX	0.56	M	0.22	0.21	0.092	ug/L	1		8330A	Total/NA
Ammonia	0.034	J	0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	4.3		1.0	0.80	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	16		0.50	0.25	0.095	mg/L	5		353.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	140	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	330		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	4.0		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0077-8 — Lab Sample ID: 280-159332-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	1.8		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	2.8	M	0.22	0.21	0.087	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	4.2		0.11	0.10	0.046	ug/L	1		8330A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0077-8 (Continued)

Lab Sample ID: 280-159332-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2-Amino-4,6-dinitrotoluene	2.6		0.11	0.10	0.052	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	2.7		0.15	0.12	0.059	ug/L	1		8330A	Total/NA
RDX	0.50	M J1	0.22	0.21	0.053	ug/L	1		8330A	Total/NA
RDX	1.0	M J1	0.22	0.21	0.053	ug/L	1		8330A	Total/NA
Nitrogen, Total Kjeldahl	4.6		1.0	0.80	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	12		0.50	0.25	0.095	mg/L	5		353.2	Total/NA
Sulfate	120	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	300		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	4.5		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0078-8

Lab Sample ID: 280-159332-8

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.20		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	0.19		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	3.0		1.0	0.80	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.022	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	260	D M	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	320		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.1		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0094-8

Lab Sample ID: 280-159332-9

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	13		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
1,3-Dinitrobenzene	1.1	J1	0.12	0.10	0.039	ug/L	1		8330A	Total/NA
1,3-Dinitrobenzene	0.46	J1	0.12	0.10	0.039	ug/L	1		8330A	Total/NA
HMX	11	M	0.22	0.21	0.092	ug/L	1		8330A	Total/NA
MNX	9.1	M J1	2.1	0.42	0.16	ug/L	1		8330A	Total/NA
MNX	19	M J1	2.1	0.42	0.16	ug/L	1		8330A	Total/NA
RDX	9.0	M	0.22	0.21	0.054	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene - DL	48	D	0.58	0.52	0.24	ug/L	5		8330A	Total/NA
2-Amino-4,6-dinitrotoluene - DL	57	D	0.58	0.52	0.27	ug/L	5		8330A	Total/NA
4-Amino-2,6-dinitrotoluene - DL	65	D	0.79	0.63	0.30	ug/L	5		8330A	Total/NA
Ammonia	3.3		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	2.8		1.0	0.80	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	12		0.20	0.10	0.038	mg/L	2		353.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	130	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	300		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	6.4		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: PZ018-8

Lab Sample ID: 280-159332-10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	16		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	2.9		1.0	0.50	0.22	mg/L	10		350.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PZ018-8 (Continued)

Lab Sample ID: 280-159332-10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrogen, Total Kjeldahl	12		1.7	1.3	1.1	mg/L	1		351.2	Total/NA
Sulfate	12	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	550		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	22		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: PZ017R-8

Lab Sample ID: 280-159332-11

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
1,3,5-Trinitrobenzene	1.4	M	0.22	0.21	0.087	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	5.0		0.11	0.10	0.047	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	3.0		0.11	0.10	0.053	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	5.3		0.16	0.12	0.060	ug/L	1		8330A	Total/NA
RDX	1.2	M	0.22	0.21	0.054	ug/L	1		8330A	Total/NA
Ammonia	0.67		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	15	D	5.0	4.0	3.4	mg/L	5		351.2	Total/NA
Nitrate Nitrite as N	5.8		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	72	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	450		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	7.4		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: PZ021-8

Lab Sample ID: 280-159332-12

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
1,3,5-Trinitrobenzene	1.0	M	0.22	0.21	0.089	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	4.5		0.12	0.11	0.048	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	2.9		0.12	0.11	0.054	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	5.1		0.16	0.13	0.061	ug/L	1		8330A	Total/NA
HMX	0.82	M J1	0.22	0.21	0.093	ug/L	1		8330A	Total/NA
HMX	1.3	M J1	0.22	0.21	0.093	ug/L	1		8330A	Total/NA
RDX	1.2	M	0.22	0.21	0.055	ug/L	1		8330A	Total/NA
Ammonia	0.84	J	1.0	0.50	0.22	mg/L	10		350.1	Total/NA
Nitrogen, Total Kjeldahl	1.5		1.0	0.80	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	5.8	J1	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	73	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	460		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	7.2		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: PZ019-8

Lab Sample ID: 280-159332-13

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate Nitrite as N	48		2.0	1.0	0.38	mg/L	20		353.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	83	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	140		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PZ019-8 (Continued)
Lab Sample ID: 280-159332-13

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Organic Carbon - Quad	2.2		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0081-8
Lab Sample ID: 280-159332-1
Date Collected: 03/01/22 14:10
Matrix: Water
Date Received: 03/03/22 09:25

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.92**		0.0050	0.0013	0.00063	mg/L		03/10/22 17:57	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**0.53**	**M**	0.22	0.21	0.088	ug/L		03/11/22 07:54	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		03/11/22 07:54	1
2,4,6-Trinitrotoluene	**0.11**		0.11	0.10	0.047	ug/L		03/11/22 07:54	1
2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.029	ug/L		03/11/22 07:54	1
2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042	ug/L		03/11/22 07:54	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.053	ug/L		03/12/22 16:05	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.089	ug/L		03/11/22 07:54	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.20	ug/L		03/11/22 07:54	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.16	0.12	0.060	ug/L		03/12/22 16:05	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.10	ug/L		03/11/22 07:54	1
HMX	0.21	U	0.22	0.21	0.091	ug/L		03/11/22 07:54	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		03/11/22 07:54	1
Nitrobenzene	0.21	U M	0.22	0.21	0.095	ug/L		03/11/22 07:54	1
RDX	0.21	U	0.22	0.21	0.054	ug/L		03/11/22 07:54	1
Tetryl	0.10	U M	0.11	0.10	0.033	ug/L		03/11/22 07:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*98*	*M*	*83 - 119*	*03/08/22 11:19*	*03/11/22 07:54*	*1*
1,2-Dinitrobenzene	*97*		*83 - 119*	*03/08/22 11:19*	*03/12/22 16:05*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.48**		0.10	0.050	0.022	mg/L		03/18/22 14:09	1
Nitrogen, Total Kjeldahl	**4.0**		1.0	0.80	0.69	mg/L		03/14/22 17:15	1
Nitrate Nitrite as N	**0.064**	**J**	0.10	0.050	0.019	mg/L		03/15/22 17:57	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/08/22 16:59	1
Sulfate	**170**	**M**	5.0	2.5	1.0	mg/L		03/18/22 02:33	1
Total Alkalinity as CaCO3	**320**		10	6.4	3.1	mg/L		03/08/22 18:09	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**5.9**		1.0	0.80	0.35	mg/L		03/14/22 23:04	1

Client Sample ID: G0082-8
Lab Sample ID: 280-159332-2
Date Collected: 03/01/22 15:25
Matrix: Water
Date Received: 03/03/22 09:25

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.14**		0.0050	0.0013	0.00063	mg/L		03/10/22 18:10	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.22	U	0.23	0.22	0.091	ug/L		03/11/22 08:17	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.040	ug/L		03/11/22 08:17	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.049	ug/L		03/11/22 08:17	1
2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.030	ug/L		03/11/22 08:17	1

Client Sample ID: G0082-8
Lab Sample ID: 280-159332-2
Date Collected: 03/01/22 15:25
Matrix: Water
Date Received: 03/03/22 09:25

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043	ug/L		03/11/22 08:17	1
2-Amino-4,6-dinitrotoluene	**0.13**		0.12	0.11	0.055	ug/L		03/11/22 08:17	1
2-Nitrotoluene	0.22	U	0.23	0.22	0.092	ug/L		03/11/22 08:17	1
3-Nitrotoluene	0.43	U	0.43	0.43	0.21	ug/L		03/11/22 08:17	1
4-Amino-2,6-dinitrotoluene	**0.14**	**J**	0.16	0.13	0.062	ug/L		03/11/22 08:17	1
4-Nitrotoluene	0.43	U	0.44	0.43	0.11	ug/L		03/11/22 08:17	1
HMX	**0.41**	**M**	0.23	0.22	0.095	ug/L		03/11/22 08:17	1
MNX	0.43	U	2.2	0.43	0.17	ug/L		03/11/22 08:17	1
Nitrobenzene	0.22	U	0.23	0.22	0.098	ug/L		03/11/22 08:17	1
RDX	**0.59**	**M**	0.23	0.22	0.056	ug/L		03/11/22 08:17	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		03/11/22 08:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*98*	*M*	*83 - 119*	*03/08/22 11:19*	*03/11/22 08:17*	*1*
1,2-Dinitrobenzene	*98*		*83 - 119*	*03/08/22 11:19*	*03/12/22 16:41*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.034**	**J**	0.10	0.050	0.022	mg/L		03/18/22 14:11	1
Nitrogen, Total Kjeldahl	**1.6**		1.0	0.80	0.69	mg/L		03/14/22 17:15	1
Nitrate Nitrite as N	**4.4**		0.10	0.050	0.019	mg/L		03/15/22 17:59	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		03/07/22 18:33	1
Sulfate	**160**	**M**	5.0	2.5	1.0	mg/L		03/18/22 03:33	1
Total Alkalinity as CaCO3	**300**		10	6.4	3.1	mg/L		03/08/22 18:16	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.8**		1.0	0.80	0.35	mg/L		03/15/22 00:00	1

Client Sample ID: G0024-8
Lab Sample ID: 280-159332-3
Date Collected: 03/01/22 13:10
Matrix: Water
Date Received: 03/03/22 09:25

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0013	U	0.0050	0.0013	0.00063	mg/L		03/10/22 18:23	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	0.22	0.21	0.087	ug/L		03/11/22 08:40	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		03/12/22 17:16	1
2,4,6-Trinitrotoluene	**0.66**		0.11	0.10	0.047	ug/L		03/11/22 08:40	1
2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028	ug/L		03/11/22 08:40	1
2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042	ug/L		03/11/22 08:40	1
2-Amino-4,6-dinitrotoluene	**1.5**		0.11	0.10	0.053	ug/L		03/11/22 08:40	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.089	ug/L		03/11/22 08:40	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.20	ug/L		03/11/22 08:40	1
4-Amino-2,6-dinitrotoluene	**0.82**		0.16	0.12	0.060	ug/L		03/11/22 08:40	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.10	ug/L		03/12/22 17:16	1
HMX	0.21	U	0.22	0.21	0.091	ug/L		03/11/22 08:40	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		03/11/22 08:40	1

Client Sample ID: G0024-8
Lab Sample ID: 280-159332-3
Date Collected: 03/01/22 13:10
Matrix: Water
Date Received: 03/03/22 09:25

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrobenzene	0.21	U	0.22	0.21	0.094	ug/L		03/11/22 08:40	1
RDX	0.21	U	0.22	0.21	0.053	ug/L		03/11/22 08:40	1
Tetryl	0.10	U M	0.11	0.10	0.033	ug/L		03/11/22 08:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*93*	*M*	*83 - 119*	*03/08/22 11:19*	*03/11/22 08:40*	*1*
1,2-Dinitrobenzene	*101*		*83 - 119*	*03/08/22 11:19*	*03/12/22 17:16*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.040**	**J**	0.10	0.050	0.022	mg/L		03/18/22 14:13	1
Nitrogen, Total Kjeldahl	**1.1**		1.0	0.80	0.69	mg/L		03/14/22 17:16	1
Nitrate Nitrite as N	**11**		0.50	0.25	0.095	mg/L		03/15/22 18:11	5
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/07/22 18:33	1
Sulfate	**54**	**M**	5.0	2.5	1.0	mg/L		03/18/22 04:18	1
Total Alkalinity as CaCO3	**210**		10	6.4	3.1	mg/L		03/08/22 18:23	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.6**		1.0	0.80	0.35	mg/L		03/15/22 00:14	1

Client Sample ID: G0096-8
Lab Sample ID: 280-159332-4
Date Collected: 03/01/22 11:10
Matrix: Water
Date Received: 03/03/22 09:25

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**9.3**		0.0050	0.0013	0.00063	mg/L		03/10/22 18:36	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	0.086	ug/L		03/11/22 09:03	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		03/11/22 09:03	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046	ug/L		03/11/22 09:03	1
2,4-Dinitrotoluene	0.082	U	0.10	0.082	0.028	ug/L		03/11/22 09:03	1
2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041	ug/L		03/11/22 09:03	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052	ug/L		03/11/22 09:03	1
2-Nitrotoluene	0.20	U M	0.21	0.20	0.087	ug/L		03/11/22 09:03	1
3-Nitrotoluene	0.41	U	0.41	0.41	0.20	ug/L		03/11/22 09:03	1
4-Amino-2,6-dinitrotoluene	**0.61**		0.15	0.12	0.059	ug/L		03/11/22 09:03	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		03/12/22 17:51	1
MNX	**2.8**	**M J1**	2.0	0.41	0.16	ug/L		03/11/22 09:03	1
MNX	**4.4**	**J1**	2.0	0.41	0.16	ug/L		03/12/22 17:51	1
Nitrobenzene	0.20	U M	0.21	0.20	0.093	ug/L		03/11/22 09:03	1
Tetryl	0.10	U M	0.11	0.10	0.032	ug/L		03/11/22 09:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*109*	*M*	*83 - 119*	*03/08/22 11:19*	*03/11/22 09:03*	*1*
1,2-Dinitrobenzene	*103*		*83 - 119*	*03/08/22 11:19*	*03/12/22 17:51*	*1*

Client Sample ID: G0096-8
Lab Sample ID: 280-159332-4
Date Collected: 03/01/22 11:10
Matrix: Water
Date Received: 03/03/22 09:25

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
HMX	**27**	**D M**	1.1	1.0	0.45	ug/L		03/11/22 17:28	5
RDX	**47**	**D M**	1.1	1.0	0.26	ug/L		03/11/22 17:28	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*105*	*M D*	*83 - 119*	*03/08/22 11:19*	*03/11/22 17:28*	*5*
1,2-Dinitrobenzene	*99*	*D*	*83 - 119*	*03/08/22 11:19*	*03/16/22 01:43*	*5*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.5**		0.10	0.050	0.022	mg/L		03/19/22 10:51	1
Nitrogen, Total Kjeldahl	0.80	U	1.0	0.80	0.69	mg/L		03/14/22 17:16	1
Nitrate Nitrite as N	**2.8**		0.10	0.050	0.019	mg/L		03/15/22 18:13	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		03/07/22 18:33	1
Sulfate	**110**	**M**	5.0	2.5	1.0	mg/L		03/18/22 04:33	1
Total Alkalinity as CaCO3	**400**		10	6.4	3.1	mg/L		03/08/22 18:56	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**6.1**		1.0	0.80	0.35	mg/L		03/15/22 01:01	1

Client Sample ID: G0296-8
Lab Sample ID: 280-159332-5
Date Collected: 03/01/22 08:00
Matrix: Water
Date Received: 03/03/22 09:25

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**7.5**		0.0050	0.0013	0.00063	mg/L		03/10/22 18:49	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.19	U	0.20	0.19	0.082	ug/L		03/11/22 09:26	1
1,3-Dinitrobenzene	0.097	U	0.11	0.097	0.036	ug/L		03/11/22 09:26	1
2,4,6-Trinitrotoluene	0.097	U	0.11	0.097	0.044	ug/L		03/11/22 09:26	1
2,4-Dinitrotoluene	0.078	U	0.097	0.078	0.027	ug/L		03/11/22 09:26	1
2,6-Dinitrotoluene	0.078	U	0.097	0.078	0.039	ug/L		03/11/22 09:26	1
2-Amino-4,6-dinitrotoluene	0.097	U	0.11	0.097	0.049	ug/L		03/11/22 09:26	1
2-Nitrotoluene	0.19	U	0.20	0.19	0.083	ug/L		03/11/22 09:26	1
3-Nitrotoluene	0.39	U	0.39	0.39	0.19	ug/L		03/11/22 09:26	1
4-Amino-2,6-dinitrotoluene	**0.62**		0.15	0.12	0.056	ug/L		03/11/22 09:26	1
4-Nitrotoluene	0.39	U	0.40	0.39	0.097	ug/L		03/11/22 09:26	1
MNX	**6.1**	**M J1**	1.9	0.39	0.15	ug/L		03/11/22 09:26	1
MNX	**3.8**	**M J1**	1.9	0.39	0.15	ug/L		03/12/22 18:26	1
Nitrobenzene	0.19	U M	0.20	0.19	0.089	ug/L		03/11/22 09:26	1
Tetryl	0.097	U M	0.11	0.097	0.031	ug/L		03/11/22 09:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*113*	*M*	*83 - 119*	*03/08/22 11:19*	*03/11/22 09:26*	*1*
1,2-Dinitrobenzene	*93*	*M*	*83 - 119*	*03/08/22 11:19*	*03/12/22 18:26*	*1*

Client Sample ID: G0296-8
Lab Sample ID: 280-159332-5
Date Collected: 03/01/22 08:00
Matrix: Water
Date Received: 03/03/22 09:25

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
HMX	**29**	**D M**	1.0	0.97	0.43	ug/L		03/11/22 17:51	5
RDX	**49**	**D M**	1.0	0.97	0.25	ug/L		03/11/22 17:51	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*106*	*M D*	*83 - 119*	*03/08/22 11:19*	*03/11/22 17:51*	*5*
1,2-Dinitrobenzene	*95*	*D*	*83 - 119*	*03/08/22 11:19*	*03/16/22 02:19*	*5*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.6**		0.10	0.050	0.022	mg/L		03/19/22 10:53	1
Nitrogen, Total Kjeldahl	**0.82**	**J**	1.0	0.80	0.69	mg/L		03/14/22 17:17	1
Nitrate Nitrite as N	**3.3**		0.10	0.050	0.019	mg/L		03/15/22 18:27	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/07/22 18:33	1
Sulfate	**110**	**M**	5.0	2.5	1.0	mg/L		03/18/22 04:48	1
Total Alkalinity as CaCO3	**400**		10	6.4	3.1	mg/L		03/08/22 19:12	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**6.3**		1.0	0.80	0.35	mg/L		03/15/22 01:20	1

Client Sample ID: PZ020-8
Lab Sample ID: 280-159332-6
Date Collected: 03/01/22 17:15
Matrix: Water
Date Received: 03/03/22 09:25

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0013	U M	0.0050	0.0013	0.00063	mg/L		03/10/22 19:02	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**2.7**		0.22	0.21	0.089	ug/L		03/11/22 09:49	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		03/12/22 19:01	1
2,4,6-Trinitrotoluene	**4.8**		0.12	0.11	0.047	ug/L		03/11/22 09:49	1
2,4-Dinitrotoluene	0.084	U	0.11	0.084	0.029	ug/L		03/12/22 19:01	1
2,6-Dinitrotoluene	0.084	U	0.11	0.084	0.042	ug/L		03/11/22 09:49	1
2-Amino-4,6-dinitrotoluene	**2.8**		0.12	0.11	0.054	ug/L		03/11/22 09:49	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.090	ug/L		03/11/22 09:49	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.21	ug/L		03/11/22 09:49	1
4-Amino-2,6-dinitrotoluene	**1.7**		0.16	0.13	0.061	ug/L		03/11/22 09:49	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.11	ug/L		03/12/22 19:01	1
HMX	**0.56**	**M**	0.22	0.21	0.092	ug/L		03/11/22 09:49	1
MNX	0.42	U M	2.1	0.42	0.16	ug/L		03/11/22 09:49	1
Nitrobenzene	0.21	U	0.22	0.21	0.096	ug/L		03/11/22 09:49	1
RDX	0.21	U M	0.22	0.21	0.054	ug/L		03/11/22 09:49	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		03/11/22 09:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*92*		*83 - 119*	*03/08/22 11:19*	*03/11/22 09:49*	*1*
1,2-Dinitrobenzene	*108*		*83 - 119*	*03/08/22 11:19*	*03/12/22 19:01*	*1*

Client Sample ID: PZ020-8
Lab Sample ID: 280-159332-6
Date Collected: 03/01/22 17:15
Matrix: Water
Date Received: 03/03/22 09:25

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.034**	**J**	0.10	0.050	0.022	mg/L		03/18/22 14:19	1
Nitrogen, Total Kjeldahl	**4.3**		1.0	0.80	0.69	mg/L		03/14/22 17:19	1
Nitrate Nitrite as N	**16**		0.50	0.25	0.095	mg/L		03/15/22 18:29	5
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		03/07/22 18:33	1
Sulfate	**140**	**M**	5.0	2.5	1.0	mg/L		03/18/22 05:03	1
Total Alkalinity as CaCO3	**330**		10	6.4	3.1	mg/L		03/08/22 19:20	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**4.0**		1.0	0.80	0.35	mg/L		03/15/22 01:36	1

Client Sample ID: G0077-8
Lab Sample ID: 280-159332-7
Date Collected: 03/01/22 14:40
Matrix: Water
Date Received: 03/03/22 09:25

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**1.8**		0.0050	0.0013	0.00063	mg/L		03/10/22 19:15	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**2.8**	**M**	0.22	0.21	0.087	ug/L		03/11/22 10:12	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		03/12/22 19:36	1
2,4,6-Trinitrotoluene	**4.2**		0.11	0.10	0.046	ug/L		03/11/22 10:12	1
2,4-Dinitrotoluene	0.082	U M	0.10	0.082	0.028	ug/L		03/11/22 10:12	1
2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041	ug/L		03/11/22 10:12	1
2-Amino-4,6-dinitrotoluene	**2.6**		0.11	0.10	0.052	ug/L		03/11/22 10:12	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.088	ug/L		03/11/22 10:12	1
3-Nitrotoluene	0.41	U	0.41	0.41	0.20	ug/L		03/11/22 10:12	1
4-Amino-2,6-dinitrotoluene	**2.7**		0.15	0.12	0.059	ug/L		03/11/22 10:12	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		03/12/22 19:36	1
HMX	0.21	U	0.22	0.21	0.090	ug/L		03/11/22 10:12	1
MNX	0.41	U M	2.1	0.41	0.16	ug/L		03/11/22 10:12	1
Nitrobenzene	0.21	U	0.22	0.21	0.094	ug/L		03/11/22 10:12	1
RDX	**0.50**	**M J1**	0.22	0.21	0.053	ug/L		03/11/22 10:12	1
RDX	**1.0**	**M J1**	0.22	0.21	0.053	ug/L		03/12/22 19:36	1
Tetryl	0.10	U M	0.11	0.10	0.033	ug/L		03/11/22 10:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*89*	*M*	*83 - 119*	*03/08/22 11:19*	*03/11/22 10:12*	*1*
1,2-Dinitrobenzene	*108*		*83 - 119*	*03/08/22 11:19*	*03/12/22 19:36*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		03/18/22 14:44	1
Nitrogen, Total Kjeldahl	**4.6**		1.0	0.80	0.69	mg/L		03/14/22 17:19	1
Nitrate Nitrite as N	**12**		0.50	0.25	0.095	mg/L		03/15/22 18:31	5
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/08/22 16:59	1
Sulfate	**120**	**M**	5.0	2.5	1.0	mg/L		03/18/22 05:18	1
Total Alkalinity as CaCO3	**300**		10	6.4	3.1	mg/L		03/08/22 19:27	1

Client Sample ID: G0077-8
Lab Sample ID: 280-159332-7
Date Collected: 03/01/22 14:40
Matrix: Water
Date Received: 03/03/22 09:25

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**4.5**		1.0	0.80	0.35	mg/L		03/15/22 01:52	1

Client Sample ID: G0078-8
Lab Sample ID: 280-159332-8
Date Collected: 03/01/22 16:00
Matrix: Water
Date Received: 03/03/22 09:25

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.20**		0.0050	0.0013	0.00063	mg/L		03/10/22 19:28	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	0.22	0.21	0.089	ug/L		03/11/22 18:14	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		03/11/22 18:14	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		03/11/22 18:14	1
2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029	ug/L		03/11/22 18:14	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.043	ug/L		03/11/22 18:14	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054	ug/L		03/11/22 18:14	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.091	ug/L		03/11/22 18:14	1
3-Nitrotoluene	0.43	U	0.43	0.43	0.21	ug/L		03/11/22 18:14	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061	ug/L		03/11/22 18:14	1
4-Nitrotoluene	0.43	U M	0.44	0.43	0.11	ug/L		03/11/22 18:14	1
HMX	0.21	U M	0.22	0.21	0.093	ug/L		03/11/22 18:14	1
MNX	0.43	U	2.1	0.43	0.16	ug/L		03/11/22 18:14	1
Nitrobenzene	0.21	U	0.22	0.21	0.097	ug/L		03/11/22 18:14	1
RDX	0.21	U	0.22	0.21	0.055	ug/L		03/11/22 18:14	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		03/11/22 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*96*	*M*	*83 - 119*	*03/08/22 11:19*	*03/11/22 18:14*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.19**		0.10	0.050	0.022	mg/L		03/18/22 14:46	1
Nitrogen, Total Kjeldahl	**3.0**		1.0	0.80	0.69	mg/L		03/14/22 17:20	1
Nitrate Nitrite as N	**0.022**	**J**	0.10	0.050	0.019	mg/L		03/15/22 18:33	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/08/22 16:59	1
Sulfate	**260**	**D M**	25	13	5.2	mg/L		03/18/22 05:48	5
Total Alkalinity as CaCO3	**320**		10	6.4	3.1	mg/L		03/08/22 19:35	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.1**		1.0	0.80	0.35	mg/L		03/15/22 02:08	1

Client Sample ID: G0094-8
Lab Sample ID: 280-159332-9
Date Collected: 03/01/22 10:00
Matrix: Water
Date Received: 03/03/22 09:25

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**13**		0.0050	0.0013	0.00063	mg/L		03/10/22 19:54	1

Client Sample ID: G0094-8
Lab Sample ID: 280-159332-9

Date Collected: 03/01/22 10:00
Matrix: Water
Date Received: 03/03/22 09:25

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	0.088	ug/L		03/11/22 18:37	1
1,3-Dinitrobenzene	**1.1**	**J1**	0.12	0.10	0.039	ug/L		03/11/22 18:37	1
1,3-Dinitrobenzene	**0.46**	**J1**	0.12	0.10	0.039	ug/L		03/15/22 19:18	1
2,4-Dinitrotoluene	0.084	U M	0.10	0.084	0.029	ug/L		03/11/22 18:37	1
2,6-Dinitrotoluene	0.084	U	0.10	0.084	0.042	ug/L		03/11/22 18:37	1
2-Nitrotoluene	0.21	U M	0.22	0.21	0.090	ug/L		03/11/22 18:37	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.20	ug/L		03/11/22 18:37	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.10	ug/L		03/15/22 19:18	1
HMX	**11**	**M**	0.22	0.21	0.092	ug/L		03/11/22 18:37	1
MNX	**9.1**	**M J1**	2.1	0.42	0.16	ug/L		03/11/22 18:37	1
MNX	**19**	**M J1**	2.1	0.42	0.16	ug/L		03/15/22 19:18	1
Nitrobenzene	0.21	U	0.22	0.21	0.095	ug/L		03/11/22 18:37	1
RDX	**9.0**	**M**	0.22	0.21	0.054	ug/L		03/11/22 18:37	1
Tetryl	0.10	U M	0.12	0.10	0.033	ug/L		03/11/22 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*103*	*M*	*83 - 119*	*03/08/22 11:19*	*03/11/22 18:37*	*1*
1,2-Dinitrobenzene	*96*		*83 - 119*	*03/08/22 11:19*	*03/15/22 19:18*	*1*

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4,6-Trinitrotoluene	**48**	**D**	0.58	0.52	0.24	ug/L		03/11/22 19:00	5
2-Amino-4,6-dinitrotoluene	**57**	**D**	0.58	0.52	0.27	ug/L		03/11/22 19:00	5
4-Amino-2,6-dinitrotoluene	**65**	**D**	0.79	0.63	0.30	ug/L		03/11/22 19:00	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*103*	*M D*	*83 - 119*	*03/08/22 11:19*	*03/11/22 19:00*	*5*
1,2-Dinitrobenzene	*94*	*M D*	*83 - 119*	*03/08/22 11:19*	*03/16/22 02:53*	*5*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**3.3**		0.10	0.050	0.022	mg/L		03/19/22 10:55	1
Nitrogen, Total Kjeldahl	**2.8**		1.0	0.80	0.69	mg/L		03/14/22 17:20	1
Nitrate Nitrite as N	**12**		0.20	0.10	0.038	mg/L		03/20/22 16:14	2
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		03/08/22 17:04	1
Sulfate	**130**	**M**	5.0	2.5	1.0	mg/L		03/18/22 06:03	1
Total Alkalinity as CaCO3	**300**		10	6.4	3.1	mg/L		03/08/22 19:42	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**6.4**		1.0	0.80	0.35	mg/L		03/15/22 02:29	1

Client Sample ID: PZ018-8
Lab Sample ID: 280-159332-10

Date Collected: 03/01/22 10:40
Matrix: Water
Date Received: 03/03/22 09:25

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**16**		0.0050	0.0013	0.00063	mg/L		03/10/22 20:07	1

Client Sample ID: PZ018-8
Lab Sample ID: 280-159332-10

Date Collected: 03/01/22 10:40
Matrix: Water
Date Received: 03/03/22 09:25

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.22	U	0.23	0.22	0.091	ug/L		03/11/22 19:23	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.040	ug/L		03/11/22 19:23	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.049	ug/L		03/11/22 19:23	1
2,4-Dinitrotoluene	0.087	U	0.11	0.087	0.030	ug/L		03/11/22 19:23	1
2,6-Dinitrotoluene	0.087	U	0.11	0.087	0.043	ug/L		03/11/22 19:23	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.055	ug/L		03/11/22 19:23	1
2-Nitrotoluene	0.22	U M	0.23	0.22	0.093	ug/L		03/11/22 19:23	1
3-Nitrotoluene	0.43	U	0.43	0.43	0.21	ug/L		03/11/22 19:23	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.062	ug/L		03/11/22 19:23	1
4-Nitrotoluene	0.43	U	0.44	0.43	0.11	ug/L		03/15/22 19:53	1
HMX	0.22	U	0.23	0.22	0.095	ug/L		03/11/22 19:23	1
MNX	0.43	U M	2.2	0.43	0.17	ug/L		03/11/22 19:23	1
Nitrobenzene	0.22	U M	0.23	0.22	0.098	ug/L		03/11/22 19:23	1
RDX	0.22	U	0.23	0.22	0.056	ug/L		03/15/22 19:53	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		03/11/22 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*112*	*M*	*83 - 119*	*03/08/22 11:19*	*03/11/22 19:23*	*1*
1,2-Dinitrobenzene	*90*	*M*	*83 - 119*	*03/08/22 11:19*	*03/15/22 19:53*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**2.9**		1.0	0.50	0.22	mg/L		03/18/22 14:54	10
Nitrogen, Total Kjeldahl	**12**		1.7	1.3	1.1	mg/L		03/14/22 17:21	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		03/15/22 18:37	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/08/22 17:04	1
Sulfate	**12**	**M**	5.0	2.5	1.0	mg/L		03/18/22 06:33	1
Total Alkalinity as CaCO3	**550**		10	6.4	3.1	mg/L		03/08/22 19:51	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**22**		1.0	0.80	0.35	mg/L		03/15/22 02:46	1

Client Sample ID: PZ017R-8
Lab Sample ID: 280-159332-11

Date Collected: 03/01/22 11:45
Matrix: Water
Date Received: 03/03/22 09:25

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		03/10/22 20:20	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**1.4**	**M**	0.22	0.21	0.087	ug/L		03/11/22 19:45	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		03/15/22 20:28	1
2,4,6-Trinitrotoluene	**5.0**		0.11	0.10	0.047	ug/L		03/11/22 19:45	1
2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028	ug/L		03/11/22 19:45	1
2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042	ug/L		03/11/22 19:45	1
2-Amino-4,6-dinitrotoluene	**3.0**		0.11	0.10	0.053	ug/L		03/11/22 19:45	1
2-Nitrotoluene	0.21	U M	0.22	0.21	0.089	ug/L		03/11/22 19:45	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.20	ug/L		03/11/22 19:45	1

Client Sample ID: PZ017R-8
Lab Sample ID: 280-159332-11
Date Collected: 03/01/22 11:45
Matrix: Water
Date Received: 03/03/22 09:25

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
4-Amino-2,6-dinitrotoluene	**5.3**		0.16	0.12	0.060	ug/L		03/11/22 19:45	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.10	ug/L		03/15/22 20:28	1
HMX	0.21	U	0.22	0.21	0.091	ug/L		03/11/22 19:45	1
MNX	0.42	U M	2.1	0.42	0.16	ug/L		03/11/22 19:45	1
Nitrobenzene	0.21	U	0.22	0.21	0.095	ug/L		03/11/22 19:45	1
RDX	**1.2**	**M**	0.22	0.21	0.054	ug/L		03/11/22 19:45	1
Tetryl	0.10	U M	0.11	0.10	0.033	ug/L		03/11/22 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*96*	*M*	*83 - 119*	*03/08/22 11:19*	*03/11/22 19:45*	*1*
1,2-Dinitrobenzene	*107*		*83 - 119*	*03/08/22 11:19*	*03/15/22 20:28*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.67**		0.10	0.050	0.022	mg/L		03/18/22 15:00	1
Nitrogen, Total Kjeldahl	**15**	**D**	5.0	4.0	3.4	mg/L		03/14/22 17:34	5
Nitrate Nitrite as N	**5.8**		0.10	0.050	0.019	mg/L		03/15/22 18:39	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/08/22 17:04	1
Sulfate	**72**	**M**	5.0	2.5	1.0	mg/L		03/18/22 07:19	1
Total Alkalinity as CaCO3	**450**		10	6.4	3.1	mg/L		03/08/22 20:00	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**7.4**		1.0	0.80	0.35	mg/L		03/15/22 03:02	1

Client Sample ID: PZ021-8
Lab Sample ID: 280-159332-12
Date Collected: 03/01/22 08:00
Matrix: Water
Date Received: 03/03/22 09:25

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		03/10/22 20:33	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**1.0**	**M**	0.22	0.21	0.089	ug/L		03/11/22 20:08	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		03/15/22 21:03	1
2,4,6-Trinitrotoluene	**4.5**		0.12	0.11	0.048	ug/L		03/11/22 20:08	1
2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029	ug/L		03/11/22 20:08	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.043	ug/L		03/11/22 20:08	1
2-Amino-4,6-dinitrotoluene	**2.9**		0.12	0.11	0.054	ug/L		03/11/22 20:08	1
2-Nitrotoluene	0.21	U M	0.22	0.21	0.091	ug/L		03/11/22 20:08	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.21	ug/L		03/11/22 20:08	1
4-Amino-2,6-dinitrotoluene	**5.1**		0.16	0.13	0.061	ug/L		03/11/22 20:08	1
4-Nitrotoluene	0.42	U	0.44	0.42	0.11	ug/L		03/15/22 21:03	1
HMX	**0.82**	**M J1**	0.22	0.21	0.093	ug/L		03/11/22 20:08	1
HMX	**1.3**	**M J1**	0.22	0.21	0.093	ug/L		03/15/22 21:03	1
MNX	0.42	U M	2.1	0.42	0.16	ug/L		03/11/22 20:08	1
Nitrobenzene	0.21	U	0.22	0.21	0.097	ug/L		03/11/22 20:08	1
RDX	**1.2**	**M**	0.22	0.21	0.055	ug/L		03/11/22 20:08	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		03/11/22 20:08	1

Client Sample ID: PZ021-8
Lab Sample ID: 280-159332-12
Date Collected: 03/01/22 08:00
Matrix: Water
Date Received: 03/03/22 09:25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*94*	*M*	*83 - 119*	*03/08/22 11:19*	*03/11/22 20:08*	*1*
1,2-Dinitrobenzene	*97*	*M*	*83 - 119*	*03/08/22 11:19*	*03/15/22 21:03*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.84**	**J**	1.0	0.50	0.22	mg/L		03/18/22 14:56	10
Nitrogen, Total Kjeldahl	**1.5**		1.0	0.80	0.69	mg/L		03/14/22 17:22	1
Nitrate Nitrite as N	**5.8**	**J1**	0.10	0.050	0.019	mg/L		03/15/22 18:41	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		03/08/22 17:04	1
Sulfate	**73**	**M**	5.0	2.5	1.0	mg/L		03/18/22 07:34	1
Total Alkalinity as CaCO3	**460**		10	6.4	3.1	mg/L		03/08/22 20:09	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**7.2**		1.0	0.80	0.35	mg/L		03/15/22 03:21	1

Client Sample ID: PZ019-8
Lab Sample ID: 280-159332-13
Date Collected: 03/01/22 09:10
Matrix: Water
Date Received: 03/03/22 09:25

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	0.0013	U	0.0050	0.0013	0.00063	mg/L		03/10/22 20:46	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 Q	0.21	0.20	0.082	ug/L		03/11/22 20:31	1
1,3-Dinitrobenzene	0.098	U Q	0.11	0.098	0.036	ug/L		03/11/22 20:31	1
2,4,6-Trinitrotoluene	0.098	U Q	0.11	0.098	0.044	ug/L		03/11/22 20:31	1
2,4-Dinitrotoluene	0.078	U Q	0.098	0.078	0.027	ug/L		03/11/22 20:31	1
2,6-Dinitrotoluene	0.078	U Q	0.098	0.078	0.039	ug/L		03/11/22 20:31	1
2-Amino-4,6-dinitrotoluene	0.098	U Q	0.11	0.098	0.050	ug/L		03/11/22 20:31	1
2-Nitrotoluene	0.20	U Q	0.21	0.20	0.084	ug/L		03/11/22 20:31	1
3-Nitrotoluene	0.39	U Q	0.39	0.39	0.19	ug/L		03/11/22 20:31	1
4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.057	ug/L		03/11/22 20:31	1
4-Nitrotoluene	0.39	U M Q	0.40	0.39	0.098	ug/L		03/11/22 20:31	1
HMX	0.20	U Q	0.21	0.20	0.086	ug/L		03/11/22 20:31	1
MNX	0.39	U M	2.0	0.39	0.15	ug/L		03/11/22 20:31	1
Nitrobenzene	0.20	U Q	0.21	0.20	0.089	ug/L		03/11/22 20:31	1
RDX	0.20	U Q	0.21	0.20	0.050	ug/L		03/11/22 20:31	1
Tetryl	0.098	U Q	0.11	0.098	0.031	ug/L		03/11/22 20:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*130*	*M Q*	*83 - 119*	*03/08/22 11:19*	*03/11/22 20:31*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		03/18/22 14:01	1
Nitrogen, Total Kjeldahl	0.80	U J1	1.0	0.80	0.69	mg/L		03/14/22 17:16	1
Nitrate Nitrite as N	**48**		2.0	1.0	0.38	mg/L		03/15/22 18:05	20
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		03/08/22 17:04	1
Sulfate	**83**	**M**	5.0	2.5	1.0	mg/L		03/18/22 07:49	1

Client Sample ID: PZ019-8
Date Collected: 03/01/22 09:10
Date Received: 03/03/22 09:25

Lab Sample ID: 280-159332-13
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Total Alkalinity as CaCO3	140		10	6.4	3.1	mg/L		03/08/22 20:27	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	2.2		1.0	0.80	0.35	mg/L		03/15/22 03:39	1

Default Detection Limits

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

Job ID: 280-159332-1

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: 280-159332-1

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)								
280-159332-1	G0081-8	98 M								
280-159332-2	G0082-8	98 M								
280-159332-3	G0024-8	93 M								
280-159332-4	G0096-8	109 M								
280-159332-4 - DL	G0096-8	105 M D								
280-159332-5	G0296-8	113 M								
280-159332-5 - DL	G0296-8	106 M D								
280-159332-6	PZ020-8	92								
280-159332-7	G0077-8	89 M								
280-159332-8	G0078-8	96 M								
280-159332-9	G0094-8	103 M								
280-159332-9 - DL	G0094-8	103 M D								
280-159332-10	PZ018-8	112 M								
280-159332-11	PZ017R-8	96 M								
280-159332-12	PZ021-8	94 M								
280-159332-13	PZ019-8	130 M Q								
280-159332-13 MS	PZ019-8	108 M								
280-159332-13 MS	PZ019-8	109 M								
280-159332-13 MSD	PZ019-8	108 M								
280-159332-13 MSD	PZ019-8	113 M								
LCS 280-567953/2-A	Lab Control Sample	95								
LCS 280-567953/3-A	Lab Control Sample	102								
MB 280-567953/1-A	Method Blank	101								

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)								
280-159332-1	G0081-8	97								
280-159332-2	G0082-8	98								
280-159332-3	G0024-8	101								
280-159332-4	G0096-8	103								
280-159332-4 - DL	G0096-8	99 D								
280-159332-5	G0296-8	93 M								
280-159332-5 - DL	G0296-8	95 D								
280-159332-6	PZ020-8	108								
280-159332-7	G0077-8	108								
280-159332-9	G0094-8	96								
280-159332-9 - DL	G0094-8	94 M D								
280-159332-10	PZ018-8	90 M								
280-159332-11	PZ017R-8	107								
280-159332-12	PZ021-8	97 M								

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 280-568337/30
Matrix: Water
Analysis Batch: 568337

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		03/10/22 17:05	1

Lab Sample ID: LCS 280-568337/4
Matrix: Water
Analysis Batch: 568337

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 280-568337/5
Matrix: Water
Analysis Batch: 568337

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	0.0669		mg/L		102	73 - 125	0	20

Lab Sample ID: 280-159332-13 MS
Matrix: Water
Analysis Batch: 568337

Client Sample ID: PZ019-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane	0.0013	U	0.0657	0.0644		mg/L		98	73 - 125		

Lab Sample ID: 280-159332-13 MSD
Matrix: Water
Analysis Batch: 568337

Client Sample ID: PZ019-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	0.0013	U	0.0657	0.0641		mg/L		98	73 - 125	1	20

Lab Sample ID: 280-159332-13 DU
Matrix: Water
Analysis Batch: 568337

Client Sample ID: PZ019-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Methane	0.0013	U	0.0013	U	mg/L				NC	20

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-567953/1-A
Matrix: Water
Analysis Batch: 568287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 567953

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		03/11/22 06:45	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		03/11/22 06:45	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		03/11/22 06:45	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		03/11/22 06:45	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		03/11/22 06:45	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		03/11/22 06:45	1

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

Lab Sample ID: MB 280-567953/1-A
Matrix: Water
Analysis Batch: 568287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 567953

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		03/11/22 06:45	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		03/11/22 06:45	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		03/11/22 06:45	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		03/11/22 06:45	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		03/11/22 06:45	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		03/11/22 06:45	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		03/11/22 06:45	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		03/11/22 06:45	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		03/11/22 06:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*101*		*83 - 119*	*03/08/22 11:19*	*03/11/22 06:45*	*1*

Lab Sample ID: LCS 280-567953/2-A
Matrix: Water
Analysis Batch: 568287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 567953

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	2.00	1.97		ug/L		99	73 - 125
1,3-Dinitrobenzene	2.00	1.98		ug/L		99	78 - 120
2,4,6-Trinitrotoluene	2.00	1.92		ug/L		96	71 - 123
2,4-Dinitrotoluene	2.00	1.85		ug/L		93	78 - 120
2,6-Dinitrotoluene	2.00	1.95		ug/L		98	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.79		ug/L		89	79 - 120
2-Nitrotoluene	2.00	1.57		ug/L		79	70 - 127
3-Nitrotoluene	2.00	1.50		ug/L		75	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.57		ug/L		79	76 - 125
4-Nitrotoluene	2.00	1.75		ug/L		87	71 - 127
HMX	2.00	1.84	M	ug/L		92	65 - 135
Nitrobenzene	2.00	1.76		ug/L		88	65 - 134
RDX	2.00	2.03		ug/L		102	68 - 130
Tetryl	2.00	1.92		ug/L		96	64 - 128

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

Lab Sample ID: LCS 280-567953/3-A
Matrix: Water
Analysis Batch: 568287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 567953

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
MNX	2.33	2.29	M	ug/L		98	57 - 132

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

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

Lab Sample ID: 280-159332-13 MS
Matrix: Water
Analysis Batch: 568433

Client Sample ID: PZ019-8
Prep Type: Total/NA
Prep Batch: 567953

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	0.20	U Q	2.06	2.28	M	ug/L		111	73 - 125
1,3-Dinitrobenzene	0.098	U Q	2.06	2.31		ug/L		112	78 - 120
2,4,6-Trinitrotoluene	0.098	U Q	2.06	2.26		ug/L		110	71 - 123
2,4-Dinitrotoluene	0.078	U Q	2.06	2.12		ug/L		103	78 - 120
2,6-Dinitrotoluene	0.078	U Q	2.06	2.25		ug/L		109	77 - 127
2-Amino-4,6-dinitrotoluene	0.098	U Q	2.06	2.02		ug/L		98	79 - 120
2-Nitrotoluene	0.20	U Q	2.06	1.96		ug/L		95	70 - 127
3-Nitrotoluene	0.39	U Q	2.06	1.71		ug/L		83	73 - 125
4-Amino-2,6-dinitrotoluene	0.12	U Q	2.06	1.68		ug/L		82	76 - 125
4-Nitrotoluene	0.39	U M Q	2.06	2.09		ug/L		102	71 - 127
HMX	0.20	U Q	2.06	2.05	M	ug/L		100	65 - 135
Nitrobenzene	0.20	U Q	2.06	2.11		ug/L		103	65 - 134
RDX	0.20	U Q	2.06	1.95	M	ug/L		95	68 - 130
Tetryl	0.098	U Q	2.06	2.31		ug/L		112	64 - 128

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dinitrobenzene	*108*	*M*	*83 - 119*

Lab Sample ID: 280-159332-13 MS
Matrix: Water
Analysis Batch: 568433

Client Sample ID: PZ019-8
Prep Type: Total/NA
Prep Batch: 567953

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
MNX	0.39	U M	2.47	2.29	M	ug/L		93	57 - 132

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

Lab Sample ID: 280-159332-13 MSD
Matrix: Water
Analysis Batch: 568433

Client Sample ID: PZ019-8
Prep Type: Total/NA
Prep Batch: 567953

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	0.20	U Q	2.03	2.26	M	ug/L		111	73 - 125	1	30
1,3-Dinitrobenzene	0.098	U Q	2.03	2.26		ug/L		111	78 - 120	2	30
2,4,6-Trinitrotoluene	0.098	U Q	2.03	2.26		ug/L		111	71 - 123	0	30
2,4-Dinitrotoluene	0.078	U Q	2.03	2.06		ug/L		101	78 - 120	3	30
2,6-Dinitrotoluene	0.078	U Q	2.03	2.13		ug/L		105	77 - 127	6	30
2-Amino-4,6-dinitrotoluene	0.098	U Q	2.03	1.97		ug/L		97	79 - 120	3	30
2-Nitrotoluene	0.20	U Q	2.03	1.82		ug/L		89	70 - 127	7	30
3-Nitrotoluene	0.39	U Q	2.03	1.63		ug/L		80	73 - 125	5	30
4-Amino-2,6-dinitrotoluene	0.12	U Q	2.03	1.67		ug/L		82	76 - 125	0	30
4-Nitrotoluene	0.39	U M Q	2.03	2.01		ug/L		99	71 - 127	4	30
HMX	0.20	U Q	2.03	2.24	M	ug/L		110	65 - 135	9	30
Nitrobenzene	0.20	U Q	2.03	1.99		ug/L		98	65 - 134	6	30
RDX	0.20	U Q	2.03	2.01	M	ug/L		99	68 - 130	3	30
Tetryl	0.098	U Q	2.03	2.34		ug/L		115	64 - 128	1	30

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

Lab Sample ID: 280-159332-13 MSD
Matrix: Water
Analysis Batch: 568433

Client Sample ID: PZ019-8
Prep Type: Total/NA
Prep Batch: 567953

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*108*	*M*	*83 - 119*

Lab Sample ID: 280-159332-13 MSD
Matrix: Water
Analysis Batch: 568433

Client Sample ID: PZ019-8
Prep Type: Total/NA
Prep Batch: 567953

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
MNX	0.39	U M	2.41	2.32	M	ug/L		97	57 - 132	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dinitrobenzene	*113*	*M*	*83 - 119*

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-569103/20
Matrix: Water
Analysis Batch: 569103

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		03/18/22 13:59	1

Lab Sample ID: LCS 280-569103/18
Matrix: Water
Analysis Batch: 569103

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	2.55		mg/L		102	90 - 110		

Lab Sample ID: LCSD 280-569103/19
Matrix: Water
Analysis Batch: 569103

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	2.51		mg/L		100	90 - 110	2	10

Lab Sample ID: 280-159332-13 MS
Matrix: Water
Analysis Batch: 569103

Client Sample ID: PZ019-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia	0.050	U	1.00	1.02		mg/L		102	90 - 110		

Lab Sample ID: 280-159332-13 MSD
Matrix: Water
Analysis Batch: 569103

Client Sample ID: PZ019-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	0.050	U	1.00	1.05		mg/L		105	90 - 110	3	10

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: MB 280-569144/20
Matrix: Water
Analysis Batch: 569144

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		03/19/22 10:41	1

Lab Sample ID: LCS 280-569144/18
Matrix: Water
Analysis Batch: 569144

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	2.50		mg/L		100	90 - 110		

Lab Sample ID: LCSD 280-569144/19
Matrix: Water
Analysis Batch: 569144

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	2.54		mg/L		102	90 - 110	1	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-568332/2-A
Matrix: Water
Analysis Batch: 568623

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 568332

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	0.80	U	1.0	0.80	0.69	mg/L		03/14/22 17:10	1

Lab Sample ID: LCS 280-568332/1-A
Matrix: Water
Analysis Batch: 568623

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 568332

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrogen, Total Kjeldahl			6.00	5.78		mg/L		96	90 - 110		

Lab Sample ID: 280-159332-13 MS
Matrix: Water
Analysis Batch: 568623

Client Sample ID: PZ019-8
Prep Type: Total/NA
Prep Batch: 568332

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrogen, Total Kjeldahl	0.80	U J1	3.00	2.64	J1	mg/L		88	90 - 110		

Lab Sample ID: 280-159332-13 MSD
Matrix: Water
Analysis Batch: 568623

Client Sample ID: PZ019-8
Prep Type: Total/NA
Prep Batch: 568332

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Total Kjeldahl	0.80	U J1	3.00	2.63	J1	mg/L		88	90 - 110	0	25

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-568761/22
Matrix: Water
Analysis Batch: 568761

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

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		03/15/22 16:47	1

Lab Sample ID: MB 280-568761/60
Matrix: Water
Analysis Batch: 568761

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

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		03/15/22 18:03	1

Lab Sample ID: LCS 280-568761/21
Matrix: Water
Analysis Batch: 568761

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate Nitrite as N			5.00	4.97		mg/L		99	90 - 110		

Lab Sample ID: LCS 280-568761/59
Matrix: Water
Analysis Batch: 568761

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate Nitrite as N			5.00	5.01		mg/L		100	90 - 110		

Lab Sample ID: 280-159332-12 MS
Matrix: Water
Analysis Batch: 568761

Client Sample ID: PZ021-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate Nitrite as N	5.8	J1	4.00	9.07	J1	mg/L		83	90 - 110		

Lab Sample ID: 280-159332-12 MSD
Matrix: Water
Analysis Batch: 568761

Client Sample ID: PZ021-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	5.8	J1	4.00	9.05	J1	mg/L		82	90 - 110	0	10

Lab Sample ID: 280-159332-13 MS
Matrix: Water
Analysis Batch: 568761

Client Sample ID: PZ019-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate Nitrite as N	48		80.0	123		mg/L		95	90 - 110		

Lab Sample ID: 280-159332-13 MSD
Matrix: Water
Analysis Batch: 568761

Client Sample ID: PZ019-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	48		80.0	124		mg/L		95	90 - 110	0	10

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-569157/22
Matrix: Water
Analysis Batch: 569157

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

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		03/20/22 16:04	1

Lab Sample ID: LCS 280-569157/21
Matrix: Water
Analysis Batch: 569157

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

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

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

Lab Sample ID: MB 280-567934/2-A
Matrix: Water
Analysis Batch: 567935

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 567934

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		03/07/22 18:33	1

Lab Sample ID: LCS 280-567934/1-A
Matrix: Water
Analysis Batch: 567935

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 567934

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	23.6	20.0		mg/L		85	44 - 110

Lab Sample ID: 280-159332-2 MS
Matrix: Water
Analysis Batch: 567935

Client Sample ID: G0082-8
Prep Type: Total/NA
Prep Batch: 567934

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	0.80	J	23.6	21.6		mg/L		88	44 - 110

Lab Sample ID: 280-159332-2 MSD
Matrix: Water
Analysis Batch: 567935

Client Sample ID: G0082-8
Prep Type: Total/NA
Prep Batch: 567934

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	0.80	J	23.6	20.8		mg/L		85	44 - 110	4	20

Lab Sample ID: MB 280-568018/2-A
Matrix: Water
Analysis Batch: 568064

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 568018

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	0.800	J	4.0	1.9	0.79	mg/L		03/08/22 16:59	1

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

Lab Sample ID: LCS 280-568018/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 568064 — **Prep Batch: 568018**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide			23.6	16.8		mg/L		71	44 - 110		

Lab Sample ID: MB 280-568024/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 568065 — **Prep Batch: 568024**

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		03/08/22 17:04	1

Lab Sample ID: LCS 280-568024/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 568065 — **Prep Batch: 568024**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide			23.6	19.2		mg/L		81	44 - 110		

Lab Sample ID: 280-159332-13 MS — **Client Sample ID: PZ019-8**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 568065 — **Prep Batch: 568024**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide	0.80	J	23.6	19.2		mg/L		78	44 - 110		

Lab Sample ID: 280-159332-13 MSD — **Client Sample ID: PZ019-8**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 568065 — **Prep Batch: 568024**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	0.80	J	23.6	19.2		mg/L		78	44 - 110	0	20

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 280-568946/47 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 568946

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		03/18/22 02:18	1

Lab Sample ID: LCS 280-568946/45 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 568946

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			100	97.4	M	mg/L		97	87 - 112		

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

Lab Sample ID: LCSD 280-568946/46
Matrix: Water
Analysis Batch: 568946

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate			100	97.4	M	mg/L		97	87 - 112	0	10

Lab Sample ID: MRL 280-568946/3
Matrix: Water
Analysis Batch: 568946

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	4.03	J M	mg/L		81	50 - 150		

Lab Sample ID: 280-159332-1 MS
Matrix: Water
Analysis Batch: 568946

Client Sample ID: G0081-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	170	M	50.0	219	M J1	mg/L		100	87 - 112		

Lab Sample ID: 280-159332-1 MSD
Matrix: Water
Analysis Batch: 568946

Client Sample ID: G0081-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	170	M	50.0	219	M J1	mg/L		101	87 - 112	0	10

Lab Sample ID: 280-159332-13 MS
Matrix: Water
Analysis Batch: 568946

Client Sample ID: PZ019-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	83	M	50.0	136	M	mg/L		104	87 - 112		

Lab Sample ID: 280-159332-13 MSD
Matrix: Water
Analysis Batch: 568946

Client Sample ID: PZ019-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	83	M	50.0	137	M	mg/L		108	87 - 112	1	10

Lab Sample ID: 280-159332-1 DU
Matrix: Water
Analysis Batch: 568946

Client Sample ID: G0081-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	170	M		169	M	mg/L				0.5	10

Lab Sample ID: 280-159332-13 DU
Matrix: Water
Analysis Batch: 568946

Client Sample ID: PZ019-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	83	M		82.4	M	mg/L				1	10

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

Lab Sample ID: MB 280-568571/2-A
Matrix: Water
Analysis Batch: 568667

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		03/14/22 18:34	1

Lab Sample ID: MB 280-568667/5
Matrix: Water
Analysis Batch: 568667

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		03/14/22 17:47	1

Lab Sample ID: LCS 280-568571/1-A
Matrix: Water
Analysis Batch: 568667

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	25.7		mg/L		103	88 - 112		

Lab Sample ID: LCS 280-568667/4
Matrix: Water
Analysis Batch: 568667

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	24.8		mg/L		99	88 - 112		

Lab Sample ID: 280-159332-1 MS
Matrix: Water
Analysis Batch: 568667

Client Sample ID: G0081-8
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Dissolved Organic Carbon - Quad	5.9		25.0	30.1		mg/L		97	88 - 112		

Lab Sample ID: 280-159332-1 MSD
Matrix: Water
Analysis Batch: 568667

Client Sample ID: G0081-8
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	5.9		25.0	29.9		mg/L		96	88 - 112	1	15

Lab Sample ID: 280-159332-13 MS
Matrix: Water
Analysis Batch: 568667

Client Sample ID: PZ019-8
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Dissolved Organic Carbon - Quad	2.2		25.0	27.3		mg/L		100	88 - 112		

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

Lab Sample ID: 280-159332-13 MSD
Matrix: Water
Analysis Batch: 568667

Client Sample ID: PZ019-8
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	2.2		25.0	26.8		mg/L		98	88 - 112	2	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-568099/32
Matrix: Water
Analysis Batch: 568099

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		03/08/22 18:48	1

Lab Sample ID: MB 280-568099/6
Matrix: Water
Analysis Batch: 568099

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		03/08/22 15:03	1

Lab Sample ID: LCS 280-568099/31
Matrix: Water
Analysis Batch: 568099

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	200		mg/L		100	89 - 109

Lab Sample ID: LCS 280-568099/4
Matrix: Water
Analysis Batch: 568099

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	198		mg/L		99	89 - 109

Lab Sample ID: LCSD 280-568099/5
Matrix: Water
Analysis Batch: 568099

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

Lab Sample ID: 280-159332-4 DU
Matrix: Water
Analysis Batch: 568099

Client Sample ID: G0096-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3	400		397		mg/L		0.2	10

GC VOA

Analysis Batch: 568337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-1	G0081-8	Total/NA	Water	RSK-175	
280-159332-2	G0082-8	Total/NA	Water	RSK-175	
280-159332-3	G0024-8	Total/NA	Water	RSK-175	
280-159332-4	G0096-8	Total/NA	Water	RSK-175	
280-159332-5	G0296-8	Total/NA	Water	RSK-175	
280-159332-6	PZ020-8	Total/NA	Water	RSK-175	
280-159332-7	G0077-8	Total/NA	Water	RSK-175	
280-159332-8	G0078-8	Total/NA	Water	RSK-175	
280-159332-9	G0094-8	Total/NA	Water	RSK-175	
280-159332-10	PZ018-8	Total/NA	Water	RSK-175	
280-159332-11	PZ017R-8	Total/NA	Water	RSK-175	
280-159332-12	PZ021-8	Total/NA	Water	RSK-175	
280-159332-13	PZ019-8	Total/NA	Water	RSK-175	
MB 280-568337/30	Method Blank	Total/NA	Water	RSK-175	
LCS 280-568337/4	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-568337/5	Lab Control Sample Dup	Total/NA	Water	RSK-175	
280-159332-13 MS	PZ019-8	Total/NA	Water	RSK-175	
280-159332-13 MSD	PZ019-8	Total/NA	Water	RSK-175	
280-159332-13 DU	PZ019-8	Total/NA	Water	RSK-175	

HPLC/IC

Prep Batch: 567953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-1	G0081-8	Total/NA	Water	3535	
280-159332-2	G0082-8	Total/NA	Water	3535	
280-159332-3	G0024-8	Total/NA	Water	3535	
280-159332-4	G0096-8	Total/NA	Water	3535	
280-159332-4 - DL	G0096-8	Total/NA	Water	3535	
280-159332-5	G0296-8	Total/NA	Water	3535	
280-159332-5 - DL	G0296-8	Total/NA	Water	3535	
280-159332-6	PZ020-8	Total/NA	Water	3535	
280-159332-7	G0077-8	Total/NA	Water	3535	
280-159332-8	G0078-8	Total/NA	Water	3535	
280-159332-9 - DL	G0094-8	Total/NA	Water	3535	
280-159332-9	G0094-8	Total/NA	Water	3535	
280-159332-10	PZ018-8	Total/NA	Water	3535	
280-159332-11	PZ017R-8	Total/NA	Water	3535	
280-159332-12	PZ021-8	Total/NA	Water	3535	
280-159332-13	PZ019-8	Total/NA	Water	3535	
MB 280-567953/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-567953/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-567953/3-A	Lab Control Sample	Total/NA	Water	3535	
280-159332-13 MS	PZ019-8	Total/NA	Water	3535	
280-159332-13 MS	PZ019-8	Total/NA	Water	3535	
280-159332-13 MSD	PZ019-8	Total/NA	Water	3535	
280-159332-13 MSD	PZ019-8	Total/NA	Water	3535	

Analysis Batch: 568287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-1	G0081-8	Total/NA	Water	8330A	567953

HPLC/IC (Continued)

Analysis Batch: 568287 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-2	G0082-8	Total/NA	Water	8330A	567953
280-159332-3	G0024-8	Total/NA	Water	8330A	567953
280-159332-4	G0096-8	Total/NA	Water	8330A	567953
280-159332-5	G0296-8	Total/NA	Water	8330A	567953
280-159332-6	PZ020-8	Total/NA	Water	8330A	567953
280-159332-7	G0077-8	Total/NA	Water	8330A	567953
MB 280-567953/1-A	Method Blank	Total/NA	Water	8330A	567953
LCS 280-567953/2-A	Lab Control Sample	Total/NA	Water	8330A	567953
LCS 280-567953/3-A	Lab Control Sample	Total/NA	Water	8330A	567953

Analysis Batch: 568433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-4 - DL	G0096-8	Total/NA	Water	8330A	567953
280-159332-5 - DL	G0296-8	Total/NA	Water	8330A	567953
280-159332-8	G0078-8	Total/NA	Water	8330A	567953
280-159332-9	G0094-8	Total/NA	Water	8330A	567953
280-159332-9 - DL	G0094-8	Total/NA	Water	8330A	567953
280-159332-10	PZ018-8	Total/NA	Water	8330A	567953
280-159332-11	PZ017R-8	Total/NA	Water	8330A	567953
280-159332-12	PZ021-8	Total/NA	Water	8330A	567953
280-159332-13	PZ019-8	Total/NA	Water	8330A	567953
280-159332-13 MS	PZ019-8	Total/NA	Water	8330A	567953
280-159332-13 MS	PZ019-8	Total/NA	Water	8330A	567953
280-159332-13 MSD	PZ019-8	Total/NA	Water	8330A	567953
280-159332-13 MSD	PZ019-8	Total/NA	Water	8330A	567953

Analysis Batch: 568485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-1	G0081-8	Total/NA	Water	8330A	567953
280-159332-2	G0082-8	Total/NA	Water	8330A	567953
280-159332-3	G0024-8	Total/NA	Water	8330A	567953
280-159332-4	G0096-8	Total/NA	Water	8330A	567953
280-159332-5	G0296-8	Total/NA	Water	8330A	567953
280-159332-6	PZ020-8	Total/NA	Water	8330A	567953
280-159332-7	G0077-8	Total/NA	Water	8330A	567953

Analysis Batch: 568709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-4 - DL	G0096-8	Total/NA	Water	8330A	567953
280-159332-5 - DL	G0296-8	Total/NA	Water	8330A	567953
280-159332-9	G0094-8	Total/NA	Water	8330A	567953
280-159332-9 - DL	G0094-8	Total/NA	Water	8330A	567953
280-159332-10	PZ018-8	Total/NA	Water	8330A	567953
280-159332-11	PZ017R-8	Total/NA	Water	8330A	567953
280-159332-12	PZ021-8	Total/NA	Water	8330A	567953

General Chemistry

Prep Batch: 567934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-2	G0082-8	Total/NA	Water	9030B	

General Chemistry (Continued)

Prep Batch: 567934 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-3	G0024-8	Total/NA	Water	9030B	
280-159332-4	G0096-8	Total/NA	Water	9030B	
280-159332-5	G0296-8	Total/NA	Water	9030B	
280-159332-6	PZ020-8	Total/NA	Water	9030B	
MB 280-567934/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-567934/1-A	Lab Control Sample	Total/NA	Water	9030B	
280-159332-2 MS	G0082-8	Total/NA	Water	9030B	
280-159332-2 MSD	G0082-8	Total/NA	Water	9030B	

Analysis Batch: 567935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-2	G0082-8	Total/NA	Water	9034	567934
280-159332-3	G0024-8	Total/NA	Water	9034	567934
280-159332-4	G0096-8	Total/NA	Water	9034	567934
280-159332-5	G0296-8	Total/NA	Water	9034	567934
280-159332-6	PZ020-8	Total/NA	Water	9034	567934
MB 280-567934/2-A	Method Blank	Total/NA	Water	9034	567934
LCS 280-567934/1-A	Lab Control Sample	Total/NA	Water	9034	567934
280-159332-2 MS	G0082-8	Total/NA	Water	9034	567934
280-159332-2 MSD	G0082-8	Total/NA	Water	9034	567934

Prep Batch: 568018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-1	G0081-8	Total/NA	Water	9030B	
280-159332-7	G0077-8	Total/NA	Water	9030B	
280-159332-8	G0078-8	Total/NA	Water	9030B	
MB 280-568018/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-568018/1-A	Lab Control Sample	Total/NA	Water	9030B	

Prep Batch: 568024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-9	G0094-8	Total/NA	Water	9030B	
280-159332-10	PZ018-8	Total/NA	Water	9030B	
280-159332-11	PZ017R-8	Total/NA	Water	9030B	
280-159332-12	PZ021-8	Total/NA	Water	9030B	
280-159332-13	PZ019-8	Total/NA	Water	9030B	
MB 280-568024/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-568024/1-A	Lab Control Sample	Total/NA	Water	9030B	
280-159332-13 MS	PZ019-8	Total/NA	Water	9030B	
280-159332-13 MSD	PZ019-8	Total/NA	Water	9030B	

Analysis Batch: 568064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-1	G0081-8	Total/NA	Water	9034	568018
280-159332-7	G0077-8	Total/NA	Water	9034	568018
280-159332-8	G0078-8	Total/NA	Water	9034	568018
MB 280-568018/2-A	Method Blank	Total/NA	Water	9034	568018
LCS 280-568018/1-A	Lab Control Sample	Total/NA	Water	9034	568018

General Chemistry

Analysis Batch: 568065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-9	G0094-8	Total/NA	Water	9034	568024
280-159332-10	PZ018-8	Total/NA	Water	9034	568024
280-159332-11	PZ017R-8	Total/NA	Water	9034	568024
280-159332-12	PZ021-8	Total/NA	Water	9034	568024
280-159332-13	PZ019-8	Total/NA	Water	9034	568024
MB 280-568024/2-A	Method Blank	Total/NA	Water	9034	568024
LCS 280-568024/1-A	Lab Control Sample	Total/NA	Water	9034	568024
280-159332-13 MS	PZ019-8	Total/NA	Water	9034	568024
280-159332-13 MSD	PZ019-8	Total/NA	Water	9034	568024

Analysis Batch: 568099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-1	G0081-8	Total/NA	Water	SM 2320B	
280-159332-2	G0082-8	Total/NA	Water	SM 2320B	
280-159332-3	G0024-8	Total/NA	Water	SM 2320B	
280-159332-4	G0096-8	Total/NA	Water	SM 2320B	
280-159332-5	G0296-8	Total/NA	Water	SM 2320B	
280-159332-6	PZ020-8	Total/NA	Water	SM 2320B	
280-159332-7	G0077-8	Total/NA	Water	SM 2320B	
280-159332-8	G0078-8	Total/NA	Water	SM 2320B	
280-159332-9	G0094-8	Total/NA	Water	SM 2320B	
280-159332-10	PZ018-8	Total/NA	Water	SM 2320B	
280-159332-11	PZ017R-8	Total/NA	Water	SM 2320B	
280-159332-12	PZ021-8	Total/NA	Water	SM 2320B	
280-159332-13	PZ019-8	Total/NA	Water	SM 2320B	
MB 280-568099/32	Method Blank	Total/NA	Water	SM 2320B	
MB 280-568099/6	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-568099/31	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 280-568099/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-568099/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
280-159332-4 DU	G0096-8	Total/NA	Water	SM 2320B	

Prep Batch: 568332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-1	G0081-8	Total/NA	Water	351.2	
280-159332-2	G0082-8	Total/NA	Water	351.2	
280-159332-3	G0024-8	Total/NA	Water	351.2	
280-159332-4	G0096-8	Total/NA	Water	351.2	
280-159332-5	G0296-8	Total/NA	Water	351.2	
280-159332-6	PZ020-8	Total/NA	Water	351.2	
280-159332-7	G0077-8	Total/NA	Water	351.2	
280-159332-8	G0078-8	Total/NA	Water	351.2	
280-159332-9	G0094-8	Total/NA	Water	351.2	
280-159332-10	PZ018-8	Total/NA	Water	351.2	
280-159332-11	PZ017R-8	Total/NA	Water	351.2	
280-159332-12	PZ021-8	Total/NA	Water	351.2	
280-159332-13	PZ019-8	Total/NA	Water	351.2	
MB 280-568332/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-568332/1-A	Lab Control Sample	Total/NA	Water	351.2	
280-159332-13 MS	PZ019-8	Total/NA	Water	351.2	
280-159332-13 MSD	PZ019-8	Total/NA	Water	351.2	

General Chemistry

Filtration Batch: 568571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-1	G0081-8	Dissolved	Water	FILTRATION	
280-159332-2	G0082-8	Dissolved	Water	FILTRATION	
280-159332-3	G0024-8	Dissolved	Water	FILTRATION	
280-159332-4	G0096-8	Dissolved	Water	FILTRATION	
280-159332-5	G0296-8	Dissolved	Water	FILTRATION	
280-159332-6	PZ020-8	Dissolved	Water	FILTRATION	
280-159332-7	G0077-8	Dissolved	Water	FILTRATION	
280-159332-8	G0078-8	Dissolved	Water	FILTRATION	
280-159332-9	G0094-8	Dissolved	Water	FILTRATION	
280-159332-10	PZ018-8	Dissolved	Water	FILTRATION	
280-159332-11	PZ017R-8	Dissolved	Water	FILTRATION	
280-159332-12	PZ021-8	Dissolved	Water	FILTRATION	
280-159332-13	PZ019-8	Dissolved	Water	FILTRATION	
MB 280-568571/2-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-568571/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
280-159332-1 MS	G0081-8	Dissolved	Water	FILTRATION	
280-159332-1 MSD	G0081-8	Dissolved	Water	FILTRATION	
280-159332-13 MS	PZ019-8	Dissolved	Water	FILTRATION	
280-159332-13 MSD	PZ019-8	Dissolved	Water	FILTRATION	

Analysis Batch: 568623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-1	G0081-8	Total/NA	Water	351.2	568332
280-159332-2	G0082-8	Total/NA	Water	351.2	568332
280-159332-3	G0024-8	Total/NA	Water	351.2	568332
280-159332-4	G0096-8	Total/NA	Water	351.2	568332
280-159332-5	G0296-8	Total/NA	Water	351.2	568332
280-159332-6	PZ020-8	Total/NA	Water	351.2	568332
280-159332-7	G0077-8	Total/NA	Water	351.2	568332
280-159332-8	G0078-8	Total/NA	Water	351.2	568332
280-159332-9	G0094-8	Total/NA	Water	351.2	568332
280-159332-10	PZ018-8	Total/NA	Water	351.2	568332
280-159332-11	PZ017R-8	Total/NA	Water	351.2	568332
280-159332-12	PZ021-8	Total/NA	Water	351.2	568332
280-159332-13	PZ019-8	Total/NA	Water	351.2	568332
MB 280-568332/2-A	Method Blank	Total/NA	Water	351.2	568332
LCS 280-568332/1-A	Lab Control Sample	Total/NA	Water	351.2	568332
280-159332-13 MS	PZ019-8	Total/NA	Water	351.2	568332
280-159332-13 MSD	PZ019-8	Total/NA	Water	351.2	568332

Analysis Batch: 568667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-1	G0081-8	Dissolved	Water	9060A	568571
280-159332-2	G0082-8	Dissolved	Water	9060A	568571
280-159332-3	G0024-8	Dissolved	Water	9060A	568571
280-159332-4	G0096-8	Dissolved	Water	9060A	568571
280-159332-5	G0296-8	Dissolved	Water	9060A	568571
280-159332-6	PZ020-8	Dissolved	Water	9060A	568571
280-159332-7	G0077-8	Dissolved	Water	9060A	568571
280-159332-8	G0078-8	Dissolved	Water	9060A	568571
280-159332-9	G0094-8	Dissolved	Water	9060A	568571

General Chemistry (Continued)

Analysis Batch: 568667 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-10	PZ018-8	Dissolved	Water	9060A	568571
280-159332-11	PZ017R-8	Dissolved	Water	9060A	568571
280-159332-12	PZ021-8	Dissolved	Water	9060A	568571
280-159332-13	PZ019-8	Dissolved	Water	9060A	568571
MB 280-568571/2-A	Method Blank	Dissolved	Water	9060A	568571
MB 280-568667/5	Method Blank	Dissolved	Water	9060A	
LCS 280-568571/1-A	Lab Control Sample	Dissolved	Water	9060A	568571
LCS 280-568667/4	Lab Control Sample	Dissolved	Water	9060A	
280-159332-1 MS	G0081-8	Dissolved	Water	9060A	568571
280-159332-1 MSD	G0081-8	Dissolved	Water	9060A	568571
280-159332-13 MS	PZ019-8	Dissolved	Water	9060A	568571
280-159332-13 MSD	PZ019-8	Dissolved	Water	9060A	568571

Analysis Batch: 568761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-1	G0081-8	Total/NA	Water	353.2	
280-159332-2	G0082-8	Total/NA	Water	353.2	
280-159332-3	G0024-8	Total/NA	Water	353.2	
280-159332-4	G0096-8	Total/NA	Water	353.2	
280-159332-5	G0296-8	Total/NA	Water	353.2	
280-159332-6	PZ020-8	Total/NA	Water	353.2	
280-159332-7	G0077-8	Total/NA	Water	353.2	
280-159332-8	G0078-8	Total/NA	Water	353.2	
280-159332-10	PZ018-8	Total/NA	Water	353.2	
280-159332-11	PZ017R-8	Total/NA	Water	353.2	
280-159332-12	PZ021-8	Total/NA	Water	353.2	
280-159332-13	PZ019-8	Total/NA	Water	353.2	
MB 280-568761/22	Method Blank	Total/NA	Water	353.2	
MB 280-568761/60	Method Blank	Total/NA	Water	353.2	
LCS 280-568761/21	Lab Control Sample	Total/NA	Water	353.2	
LCS 280-568761/59	Lab Control Sample	Total/NA	Water	353.2	
280-159332-12 MS	PZ021-8	Total/NA	Water	353.2	
280-159332-12 MSD	PZ021-8	Total/NA	Water	353.2	
280-159332-13 MS	PZ019-8	Total/NA	Water	353.2	
280-159332-13 MSD	PZ019-8	Total/NA	Water	353.2	

Analysis Batch: 568946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-1	G0081-8	Total/NA	Water	9056A	
280-159332-2	G0082-8	Total/NA	Water	9056A	
280-159332-3	G0024-8	Total/NA	Water	9056A	
280-159332-4	G0096-8	Total/NA	Water	9056A	
280-159332-5	G0296-8	Total/NA	Water	9056A	
280-159332-6	PZ020-8	Total/NA	Water	9056A	
280-159332-7	G0077-8	Total/NA	Water	9056A	
280-159332-8	G0078-8	Total/NA	Water	9056A	
280-159332-9	G0094-8	Total/NA	Water	9056A	
280-159332-10	PZ018-8	Total/NA	Water	9056A	
280-159332-11	PZ017R-8	Total/NA	Water	9056A	
280-159332-12	PZ021-8	Total/NA	Water	9056A	
280-159332-13	PZ019-8	Total/NA	Water	9056A	

General Chemistry (Continued)

Analysis Batch: 568946 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-568946/47	Method Blank	Total/NA	Water	9056A	
LCS 280-568946/45	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-568946/46	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-568946/3	Lab Control Sample	Total/NA	Water	9056A	
280-159332-1 MS	G0081-8	Total/NA	Water	9056A	
280-159332-1 MSD	G0081-8	Total/NA	Water	9056A	
280-159332-13 MS	PZ019-8	Total/NA	Water	9056A	
280-159332-13 MSD	PZ019-8	Total/NA	Water	9056A	
280-159332-1 DU	G0081-8	Total/NA	Water	9056A	
280-159332-13 DU	PZ019-8	Total/NA	Water	9056A	

Analysis Batch: 569103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-1	G0081-8	Total/NA	Water	350.1	
280-159332-2	G0082-8	Total/NA	Water	350.1	
280-159332-3	G0024-8	Total/NA	Water	350.1	
280-159332-6	PZ020-8	Total/NA	Water	350.1	
280-159332-7	G0077-8	Total/NA	Water	350.1	
280-159332-8	G0078-8	Total/NA	Water	350.1	
280-159332-10	PZ018-8	Total/NA	Water	350.1	
280-159332-11	PZ017R-8	Total/NA	Water	350.1	
280-159332-12	PZ021-8	Total/NA	Water	350.1	
280-159332-13	PZ019-8	Total/NA	Water	350.1	
MB 280-569103/20	Method Blank	Total/NA	Water	350.1	
LCS 280-569103/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-569103/19	Lab Control Sample Dup	Total/NA	Water	350.1	
280-159332-13 MS	PZ019-8	Total/NA	Water	350.1	
280-159332-13 MSD	PZ019-8	Total/NA	Water	350.1	

Analysis Batch: 569144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-4	G0096-8	Total/NA	Water	350.1	
280-159332-5	G0296-8	Total/NA	Water	350.1	
280-159332-9	G0094-8	Total/NA	Water	350.1	
MB 280-569144/20	Method Blank	Total/NA	Water	350.1	
LCS 280-569144/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-569144/19	Lab Control Sample Dup	Total/NA	Water	350.1	

Analysis Batch: 569157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159332-9	G0094-8	Total/NA	Water	353.2	
MB 280-569157/22	Method Blank	Total/NA	Water	353.2	
LCS 280-569157/21	Lab Control Sample	Total/NA	Water	353.2	

Client Sample ID: G0081-8
Lab Sample ID: 280-159332-1

Date Collected: 03/01/22 14:10
Matrix: Water
Date Received: 03/03/22 09:25

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	568337	03/10/22 17:57	CAS	TAL DEN
Total/NA	Prep	3535			480.5 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568287	03/11/22 07:54	JZ	TAL DEN
Total/NA	Prep	3535			480.5 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568485	03/12/22 16:05	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	569103	03/18/22 14:09	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	568332	03/10/22 16:01	SVC	TAL DEN
Total/NA	Analysis	351.2		1			568623	03/14/22 17:15	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	568761	03/15/22 17:57	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	568018	03/08/22 13:04	LRB	TAL DEN
Total/NA	Analysis	9034		1			568064	03/08/22 16:59	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	568946	03/18/22 02:33	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568571	03/14/22 11:58	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568667	03/14/22 23:04	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			568099	03/08/22 18:09	KEG	TAL DEN

Client Sample ID: G0082-8
Lab Sample ID: 280-159332-2

Date Collected: 03/01/22 15:25
Matrix: Water
Date Received: 03/03/22 09:25

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	568337	03/10/22 18:10	CAS	TAL DEN
Total/NA	Prep	3535			462.7 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568287	03/11/22 08:17	JZ	TAL DEN
Total/NA	Prep	3535			462.7 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568485	03/12/22 16:41	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	569103	03/18/22 14:11	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	568332	03/10/22 16:01	SVC	TAL DEN
Total/NA	Analysis	351.2		1			568623	03/14/22 17:15	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	568761	03/15/22 17:59	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567934	03/07/22 18:33	LRB	TAL DEN
Total/NA	Analysis	9034		1			567935	03/07/22 18:33	LRB	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	568946	03/18/22 03:33	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568571	03/14/22 11:58	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568667	03/15/22 00:00	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			568099	03/08/22 18:16	KEG	TAL DEN

Client Sample ID: G0024-8
Lab Sample ID: 280-159332-3

Date Collected: 03/01/22 13:10
Matrix: Water
Date Received: 03/03/22 09:25

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	568337	03/10/22 18:23	CAS	TAL DEN

Client Sample ID: G0024-8
Lab Sample ID: 280-159332-3

Date Collected: 03/01/22 13:10
Matrix: Water
Date Received: 03/03/22 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			481.6 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568287	03/11/22 08:40	JZ	TAL DEN
Total/NA	Prep	3535			481.6 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568485	03/12/22 17:16	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	569103	03/18/22 14:13	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	568332	03/10/22 16:01	SVC	TAL DEN
Total/NA	Analysis	351.2		1			568623	03/14/22 17:16	SVC	TAL DEN
Total/NA	Analysis	353.2		5	100 mL	100 mL	568761	03/15/22 18:11	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567934	03/07/22 18:33	LRB	TAL DEN
Total/NA	Analysis	9034		1			567935	03/07/22 18:33	LRB	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	568946	03/18/22 04:18	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568571	03/14/22 11:58	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568667	03/15/22 00:14	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			568099	03/08/22 18:23	KEG	TAL DEN

Client Sample ID: G0096-8
Lab Sample ID: 280-159332-4

Date Collected: 03/01/22 11:10
Matrix: Water
Date Received: 03/03/22 09:25

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	568337	03/10/22 18:36	CAS	TAL DEN
Total/NA	Prep	3535			490.1 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568287	03/11/22 09:03	JZ	TAL DEN
Total/NA	Prep	3535	DL		490.1 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A	DL	5			568433	03/11/22 17:28	JZ	TAL DEN
Total/NA	Prep	3535			490.1 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568485	03/12/22 17:51	JZ	TAL DEN
Total/NA	Prep	3535	DL		490.1 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A	DL	5			568709	03/16/22 01:43	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	569144	03/19/22 10:51	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	568332	03/10/22 16:01	SVC	TAL DEN
Total/NA	Analysis	351.2		1			568623	03/14/22 17:16	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	568761	03/15/22 18:13	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567934	03/07/22 18:33	LRB	TAL DEN
Total/NA	Analysis	9034		1			567935	03/07/22 18:33	LRB	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	568946	03/18/22 04:33	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568571	03/14/22 11:58	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568667	03/15/22 01:01	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			568099	03/08/22 18:56	KEG	TAL DEN

Client Sample ID: G0296-8
Lab Sample ID: 280-159332-5

Date Collected: 03/01/22 08:00
Matrix: Water
Date Received: 03/03/22 09:25

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	568337	03/10/22 18:49	CAS	TAL DEN
Total/NA	Prep	3535			513.8 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568287	03/11/22 09:26	JZ	TAL DEN
Total/NA	Prep	3535	DL		513.8 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A	DL	5			568433	03/11/22 17:51	JZ	TAL DEN
Total/NA	Prep	3535			513.8 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568485	03/12/22 18:26	JZ	TAL DEN
Total/NA	Prep	3535	DL		513.8 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A	DL	5			568709	03/16/22 02:19	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	569144	03/19/22 10:53	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	568332	03/10/22 16:01	SVC	TAL DEN
Total/NA	Analysis	351.2		1			568623	03/14/22 17:17	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	568761	03/15/22 18:27	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567934	03/07/22 18:33	LRB	TAL DEN
Total/NA	Analysis	9034		1			567935	03/07/22 18:33	LRB	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	568946	03/18/22 04:48	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568571	03/14/22 11:58	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568667	03/15/22 01:20	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			568099	03/08/22 19:12	KEG	TAL DEN

Client Sample ID: PZ020-8
Lab Sample ID: 280-159332-6

Date Collected: 03/01/22 17:15
Matrix: Water
Date Received: 03/03/22 09:25

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	568337	03/10/22 19:02	CAS	TAL DEN
Total/NA	Prep	3535			473.7 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568287	03/11/22 09:49	JZ	TAL DEN
Total/NA	Prep	3535			473.7 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568485	03/12/22 19:01	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	569103	03/18/22 14:19	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	568332	03/10/22 16:01	SVC	TAL DEN
Total/NA	Analysis	351.2		1			568623	03/14/22 17:19	SVC	TAL DEN
Total/NA	Analysis	353.2		5	100 mL	100 mL	568761	03/15/22 18:29	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567934	03/07/22 18:33	LRB	TAL DEN
Total/NA	Analysis	9034		1			567935	03/07/22 18:33	LRB	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	568946	03/18/22 05:03	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568571	03/14/22 11:58	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568667	03/15/22 01:36	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			568099	03/08/22 19:20	KEG	TAL DEN

Client Sample ID: G0077-8
Lab Sample ID: 280-159332-7

Date Collected: 03/01/22 14:40
Matrix: Water
Date Received: 03/03/22 09:25

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	568337	03/10/22 19:15	CAS	TAL DEN
Total/NA	Prep	3535			485.7 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568287	03/11/22 10:12	JZ	TAL DEN
Total/NA	Prep	3535			485.7 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568485	03/12/22 19:36	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	569103	03/18/22 14:44	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	568332	03/10/22 16:01	SVC	TAL DEN
Total/NA	Analysis	351.2		1			568623	03/14/22 17:19	SVC	TAL DEN
Total/NA	Analysis	353.2		5	100 mL	100 mL	568761	03/15/22 18:31	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	568018	03/08/22 13:04	LRB	TAL DEN
Total/NA	Analysis	9034		1			568064	03/08/22 16:59	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	568946	03/18/22 05:18	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568571	03/14/22 11:58	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568667	03/15/22 01:52	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			568099	03/08/22 19:27	KEG	TAL DEN

Client Sample ID: G0078-8
Lab Sample ID: 280-159332-8

Date Collected: 03/01/22 16:00
Matrix: Water
Date Received: 03/03/22 09:25

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	568337	03/10/22 19:28	CAS	TAL DEN
Total/NA	Prep	3535			470.2 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568433	03/11/22 18:14	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	569103	03/18/22 14:46	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	568332	03/10/22 16:01	SVC	TAL DEN
Total/NA	Analysis	351.2		1			568623	03/14/22 17:20	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	568761	03/15/22 18:33	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	568018	03/08/22 13:04	LRB	TAL DEN
Total/NA	Analysis	9034		1			568064	03/08/22 16:59	JJM	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	568946	03/18/22 05:48	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568571	03/14/22 11:58	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568667	03/15/22 02:08	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			568099	03/08/22 19:35	KEG	TAL DEN

Client Sample ID: G0094-8
Lab Sample ID: 280-159332-9

Date Collected: 03/01/22 10:00
Matrix: Water
Date Received: 03/03/22 09:25

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	568337	03/10/22 19:54	CAS	TAL DEN
Total/NA	Prep	3535			476.9 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568433	03/11/22 18:37	JZ	TAL DEN

Client Sample ID: G0094-8
Lab Sample ID: 280-159332-9

Date Collected: 03/01/22 10:00
Matrix: Water
Date Received: 03/03/22 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535	DL		476.9 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A	DL	5			568433	03/11/22 19:00	JZ	TAL DEN
Total/NA	Prep	3535			476.9 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568709	03/15/22 19:18	JZ	TAL DEN
Total/NA	Prep	3535	DL		476.9 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A	DL	5			568709	03/16/22 02:53	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	569144	03/19/22 10:55	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	568332	03/10/22 16:01	SVC	TAL DEN
Total/NA	Analysis	351.2		1			568623	03/14/22 17:20	SVC	TAL DEN
Total/NA	Analysis	353.2		2	100 mL	100 mL	569157	03/20/22 16:14	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	568024	03/08/22 13:48	LRB	TAL DEN
Total/NA	Analysis	9034		1			568065	03/08/22 17:04	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	568946	03/18/22 06:03	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568571	03/14/22 11:58	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568667	03/15/22 02:29	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			568099	03/08/22 19:42	KEG	TAL DEN

Client Sample ID: PZ018-8
Lab Sample ID: 280-159332-10

Date Collected: 03/01/22 10:40
Matrix: Water
Date Received: 03/03/22 09:25

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	568337	03/10/22 20:07	CAS	TAL DEN
Total/NA	Prep	3535			462 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568433	03/11/22 19:23	JZ	TAL DEN
Total/NA	Prep	3535			462 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568709	03/15/22 19:53	JZ	TAL DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	569103	03/18/22 14:54	JJM	TAL DEN
Total/NA	Prep	351.2			15 mL	25 mL	568332	03/10/22 16:01	SVC	TAL DEN
Total/NA	Analysis	351.2		1			568623	03/14/22 17:21	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	568761	03/15/22 18:37	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	568024	03/08/22 13:48	LRB	TAL DEN
Total/NA	Analysis	9034		1			568065	03/08/22 17:04	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	568946	03/18/22 06:33	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568571	03/14/22 11:58	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568667	03/15/22 02:46	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			568099	03/08/22 19:51	KEG	TAL DEN

Client Sample ID: PZ017R-8
Lab Sample ID: 280-159332-11

Date Collected: 03/01/22 11:45
Matrix: Water
Date Received: 03/03/22 09:25

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	568337	03/10/22 20:20	CAS	TAL DEN

Client Sample ID: PZ017R-8
Lab Sample ID: 280-159332-11

Date Collected: 03/01/22 11:45
Matrix: Water
Date Received: 03/03/22 09:25

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			481.3 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568433	03/11/22 19:45	JZ	TAL DEN
Total/NA	Prep	3535			481.3 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568709	03/15/22 20:28	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	569103	03/18/22 15:00	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	568332	03/10/22 16:01	SVC	TAL DEN
Total/NA	Analysis	351.2		5			568623	03/14/22 17:34	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	568761	03/15/22 18:39	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	568024	03/08/22 13:48	LRB	TAL DEN
Total/NA	Analysis	9034		1			568065	03/08/22 17:04	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	568946	03/18/22 07:19	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568571	03/14/22 11:58	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568667	03/15/22 03:02	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			568099	03/08/22 20:00	KEG	TAL DEN

Client Sample ID: PZ021-8
Lab Sample ID: 280-159332-12

Date Collected: 03/01/22 08:00
Matrix: Water
Date Received: 03/03/22 09:25

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	568337	03/10/22 20:33	CAS	TAL DEN
Total/NA	Prep	3535			470.6 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568433	03/11/22 20:08	JZ	TAL DEN
Total/NA	Prep	3535			470.6 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568709	03/15/22 21:03	JZ	TAL DEN
Total/NA	Analysis	350.1		10	10 mL	10 mL	569103	03/18/22 14:56	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	568332	03/10/22 16:01	SVC	TAL DEN
Total/NA	Analysis	351.2		1			568623	03/14/22 17:22	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	568761	03/15/22 18:41	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	568024	03/08/22 13:48	LRB	TAL DEN
Total/NA	Analysis	9034		1			568065	03/08/22 17:04	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	568946	03/18/22 07:34	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568571	03/14/22 11:58	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568667	03/15/22 03:21	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			568099	03/08/22 20:09	KEG	TAL DEN

Client Sample ID: PZ019-8
Lab Sample ID: 280-159332-13

Date Collected: 03/01/22 09:10
Matrix: Water
Date Received: 03/03/22 09:25

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	568337	03/10/22 20:46	CAS	TAL DEN
Total/NA	Prep	3535			510.4 mL	5 mL	567953	03/08/22 11:19	ARC	TAL DEN
Total/NA	Analysis	8330A		1			568433	03/11/22 20:31	JZ	TAL DEN

Lab Chronicle

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

Job ID: 280-159332-1

Client Sample ID: PZ019-8

Date Collected: 03/01/22 09:10
Date Received: 03/03/22 09:25

Lab Sample ID: 280-159332-13

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	350.1		1	10 mL	10 mL	569103	03/18/22 14:01	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	568332	03/10/22 16:01	SVC	TAL DEN
Total/NA	Analysis	351.2		1			568623	03/14/22 17:16	SVC	TAL DEN
Total/NA	Analysis	353.2		20	100 mL	100 mL	568761	03/15/22 18:05	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	568024	03/08/22 13:48	LRB	TAL DEN
Total/NA	Analysis	9034		1			568065	03/08/22 17:04	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	568946	03/18/22 07:49	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568571	03/14/22 11:58	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568667	03/15/22 03:39	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			568099	03/08/22 20:27	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: 280-159332-1
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: 280-159332-1

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: 280-159332-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-159332-1	G0081-8	Water	03/01/22 14:10	03/03/22 09:25
280-159332-2	G0082-8	Water	03/01/22 15:25	03/03/22 09:25
280-159332-3	G0024-8	Water	03/01/22 13:10	03/03/22 09:25
280-159332-4	G0096-8	Water	03/01/22 11:10	03/03/22 09:25
280-159332-5	G0296-8	Water	03/01/22 08:00	03/03/22 09:25
280-159332-6	PZ020-8	Water	03/01/22 17:15	03/03/22 09:25
280-159332-7	G0077-8	Water	03/01/22 14:40	03/03/22 09:25
280-159332-8	G0078-8	Water	03/01/22 16:00	03/03/22 09:25
280-159332-9	G0094-8	Water	03/01/22 10:00	03/03/22 09:25
280-159332-10	PZ018-8	Water	03/01/22 10:40	03/03/22 09:25
280-159332-11	PZ017R-8	Water	03/01/22 11:45	03/03/22 09:25
280-159332-12	PZ021-8	Water	03/01/22 08:00	03/03/22 09:25
280-159332-13	PZ019-8	Water	03/01/22 09:10	03/03/22 09:25

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

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.: 280-159332-1

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.: 280-159332-1

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.: 280-159332-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 568337

Lab Sample ID: CCVRT 280-568337/2 Client Sample ID:

Date Analyzed: 03/10/22 16:26 Lab File ID: 002F0201.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.09	Peak assignment corrected	sciannac	03/11/22 11:53

Lab Sample ID: CCVRT 280-568337/2 Client Sample ID:

Date Analyzed: 03/10/22 16:26 Lab File ID: 002F0201.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	03/11/22 11:53

Lab Sample ID: 280-159332-6 Client Sample ID: PZ020-8

Date Analyzed: 03/10/22 19:02 Lab File ID: 014F1401.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.25	Peak assignment corrected	sciannac	03/15/22 15:31

Lab Sample ID: 280-159332-6 Client Sample ID: PZ020-8

Date Analyzed: 03/10/22 19:02 Lab File ID: 014F1401.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.65	Peak not integrated	sciannac	03/15/22 15:32

Lab Sample ID: CCV 280-568337/53 Client Sample ID:

Date Analyzed: 03/10/22 22:04 Lab File ID: 028F2801.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	03/15/22 15:36

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 568337

Lab Sample ID: CCV 280-568337/53 Client Sample ID:

Date Analyzed: 03/10/22 22:04 Lab File ID: 028F2801.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	03/15/22 15:36

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

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.: 280-159332-1

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.: 280-159332-1

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.: 280-159332-1

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.: 280-159332-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 568287

Lab Sample ID: CCV 280-568287/50 Client Sample ID:

Date Analyzed: 03/11/22 06:22 Lab File ID: 03100050.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	03/11/22 12:32
DNX	6.79	Baseline	zhangji	03/11/22 12:32

Lab Sample ID: MB 280-567953/1-A Client Sample ID:

Date Analyzed: 03/11/22 06:45 Lab File ID: 03100051.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX		Invalid Compound ID	zhangji	03/11/22 12:32

Lab Sample ID: LCS 280-567953/2-A Client Sample ID:

Date Analyzed: 03/11/22 07:08 Lab File ID: 03100052.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	03/11/22 13:41

Lab Sample ID: LCS 280-567953/3-A Client Sample ID:

Date Analyzed: 03/11/22 07:31 Lab File ID: 03100053.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.21	Baseline	zhangji	03/11/22 13:41

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 568287

Lab Sample ID: 280-159332-1 Client Sample ID: G0081-8

Date Analyzed: 03/11/22 07:54 Lab File ID: 03100054.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.52	Baseline	zhangji	03/11/22 13:51
1,3,5-Trinitrobenzene	8.65	Baseline	zhangji	03/11/22 13:51
Nitrobenzene		Invalid Compound ID	zhangji	03/11/22 13:51
Tetryl		Invalid Compound ID	zhangji	03/11/22 13:51

Lab Sample ID: 280-159332-2 Client Sample ID: G0082-8

Date Analyzed: 03/11/22 08:17 Lab File ID: 03100055.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	03/11/22 13:51
RDX	7.58	Baseline	zhangji	03/11/22 13:52
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/11/22 13:52
Tetryl		Invalid Compound ID	zhangji	03/11/22 13:52

Lab Sample ID: 280-159332-3 Client Sample ID: G0024-8

Date Analyzed: 03/11/22 08:40 Lab File ID: 03100056.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/11/22 13:52
1,3-Dinitrobenzene	9.30	Baseline	zhangji	03/11/22 13:52
Tetryl		Invalid Compound ID	zhangji	03/11/22 13:52

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 568287

Lab Sample ID: 280-159332-4 Client Sample ID: G0096-8

Date Analyzed: 03/11/22 09:03 Lab File ID: 03100057.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	03/11/22 12:44
MNX	7.21	Baseline	zhangji	03/11/22 12:44
RDX	7.59	Baseline	zhangji	03/11/22 12:44
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/11/22 13:52
2-Nitrotoluene		Invalid Compound ID	zhangji	03/11/22 13:52
Nitrobenzene		Invalid Compound ID	zhangji	03/11/22 13:52
Tetryl		Invalid Compound ID	zhangji	03/11/22 13:52

Lab Sample ID: 280-159332-5 Client Sample ID: G0296-8

Date Analyzed: 03/11/22 09:26 Lab File ID: 03100058.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	03/11/22 13:54
MNX	7.21	Baseline	zhangji	03/11/22 13:54
RDX	7.58	Baseline	zhangji	03/11/22 13:55
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/11/22 13:55
Nitrobenzene		Invalid Compound ID	zhangji	03/11/22 13:55
Tetryl		Invalid Compound ID	zhangji	03/11/22 13:55

Lab Sample ID: 280-159332-6 Client Sample ID: PZ020-8

Date Analyzed: 03/11/22 09:49 Lab File ID: 03100059.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	03/11/22 13:55
MNX		Invalid Compound ID	zhangji	03/11/22 13:55
RDX		Invalid Compound ID	zhangji	03/11/22 13:55
Tetryl		Invalid Compound ID	zhangji	03/11/22 13:55
2,4-Dinitrotoluene	11.67	Baseline	zhangji	03/11/22 13:55

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 568287

Lab Sample ID: 280-159332-7 Client Sample ID: G0077-8

Date Analyzed: 03/11/22 10:12 Lab File ID: 03100060.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.58	Baseline	zhangji	03/11/22 13:56
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/11/22 13:56
1,3,5-Trinitrobenzene	8.66	Baseline	zhangji	03/11/22 13:56
1,3-Dinitrobenzene	9.30	Baseline	zhangji	03/11/22 13:56
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	03/11/22 13:56
MNX		Invalid Compound ID	zhangji	03/11/22 13:55
Tetryl		Invalid Compound ID	zhangji	03/11/22 13:56

Lab Sample ID: CCV 280-568287/61 Client Sample ID:

Date Analyzed: 03/11/22 10:35 Lab File ID: 03100061.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	03/11/22 13:56

Lab Sample ID: CCV 280-568287/62 Client Sample ID:

Date Analyzed: 03/11/22 10:58 Lab File ID: 03100062.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	03/11/22 13:56
DNX	6.80	Baseline	zhangji	03/11/22 13:56
MNX	7.21	Baseline	zhangji	03/11/22 13:56

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 568433

Lab Sample ID: CCV 280-568433/15 Client Sample ID:

Date Analyzed: 03/11/22 16:42 Lab File ID: 03110015.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	03/11/22 17:17
Nitroglycerin	10.44	Incomplete Integration	zhangji	03/12/22 10:38

Lab Sample ID: CCV 280-568433/16 Client Sample ID:

Date Analyzed: 03/11/22 17:05 Lab File ID: 03110016.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	03/11/22 17:32
DNX	6.79	Baseline	zhangji	03/11/22 17:32
MNX	7.21	Baseline	zhangji	03/11/22 17:32

Lab Sample ID: 280-159332-4 DL Client Sample ID: G0096-8 DL

Date Analyzed: 03/11/22 17:28 Lab File ID: 03110017.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	03/11/22 18:44
MNX	7.22	Baseline	zhangji	03/11/22 18:44
RDX	7.58	Baseline	zhangji	03/11/22 18:44
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/11/22 18:44
Tetryl		Invalid Compound ID	zhangji	03/11/22 18:44

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 568433

Lab Sample ID: 280-159332-5 DL Client Sample ID: G0296-8 DL

Date Analyzed: 03/11/22 17:51 Lab File ID: 03110018.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	03/11/22 18:45
MNX	7.22	Baseline	zhangji	03/11/22 18:45
RDX	7.59	Baseline	zhangji	03/11/22 18:45
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/11/22 18:44
Tetryl		Invalid Compound ID	zhangji	03/11/22 18:45

Lab Sample ID: 280-159332-8 Client Sample ID: G0078-8

Date Analyzed: 03/11/22 18:14 Lab File ID: 03110019.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.54	Baseline	zhangji	03/11/22 18:45
HMX		Invalid Compound ID	zhangji	03/11/22 18:45
4-Nitrotoluene	12.92	Baseline	zhangji	03/11/22 18:45

Lab Sample ID: 280-159332-9 Client Sample ID: G0094-8

Date Analyzed: 03/11/22 18:37 Lab File ID: 03110020.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	03/11/22 19:14
MNX	7.25	Baseline	zhangji	03/11/22 19:14
RDX	7.59	Baseline	zhangji	03/11/22 19:14
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/11/22 19:14
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	03/11/22 19:14
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	03/11/22 19:14
2-Nitrotoluene		Invalid Compound ID	zhangji	03/11/22 19:14
Tetryl		Invalid Compound ID	zhangji	03/11/22 19:14

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 568433

Lab Sample ID: 280-159332-9 DL Client Sample ID: G0094-8 DL

Date Analyzed: 03/11/22 19:00 Lab File ID: 03110021.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	03/11/22 19:30
RDX	7.59	Baseline	zhangji	03/11/22 19:31
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/11/22 19:31
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	03/11/22 19:31
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	03/11/22 19:31
MNX		Invalid Compound ID	zhangji	03/11/22 19:30
Tetryl		Invalid Compound ID	zhangji	03/11/22 19:31

Lab Sample ID: 280-159332-10 Client Sample ID: PZ018-8

Date Analyzed: 03/11/22 19:23 Lab File ID: 03110022.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.61	Baseline	zhangji	03/11/22 19:51
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/11/22 19:51
2-Nitrotoluene		Invalid Compound ID	zhangji	03/11/22 19:50
MNX		Invalid Compound ID	zhangji	03/11/22 19:50
Nitrobenzene		Invalid Compound ID	zhangji	03/11/22 19:50
Tetryl		Invalid Compound ID	zhangji	03/11/22 19:50

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 568433

Lab Sample ID: 280-159332-11 Client Sample ID: PZ017R-8

Date Analyzed: 03/11/22 19:45 Lab File ID: 03110023.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.60	Baseline	zhangji	03/11/22 20:13
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/11/22 20:13
1,3,5-Trinitrobenzene	8.66	Baseline	zhangji	03/11/22 20:13
1,3-Dinitrobenzene	9.29	Baseline	zhangji	03/11/22 20:14
2-Nitrotoluene		Invalid Compound ID	zhangji	03/11/22 20:13
MNX		Invalid Compound ID	zhangji	03/11/22 20:13
Tetryl		Invalid Compound ID	zhangji	03/11/22 20:13

Lab Sample ID: 280-159332-12 Client Sample ID: PZ021-8

Date Analyzed: 03/11/22 20:08 Lab File ID: 03110024.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.58	Baseline	zhangji	03/11/22 20:33
RDX	7.60	Baseline	zhangji	03/11/22 20:33
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/11/22 20:33
1,3,5-Trinitrobenzene	8.66	Baseline	zhangji	03/11/22 20:33
2-Nitrotoluene		Invalid Compound ID	zhangji	03/11/22 20:33
MNX		Invalid Compound ID	zhangji	03/11/22 20:33
Tetryl		Invalid Compound ID	zhangji	03/11/22 20:33

Lab Sample ID: 280-159332-13 Client Sample ID: PZ019-8

Date Analyzed: 03/11/22 20:31 Lab File ID: 03110025.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/12/22 09:35
4-Nitrotoluene		Invalid Compound ID	zhangji	03/12/22 09:35
MNX		Invalid Compound ID	zhangji	03/12/22 09:35

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 568433

Lab Sample ID: CCV 280-568433/26 Client Sample ID:

Date Analyzed: 03/11/22 20:54 Lab File ID: 03110026.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	03/12/22 09:45

Lab Sample ID: CCV 280-568433/27 Client Sample ID:

Date Analyzed: 03/11/22 21:17 Lab File ID: 03110027.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	03/12/22 09:45
DNX	6.80	Baseline	zhangji	03/12/22 09:45
MNX	7.21	Baseline	zhangji	03/12/22 09:45

Lab Sample ID: 280-159332-13 MS Client Sample ID: PZ019-8 MS

Date Analyzed: 03/11/22 21:40 Lab File ID: 03110028.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	03/12/22 09:45
RDX	7.58	Baseline	zhangji	03/12/22 09:45
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/12/22 09:45
1,3,5-Trinitrobenzene	8.66	Baseline	zhangji	03/12/22 09:45

Lab Sample ID: 280-159332-13 MSD Client Sample ID: PZ019-8 MSD

Date Analyzed: 03/11/22 22:03 Lab File ID: 03110029.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	03/12/22 09:46
RDX	7.59	Baseline	zhangji	03/12/22 09:46
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/12/22 09:46
1,3,5-Trinitrobenzene	8.65	Baseline	zhangji	03/12/22 09:46

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 568433

Lab Sample ID: 280-159332-13 MS Client Sample ID: PZ019-8 MS

Date Analyzed: 03/11/22 22:26 Lab File ID: 03110030.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.21	Baseline	zhangji	03/12/22 10:27
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/12/22 10:27

Lab Sample ID: 280-159332-13 MSD Client Sample ID: PZ019-8 MSD

Date Analyzed: 03/11/22 22:49 Lab File ID: 03110031.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.21	Baseline	zhangji	03/12/22 10:27
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/12/22 10:27

Lab Sample ID: CCV 280-568433/38 Client Sample ID:

Date Analyzed: 03/12/22 01:29 Lab File ID: 03110038.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	03/12/22 10:31
DNX	6.80	Baseline	zhangji	03/12/22 10:31
MNX	7.21	Baseline	zhangji	03/12/22 10:31

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

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.: 280-159332-1

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.: 280-159332-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 568485

Lab Sample ID: CCV 280-568485/11 Client Sample ID:

Date Analyzed: 03/12/22 13:10 Lab File ID: 03120011.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	15.82	Baseline Smoothing	zhangji	03/12/22 13:46
PETN	25.93	Baseline Smoothing	zhangji	03/12/22 13:46

Lab Sample ID: 280-159332-1 Client Sample ID: G0081-8

Date Analyzed: 03/12/22 16:05 Lab File ID: 03120016.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.79	Baseline Smoothing	zhangji	03/15/22 16:07
RDX	8.96	Baseline Smoothing	zhangji	03/15/22 16:07
2-Nitrotoluene	16.44	Baseline Smoothing	zhangji	03/15/22 16:07

Lab Sample ID: 280-159332-2 Client Sample ID: G0082-8

Date Analyzed: 03/12/22 16:41 Lab File ID: 03120017.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.80	Baseline Smoothing	zhangji	03/15/22 16:08
RDX	8.98	Baseline Smoothing	zhangji	03/15/22 16:08

Lab Sample ID: 280-159332-3 Client Sample ID: G0024-8

Date Analyzed: 03/12/22 17:16 Lab File ID: 03120018.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	8.99	Baseline Smoothing	zhangji	03/15/22 16:10
2,4,6-Trinitrotoluene	24.89	Incomplete Integration	zhangji	03/15/22 16:09

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 568485

Lab Sample ID: 280-159332-4 Client Sample ID: G0096-8

Date Analyzed: 03/12/22 17:51 Lab File ID: 03120019.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene		Invalid Compound ID	zhangji	03/15/22 16:10

Lab Sample ID: 280-159332-5 Client Sample ID: G0296-8

Date Analyzed: 03/12/22 18:26 Lab File ID: 03120020.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.51	Baseline Smoothing	zhangji	03/15/22 16:10
1,2-Dinitrobenzene	13.04	Baseline Smoothing	zhangji	03/15/22 16:10
2-Amino-4,6-dinitrotoluene	18.43	Baseline Smoothing	zhangji	03/15/22 16:10

Lab Sample ID: 280-159332-6 Client Sample ID: PZ020-8

Date Analyzed: 03/12/22 19:01 Lab File ID: 03120021.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	9.01	Baseline Smoothing	zhangji	03/15/22 16:11

Lab Sample ID: 280-159332-7 Client Sample ID: G0077-8

Date Analyzed: 03/12/22 19:36 Lab File ID: 03120022.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	8.98	Baseline Smoothing	zhangji	03/15/22 16:11
3-Nitrotoluene		Invalid Compound ID	zhangji	03/15/22 16:11
Tetryl		Invalid Compound ID	zhangji	03/15/22 16:11

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 568485

Lab Sample ID: CCV 280-568485/23 Client Sample ID:

Date Analyzed: 03/12/22 20:11 Lab File ID: 03120023.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	15.79	Baseline Smoothing	zhangji	03/15/22 16:11
PETN	25.88	Baseline Smoothing	zhangji	03/15/22 16:11

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 568709

Lab Sample ID: CCV 280-568709/7 Client Sample ID:

Date Analyzed: 03/15/22 18:07 Lab File ID: 03150007.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	15.91	Baseline Smoothing	zhangji	03/15/22 18:53
PETN	26.07	Baseline Smoothing	zhangji	03/15/22 18:53

Lab Sample ID: CCV 280-568709/8 Client Sample ID:

Date Analyzed: 03/15/22 18:42 Lab File ID: 03150008.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	5.16	Baseline Smoothing	zhangji	03/15/22 19:51
DNX	6.01	Baseline Smoothing	zhangji	03/15/22 19:51

Lab Sample ID: 280-159332-9 Client Sample ID: G0094-8

Date Analyzed: 03/15/22 19:18 Lab File ID: 03150010.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.85	Baseline Smoothing	zhangji	03/15/22 19:55
MNX	7.54	Baseline Smoothing	zhangji	03/15/22 19:55
RDX	9.05	Baseline Smoothing	zhangji	03/15/22 19:55

Lab Sample ID: 280-159332-10 Client Sample ID: PZ018-8

Date Analyzed: 03/15/22 19:53 Lab File ID: 03150011.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	zhangji	03/15/22 20:30
1,2-Dinitrobenzene	13.15	Baseline Smoothing	zhangji	03/15/22 20:30
2-Nitrotoluene	16.59	Baseline Smoothing	zhangji	03/15/22 20:30

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 568709

Lab Sample ID: 280-159332-11 Client Sample ID: PZ017R-8

Date Analyzed: 03/15/22 20:28 Lab File ID: 03150012.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	18.57	Split Peak	zhangji	03/15/22 21:05
1,3,5-Trinitrobenzene	18.79	Split Peak	zhangji	03/15/22 21:05

Lab Sample ID: 280-159332-12 Client Sample ID: PZ021-8

Date Analyzed: 03/15/22 21:03 Lab File ID: 03150013.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.84	Baseline Smoothing	zhangji	03/16/22 12:19
1,2-Dinitrobenzene	13.14	Baseline Smoothing	zhangji	03/16/22 12:20
2-Amino-4,6-dinitrotoluene	18.55	Baseline Smoothing	zhangji	03/16/22 12:20
1,3,5-Trinitrobenzene	18.77	Unspecified		

Lab Sample ID: CCV 280-568709/19 Client Sample ID:

Date Analyzed: 03/16/22 00:33 Lab File ID: 03150019.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	15.88	Baseline Smoothing	zhangji	03/16/22 12:35
PETN	26.00	Baseline Smoothing	zhangji	03/16/22 12:35

Lab Sample ID: 280-159332-9 DL Client Sample ID: G0094-8 DL

Date Analyzed: 03/16/22 02:53 Lab File ID: 03150023.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3-Nitrotoluene		Invalid Compound ID	zhangji	03/16/22 12:25
1,2-Dinitrobenzene	13.15	Baseline Smoothing	zhangji	03/16/22 12:25

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 568709

Lab Sample ID: CCV 280-568709/25 Client Sample ID:

Date Analyzed: 03/16/22 04:04 Lab File ID: 03150025.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Nitroglycerin	15.89	Baseline Smoothing	zhangji	03/16/22 12:33
PETN	26.02	Baseline Smoothing	zhangji	03/16/22 12:33

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 568842

Lab Sample ID: STD 280-568842/2 IC Client Sample ID:

Date Analyzed: 03/16/22 14:19 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.84	Baseline Smoothing	jindaratc	03/16/22 14:48
Bromide	5.58	Baseline Smoothing	jindaratc	03/16/22 14:48

Lab Sample ID: STD 280-568842/3 IC Client Sample ID:

Date Analyzed: 03/16/22 14:34 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.84	Baseline Smoothing	jindaratc	03/16/22 15:17
Bromide	5.58	Baseline Smoothing	jindaratc	03/16/22 15:17

Lab Sample ID: STD 280-568842/4 IC Client Sample ID:

Date Analyzed: 03/16/22 14:49 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.84	Baseline Smoothing	jindaratc	03/16/22 15:17
Bromide	5.57	Baseline Smoothing	jindaratc	03/16/22 15:17

Lab Sample ID: STD 280-568842/5 IC Client Sample ID:

Date Analyzed: 03/16/22 15:04 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.84	Baseline Smoothing	jindaratc	03/16/22 15:25
Bromide	5.57	Baseline Smoothing	jindaratc	03/16/22 15:25

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 568842

Lab Sample ID: STD 280-568842/6 IC Client Sample ID:

Date Analyzed: 03/16/22 15:19 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.85	Baseline Smoothing	jindaratc	03/16/22 15:55
Bromide	5.57	Baseline Smoothing	jindaratc	03/16/22 15:55

Lab Sample ID: STD 280-568842/7 IC Client Sample ID:

Date Analyzed: 03/16/22 15:34 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.85	Baseline Smoothing	jindaratc	03/16/22 15:55
Bromide	5.57	Baseline Smoothing	jindaratc	03/16/22 15:56

Lab Sample ID: ICV 280-568842/8 Client Sample ID:

Date Analyzed: 03/16/22 15:49 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.85	Baseline Smoothing	jindaratc	03/16/22 16:06
Bromide	5.59	Baseline Smoothing	jindaratc	03/16/22 16:06

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 568946

Lab Sample ID: MRL 280-568946/3 Client Sample ID:

Date Analyzed: 03/17/22 12:37 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.15	Baseline Smoothing	foxr	03/17/22 14:11

Lab Sample ID: CCV 280-568946/41 Client Sample ID:

Date Analyzed: 03/18/22 00:49 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.79	Baseline Smoothing	foxr	03/18/22 13:05
Bromide	5.38	Baseline Smoothing	foxr	03/18/22 13:05
Sulfate	8.11	Baseline Smoothing	foxr	03/18/22 13:06

Lab Sample ID: CCB 280-568946/42 Client Sample ID:

Date Analyzed: 03/18/22 01:04 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.21	Baseline Smoothing	foxr	03/18/22 13:06

Lab Sample ID: LCS 280-568946/45 Client Sample ID:

Date Analyzed: 03/18/22 01:49 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.12	Baseline Smoothing	foxr	03/18/22 13:10

Lab Sample ID: LCSD 280-568946/46 Client Sample ID:

Date Analyzed: 03/18/22 02:04 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.12	Baseline Smoothing	foxr	03/18/22 13:10

9056A

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 568946

Lab Sample ID: MB 280-568946/47 Client Sample ID:

Date Analyzed: 03/18/22 02:18 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.21	Baseline Smoothing	foxr	03/18/22 13:11

Lab Sample ID: 280-159332-1 Client Sample ID: G0081-8

Date Analyzed: 03/18/22 02:33 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.16	Baseline Smoothing	foxr	03/18/22 13:12

Lab Sample ID: 280-159332-1 DU Client Sample ID: G0081-8 DU

Date Analyzed: 03/18/22 02:48 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.16	Baseline Smoothing	foxr	03/18/22 13:13

Lab Sample ID: 280-159332-1 MS Client Sample ID: G0081-8 MS

Date Analyzed: 03/18/22 03:03 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.14	Baseline Smoothing	foxr	03/18/22 13:14

Lab Sample ID: 280-159332-1 MSD Client Sample ID: G0081-8 MSD

Date Analyzed: 03/18/22 03:18 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.14	Baseline Smoothing	foxr	03/18/22 13:15

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 568946

Lab Sample ID: 280-159332-2 Client Sample ID: G0082-8

Date Analyzed: 03/18/22 03:33 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.15	Baseline Smoothing	foxr	03/18/22 13:16

Lab Sample ID: CCV 280-568946/53 Client Sample ID:

Date Analyzed: 03/18/22 03:48 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.79	Baseline Smoothing	foxr	03/18/22 13:16
Bromide	5.39	Baseline Smoothing	foxr	03/18/22 13:17
Sulfate	8.12	Baseline Smoothing	foxr	03/18/22 13:17

Lab Sample ID: CCB 280-568946/54 Client Sample ID:

Date Analyzed: 03/18/22 04:03 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.21	Baseline Smoothing	foxr	03/18/22 13:18

Lab Sample ID: 280-159332-3 Client Sample ID: G0024-8

Date Analyzed: 03/18/22 04:18 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.16	Baseline Smoothing	foxr	03/18/22 13:18

Lab Sample ID: 280-159332-4 Client Sample ID: G0096-8

Date Analyzed: 03/18/22 04:33 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.16	Baseline Smoothing	foxr	03/18/22 13:19

9056A

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 568946

Lab Sample ID: 280-159332-5 Client Sample ID: G0296-8

Date Analyzed: 03/18/22 04:48 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.17	Baseline Smoothing	foxr	03/18/22 13:19

Lab Sample ID: 280-159332-6 Client Sample ID: PZ020-8

Date Analyzed: 03/18/22 05:03 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.15	Baseline Smoothing	foxr	03/18/22 13:19

Lab Sample ID: 280-159332-7 Client Sample ID: G0077-8

Date Analyzed: 03/18/22 05:18 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.15	Baseline Smoothing	foxr	03/18/22 13:19

Lab Sample ID: 280-159332-8 Client Sample ID: G0078-8

Date Analyzed: 03/18/22 05:48 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.13	Baseline Smoothing	foxr	03/18/22 13:20

Lab Sample ID: 280-159332-9 Client Sample ID: G0094-8

Date Analyzed: 03/18/22 06:03 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.15	Baseline Smoothing	foxr	03/18/22 13:20

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 568946

Lab Sample ID: 280-159332-10 Client Sample ID: PZ018-8

Date Analyzed: 03/18/22 06:33 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.20	Baseline Smoothing	foxr	03/18/22 13:21

Lab Sample ID: CCV 280-568946/65 Client Sample ID:

Date Analyzed: 03/18/22 06:49 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.79	Baseline Smoothing	foxr	03/18/22 13:21
Bromide	5.38	Baseline Smoothing	foxr	03/18/22 13:21
Sulfate	8.11	Baseline Smoothing	foxr	03/18/22 13:21

Lab Sample ID: CCB 280-568946/66 Client Sample ID:

Date Analyzed: 03/18/22 07:04 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.21	Baseline Smoothing	foxr	03/18/22 13:22

Lab Sample ID: 280-159332-11 Client Sample ID: PZ017R-8

Date Analyzed: 03/18/22 07:19 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.17	Baseline Smoothing	foxr	03/18/22 13:22

Lab Sample ID: 280-159332-12 Client Sample ID: PZ021-8

Date Analyzed: 03/18/22 07:34 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.17	Baseline Smoothing	foxr	03/18/22 13:22

9056A

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 568946

Lab Sample ID: 280-159332-13 Client Sample ID: PZ019-8

Date Analyzed: 03/18/22 07:49 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.16	Baseline Smoothing	foxr	03/18/22 13:22

Lab Sample ID: 280-159332-13 DU Client Sample ID: PZ019-8 DU

Date Analyzed: 03/18/22 08:04 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.16	Baseline Smoothing	foxr	03/18/22 13:28

Lab Sample ID: 280-159332-13 MS Client Sample ID: PZ019-8 MS

Date Analyzed: 03/18/22 08:19 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.14	Baseline Smoothing	foxr	03/18/22 13:29

Lab Sample ID: 280-159332-13 MSD Client Sample ID: PZ019-8 MSD

Date Analyzed: 03/18/22 08:34 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.15	Baseline Smoothing	foxr	03/18/22 13:29

Lab Sample ID: CCV 280-568946/77 Client Sample ID:

Date Analyzed: 03/18/22 09:49 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.79	Baseline Smoothing	foxr	03/18/22 13:31
Bromide	5.36	Baseline Smoothing	foxr	03/18/22 13:32
Sulfate	8.13	Baseline Smoothing	foxr	03/18/22 13:32

9056A

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 568946

Lab Sample ID: CCB 280-568946/78 Client Sample ID:

Date Analyzed: 03/18/22 10:04 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.23	Baseline Smoothing	foxr	03/18/22 13:32

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
350.1 cal_00525	03/24/22	03/17/22	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_00509	03/24/22	03/17/22	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_00113	09/01/22	03/01/22	Acetonitrile, Lot Acetonitrile_00055	100 mL	8330 LCSMix2_00112	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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
					8330_NG_Stk_00096	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00098	1 mL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00111	1.1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00113	0.9 mL	PETN	100 ug/mL
					8330LCSMix1_00126	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
					PicricARestek_00102	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330 LCSMix2_00112	03/01/23		Restek, Lot A0171386		(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_NG_Stk_00096	03/01/23		Restek, Lot A0161480		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00098	03/01/23		Restek, Lot A0161480		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00111	03/01/23		Restek, Lot A0172687		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00113	03/01/23		Restek, Lot A0172687		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00126	03/01/23		Restek, Lot A0171502		(Purchased Reagent)		1,3,5-Trinitrobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							2,4,6-Trinitrotoluene	1000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							HMX	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							RDX	1000 ug/mL
.PicricARestek_00102	03/01/23		Restek, Lot A0175186		(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.: 280-159332-1

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.: 280-159332-1

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_01028	03/15/22	03/08/22	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_00411	03/23/22	03/16/22	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 low_00627	03/23/22	03/16/22	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_01863	03/23/22	03/16/22	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_00748	03/23/22	03/16/22	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_00614	03/20/22	03/13/22	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_00590	03/20/22	03/13/22	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
RSK175methane_00010	04/16/22	Supelco Analytical, Lot 160-401480003-1			(Purchased Reagent)		Methane	650500 ug/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
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_02090	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	4.41948 g	Sulfide	1180 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_02091	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	4.41948 g	Sulfide	1180 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
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

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

Lot Number: 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_00113

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20220301-108907.b\071-0601.D

Lims ID: 8330LCS113 Inj. Date: 01-Mar-2022 16:06:37

Worklist ID: 280-0108907-067 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535
4 HMX	0.5000	0.4640	92.8	65-135	66-115	
8 RDX	0.5000	0.4736	94.7	68-130	69-122	
9 2,4,6-Trinitrophenol	0.5000	0.5129	102.6	73-124	80-120	63-135
11 1,3,5-Trinitrobenzene	0.5000	0.5000	100.0	73-125	62-127	
12 1,3-Dinitrobenzene	0.5000	0.5038	100.8	78-120	59-131	
13 Nitrobenzene	0.5000	0.5047	100.9	65-134	46-144	
15 Tetryl	0.5000	0.4990	99.8	64-128	56-131	
16 Nitroglycerin	5.00	5.05	101.0	74-127	70-125	
17 2,4,6-Trinitrotoluene	0.5000	0.4952	99.0	71-123	46-139	
18 4AMD	0.5000	0.4892	97.8	76-125	43-120	
19 2-Amino-4,6-dinitrotolu	0.5000	0.4885	97.7	79-120	46-124	
20 2,6-Dinitrotoluene	0.5000	0.5015	100.3	77-127	51-130	
21 2,4-Dinitrotoluene	0.5000	0.4744	94.9	78-120	53-127	
22 o-Nitrotoluene	0.5000	0.4879	97.6	70-127	37-138	
23 p-Nitrotoluene	0.5000	0.5210	104.2	71-127	41-137	
24 m-Nitrotoluene	0.5000	0.4604	92.1	73-125	31-140	
25 PETN	5.00	5.23	104.6	73-127	67-127	

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

280-159056-B-1-B	280-159056-B-2-B	280-159056-B-3-B
280-159056-B-4-B	280-159130-B-1-A	280-159130-A-2-A
280-159130-B-3-A	280-159130-B-4-A	280-159130-A-5-A
280-159130-A-6-A	280-159137-A-1-A	280-159137-B-2-A
280-159137-A-3-A	280-159137-A-4-A	280-159137-A-5-A

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

280-159005-C-1-B	280-159005-C-2-B	280-159005-C-3-B
280-159005-D-4-D	280-159005-D-5-B	280-159043-C-1-B
280-159043-D-2-B	280-159043-D-3-B	280-159043-D-4-B
280-159043-D-5-B	280-159088-D-1-C	280-159088-C-2-C
280-159088-D-3-C	280-159088-D-4-C	

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

860-21351-C-1-C	280-159025-A-1-C	280-159025-A-2-C

Reagent

8330 LCSMix2_00112

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Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

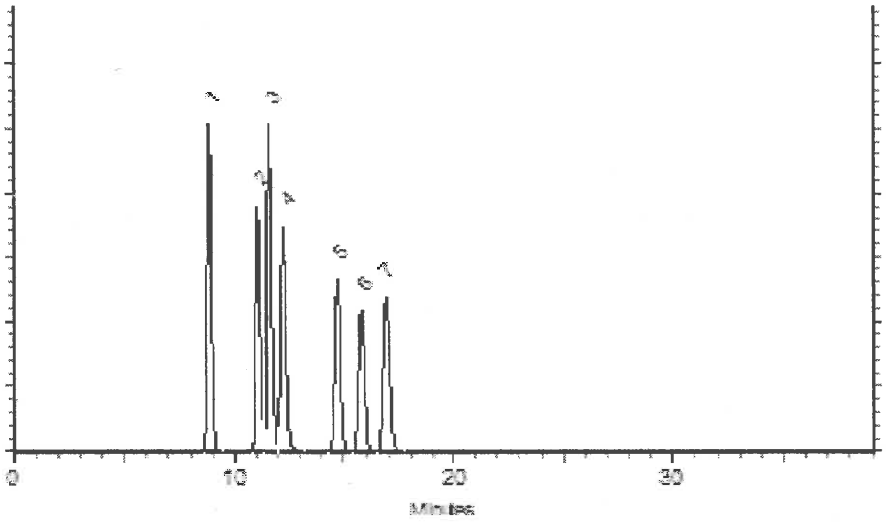
Flow Rate:
1.0 ml/min.

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

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_00096

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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_NG_Stk_00098

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Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Composition

ACCREDITED
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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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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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:

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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_00111

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

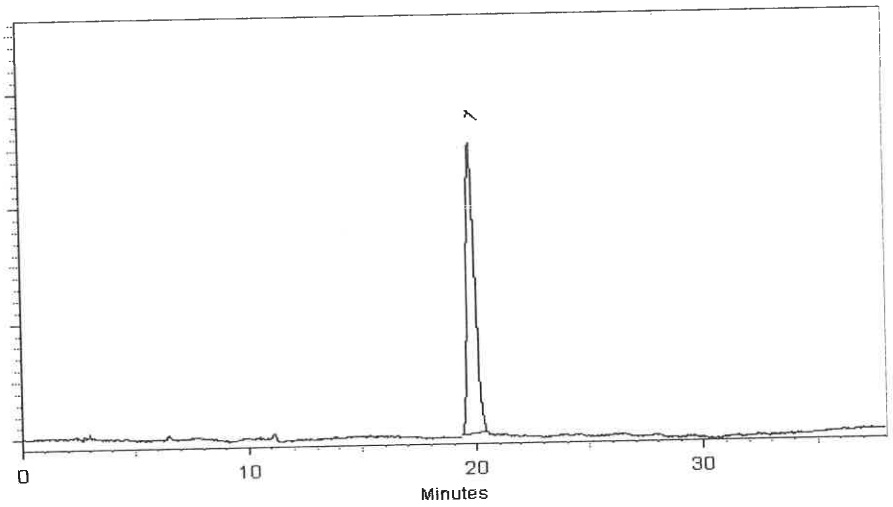
Flow Rate:
1.0 ml/min.

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:

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

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Manufacturing Notes:

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Handling Notes:

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Reagent

8330_PETN_Stk_00113

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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)

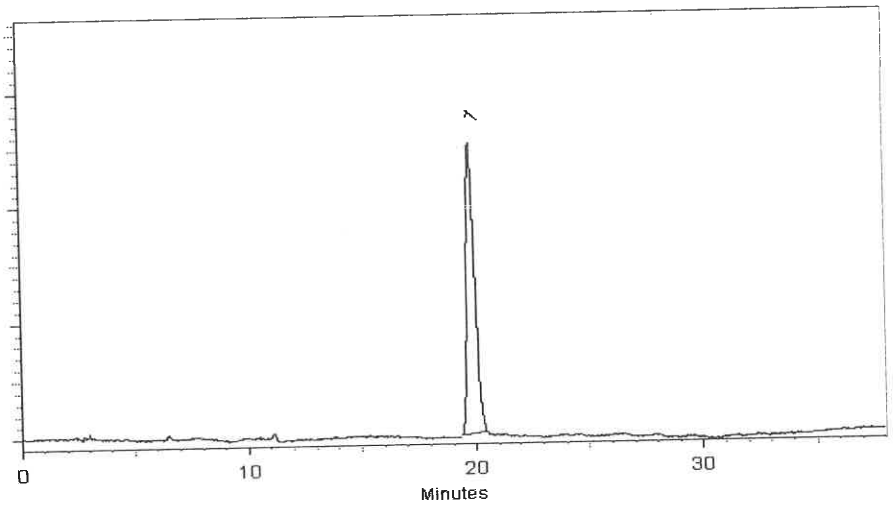
Flow Rate:
1.0 ml/min.

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.
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Purity Notes:

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

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Manufacturing Notes:

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Handling Notes:

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Reagent

8330_PETN1000_00006

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

Catalog No. : 31600 **Lot No.:** 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:

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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

8330LCSMix1_00126

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Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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 µg/mL +/- 54.8926 µg/mL +/- 64.0101 µg/mL		Gravimetric Unstressed Stressed
2	RDX **CAS #** 121-82-4 **Purity** 99%	(Lot 080220JLM)	1,003.0 µg/mL	+/- 5.9575 µg/mL +/- 54.9474 µg/mL +/- 64.0740 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 µg/mL +/- 55.0021 µg/mL +/- 64.1379 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 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL		Gravimetric Unstressed Stressed
5	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot MKCK4267)	1,010.0 µg/mL	+/- 5.9991 µg/mL +/- 55.3308 µg/mL +/- 64.5212 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 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL		Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene **CAS #** 121-14-2 **Purity** 99%	(Lot MKAA0690)	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 55.0021 µg/mL +/- 64.1379 µg/mL		Gravimetric Unstressed Stressed

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

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

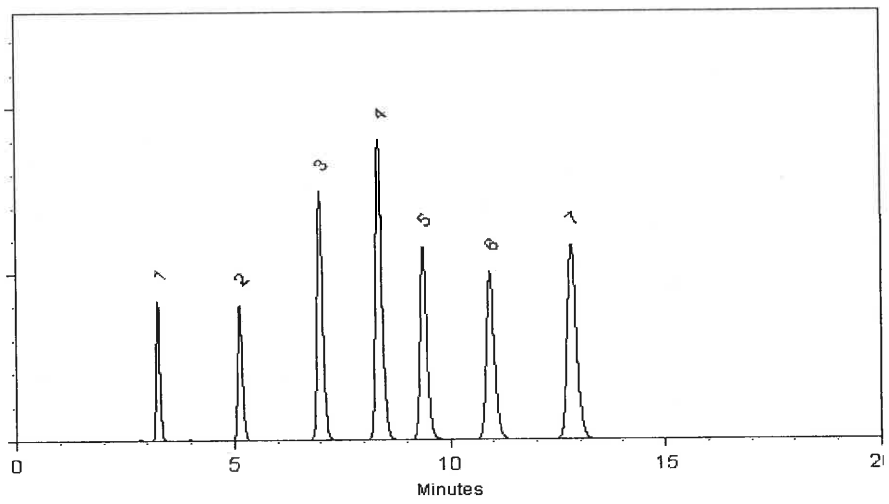
Flow Rate:
1.0 ml/min.

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330LCSMix1_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)

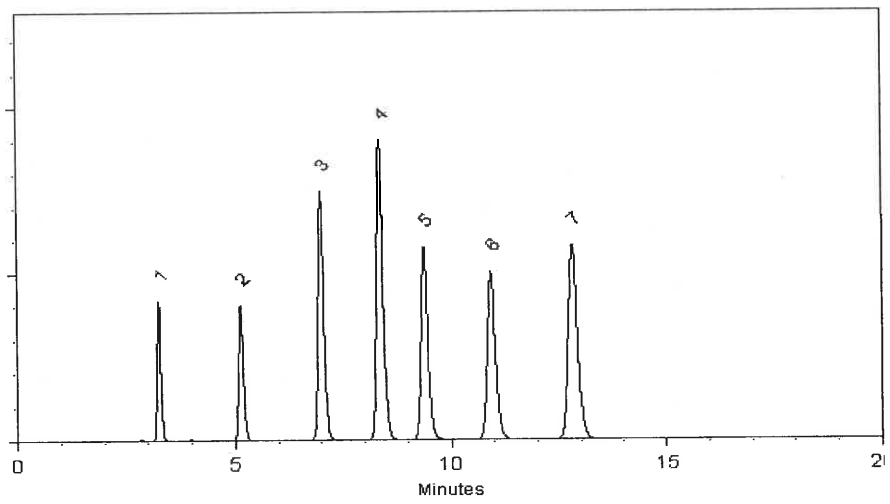
Flow Rate:
1.0 ml/min.

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.
- 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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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. : 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)

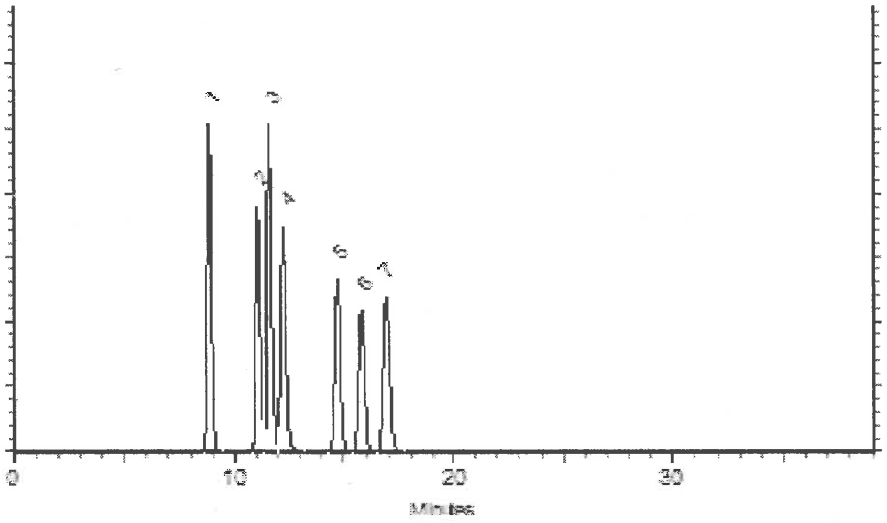
Flow Rate:
1.0 ml/min.

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 REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED TESTING LABORATORY 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

For use in routine laboratory analysis.

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

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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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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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. : 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
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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_00207

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
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Reference Material Producer
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. : 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:

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Manufacturing Notes:

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Reagent

8330SurrStkSS_00211

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CERTIFIED REFERENCE MATERIAL

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. : 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.

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Reagent

8330SurrStkSS_00212

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)	
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Solvent: Methanol
CAS # 67-56-1
Purity 99%

General Certified Reference Material Notes

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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

ACCREDITED
Reference Materials Producer
Cert# 2495.01

SPEXertificate®
Certificate of Reference Material

ilac-MRA ACCREDITED
Chemical Testing
Cert# 2495.02

Catalog Number: VTACO-3 **Lot No.:** 2-85BT

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

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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

ACCREDITED
Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

ilac-MRA 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

Katherine Cullinan, QC Manager

© 2020 SPEX CertiPrep, LLC

Reagent

IC FL cal_00019

RICCA CHEMICAL COMPANY®

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

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

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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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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

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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

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

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

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.

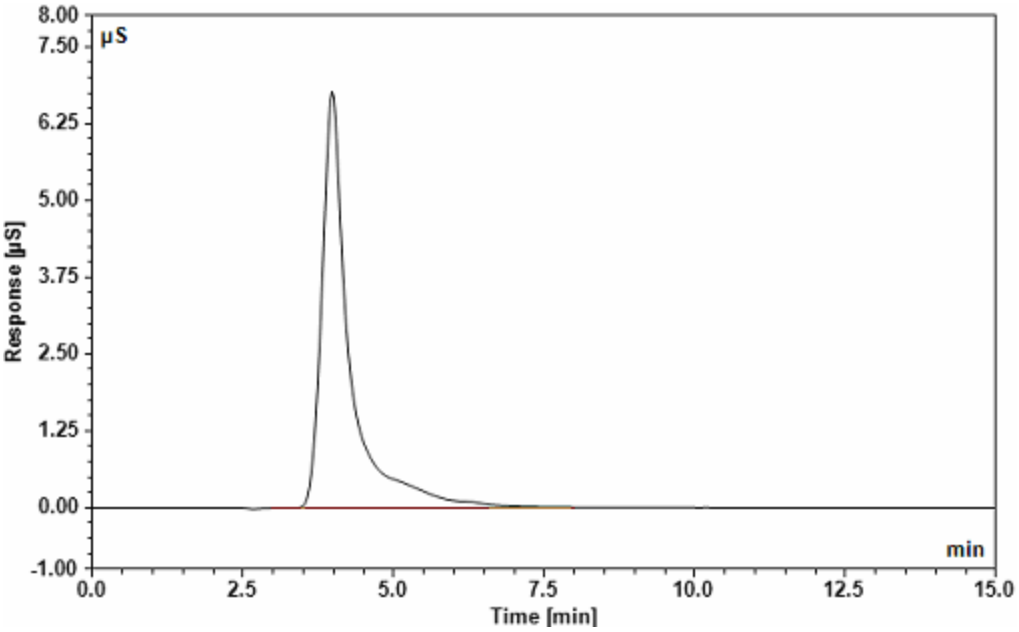
4.2 Balance Calibration

- 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_00102

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.:** A0175186

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 : 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	Picric Acid	1,006.0 µg/mL	+/- 5.9753	µg/mL	Gravimetric
	CAS # 88-89-1 (Lot 06130CU)		+/- 55.1117	µg/mL	Unstressed
	Purity 99%		+/- 64.2657	µg/mL	Stressed

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

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

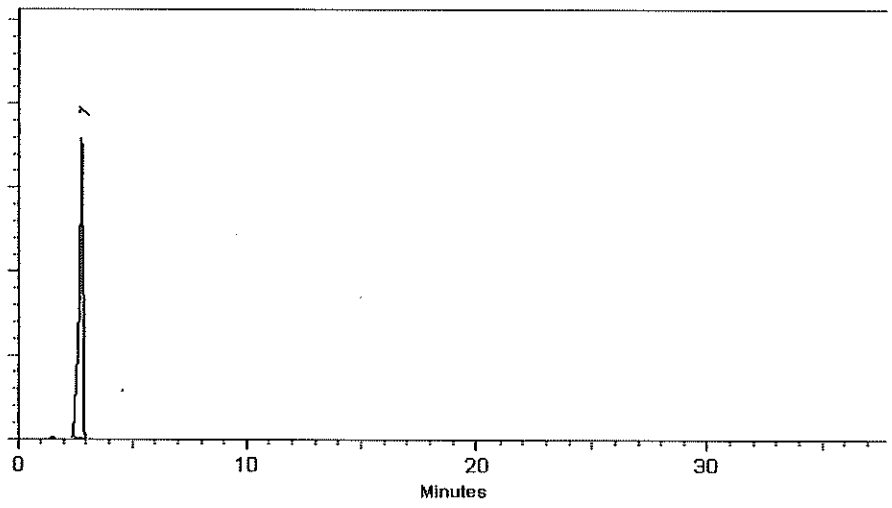
Flow Rate:
1.0 ml/min.

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.

Lane Kibe - Mix Technician

Date Mixed: 06-Aug-2021 **Balance:** B345965662

Alexis Shelow - Operations Tech I

Date Passed: 10-Aug-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

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

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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

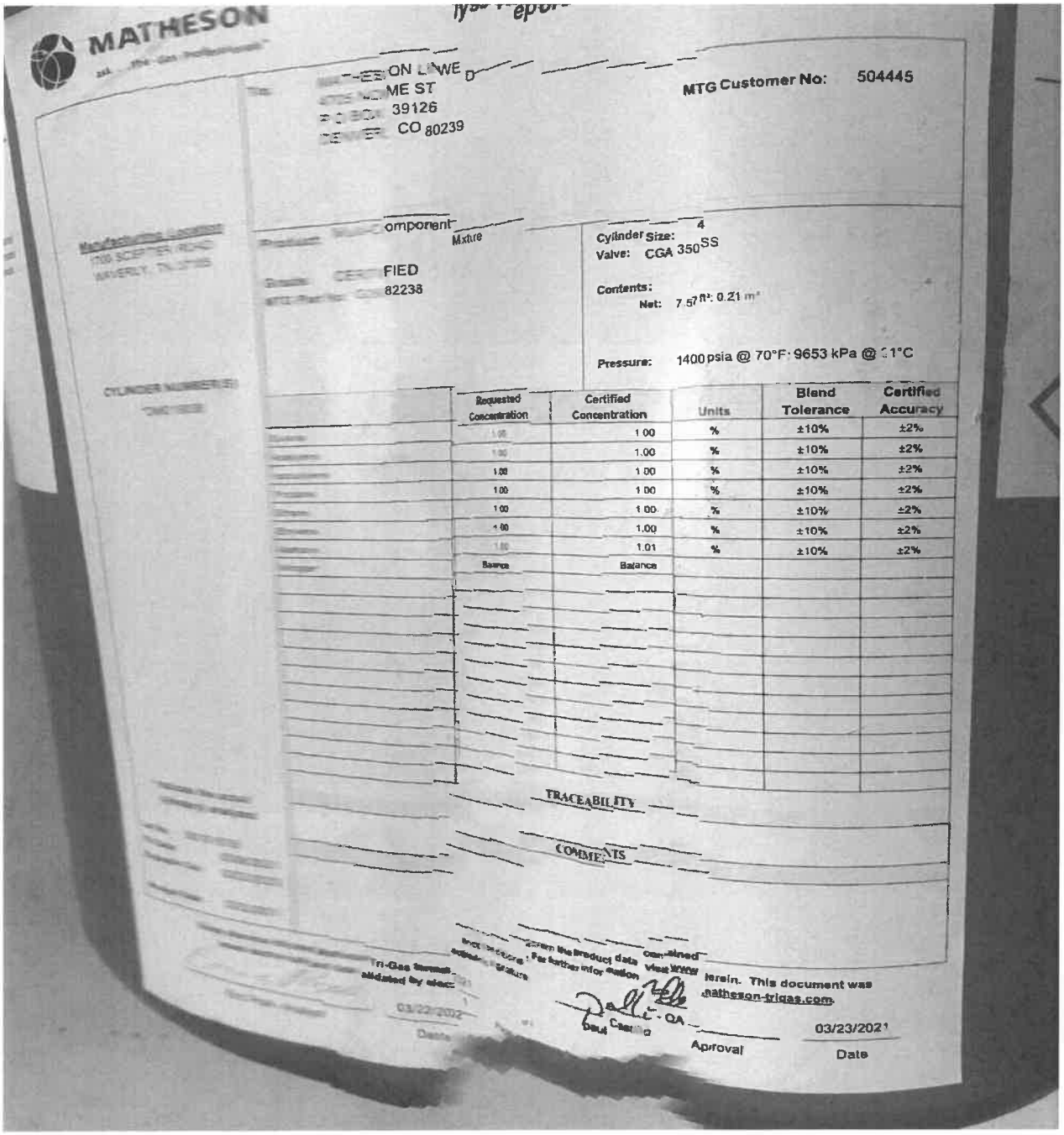
Unless otherwise indicated, Matheson Tri-Gas terms and conditions govern the product data contained herein. This document was issued electronically and data validated by electronic signature. For further information visit www.matheson-trigas.com.

Eric Popa - Analyst — 03/09/2020 Date

Meriah Boyett - QA Approval — 03/09/2020 Date

Reagent

RSK7gasMathes_00034



MATHESON

ON LINWE D
ME ST
39126
CO 80239

MTG Customer No: 504445

Manufacturing Location:
1700 SCEPTER ROAD
WAVERLY, TN 37185

Product: Multi-Component Mixture

Grade: CERTIFIED
MTG Part No: 82238

Cylinder Size: 4
Valve: CGA 350SS

Contents:
Net: 7.57 ft³: 0.21 m³

Pressure: 1400 psia @ 70°F: 9653 kPa @ 21°C

CYLINDER NUMBER(S)

	Requested Concentration	Certified Concentration	Units	Blend Tolerance	Certified Accuracy
[illegible]	1.00	1.00	%	±10%	±2%
[illegible]	1.00	1.00	%	±10%	±2%
[illegible]	1.00	1.00	%	±10%	±2%
[illegible]	1.00	1.00	%	±10%	±2%
[illegible]	1.00	1.00	%	±10%	±2%
[illegible]	1.00	1.00	%	±10%	±2%
[illegible]	1.00	1.01	%	±10%	±2%
[illegible]	Balance	Balance			

TRACEABILITY

COMMENTS

Tri-Gas formula
validated by elec

03/22/2022
Date

Paul Castillo - QA
Approval

03/23/2021
Date

...erein. This document was
...matheson-trigas.com.

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)

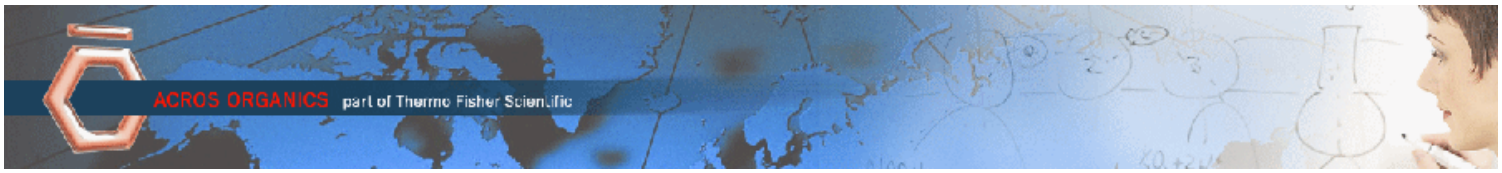
Paul Castillo - QA Approval — 03/23/2021 (Date)

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

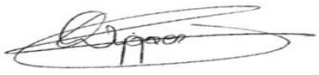
warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to human or animals. It is the responsiblity of the purchaser, formulator or those performing further manufacturing to determine suitability based 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

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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 ANSI 17025 accredited calibration laboratory.

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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

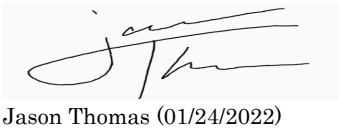
Test	Specification	Result
Appearance	Colorless liquid	Passed
Carbon (C)	995-1005 ppm	1000 ppm

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.: 280-159332-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 003F0301.D

Lab ID: LCS 280-568337/4 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 DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 004F0401.D

Lab ID: LCSD 280-568337/5 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0657	0.0669	102	0	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 024F2401.D

Lab ID: 280-159332-13 MS Client ID: PZ019-8 MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Methane	0.0657	0.0013 U	0.0644	98	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 025F2501.D

Lab ID: 280-159332-13 MSD Client ID: PZ019-8 MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0657	0.0641	98	1	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.: 280-159332-1

SDG No.:

Lab Sample ID: MB 280-568337/30

Matrix: Water Date Extracted:

Lab File ID:(1) 005F0501.D Lab File ID:(2) 005F0501.D

Date Analyzed:(1) 03/10/2022 17:05 Date Analyzed:(2) 03/10/2022 17:05

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 280-568337/4	03/10/2022 16:39	03/10/2022 16:39
	LCSD 280-568337/5	03/10/2022 16:52	03/10/2022 16:52
G0081-8	280-159332-1	03/10/2022 17:57	03/10/2022 17:57
G0082-8	280-159332-2	03/10/2022 18:10	03/10/2022 18:10
G0024-8	280-159332-3	03/10/2022 18:23	03/10/2022 18:23
G0096-8	280-159332-4	03/10/2022 18:36	03/10/2022 18:36
G0296-8	280-159332-5	03/10/2022 18:49	03/10/2022 18:49
PZ020-8	280-159332-6	03/10/2022 19:02	03/10/2022 19:02
G0077-8	280-159332-7	03/10/2022 19:15	03/10/2022 19:15
G0078-8	280-159332-8	03/10/2022 19:28	03/10/2022 19:28
G0094-8	280-159332-9	03/10/2022 19:54	03/10/2022 19:54
PZ018-8	280-159332-10	03/10/2022 20:07	03/10/2022 20:07
PZ017R-8	280-159332-11	03/10/2022 20:20	03/10/2022 20:20
PZ021-8	280-159332-12	03/10/2022 20:33	03/10/2022 20:33
PZ019-8	280-159332-13	03/10/2022 20:46	03/10/2022 20:46
PZ019-8 DU	280-159332-13 DU	03/10/2022 20:59	03/10/2022 20:59
PZ019-8 MS	280-159332-13 MS	03/10/2022 21:12	03/10/2022 21:12
PZ019-8 MSD	280-159332-13 MSD	03/10/2022 21:25	03/10/2022 21:25

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0081-8 Lab Sample ID: 280-159332-1

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/10/2022 17:57 Date Analyzed (2): 03/10/2022 17:57

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	0.92		11.5
	2		1.26	1.22	1.30	1.0		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0082-8 Lab Sample ID: 280-159332-2

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/10/2022 18:10 Date Analyzed (2): 03/10/2022 18:10

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	0.14		10.8
	2		1.26	1.22	1.30	0.15		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0096-8 Lab Sample ID: 280-159332-4

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/10/2022 18:36 Date Analyzed (2): 03/10/2022 18:36

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	9.3		9.5
	2		1.25	1.22	1.30	10		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0296-8 Lab Sample ID: 280-159332-5

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/10/2022 18:49 Date Analyzed (2): 03/10/2022 18:49

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	7.5		9.2
	2		1.26	1.22	1.30	8.2		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0077-8 Lab Sample ID: 280-159332-7

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/10/2022 19:15 Date Analyzed (2): 03/10/2022 19:15

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	1.8		10.6
	2		1.25	1.22	1.30	2.0		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0078-8 Lab Sample ID: 280-159332-8

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/10/2022 19:28 Date Analyzed (2): 03/10/2022 19:28

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	0.20		10.7
	2		1.25	1.22	1.30	0.22		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0094-8 Lab Sample ID: 280-159332-9

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/10/2022 19:54 Date Analyzed (2): 03/10/2022 19:54

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	13		9.1
	2		1.25	1.22	1.30	14		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ018-8 Lab Sample ID: 280-159332-10

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/10/2022 20:07 Date Analyzed (2): 03/10/2022 20:07

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	16		9.7
	2		1.26	1.22	1.30	17		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ017R-8 Lab Sample ID: 280-159332-11

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/10/2022 20:20 Date Analyzed (2): 03/10/2022 20:20

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		1.65	1.63	1.71	17		9.3
	2		1.25	1.22	1.30	19		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ021-8 Lab Sample ID: 280-159332-12

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/10/2022 20:33 Date Analyzed (2): 03/10/2022 20:33

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	19		9.5
	2		1.25	1.22	1.30	21		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ019-8 MS Lab Sample ID: 280-159332-13 MS

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/10/2022 21:12 Date Analyzed (2): 03/10/2022 21:12

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	0.0644		4.7
	2		1.25	1.22	1.30	0.0675		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ019-8 MSD Lab Sample ID: 280-159332-13 MSD

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/10/2022 21:25 Date Analyzed (2): 03/10/2022 21:25

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	0.0641		4.7
	2		1.25	1.22	1.30	0.0672		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-568337/4

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/10/2022 16:39 Date Analyzed (2): 03/10/2022 16:39

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		2.9
	2		1.26	1.22	1.30	0.0686		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-568337/5

Instrument ID (1): VGC_J Instrument ID (2): VGC_J

Date Analyzed (1): 03/10/2022 16:52 Date Analyzed (2): 03/10/2022 16:52

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	0.0669		3.1
	2		1.26	1.22	1.30	0.0691		

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0081-8 | Lab Sample ID: 280-159332-1

Matrix: Water | Lab File ID: 009F0901.D

Analysis Method: RSK-175 | Date Collected: 03/01/2022 14:10

Sample wt/vol: 20(mL) | Date Analyzed: 03/10/2022 17:57

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.: 568337 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.92		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\009F0901.D
Lims ID: 280-159332-G-1
Client ID: G0081-8
Sample Type: Client
Inject. Date: 10-Mar-2022 17:57:27 ALS Bottle#: 9 Worklist Smp#: 34
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159332-G-1
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:11 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: CTX1659

First Level Reviewer: sciannac Date: 15-Mar-2022 15:31:00

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	1.256	1.261	-0.005	36214665	1027.8	
2	1.661	1.670	-0.009	33123399	915.7	
					RPD = 11.53	
3 Ethane						
1		1.521			ND	
2		3.023				
4 Ethylene						
1		1.801			ND	
2		2.603				
5 Propane						
1		2.573			ND	
2		4.930				
6 Acetylene						
1		4.086			ND	
2		2.750				
7 Butane						
1		4.438			ND	
2		6.426				
8 isobutylene						
1		5.339			ND	
2		6.270				

QC Flag Legend

Processing Flags

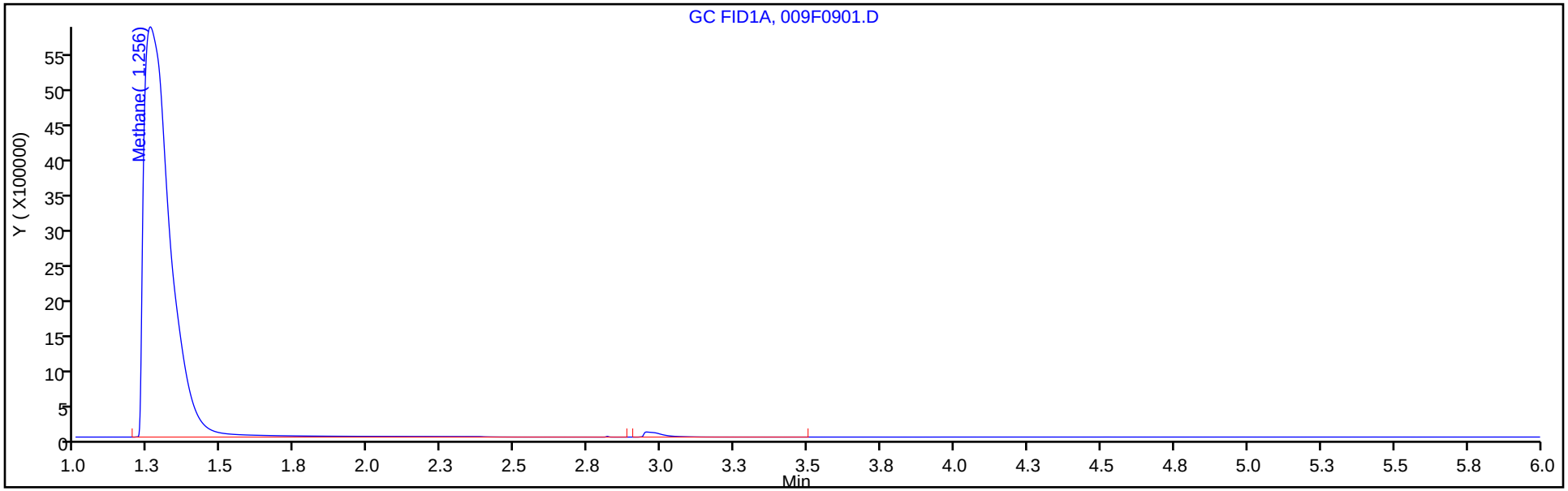
Report Date: 15-Mar-2022 15:37:15 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

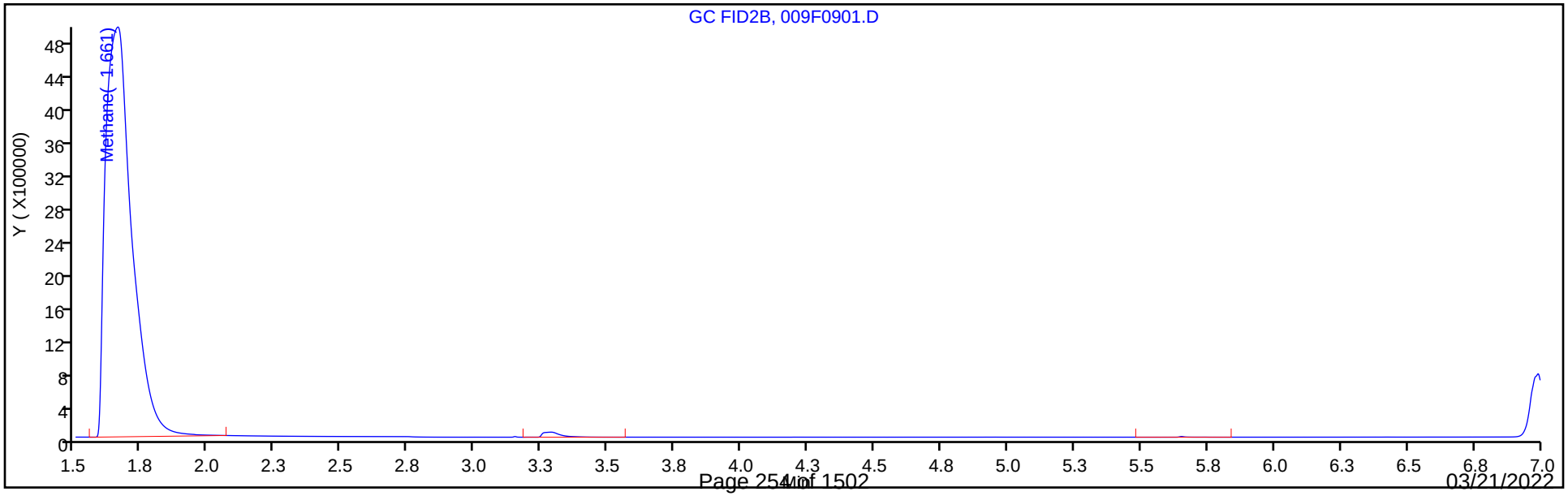
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\009F0901.D

Injection Date:	10-Mar-2022 17:57:27	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159332-G-1	Lab Sample ID:	280-159332-1	Worklist Smp#:	34
Client ID:	G0081-8				
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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0082-8 | Lab Sample ID: 280-159332-2

Matrix: Water | Lab File ID: 010F1001.D

Analysis Method: RSK-175 | Date Collected: 03/01/2022 15:25

Sample wt/vol: 20(mL) | Date Analyzed: 03/10/2022 18:10

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.: 568337 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.14		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\010F1001.D
Lims ID: 280-159332-G-2
Client ID: G0082-8
Sample Type: Client
Inject. Date: 10-Mar-2022 18:10:31 ALS Bottle#: 10 Worklist Smp#: 35
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159332-G-2
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:11 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: CTX1659

First Level Reviewer: sciannac Date: 15-Mar-2022 15:31:07

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	1.261	-0.006	5503698	154.6	
2	1.660	1.670	-0.010	5075361	138.8	
					RPD = 10.75	
3 Ethane						
1		1.521			ND	
2		3.023				
4 Ethylene						
1		1.801			ND	
2		2.603				
5 Propane						
1		2.573			ND	
2		4.930				
6 Acetylene						
1		4.086			ND	
2		2.750				
7 Butane						
1		4.438			ND	
2		6.426				
8 isobutylene						
1		5.339			ND	
2		6.270				

QC Flag Legend

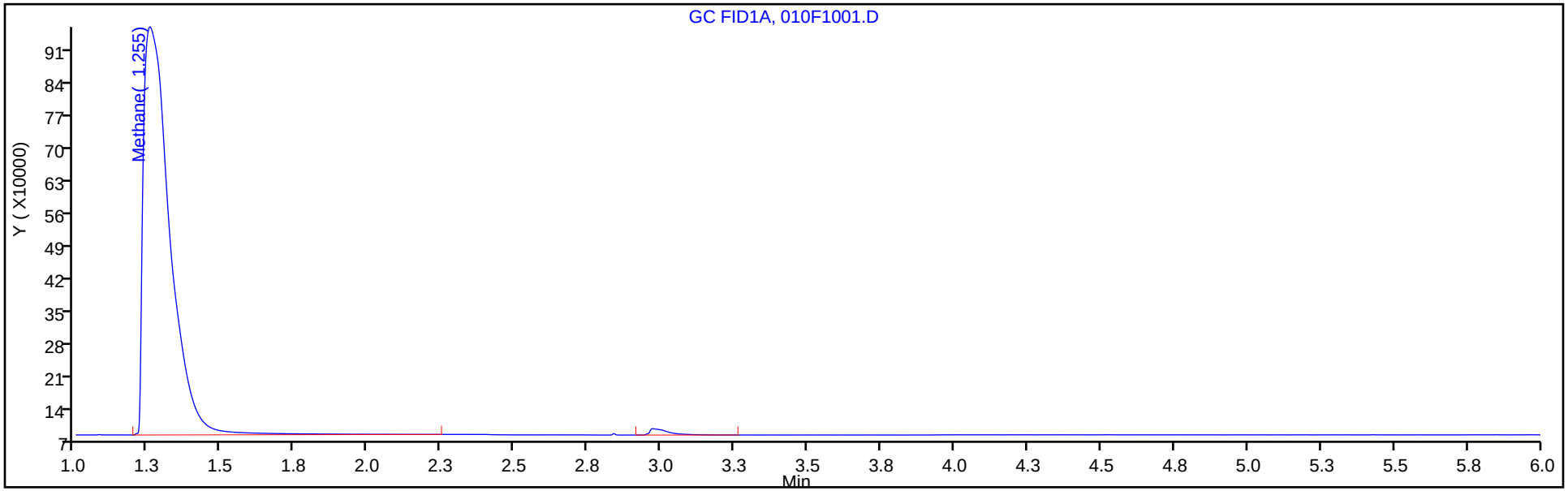
Processing Flags

Report Date: 15-Mar-2022 15:37:16 Chrom Revision: 2.3 14-Mar-2022 17:58:38

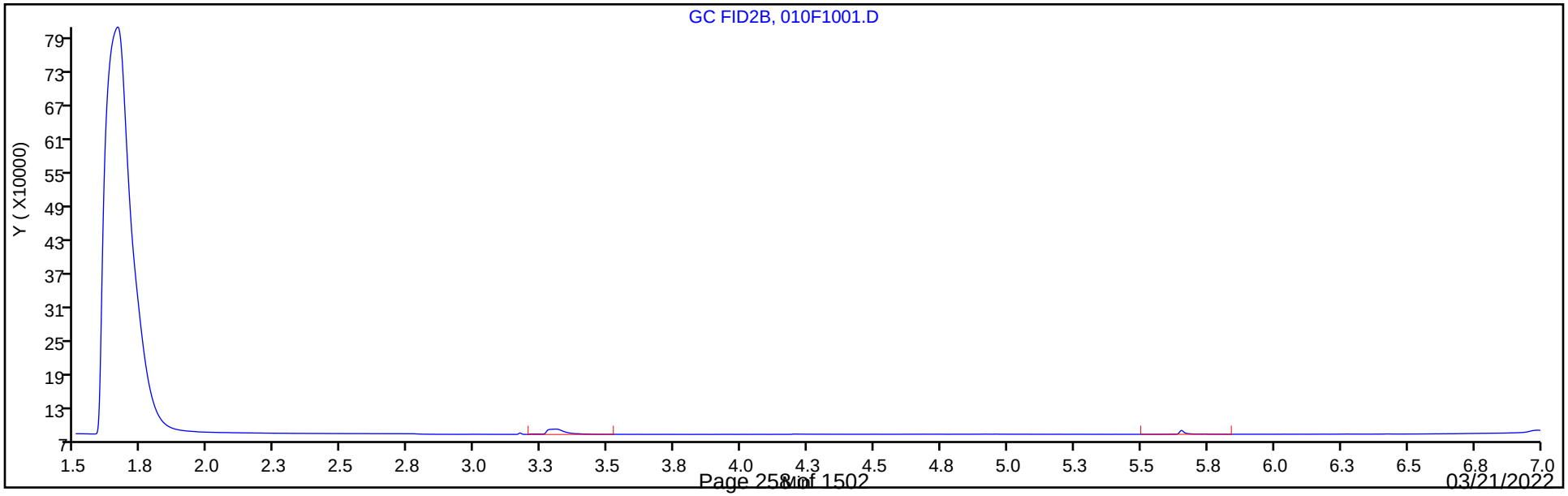
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\010F1001.D				
Injection Date:	10-Mar-2022 18:10:31	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159332-G-2	Lab Sample ID:	280-159332-2	Worklist Smp#:	35
Client ID:	G0082-8				
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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0024-8 | Lab Sample ID: 280-159332-3

Matrix: Water | Lab File ID: 011F1101.D

Analysis Method: RSK-175 | Date Collected: 03/01/2022 13:10

Sample wt/vol: 20(mL) | Date Analyzed: 03/10/2022 18:23

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.: 568337 | 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\20220310-109149.b\011F1101.D
Lims ID: 280-159332-H-3
Client ID: G0024-8
Sample Type: Client
Inject. Date: 10-Mar-2022 18:23:36 ALS Bottle#: 11 Worklist Smp#: 36
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159332-H-3
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:11 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: CTX1659

First Level Reviewer: sciannac Date: 15-Mar-2022 15:31:14

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						7
1		1.261			ND	
2		1.670				
3 Ethane						
1		1.521			ND	
2		3.023				
4 Ethylene						
1		1.801			ND	
2		2.603				
5 Propane						
1		2.573			ND	
2		4.930				
6 Acetylene						
1		4.086			ND	
2		2.750				
7 Butane						
1		4.438			ND	
2		6.426				
8 isobutylene						
1		5.339			ND	
2		6.270				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

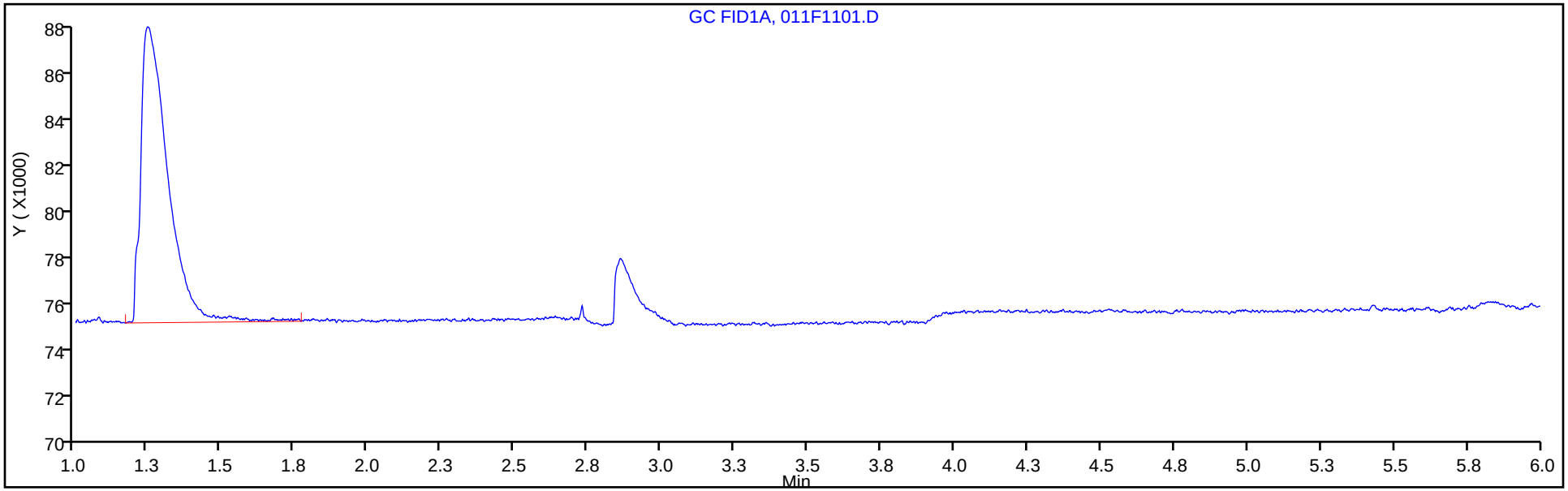
Report Date: 15-Mar-2022 15:37:16 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

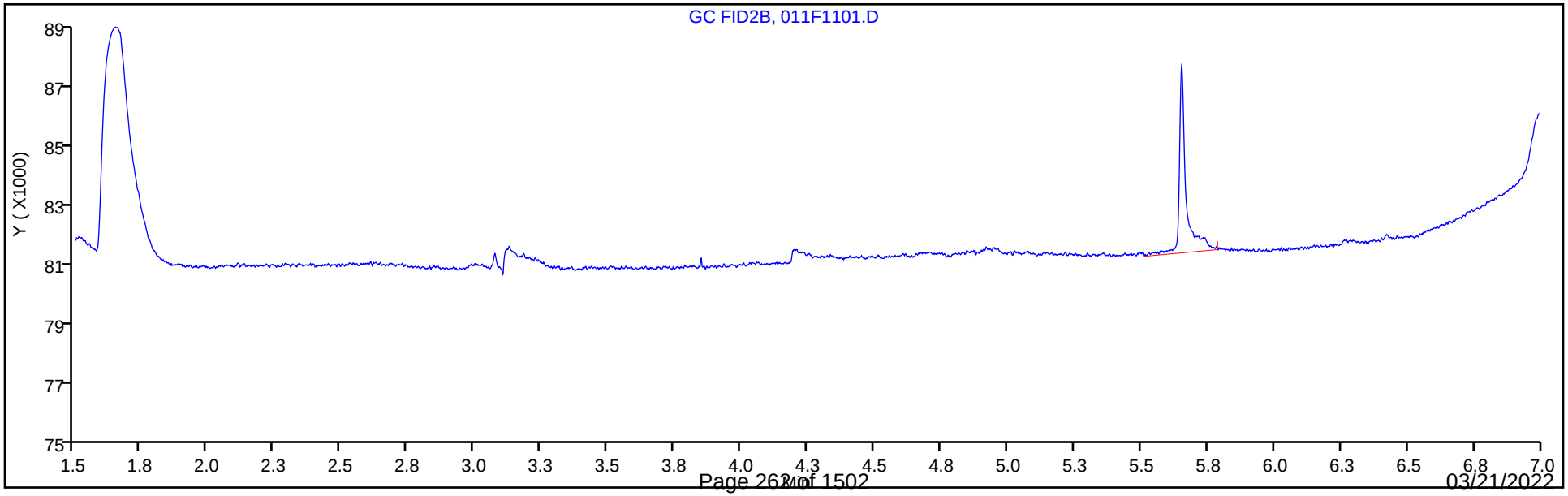
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\011F1101.D

Injection Date:	10-Mar-2022 18:23:36	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159332-H-3	Lab Sample ID:	280-159332-3	Worklist Smp#:	36
Client ID:	G0024-8				
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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0096-8 | Lab Sample ID: 280-159332-4

Matrix: Water | Lab File ID: 012F1201.D

Analysis Method: RSK-175 | Date Collected: 03/01/2022 11:10

Sample wt/vol: 20(mL) | Date Analyzed: 03/10/2022 18:36

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.: 568337 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	9.3		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\012F1201.D
Lims ID: 280-159332-I-4
Client ID: G0096-8
Sample Type: Client
Inject. Date: 10-Mar-2022 18:36:34 ALS Bottle#: 12 Worklist Smp#: 37
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159332-I-4
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:11 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: CTX1659

First Level Reviewer: sciannac Date: 15-Mar-2022 15:31:20

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	1.261	-0.008	359189082	10211	
2	1.655	1.670	-0.015	335397299	9288.3	
					RPD = 9.46	
3 Ethane						
1		1.521			ND	
2		3.023				
4 Ethylene						
1		1.801			ND	
2		2.603				
5 Propane						
1		2.573			ND	
2		4.930				
6 Acetylene						
1		4.086			ND	
2		2.750				
7 Butane						
1		4.438			ND	
2		6.426				
8 isobutylene						
1		5.339			ND	
2		6.270				

QC Flag Legend

Processing Flags

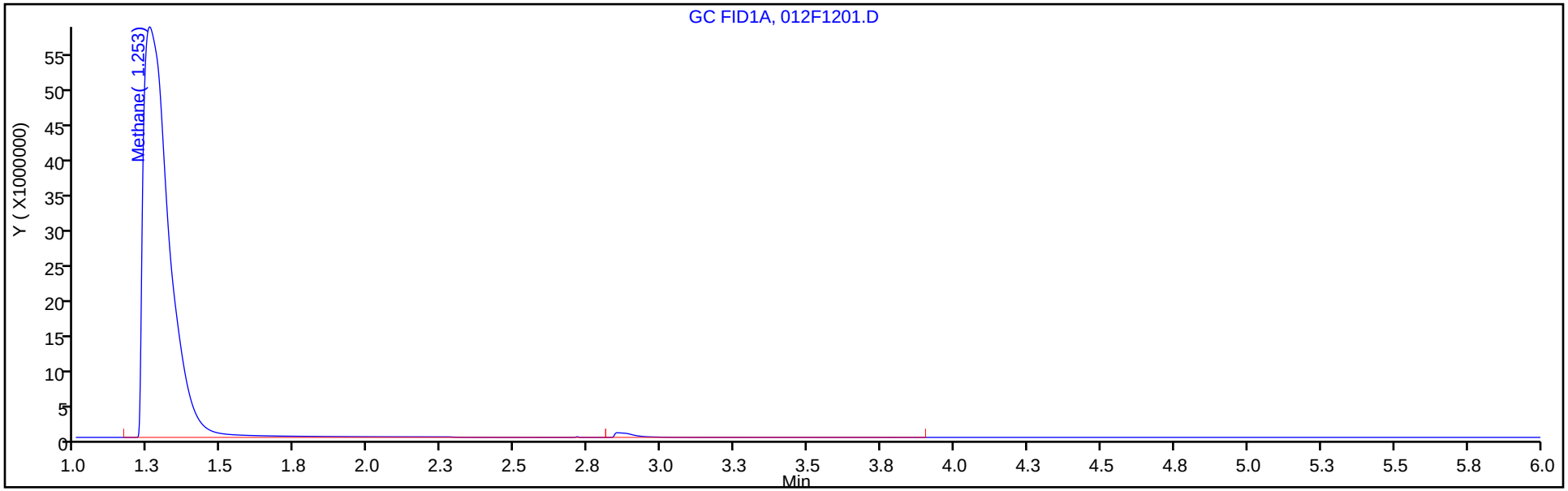
Report Date: 15-Mar-2022 15:37:17 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

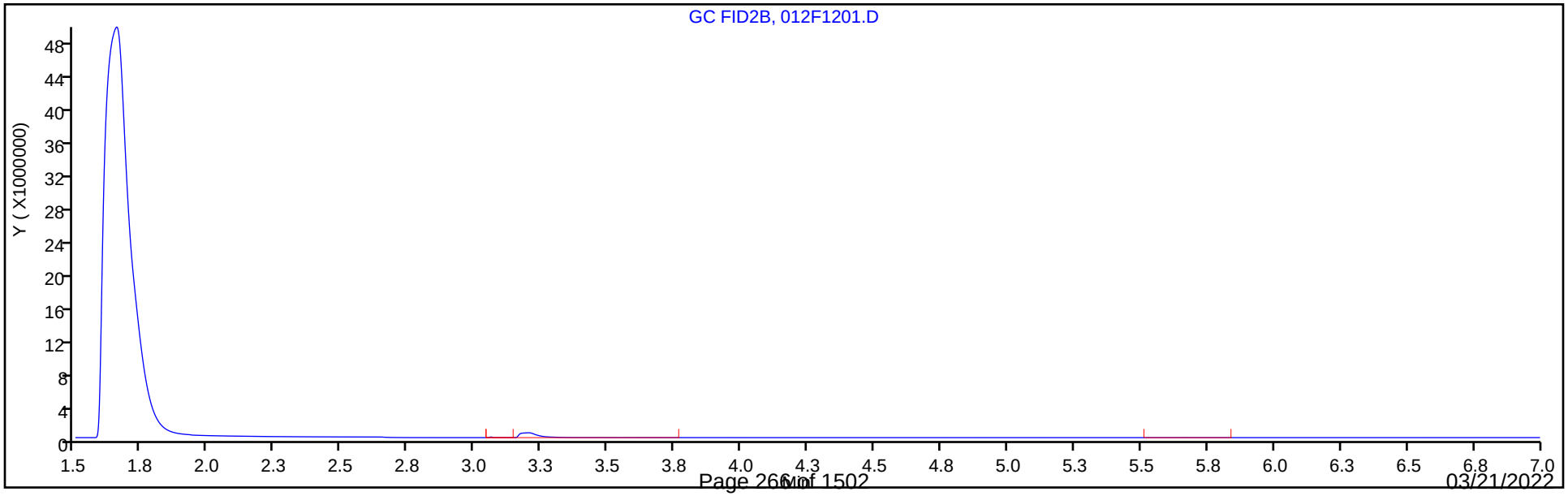
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\012F1201.D

Injection Date:	10-Mar-2022 18:36:34	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159332-I-4	Lab Sample ID:	280-159332-4	Worklist Smp#:	37
Client ID:	G0096-8				
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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0296-8 | Lab Sample ID: 280-159332-5

Matrix: Water | Lab File ID: 013F1301.D

Analysis Method: RSK-175 | Date Collected: 03/01/2022 08:00

Sample wt/vol: 20(mL) | Date Analyzed: 03/10/2022 18:49

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.: 568337 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	7.5		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\013F1301.D
Lims ID: 280-159332-H-5
Client ID: G0296-8
Sample Type: Client
Inject. Date: 10-Mar-2022 18:49:33 ALS Bottle#: 13 Worklist Smp#: 38
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159332-H-5
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:11 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: CTX1659

First Level Reviewer: sciannac Date: 15-Mar-2022 15:31:36

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	1.261	-0.006	287524259	8173.2	
2	1.657	1.670	-0.013	269074215	7451.2	
					RPD = 9.24	
3 Ethane						
1		1.521			ND	
2		3.023				
4 Ethylene						
1		1.801			ND	
2		2.603				
5 Propane						
1		2.573			ND	
2		4.930				
6 Acetylene						
1		4.086			ND	
2		2.750				
7 Butane						
1		4.438			ND	
2		6.426				
8 isobutylene						
1		5.339			ND	
2		6.270				

QC Flag Legend

Processing Flags

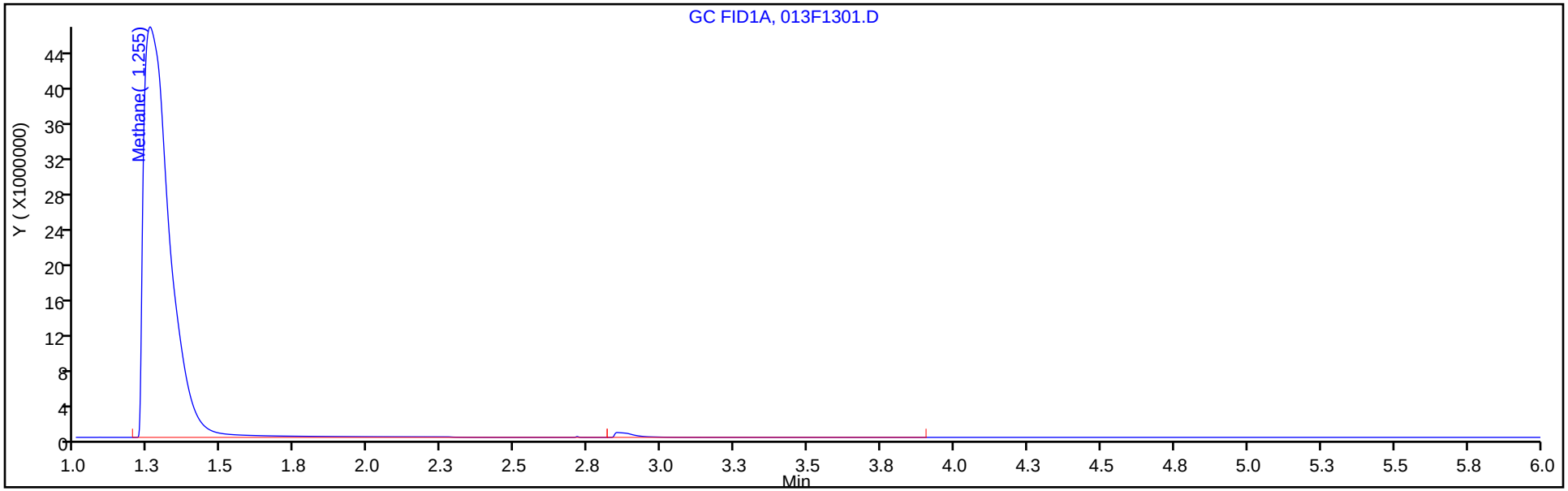
Report Date: 15-Mar-2022 15:37:17 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

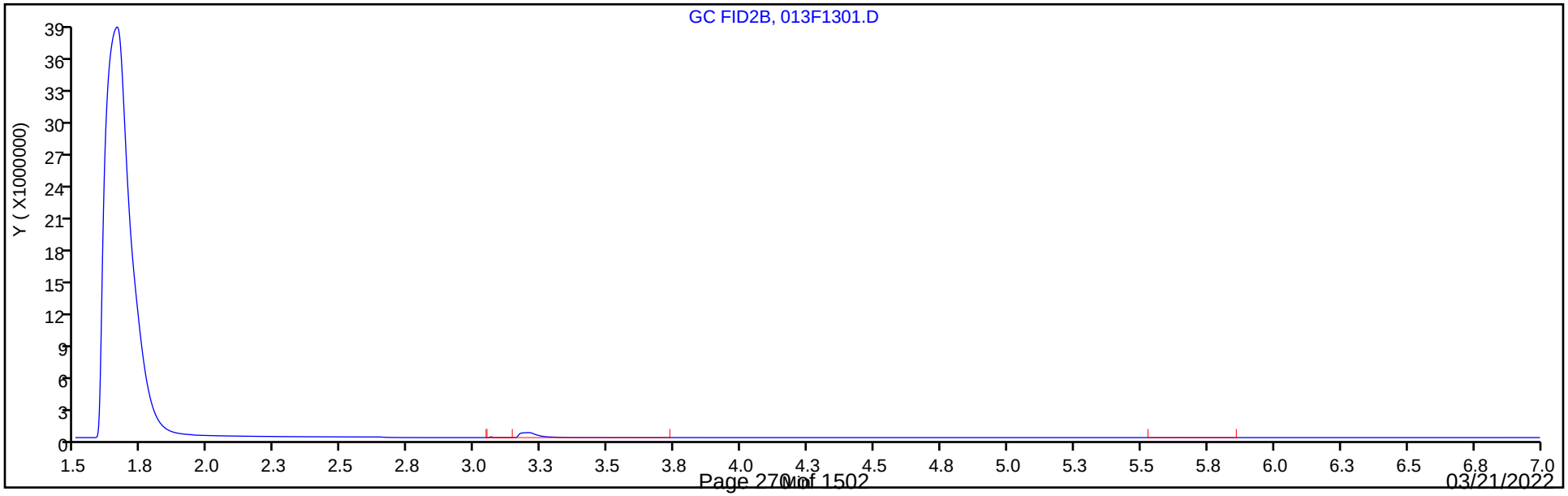
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\013F1301.D

Injection Date:	10-Mar-2022 18:49:33	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159332-H-5	Lab Sample ID:	280-159332-5	Worklist Smp#:	38
Client ID:	G0296-8				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
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.: 280-159332-1

SDG No.:

Client Sample ID: PZ020-8 | Lab Sample ID: 280-159332-6

Matrix: Water | Lab File ID: 014F1401.D

Analysis Method: RSK-175 | Date Collected: 03/01/2022 17:15

Sample wt/vol: 20(mL) | Date Analyzed: 03/10/2022 19:02

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.: 568337 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U M	0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\014F1401.D
Lims ID: 280-159332-I-6
Client ID: PZ020-8
Sample Type: Client
Inject. Date: 10-Mar-2022 19:02:31 ALS Bottle#: 14 Worklist Smp#: 39
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159332-I-6
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:11 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: CTX1659

First Level Reviewer: sciannac Date: 15-Mar-2022 15:32:27

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						7Ma
1	1.247	1.261	-0.014	82076	0.4758	a
2	1.649	1.670	-0.021	57765	-0.1349	M
					RPD = 358.22	
LOD = 0.6300						
3 Ethane						
1		1.521			ND	
2		3.023				
4 Ethylene						
1		1.801			ND	
2		2.603				
5 Propane						
1		2.573			ND	
2		4.930				
6 Acetylene						
1		4.086			ND	
2		2.750				
7 Butane						
1		4.438			ND	
2		6.426				
8 isobutylene						
1		5.339			ND	
2		6.270				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

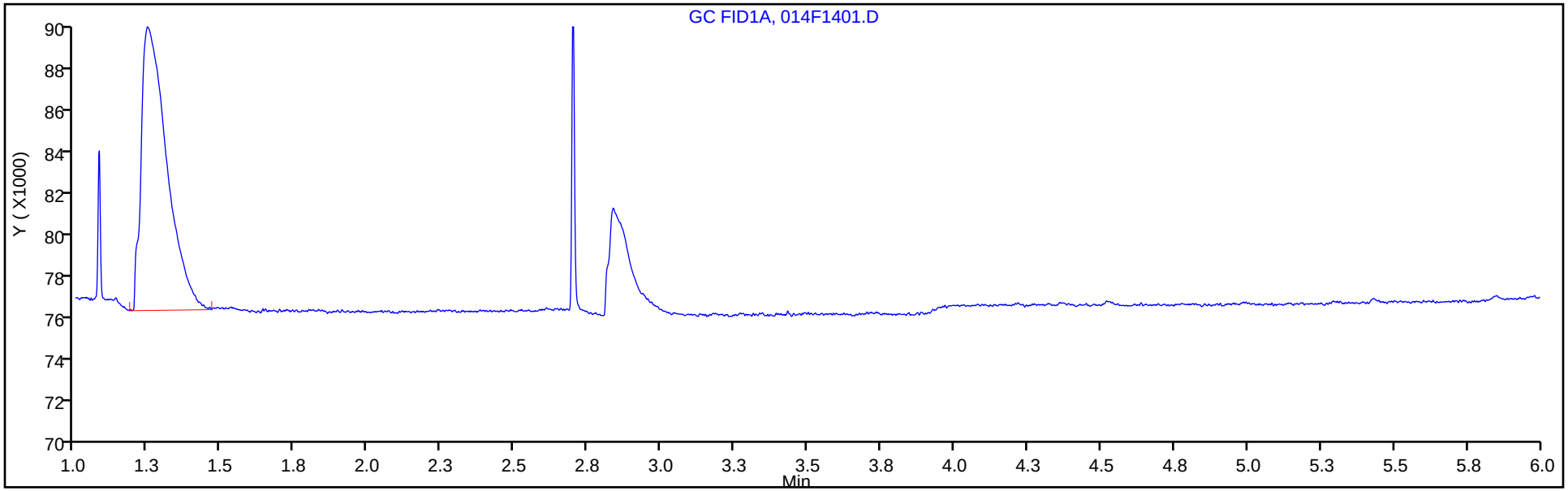
Report Date: 15-Mar-2022 15:37:18 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

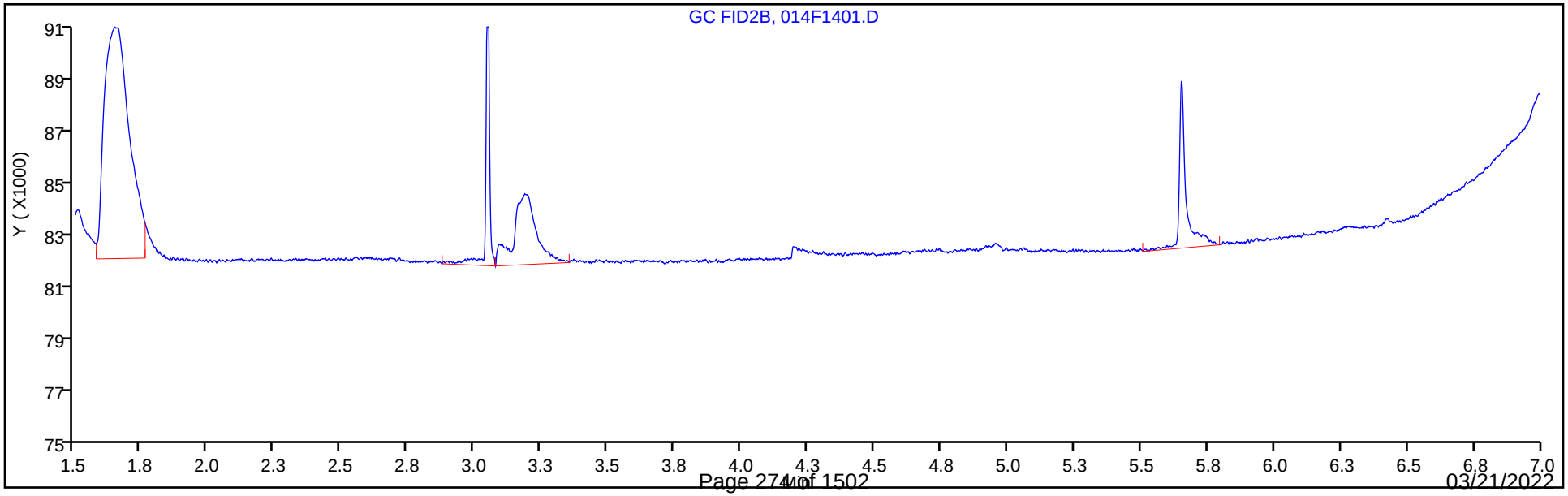
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\014F1401.D

Injection Date:	10-Mar-2022 19:02:31	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159332-I-6	Lab Sample ID:	280-159332-6	Worklist Smp#:	39
Client ID:	PZ020-8				
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



Manual Integration/User Assign Peak Report

Eurofins Denver

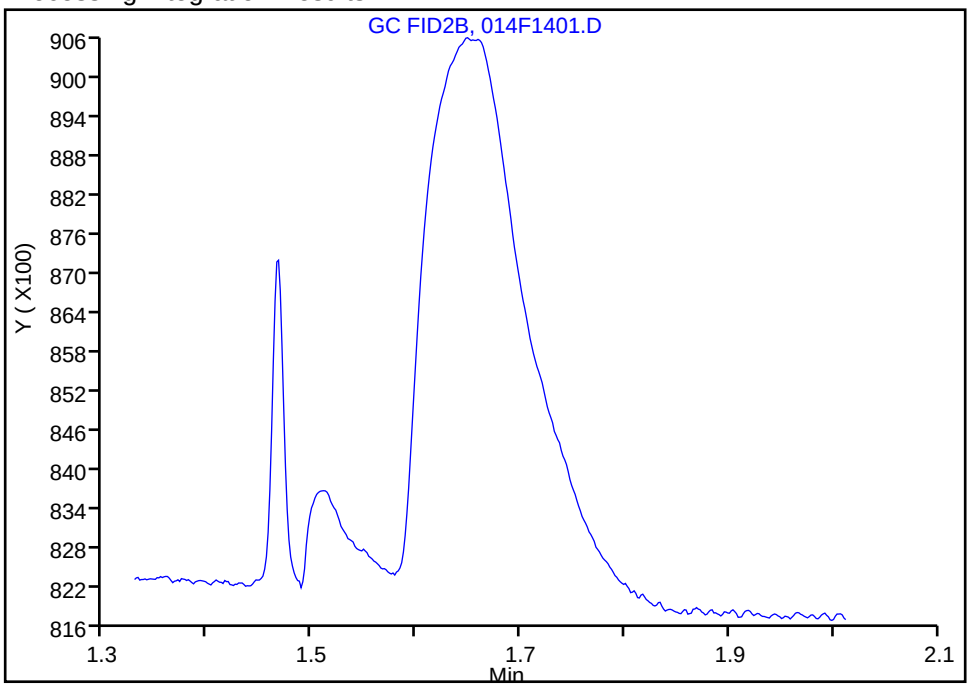
Data File:	\\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\014F1401.D				
Injection Date:	10-Mar-2022 19:02:31	Instrument ID:	VGC_J		
Lims ID:	280-159332-I-6	Lab Sample ID:	280-159332-6		
Client ID:	PZ020-8				
Operator ID:	sciannac	ALS Bottle#:	14	Worklist Smp#:	39
Purge Vol:	18.000 mL	Dil. Factor:	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

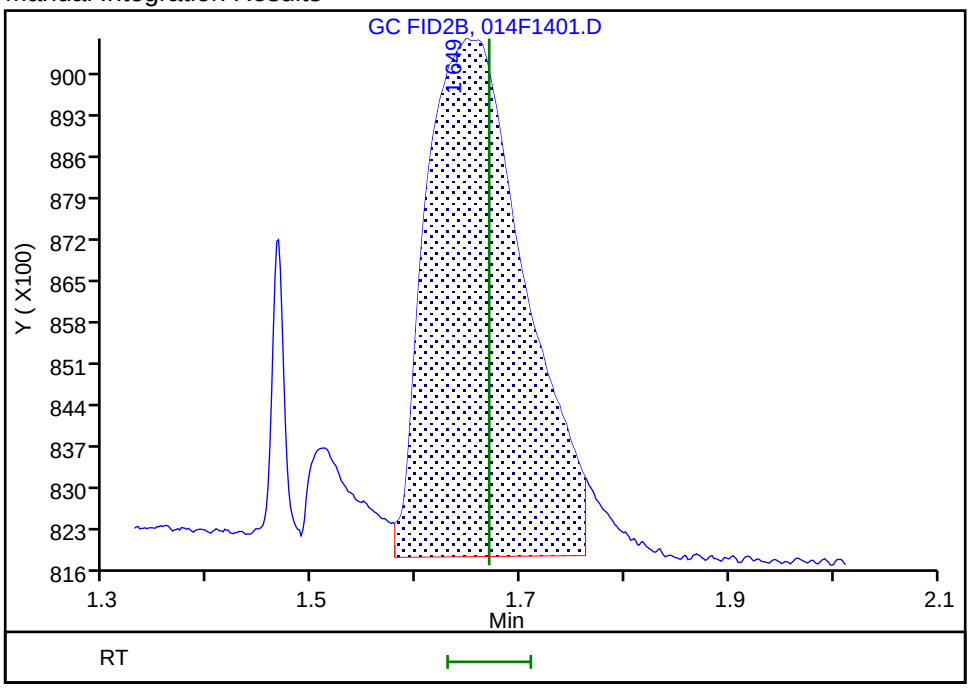
Not Detected
Expected RT: 1.67

Processing Integration Results



Manual Integration Results

RT: 1.65
Area: 57765
Amount: -0.134858
Amount Units: ug/l



Reviewer: sciannac, 15-Mar-2022 15:32:20
Audit Action: Assigned New Baseline Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0077-8 | Lab Sample ID: 280-159332-7

Matrix: Water | Lab File ID: 015F1501.D

Analysis Method: RSK-175 | Date Collected: 03/01/2022 14:40

Sample wt/vol: 20(mL) | Date Analyzed: 03/10/2022 19:15

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.: 568337 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	1.8		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\015F1501.D
Lims ID: 280-159332-I-7
Client ID: G0077-8
Sample Type: Client
Inject. Date: 10-Mar-2022 19:15:28 ALS Bottle#: 15 Worklist Smp#: 40
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159332-I-7
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:11 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: CTX1659

First Level Reviewer: sciannac Date: 15-Mar-2022 15:32:36

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	1.261	-0.008	69519509	1974.8	
2	1.656	1.670	-0.014	64148974	1775.1	
					RPD = 10.65	
3 Ethane						
1		1.521			ND	
2		3.023				
4 Ethylene						
1		1.801			ND	
2		2.603				
5 Propane						
1		2.573			ND	
2		4.930				
6 Acetylene						
1		4.086			ND	
2		2.750				
7 Butane						
1		4.438			ND	
2		6.426				
8 isobutylene						
1		5.339			ND	
2		6.270				

QC Flag Legend

Processing Flags

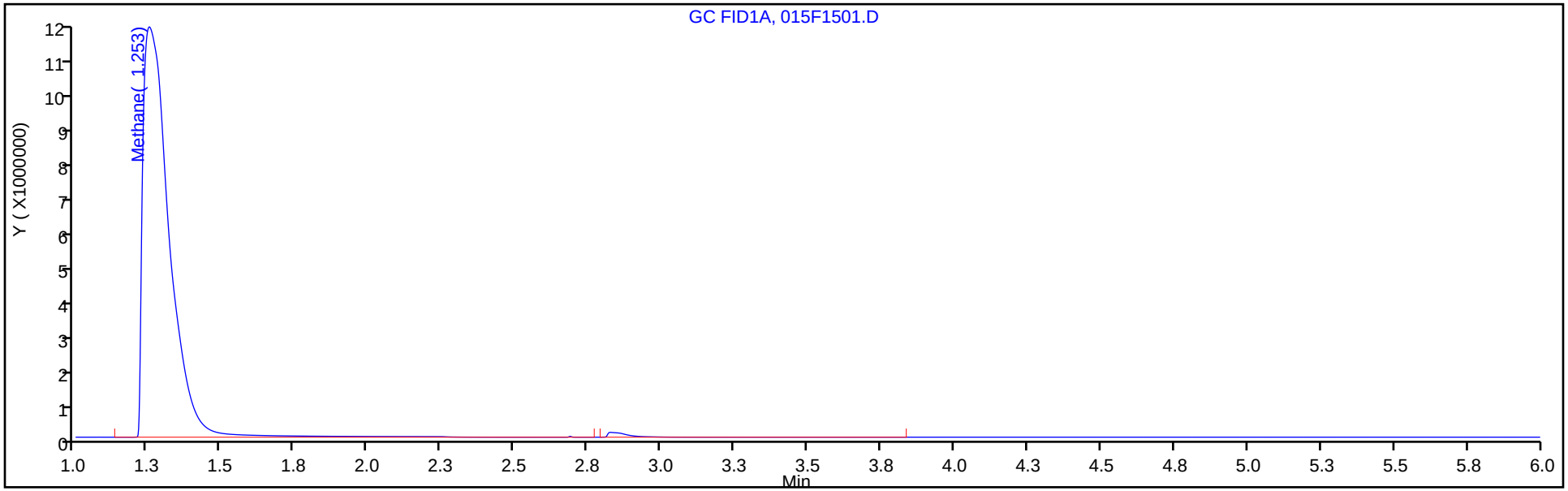
Report Date: 15-Mar-2022 15:37:18 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

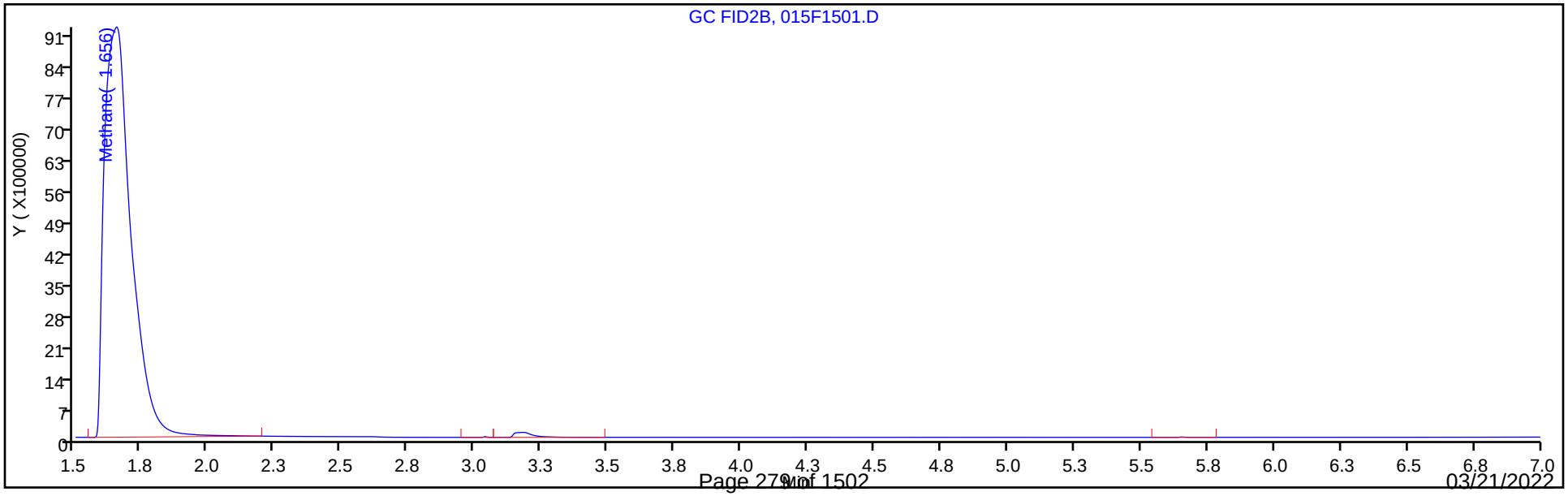
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\015F1501.D

Injection Date:	10-Mar-2022 19:15:28	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159332-I-7	Lab Sample ID:	280-159332-7	Worklist Smp#:	40
Client ID:	G0077-8				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
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.: 280-159332-1

SDG No.:

Client Sample ID: G0078-8 | Lab Sample ID: 280-159332-8

Matrix: Water | Lab File ID: 016F1601.D

Analysis Method: RSK-175 | Date Collected: 03/01/2022 16:00

Sample wt/vol: 20(mL) | Date Analyzed: 03/10/2022 19:28

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.: 568337 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.20		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\016F1601.D
Lims ID: 280-159332-H-8
Client ID: G0078-8
Sample Type: Client
Inject. Date: 10-Mar-2022 19:28:29 ALS Bottle#: 16 Worklist Smp#: 41
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159332-H-8
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:11 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: CTX1659

First Level Reviewer: sciannac Date: 15-Mar-2022 15:32:41

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	1.261	-0.007	7902169	222.8	
2	1.656	1.670	-0.014	7291817	200.2	
					RPD = 10.68	
3 Ethane						
1		1.521			ND	
2		3.023				
4 Ethylene						
1		1.801			ND	
2		2.603				
5 Propane						
1		2.573			ND	
2		4.930				
6 Acetylene						
1		4.086			ND	
2		2.750				
7 Butane						
1		4.438			ND	
2		6.426				
8 isobutylene						
1		5.339			ND	
2		6.270				

QC Flag Legend

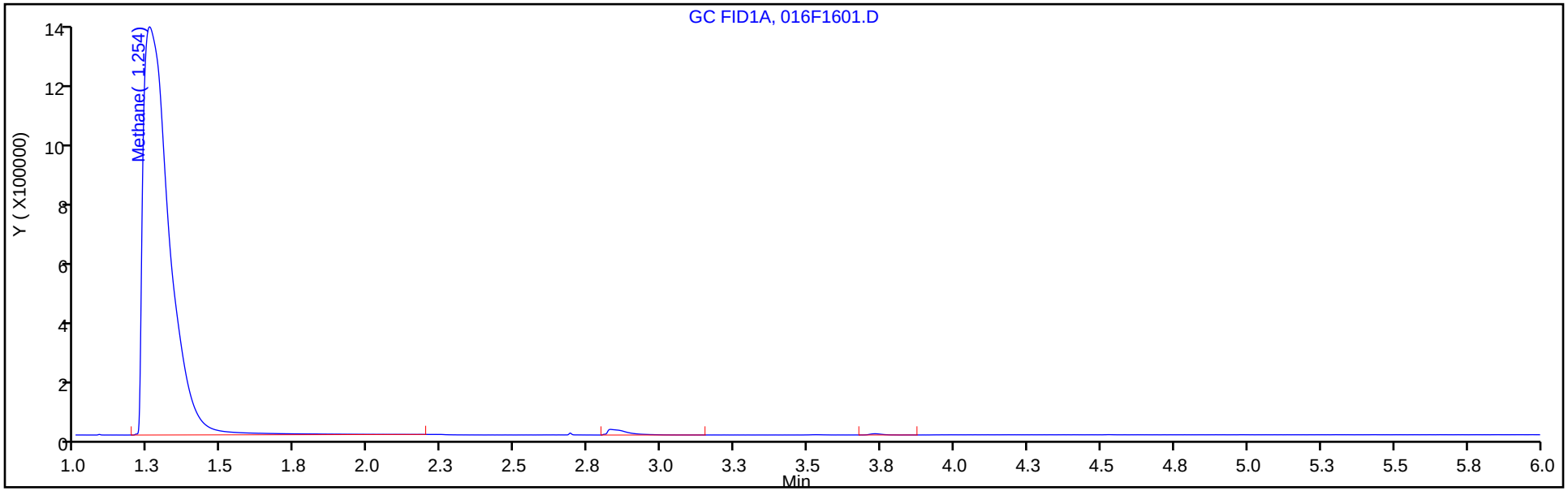
Processing Flags

Report Date: 15-Mar-2022 15:37:18 Chrom Revision: 2.3 14-Mar-2022 17:58:38

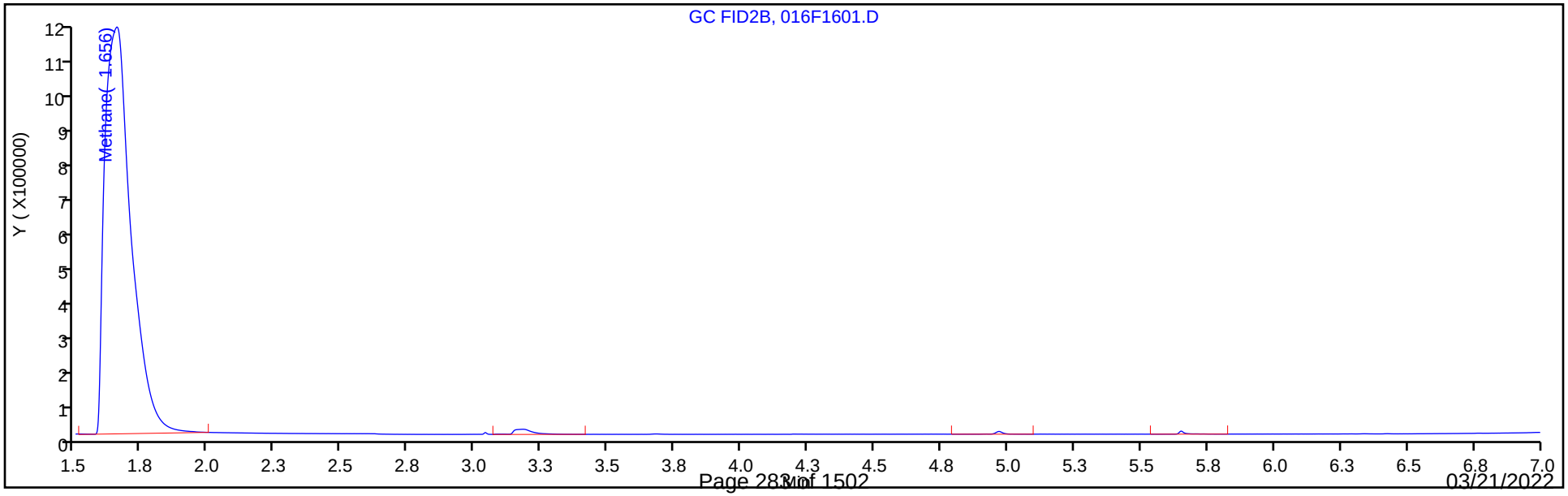
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\016F1601.D				
Injection Date:	10-Mar-2022 19:28:29	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159332-H-8	Lab Sample ID:	280-159332-8	Worklist Smp#:	41
Client ID:	G0078-8				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
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.: 280-159332-1

SDG No.:

Client Sample ID: G0094-8 | Lab Sample ID: 280-159332-9

Matrix: Water | Lab File ID: 018F1801.D

Analysis Method: RSK-175 | Date Collected: 03/01/2022 10:00

Sample wt/vol: 20(mL) | Date Analyzed: 03/10/2022 19:54

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.: 568337 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	13		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\018F1801.D
Lims ID: 280-159332-H-9
Client ID: G0094-8
Sample Type: Client
Inject. Date: 10-Mar-2022 19:54:23 ALS Bottle#: 18 Worklist Smp#: 43
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159332-H-9
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:19 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: CTX1659

First Level Reviewer: sciannac Date: 15-Mar-2022 15:33:20

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	1.261	-0.008	488165126	13878	
2	1.653	1.670	-0.017	457614586	12674	
					RPD = 9.07	
3 Ethane						
1		1.521			ND	
2		3.023				
4 Ethylene						
1		1.801			ND	
2		2.603				
5 Propane						
1		2.573			ND	
2		4.930				
6 Acetylene						
1		4.086			ND	
2		2.750				
7 Butane						
1		4.438			ND	
2		6.426				
8 isobutylene						
1		5.339			ND	
2		6.270				

QC Flag Legend

Processing Flags

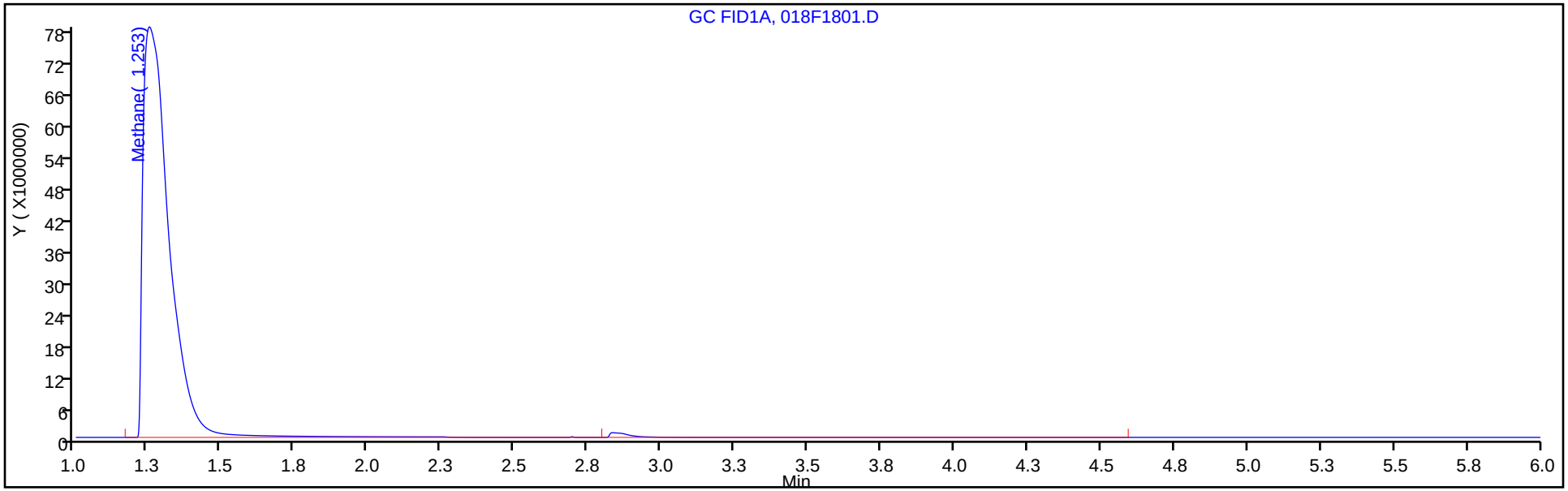
Report Date: 15-Mar-2022 15:37:20 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

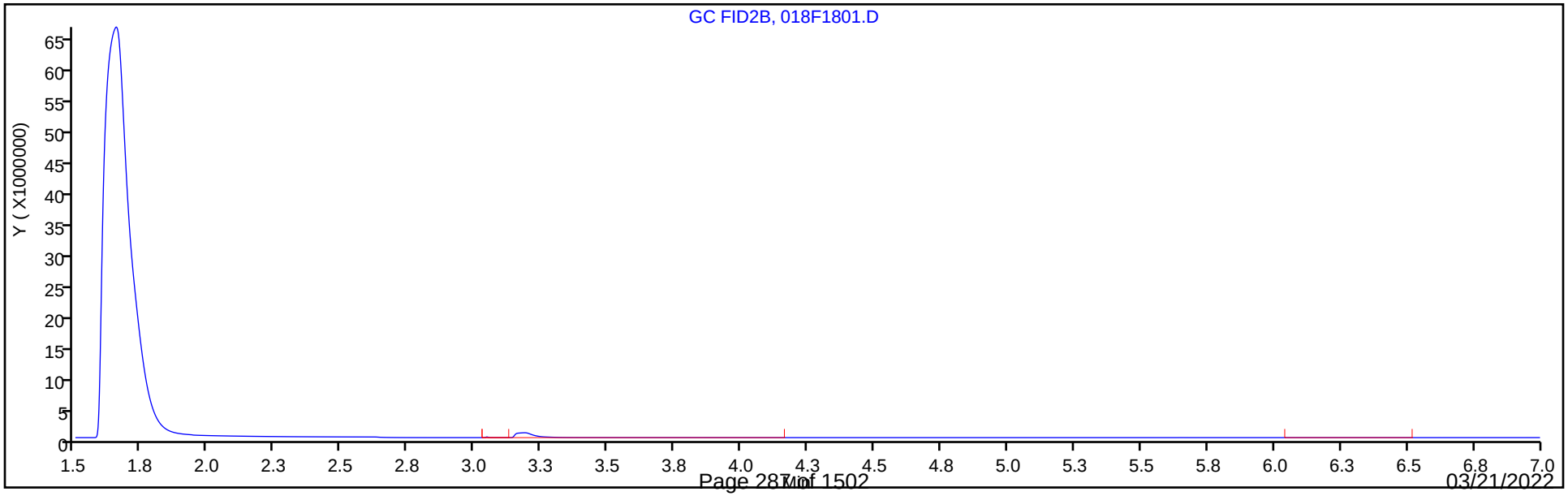
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\018F1801.D

Injection Date:	10-Mar-2022 19:54:23	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159332-H-9	Lab Sample ID:	280-159332-9	Worklist Smp#:	43
Client ID:	G0094-8				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
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.: 280-159332-1

SDG No.:

Client Sample ID: PZ018-8 | Lab Sample ID: 280-159332-10

Matrix: Water | Lab File ID: 019F1901.D

Analysis Method: RSK-175 | Date Collected: 03/01/2022 10:40

Sample wt/vol: 20(mL) | Date Analyzed: 03/10/2022 20:07

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.: 568337 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	16		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\019F1901.D
Lims ID: 280-159332-H-10
Client ID: PZ018-8
Sample Type: Client
Inject. Date: 10-Mar-2022 20:07:21 ALS Bottle#: 19 Worklist Smp#: 44
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159332-H-10
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:19 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: CTX1659

First Level Reviewer: sciannac Date: 15-Mar-2022 15:33:26

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	1.261	-0.006	615535046	17499	
2	1.654	1.670	-0.016	573665465	15888	
					RPD = 9.65	
3 Ethane						
1		1.521			ND	
2		3.023				
4 Ethylene						
1		1.801			ND	
2		2.603				
5 Propane						
1		2.573			ND	
2		4.930				
6 Acetylene						
1		4.086			ND	
2		2.750				
7 Butane						
1		4.438			ND	
2		6.426				
8 isobutylene						
1		5.339			ND	
2		6.270				

QC Flag Legend

Processing Flags

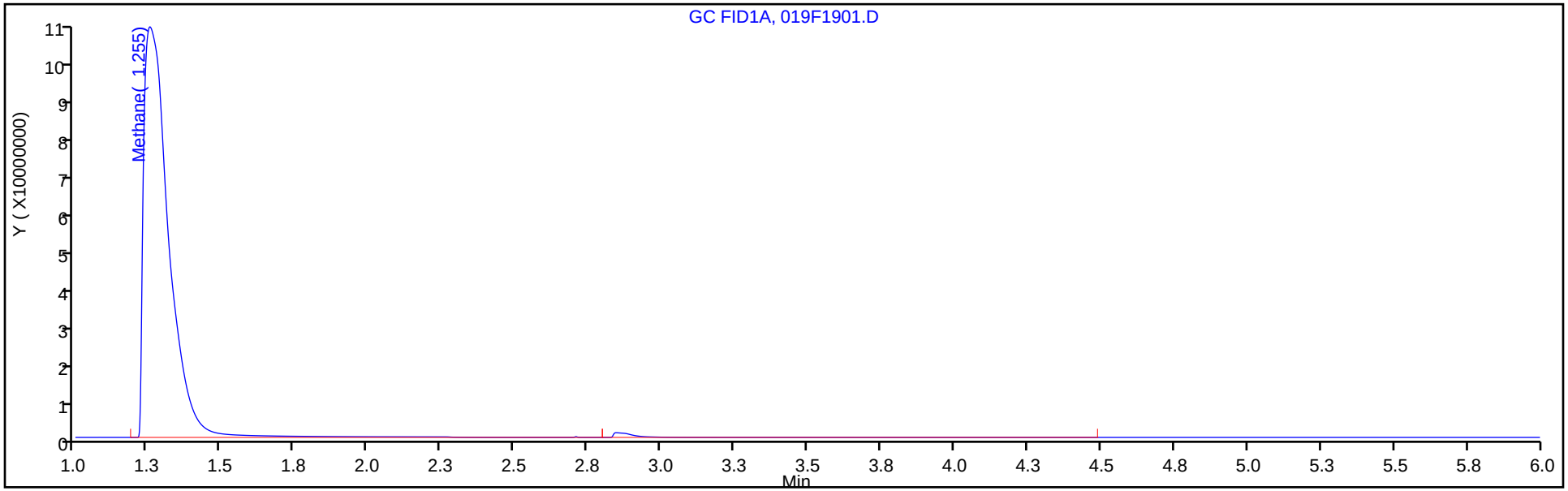
Report Date: 15-Mar-2022 15:37:21 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

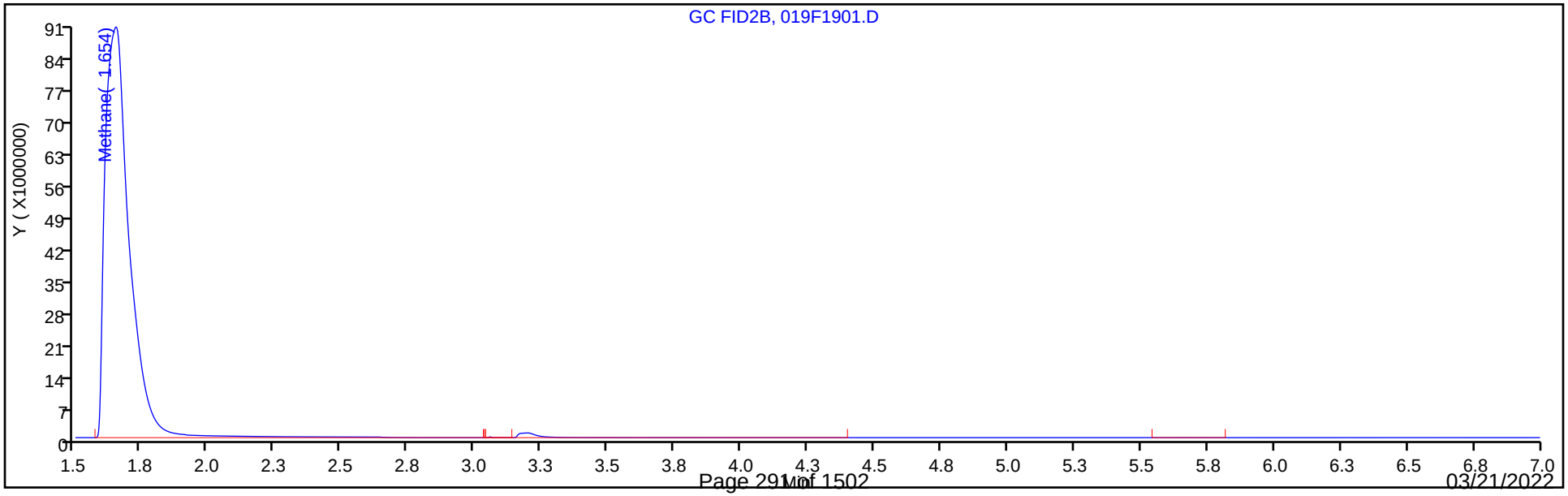
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\019F1901.D

Injection Date:	10-Mar-2022 20:07:21	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159332-H-10	Lab Sample ID:	280-159332-10	Worklist Smp#:	44
Client ID:	PZ018-8				
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.: 280-159332-1

SDG No.:

Client Sample ID: PZ017R-8 | Lab Sample ID: 280-159332-11

Matrix: Water | Lab File ID: 020F2001.D

Analysis Method: RSK-175 | Date Collected: 03/01/2022 11:45

Sample wt/vol: 20(mL) | Date Analyzed: 03/10/2022 20:20

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.: 568337 | 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\20220310-109149.b\020F2001.D
Lims ID: 280-159332-H-11
Client ID: PZ017R-8
Sample Type: Client
Inject. Date: 10-Mar-2022 20:20:20 ALS Bottle#: 20 Worklist Smp#: 45
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159332-H-11
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:19 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: CTX1659

First Level Reviewer: sciannac Date: 15-Mar-2022 15:33:32

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	1.261	-0.007	654523458	18608	
2	1.652	1.670	-0.018	611863991	16946	
					RPD = 9.35	
3 Ethane						
1		1.521			ND	
2		3.023				
4 Ethylene						
1		1.801			ND	
2		2.603				
5 Propane						
1		2.573			ND	
2		4.930				
6 Acetylene						
1		4.086			ND	
2		2.750				
7 Butane						
1		4.438			ND	
2		6.426				
8 isobutylene						
1		5.339			ND	
2		6.270				

QC Flag Legend

Processing Flags

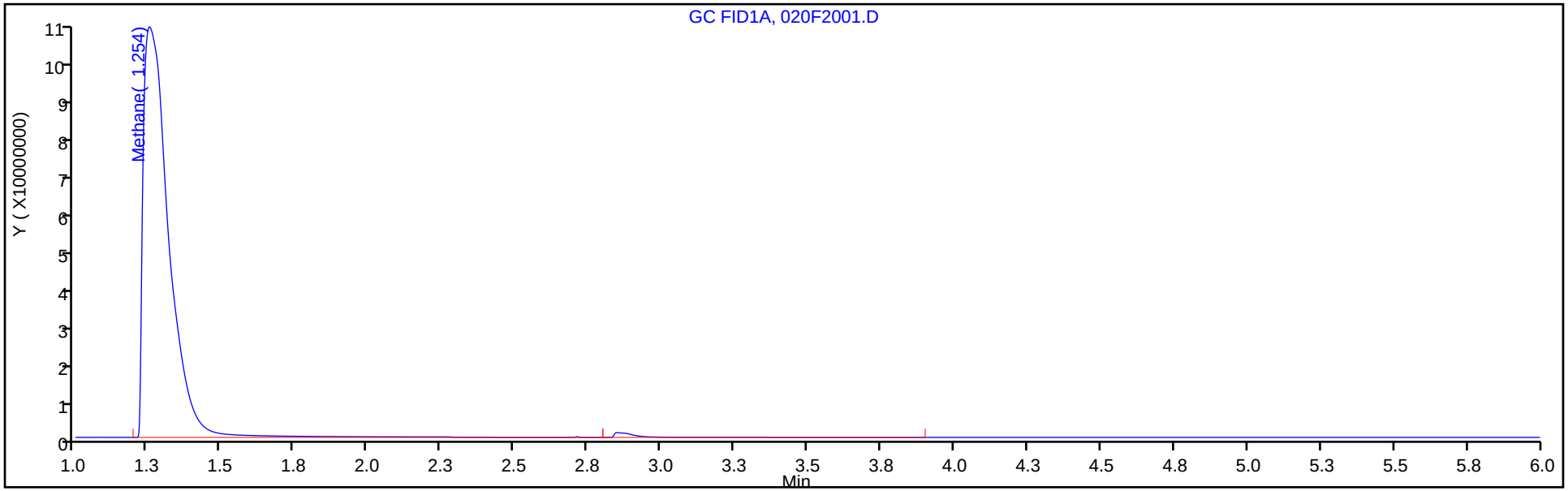
Report Date: 15-Mar-2022 15:37:21 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

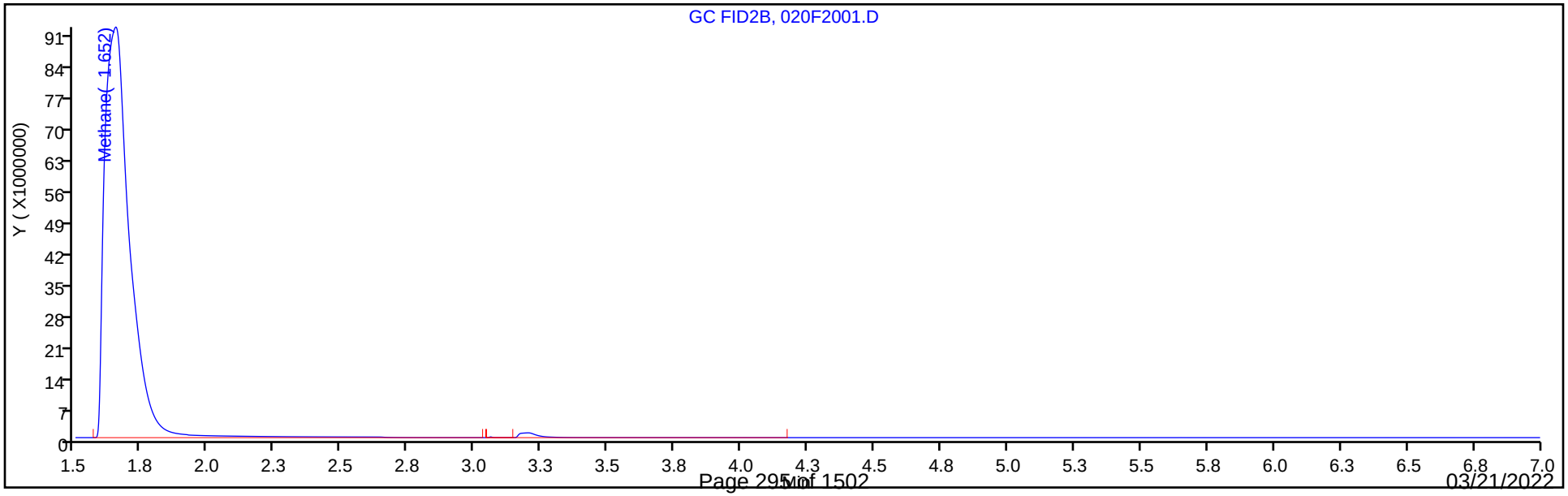
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\020F2001.D

Injection Date:	10-Mar-2022 20:20:20	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159332-H-11	Lab Sample ID:	280-159332-11	Worklist Smp#:	45
Client ID:	PZ017R-8				
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.: 280-159332-1

SDG No.:

Client Sample ID: PZ021-8 | Lab Sample ID: 280-159332-12

Matrix: Water | Lab File ID: 021F2101.D

Analysis Method: RSK-175 | Date Collected: 03/01/2022 08:00

Sample wt/vol: 20(mL) | Date Analyzed: 03/10/2022 20:33

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.: 568337 | 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\20220310-109149.b\021F2101.D
Lims ID: 280-159332-H-12
Client ID: PZ021-8
Sample Type: Client
Inject. Date: 10-Mar-2022 20:33:18 ALS Bottle#: 21 Worklist Smp#: 46
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159332-H-12
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:19 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: CTX1659

First Level Reviewer: sciannac Date: 15-Mar-2022 15:33:48

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	1.254	1.261	-0.007	724539382	20599	E
2	1.652	1.670	-0.018	676175445	18727	
					RPD = 9.52	
3 Ethane						
1		1.521			ND	
2		3.023				
4 Ethylene						
1		1.801			ND	
2		2.603				
5 Propane						
1		2.573			ND	
2		4.930				
6 Acetylene						
1		4.086			ND	
2		2.750				
7 Butane						
1		4.438			ND	
2		6.426				
8 isobutylene						
1		5.339			ND	
2		6.270				

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

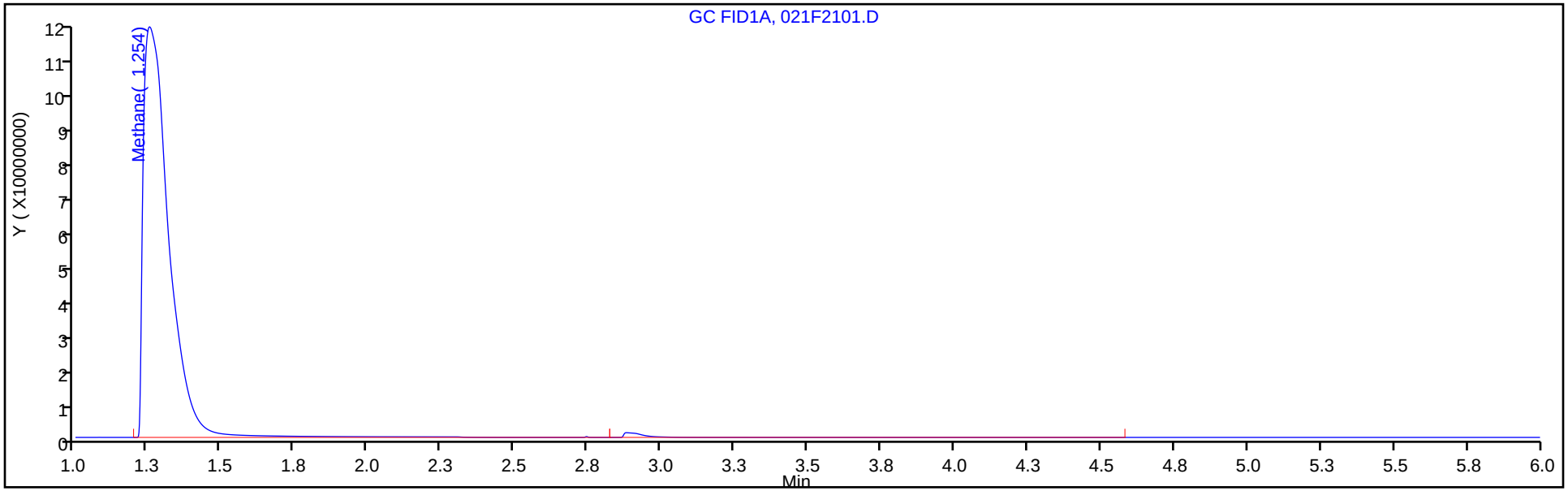
Report Date: 15-Mar-2022 15:37:22 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

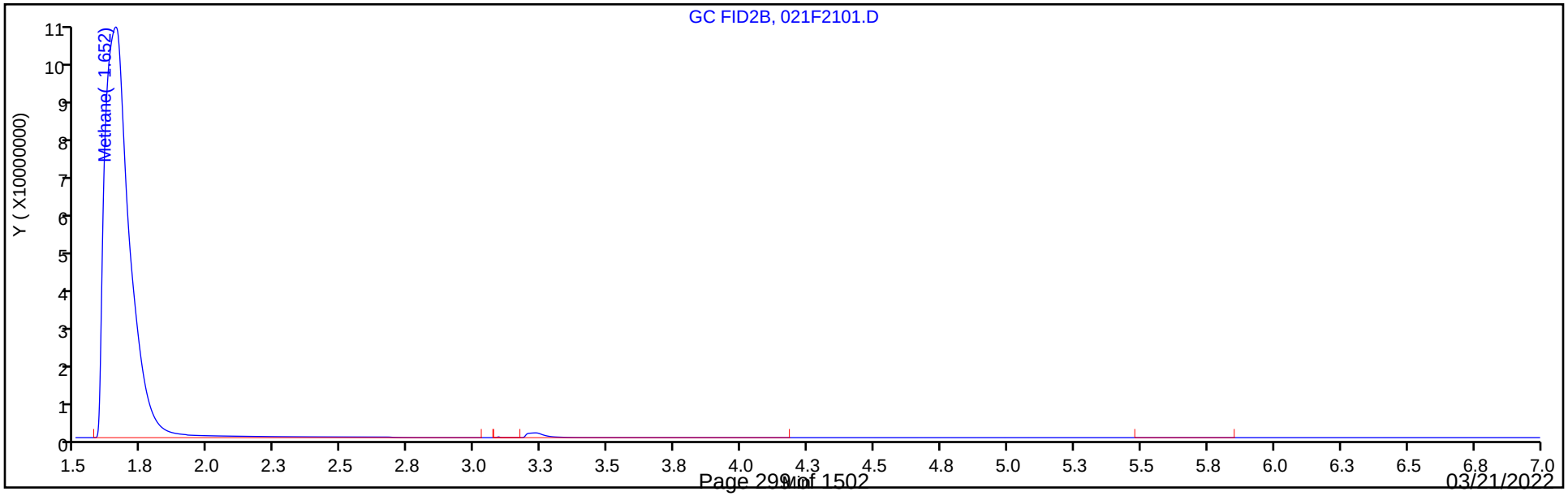
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\021F2101.D

Injection Date:	10-Mar-2022 20:33:18	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159332-H-12	Lab Sample ID:	280-159332-12	Worklist Smp#:	46
Client ID:	PZ021-8				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
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.: 280-159332-1

SDG No.:

Client Sample ID: PZ019-8 | Lab Sample ID: 280-159332-13

Matrix: Water | Lab File ID: 022F2201.D

Analysis Method: RSK-175 | Date Collected: 03/01/2022 09:10

Sample wt/vol: 20(mL) | Date Analyzed: 03/10/2022 20:46

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.: 568337 | 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\20220310-109149.b\022F2201.D
Lims ID: 280-159332-I-13
Client ID: PZ019-8
Sample Type: Client
Inject. Date: 10-Mar-2022 20:46:17 ALS Bottle#: 22 Worklist Smp#: 47
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159332-I-13
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:19 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: CTX1659

First Level Reviewer: sciannac Date: 15-Mar-2022 15:33:54

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		1.261			ND	
2		1.670				
3 Ethane						
1		1.521			ND	
2		3.023				
4 Ethylene						
1		1.801			ND	
2		2.603				
5 Propane						
1		2.573			ND	
2		4.930				
6 Acetylene						
1		4.086			ND	
2		2.750				
7 Butane						
1		4.438			ND	
2		6.426				
8 isobutylene						
1		5.339			ND	
2		6.270				

QC Flag Legend

Processing Flags

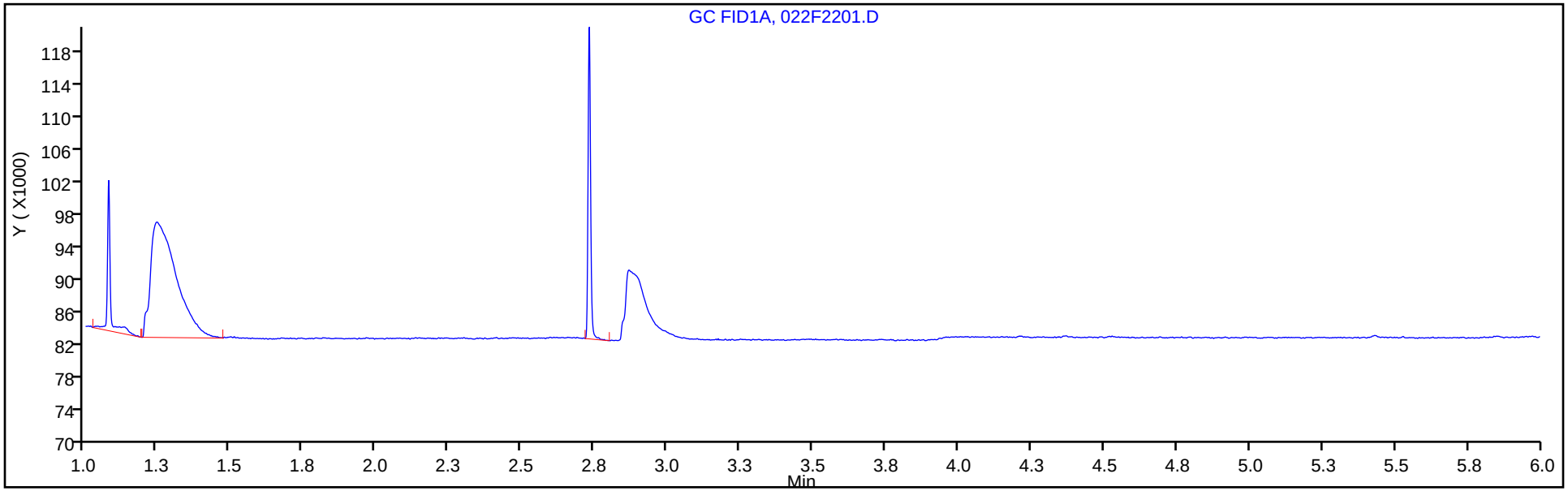
Report Date: 15-Mar-2022 15:37:22 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

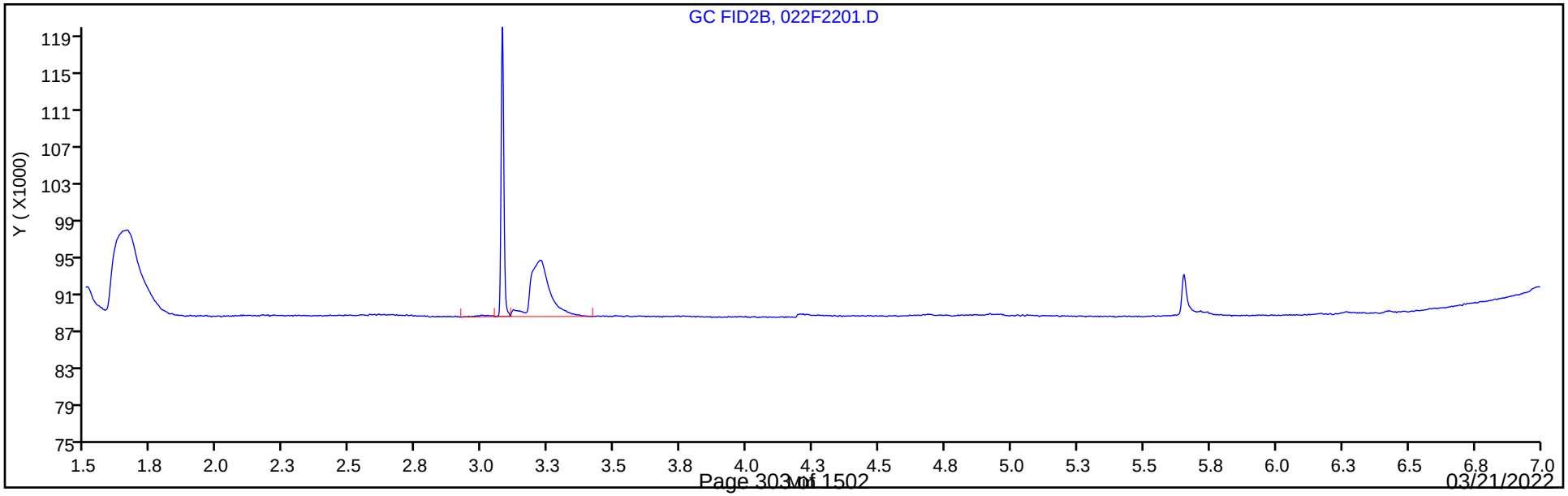
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\022F2201.D

Injection Date:	10-Mar-2022 20:46:17	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159332-I-13	Lab Sample ID:	280-159332-13	Worklist Smp#:	47
Client ID:	PZ019-8				
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 VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1 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.: 280-159332-1 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.: 280-159332-1 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

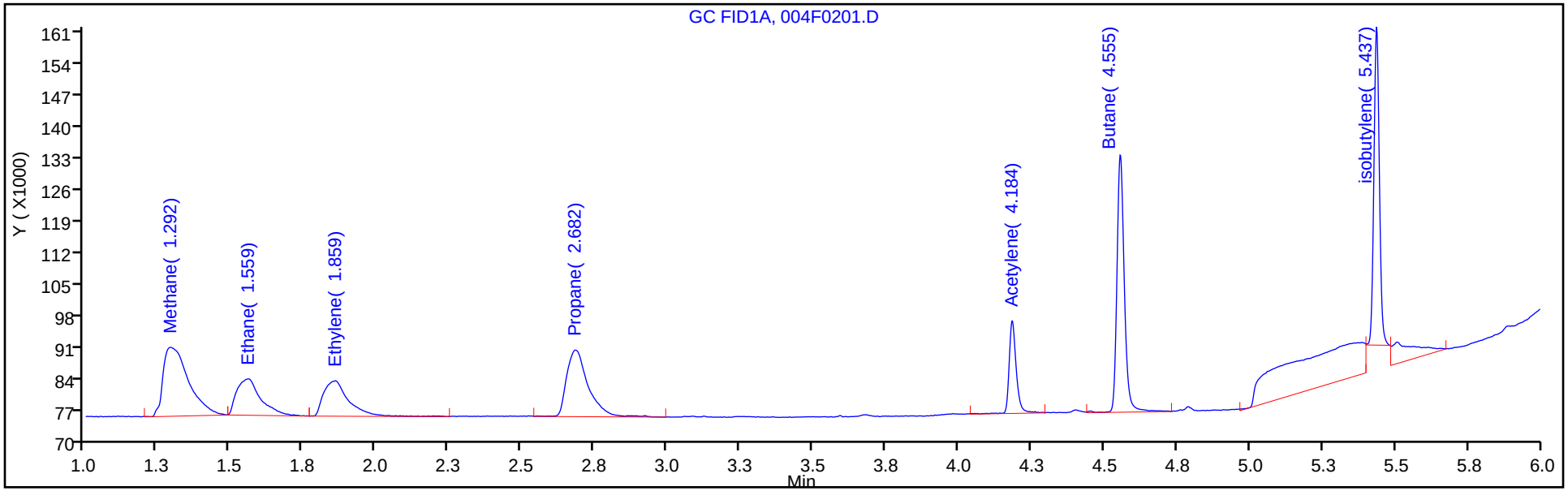
Report Date: 29-Sep-2021 10:55:12 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

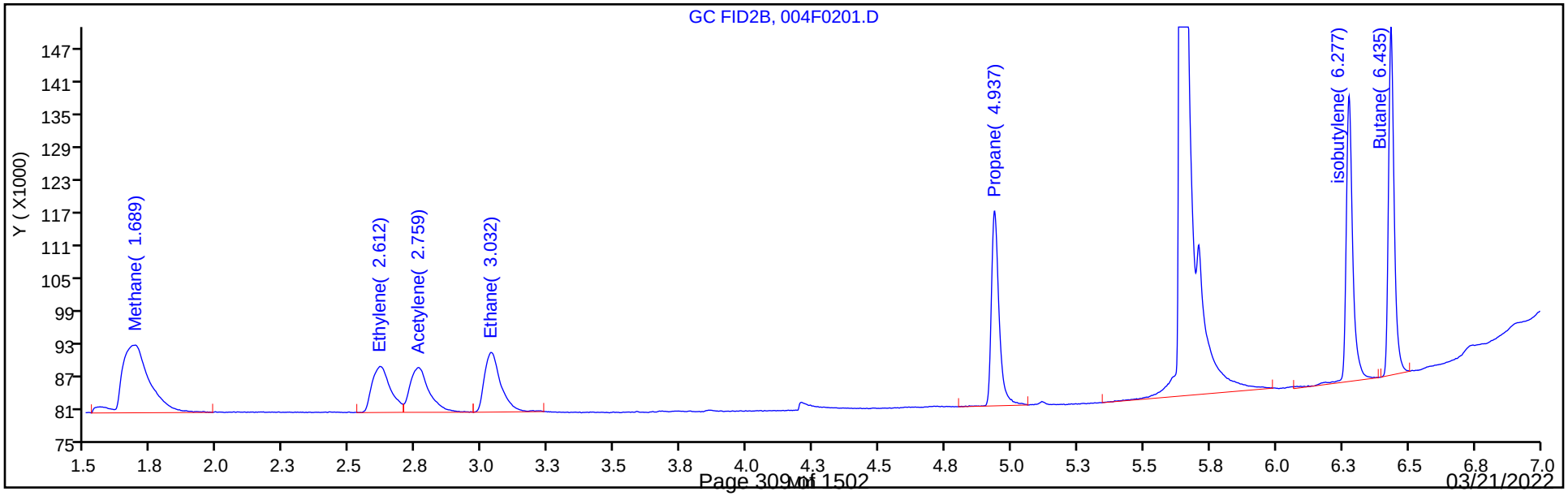
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D

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

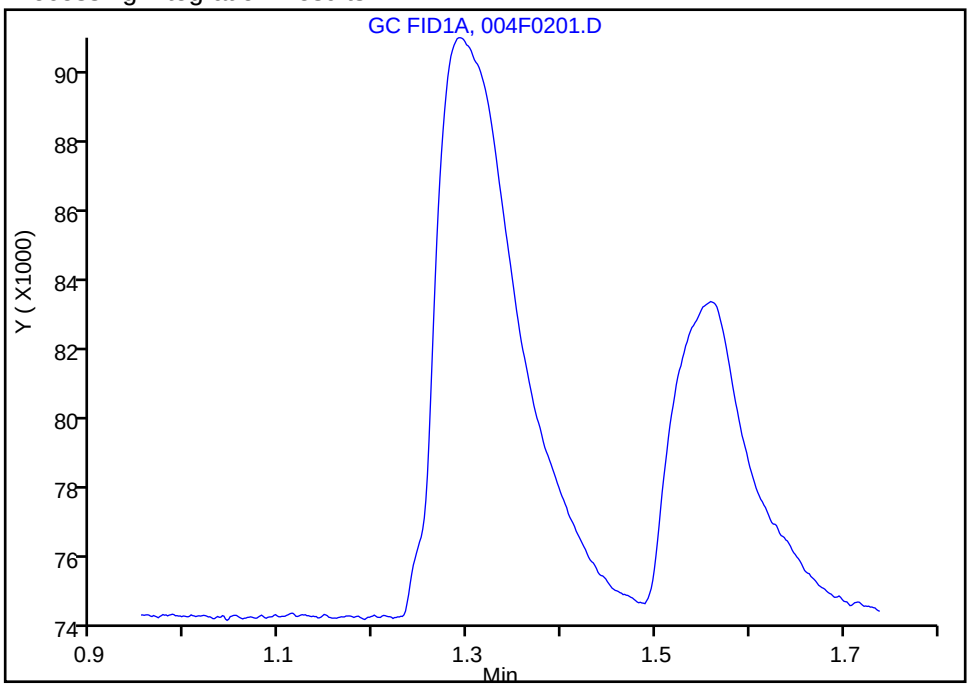
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D				
Injection Date:	24-Sep-2021 13:28:57	Instrument ID:	VGC_J		
Lims ID:	ic				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	4	Worklist Smp#:	2
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

2 Methane, CAS: 74-82-8

Signal: 1

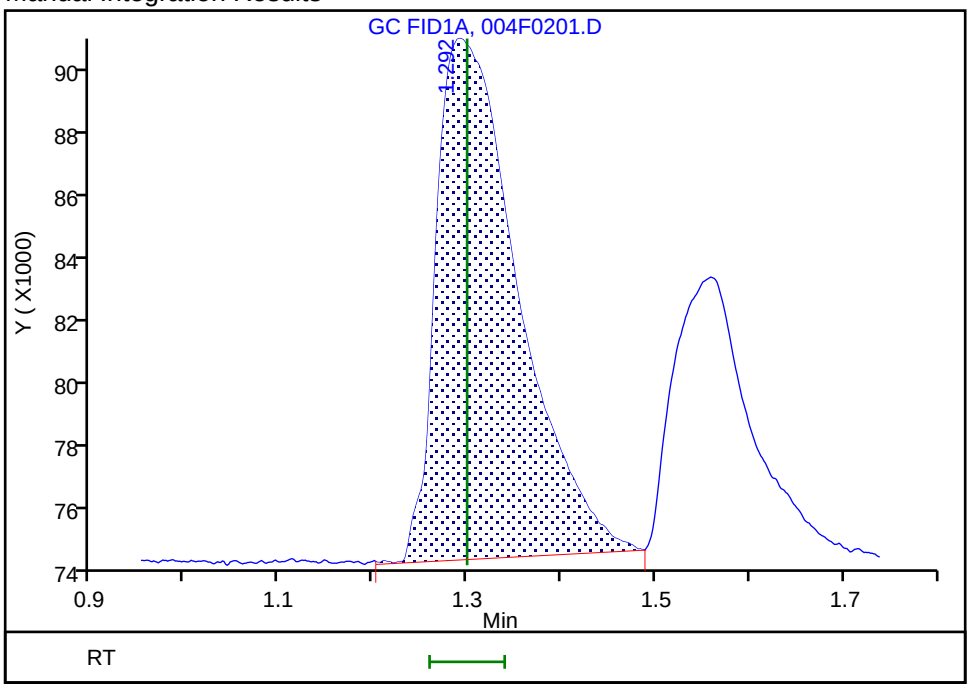
Not Detected
Expected RT: 1.30

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

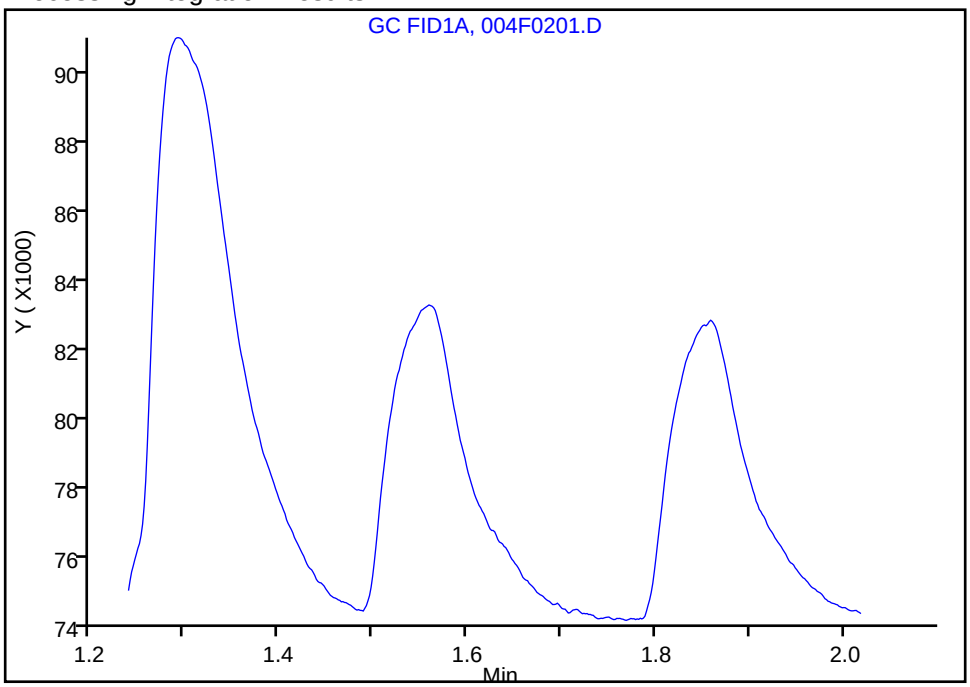
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

3 Ethane, CAS: 74-84-0

Signal: 1

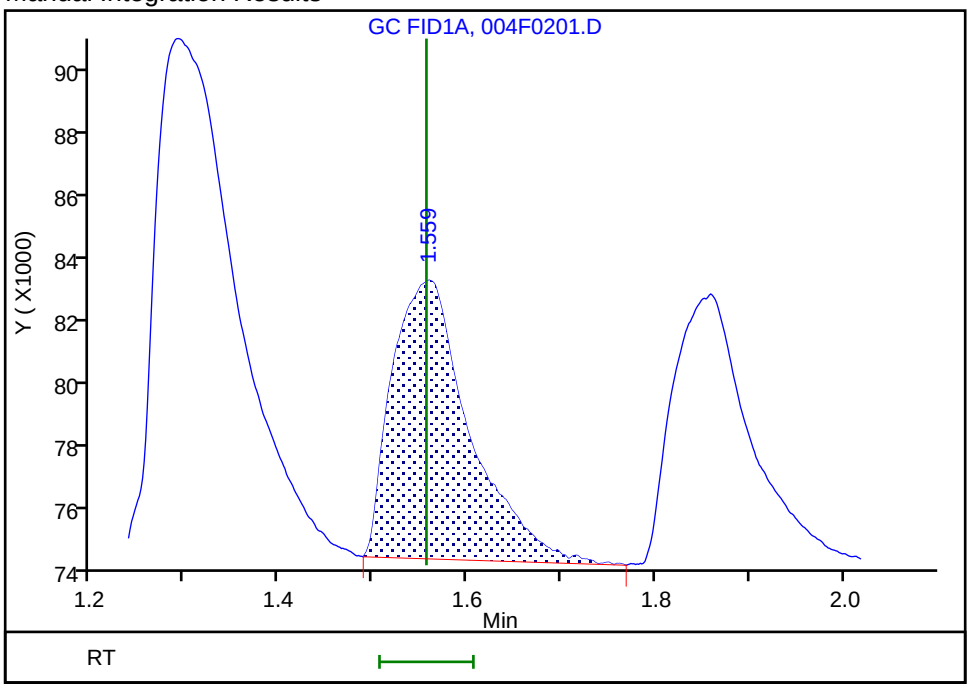
Not Detected
Expected RT: 1.56

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

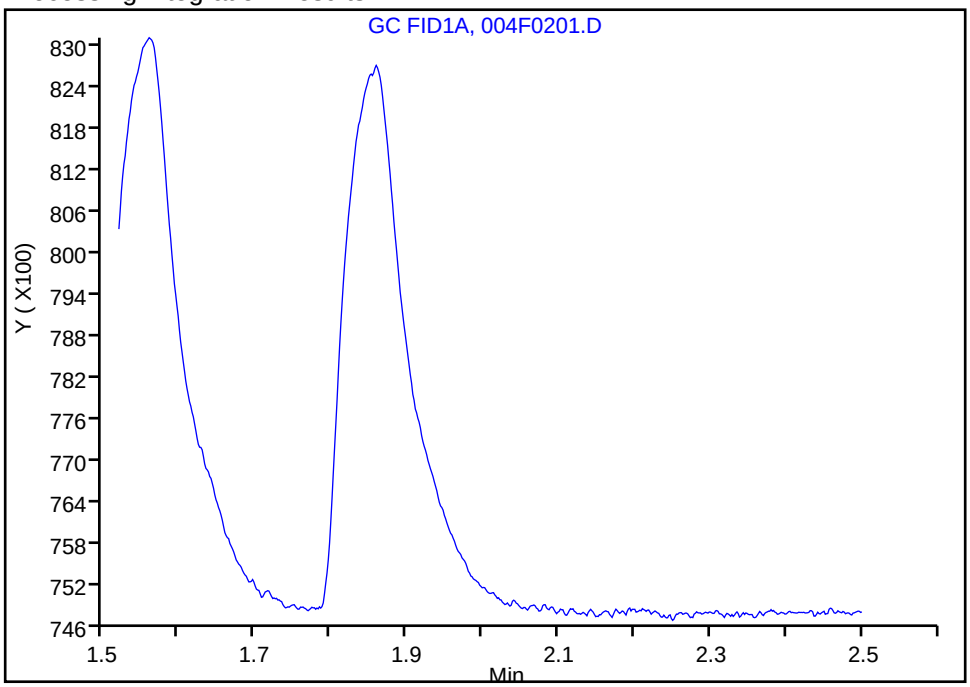
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D				
Injection Date:	24-Sep-2021 13:28:57	Instrument ID:	VGC_J		
Lims ID:	ic				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	4	Worklist Smp#:	2
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

4 Ethylene, CAS: 74-85-1

Signal: 1

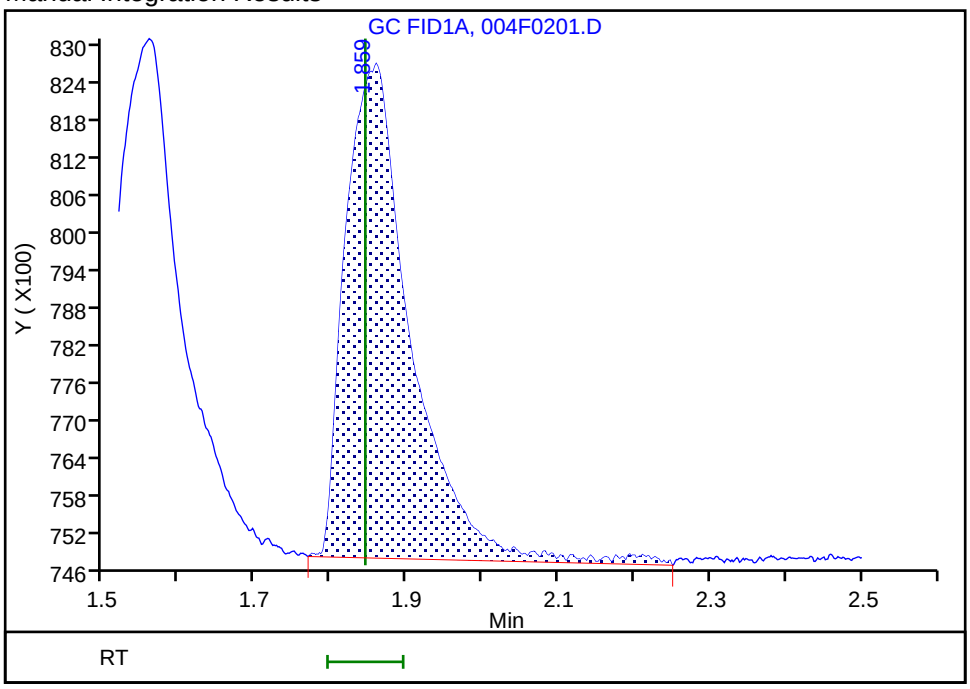
Not Detected
Expected RT: 1.84

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

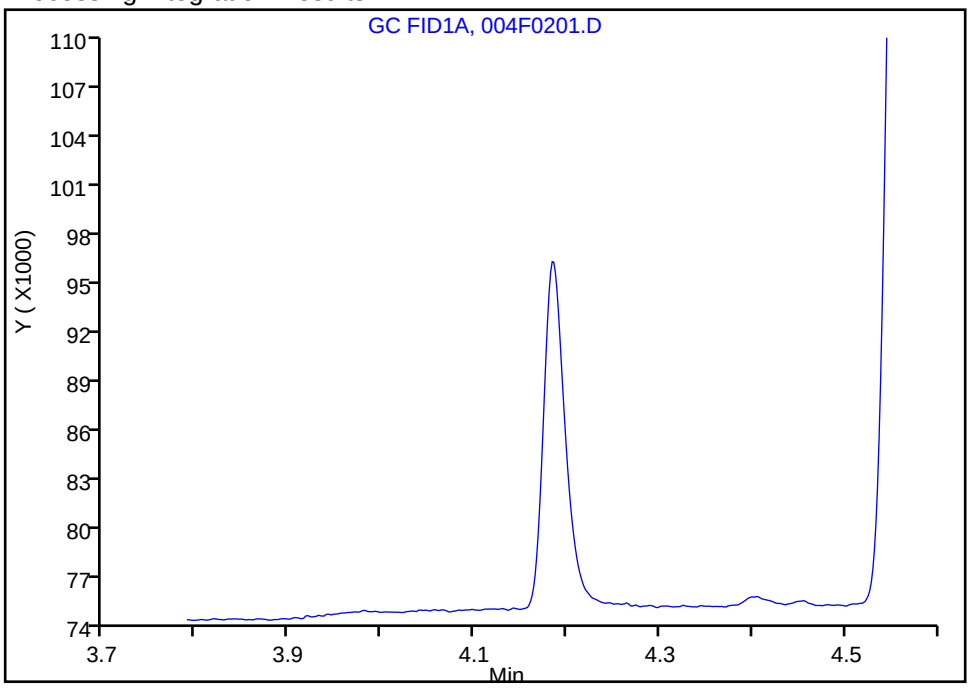
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

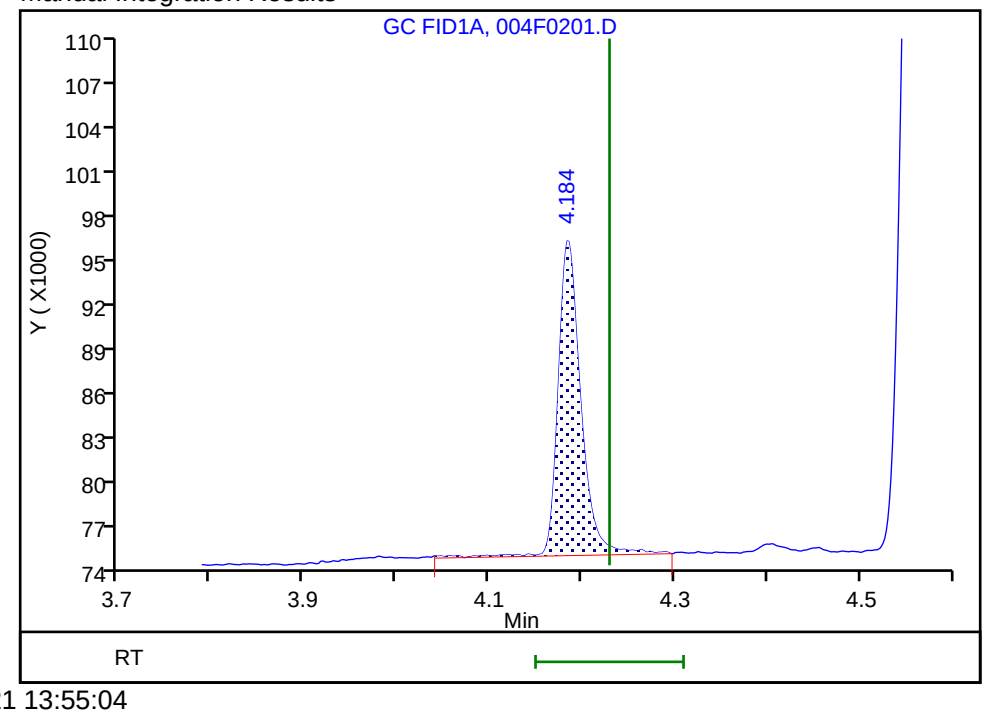
Not Detected
Expected RT: 4.23

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

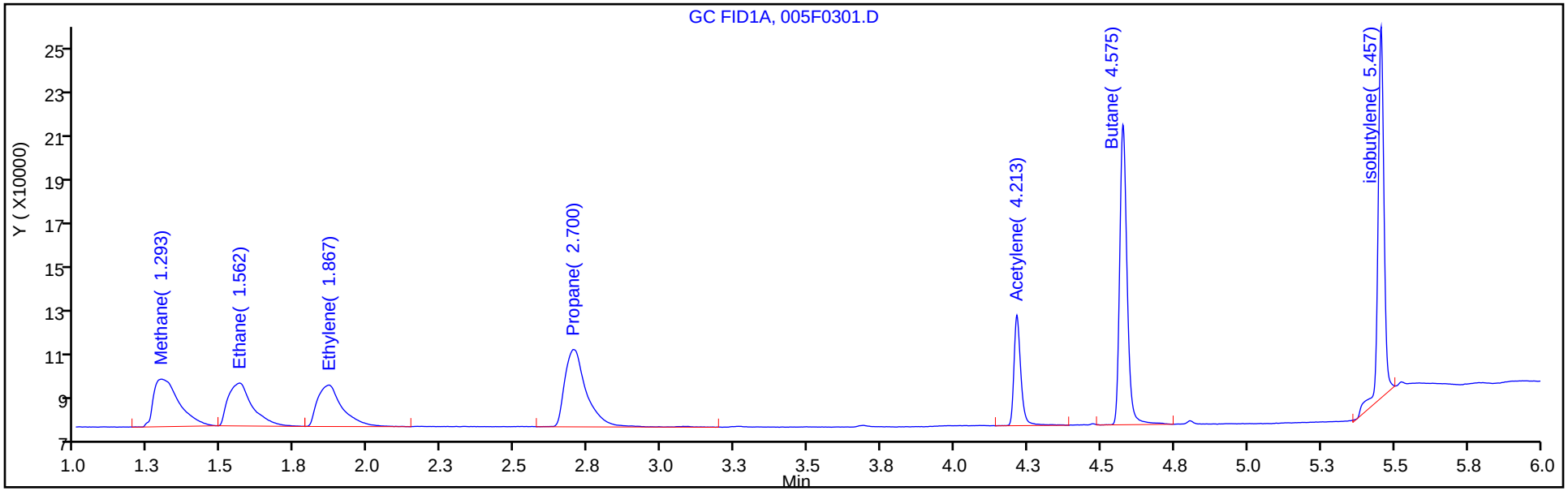
Report Date: 29-Sep-2021 10:55:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

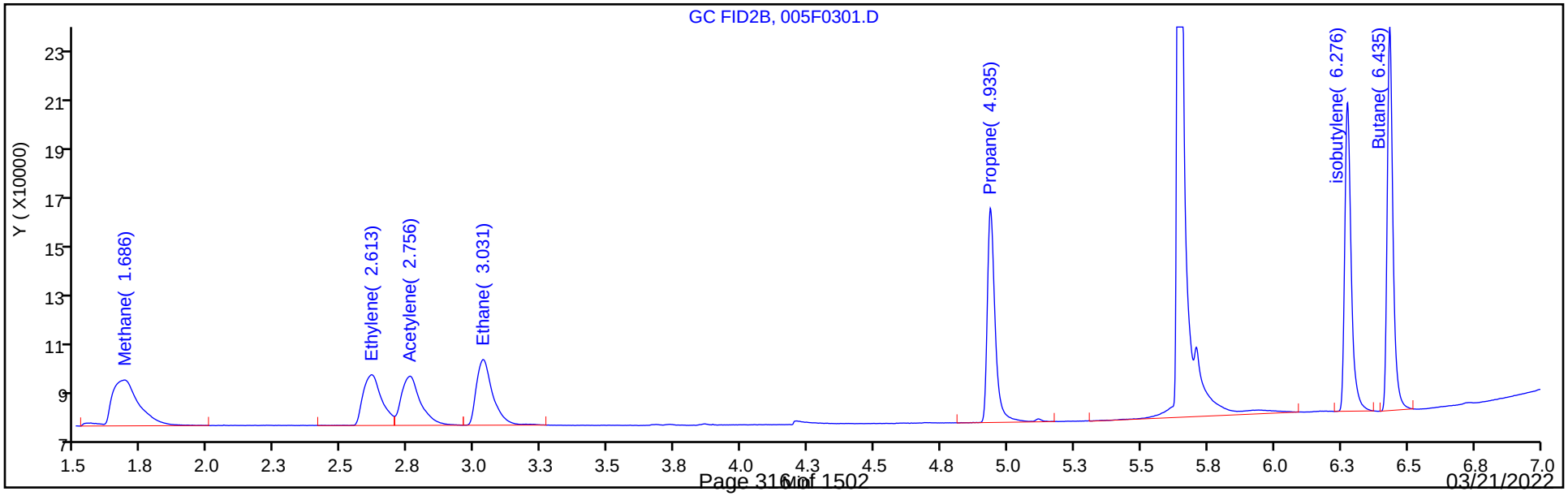
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\005F0301.D

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

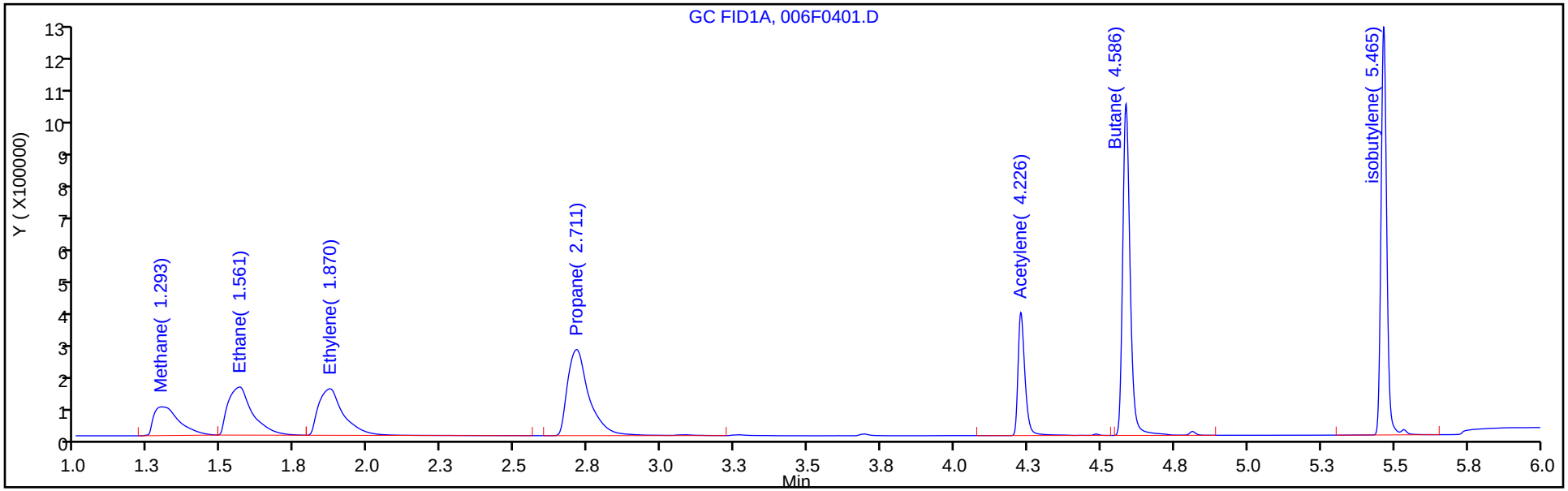
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

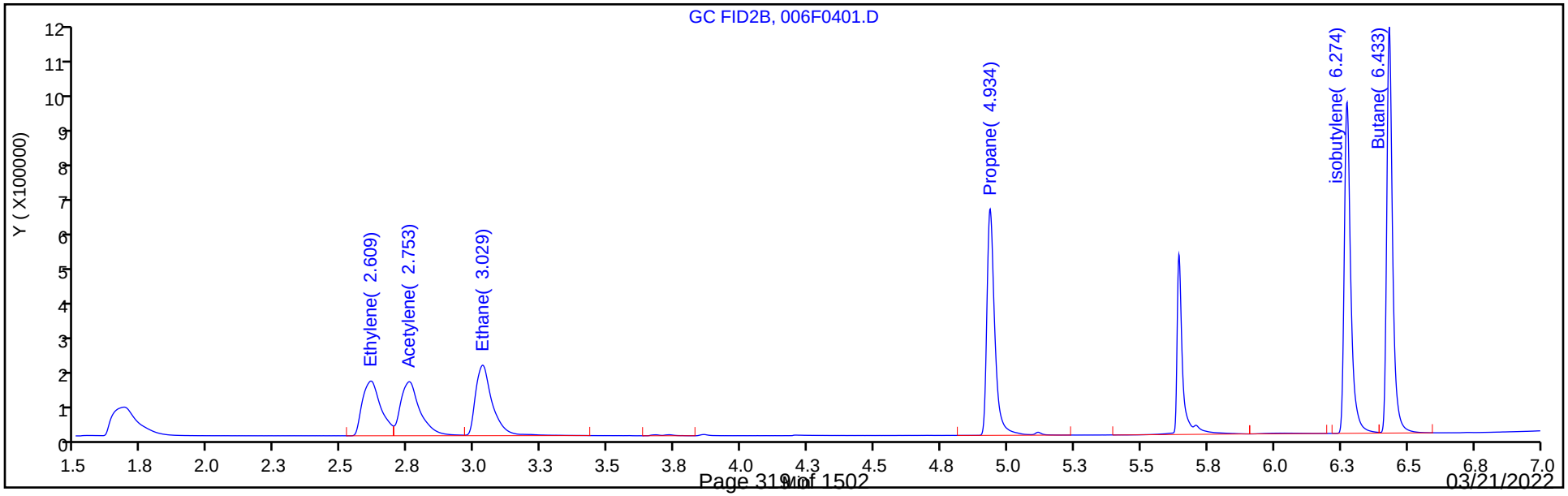
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D

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

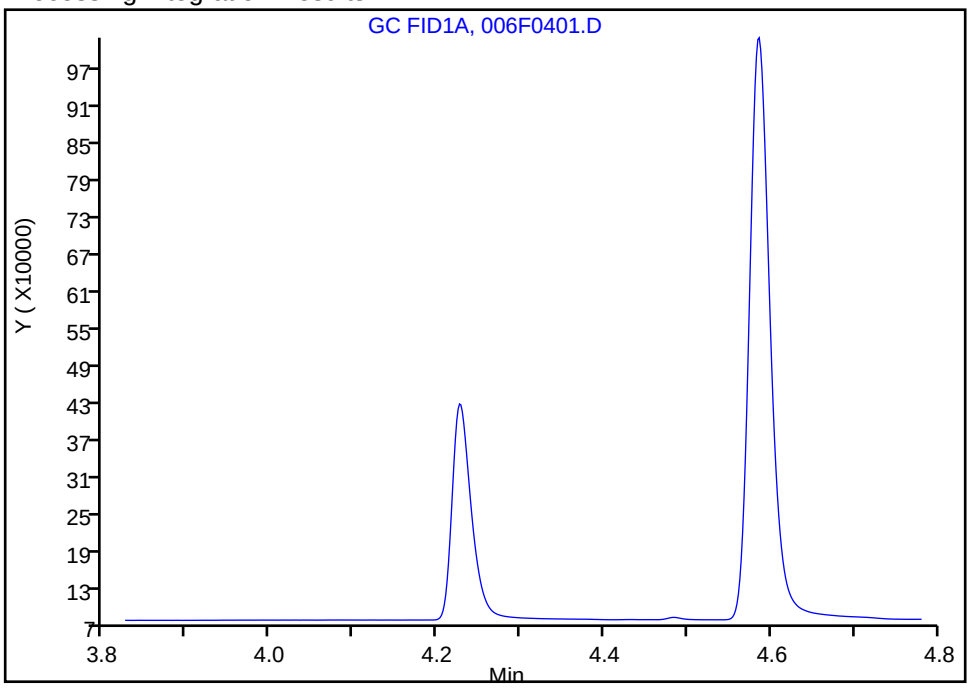
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D
Injection Date: 24-Sep-2021 13:54:46 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 6 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

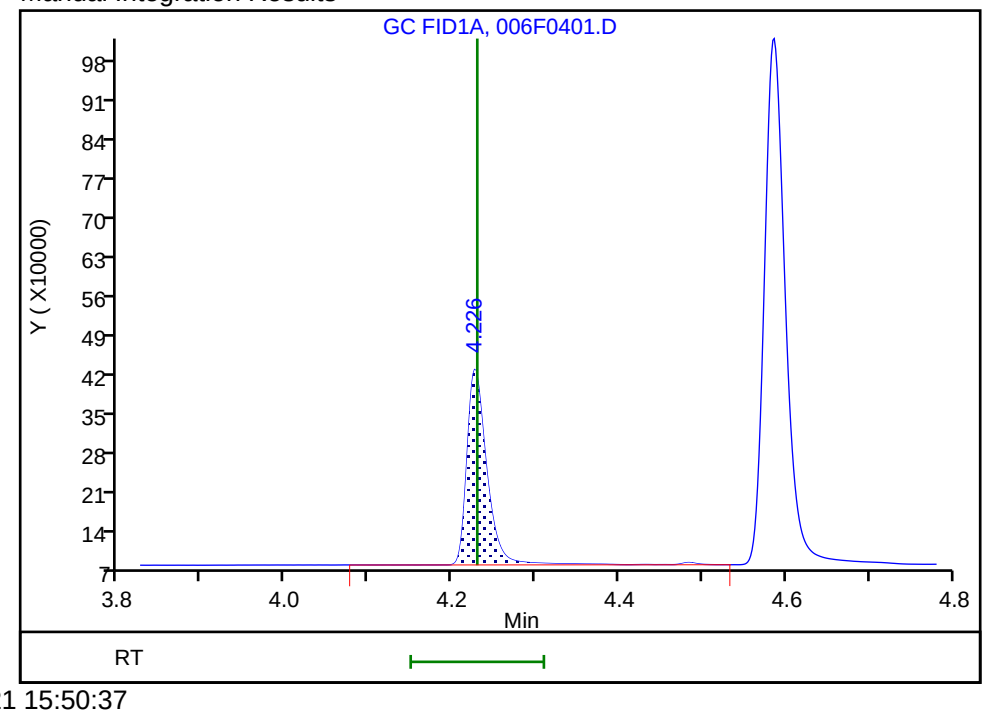
Not Detected
Expected RT: 4.23

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

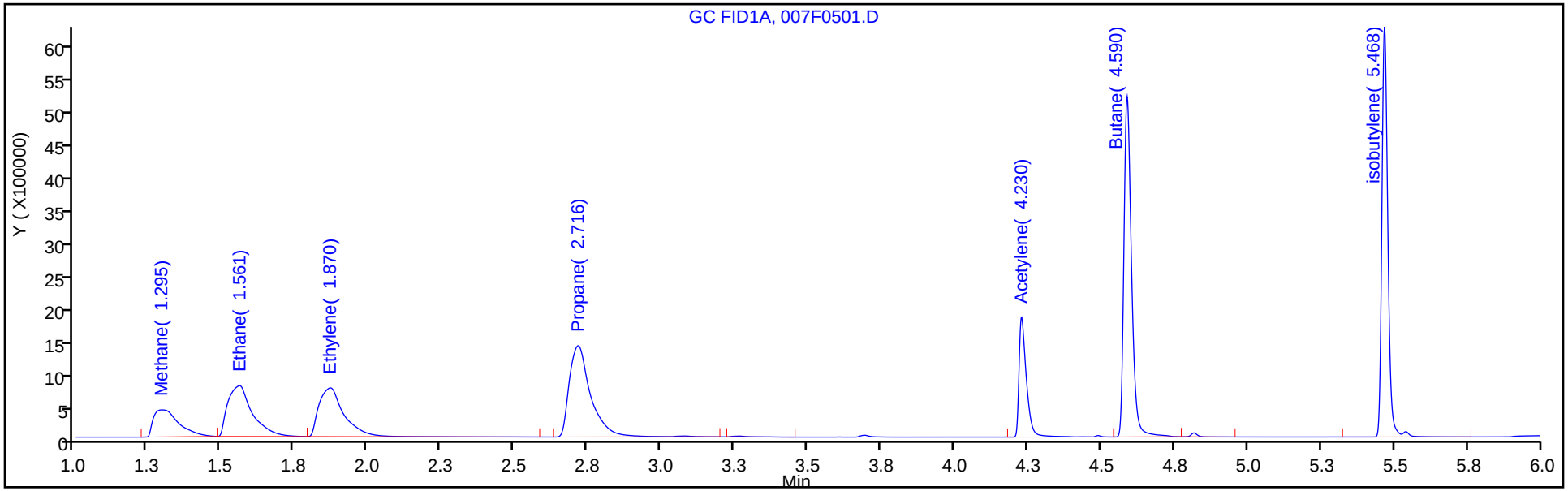
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

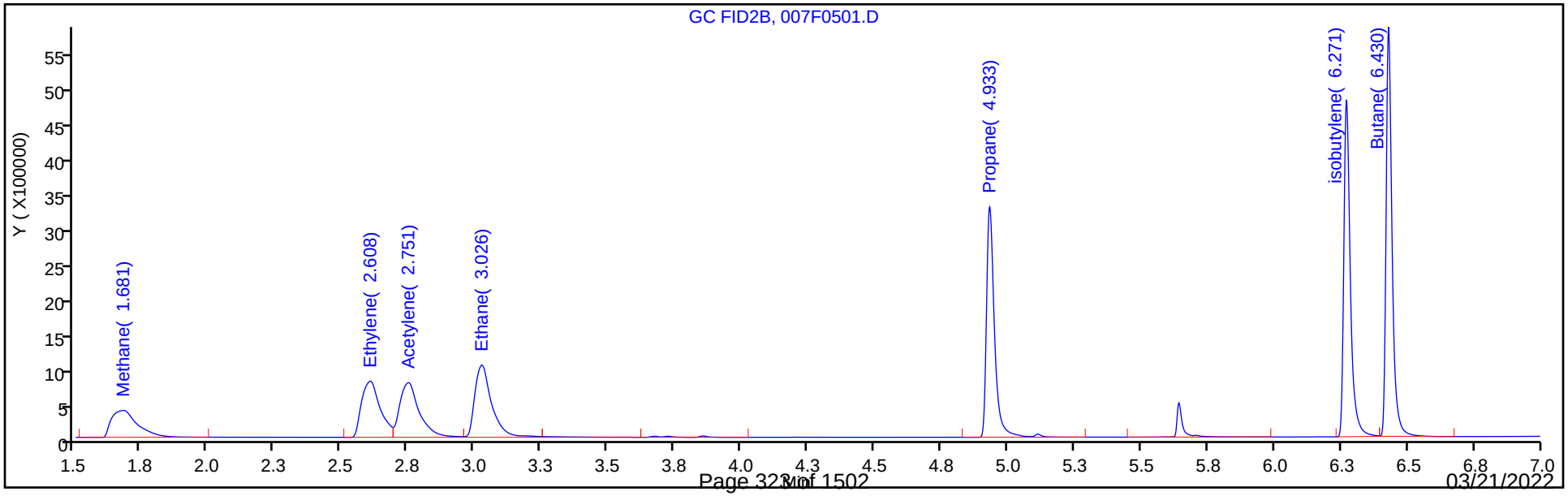
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D

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

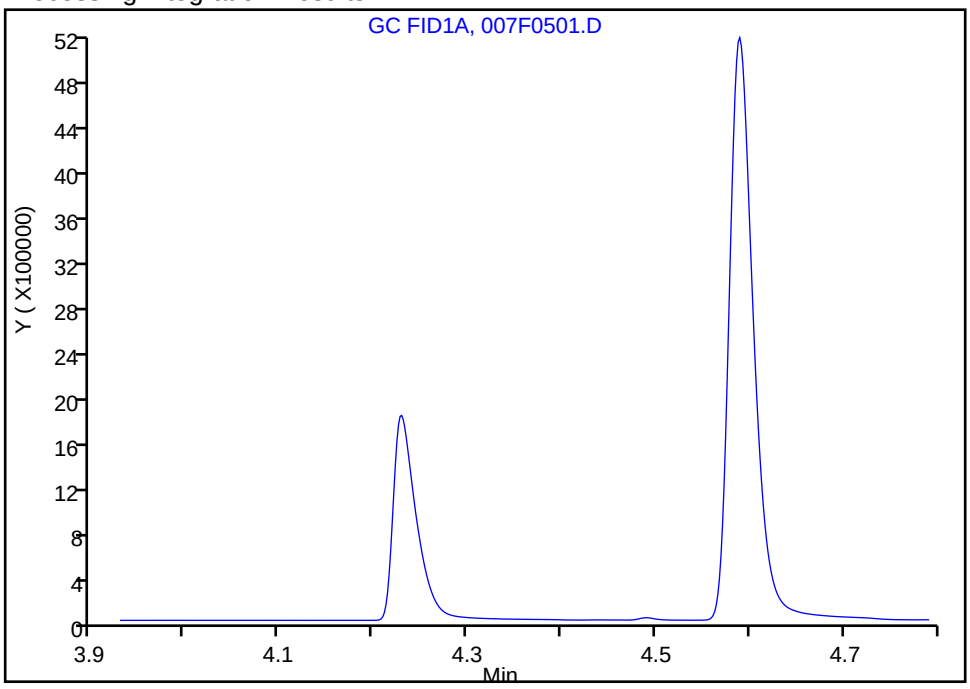
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

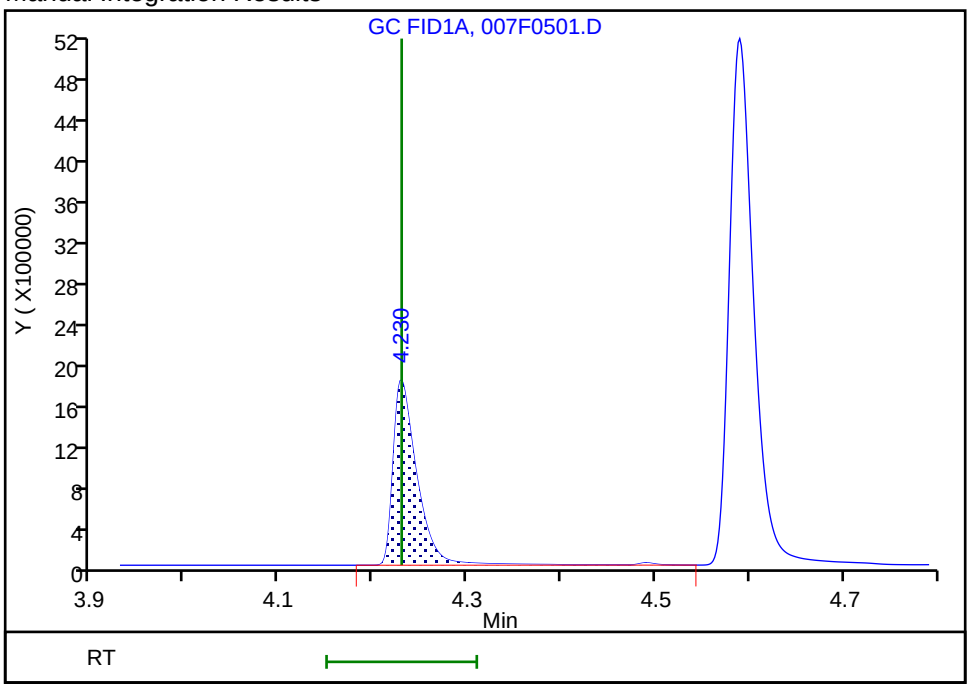
Not Detected
Expected RT: 4.23

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

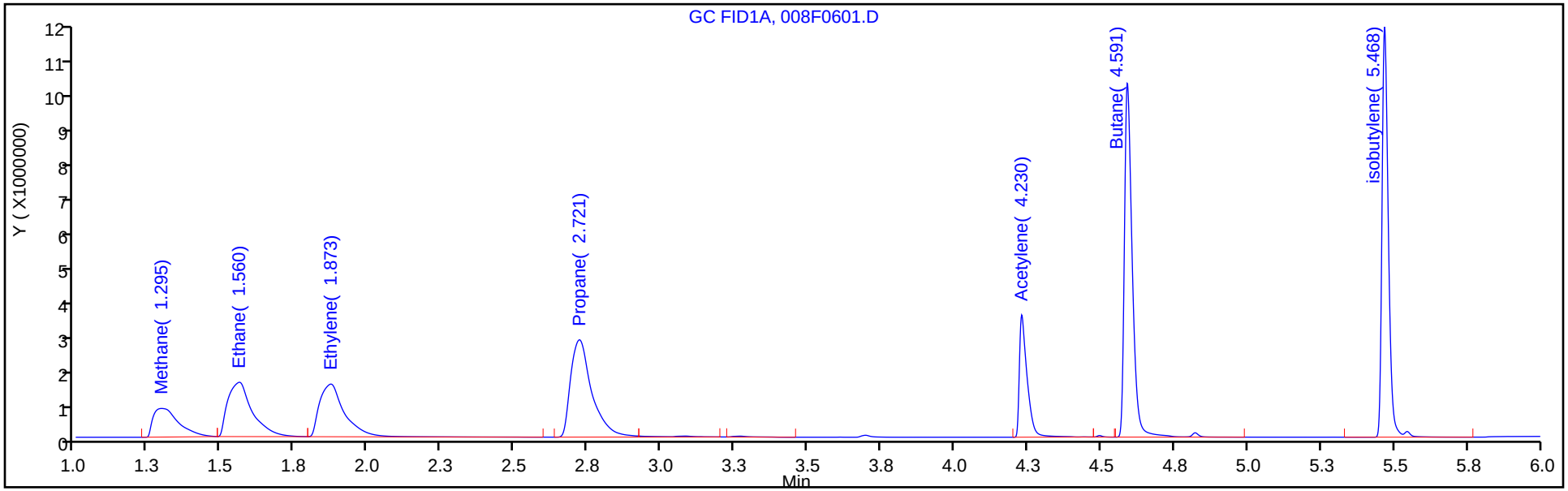
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

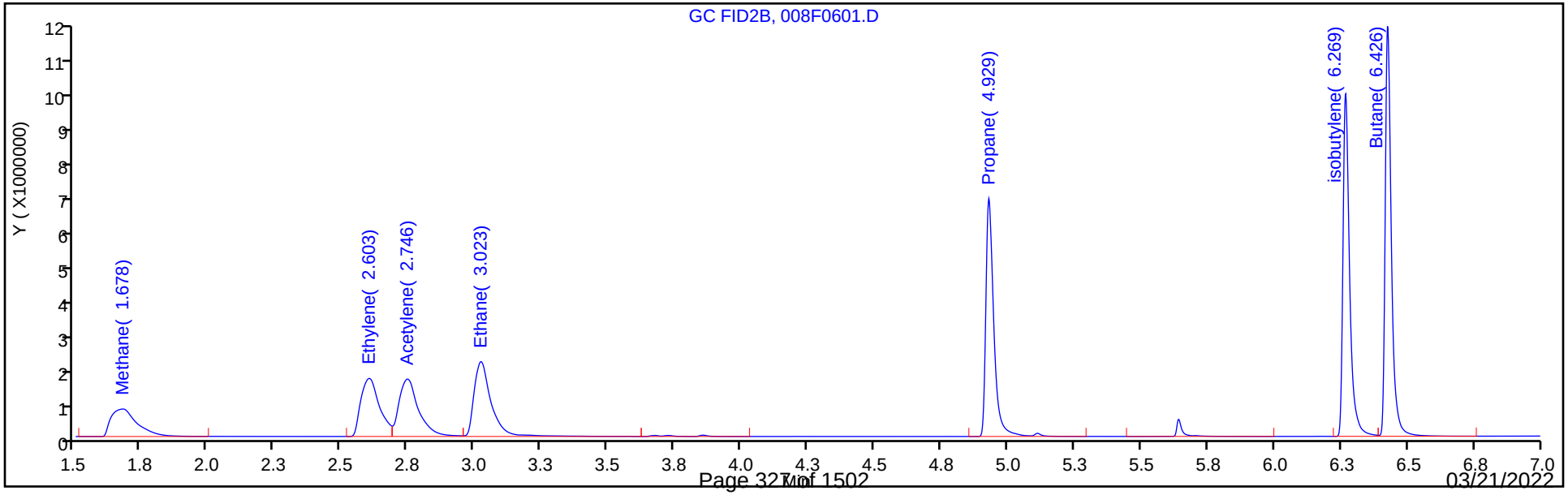
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D

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

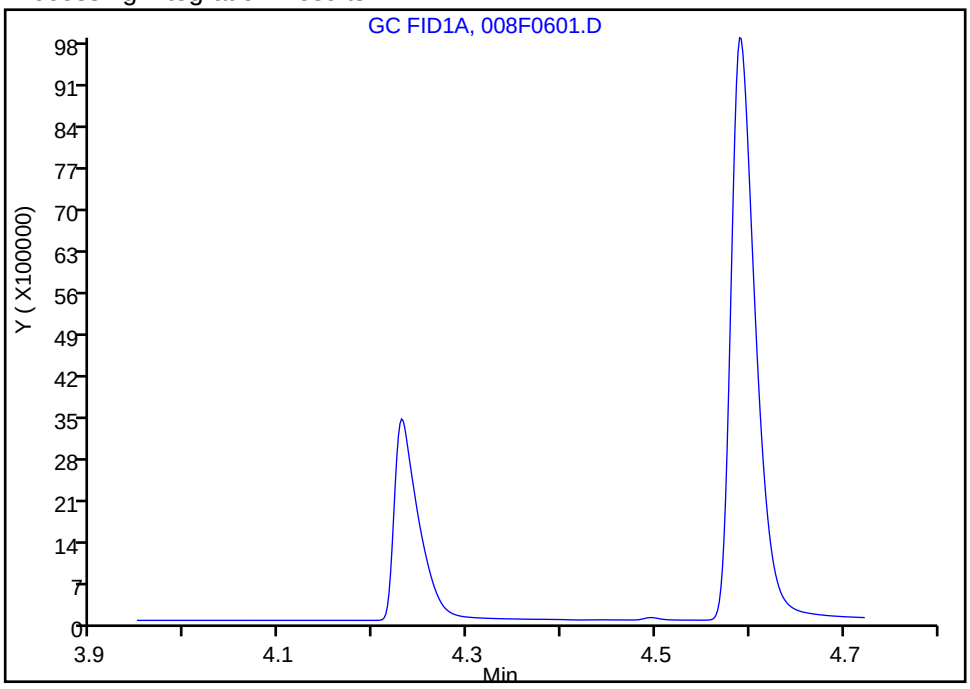
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D				
Injection Date:	24-Sep-2021 14:20:44	Instrument ID:	VGC_J		
Lims ID:	ic				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	8	Worklist Smp#:	6
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

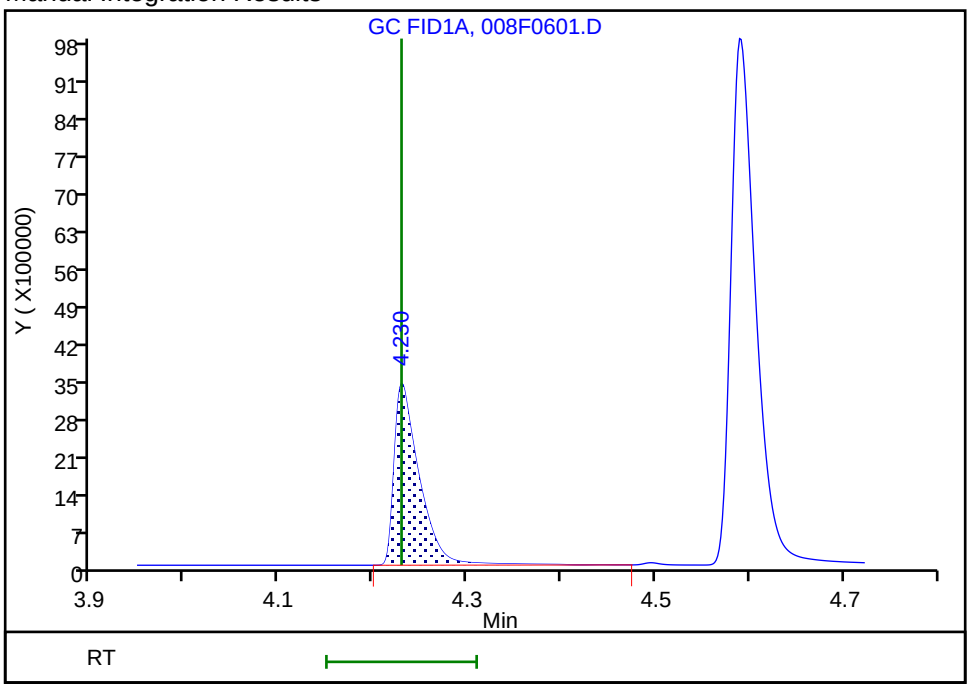
Not Detected
Expected RT: 4.23

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

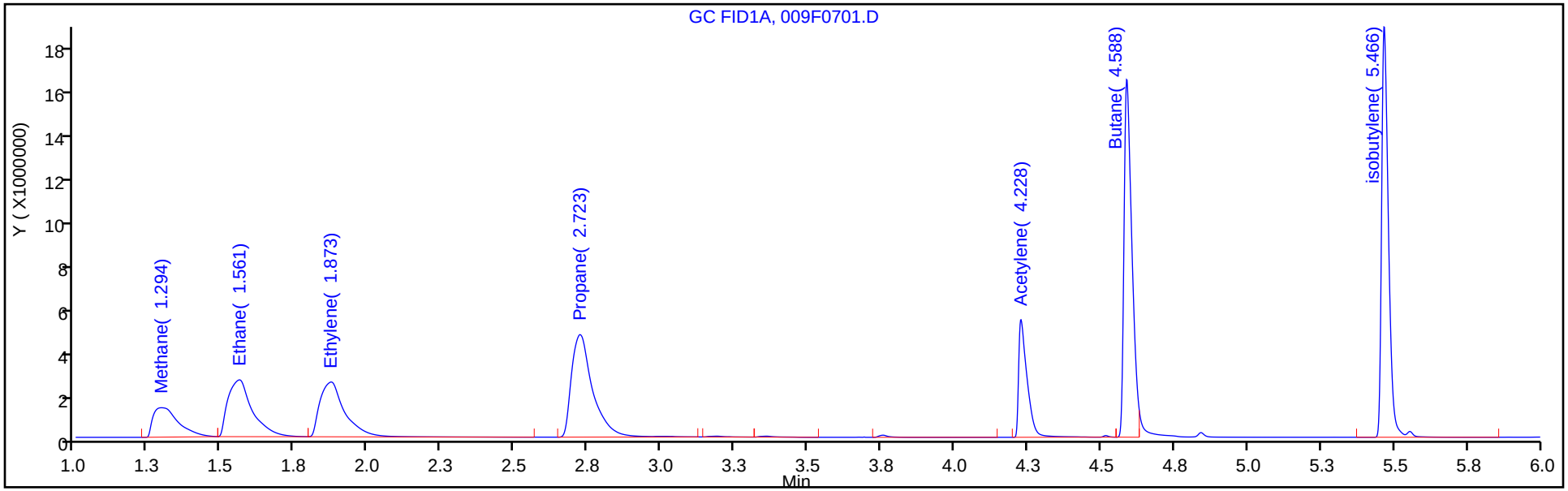
Report Date: 29-Sep-2021 10:55:16 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

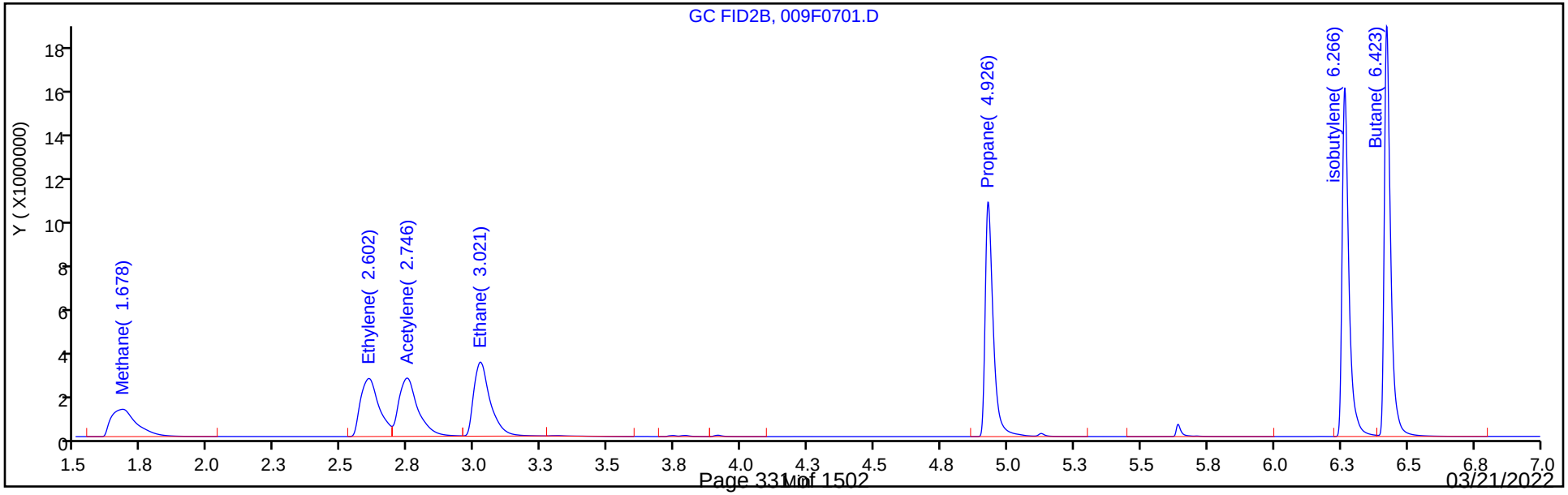
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D

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

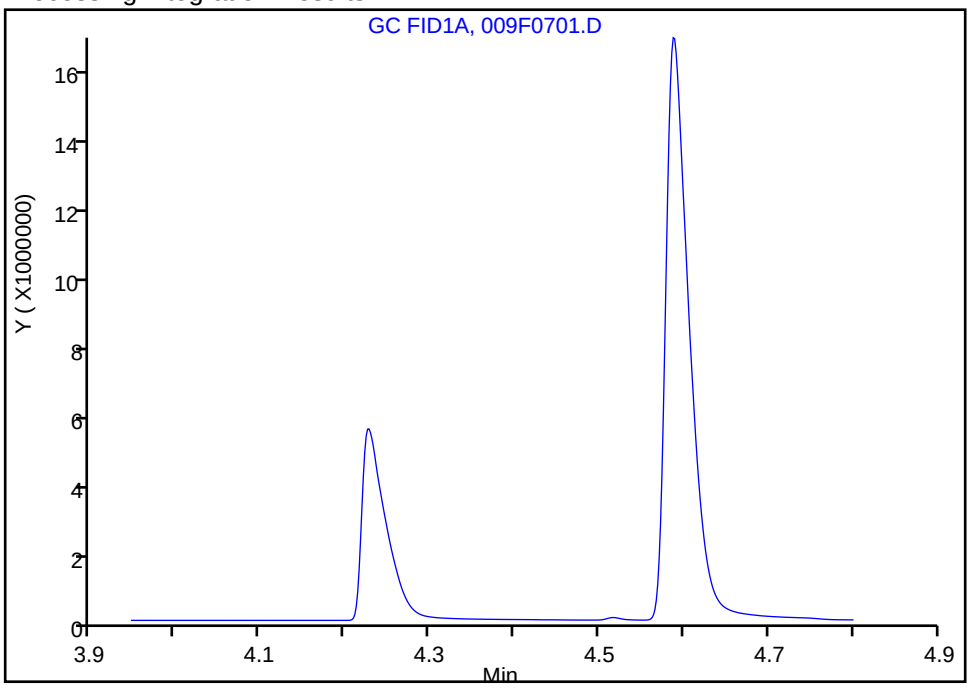
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D
Injection Date: 24-Sep-2021 14:33:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 9 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

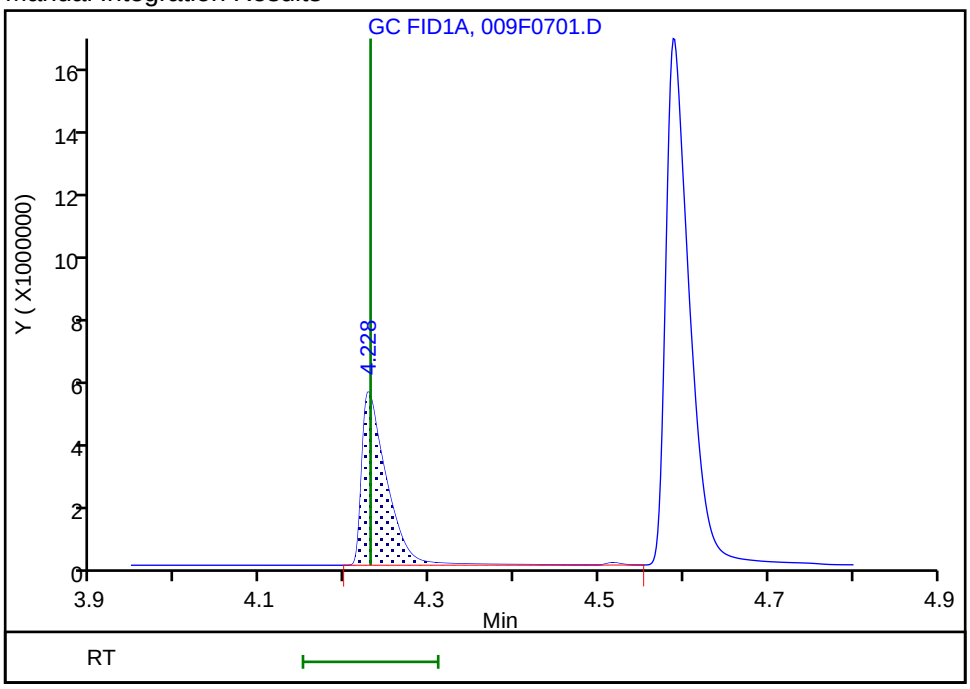
Not Detected
Expected RT: 4.23

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

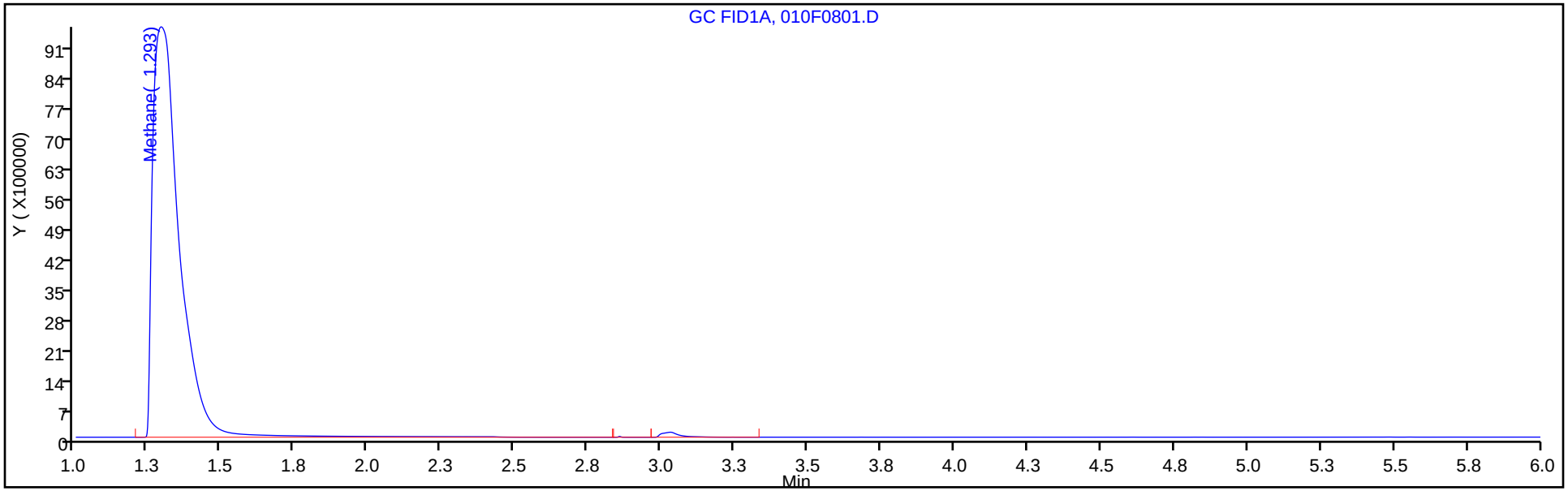
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

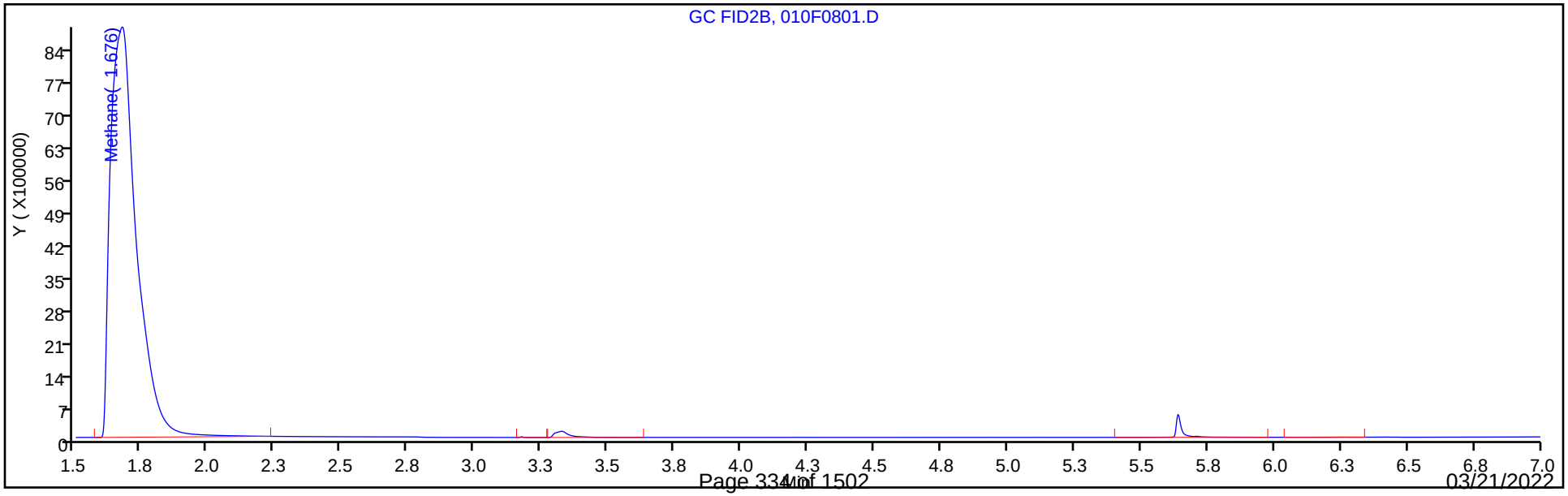
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\010F0801.D

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

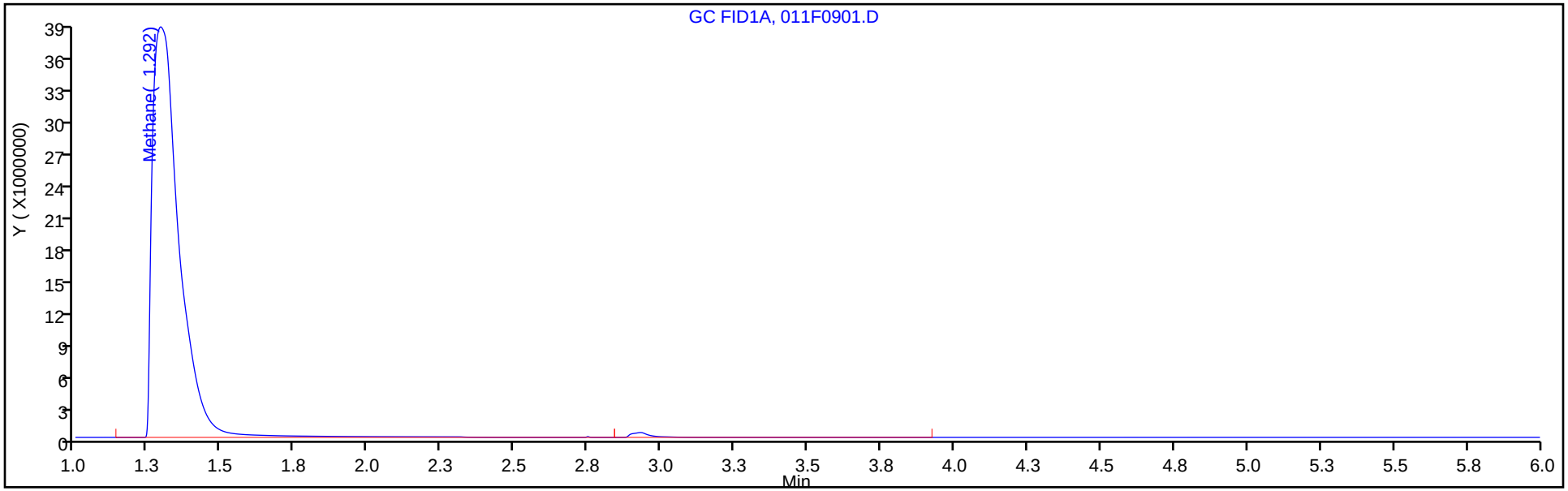
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

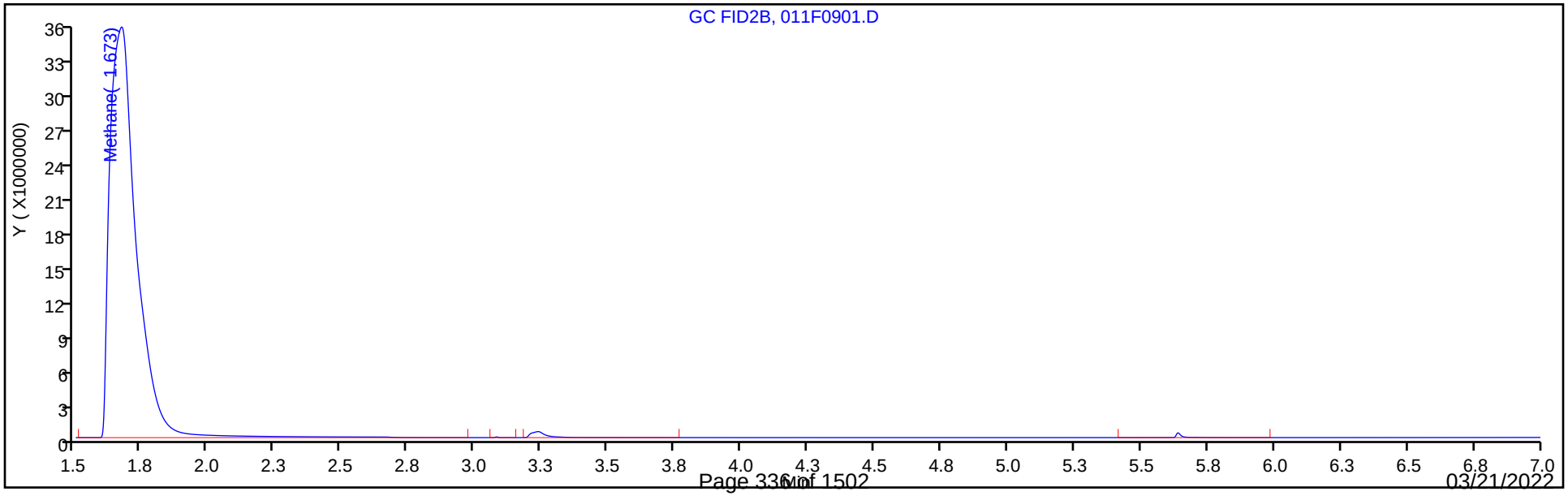
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\011F0901.D

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

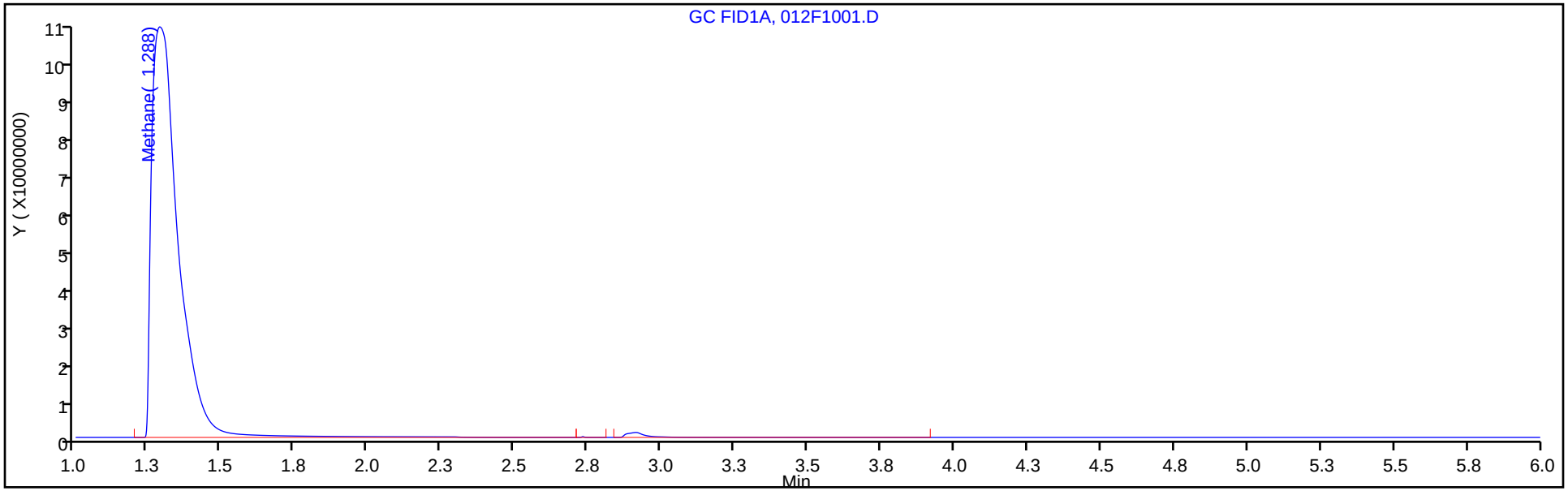
Report Date: 29-Sep-2021 10:55:18 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

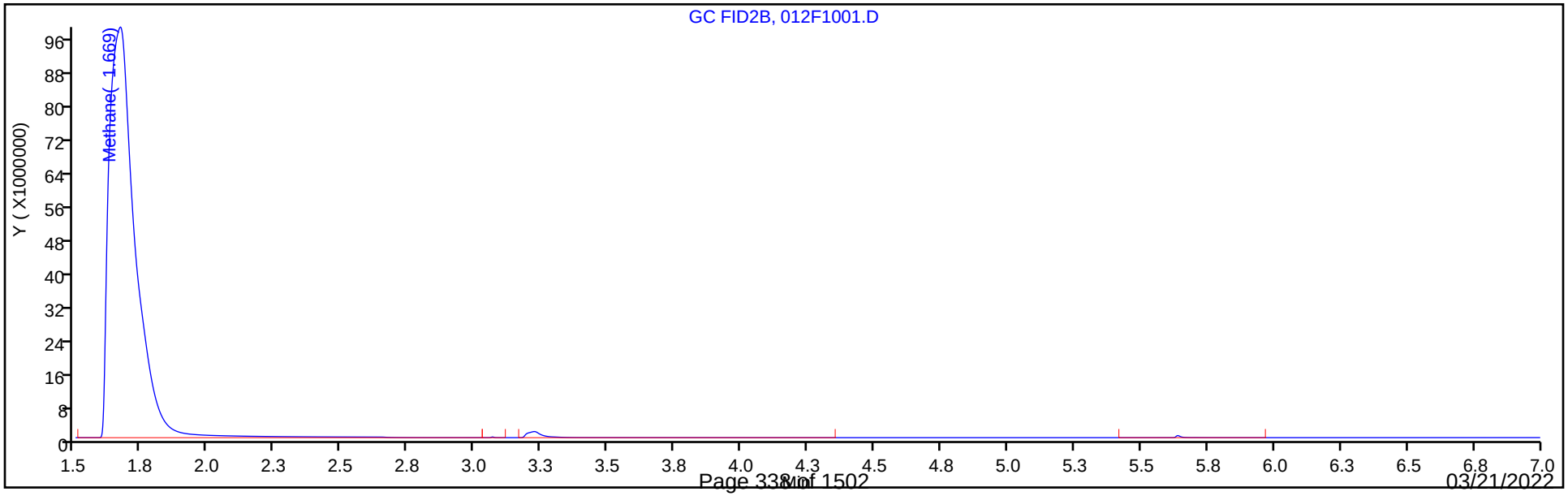
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

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

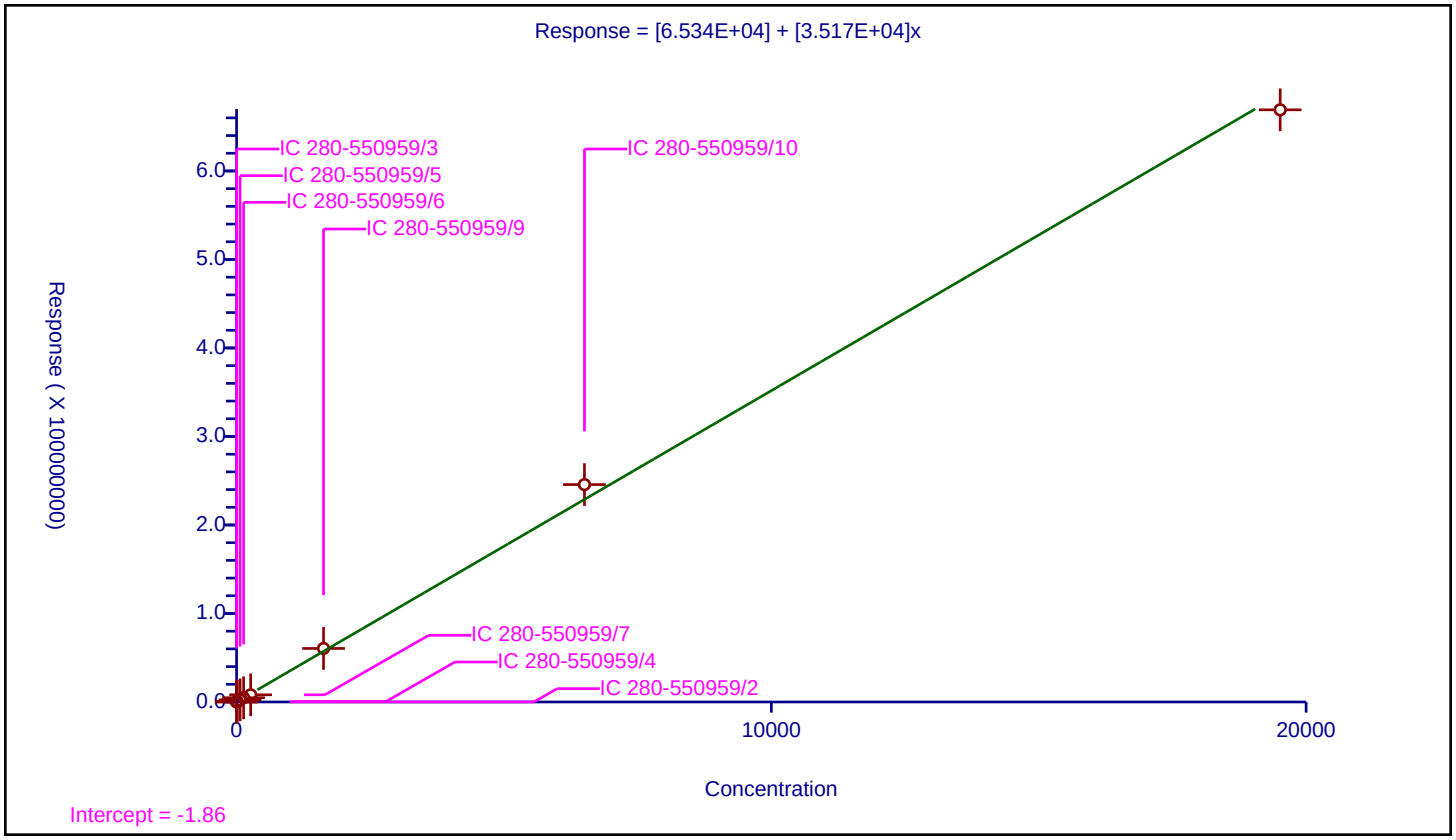
Curve Coefficients

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

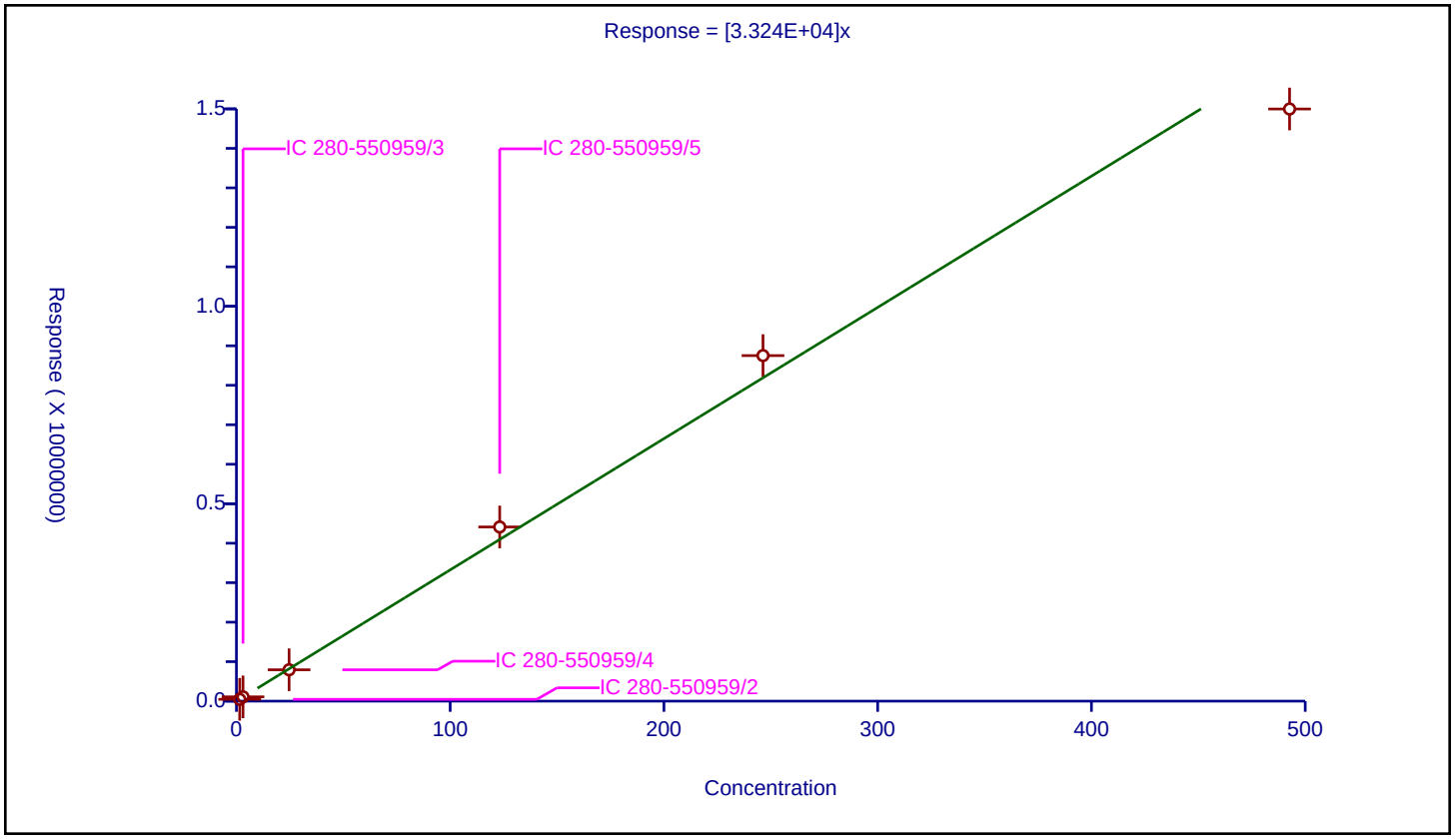
Curve Coefficients

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

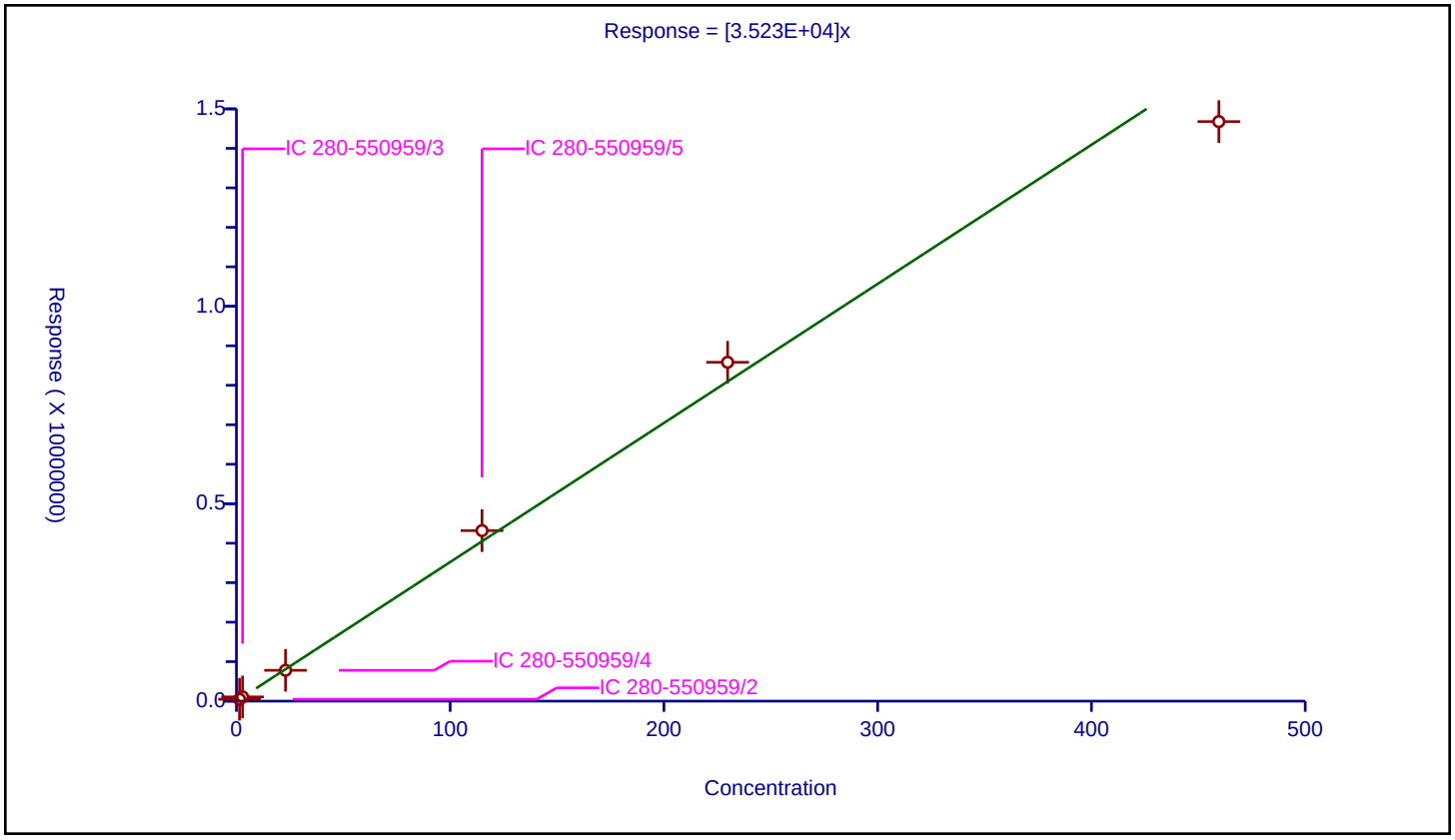
Curve Coefficients

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

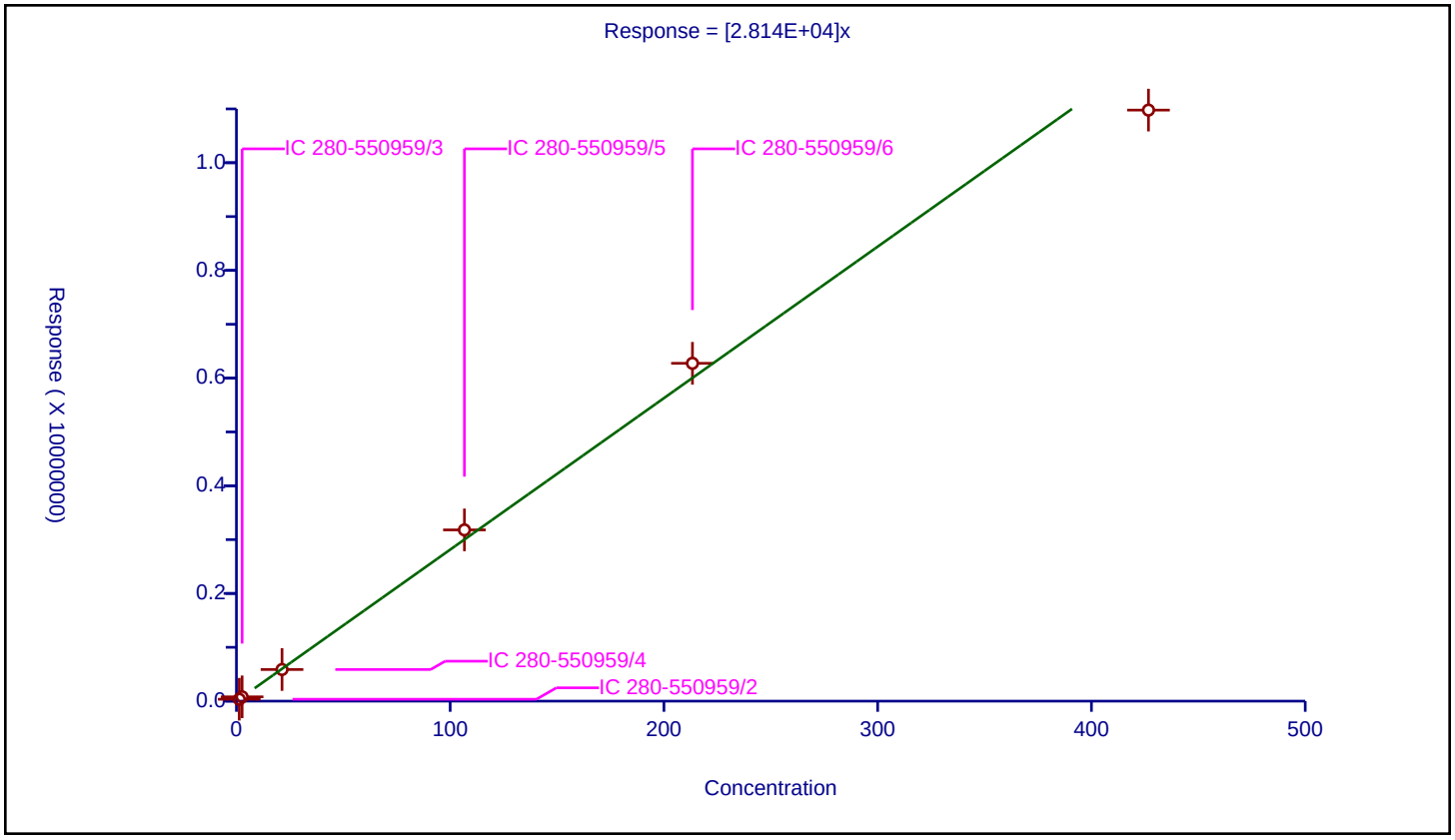
Curve Coefficients

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.: 280-159332-1 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.: 280-159332-1 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.: 280-159332-1 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

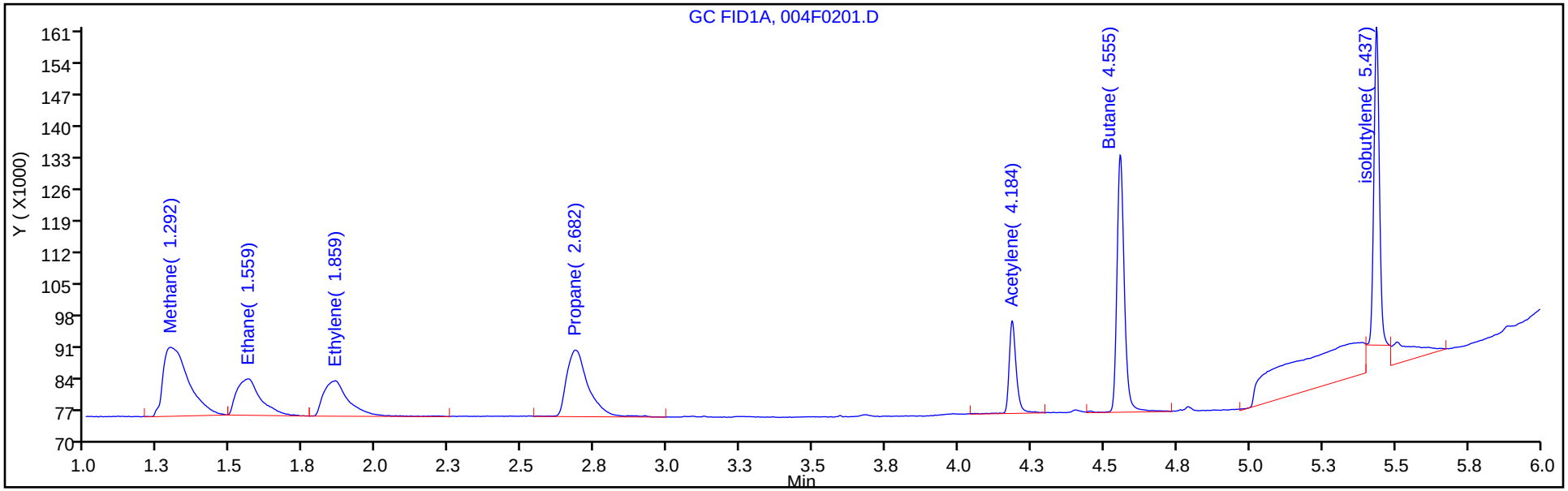
Report Date: 29-Sep-2021 10:55:12 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

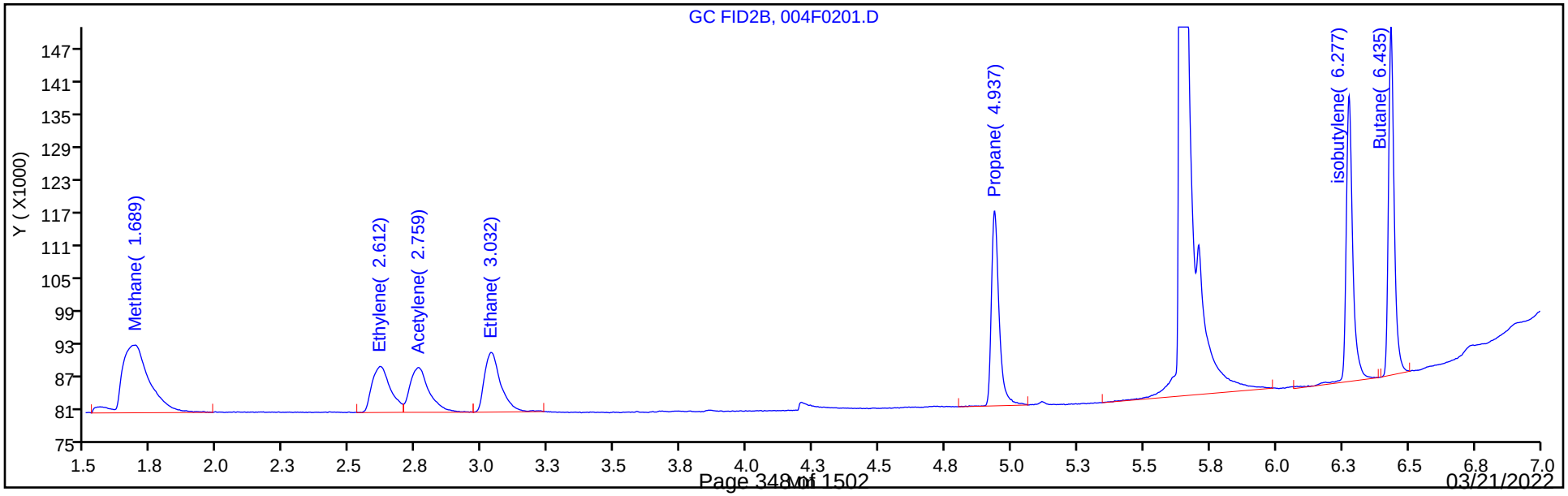
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D

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

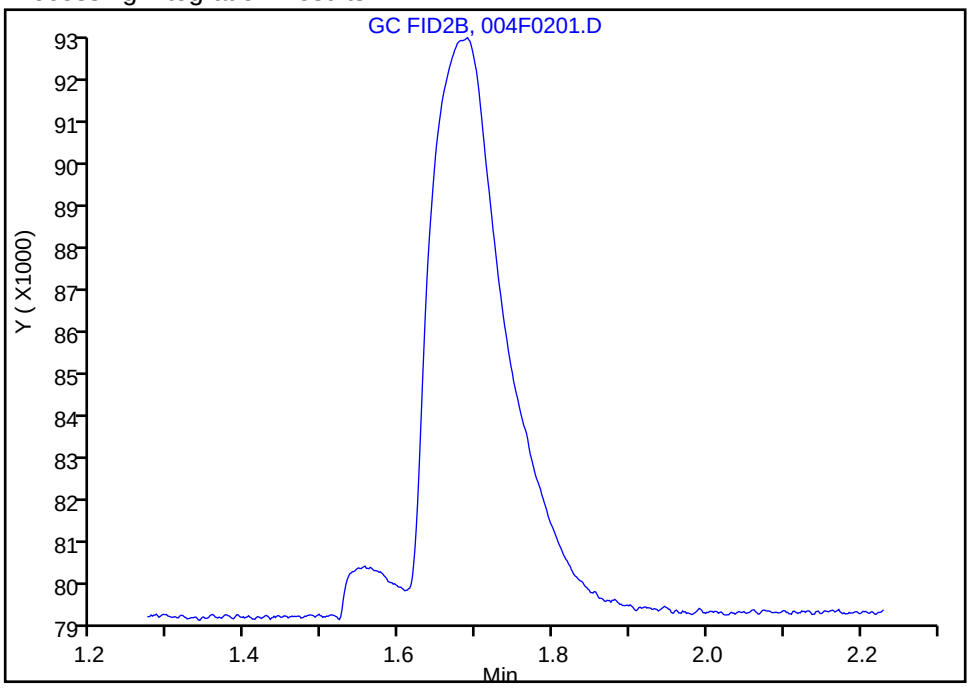
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

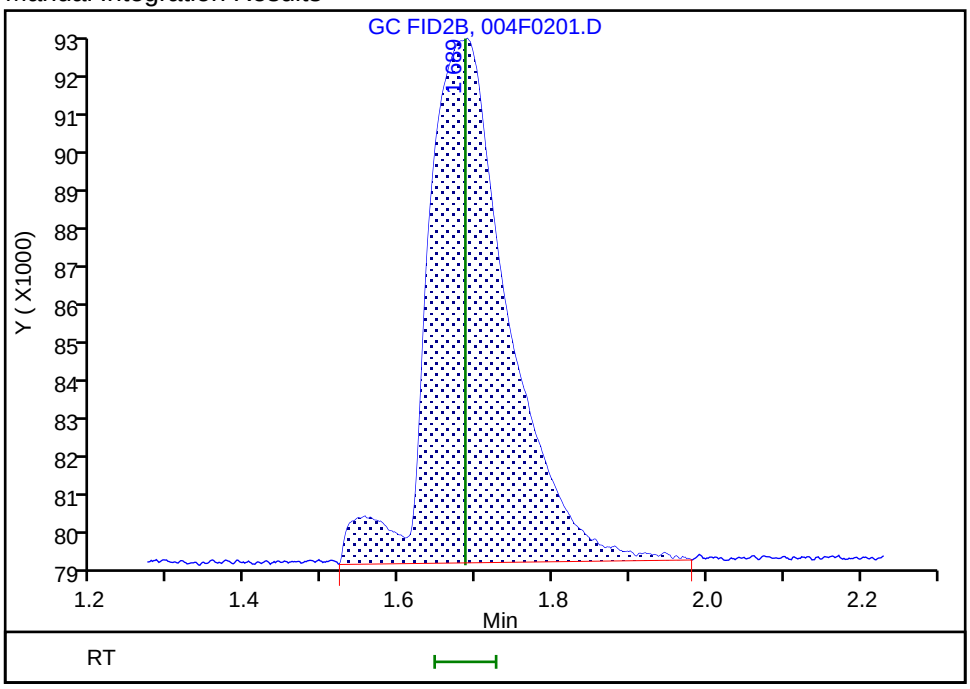
Not Detected
Expected RT: 1.69

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

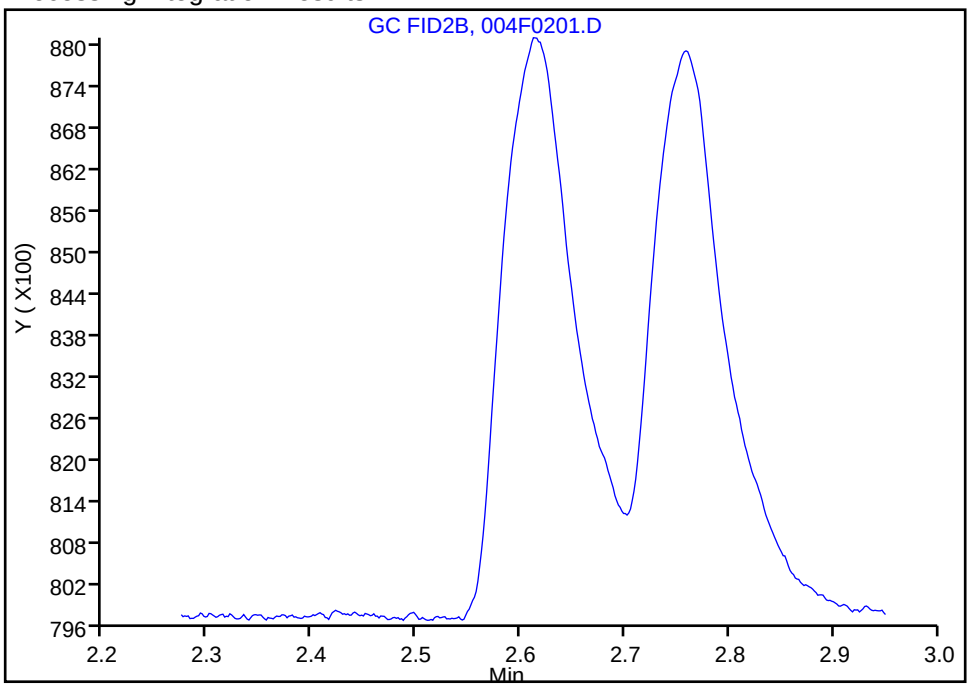
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

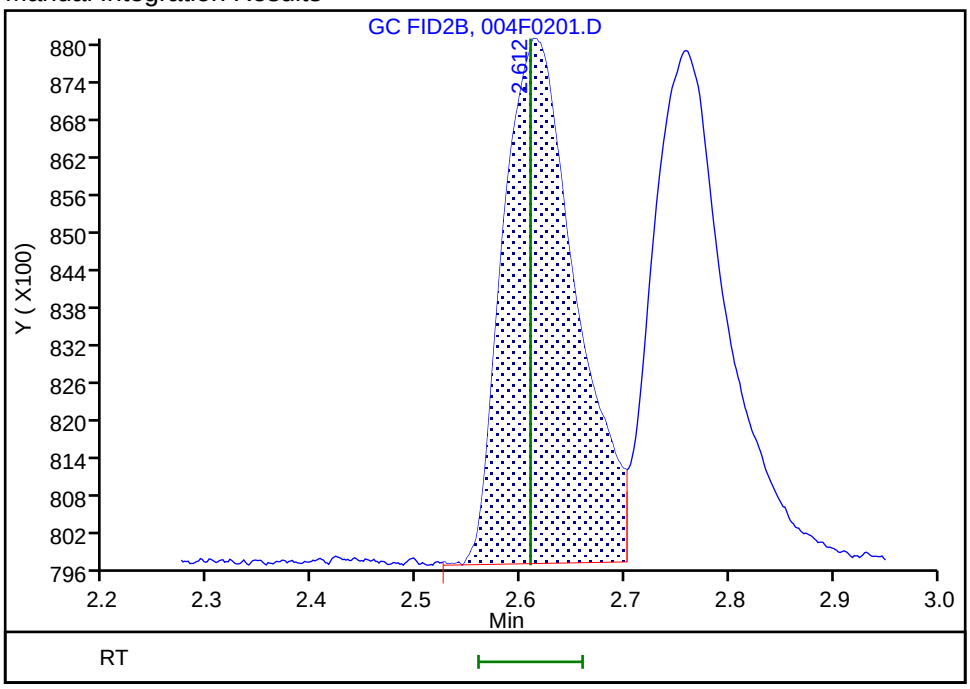
Not Detected
Expected RT: 2.61

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

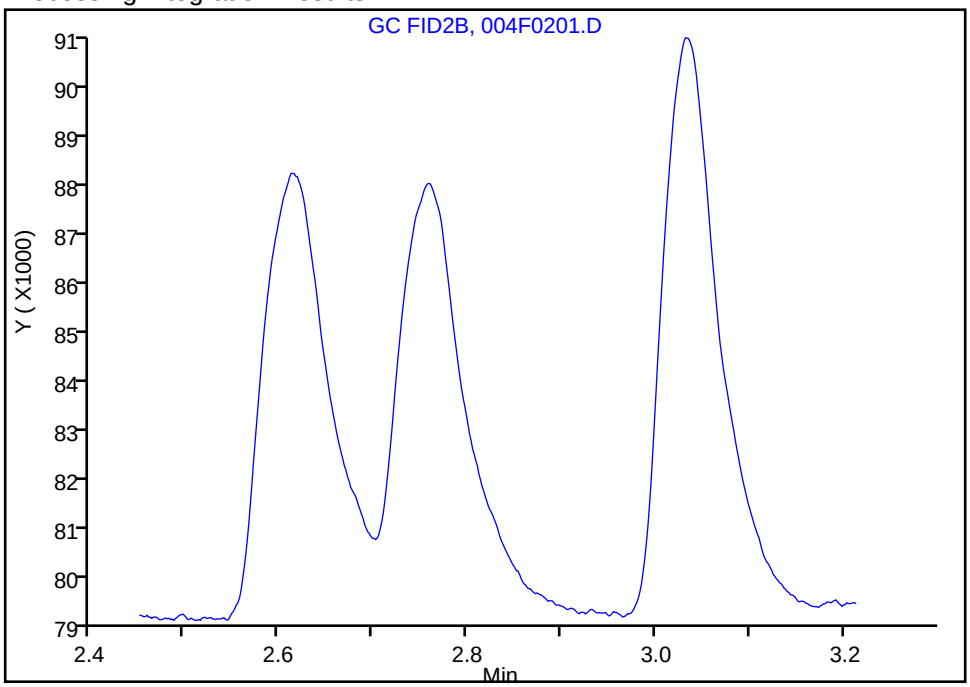
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

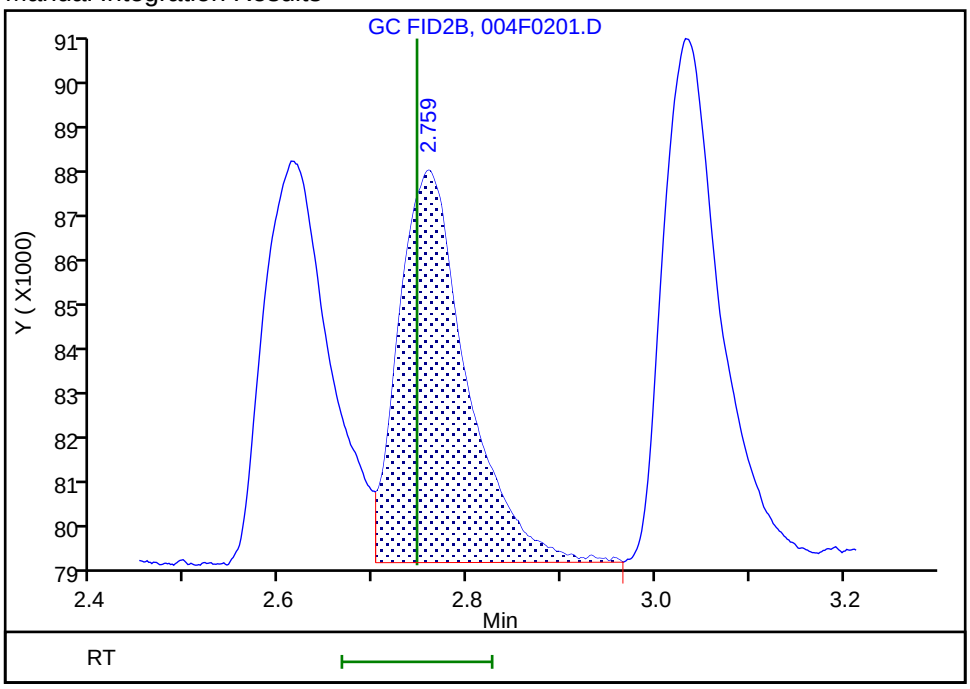
Not Detected
Expected RT: 2.75

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

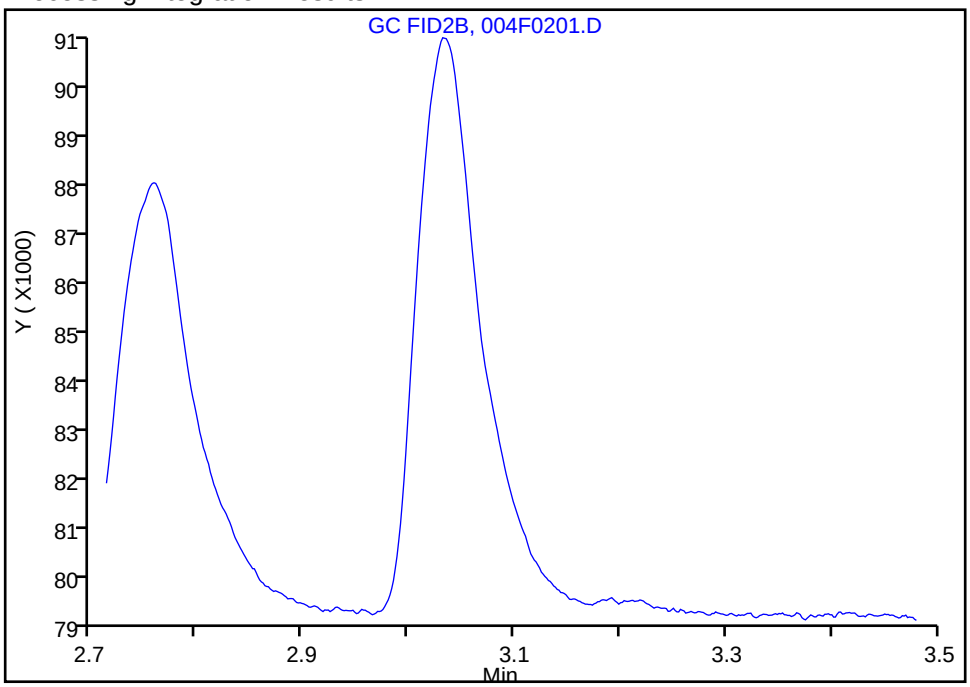
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

3 Ethane, CAS: 74-84-0

Signal: 2

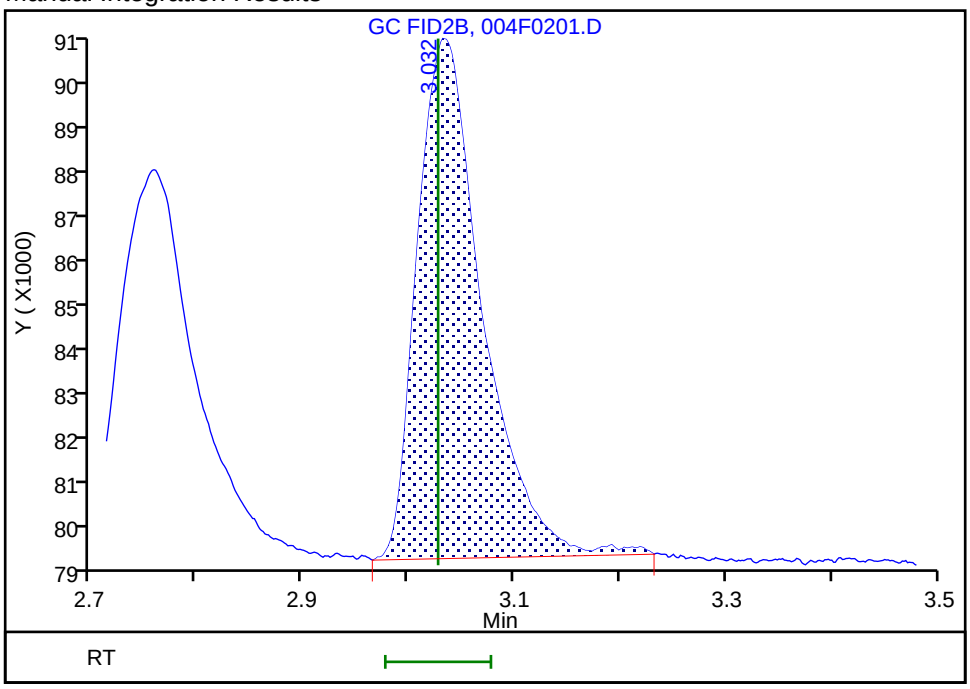
Not Detected
Expected RT: 3.03

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

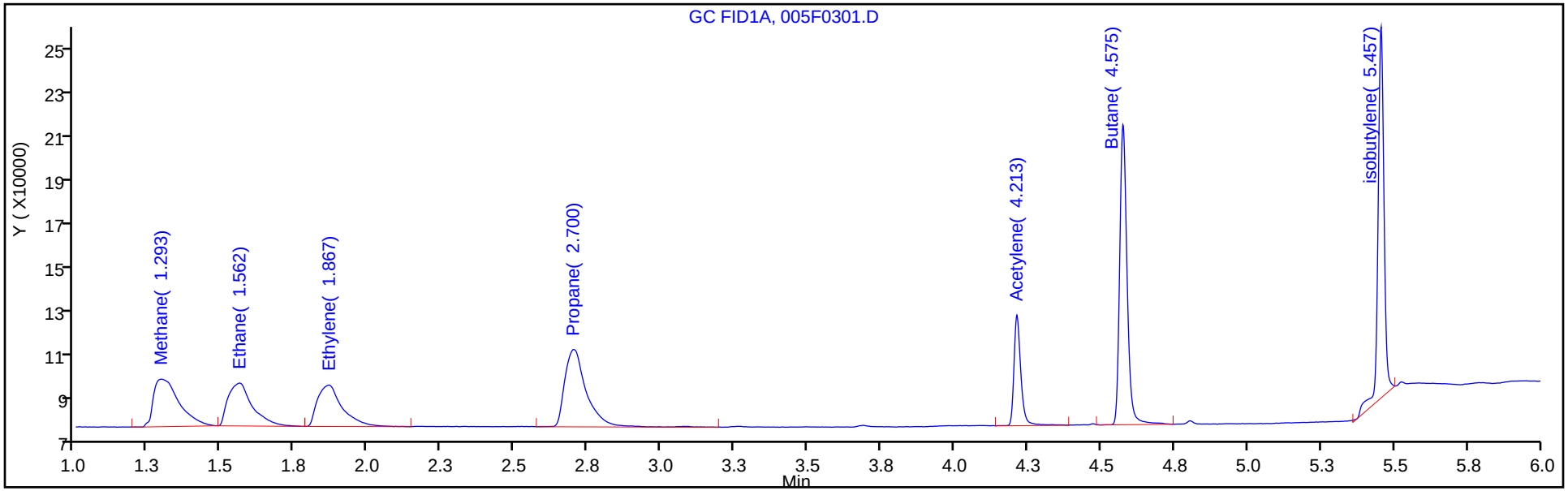
Report Date: 29-Sep-2021 10:55:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

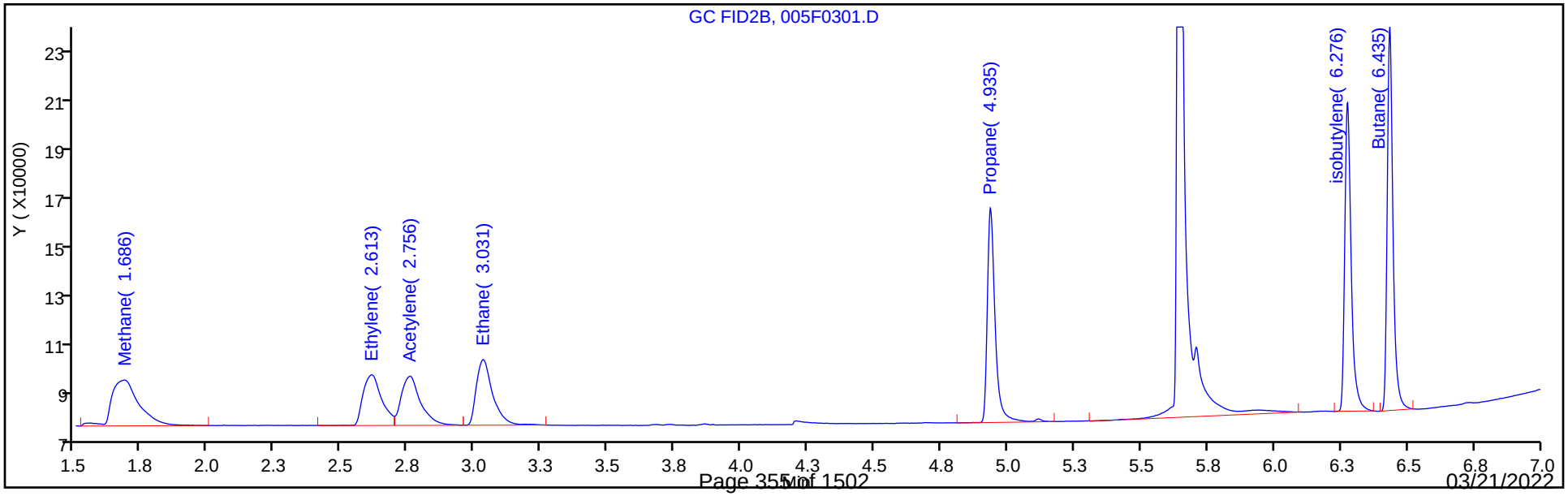
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\005F0301.D

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

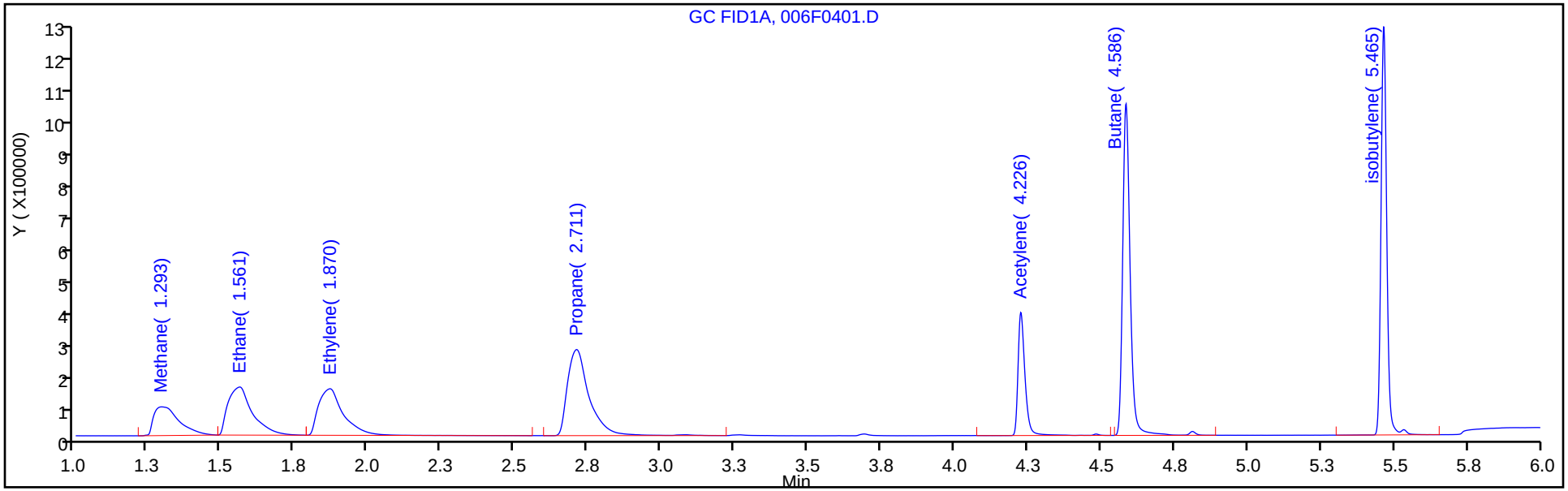
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

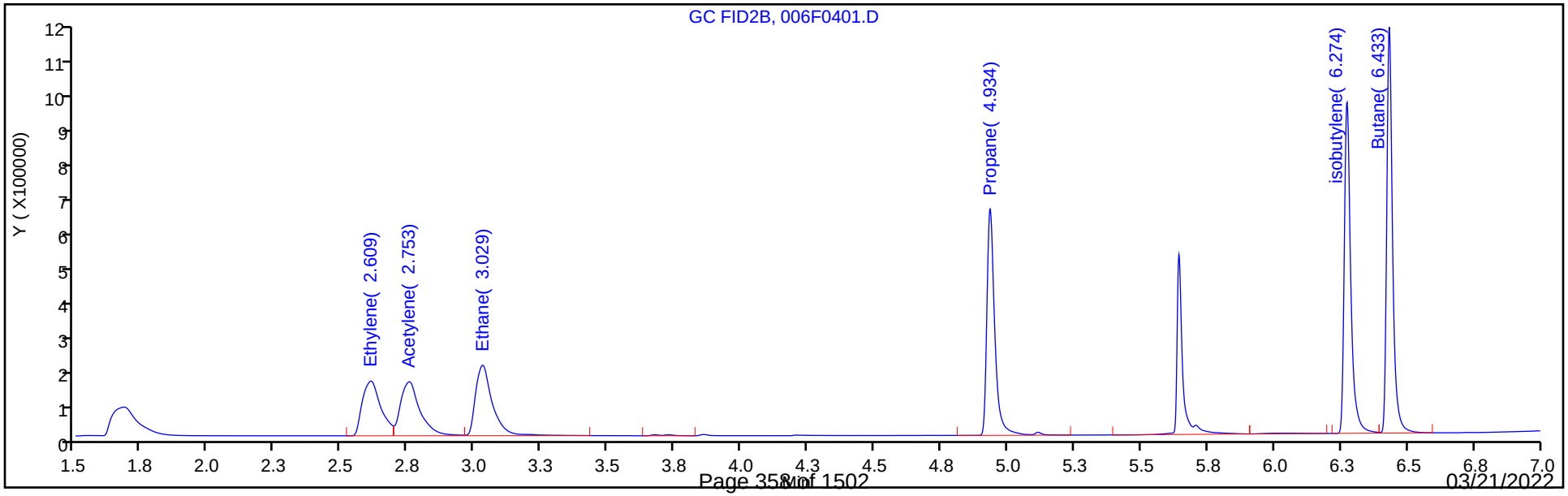
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D

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

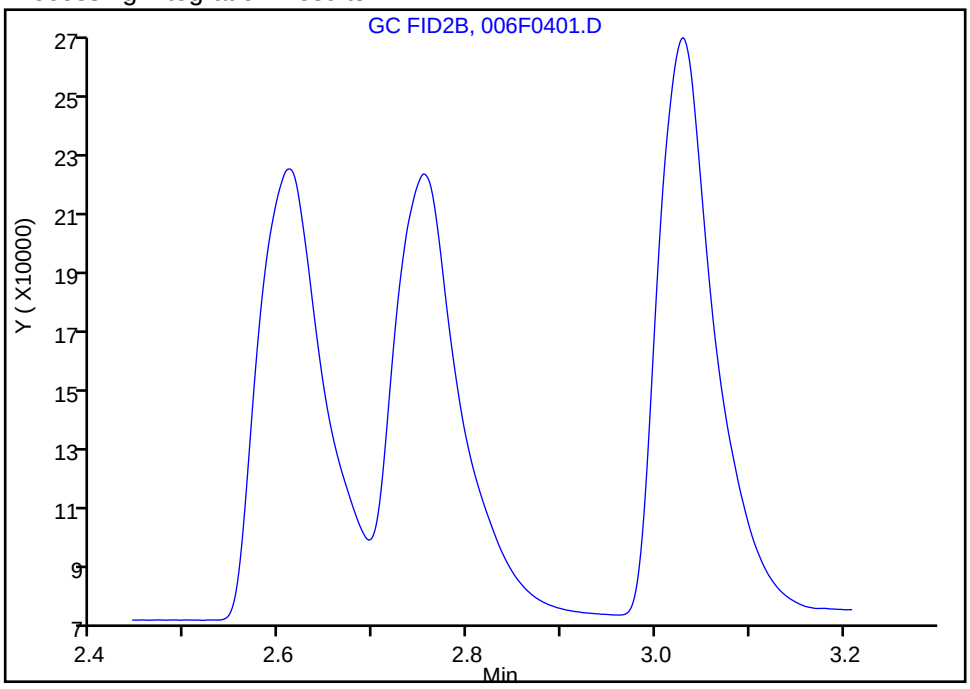
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D
Injection Date: 24-Sep-2021 13:54:46 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 6 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

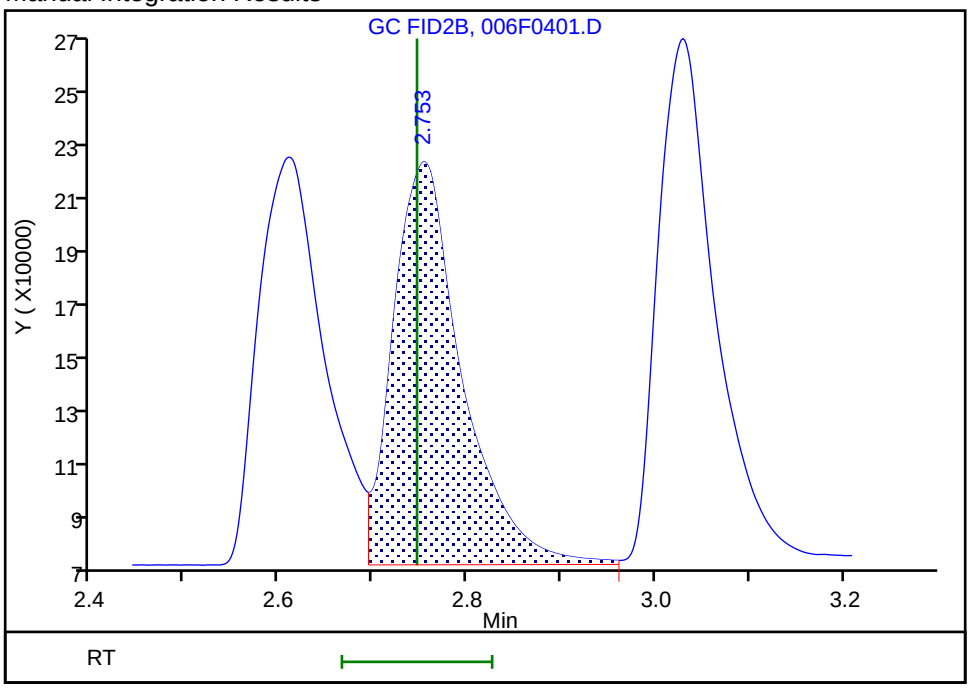
Not Detected
Expected RT: 2.75

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

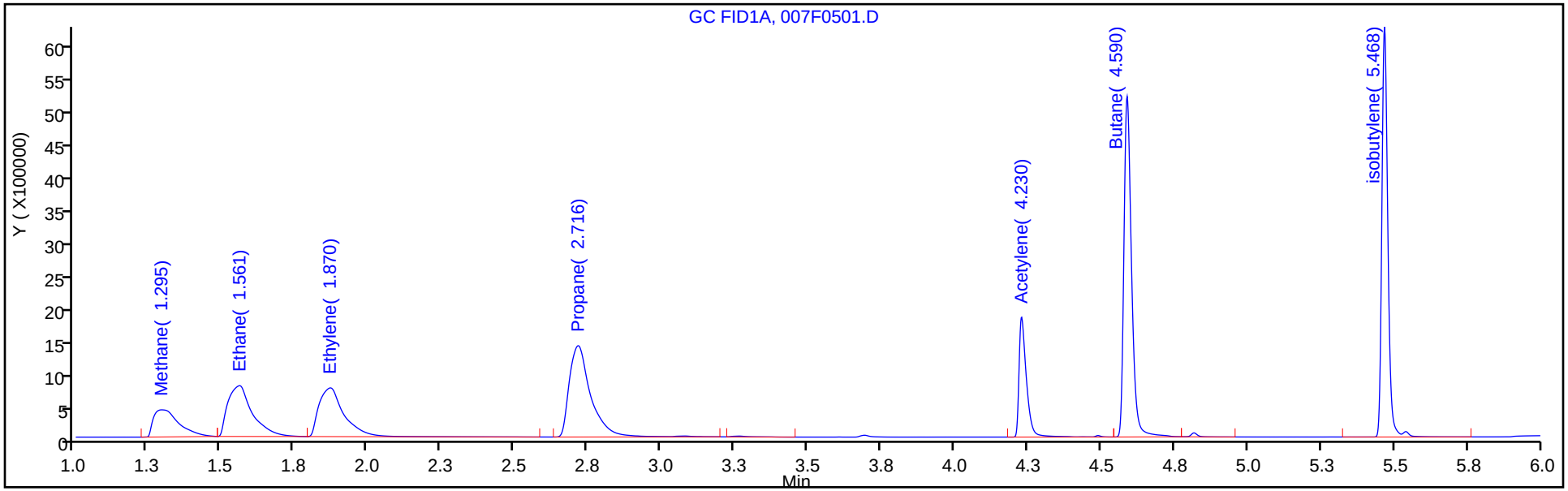
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

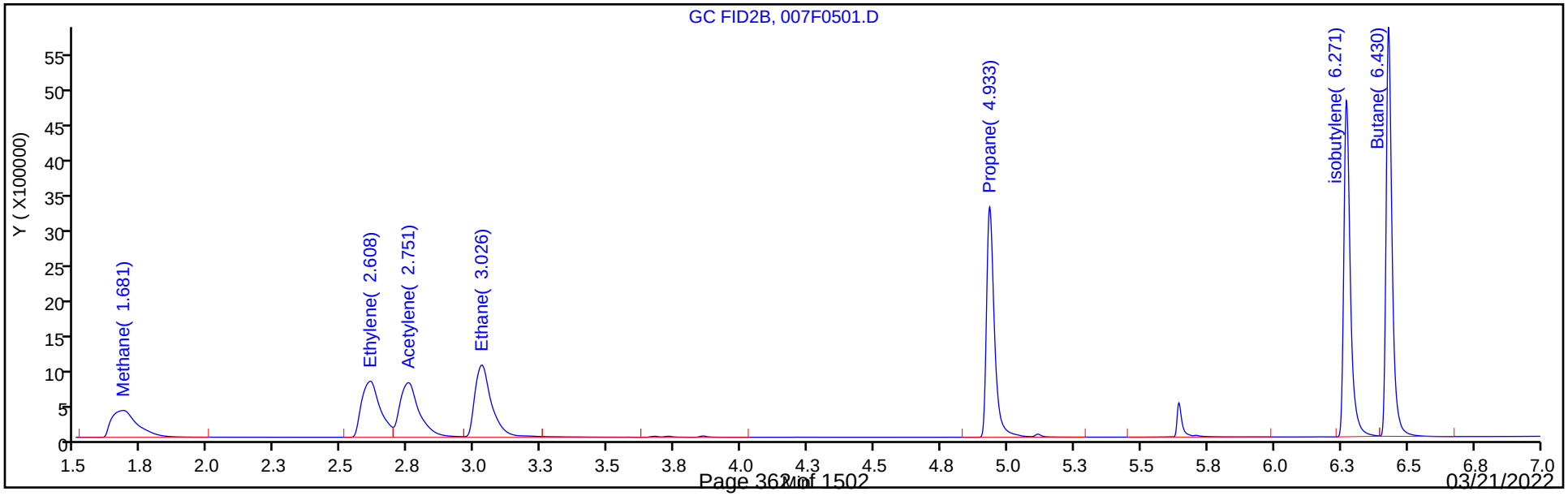
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D

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

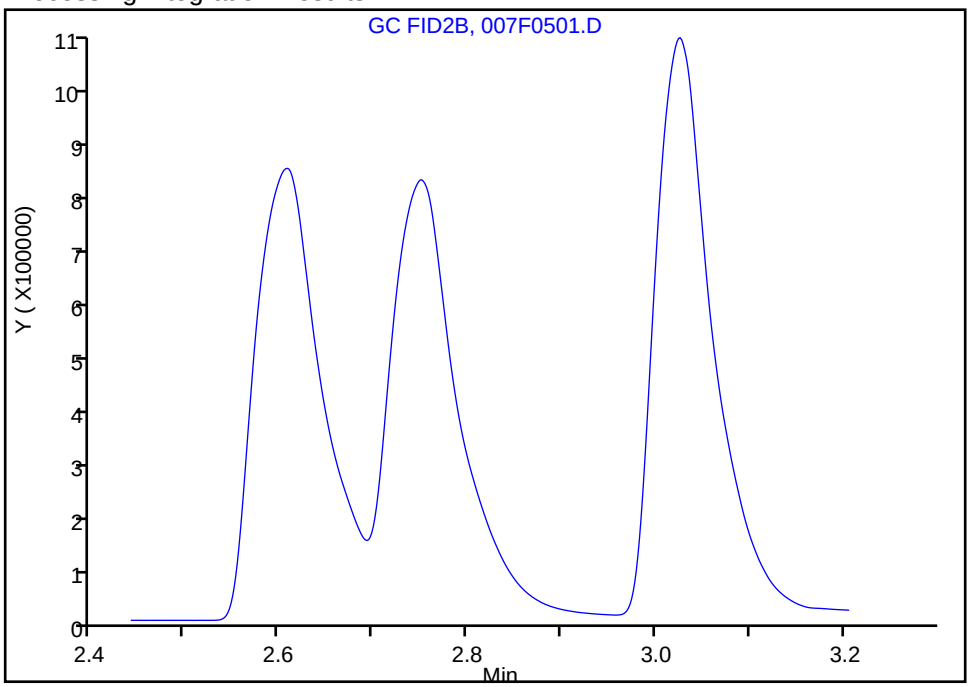
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

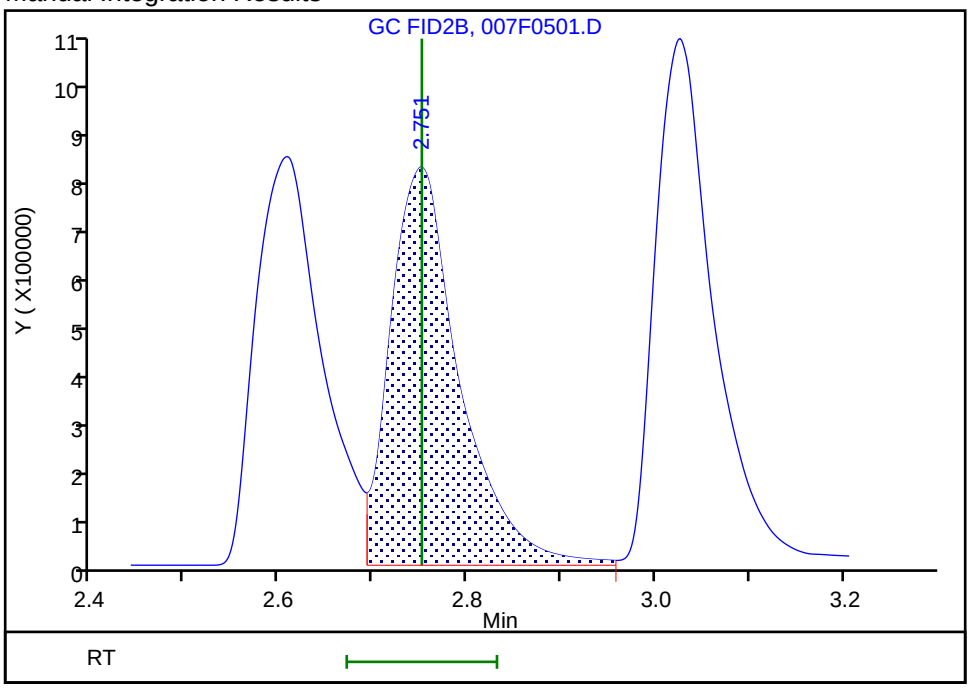
Not Detected
Expected RT: 2.75

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

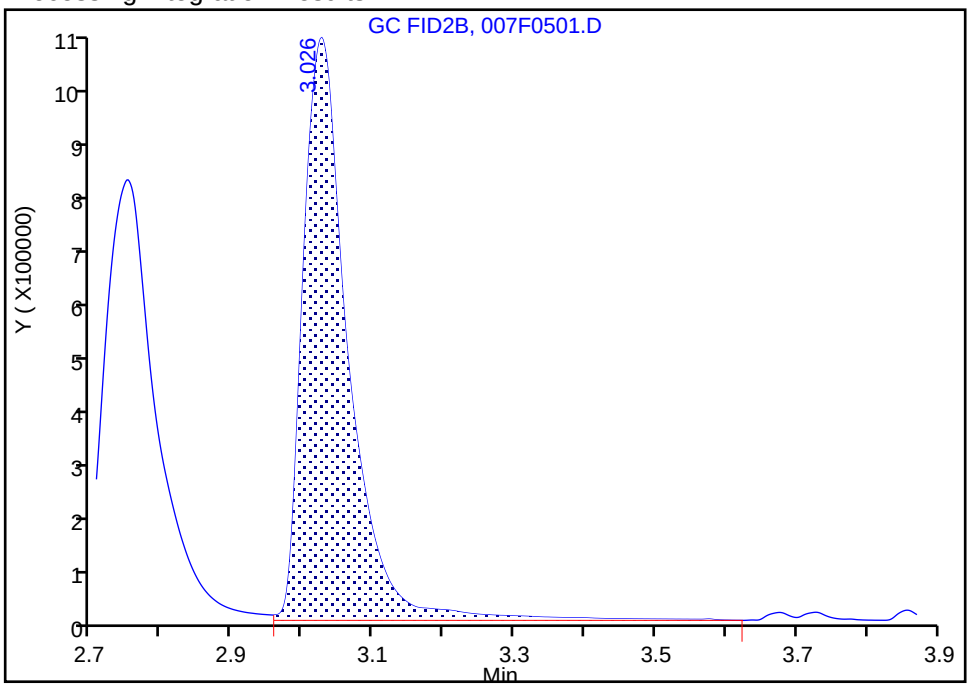
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

3 Ethane, CAS: 74-84-0

Signal: 2

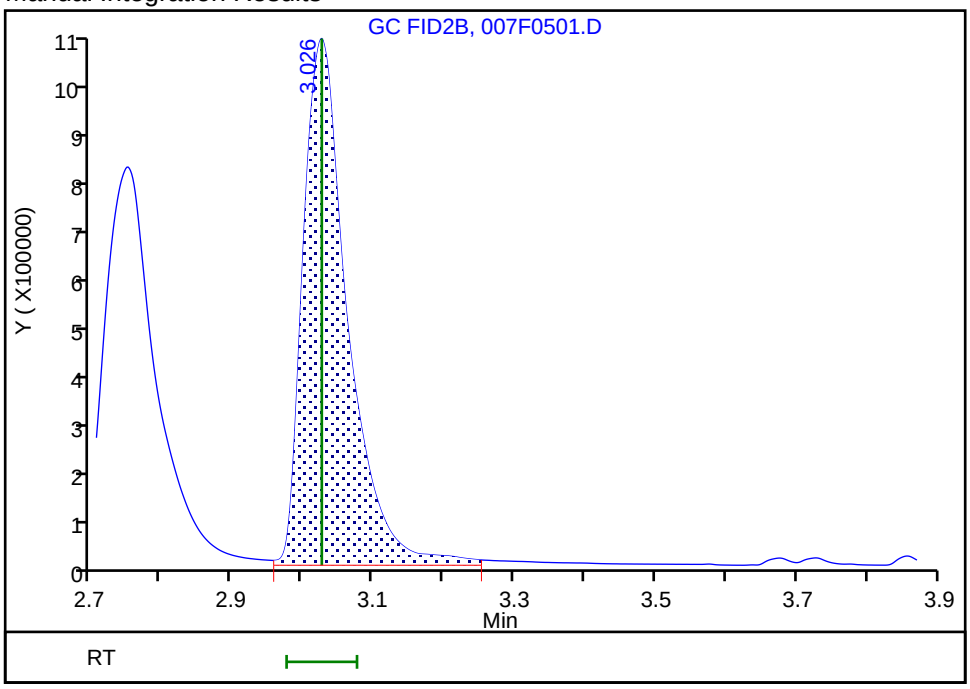
Processing Integration Results

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

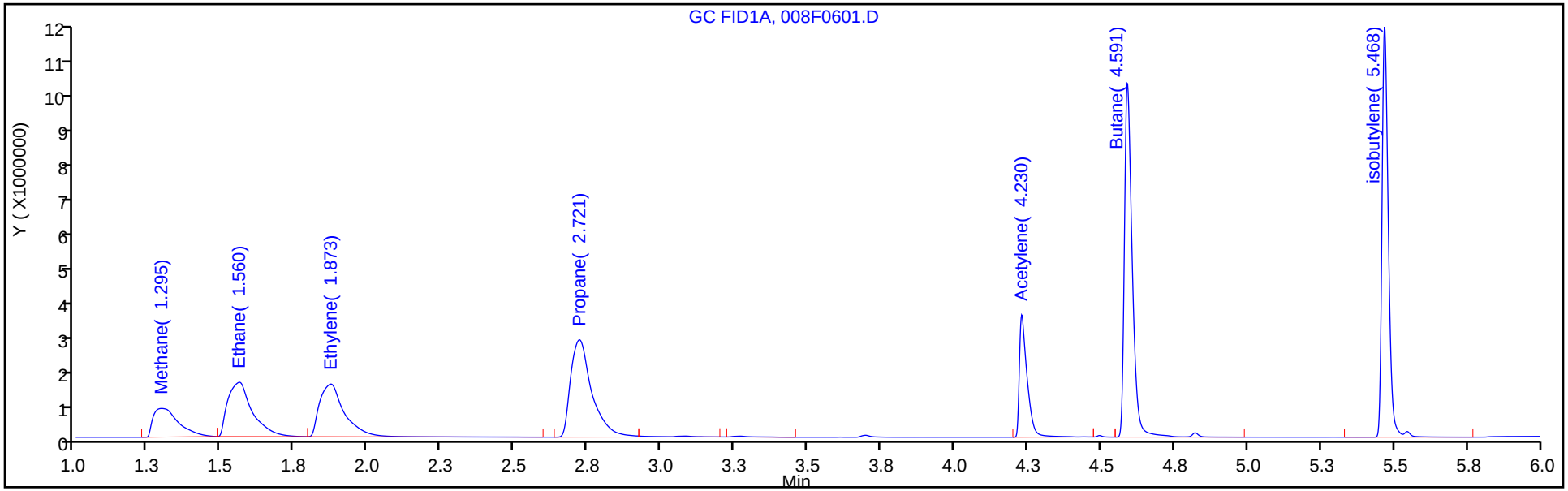
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

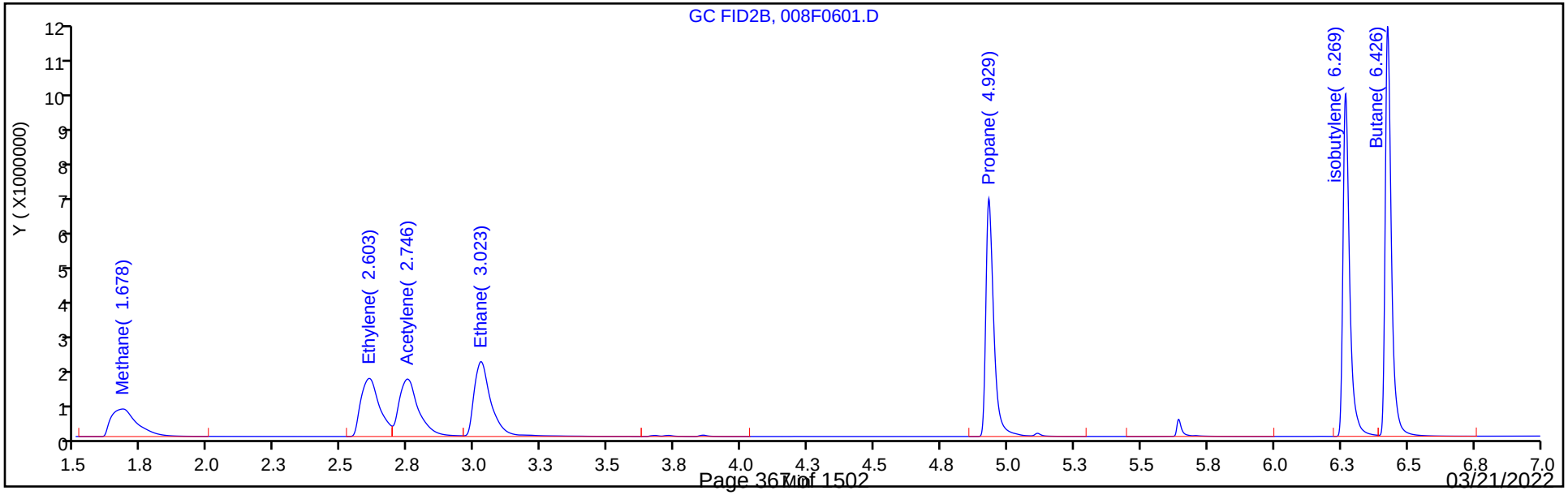
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D

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

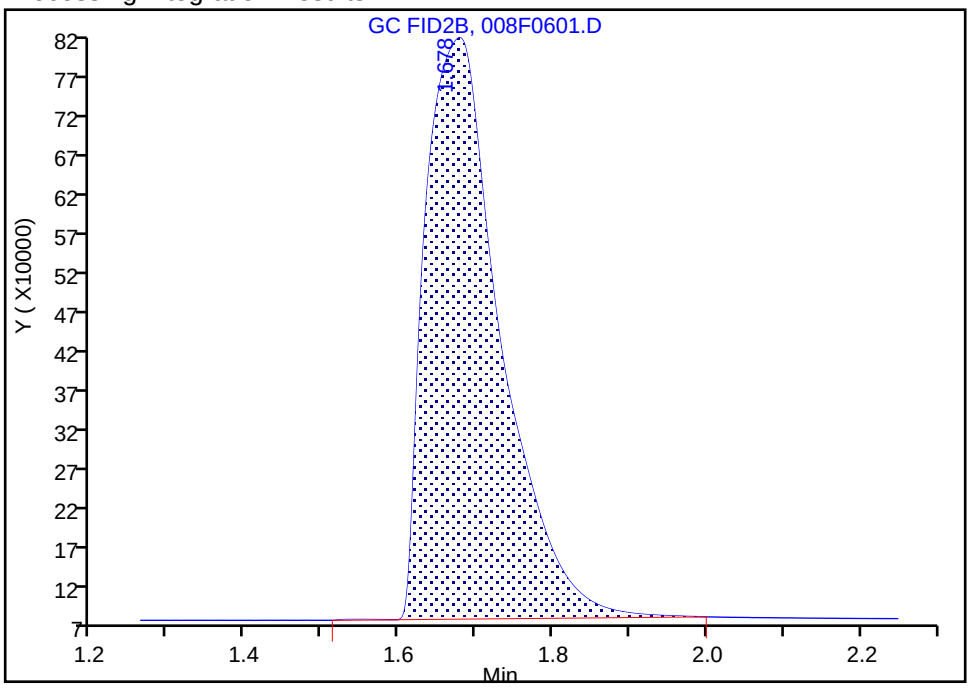
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Injection Date: 24-Sep-2021 14:20:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

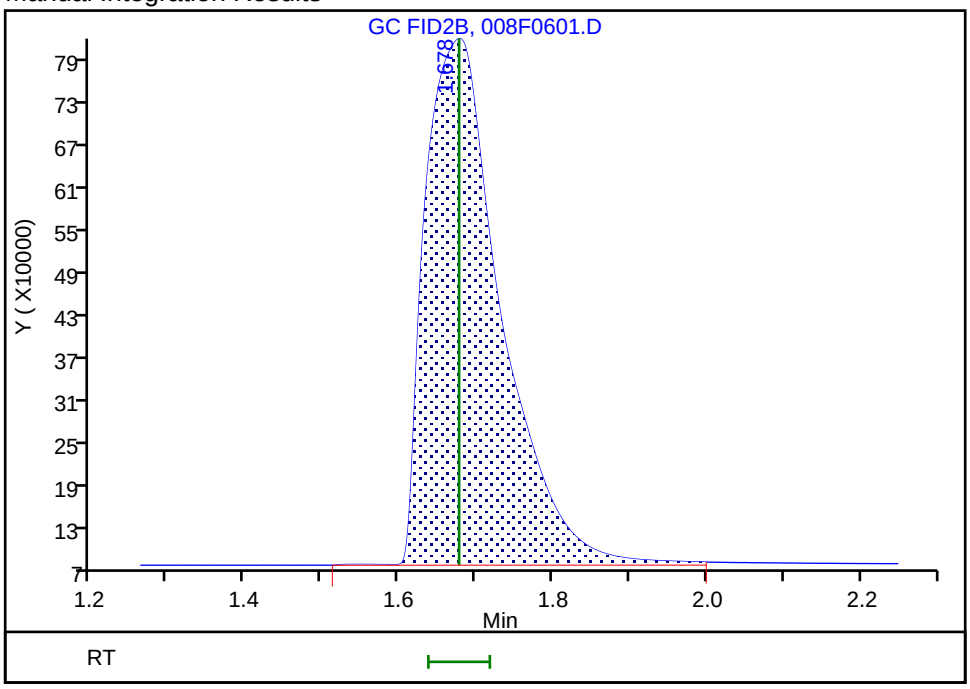
Processing Integration Results

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

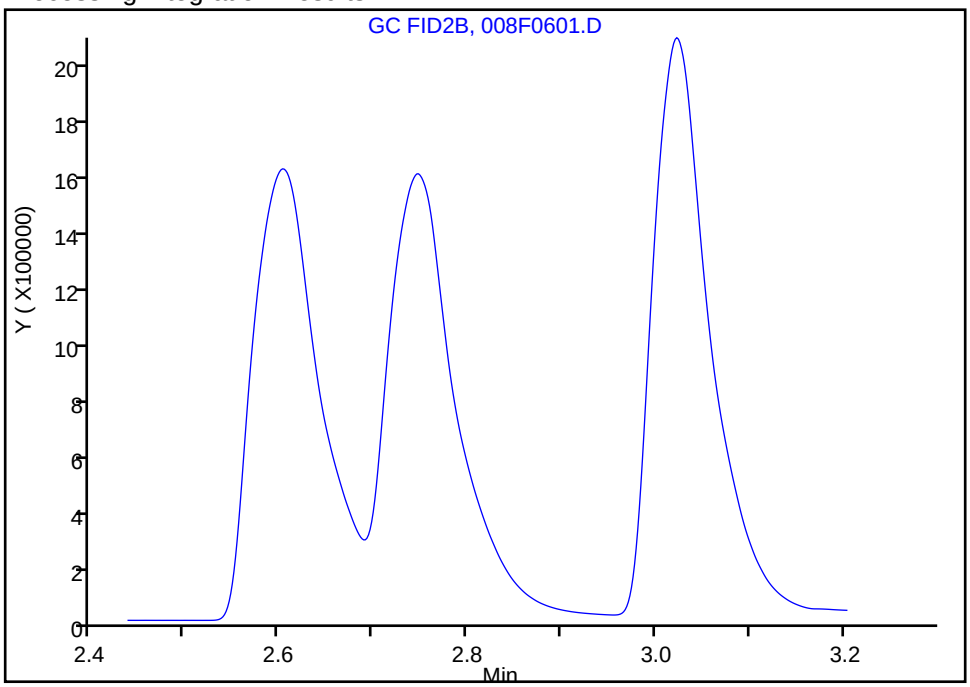
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Injection Date: 24-Sep-2021 14:20:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

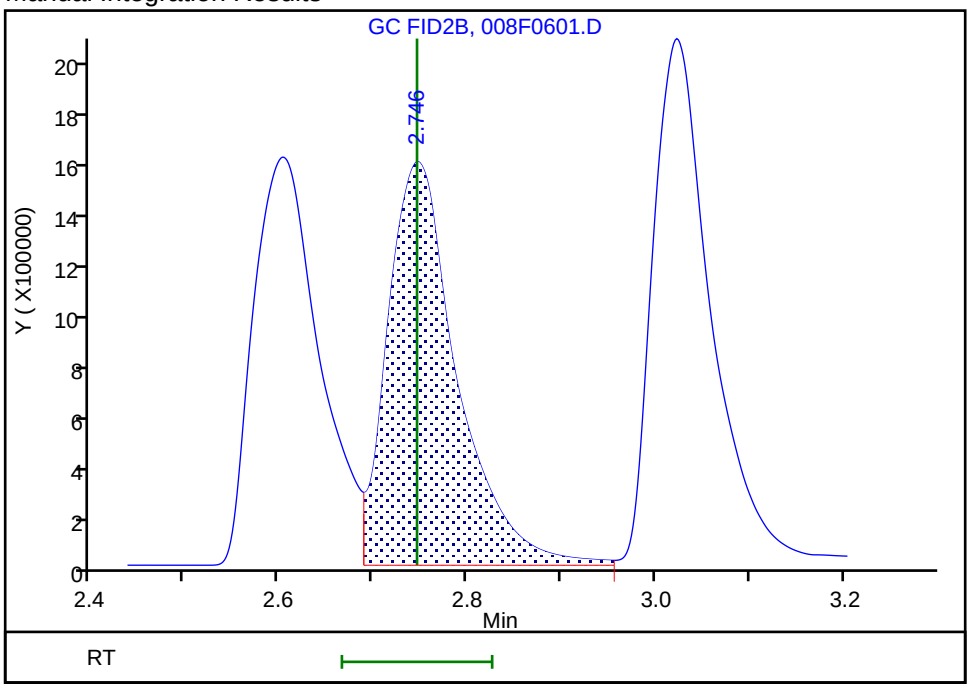
Not Detected
Expected RT: 2.75

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

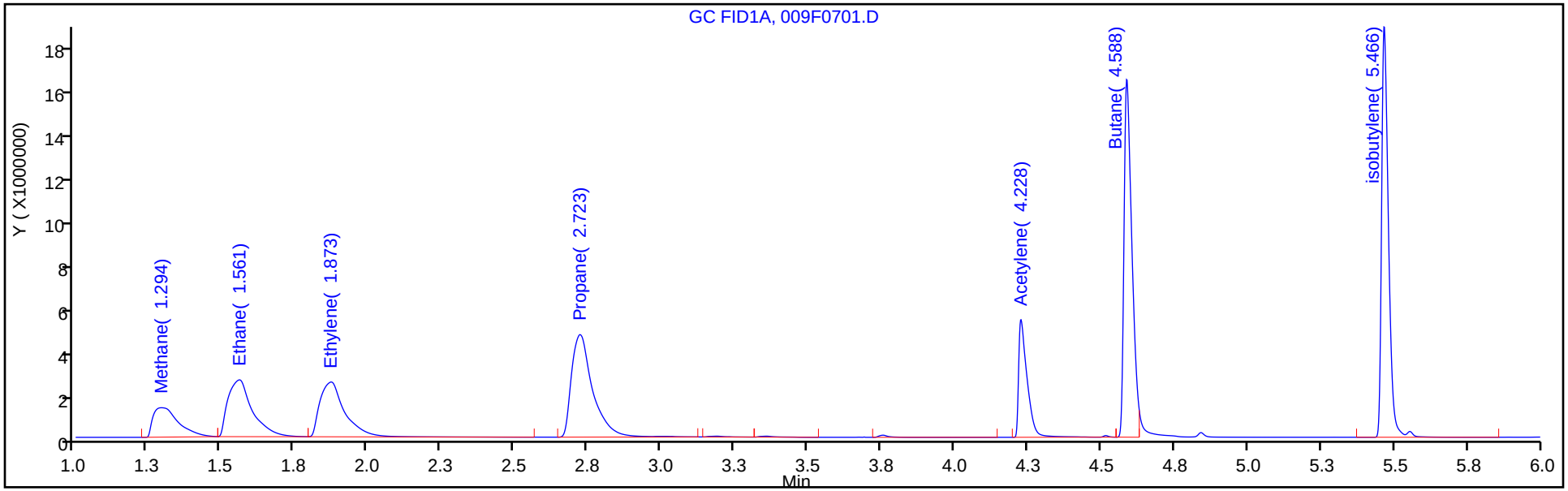
Report Date: 29-Sep-2021 10:55:16 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

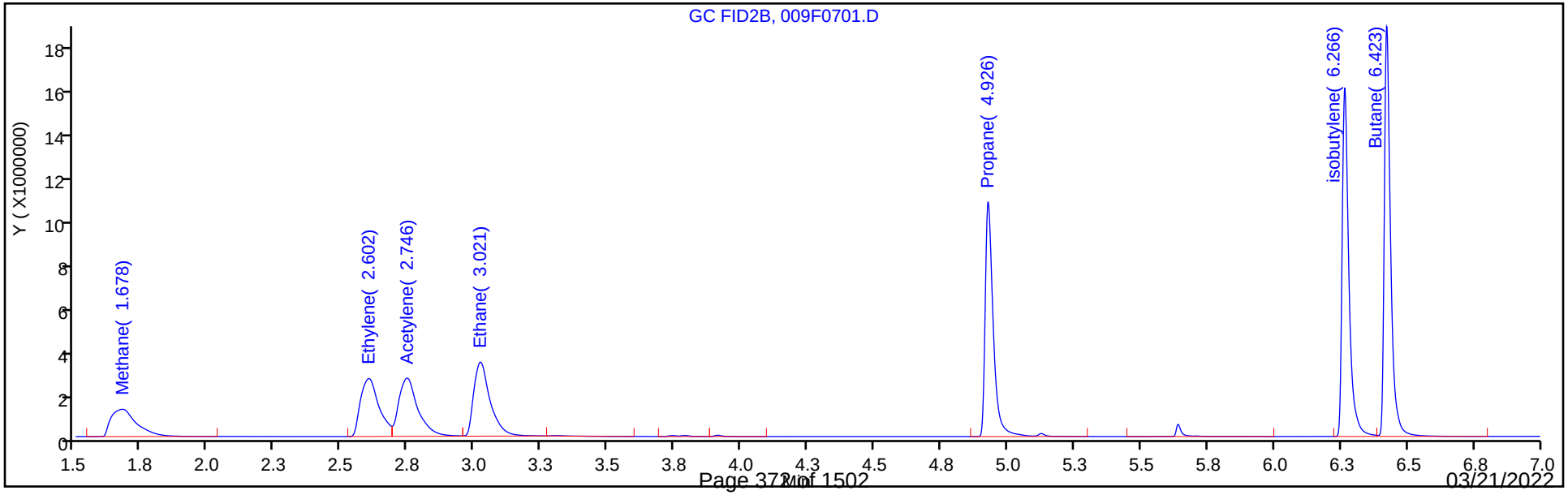
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D

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

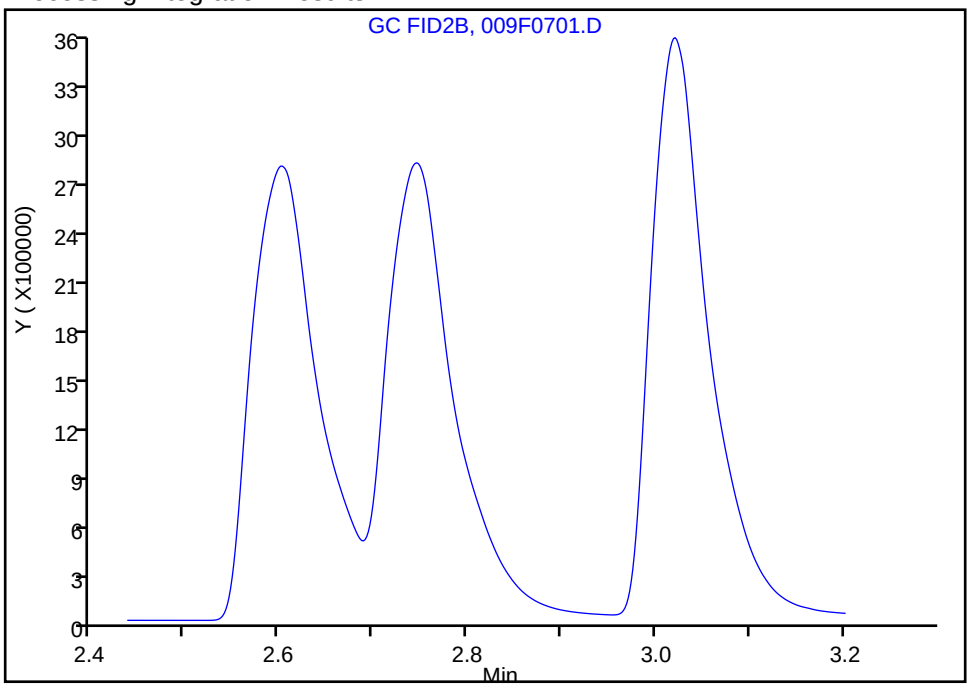
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D
Injection Date: 24-Sep-2021 14:33:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 9 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

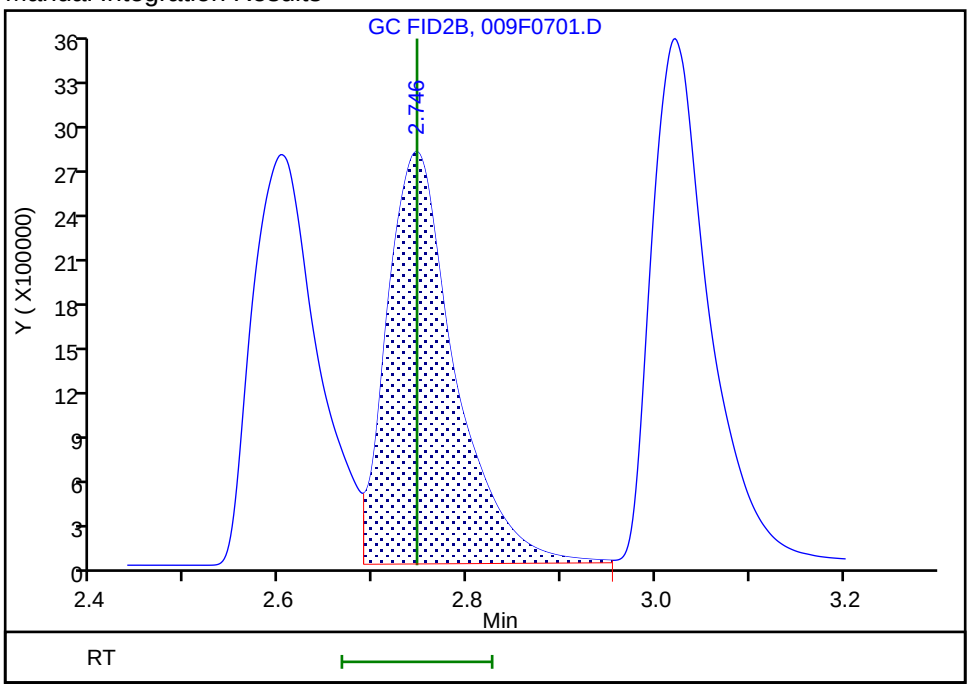
Not Detected
Expected RT: 2.75

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

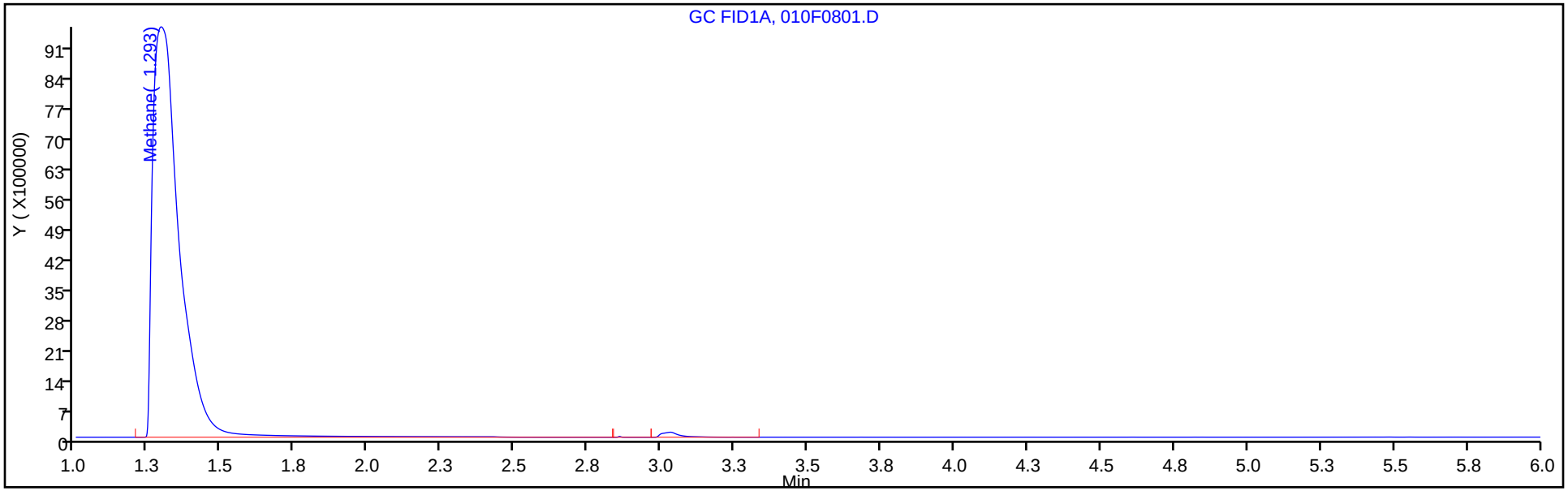
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

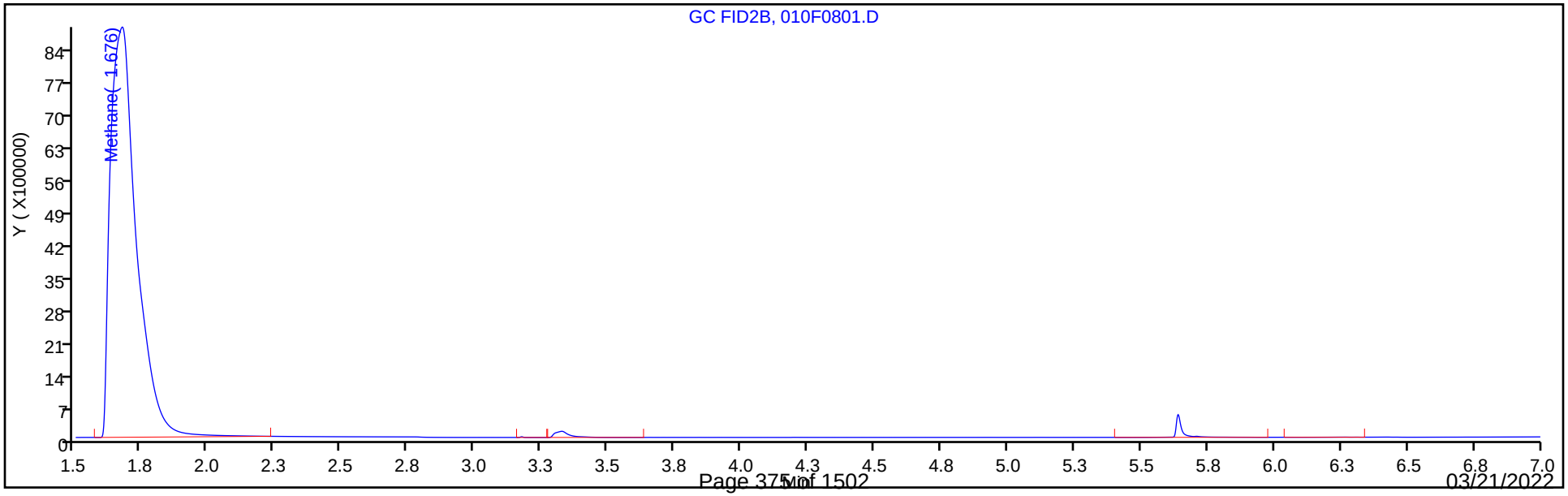
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\010F0801.D

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

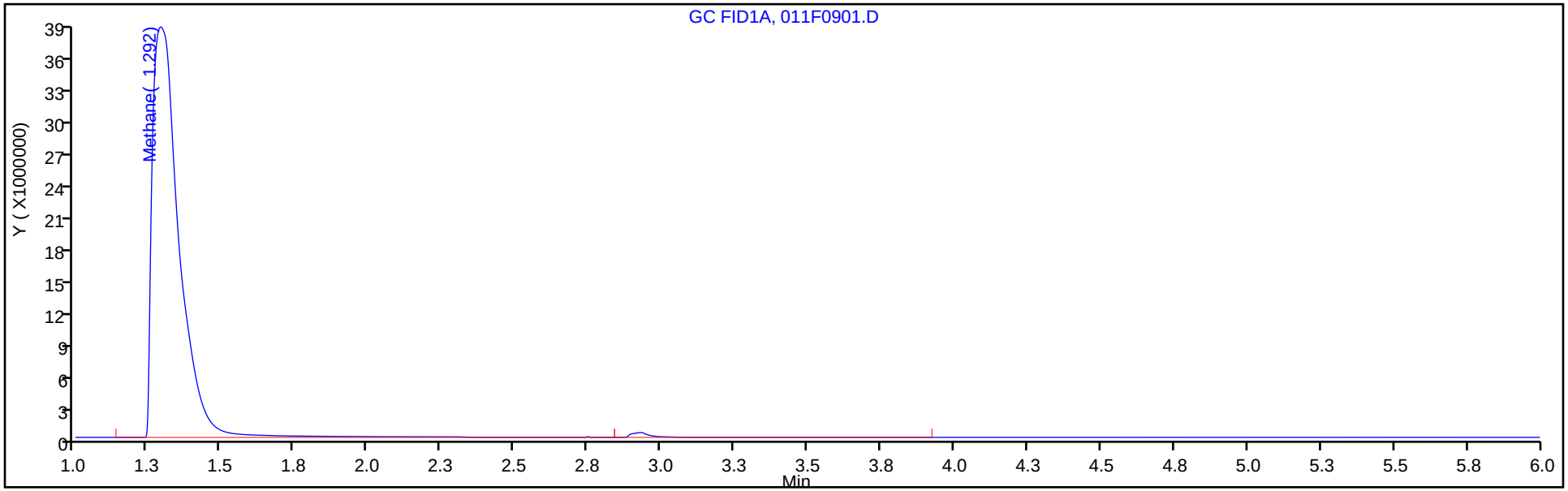
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

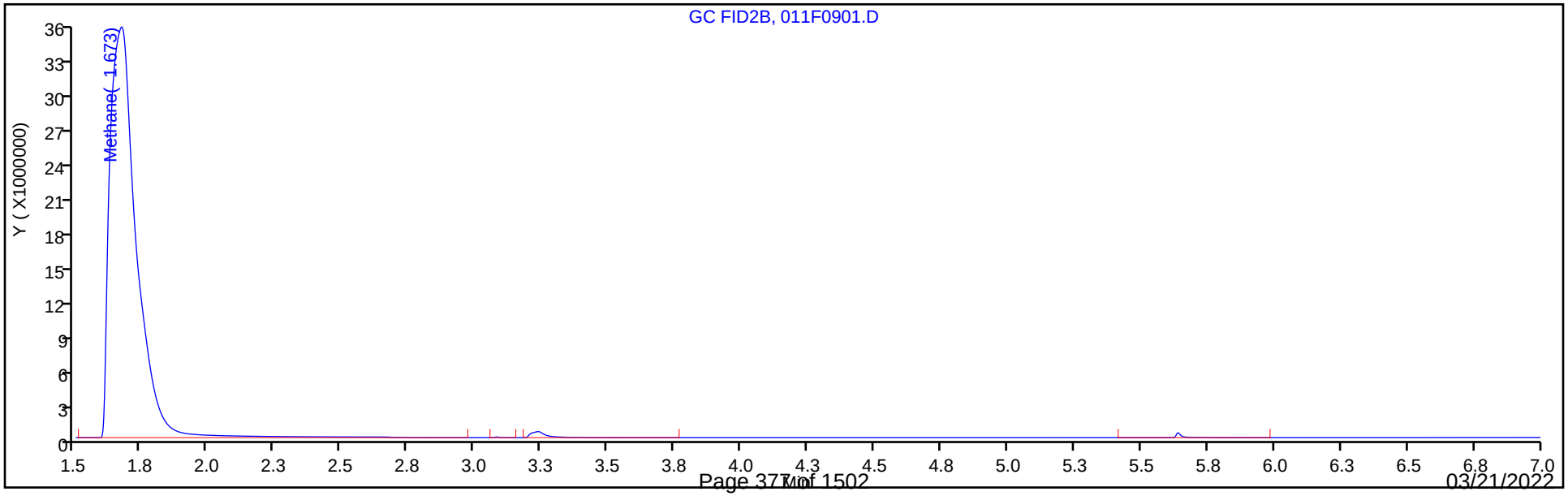
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\011F0901.D

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

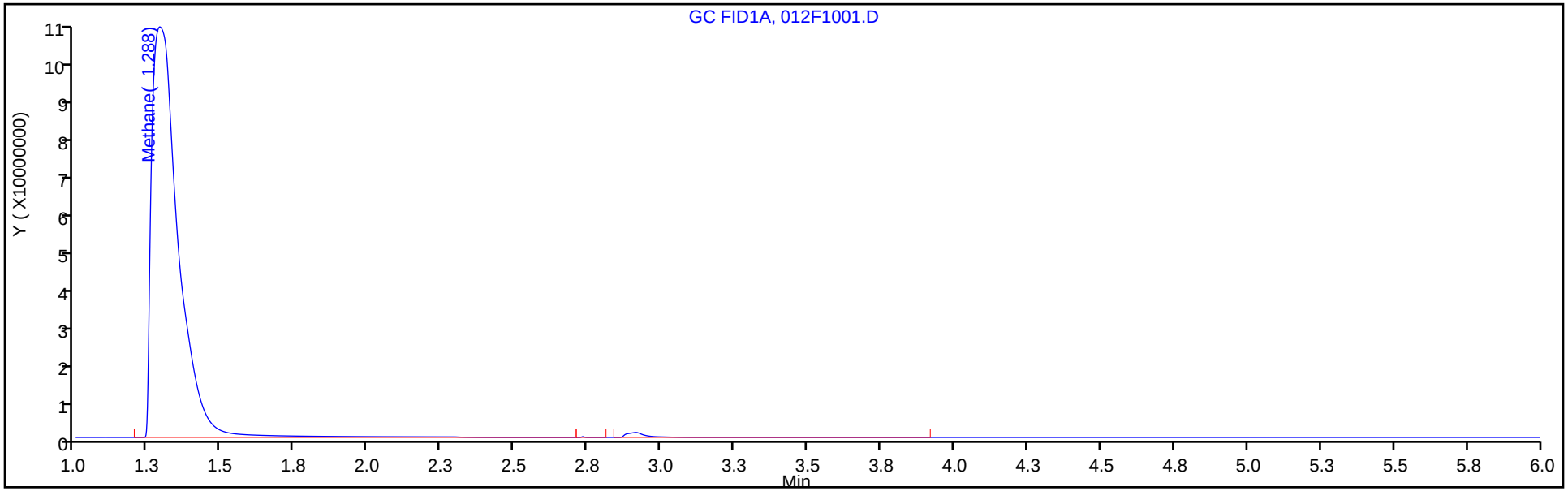
Report Date: 29-Sep-2021 10:55:18 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

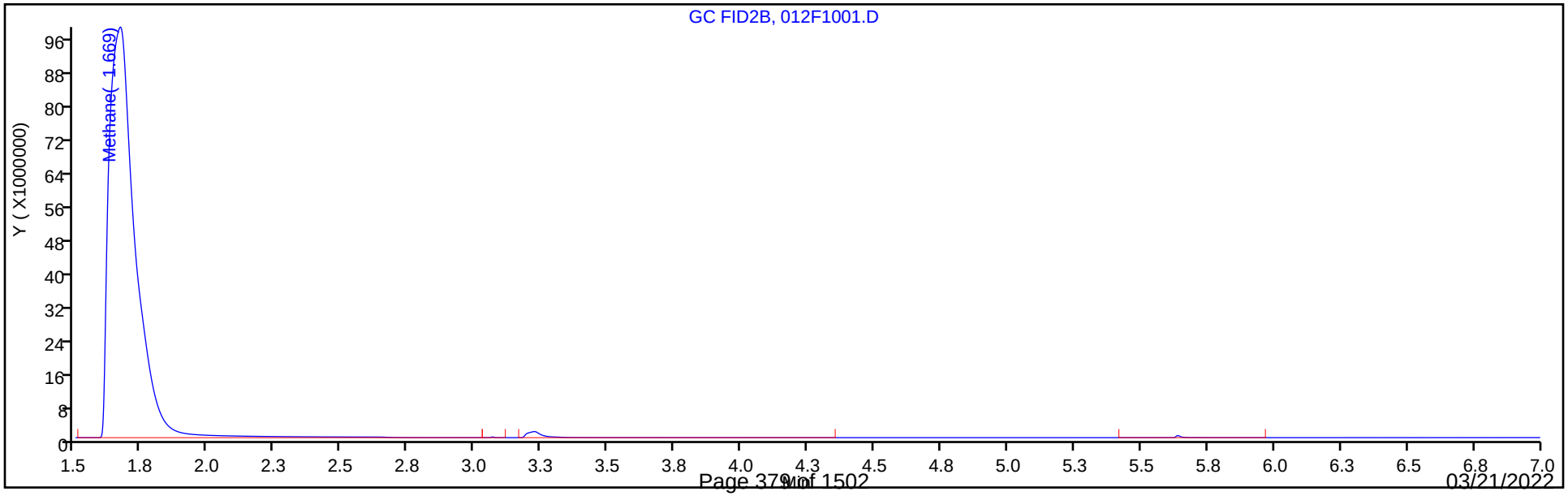
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

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

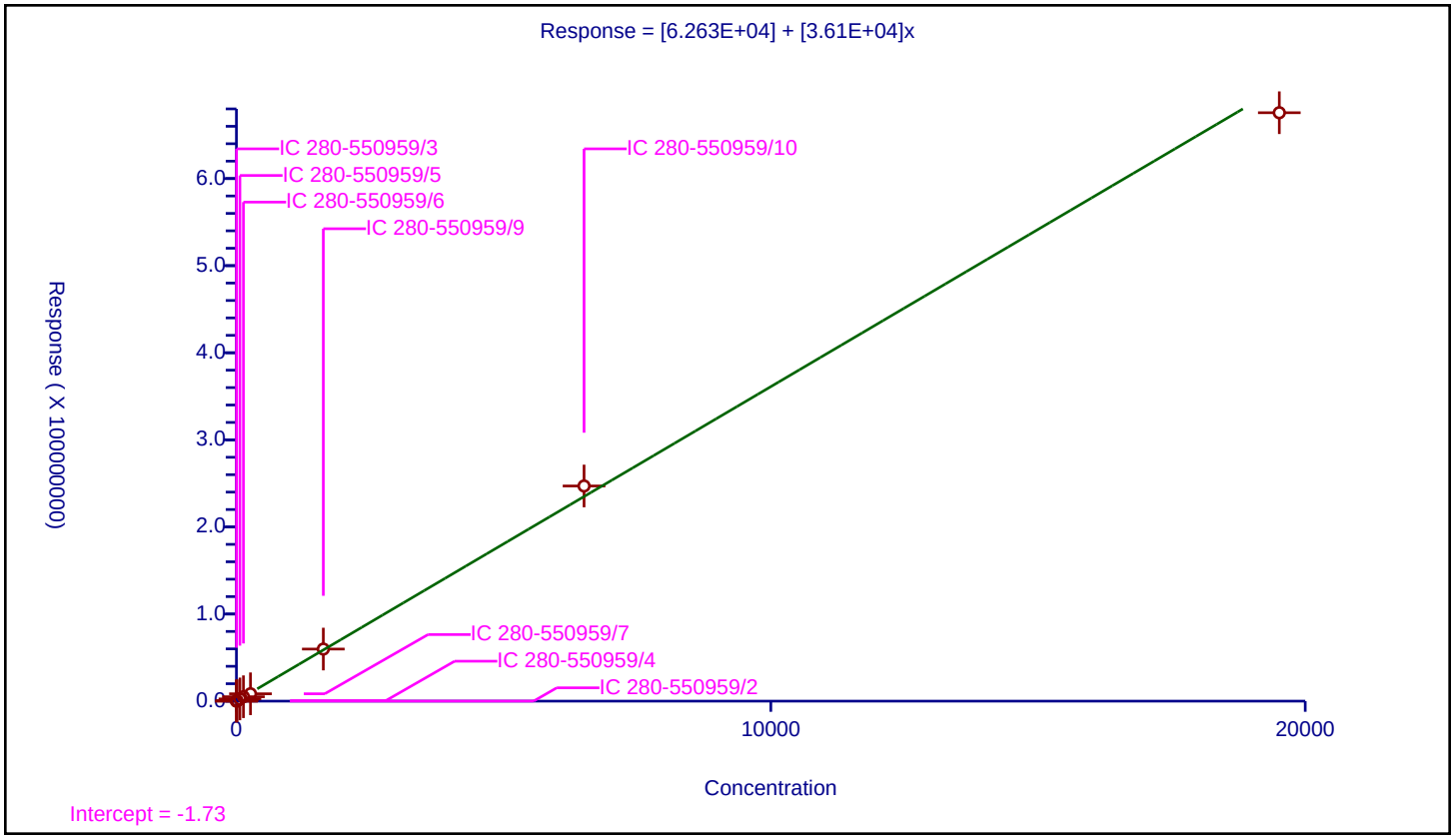
Curve Coefficients

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

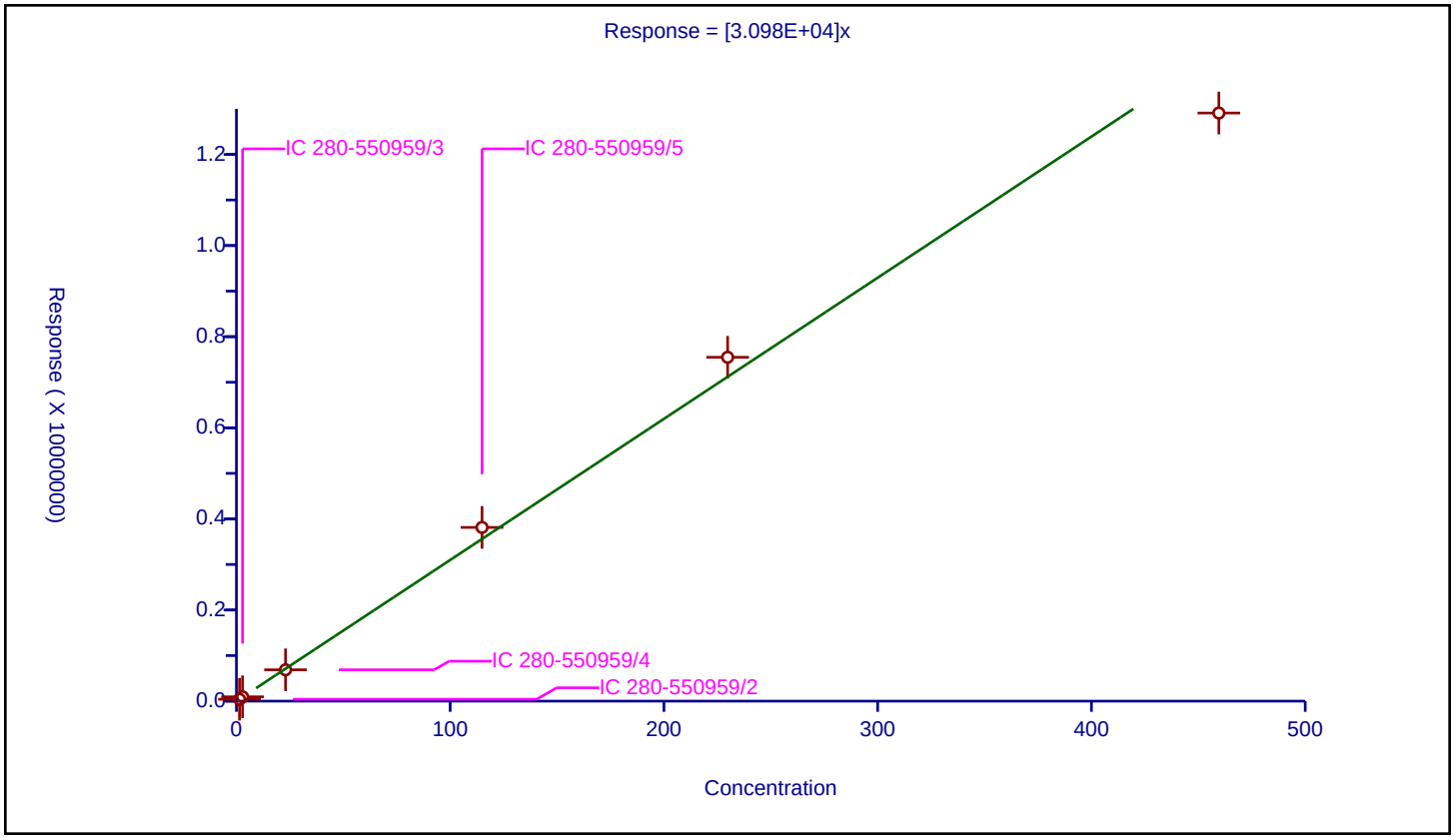
Curve Coefficients

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

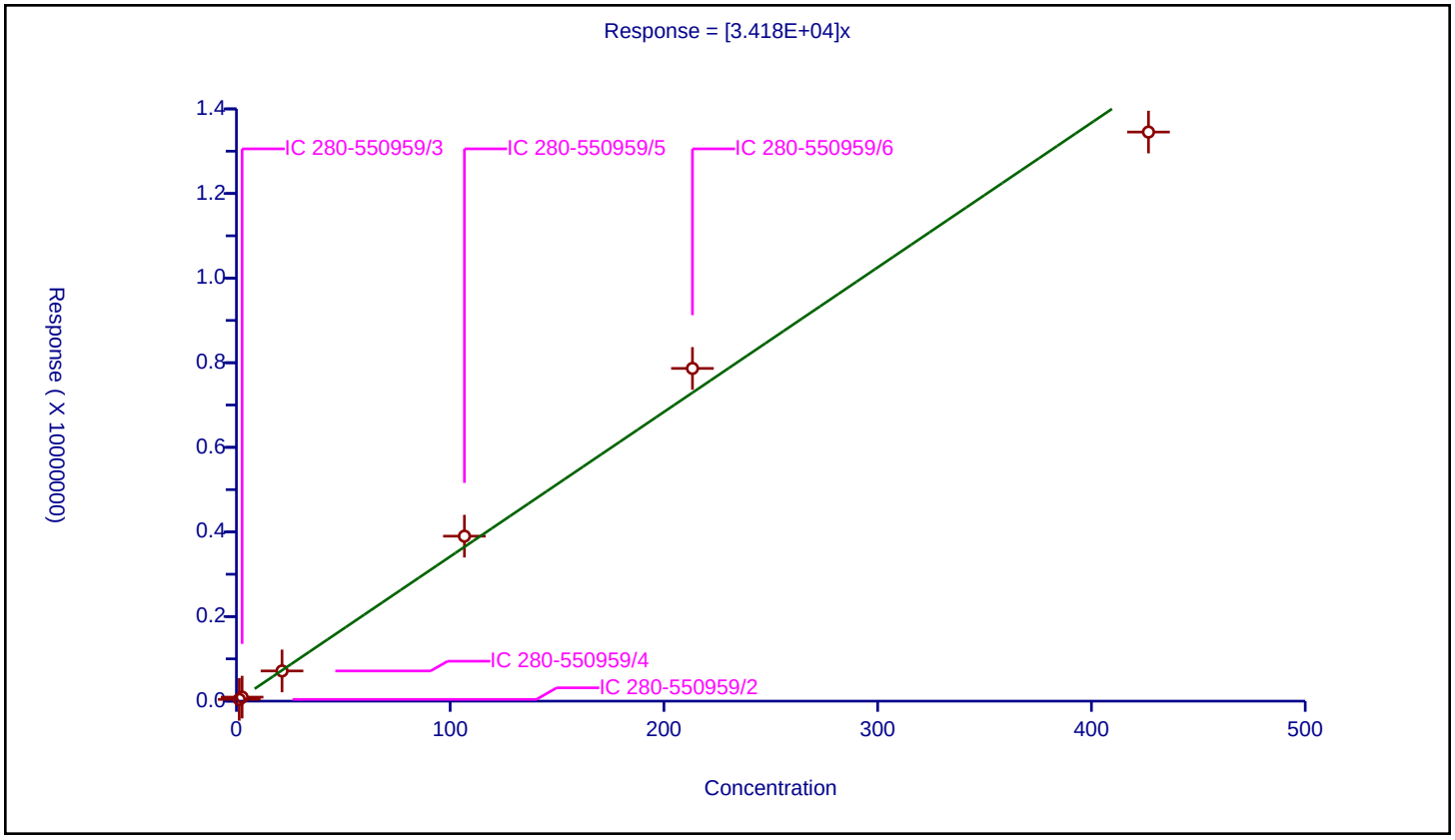
Curve Coefficients

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

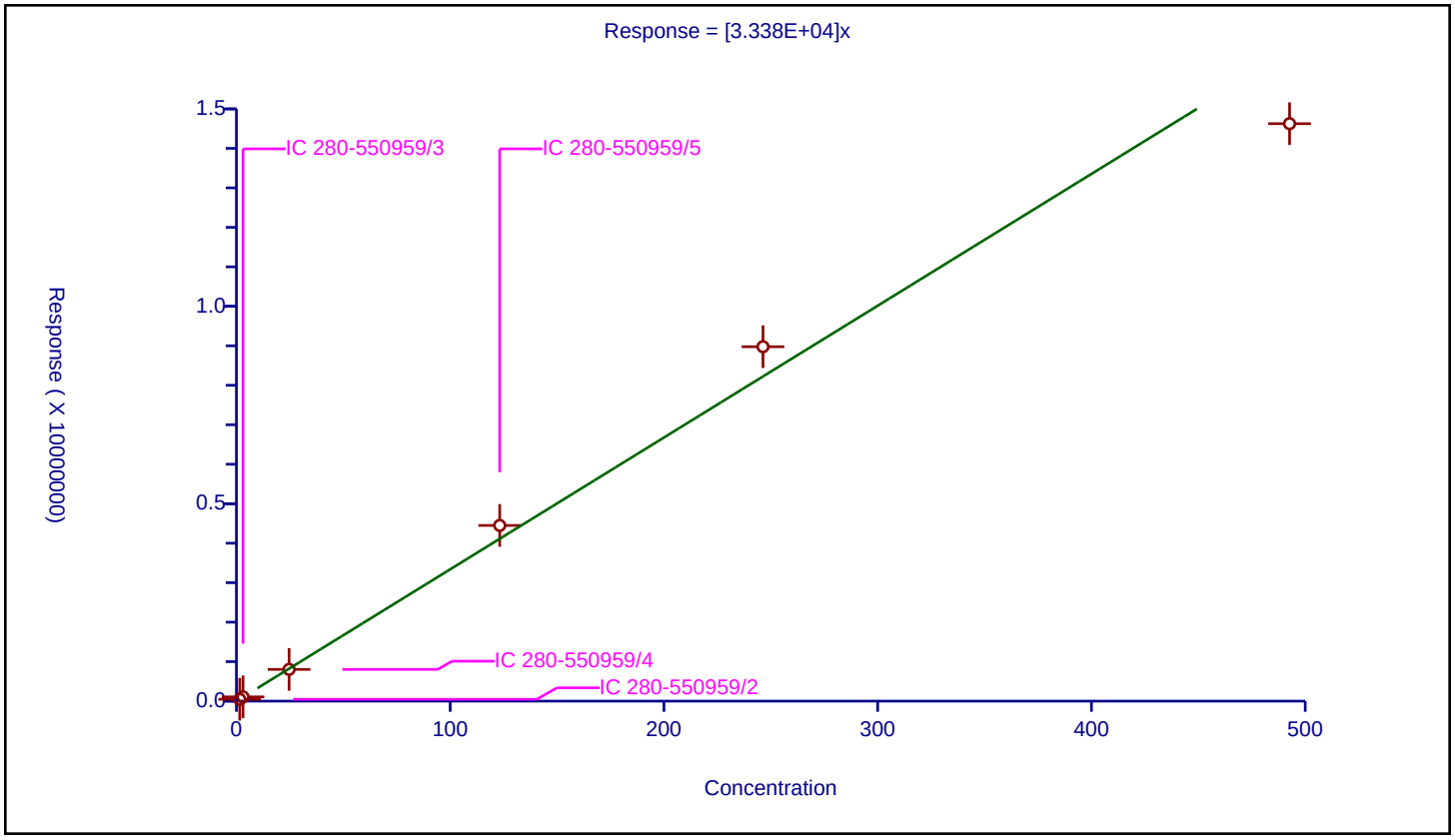
Curve Coefficients

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.: 280-159332-1

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.: 280-159332-1

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

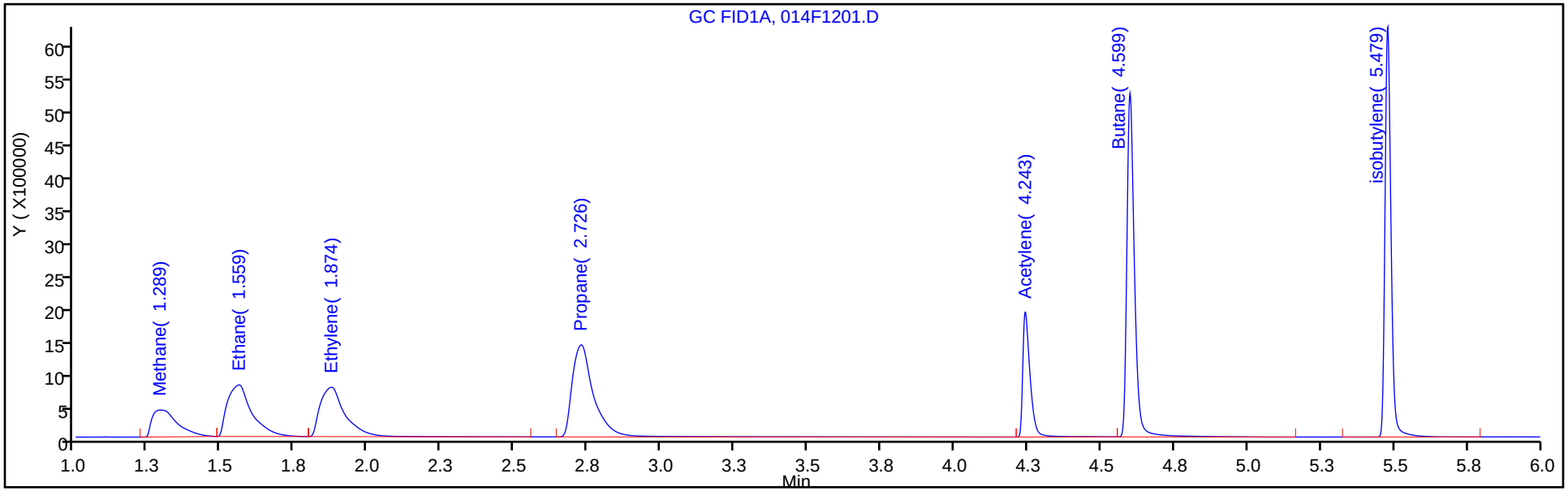
Report Date: 29-Sep-2021 10:58:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

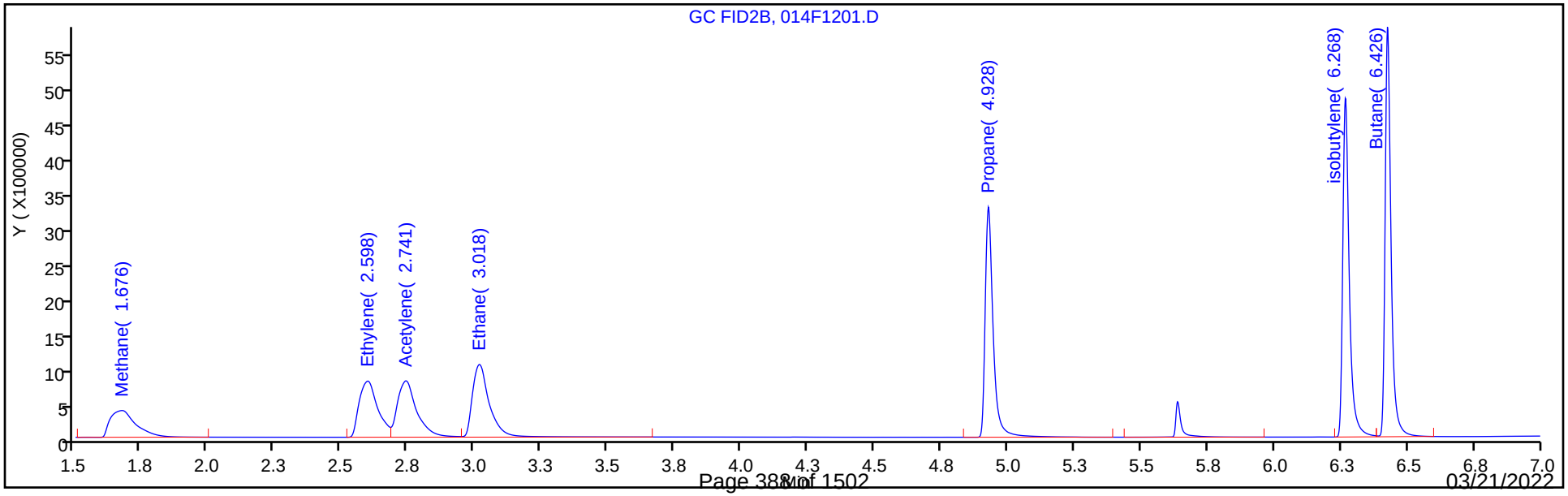
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\014F1201.D

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.: 280-159332-1

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.: 280-159332-1

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

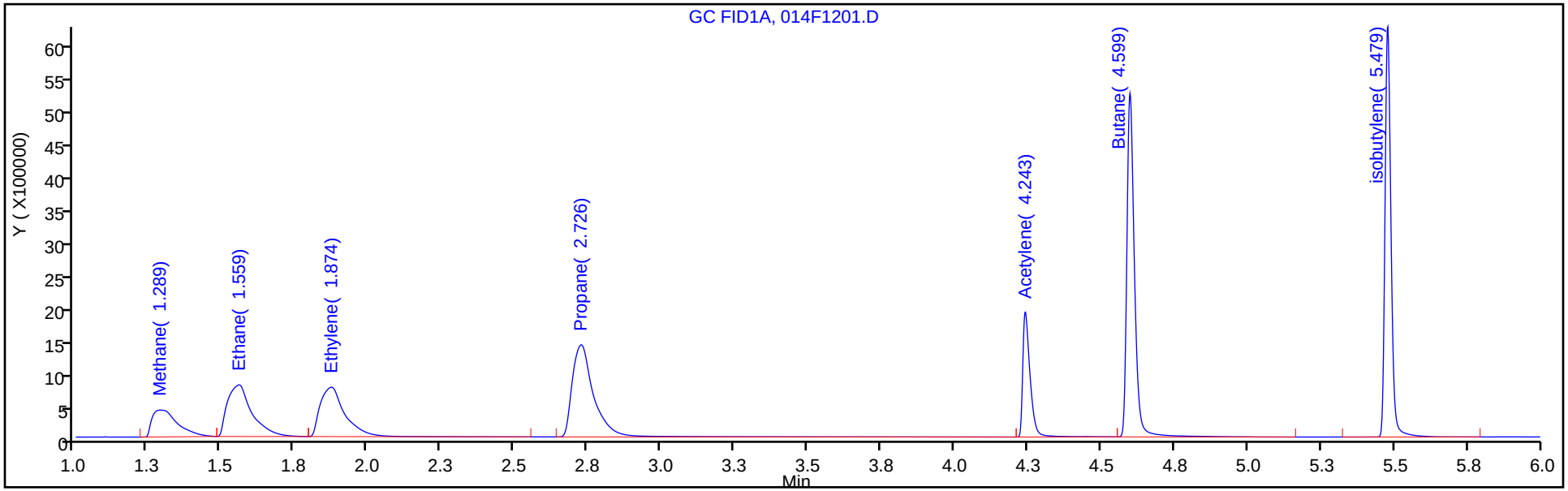
Report Date: 29-Sep-2021 10:58:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

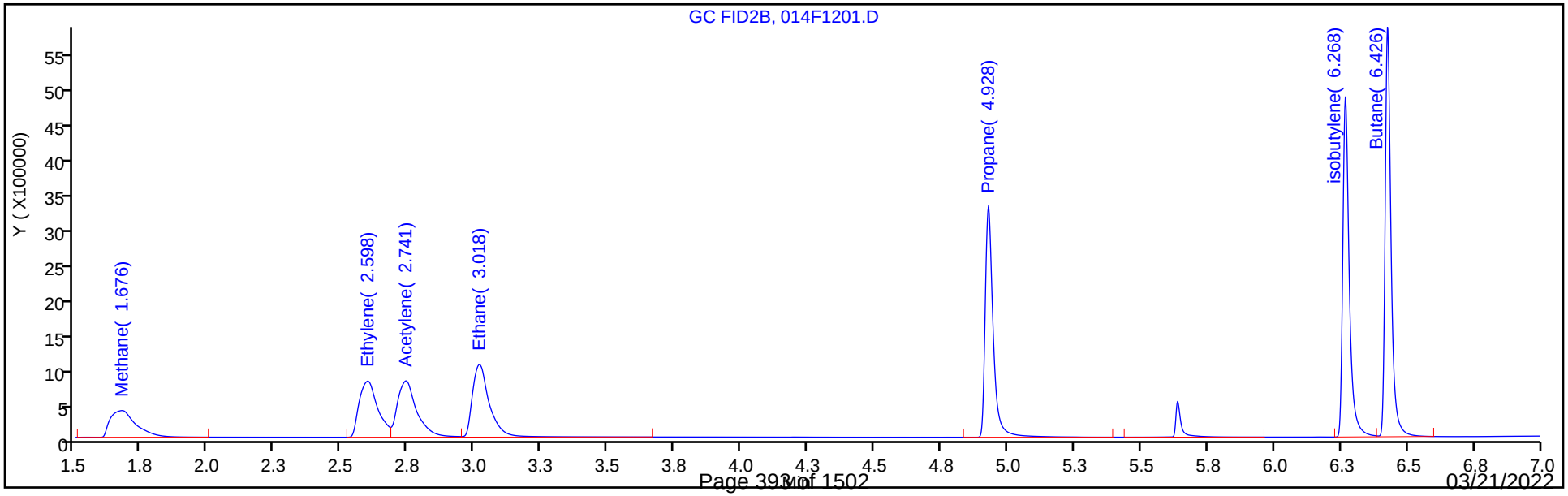
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\014F1201.D

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.: 280-159332-1

SDG No.:

Lab Sample ID: CCVRT 280-568337/2 Calibration Date: 03/10/2022 16:26

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		37544		68.3	65.7	3.9	20.0
Ethane	Ave	33241	34716		129	123	4.4	20.0
Ethylene	Ave	35226	37701		123	115	7.0	20.0
Acetylene	Ave	28139	36955		140	107	31.3*	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCVRT 280-568337/2 Calibration Date: 03/10/2022 16:26

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	1.80	1.75	1.85
Acetylene	4.09	4.01	4.17

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\002F0201.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 10-Mar-2022 16:26:53 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\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:11 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: CTX1659

First Level Reviewer: sciannac Date: 11-Mar-2022 11:53:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.261	1.261	0.000	2466766	65.7	68.3	
2	1.670	1.670	0.000	2470658	65.7	66.7	
						RPD = 2.34	
3 Ethane							
1	1.521	1.521	0.000	4275934	123.2	128.6	
2	3.023	3.023	0.000	4401048	123.2	131.8	
						RPD = 2.46	
4 Ethylene							
1	1.801	1.801	0.000	4331791	114.9	123.0	
2	2.603	2.603	0.000	3791411	114.9	122.4	
						RPD = 0.48	
5 Propane							
1	2.573	2.573	0.000	6760793	180.6	187.7	
2	4.930	4.930	0.000	6475072	180.6	184.9	
						RPD = 1.50	
6 Acetylene							a
1	4.086	4.086	0.000	3941963	106.7	140.1	a
2	2.750	2.750	0.000	4864401	106.7	142.3	a
						RPD = 1.58	
7 Butane							
1	4.438	4.438	0.000	9081592	238.1	249.3	
2	6.426	6.426	0.000	8619978	238.1	245.3	
						RPD = 1.63	
8 isobutylene							
1	5.339	5.339	0.000	8891582	229.8	246.1	
2	6.270	6.270	0.000	7997495	229.8	240.9	
						RPD = 2.16	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

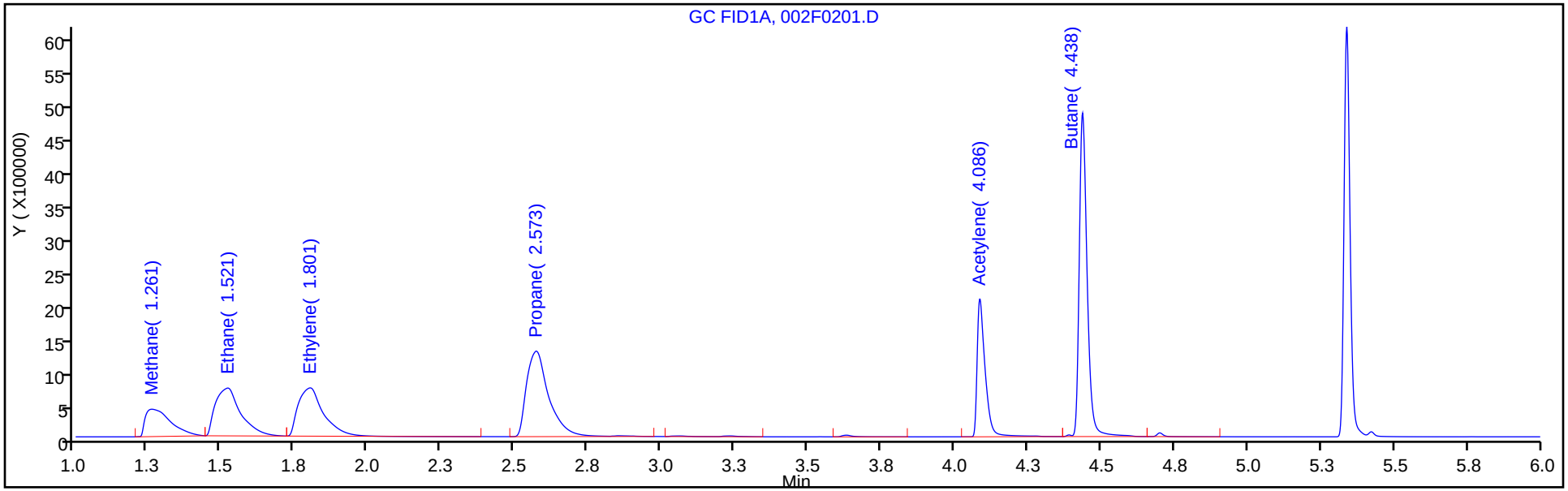
Report Date: 15-Mar-2022 15:37:11 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

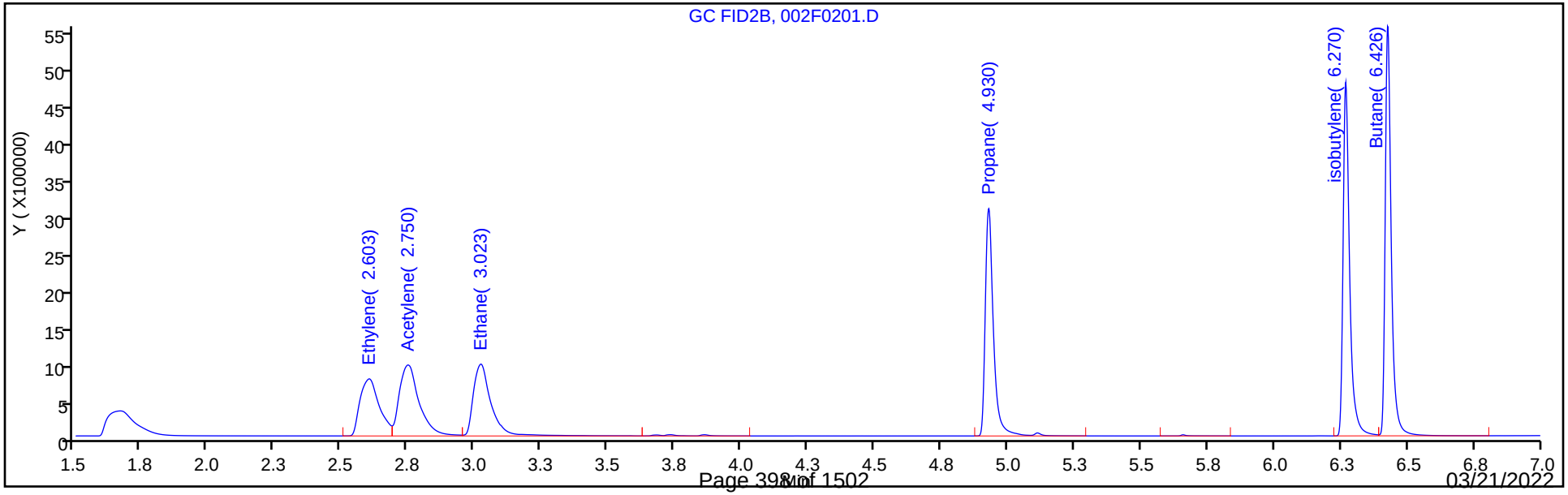
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\002F0201.D

Injection Date:	10-Mar-2022 16:26:53	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



Manual Integration/User Assign Peak Report

Eurofins Denver

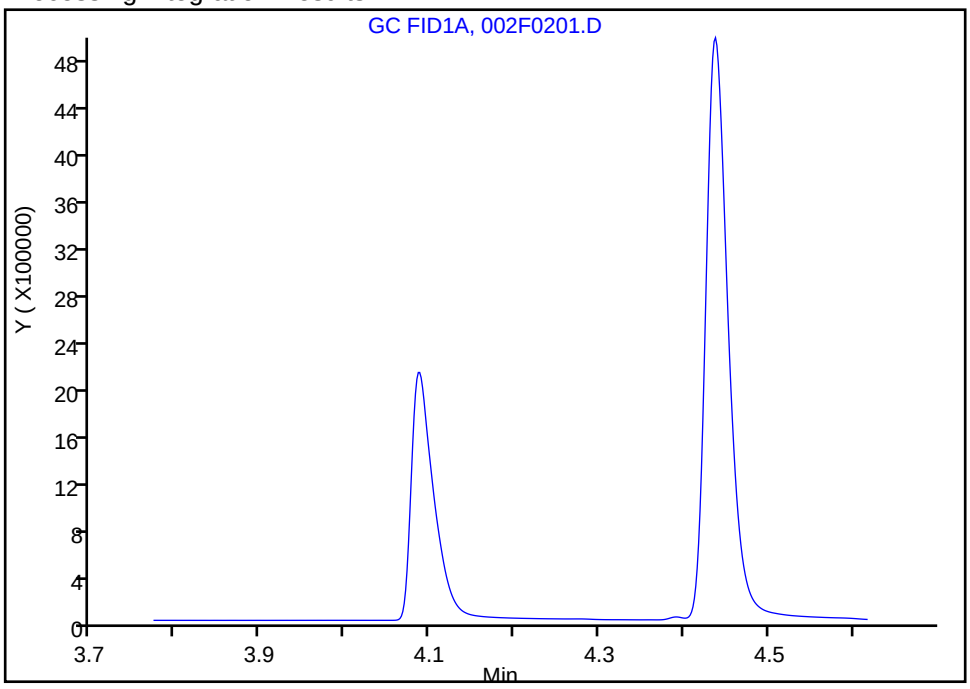
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\002F0201.D
Injection Date: 10-Mar-2022 16:26:53 Instrument ID: VGC_J
Lims ID: ccvrt
Client ID:
Operator ID: sciannac ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

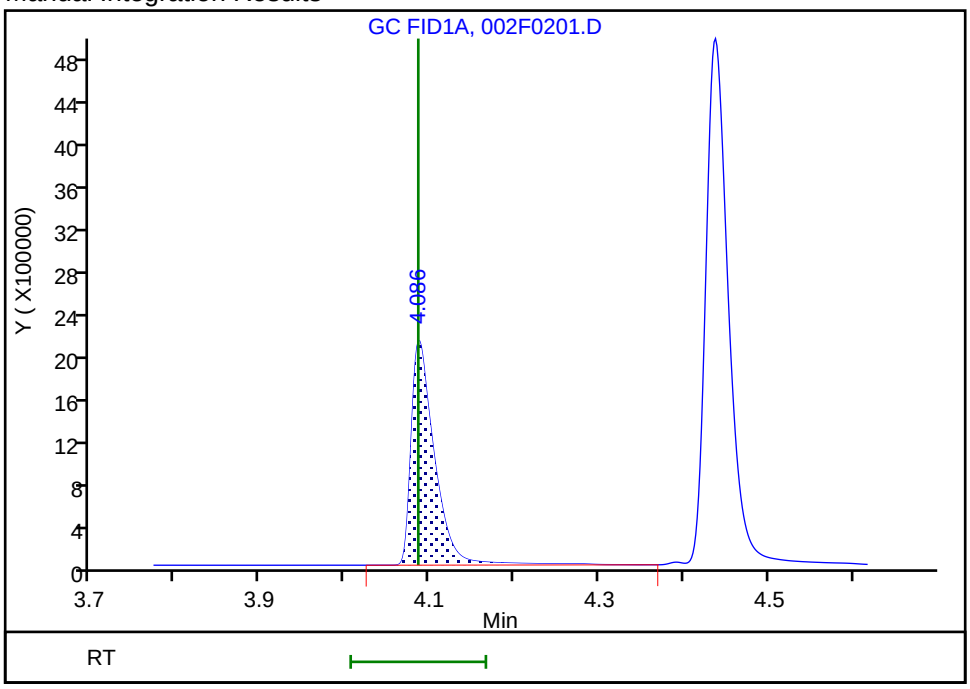
Not Detected
Expected RT: 4.09

Processing Integration Results



Manual Integration Results

RT: 4.09
Area: 3941963
Amount: 140.0889
Amount Units: ug/l



Reviewer: sciannac, 11-Mar-2022 11:53:16
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCVRT 280-568337/2 Calibration Date: 03/10/2022 16:26

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		37603		66.7	65.7	1.5	20.0
Ethylene	Ave	30980	32997		122	115	6.5	20.0
Acetylene	Ave	34179	45602		142	107	33.4*	20.0
Ethane	Ave	33383	35731		132	123	7.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCVRT 280-568337/2 Calibration Date: 03/10/2022 16:26

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\20220310-109149.b\002F0201.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 10-Mar-2022 16:26:53 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\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:11 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: CTX1659

First Level Reviewer: sciannac Date: 11-Mar-2022 11:53:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.261	1.261	0.000	2466766	65.7	68.3	
2	1.670	1.670	0.000	2470658	65.7	66.7	
						RPD = 2.34	
3 Ethane							
1	1.521	1.521	0.000	4275934	123.2	128.6	
2	3.023	3.023	0.000	4401048	123.2	131.8	
						RPD = 2.46	
4 Ethylene							
1	1.801	1.801	0.000	4331791	114.9	123.0	
2	2.603	2.603	0.000	3791411	114.9	122.4	
						RPD = 0.48	
5 Propane							
1	2.573	2.573	0.000	6760793	180.6	187.7	
2	4.930	4.930	0.000	6475072	180.6	184.9	
						RPD = 1.50	
6 Acetylene							a
1	4.086	4.086	0.000	3941963	106.7	140.1	a
2	2.750	2.750	0.000	4864401	106.7	142.3	a
						RPD = 1.58	
7 Butane							
1	4.438	4.438	0.000	9081592	238.1	249.3	
2	6.426	6.426	0.000	8619978	238.1	245.3	
						RPD = 1.63	
8 isobutylene							
1	5.339	5.339	0.000	8891582	229.8	246.1	
2	6.270	6.270	0.000	7997495	229.8	240.9	
						RPD = 2.16	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

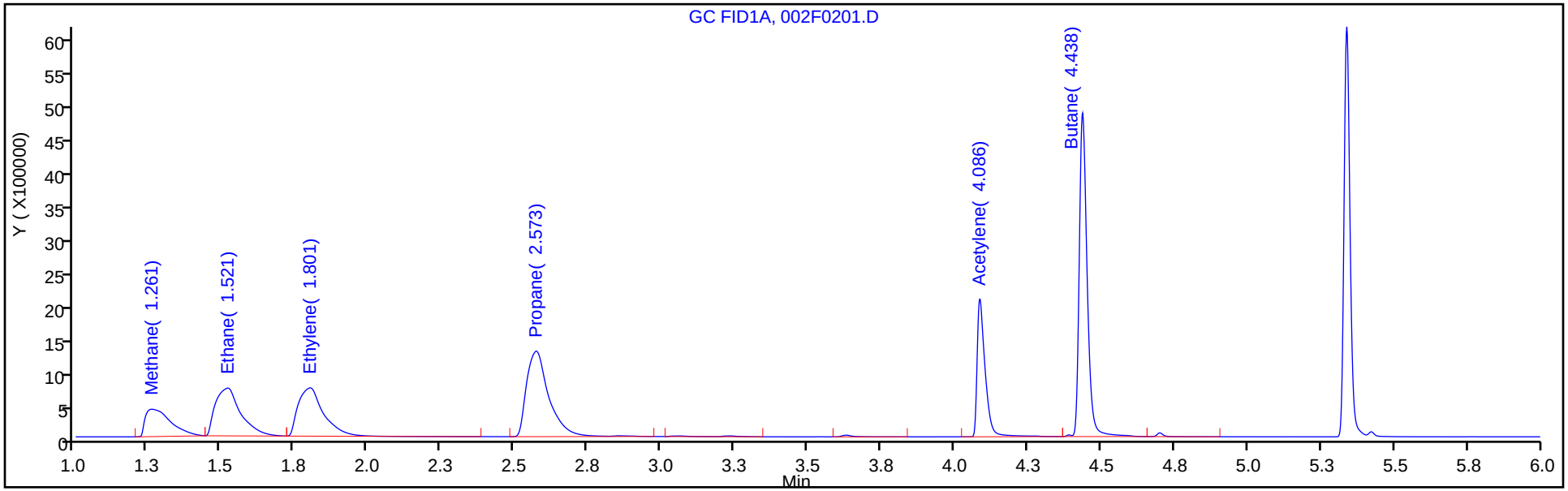
Report Date: 15-Mar-2022 15:37:12 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

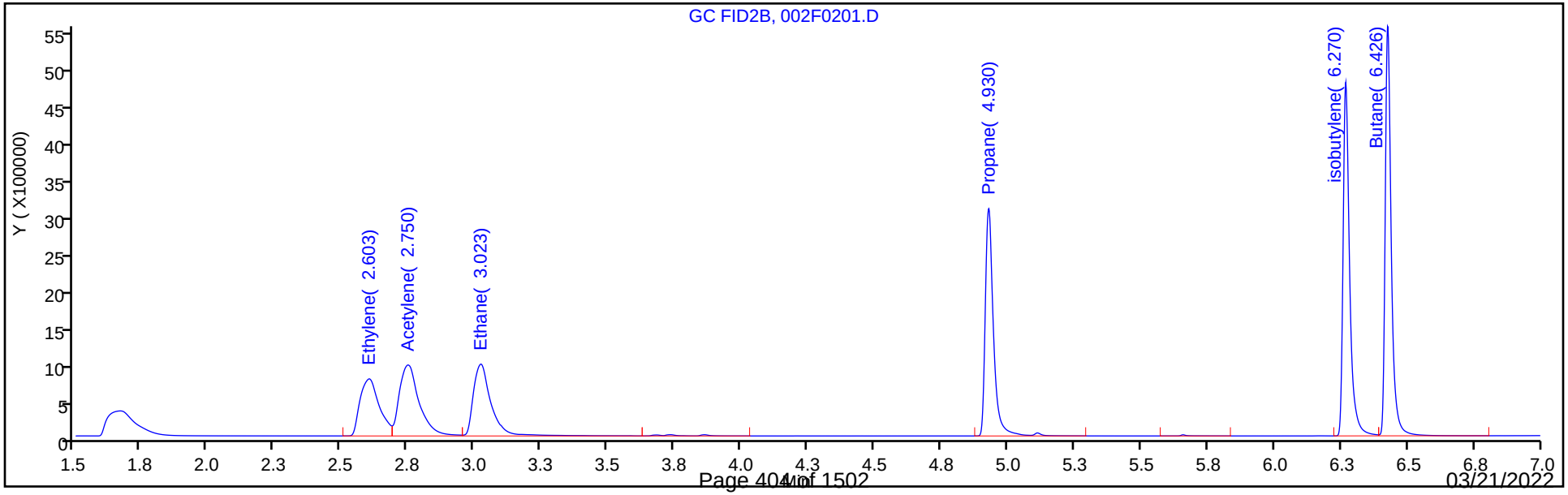
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\002F0201.D

Injection Date:	10-Mar-2022 16:26:53	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



Manual Integration/User Assign Peak Report

Eurofins Denver

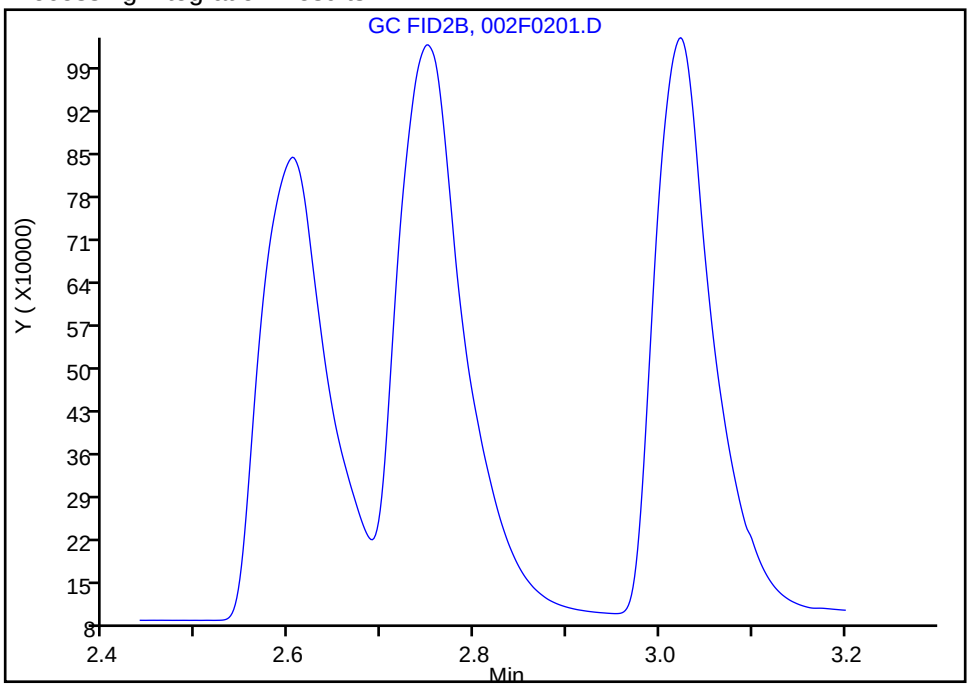
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\002F0201.D
Injection Date: 10-Mar-2022 16:26:53 Instrument ID: VGC_J
Lims ID: ccvrt
Client ID:
Operator ID: sciannac ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

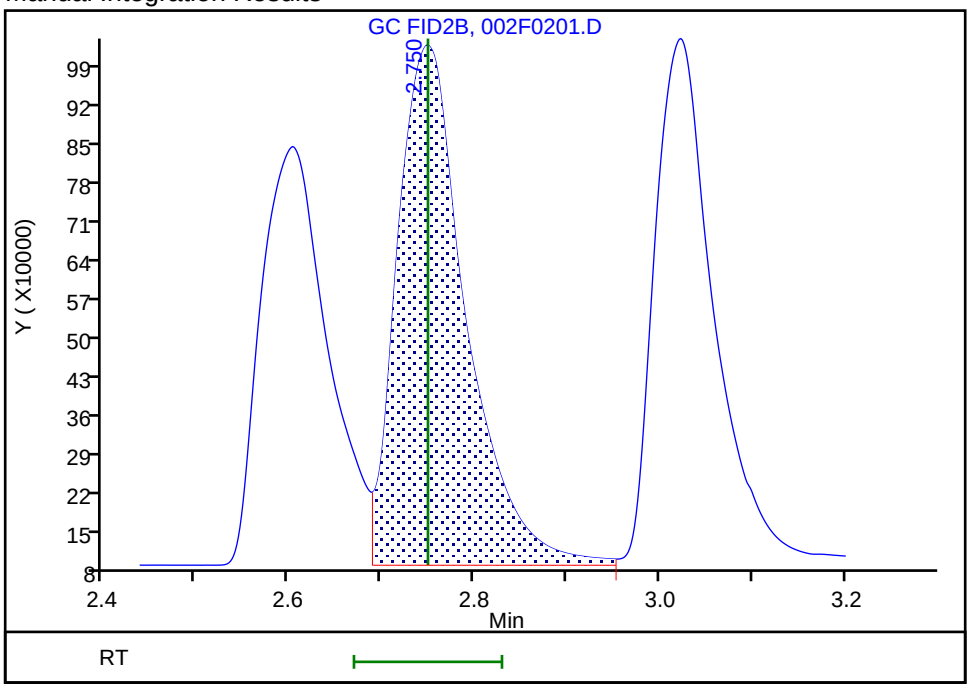
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 4864401
Amount: 142.3222
Amount Units: ug/l



Reviewer: sciannac, 11-Mar-2022 11:53:14
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568337/42 Calibration Date: 03/10/2022 19:41

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		37545		68.3	65.7	3.9	20.0
Ethane	Ave	33241	34432		128	123	3.6	20.0
Ethylene	Ave	35226	36323		118	115	3.1	20.0
Acetylene	Ave	28139	27928		106	107	-0.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568337/42 Calibration Date: 03/10/2022 19:41

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	1.75	1.85
Acetylene	4.22	4.01	4.17

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\017F1701.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 10-Mar-2022 19:41:24 ALS Bottle#: 17 Worklist Smp#: 42
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\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:19 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: CTX1659

First Level Reviewer: sciannac Date: 11-Mar-2022 12:03:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.250	1.261	-0.011	2466813	65.7	68.3	
2	1.653	1.670	-0.017	2441848	65.7	65.9	
						RPD = 3.55	
3 Ethane							
1	1.520	1.521	-0.001	4240938	123.2	127.6	
2	3.003	3.023	-0.020	4256798	123.2	127.5	
						RPD = 0.05	
4 Ethylene							
1	1.828	1.801	0.027	4173478	114.9	118.5	
2	2.582	2.603	-0.021	3624622	114.9	117.0	
						RPD = 1.26	
5 Propane							a
1	2.641	2.573	0.068	6716914	180.6	186.5	a
2	4.920	4.930	-0.010	6362293	180.6	181.7	a
						RPD = 2.61	
6 Acetylene							
1	4.216	4.086	0.130	2979095	106.7	105.9	
2	2.728	2.750	-0.022	3687589	106.7	107.9	
						RPD = 1.89	
7 Butane							a
1	4.525	4.438	0.087	8839948	238.1	242.7	a
2	6.422	6.426	-0.004	8413255	238.1	239.4	a
						RPD = 1.36	
8 isobutylene							a
1	5.425	5.339	0.086	8377323	229.8	231.9	a
2	6.263	6.270	-0.007	7545595	229.8	227.3	a
						RPD = 2.02	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

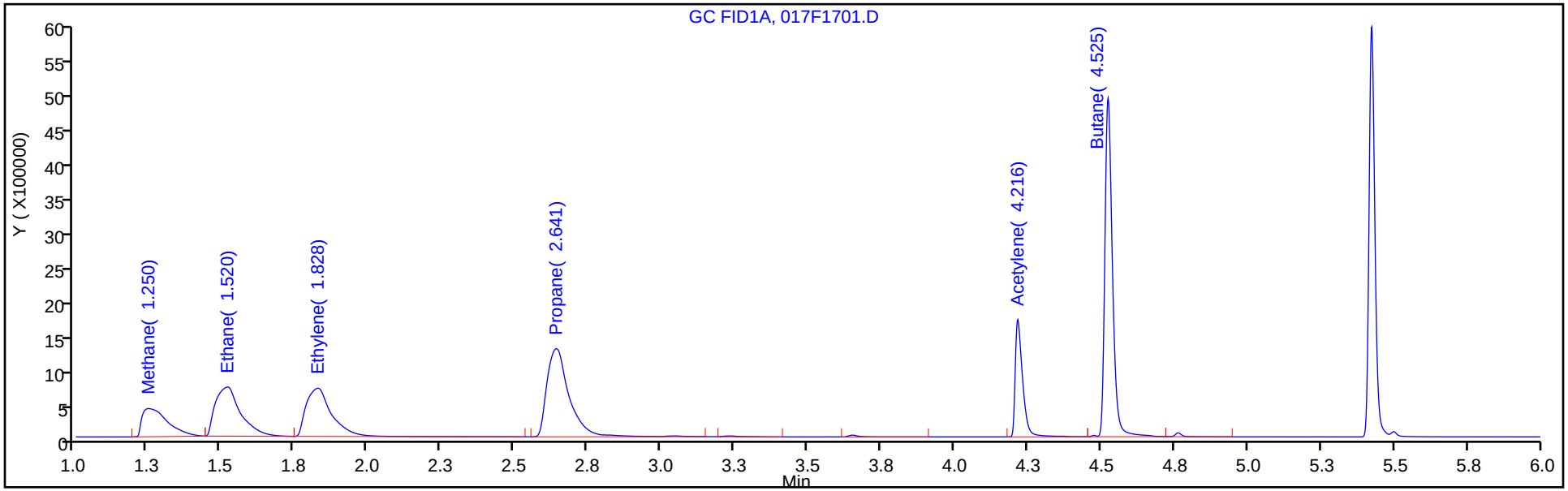
Report Date: 15-Mar-2022 15:37:19 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

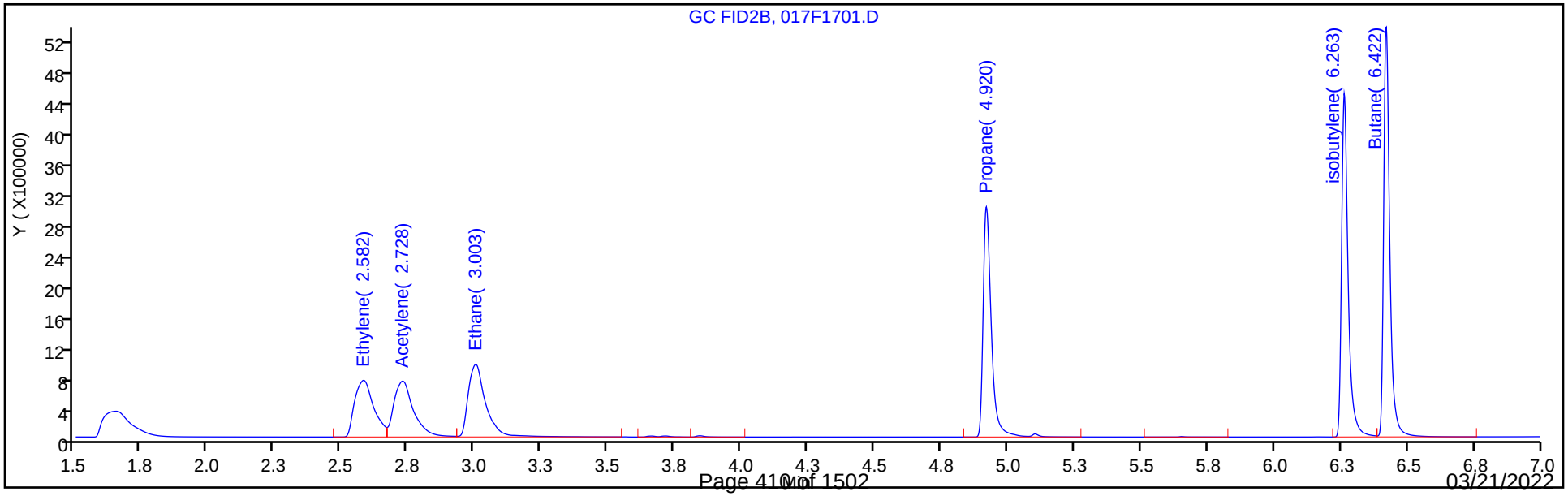
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\017F1701.D

Injection Date:	10-Mar-2022 19:41:24	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	42
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



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568337/42 Calibration Date: 03/10/2022 19:41

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		37165		65.9	65.7	0.3	20.0
Ethylene	Ave	30980	31546		117	115	1.8	20.0
Acetylene	Ave	34179	34570		108	107	1.1	20.0
Ethane	Ave	33383	34560		128	123	3.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568337/42 Calibration Date: 03/10/2022 19:41

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	2.58	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\20220310-109149.b\017F1701.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 10-Mar-2022 19:41:24 ALS Bottle#: 17 Worklist Smp#: 42
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\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:19 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: CTX1659

First Level Reviewer: sciannac Date: 11-Mar-2022 12:03:09

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.250	1.261	-0.011	2466813	65.7	68.3	
2	1.653	1.670	-0.017	2441848	65.7	65.9	
						RPD = 3.55	
3 Ethane							
1	1.520	1.521	-0.001	4240938	123.2	127.6	
2	3.003	3.023	-0.020	4256798	123.2	127.5	
						RPD = 0.05	
4 Ethylene							
1	1.828	1.801	0.027	4173478	114.9	118.5	
2	2.582	2.603	-0.021	3624622	114.9	117.0	
						RPD = 1.26	
5 Propane							a
1	2.641	2.573	0.068	6716914	180.6	186.5	a
2	4.920	4.930	-0.010	6362293	180.6	181.7	a
						RPD = 2.61	
6 Acetylene							
1	4.216	4.086	0.130	2979095	106.7	105.9	
2	2.728	2.750	-0.022	3687589	106.7	107.9	
						RPD = 1.89	
7 Butane							a
1	4.525	4.438	0.087	8839948	238.1	242.7	a
2	6.422	6.426	-0.004	8413255	238.1	239.4	a
						RPD = 1.36	
8 isobutylene							a
1	5.425	5.339	0.086	8377323	229.8	231.9	a
2	6.263	6.270	-0.007	7545595	229.8	227.3	a
						RPD = 2.02	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

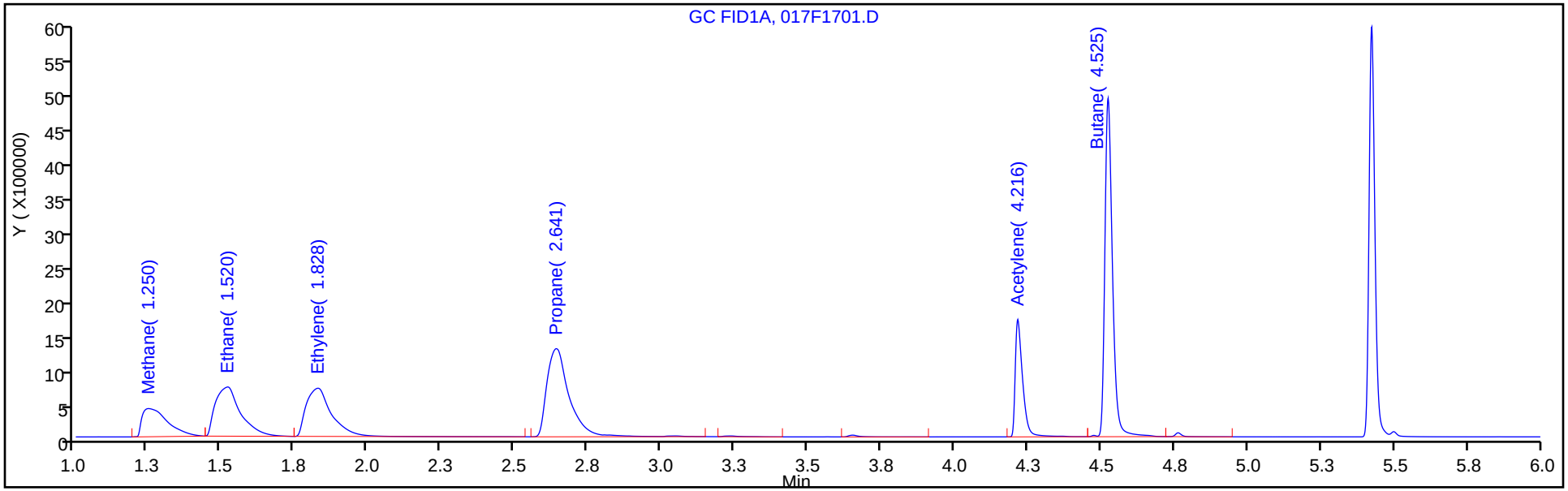
Report Date: 15-Mar-2022 15:37:19 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

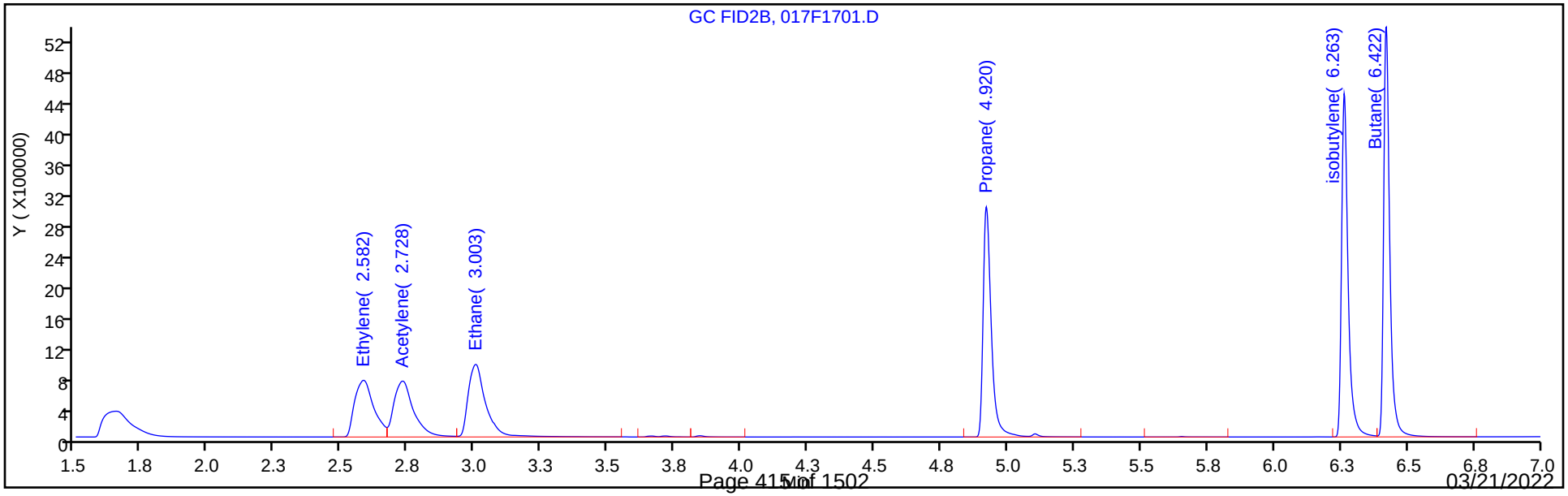
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\017F1701.D

Injection Date:	10-Mar-2022 19:41:24	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	42
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



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568337/53 Calibration Date: 03/10/2022 22:04

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: 028F2801.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		37734		68.6	65.7	4.5	20.0
Ethane	Ave	33241	34565		128	123	4.0	20.0
Ethylene	Ave	35226	36250		118	115	2.9	20.0
Acetylene	Ave	28139	26797		102	107	-4.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568337/53 Calibration Date: 03/10/2022 22:04

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: 028F2801.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	1.75	1.85
Acetylene	4.22	4.01	4.17

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\028F2801.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 10-Mar-2022 22:04:07 ALS Bottle#: 28 Worklist Smp#: 53
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\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:26 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: CTX1659

First Level Reviewer: sciannac Date: 15-Mar-2022 15:36:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.251	1.261	-0.010	2479215	65.7	68.6	
2	1.657	1.670	-0.013	2444618	65.7	66.0	
						RPD = 3.95	
3 Ethane							
1	1.521	1.521	0.000	4257390	123.2	128.1	
2	3.003	3.023	-0.020	4219560	123.2	126.4	
						RPD = 1.32	
4 Ethylene							
1	1.830	1.801	0.029	4165072	114.9	118.2	
2	2.585	2.603	-0.018	3631822	114.9	117.2	
						RPD = 0.86	
5 Propane							a
1	2.645	2.573	0.072	6873176	180.6	190.9	a
2	4.920	4.930	-0.010	6441019	180.6	184.0	a
						RPD = 3.68	
6 Acetylene							Ma
1	4.216	4.086	0.130	2858434	106.7	101.6	M
2	2.732	2.750	-0.018	3660117	106.7	107.1	a
						RPD = 5.28	
7 Butane							a
1	4.526	4.438	0.088	9070902	238.1	249.1	a
2	6.420	6.426	-0.006	8546464	238.1	243.2	a
						RPD = 2.37	
8 isobutylene							a
1	5.426	5.339	0.087	8482397	229.8	234.8	a
2	6.263	6.270	-0.007	7642434	229.8	230.2	a
						RPD = 1.99	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

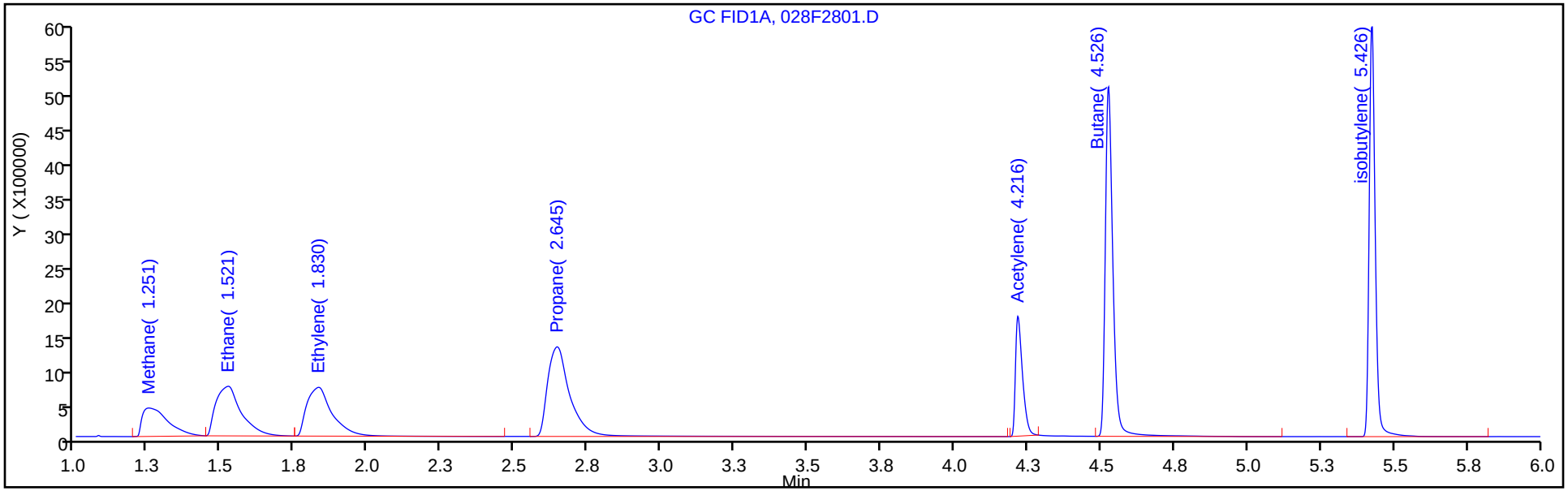
Report Date: 15-Mar-2022 15:37:26 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

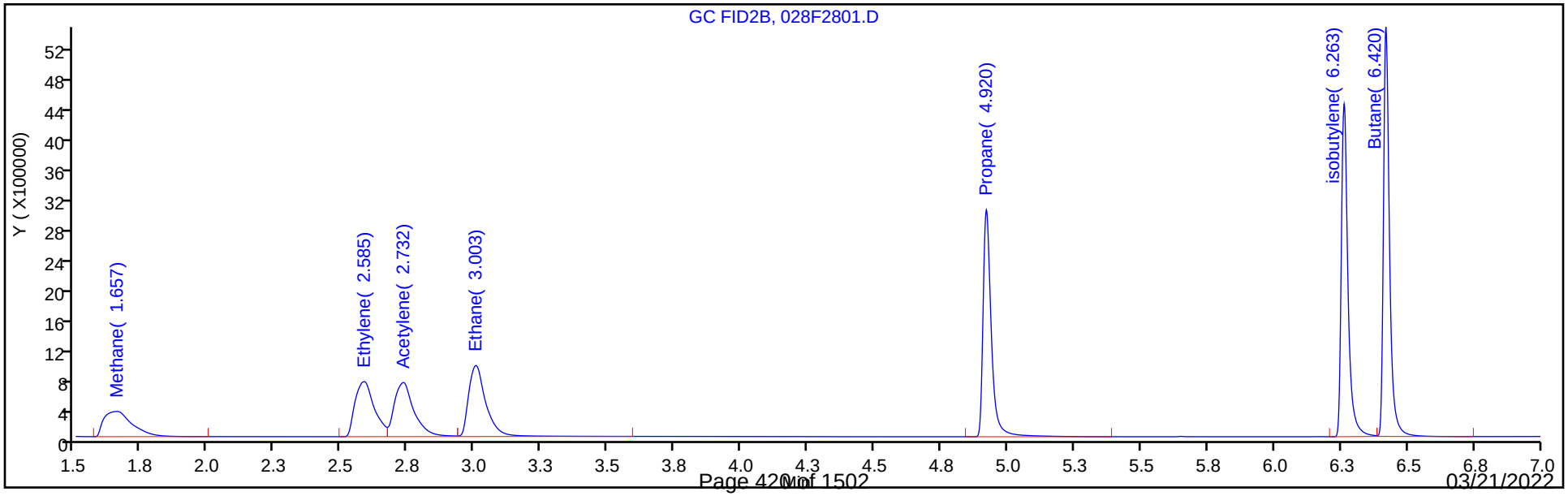
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\028F2801.D

Injection Date:	10-Mar-2022 22:04:07	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	53
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
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

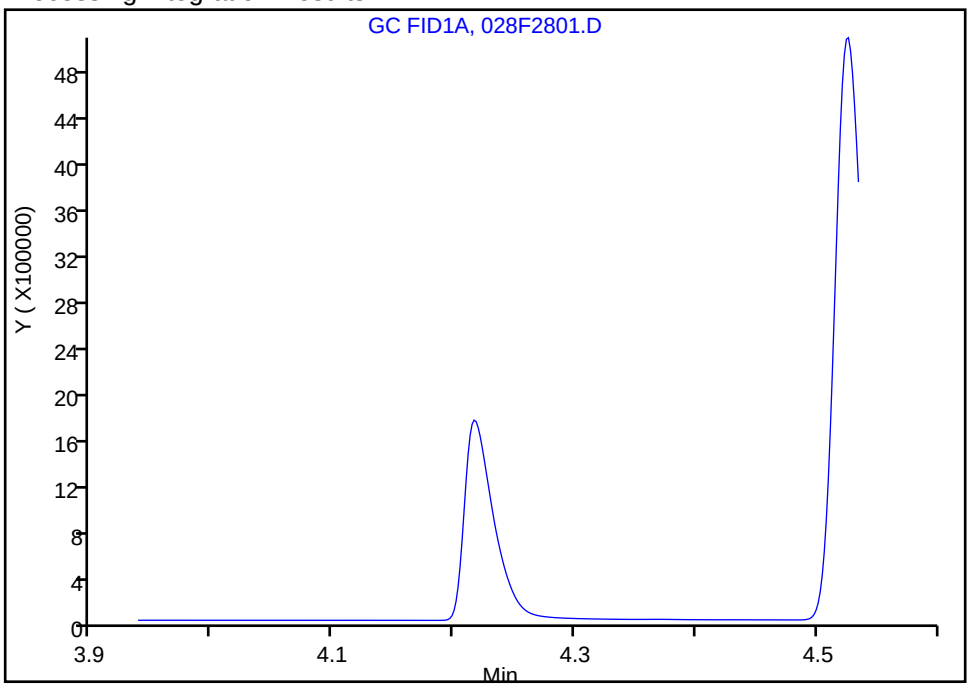
Data File:	\\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\028F2801.D				
Injection Date:	10-Mar-2022 22:04:07	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	28	Worklist Smp#:	53
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

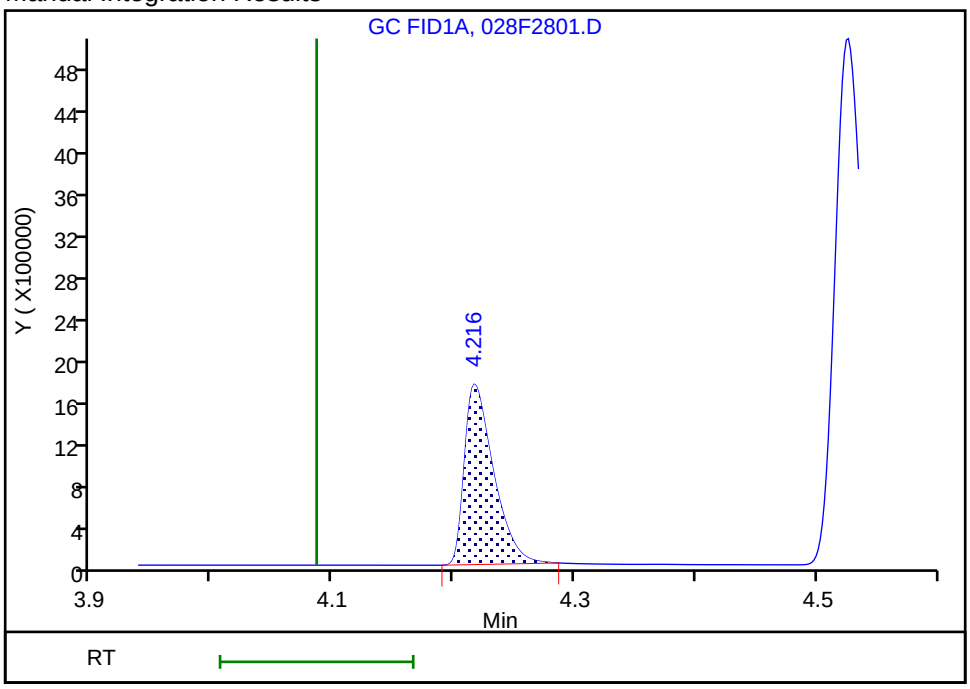
Not Detected
Expected RT: 4.09

Processing Integration Results



Manual Integration Results

RT: 4.22
Area: 2858434
Amount: 101.5826
Amount Units: ug/l



Reviewer: sciannac, 15-Mar-2022 15:36:25
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.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568337/53 Calibration Date: 03/10/2022 22:04

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: 028F2801.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		37207		66.0	65.7	0.4	20.0
Ethylene	Ave	30980	31609		117	115	2.0	20.0
Acetylene	Ave	34179	34313		107	107	0.4	20.0
Ethane	Ave	33383	34258		126	123	2.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568337/53 Calibration Date: 03/10/2022 22:04

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: 028F2801.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	3.00	2.97	3.07

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\028F2801.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 10-Mar-2022 22:04:07 ALS Bottle#: 28 Worklist Smp#: 53
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\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:26 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: CTX1659

First Level Reviewer: sciannac Date: 15-Mar-2022 15:36:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.251	1.261	-0.010	2479215	65.7	68.6	
2	1.657	1.670	-0.013	2444618	65.7	66.0	
						RPD = 3.95	
3 Ethane							
1	1.521	1.521	0.000	4257390	123.2	128.1	
2	3.003	3.023	-0.020	4219560	123.2	126.4	
						RPD = 1.32	
4 Ethylene							
1	1.830	1.801	0.029	4165072	114.9	118.2	
2	2.585	2.603	-0.018	3631822	114.9	117.2	
						RPD = 0.86	
5 Propane							a
1	2.645	2.573	0.072	6873176	180.6	190.9	a
2	4.920	4.930	-0.010	6441019	180.6	184.0	a
						RPD = 3.68	
6 Acetylene							Ma
1	4.216	4.086	0.130	2858434	106.7	101.6	M
2	2.732	2.750	-0.018	3660117	106.7	107.1	a
						RPD = 5.28	
7 Butane							a
1	4.526	4.438	0.088	9070902	238.1	249.1	a
2	6.420	6.426	-0.006	8546464	238.1	243.2	a
						RPD = 2.37	
8 isobutylene							a
1	5.426	5.339	0.087	8482397	229.8	234.8	a
2	6.263	6.270	-0.007	7642434	229.8	230.2	a
						RPD = 1.99	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

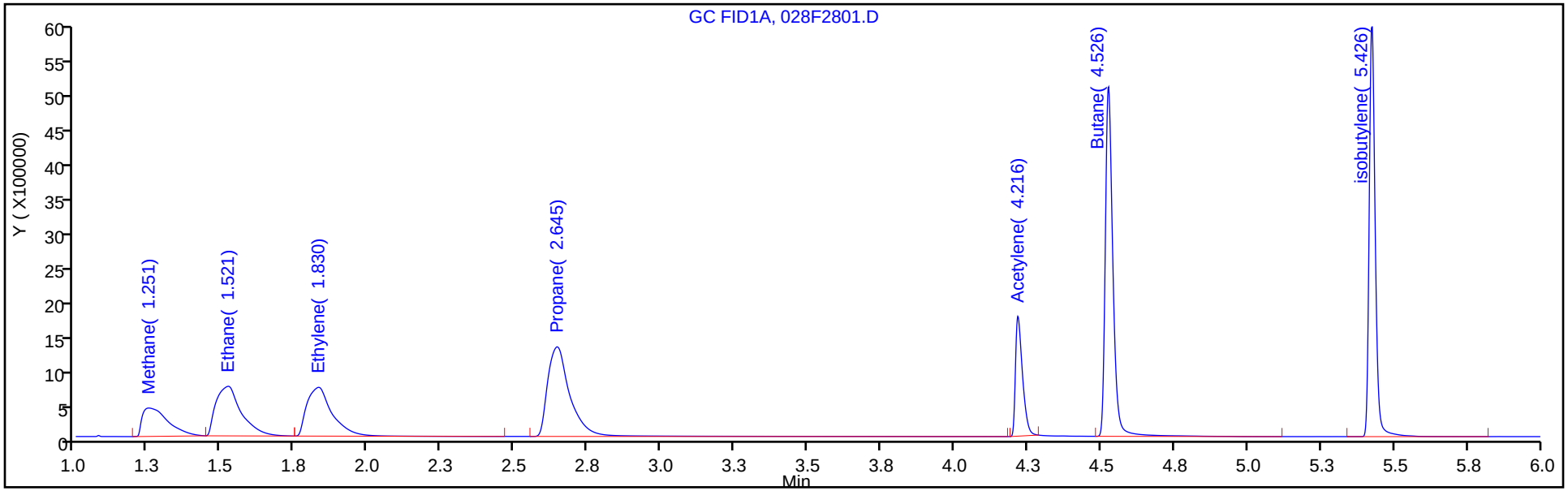
Report Date: 15-Mar-2022 15:37:26 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

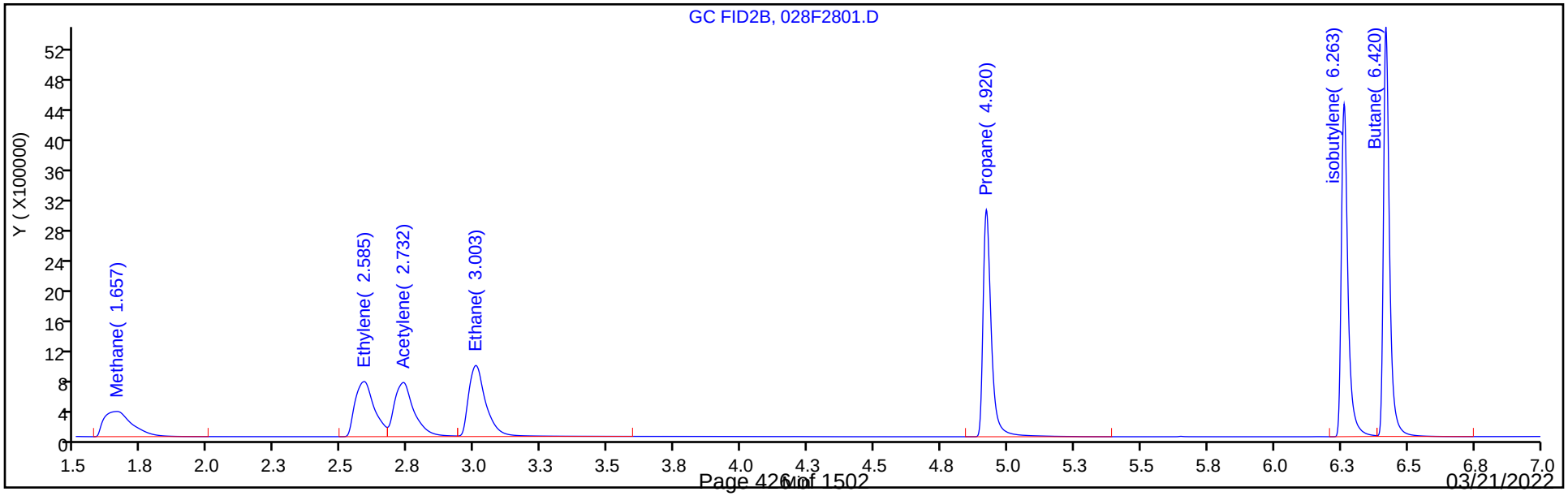
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\028F2801.D

Injection Date:	10-Mar-2022 22:04:07	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	53
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
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

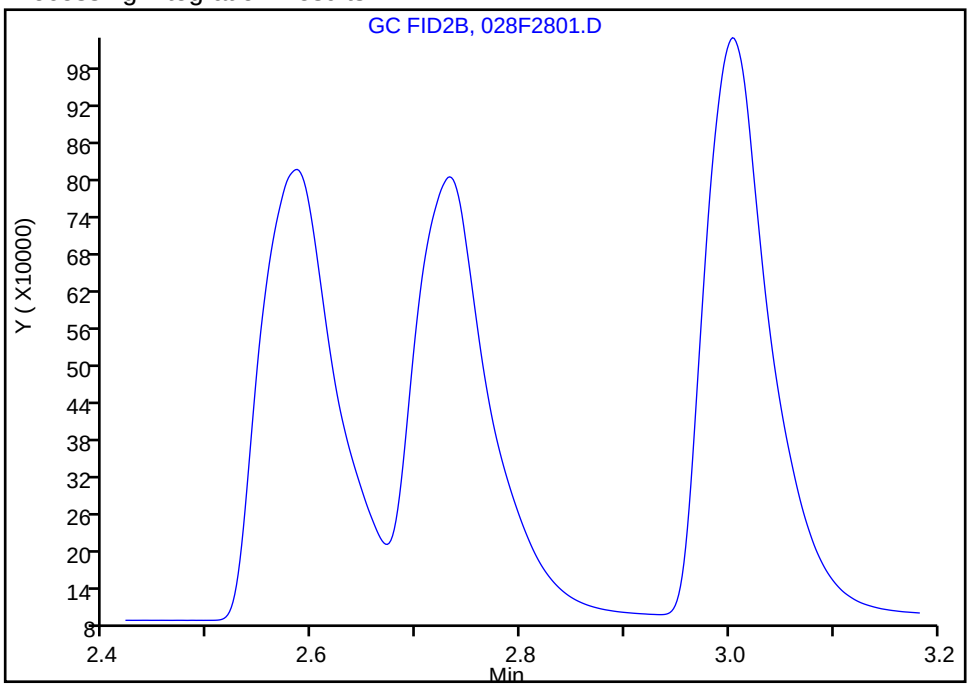
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\028F2801.D
Injection Date: 10-Mar-2022 22:04:07 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 28 Worklist Smp#: 53
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

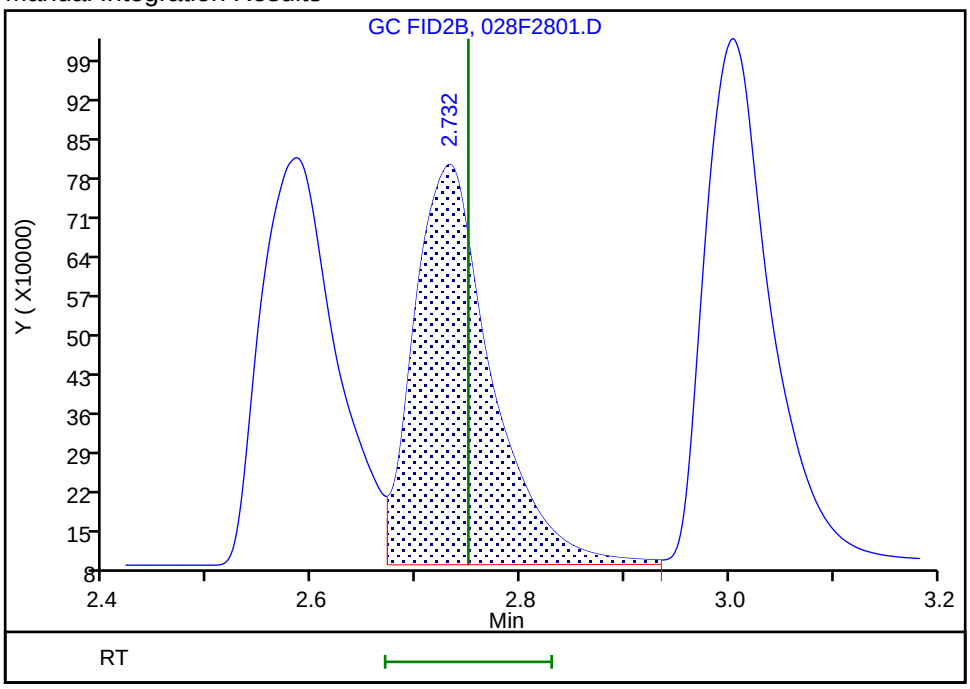
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.73
Area: 3660117
Amount: 107.0874
Amount Units: ug/l



Reviewer: sciannac, 15-Mar-2022 15:36:09
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-568337/30

Matrix: Water | Lab File ID: 005F0501.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 03/10/2022 17:05

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.: 568337 | 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\20220310-109149.b\005F0501.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 10-Mar-2022 17:05:39 ALS Bottle#: 5 Worklist Smp#: 30
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\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:11 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: CTX1659

First Level Reviewer: sciannac Date: 15-Mar-2022 15:26:40

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		1.261				ND	
2		1.670					
3 Ethane							
1		1.521				ND	
2		3.023					
4 Ethylene							
1		1.801				ND	
2		2.603					
5 Propane							
1		2.573				ND	
2		4.930					
6 Acetylene							
1		4.086				ND	
2		2.750					
7 Butane							
1		4.438				ND	
2		6.426					
8 isobutylene							
1		5.339				ND	
2		6.270					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

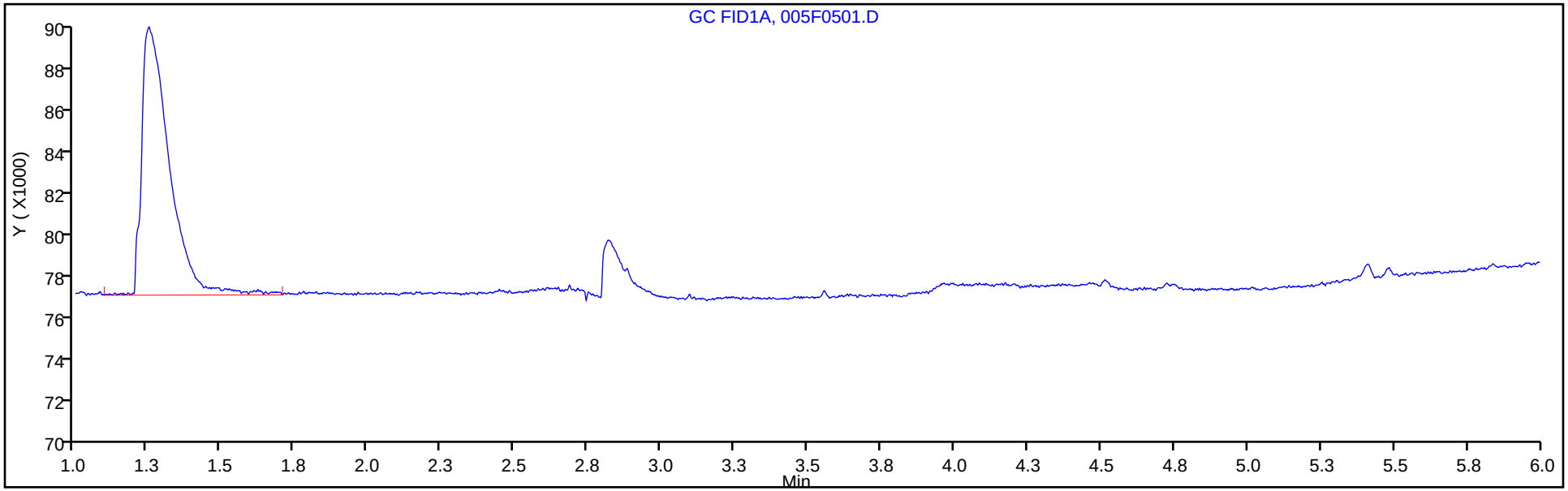
Report Date: 15-Mar-2022 15:37:13 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

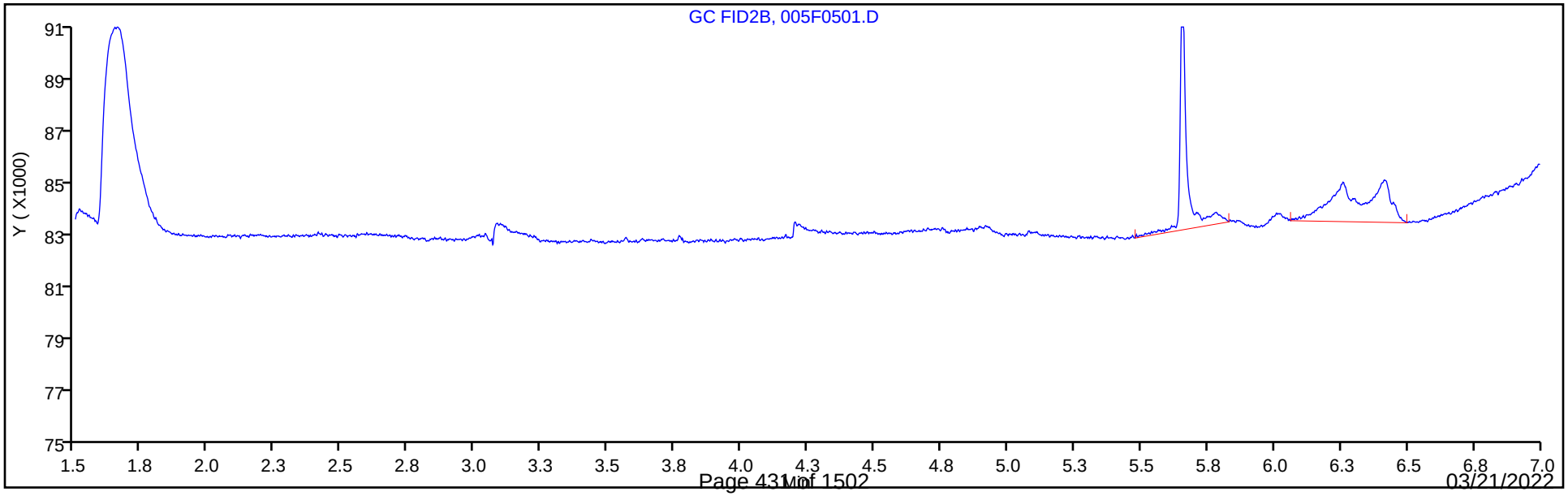
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\005F0501.D

Injection Date:	10-Mar-2022 17:05:39	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	mb			Worklist Smp#:	30
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.: 280-159332-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-568337/4

Matrix: Water | Lab File ID: 003F0301.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 03/10/2022 16:39

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.: 568337 | 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\20220310-109149.b\003F0301.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 10-Mar-2022 16:39:49 ALS Bottle#: 3 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\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:11 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: CTX1659

First Level Reviewer: sciannac Date: 11-Mar-2022 11:54:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.258	1.261	-0.003	2478575	65.7	68.6	
2	1.665	1.670	-0.005	2469002	65.7	66.7	
						RPD = 2.90	
3 Ethane							
1	1.522	1.521	0.001	4291404	123.2	129.1	
2	3.019	3.023	-0.004	4394004	123.2	131.6	
						RPD = 1.94	
4 Ethylene							
1	1.808	1.801	0.007	4326901	114.9	122.8	
2	2.600	2.603	-0.003	3761953	114.9	121.4	
						RPD = 1.15	
5 Propane							
1	2.592	2.573	0.019	6770490	180.6	188.0	
2	4.927	4.930	-0.003	6474583	180.6	184.9	
						RPD = 1.65	
6 Acetylene							
1	4.142	4.086	0.056	3736285	106.7	132.8	
2	2.747	2.750	-0.003	4641608	106.7	135.8	
						RPD = 2.25	
7 Butane							
1	4.472	4.438	0.034	9088928	238.1	249.6	
2	6.425	6.426	-0.001	8622822	238.1	245.4	
						RPD = 1.68	
8 isobutylene							
1	5.372	5.339	0.033	8847136	229.8	244.9	
2	6.269	6.270	-0.001	7966596	229.8	239.9	
						RPD = 2.05	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

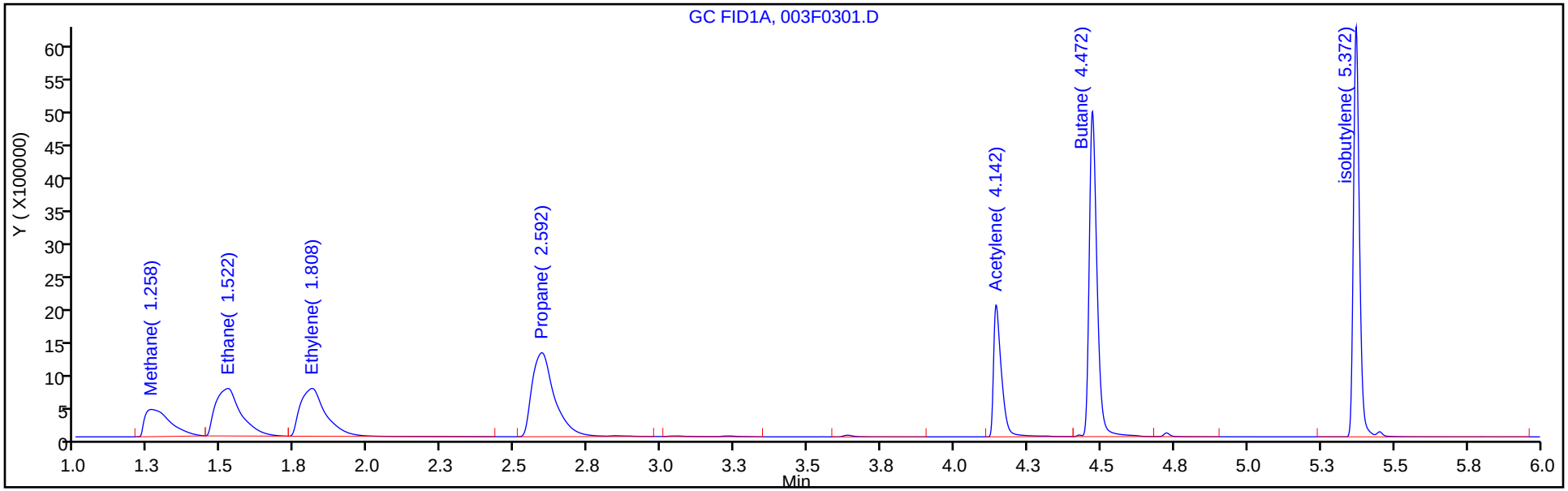
Report Date: 15-Mar-2022 15:37:12 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

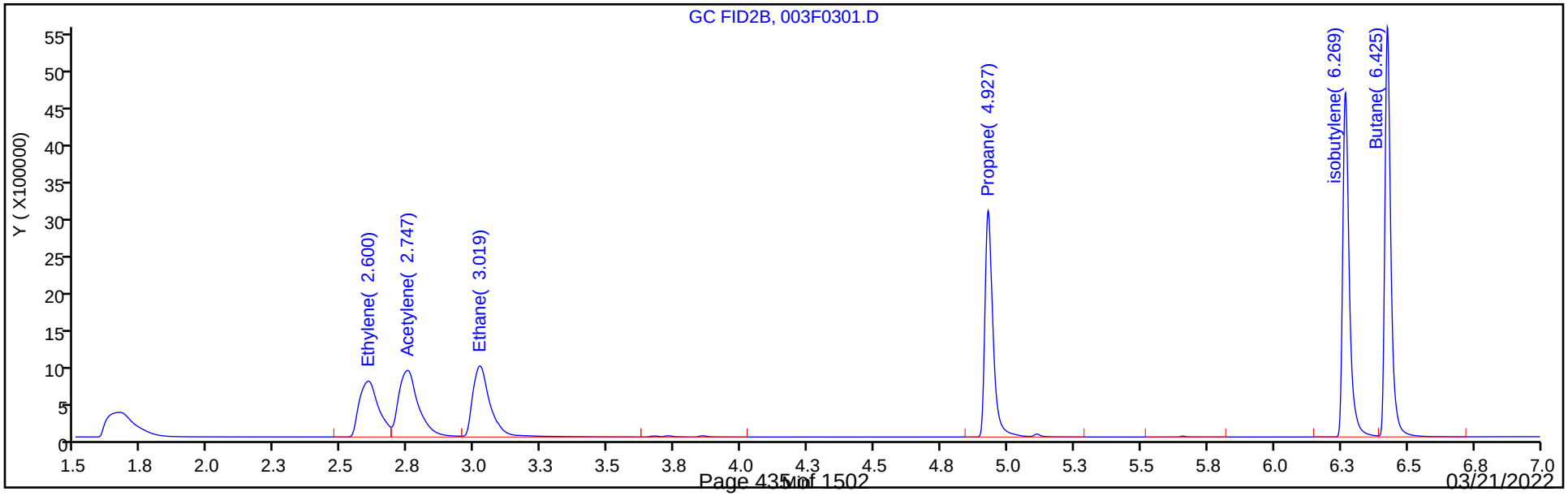
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\003F0301.D

Injection Date:	10-Mar-2022 16:39:49	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#:	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.: 280-159332-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-568337/5

Matrix: Water | Lab File ID: 004F0401.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 03/10/2022 16:52

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.: 568337 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0669		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\004F0401.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 10-Mar-2022 16:52:44 ALS Bottle#: 4 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\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:11 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: CTX1659

First Level Reviewer: sciannac Date: 15-Mar-2022 15:26:34

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.256	1.261	-0.005	2494758	65.7	69.1	
2	1.661	1.670	-0.009	2479489	65.7	66.9	
						RPD = 3.13	
3 Ethane							
1	1.521	1.521	0.000	4316782	123.2	129.9	
2	3.015	3.023	-0.008	4402056	123.2	131.9	
						RPD = 1.53	
4 Ethylene							
1	1.818	1.801	0.017	4322062	114.9	122.7	
2	2.596	2.603	-0.007	3752213	114.9	121.1	
						RPD = 1.30	
5 Propane							
1	2.613	2.573	0.040	6794478	180.6	188.7	
2	4.925	4.930	-0.005	6504242	180.6	185.8	
						RPD = 1.55	
6 Acetylene							
1	4.178	4.086	0.092	3448262	106.7	122.5	
2	2.741	2.750	-0.009	4291435	106.7	125.6	
						RPD = 2.43	
7 Butane							Ma
1	4.496	4.438	0.058	9241761	238.1	253.7	a
2	6.425	6.426	-0.001	8699001	238.1	247.6	M
						RPD = 2.47	
8 isobutylene							Ma
1	5.394	5.339	0.055	8824566	229.8	244.3	
2	6.268	6.270	-0.002	7939534	229.8	239.1	M
						RPD = 2.13	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

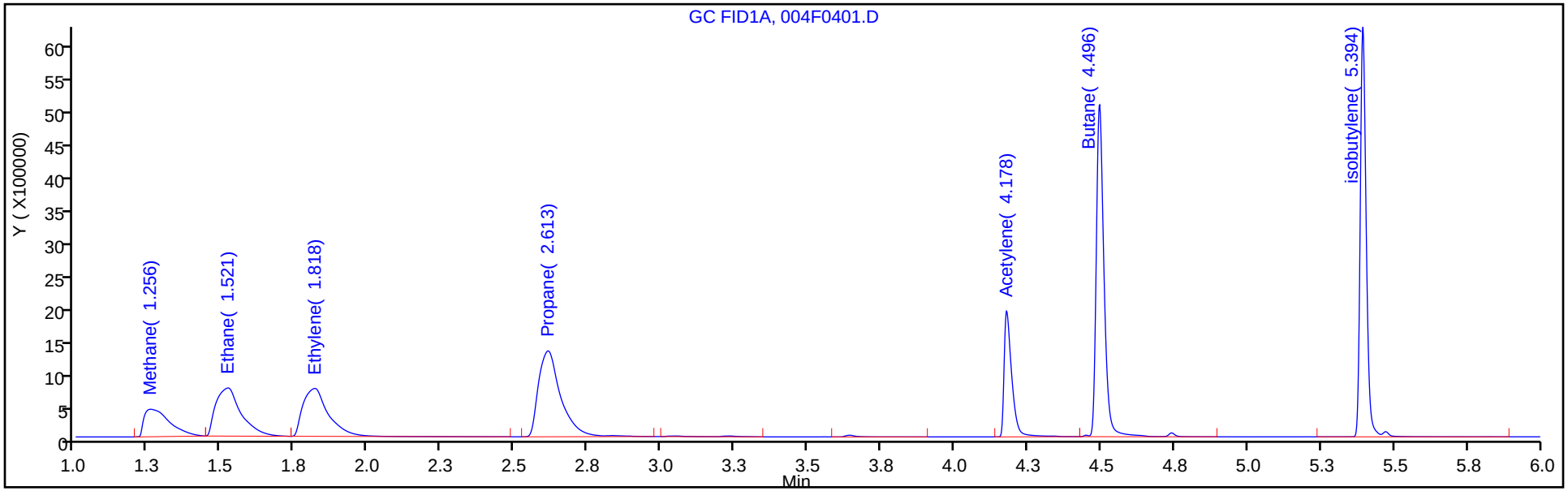
Report Date: 15-Mar-2022 15:37:13 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

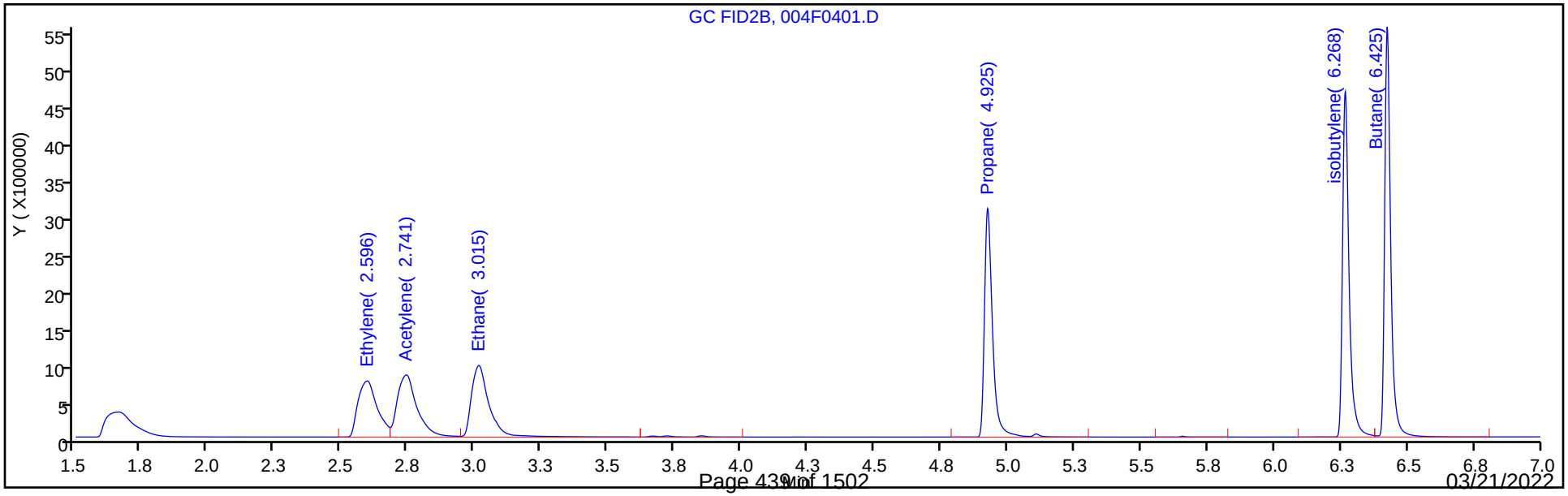
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\004F0401.D

Injection Date:	10-Mar-2022 16:52:44	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#:	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.: 280-159332-1

SDG No.:

Client Sample ID: PZ019-8 MS | Lab Sample ID: 280-159332-13 MS

Matrix: Water | Lab File ID: 024F2401.D

Analysis Method: RSK-175 | Date Collected: 03/01/2022 09:10

Sample wt/vol: 20(mL) | Date Analyzed: 03/10/2022 21:12

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.: 568337 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0644		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\024F2401.D
Lims ID: 280-159332-H-13 MS
Client ID: PZ019-8
Sample Type: MS
Inject. Date: 10-Mar-2022 21:12:11 ALS Bottle#: 24 Worklist Smp#: 49
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159332-H-13M
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 17:07:03 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: CTX1659

First Level Reviewer: sciannac Date: 15-Mar-2022 15:34:41

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							
1	1.251	1.261	-0.010	2440505	65.7	67.5	
2	1.655	1.670	-0.015	2388959	65.7	64.4	
						RPD = 4.69	
3 Ethane							
1	1.520	1.521	-0.001	4209595	123.2	126.6	
2	3.003	3.023	-0.020	4172214	123.2	125.0	
						RPD = 1.32	
4 Ethylene							
1	1.826	1.801	0.025	4119659	114.9	116.9	
2	2.581	2.603	-0.022	3520962	114.9	113.7	
						RPD = 2.86	
5 Propane							
1	2.630	2.573	0.057	6688359	180.6	185.7	
2	4.920	4.930	-0.010	6270376	180.6	179.1	
						RPD = 3.64	
6 Acetylene							
1	4.208	4.086	0.122	2818902	106.7	100.2	
2	2.728	2.750	-0.022	3496838	106.7	102.3	
						RPD = 2.11	
7 Butane							a
1	4.523	4.438	0.085	8899085	238.1	244.3	a
2	6.421	6.426	-0.005	8366650	238.1	238.1	a
						RPD = 2.58	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 isobutylene							a
1	5.426	5.339	0.087	8326177	229.8	230.5	a
2	6.263	6.270	-0.007	7420076	229.8	223.5	a
						RPD = 3.09	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

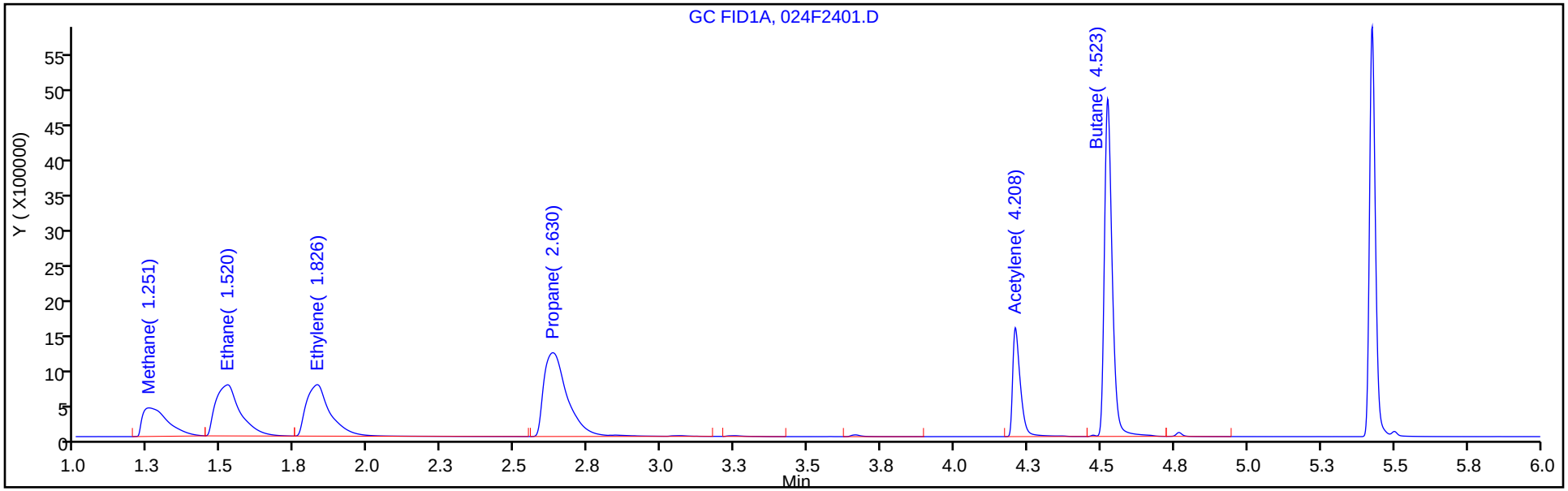
Report Date: 15-Mar-2022 17:07:13 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

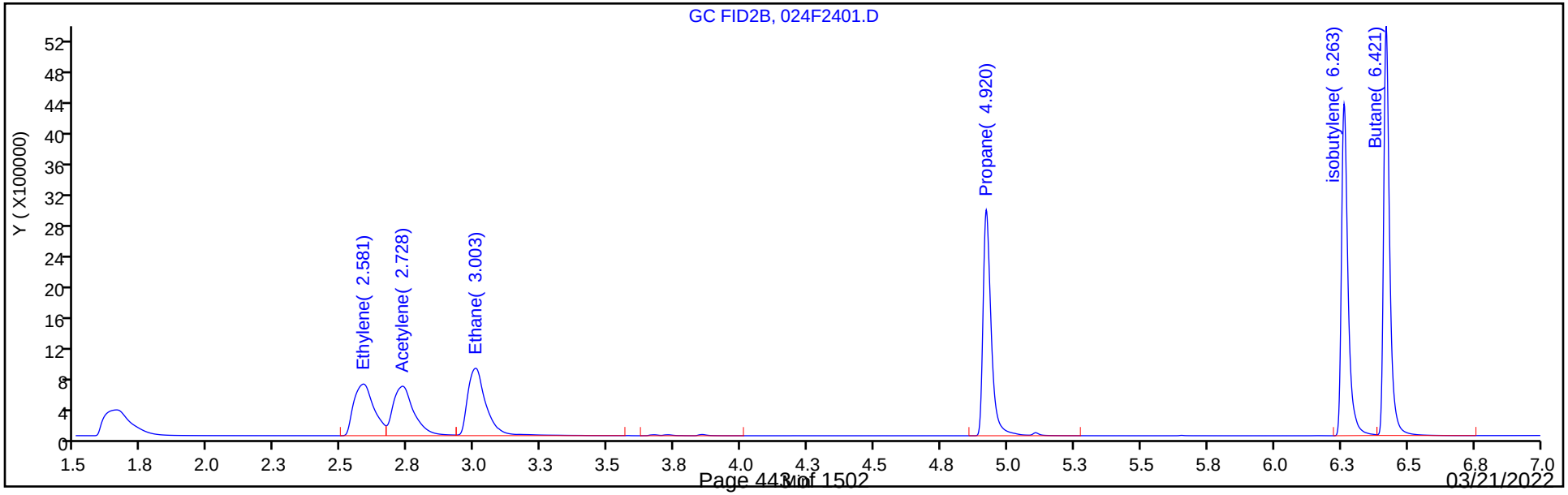
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\024F2401.D

Injection Date:	10-Mar-2022 21:12:11	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159332-H-13 MS			Worklist Smp#:	49
Client ID:	PZ019-8				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
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.: 280-159332-1

SDG No.:

Client Sample ID: PZ019-8 MSD | Lab Sample ID: 280-159332-13 MSD

Matrix: Water | Lab File ID: 025F2501.D

Analysis Method: RSK-175 | Date Collected: 03/01/2022 09:10

Sample wt/vol: 20(mL) | Date Analyzed: 03/10/2022 21:25

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.: 568337 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0641		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\025F2501.D
Lims ID: 280-159332-H-13 MSD
Client ID: PZ019-8
Sample Type: MSD
Inject. Date: 10-Mar-2022 21:25:10 ALS Bottle#: 25 Worklist Smp#: 50
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159332-H-13M
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 17:07:03 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: CTX1659

First Level Reviewer: sciannac Date: 11-Mar-2022 12:07:50

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							
1	1.251	1.261	-0.010	2427582	65.7	67.2	
2	1.655	1.670	-0.015	2375588	65.7	64.1	
						RPD = 4.72	
3 Ethane							
1	1.520	1.521	-0.001	4180589	123.2	125.8	
2	3.003	3.023	-0.020	4144712	123.2	124.2	
						RPD = 1.29	
4 Ethylene							
1	1.826	1.801	0.025	4094572	114.9	116.2	
2	2.581	2.603	-0.022	3500607	114.9	113.0	
						RPD = 2.83	
5 Propane							
1	2.628	2.573	0.055	6627081	180.6	184.0	
2	4.920	4.930	-0.010	6087488	180.6	173.9	
						RPD = 5.68	
6 Acetylene							
1	4.208	4.086	0.122	2841725	106.7	101.0	
2	2.728	2.750	-0.022	3524173	106.7	103.1	
						RPD = 2.08	
7 Butane							Ma
1	4.523	4.438	0.085	8740737	238.1	240.0	a
2	6.421	6.426	-0.005	8252788	238.1	234.9	M
						RPD = 2.16	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 isobutylene							Ma
1	5.426	5.339	0.087	8180341	229.8	226.4	a
2	6.263	6.270	-0.007	7293940	229.8	219.7	M
						RPD = 3.03	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

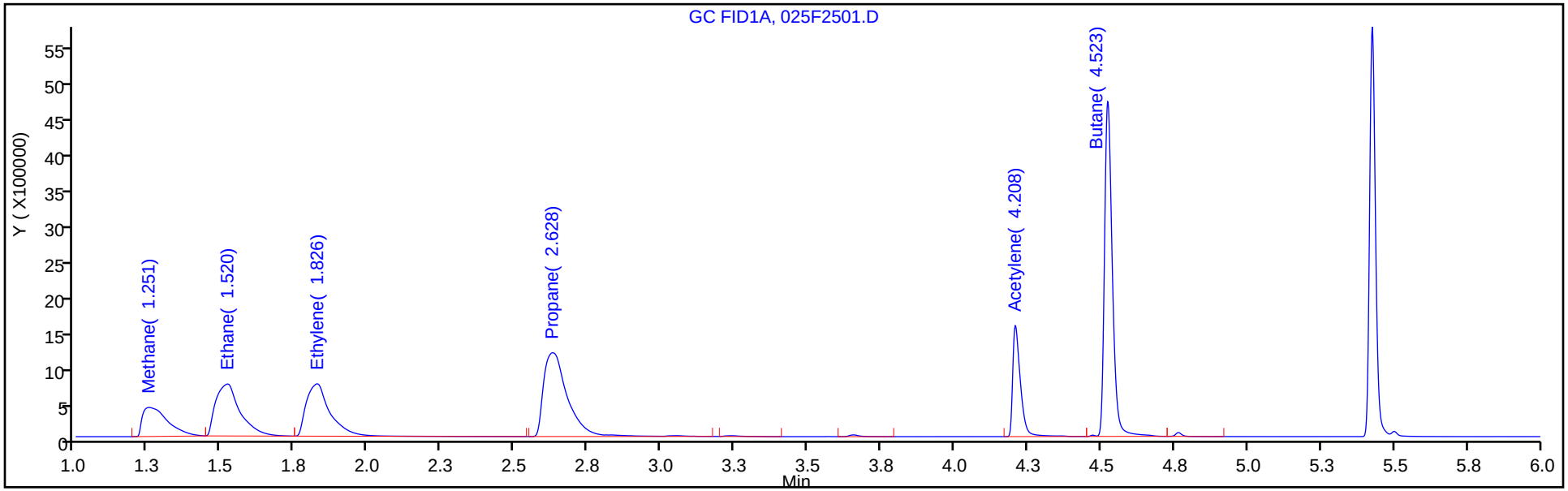
Report Date: 15-Mar-2022 17:07:13 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

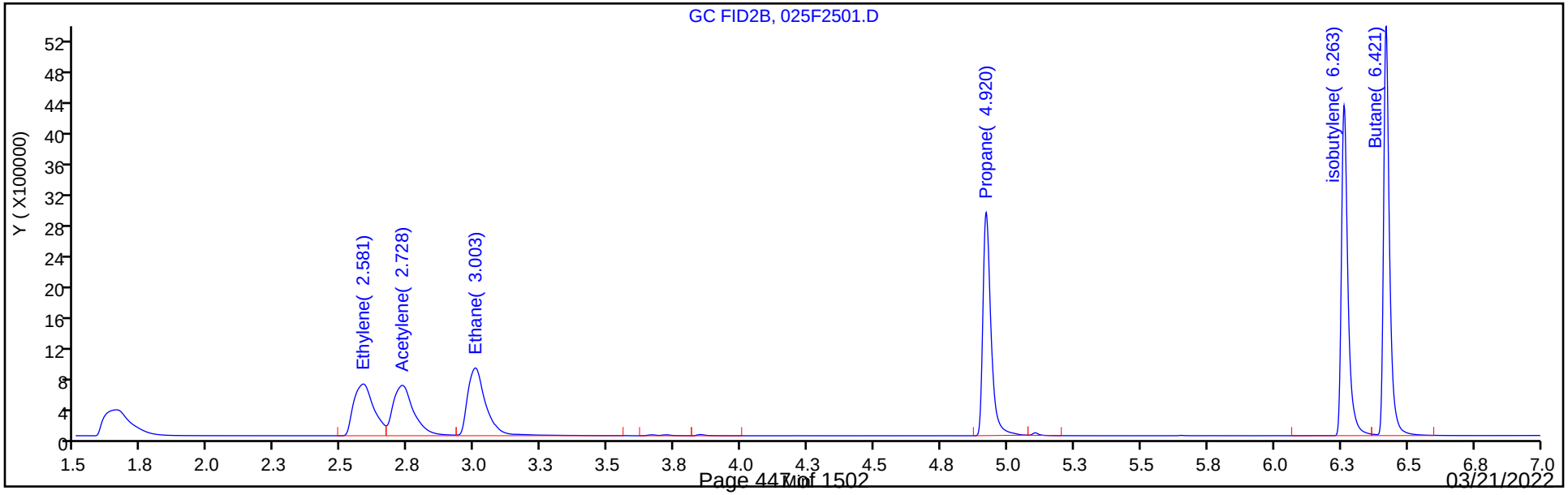
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\025F2501.D

Injection Date:	10-Mar-2022 21:25:10	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159332-H-13 MSD			Worklist Smp#:	50
Client ID:	PZ019-8				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
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.: 280-159332-1

SDG No.:

Client Sample ID: PZ019-8 DU | Lab Sample ID: 280-159332-13 DU

Matrix: Water | Lab File ID: 023F2301.D

Analysis Method: RSK-175 | Date Collected: 03/01/2022 09:10

Sample wt/vol: 20(mL) | Date Analyzed: 03/10/2022 20:59

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.: 568337 | 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\20220310-109149.b\023F2301.D
Lims ID: 280-159332-I-13 DU
Client ID:
Sample Type: DU
Inject. Date: 10-Mar-2022 20:59:15 ALS Bottle#: 23 Worklist Smp#: 48
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159332-I-13
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Mar-2022 15:37:19 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: CTX1659

First Level Reviewer: sciannac Date: 15-Mar-2022 15:33:57

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		1.261				ND	
2		1.670					
3 Ethane							
1		1.521				ND	
2		3.023					
4 Ethylene							
1		1.801				ND	
2		2.603					
5 Propane							
1		2.573				ND	
2		4.930					
6 Acetylene							
1		4.086				ND	
2		2.750					
7 Butane							
1		4.438				ND	
2		6.426					
8 isobutylene							
1		5.339				ND	
2		6.270					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

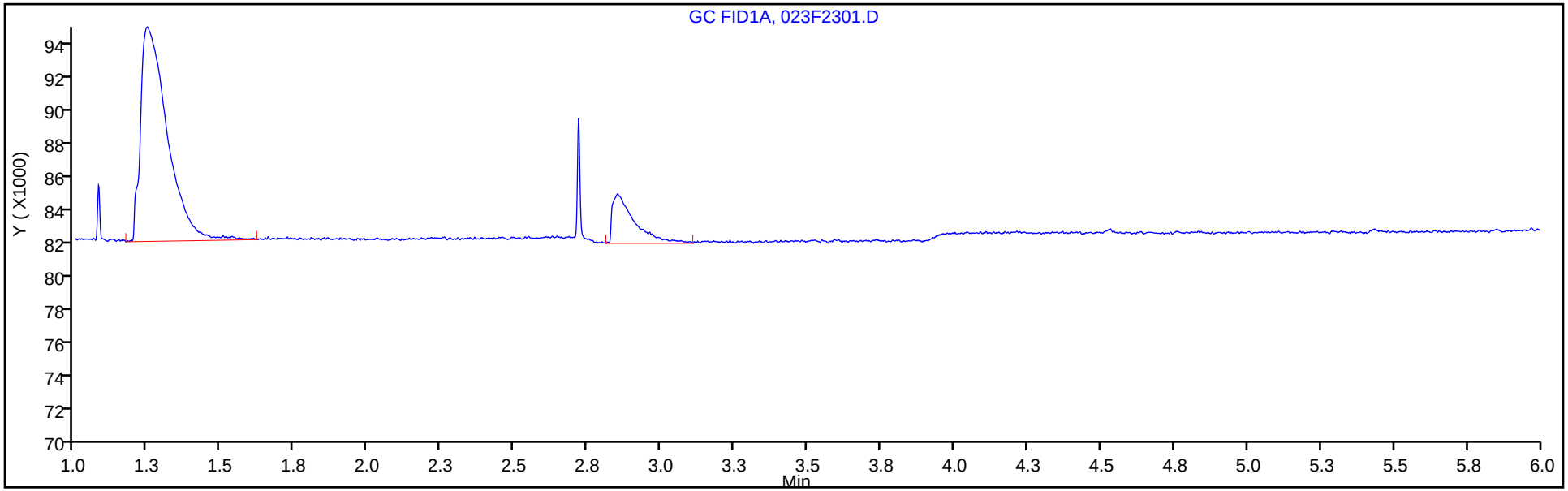
Report Date: 15-Mar-2022 15:37:23 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

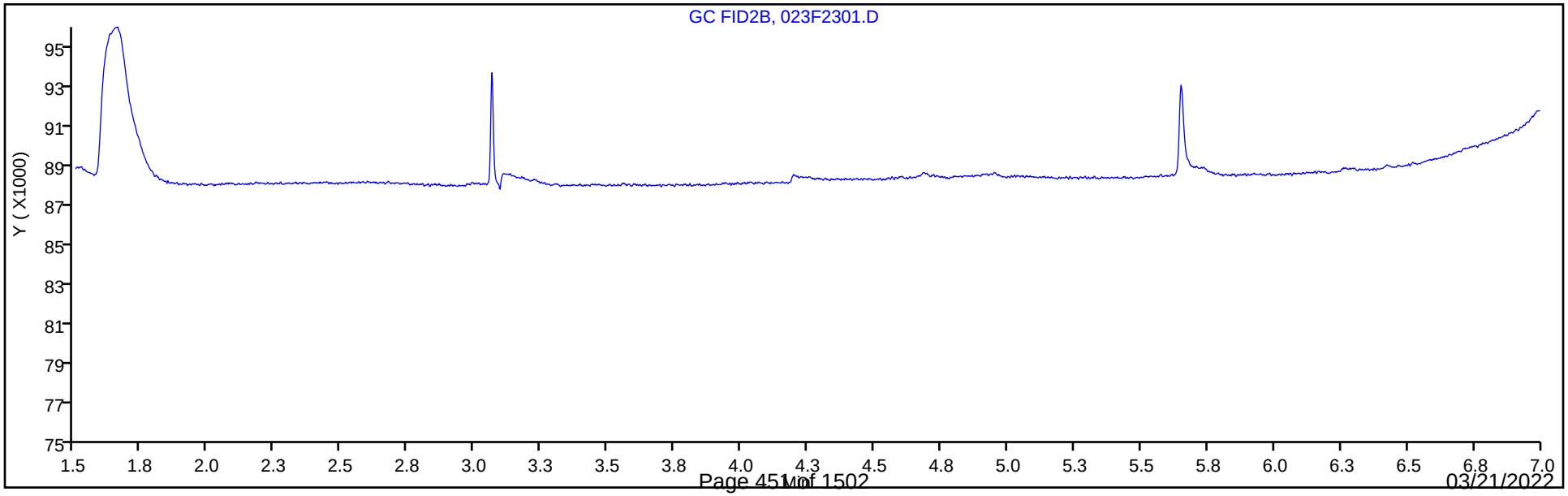
Data File: \\chromfs\Denver\ChromData\VGC_J\20220310-109149.b\023F2301.D

Injection Date:	10-Mar-2022 20:59:15	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159332-I-13 DU			Worklist Smp#:	48
Client ID:					
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



GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159332-1

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.: 280-159332-1

SDG No.:

Instrument ID: VGC_J Start Date: 03/10/2022 16:26

Analysis Batch Number: 568337 End Date: 03/10/2022 22:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-568337/2		03/10/2022 16:26	1	002F0201.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-568337/2		03/10/2022 16:26	1	002F0201.D	HP-Plot Q 0.53(mm)
LCS 280-568337/4		03/10/2022 16:39	1	003F0301.D	Rt-Alumina KCl 0.53(mm)
LCS 280-568337/4		03/10/2022 16:39	1	003F0301.D	HP-Plot Q 0.53(mm)
LCSD 280-568337/5		03/10/2022 16:52	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-568337/5		03/10/2022 16:52	1	004F0401.D	HP-Plot Q 0.53(mm)
MB 280-568337/30		03/10/2022 17:05	1	005F0501.D	Rt-Alumina KCl 0.53(mm)
MB 280-568337/30		03/10/2022 17:05	1	005F0501.D	HP-Plot Q 0.53(mm)
ZZZZZ		03/10/2022 17:18	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/10/2022 17:18	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/10/2022 17:31	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/10/2022 17:31	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/10/2022 17:44	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/10/2022 17:44	1		HP-Plot Q 0.53(mm)
280-159332-1	G0081-8	03/10/2022 17:57	1	009F0901.D	Rt-Alumina KCl 0.53(mm)
280-159332-1	G0081-8	03/10/2022 17:57	1	009F0901.D	HP-Plot Q 0.53(mm)
280-159332-2	G0082-8	03/10/2022 18:10	1	010F1001.D	Rt-Alumina KCl 0.53(mm)
280-159332-2	G0082-8	03/10/2022 18:10	1	010F1001.D	HP-Plot Q 0.53(mm)
280-159332-3	G0024-8	03/10/2022 18:23	1	011F1101.D	Rt-Alumina KCl 0.53(mm)
280-159332-3	G0024-8	03/10/2022 18:23	1	011F1101.D	HP-Plot Q 0.53(mm)
280-159332-4	G0096-8	03/10/2022 18:36	1	012F1201.D	Rt-Alumina KCl 0.53(mm)
280-159332-4	G0096-8	03/10/2022 18:36	1	012F1201.D	HP-Plot Q 0.53(mm)
280-159332-5	G0296-8	03/10/2022 18:49	1	013F1301.D	Rt-Alumina KCl 0.53(mm)
280-159332-5	G0296-8	03/10/2022 18:49	1	013F1301.D	HP-Plot Q 0.53(mm)
280-159332-6	PZ020-8	03/10/2022 19:02	1	014F1401.D	Rt-Alumina KCl 0.53(mm)
280-159332-6	PZ020-8	03/10/2022 19:02	1	014F1401.D	HP-Plot Q 0.53(mm)
280-159332-7	G0077-8	03/10/2022 19:15	1	015F1501.D	Rt-Alumina KCl 0.53(mm)
280-159332-7	G0077-8	03/10/2022 19:15	1	015F1501.D	HP-Plot Q 0.53(mm)
280-159332-8	G0078-8	03/10/2022 19:28	1	016F1601.D	Rt-Alumina KCl 0.53(mm)
280-159332-8	G0078-8	03/10/2022 19:28	1	016F1601.D	HP-Plot Q 0.53(mm)
CCV 280-568337/42		03/10/2022 19:41	1	017F1701.D	Rt-Alumina KCl 0.53(mm)
CCV 280-568337/42		03/10/2022 19:41	1	017F1701.D	HP-Plot Q 0.53(mm)
280-159332-9	G0094-8	03/10/2022 19:54	1	018F1801.D	Rt-Alumina KCl 0.53(mm)
280-159332-9	G0094-8	03/10/2022 19:54	1	018F1801.D	HP-Plot Q 0.53(mm)
280-159332-10	PZ018-8	03/10/2022 20:07	1	019F1901.D	Rt-Alumina KCl 0.53(mm)
280-159332-10	PZ018-8	03/10/2022 20:07	1	019F1901.D	HP-Plot Q 0.53(mm)
280-159332-11	PZ017R-8	03/10/2022 20:20	1	020F2001.D	Rt-Alumina KCl 0.53(mm)
280-159332-11	PZ017R-8	03/10/2022 20:20	1	020F2001.D	HP-Plot Q 0.53(mm)
280-159332-12	PZ021-8	03/10/2022 20:33	1	021F2101.D	Rt-Alumina KCl 0.53(mm)
280-159332-12	PZ021-8	03/10/2022 20:33	1	021F2101.D	HP-Plot Q 0.53(mm)
280-159332-13	PZ019-8	03/10/2022 20:46	1	022F2201.D	Rt-Alumina KCl 0.53(mm)
280-159332-13	PZ019-8	03/10/2022 20:46	1	022F2201.D	HP-Plot Q 0.53(mm)
280-159332-13 DU	PZ019-8 DU	03/10/2022 20:59	1	023F2301.D	Rt-Alumina KCl 0.53(mm)
280-159332-13 DU	PZ019-8 DU	03/10/2022 20:59	1	023F2301.D	HP-Plot Q 0.53(mm)
280-159332-13 MS	PZ019-8 MS	03/10/2022 21:12	1	024F2401.D	Rt-Alumina KCl 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: VGC_J Start Date: 03/10/2022 16:26

Analysis Batch Number: 568337 End Date: 03/10/2022 22:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-159332-13 MS	PZ019-8 MS	03/10/2022 21:12	1	024F2401.D	HP-Plot Q 0.53(mm)
280-159332-13 MSD	PZ019-8 MSD	03/10/2022 21:25	1	025F2501.D	Rt-Alumina KCl 0.53(mm)
280-159332-13 MSD	PZ019-8 MSD	03/10/2022 21:25	1	025F2501.D	HP-Plot Q 0.53(mm)
ZZZZZ		03/10/2022 21:38	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/10/2022 21:38	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/10/2022 21:51	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/10/2022 21:51	1		HP-Plot Q 0.53(mm)
CCV 280-568337/53		03/10/2022 22:04	1	028F2801.D	Rt-Alumina KCl 0.53(mm)
CCV 280-568337/53		03/10/2022 22:04	1	028F2801.D	HP-Plot Q 0.53(mm)

GC VOA BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Batch Number: 568337 Batch Start Date: 03/10/22 16:26 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 280-568337/2		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCS 280-568337/4		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCSD 280-568337/5		RSK-175		20 mL	20 mL	5 SU	200 uL		
MB 280-568337/30		RSK-175		20 mL	20 mL	5 SU			
280-159332-G-1	G0081-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159332-G-2	G0082-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159332-H-3	G0024-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159332-I-4	G0096-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159332-H-5	G0296-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159332-I-6	PZ020-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159332-I-7	G0077-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159332-H-8	G0078-8	RSK-175	T	20 mL	20 mL	< 2 SU			
CCV 280-568337/42		RSK-175		20 mL	20 mL	5 SU	200 uL		
280-159332-H-9	G0094-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159332-H-10	PZ018-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159332-H-11	PZ017R-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159332-H-12	PZ021-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159332-I-13	PZ019-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159332-I-13 DU	PZ019-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159332-H-13 MS	PZ019-8	RSK-175	T	20 mL	20 mL	< 2 SU	200 uL		
280-159332-H-13 MSD	PZ019-8	RSK-175	T	20 mL	20 mL	< 2 SU	200 uL		
CCV 280-568337/53		RSK-175		20 mL	20 mL	5 SU	200 uL		

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC VOA BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Batch Number: 568337 Batch Start Date: 03/10/22 16:26 Batch Analyst: Scianna, Charles A

Batch Method: RSK-175 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.

8330A_DOD5

Nitroaromatics and Nitramines (HPLC)

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159332-1

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 #
G0081-8	280-159332-1	98 M	
G0081-8	280-159332-1		97
G0082-8	280-159332-2	98 M	
G0082-8	280-159332-2		98
G0024-8	280-159332-3	93 M	
G0024-8	280-159332-3		101
G0096-8	280-159332-4	109 M	
G0096-8	280-159332-4		103
G0096-8 DL	280-159332-4 DL	105 M D	
G0096-8 DL	280-159332-4 DL		99 D
G0296-8	280-159332-5	113 M	
G0296-8	280-159332-5		93 M
G0296-8 DL	280-159332-5 DL	106 M D	
G0296-8 DL	280-159332-5 DL		95 D
PZ020-8	280-159332-6	92	
PZ020-8	280-159332-6		108
G0077-8	280-159332-7	89 M	
G0077-8	280-159332-7		108
G0078-8	280-159332-8	96 M	
G0094-8	280-159332-9	103 M	
G0094-8	280-159332-9		96
G0094-8 DL	280-159332-9 DL	103 M D	
G0094-8 DL	280-159332-9 DL		94 M D
PZ018-8	280-159332-10	112 M	
PZ018-8	280-159332-10		90 M
PZ017R-8	280-159332-11	96 M	
PZ017R-8	280-159332-11		107
PZ021-8	280-159332-12	94 M	
PZ021-8	280-159332-12		97 M
PZ019-8	280-159332-13	130 M Q	
	MB 280-567953/1-A	101	
	LCS 280-567953/2-A	95	
	LCS 280-567953/3-A	102	

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

Column to be used to flag recovery values

FORM II 8330A

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159332-1

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 #
PZ019-8 MS	280-159332-13 MS	108 M	
PZ019-8 MS	280-159332-13 MS	109 M	
PZ019-8 MSD	280-159332-13 MSD	108 M	
PZ019-8 MSD	280-159332-13 MSD	113 M	

	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.: 280-159332-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03100052.D

Lab ID: LCS 280-567953/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	1.97	99	73-125	
1,3-Dinitrobenzene	2.00	1.98	99	78-120	
2,4,6-Trinitrotoluene	2.00	1.92	96	71-123	
2,4-Dinitrotoluene	2.00	1.85	93	78-120	
2,6-Dinitrotoluene	2.00	1.95	98	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.79	89	79-120	
2-Nitrotoluene	2.00	1.57	79	70-127	
3-Nitrotoluene	2.00	1.50	75	73-125	
4-Amino-2,6-dinitrotoluene	2.00	1.57	79	76-125	
4-Nitrotoluene	2.00	1.75	87	71-127	
HMX	2.00	1.84	92	65-135	M
Nitrobenzene	2.00	1.76	88	65-134	
RDX	2.00	2.03	102	68-130	
Tetryl	2.00	1.92	96	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.: 280-159332-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03100053.D

Lab ID: LCS 280-567953/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
MNX	2.33	2.29	98	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03110028.D

Lab ID: 280-159332-13 MS Client ID: PZ019-8 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.06	0.20 U	2.28	111	73-125	M
1,3-Dinitrobenzene	2.06	0.098 U	2.31	112	78-120	
2,4,6-Trinitrotoluene	2.06	0.098 U	2.26	110	71-123	
2,4-Dinitrotoluene	2.06	0.078 U	2.12	103	78-120	
2,6-Dinitrotoluene	2.06	0.078 U	2.25	109	77-127	
2-Amino-4,6-dinitrotoluene	2.06	0.098 U	2.02	98	79-120	
2-Nitrotoluene	2.06	0.20 U	1.96	95	70-127	
3-Nitrotoluene	2.06	0.39 U	1.71	83	73-125	
4-Amino-2,6-dinitrotoluene	2.06	0.12 U	1.68	82	76-125	
4-Nitrotoluene	2.06	0.39 U	2.09	102	71-127	
HMX	2.06	0.20 U	2.05	100	65-135	M
Nitrobenzene	2.06	0.20 U	2.11	103	65-134	
RDX	2.06	0.20 U	1.95	95	68-130	M
Tetryl	2.06	0.098 U	2.31	112	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03110030.D

Lab ID: 280-159332-13 MS Client ID: PZ019-8 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
MNX	2.47	0.39 U	2.29	93	57-132	M

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03110029.D

Lab ID: 280-159332-13 MSD Client ID: PZ019-8 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.03	2.26	111	1	30	73-125	M
1,3-Dinitrobenzene	2.03	2.26	111	2	30	78-120	
2,4,6-Trinitrotoluene	2.03	2.26	111	0	30	71-123	
2,4-Dinitrotoluene	2.03	2.06	101	3	30	78-120	
2,6-Dinitrotoluene	2.03	2.13	105	6	30	77-127	
2-Amino-4,6-dinitrotoluene	2.03	1.97	97	3	30	79-120	
2-Nitrotoluene	2.03	1.82	89	7	30	70-127	
3-Nitrotoluene	2.03	1.63	80	5	30	73-125	
4-Amino-2,6-dinitrotoluene	2.03	1.67	82	0	30	76-125	
4-Nitrotoluene	2.03	2.01	99	4	30	71-127	
HMX	2.03	2.24	110	9	30	65-135	M
Nitrobenzene	2.03	1.99	98	6	30	65-134	
RDX	2.03	2.01	99	3	30	68-130	M
Tetryl	2.03	2.34	115	1	30	64-128	

Column to be used to flag recovery and RPD values

FORM III 8330A

FORM III
HPLC/IC MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03110031.D

Lab ID: 280-159332-13 MSD Client ID: PZ019-8 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
MNX	2.41	2.32	97	1	30	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.: 280-159332-1

SDG No.:

Lab Sample ID: MB 280-567953/1-A

Matrix: Water Date Extracted: 03/08/2022 11:19

Lab File ID:(1) 03100051.D Lab File ID:(2)

Date Analyzed:(1) 03/11/2022 06:45 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 280-567953/2-A	03/11/2022 07:08	
	LCS 280-567953/3-A	03/11/2022 07:31	
G0081-8	280-159332-1	03/11/2022 07:54	03/12/2022 16:05
G0082-8	280-159332-2	03/11/2022 08:17	03/12/2022 16:41
G0024-8	280-159332-3	03/11/2022 08:40	03/12/2022 17:16
G0096-8	280-159332-4	03/11/2022 09:03	03/12/2022 17:51
G0296-8	280-159332-5	03/11/2022 09:26	03/12/2022 18:26
PZ020-8	280-159332-6	03/11/2022 09:49	03/12/2022 19:01
G0077-8	280-159332-7	03/11/2022 10:12	03/12/2022 19:36
G0096-8 DL	280-159332-4 DL	03/11/2022 17:28	03/16/2022 01:43
G0296-8 DL	280-159332-5 DL	03/11/2022 17:51	03/16/2022 02:19
G0078-8	280-159332-8	03/11/2022 18:14	
G0094-8	280-159332-9	03/11/2022 18:37	03/15/2022 19:18
G0094-8 DL	280-159332-9 DL	03/11/2022 19:00	03/16/2022 02:53
PZ018-8	280-159332-10	03/11/2022 19:23	03/15/2022 19:53
PZ017R-8	280-159332-11	03/11/2022 19:45	03/15/2022 20:28
PZ021-8	280-159332-12	03/11/2022 20:08	03/15/2022 21:03
PZ019-8	280-159332-13	03/11/2022 20:31	
PZ019-8 MS	280-159332-13 MS	03/11/2022 21:40	
PZ019-8 MSD	280-159332-13 MSD	03/11/2022 22:03	
PZ019-8 MS	280-159332-13 MS	03/11/2022 22:26	
PZ019-8 MSD	280-159332-13 MSD	03/11/2022 22:49	

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0081-8 Lab Sample ID: 280-159332-1

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

Date Analyzed (1): 03/11/2022 07:54 Date Analyzed (2): 03/12/2022 16:05

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
1,3,5-Trinitrobenzene	1		8.65	8.51	8.81	0.53		16.2
	2		18.69	18.53	18.83	0.62		
2,4,6-Trinitrotoluene	1		10.87	10.79	10.99	0.11		1.1
	2		24.90	24.73	25.03	0.11		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0082-8 Lab Sample ID: 280-159332-2

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

Date Analyzed (1): 03/11/2022 08:17 Date Analyzed (2): 03/12/2022 16:41

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		6.59	6.44	6.74	0.41		20.7
	2		6.80	6.67	6.97	0.51		
RDX	1		7.58	7.44	7.74	0.59		15.9
	2		8.98	8.85	9.15	0.69		
4-Amino-2,6-dinitrotoluene	1		11.06	10.98	11.18	0.14		33.8
	2		17.43	17.29	17.59	0.20		
2-Amino-4,6-dinitrotoluene	1		11.31	11.23	11.43	0.13		28.7
	2		18.42	18.30	18.60	0.17		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0024-8 Lab Sample ID: 280-159332-3

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

Date Analyzed (1): 03/11/2022 08:40 Date Analyzed (2): 03/12/2022 17:16

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4,6-Trinitrotoluene	1		10.89	10.79	10.99	0.66		6.5
	2		24.89	24.73	25.03	0.70		
4-Amino-2,6-dinitrotoluene	1		11.07	10.98	11.18	0.82		17.1
	2		17.48	17.29	17.59	0.98		
2-Amino-4,6-dinitrotoluene	1		11.32	11.23	11.43	1.5		7.2
	2		18.47	18.30	18.60	1.6		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0096-8 Lab Sample ID: 280-159332-4

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

Date Analyzed (1): 03/11/2022 09:03 Date Analyzed (2): 03/12/2022 17:51

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		6.59	6.44	6.74	27		2.6
	2		6.80	6.67	6.97	28		
MNX	1		7.21	7.06	7.36	2.8		44.1
	2		7.52	7.39	7.69	4.4		
RDX	1		7.59	7.44	7.74	46		7.7
	2		8.99	8.85	9.15	49		
4-Amino-2,6-dinitrotoluene	1		11.07	10.98	11.18	0.61		8.5
	2		17.43	17.29	17.59	0.67		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0096-8 DL Lab Sample ID: 280-159332-4 DL

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

Date Analyzed (1): 03/11/2022 17:28 Date Analyzed (2): 03/16/2022 01:43

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		6.60	6.45	6.75	27		6.1
	2		6.84	6.70	7.00	29		
MNX	1		7.22	7.06	7.36	5.5		15.7
	2		7.56	7.43	7.73	4.7		
RDX	1		7.58	7.43	7.73	47		5.4
	2		9.04	8.90	9.20	49		
4-Amino-2,6-dinitrotoluene	1		11.08	10.97	11.17	0.55		11.6
	2		17.57	17.42	17.72	0.62		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0296-8 Lab Sample ID: 280-159332-5

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

Date Analyzed (1): 03/11/2022 09:26 Date Analyzed (2): 03/12/2022 18:26

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.60	6.44	6.74	30		5.8
	2		6.79	6.67	6.97	28		
MNX	1		7.21	7.06	7.36	6.1		45.6
	2		7.51	7.39	7.69	3.8		
RDX	1		7.58	7.44	7.74	49		4.1
	2		8.97	8.85	9.15	51		
4-Amino-2,6-dinitrotoluene	1		11.06	10.98	11.18	0.62		18.7
	2		17.43	17.29	17.59	0.75		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0296-8 DL Lab Sample ID: 280-159332-5 DL

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

Date Analyzed (1): 03/11/2022 17:51 Date Analyzed (2): 03/16/2022 02:19

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		6.60	6.45	6.75	29		2.7
	2		6.84	6.70	7.00	28		
MNX	1		7.22	7.06	7.36	8.0		62.1
	2		7.56	7.43	7.73	4.2		
RDX	1		7.59	7.43	7.73	49		5.0
	2		9.04	8.90	9.20	51		
4-Amino-2,6-dinitrotoluene	1		11.08	10.97	11.17	0.52		28.4
	2		17.56	17.42	17.72	0.69		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ020-8 Lab Sample ID: 280-159332-6

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

Date Analyzed (1): 03/11/2022 09:49 Date Analyzed (2): 03/12/2022 19:01

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		6.59	6.44	6.74	0.56		5.2
	2		6.82	6.67	6.97	0.53		
1,3,5-Trinitrobenzene	1		8.66	8.51	8.81	2.7		2.9
	2		18.68	18.53	18.83	2.7		
2,4,6-Trinitrotoluene	1		10.88	10.79	10.99	4.8		5.7
	2		24.87	24.73	25.03	5.1		
4-Amino-2,6-dinitrotoluene	1		11.06	10.98	11.18	1.7		17.6
	2		17.43	17.29	17.59	2.1		
2-Amino-4,6-dinitrotoluene	1		11.30	11.23	11.43	2.8		6.0
	2		18.43	18.30	18.60	3.0		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0077-8 Lab Sample ID: 280-159332-7

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

Date Analyzed (1): 03/11/2022 10:12 Date Analyzed (2): 03/12/2022 19:36

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
RDX	1		7.58	7.44	7.74	0.50		66.7
	2		8.98	8.85	9.15	1.0		
1,3,5-Trinitrobenzene	1		8.66	8.51	8.81	2.8		12.5
	2		18.70	18.53	18.83	3.1		
2,4,6-Trinitrotoluene	1		10.88	10.79	10.99	4.2		0.1
	2		24.90	24.73	25.03	4.2		
4-Amino-2,6-dinitrotoluene	1		11.06	10.98	11.18	2.7		8.6
	2		17.45	17.29	17.59	3.0		
2-Amino-4,6-dinitrotoluene	1		11.32	11.23	11.43	2.6		2.9
	2		18.46	18.30	18.60	2.6		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0094-8 Lab Sample ID: 280-159332-9

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

Date Analyzed (1): 03/11/2022 18:37 Date Analyzed (2): 03/15/2022 19:18

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		6.60	6.45	6.75	11		9.0
	2		6.85	6.70	7.00	9.8		
MNX	1		7.25	7.06	7.36	9.1		69.7
	2		7.54	7.43	7.73	19		
RDX	1		7.59	7.43	7.73	9.0		2.3
	2		9.05	8.90	9.20	9.2		
1,3-Dinitrobenzene	1		9.27	9.13	9.43	1.1		79.8
	2		15.58	15.36	15.66	0.46		
2,4,6-Trinitrotoluene	1		10.89	10.79	10.99	44		10.4
	2		25.07	24.92	25.22	49		
4-Amino-2,6-dinitrotoluene	1		11.08	10.97	11.17	58		13.5
	2		17.58	17.42	17.72	66		
2-Amino-4,6-dinitrotoluene	1		11.33	11.22	11.42	52		10.3
	2		18.58	18.43	18.73	57		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0094-8 DL Lab Sample ID: 280-159332-9 DL

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

Date Analyzed (1): 03/11/2022 19:00 Date Analyzed (2): 03/16/2022 02:53

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.60	6.45	6.75	11		6.5
	2		6.84	6.70	7.00	12		
RDX	1		7.59	7.43	7.73	8.3		17.9
	2		9.05	8.90	9.20	9.9		
2,4,6-Trinitrotoluene	1		10.89	10.79	10.99	48		3.4
	2		25.02	24.92	25.22	50		
4-Amino-2,6-dinitrotoluene	1		11.08	10.97	11.17	65		1.3
	2		17.56	17.42	17.72	66		
2-Amino-4,6-dinitrotoluene	1		11.33	11.22	11.42	57		0.7
	2		18.56	18.43	18.73	57		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ017R-8 Lab Sample ID: 280-159332-11

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

Date Analyzed (1): 03/11/2022 19:45 Date Analyzed (2): 03/15/2022 20:28

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
RDX	1		7.60	7.43	7.73	1.2		26.9
	2		9.03	8.90	9.20	0.93		
1,3,5-Trinitrobenzene	1		8.66	8.51	8.81	1.4		10.8
	2		18.79	18.64	18.94	1.5		
2,4,6-Trinitrotoluene	1		10.90	10.79	10.99	5.0		5.6
	2		25.06	24.92	25.22	5.3		
4-Amino-2,6-dinitrotoluene	1		11.08	10.97	11.17	5.3		5.7
	2		17.57	17.42	17.72	5.0		
2-Amino-4,6-dinitrotoluene	1		11.33	11.22	11.42	3.0		5.9
	2		18.57	18.43	18.73	3.2		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ021-8 Lab Sample ID: 280-159332-12

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

Date Analyzed (1): 03/11/2022 20:08 Date Analyzed (2): 03/15/2022 21:03

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.58	6.45	6.75	0.82		47.5
	2		6.84	6.70	7.00	1.3		
RDX	1		7.60	7.43	7.73	1.2		17.7
	2		9.04	8.90	9.20	1.0		
1,3,5-Trinitrobenzene	1		8.66	8.51	8.81	1.0		39.3
	2		18.77	18.64	18.94	0.68		
2,4,6-Trinitrotoluene	1		10.89	10.79	10.99	4.5		5.0
	2		25.06	24.92	25.22	4.7		
4-Amino-2,6-dinitrotoluene	1		11.07	10.97	11.17	5.1		1.0
	2		17.55	17.42	17.72	5.0		
2-Amino-4,6-dinitrotoluene	1		11.33	11.22	11.42	2.9		3.4
	2		18.55	18.43	18.73	3.0		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0081-8 | Lab Sample ID: 280-159332-1

Matrix: Water | Lab File ID: 03100054.D

Analysis Method: 8330A | Date Collected: 03/01/2022 14:10

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 480.5(mL) | Date Analyzed: 03/11/2022 07:54

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.: 568287 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.53	M	0.22	0.21	0.088
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.11		0.11	0.10	0.047
121-14-2	2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.029
606-20-2	2,6-Dinitrotoluene	0.083	U	0.10	0.083	0.042
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.089
99-08-1	3-Nitrotoluene	0.42	U	0.42	0.42	0.20
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	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U M	0.22	0.21	0.095
121-82-4	RDX	0.21	U	0.22	0.21	0.054
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	98	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\03100054.D
Lims ID: 280-159332-A-1-A
Client ID: G0081-8
Sample Type: Client
Inject. Date: 11-Mar-2022 07:54:34 ALS Bottle#: 54 Worklist Smp#: 54
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-A-1-A
Misc. Info.: 280-0109139-054
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 11-Mar-2022 13:57:00 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: CTX1614

First Level Reviewer: zhangji Date: 11-Mar-2022 13:51:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.593			ND	
7 MNX	1		7.209			ND	
8 RDX	1		7.587			ND	
$ 10 1,2-Dinitrobenzene	1	8.520	8.533	-0.013	24429	0.1959	M
11 1,3,5-Trinitrobenzene	1	8.647	8.660	-0.013	11110	0.0509	M
12 1,3-Dinitrobenzene	1		9.280			ND	
13 Nitrobenzene	1		9.667			ND	U
15 Tetryl	1		9.987			ND	U
17 2,4,6-Trinitrotoluene	1	10.874	10.893	-0.019	2090	0.0103	
18 4-Amino-2,6-dinitrotoluene	1	11.054	11.080	-0.026	1310	0.008676	
19 2-Amino-4,6-dinitrotoluene	1	11.307	11.327	-0.020	1654	0.008181	
20 2,6-Dinitrotoluene	1		11.500			ND	
21 2,4-Dinitrotoluene	1		11.667			ND	
22 o-Nitrotoluene	1		12.513			ND	
23 p-Nitrotoluene	1		12.940			ND	7
24 m-Nitrotoluene	1		13.507			ND	

QC Flag Legend

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

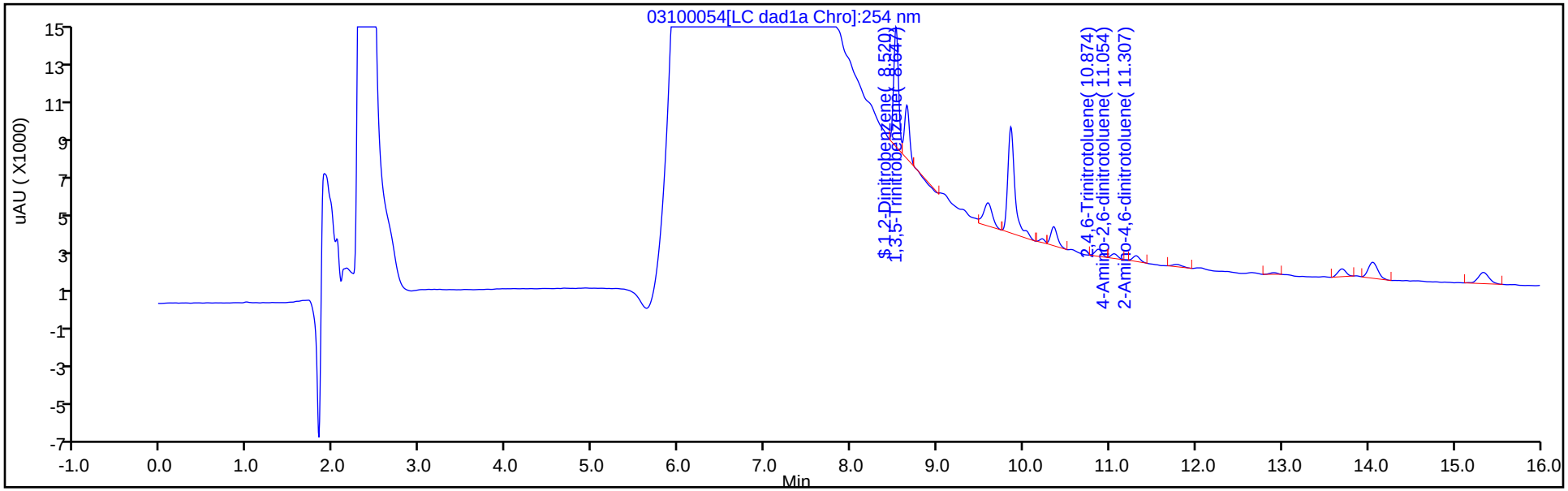
Report Date: 11-Mar-2022 13:57:05 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

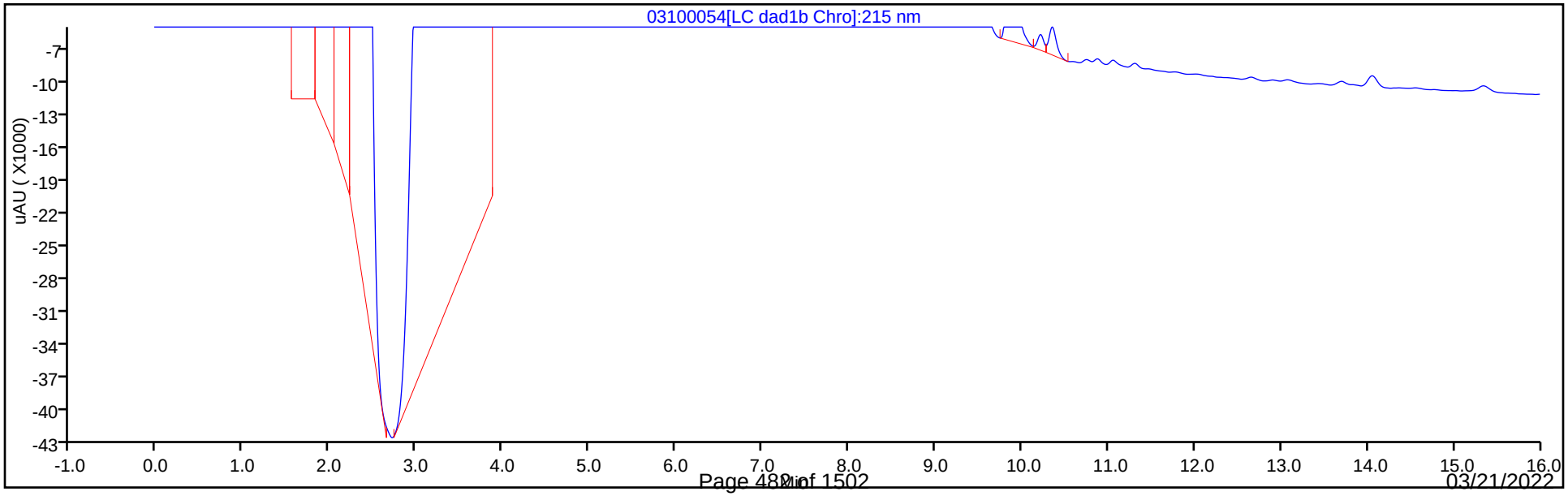
Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100054.d

Injection Date:	11-Mar-2022 07:54:34	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159332-A-1-A	Lab Sample ID:	280-159332-1	Worklist Smp#:	54
Client ID:	G0081-8				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	54
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\03100054.D				
Lims ID:	280-159332-A-1-A				
Client ID:	G0081-8				
Sample Type:	Client				
Inject. Date:	11-Mar-2022 07:54:34	ALS Bottle#:	54	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-A-1-A				
Misc. Info.:	280-0109139-054				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	11-Mar-2022 13:57:00	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:	CTX1614				

First Level Reviewer: zhangji Date: 11-Mar-2022 13:51:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1959	97.95

Manual Integration/User Assign Peak Report

Eurofins Denver

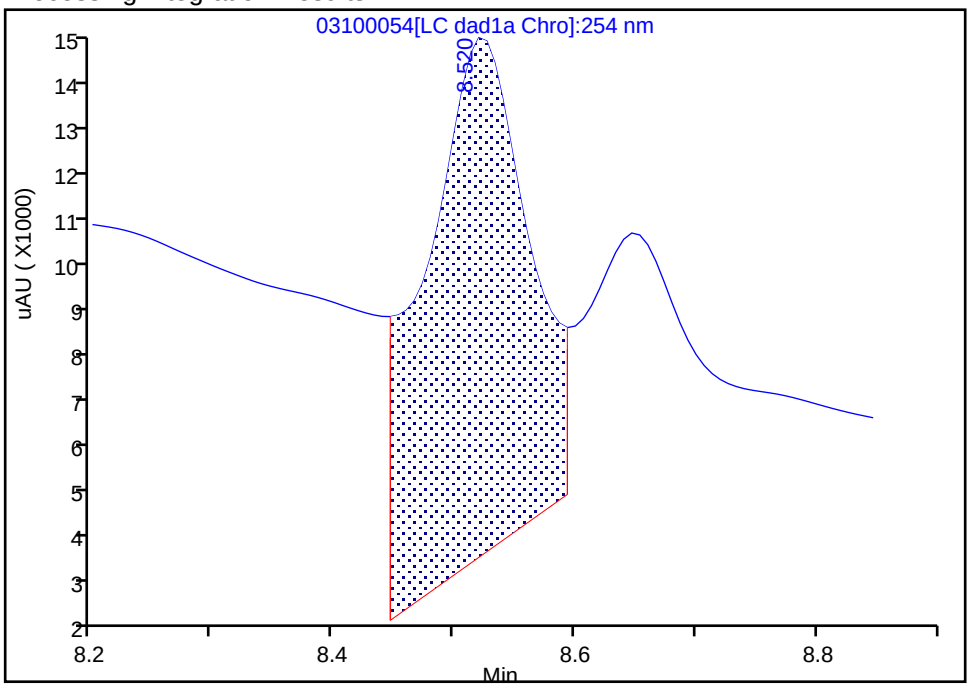
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100054.d				
Injection Date:	11-Mar-2022 07:54:34	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-1-A	Lab Sample ID:	280-159332-1		
Client ID:	G0081-8				
Operator ID:	JZ	ALS Bottle#:	54	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

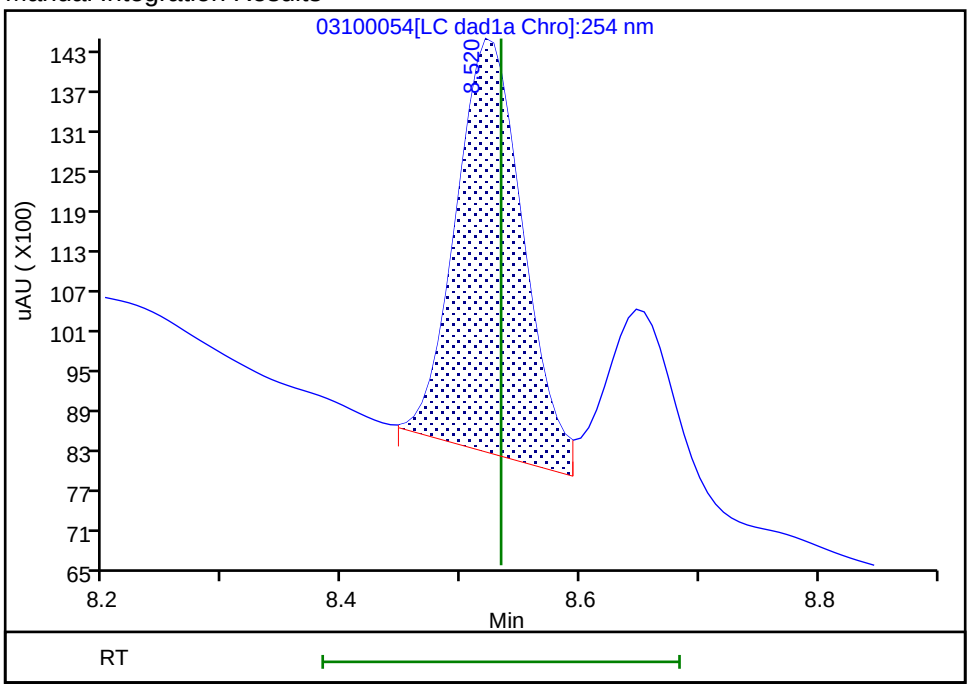
Processing Integration Results

RT: 8.52
Area: 65046
Amount: 0.521630
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 24429
Amount: 0.195906
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:51:37
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

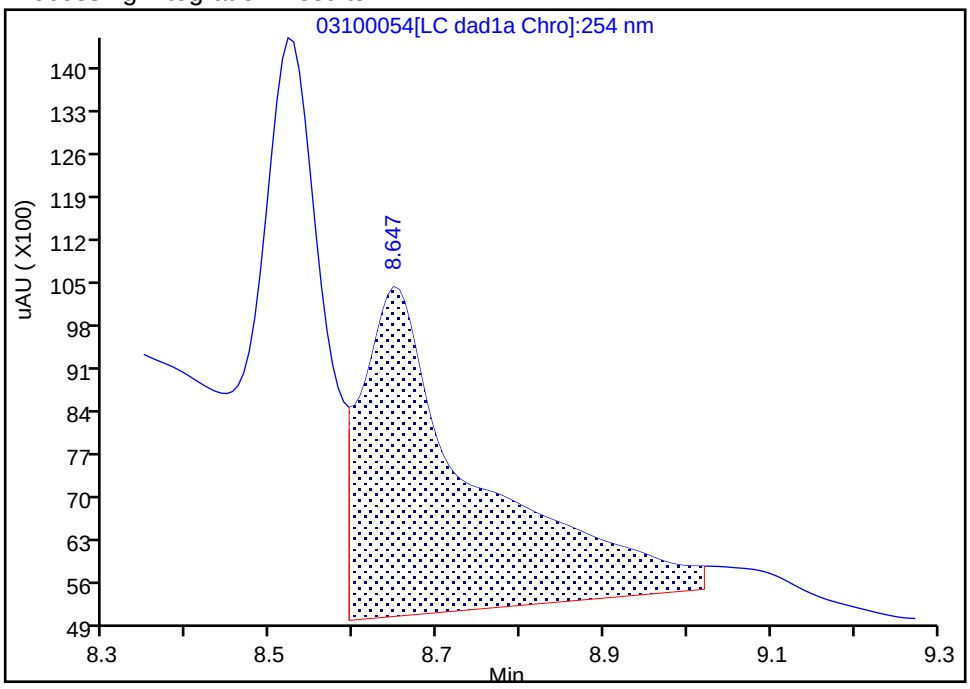
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100054.d				
Injection Date:	11-Mar-2022 07:54:34	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-1-A	Lab Sample ID:	280-159332-1		
Client ID:	G0081-8				
Operator ID:	JZ	ALS Bottle#:	54	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

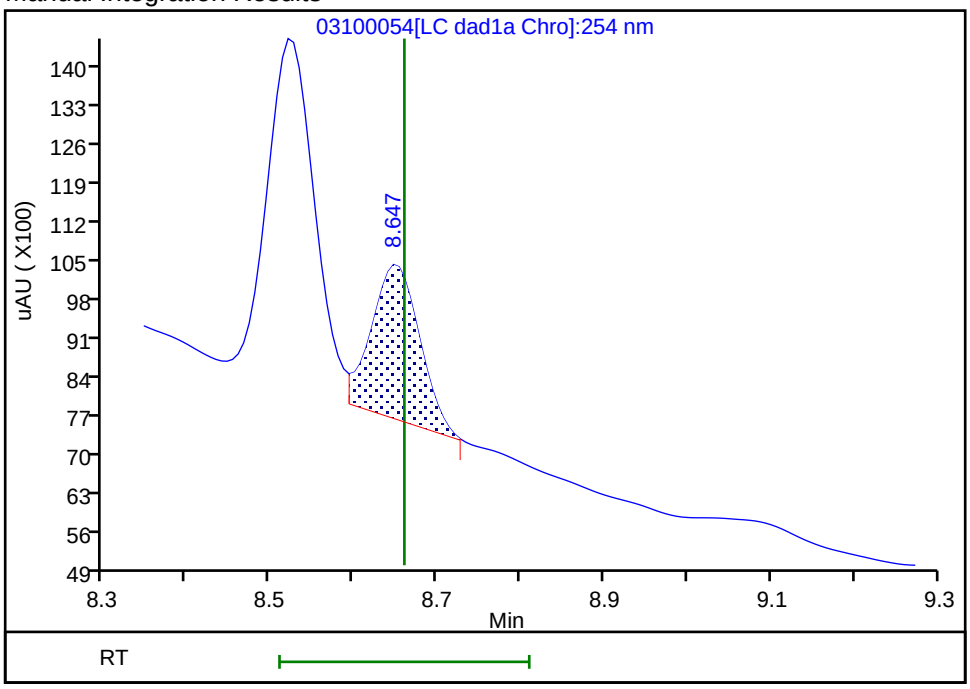
Processing Integration Results

RT: 8.65
Area: 51743
Amount: 0.237249
Amount Units: ug/mL



Manual Integration Results

RT: 8.65
Area: 11110
Amount: 0.050941
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:51:39

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

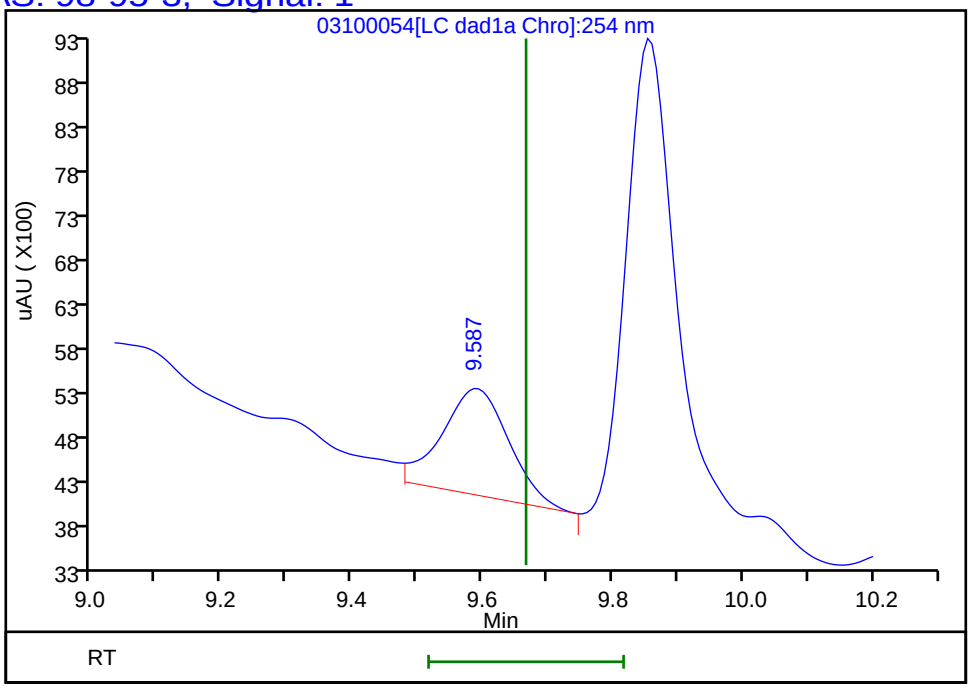
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100054.d

Injection Date:	11-Mar-2022 07:54:34	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-1-A	Lab Sample ID:	280-159332-1		
Client ID:	G0081-8				
Operator ID:	JZ	ALS Bottle#:	54	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		

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

RT: 9.59
Response: 8551
Amount: 0.044547



Reviewer: zhangji, 11-Mar-2022 13:51:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

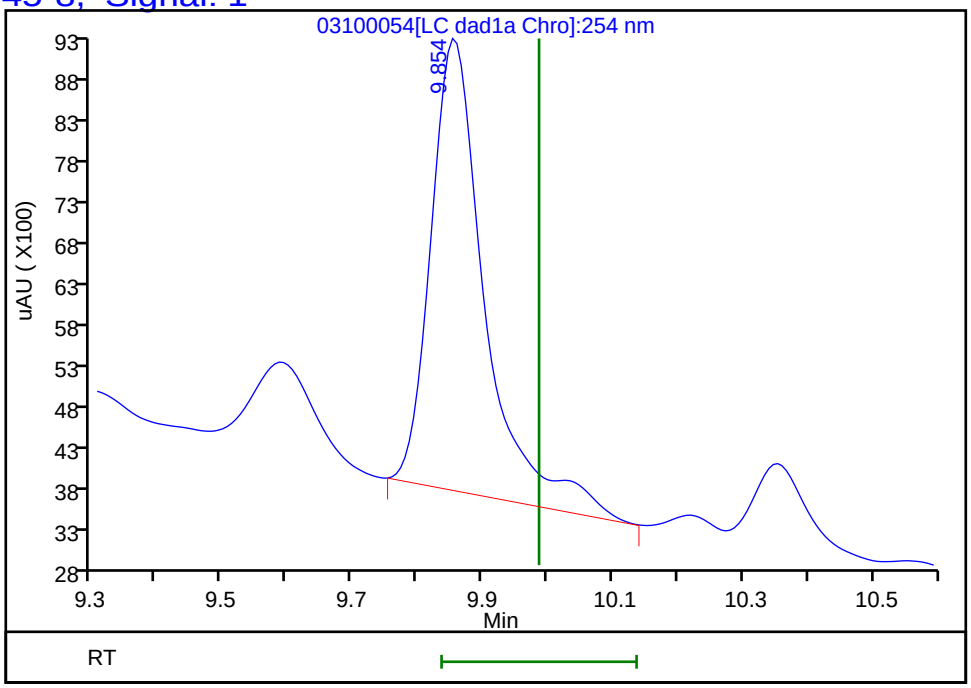
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100054.d
Injection Date: 11-Mar-2022 07:54:34 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-A-1-A Lab Sample ID: 280-159332-1
Client ID: G0081-8
Operator ID: JZ ALS Bottle#: 54 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

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

RT: 9.85
Response: 32013
Amount: 0.187686



Reviewer: zhangji, 11-Mar-2022 13:51:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0081-8 | Lab Sample ID: 280-159332-1

Matrix: Water | Lab File ID: 03120016.D

Analysis Method: 8330A | Date Collected: 03/01/2022 14:10

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 480.5(mL) | Date Analyzed: 03/12/2022 16:05

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.: 568485 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.053
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.16	0.12	0.060

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	97		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120016.D
Lims ID: 280-159332-A-1-A
Client ID: G0081-8
Sample Type: Client
Inject. Date: 12-Mar-2022 16:05:52 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-A-1-A
Misc. Info.: 280-0109194-016
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-Mar-2022 16:12:02 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: CTX1624

First Level Reviewer: zhangji Date: 15-Mar-2022 16:07:49

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.791	6.816	-0.025	2556	0.0154	M
	6 MNX	1		7.537			ND	
	8 RDX	1	8.957	9.003	-0.046	777	0.003998	7M
	9 Nitrobenzene	1		11.883			ND	
$	10 1,2-Dinitrobenzene	1	13.030	13.056	-0.026	48396	0.1938	
	12 1,3-Dinitrobenzene	1		15.410			ND	
	14 o-Nitrotoluene	1	16.444	16.530	-0.086	6223	0.0265	M
	16 p-Nitrotoluene	1		16.836			ND	
	17 4-Amino-2,6-dinitrotoluene	1		17.443			ND	
	18 m-Nitrotoluene	1		17.790			ND	
	19 2-Amino-4,6-dinitrotoluene	1		18.450			ND	
	20 1,3,5-Trinitrobenzene	1	18.690	18.683	0.007	24886	0.0599	
	21 2,6-Dinitrotoluene	1		19.916			ND	
	22 2,4-Dinitrotoluene	1		20.436			ND	
	23 Tetryl	1		24.096			ND	
	24 2,4,6-Trinitrotoluene	1	24.897	24.876	0.021	3850	0.0104	

QC Flag Legend

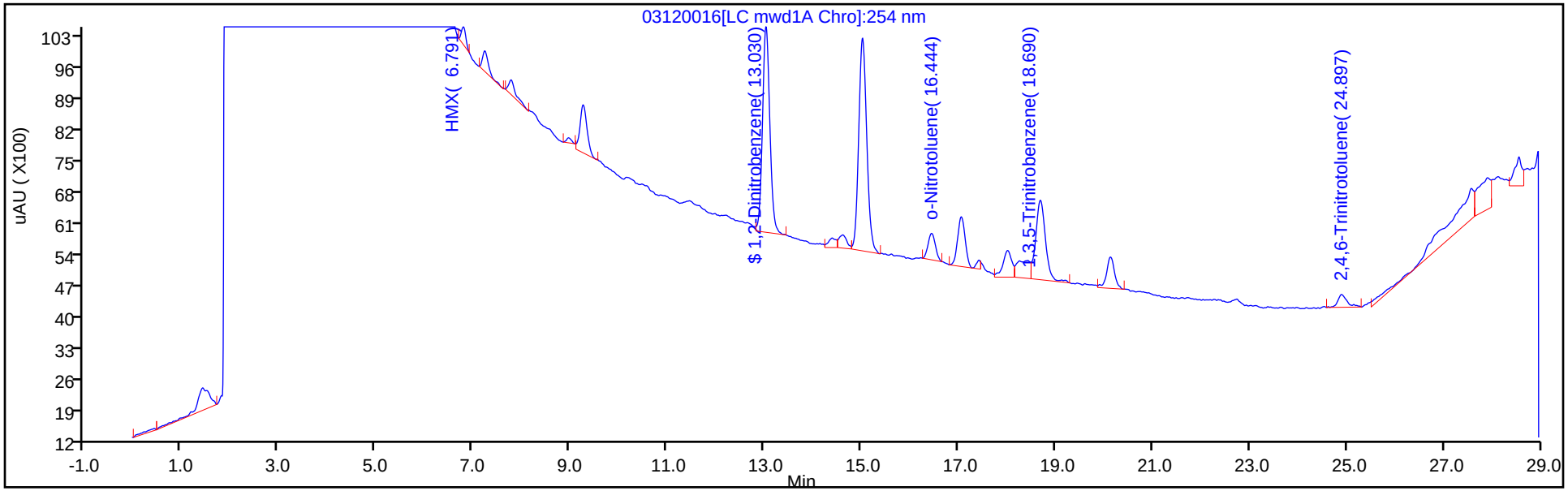
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated

Report Date: 15-Mar-2022 16:12:04 Chrom Revision: 2.3 14-Mar-2022 17:58:38

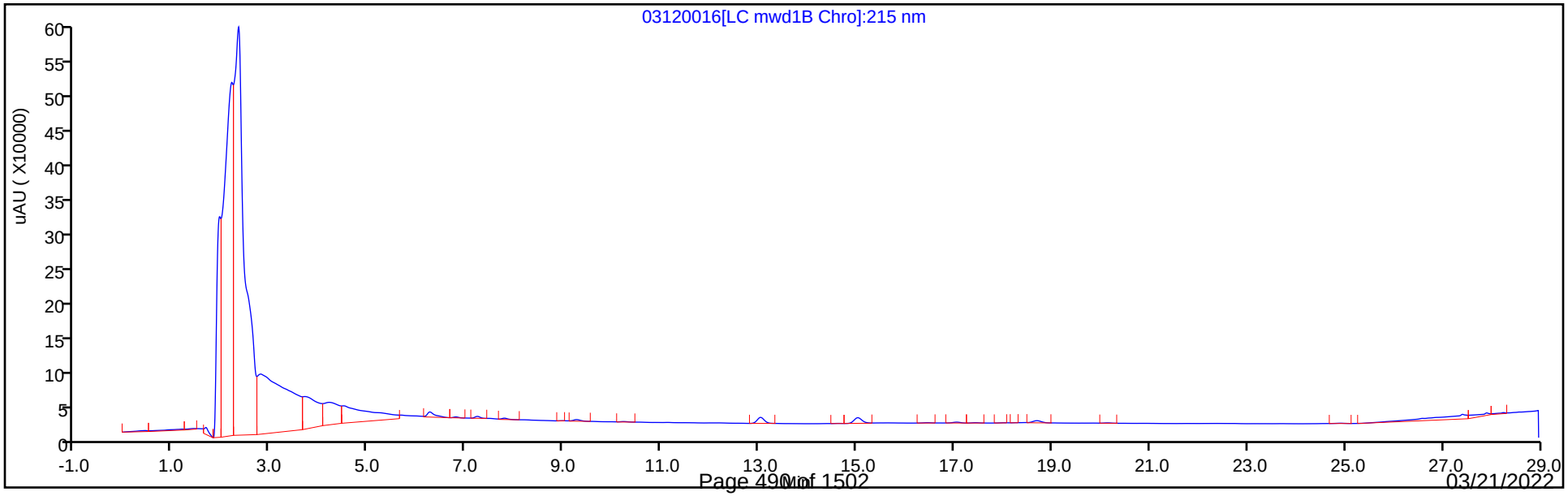
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120016.D				
Injection Date:	12-Mar-2022 16:05:52	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159332-A-1-A	Lab Sample ID:	280-159332-1	Worklist Smp#:	16
Client ID:	G0081-8				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120016.D				
Lims ID:	280-159332-A-1-A				
Client ID:	G0081-8				
Sample Type:	Client				
Inject. Date:	12-Mar-2022 16:05:52	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-A-1-A				
Misc. Info.:	280-0109194-016				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-Mar-2022 16:12:02	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:	CTX1624				
First Level Reviewer: zhangji		Date:	15-Mar-2022 16:07:49		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1938	96.89

Manual Integration/User Assign Peak Report

Eurofins Denver

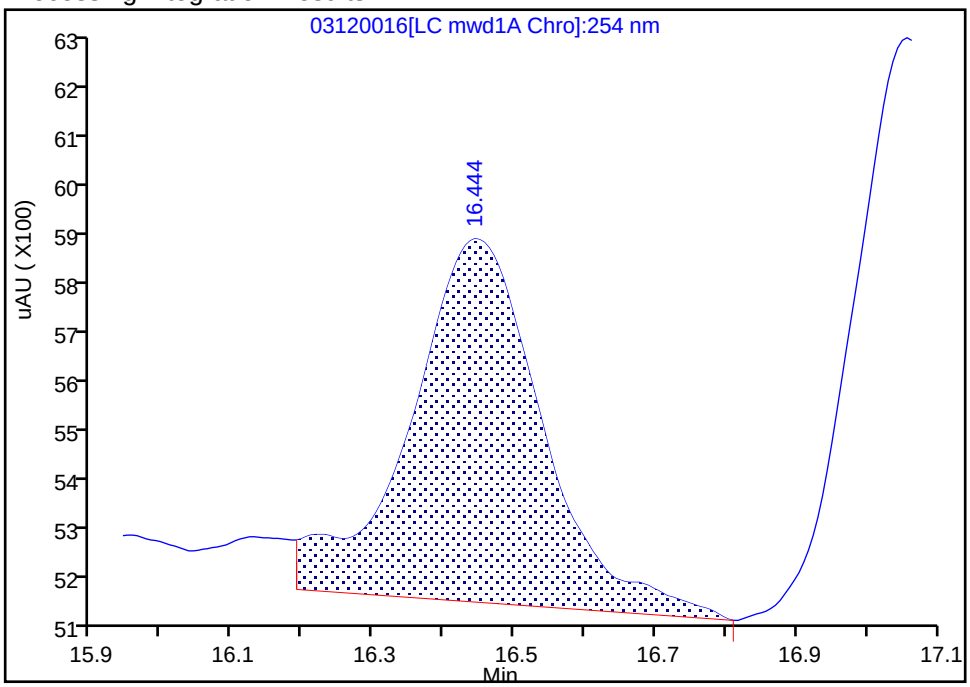
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120016.D				
Injection Date:	12-Mar-2022 16:05:52	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-A-1-A	Lab Sample ID:	280-159332-1		
Client ID:	G0081-8				
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

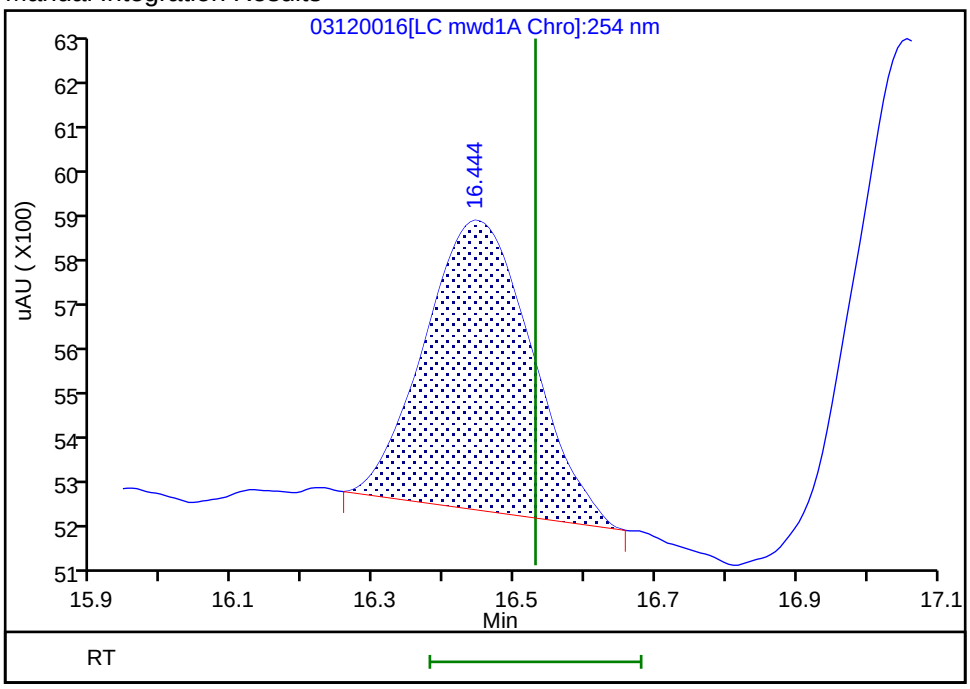
Processing Integration Results

RT: 16.44
Area: 8793
Amount: 0.037469
Amount Units: ug/ml



Manual Integration Results

RT: 16.44
Area: 6223
Amount: 0.026518
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 16:07:43

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

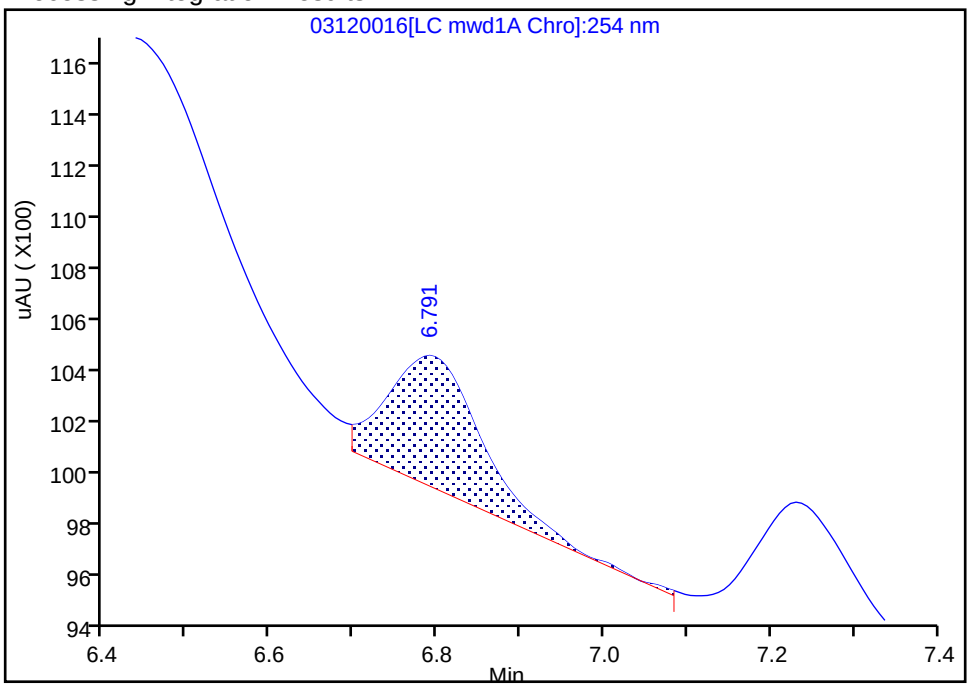
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120016.D				
Injection Date:	12-Mar-2022 16:05:52	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-A-1-A	Lab Sample ID:	280-159332-1		
Client ID:	G0081-8				
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

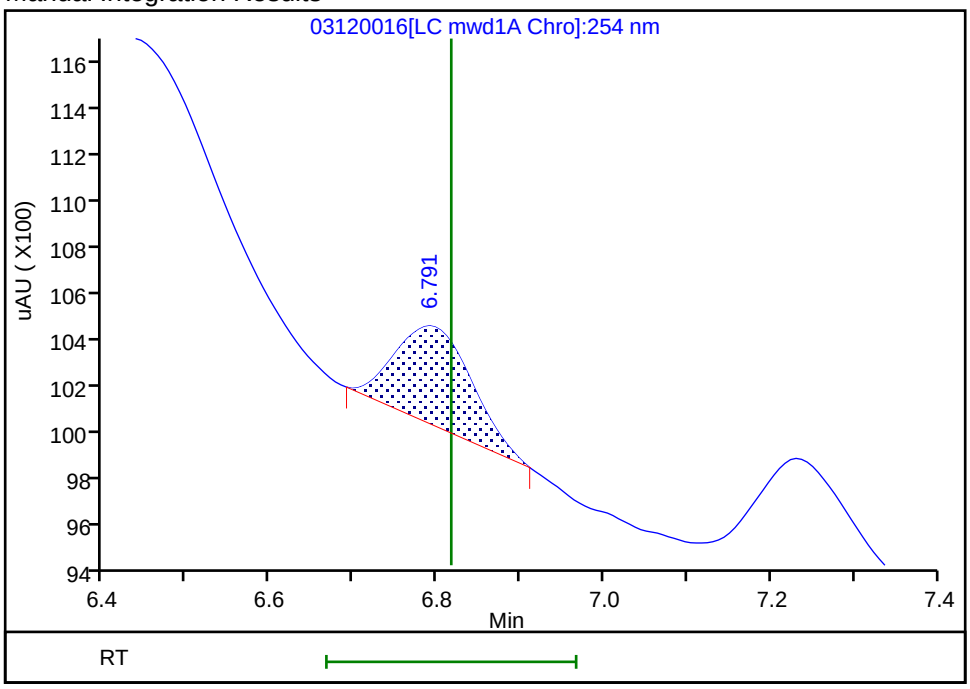
Processing Integration Results

RT: 6.79
Area: 3765
Amount: 0.022662
Amount Units: ug/ml



Manual Integration Results

RT: 6.79
Area: 2556
Amount: 0.015385
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 16:07:32

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

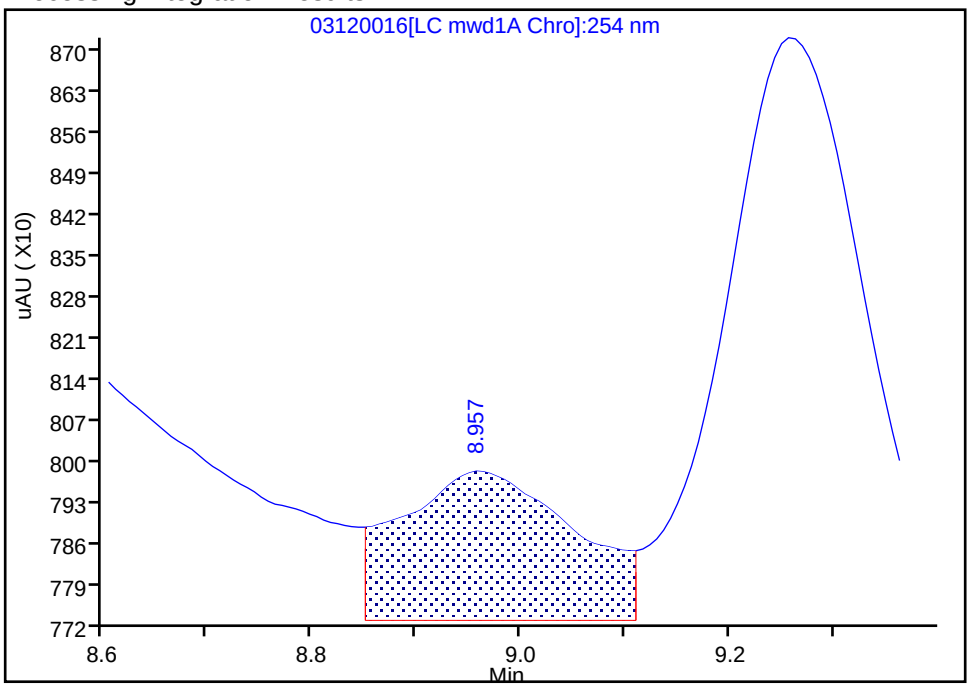
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120016.D				
Injection Date:	12-Mar-2022 16:05:52	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-A-1-A	Lab Sample ID:	280-159332-1		
Client ID:	G0081-8				
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

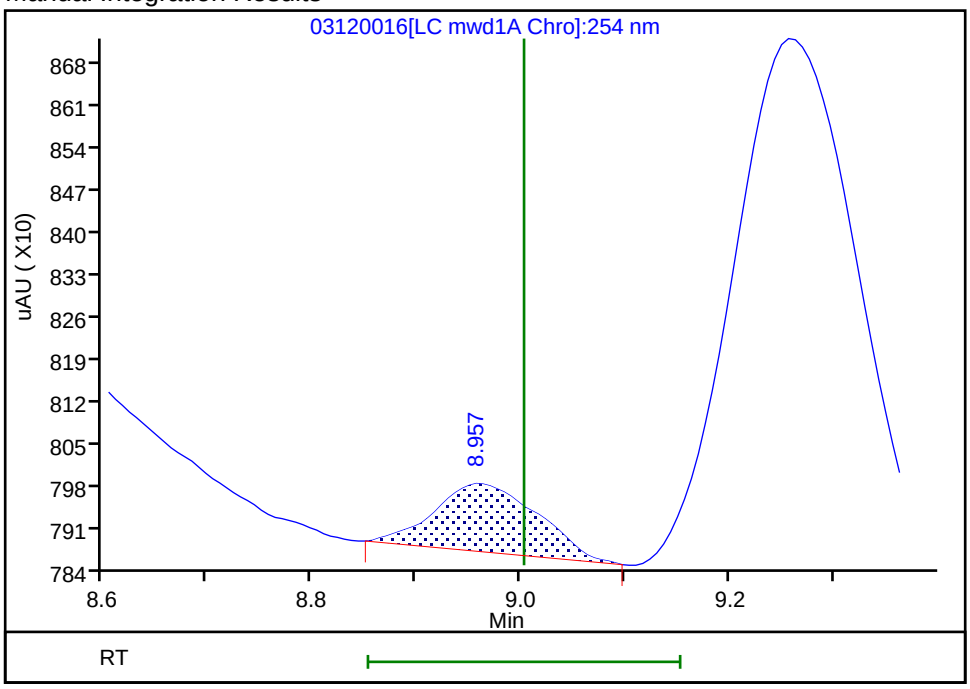
Processing Integration Results

RT: 8.96
Area: 2921
Amount: 0.015031
Amount Units: ug/ml



Manual Integration Results

RT: 8.96
Area: 777
Amount: 0.003998
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 16:07:35

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0082-8 | Lab Sample ID: 280-159332-2

Matrix: Water | Lab File ID: 03100055.D

Analysis Method: 8330A | Date Collected: 03/01/2022 15:25

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 462.7(mL) | Date Analyzed: 03/11/2022 08:17

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.: 568287 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.22	U	0.23	0.22	0.091
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.040
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.049
121-14-2	2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.030
606-20-2	2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	0.13		0.12	0.11	0.055
88-72-2	2-Nitrotoluene	0.22	U	0.23	0.22	0.092
99-08-1	3-Nitrotoluene	0.43	U	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.14	J	0.16	0.13	0.062
99-99-0	4-Nitrotoluene	0.43	U	0.44	0.43	0.11
2691-41-0	HMX	0.41	M	0.23	0.22	0.095
5755-27-1	MNX	0.43	U	2.2	0.43	0.17
98-95-3	Nitrobenzene	0.22	U	0.23	0.22	0.098
121-82-4	RDX	0.59	M	0.23	0.22	0.056
479-45-8	Tetryl	0.11	U M	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	98	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\03100055.D
Lims ID: 280-159332-B-2-A
Client ID: G0082-8
Sample Type: Client
Inject. Date: 11-Mar-2022 08:17:26 ALS Bottle#: 55 Worklist Smp#: 55
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-B-2-A
Misc. Info.: 280-0109139-055
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 11-Mar-2022 13:57:00 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: CTX1614

First Level Reviewer: zhangji Date: 11-Mar-2022 13:52:09

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.587	6.593	-0.006	3189	0.0380	M
7 MNX	1		7.209			ND	
8 RDX	1	7.580	7.587	-0.007	5660	0.0546	M
$ 10 1,2-Dinitrobenzene	1	8.527	8.533	-0.006	24390	0.1956	M
11 1,3,5-Trinitrobenzene	1		8.660			ND	
12 1,3-Dinitrobenzene	1		9.280			ND	
13 Nitrobenzene	1		9.667			ND	
15 Tetryl	1		9.987			ND	U
17 2,4,6-Trinitrotoluene	1		10.893			ND	
18 4-Amino-2,6-dinitrotoluene	1	11.060	11.080	-0.020	2006	0.0133	
19 2-Amino-4,6-dinitrotoluene	1	11.314	11.327	-0.013	2374	0.0117	
20 2,6-Dinitrotoluene	1		11.500			ND	
21 2,4-Dinitrotoluene	1		11.667			ND	
22 o-Nitrotoluene	1		12.513			ND	
23 p-Nitrotoluene	1		12.940			ND	
24 m-Nitrotoluene	1		13.507			ND	

QC Flag Legend

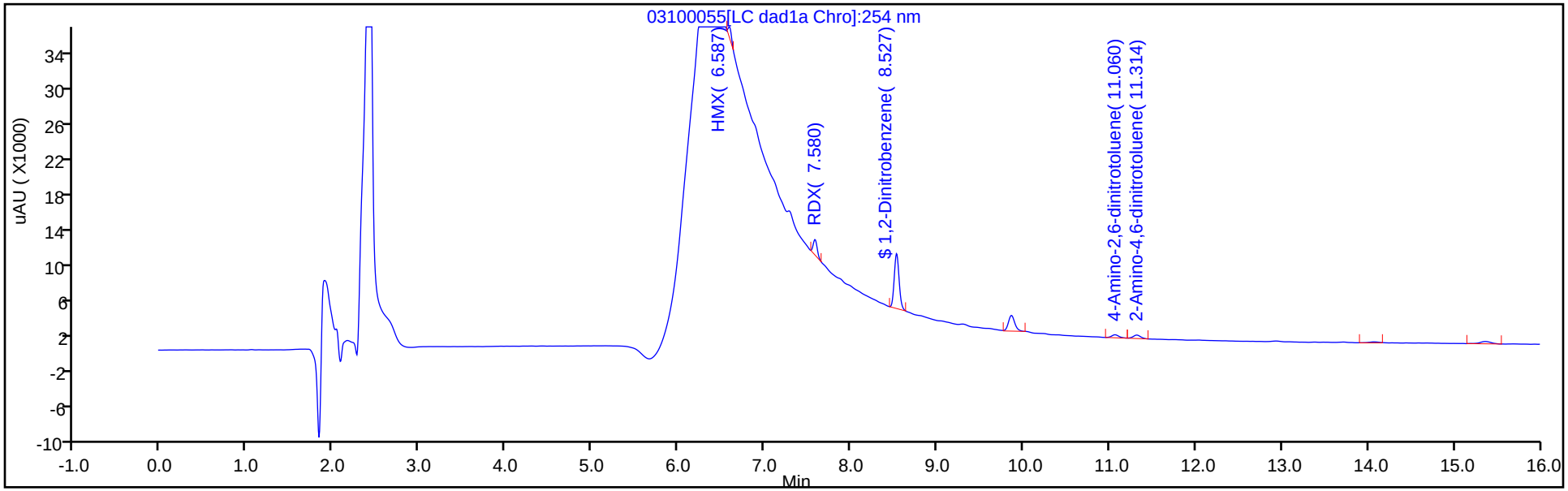
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 11-Mar-2022 13:57:05 Chrom Revision: 2.3 16-Feb-2022 17:52:00

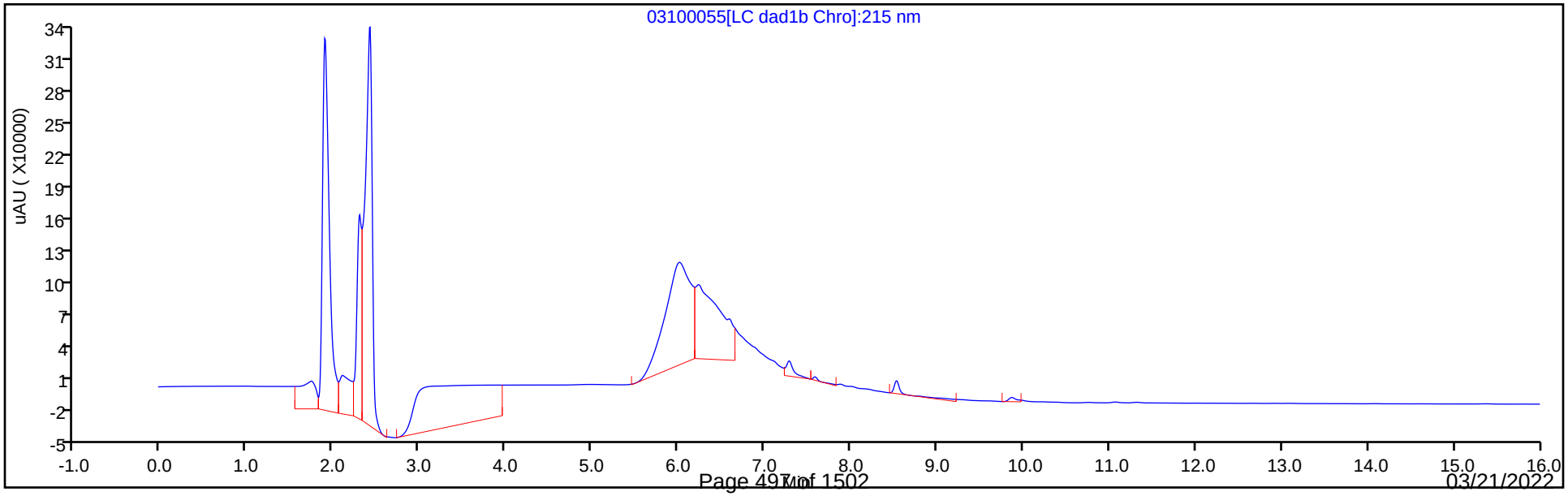
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100055.d				
Injection Date:	11-Mar-2022 08:17:26	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159332-B-2-A	Lab Sample ID:	280-159332-2	Worklist Smp#:	55
Client ID:	G0082-8				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	55
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\03100055.D				
Lims ID:	280-159332-B-2-A				
Client ID:	G0082-8				
Sample Type:	Client				
Inject. Date:	11-Mar-2022 08:17:26	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-B-2-A				
Misc. Info.:	280-0109139-055				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	11-Mar-2022 13:57:00	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:	CTX1614				
First Level Reviewer: zhangji		Date:	11-Mar-2022 13:52:09		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1956	97.80

Manual Integration/User Assign Peak Report

Eurofins Denver

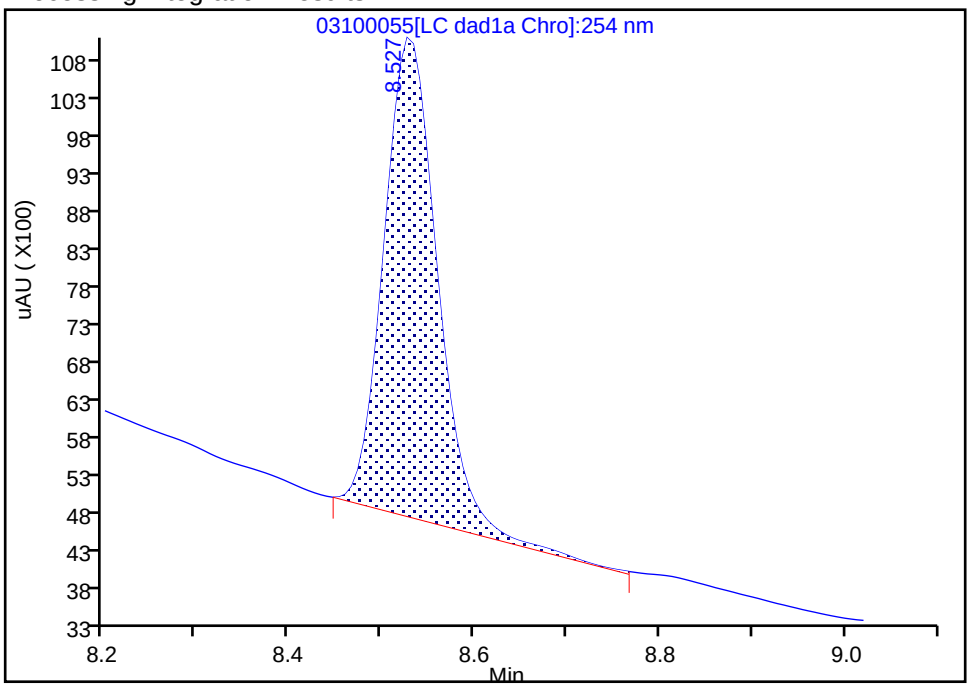
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100055.d				
Injection Date:	11-Mar-2022 08:17:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-2-A	Lab Sample ID:	280-159332-2		
Client ID:	G0082-8				
Operator ID:	JZ	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

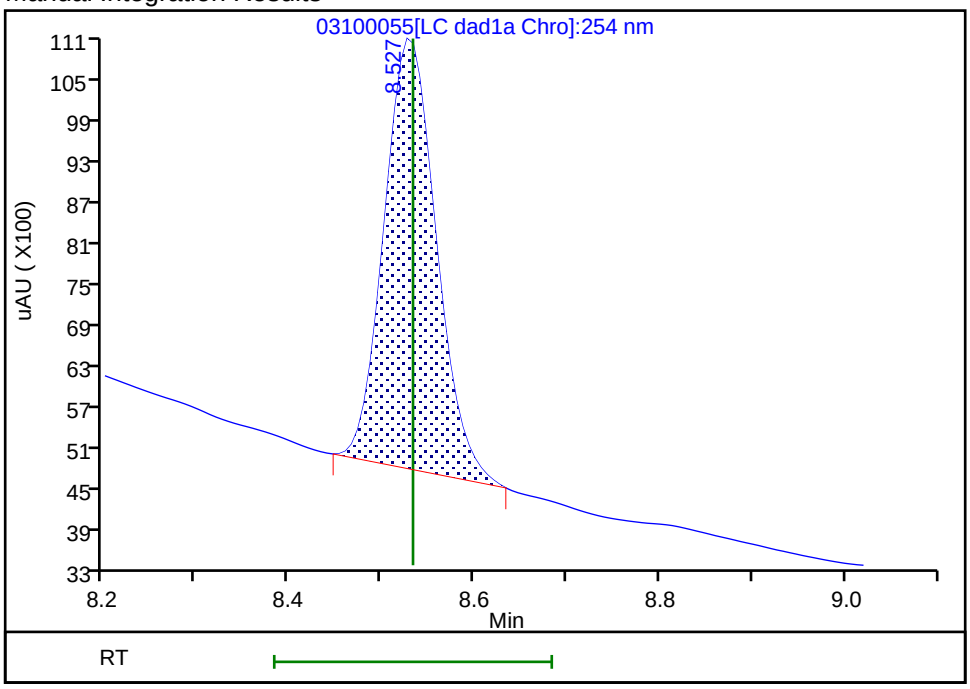
Processing Integration Results

RT: 8.53
Area: 25275
Amount: 0.202690
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 24390
Amount: 0.195593
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:52:03
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

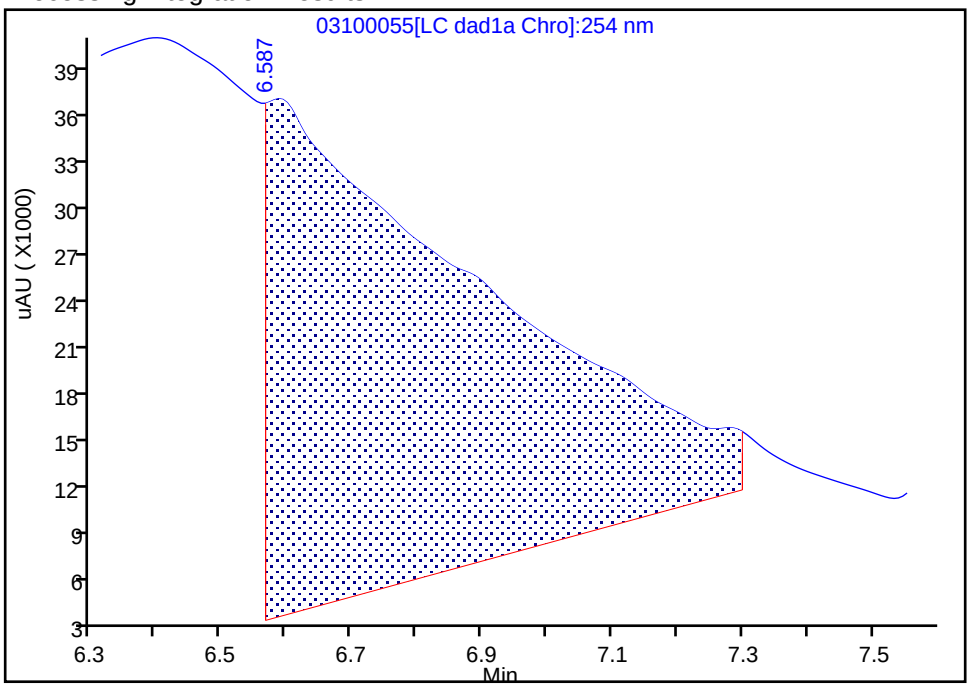
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100055.d				
Injection Date:	11-Mar-2022 08:17:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-2-A	Lab Sample ID:	280-159332-2		
Client ID:	G0082-8				
Operator ID:	JZ	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. 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

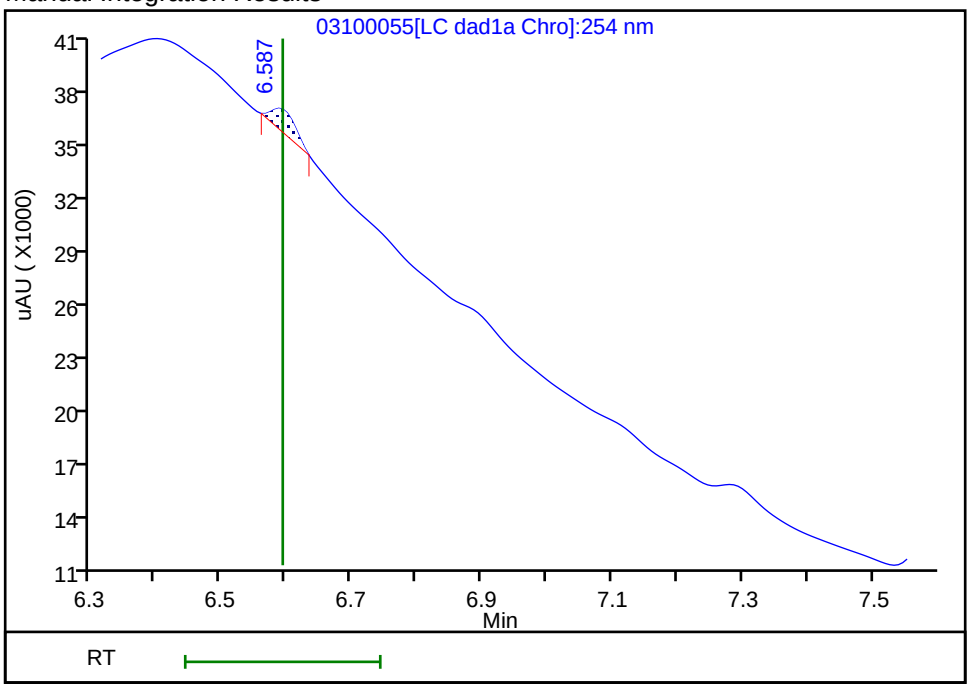
Processing Integration Results

RT: 6.59
Area: 733814
Amount: 8.753889
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 3189
Amount: 0.038043
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:51:55

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

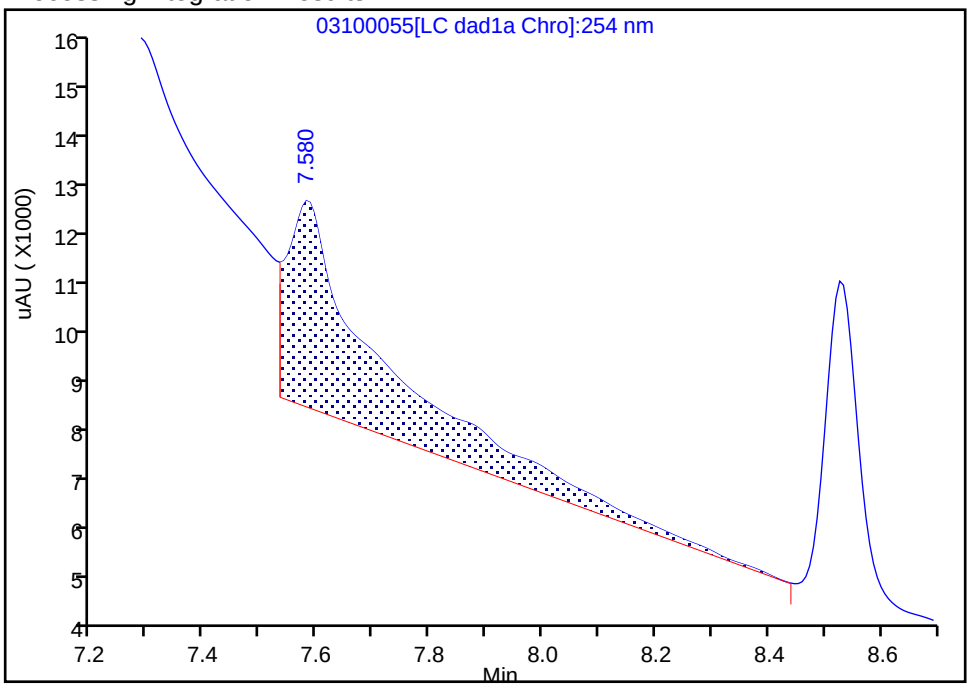
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100055.d				
Injection Date:	11-Mar-2022 08:17:26	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-2-A	Lab Sample ID:	280-159332-2		
Client ID:	G0082-8				
Operator ID:	JZ	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

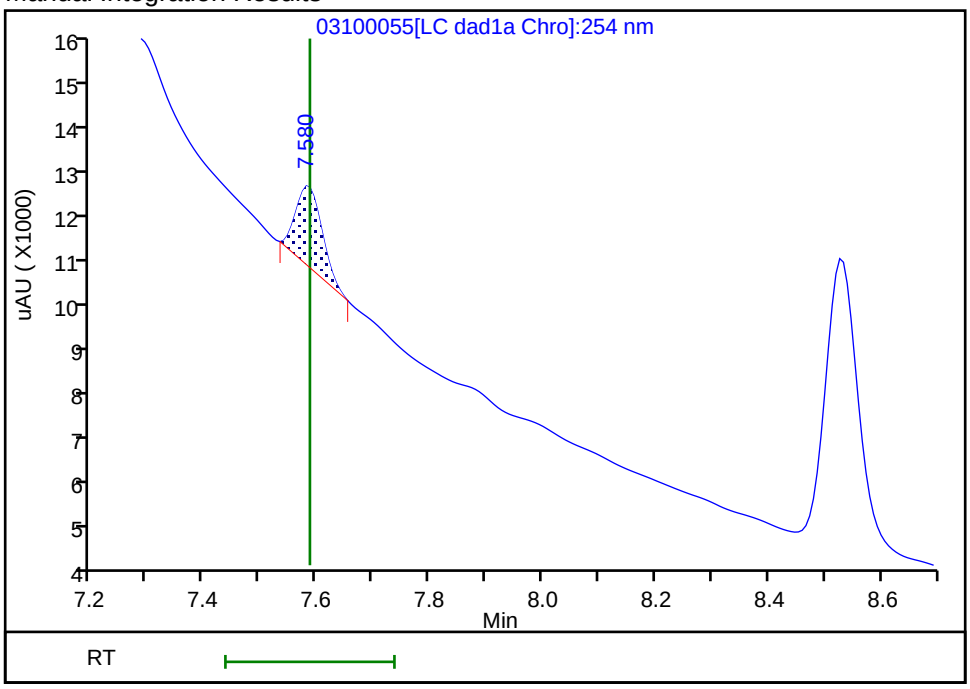
Processing Integration Results

RT: 7.58
Area: 47384
Amount: 0.457334
Amount Units: ug/mL



Manual Integration Results

RT: 7.58
Area: 5660
Amount: 0.054628
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:52:00

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

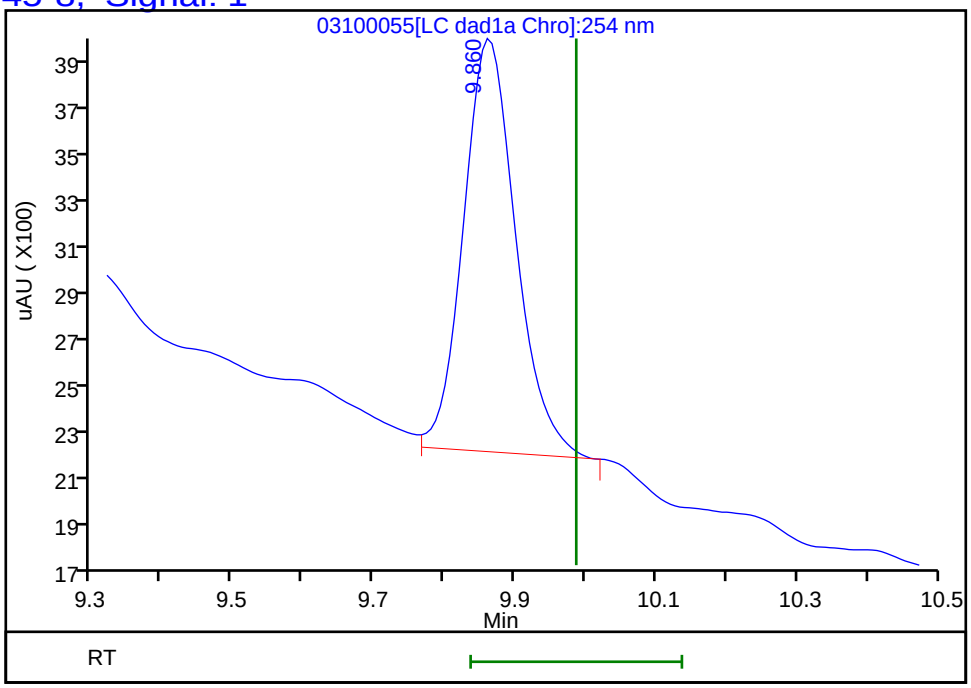
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100055.d
Injection Date: 11-Mar-2022 08:17:26 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-B-2-A Lab Sample ID: 280-159332-2
Client ID: G0082-8
Operator ID: JZ ALS Bottle#: 55 Worklist Smp#: 55
Injection Vol: 100.0 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: 9.86
Response: 9196
Amount: 0.053914



Reviewer: zhangji, 11-Mar-2022 13:52:09
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0082-8 | Lab Sample ID: 280-159332-2

Matrix: Water | Lab File ID: 03120017.D

Analysis Method: 8330A | Date Collected: 03/01/2022 15:25

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 462.7(mL) | Date Analyzed: 03/12/2022 16:41

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.: 568485 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	98		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120017.D
Lims ID: 280-159332-B-2-A
Client ID: G0082-8
Sample Type: Client
Inject. Date: 12-Mar-2022 16:41:02 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-B-2-A
Misc. Info.: 280-0109194-017
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-Mar-2022 16:12:02 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: CTX1624

First Level Reviewer: zhangji Date: 15-Mar-2022 16:08:10

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.797	6.816	-0.019	7778	0.0468	M
	6 MNX	1		7.537			ND	
	8 RDX	1	8.977	9.003	-0.026	12451	0.0641	M
	9 Nitrobenzene	1		11.883			ND	
$	10 1,2-Dinitrobenzene	1	13.044	13.056	-0.012	48766	0.1953	
	12 1,3-Dinitrobenzene	1		15.410			ND	
	14 o-Nitrotoluene	1		16.530			ND	
	16 p-Nitrotoluene	1		16.836			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.431	17.443	-0.012	4932	0.0187	
	18 m-Nitrotoluene	1		17.790			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.424	18.450	-0.026	5651	0.0157	
	20 1,3,5-Trinitrobenzene	1		18.683			ND	
	21 2,6-Dinitrotoluene	1		19.916			ND	
	22 2,4-Dinitrotoluene	1		20.436			ND	
	23 Tetryl	1		24.096			ND	
	24 2,4,6-Trinitrotoluene	1		24.876			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

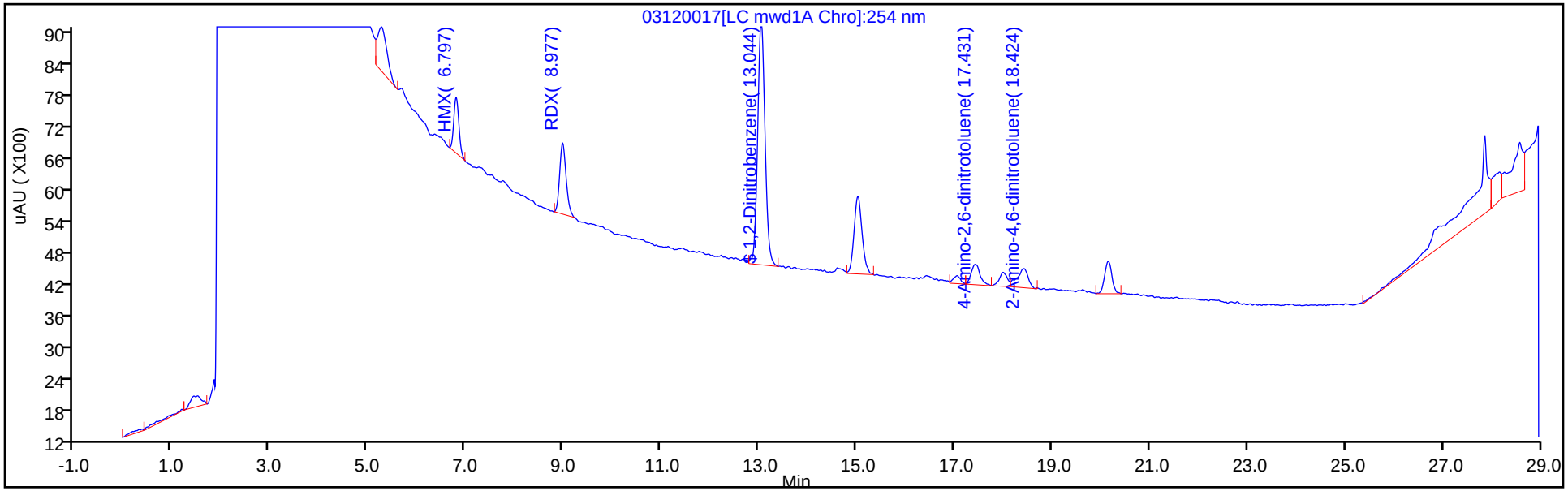
Report Date: 15-Mar-2022 16:12:04 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

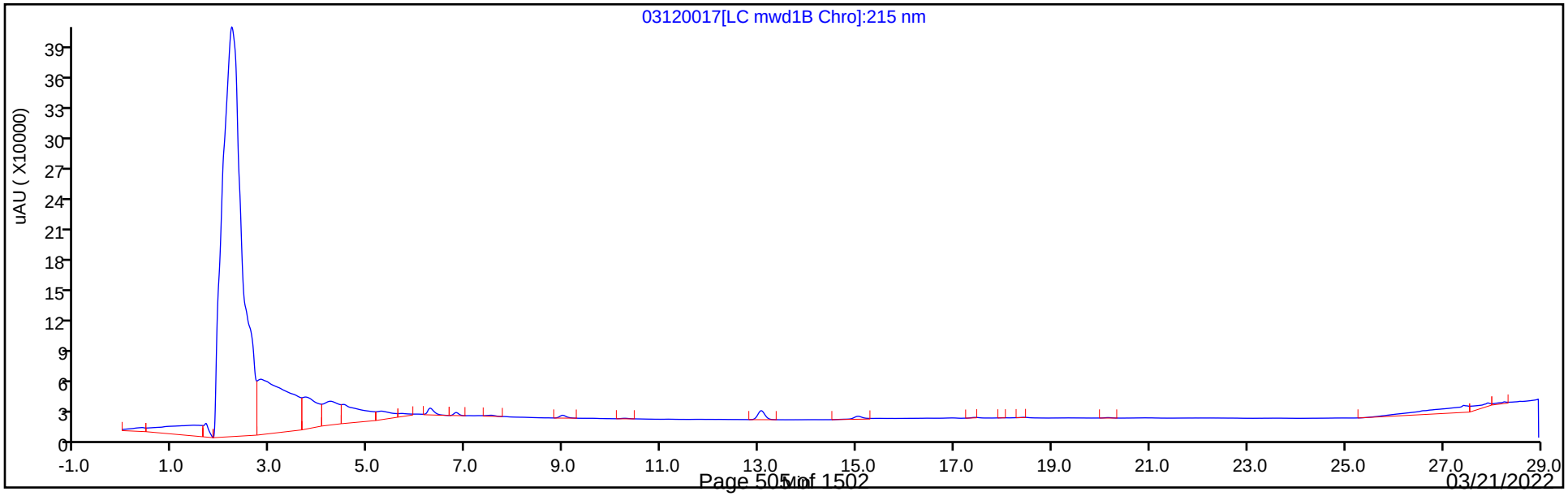
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120017.D				
Injection Date:	12-Mar-2022 16:41:02	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159332-B-2-A	Lab Sample ID:	280-159332-2	Worklist Smp#:	17
Client ID:	G0082-8				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS 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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120017.D				
Lims ID:	280-159332-B-2-A				
Client ID:	G0082-8				
Sample Type:	Client				
Inject. Date:	12-Mar-2022 16:41:02	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-B-2-A				
Misc. Info.:	280-0109194-017				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-Mar-2022 16:12:02	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:	CTX1624				
First Level Reviewer: zhangji		Date:	15-Mar-2022 16:08:10		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1953	97.63

Manual Integration/User Assign Peak Report

Eurofins Denver

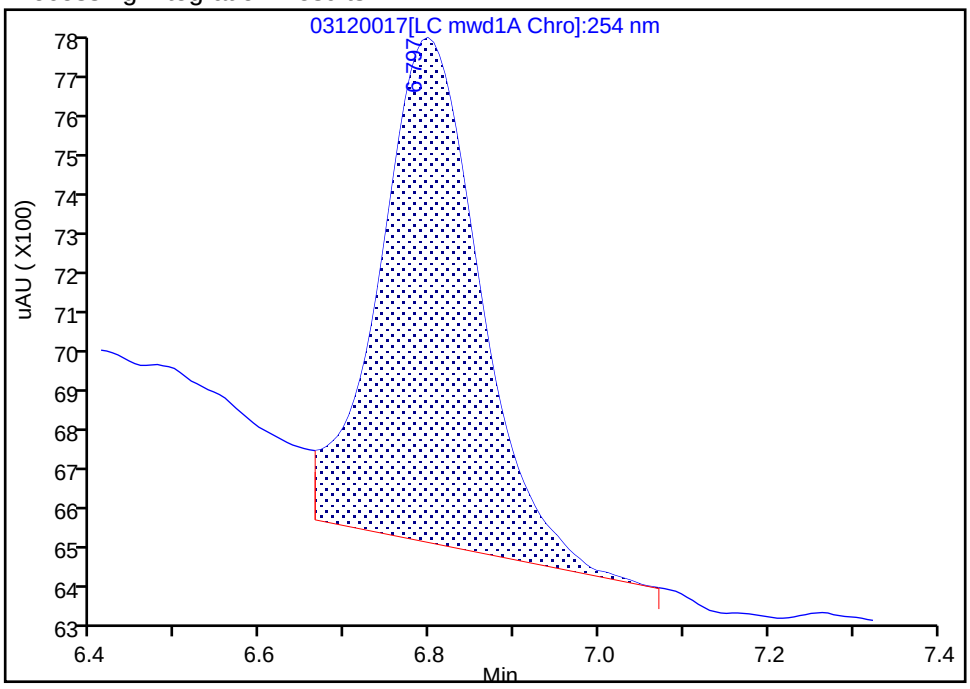
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120017.D				
Injection Date:	12-Mar-2022 16:41:02	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-B-2-A	Lab Sample ID:	280-159332-2		
Client ID:	G0082-8				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

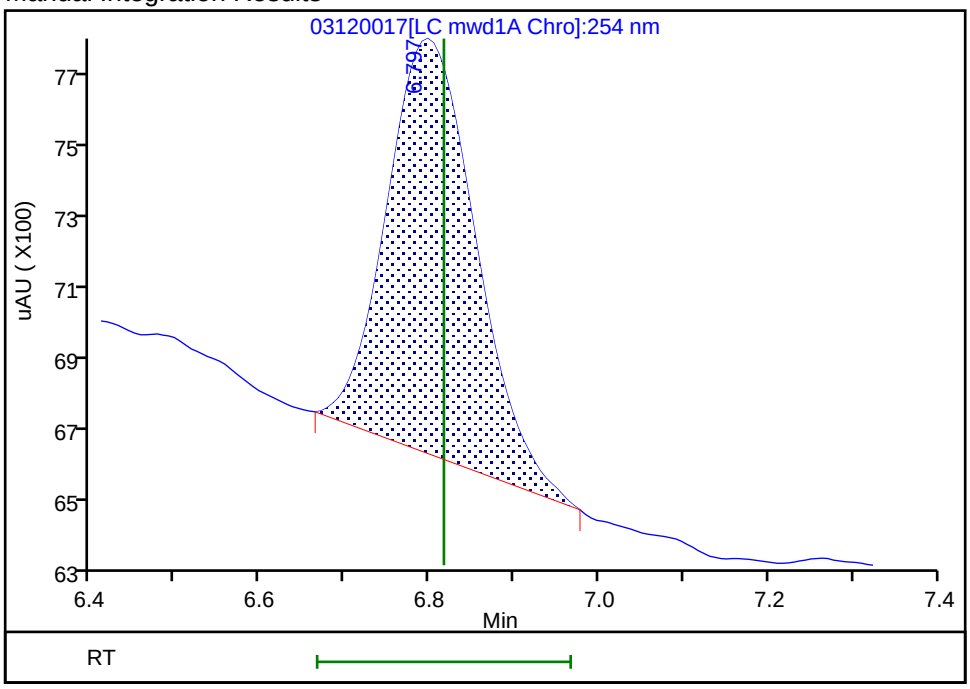
Processing Integration Results

RT: 6.80
Area: 9625
Amount: 0.057935
Amount Units: ug/ml



Manual Integration Results

RT: 6.80
Area: 7778
Amount: 0.046817
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 16:08:00
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

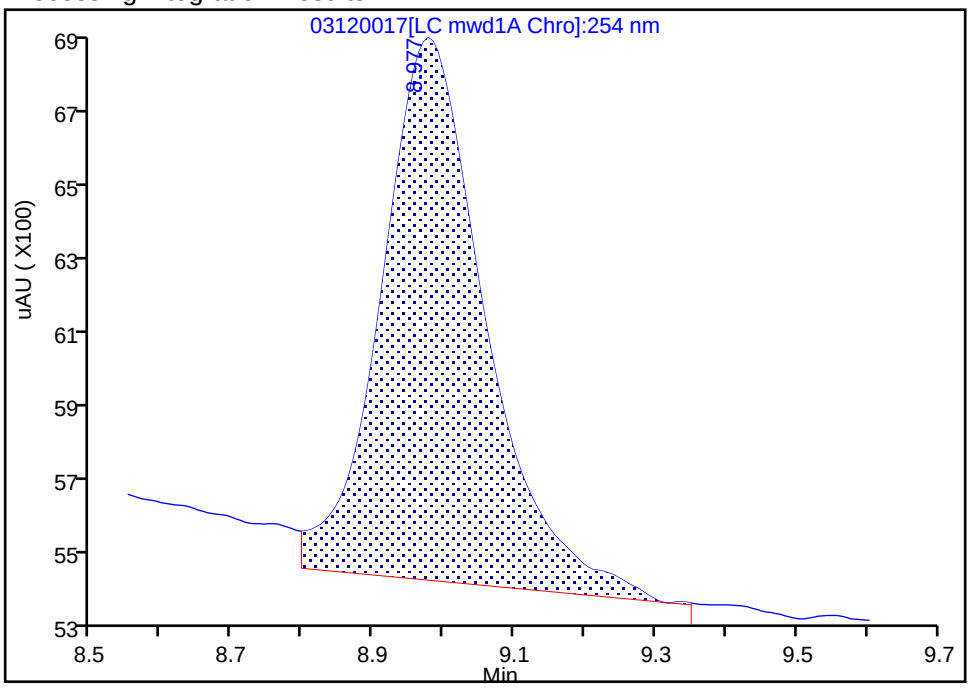
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120017.D				
Injection Date:	12-Mar-2022 16:41:02	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-B-2-A	Lab Sample ID:	280-159332-2		
Client ID:	G0082-8				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

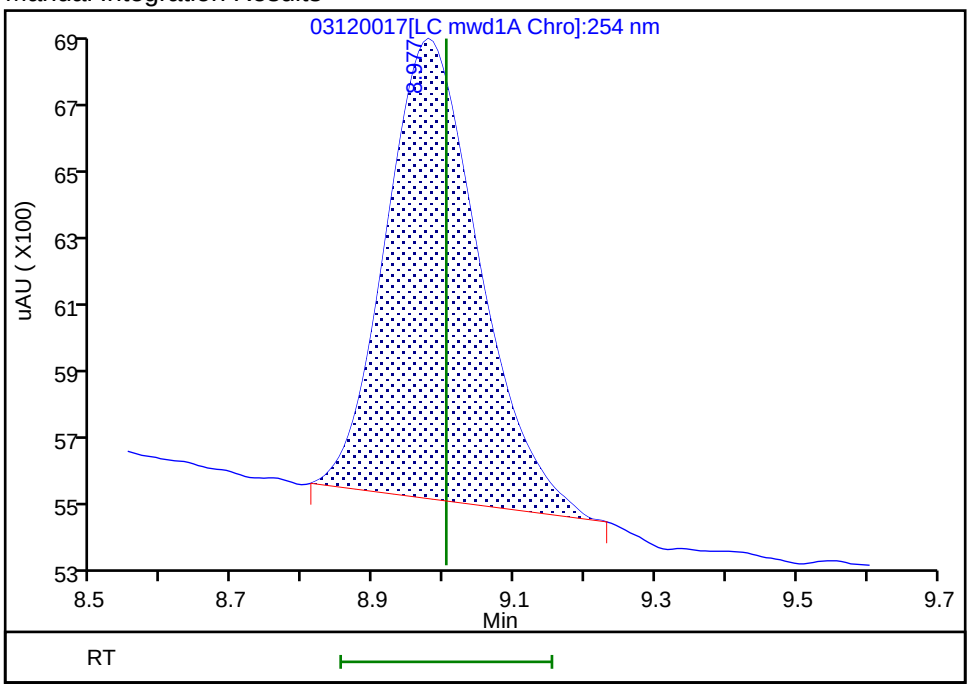
Processing Integration Results

RT: 8.98
Area: 14831
Amount: 0.076318
Amount Units: ug/ml



Manual Integration Results

RT: 8.98
Area: 12451
Amount: 0.064071
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 16:08:03

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0024-8 | Lab Sample ID: 280-159332-3

Matrix: Water | Lab File ID: 03100056.D

Analysis Method: 8330A | Date Collected: 03/01/2022 13:10

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 481.6(mL) | Date Analyzed: 03/11/2022 08:40

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.: 568287 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.087
118-96-7	2,4,6-Trinitrotoluene	0.66		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	1.5		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	0.42	0.42	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.82		0.16	0.12	0.060
2691-41-0	HMX	0.21	U	0.22	0.21	0.091
5755-27-1	MNX	0.42	U	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.094
121-82-4	RDX	0.21	U	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	93	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\03100056.D
Lims ID: 280-159332-A-3-A
Client ID: G0024-8
Sample Type: Client
Inject. Date: 11-Mar-2022 08:40:23 ALS Bottle#: 56 Worklist Smp#: 56
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-A-3-A
Misc. Info.: 280-0109139-056
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 11-Mar-2022 13:57:00 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: CTX1614

First Level Reviewer: zhangji Date: 11-Mar-2022 13:52:28

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.593			ND	
7 MNX	1		7.209			ND	
8 RDX	1		7.587			ND	
$ 10 1,2-Dinitrobenzene	1	8.532	8.533	-0.001	23220	0.1862	M
11 1,3,5-Trinitrobenzene	1		8.660			ND	
12 1,3-Dinitrobenzene	1	9.298	9.280	0.018	1566	0.005430	M
13 Nitrobenzene	1		9.667			ND	
15 Tetryl	1		9.987			ND	U
17 2,4,6-Trinitrotoluene	1	10.885	10.893	-0.008	12835	0.0633	
18 4-Amino-2,6-dinitrotoluene	1	11.071	11.080	-0.009	11992	0.0794	
19 2-Amino-4,6-dinitrotoluene	1	11.318	11.327	-0.009	28470	0.1408	
20 2,6-Dinitrotoluene	1		11.500			ND	
21 2,4-Dinitrotoluene	1		11.667			ND	
22 o-Nitrotoluene	1		12.513			ND	
23 p-Nitrotoluene	1	12.931	12.940	-0.009	1865	0.0176	
24 m-Nitrotoluene	1		13.507			ND	

QC Flag Legend

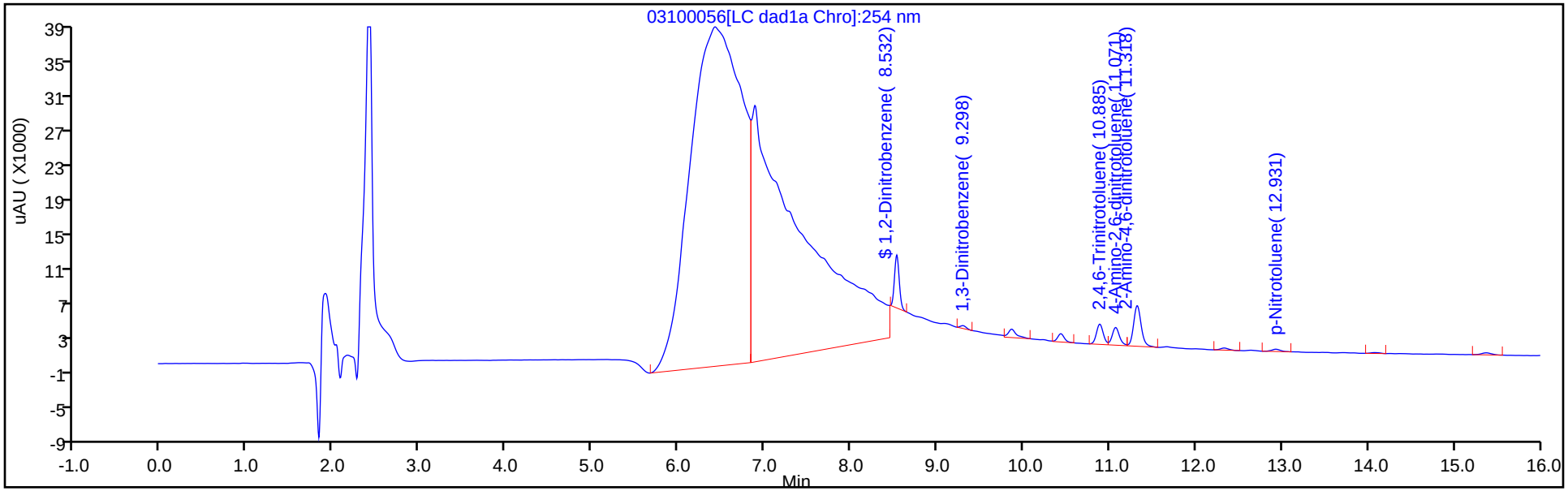
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 11-Mar-2022 13:57:04 Chrom Revision: 2.3 16-Feb-2022 17:52:00

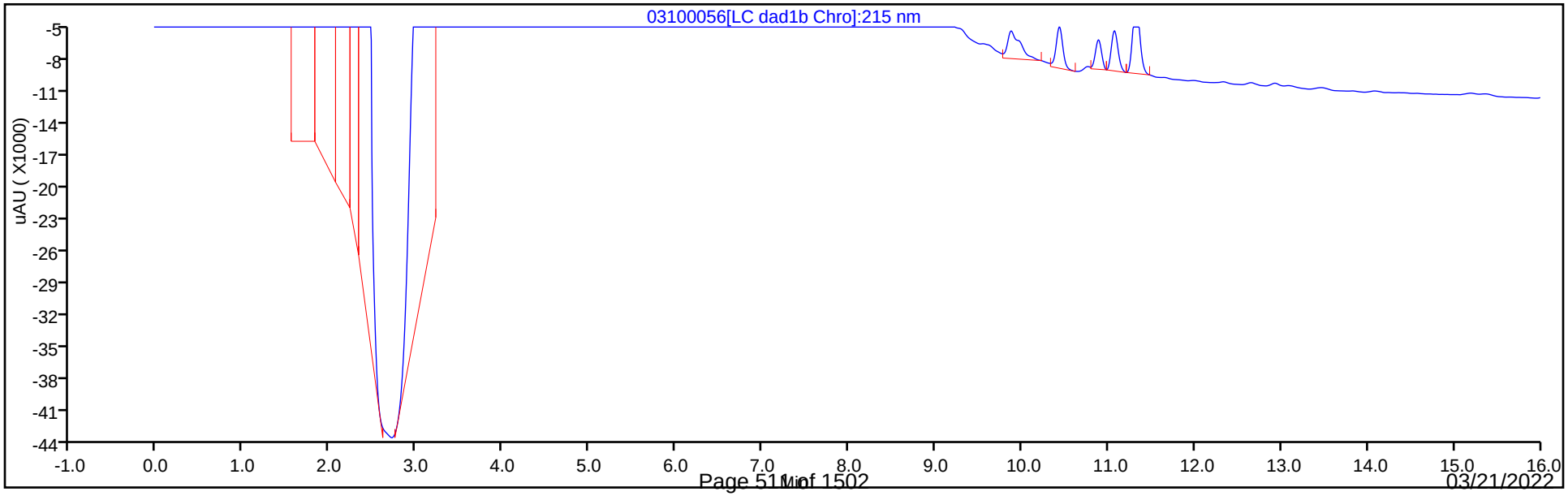
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100056.d				
Injection Date:	11-Mar-2022 08:40:23	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159332-A-3-A	Lab Sample ID:	280-159332-3	Worklist Smp#:	56
Client ID:	G0024-8				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	56
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\03100056.D				
Lims ID:	280-159332-A-3-A				
Client ID:	G0024-8				
Sample Type:	Client				
Inject. Date:	11-Mar-2022 08:40:23	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-A-3-A				
Misc. Info.:	280-0109139-056				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	11-Mar-2022 13:57:00	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:	CTX1614				

First Level Reviewer: zhangji Date: 11-Mar-2022 13:52:28

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1862	93.11

Manual Integration/User Assign Peak Report

Eurofins Denver

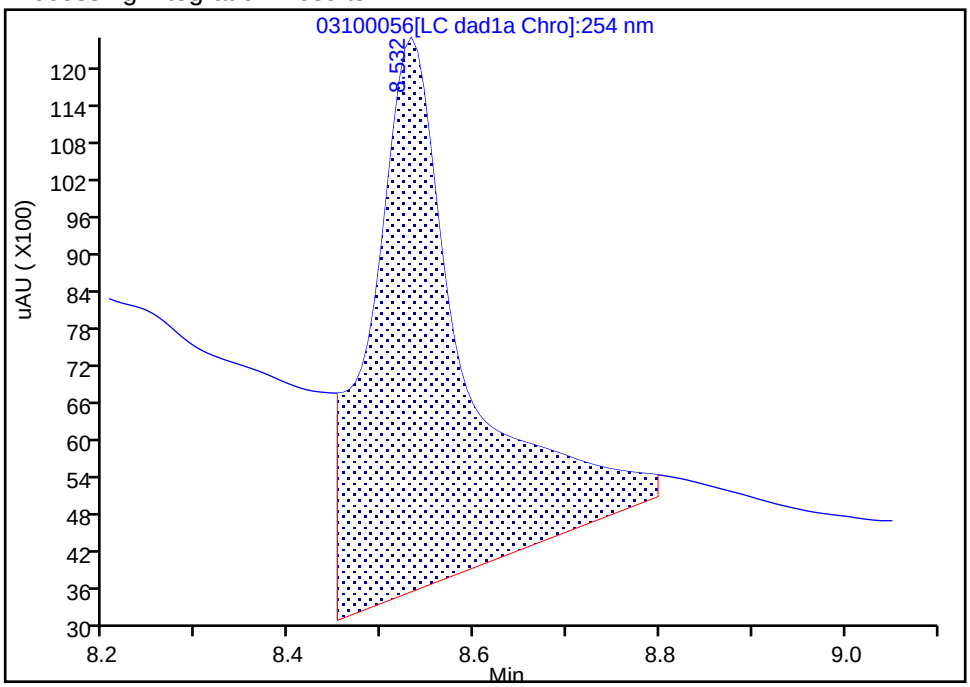
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100056.d				
Injection Date:	11-Mar-2022 08:40:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-3-A	Lab Sample ID:	280-159332-3		
Client ID:	G0024-8				
Operator ID:	JZ	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

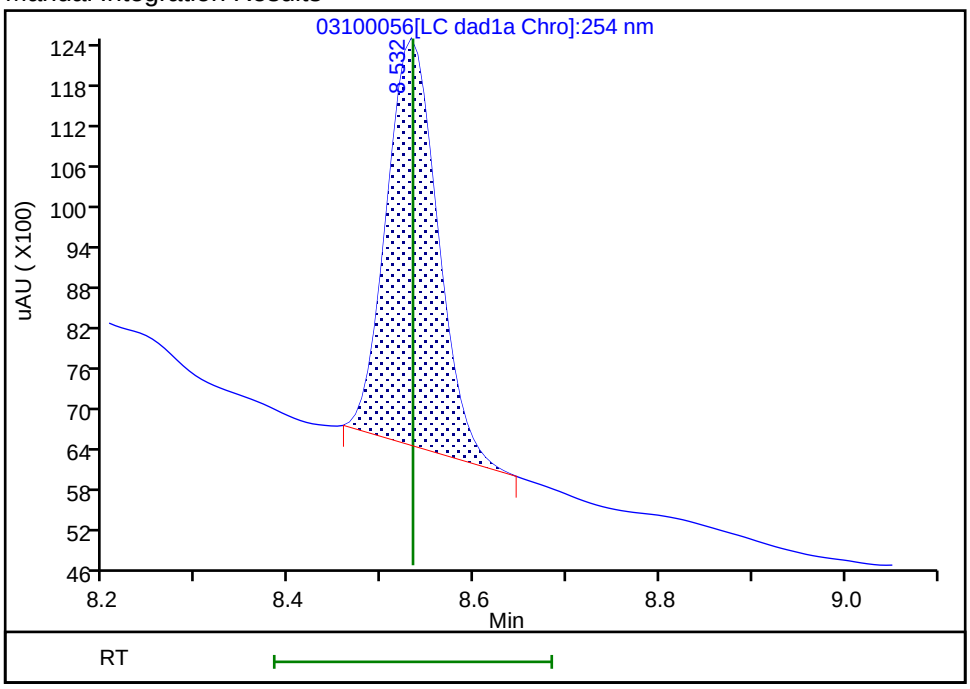
Processing Integration Results

RT: 8.53
Area: 64735
Amount: 0.519136
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 23220
Amount: 0.186210
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:52:22

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

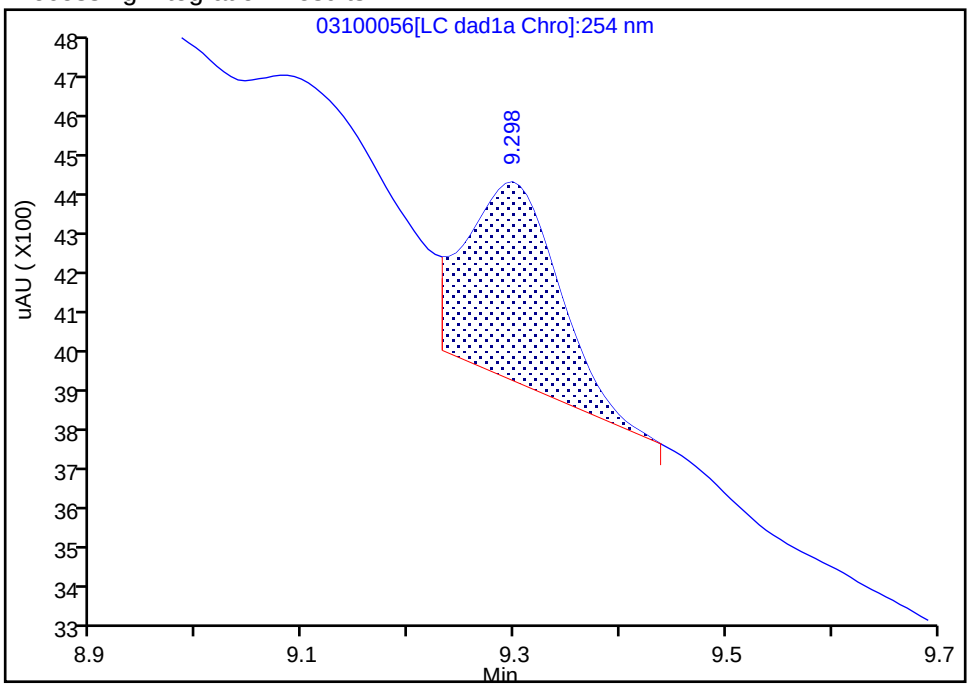
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100056.d				
Injection Date:	11-Mar-2022 08:40:23	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-3-A	Lab Sample ID:	280-159332-3		
Client ID:	G0024-8				
Operator ID:	JZ	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

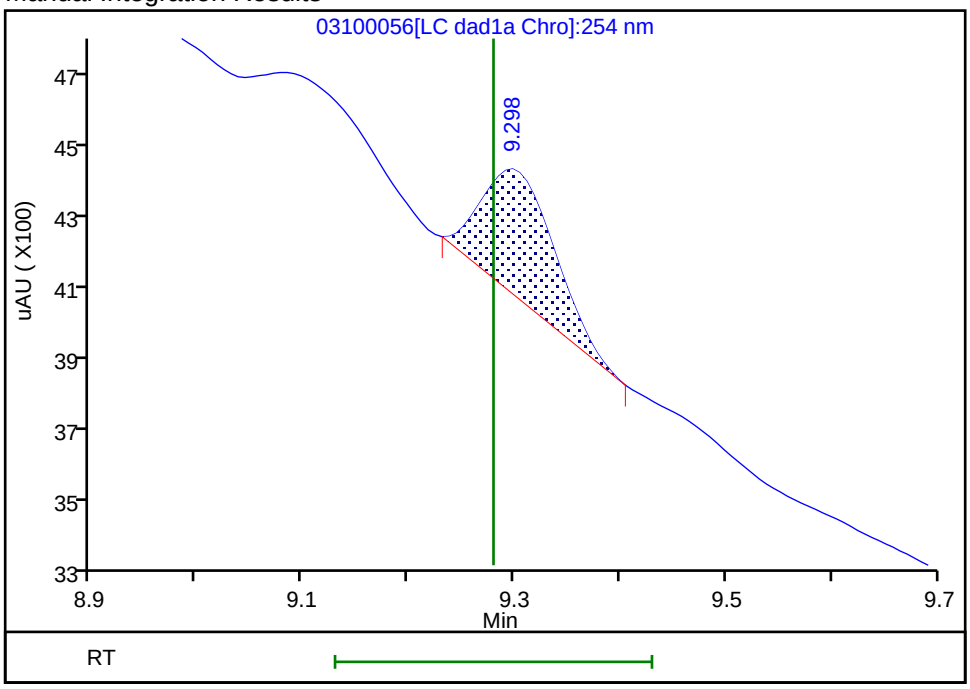
Processing Integration Results

RT: 9.30
Area: 2813
Amount: 0.009754
Amount Units: ug/mL



Manual Integration Results

RT: 9.30
Area: 1566
Amount: 0.005430
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:52:25

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

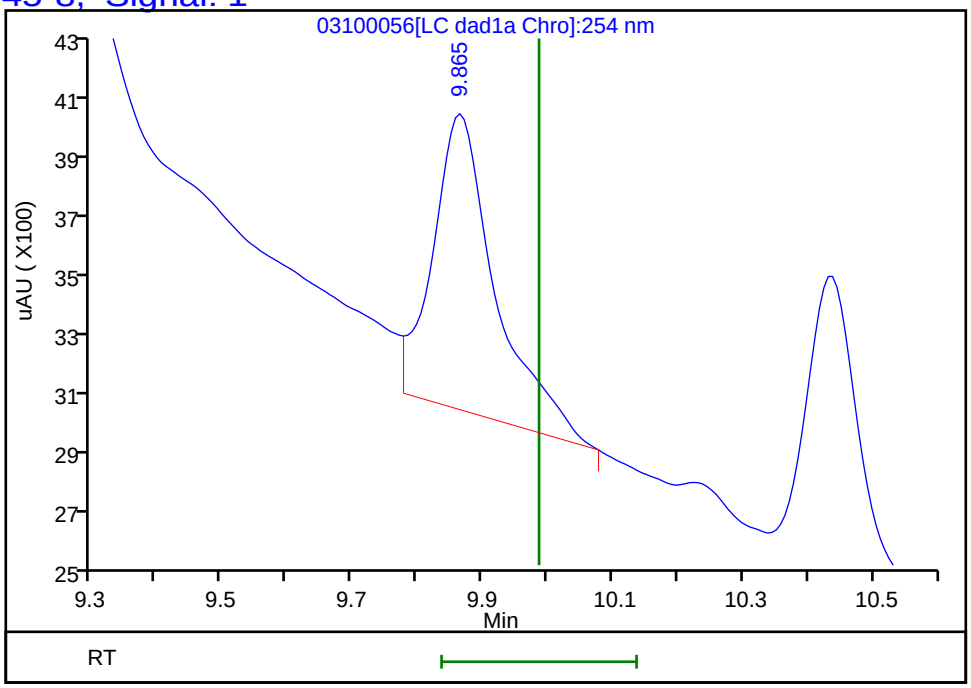
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100056.d
Injection Date: 11-Mar-2022 08:40:23 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-A-3-A Lab Sample ID: 280-159332-3
Client ID: G0024-8
Operator ID: JZ ALS Bottle#: 56 Worklist Smp#: 56
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 9.86
Response: 6367
Amount: 0.037328



Reviewer: zhangji, 11-Mar-2022 13:52:28
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0024-8 | Lab Sample ID: 280-159332-3

Matrix: Water | Lab File ID: 03120018.D

Analysis Method: 8330A | Date Collected: 03/01/2022 13:10

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 481.6(mL) | Date Analyzed: 03/12/2022 17:16

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.: 568485 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038
99-99-0	4-Nitrotoluene	0.42	U	0.43	0.42	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	101		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120018.D
Lims ID: 280-159332-A-3-A
Client ID: G0024-8
Sample Type: Client
Inject. Date: 12-Mar-2022 17:16:08 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-A-3-A
Misc. Info.: 280-0109194-018
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-Mar-2022 16:12:02 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: CTX1624

First Level Reviewer: zhangji Date: 15-Mar-2022 16:10:13

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1		6.816			ND	
	6 MNX	1		7.537			ND	
	8 RDX	1	8.991	9.003	-0.012	1085	0.005583	M
	9 Nitrobenzene	1		11.883			ND	
$	10 1,2-Dinitrobenzene	1	13.077	13.056	0.021	50629	0.2027	
	12 1,3-Dinitrobenzene	1		15.410			ND	
	14 o-Nitrotoluene	1	16.577	16.530	0.047	2070	0.008821	
	16 p-Nitrotoluene	1		16.836			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.477	17.443	0.034	25144	0.0943	
	18 m-Nitrotoluene	1		17.790			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.471	18.450	0.021	54545	0.1513	
	20 1,3,5-Trinitrobenzene	1		18.683			ND	
	21 2,6-Dinitrotoluene	1		19.916			ND	
	22 2,4-Dinitrotoluene	1		20.436			ND	
	23 Tetryl	1	24.177	24.096	0.081	5437	0.0159	
	24 2,4,6-Trinitrotoluene	1	24.891	24.876	0.015	24938	0.0675	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

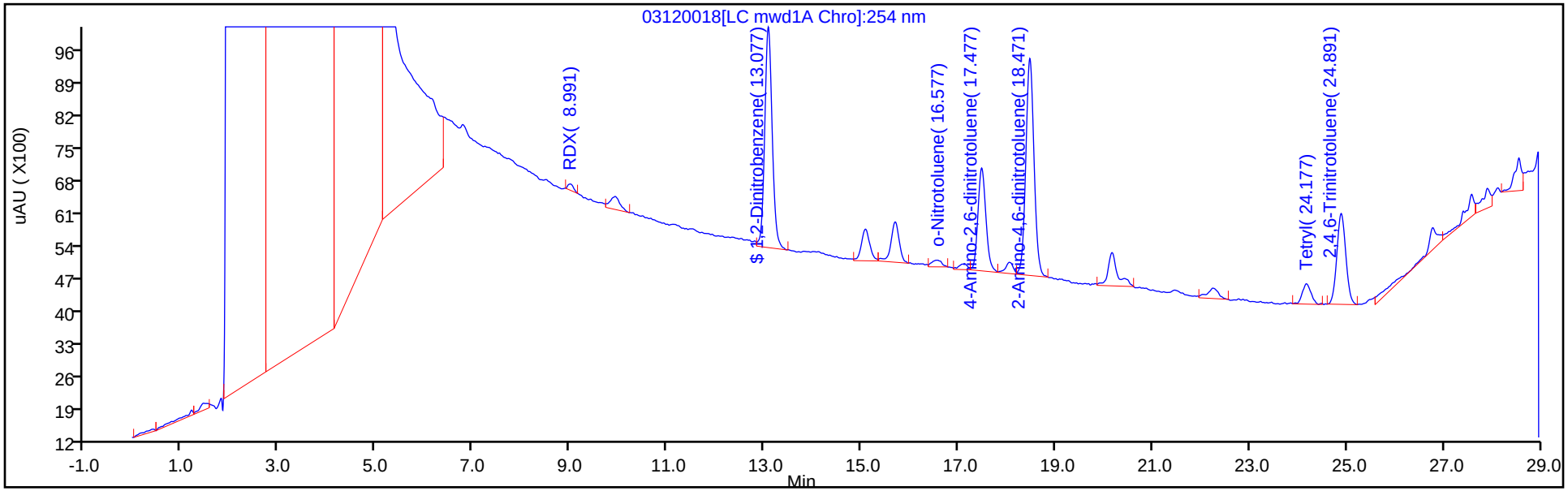
Report Date: 15-Mar-2022 16:12:05 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

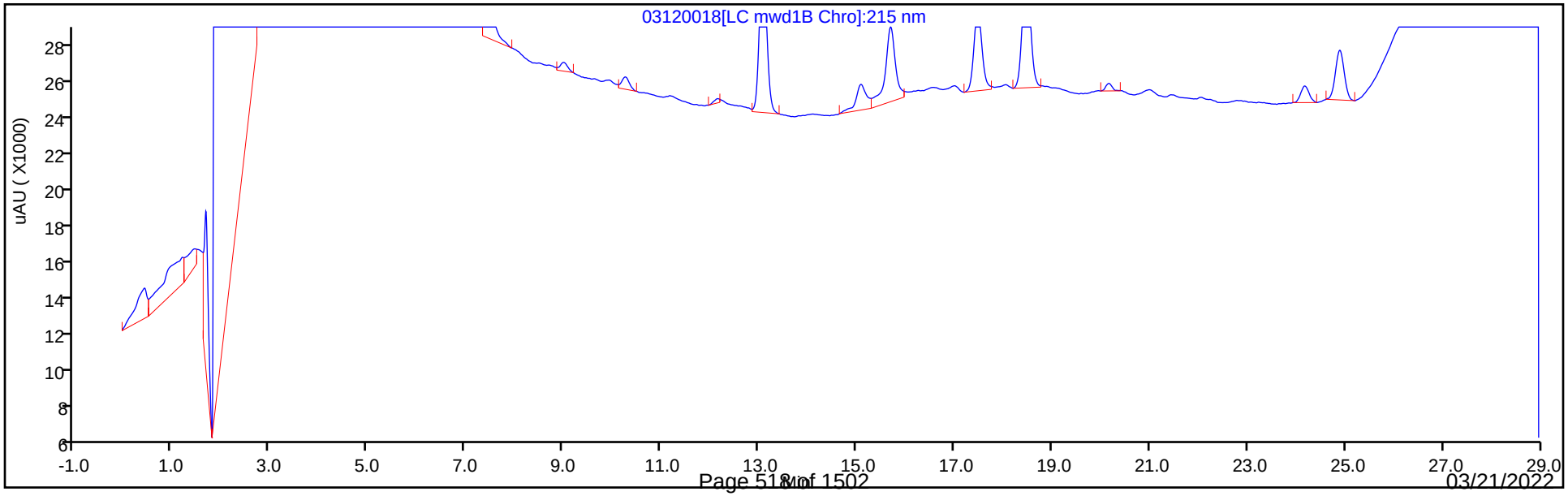
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120018.D

Injection Date:	12-Mar-2022 17:16:08	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159332-A-3-A	Lab Sample ID:	280-159332-3	Worklist Smp#:	18
Client ID:	G0024-8				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120018.D				
Lims ID:	280-159332-A-3-A				
Client ID:	G0024-8				
Sample Type:	Client				
Inject. Date:	12-Mar-2022 17:16:08	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-A-3-A				
Misc. Info.:	280-0109194-018				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-Mar-2022 16:12:02	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:	CTX1624				
First Level Reviewer: zhangji		Date:	15-Mar-2022 16:10:13		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2027	101.36

Manual Integration/User Assign Peak Report

Eurofins Denver

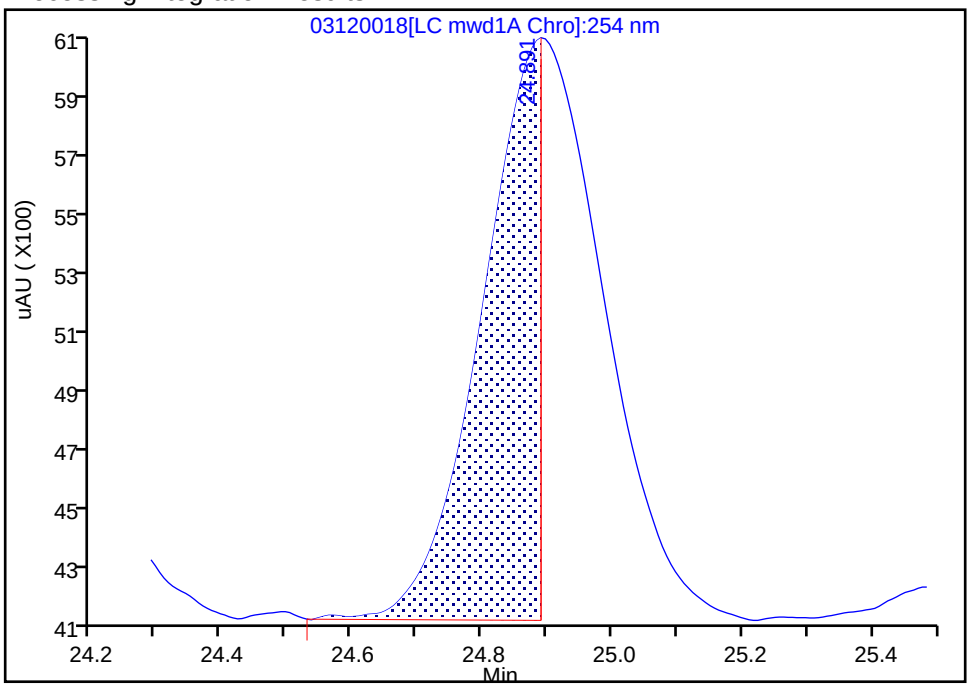
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120018.D				
Injection Date:	12-Mar-2022 17:16:08	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-A-3-A	Lab Sample ID:	280-159332-3		
Client ID:	G0024-8				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

24 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

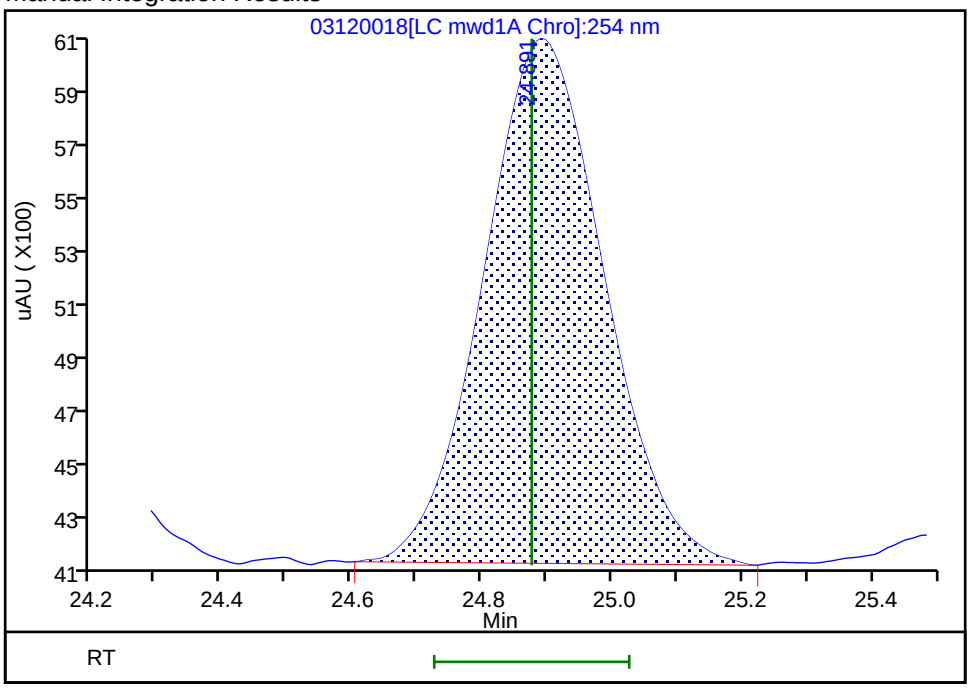
Processing Integration Results

RT: 24.89
Area: 11944
Amount: 0.032353
Amount Units: ug/ml



Manual Integration Results

RT: 24.89
Area: 24938
Amount: 0.067550
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 16:09:53

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Denver

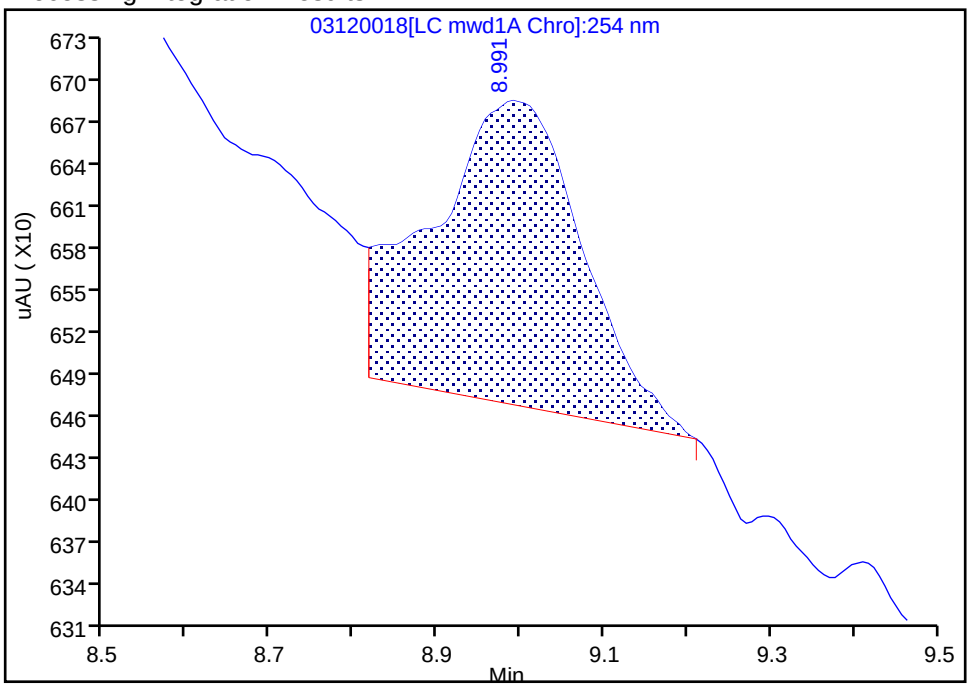
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120018.D				
Injection Date:	12-Mar-2022 17:16:08	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-A-3-A	Lab Sample ID:	280-159332-3		
Client ID:	G0024-8				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

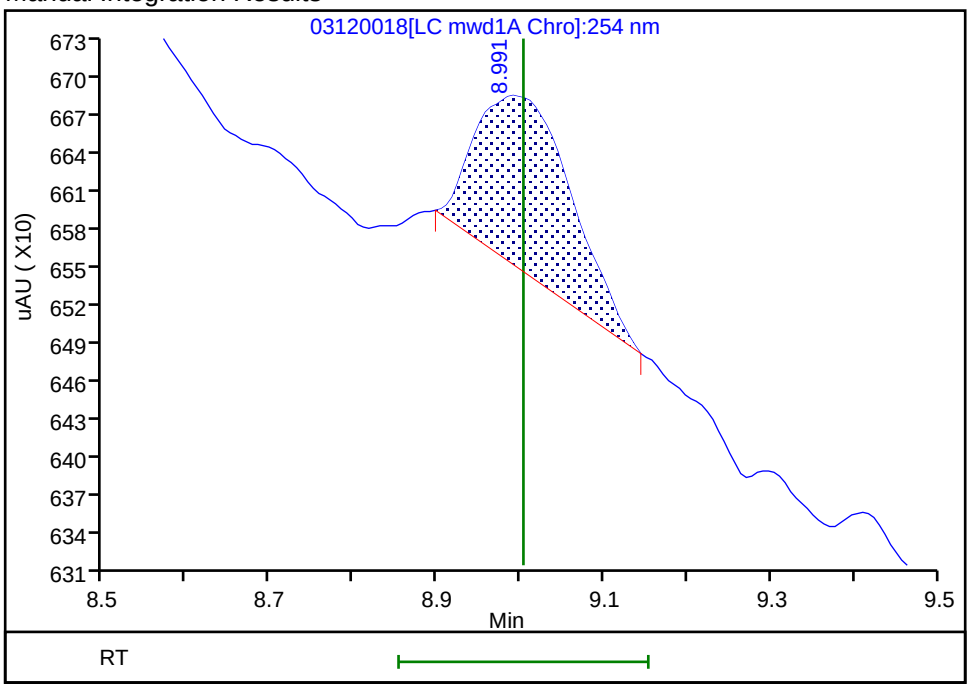
Processing Integration Results

RT: 8.99
Area: 2692
Amount: 0.013853
Amount Units: ug/ml



Manual Integration Results

RT: 8.99
Area: 1085
Amount: 0.005583
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 16:10:04
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0096-8 | Lab Sample ID: 280-159332-4

Matrix: Water | Lab File ID: 03100057.D

Analysis Method: 8330A | Date Collected: 03/01/2022 11:10

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 490.1(mL) | Date Analyzed: 03/11/2022 09:03

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.: 568287 | 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	0.086
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	0.082	U	0.10	0.082	0.028
606-20-2	2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052
88-72-2	2-Nitrotoluene	0.20	U M	0.21	0.20	0.087
99-08-1	3-Nitrotoluene	0.41	U	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.61		0.15	0.12	0.059
5755-27-1	MNX	2.8	M J1	2.0	0.41	0.16
98-95-3	Nitrobenzene	0.20	U M	0.21	0.20	0.093
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	109	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\03100057.D
Lims ID: 280-159332-A-4-A
Client ID: G0096-8
Sample Type: Client
Inject. Date: 11-Mar-2022 09:03:19 ALS Bottle#: 57 Worklist Smp#: 57
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-A-4-A
Misc. Info.: 280-0109139-057
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 11-Mar-2022 13:57:00 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: CTX1614

First Level Reviewer: zhangji Date: 11-Mar-2022 12:44:48

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.592	6.593	-0.001	220365	2.63	EM
7 MNX	1	7.212	7.209	0.003	34798	0.2762	M
8 RDX	1	7.585	7.587	-0.002	463367	4.47	EM
$ 10 1,2-Dinitrobenzene	1	8.525	8.533	-0.008	27089	0.2172	M
11 1,3,5-Trinitrobenzene	1		8.660			ND	
12 1,3-Dinitrobenzene	1		9.280			ND	
13 Nitrobenzene	1		9.667			ND	U
15 Tetryl	1		9.987			ND	U
17 2,4,6-Trinitrotoluene	1		10.893			ND	
18 4-Amino-2,6-dinitrotoluene	1	11.065	11.080	-0.015	9038	0.0599	
19 2-Amino-4,6-dinitrotoluene	1		11.327			ND	
20 2,6-Dinitrotoluene	1		11.500			ND	
21 2,4-Dinitrotoluene	1		11.667			ND	
22 o-Nitrotoluene	1		12.513			ND	U
23 p-Nitrotoluene	1	12.945	12.940	0.005	2437	0.0229	
24 m-Nitrotoluene	1		13.507			ND	

QC Flag Legend

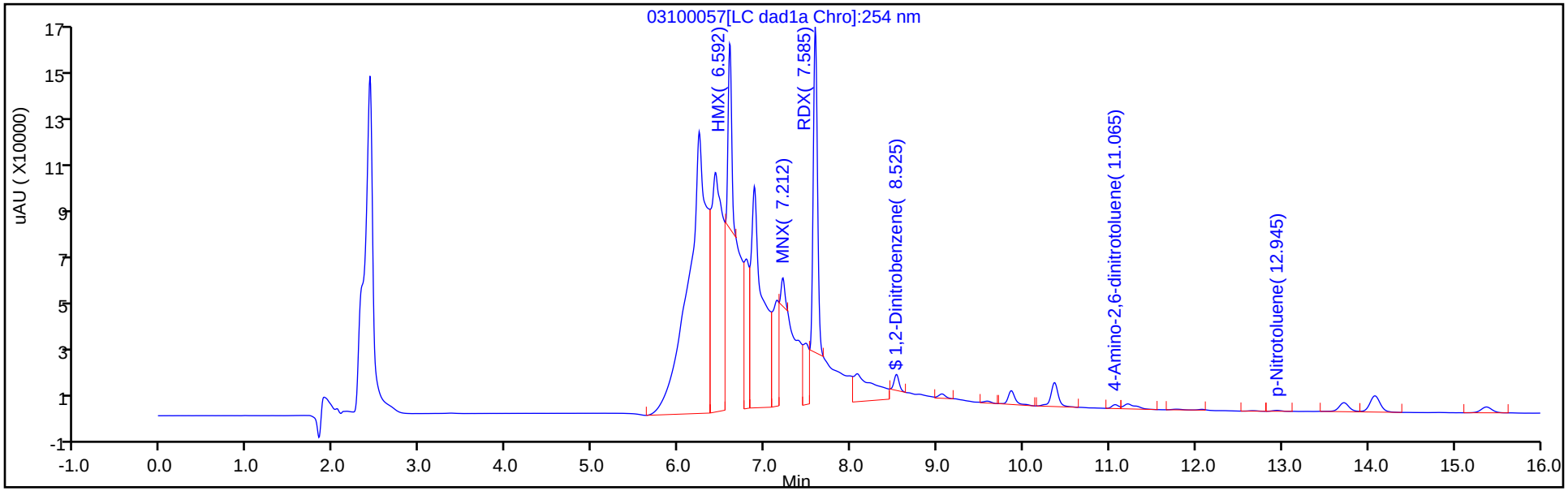
Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 11-Mar-2022 13:57:03 Chrom Revision: 2.3 16-Feb-2022 17:52:00

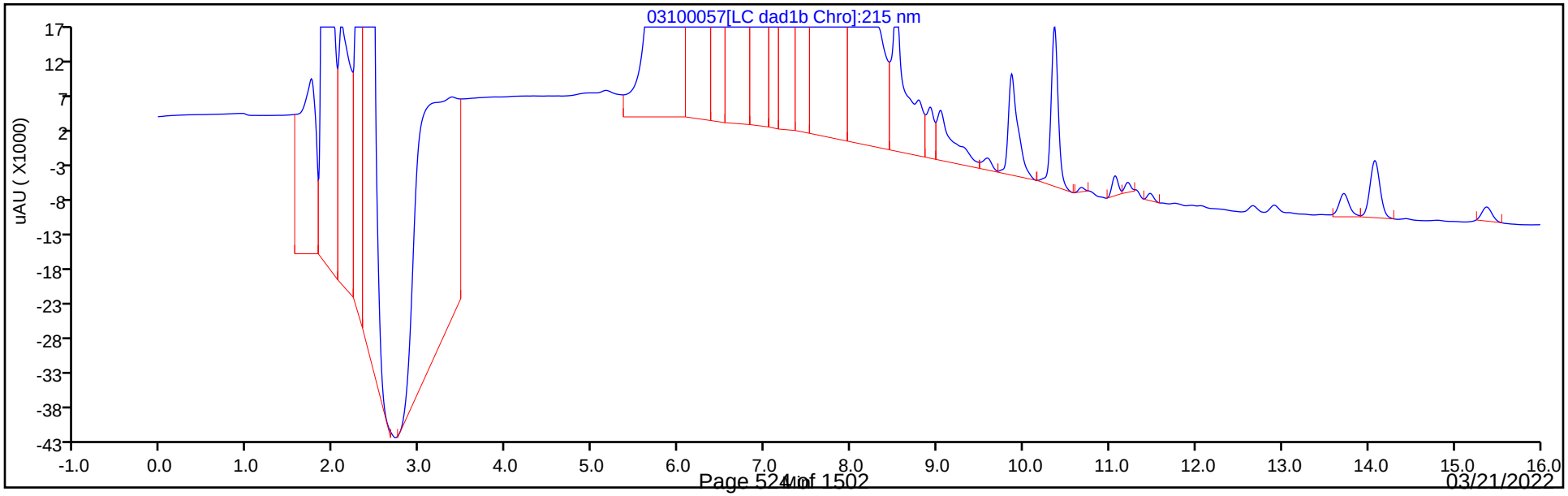
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100057.d				
Injection Date:	11-Mar-2022 09:03:19	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159332-A-4-A	Lab Sample ID:	280-159332-4	Worklist Smp#:	57
Client ID:	G0096-8				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	57
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\03100057.D				
Lims ID:	280-159332-A-4-A				
Client ID:	G0096-8				
Sample Type:	Client				
Inject. Date:	11-Mar-2022 09:03:19	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-A-4-A				
Misc. Info.:	280-0109139-057				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	11-Mar-2022 13:57:00	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:	CTX1614				
First Level Reviewer: zhangji		Date:	11-Mar-2022 12:44:48		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2172	108.62

Manual Integration/User Assign Peak Report

Eurofins Denver

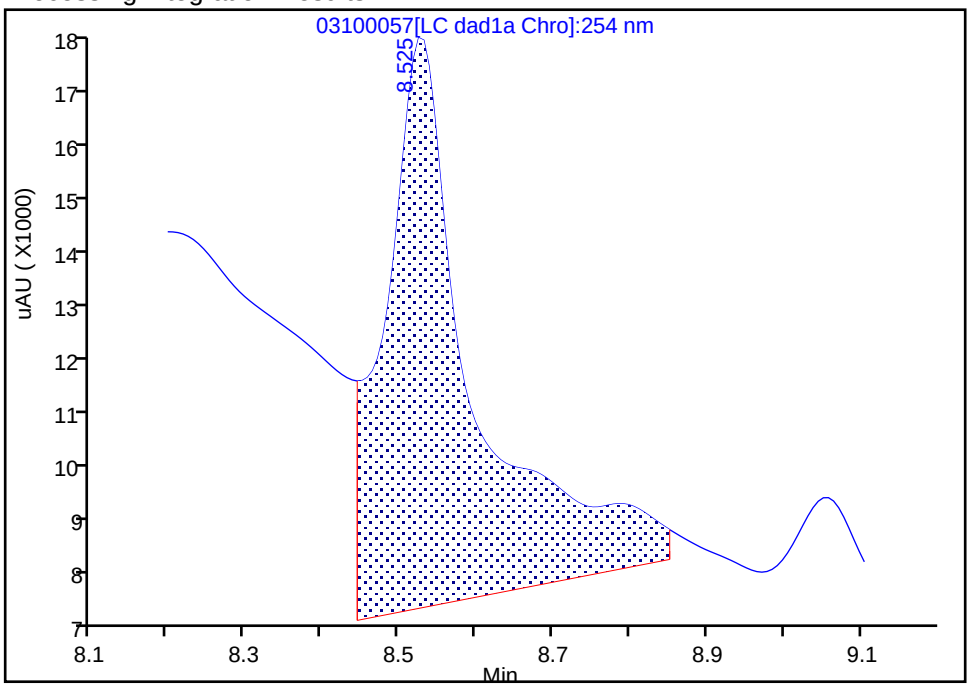
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100057.d				
Injection Date:	11-Mar-2022 09:03:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-4-A	Lab Sample ID:	280-159332-4		
Client ID:	G0096-8				
Operator ID:	JZ	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

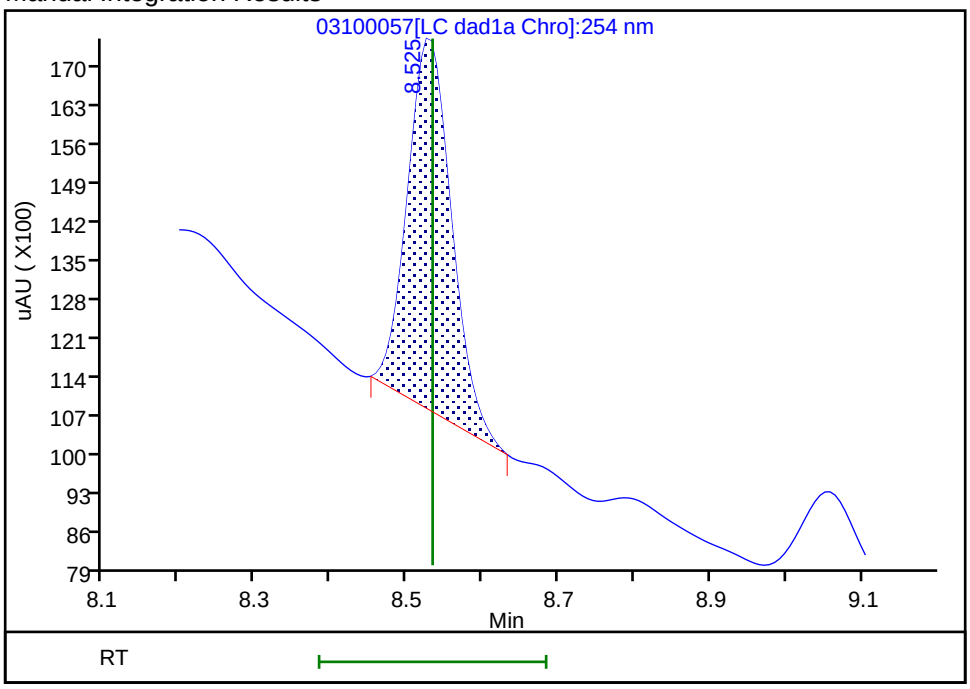
Processing Integration Results

RT: 8.53
Area: 83480
Amount: 0.669459
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 27089
Amount: 0.217237
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:52:42

Audit Action: Manually Integrated Audit Reason: Baseline

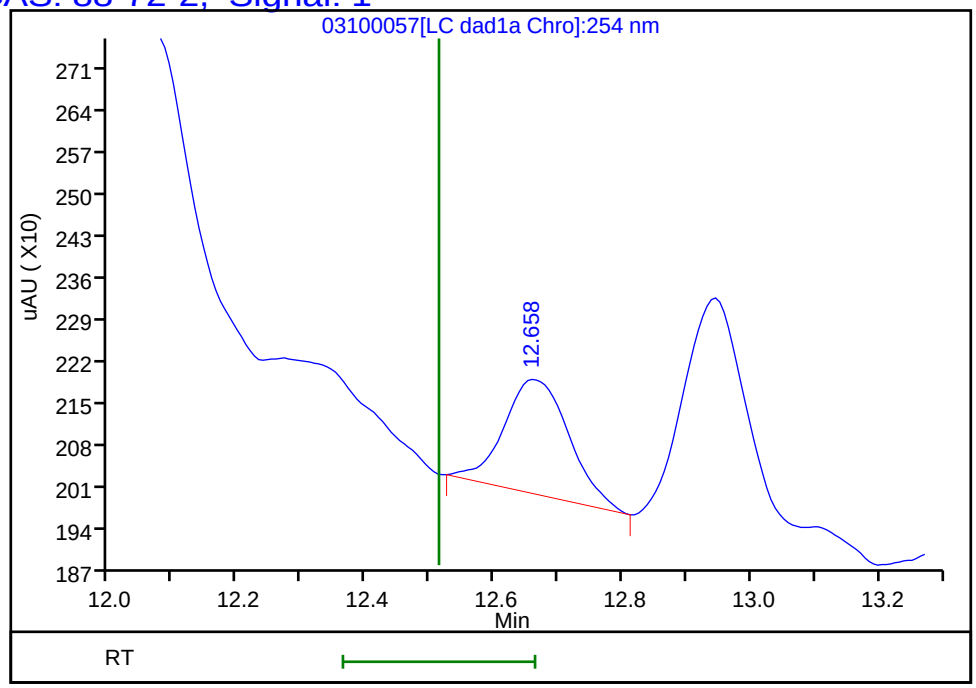
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100057.d				
Injection Date:	11-Mar-2022 09:03:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-4-A	Lab Sample ID:	280-159332-4		
Client ID:	G0096-8				
Operator ID:	JZ	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 12.66
Response: 1358
Amount: 0.010641



Reviewer: zhangji, 11-Mar-2022 13:52:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

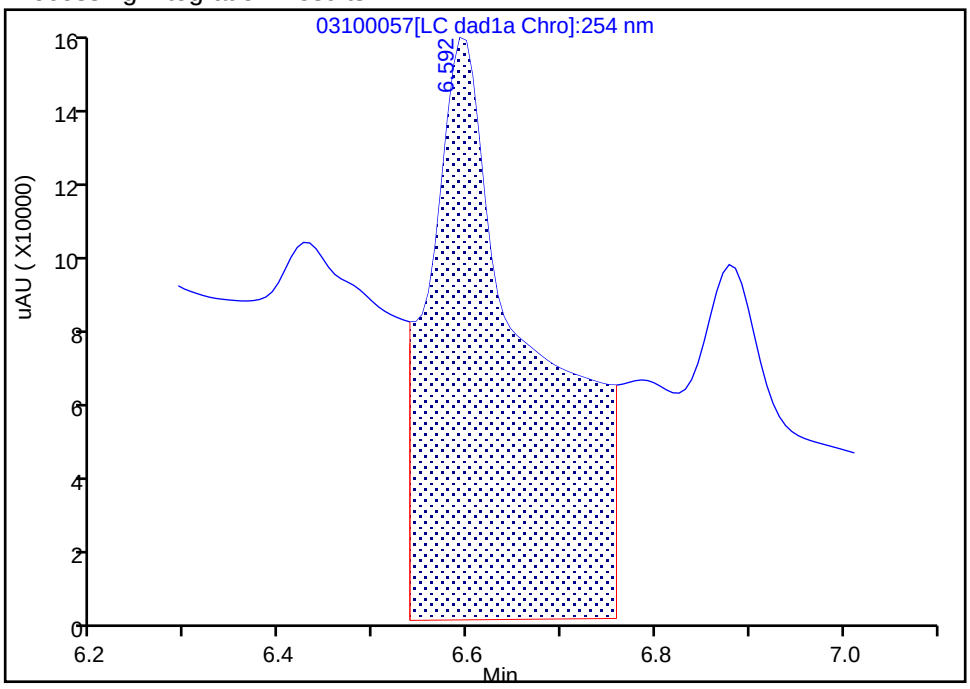
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100057.d				
Injection Date:	11-Mar-2022 09:03:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-4-A	Lab Sample ID:	280-159332-4		
Client ID:	G0096-8				
Operator ID:	JZ	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

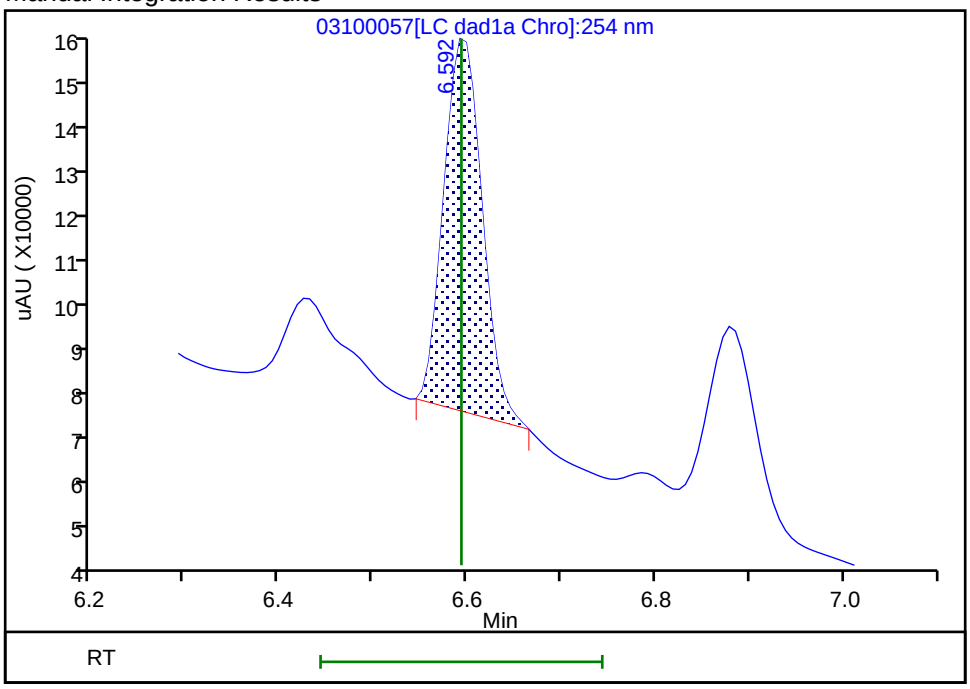
Processing Integration Results

RT: 6.59
Area: 1163231
Amount: 13.876534
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 220365
Amount: 2.628801
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 12:44:24
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

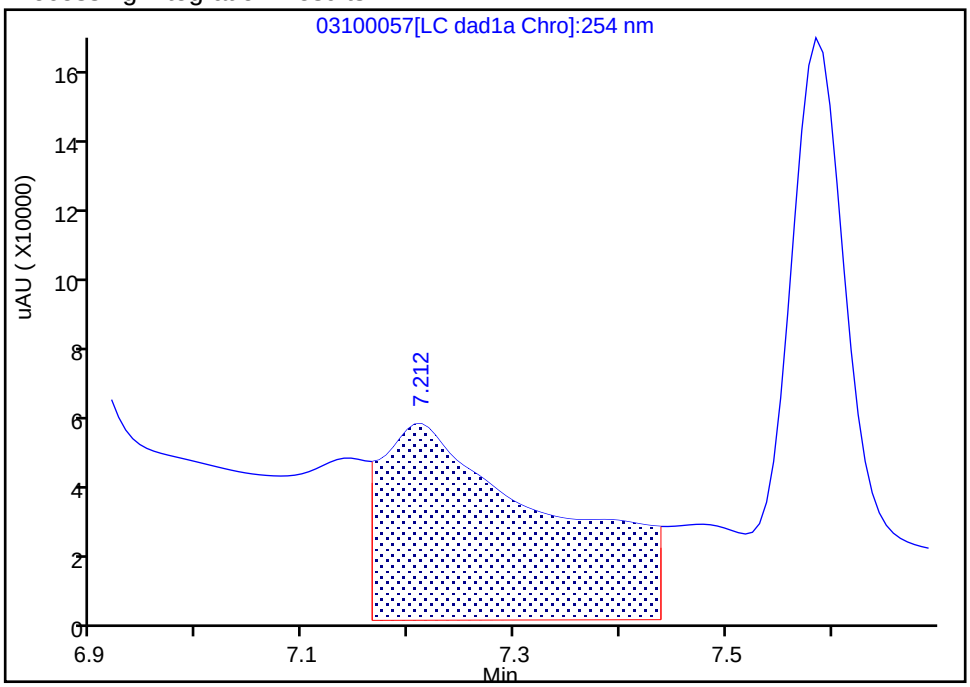
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100057.d				
Injection Date:	11-Mar-2022 09:03:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-4-A	Lab Sample ID:	280-159332-4		
Client ID:	G0096-8				
Operator ID:	JZ	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

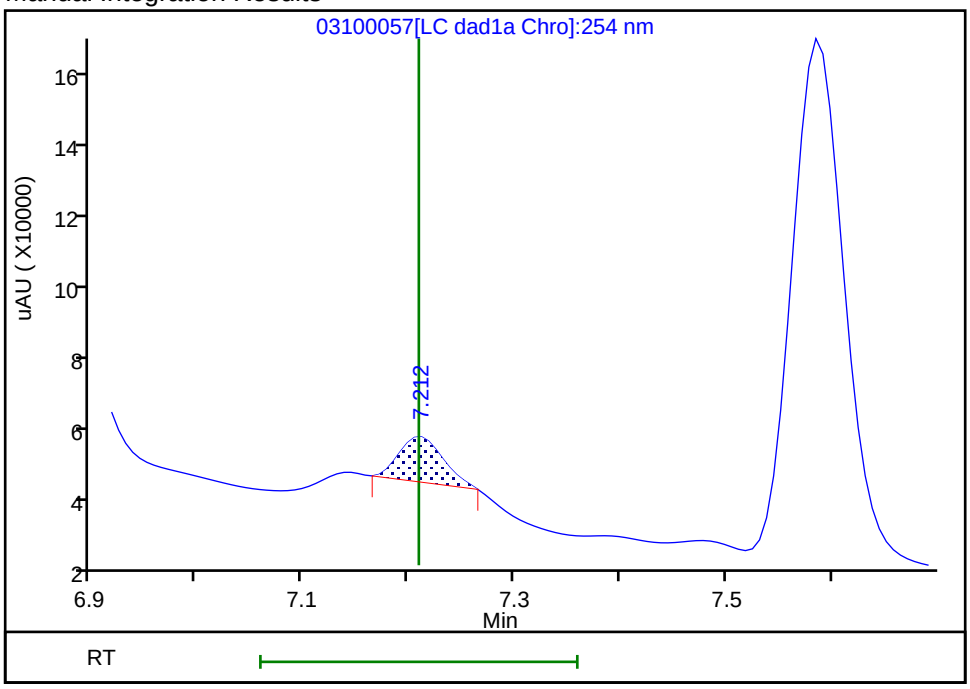
Processing Integration Results

RT: 7.21
Area: 590757
Amount: 4.688718
Amount Units: ug/mL



Manual Integration Results

RT: 7.21
Area: 34798
Amount: 0.276185
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 12:44:27
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

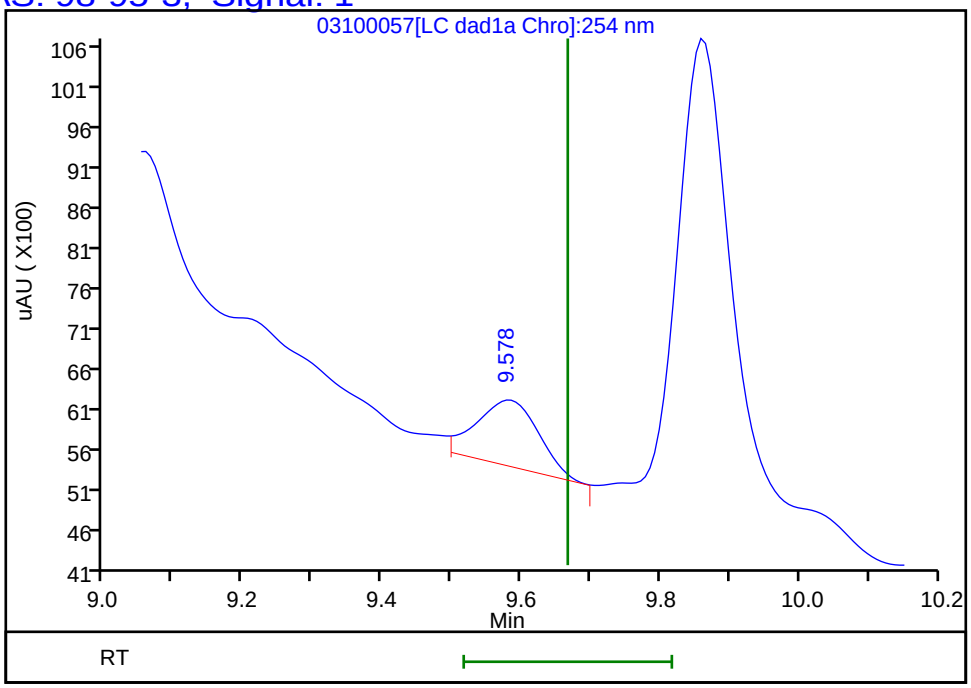
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100057.d
Injection Date: 11-Mar-2022 09:03:19 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-A-4-A Lab Sample ID: 280-159332-4
Client ID: G0096-8
Operator ID: JZ ALS Bottle#: 57 Worklist Smp#: 57
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 9.58
Response: 4940
Amount: 0.025735



Reviewer: zhangji, 11-Mar-2022 13:52:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

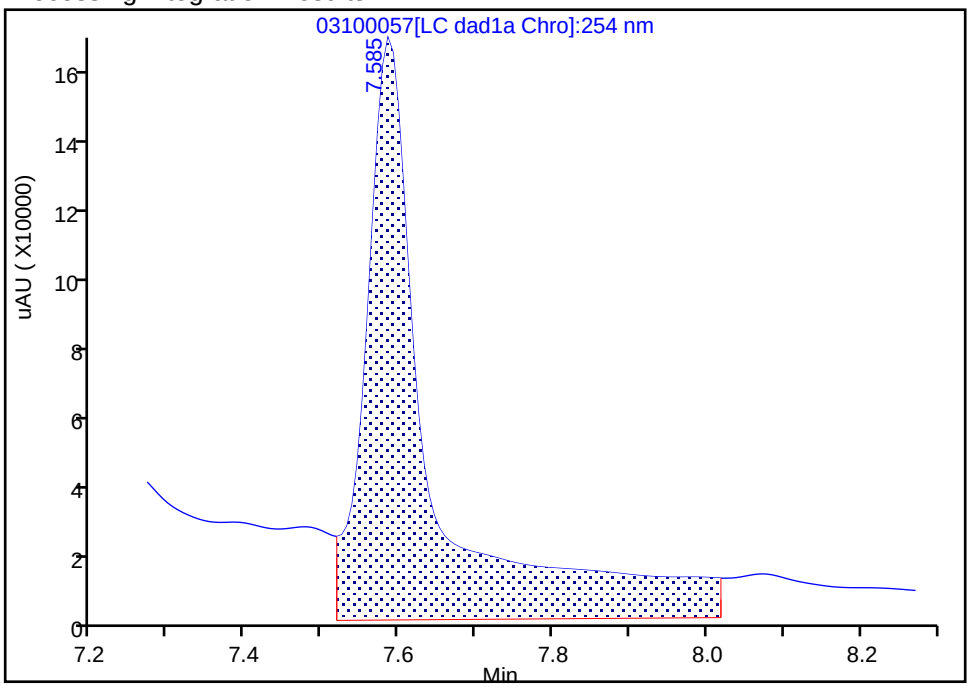
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100057.d				
Injection Date:	11-Mar-2022 09:03:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-4-A	Lab Sample ID:	280-159332-4		
Client ID:	G0096-8				
Operator ID:	JZ	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

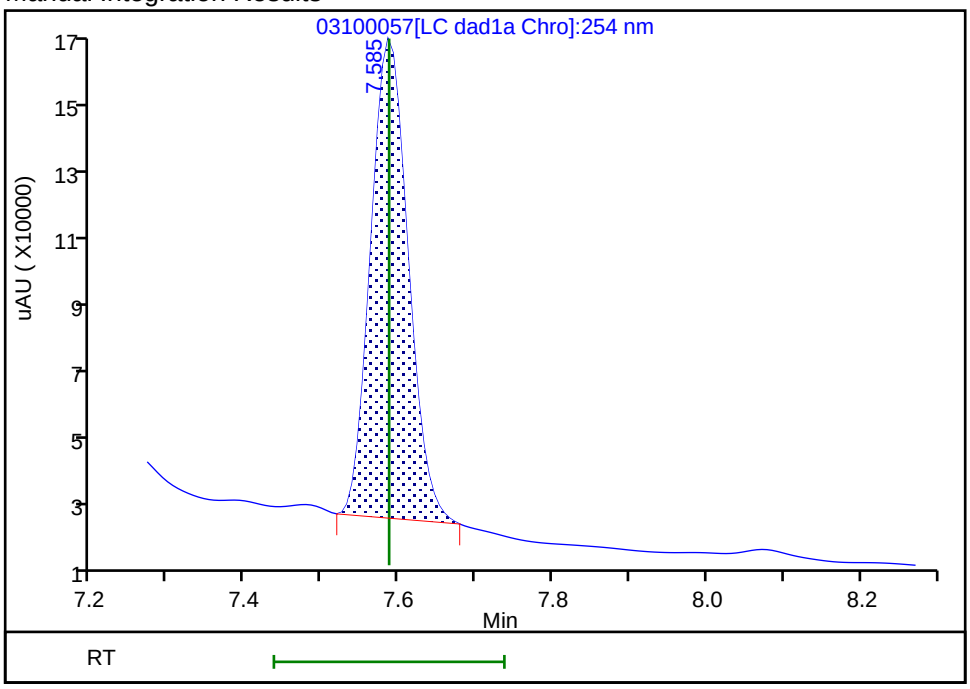
Processing Integration Results

RT: 7.59
Area: 942413
Amount: 9.095843
Amount Units: ug/mL



Manual Integration Results

RT: 7.59
Area: 463367
Amount: 4.472257
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 12:44:33
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

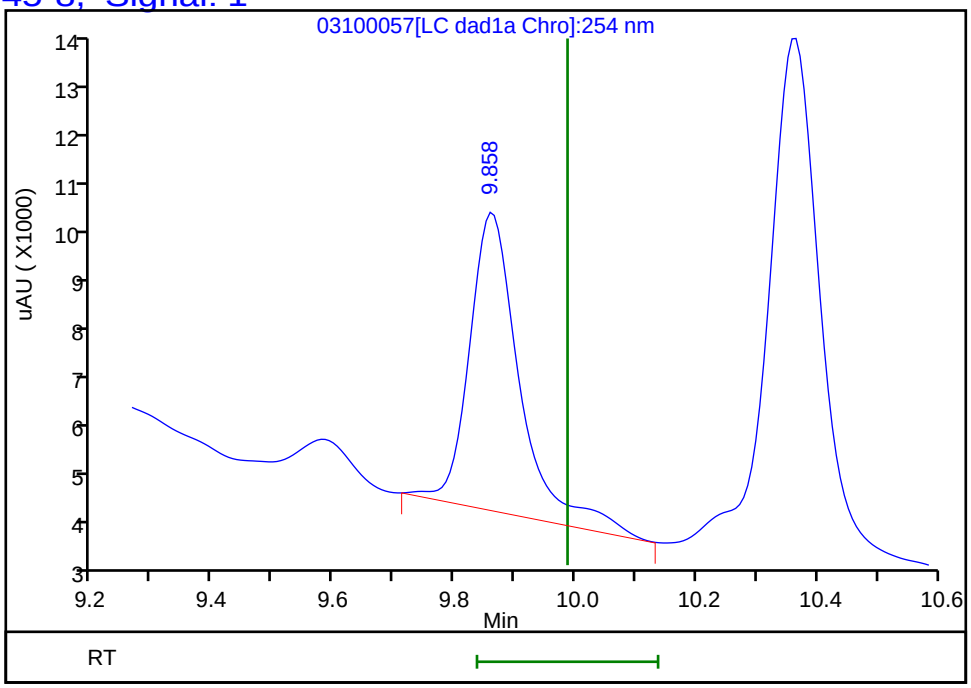
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100057.d
Injection Date: 11-Mar-2022 09:03:19 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-A-4-A Lab Sample ID: 280-159332-4
Client ID: G0096-8
Operator ID: JZ ALS Bottle#: 57 Worklist Smp#: 57
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 9.86
Response: 33709
Amount: 0.197629



Reviewer: zhangji, 11-Mar-2022 13:52:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0096-8 | Lab Sample ID: 280-159332-4

Matrix: Water | Lab File ID: 03120019.D

Analysis Method: 8330A | Date Collected: 03/01/2022 11:10

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 490.1(mL) | Date Analyzed: 03/12/2022 17:51

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.: 568485 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-99-0	4-Nitrotoluene	0.41	U	0.42	0.41	0.10
5755-27-1	*MNX*	*4.4*	*J1*	*2.0*	0.41	*0.16*

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120019.D
Lims ID: 280-159332-A-4-A
Client ID: G0096-8
Sample Type: Client
Inject. Date: 12-Mar-2022 17:51:18 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-A-4-A
Misc. Info.: 280-0109194-019
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-Mar-2022 16:12:02 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: CTX1624

First Level Reviewer: zhangji Date: 15-Mar-2022 16:10:25

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.799	6.816	-0.017	448387	2.70	E
	6 MNX	1	7.519	7.537	-0.018	108119	0.4323	
	8 RDX	1	8.986	9.003	-0.017	938622	4.83	E
	9 Nitrobenzene	1		11.883			ND	
$	10 1,2-Dinitrobenzene	1	13.065	13.056	0.009	51309	0.2054	
	12 1,3-Dinitrobenzene	1		15.410			ND	
	14 o-Nitrotoluene	1		16.530			ND	U
	16 p-Nitrotoluene	1		16.836			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.432	17.443	-0.011	17363	0.0652	
	18 m-Nitrotoluene	1		17.790			ND	
	19 2-Amino-4,6-dinitrotoluene	1		18.450			ND	
	20 1,3,5-Trinitrobenzene	1		18.683			ND	
	21 2,6-Dinitrotoluene	1		19.916			ND	
	22 2,4-Dinitrotoluene	1		20.436			ND	
	23 Tetryl	1		24.096			ND	
	24 2,4,6-Trinitrotoluene	1		24.876			ND	

QC Flag Legend

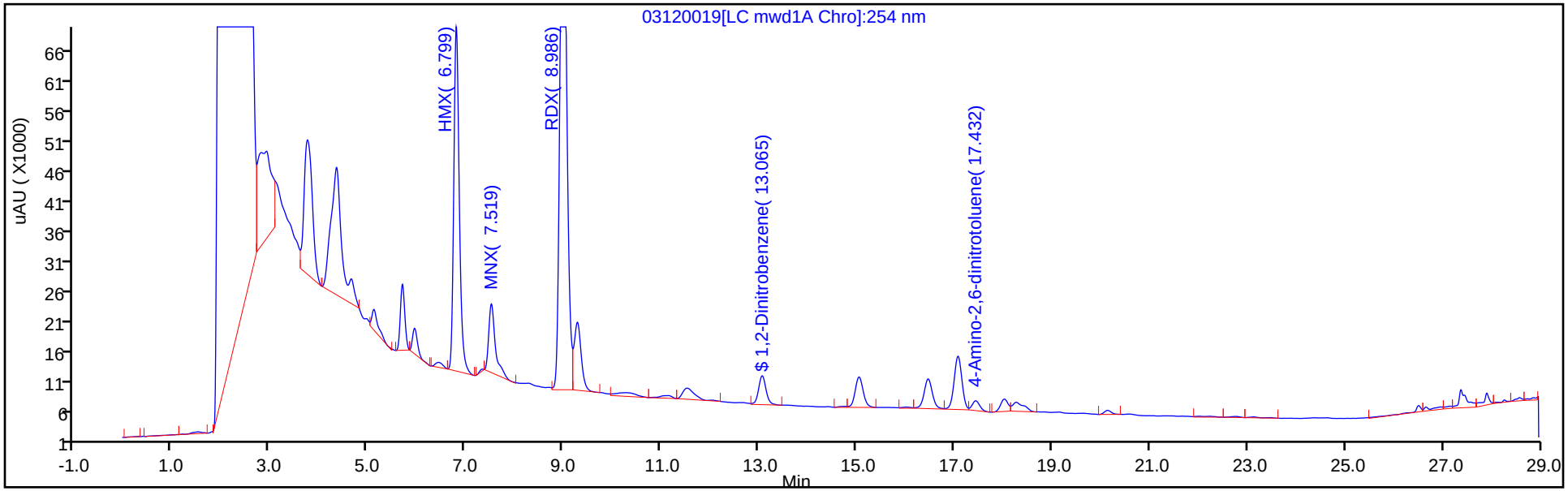
Processing Flags
E - Exceeded Maximum Amount
Review Flags
U - Marked Undetected

Report Date: 15-Mar-2022 16:12:05 Chrom Revision: 2.3 14-Mar-2022 17:58:38

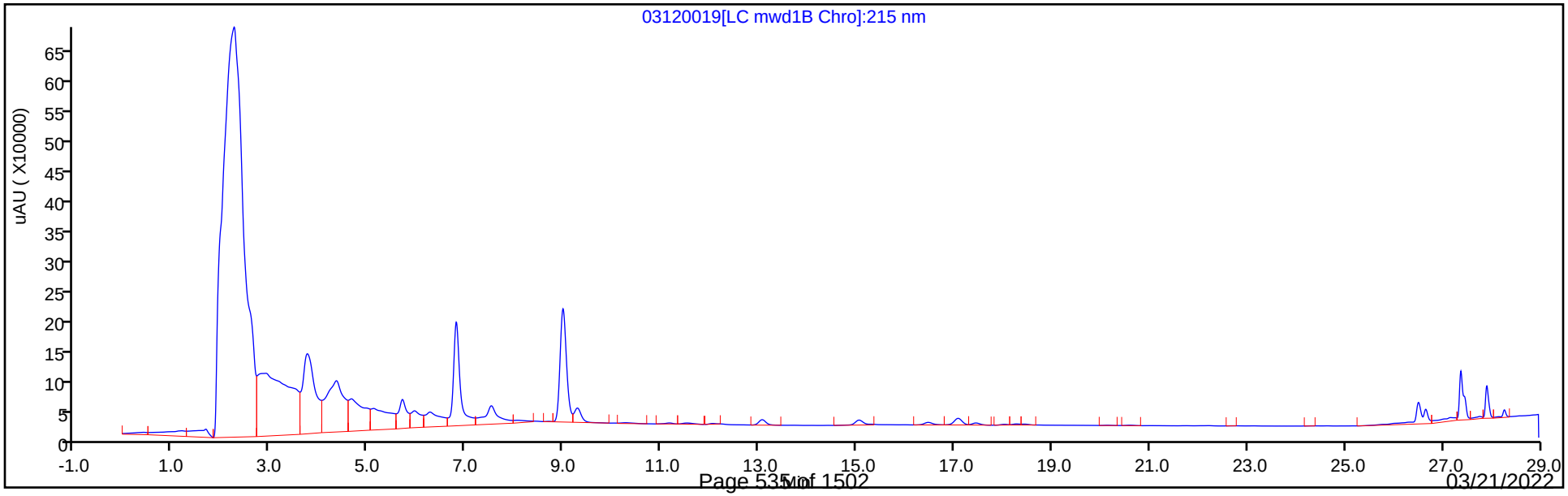
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120019.D				
Injection Date:	12-Mar-2022 17:51:18	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159332-A-4-A	Lab Sample ID:	280-159332-4	Worklist Smp#:	19
Client ID:	G0096-8				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120019.D				
Lims ID:	280-159332-A-4-A				
Client ID:	G0096-8				
Sample Type:	Client				
Inject. Date:	12-Mar-2022 17:51:18	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-A-4-A				
Misc. Info.:	280-0109194-019				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-Mar-2022 16:12:02	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:	CTX1624				
First Level Reviewer: zhangji		Date:	15-Mar-2022 16:10:25		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2054	102.72

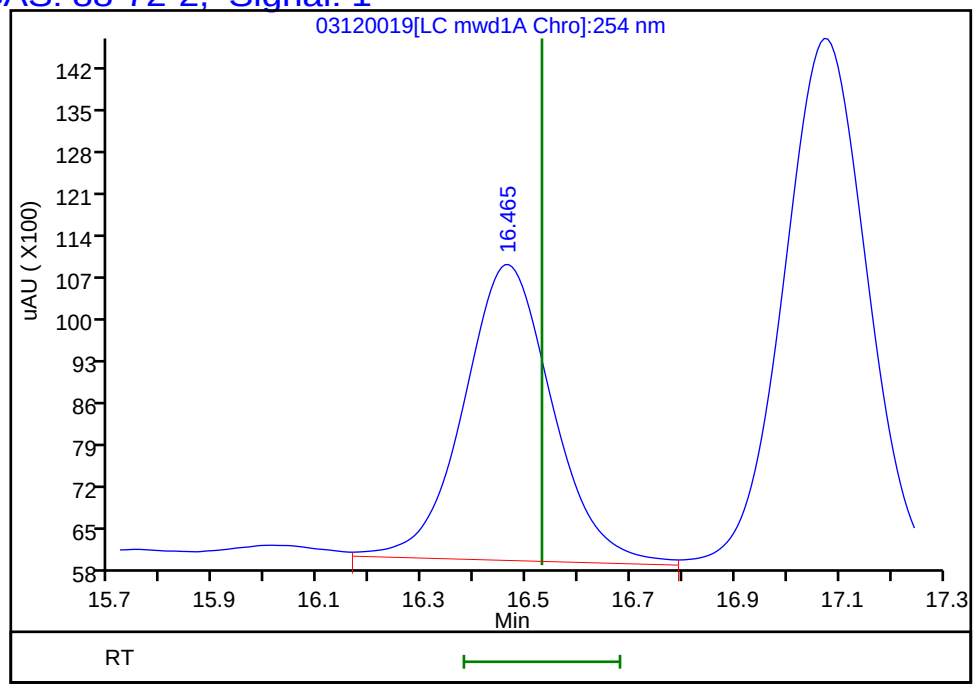
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120019.D				
Injection Date:	12-Mar-2022 17:51:18	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-A-4-A	Lab Sample ID:	280-159332-4		
Client ID:	G0096-8				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

RT: 16.47
Response: 58425
Amount: 0.248964



Reviewer: zhangji, 15-Mar-2022 16:10:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0096-8 DL | Lab Sample ID: 280-159332-4 DL

Matrix: Water | Lab File ID: 03110017.D

Analysis Method: 8330A | Date Collected: 03/01/2022 11:10

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 490.1(mL) | Date Analyzed: 03/11/2022 17:28

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

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

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

Analysis Batch No.: 568433 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
2691-41-0	HMX	27	D M	1.1	1.0	0.45
121-82-4	RDX	47	D M	1.1	1.0	0.26

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	105	M D	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110017.D
Lims ID: 280-159332-A-4-A
Client ID: G0096-8
Sample Type: Client
Inject. Date: 11-Mar-2022 17:28:22 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 5.0000
Sample Info: 280-159332-A-4-A
Misc. Info.: 280-0109174-017
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Mar-2022 10:32:08 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: CTX1616

First Level Reviewer: zhangji Date: 11-Mar-2022 18:44:50

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.597	6.595	0.002	44234	0.5277	M
7 MNX	1	7.217	7.211	0.006	13676	0.1085	M
8 RDX	1	7.584	7.582	0.002	94720	0.9142	M
$ 10 1,2-Dinitrobenzene	1	8.531	8.529	0.002	5257	0.0422	M
11 1,3,5-Trinitrobenzene	1		8.655			ND	
12 1,3-Dinitrobenzene	1		9.282			ND	
13 Nitrobenzene	1		9.668			ND	7
15 Tetryl	1		9.982			ND	U
17 2,4,6-Trinitrotoluene	1		10.888			ND	
18 4-Amino-2,6-dinitrotoluene	1	11.084	11.068	0.016	1629	0.0108	
19 2-Amino-4,6-dinitrotoluene	1		11.322			ND	
20 2,6-Dinitrotoluene	1		11.495			ND	
21 2,4-Dinitrotoluene	1		11.662			ND	
22 o-Nitrotoluene	1		12.508			ND	
23 p-Nitrotoluene	1	12.910	12.935	-0.025	998	0.009394	
24 m-Nitrotoluene	1		13.502			ND	

QC Flag Legend

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

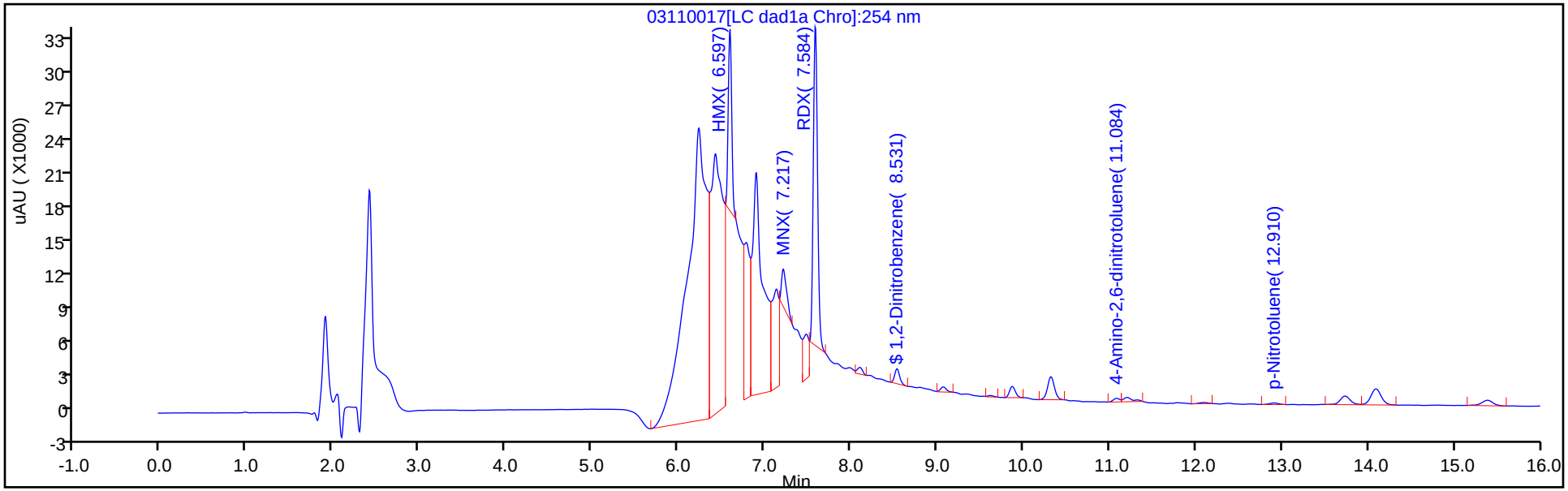
Report Date: 12-Mar-2022 10:32:12 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

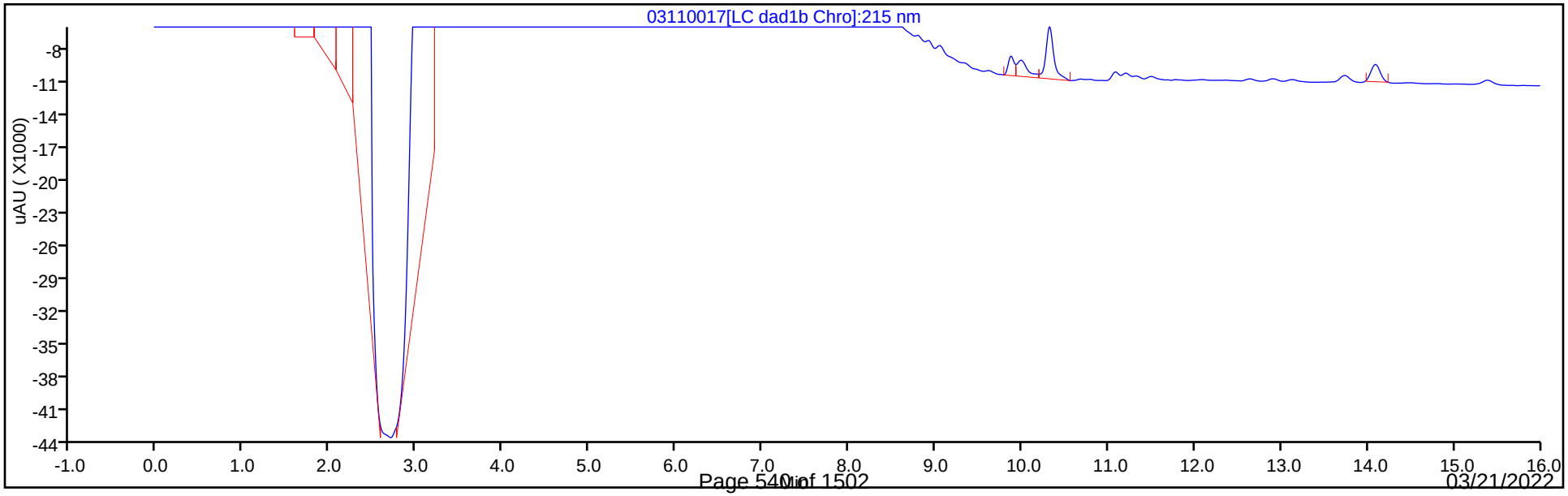
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110017.d

Injection Date:	11-Mar-2022 17:28:22	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159332-A-4-A	Lab Sample ID:	280-159332-4	Worklist Smp#:	17
Client ID:	G0096-8				
Injection Vol:	100.0 ul	Dil. Factor:	5.0000	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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110017.D				
Lims ID:	280-159332-A-4-A				
Client ID:	G0096-8				
Sample Type:	Client				
Inject. Date:	11-Mar-2022 17:28:22	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
Sample Info:	280-159332-A-4-A				
Misc. Info.:	280-0109174-017				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2022 10:32:08	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:	CTX1616				

First Level Reviewer: zhangji Date: 11-Mar-2022 18:44:50

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.0422	21.08

Manual Integration/User Assign Peak Report

Eurofins Denver

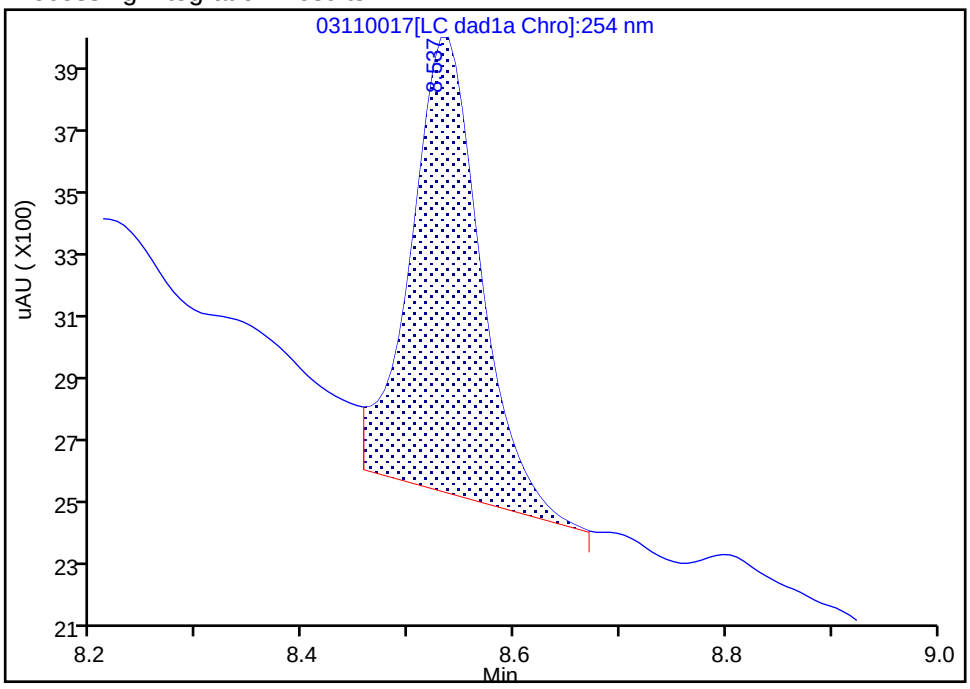
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110017.d				
Injection Date:	11-Mar-2022 17:28:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-4-A	Lab Sample ID:	280-159332-4		
Client ID:	G0096-8				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
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

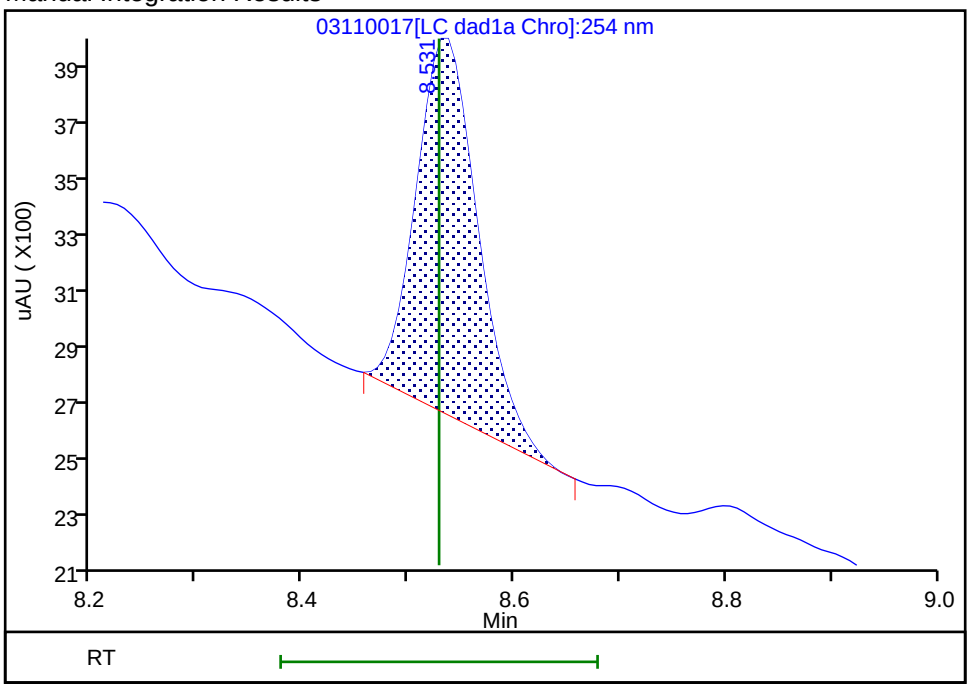
Processing Integration Results

RT: 8.54
Area: 6492
Amount: 0.052062
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 5257
Amount: 0.042158
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 18:44:43

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

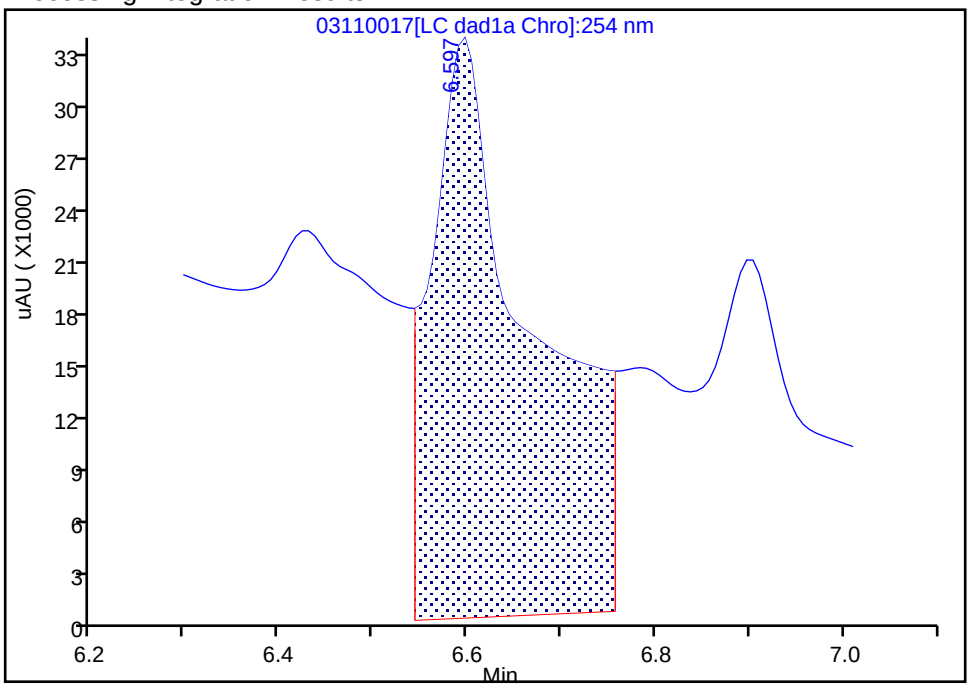
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110017.d				
Injection Date:	11-Mar-2022 17:28:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-4-A	Lab Sample ID:	280-159332-4		
Client ID:	G0096-8				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
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

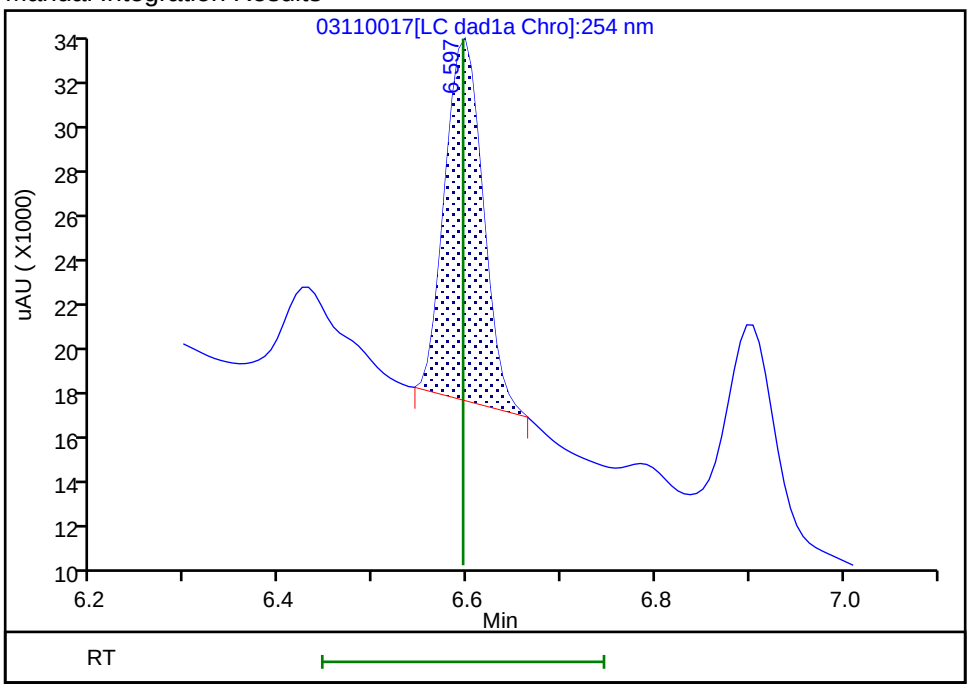
Processing Integration Results

RT: 6.60
Area: 244798
Amount: 2.920269
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 44234
Amount: 0.527681
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 18:44:32

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

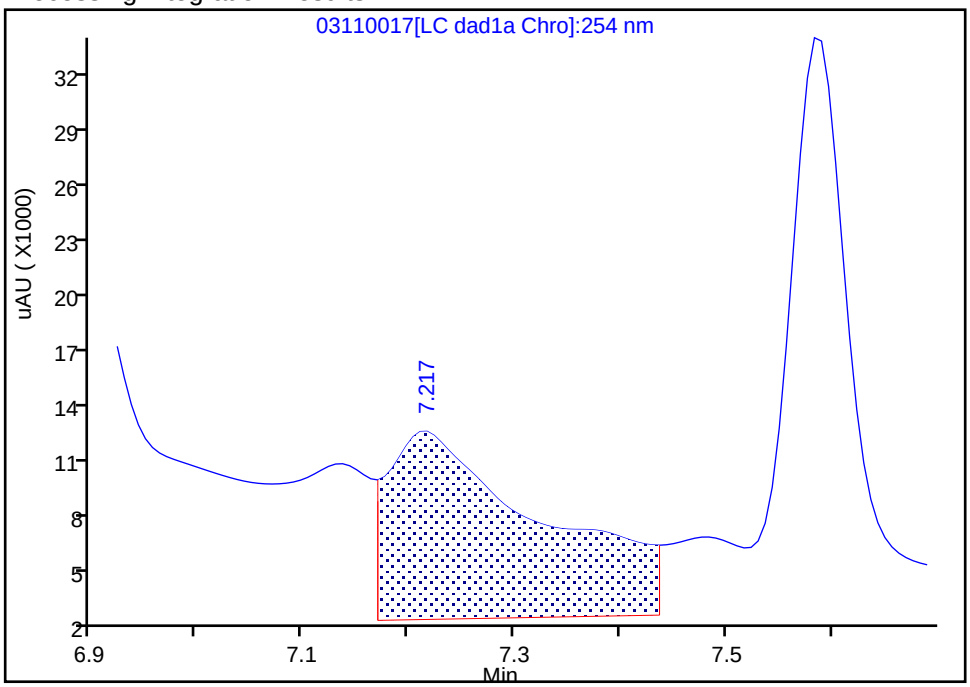
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110017.d				
Injection Date:	11-Mar-2022 17:28:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-4-A	Lab Sample ID:	280-159332-4		
Client ID:	G0096-8				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
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

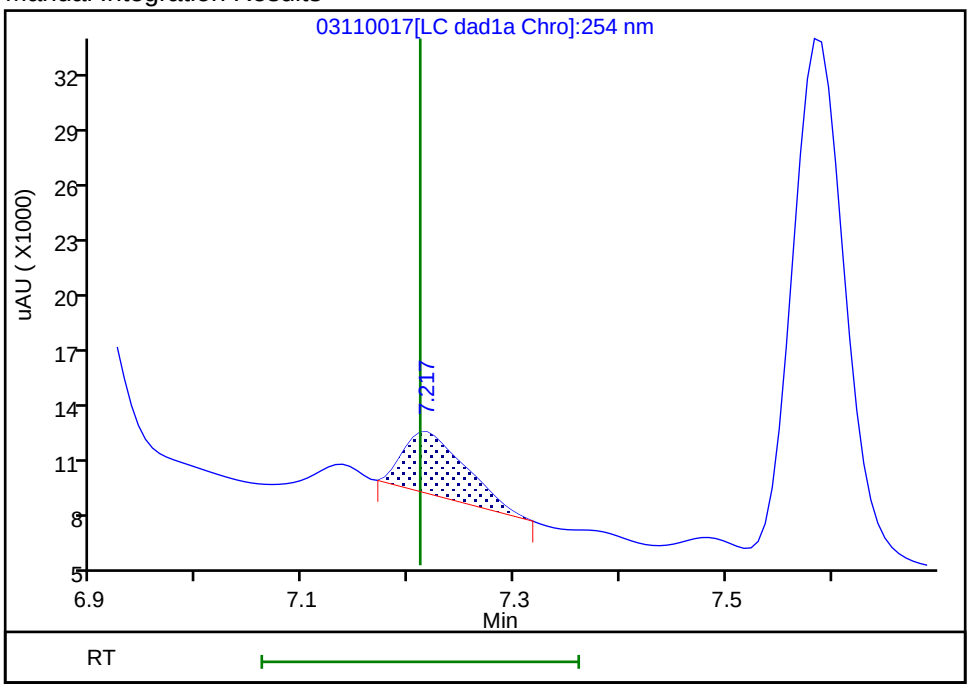
Processing Integration Results

RT: 7.22
Area: 101212
Amount: 0.803299
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 13676
Amount: 0.108544
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 18:44:35
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

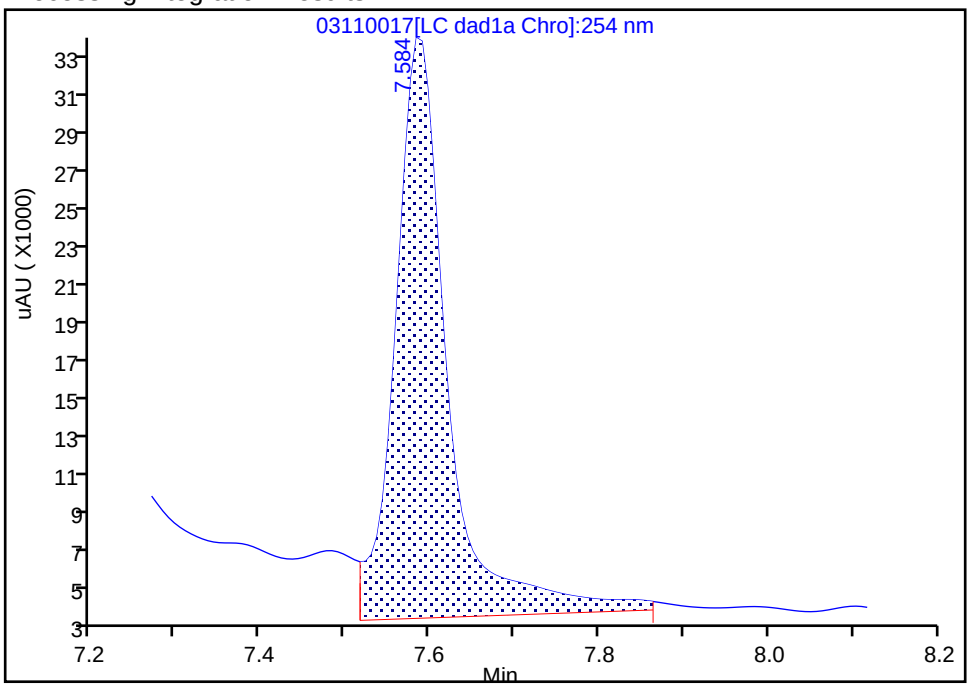
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110017.d				
Injection Date:	11-Mar-2022 17:28:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-4-A	Lab Sample ID:	280-159332-4		
Client ID:	G0096-8				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

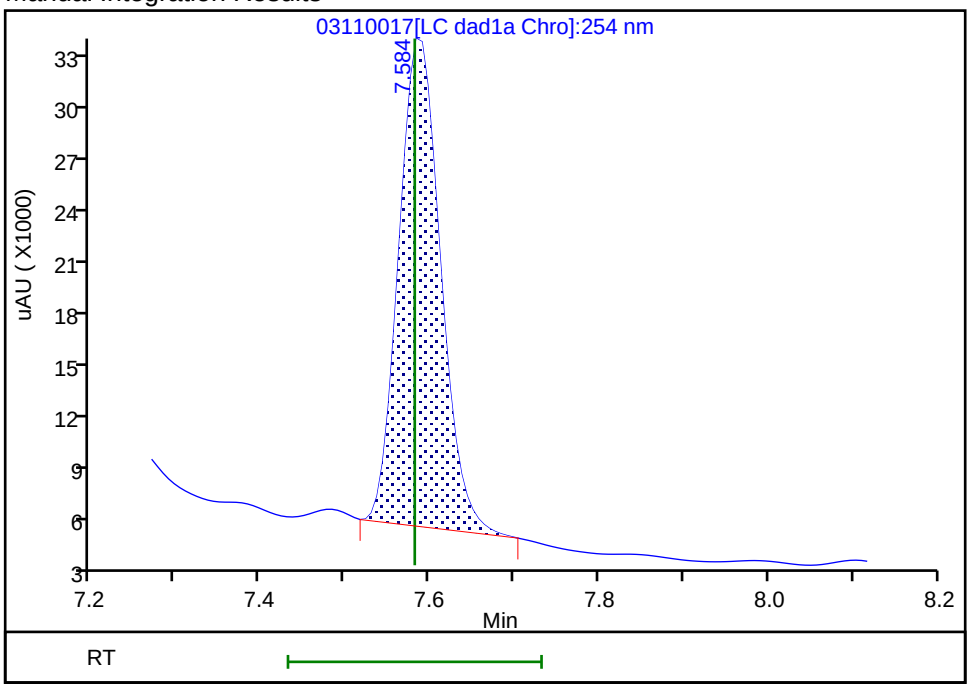
Processing Integration Results

RT: 7.58
Area: 129793
Amount: 1.252717
Amount Units: ug/mL



Manual Integration Results

RT: 7.58
Area: 94720
Amount: 0.914205
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 18:44:38
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

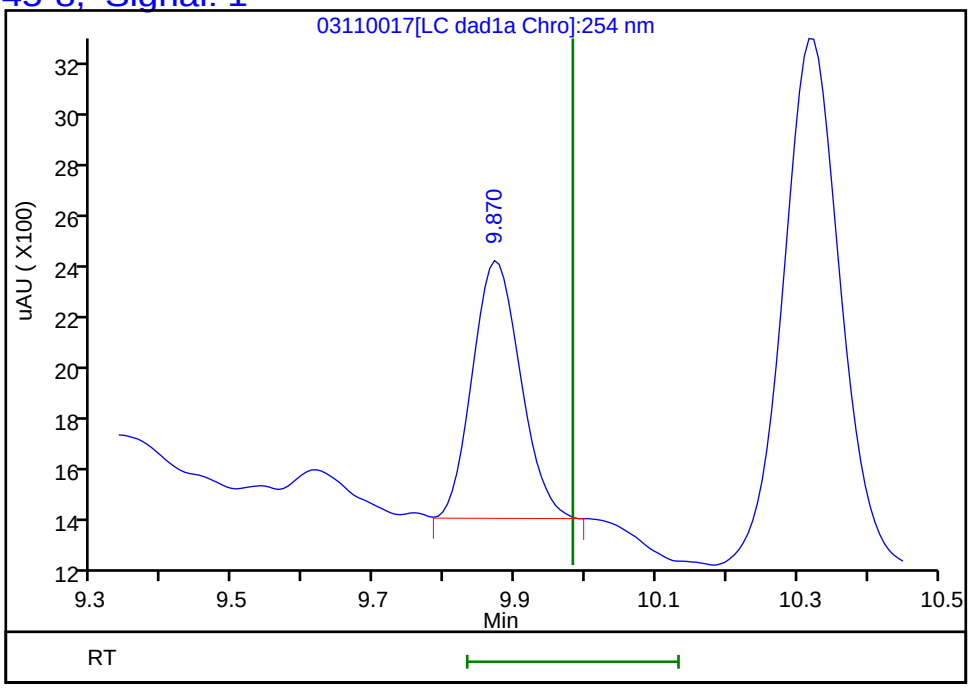
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110017.d
Injection Date: 11-Mar-2022 17:28:22 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-A-4-A Lab Sample ID: 280-159332-4
Client ID: G0096-8
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 5.0000
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: 9.87
Response: 4608
Amount: 0.027016



Reviewer: zhangji, 11-Mar-2022 18:44:50
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0096-8 DL | Lab Sample ID: 280-159332-4 DL

Matrix: Water | Lab File ID: 03150021.D

Analysis Method: 8330A | Date Collected: 03/01/2022 11:10

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 490.1(mL) | Date Analyzed: 03/16/2022 01:43

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

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

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

Analysis Batch No.: 568709 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	99	*D*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150021.D
Lims ID: 280-159332-A-4-A DL
Client ID: G0096-8
Sample Type: Client
Inject. Date: 16-Mar-2022 01:43:56 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 5.0000
Sample Info: 280-159332-A-4-A
Misc. Info.: 280-0109260-021
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Mar-2022 12:38:36 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: CTX1609

First Level Reviewer: zhangji Date: 16-Mar-2022 12:24:50

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1	6.842	6.854	-0.012	93166	0.5608	
6 MNX	1	7.562	7.581	-0.019	23182	0.0927	
8 RDX	1	9.035	9.054	-0.019	187563	0.9652	
9 Nitrobenzene	1		11.960			ND	
$ 10 1,2-Dinitrobenzene	1	13.148	13.160	-0.012	9855	0.0395	
12 1,3-Dinitrobenzene	1		15.514			ND	
14 o-Nitrotoluene	1	16.588	16.640	-0.052	11974	0.0510	
16 p-Nitrotoluene	1		16.954			ND	
17 4-Amino-2,6-dinitrotoluene	1	17.568	17.574	-0.006	3175	0.0121	
18 m-Nitrotoluene	1		17.914			ND	
19 2-Amino-4,6-dinitrotoluene	1		18.580			ND	
20 1,3,5-Trinitrobenzene	1		18.794			ND	
21 2,6-Dinitrotoluene	1		20.054			ND	
22 2,4-Dinitrotoluene	1		20.574			ND	
23 Tetryl	1		24.307			ND	
24 2,4,6-Trinitrotoluene	1		25.074			ND	

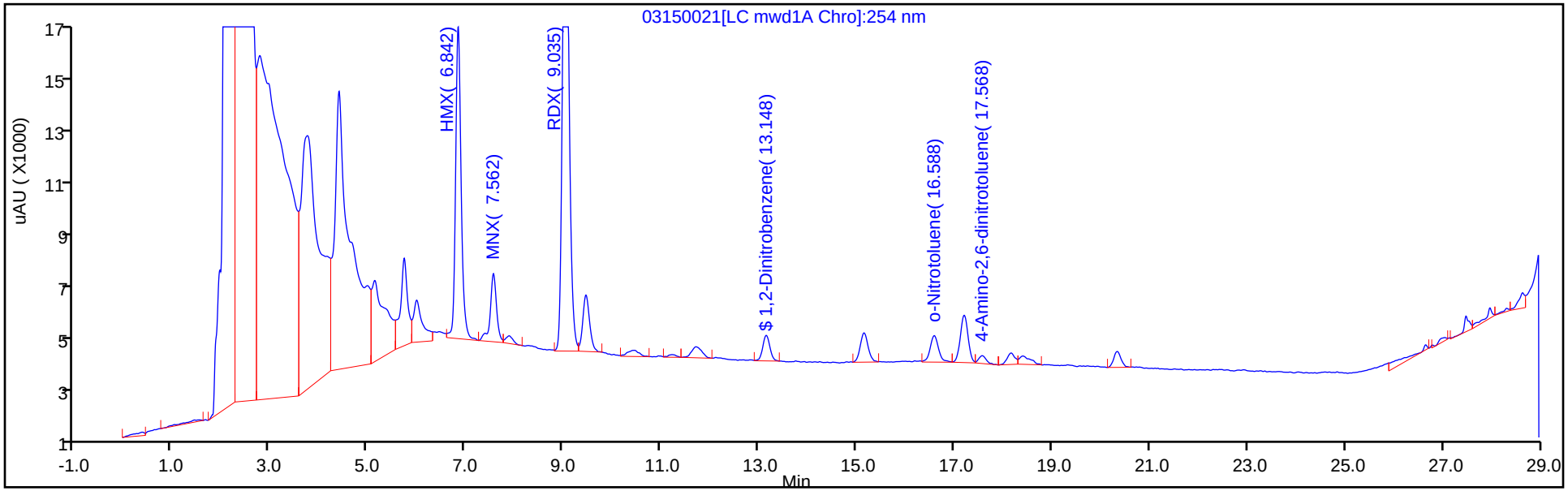
QC Flag Legend
Processing Flags

Report Date: 16-Mar-2022 12:38:39 Chrom Revision: 2.3 14-Mar-2022 17:58:38

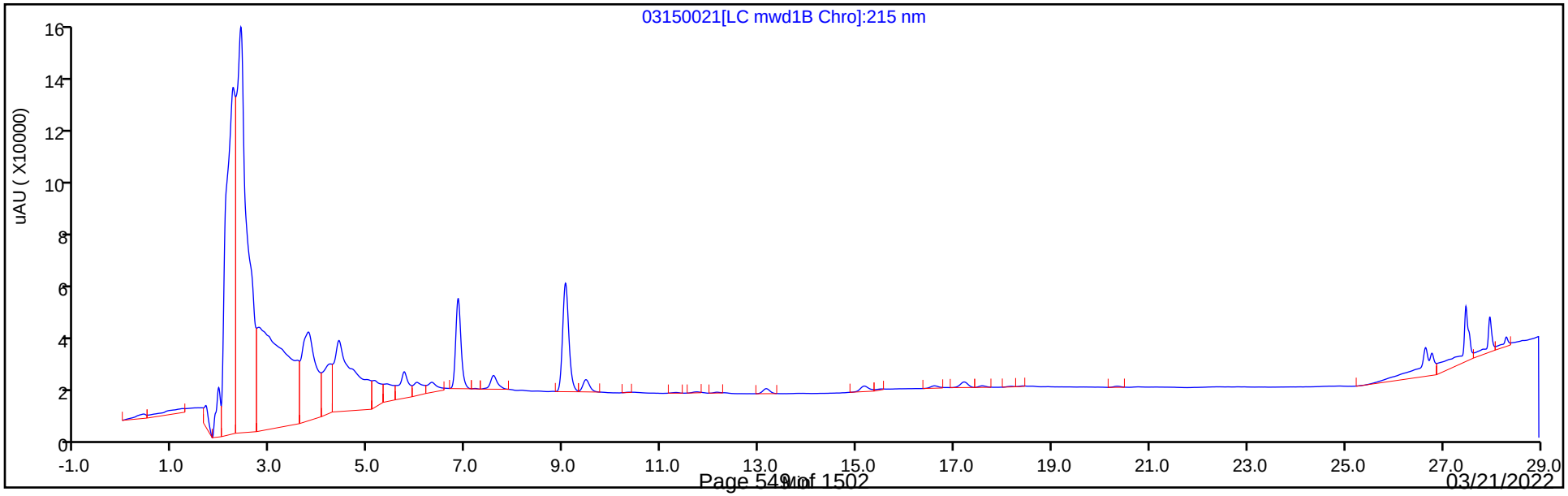
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150021.D				
Injection Date:	16-Mar-2022 01:43:56	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159332-A-4-A DL	Lab Sample ID:	280-159332-4	Worklist Smp#:	21
Client ID:	G0096-8				
Injection Vol:	100.0 ul	Dil. Factor:	5.0000	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
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150021.D				
Lims ID:	280-159332-A-4-A DL				
Client ID:	G0096-8				
Sample Type:	Client				
Inject. Date:	16-Mar-2022 01:43:56	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
Sample Info:	280-159332-A-4-A				
Misc. Info.:	280-0109260-021				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Mar-2022 12:38:36	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:	CTX1609				
First Level Reviewer: zhangji		Date:	16-Mar-2022 12:24:50		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.0395	19.73

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0296-8 | Lab Sample ID: 280-159332-5

Matrix: Water | Lab File ID: 03100058.D

Analysis Method: 8330A | Date Collected: 03/01/2022 08:00

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 513.8(mL) | Date Analyzed: 03/11/2022 09:26

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.: 568287 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.19	U	0.20	0.19	0.082
99-65-0	1,3-Dinitrobenzene	0.097	U	0.11	0.097	0.036
118-96-7	2,4,6-Trinitrotoluene	0.097	U	0.11	0.097	0.044
121-14-2	2,4-Dinitrotoluene	0.078	U	0.097	0.078	0.027
606-20-2	2,6-Dinitrotoluene	0.078	U	0.097	0.078	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.097	U	0.11	0.097	0.049
88-72-2	2-Nitrotoluene	0.19	U	0.20	0.19	0.083
99-08-1	3-Nitrotoluene	0.39	U	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.62		0.15	0.12	0.056
99-99-0	4-Nitrotoluene	0.39	U	0.40	0.39	0.097
5755-27-1	MNX	6.1	M J1	1.9	0.39	0.15
98-95-3	Nitrobenzene	0.19	U M	0.20	0.19	0.089
479-45-8	Tetryl	0.097	U M	0.11	0.097	0.031

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	113	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\03100058.D
Lims ID: 280-159332-B-5-A
Client ID: G0296-8
Sample Type: Client
Inject. Date: 11-Mar-2022 09:26:14 ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-B-5-A
Misc. Info.: 280-0109139-058
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 11-Mar-2022 13:57:00 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: CTX1614

First Level Reviewer: zhangji Date: 11-Mar-2022 13:55:15

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.596	6.593	0.003	256008	3.05	EM
7 MNX	1	7.209	7.209	0.000	78421	0.6224	M
8 RDX	1	7.583	7.587	-0.004	519776	5.02	EM
$ 10 1,2-Dinitrobenzene	1	8.529	8.533	-0.004	28221	0.2263	M
11 1,3,5-Trinitrobenzene	1		8.660			ND	
12 1,3-Dinitrobenzene	1		9.280			ND	
13 Nitrobenzene	1		9.667			ND	U
15 Tetryl	1		9.987			ND	U
17 2,4,6-Trinitrotoluene	1		10.893			ND	
18 4-Amino-2,6-dinitrotoluene	1	11.062	11.080	-0.018	9651	0.0639	
19 2-Amino-4,6-dinitrotoluene	1		11.327			ND	
20 2,6-Dinitrotoluene	1		11.500			ND	
21 2,4-Dinitrotoluene	1		11.667			ND	
22 o-Nitrotoluene	1		12.513			ND	
23 p-Nitrotoluene	1	12.902	12.940	-0.038	994	0.009357	
24 m-Nitrotoluene	1		13.507			ND	

QC Flag Legend

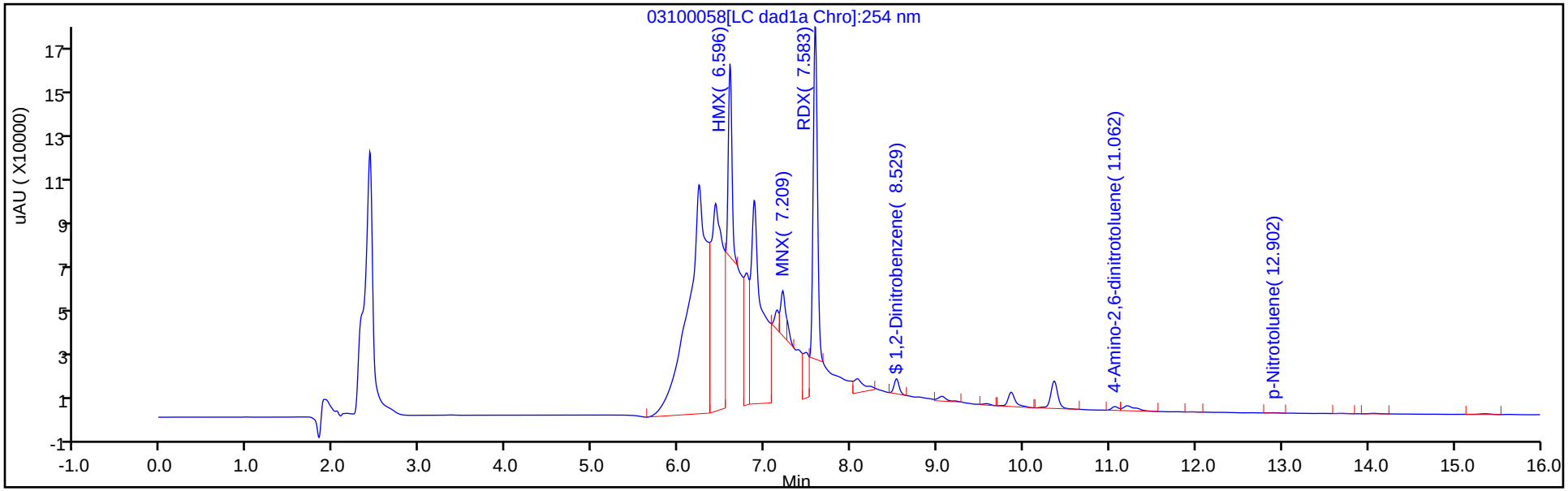
Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 11-Mar-2022 13:57:03 Chrom Revision: 2.3 16-Feb-2022 17:52:00

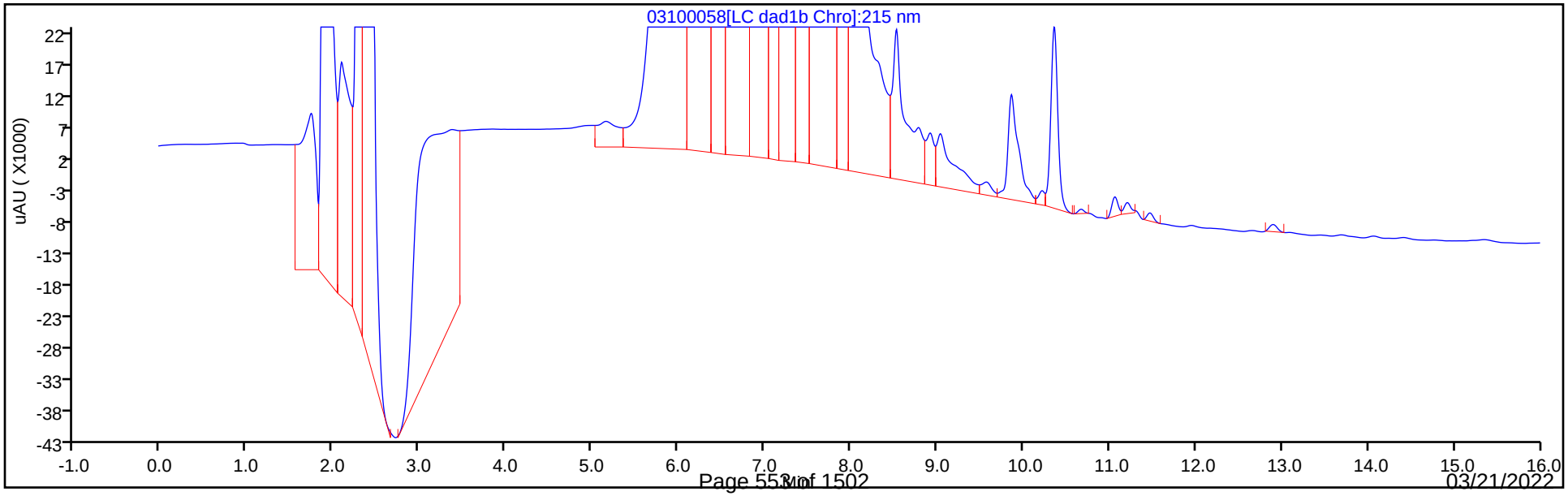
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100058.d				
Injection Date:	11-Mar-2022 09:26:14	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159332-B-5-A	Lab Sample ID:	280-159332-5	Worklist Smp#:	58
Client ID:	G0296-8				
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\20220310-109139.b\03100058.D				
Lims ID:	280-159332-B-5-A				
Client ID:	G0296-8				
Sample Type:	Client				
Inject. Date:	11-Mar-2022 09:26:14	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-B-5-A				
Misc. Info.:	280-0109139-058				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	11-Mar-2022 13:57:00	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:	CTX1614				

First Level Reviewer: zhangji Date: 11-Mar-2022 13:55:15

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2263	113.16

Manual Integration/User Assign Peak Report

Eurofins Denver

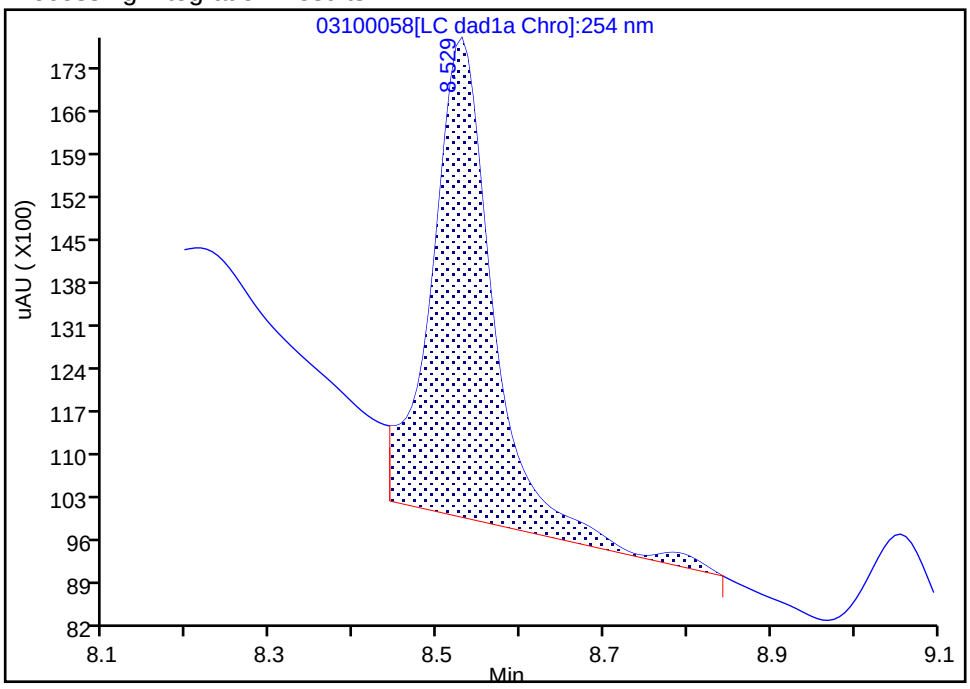
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100058.d				
Injection Date:	11-Mar-2022 09:26:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-5-A	Lab Sample ID:	280-159332-5		
Client ID:	G0296-8				
Operator ID:	JZ	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

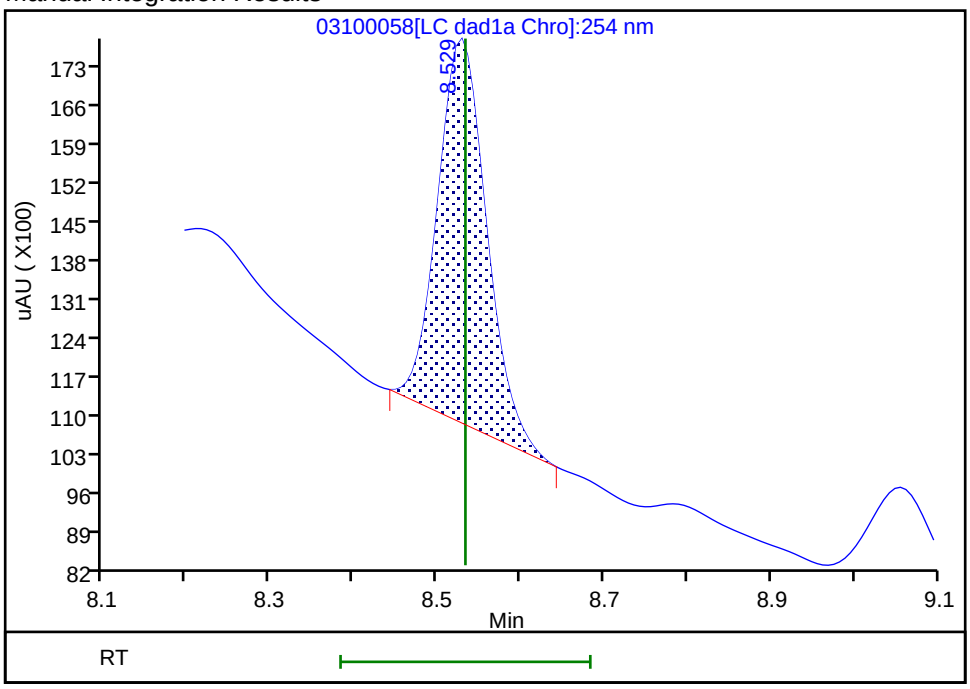
Processing Integration Results

RT: 8.53
Area: 40315
Amount: 0.323302
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 28221
Amount: 0.226315
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:55:07

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

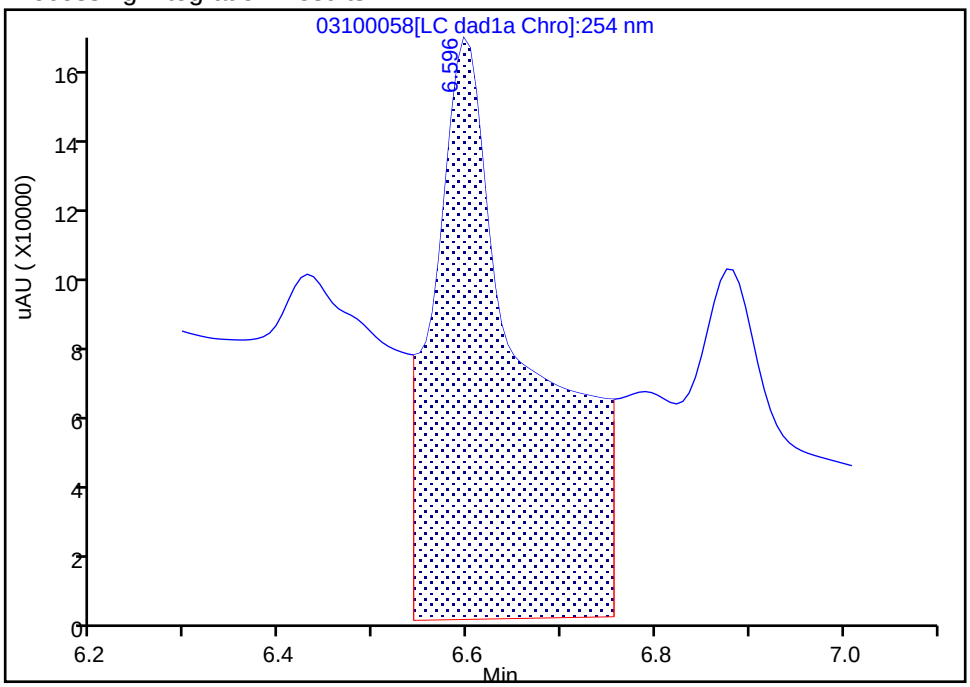
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100058.d				
Injection Date:	11-Mar-2022 09:26:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-5-A	Lab Sample ID:	280-159332-5		
Client ID:	G0296-8				
Operator ID:	JZ	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

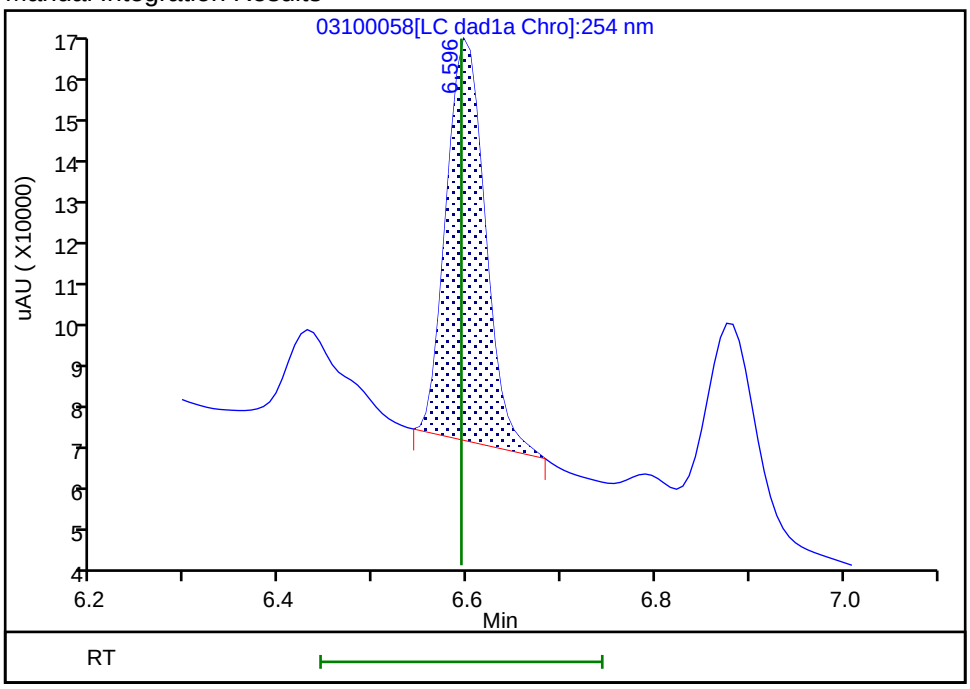
Processing Integration Results

RT: 6.60
Area: 1100147
Amount: 13.123986
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 256008
Amount: 3.053997
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:54:51
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

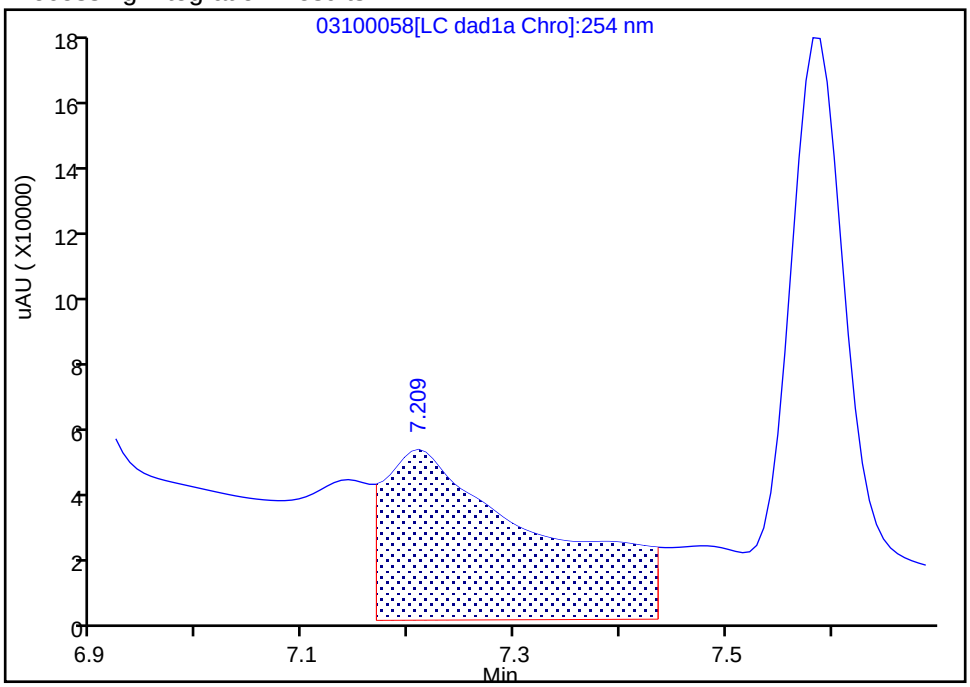
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100058.d				
Injection Date:	11-Mar-2022 09:26:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-5-A	Lab Sample ID:	280-159332-5		
Client ID:	G0296-8				
Operator ID:	JZ	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. 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

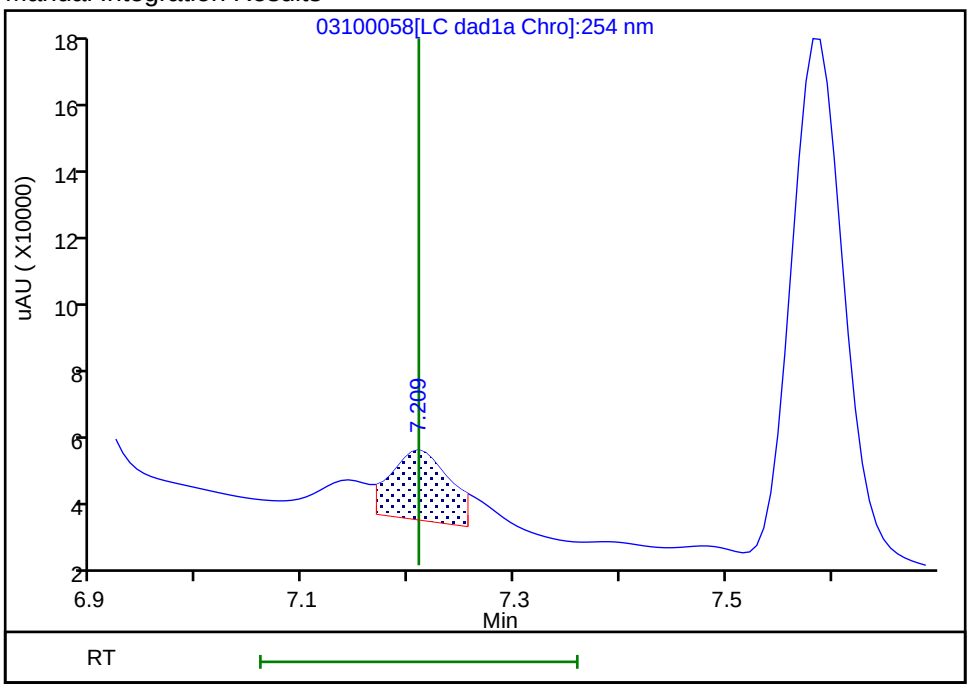
Processing Integration Results

RT: 7.21
Area: 509002
Amount: 4.039845
Amount Units: ug/mL



Manual Integration Results

RT: 7.21
Area: 78421
Amount: 0.622412
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:54:59
Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

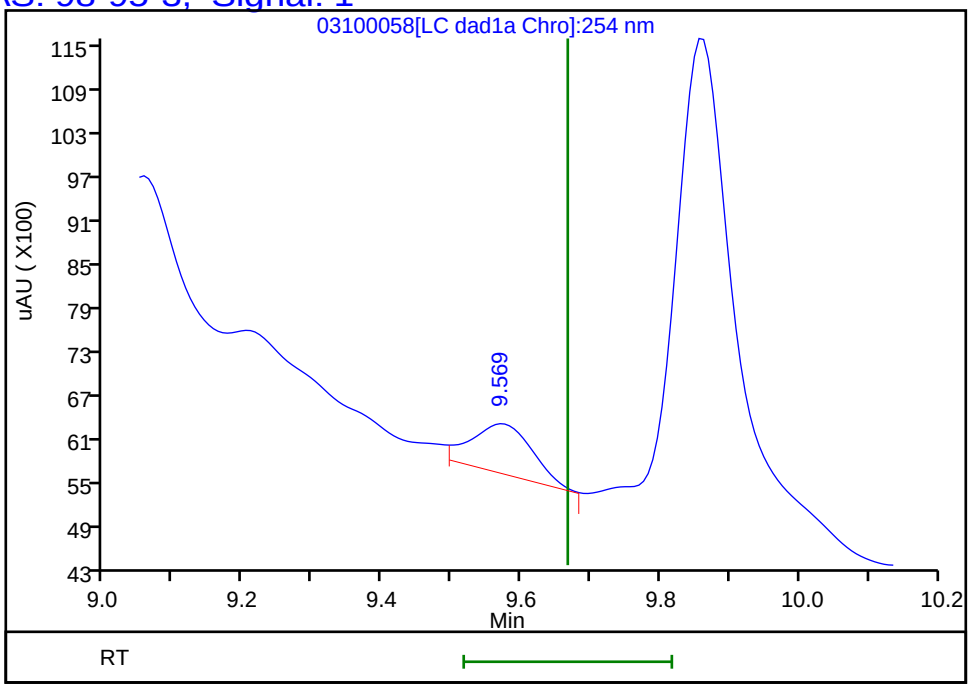
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100058.d
Injection Date: 11-Mar-2022 09:26:14 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-B-5-A Lab Sample ID: 280-159332-5
Client ID: G0296-8
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

RT: 9.57
Response: 4083
Amount: 0.021271



Reviewer: zhangji, 11-Mar-2022 13:55:15
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

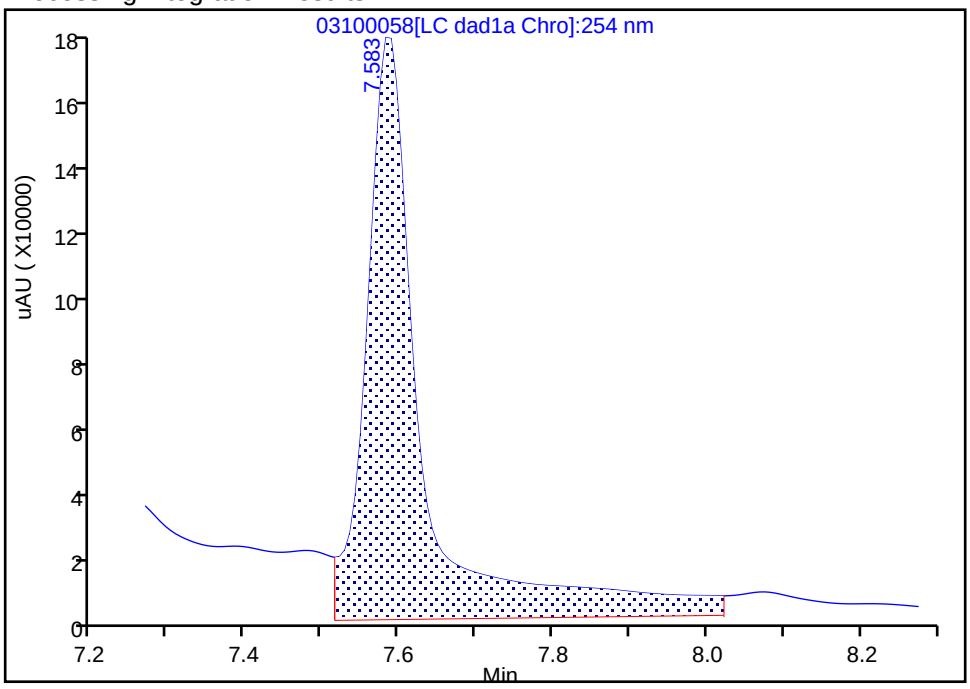
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100058.d				
Injection Date:	11-Mar-2022 09:26:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-5-A	Lab Sample ID:	280-159332-5		
Client ID:	G0296-8				
Operator ID:	JZ	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. 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

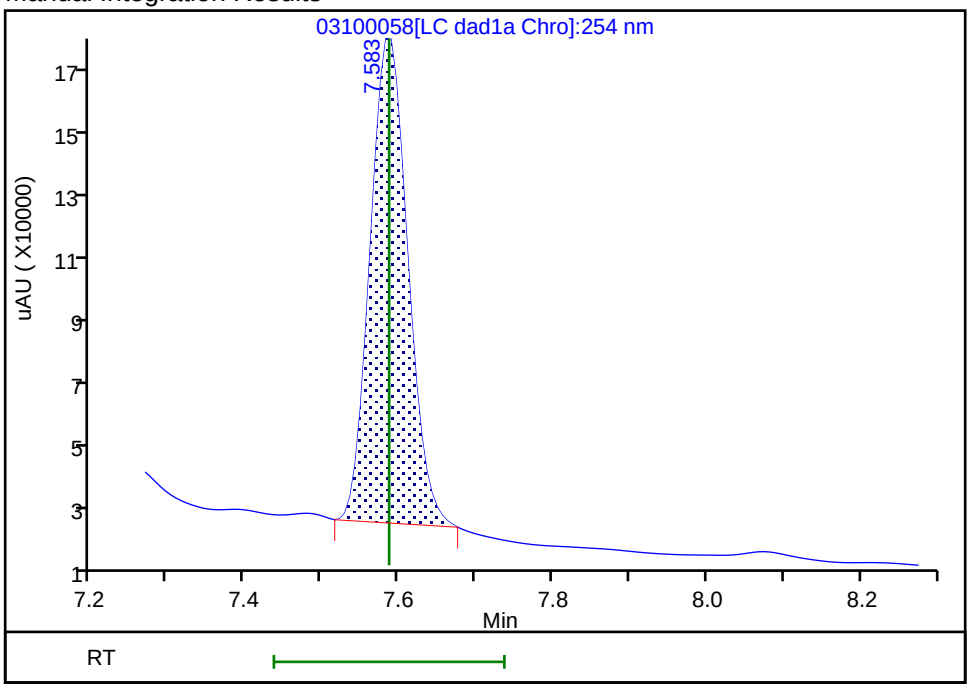
Processing Integration Results

RT: 7.58
Area: 864795
Amount: 8.346701
Amount Units: ug/mL



Manual Integration Results

RT: 7.58
Area: 519776
Amount: 5.016698
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:55:03
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

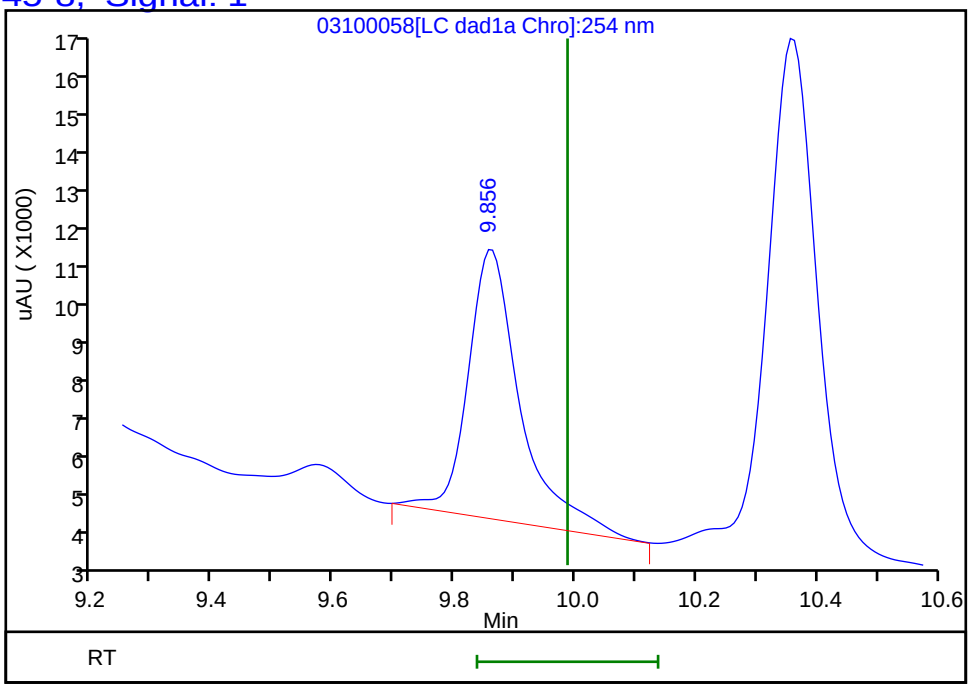
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100058.d
Injection Date: 11-Mar-2022 09:26:14 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-B-5-A Lab Sample ID: 280-159332-5
Client ID: G0296-8
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: 9.86
Response: 39598
Amount: 0.232155



Reviewer: zhangji, 11-Mar-2022 13:55:15
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0296-8 | Lab Sample ID: 280-159332-5

Matrix: Water | Lab File ID: 03120020.D

Analysis Method: 8330A | Date Collected: 03/01/2022 08:00

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 513.8(mL) | Date Analyzed: 03/12/2022 18:26

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.: 568485 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	*MNX*	*3.8*	*M J1*	*1.9*	0.39	*0.15*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	93	*M*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120020.D
Lims ID: 280-159332-B-5-A
Client ID: G0296-8
Sample Type: Client
Inject. Date: 12-Mar-2022 18:26:28 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-B-5-A
Misc. Info.: 280-0109194-020
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-Mar-2022 16:12:02 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: CTX1624

First Level Reviewer: zhangji Date: 15-Mar-2022 16:10:52

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.786	6.816	-0.030	479017	2.88	E
	6 MNX	1	7.506	7.537	-0.031	97816	0.3911	M
	8 RDX	1	8.966	9.003	-0.037	1015277	5.22	E
	9 Nitrobenzene	1		11.883			ND	
$	10 1,2-Dinitrobenzene	1	13.039	13.056	-0.017	46316	0.1854	M
	12 1,3-Dinitrobenzene	1		15.410			ND	
	14 o-Nitrotoluene	1	16.485	16.530	-0.045	5578	0.0238	
	16 p-Nitrotoluene	1		16.836			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.425	17.443	-0.018	20552	0.0771	
	18 m-Nitrotoluene	1		17.790			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.425	18.450	-0.025	11078	0.0307	M
	20 1,3,5-Trinitrobenzene	1		18.683			ND	
	21 2,6-Dinitrotoluene	1		19.916			ND	
	22 2,4-Dinitrotoluene	1		20.436			ND	
	23 Tetryl	1		24.096			ND	
	24 2,4,6-Trinitrotoluene	1		24.876			ND	

QC Flag Legend

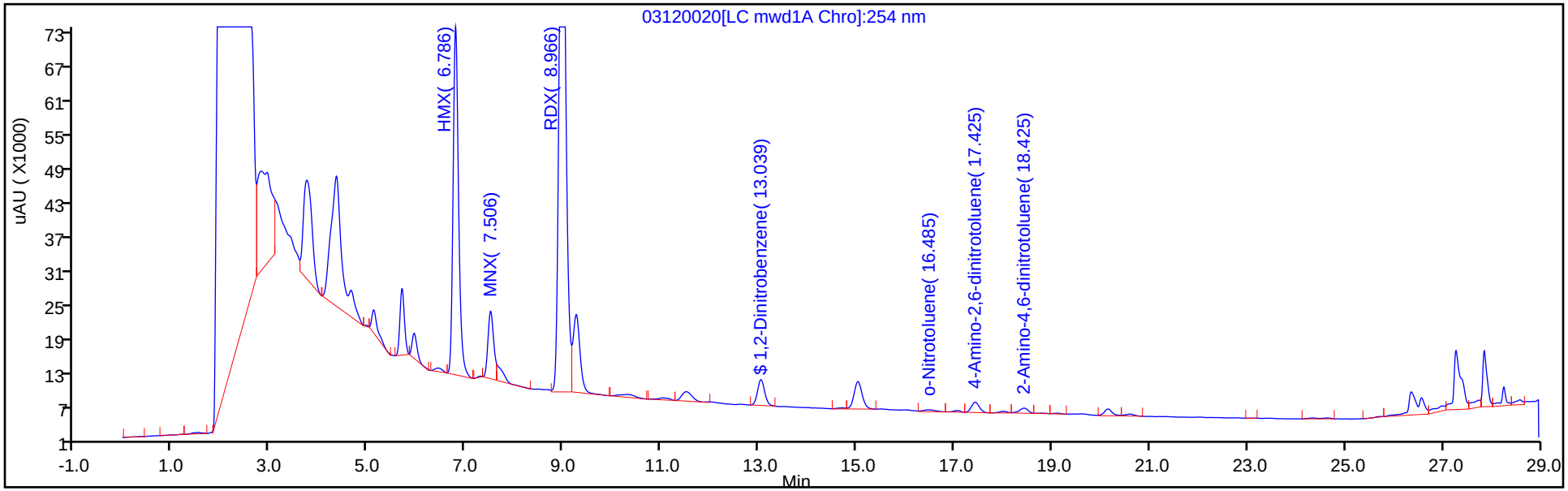
Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated

Report Date: 15-Mar-2022 16:12:06 Chrom Revision: 2.3 14-Mar-2022 17:58:38

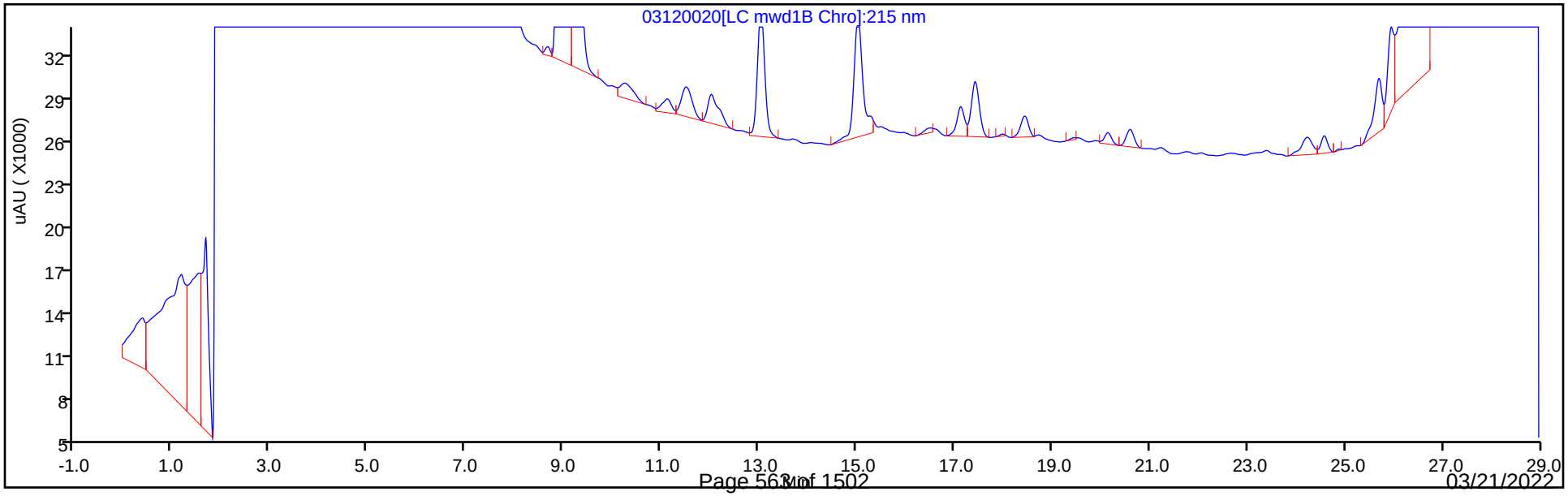
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120020.D				
Injection Date:	12-Mar-2022 18:26:28	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159332-B-5-A	Lab Sample ID:	280-159332-5	Worklist Smp#:	20
Client ID:	G0296-8				
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
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120020.D				
Lims ID:	280-159332-B-5-A				
Client ID:	G0296-8				
Sample Type:	Client				
Inject. Date:	12-Mar-2022 18:26:28	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-B-5-A				
Misc. Info.:	280-0109194-020				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-Mar-2022 16:12:02	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:	CTX1624				
First Level Reviewer: zhangji		Date:	15-Mar-2022 16:10:52		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1854	92.72

Manual Integration/User Assign Peak Report

Eurofins Denver

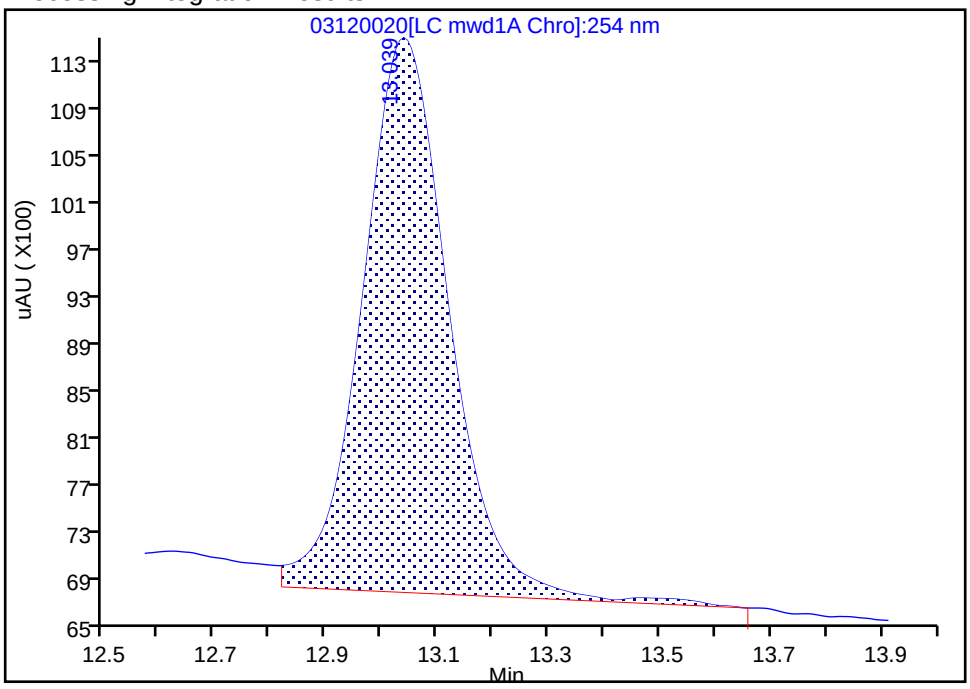
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120020.D				
Injection Date:	12-Mar-2022 18:26:28	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-B-5-A	Lab Sample ID:	280-159332-5		
Client ID:	G0296-8				
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

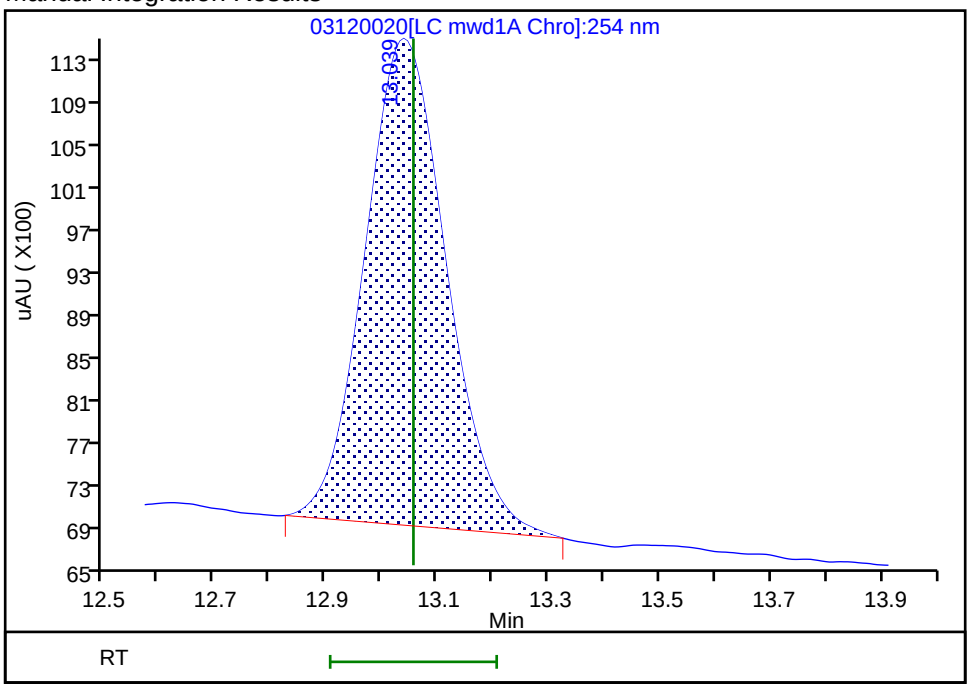
Processing Integration Results

RT: 13.04
Area: 50957
Amount: 0.204030
Amount Units: ug/ml



Manual Integration Results

RT: 13.04
Area: 46316
Amount: 0.185447
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 16:10:43

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

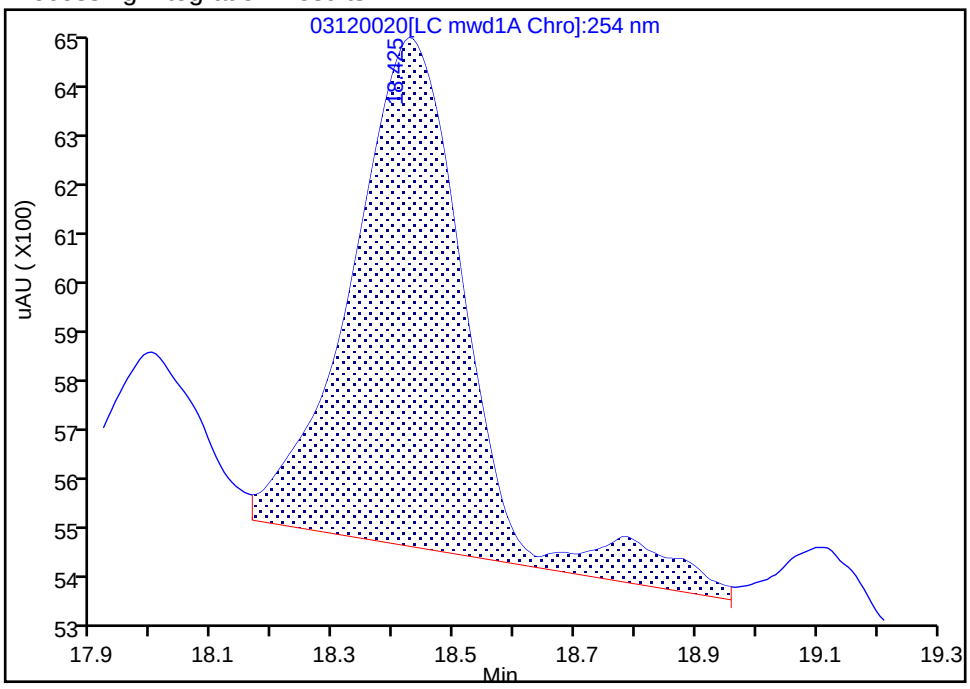
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120020.D				
Injection Date:	12-Mar-2022 18:26:28	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-B-5-A	Lab Sample ID:	280-159332-5		
Client ID:	G0296-8				
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

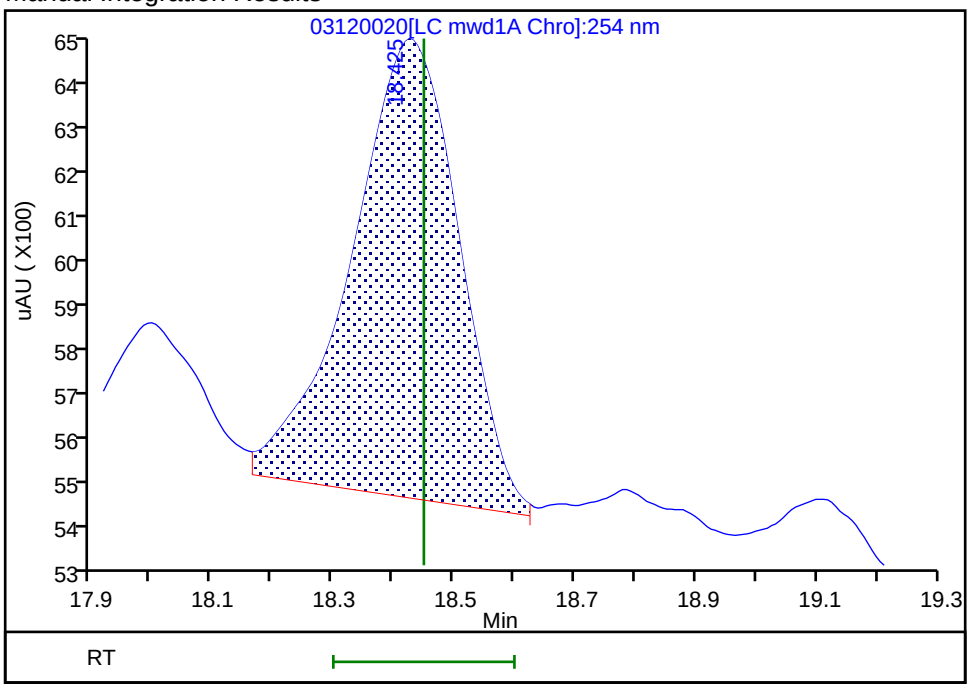
Processing Integration Results

RT: 18.43
Area: 12029
Amount: 0.033364
Amount Units: ug/ml



Manual Integration Results

RT: 18.43
Area: 11078
Amount: 0.030726
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 16:10:35

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

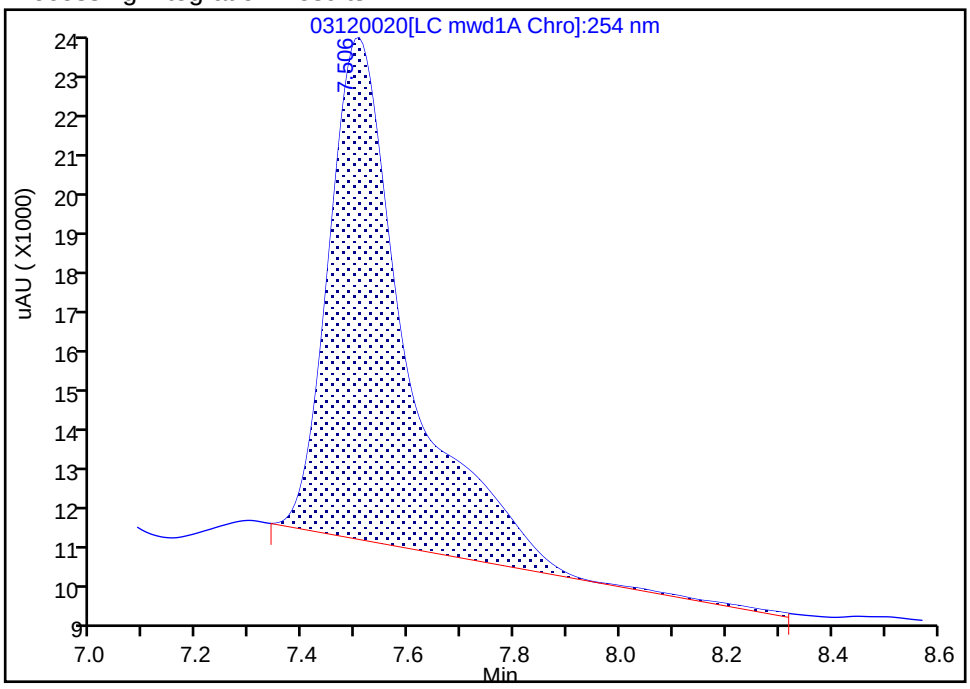
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120020.D				
Injection Date:	12-Mar-2022 18:26:28	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-B-5-A	Lab Sample ID:	280-159332-5		
Client ID:	G0296-8				
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

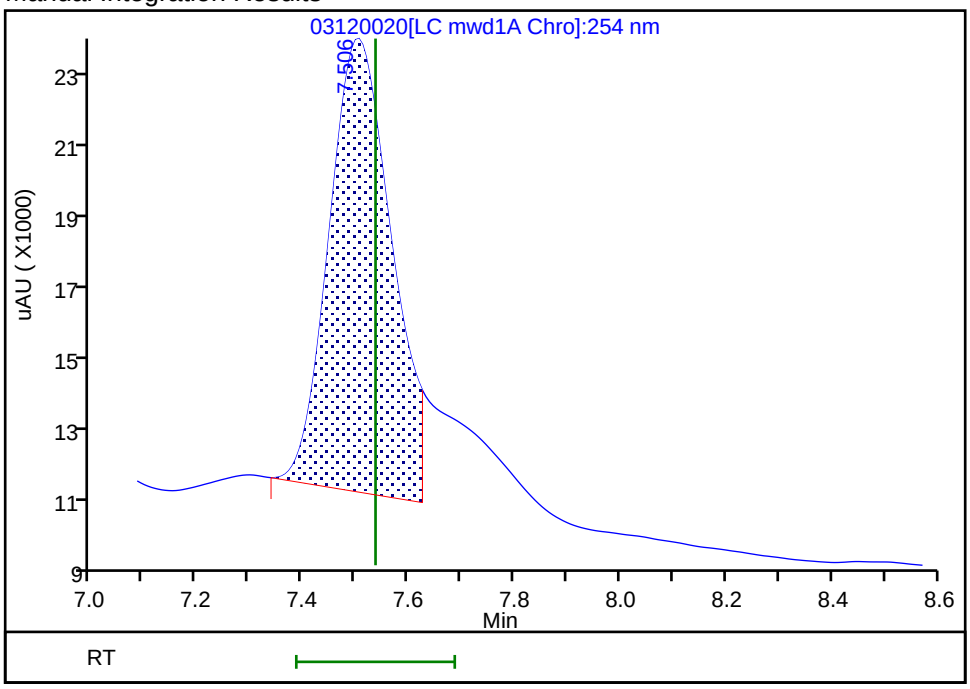
Processing Integration Results

RT: 7.51
Area: 123184
Amount: 0.492576
Amount Units: ug/ml



Manual Integration Results

RT: 7.51
Area: 97816
Amount: 0.391137
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 16:10:51
Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0296-8 DL | Lab Sample ID: 280-159332-5 DL

Matrix: Water | Lab File ID: 03110018.D

Analysis Method: 8330A | Date Collected: 03/01/2022 08:00

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 513.8(mL) | Date Analyzed: 03/11/2022 17:51

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

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

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

Analysis Batch No.: 568433 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
2691-41-0	HMX	29	D M	1.0	0.97	0.43
121-82-4	RDX	49	D M	1.0	0.97	0.25

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	106	M D	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110018.D
Lims ID: 280-159332-B-5-A
Client ID: G0296-8
Sample Type: Client
Inject. Date: 11-Mar-2022 17:51:17 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 5.0000
Sample Info: 280-159332-B-5-A
Misc. Info.: 280-0109174-018
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Mar-2022 10:32:08 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: CTX1616

First Level Reviewer: zhangji Date: 11-Mar-2022 18:45:20

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.597	6.595	0.002	50178	0.5986	M
7 MNX	1	7.217	7.211	0.006	20815	0.1652	M
8 RDX	1	7.590	7.582	0.008	103590	1.00	M
$ 10 1,2-Dinitrobenzene	1	8.530	8.529	0.001	5309	0.0426	M
11 1,3,5-Trinitrobenzene	1		8.655			ND	
12 1,3-Dinitrobenzene	1		9.282			ND	
13 Nitrobenzene	1		9.668			ND	
15 Tetryl	1		9.982			ND	U
17 2,4,6-Trinitrotoluene	1		10.888			ND	
18 4-Amino-2,6-dinitrotoluene	1	11.076	11.068	0.008	1615	0.0107	
19 2-Amino-4,6-dinitrotoluene	1		11.322			ND	
20 2,6-Dinitrotoluene	1		11.495			ND	
21 2,4-Dinitrotoluene	1		11.662			ND	
22 o-Nitrotoluene	1		12.508			ND	7
23 p-Nitrotoluene	1		12.935			ND	
24 m-Nitrotoluene	1		13.502			ND	

QC Flag Legend

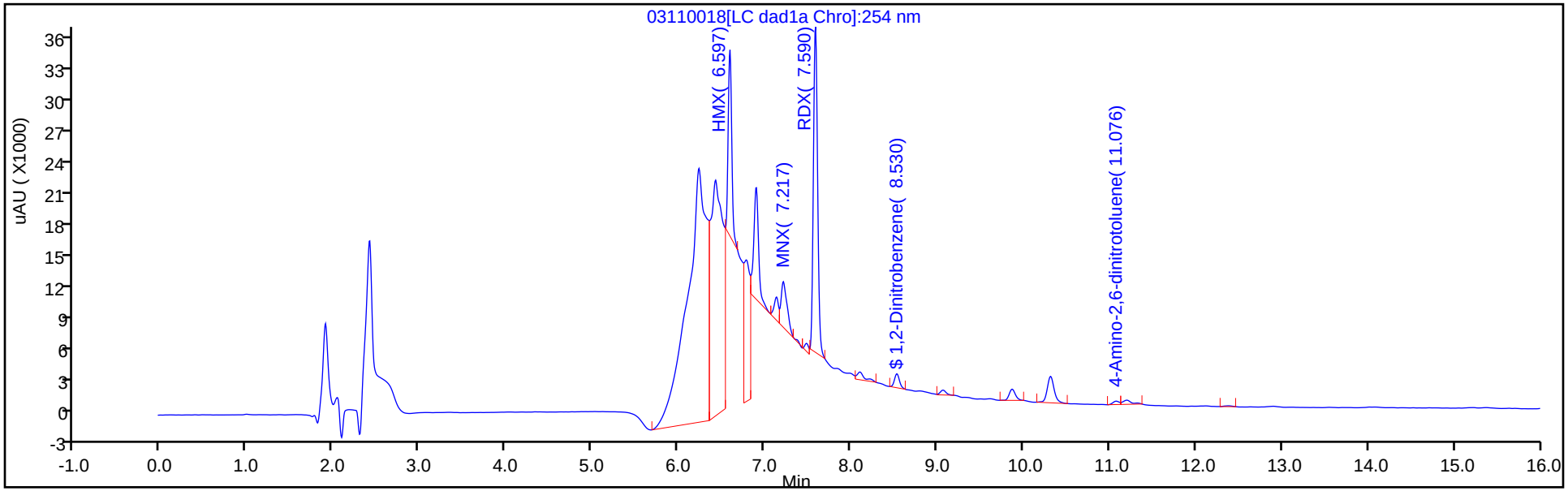
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 12-Mar-2022 10:32:12 Chrom Revision: 2.3 16-Feb-2022 17:52:00

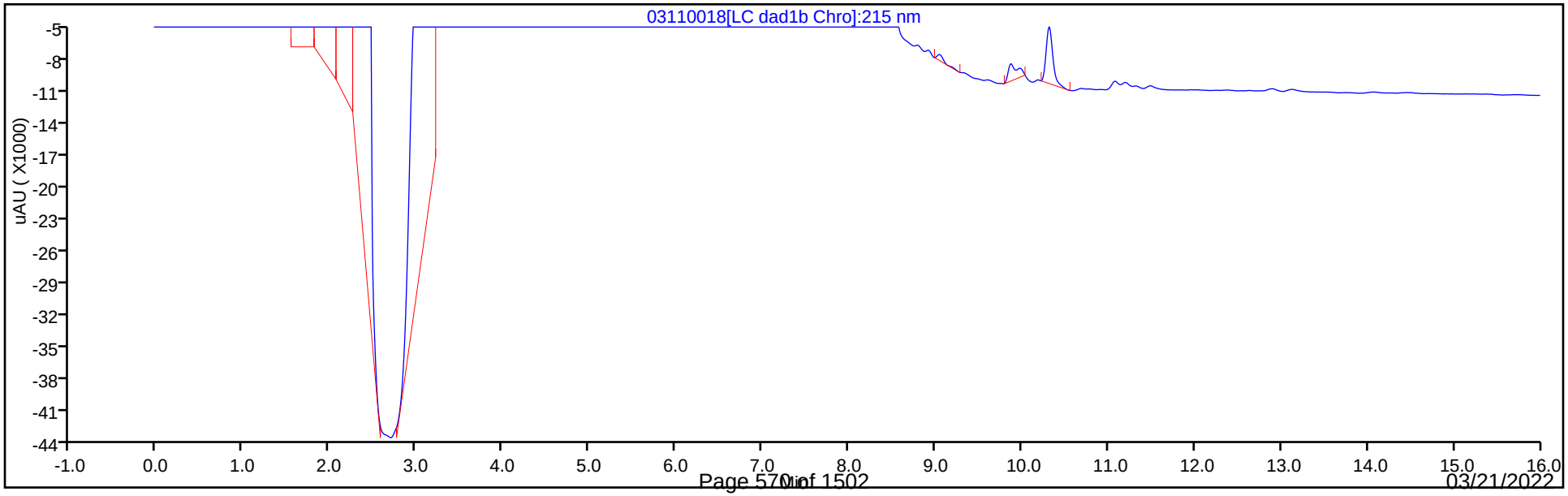
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110018.d				
Injection Date:	11-Mar-2022 17:51:17	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159332-B-5-A	Lab Sample ID:	280-159332-5	Worklist Smp#:	18
Client ID:	G0296-8				
Injection Vol:	100.0 ul	Dil. Factor:	5.0000	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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110018.D				
Lims ID:	280-159332-B-5-A				
Client ID:	G0296-8				
Sample Type:	Client				
Inject. Date:	11-Mar-2022 17:51:17	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
Sample Info:	280-159332-B-5-A				
Misc. Info.:	280-0109174-018				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2022 10:32:08	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:	CTX1616				

First Level Reviewer: zhangji Date: 11-Mar-2022 18:45:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.0426	21.29

Manual Integration/User Assign Peak Report

Eurofins Denver

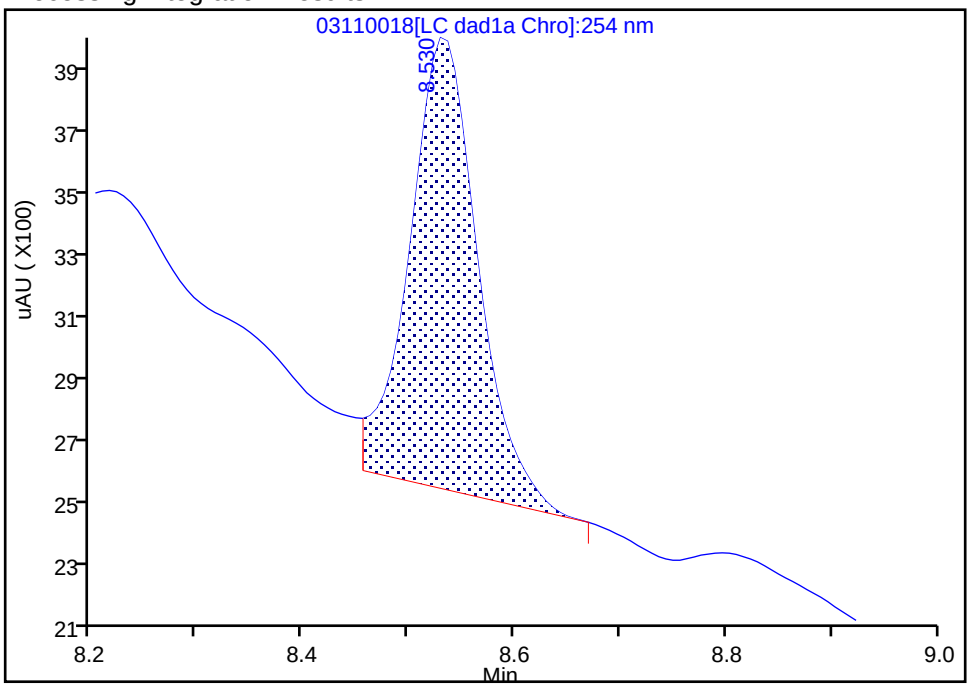
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110018.d				
Injection Date:	11-Mar-2022 17:51:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-5-A	Lab Sample ID:	280-159332-5		
Client ID:	G0296-8				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

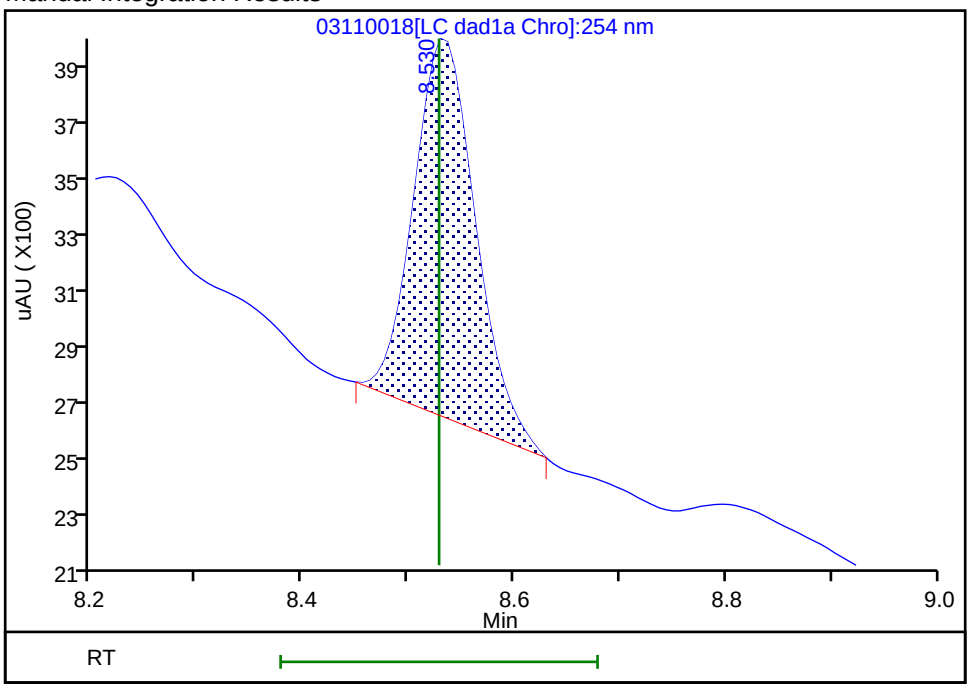
Processing Integration Results

RT: 8.53
Area: 6313
Amount: 0.050626
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 5309
Amount: 0.042575
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 18:44:56

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

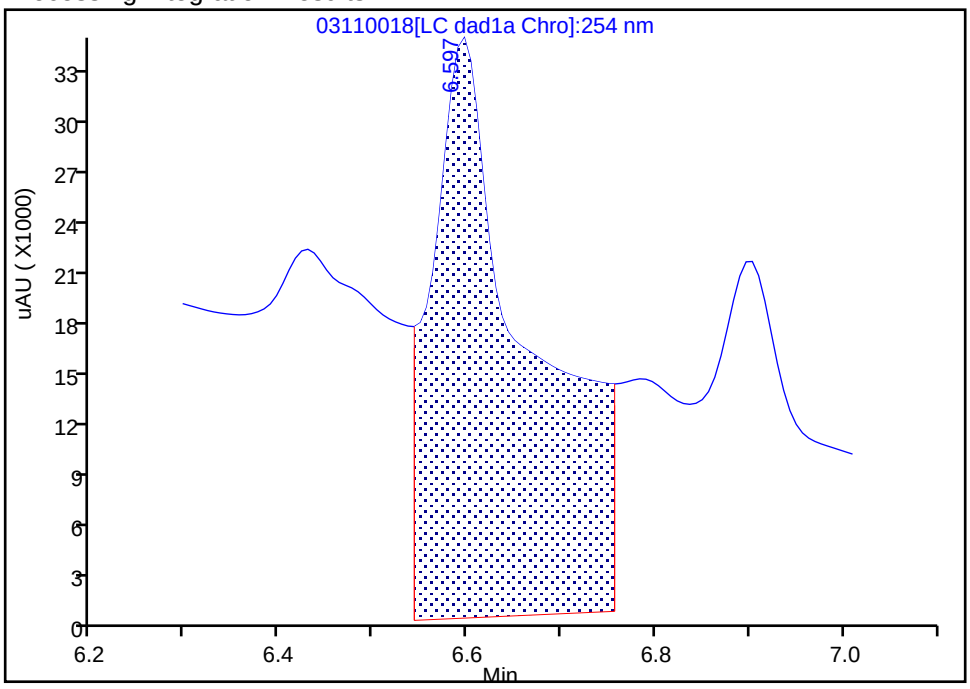
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110018.d				
Injection Date:	11-Mar-2022 17:51:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-5-A	Lab Sample ID:	280-159332-5		
Client ID:	G0296-8				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
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

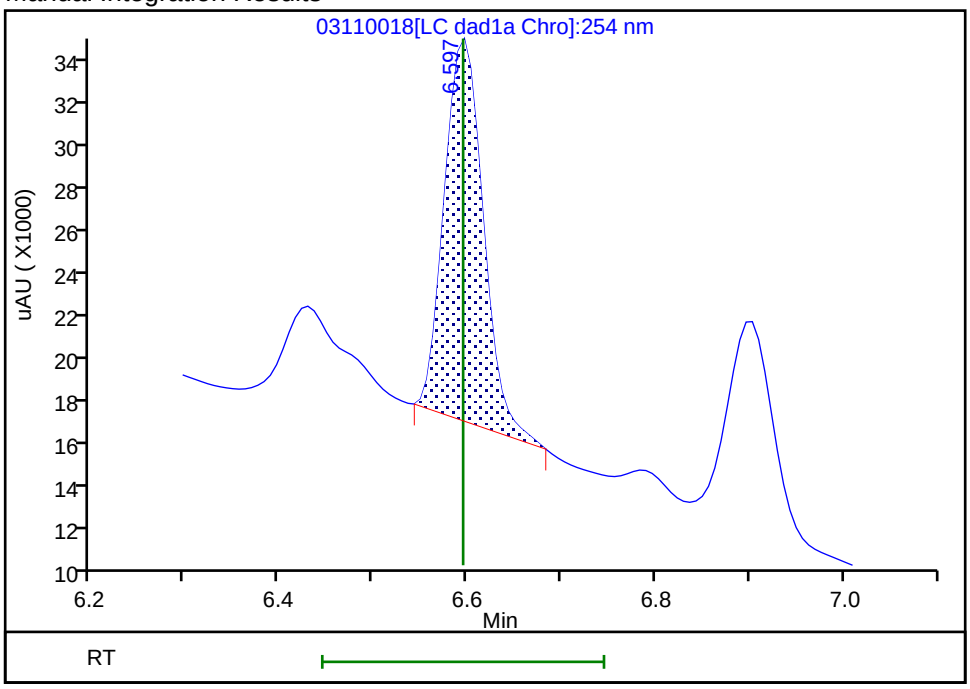
Processing Integration Results

RT: 6.60
Area: 242549
Amount: 2.893440
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 50178
Amount: 0.598589
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 18:45:14

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

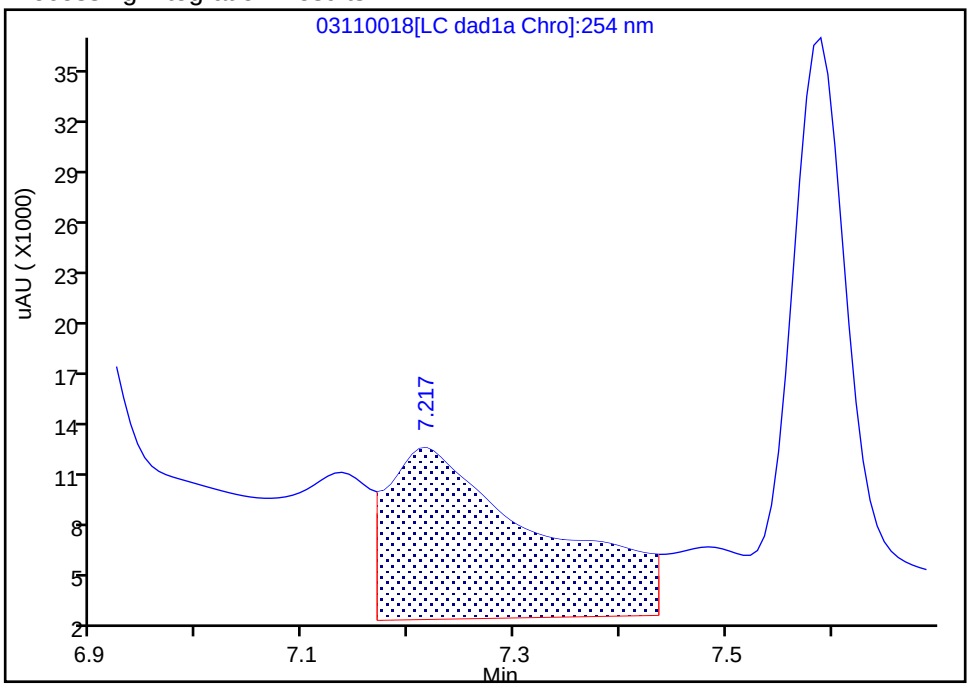
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110018.d				
Injection Date:	11-Mar-2022 17:51:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-5-A	Lab Sample ID:	280-159332-5		
Client ID:	G0296-8				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
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

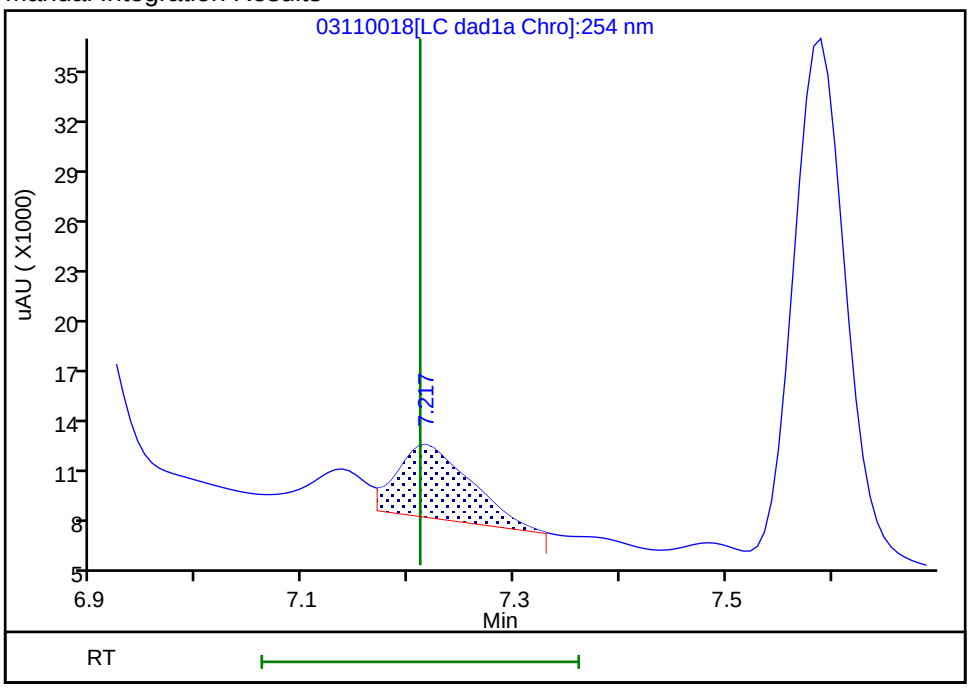
Processing Integration Results

RT: 7.22
Area: 99545
Amount: 0.790068
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 20815
Amount: 0.165204
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 18:45:10
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

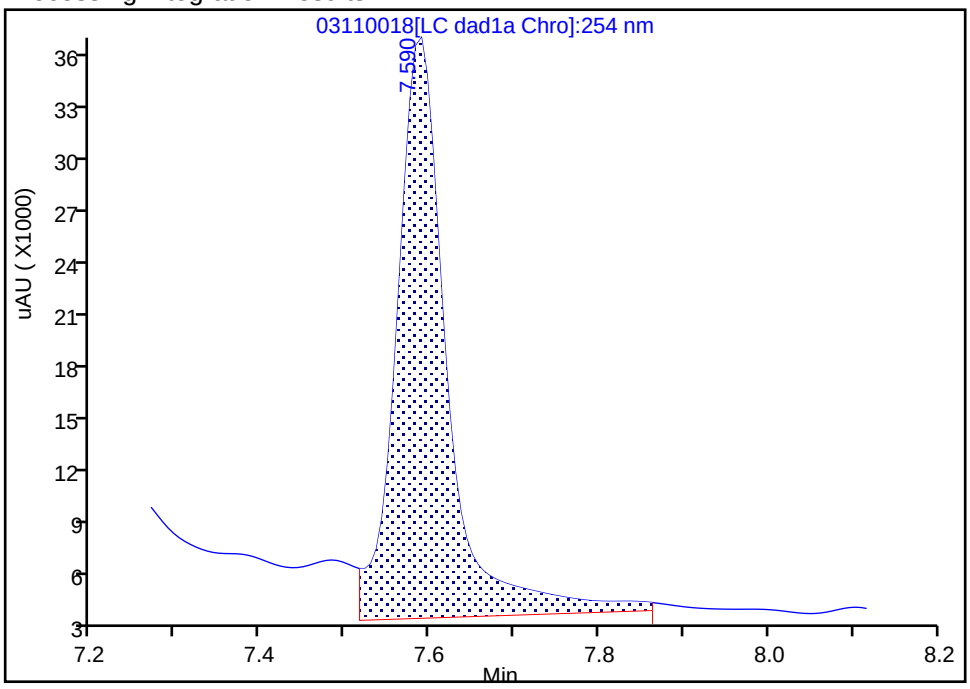
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110018.d				
Injection Date:	11-Mar-2022 17:51:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-5-A	Lab Sample ID:	280-159332-5		
Client ID:	G0296-8				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

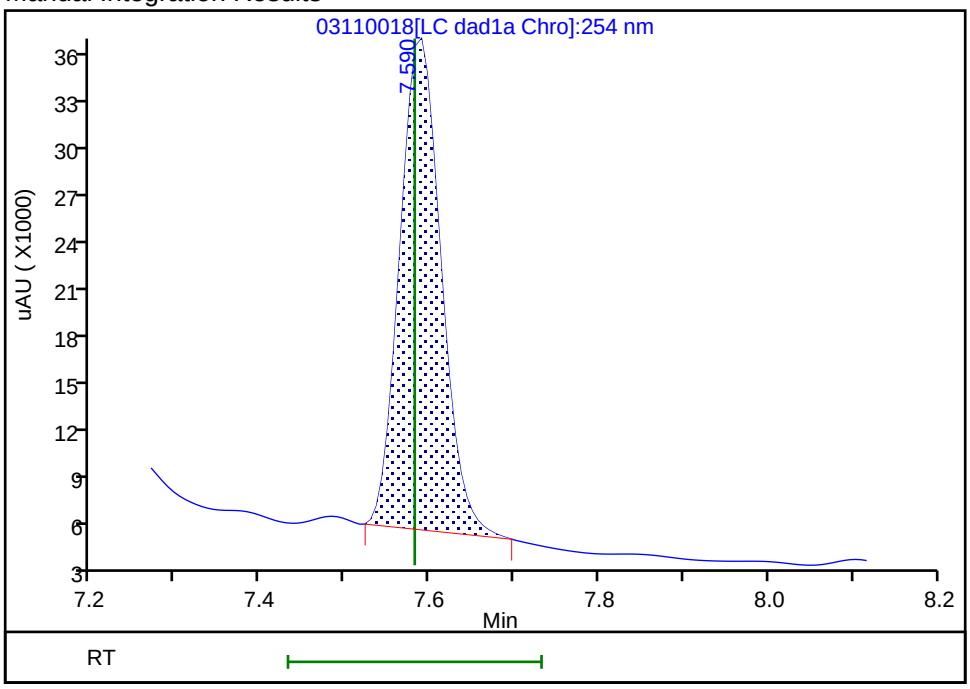
Processing Integration Results

RT: 7.59
Area: 137787
Amount: 1.329872
Amount Units: ug/mL



Manual Integration Results

RT: 7.59
Area: 103590
Amount: 0.999815
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 18:45:00

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

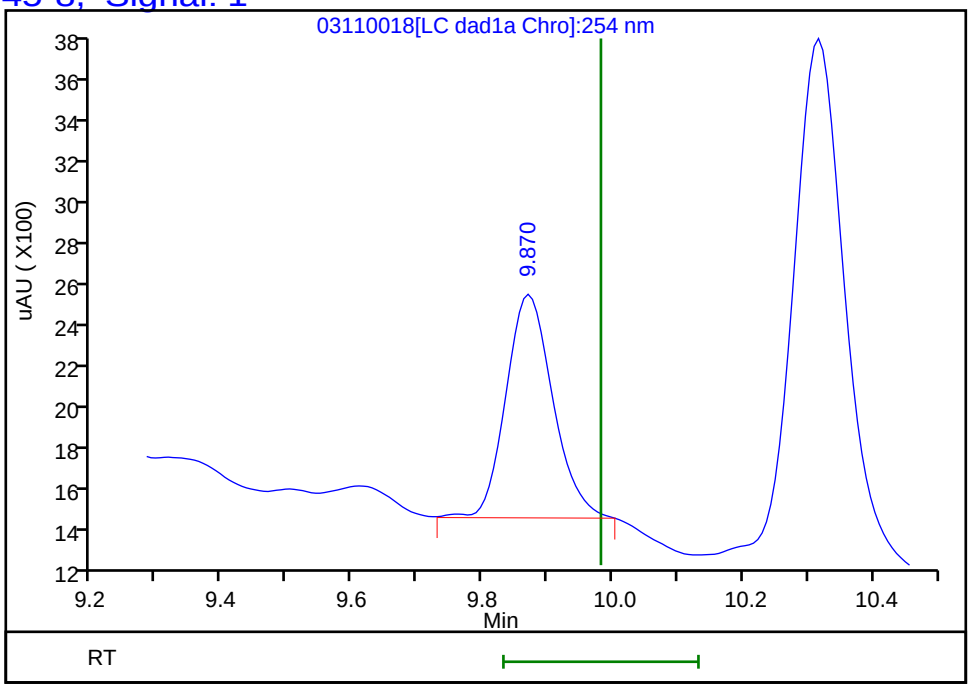
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110018.d
Injection Date: 11-Mar-2022 17:51:17 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-B-5-A Lab Sample ID: 280-159332-5
Client ID: G0296-8
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 5.0000
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: 9.87
Response: 5257
Amount: 0.030821



Reviewer: zhangji, 11-Mar-2022 18:45:20
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0296-8 DL | Lab Sample ID: 280-159332-5 DL

Matrix: Water | Lab File ID: 03150022.D

Analysis Method: 8330A | Date Collected: 03/01/2022 08:00

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 513.8(mL) | Date Analyzed: 03/16/2022 02:19

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

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

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

Analysis Batch No.: 568709 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95	*D*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150022.D
Lims ID: 280-159332-B-5-A DL
Client ID: G0296-8
Sample Type: Client
Inject. Date: 16-Mar-2022 02:19:00 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 5.0000
Sample Info: 280-159332-B-5-A
Misc. Info.: 280-0109260-022
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Mar-2022 12:38:36 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: CTX1609

First Level Reviewer: zhangji Date: 16-Mar-2022 12:24:57

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1	6.841	6.854	-0.013	96807	0.5827	
6 MNX	1	7.561	7.581	-0.020	21731	0.0869	
8 RDX	1	9.041	9.054	-0.013	204162	1.05	
9 Nitrobenzene	1		11.960			ND	
$ 10 1,2-Dinitrobenzene	1	13.141	13.160	-0.019	9455	0.0379	
12 1,3-Dinitrobenzene	1		15.514			ND	
14 o-Nitrotoluene	1		16.640			ND	
16 p-Nitrotoluene	1		16.954			ND	
17 4-Amino-2,6-dinitrotoluene	1	17.561	17.574	-0.013	3743	0.0142	
18 m-Nitrotoluene	1		17.914			ND	
19 2-Amino-4,6-dinitrotoluene	1	18.568	18.580	-0.012	2264	0.006280	
20 1,3,5-Trinitrobenzene	1		18.794			ND	
21 2,6-Dinitrotoluene	1		20.054			ND	
22 2,4-Dinitrotoluene	1		20.574			ND	
23 Tetryl	1		24.307			ND	
24 2,4,6-Trinitrotoluene	1		25.074			ND	

QC Flag Legend

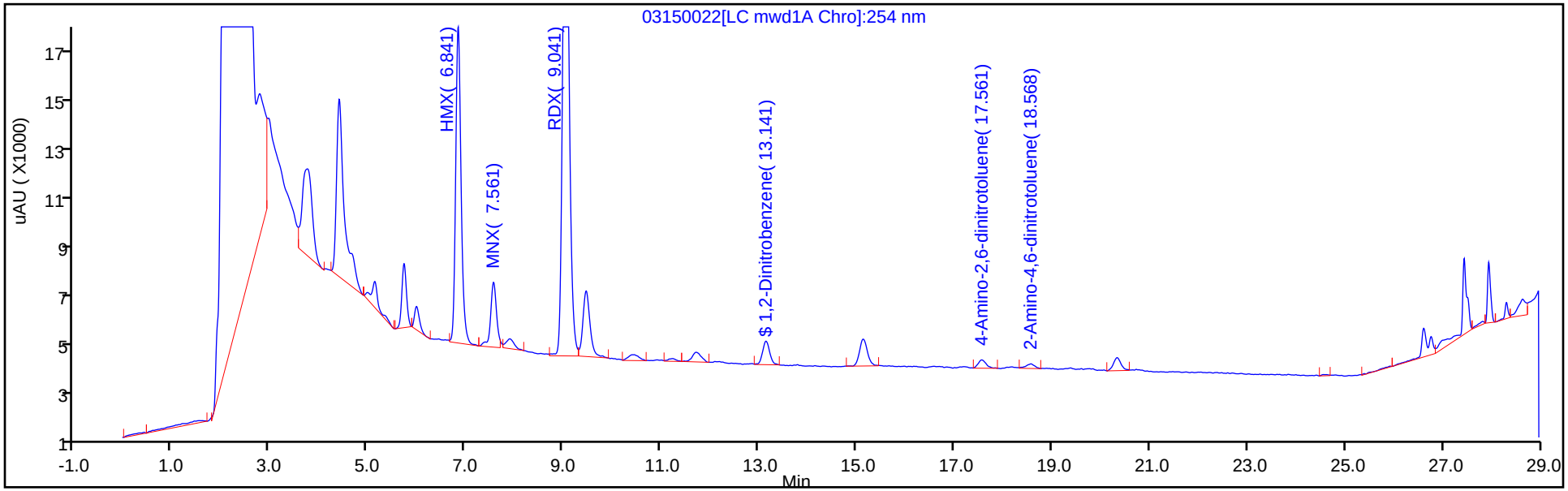
Processing Flags

Report Date: 16-Mar-2022 12:38:39 Chrom Revision: 2.3 14-Mar-2022 17:58:38

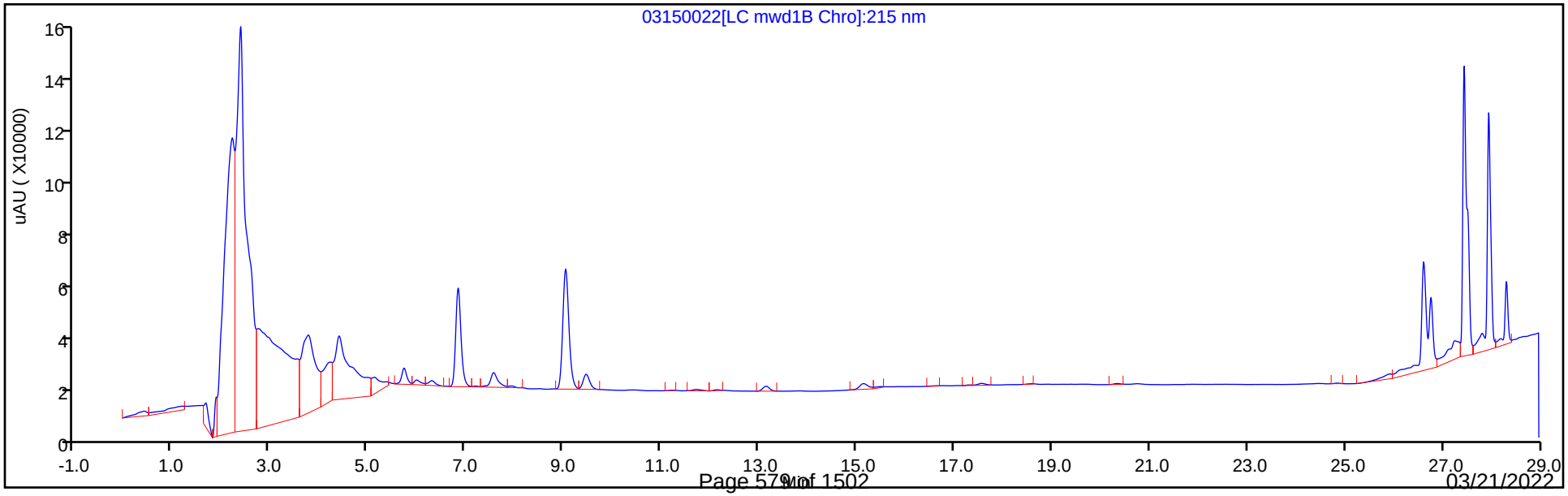
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150022.D				
Injection Date:	16-Mar-2022 02:19:00	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159332-B-5-A DL	Lab Sample ID:	280-159332-5	Worklist Smp#:	22
Client ID:	G0296-8				
Injection Vol:	100.0 ul	Dil. Factor:	5.0000	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
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150022.D				
Lims ID:	280-159332-B-5-A DL				
Client ID:	G0296-8				
Sample Type:	Client				
Inject. Date:	16-Mar-2022 02:19:00	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
Sample Info:	280-159332-B-5-A				
Misc. Info.:	280-0109260-022				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Mar-2022 12:38:36	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:	CTX1609				
First Level Reviewer: zhangji		Date:	16-Mar-2022 12:24:57		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.0379	18.93

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ020-8 | Lab Sample ID: 280-159332-6

Matrix: Water | Lab File ID: 03100059.D

Analysis Method: 8330A | Date Collected: 03/01/2022 17:15

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 473.7(mL) | Date Analyzed: 03/11/2022 09:49

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.: 568287 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.7		0.22	0.21	0.089
118-96-7	2,4,6-Trinitrotoluene	4.8		0.12	0.11	0.047
606-20-2	2,6-Dinitrotoluene	0.084	U	0.11	0.084	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	2.8		0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.090
99-08-1	3-Nitrotoluene	0.42	U	0.42	0.42	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	1.7		0.16	0.13	0.061
2691-41-0	HMX	0.56	M	0.22	0.21	0.092
5755-27-1	MNX	0.42	U M	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.096
121-82-4	RDX	0.21	U M	0.22	0.21	0.054
479-45-8	Tetryl	0.11	U M	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\03100059.D
Lims ID: 280-159332-A-6-A
Client ID: PZ020-8
Sample Type: Client
Inject. Date: 11-Mar-2022 09:49:10 ALS Bottle#: 59 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-A-6-A
Misc. Info.: 280-0109139-059
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 11-Mar-2022 13:57:00 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: CTX1614

First Level Reviewer: zhangji Date: 11-Mar-2022 13:55:49

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.589	6.593	-0.004	4442	0.0530	M
7 MNX	1		7.209			ND	U
8 RDX	1		7.587			ND	U
$ 10 1,2-Dinitrobenzene	1	8.523	8.533	-0.010	22896	0.1836	
11 1,3,5-Trinitrobenzene	1	8.656	8.660	-0.004	55074	0.2525	
12 1,3-Dinitrobenzene	1	9.289	9.280	0.009	3775	0.0131	
13 Nitrobenzene	1		9.667			ND	
15 Tetryl	1		9.987			ND	U
17 2,4,6-Trinitrotoluene	1	10.876	10.893	-0.017	92547	0.4565	
18 4-Amino-2,6-dinitrotoluene	1	11.056	11.080	-0.024	24758	0.1640	
19 2-Amino-4,6-dinitrotoluene	1	11.303	11.327	-0.024	54072	0.2675	
20 2,6-Dinitrotoluene	1		11.500			ND	
21 2,4-Dinitrotoluene	1	11.669	11.667	0.002	1491	0.005153	M
22 o-Nitrotoluene	1		12.513			ND	
23 p-Nitrotoluene	1	12.896	12.940	-0.044	2127	0.0200	
24 m-Nitrotoluene	1		13.507			ND	

QC Flag Legend

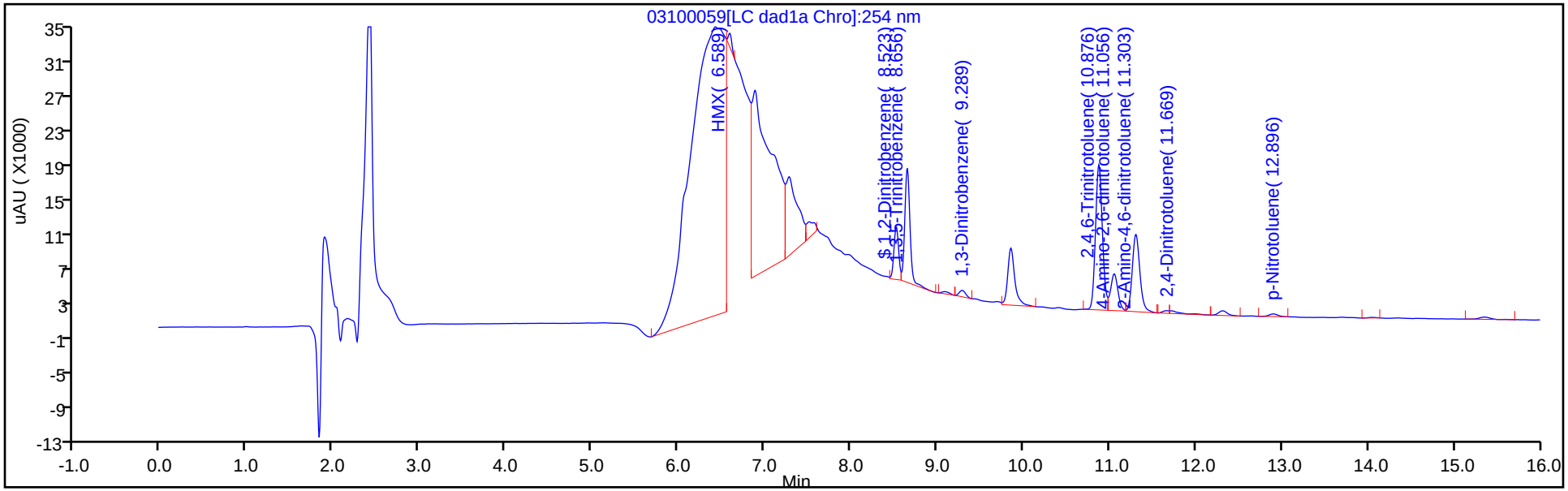
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 11-Mar-2022 13:57:02 Chrom Revision: 2.3 16-Feb-2022 17:52:00

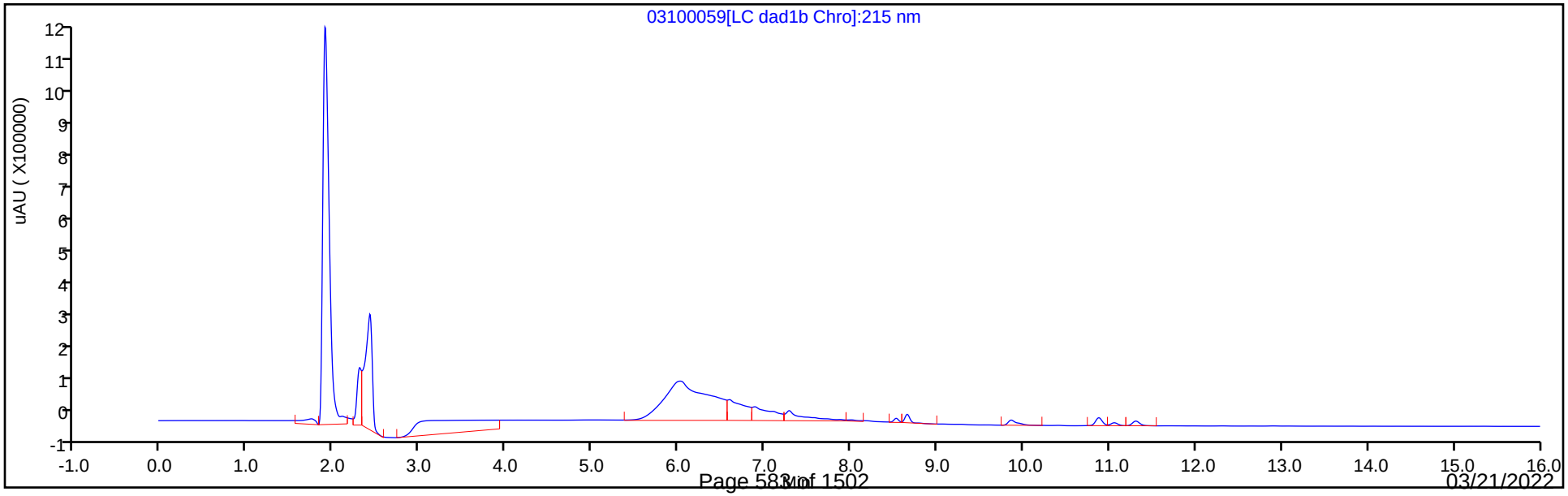
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100059.d				
Injection Date:	11-Mar-2022 09:49:10	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159332-A-6-A	Lab Sample ID:	280-159332-6	Worklist Smp#:	59
Client ID:	PZ020-8				
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\20220310-109139.b\03100059.D				
Lims ID:	280-159332-A-6-A				
Client ID:	PZ020-8				
Sample Type:	Client				
Inject. Date:	11-Mar-2022 09:49:10	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-A-6-A				
Misc. Info.:	280-0109139-059				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	11-Mar-2022 13:57:00	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:	CTX1614				

First Level Reviewer: zhangji Date: 11-Mar-2022 13:55:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1836	91.81

Manual Integration/User Assign Peak Report

Eurofins Denver

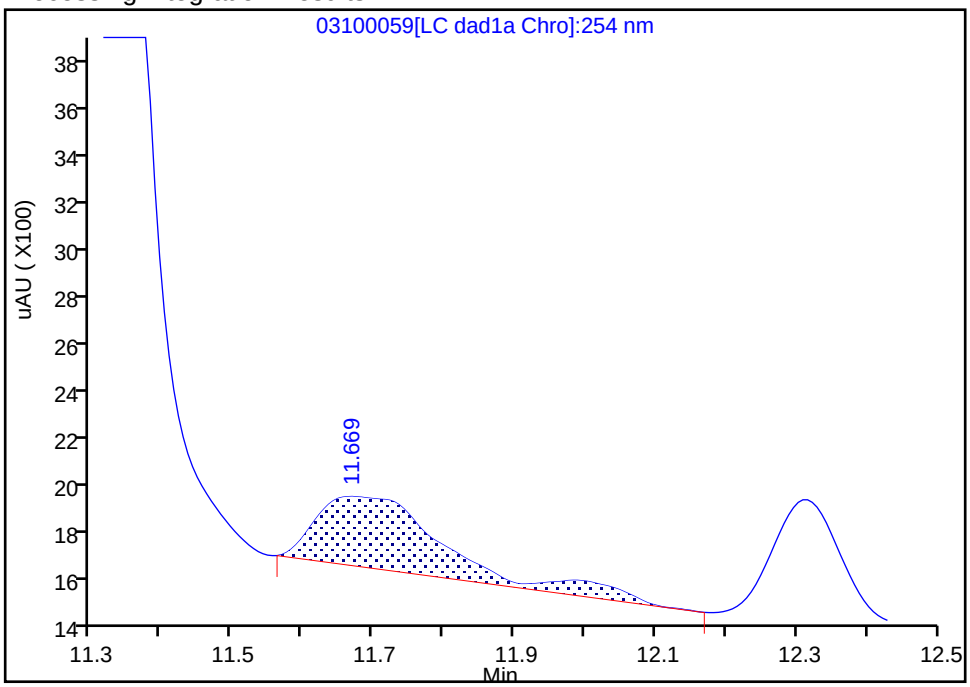
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100059.d				
Injection Date:	11-Mar-2022 09:49:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-6-A	Lab Sample ID:	280-159332-6		
Client ID:	PZ020-8				
Operator ID:	JZ	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

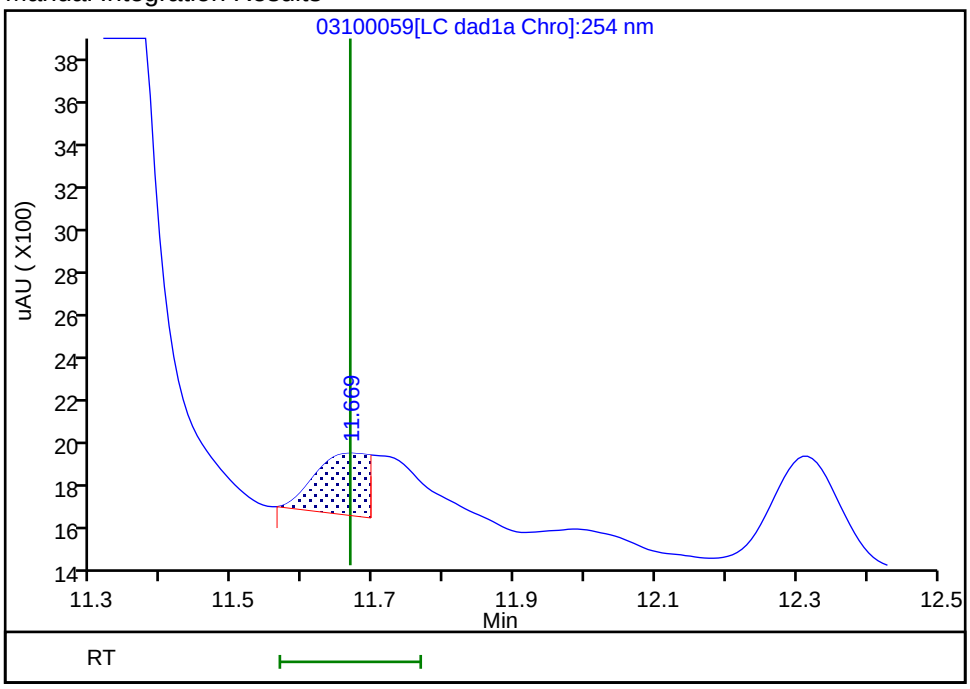
Processing Integration Results

RT: 11.67
Area: 3933
Amount: 0.013593
Amount Units: ug/mL



Manual Integration Results

RT: 11.67
Area: 1491
Amount: 0.005153
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:55:48

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

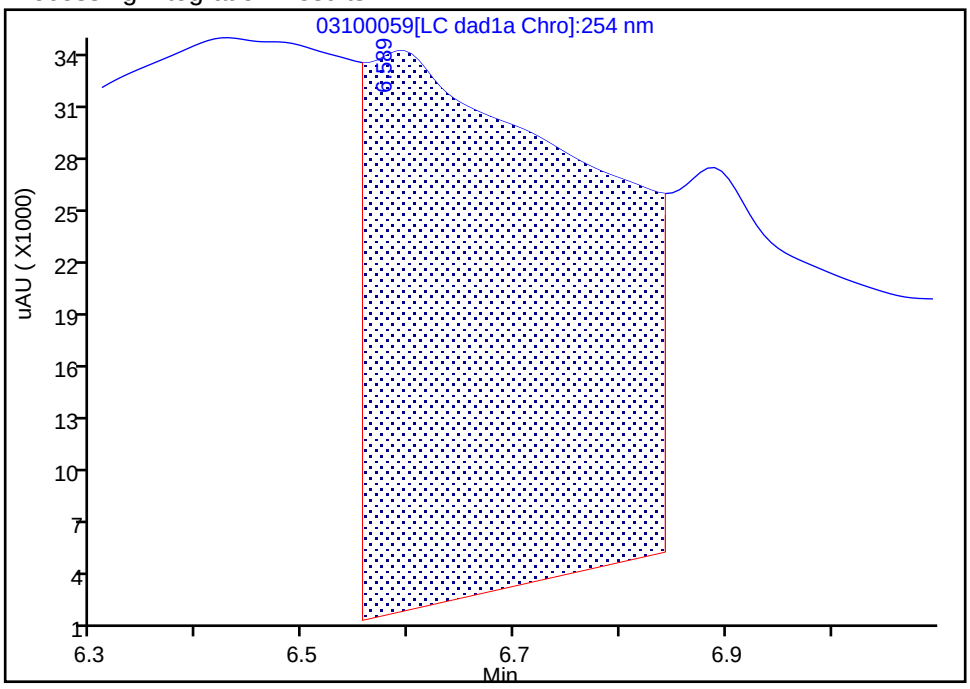
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100059.d				
Injection Date:	11-Mar-2022 09:49:10	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-6-A	Lab Sample ID:	280-159332-6		
Client ID:	PZ020-8				
Operator ID:	JZ	ALS Bottle#:	59	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

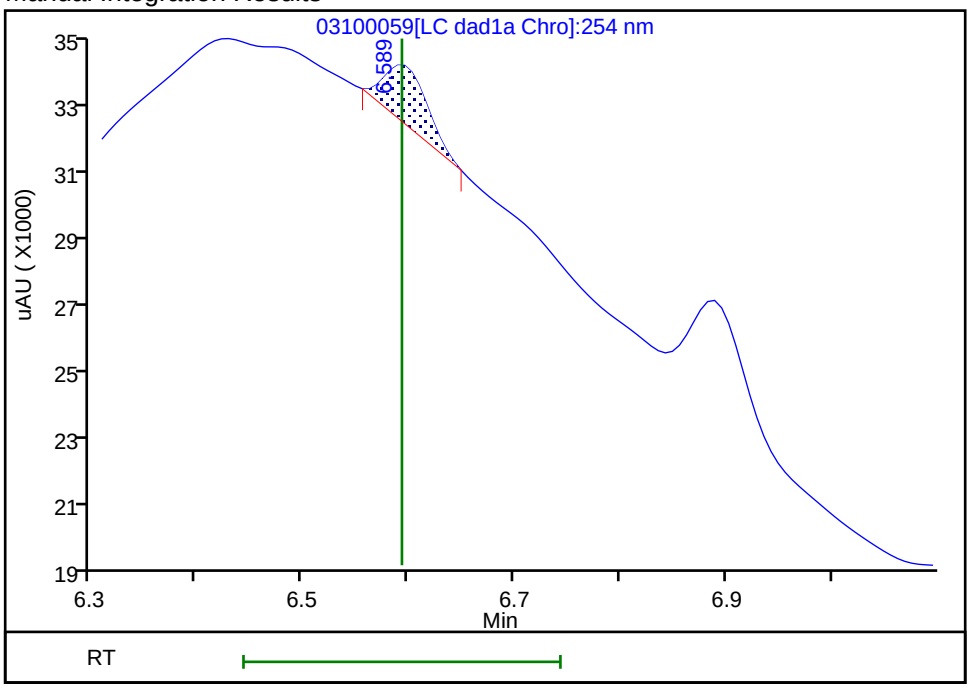
Processing Integration Results

RT: 6.59
Area: 441548
Amount: 5.267359
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 4442
Amount: 0.052990
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:55:22

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

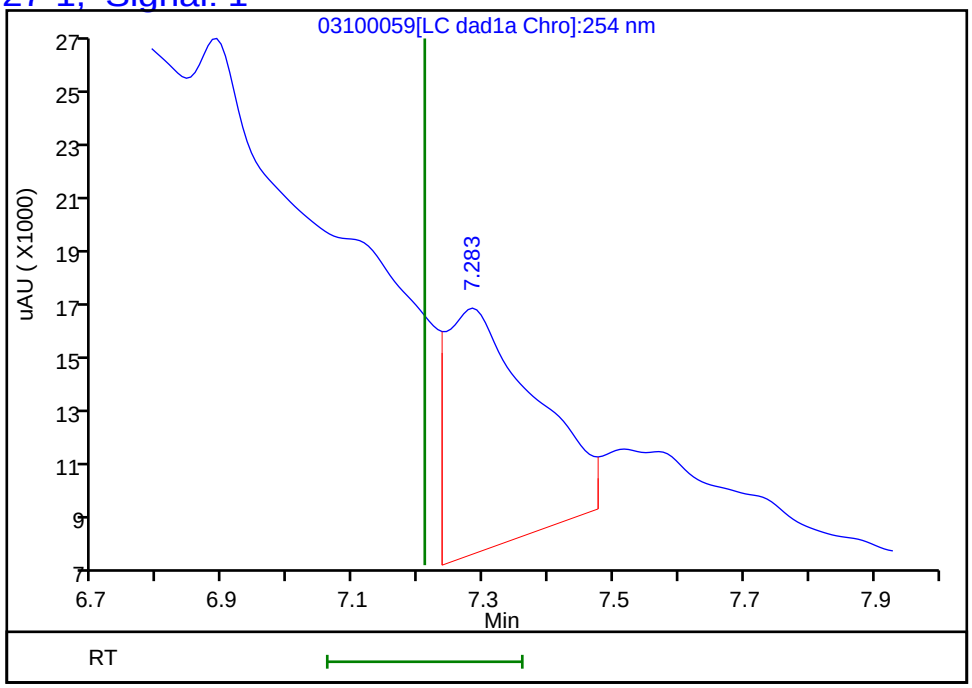
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100059.d
Injection Date: 11-Mar-2022 09:49:10 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-A-6-A Lab Sample ID: 280-159332-6
Client ID: PZ020-8
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: 7.28
Response: 83096
Amount: 0.659516



Reviewer: zhangji, 11-Mar-2022 13:55:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

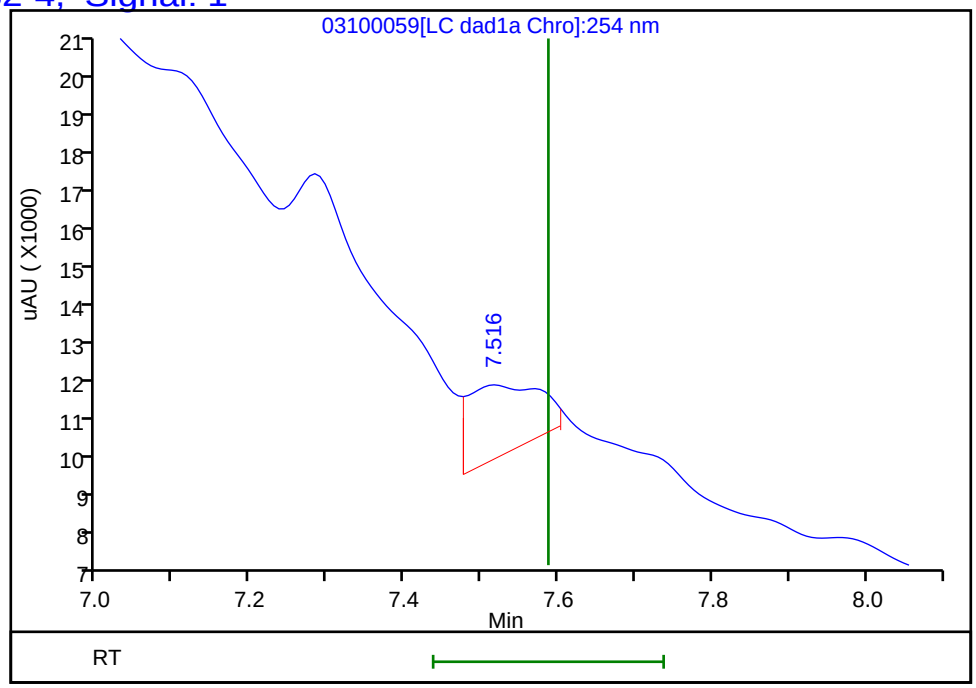
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100059.d
Injection Date: 11-Mar-2022 09:49:10 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-A-6-A Lab Sample ID: 280-159332-6
Client ID: PZ020-8
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: 7.52
Response: 10930
Amount: 0.105493



Reviewer: zhangji, 11-Mar-2022 13:55:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

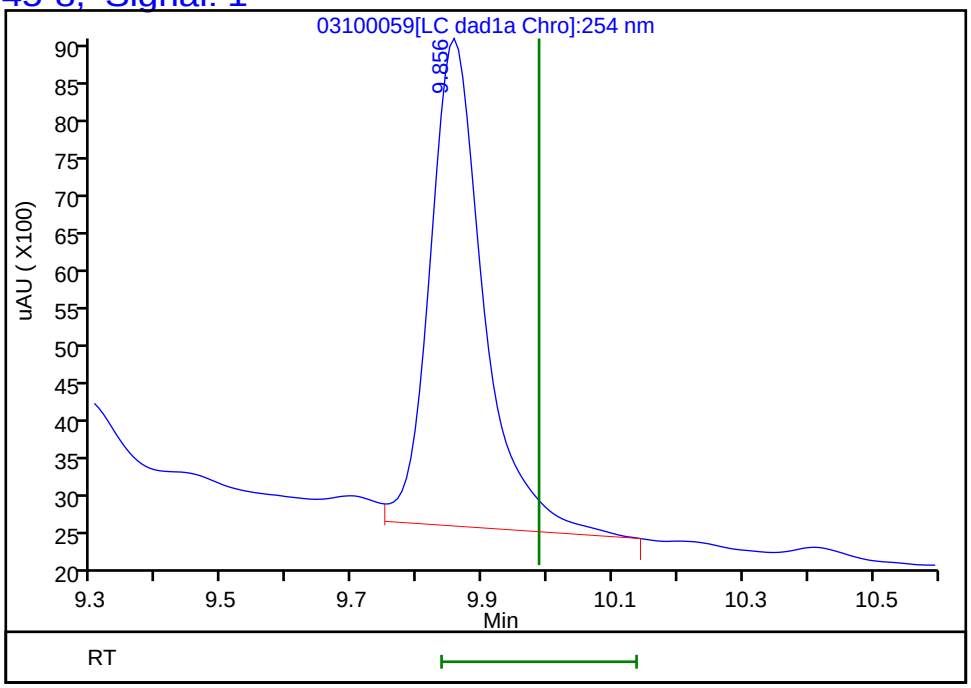
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100059.d
Injection Date: 11-Mar-2022 09:49:10 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-A-6-A Lab Sample ID: 280-159332-6
Client ID: PZ020-8
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: 9.86
Response: 37319
Amount: 0.218794



Reviewer: zhangji, 11-Mar-2022 13:55:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ020-8 | Lab Sample ID: 280-159332-6

Matrix: Water | Lab File ID: 03120021.D

Analysis Method: 8330A | Date Collected: 03/01/2022 17:15

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 473.7(mL) | Date Analyzed: 03/12/2022 19:01

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.: 568485 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039
121-14-2	2,4-Dinitrotoluene	0.084	U	0.11	0.084	0.029
99-99-0	4-Nitrotoluene	0.42	U	0.43	0.42	0.11

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	108		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120021.D
Lims ID: 280-159332-A-6-A
Client ID: PZ020-8
Sample Type: Client
Inject. Date: 12-Mar-2022 19:01:35 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-A-6-A
Misc. Info.: 280-0109194-021
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-Mar-2022 16:12:02 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: CTX1624

First Level Reviewer: zhangji Date: 15-Mar-2022 16:11:09

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.815	6.816	-0.001	8358	0.0503	
	6 MNX	1		7.537			ND	
	8 RDX	1	9.008	9.003	0.005	6170	0.0317	M
	9 Nitrobenzene	1		11.883			ND	
$	10 1,2-Dinitrobenzene	1	13.075	13.056	0.019	53718	0.2151	
	12 1,3-Dinitrobenzene	1		15.410			ND	
	14 o-Nitrotoluene	1		16.530			ND	
	16 p-Nitrotoluene	1		16.836			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.428	17.443	-0.015	52231	0.1957	
	18 m-Nitrotoluene	1		17.790			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.428	18.450	-0.022	102407	0.2840	
	20 1,3,5-Trinitrobenzene	1	18.681	18.683	-0.002	108040	0.2600	
	21 2,6-Dinitrotoluene	1		19.916			ND	
	22 2,4-Dinitrotoluene	1		20.436			ND	7
	23 Tetryl	1		24.096			ND	
	24 2,4,6-Trinitrotoluene	1	24.868	24.876	-0.008	178425	0.4833	

QC Flag Legend

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

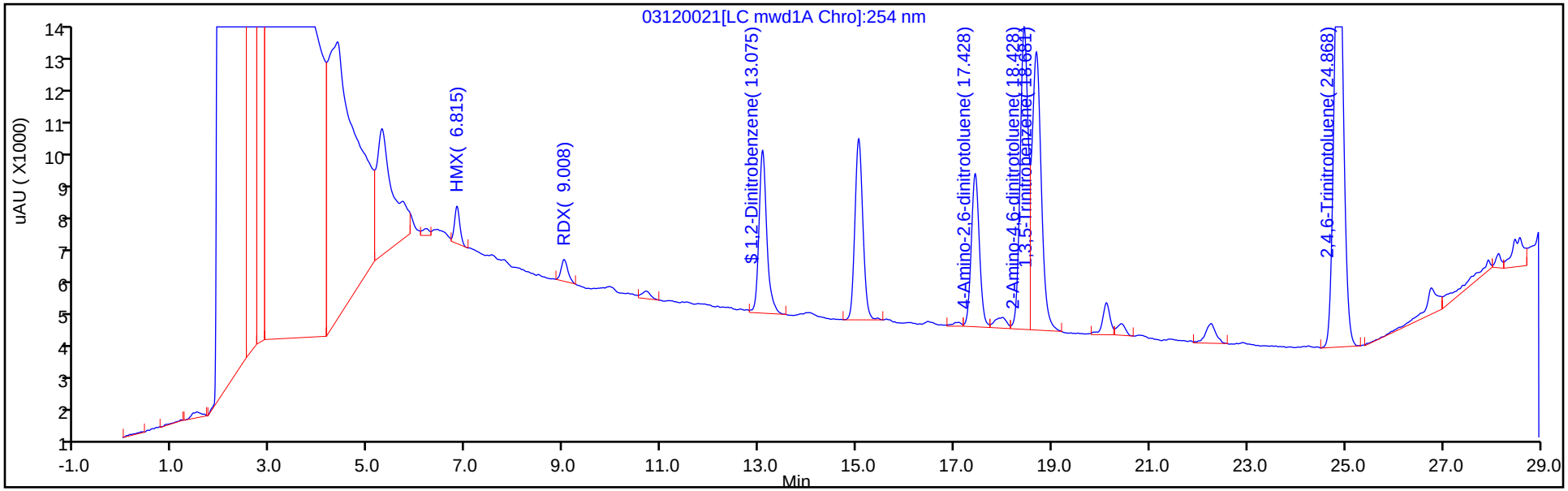
Report Date: 15-Mar-2022 16:12:06 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

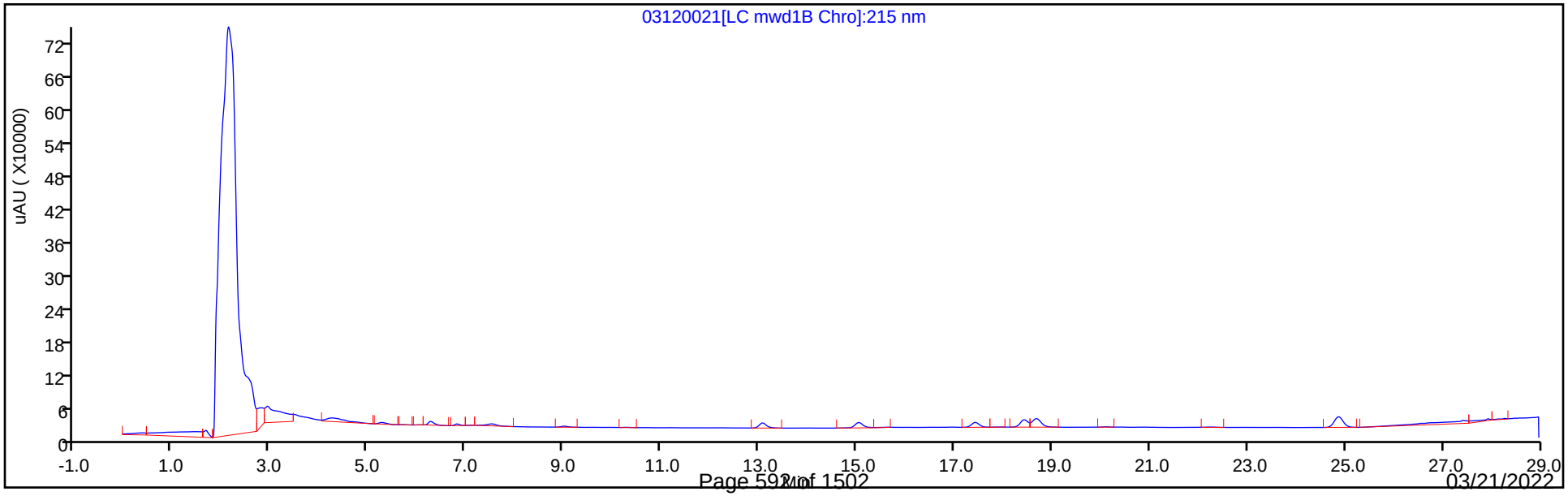
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120021.D

Injection Date:	12-Mar-2022 19:01:35	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159332-A-6-A	Lab Sample ID:	280-159332-6	Worklist Smp#:	21
Client ID:	PZ020-8				
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
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120021.D				
Lims ID:	280-159332-A-6-A				
Client ID:	PZ020-8				
Sample Type:	Client				
Inject. Date:	12-Mar-2022 19:01:35	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-A-6-A				
Misc. Info.:	280-0109194-021				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-Mar-2022 16:12:02	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:	CTX1624				
First Level Reviewer: zhangji		Date:	15-Mar-2022 16:11:09		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2151	107.54

Manual Integration/User Assign Peak Report

Eurofins Denver

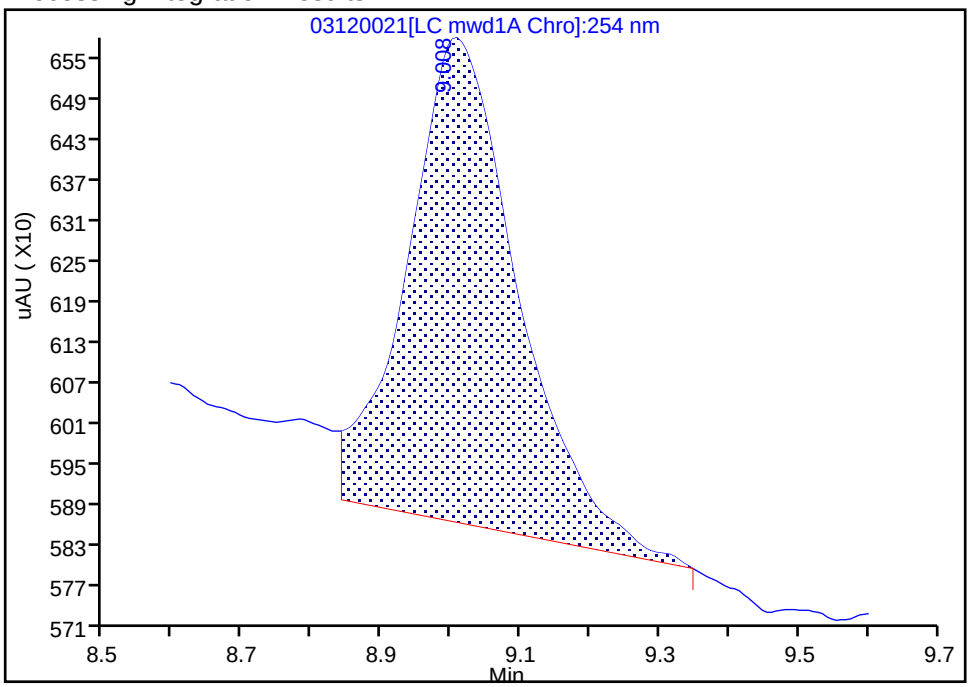
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120021.D				
Injection Date:	12-Mar-2022 19:01:35	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-A-6-A	Lab Sample ID:	280-159332-6		
Client ID:	PZ020-8				
Operator ID:	JZ	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. 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

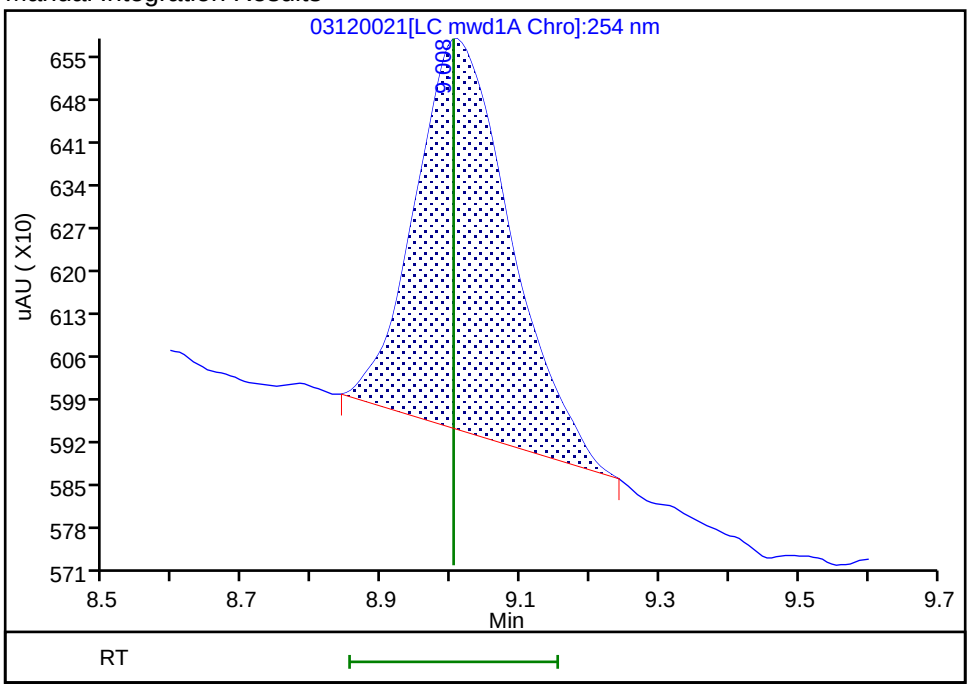
Processing Integration Results

RT: 9.01
Area: 8029
Amount: 0.041316
Amount Units: ug/ml



Manual Integration Results

RT: 9.01
Area: 6170
Amount: 0.031750
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 16:11:01
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0077-8 | Lab Sample ID: 280-159332-7

Matrix: Water | Lab File ID: 03100060.D

Analysis Method: 8330A | Date Collected: 03/01/2022 14:40

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 485.7(mL) | Date Analyzed: 03/11/2022 10:12

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.: 568287 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.8	M	0.22	0.21	0.087
118-96-7	2,4,6-Trinitrotoluene	4.2		0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	0.082	U M	0.10	0.082	0.028
606-20-2	2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	2.6		0.11	0.10	0.052
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.088
99-08-1	3-Nitrotoluene	0.41	U	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	2.7		0.15	0.12	0.059
2691-41-0	HMX	0.21	U	0.22	0.21	0.090
5755-27-1	MNX	0.41	U M	2.1	0.41	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.094
121-82-4	RDX	0.50	M J1	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	89	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\03100060.D
Lims ID: 280-159332-A-7-A
Client ID: G0077-8
Sample Type: Client
Inject. Date: 11-Mar-2022 10:12:08 ALS Bottle#: 60 Worklist Smp#: 60
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-A-7-A
Misc. Info.: 280-0109139-060
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 11-Mar-2022 13:57:00 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: CTX1614

First Level Reviewer: zhangji Date: 11-Mar-2022 13:56:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.593			ND	
7 MNX	1		7.209			ND	U
8 RDX	1	7.583	7.587	-0.004	5027	0.0485	M
$ 10 1,2-Dinitrobenzene	1	8.529	8.533	-0.004	22181	0.1779	M
11 1,3,5-Trinitrobenzene	1	8.656	8.660	-0.004	58753	0.2694	M
12 1,3-Dinitrobenzene	1	9.296	9.280	0.016	5519	0.0191	M
13 Nitrobenzene	1		9.667			ND	
15 Tetryl	1		9.987			ND	U
17 2,4,6-Trinitrotoluene	1	10.883	10.893	-0.010	82975	0.4093	
18 4-Amino-2,6-dinitrotoluene	1	11.063	11.080	-0.017	39766	0.2634	
19 2-Amino-4,6-dinitrotoluene	1	11.316	11.327	-0.011	51816	0.2563	
20 2,6-Dinitrotoluene	1		11.500			ND	
21 2,4-Dinitrotoluene	1		11.667			ND	U
22 o-Nitrotoluene	1		12.513			ND	
23 p-Nitrotoluene	1	12.916	12.940	-0.024	2542	0.0239	
24 m-Nitrotoluene	1		13.507			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

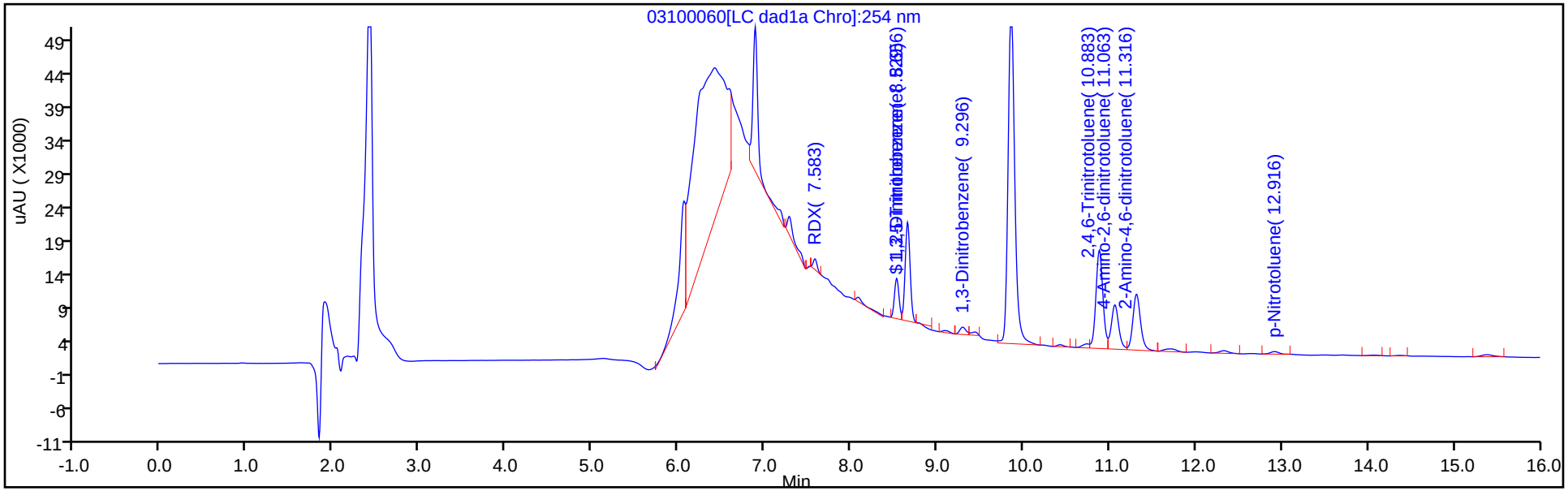
Report Date: 11-Mar-2022 13:57:01 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

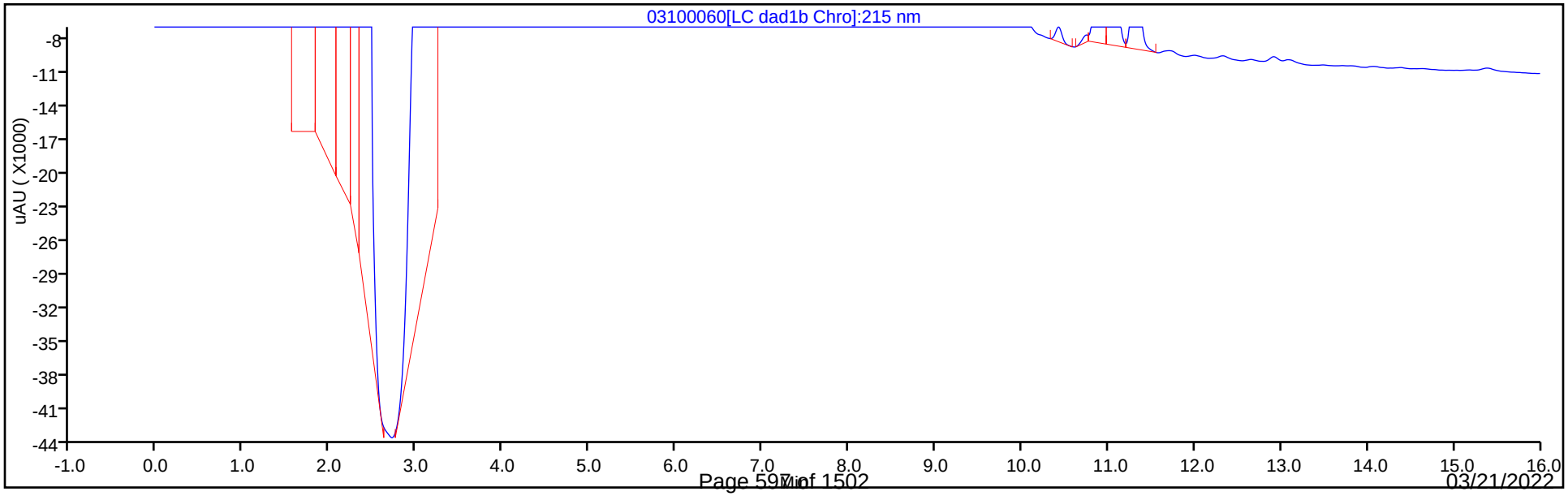
Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100060.d

Injection Date:	11-Mar-2022 10:12:08	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159332-A-7-A	Lab Sample ID:	280-159332-7	Worklist Smp#:	60
Client ID:	G0077-8				
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\20220310-109139.b\03100060.D				
Lims ID:	280-159332-A-7-A				
Client ID:	G0077-8				
Sample Type:	Client				
Inject. Date:	11-Mar-2022 10:12:08	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-A-7-A				
Misc. Info.:	280-0109139-060				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	11-Mar-2022 13:57:00	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:	CTX1614				

First Level Reviewer: zhangji Date: 11-Mar-2022 13:56:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1779	88.94

Manual Integration/User Assign Peak Report

Eurofins Denver

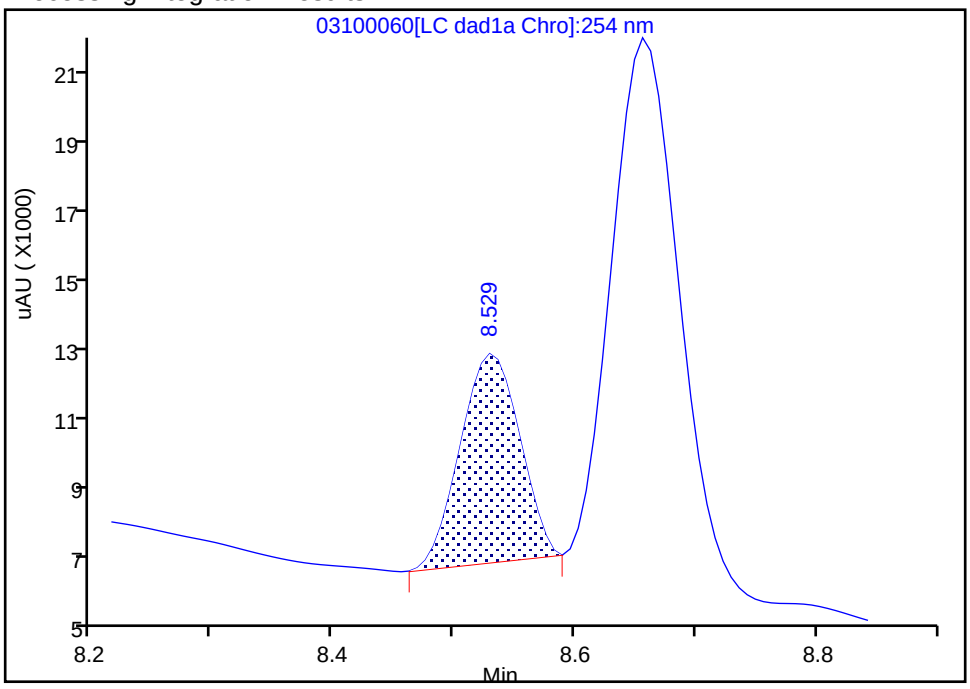
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100060.d				
Injection Date:	11-Mar-2022 10:12:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-7-A	Lab Sample ID:	280-159332-7		
Client ID:	G0077-8				
Operator ID:	JZ	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. 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

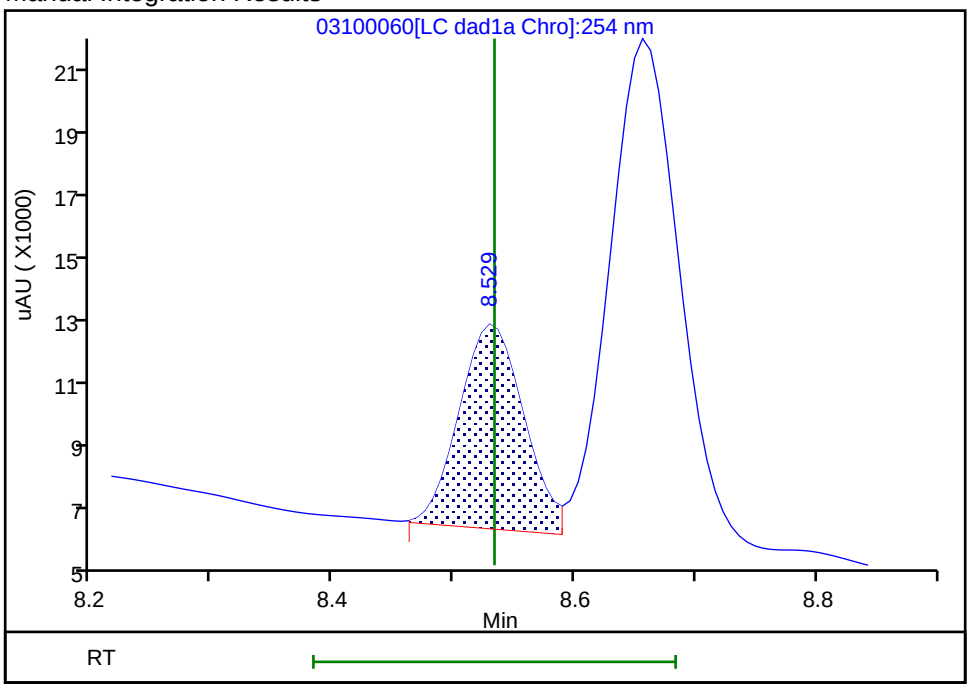
Processing Integration Results

RT: 8.53
Area: 18935
Amount: 0.151847
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 22181
Amount: 0.177878
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:56:09
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

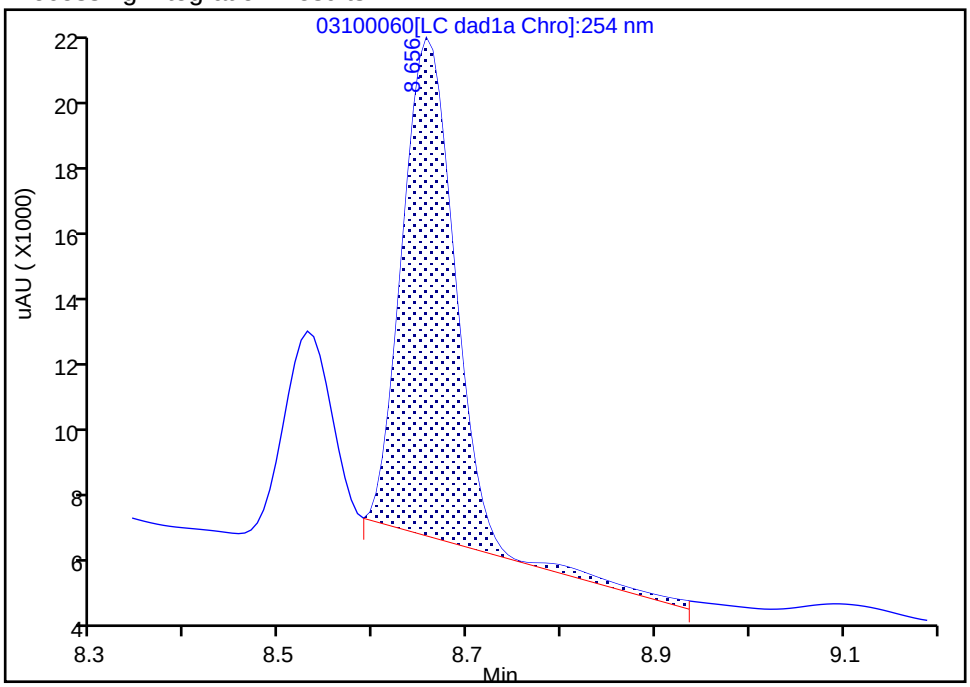
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100060.d				
Injection Date:	11-Mar-2022 10:12:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-7-A	Lab Sample ID:	280-159332-7		
Client ID:	G0077-8				
Operator ID:	JZ	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. 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

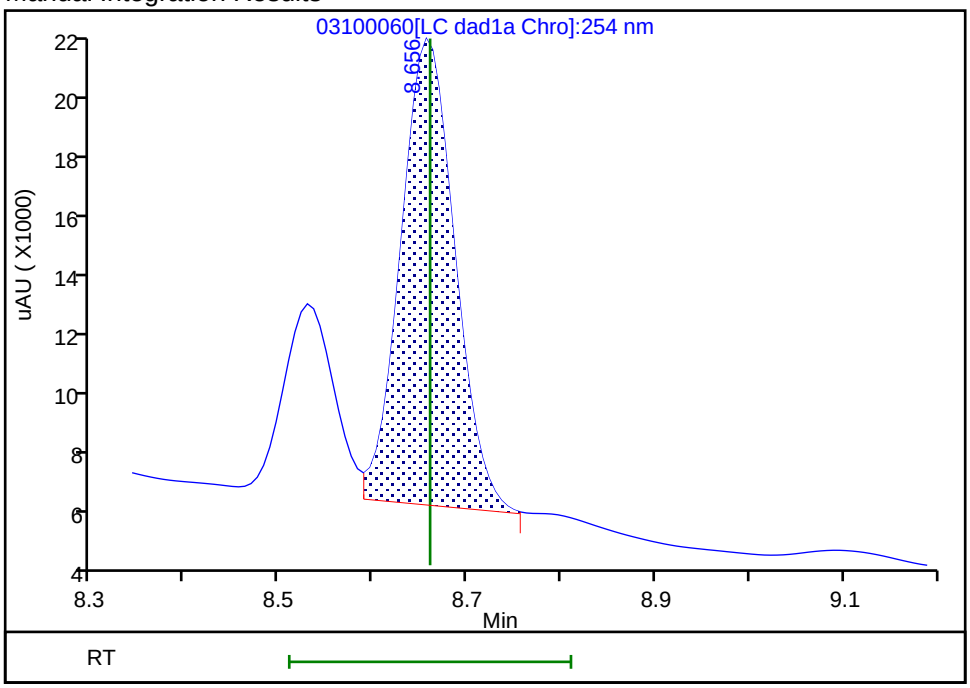
Processing Integration Results

RT: 8.66
Area: 56220
Amount: 0.257777
Amount Units: ug/mL



Manual Integration Results

RT: 8.66
Area: 58753
Amount: 0.269391
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:56:12

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

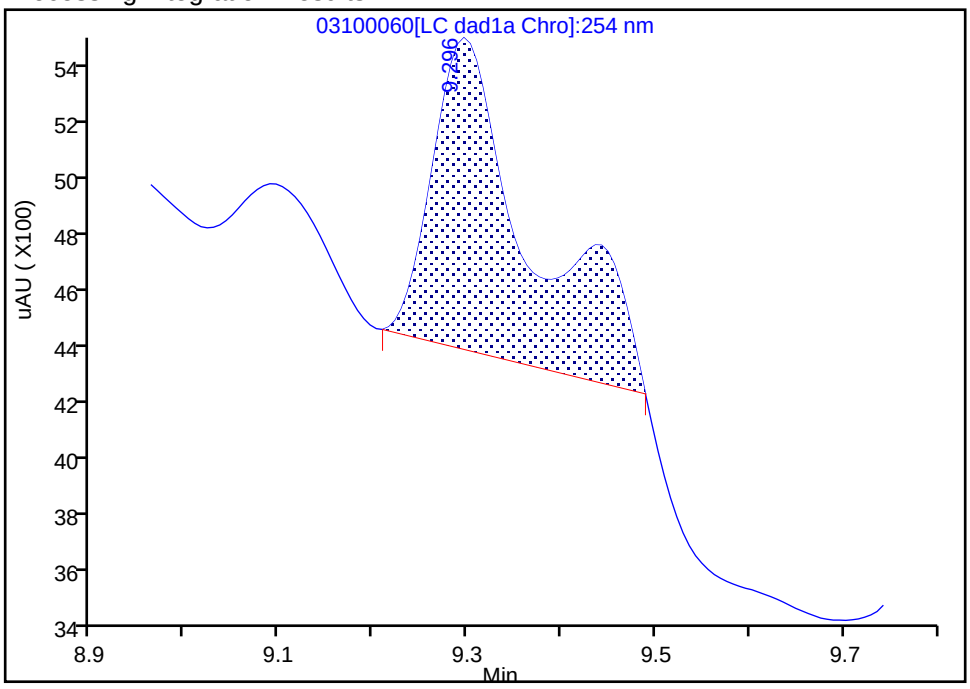
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100060.d				
Injection Date:	11-Mar-2022 10:12:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-7-A	Lab Sample ID:	280-159332-7		
Client ID:	G0077-8				
Operator ID:	JZ	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. 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

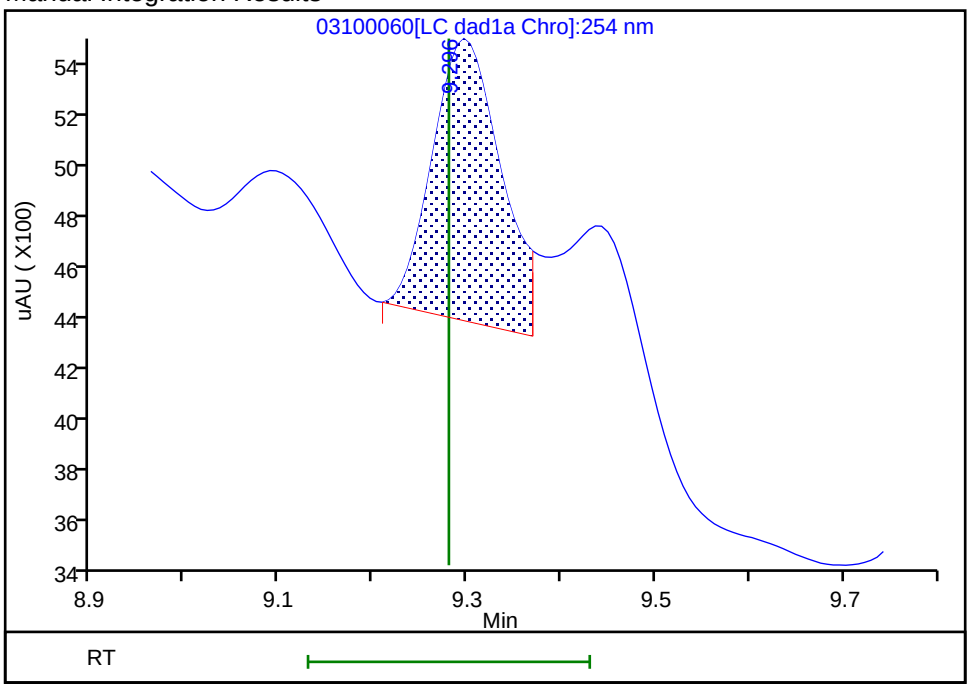
Processing Integration Results

RT: 9.30
Area: 8004
Amount: 0.027753
Amount Units: ug/mL



Manual Integration Results

RT: 9.30
Area: 5519
Amount: 0.019137
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:56:20

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

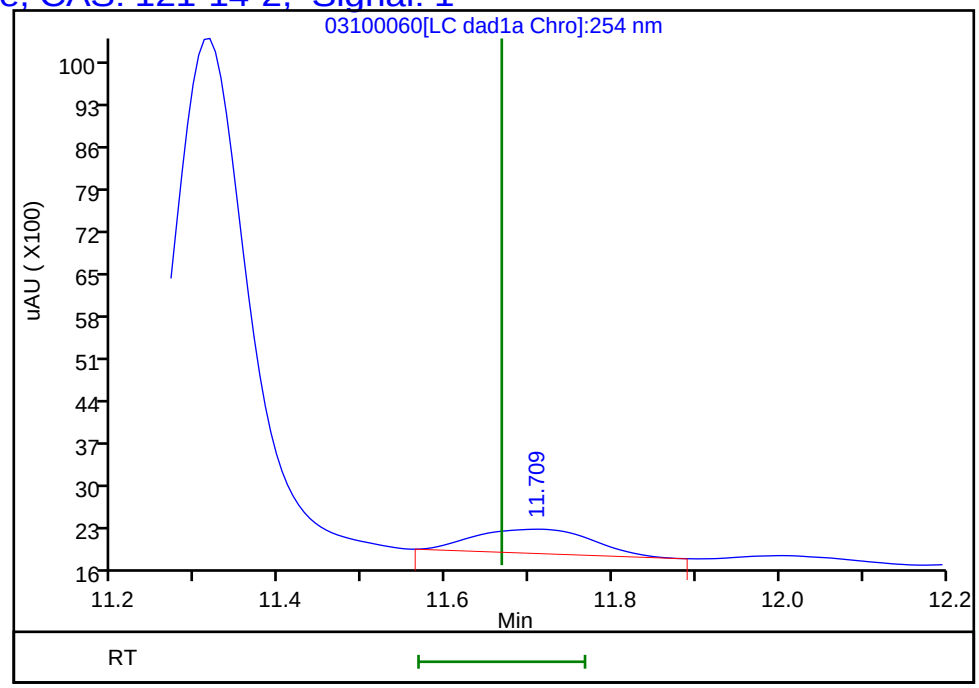
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100060.d
Injection Date: 11-Mar-2022 10:12:08 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-A-7-A Lab Sample ID: 280-159332-7
Client ID: G0077-8
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

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 11.71
Response: 3936
Amount: 0.013603



Reviewer: zhangji, 11-Mar-2022 13:56:33
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

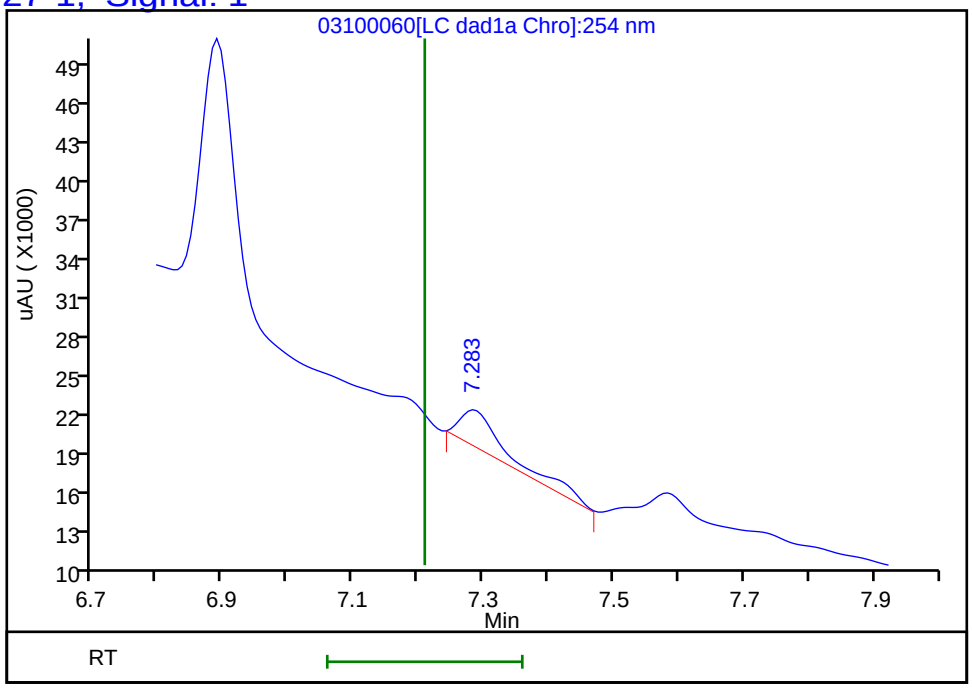
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100060.d				
Injection Date:	11-Mar-2022 10:12:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-7-A	Lab Sample ID:	280-159332-7		
Client ID:	G0077-8				
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: 7.28
Response: 14550
Amount: 0.115480



Reviewer: zhangji, 11-Mar-2022 13:56:33
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

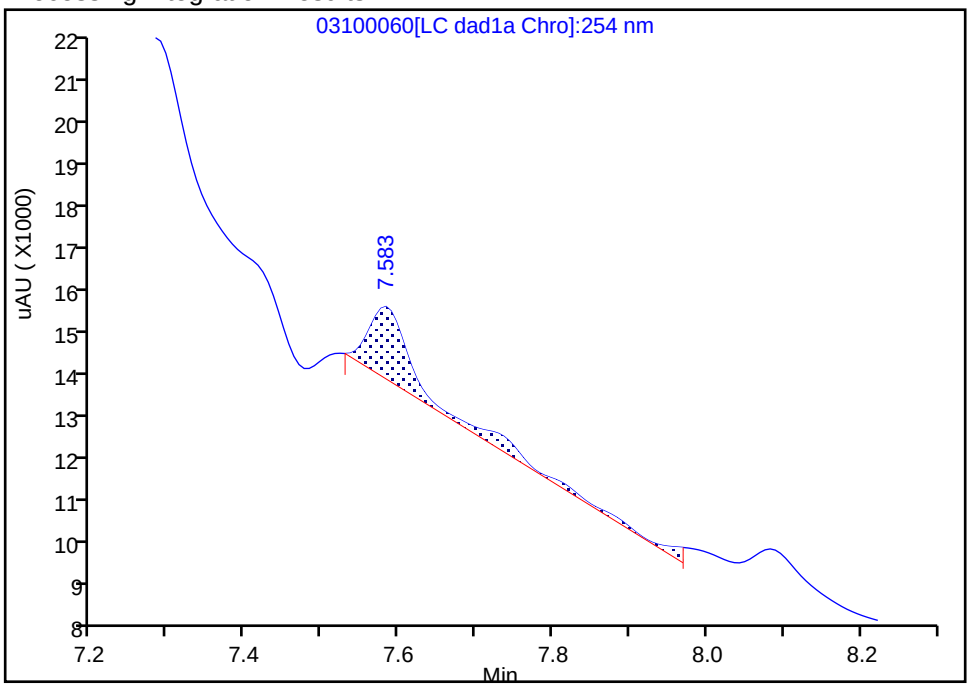
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100060.d				
Injection Date:	11-Mar-2022 10:12:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-7-A	Lab Sample ID:	280-159332-7		
Client ID:	G0077-8				
Operator ID:	JZ	ALS Bottle#:	60	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. 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

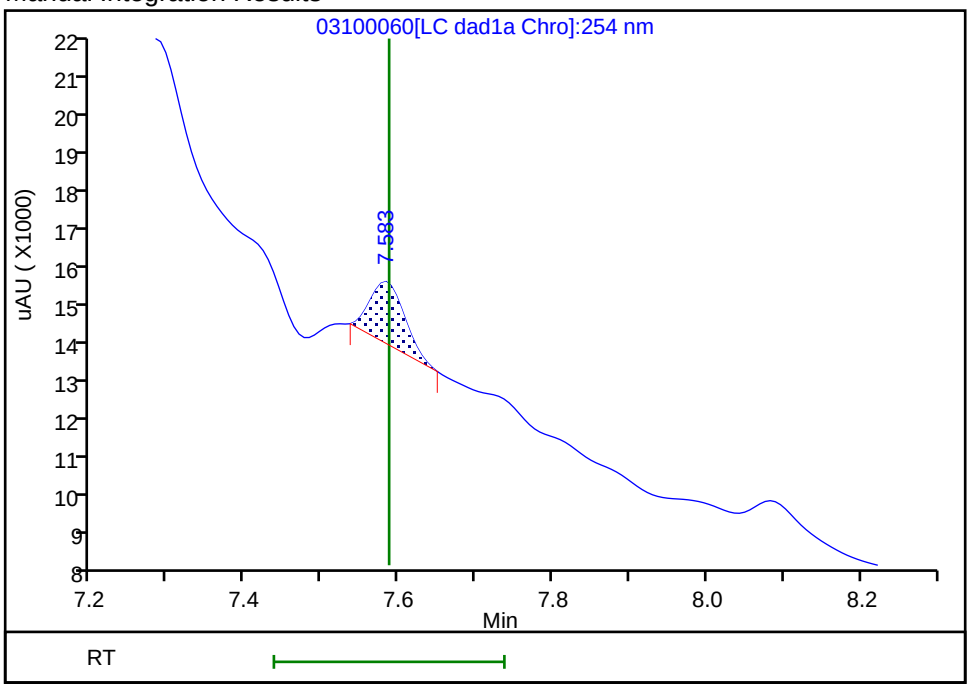
Processing Integration Results

RT: 7.58
Area: 8209
Amount: 0.079230
Amount Units: ug/mL



Manual Integration Results

RT: 7.58
Area: 5027
Amount: 0.048519
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:56:04
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

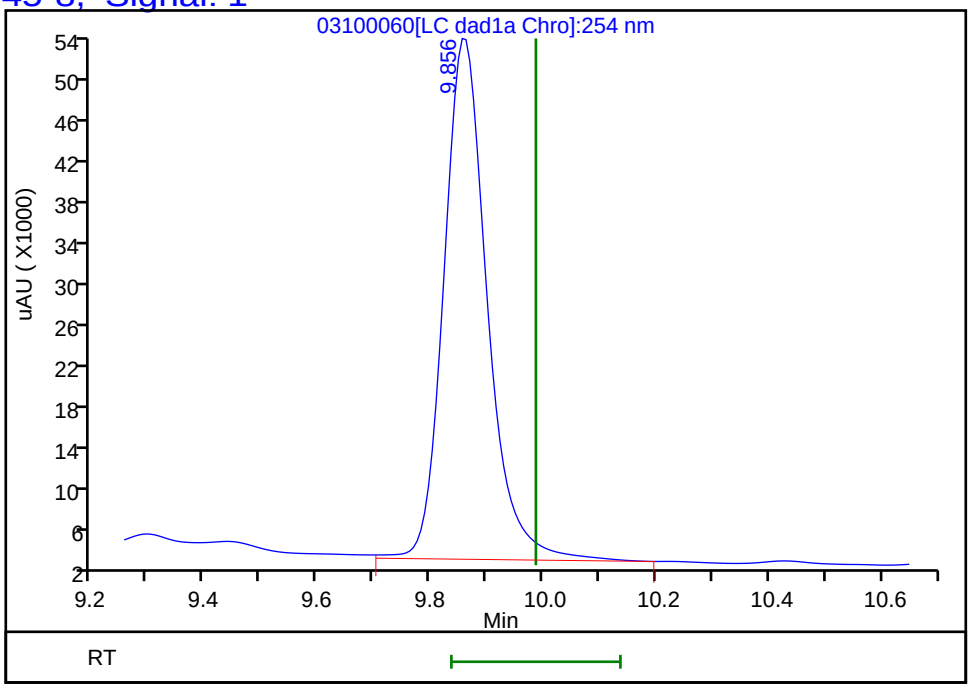
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100060.d
Injection Date: 11-Mar-2022 10:12:08 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-A-7-A Lab Sample ID: 280-159332-7
Client ID: G0077-8
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: 9.86
Response: 271195
Amount: 1.589964



Reviewer: zhangji, 11-Mar-2022 13:56:33
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0077-8 | Lab Sample ID: 280-159332-7

Matrix: Water | Lab File ID: 03120022.D

Analysis Method: 8330A | Date Collected: 03/01/2022 14:40

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 485.7(mL) | Date Analyzed: 03/12/2022 19:36

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.: 568485 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038
99-99-0	4-Nitrotoluene	0.41	U	0.42	0.41	0.10
121-82-4	*RDX*	*1.0*	*M J1*	*0.22*	0.21	*0.053*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	108		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120022.D
Lims ID: 280-159332-A-7-A
Client ID: G0077-8
Sample Type: Client
Inject. Date: 12-Mar-2022 19:36:39 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-A-7-A
Misc. Info.: 280-0109194-022
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-Mar-2022 16:12:02 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: CTX1624

First Level Reviewer: zhangji Date: 15-Mar-2022 16:11:39

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.795	6.816	-0.021	5918	0.0356	
	6 MNX	1		7.537			ND	7
	8 RDX	1	8.982	9.003	-0.021	18870	0.0971	M
	9 Nitrobenzene	1		11.883			ND	
$	10 1,2-Dinitrobenzene	1	13.035	13.056	-0.021	54106	0.2166	
	12 1,3-Dinitrobenzene	1		15.410			ND	
	14 o-Nitrotoluene	1		16.530			ND	7
	16 p-Nitrotoluene	1		16.836			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.448	17.443	0.005	76629	0.2870	
	18 m-Nitrotoluene	1		17.790			ND	U
	19 2-Amino-4,6-dinitrotoluene	1	18.461	18.450	0.011	89765	0.2490	
	20 1,3,5-Trinitrobenzene	1	18.701	18.683	0.018	126808	0.3052	
	21 2,6-Dinitrotoluene	1		19.916			ND	
	22 2,4-Dinitrotoluene	1	20.461	20.436	0.025	14042	0.0141	
	23 Tetryl	1		24.096			ND	U
	24 2,4,6-Trinitrotoluene	1	24.895	24.876	0.019	151184	0.4095	

QC Flag Legend

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

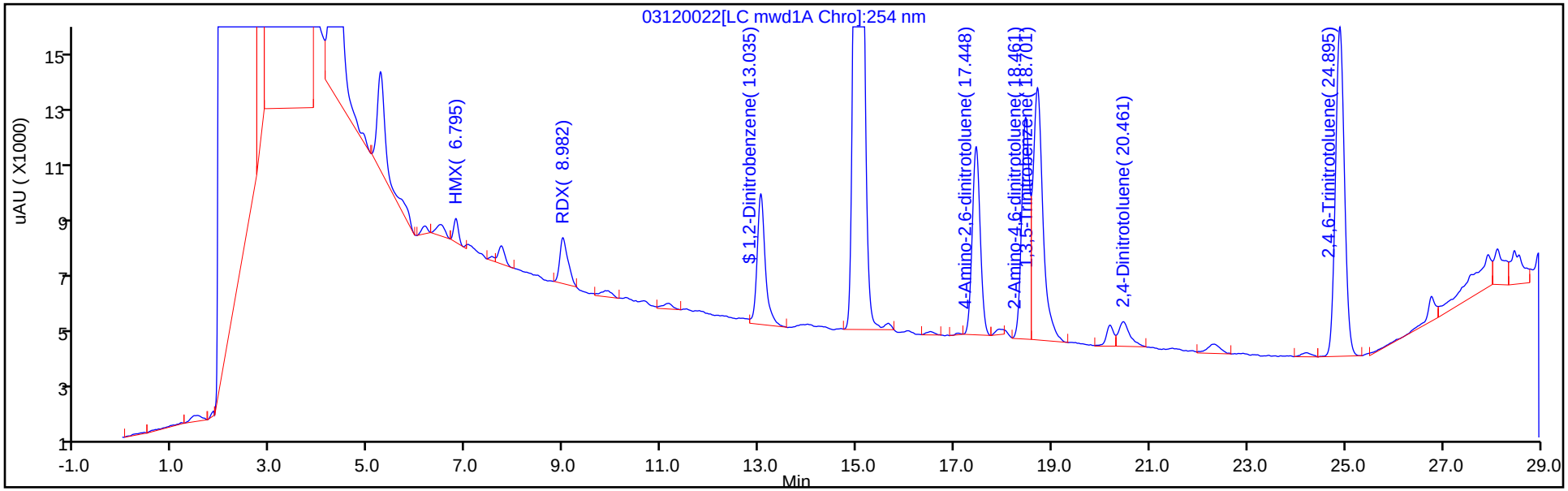
Report Date: 15-Mar-2022 16:12:07 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

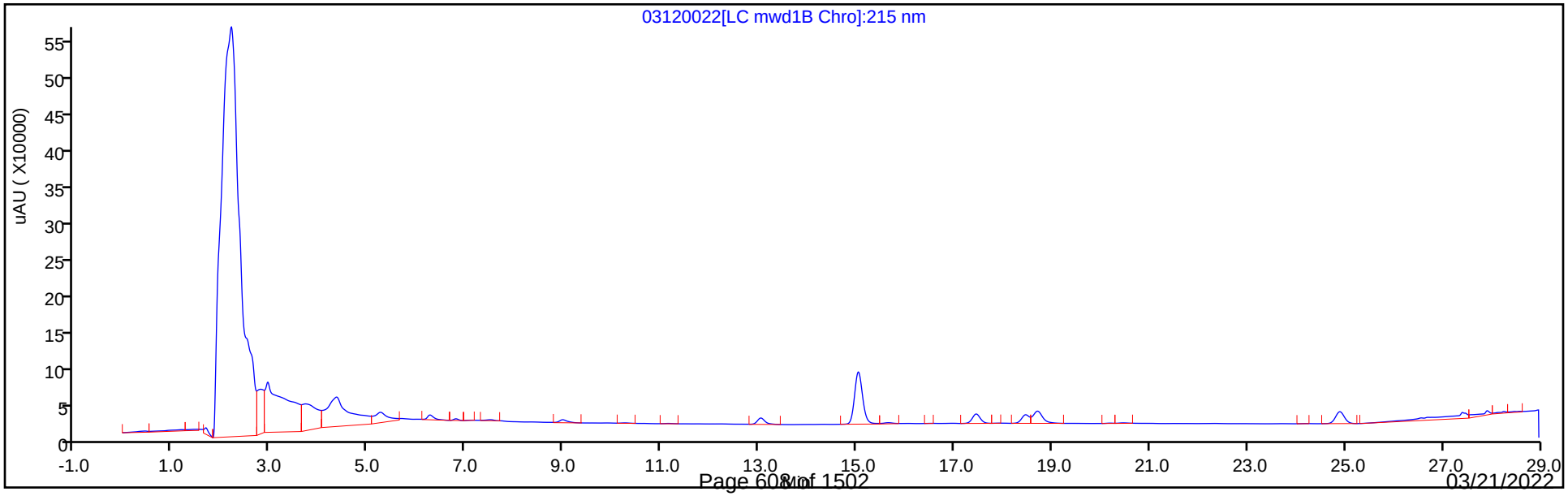
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120022.D

Injection Date:	12-Mar-2022 19:36:39	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159332-A-7-A	Lab Sample ID:	280-159332-7	Worklist Smp#:	22
Client ID:	G0077-8				
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
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120022.D				
Lims ID:	280-159332-A-7-A				
Client ID:	G0077-8				
Sample Type:	Client				
Inject. Date:	12-Mar-2022 19:36:39	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-A-7-A				
Misc. Info.:	280-0109194-022				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-Mar-2022 16:12:02	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:	CTX1624				
First Level Reviewer: zhangji		Date:	15-Mar-2022 16:11:39		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2166	108.32

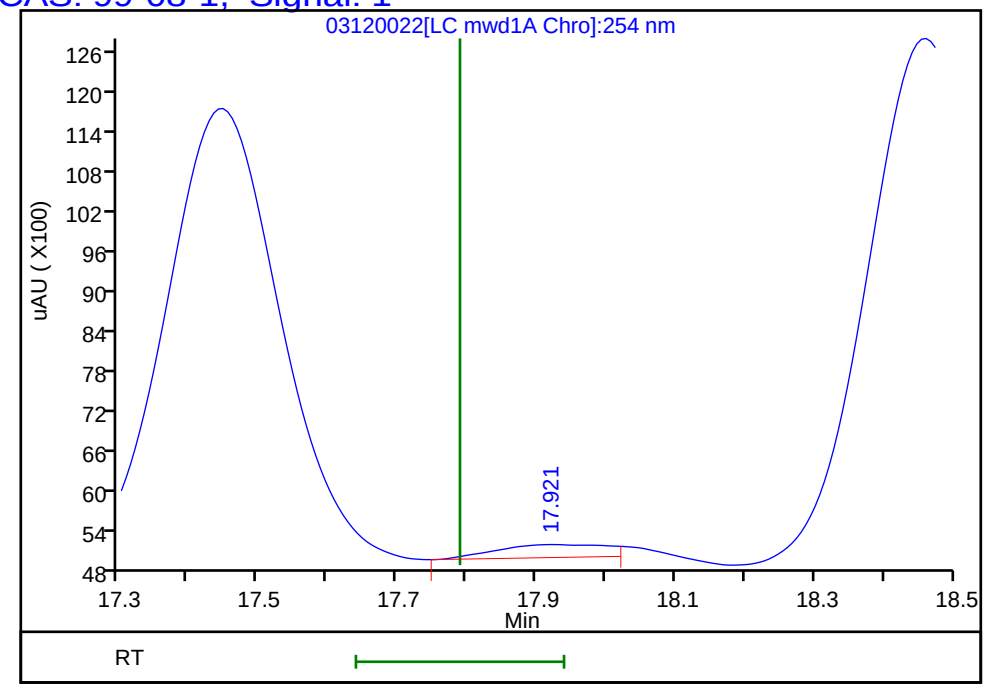
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120022.D				
Injection Date:	12-Mar-2022 19:36:39	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-A-7-A	Lab Sample ID:	280-159332-7		
Client ID:	G0077-8				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 17.92
Response: 2133
Amount: 0.008731



Reviewer: zhangji, 15-Mar-2022 16:11:39
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

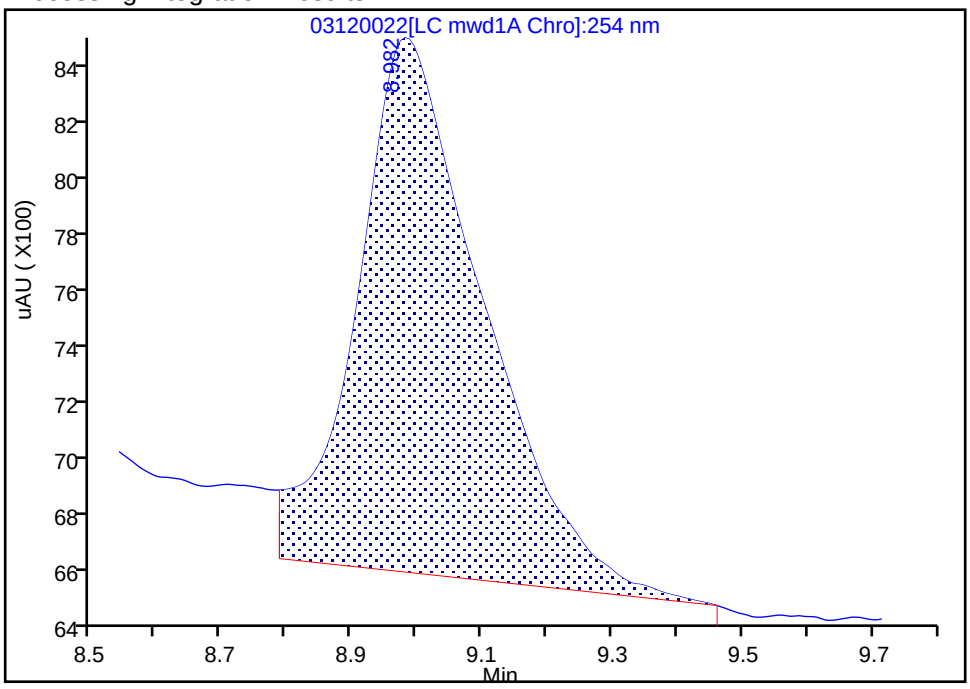
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120022.D				
Injection Date:	12-Mar-2022 19:36:39	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-A-7-A	Lab Sample ID:	280-159332-7		
Client ID:	G0077-8				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. 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

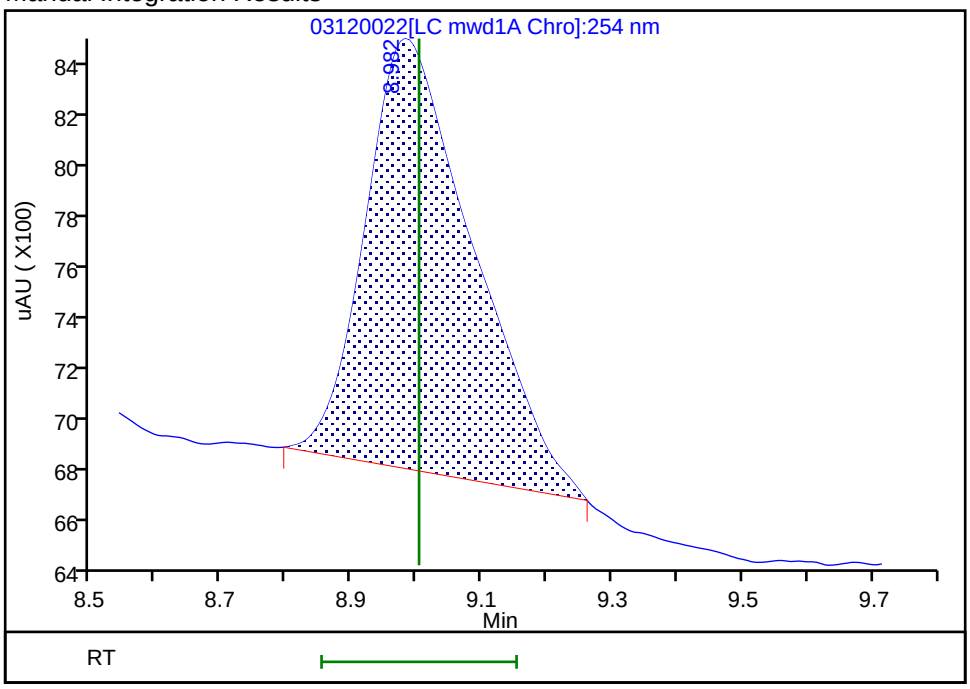
Processing Integration Results

RT: 8.98
Area: 24894
Amount: 0.128101
Amount Units: ug/ml



Manual Integration Results

RT: 8.98
Area: 18870
Amount: 0.097102
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 16:11:18

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

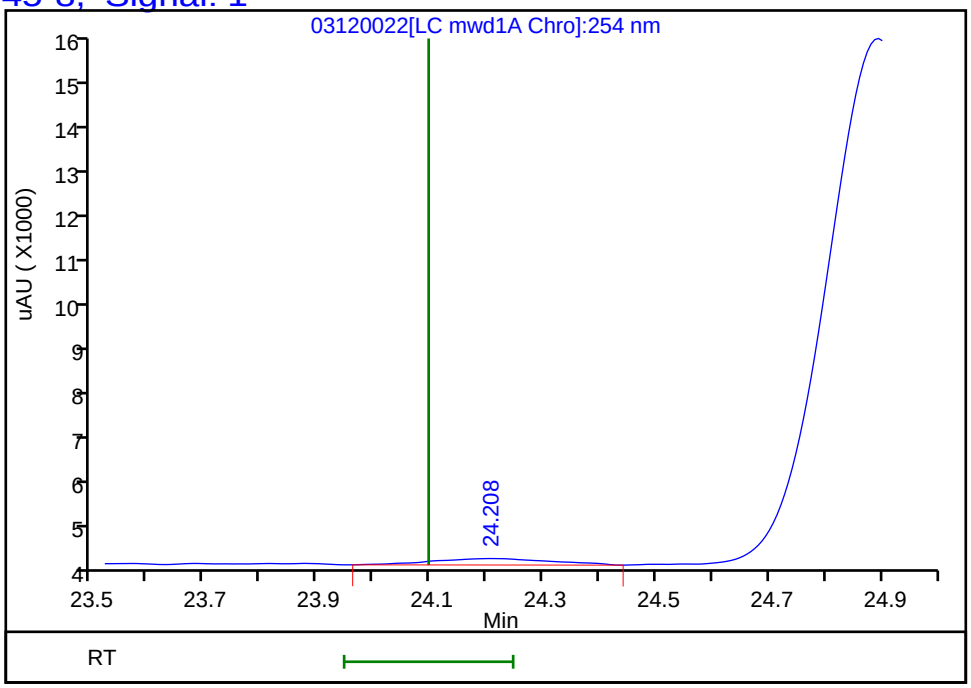
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120022.D				
Injection Date:	12-Mar-2022 19:36:39	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-A-7-A	Lab Sample ID:	280-159332-7		
Client ID:	G0077-8				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

RT: 24.21
Response: 2105
Amount: 0.006152



Reviewer: zhangji, 15-Mar-2022 16:11:39
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0078-8 | Lab Sample ID: 280-159332-8

Matrix: Water | Lab File ID: 03110019.D

Analysis Method: 8330A | Date Collected: 03/01/2022 16:00

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 470.2(mL) | Date Analyzed: 03/11/2022 18:14

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.: 568433 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.089
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029
606-20-2	2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.091
99-08-1	3-Nitrotoluene	0.43	U	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061
99-99-0	4-Nitrotoluene	0.43	U M	0.44	0.43	0.11
2691-41-0	HMX	0.21	U M	0.22	0.21	0.093
5755-27-1	MNX	0.43	U	2.1	0.43	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.097
121-82-4	RDX	0.21	U	0.22	0.21	0.055
479-45-8	Tetryl	0.11	U	0.12	0.11	0.034

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110019.D
Lims ID: 280-159332-B-8-A
Client ID: G0078-8
Sample Type: Client
Inject. Date: 11-Mar-2022 18:14:15 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-B-8-A
Misc. Info.: 280-0109174-019
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Mar-2022 10:32:08 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: CTX1616

First Level Reviewer: zhangji Date: 11-Mar-2022 18:45:39

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.595			ND	U
7 MNX	1		7.211			ND	
8 RDX	1		7.582			ND	
$ 10 1,2-Dinitrobenzene	1	8.537	8.529	0.008	24019	0.1926	M
11 1,3,5-Trinitrobenzene	1		8.655			ND	
12 1,3-Dinitrobenzene	1		9.282			ND	
13 Nitrobenzene	1		9.668			ND	
15 Tetryl	1		9.982			ND	
17 2,4,6-Trinitrotoluene	1		10.888			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.068			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.322			ND	
20 2,6-Dinitrotoluene	1		11.495			ND	
21 2,4-Dinitrotoluene	1		11.662			ND	
22 o-Nitrotoluene	1		12.508			ND	
23 p-Nitrotoluene	1	12.923	12.935	-0.012	922	0.008679	7M
24 m-Nitrotoluene	1		13.502			ND	7

QC Flag Legend

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

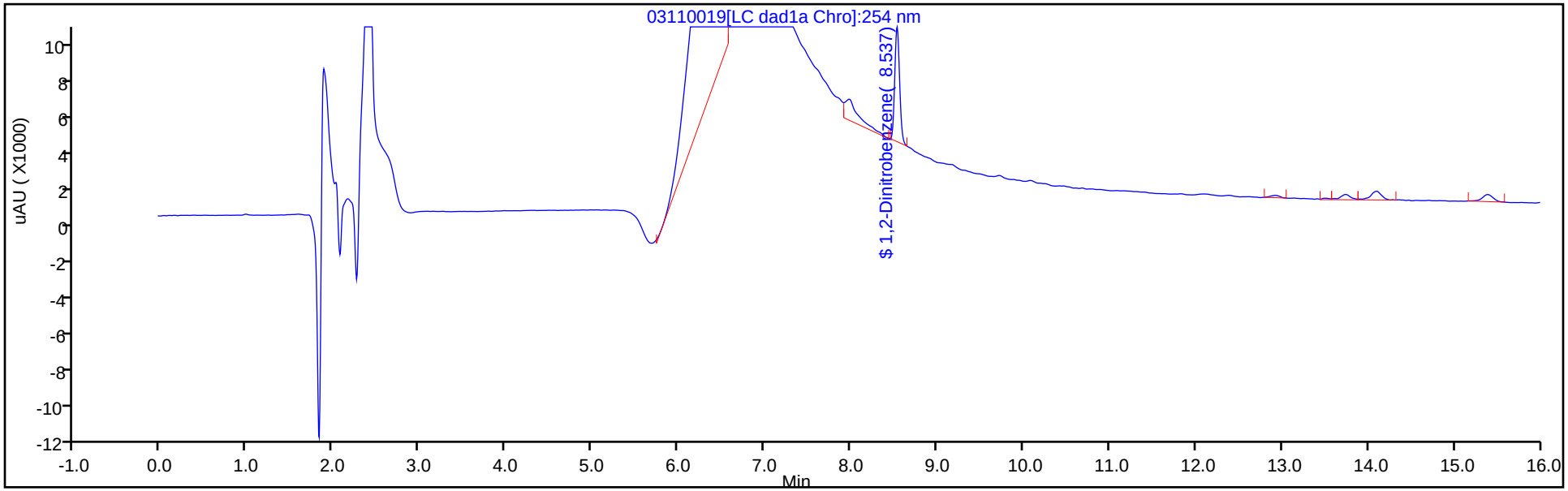
Report Date: 12-Mar-2022 10:32:11 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

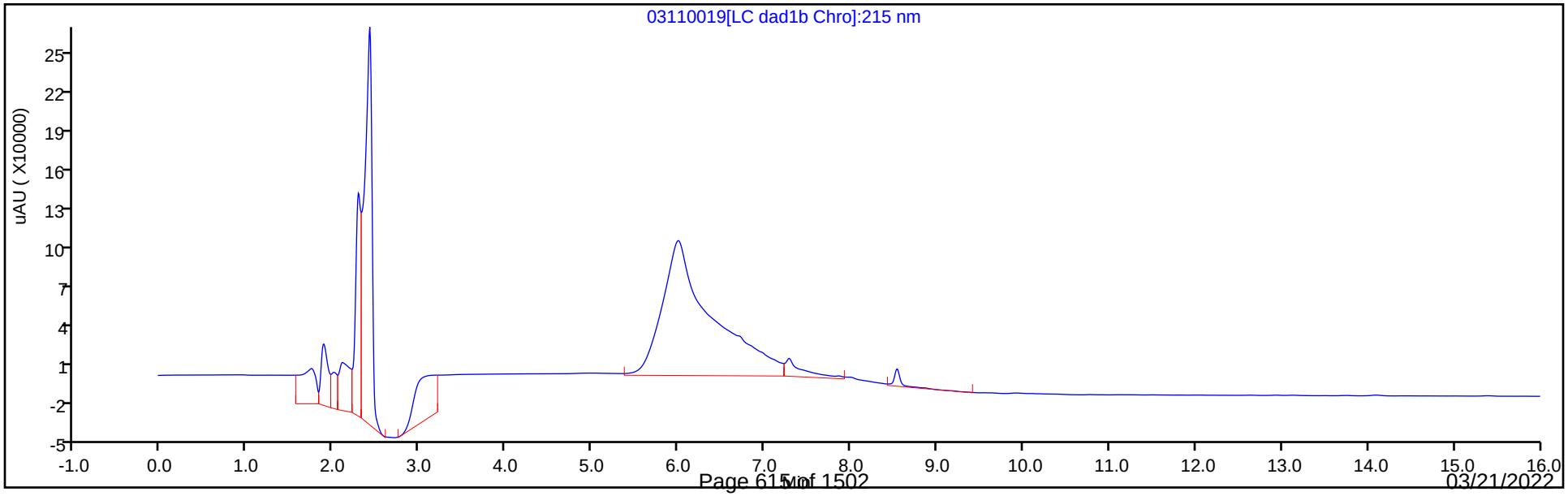
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110019.d

Injection Date:	11-Mar-2022 18:14:15	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159332-B-8-A	Lab Sample ID:	280-159332-8	Worklist Smp#:	19
Client ID:	G0078-8				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110019.D				
Lims ID:	280-159332-B-8-A				
Client ID:	G0078-8				
Sample Type:	Client				
Inject. Date:	11-Mar-2022 18:14:15	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-B-8-A				
Misc. Info.:	280-0109174-019				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2022 10:32:08	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:	CTX1616				

First Level Reviewer: zhangji Date: 11-Mar-2022 18:45:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1926	96.31

Manual Integration/User Assign Peak Report

Eurofins Denver

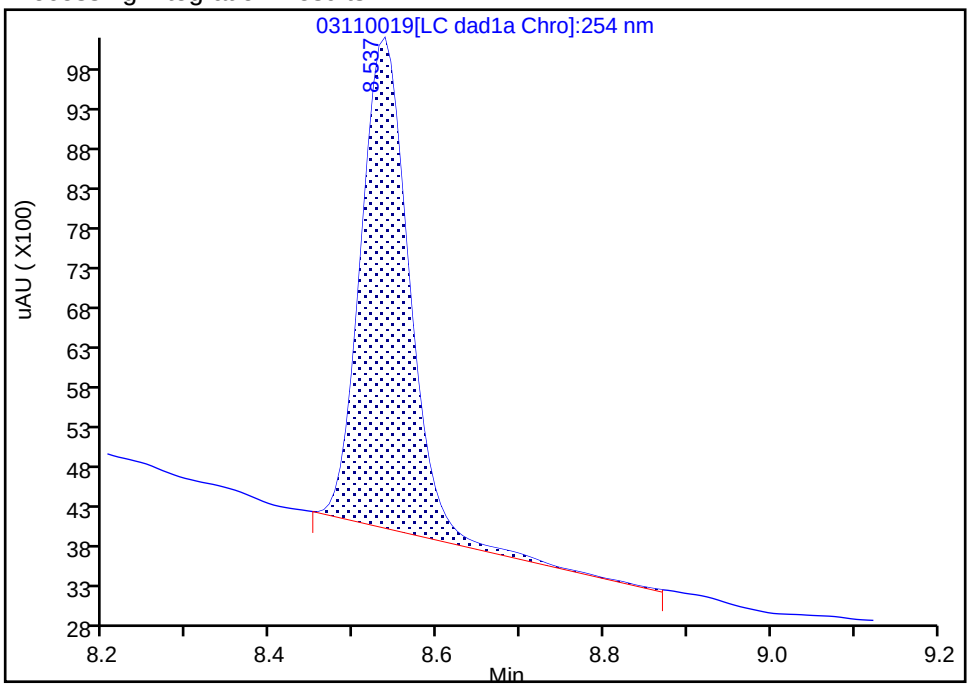
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110019.d				
Injection Date:	11-Mar-2022 18:14:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-8-A	Lab Sample ID:	280-159332-8		
Client ID:	G0078-8				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

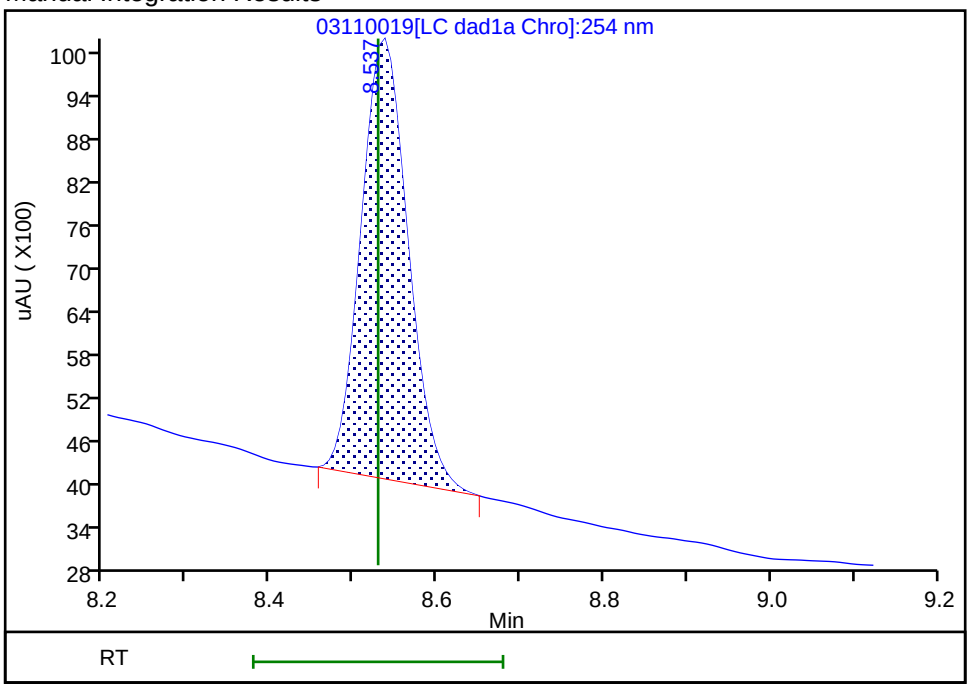
Processing Integration Results

RT: 8.54
Area: 25001
Amount: 0.200493
Amount Units: ug/mL



Manual Integration Results

RT: 8.54
Area: 24019
Amount: 0.192618
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 18:45:29

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

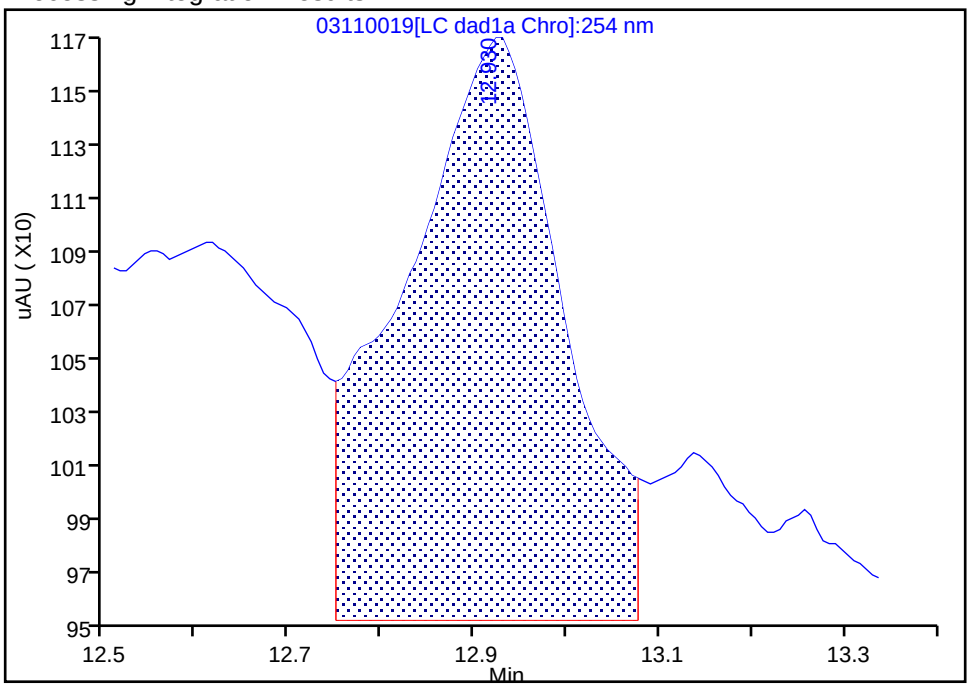
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110019.d				
Injection Date:	11-Mar-2022 18:14:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-8-A	Lab Sample ID:	280-159332-8		
Client ID:	G0078-8				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

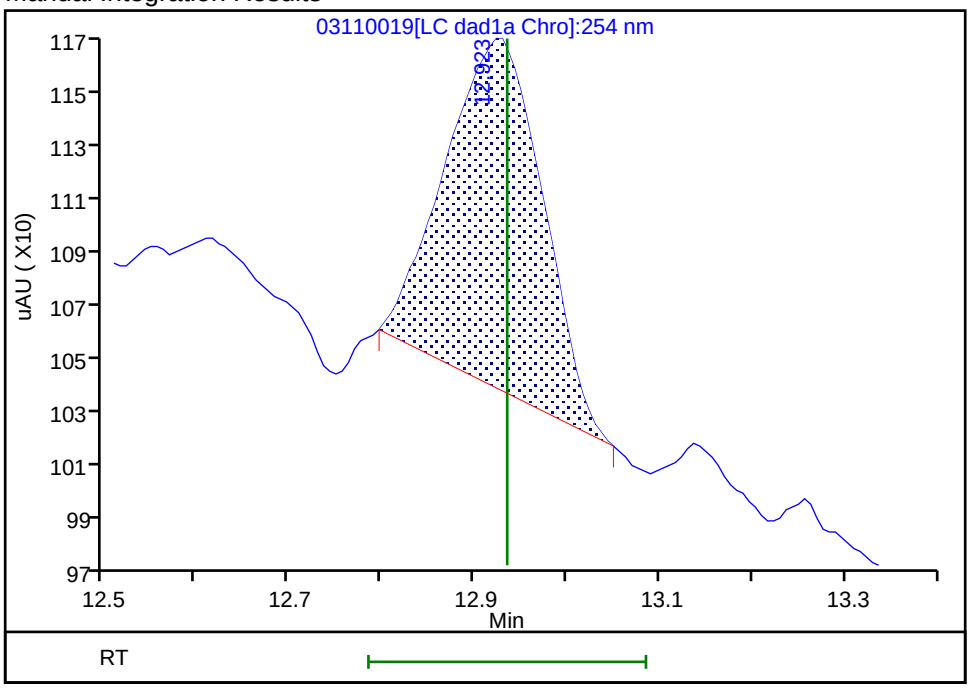
Processing Integration Results

RT: 12.93
Area: 2468
Amount: 0.023231
Amount Units: ug/mL



Manual Integration Results

RT: 12.92
Area: 922
Amount: 0.008679
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 18:45:33

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

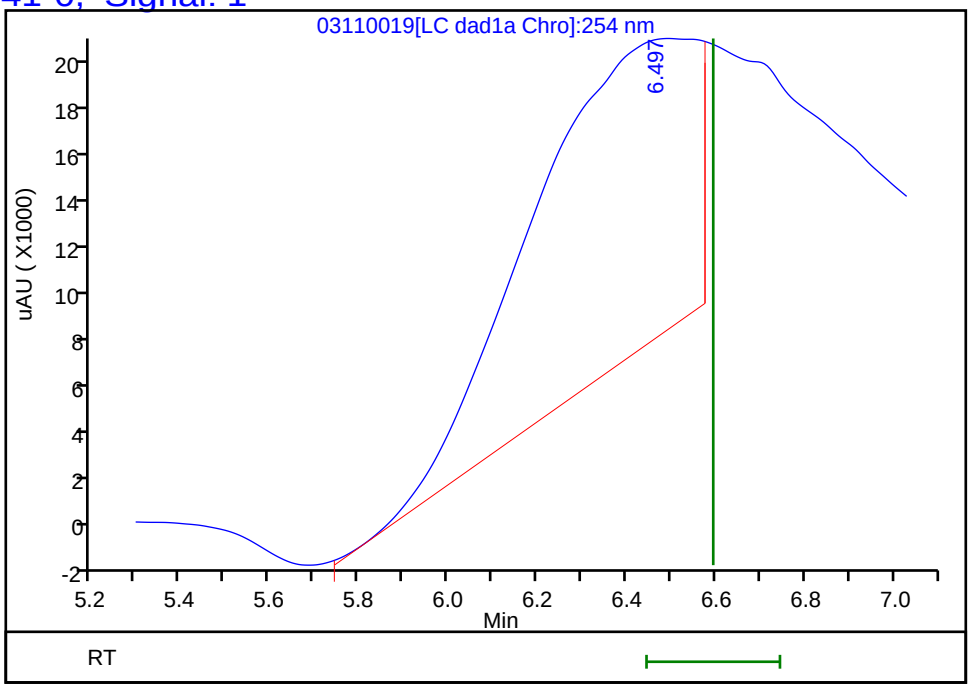
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110019.d
Injection Date: 11-Mar-2022 18:14:15 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-B-8-A Lab Sample ID: 280-159332-8
Client ID: G0078-8
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

RT: 6.50
Response: 328830
Amount: 3.922712



Reviewer: zhangji, 11-Mar-2022 18:45:39
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0094-8 | Lab Sample ID: 280-159332-9

Matrix: Water | Lab File ID: 03110020.D

Analysis Method: 8330A | Date Collected: 03/01/2022 10:00

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 476.9(mL) | Date Analyzed: 03/11/2022 18:37

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.: 568433 | 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	0.088
99-65-0	1,3-Dinitrobenzene	1.1	J1	0.12	0.10	0.039
121-14-2	2,4-Dinitrotoluene	0.084	U M	0.10	0.084	0.029
606-20-2	2,6-Dinitrotoluene	0.084	U	0.10	0.084	0.042
88-72-2	2-Nitrotoluene	0.21	U M	0.22	0.21	0.090
99-08-1	3-Nitrotoluene	0.42	U	0.42	0.42	0.20
2691-41-0	HMX	11	M	0.22	0.21	0.092
5755-27-1	MNX	9.1	M J1	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.095
121-82-4	RDX	9.0	M	0.22	0.21	0.054
479-45-8	Tetryl	0.10	U M	0.12	0.10	0.033

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110020.D
Lims ID: 280-159332-A-9-A
Client ID: G0094-8
Sample Type: Client
Inject. Date: 11-Mar-2022 18:37:13 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-A-9-A
Misc. Info.: 280-0109174-020
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Mar-2022 10:32:08 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: CTX1616

First Level Reviewer: zhangji Date: 11-Mar-2022 19:15:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.599	6.595	0.004	85891	1.02	M
7 MNX	1	7.253	7.211	0.042	109868	0.8720	M
8 RDX	1	7.586	7.582	0.004	89210	0.8610	M
$ 10 1,2-Dinitrobenzene	1	8.533	8.529	0.004	25737	0.2064	M
11 1,3,5-Trinitrobenzene	1		8.655			ND	U
12 1,3-Dinitrobenzene	1	9.273	9.282	-0.009	29359	0.1018	
13 Nitrobenzene	1		9.668			ND	
15 Tetryl	1		9.982			ND	U
17 2,4,6-Trinitrotoluene	1	10.893	10.888	0.005	860245	4.24	E
18 4-Amino-2,6-dinitrotoluene	1	11.079	11.068	0.011	832278	5.51	E
19 2-Amino-4,6-dinitrotoluene	1	11.326	11.322	0.004	997473	4.93	E
20 2,6-Dinitrotoluene	1		11.495			ND	
21 2,4-Dinitrotoluene	1		11.662			ND	U
22 o-Nitrotoluene	1		12.508			ND	U
23 p-Nitrotoluene	1	12.913	12.935	-0.022	4224	0.0398	
24 m-Nitrotoluene	1		13.502			ND	

QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated
U - Marked Undetected

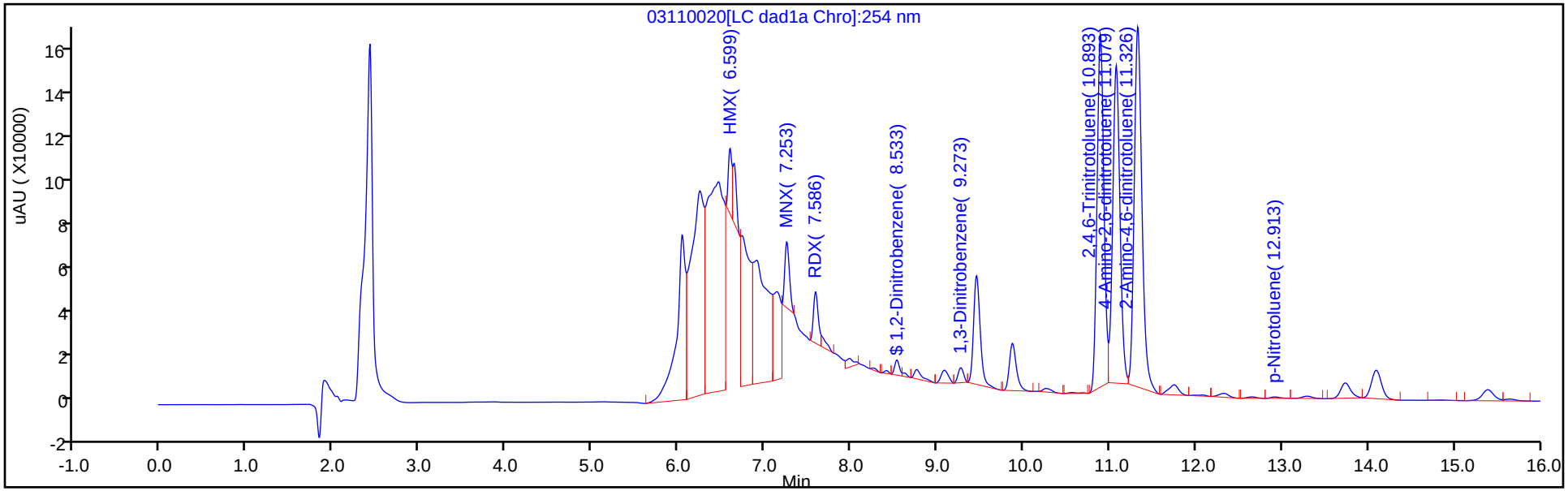
Report Date: 12-Mar-2022 10:32:11 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

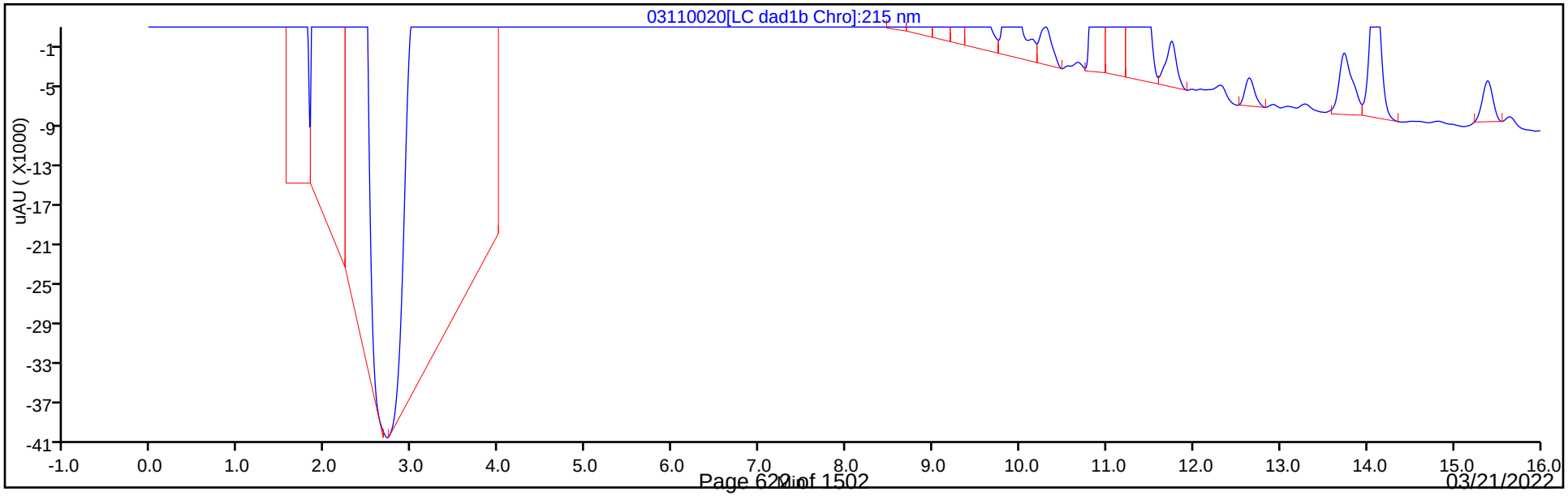
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110020.d

Injection Date:	11-Mar-2022 18:37:13	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159332-A-9-A	Lab Sample ID:	280-159332-9	Worklist Smp#:	20
Client ID:	G0094-8				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110020.D				
Lims ID:	280-159332-A-9-A				
Client ID:	G0094-8				
Sample Type:	Client				
Inject. Date:	11-Mar-2022 18:37:13	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-A-9-A				
Misc. Info.:	280-0109174-020				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2022 10:32:08	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:	CTX1616				

First Level Reviewer: zhangji Date: 11-Mar-2022 19:15:01

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2064	103.20

Manual Integration/User Assign Peak Report

Eurofins Denver

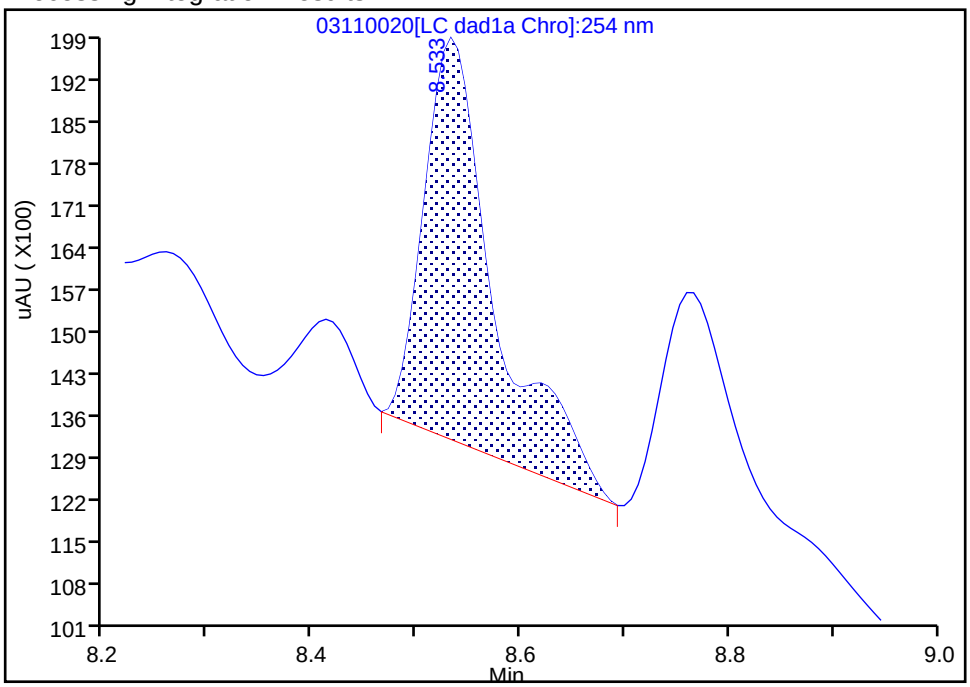
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110020.d				
Injection Date:	11-Mar-2022 18:37:13	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-9-A	Lab Sample ID:	280-159332-9		
Client ID:	G0094-8				
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

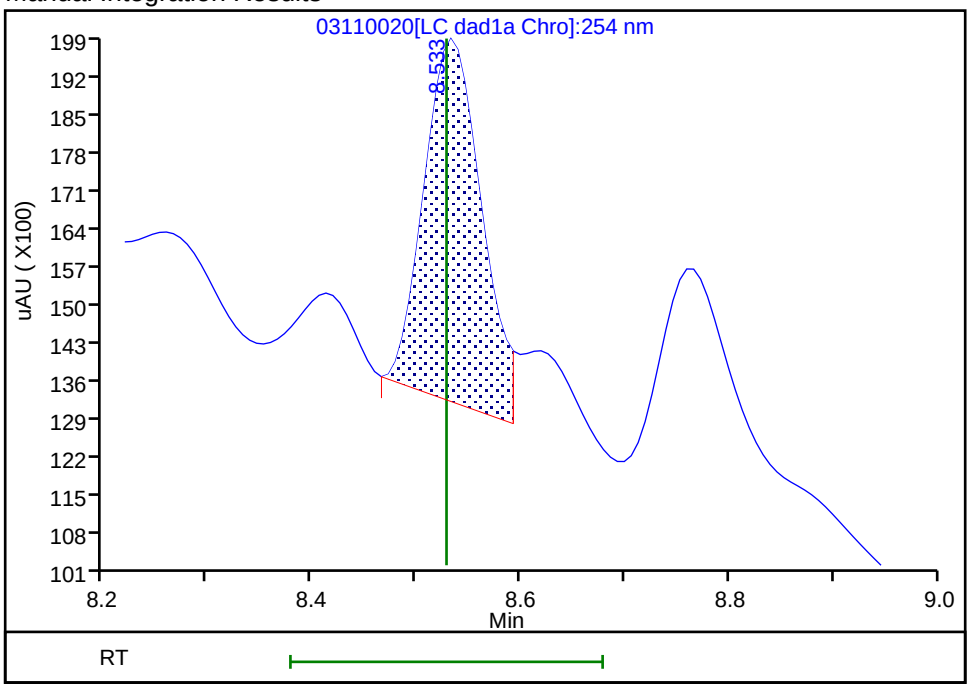
Processing Integration Results

RT: 8.53
Area: 31437
Amount: 0.252106
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 25737
Amount: 0.206395
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 19:14:23

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

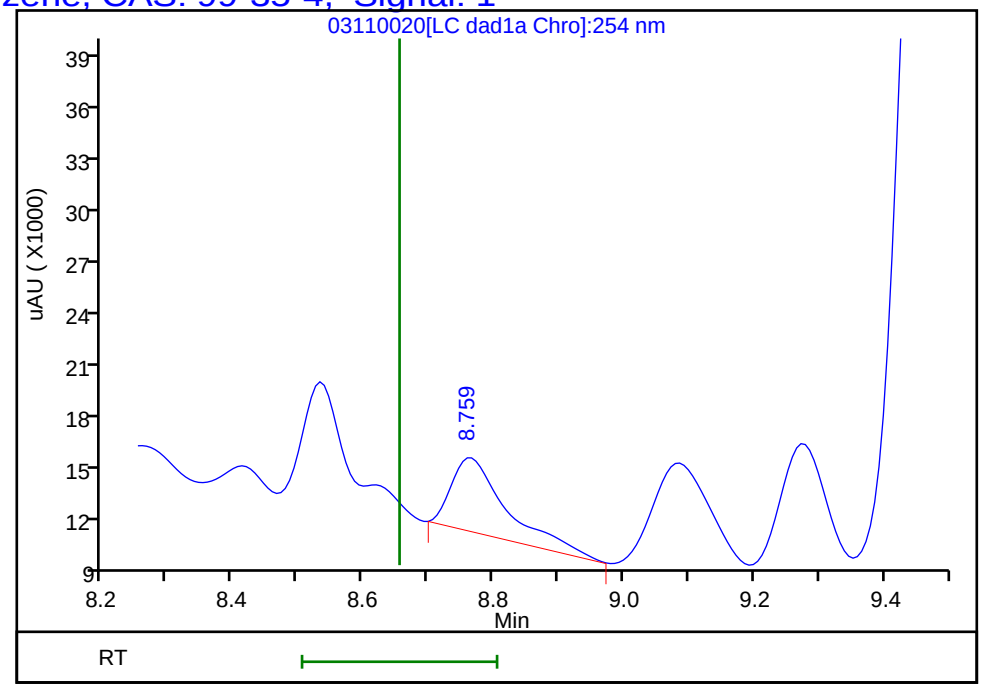
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110020.d
Injection Date: 11-Mar-2022 18:37:13 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-A-9-A Lab Sample ID: 280-159332-9
Client ID: G0094-8
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

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

RT: 8.76
Response: 24613
Amount: 0.112854



Reviewer: zhangji, 11-Mar-2022 19:15:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

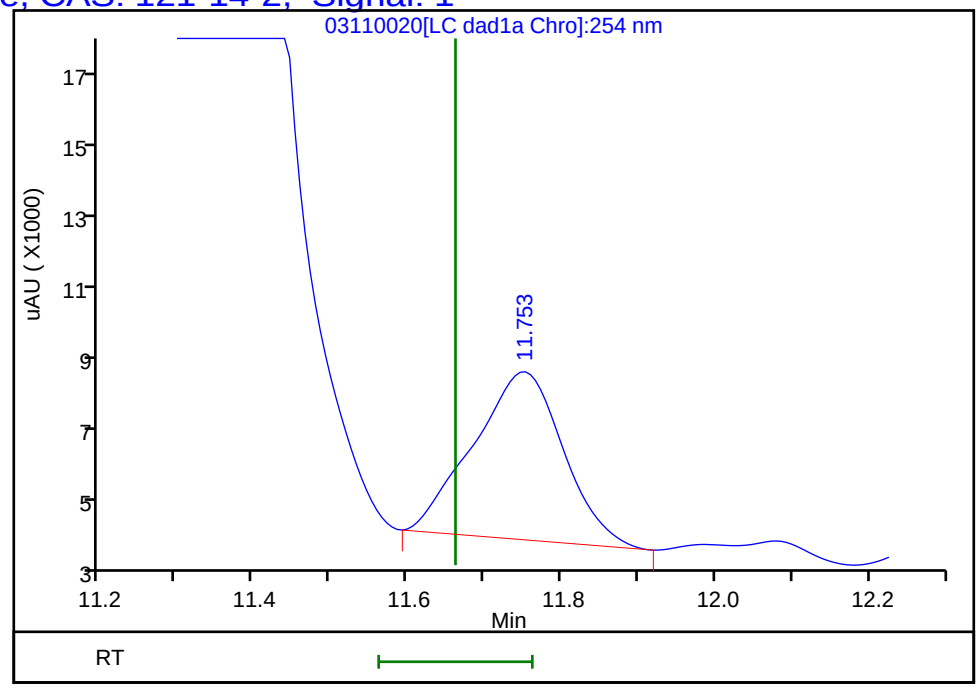
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110020.d
Injection Date: 11-Mar-2022 18:37:13 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-A-9-A Lab Sample ID: 280-159332-9
Client ID: G0094-8
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

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 11.75
Response: 36411
Amount: 0.125837



Reviewer: zhangji, 11-Mar-2022 19:15:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

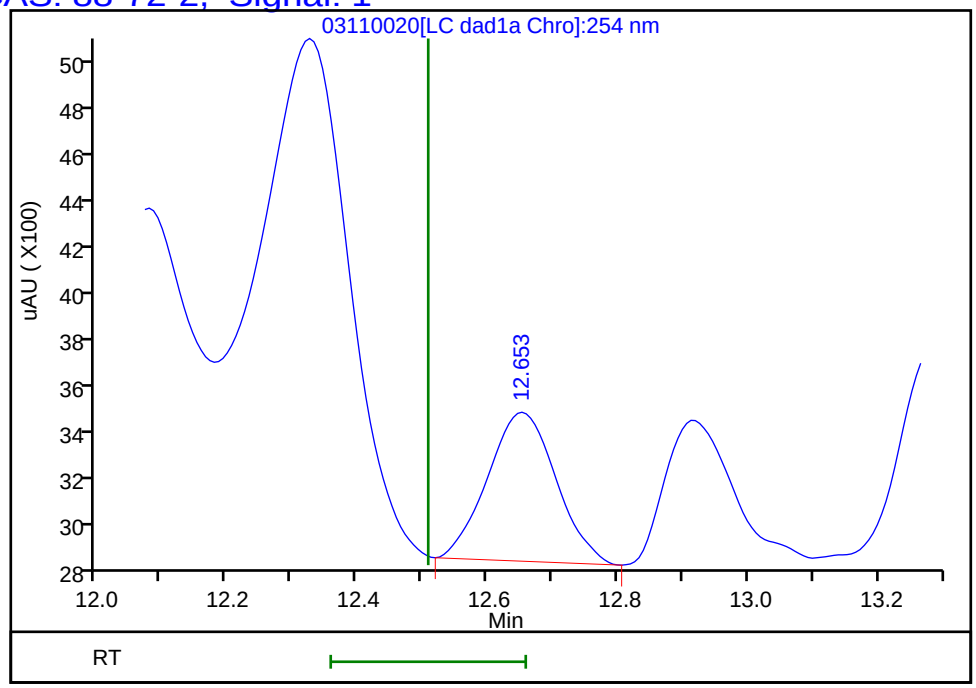
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110020.d
Injection Date: 11-Mar-2022 18:37:13 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-A-9-A Lab Sample ID: 280-159332-9
Client ID: G0094-8
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

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

RT: 12.65
Response: 4553
Amount: 0.035678



Reviewer: zhangji, 11-Mar-2022 19:15:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

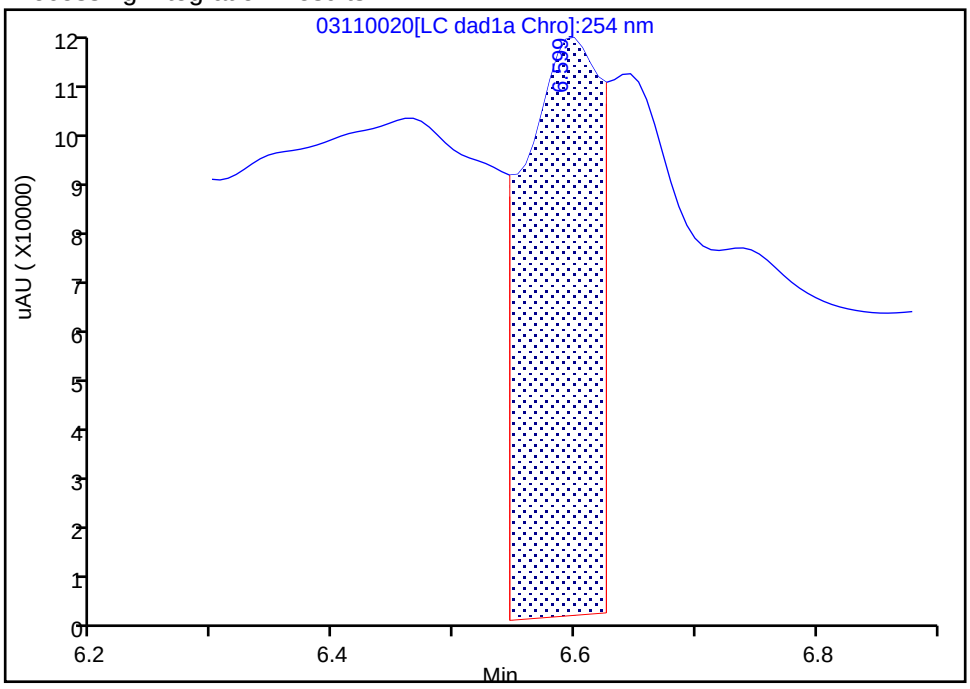
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110020.d				
Injection Date:	11-Mar-2022 18:37:13	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-9-A	Lab Sample ID:	280-159332-9		
Client ID:	G0094-8				
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

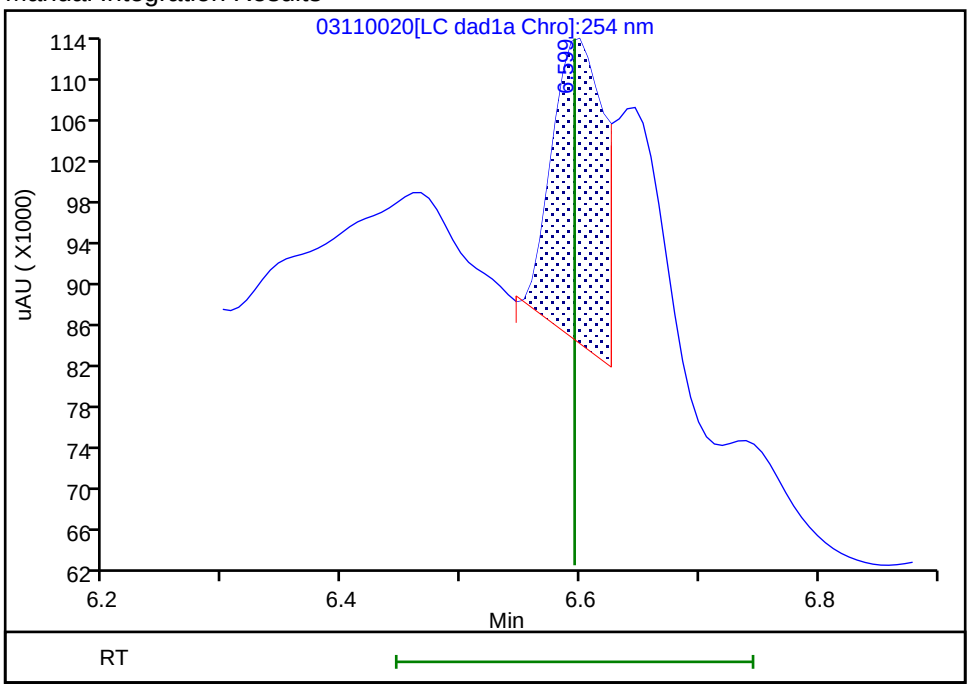
Processing Integration Results

RT: 6.60
Area: 460913
Amount: 5.498370
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 85891
Amount: 1.024620
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 19:14:30
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

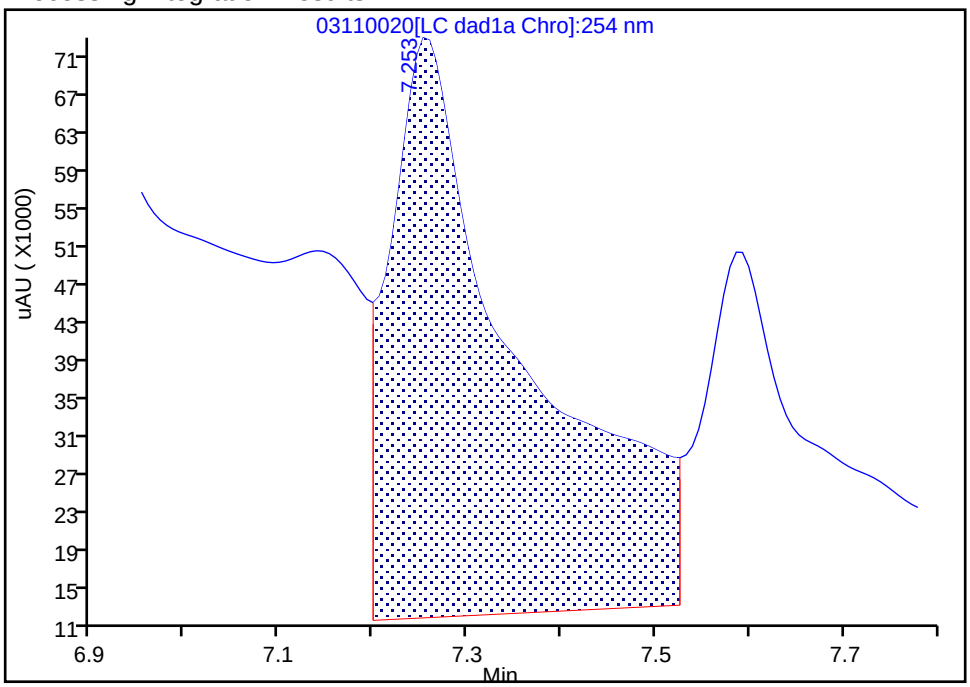
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110020.d				
Injection Date:	11-Mar-2022 18:37:13	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-9-A	Lab Sample ID:	280-159332-9		
Client ID:	G0094-8				
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

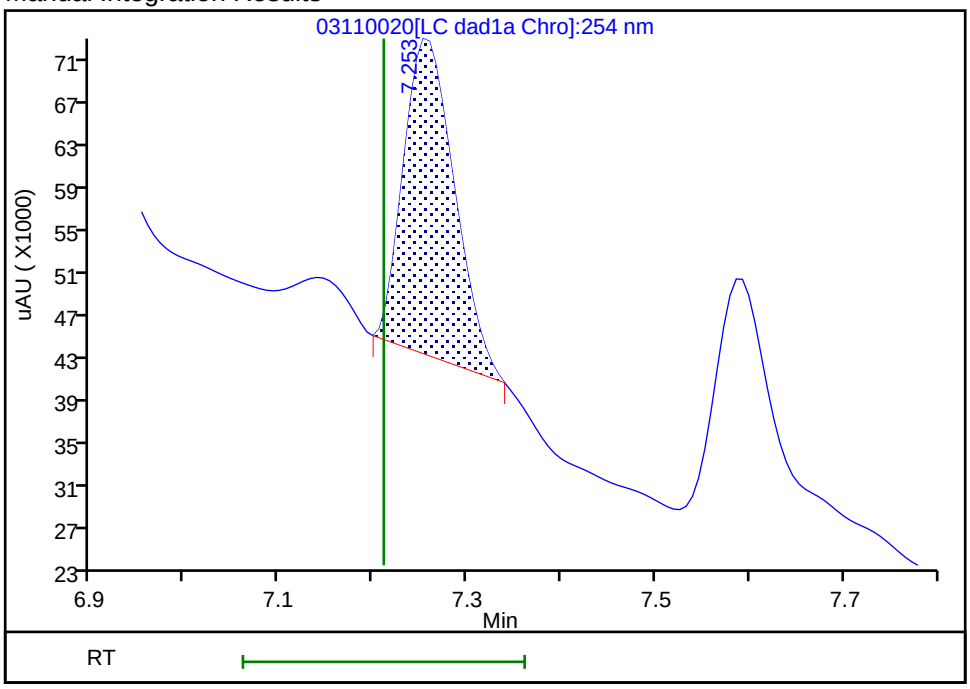
Processing Integration Results

RT: 7.25
Area: 587076
Amount: 4.659503
Amount Units: ug/mL



Manual Integration Results

RT: 7.25
Area: 109868
Amount: 0.872000
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 19:14:40

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

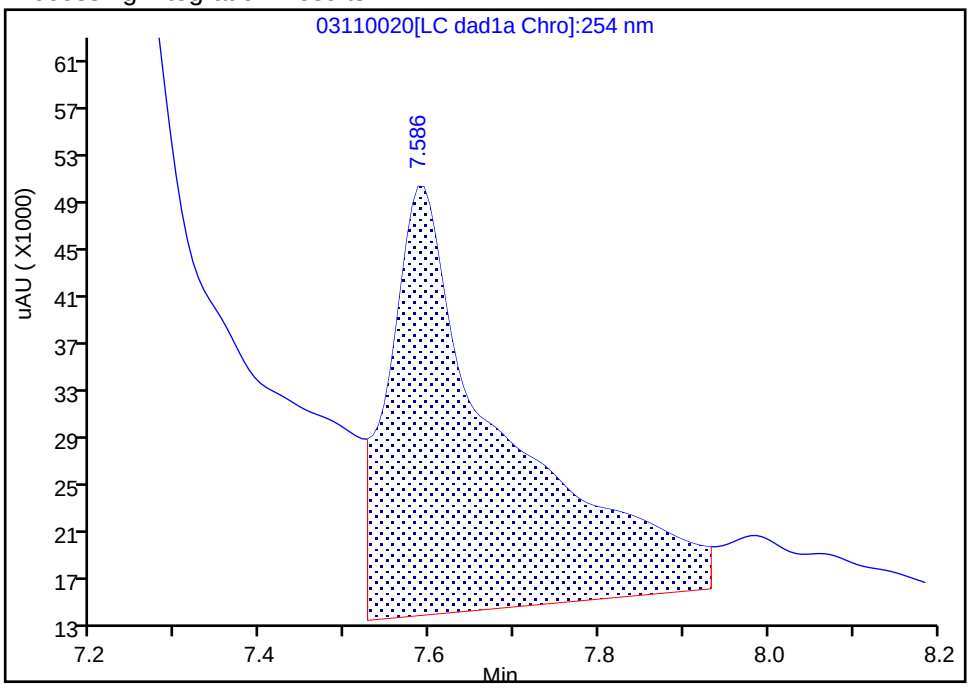
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110020.d				
Injection Date:	11-Mar-2022 18:37:13	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-9-A	Lab Sample ID:	280-159332-9		
Client ID:	G0094-8				
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. 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

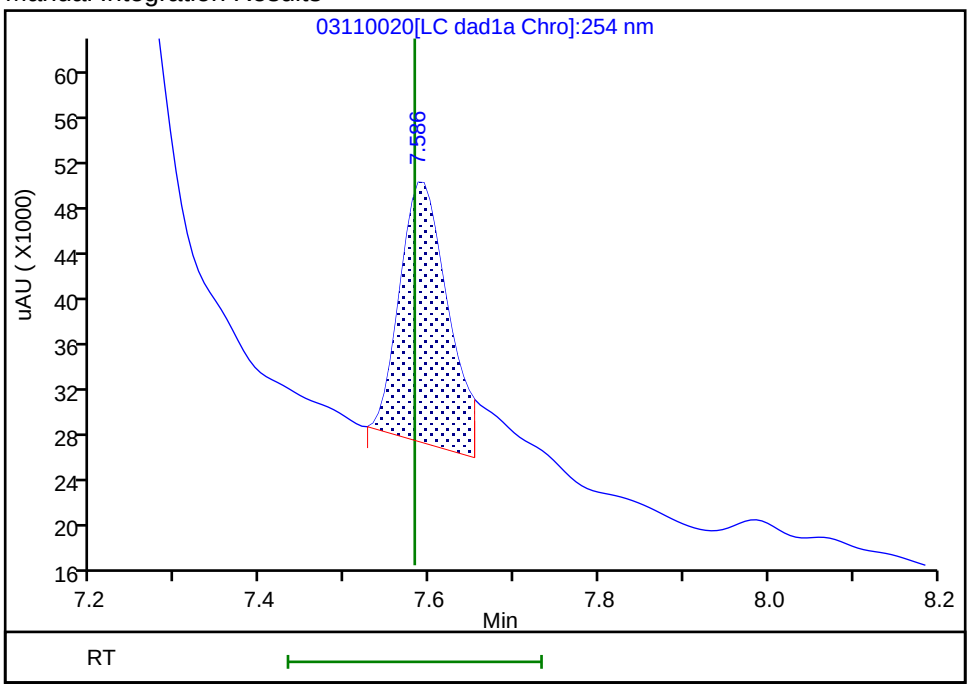
Processing Integration Results

RT: 7.59
Area: 343279
Amount: 3.313210
Amount Units: ug/mL



Manual Integration Results

RT: 7.59
Area: 89210
Amount: 0.861024
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 19:14:46

Audit Action: Split an Integrated Peak Audit Reason: Baseline

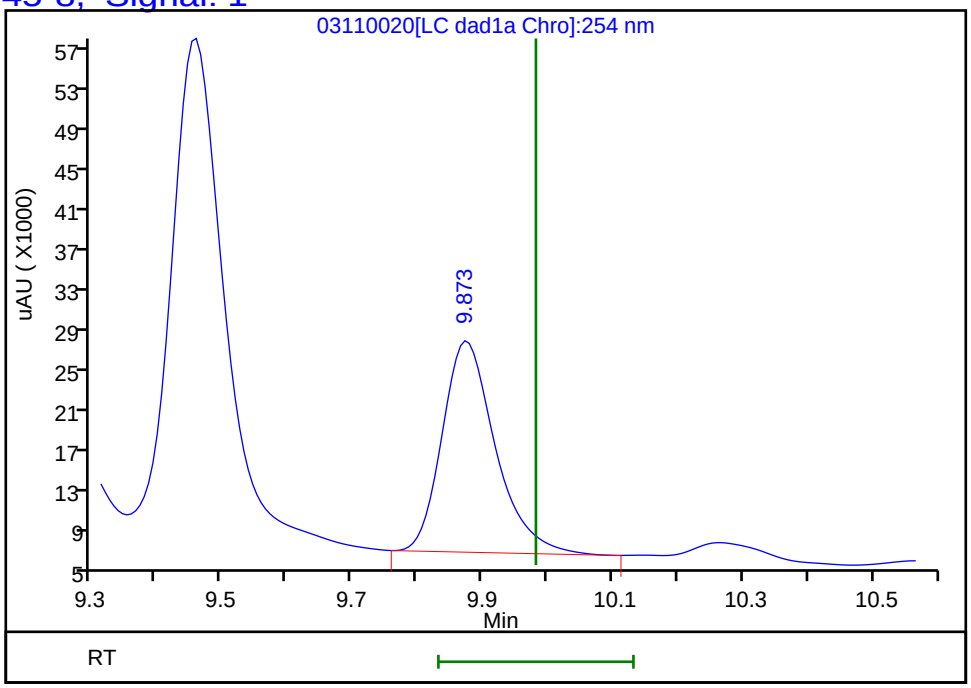
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110020.d				
Injection Date:	11-Mar-2022 18:37:13	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-9-A	Lab Sample ID:	280-159332-9		
Client ID:	G0094-8				
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		

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

RT: 9.87
Response: 119124
Amount: 0.698401



Reviewer: zhangji, 11-Mar-2022 19:15:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0094-8 | Lab Sample ID: 280-159332-9

Matrix: Water | Lab File ID: 03150010.D

Analysis Method: 8330A | Date Collected: 03/01/2022 10:00

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 476.9(mL) | Date Analyzed: 03/15/2022 19:18

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.: 568709 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	*1,3-Dinitrobenzene*	*0.46*	*J1*	*0.12*	0.10	*0.039*
99-99-0	4-Nitrotoluene	0.42	U	0.43	0.42	0.10
5755-27-1	*MNX*	*19*	*M J1*	*2.1*	0.42	*0.16*

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150010.D
Lims ID: 280-159332-A-9-A
Client ID: G0094-8
Sample Type: Client
Inject. Date: 15-Mar-2022 19:18:05 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-A-9-A
Misc. Info.: 280-0109260-010
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Mar-2022 12:38:41 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: CTX1609

First Level Reviewer: zhangji Date: 15-Mar-2022 19:56:14

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1	6.849	6.854	-0.005	155595	0.9366	M
6 MNX	1	7.543	7.581	-0.038	451580	1.81	M
8 RDX	1	9.049	9.054	-0.005	171220	0.8811	M
9 Nitrobenzene	1		11.960			ND	
$ 10 1,2-Dinitrobenzene	1	13.163	13.160	0.003	48082	0.1925	
12 1,3-Dinitrobenzene	1	15.583	15.514	0.069	24999	0.0437	
14 o-Nitrotoluene	1	16.596	16.640	-0.044	145691	0.6208	
16 p-Nitrotoluene	1		16.954			ND	
17 4-Amino-2,6-dinitrotoluene	1	17.576	17.574	0.002	1686643	6.31	E
18 m-Nitrotoluene	1		17.914			ND	
19 2-Amino-4,6-dinitrotoluene	1	18.576	18.580	-0.004	1972483	5.47	E
20 1,3,5-Trinitrobenzene	1		18.794			ND	
21 2,6-Dinitrotoluene	1	20.063	20.054	0.009	15131	0.0570	
22 2,4-Dinitrotoluene	1	20.583	20.574	0.009	83881	0.1431	
23 Tetryl	1		24.307			ND	
24 2,4,6-Trinitrotoluene	1	25.069	25.074	-0.005	1738766	4.71	E

QC Flag Legend

Processing Flags
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated

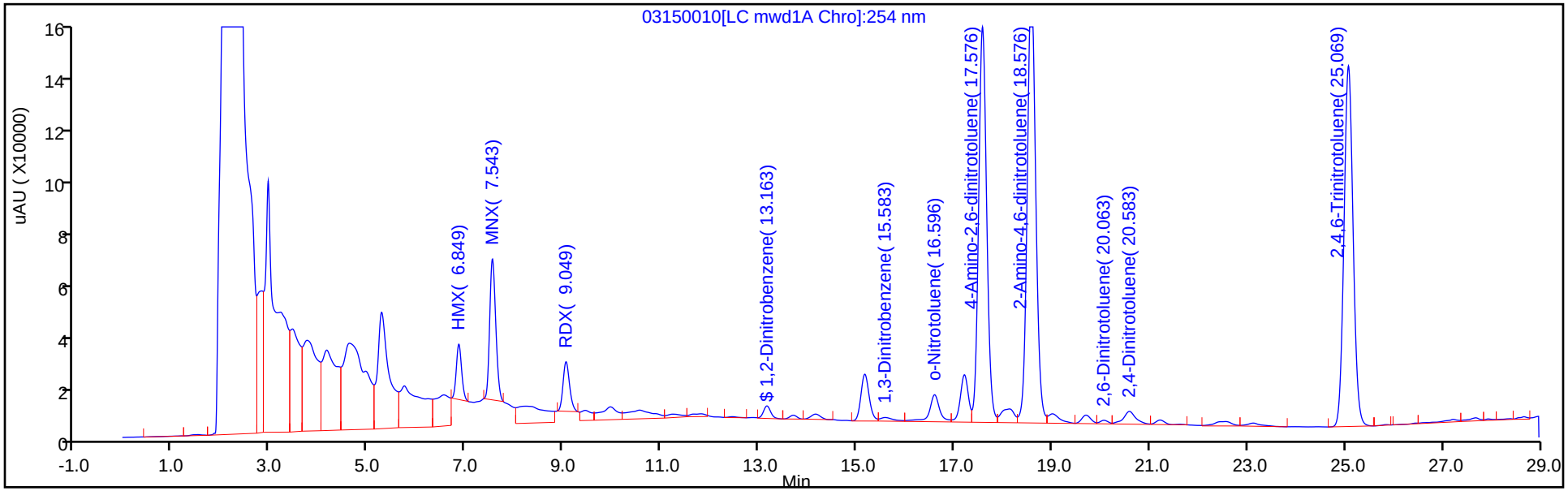
Report Date: 16-Mar-2022 12:38:48 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

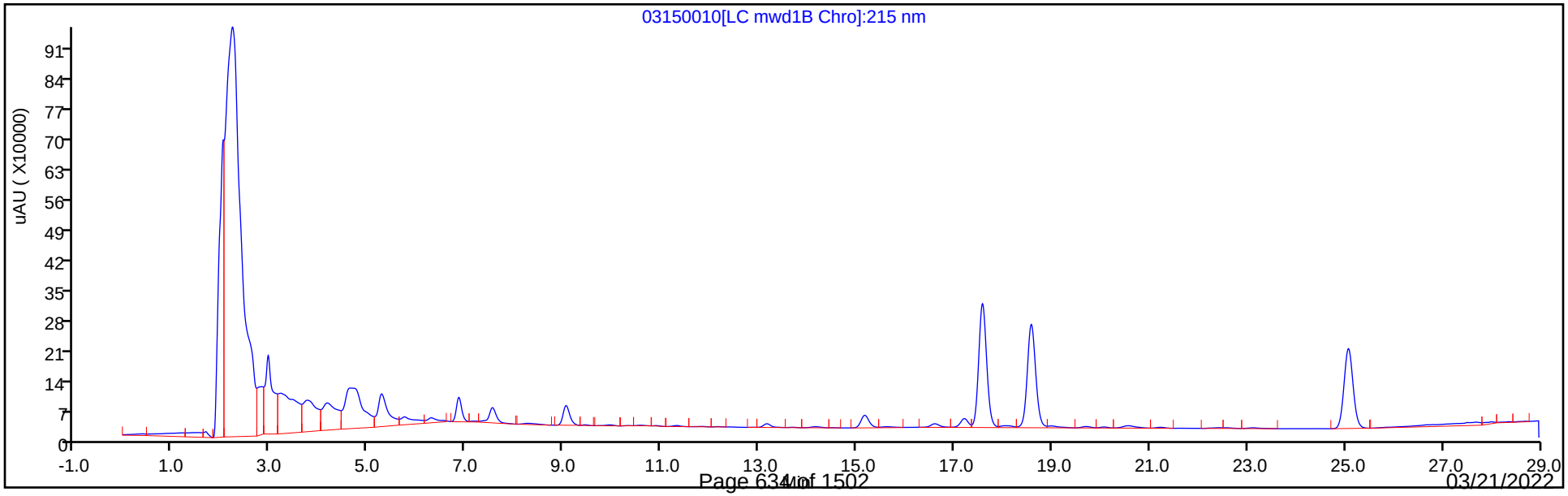
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150010.D

Injection Date:	15-Mar-2022 19:18:05	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159332-A-9-A	Lab Sample ID:	280-159332-9	Worklist Smp#:	10
Client ID:	G0094-8				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150010.D				
Lims ID:	280-159332-A-9-A				
Client ID:	G0094-8				
Sample Type:	Client				
Inject. Date:	15-Mar-2022 19:18:05	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-A-9-A				
Misc. Info.:	280-0109260-010				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Mar-2022 12:38:41	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:	CTX1609				
First Level Reviewer: zhangji		Date:	15-Mar-2022 19:56:14		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1925	96.26

Manual Integration/User Assign Peak Report

Eurofins Denver

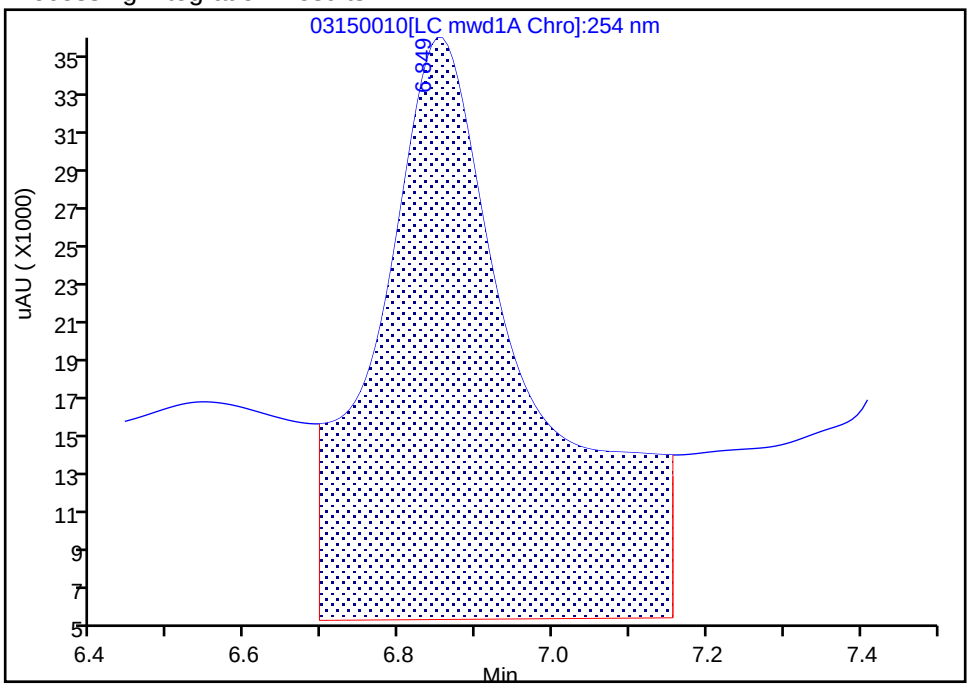
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150010.D				
Injection Date:	15-Mar-2022 19:18:05	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-A-9-A	Lab Sample ID:	280-159332-9		
Client ID:	G0094-8				
Operator ID:	JZ	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

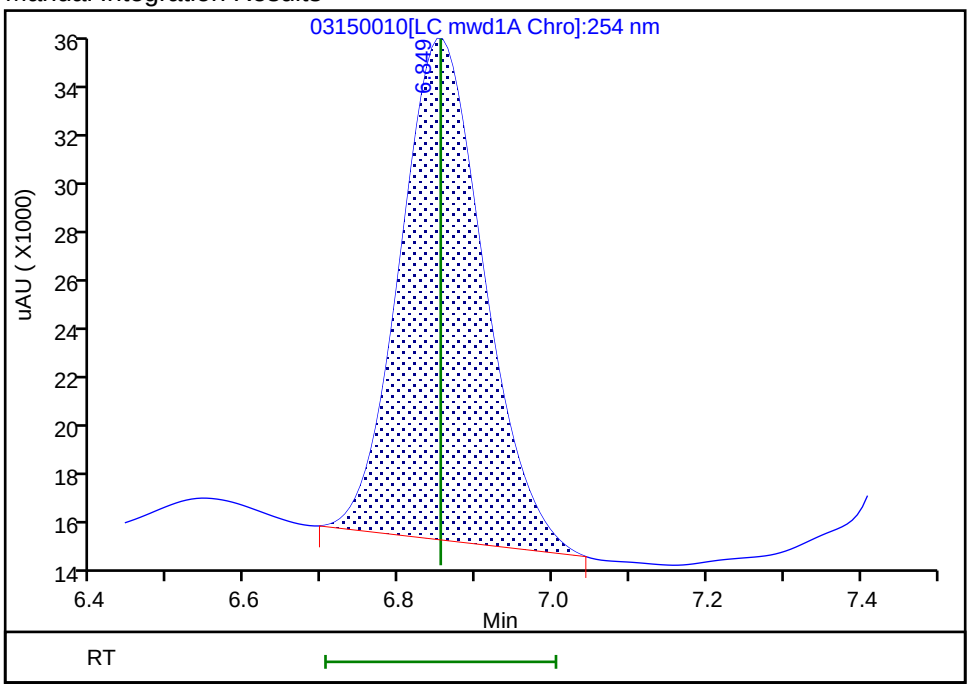
Processing Integration Results

RT: 6.85
Area: 409847
Amount: 2.466948
Amount Units: ug/ml



Manual Integration Results

RT: 6.85
Area: 155595
Amount: 0.936556
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 19:55:50

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

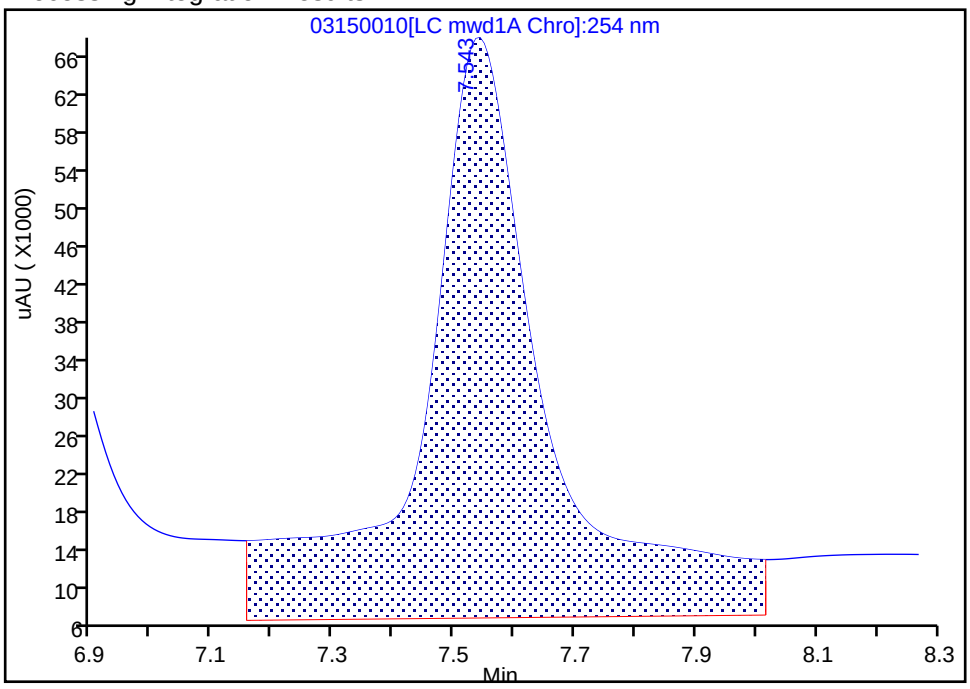
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150010.D				
Injection Date:	15-Mar-2022 19:18:05	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-A-9-A	Lab Sample ID:	280-159332-9		
Client ID:	G0094-8				
Operator ID:	JZ	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

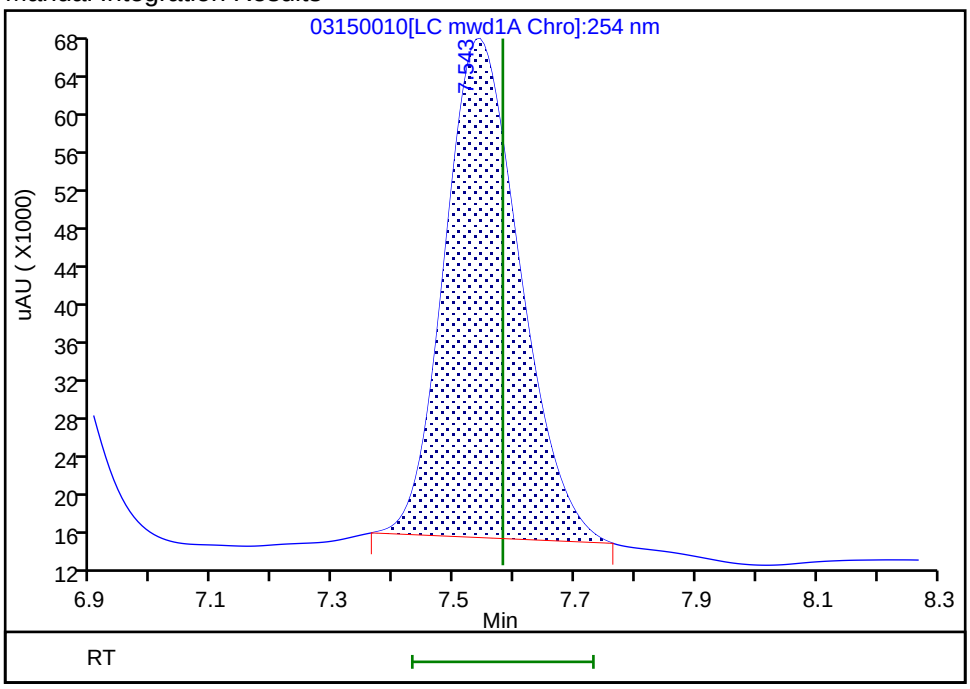
Processing Integration Results

RT: 7.54
Area: 880447
Amount: 3.520647
Amount Units: ug/ml



Manual Integration Results

RT: 7.54
Area: 451580
Amount: 1.805735
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 19:55:53

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

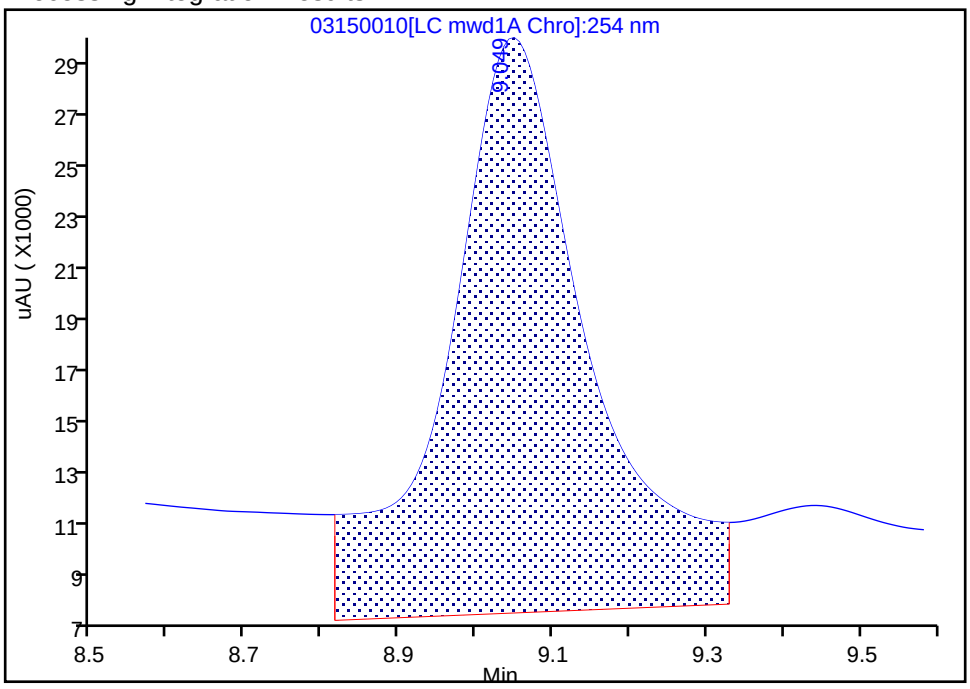
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150010.D				
Injection Date:	15-Mar-2022 19:18:05	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-A-9-A	Lab Sample ID:	280-159332-9		
Client ID:	G0094-8				
Operator ID:	JZ	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

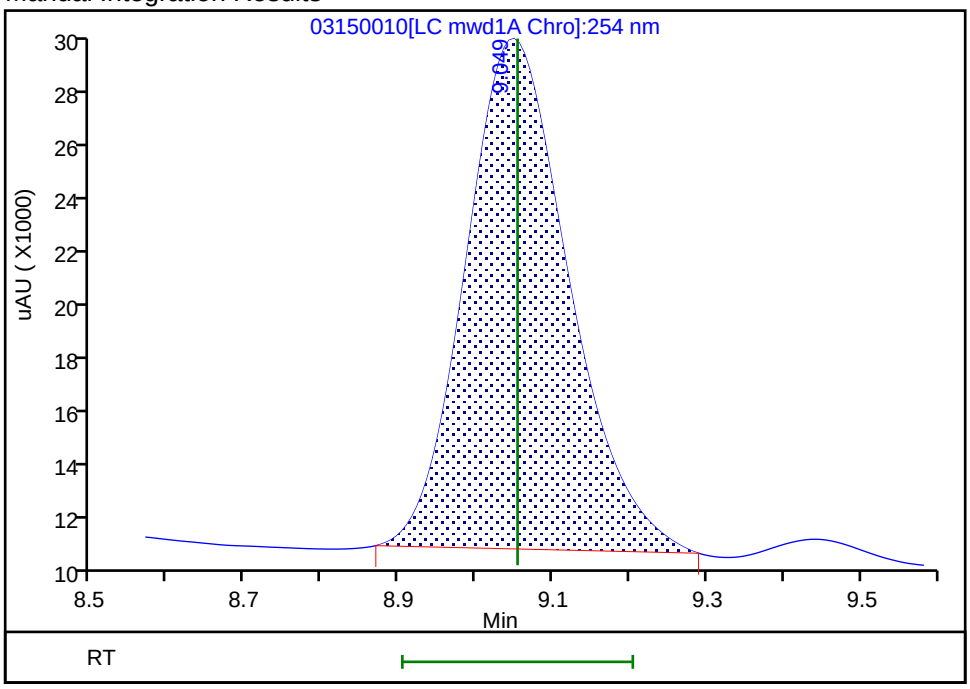
Processing Integration Results

RT: 9.05
Area: 285792
Amount: 1.470645
Amount Units: ug/ml



Manual Integration Results

RT: 9.05
Area: 171220
Amount: 0.881074
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 19:55:57

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0094-8 DL | Lab Sample ID: 280-159332-9 DL

Matrix: Water | Lab File ID: 03110021.D

Analysis Method: 8330A | Date Collected: 03/01/2022 10:00

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 476.9(mL) | Date Analyzed: 03/11/2022 19:00

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

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

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

Analysis Batch No.: 568433 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	48	D	0.58	0.52	0.24
35572-78-2	2-Amino-4,6-dinitrotoluene	57	D	0.58	0.52	0.27
19406-51-0	4-Amino-2,6-dinitrotoluene	65	D	0.79	0.63	0.30

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

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110021.D
Lims ID: 280-159332-A-9-A DL
Client ID: G0094-8
Sample Type: Client
Inject. Date: 11-Mar-2022 19:00:05 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 5.0000
Sample Info: 280-159332-A-9-A
Misc. Info.: 280-0109174-021
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Mar-2022 10:32:08 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: CTX1616

First Level Reviewer: zhangji Date: 11-Mar-2022 19:31:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.599	6.595	0.004	17777	0.2121	M
7 MNX	1		7.211			ND	U
8 RDX	1	7.593	7.582	0.011	16408	0.1584	M
$ 10 1,2-Dinitrobenzene	1	8.533	8.529	0.004	5126	0.0411	M
11 1,3,5-Trinitrobenzene	1		8.655			ND	
12 1,3-Dinitrobenzene	1		9.282			ND	U
13 Nitrobenzene	1		9.668			ND	
15 Tetryl	1		9.982			ND	U
17 2,4,6-Trinitrotoluene	1	10.892	10.888	0.004	186303	0.9190	
18 4-Amino-2,6-dinitrotoluene	1	11.079	11.068	0.011	186440	1.23	
19 2-Amino-4,6-dinitrotoluene	1	11.326	11.322	0.004	219831	1.09	
20 2,6-Dinitrotoluene	1		11.495			ND	
21 2,4-Dinitrotoluene	1		11.662			ND	U
22 o-Nitrotoluene	1		12.508			ND	7
23 p-Nitrotoluene	1	12.912	12.935	-0.023	1068	0.0101	
24 m-Nitrotoluene	1		13.502			ND	

QC Flag Legend

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

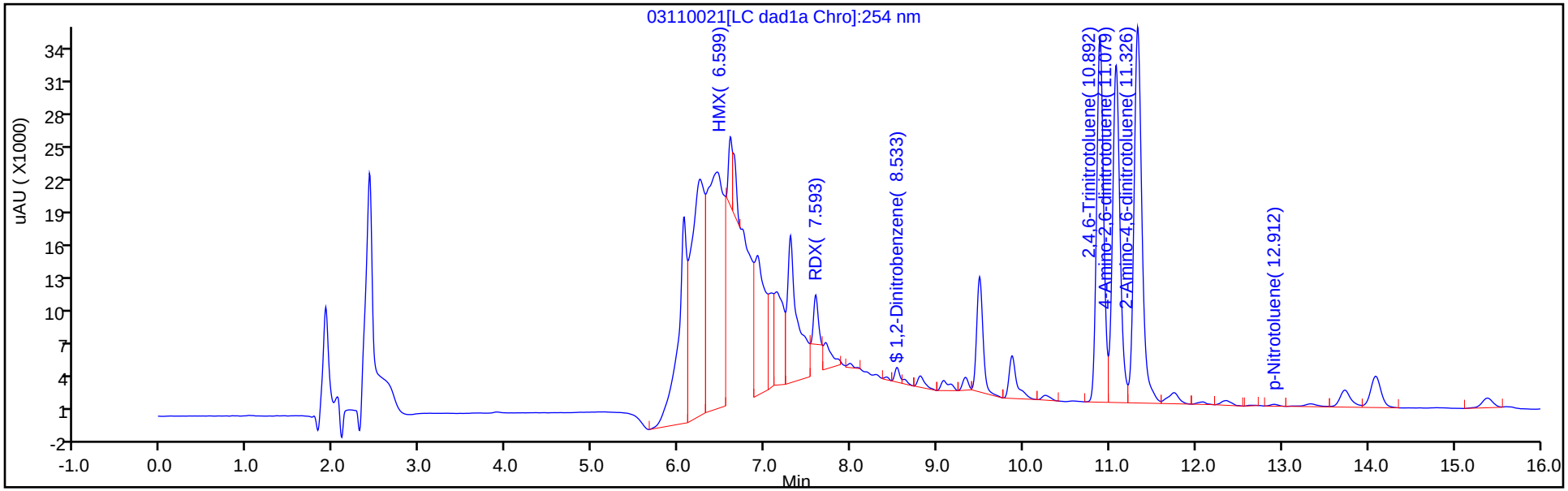
Report Date: 12-Mar-2022 10:32:10 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

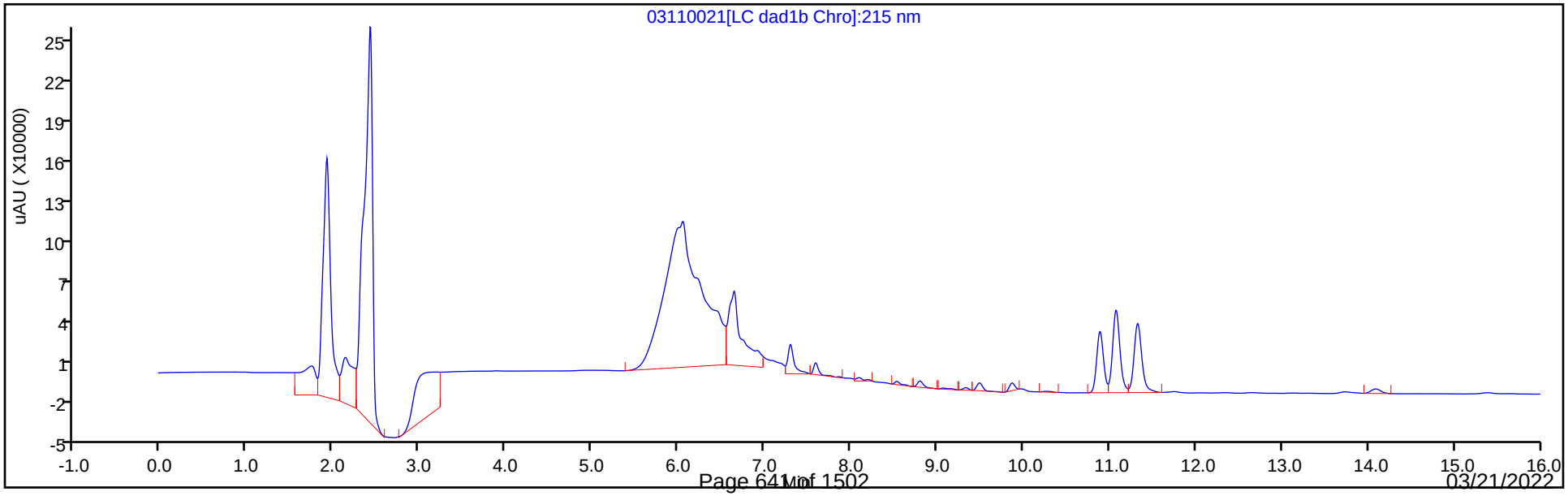
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110021.d

Injection Date:	11-Mar-2022 19:00:05	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159332-A-9-A DL	Lab Sample ID:		Worklist Smp#:	21
Client ID:	G0094-8				
Injection Vol:	100.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	21
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110021.D				
Lims ID:	280-159332-A-9-A DL				
Client ID:	G0094-8				
Sample Type:	Client				
Inject. Date:	11-Mar-2022 19:00:05	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
Sample Info:	280-159332-A-9-A				
Misc. Info.:	280-0109174-021				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2022 10:32:08	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:	CTX1616				

First Level Reviewer: zhangji Date: 11-Mar-2022 19:31:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.0411	20.55

Manual Integration/User Assign Peak Report

Eurofins Denver

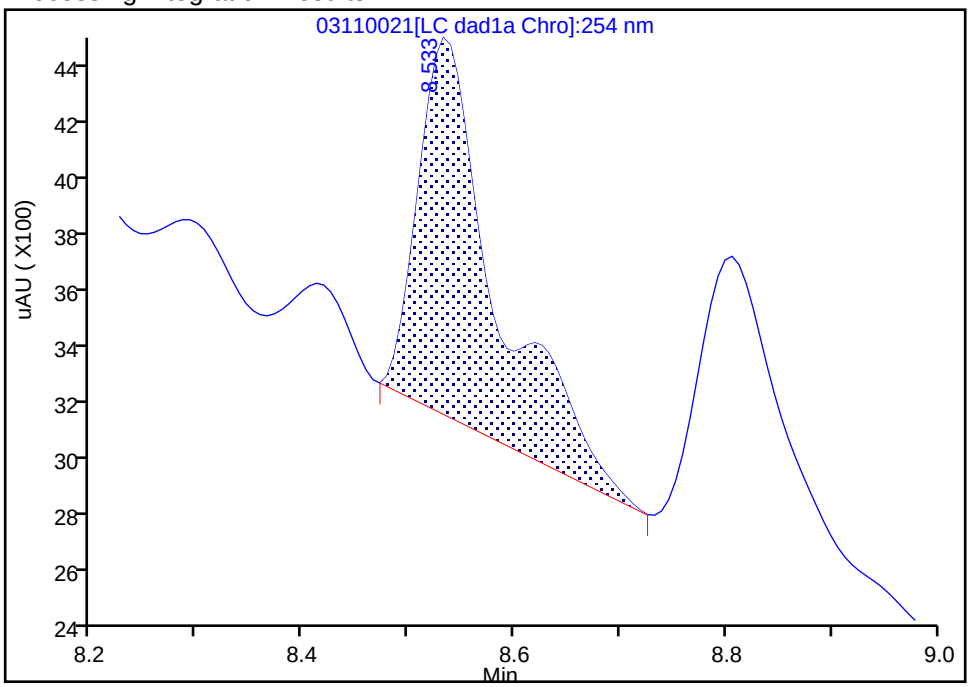
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110021.d				
Injection Date:	11-Mar-2022 19:00:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-9-A DL	Lab Sample ID:			
Client ID:	G0094-8				
Operator ID:	JZ	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

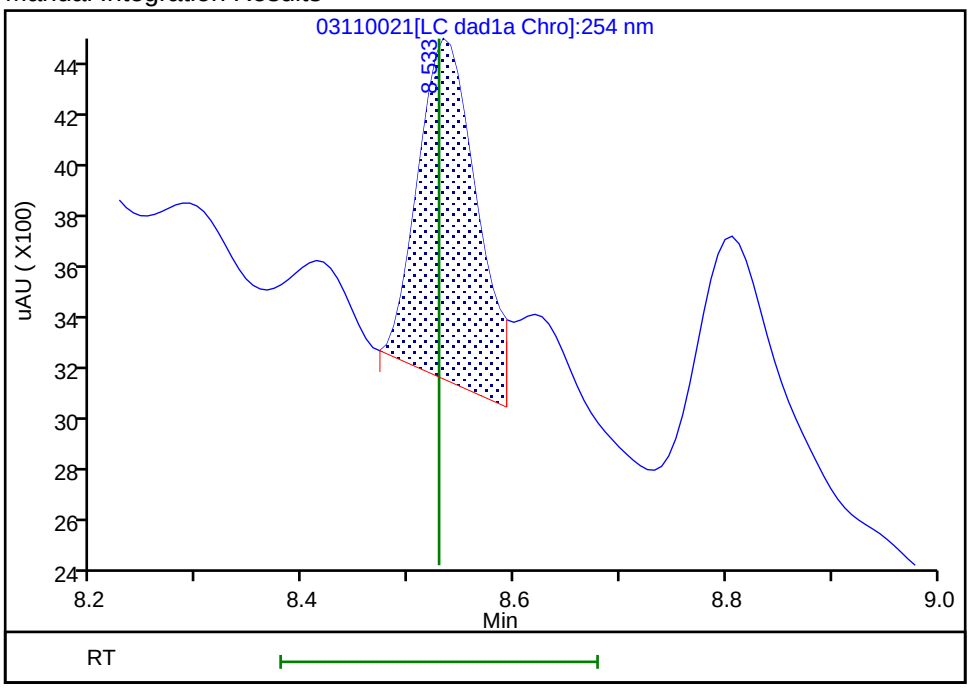
Processing Integration Results

RT: 8.53
Area: 6825
Amount: 0.054732
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 5126
Amount: 0.041107
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 19:31:08
Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

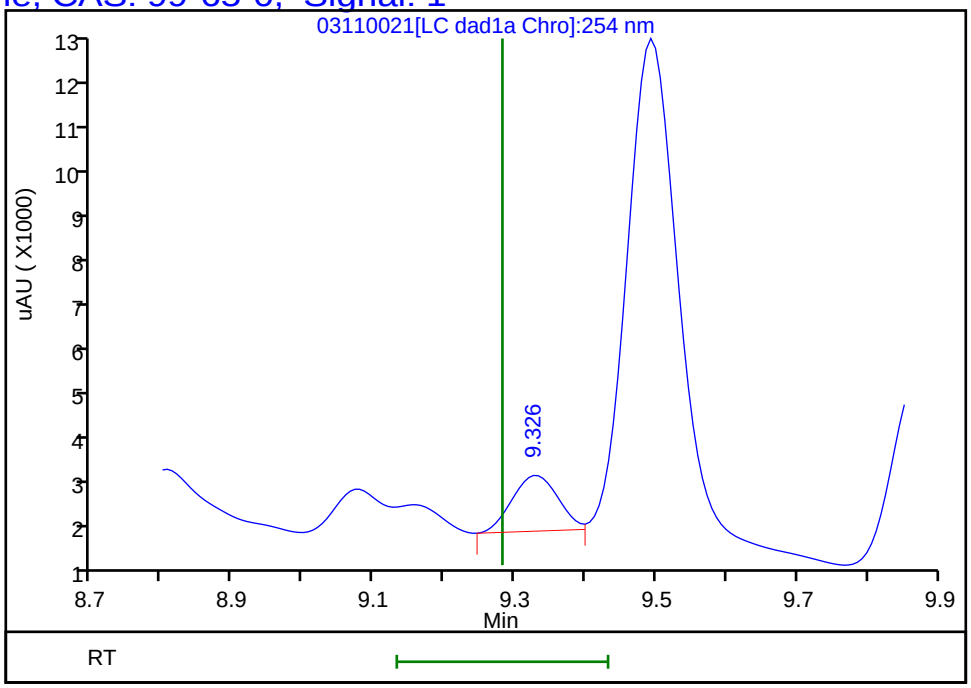
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110021.d
Injection Date: 11-Mar-2022 19:00:05 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-A-9-A DL Lab Sample ID:
Client ID: G0094-8
Operator ID: JZ ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 5.0000
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: 9.33
Response: 5272
Amount: 0.018280



Reviewer: zhangji, 11-Mar-2022 19:31:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

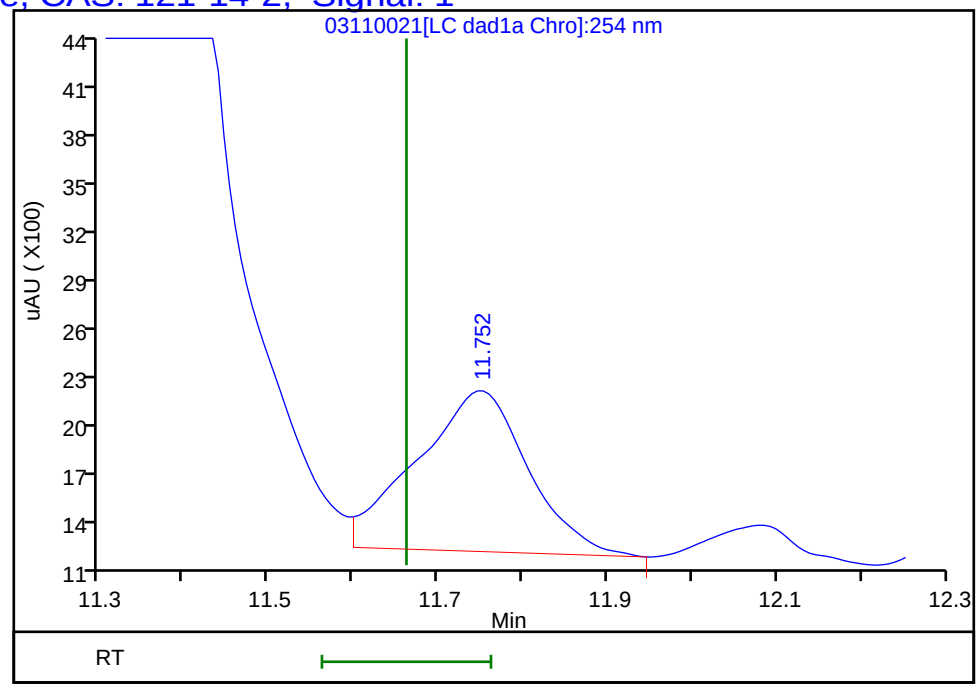
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110021.d				
Injection Date:	11-Mar-2022 19:00:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-9-A DL	Lab Sample ID:			
Client ID:	G0094-8				
Operator ID:	JZ	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
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: 11.75
Response: 9196
Amount: 0.031782



Reviewer: zhangji, 11-Mar-2022 19:31:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

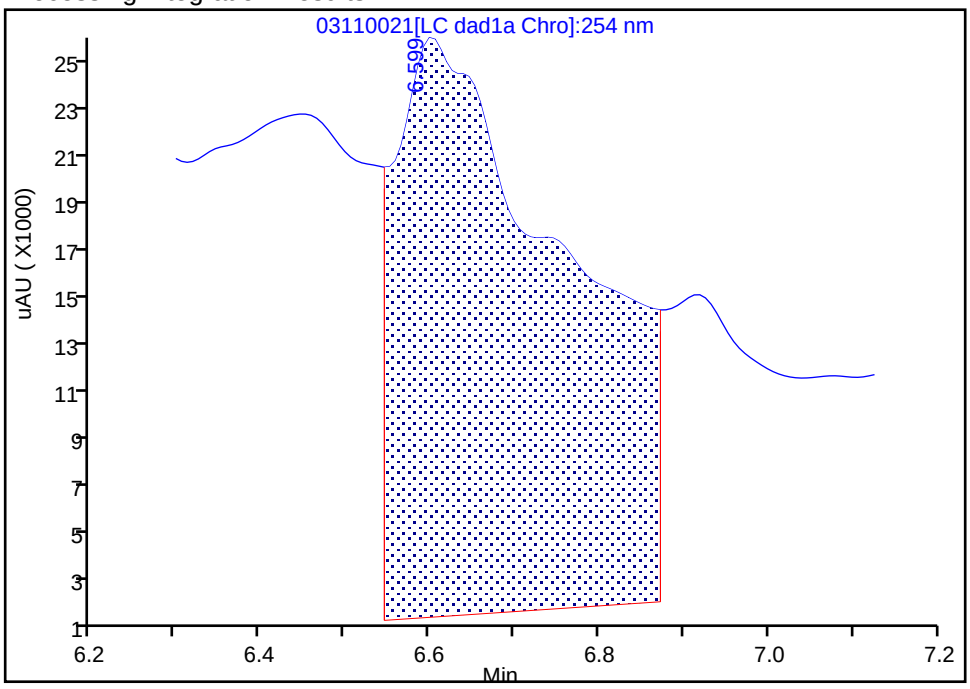
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110021.d				
Injection Date:	11-Mar-2022 19:00:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-9-A DL	Lab Sample ID:			
Client ID:	G0094-8				
Operator ID:	JZ	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
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

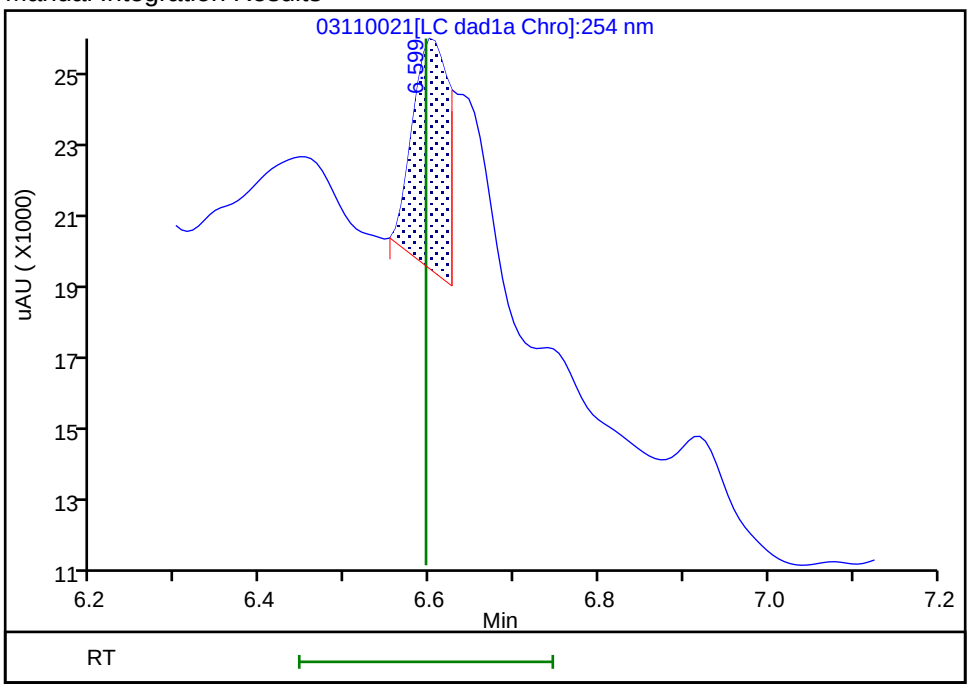
Processing Integration Results

RT: 6.60
Area: 341001
Amount: 4.067904
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 17777
Amount: 0.212067
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 19:30:54
Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

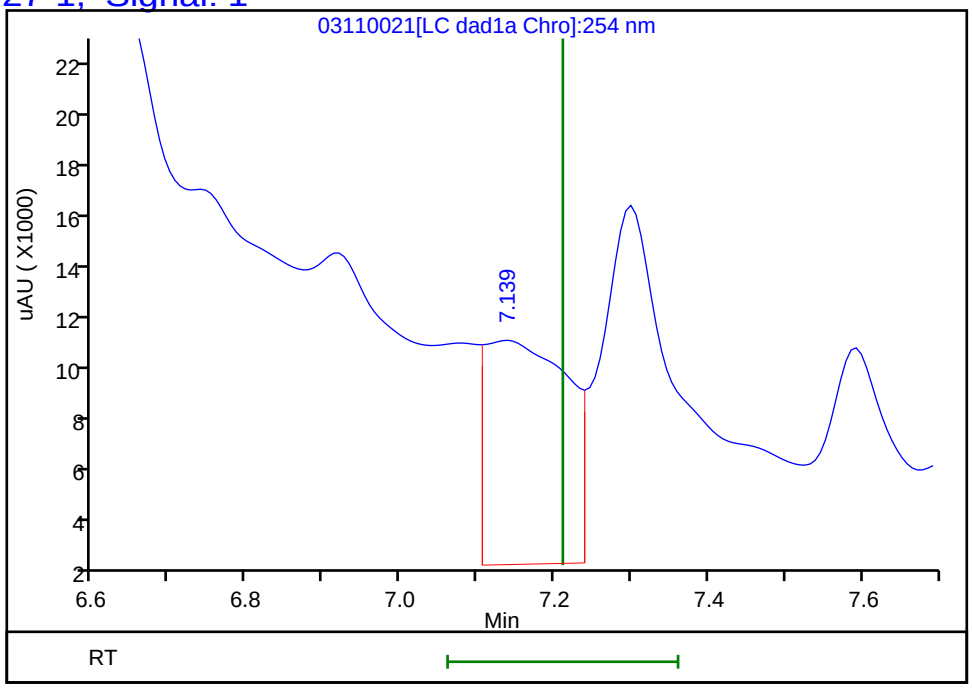
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110021.d
Injection Date: 11-Mar-2022 19:00:05 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-A-9-A DL Lab Sample ID:
Client ID: G0094-8
Operator ID: JZ ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 5.0000
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: 7.14
Response: 62215
Amount: 0.493788



Reviewer: zhangji, 11-Mar-2022 19:31:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

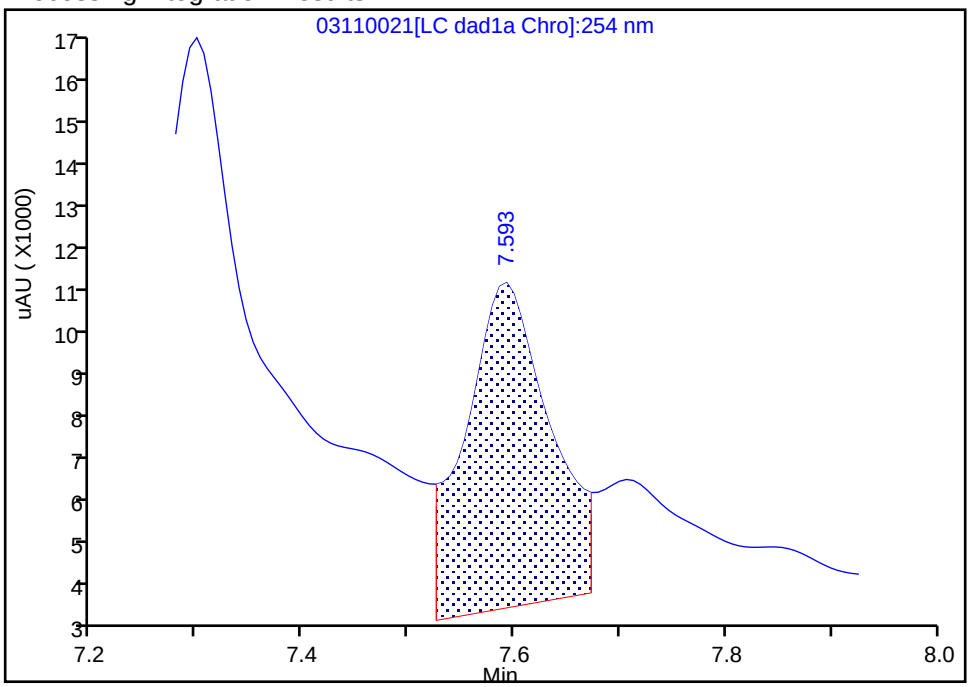
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110021.d				
Injection Date:	11-Mar-2022 19:00:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-9-A DL	Lab Sample ID:			
Client ID:	G0094-8				
Operator ID:	JZ	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

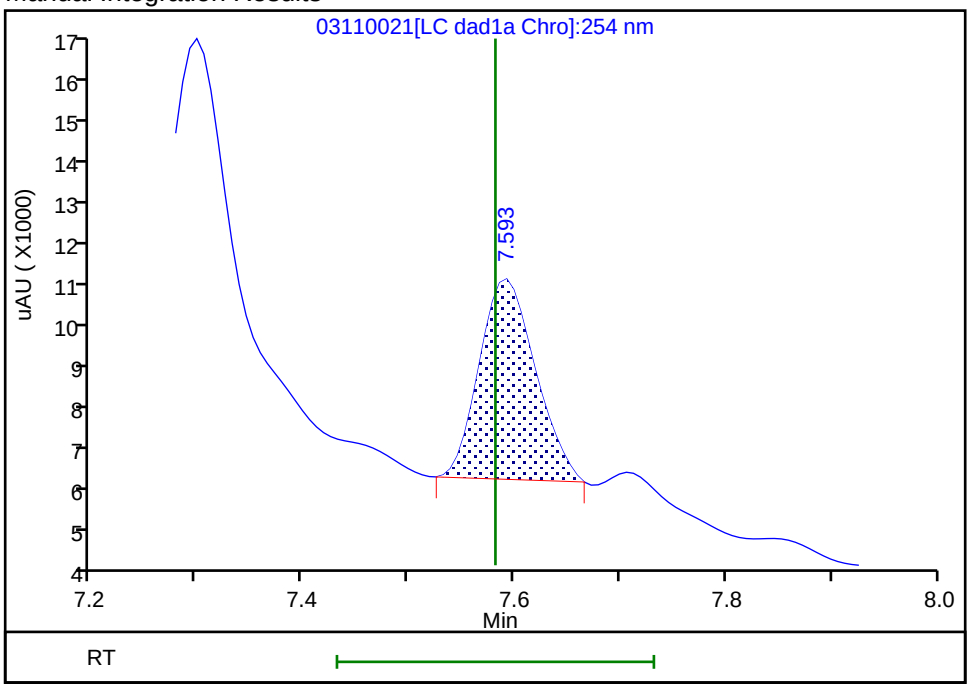
Processing Integration Results

RT: 7.59
Area: 39427
Amount: 0.380536
Amount Units: ug/mL



Manual Integration Results

RT: 7.59
Area: 16408
Amount: 0.158364
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 19:31:03
Audit Action: Manually Integrated Audit Reason: Baseline

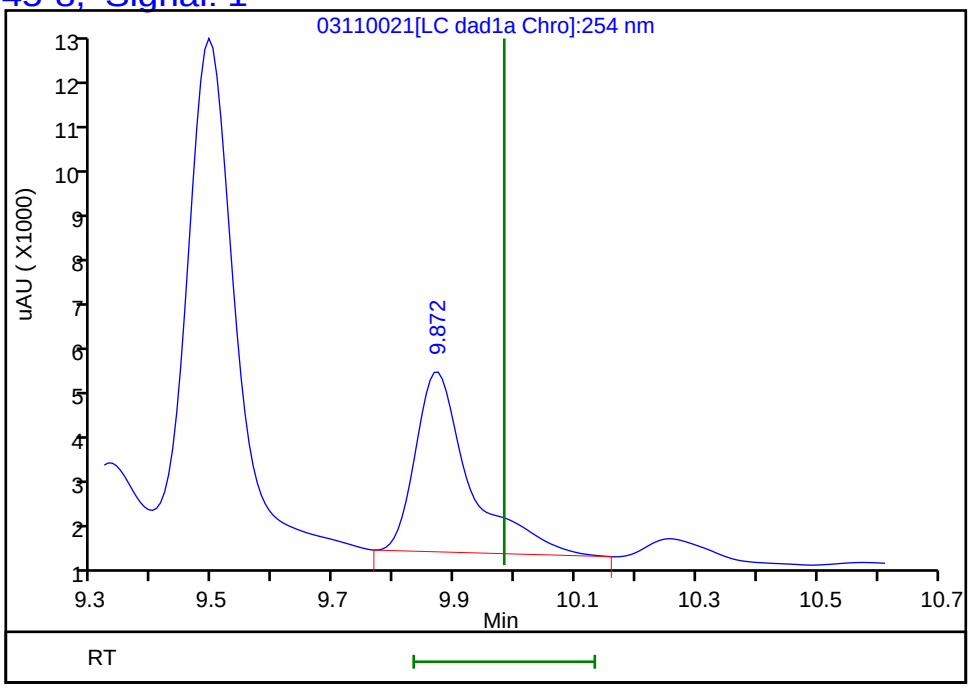
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110021.d				
Injection Date:	11-Mar-2022 19:00:05	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-9-A DL	Lab Sample ID:			
Client ID:	G0094-8				
Operator ID:	JZ	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
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: 9.87
Response: 24252
Amount: 0.142185



Reviewer: zhangji, 11-Mar-2022 19:31:18
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: G0094-8 DL | Lab Sample ID: 280-159332-9 DL

Matrix: Water | Lab File ID: 03150023.D

Analysis Method: 8330A | Date Collected: 03/01/2022 10:00

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 476.9(mL) | Date Analyzed: 03/16/2022 02:53

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

Injection Volume: 100(uL) | GC Column: Luna-phenylhex ID: 4.6(mm)

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

Analysis Batch No.: 568709 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	94	*M D*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150023.D
Lims ID: 280-159332-A-9-A DL
Client ID: G0094-8
Sample Type: Client
Inject. Date: 16-Mar-2022 02:53:57 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 5.0000
Sample Info: 280-159332-A-9-A
Misc. Info.: 280-0109260-023
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Mar-2022 12:38:36 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: CTX1609

First Level Reviewer: zhangji Date: 16-Mar-2022 12:25:22

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1	6.839	6.854	-0.015	37617	0.2264	
6 MNX	1	7.612	7.581	0.031	100304	0.4011	
8 RDX	1	9.045	9.054	-0.009	36818	0.1895	
9 Nitrobenzene	1		11.960			ND	
$ 10 1,2-Dinitrobenzene	1	13.145	13.160	-0.015	9354	0.0375	M
12 1,3-Dinitrobenzene	1		15.514			ND	
14 o-Nitrotoluene	1	16.585	16.640	-0.055	22686	0.0967	
16 p-Nitrotoluene	1		16.954			ND	
17 4-Amino-2,6-dinitrotoluene	1	17.559	17.574	-0.015	334102	1.25	
18 m-Nitrotoluene	1		17.914			ND	U
19 2-Amino-4,6-dinitrotoluene	1	18.559	18.580	-0.021	389170	1.08	
20 1,3,5-Trinitrobenzene	1		18.794			ND	
21 2,6-Dinitrotoluene	1		20.054			ND	
22 2,4-Dinitrotoluene	1	20.579	20.574	0.005	14460	0.0149	
23 Tetryl	1		24.307			ND	
24 2,4,6-Trinitrotoluene	1	25.019	25.074	-0.055	351063	0.9509	

QC Flag Legend

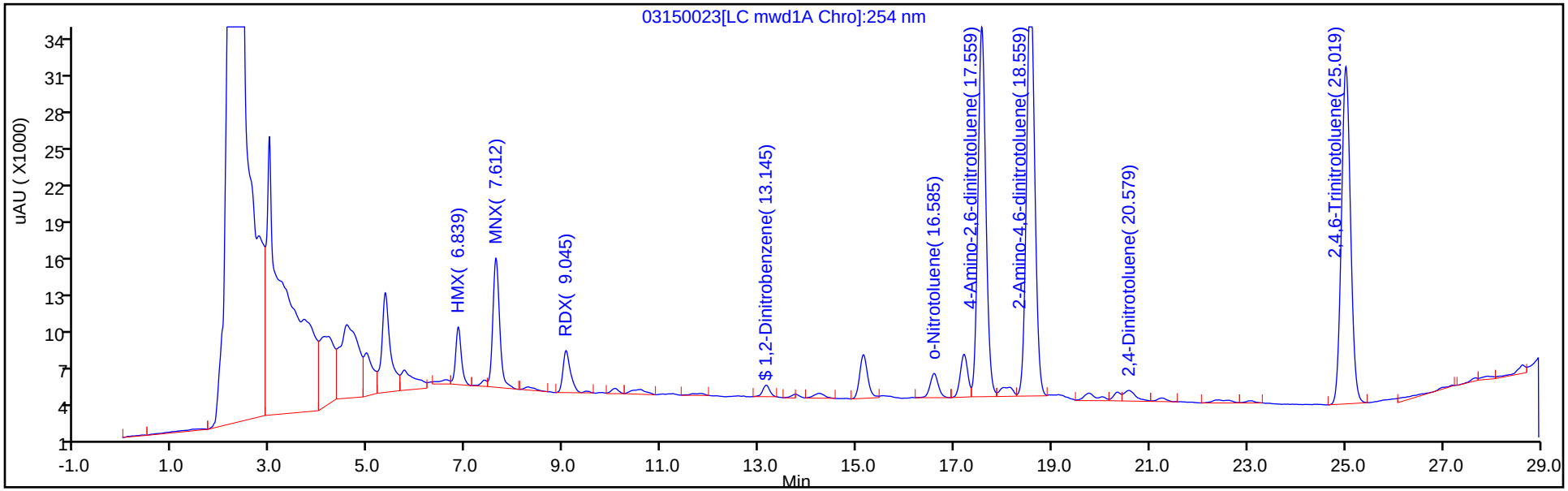
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 16-Mar-2022 12:38:38 Chrom Revision: 2.3 14-Mar-2022 17:58:38

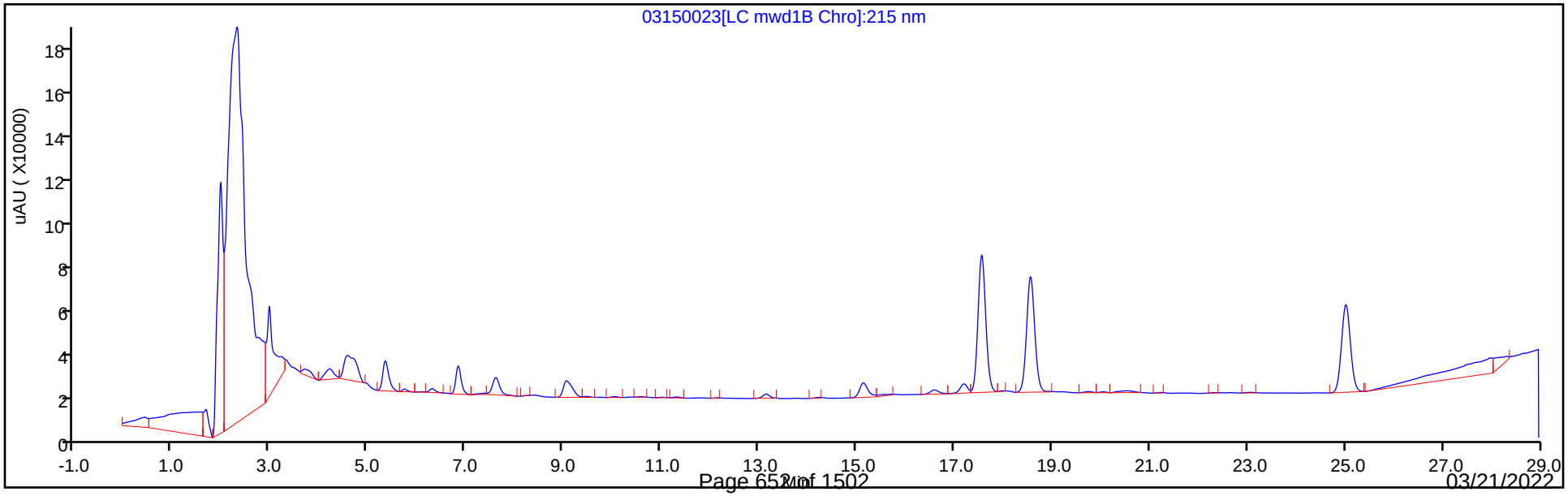
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150023.D				
Injection Date:	16-Mar-2022 02:53:57	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159332-A-9-A DL	Lab Sample ID:	280-159332-9	Worklist Smp#:	23
Client ID:	G0094-8				
Injection Vol:	100.0 ul	Dil. Factor:	5.0000	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
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150023.D				
Lims ID:	280-159332-A-9-A DL				
Client ID:	G0094-8				
Sample Type:	Client				
Inject. Date:	16-Mar-2022 02:53:57	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
Sample Info:	280-159332-A-9-A				
Misc. Info.:	280-0109260-023				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Mar-2022 12:38:36	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:	CTX1609				
First Level Reviewer: zhangji		Date:	16-Mar-2022 12:25:22		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.0375	18.73

Manual Integration/User Assign Peak Report

Eurofins Denver

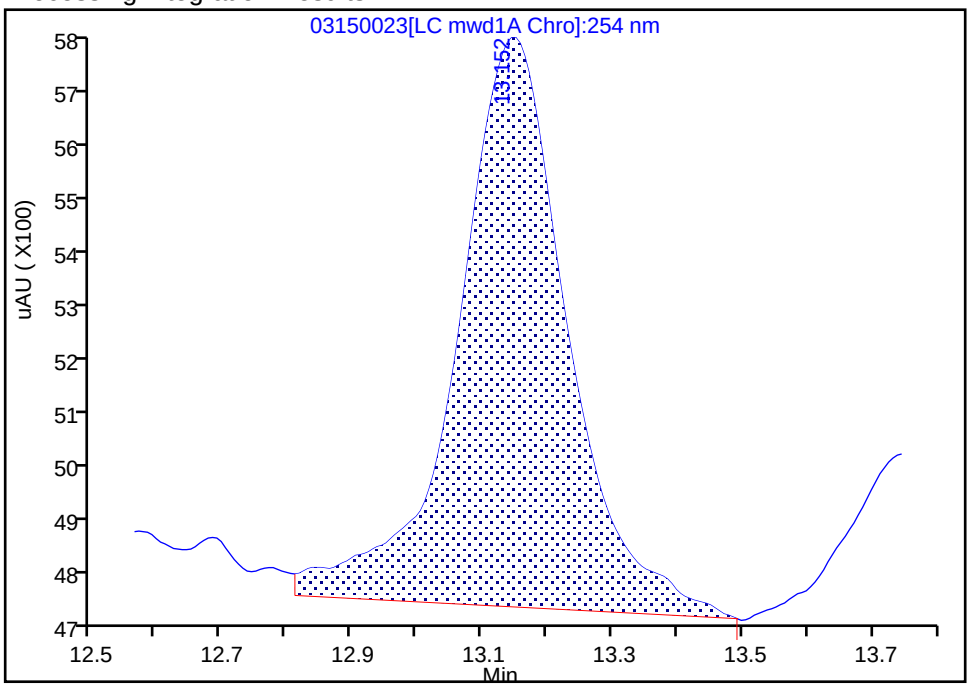
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150023.D				
Injection Date:	16-Mar-2022 02:53:57	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-A-9-A DL	Lab Sample ID:	280-159332-9		
Client ID:	G0094-8				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
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

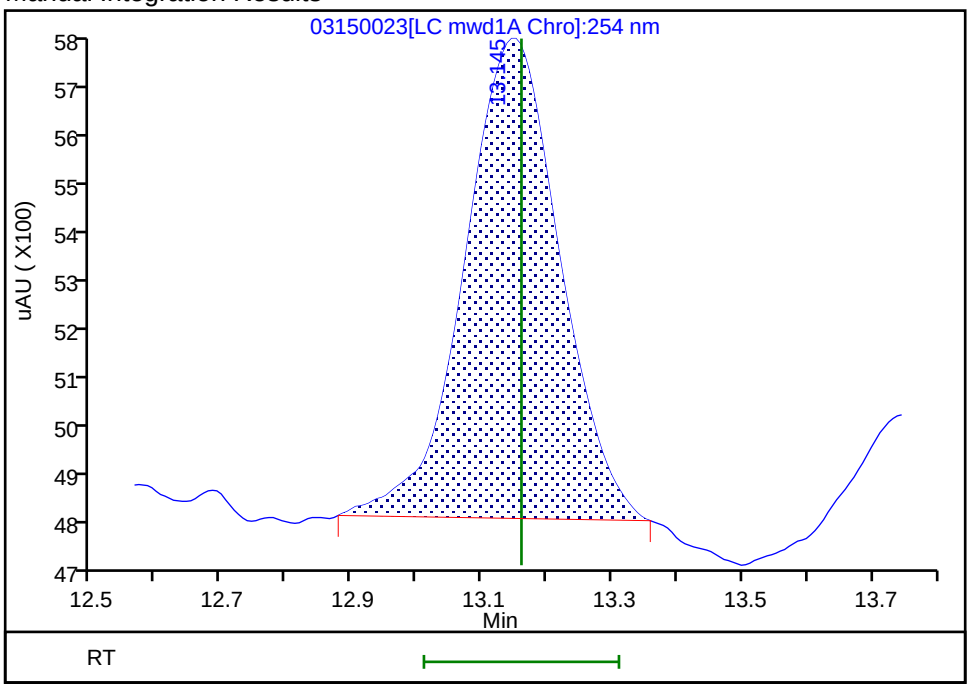
Processing Integration Results

RT: 13.15
Area: 11686
Amount: 0.046790
Amount Units: ug/ml



Manual Integration Results

RT: 13.15
Area: 9354
Amount: 0.037453
Amount Units: ug/ml



Reviewer: zhangji, 16-Mar-2022 12:25:21

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

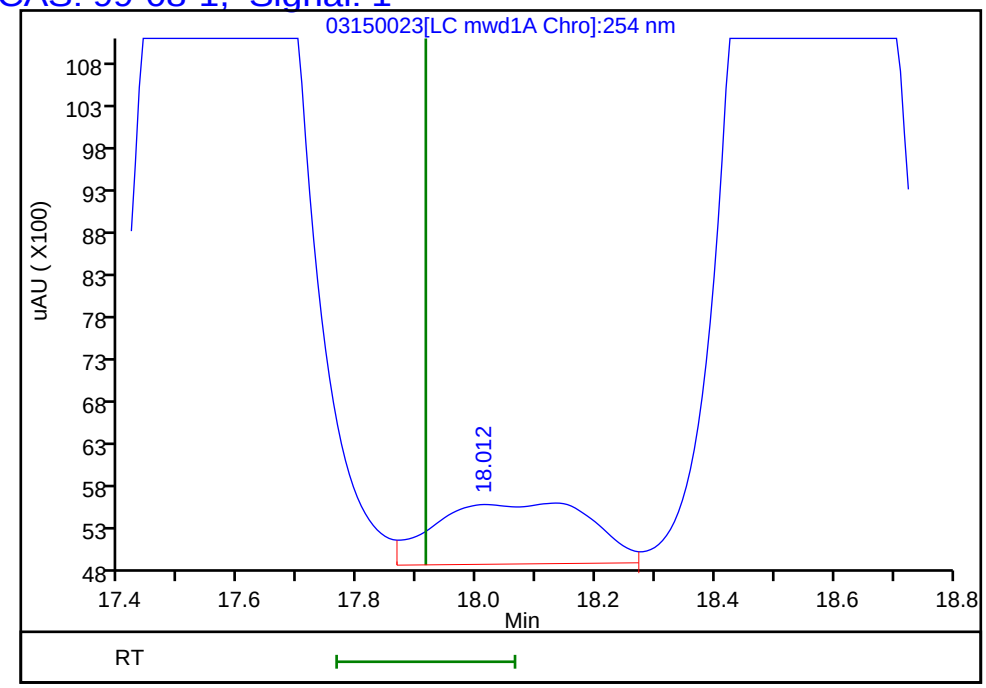
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150023.D				
Injection Date:	16-Mar-2022 02:53:57	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-A-9-A DL	Lab Sample ID:	280-159332-9		
Client ID:	G0094-8				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	5.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 18.01
Response: 13251
Amount: 0.050528



Reviewer: zhangji, 16-Mar-2022 12:25:22
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ018-8 | Lab Sample ID: 280-159332-10

Matrix: Water | Lab File ID: 03110022.D

Analysis Method: 8330A | Date Collected: 03/01/2022 10:40

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 462(mL) | Date Analyzed: 03/11/2022 19:23

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.: 568433 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.22	U	0.23	0.22	0.091
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.040
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.049
121-14-2	2,4-Dinitrotoluene	0.087	U	0.11	0.087	0.030
606-20-2	2,6-Dinitrotoluene	0.087	U	0.11	0.087	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.055
88-72-2	2-Nitrotoluene	0.22	U M	0.23	0.22	0.093
99-08-1	3-Nitrotoluene	0.43	U	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.062
2691-41-0	HMX	0.22	U	0.23	0.22	0.095
5755-27-1	MNX	0.43	U M	2.2	0.43	0.17
98-95-3	Nitrobenzene	0.22	U M	0.23	0.22	0.098
479-45-8	Tetryl	0.11	U M	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	112	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110022.D
Lims ID: 280-159332-B-10-A
Client ID: PZ018-8
Sample Type: Client
Inject. Date: 11-Mar-2022 19:23:01 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-B-10-
Misc. Info.: 280-0109174-022
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Mar-2022 10:32:08 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: CTX1616

First Level Reviewer: zhangji Date: 11-Mar-2022 19:51:10

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.595			ND	
7 MNX	1		7.211			ND	U
8 RDX	1	7.607	7.582	0.025	12311	0.1188	M
$ 10 1,2-Dinitrobenzene	1	8.527	8.529	-0.002	28017	0.2247	M
11 1,3,5-Trinitrobenzene	1		8.655			ND	
12 1,3-Dinitrobenzene	1		9.282			ND	
13 Nitrobenzene	1		9.668			ND	U
15 Tetryl	1		9.982			ND	U
17 2,4,6-Trinitrotoluene	1		10.888			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.068			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.322			ND	
20 2,6-Dinitrotoluene	1		11.495			ND	
21 2,4-Dinitrotoluene	1		11.662			ND	
22 o-Nitrotoluene	1		12.508			ND	U
23 p-Nitrotoluene	1	12.913	12.935	-0.022	7997	0.0753	
24 m-Nitrotoluene	1		13.502			ND	

QC Flag Legend

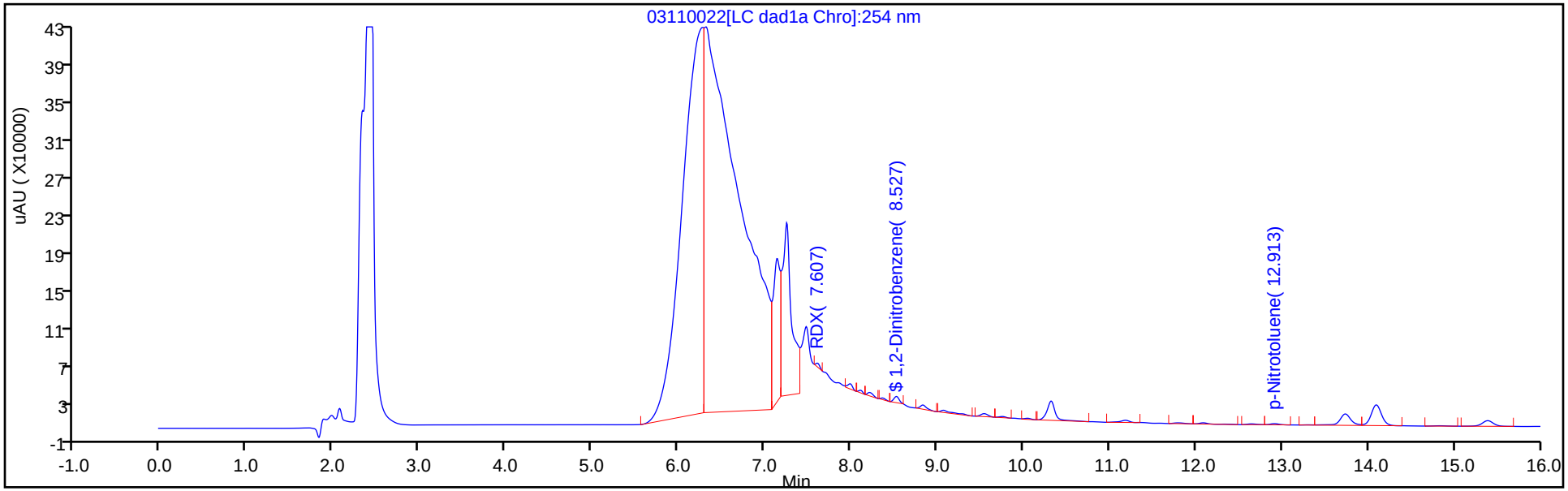
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 12-Mar-2022 10:32:10 Chrom Revision: 2.3 16-Feb-2022 17:52:00

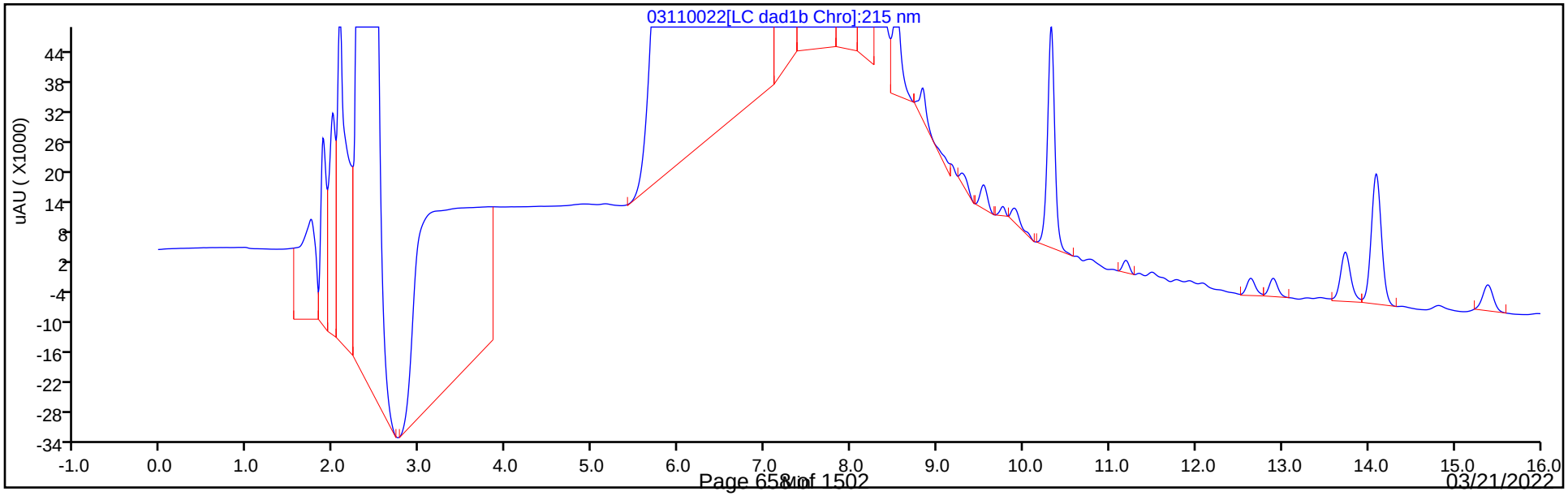
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110022.d				
Injection Date:	11-Mar-2022 19:23:01	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159332-B-10-A	Lab Sample ID:	280-159332-10	Worklist Smp#:	22
Client ID:	PZ018-8				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110022.D				
Lims ID:	280-159332-B-10-A				
Client ID:	PZ018-8				
Sample Type:	Client				
Inject. Date:	11-Mar-2022 19:23:01	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-B-10-				
Misc. Info.:	280-0109174-022				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2022 10:32:08	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:	CTX1616				

First Level Reviewer: zhangji Date: 11-Mar-2022 19:51:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2247	112.34

Manual Integration/User Assign Peak Report

Eurofins Denver

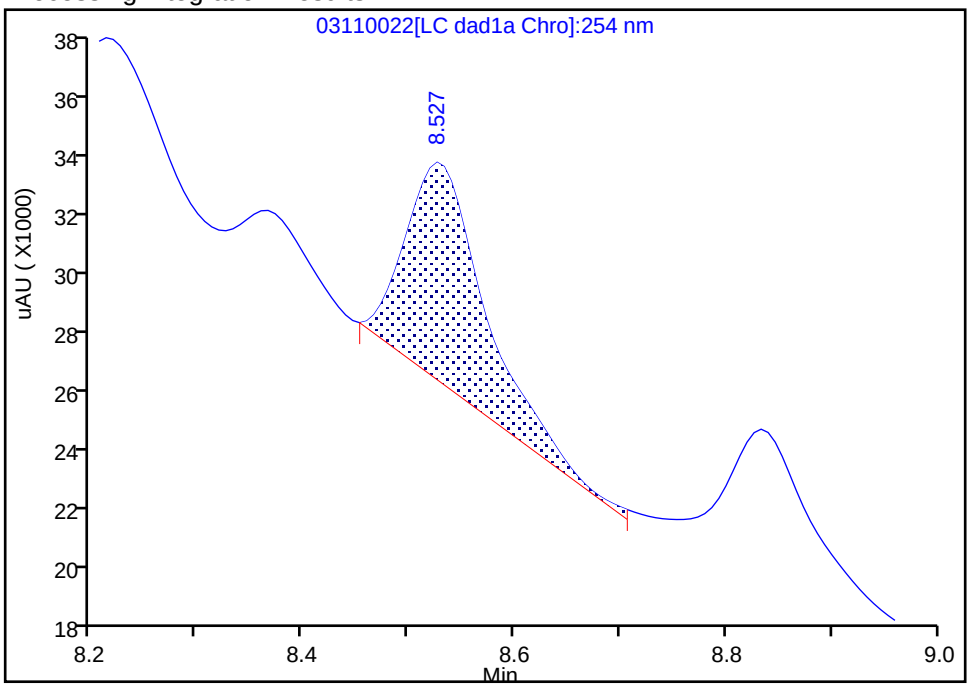
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110022.d				
Injection Date:	11-Mar-2022 19:23:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-10-A	Lab Sample ID:	280-159332-10		
Client ID:	PZ018-8				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

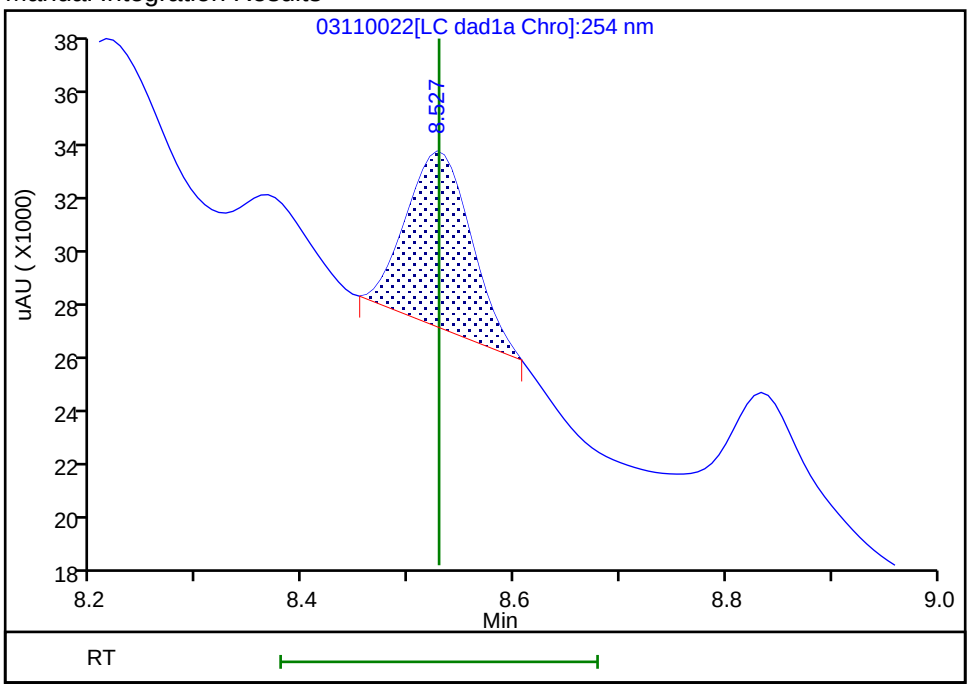
Processing Integration Results

RT: 8.53
Area: 38823
Amount: 0.311337
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 28017
Amount: 0.224679
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 19:51:07

Audit Action: Manually Integrated Audit Reason: Baseline

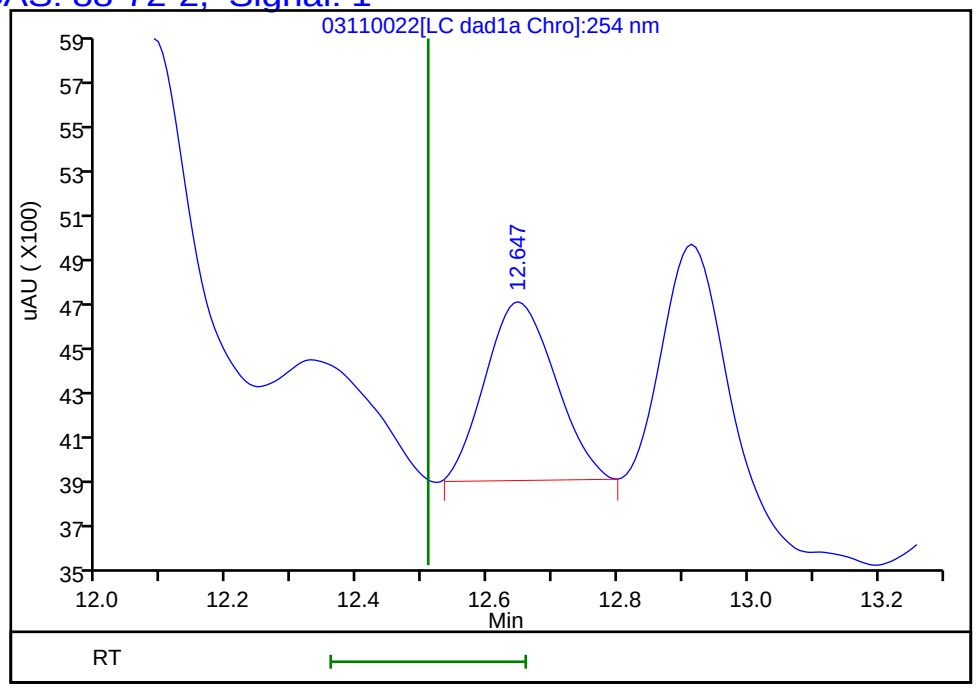
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110022.d				
Injection Date:	11-Mar-2022 19:23:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-10-A	Lab Sample ID:	280-159332-10		
Client ID:	PZ018-8				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 12.65
Response: 5830
Amount: 0.045685



Reviewer: zhangji, 11-Mar-2022 19:51:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

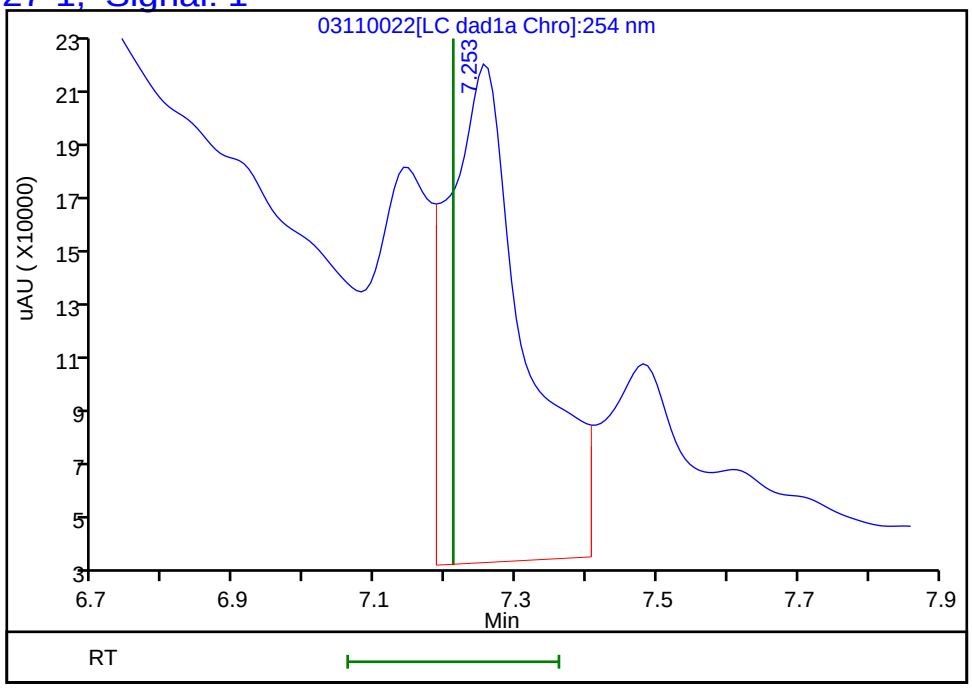
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110022.d				
Injection Date:	11-Mar-2022 19:23:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-10-A	Lab Sample ID:	280-159332-10		
Client ID:	PZ018-8				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.25
Response: 1372763
Amount: 10.895341



Reviewer: zhangji, 11-Mar-2022 19:51:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

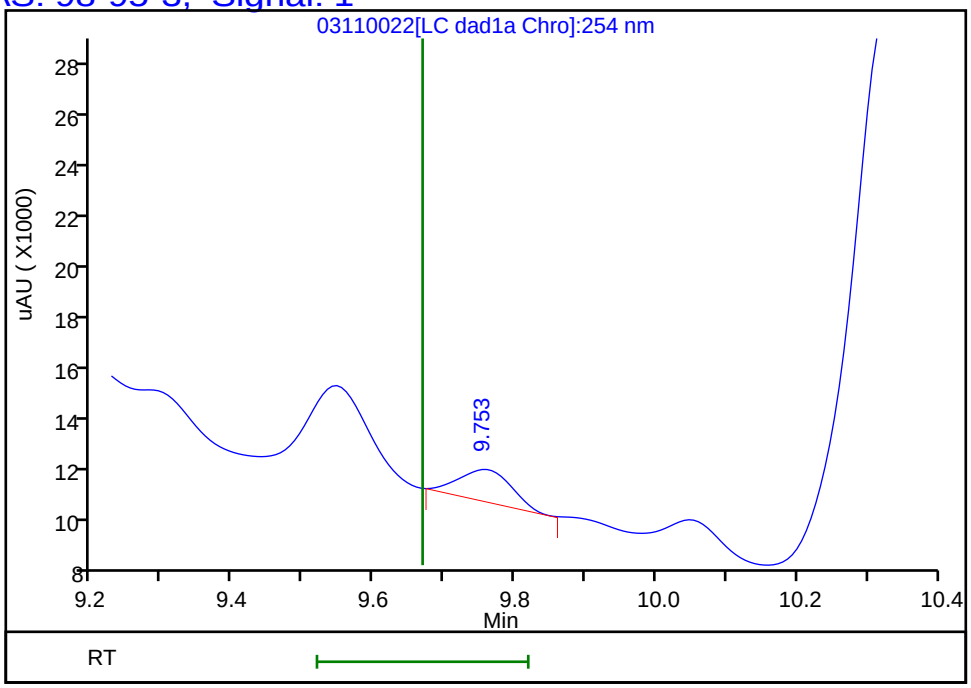
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110022.d				
Injection Date:	11-Mar-2022 19:23:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-10-A	Lab Sample ID:	280-159332-10		
Client ID:	PZ018-8				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 9.75
Response: 6060
Amount: 0.031570



Reviewer: zhangji, 11-Mar-2022 19:51:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

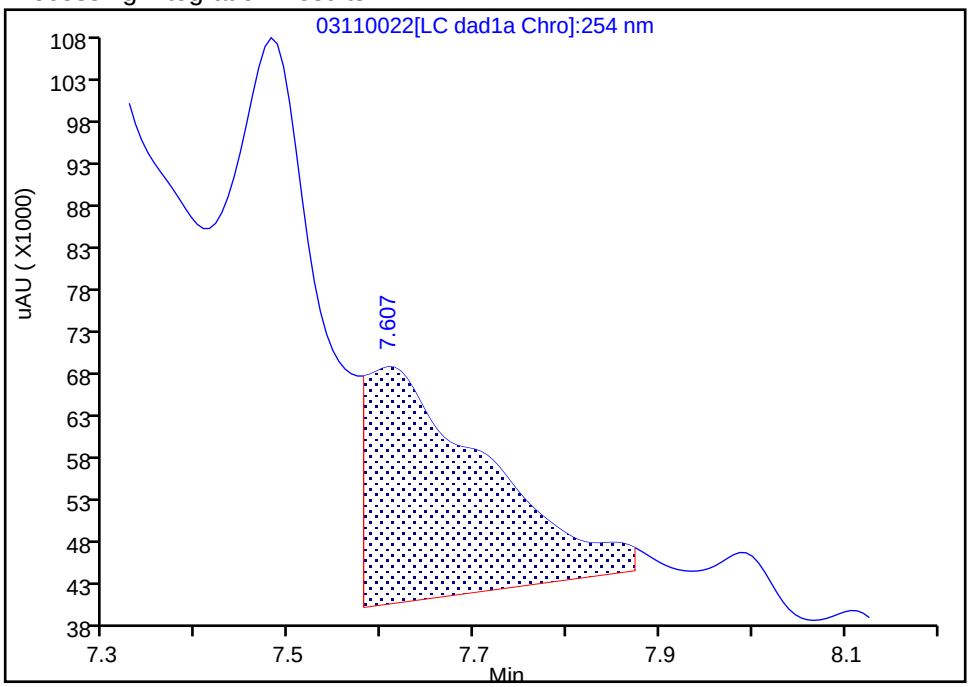
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110022.d				
Injection Date:	11-Mar-2022 19:23:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-10-A	Lab Sample ID:	280-159332-10		
Client ID:	PZ018-8				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

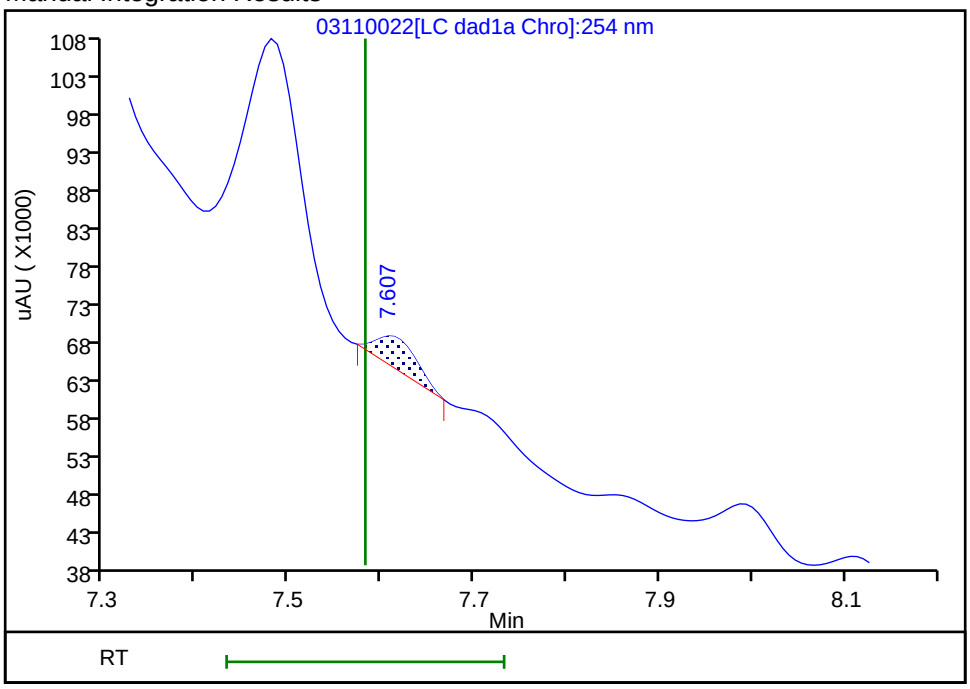
Processing Integration Results

RT: 7.61
Area: 247928
Amount: 2.392915
Amount Units: ug/mL



Manual Integration Results

RT: 7.61
Area: 12311
Amount: 0.118821
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 19:51:03
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

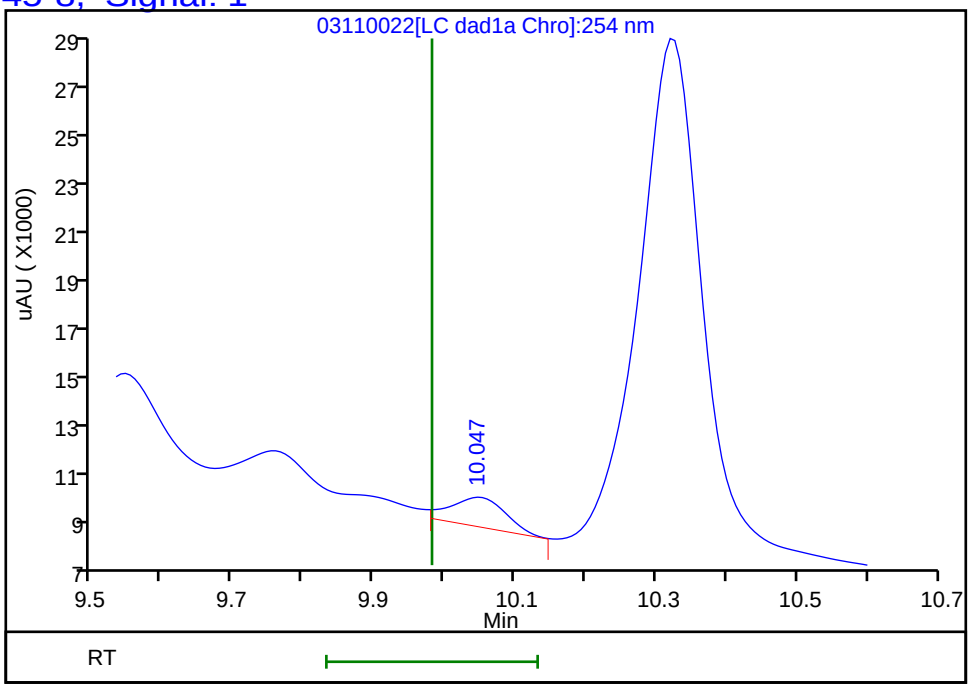
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110022.d
Injection Date: 11-Mar-2022 19:23:01 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-B-10-A Lab Sample ID: 280-159332-10
Client ID: PZ018-8
Operator ID: JZ ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 10.05
Response: 6211
Amount: 0.036414



Reviewer: zhangji, 11-Mar-2022 19:51:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ018-8 | Lab Sample ID: 280-159332-10

Matrix: Water | Lab File ID: 03150011.D

Analysis Method: 8330A | Date Collected: 03/01/2022 10:40

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 462(mL) | Date Analyzed: 03/15/2022 19:53

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.: 568709 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-99-0	4-Nitrotoluene	0.43	U	0.44	0.43	0.11
121-82-4	RDX	0.22	U	0.23	0.22	0.056

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\20220315-109260.b\03150011.D
Lims ID: 280-159332-B-10-A
Client ID: PZ018-8
Sample Type: Client
Inject. Date: 15-Mar-2022 19:53:07 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-B-10-A
Misc. Info.: 280-0109260-011
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Mar-2022 12:38:41 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: CTX1609

First Level Reviewer: zhangji Date: 15-Mar-2022 20:30:57

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1		6.854			ND	U
	6 MNX	1		7.581			ND	
	8 RDX	1		9.054			ND	
	9 Nitrobenzene	1		11.960			ND	
$	10 1,2-Dinitrobenzene	1	13.149	13.160	-0.011	44765	0.1792	M
	12 1,3-Dinitrobenzene	1		15.514			ND	
	14 o-Nitrotoluene	1	16.589	16.640	-0.051	160477	0.6838	M
	16 p-Nitrotoluene	1		16.954			ND	
	17 4-Amino-2,6-dinitrotoluene	1		17.574			ND	
	18 m-Nitrotoluene	1		17.914			ND	
	19 2-Amino-4,6-dinitrotoluene	1		18.580			ND	
	20 1,3,5-Trinitrobenzene	1		18.794			ND	
	21 2,6-Dinitrotoluene	1		20.054			ND	
	22 2,4-Dinitrotoluene	1		20.574			ND	
	23 Tetryl	1		24.307			ND	
	24 2,4,6-Trinitrotoluene	1		25.074			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

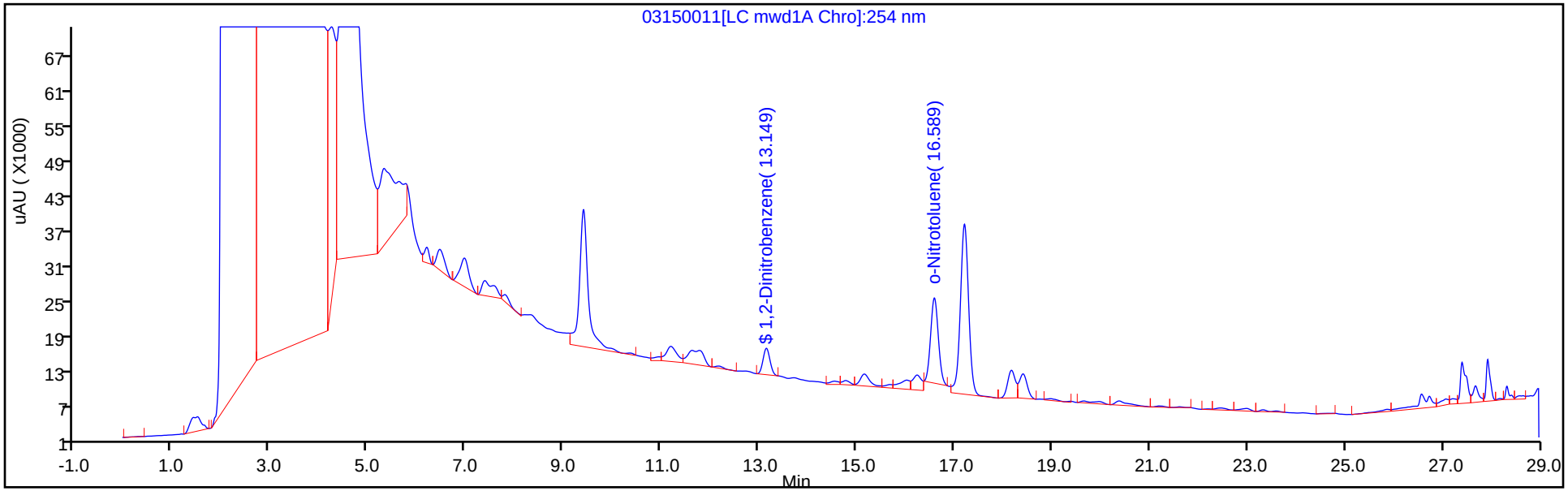
Report Date: 16-Mar-2022 12:38:47 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

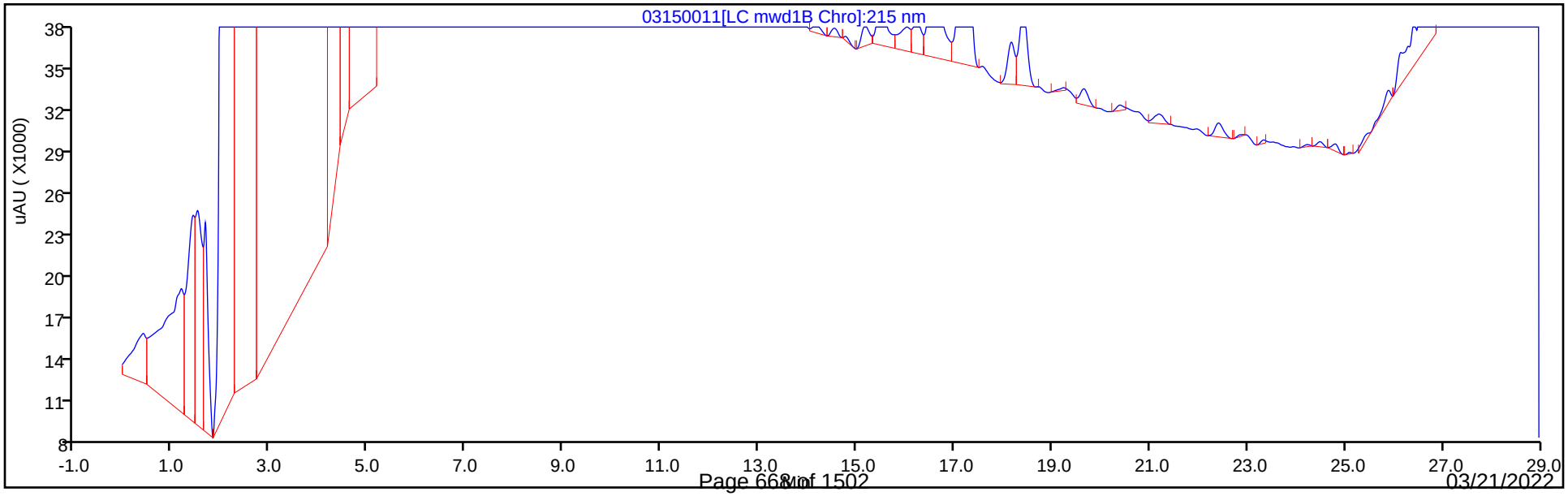
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150011.D

Injection Date:	15-Mar-2022 19:53:07	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159332-B-10-A	Lab Sample ID:	280-159332-10	Worklist Smp#:	11
Client ID:	PZ018-8				
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
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150011.D				
Lims ID:	280-159332-B-10-A				
Client ID:	PZ018-8				
Sample Type:	Client				
Inject. Date:	15-Mar-2022 19:53:07	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-B-10-A				
Misc. Info.:	280-0109260-011				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Mar-2022 12:38:41	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:	CTX1609				
First Level Reviewer: zhangji		Date:	15-Mar-2022 20:30:57		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1792	89.62

Manual Integration/User Assign Peak Report

Eurofins Denver

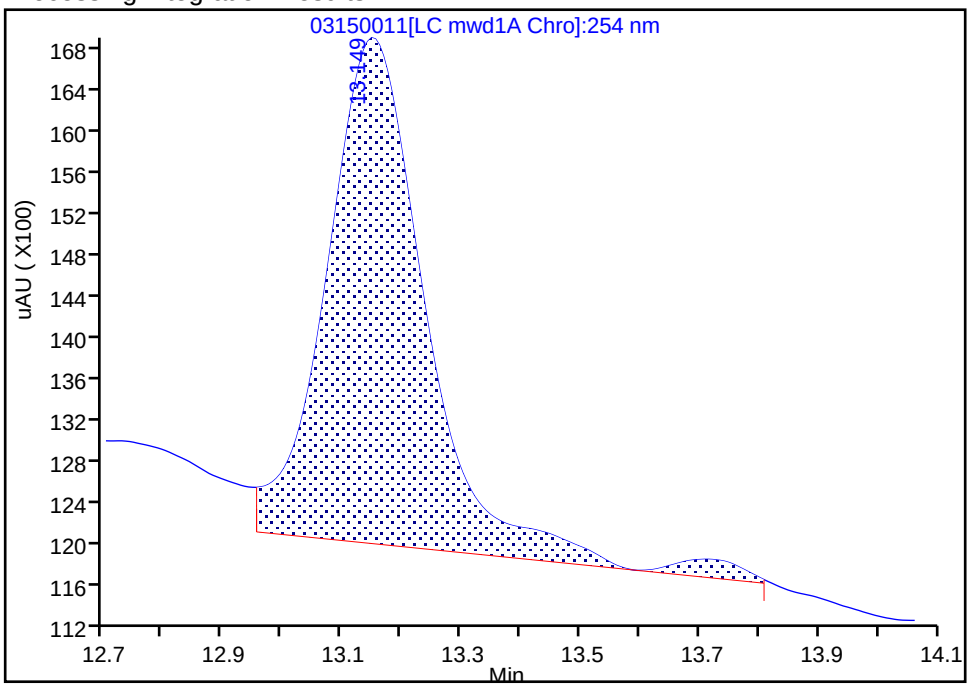
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150011.D				
Injection Date:	15-Mar-2022 19:53:07	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-B-10-A	Lab Sample ID:	280-159332-10		
Client ID:	PZ018-8				
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

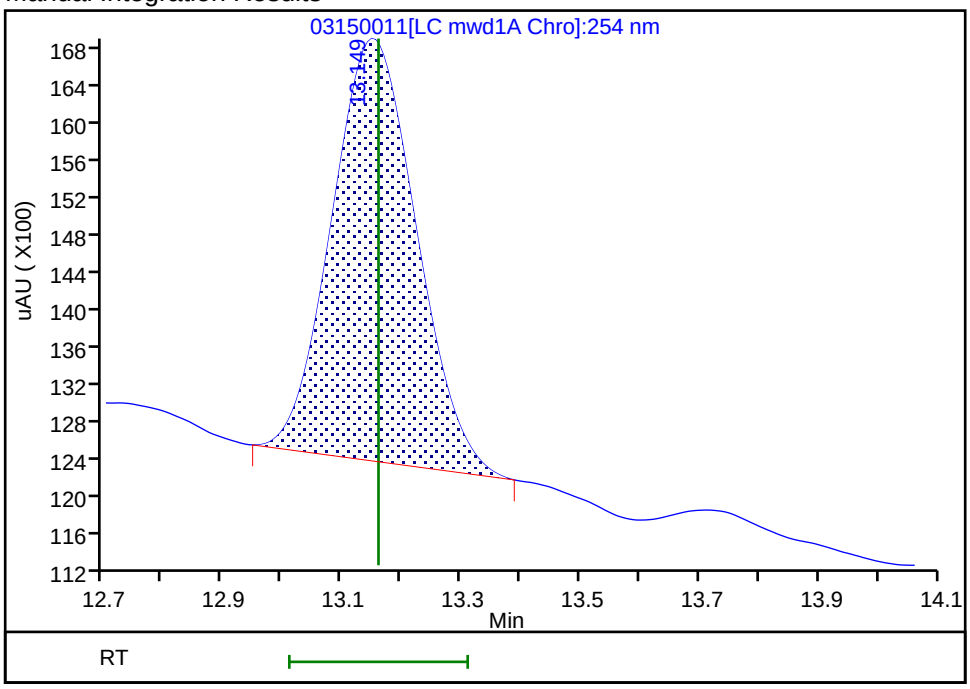
Processing Integration Results

RT: 13.15
Area: 57807
Amount: 0.231457
Amount Units: ug/ml



Manual Integration Results

RT: 13.15
Area: 44765
Amount: 0.179237
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 20:30:43

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

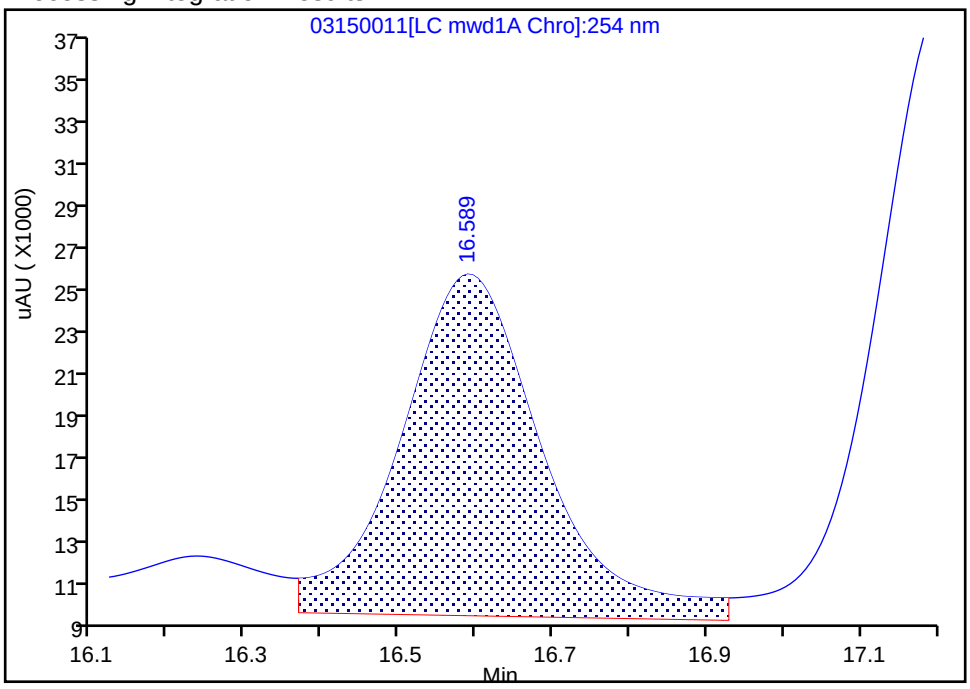
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150011.D				
Injection Date:	15-Mar-2022 19:53:07	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-B-10-A	Lab Sample ID:	280-159332-10		
Client ID:	PZ018-8				
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

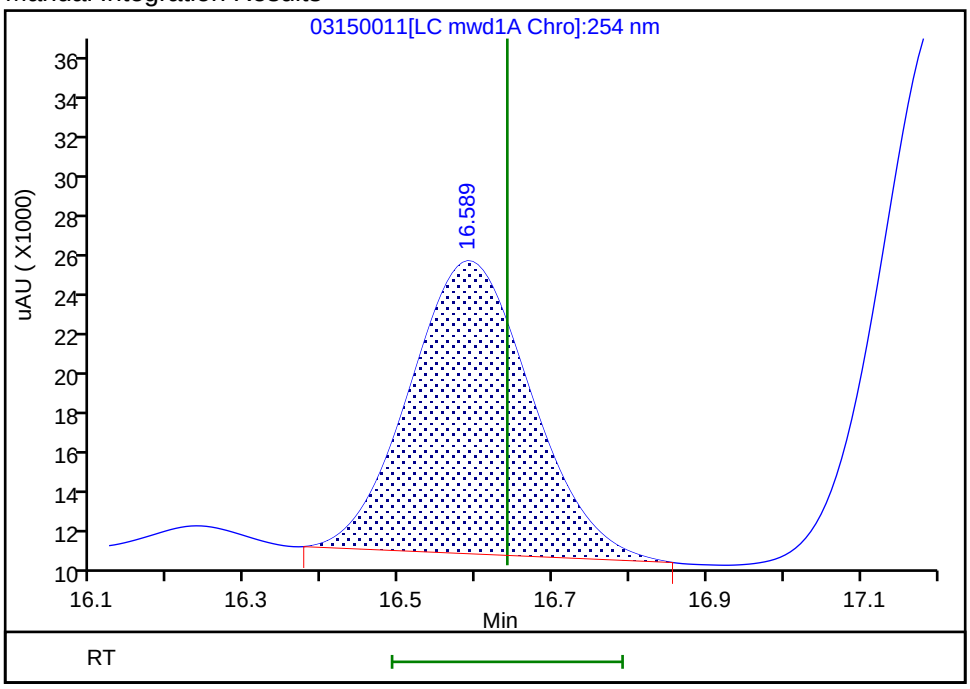
Processing Integration Results

RT: 16.59
Area: 205470
Amount: 0.875561
Amount Units: ug/ml



Manual Integration Results

RT: 16.59
Area: 160477
Amount: 0.683834
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 20:30:46

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

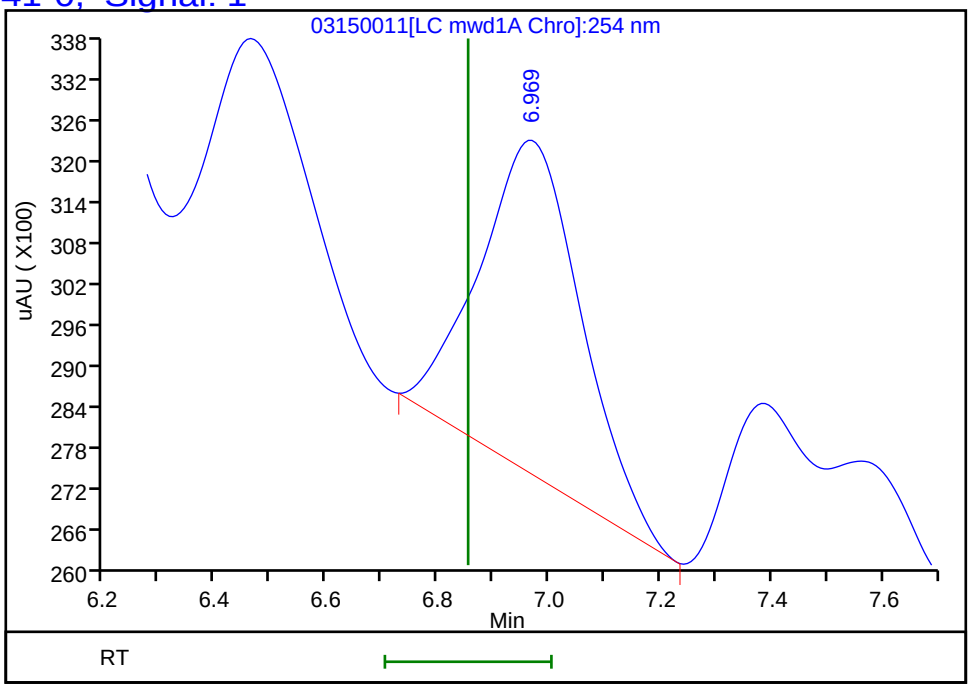
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150011.D				
Injection Date:	15-Mar-2022 19:53:07	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-B-10-A	Lab Sample ID:	280-159332-10		
Client ID:	PZ018-8				
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

RT: 6.97
Response: 62773
Amount: 0.377843



Reviewer: zhangji, 15-Mar-2022 20:30:57
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ017R-8 | Lab Sample ID: 280-159332-11

Matrix: Water | Lab File ID: 03110023.D

Analysis Method: 8330A | Date Collected: 03/01/2022 11:45

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 481.3(mL) | Date Analyzed: 03/11/2022 19:45

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.: 568433 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.4	M	0.22	0.21	0.087
118-96-7	2,4,6-Trinitrotoluene	5.0		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	3.0		0.11	0.10	0.053
88-72-2	2-Nitrotoluene	0.21	U M	0.22	0.21	0.089
99-08-1	3-Nitrotoluene	0.42	U	0.42	0.42	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	5.3		0.16	0.12	0.060
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
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.095
121-82-4	RDX	1.2	M	0.22	0.21	0.054
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	96	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110023.D
Lims ID: 280-159332-B-11-A
Client ID: PZ017R-8
Sample Type: Client
Inject. Date: 11-Mar-2022 19:45:52 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-B-11-
Misc. Info.: 280-0109174-023
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Mar-2022 10:32:08 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: CTX1616

First Level Reviewer: zhangji Date: 11-Mar-2022 20:14:08

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.595			ND	
7 MNX	1		7.211			ND	U
8 RDX	1	7.595	7.582	0.013	12157	0.1173	M
$ 10 1,2-Dinitrobenzene	1	8.529	8.529	0.000	23833	0.1911	M
11 1,3,5-Trinitrobenzene	1	8.655	8.655	0.000	28665	0.1314	M
12 1,3-Dinitrobenzene	1	9.289	9.282	0.007	5100	0.0177	M
13 Nitrobenzene	1		9.668			ND	
15 Tetryl	1		9.982			ND	U
17 2,4,6-Trinitrotoluene	1	10.895	10.888	0.007	97443	0.4807	
18 4-Amino-2,6-dinitrotoluene	1	11.082	11.068	0.014	76737	0.5082	
19 2-Amino-4,6-dinitrotoluene	1	11.329	11.322	0.007	58219	0.2880	
20 2,6-Dinitrotoluene	1		11.495			ND	
21 2,4-Dinitrotoluene	1		11.662			ND	
22 o-Nitrotoluene	1		12.508			ND	U
23 p-Nitrotoluene	1	12.922	12.935	-0.013	5540	0.0521	
24 m-Nitrotoluene	1		13.502			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

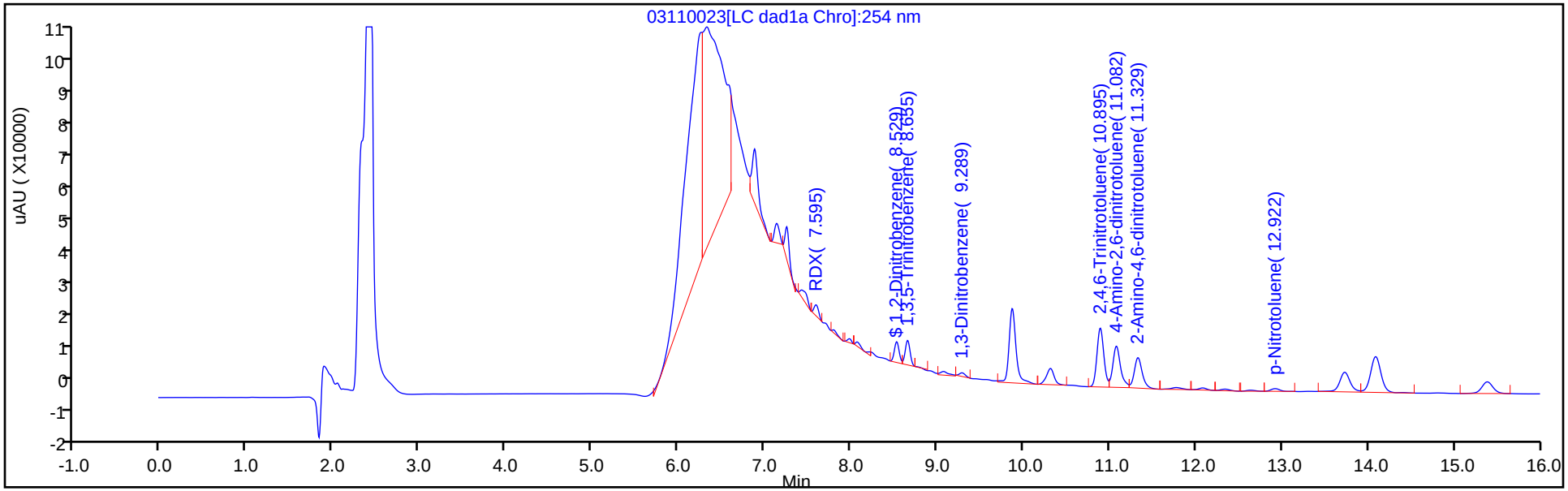
Report Date: 12-Mar-2022 10:32:09 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

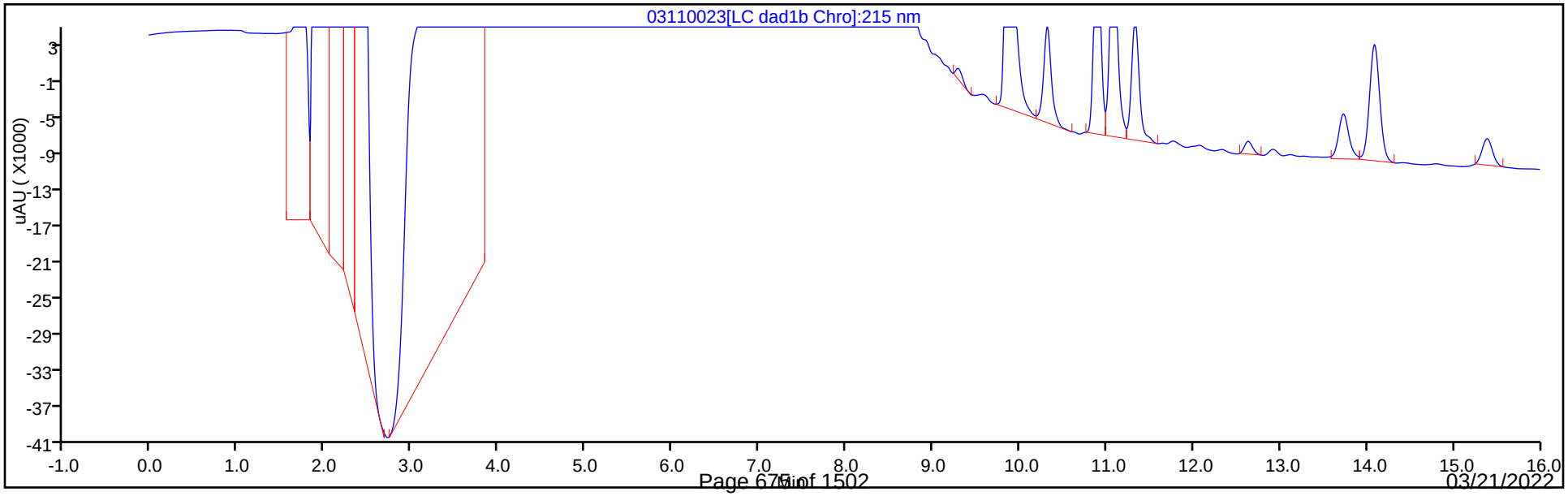
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110023.d

Injection Date:	11-Mar-2022 19:45:52	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159332-B-11-A	Lab Sample ID:	280-159332-11	Worklist Smp#:	23
Client ID:	PZ017R-8				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110023.D				
Lims ID:	280-159332-B-11-A				
Client ID:	PZ017R-8				
Sample Type:	Client				
Inject. Date:	11-Mar-2022 19:45:52	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-B-11-				
Misc. Info.:	280-0109174-023				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2022 10:32:08	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:	CTX1616				

First Level Reviewer: zhangji Date: 11-Mar-2022 20:14:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1911	95.56

Manual Integration/User Assign Peak Report

Eurofins Denver

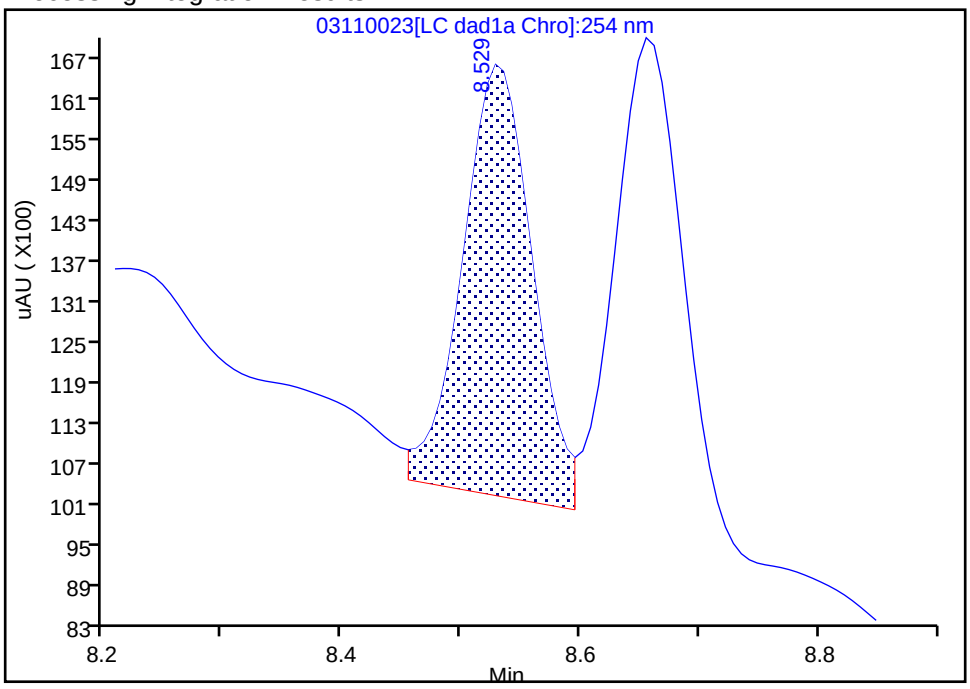
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110023.d				
Injection Date:	11-Mar-2022 19:45:52	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-11-A	Lab Sample ID:	280-159332-11		
Client ID:	PZ017R-8				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

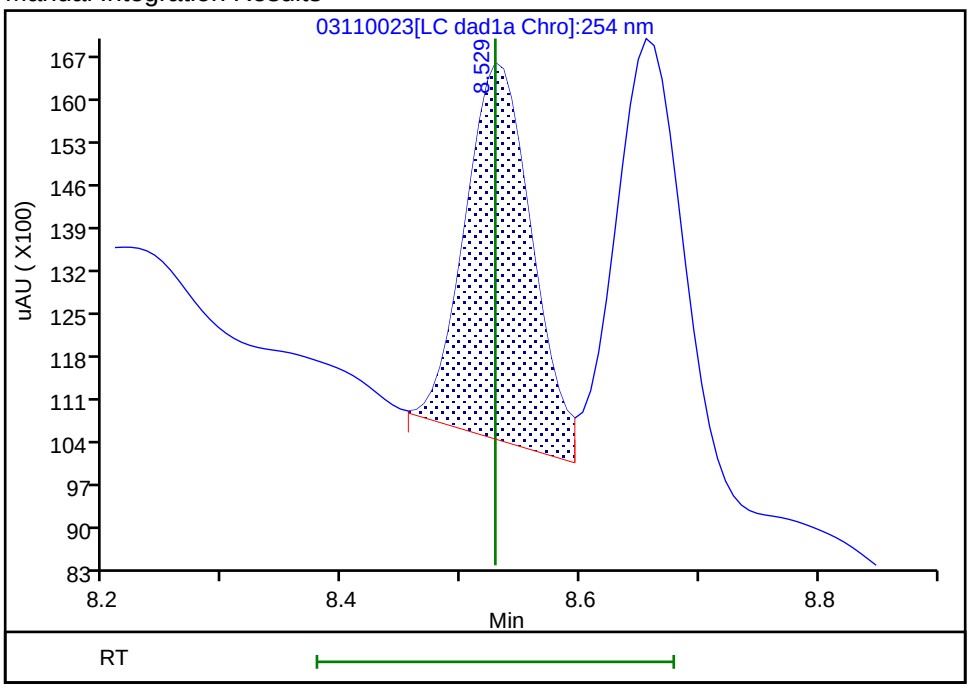
Processing Integration Results

RT: 8.53
Area: 25715
Amount: 0.206219
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 23833
Amount: 0.191126
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 20:13:54
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

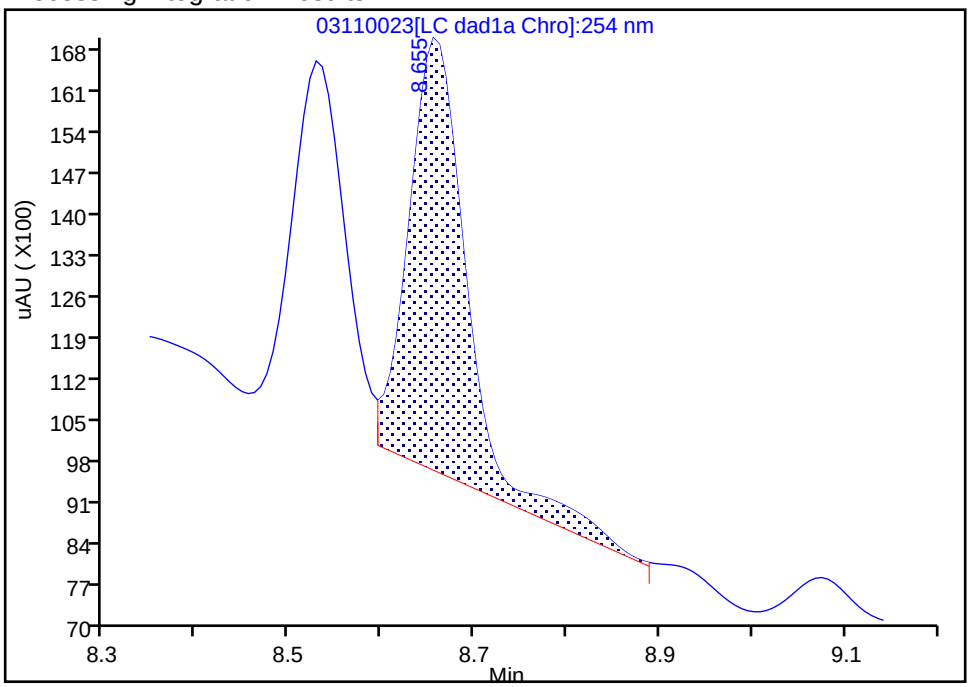
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110023.d				
Injection Date:	11-Mar-2022 19:45:52	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-11-A	Lab Sample ID:	280-159332-11		
Client ID:	PZ017R-8				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

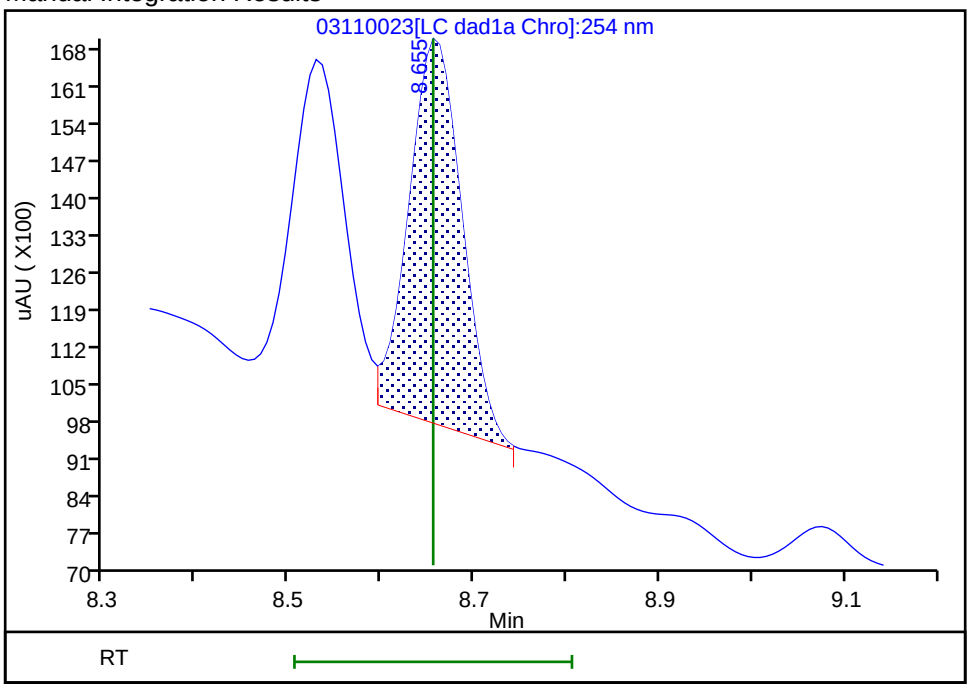
Processing Integration Results

RT: 8.66
Area: 32155
Amount: 0.147435
Amount Units: ug/mL



Manual Integration Results

RT: 8.66
Area: 28665
Amount: 0.131433
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 20:13:57

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

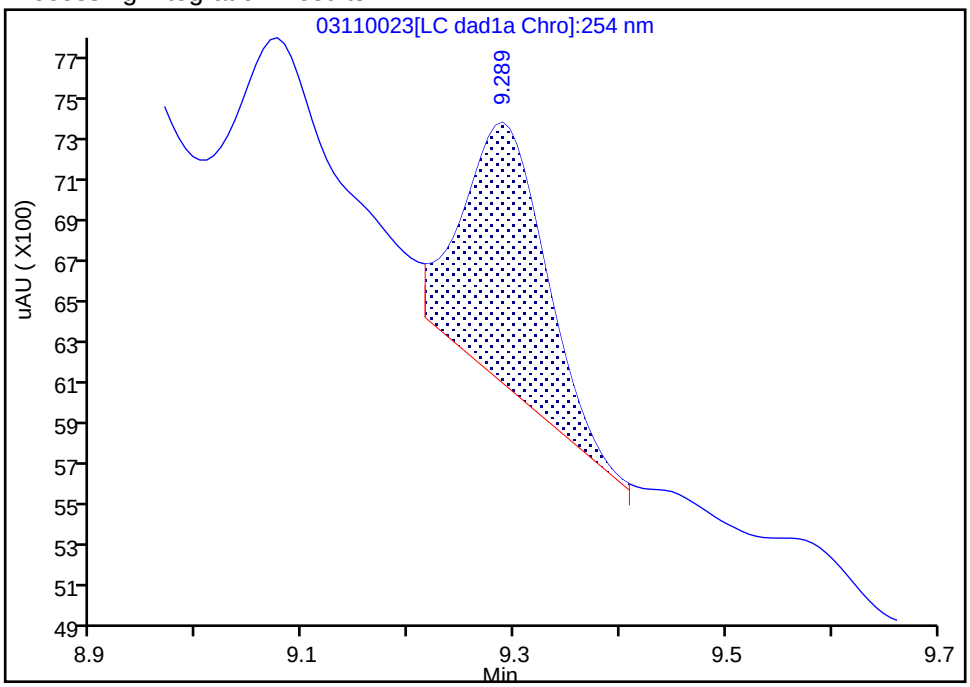
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110023.d				
Injection Date:	11-Mar-2022 19:45:52	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-11-A	Lab Sample ID:	280-159332-11		
Client ID:	PZ017R-8				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

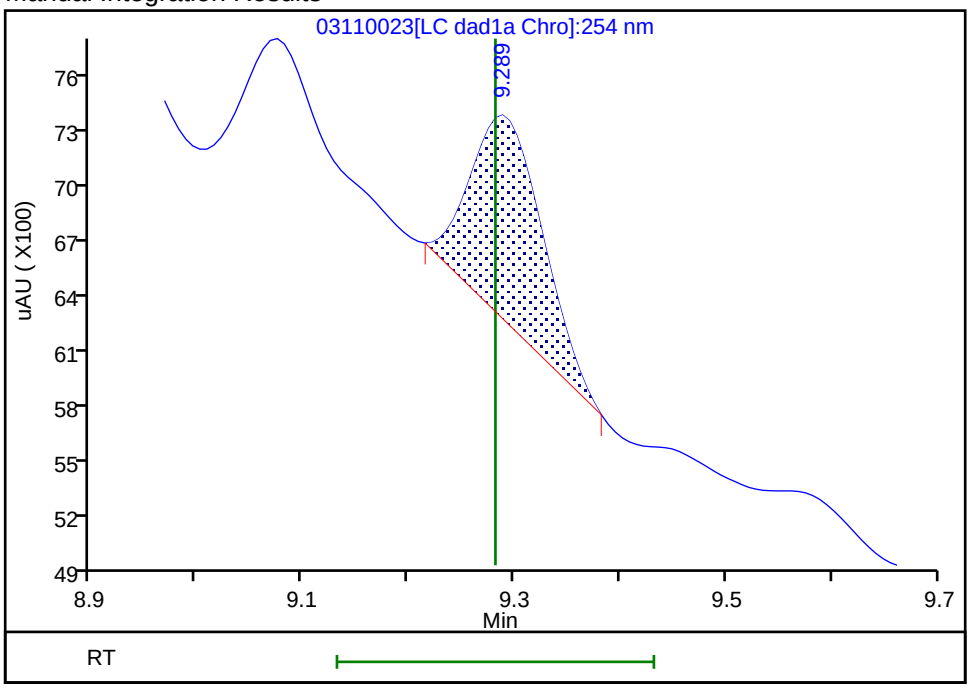
Processing Integration Results

RT: 9.29
Area: 6722
Amount: 0.023308
Amount Units: ug/mL



Manual Integration Results

RT: 9.29
Area: 5100
Amount: 0.017684
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 20:14:04

Audit Action: Manually Integrated Audit Reason: Baseline

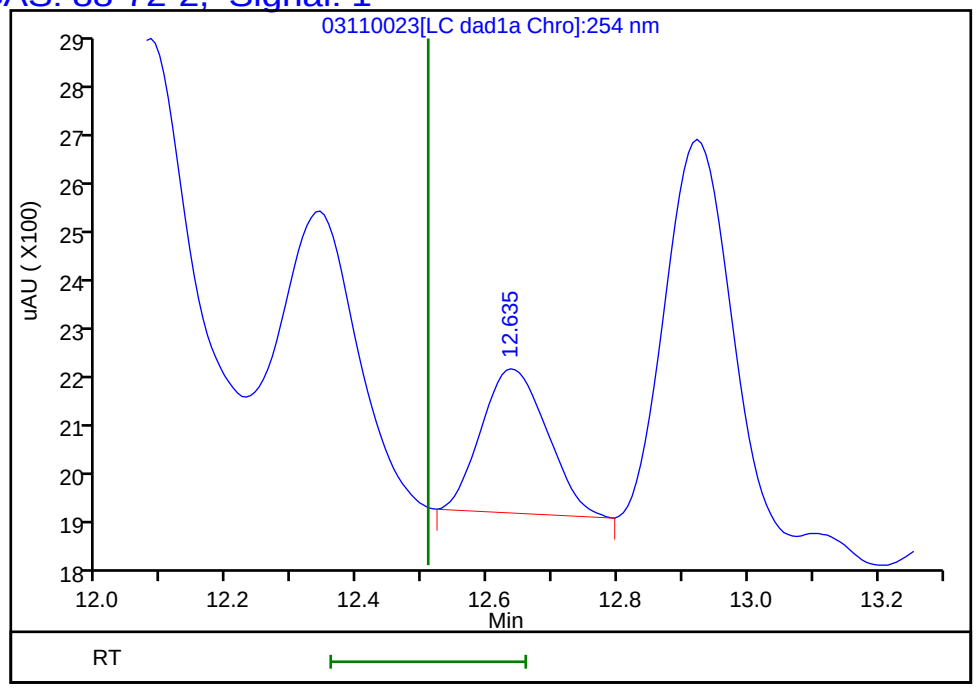
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110023.d				
Injection Date:	11-Mar-2022 19:45:52	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-11-A	Lab Sample ID:	280-159332-11		
Client ID:	PZ017R-8				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 12.64
Response: 2053
Amount: 0.016088



Reviewer: zhangji, 11-Mar-2022 20:14:08
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

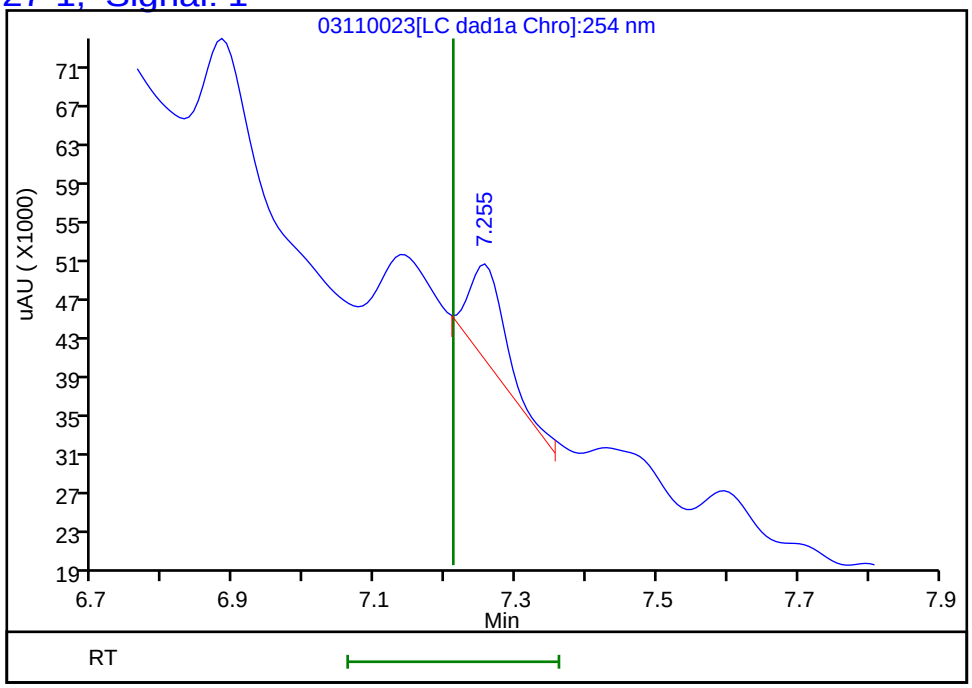
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110023.d
Injection Date: 11-Mar-2022 19:45:52 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-B-11-A Lab Sample ID: 280-159332-11
Client ID: PZ017R-8
Operator ID: JZ ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.26
Response: 33508
Amount: 0.265946



Reviewer: zhangji, 11-Mar-2022 20:14:08
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

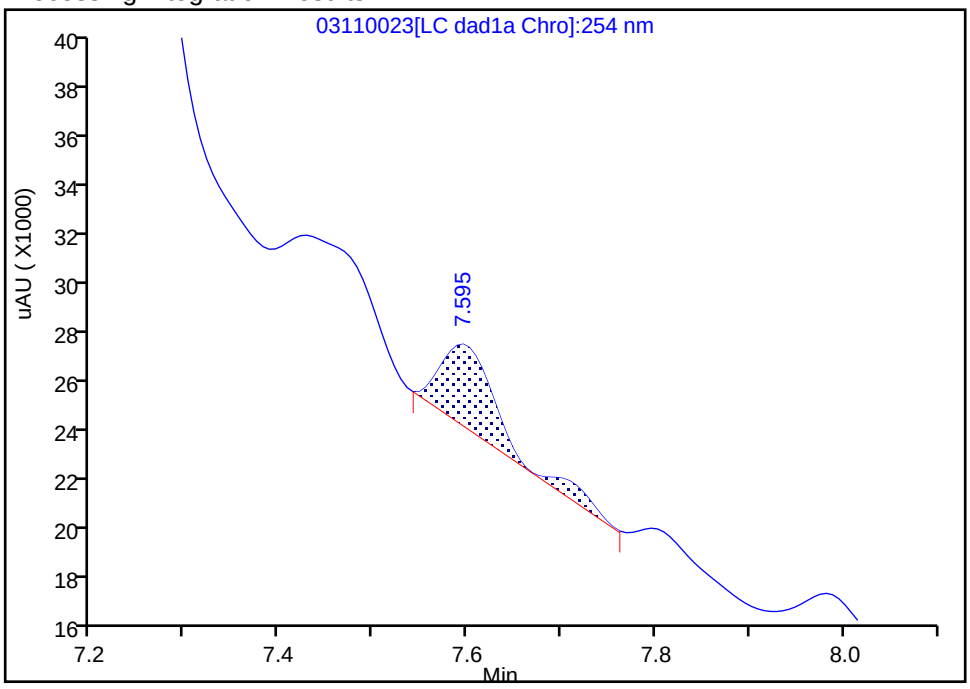
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110023.d				
Injection Date:	11-Mar-2022 19:45:52	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-11-A	Lab Sample ID:	280-159332-11		
Client ID:	PZ017R-8				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

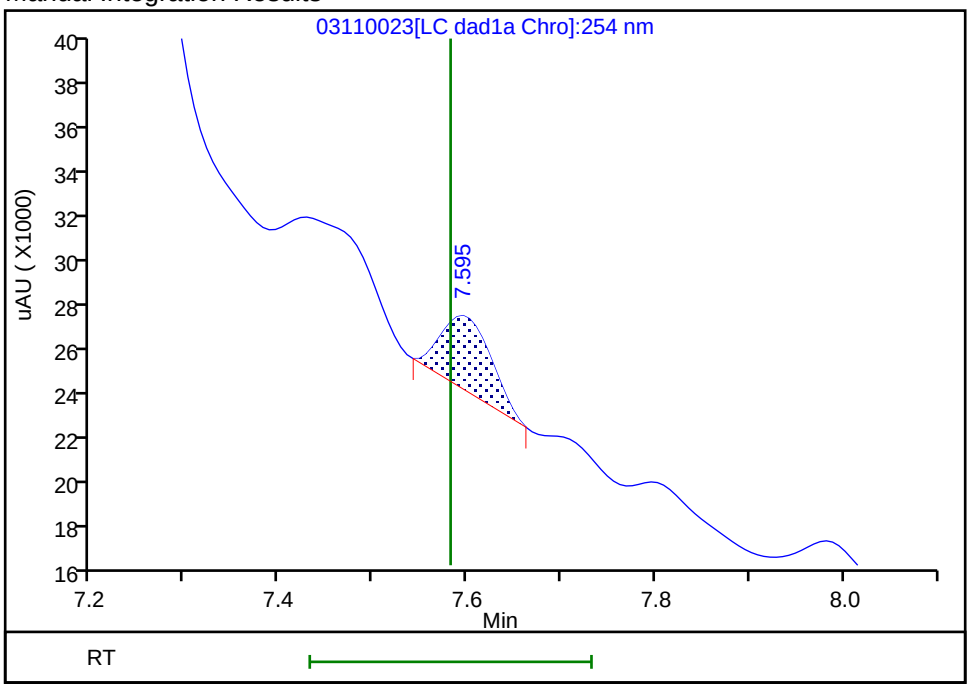
Processing Integration Results

RT: 7.60
Area: 14336
Amount: 0.138366
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 12157
Amount: 0.117335
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 20:13:48
Audit Action: Manually Integrated Audit Reason: Baseline

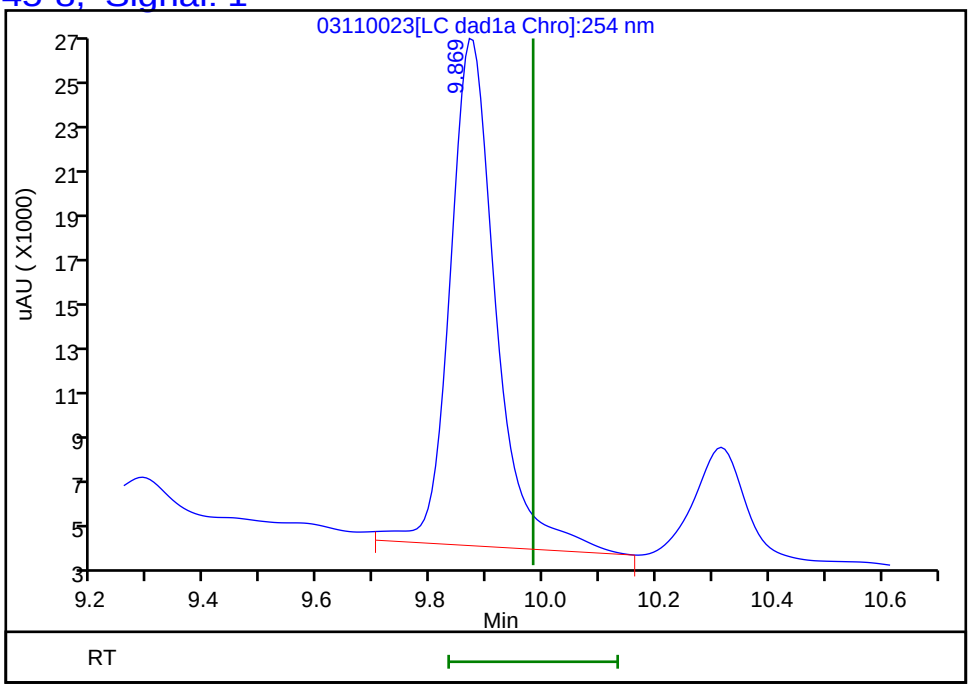
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110023.d				
Injection Date:	11-Mar-2022 19:45:52	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-11-A	Lab Sample ID:	280-159332-11		
Client ID:	PZ017R-8				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 9.87
Response: 124451
Amount: 0.729632



Reviewer: zhangji, 11-Mar-2022 20:14:08
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ017R-8 | Lab Sample ID: 280-159332-11

Matrix: Water | Lab File ID: 03150012.D

Analysis Method: 8330A | Date Collected: 03/01/2022 11:45

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 481.3(mL) | Date Analyzed: 03/15/2022 20:28

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.: 568709 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038
99-99-0	4-Nitrotoluene	0.42	U	0.43	0.42	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	107		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150012.D
Lims ID: 280-159332-B-11-A
Client ID: PZ017R-8
Sample Type: Client
Inject. Date: 15-Mar-2022 20:28:10 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-B-11-A
Misc. Info.: 280-0109260-012
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Mar-2022 12:38:41 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: CTX1609

First Level Reviewer: zhangji Date: 15-Mar-2022 21:05:28

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.833	6.854	-0.021	16916	0.1018	
	6 MNX	1		7.581			ND	
	8 RDX	1	9.027	9.054	-0.027	17389	0.0895	
	9 Nitrobenzene	1		11.960			ND	
$	10 1,2-Dinitrobenzene	1	13.140	13.160	-0.020	53426	0.2139	
	12 1,3-Dinitrobenzene	1		15.514			ND	
	14 o-Nitrotoluene	1	16.580	16.640	-0.060	83328	0.3551	
	16 p-Nitrotoluene	1		16.954			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.566	17.574	-0.008	128232	0.4801	
	18 m-Nitrotoluene	1		17.914			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.573	18.580	-0.007	110080	0.3053	M
	20 1,3,5-Trinitrobenzene	1	18.793	18.794	-0.001	60820	0.1464	Ma
	21 2,6-Dinitrotoluene	1		20.054			ND	
	22 2,4-Dinitrotoluene	1		20.574			ND	
	23 Tetryl	1		24.307			ND	
	24 2,4,6-Trinitrotoluene	1	25.060	25.074	-0.014	187737	0.5085	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

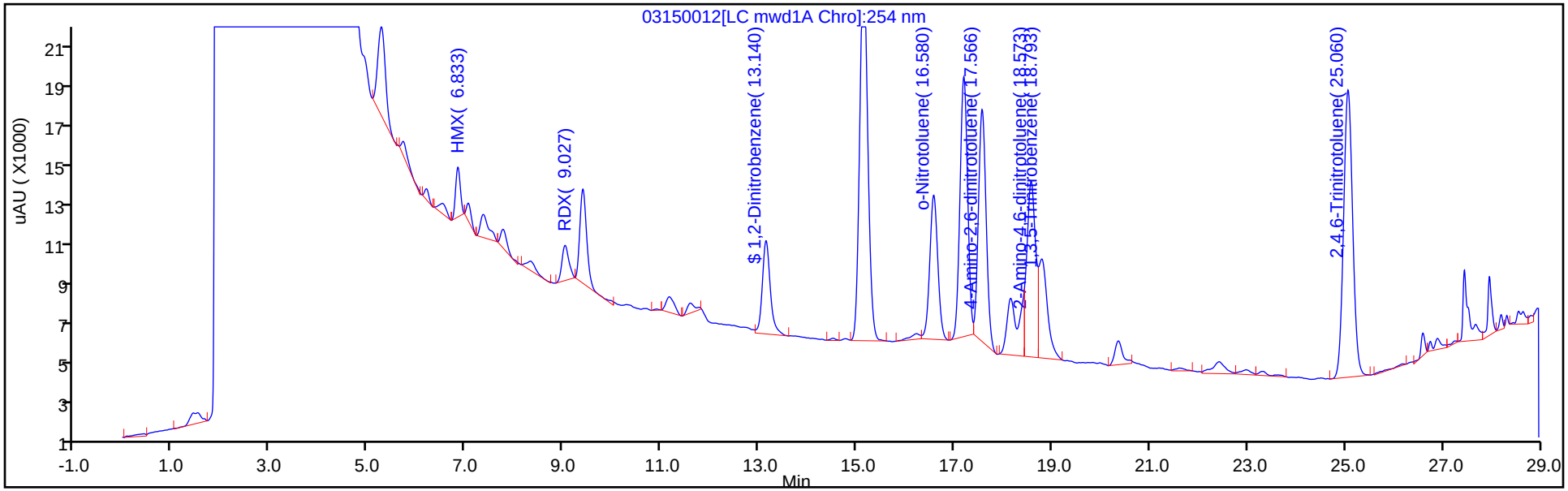
Report Date: 16-Mar-2022 12:38:47 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

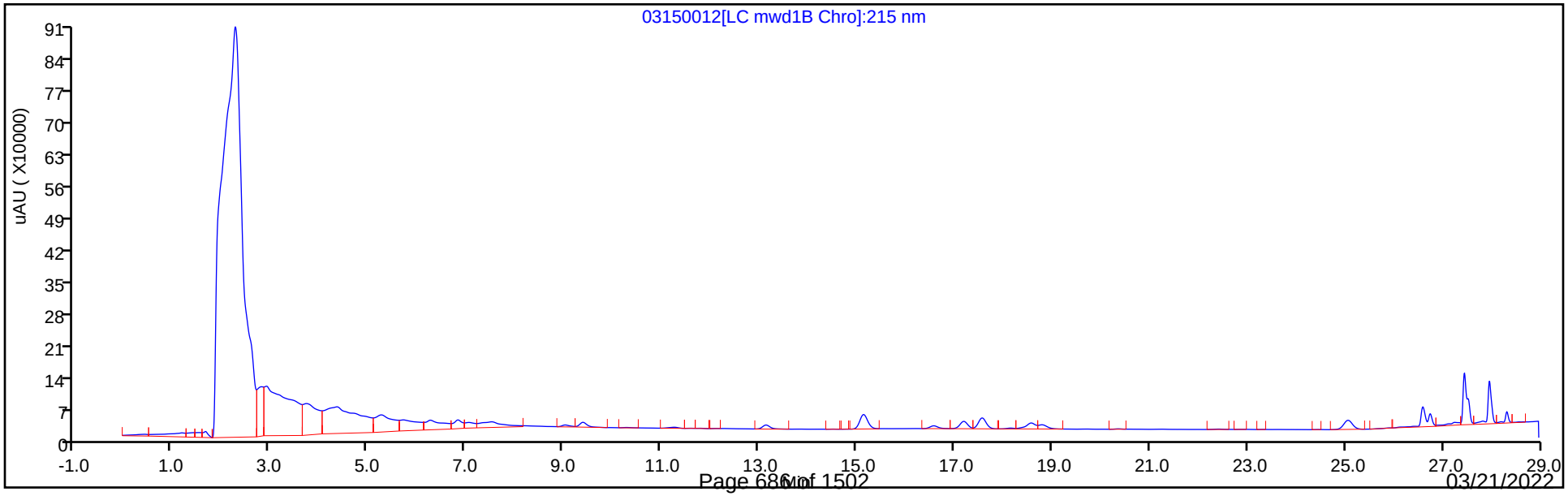
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150012.D

Injection Date:	15-Mar-2022 20:28:10	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159332-B-11-A	Lab Sample ID:	280-159332-11	Worklist Smp#:	12
Client ID:	PZ017R-8				
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
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150012.D				
Lims ID:	280-159332-B-11-A				
Client ID:	PZ017R-8				
Sample Type:	Client				
Inject. Date:	15-Mar-2022 20:28:10	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-B-11-A				
Misc. Info.:	280-0109260-012				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Mar-2022 12:38:41	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:	CTX1609				
First Level Reviewer: zhangji		Date:	15-Mar-2022 21:05:28		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2139	106.96

Manual Integration/User Assign Peak Report

Eurofins Denver

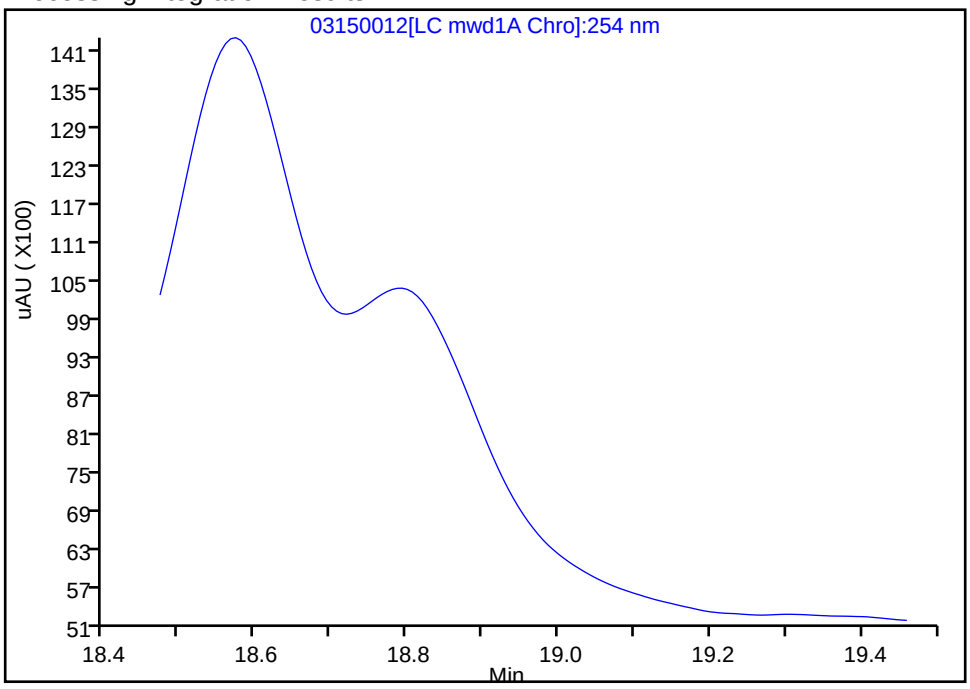
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150012.D				
Injection Date:	15-Mar-2022 20:28:10	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-B-11-A	Lab Sample ID:	280-159332-11		
Client ID:	PZ017R-8				
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

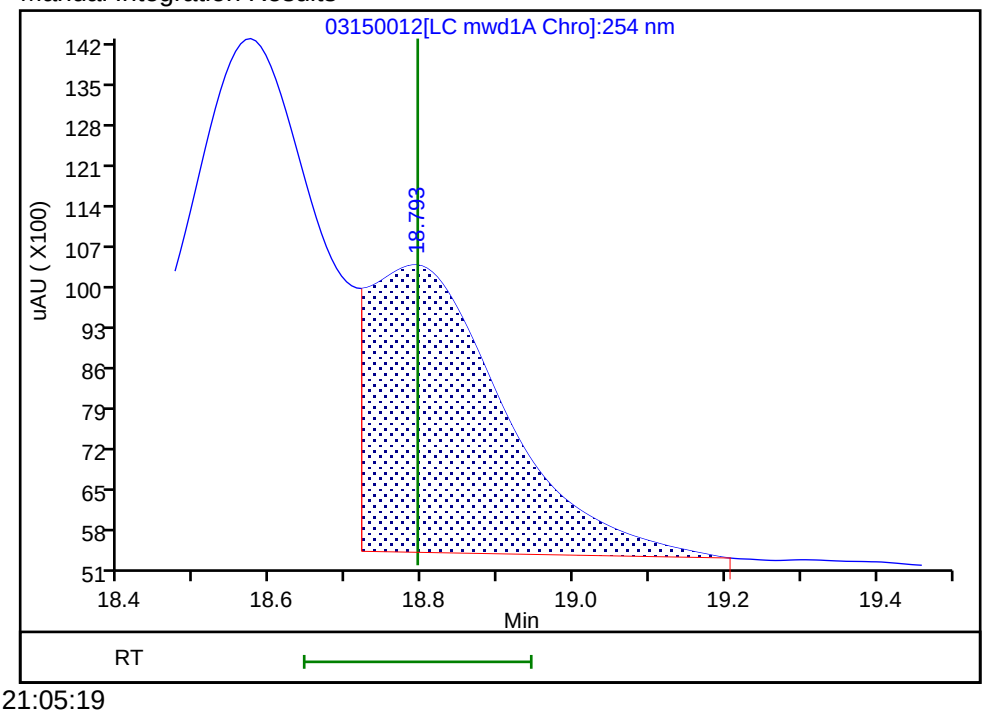
Not Detected
Expected RT: 18.79

Processing Integration Results



Manual Integration Results

RT: 18.79
Area: 60820
Amount: 0.146390
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 21:05:19
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

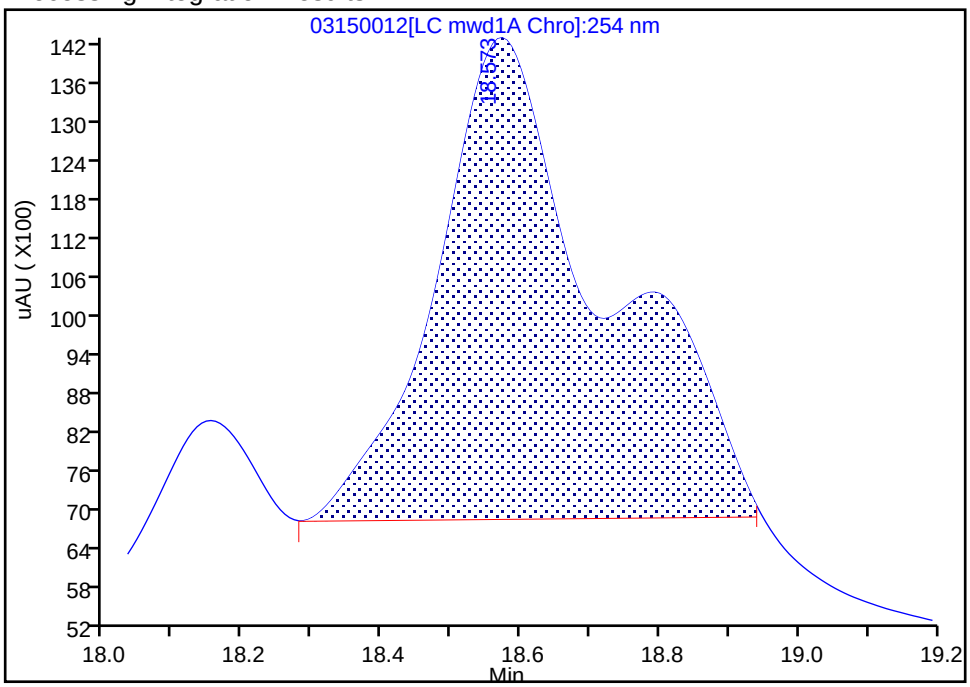
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150012.D				
Injection Date:	15-Mar-2022 20:28:10	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-B-11-A	Lab Sample ID:	280-159332-11		
Client ID:	PZ017R-8				
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

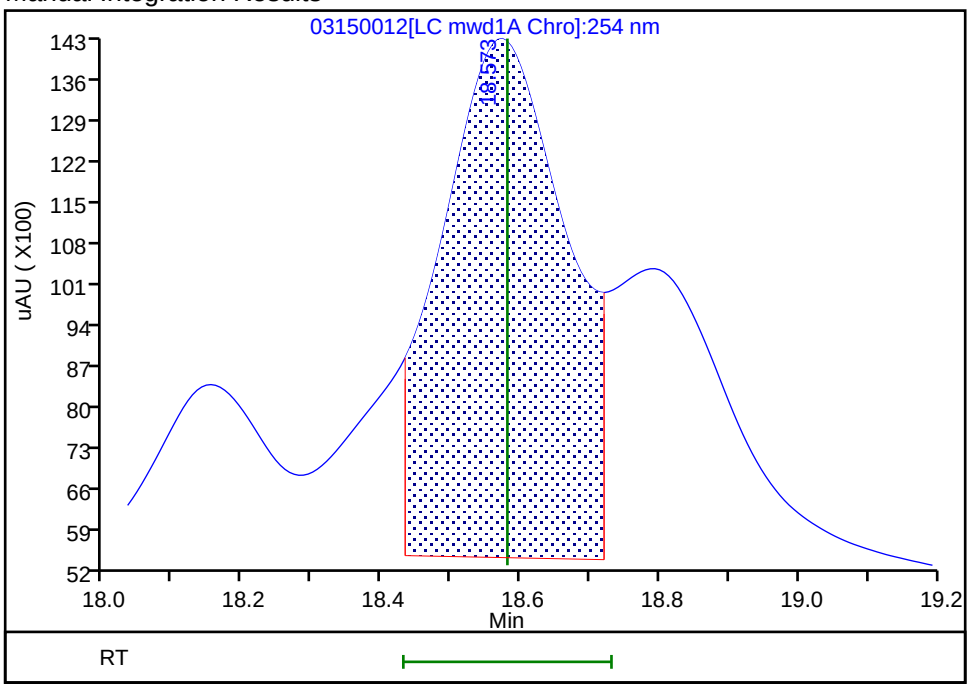
Processing Integration Results

RT: 18.57
Area: 125567
Amount: 0.348279
Amount Units: ug/ml



Manual Integration Results

RT: 18.57
Area: 110080
Amount: 0.305323
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 21:05:17

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ021-8 | Lab Sample ID: 280-159332-12

Matrix: Water | Lab File ID: 03110024.D

Analysis Method: 8330A | Date Collected: 03/01/2022 08:00

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 470.6(mL) | Date Analyzed: 03/11/2022 20:08

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.: 568433 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.0	M	0.22	0.21	0.089
118-96-7	2,4,6-Trinitrotoluene	4.5		0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029
606-20-2	2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	2.9		0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U M	0.22	0.21	0.091
99-08-1	3-Nitrotoluene	0.42	U	0.42	0.42	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	5.1		0.16	0.13	0.061
2691-41-0	HMX	0.82	M J1	0.22	0.21	0.093
5755-27-1	MNX	0.42	U M	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.097
121-82-4	RDX	1.2	M	0.22	0.21	0.055
479-45-8	Tetryl	0.11	U M	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	94	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110024.D
Lims ID: 280-159332-B-12-A
Client ID: PZ021-8
Sample Type: Client
Inject. Date: 11-Mar-2022 20:08:43 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-B-12-
Misc. Info.: 280-0109174-024
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Mar-2022 10:32:08 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: CTX1616

First Level Reviewer: zhangji Date: 11-Mar-2022 20:33:38

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.579	6.595	-0.016	6431	0.0767	M
7 MNX	1		7.211			ND	U
8 RDX	1	7.599	7.582	0.017	12186	0.1176	M
$ 10 1,2-Dinitrobenzene	1	8.533	8.529	0.004	23334	0.1871	M
11 1,3,5-Trinitrobenzene	1	8.659	8.655	0.004	20764	0.0952	M
12 1,3-Dinitrobenzene	1	9.286	9.282	0.004	7266	0.0252	
13 Nitrobenzene	1		9.668			ND	
15 Tetryl	1		9.982			ND	U
17 2,4,6-Trinitrotoluene	1	10.886	10.888	-0.002	85504	0.4218	
18 4-Amino-2,6-dinitrotoluene	1	11.073	11.068	0.005	72020	0.4770	
19 2-Amino-4,6-dinitrotoluene	1	11.326	11.322	0.004	55806	0.2760	
20 2,6-Dinitrotoluene	1		11.495			ND	
21 2,4-Dinitrotoluene	1		11.662			ND	
22 o-Nitrotoluene	1		12.508			ND	U
23 p-Nitrotoluene	1	12.913	12.935	-0.022	5524	0.0520	
24 m-Nitrotoluene	1		13.502			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

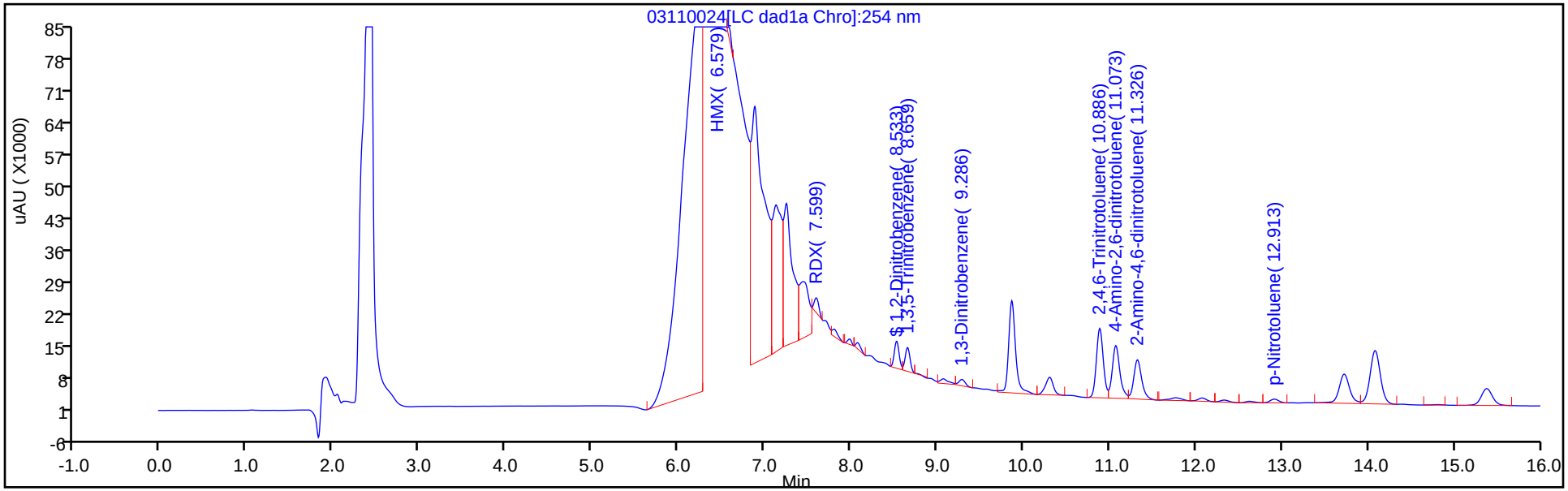
Report Date: 12-Mar-2022 10:32:09 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

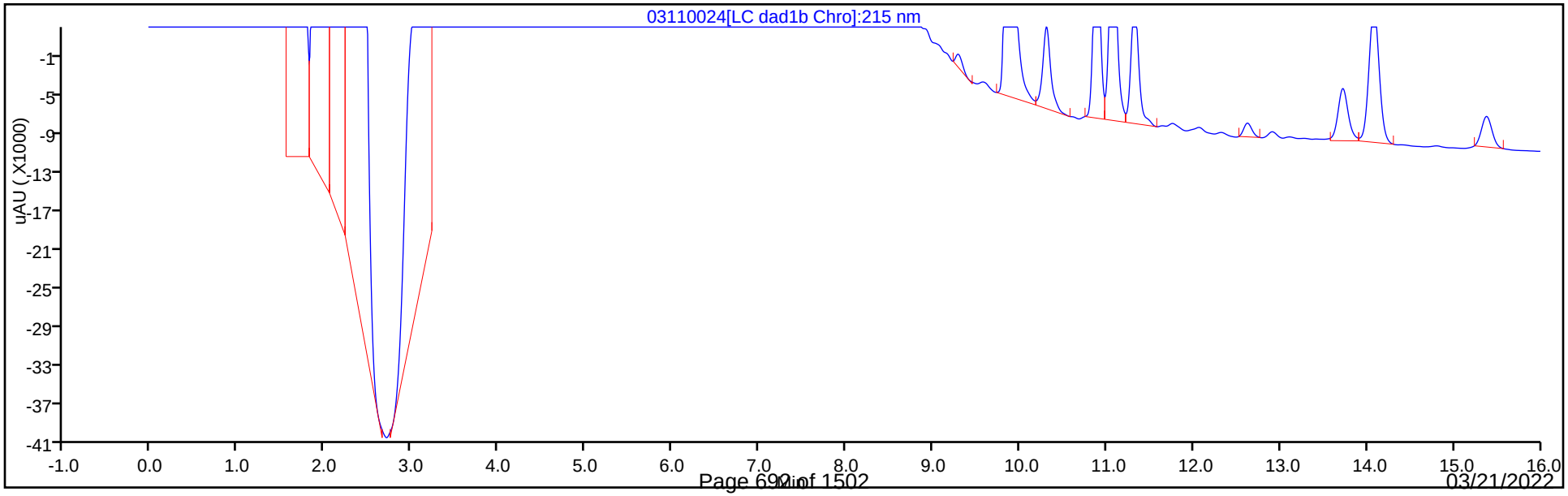
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110024.d

Injection Date:	11-Mar-2022 20:08:43	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159332-B-12-A	Lab Sample ID:	280-159332-12	Worklist Smp#:	24
Client ID:	PZ021-8				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110024.D				
Lims ID:	280-159332-B-12-A				
Client ID:	PZ021-8				
Sample Type:	Client				
Inject. Date:	11-Mar-2022 20:08:43	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-B-12-				
Misc. Info.:	280-0109174-024				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2022 10:32:08	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:	CTX1616				

First Level Reviewer: zhangji Date: 11-Mar-2022 20:33:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1871	93.56

Manual Integration/User Assign Peak Report

Eurofins Denver

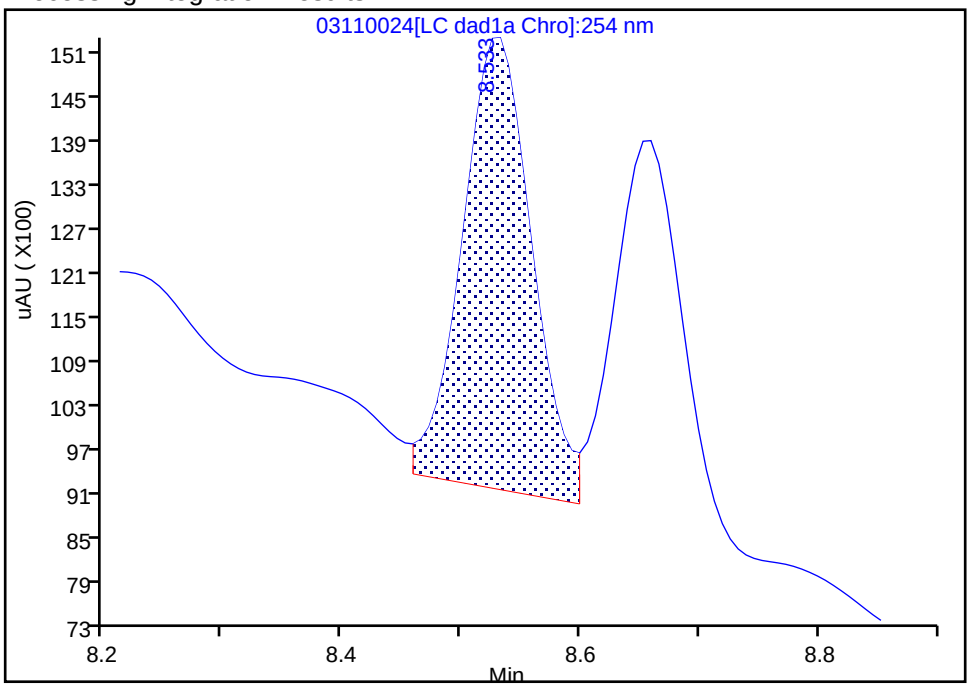
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110024.d				
Injection Date:	11-Mar-2022 20:08:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-12-A	Lab Sample ID:	280-159332-12		
Client ID:	PZ021-8				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

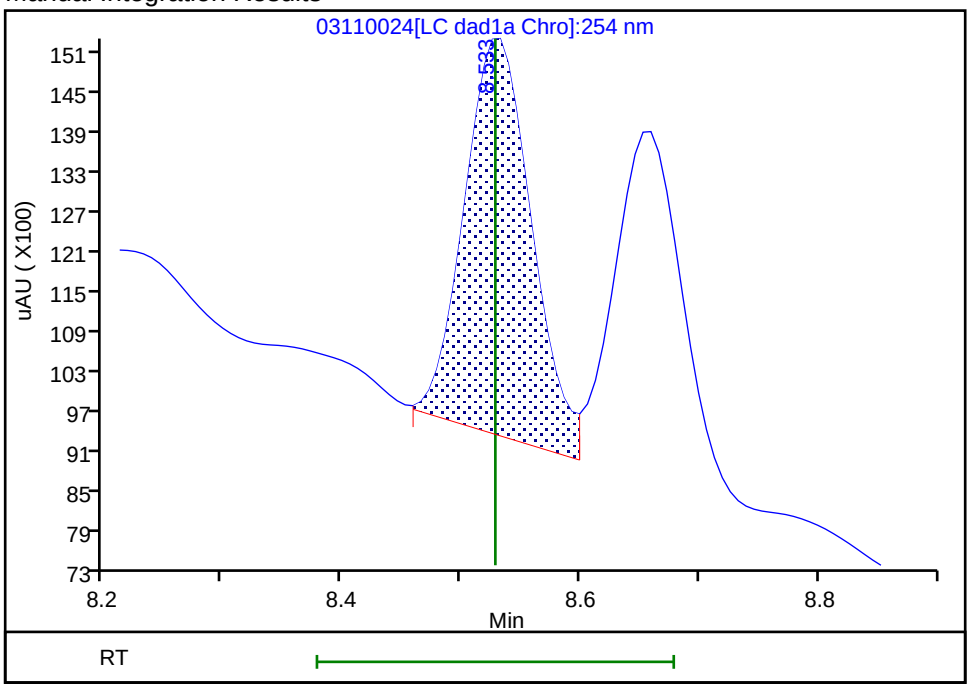
Processing Integration Results

RT: 8.53
Area: 24808
Amount: 0.198945
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 23334
Amount: 0.187125
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 20:33:24
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

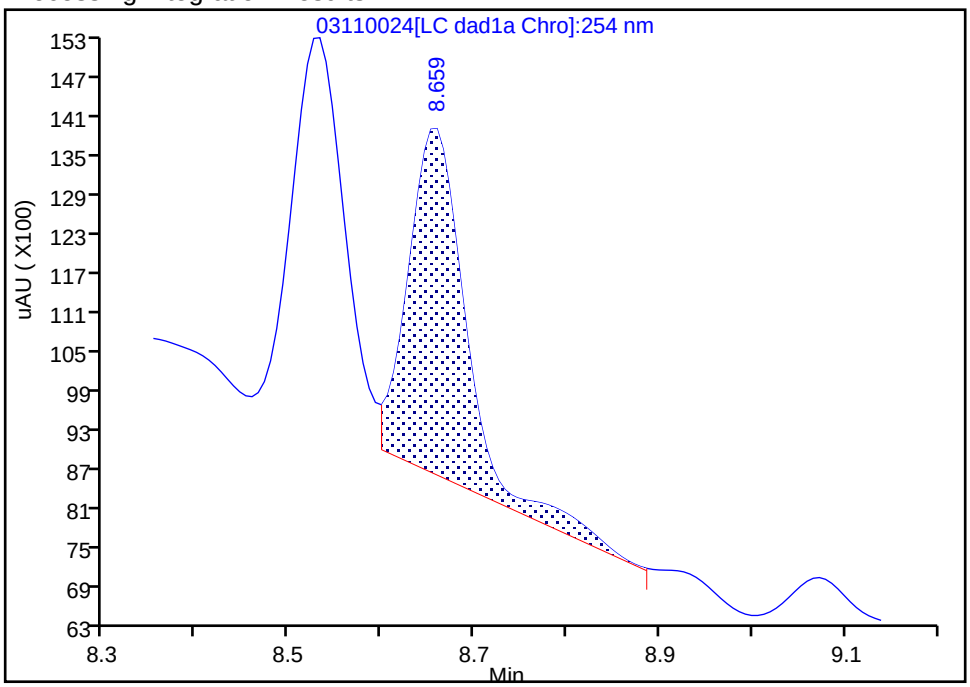
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110024.d				
Injection Date:	11-Mar-2022 20:08:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-12-A	Lab Sample ID:	280-159332-12		
Client ID:	PZ021-8				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

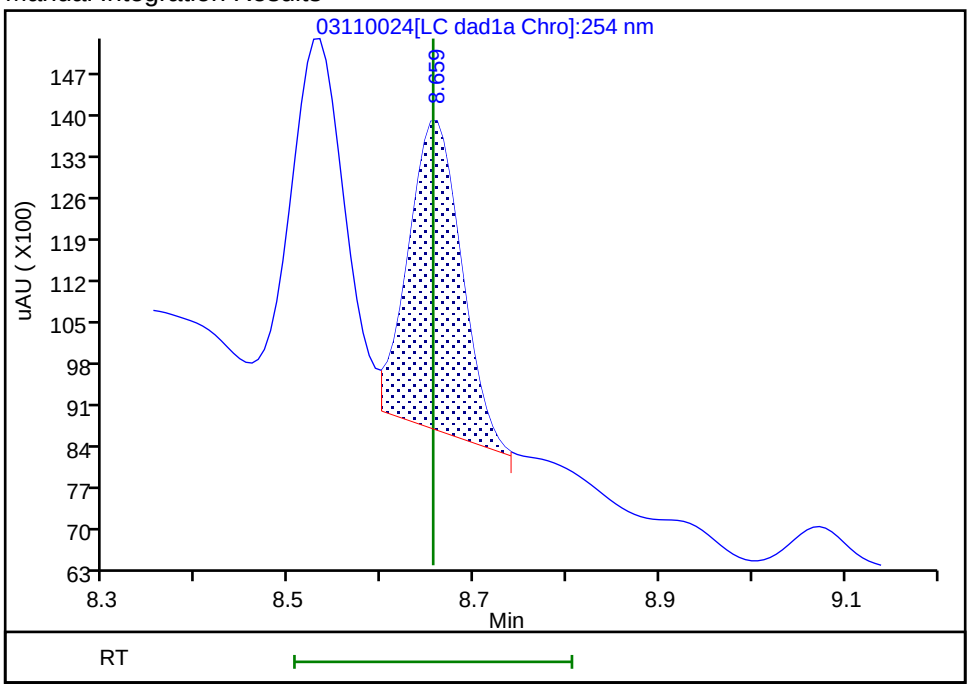
Processing Integration Results

RT: 8.66
Area: 23076
Amount: 0.105807
Amount Units: ug/mL



Manual Integration Results

RT: 8.66
Area: 20764
Amount: 0.095206
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 20:33:27

Audit Action: Split an Integrated Peak Audit Reason: Baseline

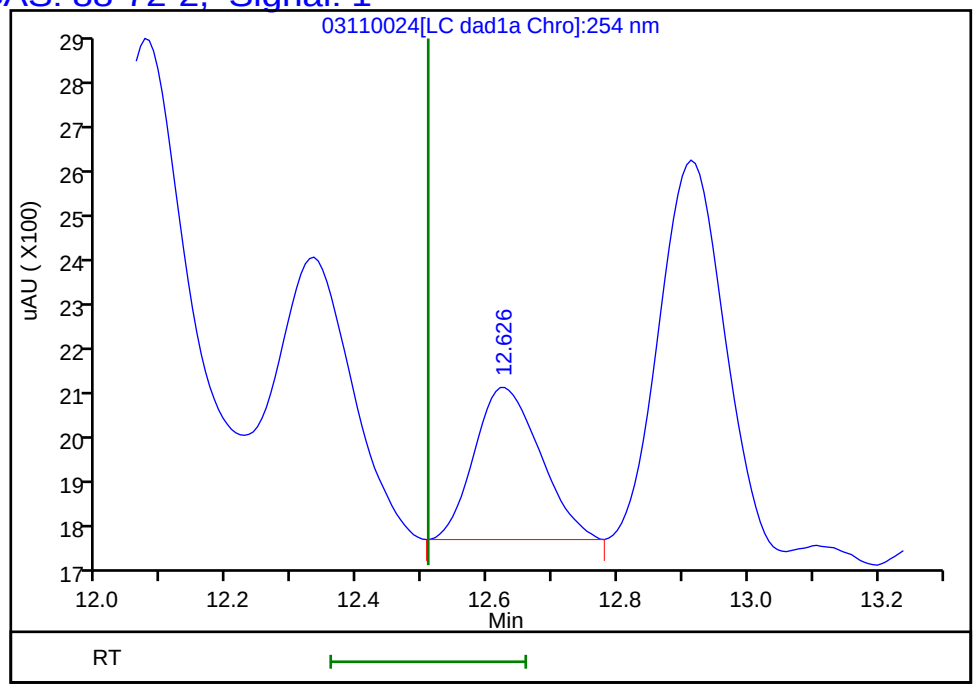
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110024.d				
Injection Date:	11-Mar-2022 20:08:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-12-A	Lab Sample ID:	280-159332-12		
Client ID:	PZ021-8				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 12.63
Response: 2221
Amount: 0.017404



Reviewer: zhangji, 11-Mar-2022 20:33:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

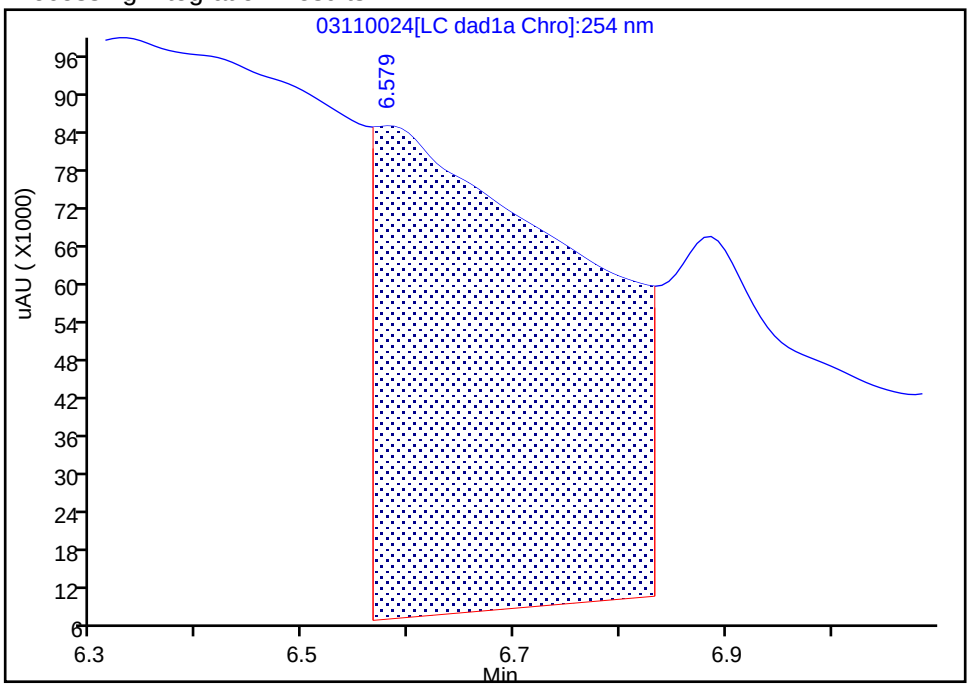
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110024.d				
Injection Date:	11-Mar-2022 20:08:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-12-A	Lab Sample ID:	280-159332-12		
Client ID:	PZ021-8				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

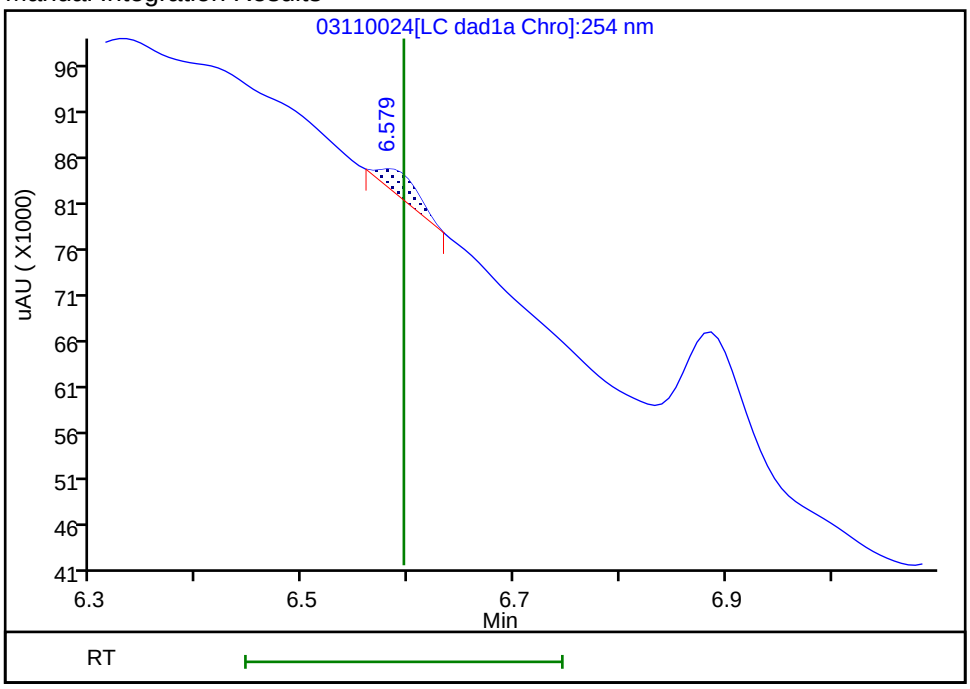
Processing Integration Results

RT: 6.58
Area: 1006893
Amount: 12.011531
Amount Units: ug/mL



Manual Integration Results

RT: 6.58
Area: 6431
Amount: 0.076717
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 20:33:07

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

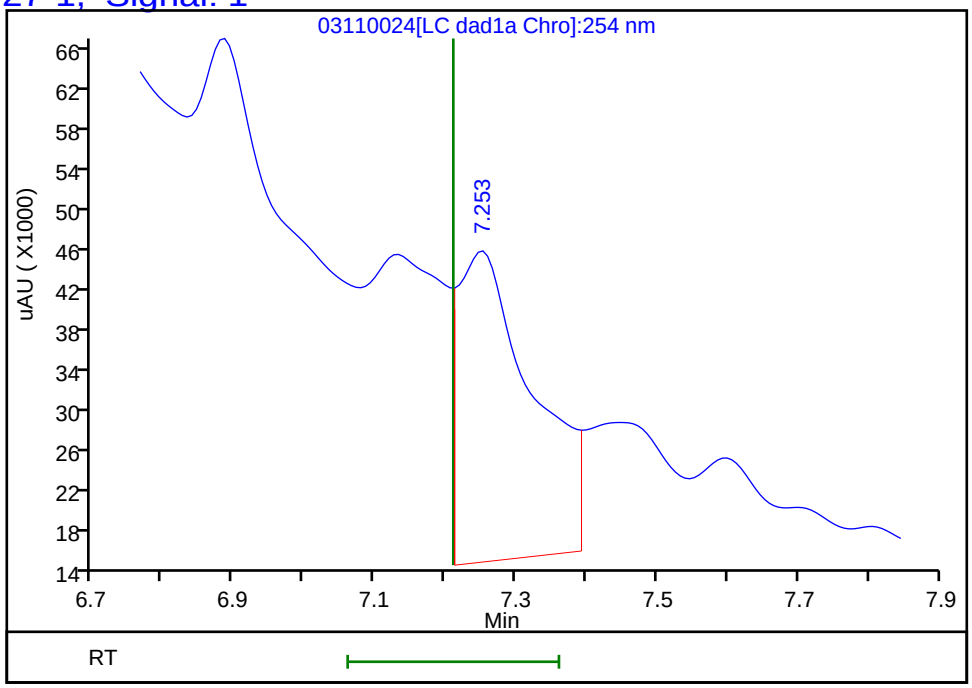
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110024.d
Injection Date: 11-Mar-2022 20:08:43 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-B-12-A Lab Sample ID: 280-159332-12
Client ID: PZ021-8
Operator ID: JZ ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.25
Response: 226993
Amount: 1.801597



Reviewer: zhangji, 11-Mar-2022 20:33:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

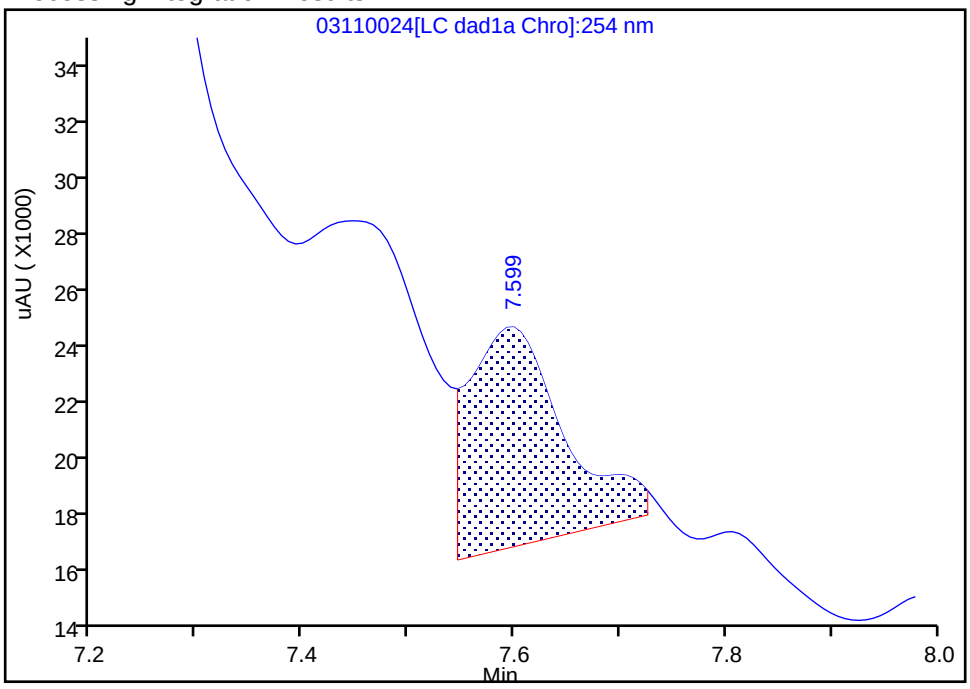
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110024.d				
Injection Date:	11-Mar-2022 20:08:43	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-12-A	Lab Sample ID:	280-159332-12		
Client ID:	PZ021-8				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

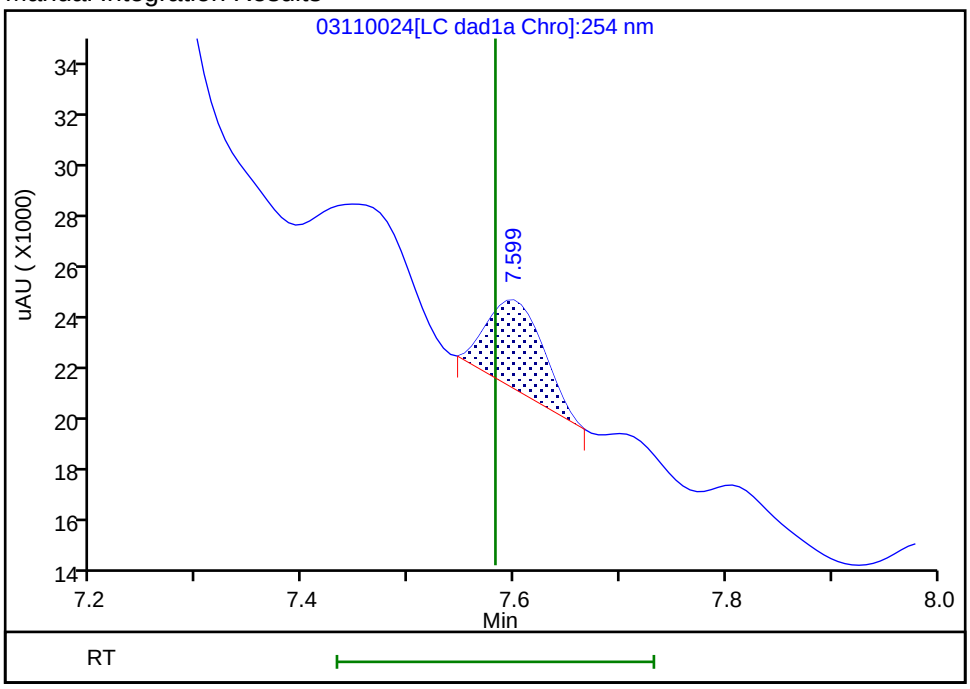
Processing Integration Results

RT: 7.60
Area: 45575
Amount: 0.439874
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 12186
Amount: 0.117615
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 20:33:18
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

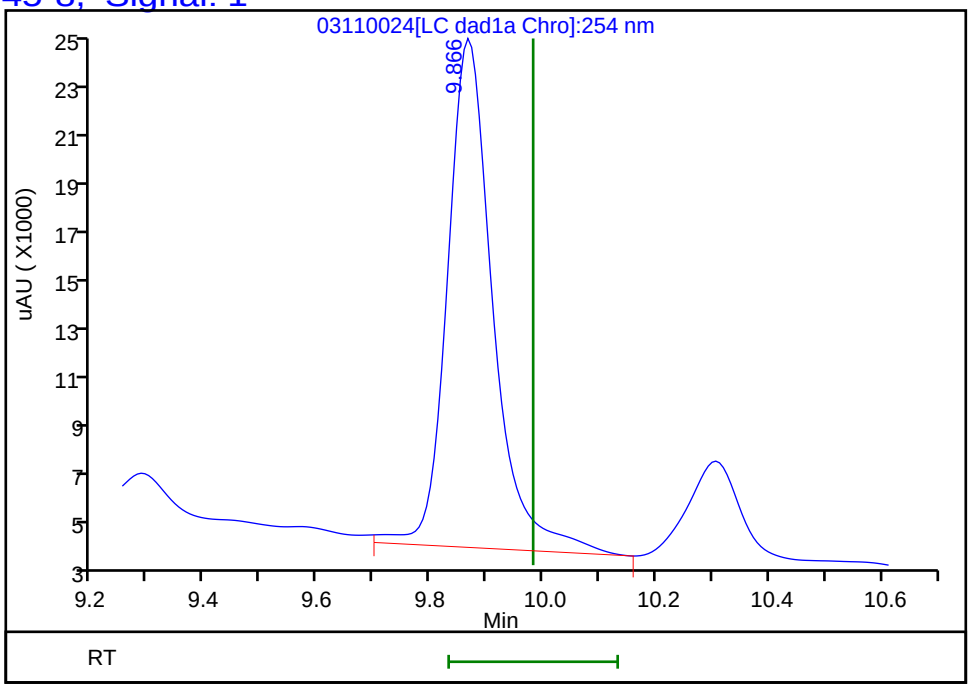
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110024.d
Injection Date: 11-Mar-2022 20:08:43 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-B-12-A Lab Sample ID: 280-159332-12
Client ID: PZ021-8
Operator ID: JZ ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 9.87
Response: 114035
Amount: 0.668565



Reviewer: zhangji, 11-Mar-2022 20:33:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ021-8 | Lab Sample ID: 280-159332-12

Matrix: Water | Lab File ID: 03150013.D

Analysis Method: 8330A | Date Collected: 03/01/2022 08:00

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 470.6(mL) | Date Analyzed: 03/15/2022 21:03

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.: 568709 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039
99-99-0	4-Nitrotoluene	0.42	U	0.44	0.42	0.11
2691-41-0	*HMX*	*1.3*	*M J1*	*0.22*	0.21	*0.093*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	97	*M*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150013.D
Lims ID: 280-159332-B-12-A
Client ID: PZ021-8
Sample Type: Client
Inject. Date: 15-Mar-2022 21:03:09 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-B-12-A
Misc. Info.: 280-0109260-013
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Mar-2022 12:38:41 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: CTX1609

First Level Reviewer: zhangji Date: 16-Mar-2022 12:20:22

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.836	6.854	-0.018	20683	0.1245	M
	6 MNX	1		7.581			ND	
	8 RDX	1	9.036	9.054	-0.018	19130	0.0984	
	9 Nitrobenzene	1		11.960			ND	
$	10 1,2-Dinitrobenzene	1	13.135	13.160	-0.025	48267	0.1933	M
	12 1,3-Dinitrobenzene	1		15.514			ND	
	14 o-Nitrotoluene	1	16.562	16.640	-0.078	96865	0.4128	
	16 p-Nitrotoluene	1		16.954			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.549	17.574	-0.025	126198	0.4725	
	18 m-Nitrotoluene	1		17.914			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.549	18.580	-0.031	102974	0.2856	M
	20 1,3,5-Trinitrobenzene	1	18.769	18.794	-0.025	26569	0.0640	M
	21 2,6-Dinitrotoluene	1		20.054			ND	
	22 2,4-Dinitrotoluene	1		20.574			ND	
	23 Tetryl	1		24.307			ND	
	24 2,4,6-Trinitrotoluene	1	25.056	25.074	-0.018	163710	0.4434	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

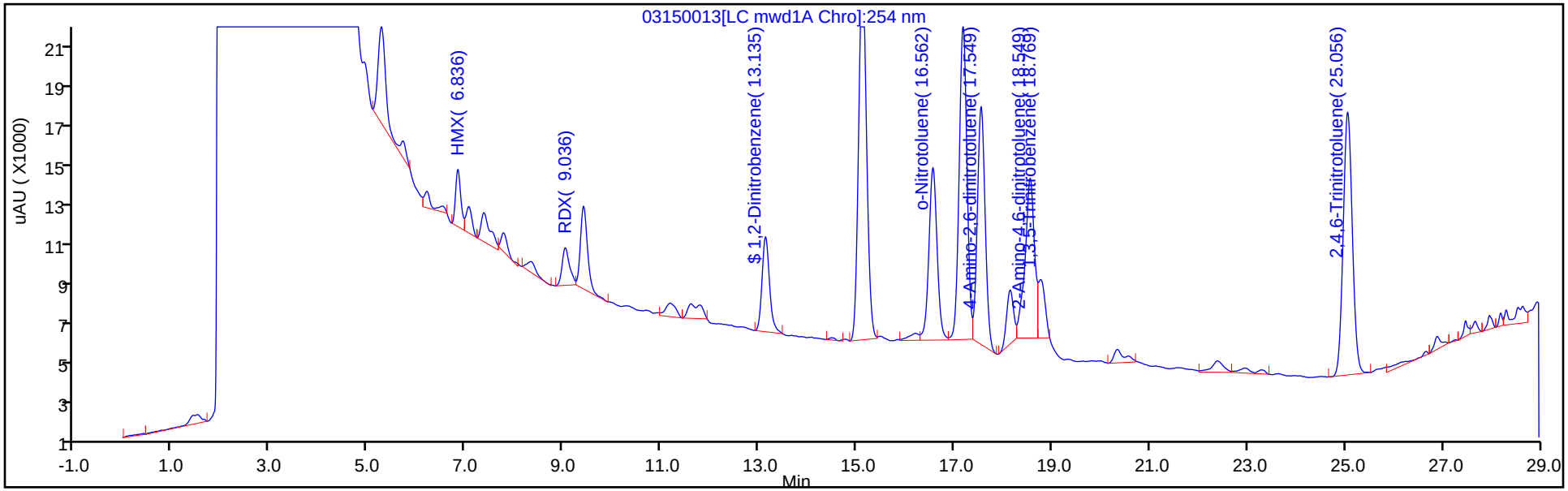
Report Date: 16-Mar-2022 12:38:46 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

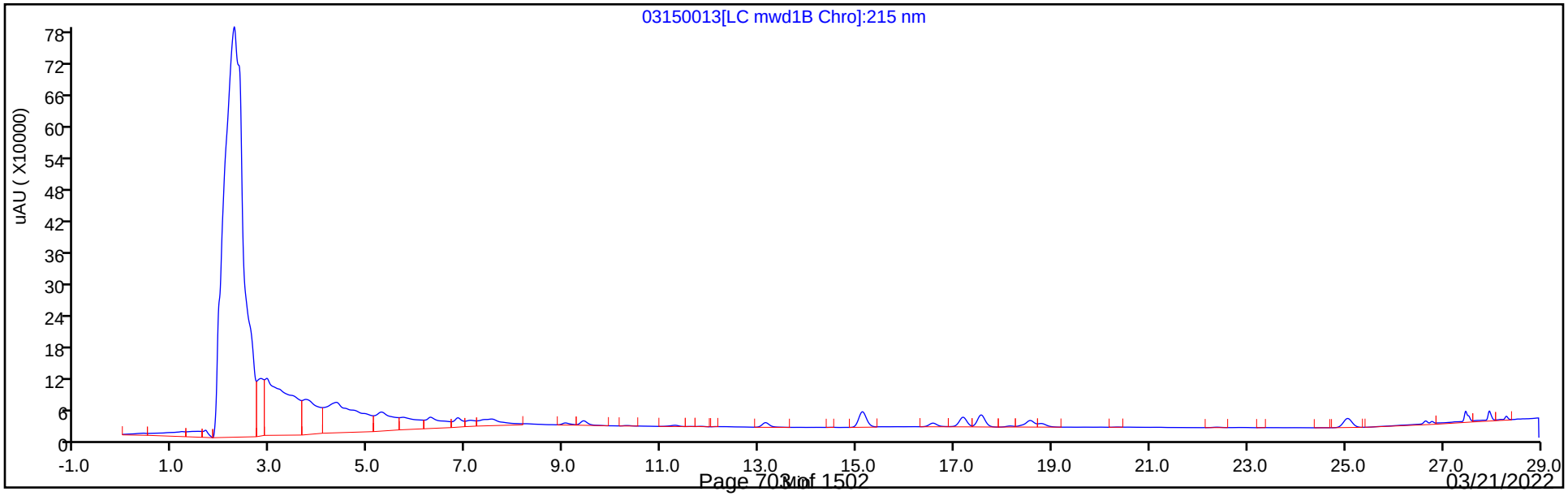
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150013.D

Injection Date:	15-Mar-2022 21:03:09	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159332-B-12-A	Lab Sample ID:	280-159332-12	Worklist Smp#:	13
Client ID:	PZ021-8				
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
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150013.D				
Lims ID:	280-159332-B-12-A				
Client ID:	PZ021-8				
Sample Type:	Client				
Inject. Date:	15-Mar-2022 21:03:09	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-B-12-A				
Misc. Info.:	280-0109260-013				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Mar-2022 12:38:41	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:	CTX1609				
First Level Reviewer: zhangji		Date:	16-Mar-2022 12:20:22		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1933	96.63

Manual Integration/User Assign Peak Report

Eurofins Denver

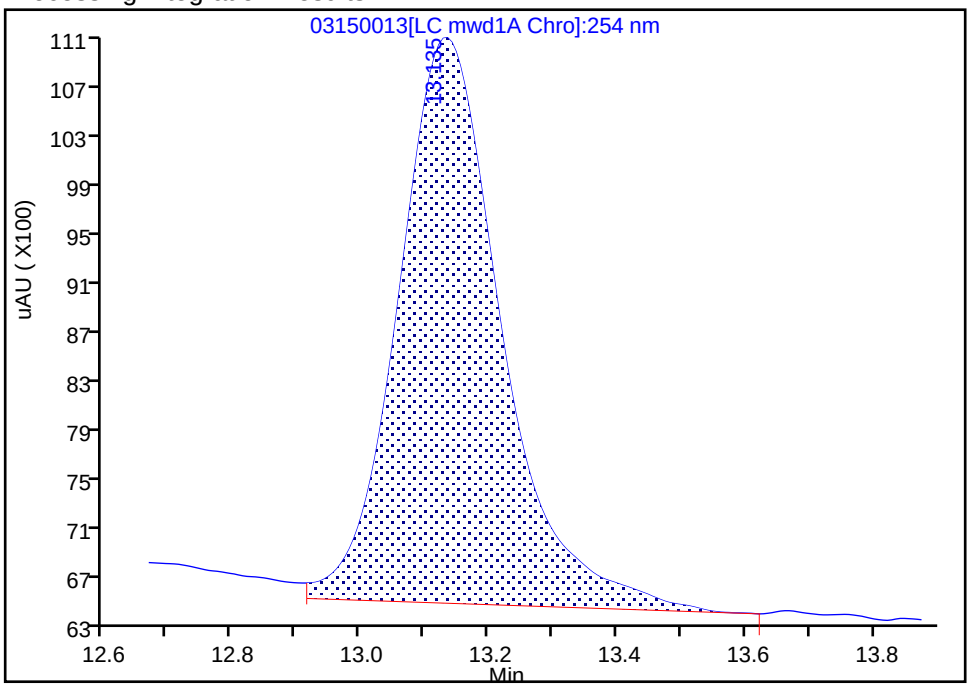
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150013.D				
Injection Date:	15-Mar-2022 21:03:09	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-B-12-A	Lab Sample ID:	280-159332-12		
Client ID:	PZ021-8				
Operator ID:	JZ	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

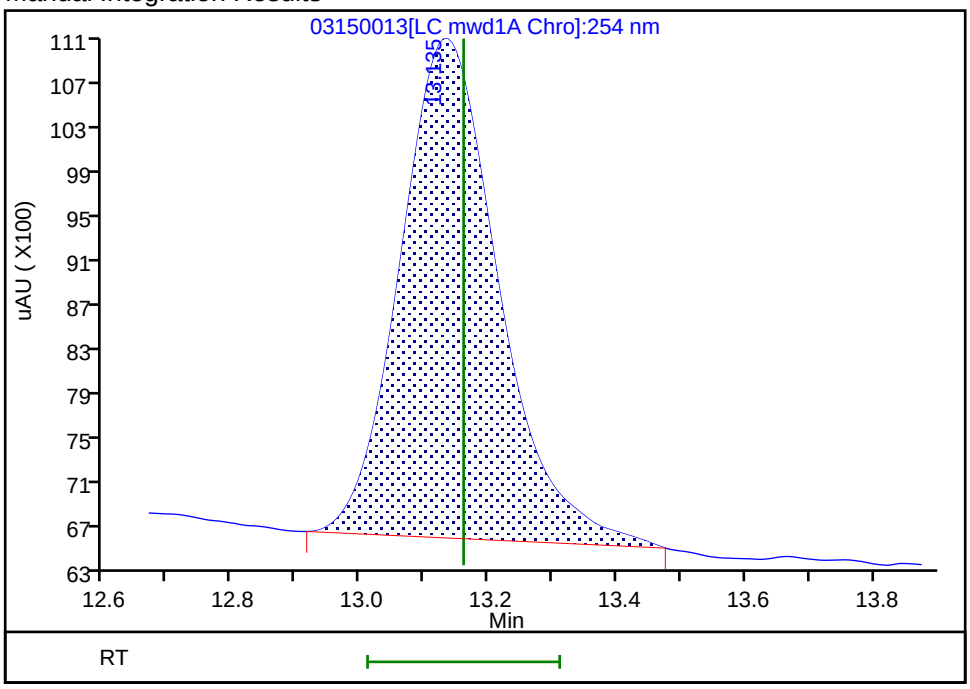
Processing Integration Results

RT: 13.14
Area: 51859
Amount: 0.207641
Amount Units: ug/ml



Manual Integration Results

RT: 13.14
Area: 48267
Amount: 0.193259
Amount Units: ug/ml



Reviewer: zhangji, 16-Mar-2022 12:20:06

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

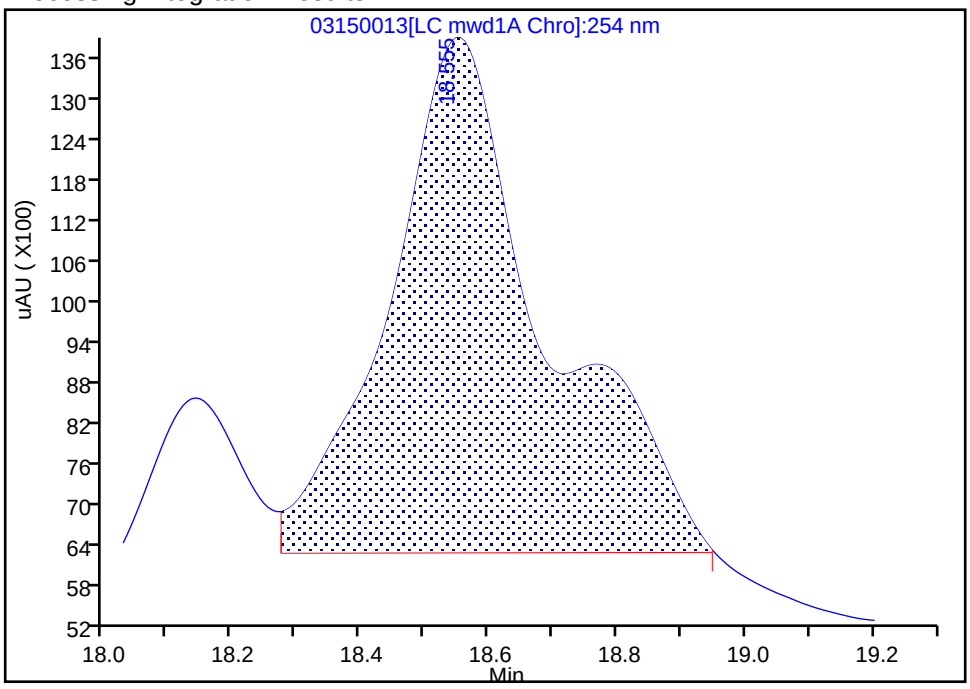
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150013.D				
Injection Date:	15-Mar-2022 21:03:09	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-B-12-A	Lab Sample ID:	280-159332-12		
Client ID:	PZ021-8				
Operator ID:	JZ	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

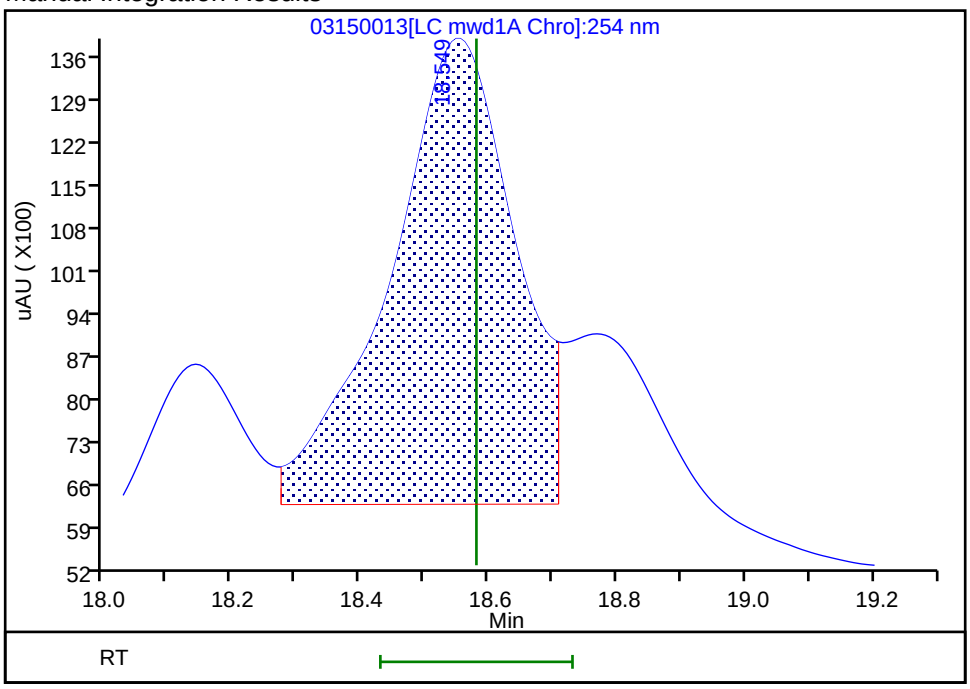
Processing Integration Results

RT: 18.56
Area: 129536
Amount: 0.359288
Amount Units: ug/ml



Manual Integration Results

RT: 18.55
Area: 102974
Amount: 0.285614
Amount Units: ug/ml



Reviewer: zhangji, 16-Mar-2022 12:20:15

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

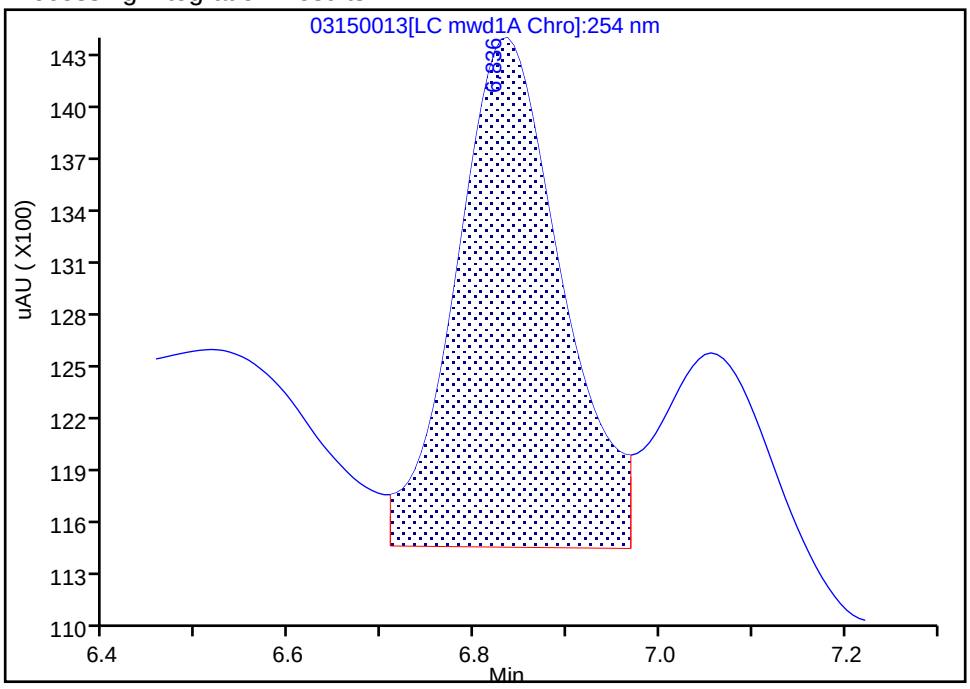
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150013.D				
Injection Date:	15-Mar-2022 21:03:09	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159332-B-12-A	Lab Sample ID:	280-159332-12		
Client ID:	PZ021-8				
Operator ID:	JZ	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

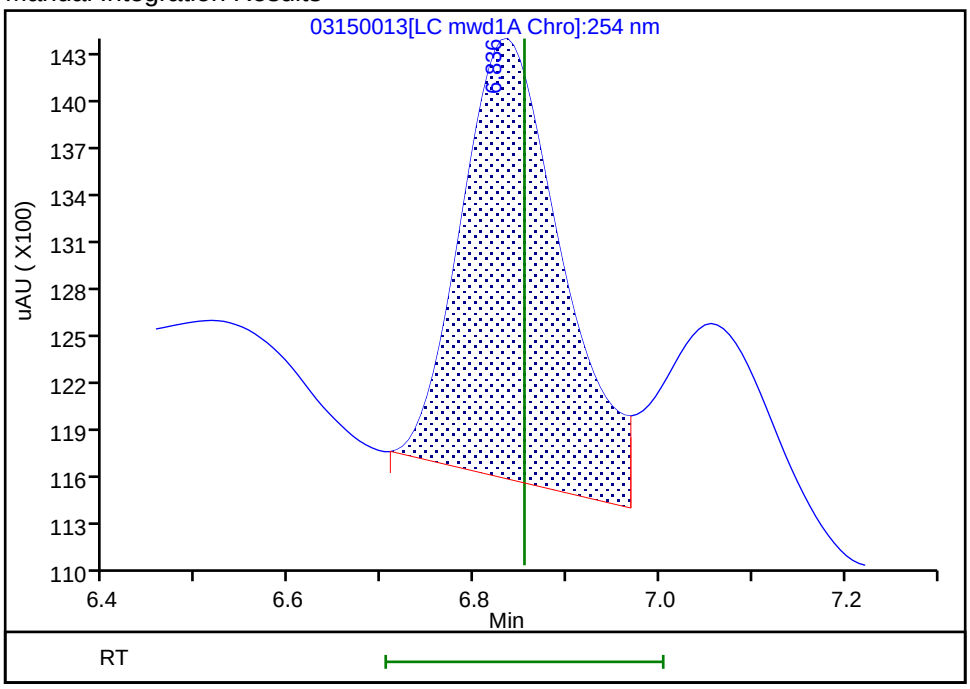
Processing Integration Results

RT: 6.84
Area: 22555
Amount: 0.135763
Amount Units: ug/ml



Manual Integration Results

RT: 6.84
Area: 20683
Amount: 0.124495
Amount Units: ug/ml



Reviewer: zhangji, 16-Mar-2022 12:19:59

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ019-8 | Lab Sample ID: 280-159332-13

Matrix: Water | Lab File ID: 03110025.D

Analysis Method: 8330A | Date Collected: 03/01/2022 09:10

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 510.4(mL) | Date Analyzed: 03/11/2022 20:31

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.: 568433 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U Q	0.21	0.20	0.082
99-65-0	1,3-Dinitrobenzene	0.098	U Q	0.11	0.098	0.036
118-96-7	2,4,6-Trinitrotoluene	0.098	U Q	0.11	0.098	0.044
121-14-2	2,4-Dinitrotoluene	0.078	U Q	0.098	0.078	0.027
606-20-2	2,6-Dinitrotoluene	0.078	U Q	0.098	0.078	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.098	U Q	0.11	0.098	0.050
88-72-2	2-Nitrotoluene	0.20	U Q	0.21	0.20	0.084
99-08-1	3-Nitrotoluene	0.39	U Q	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U Q	0.15	0.12	0.057
99-99-0	4-Nitrotoluene	0.39	U M Q	0.40	0.39	0.098
2691-41-0	HMX	0.20	U Q	0.21	0.20	0.086
5755-27-1	MNX	0.39	U M	2.0	0.39	0.15
98-95-3	Nitrobenzene	0.20	U Q	0.21	0.20	0.089
121-82-4	RDX	0.20	U Q	0.21	0.20	0.050
479-45-8	Tetryl	0.098	U Q	0.11	0.098	0.031

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	130	M Q	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110025.D
Lims ID: 280-159332-A-13-A
Client ID: PZ019-8
Sample Type: Client
Inject. Date: 11-Mar-2022 20:31:38 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-A-13-
Misc. Info.: 280-0109174-025
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Mar-2022 10:32:08 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: CTX1616

First Level Reviewer: zhangji Date: 12-Mar-2022 09:35:49

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	1 Triamine Trinitrobenzene	1		2.447			ND	
	2 2,6-diamino-4-nitrotoluene	1		6.462			ND	
	3 TNX	1		6.477			ND	U
	4 HMX	1		6.595			ND	
	5 2,4-diamino-6-nitrotoluene	1		6.649			ND	
	6 DNX	1		6.791			ND	
	7 MNX	1		7.211			ND	U
	8 RDX	1		7.582			ND	
	9 2,4,6-Trinitrophenol	1		7.929			ND	
$	10 1,2-Dinitrobenzene	1	8.531	8.529	0.002	32540	0.2610	M
	11 1,3,5-Trinitrobenzene	1		8.655			ND	
	12 1,3-Dinitrobenzene	1		9.282			ND	
	13 Nitrobenzene	1		9.668			ND	
	14 3,5-Dinitroaniline	1	9.864	9.868	-0.004	464	0.003759	
	15 Tetryl	1		9.982			ND	
	16 Nitroglycerin	2		10.435			ND	
	17 2,4,6-Trinitrotoluene	1		10.888			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.068			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.322			ND	
	20 2,6-Dinitrotoluene	1		11.495			ND	
	21 2,4-Dinitrotoluene	1		11.662			ND	
	22 o-Nitrotoluene	1		12.508			ND	
	23 p-Nitrotoluene	1		12.935			ND	U
	24 m-Nitrotoluene	1		13.502			ND	
	25 PETN	2		14.555			ND	
	26 Ammonium Picrate	1		0.000			ND	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
U - Marked Undetected

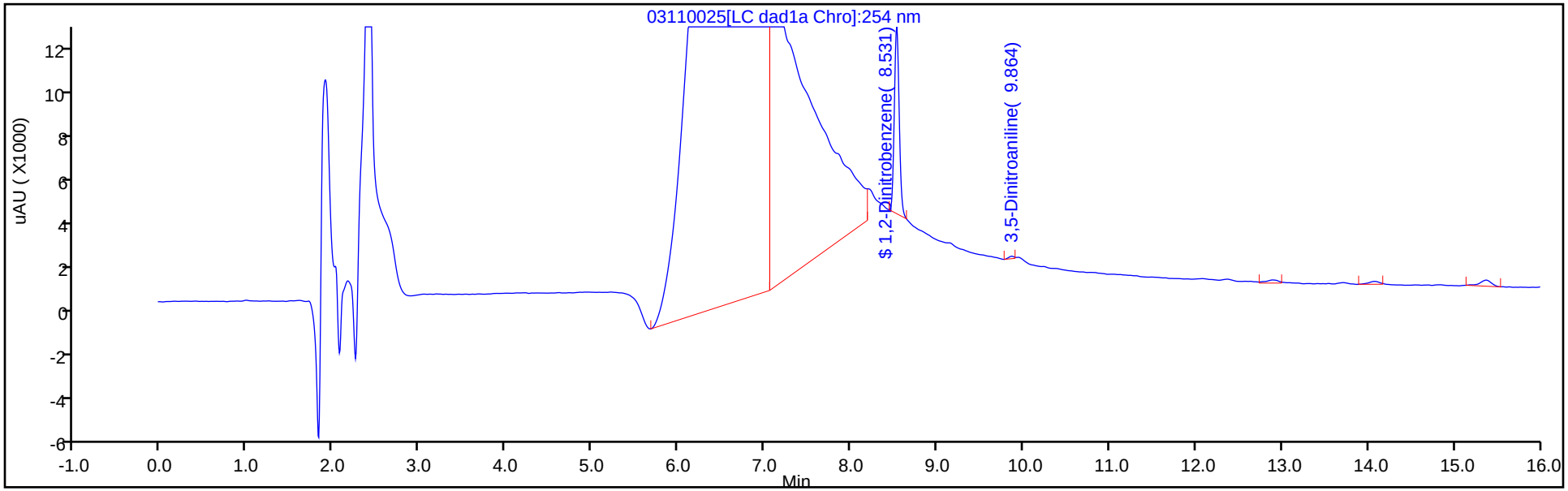
Report Date: 12-Mar-2022 10:32:08 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

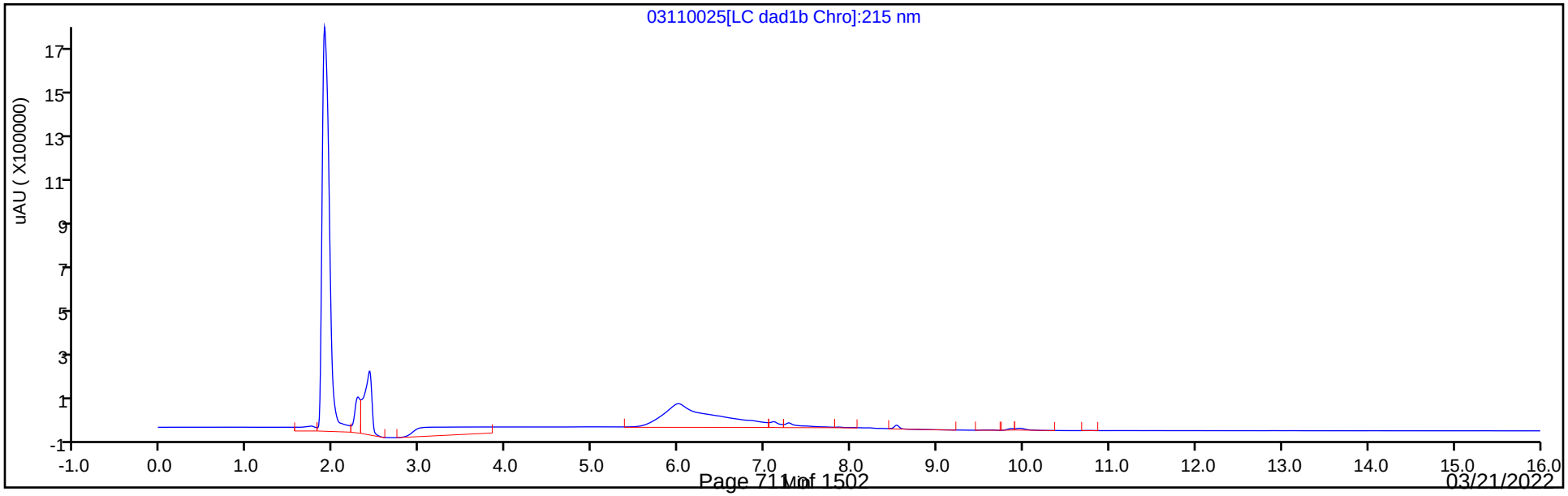
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110025.d

Injection Date:	11-Mar-2022 20:31:38	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159332-A-13-A	Lab Sample ID:	280-159332-13	Worklist Smp#:	25
Client ID:	PZ019-8				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110025.D				
Lims ID:	280-159332-A-13-A				
Client ID:	PZ019-8				
Sample Type:	Client				
Inject. Date:	11-Mar-2022 20:31:38	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-A-13-				
Misc. Info.:	280-0109174-025				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2022 10:32:08	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:	CTX1616				

First Level Reviewer: zhangji Date: 12-Mar-2022 09:35:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2610	130.48

Manual Integration/User Assign Peak Report

Eurofins Denver

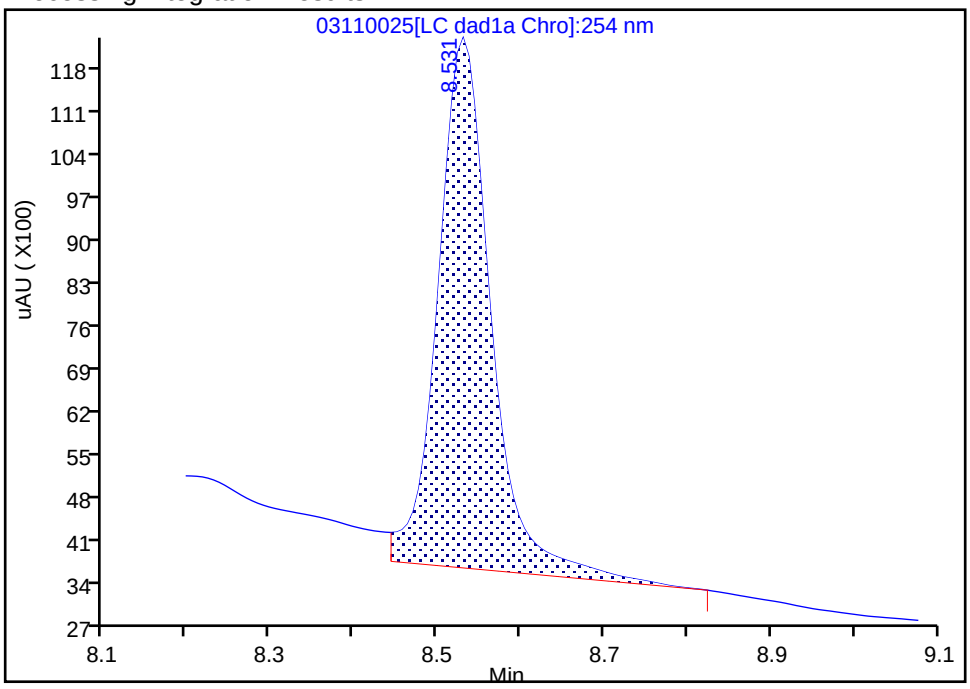
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110025.d				
Injection Date:	11-Mar-2022 20:31:38	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-13-A	Lab Sample ID:	280-159332-13		
Client ID:	PZ019-8				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

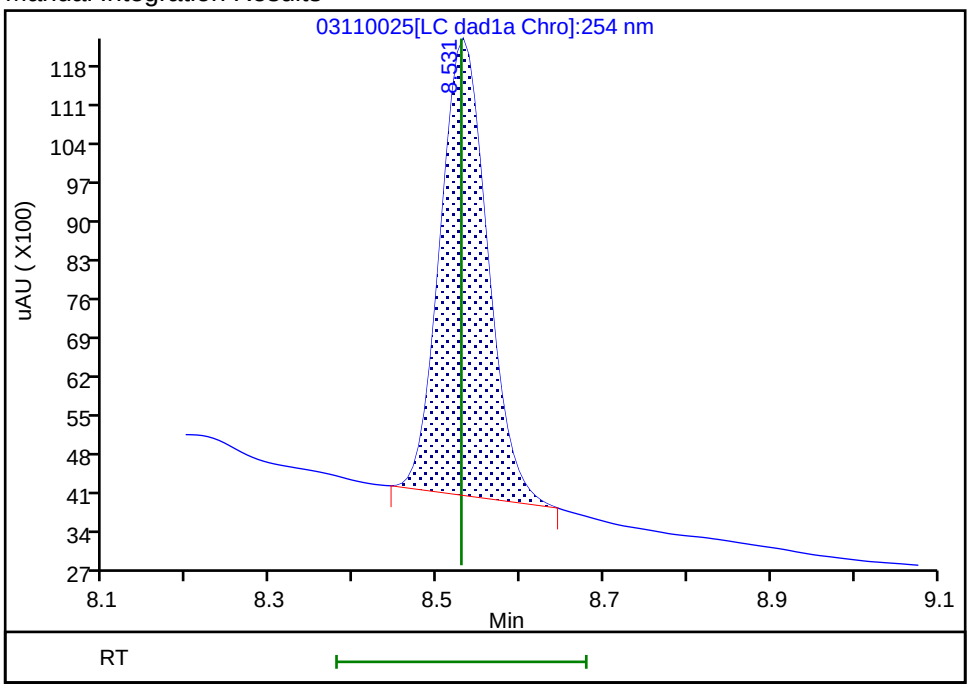
Processing Integration Results

RT: 8.53
Area: 38417
Amount: 0.308081
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 32540
Amount: 0.260951
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 09:35:46

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

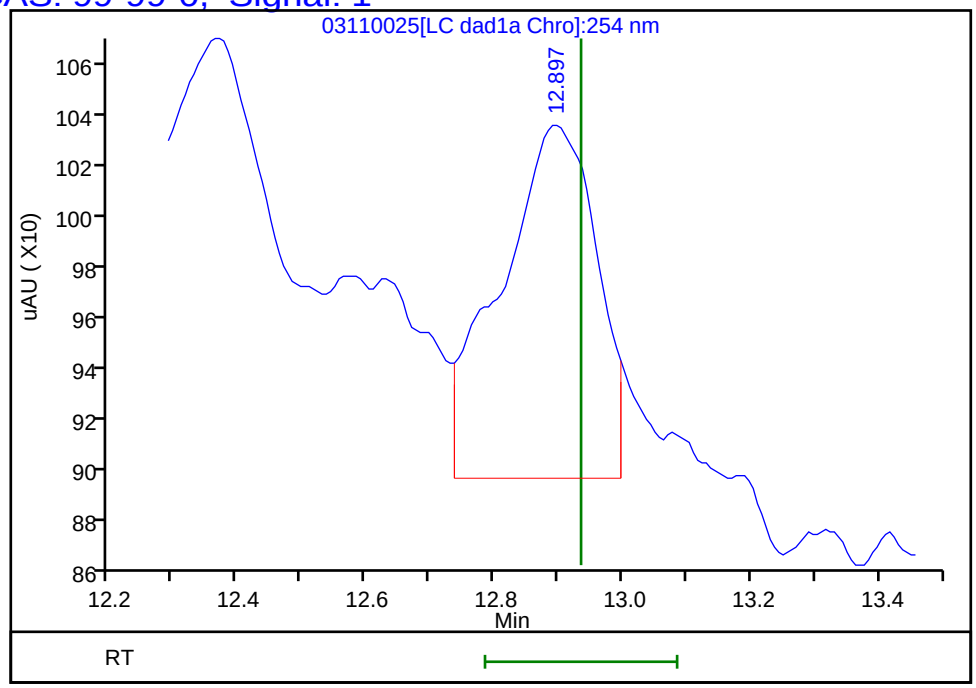
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110025.d
Injection Date: 11-Mar-2022 20:31:38 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-A-13-A Lab Sample ID: 280-159332-13
Client ID: PZ019-8
Operator ID: JZ ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 12.90
Response: 1436
Amount: 0.013517



Reviewer: zhangji, 12-Mar-2022 09:35:49
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

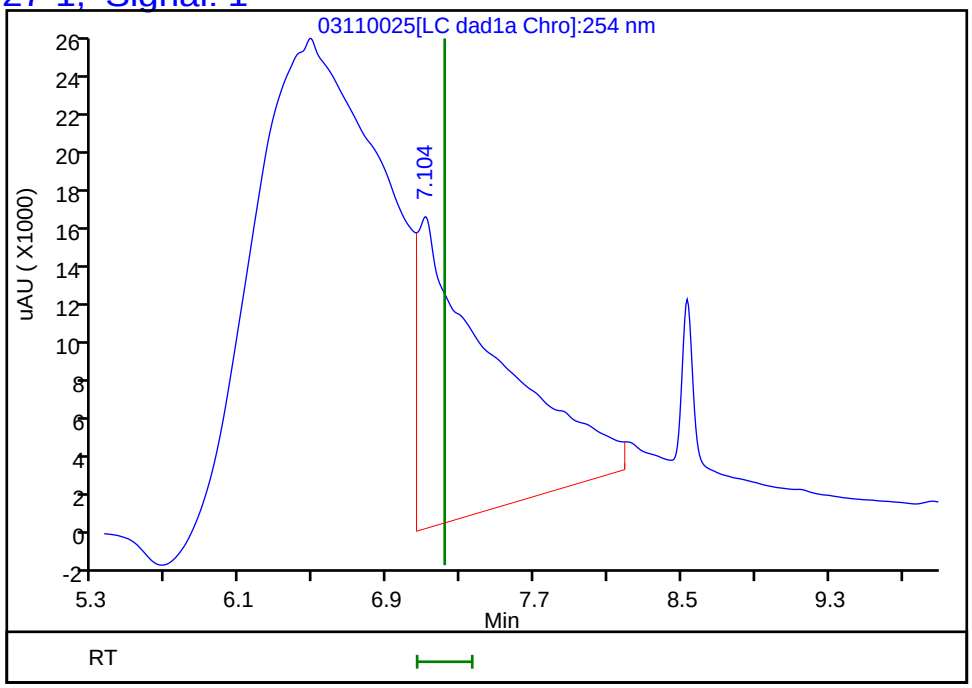
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110025.d
Injection Date: 11-Mar-2022 20:31:38 Instrument ID: CHHPLC_X3
Lims ID: 280-159332-A-13-A Lab Sample ID: 280-159332-13
Client ID: PZ019-8
Operator ID: JZ ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.10
Response: 456242
Amount: 3.621100



Reviewer: zhangji, 12-Mar-2022 09:35:49
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.: 280-159332-1 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.: 280-159332-1 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.: 280-159332-1 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.: 280-159332-1 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.: 280-159332-1 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

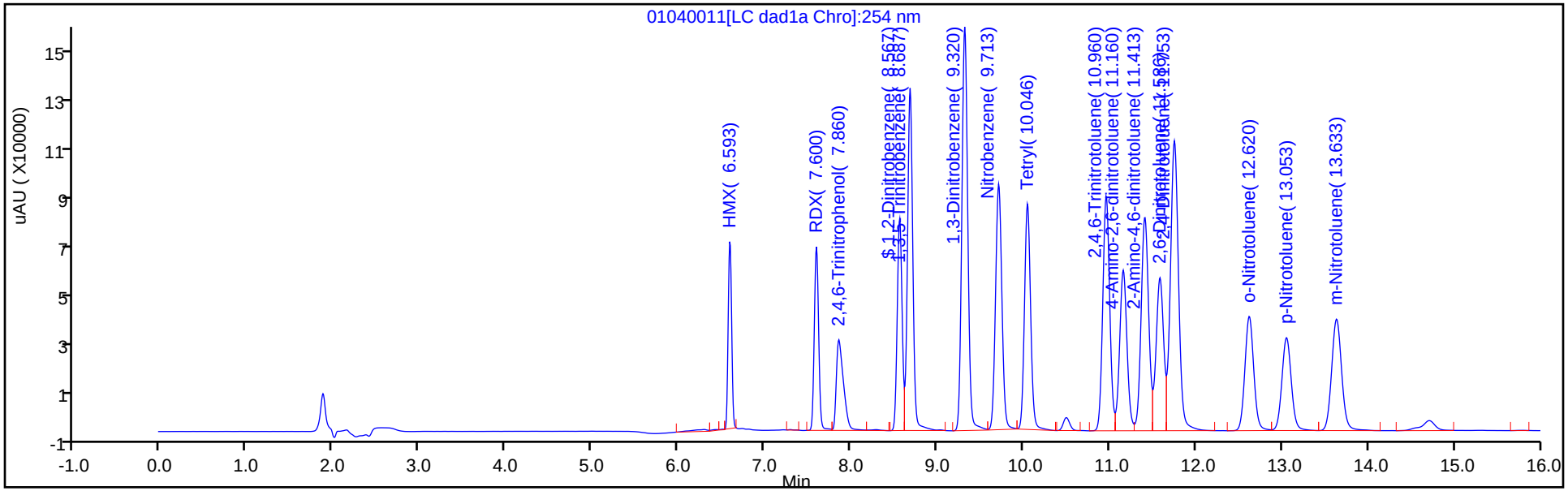
Report Date: 06-Jan-2022 20:05:10 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

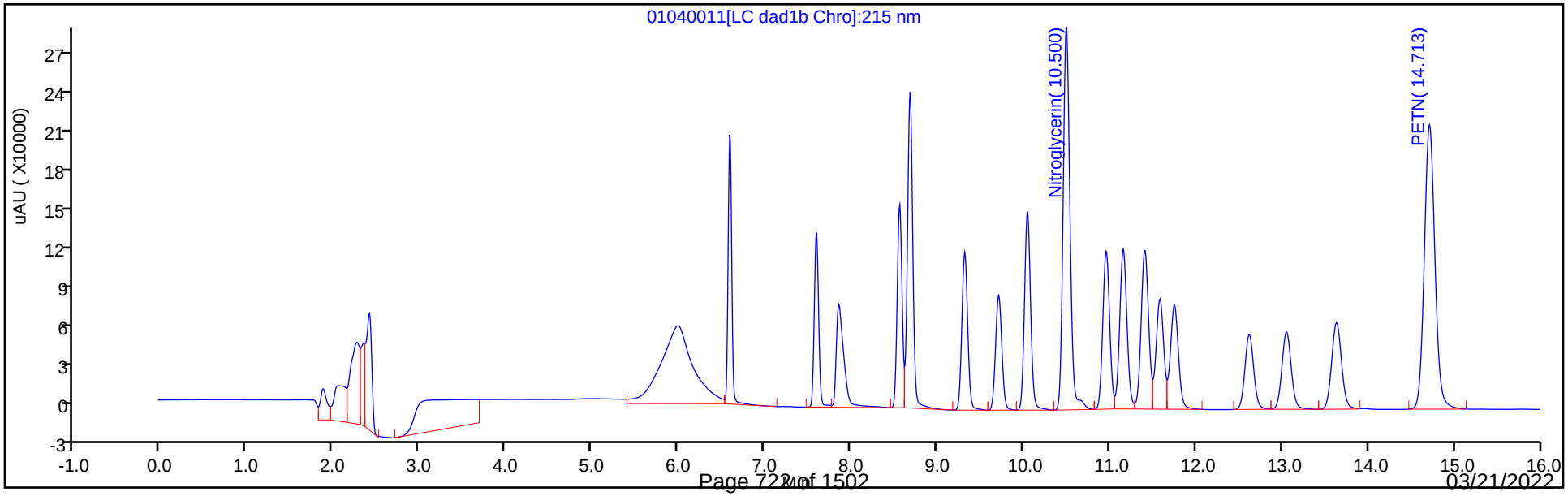
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040011.d

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

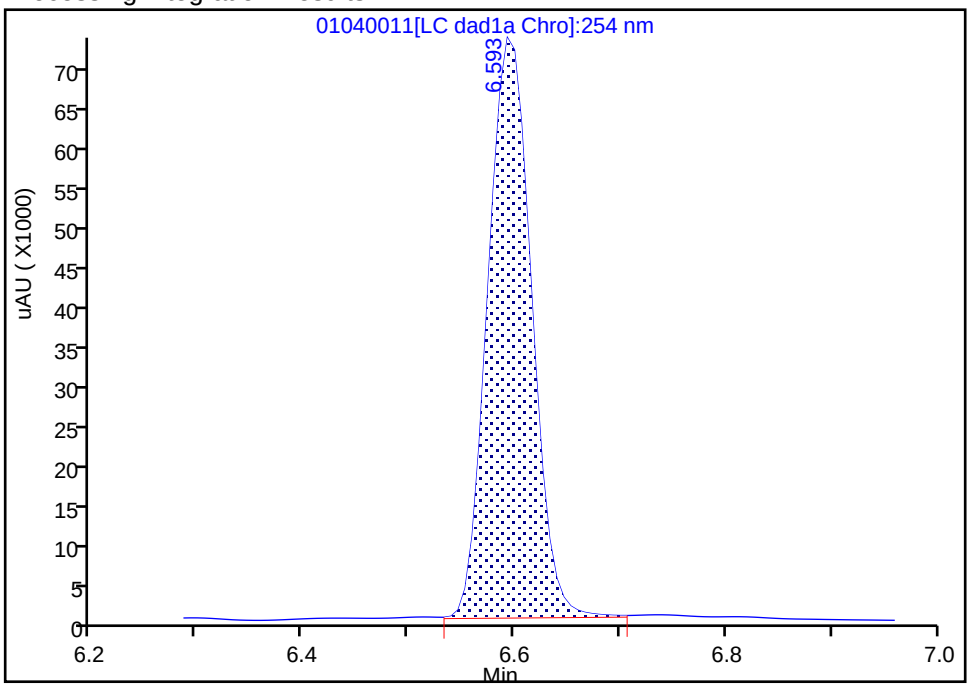
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040011.d				
Injection Date:	04-Jan-2022 18:28:10	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

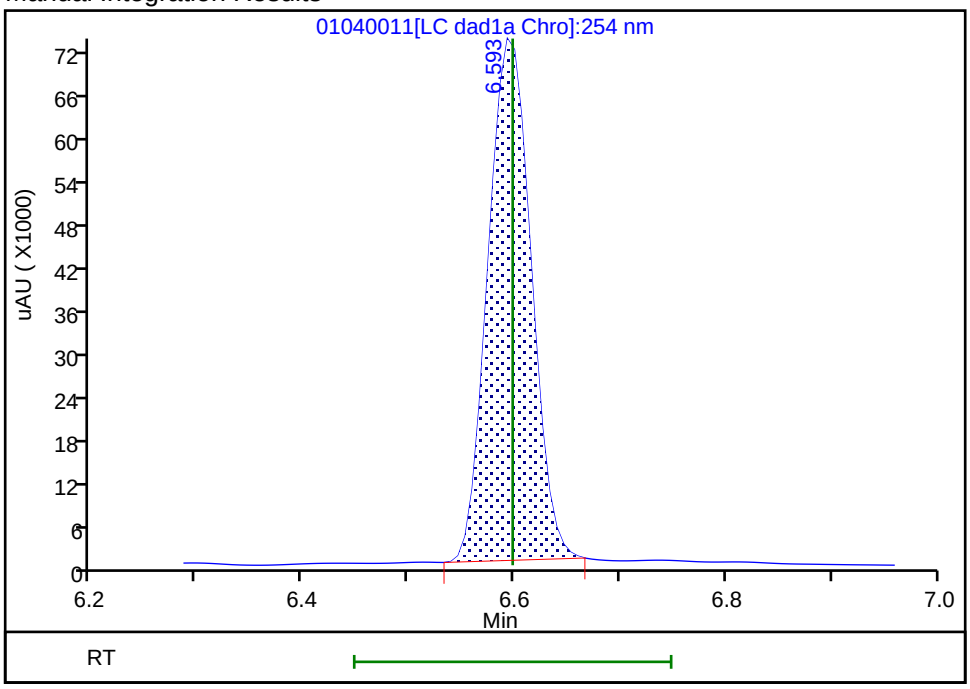
Processing Integration Results

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:

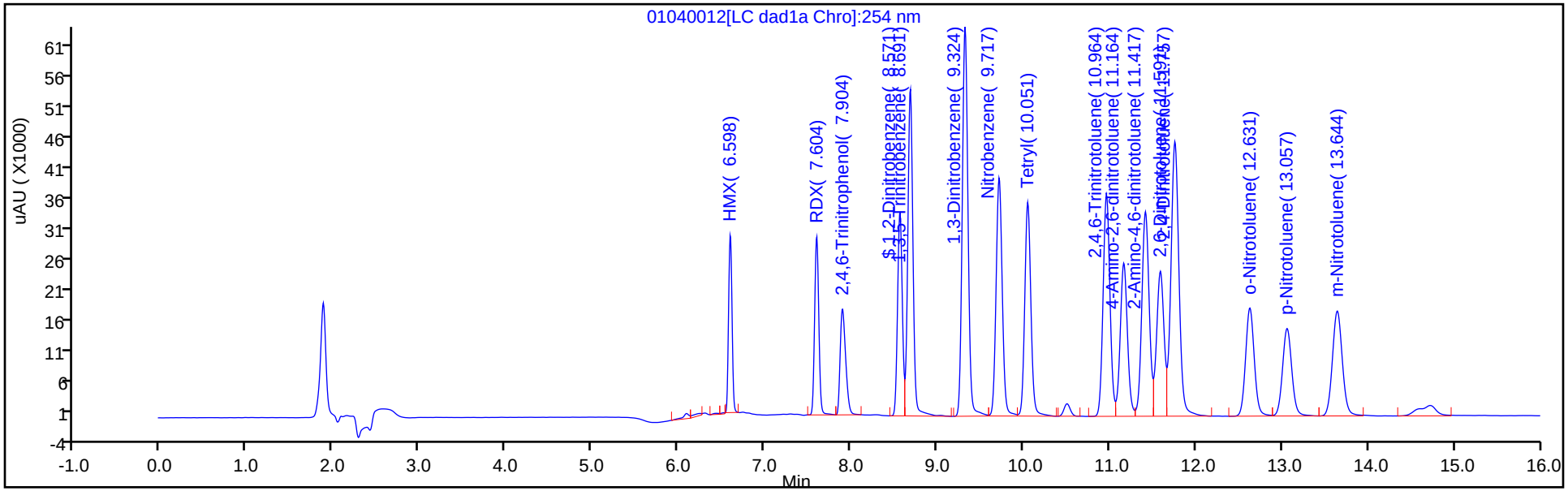
8330IntermStk_00070 Amount Added: 100.00 Units: uL

Report Date: 06-Jan-2022 20:05:11 Chrom Revision: 2.3 03-Jan-2022 17:03:12

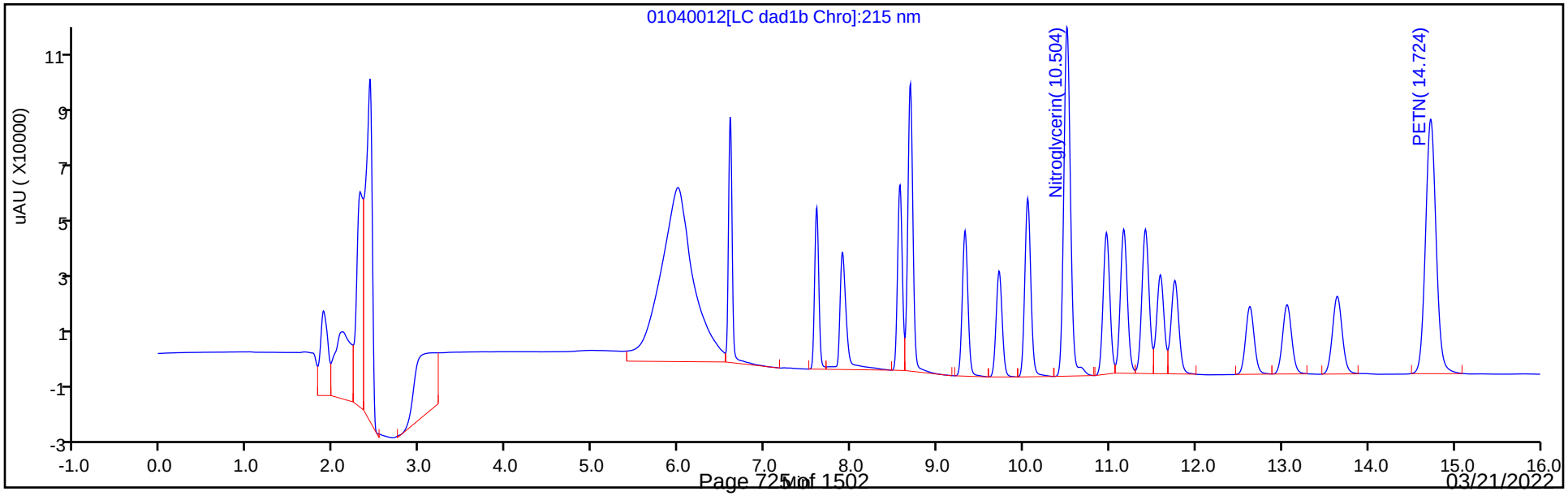
Eurofins TestAmerica, Denver

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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

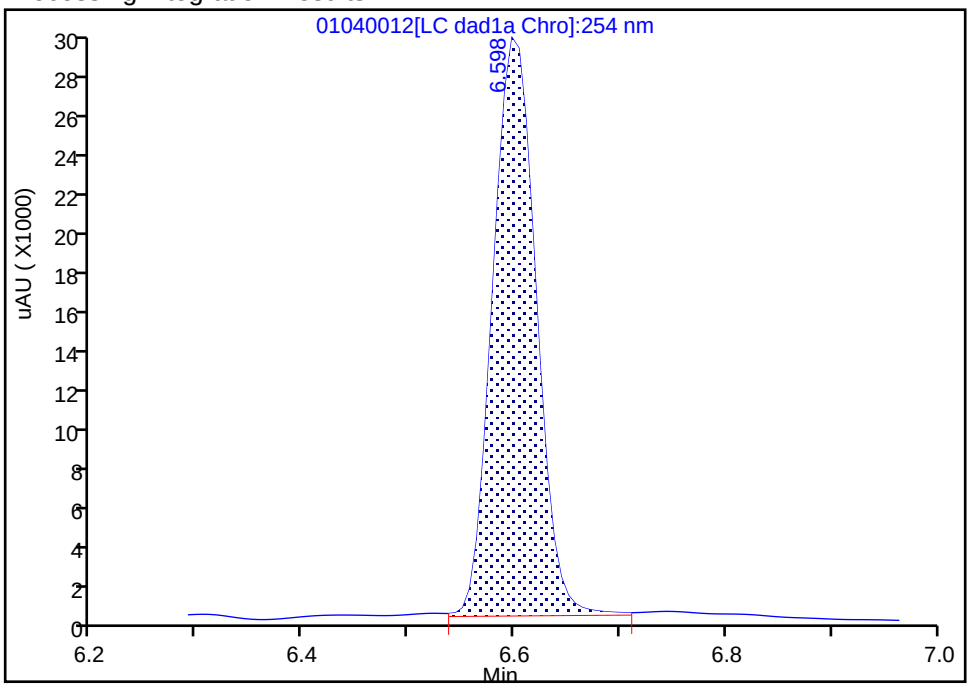
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040012.d				
Injection Date:	04-Jan-2022 18:51:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

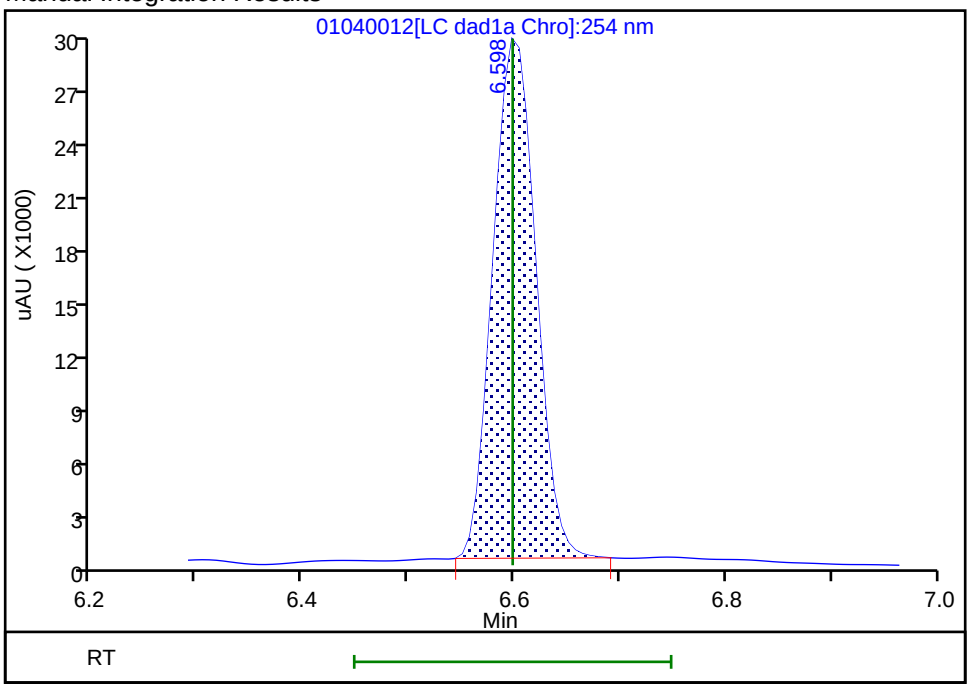
Processing Integration Results

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

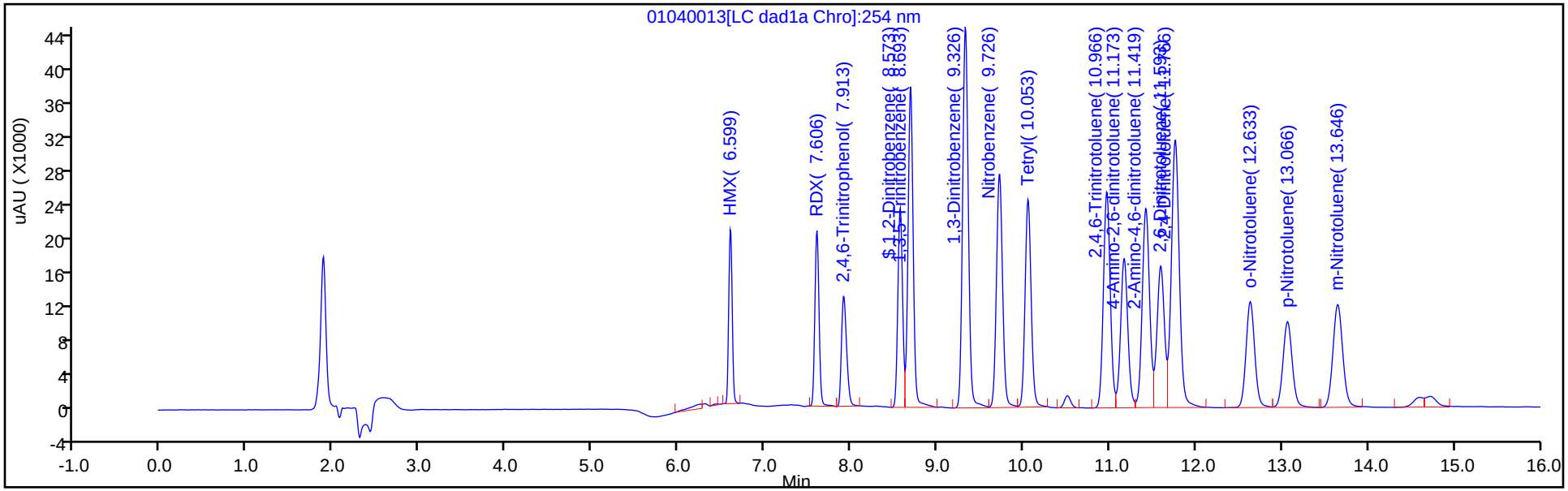
Report Date: 06-Jan-2022 20:05:11 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

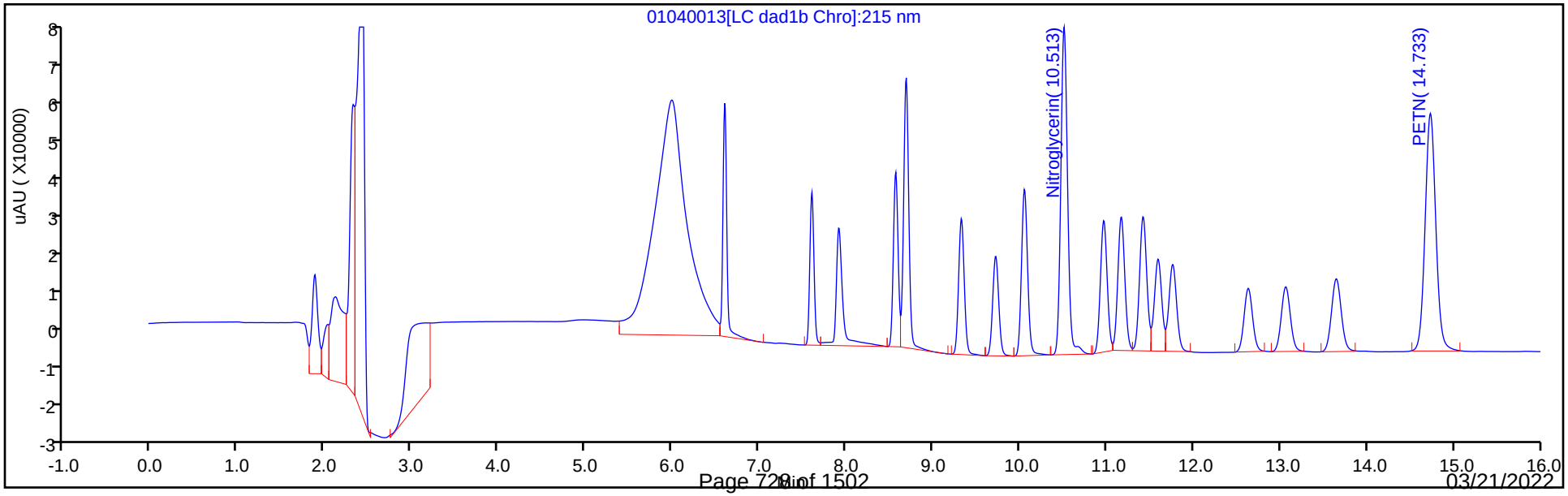
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040013.d

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

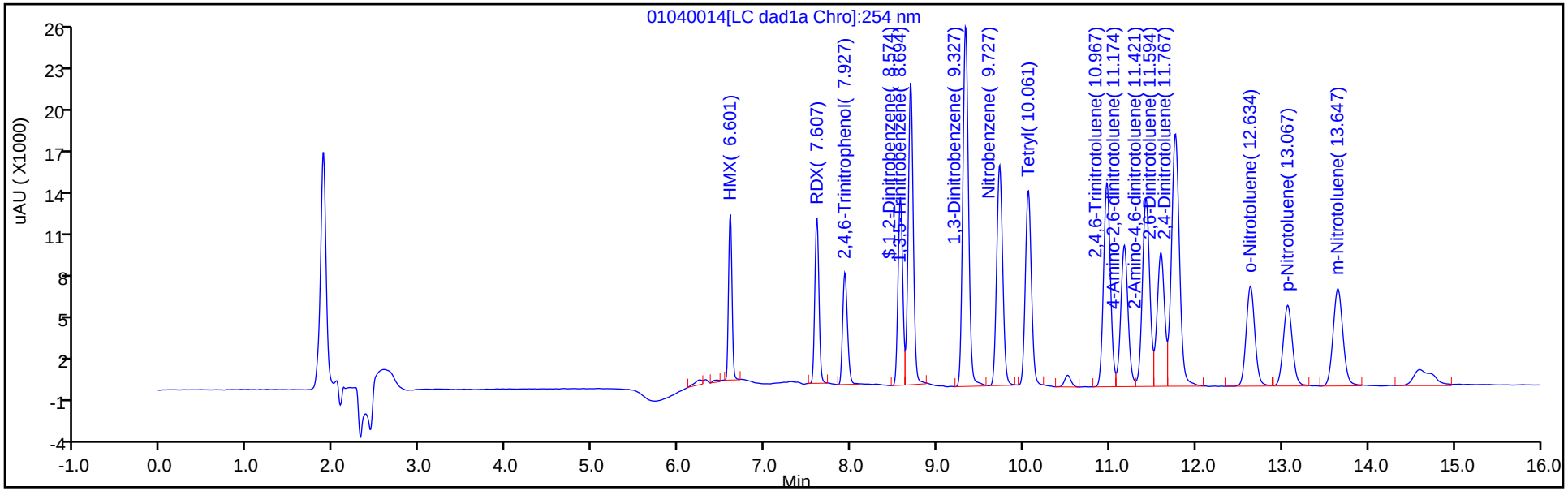
Report Date: 06-Jan-2022 20:05:12 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

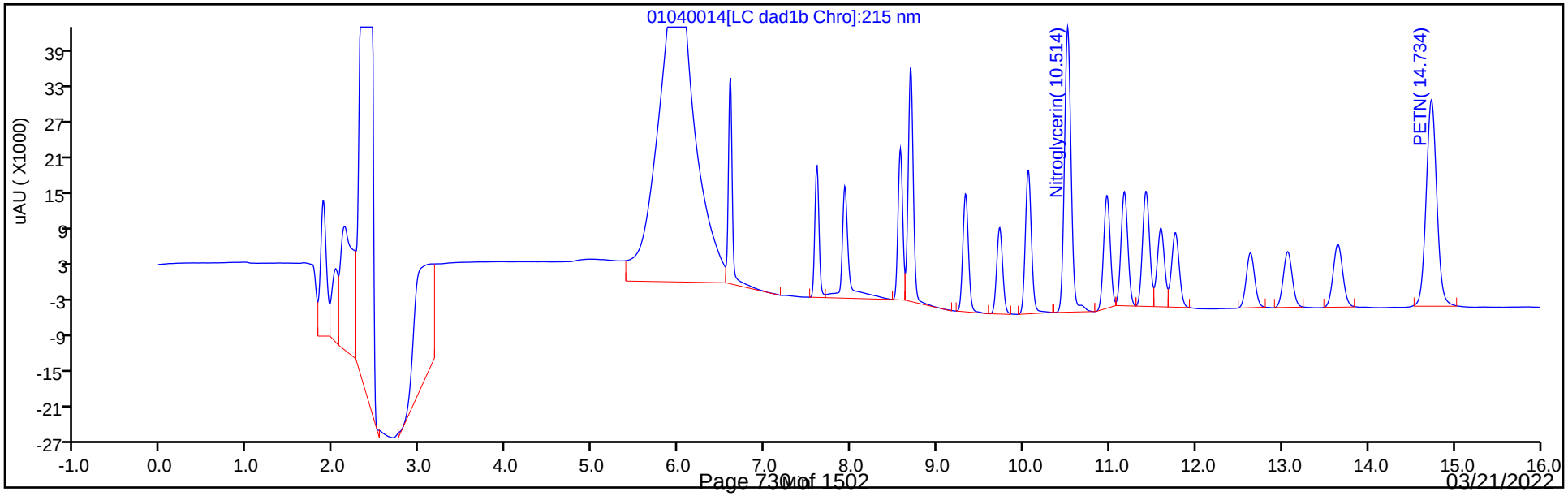
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040014.d

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

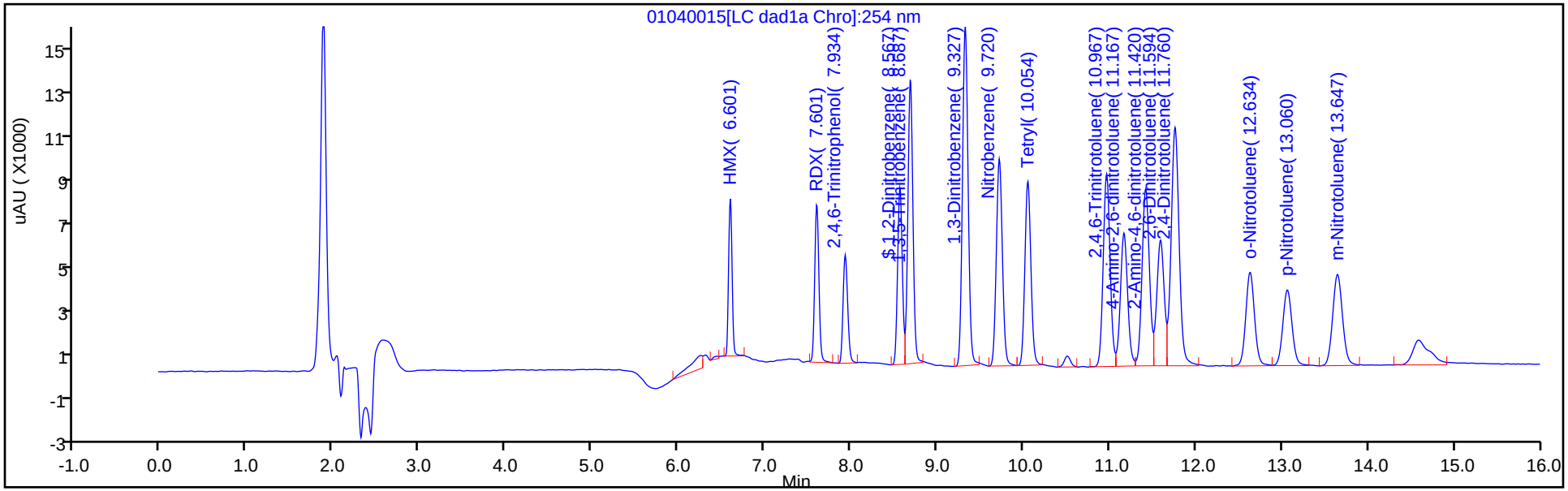
Report Date: 06-Jan-2022 20:05:12 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

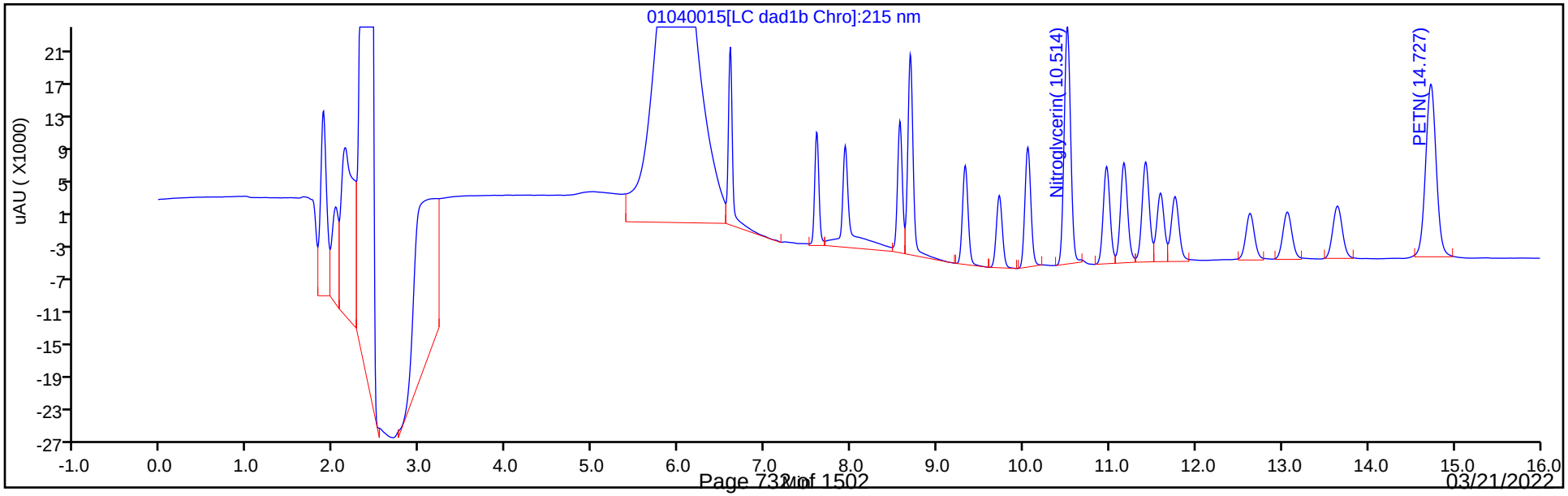
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040015.d

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

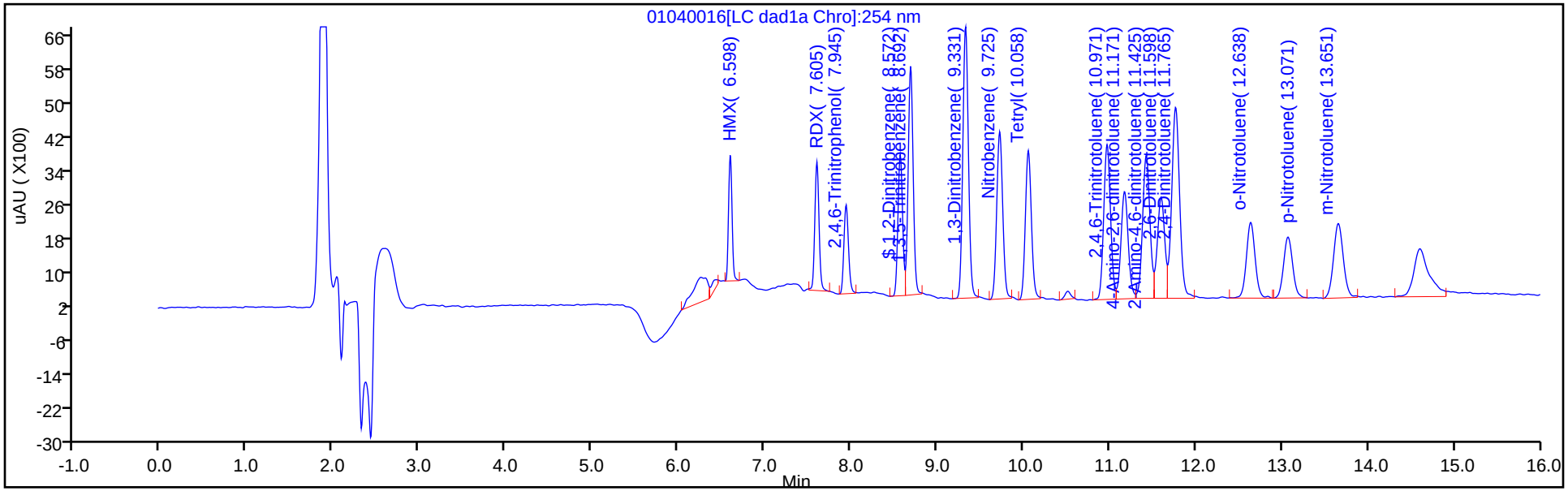
Report Date: 06-Jan-2022 20:05:13 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

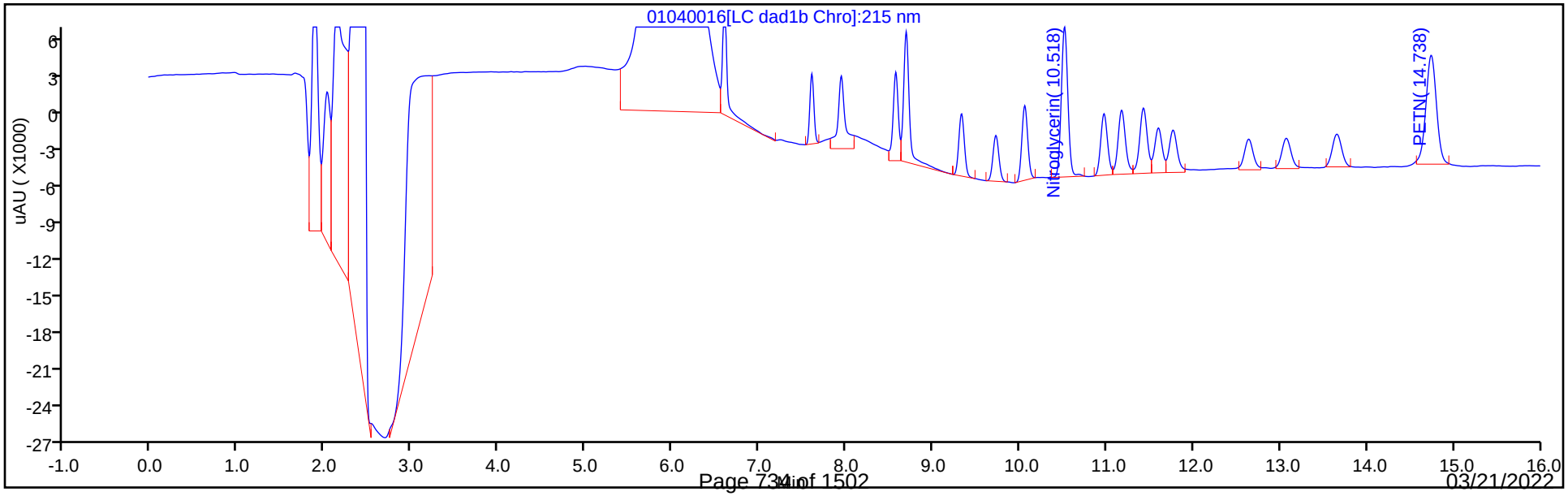
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040016.d

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

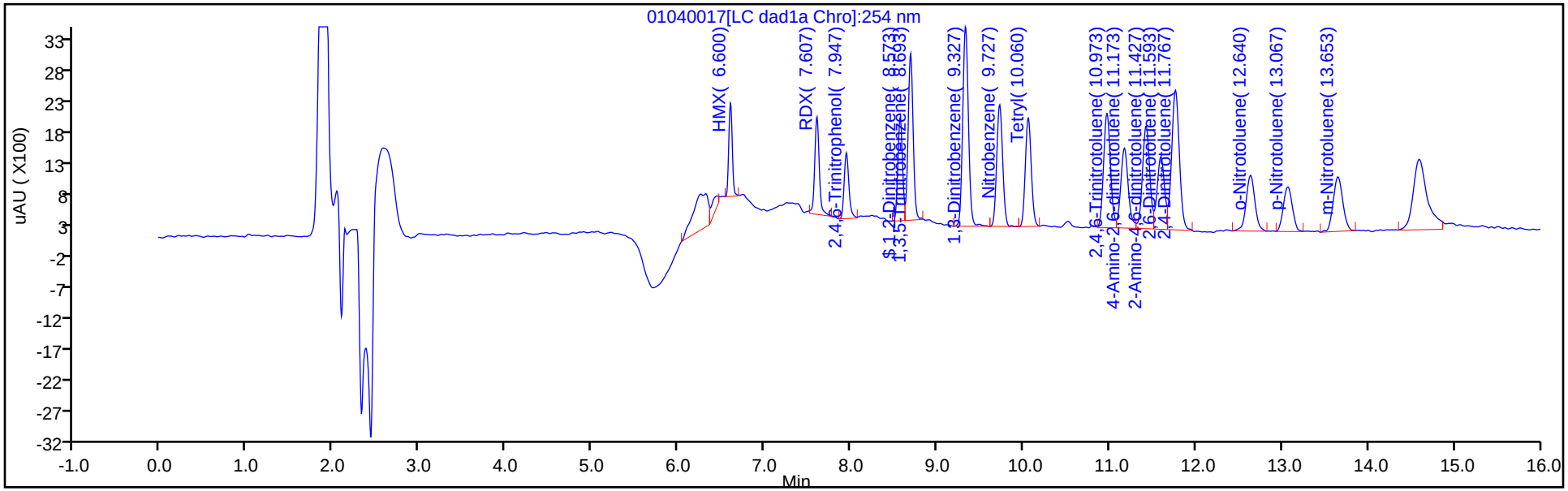
Report Date: 06-Jan-2022 20:05:13 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

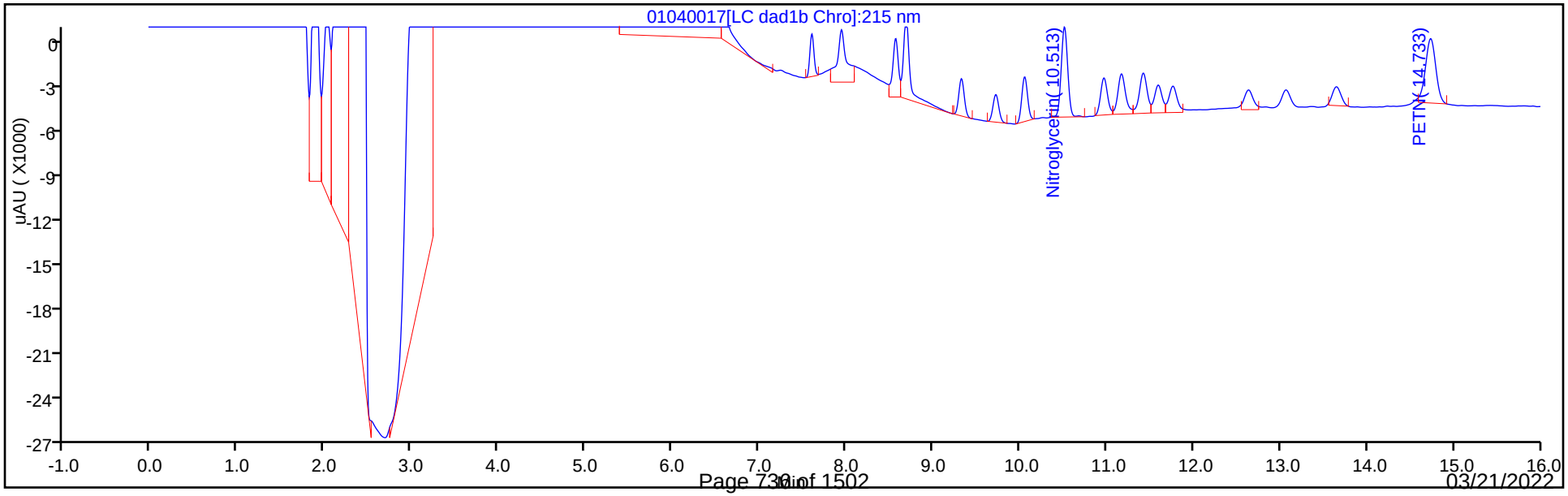
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040017.d

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

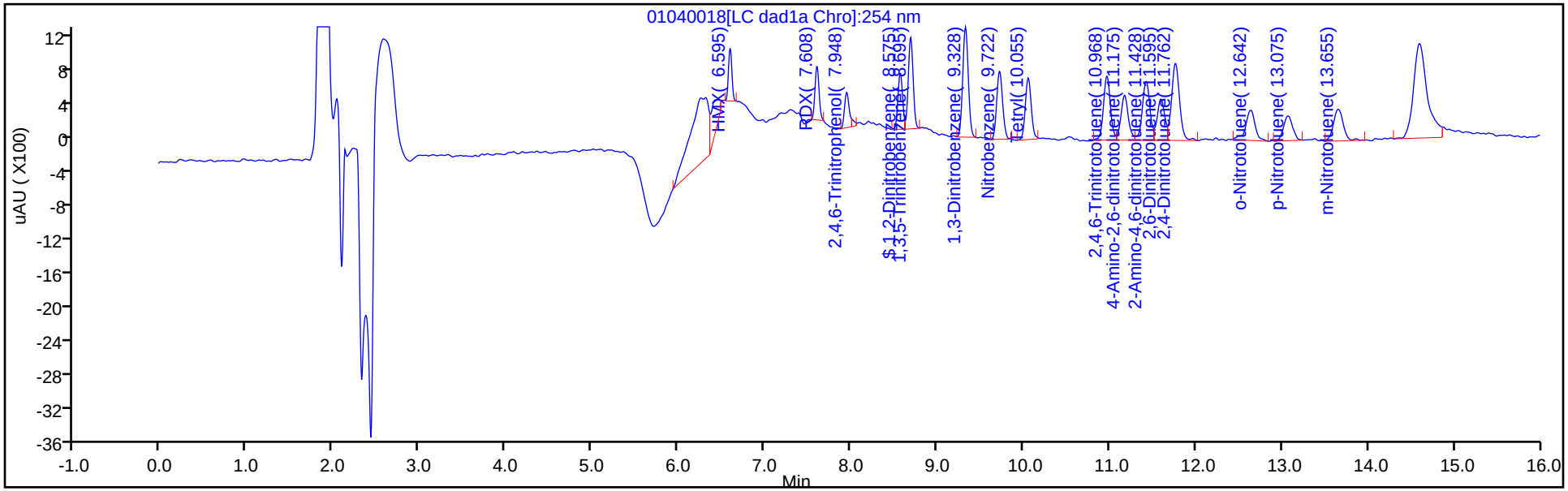
Report Date: 06-Jan-2022 20:05:13 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

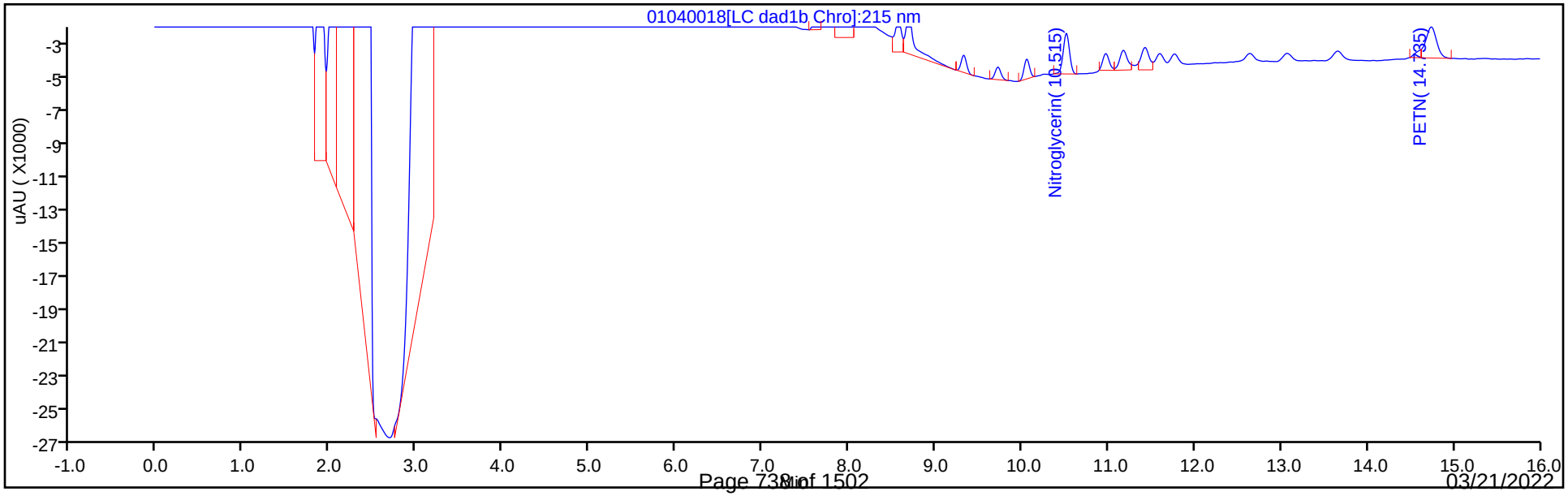
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040018.d

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

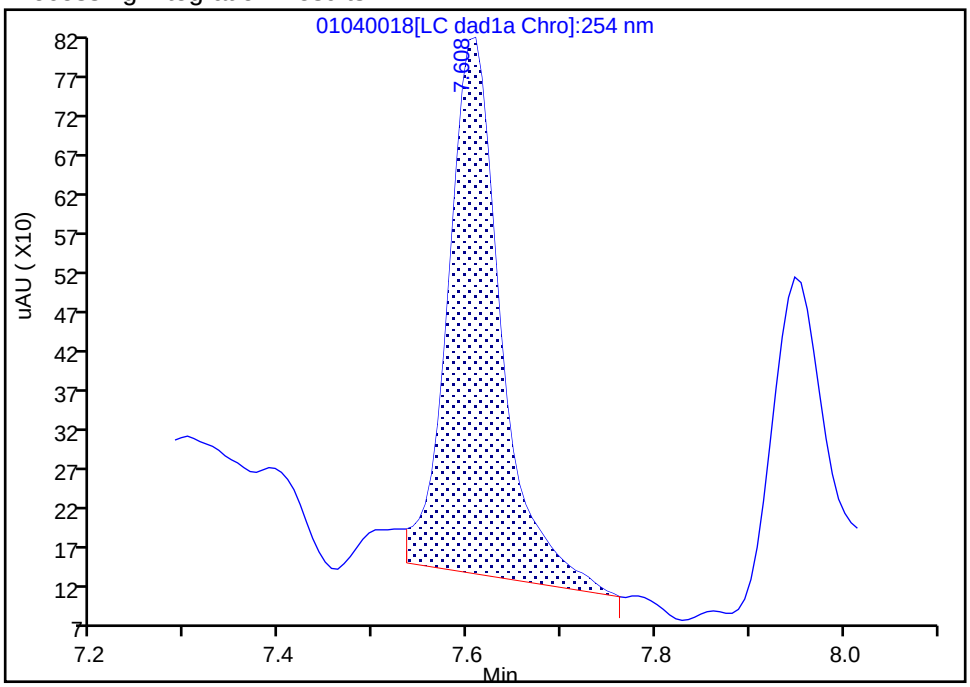
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040018.d				
Injection Date:	04-Jan-2022 21:08:26	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

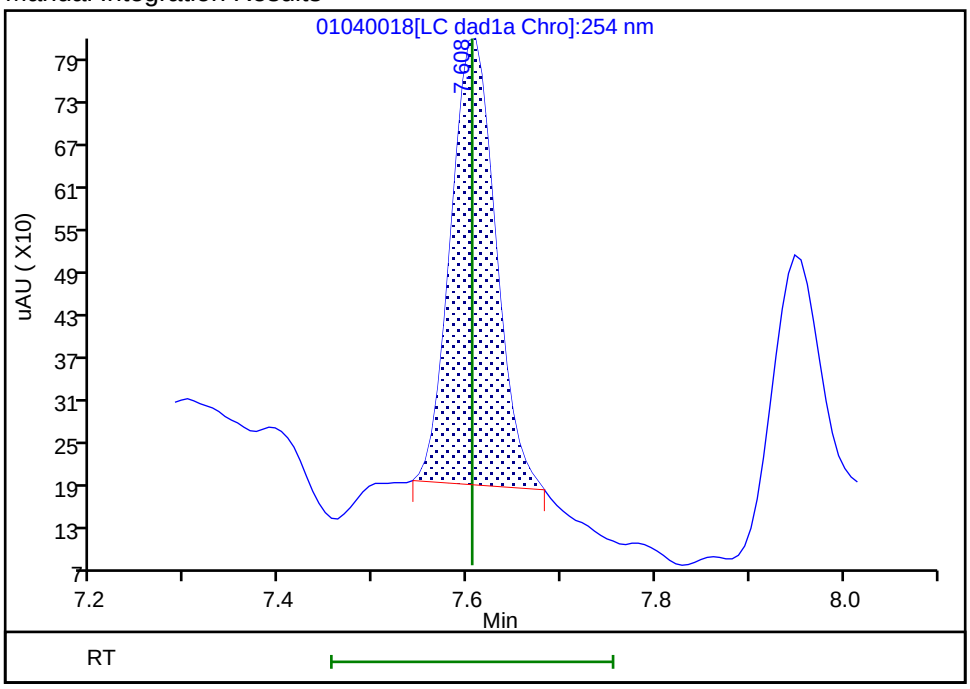
Processing Integration Results

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

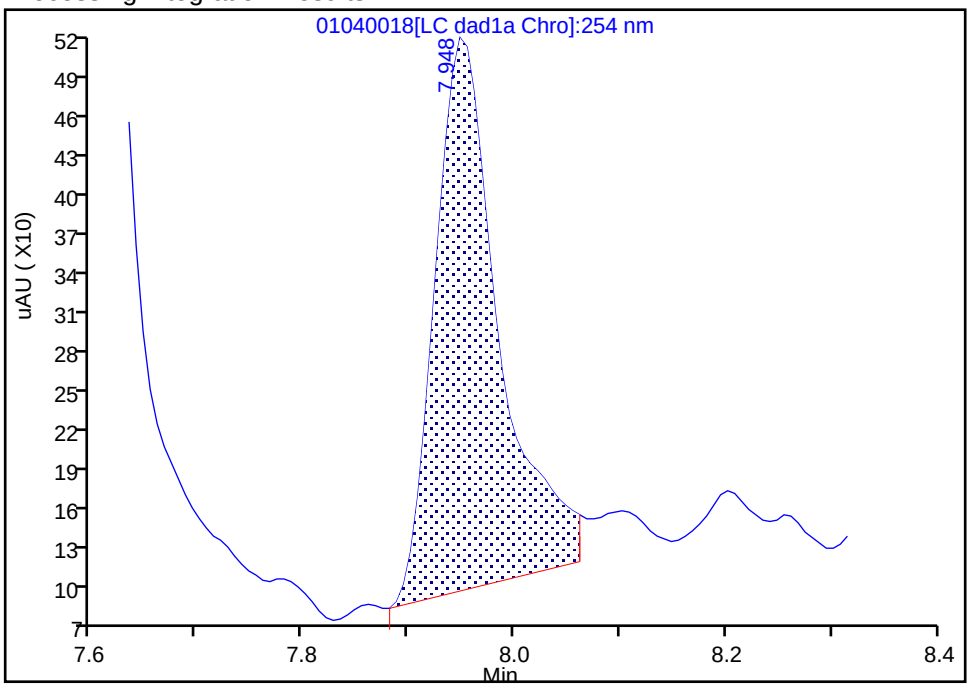
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040018.d				
Injection Date:	04-Jan-2022 21:08:26	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

9 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

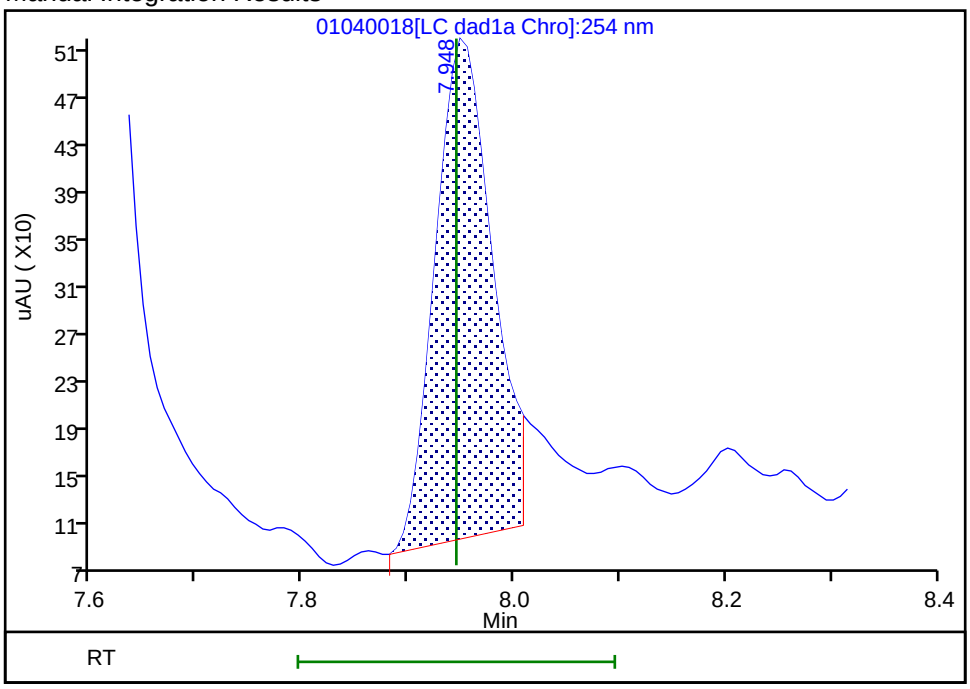
Processing Integration Results

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

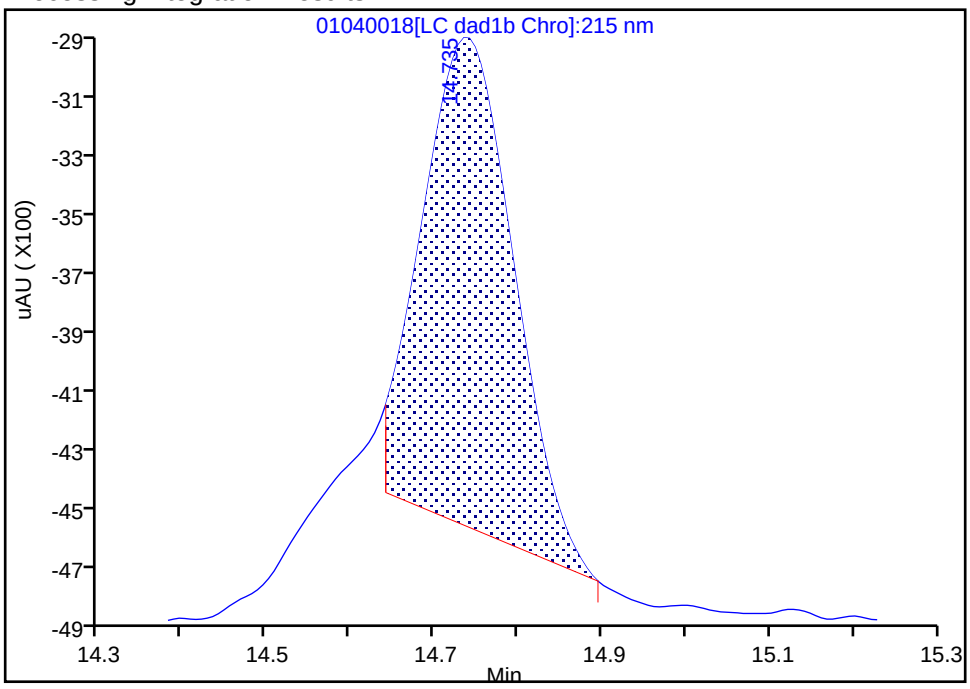
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040018.d		
Injection Date:	04-Jan-2022 21:08:26	Instrument ID:	CHHPLC_X3
Lims ID:	IC INT 2		
Client ID:			
Operator ID:	JZ	ALS Bottle#:	18 Worklist Smp#: 18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:		Detector	LC DAD1C, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

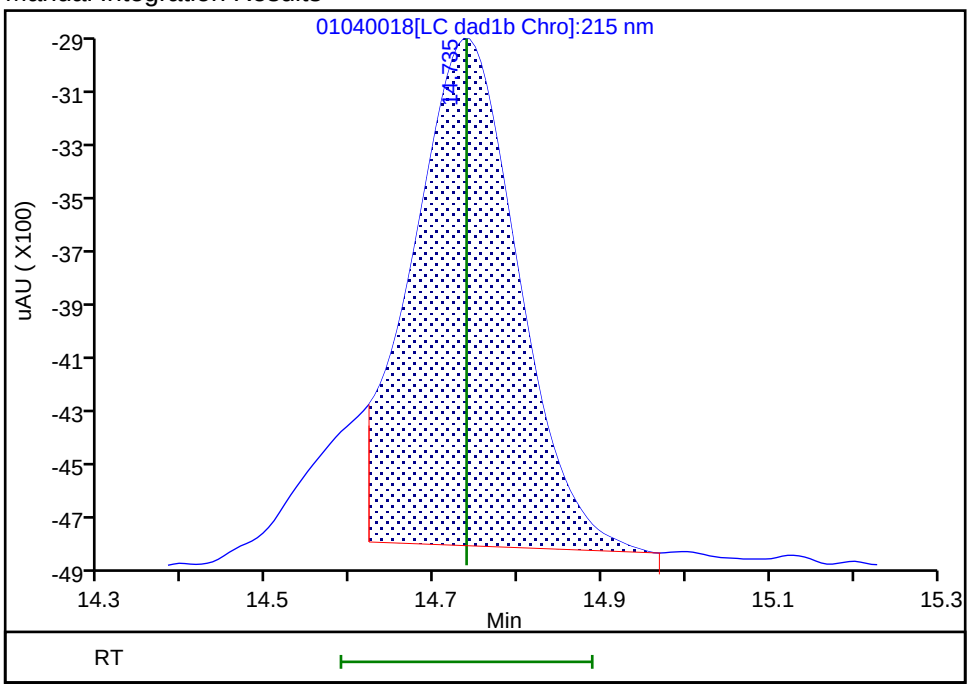
Processing Integration Results

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

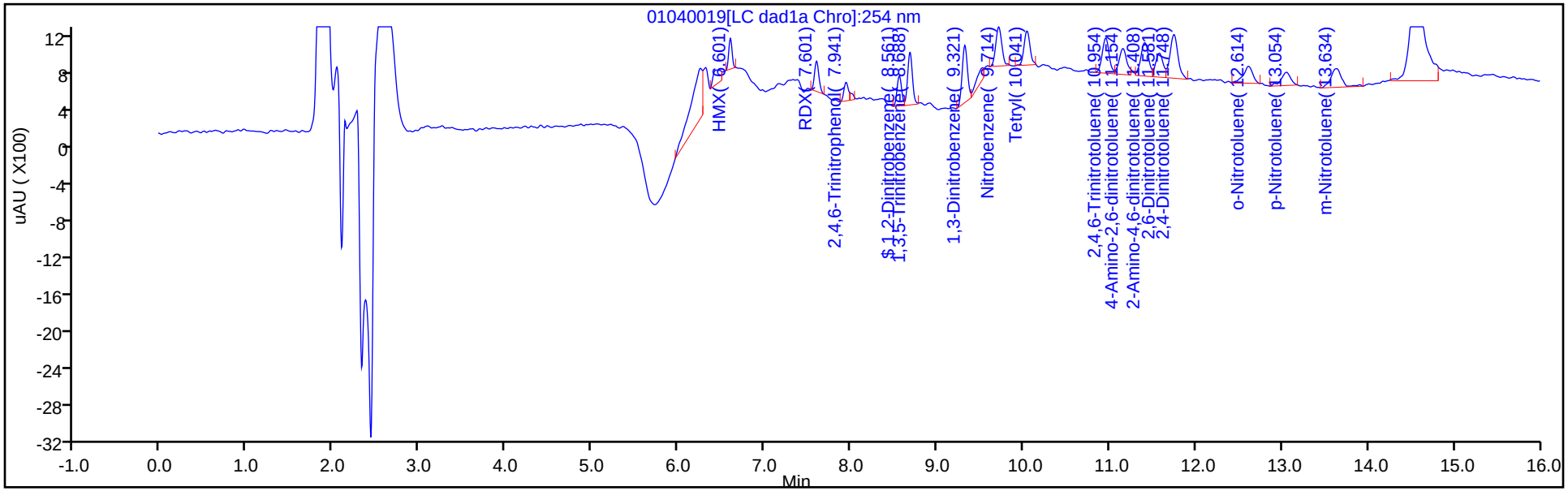
Report Date: 06-Jan-2022 20:05:14 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

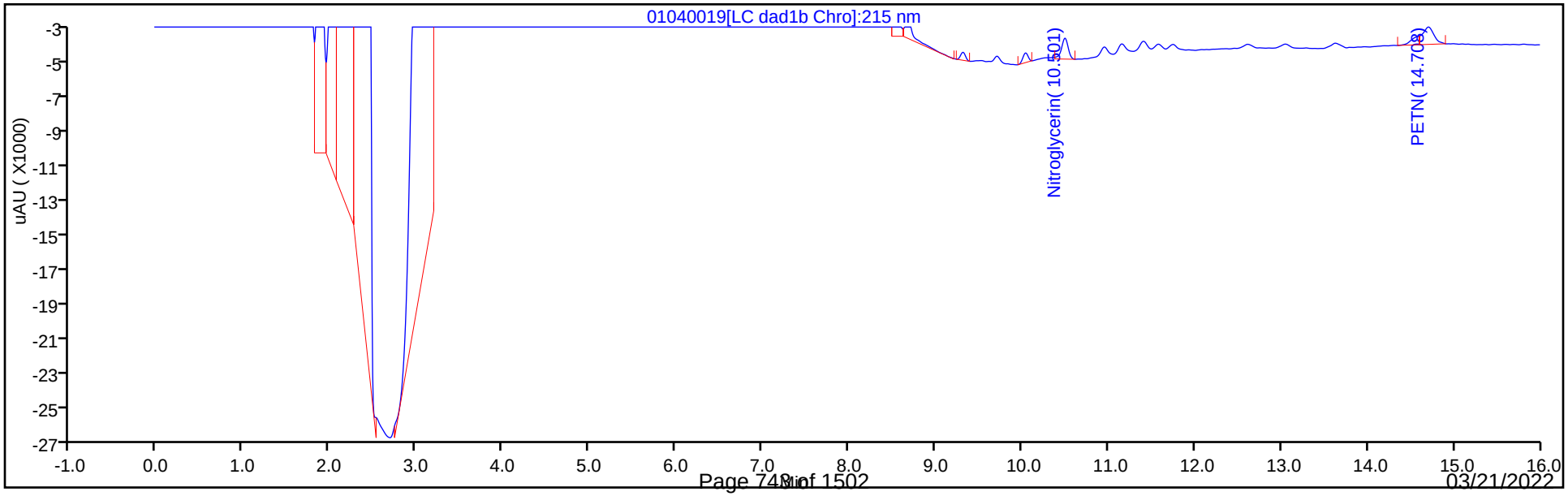
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d

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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

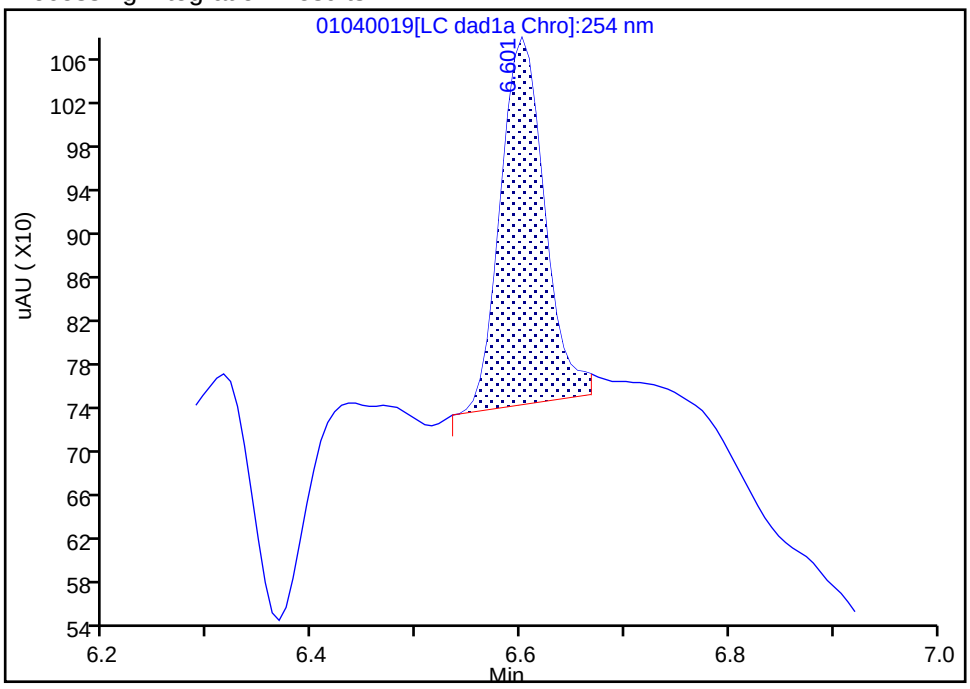
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

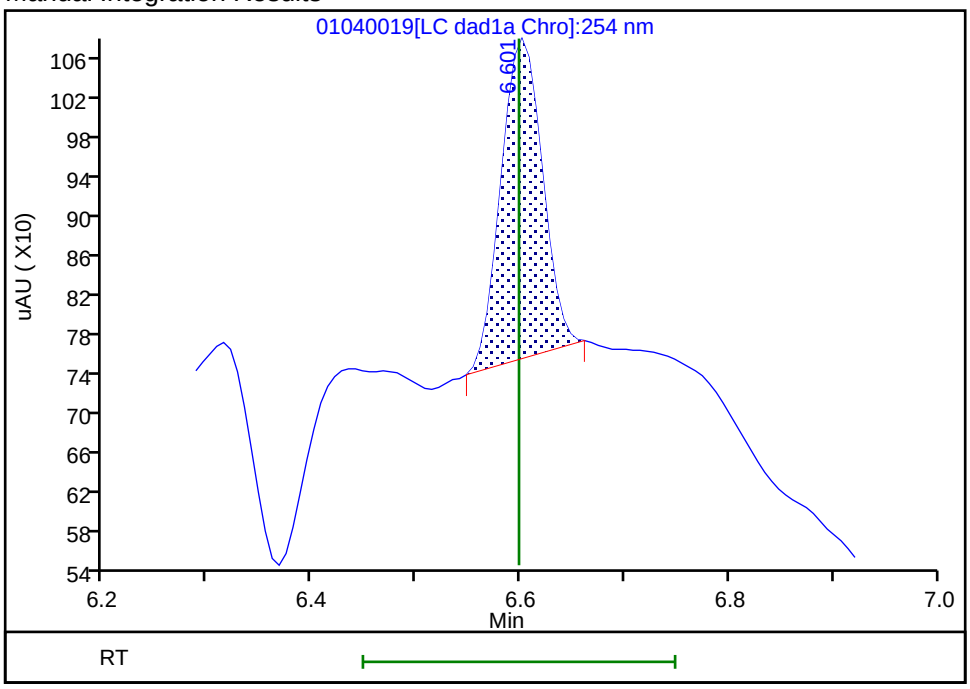
Processing Integration Results

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

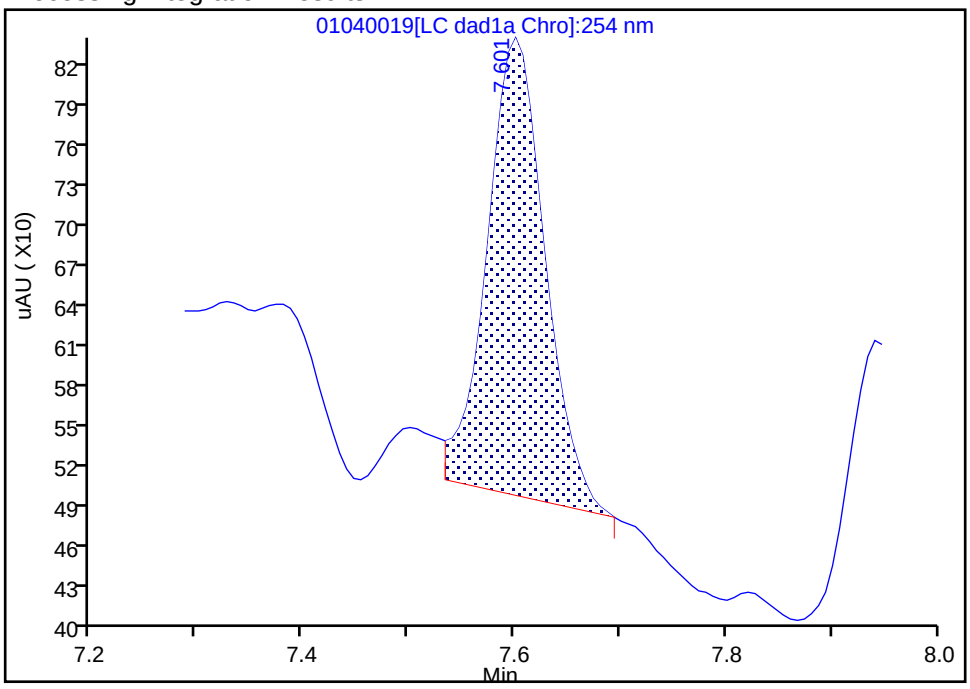
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

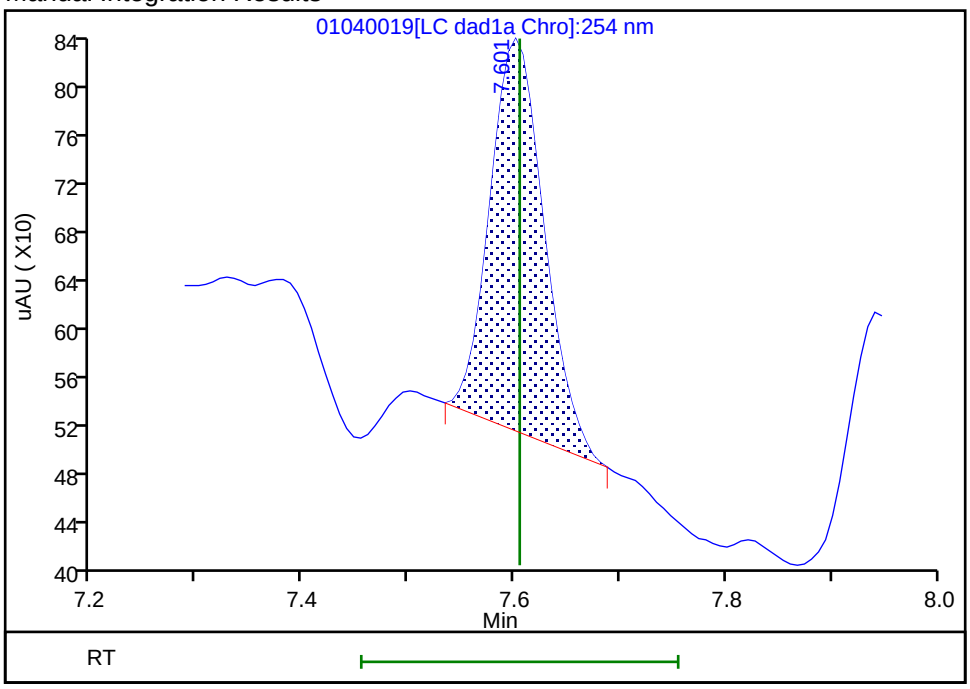
Processing Integration Results

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

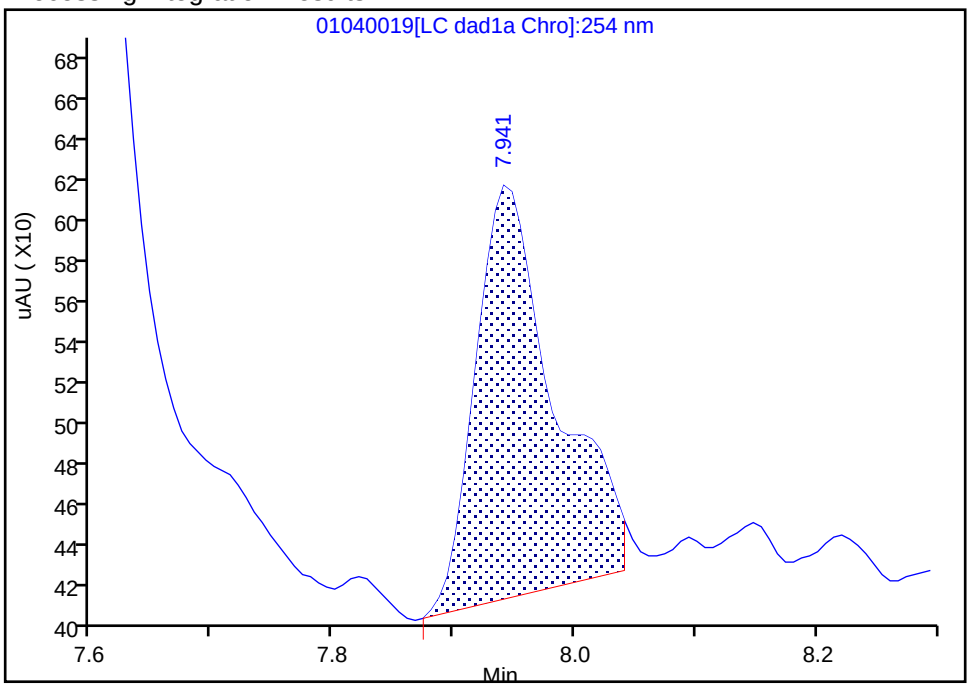
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

9 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

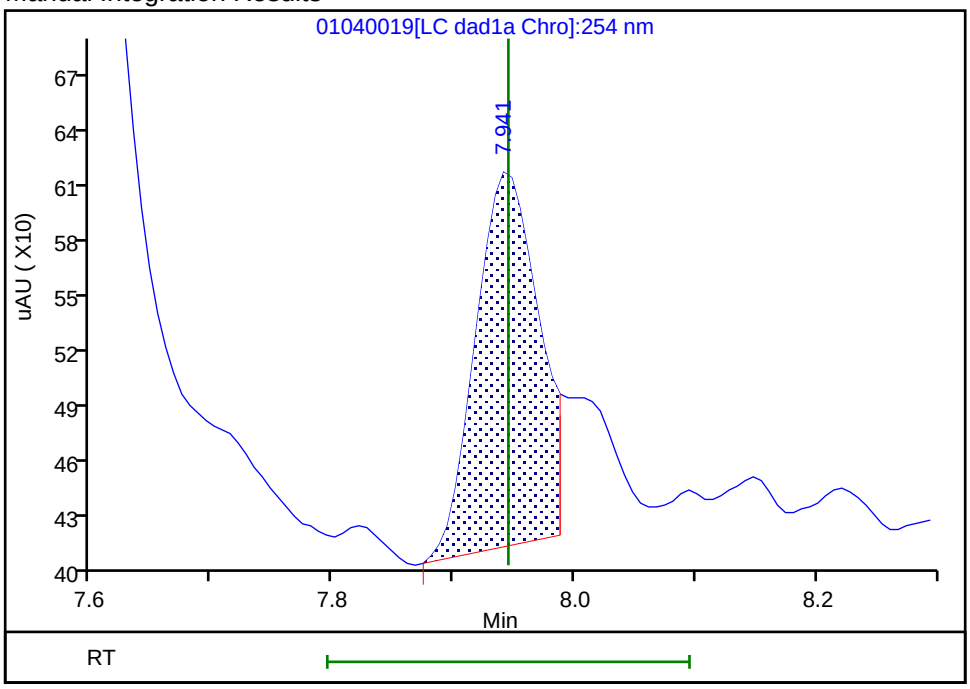
Processing Integration Results

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

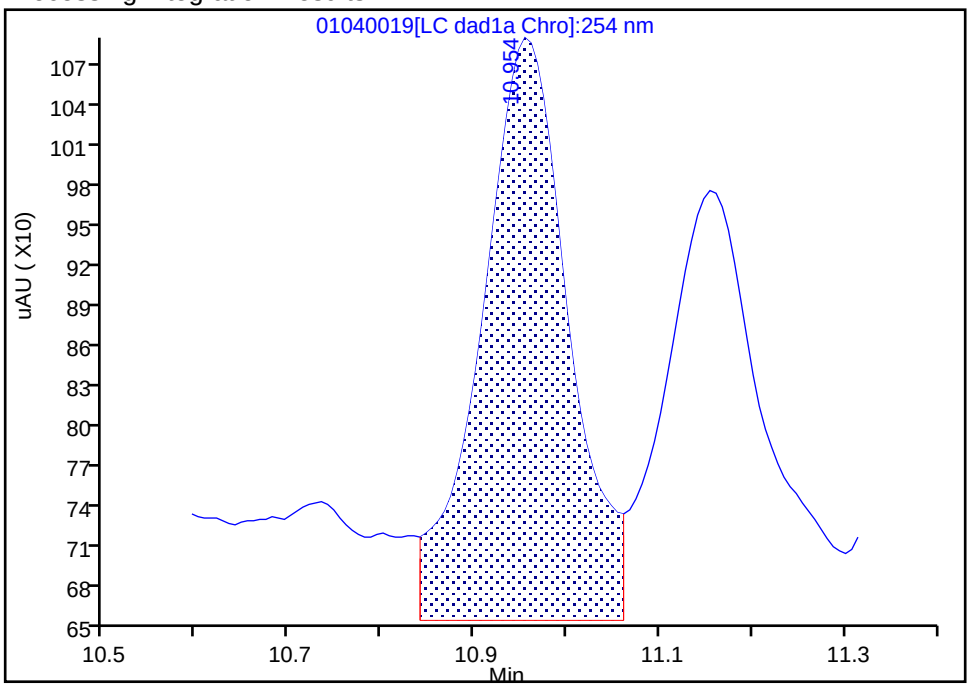
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

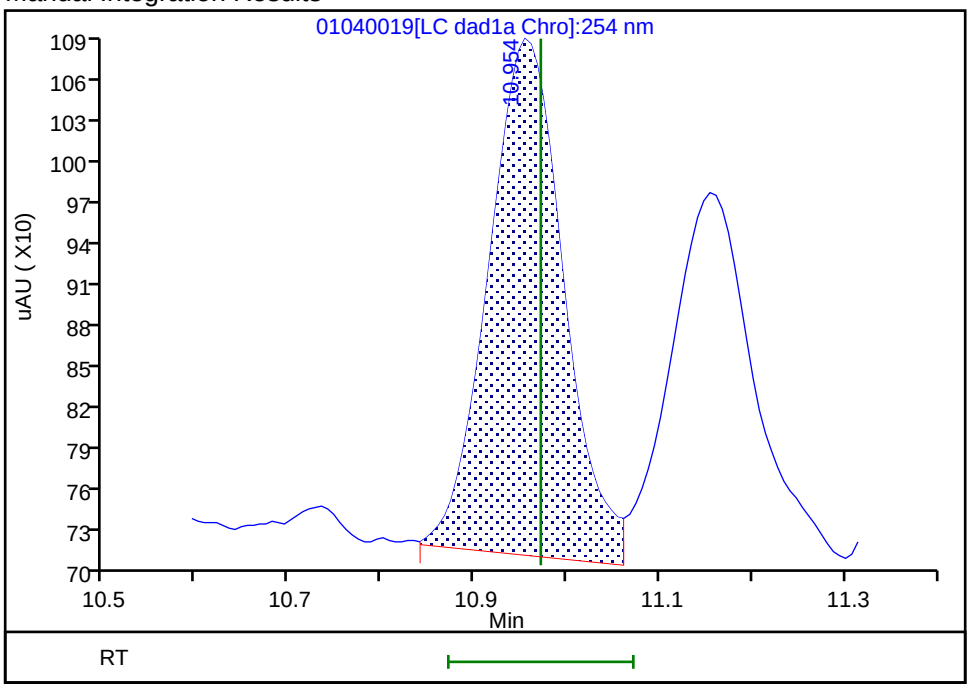
Processing Integration Results

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

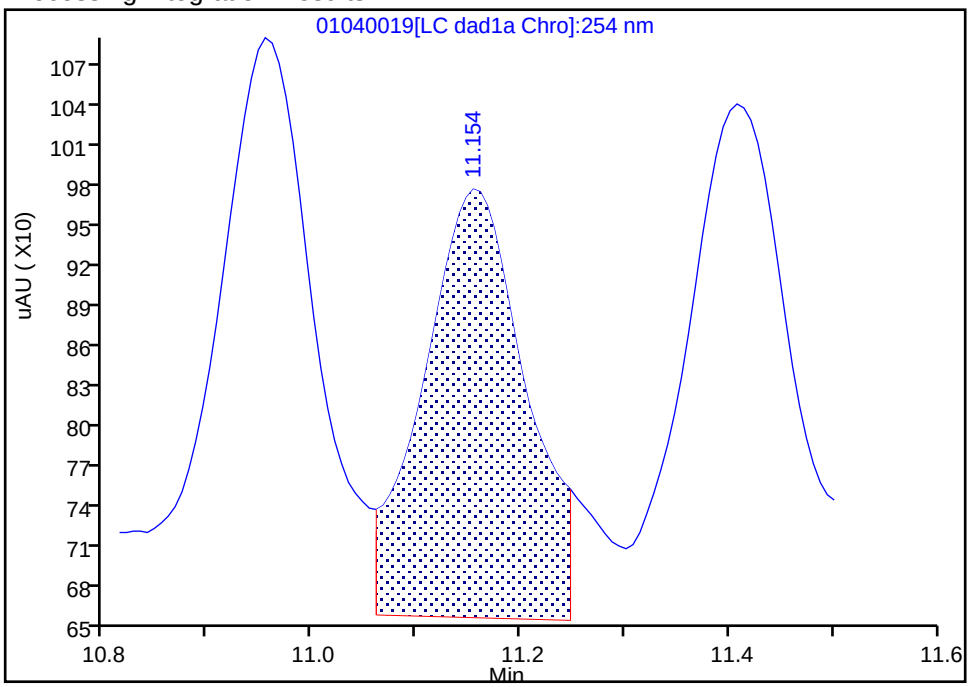
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	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

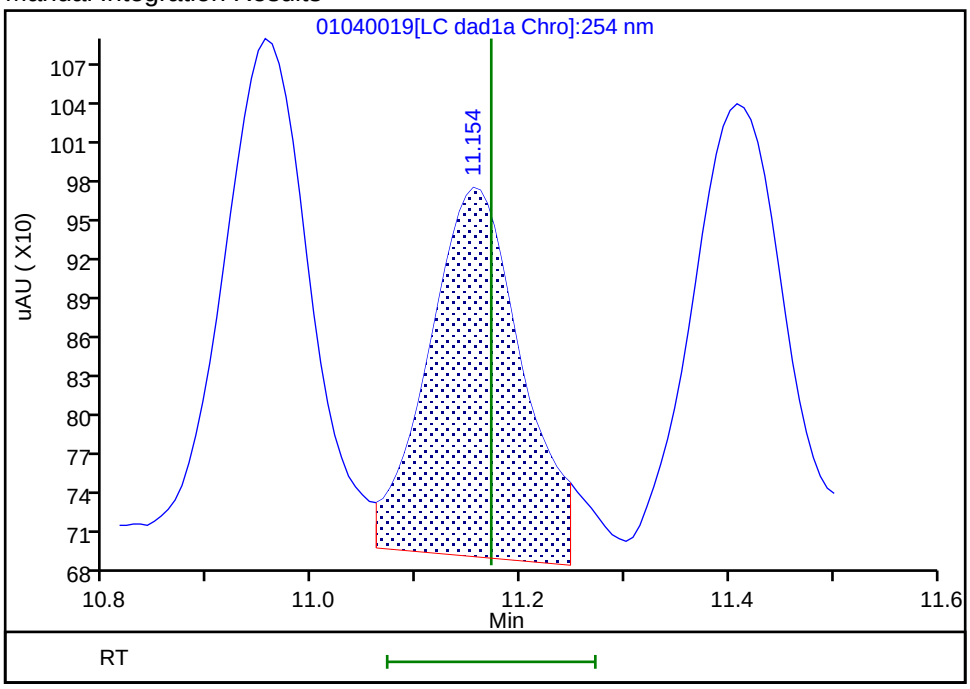
Processing Integration Results

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

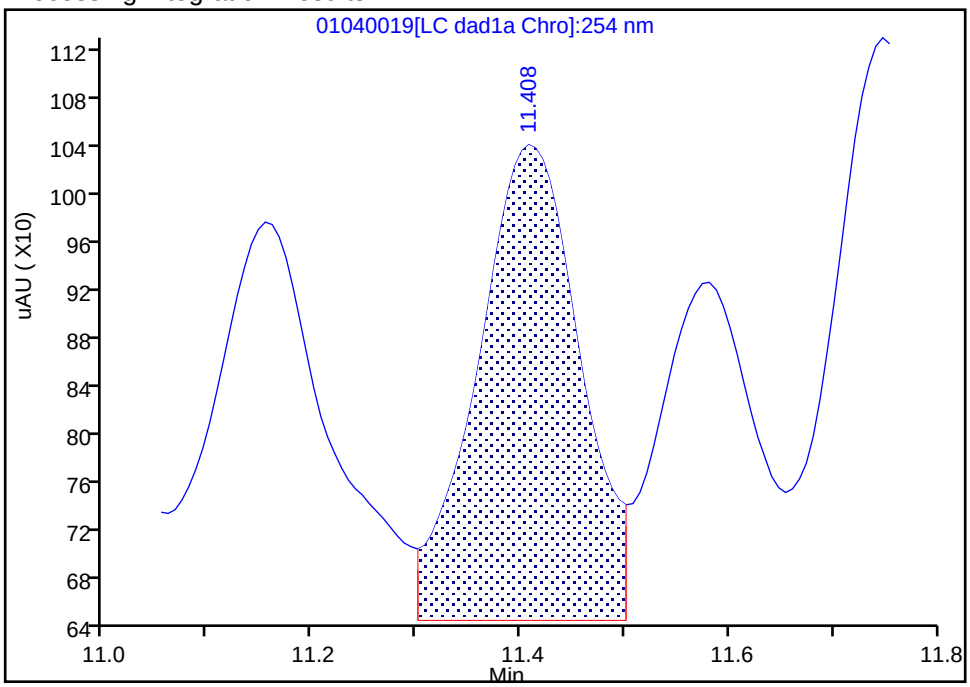
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	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

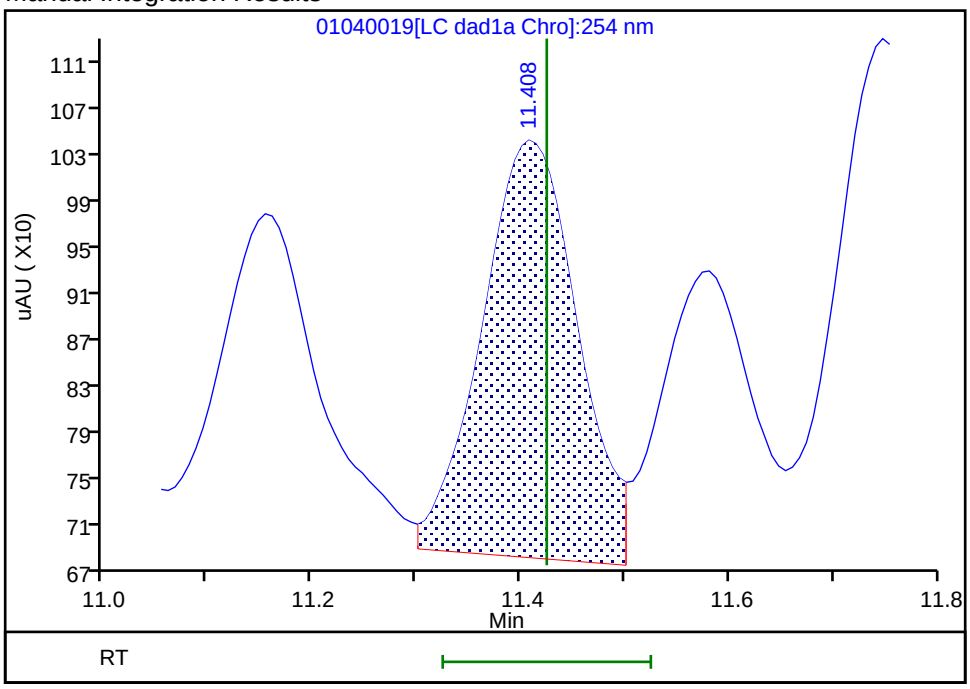
Processing Integration Results

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

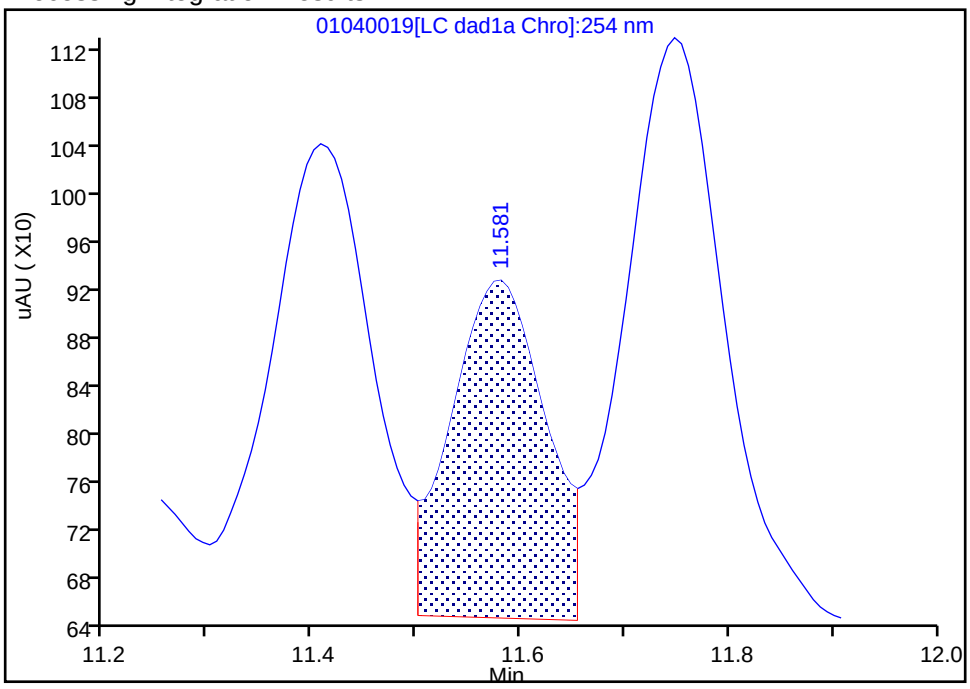
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

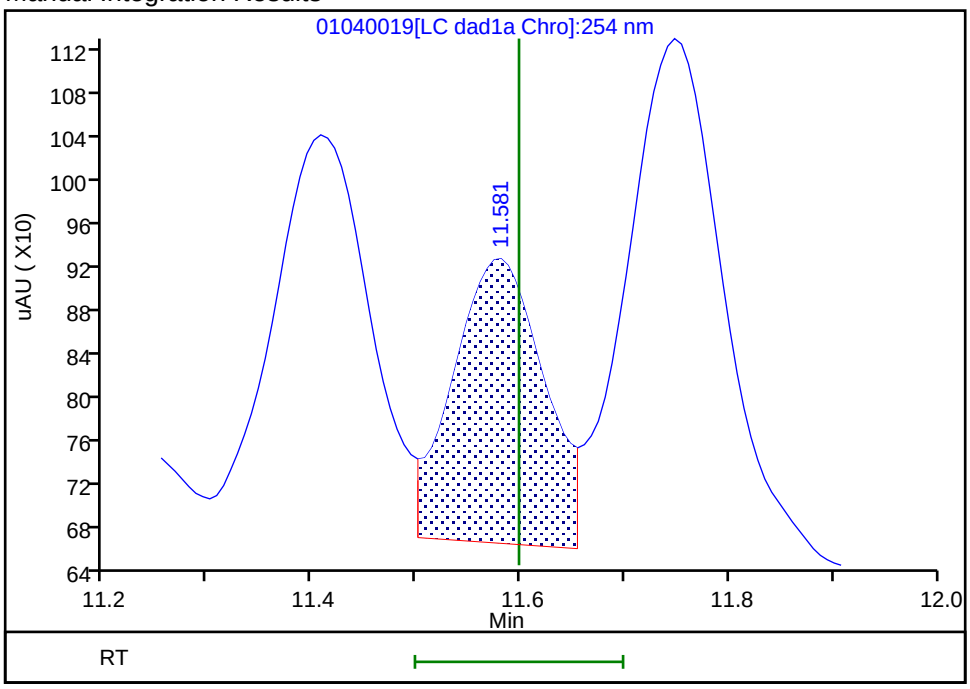
Processing Integration Results

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

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

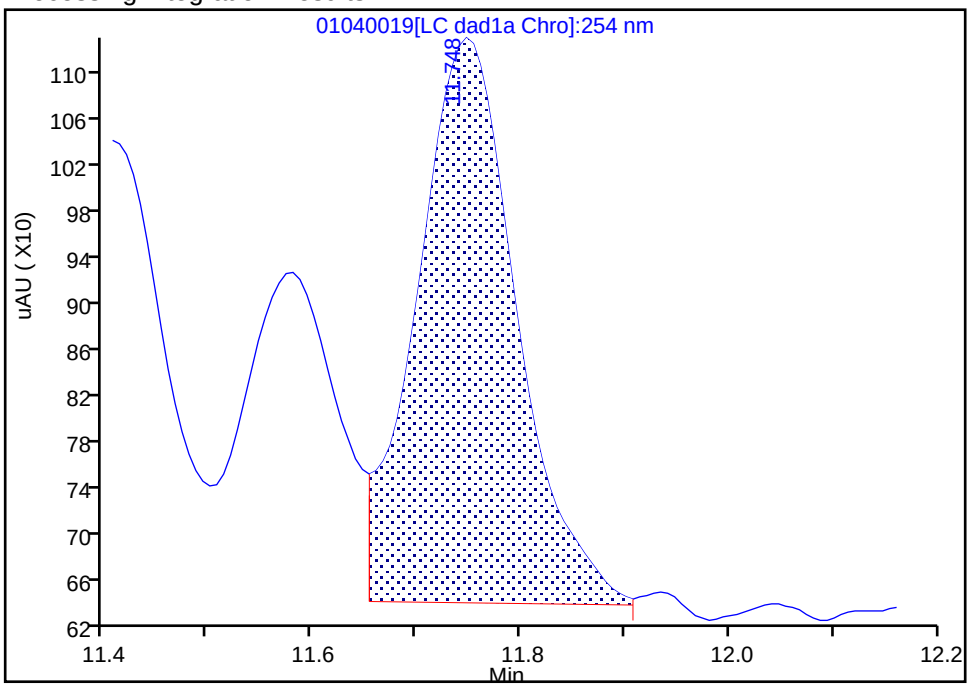
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

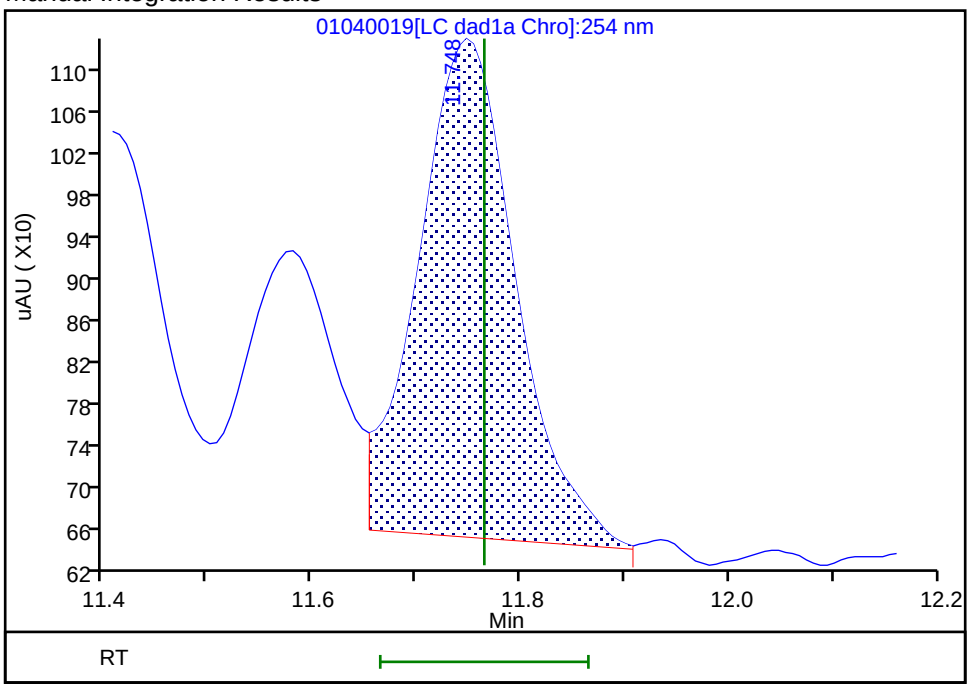
Processing Integration Results

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

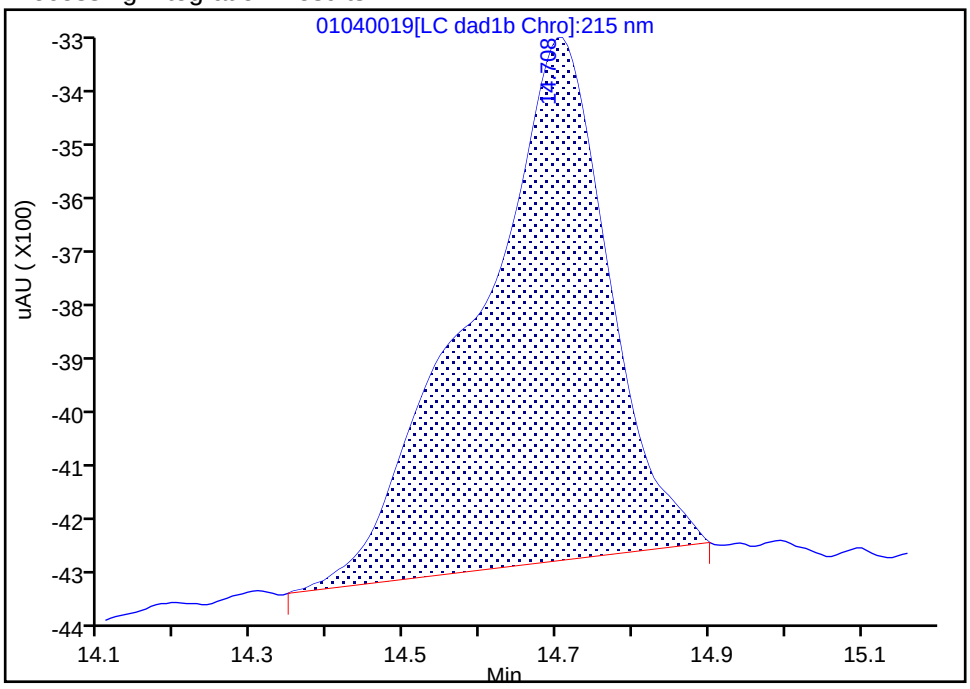
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d
Injection Date: 04-Jan-2022 21:31:24 Instrument ID: CHHPLC_X3
Lims ID: IC INT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

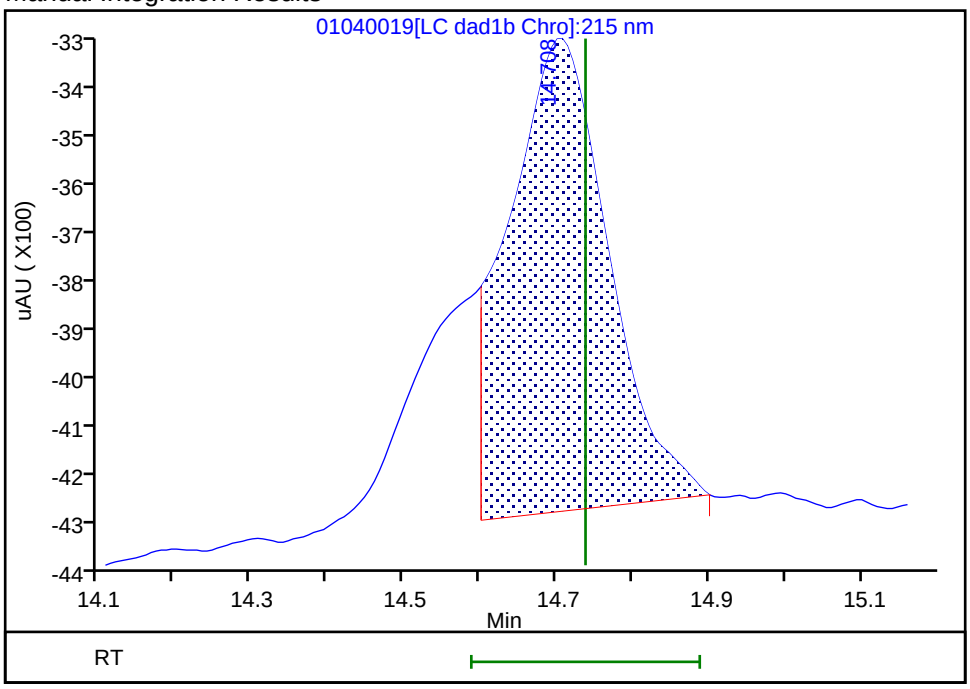
Processing Integration Results

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

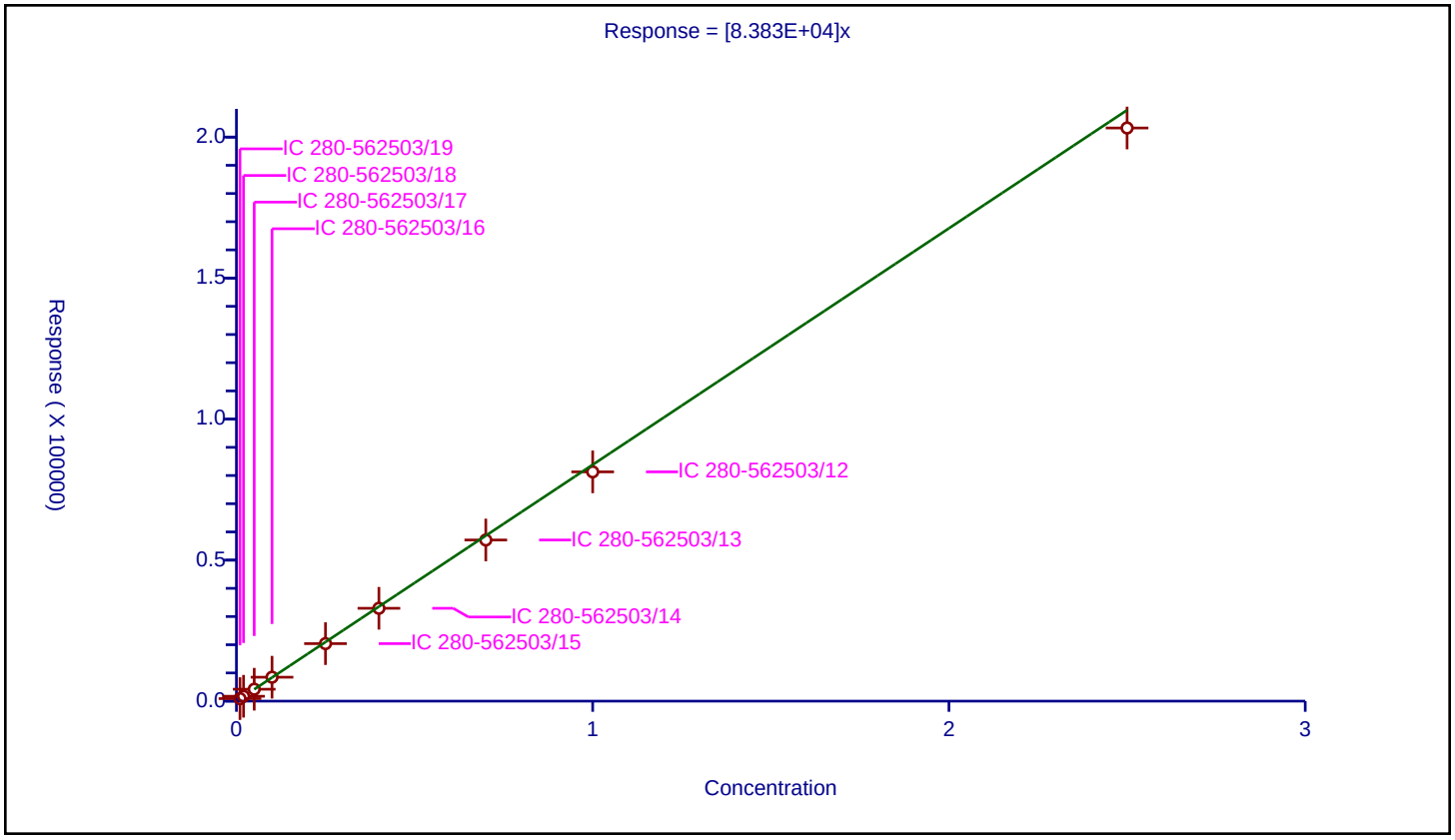
Curve Coefficients

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

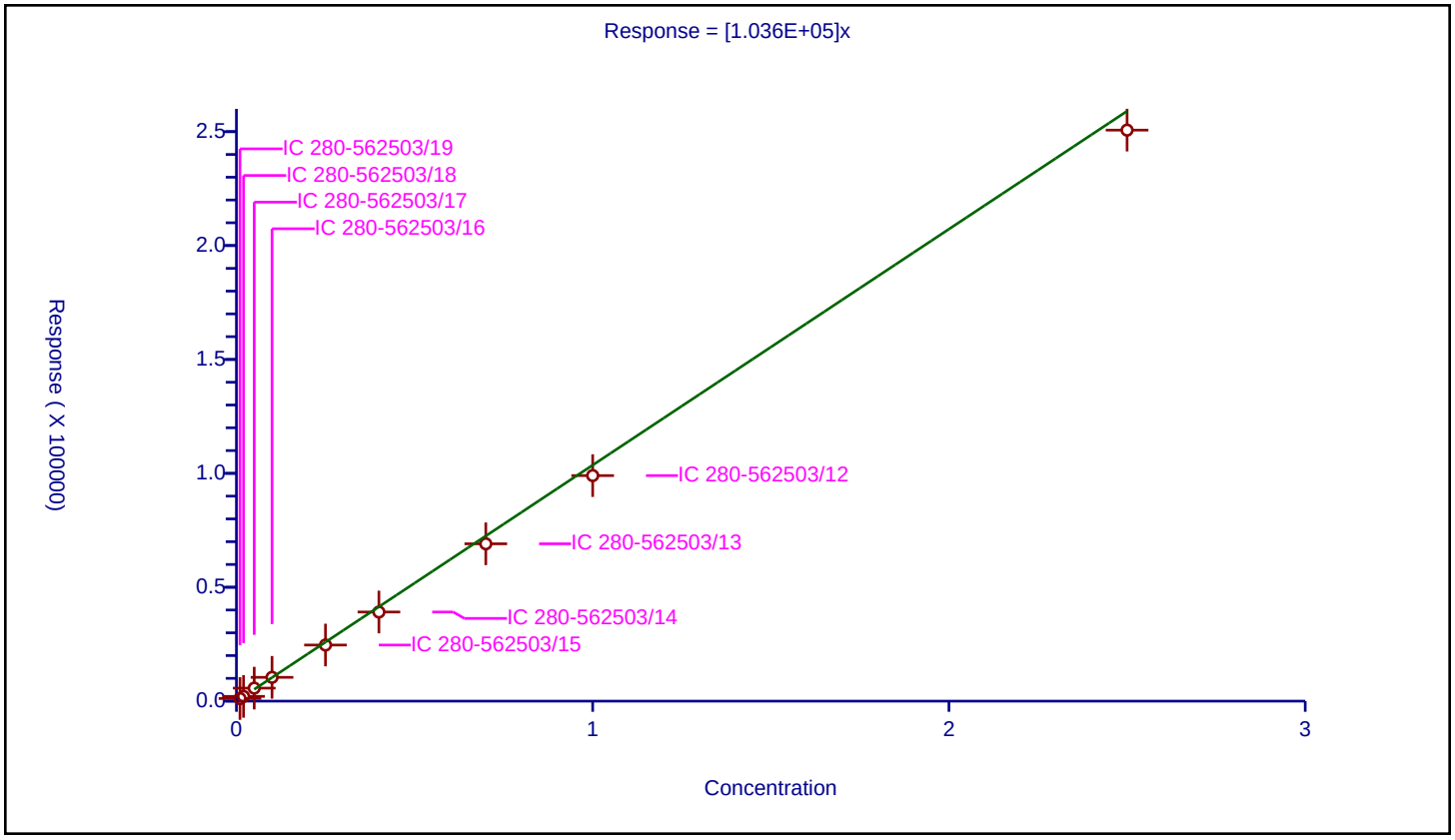
Curve Coefficients

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

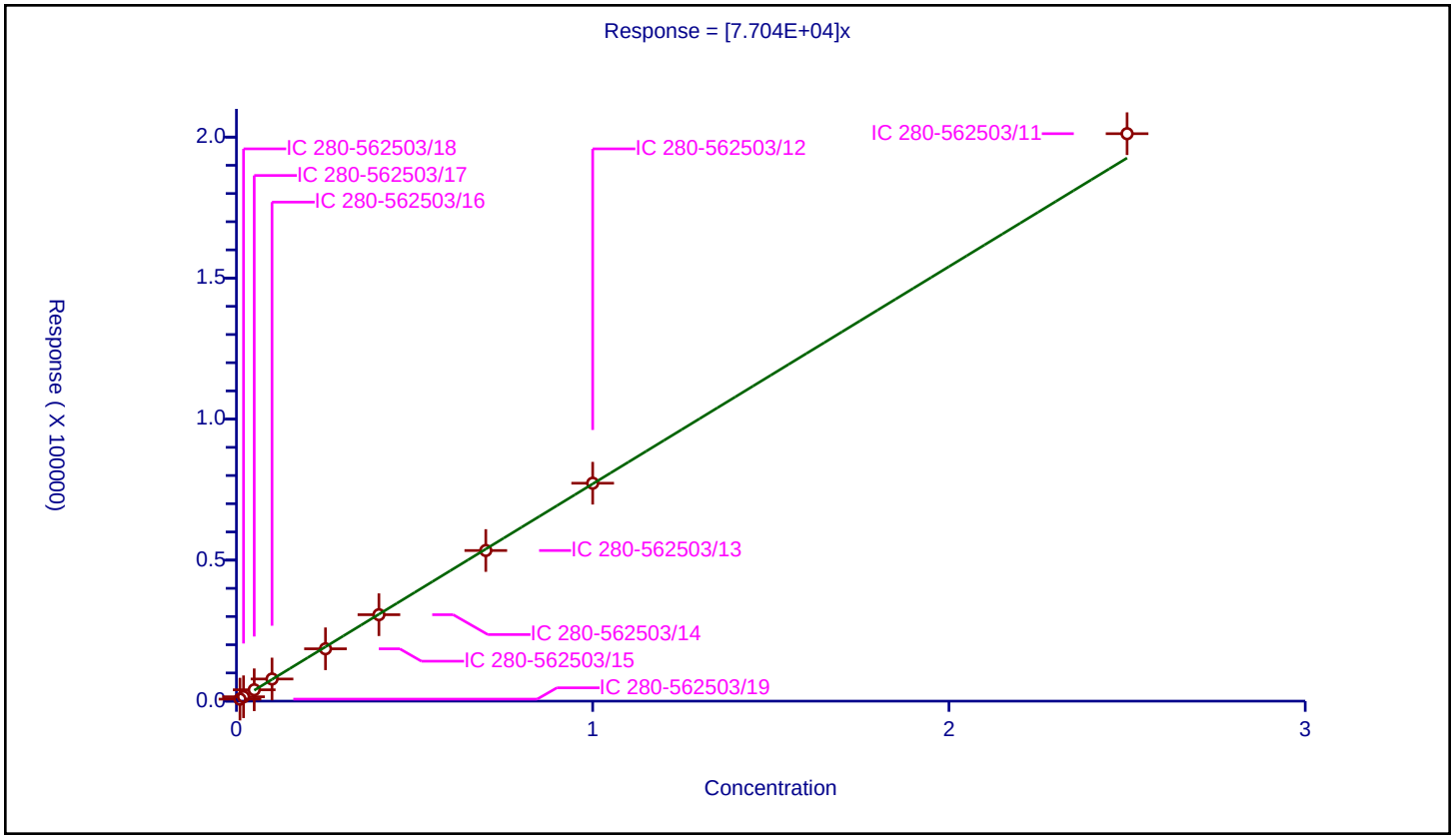
Curve Coefficients

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

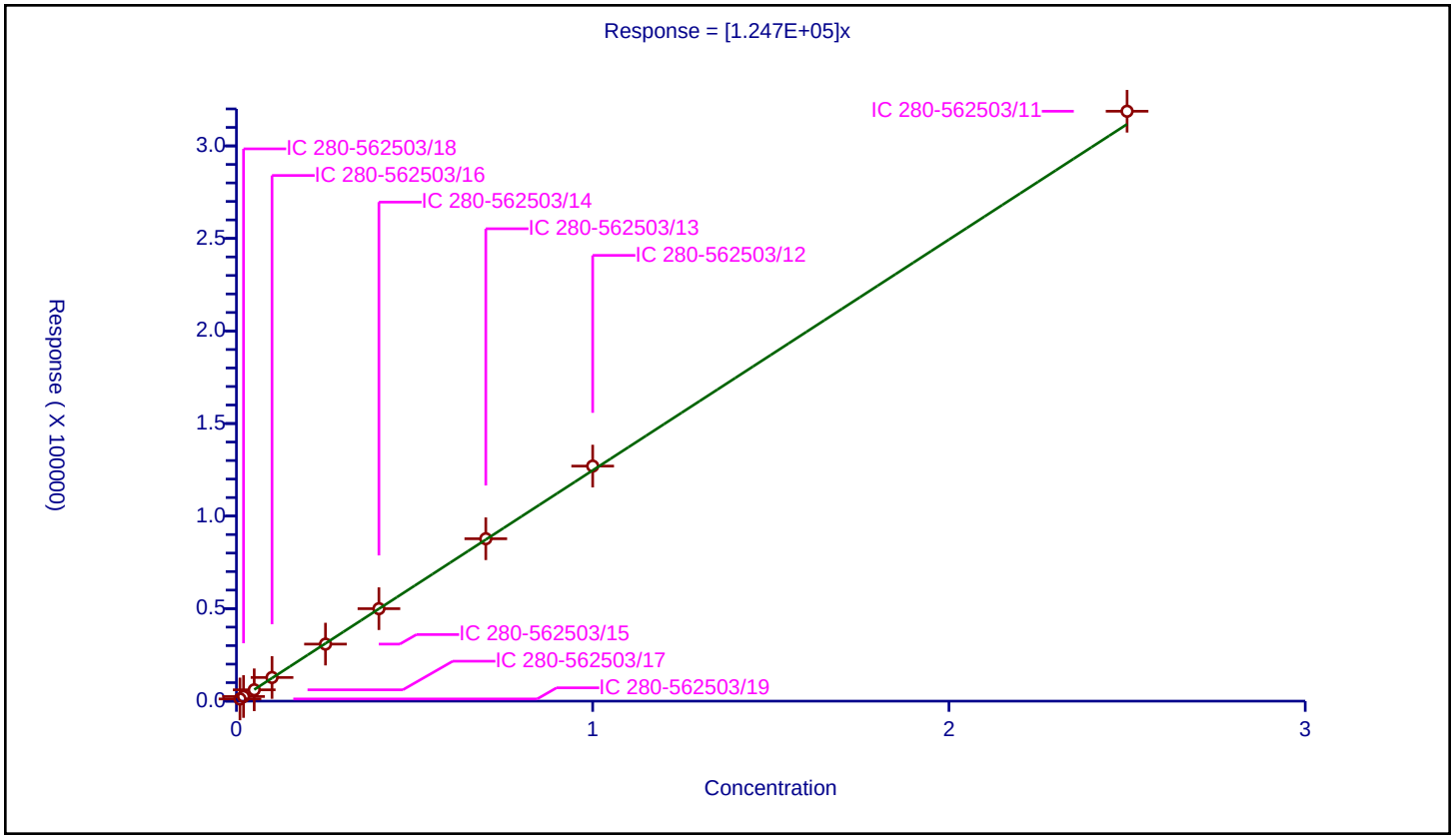
Curve Coefficients

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



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

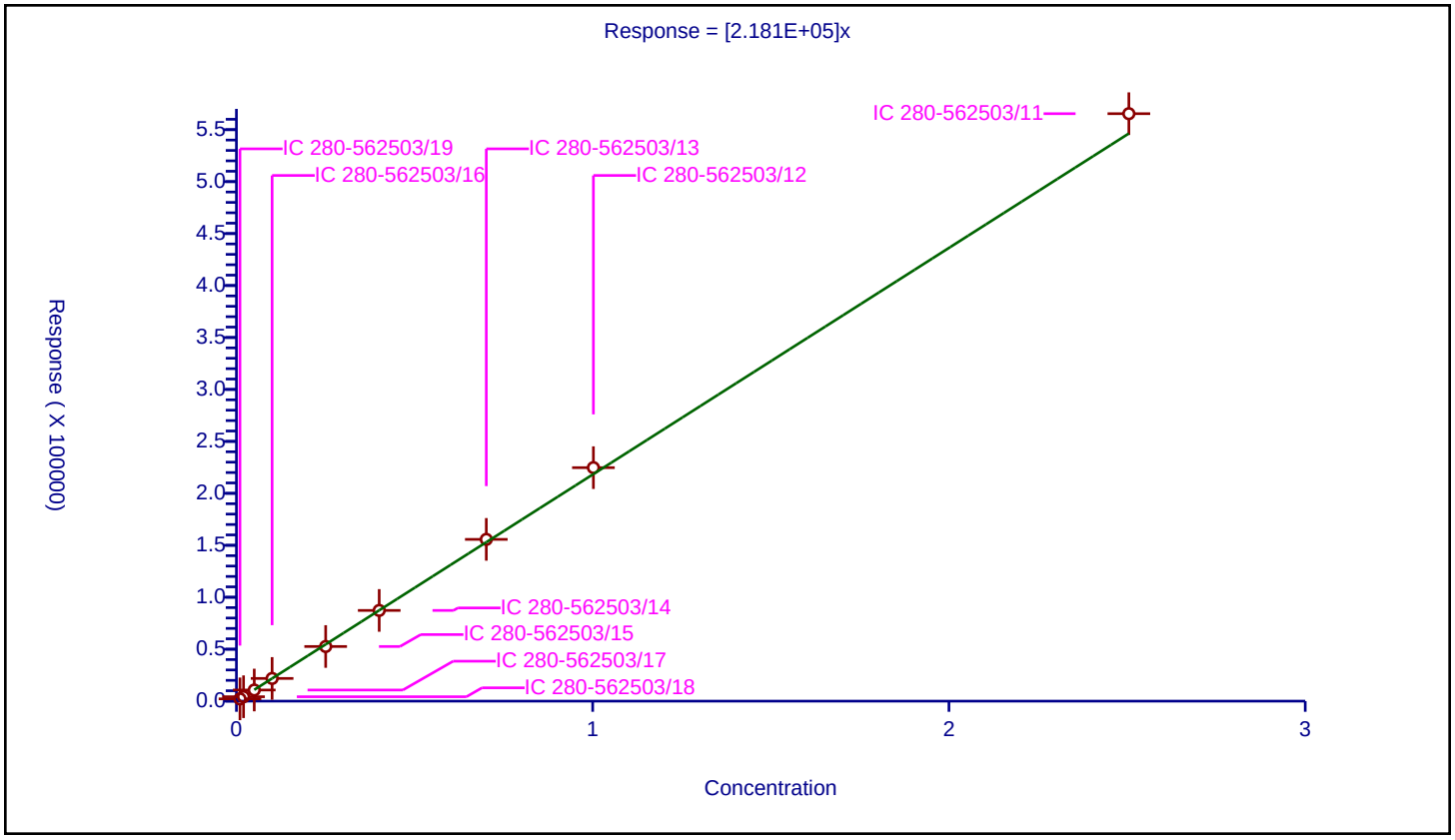
Curve Coefficients

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

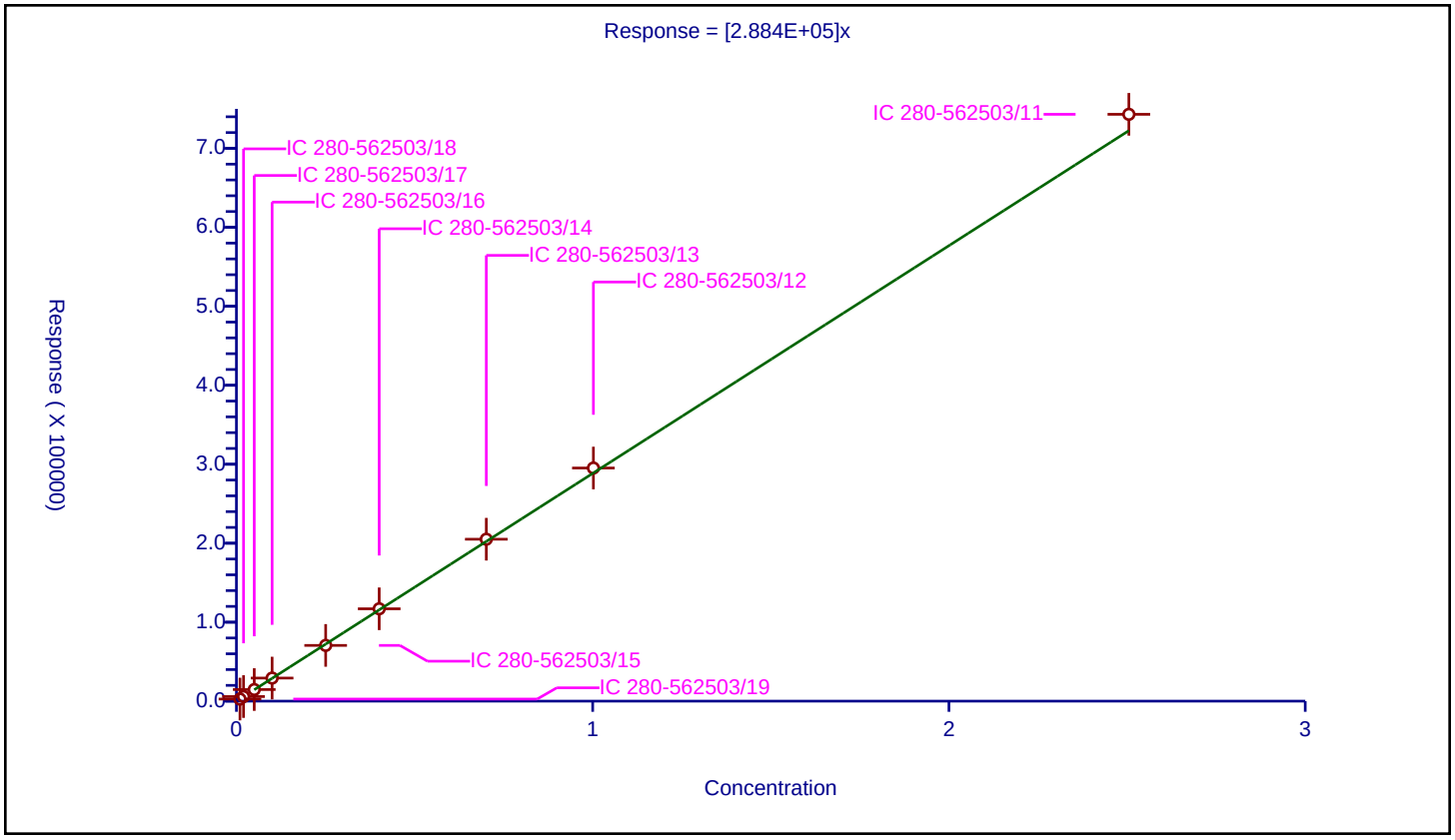
Curve Coefficients

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

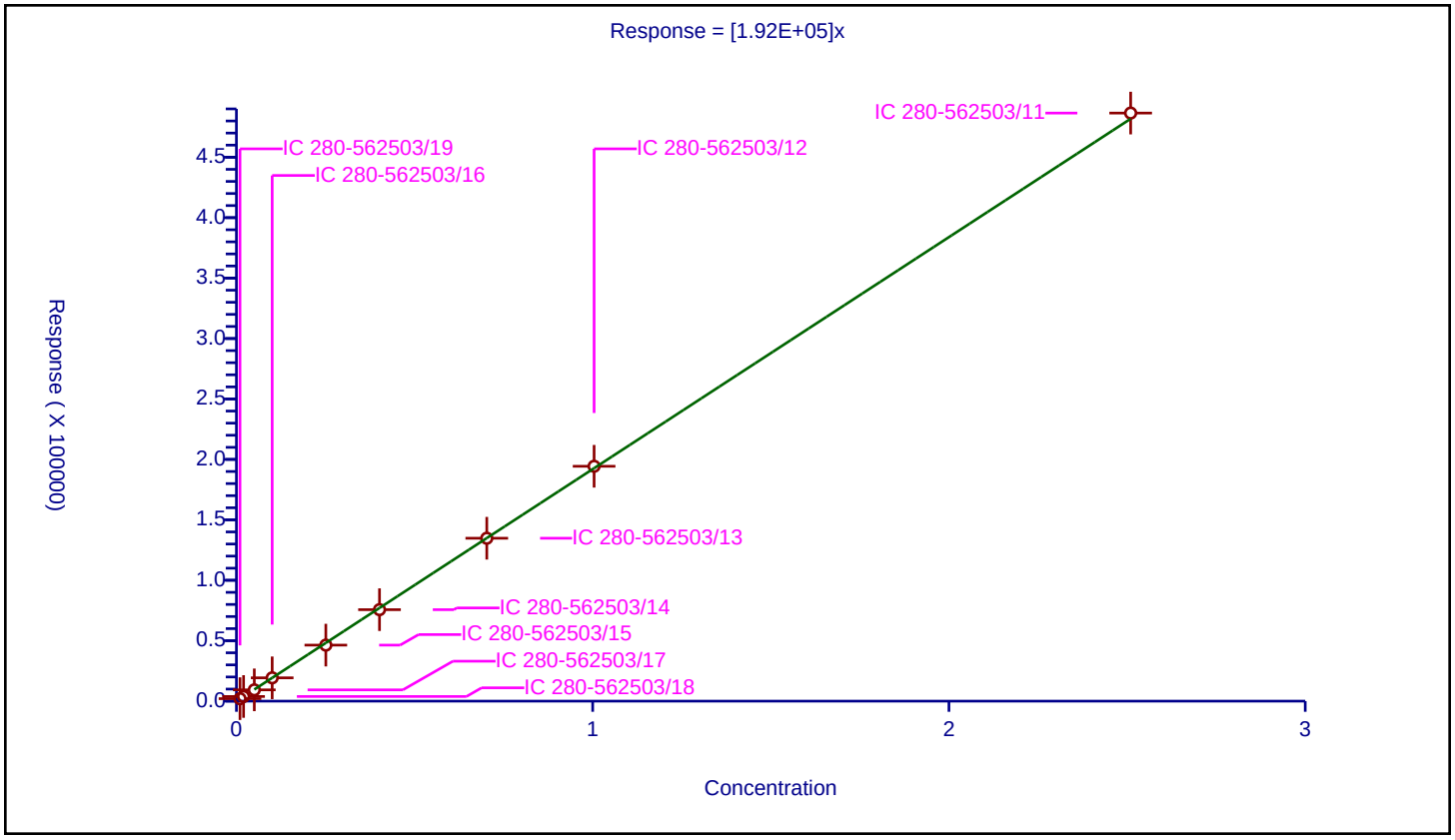
Curve Coefficients

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



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

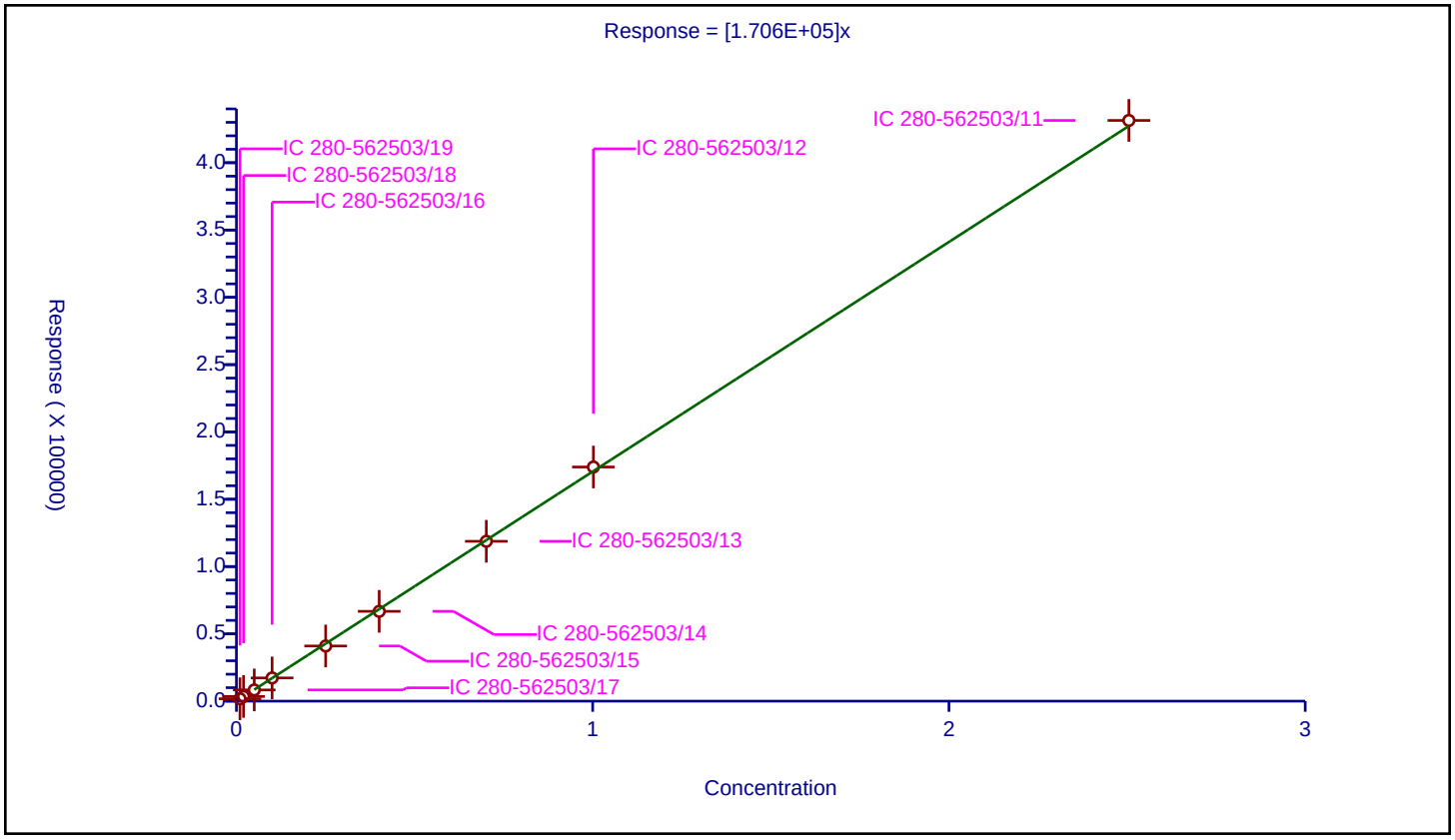
Curve Coefficients

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

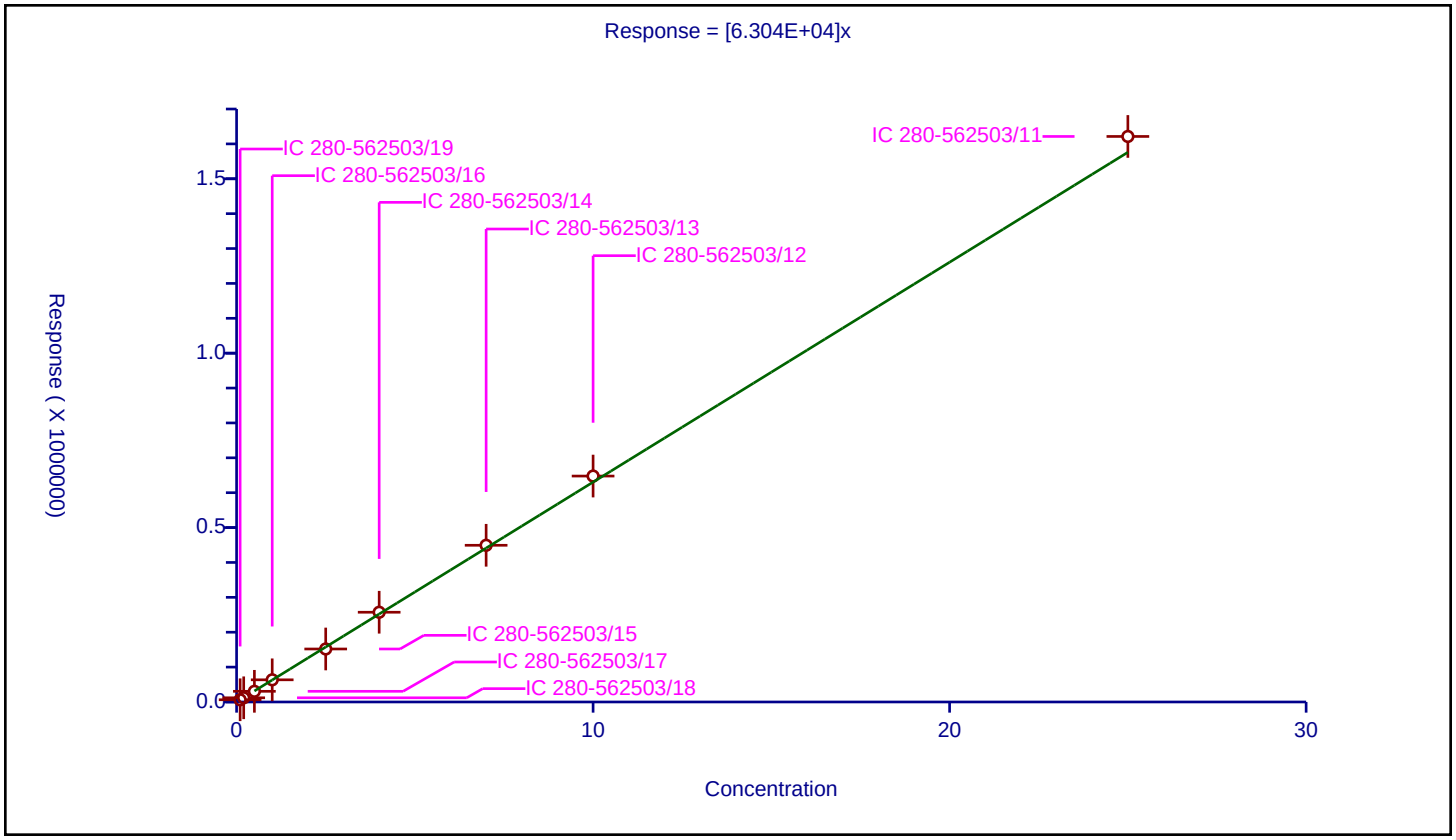
Curve Coefficients

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

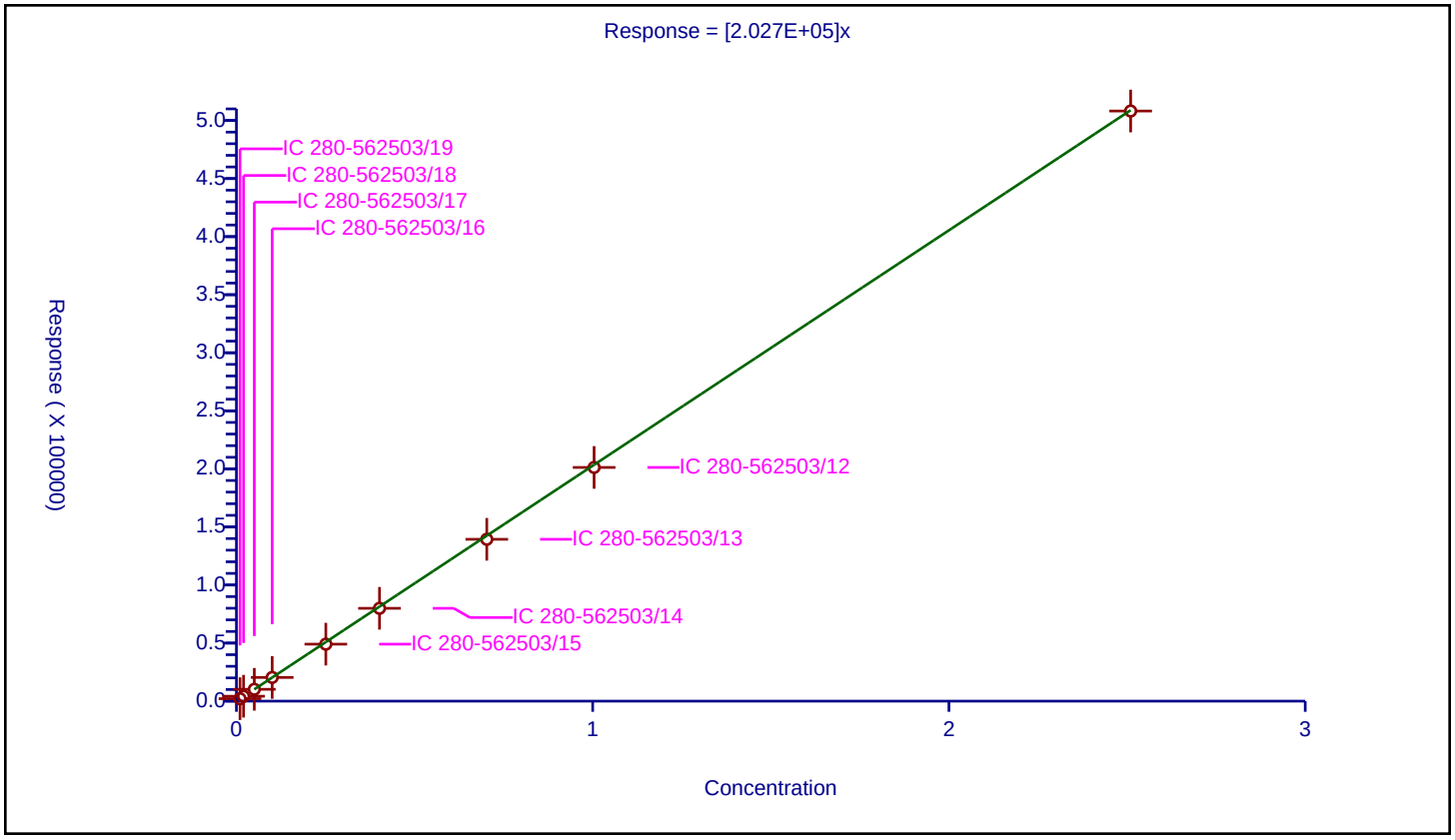
Curve Coefficients

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

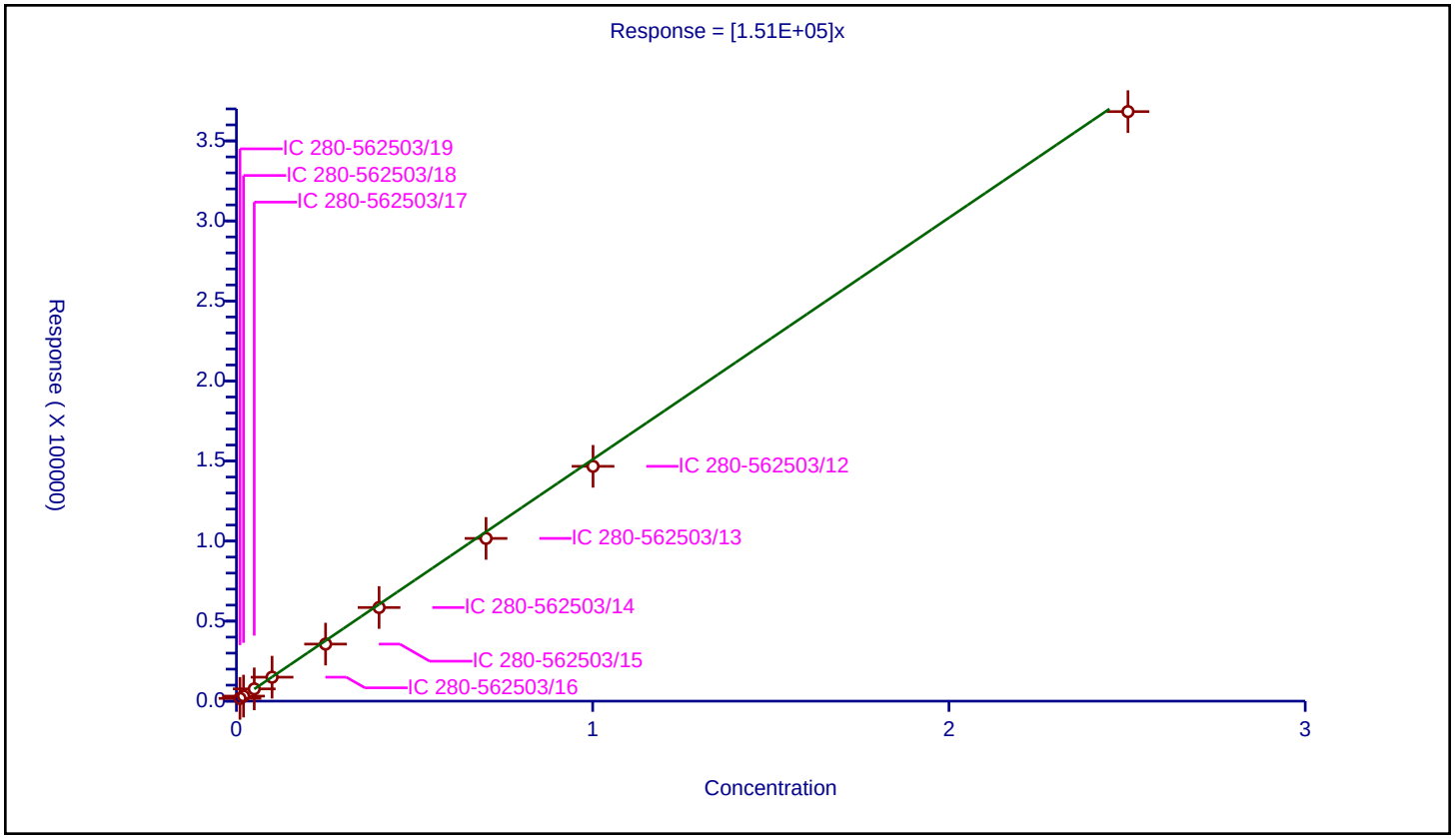
Curve Coefficients

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

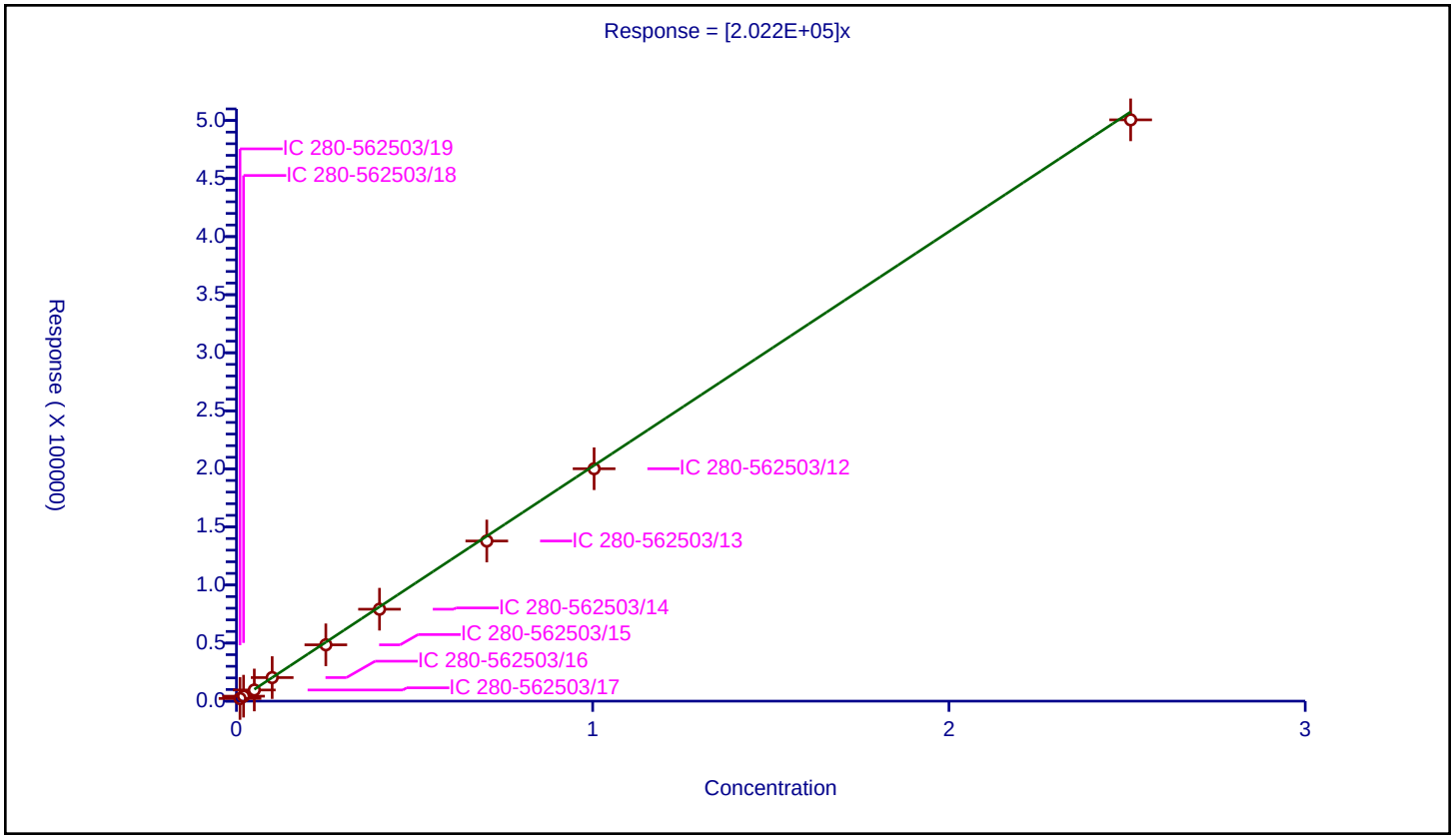
Curve Coefficients

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

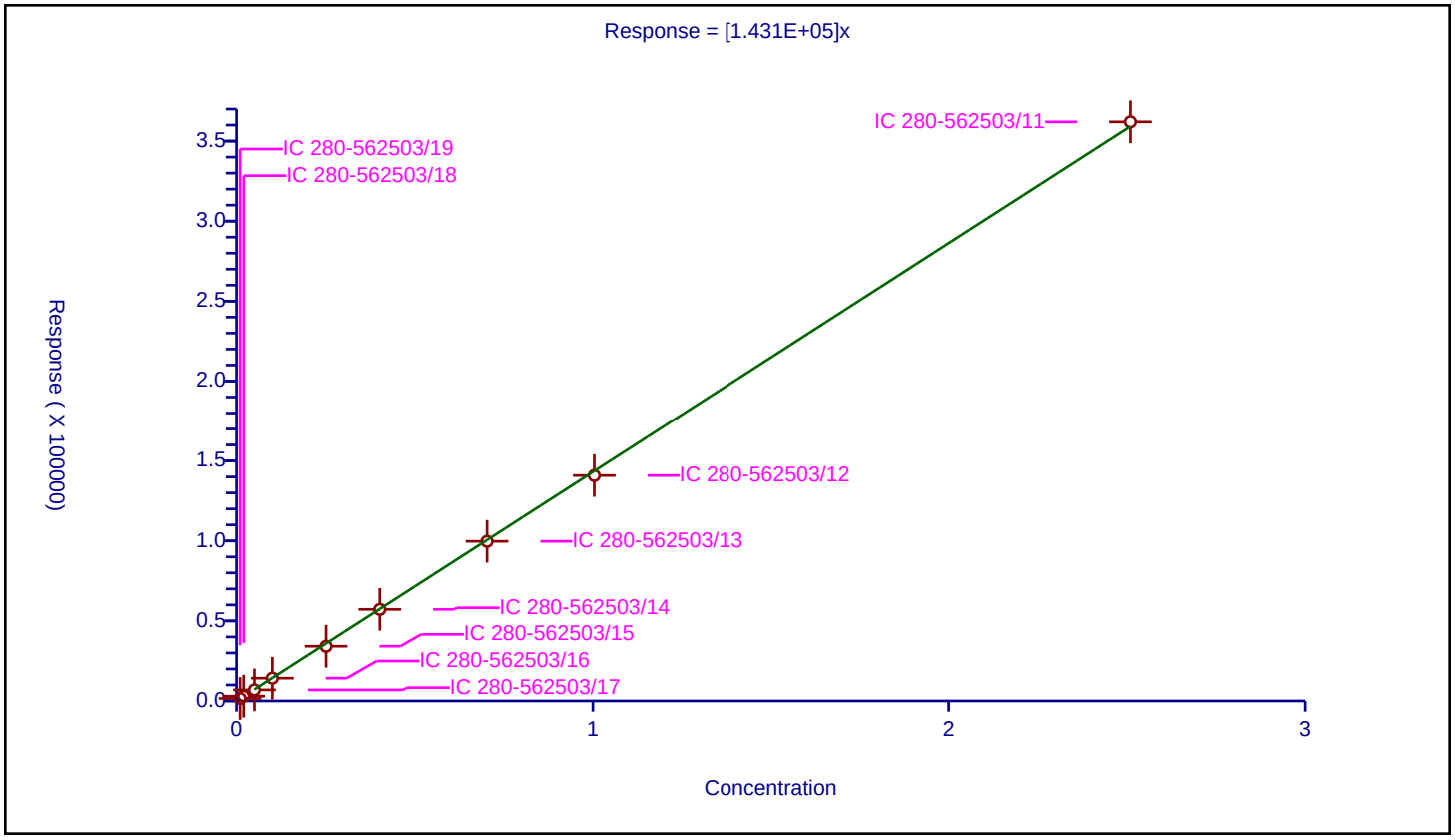
Curve Coefficients

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

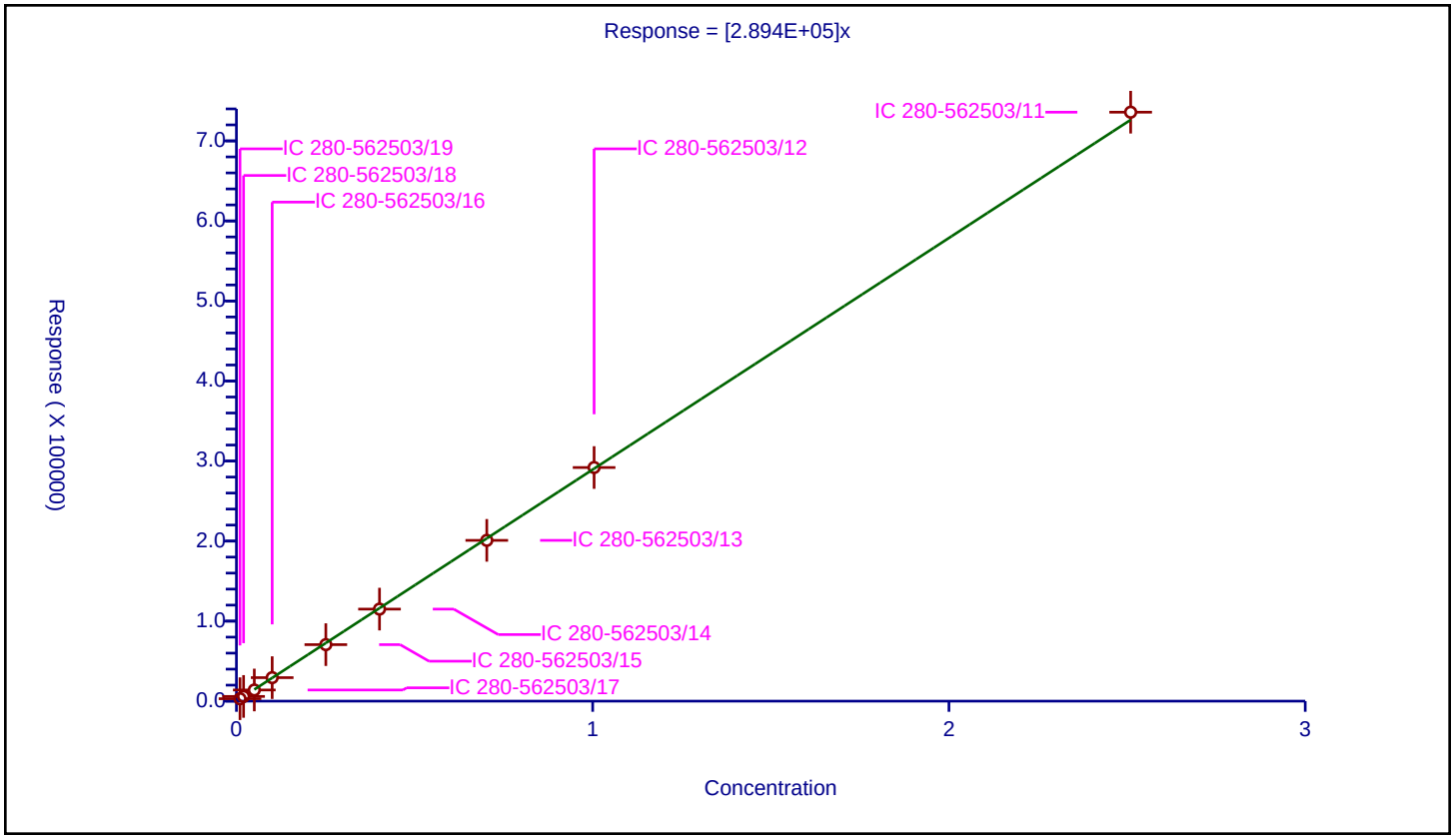
Curve Coefficients

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

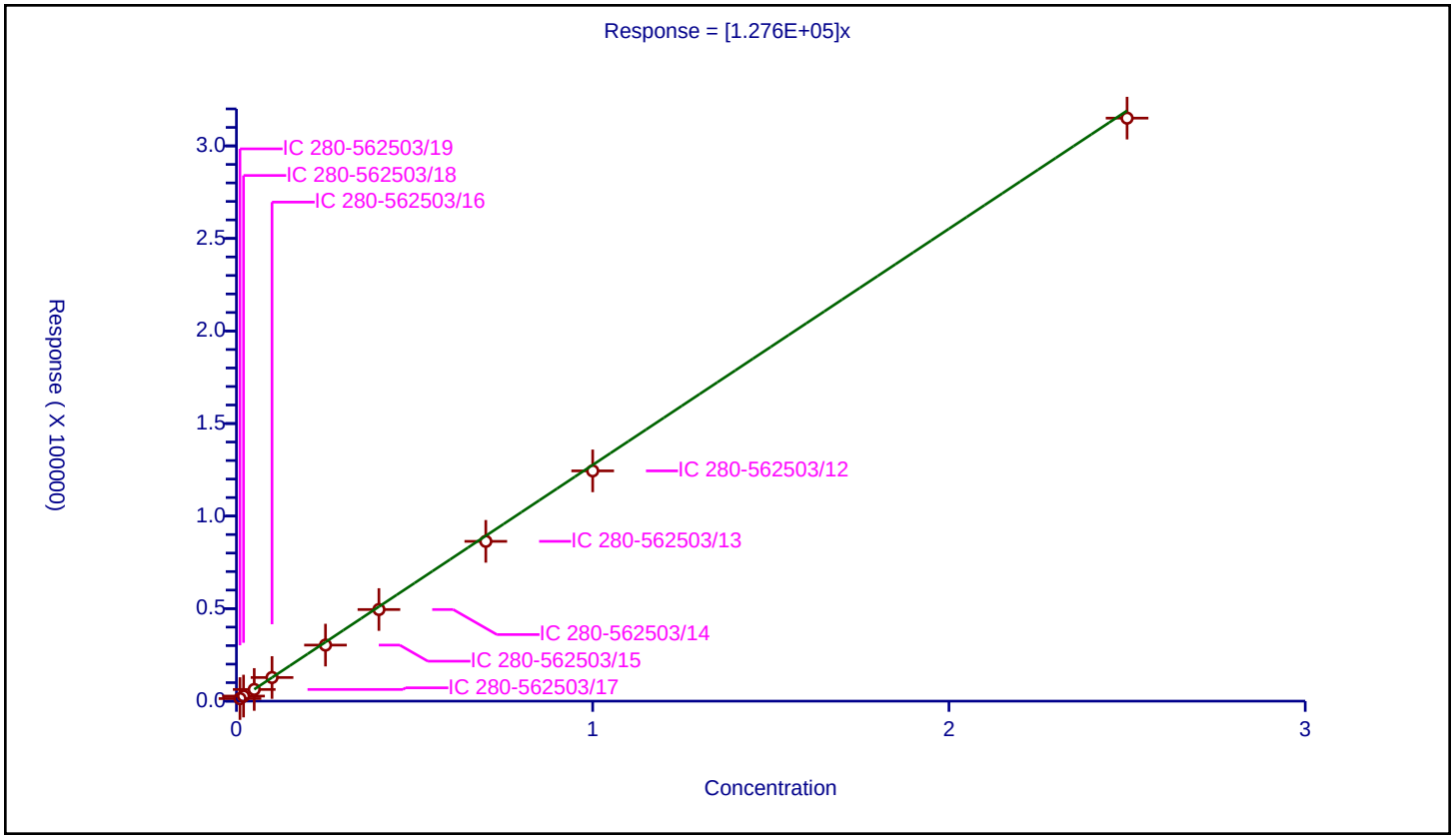
Curve Coefficients

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

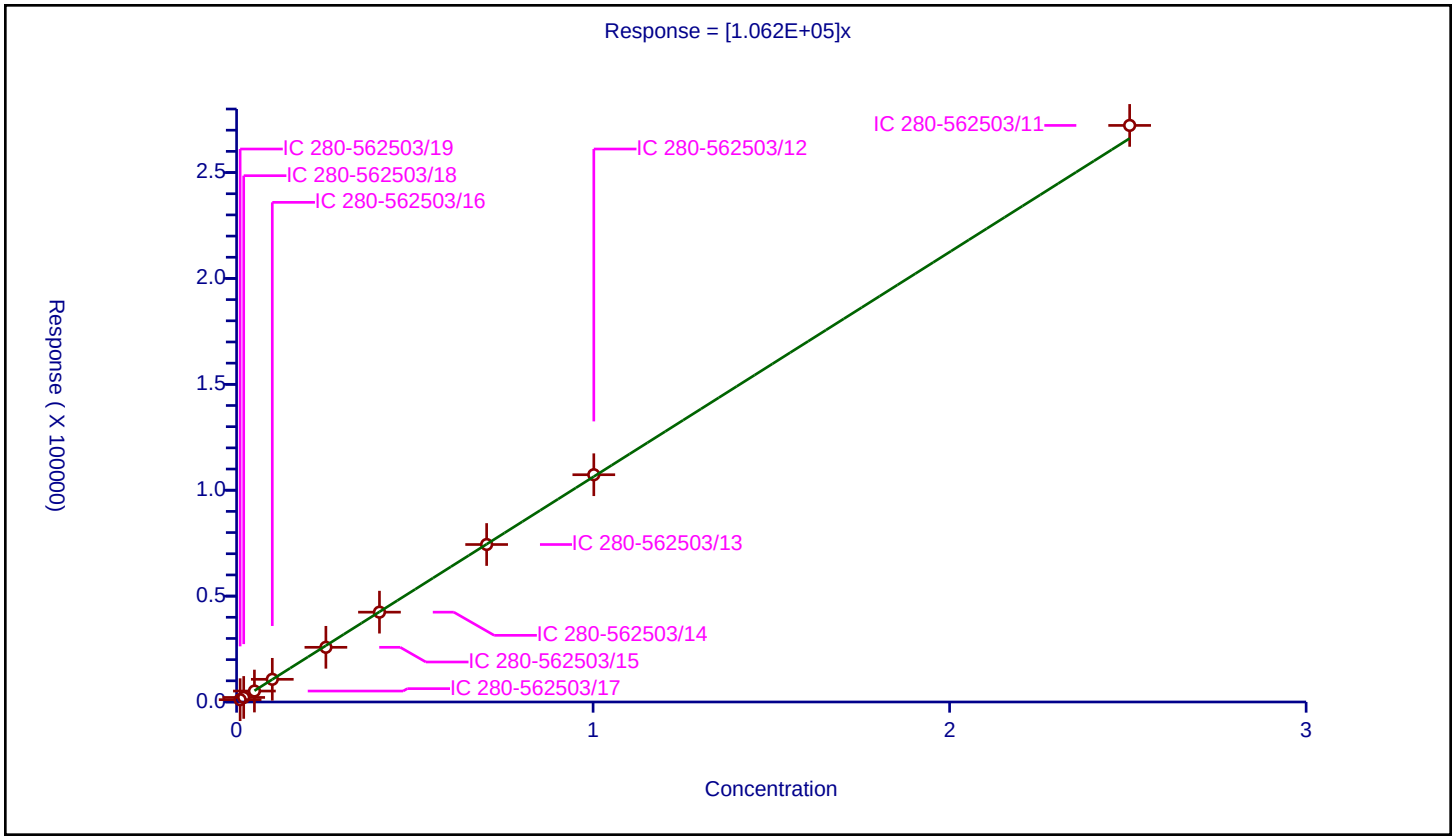
Curve Coefficients

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

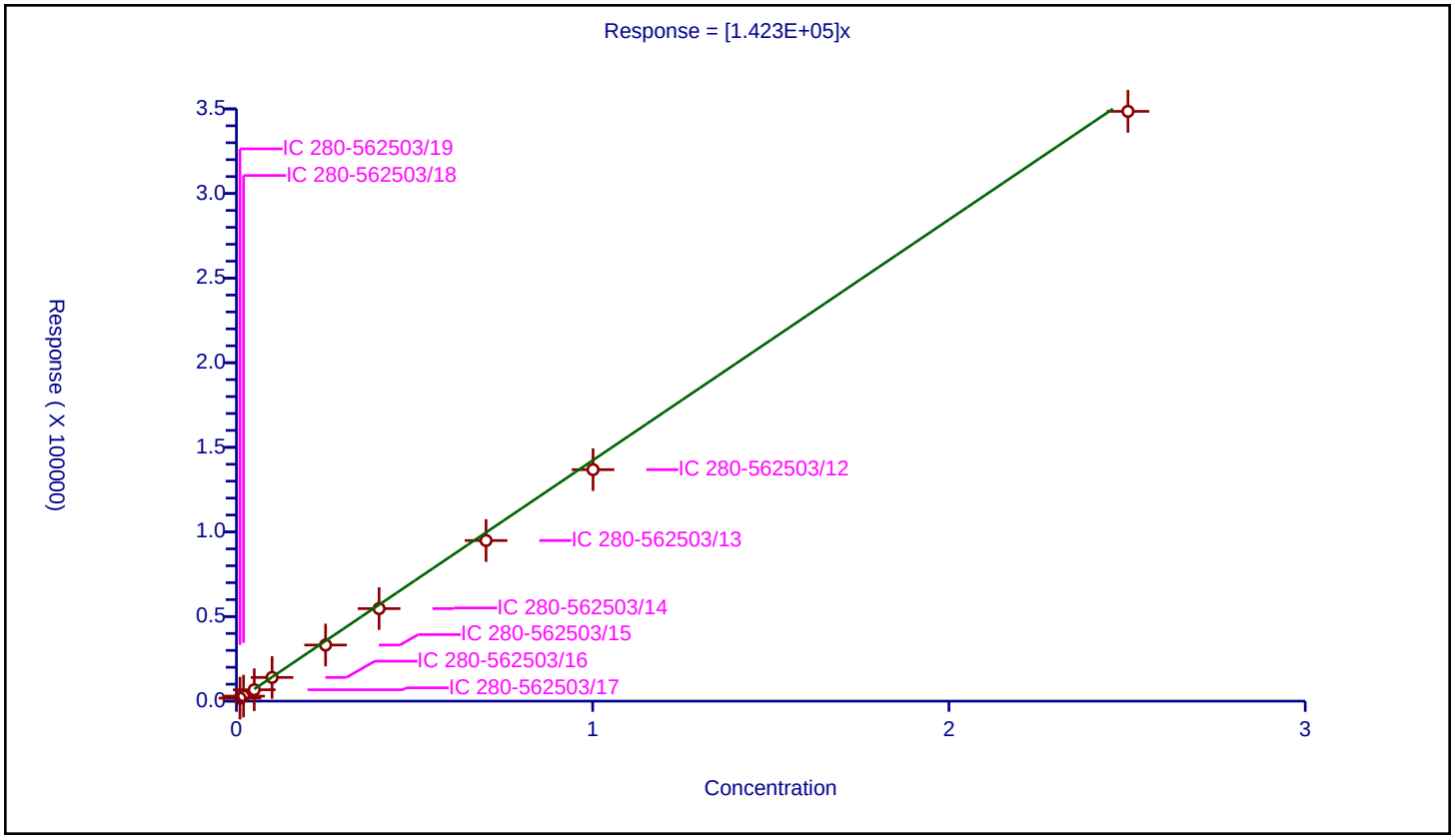
Curve Coefficients

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

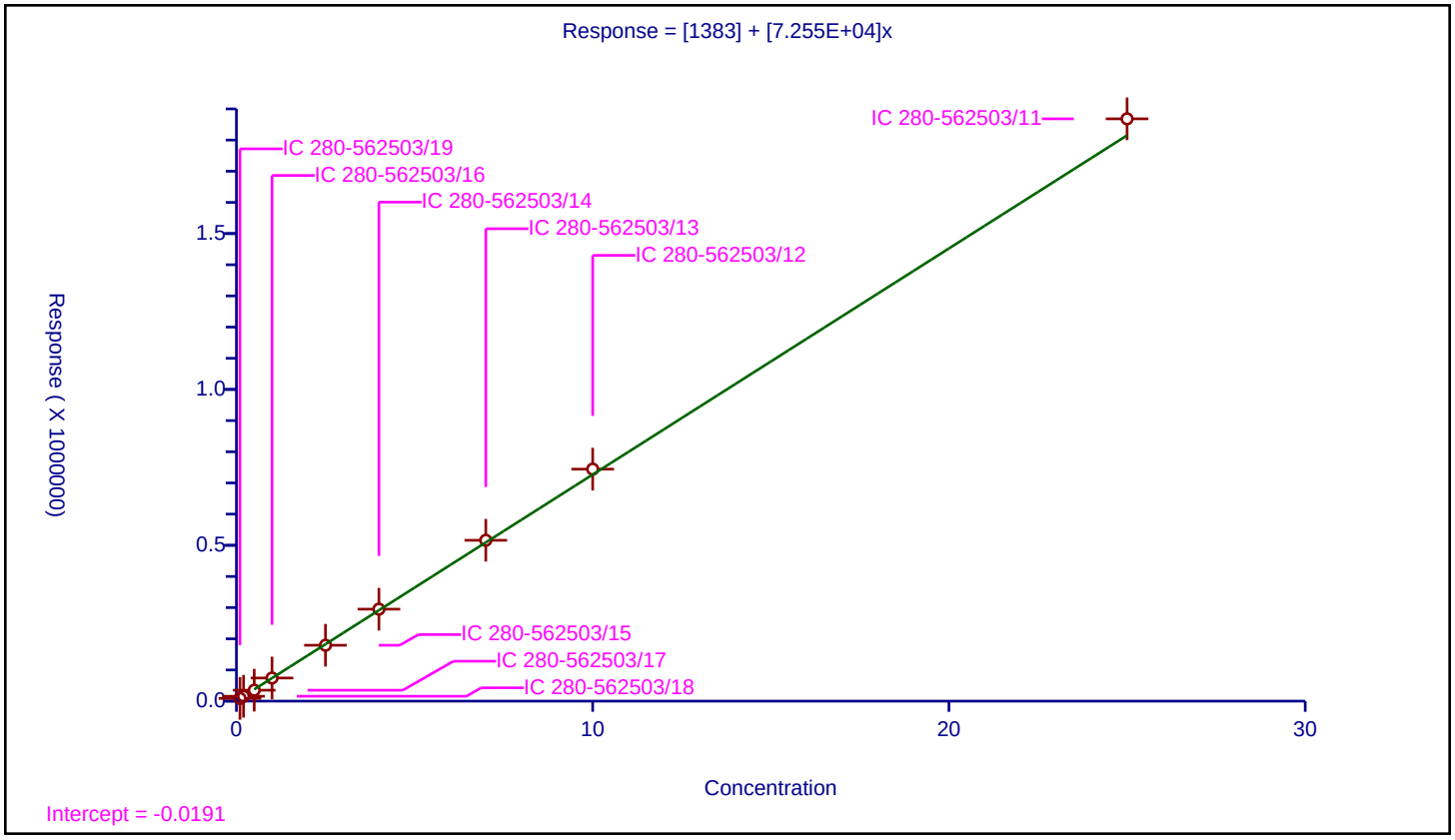
Curve Coefficients

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.: 280-159332-1 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.: 280-159332-1 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.: 280-159332-1 | 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

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220104-107731.b\01040030.D				
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

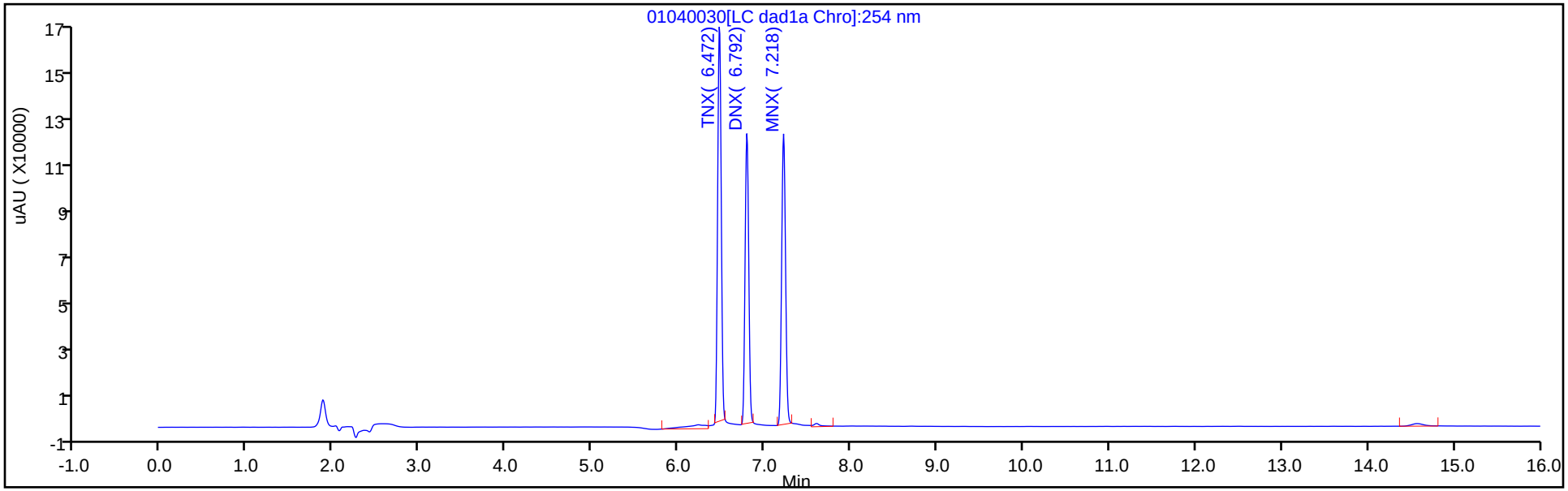
Report Date: 05-Jan-2022 12:10:05 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

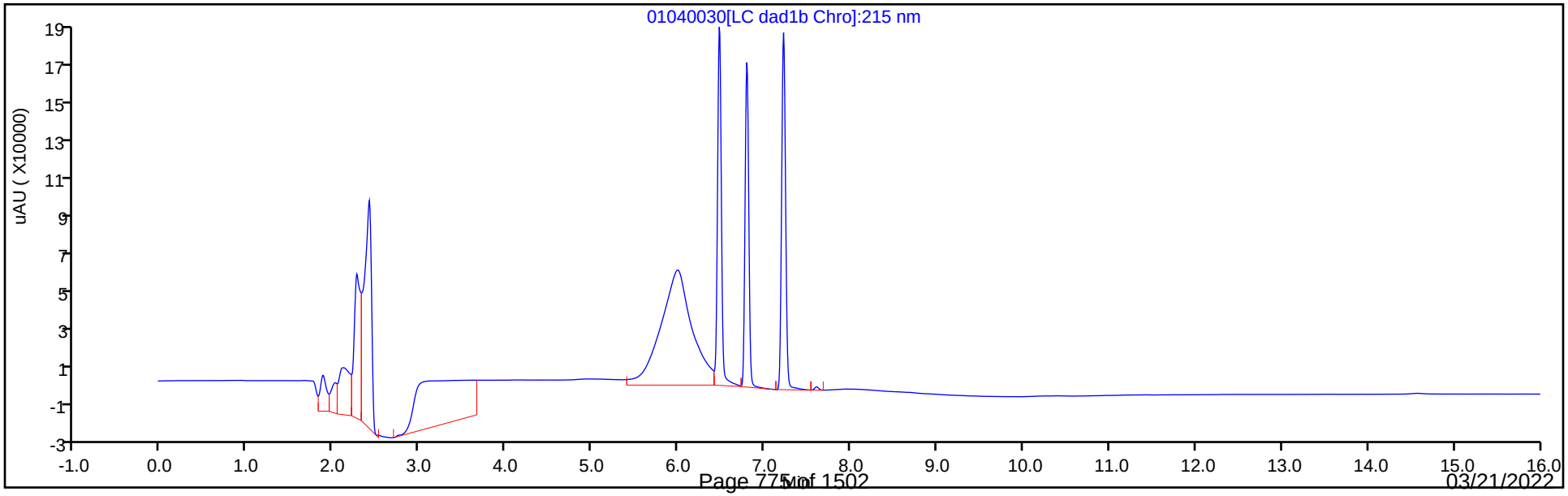
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040030.d

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

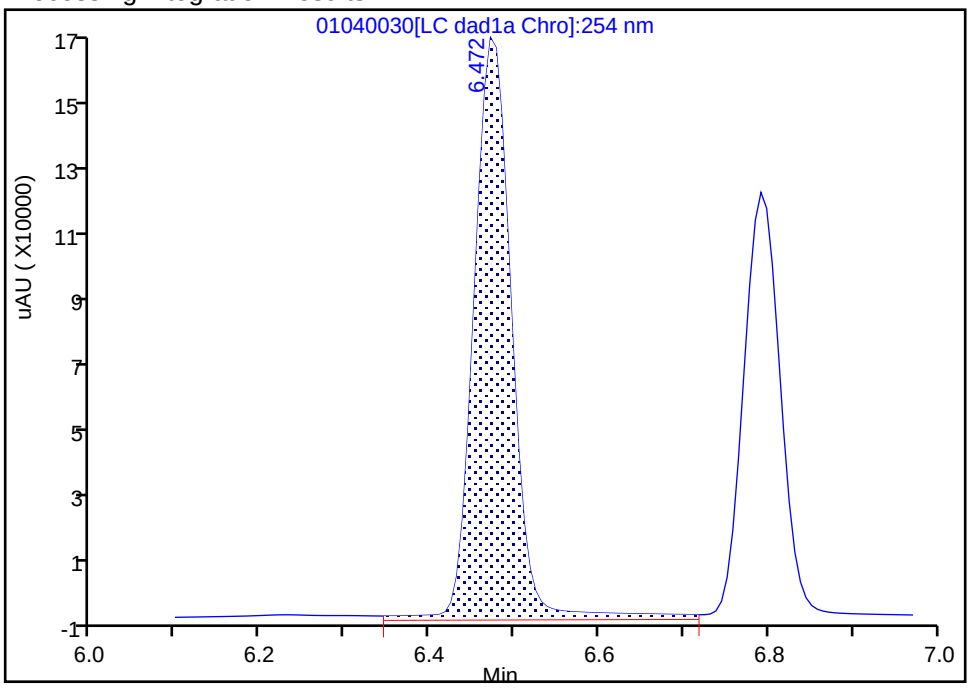
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040030.d				
Injection Date:	05-Jan-2022 01:43:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

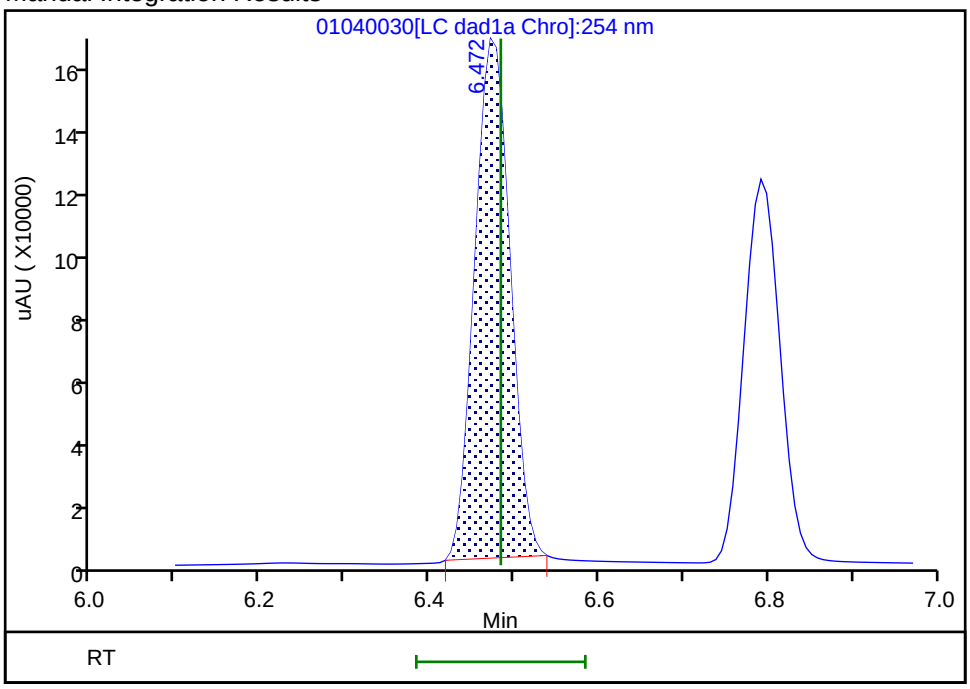
Processing Integration Results

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

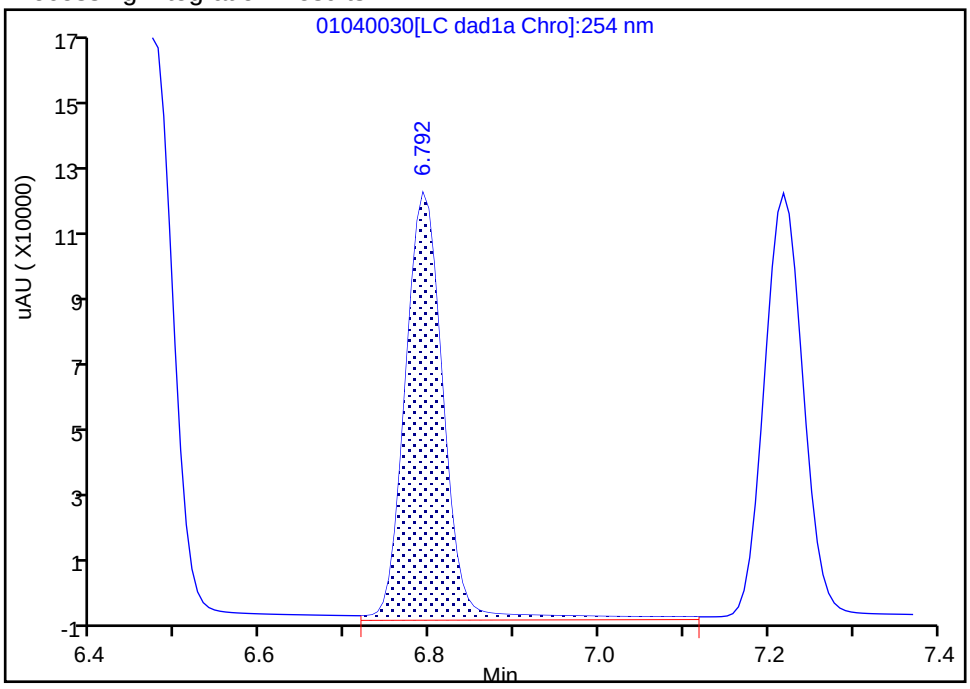
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040030.d				
Injection Date:	05-Jan-2022 01:43:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

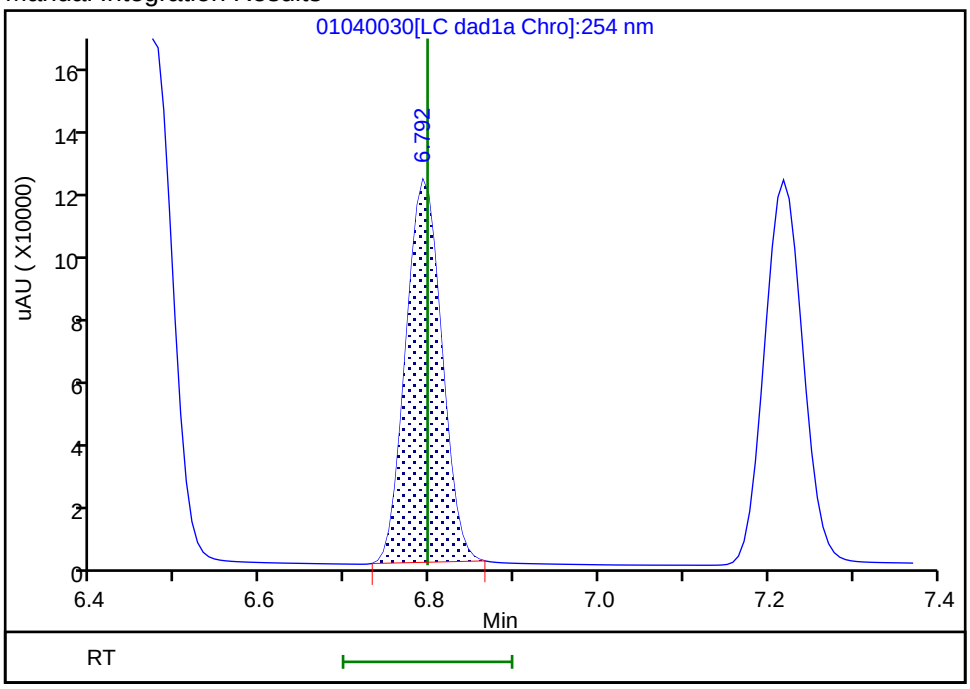
Processing Integration Results

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

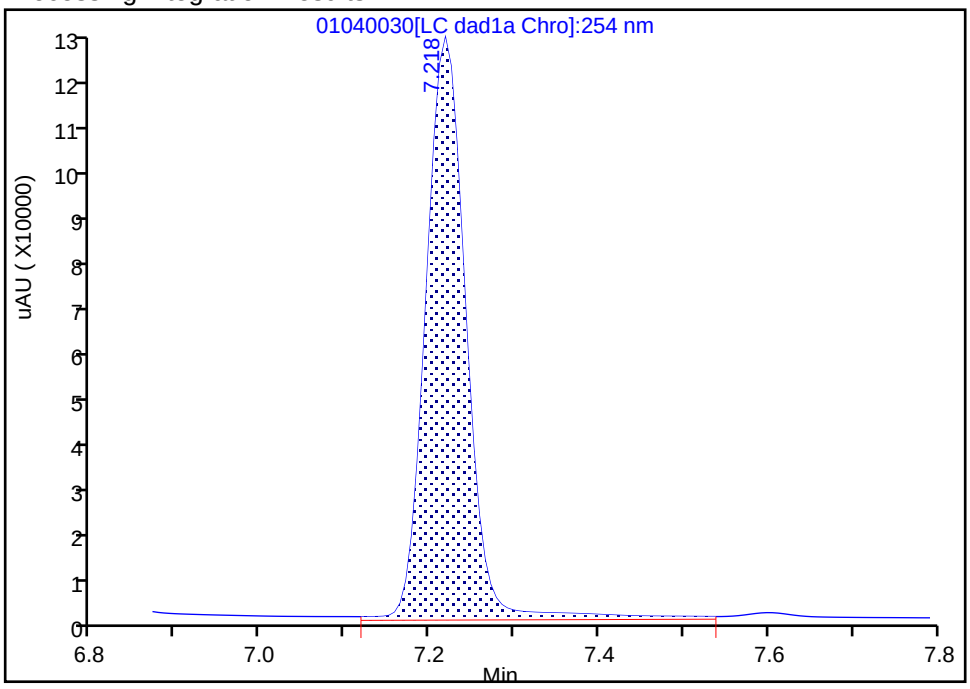
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040030.d				
Injection Date:	05-Jan-2022 01:43:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

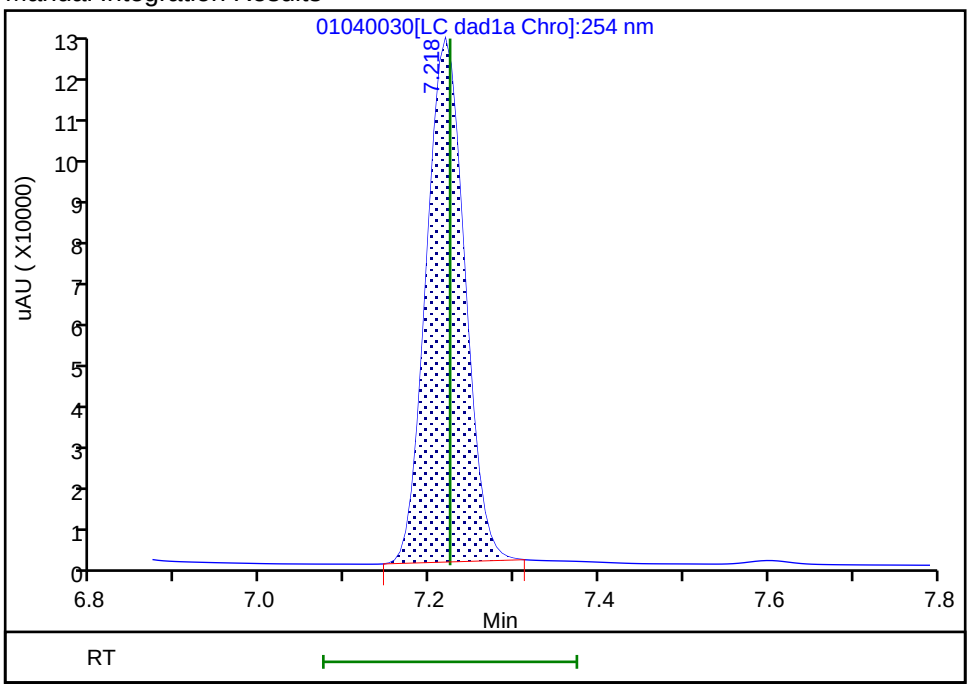
Processing Integration Results

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

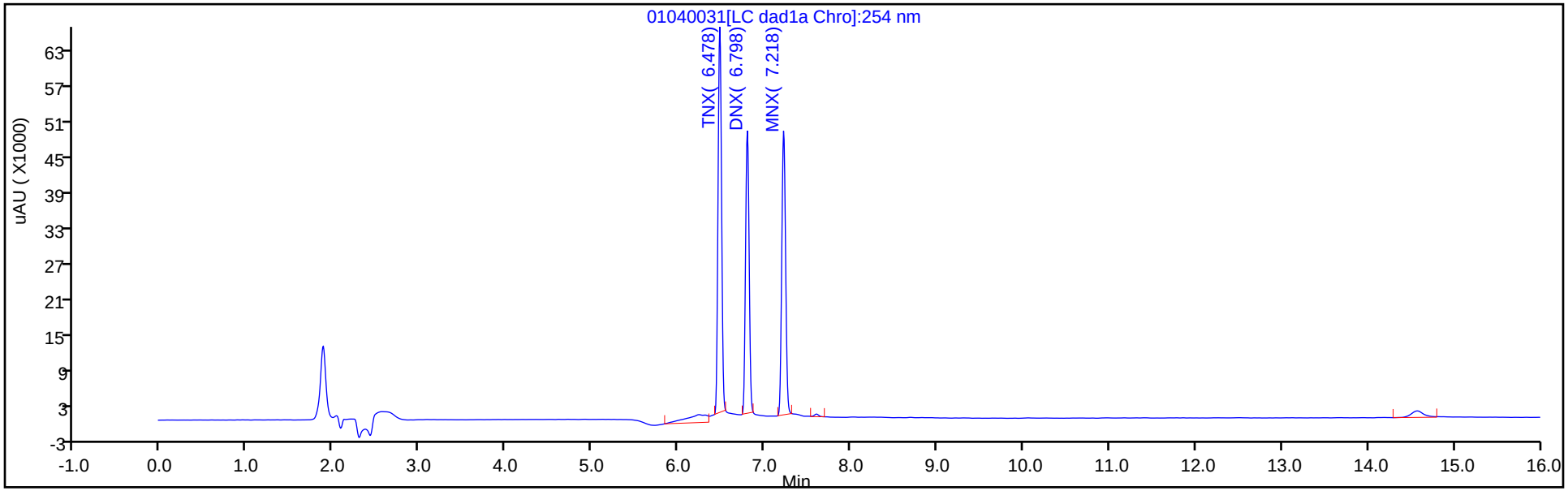
Report Date: 05-Jan-2022 12:10:06 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

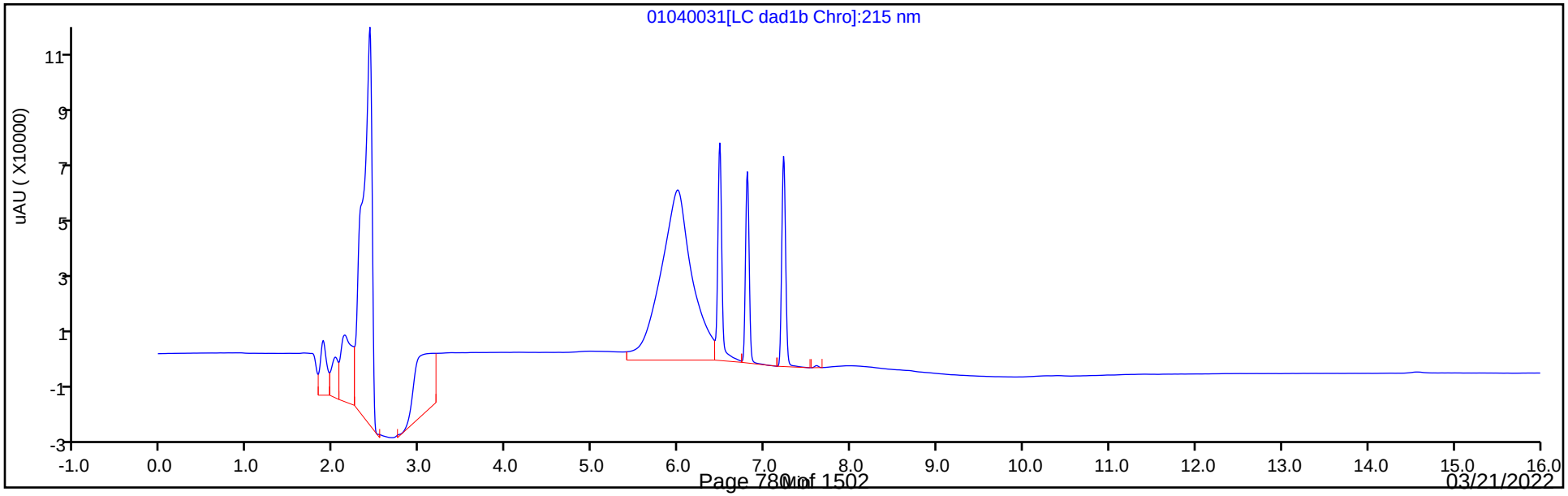
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040031.d

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

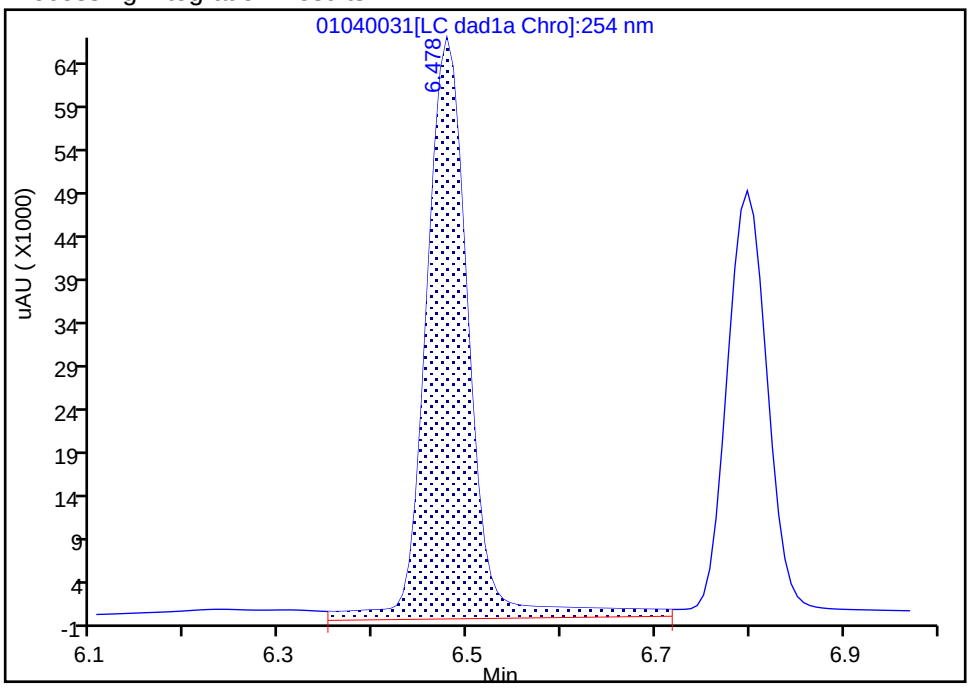
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040031.d				
Injection Date:	05-Jan-2022 02:06:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

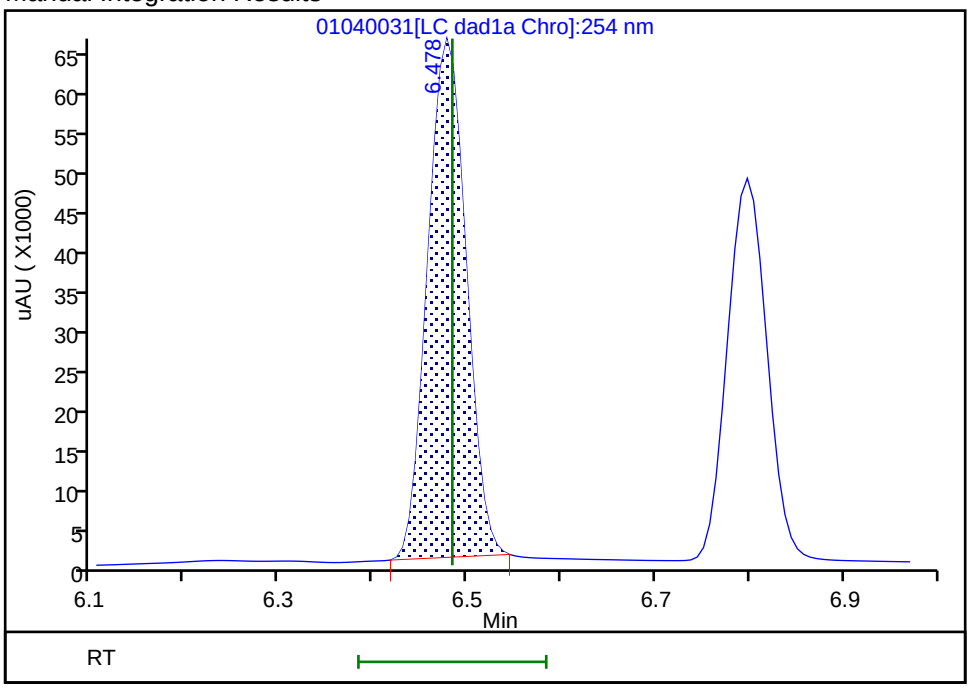
Processing Integration Results

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

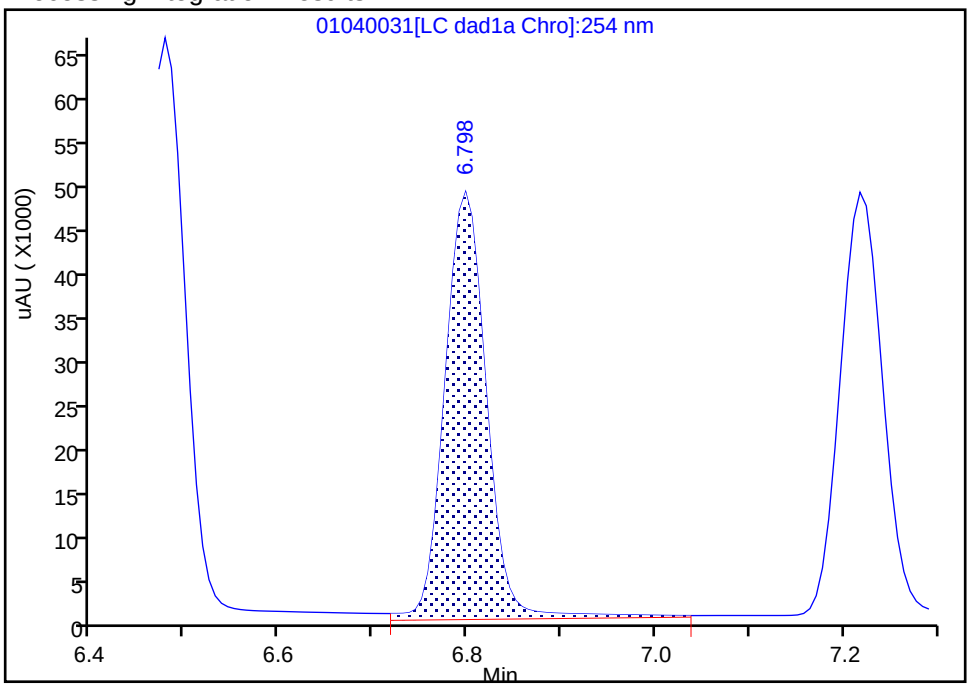
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040031.d				
Injection Date:	05-Jan-2022 02:06:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

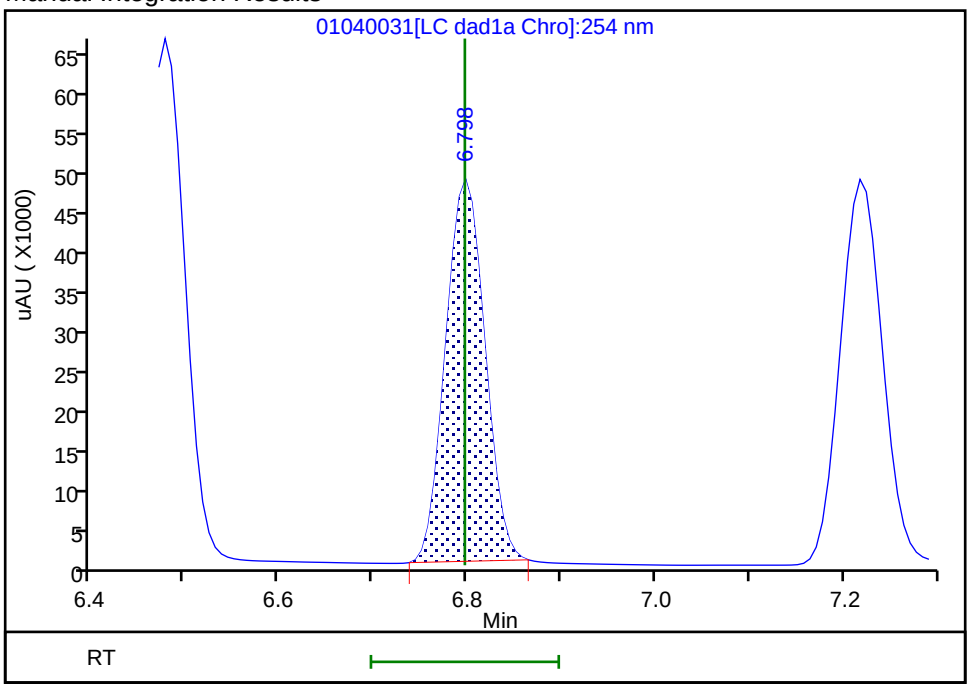
Processing Integration Results

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

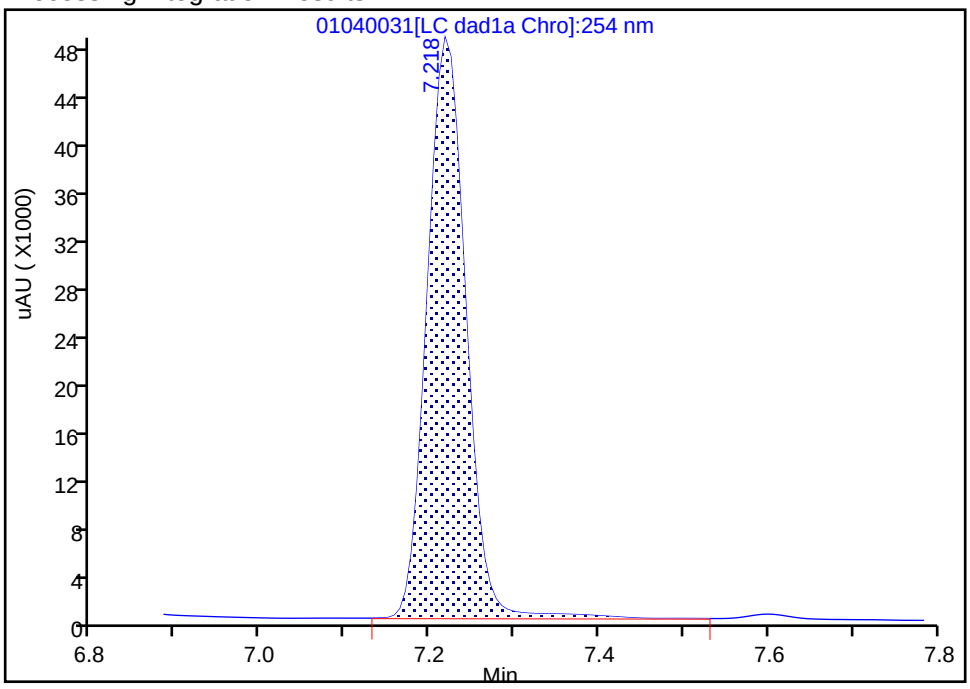
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040031.d				
Injection Date:	05-Jan-2022 02:06:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

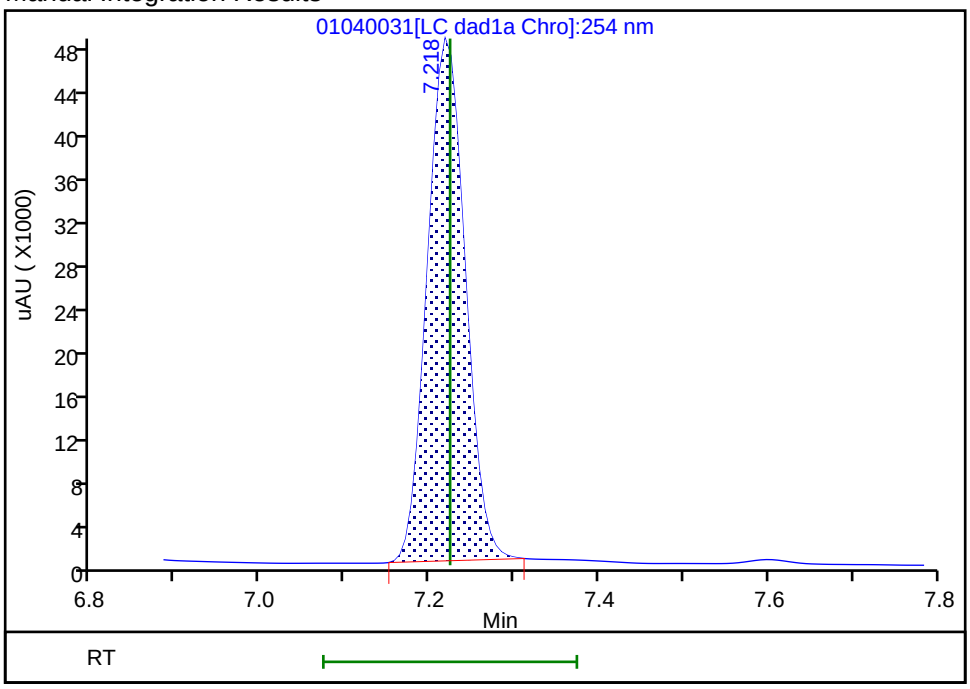
Processing Integration Results

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

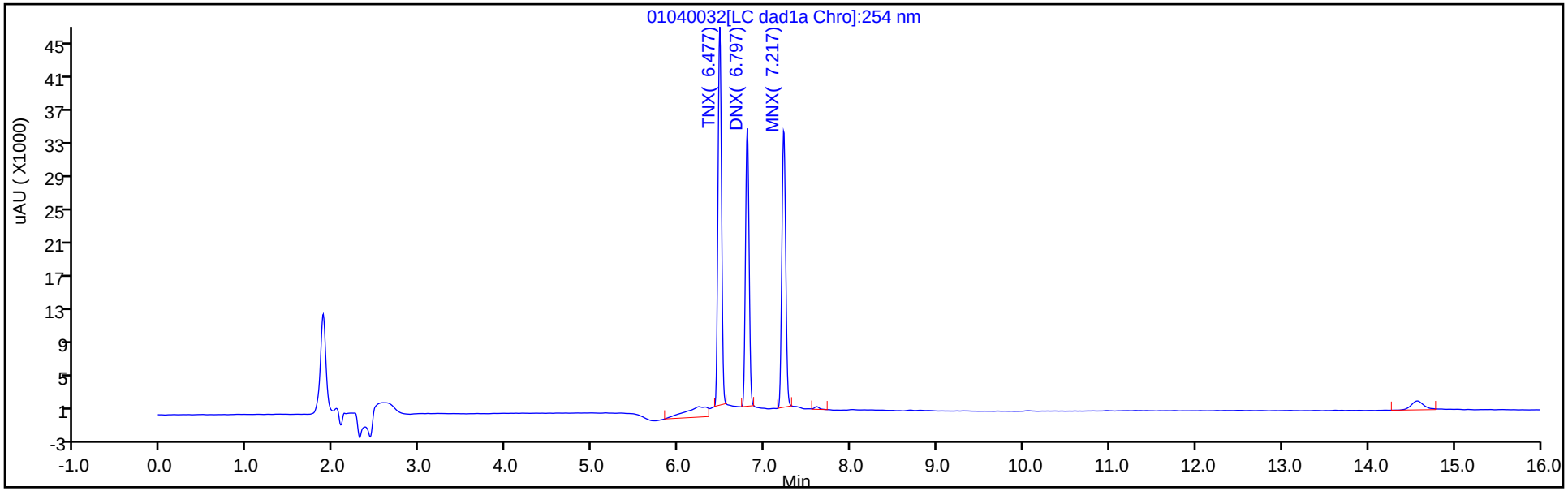
Report Date: 05-Jan-2022 12:10:06 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

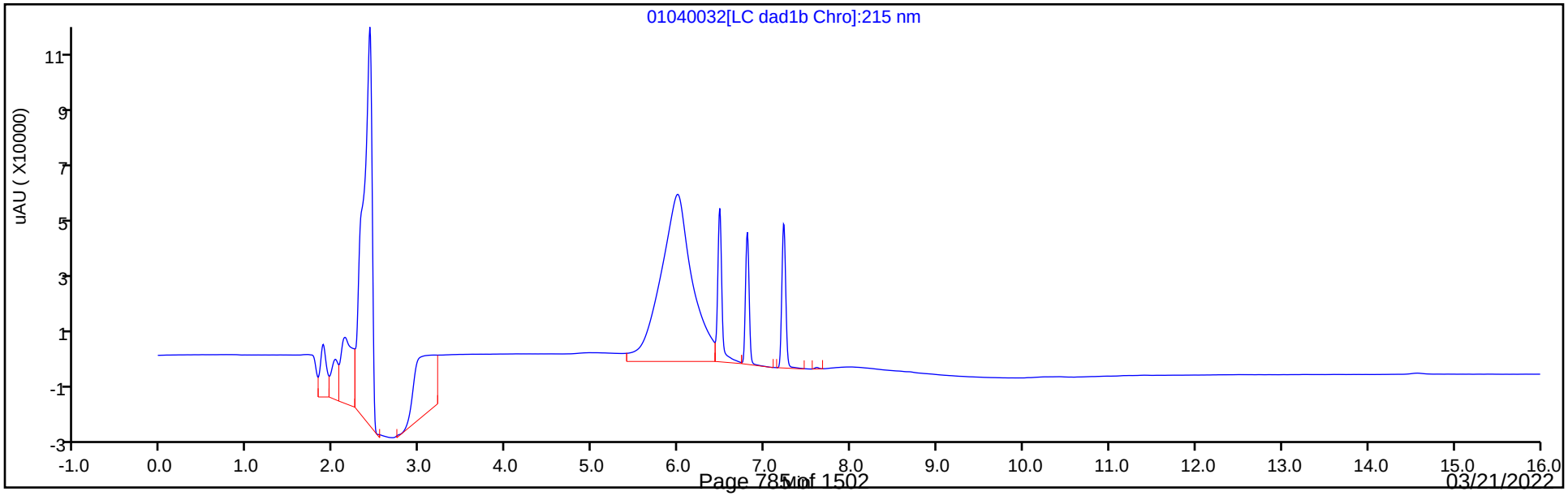
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040032.d

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

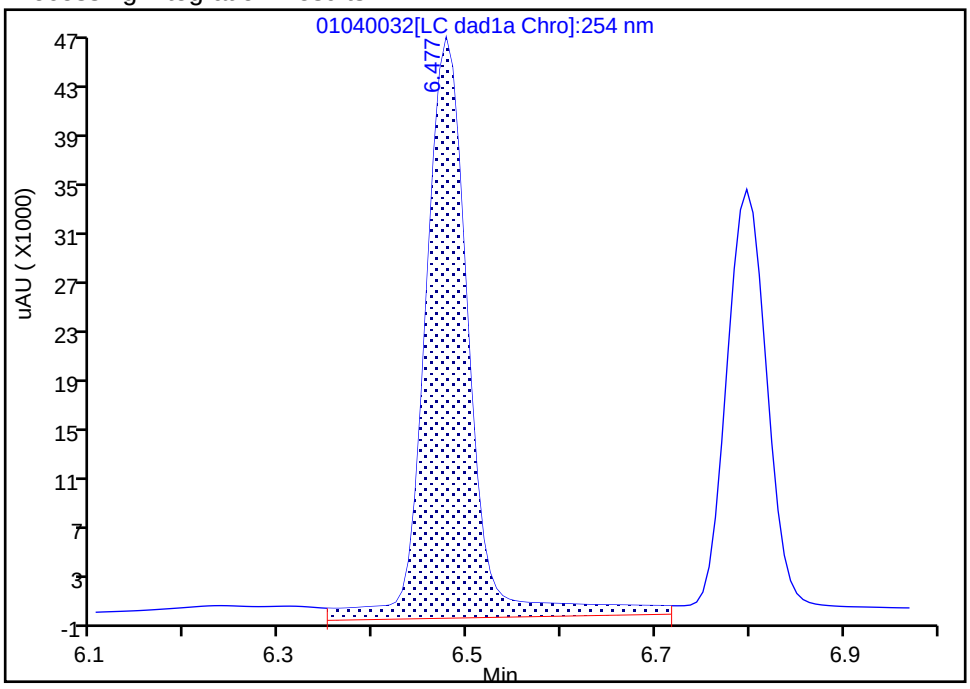
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040032.d				
Injection Date:	05-Jan-2022 02:29:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

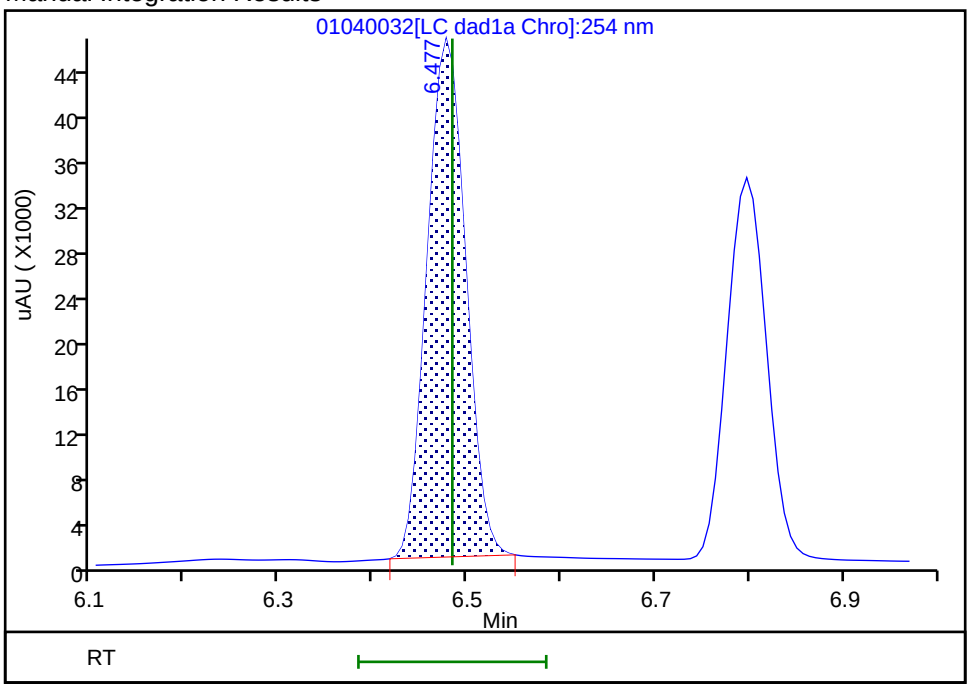
Processing Integration Results

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

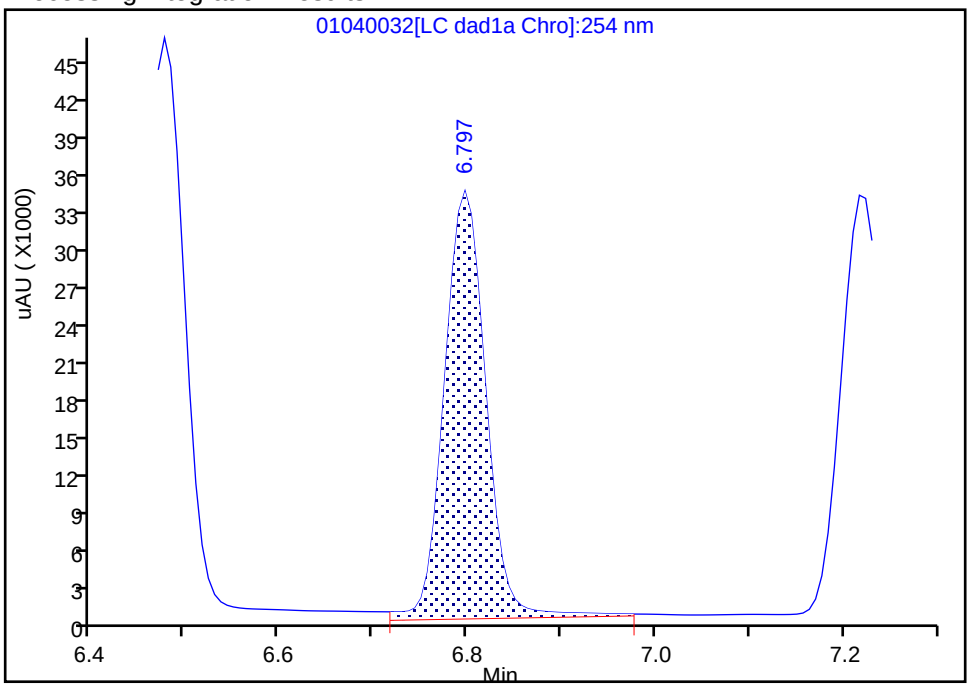
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040032.d				
Injection Date:	05-Jan-2022 02:29:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

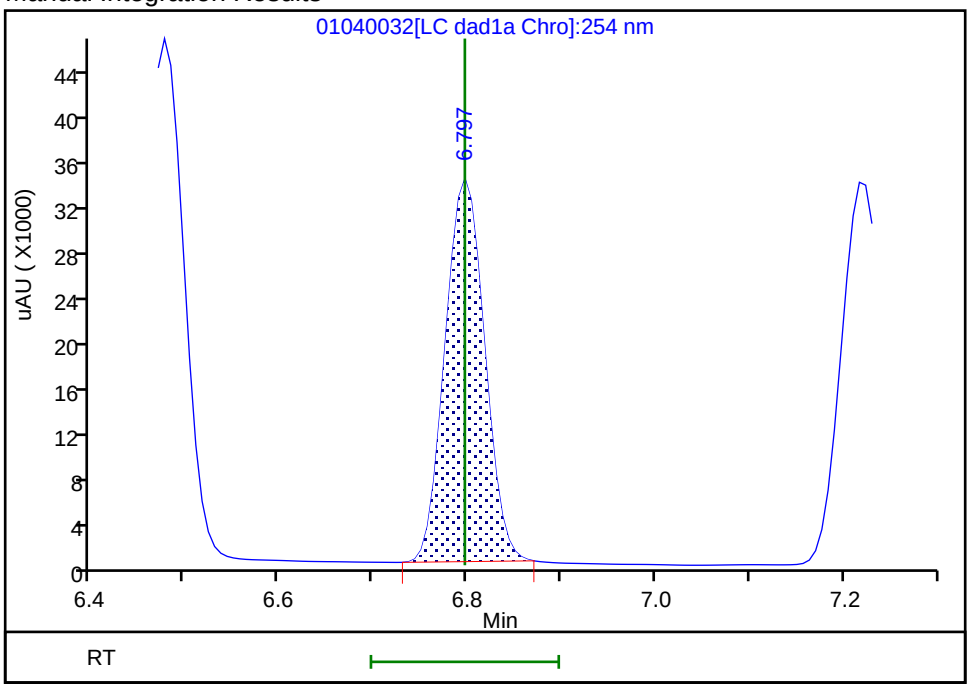
Processing Integration Results

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

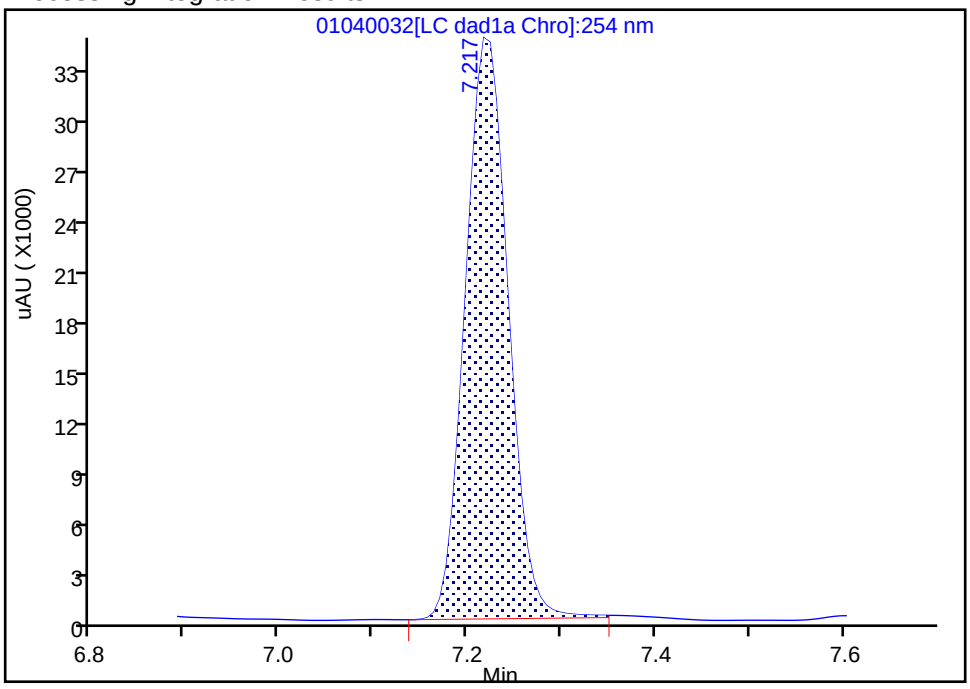
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040032.d				
Injection Date:	05-Jan-2022 02:29:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

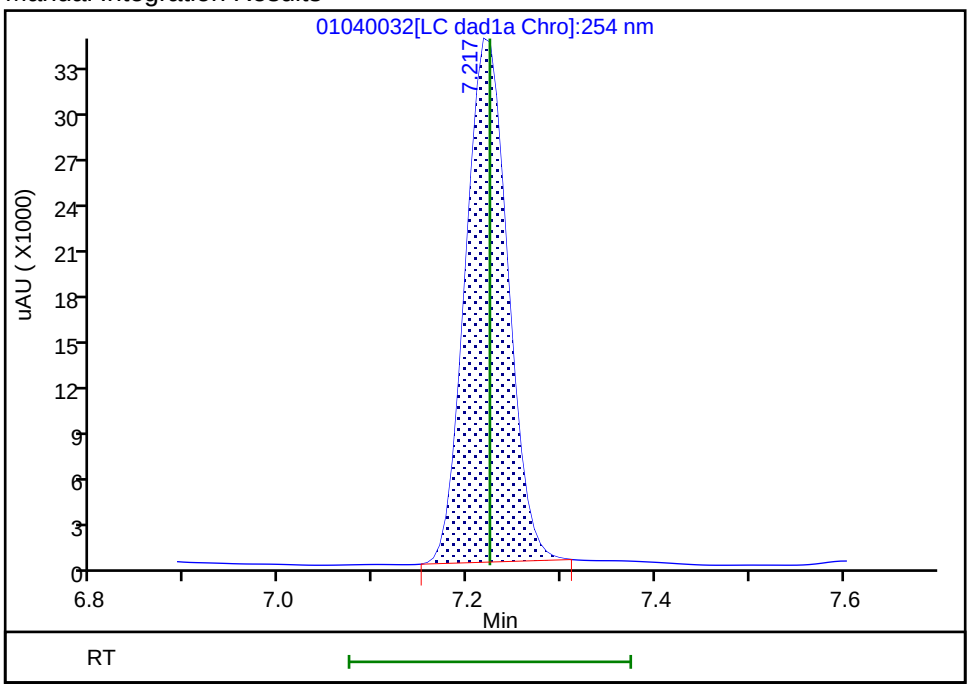
Processing Integration Results

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

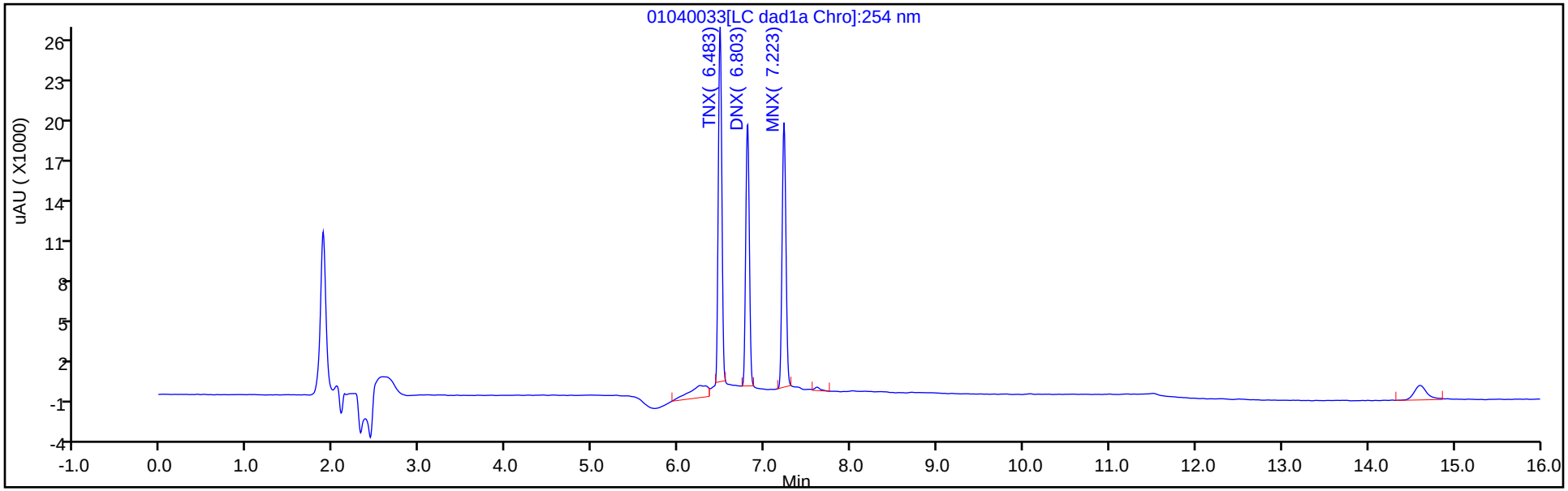
Report Date: 05-Jan-2022 12:10:07 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

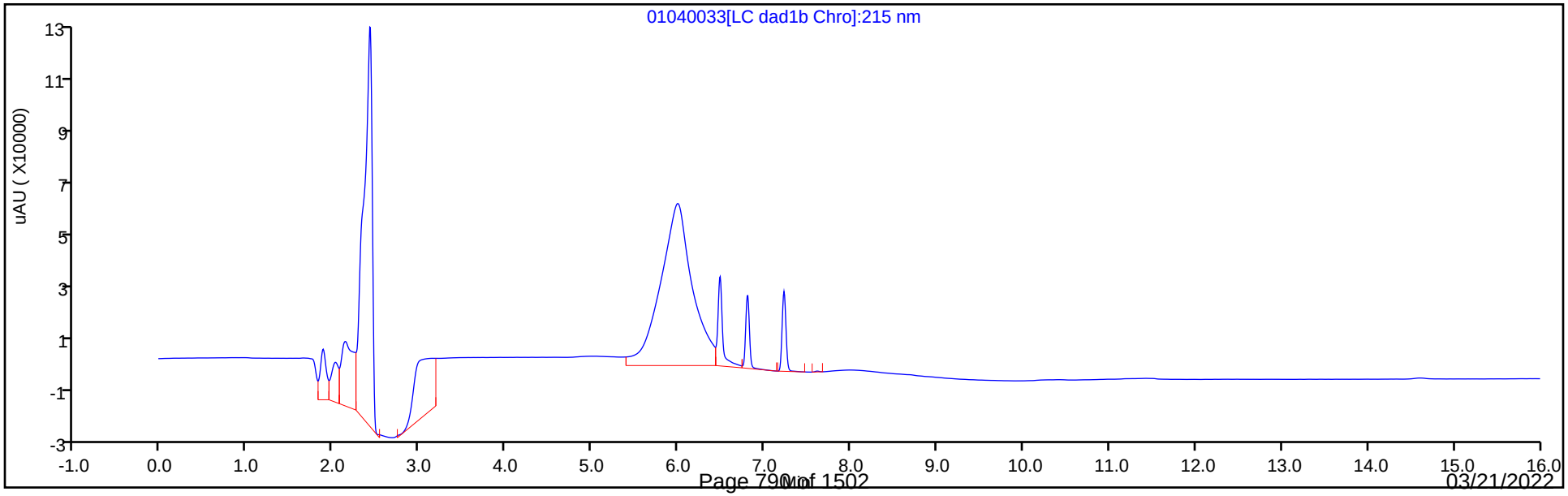
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040033.d

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

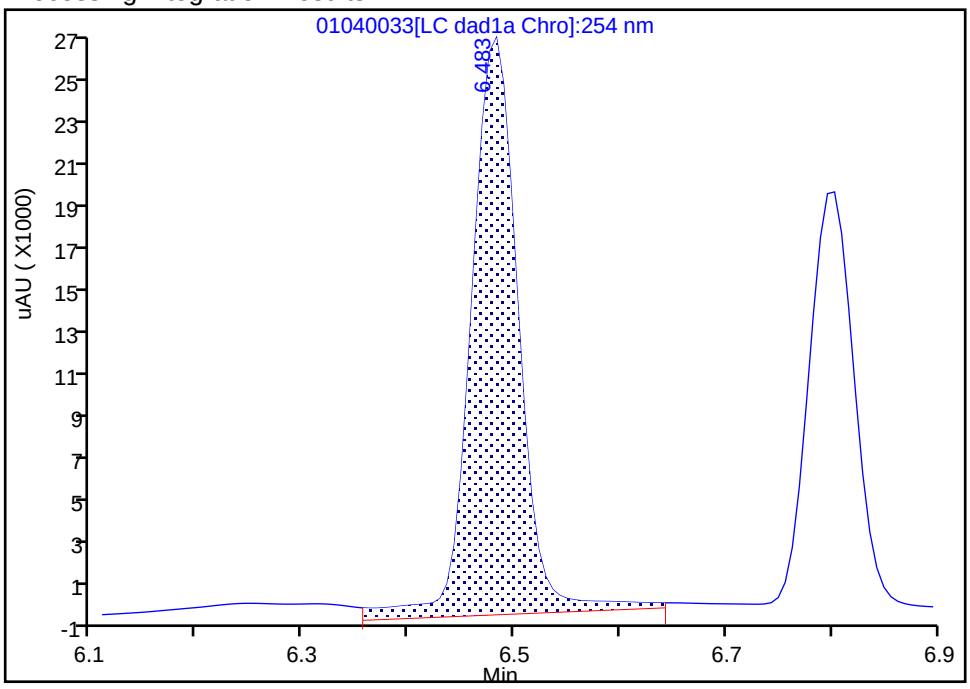
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040033.d				
Injection Date:	05-Jan-2022 02:52:35	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

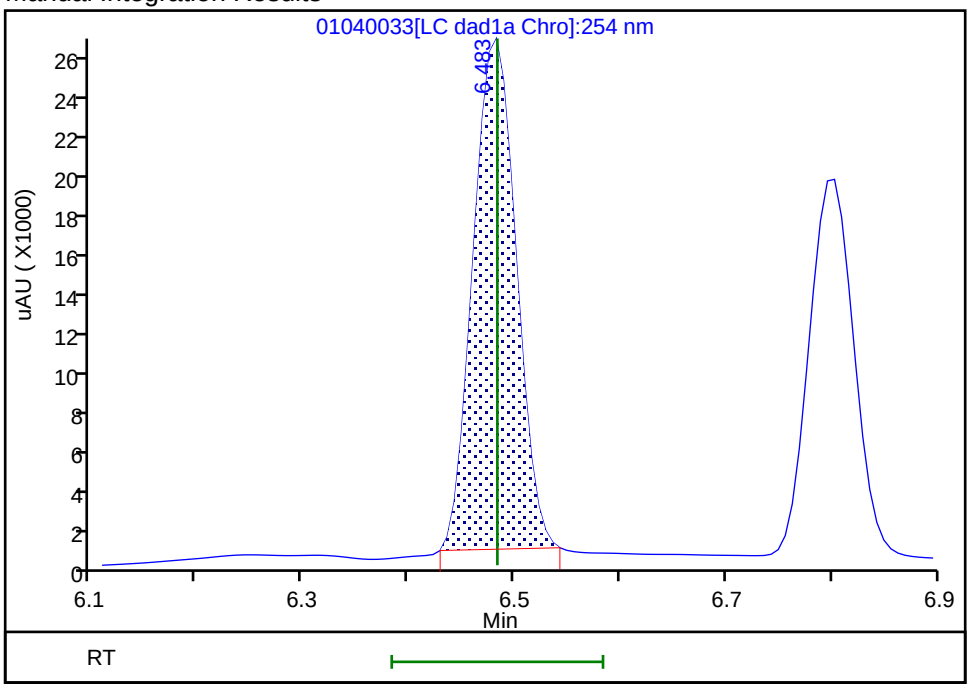
Processing Integration Results

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

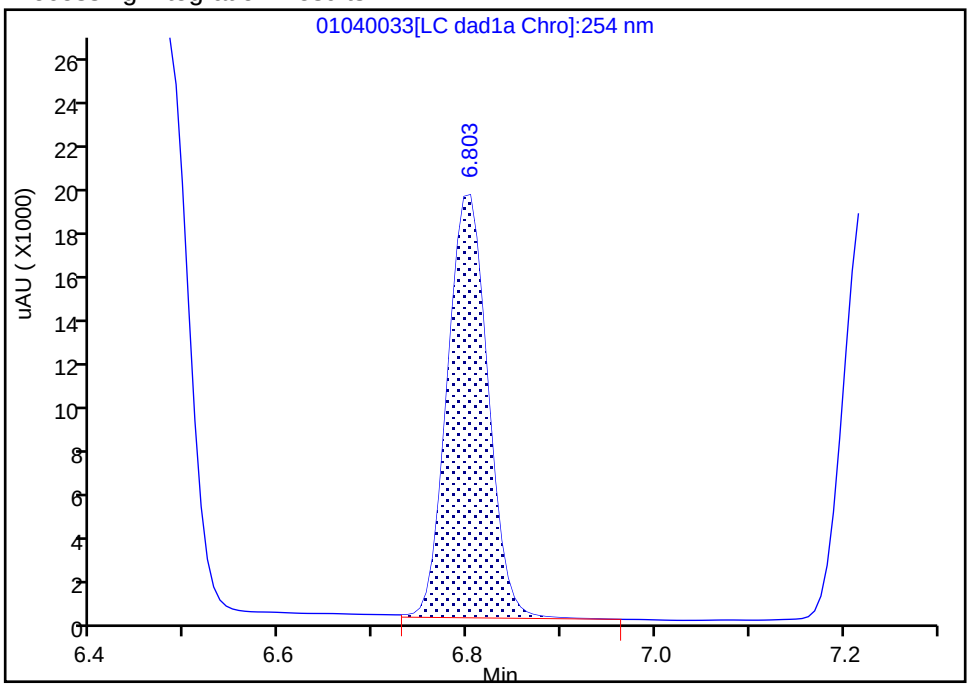
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040033.d				
Injection Date:	05-Jan-2022 02:52:35	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

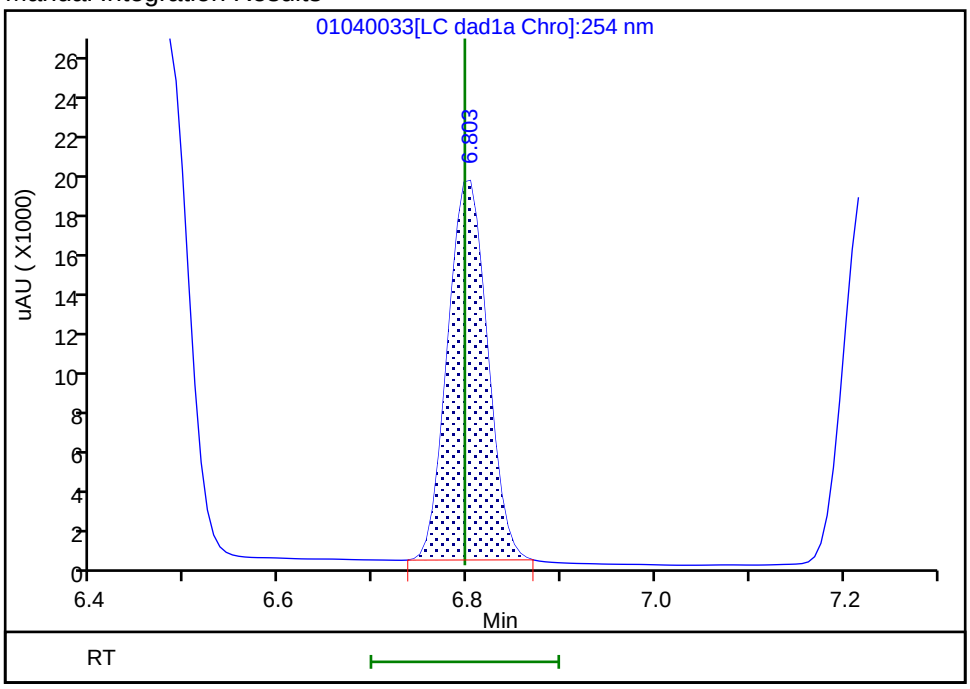
Processing Integration Results

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

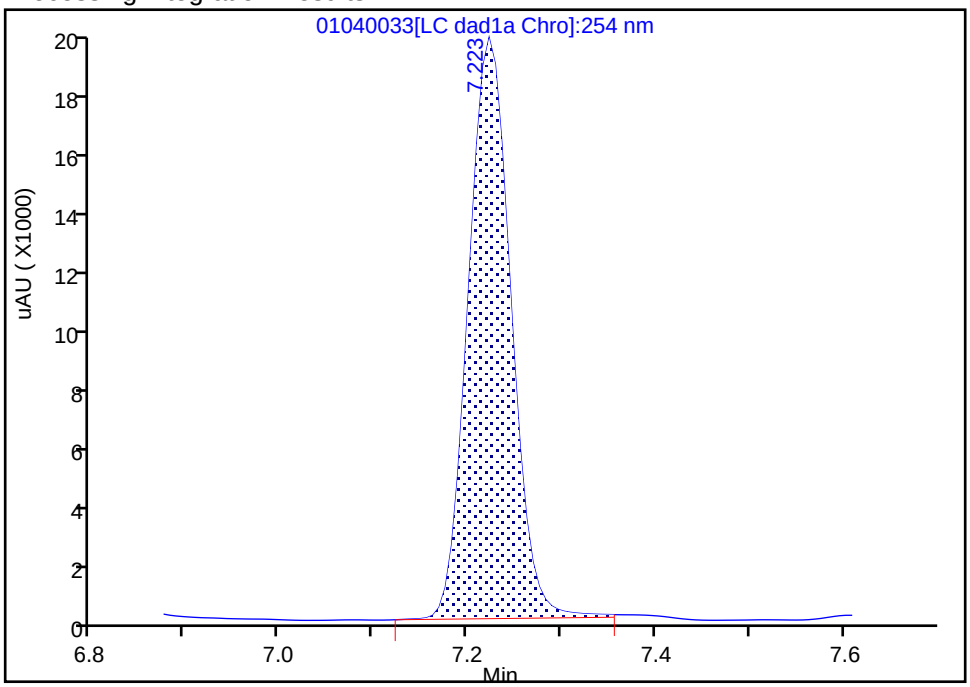
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040033.d				
Injection Date:	05-Jan-2022 02:52:35	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

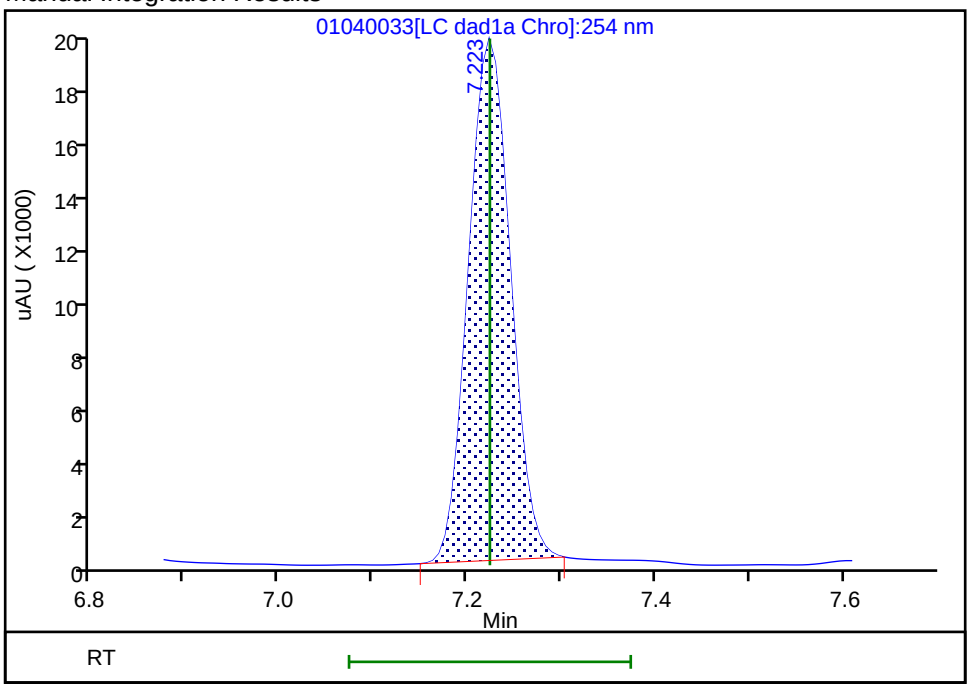
Processing Integration Results

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

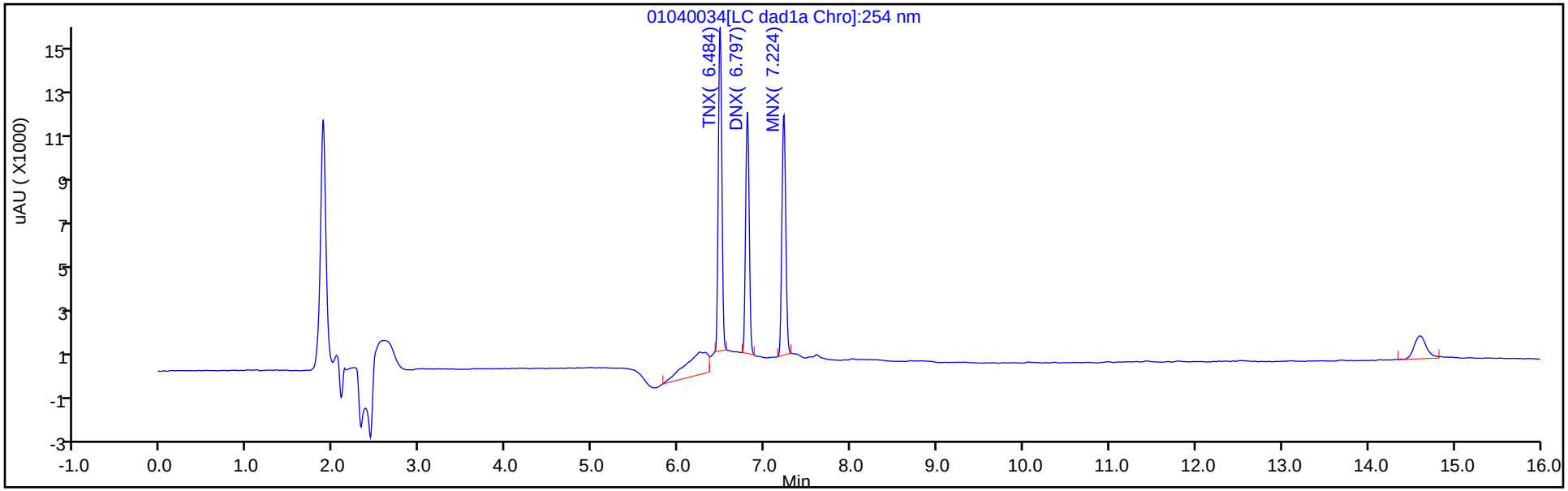
Report Date: 05-Jan-2022 12:10:07 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

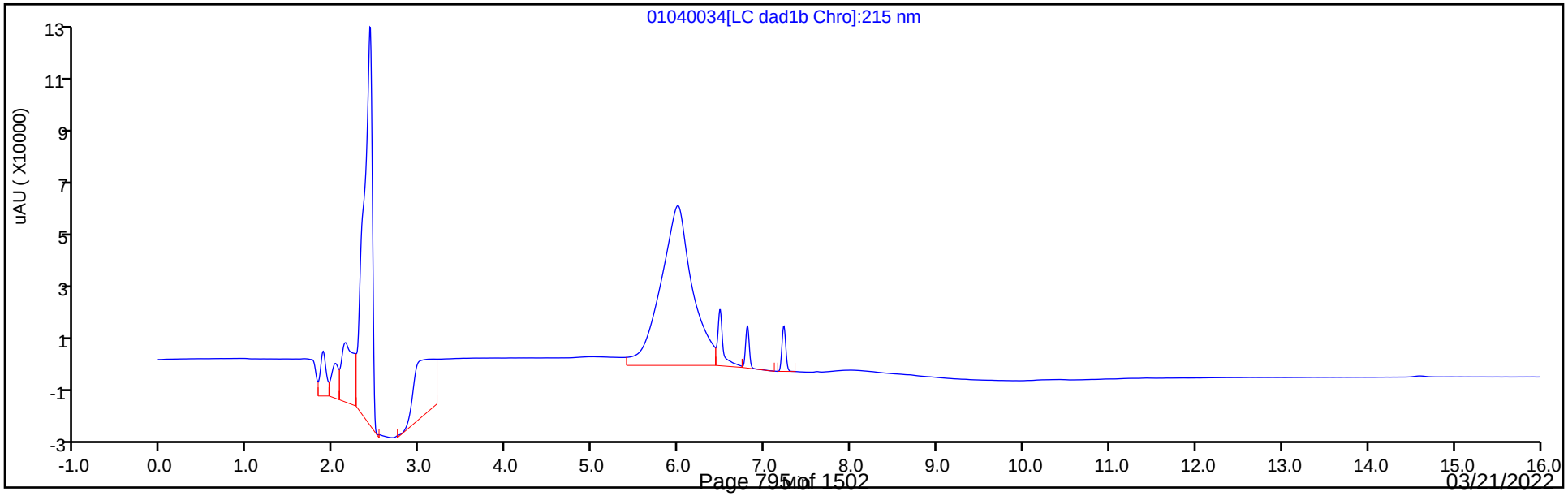
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040034.d

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

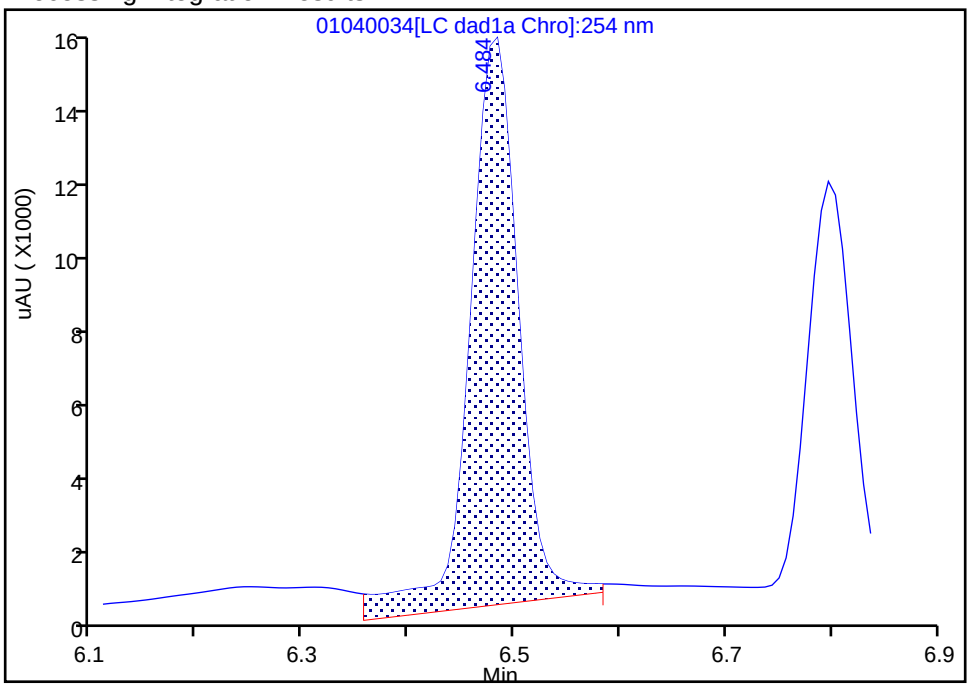
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040034.d				
Injection Date:	05-Jan-2022 03:15:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

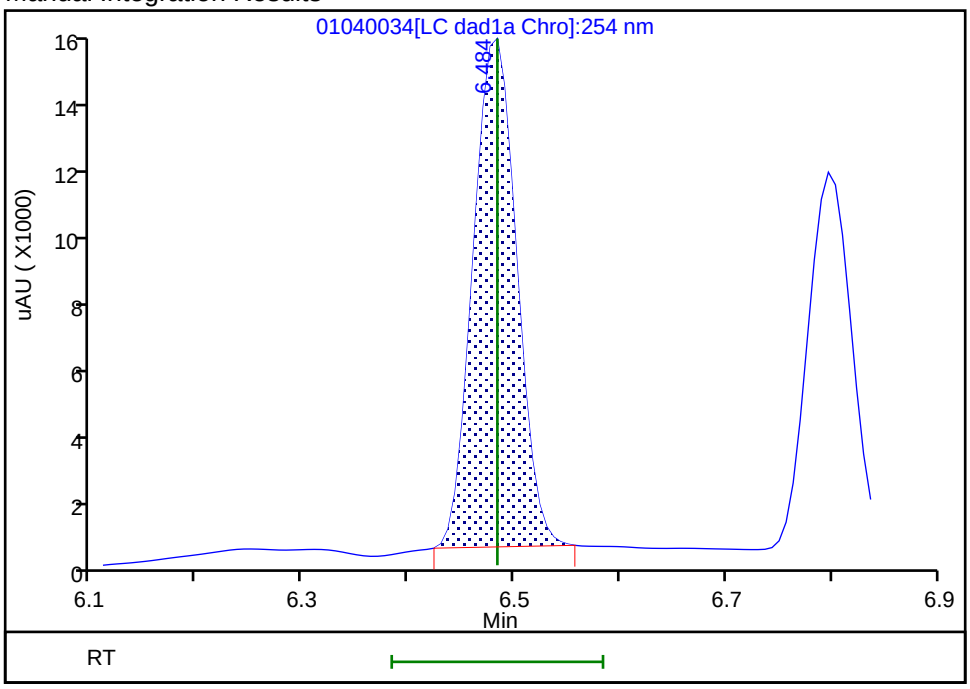
Processing Integration Results

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

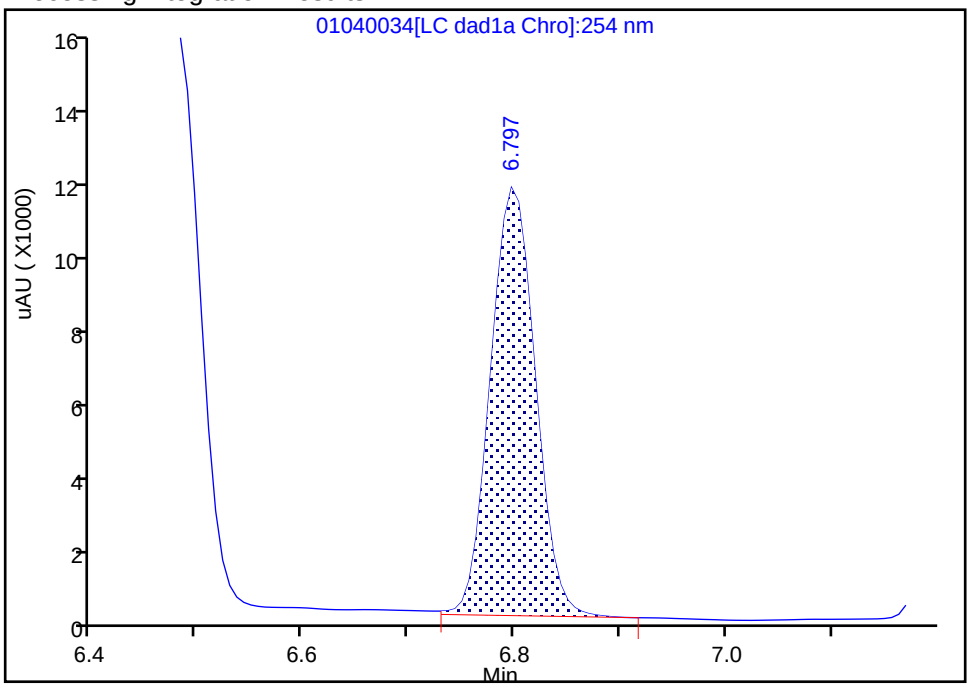
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040034.d				
Injection Date:	05-Jan-2022 03:15:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

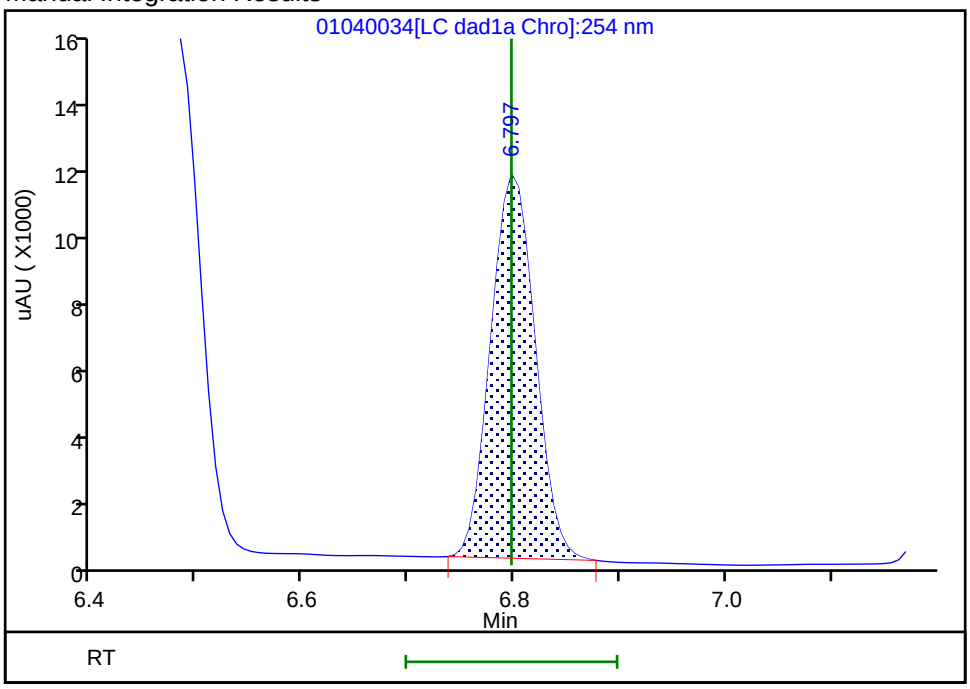
Processing Integration Results

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

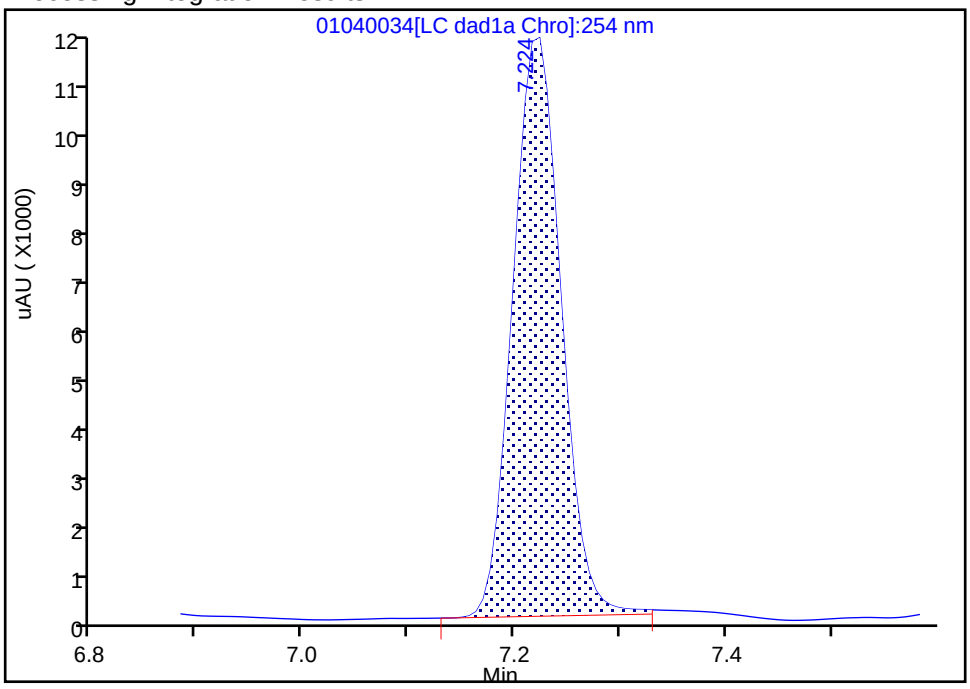
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040034.d				
Injection Date:	05-Jan-2022 03:15:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

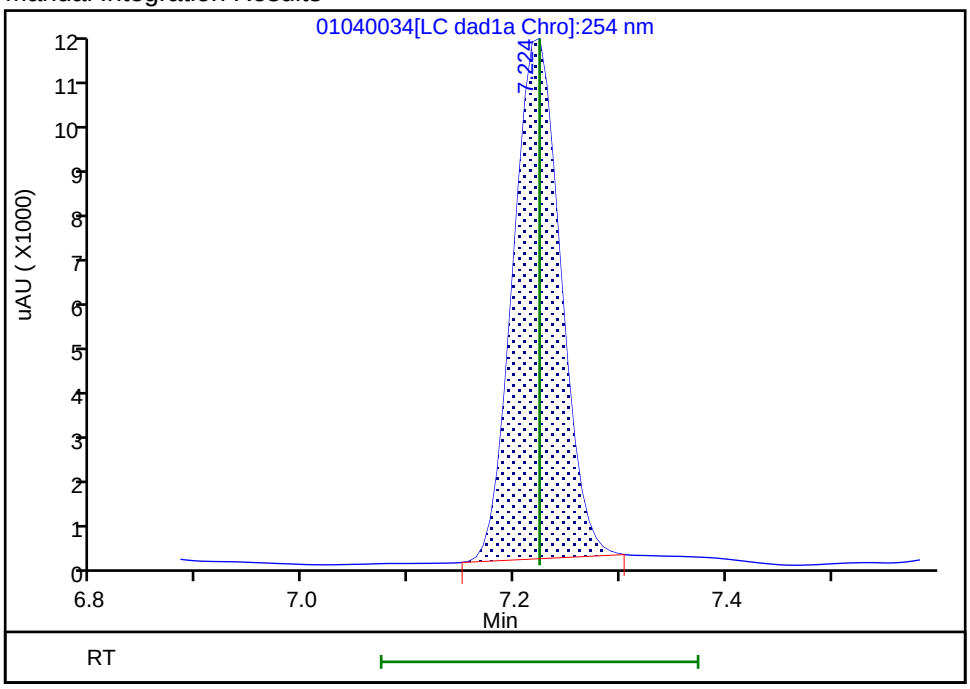
Processing Integration Results

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

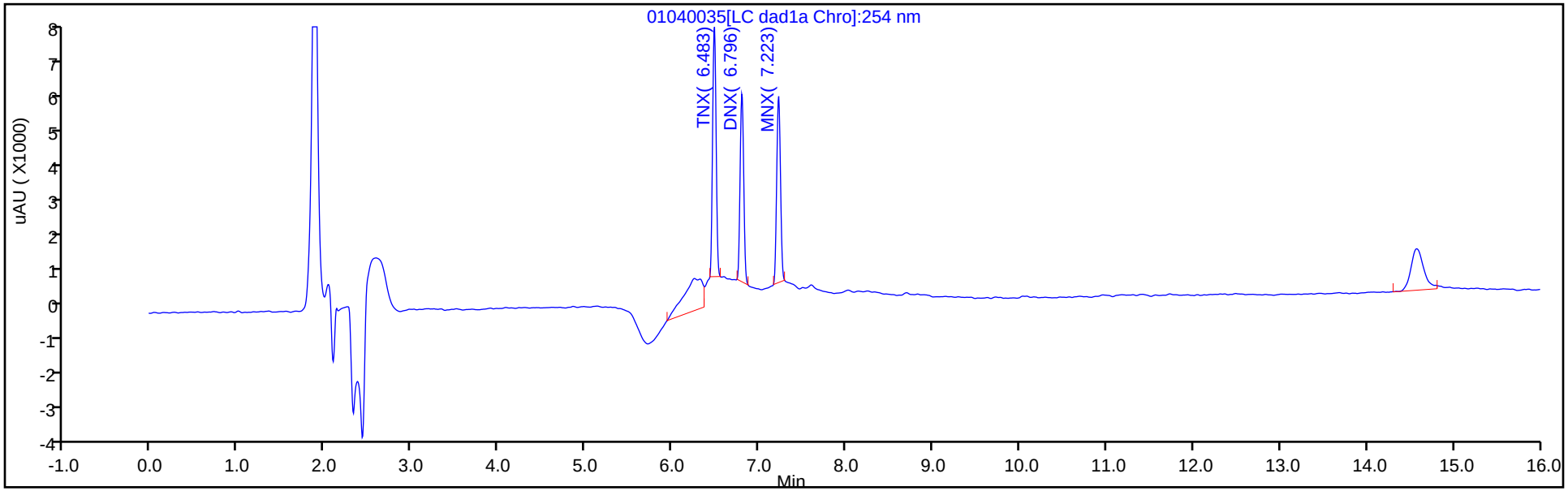
Report Date: 05-Jan-2022 12:10:08 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

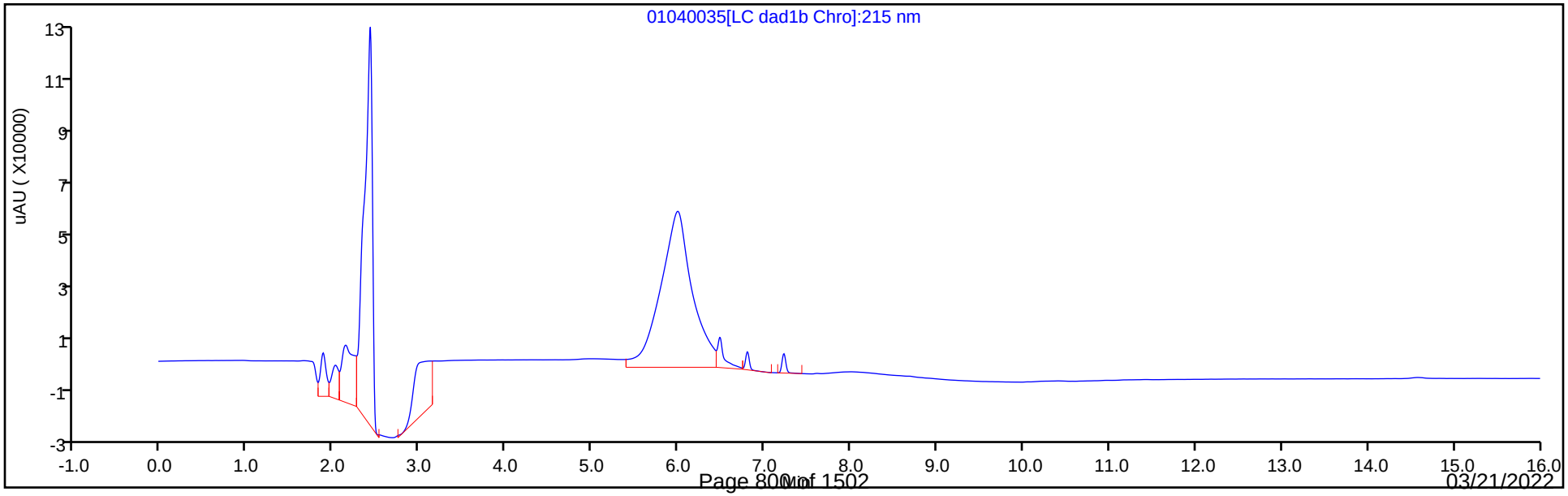
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040035.d

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

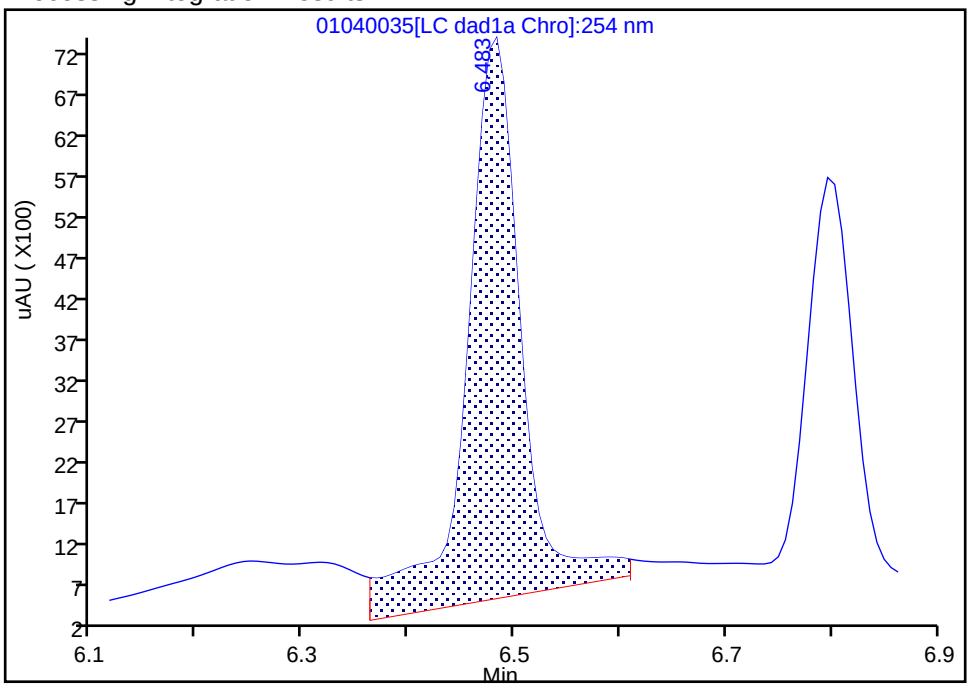
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040035.d				
Injection Date:	05-Jan-2022 03:38:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

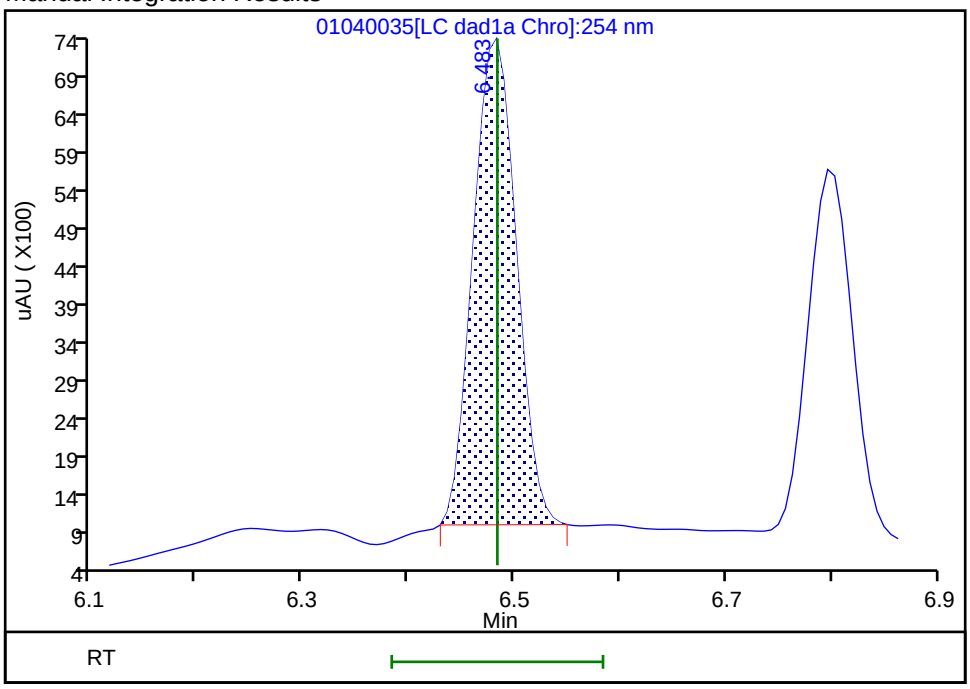
Processing Integration Results

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

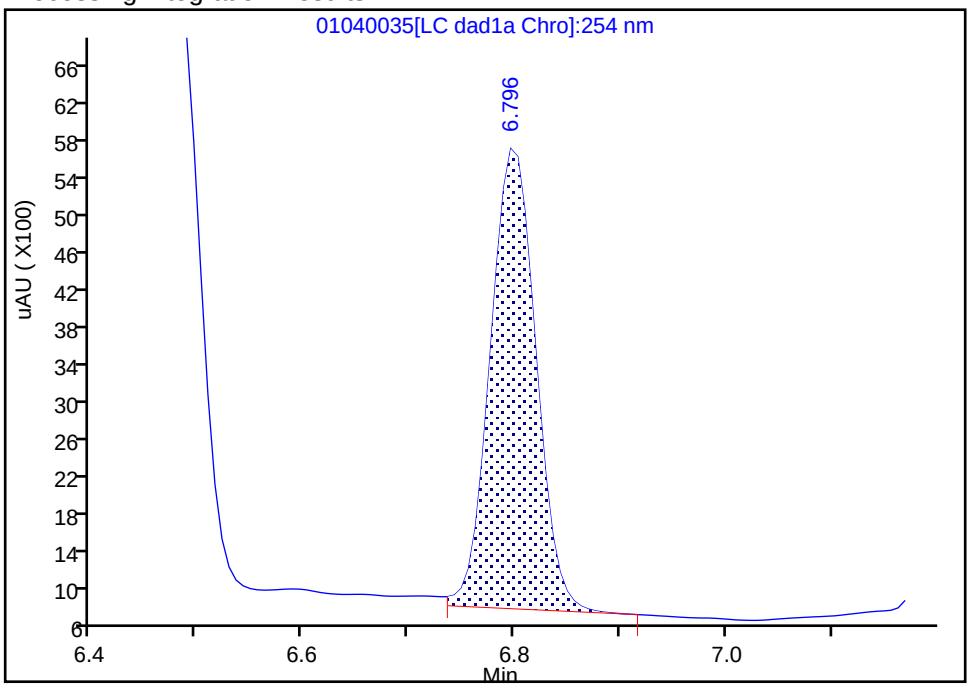
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040035.d				
Injection Date:	05-Jan-2022 03:38:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

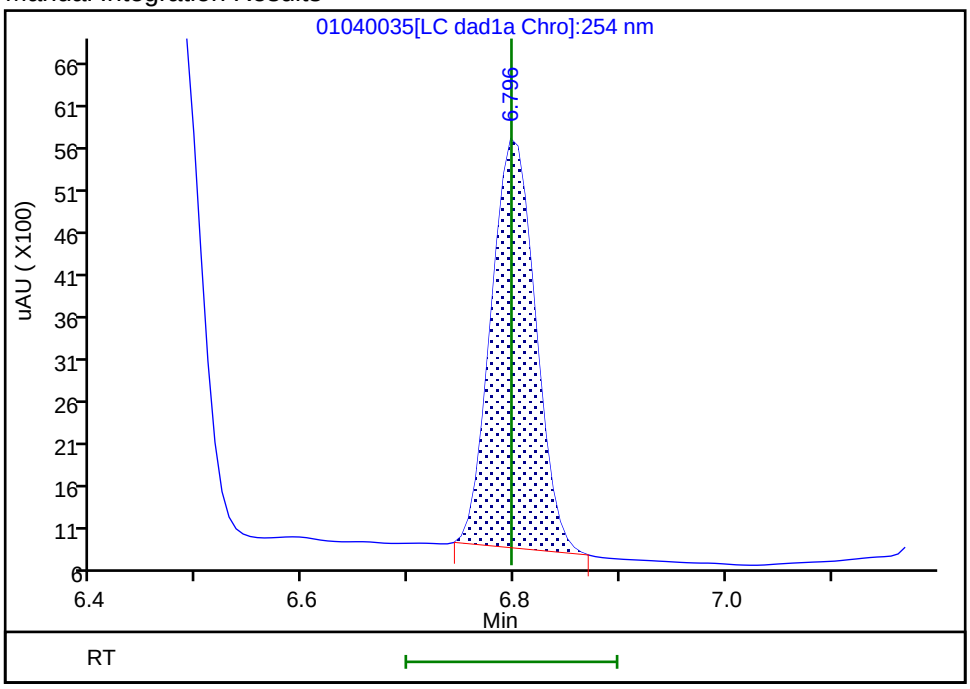
Processing Integration Results

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

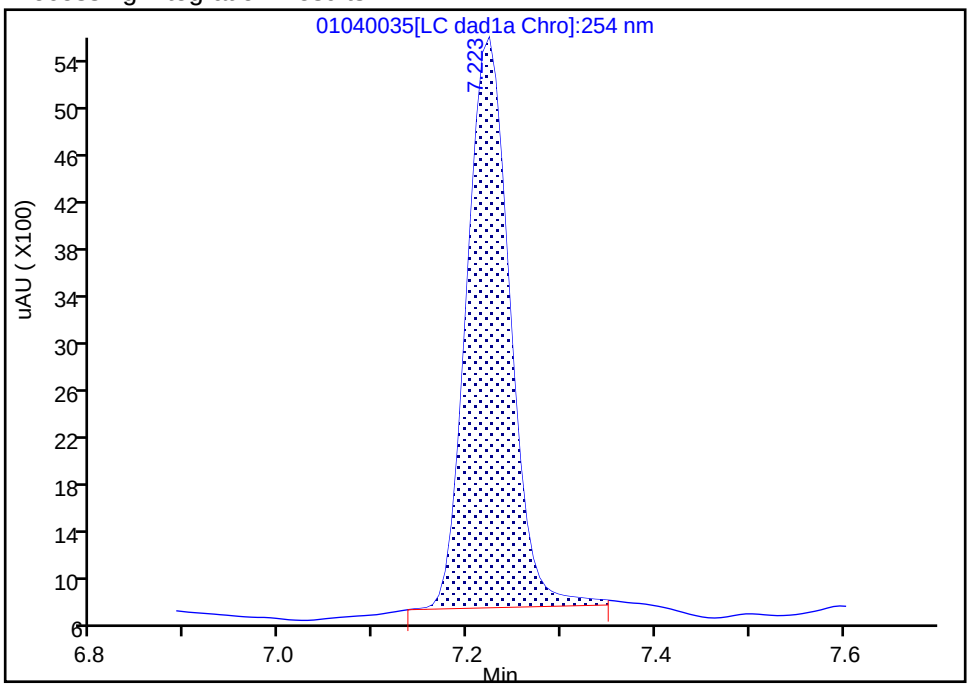
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040035.d				
Injection Date:	05-Jan-2022 03:38:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

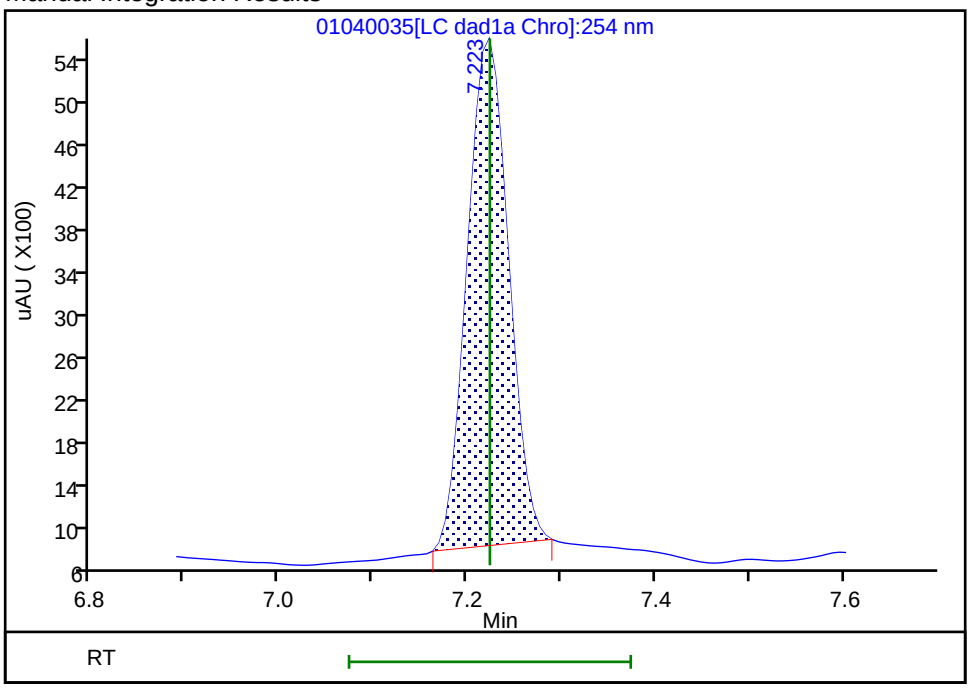
Processing Integration Results

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

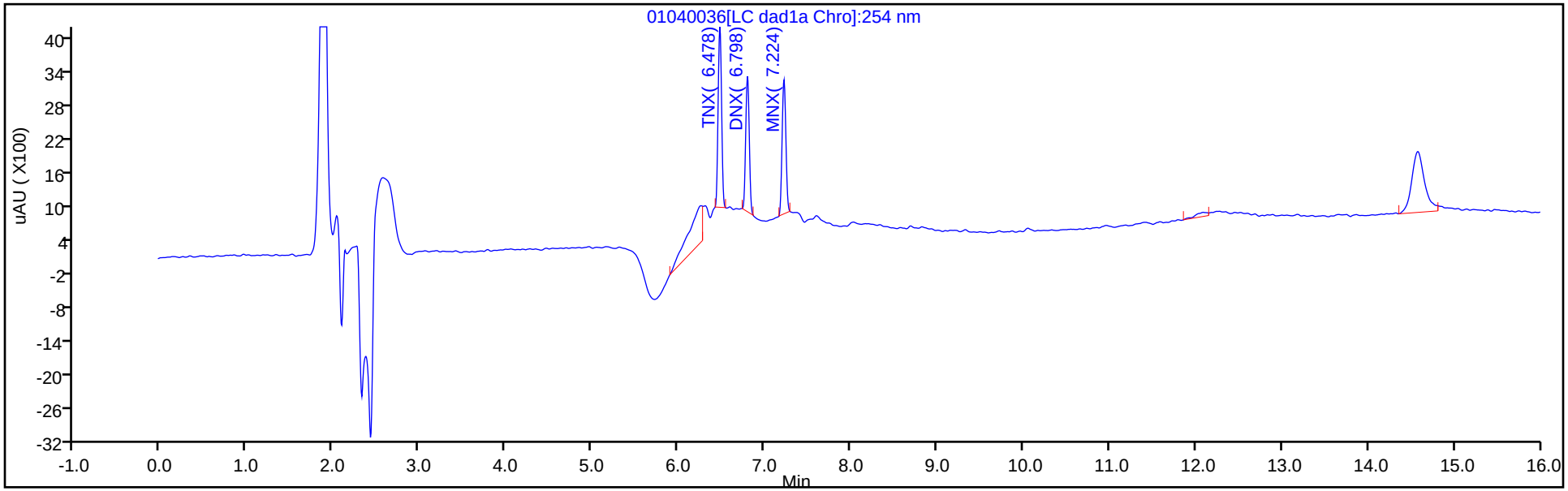
Report Date: 05-Jan-2022 12:10:08 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

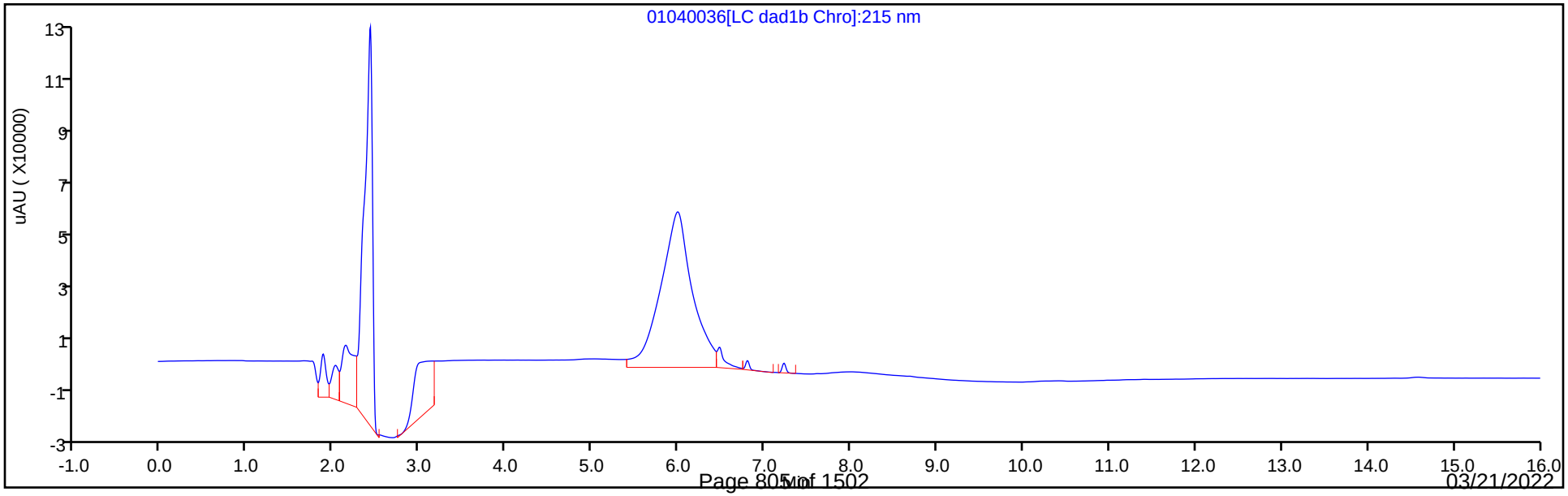
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040036.d

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

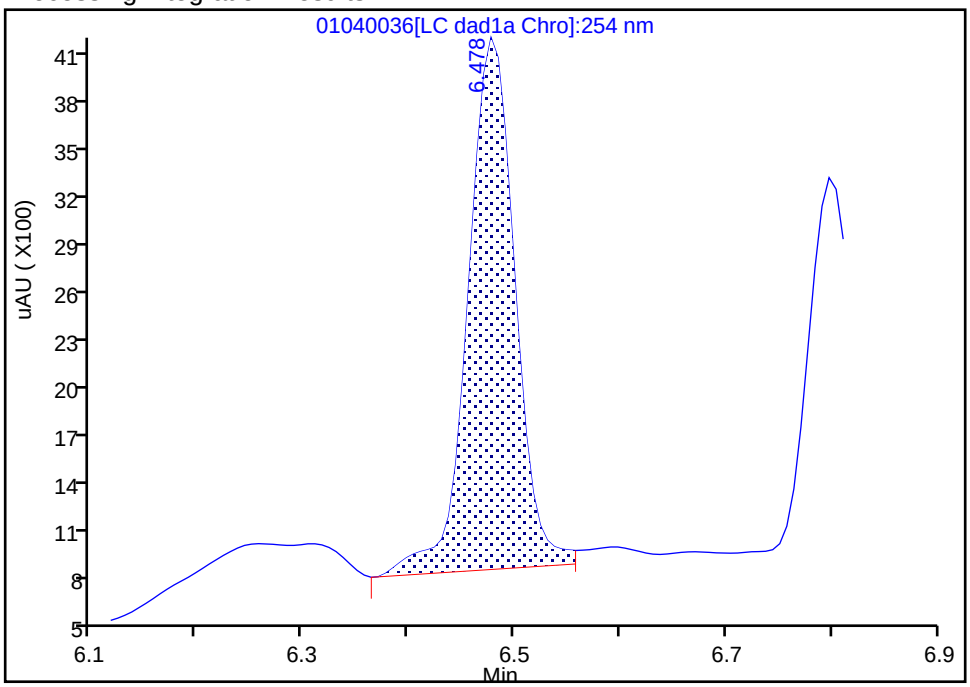
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040036.d				
Injection Date:	05-Jan-2022 04:01:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

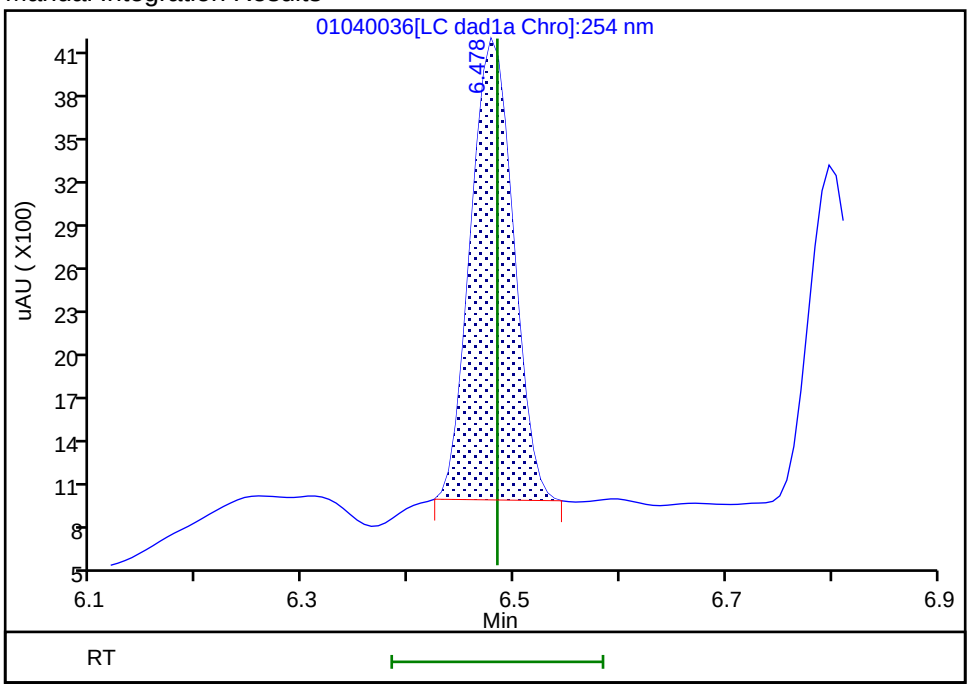
Processing Integration Results

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

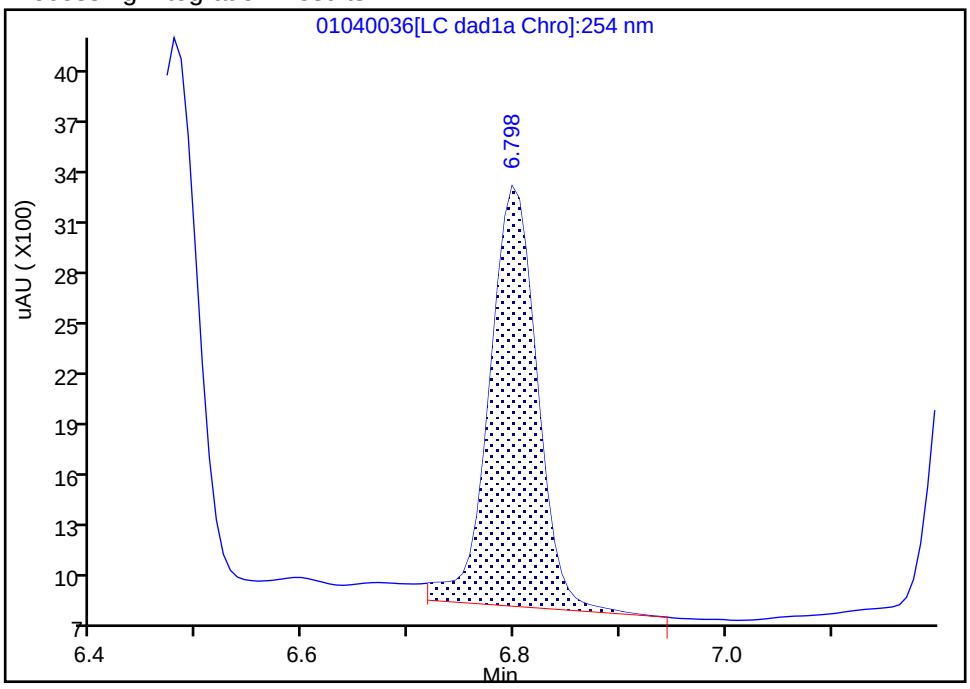
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040036.d				
Injection Date:	05-Jan-2022 04:01:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

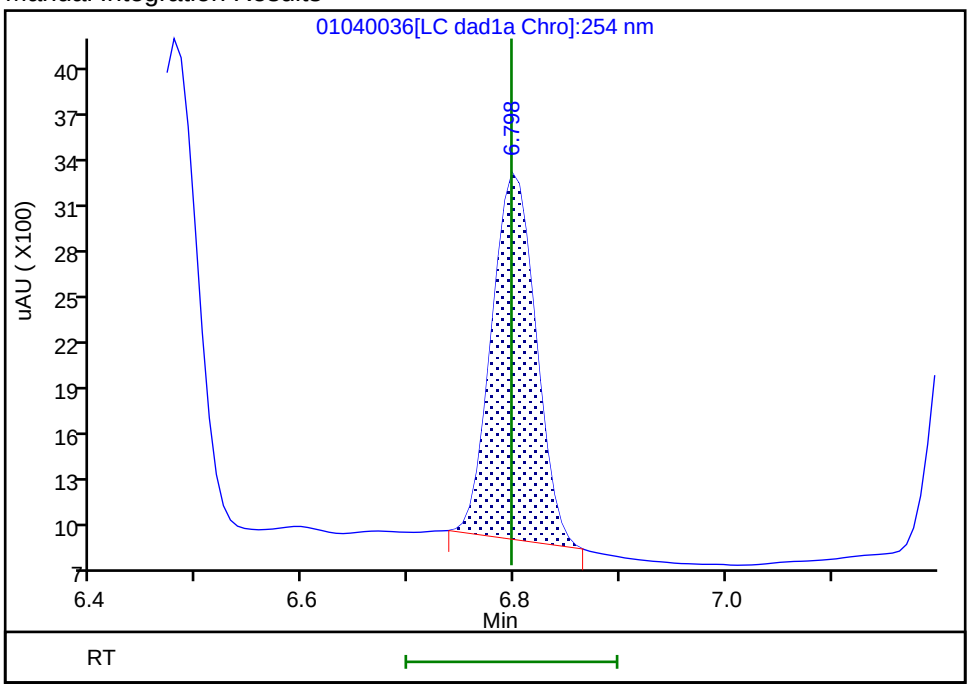
Processing Integration Results

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

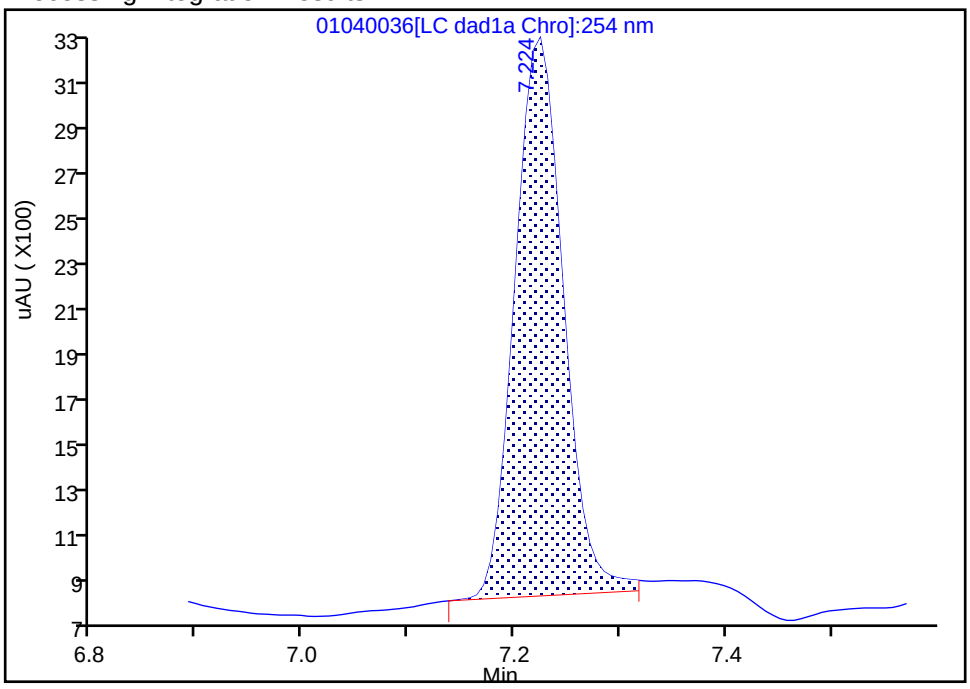
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040036.d				
Injection Date:	05-Jan-2022 04:01:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

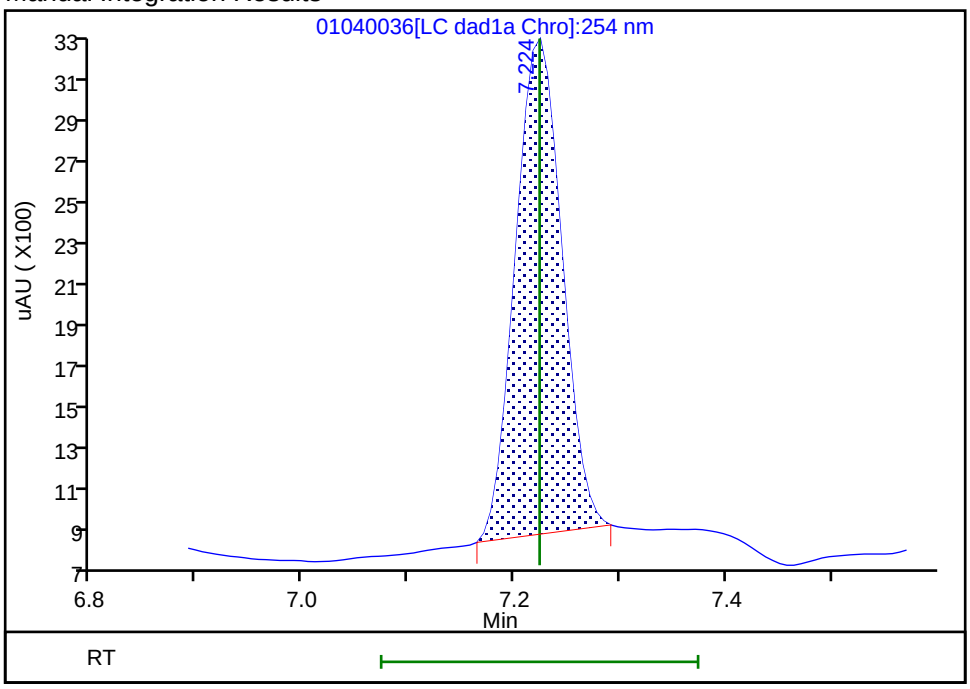
Processing Integration Results

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

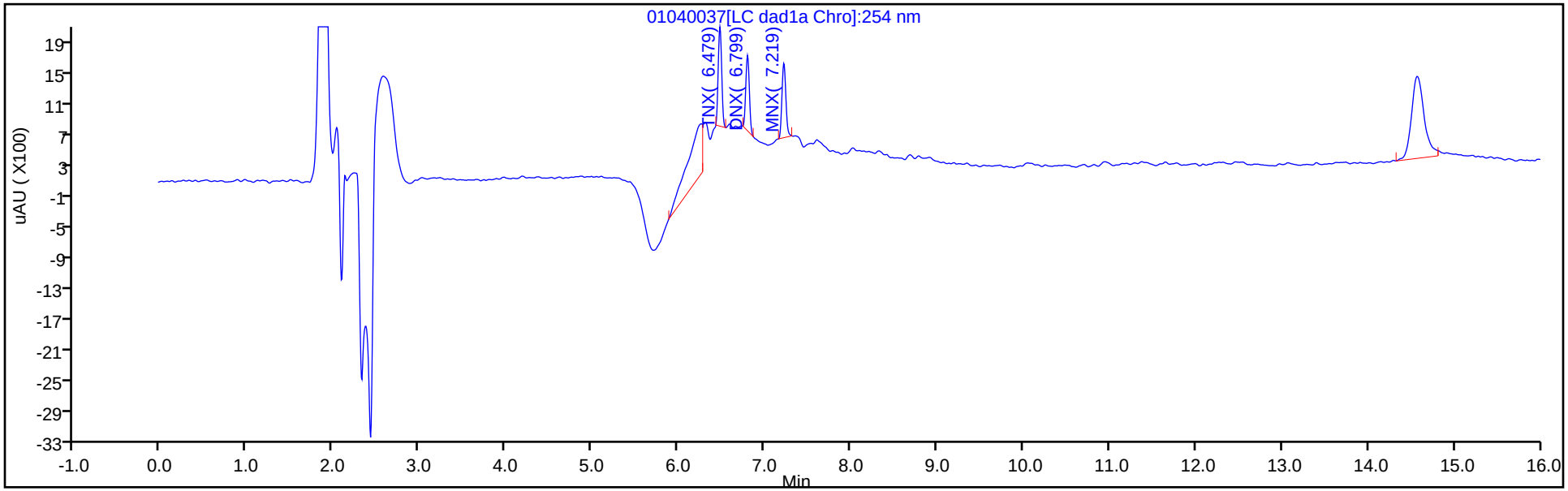
Report Date: 05-Jan-2022 12:10:09 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

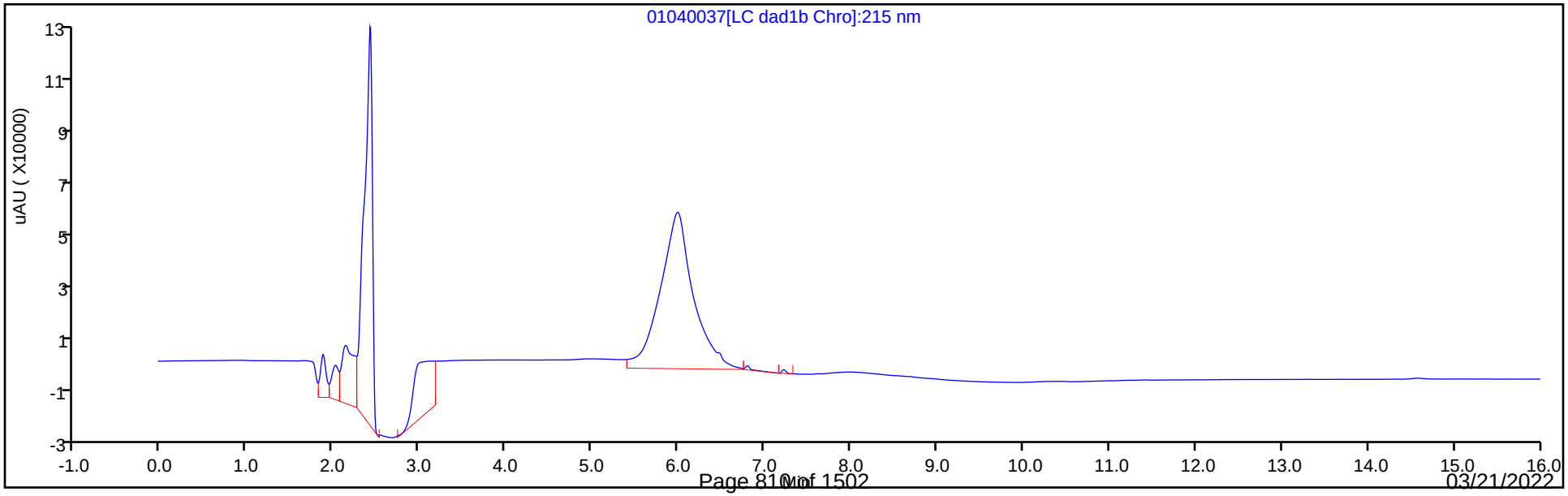
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040037.d

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

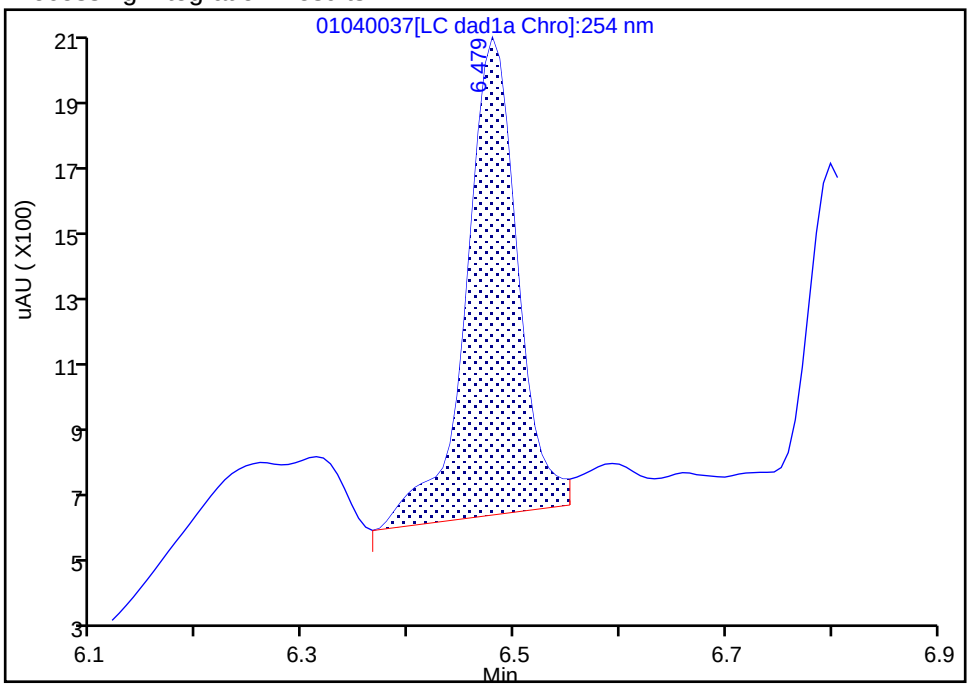
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040037.d				
Injection Date:	05-Jan-2022 04:24:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

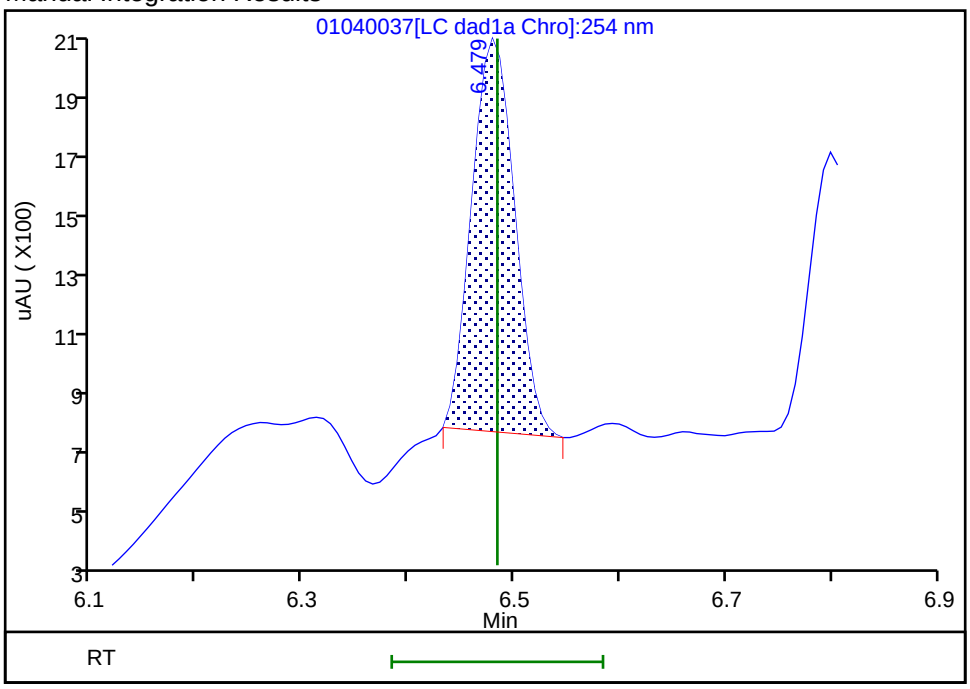
Processing Integration Results

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

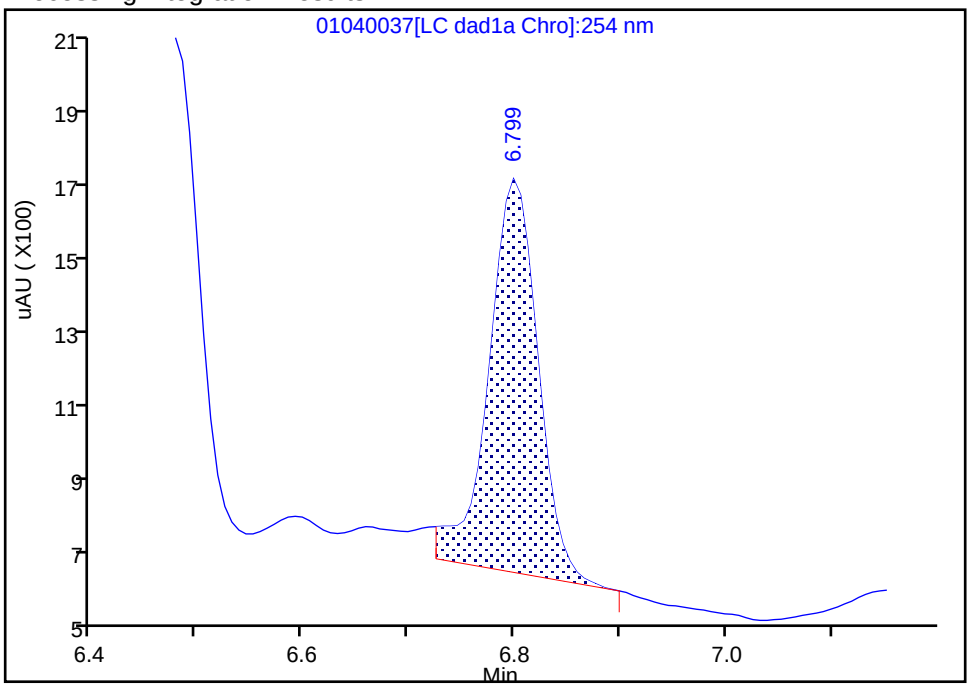
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040037.d				
Injection Date:	05-Jan-2022 04:24:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

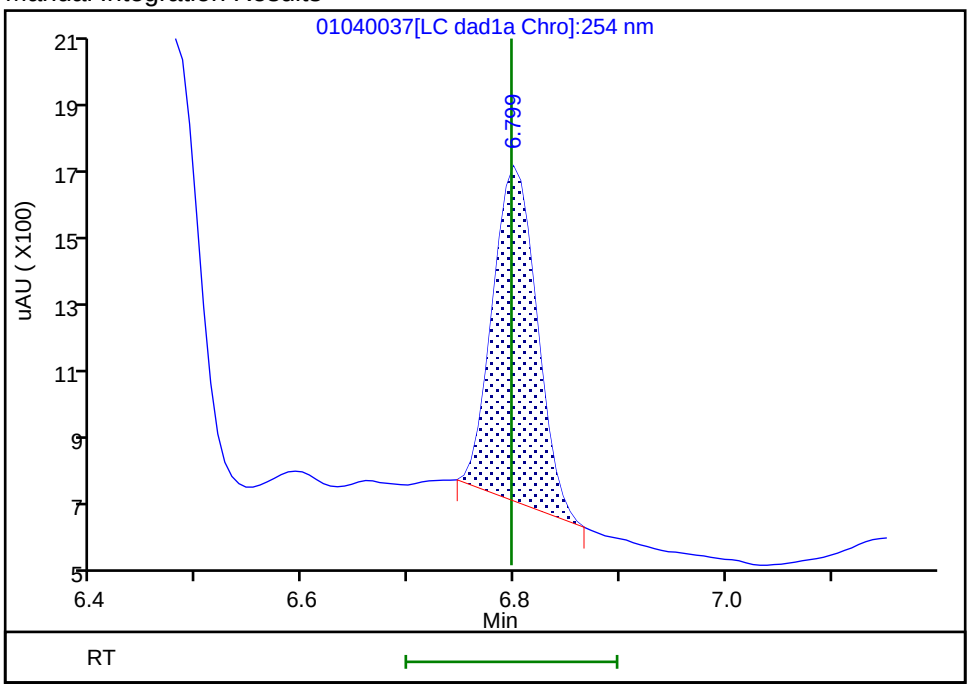
Processing Integration Results

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

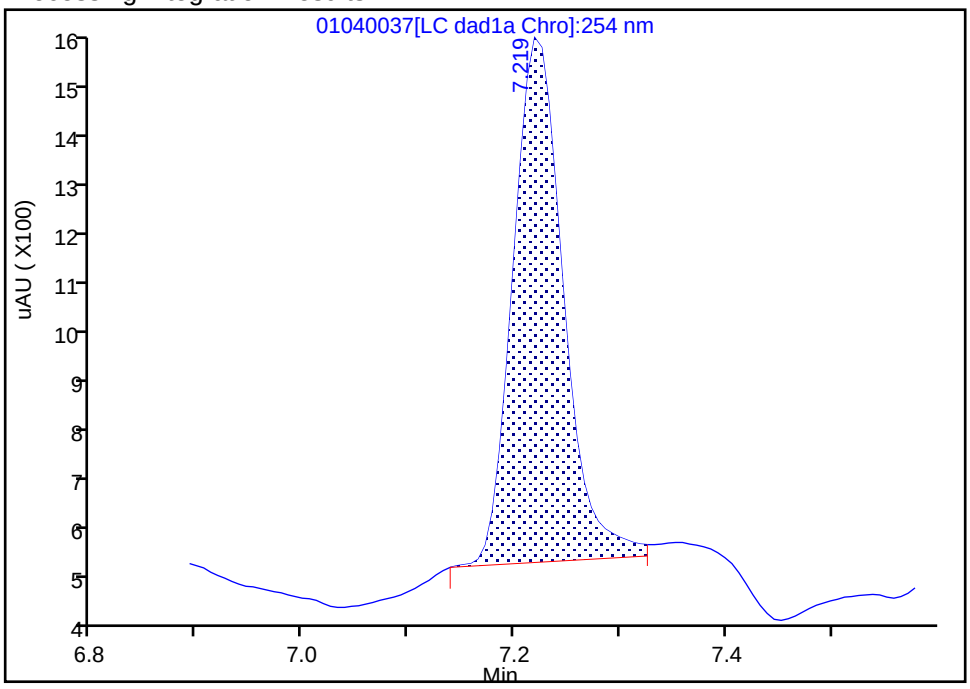
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040037.d				
Injection Date:	05-Jan-2022 04:24:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

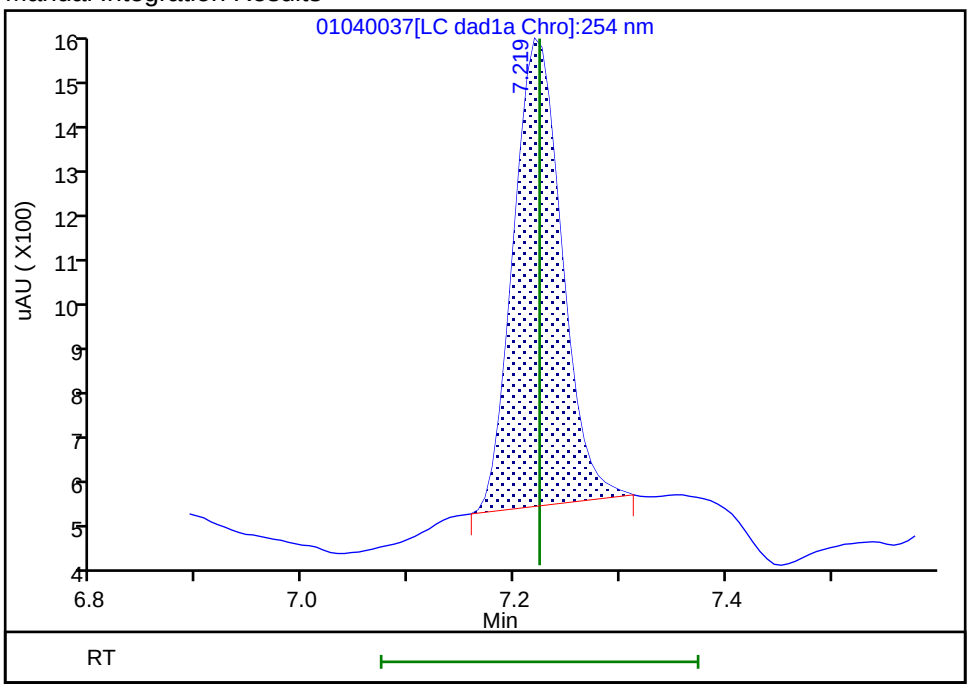
Processing Integration Results

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

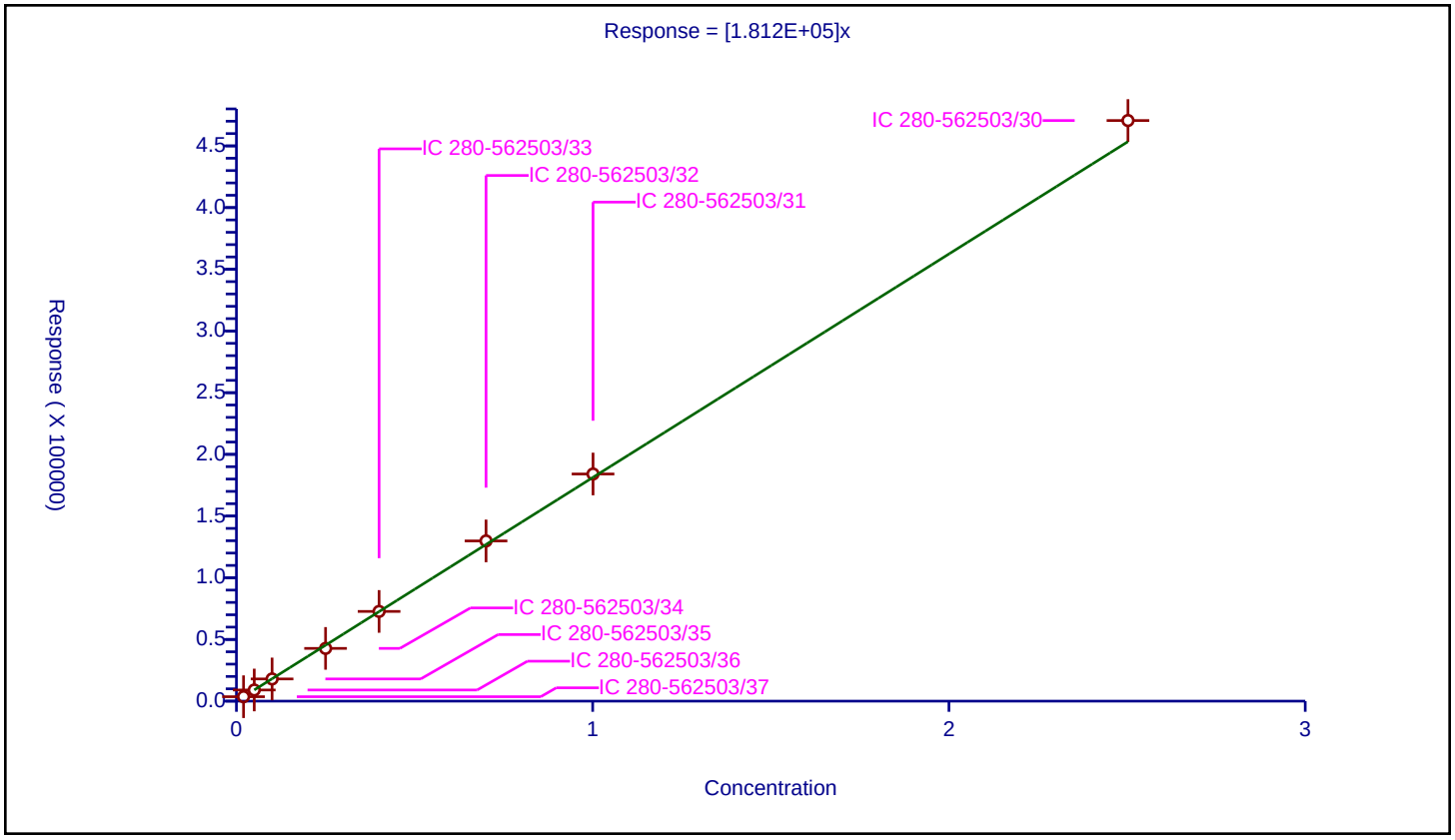
Curve Coefficients

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

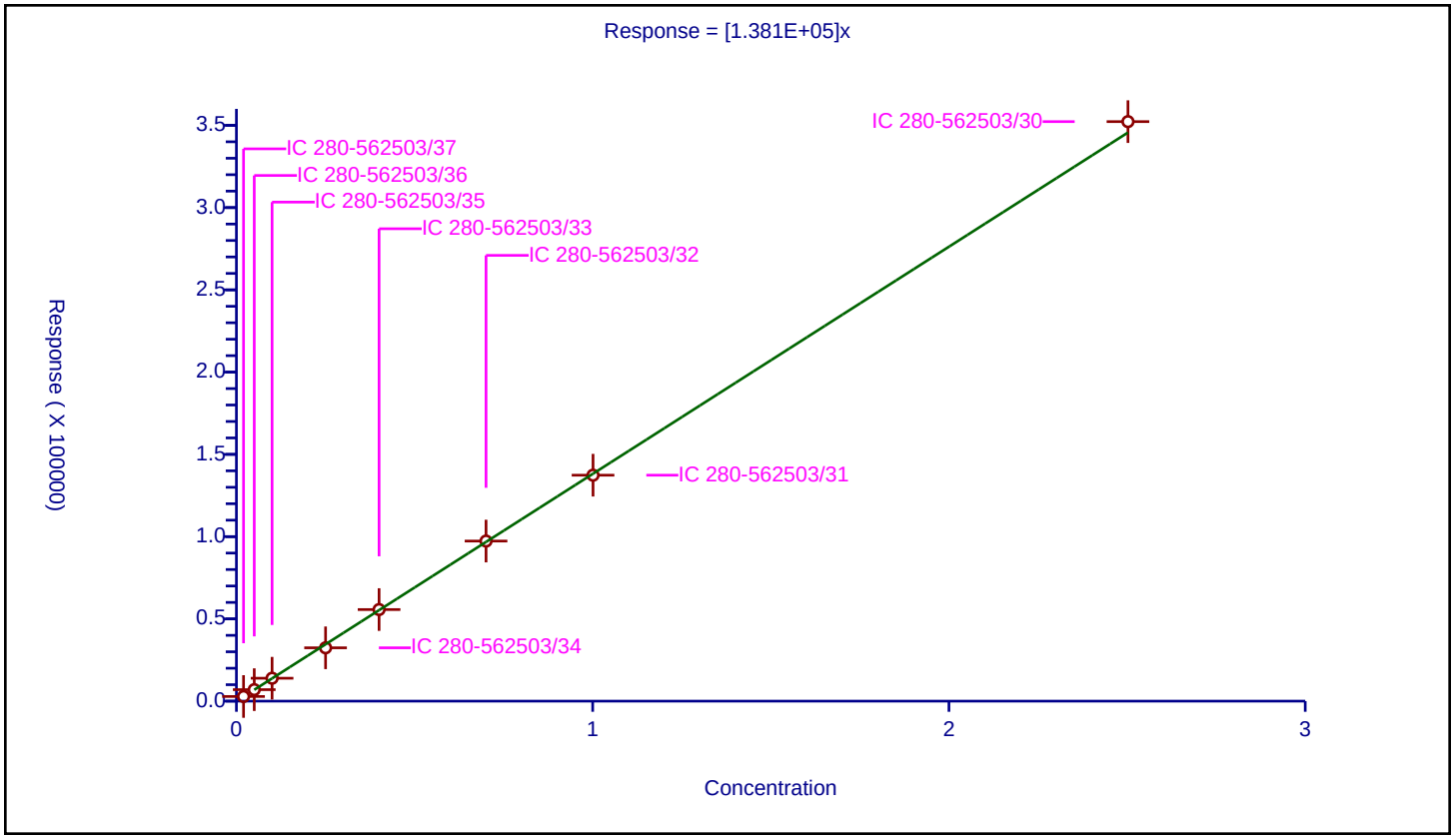
Curve Coefficients

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

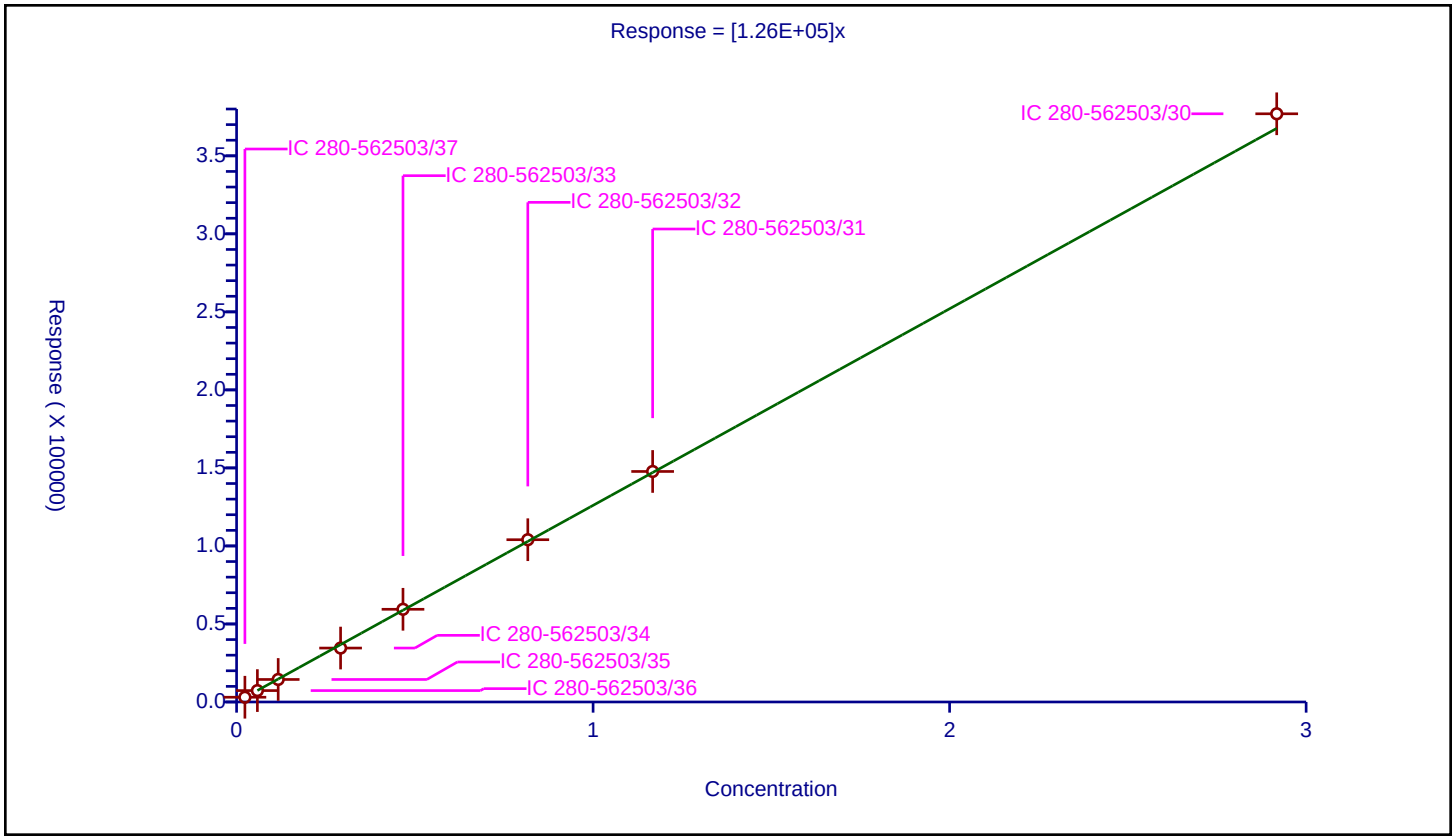
Curve Coefficients

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.: 280-159332-1 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.: 280-159332-1 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.: 280-159332-1 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.: 280-159332-1 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	3127	8053	16109	38318	0.0100	0.0200	0.0500	0.100	0.250
		62819	109512	158593	468398		0.400	0.700	1.00	2.50	
Picric acid	Ave		2301	6356	14009	34288		0.0200	0.0500	0.100	0.250
		58358	102939	150719	250000		0.400	0.700	1.00	2.50	
RDX	Ave	2097	3719	10028	19750	46417	0.0100	0.0200	0.0500	0.100	0.250
		76711	134031	193402	482372		0.400	0.700	1.00	2.50	
Nitrobenzene	Ave	3890	6686	19149	37271	90246	0.0100	0.0201	0.0502	0.100	0.251
		148639	259585	367582	944774		0.402	0.703	1.00	2.51	
1,3-Dinitrobenzene	Ave	5961	10643	30181	59537	136486	0.0100	0.0200	0.0501	0.100	0.251
		225815	394707	569212	1461217		0.401	0.701	1.00	2.51	
Nitroglycerin	Ave	10664	21750	59894	133241	309657	0.100	0.200	0.500	1.00	2.50
		519683	888552	1272015	3158004		4.00	7.00	10.0	25.0	
2-Nitrotoluene	Ave	2491	4607	12057	23857	56221	0.0100	0.0200	0.0500	0.100	0.250
		93064	161534	232476	580270		0.400	0.700	1.00	2.50	
4-Nitrotoluene	Ave	2203	4078	10595	21625	50555	0.0100	0.0200	0.0501	0.100	0.251
		83857	146563	211344	540531		0.401	0.701	1.00	2.51	
4-Amino-2,6-dinitrotoluene	Lin2	2610	5271	13425	27216	64569	0.0100	0.0200	0.0501	0.100	0.250
		107043	186078	269691	672715		0.400	0.701	1.00	2.50	
3-Nitrotoluene	Lin2	2543	4805	13387	26978	64150	0.0100	0.0200	0.0501	0.100	0.250
		106661	185839	267812	679800		0.400	0.701	1.00	2.50	
2-Amino-4,6-dinitrotoluene	Ave	3705	6899	18562	37178	88010	0.0100	0.0201	0.0502	0.100	0.251
		146764	257718	374916	843240		0.402	0.703	1.00	2.51	
1,3,5-Trinitrobenzene	Ave	3947	6970	21339	42514	102576	0.0100	0.0200	0.0501	0.100	0.251
		170012	295298	425388	1172398		0.401	0.701	1.00	2.51	
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.: 280-159332-1 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	16863	33918	64187	139375	0.0100	0.0201	0.0502	0.100	0.251
		220828	382059	549112	1368356		0.402	0.703	1.00	2.51	
Tetryl	Ave	4722	6933	18110	33188	77249	0.0100	0.0200	0.0501	0.100	0.251
		126546	219675	316900	791703		0.401	0.701	1.00	2.51	
2,4,6-Trinitrotoluene	Ave	3720	6507	18556	37205	91338	0.0100	0.0201	0.0502	0.100	0.251
		151235	265676	385560	967117		0.402	0.703	1.00	2.51	
PETN	Ave	10842	21923	67082	134076	329509	0.100	0.200	0.500	1.00	2.50
		544987	951206	1369840	3419168		4.00	7.00	10.0	25.0	
1,2-Dinitrobenzene	Ave	2461	4809	12864	25499	61198	0.0100	0.0200	0.0500	0.100	0.250
		99804	175358	251717	631065		0.400	0.700	1.00	2.50	

Curve Type Legend
Ave = Average
Lin2 = Linear 1/conc^2

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\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

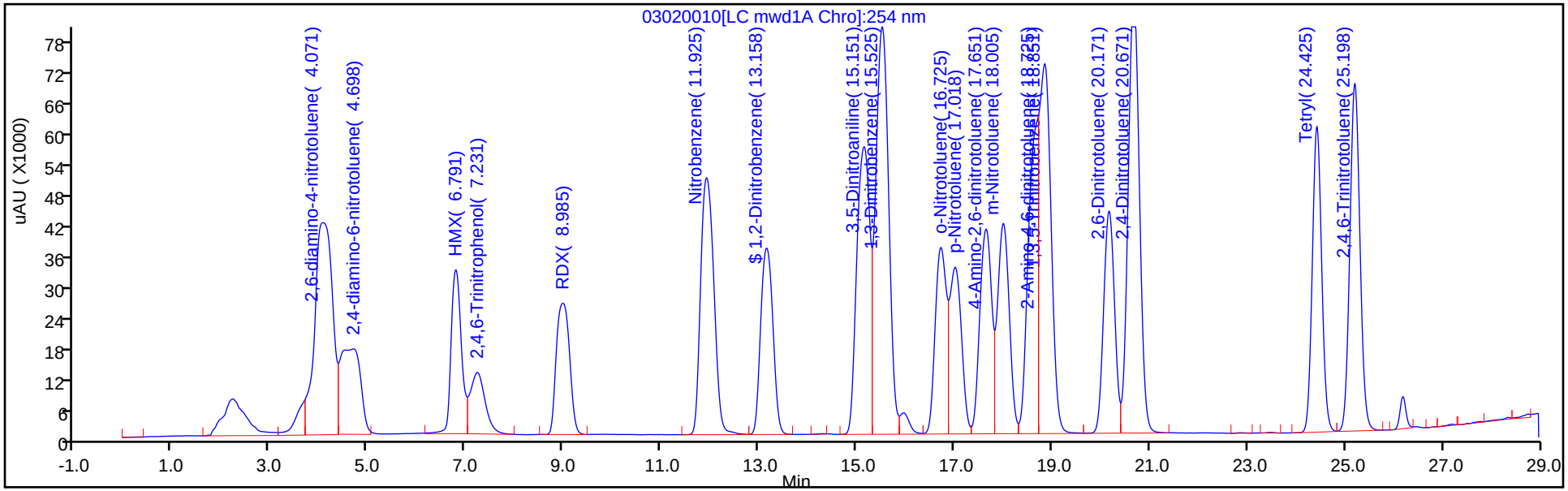
Report Date: 03-Mar-2022 12:49:12 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

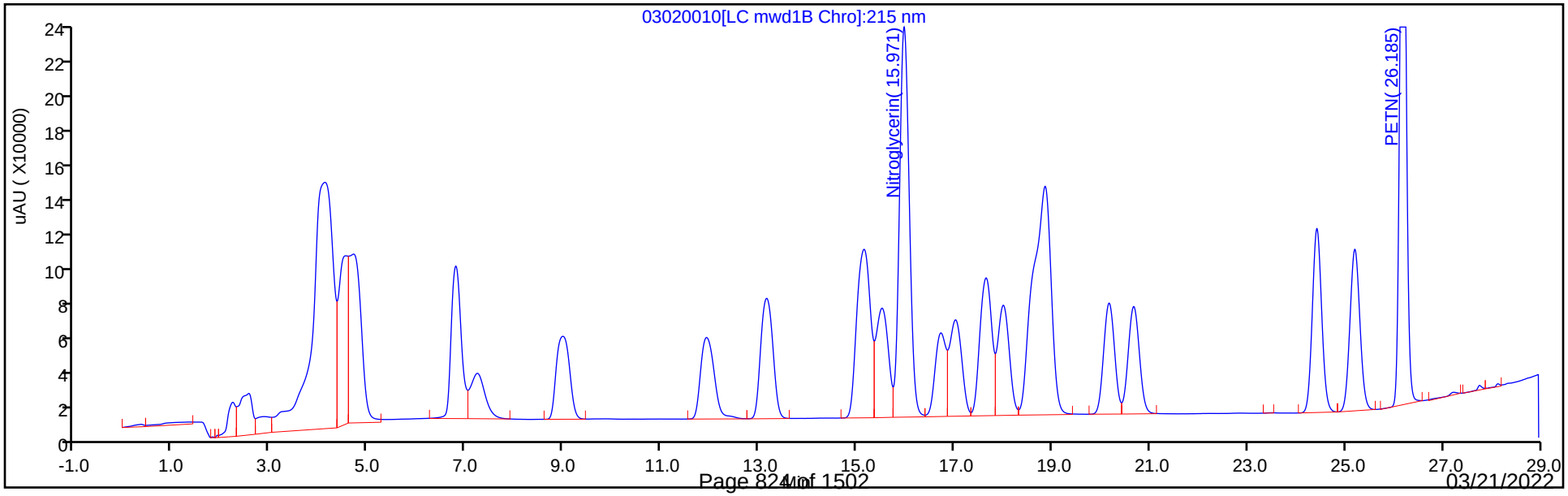
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020010.D

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

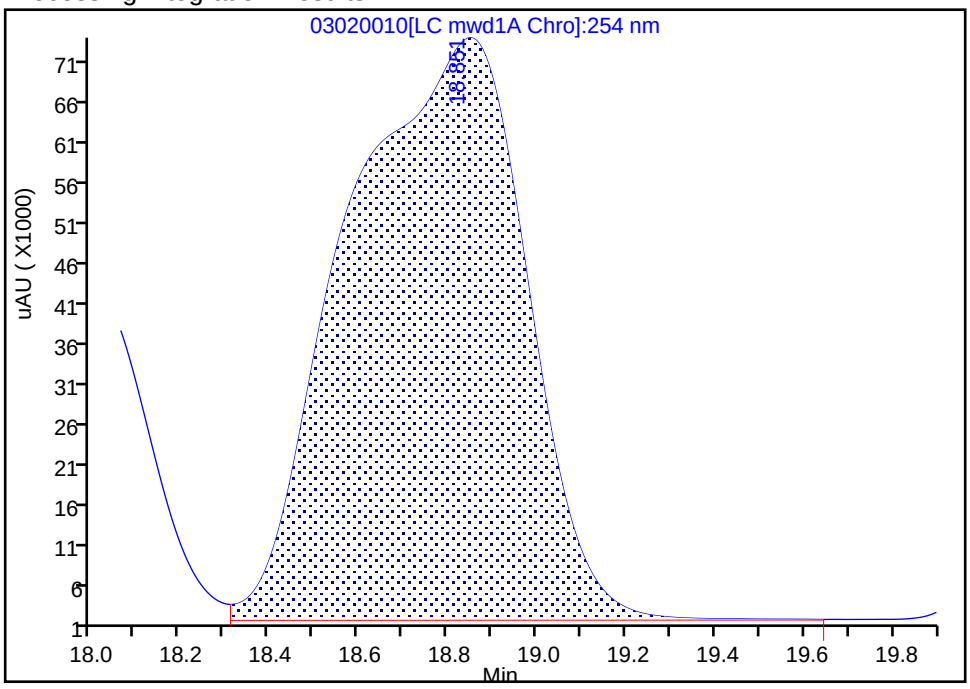
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020010.D
Injection Date: 02-Mar-2022 21:22:03 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 9
Client ID:
Operator ID: JZ ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

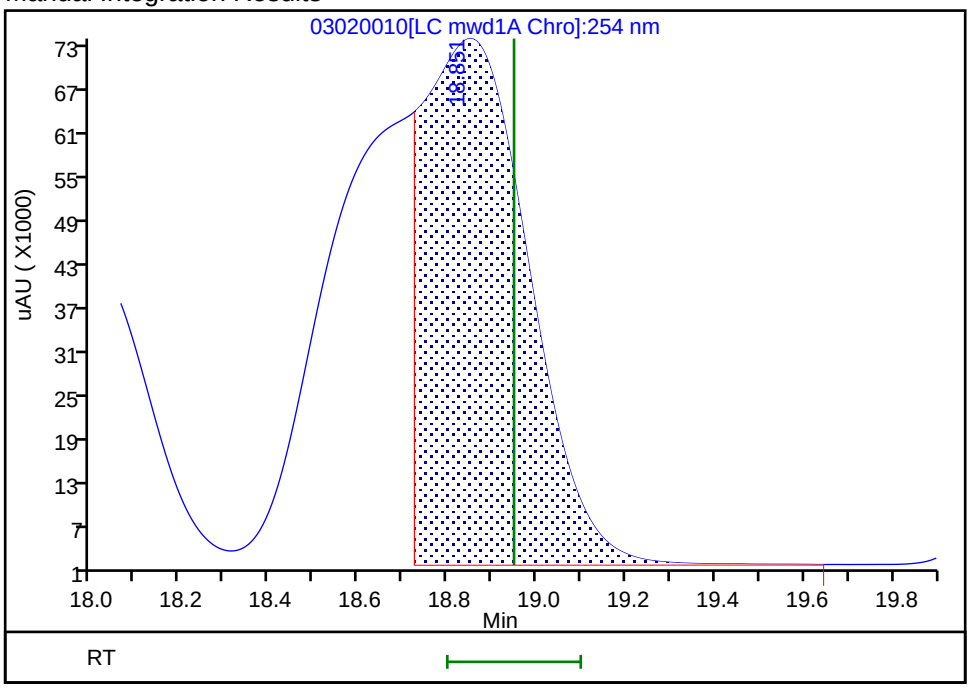
Processing Integration Results

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

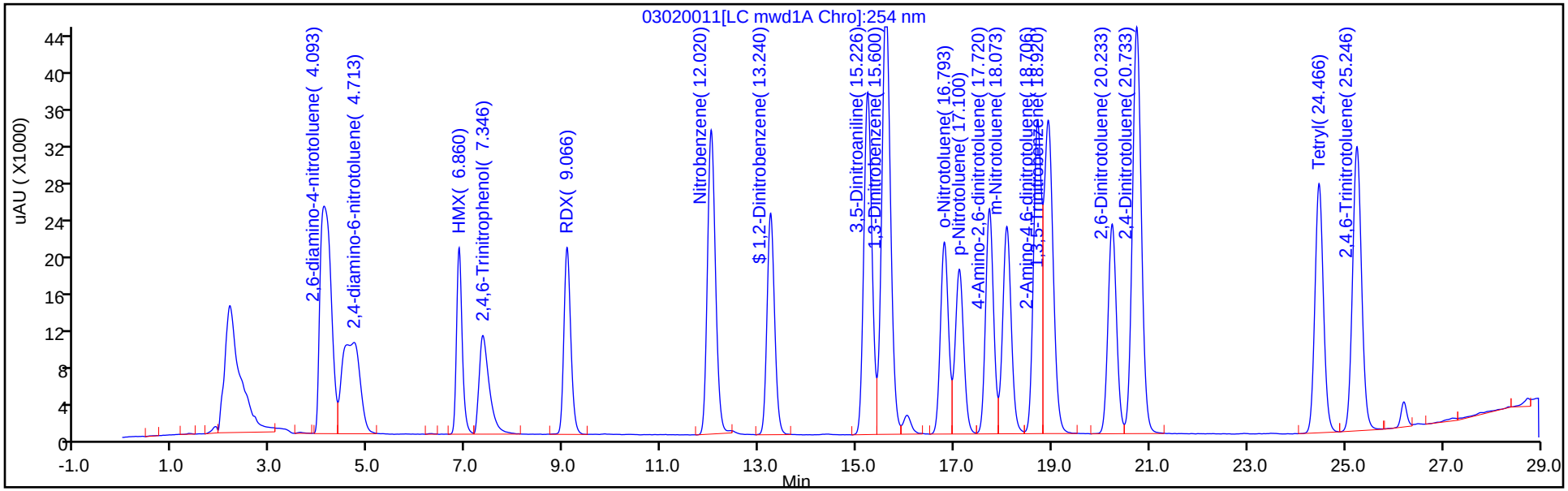
Report Date: 03-Mar-2022 12:49:13 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

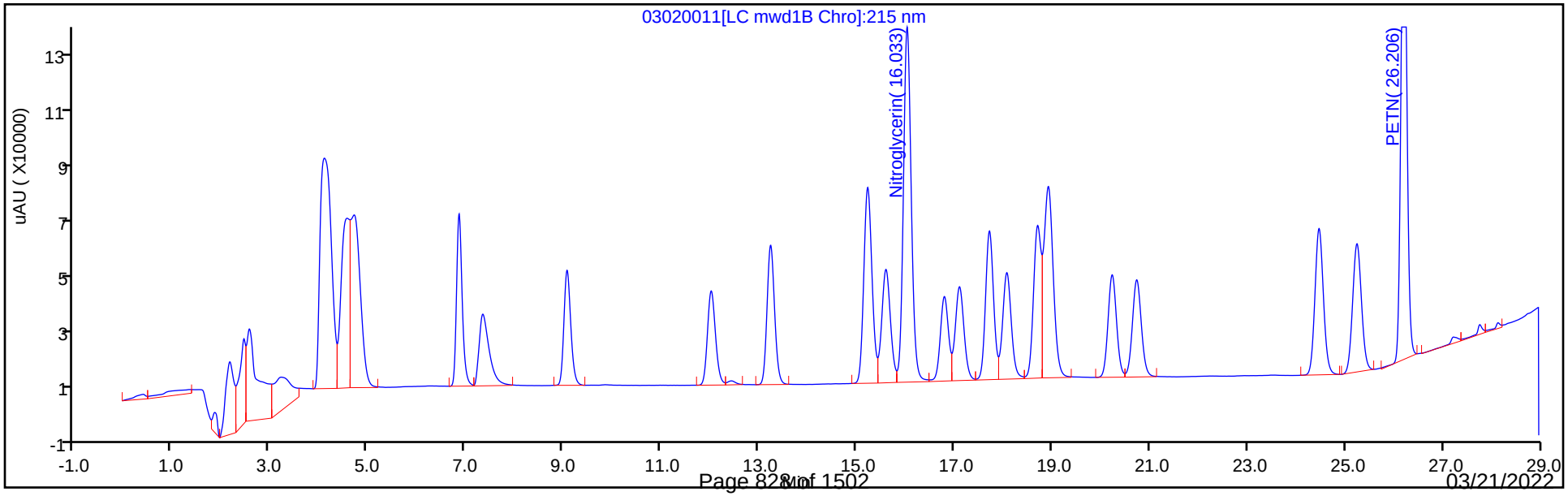
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020011.D

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

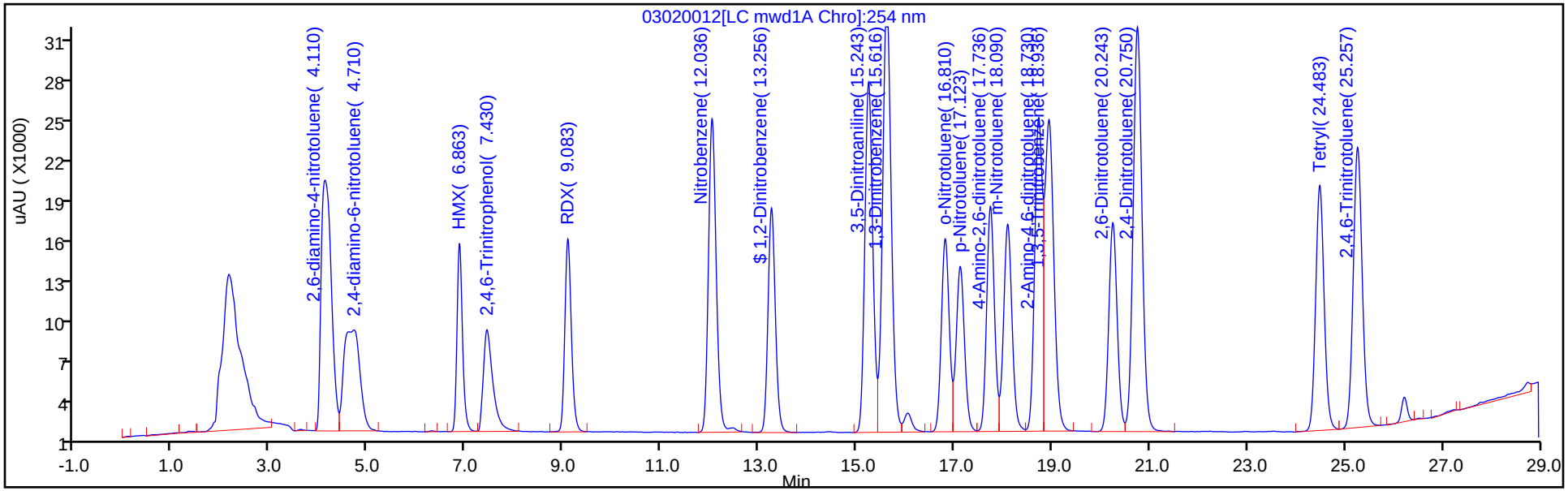
Report Date: 03-Mar-2022 12:49:14 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

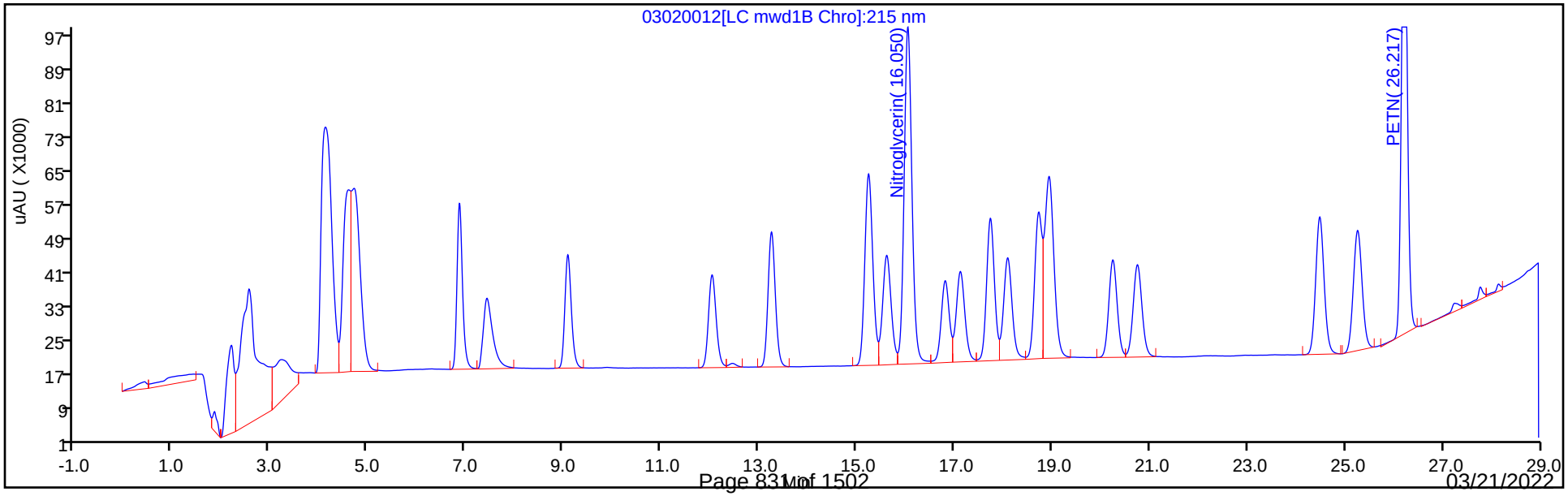
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020012.D

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

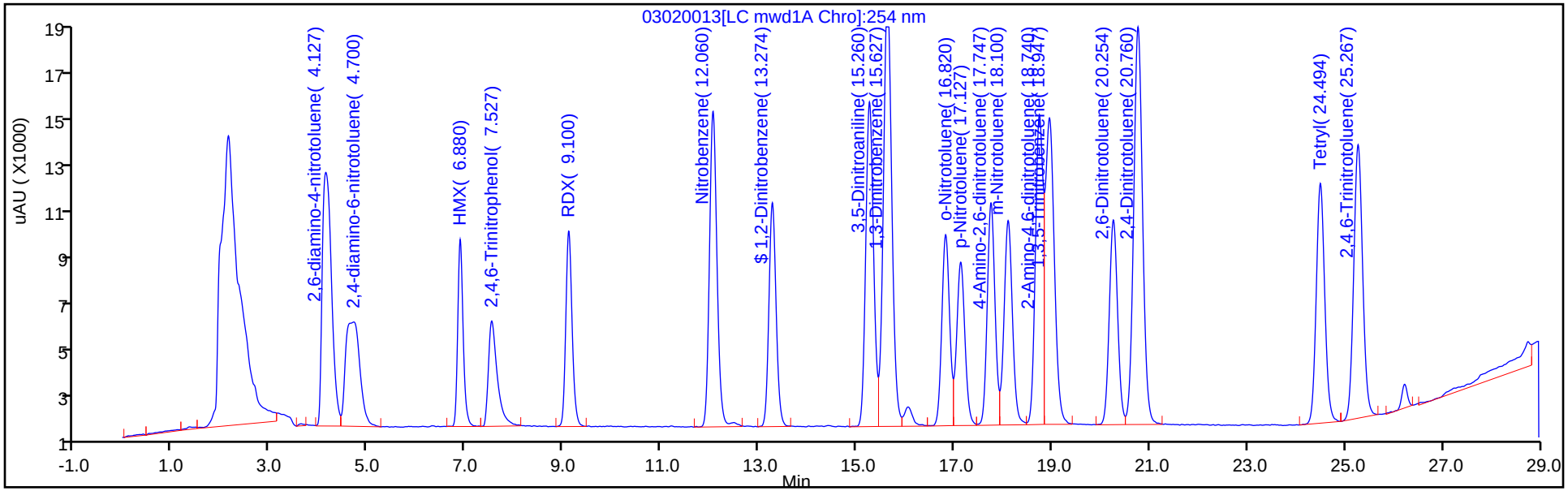
Report Date: 03-Mar-2022 12:49:14 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

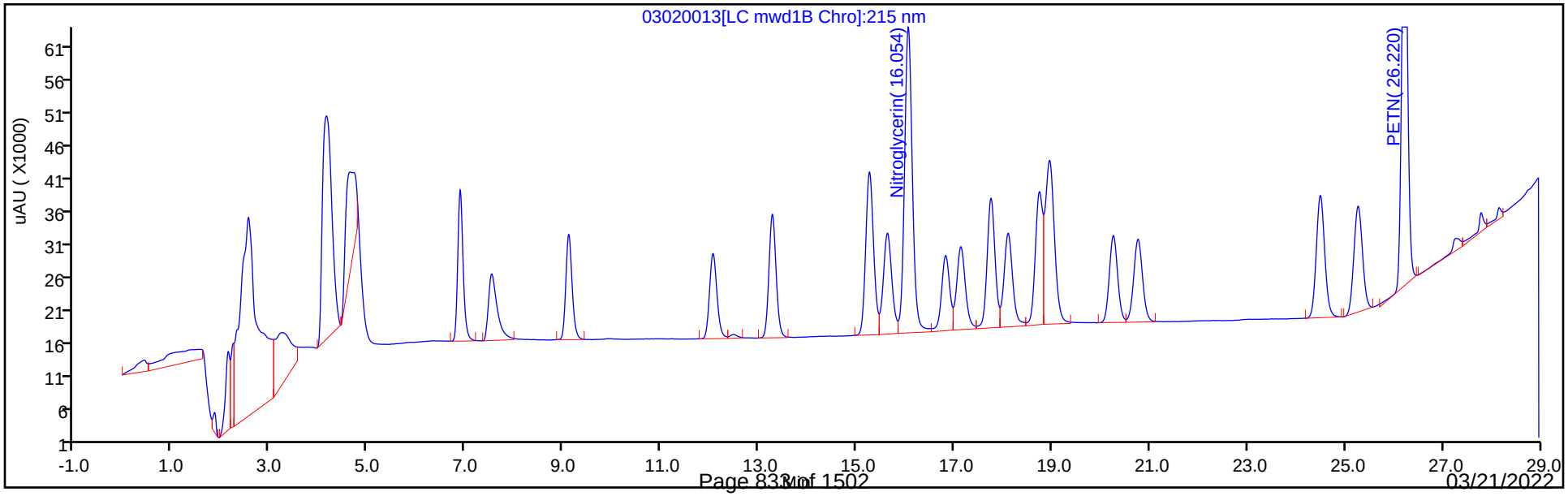
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020013.D

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

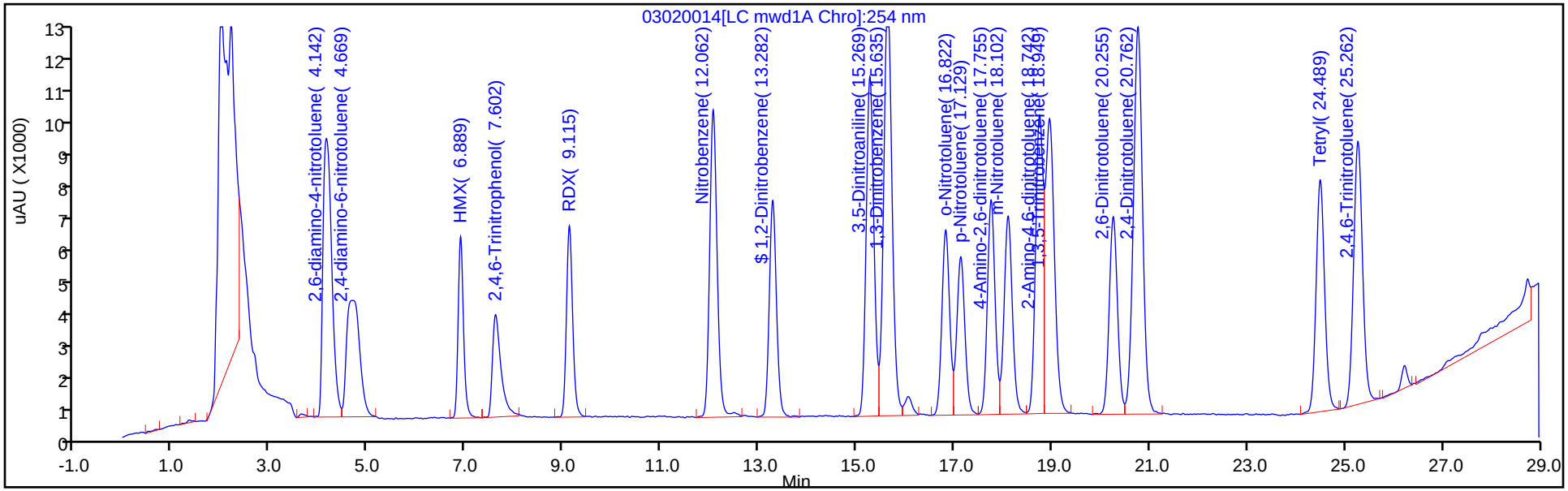
Report Date: 03-Mar-2022 12:49:15 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

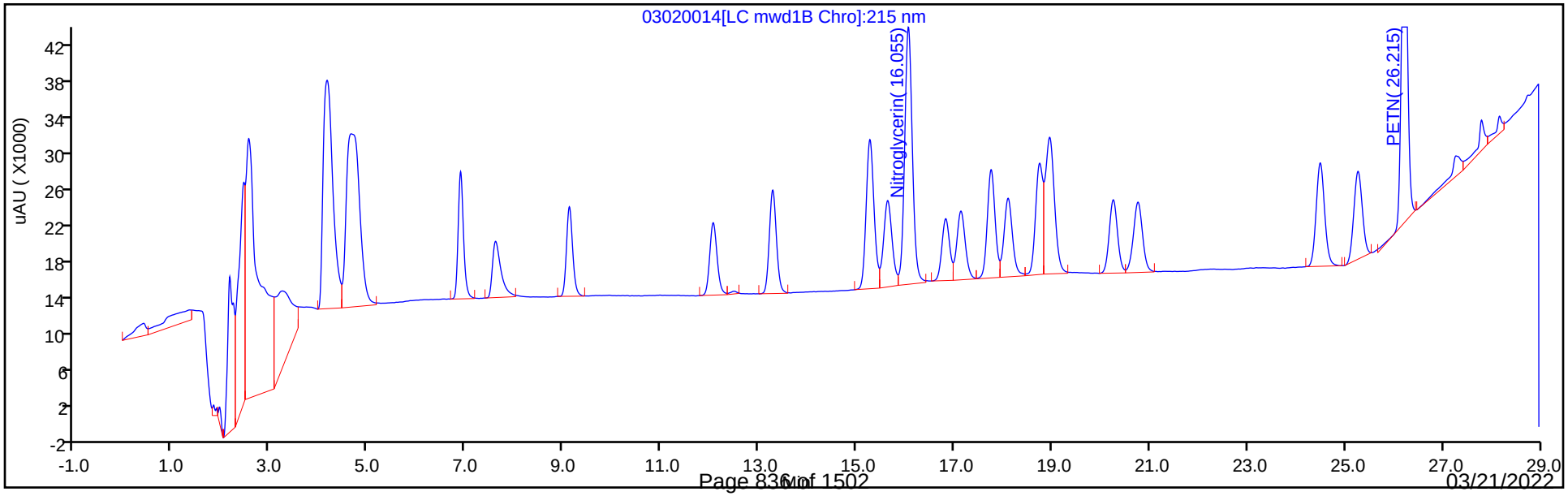
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020014.D

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

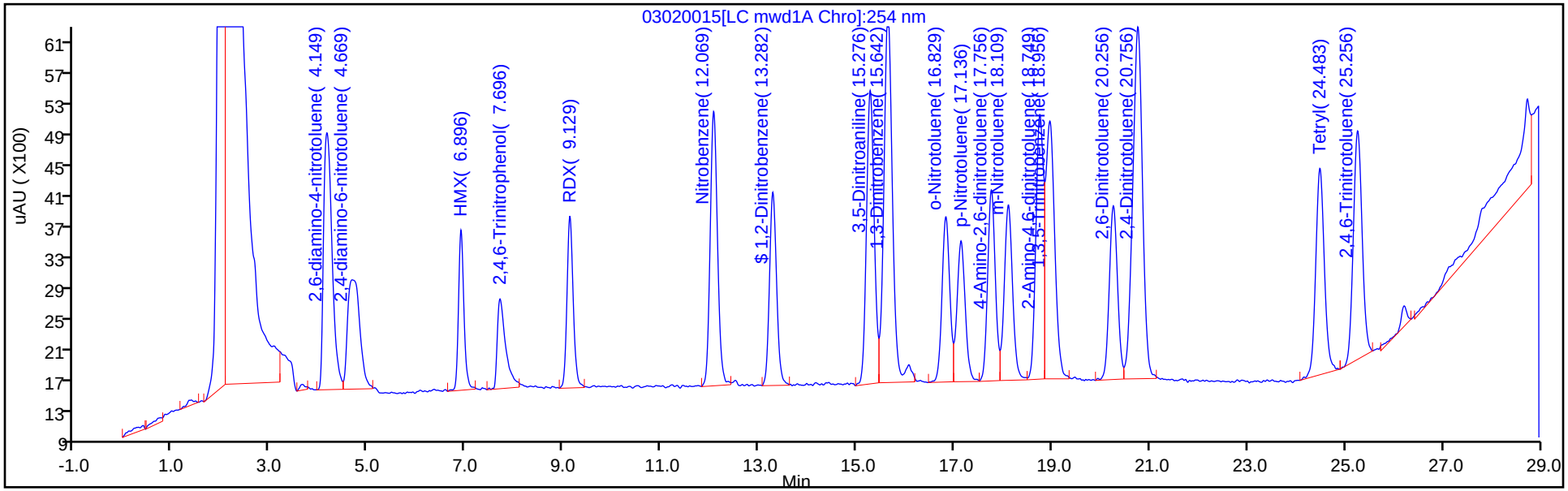
Report Date: 03-Mar-2022 12:49:16 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

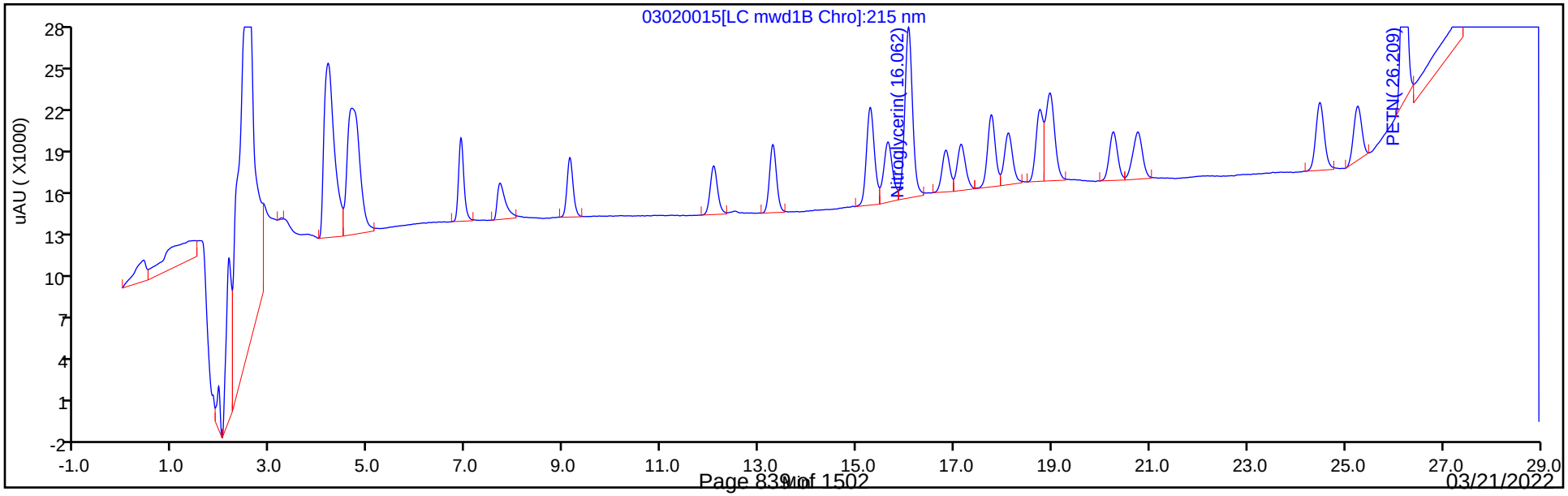
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020015.D

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

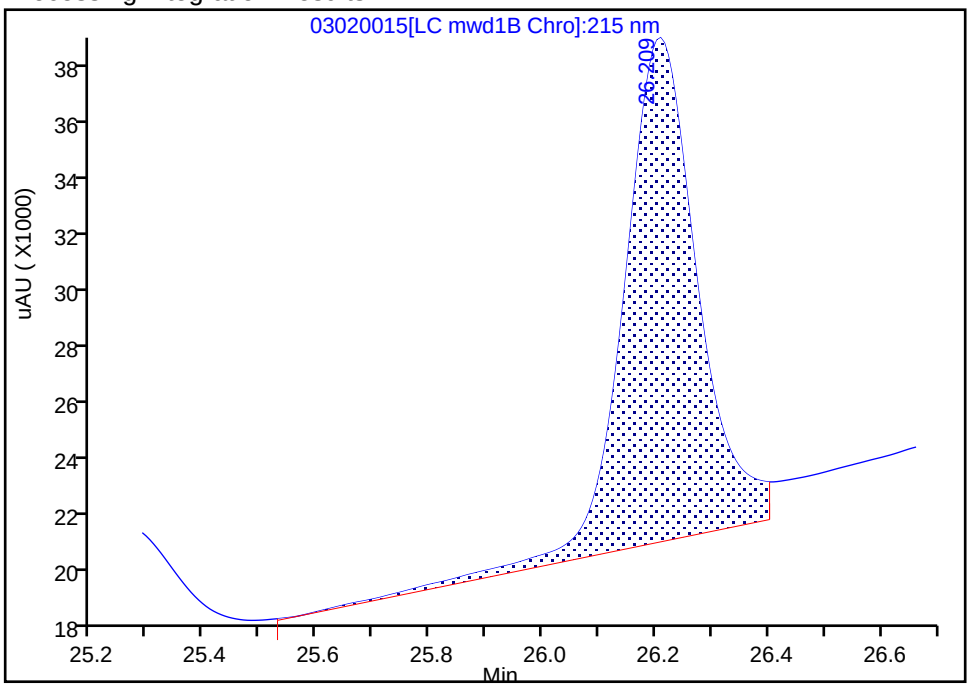
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020015.D
Injection Date: 03-Mar-2022 00:17:55 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 4
Client ID:
Operator ID: JZ ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

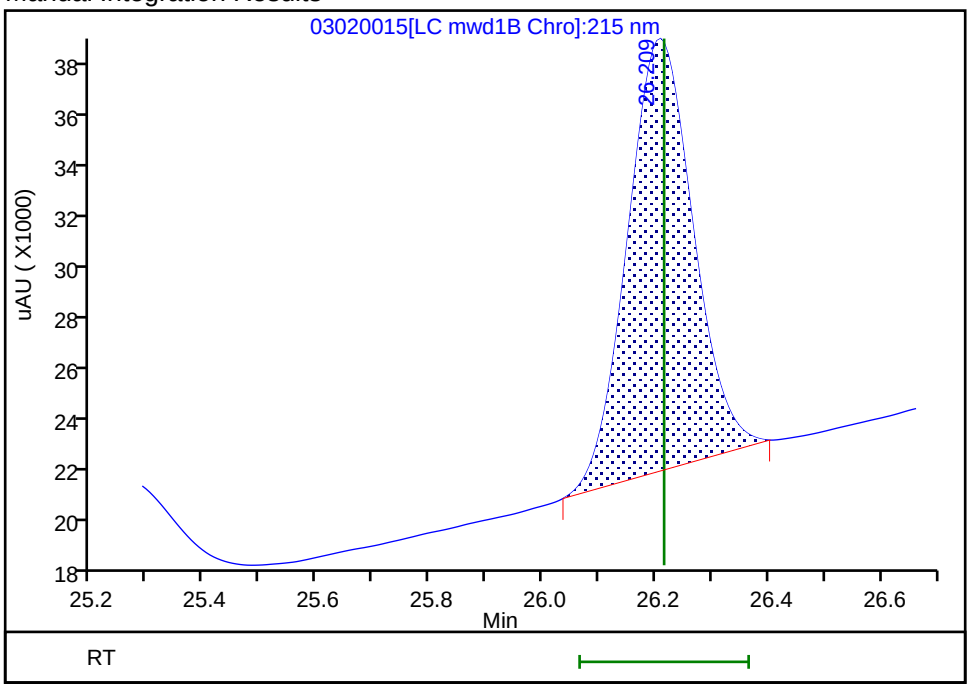
Processing Integration Results

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

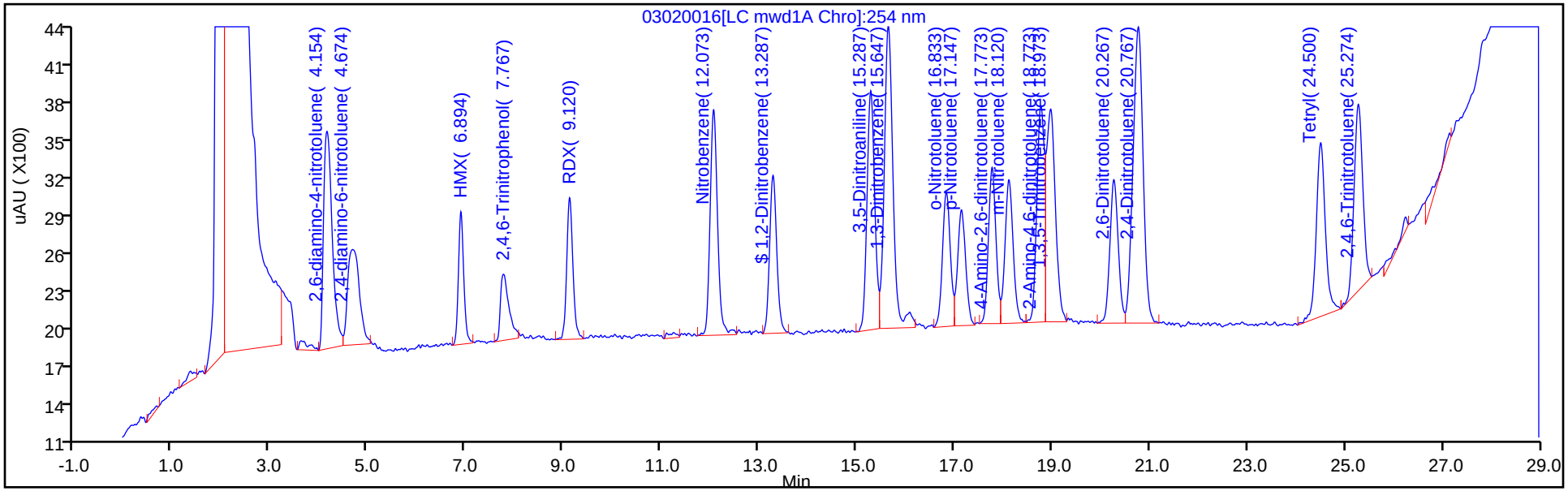
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020016.D

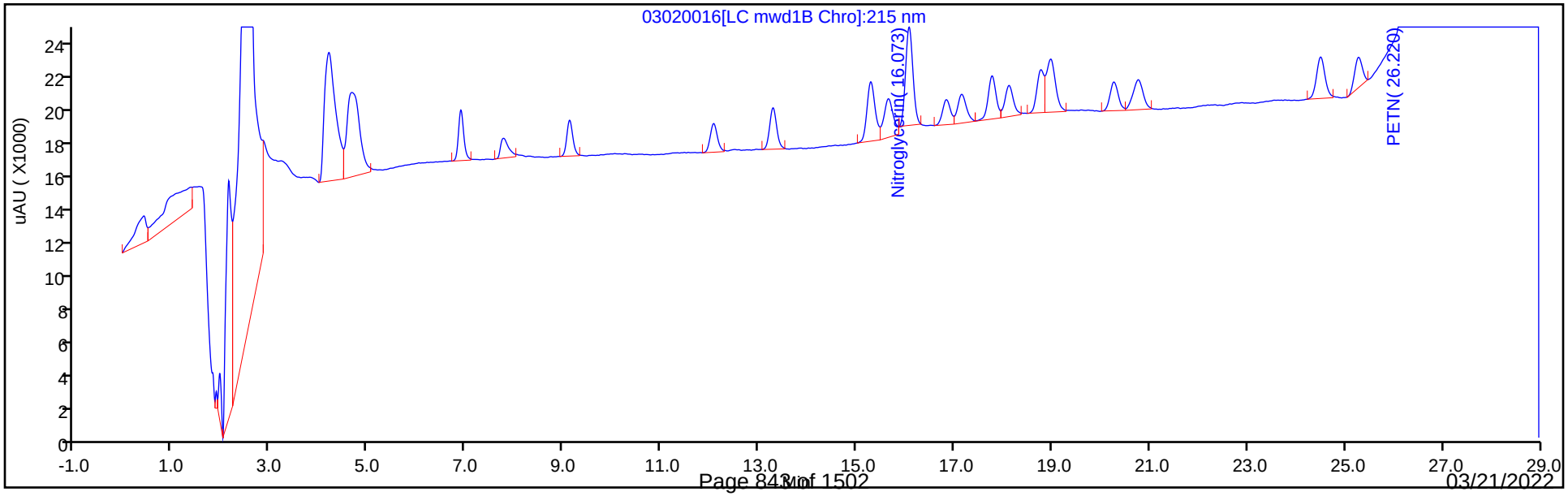
Injection Date:	03-Mar-2022 00:53:03	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 3			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

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

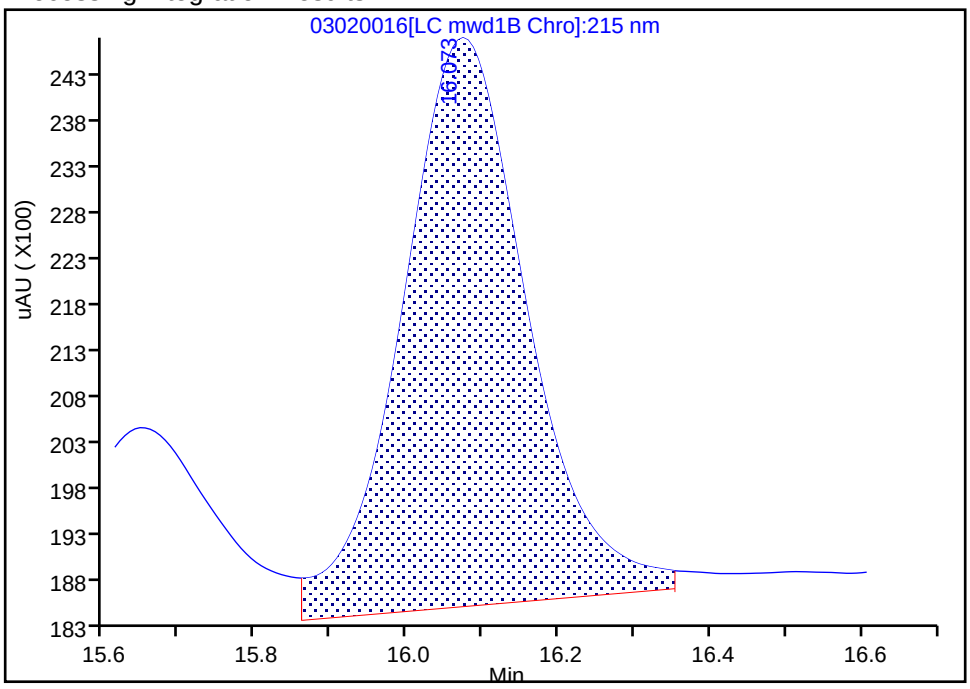
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020016.D
Injection Date: 03-Mar-2022 00:53:03 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 3
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

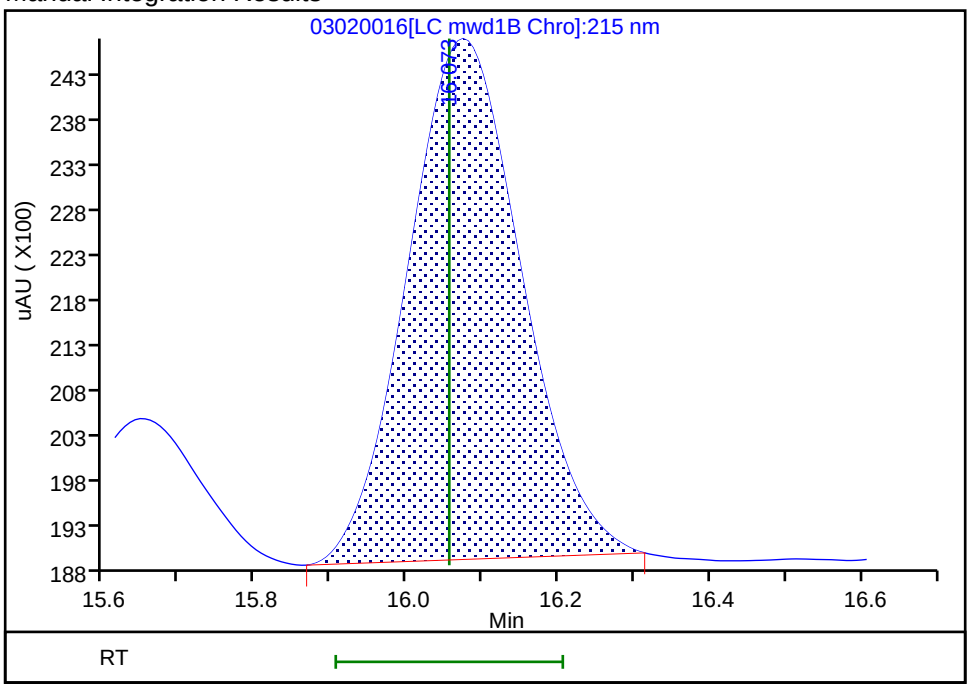
Processing Integration Results

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

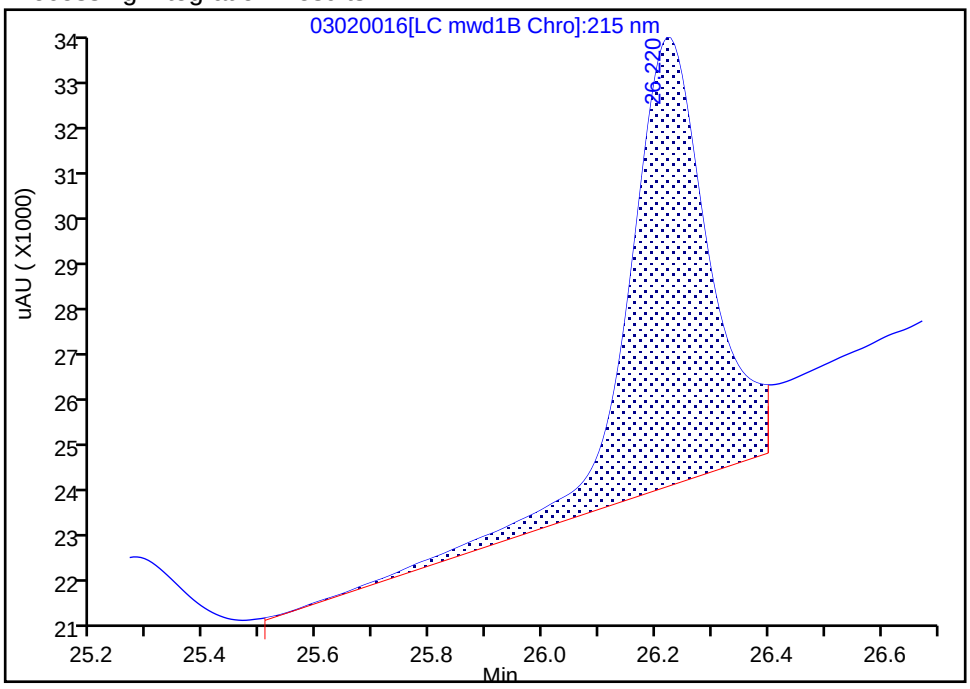
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020016.D
Injection Date: 03-Mar-2022 00:53:03 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 3
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

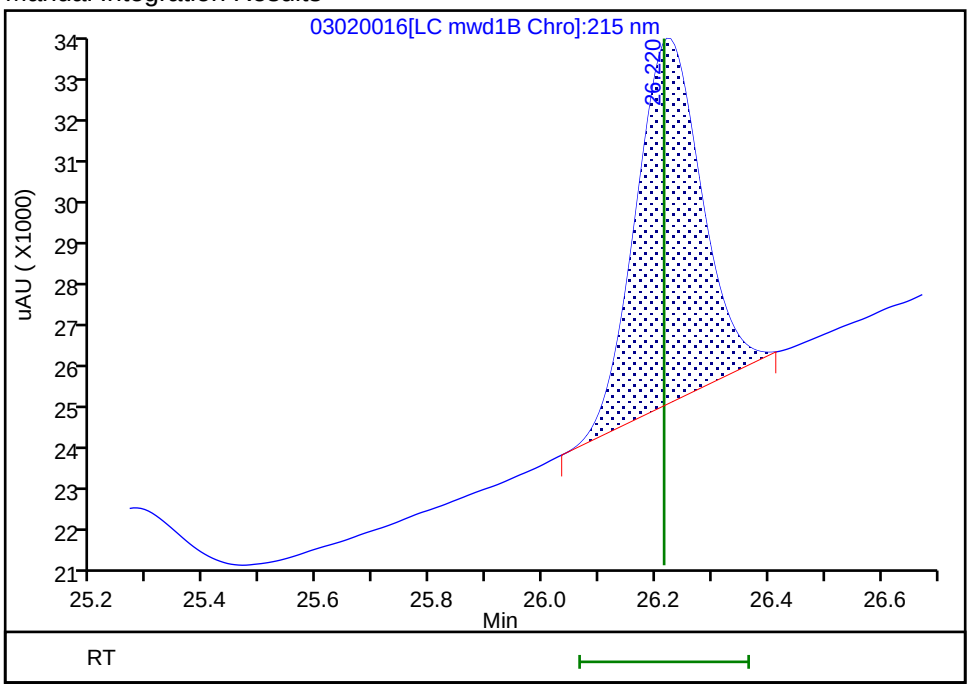
Processing Integration Results

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

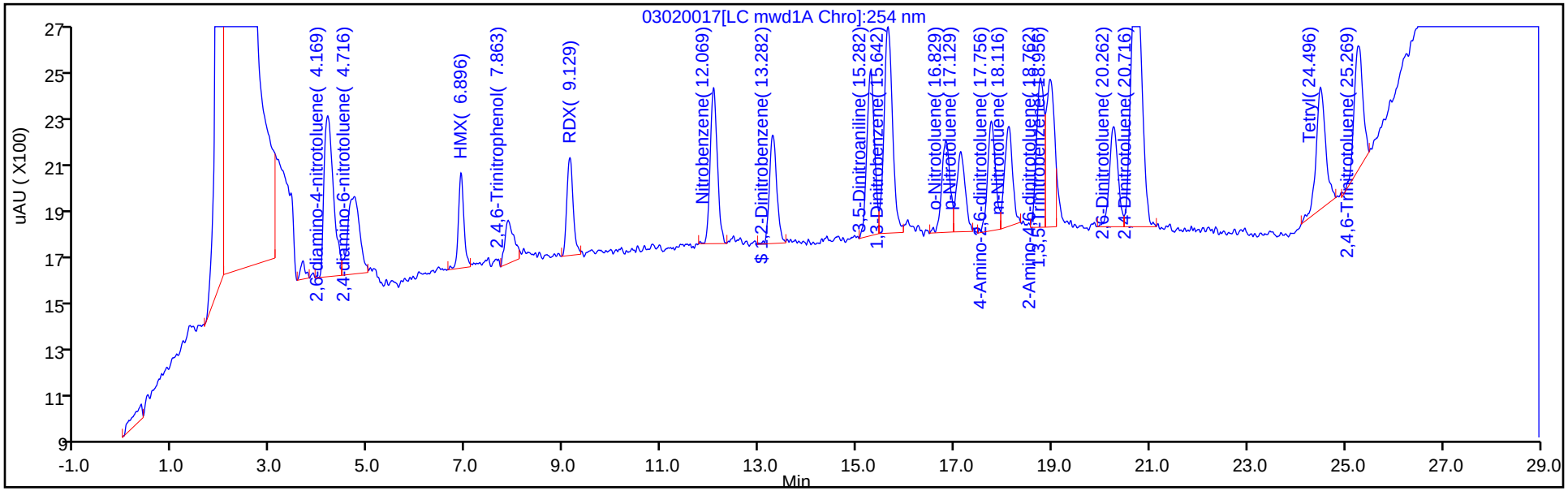
Report Date: 03-Mar-2022 12:49:17 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

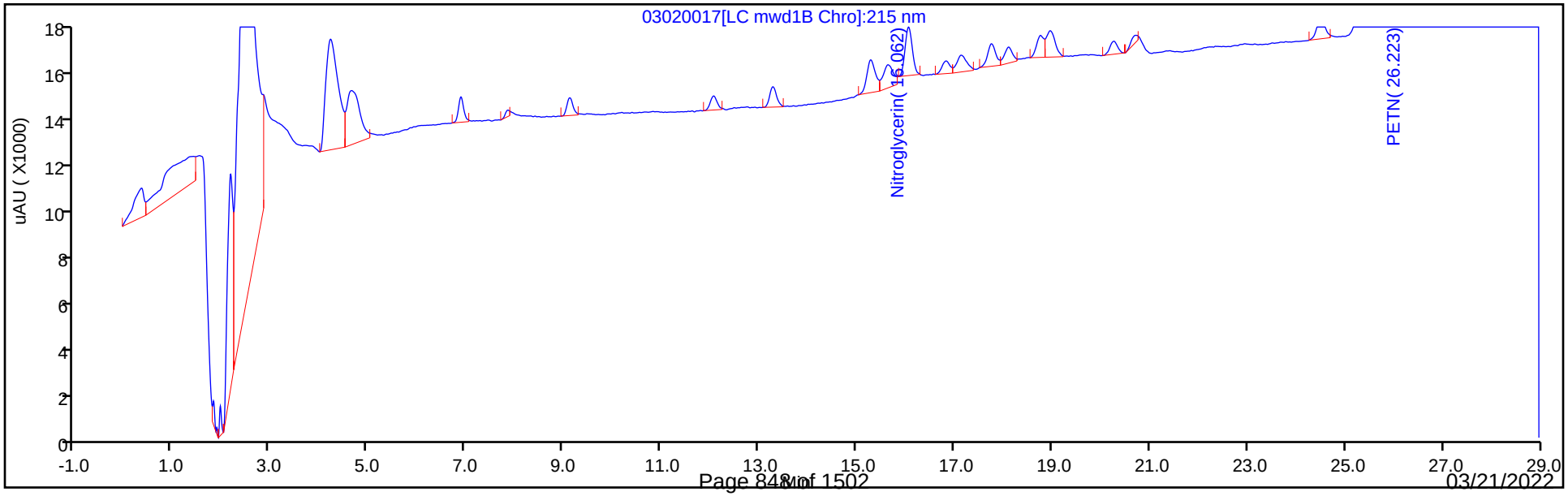
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D

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

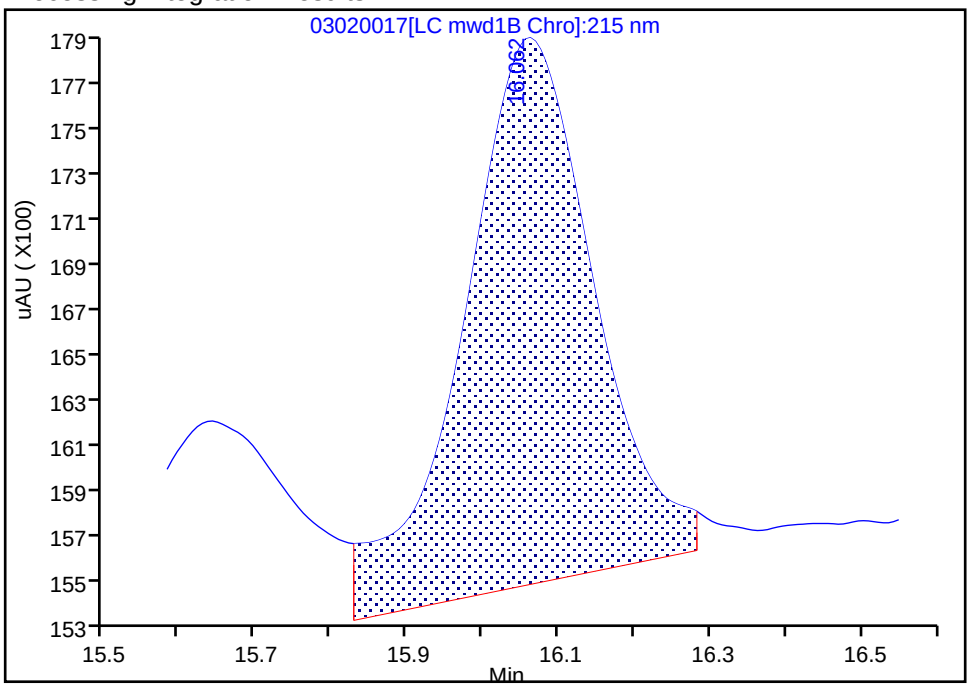
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D
Injection Date: 03-Mar-2022 01:28:22 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 2
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

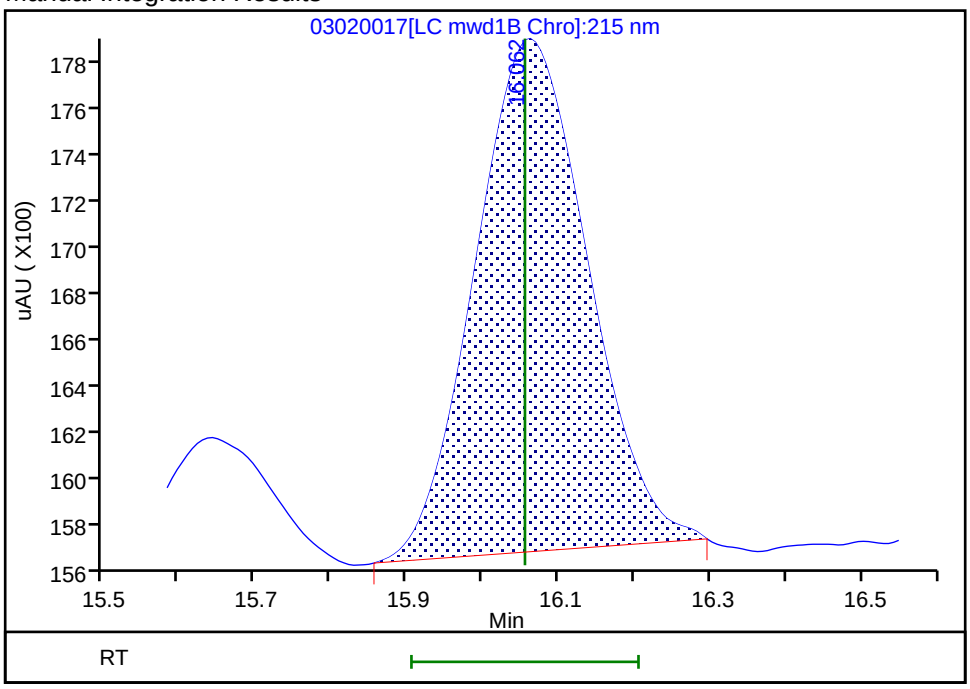
Processing Integration Results

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

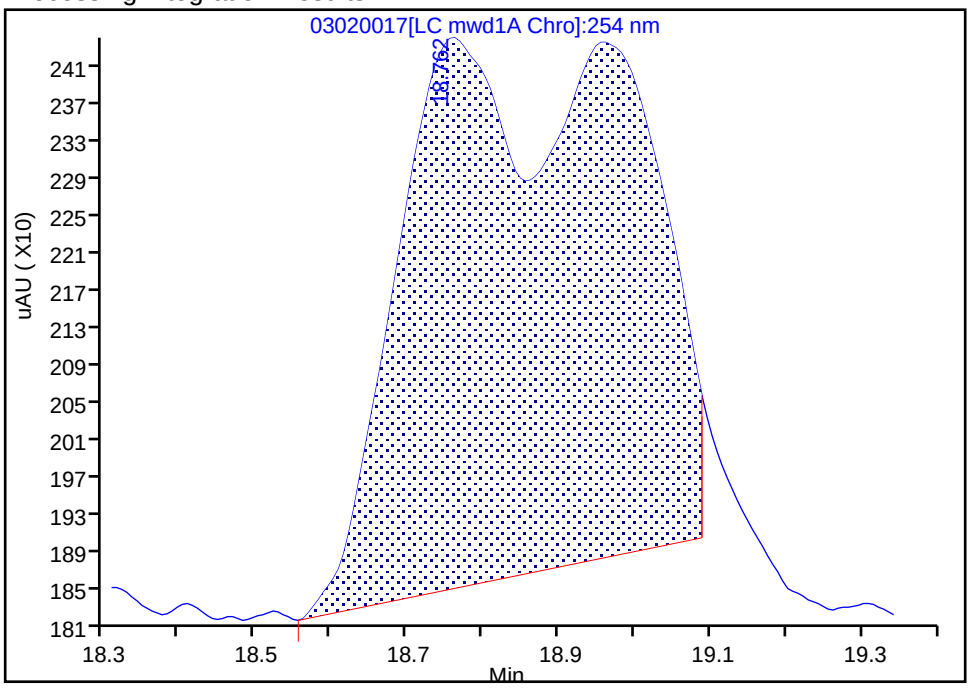
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D				
Injection Date:	03-Mar-2022 01:28:22	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

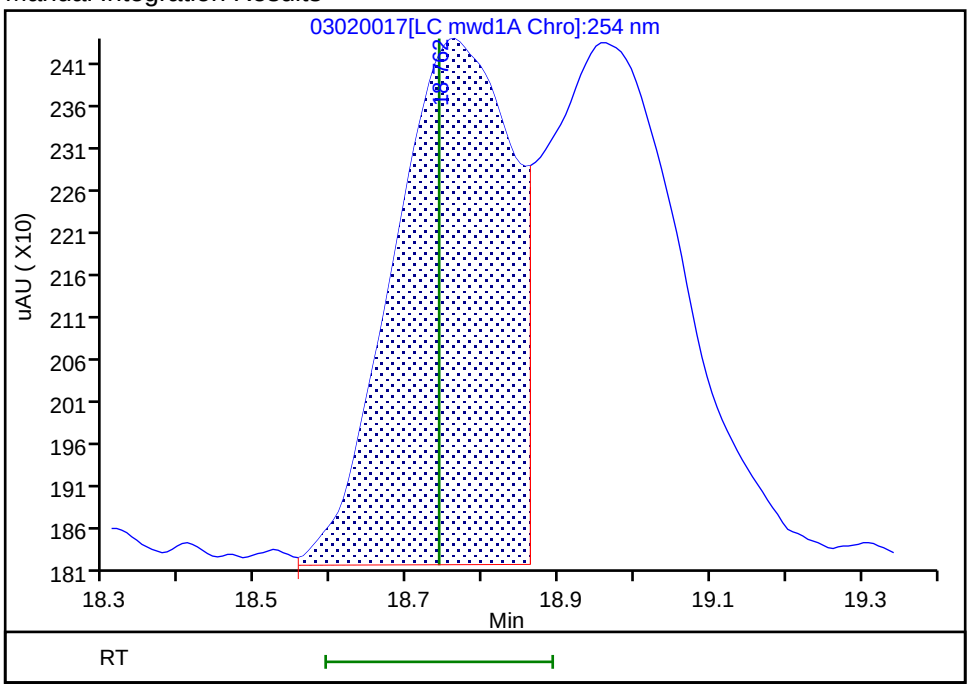
Processing Integration Results

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

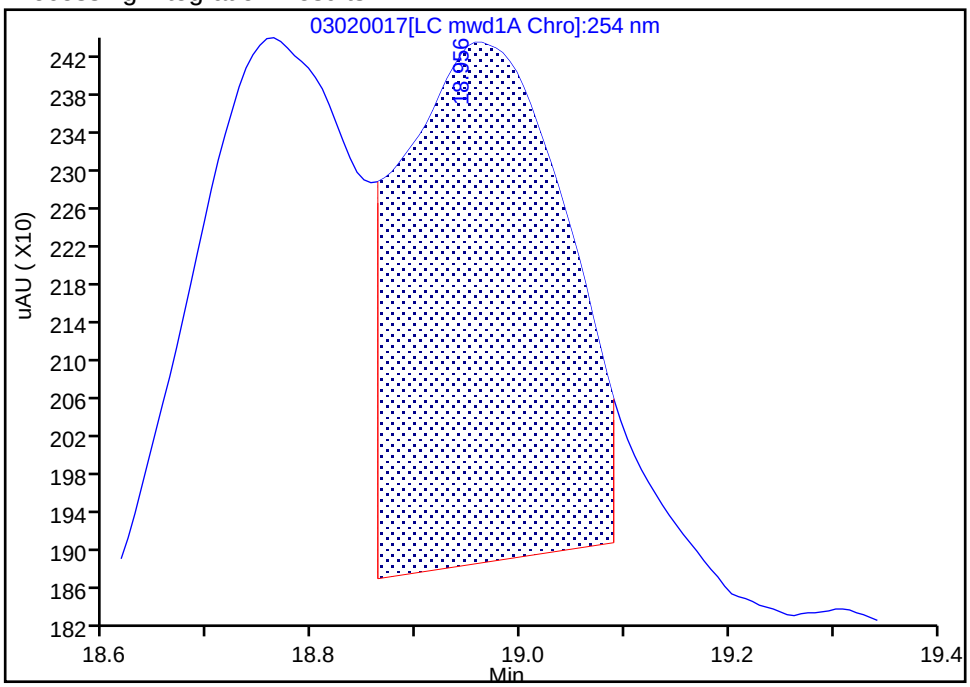
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D
Injection Date: 03-Mar-2022 01:28:22 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 2
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

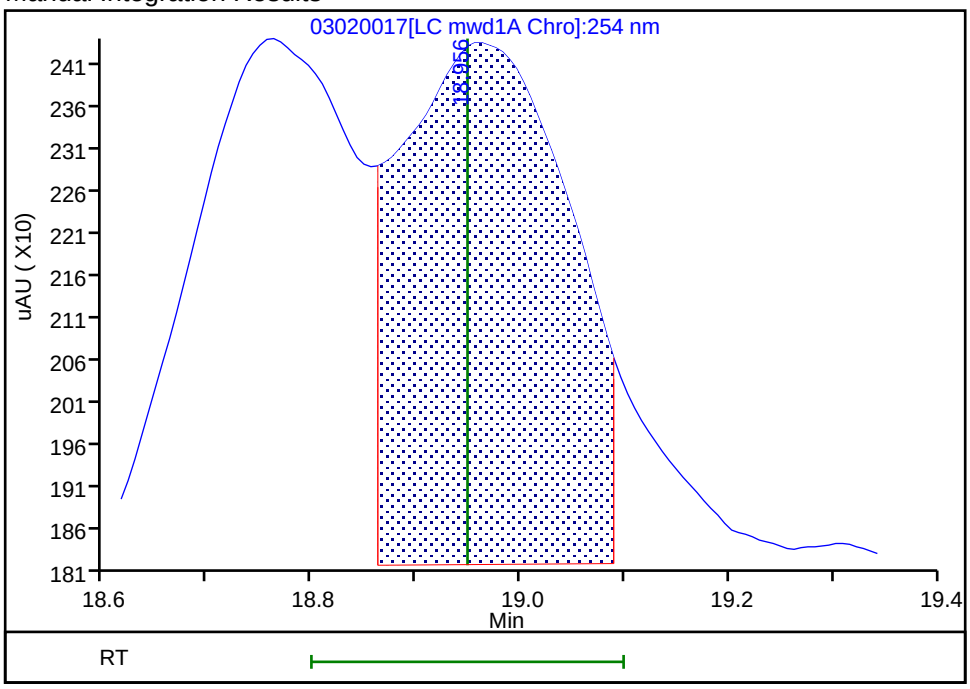
Processing Integration Results

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

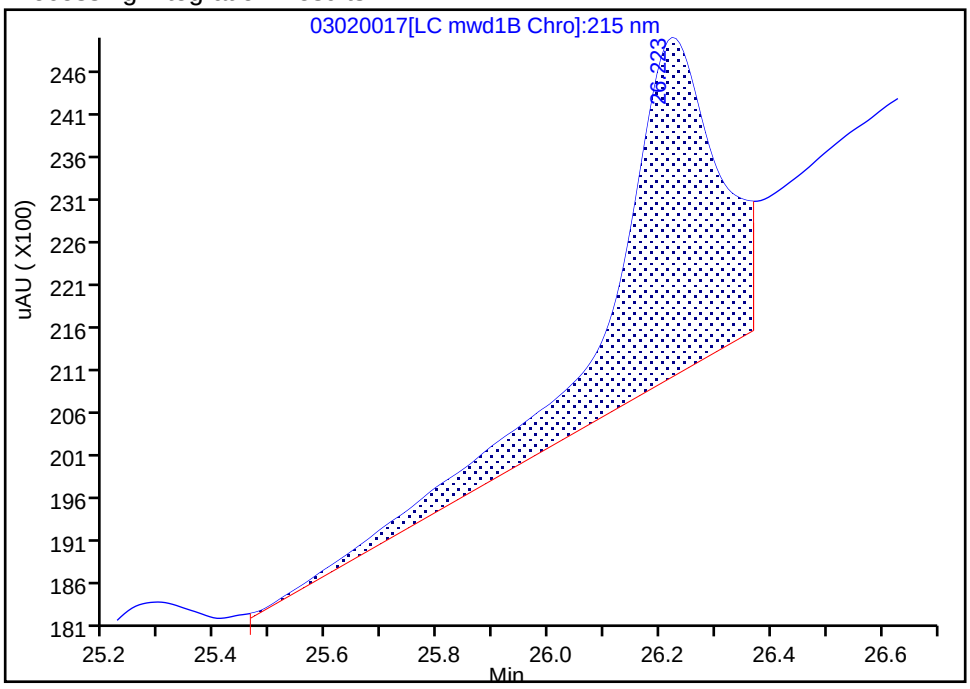
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D
Injection Date: 03-Mar-2022 01:28:22 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 2
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

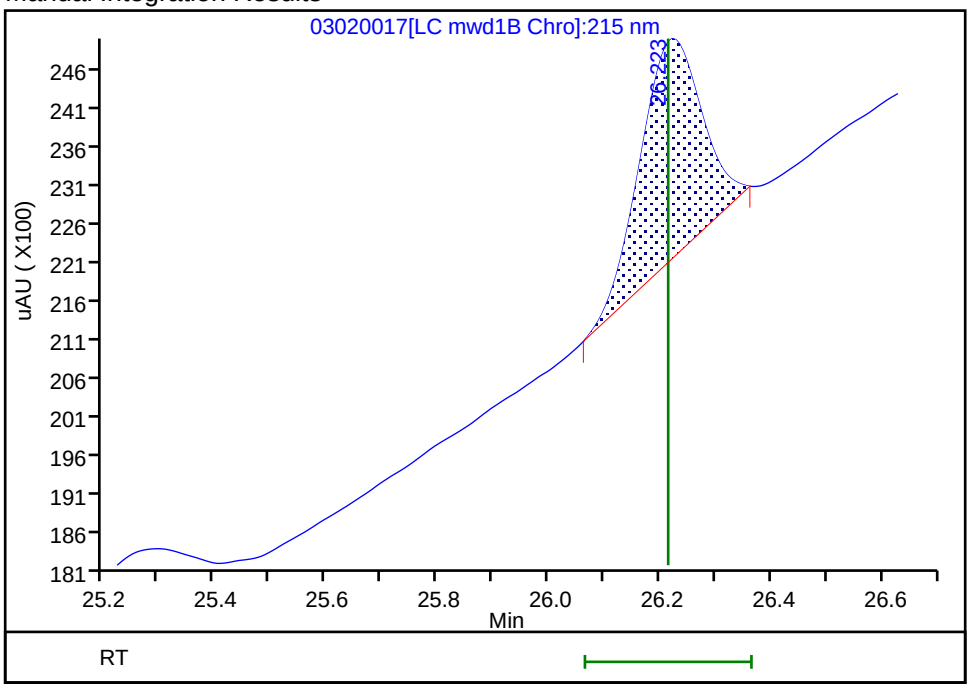
Processing Integration Results

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

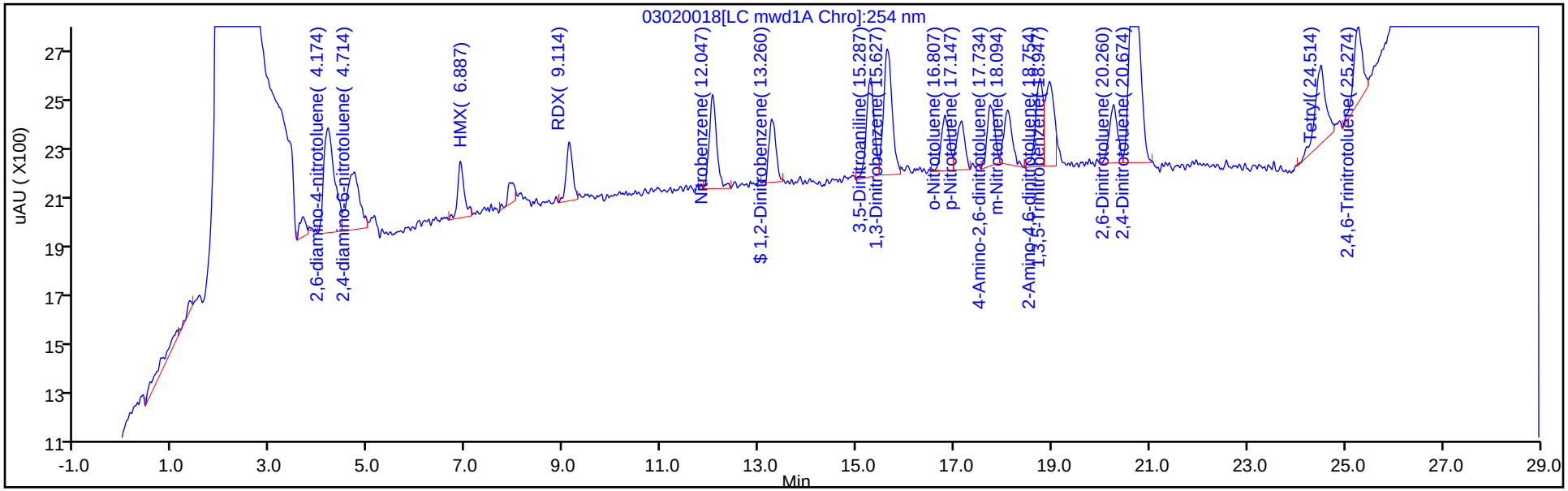
Report Date: 03-Mar-2022 12:49:18 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

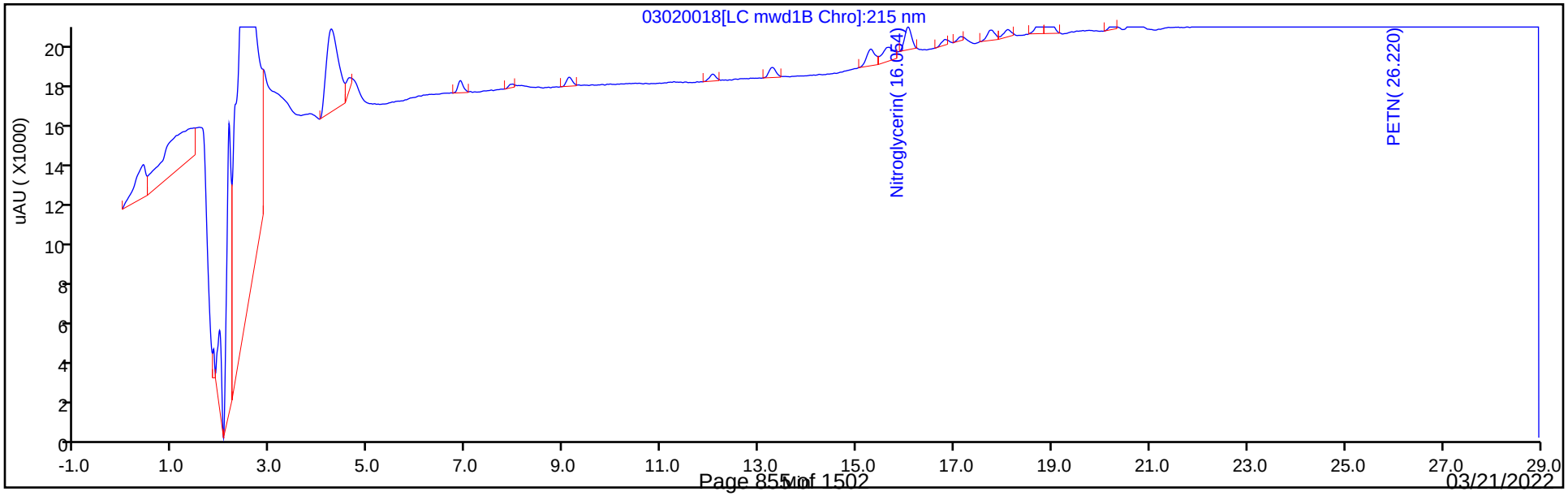
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D

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

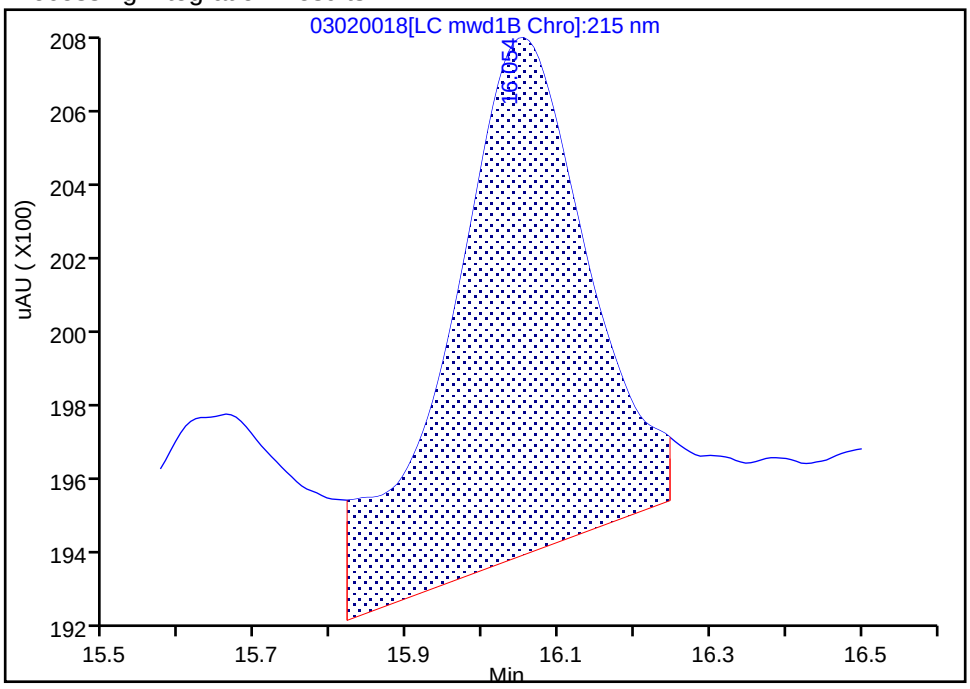
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D
Injection Date: 03-Mar-2022 02:03:29 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 1
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

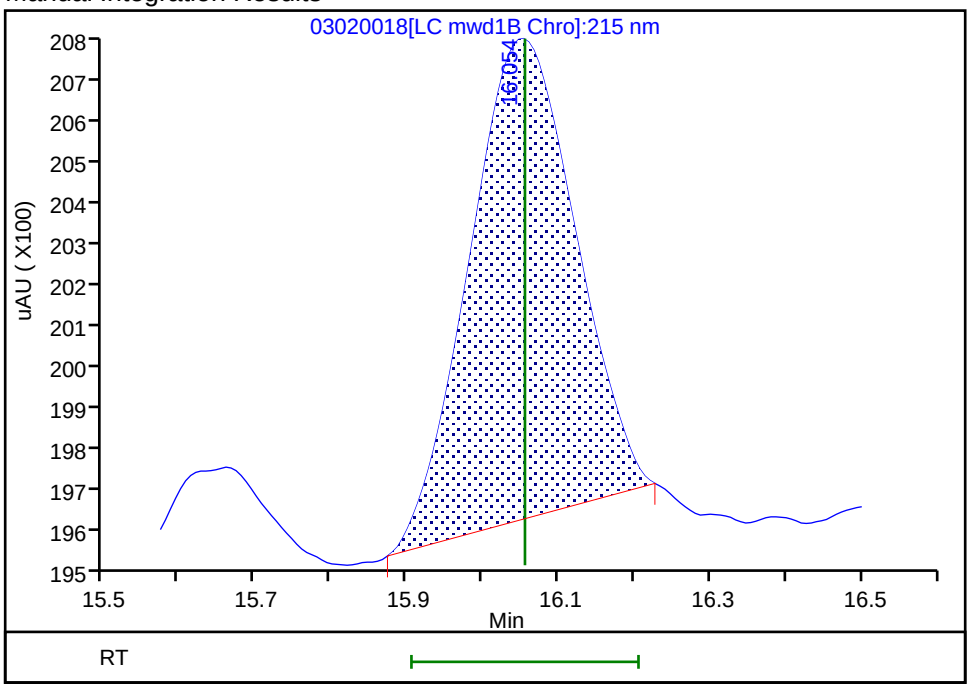
Processing Integration Results

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

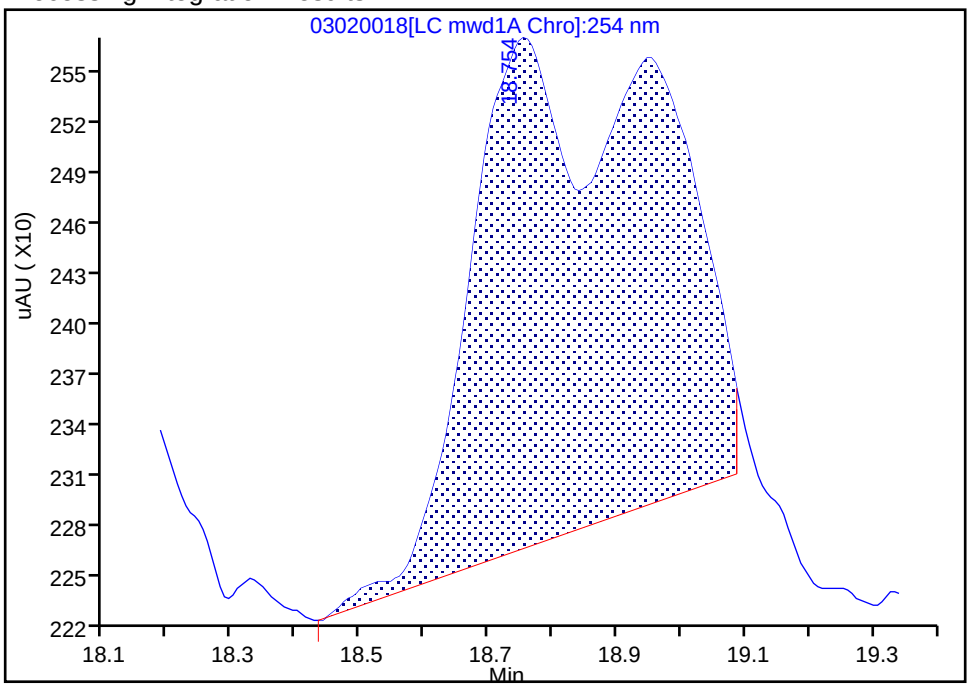
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D				
Injection Date:	03-Mar-2022 02:03:29	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

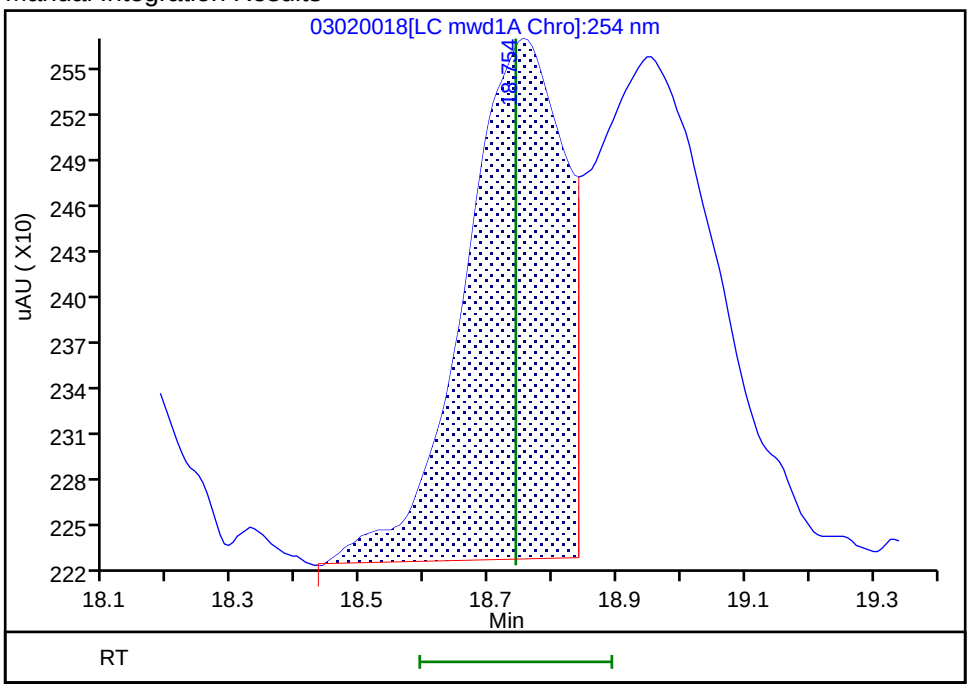
Processing Integration Results

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

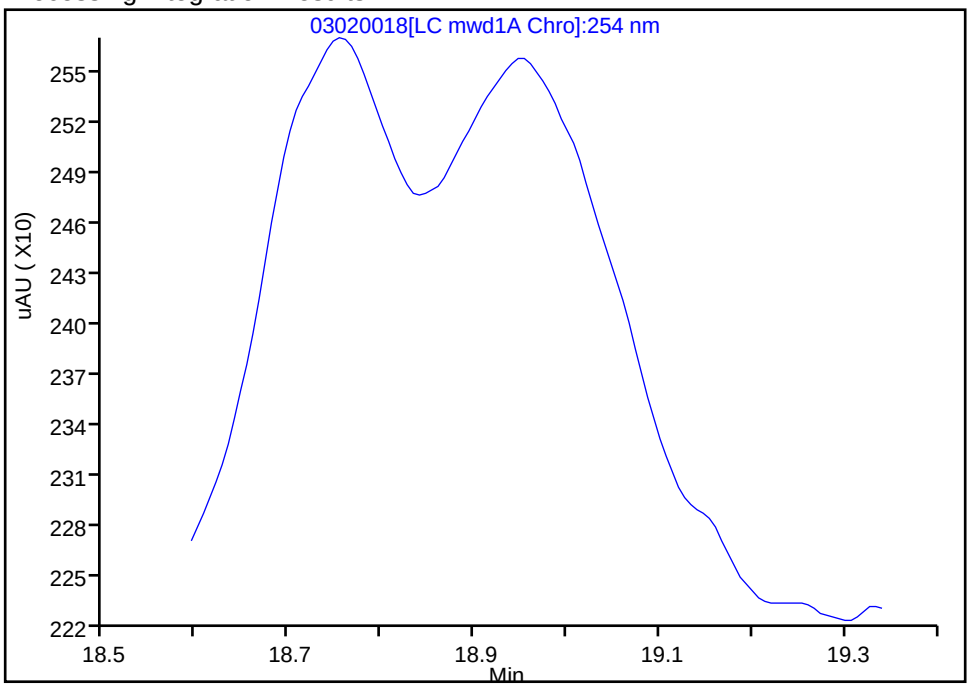
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D				
Injection Date:	03-Mar-2022 02:03:29	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

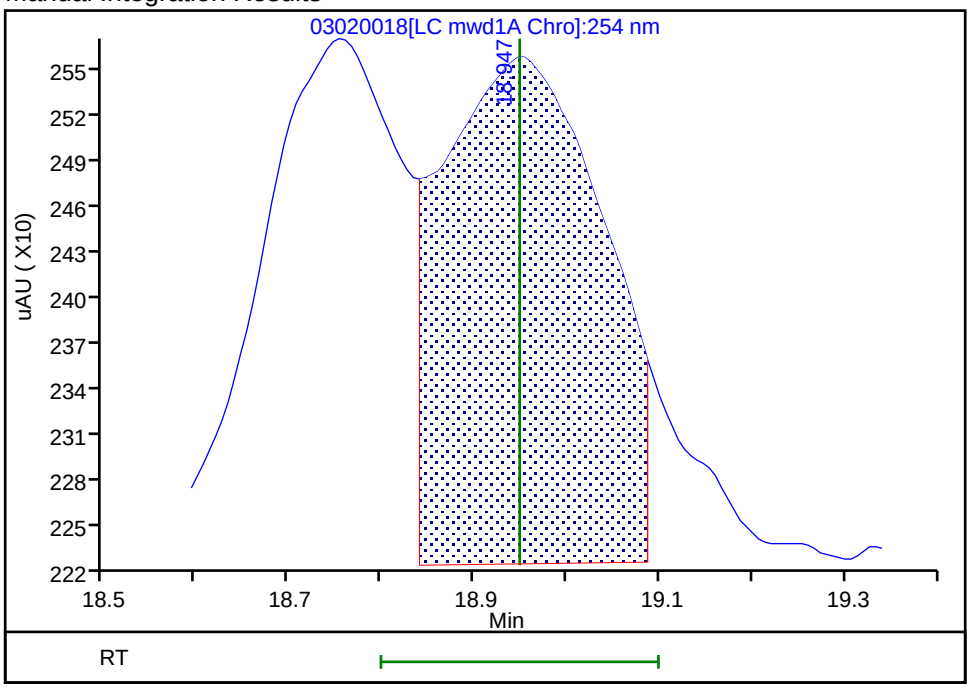
Not Detected
Expected RT: 18.95

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

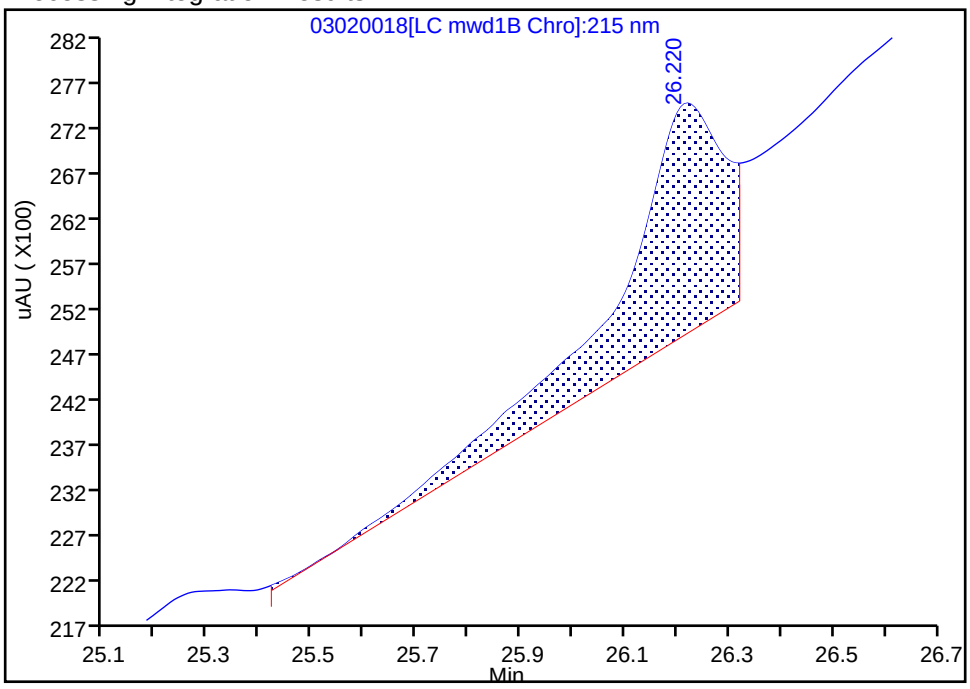
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D
Injection Date: 03-Mar-2022 02:03:29 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 1
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

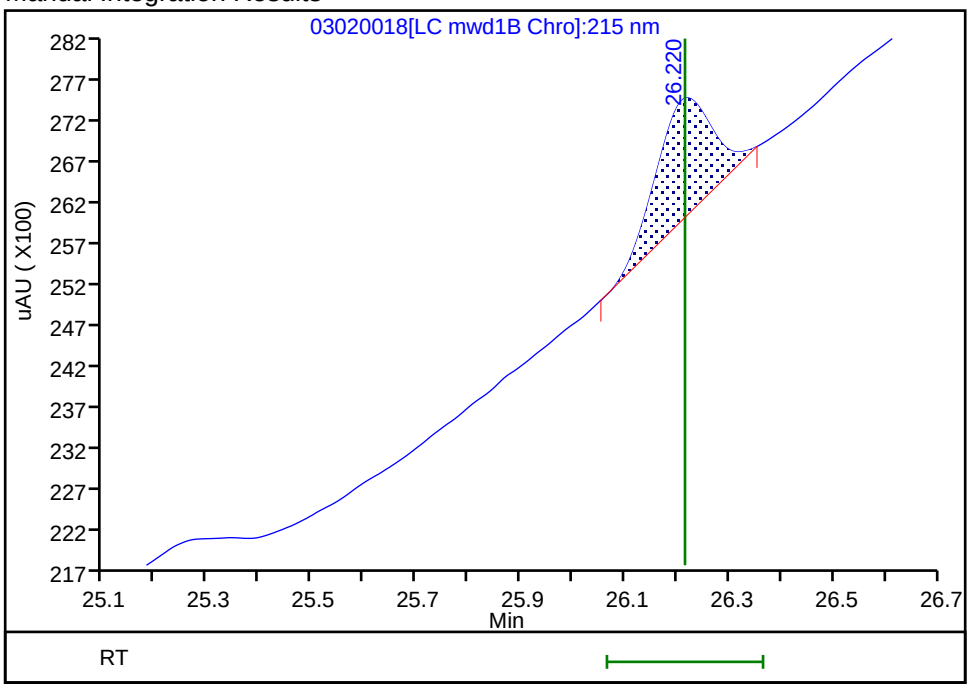
Processing Integration Results

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

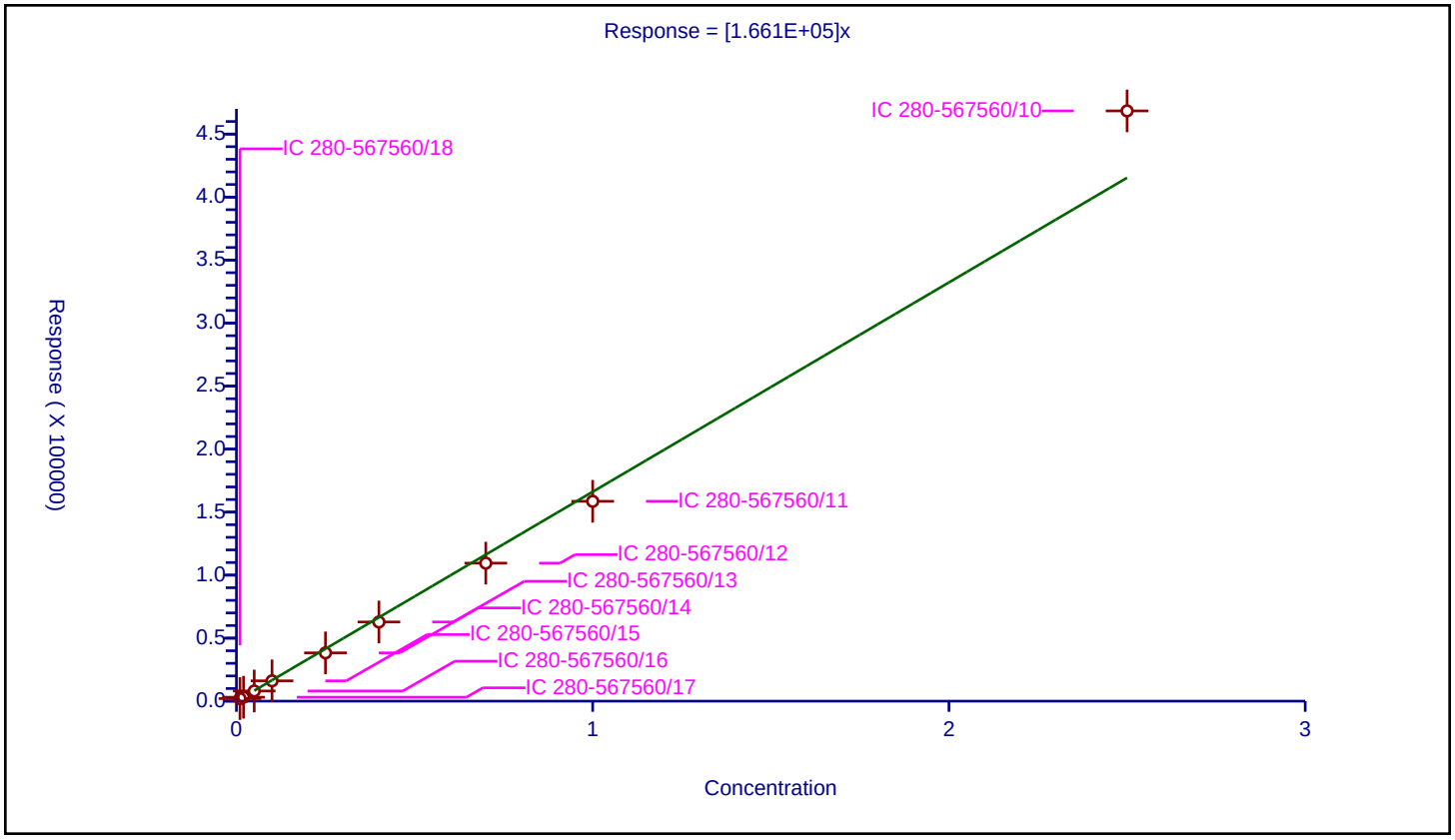
Curve Coefficients

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

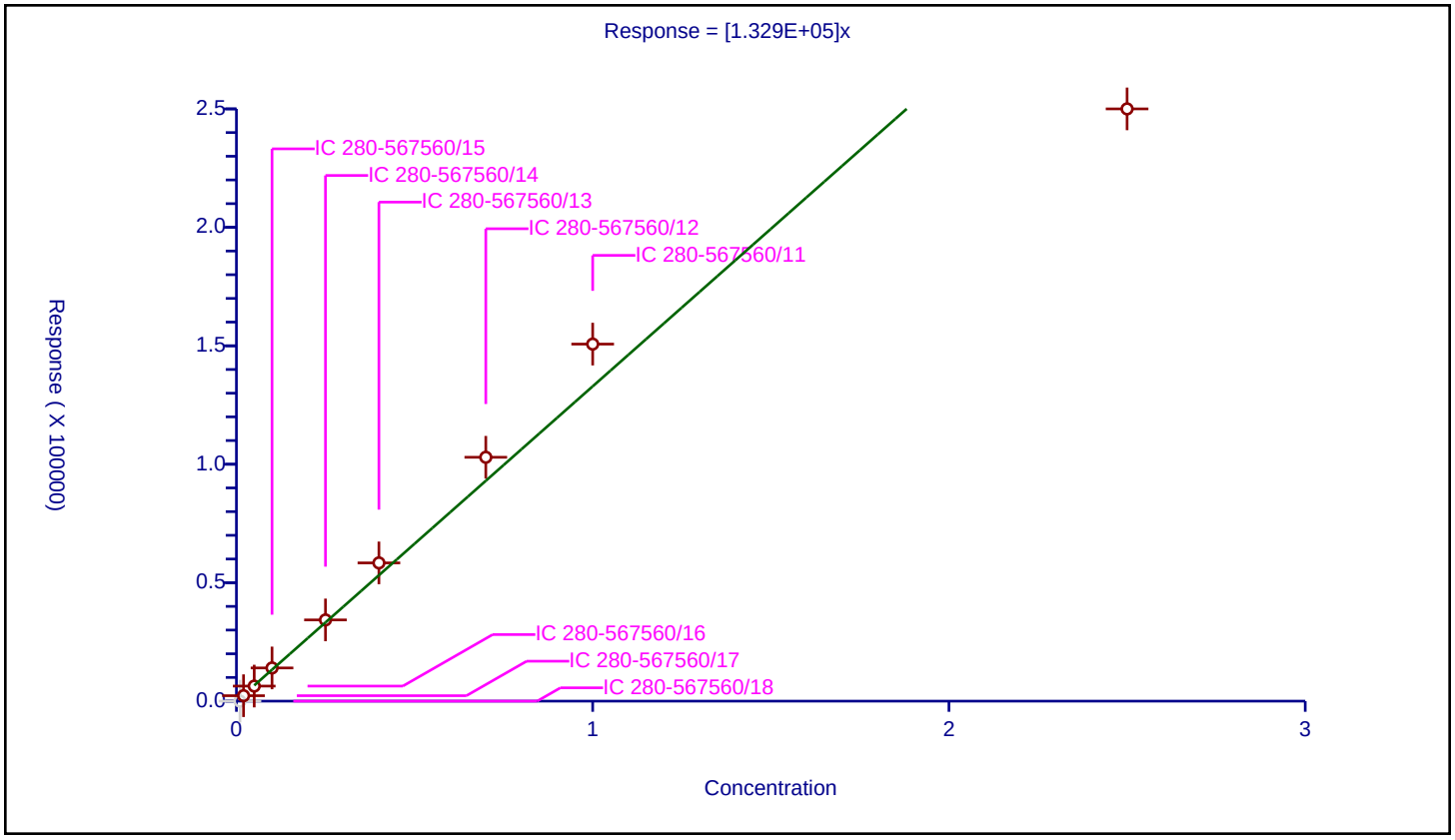
Curve Coefficients

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

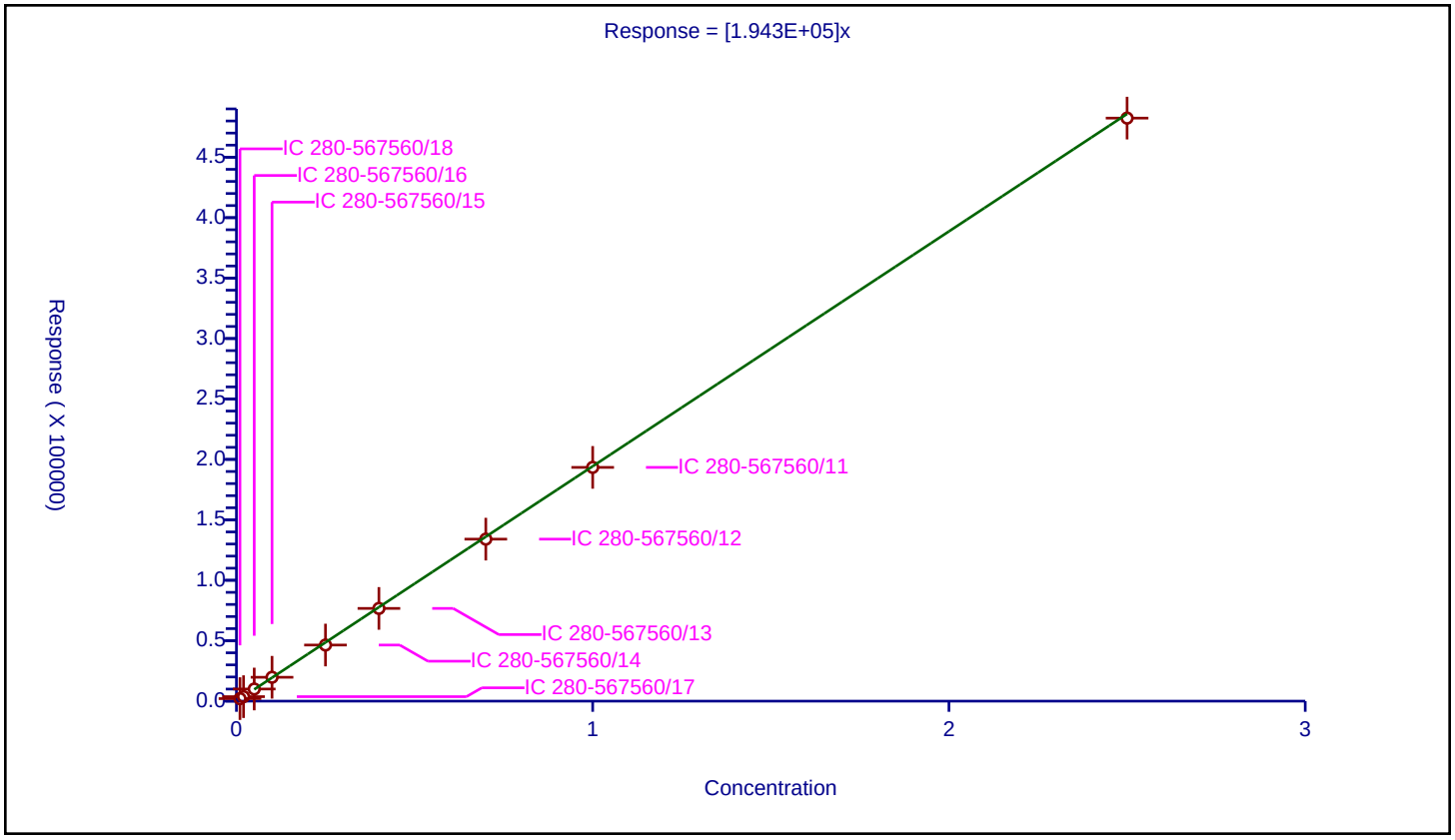
Curve Coefficients

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

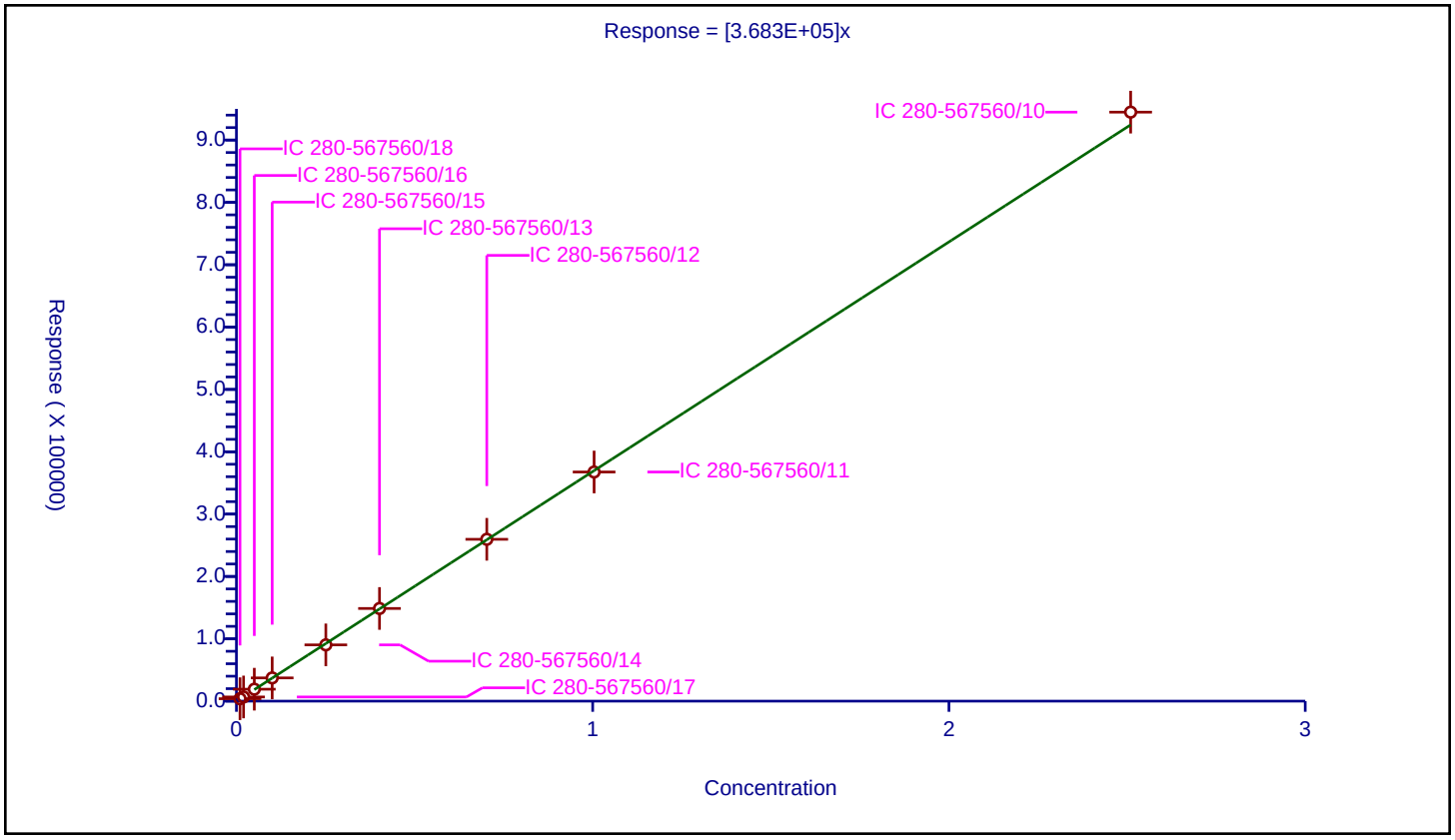
Curve Coefficients

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

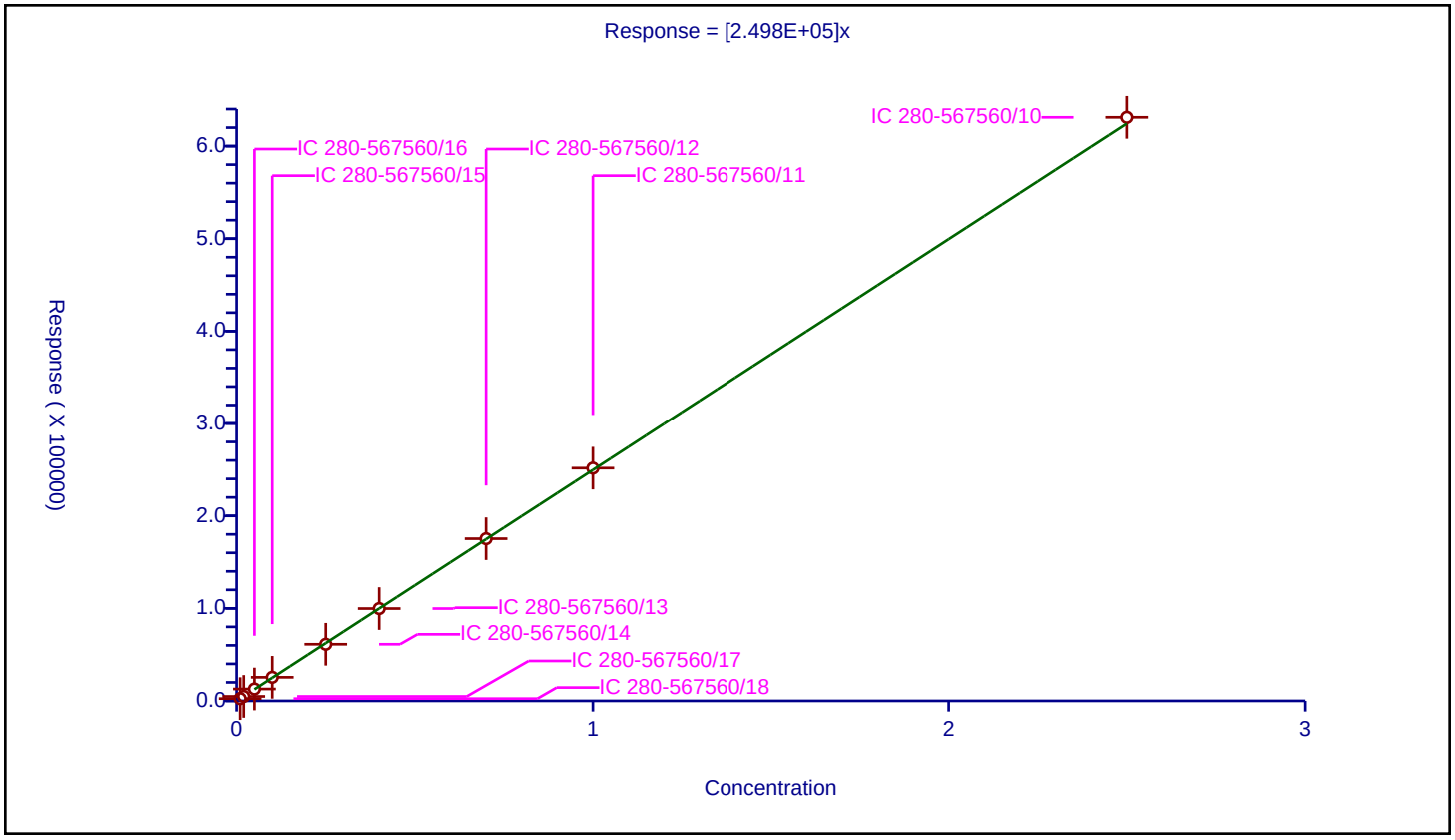
Curve Coefficients

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

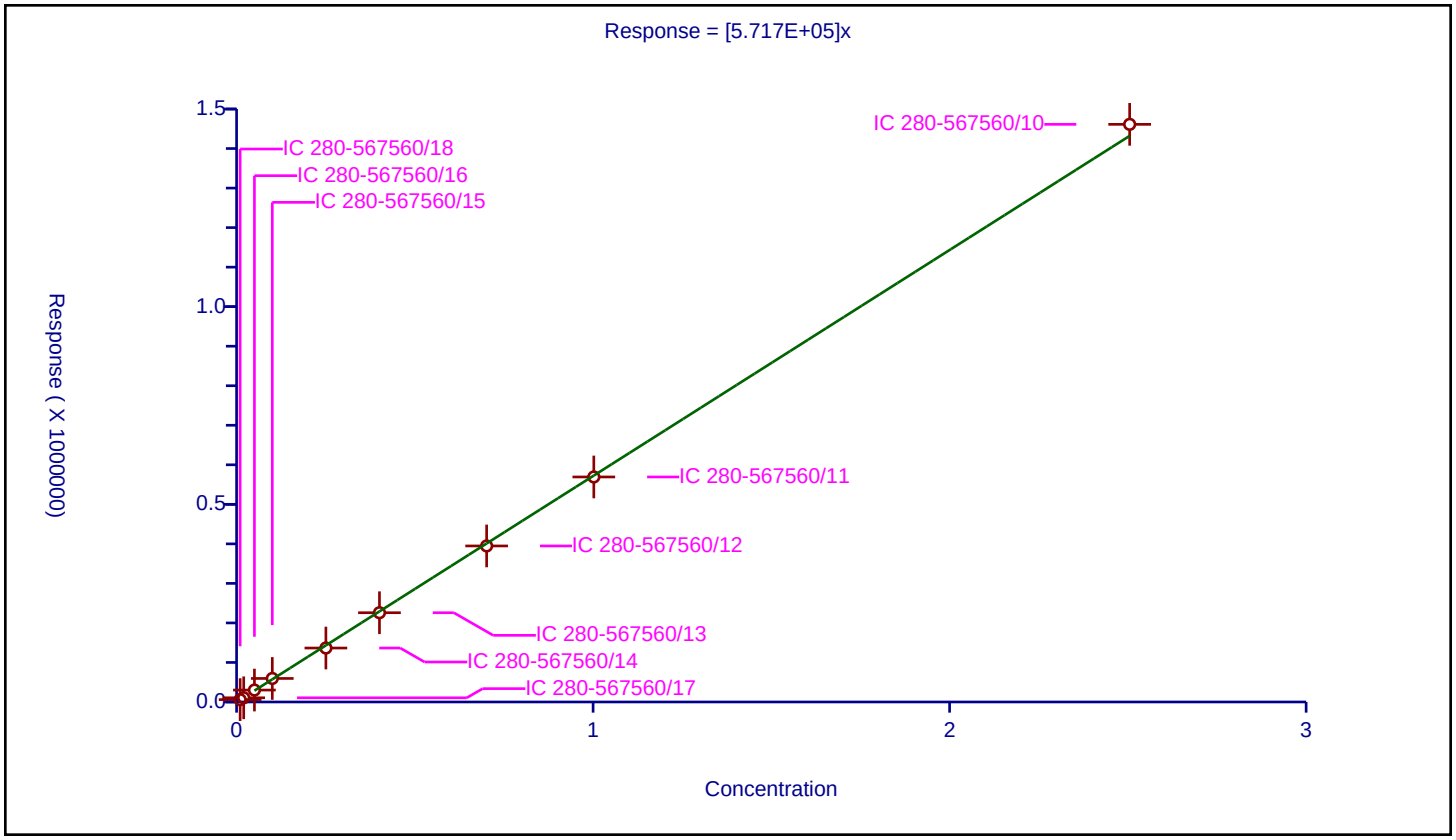
Curve Coefficients

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

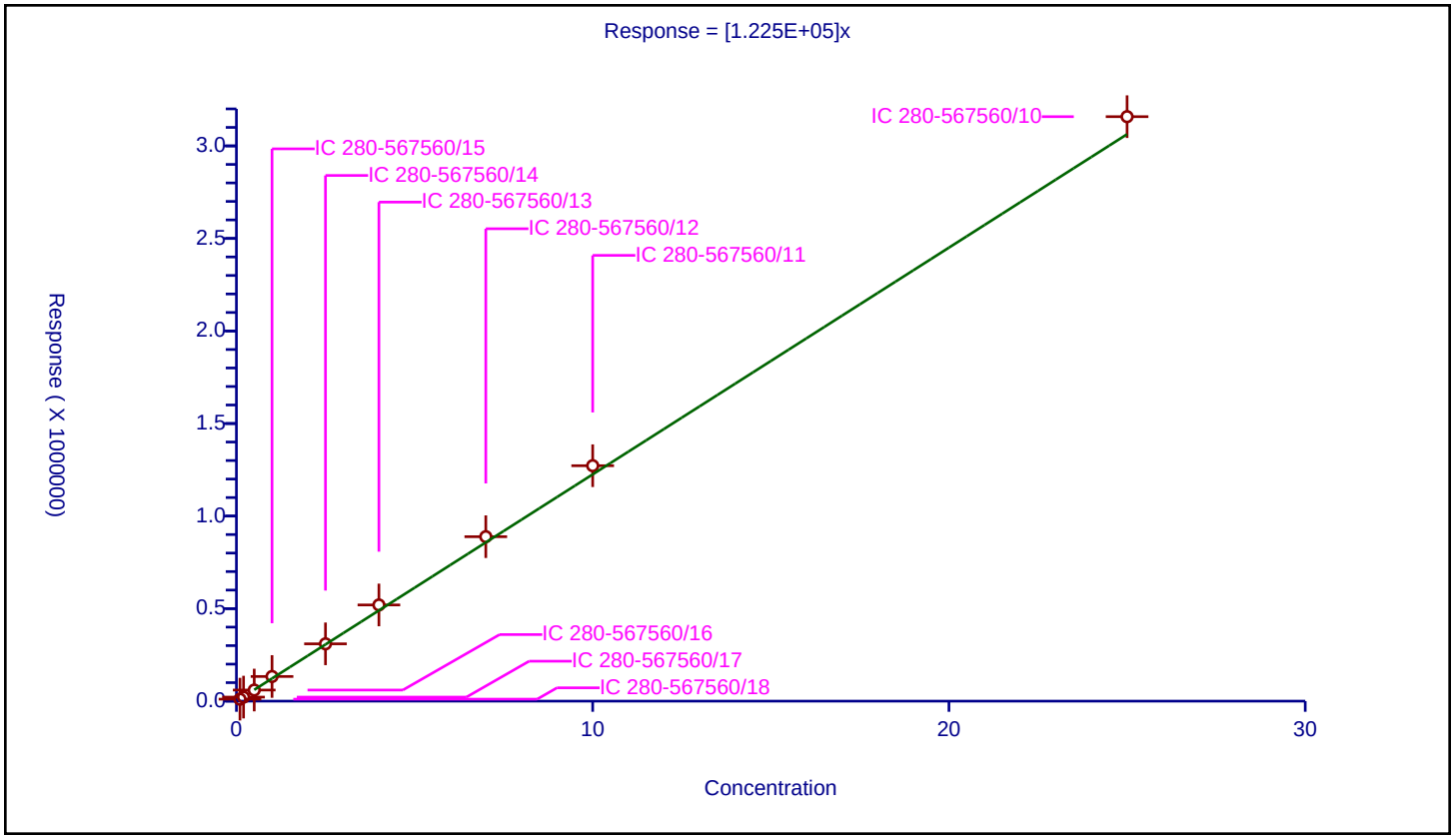
Curve Coefficients

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

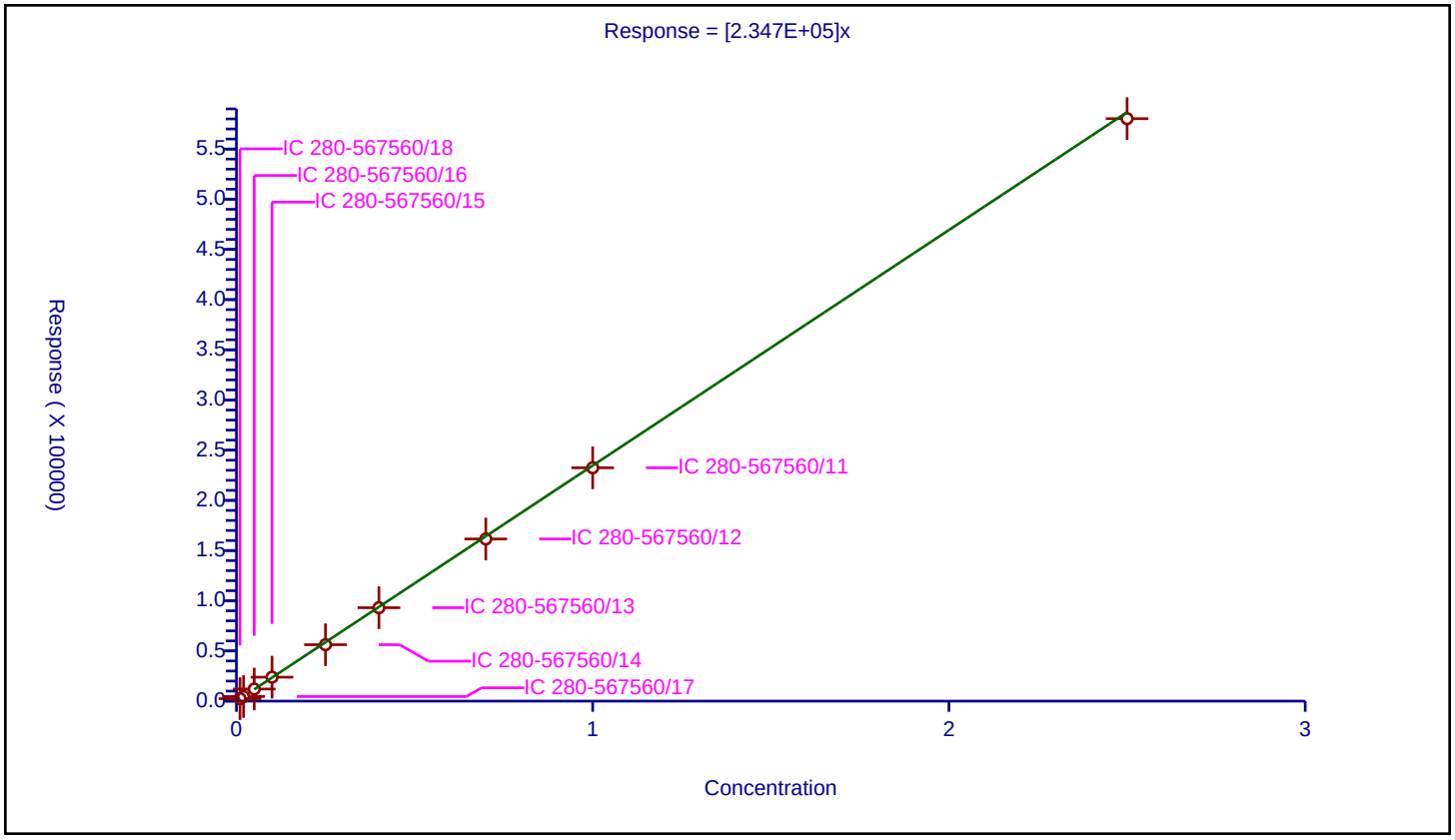
Curve Coefficients

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

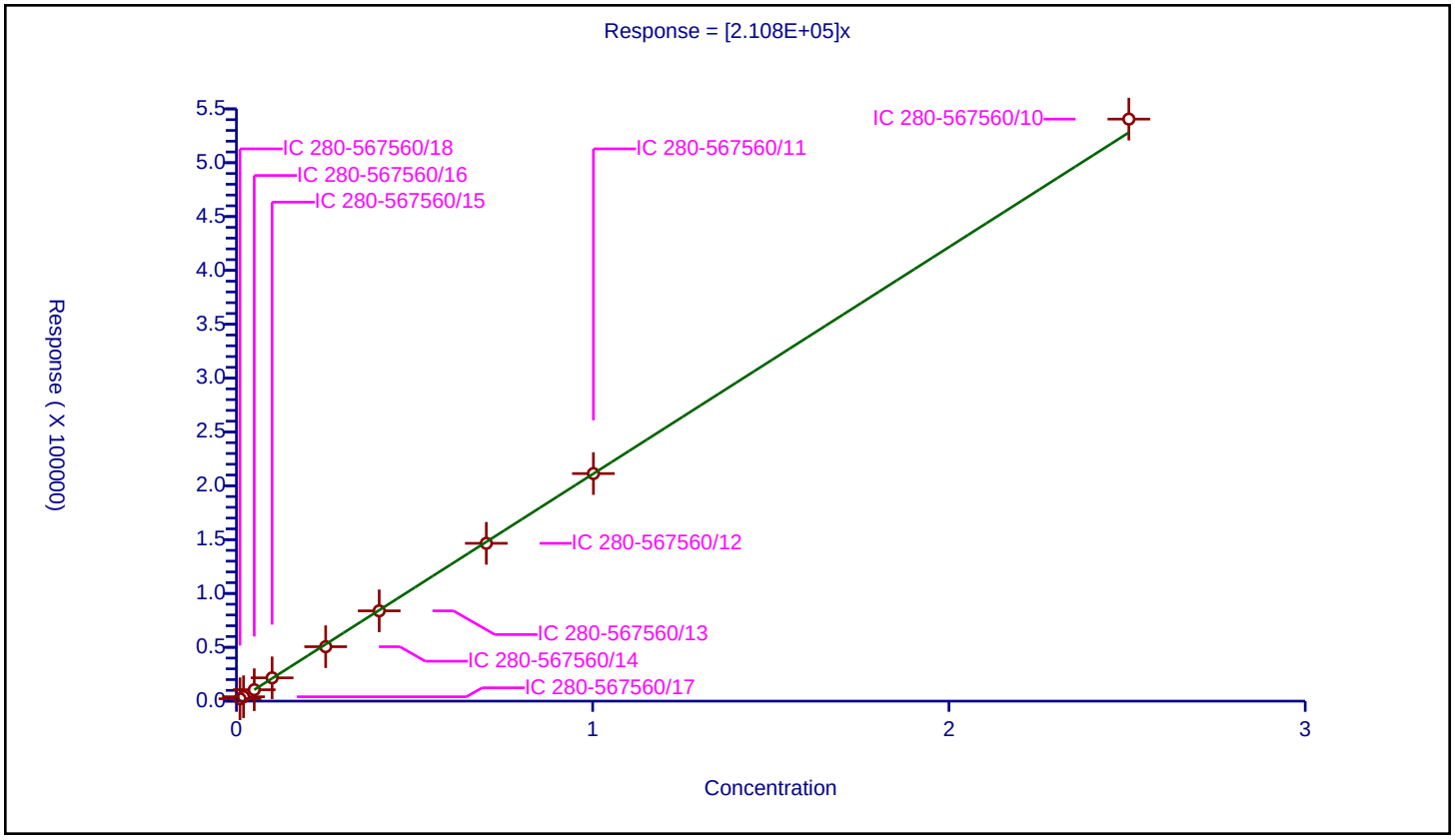
Curve Coefficients

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

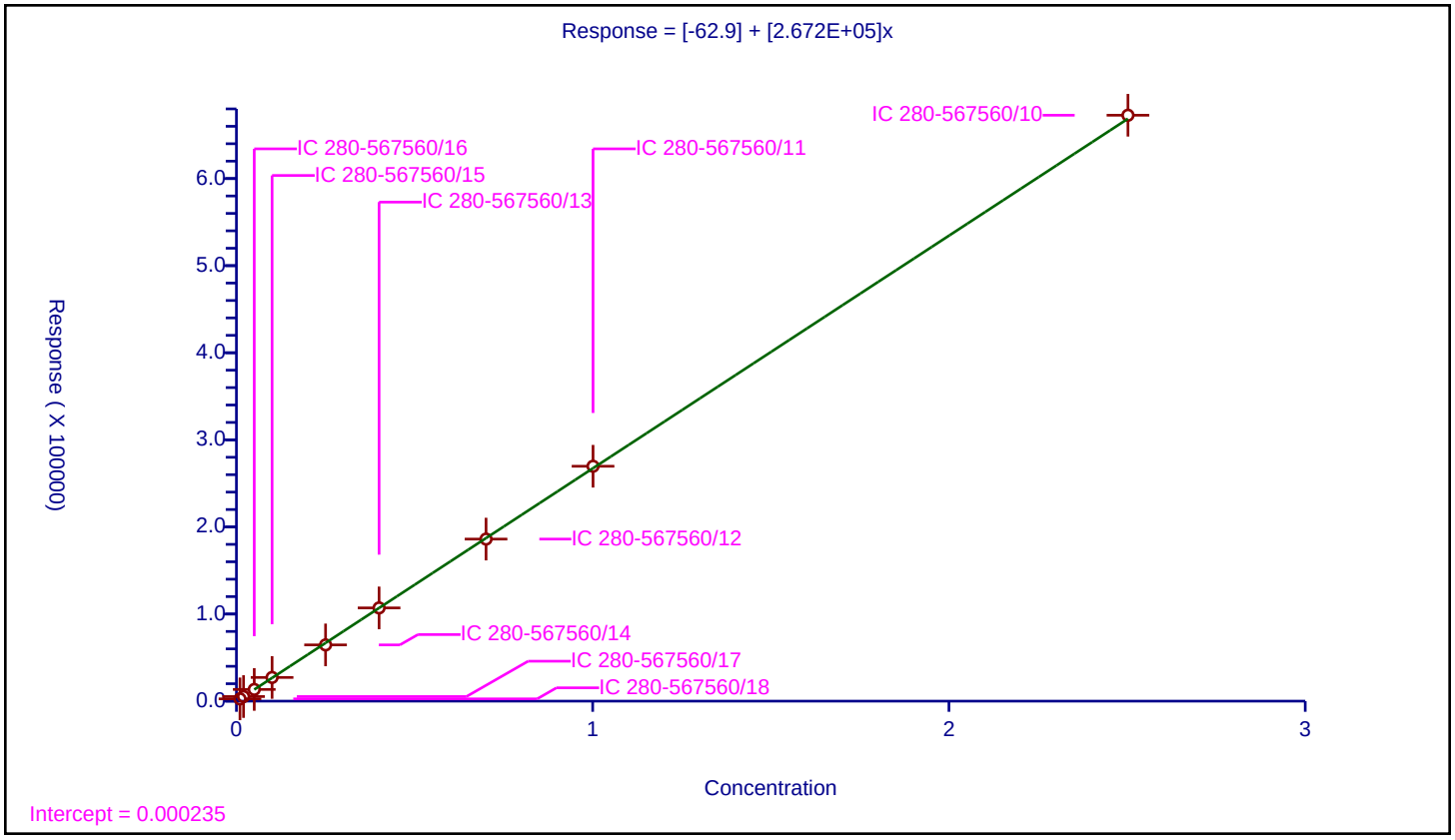
Curve Coefficients

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

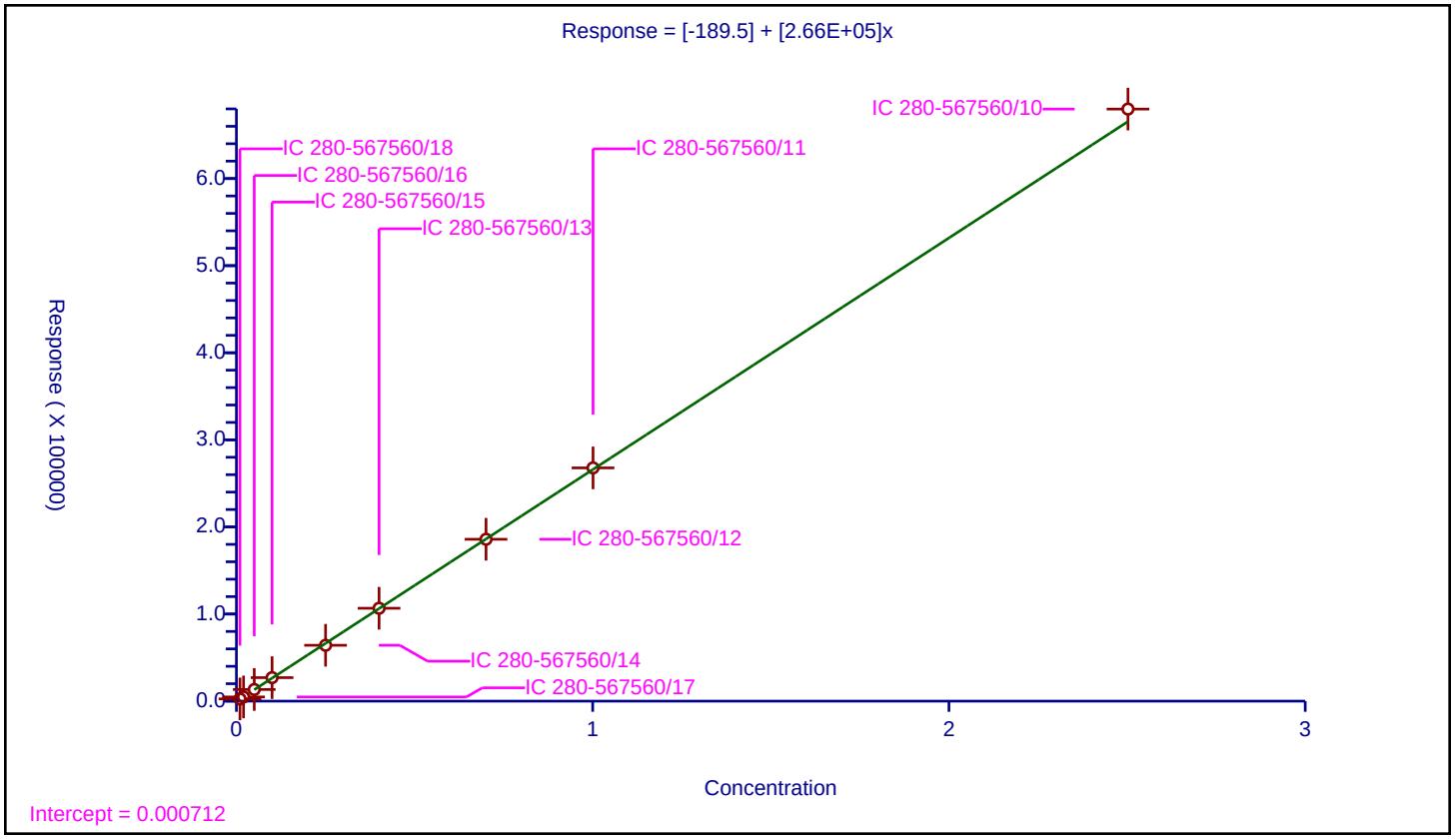
Curve Coefficients

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

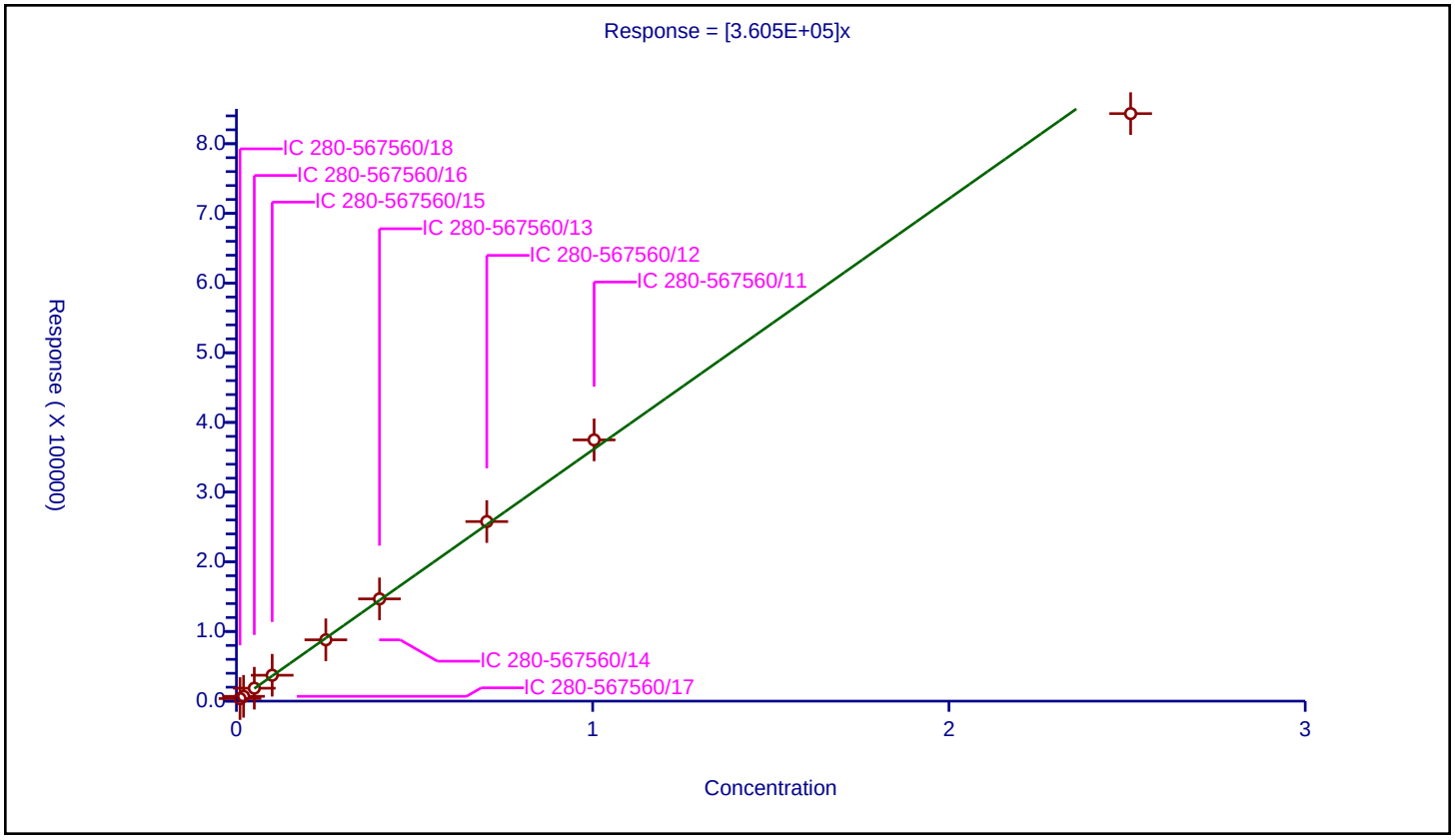
Curve Coefficients

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



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

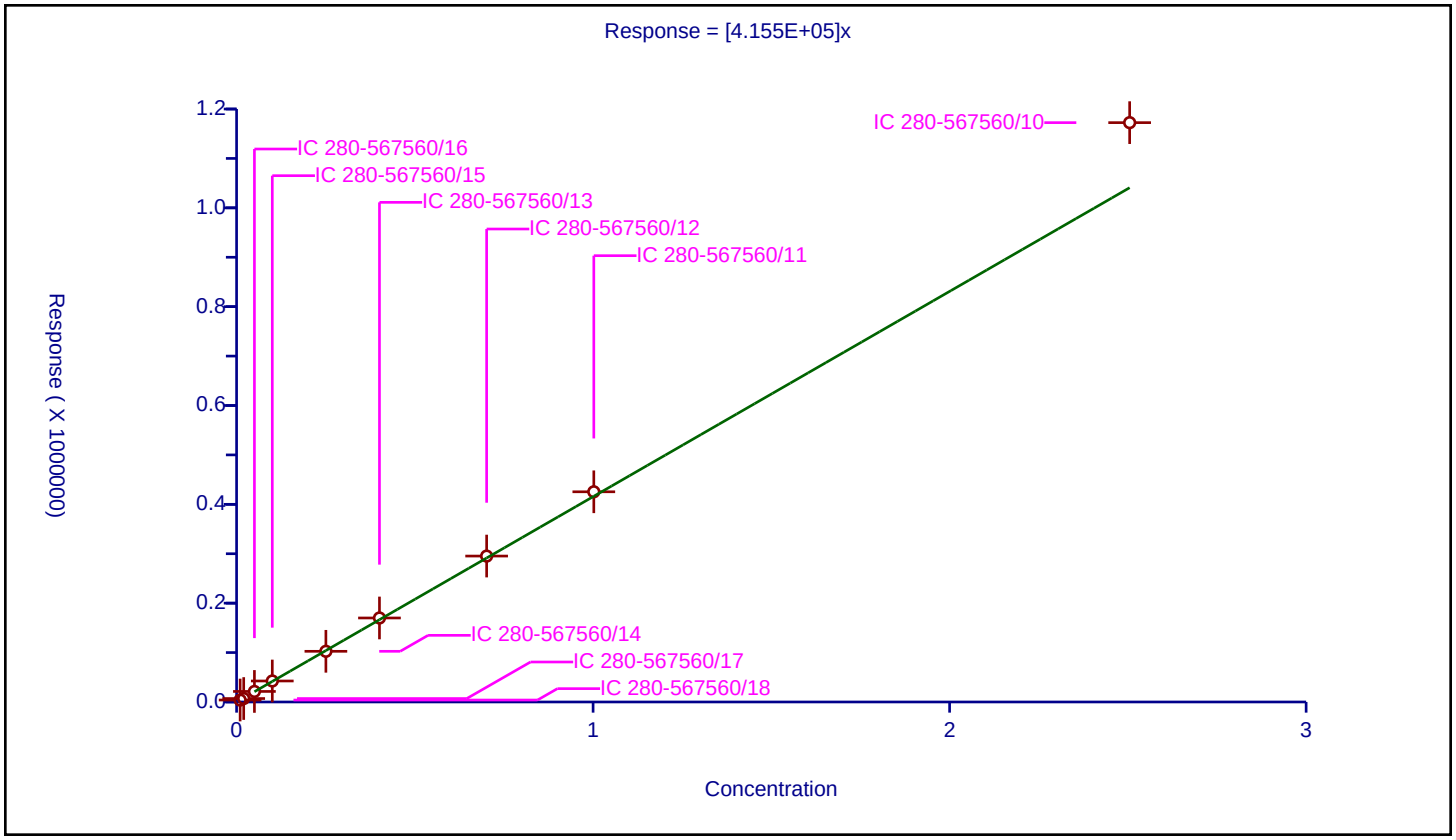
Curve Coefficients

Intercept:	0
Slope:	4.155E+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

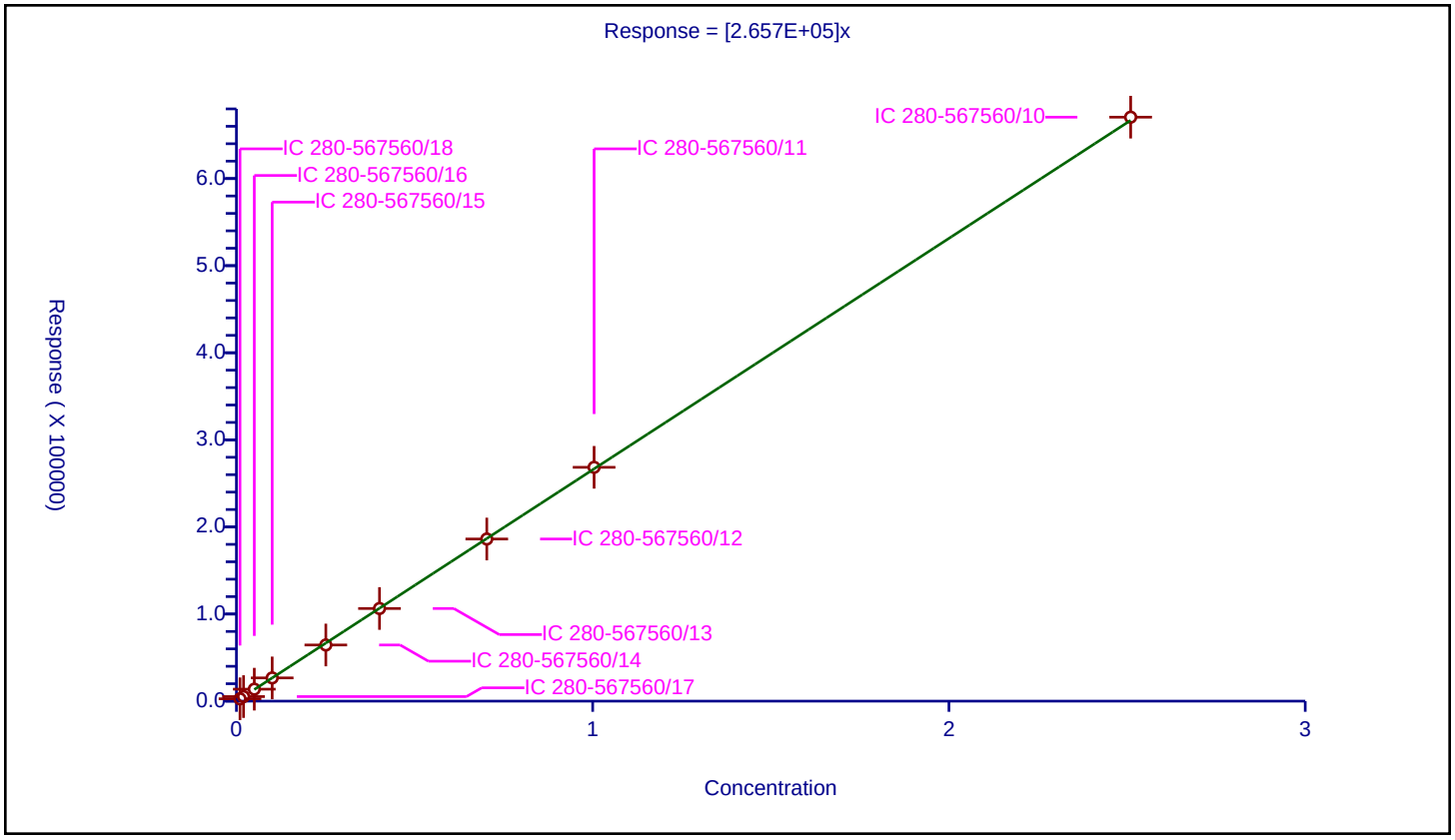
Curve Coefficients

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

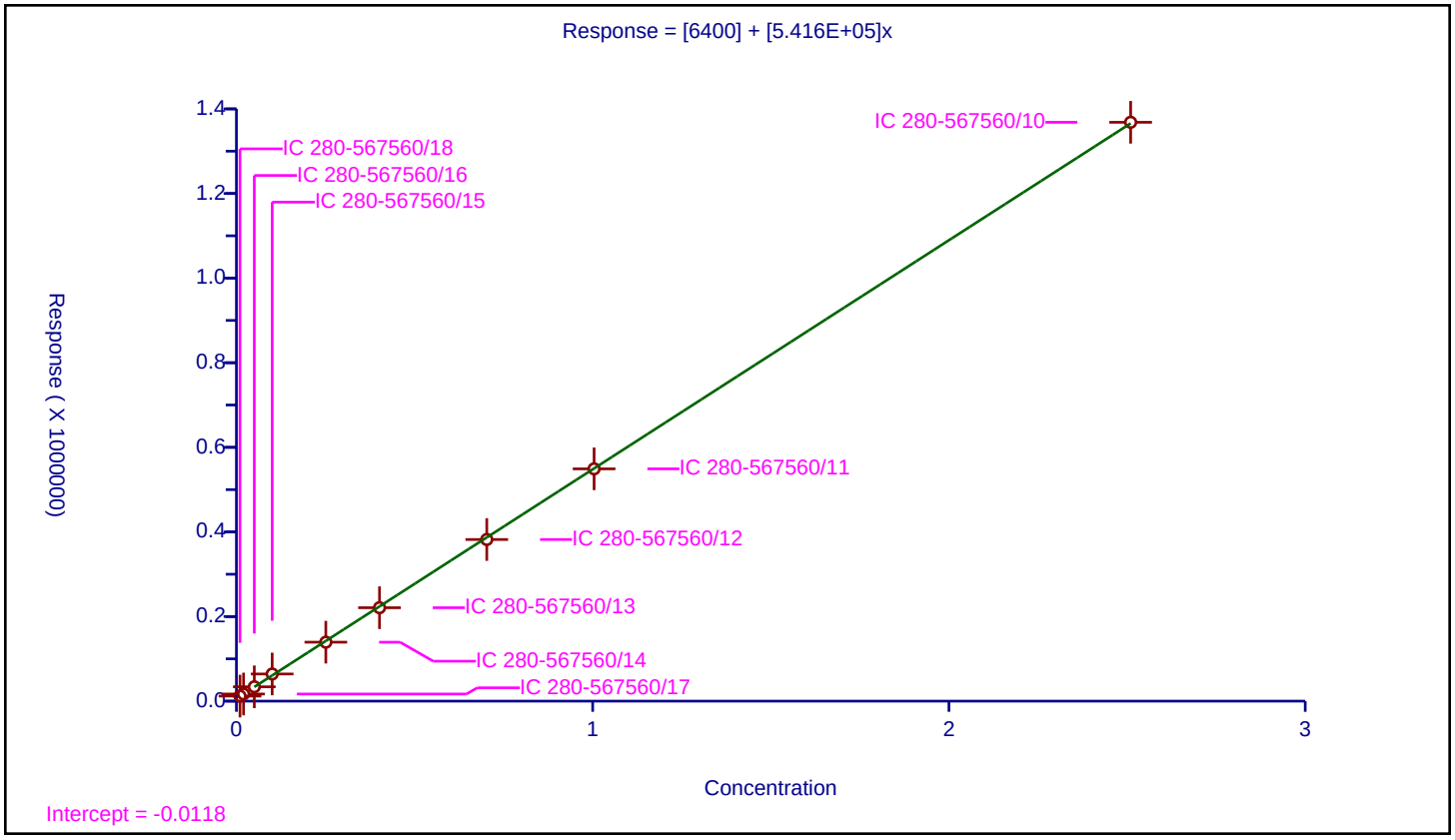
Curve Coefficients

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

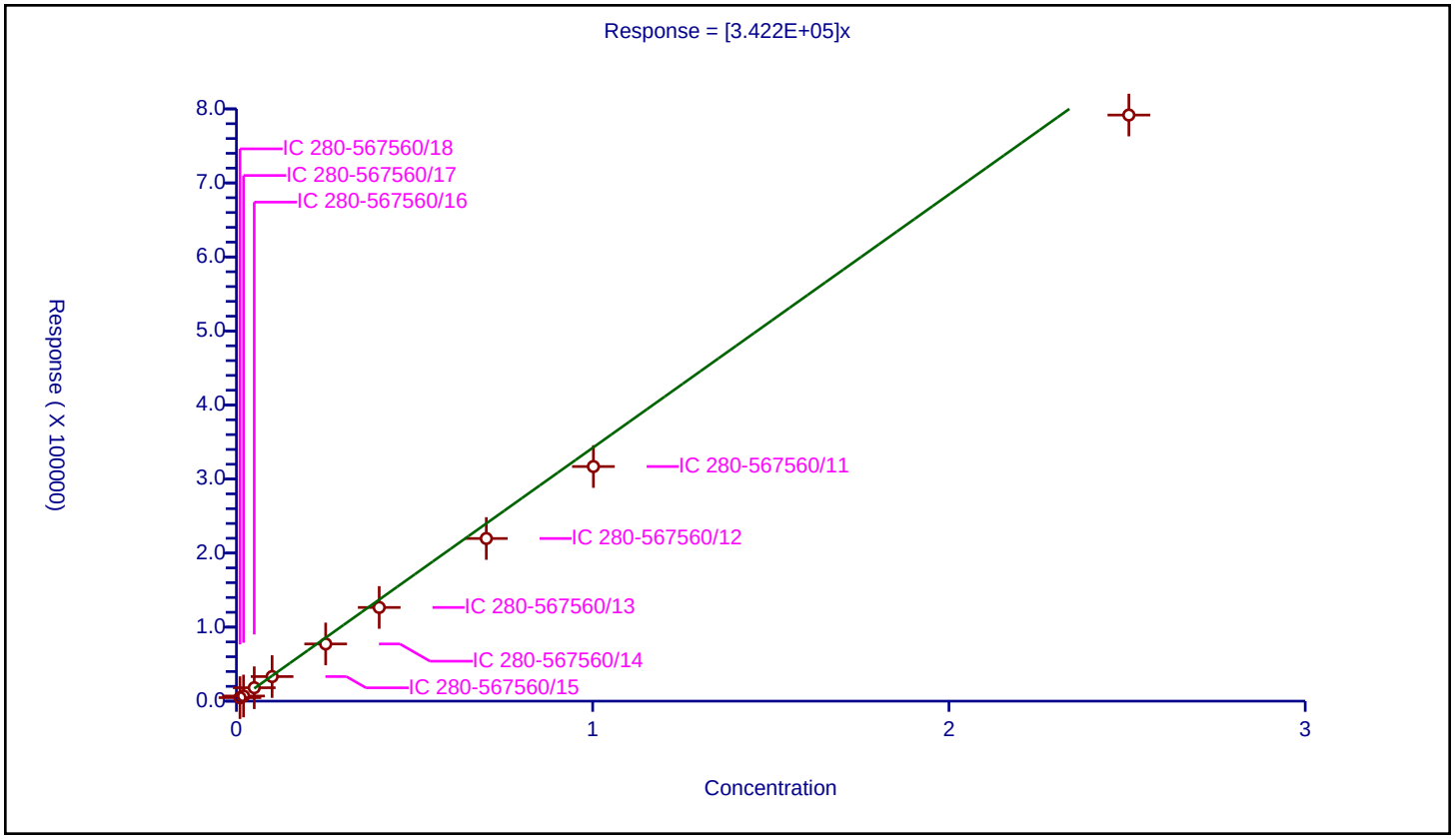
Curve Coefficients

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

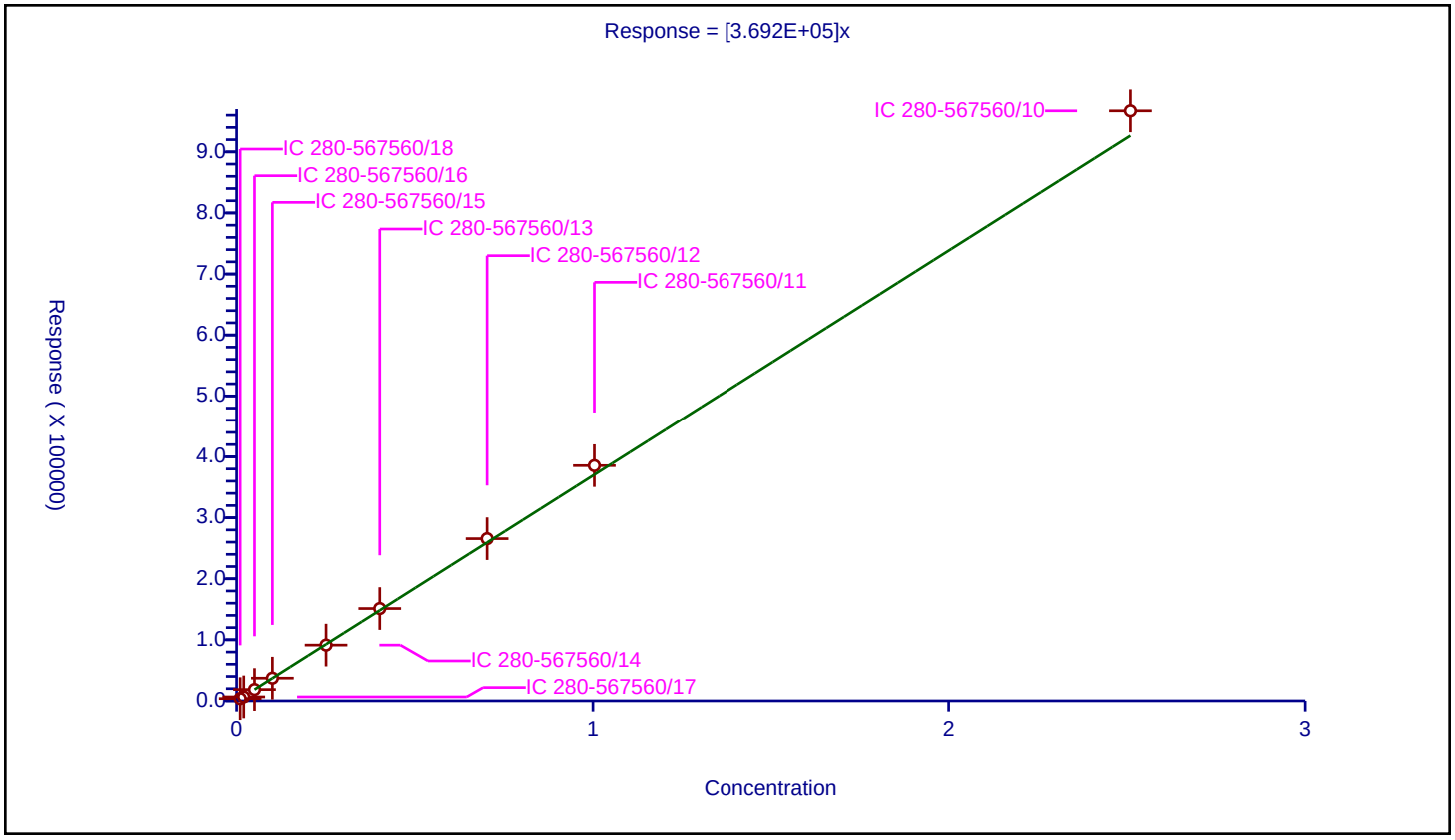
Curve Coefficients

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

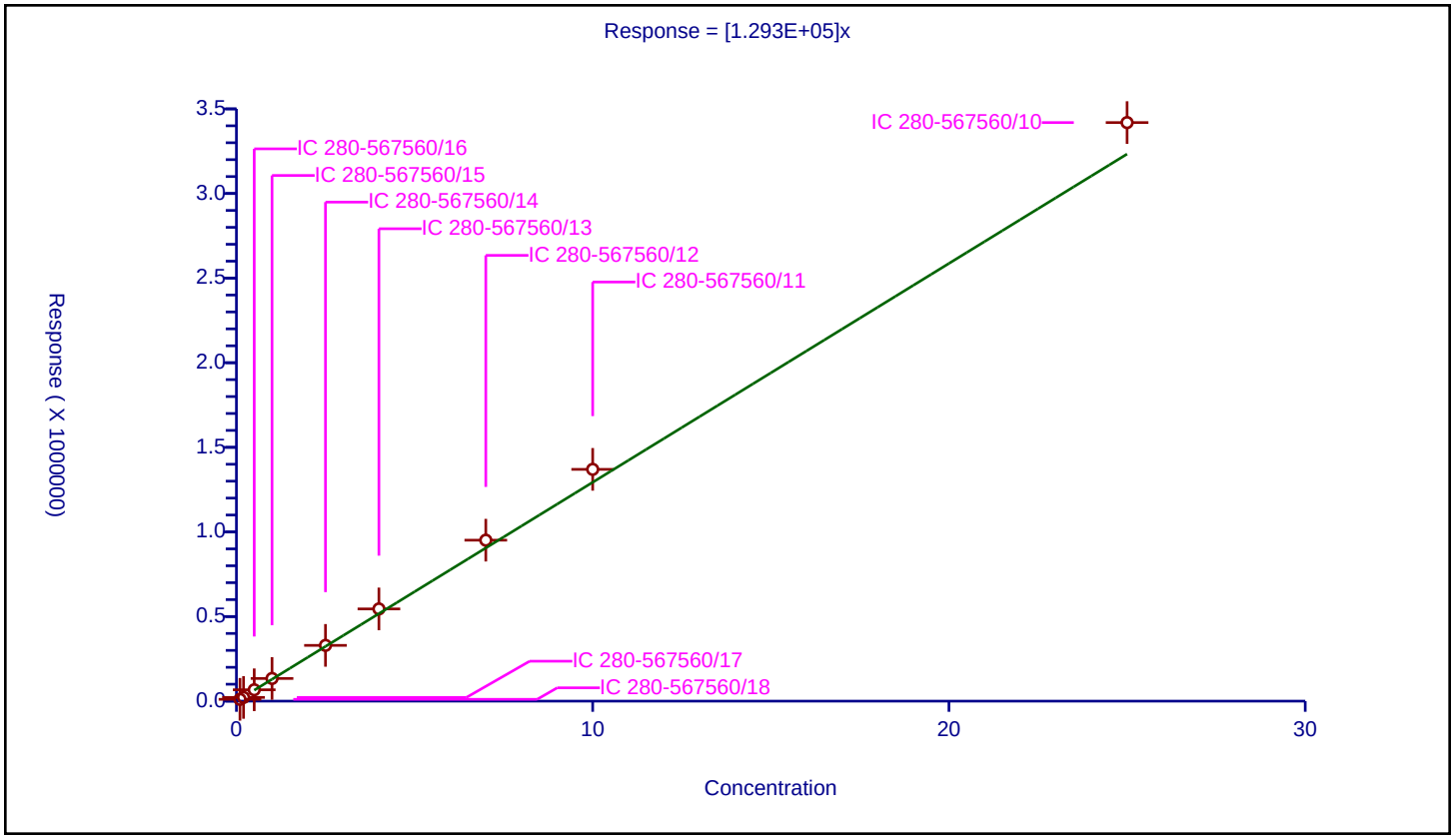
Curve Coefficients

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.: 280-159332-1 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.: 280-159332-1 | 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.: 280-159332-1 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

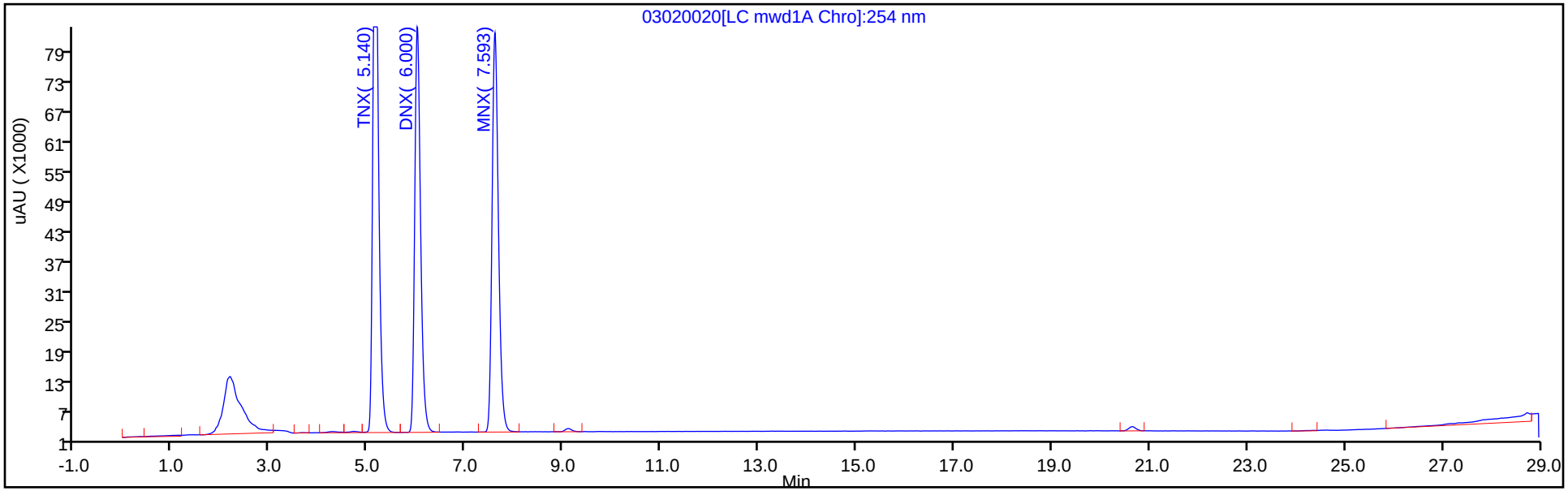
Report Date: 03-Mar-2022 12:49:19 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

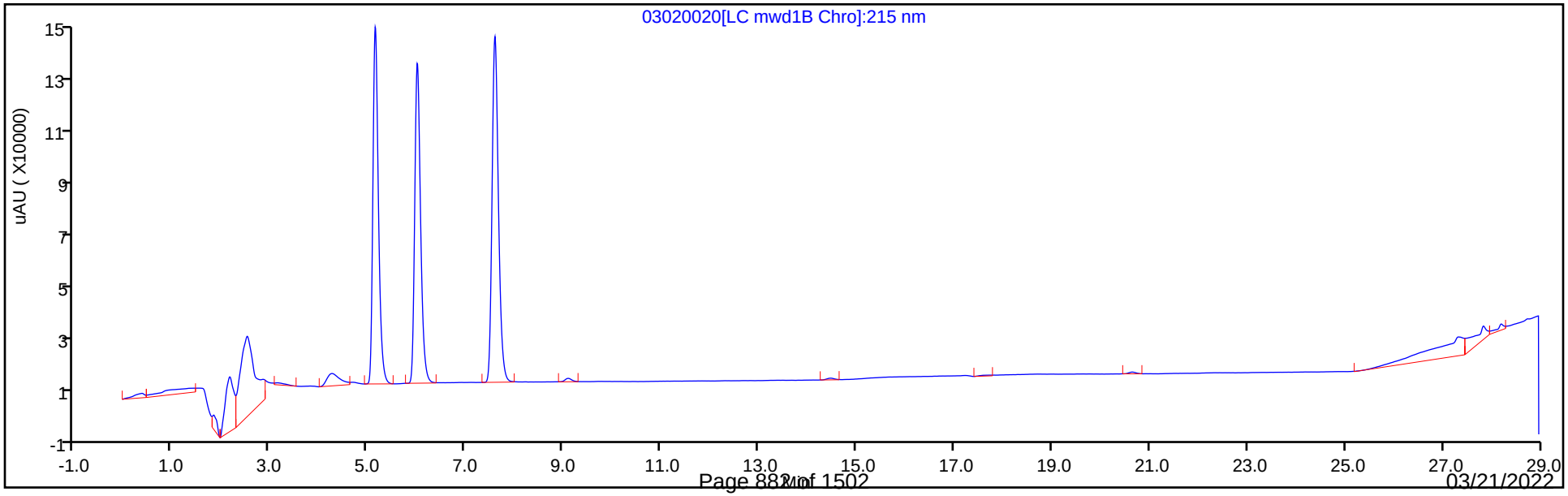
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020020.D

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

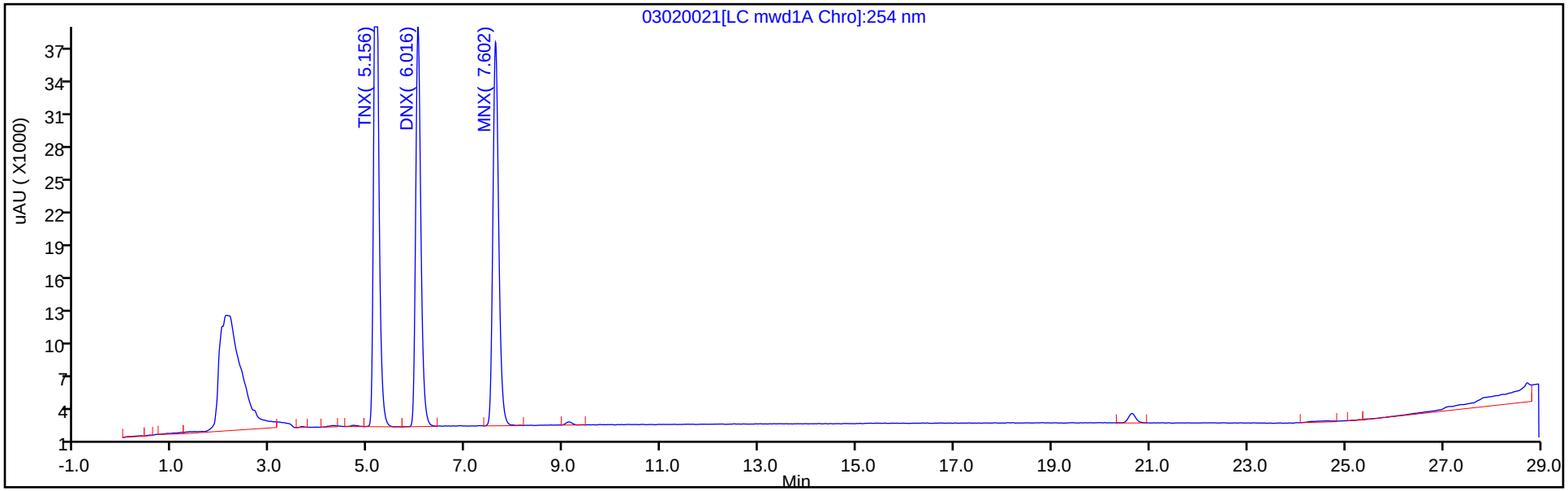
Report Date: 03-Mar-2022 12:49:19 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

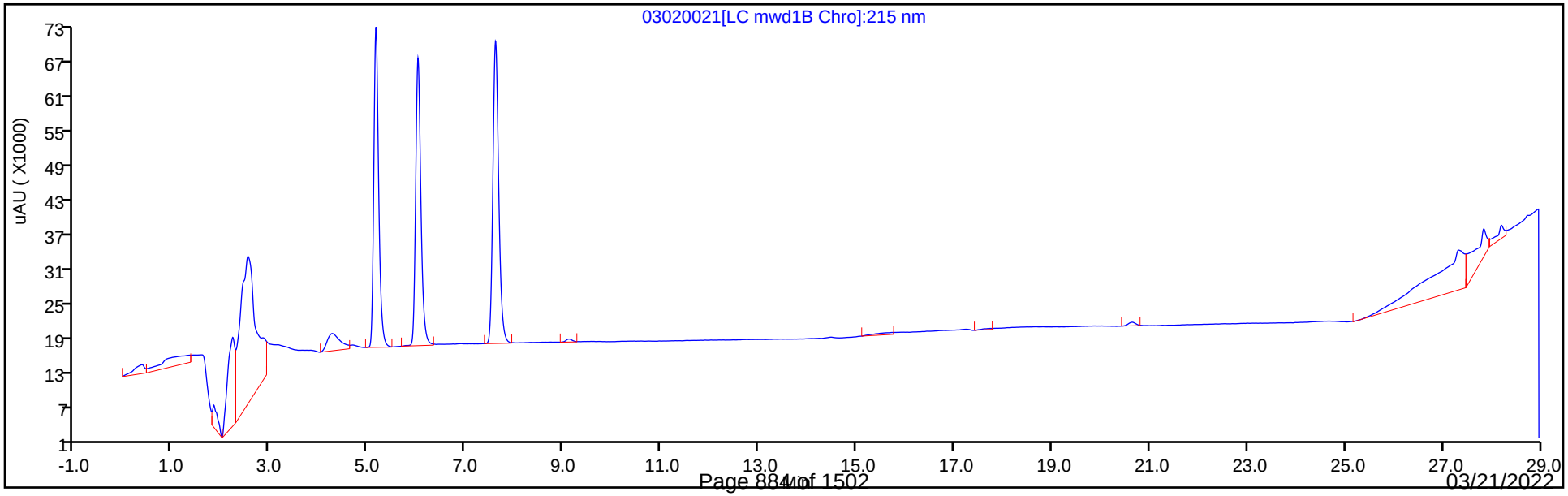
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020021.D

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

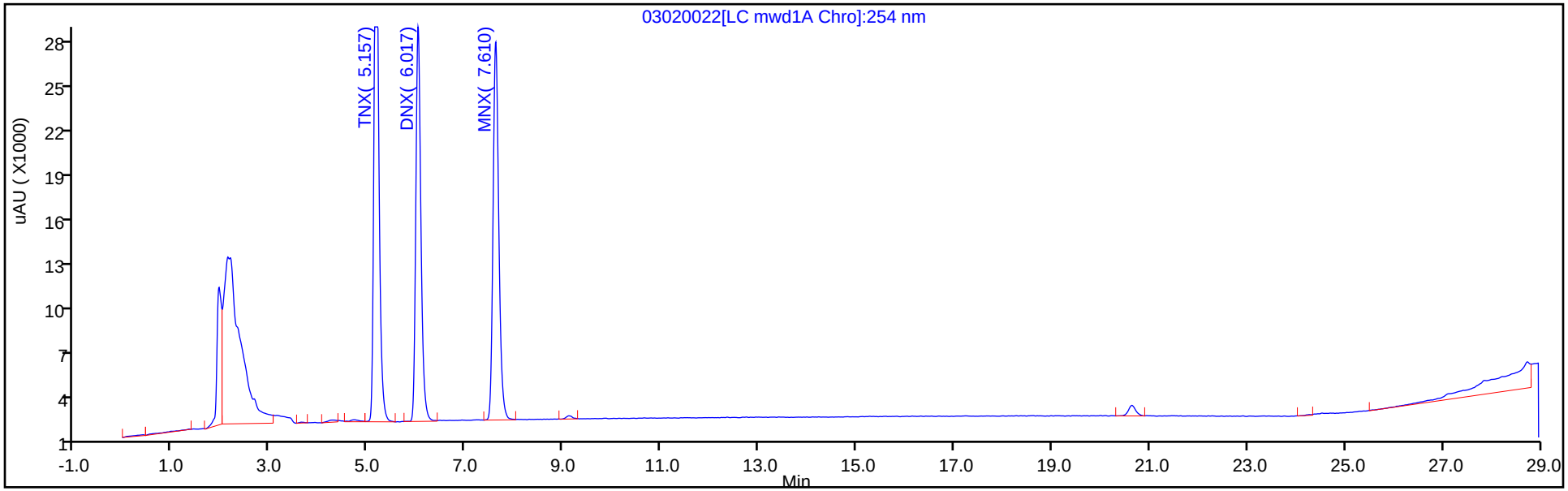
Report Date: 03-Mar-2022 12:49:19 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

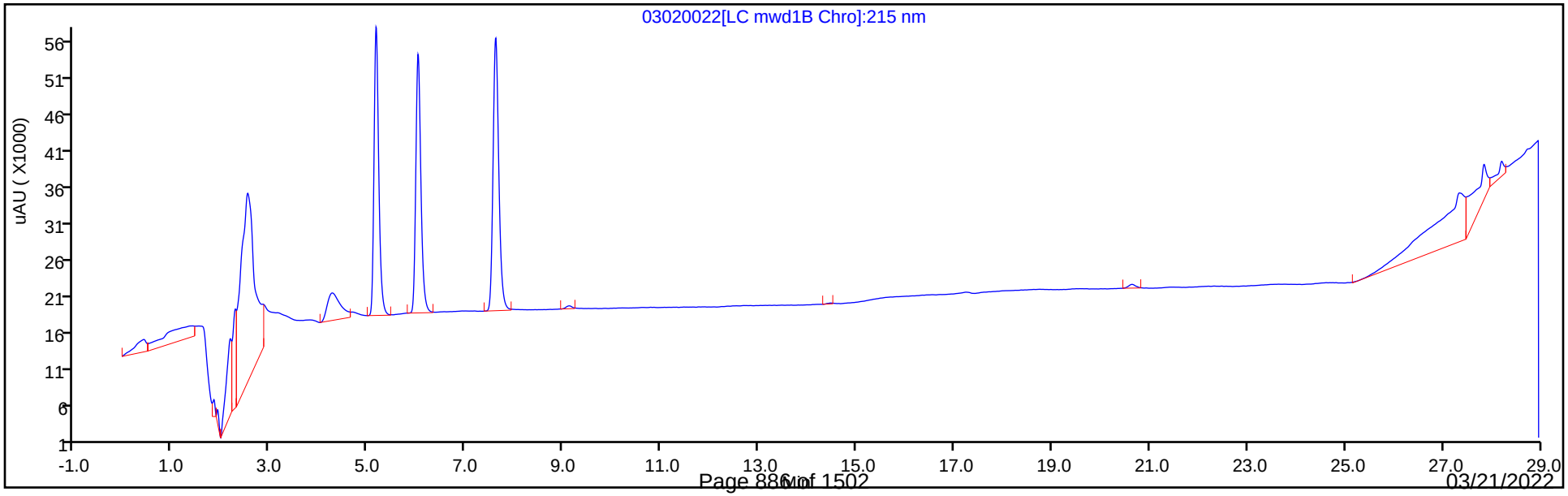
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020022.D

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

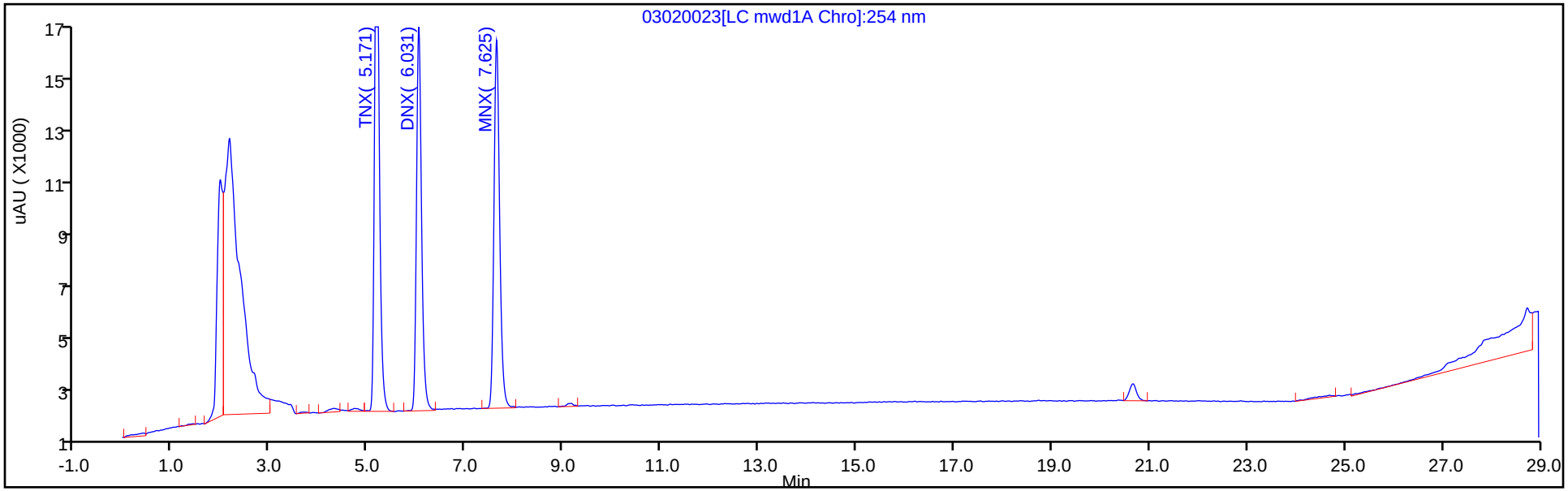
Report Date: 03-Mar-2022 12:49:20 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

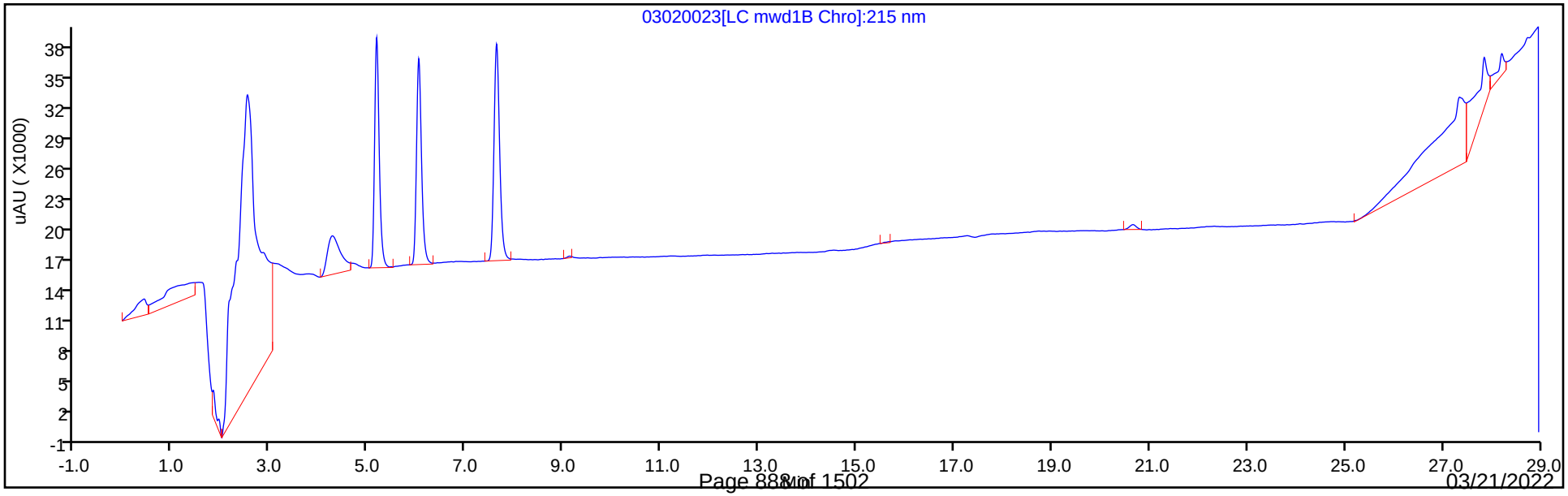
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020023.D

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

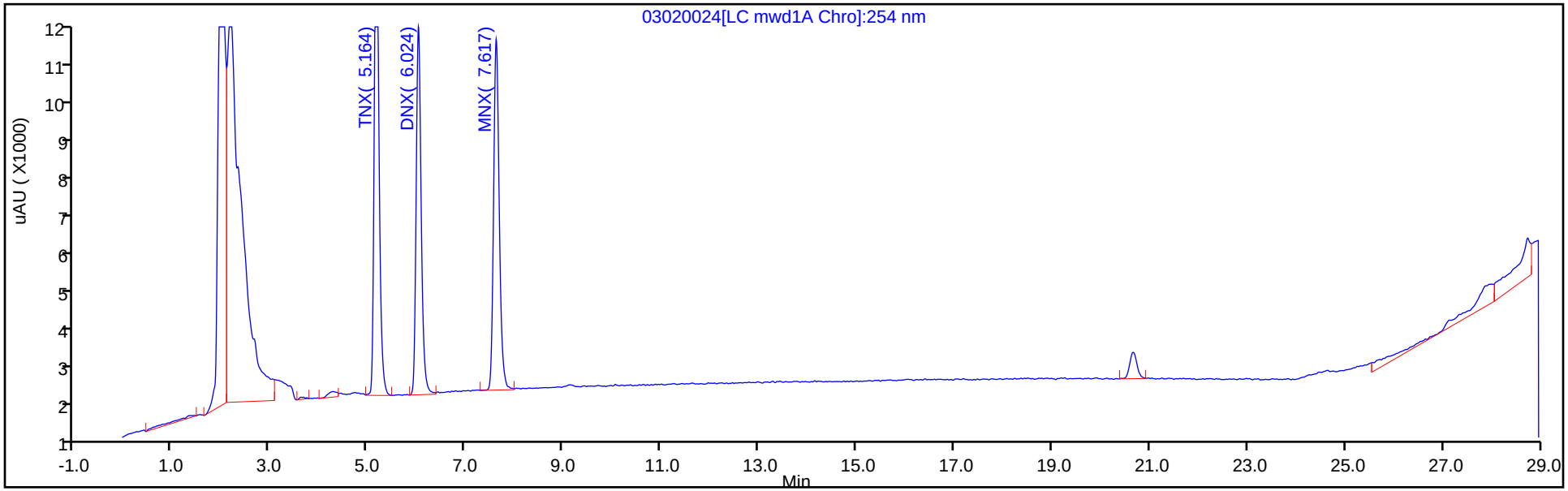
Report Date: 03-Mar-2022 12:49:20 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

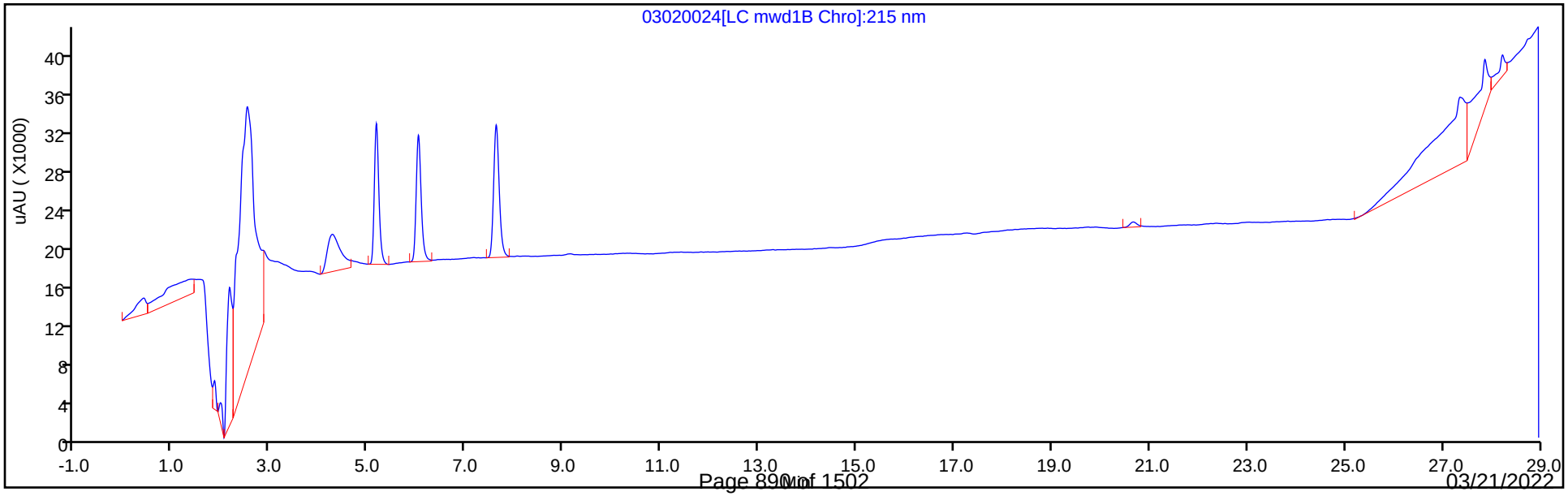
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020024.D

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

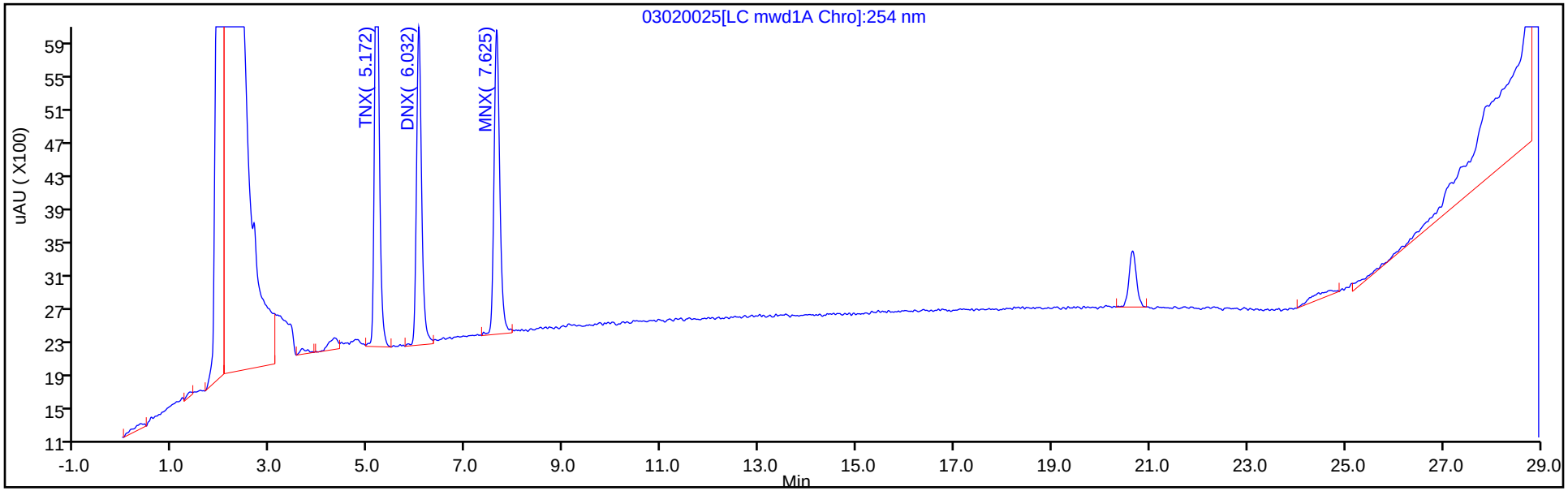
Report Date: 03-Mar-2022 12:49:21 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

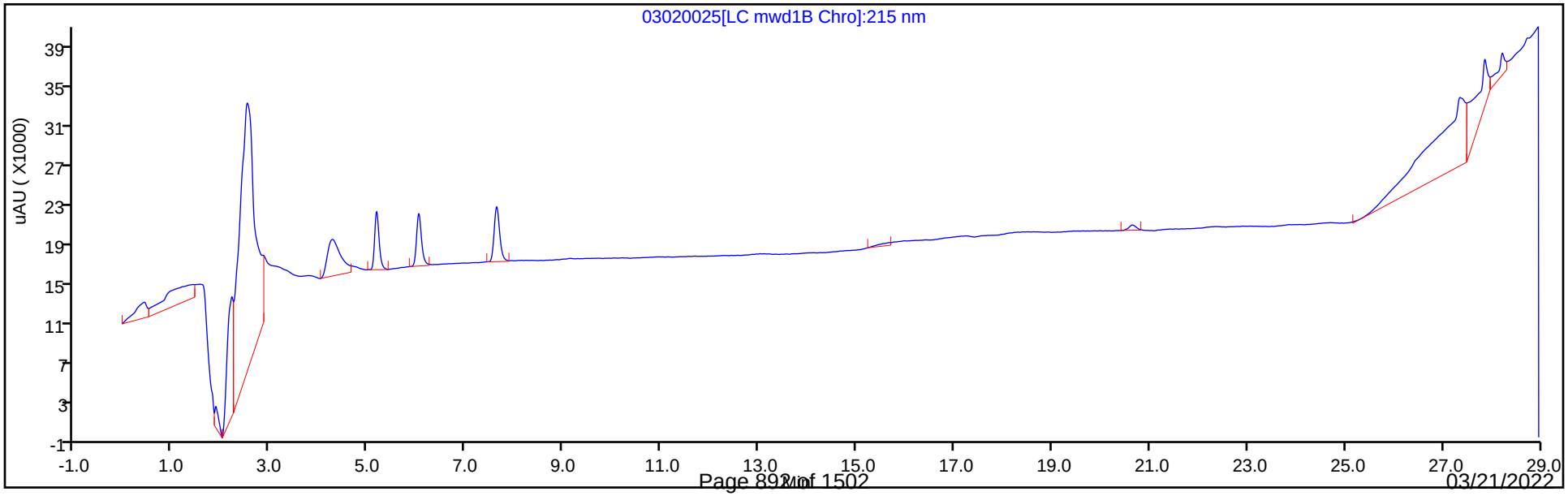
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020025.D

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

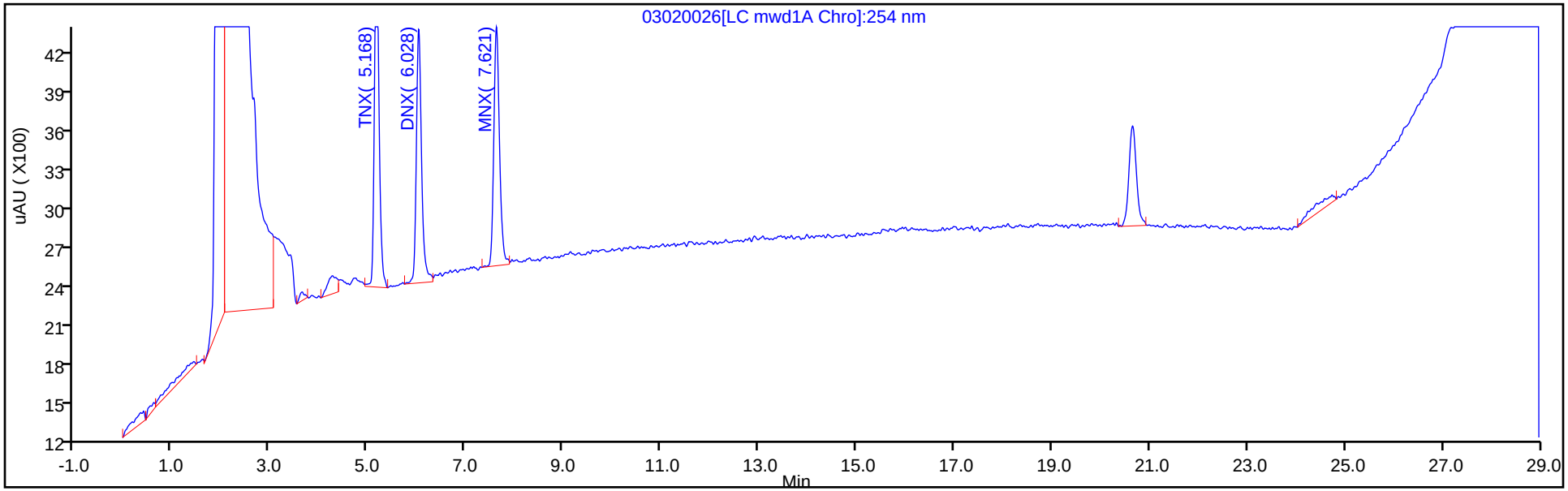
Report Date: 03-Mar-2022 12:49:21 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

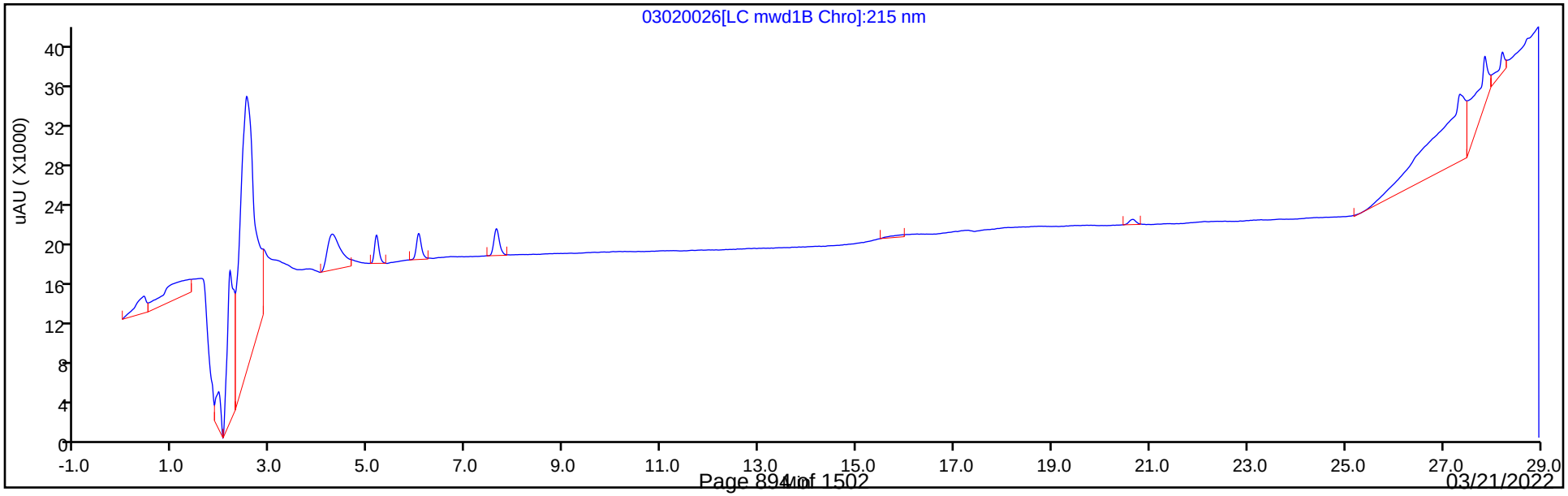
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020026.D

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

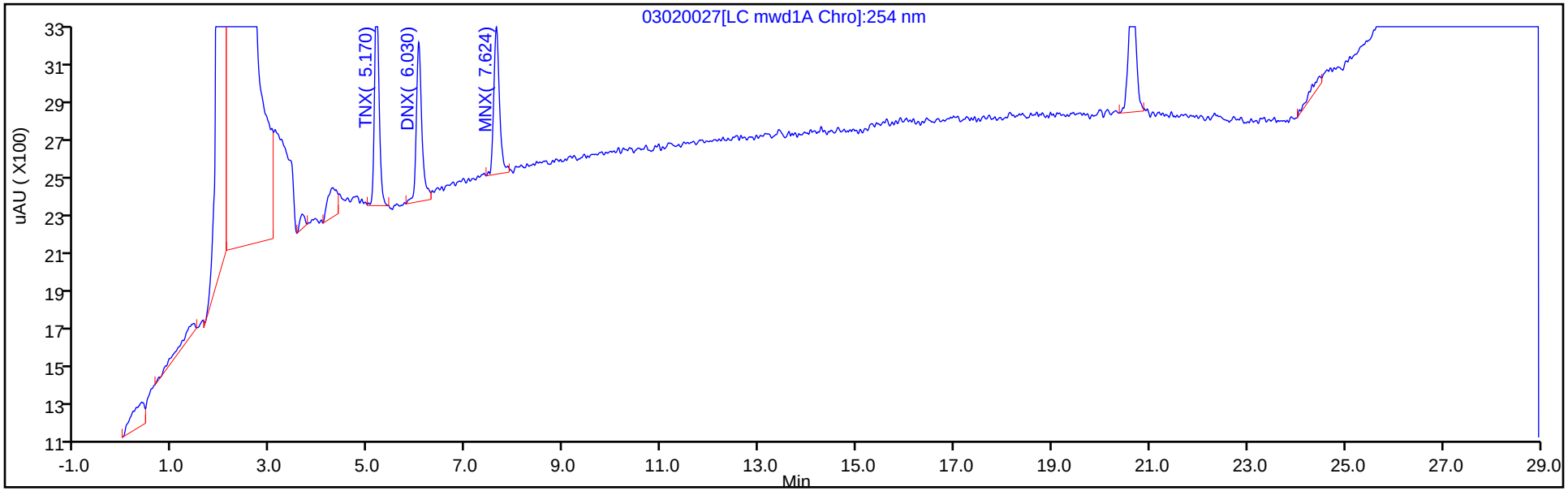
Report Date: 03-Mar-2022 12:49:22 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

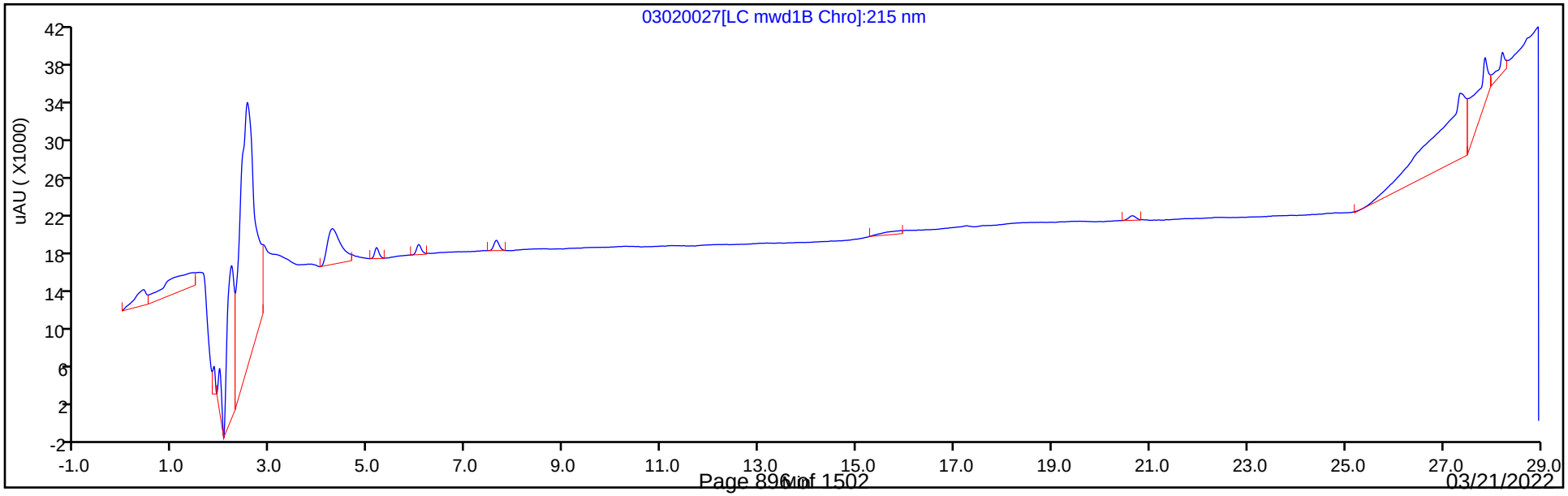
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

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

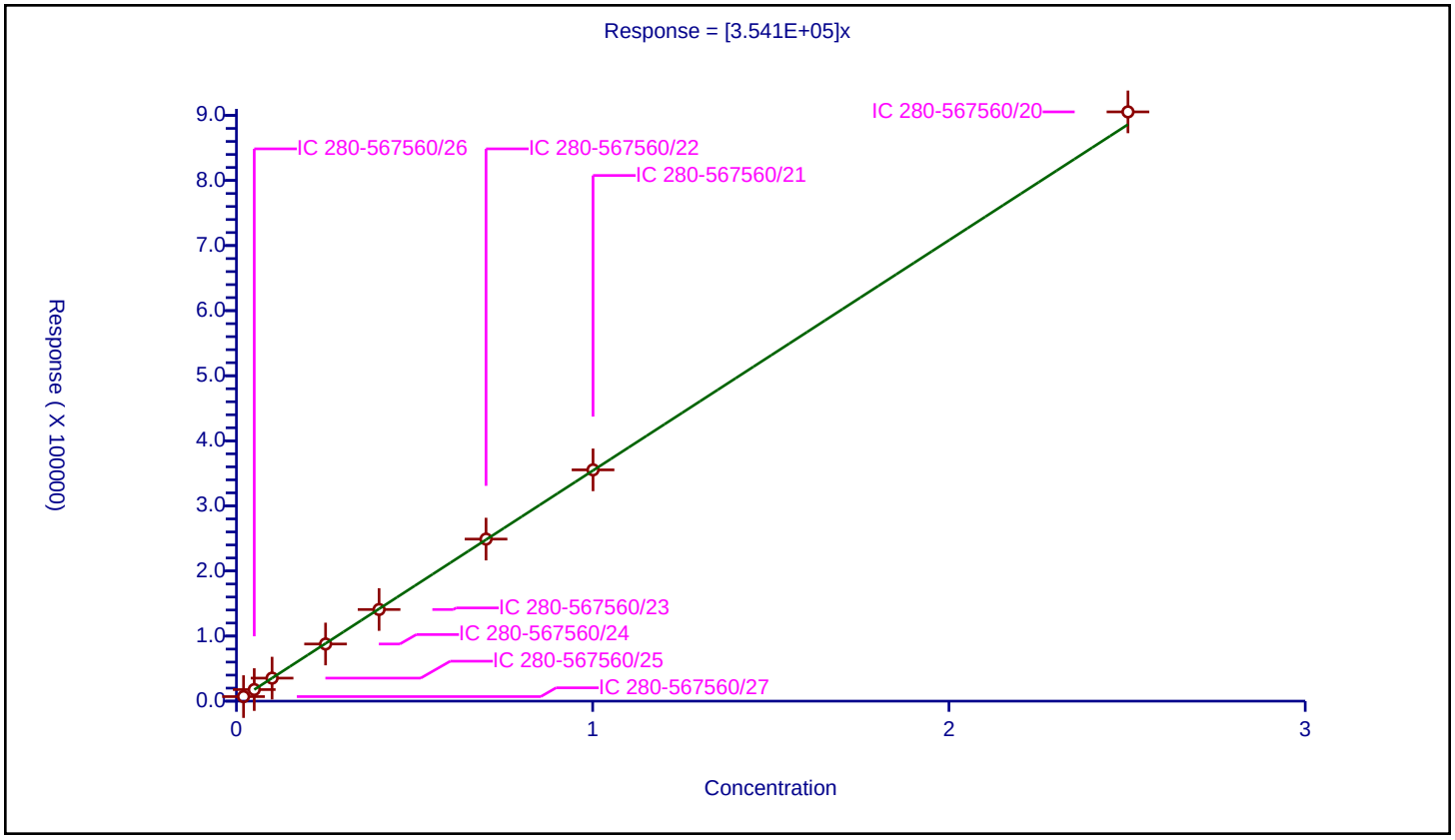
Curve Coefficients

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

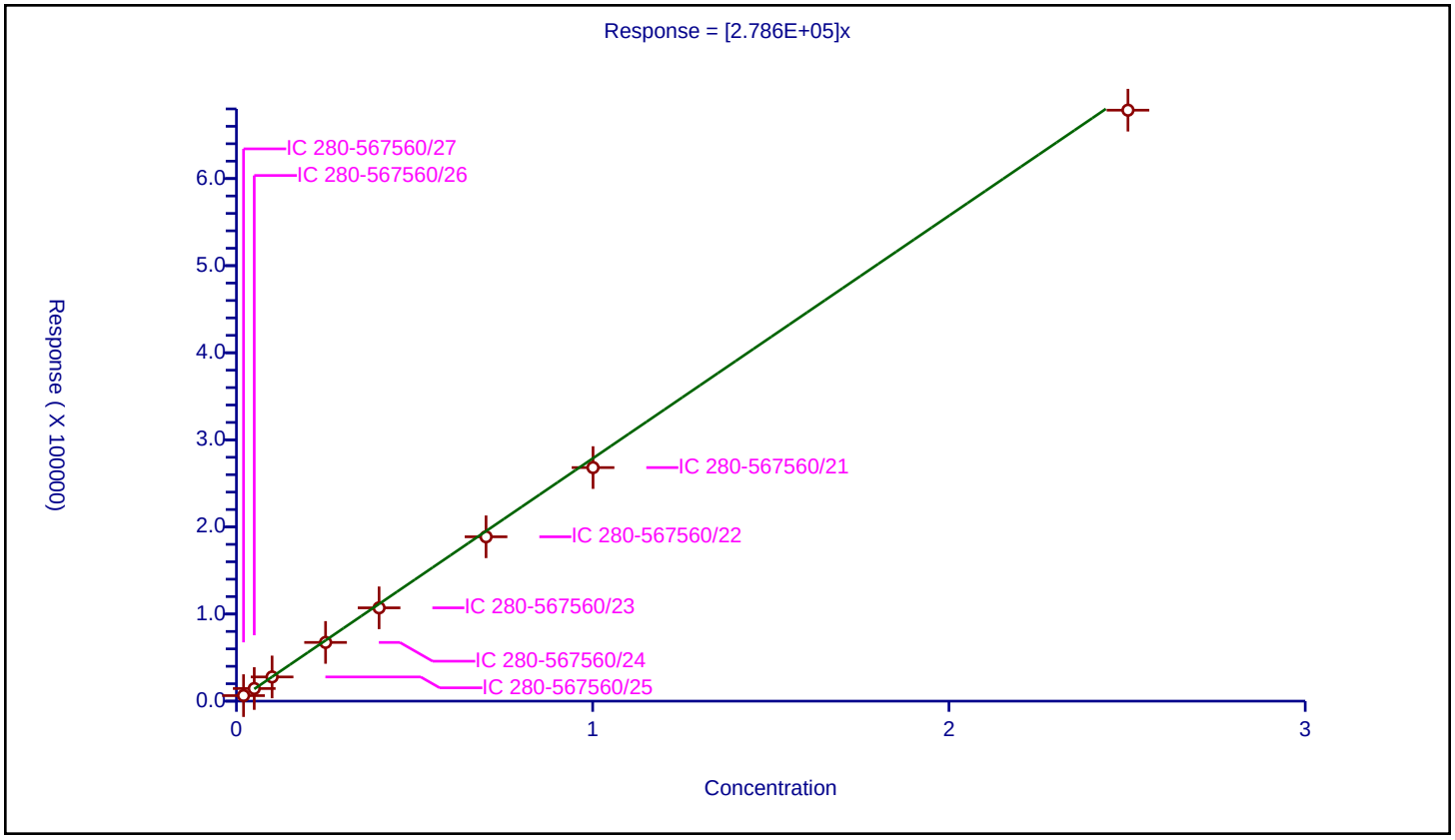
Curve Coefficients

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

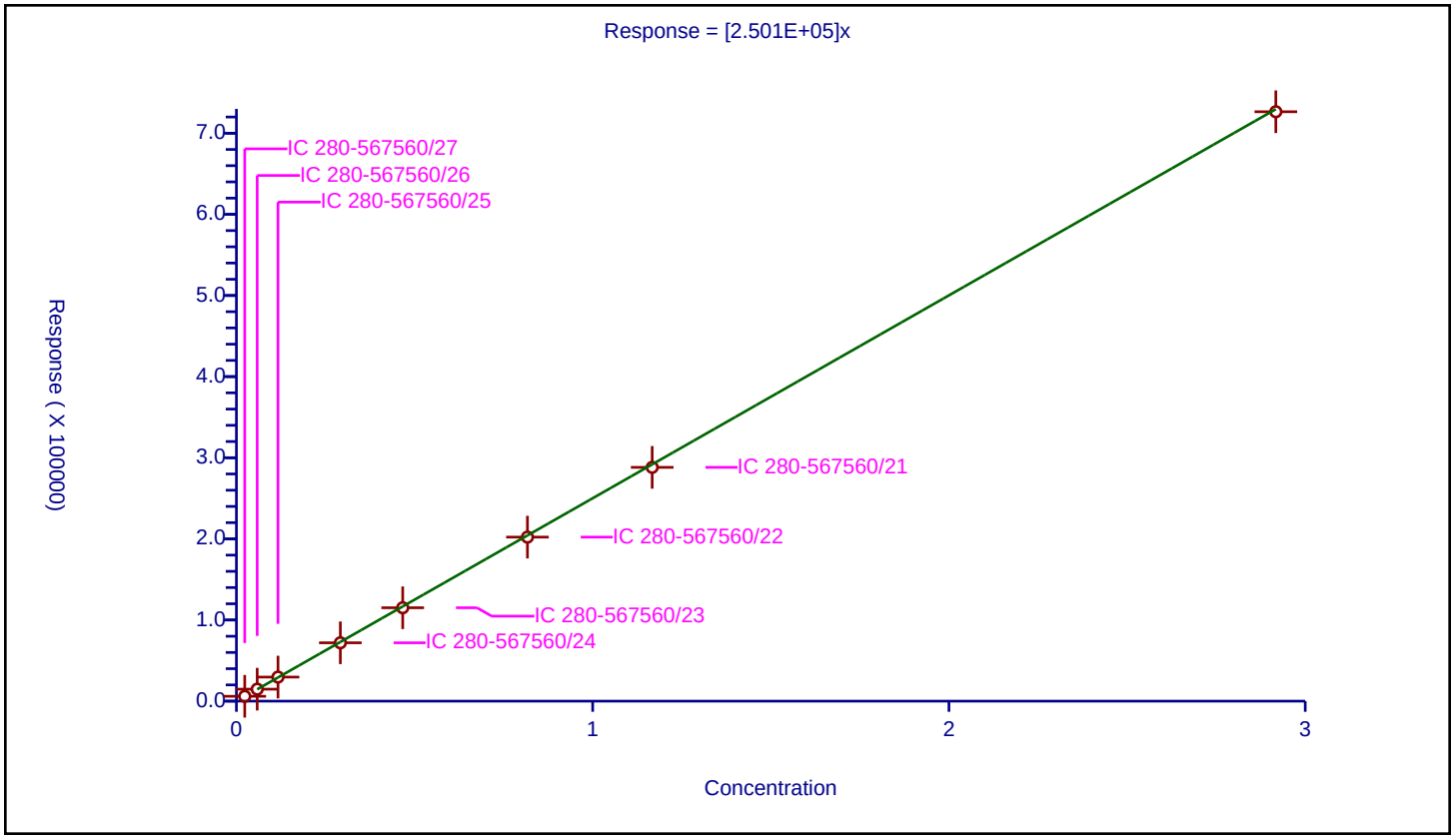
Curve Coefficients

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.: 280-159332-1

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.: 280-159332-1

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

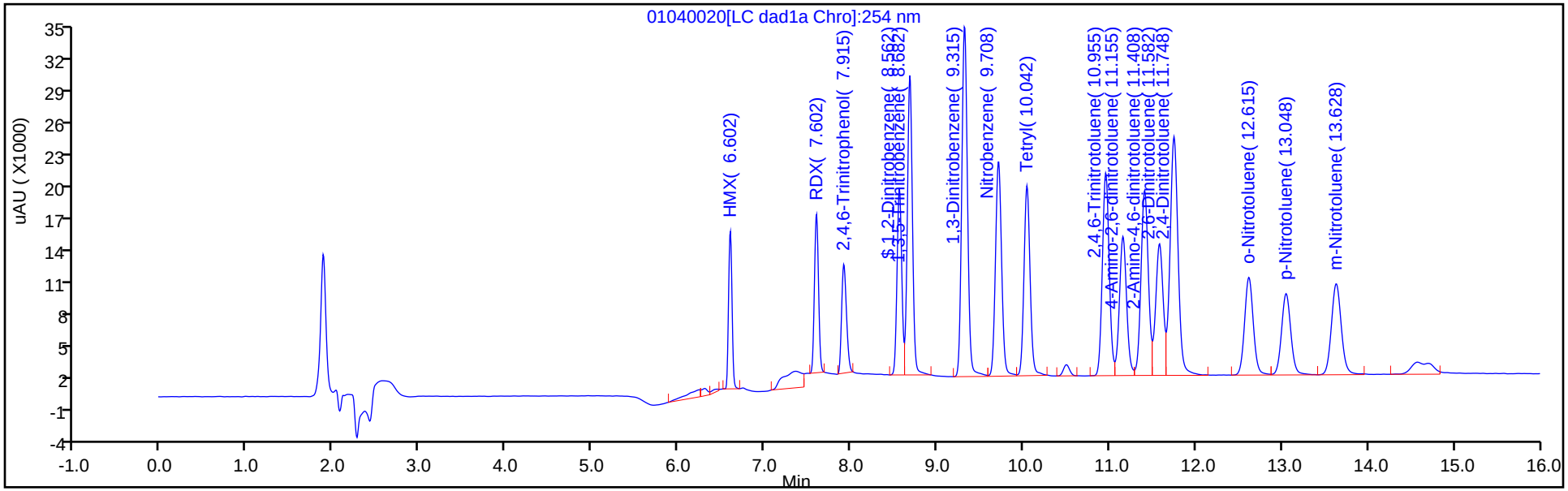
Report Date: 06-Jan-2022 20:08:00 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

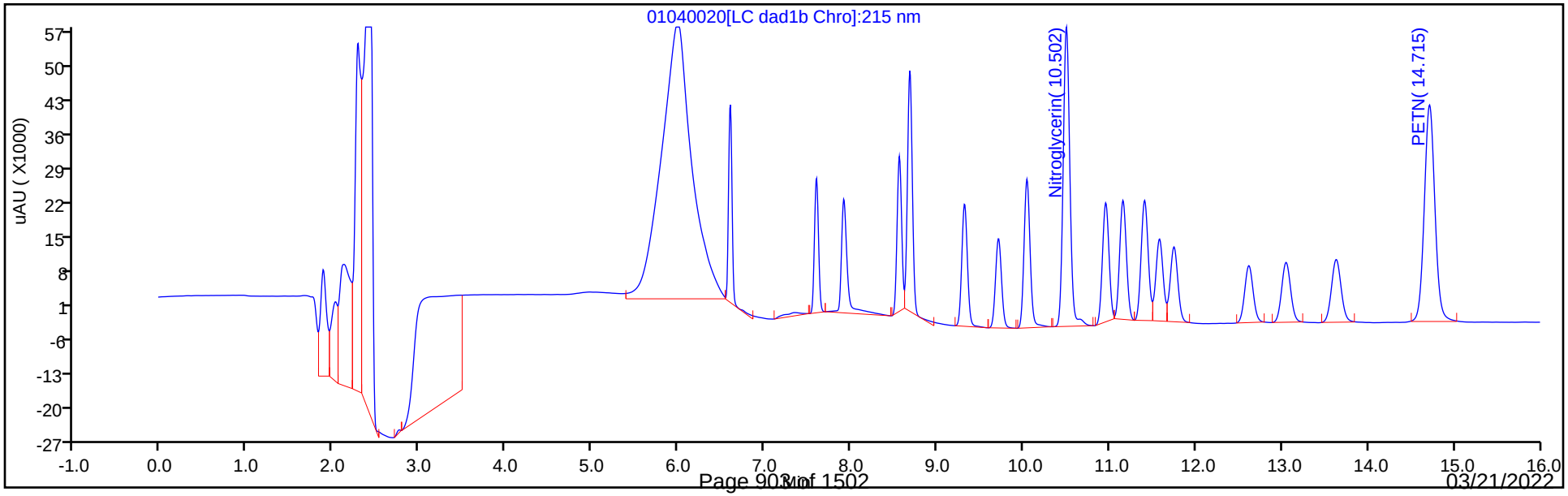
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040020.d

Injection Date:	04-Jan-2022 21:54:19	Instrument ID:	CHHPLC_X3	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

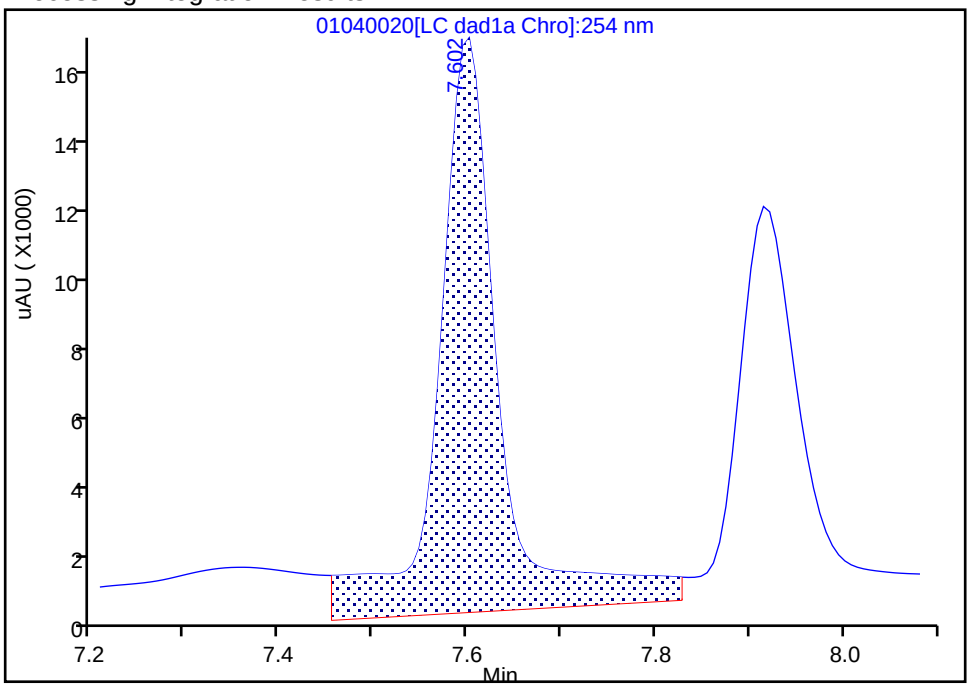
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040020.d				
Injection Date:	04-Jan-2022 21:54:19	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

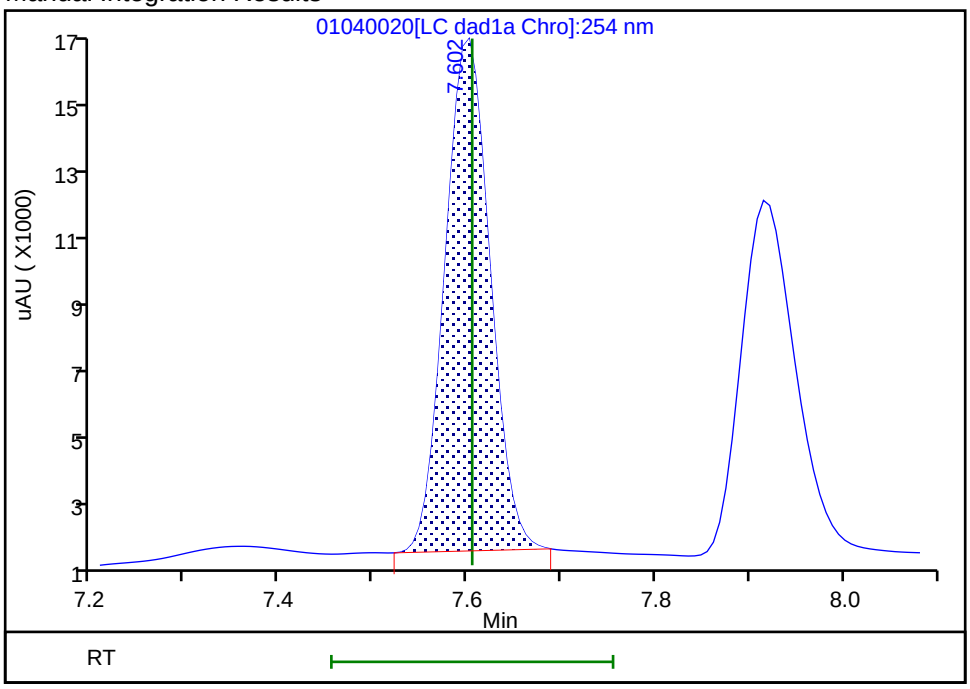
Processing Integration Results

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

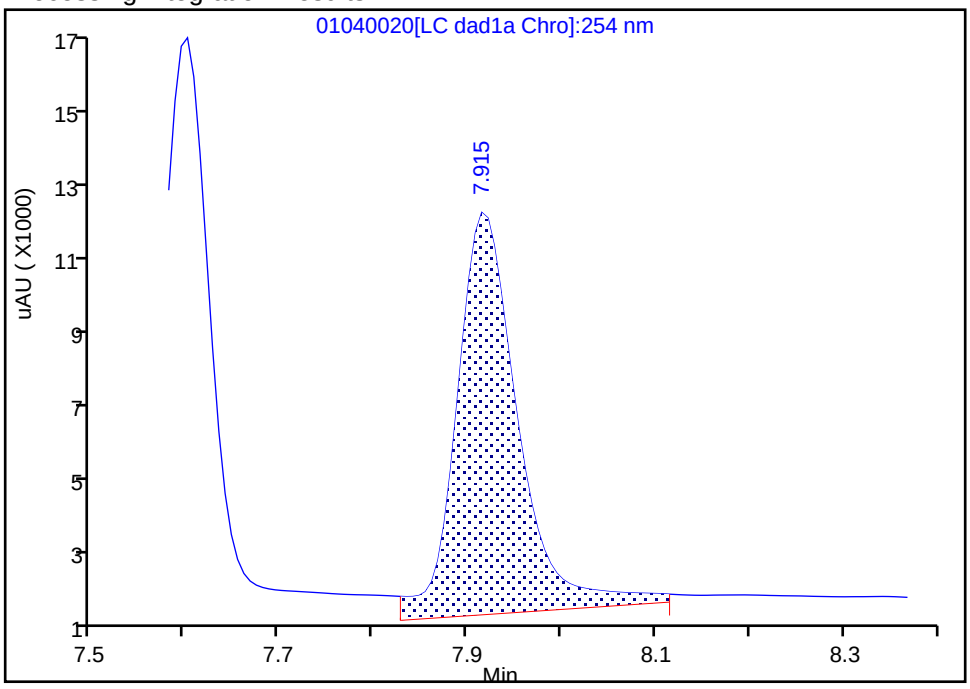
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040020.d				
Injection Date:	04-Jan-2022 21:54:19	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

9 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

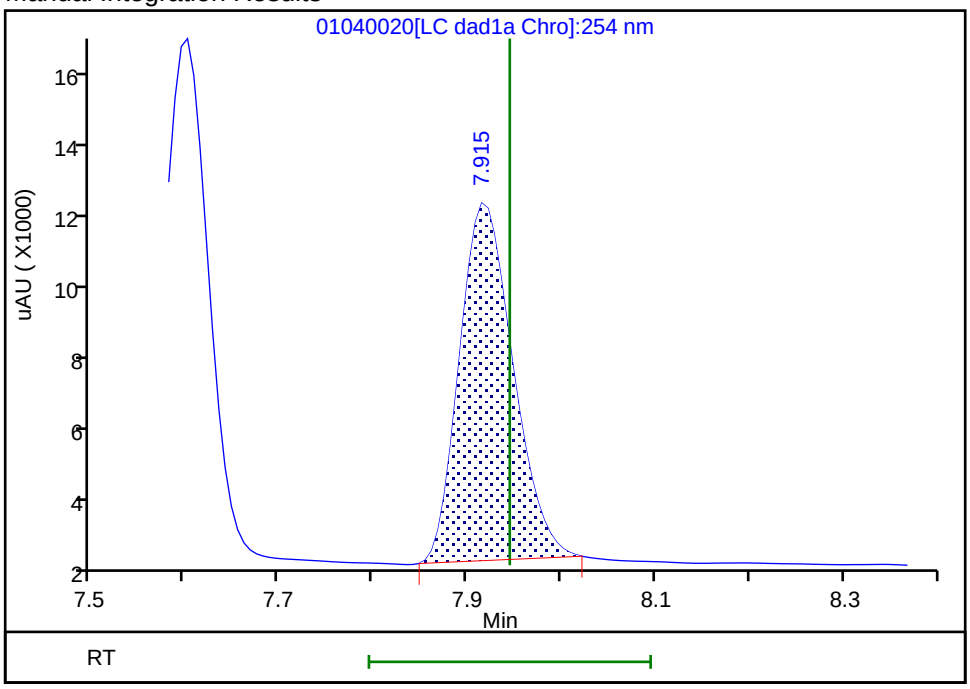
Processing Integration Results

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.: 280-159332-1

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.: 280-159332-1

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

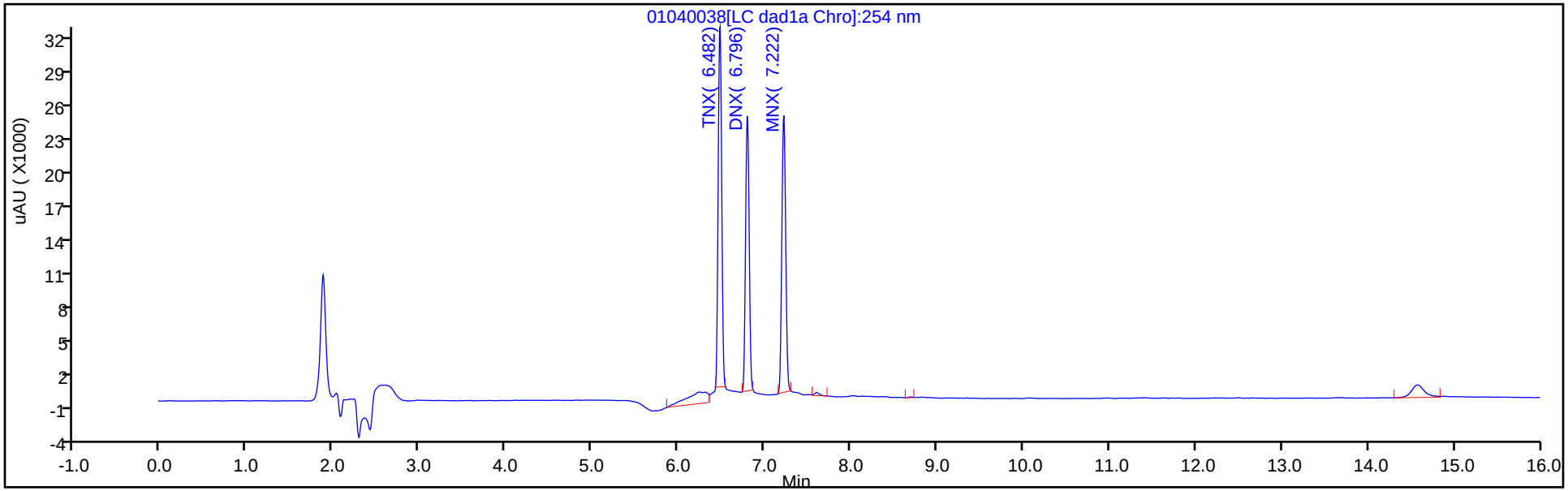
Report Date: 05-Jan-2022 12:19:19 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

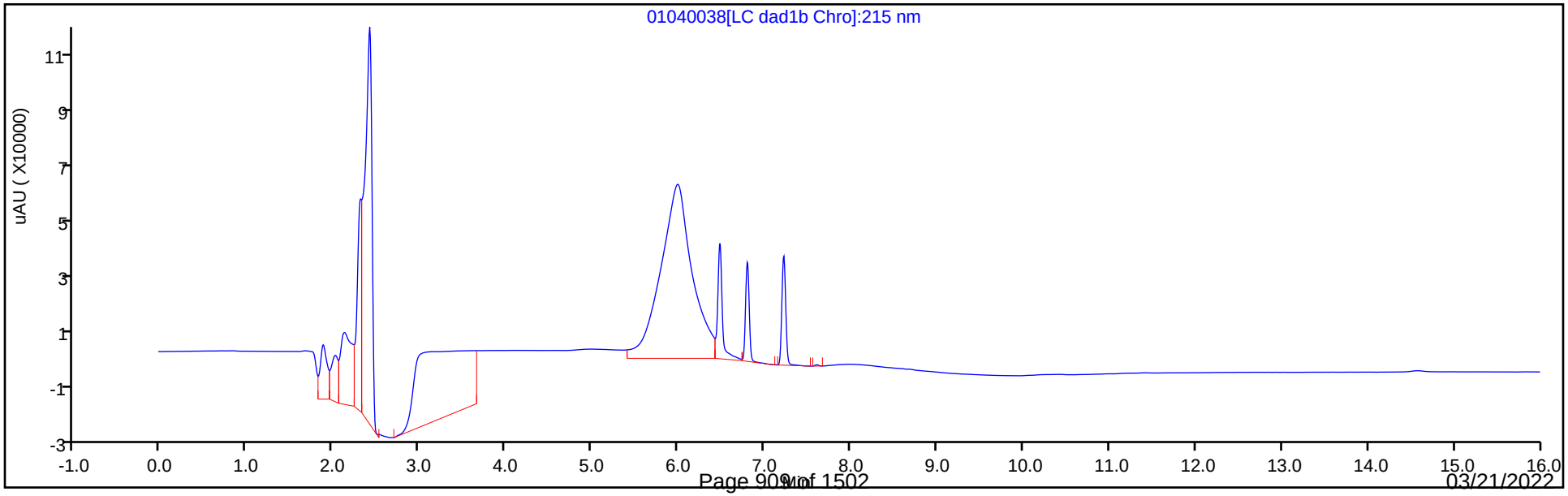
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040038.d

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

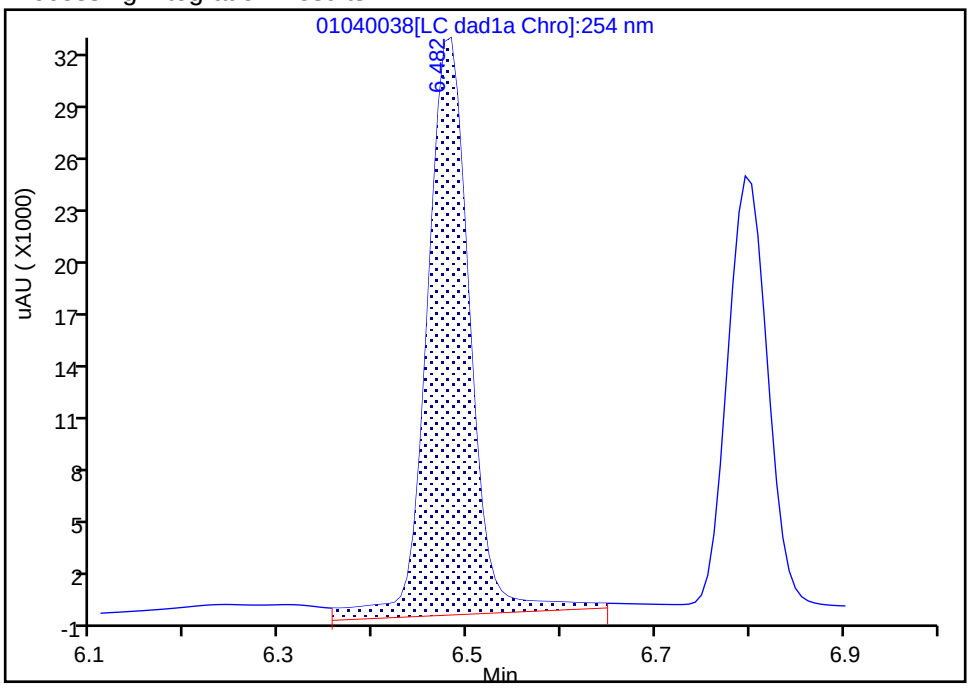
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040038.d				
Injection Date:	05-Jan-2022 04:47:17	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

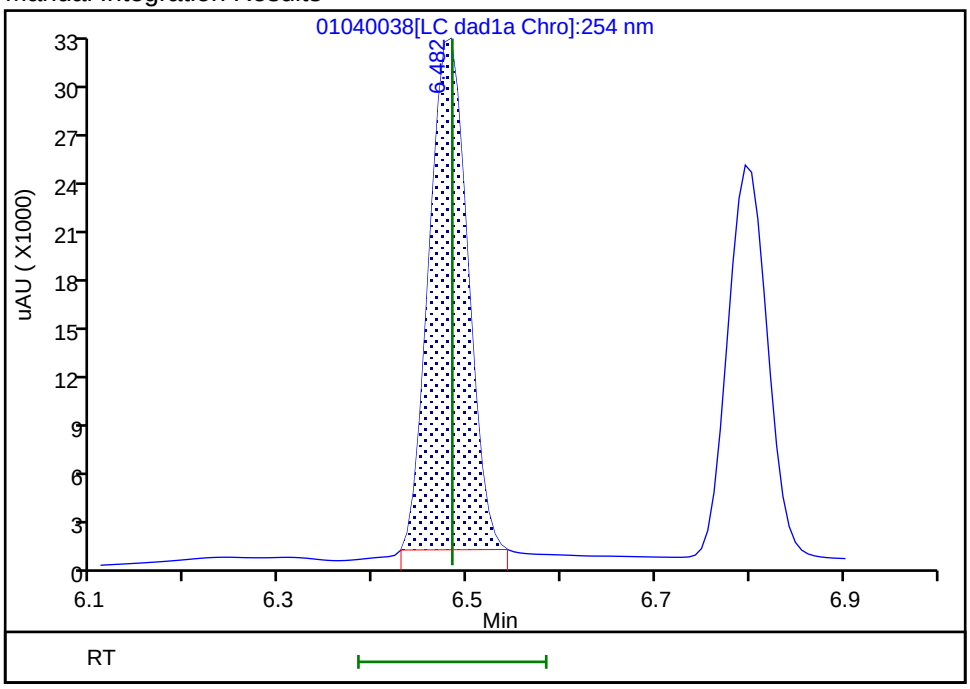
Processing Integration Results

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

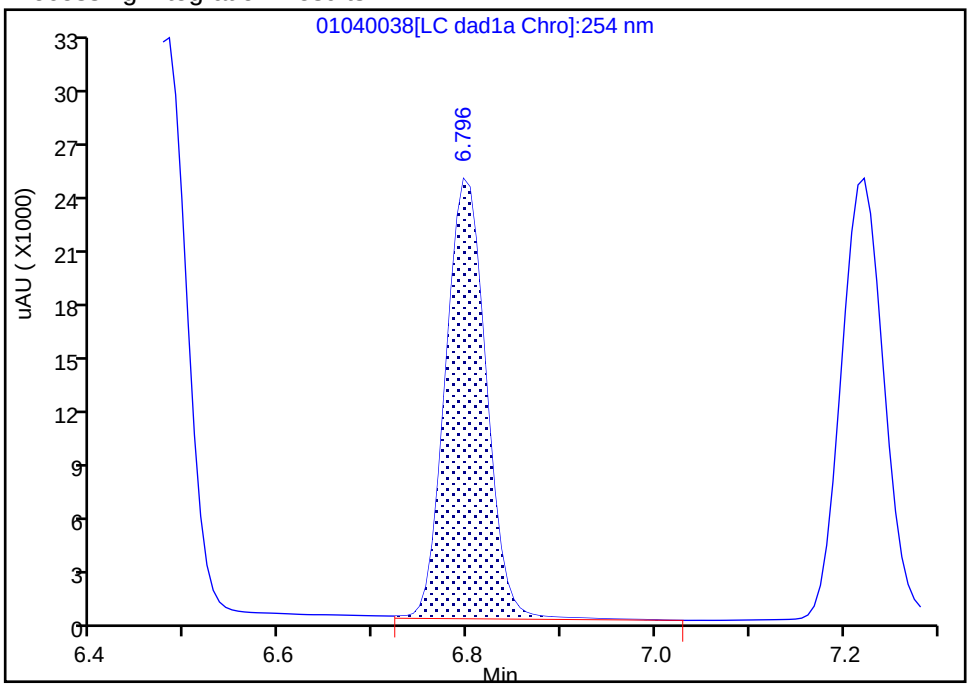
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040038.d				
Injection Date:	05-Jan-2022 04:47:17	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

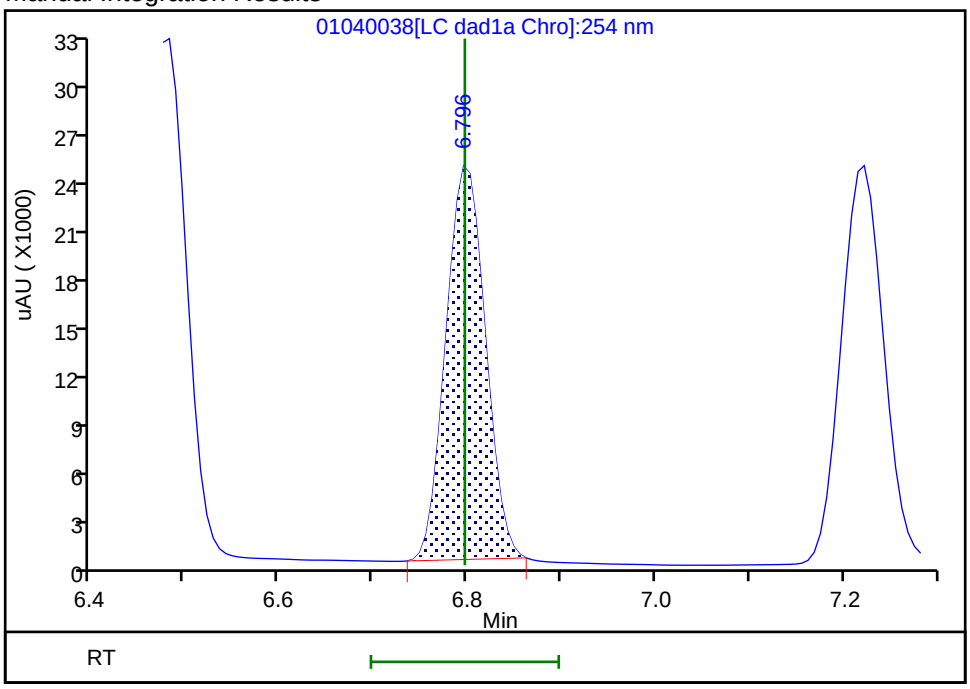
Processing Integration Results

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

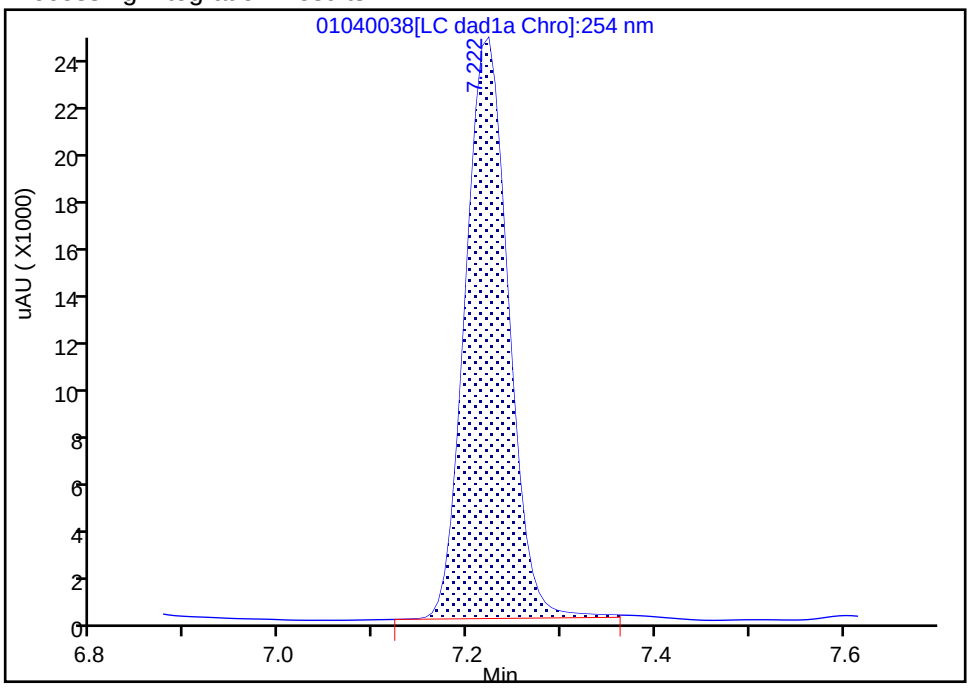
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040038.d				
Injection Date:	05-Jan-2022 04:47:17	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

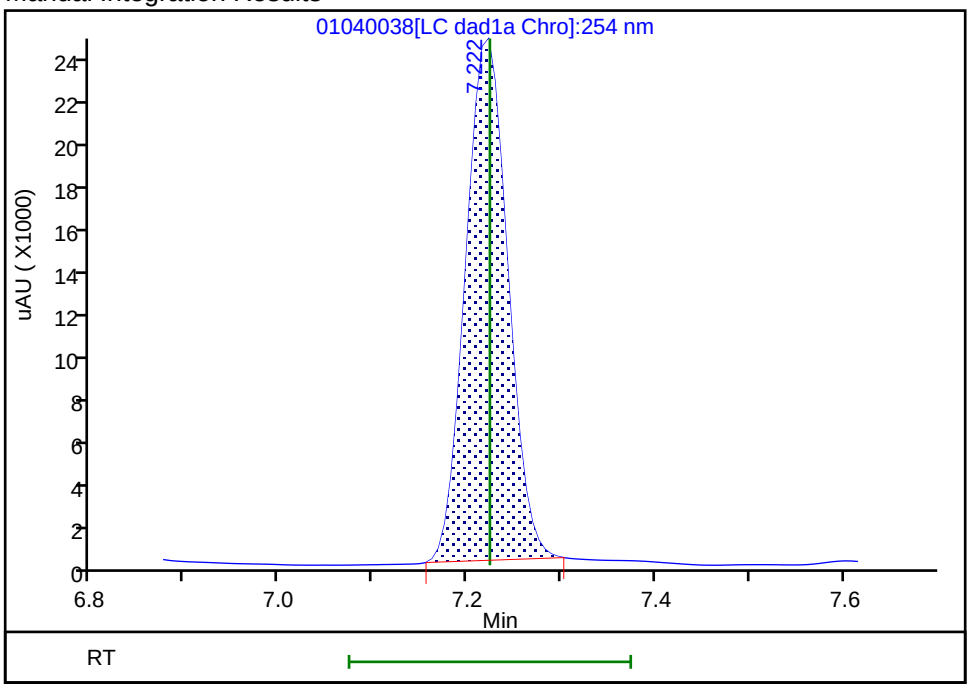
Processing Integration Results

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.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568287/49 Calibration Date: 03/11/2022 05:59

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: 03100049.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	86956		259	250	3.7	15.0
RDX	Ave	103609	108540		262	250	4.8	15.0
Picric acid	Ave	77039	79636		258	250	3.4	15.0
1,3,5-Trinitrobenzene	Ave	218096	228511		262	251	4.8	15.0
1,3-Dinitrobenzene	Ave	288401	302719		263	251	5.0	15.0
Nitrobenzene	Ave	191953	188478		246	251	-1.8	15.0
Tetryl	Ave	170567	168475		247	251	-1.2	15.0
Nitroglycerin	Ave	63037	66646		2640	2500	5.7	15.0
2,4,6-Trinitrotoluene	Ave	202726	203637		252	251	0.4	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	150881		250	250	-0.0	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	201936		251	251	-0.1	15.0
2,6-Dinitrotoluene	Ave	143115	144056		253	251	0.7	15.0
2,4-Dinitrotoluene	Ave	289351	300319		261	251	3.8	15.0
2-Nitrotoluene	Ave	127614	121808		239	250	-4.5	15.0
4-Nitrotoluene	Ave	106235	106499		251	251	0.2	15.0
3-Nitrotoluene	Ave	142273	134210		236	250	-5.7	15.0
PETN	Lin2		74353		2540	2500	1.7	15.0
1,2-Dinitrobenzene	Ave	124698	129260		259	250	3.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568287/49 Calibration Date: 03/11/2022 05:59

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: 03100049.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.44	6.74
RDX	7.59	7.44	7.74
Picric acid	7.94	7.78	8.08
1,3,5-Trinitrobenzene	8.66	8.51	8.81
1,3-Dinitrobenzene	9.27	9.13	9.43
Nitrobenzene	9.66	9.52	9.82
Tetryl	9.97	9.84	10.14
Nitroglycerin	10.42	10.29	10.59
2,4,6-Trinitrotoluene	10.87	10.79	10.99
4-Amino-2,6-dinitrotoluene	11.05	10.98	11.18
2-Amino-4,6-dinitrotoluene	11.31	11.23	11.43
2,6-Dinitrotoluene	11.48	11.40	11.60
2,4-Dinitrotoluene	11.65	11.57	11.77
2-Nitrotoluene	12.49	12.36	12.66
4-Nitrotoluene	12.91	12.79	13.09
3-Nitrotoluene	13.48	13.36	13.66
PETN	14.53	14.41	14.71
1,2-Dinitrobenzene	8.53	8.38	8.68

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\03100049.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 11-Mar-2022 05:59:55 ALS Bottle#: 7 Worklist Smp#: 49
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0109139-049
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 11-Mar-2022 12:32:37 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: CTX1614

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	6.593	0.008	21739	0.2500	0.2593	
8 RDX	1	7.588	7.587	0.001	27135	0.2500	0.2619	
9 2,4,6-Trinitrophenol	1	7.935	7.933	0.002	19909	0.2500	0.2584	
$ 10 1,2-Dinitrobenzene	1	8.528	8.533	-0.005	32315	0.2500	0.2591	
11 1,3,5-Trinitrobenzene	1	8.655	8.660	-0.005	57242	0.2505	0.2625	
12 1,3-Dinitrobenzene	1	9.274	9.280	-0.006	75831	0.2505	0.2629	
13 Nitrobenzene	1	9.661	9.667	-0.006	47308	0.2510	0.2465	
15 Tetryl	1	9.968	9.987	-0.019	42203	0.2505	0.2474	
16 Nitroglycerin	2	10.421	10.440	-0.019	166615	2.50	2.64	
17 2,4,6-Trinitrotoluene	1	10.874	10.893	-0.019	51113	0.2510	0.2521	
18 4-Amino-2,6-dinitrotoluene	1	11.054	11.080	-0.026	37758	0.2503	0.2501	
19 2-Amino-4,6-dinitrotoluene	1	11.308	11.327	-0.019	50686	0.2510	0.2507	
20 2,6-Dinitrotoluene	1	11.481	11.500	-0.019	36158	0.2510	0.2526	
21 2,4-Dinitrotoluene	1	11.648	11.667	-0.019	75380	0.2510	0.2605	
22 o-Nitrotoluene	1	12.494	12.513	-0.019	30452	0.2500	0.2386	
23 p-Nitrotoluene	1	12.914	12.940	-0.026	26678	0.2505	0.2511	
24 m-Nitrotoluene	1	13.481	13.507	-0.026	33586	0.2503	0.2361	
25 PETN	2	14.528	14.560	-0.032	185883	2.50	2.54	

Reagents:

8330IntermStk_00070 Amount Added: 25.00 Units: uL

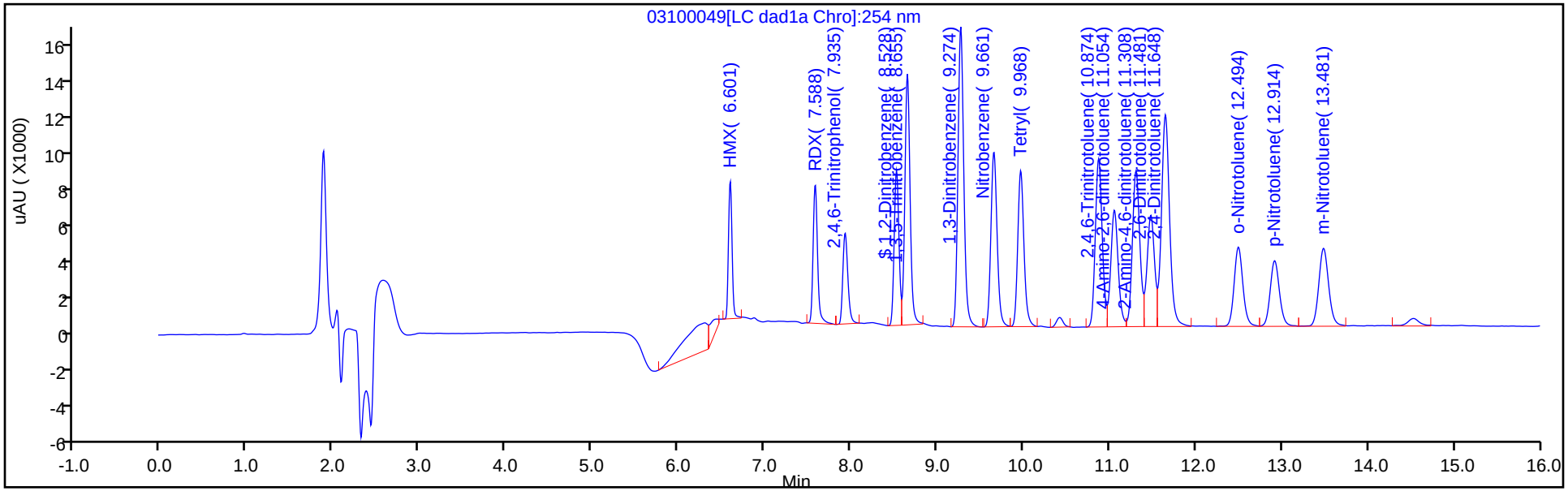
Report Date: 11-Mar-2022 12:32:37 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

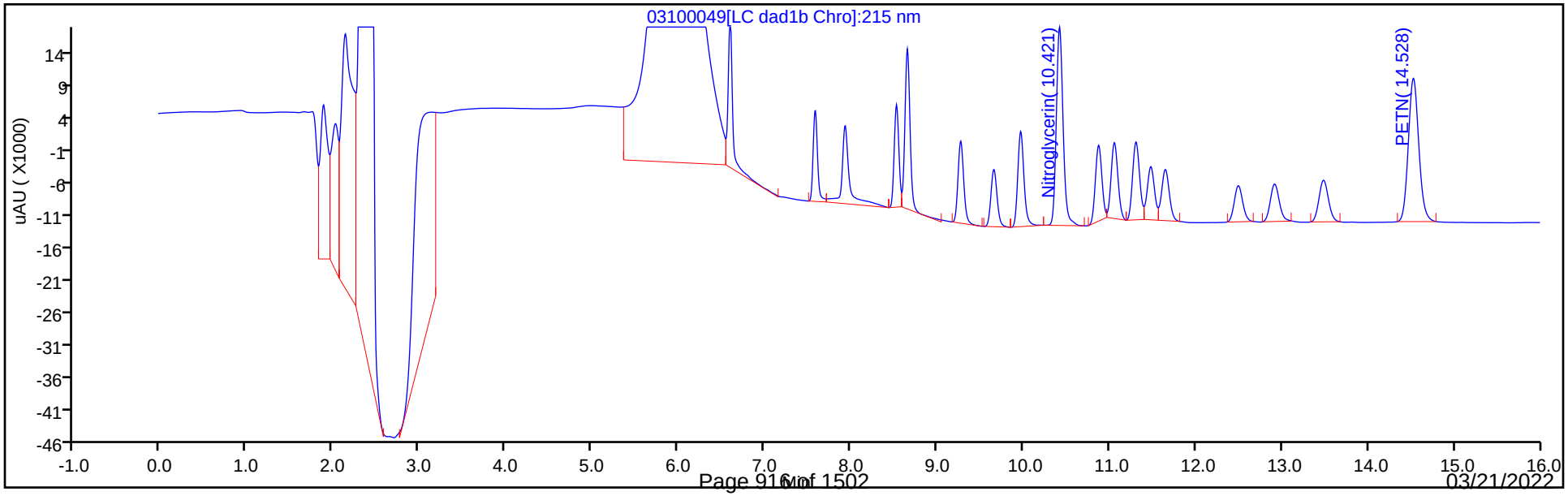
Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100049.d

Injection Date:	11-Mar-2022 05:59:55	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	49
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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568287/50 Calibration Date: 03/11/2022 06:22

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: 03100050.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	172408		238	250	-4.9	15.0
DNX	Ave	138113	131588		238	250	-4.7	15.0
MNX	Ave	125995	131290		304	292	4.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568287/50 Calibration Date: 03/11/2022 06:22

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: 03100050.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.38	6.58
DNX	6.79	6.70	6.90
MNX	7.21	7.06	7.36

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\03100050.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 11-Mar-2022 06:22:49 ALS Bottle#: 9 Worklist Smp#: 50
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0109139-050
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 11-Mar-2022 12:32:36 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: CTX1614

First Level Reviewer: zhangji Date: 11-Mar-2022 12:32:20

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.478	6.476	0.002	43145	0.2503	0.2381	M
6 DNX	1	6.791	6.796	-0.005	32930	0.2503	0.2384	M
7 MNX	1	7.205	7.209	-0.004	38304	0.2918	0.3040	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

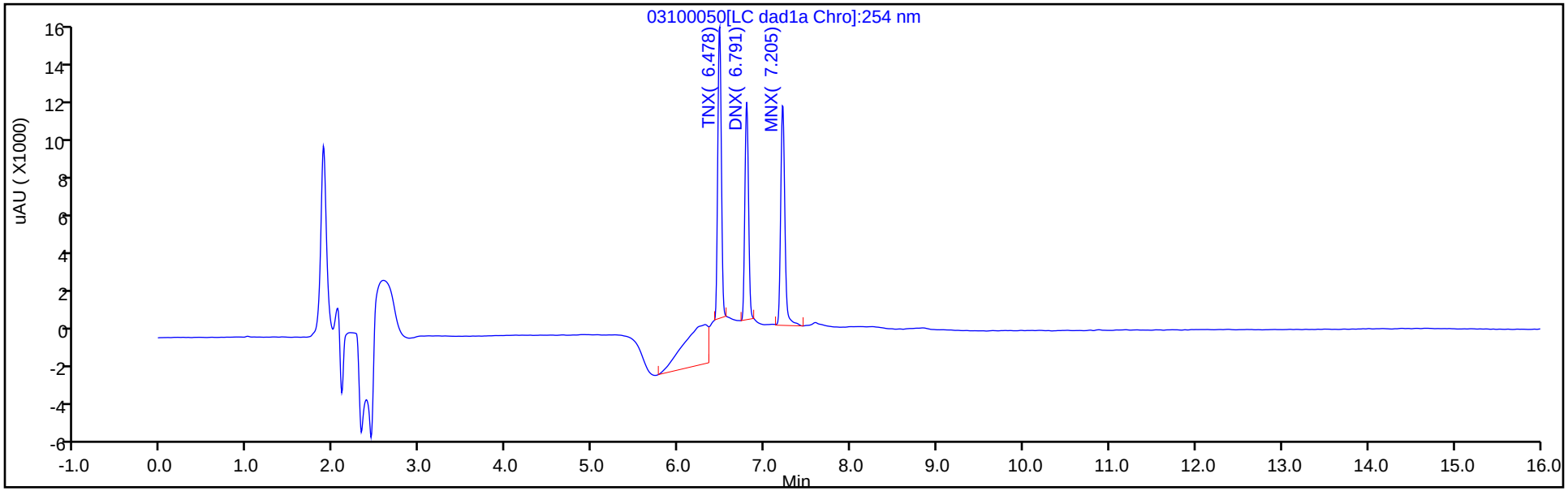
Report Date: 11-Mar-2022 12:32:36 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

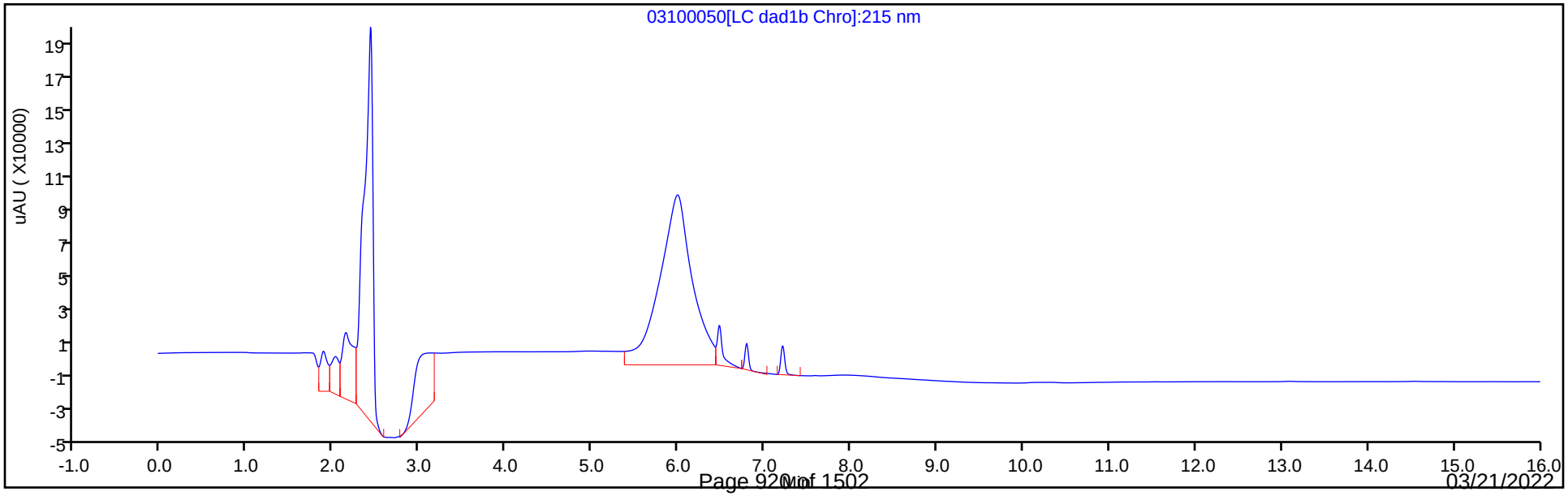
Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100050.d

Injection Date:	11-Mar-2022 06:22:49	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	50
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

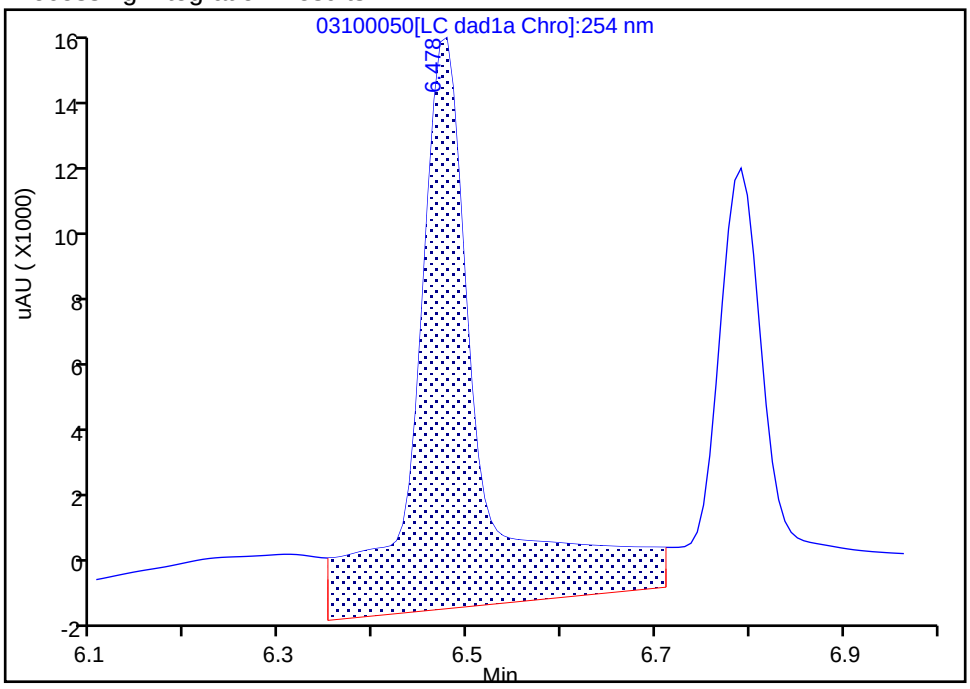
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100050.d				
Injection Date:	11-Mar-2022 06:22:49	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

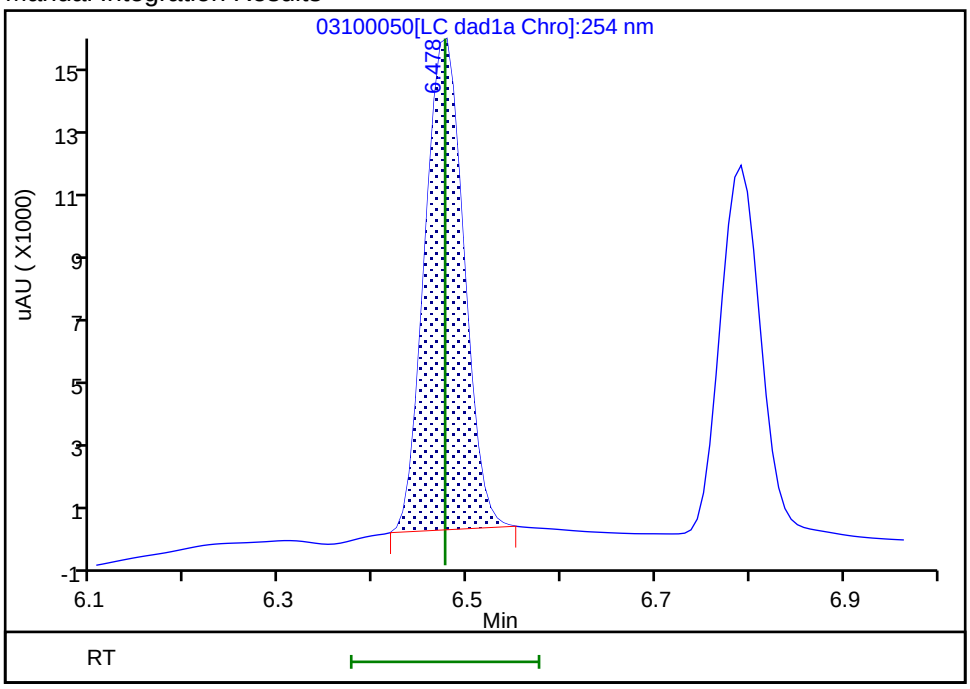
Processing Integration Results

RT: 6.48
Area: 80422
Amount: 0.443812
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 43145
Amount: 0.238097
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 12:32:14
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

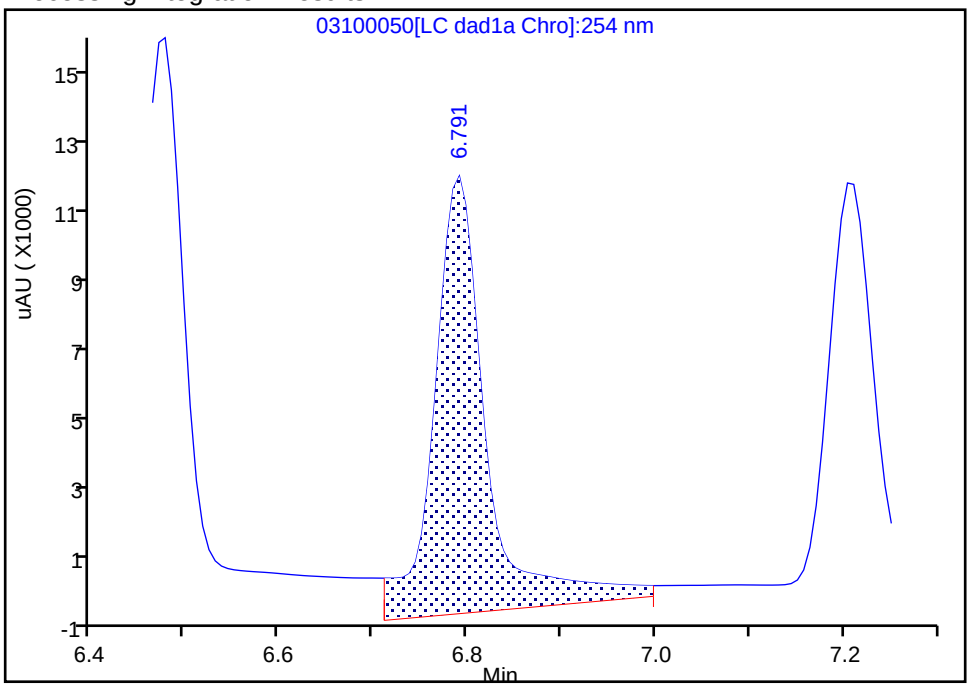
Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100050.d
Injection Date: 11-Mar-2022 06:22:49 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 50
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

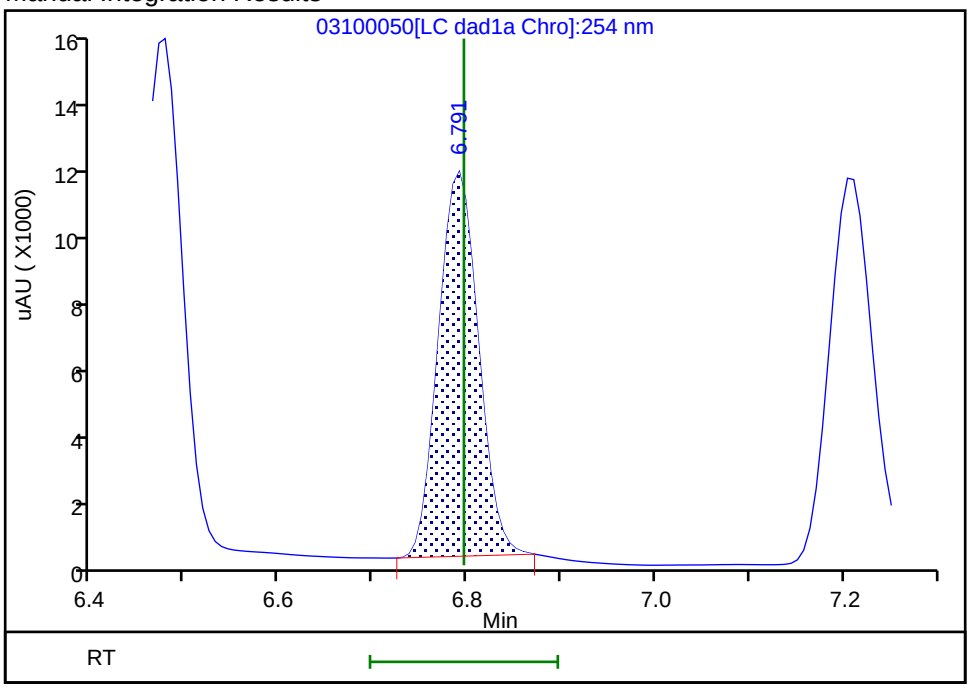
Processing Integration Results

RT: 6.79
Area: 47111
Amount: 0.341105
Amount Units: ug/mL



Manual Integration Results

RT: 6.79
Area: 32930
Amount: 0.238428
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 12:32:17
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568287/61 Calibration Date: 03/11/2022 10:35

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: 03100061.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	83508		249	250	-0.4	15.0
RDX	Ave	103609	108460		262	250	4.7	15.0
Picric acid	Ave	77039	80828		262	250	4.9	15.0
1,3,5-Trinitrobenzene	Ave	218096	227713		262	251	4.4	15.0
1,3-Dinitrobenzene	Ave	288401	302758		263	251	5.0	15.0
Nitrobenzene	Ave	191953	184689		242	251	-3.8	15.0
Tetryl	Ave	170567	167784		246	251	-1.6	15.0
Nitroglycerin	Ave	63037	66963		2660	2500	6.2	15.0
2,4,6-Trinitrotoluene	Ave	202726	203060		251	251	0.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	150929		250	250	-0.0	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	201398		250	251	-0.4	15.0
2,6-Dinitrotoluene	Ave	143115	146092		256	251	2.1	15.0
2,4-Dinitrotoluene	Ave	289351	297920		258	251	3.0	15.0
2-Nitrotoluene	Ave	127614	116856		229	250	-8.4	15.0
4-Nitrotoluene	Ave	106235	103457		244	251	-2.6	15.0
3-Nitrotoluene	Ave	142273	130709		230	250	-8.1	15.0
PETN	Lin2		74862		2560	2500	2.4	15.0
1,2-Dinitrobenzene	Ave	124698	129348		259	250	3.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568287/61 Calibration Date: 03/11/2022 10:35

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: 03100061.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.44	6.74
RDX	7.58	7.44	7.74
Picric acid	7.93	7.78	8.08
1,3,5-Trinitrobenzene	8.66	8.51	8.81
1,3-Dinitrobenzene	9.28	9.13	9.43
Nitrobenzene	9.66	9.52	9.82
Tetryl	9.98	9.84	10.14
Nitroglycerin	10.43	10.29	10.59
2,4,6-Trinitrotoluene	10.88	10.79	10.99
4-Amino-2,6-dinitrotoluene	11.06	10.98	11.18
2-Amino-4,6-dinitrotoluene	11.31	11.23	11.43
2,6-Dinitrotoluene	11.48	11.40	11.60
2,4-Dinitrotoluene	11.66	11.57	11.77
2-Nitrotoluene	12.50	12.36	12.66
4-Nitrotoluene	12.92	12.79	13.09
3-Nitrotoluene	13.50	13.36	13.66
PETN	14.54	14.41	14.71
1,2-Dinitrobenzene	8.53	8.38	8.68

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\03100061.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 11-Mar-2022 10:35:06 ALS Bottle#: 7 Worklist Smp#: 61
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0109139-061
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 11-Mar-2022 13:57:00 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: CTX1614

First Level Reviewer: zhangji Date: 11-Mar-2022 13:56:40

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.597	6.593	0.004	20877	0.2500	0.2490	M
8 RDX	1	7.583	7.587	-0.004	27115	0.2500	0.2617	
9 2,4,6-Trinitrophenol	1	7.930	7.933	-0.003	20207	0.2500	0.2623	
$ 10 1,2-Dinitrobenzene	1	8.530	8.533	-0.003	32337	0.2500	0.2593	
11 1,3,5-Trinitrobenzene	1	8.657	8.660	-0.003	57042	0.2505	0.2615	
12 1,3-Dinitrobenzene	1	9.277	9.280	-0.003	75841	0.2505	0.2630	
13 Nitrobenzene	1	9.663	9.667	-0.004	46357	0.2510	0.2415	
15 Tetryl	1	9.977	9.987	-0.010	42030	0.2505	0.2464	
16 Nitroglycerin	2	10.430	10.440	-0.010	167408	2.50	2.66	
17 2,4,6-Trinitrotoluene	1	10.877	10.893	-0.016	50968	0.2510	0.2514	
18 4-Amino-2,6-dinitrotoluene	1	11.057	11.080	-0.023	37770	0.2503	0.2502	
19 2-Amino-4,6-dinitrotoluene	1	11.310	11.327	-0.017	50551	0.2510	0.2500	
20 2,6-Dinitrotoluene	1	11.483	11.500	-0.017	36669	0.2510	0.2562	
21 2,4-Dinitrotoluene	1	11.657	11.667	-0.010	74778	0.2510	0.2584	
22 o-Nitrotoluene	1	12.503	12.513	-0.010	29214	0.2500	0.2289	
23 p-Nitrotoluene	1	12.923	12.940	-0.017	25916	0.2505	0.2439	
24 m-Nitrotoluene	1	13.497	13.507	-0.010	32710	0.2503	0.2299	
25 PETN	2	14.543	14.560	-0.017	187155	2.50	2.56	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070 Amount Added: 25.00 Units: uL

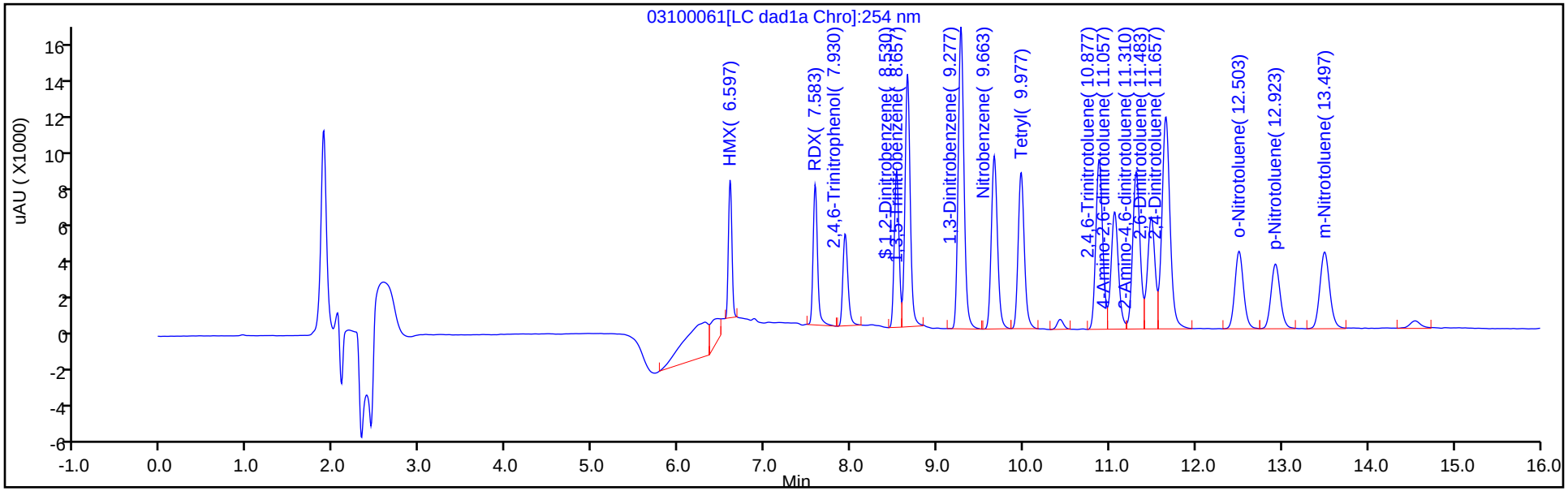
Report Date: 11-Mar-2022 13:57:00 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

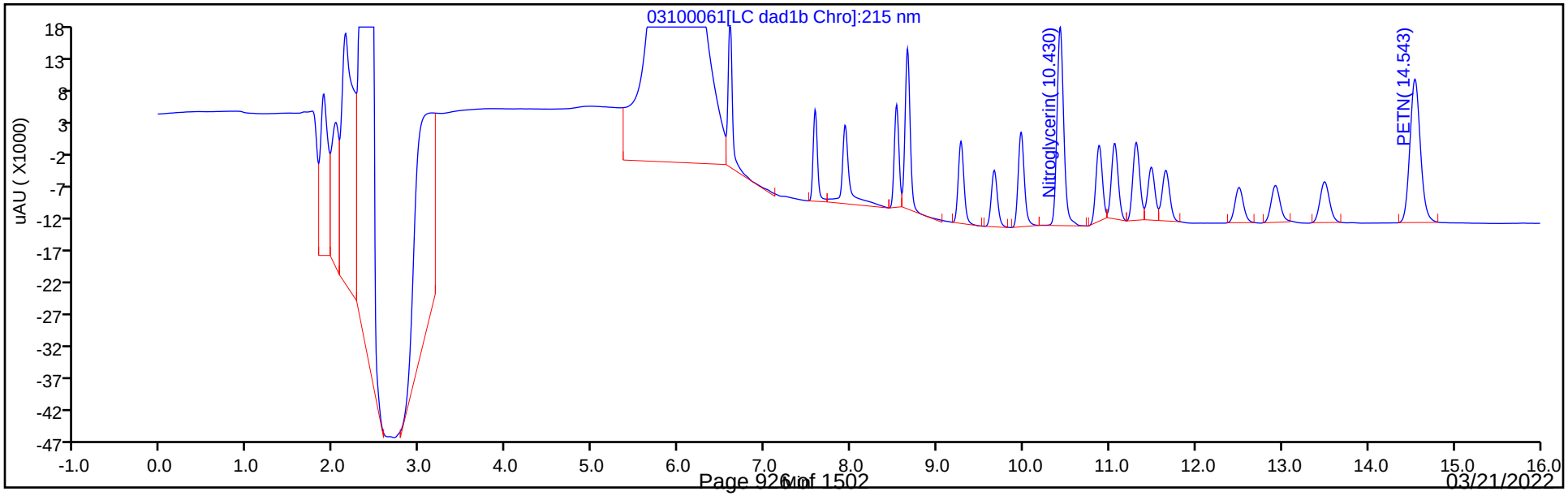
Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100061.d

Injection Date:	11-Mar-2022 10:35:06	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	61
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

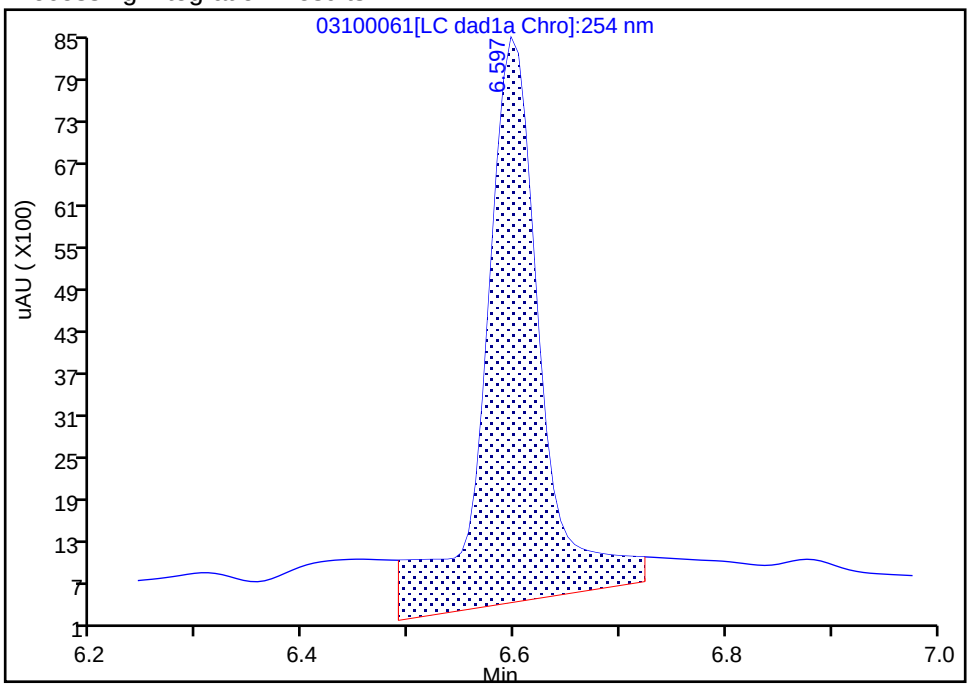
Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100061.d
Injection Date: 11-Mar-2022 10:35:06 Instrument ID: CHHPLC_X3
Lims ID: CCV INT
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 61
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0

Signal: 1

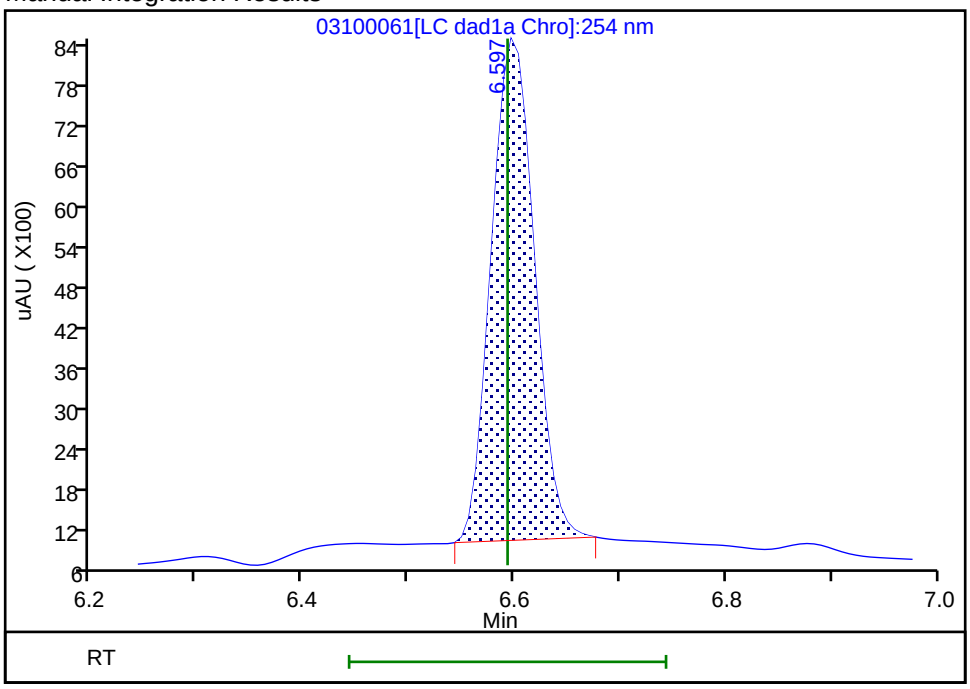
Processing Integration Results

RT: 6.60
Area: 29767
Amount: 0.355100
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 20877
Amount: 0.249048
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:56:39
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568287/62 Calibration Date: 03/11/2022 10:58

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: 03100062.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	169263		234	250	-6.6	15.0
DNX	Ave	138113	131564		238	250	-4.7	15.0
MNX	Ave	125995	120960		280	292	-4.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568287/62 Calibration Date: 03/11/2022 10:58

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: 03100062.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.38	6.58
DNX	6.80	6.70	6.90
MNX	7.21	7.06	7.36

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\03100062.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	11-Mar-2022 10:58:05	ALS Bottle#:	9	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0109139-062				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	11-Mar-2022 13:56:59	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:	CTX1614				
First Level Reviewer: zhangji		Date:	11-Mar-2022 13:56:56		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.476	6.476	0.000	42358	0.2503	0.2338	M
6 DNX	1	6.796	6.796	0.000	32924	0.2503	0.2384	M
7 MNX	1	7.210	7.209	0.001	35290	0.2918	0.2801	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

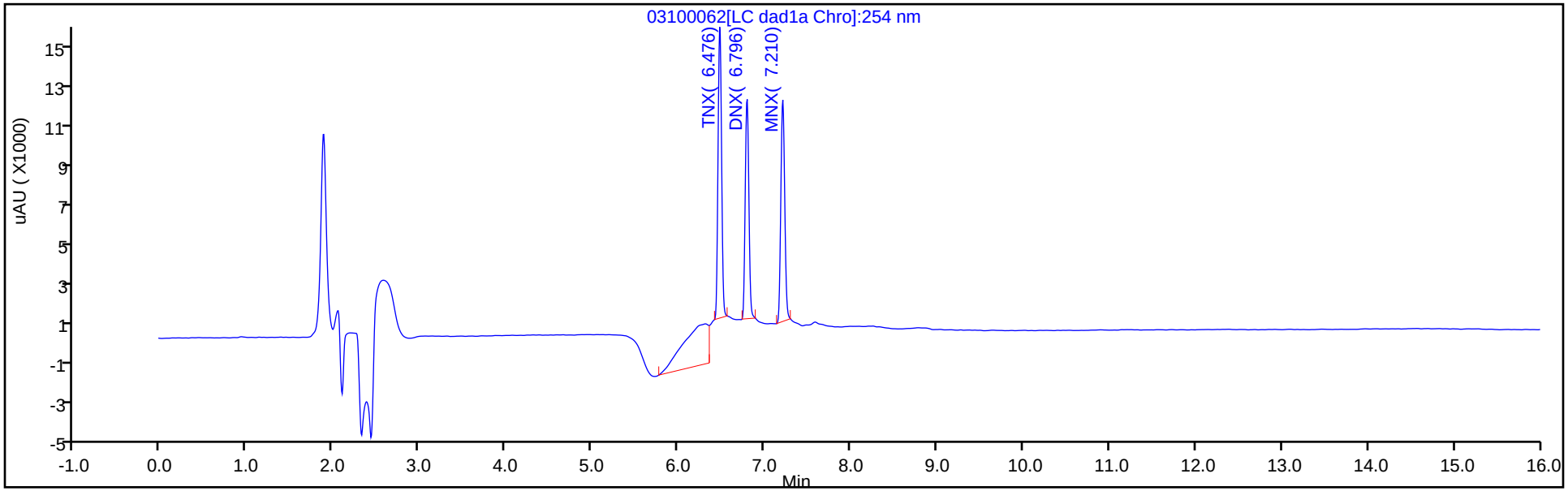
Report Date: 11-Mar-2022 13:57:00 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

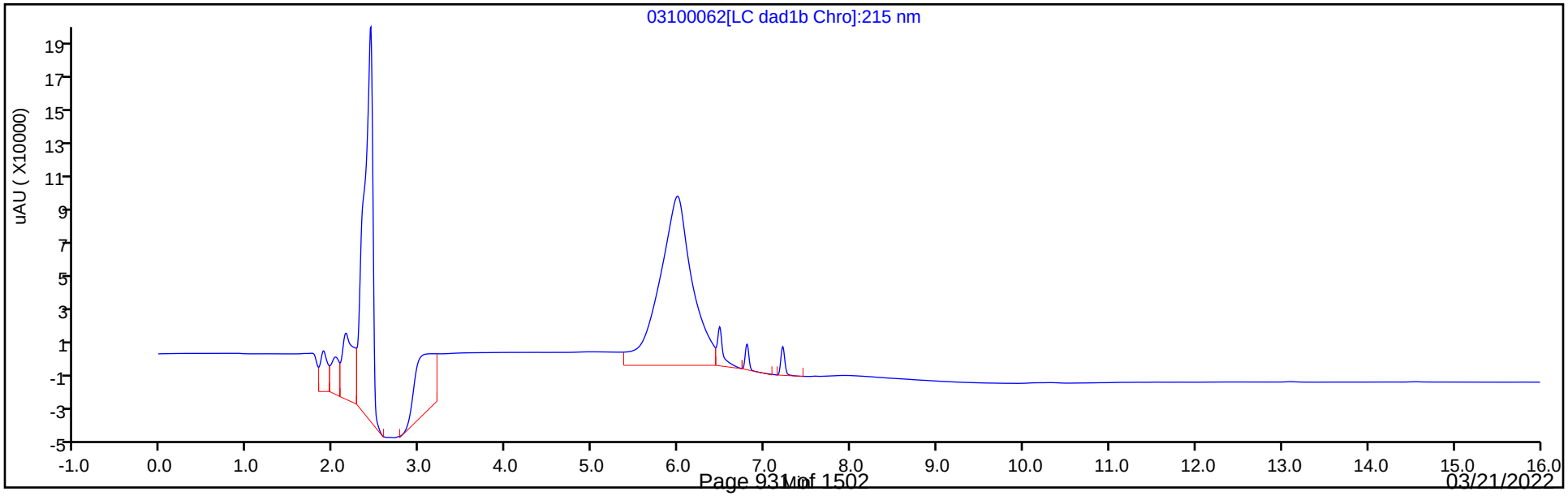
Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100062.d

Injection Date:	11-Mar-2022 10:58:05	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	62
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

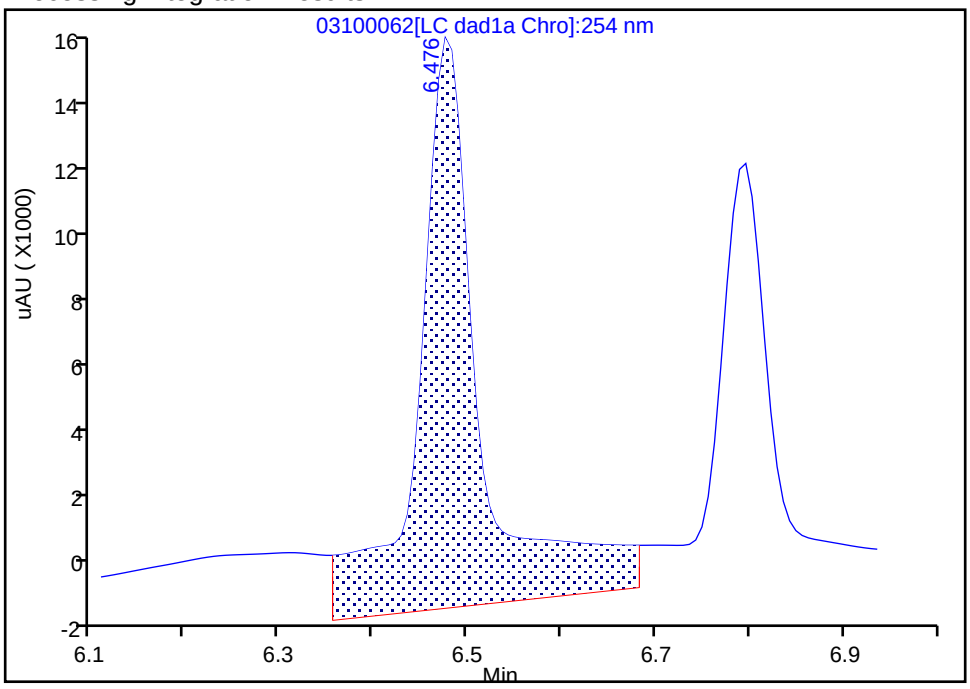
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100062.d				
Injection Date:	11-Mar-2022 10:58:05	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

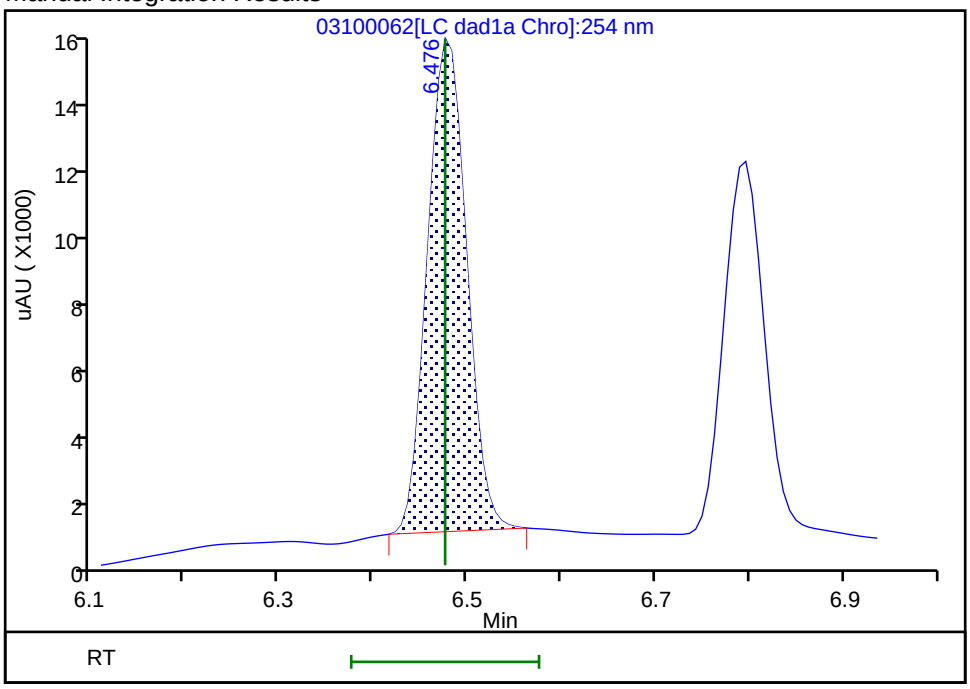
Processing Integration Results

RT: 6.48
Area: 76592
Amount: 0.422676
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 42358
Amount: 0.233754
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:56:46
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

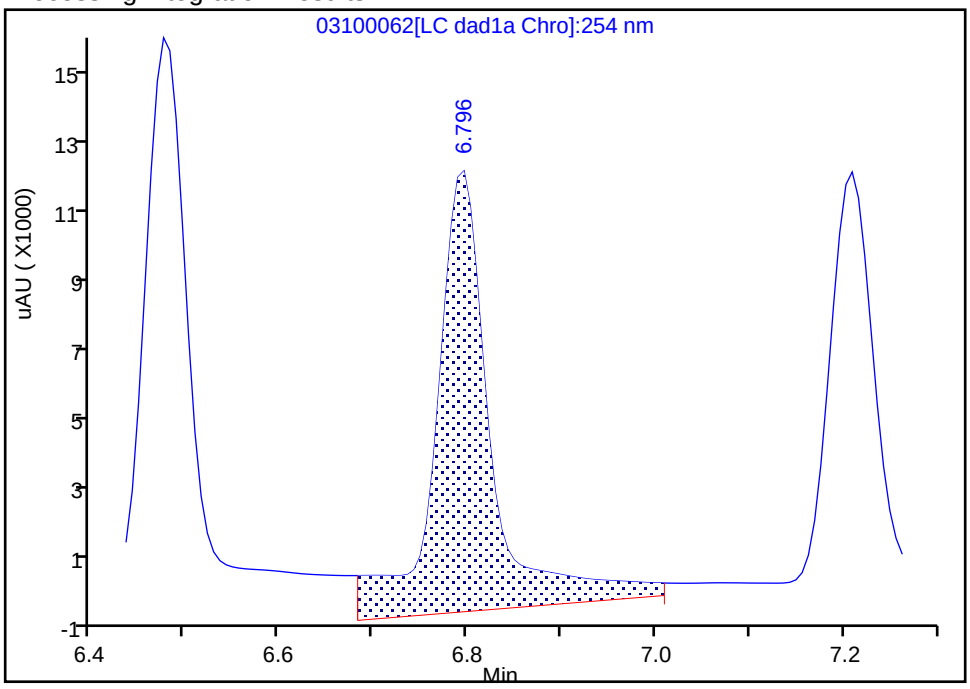
Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100062.d
Injection Date: 11-Mar-2022 10:58:05 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 62
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

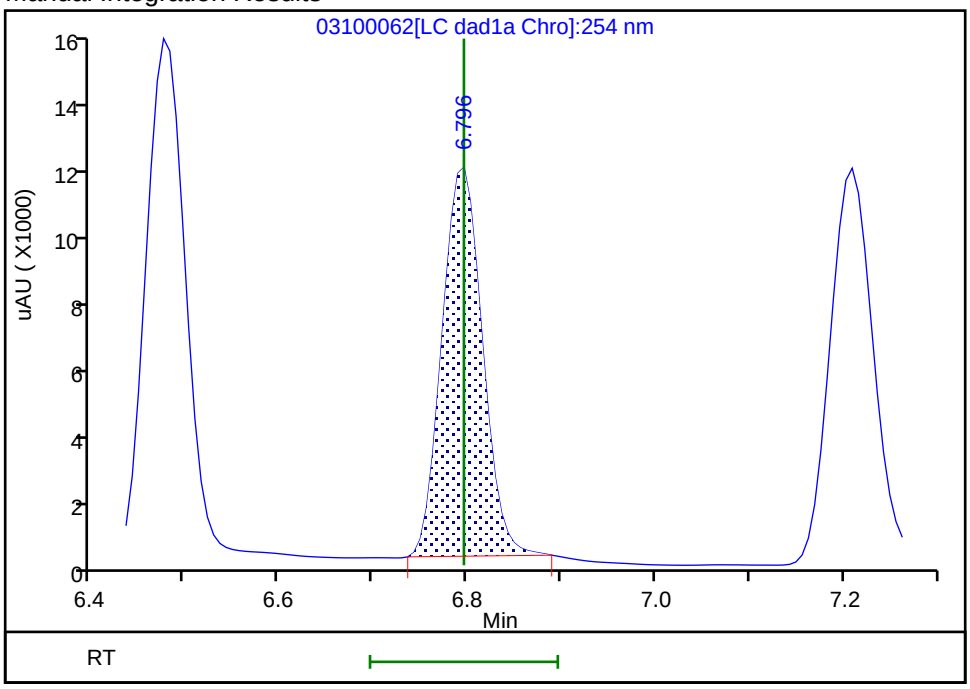
Processing Integration Results

RT: 6.80
Area: 50008
Amount: 0.362080
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 32924
Amount: 0.238385
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:56:48
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

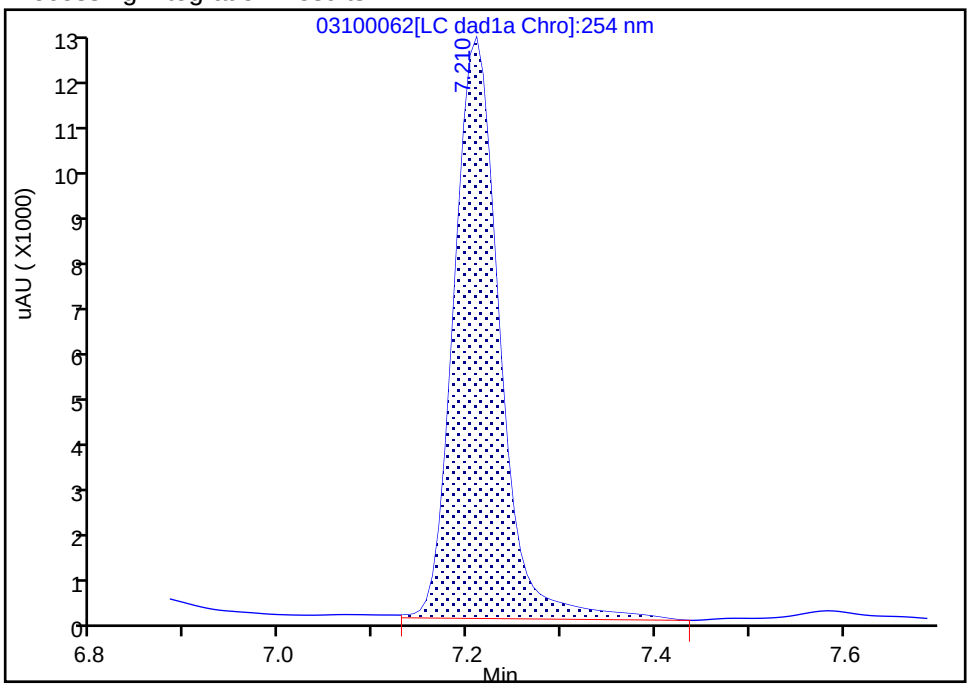
Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100062.d
Injection Date: 11-Mar-2022 10:58:05 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 62
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

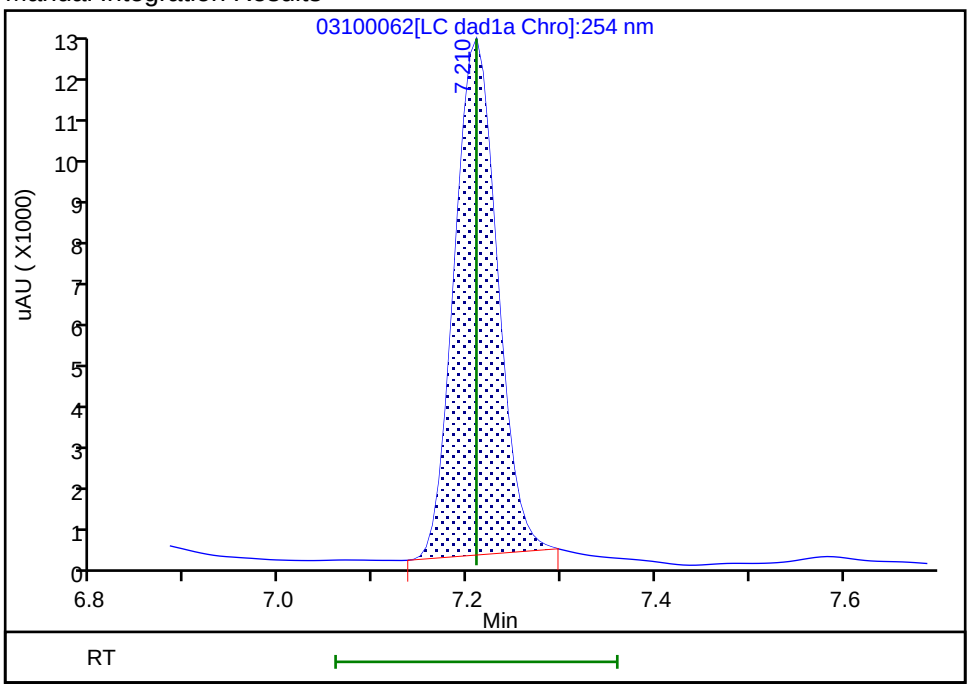
Processing Integration Results

RT: 7.21
Area: 38320
Amount: 0.304138
Amount Units: ug/mL



Manual Integration Results

RT: 7.21
Area: 35290
Amount: 0.280090
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:56:52
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568433/15 Calibration Date: 03/11/2022 16:42

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: 03110015.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	82516		246	250	-1.6	15.0
RDX	Ave	103609	106460		257	250	2.8	15.0
Picric acid	Ave	77039	80004		260	250	3.8	15.0
1,3,5-Trinitrobenzene	Ave	218096	224994		258	251	3.2	15.0
1,3-Dinitrobenzene	Ave	288401	297094		258	251	3.0	15.0
Nitrobenzene	Ave	191953	195606		256	251	1.9	15.0
Tetryl	Ave	170567	166335		244	251	-2.5	15.0
Nitroglycerin	Ave	63037	65482		2600	2500	3.9	15.0
2,4,6-Trinitrotoluene	Ave	202726	198398		246	251	-2.1	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	151137		251	250	0.1	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	200235		249	251	-1.0	15.0
2,6-Dinitrotoluene	Ave	143115	142020		249	251	-0.8	15.0
2,4-Dinitrotoluene	Ave	289351	294104		255	251	1.6	15.0
2-Nitrotoluene	Ave	127614	127160		249	250	-0.4	15.0
4-Nitrotoluene	Ave	106235	111178		262	251	4.7	15.0
3-Nitrotoluene	Ave	142273	139217		245	250	-2.1	15.0
PETN	Lin2		73331		2510	2500	0.3	15.0
1,2-Dinitrobenzene	Ave	124698	129744		260	250	4.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568433/15 Calibration Date: 03/11/2022 16:42

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: 03110015.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.45	6.75
RDX	7.59	7.43	7.73
Picric acid	7.94	7.78	8.08
1,3,5-Trinitrobenzene	8.66	8.51	8.81
1,3-Dinitrobenzene	9.28	9.13	9.43
Nitrobenzene	9.67	9.52	9.82
Tetryl	9.98	9.83	10.13
Nitroglycerin	10.44	10.29	10.59
2,4,6-Trinitrotoluene	10.89	10.79	10.99
4-Amino-2,6-dinitrotoluene	11.08	10.97	11.17
2-Amino-4,6-dinitrotoluene	11.33	11.22	11.42
2,6-Dinitrotoluene	11.50	11.40	11.60
2,4-Dinitrotoluene	11.67	11.56	11.76
2-Nitrotoluene	12.52	12.36	12.66
4-Nitrotoluene	12.95	12.79	13.09
3-Nitrotoluene	13.52	13.35	13.65
PETN	14.57	14.41	14.71
1,2-Dinitrobenzene	8.54	8.38	8.68

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110015.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 11-Mar-2022 16:42:31 ALS Bottle#: 7 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0109174-015
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Mar-2022 10:38:23 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: CTX1616

First Level Reviewer: zhangji Date: 11-Mar-2022 17:17:53

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	6.595	0.003	20629	0.2500	0.2461	M
8 RDX	1	7.591	7.582	0.009	26615	0.2500	0.2569	
9 2,4,6-Trinitrophenol	1	7.938	7.929	0.009	20001	0.2500	0.2596	
$ 10 1,2-Dinitrobenzene	1	8.538	8.529	0.009	32436	0.2500	0.2601	
11 1,3,5-Trinitrobenzene	1	8.658	8.655	0.003	56361	0.2505	0.2584	
12 1,3-Dinitrobenzene	1	9.284	9.282	0.002	74422	0.2505	0.2580	
13 Nitrobenzene	1	9.671	9.668	0.003	49097	0.2510	0.2558	
15 Tetryl	1	9.984	9.982	0.002	41667	0.2505	0.2443	
16 Nitroglycerin	2	10.438	10.435	0.003	163706	2.50	2.60	M
17 2,4,6-Trinitrotoluene	1	10.891	10.888	0.003	49798	0.2510	0.2456	
18 4-Amino-2,6-dinitrotoluene	1	11.078	11.068	0.010	37822	0.2503	0.2505	
19 2-Amino-4,6-dinitrotoluene	1	11.331	11.322	0.009	50259	0.2510	0.2486	
20 2,6-Dinitrotoluene	1	11.504	11.495	0.009	35647	0.2510	0.2491	
21 2,4-Dinitrotoluene	1	11.671	11.662	0.009	73820	0.2510	0.2551	
22 o-Nitrotoluene	1	12.524	12.508	0.016	31790	0.2500	0.2491	
23 p-Nitrotoluene	1	12.951	12.935	0.016	27850	0.2505	0.2622	
24 m-Nitrotoluene	1	13.518	13.502	0.016	34839	0.2503	0.2449	
25 PETN	2	14.571	14.555	0.016	183327	2.50	2.51	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070 Amount Added: 25.00 Units: uL

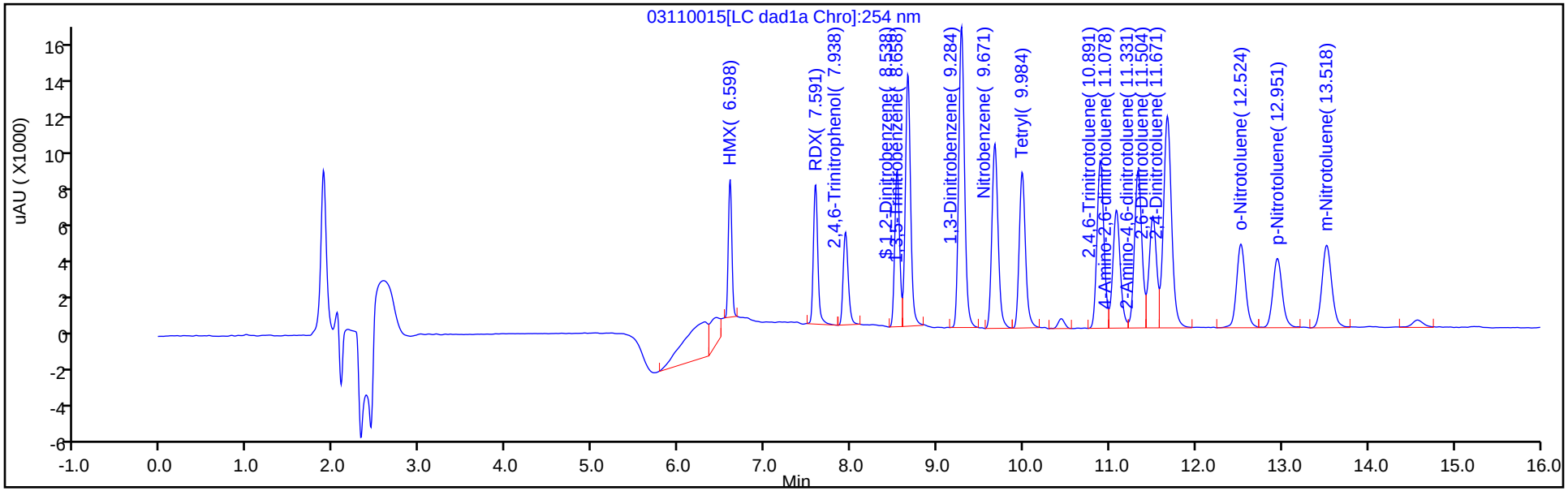
Report Date: 12-Mar-2022 10:38:23 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

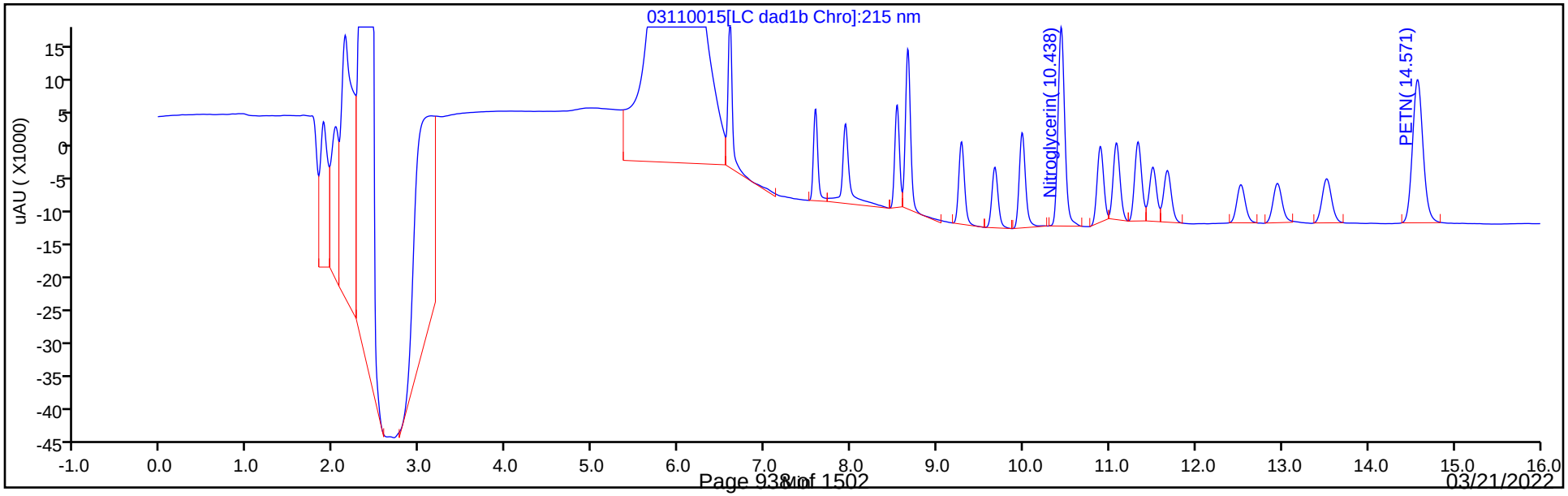
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110015.d

Injection Date:	11-Mar-2022 16:42:31	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	15
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

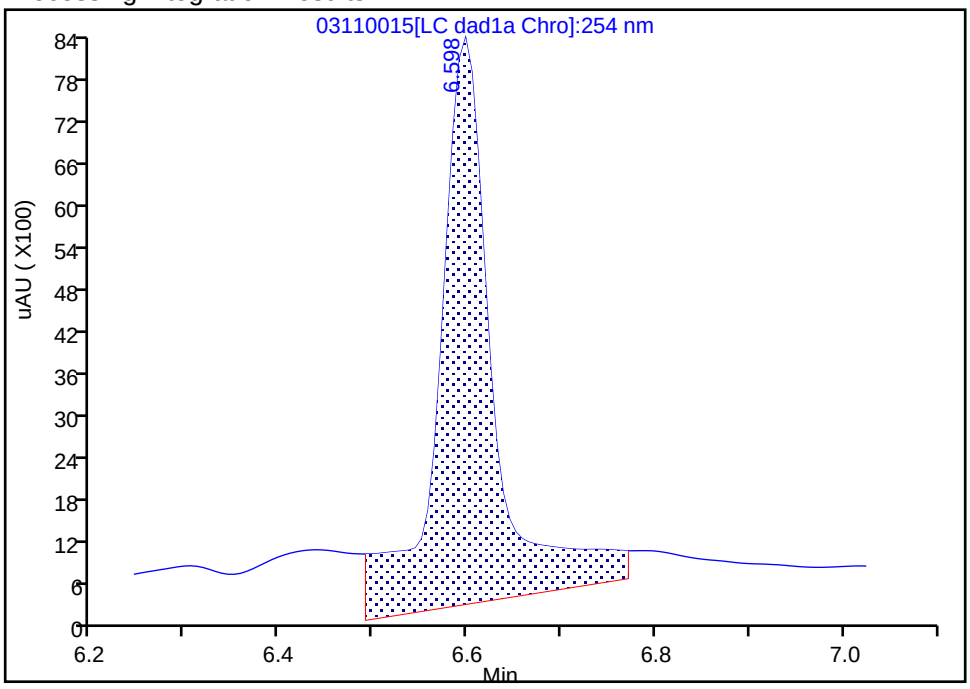
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110015.d				
Injection Date:	11-Mar-2022 16:42:31	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

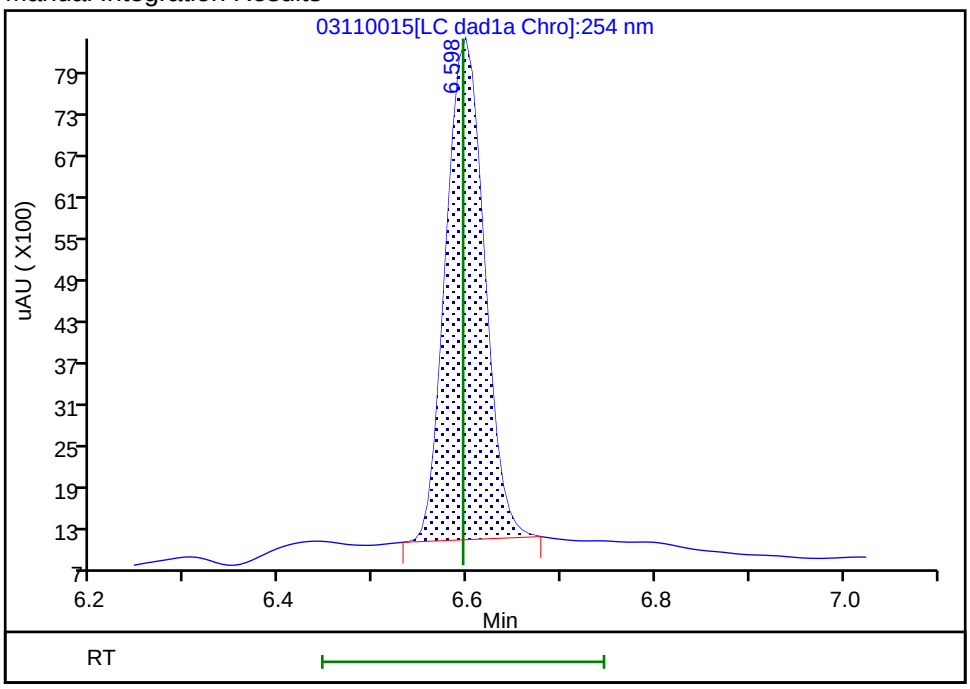
Processing Integration Results

RT: 6.60
Area: 32701
Amount: 0.390100
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 20629
Amount: 0.246090
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 17:17:52
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

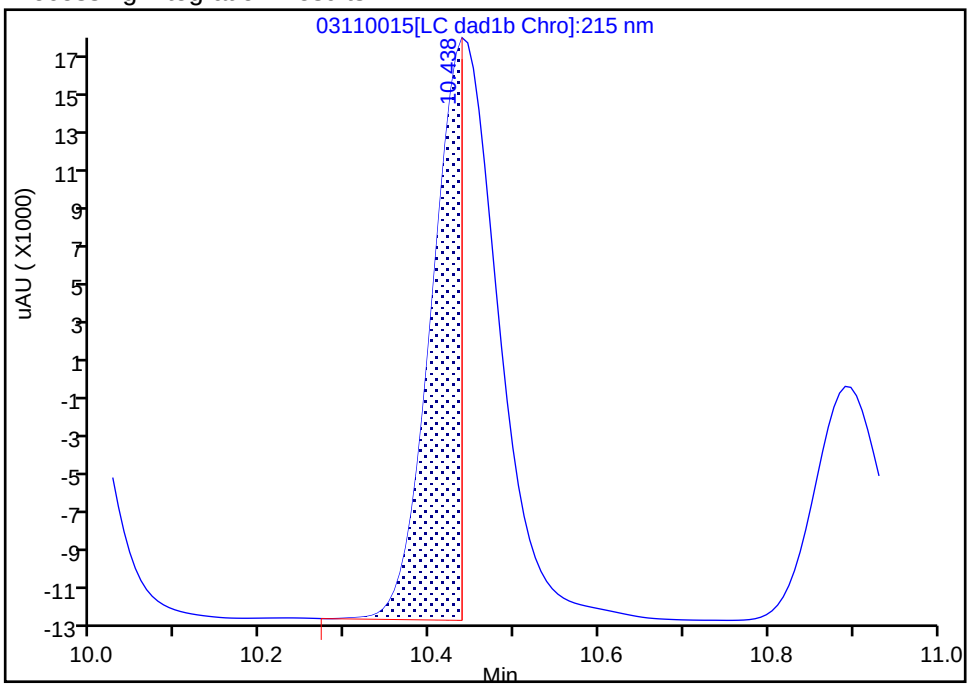
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110015.d
Injection Date: 11-Mar-2022 16:42:31 Instrument ID: CHHPLC_X3
Lims ID: CCV INT
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

16 Nitroglycerin, CAS: 55-63-0

Signal: 1

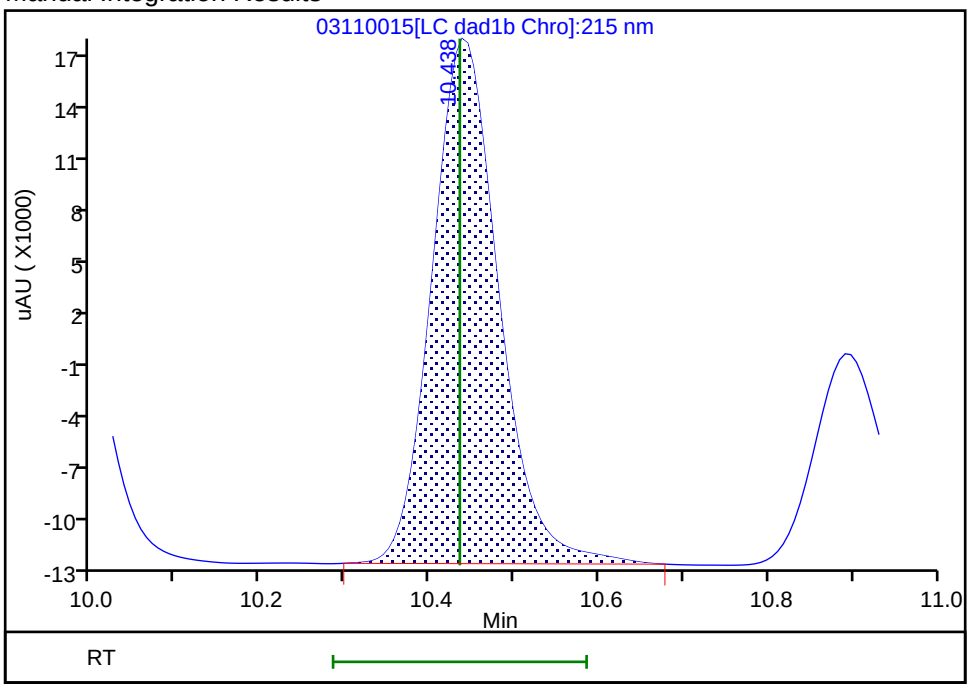
Processing Integration Results

RT: 10.44
Area: 73101
Amount: 1.159647
Amount Units: ug/mL



Manual Integration Results

RT: 10.44
Area: 163706
Amount: 2.596971
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 10:38:21
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568433/16 Calibration Date: 03/11/2022 17:05

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: 03110016.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	184891		255	250	2.0	15.0
DNX	Ave	138113	135924		246	250	-1.6	15.0
MNX	Ave	125995	125138		290	292	-0.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568433/16 Calibration Date: 03/11/2022 17:05

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: 03110016.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.38	6.58
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\20220311-109174.b\03110016.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 11-Mar-2022 17:05:27 ALS Bottle#: 9 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0109174-016
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Mar-2022 10:32:13 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: CTX1616

First Level Reviewer: zhangji Date: 11-Mar-2022 17:32:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.477	6.477	0.000	46269	0.2503	0.2553	M
6 DNX	1	6.791	6.791	0.000	34015	0.2503	0.2463	M
7 MNX	1	7.211	7.211	0.000	36509	0.2918	0.2898	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

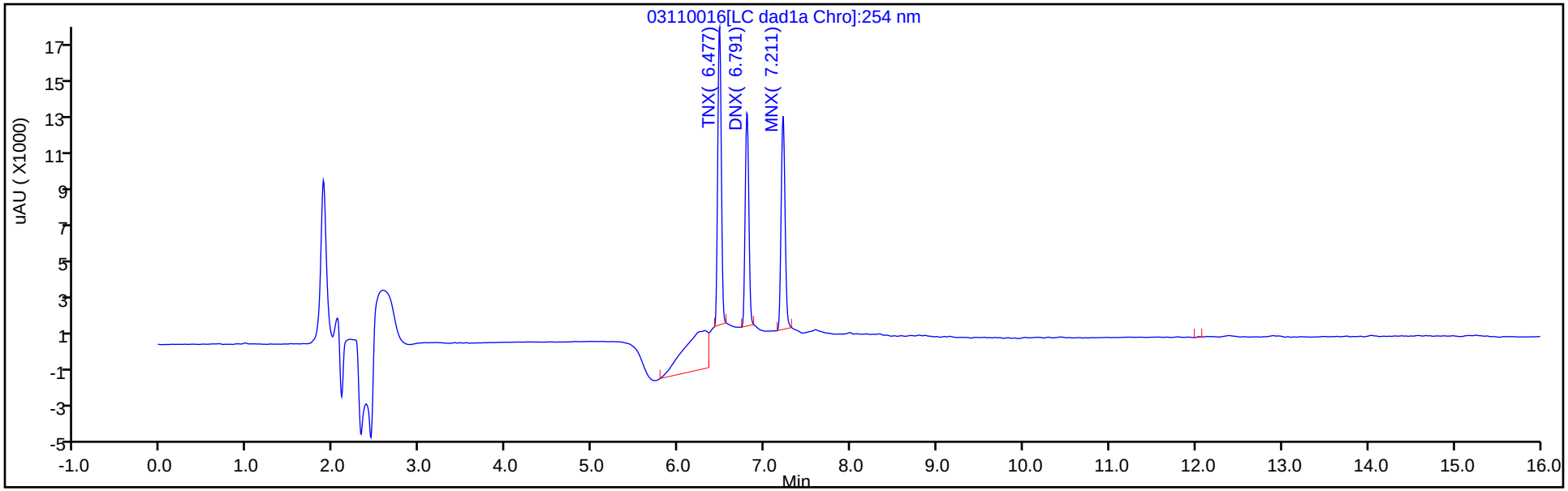
Report Date: 12-Mar-2022 10:32:13 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

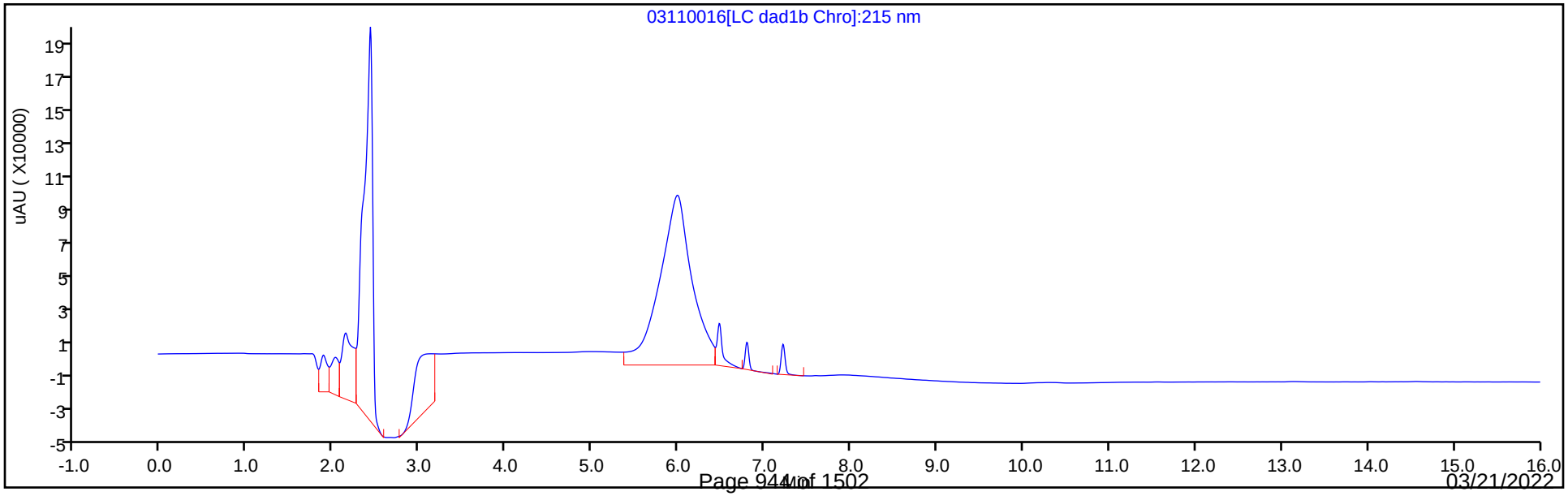
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110016.d

Injection Date:	11-Mar-2022 17:05:27	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	16
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

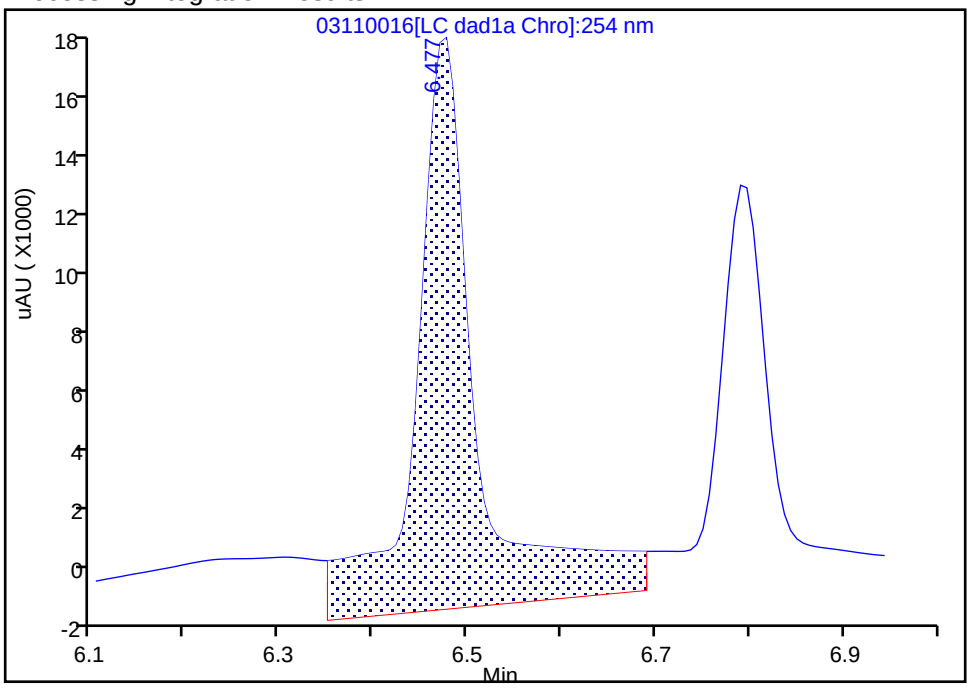
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110016.d
Injection Date: 11-Mar-2022 17:05:27 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

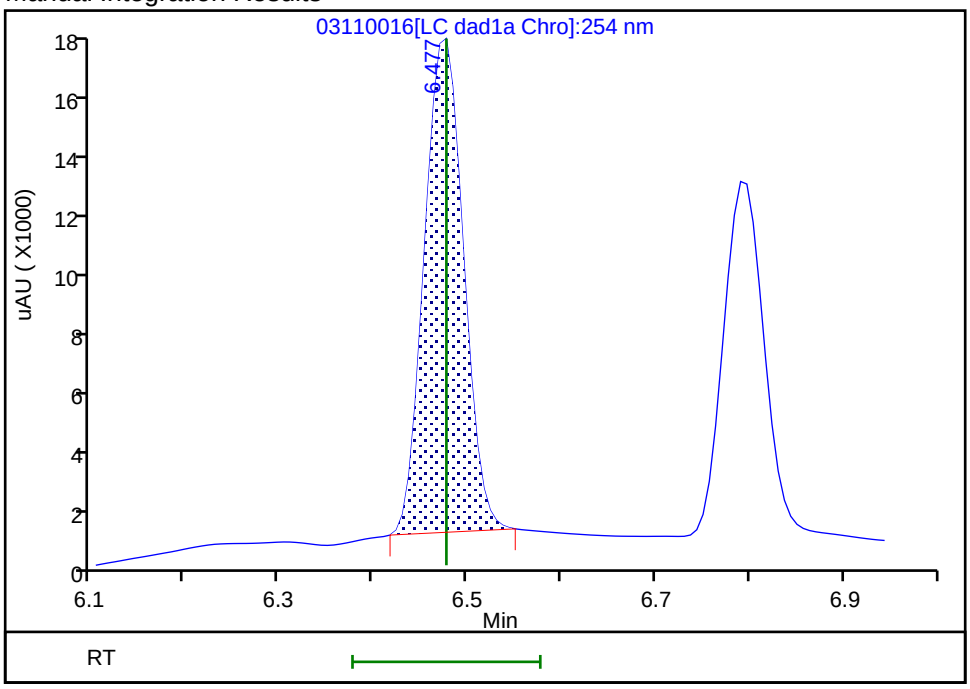
Processing Integration Results

RT: 6.48
Area: 82229
Amount: 0.453784
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 46269
Amount: 0.255337
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 17:32:11
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

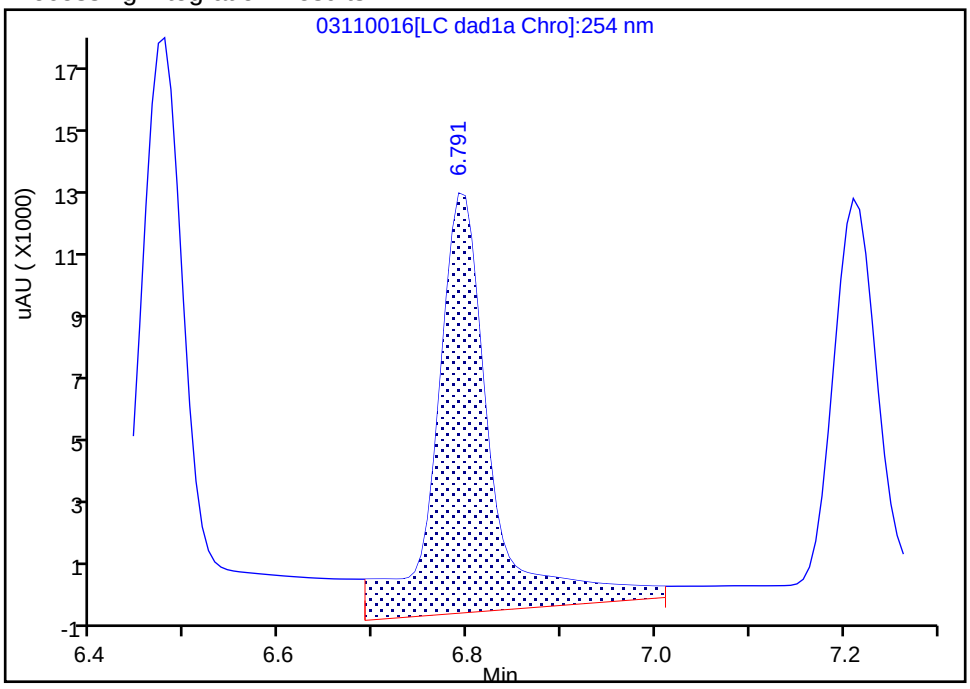
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110016.d
Injection Date: 11-Mar-2022 17:05:27 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

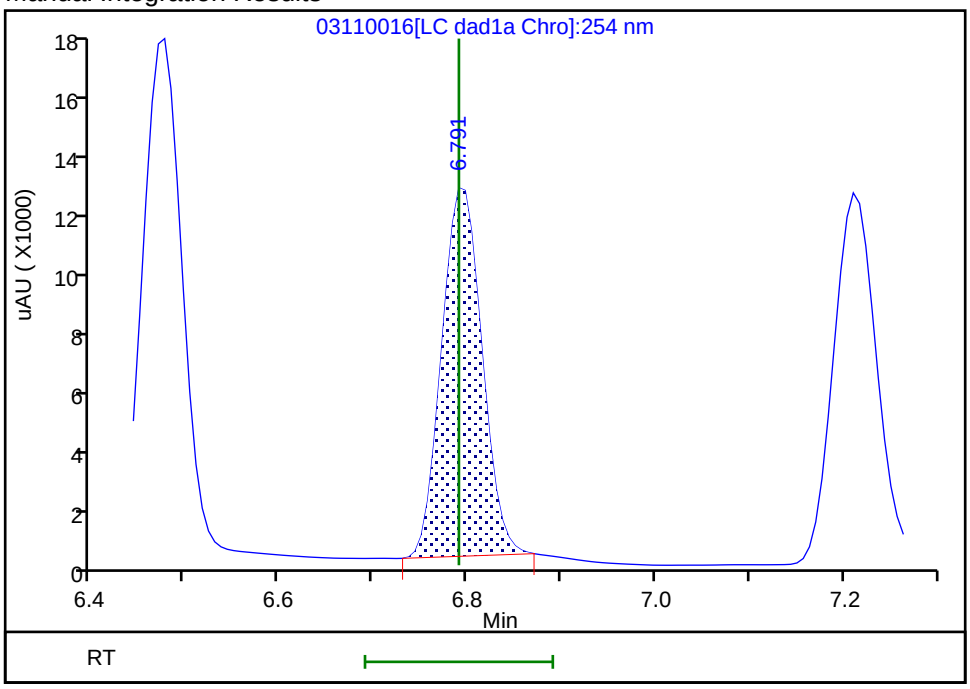
Processing Integration Results

RT: 6.79
Area: 50945
Amount: 0.368865
Amount Units: ug/mL



Manual Integration Results

RT: 6.79
Area: 34015
Amount: 0.246284
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 17:32:14
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

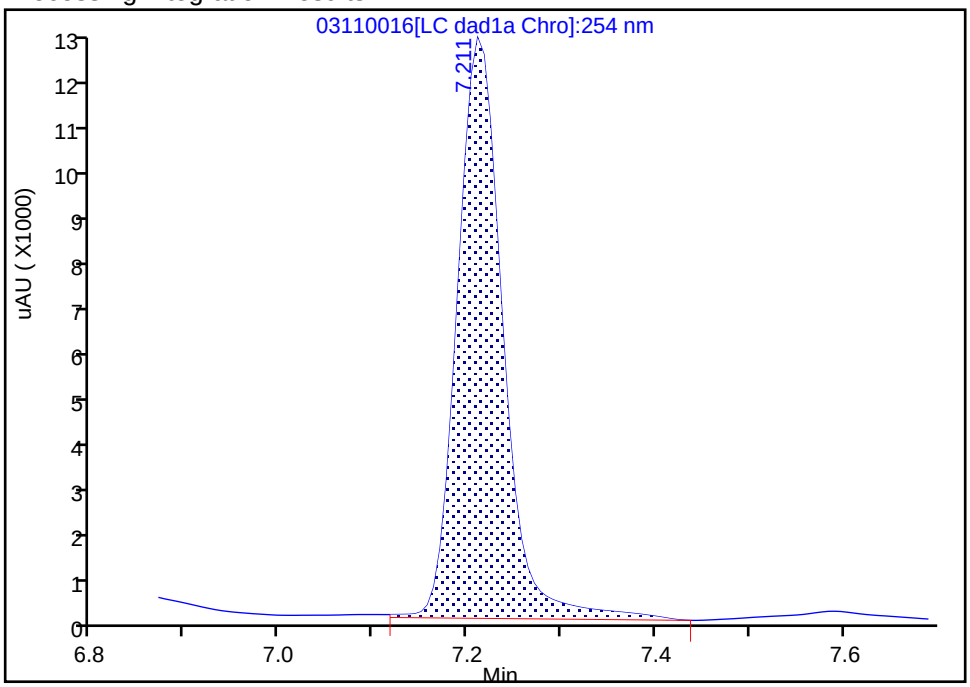
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110016.d				
Injection Date:	11-Mar-2022 17:05:27	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

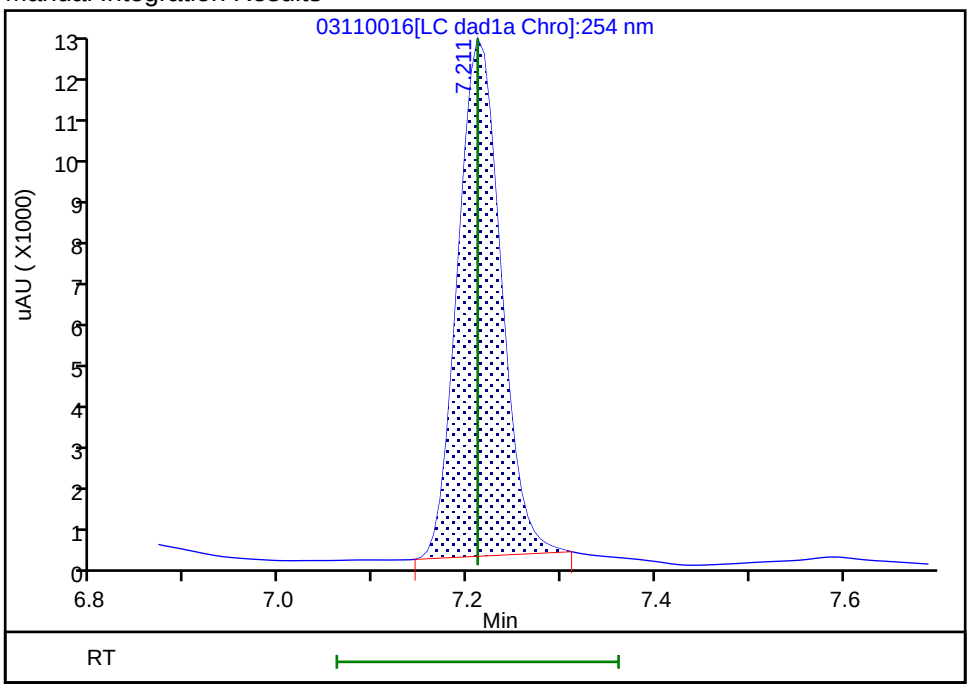
Processing Integration Results

RT: 7.21
Area: 39343
Amount: 0.312257
Amount Units: ug/mL



Manual Integration Results

RT: 7.21
Area: 36509
Amount: 0.289765
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 17:32:17
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568433/26 Calibration Date: 03/11/2022 20:54

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: 03110026.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	82472		246	250	-1.6	15.0
RDX	Ave	103609	106800		258	250	3.1	15.0
Picric acid	Ave	77039	80656		262	250	4.7	15.0
1,3,5-Trinitrobenzene	Ave	218096	225078		259	251	3.2	15.0
1,3-Dinitrobenzene	Ave	288401	299174		260	251	3.7	15.0
Nitrobenzene	Ave	191953	192701		252	251	0.4	15.0
Tetryl	Ave	170567	166978		245	251	-2.1	15.0
Nitroglycerin	Ave	63037	65783		2610	2500	4.4	15.0
2,4,6-Trinitrotoluene	Ave	202726	200331		248	251	-1.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	149590		248	250	-0.9	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	199159		247	251	-1.5	15.0
2,6-Dinitrotoluene	Ave	143115	142430		250	251	-0.5	15.0
2,4-Dinitrotoluene	Ave	289351	295873		257	251	2.3	15.0
2-Nitrotoluene	Ave	127614	125212		245	250	-1.9	15.0
4-Nitrotoluene	Ave	106235	109369		258	251	2.9	15.0
3-Nitrotoluene	Ave	142273	135864		239	250	-4.5	15.0
PETN	Lin2		73709		2520	2500	0.8	15.0
1,2-Dinitrobenzene	Ave	124698	129296		259	250	3.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568433/26 Calibration Date: 03/11/2022 20:54

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: 03110026.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.45	6.75
RDX	7.58	7.43	7.73
Picric acid	7.93	7.78	8.08
1,3,5-Trinitrobenzene	8.66	8.51	8.81
1,3-Dinitrobenzene	9.28	9.13	9.43
Nitrobenzene	9.66	9.52	9.82
Tetryl	9.98	9.83	10.13
Nitroglycerin	10.43	10.29	10.59
2,4,6-Trinitrotoluene	10.89	10.79	10.99
4-Amino-2,6-dinitrotoluene	11.08	10.97	11.17
2-Amino-4,6-dinitrotoluene	11.32	11.22	11.42
2,6-Dinitrotoluene	11.50	11.40	11.60
2,4-Dinitrotoluene	11.66	11.56	11.76
2-Nitrotoluene	12.52	12.36	12.66
4-Nitrotoluene	12.94	12.79	13.09
3-Nitrotoluene	13.51	13.35	13.65
PETN	14.56	14.41	14.71
1,2-Dinitrobenzene	8.53	8.38	8.68

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110026.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 11-Mar-2022 20:54:32 ALS Bottle#: 7 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0109174-026
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Mar-2022 10:32:08 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: CTX1616

First Level Reviewer: zhangji Date: 12-Mar-2022 09:45:12

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	6.595	0.001	20618	0.2500	0.2460	M
8 RDX	1	7.583	7.582	0.001	26700	0.2500	0.2577	
9 2,4,6-Trinitrophenol	1	7.929	7.929	0.000	20164	0.2500	0.2617	
$ 10 1,2-Dinitrobenzene	1	8.529	8.529	0.000	32324	0.2500	0.2592	
11 1,3,5-Trinitrobenzene	1	8.656	8.655	0.001	56382	0.2505	0.2585	
12 1,3-Dinitrobenzene	1	9.276	9.282	-0.006	74943	0.2505	0.2599	
13 Nitrobenzene	1	9.662	9.668	-0.006	48368	0.2510	0.2520	
15 Tetryl	1	9.982	9.982	0.000	41828	0.2505	0.2452	
16 Nitroglycerin	2	10.429	10.435	-0.006	164458	2.50	2.61	
17 2,4,6-Trinitrotoluene	1	10.889	10.888	0.001	50283	0.2510	0.2480	
18 4-Amino-2,6-dinitrotoluene	1	11.076	11.068	0.008	37435	0.2503	0.2479	
19 2-Amino-4,6-dinitrotoluene	1	11.322	11.322	0.000	49989	0.2510	0.2473	
20 2,6-Dinitrotoluene	1	11.496	11.495	0.001	35750	0.2510	0.2498	
21 2,4-Dinitrotoluene	1	11.662	11.662	0.000	74264	0.2510	0.2567	
22 o-Nitrotoluene	1	12.516	12.508	0.008	31303	0.2500	0.2453	
23 p-Nitrotoluene	1	12.936	12.935	0.001	27397	0.2505	0.2579	
24 m-Nitrotoluene	1	13.509	13.502	0.007	34000	0.2503	0.2390	
25 PETN	2	14.562	14.555	0.007	184273	2.50	2.52	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070 Amount Added: 25.00 Units: uL

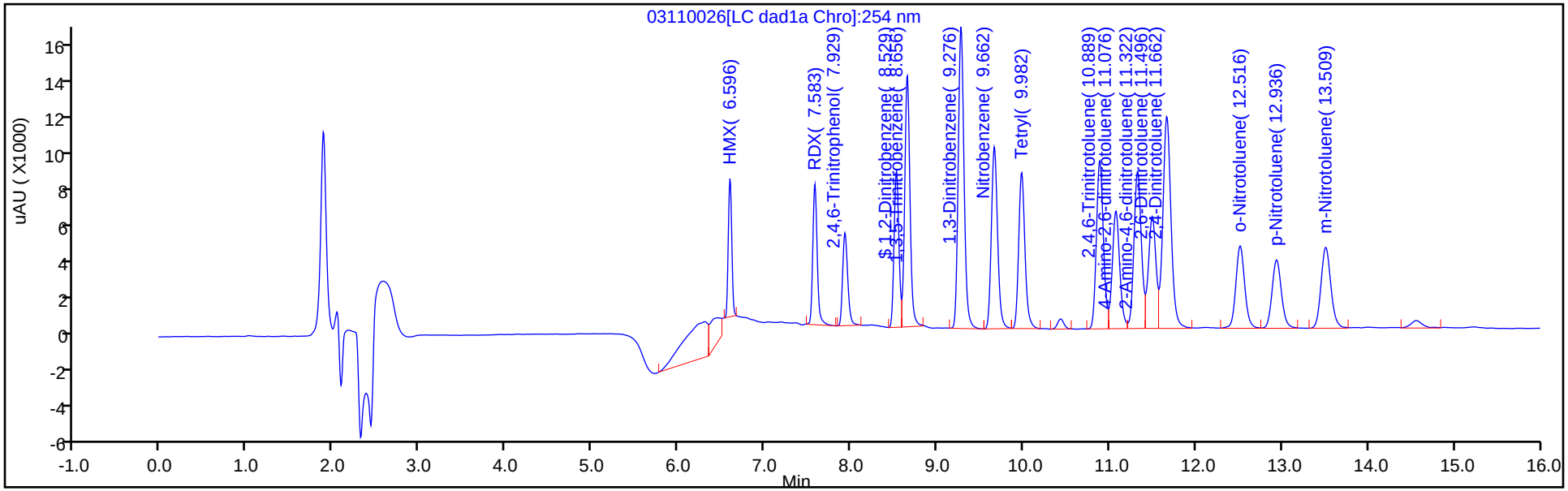
Report Date: 12-Mar-2022 10:32:08 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

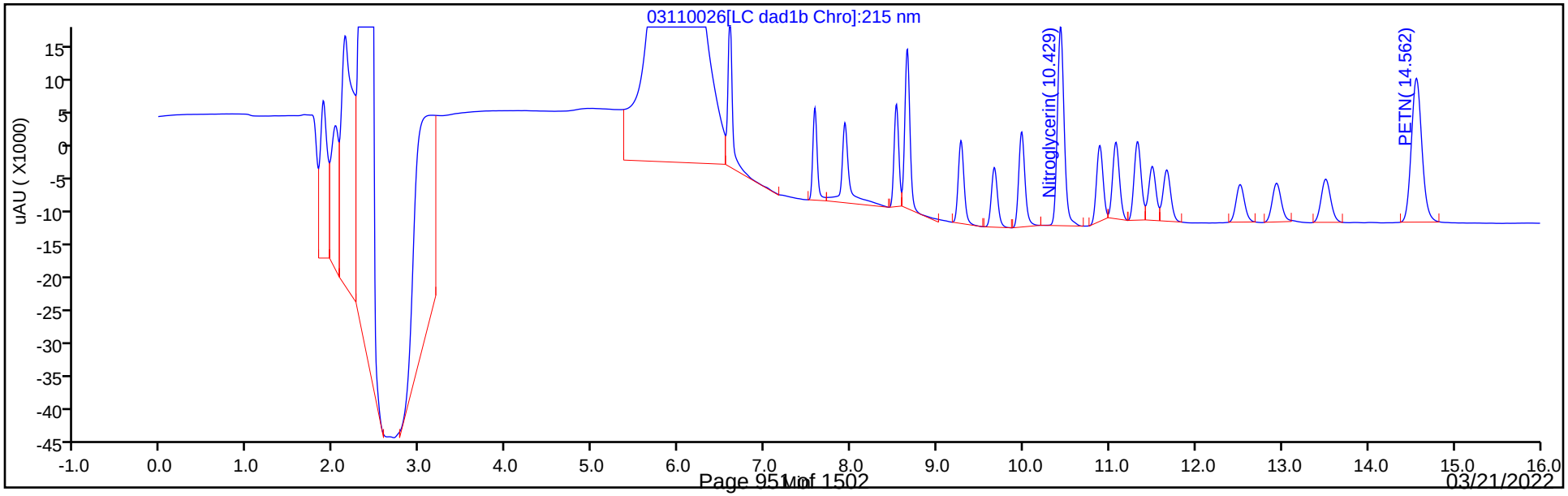
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110026.d

Injection Date:	11-Mar-2022 20:54:32	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	26
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

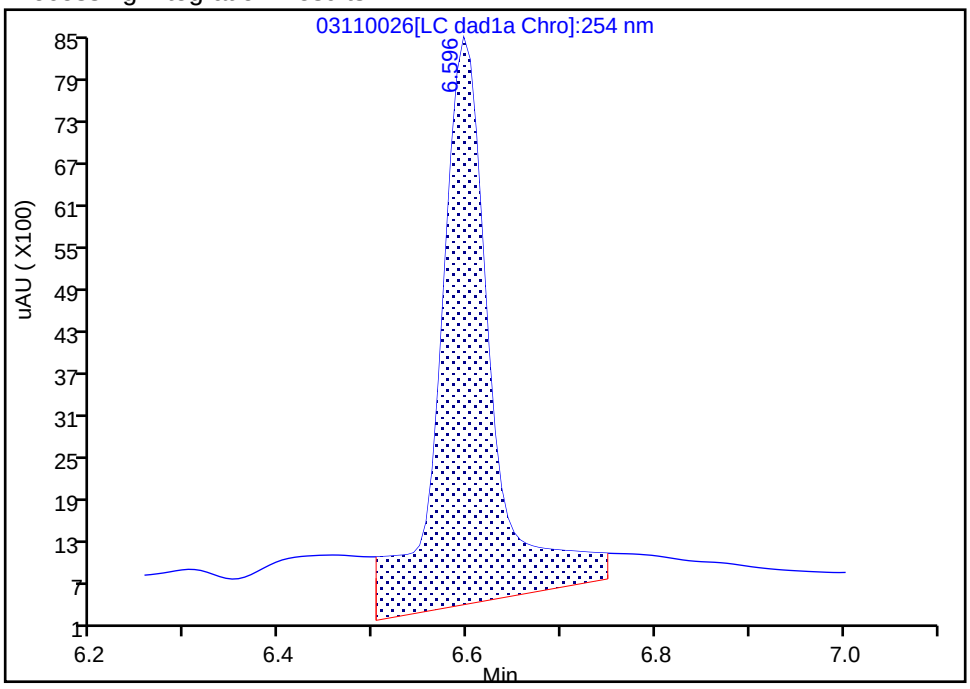
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110026.d
Injection Date: 11-Mar-2022 20:54:32 Instrument ID: CHHPLC_X3
Lims ID: CCV INT
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0

Signal: 1

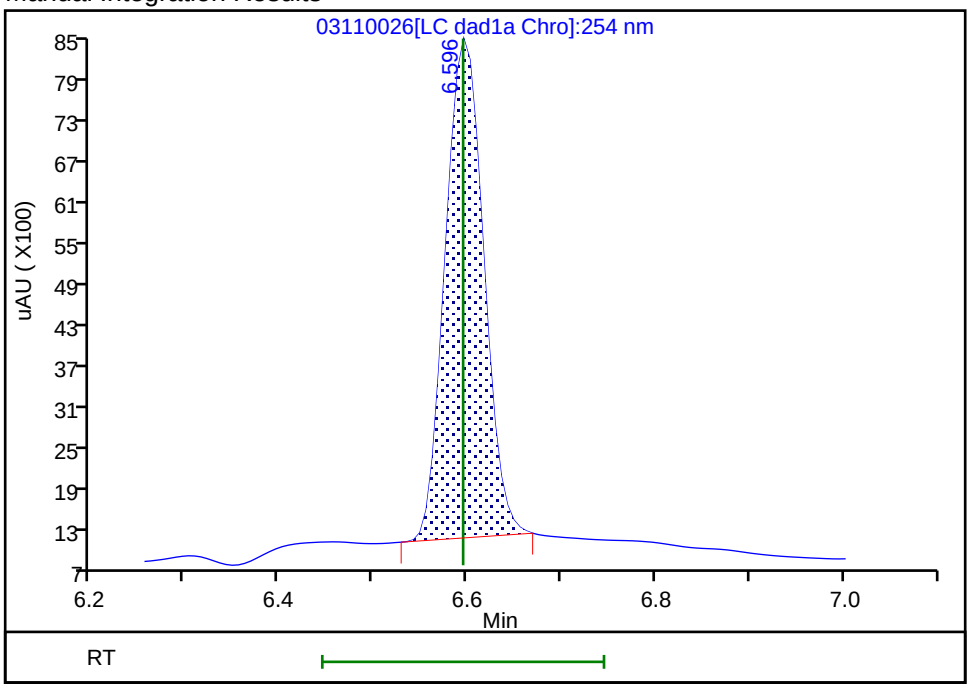
Processing Integration Results

RT: 6.60
Area: 30763
Amount: 0.366981
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 20618
Amount: 0.245958
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 09:45:11
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568433/27 Calibration Date: 03/11/2022 21:17

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: 03110027.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	182022		251	250	0.4	15.0
DNX	Ave	138113	137047		248	250	-0.8	15.0
MNX	Ave	125995	122170		283	292	-3.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568433/27 Calibration Date: 03/11/2022 21:17

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: 03110027.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.38	6.58
DNX	6.80	6.69	6.89
MNX	7.21	7.06	7.36

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110027.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	11-Mar-2022 21:17:29	ALS Bottle#:	9	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0109174-027				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2022 10:32:07	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:	CTX1616				
First Level Reviewer: zhangji		Date:	12-Mar-2022 09:45:25		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.475	6.477	-0.002	45551	0.2503	0.2514	M
6 DNX	1	6.795	6.791	0.004	34296	0.2503	0.2483	M
7 MNX	1	7.208	7.211	-0.003	35643	0.2918	0.2829	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

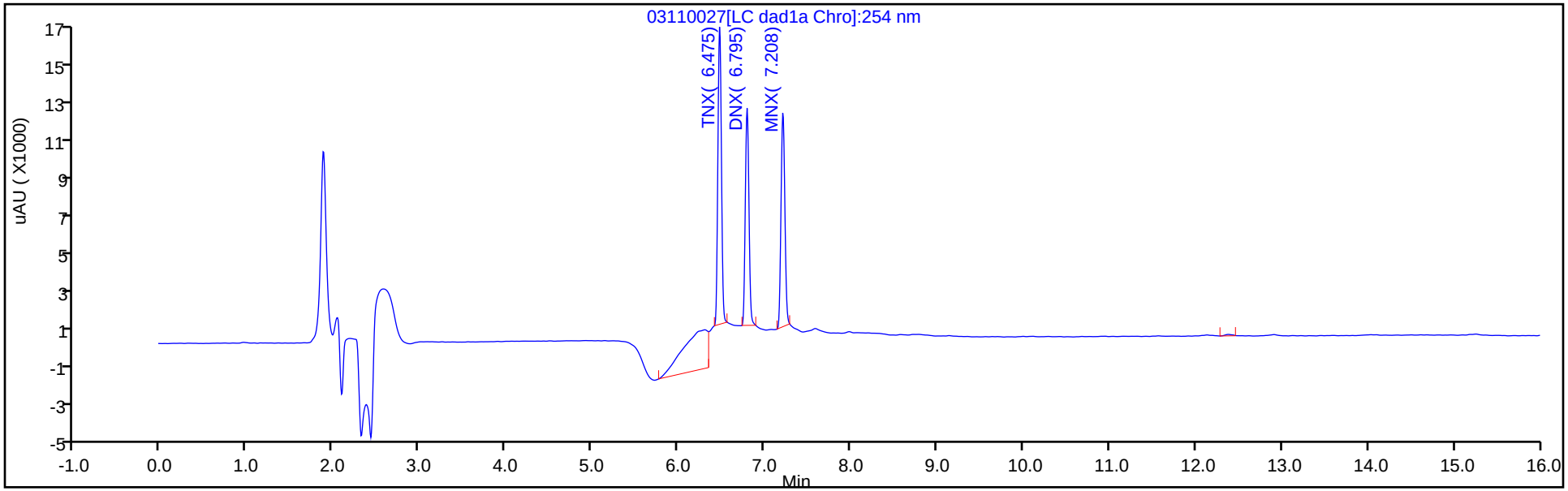
Report Date: 12-Mar-2022 10:32:08 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

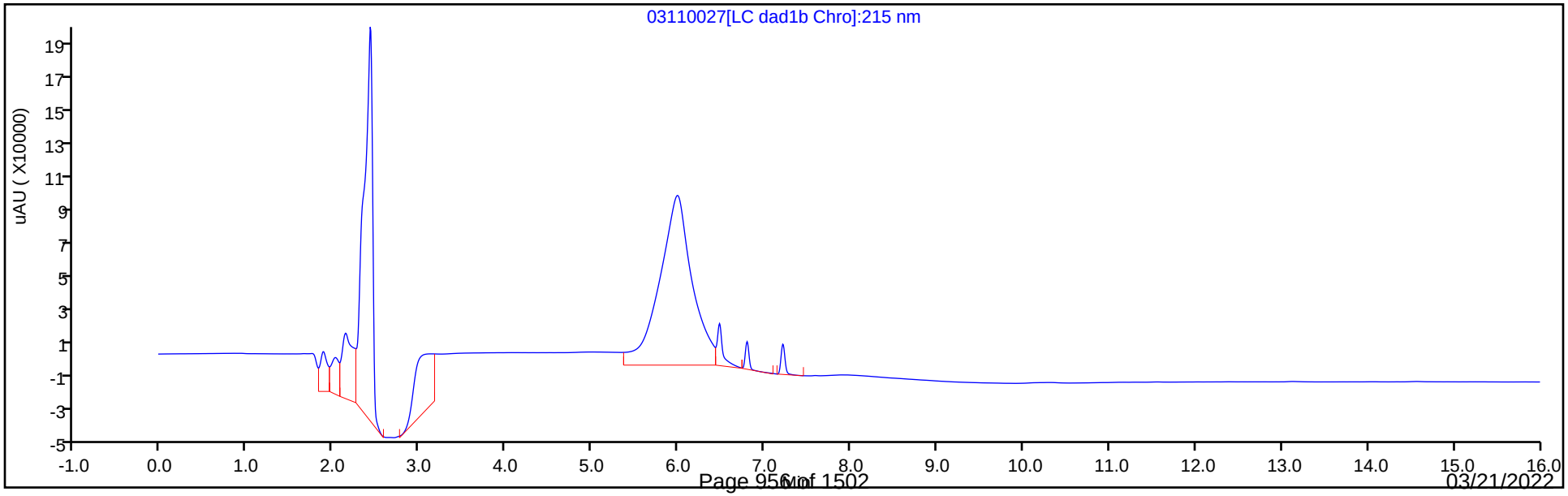
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110027.d

Injection Date:	11-Mar-2022 21:17:29	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	27
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

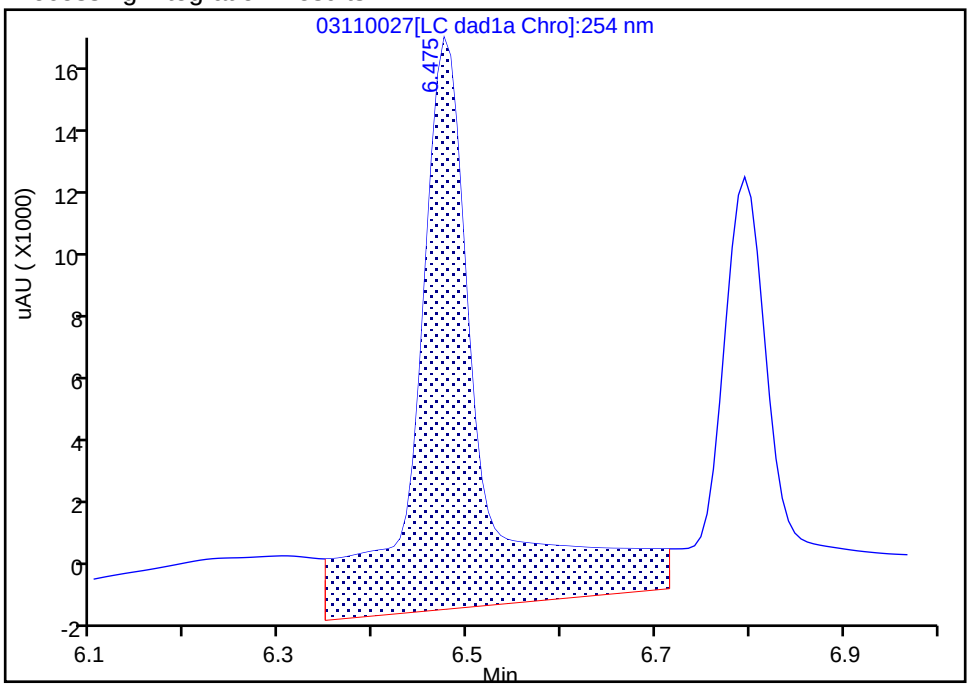
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110027.d				
Injection Date:	11-Mar-2022 21:17:29	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

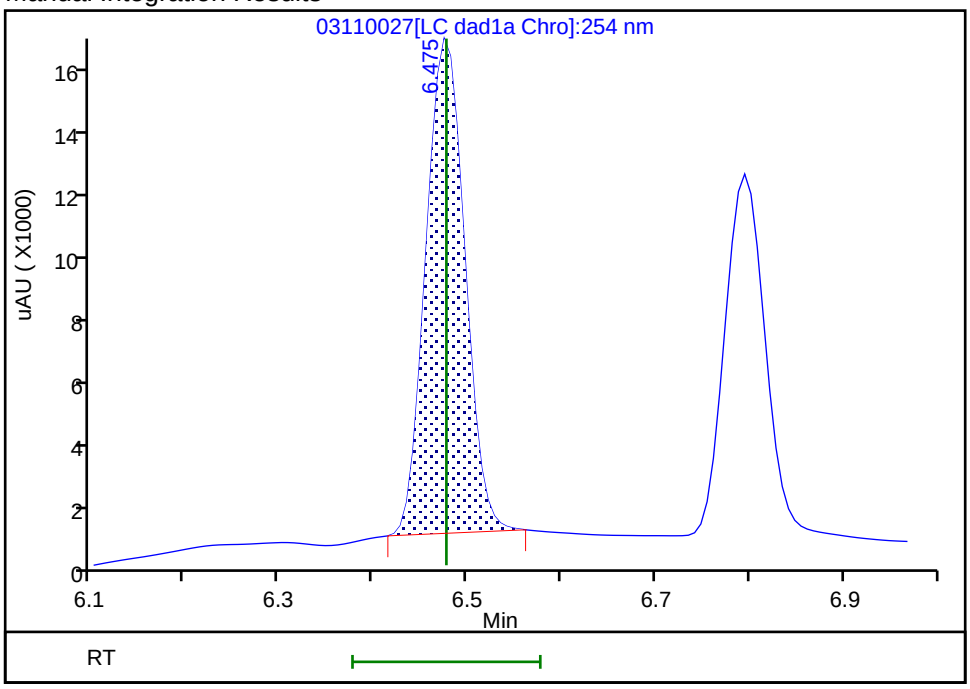
Processing Integration Results

RT: 6.48
Area: 84337
Amount: 0.465417
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 45551
Amount: 0.251375
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 09:45:18
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

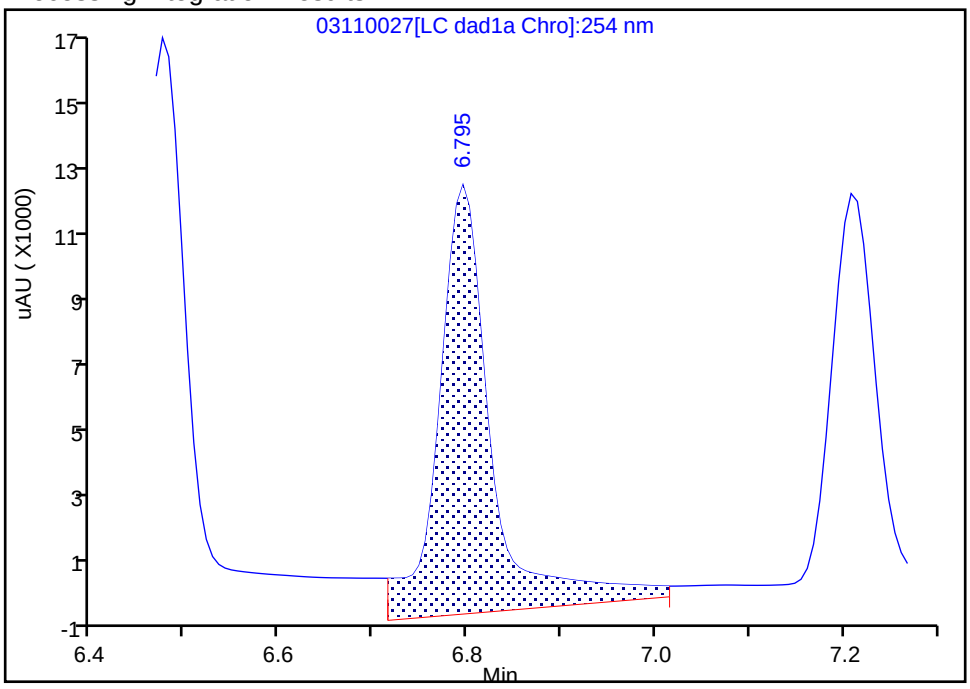
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110027.d
Injection Date: 11-Mar-2022 21:17:29 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

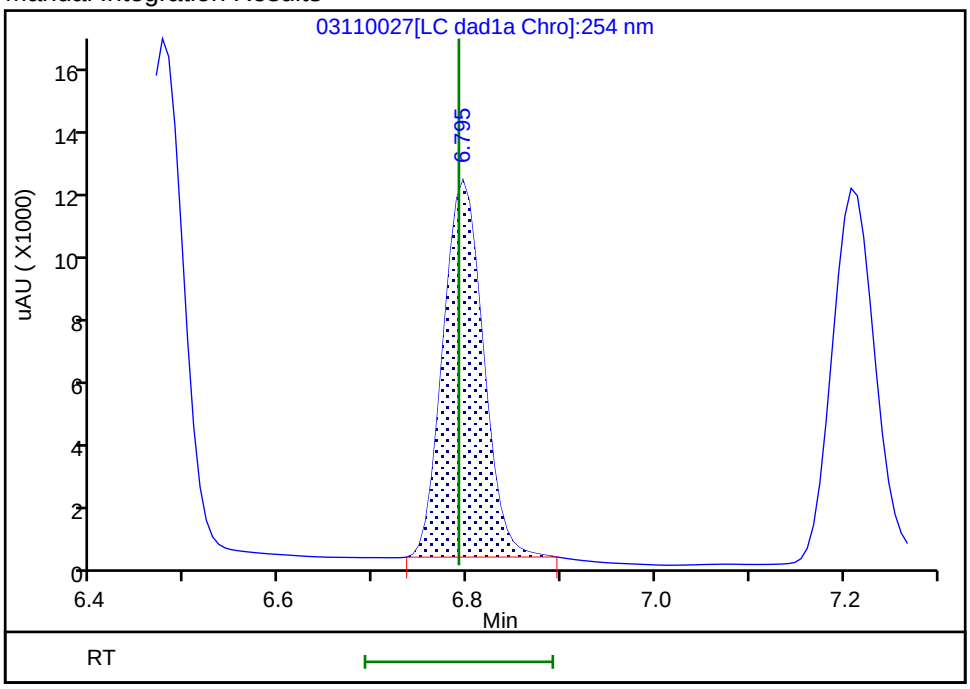
Processing Integration Results

RT: 6.80
Area: 49520
Amount: 0.358547
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 34296
Amount: 0.248318
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 09:45:21
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

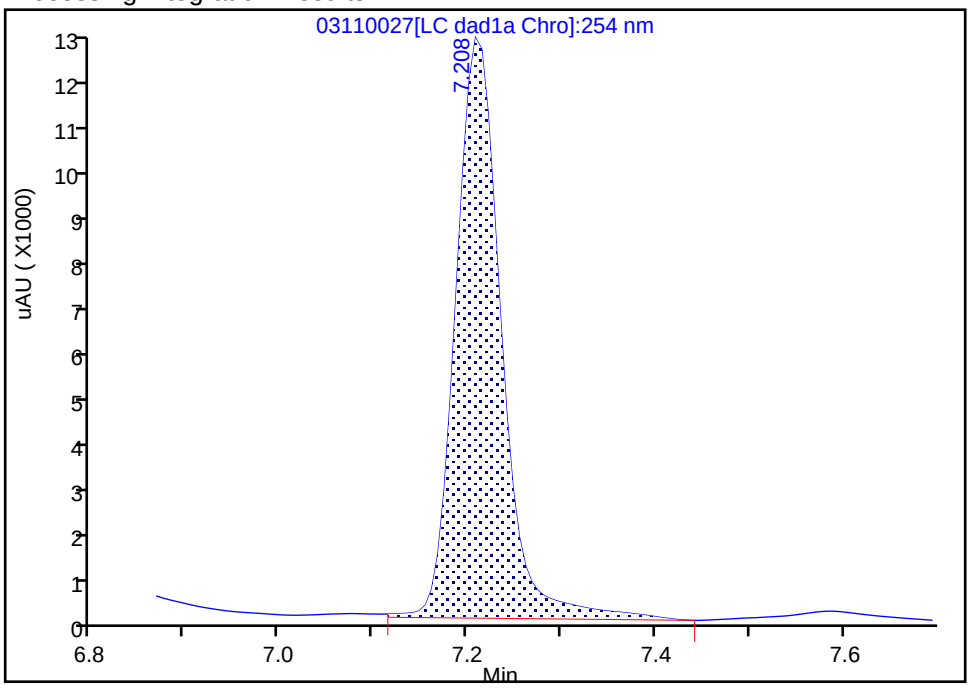
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110027.d				
Injection Date:	11-Mar-2022 21:17:29	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

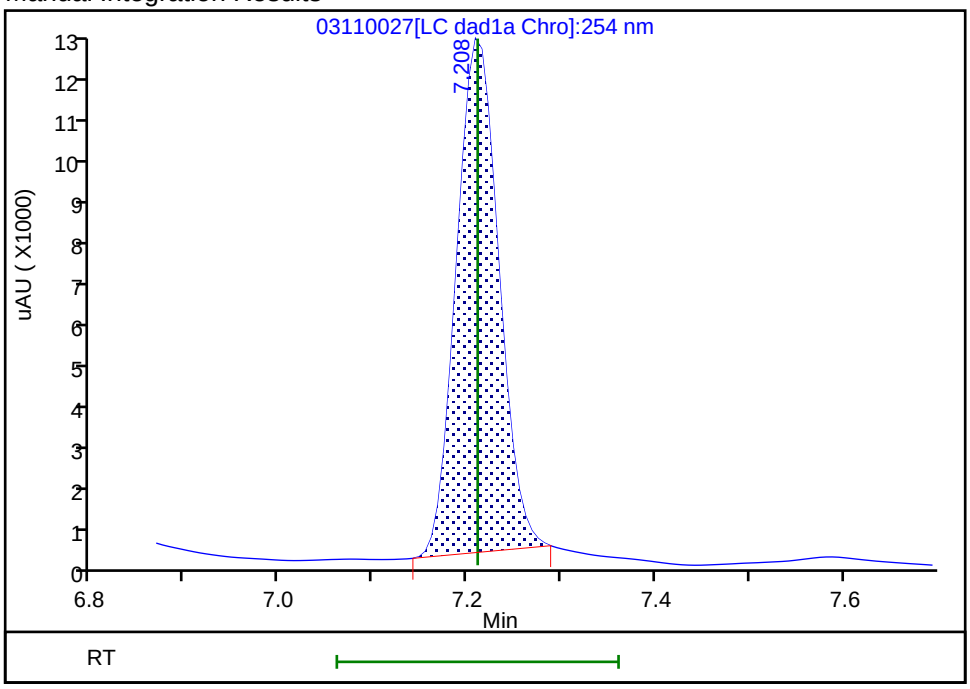
Processing Integration Results

RT: 7.21
Area: 39362
Amount: 0.312408
Amount Units: ug/mL



Manual Integration Results

RT: 7.21
Area: 35643
Amount: 0.282891
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 09:45:24
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568433/38 Calibration Date: 03/12/2022 01:29

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: 03110038.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	178753		247	250	-1.4	15.0
DNX	Ave	138113	135181		245	250	-2.1	15.0
MNX	Ave	125995	125837		291	292	-0.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568433/38 Calibration Date: 03/12/2022 01:29

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: 03110038.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.38	6.58
DNX	6.80	6.69	6.89
MNX	7.21	7.06	7.36

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110038.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 12-Mar-2022 01:29:36 ALS Bottle#: 9 Worklist Smp#: 38
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0109174-038
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Mar-2022 10:32:02 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: CTX1616

First Level Reviewer: zhangji Date: 12-Mar-2022 10:31:46

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.479	6.477	0.002	44733	0.2503	0.2469	M
6 DNX	1	6.799	6.791	0.008	33829	0.2503	0.2449	M
7 MNX	1	7.212	7.211	0.001	36713	0.2918	0.2914	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

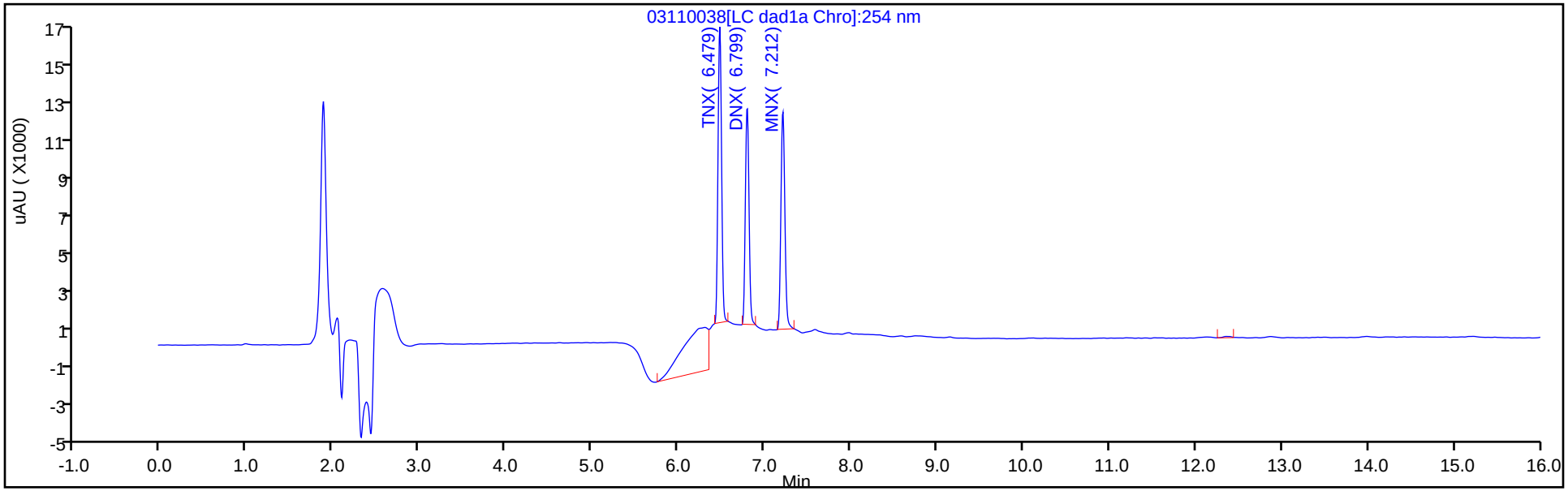
Report Date: 12-Mar-2022 10:32:02 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

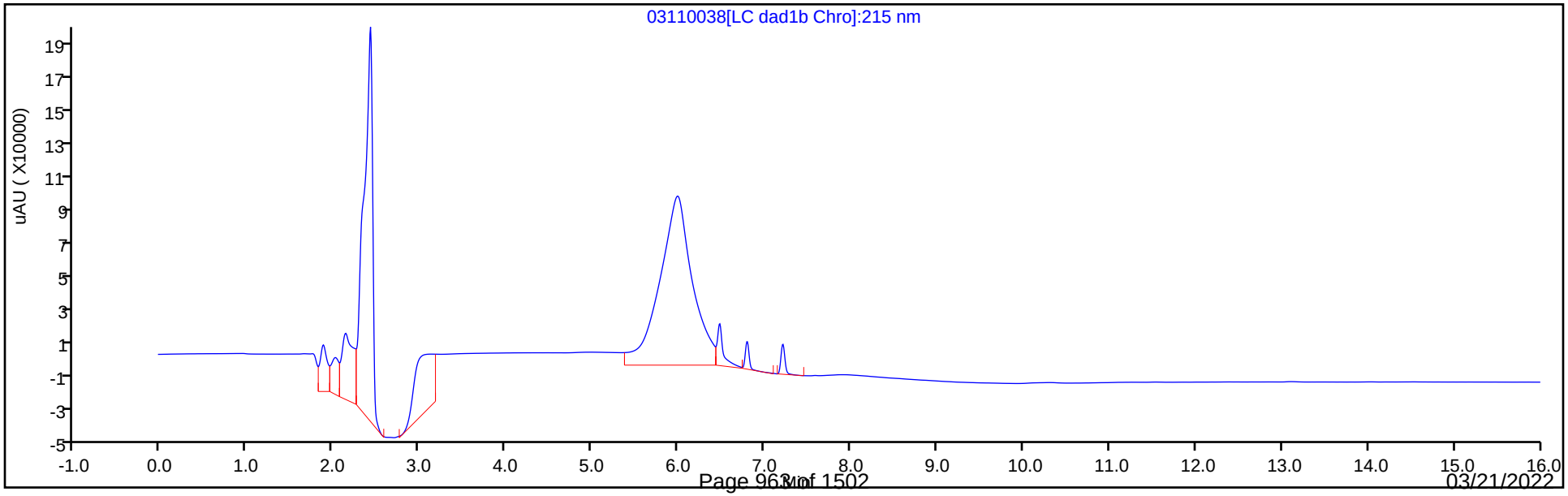
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110038.d

Injection Date:	12-Mar-2022 01:29:36	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	38
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

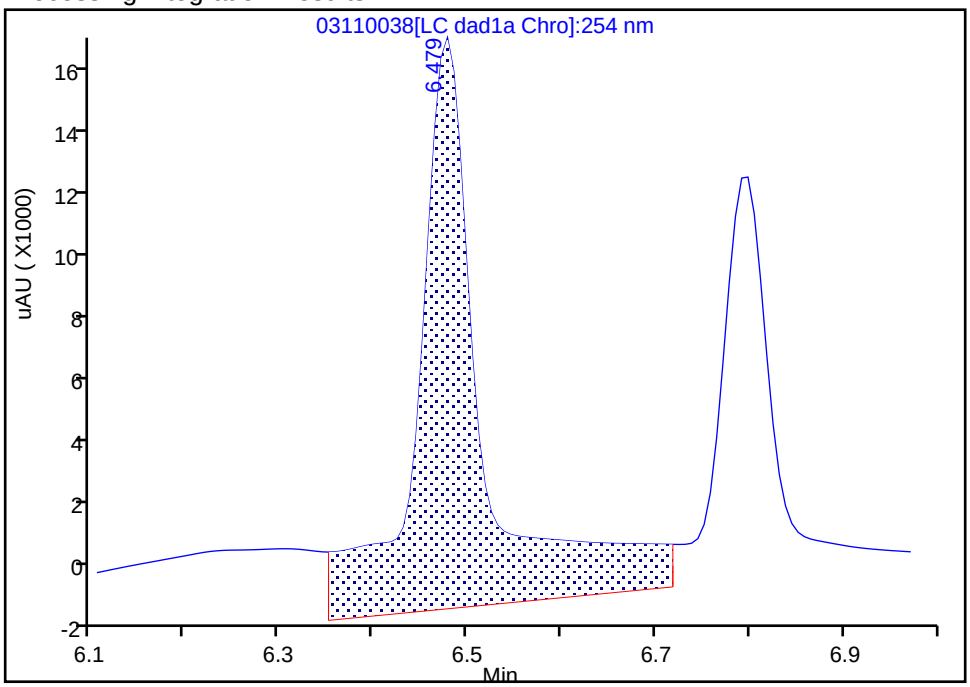
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110038.d
Injection Date: 12-Mar-2022 01:29:36 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 38
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

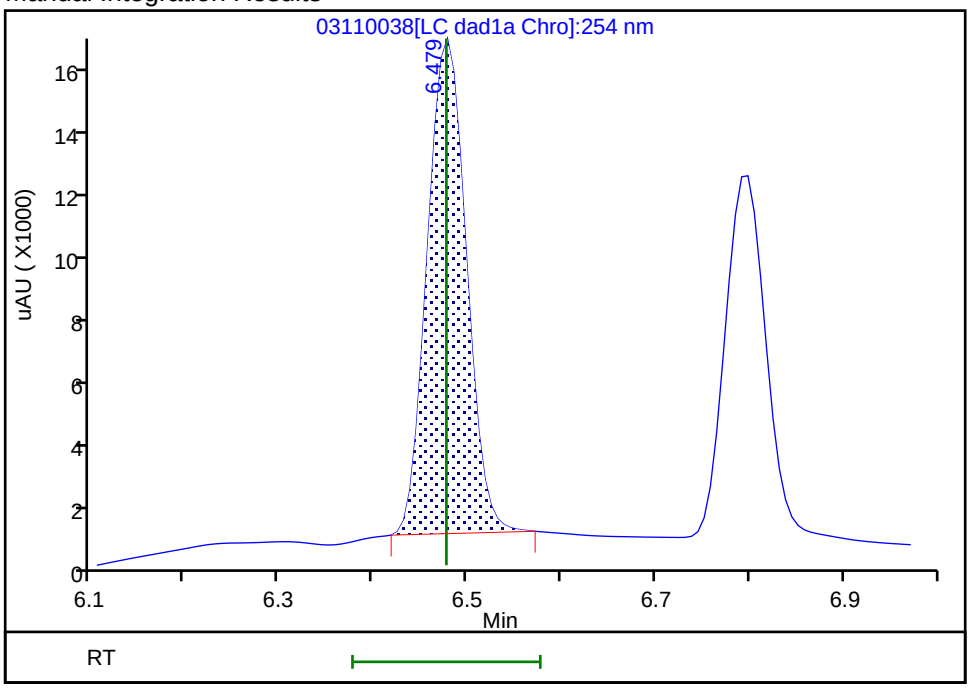
Processing Integration Results

RT: 6.48
Area: 86351
Amount: 0.476531
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 44733
Amount: 0.246861
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 10:31:39
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

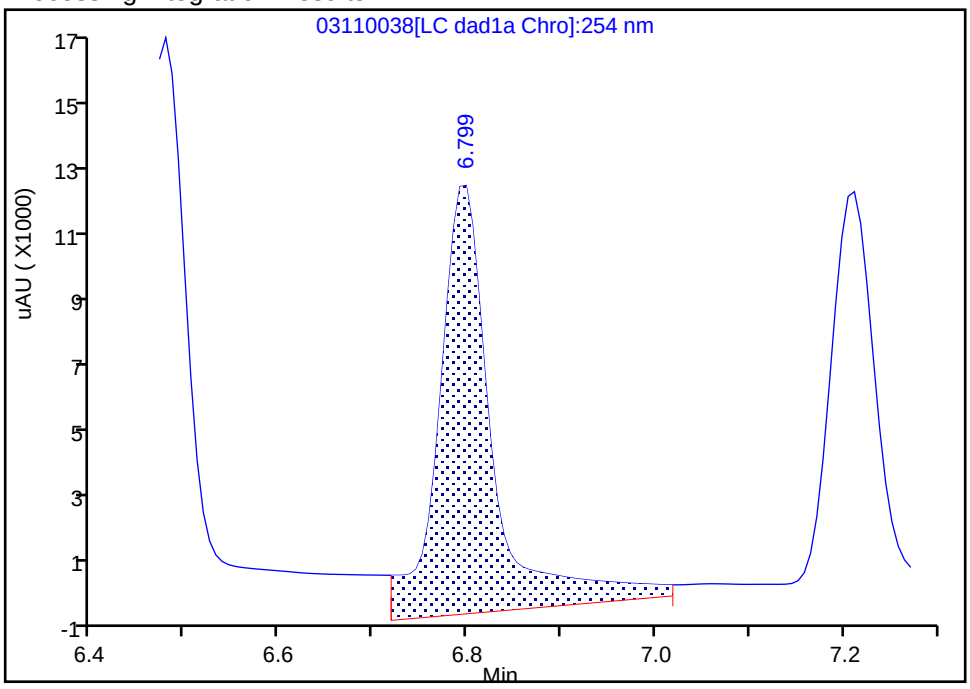
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110038.d
Injection Date: 12-Mar-2022 01:29:36 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 38
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

6 DNX, CAS: 80251-29-2

Signal: 1

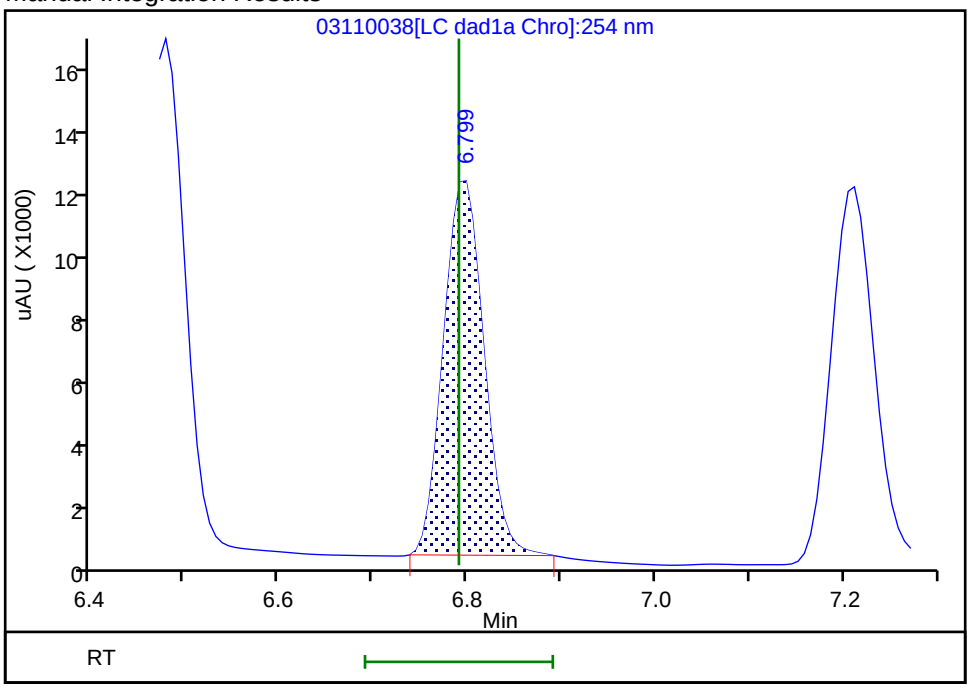
Processing Integration Results

RT: 6.80
Area: 49882
Amount: 0.361168
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 33829
Amount: 0.244937
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 10:31:42
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

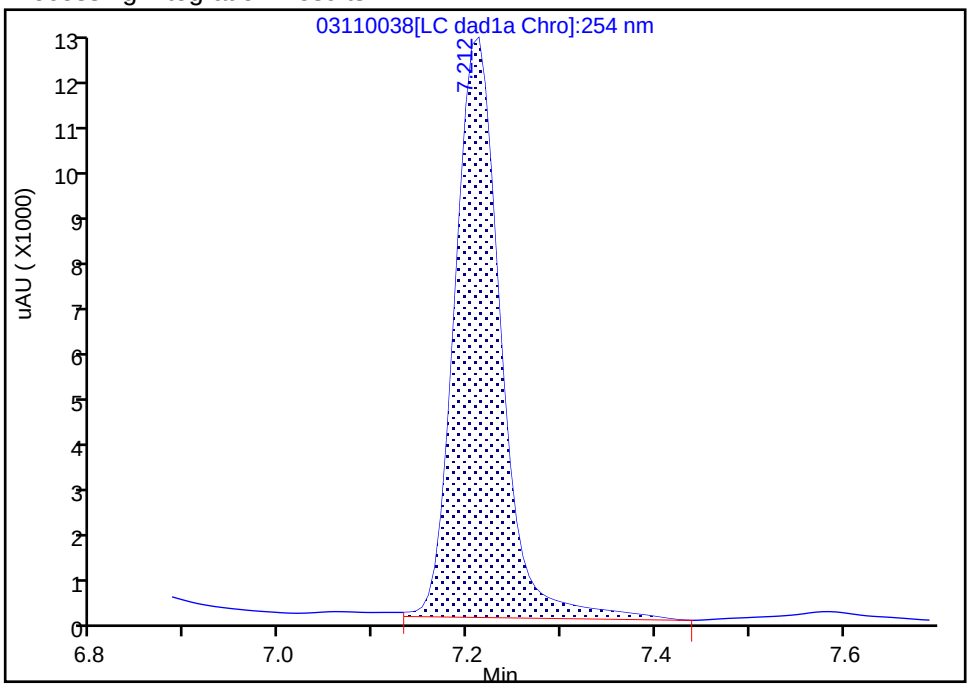
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110038.d				
Injection Date:	12-Mar-2022 01:29:36	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

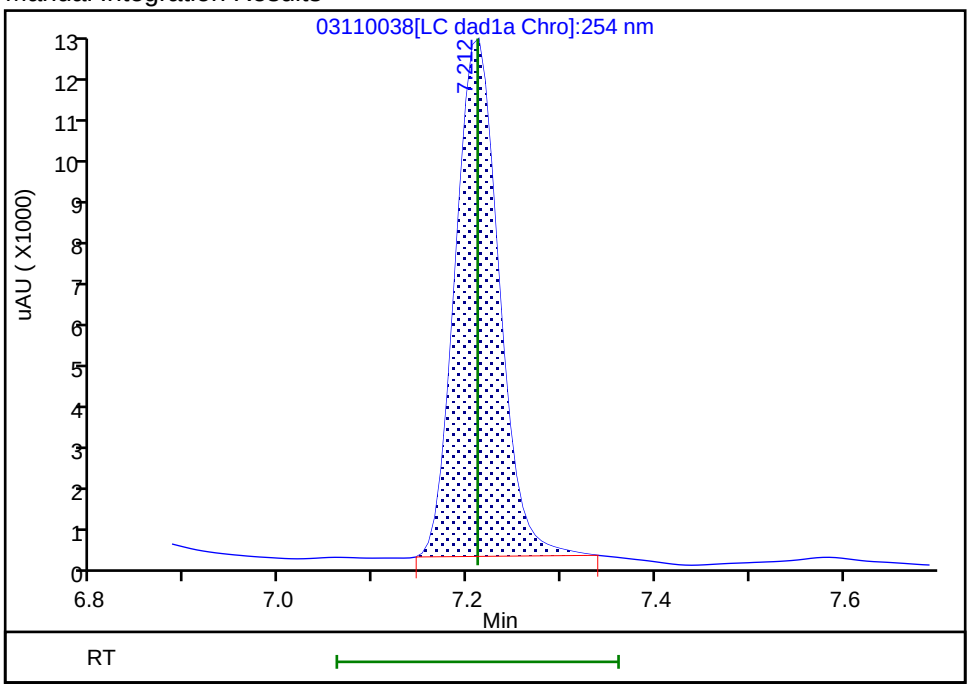
Processing Integration Results

RT: 7.21
Area: 39065
Amount: 0.310051
Amount Units: ug/mL



Manual Integration Results

RT: 7.21
Area: 36713
Amount: 0.291384
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 10:31:45
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568433/39 Calibration Date: 03/12/2022 01:52

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: 03110039.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	85080		254	250	1.5	15.0
RDX	Ave	103609	106816		258	250	3.1	15.0
Picric acid	Ave	77039	79956		259	250	3.8	15.0
1,3,5-Trinitrobenzene	Ave	218096	226667		260	251	3.9	15.0
1,3-Dinitrobenzene	Ave	288401	299836		260	251	4.0	15.0
Nitrobenzene	Ave	191953	190139		249	251	-0.9	15.0
Tetryl	Ave	170567	166822		245	251	-2.2	15.0
Nitroglycerin	Ave	63037	65985		2620	2500	4.7	15.0
2,4,6-Trinitrotoluene	Ave	202726	200084		248	251	-1.3	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	149019		247	250	-1.3	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	198741		247	251	-1.7	15.0
2,6-Dinitrotoluene	Ave	143115	145849		256	251	1.9	15.0
2,4-Dinitrotoluene	Ave	289351	293550		255	251	1.5	15.0
2-Nitrotoluene	Ave	127614	121988		239	250	-4.4	15.0
4-Nitrotoluene	Ave	106235	107609		254	251	1.3	15.0
3-Nitrotoluene	Ave	142273	133051		234	250	-6.5	15.0
PETN	Lin2		73682		2520	2500	0.8	15.0
1,2-Dinitrobenzene	Ave	124698	129232		259	250	3.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568433/39 Calibration Date: 03/12/2022 01:52

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: 03110039.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.59	6.45	6.75
RDX	7.59	7.43	7.73
Picric acid	7.94	7.78	8.08
1,3,5-Trinitrobenzene	8.66	8.51	8.81
1,3-Dinitrobenzene	9.28	9.13	9.43
Nitrobenzene	9.67	9.52	9.82
Tetryl	9.98	9.83	10.13
Nitroglycerin	10.43	10.29	10.59
2,4,6-Trinitrotoluene	10.89	10.79	10.99
4-Amino-2,6-dinitrotoluene	11.07	10.97	11.17
2-Amino-4,6-dinitrotoluene	11.33	11.22	11.42
2,6-Dinitrotoluene	11.49	11.40	11.60
2,4-Dinitrotoluene	11.66	11.56	11.76
2-Nitrotoluene	12.51	12.36	12.66
4-Nitrotoluene	12.93	12.79	13.09
3-Nitrotoluene	13.50	13.35	13.65
PETN	14.55	14.41	14.71
1,2-Dinitrobenzene	8.53	8.38	8.68

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110039.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 12-Mar-2022 01:52:30 ALS Bottle#: 7 Worklist Smp#: 39
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0109174-039
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Mar-2022 10:32:01 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: CTX1616

First Level Reviewer: zhangji Date: 12-Mar-2022 10:31:50

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.592	6.595	-0.003	21270	0.2500	0.2537	
8 RDX	1	7.586	7.582	0.004	26704	0.2500	0.2577	
9 2,4,6-Trinitrophenol	1	7.939	7.929	0.010	19989	0.2500	0.2595	
$ 10 1,2-Dinitrobenzene	1	8.532	8.529	0.003	32308	0.2500	0.2591	
11 1,3,5-Trinitrobenzene	1	8.659	8.655	0.004	56780	0.2505	0.2603	
12 1,3-Dinitrobenzene	1	9.279	9.282	-0.003	75109	0.2505	0.2604	
13 Nitrobenzene	1	9.666	9.668	-0.002	47725	0.2510	0.2486	
15 Tetryl	1	9.979	9.982	-0.003	41789	0.2505	0.2450	
16 Nitroglycerin	2	10.432	10.435	-0.003	164962	2.50	2.62	
17 2,4,6-Trinitrotoluene	1	10.886	10.888	-0.002	50221	0.2510	0.2477	
18 4-Amino-2,6-dinitrotoluene	1	11.072	11.068	0.004	37292	0.2503	0.2470	
19 2-Amino-4,6-dinitrotoluene	1	11.326	11.322	0.004	49884	0.2510	0.2467	
20 2,6-Dinitrotoluene	1	11.492	11.495	-0.003	36608	0.2510	0.2558	
21 2,4-Dinitrotoluene	1	11.659	11.662	-0.003	73681	0.2510	0.2546	
22 o-Nitrotoluene	1	12.506	12.508	-0.002	30497	0.2500	0.2390	
23 p-Nitrotoluene	1	12.932	12.935	-0.003	26956	0.2505	0.2537	
24 m-Nitrotoluene	1	13.499	13.502	-0.003	33296	0.2503	0.2340	
25 PETN	2	14.546	14.555	-0.009	184205	2.50	2.52	

QC Flag Legend
Processing Flags

Reagents:
8330IntermStk_00070 Amount Added: 25.00 Units: uL

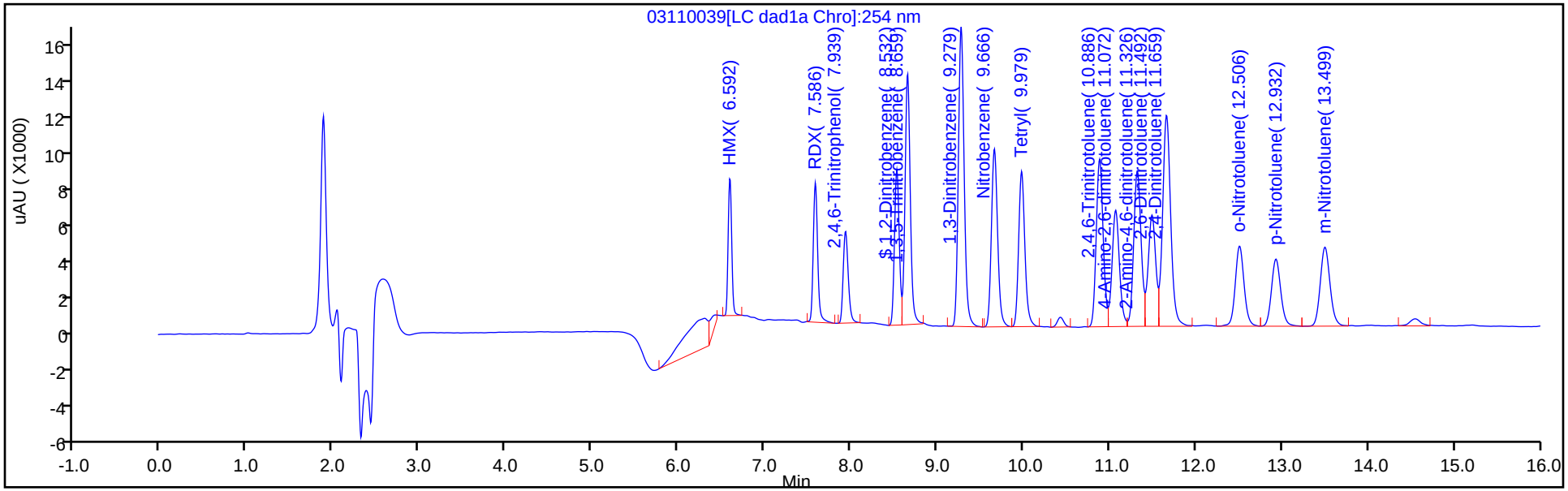
Report Date: 12-Mar-2022 10:32:02 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

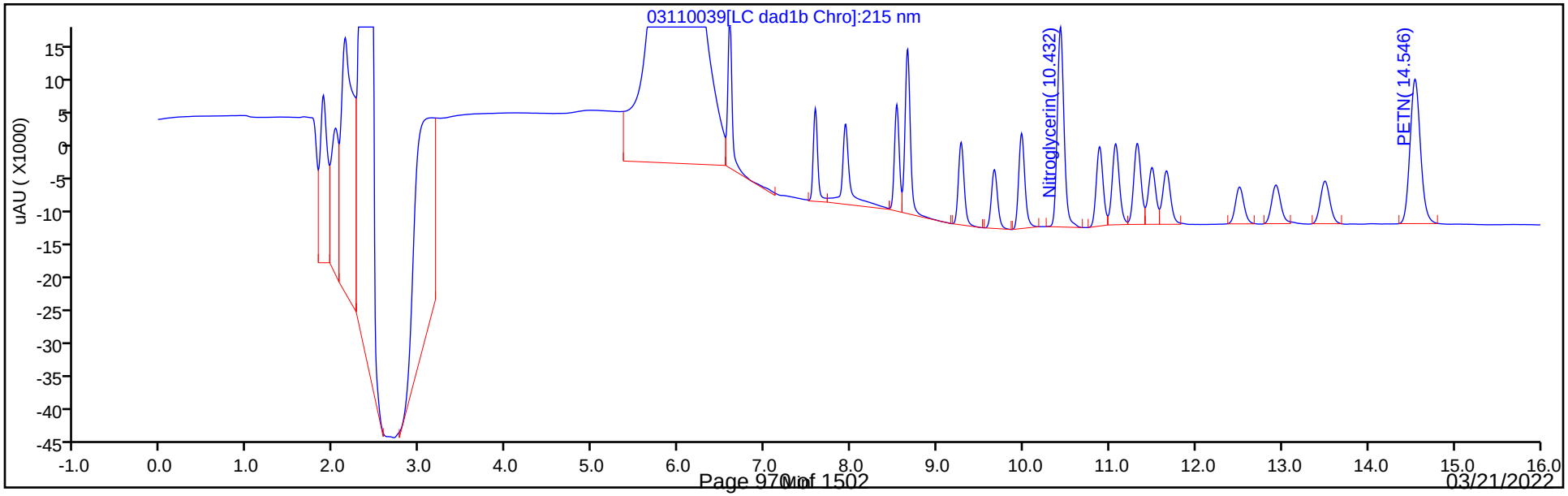
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110039.d

Injection Date:	12-Mar-2022 01:52:30	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	39
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



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-159332-1

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.: 280-159332-1

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

Report Date: 03-Mar-2022 12:52:29 Chrom Revision: 2.3 16-Feb-2022 17:52:00

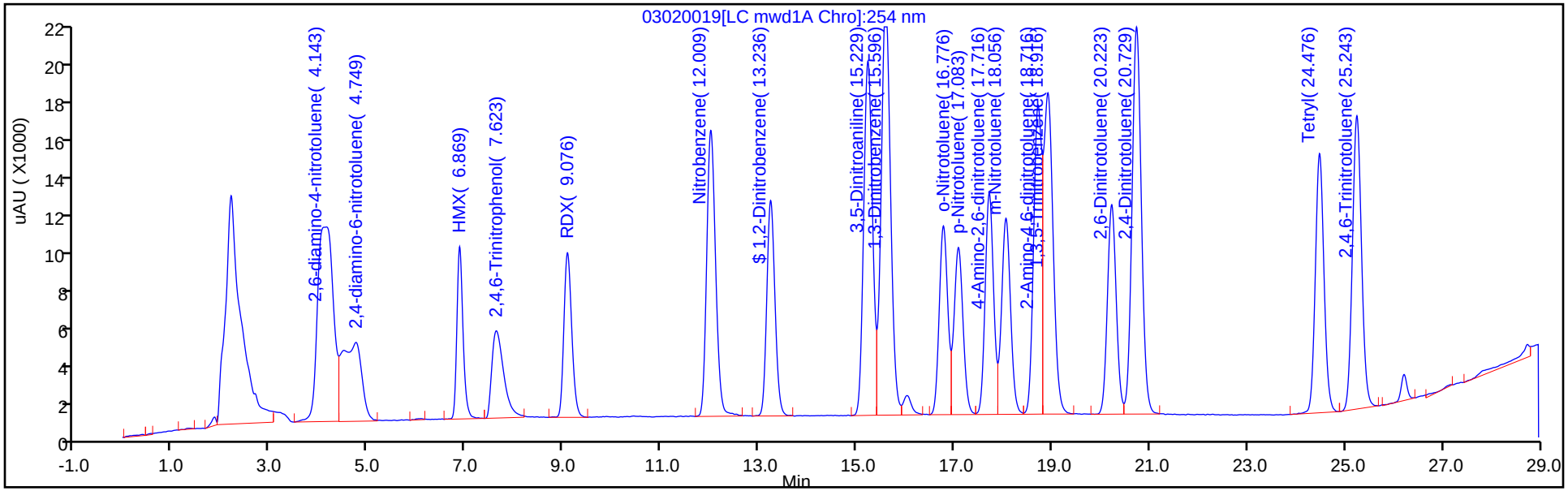
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020019.D

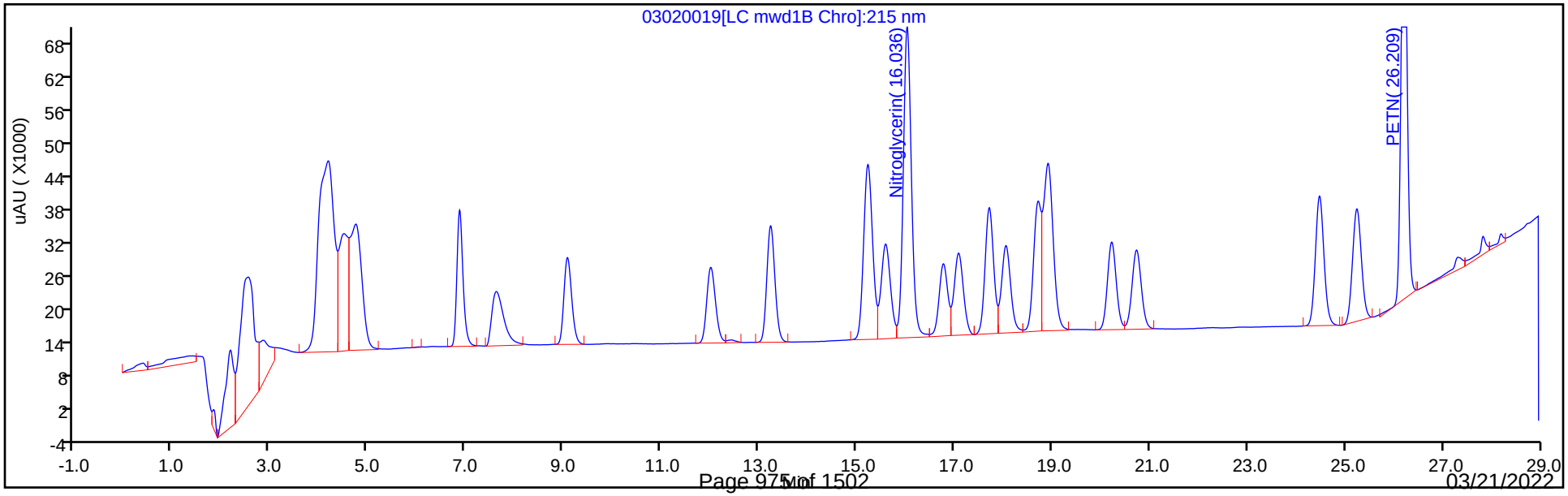
Injection Date:	03-Mar-2022 02:38:50	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	ICV INT			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

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.: 280-159332-1

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.: 280-159332-1

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

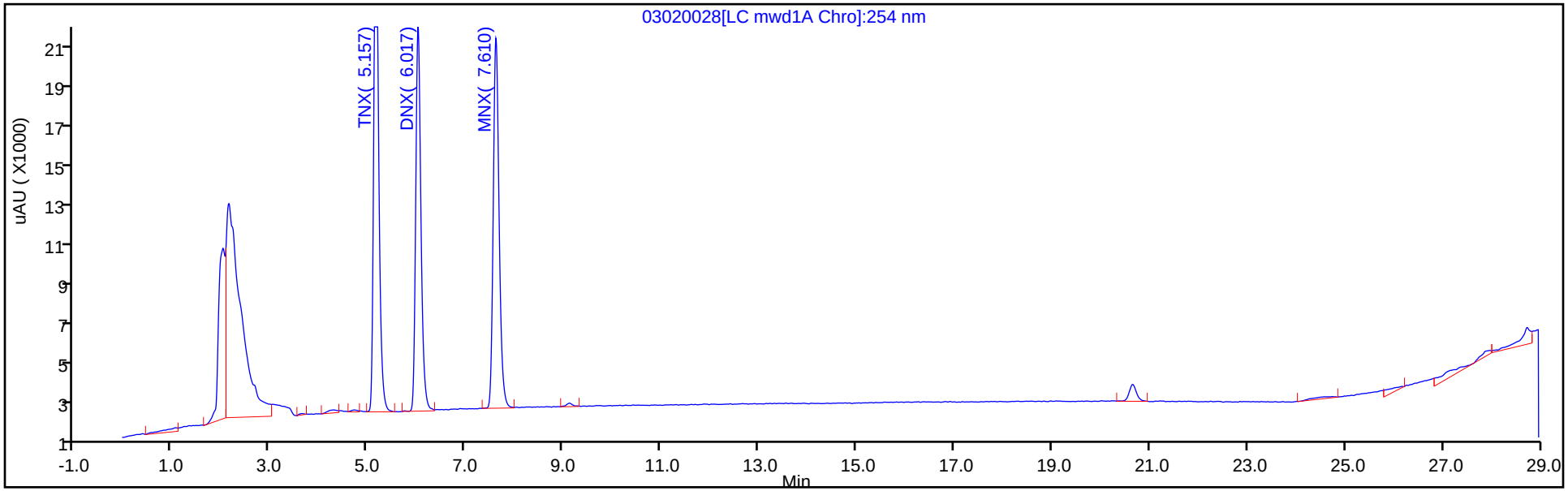
Report Date: 03-Mar-2022 13:02:44 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

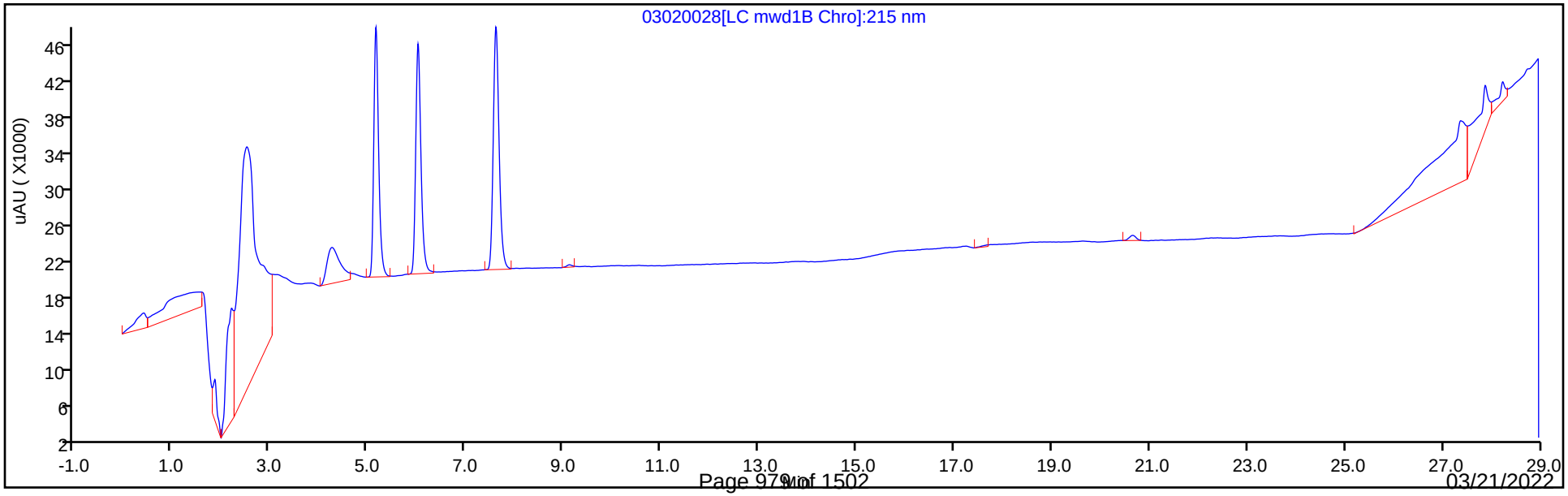
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020028.D

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.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568485/11 Calibration Date: 03/12/2022 13:10

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: 03120011.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	166135	166884		251	250	0.5	15.0
Picric acid	Ave	132885	155496		293	250	17.0*	15.0
RDX	Ave	194331	205288		264	250	5.6	15.0
Nitrobenzene	Ave	368293	382853		261	251	4.0	15.0
1,3-Dinitrobenzene	Ave	571666	578986		254	251	1.3	15.0
Nitroglycerin	Ave	122518	117430		2400	2500	-4.2	15.0
2-Nitrotoluene	Ave	234672	242260		258	250	3.2	15.0
4-Nitrotoluene	Ave	210817	216762		258	251	2.8	15.0
4-Amino-2,6-dinitrotoluene	Lin2		274961		258	250	3.0	15.0
3-Nitrotoluene	Lin2		271560		256	250	2.4	15.0
2-Amino-4,6-dinitrotoluene	Ave	360536	382761		266	251	6.2	15.0
1,3,5-Trinitrobenzene	Ave	415464	426435		257	251	2.6	15.0
2,6-Dinitrotoluene	Ave	265662	275486		260	251	3.7	15.0
2,4-Dinitrotoluene	Lin2		564466		250	251	-0.5	15.0
Tetryl	Ave	342171	321956		236	251	-5.9	15.0
2,4,6-Trinitrotoluene	Ave	369179	383861		261	251	4.0	15.0
PETN	Ave	129329	135988		2630	2500	5.1	15.0
1,2-Dinitrobenzene	Ave	249753	254676		255	250	2.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568485/11 Calibration Date: 03/12/2022 13:10

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: 03120011.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.81	6.67	6.97
Picric acid	8.28	8.17	8.47
RDX	9.00	8.85	9.15
Nitrobenzene	11.88	11.73	12.03
1,3-Dinitrobenzene	15.41	15.26	15.56
Nitroglycerin	15.82	15.66	15.96
2-Nitrotoluene	16.54	16.38	16.68
4-Nitrotoluene	16.85	16.69	16.99
4-Amino-2,6-dinitrotoluene	17.46	17.29	17.59
3-Nitrotoluene	17.80	17.64	17.94
2-Amino-4,6-dinitrotoluene	18.46	18.30	18.60
1,3,5-Trinitrobenzene	18.70	18.53	18.83
2,6-Dinitrotoluene	19.93	19.77	20.07
2,4-Dinitrotoluene	20.45	20.29	20.59
Tetryl	24.13	23.95	24.25
2,4,6-Trinitrotoluene	24.90	24.73	25.03
PETN	25.93	25.77	26.07
1,2-Dinitrobenzene	13.06	12.91	13.21

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120011.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 12-Mar-2022 13:10:35 ALS Bottle#: 7 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0109194-011
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 12-Mar-2022 13:46:44 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: CTX1616

First Level Reviewer: zhangji Date: 12-Mar-2022 13:46:40

	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	4.184	4.183	0.001	54399	0.2500	0.1338	
	2 2,4-diamino-6-nitrotoluene	1	4.838	4.836	0.002	11741	0.2500	0.0445	
	5 HMX	1	6.811	6.816	-0.005	41721	0.2500	0.2511	
	7 2,4,6-Trinitrophenol	1	8.284	8.323	-0.039	38874	0.2500	0.2925	
	8 RDX	1	8.998	9.003	-0.005	51322	0.2500	0.2641	
	9 Nitrobenzene	1	11.884	11.883	0.001	96096	0.2510	0.2609	
$	10 1,2-Dinitrobenzene	1	13.064	13.056	0.008	63669	0.2500	0.2549	
	11 3,5-Dinitroaniline	1	15.044	15.043	0.001	107342	0.2500	0.2608	
	12 1,3-Dinitrobenzene	1	15.411	15.410	0.001	145036	0.2505	0.2537	
	13 Nitroglycerin	2	15.818	15.810	0.008	293576	2.50	2.40	M
	14 o-Nitrotoluene	1	16.538	16.530	0.008	60565	0.2500	0.2581	
	16 p-Nitrotoluene	1	16.851	16.836	0.015	54299	0.2505	0.2576	
	17 4-Amino-2,6-dinitrotoluene	1	17.458	17.443	0.015	68809	0.2503	0.2577	
	18 m-Nitrotoluene	1	17.804	17.790	0.014	67958	0.2503	0.2562	
	19 2-Amino-4,6-dinitrotoluene	1	18.464	18.450	0.014	96073	0.2510	0.2665	
	20 1,3,5-Trinitrobenzene	1	18.698	18.683	0.015	106822	0.2505	0.2571	
	21 2,6-Dinitrotoluene	1	19.931	19.916	0.015	69147	0.2510	0.2603	
	22 2,4-Dinitrotoluene	1	20.451	20.436	0.015	141681	0.2510	0.2498	
	23 Tetryl	1	24.131	24.096	0.035	80650	0.2505	0.2357	
	24 2,4,6-Trinitrotoluene	1	24.904	24.876	0.028	96349	0.2510	0.2610	
	25 PETN	2	25.931	25.916	0.015	339971	2.50	2.63	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070	Amount Added:	25.00	Units: uL
8330_ADDs_00031	Amount Added:	12.50	Units: uL

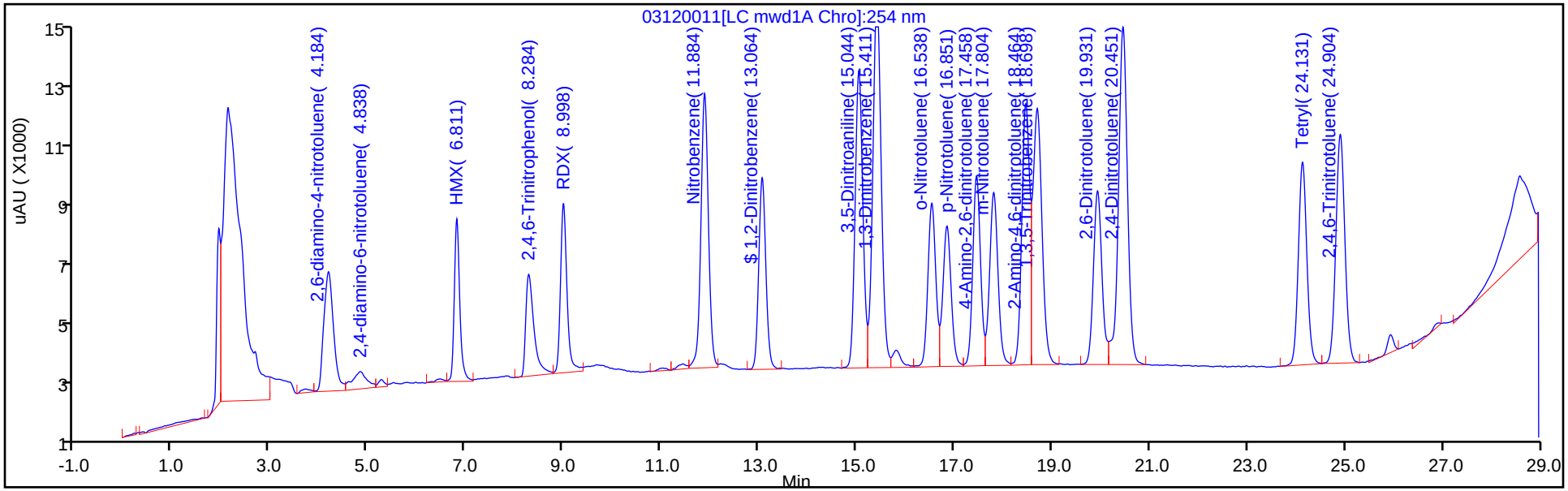
Report Date: 12-Mar-2022 13:46:44 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

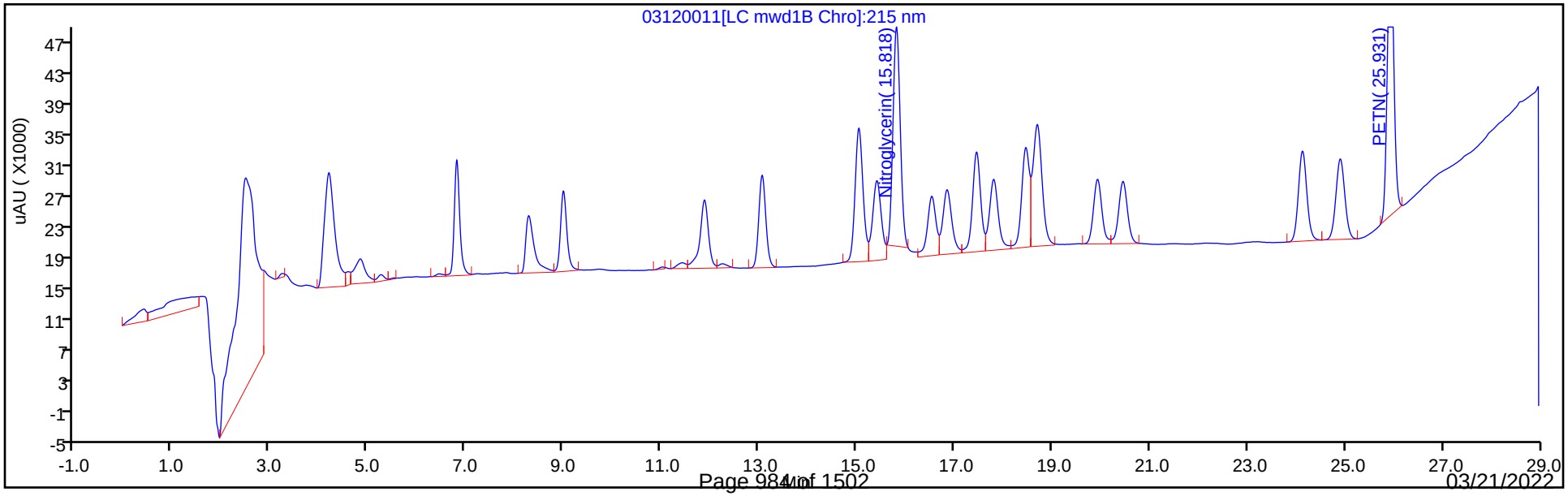
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120011.D

Injection Date:	12-Mar-2022 13:10:35	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	11
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



Manual Integration/User Assign Peak Report

Eurofins Denver

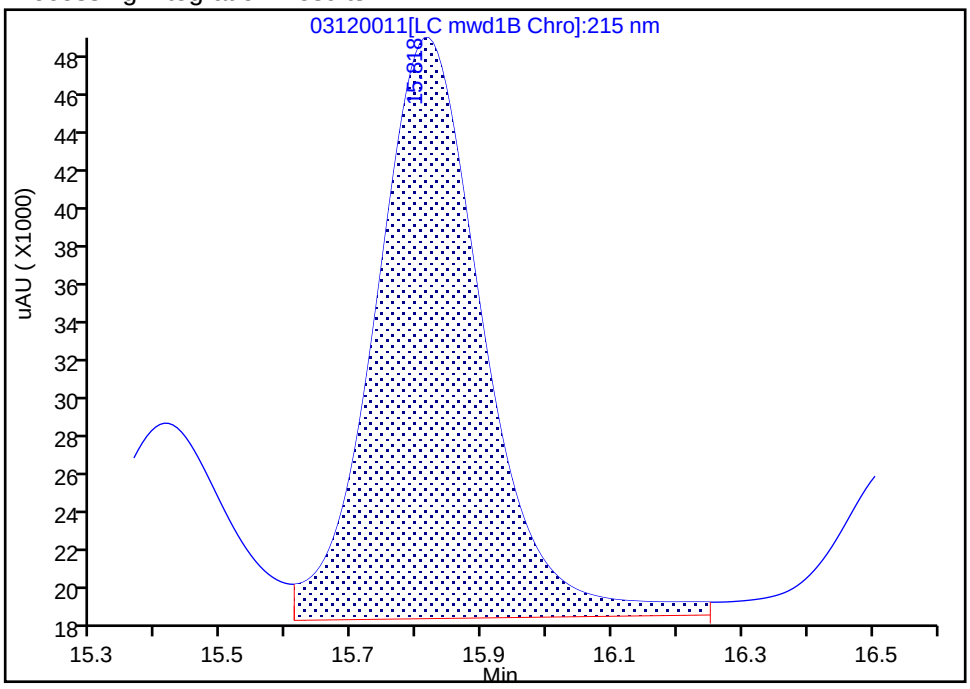
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120011.D
Injection Date: 12-Mar-2022 13:10:35 Instrument ID: CHHPLC_X5
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

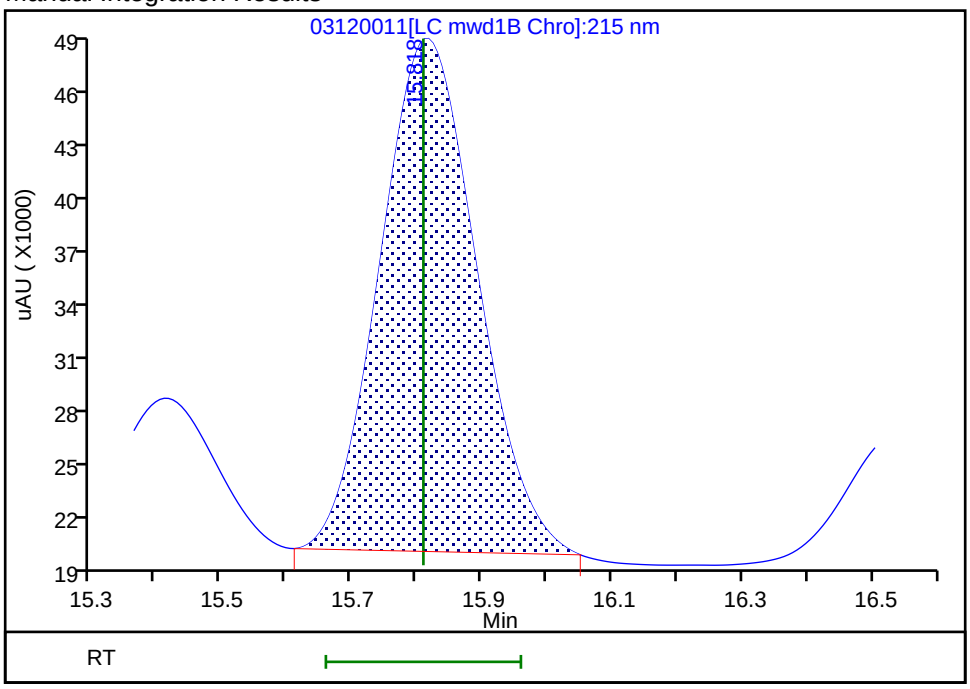
Processing Integration Results

RT: 15.82
Area: 345149
Amount: 2.817133
Amount Units: ug/ml



Manual Integration Results

RT: 15.82
Area: 293576
Amount: 2.396191
Amount Units: ug/ml



Reviewer: zhangji, 12-Mar-2022 13:46:35
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

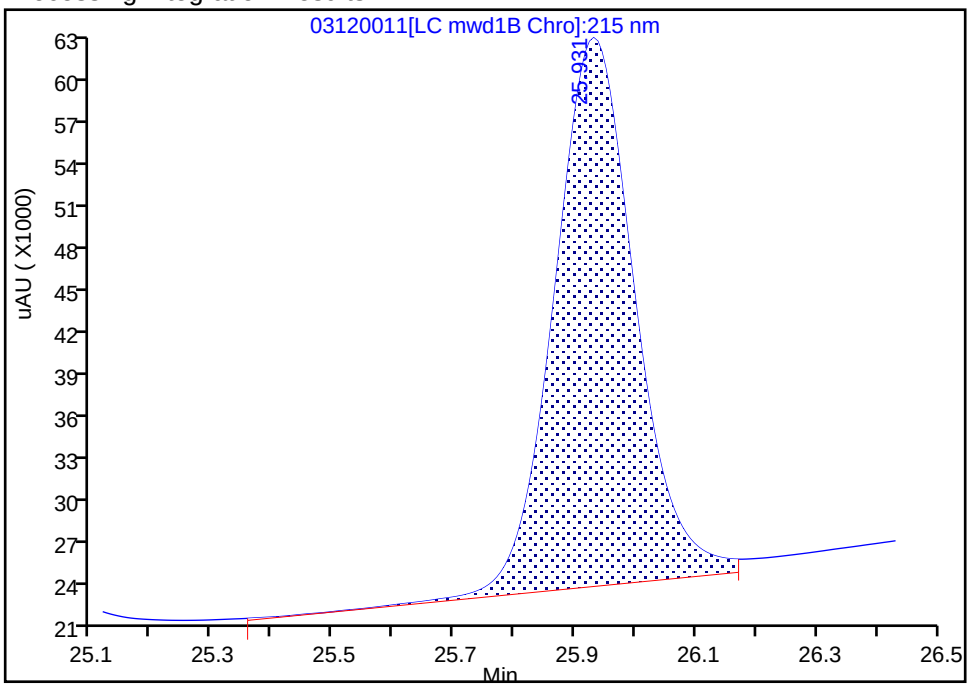
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120011.D
Injection Date: 12-Mar-2022 13:10:35 Instrument ID: CHHPLC_X5
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

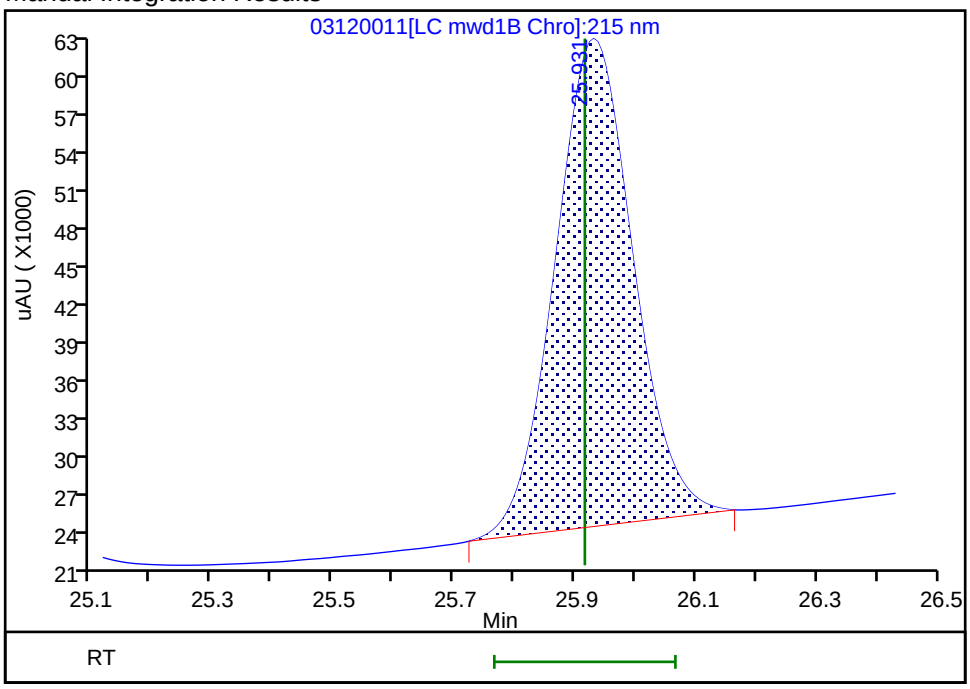
Processing Integration Results

RT: 25.93
Area: 359472
Amount: 2.779512
Amount Units: ug/ml



Manual Integration Results

RT: 25.93
Area: 339971
Amount: 2.628726
Amount Units: ug/ml



Reviewer: zhangji, 12-Mar-2022 13:46:38
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568485/12 Calibration Date: 03/12/2022 13:45

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: 03120012.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	354070	339217		240	250	-4.2	15.0
DNX	Ave	278639	271421		244	250	-2.6	15.0
MNX	Ave	250081	249426		291	292	-0.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568485/12 Calibration Date: 03/12/2022 13:45

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: 03120012.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.14	4.99	5.29
DNX	5.98	5.83	6.13
MNX	7.54	7.39	7.69

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120012.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	12-Mar-2022 13:45:36	ALS Bottle#:	8	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0109194-012				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-Mar-2022 16:12:02	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:	CTX1624				
First Level Reviewer: zhangji		Date:	12-Mar-2022 14:21:07		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.137	5.137	0.000	84889	0.2503	0.2398	
4 DNX	1	5.977	5.977	0.000	67923	0.2503	0.2438	
6 MNX	1	7.537	7.537	0.000	72770	0.2918	0.2910	

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

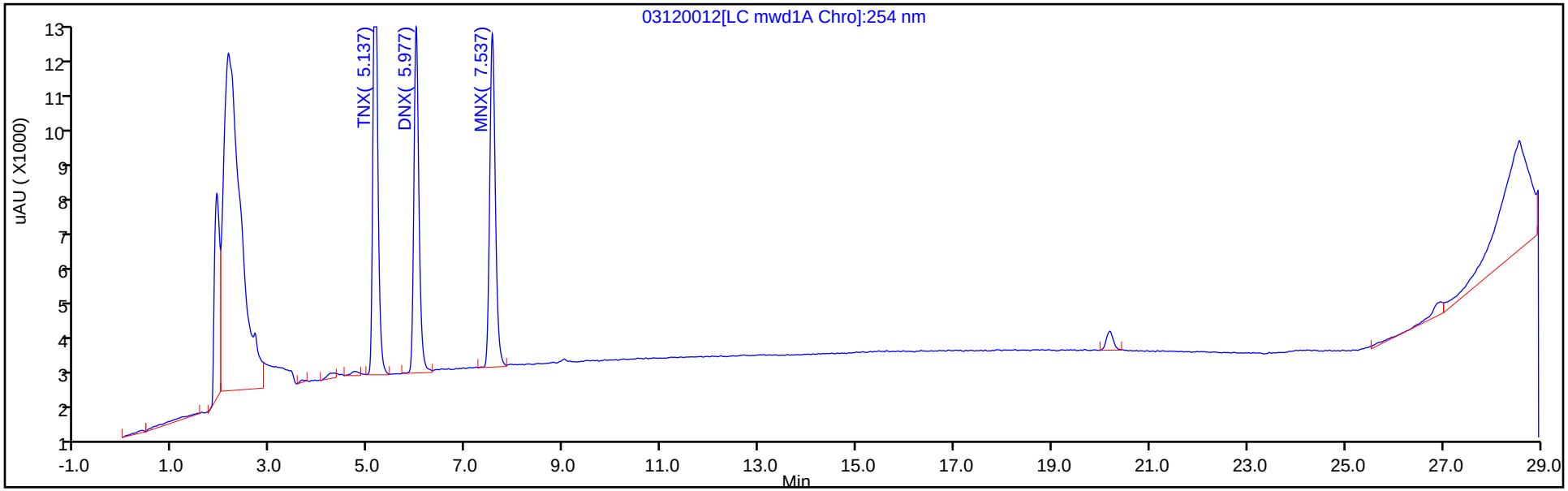
Report Date: 15-Mar-2022 16:12:02 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

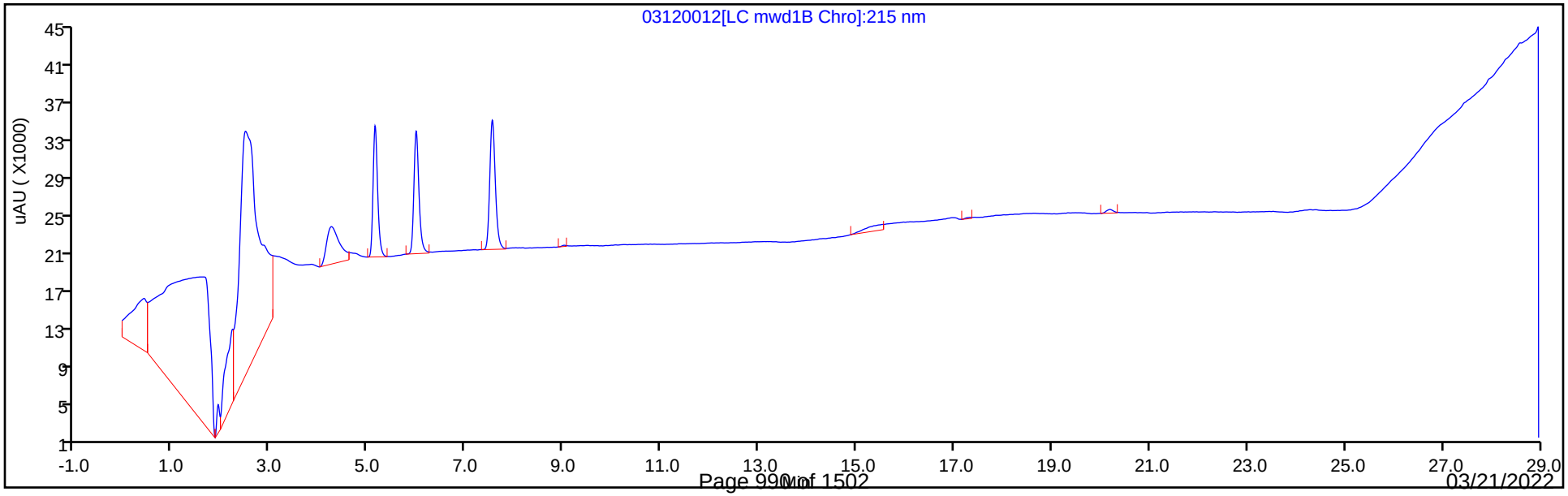
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120012.D

Injection Date:	12-Mar-2022 13:45:36	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	12
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.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568485/23 Calibration Date: 03/12/2022 20:11

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: 03120023.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	166135	169312		255	250	1.9	15.0
Picric acid	Ave	132885	149620		281	250	12.6	15.0
RDX	Ave	194331	200408		258	250	3.1	15.0
Nitrobenzene	Ave	368293	383649		261	251	4.2	15.0
1,3-Dinitrobenzene	Ave	571666	589705		258	251	3.2	15.0
Nitroglycerin	Ave	122518	116687		2380	2500	-4.8	15.0
2-Nitrotoluene	Ave	234672	230608		246	250	-1.7	15.0
4-Nitrotoluene	Ave	210817	210970		251	251	0.0	15.0
4-Amino-2,6-dinitrotoluene	Lin2		272779		256	250	2.2	15.0
3-Nitrotoluene	Lin2		266386		251	250	0.4	15.0
2-Amino-4,6-dinitrotoluene	Ave	360536	384518		268	251	6.7	15.0
1,3,5-Trinitrobenzene	Ave	415464	426942		257	251	2.8	15.0
2,6-Dinitrotoluene	Ave	265662	292434		276	251	10.1	15.0
2,4-Dinitrotoluene	Lin2		547594		242	251	-3.6	15.0
Tetryl	Ave	342171	321693		236	251	-6.0	15.0
2,4,6-Trinitrotoluene	Ave	369179	383259		261	251	3.8	15.0
PETN	Ave	129329	135819		2630	2500	5.0	15.0
1,2-Dinitrobenzene	Ave	249753	256976		257	250	2.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568485/23 Calibration Date: 03/12/2022 20:11

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: 03120023.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.80	6.67	6.97
Picric acid	8.20	8.17	8.47
RDX	8.99	8.85	9.15
Nitrobenzene	11.87	11.73	12.03
1,3-Dinitrobenzene	15.40	15.26	15.56
Nitroglycerin	15.79	15.66	15.96
2-Nitrotoluene	16.51	16.38	16.68
4-Nitrotoluene	16.82	16.69	16.99
4-Amino-2,6-dinitrotoluene	17.43	17.29	17.59
3-Nitrotoluene	17.77	17.64	17.94
2-Amino-4,6-dinitrotoluene	18.43	18.30	18.60
1,3,5-Trinitrobenzene	18.67	18.53	18.83
2,6-Dinitrotoluene	19.90	19.77	20.07
2,4-Dinitrotoluene	20.42	20.29	20.59
Tetryl	24.07	23.95	24.25
2,4,6-Trinitrotoluene	24.85	24.73	25.03
PETN	25.88	25.77	26.07
1,2-Dinitrobenzene	13.05	12.91	13.21

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120023.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 12-Mar-2022 20:11:39 ALS Bottle#: 7 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0109194-023
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 15-Mar-2022 16:12:07 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: CTX1624

First Level Reviewer: zhangji Date: 15-Mar-2022 16:11:56

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	4.179	4.183	-0.004	50777	0.2500	0.1249	
2 2,4-diamino-6-nitrotoluene	1	4.832	4.836	-0.004	11122	0.2500	0.0418	
5 HMX	1	6.799	6.816	-0.017	42328	0.2500	0.2548	
7 2,4,6-Trinitrophenol	1	8.199	8.323	-0.124	37405	0.2500	0.2815	
8 RDX	1	8.985	9.003	-0.018	50102	0.2500	0.2578	
9 Nitrobenzene	1	11.865	11.883	-0.018	96296	0.2510	0.2615	
$ 10 1,2-Dinitrobenzene	1	13.045	13.056	-0.011	64244	0.2500	0.2572	
11 3,5-Dinitroaniline	1	15.025	15.043	-0.018	106378	0.2500	0.2584	
12 1,3-Dinitrobenzene	1	15.398	15.410	-0.012	147721	0.2505	0.2584	
13 Nitroglycerin	2	15.785	15.810	-0.025	291717	2.50	2.38	M
14 o-Nitrotoluene	1	16.512	16.530	-0.018	57652	0.2500	0.2457	
16 p-Nitrotoluene	1	16.818	16.836	-0.018	52848	0.2505	0.2507	
17 4-Amino-2,6-dinitrotoluene	1	17.425	17.443	-0.018	68263	0.2503	0.2557	
18 m-Nitrotoluene	1	17.772	17.790	-0.018	66663	0.2503	0.2513	
19 2-Amino-4,6-dinitrotoluene	1	18.425	18.450	-0.025	96514	0.2510	0.2677	
20 1,3,5-Trinitrobenzene	1	18.672	18.683	-0.011	106949	0.2505	0.2574	
21 2,6-Dinitrotoluene	1	19.898	19.916	-0.018	73401	0.2510	0.2763	
22 2,4-Dinitrotoluene	1	20.418	20.436	-0.018	137446	0.2510	0.2420	
23 Tetryl	1	24.072	24.096	-0.024	80584	0.2505	0.2355	
24 2,4,6-Trinitrotoluene	1	24.852	24.876	-0.024	96198	0.2510	0.2606	
25 PETN	2	25.879	25.916	-0.037	339548	2.50	2.63	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070	Amount Added:	25.00	Units: uL
8330_ADDs_00031	Amount Added:	12.50	Units: uL

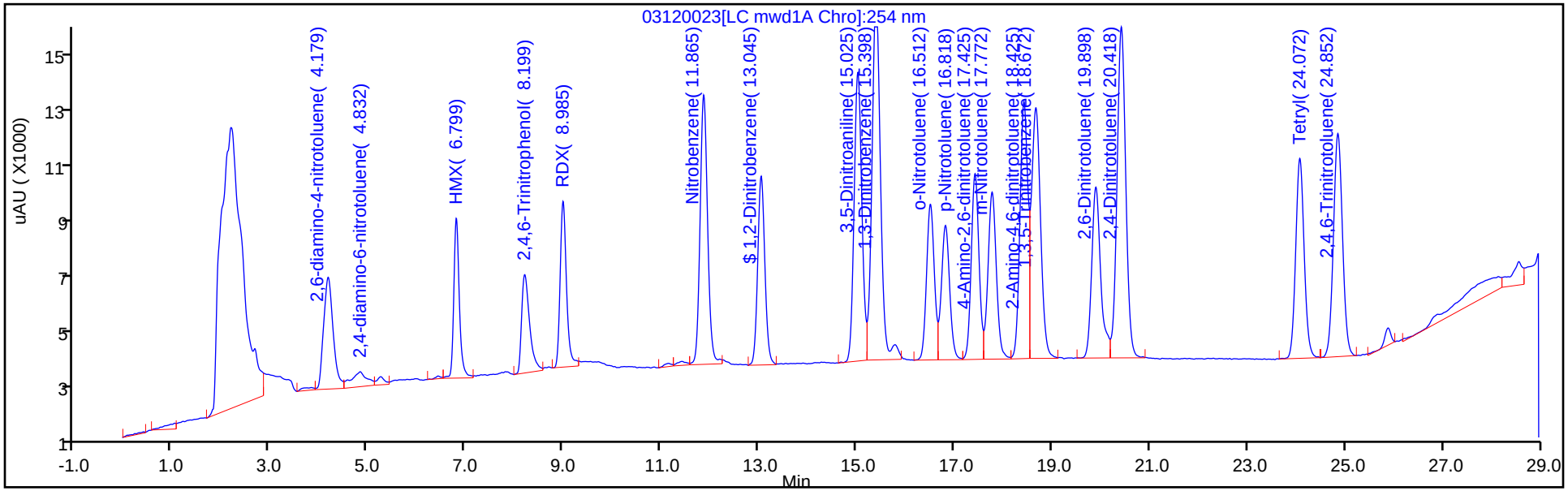
Report Date: 15-Mar-2022 16:12:07 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

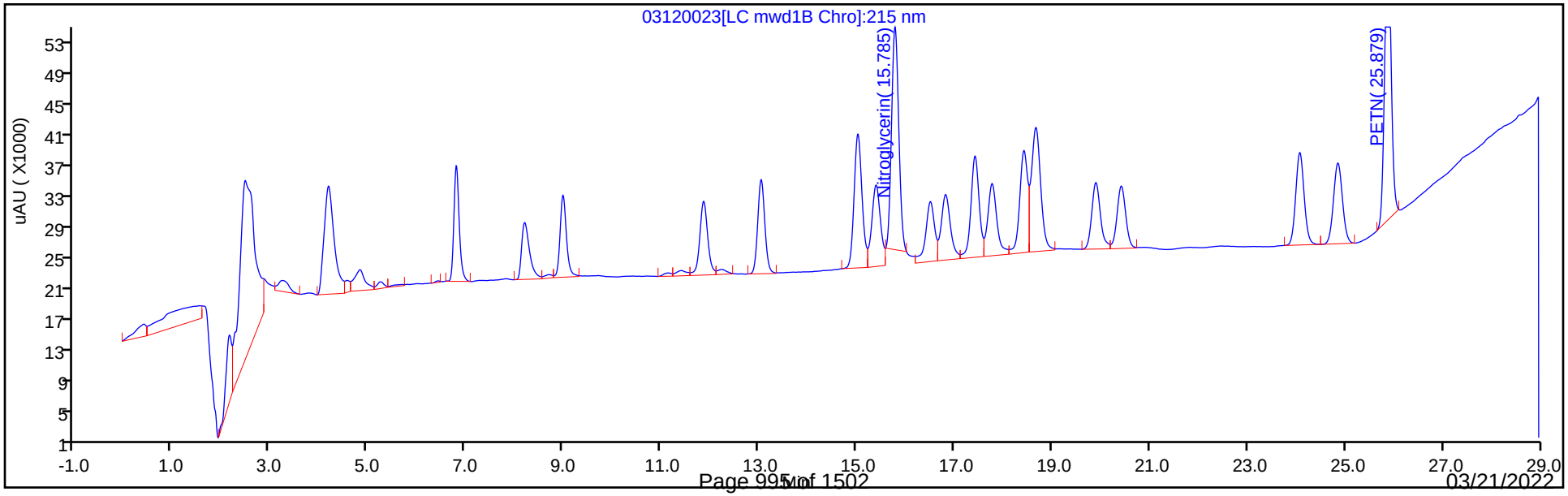
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120023.D

Injection Date:	12-Mar-2022 20:11:39	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	23
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



Manual Integration/User Assign Peak Report

Eurofins Denver

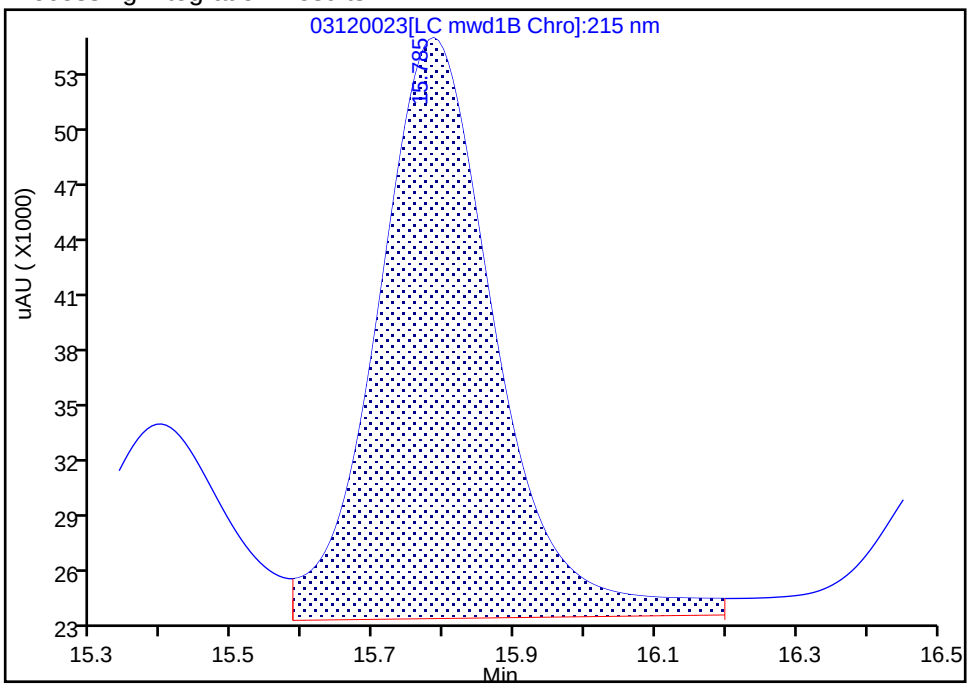
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120023.D
Injection Date: 12-Mar-2022 20:11:39 Instrument ID: CHHPLC_X5
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

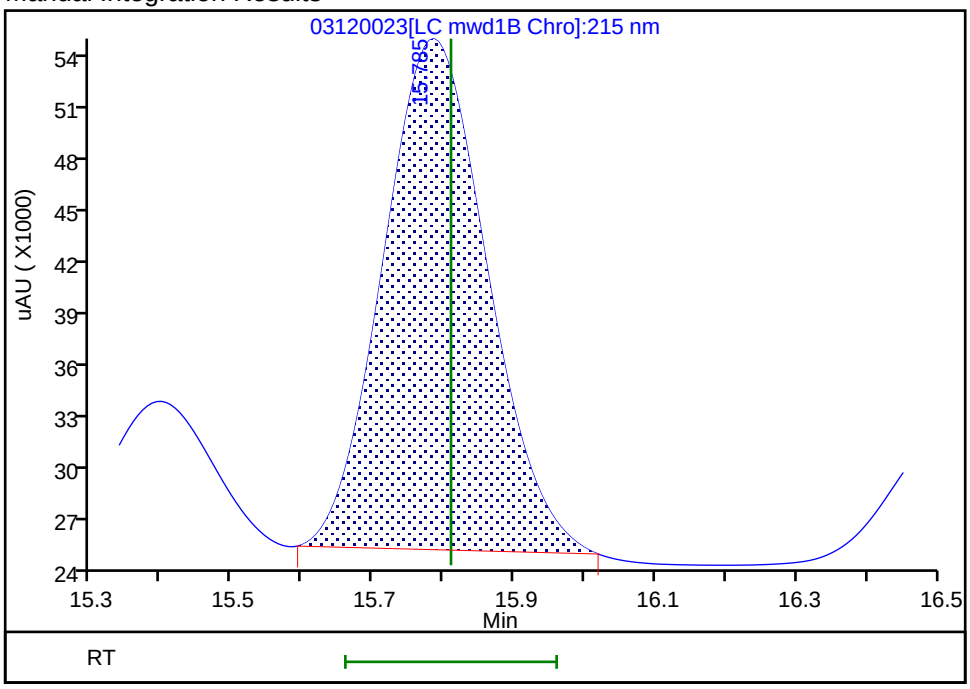
Processing Integration Results

RT: 15.79
Area: 351923
Amount: 2.872423
Amount Units: ug/ml



Manual Integration Results

RT: 15.79
Area: 291717
Amount: 2.381017
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 16:11:51
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

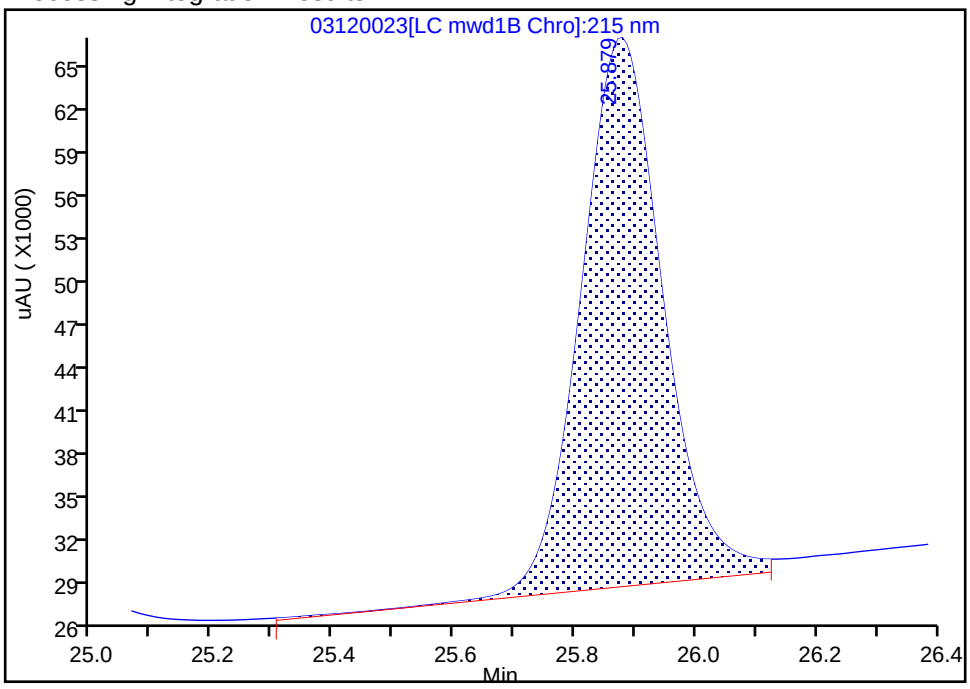
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120023.D
Injection Date: 12-Mar-2022 20:11:39 Instrument ID: CHHPLC_X5
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

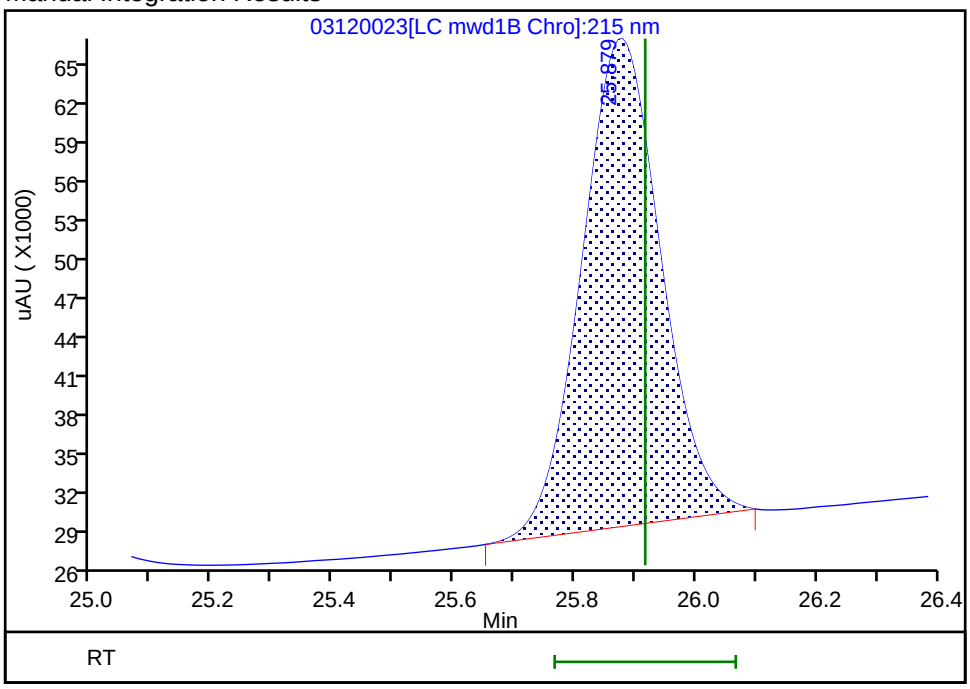
Processing Integration Results

RT: 25.88
Area: 359355
Amount: 2.778607
Amount Units: ug/ml



Manual Integration Results

RT: 25.88
Area: 339548
Amount: 2.625455
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 16:11:54
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568485/24 Calibration Date: 03/12/2022 20:46

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: 03120024.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	354070	335896		237	250	-5.1	15.0
DNX	Ave	278639	270082		243	250	-3.1	15.0
MNX	Ave	250081	249704		291	292	-0.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568485/24 Calibration Date: 03/12/2022 20:46

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: 03120024.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.13	4.99	5.29
DNX	5.96	5.83	6.13
MNX	7.52	7.39	7.69

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120024.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	12-Mar-2022 20:46:38	ALS Bottle#:	8	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0109194-024				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	15-Mar-2022 16:12:08	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:	CTX1624				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.128	5.137	-0.009	84058	0.2503	0.2374	
4 DNX	1	5.962	5.977	-0.015	67588	0.2503	0.2426	
6 MNX	1	7.522	7.537	-0.015	72851	0.2918	0.2913	

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

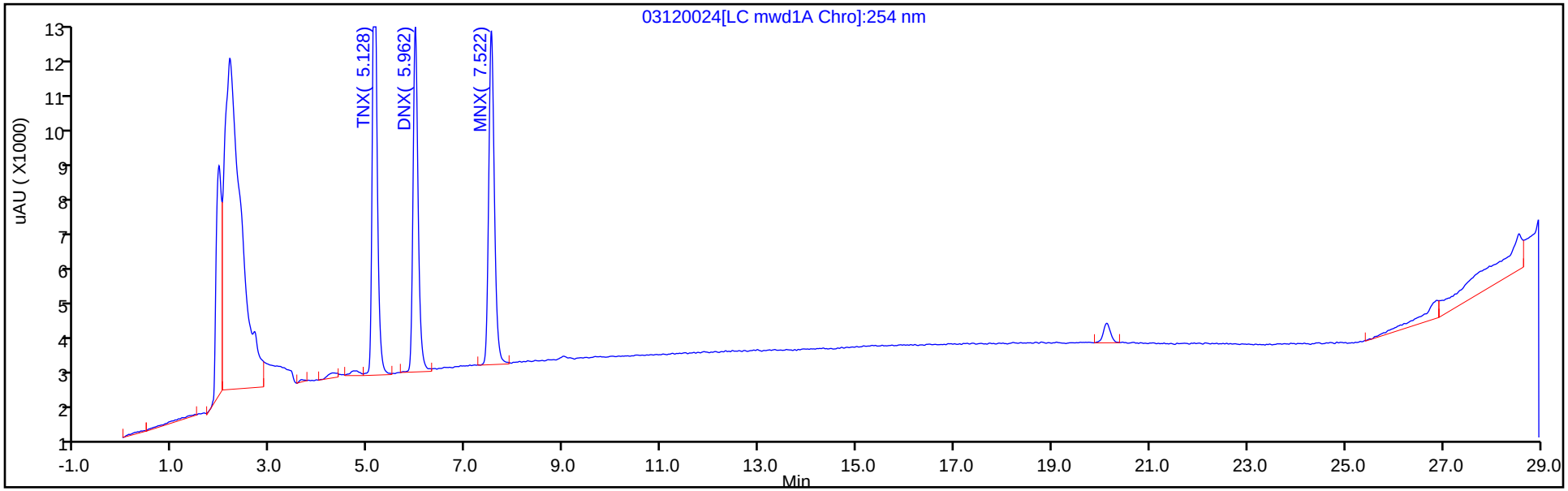
Report Date: 15-Mar-2022 16:12:08 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

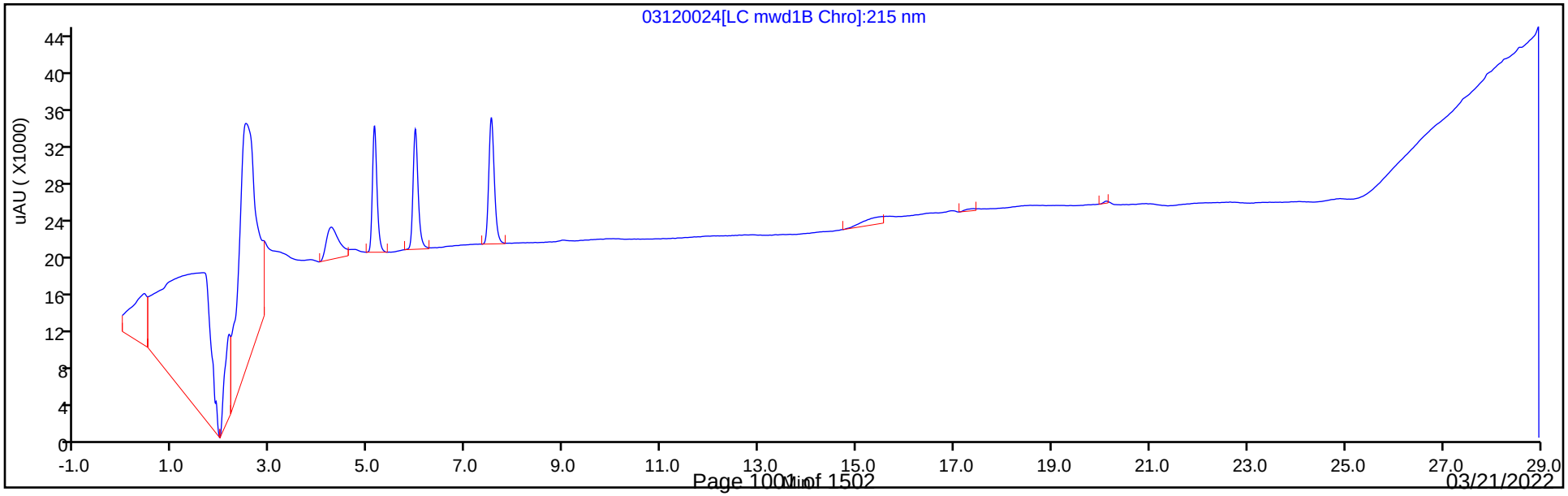
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220312-109194.b\03120024.D

Injection Date:	12-Mar-2022 20:46:38	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	24
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.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568709/7 Calibration Date: 03/15/2022 18:07

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: 03150007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	166135	160556		242	250	-3.4	15.0
Picric acid	Ave	132885	154452		291	250	16.2*	15.0
RDX	Ave	194331	207308		267	250	6.7	15.0
Nitrobenzene	Ave	368293	393968		268	251	7.0	15.0
1,3-Dinitrobenzene	Ave	571666	589621		258	251	3.1	15.0
Nitroglycerin	Ave	122518	118026		2410	2500	-3.7	15.0
2-Nitrotoluene	Ave	234672	237088		253	250	1.0	15.0
4-Nitrotoluene	Ave	210817	215904		257	251	2.4	15.0
4-Amino-2,6-dinitrotoluene	Lin2		274158		257	250	2.7	15.0
3-Nitrotoluene	Lin2		272659		257	250	2.8	15.0
2-Amino-4,6-dinitrotoluene	Ave	360536	379841		264	251	5.4	15.0
1,3,5-Trinitrobenzene	Ave	415464	426471		257	251	2.6	15.0
2,6-Dinitrotoluene	Ave	265662	271351		256	251	2.1	15.0
2,4-Dinitrotoluene	Lin2		571781		253	251	0.9	15.0
Tetryl	Ave	342171	318355		233	251	-7.0	15.0
2,4,6-Trinitrotoluene	Ave	369179	381538		259	251	3.3	15.0
PETN	Ave	129329	134966		2610	2500	4.4	15.0
1,2-Dinitrobenzene	Ave	249753	255028		255	250	2.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568709/7 Calibration Date: 03/15/2022 18:07

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: 03150007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.85	6.70	7.00
Picric acid	8.31	8.16	8.46
RDX	9.05	8.90	9.20
Nitrobenzene	11.96	11.81	12.11
1,3-Dinitrobenzene	15.51	15.36	15.66
Nitroglycerin	15.91	15.76	16.06
2-Nitrotoluene	16.64	16.49	16.79
4-Nitrotoluene	16.95	16.80	17.10
4-Amino-2,6-dinitrotoluene	17.57	17.42	17.72
3-Nitrotoluene	17.91	17.76	18.06
2-Amino-4,6-dinitrotoluene	18.58	18.43	18.73
1,3,5-Trinitrobenzene	18.79	18.64	18.94
2,6-Dinitrotoluene	20.05	19.90	20.20
2,4-Dinitrotoluene	20.57	20.42	20.72
Tetryl	24.31	24.16	24.46
2,4,6-Trinitrotoluene	25.07	24.92	25.22
PETN	26.07	25.92	26.22
1,2-Dinitrobenzene	13.16	13.01	13.31

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150007.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 15-Mar-2022 18:07:51 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0109260-007
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Mar-2022 12:38:49 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: CTX1609

First Level Reviewer: zhangji Date: 15-Mar-2022 19:51:13

	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	4.134	4.134	0.000	90993	0.2500	0.2239	M
	2 2,4-diamino-6-nitrotoluene	1	4.714	4.621	0.093	30681	0.2500	0.1282	M
	5 HMX	1	6.854	6.854	0.000	40139	0.2500	0.2416	
	7 2,4,6-Trinitrophenol	1	8.314	8.314	0.000	38613	0.2500	0.2906	
	8 RDX	1	9.054	9.054	0.000	51827	0.2500	0.2667	
	9 Nitrobenzene	1	11.960	11.960	0.000	98886	0.2510	0.2685	
$	10 1,2-Dinitrobenzene	1	13.160	13.160	0.000	63757	0.2500	0.2553	
	11 3,5-Dinitroaniline	1	15.154	15.154	0.000	107070	0.2500	0.2601	
	12 1,3-Dinitrobenzene	1	15.514	15.514	0.000	147700	0.2505	0.2584	
	13 Nitroglycerin	2	15.914	15.914	0.000	295064	2.50	2.41	M
	14 o-Nitrotoluene	1	16.640	16.640	0.000	59272	0.2500	0.2526	
	16 p-Nitrotoluene	1	16.954	16.954	0.000	54084	0.2505	0.2565	
	17 4-Amino-2,6-dinitrotoluene	1	17.574	17.574	0.000	68608	0.2503	0.2570	
	18 m-Nitrotoluene	1	17.914	17.914	0.000	68233	0.2503	0.2572	
	19 2-Amino-4,6-dinitrotoluene	1	18.580	18.580	0.000	95340	0.2510	0.2644	
	20 1,3,5-Trinitrobenzene	1	18.794	18.794	0.000	106831	0.2505	0.2571	
	21 2,6-Dinitrotoluene	1	20.054	20.054	0.000	68109	0.2510	0.2564	
	22 2,4-Dinitrotoluene	1	20.574	20.574	0.000	143517	0.2510	0.2532	
	23 Tetryl	1	24.307	24.307	0.000	79748	0.2505	0.2331	
	24 2,4,6-Trinitrotoluene	1	25.074	25.074	0.000	95766	0.2510	0.2594	
	25 PETN	2	26.074	26.074	0.000	337414	2.50	2.61	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070	Amount Added:	25.00	Units: uL
8330_ADDs_00031	Amount Added:	12.50	Units: uL

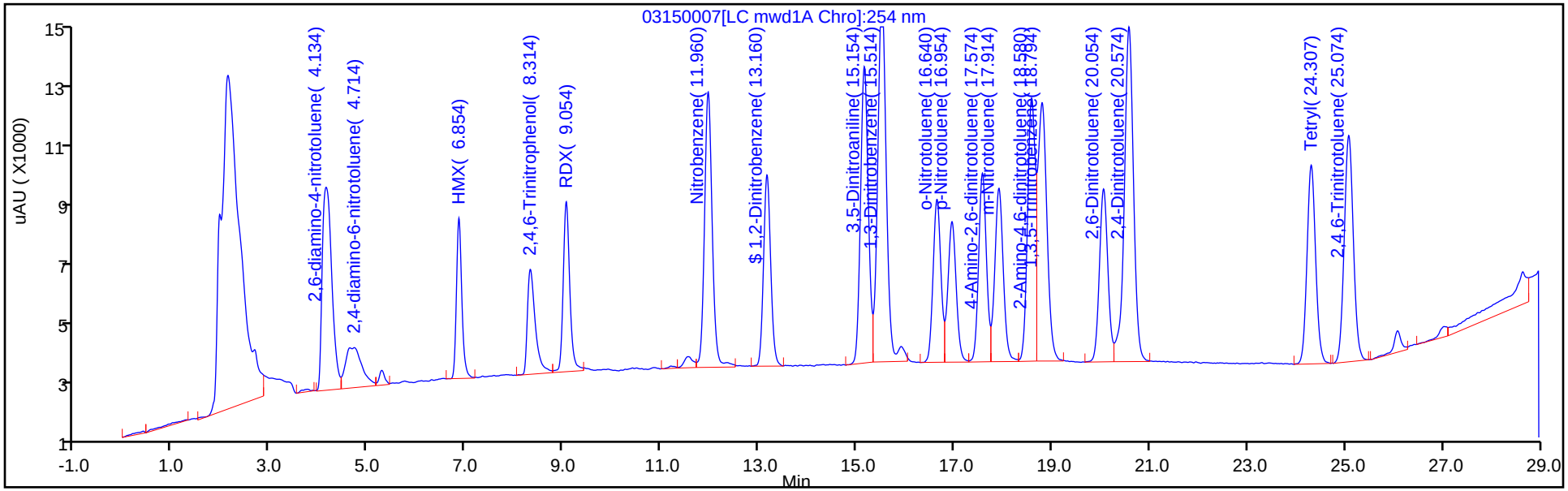
Report Date: 16-Mar-2022 12:38:49 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

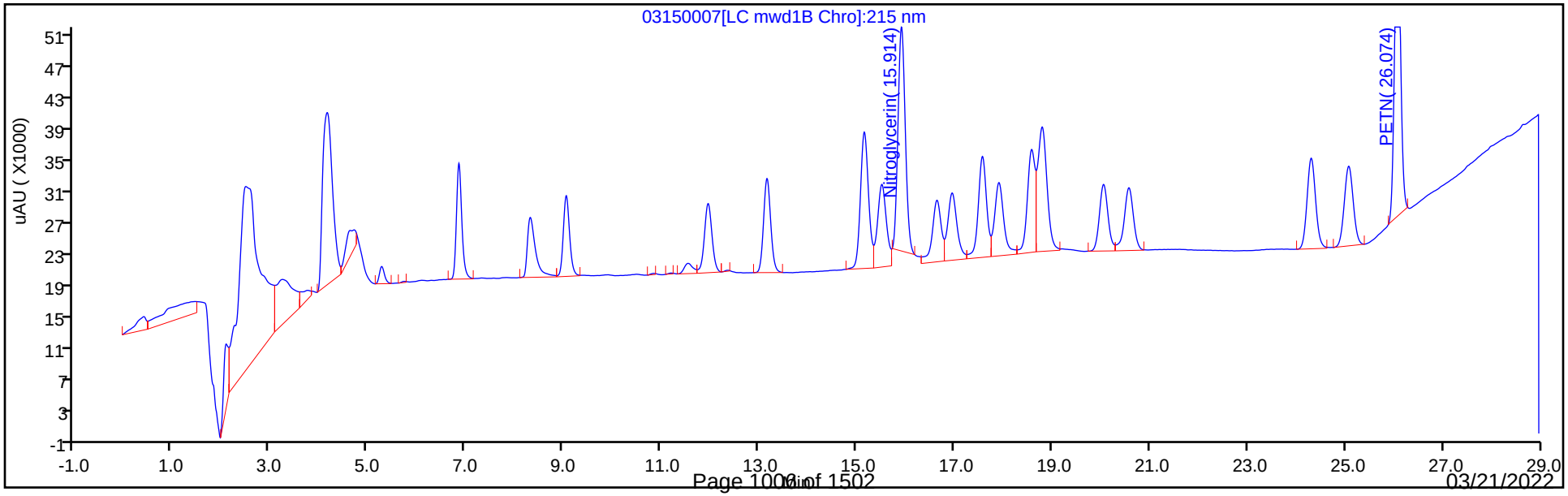
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150007.D

Injection Date:	15-Mar-2022 18:07:51	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	7
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



Manual Integration/User Assign Peak Report

Eurofins Denver

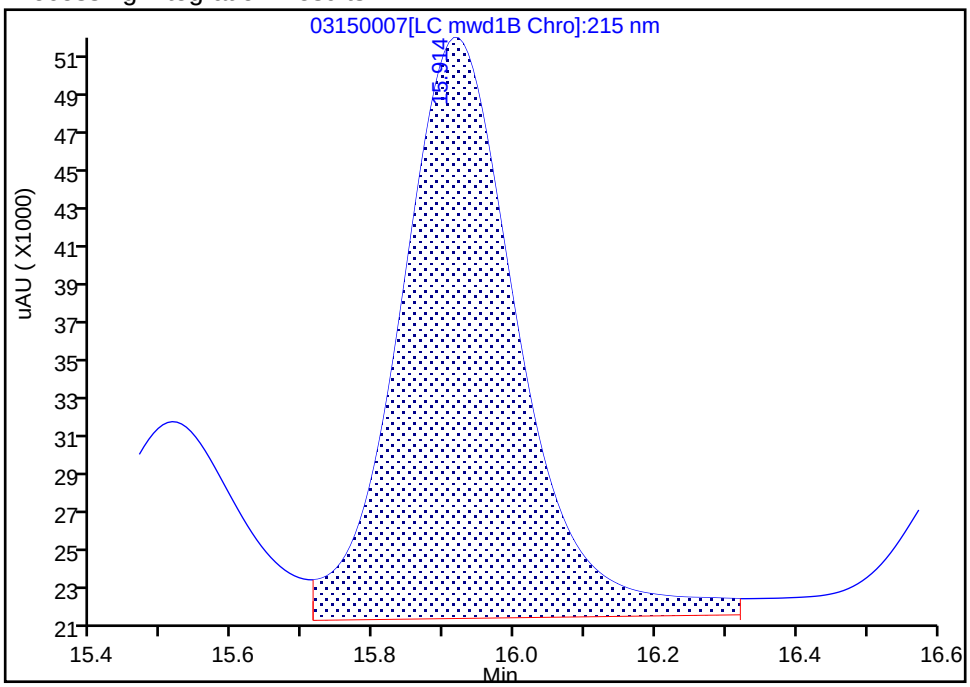
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150007.D				
Injection Date:	15-Mar-2022 18:07:51	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC mwd1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

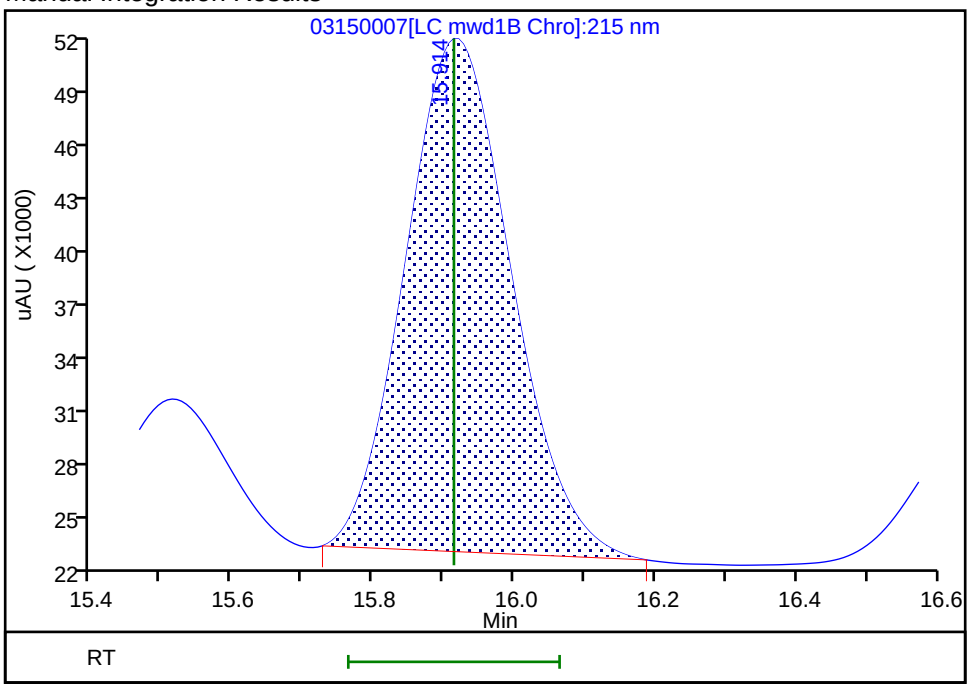
Processing Integration Results

RT: 15.91
Area: 350983
Amount: 2.864751
Amount Units: ug/ml



Manual Integration Results

RT: 15.91
Area: 295064
Amount: 2.408336
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 18:53:40

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

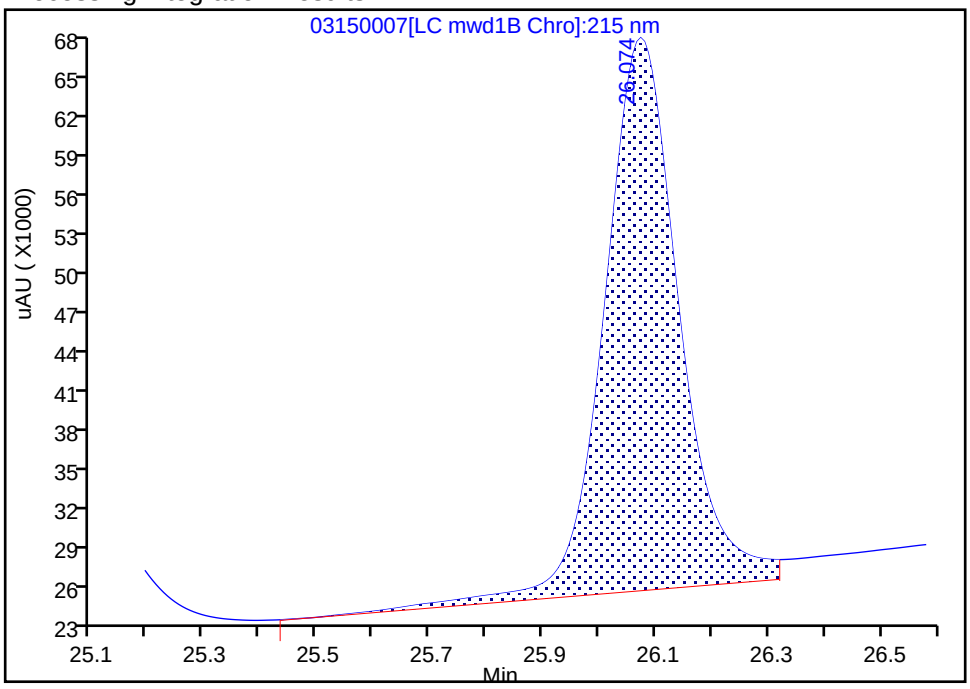
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150007.D
Injection Date: 15-Mar-2022 18:07:51 Instrument ID: CHHPLC_X5
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

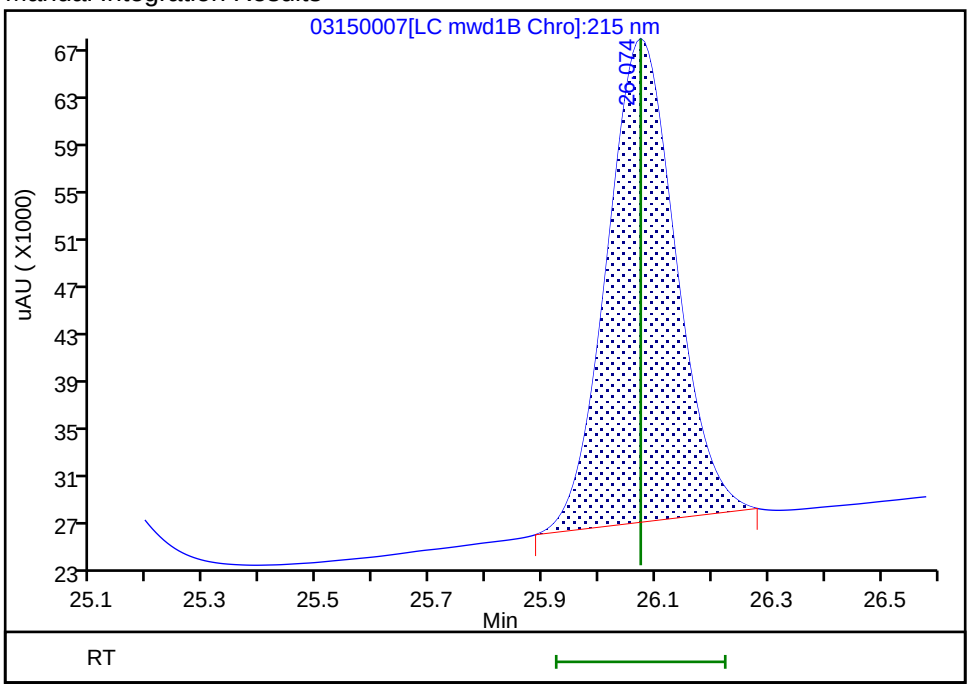
Processing Integration Results

RT: 26.07
Area: 381533
Amount: 2.950092
Amount Units: ug/ml



Manual Integration Results

RT: 26.07
Area: 337414
Amount: 2.608955
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 18:53:44
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568709/8 Calibration Date: 03/15/2022 18:42

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: 03150008.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	354070	361339		255	250	2.1	15.0
DNX	Ave	278639	272464		245	250	-2.2	15.0
MNX	Ave	250081	255208		298	292	2.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568709/8 Calibration Date: 03/15/2022 18:42

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: 03150008.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.16	5.01	5.31
DNX	6.01	5.86	6.16
MNX	7.58	7.43	7.73

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150008.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 15-Mar-2022 18:42:58 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0109260-008
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub2

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Mar-2022 12:38:49 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: CTX1609

First Level Reviewer: zhangji Date: 15-Mar-2022 19:51:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.161	5.161	0.000	90425	0.2503	0.2554	M
4 DNX	1	6.007	6.007	0.000	68184	0.2503	0.2447	M
6 MNX	1	7.581	7.581	0.000	74457	0.2918	0.2977	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

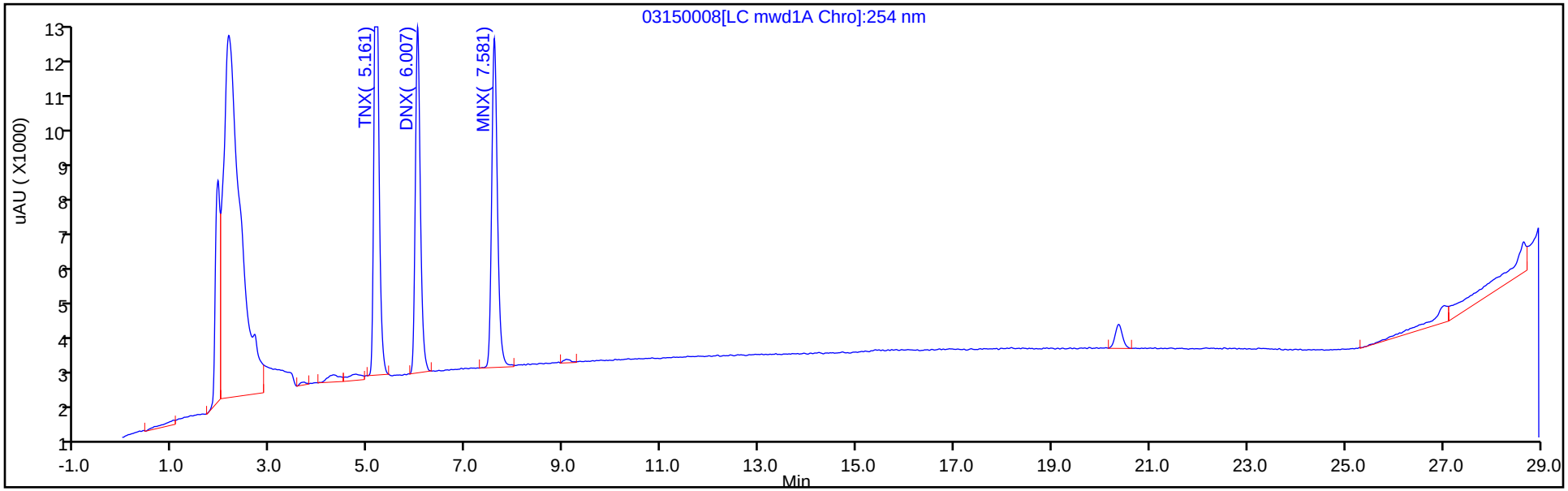
Report Date: 16-Mar-2022 12:38:49 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

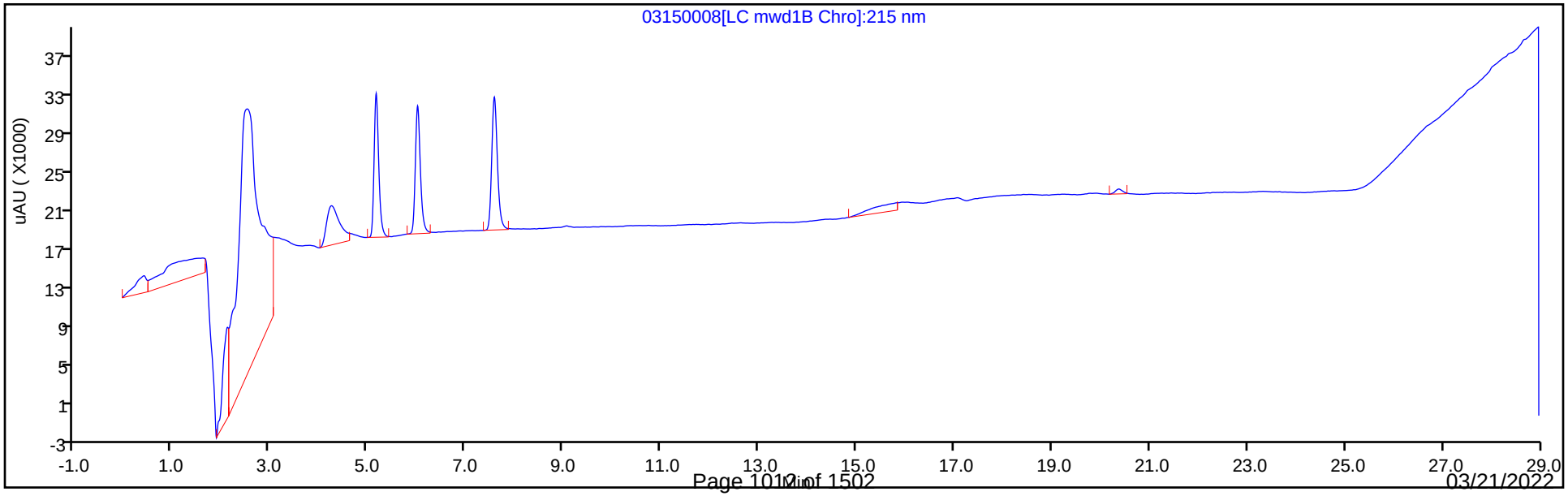
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150008.D

Injection Date:	15-Mar-2022 18:42:58	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	8
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



Manual Integration/User Assign Peak Report

Eurofins Denver

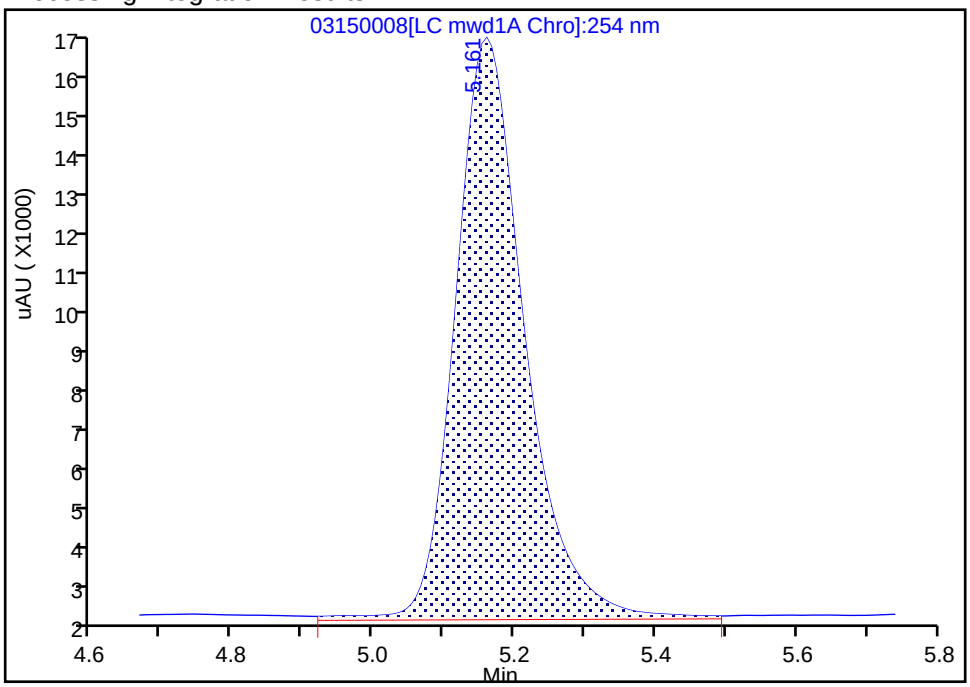
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150008.D				
Injection Date:	15-Mar-2022 18:42:58	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

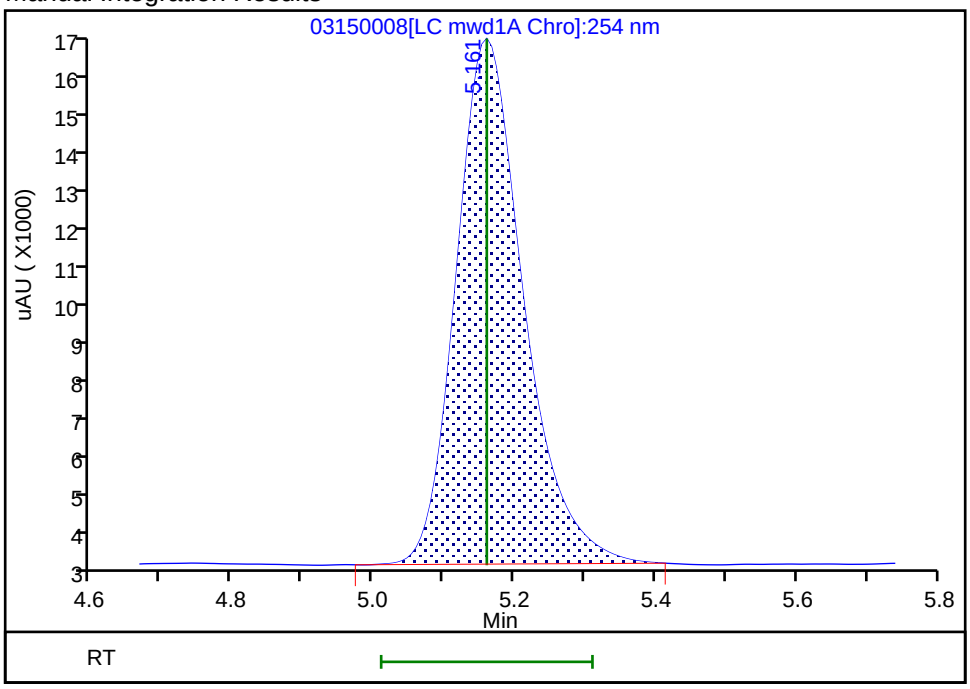
Processing Integration Results

RT: 5.16
Area: 94007
Amount: 0.265504
Amount Units: ug/ml



Manual Integration Results

RT: 5.16
Area: 90425
Amount: 0.255387
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 19:51:27
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

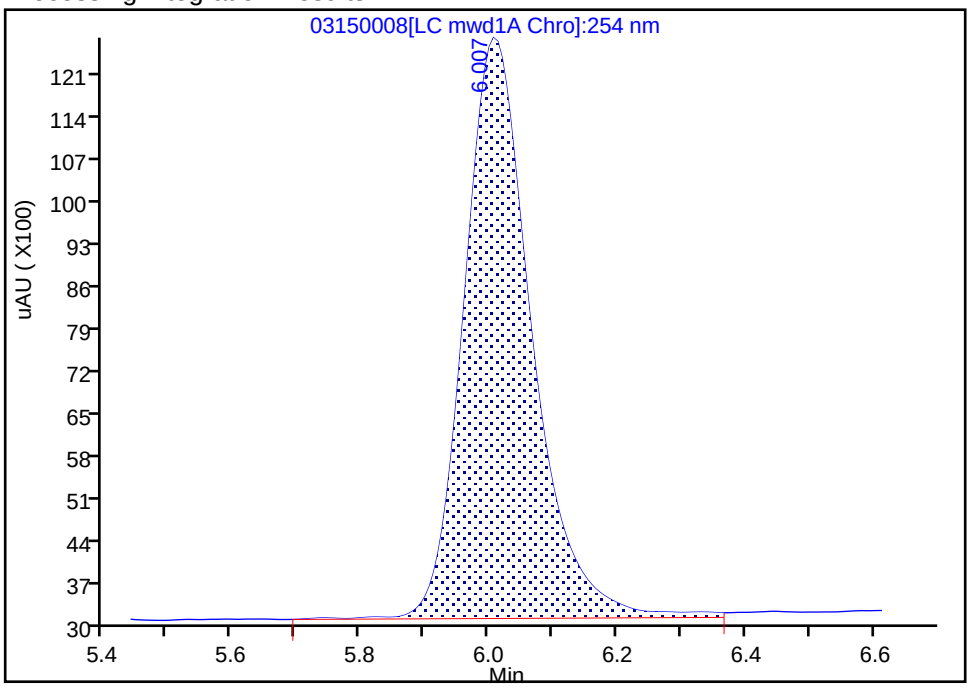
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150008.D				
Injection Date:	15-Mar-2022 18:42:58	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

4 DNX, CAS: 80251-29-2

Signal: 1

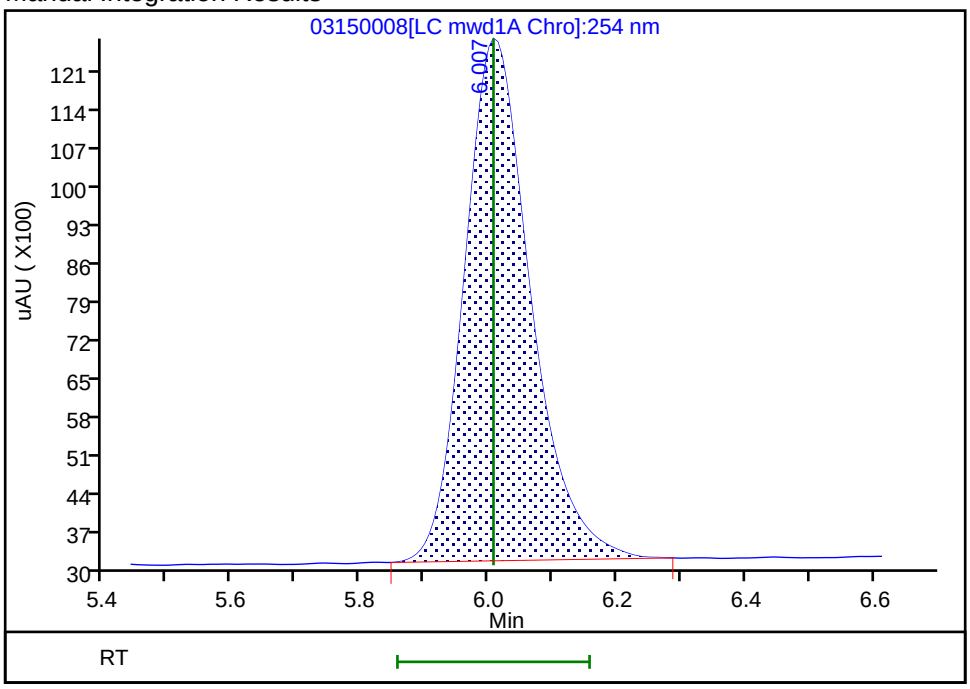
Processing Integration Results

RT: 6.01
Area: 70291
Amount: 0.252266
Amount Units: ug/ml



Manual Integration Results

RT: 6.01
Area: 68184
Amount: 0.244704
Amount Units: ug/ml



Reviewer: zhangji, 15-Mar-2022 19:51:30

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568709/19 | Calibration Date: 03/16/2022 00:33

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: 03150019.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	166135	163568		246	250	-1.5	15.0
Picric acid	Ave	132885	155240		292	250	16.8*	15.0
RDX	Ave	194331	203208		261	250	4.6	15.0
Nitrobenzene	Ave	368293	365175		249	251	-0.8	15.0
1,3-Dinitrobenzene	Ave	571666	578503		253	251	1.2	15.0
Nitroglycerin	Ave	122518	119482		2440	2500	-2.5	15.0
2-Nitrotoluene	Ave	234672	232712		248	250	-0.8	15.0
4-Nitrotoluene	Ave	210817	212695		253	251	0.9	15.0
4-Amino-2,6-dinitrotoluene	Lin2		272711		256	250	2.1	15.0
3-Nitrotoluene	Lin2		269083		254	250	1.4	15.0
2-Amino-4,6-dinitrotoluene	Ave	360536	383084		267	251	6.3	15.0
1,3,5-Trinitrobenzene	Ave	415464	430483		260	251	3.6	15.0
2,6-Dinitrotoluene	Ave	265662	271502		257	251	2.2	15.0
2,4-Dinitrotoluene	Lin2		573442		254	251	1.2	15.0
Tetryl	Ave	342171	321433		235	251	-6.1	15.0
2,4,6-Trinitrotoluene	Ave	369179	385857		262	251	4.5	15.0
PETN	Ave	129329	137890		2670	2500	6.6	15.0
1,2-Dinitrobenzene	Ave	249753	257648		258	250	3.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568709/19 Calibration Date: 03/16/2022 00:33

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: 03150019.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.82	6.70	7.00
Picric acid	8.22	8.16	8.46
RDX	9.02	8.90	9.20
Nitrobenzene	11.92	11.81	12.11
1,3-Dinitrobenzene	15.47	15.36	15.66
Nitroglycerin	15.88	15.76	16.06
2-Nitrotoluene	16.60	16.49	16.79
4-Nitrotoluene	16.92	16.80	17.10
4-Amino-2,6-dinitrotoluene	17.53	17.42	17.72
3-Nitrotoluene	17.88	17.76	18.06
2-Amino-4,6-dinitrotoluene	18.54	18.43	18.73
1,3,5-Trinitrobenzene	18.76	18.64	18.94
2,6-Dinitrotoluene	20.02	19.90	20.20
2,4-Dinitrotoluene	20.54	20.42	20.72
Tetryl	24.23	24.16	24.46
2,4,6-Trinitrotoluene	25.00	24.92	25.22
PETN	26.00	25.92	26.22
1,2-Dinitrobenzene	13.11	13.01	13.31

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150019.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 16-Mar-2022 00:33:49 ALS Bottle#: 7 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0109260-019
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Mar-2022 12:38:41 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: CTX1609

First Level Reviewer: zhangji Date: 16-Mar-2022 12:35:46

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	4.108	4.134	-0.026	100453	0.2500	0.2471	
2 2,4-diamino-6-nitrotoluene	1	4.675	4.621	0.054	63695	0.2500	0.2741	
5 HMX	1	6.815	6.854	-0.039	40892	0.2500	0.2461	
7 2,4,6-Trinitrophenol	1	8.215	8.314	-0.099	38810	0.2500	0.2921	
8 RDX	1	9.015	9.054	-0.039	50802	0.2500	0.2614	
9 Nitrobenzene	1	11.915	11.960	-0.045	91659	0.2510	0.2489	
$ 10 1,2-Dinitrobenzene	1	13.108	13.160	-0.052	64412	0.2500	0.2579	
11 3,5-Dinitroaniline	1	15.101	15.154	-0.053	108231	0.2500	0.2629	
12 1,3-Dinitrobenzene	1	15.468	15.514	-0.046	144915	0.2505	0.2535	
13 Nitroglycerin	2	15.875	15.914	-0.039	298705	2.50	2.44	M
14 o-Nitrotoluene	1	16.601	16.640	-0.039	58178	0.2500	0.2479	
16 p-Nitrotoluene	1	16.915	16.954	-0.039	53280	0.2505	0.2527	
17 4-Amino-2,6-dinitrotoluene	1	17.528	17.574	-0.046	68246	0.2503	0.2556	
18 m-Nitrotoluene	1	17.875	17.914	-0.039	67338	0.2503	0.2539	
19 2-Amino-4,6-dinitrotoluene	1	18.535	18.580	-0.045	96154	0.2510	0.2667	
20 1,3,5-Trinitrobenzene	1	18.761	18.794	-0.033	107836	0.2505	0.2596	
21 2,6-Dinitrotoluene	1	20.015	20.054	-0.039	68147	0.2510	0.2565	
22 2,4-Dinitrotoluene	1	20.535	20.574	-0.039	143934	0.2510	0.2540	
23 Tetryl	1	24.228	24.307	-0.079	80519	0.2505	0.2353	
24 2,4,6-Trinitrotoluene	1	24.995	25.074	-0.079	96850	0.2510	0.2623	
25 PETN	2	26.002	26.074	-0.072	344724	2.50	2.67	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070	Amount Added:	25.00	Units: uL
8330_ADDs_00031	Amount Added:	12.50	Units: uL

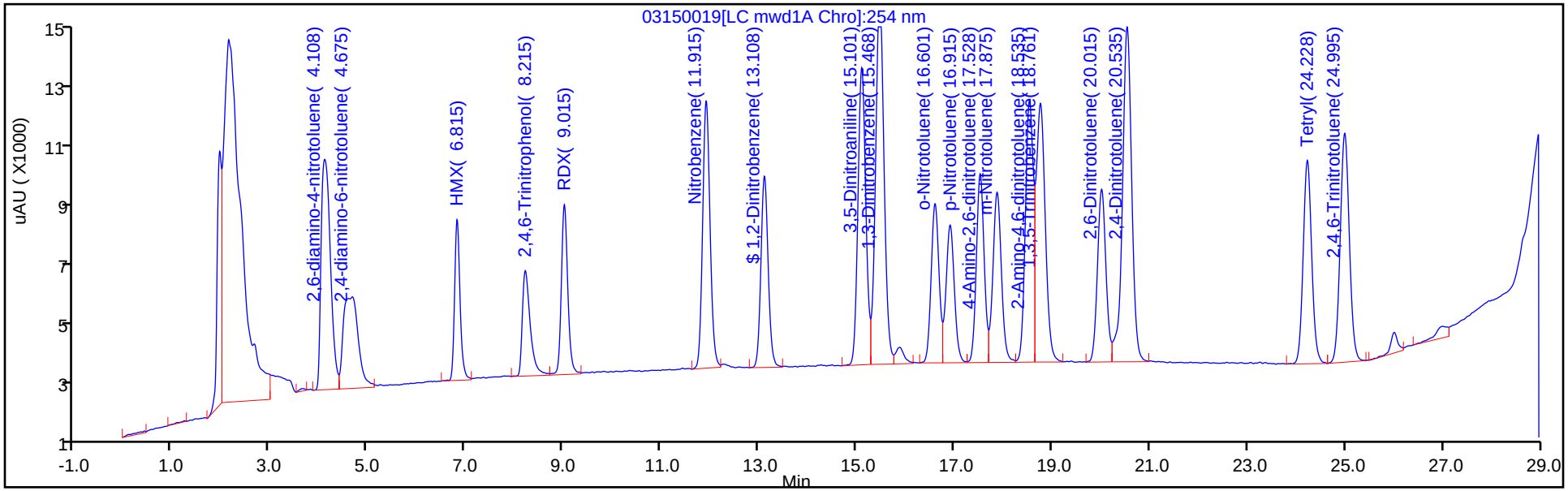
Report Date: 16-Mar-2022 12:38:41 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

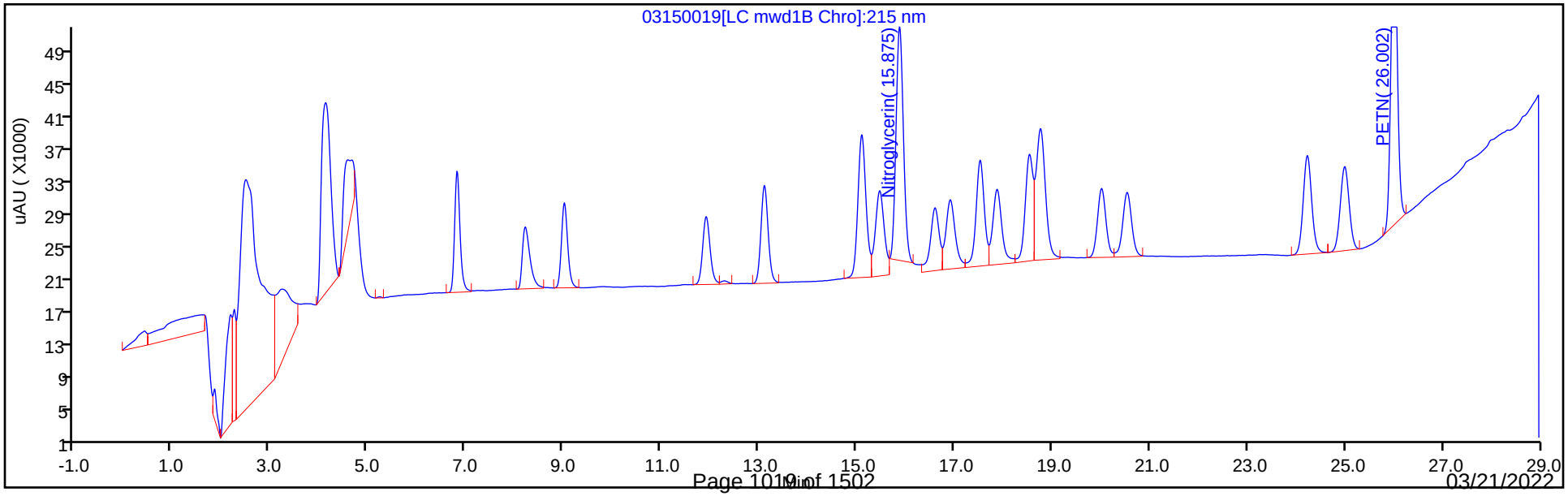
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150019.D

Injection Date:	16-Mar-2022 00:33:49	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	19
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Denver

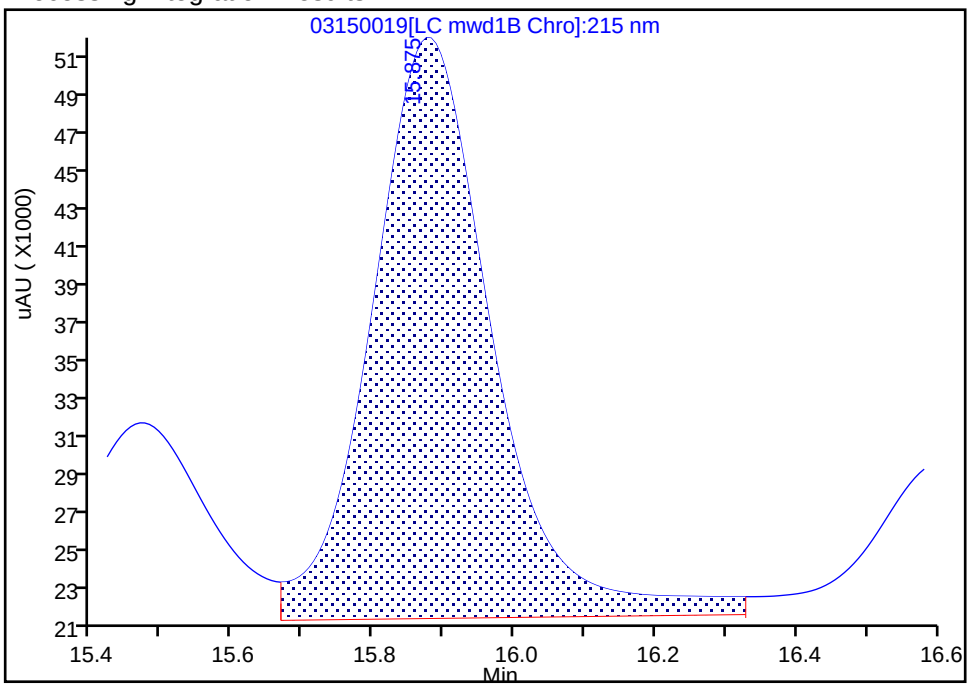
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150019.D
Injection Date: 16-Mar-2022 00:33:49 Instrument ID: CHHPLC_X5
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

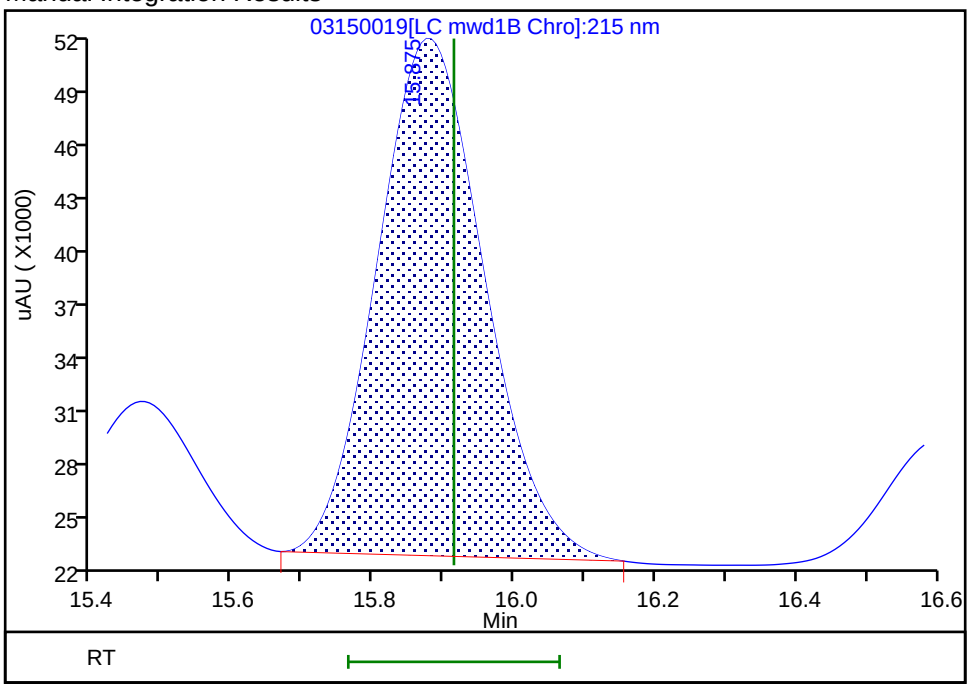
Processing Integration Results

RT: 15.87
Area: 355607
Amount: 2.902493
Amount Units: ug/ml



Manual Integration Results

RT: 15.87
Area: 298705
Amount: 2.438054
Amount Units: ug/ml



Reviewer: zhangji, 16-Mar-2022 12:35:44
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

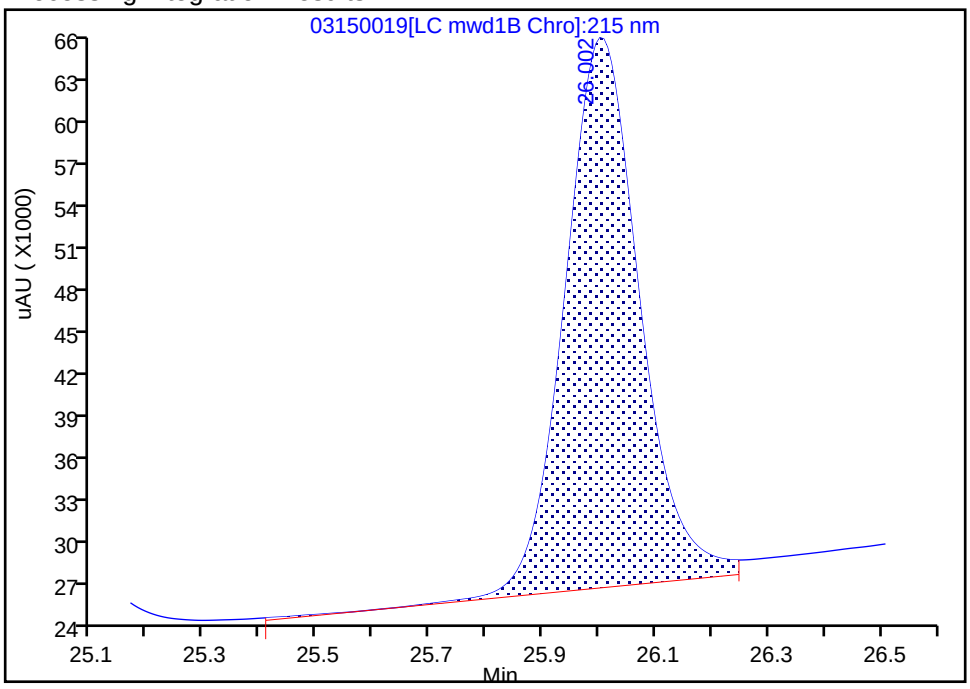
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150019.D
Injection Date: 16-Mar-2022 00:33:49 Instrument ID: CHHPLC_X5
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

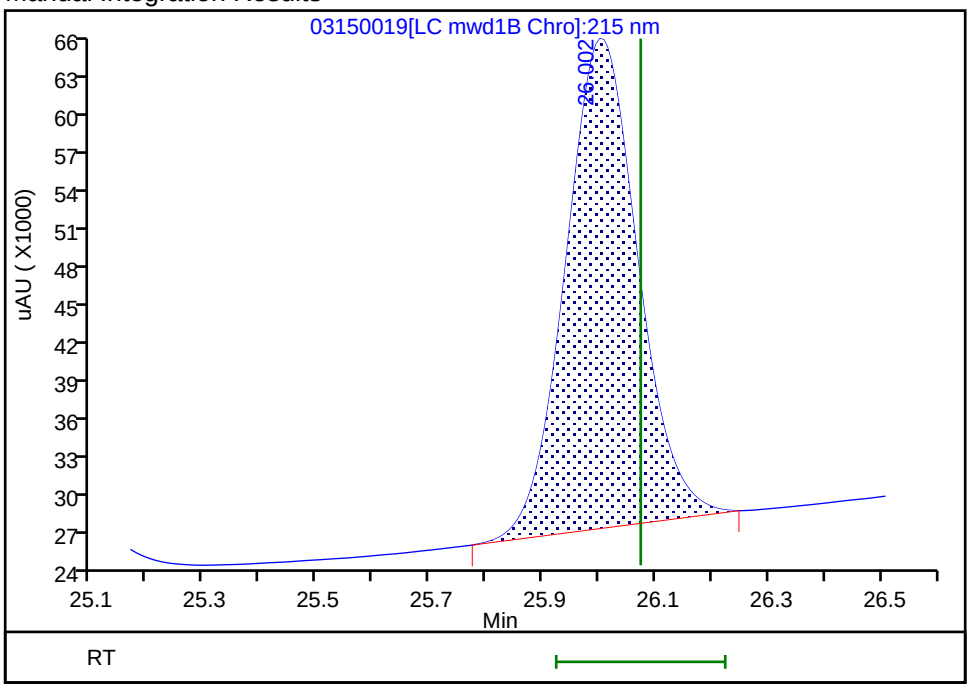
Processing Integration Results

RT: 26.00
Area: 363054
Amount: 2.807209
Amount Units: ug/ml



Manual Integration Results

RT: 26.00
Area: 344724
Amount: 2.665477
Amount Units: ug/ml



Reviewer: zhangji, 16-Mar-2022 12:35:40
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568709/20 Calibration Date: 03/16/2022 01:08

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: 03150020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	354070	357614		253	250	1.0	15.0
DNX	Ave	278639	277966		250	250	-0.2	15.0
MNX	Ave	250081	253580		296	292	1.4	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568709/20 Calibration Date: 03/16/2022 01:08

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: 03150020.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.13	5.01	5.31
DNX	5.97	5.86	6.16
MNX	7.54	7.43	7.73

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150020.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	16-Mar-2022 01:08:55	ALS Bottle#:	8	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0109260-020				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Mar-2022 12:38:40	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:	CTX1609				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.134	5.161	-0.027	89493	0.2503	0.2528	
4 DNX	1	5.974	6.007	-0.033	69561	0.2503	0.2496	
6 MNX	1	7.541	7.581	-0.040	73982	0.2918	0.2958	

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

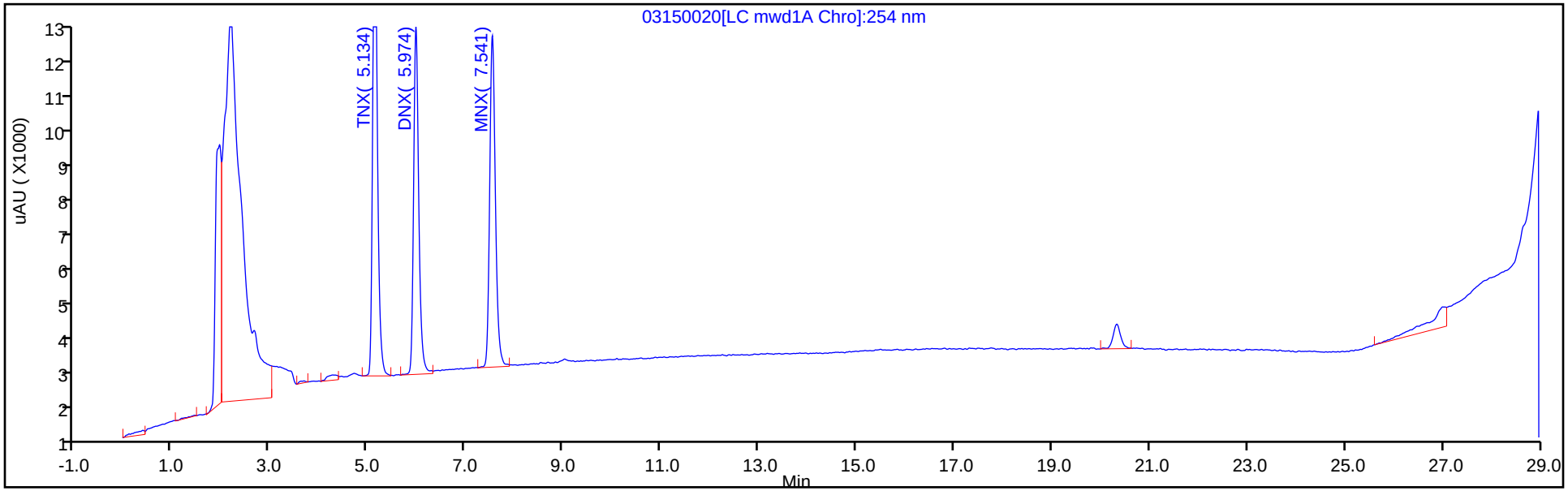
Report Date: 16-Mar-2022 12:38:40 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

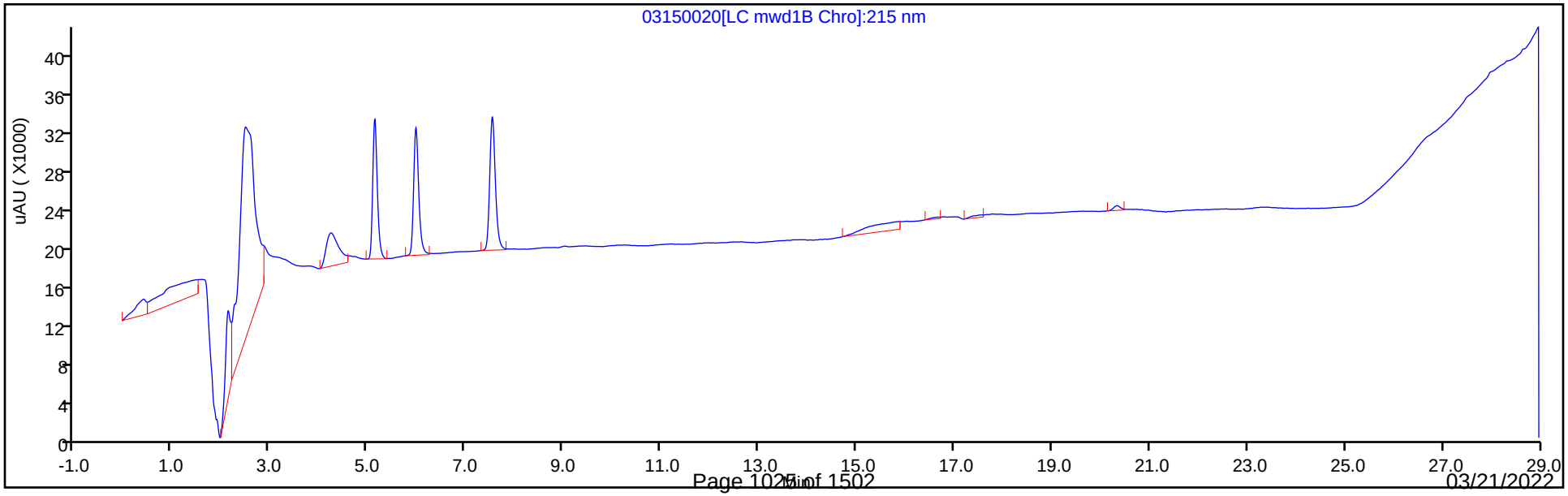
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150020.D

Injection Date:	16-Mar-2022 01:08:55	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	20
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.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568709/25 Calibration Date: 03/16/2022 04:04

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: 03150025.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	166135	168164		253	250	1.2	15.0
Picric acid	Ave	132885	155360		292	250	16.9*	15.0
RDX	Ave	194331	206752		266	250	6.4	15.0
Nitrobenzene	Ave	368293	367841		251	251	-0.1	15.0
1,3-Dinitrobenzene	Ave	571666	581094		255	251	1.6	15.0
Nitroglycerin	Ave	122518	119563		2440	2500	-2.4	15.0
2-Nitrotoluene	Ave	234672	229072		244	250	-2.4	15.0
4-Nitrotoluene	Ave	210817	210299		250	251	-0.2	15.0
4-Amino-2,6-dinitrotoluene	Lin2		272871		256	250	2.2	15.0
3-Nitrotoluene	Lin2		263804		249	250	-0.5	15.0
2-Amino-4,6-dinitrotoluene	Ave	360536	385036		268	251	6.8	15.0
1,3,5-Trinitrobenzene	Ave	415464	425142		256	251	2.3	15.0
2,6-Dinitrotoluene	Ave	265662	271968		257	251	2.4	15.0
2,4-Dinitrotoluene	Lin2		569801		252	251	0.5	15.0
Tetryl	Ave	342171	319317		234	251	-6.7	15.0
2,4,6-Trinitrotoluene	Ave	369179	383693		261	251	3.9	15.0
PETN	Ave	129329	137015		2650	2500	5.9	15.0
1,2-Dinitrobenzene	Ave	249753	256672		257	250	2.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568709/25 Calibration Date: 03/16/2022 04:04

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: 03150025.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.84	6.70	7.00
Picric acid	8.28	8.16	8.46
RDX	9.04	8.90	9.20
Nitrobenzene	11.94	11.81	12.11
1,3-Dinitrobenzene	15.48	15.36	15.66
Nitroglycerin	15.89	15.76	16.06
2-Nitrotoluene	16.62	16.49	16.79
4-Nitrotoluene	16.92	16.80	17.10
4-Amino-2,6-dinitrotoluene	17.54	17.42	17.72
3-Nitrotoluene	17.88	17.76	18.06
2-Amino-4,6-dinitrotoluene	18.54	18.43	18.73
1,3,5-Trinitrobenzene	18.77	18.64	18.94
2,6-Dinitrotoluene	20.02	19.90	20.20
2,4-Dinitrotoluene	20.54	20.42	20.72
Tetryl	24.23	24.16	24.46
2,4,6-Trinitrotoluene	25.00	24.92	25.22
PETN	26.02	25.92	26.22
1,2-Dinitrobenzene	13.12	13.01	13.31

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150025.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 16-Mar-2022 04:04:04 ALS Bottle#: 7 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0109260-025
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 16-Mar-2022 12:38:36 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: CTX1609

First Level Reviewer: zhangji Date: 16-Mar-2022 12:25:52

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	4.117	4.134	-0.017	98990	0.2500	0.2435	M
2 2,4-diamino-6-nitrotoluene	1	4.690	4.621	0.069	56969	0.2500	0.2444	M
5 HMX	1	6.837	6.854	-0.017	42041	0.2500	0.2531	
7 2,4,6-Trinitrophenol	1	8.277	8.314	-0.037	38840	0.2500	0.2923	
8 RDX	1	9.037	9.054	-0.017	51688	0.2500	0.2660	
9 Nitrobenzene	1	11.937	11.960	-0.023	92328	0.2510	0.2507	
$ 10 1,2-Dinitrobenzene	1	13.124	13.160	-0.036	64168	0.2500	0.2569	
11 3,5-Dinitroaniline	1	15.117	15.154	-0.037	107845	0.2500	0.2620	
12 1,3-Dinitrobenzene	1	15.484	15.514	-0.030	145564	0.2505	0.2546	
13 Nitroglycerin	2	15.890	15.914	-0.024	298907	2.50	2.44	M
14 o-Nitrotoluene	1	16.617	16.640	-0.023	57268	0.2500	0.2440	
16 p-Nitrotoluene	1	16.924	16.954	-0.030	52680	0.2505	0.2499	
17 4-Amino-2,6-dinitrotoluene	1	17.537	17.574	-0.037	68286	0.2503	0.2558	
18 m-Nitrotoluene	1	17.884	17.914	-0.030	66017	0.2503	0.2489	
19 2-Amino-4,6-dinitrotoluene	1	18.544	18.580	-0.036	96644	0.2510	0.2681	
20 1,3,5-Trinitrobenzene	1	18.770	18.794	-0.024	106498	0.2505	0.2563	
21 2,6-Dinitrotoluene	1	20.024	20.054	-0.030	68264	0.2510	0.2570	
22 2,4-Dinitrotoluene	1	20.544	20.574	-0.030	143020	0.2510	0.2523	
23 Tetryl	1	24.230	24.307	-0.077	79989	0.2505	0.2338	
24 2,4,6-Trinitrotoluene	1	25.004	25.074	-0.070	96307	0.2510	0.2609	
25 PETN	2	26.024	26.074	-0.050	342538	2.50	2.65	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070	Amount Added:	25.00	Units: uL
8330_ADDs_00031	Amount Added:	12.50	Units: uL

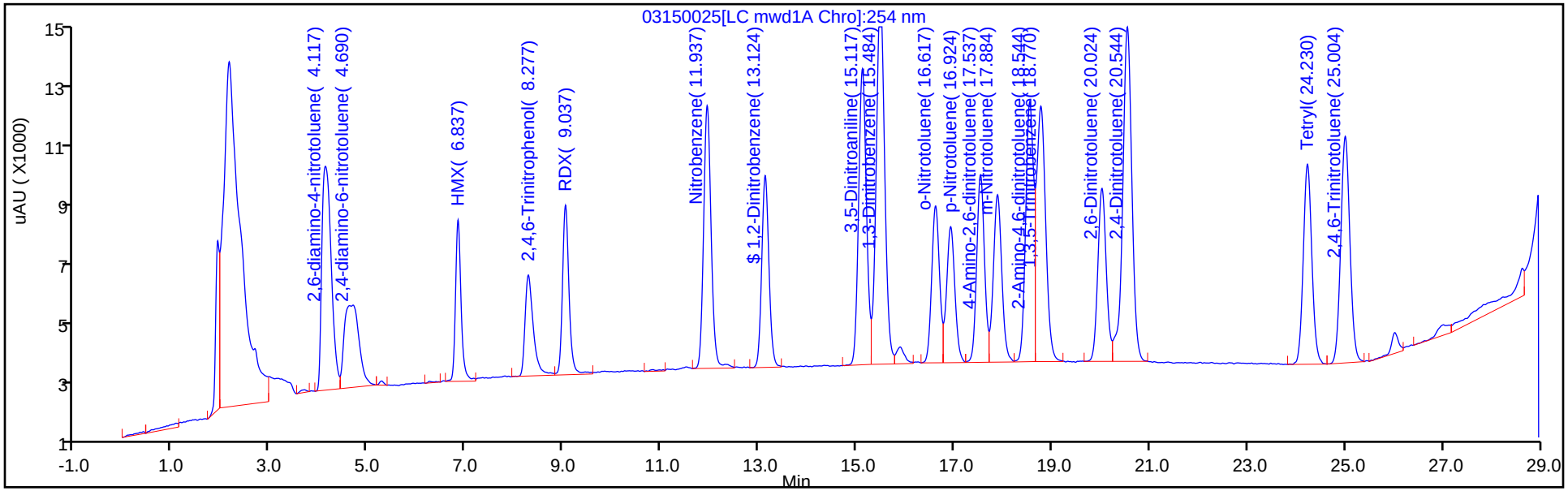
Report Date: 16-Mar-2022 12:38:36 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

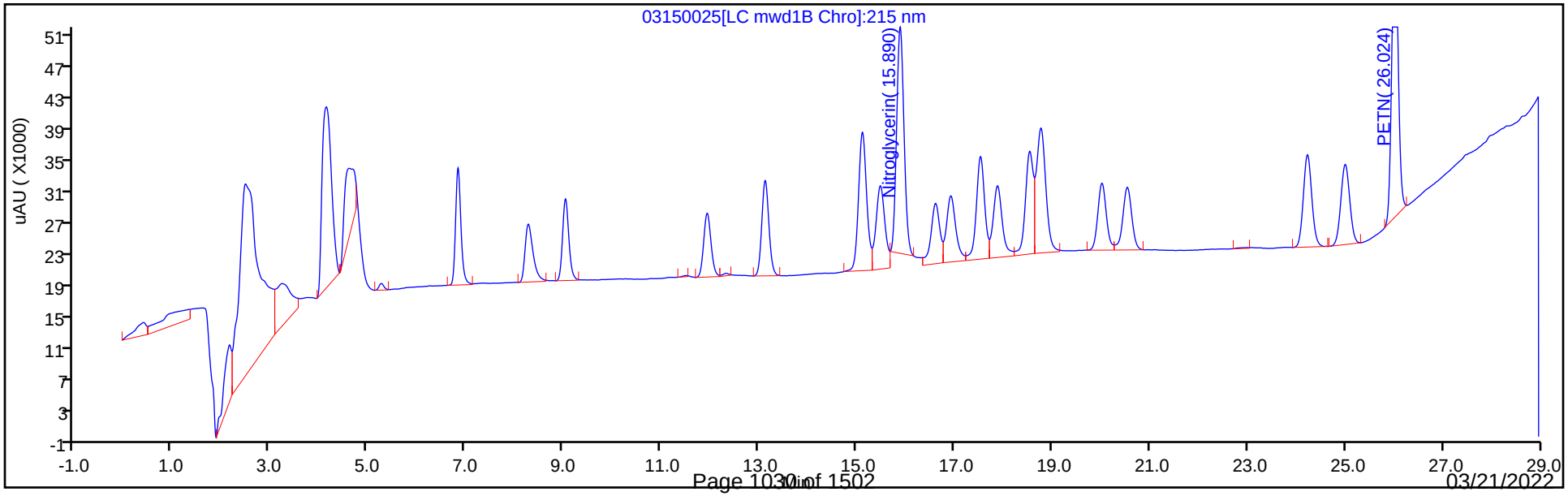
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150025.D

Injection Date:	16-Mar-2022 04:04:04	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	25
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



Manual Integration/User Assign Peak Report

Eurofins Denver

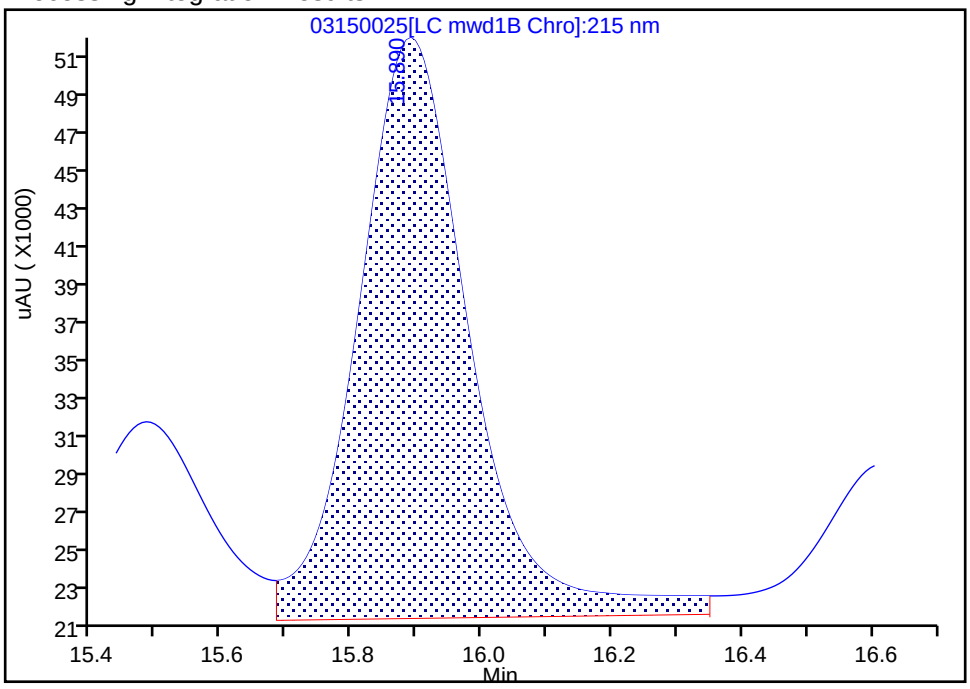
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150025.D				
Injection Date:	16-Mar-2022 04:04:04	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC mwd1B, 215 nm		

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

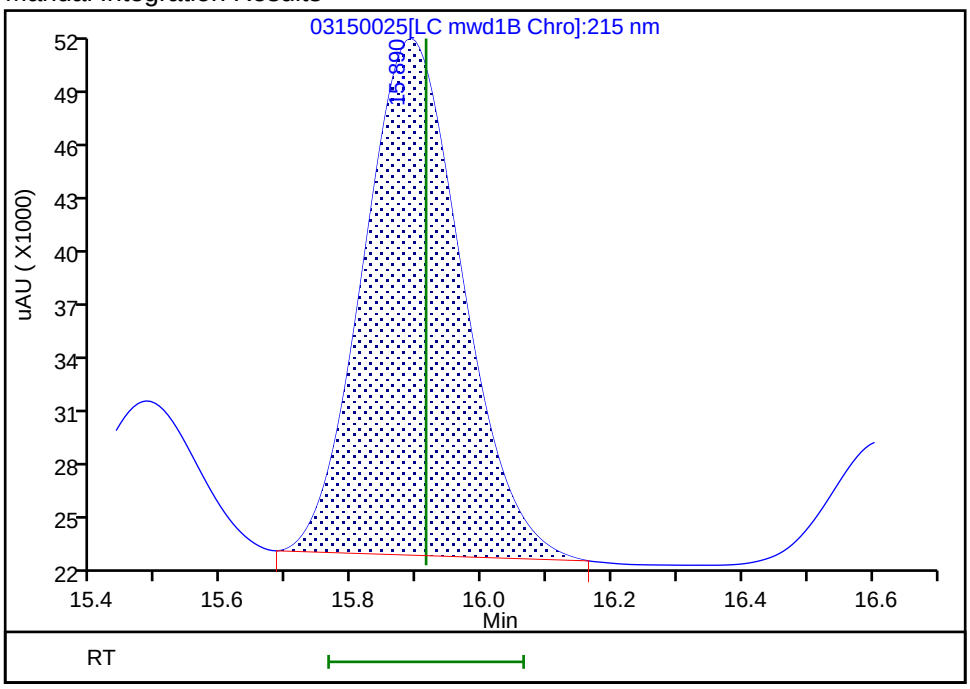
Processing Integration Results

RT: 15.89
Area: 358676
Amount: 2.927542
Amount Units: ug/ml



Manual Integration Results

RT: 15.89
Area: 298907
Amount: 2.439703
Amount Units: ug/ml



Reviewer: zhangji, 16-Mar-2022 12:33:22

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

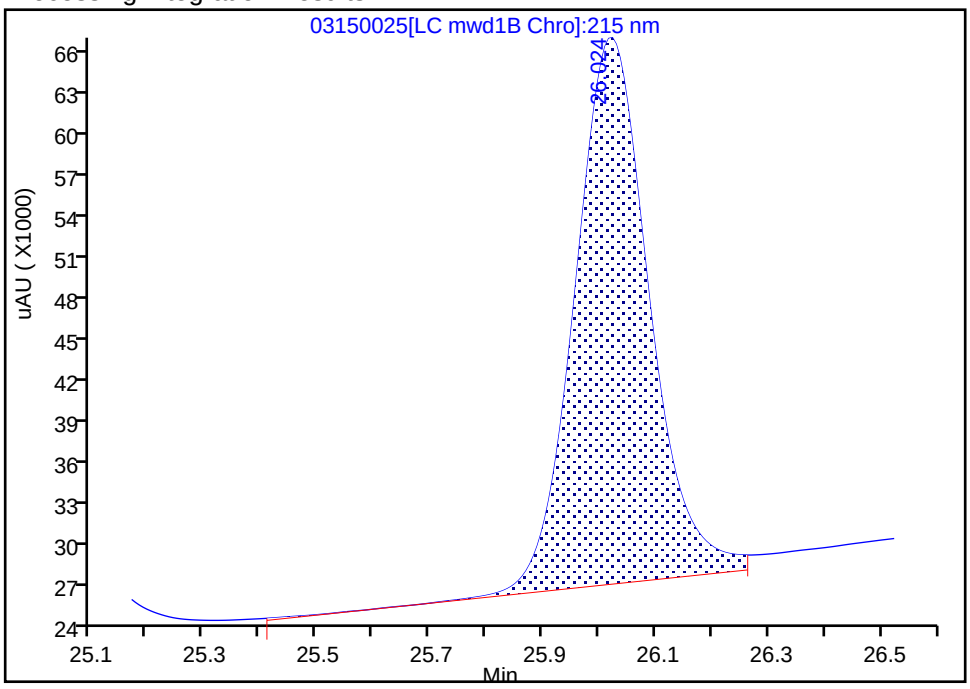
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150025.D
Injection Date: 16-Mar-2022 04:04:04 Instrument ID: CHHPLC_X5
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

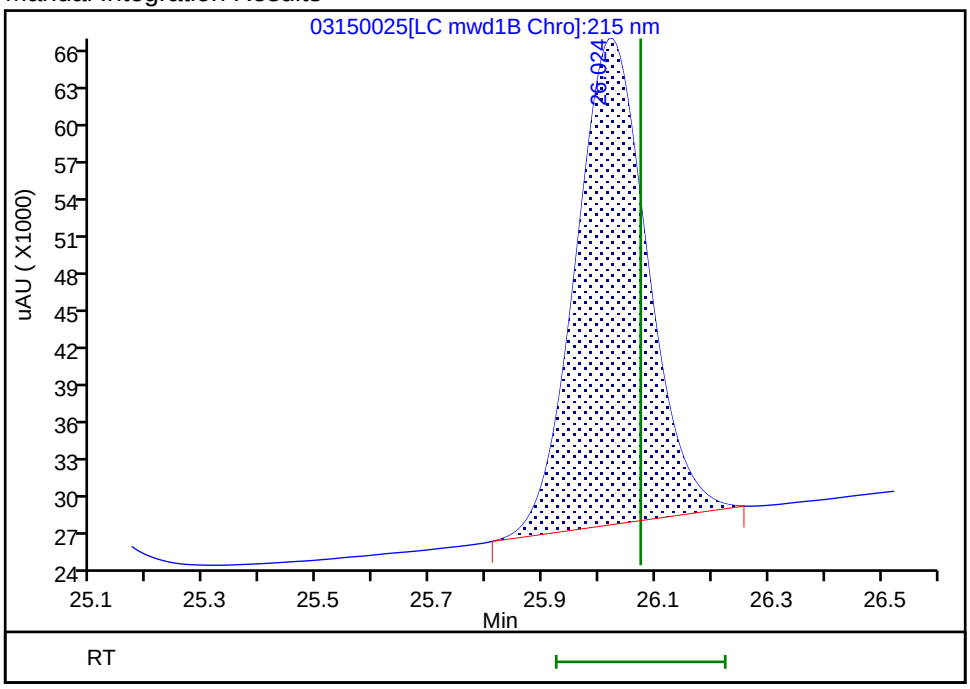
Processing Integration Results

RT: 26.02
Area: 361422
Amount: 2.794590
Amount Units: ug/ml



Manual Integration Results

RT: 26.02
Area: 342538
Amount: 2.648575
Amount Units: ug/ml



Reviewer: zhangji, 16-Mar-2022 12:33:26
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568709/26 Calibration Date: 03/16/2022 04:39

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: 03150026.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	354070	364795		258	250	3.0	15.0
DNX	Ave	278639	277347		249	250	-0.5	15.0
MNX	Ave	250081	252929		295	292	1.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Lab Sample ID: CCV 280-568709/26 Calibration Date: 03/16/2022 04:39

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: 03150026.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.15	5.01	5.31
DNX	5.99	5.86	6.16
MNX	7.56	7.43	7.73

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150026.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	16-Mar-2022 04:39:10	ALS Bottle#:	8	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0109260-026				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	16-Mar-2022 12:38:35	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:	CTX1609				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.146	5.161	-0.015	91290	0.2503	0.2578	
4 DNX	1	5.993	6.007	-0.014	69406	0.2503	0.2491	
6 MNX	1	7.560	7.581	-0.021	73792	0.2918	0.2951	

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

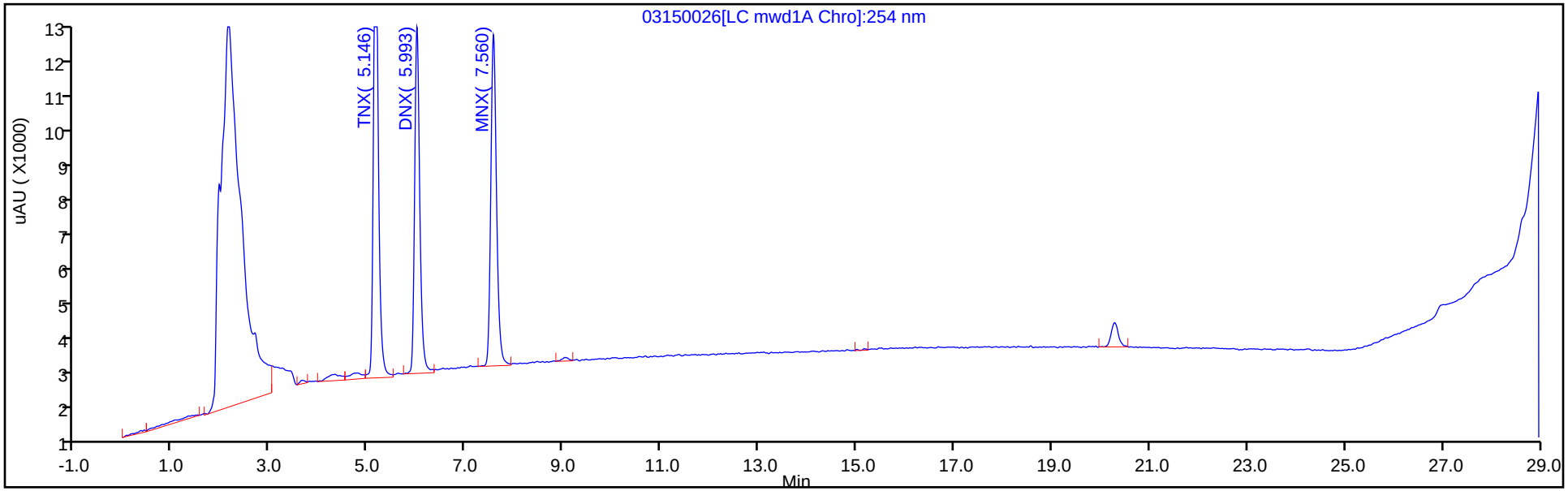
Report Date: 16-Mar-2022 12:38:35 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

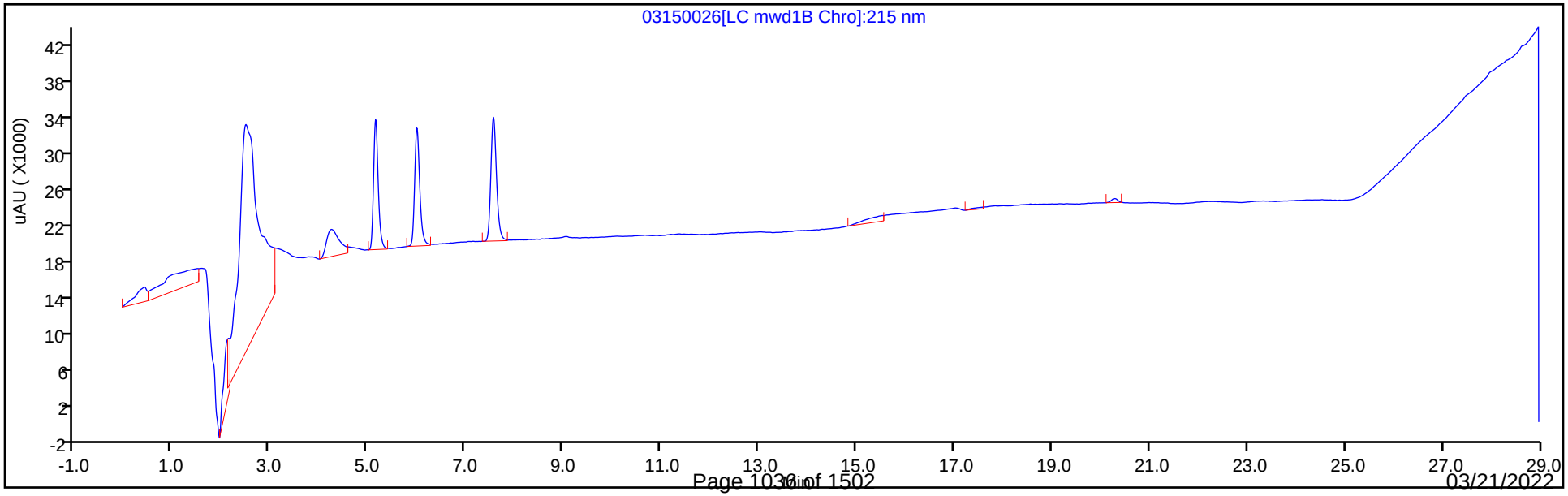
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220315-109260.b\03150026.D

Injection Date:	16-Mar-2022 04:39:10	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	26
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.: 280-159332-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-567953/1-A

Matrix: Water | Lab File ID: 03100051.D

Analysis Method: 8330A | Date Collected:

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 500(mL) | Date Analyzed: 03/11/2022 06:45

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.: 568287 | 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	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	101		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\03100051.D
Lims ID: MB 280-567953/1-A
Client ID:
Sample Type: MB
Inject. Date: 11-Mar-2022 06:45:49 ALS Bottle#: 51 Worklist Smp#: 51
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-567953/1-
Misc. Info.: 280-0109139-051
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 11-Mar-2022 13:57:00 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: CTX1614

First Level Reviewer: zhangji Date: 11-Mar-2022 12:35:32

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
1 Triamine Trinitrobenzene	1		2.447				ND	
2 2,6-diamino-4-nitrotoluene	1		6.466				ND	
3 TNX	1		6.476				ND	U
4 HMX	1		6.593				ND	
5 2,4-diamino-6-nitrotoluene	1		6.646				ND	
6 DNX	1		6.796				ND	
7 MNX	1		7.209				ND	U
8 RDX	1		7.587				ND	
9 2,4,6-Trinitrophenol	1		7.933				ND	U
$ 10 1,2-Dinitrobenzene	1	8.528	8.533	-0.005	25155	0.2000	0.2017	
11 1,3,5-Trinitrobenzene	1		8.660				ND	
12 1,3-Dinitrobenzene	1		9.280				ND	
13 Nitrobenzene	1		9.667				ND	
14 3,5-Dinitroaniline	1		9.872				ND	
15 Tetryl	1		9.987				ND	
16 Nitroglycerin	2		10.440				ND	
17 2,4,6-Trinitrotoluene	1		10.893				ND	
18 4-Amino-2,6-dinitrotoluene	1		11.080				ND	
19 2-Amino-4,6-dinitrotoluene	1		11.327				ND	
20 2,6-Dinitrotoluene	1		11.500				ND	
21 2,4-Dinitrotoluene	1		11.667				ND	
22 o-Nitrotoluene	1		12.513				ND	
23 p-Nitrotoluene	1		12.940				ND	
24 m-Nitrotoluene	1		13.507				ND	
25 PETN	2		14.560				ND	
26 Ammonium Picrate	1		0.000				ND	

QC Flag Legend
Processing Flags

Review Flags
U - Marked Undetected

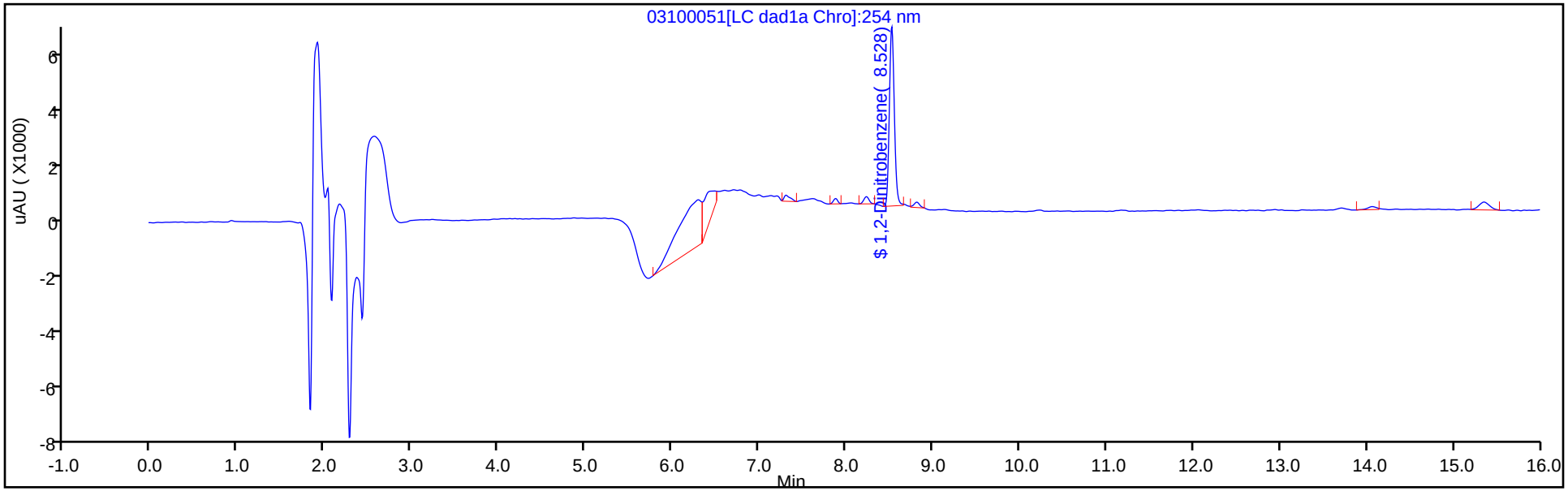
Report Date: 11-Mar-2022 13:57:07 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

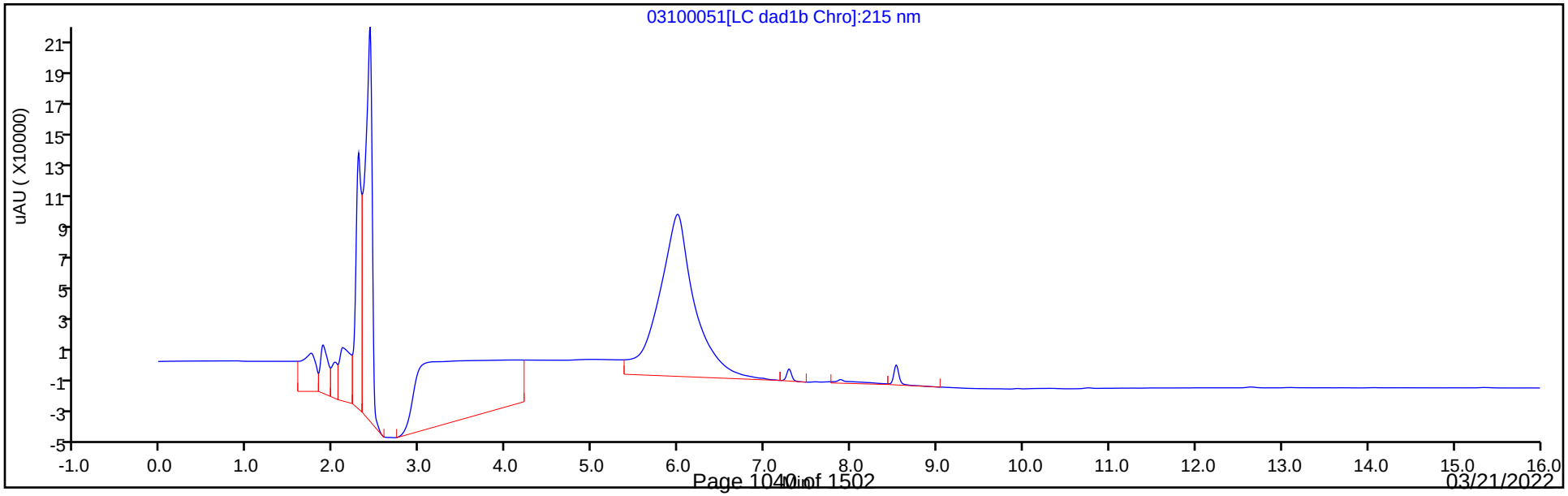
Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100051.d

Injection Date:	11-Mar-2022 06:45:49	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	MB 280-567953/1-A			Worklist Smp#:	51
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	51
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\03100051.D
Lims ID: MB 280-567953/1-A
Client ID:
Sample Type: MB
Inject. Date: 11-Mar-2022 06:45:49 ALS Bottle#: 51 Worklist Smp#: 51
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-567953/1-
Misc. Info.: 280-0109139-051
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 11-Mar-2022 13:57:00 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: CTX1614

First Level Reviewer: zhangji Date: 11-Mar-2022 12:35:32

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2017	100.86

User Disabled Compound Report

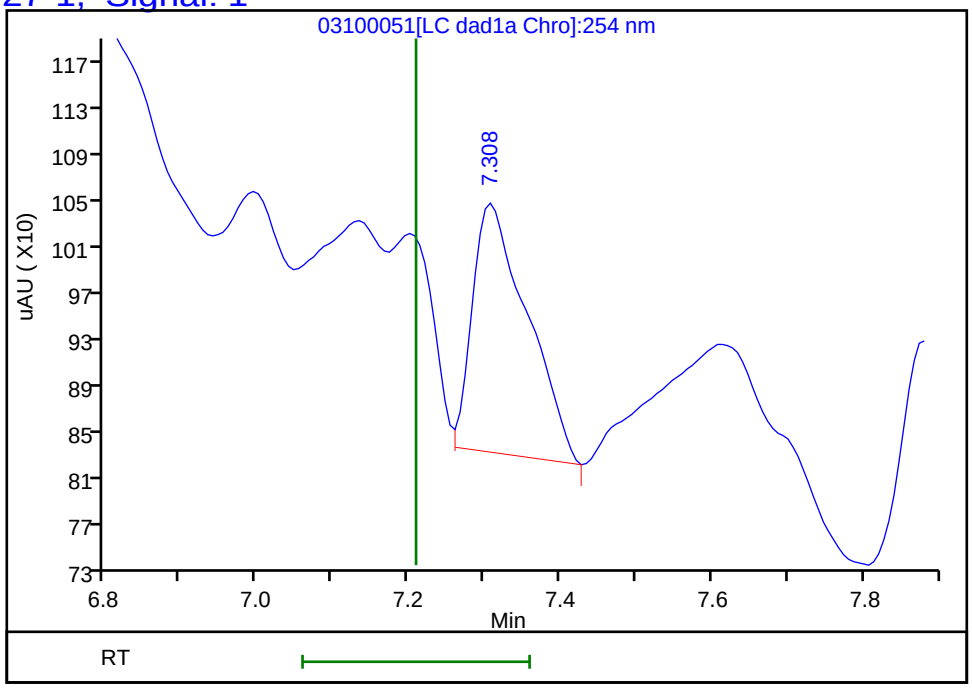
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100051.d
Injection Date: 11-Mar-2022 06:45:49 Instrument ID: CHHPLC_X3
Lims ID: MB 280-567953/1-A
Client ID:
Operator ID: JZ ALS Bottle#: 51 Worklist Smp#: 51
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.31
Response: 1075
Amount: 0.008532



Reviewer: zhangji, 11-Mar-2022 12:35:32
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-567953/2-A

Matrix: Water | Lab File ID: 03100052.D

Analysis Method: 8330A | Date Collected:

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 500(mL) | Date Analyzed: 03/11/2022 07:08

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.: 568287 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	1.97		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	1.98		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	1.92		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	1.85		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.95		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.79		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.57		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.50		0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.57		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.75		0.41	0.40	0.10
2691-41-0	HMX	1.84	M	0.21	0.20	0.088
98-95-3	Nitrobenzene	1.76		0.21	0.20	0.091
121-82-4	RDX	2.03		0.21	0.20	0.052
479-45-8	Tetryl	1.92		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\20220310-109139.b\03100052.D
Lims ID: LCS 280-567953/2-A
Client ID:
Sample Type: LCS
Inject. Date: 11-Mar-2022 07:08:45 ALS Bottle#: 52 Worklist Smp#: 52
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-567953/2
Misc. Info.: 280-0109139-052
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 11-Mar-2022 13:57:00 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: CTX1614

First Level Reviewer: zhangji Date: 11-Mar-2022 13:41:21

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.597	6.593	0.004	15409	0.2000	0.1838	M
8 RDX	1	7.583	7.587	-0.004	21049	0.2000	0.2032	
9 2,4,6-Trinitrophenol	1	7.923	7.933	-0.010	15916	0.2000	0.2066	
$ 10 1,2-Dinitrobenzene	1	8.530	8.533	-0.003	23768	0.2000	0.1906	
11 1,3,5-Trinitrobenzene	1	8.657	8.660	-0.003	42988	0.2000	0.1971	
12 1,3-Dinitrobenzene	1	9.276	9.280	-0.004	56967	0.2000	0.1975	
13 Nitrobenzene	1	9.656	9.667	-0.011	33855	0.2000	0.1764	
15 Tetryl	1	9.976	9.987	-0.011	32782	0.2000	0.1922	
16 Nitroglycerin	2	10.430	10.440	-0.010	128032	2.00	2.03	
17 2,4,6-Trinitrotoluene	1	10.876	10.893	-0.017	38898	0.2000	0.1919	
18 4-Amino-2,6-dinitrotoluene	1	11.063	11.080	-0.017	23734	0.2000	0.1572	
19 2-Amino-4,6-dinitrotoluene	1	11.316	11.327	-0.011	36112	0.2000	0.1786	
20 2,6-Dinitrotoluene	1	11.483	11.500	-0.017	27915	0.2000	0.1951	
21 2,4-Dinitrotoluene	1	11.656	11.667	-0.011	53668	0.2000	0.1855	
22 o-Nitrotoluene	1	12.503	12.513	-0.010	20079	0.2000	0.1573	
23 p-Nitrotoluene	1	12.923	12.940	-0.017	18568	0.2000	0.1748	
24 m-Nitrotoluene	1	13.496	13.507	-0.011	21324	0.2000	0.1499	
25 PETN	2	14.543	14.560	-0.017	144587	2.00	1.97	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

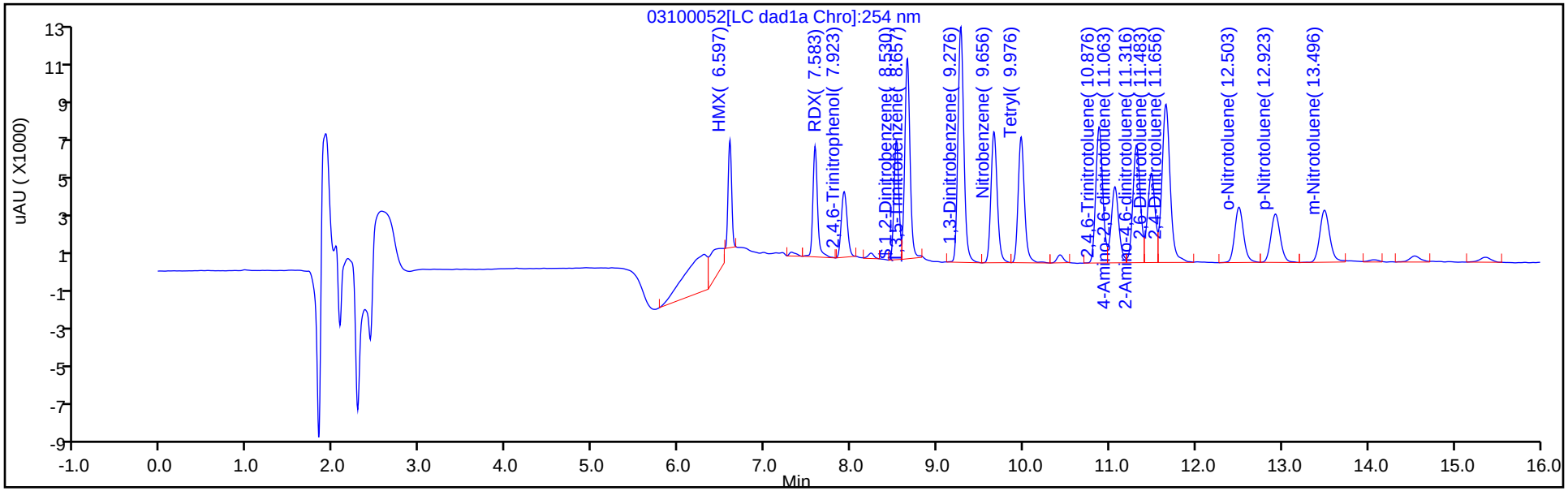
Report Date: 11-Mar-2022 13:57:07 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

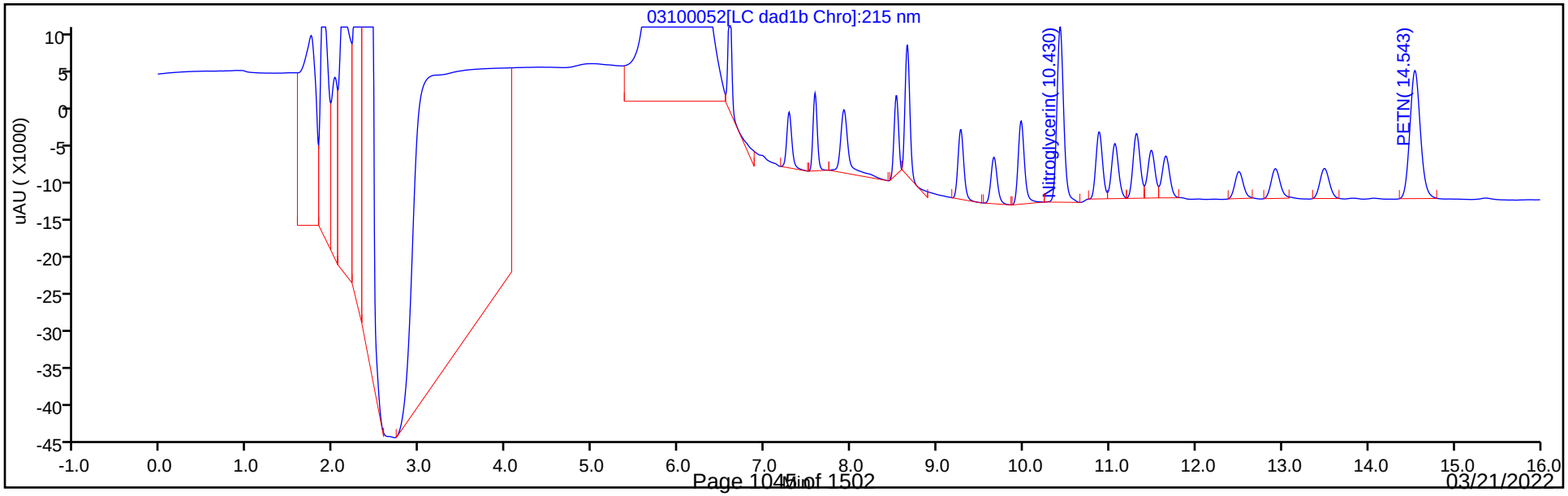
Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100052.d

Injection Date:	11-Mar-2022 07:08:45	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-567953/2-A			Worklist Smp#:	52
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	52
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\03100052.D				
Lims ID:	LCS 280-567953/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	11-Mar-2022 07:08:45	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-567953/2				
Misc. Info.:	280-0109139-052				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	11-Mar-2022 13:57:00	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:	CTX1614				
First Level Reviewer: zhangji		Date:	11-Mar-2022 13:41:21		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1906	95.30

Manual Integration/User Assign Peak Report

Eurofins Denver

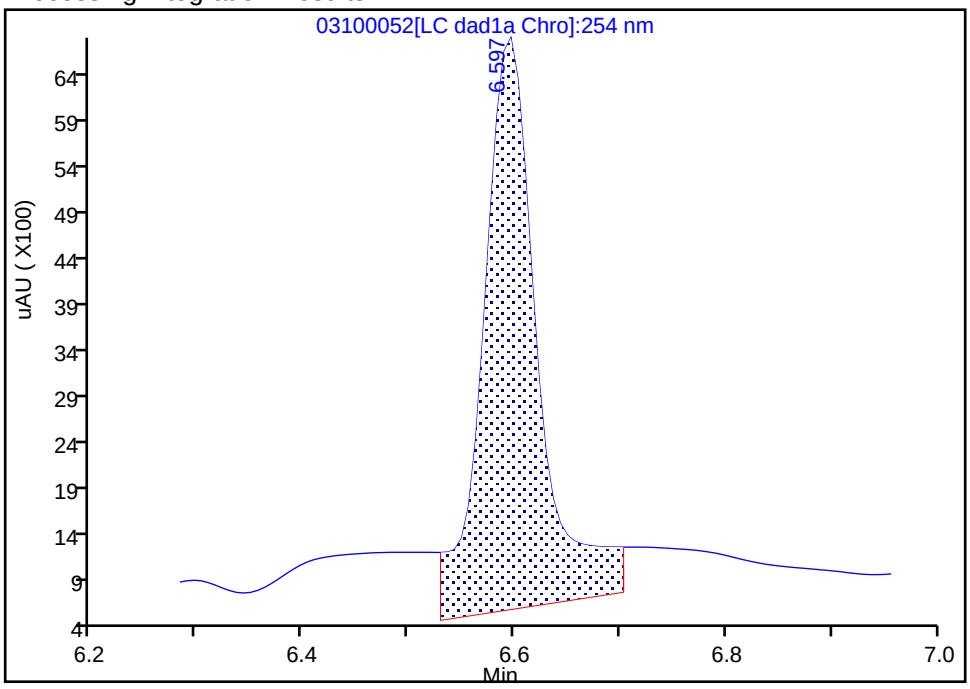
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100052.d				
Injection Date:	11-Mar-2022 07:08:45	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-567953/2-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

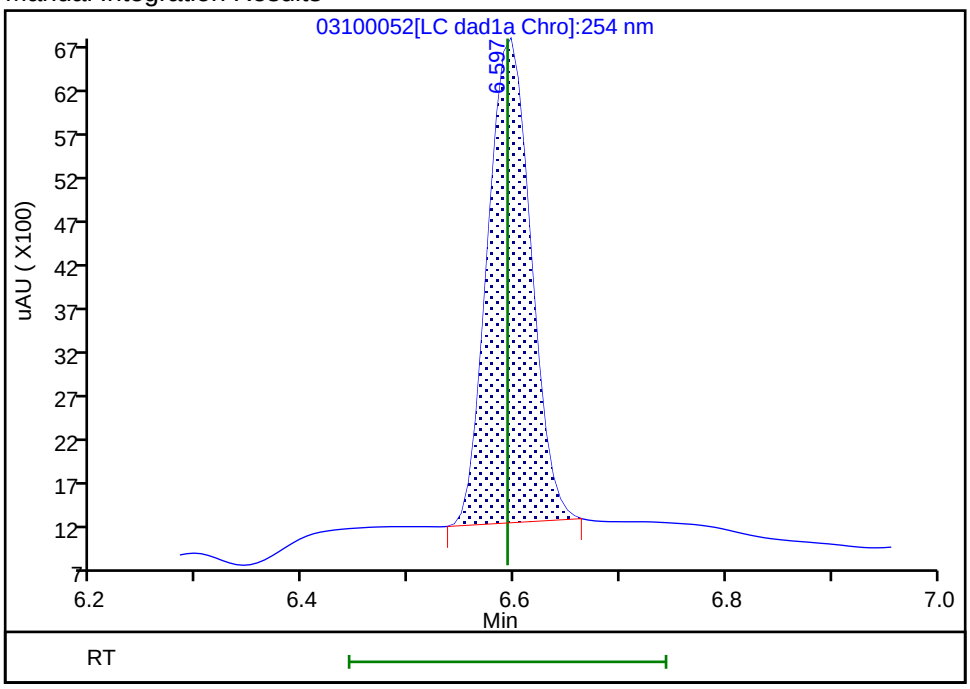
Processing Integration Results

RT: 6.60
Area: 21902
Amount: 0.261276
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 15409
Amount: 0.183819
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:41:20
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-567953/3-A

Matrix: Water | Lab File ID: 03100053.D

Analysis Method: 8330A | Date Collected:

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 500(mL) | Date Analyzed: 03/11/2022 07:31

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.: 568287 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.29	M	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	102		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\03100053.D
Lims ID: LCS 280-567953/3-A
Client ID:
Sample Type: LCS
Inject. Date: 11-Mar-2022 07:31:39 ALS Bottle#: 53 Worklist Smp#: 53
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-567953/3
Misc. Info.: 280-0109139-053
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 11-Mar-2022 13:57:00 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: CTX1614

First Level Reviewer: zhangji Date: 11-Mar-2022 13:41:32

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.472	6.476	-0.004	34148	0.2002	0.1884	M
6 DNX	1	6.792	6.796	-0.004	28067	0.2002	0.2032	M
7 MNX	1	7.205	7.209	-0.004	28828	0.2334	0.2288	M
$ 10 1,2-Dinitrobenzene	1	8.532	8.533	-0.001	25323	0.2000	0.2031	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

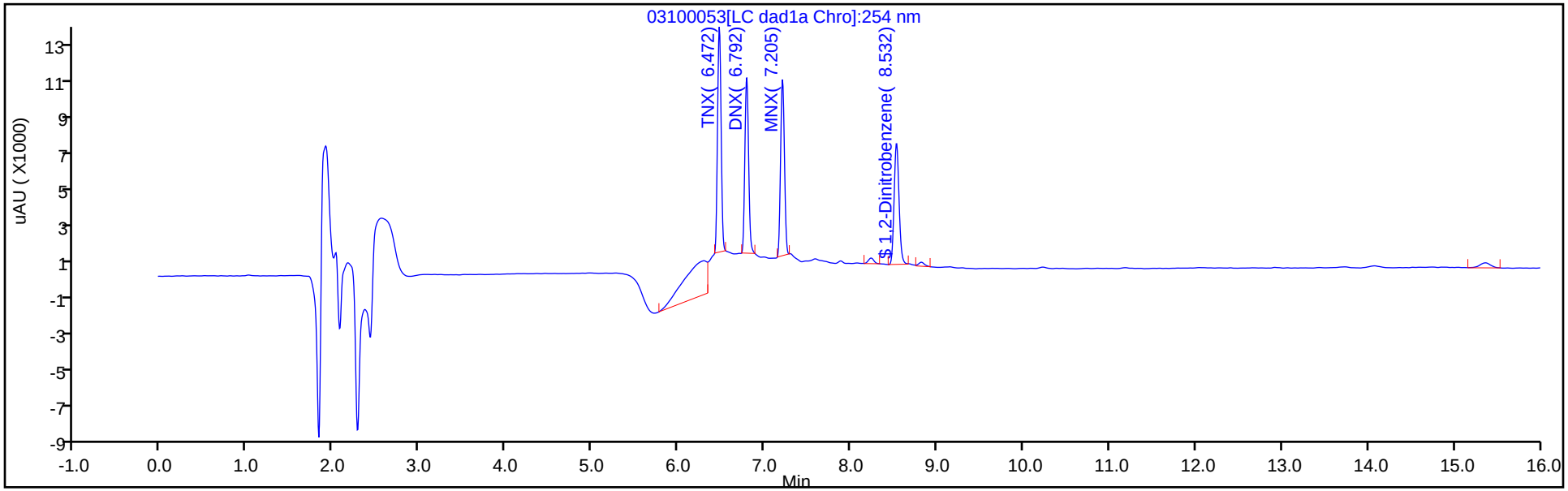
Report Date: 11-Mar-2022 13:57:06 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

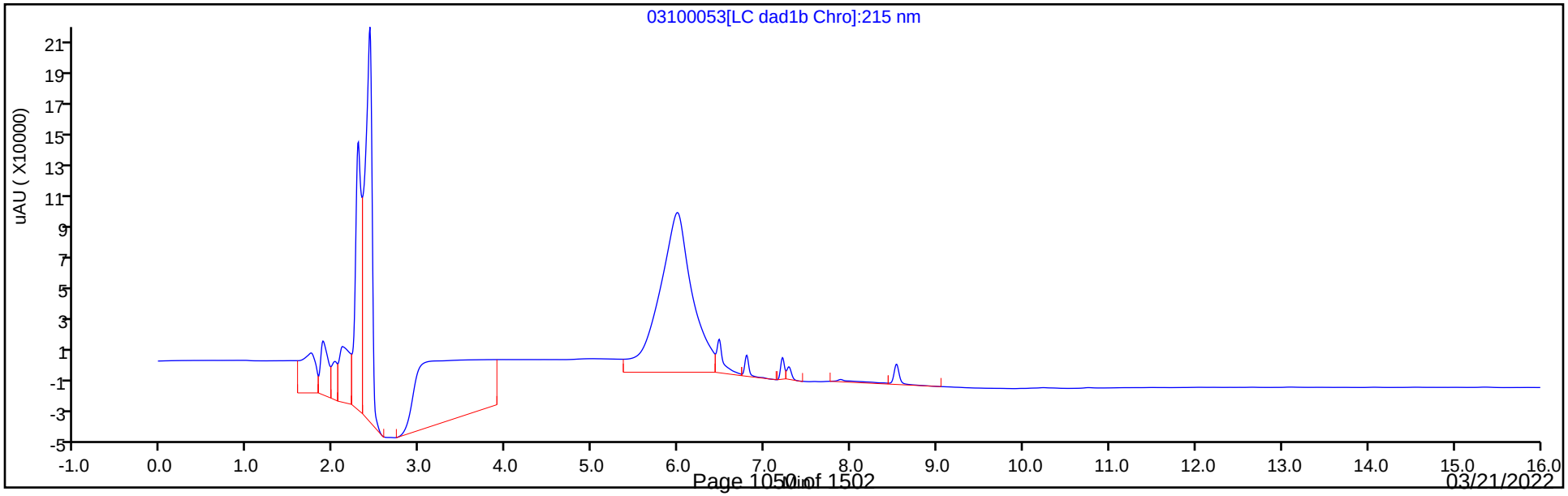
Data File: \\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100053.d

Injection Date:	11-Mar-2022 07:31:39	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-567953/3-A			Worklist Smp#:	53
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	53
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\03100053.D				
Lims ID:	LCS 280-567953/3-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	11-Mar-2022 07:31:39	ALS Bottle#:	53	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-567953/3				
Misc. Info.:	280-0109139-053				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220310-109139.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	11-Mar-2022 13:57:00	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:	CTX1614				
First Level Reviewer: zhangji		Date:	11-Mar-2022 13:41:32		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2031	101.54

Manual Integration/User Assign Peak Report

Eurofins Denver

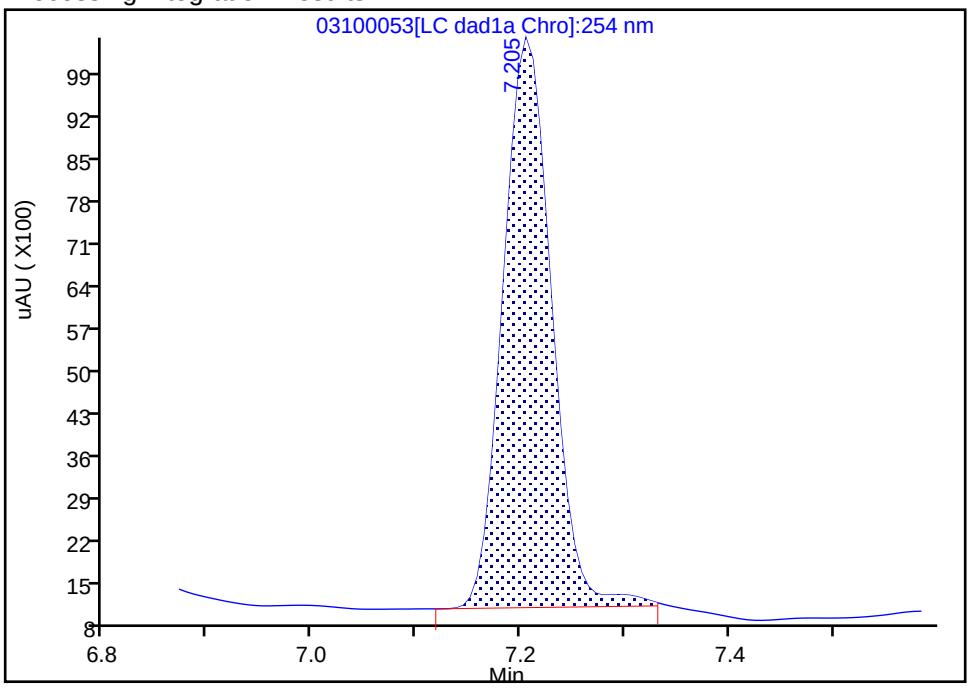
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220310-109139.b\03100053.d				
Injection Date:	11-Mar-2022 07:31:39	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-567953/3-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	53	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

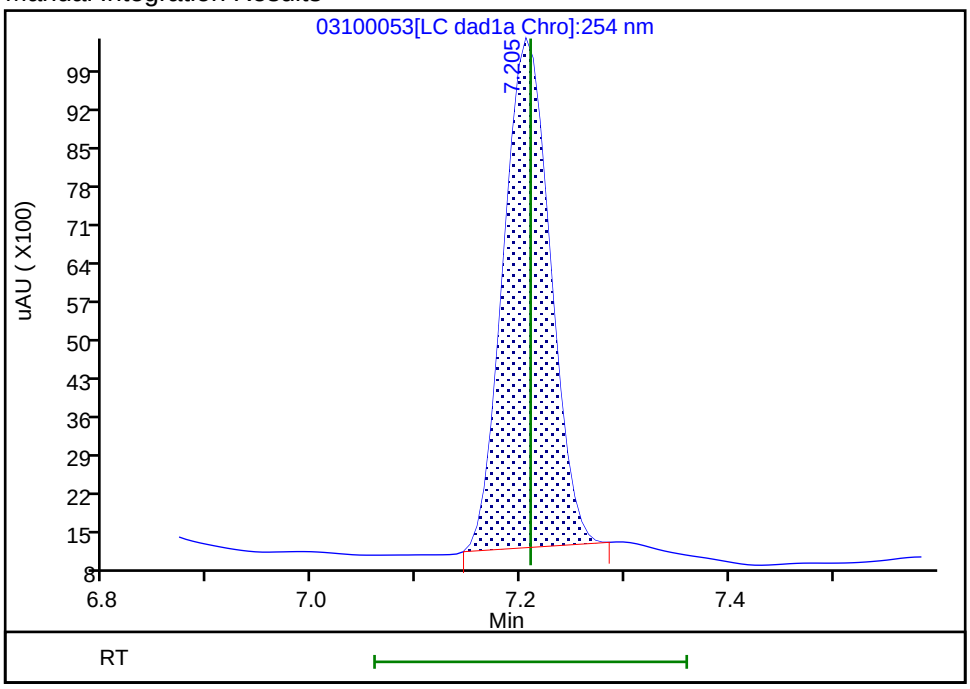
Processing Integration Results

RT: 7.20
Area: 30268
Amount: 0.240231
Amount Units: ug/mL



Manual Integration Results

RT: 7.20
Area: 28828
Amount: 0.228802
Amount Units: ug/mL



Reviewer: zhangji, 11-Mar-2022 13:41:31

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ019-8 MS | Lab Sample ID: 280-159332-13 MS

Matrix: Water | Lab File ID: 03110028.D

Analysis Method: 8330A | Date Collected: 03/01/2022 09:10

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 486.2(mL) | Date Analyzed: 03/11/2022 21:40

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.: 568433 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.28	M	0.22	0.21	0.086
99-65-0	1,3-Dinitrobenzene	2.31		0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	2.26		0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	2.12		0.10	0.082	0.028
606-20-2	2,6-Dinitrotoluene	2.25		0.10	0.082	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	2.02		0.11	0.10	0.052
88-72-2	2-Nitrotoluene	1.96		0.22	0.21	0.088
99-08-1	3-Nitrotoluene	1.71		0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.68		0.15	0.12	0.059
99-99-0	4-Nitrotoluene	2.09		0.42	0.41	0.10
2691-41-0	HMX	2.05	M	0.22	0.21	0.090
98-95-3	Nitrobenzene	2.11		0.22	0.21	0.094
121-82-4	RDX	1.95	M	0.22	0.21	0.053
479-45-8	Tetryl	2.31		0.11	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	108	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110028.D
Lims ID: 280-159332-B-13-A MS
Client ID: PZ019-8
Sample Type: MS
Inject. Date: 11-Mar-2022 21:40:24 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-B-13-
Misc. Info.: 280-0109174-028
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Mar-2022 10:32:02 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: CTX1616

First Level Reviewer: zhangji Date: 12-Mar-2022 09:45:56

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	6.595	0.000	16722	0.2000	0.1995	M
8 RDX	1	7.582	7.582	0.000	19631	0.2000	0.1895	M
9 2,4,6-Trinitrophenol	1	7.902	7.929	-0.027	16748	0.2000	0.2174	M
$ 10 1,2-Dinitrobenzene	1	8.529	8.529	0.000	26985	0.2000	0.2164	M
11 1,3,5-Trinitrobenzene	1	8.655	8.655	0.000	48458	0.2000	0.2222	M
12 1,3-Dinitrobenzene	1	9.275	9.282	-0.007	64884	0.2000	0.2250	
13 Nitrobenzene	1	9.662	9.668	-0.006	39445	0.2000	0.2055	
15 Tetryl	1	9.982	9.982	0.000	38364	0.2000	0.2249	
16 Nitroglycerin	2	10.435	10.435	0.000	145182	2.00	2.30	
17 2,4,6-Trinitrotoluene	1	10.889	10.888	0.001	44486	0.2000	0.2194	
18 4-Amino-2,6-dinitrotoluene	1	11.075	11.068	0.007	24654	0.2000	0.1633	
19 2-Amino-4,6-dinitrotoluene	1	11.329	11.322	0.007	39712	0.2000	0.1964	
20 2,6-Dinitrotoluene	1	11.495	11.495	0.000	31291	0.2000	0.2186	
21 2,4-Dinitrotoluene	1	11.662	11.662	0.000	59592	0.2000	0.2060	
22 o-Nitrotoluene	1	12.515	12.508	0.007	24272	0.2000	0.1902	
23 p-Nitrotoluene	1	12.935	12.935	0.000	21634	0.2000	0.2036	
24 m-Nitrotoluene	1	13.509	13.502	0.007	23620	0.2000	0.1660	
25 PETN	2	14.562	14.555	0.007	166481	2.00	2.28	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

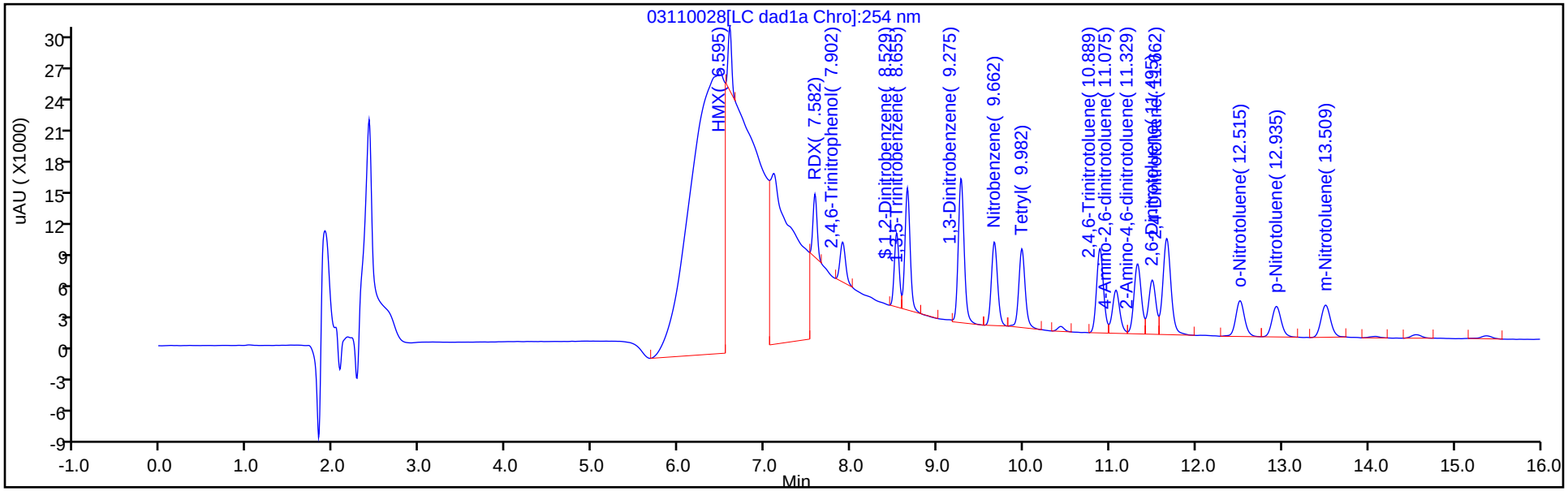
Report Date: 12-Mar-2022 10:32:07 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

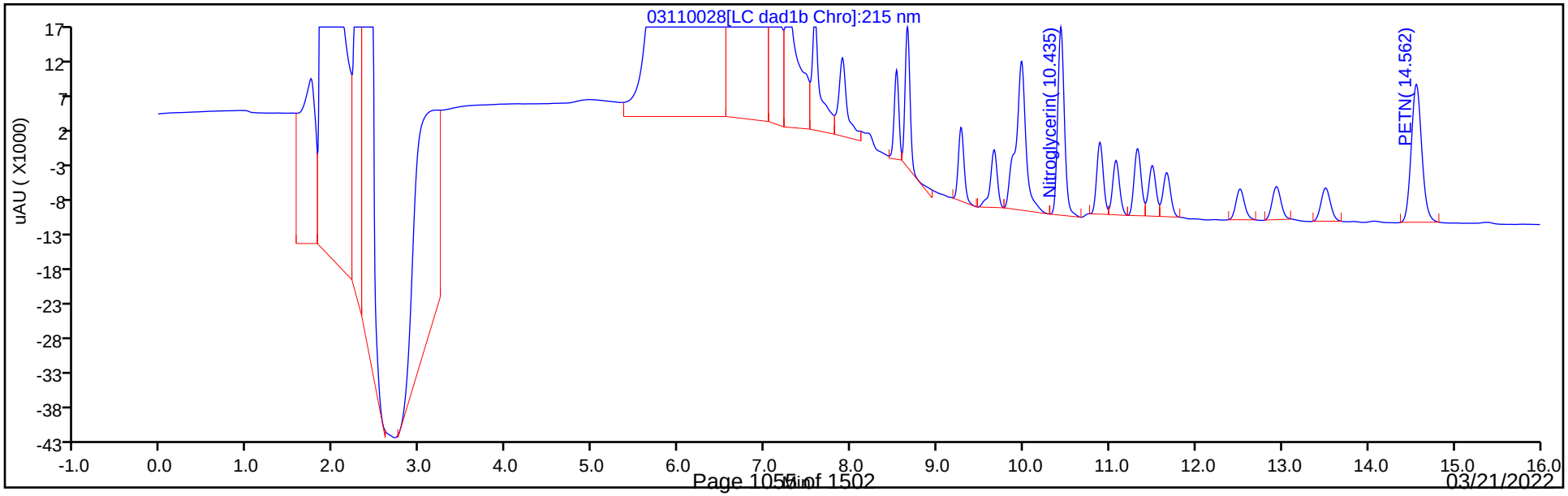
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110028.d

Injection Date:	11-Mar-2022 21:40:24	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159332-B-13-A MS			Worklist Smp#:	28
Client ID:	PZ019-8				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110028.D				
Lims ID:	280-159332-B-13-A MS				
Client ID:	PZ019-8				
Sample Type:	MS				
Inject. Date:	11-Mar-2022 21:40:24	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-B-13-				
Misc. Info.:	280-0109174-028				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2022 10:32:02	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:	CTX1616				

First Level Reviewer: zhangji Date: 12-Mar-2022 09:45:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2164	108.20

Manual Integration/User Assign Peak Report

Eurofins Denver

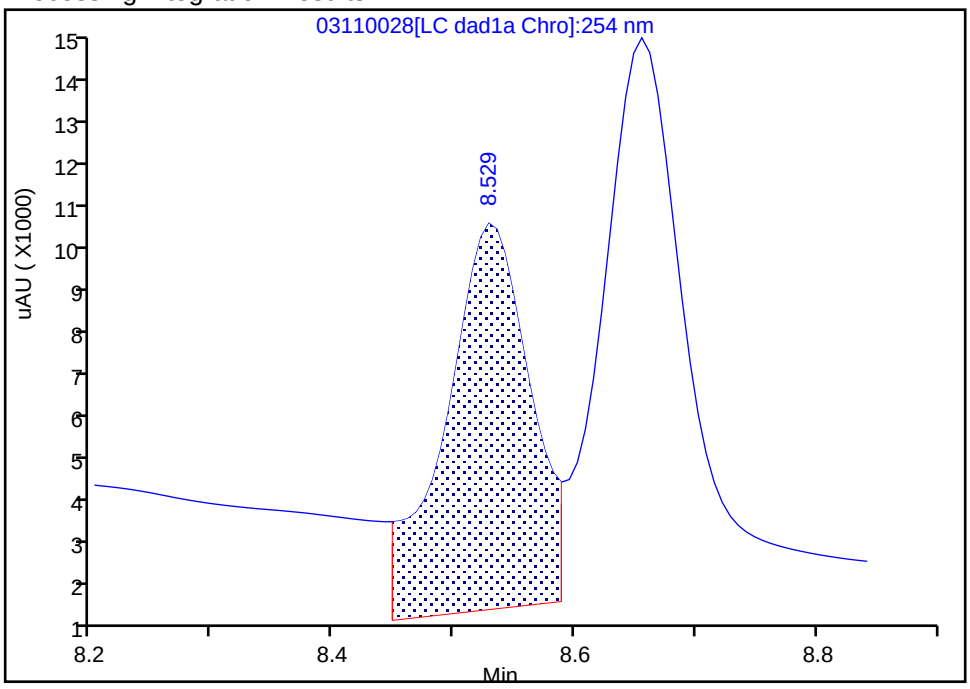
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110028.d				
Injection Date:	11-Mar-2022 21:40:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-13-A MS				
Client ID:	PZ019-8				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

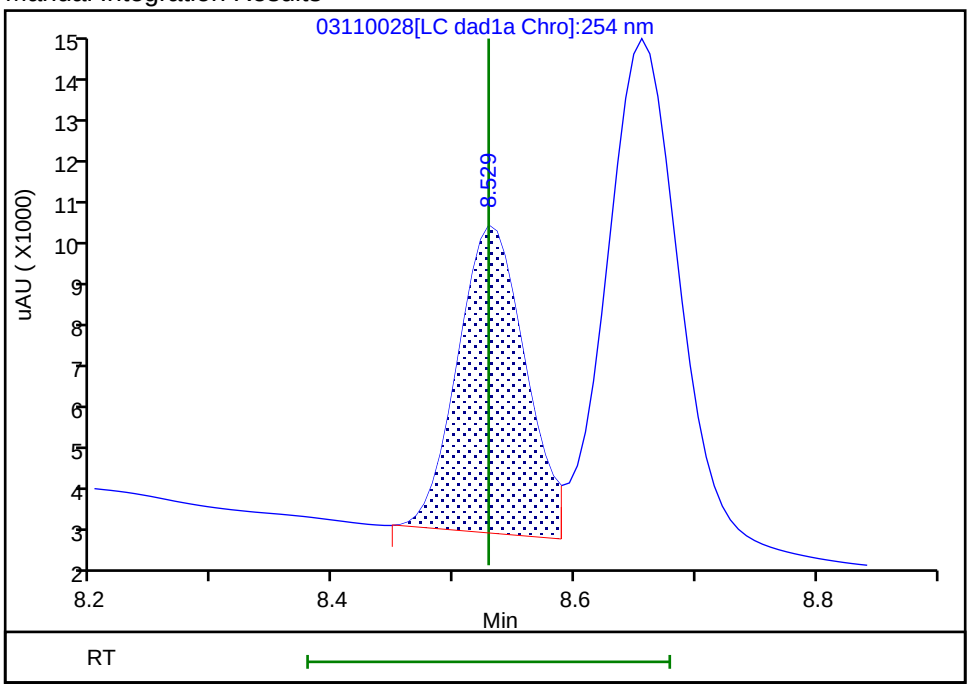
Processing Integration Results

RT: 8.53
Area: 42848
Amount: 0.343615
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 26985
Amount: 0.216403
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 09:45:49
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

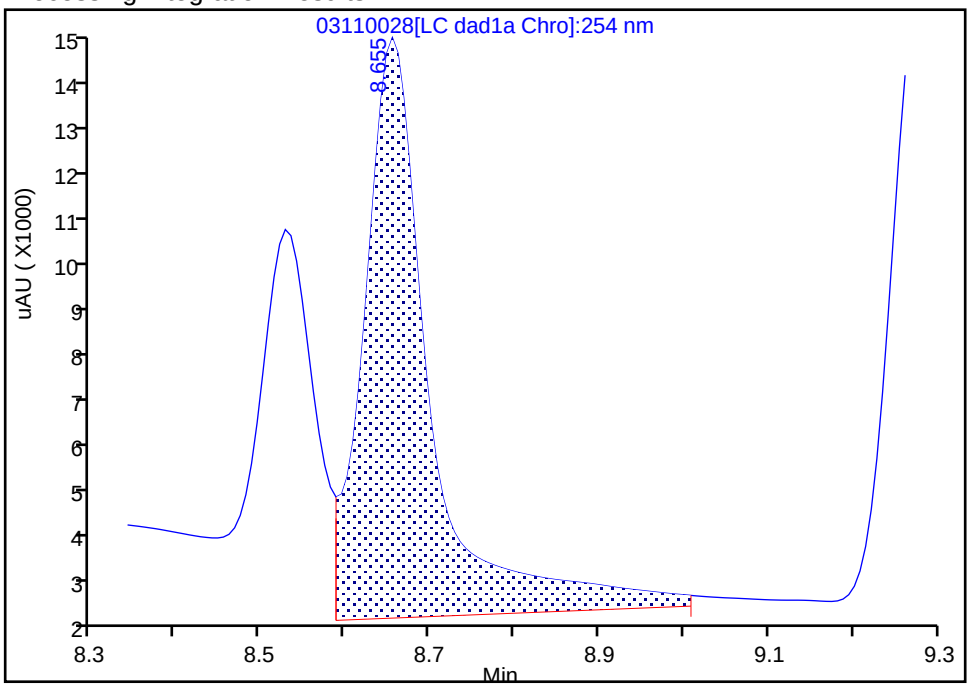
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110028.d				
Injection Date:	11-Mar-2022 21:40:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-13-A MS				
Client ID:	PZ019-8				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

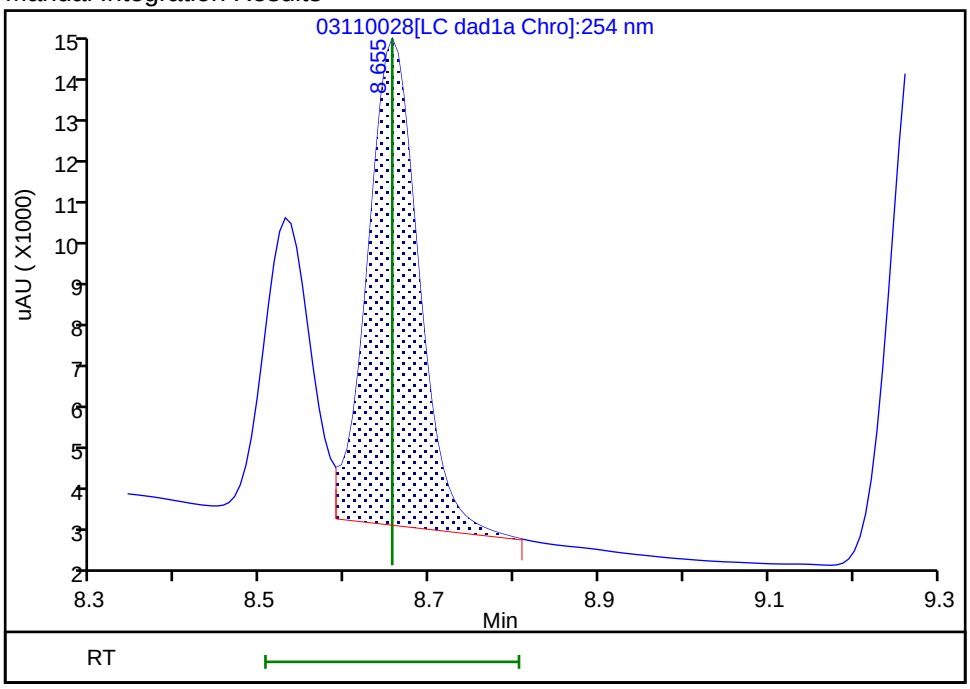
Processing Integration Results

RT: 8.66
Area: 70370
Amount: 0.322657
Amount Units: ug/mL



Manual Integration Results

RT: 8.66
Area: 48458
Amount: 0.222187
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 09:45:52
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

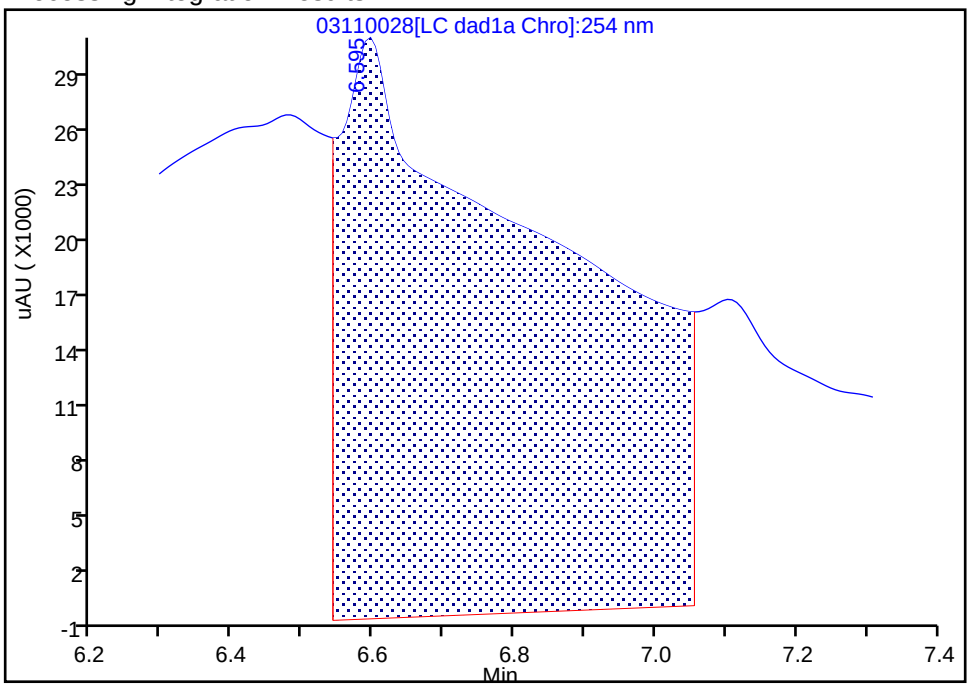
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110028.d				
Injection Date:	11-Mar-2022 21:40:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-13-A MS				
Client ID:	PZ019-8				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

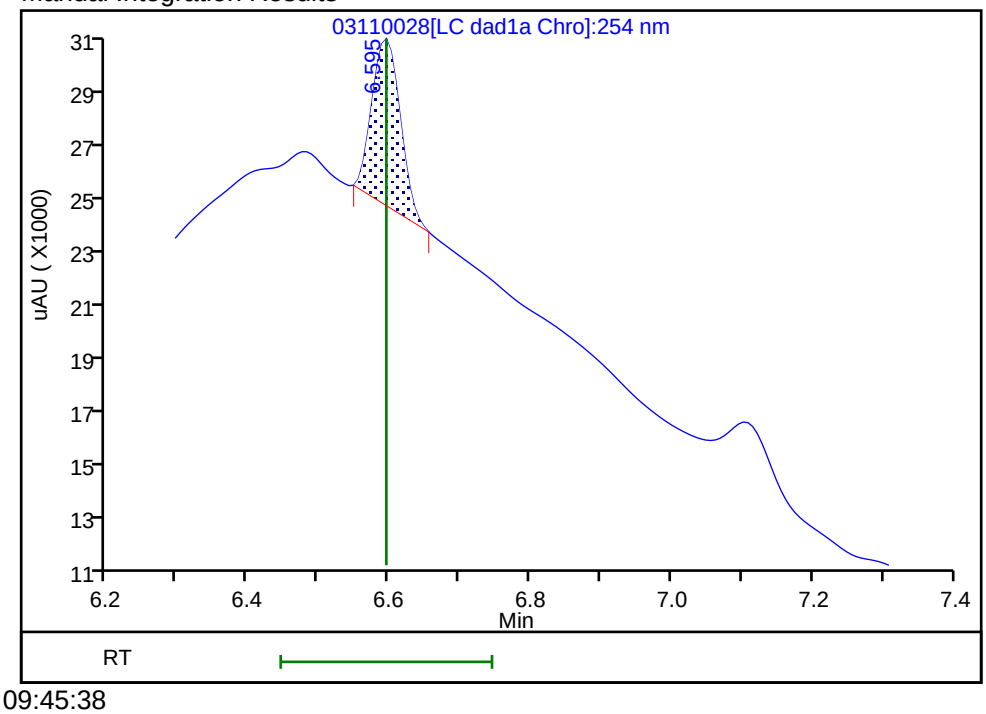
Processing Integration Results

RT: 6.60
Area: 649477
Amount: 7.747807
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 16722
Amount: 0.199482
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 09:45:38
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

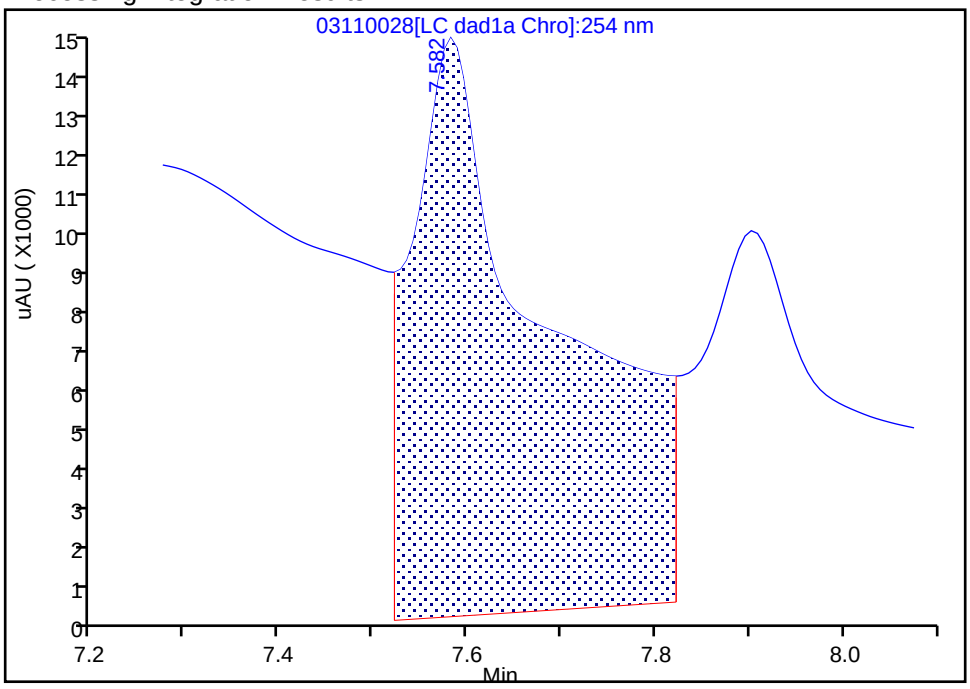
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110028.d				
Injection Date:	11-Mar-2022 21:40:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-13-A MS				
Client ID:	PZ019-8				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

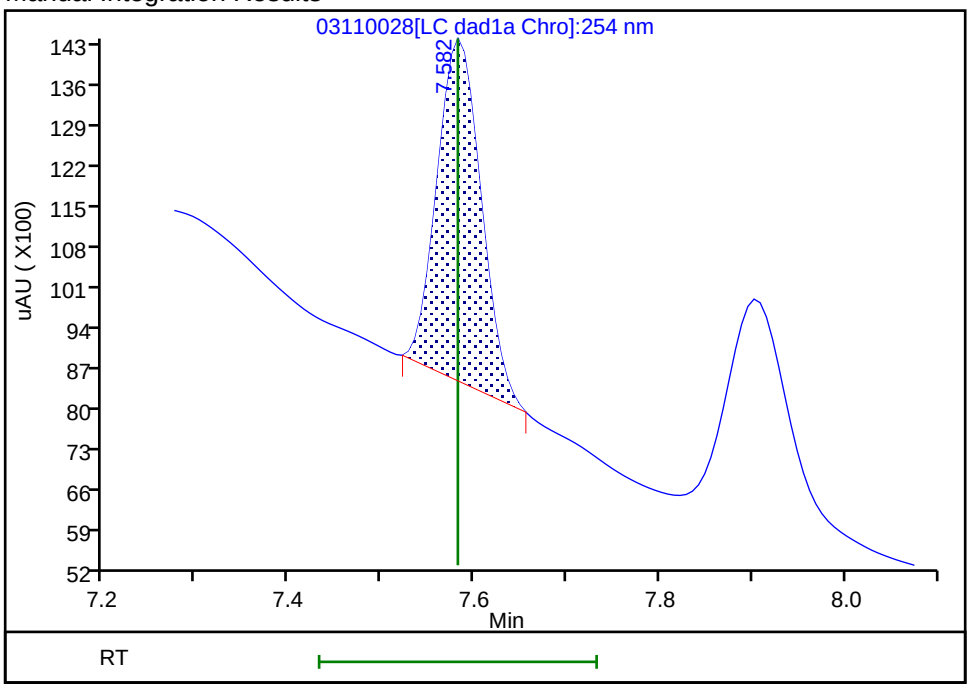
Processing Integration Results

RT: 7.58
Area: 140619
Amount: 1.357206
Amount Units: ug/mL



Manual Integration Results

RT: 7.58
Area: 19631
Amount: 0.189472
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 09:45:42
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ019-8 MS | Lab Sample ID: 280-159332-13 MS

Matrix: Water | Lab File ID: 03110030.D

Analysis Method: 8330A | Date Collected: 03/01/2022 09:10

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 472.1(mL) | Date Analyzed: 03/11/2022 22:26

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.: 568433 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.29	M	2.1	0.42	0.16

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	109	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110030.D				
Lims ID:	280-159332-A-13-B MS				
Client ID:	PZ019-8				
Sample Type:	MS				
Inject. Date:	11-Mar-2022 22:26:14	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-A-13-				
Misc. Info.:	280-0109174-030				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2022 10:32:02	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:	CTX1616				
First Level Reviewer: zhangji		Date:	12-Mar-2022 10:27:20		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.473	6.477	-0.004	36024	0.2002	0.1988	M
6 DNX	1	6.787	6.791	-0.004	28179	0.2002	0.2040	M
7 MNX	1	7.207	7.211	-0.004	27243	0.2334	0.2162	M
$ 10 1,2-Dinitrobenzene	1	8.527	8.529	-0.002	27085	0.2000	0.2172	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

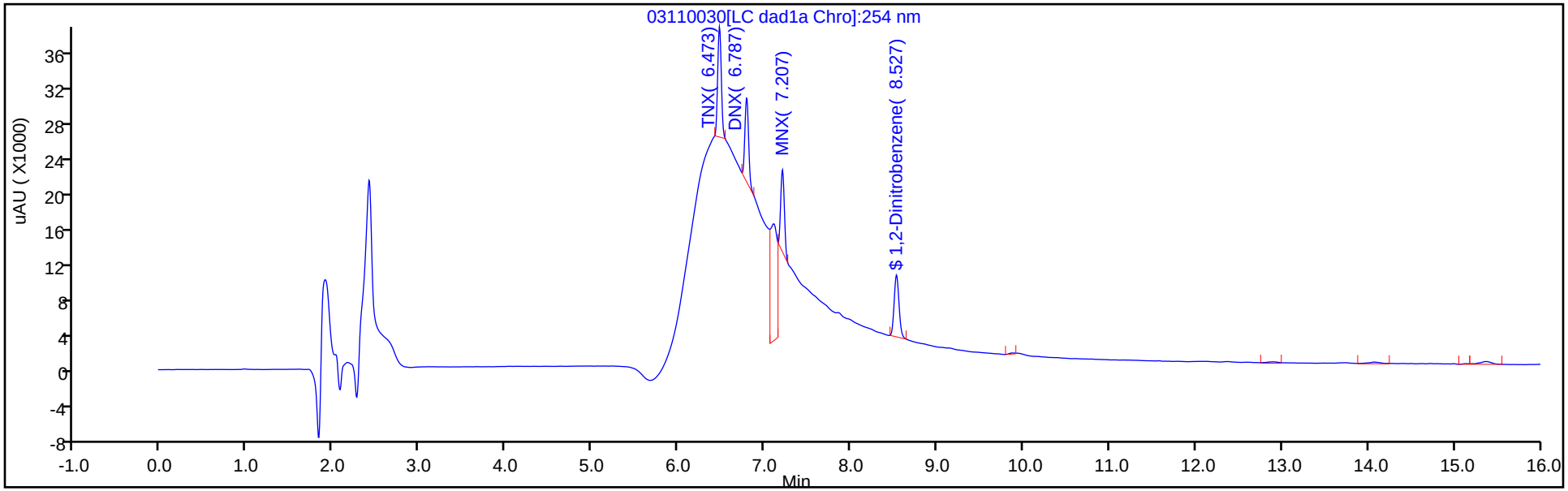
Report Date: 12-Mar-2022 10:32:06 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

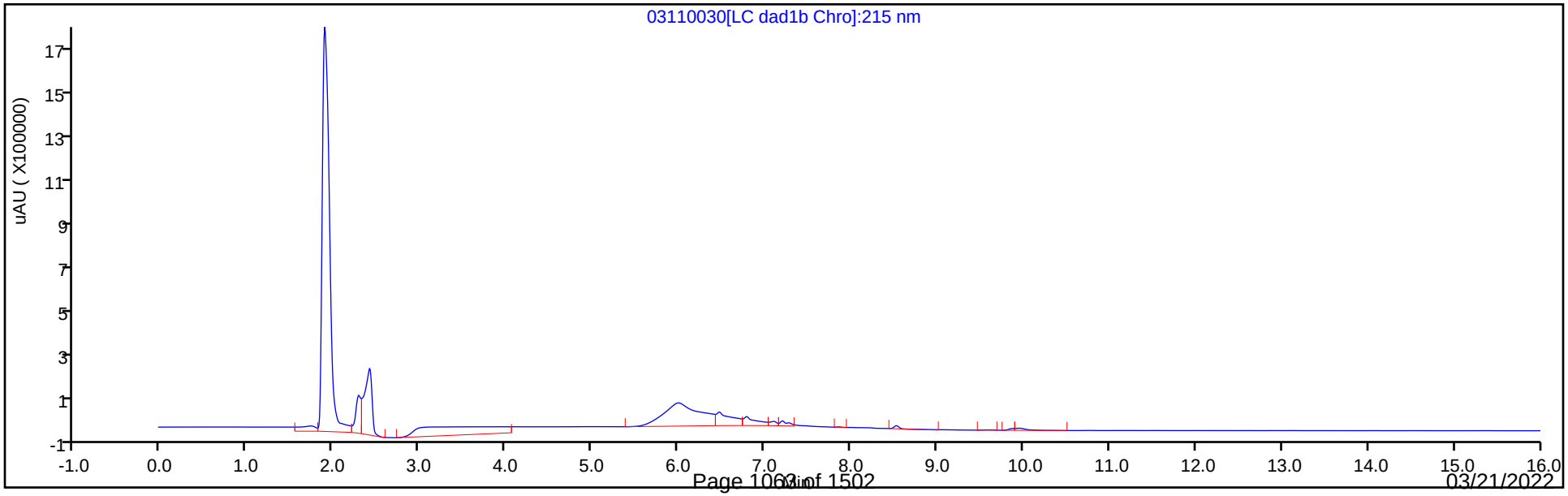
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110030.d

Injection Date:	11-Mar-2022 22:26:14	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159332-A-13-B MS			Worklist Smp#:	30
Client ID:	PZ019-8				
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



Eurofins Denver
Recovery Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110030.D
Lims ID: 280-159332-A-13-B MS
Client ID: PZ019-8
Sample Type: MS
Inject. Date: 11-Mar-2022 22:26:14 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-A-13-
Misc. Info.: 280-0109174-030
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Mar-2022 10:32:02 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: CTX1616

First Level Reviewer: zhangji Date: 12-Mar-2022 10:27:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2172	108.60

Manual Integration/User Assign Peak Report

Eurofins Denver

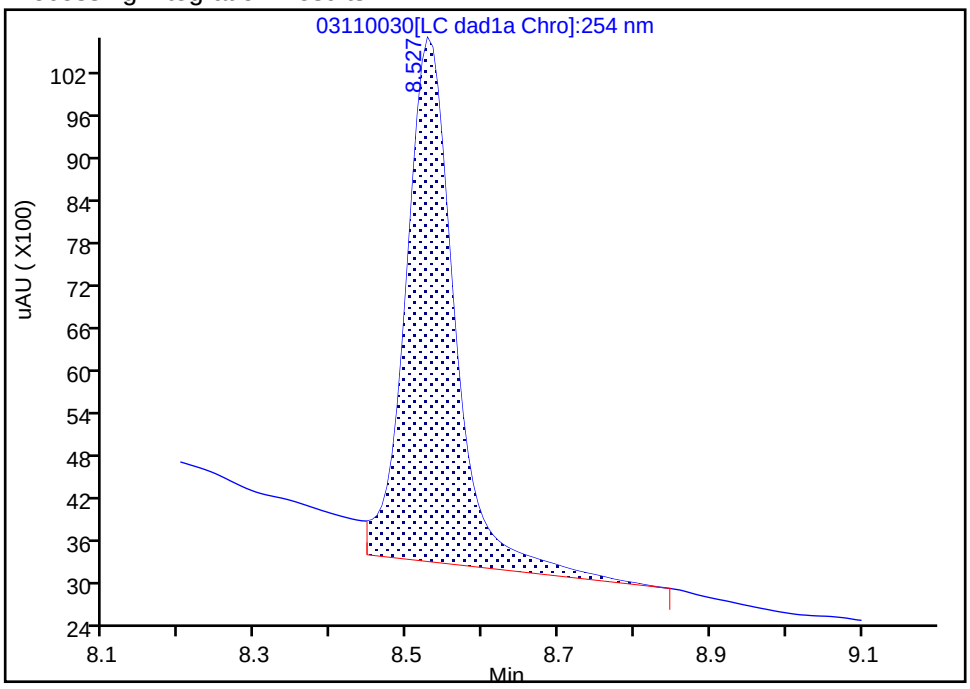
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110030.d				
Injection Date:	11-Mar-2022 22:26:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-13-B MS				
Client ID:	PZ019-8				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

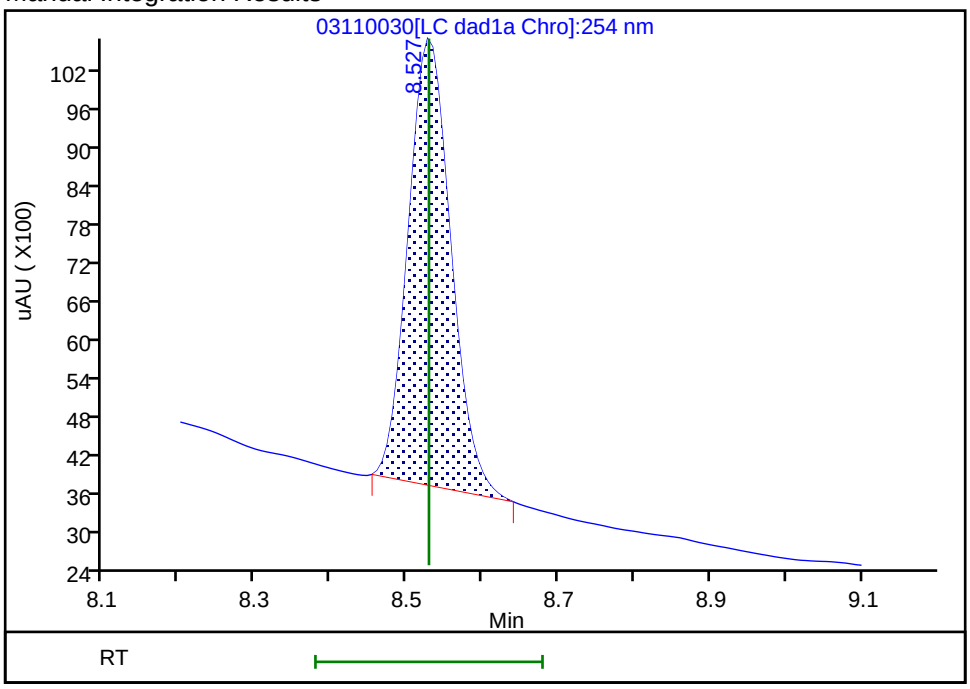
Processing Integration Results

RT: 8.53
Area: 32923
Amount: 0.264023
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 27085
Amount: 0.217205
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 10:27:19

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

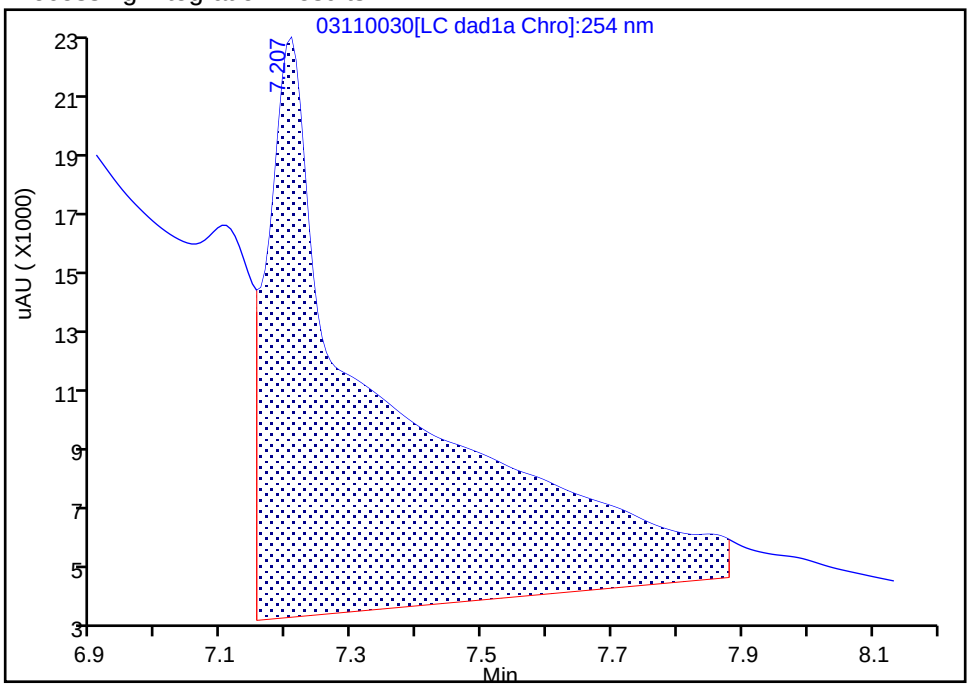
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110030.d				
Injection Date:	11-Mar-2022 22:26:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-13-B MS				
Client ID:	PZ019-8				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	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

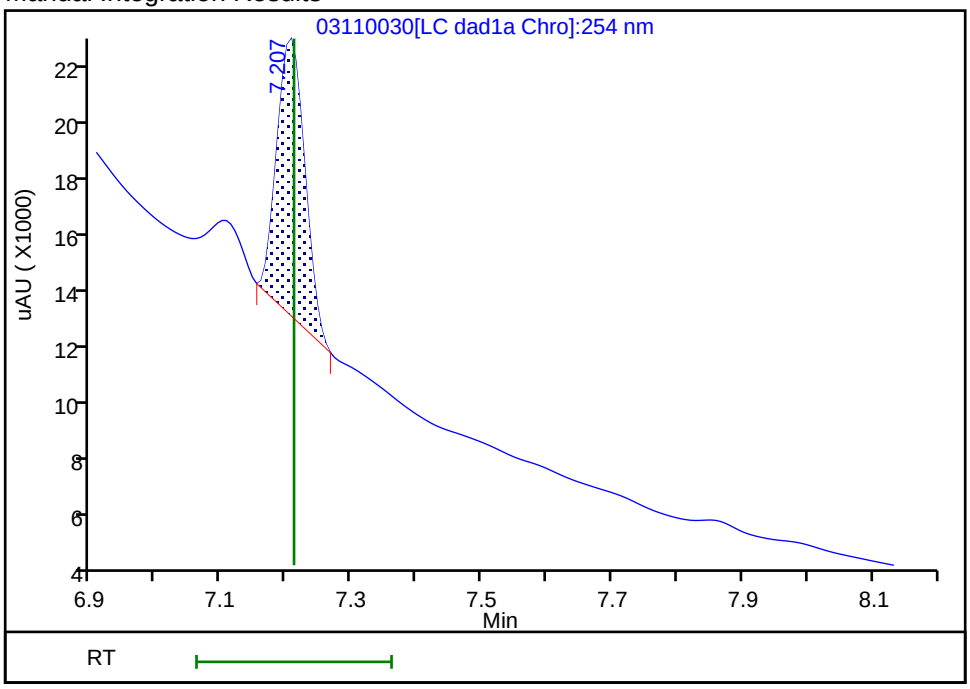
Processing Integration Results

RT: 7.21
Area: 240192
Amount: 1.906355
Amount Units: ug/mL



Manual Integration Results

RT: 7.21
Area: 27243
Amount: 0.216222
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 10:27:15

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ019-8 MSD | Lab Sample ID: 280-159332-13 MSD

Matrix: Water | Lab File ID: 03110029.D

Analysis Method: 8330A | Date Collected: 03/01/2022 09:10

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 492.4(mL) | Date Analyzed: 03/11/2022 22:03

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.: 568433 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.26	M	0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	2.26		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	2.26		0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	2.06		0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	2.13		0.10	0.081	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	1.97		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.82		0.21	0.20	0.087
99-08-1	3-Nitrotoluene	1.63		0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.67		0.15	0.12	0.059
99-99-0	4-Nitrotoluene	2.01		0.42	0.41	0.10
2691-41-0	HMX	2.24	M	0.21	0.20	0.089
98-95-3	Nitrobenzene	1.99		0.21	0.20	0.092
121-82-4	RDX	2.01	M	0.21	0.20	0.052
479-45-8	Tetryl	2.34		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	108	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110029.D
Lims ID: 280-159332-B-13-B MSD
Client ID: PZ019-8
Sample Type: MSD
Inject. Date: 11-Mar-2022 22:03:19 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159332-B-13-
Misc. Info.: 280-0109174-029
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 12-Mar-2022 10:32:02 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: CTX1616

First Level Reviewer: zhangji Date: 12-Mar-2022 10:27:02

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	6.595	0.004	18460	0.2000	0.2202	M
8 RDX	1	7.585	7.582	0.003	20470	0.2000	0.1976	M
9 2,4,6-Trinitrophenol	1	7.905	7.929	-0.024	16922	0.2000	0.2197	M
$ 10 1,2-Dinitrobenzene	1	8.532	8.529	0.003	26948	0.2000	0.2161	M
11 1,3,5-Trinitrobenzene	1	8.652	8.655	-0.003	48458	0.2000	0.2222	M
12 1,3-Dinitrobenzene	1	9.272	9.282	-0.010	64109	0.2000	0.2223	
13 Nitrobenzene	1	9.659	9.668	-0.009	37584	0.2000	0.1958	
15 Tetryl	1	9.979	9.982	-0.003	39363	0.2000	0.2308	
16 Nitroglycerin	2	10.425	10.435	-0.010	148640	2.00	2.36	
17 2,4,6-Trinitrotoluene	1	10.879	10.888	-0.009	45026	0.2000	0.2221	
18 4-Amino-2,6-dinitrotoluene	1	11.065	11.068	-0.003	24905	0.2000	0.1649	
19 2-Amino-4,6-dinitrotoluene	1	11.319	11.322	-0.003	39140	0.2000	0.1936	
20 2,6-Dinitrotoluene	1	11.492	11.495	-0.003	29951	0.2000	0.2093	
21 2,4-Dinitrotoluene	1	11.659	11.662	-0.003	58705	0.2000	0.2029	
22 o-Nitrotoluene	1	12.505	12.508	-0.003	22837	0.2000	0.1790	
23 p-Nitrotoluene	1	12.925	12.935	-0.010	21000	0.2000	0.1977	
24 m-Nitrotoluene	1	13.499	13.502	-0.003	22770	0.2000	0.1600	
25 PETN	2	14.552	14.555	-0.003	172425	2.00	2.36	

QC Flag Legend

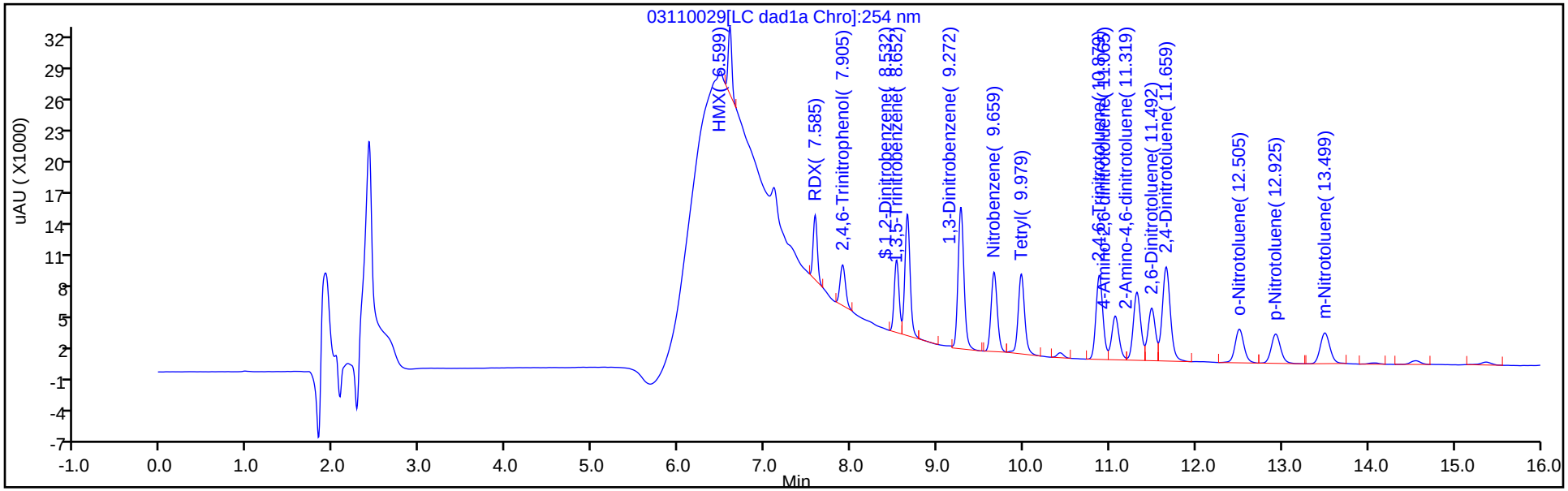
Processing Flags
Review Flags
M - Manually Integrated

Report Date: 12-Mar-2022 10:32:07 Chrom Revision: 2.3 16-Feb-2022 17:52:00

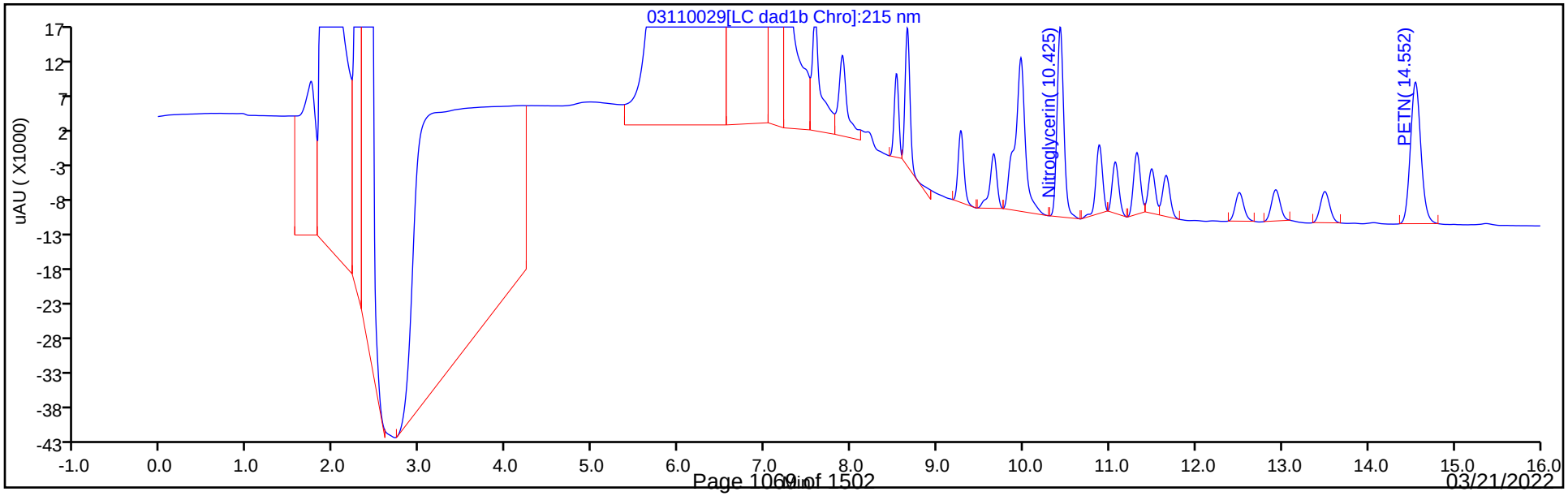
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110029.d				
Injection Date:	11-Mar-2022 22:03:19	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159332-B-13-B MSD			Worklist Smp#:	29
Client ID:	PZ019-8				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110029.D				
Lims ID:	280-159332-B-13-B MSD				
Client ID:	PZ019-8				
Sample Type:	MSD				
Inject. Date:	11-Mar-2022 22:03:19	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-B-13-				
Misc. Info.:	280-0109174-029				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2022 10:32:02	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:	CTX1616				

First Level Reviewer: zhangji Date: 12-Mar-2022 10:27:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2161	108.05

Manual Integration/User Assign Peak Report

Eurofins Denver

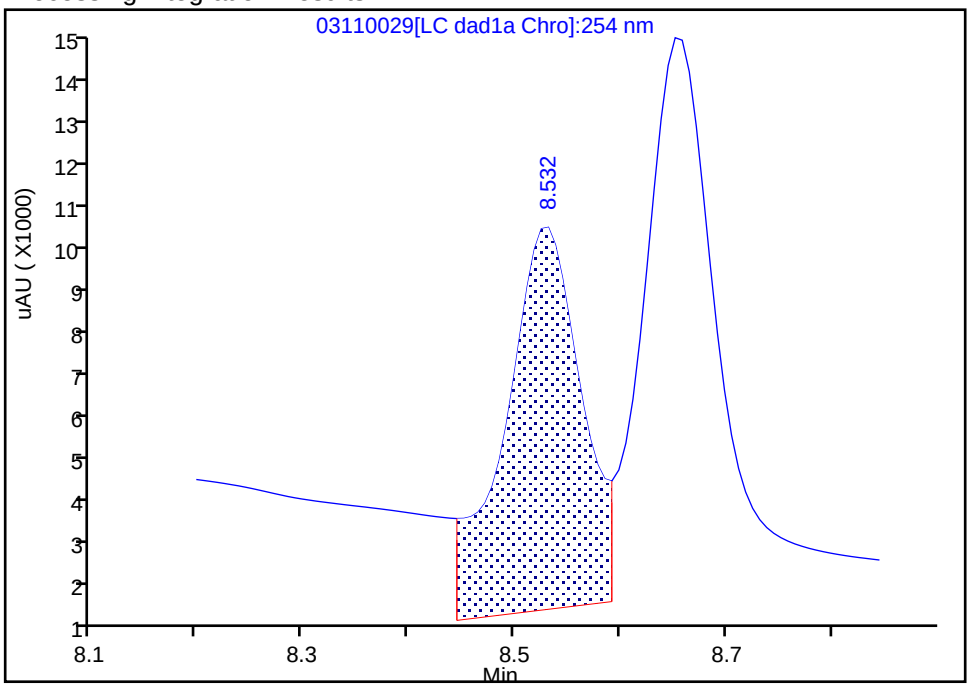
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110029.d				
Injection Date:	11-Mar-2022 22:03:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-13-B MSD				
Client ID:	PZ019-8				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

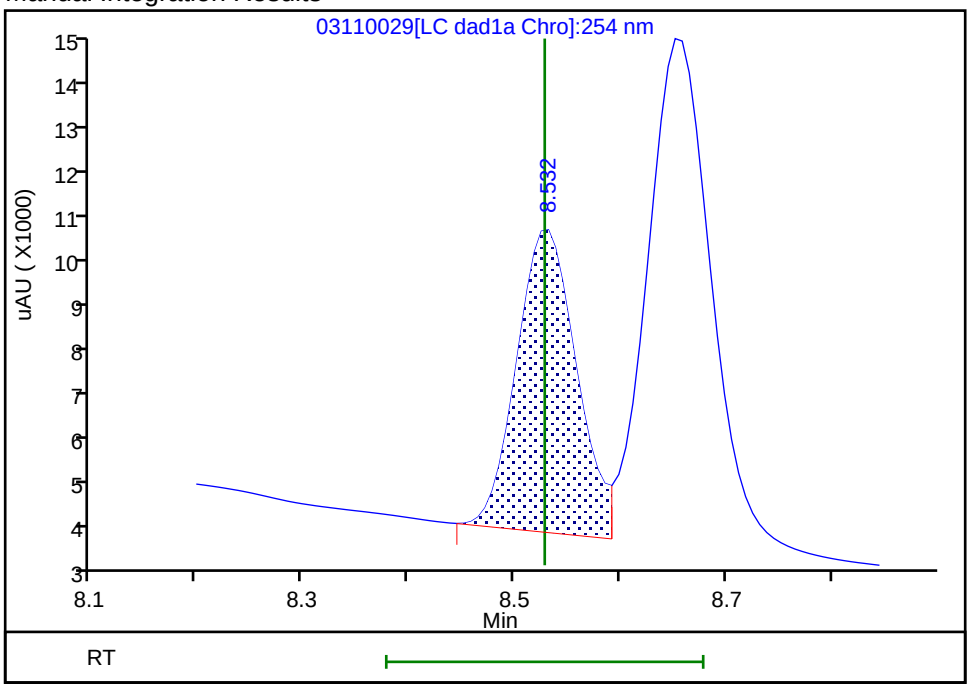
Processing Integration Results

RT: 8.53
Area: 43963
Amount: 0.352557
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 26948
Amount: 0.216107
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 09:46:16
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

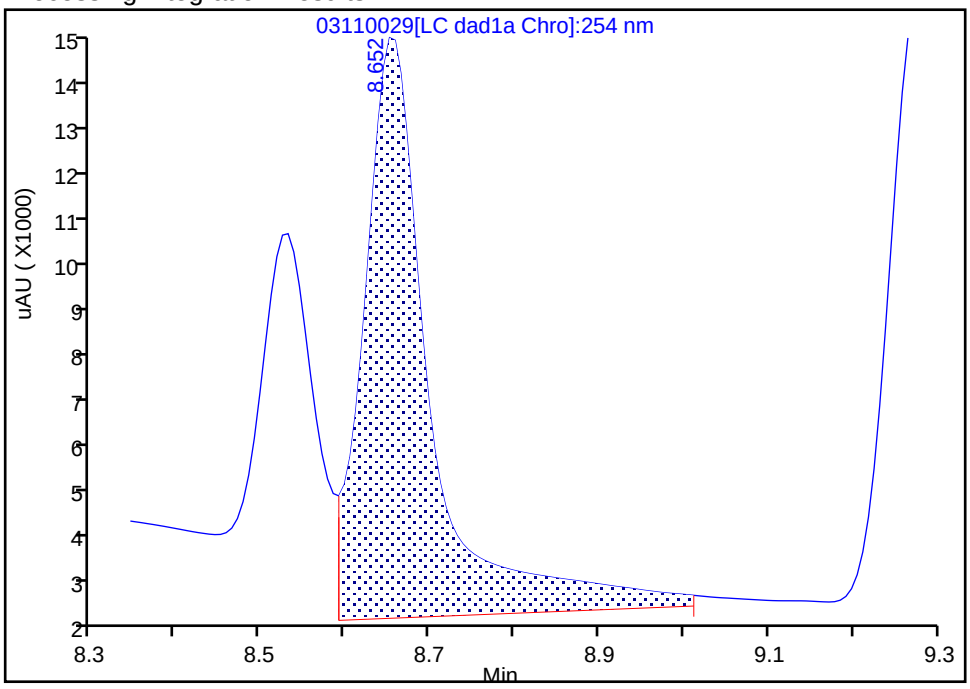
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110029.d				
Injection Date:	11-Mar-2022 22:03:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-13-B MSD				
Client ID:	PZ019-8				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

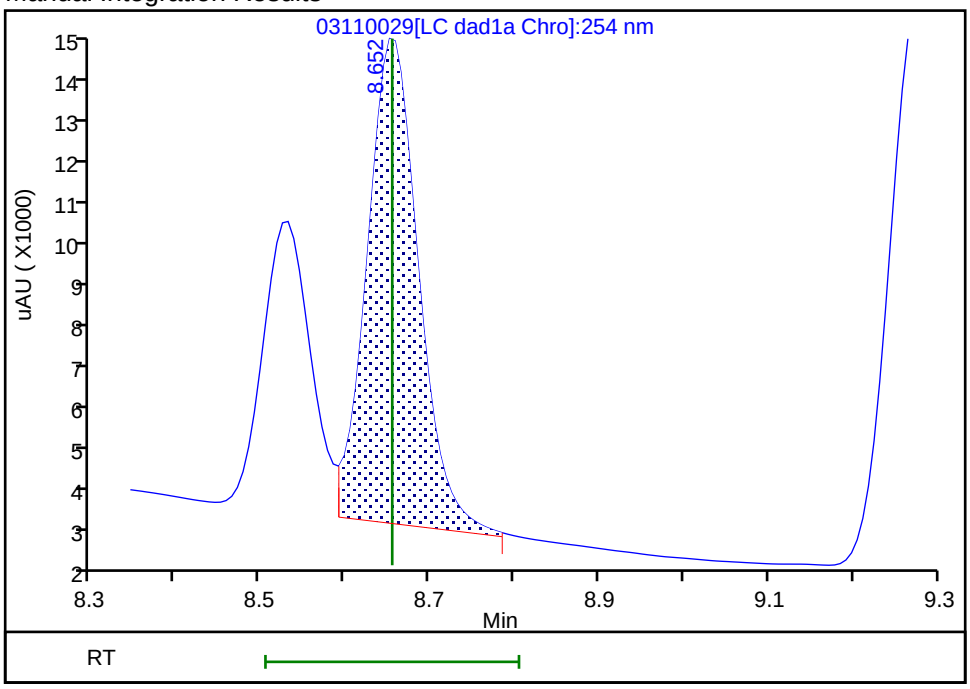
Processing Integration Results

RT: 8.65
Area: 70825
Amount: 0.324743
Amount Units: ug/mL



Manual Integration Results

RT: 8.65
Area: 48458
Amount: 0.222187
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 09:46:17
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

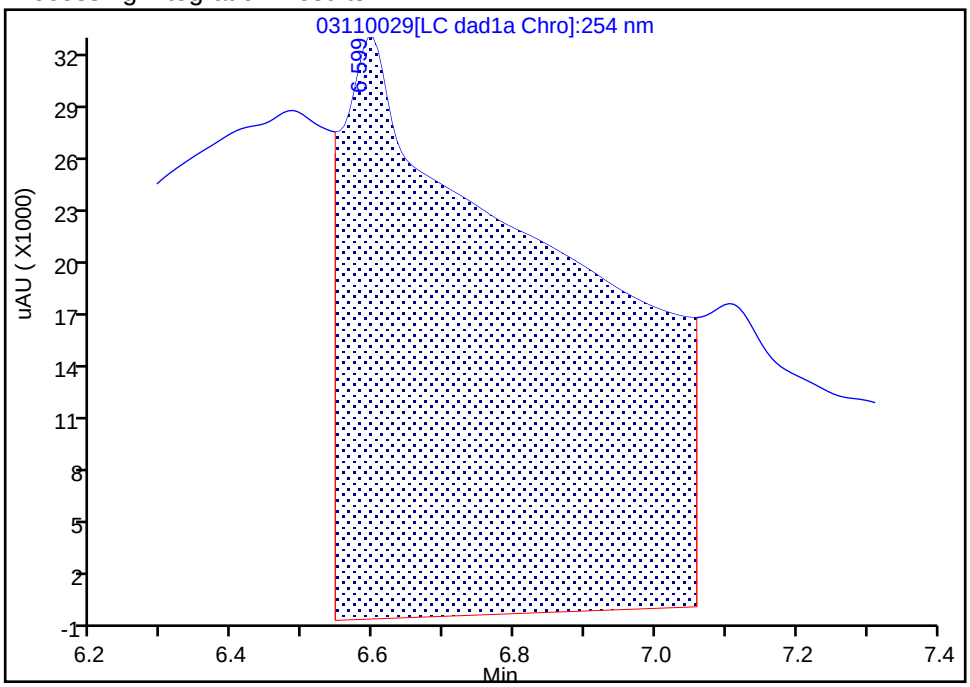
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110029.d				
Injection Date:	11-Mar-2022 22:03:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-13-B MSD				
Client ID:	PZ019-8				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

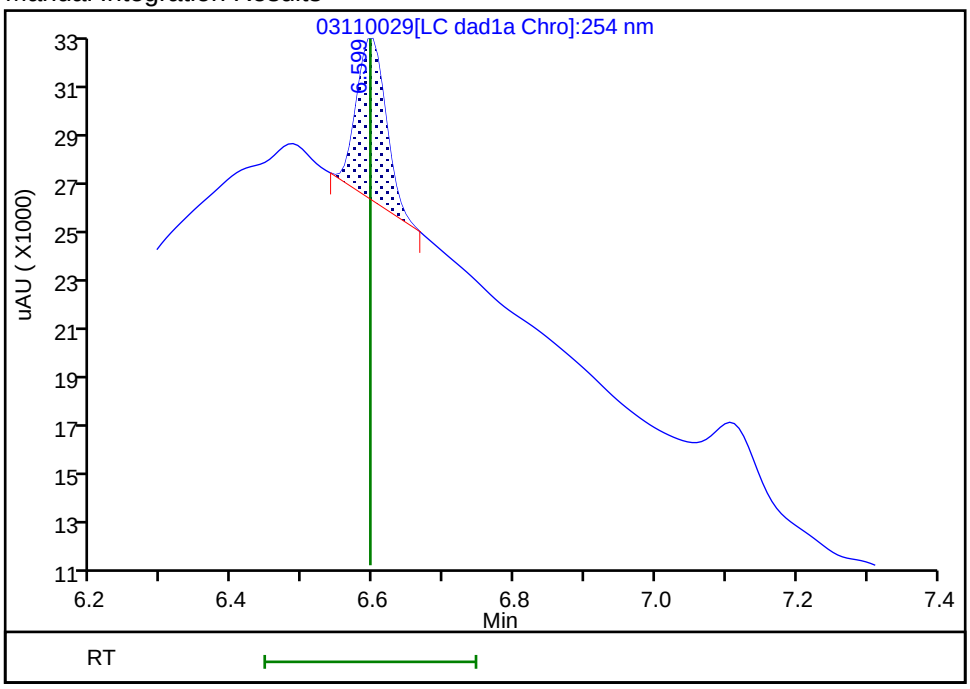
Processing Integration Results

RT: 6.60
Area: 695743
Amount: 8.299728
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 18460
Amount: 0.220215
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 09:46:02
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

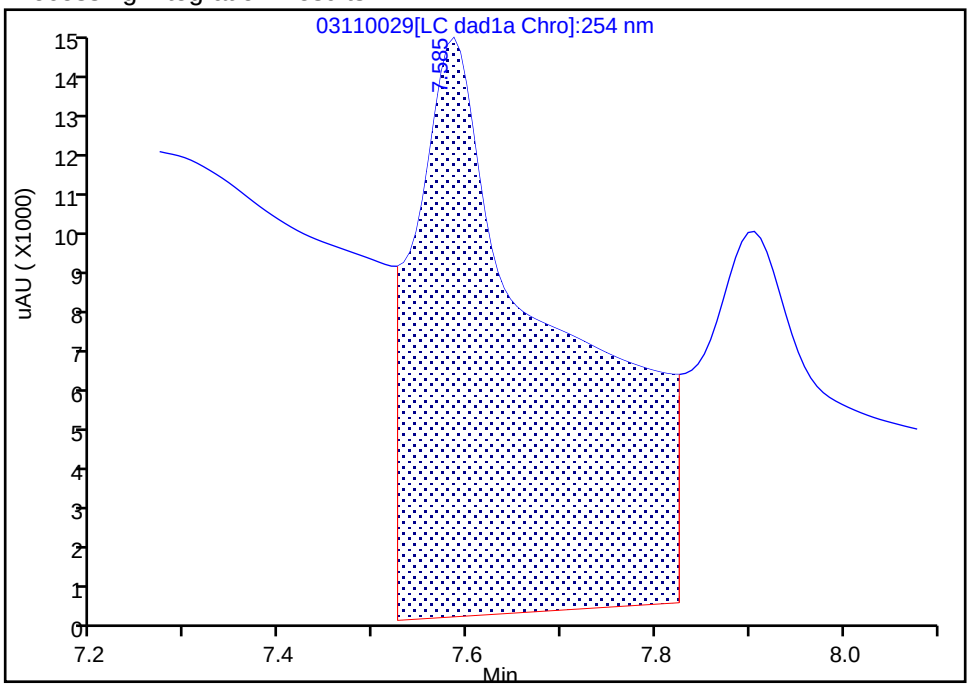
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110029.d				
Injection Date:	11-Mar-2022 22:03:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-B-13-B MSD				
Client ID:	PZ019-8				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

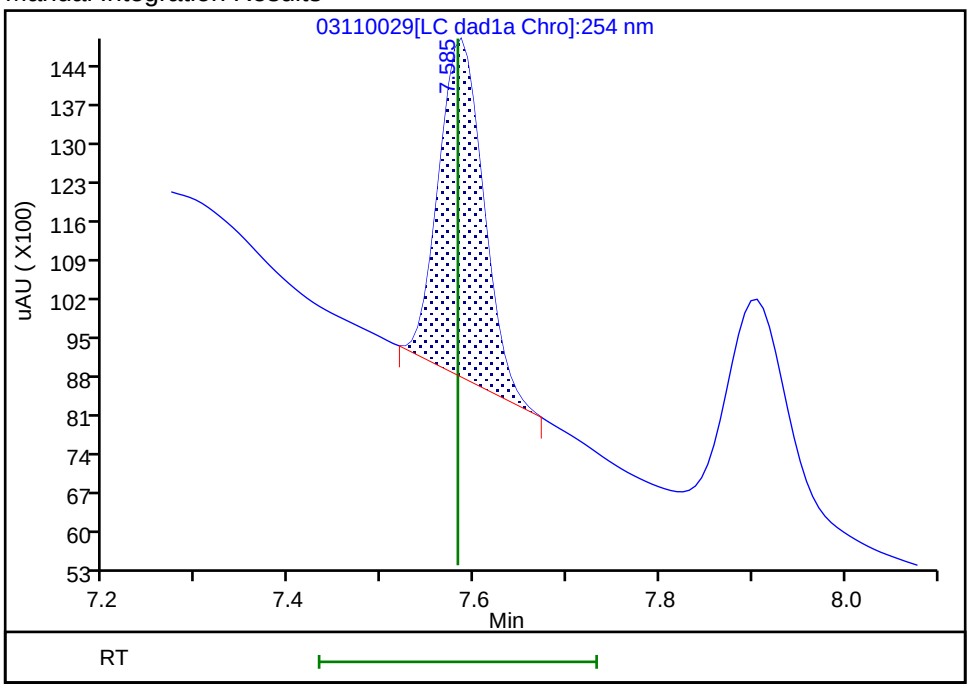
Processing Integration Results

RT: 7.59
Area: 146624
Amount: 1.415164
Amount Units: ug/mL



Manual Integration Results

RT: 7.59
Area: 20470
Amount: 0.197569
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 09:46:06
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159332-1

SDG No.:

Client Sample ID: PZ019-8 MSD | Lab Sample ID: 280-159332-13 MSD

Matrix: Water | Lab File ID: 03110031.D

Analysis Method: 8330A | Date Collected: 03/01/2022 09:10

Extraction Method: 3535 | Date Extracted: 03/08/2022 11:19

Sample wt/vol: 484.7(mL) | Date Analyzed: 03/11/2022 22:49

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.: 568433 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.32	M	2.1	0.41	0.16

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	113	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110031.D				
Lims ID:	280-159332-A-13-C MSD				
Client ID:	PZ019-8				
Sample Type:	MSD				
Inject. Date:	11-Mar-2022 22:49:14	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-A-13-				
Misc. Info.:	280-0109174-031				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2022 10:32:02	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:	CTX1616				
First Level Reviewer: zhangji		Date:	12-Mar-2022 10:27:42		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.473	6.477	-0.004	38551	0.2002	0.2127	M
6 DNX	1	6.793	6.791	0.002	29808	0.2002	0.2158	M
7 MNX	1	7.207	7.211	-0.004	28387	0.2334	0.2253	M
$ 10 1,2-Dinitrobenzene	1	8.533	8.529	0.004	28126	0.2000	0.2256	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

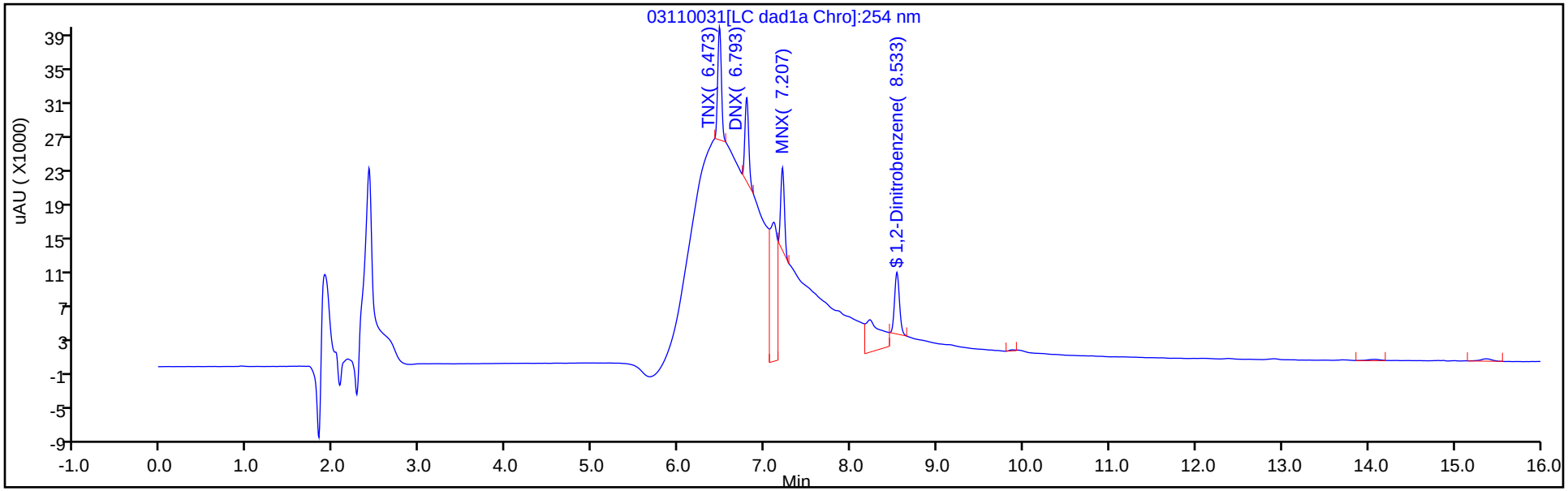
Report Date: 12-Mar-2022 10:32:06 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

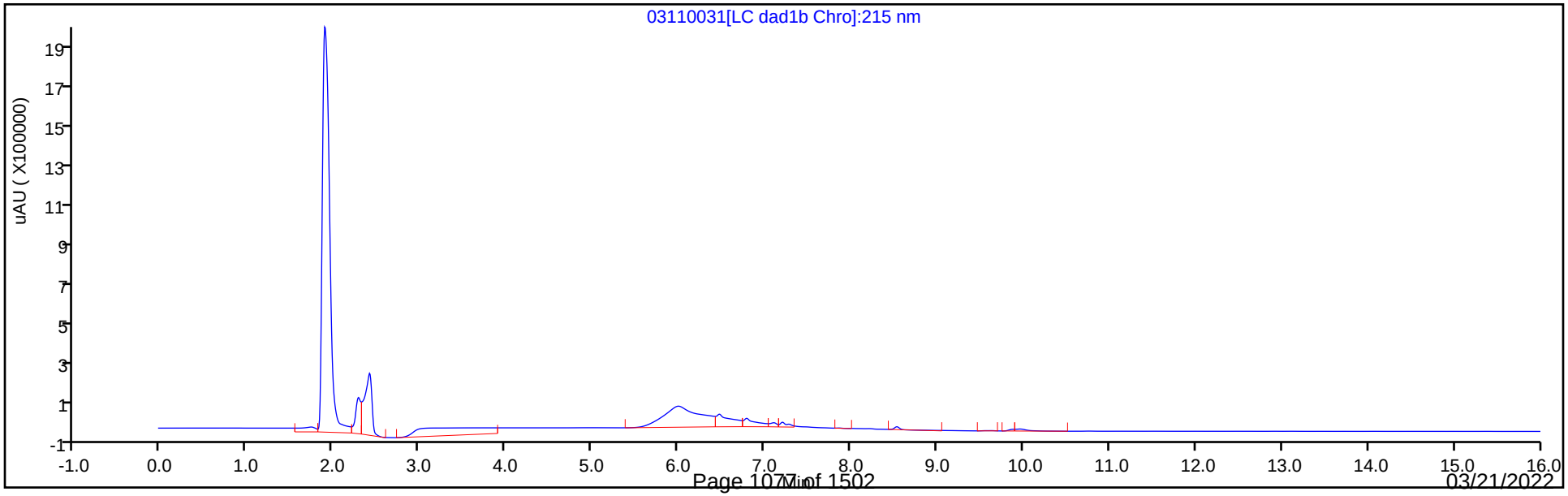
Data File: \\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110031.d

Injection Date:	11-Mar-2022 22:49:14	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159332-A-13-C MSD			Worklist Smp#:	31
Client ID:	PZ019-8				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\03110031.D				
Lims ID:	280-159332-A-13-C MSD				
Client ID:	PZ019-8				
Sample Type:	MSD				
Inject. Date:	11-Mar-2022 22:49:14	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159332-A-13-				
Misc. Info.:	280-0109174-031				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220311-109174.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	12-Mar-2022 10:32:02	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:	CTX1616				

First Level Reviewer: zhangji Date: 12-Mar-2022 10:27:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2256	112.78

Manual Integration/User Assign Peak Report

Eurofins Denver

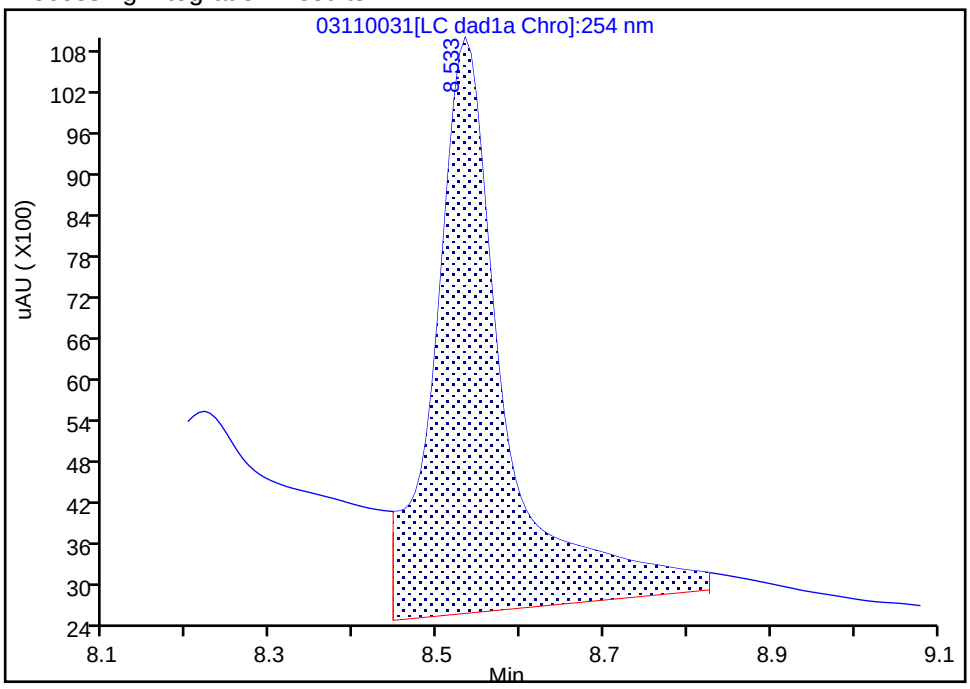
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110031.d				
Injection Date:	11-Mar-2022 22:49:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-13-C MSD				
Client ID:	PZ019-8				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

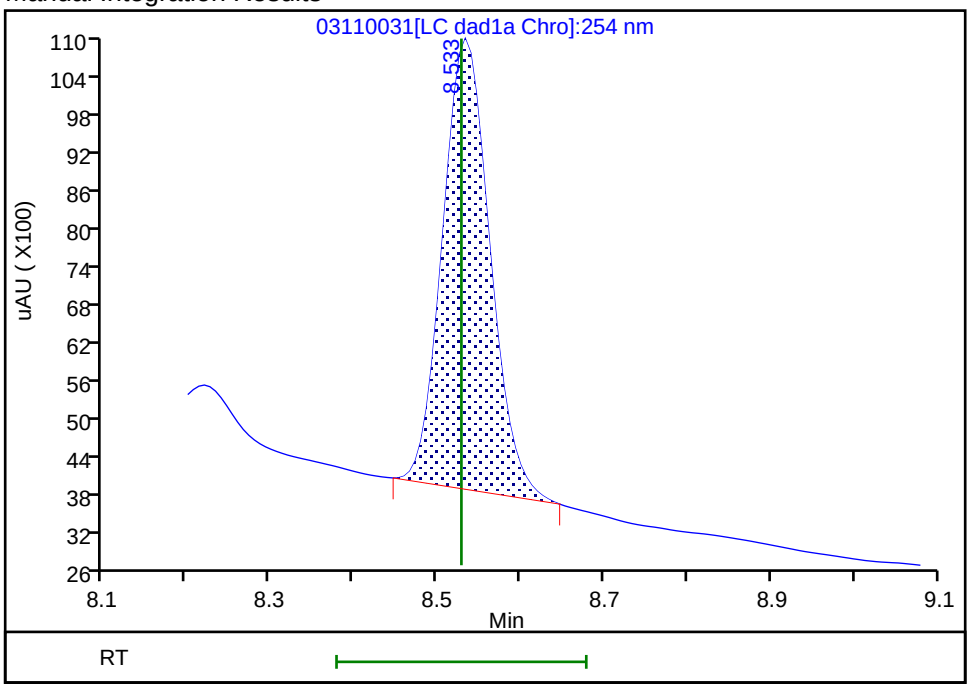
Processing Integration Results

RT: 8.53
Area: 49398
Amount: 0.396142
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 28126
Amount: 0.225554
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 10:27:42
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

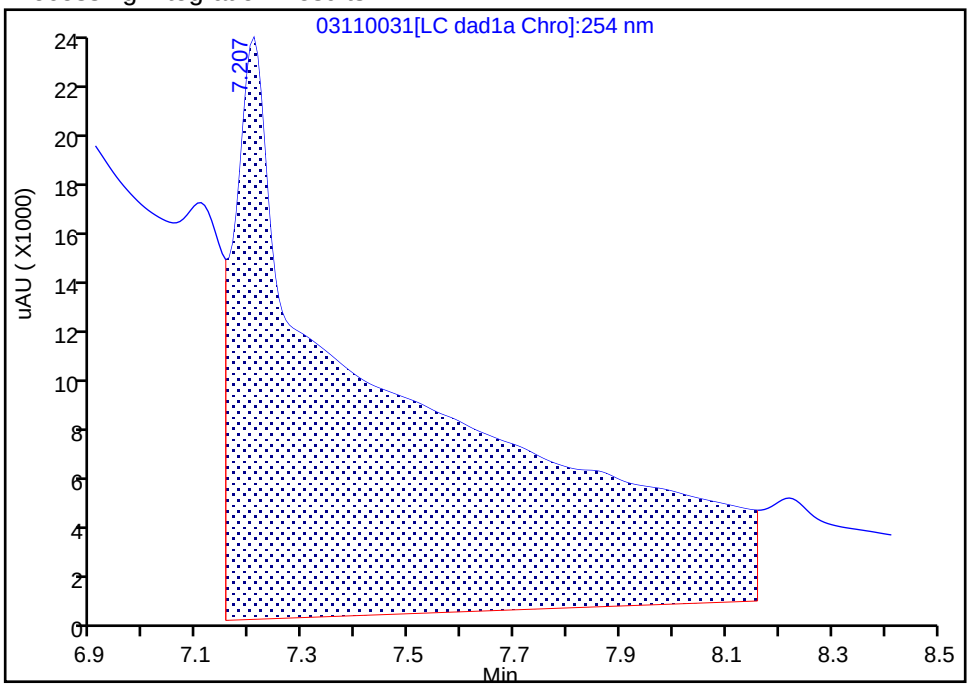
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220311-109174.b\03110031.d				
Injection Date:	11-Mar-2022 22:49:14	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159332-A-13-C MSD				
Client ID:	PZ019-8				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	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

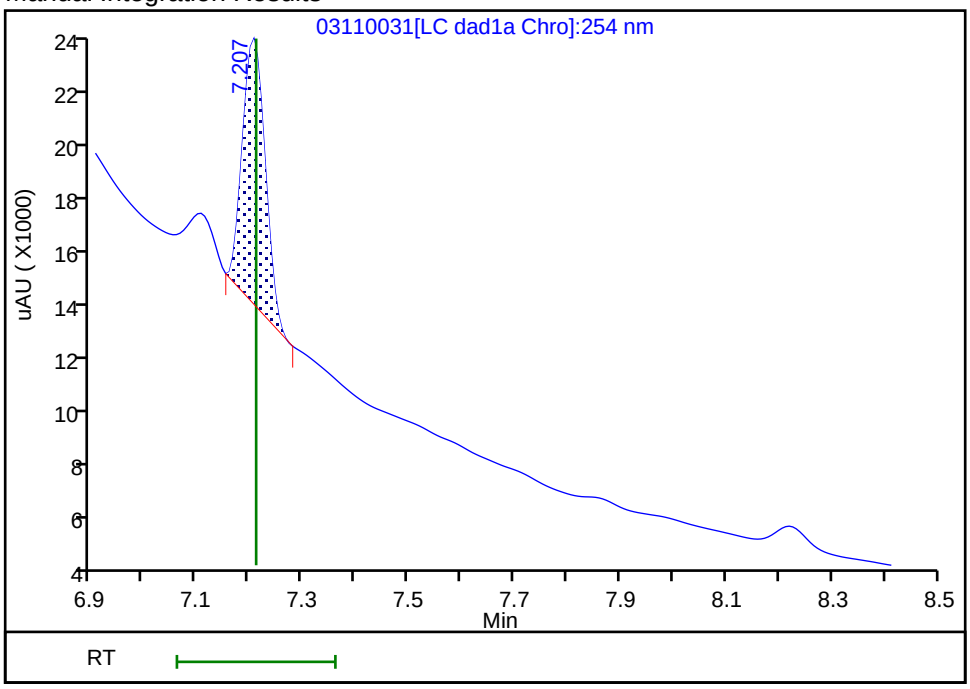
Processing Integration Results

RT: 7.21
Area: 463326
Amount: 3.677324
Amount Units: ug/mL



Manual Integration Results

RT: 7.21
Area: 28387
Amount: 0.225302
Amount Units: ug/mL



Reviewer: zhangji, 12-Mar-2022 10:27:36

Audit Action: Manually Integrated Audit Reason: Baseline

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159332-1

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.: 280-159332-1

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.: 280-159332-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 03/11/2022 05:59

Analysis Batch Number: 568287 End Date: 03/11/2022 10:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-568287/49		03/11/2022 05:59	1	03100049.D	UltraCarb5uODS 4.6(mm)
CCV 280-568287/50		03/11/2022 06:22	1	03100050.D	UltraCarb5uODS 4.6(mm)
MB 280-567953/1-A		03/11/2022 06:45	1	03100051.D	UltraCarb5uODS 4.6(mm)
LCS 280-567953/2-A		03/11/2022 07:08	1	03100052.D	UltraCarb5uODS 4.6(mm)
LCS 280-567953/3-A		03/11/2022 07:31	1	03100053.D	UltraCarb5uODS 4.6(mm)
280-159332-1	G0081-8	03/11/2022 07:54	1	03100054.D	UltraCarb5uODS 4.6(mm)
280-159332-2	G0082-8	03/11/2022 08:17	1	03100055.D	UltraCarb5uODS 4.6(mm)
280-159332-3	G0024-8	03/11/2022 08:40	1	03100056.D	UltraCarb5uODS 4.6(mm)
280-159332-4	G0096-8	03/11/2022 09:03	1	03100057.D	UltraCarb5uODS 4.6(mm)
280-159332-5	G0296-8	03/11/2022 09:26	1	03100058.D	UltraCarb5uODS 4.6(mm)
280-159332-6	PZ020-8	03/11/2022 09:49	1	03100059.D	UltraCarb5uODS 4.6(mm)
280-159332-7	G0077-8	03/11/2022 10:12	1	03100060.D	UltraCarb5uODS 4.6(mm)
CCV 280-568287/61		03/11/2022 10:35	1	03100061.D	UltraCarb5uODS 4.6(mm)
CCV 280-568287/62		03/11/2022 10:58	1	03100062.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 03/11/2022 16:42

Analysis Batch Number: 568433 End Date: 03/12/2022 01:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-568433/15		03/11/2022 16:42	1	03110015.D	UltraCarb5uODS 4.6(mm)
CCV 280-568433/16		03/11/2022 17:05	1	03110016.D	UltraCarb5uODS 4.6(mm)
280-159332-4 DL	G0096-8 DL	03/11/2022 17:28	5	03110017.D	UltraCarb5uODS 4.6(mm)
280-159332-5 DL	G0296-8 DL	03/11/2022 17:51	5	03110018.D	UltraCarb5uODS 4.6(mm)
280-159332-8	G0078-8	03/11/2022 18:14	1	03110019.D	UltraCarb5uODS 4.6(mm)
280-159332-9	G0094-8	03/11/2022 18:37	1	03110020.D	UltraCarb5uODS 4.6(mm)
280-159332-9 DL	G0094-8 DL	03/11/2022 19:00	5	03110021.D	UltraCarb5uODS 4.6(mm)
280-159332-10	PZ018-8	03/11/2022 19:23	1	03110022.D	UltraCarb5uODS 4.6(mm)
280-159332-11	PZ017R-8	03/11/2022 19:45	1	03110023.D	UltraCarb5uODS 4.6(mm)
280-159332-12	PZ021-8	03/11/2022 20:08	1	03110024.D	UltraCarb5uODS 4.6(mm)
280-159332-13	PZ019-8	03/11/2022 20:31	1	03110025.D	UltraCarb5uODS 4.6(mm)
CCV 280-568433/26		03/11/2022 20:54	1	03110026.D	UltraCarb5uODS 4.6(mm)
CCV 280-568433/27		03/11/2022 21:17	1	03110027.D	UltraCarb5uODS 4.6(mm)
280-159332-13 MS	PZ019-8 MS	03/11/2022 21:40	1	03110028.D	UltraCarb5uODS 4.6(mm)
280-159332-13 MSD	PZ019-8 MSD	03/11/2022 22:03	1	03110029.D	UltraCarb5uODS 4.6(mm)
280-159332-13 MS	PZ019-8 MS	03/11/2022 22:26	1	03110030.D	UltraCarb5uODS 4.6(mm)
280-159332-13 MSD	PZ019-8 MSD	03/11/2022 22:49	1	03110031.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		03/11/2022 23:12	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/11/2022 23:35	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/11/2022 23:57	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/12/2022 00:20	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/12/2022 00:43	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/12/2022 01:06	1		UltraCarb5uODS 4.6(mm)
CCV 280-568433/38		03/12/2022 01:29	1	03110038.D	UltraCarb5uODS 4.6(mm)
CCV 280-568433/39		03/12/2022 01:52	1	03110039.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 03/12/2022 13:10

Analysis Batch Number: 568485 End Date: 03/12/2022 20:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-568485/11		03/12/2022 13:10	1	03120011.D	Luna-phenylhex 4.6(mm)
CCV 280-568485/12		03/12/2022 13:45	1	03120012.D	Luna-phenylhex 4.6(mm)
ZZZZZ		03/12/2022 14:20	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/12/2022 14:55	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/12/2022 15:30	1		Luna-phenylhex 4.6(mm)
280-159332-1	G0081-8	03/12/2022 16:05	1	03120016.D	Luna-phenylhex 4.6(mm)
280-159332-2	G0082-8	03/12/2022 16:41	1	03120017.D	Luna-phenylhex 4.6(mm)
280-159332-3	G0024-8	03/12/2022 17:16	1	03120018.D	Luna-phenylhex 4.6(mm)
280-159332-4	G0096-8	03/12/2022 17:51	1	03120019.D	Luna-phenylhex 4.6(mm)
280-159332-5	G0296-8	03/12/2022 18:26	1	03120020.D	Luna-phenylhex 4.6(mm)
280-159332-6	PZ020-8	03/12/2022 19:01	1	03120021.D	Luna-phenylhex 4.6(mm)
280-159332-7	G0077-8	03/12/2022 19:36	1	03120022.D	Luna-phenylhex 4.6(mm)
CCV 280-568485/23		03/12/2022 20:11	1	03120023.D	Luna-phenylhex 4.6(mm)
CCV 280-568485/24		03/12/2022 20:46	1	03120024.D	Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 03/15/2022 18:07

Analysis Batch Number: 568709 End Date: 03/16/2022 04:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-568709/7		03/15/2022 18:07	1	03150007.D	Luna-phenylhex 4.6(mm)
CCV 280-568709/8		03/15/2022 18:42	1	03150008.D	Luna-phenylhex 4.6(mm)
280-159332-9	G0094-8	03/15/2022 19:18	1	03150010.D	Luna-phenylhex 4.6(mm)
280-159332-10	PZ018-8	03/15/2022 19:53	1	03150011.D	Luna-phenylhex 4.6(mm)
280-159332-11	PZ017R-8	03/15/2022 20:28	1	03150012.D	Luna-phenylhex 4.6(mm)
280-159332-12	PZ021-8	03/15/2022 21:03	1	03150013.D	Luna-phenylhex 4.6(mm)
ZZZZZ		03/15/2022 21:38	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/15/2022 22:13	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/15/2022 22:48	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/15/2022 23:23	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/15/2022 23:58	1		Luna-phenylhex 4.6(mm)
CCV 280-568709/19		03/16/2022 00:33	1	03150019.D	Luna-phenylhex 4.6(mm)
CCV 280-568709/20		03/16/2022 01:08	1	03150020.D	Luna-phenylhex 4.6(mm)
280-159332-4 DL	G0096-8 DL	03/16/2022 01:43	5	03150021.D	Luna-phenylhex 4.6(mm)
280-159332-5 DL	G0296-8 DL	03/16/2022 02:19	5	03150022.D	Luna-phenylhex 4.6(mm)
280-159332-9 DL	G0094-8 DL	03/16/2022 02:53	5	03150023.D	Luna-phenylhex 4.6(mm)
ZZZZZ		03/16/2022 03:28	5		Luna-phenylhex 4.6(mm)
CCV 280-568709/25		03/16/2022 04:04	1	03150025.D	Luna-phenylhex 4.6(mm)
CCV 280-568709/26		03/16/2022 04:39	1	03150026.D	Luna-phenylhex 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Batch Number: 567953 Batch Start Date: 03/08/22 11:19 Batch Analyst: Cook, Ashleigh R

Batch Method: 3535 Batch End Date: 03/08/22 14:44

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00113	8330_OP_DMT 00013
MB 280-567953/1		3535, 8330A				500 mL	5 mL		
LCS 280-567953/2		3535, 8330A				500 mL	5 mL	0.1 mL	
LCS 280-567953/3		3535, 8330A				500 mL	5 mL		0.1 mL
280-159332-A-1	G0081-8	3535, 8330A	T	766.3 g	285.8 g	480.5 mL	5 mL		
280-159332-B-2	G0082-8	3535, 8330A	T	718.5 g	255.8 g	462.7 mL	5 mL		
280-159332-A-3	G0024-8	3535, 8330A	T	737.5 g	255.9 g	481.6 mL	5 mL		
280-159332-A-4	G0096-8	3535, 8330A	T	745.8 g	255.7 g	490.1 mL	5 mL		
280-159332-B-5	G0296-8	3535, 8330A	T	801.7 g	287.9 g	513.8 mL	5 mL		
280-159332-A-6	PZ020-8	3535, 8330A	T	729.5 g	255.8 g	473.7 mL	5 mL		
280-159332-A-7	G0077-8	3535, 8330A	T	741.9 g	256.2 g	485.7 mL	5 mL		
280-159332-B-8	G0078-8	3535, 8330A	T	726.6 g	256.4 g	470.2 mL	5 mL		
280-159332-A-9	G0094-8	3535, 8330A	T	727.7 g	250.8 g	476.9 mL	5 mL		
280-159332-B-10	PZ018-8	3535, 8330A	T	718.2 g	256.2 g	462 mL	5 mL		
280-159332-B-11	PZ017R-8	3535, 8330A	T	737.5 g	256.2 g	481.3 mL	5 mL		
280-159332-B-12	PZ021-8	3535, 8330A	T	725.9 g	255.3 g	470.6 mL	5 mL		
280-159332-A-13	PZ019-8	3535, 8330A	T	797.4 g	287.0 g	510.4 mL	5 mL		
280-159332-B-13 MS	PZ019-8	3535, 8330A	T	743.0 g	256.8 g	486.2 mL	5 mL	0.1 mL	
280-159332-B-13 MSD	PZ019-8	3535, 8330A	T	748.1 g	255.7 g	492.4 mL	5 mL	0.1 mL	
280-159332-A-13 MS	PZ019-8	3535, 8330A	T	728.8 g	256.7 g	472.1 mL	5 mL		0.1 mL
280-159332-A-13 MSD	PZ019-8	3535, 8330A	T	771.0 g	286.3 g	484.7 mL	5 mL		0.1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00127	AnalysisComment				
MB 280-567953/1		3535, 8330A		0.1 mL					
LCS 280-567953/2		3535, 8330A		0.1 mL	8330 LCS				
LCS 280-567953/3		3535, 8330A		0.1 mL	DMT				
280-159332-A-1	G0081-8	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.: 280-159332-1

SDG No.:

Batch Number: 567953 Batch Start Date: 03/08/22 11:19 Batch Analyst: Cook, Ashleigh R

Batch Method: 3535 Batch End Date: 03/08/22 14:44

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00127	AnalysisComment				
280-159332-B-2	G0082-8	3535, 8330A	T	0.1 mL					
280-159332-A-3	G0024-8	3535, 8330A	T	0.1 mL					
280-159332-A-4	G0096-8	3535, 8330A	T	0.1 mL					
280-159332-B-5	G0296-8	3535, 8330A	T	0.1 mL					
280-159332-A-6	PZ020-8	3535, 8330A	T	0.1 mL					
280-159332-A-7	G0077-8	3535, 8330A	T	0.1 mL					
280-159332-B-8	G0078-8	3535, 8330A	T	0.1 mL					
280-159332-A-9	G0094-8	3535, 8330A	T	0.1 mL					
280-159332-B-10	PZ018-8	3535, 8330A	T	0.1 mL					
280-159332-B-11	PZ017R-8	3535, 8330A	T	0.1 mL					
280-159332-B-12	PZ021-8	3535, 8330A	T	0.1 mL					
280-159332-A-13	PZ019-8	3535, 8330A	T	0.1 mL					
280-159332-B-13 MS	PZ019-8	3535, 8330A	T	0.1 mL	8330 LCS				
280-159332-B-13 MSD	PZ019-8	3535, 8330A	T	0.1 mL	8330 LCS				
280-159332-A-13 MS	PZ019-8	3535, 8330A	T	0.1 mL	DMT				
280-159332-A-13 MSD	PZ019-8	3535, 8330A	T	0.1 mL	DMT				

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.: 280-159332-1

SDG No.:

Batch Number: 567953 Batch Start Date: 03/08/22 11:19 Batch Analyst: Cook, Ashleigh R

Batch Method: 3535 Batch End Date: 03/08/22 14:44

Batch Notes	
First Start time	03/08/2022 11:37
First End time	03/08/2022 13:47
SPE Cartridge Type	Porapak RDX
SPE Cartridge Lot ID	004838018A
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_00179
Acid Name	Ca2Cl
Acid ID	Ca2Cl_Sol_00079
Analyst ID - Spike Analyst	ARC
Analyst ID - Spike Witness Analyst	Reviewer: DL
Batch Comment	DV-OP-0017; Mantel: B/C

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: 280-159332-1

SDG No.:

Project: Cornhusker (CHAAP)

Client Sample ID	Lab Sample ID
G0081-8	280-159332-1
G0082-8	280-159332-2
G0024-8	280-159332-3
G0096-8	280-159332-4
G0296-8	280-159332-5
PZ020-8	280-159332-6
G0077-8	280-159332-7
G0078-8	280-159332-8
G0094-8	280-159332-9
PZ018-8	280-159332-10
PZ017R-8	280-159332-11
PZ021-8	280-159332-12
PZ019-8	280-159332-13

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0081-8 Lab Sample ID: 280-159332-1

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 14:10

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.48	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	4.0	1.0	0.80	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.064	0.10	0.050	0.019	mg/L	J		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	170	5.0	2.5	1.0	mg/L		M	1	9056A
Total Alkalinity as CaCO3	320	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0081-8 Lab Sample ID: 280-159332-1

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 14:10

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	5.9	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0082-8 Lab Sample ID: 280-159332-2

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 15:25

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.034	0.10	0.050	0.022	mg/L	J		1	350.1
Nitrogen, Total Kjeldahl	1.6	1.0	0.80	0.69	mg/L			1	351.2
Nitrate Nitrite as N	4.4	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	160	5.0	2.5	1.0	mg/L		M	1	9056A
Total Alkalinity as CaCO3	300	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0082-8 Lab Sample ID: 280-159332-2

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 15:25

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.8	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0024-8 Lab Sample ID: 280-159332-3

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 13:10

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.040	0.10	0.050	0.022	mg/L	J		1	350.1
Nitrogen, Total Kjeldahl	1.1	1.0	0.80	0.69	mg/L			1	351.2
Nitrate Nitrite as N	11	0.50	0.25	0.095	mg/L			5	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	54	5.0	2.5	1.0	mg/L		M	1	9056A
Total Alkalinity as CaCO3	210	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0024-8 Lab Sample ID: 280-159332-3

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 13:10

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.6	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0096-8 Lab Sample ID: 280-159332-4

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 11:10

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.5	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	0.80	1.0	0.80	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	2.8	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	110	5.0	2.5	1.0	mg/L		M	1	9056A
Total Alkalinity as CaCO3	400	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0096-8 Lab Sample ID: 280-159332-4

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 11:10

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	6.1	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0296-8 Lab Sample ID: 280-159332-5

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 08:00

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.6	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	0.82	1.0	0.80	0.69	mg/L	J		1	351.2
Nitrate Nitrite as N	3.3	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	110	5.0	2.5	1.0	mg/L		M	1	9056A
Total Alkalinity as CaCO3	400	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0296-8 Lab Sample ID: 280-159332-5

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 08:00

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	6.3	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ020-8 Lab Sample ID: 280-159332-6

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 17:15

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.034	0.10	0.050	0.022	mg/L	J		1	350.1
Nitrogen, Total Kjeldahl	4.3	1.0	0.80	0.69	mg/L			1	351.2
Nitrate Nitrite as N	16	0.50	0.25	0.095	mg/L			5	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	1	9056A
Total Alkalinity as CaCO3	330	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ020-8 Lab Sample ID: 280-159332-6

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 17:15

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.0	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0077-8 Lab Sample ID: 280-159332-7

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 14:40

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	4.6	1.0	0.80	0.69	mg/L			1	351.2
Nitrate Nitrite as N	12	0.50	0.25	0.095	mg/L			5	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	300	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0077-8 Lab Sample ID: 280-159332-7

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 14:40

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.5	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0078-8 Lab Sample ID: 280-159332-8

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 16:00

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.19	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	3.0	1.0	0.80	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.022	0.10	0.050	0.019	mg/L	J		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	260	25	13	5.2	mg/L		D M	5	9056A
Total Alkalinity as CaCO3	320	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0078-8 Lab Sample ID: 280-159332-8

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 16:00

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.1	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0094-8 Lab Sample ID: 280-159332-9

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 10:00

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	3.3	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	2.8	1.0	0.80	0.69	mg/L			1	351.2
Nitrate Nitrite as N	12	0.20	0.10	0.038	mg/L			2	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	130	5.0	2.5	1.0	mg/L		M	1	9056A
Total Alkalinity as CaCO3	300	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0094-8 Lab Sample ID: 280-159332-9

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 10:00

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	6.4	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ018-8 Lab Sample ID: 280-159332-10

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 10:40

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	2.9	1.0	0.50	0.22	mg/L			10	350.1
Nitrogen, Total Kjeldahl	12	1.7	1.3	1.1	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	12	5.0	2.5	1.0	mg/L		M	1	9056A
Total Alkalinity as CaCO3	550	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ018-8 Lab Sample ID: 280-159332-10

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 10:40

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	22	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ017R-8 Lab Sample ID: 280-159332-11

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 11:45

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.67	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	15	5.0	4.0	3.4	mg/L		D	5	351.2
Nitrate Nitrite as N	5.8	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	72	5.0	2.5	1.0	mg/L		M	1	9056A
Total Alkalinity as CaCO3	450	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ017R-8 Lab Sample ID: 280-159332-11

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 11:45

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	7.4	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ021-8 Lab Sample ID: 280-159332-12

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 08:00

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.84	1.0	0.50	0.22	mg/L	J		10	350.1
Nitrogen, Total Kjeldahl	1.5	1.0	0.80	0.69	mg/L			1	351.2
Nitrate Nitrite as N	5.8	0.10	0.050	0.019	mg/L		J1	1	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	73	5.0	2.5	1.0	mg/L		M	1	9056A
Total Alkalinity as CaCO3	460	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ021-8 Lab Sample ID: 280-159332-12

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 08:00

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	7.2	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ019-8 Lab Sample ID: 280-159332-13

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 09:10

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	0.80	1.0	0.80	0.69	mg/L	U	J1	1	351.2
Nitrate Nitrite as N	48	2.0	1.0	0.38	mg/L			20	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	83	5.0	2.5	1.0	mg/L		M	1	9056A
Total Alkalinity as CaCO3	140	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ019-8 Lab Sample ID: 280-159332-13

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG ID.:

Matrix: Water Date Sampled: 03/01/2022 09:10

Reporting Basis: WET Date Received: 03/03/2022 09:25

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	2.2	1.0	0.80	0.35	mg/L			1	9060A

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Analyst: JJM Batch Start Date: 03/18/2022

Reporting Units: mg/L Analytical Batch No.: 569103

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	13:47	Ammonia	0.486	0.501	97	90-110		350.1 ICV_00509
15	ICV	13:49	Ammonia	2.51	2.51	100	90-110		350.1 ICV_00509
16	ICB	13:51	Ammonia	0.050				U	
33	CCVL	14:25	Ammonia	0.529	0.500	106	90-110		350.1 cal_00525
35	CCB	14:29	Ammonia	0.0293				J	
37	CCV	14:38	Ammonia	2.51	2.50	101	90-110		350.1 cal_00525
52	CCVL	15:08	Ammonia	0.511	0.500	102	90-110		350.1 cal_00525
53	CCV	15:10	Ammonia	2.53	2.50	101	90-110		350.1 cal_00525
54	CCB	15:12	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.: 280-159332-1

SDG No.:

Analyst: JJM Batch Start Date: 03/19/2022

Reporting Units: mg/L Analytical Batch No.: 569144

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	10:29	Ammonia	0.491	0.501	98	90-110		350.1 ICV_00509
15	ICV	10:31	Ammonia	2.52	2.51	101	90-110		350.1 ICV_00509
16	ICB	10:33	Ammonia	0.050				U	
33	CCVL	11:07	Ammonia	0.507	0.500	101	90-110		350.1 cal_00525
34	CCV	11:09	Ammonia	2.52	2.50	101	90-110		350.1 cal_00525
35	CCB	11:11	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.: 280-159332-1

SDG No.:

Analyst: SVC Batch Start Date: 03/14/2022

Reporting Units: mg/L Analytical Batch No.: 568623

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
7	ICV	17:02	Nitrogen, Total Kjeldahl	5.27	5.00	105	90-110		TKN ICV 25_00115
8	ICB	17:02	Nitrogen, Total Kjeldahl	1.0				U	
33	CCV	17:13	Nitrogen, Total Kjeldahl	5.39	5.00	108	90-110		TKN 25ppm_00829
34	CCB	17:13	Nitrogen, Total Kjeldahl	1.0				U	
45	CCV	17:19	Nitrogen, Total Kjeldahl	5.37	5.00	107	90-110		TKN 25ppm_00829
46	CCB	17:19	Nitrogen, Total Kjeldahl	1.0				U	
53	CCV	17:23	Nitrogen, Total Kjeldahl	5.34	5.00	107	90-110		TKN 25ppm_00829
54	CCB	17:23	Nitrogen, Total Kjeldahl	1.0				U	
57	CCV	17:58	Nitrogen, Total Kjeldahl	5.36	5.00	107	90-110		TKN 25ppm_00829
58	CCB	17:58	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.: 280-159332-1

SDG No.:

Analyst: SVC Batch Start Date: 03/15/2022

Reporting Units: mg/L Analytical Batch No.: 568761

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	ICV	16:37	Nitrate Nitrite as N	5.12	5.00	102	90-110		NXN ICV INT_00590
18	ICVL	16:39	Nitrate Nitrite as N	2.20	2.00	110	90-110		NXN ICV INT_00590
19	ICB	16:41	Nitrate Nitrite as N	0.050				U	
35	CCV	17:13	Nitrate Nitrite as N	4.92	5.00	98	90-110		NXN CAL INT_00614
37	CCB	17:17	Nitrate Nitrite as N	0.050				U	
51	CCV	17:45	Nitrate Nitrite as N	5.01	5.00	100	90-110		NXN CAL INT_00614
52	CCVL	17:47	Nitrate Nitrite as N	1.04	1.00	104	90-110		NXN CAL INT_00614
53	CCB	17:49	Nitrate Nitrite as N	0.050				U	
68	CCV	18:19	Nitrate Nitrite as N	4.98	5.00	100	90-110		NXN CAL INT_00614
69	CCVL	18:21	Nitrate Nitrite as N	1.06	1.00	106	90-110		NXN CAL INT_00614
84	CCV	18:51	Nitrate Nitrite as N	4.93	5.00	99	90-110		NXN CAL INT_00614
85	CCVL	18:53	Nitrate Nitrite as N	1.04	1.00	104	90-110		NXN CAL INT_00614
86	CCB	18:55	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.: 280-159332-1

SDG No.:

Analyst: SVC Batch Start Date: 03/20/2022

Reporting Units: mg/L Analytical Batch No.: 569157

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	ICV	15:54	Nitrate Nitrite as N	5.08	5.00	102	90-110		NXN ICV INT_00590
18	ICVL	15:56	Nitrate Nitrite as N	2.04	2.00	102	90-110		NXN ICV INT_00590
19	ICB	15:58	Nitrate Nitrite as N	0.050				U	
35	CCV	16:30	Nitrate Nitrite as N	4.97	5.00	99	90-110		NXN CAL INT_00614
36	CCVL	16:32	Nitrate Nitrite as N	1.05	1.00	105	90-110		NXN CAL INT_00614
37	CCB	16:34	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.: 280-159332-1

SDG No.:

Analyst: CJ Batch Start Date: 03/16/2022

Reporting Units: mg/L Analytical Batch No.: 568842

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICV	15:49	Sulfate	85.4	80.0	107	90-110		IC SO4 ICV_00022
9	ICB	16:04	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.: 280-159332-1

SDG No.:

Analyst: RAF Batch Start Date: 03/18/2022

Reporting Units: mg/L Analytical Batch No.: 568946

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
41	CCV	00:49	Sulfate	97.2	100	97	90-110		IC LCS_01863
42	CCB	01:04	Sulfate	2.5				U	
53	CCV	03:48	Sulfate	97.4	100	97	90-110		IC LCS_01863
54	CCB	04:03	Sulfate	2.5				U	
65	CCV	06:49	Sulfate	97.8	100	98	90-110		IC LCS_01863
66	CCB	07:04	Sulfate	2.5				U	
77	CCV	09:49	Sulfate	98.0	100	98	90-110		IC LCS_01863
78	CCB	10:04	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.: 280-159332-1

SDG No.:

Analyst: ABW Batch Start Date: 03/14/2022

Reporting Units: mg/L Analytical Batch No.: 568667

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
2	ICV	17:02	Dissolved Organic Carbon - Quad	20.3	20.0	101	90-110		TOC ICV Std_00049
3	ICB	17:16	Dissolved Organic Carbon - Quad	0.80				U	
16	CCV	20:57	Dissolved Organic Carbon - Quad	24.4	25.0	97	90-110		TOC LCS Std_00053
17	CCB	21:14	Dissolved Organic Carbon - Quad	0.80				U	
28	CCV	00:32	Dissolved Organic Carbon - Quad	25.2	25.0	101	90-110		TOC LCS Std_00053
29	CCB	00:47	Dissolved Organic Carbon - Quad	0.80				U	
40	CCV	03:54	Dissolved Organic Carbon - Quad	25.3	25.0	101	90-110		TOC LCS Std_00053
41	CCB	04:08	Dissolved Organic Carbon - Quad	0.80				U	
44	CCV	04:51	Dissolved Organic Carbon - Quad	25.5	25.0	102	90-110		TOC LCS Std_00053
45	CCB	05:07	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.: 280-159332-1

SDG No.:

Analyst: KEG Batch Start Date: 03/08/2022

Reporting Units: mg/L Analytical Batch No.: 568099

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	CCV	16:53	Total Alkalinity as CaCO3	198	200	99	90-110		Alk daily lcs 01028
18	CCB	16:59	Total Alkalinity as CaCO3	6.4				U	
29	CCV	18:30	Total Alkalinity as CaCO3	197	200	99	90-110		Alk daily lcs 01028
30	CCB	18:36	Total Alkalinity as CaCO3	6.4				U	
43	CCV	20:15	Total Alkalinity as CaCO3	199	200	99	90-110		Alk daily lcs 01028
44	CCB	20:21	Total Alkalinity as CaCO3	6.4				U	
55	CCV	22:01	Total Alkalinity as CaCO3	201	200	100	90-110		Alk daily lcs 01028
56	CCB	22:06	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.: 280-159332-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 569103 Date: 03/18/2022 13:59							
350.1	MB 280-569103/20	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 569144 Date: 03/19/2022 10:41							
350.1	MB 280-569144/20	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 568623 Date: 03/14/2022 17:10 Prep Batch: 568332 Date: 03/10/2022 16:01							
351.2	MB 280-568332/2-A	Nitrogen, Total Kjeldahl	0.80	U	mg/L	1.0	1
Batch ID: 568761 Date: 03/15/2022 16:47							
353.2	MB 280-568761/22	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 568761 Date: 03/15/2022 18:03							
353.2	MB 280-568761/60	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 569157 Date: 03/20/2022 16:04							
353.2	MB 280-569157/22	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 567935 Date: 03/07/2022 18:33 Prep Batch: 567934 Date: 03/07/2022 18:33							
9034	MB 280-567934/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 568064 Date: 03/08/2022 16:59 Prep Batch: 568018 Date: 03/08/2022 12:04							
9034	MB 280-568018/2-A	Sulfide	0.800	J	mg/L	4.0	1
Batch ID: 568065 Date: 03/08/2022 17:04 Prep Batch: 568024 Date: 03/08/2022 12:47							
9034	MB 280-568024/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 568946 Date: 03/18/2022 02:18							
9056A	MB 280-568946/47	Sulfate	2.5	U M	mg/L	5.0	1
Batch ID: 568667 Date: 03/14/2022 17:47							
9060A	MB 280-568667/5	Dissolved Organic Carbon - Quad	0.80	U	mg/L	1.0	1
Batch ID: 568667 Date: 03/14/2022 18:34							
9060A	MB 280-568571/2-A	Dissolved Organic Carbon - Quad	0.80	U	mg/L	1.0	1
Batch ID: 568099 Date: 03/08/2022 15:03							
SM 2320B	MB 280-568099/6	Total Alkalinity as CaCO3	6.4	U	mg/L	10	1
Batch ID: 568099 Date: 03/08/2022 18:48							
SM 2320B	MB 280-568099/32	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.: 280-159332-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 569103 Date: 03/18/2022 14:03											
350.1	280-159332-13	Ammonia	0.050	U	mg/L						
350.1	280-159332-13 MS	Ammonia	1.02		mg/L	1.00	102	90-110			
Batch ID: 568623 Date: 03/14/2022 17:17 Prep Batch: 568332 Date: 03/10/2022 16:01											
351.2	280-159332-13	Nitrogen, Total Kjeldahl	0.80	U	mg/L						J1
351.2	280-159332-13 MS	Nitrogen, Total Kjeldahl	2.64		mg/L	3.00	88	90-110			J1
Batch ID: 568761 Date: 03/15/2022 18:07											
353.2	280-159332-13	Nitrate Nitrite as N	48		mg/L						
353.2	280-159332-13 MS	Nitrate Nitrite as N	123		mg/L	80.0	95	90-110			
Batch ID: 568761 Date: 03/15/2022 18:43											
353.2	280-159332-12	Nitrate Nitrite as N	5.8		mg/L						J1
353.2	280-159332-12 MS	Nitrate Nitrite as N	9.07		mg/L	4.00	83	90-110			J1
Batch ID: 567935 Date: 03/07/2022 18:33 Prep Batch: 567934 Date: 03/07/2022 18:33											
9034	280-159332-2	Sulfide	0.80	J	mg/L						
9034	280-159332-2 MS	Sulfide	21.6		mg/L	23.6	88	44-110			
Batch ID: 568065 Date: 03/08/2022 17:04 Prep Batch: 568024 Date: 03/08/2022 13:48											
9034	280-159332-13	Sulfide	0.80	J	mg/L						
9034	280-159332-13 MS	Sulfide	19.2		mg/L	23.6	78	44-110			
Batch ID: 568946 Date: 03/18/2022 03:03											
9056A	280-159332-1	Sulfate	170		mg/L						M
9056A	280-159332-1 MS	Sulfate	219		mg/L	50.0	100	87-112			M J1
Batch ID: 568946 Date: 03/18/2022 08:19											
9056A	280-159332-13	Sulfate	83		mg/L						M
9056A	280-159332-13 MS	Sulfate	136		mg/L	50.0	104	87-112			M
Batch ID: 568667 Date: 03/14/2022 23:23											
9060A	280-159332-1	Dissolved Organic Carbon - Quad	5.9		mg/L						
9060A	280-159332-1 MS	Dissolved Organic Carbon - Quad	30.1		mg/L	25.0	97	88-112			
Batch ID: 568667 Date: 03/15/2022 04:22											
9060A	280-159332-13	Dissolved Organic Carbon - Quad	2.2		mg/L						
9060A	280-159332-13 MS	Dissolved Organic Carbon - Quad	27.3		mg/L	25.0	100	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.: 280-159332-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 569103 Date: 03/18/2022 14:05											
350.1	280-159332-13 MSD	Ammonia	1.05		mg/L	1.00	105	90-110	3	10	
Batch ID: 568623 Date: 03/14/2022 17:17			Prep Batch: 568332			Date: 03/10/2022 16:01					
351.2	280-159332-13 MSD	Nitrogen, Total Kjeldahl	2.63		mg/L	3.00	88	90-110	0	25	J1
Batch ID: 568761 Date: 03/15/2022 18:09											
353.2	280-159332-13 MSD	Nitrate Nitrite as N	124		mg/L	80.0	95	90-110	0	10	
Batch ID: 568761 Date: 03/15/2022 18:45											
353.2	280-159332-12 MSD	Nitrate Nitrite as N	9.05		mg/L	4.00	82	90-110	0	10	J1
Batch ID: 567935 Date: 03/07/2022 18:33			Prep Batch: 567934			Date: 03/07/2022 18:33					
9034	280-159332-2 MSD	Sulfide	20.8		mg/L	23.6	85	44-110	4	20	
Batch ID: 568065 Date: 03/08/2022 17:04			Prep Batch: 568024			Date: 03/08/2022 13:48					
9034	280-159332-13 MSD	Sulfide	19.2		mg/L	23.6	78	44-110	0	20	
Batch ID: 568946 Date: 03/18/2022 03:18											
9056A	280-159332-1 MSD	Sulfate	219		mg/L	50.0	101	87-112	0	10	M J1
Batch ID: 568946 Date: 03/18/2022 08:34											
9056A	280-159332-13 MSD	Sulfate	137		mg/L	50.0	108	87-112	1	10	M
Batch ID: 568667 Date: 03/14/2022 23:42											
9060A	280-159332-1 MSD	Dissolved Organic Carbon - Quad	29.9		mg/L	25.0	96	88-112	1	15	
Batch ID: 568667 Date: 03/15/2022 04:37											
9060A	280-159332-13 MSD	Dissolved Organic Carbon - Quad	26.8		mg/L	25.0	98	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.: 280-159332-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 568946	Date: 03/18/2022 02:48							
9056A	G0081-8	280-159332-1	Sulfate	170	mg/L			
9056A	G0081-8	280-159332-1 DU	Sulfate	169	mg/L	0.5	10	M
Batch ID: 568946	Date: 03/18/2022 08:04							
9056A	PZ019-8	280-159332-13	Sulfate	83	mg/L			
9056A	PZ019-8	280-159332-13 DU	Sulfate	82.4	mg/L	1	10	M
Batch ID: 568099	Date: 03/08/2022 19:04							
SM 2320B	G0096-8	280-159332-4	Total Alkalinity as CaCO3	400	mg/L			
SM 2320B	G0096-8	280-159332-4 DU	Total Alkalinity as CaCO3	397	mg/L	0.2	10	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 569103	Date: 03/18/2022 13:55										
						LCS Source: 350.1 cal_00525					
350.1	LCS 280-569103/18	Ammonia	2.55		mg/L	2.50	102	90-110	2	10	
Batch ID: 569144	Date: 03/19/2022 10:37										
						LCS Source: 350.1 cal_00525					
350.1	LCS 280-569144/18	Ammonia	2.50		mg/L	2.50	100	90-110	1	10	
Batch ID: 568623	Date: 03/14/2022 17:10	Prep Batch: 568332	Date: 03/10/2022 16:01								
						LCS Source: TKN 25ppm_00829					
351.2	LCS 280-568332/1-A	Nitrogen, Total Kjeldahl	5.78		mg/L	6.00	96	90-110			
Batch ID: 568761	Date: 03/15/2022 16:45										
						LCS Source: NXN CAL INT_00614					
353.2	LCS 280-568761/21	Nitrate Nitrite as N	4.97		mg/L	5.00	99	90-110			
Batch ID: 568761	Date: 03/15/2022 18:01										
						LCS Source: NXN CAL INT_00614					
353.2	LCS 280-568761/59	Nitrate Nitrite as N	5.01		mg/L	5.00	100	90-110			
Batch ID: 569157	Date: 03/20/2022 16:02										
						LCS Source: NXN CAL INT_00614					
353.2	LCS 280-569157/21	Nitrate Nitrite as N	5.04		mg/L	5.00	101	90-110			
Batch ID: 567935	Date: 03/07/2022 18:33	Prep Batch: 567934	Date: 03/07/2022 18:33								
						LCS Source: SFD ICV INT_02090					
9034	LCS 280-567934/1-A	Sulfide	20.0		mg/L	23.6	85	44-110			
Batch ID: 568064	Date: 03/08/2022 16:59	Prep Batch: 568018	Date: 03/08/2022 12:04								
						LCS Source: SFD ICV INT_02091					
9034	LCS 280-568018/1-A	Sulfide	16.8		mg/L	23.6	71	44-110			
Batch ID: 568065	Date: 03/08/2022 17:04	Prep Batch: 568024	Date: 03/08/2022 12:47								
						LCS Source: SFD ICV INT_02091					
9034	LCS 280-568024/1-A	Sulfide	19.2		mg/L	23.6	81	44-110			
Batch ID: 568946	Date: 03/18/2022 01:49										
						LCS Source: IC LCS_01863					
9056A	LCS 280-568946/45	Sulfate	97.4		mg/L	100	97	87-112	0	10	M
Batch ID: 568667	Date: 03/14/2022 17:33										
						LCS Source: TOC LCS Std_00053					
9060A	LCS 280-568667/4	Dissolved Organic Carbon - Quad	24.8		mg/L	25.0	99	88-112			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 568667	Date: 03/14/2022 18:20										
						LCS Source: TOC LCS Std_00053					
9060A	LCS 280-568571/1-A	Dissolved Organic Carbon - Quad	25.7		mg/L	25.0	103	88-112			
Batch ID: 568099	Date: 03/08/2022 14:50										
						LCS Source: Alk daily lcs_01028					
SM 2320B	LCS 280-568099/4	Total Alkalinity as CaCO3	198		mg/L	200	99	89-109	0	10	
Batch ID: 568099	Date: 03/08/2022 18:43										
						LCS Source: Alk daily lcs_01028					
SM 2320B	LCS 280-568099/31	Total Alkalinity as CaCO3	200		mg/L	200	100	89-109			

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.: 280-159332-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 569103	Date: 03/18/2022 13:57										
						LCSD Source: 350.1 cal_00525					
350.1	LCSD 280-569103/19	Ammonia	2.51		mg/L	2.50	100	90-110	2	10	
Batch ID: 569144	Date: 03/19/2022 10:39										
						LCSD Source: 350.1 cal_00525					
350.1	LCSD 280-569144/19	Ammonia	2.54		mg/L	2.50	102	90-110	1	10	
Batch ID: 568946	Date: 03/18/2022 02:04										
						LCSD Source: IC LCS_01863					
9056A	LCSD 280-568946/46	Sulfate	97.4		mg/L	100	97	87-112	0	10	M
Batch ID: 568099	Date: 03/08/2022 14:57										
						LCSD Source: Alk daily lcs_01028					
SM 2320B	LCSD 280-568099/5	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.: 280-159332-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 568946	Date: 03/17/2022 12:37										
						LCS Source: IC CAL cl/so4_00411					
9056A	MRL 280-568946/3	Sulfate	4.03	J	mg/L	5.00	81	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: 280-159332-1

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: 280-159332-1

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: 280-159332-1

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: 280-159332-1

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: 280-159332-1

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: 280-159332-1

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: 280-159332-1

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: 280-159332-1

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: 280-159332-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom13

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: 280-159332-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom13

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: 280-159332-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI5

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: 280-159332-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI5

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: 280-159332-1

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: 280-159332-1

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.: 280-159332-1

SDG No.:

Prep Method: 351.2

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-568332/1-A	03/10/2022 16:01	568332		25	25
MB 280-568332/2-A	03/10/2022 16:01	568332		25	25
280-159332-1	03/10/2022 16:01	568332		25	25
280-159332-2	03/10/2022 16:01	568332		25	25
280-159332-3	03/10/2022 16:01	568332		25	25
280-159332-4	03/10/2022 16:01	568332		25	25
280-159332-13	03/10/2022 16:01	568332		25	25
280-159332-13 MS	03/10/2022 16:01	568332		25	25
280-159332-13 MSD	03/10/2022 16:01	568332		25	25
280-159332-5	03/10/2022 16:01	568332		25	25
280-159332-6	03/10/2022 16:01	568332		25	25
280-159332-7	03/10/2022 16:01	568332		25	25
280-159332-8	03/10/2022 16:01	568332		25	25
280-159332-9	03/10/2022 16:01	568332		25	25
280-159332-10	03/10/2022 16:01	568332		15	25
280-159332-11	03/10/2022 16:01	568332		25	25
280-159332-12	03/10/2022 16:01	568332		25	25

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-567934/1-A	03/07/2022 18:33	567934		50	50
MB 280-567934/2-A	03/07/2022 18:33	567934		50	50
280-159332-2	03/07/2022 18:33	567934		50	50
280-159332-2 MS	03/07/2022 18:33	567934		50	50
280-159332-2 MSD	03/07/2022 18:33	567934		50	50
280-159332-3	03/07/2022 18:33	567934		50	50
280-159332-4	03/07/2022 18:33	567934		50	50
280-159332-5	03/07/2022 18:33	567934		50	50
280-159332-6	03/07/2022 18:33	567934		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-568018/1-A	03/08/2022 12:04	568018		50	50
MB 280-568018/2-A	03/08/2022 12:04	568018		50	50
280-159332-1	03/08/2022 13:04	568018		50	50
280-159332-7	03/08/2022 13:04	568018		50	50
280-159332-8	03/08/2022 13:04	568018		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-568024/1-A	03/08/2022 12:47	568024		50	50
MB 280-568024/2-A	03/08/2022 12:47	568024		50	50
280-159332-13	03/08/2022 13:48	568024		50	50
280-159332-13 MS	03/08/2022 13:48	568024		50	50
280-159332-13 MSD	03/08/2022 13:48	568024		50	50
280-159332-9	03/08/2022 13:48	568024		50	50
280-159332-10	03/08/2022 13:48	568024		50	50
280-159332-11	03/08/2022 13:48	568024		50	50
280-159332-12	03/08/2022 13:48	568024		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 03/18/2022 13:21 End Date: 03/18/2022 16:17

Lab Sample Id	D/F	Type	Time	Analytes
				NH3
ZZZZZZ			13:21	
ZZZZZZ			13:23	
ZZZZZZ			13:25	
IC 280-569103/4			13:27	X
IC 280-569103/5			13:29	X
IC 280-569103/6			13:31	X
IC 280-569103/7			13:33	X
IC 280-569103/8			13:35	X
IC 280-569103/9			13:37	X
IC 280-569103/10			13:39	X
IC 280-569103/11			13:41	X
ZZZZZZ			13:43	
ZZZZZZ			13:45	
ICVL 280-569103/14	1		13:47	X
ICV 280-569103/15	1		13:49	X
ICB 280-569103/16	1		13:51	X
ZZZZZZ			13:53	
LCS 280-569103/18	1	T	13:55	X
LCSD 280-569103/19	1	T	13:57	X
MB 280-569103/20	1	T	13:59	X
280-159332-13	1	T	14:01	X
280-159332-13 MS	1	T	14:03	X
280-159332-13 MSD	1	T	14:05	X
ZZZZZZ			14:07	
280-159332-1	1	T	14:09	X
280-159332-2	1	T	14:11	X
280-159332-3	1	T	14:13	X
ZZZZZZ			14:15	
ZZZZZZ			14:17	
280-159332-6	1	T	14:19	X
ZZZZZZ			14:21	
ZZZZZZ			14:23	
CCVL 280-569103/33	1		14:25	X
ZZZZZZ			14:27	
CCB 280-569103/35	1		14:29	X
ZZZZZZ			14:31	
CCV 280-569103/37	1		14:38	X
ZZZZZZ			14:40	
ZZZZZZ			14:42	
280-159332-7	1	T	14:44	X
280-159332-8	1	T	14:46	X

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 03/18/2022 13:21 End Date: 03/18/2022 16:17

Lab Sample Id	D/F	Type	Time	Analytes
				NH3
ZZZZZZ			14:48	
ZZZZZZ			14:50	
ZZZZZZ			14:52	
280-159332-10	10	T	14:54	X
280-159332-12	10	T	14:56	X
ZZZZZZ			14:58	
280-159332-11	1	T	15:00	X
ZZZZZZ			15:02	
ZZZZZZ			15:04	
ZZZZZZ			15:06	
CCVL 280-569103/52	1		15:08	X
CCV 280-569103/53	1		15:10	X
CCB 280-569103/54	1		15:12	X
ZZZZZZ			15:14	
ZZZZZZ			15:16	
ZZZZZZ			15:18	
ZZZZZZ			15:20	
ZZZZZZ			15:22	
ZZZZZZ			15:24	
ZZZZZZ			15:26	
ZZZZZZ			15:28	
ZZZZZZ			15:30	
ZZZZZZ			15:32	
ZZZZZZ			15:34	
ZZZZZZ			15:36	
ZZZZZZ			15:38	
CCVL 280-569103/68			15:40	
CCV 280-569103/69			15:42	
CCB 280-569103/70			15:44	
ZZZZZZ			15:46	
ZZZZZZ			15:48	
ZZZZZZ			15:50	
ZZZZZZ			15:52	
ZZZZZZ			15:58	
ZZZZZZ			16:06	
ZZZZZZ			16:08	
CCVL 280-569103/78			16:10	
CCV 280-569103/79			16:12	
CCB 280-569103/80			16:14	
ZZZZZZ			16:17	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 03/18/2022 13:21 End Date: 03/18/2022 16:17

Lab Sample Id	D/F	Type	Time	Analytes																									
				NH3																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 03/19/2022 10:03 End Date: 03/19/2022 13:28

Lab Sample Id	D/F	Type	Time	Analytes
				NH3
ZZZZZZ			10:03	
ZZZZZZ			10:05	
ZZZZZZ			10:07	
IC 280-569144/4			10:09	X
IC 280-569144/5			10:11	X
IC 280-569144/6			10:13	X
IC 280-569144/7			10:15	X
IC 280-569144/8			10:17	X
IC 280-569144/9			10:19	X
IC 280-569144/10			10:21	X
IC 280-569144/11			10:23	X
ZZZZZZ			10:25	
ZZZZZZ			10:27	
ICVL 280-569144/14	1		10:29	X
ICV 280-569144/15	1		10:31	X
ICB 280-569144/16	1		10:33	X
ZZZZZZ			10:35	
LCS 280-569144/18	1	T	10:37	X
LCSD 280-569144/19	1	T	10:39	X
MB 280-569144/20	1	T	10:41	X
ZZZZZZ			10:43	
ZZZZZZ			10:45	
ZZZZZZ			10:47	
ZZZZZZ			10:49	
280-159332-4	1	T	10:51	X
280-159332-5	1	T	10:53	X
280-159332-9	1	T	10:55	X
ZZZZZZ			10:57	
ZZZZZZ			10:59	
ZZZZZZ			11:01	
ZZZZZZ			11:03	
ZZZZZZ			11:05	
CCVL 280-569144/33	1		11:07	X
CCV 280-569144/34	1		11:09	X
CCB 280-569144/35	1		11:11	X
ZZZZZZ			11:13	
ZZZZZZ			11:15	
ZZZZZZ			11:17	
ZZZZZZ			11:19	
ZZZZZZ			11:21	
ZZZZZZ			11:23	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 03/19/2022 10:03 End Date: 03/19/2022 13:28

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			11:25																									
ZZZZZZ			11:27																									
ZZZZZZ			11:29																									
ZZZZZZ			11:31																									
ZZZZZZ			11:33																									
ZZZZZZ			11:35																									
ZZZZZZ			11:37																									
CCVL 280-569144/49			11:39																									
CCV 280-569144/50			11:41																									
CCB 280-569144/51			11:43																									
ZZZZZZ			11:45																									
ZZZZZZ			11:47																									
ZZZZZZ			11:49																									
ZZZZZZ			11:51																									
ZZZZZZ			11:53																									
ZZZZZZ			11:55																									
ZZZZZZ			11:57																									
ZZZZZZ			11:59																									
ZZZZZZ			12:01																									
ZZZZZZ			12:03																									
ZZZZZZ			12:05																									
ZZZZZZ			12:07																									
ZZZZZZ			12:09																									
CCVL 280-569144/65			12:11																									
CCV 280-569144/66			12:13																									
CCB 280-569144/67			12:15																									
ZZZZZZ			12:17																									
ZZZZZZ			12:19																									
ZZZZZZ			12:21																									
ZZZZZZ			12:23																									
ZZZZZZ			12:25																									
ZZZZZZ			12:27																									
ZZZZZZ			12:29																									
ZZZZZZ			12:31																									
ZZZZZZ			12:33																									
ZZZZZZ			12:35																									
ZZZZZZ			12:37																									
ZZZZZZ			12:39																									
ZZZZZZ			12:41																									
CCVL 280-569144/81			12:43																									
CCV 280-569144/82			12:45																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 03/19/2022 10:03 End Date: 03/19/2022 13:28

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
CCB 280-569144/83			12:47																									
ZZZZZZ			12:49																									
ZZZZZZ			12:51																									
ZZZZZZ			12:53																									
ZZZZZZ			13:04																									
ZZZZZZ			13:06																									
ZZZZZZ			13:08																									
ZZZZZZ			13:10																									
ZZZZZZ			13:18																									
ZZZZZZ			13:20																									
CCVL 280-569144/93			13:22																									
CCV 280-569144/94			13:24																									
CCB 280-569144/95			13:26																									
ZZZZZZ			13:28																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_GAL1 Analysis Method: 351.2

Start Date: 02/22/2022 16:21 End Date: 03/14/2022 17:58

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		17:02	X																								
ICB 280-566632/22-A	1		17:02	X																								
ZZZZZZ			17:02																									
ZZZZZZ			17:02																									
ZZZZZZ			17:03																									
ZZZZZZ			17:03																									
ZZZZZZ			17:04																									
ZZZZZZ			17:04																									
ZZZZZZ			17:05																									
ZZZZZZ			17:05																									
ZZZZZZ			17:06																									
ZZZZZZ			17:06																									
ZZZZZZ			17:07																									
ZZZZZZ			17:07																									
CCV 280-566632/23-A			17:07																									
CCB 280-566632/24-A			17:08																									
ZZZZZZ			17:08																									
ZZZZZZ			17:08																									
LCS 280-568332/1-A	1	T	17:10	X																								
MB 280-568332/2-A	1	T	17:10	X																								
ZZZZZZ			17:10																									
ZZZZZZ			17:10																									
ZZZZZZ			17:11																									
ZZZZZZ			17:11																									
ZZZZZZ			17:12																									
ZZZZZZ			17:12																									
CCV 280-566632/23-A	1		17:13	X																								
CCB 280-566632/24-A	1		17:13	X																								
ZZZZZZ			17:14																									
ZZZZZZ			17:14																									
280-159332-1	1	T	17:15	X																								
280-159332-2	1	T	17:15	X																								
280-159332-3	1	T	17:16	X																								
280-159332-4	1	T	17:16	X																								
280-159332-13	1	T	17:16	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_GAL1 Analysis Method: 351.2

Start Date: 02/22/2022 16:21 End Date: 03/14/2022 17:58

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
280-159332-13 MS	1	T	17:17	X																								
280-159332-13 MSD	1	T	17:17	X																								
280-159332-5	1	T	17:17	X																								
CCV 280-566632/23-A	1		17:19	X																								
CCB 280-566632/24-A	1		17:19	X																								
280-159332-6	1	T	17:19	X																								
280-159332-7	1	T	17:19	X																								
280-159332-8	1	T	17:20	X																								
280-159332-9	1	T	17:20	X																								
280-159332-10	1	T	17:21	X																								
280-159332-12	1	T	17:22	X																								
CCV 280-566632/23-A	1		17:23	X																								
CCB 280-566632/24-A	1		17:23	X																								
280-159332-11	5	T	17:34	X																								
ZZZZZZ			17:35																									
CCV 280-566632/23-A	1		17:58	X																								
CCB 280-566632/24-A	1		17:58	X																								

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 03/15/2022 16:05 End Date: 03/15/2022 18:57

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			16:05	
ZZZZZZ			16:07	
ZZZZZZ			16:09	
ZZZZZZ			16:11	
IC 280-568761/5			16:13	X
IC 280-568761/6			16:15	X
IC 280-568761/7			16:17	X
IC 280-568761/8			16:19	X
IC 280-568761/9			16:21	X
IC 280-568761/10			16:23	X
IC 280-568761/11			16:25	X
IC 280-568761/12			16:27	X
IC 280-568761/13			16:29	X
ZZZZZZ			16:31	
ZZZZZZ			16:33	
ZZZZZZ			16:35	
ICV 280-568761/17	1		16:37	X
ICVL 280-568761/18	1		16:39	X
ICB 280-568761/19	1		16:41	X
ZZZZZZ			16:43	
LCS 280-568761/21	1	T	16:45	X
MB 280-568761/22	1	T	16:47	X
ZZZZZZ			16:49	
ZZZZZZ			16:51	
ZZZZZZ			16:53	
ZZZZZZ			16:55	
ZZZZZZ			16:57	
ZZZZZZ			16:59	
ZZZZZZ			17:01	
ZZZZZZ			17:03	
ZZZZZZ			17:05	
ZZZZZZ			17:07	
RINSE 280-568761/33			17:09	
ZZZZZZ			17:11	
CCV 280-568761/35	1		17:13	X
CCVL 280-568761/36			17:15	
CCB 280-568761/37	1		17:17	X
ZZZZZZ			17:19	
ZZZZZZ			17:21	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 03/15/2022 16:05 End Date: 03/15/2022 18:57

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			17:23	
ZZZZZZ			17:25	
ZZZZZZ			17:27	
ZZZZZZ			17:29	
ZZZZZZ			17:31	
ZZZZZZ			17:33	
ZZZZZZ			17:35	
ZZZZZZ			17:37	
ZZZZZZ			17:39	
RINSE 280-568761/49			17:41	
ZZZZZZ			17:43	
CCV 280-568761/51	1		17:45	X
CCVL 280-568761/52	1		17:47	X
CCB 280-568761/53	1		17:49	X
ZZZZZZ			17:51	
ZZZZZZ			17:53	
ZZZZZZ			17:55	
280-159332-1	1	T	17:57	X
280-159332-2	1	T	17:59	X
LCS 280-568761/59	1	T	18:01	X
MB 280-568761/60	1	T	18:03	X
280-159332-13	20	T	18:05	X
280-159332-13 MS	20	T	18:07	X
280-159332-13 MSD	20	T	18:09	X
280-159332-3	5	T	18:11	X
280-159332-4	1	T	18:13	X
RINSE 280-568761/66			18:15	
ZZZZZZ			18:17	
CCV 280-568761/68	1		18:19	X
CCVL 280-568761/69	1		18:21	X
RINSE 280-568761/70			18:23	
ZZZZZZ			18:25	
280-159332-5	1	T	18:27	X
280-159332-6	5	T	18:29	X
280-159332-7	5	T	18:31	X
280-159332-8	1	T	18:33	X
ZZZZZZ			18:35	
280-159332-10	1	T	18:37	X
280-159332-11	1	T	18:39	X

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 03/15/2022 16:05 End Date: 03/15/2022 18:57

Lab Sample Id	D/F	Type	Time	Analytes																								
				NNO32																								
280-159332-12	1	T	18:41	X																								
280-159332-12 MS	1	T	18:43	X																								
280-159332-12 MSD	1	T	18:45	X																								
RINSE 280-568761/82			18:47																									
ZZZZZZ			18:49																									
CCV 280-568761/84	1		18:51	X																								
CCVL 280-568761/85	1		18:53	X																								
CCB 280-568761/86	1		18:55	X																								
ZZZZZZ			18:57																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 03/20/2022 15:22 End Date: 03/20/2022 18:44

Lab Sample Id	D/F	Type	Time	Analytes																								
				NNO32																								
ZZZZZZ			15:22																									
ZZZZZZ			15:24																									
ZZZZZZ			15:26																									
ZZZZZZ			15:28																									
IC 280-569157/5			15:30	X																								
IC 280-569157/6			15:32	X																								
IC 280-569157/7			15:34	X																								
IC 280-569157/8			15:36	X																								
IC 280-569157/9			15:38	X																								
IC 280-569157/10			15:40	X																								
IC 280-569157/11			15:42	X																								
IC 280-569157/12			15:44	X																								
IC 280-569157/13			15:46	X																								
ZZZZZZ			15:48																									
ZZZZZZ			15:50																									
ZZZZZZ			15:52																									
ICV 280-569157/17	1		15:54	X																								
ICVL 280-569157/18	1		15:56	X																								
ICB 280-569157/19	1		15:58	X																								
ZZZZZZ			16:00																									
LCS 280-569157/21	1	T	16:02	X																								
MB 280-569157/22	1	T	16:04	X																								
ZZZZZZ			16:06																									
ZZZZZZ			16:08																									
ZZZZZZ			16:10																									
ZZZZZZ			16:12																									
280-159332-9	2	T	16:14	X																								
ZZZZZZ			16:16																									
ZZZZZZ			16:18																									
ZZZZZZ			16:20																									
ZZZZZZ			16:22																									
ZZZZZZ			16:24																									
RINSE 280-569157/33			16:26																									
ZZZZZZ			16:28																									
CCV 280-569157/35	1		16:30	X																								
CCVL 280-569157/36	1		16:32	X																								
CCB 280-569157/37	1		16:34	X																								
ZZZZZZ			16:36																									
ZZZZZZ			16:38																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 03/20/2022 15:22 End Date: 03/20/2022 18:44

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			16:40	
ZZZZZZ			16:42	
ZZZZZZ			16:44	
ZZZZZZ			16:46	
ZZZZZZ			16:48	
ZZZZZZ			16:50	
ZZZZZZ			16:52	
ZZZZZZ			16:54	
ZZZZZZ			16:56	
RINSE 280-569157/49			16:58	
ZZZZZZ			17:00	
CCV 280-569157/51			17:02	
CCVL 280-569157/52			17:04	
CCB 280-569157/53			17:06	
ZZZZZZ			17:08	
ZZZZZZ			17:10	
ZZZZZZ			17:12	
ZZZZZZ			17:14	
ZZZZZZ			17:16	
ZZZZZZ			17:18	
ZZZZZZ			17:20	
ZZZZZZ			17:22	
ZZZZZZ			17:24	
ZZZZZZ			17:26	
ZZZZZZ			17:28	
RINSE 280-569157/65			17:30	
ZZZZZZ			17:32	
CCV 280-569157/67			17:34	
CCVL 280-569157/68			17:36	
CCB 280-569157/69			17:38	
ZZZZZZ			17:40	
ZZZZZZ			17:42	
ZZZZZZ			17:44	
ZZZZZZ			17:46	
ZZZZZZ			17:48	
ZZZZZZ			17:50	
ZZZZZZ			17:52	
ZZZZZZ			17:54	
ZZZZZZ			17:56	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 03/20/2022 15:22 End Date: 03/20/2022 18:44

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			17:58	
ZZZZZZ			18:00	
RINSE 280-569157/81			18:02	
ZZZZZZ			18:04	
CCV 280-569157/83			18:06	
CCVL 280-569157/84			18:08	
CCB 280-569157/85			18:10	
ZZZZZZ			18:12	
ZZZZZZ			18:14	
ZZZZZZ			18:16	
ZZZZZZ			18:18	
ZZZZZZ			18:20	
ZZZZZZ			18:22	
ZZZZZZ			18:24	
ZZZZZZ			18:26	
ZZZZZZ			18:28	
ZZZZZZ			18:30	
ZZZZZZ			18:32	
RINSE 280-569157/97			18:34	
ZZZZZZ			18:36	
CCV 280-569157/99			18:38	
CCVL 280-569157/100			18:40	
CCB 280-569157/101			18:42	
ZZZZZZ			18:44	

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 03/07/2022 18:33 End Date: 03/07/2022 18:33

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-567934/1-A	1	T	18:33	X																								
MB 280-567934/2-A	1	T	18:33	X																								
280-159332-2	1	T	18:33	X																								
280-159332-2 MS	1	T	18:33	X																								
280-159332-2 MSD	1	T	18:33	X																								
280-159332-3	1	T	18:33	X																								
280-159332-4	1	T	18:33	X																								
280-159332-5	1	T	18:33	X																								
280-159332-6	1	T	18:33	X																								
ZZZZZZ			18:33																									
ZZZZZZ			18:33																									
ZZZZZZ			18:33																									
ZZZZZZ			18:33																									
ZZZZZZ			18:33																									
ZZZZZZ			18:33																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 03/08/2022 16:59 End Date: 03/08/2022 16:59

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-568018/1-A	1	T	16:59	X																								
MB 280-568018/2-A	1	T	16:59	X																								
ZZZZZZ			16:59																									
ZZZZZZ			16:59																									
ZZZZZZ			16:59																									
ZZZZZZ			16:59																									
ZZZZZZ			16:59																									
ZZZZZZ			16:59																									
ZZZZZZ			16:59																									
ZZZZZZ			16:59																									
ZZZZZZ			16:59																									
ZZZZZZ			16:59																									
ZZZZZZ			16:59																									
280-159332-1	1	T	16:59	X																								
280-159332-7	1	T	16:59	X																								
280-159332-8	1	T	16:59	X																								

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 03/08/2022 17:04 End Date: 03/08/2022 17:04

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-568024/1-A	1	T	17:04	X																								
MB 280-568024/2-A	1	T	17:04	X																								
280-159332-13	1	T	17:04	X																								
280-159332-13 MS	1	T	17:04	X																								
280-159332-13 MSD	1	T	17:04	X																								
280-159332-9	1	T	17:04	X																								
280-159332-10	1	T	17:04	X																								
280-159332-11	1	T	17:04	X																								
280-159332-12	1	T	17:04	X																								
ZZZZZZ			17:04																									
ZZZZZZ			17:04																									
ZZZZZZ			17:04																									
ZZZZZZ			17:04																									
ZZZZZZ			17:04																									
ZZZZZZ			17:04																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 03/16/2022 14:19 End Date: 03/17/2022 01:35

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
STD 280-568842/2 IC	1		14:19	X																								
STD 280-568842/3 IC	1		14:34	X																								
STD 280-568842/4 IC	1		14:49	X																								
STD 280-568842/5 IC	1		15:04	X																								
STD 280-568842/6 IC	1		15:19	X																								
STD 280-568842/7 IC	1		15:34	X																								
ICV 280-568842/8	1		15:49	X																								
ICB 280-568842/9	1		16:04	X																								
ZZZZZZ			16:19																									
ZZZZZZ			16:34																									
ZZZZZZ			16:49																									
ZZZZZZ			17:04																									
ZZZZZZ			17:19																									
ZZZZZZ			17:34																									
ZZZZZZ			17:49																									
ZZZZZZ			18:04																									
ZZZZZZ			18:19																									
ZZZZZZ			18:34																									
ZZZZZZ			18:49																									
ZZZZZZ			19:04																									
ZZZZZZ			19:19																									
ZZZZZZ			19:34																									
CCV 280-568842/24			19:49																									
CCB 280-568842/25			20:05																									
ZZZZZZ			20:20																									
ZZZZZZ			20:35																									
ZZZZZZ			20:50																									
ZZZZZZ			21:05																									
ZZZZZZ			21:20																									
ZZZZZZ			21:35																									
ZZZZZZ			21:50																									
ZZZZZZ			22:05																									
ZZZZZZ			22:20																									
ZZZZZZ			22:35																									
CCV 280-568842/36			22:50																									
CCB 280-568842/37			23:05																									
ZZZZZZ			23:20																									
ZZZZZZ			23:35																									
ZZZZZZ			23:50																									
ZZZZZZ			00:05																									
ZZZZZZ			00:20																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 03/16/2022 14:19 End Date: 03/17/2022 01:35

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			00:35																									
ZZZZZZ			00:50																									
ZZZZZZ			01:05																									
CCV 280-568842/46			01:20																									
CCB 280-568842/47			01:35																									

Prep Types:
=

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 03/17/2022 12:07 End Date: 03/18/2022 10:04

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCV 280-568946/1			12:07																									
CCB 280-568946/2			12:22																									
MRL 280-568946/3	1	T	12:37	X																								
ZZZZZZ			12:52																									
ZZZZZZ			13:07																									
ZZZZZZ			13:22																									
ZZZZZZ			16:18																									
ZZZZZZ			16:33																									
ZZZZZZ			16:48																									
ZZZZZZ			17:03																									
ZZZZZZ			17:18																									
ZZZZZZ			17:33																									
ZZZZZZ			17:48																									
ZZZZZZ			18:03																									
ZZZZZZ			18:18																									
ZZZZZZ			18:33																									
CCV 280-568946/17			18:48																									
CCB 280-568946/18			19:03																									
ZZZZZZ			19:18																									
ZZZZZZ			19:33																									
ZZZZZZ			19:48																									
ZZZZZZ			20:03																									
ZZZZZZ			20:18																									
ZZZZZZ			20:33																									
ZZZZZZ			20:48																									
ZZZZZZ			21:03																									
ZZZZZZ			21:19																									
ZZZZZZ			21:34																									
CCV 280-568946/29			21:49																									
CCB 280-568946/30			22:04																									
ZZZZZZ			22:19																									
ZZZZZZ			22:34																									
ZZZZZZ			22:49																									
ZZZZZZ			23:04																									
ZZZZZZ			23:19																									
ZZZZZZ			23:34																									
ZZZZZZ			23:49																									
ZZZZZZ			00:04																									
ZZZZZZ			00:19																									
ZZZZZZ			00:34																									
CCV 280-568946/41	1		00:49	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Method: 9056A

Start Date: 03/17/2022 12:07 End Date: 03/18/2022 10:04

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCB 280-568946/42	1		01:04	X																								
ZZZZZZ			01:19																									
ZZZZZZ			01:34																									
LCS 280-568946/45	1	T	01:49	X																								
LCSD 280-568946/46	1	T	02:04	X																								
MB 280-568946/47	1	T	02:18	X																								
280-159332-1	1	T	02:33	X																								
280-159332-1 DU	1	T	02:48	X																								
280-159332-1 MS	1	T	03:03	X																								
280-159332-1 MSD	1	T	03:18	X																								
280-159332-2	1	T	03:33	X																								
CCV 280-568946/53	1		03:48	X																								
CCB 280-568946/54	1		04:03	X																								
280-159332-3	1	T	04:18	X																								
280-159332-4	1	T	04:33	X																								
280-159332-5	1	T	04:48	X																								
280-159332-6	1	T	05:03	X																								
280-159332-7	1	T	05:18	X																								
ZZZZZZ			05:33																									
280-159332-8	5	T	05:48	X																								
280-159332-9	1	T	06:03	X																								
ZZZZZZ			06:18																									
280-159332-10	1	T	06:33	X																								
CCV 280-568946/65	1		06:49	X																								
CCB 280-568946/66	1		07:04	X																								
280-159332-11	1	T	07:19	X																								
280-159332-12	1	T	07:34	X																								
280-159332-13	1	T	07:49	X																								
280-159332-13 DU	1	T	08:04	X																								
280-159332-13 MS	1	T	08:19	X																								
280-159332-13 MSD	1	T	08:34	X																								
ZZZZZZ			08:49																									
ZZZZZZ			09:04																									
ZZZZZZ			09:19																									
ZZZZZZ			09:34																									
CCV 280-568946/77	1		09:49	X																								
CCB 280-568946/78	1		10:04	X																								

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_SHI5 Analysis Method: 9060A

Start Date: 03/14/2022 16:01 End Date: 03/15/2022 20:52

Lab Sample Id	D/F	Type	Time	Analytes
				DOCQ
ZZZZZZ			16:01	
ICV 280-568667/2	1		17:02	X
ICB 280-568667/3	1		17:16	X
LCS 280-568667/4	1	D	17:33	X
MB 280-568667/5	1	D	17:47	X
ZZZZZZ			18:05	
LCS 280-568571/1-A	1	D	18:20	X
MB 280-568571/2-A	1	D	18:34	X
ZZZZZZ			18:52	
ZZZZZZ			19:13	
ZZZZZZ			19:27	
ZZZZZZ			19:45	
ZZZZZZ			20:03	
ZZZZZZ			20:20	
ZZZZZZ			20:39	
CCV 280-568667/16	1		20:57	X
CCB 280-568667/17	1		21:14	X
ZZZZZZ			21:43	
ZZZZZZ			21:57	
ZZZZZZ			22:12	
ZZZZZZ			22:30	
ZZZZZZ			22:46	
280-159332-1	1	D	23:04	X
280-159332-1 MS	1	D	23:23	X
280-159332-1 MSD	1	D	23:42	X
280-159332-2	1	D	00:00	X
280-159332-3	1	D	00:14	X
CCV 280-568667/28	1		00:32	X
CCB 280-568667/29	1		00:47	X
280-159332-4	1	D	01:01	X
280-159332-5	1	D	01:20	X
280-159332-6	1	D	01:36	X
280-159332-7	1	D	01:52	X
280-159332-8	1	D	02:08	X
280-159332-9	1	D	02:29	X
280-159332-10	1	D	02:46	X
280-159332-11	1	D	03:02	X
280-159332-12	1	D	03:21	X
280-159332-13	1	D	03:39	X
CCV 280-568667/40	1		03:54	X

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_SHI5 Analysis Method: 9060A

Start Date: 03/14/2022 16:01 End Date: 03/15/2022 20:52

Lab Sample Id	D/F	Type	Time	Analytes
				DOCQ
CCB 280-568667/41	1		04:08	X
280-159332-13 MS	1	D	04:22	X
280-159332-13 MSD	1	D	04:37	X
CCV 280-568667/44	1		04:51	X
CCB 280-568667/45	1		05:07	X
ICV 280-568667/46			15:45	
ICB 280-568667/47			15:59	
ZZZZZZ			16:13	
ZZZZZZ			16:27	
ZZZZZZ			16:42	
ZZZZZZ			16:56	
ZZZZZZ			17:12	
ZZZZZZ			17:26	
ZZZZZZ			17:45	
ZZZZZZ			18:01	
ZZZZZZ			18:22	
ZZZZZZ			18:40	
ZZZZZZ			18:56	
ZZZZZZ			19:17	
CCV 280-568667/60			19:33	
CCB 280-568667/61			19:49	
ZZZZZZ			20:03	
ZZZZZZ			20:20	
CCV 280-568667/64			20:36	
CCB 280-568667/65			20:52	

Prep Types:
D = Dissolved

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 03/08/2022 14:33 End Date: 03/09/2022 03:03

Lab Sample Id	D/F	Type	Time	Analytes
				Alk
RINSE 280-568099/1			14:33	
ZZZZZZ			14:40	
ZZZZZZ			14:43	
LCS 280-568099/4	1	T	14:50	X
LCSD 280-568099/5	1	T	14:57	X
MB 280-568099/6	1	T	15:03	X
ZZZZZZ			15:08	
ZZZZZZ			15:13	
ZZZZZZ			15:22	
ZZZZZZ			15:33	
ZZZZZZ			15:45	
ZZZZZZ			15:55	
ZZZZZZ			16:09	
ZZZZZZ			16:22	
ZZZZZZ			16:31	
ZZZZZZ			16:46	
CCV 280-568099/17	1		16:53	X
CCB 280-568099/18	1		16:59	X
ZZZZZZ			17:09	
ZZZZZZ			17:18	
ZZZZZZ			17:25	
ZZZZZZ			17:32	
ZZZZZZ			17:41	
ZZZZZZ			17:53	
ZZZZZZ			18:02	
280-159332-1	1	T	18:09	X
280-159332-2	1	T	18:16	X
280-159332-3	1	T	18:23	X
CCV 280-568099/29	1		18:30	X
CCB 280-568099/30	1		18:36	X
LCS 280-568099/31	1	T	18:43	X
MB 280-568099/32	1	T	18:48	X
280-159332-4	1	T	18:56	X
280-159332-4 DU	1	T	19:04	X
280-159332-5	1	T	19:12	X
280-159332-6	1	T	19:20	X
280-159332-7	1	T	19:27	X
280-159332-8	1	T	19:35	X
280-159332-9	1	T	19:42	X
280-159332-10	1	T	19:51	X
280-159332-11	1	T	20:00	X

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 03/08/2022 14:33 End Date: 03/09/2022 03:03

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
280-159332-12	1	T	20:09	X																								
CCV 280-568099/43	1		20:15	X																								
CCB 280-568099/44	1		20:21	X																								
280-159332-13	1	T	20:27	X																								
ZZZZZZ			20:42																									
ZZZZZZ			20:51																									
ZZZZZZ			21:00																									
ZZZZZZ			21:08																									
ZZZZZZ			21:16																									
ZZZZZZ			21:26																									
ZZZZZZ			21:35																									
ZZZZZZ			21:48																									
ZZZZZZ			21:54																									
CCV 280-568099/55	1		22:01	X																								
CCB 280-568099/56	1		22:06	X																								
ZZZZZZ			22:13																									
ZZZZZZ			22:19																									
ZZZZZZ			22:28																									
ZZZZZZ			22:38																									
ZZZZZZ			22:44																									
ZZZZZZ			22:53																									
ZZZZZZ			23:05																									
ZZZZZZ			23:16																									
ZZZZZZ			23:26																									
ZZZZZZ			23:36																									
ZZZZZZ			23:42																									
ZZZZZZ			23:48																									
CCV 280-568099/69			23:54																									
CCB 280-568099/70			00:00																									
ZZZZZZ			00:05																									
ZZZZZZ			00:13																									
ZZZZZZ			00:20																									
ZZZZZZ			00:32																									
ZZZZZZ			00:45																									
ZZZZZZ			00:54																									
ZZZZZZ			01:03																									
ZZZZZZ			01:13																									
ZZZZZZ			01:22																									
ZZZZZZ			01:40																									
CCV 280-568099/81			01:48																									
CCB 280-568099/82			01:53																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 03/08/2022 14:33 End Date: 03/09/2022 03:03

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			02:01																									
ZZZZZZ			02:06																									
ZZZZZZ			02:28																									
ZZZZZZ			02:50																									
CCV 280-568099/87			02:58																									
CCB 280-568099/88			03:03																									

Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Batch Number: 569103 Batch Start Date: 03/18/22 13:21 Batch Analyst: Mitchell, Jacob J

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00525	350.1 ICV 00509
ICVL 280-569103/14		350.1			100 mL	100 mL			0.5 mL
ICV 280-569103/15		350.1			100 mL	100 mL			2.5 mL
ICB 280-569103/16		350.1			10 mL	10 mL			
LCS 280-569103/18		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-569103/19		350.1			100 mL	100 mL		2.5 mL	
MB 280-569103/20		350.1			10 mL	10 mL			
280-159332-C-13	PZ019-8	350.1	T	no	10 mL	10 mL	<2 SU		
280-159332-C-13 MS	PZ019-8	350.1	T	no	10 mL	10 mL	<2 SU	0.1 mL	
280-159332-C-13 MSD	PZ019-8	350.1	T	no	10 mL	10 mL	<2 SU	0.1 mL	
280-159332-C-1	G0081-8	350.1	T	no	10 mL	10 mL	<2 SU		
280-159332-C-2	G0082-8	350.1	T	no	10 mL	10 mL	<2 SU		
280-159332-C-3	G0024-8	350.1	T	no	10 mL	10 mL	<2 SU		
280-159332-C-6	PZ020-8	350.1	T	no	10 mL	10 mL	<2 SU		
CCVL 280-569103/33		350.1			100 mL	100 mL		0.5 mL	
CCB 280-569103/35		350.1			10 mL	10 mL			
CCV 280-569103/37		350.1			100 mL	100 mL		2.5 mL	
280-159332-C-7	G0077-8	350.1	T	no	10 mL	10 mL	<2 SU		
280-159332-C-8	G0078-8	350.1	T	no	10 mL	10 mL	<2 SU		
280-159332-C-10	PZ018-8	350.1	T	no	10 mL	10 mL	<2 SU		
280-159332-C-12	PZ021-8	350.1	T	no	10 mL	10 mL	<2 SU		
280-159332-C-11	PZ017R-8	350.1	T	no	10 mL	10 mL	<2 SU		
CCVL 280-569103/52		350.1			100 mL	100 mL		0.5 mL	
CCV 280-569103/53		350.1			100 mL	100 mL		2.5 mL	
CCB 280-569103/54		350.1			10 mL	10 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Batch Number: 569103 Batch Start Date: 03/18/22 13:21 Batch Analyst: Mitchell, Jacob J

Batch Method: 350.1 Batch End Date:

Batch Notes	
Sodium Nitroprusside ID	350.1 color_00277
Hypochlorite ID	350.1 bleach_01587
Carrier Identification	350.1 complex_00603
Sodium Salicylate ID	Sodium Sal_00023
Pipette/Syringe/Dispenser ID	SAH5000, 1000 INTERCESSOR, BWH 200
Batch Comment	JM

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.: 280-159332-1

SDG No.:

Batch Number: 569144 Batch Start Date: 03/19/22 10:03 Batch Analyst: Mitchell, Jacob J

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00525	350.1 ICV 00509
ICVL 280-569144/14		350.1			100 mL	100 mL			0.5 mL
ICV 280-569144/15		350.1			100 mL	100 mL			2.5 mL
ICB 280-569144/16		350.1			10 mL	10 mL			
LCS 280-569144/18		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-569144/19		350.1			100 mL	100 mL		2.5 mL	
MB 280-569144/20		350.1			10 mL	10 mL			
280-159332-C-4	G0096-8	350.1	T	no	10 mL	10 mL	<2 SU		
280-159332-C-5	G0296-8	350.1	T	no	10 mL	10 mL	<2 SU		
280-159332-C-9	G0094-8	350.1	T	no	10 mL	10 mL	<2 SU		
CCVL 280-569144/33		350.1			100 mL	100 mL		0.5 mL	
CCV 280-569144/34		350.1			100 mL	100 mL		2.5 mL	
CCB 280-569144/35		350.1			10 mL	10 mL			

Batch Notes	
Sodium Nitroprusside ID	350.1 color_00277
Hypochlorite ID	350.1 bleach_01588
Carrier Identification	350.1 complex_00603
Sodium Salicylate ID	Sodium Sal_00023
Pipette/Syringe/Dispenser ID	SAH5000, 1000 INTERCESSOR, BWH 200
Batch Comment	JM

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.: 280-159332-1

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.: 280-159332-1

SDG No.:

Batch Number: 568332 Batch Start Date: 03/10/22 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 280-568332/1		351.2, 351.2			25 mL	25 mL	6 mL		
MB 280-568332/2		351.2, 351.2			25 mL	25 mL			
280-159332-C-1	G0081-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159332-C-2	G0082-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159332-C-3	G0024-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159332-C-4	G0096-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159332-C-13	PZ019-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159332-C-13 MS	PZ019-8	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-159332-C-13 MSD	PZ019-8	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-159332-C-5	G0296-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159332-C-6	PZ020-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159332-C-7	G0077-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159332-C-8	G0078-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159332-C-9	G0094-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159332-C-10	PZ018-8	351.2, 351.2	T	<2	15 mL	25 mL			
280-159332-C-11	PZ017R-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159332-C-12	PZ021-8	351.2, 351.2	T	<2	25 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	03/10/2022 17:00
Oven, Bath or Block Temperature 2	380 Degrees C
Bl;ock Digestion Temperature End Date	03/10/2022 23:00
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
pH Indicator ID	hc902937

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.: 280-159332-1

SDG No.:

Batch Number: 568332 Batch Start Date: 03/10/22 16:01 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.: 280-159332-1

SDG No.:

Batch Number: 568623 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 280-568332/1-A		351.2		2 mL					
MB 280-568332/2-A		351.2		2 mL					
CCV 280-566632/23-A		351.2		2 mL					
CCB 280-566632/24-A		351.2		2 mL					
280-159332-C-1-A	G0081-8	351.2	T	2 mL					
280-159332-C-2-A	G0082-8	351.2	T	2 mL					
280-159332-C-3-A	G0024-8	351.2	T	2 mL					
280-159332-C-4-A	G0096-8	351.2	T	2 mL					
280-159332-C-13-A	PZ019-8	351.2	T	2 mL					
280-159332-C-13-B MS	PZ019-8	351.2	T	2 mL					
280-159332-C-13-C MSD	PZ019-8	351.2	T	2 mL					
280-159332-C-5-A	G0296-8	351.2	T	2 mL					
CCV 280-566632/23-A		351.2		2 mL					
CCB 280-566632/24-A		351.2		2 mL					
280-159332-C-6-A	PZ020-8	351.2	T	2 mL					
280-159332-C-7-A	G0077-8	351.2	T	2 mL					
280-159332-C-8-A	G0078-8	351.2	T	2 mL					
280-159332-C-9-A	G0094-8	351.2	T	2 mL					
280-159332-C-10-A	PZ018-8	351.2	T	2 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.: 280-159332-1

SDG No.:

Batch Number: 568623 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					
280-159332-C-12-A	PZ021-8	351.2	T	2 mL					
CCV 280-566632/23-A		351.2		2 mL					
CCB 280-566632/24-A		351.2		2 mL					
280-159332-C-11-A	PZ017R-8	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

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.: 280-159332-1

SDG No.:

Batch Number: 568761 Batch Start Date: 03/15/22 16:05 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 00614	NXN ICV INT 00590		
ICV 280-568761/17		353.2		100 mL	100 mL		5 mL		
ICVL 280-568761/18		353.2		100 mL	100 mL		2 mL		
ICB 280-568761/19		353.2		100 mL	100 mL				
LCS 280-568761/21		353.2		100 mL	100 mL	5 mL			
MB 280-568761/22		353.2		100 mL	100 mL				
CCV 280-568761/35		353.2		100 mL	100 mL	5 mL			
CCB 280-568761/37		353.2		100 mL	100 mL				
CCV 280-568761/51		353.2		100 mL	100 mL	5 mL			
CCVL 280-568761/52		353.2		100 mL	100 mL	1 mL			
CCB 280-568761/53		353.2		100 mL	100 mL				
280-159332-C-1	G0081-8	353.2	T	100 mL	100 mL				
280-159332-C-2	G0082-8	353.2	T	100 mL	100 mL				
LCS 280-568761/59		353.2		100 mL	100 mL	5 mL			
MB 280-568761/60		353.2		100 mL	100 mL				
280-159332-C-13	PZ019-8	353.2	T	100 mL	100 mL				
280-159332-C-13 MS	PZ019-8	353.2	T	5 mL	5 mL	0.2 mL			
280-159332-C-13 MSD	PZ019-8	353.2	T	5 mL	5 mL	0.2 mL			
280-159332-C-3	G0024-8	353.2	T	100 mL	100 mL				
280-159332-C-4	G0096-8	353.2	T	100 mL	100 mL				
CCV 280-568761/68		353.2		100 mL	100 mL	5 mL			
CCVL 280-568761/69		353.2		100 mL	100 mL	1 mL			
280-159332-C-5	G0296-8	353.2	T	100 mL	100 mL				
280-159332-C-6	PZ020-8	353.2	T	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.: 280-159332-1

SDG No.:

Batch Number: 568761 Batch Start Date: 03/15/22 16:05 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 00614	NXN ICV INT 00590		
280-159332-C-7	G0077-8	353.2	T	100 mL	100 mL				
280-159332-C-8	G0078-8	353.2	T	100 mL	100 mL				
280-159332-C-10	PZ018-8	353.2	T	100 mL	100 mL				
280-159332-C-11	PZ017R-8	353.2	T	100 mL	100 mL				
280-159332-C-12	PZ021-8	353.2	T	100 mL	100 mL				
280-159332-C-12 MS	PZ021-8	353.2	T	5 mL	5 mL	0.2 mL			
280-159332-C-12 MSD	PZ021-8	353.2	T	5 mL	5 mL	0.2 mL			
CCV 280-568761/84		353.2		100 mL	100 mL	5 mL			
CCVL 280-568761/85		353.2		100 mL	100 mL	1 mL			
CCB 280-568761/86		353.2		100 mL	100 mL				

Batch Notes	
pH Indicator ID	hc155968
Buffer Reagent ID	NOXT Buffer_00223
Color Reagent ID	NOXT CR_00123
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.: 280-159332-1

SDG No.:

Batch Number: 569157 Batch Start Date: 03/20/22 15:22 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 00614	NXN ICV INT 00590		
ICV 280-569157/17		353.2		100 mL	100 mL		5 mL		
ICVL 280-569157/18		353.2		100 mL	100 mL		2 mL		
ICB 280-569157/19		353.2		100 mL	100 mL				
LCS 280-569157/21		353.2		100 mL	100 mL	5 mL			
MB 280-569157/22		353.2		100 mL	100 mL				
280-159332-C-9	G0094-8	353.2	T	100 mL	100 mL				
CCV 280-569157/35		353.2		100 mL	100 mL	5 mL			
CCVL 280-569157/36		353.2		100 mL	100 mL	1 mL			
CCB 280-569157/37		353.2		100 mL	100 mL				

Batch Notes	
pH Indicator ID	hc155968
Buffer Reagent ID	NOXT Buffer_00223
Color Reagent ID	NOXT CR_00123
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.: 280-159332-1

SDG No.:

Batch Number: 567934 Batch Start Date: 03/07/22 16:33 Batch Analyst: Brock, Lucynda R

Batch Method: 9030B Batch End Date: 03/07/22 18:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-567934/1		9030B, 9034		50 mL	50 mL	2	<9 SU	>2 SU	5 mL
MB 280-567934/2		9030B, 9034		50 mL	50 mL	3	<9 SU	>2 SU	5 mL
280-159332-E-2	G0082-8	9030B, 9034	T	50 mL	50 mL	6	<9 SU	>2 SU	5 mL
280-159332-E-2 MS	G0082-8	9030B, 9034	T	50 mL	50 mL	7	<9 SU	>2 SU	5 mL
280-159332-E-2 MSD	G0082-8	9030B, 9034	T	50 mL	50 mL	8	<9 SU	>2 SU	5 mL
280-159332-E-3	G0024-8	9030B, 9034	T	50 mL	50 mL	9	<9 SU	>2 SU	5 mL
280-159332-E-4	G0096-8	9030B, 9034	T	50 mL	50 mL	10	<9 SU	>2 SU	5 mL
280-159332-E-5	G0296-8	9030B, 9034	T	50 mL	50 mL	12	<9 SU	>2 SU	5 mL
280-159332-E-6	PZ020-8	9030B, 9034	T	50 mL	50 mL	13	<9 SU	>2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 02090					
LCS 280-567934/1		9030B, 9034		1 mL					
MB 280-567934/2		9030B, 9034							
280-159332-E-2	G0082-8	9030B, 9034	T						
280-159332-E-2 MS	G0082-8	9030B, 9034	T	1 mL					
280-159332-E-2 MSD	G0082-8	9030B, 9034	T	1 mL					
280-159332-E-3	G0024-8	9030B, 9034	T						
280-159332-E-4	G0096-8	9030B, 9034	T						
280-159332-E-5	G0296-8	9030B, 9034	T						
280-159332-E-6	PZ020-8	9030B, 9034	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Batch Number: 567934 Batch Start Date: 03/07/22 16:33 Batch Analyst: Brock, Lucynda R

Batch Method: 9030B Batch End Date: 03/07/22 18:30

Batch Notes	
Formaldehyde ID	Form_00121
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	03/07/2022 17:00
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	03/07/2022 18:30
Batch Comment	LRB

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.: 280-159332-1

SDG No.:

Batch Number: 567935 Batch Start Date: 03/07/22 18:36 Batch Analyst: Brock, Lucynda R

Batch Method: 9034 Batch End Date: 03/07/22 19:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-567934/1-A		9034		0.0 mL	2.5 mL	5 mL	2.5 mL	50 mL	
MB 280-567934/2-A		9034		2.5 mL	3.5 mL	1 mL	1 mL	50 mL	
280-159332-E-2-A	G0082-8	9034	T	3.5 mL	4.4 mL	1 mL	0.9 mL	50 mL	
280-159332-E-2-B MS	G0082-8	9034	T	4.5 mL	6.8 mL	5 mL	2.3 mL	50 mL	
280-159332-E-2-C MSD	G0082-8	9034	T	6.8 mL	9.2 mL	5 mL	2.4 mL	50 mL	
280-159332-E-3-A	G0024-8	9034	T	9.2 mL	10.2 mL	1 mL	1 mL	50 mL	
280-159332-E-4-A	G0096-8	9034	T	10.2 mL	11.1 mL	1 mL	0.9 mL	50 mL	
280-159332-E-5-A	G0296-8	9034	T	11.1 mL	12.1 mL	1 mL	1 mL	50 mL	
280-159332-E-6-A	PZ020-8	9034	T	12.1 mL	13.0 mL	1 mL	0.9 mL	50 mL	

Batch Notes	
Normality of First Titrant	0.025 N
Normality of Iodine Solution	0.025 N
Zinc Acetate Buffer ID	znac_00121
Iodine ID	WCIODINE_01326
Hydrochloric Acid ID	HCl Sol_00197
Sodium Thiosulfate ID	Na Thio_00177
Starch Reagent ID	Starch Ind_00068
Pipette/Syringe/Dispenser ID	5Hz4, ARM1000
Batch Comment	LRB train 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.: 280-159332-1

SDG No.:

Batch Number: 568018 Batch Start Date: 03/08/22 11:04 Batch Analyst: Brock, Lucynda R

Batch Method: 9030B Batch End Date: 03/08/22 13:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-568018/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
MB 280-568018/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-159332-E-1	G0081-8	9030B, 9034	T	50 mL	50 mL	17	>9 SU	<2 SU	5 mL
280-159332-E-7	G0077-8	9030B, 9034	T	50 mL	50 mL	18	>9 SU	<2 SU	5 mL
280-159332-E-8	G0078-8	9030B, 9034	T	50 mL	50 mL	20	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 02091					
LCS 280-568018/1		9030B, 9034		1 mL					
MB 280-568018/2		9030B, 9034							
280-159332-E-1	G0081-8	9030B, 9034	T						
280-159332-E-7	G0077-8	9030B, 9034	T						
280-159332-E-8	G0078-8	9030B, 9034	T						

Batch Notes	
Formaldehyde ID	form_00121
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	03/08/2022 12:00
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	03/08/2022 13:30
Batch Comment	LRB 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.: 280-159332-1

SDG No.:

Batch Number: 568024 Batch Start Date: 03/08/22 14:00 Batch Analyst: Brock, Lucynda R

Batch Method: 9030B Batch End Date: 03/08/22 15:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-568024/1		9030B, 9034		50 mL	50 mL	20	>9 SU	<2 SU	5 mL
MB 280-568024/2		9030B, 9034		50 mL	50 mL	19	>9 SU	<2 SU	5 mL
280-159332-E-13	PZ019-8	9030B, 9034	T	50 mL	50 mL	18	>9 SU	<2 SU	5 mL
280-159332-E-13 MS	PZ019-8	9030B, 9034	T	50 mL	50 mL	17	>9 SU	<2 SU	5 mL
280-159332-E-13 MSD	PZ019-8	9030B, 9034	T	50 mL	50 mL	16	>9 SU	<2 SU	5 mL
280-159332-E-9	G0094-8	9030B, 9034	T	50 mL	50 mL	15	>9 SU	<2 SU	5 mL
280-159332-E-10	PZ018-8	9030B, 9034	T	50 mL	50 mL	14	>9 SU	<2 SU	5 mL
280-159332-E-11	PZ017R-8	9030B, 9034	T	50 mL	50 mL	13	>9 SU	<2 SU	5 mL
280-159332-E-12	PZ021-8	9030B, 9034	T	50 mL	50 mL	12	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 02091					
LCS 280-568024/1		9030B, 9034		1 mL					
MB 280-568024/2		9030B, 9034							
280-159332-E-13	PZ019-8	9030B, 9034	T						
280-159332-E-13 MS	PZ019-8	9030B, 9034	T	1 mL					
280-159332-E-13 MSD	PZ019-8	9030B, 9034	T	1 mL					
280-159332-E-9	G0094-8	9030B, 9034	T						
280-159332-E-10	PZ018-8	9030B, 9034	T						
280-159332-E-11	PZ017R-8	9030B, 9034	T						
280-159332-E-12	PZ021-8	9030B, 9034	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Batch Number: 568024 Batch Start Date: 03/08/22 14:00 Batch Analyst: Brock, Lucynda R

Batch Method: 9030B Batch End Date: 03/08/22 15:30

Batch Notes	
Formaldehyde ID	form_00121
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	03/08/2022 14:00
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	03/08/2022 15:30
Batch Comment	LRB 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.: 280-159332-1

SDG No.:

Batch Number: 568064 Batch Start Date: 03/08/22 16:59 Batch Analyst: Mitchell, Jacob J

Batch Method: 9034 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-568018/1-A		9034		0 mL	2.9 mL	5 mL	2.9 mL	50 mL	
MB 280-568018/2-A		9034		2.9 mL	3.8 mL	1 mL	0.9 mL	50 mL	
280-159332-E-1-A	G0081-8	9034	T	17.7 mL	18.65 mL	1 mL	0.949999999999999 mL	50 mL	
280-159332-E-7-A	G0077-8	9034	T	18.65 mL	19.6 mL	1 mL	0.950000000000003 mL	50 mL	
280-159332-E-8-A	G0078-8	9034	T	19.6 mL	20.55 mL	1 mL	0.949999999999999 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	LRB 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.: 280-159332-1

SDG No.:

Batch Number: 568065 Batch Start Date: 03/08/22 17:04 Batch Analyst: Mitchell, Jacob J

Batch Method: 9034 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-568024/1-A		9034		0 mL	2.6 mL	5 mL	2.6 mL	50 mL	
MB 280-568024/2-A		9034		2.6 mL	3.6 mL	1 mL	1 mL	50 mL	
280-159332-E-13-A	PZ019-8	9034	T	3.6 mL	4.5 mL	1 mL	0.9 mL	50 mL	
280-159332-E-13-B MS	PZ019-8	9034	T	4.5 mL	7.1 mL	5 mL	2.6 mL	50 mL	
280-159332-E-13-C MSD	PZ019-8	9034	T	7.2 mL	9.8 mL	5 mL	2.6 mL	50 mL	
280-159332-E-9-A	G0094-8	9034	T	9.8 mL	10.7 mL	1 mL	0.899999999999999 mL	50 mL	
280-159332-E-10-A	PZ018-8	9034	T	10.7 mL	11.7 mL	1 mL	1 mL	50 mL	
280-159332-E-11-A	PZ017R-8	9034	T	11.7 mL	12.7 mL	1 mL	1 mL	50 mL	
280-159332-E-12-A	PZ021-8	9034	T	12.7 mL	13.6 mL	1 mL	0.9 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	LRB 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.: 280-159332-1

SDG No.:

Batch Number: 568842 Batch Start Date: 03/16/22 14:19 Batch Analyst: Jindarat, Chanida

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 00411	IC Cal low 00627	IC ICV 5 00355
STD 280-568842/2 IC		9056A		5 mL	5 mL		0.02 mL	0.02 mL	
STD 280-568842/3 IC		9056A		5 mL	5 mL		0.05 mL	0.05 mL	
STD 280-568842/4 IC		9056A		5 mL	5 mL		0.1 mL	0.1 mL	
STD 280-568842/5 IC		9056A		5 mL	5 mL		1.2 mL	0.4 mL	
STD 280-568842/6 IC		9056A		5 mL	5 mL		2.4 mL	0.8 mL	
STD 280-568842/7 IC		9056A		5 mL	5 mL		4 mL	1 mL	
ICV 280-568842/8		9056A		5 mL	5 mL	0.4 mL			0.4 mL
ICB 280-568842/9		9056A		5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00022					
STD 280-568842/2 IC		9056A							
STD 280-568842/3 IC		9056A							
STD 280-568842/4 IC		9056A							
STD 280-568842/5 IC		9056A							
STD 280-568842/6 IC		9056A							
STD 280-568842/7 IC		9056A							
ICV 280-568842/8		9056A		0.4 mL					
ICB 280-568842/9		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.: 280-159332-1

SDG No.:

Batch Number: 568842 Batch Start Date: 03/16/22 14:19 Batch Analyst: Jindarat, Chanida

Batch Method: 9056A Batch End Date:

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	5000CK,BMF1000,200CJ,ic100
Sufficient Volume for Batch QC	Yes
Eluent 1 ID	IC10 Eluent_00002
Batch Comment	CJ

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.: 280-159332-1

SDG No.:

Batch Number: 568946 Batch Start Date: 03/17/22 12:07 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 00411	IC Cal low 00627	IC LCS 01863	ICMS/MSD WEEK 00748
MRL 280-568946/3		9056A		10 mL	10 mL	0.2 mL	0.1 mL		
CCV 280-568946/41		9056A		10 mL	10 mL			10 mL	
CCB 280-568946/42		9056A		10 mL	10 mL				
LCS 280-568946/45		9056A		10 mL	10 mL			10 mL	
LCSD 280-568946/46		9056A		10 mL	10 mL			10 mL	
MB 280-568946/47		9056A		10 mL	10 mL				
280-159332-F-1	G0081-8	9056A	T	10 mL	10 mL				
280-159332-F-1 DU	G0081-8	9056A	T	10 mL	10 mL				
280-159332-F-1 MS	G0081-8	9056A	T	10 mL	10 mL				0.1 mL
280-159332-F-1 MSD	G0081-8	9056A	T	10 mL	10 mL				0.1 mL
280-159332-F-2	G0082-8	9056A	T	10 mL	10 mL				
CCV 280-568946/53		9056A		10 mL	10 mL			10 mL	
CCB 280-568946/54		9056A		10 mL	10 mL				
280-159332-F-3	G0024-8	9056A	T	10 mL	10 mL				
280-159332-F-4	G0096-8	9056A	T	10 mL	10 mL				
280-159332-F-5	G0296-8	9056A	T	10 mL	10 mL				
280-159332-F-6	PZ020-8	9056A	T	10 mL	10 mL				
280-159332-F-7	G0077-8	9056A	T	10 mL	10 mL				
280-159332-F-8	G0078-8	9056A	T	10 mL	10 mL				
280-159332-F-9	G0094-8	9056A	T	10 mL	10 mL				
280-159332-F-10	PZ018-8	9056A	T	10 mL	10 mL				
CCV 280-568946/65		9056A		10 mL	10 mL			10 mL	
CCB 280-568946/66		9056A		10 mL	10 mL				
280-159332-F-11	PZ017R-8	9056A	T	10 mL	10 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Batch Number: 568946 Batch Start Date: 03/17/22 12:07 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 00411	IC Cal low 00627	IC LCS 01863	ICMS/MSD WEEK 00748
280-159332-F-12	PZ021-8	9056A	T	10 mL	10 mL				
280-159332-F-13	PZ019-8	9056A	T	10 mL	10 mL				
280-159332-F-13 DU	PZ019-8	9056A	T	10 mL	10 mL				
280-159332-F-13 MS	PZ019-8	9056A	T	10 mL	10 mL				0.1 mL
280-159332-F-13 MSD	PZ019-8	9056A	T	10 mL	10 mL				0.1 mL
CCV 280-568946/77		9056A		10 mL	10 mL			10 mL	
CCB 280-568946/78		9056A		10 mL	10 mL				

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, HEX1000, 200CJ, IC100
Sufficient Volume for Batch QC	yes
Eluent 1 ID	IC10 Eluent_00002
Batch Comment	RAF

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.: 280-159332-1

SDG No.:

Batch Number: 568667 Batch Start Date: 03/14/22 16:01 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 280-568667/2		9060A		50 mL	50 mL	<2 SU	<2 SU	1 mL	
ICB 280-568667/3		9060A		20 mL	20 mL	<2 SU	<2 SU		
LCS 280-568667/4		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
MB 280-568667/5		9060A		20 mL	20 mL	<2 SU	<2 SU		
LCS 280-568571/1-A		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
MB 280-568571/2-A		9060A		20 mL	20 mL	<2 SU	<2 SU		
CCV 280-568667/16		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-568667/17		9060A		20 mL	20 mL	<2 SU	<2 SU		
280-159332-D-1-A	G0081-8	9060A	D	20 mL	20 mL	>2 SU	>2 SU		
280-159332-D-1-B MS	G0081-8	9060A	D	50 mL	50 mL	>2 SU	>2 SU		1.25 mL
280-159332-D-1-C MSD	G0081-8	9060A	D	50 mL	50 mL	>2 SU	>2 SU		1.25 mL
280-159332-D-2-A	G0082-8	9060A	D	20 mL	20 mL	>2 SU	>2 SU		
280-159332-D-3-A	G0024-8	9060A	D	20 mL	20 mL	>2 SU	>2 SU		
CCV 280-568667/28		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-568667/29		9060A		20 mL	20 mL	<2 SU	<2 SU		
280-159332-D-4-A	G0096-8	9060A	D	20 mL	20 mL	>2 SU	>2 SU		
280-159332-D-5-A	G0296-8	9060A	D	20 mL	20 mL	>2 SU	>2 SU		
280-159332-D-6-A	PZ020-8	9060A	D	20 mL	20 mL	>2 SU	>2 SU		
280-159332-D-7-A	G0077-8	9060A	D	20 mL	20 mL	>2 SU	>2 SU		
280-159332-D-8-A	G0078-8	9060A	D	20 mL	20 mL	>2 SU	>2 SU		
280-159332-D-9-A	G0094-8	9060A	D	20 mL	20 mL	>2 SU	>2 SU		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159332-1

SDG No.:

Batch Number: 568667 Batch Start Date: 03/14/22 16:01 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
280-159332-D-10 -A	PZ018-8	9060A	D	20 mL	20 mL	>2 SU	>2 SU		
280-159332-D-11 -A	PZ017R-8	9060A	D	20 mL	20 mL	>2 SU	>2 SU		
280-159332-D-12 -A	PZ021-8	9060A	D	20 mL	20 mL	>2 SU	>2 SU		
280-159332-D-13 -A	PZ019-8	9060A	D	20 mL	20 mL	>2 SU	>2 SU		
CCV 280-568667/40		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-568667/41		9060A		20 mL	20 mL	<2 SU	<2 SU		
280-159332-D-13 -B MS	PZ019-8	9060A	D	50 mL	50 mL	>2 SU	>2 SU		1.25 mL
280-159332-D-13 -C MSD	PZ019-8	9060A	D	50 mL	50 mL	>2 SU	>2 SU		1.25 mL
CCV 280-568667/44		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-568667/45		9060A		20 mL	20 mL	<2 SU	<2 SU		

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
ICV 280-568667/2		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
ICB 280-568667/3		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
LCS 280-568667/4		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.: 280-159332-1

SDG No.:

Batch Number: 568667 Batch Start Date: 03/14/22 16:01 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
MB 280-568667/5		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
LCS 280-568571/1-A		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
MB 280-568571/2-A		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-568667/16		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-568667/17		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159332-D-1-A	G0081-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159332-D-1-B MS	G0081-8	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.: 280-159332-1

SDG No.:

Batch Number: 568667 Batch Start Date: 03/14/22 16:01 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-159332-D-1-C MSD	G0081-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159332-D-2-A	G0082-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159332-D-3-A	G0024-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-568667/28		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-568667/29		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159332-D-4-A	G0096-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159332-D-5-A	G0296-8	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.: 280-159332-1

SDG No.:

Batch Number: 568667 Batch Start Date: 03/14/22 16:01 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-159332-D-6-A	PZ020-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159332-D-7-A	G0077-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159332-D-8-A	G0078-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159332-D-9-A	G0094-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159332-D-10-A	PZ018-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159332-D-11-A	PZ017R-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159332-D-12-A	PZ021-8	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.: 280-159332-1

SDG No.:

Batch Number: 568667 Batch Start Date: 03/14/22 16:01 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-159332-D-13-A	PZ019-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-568667/40		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-568667/41		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159332-D-13-B MS	PZ019-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159332-D-13-C MSD	PZ019-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-568667/44		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-568667/45		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.: 280-159332-1

SDG No.:

Batch Number: 568667 Batch Start Date: 03/14/22 16:01 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
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.: 280-159332-1

SDG No.:

Batch Number: 568099 Batch Start Date: 03/08/22 14:33 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 01028				
LCS 280-568099/4		SM 2320B		InitialAmount is blank	10 mL				
LCSD 280-568099/5		SM 2320B		InitialAmount is blank	10 mL				
MB 280-568099/6		SM 2320B		InitialAmount is blank					
CCV 280-568099/17		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-568099/18		SM 2320B		InitialAmount is blank					
280-159332-F-1	G0081-8	SM 2320B	T	InitialAmount is blank					
280-159332-F-2	G0082-8	SM 2320B	T	InitialAmount is blank					
280-159332-F-3	G0024-8	SM 2320B	T	InitialAmount is blank					
CCV 280-568099/29		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-568099/30		SM 2320B		InitialAmount is blank					
LCS 280-568099/31		SM 2320B		InitialAmount is blank	10 mL				
MB 280-568099/32		SM 2320B		InitialAmount is blank					
280-159332-F-4	G0096-8	SM 2320B	T	InitialAmount is blank					
280-159332-F-4 DU	G0096-8	SM 2320B	T	InitialAmount is blank					
280-159332-F-5	G0296-8	SM 2320B	T	InitialAmount is blank					
280-159332-F-6	PZ020-8	SM 2320B	T	InitialAmount is blank					
280-159332-F-7	G0077-8	SM 2320B	T	InitialAmount is blank					
280-159332-F-8	G0078-8	SM 2320B	T	InitialAmount is blank					
280-159332-F-9	G0094-8	SM 2320B	T	InitialAmount is blank					
280-159332-F-10	PZ018-8	SM 2320B	T	InitialAmount is blank					
280-159332-F-11	PZ017R-8	SM 2320B	T	InitialAmount is blank					

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.: 280-159332-1

SDG No.:

Batch Number: 568099 Batch Start Date: 03/08/22 14:33 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 01028				
280-159332-F-12	PZ021-8	SM 2320B	T	InitialAmount is blank					
CCV 280-568099/43		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-568099/44		SM 2320B		InitialAmount is blank					
280-159332-F-13	PZ019-8	SM 2320B	T	InitialAmount is blank					
CCV 280-568099/55		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-568099/56		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_00096
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_00160
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

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: 18-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	280-159332-C-13	U	1	1	1		pH<2, Cl- non-detect
202	ms 280-159332-C-13	U	1	1	1		pH<2, Cl- non-detect
203	msd 280-159332-C-13	U	1	1	1		pH<2, Cl- non-detect
204	VOID 280-159510-E-1	U	1	1	1		pH<2, Cl- non-detect
205	280-159332-C-1	U	1	1	1		pH<2, Cl- non-detect
206	280-159332-C-2	U	1	1	1		pH<2, Cl- non-detect
207	280-159332-C-3	U	1	1	1		pH<2, Cl- non-detect
208	280-159332-C-4	U	1	1	1		pH<2, Cl- non-detect
209	280-159332-C-5	U	1	1	1		pH<2, Cl- non-detect
210	280-159332-C-6	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	VOID CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
211	280-159332-C-7	U	1	1	1		pH<2, Cl- non-detect
212	280-159332-C-8	U	1	1	1		pH<2, Cl- non-detect
213	280-159302-C-1	U	1	1	1		pH<2, Cl- non-detect
214	ms 280-159302-C-1	U	1	1	1		pH<2, Cl- non-detect
215	msd 280-159302-C-1	U	1	1	1		pH<2, Cl- non-detect
216	280-159332-C-10	U	1	10	1		pH<2, Cl- non-detect
217	280-159332-C-12	U	1	10	1		pH<2, Cl- non-detect
218	280-159332-C-9	U	1	1	1		pH<2, Cl- non-detect
219	280-159332-C-11	U	1	1	1		pH<2, Cl- non-detect
220	VOID 280-159302-C-2	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		
221	280-159302-C-3	U	1	1	1		pH<2, Cl- non-detect
222	280-159302-C-4	U	1	1	1		pH<2, Cl- non-detect
223	280-159302-C-5	U	1	1	1		pH<2, Cl- non-detect
224	280-159302-C-6	U	1	1	1		pH<2, Cl- non-detect
107	LCS	U	1	1	1		
107	LCSD	U	1	1	1		

Cup	Name	Type	R	Dil	Wt	Vial	Comment
111	MB	U	1	1	1		
225	280-159302-C-7	U	1	1	1		pH<2, Cl- non-detect
226	ms 280-159302-C-7 U		1	1	1		pH<2, Cl- non-detect
227	msd 280-159302-C-7 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		
228	280-159302-C-8	U	1	1	1		pH<2, Cl- non-detect
229	280-159302-C-9	U	1	1	1		pH<2, Cl- non-detect
204	280-159510-E-1	U	1	1	1		pH<2, Cl- non-detect
220	280-159302-C-2	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		

Peak Table:NH3

File name: C:\FLOW_4\031822.RST
Date: 18-Mar-22
Operator: JM

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	106	Sync	1	SYNC	1	1	14410	1096.975098	
2	0	Carry Over	1	CO	1	1	29	0.714042	
3	0	Blank	1	BLNK	1	1	-59	-5.960899	LO
4	101	Cal 0 ppb	1	C	1	1	232	16.092653	
5	102	Cal 25 ppb	1	C	1	1	375	26.908152	
6	103	Cal 50 ppb	1	C	1	1	633	46.496525	
7	104	Cal 100 ppb	1	C	1	1	1212	90.435730	
8	105	Cal 500 ppb	1	C	1	1	6469	490.226135	
9	106	Cal 1000 ppb	1	C	1	1	13190	1003.565308	
10	107	Cal 2500 ppb	1	C	1	1	32620	2501.780273	
11	108	Cal 5000 ppb	1	C	1	1	64421	4999.499023	
12	0	Blank	1	BLNK	1	1	-842	-65.292709	LO
B	0	Read Baseline	1	RB	1	1	0	-1.497813	BL
14	109	ICVL 500.0 ppb	1	U	1	1	6409	485.599396	UM
15	110	ICV 2500.0 ppb	1	U	1	1	32764	2512.949707	
16	111	ICB	1	U	1	1	-6	-1.917274	LO
B	0	read baseline	1	RB	1	1	0	-1.497814	BL
18	107	LCS	1	U	1	1	33292	2553.931641	
19	107	LCSD	1	U	1	1	32727	2510.083984	
20	111	MB	1	U	1	1	231	15.995503	
21	201	280-159332-C-13	1	U	1	1	58	2.897058	
22	202	ms 280-159332-C-13	1	U	1	1	13404	1019.931030	
23	203	msd 280-159332-C-13	1	U	1	1	13839	1053.210205	
24	204	VOID 280-159510-E-1	1	U	1	1	65790	5108.261230	HI
25	205	280-159332-C-1	1	U	1	1	6291	476.670349	FL
26	206	280-159332-C-2	1	U	1	1	462	33.542015	FL
27	207	280-159332-C-3	1	U	1	1	549	40.169163	
28	208	280-159332-C-4	1	U	1	1	31925	2447.786621	
29	209	280-159332-C-5	1	U	1	1	33141	2542.186768	
30	210	280-159332-C-6	1	U	1	1	462	33.546238	
31	0	Blank	1	BLNK	1	1	21	0.080648	
B	0	Read Baseline	1	RB	1	1	0	-1.497813	BL
33	105	CCVL 500.0 ppb	1	U	1	1	6983	529.396240	
34	107	VOID CCV 2500.0 ppb	1	U	1	1	37698	2896.786133	
35	111	CCB	1	U	1	1	406	29.272326	
B	0	read baseline	1	RB	1	1	0	-1.497813	BL
37	107	CCV 2500.0 ppb	1	U	1	1	32780	2514.167725	
38	0	Blank	1	BLNK	1	1	28	0.587923	
B	0	Read Baseline	1	RB	1	1	0	-1.497813	BL
40	211	280-159332-C-7	1	U	1	1	162	10.771034	
41	212	280-159332-C-8	1	U	1	1	2543	191.488693	
42	213	280-159302-C-1	1	U	1	1	334	23.818775	
43	214	ms 280-159302-C-1	1	U	1	1	13366	1016.975708	
44	215	msd 280-159302-C-1	1	U	1	1	13473	1025.202881	
45	216	280-159332-C-10	1	U	10	1	3891	2939.880127	
46	217	280-159332-C-12	1	U	10	1	1121	835.036621	
47	218	280-159332-C-9	1	U	1	1	40900	3146.608154	
48	219	280-159332-C-11	1	U	1	1	8776	666.138306	
49	220	VOID 280-159302-C-2	1	U	1	1	70207	5460.037109	HI
50	0	Blank	1	BLNK	1	1	-150	-12.874560	LO
B	0	Read Baseline	1	RB	1	1	0	-1.497813	BL
52	105	CCVL 500.0 ppb	1	U	1	1	6745	511.204132	UM
53	107	CCV 2500.0 ppb	1	U	1	1	32967	2528.701416	
54	111	CCB	1	U	1	1	207	14.163047	
B	0	read baseline	1	RB	1	1	0	-1.497813	BL
56	221	280-159302-C-3	1	U	1	1	414	29.882751	
57	222	280-159302-C-4	1	U	1	1	13883	1056.624878	
58	223	280-159302-C-5	1	U	1	1	363	26.039614	
59	224	280-159302-C-6	1	U	1	1	434	31.427837	
60	107	LCS	1	U	1	1	31477	2413.003418	
61	107	LCSD	1	U	1	1	31576	2420.745117	
62	111	MB	1	U	1	1	235	16.290205	
63	225	280-159302-C-7	1	U	1	1	459	33.283913	
64	226	ms 280-159302-C-7	1	U	1	1	13225	1006.212341	
65	227	msd 280-159302-C-7	1	U	1	1	12997	988.761230	
66	0	Blank	1	BLNK	1	1	13	-0.534827	LO
B	0	Read Baseline	1	RB	1	1	0	-1.497813	BL
68	105	CCVL 500.0 ppb	1	U	1	1	6631	502.552582	
69	107	CCV 2500.0 ppb	1	U	1	1	34077	2614.969238	
70	111	CCB	1	U	1	1	125	7.971708	

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
B	0	read baseline	1	RB	1	1	0	-1.497813	BL
72	228	280-159302-C-8	1	U	1	1	-14	-2.541455	LO
73	229	280-159302-C-9	1	U	1	1	-28	-3.602352	LO
74	204	280-159510-E-1	1	U	1	1	2509	188.903351	
75	220	280-159302-C-2	1	U	1	1	8706	660.810120	
76	0	Blank	1	BLNK	1	1	47	2.068209	
B	0	Read Baseline	1	RB	1	1	0	-1.497813	BL
78	105	CCVL 500.0 ppb	1	U	1	1	6438	487.829620	
79	107	CCV 2500.0 ppb	1	U	1	1	34703	2663.610840	
80	111	CCB	1	U	1	1	219	15.086454	
B	0	read baseline	1	RB	1	1	0	-1.497813	BL

NH3:Calibration 1: Peak 4-81

File name: C:\FLOW_4\031822.RST
Date: 18-Mar-22
Operator: JM

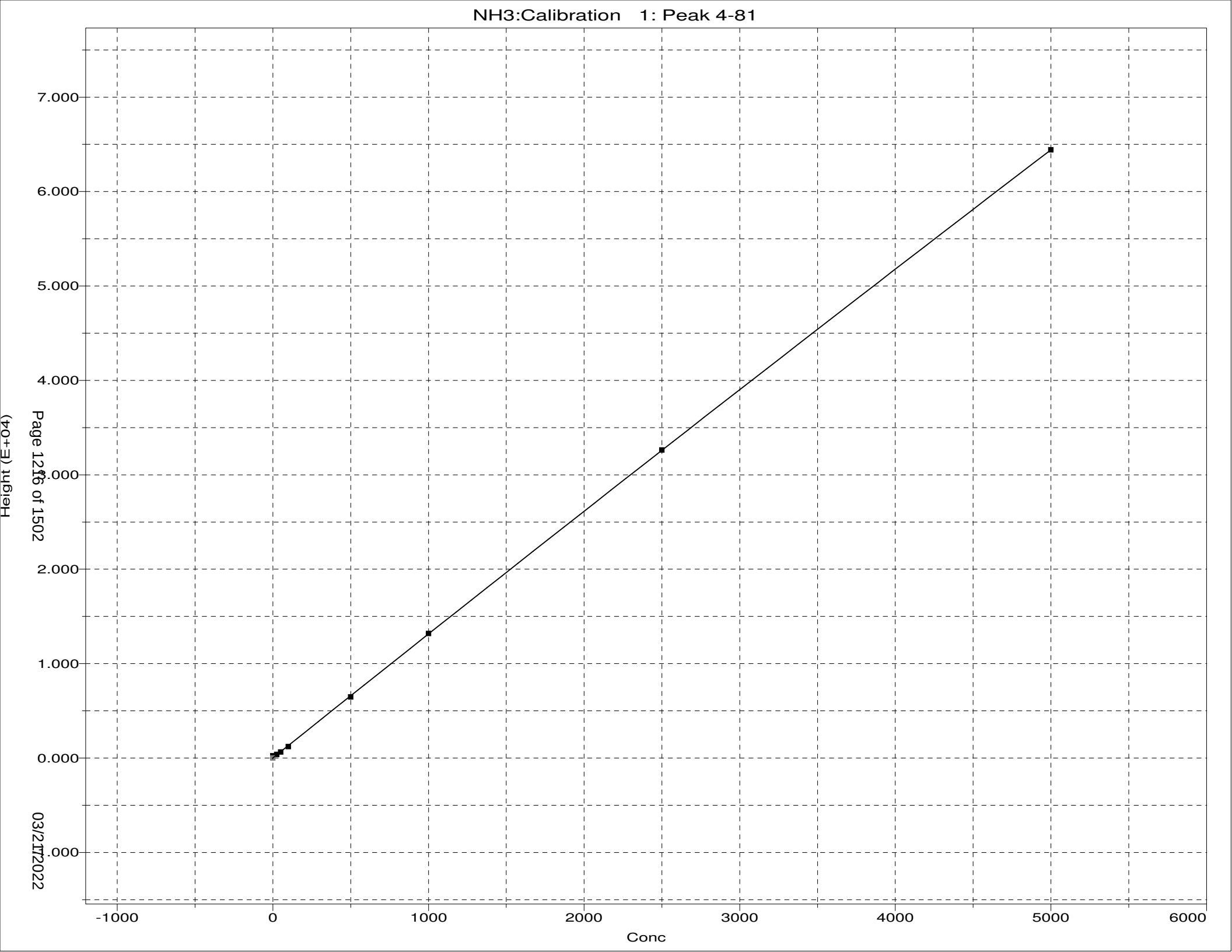
*	Name	Conc	Height
*	Cal 0 ppb	0.000000	231.960892
*	Cal 25 ppb	25.000000	374.562378
*	Cal 50 ppb	50.000000	632.795288
*	Cal 100 ppb	100.000000	1211.865601
*	Cal 500 ppb	500.000000	6469.348633
*	Cal 1000 ppb	1000.000000	13190.442383
*	Cal 2500 ppb	2500.000000	32620.285156
*	Cal 5000 ppb	5000.000000	64421.222656

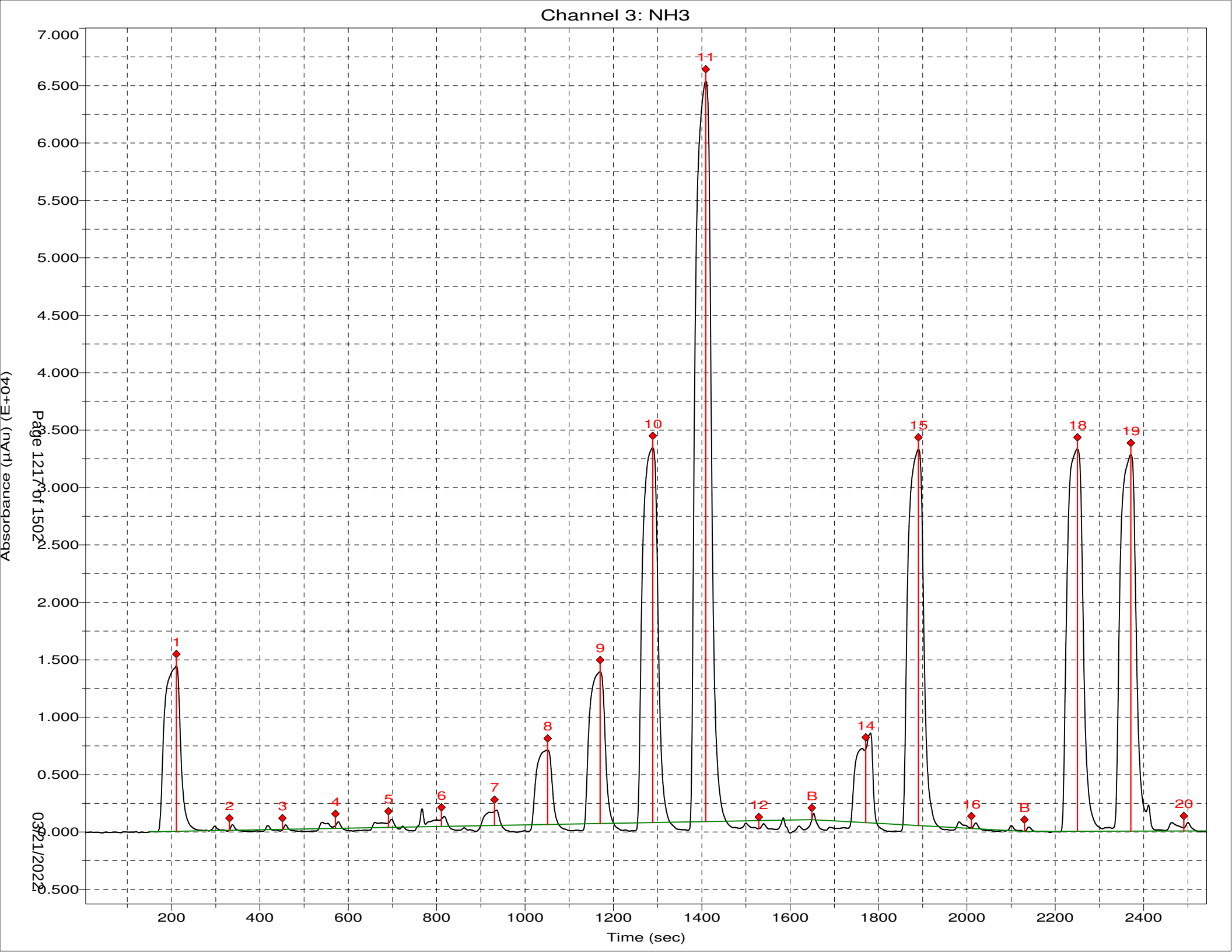
Calib Coef:
x=cyy+by+a
a: (intercept) -1.4978e+00
b: 7.5827e-02
c: 2.7978e-08

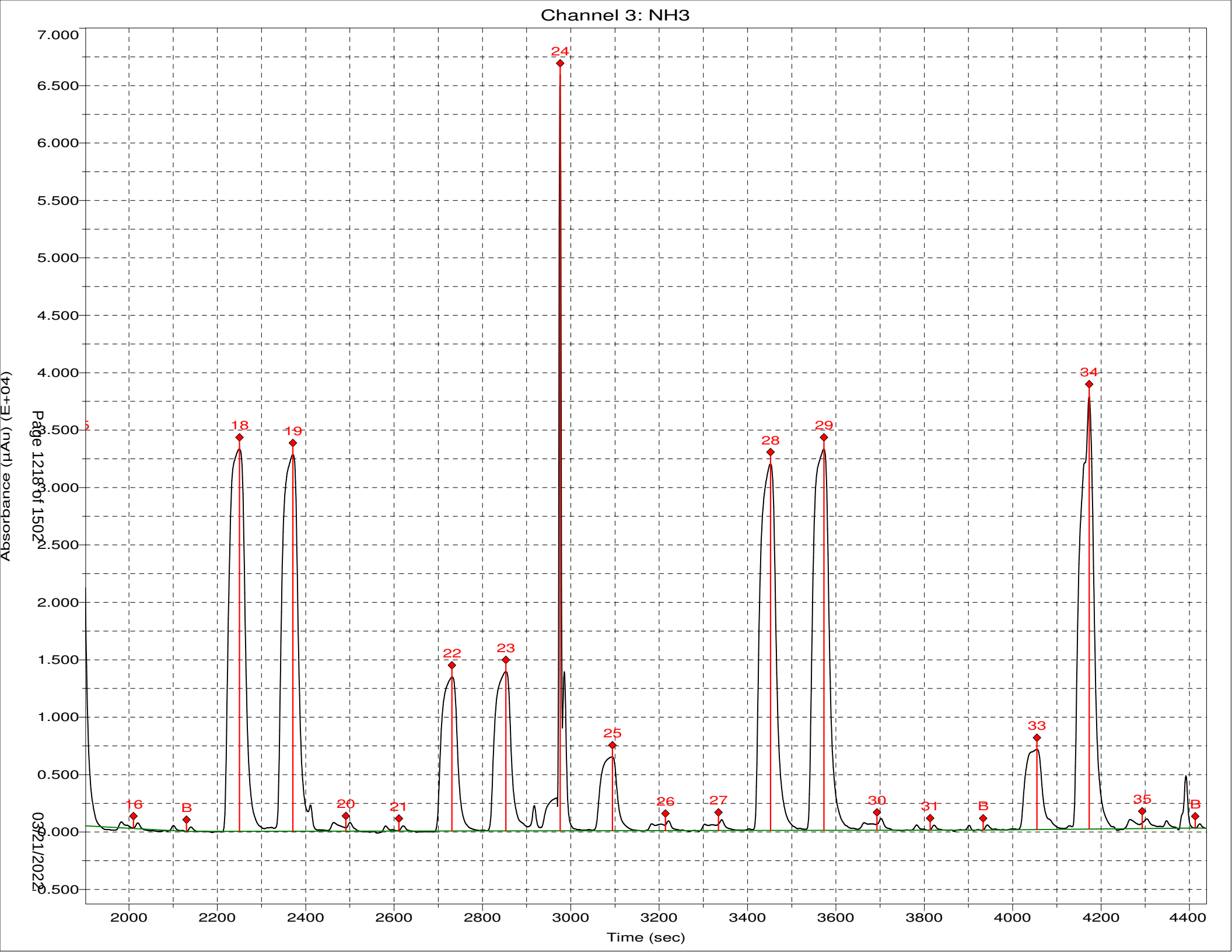
Corr Coef: 0.999989

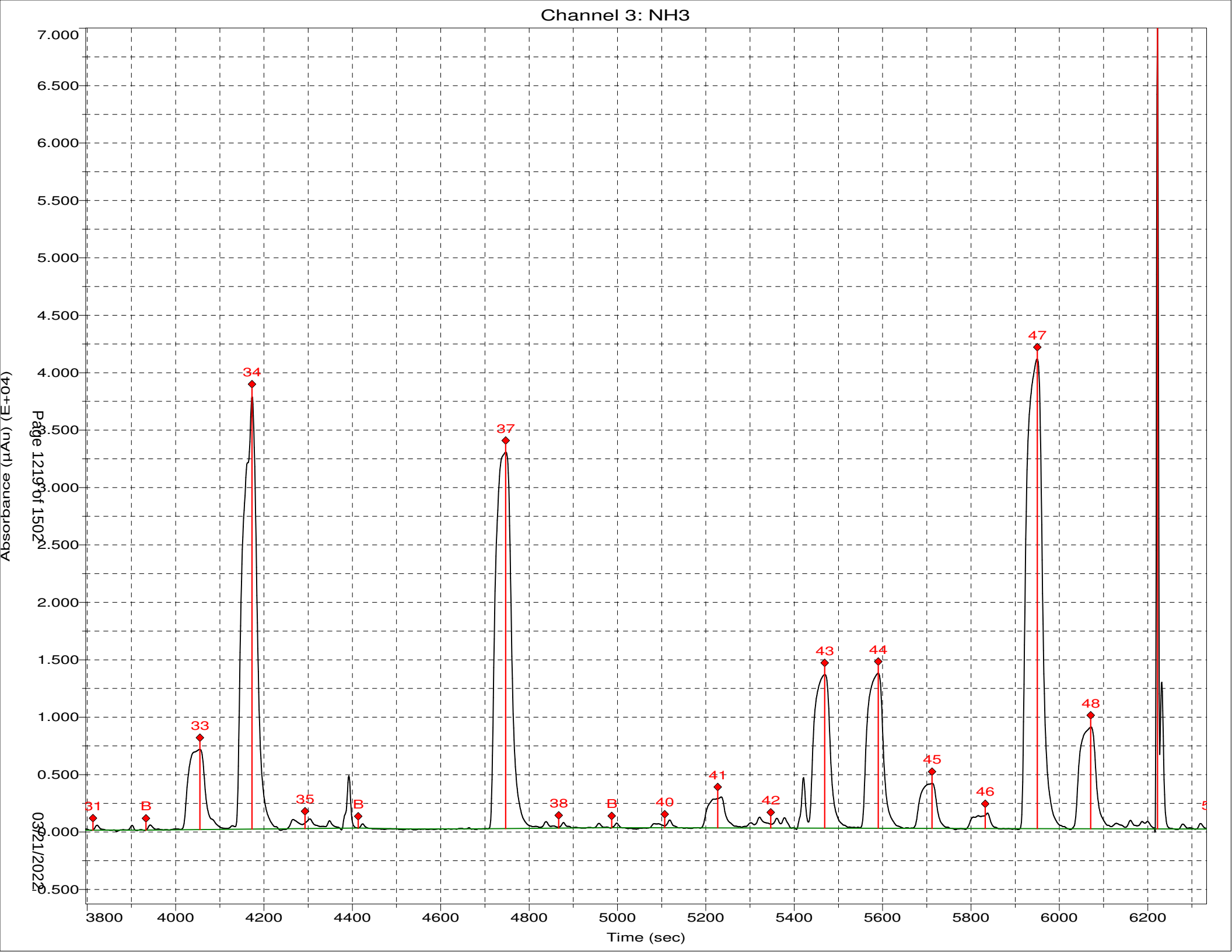
Carryover: 0.202%

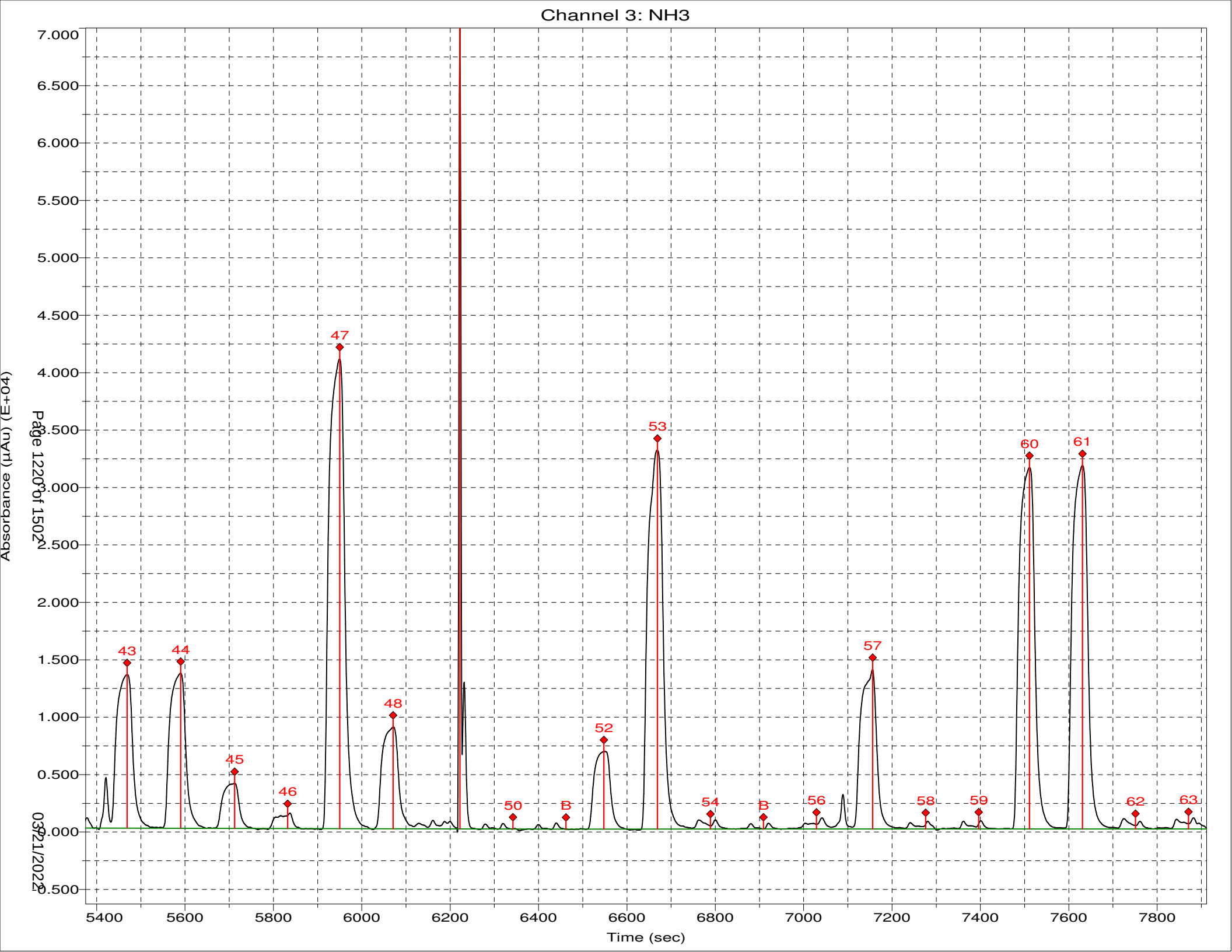
No Drift Peaks

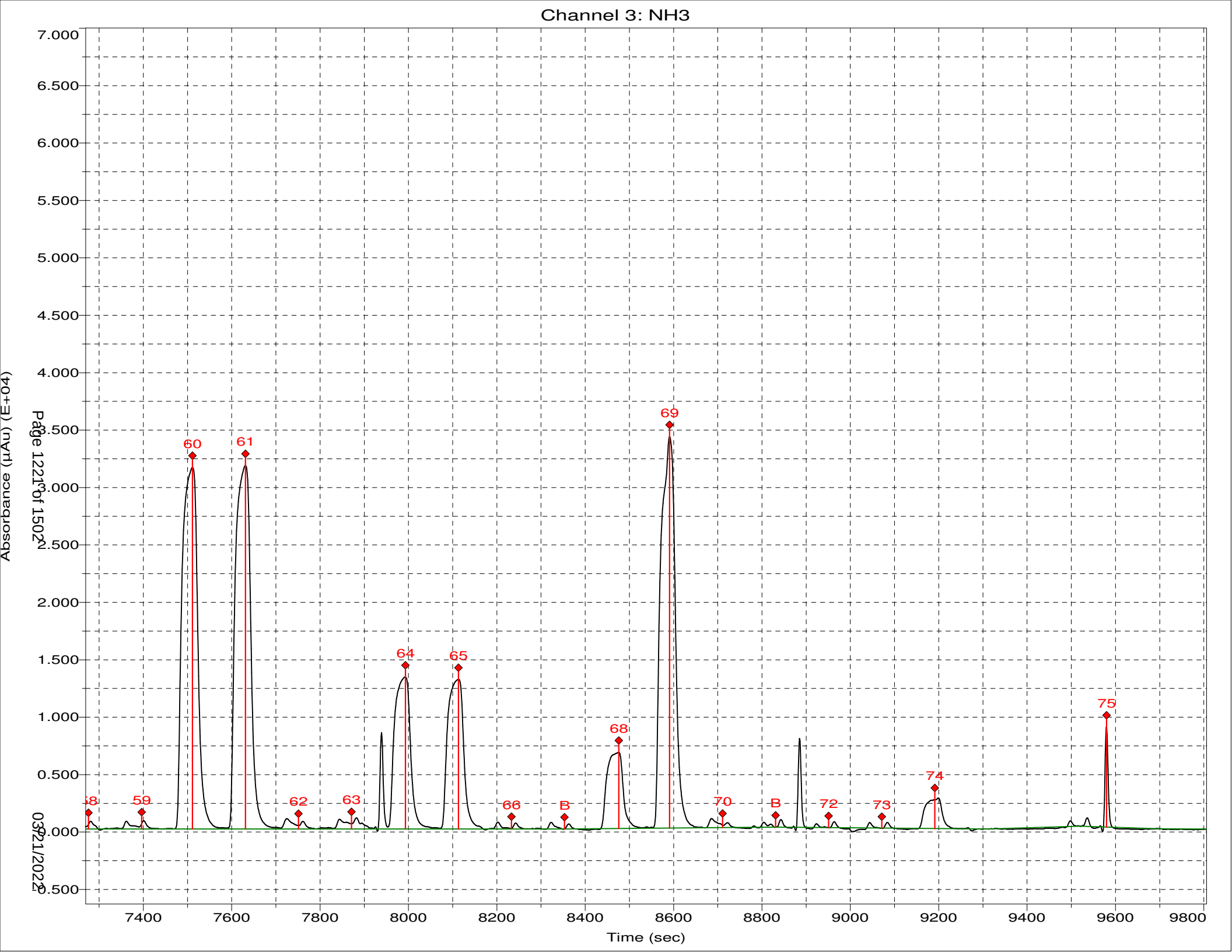

NH3:Calibration 1: Peak 4-81
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
-1.000
Height (E+04)
-1000
0
1000
2000
3000
4000
5000
6000
Conc
Page 1216 of 1502
03/21/2022

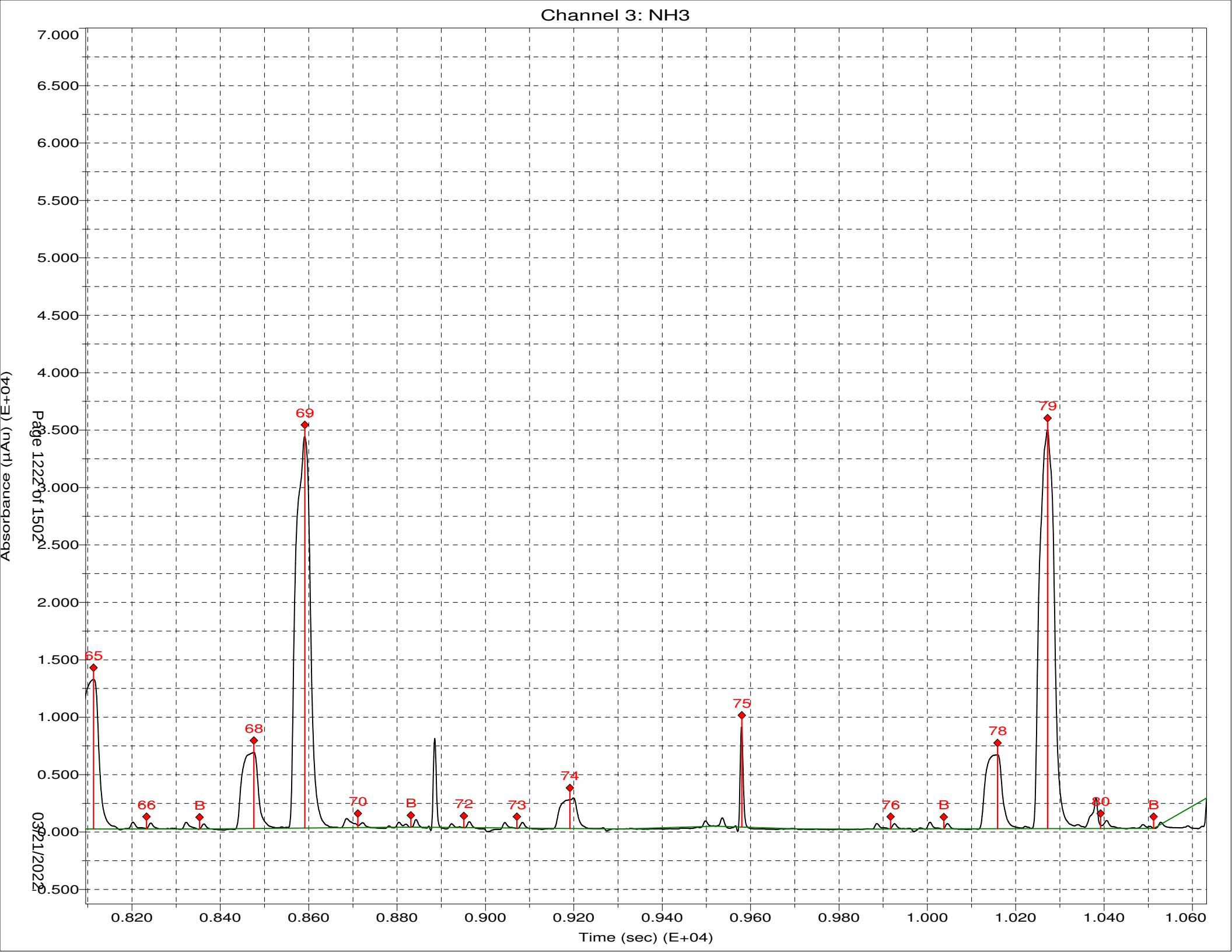

Channel 3: NH3
Absorbance (µAu) (E+04)
7.000
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
-0.500
Time (sec)
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
1
2
3
4
5
6
7
8
9
10
11
12
B
14
15
16
B
18
19
20
Page 1217 of 1502
03/21/2022


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec)
7.000
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
-0.500
2000
2200
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
16
B
18
19
20
21
22
23
24
25
26
27
28
29
30
31
B
33
34
35
B


Channel 3: NH3
Absorbance (µAu) (E+04)
7.000
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
-0.500
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
6200
Time (sec)
31
B
33
34
35
B
37
38
B
40
41
42
43
44
45
46
47
48
Page 1219 of 1502
03/21/2022


Channel 3: NH3
Absorbance (µAu) (E+04)
7.000
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
-0.500
5400
5600
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
Time (sec)
43
44
45
46
47
48
50
B
52
53
54
B
56
57
58
59
60
61
62
63
Page 1220 of 1502
03/21/2022


Channel 3: NH3
Absorbance (µAu) (E+04)
7.000
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
-0.500
Time (sec)
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
9400
9600
9800
58
59
60
61
62
63
64
65
66
B
68
69
70
B
72
73
74
75
Page 1221 of 1502
03/21/2022


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec) (E+04)
7.000
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
0.500
0.820
0.840
0.860
0.880
0.900
0.920
0.940
0.960
0.980
1.000
1.020
1.040
1.060
65
66
B
68
69
70
B
72
73
74
75
76
B
78
79
80
B

TestAmerica Calibration Spreadsheet, Work Instruction No. CA-Q-WI-13; dated 8/10/2011

Method		350.1
Analyte/Da	NH3	3/18/2022

Input Calibration Data

Amount	Response	ISTD Amt	ISTD Resp	Response
0.000	231.961			231.96100
25.000	374.562			374.56200
50.000	632.795			632.79500
100.000	4244.866			4244.86600
500.000	6769.379			6769.37900
1000.000	13190.420			13190.42000
2500.000	32620.285			32620.28500
5000.000	64421.223			64421.22300
				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!	14.17%	-202.34%	-219.10%
#DIV/0!	#DIV/0!	#DIV/0!	-3.56%	-110.61%	-118.05%
#DIV/0!	#DIV/0!	#DIV/0!	223.48%	178.36%	180.40%
#DIV/0!	#DIV/0!	#DIV/0!	3.17%	-4.68%	-3.65%
#DIV/0!	#DIV/0!	#DIV/0!	0.52%	-1.91%	-0.94%
#DIV/0!	#DIV/0!	#DIV/0!	-0.57%	0.27%	0.08%
#DIV/0!	#DIV/0!	#DIV/0!	-1.82%	0.08%	-2.18%
#DIV/0!	#DIV/0!	#DIV/0!	91.4%	130.4%	153.7%

RSE in X:

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		1.3123E+01		0	0.99814	0.99907
Linear	7.0036E+02	1.2733E+01		-55.00	0.99820	0.99910
Quadratic	7.4511E+02	1.2448E+01	1.1667E-04	-59.89	0.99759	0.99880
	c	b	a			

Sample Results

	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Instrum.Responses:	374.562	6,769.379			
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:	28.543	515.859	0.000	0.000	0.000
Linear Result:	-25.586	476.624	-55.002	-55.002	-55.002
Quad Result (no IS):	-29.775	481.765	-59.890	-59.890	-59.890
Quad Result (with IS):					

*** Sample Table from Analysis ***

File name: B
Date: 18-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	280-159332-C-13	U	1	1	1		pH<2, Cl- non-detect
202	ms 280-159332-C-13	U	1	1	1		pH<2, Cl- non-detect
203	msd 280-159332-C-13	U	1	1	1		pH<2, Cl- non-detect
204	VOID 280-159510-E-1	U	1	1	1		pH<2, Cl- non-detect
205	280-159332-C-1	U	1	1	1		pH<2, Cl- non-detect
206	280-159332-C-2	U	1	1	1		pH<2, Cl- non-detect
207	280-159332-C-3	U	1	1	1		pH<2, Cl- non-detect
208	280-159332-C-4	U	1	1	1		pH<2, Cl- non-detect
209	280-159332-C-5	U	1	1	1		pH<2, Cl- non-detect
210	280-159332-C-6	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	VOID CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
211	280-159332-C-7	U	1	1	1		pH<2, Cl- non-detect
212	280-159332-C-8	U	1	1	1		pH<2, Cl- non-detect
213	280-159302-C-1	U	1	1	1		pH<2, Cl- non-detect
214	ms 280-159302-C-1	U	1	1	1		pH<2, Cl- non-detect
215	msd 280-159302-C-1	U	1	1	1		pH<2, Cl- non-detect
216	280-159332-C-10	U	1	10	1		pH<2, Cl- non-detect
217	280-159332-C-12	U	1	10	1		pH<2, Cl- non-detect
218	280-159332-C-9	U	1	1	1		pH<2, Cl- non-detect
219	280-159332-C-11	U	1	1	1		pH<2, Cl- non-detect
220	VOID 280-159302-C-2	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		
221	280-159302-C-3	U	1	1	1		pH<2, Cl- non-detect

350.1 color_00277

350.1 bleach_01587

350.1 complex_00603

Cup	Name	Type	R	Dil	Wt	Vial	Comment
222	280-159302-C-4	U	1	1	1		pH<2, Cl- non-detect
223	280-159302-C-5	U	1	1	1		pH<2, Cl- non-detect
224	280-159302-C-6	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	280-159302-C-7	U	1	1	1		pH<2, Cl- non-detect
226	ms 280-159302-C-7	U	1	1	1		pH<2, Cl- non-detect
227	msd 280-159302-C-7	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		
228	280-159302-C-8	U	1	1	1		pH<2, Cl- non-detect
229	280-159302-C-9	U	1	1	1		pH<2, Cl- non-detect
204	280-159510-E-1	U	1	1	1		pH<2, Cl- non-detect
220	280-159302-C-2	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		

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 19-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	280-159888-A-2	U	1	1	1		pH<2, Cl- non-detect
202	ms 280-159888-A-2	U	1	1	1		pH<2, Cl- non-detect
203	msd 280-159888-A-2	U	1	1	1		pH<2, Cl- non-detect
204	280-159302-C-2	U	1	1	1		pH<2, Cl- non-detect
205	280-159332-C-4	U	1	1	1		pH<2, Cl- non-detect
206	280-159332-C-5	U	1	1	1		pH<2, Cl- non-detect
207	280-159332-C-9	U	1	1	1		pH<2, Cl- non-detect
208	280-159361-B-2	U	1	1	1		pH<2, Cl- non-detect
209	280-159361-B-3	U	1	1	1		pH<2, Cl- non-detect
210	280-159361-B-4	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	280-159361-B-5	U	1	1	1		pH<2, Cl- non-detect
212	280-159361-B-6	U	1	1	1		pH<2, Cl- non-detect
213	280-159361-B-7	U	1	1	1		pH<2, Cl- non-detect
214	ms 280-159361-B-7	U	1	1	1		pH<2, Cl- non-detect
215	msd 280-159361-B-7	U	1	1	1		pH<2, Cl- non-detect
216	280-159361-B-8	U	1	1	1		pH<2, Cl- non-detect
217	280-159384-C-1	U	1	1	1		pH<2, Cl- non-detect
218	280-159384-C-2	U	1	10	1		pH<2, Cl- non-detect
219	280-159384-C-6	U	1	10	1		pH<2, Cl- non-detect
220	VOID 280-159384-C-4	U	1	100	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	VOID 280-159384-C-5	U	1	100	1		pH<2, Cl- non-detect
222	280-159419-B-1	U	1	1	1		pH<2, Cl- non-detect
223	280-159419-B-2	U	1	1	1		pH<2, Cl- non-detect
224	280-159419-B-3	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	280-159419-B-4	U	1	1	1		pH<2, Cl- non-detect
226	ms 280-159419-B-4	U	1	1	1		pH<2, Cl- non-detect

Cup	Name	Type	R	Dil	Wt	Vial	Comment
227	msd 280-159419-B-4 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		
0	read baseline	RB	1	1	1		
228	280-159419-B-6	U	1	1	1		pH<2, Cl- non-detect
229	280-159342-H-2	U	1	20	1		pH<2, Cl- non-detect
230	280-159342-H-3	U	1	20	1		pH<2, Cl- non-detect
231	280-159341-J-1	U	1	100	1		pH<2, Cl- non-detect
232	280-159341-J-2	U	1	100	1		pH<2, Cl- non-detect
233	VOID 280-159341-H-3 U		1	100	1		pH<2, Cl- non-detect
234	VOID 280-159342-H-1 U		1	100	1		pH<2, Cl- non-detect
235	280-159343-I-1	U	1	100	1		pH<2, Cl- non-detect
236	280-159343-J-2	U	1	100	1		pH<2, Cl- non-detect
237	280-159419-B-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		
0	read baseline	RB	1	1	1		
238	ms 280-159419-B-5 U		1	1	1	1	pH<2, Cl- non-detect
239	msd 280-159419-B-5 U		1	1	1	1	pH<2, Cl- non-detect
240	280-159341-h-3	U	1	200	1		pH<2, Cl- non-detect
241	280-159342-h-1	U	1	200	1		pH<2, Cl- non-detect
242	280-159384-c-4	U	1	10	1		pH<2, Cl- non-detect
243	280-159384-c-5	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		

Peak Table:NH3

File name: C:\FLOW_4\031922.RST
Date: 19-Mar-22
Operator: JM

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	106	Sync	1	SYNC	1	1	15151	986.360352	
2	0	Carry Over	1	CO	1	1	59	-21.542271	LO
3	0	Blank	1	BLNK	1	1	43	-22.582760	LO
4	101	Cal 0 ppb	1	C	1	1	531	9.695040	
5	102	Cal 25 ppb	1	C	1	1	702	21.007793	
6	103	Cal 50 ppb	1	C	1	1	1086	46.456394	
7	104	Cal 100 ppb	1	C	1	1	1835	96.057518	
8	105	Cal 500 ppb	1	C	1	1	7869	497.570099	
9	106	Cal 1000 ppb	1	C	1	1	15455	1006.831421	
10	107	Cal 2500 ppb	1	C	1	1	37236	2496.830322	
11	108	Cal 5000 ppb	1	C	1	1	72559	5000.566406	HI
12	0	Blank	1	BLNK	1	1	-168	-36.518921	LO
B	0	Read Baseline	1	RB	1	1	0	-25.435322	BL
14	109	ICVL 500.0 ppb	1	U	1	1	7777	491.403107	
15	110	ICV 2500.0 ppb	1	U	1	1	37630	2524.107422	
16	111	ICB	1	U	1	1	303	-5.409184	LO
B	0	read baseline	1	RB	1	1	0	-25.435322	BL
18	107	LCS	1	U	1	1	37335	2503.652344	
19	107	LCSD	1	U	1	1	37842	2538.840820	
20	111	MB	1	U	1	1	248	-9.034856	LO
21	201	280-159888-A-2	1	U	1	1	718	22.055817	
22	202	ms 280-159888-A-2	1	U	1	1	16142	1053.217163	
23	203	msd 280-159888-A-2	1	U	1	1	16045	1046.685547	
24	204	280-159302-C-2	1	U	1	1	74	-20.551632	LO
25	205	280-159332-C-4	1	U	1	1	36720	2461.000488	
26	206	280-159332-C-5	1	U	1	1	38231	2565.817871	
27	207	280-159332-C-9	1	U	1	1	48508	3283.998047	
28	208	280-159361-B-2	1	U	1	1	2593	146.279678	
29	209	280-159361-B-3	1	U	1	1	1803	93.927078	
30	210	280-159361-B-4	1	U	1	1	900	34.083664	
31	0	Blank	1	BLNK	1	1	-45	-28.415340	LO
B	0	Read Baseline	1	RB	1	1	0	-25.435322	BL
33	105	CCVL 500.0 ppb	1	U	1	1	8008	506.872009	
34	107	CCV 2500.0 ppb	1	U	1	1	37556	2519.004395	
35	111	CCB	1	U	1	1	213	-11.352287	LO
B	0	read baseline	1	RB	1	1	0	-25.435322	BL
37	211	280-159361-B-5	1	U	1	1	3893	232.627350	
38	212	280-159361-B-6	1	U	1	1	406	1.439364	
39	213	280-159361-B-7	1	U	1	1	4699	286.209106	
40	214	ms 280-159361-B-7	1	U	1	1	19884	1306.492310	
41	215	msd 280-159361-B-7	1	U	1	1	19634	1289.506348	
42	216	280-159361-B-8	1	U	1	1	2094	113.196274	
43	217	280-159384-C-1	1	U	1	1	11469	738.616516	
44	218	280-159384-C-2	1	U	10	1	753	243.771332	
45	219	280-159384-C-6	1	U	10	1	2975	1716.305176	
46	220	VOID 280-159384-C-4	1	U	100	1	2296	12658.966797	
47	0	Blank	1	BLNK	1	1	50	-22.161015	LO
B	0	Read Baseline	1	RB	1	1	0	-25.435322	BL
49	105	CCVL 500.0 ppb	1	U	1	1	7812	493.763641	
50	107	CCV 2500.0 ppb	1	U	1	1	37746	2532.201416	
51	111	CCB	1	U	1	1	189	-12.964509	LO
B	0	read baseline	1	RB	1	1	0	-25.435322	BL
53	221	VOID 280-159384-C-5	1	U	100	1	1590	7978.251465	
54	222	280-159419-B-1	1	U	1	1	22579	1489.650757	
55	223	280-159419-B-2	1	U	1	1	32579	2174.770996	
56	224	280-159419-B-3	1	U	1	1	1147	50.486713	
57	107	LCS	1	U	1	1	38572	2589.554932	
58	107	LCSD	1	U	1	1	38716	2599.537109	
59	111	MB	1	U	1	1	437	3.442815	
60	225	280-159419-B-4	1	U	1	1	3904	233.395889	
61	226	ms 280-159419-B-4	1	U	1	1	19467	1278.228516	
62	227	msd 280-159419-B-4	1	U	1	1	18766	1230.697510	
63	0	Blank	1	BLNK	1	1	7	-24.944736	LO
B	0	Read Baseline	1	RB	1	1	0	-25.435322	BL
65	105	CCVL 500.0 ppb	1	U	1	1	8060	510.307465	
66	107	CCV 2500.0 ppb	1	U	1	1	38316	2571.746338	
67	111	CCB	1	U	1	1	498	7.523621	
B	0	read baseline	1	RB	1	1	0	-25.435322	BL
69	228	280-159419-B-6	1	U	1	1	4582	278.426208	
70	229	280-159342-H-2	1	U	20	1	68186	93694.046875	

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	230	280-159342-H-3	1	U	20	1	42310	56996.230469	
72	231	280-159341-J-1	1	U	100	1	15566	101430.882812	
73	232	280-159341-J-2	1	U	100	1	42366	285369.750000	
74	233	VOID 280-159341-H-3	1	U	100	1	84622	588035.937500	HI
75	234	VOID 280-159342-H-1	1	U	100	1	76274	527017.375000	HI
76	235	280-159343-I-1	1	U	100	1	27459	182290.812500	FL
77	236	280-159343-J-2	1	U	100	1	45333	306115.156250	FL
78	237	280-159419-B-5	1	U	1	1	3253	190.093536	
79	0	Blank	1	BLNK	1	1	14	-24.537720	LO
B	0	Read Baseline	1	RB	1	1	0	-25.435322	BL
81	105	CCVL 500.0 ppb	1	U	1	1	7776	491.342621	
82	107	CCV 2500.0 ppb	1	U	1	1	38058	2553.836182	
83	111	CCB	1	U	1	1	423	2.566536	
B	0	read baseline	1	RB	1	1	0	-25.435322	BL
85	238	ms 280-159419-B-5	1	U	1	1	18493	1212.190674	
86	239	msd 280-159419-B-5	1	U	1	1	18500	1212.660522	
87	240	280-159341-h-3	1	U	200	1	49250	667244.125000	
88	241	280-159342-h-1	1	U	200	1	45201	610389.500000	
89	242	280-159384-c-4	1	U	10	1	23316	15398.203125	
90	243	280-159384-c-5	1	U	10	1	13993	9082.945312	
91	0	Blank	1	BLNK	1	1	59	-21.511436	LO
B	0	Read Baseline	1	RB	1	1	0	-25.435322	BL
93	105	CCVL 500.0 ppb	1	U	1	1	7966	504.026642	
94	107	CCV 2500.0 ppb	1	U	1	1	37270	2499.125732	
95	111	CCB	1	U	1	1	495	7.276415	
B	0	read baseline	1	RB	1	1	0	-25.435322	BL

NH3:Calibration 1: Peak 4-96

File name: C:\FLOW_4\031922.RST
Date: 19-Mar-22
Operator: JM

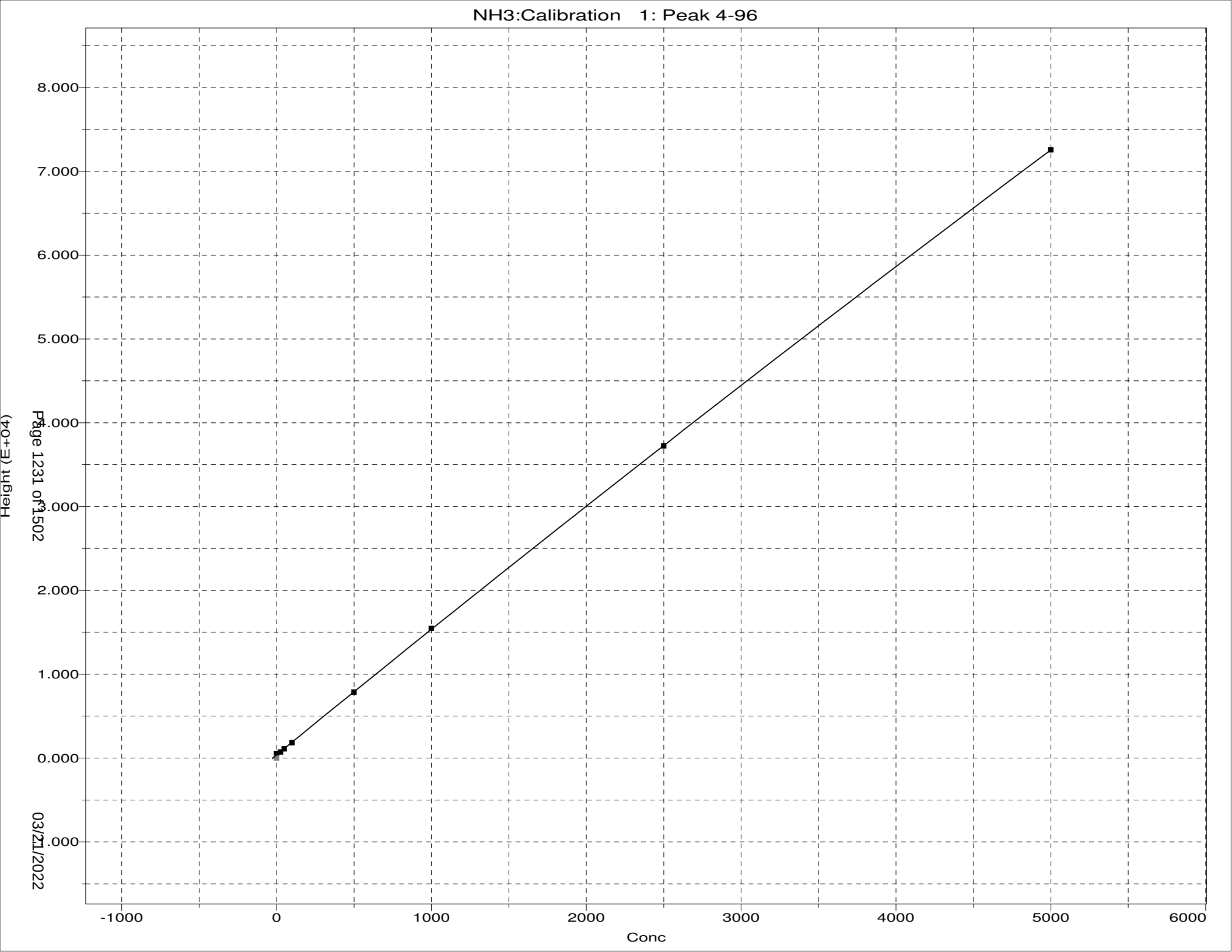
*	Name	Conc	Height
*	Cal 0 ppb	0.000000	531.109009
*	Cal 25 ppb	25.000000	702.059143
*	Cal 50 ppb	50.000000	1086.480225
*	Cal 100 ppb	100.000000	1835.188599
*	Cal 500 ppb	500.000000	7869.072754
*	Cal 1000 ppb	1000.000000	15454.886719
*	Cal 2500 ppb	2500.000000	37236.429688
*	Cal 5000 ppb	5000.000000	72559.023438

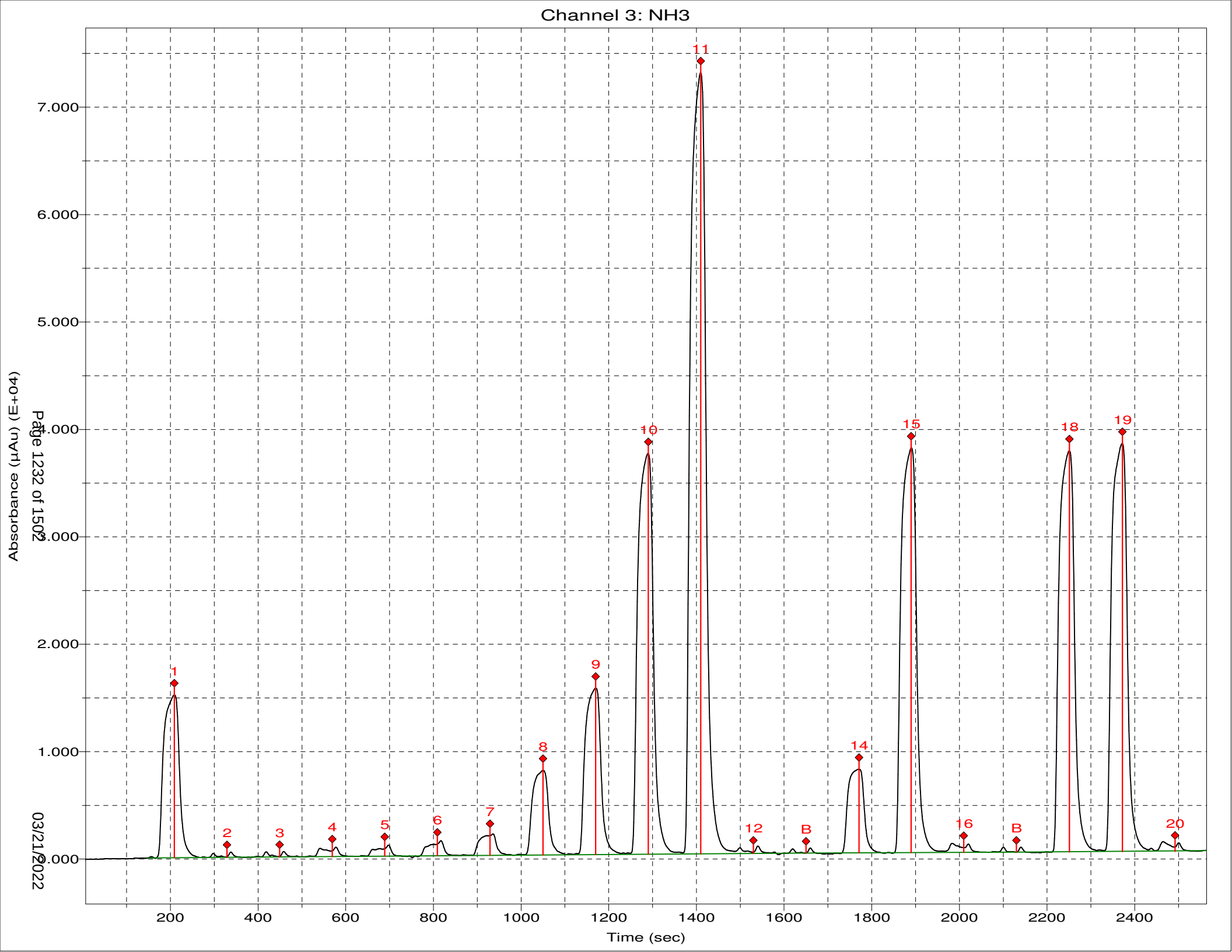
Calib Coef:
x=cyy+by+a
a: (intercept) -2.5435e+01
b: 6.6122e-02
c: 4.3351e-08

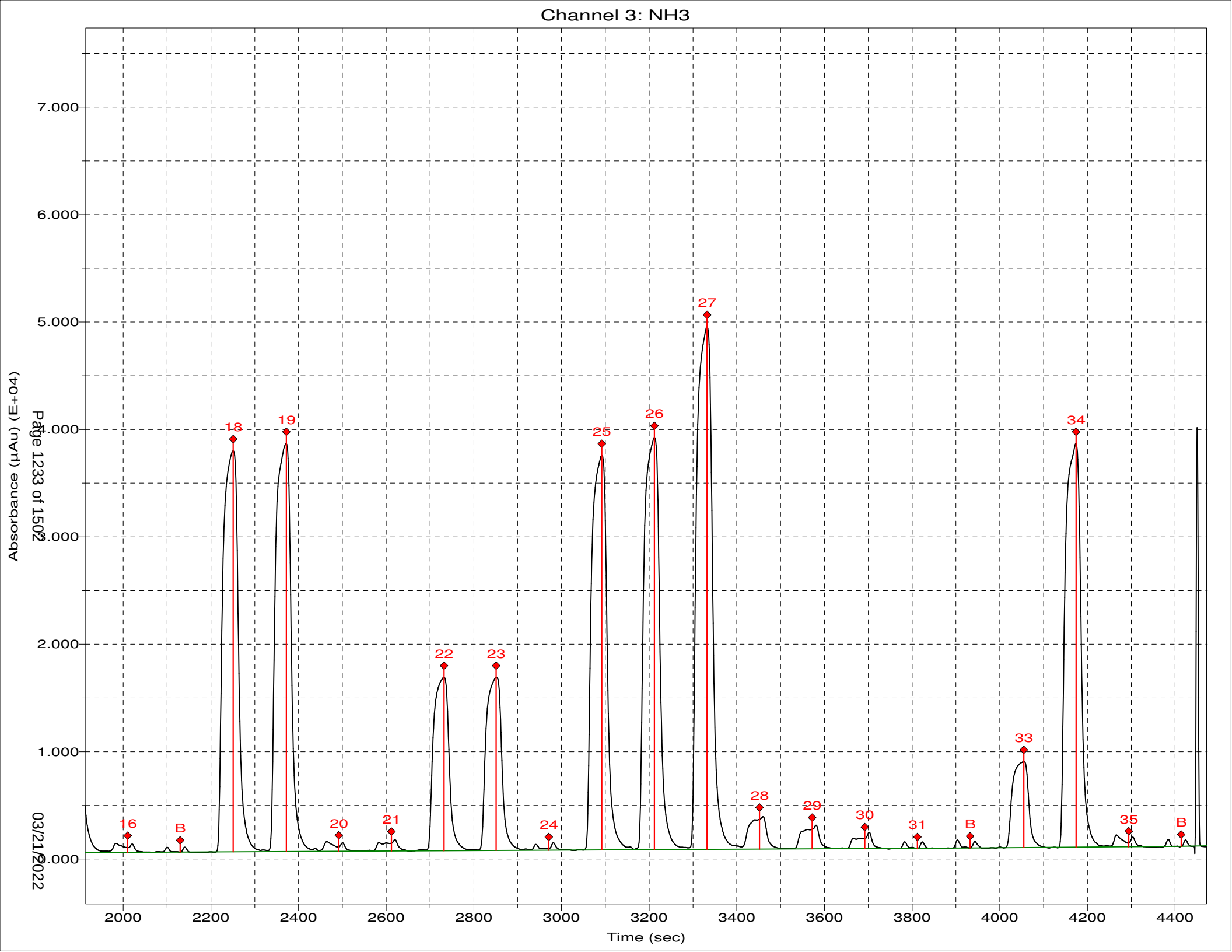
Corr Coef: 0.999995

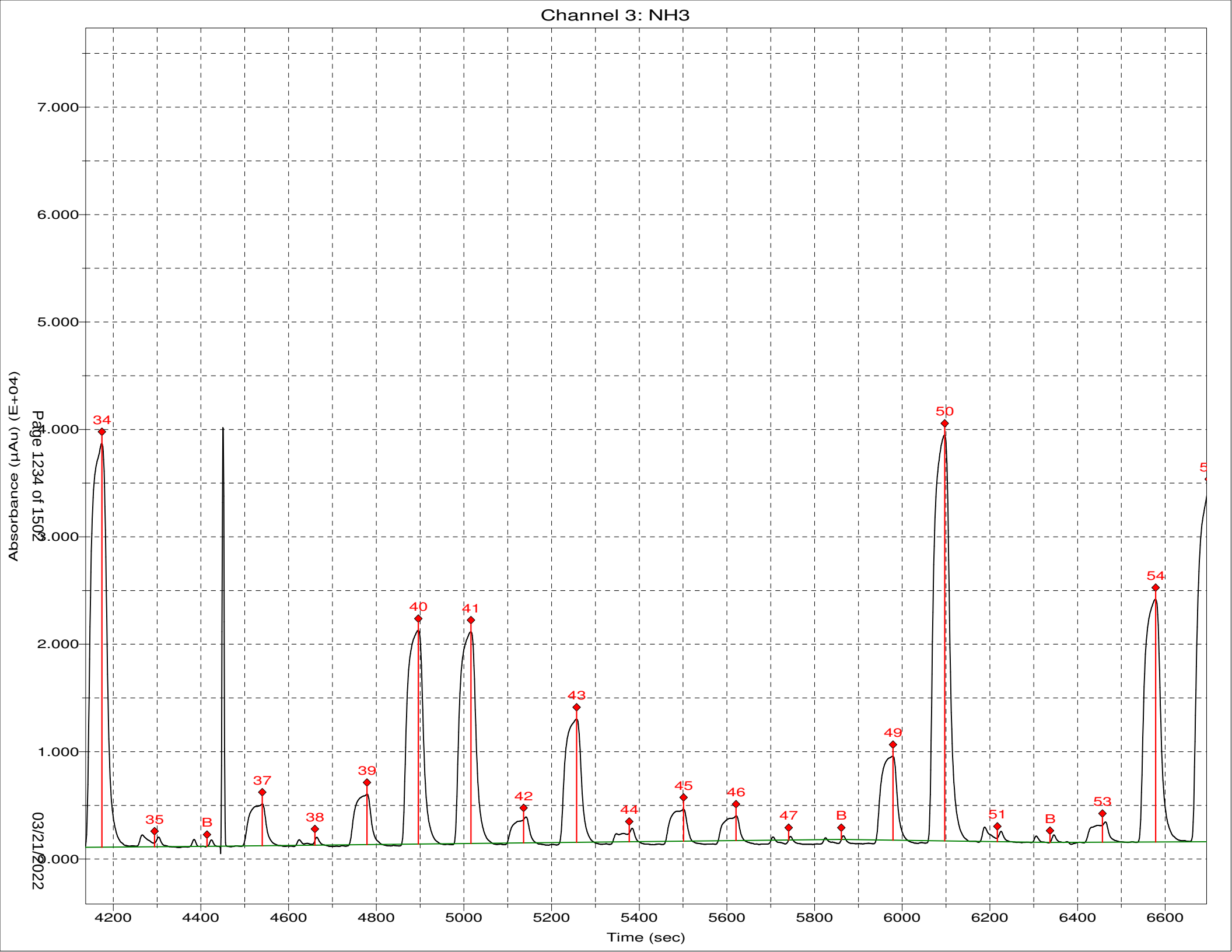
Carryover: 0.389%

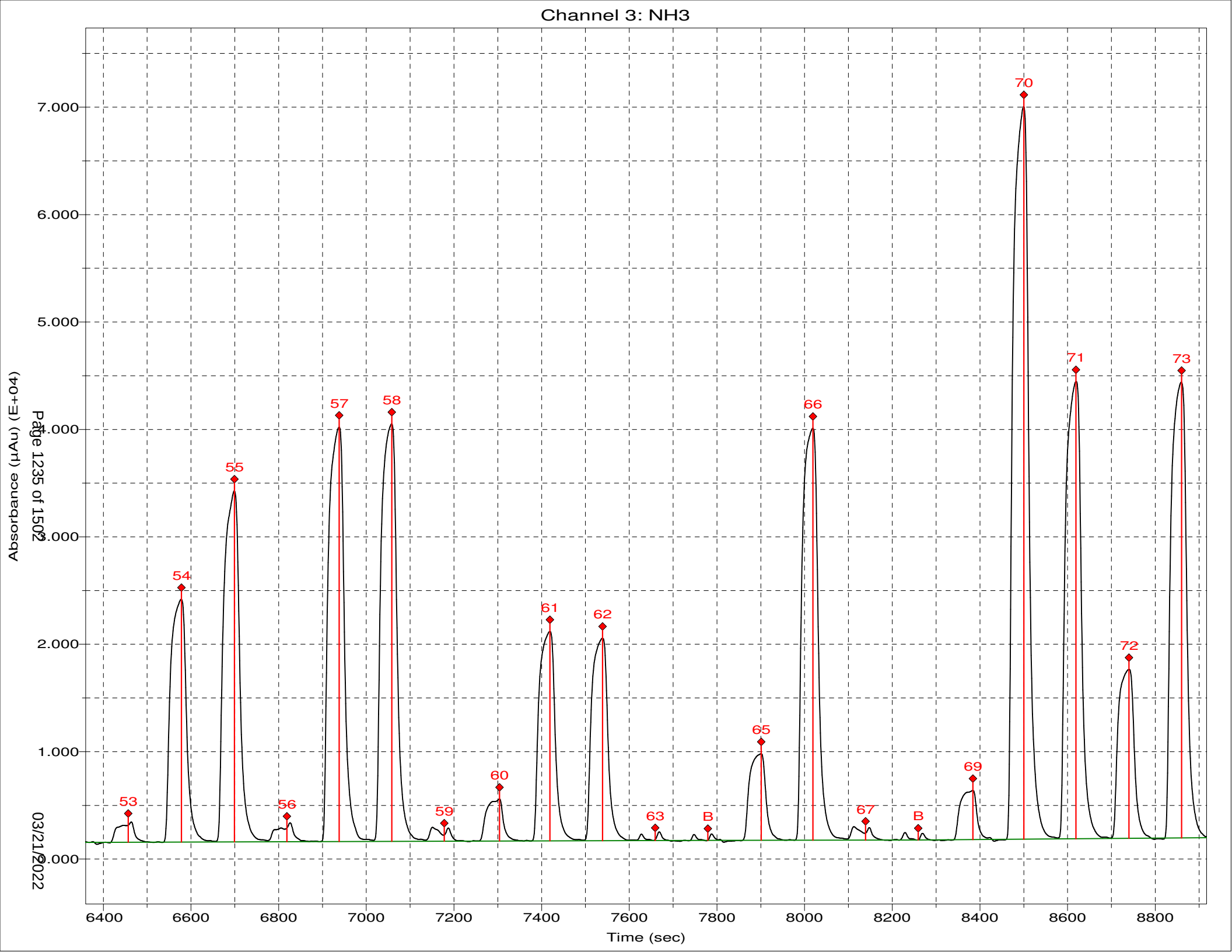
No Drift Peaks

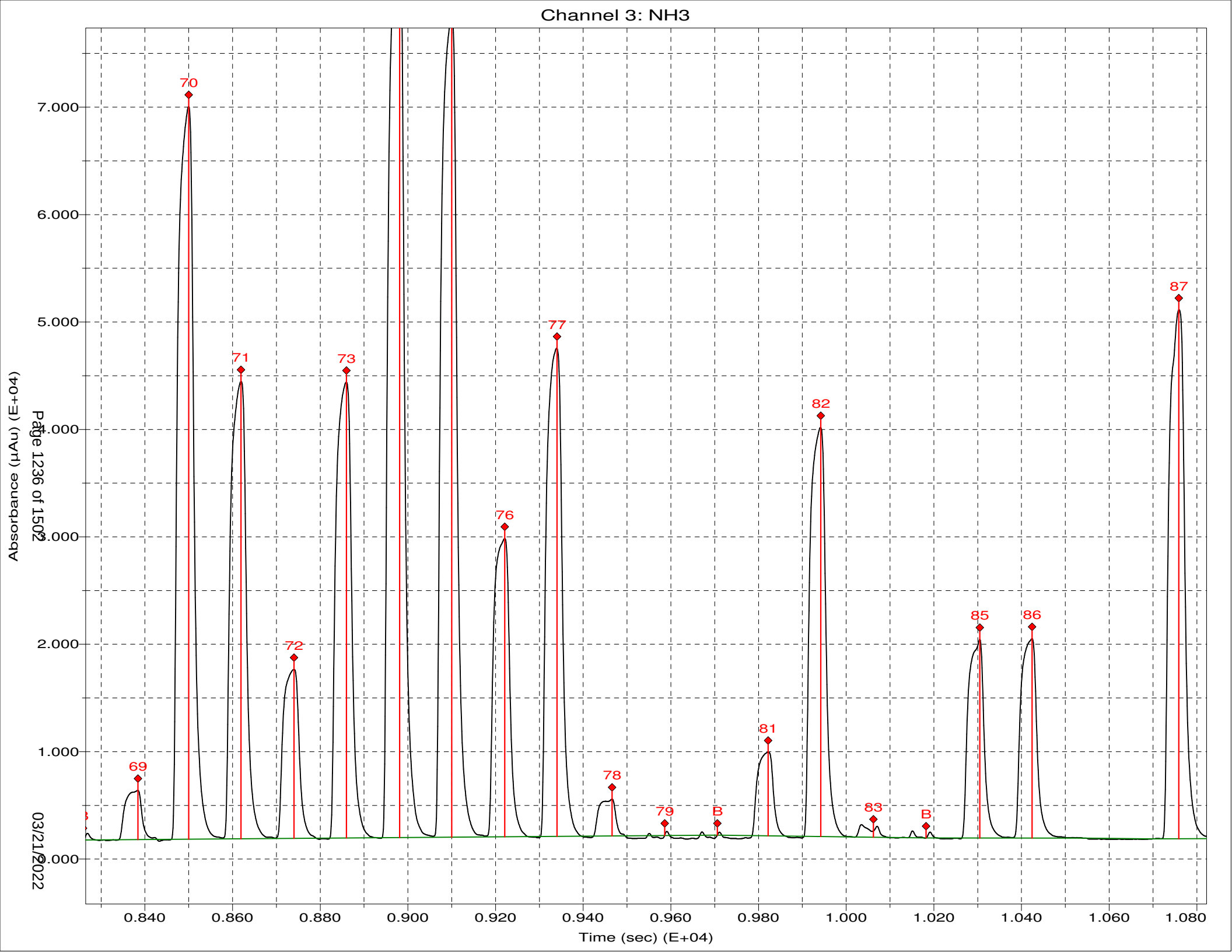

NH3:Calibration 1: Peak 4-96
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
-1.000
Height (E+04)
-1000
0
1000
2000
3000
4000
5000
6000
Conc
Page 1231 of 1502
03/21/2022

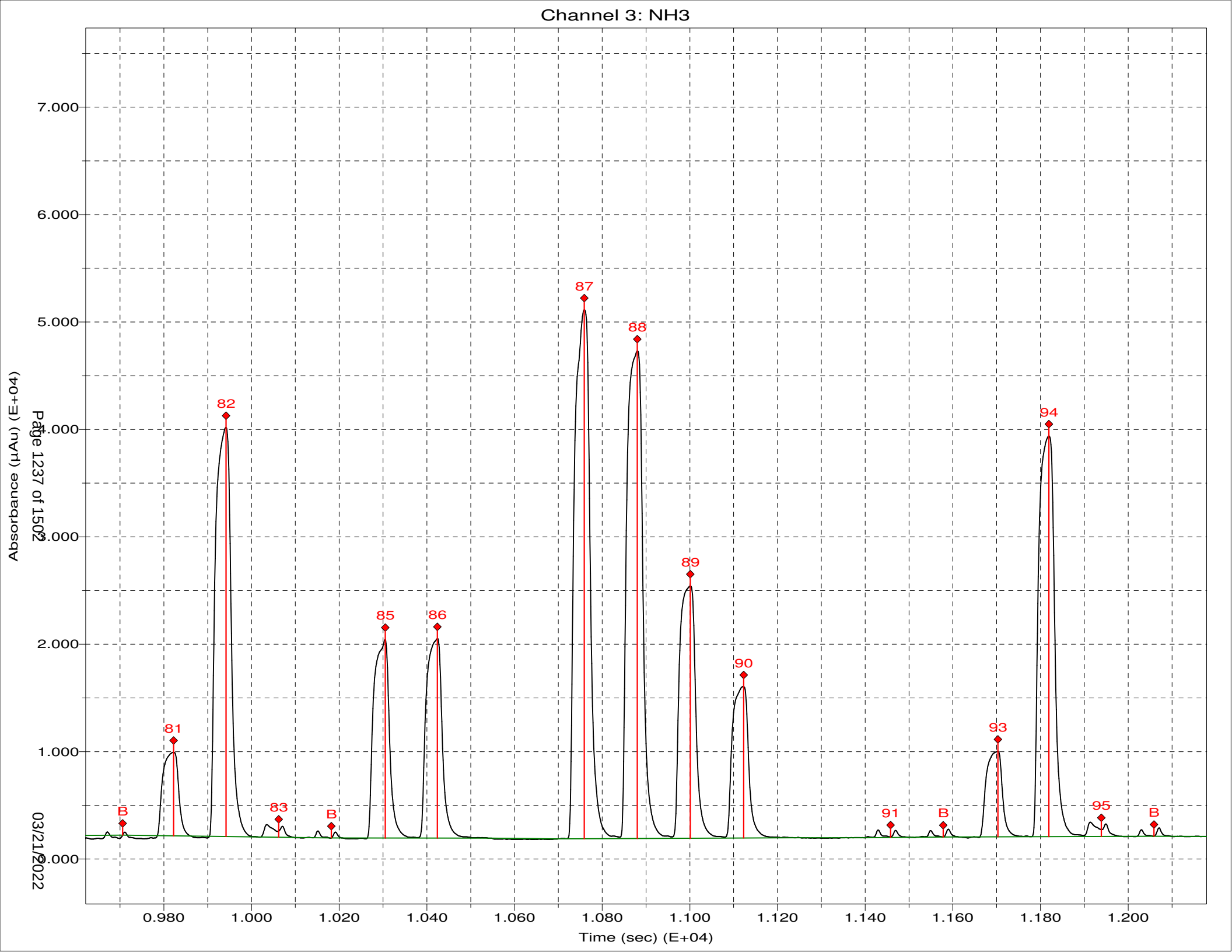

Channel 3: NH3
Absorbance (µAu) (E+04)
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
1
2
3
4
5
6
7
8
9
10
11
12
B
14
15
16
B
18
19
20
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
Time (sec)
Page 1232 of 1502
03/21/2022


Channel 3: NH3
Absorbance (µAu) (E+04)
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
16
B
18
19
20
21
22
23
24
25
26
27
28
29
30
31
B
33
34
35
B
2000
2200
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
Time (sec)
Page 1233 of 1502
03/21/2022


Channel 3: NH3
Absorbance (µAu) (E+04)
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
Time (sec)
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
6200
6400
6600
34
35
B
37
38
39
40
41
42
43
44
45
46
47
B
49
50
51
B
53
54
Page 1234 of 1502
03/21/2022


Channel 3: NH3
Absorbance (µAu) (E+04)
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
Time (sec)
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
53
54
55
56
57
58
59
60
61
62
63
B
65
66
67
B
69
70
71
72
73
Page 1235 of 1502
03/21/2022


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec) (E+04)
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
0.840
0.860
0.880
0.900
0.920
0.940
0.960
0.980
1.000
1.020
1.040
1.060
1.080
69
70
71
72
73
76
77
78
79
B
81
82
83
B
85
86
87
Page 1236 of 1502
03/21/2022


Channel 3: NH3
Absorbance (µAu) (E+04)
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
Time (sec) (E+04)
0.980
1.000
1.020
1.040
1.060
1.080
1.100
1.120
1.140
1.160
1.180
1.200
B
81
82
83
B
85
86
87
88
89
90
91
B
93
94
95
B

TestAmerica Calibration Spreadsheet, Work Instruction No. CA-Q-WI-13; dated 8/10/2011

Method		350.1
Analyte/Da	NH3	3/18/2022

Input Calibration Data

Amount	Response	ISTD Amt	ISTD Resp	Response
0.000	531.109			531.10900
25.000	702.059			702.05900
50.000	1086.480			1086.48000
100.000	1835.189			1835.18900
500.000	7869.073			7869.07300
1000.000	15454.887			15454.88700
2500.000	37236.429			37236.42900
5000.000	72559.023			72559.02300
				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!	87.15%	-29.52%	-12.81%
	#DIV/0!	#DIV/0!	#DIV/0!	44.81%	-12.67%	-5.83%
	#DIV/0!	#DIV/0!	#DIV/0!	22.30%	-5.61%	-3.62%
	#DIV/0!	#DIV/0!	#DIV/0!	4.88%	0.64%	-0.83%
	#DIV/0!	#DIV/0!	#DIV/0!	3.00%	1.72%	0.38%
	#DIV/0!	#DIV/0!	#DIV/0!	-0.74%	-0.28%	-0.02%
	#DIV/0!	#DIV/0!	#DIV/0!	-3.29%	-2.28%	1.16%
RSE in X:	#DIV/0!	#DIV/0!	#DIV/0!	41.1%	14.6%	7.3%

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		1.5005E+01		0	0.99898	0.99949
Linear	4.4200E+02	1.4760E+01		-29.95	0.99936	0.99968
Quadratic	3.7050E+02	1.5215E+01	-1.8637E-04	-24.34	0.99986	0.99993
	c	b	a			

Sample Results

	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Instrum.Responses:	702.059	7,869.073			
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:	46.788	524.423	0.000	0.000	0.000
Linear Result:	17.620	503.204	-29.947	-29.947	-29.947
Quad Result (no IS):	21.798	495.858	-24.344	-24.344	-24.344
Quad Result (with IS):					

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 19-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	280-159888-A-2	U	1	1	1		pH<2, Cl- non-detect
202	ms 280-159888-A-2 U		1	1	1		pH<2, Cl- non-detect
203	msd 280-159888-A-2 U		1	1	1		pH<2, Cl- non-detect
204	280-159302-C-2	U	1	1	1		pH<2, Cl- non-detect
205	280-159332-C-4	U	1	1	1		pH<2, Cl- non-detect
206	280-159332-C-5	U	1	1	1		pH<2, Cl- non-detect
207	280-159332-C-9	U	1	1	1		pH<2, Cl- non-detect
208	280-159361-B-2	U	1	1	1		pH<2, Cl- non-detect
209	280-159361-B-3	U	1	1	1		pH<2, Cl- non-detect
210	280-159361-B-4	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	280-159361-B-5	U	1	1	1		pH<2, Cl- non-detect
212	280-159361-B-6	U	1	1	1		pH<2, Cl- non-detect
213	280-159361-B-7	U	1	1	1		pH<2, Cl- non-detect
214	ms 280-159361-B-7 U		1	1	1		pH<2, Cl- non-detect
215	msd 280-159361-B-7 U		1	1	1		pH<2, Cl- non-detect
216	280-159361-B-8	U	1	1	1		pH<2, Cl- non-detect
217	280-159384-C-1	U	1	1	1		pH<2, Cl- non-detect
218	280-159384-C-2	U	1	10	1		pH<2, Cl- non-detect
219	280-159384-C-6	U	1	10	1		pH<2, Cl- non-detect
220	VOID 280-159384-C-4 U		1	100	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	VOID 280-159384-C-5 U		1	100	1		pH<2, Cl- non-detect
222	280-159419-B-1	U	1	1	1		pH<2, Cl- non-detect
223	280-159419-B-2	U	1	1	1		pH<2, Cl- non-detect
224	280-159419-B-3	U	1	1	1		pH<2, Cl- non-detect

350.1 color_00247

350.1 bleach_01588

350.1 complex_00603

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	280-159419-B-4	U	1	1	1		pH<2, Cl- non-detect
226	ms 280-159419-B-4	U	1	1	1		pH<2, Cl- non-detect
227	msd 280-159419-B-4	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		
228	280-159419-B-6	U	1	1	1		pH<2, Cl- non-detect
229	280-159342-H-2	U	1	20	1		pH<2, Cl- non-detect
230	280-159342-H-3	U	1	20	1		pH<2, Cl- non-detect
231	280-159341-J-1	U	1	100	1		pH<2, Cl- non-detect
232	280-159341-J-2	U	1	100	1		pH<2, Cl- non-detect
233	VOID 280-159341-H-3	U	1	100	1		pH<2, Cl- non-detect
234	VOID 280-159342-H-1	U	1	100	1		pH<2, Cl- non-detect
235	280-159343-I-1	U	1	100	1		pH<2, Cl- non-detect
236	280-159343-J-2	U	1	100	1		pH<2, Cl- non-detect
237	280-159419-B-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		
0	read baseline	RB	1	1	1		
238	ms 280-159419-B-5	U	1	1	1		pH<2, Cl- non-detect
239	msd 280-159419-B-5	U	1	1	1		pH<2, Cl- non-detect
240	280-159341-h-3	U	1	200	1		pH<2, Cl- non-detect
241	280-159342-h-1	U	1	200	1		pH<2, Cl- non-detect
242	280-159384-c-4	U	1	10	1		pH<2, Cl- non-detect
243	280-159384-c-5	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		

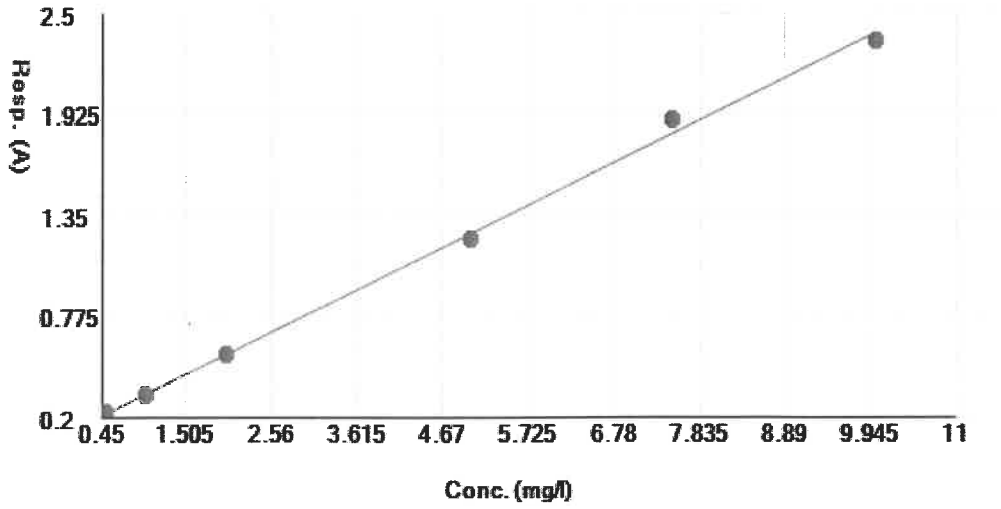
Calibration results

TKN Version number 1.5 WC_GAL1

Date	3/14/2022	**User**	Dealer
Time	4:57:44PM	**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 3/14/2022 **User** Dealer

Time 6:01:14PM **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	5.2708190	mg/l		0.0	calc	
TKN	icb	1.5	0.0227165	mg/l		0.0	calc	
TKN	LCS 280-568334/1-A	1.5	5.8459130	mg/l		0.0	calc	
TKN	MB 280-568334/2-A	1.5	-0.0401942	mg/l		0.0	calc	
TKN	280-159384-C-1-A	1.5	-0.1714457	mg/l		0.0	calc	
TKN	280-159384-C-1-B MS	1.5	-0.1153076	mg/l		0.0	calc	
TKN	280-159384-C-1-C MSD	1.5	-0.0873640	mg/l		0.0	calc	
TKN	280-159384-C-2-A	1.5	0.9833338	mg/l		0.0	calc	
TKN	280-159384-C-4-A	1.5	0.2057191	mg/l		0.0	calc	
TKN	280-159384-C-5-A	1.5	1.1579750	mg/l		0.0	calc	
TKN	280-159384-C-6-A	1.5	-0.1698207	mg/l		0.0	calc	
TKN	280-159341-B-1-A	1.5	0.0327413	mg/l		0.0	calc	
TKN	280-159341-B-2-A	1.5	1.2491350	mg/l		0.0	calc	
TKN	280-159341-A-3-A	1.5	0.0673253	mg/l		0.0	calc	
TKN	ccv1	1.5	5.3344740	mg/l		0.0	calc	
TKN	ccb1	1.5	-0.0359808	mg/l		0.0	calc	
TKN	280-159315-A-3-A	1.5	-0.1697045	mg/l		0.0	calc	
TKN	580-111014-I-2-A	1.5	3.7774530	mg/l		0.0	calc	
TKN	LCS 280-568332/1-A	1.5	5.7813060	mg/l		0.0	calc	
TKN	MB 280-568332/2-A	1.5	-0.0389935	mg/l		0.0	calc	
TKN	280-159275-C-2-A	1.5	-0.1016267	mg/l		0.0	calc	

Test	Sample/ctrl ID	Test version	Result	Unit	Note	Dil. 1 +	Status	Errors
TKN	280-159275-C-2-B MS	1.5	-0.1666925	mg/l		0.0	calc	
TKN	280-159275-C-2-C MSD	1.5	-0.1682392	mg/l		0.0	calc	
TKN	280-159275-B-3-A	1.5	3.9785340	mg/l		0.0	calc	
TKN	280-159275-C-4-A	1.5	-0.1649425	mg/l		0.0	calc	
TKN	280-159275-B-5-A	1.5	-0.1389836	mg/l		0.0	calc	
TKN	ccv2	1.5	5.3885130	mg/l		0.0	calc	
TKN	ccb2	1.5	0.0957609	mg/l		0.0	calc	
TKN	280-159275-B-6-A	1.5	0.4563175	mg/l		0.0	calc	
TKN	580-110868-A-2-A	1.5	3.1458040	mg/l		0.0	calc	
TKN	280-159332-C-1-A	1.5	4.0151850	mg/l		0.0	calc	
TKN	280-159332-C-2-A	1.5	1.6140330	mg/l		0.0	calc	
TKN	280-159332-C-3-A	1.5	1.1306330	mg/l		0.0	calc	
TKN	280-159332-C-4-A	1.5	-0.0132570	mg/l		0.0	calc	
TKN	280-159332-C-13-A	1.5	0.1373091	mg/l		0.0	calc	
TKN	280-159332-C-13-B MS	1.5	2.6379580	mg/l		0.0	calc	
TKN	280-159332-C-13-C MS	1.5	2.6261480	mg/l		0.0	calc	
TKN	280-159332-C-5-A	1.5	0.8201759	mg/l		0.0	calc	
TKN	ccv3	1.5	5.3723730	mg/l		0.0	calc	
TKN	ccb3	1.5	0.0043324	mg/l		0.0	calc	
TKN	280-159332-C-6-A	1.5	4.2868430	mg/l		0.0	calc	
TKN	280-159332-C-7-A	1.5	4.5513310	mg/l		0.0	calc	
TKN	280-159332-C-8-A	1.5	2.9557220	mg/l		0.0	calc	
TKN	280-159332-C-9-A	1.5	2.8191520	mg/l		0.0	calc	
TKN	280-159332-C-10-A	1.5	7.0107070	mg/l		0.0	calc	
TKN	280-159332-C-12-A	1.5	1.4839770	mg/l		0.0	calc	
TKN	ccv4	1.5	5.3363210	mg/l		0.0	calc	
TKN	ccb4	1.5	-0.0245247	mg/l		0.0	calc	

Test	Sample/ctrl ID	Test version	Result	Unit	Note	Dil. 1 +	Status	Errors
TKN	280-159332-C-11-A	1.5	14.7131300	mg/l		4.0	calc	
TKN	580-110867-A-2-A	1.5	16.4291300	mg/l		4.0	calc	
TKN	ccv5	1.5	5.3621510	mg/l		0.0	calc	
TKN	ccb5	1.5	-0.0346537	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\031522.RST
Sample table path	C:\FLOW_4\031522.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	15-Mar-22
Time acquired	19:04

Date	Time	Cup	Name
15-Mar-22	16:05	109	SYNC
15-Mar-22	16:07	0	Carryover
15-Mar-22	16:09	0	Carryover (Statistics)
15-Mar-22	16:11	0	read baseline
15-Mar-22	16:13	101	Cal 0.00 ppb
15-Mar-22	16:15	102	Cal 50.0 ppb
15-Mar-22	16:17	103	Cal 100 ppb
15-Mar-22	16:19	104	Cal 500 ppb
15-Mar-22	16:21	105	Cal 1000 ppb
15-Mar-22	16:23	106	Cal 2500 ppb
15-Mar-22	16:25	107	Cal 5000 ppb
15-Mar-22	16:27	108	Cal 7500 ppb
15-Mar-22	16:29	109	Cal 10000 ppb
15-Mar-22	16:31	0	Blank
15-Mar-22	16:33	0	Read Baseline
15-Mar-22	16:35	110	5000 PPB NO2
15-Mar-22	16:37	111	ICV 5000 PPB
15-Mar-22	16:39	112	ICV 2000 PPB
15-Mar-22	16:41	0	ICB
15-Mar-22	16:43	0	Read Baseline
15-Mar-22	16:45	107	LCS
15-Mar-22	16:47	0	MB
15-Mar-22	16:49	113	280-159293-E-5
15-Mar-22	16:51	114	ms 280-159293-E-5
15-Mar-22	16:53	115	msd 280-159293-E-5
15-Mar-22	16:55	116	280-159510-E-1
15-Mar-22	16:57	117	280-159034-B-18
15-Mar-22	16:59	118	280-159190-C-5
15-Mar-22	17:01	119	580-110902-B-1
15-Mar-22	17:03	120	280-159293-E-1
15-Mar-22	17:05	121	280-159293-E-2
15-Mar-22	17:07	122	280-159293-E-3
15-Mar-22	17:09	0	Rinse
15-Mar-22	17:11	0	Read Baseline
15-Mar-22	17:13	107	CCV 5000 ppb
15-Mar-22	17:15	105	CCVL 1000 ppb
15-Mar-22	17:17	0	CCB
15-Mar-22	17:19	0	Read Baseline
15-Mar-22	17:21	123	280-159293-E-4
15-Mar-22	17:23	124	280-159293-E-7
15-Mar-22	17:25	125	280-159293-E-6
15-Mar-22	17:27	126	ms 280-159293-E-6
15-Mar-22	17:29	127	msd 280-159293-E-6
15-Mar-22	17:31	128	280-159293-E-8

Result path	C:\FLOW_4\031522.RST
Sample table path	C:\FLOW_4\031522.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	15-Mar-22
Time acquired	19:04

Date	Time	Cup	Name
15-Mar-22	17:33	129	280-159293-E-9
15-Mar-22	17:35	130	280-159293-E-10
15-Mar-22	17:37	131	280-159293-E-11
15-Mar-22	17:39	132	280-159293-E-12
15-Mar-22	17:41	0	Rinse
15-Mar-22	17:43	0	Read Baseline
15-Mar-22	17:45	107	CCV 5000 ppb
15-Mar-22	17:47	105	CCVL 1000 ppb
15-Mar-22	17:49	0	CCB
15-Mar-22	17:51	0	Read Baseline
15-Mar-22	17:53	133	280-159293-E-13
15-Mar-22	17:55	134	280-159293-E-14
15-Mar-22	17:57	135	280-159332-C-1
15-Mar-22	17:59	136	280-159332-C-2
15-Mar-22	18:01	107	LCS
15-Mar-22	18:03	0	MB
15-Mar-22	18:05	137	280-159332-C-13
15-Mar-22	18:07	138	ms 280-159332-C-13
15-Mar-22	18:09	139	msd 280-159332-C-13
15-Mar-22	18:11	140	280-159332-C-3
15-Mar-22	18:13	141	280-159332-C-4
15-Mar-22	18:15	0	Rinse
15-Mar-22	18:17	0	Read Baseline
15-Mar-22	18:19	107	CCV 5000 ppb
15-Mar-22	18:21	105	CCVL 1000 ppb
15-Mar-22	18:23	0	Rinse
15-Mar-22	18:25	0	Read Baseline
15-Mar-22	18:27	142	280-159332-C-5
15-Mar-22	18:29	143	280-159332-C-6
15-Mar-22	18:31	144	280-159332-C-7
15-Mar-22	18:33	145	280-159332-C-8
15-Mar-22	18:35	146	280-159332-C-9
15-Mar-22	18:37	147	280-159332-C-10
15-Mar-22	18:39	148	280-159332-C-11
15-Mar-22	18:41	149	280-159332-C-12
15-Mar-22	18:43	150	ms 280-159332-C-12
15-Mar-22	18:45	151	msd 280-159332-C-12
15-Mar-22	18:47	0	Rinse
15-Mar-22	18:49	0	Read Baseline
15-Mar-22	18:51	107	CCV 5000 ppb
15-Mar-22	18:53	105	CCVL 1000 ppb
15-Mar-22	18:55	0	CCB
15-Mar-22	18:57	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\031522.RST
Sample table path	C:\FLOW_4\031522.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	15-Mar-22
Time acquired	19:04

	Nitrate as N					
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	
SYNC	2572638	9890.279				
Carryover	1692	-15.541	LO			
Carryover	116	-21.596	LO			
(Statistics)				904	-18.569	N
read baseline	0	-22.040	BL			
Cal 0.00 ppb	1696	-15.526	LO			
Cal 50.0 ppb	14621	34.111				
Cal 100 ppb	28683	88.116				
Cal 500 ppb	139833	515.058				
Cal 1000 ppb	271946	1022.682				
Cal 2500 ppb	668400	2547.025				
Cal 5000 ppb	1289020	4936.377				
Cal 7500 ppb	1959760	7522.957				
Cal 10000 ppb	2600815	9999.204				
Blank	524	-20.027	LO			
Read Baseline	0	-22.040	BL			
5000 PPB NO2	1288624	4934.851				
ICV 5000 PPB	1337024	5121.349				
ICV 2000 PPB	578172	2199.966				
ICB	-710	-24.766	LO			
Read Baseline	0	-22.040	BL UM			
LCS	1297452	4968.867				
MB	-1176	-26.557	LO			
280-159293-E-5	580599	2209.299				
ms 280-159293-E-5	1559386	5978.458				
msd 280-159293-E-5	1560739	5983.677				
280-159510-E-1	1124068	4300.952				
280-159034-B-18	109674	399.202				
280-159190-C-5	793272	15137.354				
580-110902-B-1	20460	56.533				
280-159293-E-1	120868	442.204				
280-159293-E-2	14227	32.596				
280-159293-E-3	557407	2120.104				
Rinse	-69	-22.304	LO			
Read Baseline	0	-22.040	BL			
CCV 5000 ppb	1284273	4918.089				
CCVL 1000 ppb	276414	1039.853				
CCB	101	-21.654	LO			
Read Baseline	0	-22.040	BL			
280-159293-E-4	42003	139.273				
280-159293-E-7	80151	285.798				
280-159293-E-6	5064	-2.591	LO			
ms 280-159293-E-6	1039337	3974.657				
msd 280-159293-E-6	1044926	3996.176				
280-159293-E-8	7886	8.245				

Result path C:\FLOW_4\031522.RST
Sample table path C:\FLOW_4\031522.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 15-Mar-22
Time acquired 19:04

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
280-159293-E-9	8538	10.748			
280-159293-E-10	3442	-8.823	LO		
280-159293-E-11	11104	20.604			
280-159293-E-12	1577	-15.982	LO		
Rinse	485	-20.176	LO		
Read Baseline	0	-22.040	BL		
CCV 5000 ppb	1307875	5009.027			
CCVL 1000 ppb	276229	1039.142			
CCB	-394	-23.555	LO		
Read Baseline	0	-22.040	BL		
280-159293-E-13	879403	3358.947			
280-159293-E-14	886326	3385.596			
280-159332-C-1	22349	63.790			
280-159332-C-2	1144496	4379.629			
LCS	1307669	5008.232			
MB	794	-18.991	LO		
280-159332-C-13	623713	47502.520			
ms 280-159332-C-13	1606770	123223.328			
msd 280-159332-C-13	1614282	123802.688			
280-159332-C-3	585202	11135.010			
280-159332-C-4	730484	2785.872			
Rinse	191	-21.308	LO		
Read Baseline	0	-22.040	BL		
CCV 5000 ppb	1299106	4975.239			
CCVL 1000 ppb	282074	1061.605			
Rinse	-247	-22.988	LO		
Read Baseline	0	-22.040	BL		
280-159332-C-5	858564	3278.741			
280-159332-C-6	854346	16312.530			
280-159332-C-7	625697	11913.794			
280-159332-C-8	11570	22.394			
280-159332-C-9	3018836	11616.104	HI		
280-159332-C-10	5746	0.027	FL		
280-159332-C-11	1511124	5792.389			
280-159332-C-12	1504392	5766.434			
ms 280-159332-C-12	2360811	9071.649			
msd 280-159332-C-12	2354958	9049.038			
Rinse	1047	-18.021	LO		
Read Baseline	0	-22.040	BL		
CCV 5000 ppb	1288260	4933.448			
CCVL 1000 ppb	277303	1043.269			
CCB	-301	-23.196	LO		
Read Baseline	0	-22.040	BL		

Peak Table:Nitrate as N

File name: C:\FLOW_4\031522.RST
Date: 15-Mar-22
Operator: svc

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	109	SYNC	1	SYNC	1	1	2572638	9890.279297	
2	0	Carryover	1	CO	1	1	1692	-15.541259	LO
3	0	Carryover	2	CO	1	1	116	-21.596308	LO
B	0	read baseline	1	RB	1	1	0	-22.039913	BL
5	101	Cal 0.00 ppb	1	C	1	1	1696	-15.526150	LO
6	102	Cal 50.0 ppb	1	C	1	1	14621	34.111191	
7	103	Cal 100 ppb	1	C	1	1	28683	88.115738	
8	104	Cal 500 ppb	1	C	1	1	139833	515.058411	
9	105	Cal 1000 ppb	1	C	1	1	271946	1022.682495	
10	106	Cal 2500 ppb	1	C	1	1	668400	2547.024658	
11	107	Cal 5000 ppb	1	C	1	1	1289020	4936.377441	
12	108	Cal 7500 ppb	1	C	1	1	1959760	7522.956543	
13	109	Cal 10000 ppb	1	C	1	1	2600815	9999.204102	
14	0	Blank	1	BLNK	1	1	524	-20.026728	LO
B	0	Read Baseline	1	RB	1	1	0	-22.039913	BL
16	110	5000 PPB NO2	1	U	1	1	1288624	4934.850586	
17	111	ICV 5000 PPB	1	CCV	1	1	1337024	5121.349121	
18	112	ICV 2000 PPB	1	CCV	1	1	578172	2199.966064	
19	0	ICB	1	U	1	1	-710	-24.766312	LO
B	0	Read Baseline	1	RB	1	1	0	-22.039913	BL UM
21	107	LCS	1	U	1	1	1297452	4968.867188	
22	0	MB	1	U	1	1	-1176	-26.557039	LO
23	113	280-159293-E-5	1	U	1	1	580599	2209.298828	
24	114	ms 280-159293-E-5	1	U	1	1	1559386	5978.457520	
25	115	msd 280-159293-E-5	1	U	1	1	1560739	5983.676758	
26	116	280-159510-E-1	1	U	1	1	1124068	4300.952148	
27	117	280-159034-B-18	1	U	1	1	109674	399.201660	
28	118	280-159190-C-5	1	U	5	1	793272	15137.353516	
29	119	580-110902-B-1	1	U	1	1	20460	56.533039	
30	120	280-159293-E-1	1	U	1	1	120868	442.203949	
31	121	280-159293-E-2	1	U	1	1	14227	32.595615	
32	122	280-159293-E-3	1	U	1	1	557407	2120.104004	
33	0	Rinse	1	U	1	1	-69	-22.304146	LO
B	0	Read Baseline	1	RB	1	1	0	-22.039913	BL
35	107	CCV 5000 ppb	1	CCV	1	1	1284273	4918.088867	
36	105	CCVL 1000 ppb	1	CCV	1	1	276414	1039.853394	
37	0	CCB	1	U	1	1	101	-21.653910	LO
B	0	Read Baseline	1	RB	1	1	0	-22.039913	BL
39	123	280-159293-E-4	1	U	1	1	42003	139.272552	
40	124	280-159293-E-7	1	U	1	1	80151	285.797577	
41	125	280-159293-E-6	1	U	1	1	5064	-2.591381	LO
42	126	ms 280-159293-E-6	1	U	1	1	1039337	3974.656738	
43	127	msd 280-159293-E-6	1	U	1	1	1044926	3996.176270	
44	128	280-159293-E-8	1	U	1	1	7886	8.244795	
45	129	280-159293-E-9	1	U	1	1	8538	10.747915	
46	130	280-159293-E-10	1	U	1	1	3442	-8.822526	LO
47	131	280-159293-E-11	1	U	1	1	11104	20.603937	
48	132	280-159293-E-12	1	U	1	1	1577	-15.982009	LO
49	0	Rinse	1	U	1	1	485	-20.175552	LO
B	0	Read Baseline	1	RB	1	1	0	-22.039913	BL
51	107	CCV 5000 ppb	1	CCV	1	1	1307875	5009.027344	
52	105	CCVL 1000 ppb	1	CCV	1	1	276229	1039.141724	
53	0	CCB	1	U	1	1	-394	-23.554636	LO
B	0	Read Baseline	1	RB	1	1	0	-22.039913	BL
55	133	280-159293-E-13	1	U	1	1	879403	3358.947021	
56	134	280-159293-E-14	1	U	1	1	886326	3385.595703	
57	135	280-159332-C-1	1	U	1	1	22349	63.789921	
58	136	280-159332-C-2	1	U	1	1	1144496	4379.629395	
59	107	LCS	1	U	1	1	1307669	5008.232422	
60	0	MB	1	U	1	1	794	-18.990612	LO
61	137	280-159332-C-13	1	U	20	1	623713	47502.519531	
62	138	ms 280-159332-C-13	1	U	20	1	1606770	123223.328125	
63	139	msd 280-159332-C-13	1	U	20	1	1614282	123802.687500	
64	140	280-159332-C-3	1	U	5	1	585202	11135.009766	
65	141	280-159332-C-4	1	U	1	1	730484	2785.872070	
66	0	Rinse	1	U	1	1	191	-21.307541	LO
B	0	Read Baseline	1	RB	1	1	0	-22.039913	BL
68	107	CCV 5000 ppb	1	CCV	1	1	1299106	4975.238770	
69	105	CCVL 1000 ppb	1	CCV	1	1	282074	1061.605103	
70	0	Rinse	1	U	1	1	-247	-22.987644	LO

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
B	0	Read Baseline	1	RB	1	1	0	-22.039913	BL
72	142	280-159332-C-5	1	U	1	1	858564	3278.741211	
73	143	280-159332-C-6	1	U	5	1	854346	16312.530273	
74	144	280-159332-C-7	1	U	5	1	625697	11913.793945	
75	145	280-159332-C-8	1	U	1	1	11570	22.393536	
76	146	280-159332-C-9	1	U	1	1	3018836	11616.103516	HI
77	147	280-159332-C-10	1	U	1	1	5746	0.027151	FL
78	148	280-159332-C-11	1	U	1	1	1511124	5792.388672	
79	149	280-159332-C-12	1	U	1	1	1504392	5766.433594	
80	150	ms 280-159332-C-12	1	U	1	1	2360811	9071.649414	
81	151	msd 280-159332-C-12	1	U	1	1	2354958	9049.038086	
82	0	Rinse	1	U	1	1	1047	-18.020569	LO
B	0	Read Baseline	1	RB	1	1	0	-22.039913	BL
84	107	CCV 5000 ppb	1	CCV	1	1	1288260	4933.447754	
85	105	CCVL 1000 ppb	1	CCV	1	1	277303	1043.269165	
86	0	CCB	1	U	1	1	-301	-23.196354	LO
B	0	Read Baseline	1	RB	1	1	0	-22.039913	BL

Nitrate as N:Calibration 1: Peak 5-87

File name: C:\FLOW_4\031522.RST
Date: 15-Mar-22
Operator: svc

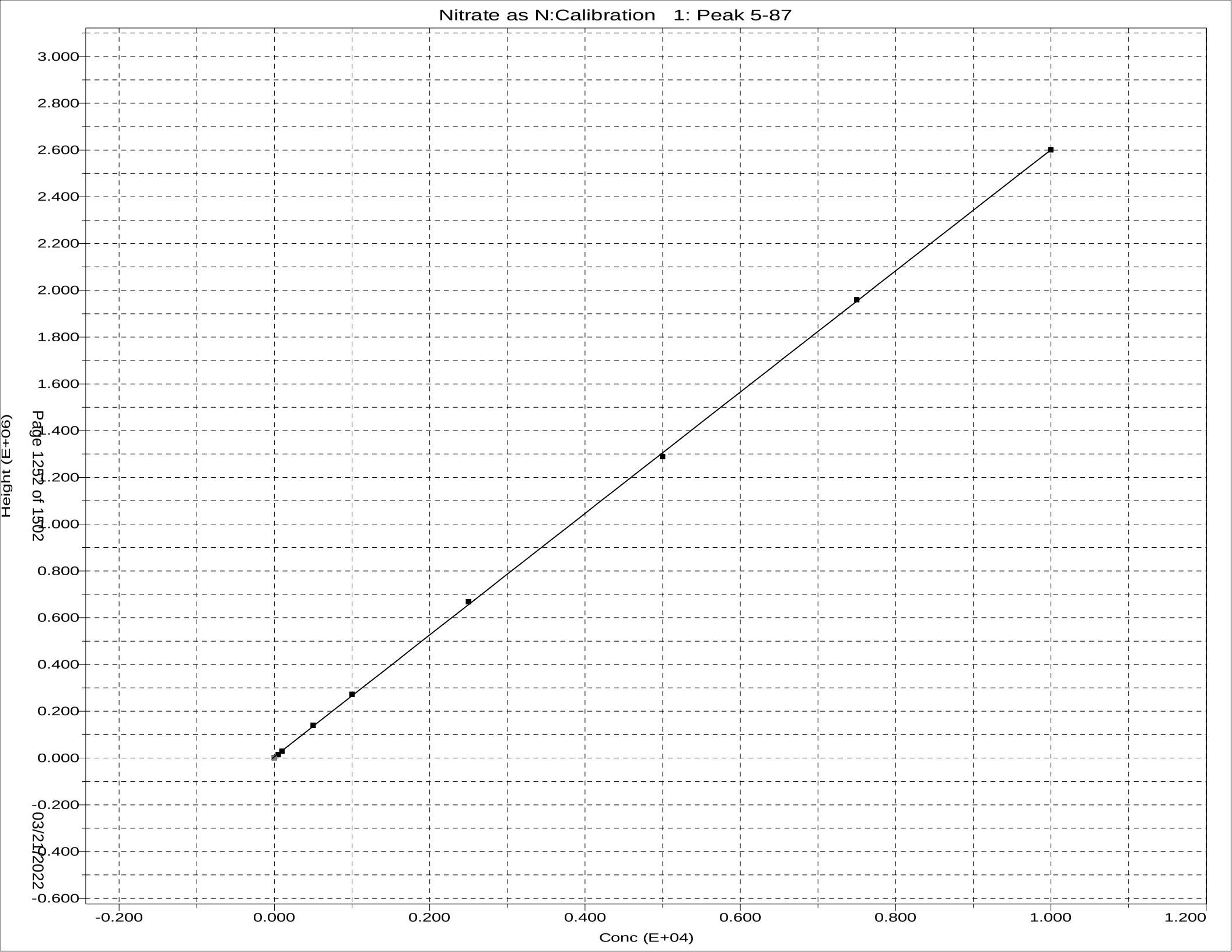
*	Name	Conc	Height
*	Cal 0.00 ppb	0.000000	1696.152100
*	Cal 50.0 ppb	50.000000	14621.230469
*	Cal 100 ppb	100.000000	28683.000000
*	Cal 500 ppb	500.000000	139833.015625
*	Cal 1000 ppb	1000.000000	271946.375000
*	Cal 2500 ppb	2500.000000	668400.437500
*	Cal 5000 ppb	5000.000000	1289020.000000
*	Cal 7500 ppb	7500.000000	1959759.750000
*	Cal 10000 ppb	10000.000000	2600815.000000

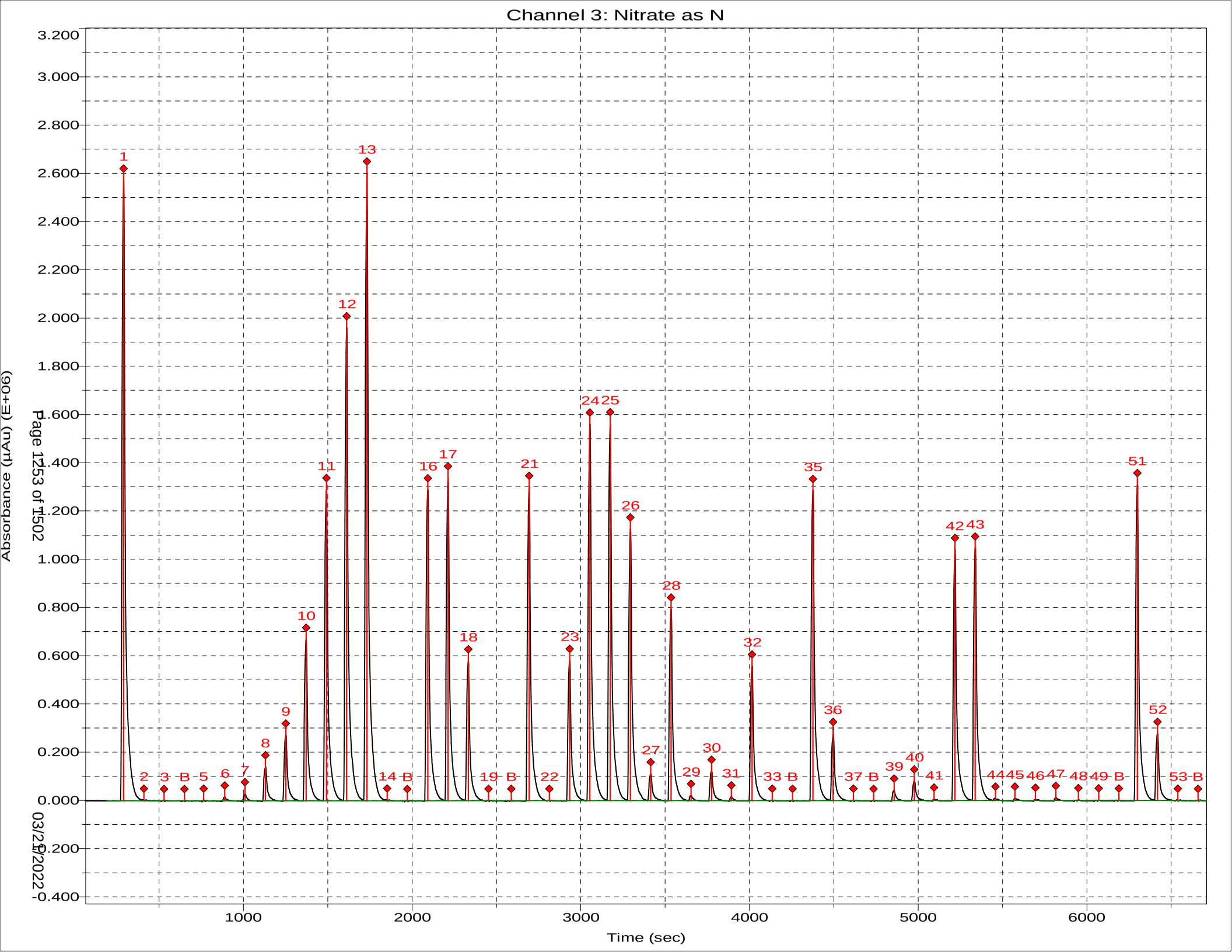
Calib Coef:
x=cyy+by+a
a: (intercept) -2.2040e+01
b: 3.8403e-03
c: 4.9243e-12

Corr Coef: 0.999963

Carryover: 0.0658%

No Drift Peaks


Nitrate as N:Calibration 1: Peak 5-87
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)


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec)
Page 1253 of 1502
03/21/2022
3.200
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
1000
2000
3000
4000
5000
6000
1
2
3
B
5
6
7
8
9
10
11
12
13
14
B
16
17
18
19
B
21
22
23
24
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29
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32
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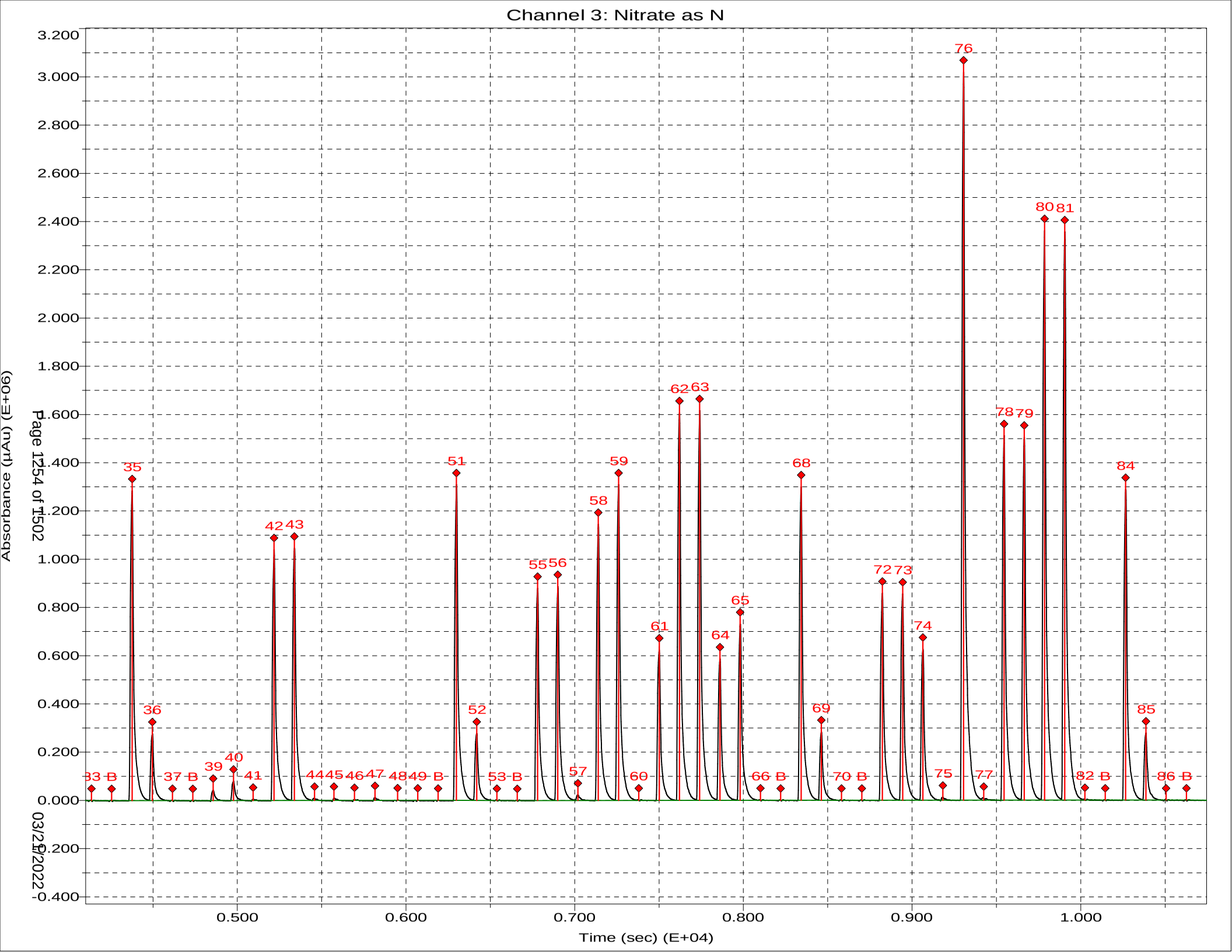
49
B
51
52
53
B


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec) (E+04)
Page 1254 of 1502
03/21/2022
3.200
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
0.500
0.600
0.700
0.800
0.900
1.000
33 B
35
36
37 B
39
40
41
42 43
44 45 46 47 48 49 B
51
52
53 B
55 56
57
58
59
60
61
62 63
64
65
66 B
68
69
70 B
72 73
74
75
76
77
78 79
80 81
82 B
84
85
86 B

Sample Table - 031522.tbl

File name: C:\FLOW_4\031522.TBL
Date: 15-Mar-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		
0	MB	U	1	1	1		
113	280-159293-E-5	U	1	1	1		
114	ms 280-159293-E-5	U	1	1	1		
115	msd 280-159293-E-5	U	1	1	1		
116	280-159510-E-1	U	1	1	1		
117	280-159034-B-18	U	1	1	1		
118	280-159190-C-5	U	1	5	1		
119	580-110902-B-1	U	1	1	1		
120	280-159293-E-1	U	1	1	1		
121	280-159293-E-2	U	1	1	1		
122	280-159293-E-3	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		
123	280-159293-E-4	U	1	1	1		
124	280-159293-E-7	U	1	1	1		
125	280-159293-E-6	U	1	1	1		
126	ms 280-159293-E-6	U	1	1	1		
127	msd 280-159293-E-6	U	1	1	1		
128	280-159293-E-8	U	1	1	1		
129	280-159293-E-9	U	1	1	1		
130	280-159293-E-10	U	1	1	1		
131	280-159293-E-11	U	1	1	1		
132	280-159293-E-12	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		
133	280-159293-E-13	U	1	1	1		
134	280-159293-E-14	U	1	1	1		

Cup	Name	Type	R	Dil	Wt	Vial	Comment
135	280-159332-C-1	U	1	1	1		<2
136	280-159332-C-2	U	1	1	1		<2
107	LCS	U	1	1	1		
0	MB	U	1	1	1		
137	280-159332-C-13	U	1	20 ±	1		<2
138	ms 280-159332-C-13	U	1	20 ±	1		<2
139	msd 280-159332-C-13	U	1	20 ±	1		<2
140	280-159332-C-3	U	1	5 ±	1		<2
141	280-159332-C-4	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	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
142	280-159332-C-5	U	1	1	1		<2
143	280-159332-C-6	U	1	5 ±	1		<2
144	280-159332-C-7	U	1	5 ±	1		<2
145	280-159332-C-8	U	1	1	1		<2
146	280-159332-C-9	U	1	1	1		<2
147	280-159332-C-10	U	1	1	1		<2
148	280-159332-C-11	U	1	1	1		<2
149	280-159332-C-12	U	1	1	1		<2
150	ms 280-159332-C-12	U	1	1	1		<2
151	msd 280-159332-C-12	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		

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\032022.RST
Sample table path	C:\FLOW_4\032022.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	20-Mar-22
Time acquired	18:51

Date	Time	Cup	Name
20-Mar-22	15:22	109	SYNC
20-Mar-22	15:24	0	Carryover
20-Mar-22	15:26	0	Carryover (Statistics)
20-Mar-22	15:28	0	read baseline
20-Mar-22	15:30	101	Cal 0.00 ppb
20-Mar-22	15:32	102	Cal 50.0 ppb
20-Mar-22	15:34	103	Cal 100 ppb
20-Mar-22	15:36	104	Cal 500 ppb
20-Mar-22	15:38	105	Cal 1000 ppb
20-Mar-22	15:40	106	Cal 2500 ppb
20-Mar-22	15:42	107	Cal 5000 ppb
20-Mar-22	15:44	108	Cal 7500 ppb
20-Mar-22	15:46	109	Cal 10000 ppb
20-Mar-22	15:48	0	Blank
20-Mar-22	15:50	0	Read Baseline
20-Mar-22	15:52	110	5000 PPB NO2
20-Mar-22	15:54	111	ICV 5000 PPB
20-Mar-22	15:56	112	ICV 2000 PPB
20-Mar-22	15:58	0	ICB
20-Mar-22	16:00	0	Read Baseline
20-Mar-22	16:02	107	LCS
20-Mar-22	16:04	0	MB
20-Mar-22	16:06	113	280-159312-A-6
20-Mar-22	16:08	114	ms 280-159312-A-6
20-Mar-22	16:10	115	msd 280-159312-A-6
20-Mar-22	16:12	116	280-159312-A-13
20-Mar-22	16:14	117	280-159332-C-9
20-Mar-22	16:16	118	280-159315-A-3
20-Mar-22	16:18	119	280-159485-A-1
20-Mar-22	16:20	120	280-159485-B-2
20-Mar-22	16:22	121	280-159485-B-3
20-Mar-22	16:24	122	280-159485-B-4
20-Mar-22	16:26	0	Rinse
20-Mar-22	16:28	0	Read Baseline
20-Mar-22	16:30	107	CCV 5000 ppb
20-Mar-22	16:32	105	CCVL 1000 ppb
20-Mar-22	16:34	0	CCB
20-Mar-22	16:36	0	Read Baseline
20-Mar-22	16:38	123	280-159345-A-2
20-Mar-22	16:40	124	280-159345-E-3
20-Mar-22	16:42	125	280-159375-A-4
20-Mar-22	16:44	126	ms 280-159375-A-4
20-Mar-22	16:46	127	msd 280-159375-A-4
20-Mar-22	16:48	128	280-159345-E-4

Result path C:\FLOW_4\032022.RST
Sample table path C:\FLOW_4\032022.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 20-Mar-22
Time acquired 18:51

Date	Time	Cup	Name
20-Mar-22	16:50	129	280-159345-E-5
20-Mar-22	16:52	130	280-159345-E-6
20-Mar-22	16:54	131	280-159345-E-7
20-Mar-22	16:56	132	280-159345-E-8
20-Mar-22	16:58	0	Rinse
20-Mar-22	17:00	0	Read Baseline
20-Mar-22	17:02	107	CCV 5000 ppb
20-Mar-22	17:04	105	CCVL 1000 ppb
20-Mar-22	17:06	0	CCB
20-Mar-22	17:08	0	Read Baseline
20-Mar-22	17:10	133	280-159345-A-9
20-Mar-22	17:12	134	280-159345-C-10
20-Mar-22	17:14	135	280-159454-C-1
20-Mar-22	17:16	136	280-159454-C-2
20-Mar-22	17:18	107	LCS
20-Mar-22	17:20	0	MB
20-Mar-22	17:22	137	280-159370-A-1
20-Mar-22	17:24	138	ms 280-159370-A-1
20-Mar-22	17:26	139	msd 280-159370-A-1
20-Mar-22	17:28	140	280-159384-C-1
20-Mar-22	17:30	0	Rinse
20-Mar-22	17:32	0	Read Baseline
20-Mar-22	17:34	107	CCV 5000 ppb
20-Mar-22	17:36	105	CCVL 1000 ppb
20-Mar-22	17:38	0	CCB
20-Mar-22	17:40	0	Read Baseline
20-Mar-22	17:42	141	280-159384-C-2
20-Mar-22	17:44	142	280-159384-C-4
20-Mar-22	17:46	143	280-159384-C-5
20-Mar-22	17:48	144	280-159384-C-6
20-Mar-22	17:50	145	280-159419-B-1
20-Mar-22	17:52	146	280-159419-B-2
20-Mar-22	17:54	147	280-159419-B-3
20-Mar-22	17:56	148	280-159419-B-4
20-Mar-22	17:58	149	280-159369-A-1
20-Mar-22	18:00	150	ms 280-159369-A-1
20-Mar-22	18:02	0	Rinse
20-Mar-22	18:04	0	Read Baseline
20-Mar-22	18:06	107	CCV 5000 ppb
20-Mar-22	18:08	105	CCVL 1000 ppb
20-Mar-22	18:10	0	CCB
20-Mar-22	18:12	0	Read Baseline
20-Mar-22	18:14	151	msd 280-159369-A-1
20-Mar-22	18:16	152	280-159419-B-5
20-Mar-22	18:18	153	280-159419-B-6
20-Mar-22	18:20	154	280-159455-E-1
20-Mar-22	18:22	155	550-180434-J-1
20-Mar-22	18:24	156	550-180434-J-2
20-Mar-22	18:26	157	550-180434-J-3
20-Mar-22	18:28	158	550-180434-J-4
20-Mar-22	18:30	159	280-159706-B-1
20-Mar-22	18:32	160	280-159663-A-1
20-Mar-22	18:34	0	Rinse
20-Mar-22	18:36	0	Read Baseline
20-Mar-22	18:38	107	CCV 5000 ppb
20-Mar-22	18:40	105	CCVL 1000 ppb
20-Mar-22	18:42	0	CCB

Result path	C:\FLOW_4\032022.RST
Sample table path	C:\FLOW_4\032022.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	20-Mar-22
Time acquired	18:51

Date	Time	Cup	Name
20-Mar-22	18:44	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\032022.RST
Sample table path	C:\FLOW_4\032022.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	20-Mar-22
Time acquired	18:51

	Nitrate as N					
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	
SYNC	2576803	9989.227				
Carryover	3596	7.844				
Carryover	501	-4.159	LO			
(Statistics)				2049	1.842	N
read baseline	0	-6.104	BL			
Cal 0.00 ppb	1794	0.855				
Cal 50.0 ppb	13208	45.128				
Cal 100 ppb	25955	94.575				
Cal 500 ppb	130296	499.308				
Cal 1000 ppb	265785	1024.866				
Cal 2500 ppb	660897	2557.493				
Cal 5000 ppb	1276097	4943.833				
Cal 7500 ppb	1906830	7390.423				
Cal 10000 ppb	2603689	10093.518	HI			
Blank	-2484	-15.738	LO			
Read Baseline	0	-6.104	BL			
5000 PPB NO2	1263731	4895.867				
ICV 5000 PPB	1310427	5076.997				
ICV 2000 PPB	527518	2040.119				
ICB	94	-5.741	LO			
Read Baseline	0	-6.104	BL			
LCS	1301196	5041.193				
MB	-910	-9.632	LO			
280-159312-A-6	299297	1154.859				
ms 280-159312-A-6	1307102	5064.098				
msd 280-159312-A-6	1303470	5050.010				
280-159312-A-13	295501	1140.135				
280-159332-C-9	1581329	12255.636				
280-159315-A-3	1466832	5683.688				
280-159485-A-1	-3071	-18.015	LO			
280-159485-B-2	1461294	56622.051				
280-159485-B-3	1456667	56442.582				
280-159485-B-4	1496206	57976.258				
Rinse	-414	-7.710	LO			
Read Baseline	0	-6.104	BL			
CCV 5000 ppb	1282333	4968.022				
CCVL 1000 ppb	271354	1046.469				
CCB	-208	-6.911	LO			
Read Baseline	0	-6.104	BL			
280-159345-A-2	705641	2731.053				
280-159345-E-3	708553	2742.350				
280-159375-A-4	131165	502.680				
ms 280-159375-A-4	1141088	4420.136				
msd 280-159375-A-4	1149560	4453.002				
280-159345-E-4	239166	921.611				

Result path C:\FLOW_4\032022.RST
Sample table path C:\FLOW_4\032022.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 20-Mar-22
Time acquired 18:51

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
280-159345-E-5	-659	-8.661	LO		
280-159345-E-6	10619	35.088			
280-159345-E-7	-72	-6.384	LO		
280-159345-E-8	80324	305.470			
Rinse	-272	-7.159	LO		
Read Baseline	0	-6.104	BL		
CCV 5000 ppb	1277760	4950.283			
CCVL 1000 ppb	271969	1048.855			
CCB	103	-5.705	LO		
Read Baseline	0	-6.104	BL		
280-159345-A-9	39156	145.782			
280-159345-C-10	163	-5.471	LO		
280-159454-C-1	182411	701.461			
280-159454-C-2	193964	746.278			
LCS	1269824	4919.501			
MB	-1246	-10.938	LO		
280-159370-A-1	629738	2436.630			
ms 280-159370-A-1	1580975	6126.444			
msd 280-159370-A-1	1609052	6235.356			
280-159384-C-1	1464636	11350.340			
Rinse	-750	-9.015	LO		
Read Baseline	0	-6.104	BL		
CCV 5000 ppb	1263393	4894.556			
CCVL 1000 ppb	270386	1042.714			
CCB	-27	-6.210	LO		
Read Baseline	0	-6.104	BL		
280-159384-C-2	2133	2.169			
280-159384-C-4	4751	12.325			
280-159384-C-5	17289	60.961			
280-159384-C-6	475	-4.263	LO		
280-159419-B-1	1096	-1.851	LO		
280-159419-B-2	-681	-8.745	LO		
280-159419-B-3	1544540	5985.114			
280-159419-B-4	732	-3.264	LO		
280-159369-A-1	403076	1557.414			
ms 280-159369-A-1	1385615	5368.650			
Rinse	-1002	-9.992	LO		
Read Baseline	0	-6.104	BL		
CCV 5000 ppb	1258082	4873.952			
CCVL 1000 ppb	272474	1050.815			
CCB	145	-5.540	LO		
Read Baseline	0	-6.104	BL		
msd 280-159369-A-1	1381891	5354.204			
280-159419-B-5	29278	107.463			
280-159419-B-6	4610	11.778			
280-159455-E-1	861377	3335.149			
550-180434-J-1	9798	31.901			
550-180434-J-2	12918	44.006			
550-180434-J-3	7175	21.726			
550-180434-J-4	7442	22.765			
280-159706-B-1	371053	1433.198			
280-159663-A-1	244383	941.848			
Rinse	104	-5.699	LO		
Read Baseline	0	-6.104	BL		
CCV 5000 ppb	1249474	4840.565			
CCVL 1000 ppb	272149	1049.553			
CCB	-305	-7.288	LO		

Result path C:\FLOW_4\032022.RST
Sample table path C:\FLOW_4\032022.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 20-Mar-22
Time acquired 18:51

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
Read Baseline	0	-6.104	BL		

Peak Table:Nitrate as N

File name: C:\FLOW_4\032022.RST
Date: 20-Mar-22
Operator: svc

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	109	SYNC	1	SYNC	1	1	2576803	9989.226562	
2	0	Carryover	1	CO	1	1	3596	7.843800	
3	0	Carryover	2	CO	1	1	501	-4.159135	LO
B	0	read baseline	1	RB	1	1	0	-6.103962	BL
5	101	Cal 0.00 ppb	1	C	1	1	1794	0.854789	
6	102	Cal 50.0 ppb	1	C	1	1	13208	45.127693	
7	103	Cal 100 ppb	1	C	1	1	25955	94.574982	
8	104	Cal 500 ppb	1	C	1	1	130296	499.308319	
9	105	Cal 1000 ppb	1	C	1	1	265785	1024.866089	
10	106	Cal 2500 ppb	1	C	1	1	660897	2557.493164	
11	107	Cal 5000 ppb	1	C	1	1	1276097	4943.833496	
12	108	Cal 7500 ppb	1	C	1	1	1906830	7390.422852	
13	109	Cal 10000 ppb	1	C	1	1	2603689	10093.517578	HI
14	0	Blank	1	BLNK	1	1	-2484	-15.738497	LO
B	0	Read Baseline	1	RB	1	1	0	-6.103966	BL
16	110	5000 PPB NO2	1	U	1	1	1263731	4895.866699	
17	111	ICV 5000 PPB	1	CCV	1	1	1310427	5076.997070	
18	112	ICV 2000 PPB	1	CCV	1	1	527518	2040.118774	
19	0	ICB	1	U	1	1	94	-5.740914	LO
B	0	Read Baseline	1	RB	1	1	0	-6.103962	BL
21	107	LCS	1	U	1	1	1301196	5041.192871	
22	0	MB	1	U	1	1	-910	-9.632334	LO
23	113	280-159312-A-6	1	U	1	1	299297	1154.859497	
24	114	ms 280-159312-A-6	1	U	1	1	1307102	5064.098145	
25	115	msd 280-159312-A-6	1	U	1	1	1303470	5050.010254	
26	116	280-159312-A-13	1	U	1	1	295501	1140.135132	
27	117	280-159332-C-9	1	U	2	1	1581329	12255.635742	
28	118	280-159315-A-3	1	U	1	1	1466832	5683.687988	
29	119	280-159485-A-1	1	U	1	1	-3071	-18.015198	LO
30	120	280-159485-B-2	1	U	10	1	1461294	56622.050781	
31	121	280-159485-B-3	1	U	10	1	1456667	56442.582031	
32	122	280-159485-B-4	1	U	10	1	1496206	57976.257812	
33	0	Rinse	1	U	1	1	-414	-7.710243	LO
B	0	Read Baseline	1	RB	1	1	0	-6.103962	BL
35	107	CCV 5000 ppb	1	CCV	1	1	1282333	4968.022461	
36	105	CCVL 1000 ppb	1	CCV	1	1	271354	1046.468750	
37	0	CCB	1	U	1	1	-208	-6.911433	LO
B	0	Read Baseline	1	RB	1	1	0	-6.103962	BL
39	123	280-159345-A-2	1	U	1	1	705641	2731.053223	
40	124	280-159345-E-3	1	U	1	1	708553	2742.350098	
41	125	280-159375-A-4	1	U	1	1	131165	502.680206	
42	126	ms 280-159375-A-4	1	U	1	1	1141088	4420.136230	
43	127	msd 280-159375-A-4	1	U	1	1	1149560	4453.001953	
44	128	280-159345-E-4	1	U	1	1	239166	921.611023	
45	129	280-159345-E-5	1	U	1	1	-659	-8.661107	LO
46	130	280-159345-E-6	1	U	1	1	10619	35.088051	
47	131	280-159345-E-7	1	U	1	1	-72	-6.384443	LO
48	132	280-159345-E-8	1	U	1	1	80324	305.470306	
49	0	Rinse	1	U	1	1	-272	-7.159269	LO
B	0	Read Baseline	1	RB	1	1	0	-6.103962	BL
51	107	CCV 5000 ppb	1	CCV	1	1	1277760	4950.283203	
52	105	CCVL 1000 ppb	1	CCV	1	1	271969	1048.854858	
53	0	CCB	1	U	1	1	103	-5.704998	LO
B	0	Read Baseline	1	RB	1	1	0	-6.103962	BL
55	133	280-159345-A-9	1	U	1	1	39156	145.782104	
56	134	280-159345-C-10	1	U	1	1	163	-5.470888	LO
57	135	280-159454-C-1	1	U	1	1	182411	701.460815	
58	136	280-159454-C-2	1	U	1	1	193964	746.277527	
59	107	LCS	1	U	1	1	1269824	4919.501465	
60	0	MB	1	U	1	1	-1246	-10.938306	LO
61	137	280-159370-A-1	1	U	1	1	629738	2436.630127	
62	138	ms 280-159370-A-1	1	U	1	1	1580975	6126.443848	
63	139	msd 280-159370-A-1	1	U	1	1	1609052	6235.355957	
64	140	280-159384-C-1	1	U	2	1	1464636	11350.339844	
65	0	Rinse	1	U	1	1	-750	-9.014830	LO
B	0	Read Baseline	1	RB	1	1	0	-6.103962	BL
67	107	CCV 5000 ppb	1	CCV	1	1	1263393	4894.556152	
68	105	CCVL 1000 ppb	1	CCV	1	1	270386	1042.714233	
69	0	CCB	1	U	1	1	-27	-6.209905	LO
B	0	Read Baseline	1	RB	1	1	0	-6.103962	BL

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	141	280-159384-C-2	1	U	1	1	2133	2.168793	
72	142	280-159384-C-4	1	U	1	1	4751	12.325336	
73	143	280-159384-C-5	1	U	1	1	17289	60.961353	
74	144	280-159384-C-6	1	U	1	1	475	-4.262721	LO
75	145	280-159419-B-1	1	U	1	1	1096	-1.851118	LO
76	146	280-159419-B-2	1	U	1	1	-681	-8.745366	LO
77	147	280-159419-B-3	1	U	1	1	1544540	5985.114258	
78	148	280-159419-B-4	1	U	1	1	732	-3.263721	LO
79	149	280-159369-A-1	1	U	1	1	403076	1557.413940	
80	150	ms 280-159369-A-1	1	U	1	1	1385615	5368.649902	
81	0	Rinse	1	U	1	1	-1002	-9.992111	LO
B	0	Read Baseline	1	RB	1	1	0	-6.103962	BL
83	107	CCV 5000 ppb	1	CCV	1	1	1258082	4873.951660	
84	105	CCVL 1000 ppb	1	CCV	1	1	272474	1050.815063	
85	0	CCB	1	U	1	1	145	-5.540202	LO
B	0	Read Baseline	1	RB	1	1	0	-6.103962	BL
87	151	msd 280-159369-A-1	1	U	1	1	1381891	5354.204102	
88	152	280-159419-B-5	1	U	1	1	29278	107.463394	
89	153	280-159419-B-6	1	U	1	1	4610	11.777969	
90	154	280-159455-E-1	1	U	1	1	861377	3335.148682	
91	155	550-180434-J-1	1	U	1	1	9798	31.901251	
92	156	550-180434-J-2	1	U	1	1	12918	44.006226	
93	157	550-180434-J-3	1	U	1	1	7175	21.726479	
94	158	550-180434-J-4	1	U	1	1	7442	22.764771	
95	159	280-159706-B-1	1	U	1	1	371053	1433.198364	
96	160	280-159663-A-1	1	U	1	1	244383	941.847839	
97	0	Rinse	1	U	1	1	104	-5.698692	LO
B	0	Read Baseline	1	RB	1	1	0	-6.103962	BL
99	107	CCV 5000 ppb	1	CCV	1	1	1249474	4840.564941	
100	105	CCVL 1000 ppb	1	CCV	1	1	272149	1049.553467	
101	0	CCB	1	U	1	1	-305	-7.287851	LO
B	0	Read Baseline	1	RB	1	1	0	-6.103962	BL

Nitrate as N:Calibration 1: Peak 5-102

File name: C:\FLOW_4\032022.RST
Date: 20-Mar-22
Operator: svc

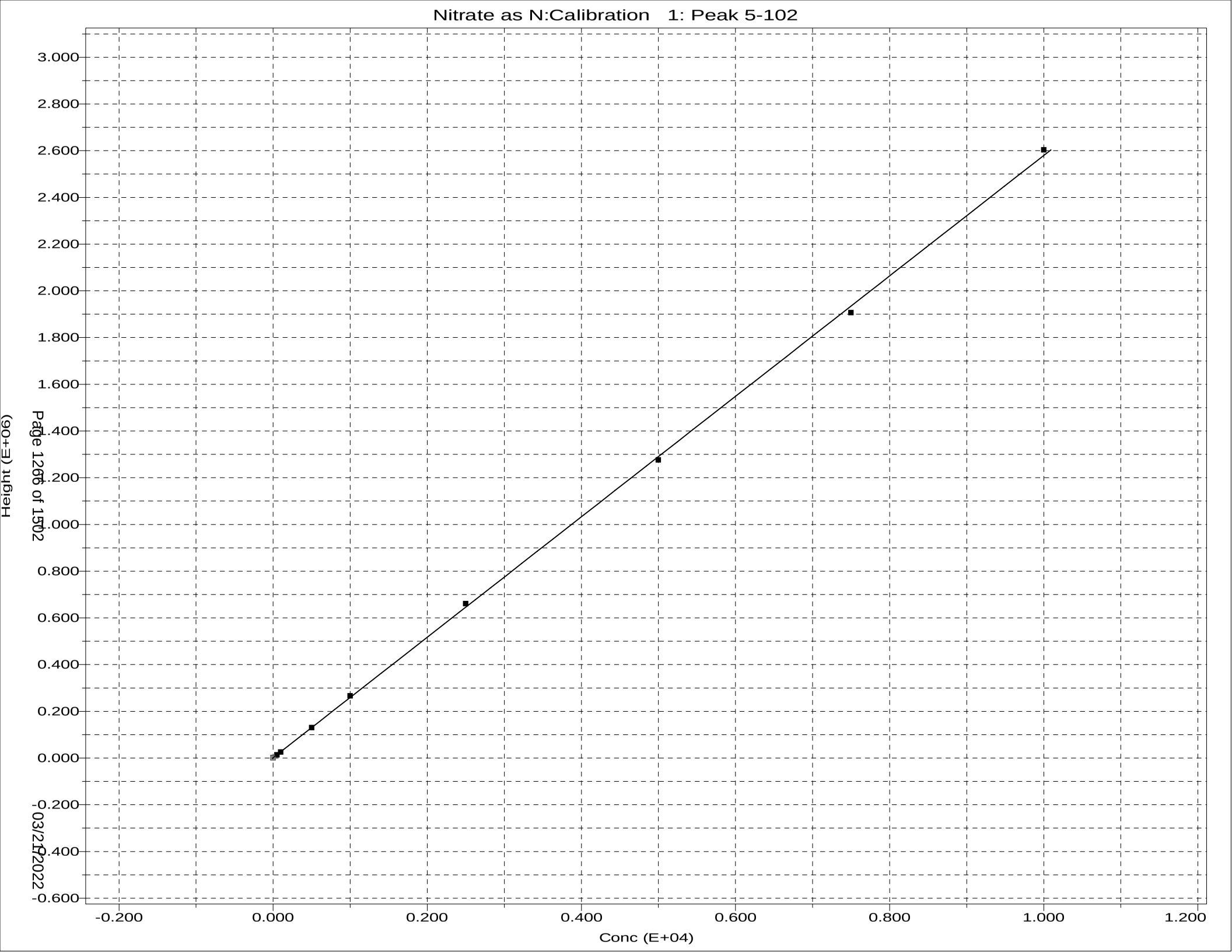
*	Name	Conc	Height
*	Cal 0.00 ppb	0.000000	1793.970459
*	Cal 50.0 ppb	50.000000	13207.553711
*	Cal 100 ppb	100.000000	25955.097656
*	Cal 500 ppb	500.000000	130295.617188
*	Cal 1000 ppb	1000.000000	265784.781250
*	Cal 2500 ppb	2500.000000	660897.000000
*	Cal 5000 ppb	5000.000000	1276097.125000
*	Cal 7500 ppb	7500.000000	1906829.500000
*	Cal 10000 ppb	10000.000000	2603689.250000

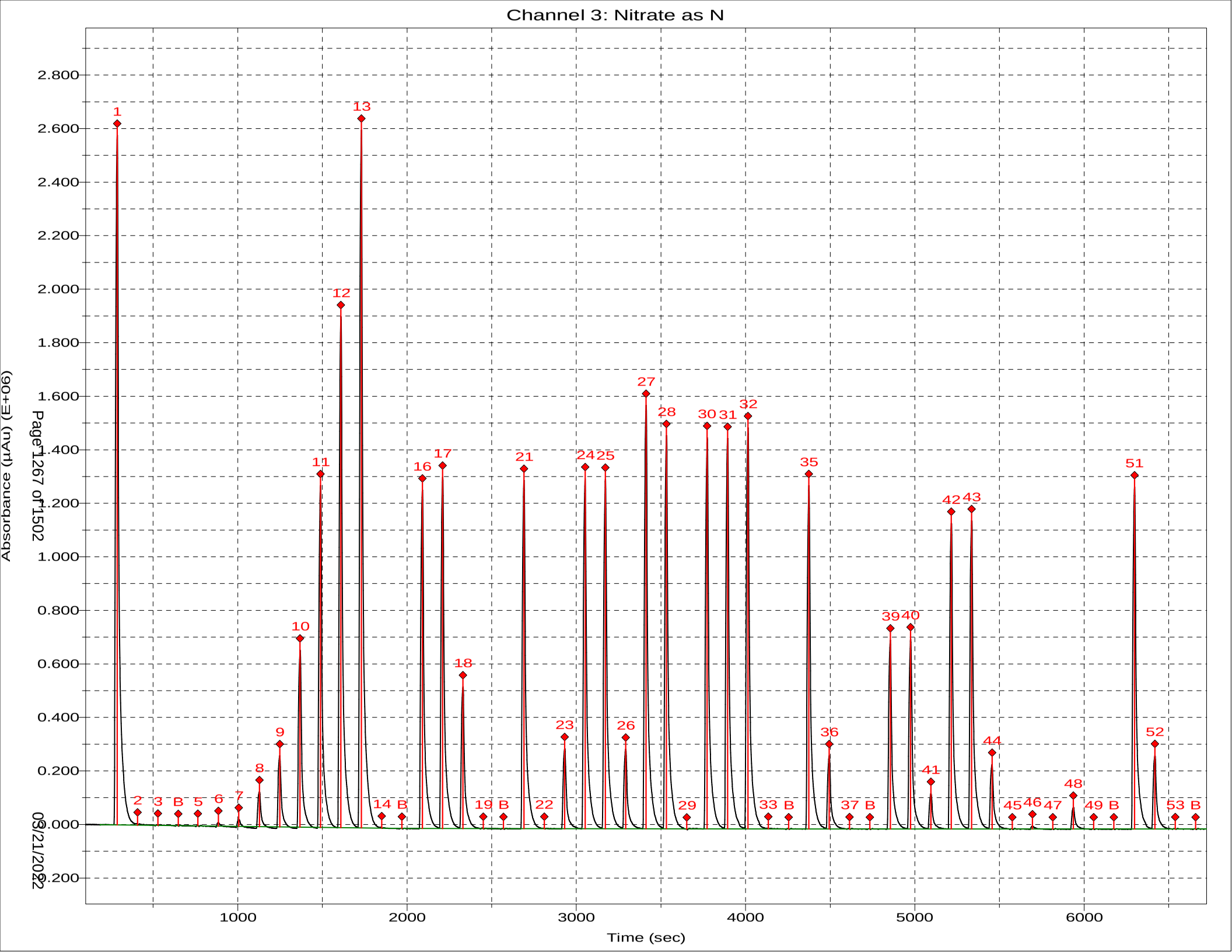
Calib Coef:
y=bx+a
a: (intercept) 1.5736e+03
b: 2.5780e+02

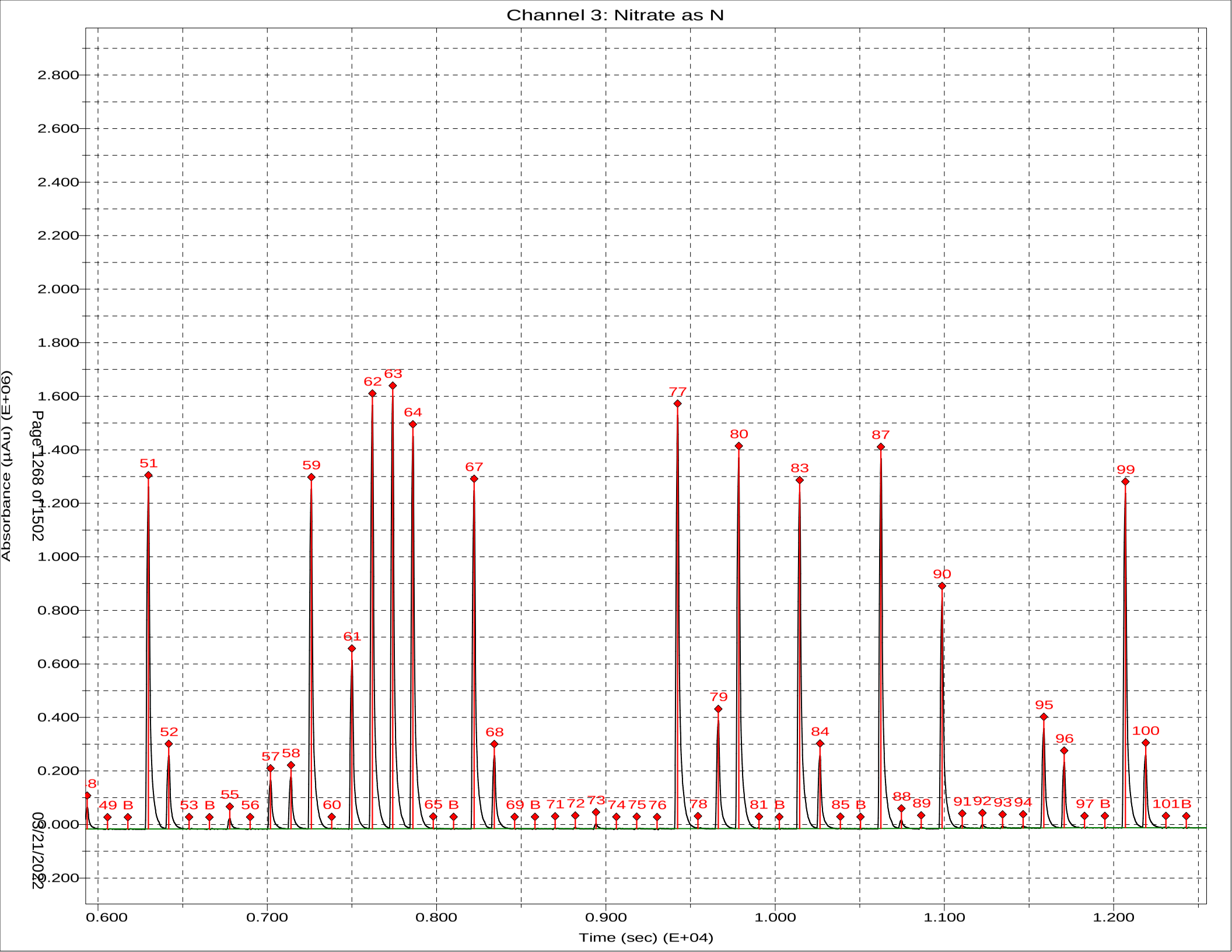
Corr Coef: 0.999873

Carryover: 0.14%

No Drift Peaks


Nitrate as N:Calibration 1: Peak 5-102
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 1266 of 1502
03/21/2022


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec)
Page 1267 of 1502
03/21/2022
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
1000
2000
3000
4000
5000
6000
1 2 3 B 5 6 7 8 9 10 11 12 13 14 B 16 17 18 19 B 21 22 23 24 25 26 27 28 29 30 31 32 33 B 35 36 37 B 39 40 41 42 43 44 45 46 47 48 49 B 51 52 53 B


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec) (E+04)
Page 1268 of 1502
03/21/2022
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
0.600
0.700
0.800
0.900
1.000
1.100
1.200
8
49 B
51
52
53 B
55
56
57
58
59
60
61
62
63
64
65 B
67
68
69 B
71
72
73
74
75
76
77
78
79
80
81 B
83
84
85 B
87
88
89
90
91
92
93
94
95
96
97 B
99
100
101B

Sample Table - 032022.tbl

File name: C:\FLOW_4\032022.TBL
Date: 20-Mar-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
0	MB	U	1	1	1		
113	280-159312-A-6	U	1	1	1		
114	ms 280-159312-A-6	U	1	1	1		
115	msd 280-159312-A-6	U	1	1	1		
116	280-159312-A-13	U	1	1	1		
117	280-159332-C-9	U	1	2	1		
118	280-159315-A-3	U	1	1	1		
119	280-159485-A-1	U	1	1	1		
120	280-159485-B-2	U	1	10	1		
121	280-159485-B-3	U	1	10	1		
122	280-159485-B-4	U	1	10	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		
123	280-159345-A-2	U	1	1	1		
124	280-159345-E-3	U	1	1	1		
125	280-159375-A-4	U	1	1	1		
126	ms 280-159375-A-4	U	1	1	1		
127	msd 280-159375-A-4	U	1	1	1		
128	280-159345-E-4	U	1	1	1		
129	280-159345-E-5	U	1	1	1		
130	280-159345-E-6	U	1	1	1		
131	280-159345-E-7	U	1	1	1		
132	280-159345-E-8	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		
133	280-159345-A-9	U	1	1	1		
134	280-159345-C-10	U	1	1	1		

Cup	Name	Type	R	Dil	Wt	Vial	Comment
135	280-159454-C-1	U	1	1	1		<2
136	280-159454-C-2	U	1	1	1		<2
107	LCS	U	1	1	1		
0	MB	U	1	1	1		
137	280-159370-A-1	U	1	1	1		<2
138	ms 280-159370-A-1	U	1	1	1		<2
139	msd 280-159370-A-1	U	1	1	1		<2
140	280-159384-C-1	U	1	2	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	280-159384-C-2	U	1	1	1		<2
142	280-159384-C-4	U	1	1	1		<2
143	280-159384-C-5	U	1	1	1		<2
144	280-159384-C-6	U	1	1	1		<2
145	280-159419-B-1	U	1	1	1		<2
146	280-159419-B-2	U	1	1	1		<2
147	280-159419-B-3	U	1	1	1		<2
148	280-159419-B-4	U	1	1	1		<2
149	280-159369-A-1	U	1	1	1		<2
150	ms 280-159369-A-1	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		
151	msd 280-159369-A-1	U	1	1	1		<2
152	280-159419-B-5	U	1	1	1		<2
153	280-159419-B-6	U	1	1	1		<2
154	280-159455-E-1	U	1	1	1		<2
155	550-180434-J-1	U	1	1	1		<2
156	550-180434-J-2	U	1	1	1		<2
157	550-180434-J-3	U	1	1	1		<2
158	550-180434-J-4	U	1	1	1		<2
159	280-159706-B-1	U	1	1	1		<2
160	280-159663-A-1	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		

General Chemistry Raw Data Report

Job ID: 280-159332-1

Batch: 567935 **Analyst Initials: LRB**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-567934/1-A **Analysis Date: Mar 07, 2022 18:33**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	20	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-567934/2-A **Analysis Date: Mar 07, 2022 18:33**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-159332-E-2-A **Analysis Date: Mar 07, 2022 18:33**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-159332-E-2-B MS **Analysis Date: Mar 07, 2022 18:33**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	21.6	mg/L	50 mL	50 mL

Lab Sample ID: 280-159332-E-2-C MSD **Analysis Date: Mar 07, 2022 18:33**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	20.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-159332-E-3-A **Analysis Date: Mar 07, 2022 18:33**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-159332-E-4-A **Analysis Date: Mar 07, 2022 18:33**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-159332-E-5-A **Analysis Date: Mar 07, 2022 18:33**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-159332-E-6-A **Analysis Date: Mar 07, 2022 18:33**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Sulfide by Titration

Analyst:	MG	SOP Information:	
Date:	3/7/2022	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:	1193
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	5.10	20	5.10	1192.000
CAL	5	0.00	5.08	20	5.08	1193.600

ICV Information	
Source/Ver-Lot#:	INT_0204
Prep Date:	2/8/2022
Made By:	MMP
Concentration:	1180
Expiration Date:	5/8/2022

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	5.20	20	5.20	1184.000
ICV	5	5.20	10.50	20	5.30	1176.000

TALS Raw Data Report

Job Number: 280-110951-1
LIMS Batch: 567935
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-567934/1-A** Inj Date: 3/7/2022 6:33:36PM 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	85	44 110		
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-567934/2-A** Inj Date: 3/7/2022 6:33:47PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 3 Lab ID: **280-159332-E-2-A** Inj Date: 3/7/2022 6:33:47PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	mg/L				
Sulfide as H2S		0.85 mg/L	mg/L				

RS# 4 Lab ID: **280-159332-E-2-B MS** Inj Date: 3/7/2022 6:33:47PM 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	88	44 110		
Sulfide as H2S		22.95 mg/L	mg/L				

RS# 5 Lab ID: **280-159332-E-2-C MSD** Inj Date: 3/7/2022 6:33:47PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		20.8 mg/L	mg/L	85	44 110	4	20
Sulfide as H2S		22.1 mg/L	mg/L				

RS# 13 Lab ID: **580-110951-P-1-A** Inj Date: 3/7/2022 6:33:47PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.8 mg/L	mg/L				
Sulfide as H2S		-0.85 mg/L	mg/L				

RS# 14 Lab ID: **580-110951-P-2-A** Inj Date: 3/7/2022 6:33:47PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		2.4 mg/L	mg/L				
Sulfide as H2S		2.55 mg/L	mg/L				

RS# 15 Lab ID: **580-110951-P-3-A** Inj Date: 3/7/2022 6:33:47PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		1.6 mg/L	mg/L				
Sulfide as H2S		1.7 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-159219-1
LIMS Batch: 567935
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-567934/1-A** Inj Date: 3/7/2022 6:33:36PM 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	85	44 110		
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-567934/2-A** Inj Date: 3/7/2022 6:33:47PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 3 Lab ID: **280-159332-E-2-A** Inj Date: 3/7/2022 6:33:47PM 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: **280-159332-E-2-B MS** Inj Date: 3/7/2022 6:33:47PM 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	88	44 110		
Sulfide as H2S		22.95 mg/L	mg/L				

RS# 5 Lab ID: **280-159332-E-2-C MSD** Inj Date: 3/7/2022 6:33:47PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		20.8 mg/L	mg/L	85	44 110	4	20
Sulfide as H2S		22.1 mg/L	mg/L				

RS# 10 Lab ID: **280-159219-F-1-A** Inj Date: 3/7/2022 6:33:47PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-159234-1
LIMS Batch: 567935
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-567934/1-A** Inj Date: 3/7/2022 6:33:36PM 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	85	44 110		
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-567934/2-A** Inj Date: 3/7/2022 6:33:47PM 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: **280-159332-E-2-A** Inj Date: 3/7/2022 6:33:47PM 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: **280-159332-E-2-B MS** Inj Date: 3/7/2022 6:33:47PM 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	88	44 110		
Sulfide as H2S		22.95 mg/L	mg/L				

RS# 5 Lab ID: **280-159332-E-2-C MSD** Inj Date: 3/7/2022 6:33:47PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		20.8 mg/L	mg/L	85	44 110	4	20
Sulfide as H2S		22.1 mg/L	mg/L				

RS# 11 Lab ID: **280-159234-N-4-A** Inj Date: 3/7/2022 6:33:47PM 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: **280-159234-N-5-A** Inj Date: 3/7/2022 6:33:47PM 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: 280-159332-1
LIMS Batch: 567935
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-567934/1-A** Inj Date: 3/7/2022 6:33:36PM 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	85	44 110		
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-567934/2-A** Inj Date: 3/7/2022 6:33:47PM 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: **280-159332-E-2-A** Inj Date: 3/7/2022 6:33:47PM 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: **280-159332-E-2-B MS** Inj Date: 3/7/2022 6:33:47PM 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	88	44 110		
Sulfide as H2S		22.95 mg/L	mg/L				

RS# 5 Lab ID: **280-159332-E-2-C MSD** Inj Date: 3/7/2022 6:33:47PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		20.8 mg/L	mg/L	85	44 110	4	20
Sulfide as H2S		22.1 mg/L	mg/L				

RS# 6 Lab ID: **280-159332-E-3-A** Inj Date: 3/7/2022 6:33:47PM 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# 7 Lab ID: **280-159332-E-4-A** Inj Date: 3/7/2022 6:33:47PM 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# 8 Lab ID: **280-159332-E-5-A** Inj Date: 3/7/2022 6:33:47PM 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: **280-159332-E-6-A** Inj Date: 3/7/2022 6:33:47PM 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				

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Titration Data Review Checklist

LIMS Batch Number: 567935	Method (circle one):	QC Type (circle):
Analyst/1st Reviewer: MRB	2310B 2320B 2340C	Standard DoD QAPP Other
Date: 3/8/22	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.	Y		/	□ 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

General Chemistry Raw Data Report

Job ID: 280-159332-1

Batch: 568064 **Analyst Initials: JJM**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-568018/1-A **Analysis Date: Mar 08, 2022 16:59**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	16.8	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-568018/2-A **Analysis Date: Mar 08, 2022 16:59**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-159332-E-1-A **Analysis Date: Mar 08, 2022 16:59**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.4	mg/L	50 mL	50 mL

Lab Sample ID: 280-159332-E-7-A **Analysis Date: Mar 08, 2022 16:59**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.399999999999968	mg/L	50 mL	50 mL

Lab Sample ID: 280-159332-E-8-A **Analysis Date: Mar 08, 2022 16:59**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.4	mg/L	50 mL	50 mL

Sulfide by Titration

Analyst:	MG	SOP Information:	
Date:	3/8/2022	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:	1190
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	5.00	20	5.00	1200.000
CAL	5	5.00	10.25	20	5.25	1180.000

ICV Information	
Source/Ver-Lot#:	INT_0204
Prep Date:	2/8/2022
Made By:	MMP
Concentration:	1180
Expiration Date:	5/8/2022

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	5.40	20	5.40	1168.000
ICV	5	5.40	10.50	20	5.10	1192.000

TALS Raw Data Report

Job Number: 280-159234-1
LIMS Batch: 568064
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-568018/1-A** Inj Date: 3/8/2022 4:59:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	71	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-568018/2-A** Inj Date: 3/8/2022 4:59:00PM 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	0.800 J mg/L				
Sulfide as H2S		0.85 mg/L	0.850 J mg/L				

RS# 3 Lab ID: **280-159234-N-7-A** Inj Date: 3/8/2022 4:59:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.4 mg/L	1.9 U mg/L				
Sulfide as H2S		0.425 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-159234-N-7-B MS** Inj Date: 3/8/2022 4:59:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.4 mg/L	mg/L	69	44 110		
Sulfide as H2S		17.425 mg/L	mg/L				

RS# 5 Lab ID: **280-159234-E-7-A MSD** Inj Date: 3/8/2022 4:59:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		19.2 mg/L	mg/L	81	44 110	16	20
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 6 Lab ID: **280-159234-N-6-A** Inj Date: 3/8/2022 4:59:00PM 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: **280-159234-N-8-A** Inj Date: 3/8/2022 4:59:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.4 mg/L	1.9 U mg/L				
Sulfide as H2S		0.425 mg/L	2.0 U mg/L				

RS# 8 Lab ID: **280-159234-N-9-A** Inj Date: 3/8/2022 4:59:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.4 mg/L	1.9 U mg/L				
Sulfide as H2S		0.425 mg/L	2.0 U mg/L				

RS# 9 Lab ID: **280-159234-N-10-A** Inj Date: 3/8/2022 4:59:00PM 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				

TALS Raw Data Report

Job Number: 280-159276-1
LIMS Batch: 568064
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-568018/1-A** Inj Date: 3/8/2022 4:59:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	71	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-568018/2-A** Inj Date: 3/8/2022 4:59:00PM 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	0.800 J mg/L				
Sulfide as H2S		0.85 mg/L	0.850 J mg/L				

RS# 3 Lab ID: **280-159234-N-7-A** Inj Date: 3/8/2022 4:59:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.4 mg/L	mg/L				
Sulfide as H2S		0.425 mg/L	mg/L				

RS# 4 Lab ID: **280-159234-N-7-B MS** Inj Date: 3/8/2022 4:59:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.4 mg/L	mg/L	69	44 110		
Sulfide as H2S		17.425 mg/L	mg/L				

RS# 5 Lab ID: **280-159234-E-7-A MSD** Inj Date: 3/8/2022 4:59:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		19.2 mg/L	mg/L	81	44 110	16	20
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 10 Lab ID: **280-159276-D-2-A** Inj Date: 3/8/2022 4:59:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.4 mg/L	mg/L				
Sulfide as H2S		0.425 mg/L	mg/L				

RS# 11 Lab ID: **280-159276-D-3-A** Inj Date: 3/8/2022 4:59:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.4 mg/L	mg/L				
Sulfide as H2S		0.425 mg/L	mg/L				

RS# 12 Lab ID: **280-159276-D-4-A** Inj Date: 3/8/2022 4:59:00PM 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# 13 Lab ID: **280-159276-D-5-A** Inj Date: 3/8/2022 4:59:00PM 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				

TALS Raw Data Report

Job Number: 280-159332-1
LIMS Batch: 568064
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-568018/1-A** Inj Date: 3/8/2022 4:59:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.8 mg/L	mg/L	71	44 110		
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-568018/2-A** Inj Date: 3/8/2022 4:59:00PM 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	0.800 J mg/L				
Sulfide as H2S		0.85 mg/L	0.850 J mg/L				

RS# 3 Lab ID: **280-159234-N-7-A** Inj Date: 3/8/2022 4:59:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.4 mg/L	1.9 U mg/L				
Sulfide as H2S		0.425 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-159234-N-7-B MS** Inj Date: 3/8/2022 4:59:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.4 mg/L	mg/L	69	44 110		
Sulfide as H2S		17.425 mg/L	mg/L				

RS# 5 Lab ID: **280-159234-E-7-A MSD** Inj Date: 3/8/2022 4:59:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		19.2 mg/L	mg/L	81	44 110	16	20
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 14 Lab ID: **280-159332-E-1-A** Inj Date: 3/8/2022 4:59:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.4 mg/L	1.9 U mg/L				
Sulfide as H2S		0.425 mg/L	2.0 U mg/L				

RS# 15 Lab ID: **280-159332-E-7-A** Inj Date: 3/8/2022 4:59:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		999999968 mg/L	1.9 U mg/L				
Sulfide as H2S		999999966 mg/L	2.0 U mg/L				

RS# 16 Lab ID: **280-159332-E-8-A** Inj Date: 3/8/2022 4:59:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.4 mg/L	1.9 U mg/L				
Sulfide as H2S		0.425 mg/L	2.0 U mg/L				

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Titration Data Review Checklist

LIMS Batch Number: 568064	**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

General Chemistry Raw Data Report

Job ID: 280-159332-1

Batch: 568065 **Analyst Initials: JJM**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-568024/1-A

Analysis Date: Mar 08, 2022 17:04

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	19.2	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-568024/2-A

Analysis Date: Mar 08, 2022 17:04

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-159332-E-13-A

Analysis Date: Mar 08, 2022 17:04

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-159332-E-13-B MS

Analysis Date: Mar 08, 2022 17:04

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	19.2	mg/L	50 mL	50 mL

Lab Sample ID: 280-159332-E-13-C MSD

Analysis Date: Mar 08, 2022 17:04

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	19.2	mg/L	50 mL	50 mL

Lab Sample ID: 280-159332-E-9-A

Analysis Date: Mar 08, 2022 17:04

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-159332-E-10-A

Analysis Date: Mar 08, 2022 17:04

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-159332-E-11-A

Analysis Date: Mar 08, 2022 17:04

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-159332-E-12-A

Analysis Date: Mar 08, 2022 17:04

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Sulfide by Titration

Analyst:	MG	SOP Information:	
Date:	3/8/2022	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:	1190
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:	1180
Expiration Date:	5/8/2022

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	5.00	20	5.00	1200.000
CAL	5	5.00	10.25	20	5.25	1180.000

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	5.40	20	5.40	1168.000
ICV	5	5.40	10.50	20	5.10	1192.000

TALS Raw Data Report

Job Number: 280-159275-1
LIMS Batch: 568065
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-568024/1-A** Inj Date: 3/8/2022 5:04:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		19.2 mg/L	mg/L	81	44 110		
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-568024/2-A** Inj Date: 3/8/2022 5:04:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 3 Lab ID: **280-159332-E-13-A** Inj Date: 3/8/2022 5:04:00PM 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: **280-159332-E-13-B MS** Inj Date: 3/8/2022 5:04:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		19.2 mg/L	mg/L	78	44 110		
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 5 Lab ID: **280-159332-E-13-C MSD** Inj Date: 3/8/2022 5:04:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		19.2 mg/L	mg/L	78	44 110	0	20
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 10 Lab ID: **280-159275-E-3-A** Inj Date: 3/8/2022 5:04:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 11 Lab ID: **280-159275-E-4-A** Inj Date: 3/8/2022 5:04:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 12 Lab ID: **280-159275-E-5-A** Inj Date: 3/8/2022 5:04:00PM 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# 13 Lab ID: **280-159275-E-6-A** Inj Date: 3/8/2022 5:04:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

TALS Raw Data Report

Job Number: 280-159332-1
LIMS Batch: 568065
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-568024/1-A** Inj Date: 3/8/2022 5:04:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		19.2 mg/L	mg/L	81	44 110		
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-568024/2-A** Inj Date: 3/8/2022 5:04:00PM 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: **280-159332-E-13-A** Inj Date: 3/8/2022 5:04:00PM 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: **280-159332-E-13-B MS** Inj Date: 3/8/2022 5:04:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		19.2 mg/L	mg/L	78	44 110		
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 5 Lab ID: **280-159332-E-13-C MSD** Inj Date: 3/8/2022 5:04:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		19.2 mg/L	mg/L	78	44 110	0	20
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 6 Lab ID: **280-159332-E-9-A** Inj Date: 3/8/2022 5:04:00PM 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: **280-159332-E-10-A** Inj Date: 3/8/2022 5:04:00PM 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: **280-159332-E-11-A** Inj Date: 3/8/2022 5:04:00PM 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: **280-159332-E-12-A** Inj Date: 3/8/2022 5:04:00PM 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				

TALS Raw Data Report

Job Number: 280-159454-1
LIMS Batch: 568065
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-568024/1-A** Inj Date: 3/8/2022 5:04:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		19.2 mg/L	mg/L	81	44 110		
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-568024/2-A** Inj Date: 3/8/2022 5:04:00PM 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: **280-159332-E-13-A** Inj Date: 3/8/2022 5:04:00PM 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: **280-159332-E-13-B MS** Inj Date: 3/8/2022 5:04:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		19.2 mg/L	mg/L	78	44 110		
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 5 Lab ID: **280-159332-E-13-C MSD** Inj Date: 3/8/2022 5:04:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		19.2 mg/L	mg/L	78	44 110	0	20
Sulfide as H2S		20.4 mg/L	mg/L				

RS# 14 Lab ID: **280-159454-E-1-A** Inj Date: 3/8/2022 5:04:00PM 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# 15 Lab ID: **280-159454-E-2-A** Inj Date: 3/8/2022 5:04:00PM 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				

Titration Data Review Checklist

LIMS Batch Number: 568065	**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_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-143				
Lims ID:	std L1				
Client ID:					
Sample Type:	IC	Calib Level:	1		
Inject. Date:	16-Mar-2022 14:19:00	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0109293-002				
Misc. Info.:	280-0109293-002				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom13		
Sublist:	chrom-Anions-IC13*sub1				
Method:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Anions-IC13.m				
Limit Group:	Wet - Anions 28D				
Last Update:	17-Mar-2022 12:52:38	Calib Date:	16-Mar-2022 15:34:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154				
Column 1 :			Det: 0005		
Process Host:	CTX1616				
First Level Reviewer: jindaratc		Date:	16-Mar-2022 14:48:15		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.837	2.837	0.000	5145157	0.2000	0.2139	M
2 Chloride	3.868	3.868	0.000	14550428	1.00	1.03	
3 Nitrite as N	4.497	4.497	0.000	7184148	NC	NC	M
4 Bromide	5.577	5.577	0.000	1154528	0.2000	0.1867	M
5 Nitrate as N	6.307	6.307	0.000	7013948	NC	NC	
7 Orthophosphate as P	7.848	7.848	0.000	3336826	NC	NC	
6 Sulfate	8.888	8.888	0.000	23581937	1.00	1.04	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

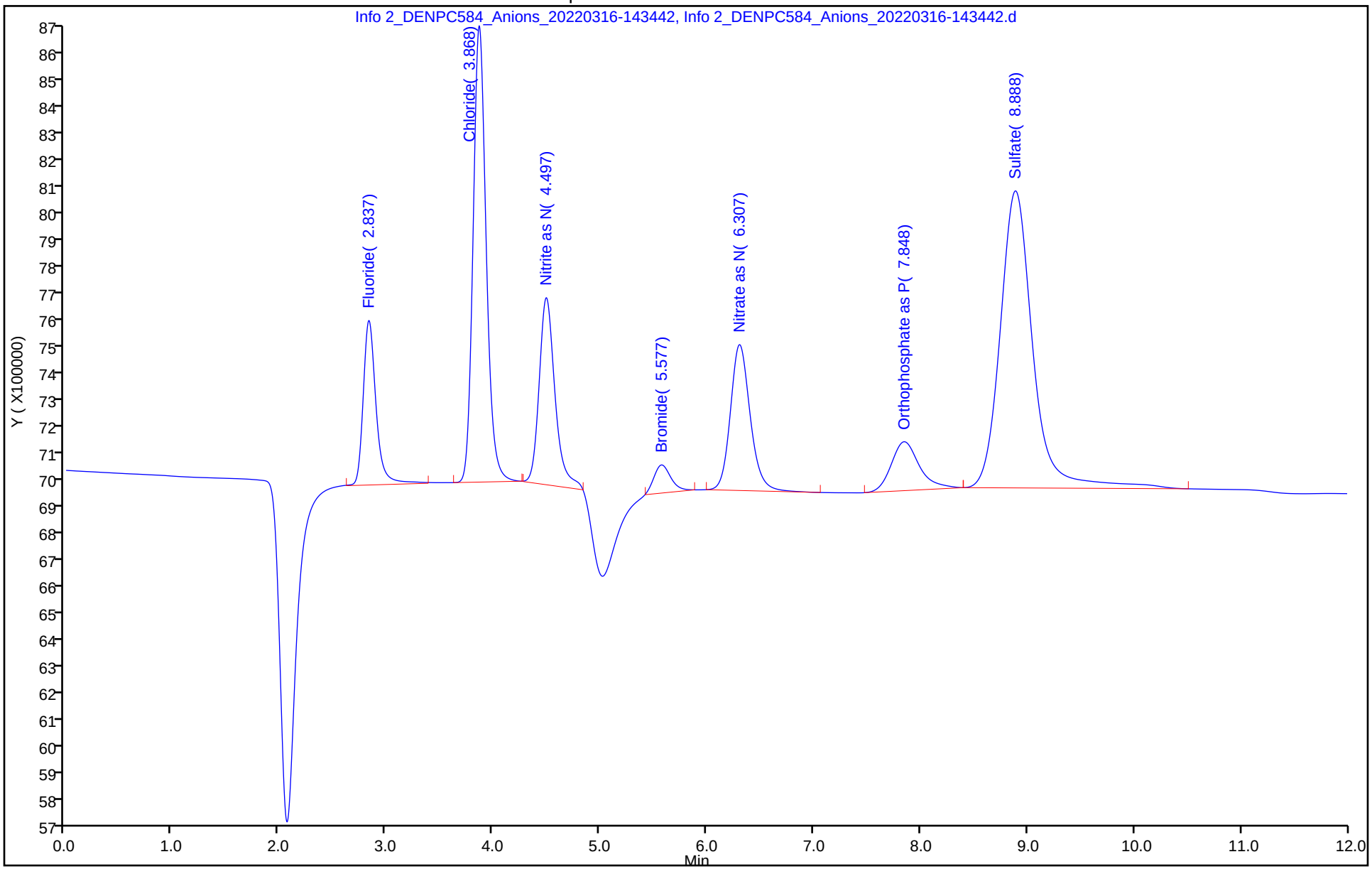
Reagents:

IC CAL cl/so4_00411	Amount Added:	0.02	Units: mL
IC Cal low_00627	Amount Added:	0.02	Units: mL

Report Date: 17-Mar-2022 12:52:39 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-143442.d				
Injection Date:	16-Mar-2022 14:19:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	std L1			Worklist Smp#:	2
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

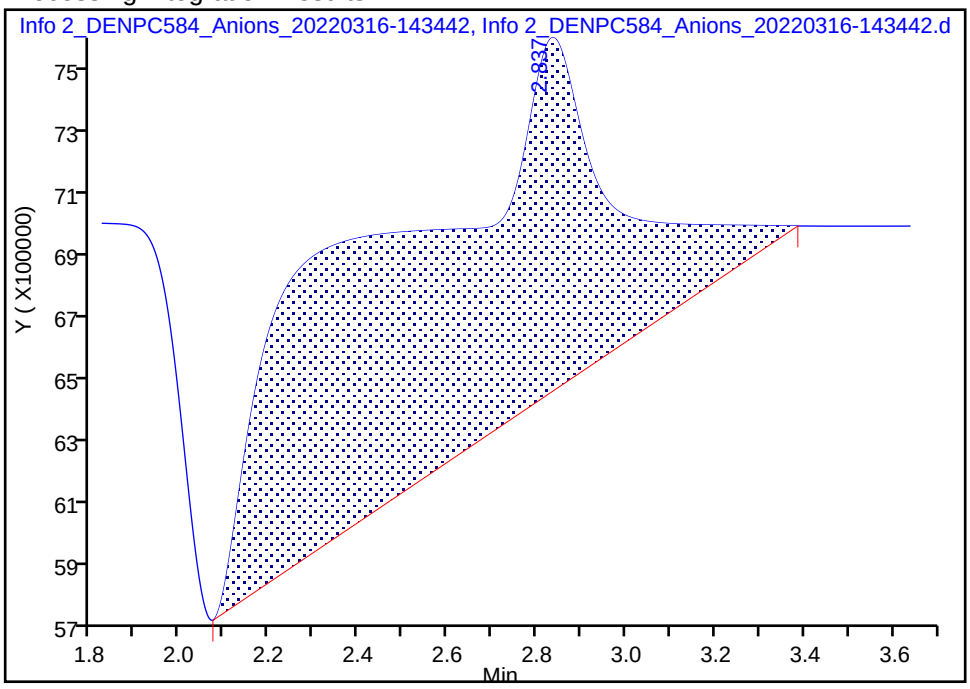
Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-143
Injection Date: 16-Mar-2022 14:19:00 Instrument ID: WC_IonChrom13
Lims ID: std L1
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions-IC13 Limit Group: Wet - Anions 28D
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

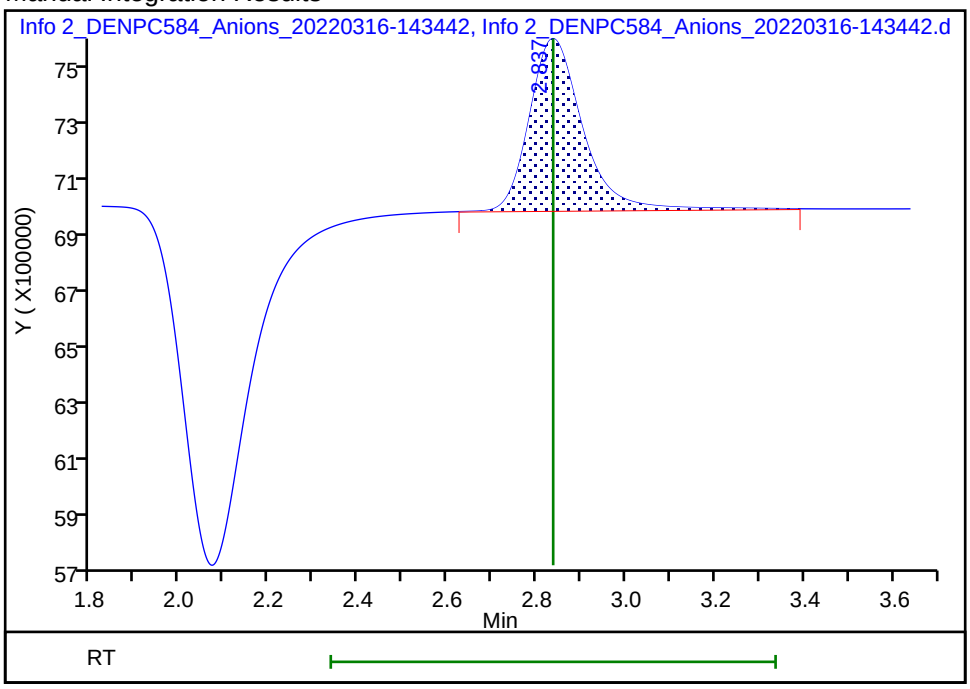
Processing Integration Results

RT: 2.84
Area: 46750380
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 2.84
Area: 5145157
Amount: 0.213882
Amount Units: ug/ml



Reviewer: jindaratc, 16-Mar-2022 14:48:04
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-143

Injection Date: 16-Mar-2022 14:19:00 Instrument ID: WC_IonChrom13

Lims ID: std L1

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

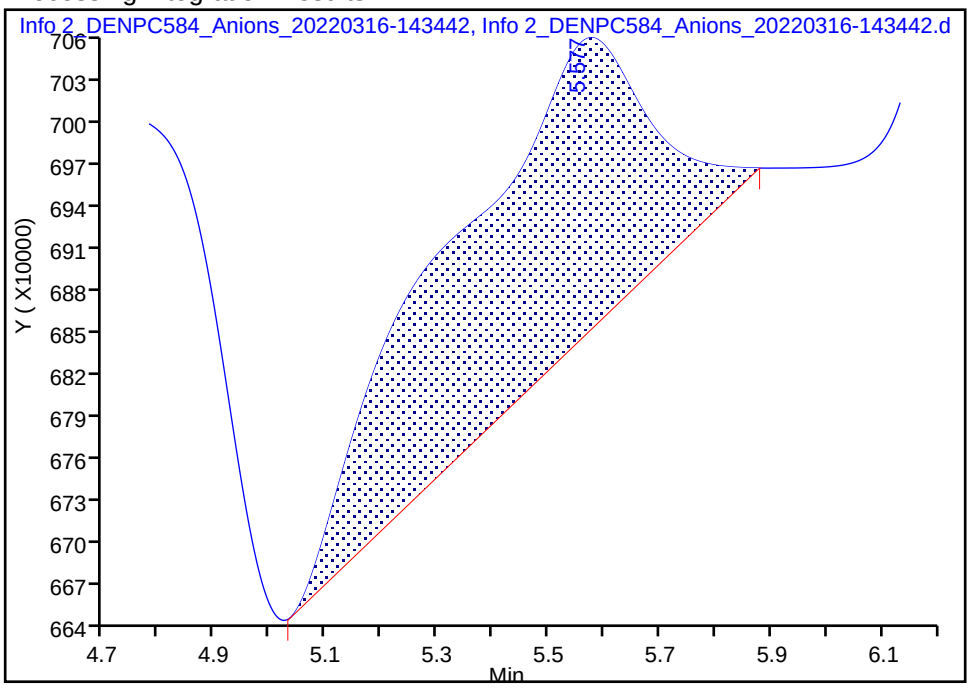
Column: Detector 0005

4 Bromide, CAS: 24959-67-9

Signal: 1

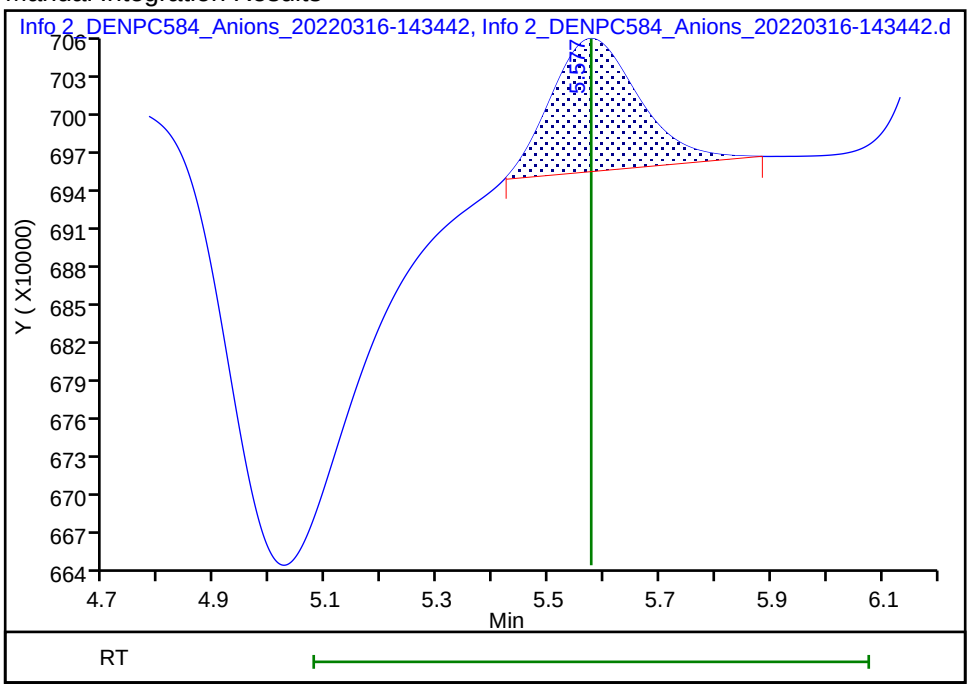
RT: 5.58
Area: 5914078
Amount: 0
Amount Units: ug/ml

Processing Integration Results



RT: 5.58
Area: 1154528
Amount: 0.186743
Amount Units: ug/ml

Manual Integration Results



Reviewer: jindaratc, 16-Mar-2022 14:48:12

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-144
Lims ID: std L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-Mar-2022 14:34:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109293-003
Misc. Info.: 280-0109293-003
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 12:52:39 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1616

First Level Reviewer: jindaratc Date: 16-Mar-2022 15:17:22

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.838	2.838	0.000	12471701	0.5000	0.4846	M
2 Chloride	3.870	3.870	0.000	34595051	2.50	2.45	
3 Nitrite as N	4.498	4.498	0.000	17152795	NC	NC	M
4 Bromide	5.575	5.575	0.000	3101352	0.5000	0.5051	M
5 Nitrate as N	6.297	6.297	0.000	17227671	NC	NC	
7 Orthophosphate as P	7.848	7.848	0.000	8494219	NC	NC	
6 Sulfate	8.878	8.878	0.000	38203195	2.50	2.45	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

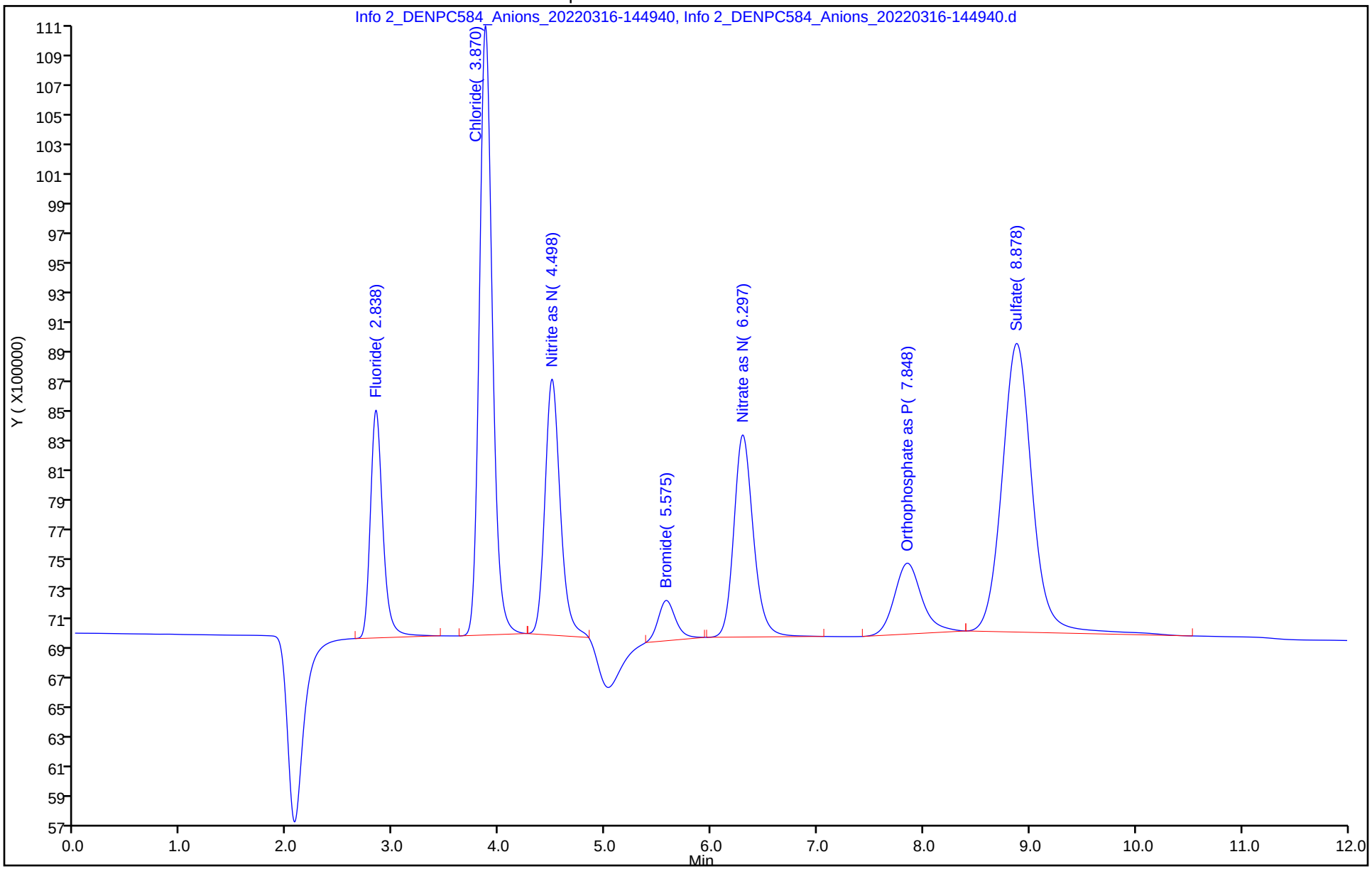
Reagents:

IC CAL cl/so4_00411 Amount Added: 0.05 Units: mL
IC Cal low_00627 Amount Added: 0.05 Units: mL

Report Date: 17-Mar-2022 12:52:39 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-144940.d				
Injection Date:	16-Mar-2022 14:34:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	std L2			Worklist Smp#:	3
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-144

Injection Date: 16-Mar-2022 14:34:00 Instrument ID: WC_IonChrom13

Lims ID: std L2

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

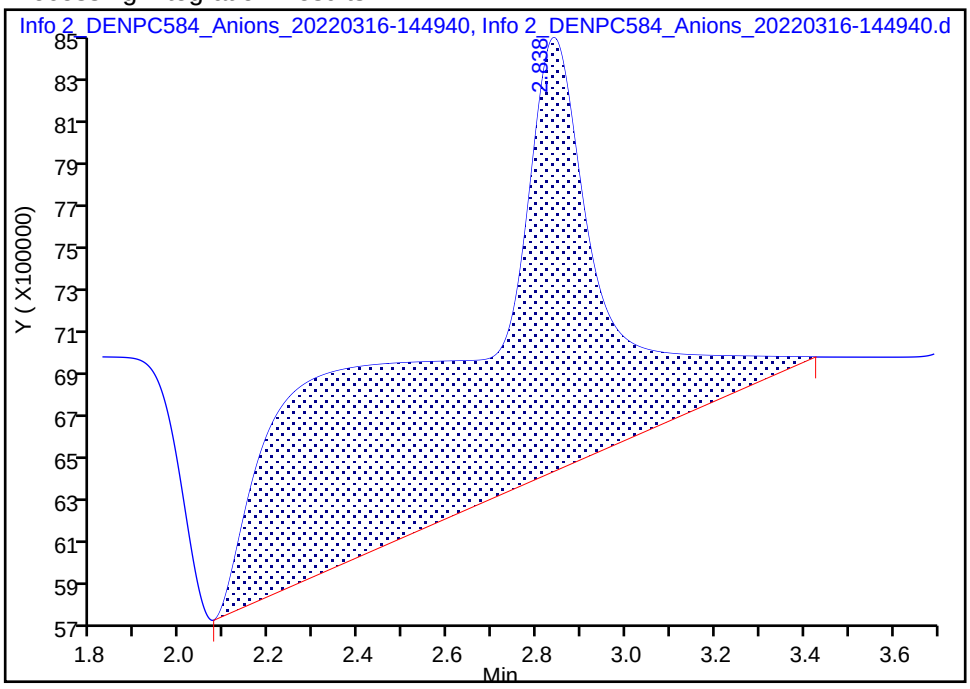
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

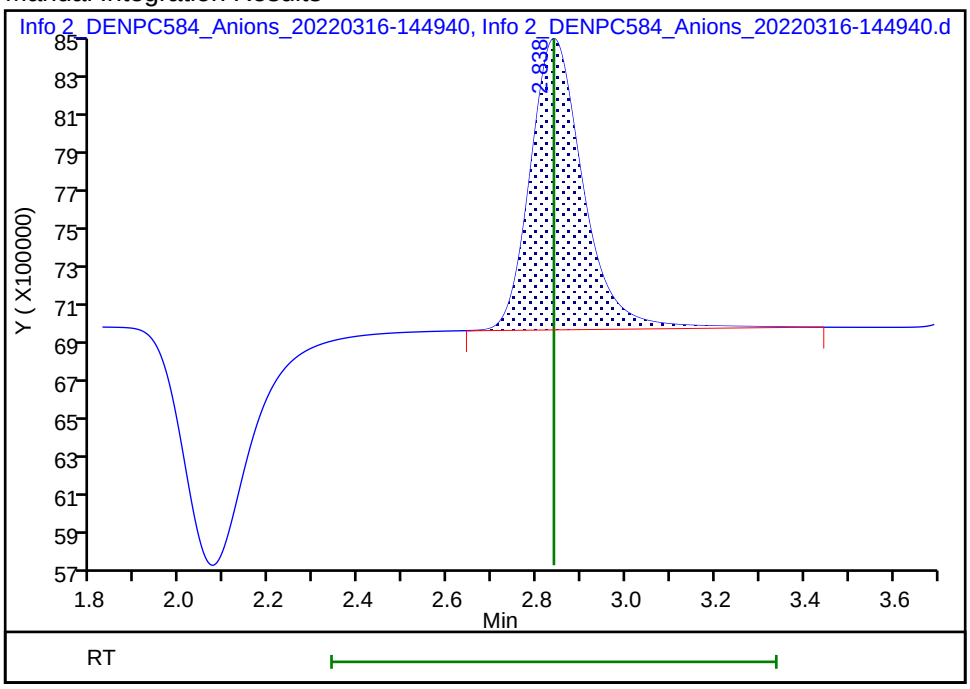
Processing Integration Results

RT: 2.84
Area: 54320360
Amount: 0.676387
Amount Units: ug/ml



Manual Integration Results

RT: 2.84
Area: 12471701
Amount: 0.484552
Amount Units: ug/ml



Reviewer: jindaratc, 16-Mar-2022 15:17:11

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-144

Injection Date: 16-Mar-2022 14:34:00 Instrument ID: WC_IonChrom13

Lims ID: std L2

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

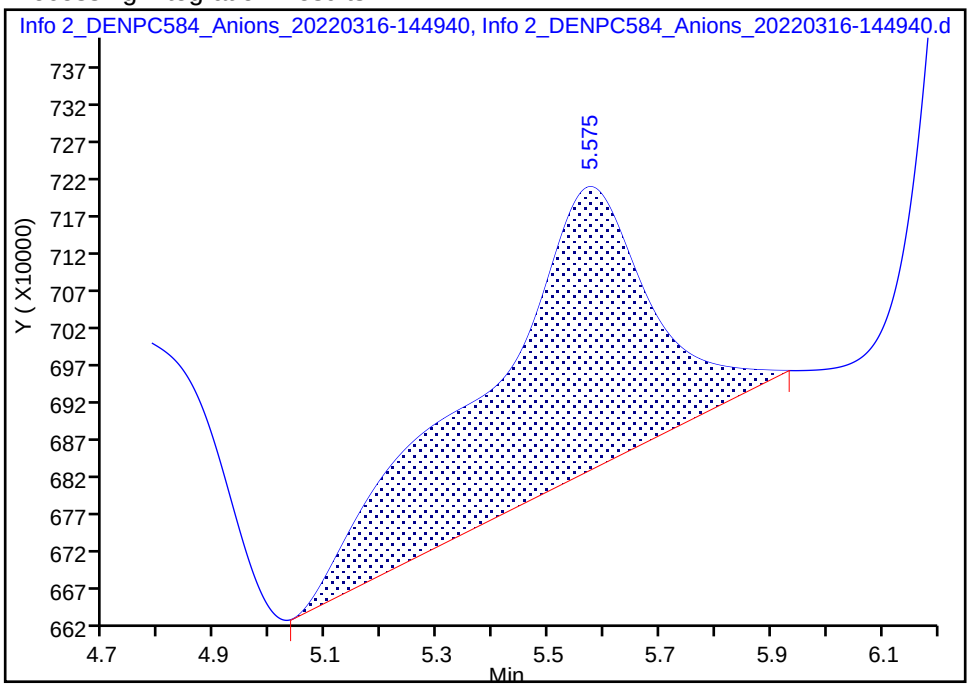
Column: Detector 0005

4 Bromide, CAS: 24959-67-9

Signal: 1

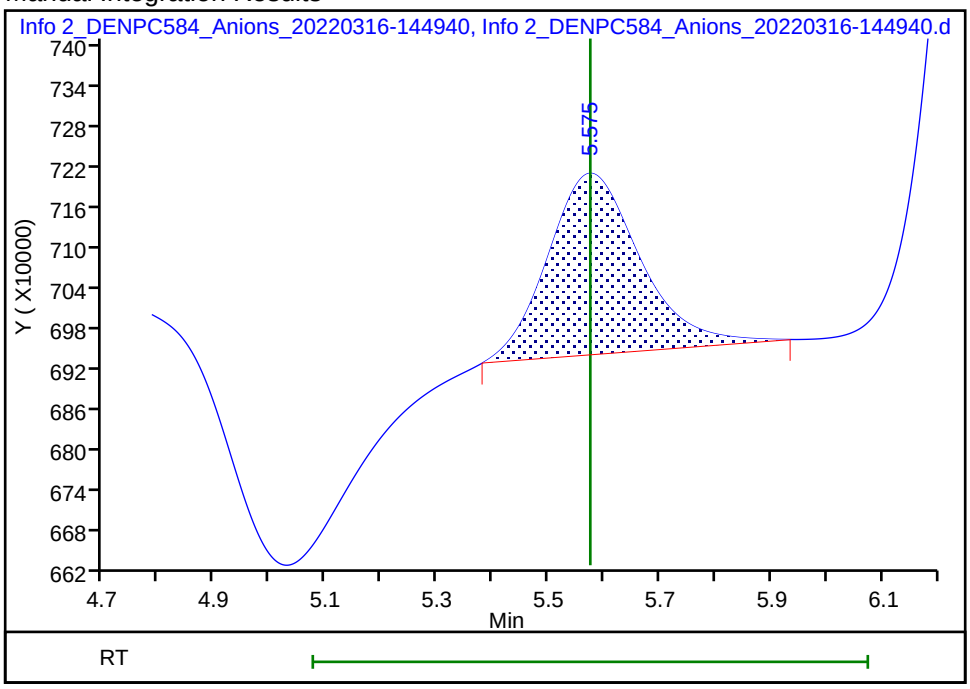
Processing Integration Results

RT: 5.58
Area: 8220845
Amount: 0.656372
Amount Units: ug/ml



Manual Integration Results

RT: 5.58
Area: 3101352
Amount: 0.505107
Amount Units: ug/ml



Reviewer: jindaratc, 16-Mar-2022 15:17:19

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-150
Lims ID: std L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 16-Mar-2022 14:49:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109293-004
Misc. Info.: 280-0109293-004
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 12:52:40 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1616

First Level Reviewer: jindaratc Date: 16-Mar-2022 15:17:59

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.838	2.838	0.000	25299978	1.00	0.9585	M
2 Chloride	3.870	3.870	0.000	69879179	5.00	4.94	
3 Nitrite as N	4.495	4.495	0.000	34854829	NC	NC	M
4 Bromide	5.572	5.572	0.000	6459909	1.00	1.05	M
5 Nitrate as N	6.282	6.282	0.000	34565739	NC	NC	
7 Orthophosphate as P	7.848	7.848	0.000	17915317	NC	NC	
6 Sulfate	8.872	8.872	0.000	63515904	5.00	4.91	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

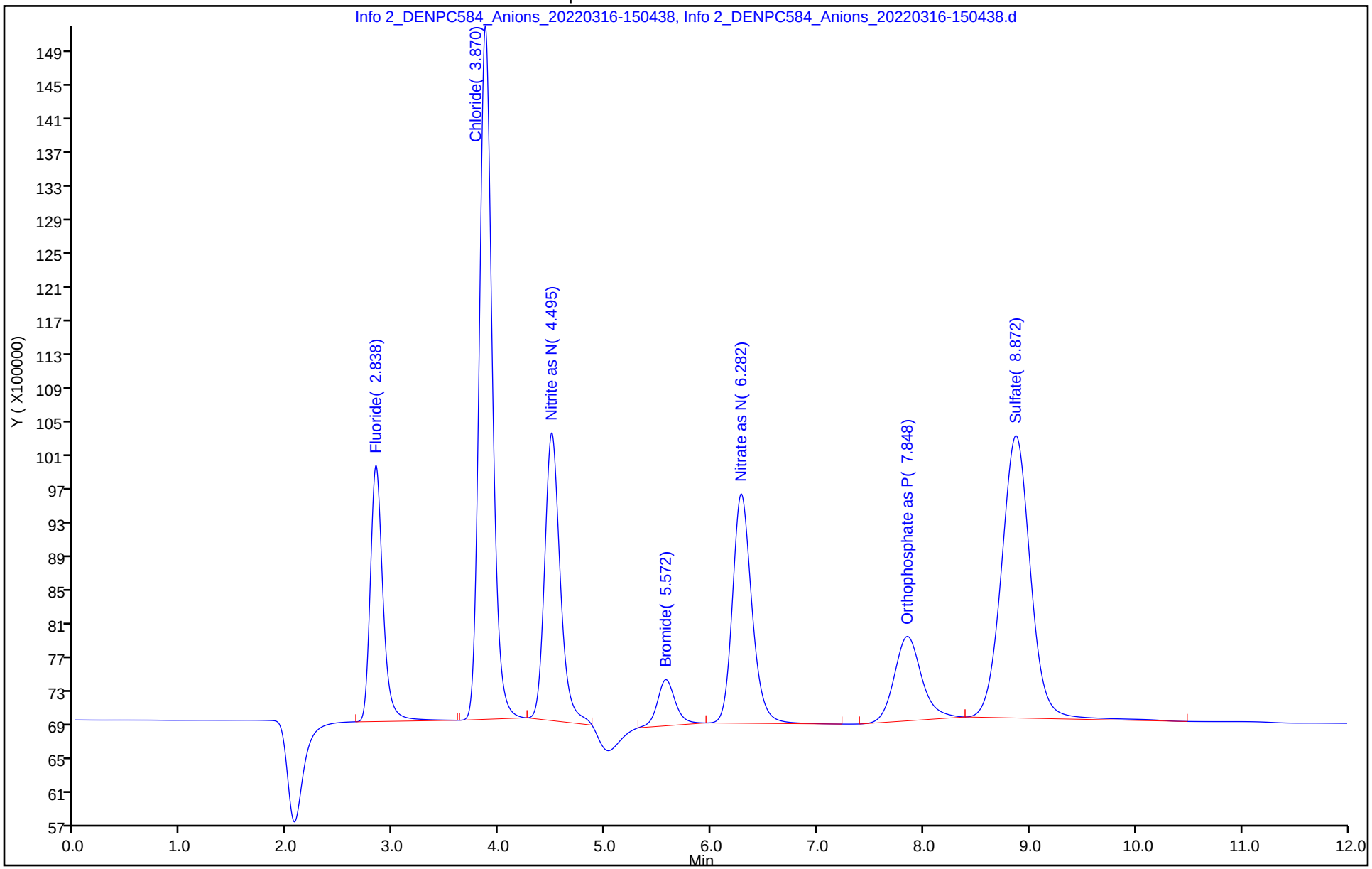
Reagents:

IC CAL cl/so4_00411 Amount Added: 0.10 Units: mL
IC Cal low_00627 Amount Added: 0.10 Units: mL

Report Date: 17-Mar-2022 12:52:40 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-150438.d				
Injection Date:	16-Mar-2022 14:49:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	std L3			Worklist Smp#:	4
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-150

Injection Date: 16-Mar-2022 14:49:00 Instrument ID: WC_IonChrom13

Lims ID: std L3

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

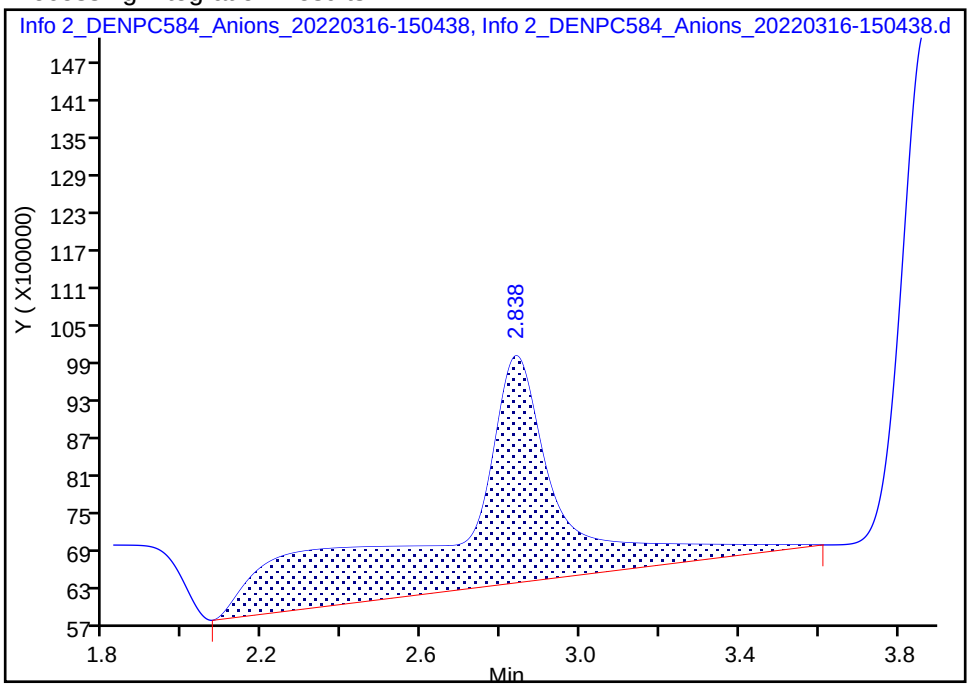
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

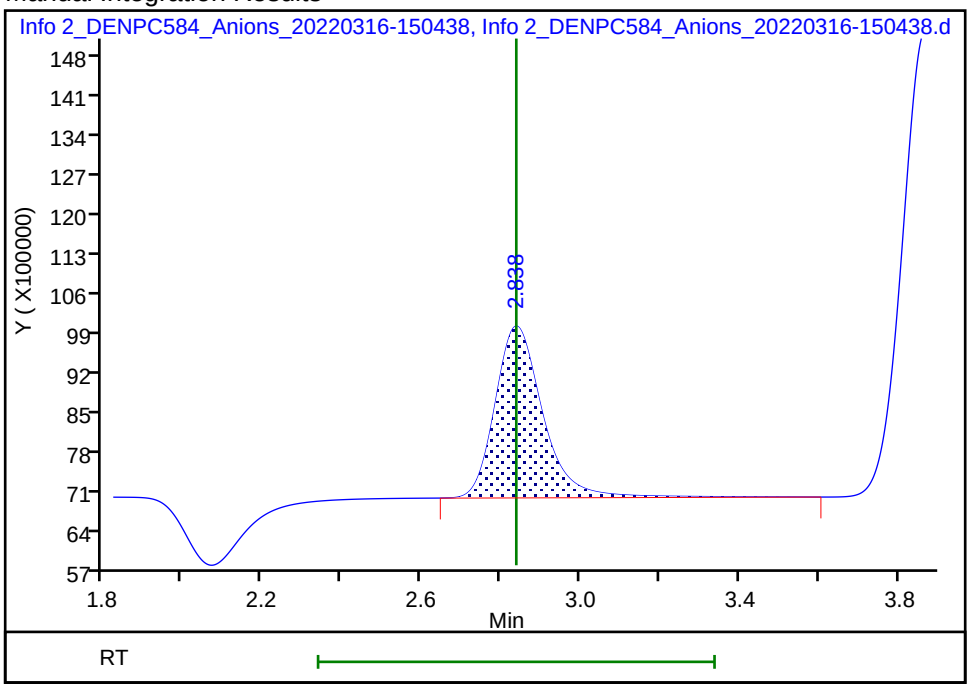
RT: 2.84
Area: 72396522
Amount: 1.122375
Amount Units: ug/ml

Processing Integration Results



RT: 2.84
Area: 25299978
Amount: 0.958475
Amount Units: ug/ml

Manual Integration Results



Reviewer: jindaratc, 16-Mar-2022 15:17:34

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-150

Injection Date: 16-Mar-2022 14:49:00 Instrument ID: WC_IonChrom13

Lims ID: std L3

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

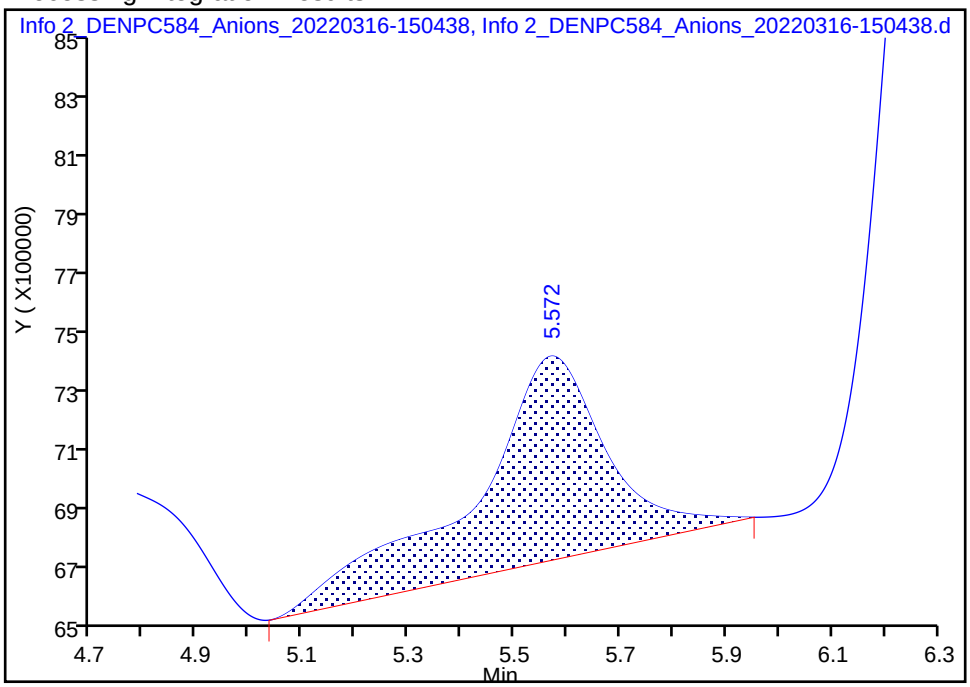
Column: Detector 0005

4 Bromide, CAS: 24959-67-9

Signal: 1

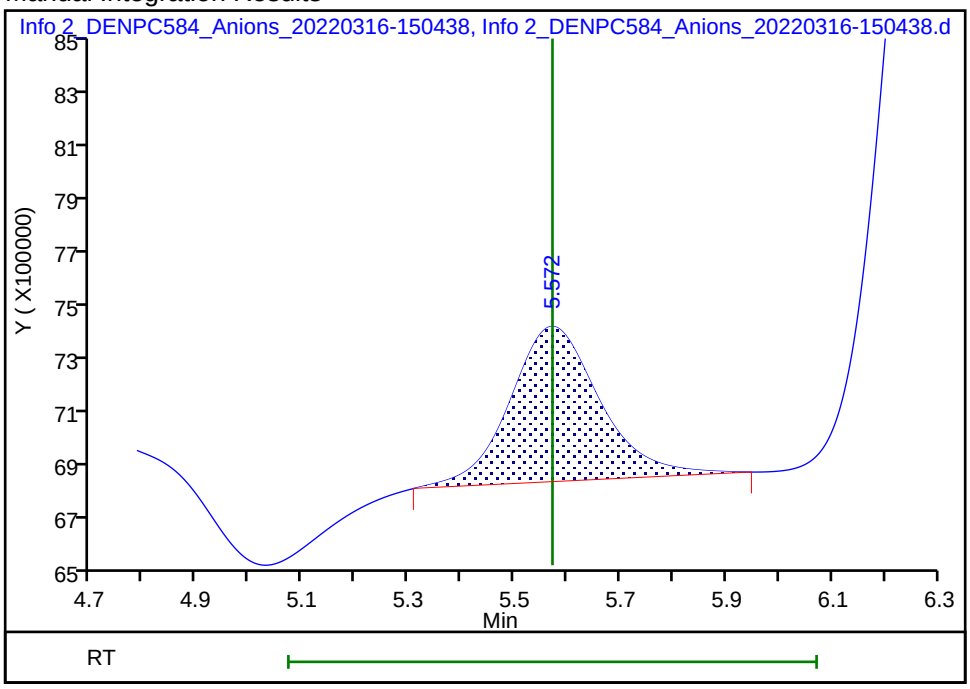
RT: 5.57
Area: 11449018
Amount: 1.082951
Amount Units: ug/ml

Processing Integration Results



RT: 5.57
Area: 6459909
Amount: 1.054332
Amount Units: ug/ml

Manual Integration Results



Reviewer: jindaratc, 16-Mar-2022 15:17:47

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-151
Lims ID: std L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 16-Mar-2022 15:04:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109293-005
Misc. Info.: 280-0109293-005
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 12:52:41 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1616

First Level Reviewer: jindaratc Date: 16-Mar-2022 15:25:34

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.843	2.843	0.000	107223627	4.00	3.99	M
2 Chloride	3.887	3.887	0.000	852921414	60.0	60.3	
3 Nitrite as N	4.490	4.490	0.000	134479946	NC	NC	M
4 Bromide	5.567	5.567	0.000	24768265	4.00	4.05	M
5 Nitrate as N	6.250	6.250	0.000	140496253	NC	NC	
7 Orthophosphate as P	7.850	7.850	0.000	77256390	NC	NC	
6 Sulfate	8.855	8.855	0.000	636625483	60.0	60.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

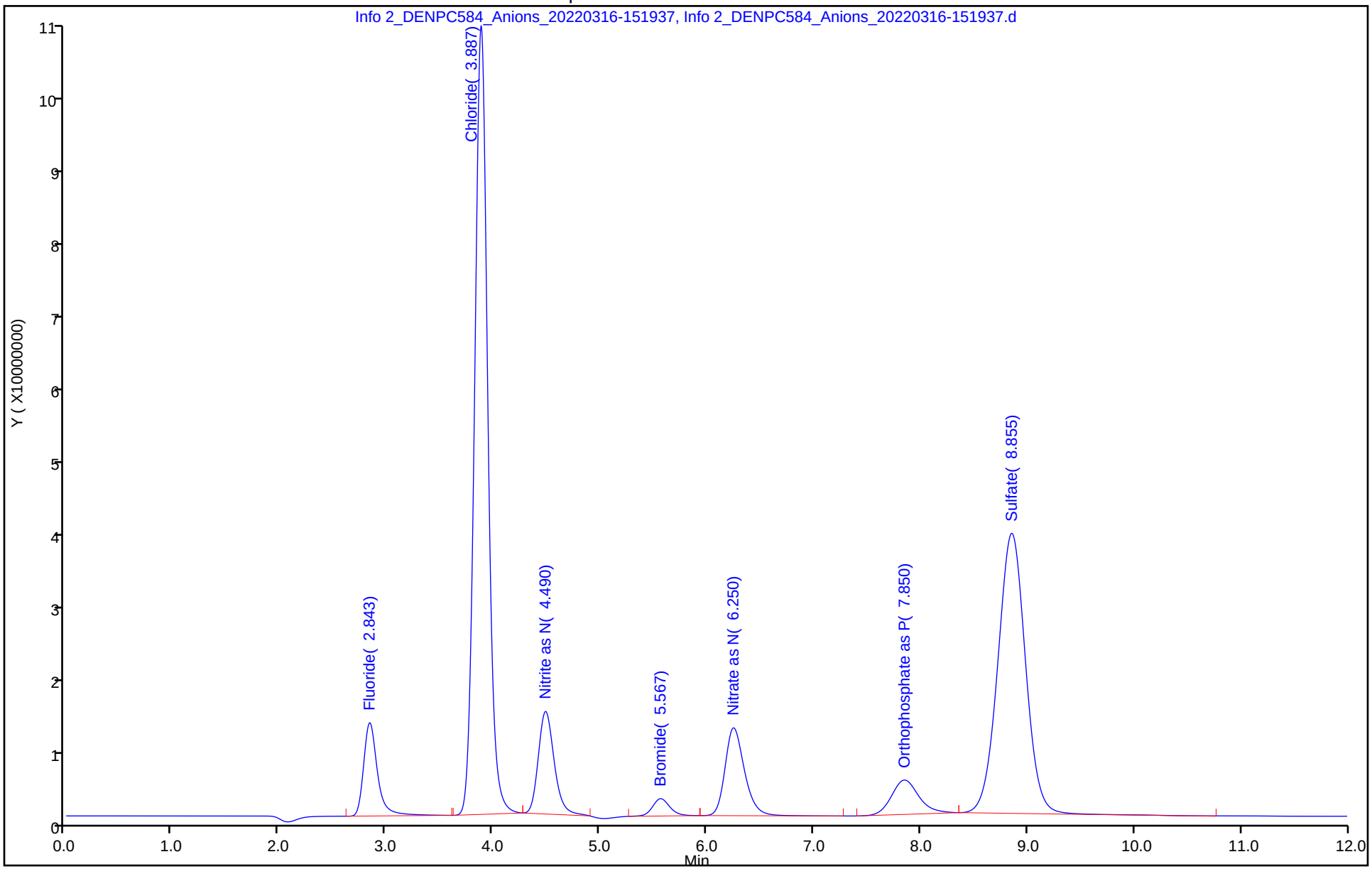
Reagents:

IC CAL cl/so4_00411 Amount Added: 1.20 Units: mL
IC Cal low_00627 Amount Added: 0.40 Units: mL

Report Date: 17-Mar-2022 12:52:41 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-151937.d				
Injection Date:	16-Mar-2022 15:04:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	std L4			Worklist Smp#:	5
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-151

Injection Date: 16-Mar-2022 15:04:00 Instrument ID: WC_IonChrom13

Lims ID: std L4

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 5

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

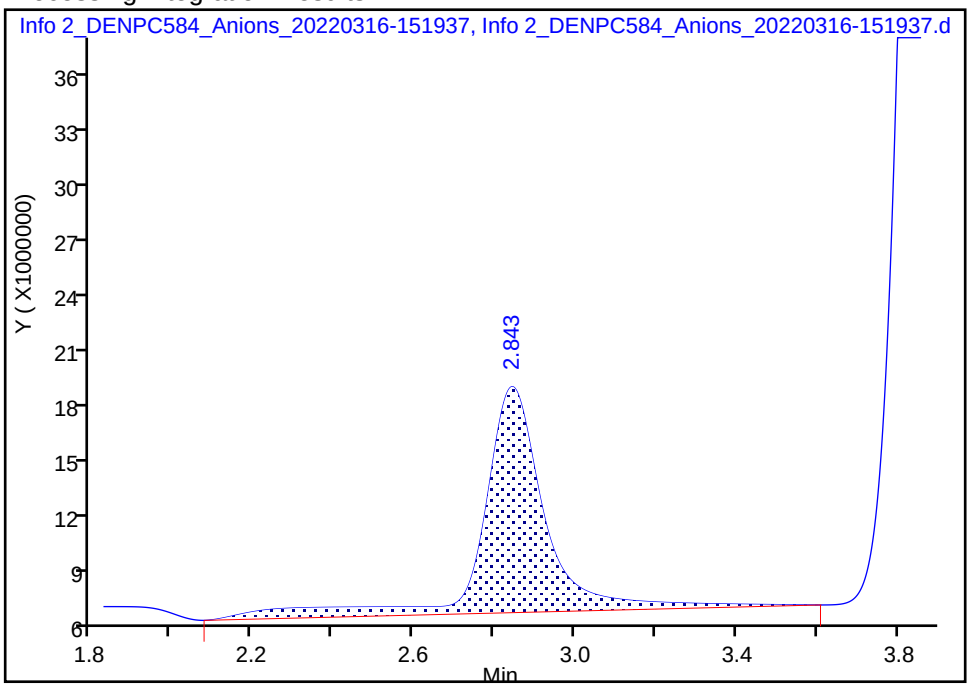
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

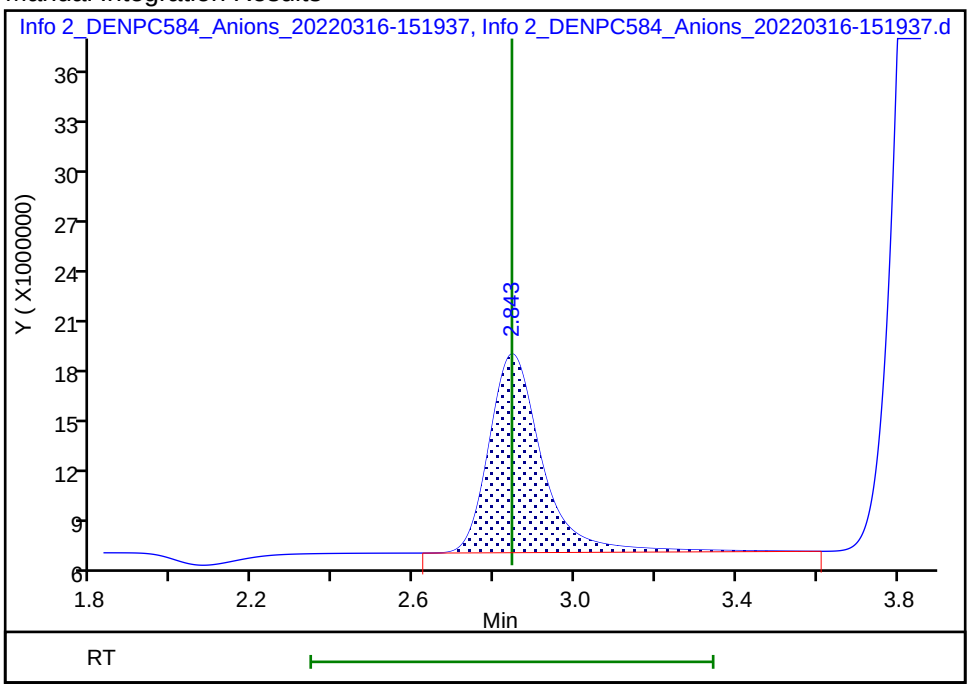
Processing Integration Results

RT: 2.84
Area: 133584109
Amount: 4.149588
Amount Units: ug/ml



Manual Integration Results

RT: 2.84
Area: 107223627
Amount: 3.985035
Amount Units: ug/ml



Reviewer: jindaratc, 16-Mar-2022 15:25:12

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-151

Injection Date: 16-Mar-2022 15:04:00 Instrument ID: WC_IonChrom13

Lims ID: std L4

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 5

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

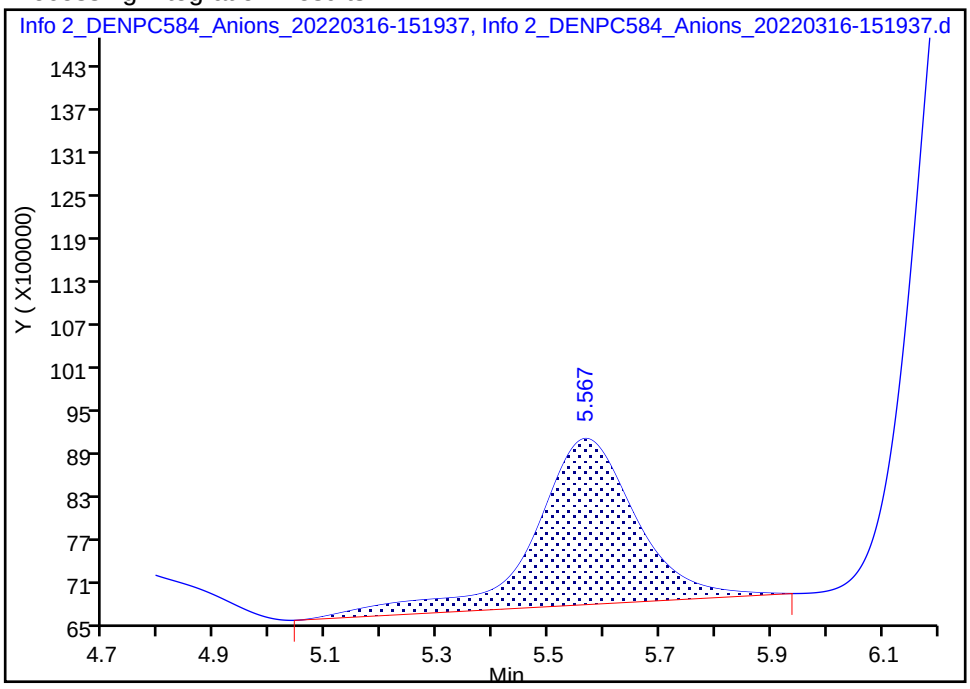
Column: Detector 0005

4 Bromide, CAS: 24959-67-9

Signal: 1

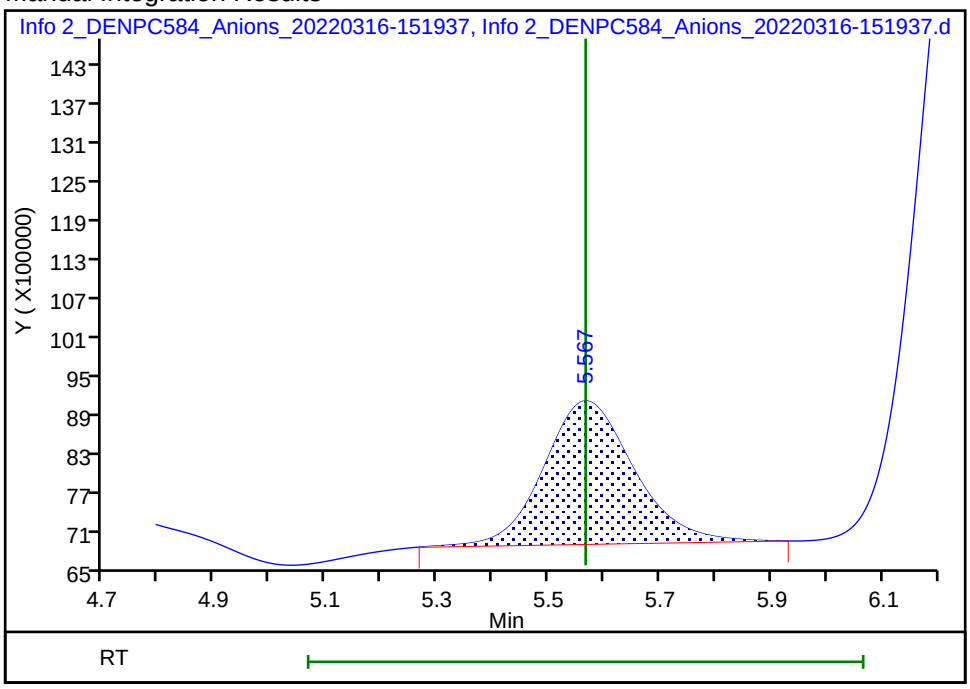
Processing Integration Results

RT: 5.57
Area: 29743417
Amount: 4.069234
Amount Units: ug/ml



Manual Integration Results

RT: 5.57
Area: 24768265
Amount: 4.048300
Amount Units: ug/ml



Reviewer: jindaratc, 16-Mar-2022 15:25:30

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-153
Lims ID: std L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 16-Mar-2022 15:19:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109293-006
Misc. Info.: 280-0109293-006
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 12:52:42 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1616

First Level Reviewer: jindaratc Date: 16-Mar-2022 15:55:31

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.852	2.852	0.000	216926359	8.00	8.04	M
2 Chloride	3.913	3.913	0.000	1681395021	120.0	118.8	
3 Nitrite as N	4.490	4.490	0.000	260864425	NC	NC	M
4 Bromide	5.570	5.570	0.000	48716159	8.00	7.96	M
5 Nitrate as N	6.238	6.238	0.000	283342648	NC	NC	
7 Orthophosphate as P	7.842	7.842	0.000	147390047	NC	NC	
6 Sulfate	8.843	8.843	0.000	1241988390	120.0	119.1	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

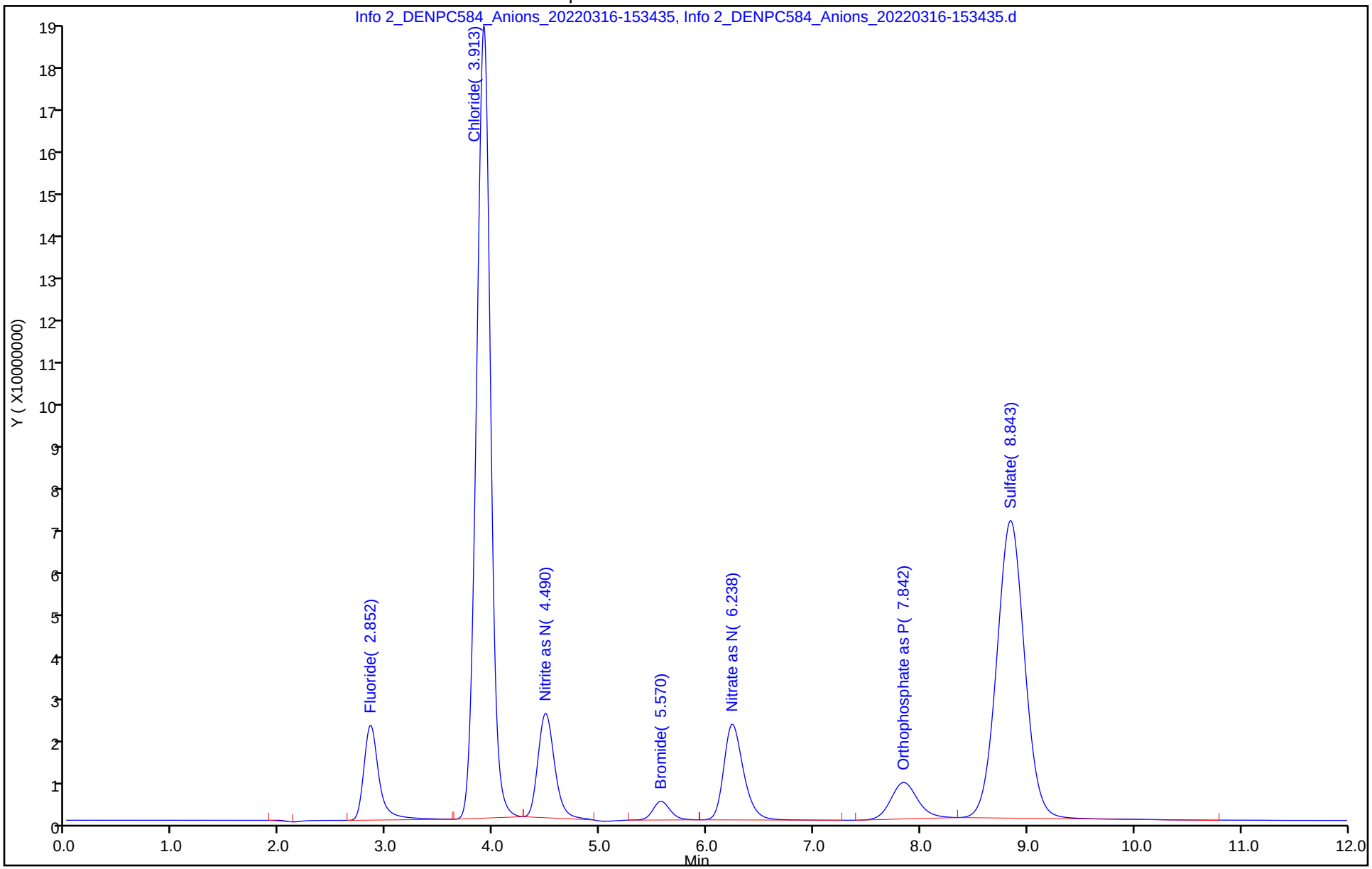
Reagents:

IC CAL cl/so4_00411 Amount Added: 2.40 Units: mL
IC Cal low_00627 Amount Added: 0.80 Units: mL

Report Date: 17-Mar-2022 12:52:42 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-153435.d				
Injection Date:	16-Mar-2022 15:19:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	std L5			Worklist Smp#:	6
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-153

Injection Date: 16-Mar-2022 15:19:00 Instrument ID: WC_IonChrom13

Lims ID: std L5

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 6

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

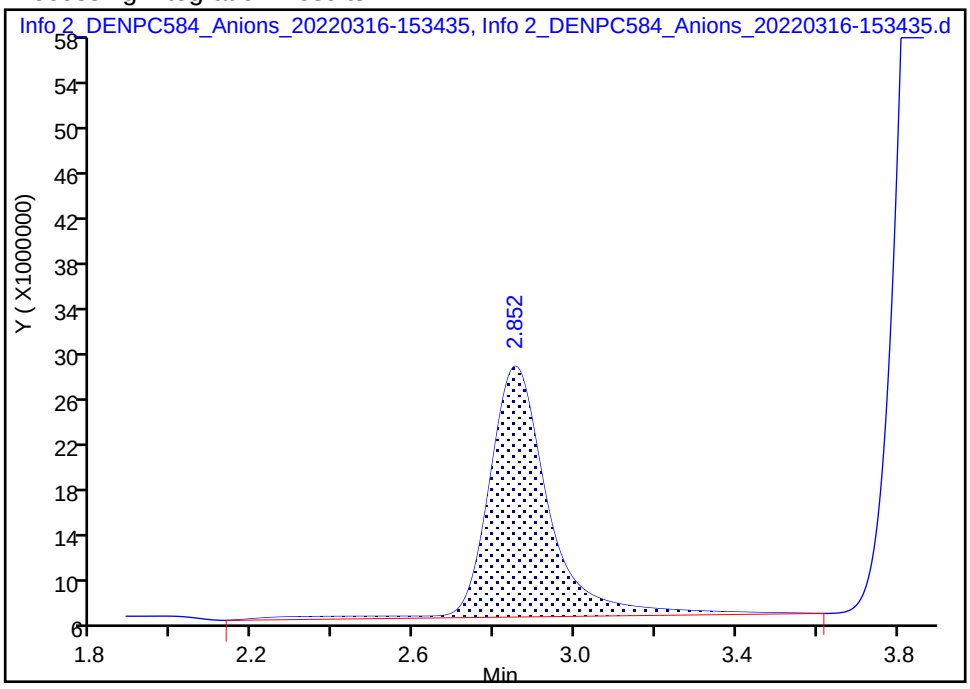
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

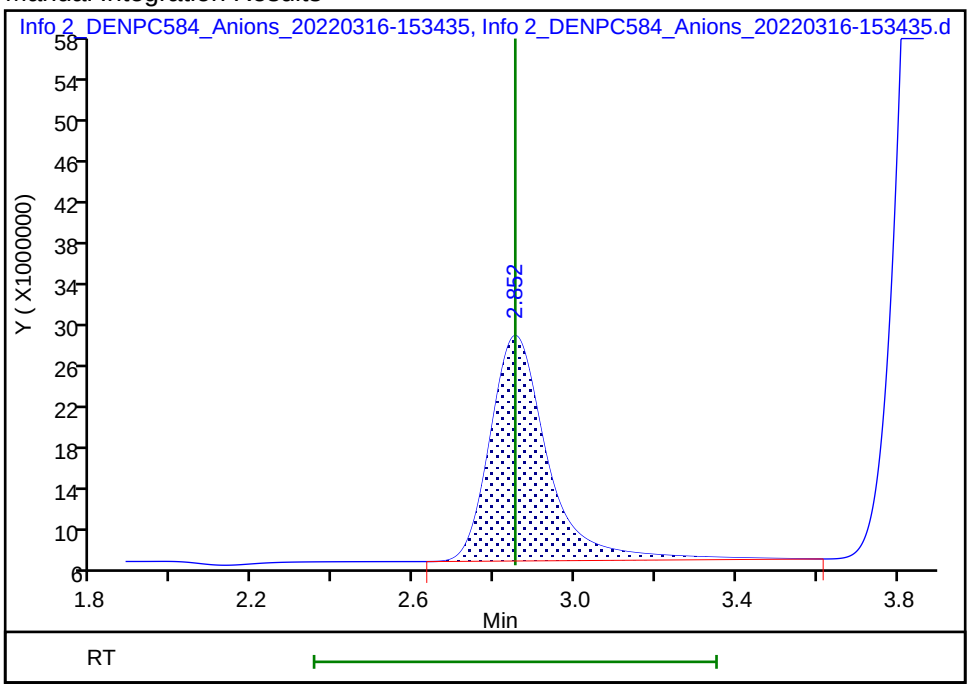
RT: 2.85
Area: 226873547
Amount: 8.241492
Amount Units: ug/ml

Processing Integration Results



RT: 2.85
Area: 216926359
Amount: 8.037856
Amount Units: ug/ml

Manual Integration Results



Reviewer: jindaratc, 16-Mar-2022 15:55:11

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

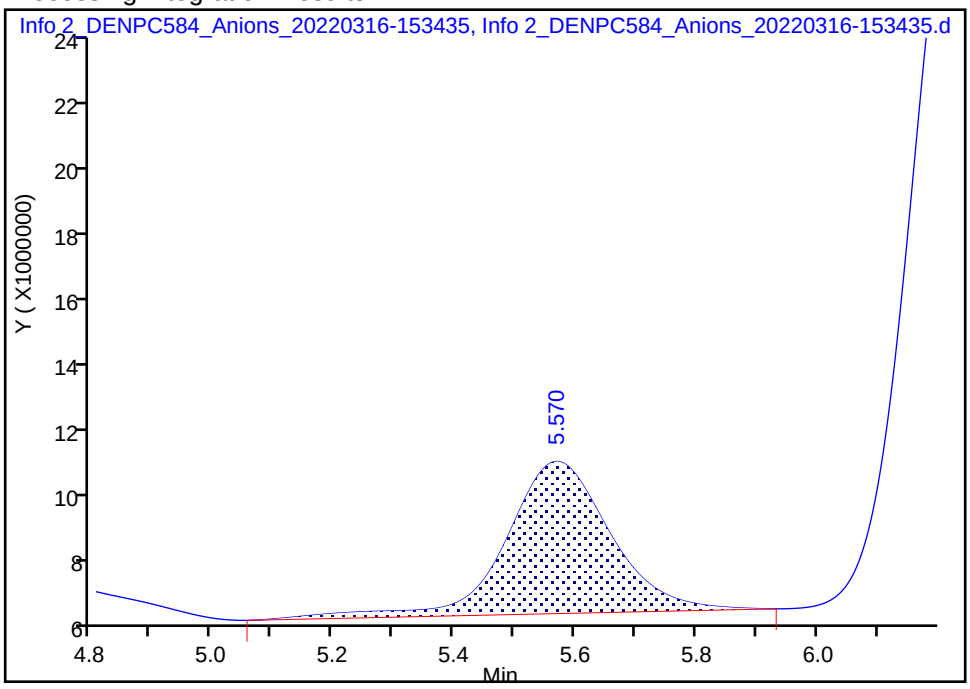
Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-153
Injection Date: 16-Mar-2022 15:19:00 Instrument ID: WC_IonChrom13
Lims ID: std L5
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions-IC13 Limit Group: Wet - Anions 28D
Column: Detector 0005

4 Bromide, CAS: 24959-67-9

Signal: 1

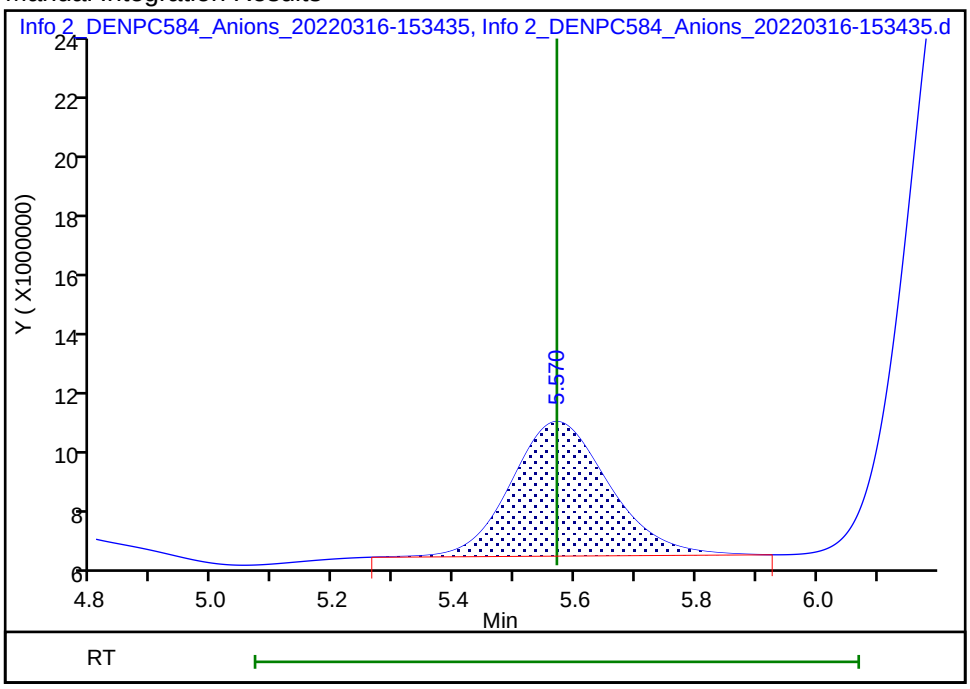
Processing Integration Results

RT: 5.57
Area: 53437781
Amount: 8.205898
Amount Units: ug/ml



Manual Integration Results

RT: 5.57
Area: 48716159
Amount: 7.964502
Amount Units: ug/ml



Reviewer: jindaratc, 16-Mar-2022 15:55:26
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154
Lims ID: std L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-Mar-2022 15:34:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109293-007
Misc. Info.: 280-0109293-007
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 12:52:43 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1616

First Level Reviewer: jindaratc Date: 16-Mar-2022 15:56:06

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.847	2.847	0.000	270584920	10.0	10.0	M
2 Chloride	3.938	3.938	0.000	2843421175	200.0	201.0	
3 Nitrite as N	4.488	4.488	0.000	317946373	NC	NC	M
4 Bromide	5.568	5.568	0.000	60802699	10.0	9.94	M
5 Nitrate as N	6.233	6.233	0.000	354606176	NC	NC	
7 Orthophosphate as P	7.833	7.833	0.000	178848712	NC	NC	
6 Sulfate	8.818	8.818	0.000	2082694626	200.0	200.6	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

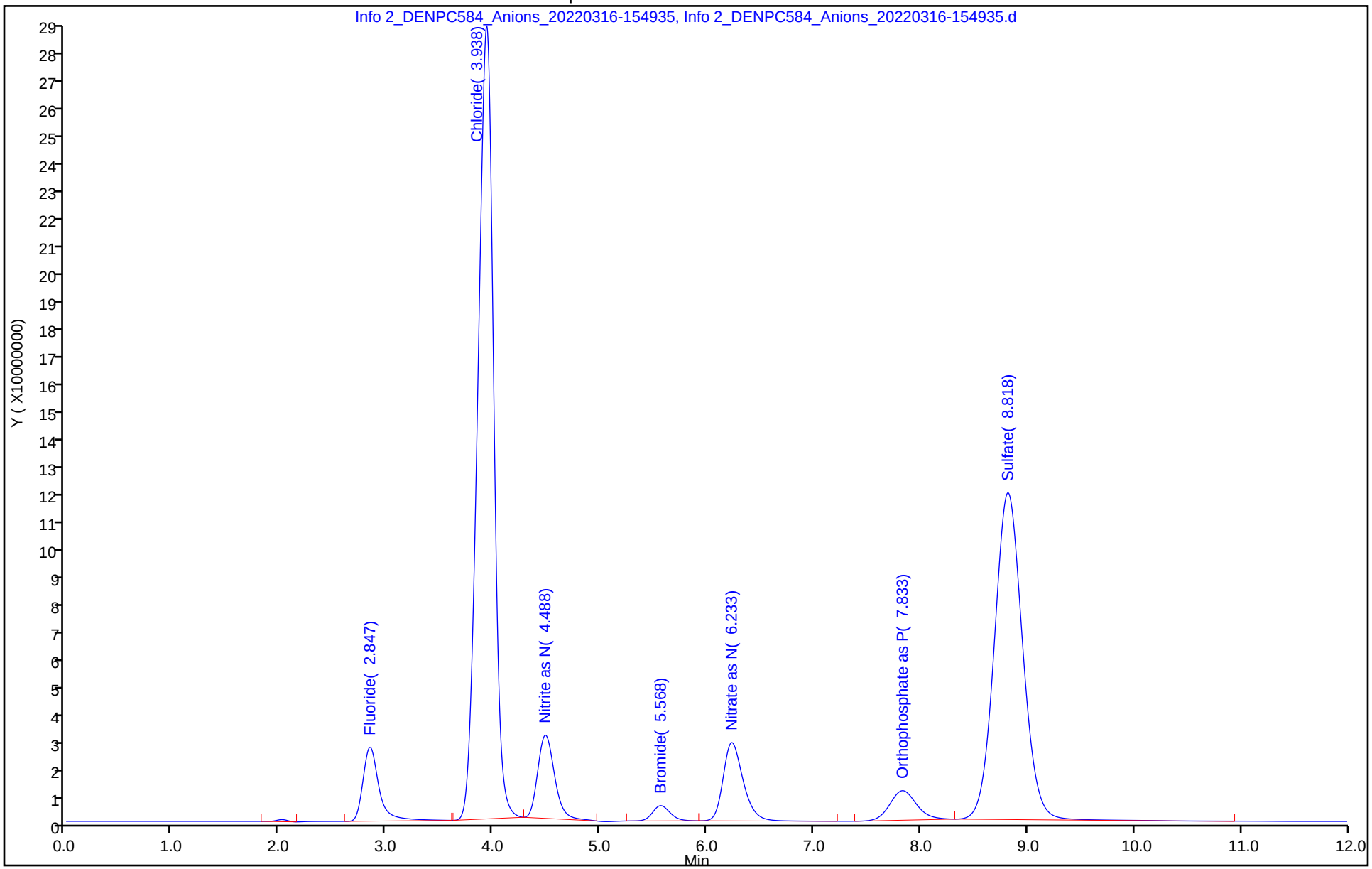
Reagents:

IC CAL cl/so4_00411 Amount Added: 4.00 Units: mL
IC Cal low_00627 Amount Added: 1.00 Units: mL

Report Date: 17-Mar-2022 12:52:43 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154935.d				
Injection Date:	16-Mar-2022 15:34:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	std L6			Worklist Smp#:	7
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Injection Date: 16-Mar-2022 15:34:00 Instrument ID: WC_IonChrom13

Lims ID: std L6

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 7

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

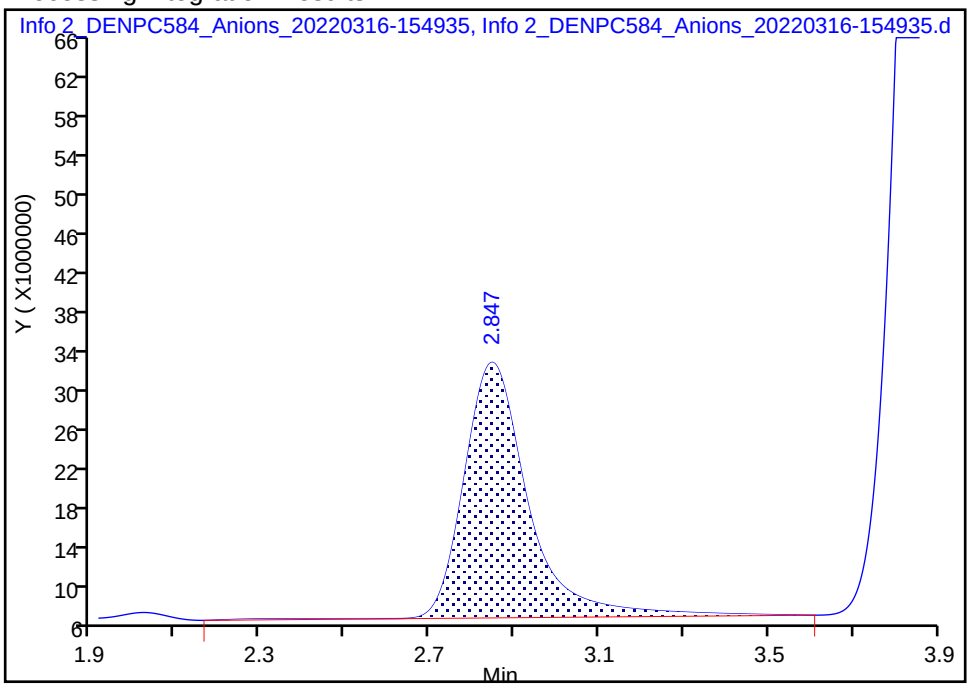
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

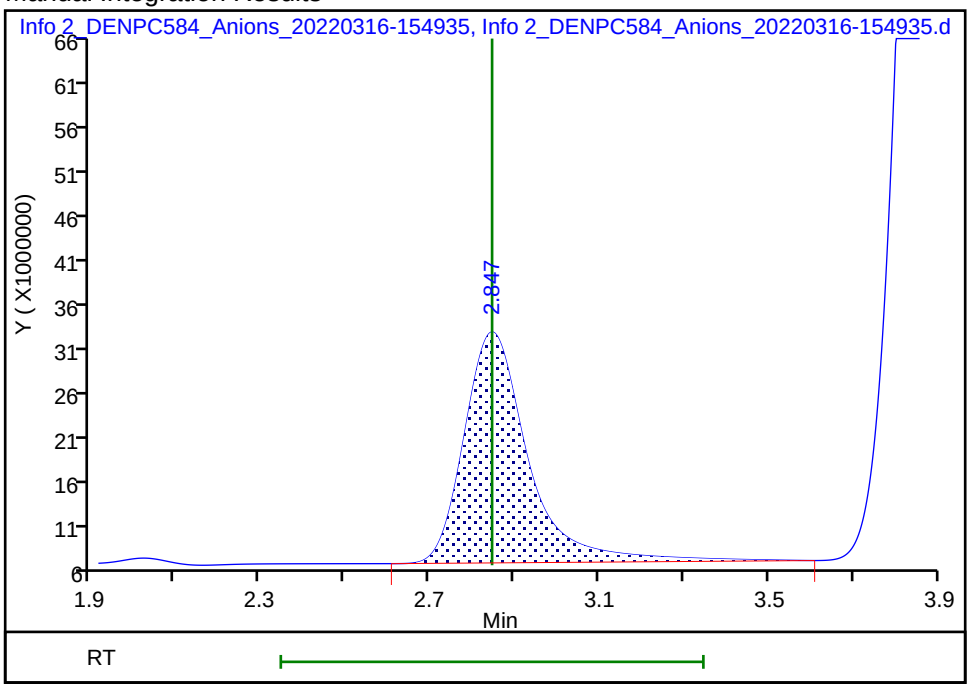
Processing Integration Results

RT: 2.85
Area: 272675380
Amount: 10.062010
Amount Units: ug/ml



Manual Integration Results

RT: 2.85
Area: 270584920
Amount: 10.020200
Amount Units: ug/ml



Reviewer: jindaratc, 16-Mar-2022 15:55:43

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Injection Date: 16-Mar-2022 15:34:00 Instrument ID: WC_IonChrom13

Lims ID: std L6

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 7

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

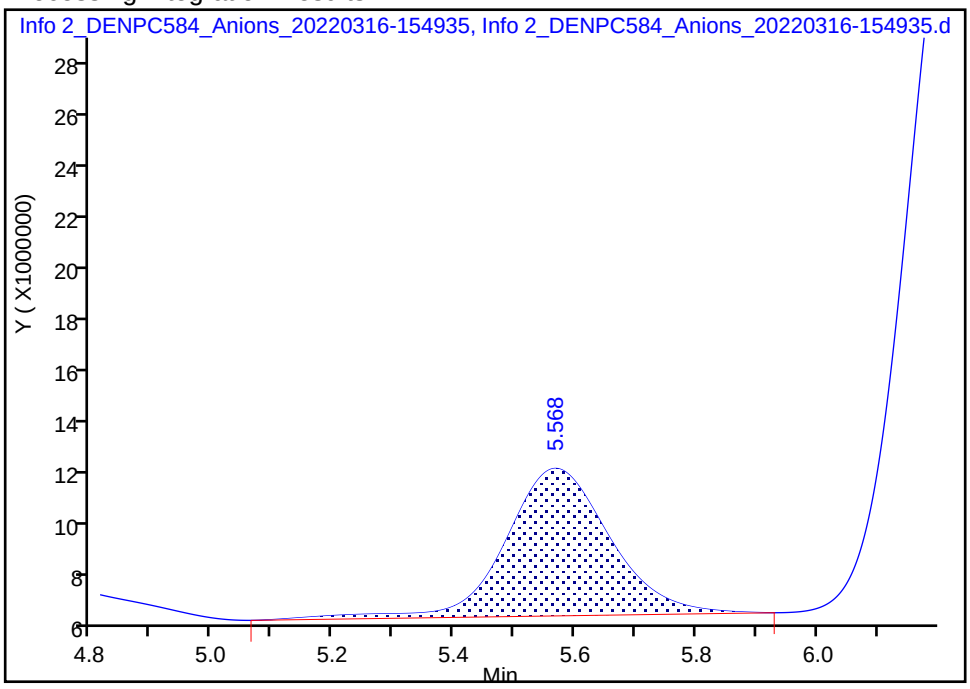
Column: Detector 0005

4 Bromide, CAS: 24959-67-9

Signal: 1

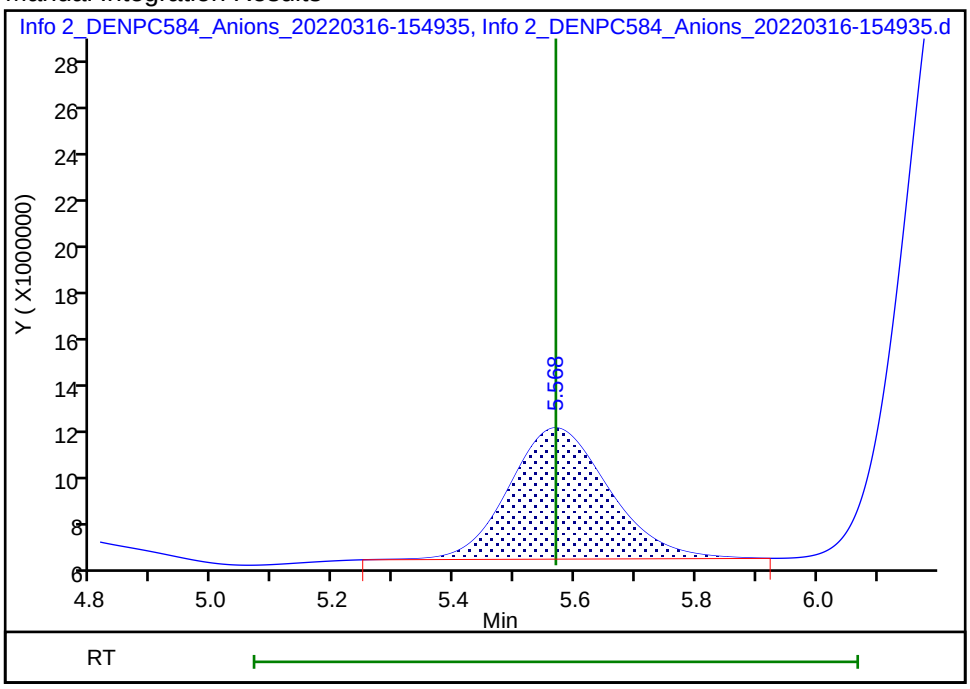
Processing Integration Results

RT: 5.57
Area: 64902861
Amount: 10.296495
Amount Units: ug/ml



Manual Integration Results

RT: 5.57
Area: 60802699
Amount: 9.941015
Amount Units: ug/ml



Reviewer: jindaratc, 16-Mar-2022 15:56:03

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

IC Instrument Information

WL: 109293 **Inst ID:** IC13 **Analysis Date:** 3/16/2022 **Analyst:** CJ

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	159523	7	(F) Cl NO2 (Br) NO3 PO4 SO4	MS/D	
☐	159246	2	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	159234	10	F Cl NO2 Br NO3 PO4 (SO4)	(MS/D) *	
☐	159190	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	
☐			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
246		F Cl NO2 Br NO3 PO4 SO4	200, 500, 1000X	dilution.
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		

Eurofins Environment Testing America
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Anions-IC13.m

Instrument:	WC_IonChrom13	Lims Location:	280
Lock State:	Unlocked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	17-Mar-2022 12:55:13

No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b
Inj Date : 16-Mar-2022 14:19:00, Sublist: chrom-Anions-IC13*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-644257	2706824		1.000
2 Chloride					-54451	1414952		1.000
3 Nitrite as N	108375	3231983		0.999				
4 Bromide					12581	6115081		1.000
5 Nitrate as N	-268733	3539514		1.000				
7 Orthophosphate as P	-355201	183701		0.999				
6 Sulfate					128966	103197		1.000

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Anions-IC13.m
Instrument: WC_IonChrom13 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-Mar-2022 12:55:13
No.Compounds:7
Sublist: chrom-Anions-IC13*sub1
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.933 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-14344
Inj Date: 16-Mar-2022 14:19:00 Worklist: 109293 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-14494
Inj Date: 16-Mar-2022 14:34:00 Worklist: 109293 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-15043
Inj Date: 16-Mar-2022 14:49:00 Worklist: 109293 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-15193
Inj Date: 16-Mar-2022 15:04:00 Worklist: 109293 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-15343
Inj Date: 16-Mar-2022 15:19:00 Worklist: 109293 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-15493
Inj Date: 16-Mar-2022 15:34:00 Worklist: 109293 Sample#: 7

Start Cal Date: 16-Mar-2022 14:04:00 End Cal Date: 16-Mar-2022 15:34:00

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									
25725785	24943402	25299978	26805907	27115795	27058492	-644257			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		27068240		
M5145157	M12471701	M25299978	M107223627	M216926359	M270584920				
109293(2)	109293(3)	109293(4)	109293(5)	109293(6)	109293(7)				
2 Chloride				Signal: 1					
14550428	13838020	13975836	14215357	14011625	14217106	-54451			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		14149521		
14550428	34595051	69879179	852921414	1681395021	2843421175				
109293(2)	109293(3)	109293(4)	109293(5)	109293(6)	109293(7)				
4 Bromide				Signal: 1					
5772640	6202704	6459909	6192066	6089520	6080270	12581			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		6115081		
M1154528	M3101352	M6459909	M24768265	M48716159	M60802699				
109293(2)	109293(3)	109293(4)	109293(5)	109293(6)	109293(7)				
6 Sulfate				Signal: 1					
Error: raw_COD									
23581937	15281278	12703181	10610425	10349903	10413473	12896684			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		10319767		
23581937	38203195	63515904	636625483	1241988390	2082694626				
109293(2)	109293(3)	109293(4)	109293(5)	109293(6)	109293(7)				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Anions-IC13.m
Instrument: WC_IonChrom13 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-Mar-2022 12:58:05
No.Compounds:7
Sublist: chrom-Anions-IC13*sub1
Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.933 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-14344
Inj Date: 16-Mar-2022 14:19:00 Worklist: 109293 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-14494
Inj Date: 16-Mar-2022 14:34:00 Worklist: 109293 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-15043
Inj Date: 16-Mar-2022 14:49:00 Worklist: 109293 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-15193
Inj Date: 16-Mar-2022 15:04:00 Worklist: 109293 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-15343
Inj Date: 16-Mar-2022 15:19:00 Worklist: 109293 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-15493
Inj Date: 16-Mar-2022 15:34:00 Worklist: 109293 Sample#: 7

Start Cal Date: 16-Mar-2022 14:04:00 End Cal Date: 16-Mar-2022 15:34:00

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					
35920740	34305590	34854829	33619987	32608053	31794637	1083759			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		32319830		
M7184148	M17152795	M34854829	M134479946	M260864425	M317946373				
109293(2)	109293(3)	109293(4)	109293(5)	109293(6)	109293(7)				
5 Nitrate as N				Signal: 1					
Error: CorrCoef									
35069740	34455342	34565739	35124063	35417831	35460618	-268733			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		35395141		
7013948	17227671	34565739	140496253	283342648	354606176				
109293(2)	109293(3)	109293(4)	109293(5)	109293(6)	109293(7)				
7 Orthophosphate as P				Signal: 1					
16684130	16988438	17915317	19314098	18423756	17884871	-355201			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		18370157		
3336826	8494219	17915317	77256390	147390047	178848712				
109293(2)	109293(3)	109293(4)	109293(5)	109293(6)	109293(7)				

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-160
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 16-Mar-2022 15:49:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109293-008
Misc. Info.: 280-0109293-008
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:14:03 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1616

First Level Reviewer: jindaratc Date: 16-Mar-2022 16:07:14

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.847	2.847	0.000	107522746	4.00	4.00	M
2 Chloride	3.903	3.903	0.000	1187185300	80.0	83.9	
3 Nitrite as N	4.500	4.500	0.000	131917537	NC	NC	M
4 Bromide	5.585	5.585	0.000	25719541	4.00	4.20	M
5 Nitrate as N	6.270	6.270	0.000	145270736	NC	NC	
7 Orthophosphate as P	7.853	7.853	0.000	75903685	NC	NC	
6 Sulfate	8.857	8.857	0.000	894288198	80.0	85.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

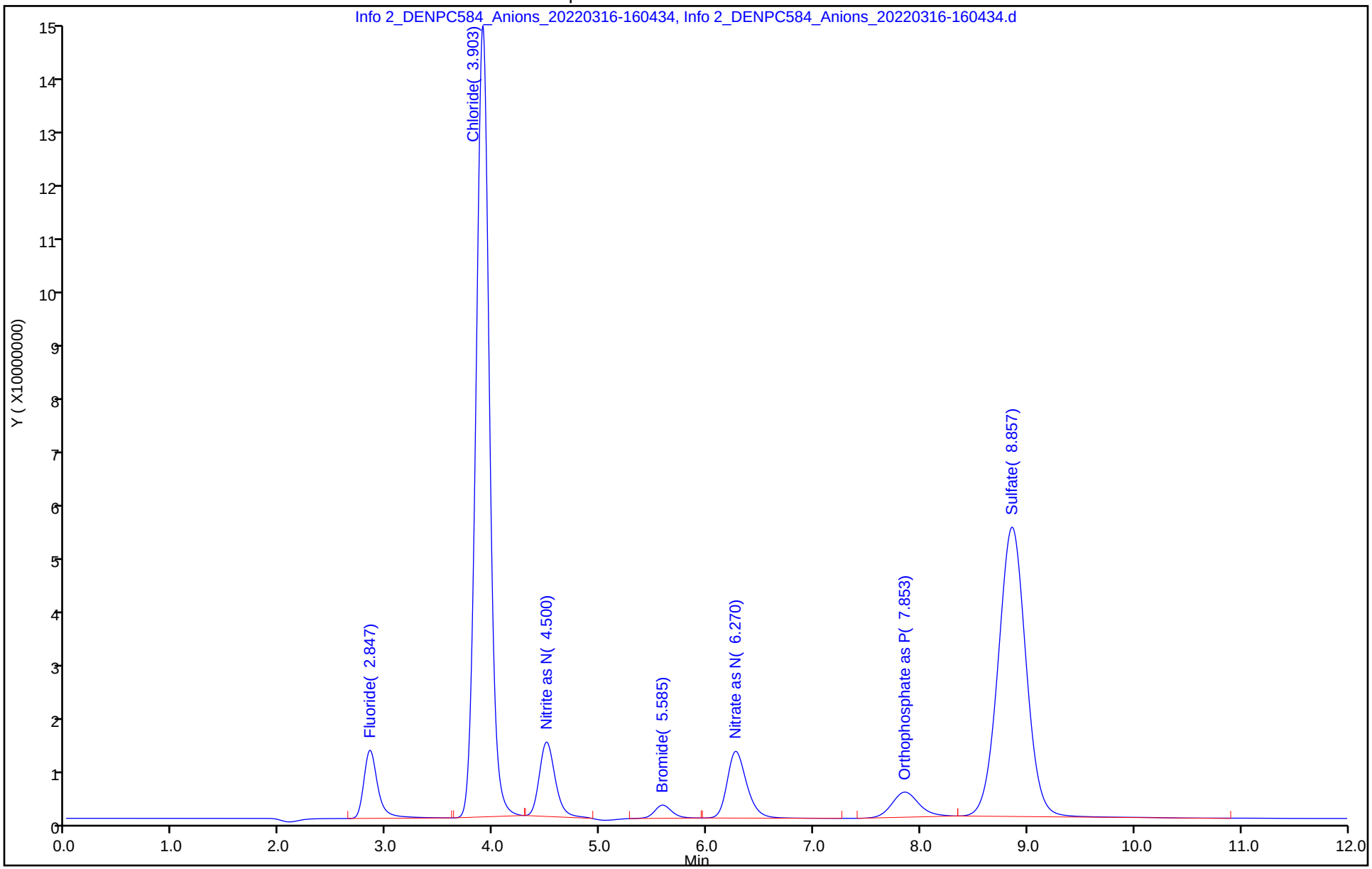
IC SO4 ICV_00022	Amount Added:	0.40	Units: mL
Cl ICV Std_00002	Amount Added:	0.40	Units: mL
IC ICV 5_00355	Amount Added:	0.40	Units: mL

Report Date: 17-Mar-2022 13:14:04 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-160434.d

Injection Date:	16-Mar-2022 15:49:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ICV			Worklist Smp#:	8
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-161
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 16-Mar-2022 16:04:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109293-009
Misc. Info.: 280-0109293-009
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:14:03 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1616

First Level Reviewer: jindaratc Date: 17-Mar-2022 13:02:21

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.847				ND	U
2 Chloride		3.903				ND	
3 Nitrite as N		4.500				ND	
4 Bromide		5.585				ND	
5 Nitrate as N		6.270				ND	U
7 Orthophosphate as P	7.912	7.853	0.059	1283699		NC	
6 Sulfate	8.953	8.857	0.096	14226468		0.1289	

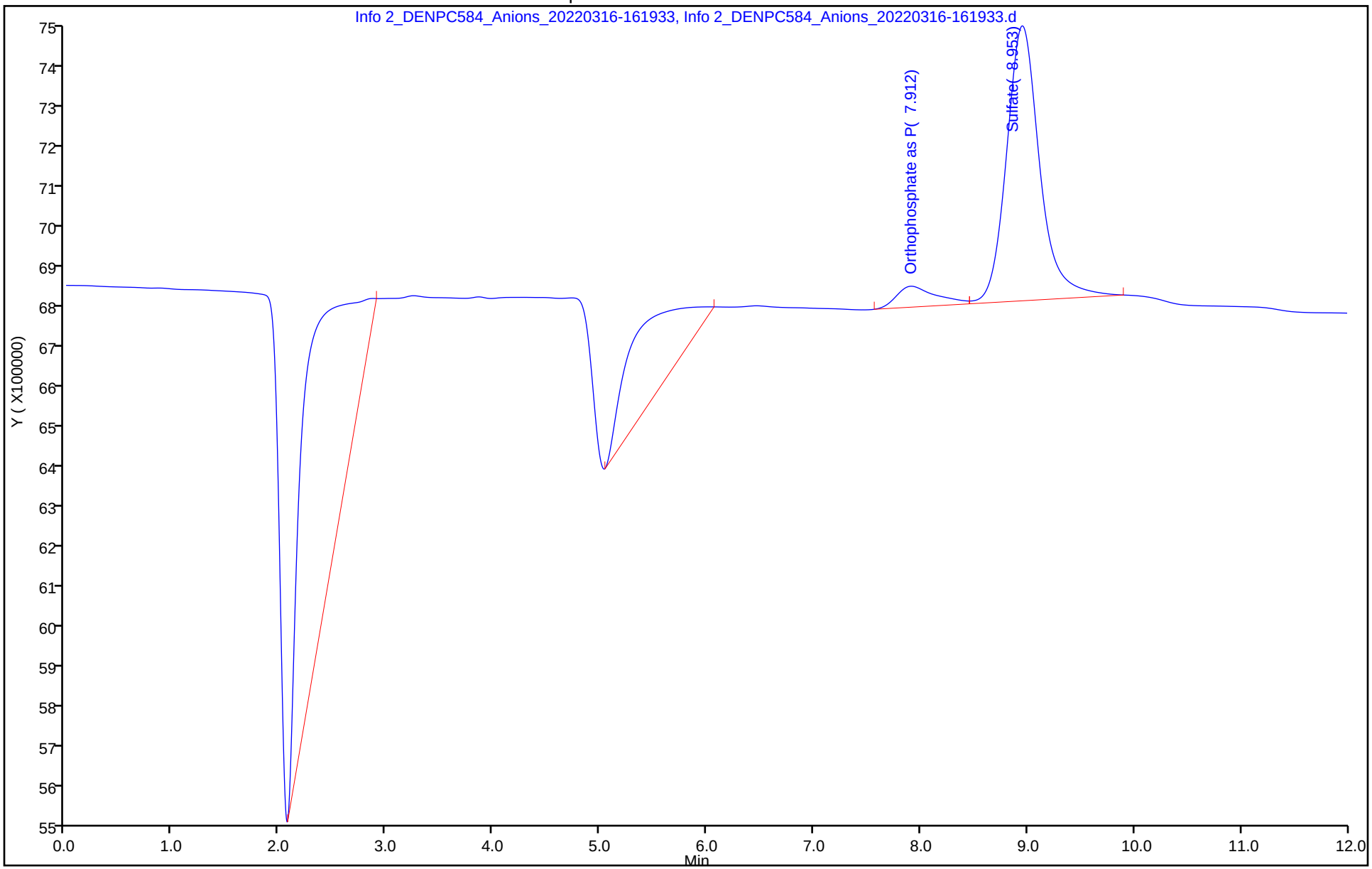
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 17-Mar-2022 13:14:04 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-161933.d				
Injection Date:	16-Mar-2022 16:04:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ICB			Worklist Smp#:	9
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



IC Instrument Information

WL: 109325 **Inst ID:** IC13 **Analysis Date:** 3-17-22 **Analyst:** RF

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	159819	6	F Cl (NO2) Br (NO3) PO4 (SO4)	(MS/D) #6	#2-4 3-17-22
☐	159820	1	F (Cl) NO2 Br (NO3) PO4 (SO4)	MS/D	
☐	159466	3	(F) Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	159469	6	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	159190	4	F Cl NO2 Br NO3 PO4 (SO4)	(MS/D) #6	
☐	159332	13	F Cl NO2 Br NO3 PO4 (SO4)	(MS/D) #13	
☐	159829	3	F (Cl) (NO2) Br (NO3) PO4 (SO4)	MS/D	3-17-22@1200
☐			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
819	2	F Cl (NO2) Br (NO3) PO4 (SO4)	5X	test
820	1	F (Cl) NO2 Br (NO3) PO4 (SO4)	5X	test
466	2	(F) Cl NO2 Br NO3 PO4 (SO4)	5X	rerun
190	4	F Cl NO2 Br NO3 PO4 (SO4)	5X	rerun
332	2	F Cl NO2 Br NO3 PO4 (SO4)	5X	test
829	1	F (Cl) (NO2) Br (NO3) PO4 (SO4)	5X	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_IonChrom13\20220316-109293.b\Anions-IC13.m

Instrument:	WC_IonChrom13	Lims Location:	280
Lock State:	Unlocked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	17-Mar-2022 12:55:13

No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b
Inj Date : 16-Mar-2022 14:19:00, Sublist: chrom-Anions-IC13*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-644257	2706824		1.000
2 Chloride					-54451	1414952		1.000
3 Nitrite as N	108375[illegible]	3231983		0.999				
4 Bromide					12581	6115081		1.000
5 Nitrate as N	-268733	3539514		1.000				
7 Orthophosphate as P	-355201	183701[illegible]		0.999				
6 Sulfate					1289668	1031976		1.000

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Anions-IC13.m
Instrument: WC_IonChrom13 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 17-Mar-2022 12:55:13
No.Compounds:7
Sublist: chrom-Anions-IC13*sub1
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.933 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-14344
Inj Date: 16-Mar-2022 14:19:00 Worklist: 109293 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-14494
Inj Date: 16-Mar-2022 14:34:00 Worklist: 109293 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-15043
Inj Date: 16-Mar-2022 14:49:00 Worklist: 109293 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-15193
Inj Date: 16-Mar-2022 15:04:00 Worklist: 109293 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-15343
Inj Date: 16-Mar-2022 15:19:00 Worklist: 109293 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-15493
Inj Date: 16-Mar-2022 15:34:00 Worklist: 109293 Sample#: 7

Start Cal Date: 16-Mar-2022 14:04:00 End Cal Date: 16-Mar-2022 15:34:00

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									
25725785	24943402	25299978	26805907	27115795	27058492	-644257			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		27068240		
M5145157	M12471701	M25299978	M107223627	M216926359	M270584920				
109293(2)	109293(3)	109293(4)	109293(5)	109293(6)	109293(7)				
2 Chloride				Signal: 1					
14550428	13838020	13975836	14215357	14011625	14217106	-54451			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		14149521		
14550428	34595051	69879179	852921414	1681395021	2843421175				
109293(2)	109293(3)	109293(4)	109293(5)	109293(6)	109293(7)				
4 Bromide				Signal: 1					
5772640	6202704	6459909	6192066	6089520	6080270	12581			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		6115081		
M1154528	M3101352	M6459909	M24768265	M48716159	M60802699				
109293(2)	109293(3)	109293(4)	109293(5)	109293(6)	109293(7)				
6 Sulfate				Signal: 1					
Error: raw_COD									
23581937	15281278	12703181	10610425	10349903	10413473	12896684			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		10319767		
23581937	38203195	63515904	636625483	1241988390	2082694626				
109293(2)	109293(3)	109293(4)	109293(5)	109293(6)	109293(7)				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Anions-IC13.m

Instrument:	WC_IonChrom13	Lims Location:	280
Lock State:	Unlocked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	17-Mar-2022 12:58:05
No.Compounds:	7		
Sublist:	chrom-Anions-IC13*sub1		
Limit Group:	Wet - Anions		

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-14.933 No. Points: 1561

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-14344
Inj Date: 16-Mar-2022 14:19:00 Worklist: 109293 Sample#: 2

Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-14494
Inj Date: 16-Mar-2022 14:34:00 Worklist: 109293 Sample#: 3

Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-15043
Inj Date: 16-Mar-2022 14:49:00 Worklist: 109293 Sample#: 4

Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-15193
Inj Date: 16-Mar-2022 15:04:00 Worklist: 109293 Sample#: 5

Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-15343
Inj Date: 16-Mar-2022 15:19:00 Worklist: 109293 Sample#: 6

Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-15493
Inj Date: 16-Mar-2022 15:34:00 Worklist: 109293 Sample#: 7

Start Cal Date: 16-Mar-2022 14:04:00 End Cal Date: 16-Mar-2022 15:34:00

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					
35920740	34305590	34854829	33619987	32608053	31794637	1083759			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		32319830		
M7184148	M17152795	M34854829	M134479946	M260864425	M317946373				
109293(2)	109293(3)	109293(4)	109293(5)	109293(6)	109293(7)				
5 Nitrate as N				Signal: 1					
Error: CorrCoef									
35069740	34455342	34565739	35124063	35417831	35460618	-268733			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		35395141		
7013948	17227671	34565739	140496253	283342648	354606176				
109293(2)	109293(3)	109293(4)	109293(5)	109293(6)	109293(7)				
7 Orthophosphate as P				Signal: 1					
16684130	16988438	17915317	19314098	18423756	17884871	-355201			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		18370157		
3336826	8494219	17915317	77256390	147390047	178848712				
109293(2)	109293(3)	109293(4)	109293(5)	109293(6)	109293(7)				

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220317-125
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 17-Mar-2022 12:37:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-003
Misc. Info.: 280-0109325-003
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:33:27 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: jindaratc Date: 17-Mar-2022 13:30:59

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.788	2.787	0.001	12203392	1.00	0.4746	M
2 Chloride	3.770	3.790	-0.020	67520813	2.50	4.78	
3 Nitrite as N	4.370	4.357	0.013	15859829	NC	NC	M
4 Bromide	5.392	5.370	0.022	2969349	1.00	0.4835	M
5 Nitrate as N	6.082	6.020	0.062	16150564	NC	NC	
7 Orthophosphate as P	7.203	7.190	0.013	7574333	NC	NC	
6 Sulfate	8.147	8.113	0.034	54457012	2.50	4.03	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

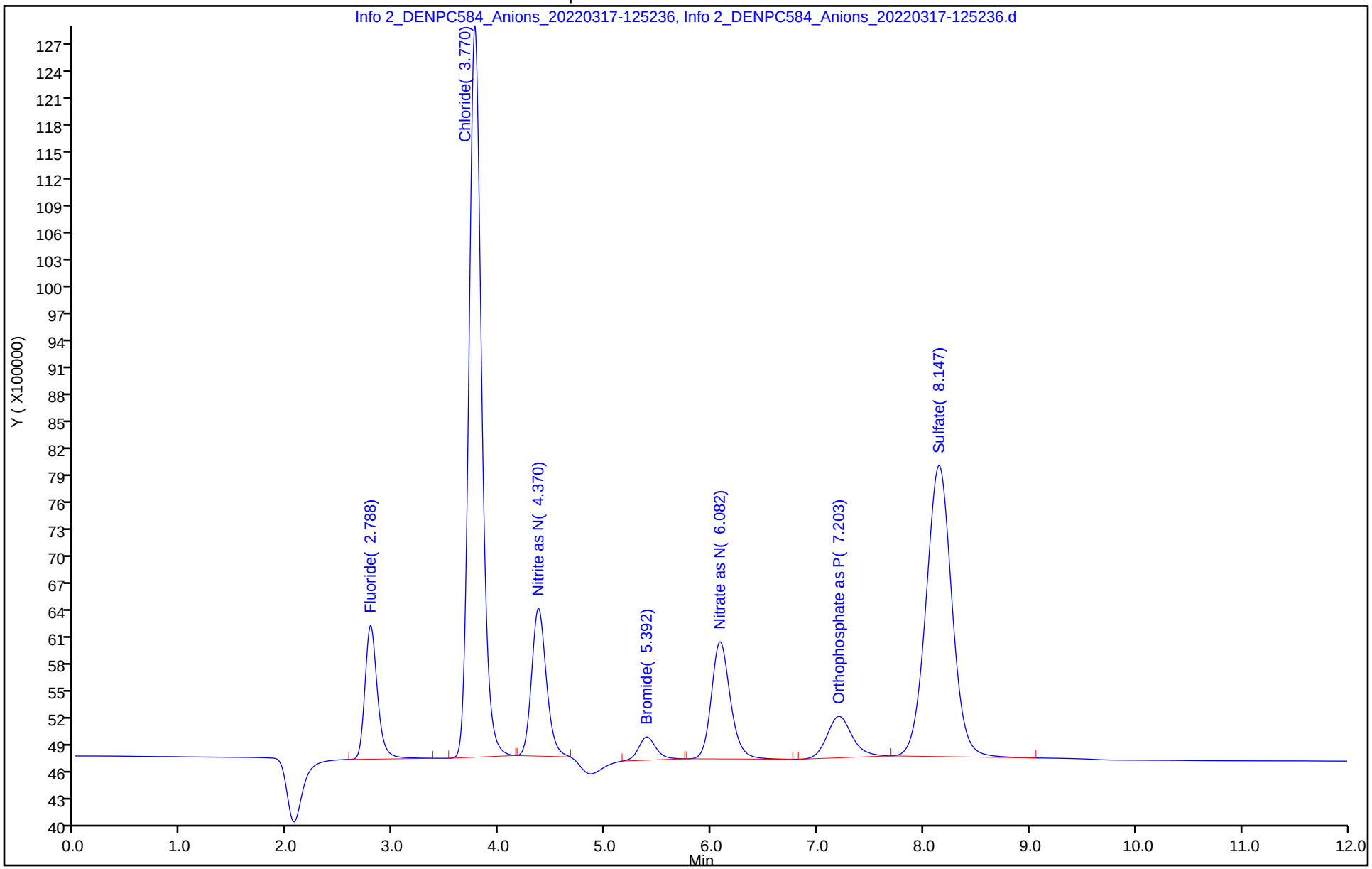
Reagents:

IC Cal low_00627 Amount Added: 0.20 Units: mL
IC CAL cl/so4_00411 Amount Added: 0.10 Units: mL

Report Date: 18-Mar-2022 13:33:28 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220317-125236.d				
Injection Date:	17-Mar-2022 12:37:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	MRL			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

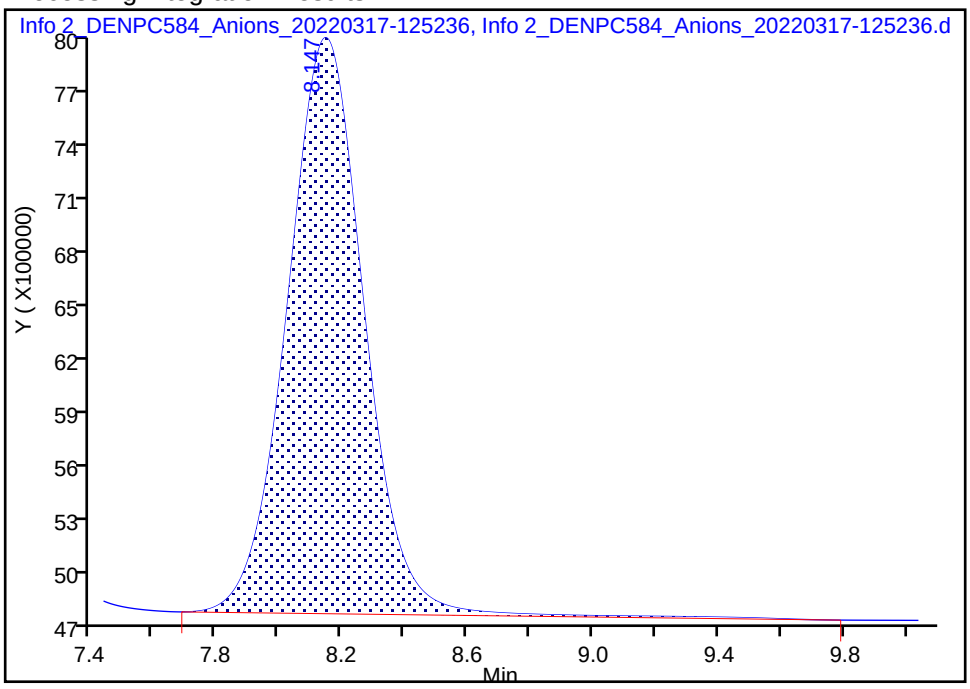
Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220317-125
Injection Date: 17-Mar-2022 12:37:00 Instrument ID: WC_IonChrom13
Lims ID: MRL
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions-IC13 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

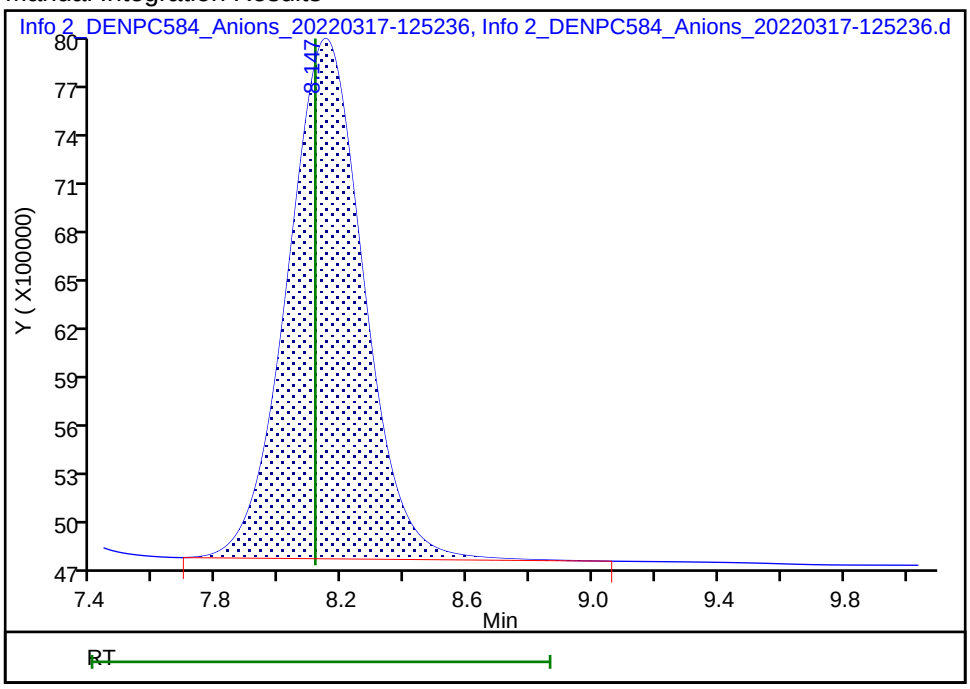
RT: 8.15
Area: 55029829
Amount: 4.082761
Amount Units: ug/ml

Processing Integration Results



RT: 8.15
Area: 54457012
Amount: 4.027254
Amount Units: ug/ml

Manual Integration Results



Reviewer: foxr, 17-Mar-2022 14:11:52
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-010
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 18-Mar-2022 00:49:00 ALS Bottle#: 0 Worklist Smp#: 41
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-041
Misc. Info.: 280-0109325-041
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:33:48 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:06:15

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.788	2.787	0.001	123203268	5.00	4.58	M
2 Chloride	3.793	3.790	0.003	1379555529	100.0	97.5	
3 Nitrite as N	4.365	4.357	0.008	157748255	NC	NC	M
4 Bromide	5.380	5.370	0.010	27728602	5.00	4.53	M
5 Nitrate as N	6.040	6.020	0.020	169262818	NC	NC	
7 Orthophosphate as P	7.183	7.190	-0.007	99254452	NC	NC	
6 Sulfate	8.112	8.220	-0.108	1016273260	100.0	97.2	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

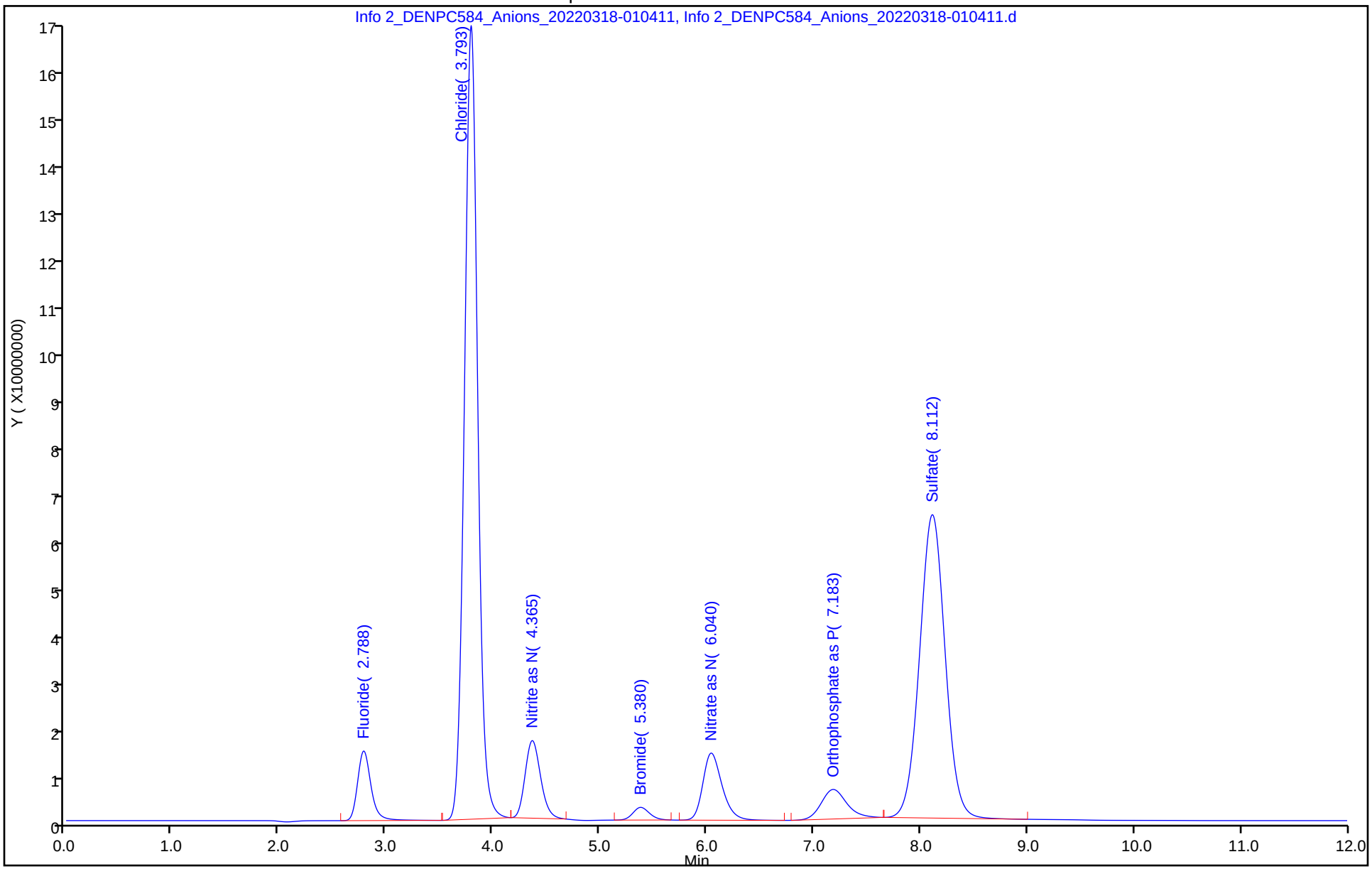
Reagents:

IC LCS_01863 Amount Added: 10.00 Units: mL

Report Date: 18-Mar-2022 13:33:49 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-010411.d				
Injection Date:	18-Mar-2022 00:49:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	41
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

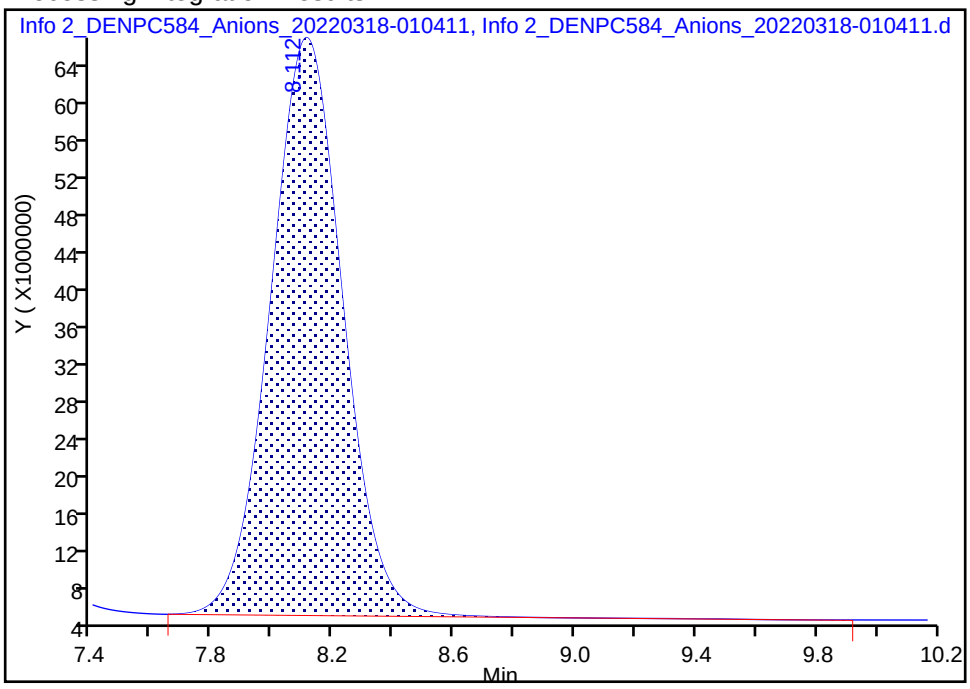
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-010				
Injection Date:	18-Mar-2022 00:49:00	Instrument ID:	WC_IonChrom13		
Lims ID:	ccv				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	41
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

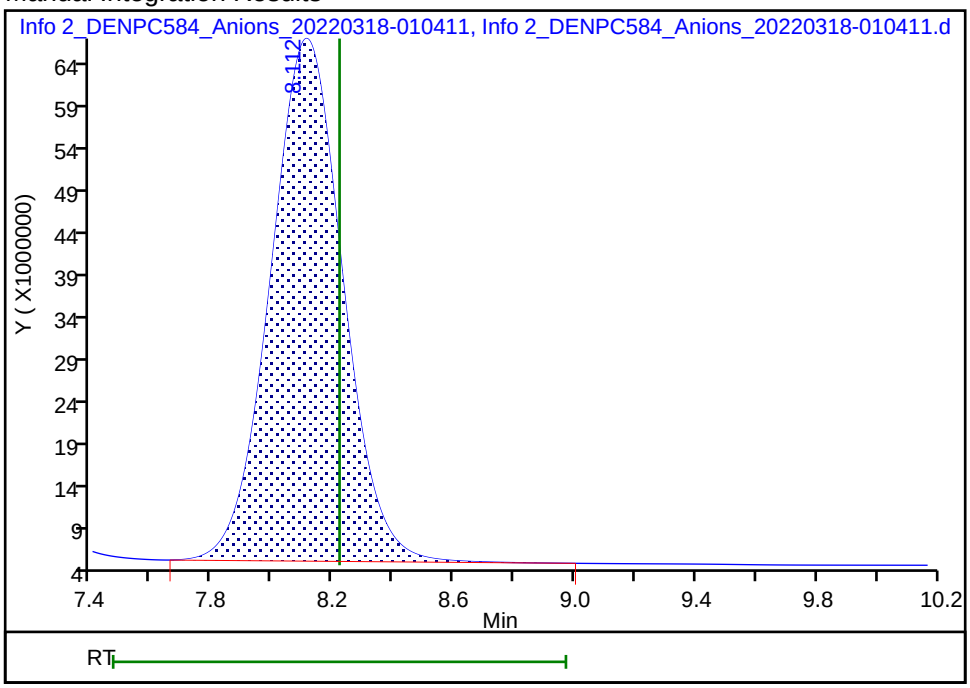
Processing Integration Results

RT: 8.11
Area: 1017081562
Amount: 97.306934
Amount Units: ug/ml



Manual Integration Results

RT: 8.11
Area: 1016273260
Amount: 97.228609
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:06:05

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-011
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 18-Mar-2022 01:04:00 ALS Bottle#: 0 Worklist Smp#: 42
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-042
Misc. Info.: 280-0109325-042
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:33:48 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:06:50

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.190	2.787	0.403	32893		0.0250	M
2 Chloride	3.772	3.790	-0.018	9984		0.004554	Ma
3 Nitrite as N		4.357				ND	
4 Bromide		5.370				ND	
5 Nitrate as N		6.020				ND	U
7 Orthophosphate as P	7.260	7.190	0.070	1039392		NC	
6 Sulfate	8.207	8.220	-0.013	5211942		-0.7447	M

QC Flag Legend

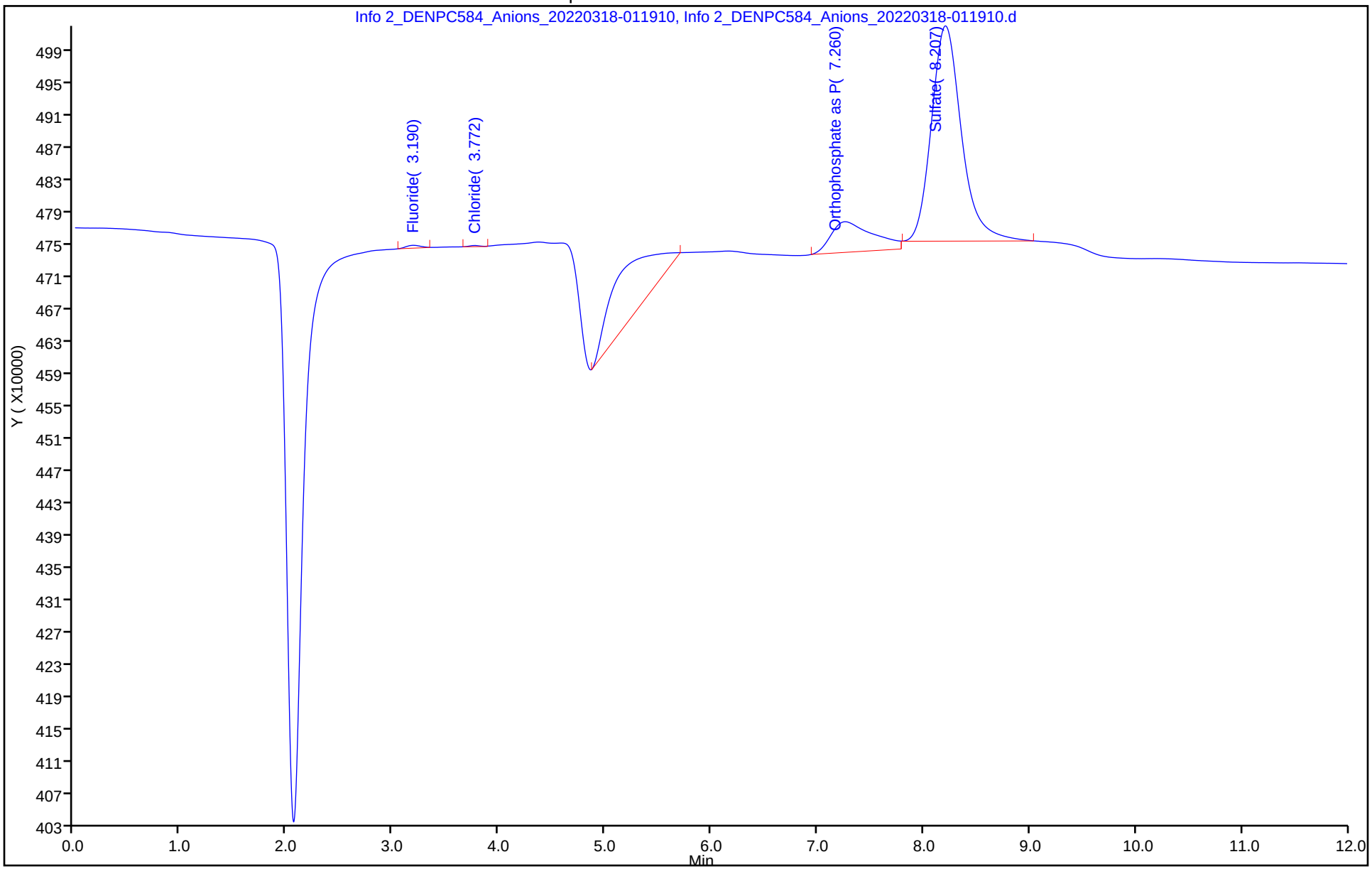
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected
a - User Assigned ID

Report Date: 18-Mar-2022 13:33:49 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-011910.d

Injection Date:	18-Mar-2022 01:04:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	42
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-011

Injection Date: 18-Mar-2022 01:04:00 Instrument ID: WC_IonChrom13

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 42

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

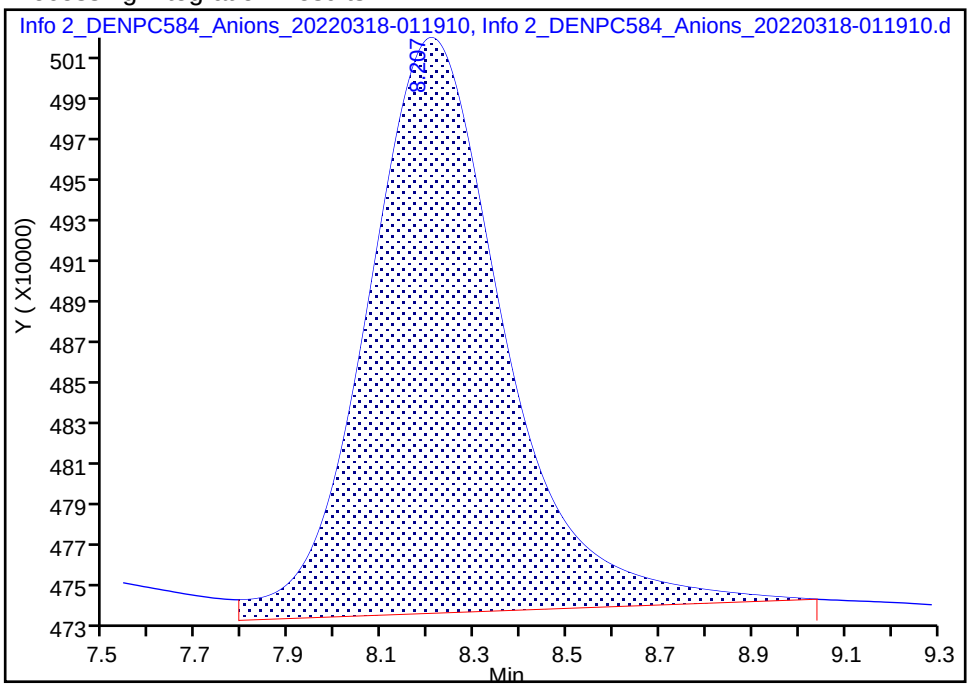
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

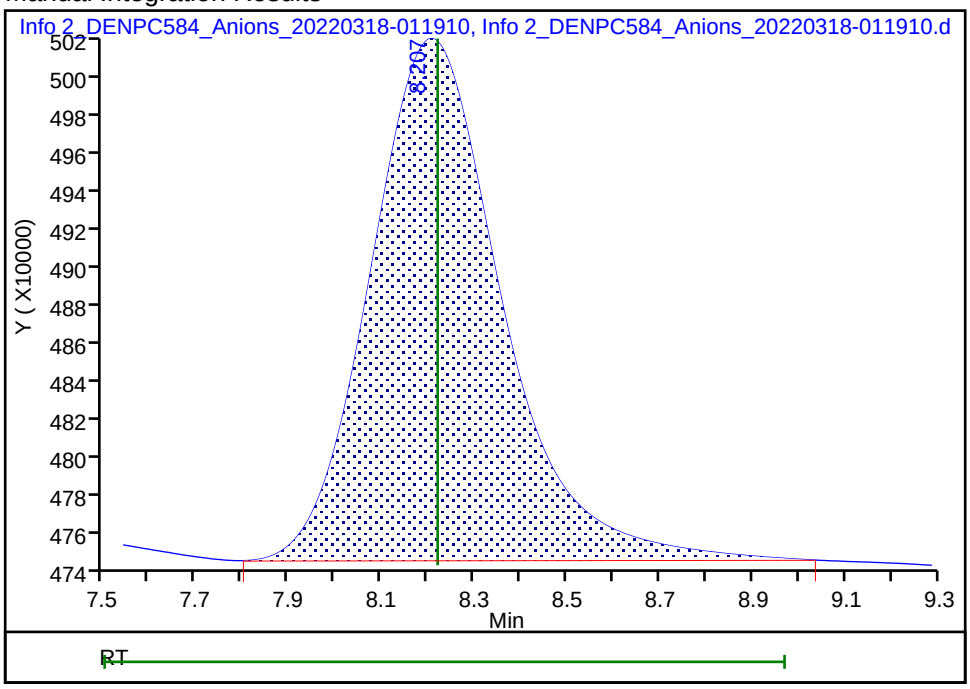
Processing Integration Results

RT: 8.21
Area: 5563206
Amount: -0.710624
Amount Units: ug/ml



Manual Integration Results

RT: 8.21
Area: 5211942
Amount: -0.744662
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:06:47

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-020
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 18-Mar-2022 01:49:00 ALS Bottle#: 0 Worklist Smp#: 45
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-045
Misc. Info.: 280-0109325-045
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:33:48 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:10:12

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.793	2.787	0.006	124282217	5.00	4.62	M
2 Chloride	3.798	3.790	0.008	1381808495	100.0	97.7	
3 Nitrite as N	4.370	4.357	0.013	158005043	NC	NC	M
4 Bromide	5.387	5.370	0.017	27665201	5.00	4.52	M
5 Nitrate as N	6.048	6.020	0.028	169557360	NC	NC	
7 Orthophosphate as P	7.188	7.190	-0.002	102917103	NC	NC	
6 Sulfate	8.117	8.220	-0.103	1018127474	100.0	97.4	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

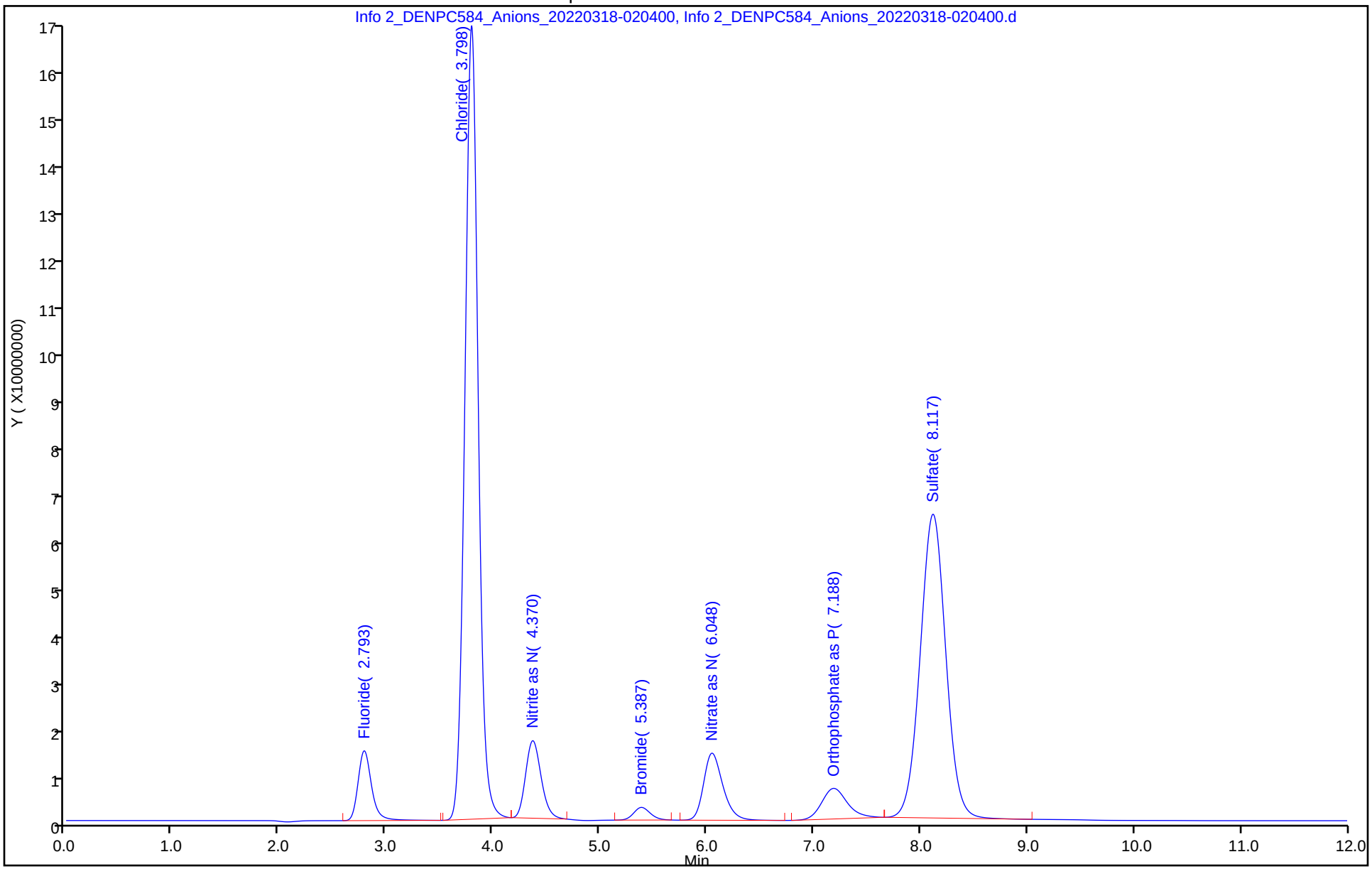
Reagents:

IC LCS_01863 Amount Added: 10.00 Units: mL

Report Date: 18-Mar-2022 13:33:51 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-020400.d				
Injection Date:	18-Mar-2022 01:49:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	lcs			Worklist Smp#:	45
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-020

Injection Date: 18-Mar-2022 01:49:00 Instrument ID: WC_IonChrom13

Lims ID: lcs

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 45

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

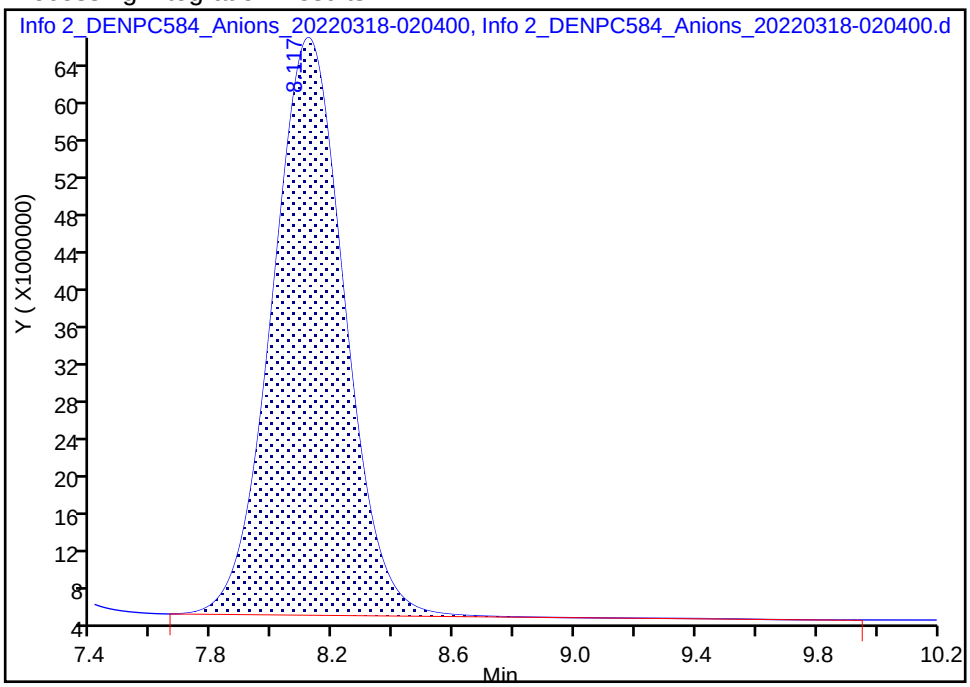
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

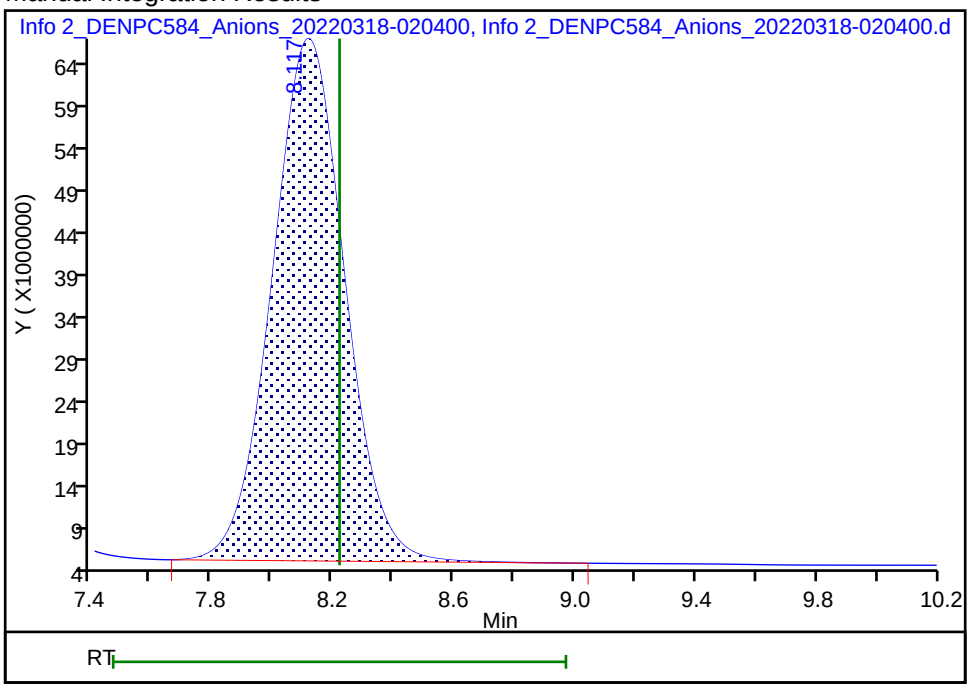
Processing Integration Results

RT: 8.12
Area: 1019198917
Amount: 97.512109
Amount Units: ug/ml



Manual Integration Results

RT: 8.12
Area: 1018127474
Amount: 97.408285
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:10:01

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-021
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 18-Mar-2022 02:04:00 ALS Bottle#: 0 Worklist Smp#: 46
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-046
Misc. Info.: 280-0109325-046
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:33:48 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:10:48

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.792	2.787	0.005	125751060	5.00	4.67	M
2 Chloride	3.797	3.790	0.007	1379977574	100.0	97.5	
3 Nitrite as N	4.368	4.357	0.011	158095438	NC	NC	M
4 Bromide	5.392	5.370	0.022	27414467	5.00	4.48	M
5 Nitrate as N	6.050	6.020	0.030	169381954	NC	NC	
7 Orthophosphate as P	7.192	7.190	0.002	102781070	NC	NC	
6 Sulfate	8.120	8.220	-0.100	1018460460	100.0	97.4	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

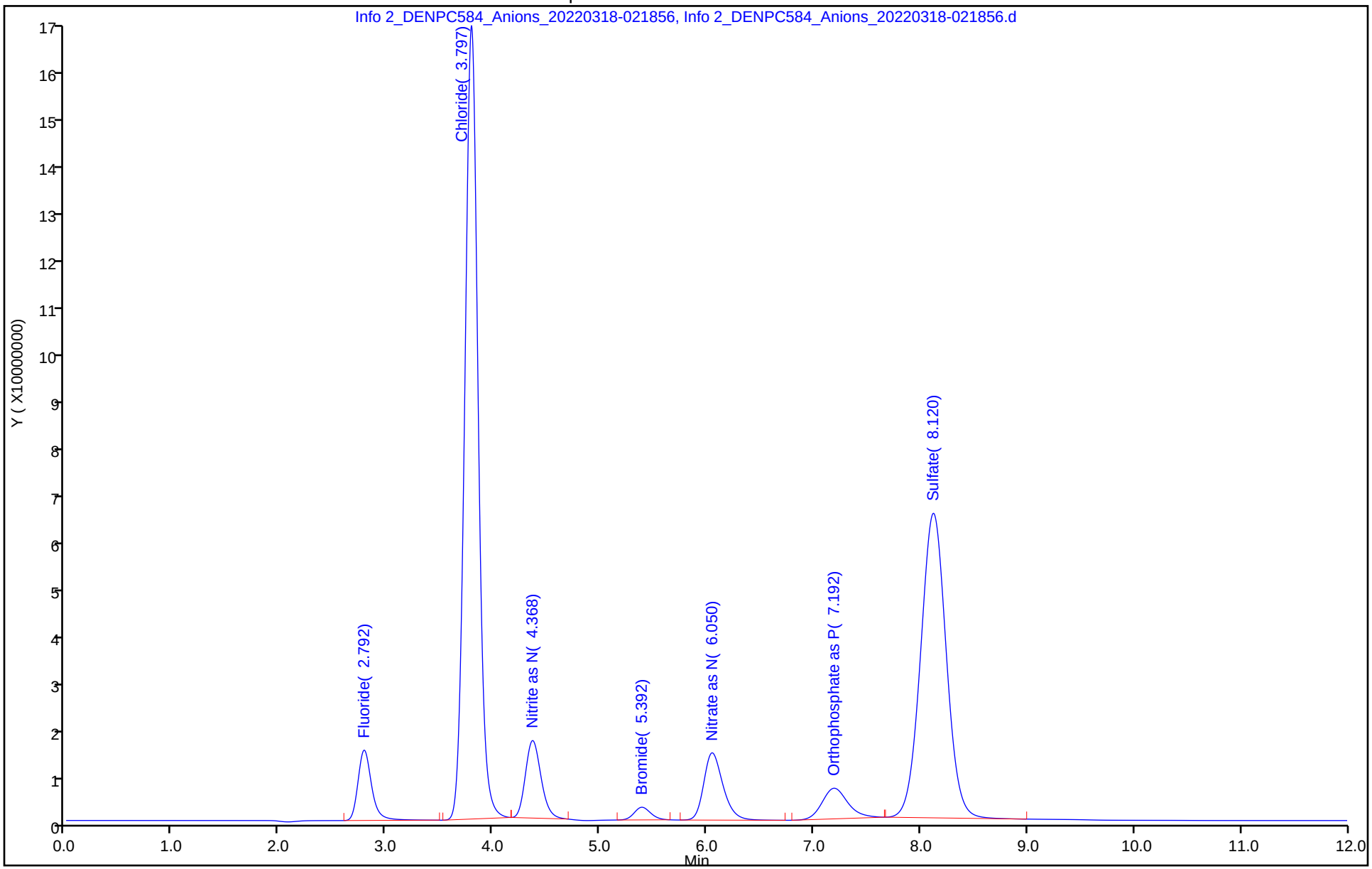
Reagents:

IC LCS_01863 Amount Added: 10.00 Units: mL

Report Date: 18-Mar-2022 13:33:52 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-021856.d				
Injection Date:	18-Mar-2022 02:04:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	lcsd			Worklist Smp#:	46
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

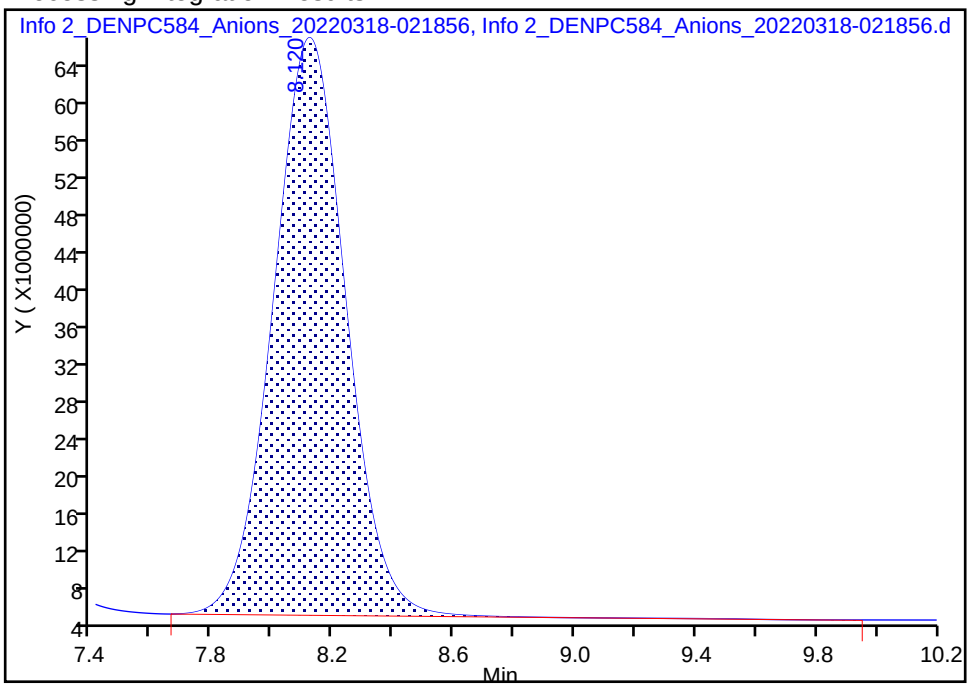
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-021				
Injection Date:	18-Mar-2022 02:04:00	Instrument ID:	WC_IonChrom13		
Lims ID:	lcsd				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	46
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

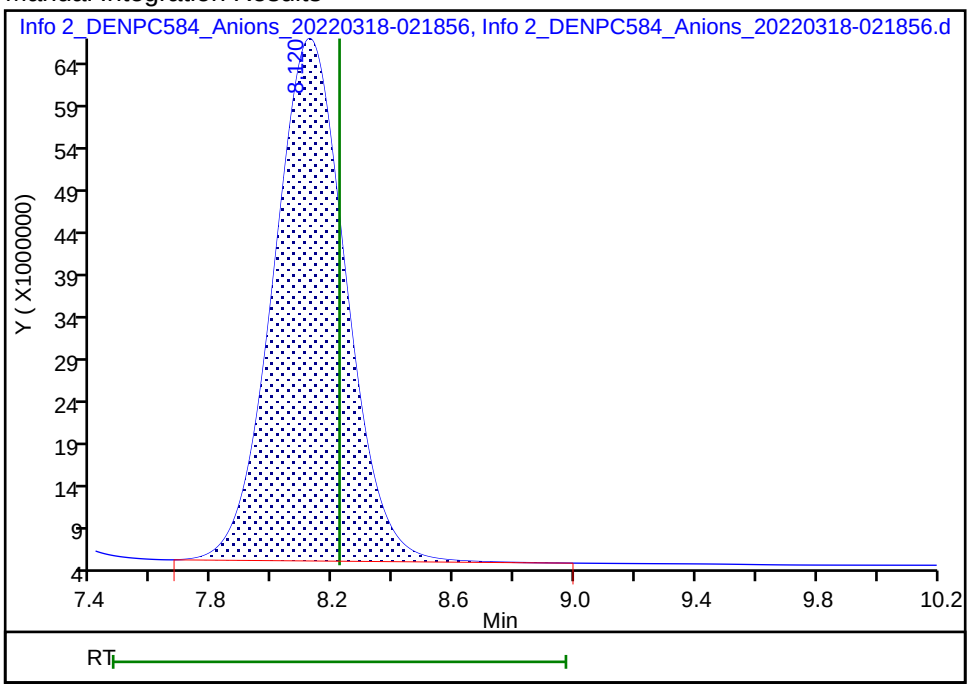
Processing Integration Results

RT: 8.12
Area: 1019602535
Amount: 97.551220
Amount Units: ug/ml



Manual Integration Results

RT: 8.12
Area: 1018460460
Amount: 97.440552
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:10:45
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-023
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 18-Mar-2022 02:18:00 ALS Bottle#: 0 Worklist Smp#: 47
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-047
Misc. Info.: 280-0109325-047
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:33:48 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:11:14

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.787				ND	U
2 Chloride		3.790				ND	
3 Nitrite as N		4.357				ND	
4 Bromide		5.370				ND	
5 Nitrate as N		6.020				ND	U
7 Orthophosphate as P	7.265	7.190	0.075	1487212		NC	
6 Sulfate	8.213	8.220	-0.007	6035928		-0.6648	M

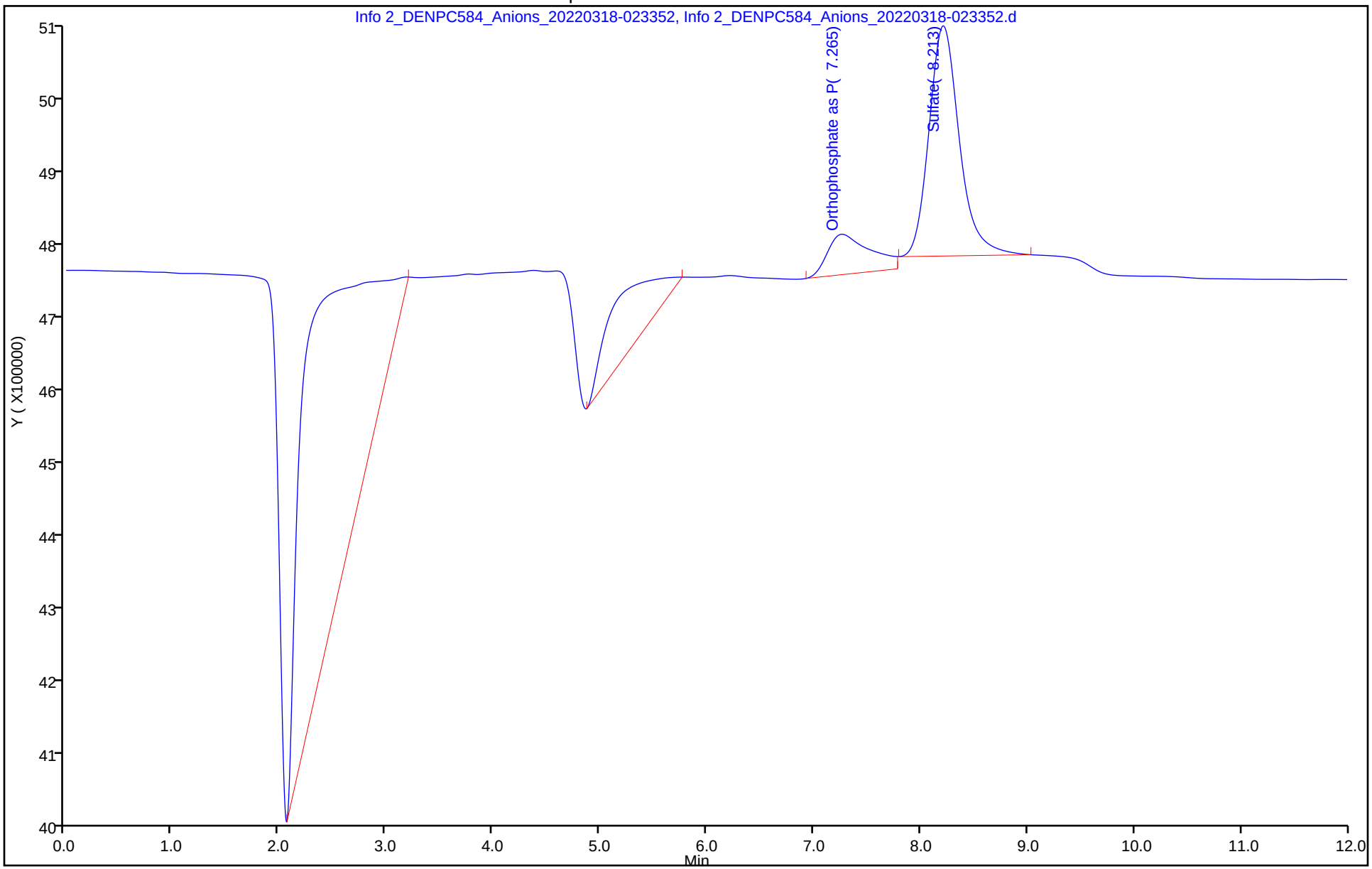
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 18-Mar-2022 13:33:53 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-023352.d				
Injection Date:	18-Mar-2022 02:18:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	mb			Worklist Smp#:	47
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-023

Injection Date: 18-Mar-2022 02:18:00 Instrument ID: WC_IonChrom13

Lims ID: mb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 47

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

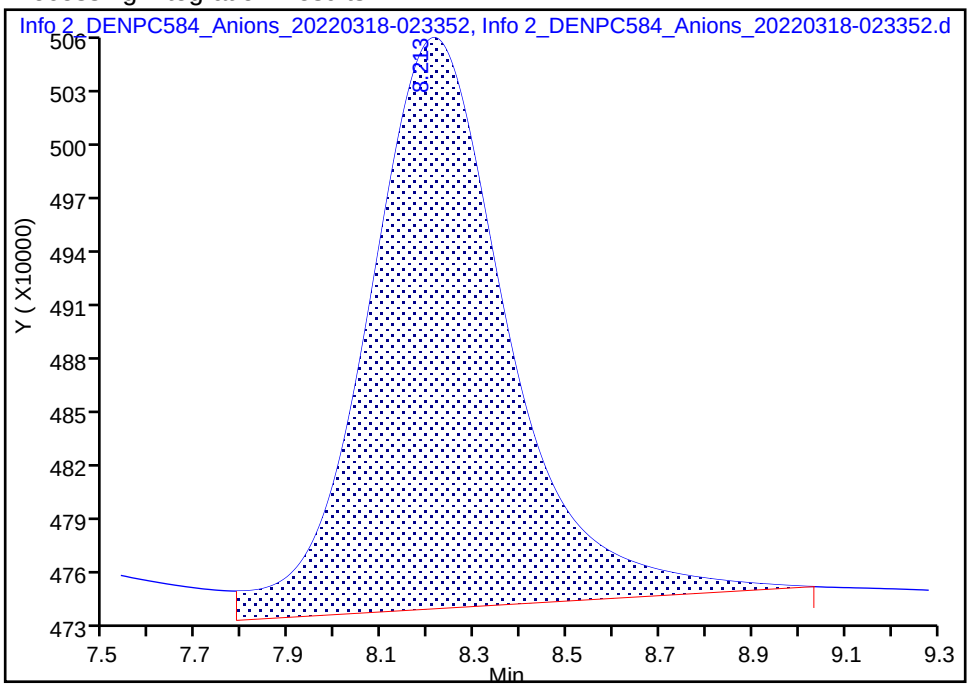
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

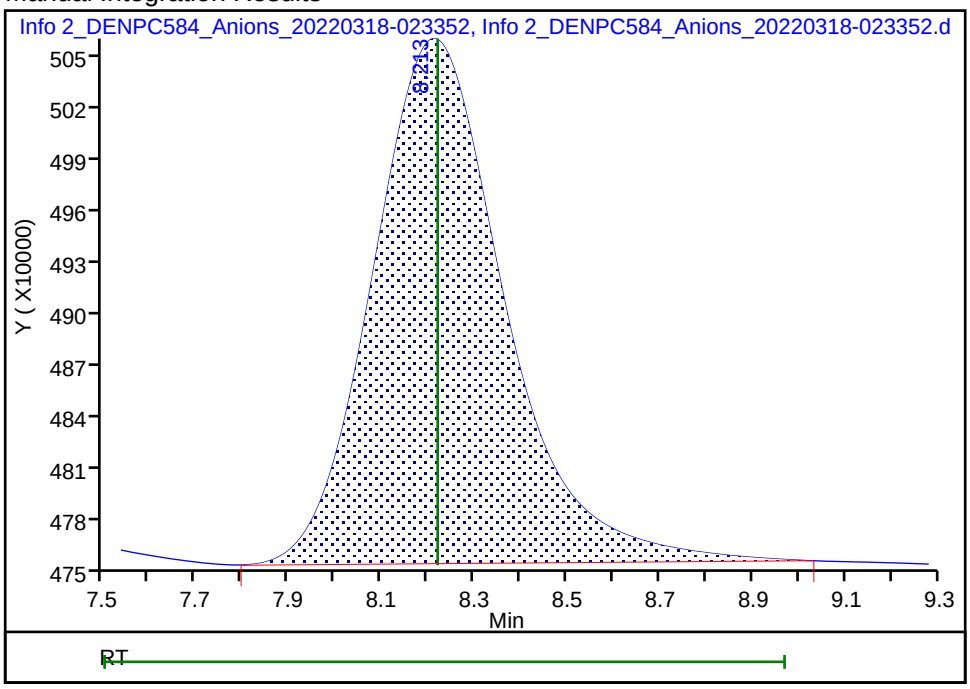
Processing Integration Results

RT: 8.21
Area: 6634962
Amount: -0.606770
Amount Units: ug/ml



Manual Integration Results

RT: 8.21
Area: 6035928
Amount: -0.664817
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:11:12

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-024
Lims ID: 280-159332-F-1
Client ID: G0081-8
Sample Type: Client
Inject. Date: 18-Mar-2022 02:33:00 ALS Bottle#: 0 Worklist Smp#: 48
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-048
Misc. Info.: 280-0109325-048
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:33:48 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:13:03

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.787	2.787	0.000	9865142	0.3883	
2 Chloride	3.787	3.790	-0.003	625642166	44.2	M
3 Nitrite as N		4.357			ND	
4 Bromide	5.497	5.370	0.127	1450902	0.2352	M
5 Nitrate as N	6.198	6.020	0.178	3004093	NC	M
7 Orthophosphate as P	7.283	7.190	0.093	24790921	NC	
6 Sulfate	8.155	8.220	-0.065	1752009335	168.5	M

QC Flag Legend

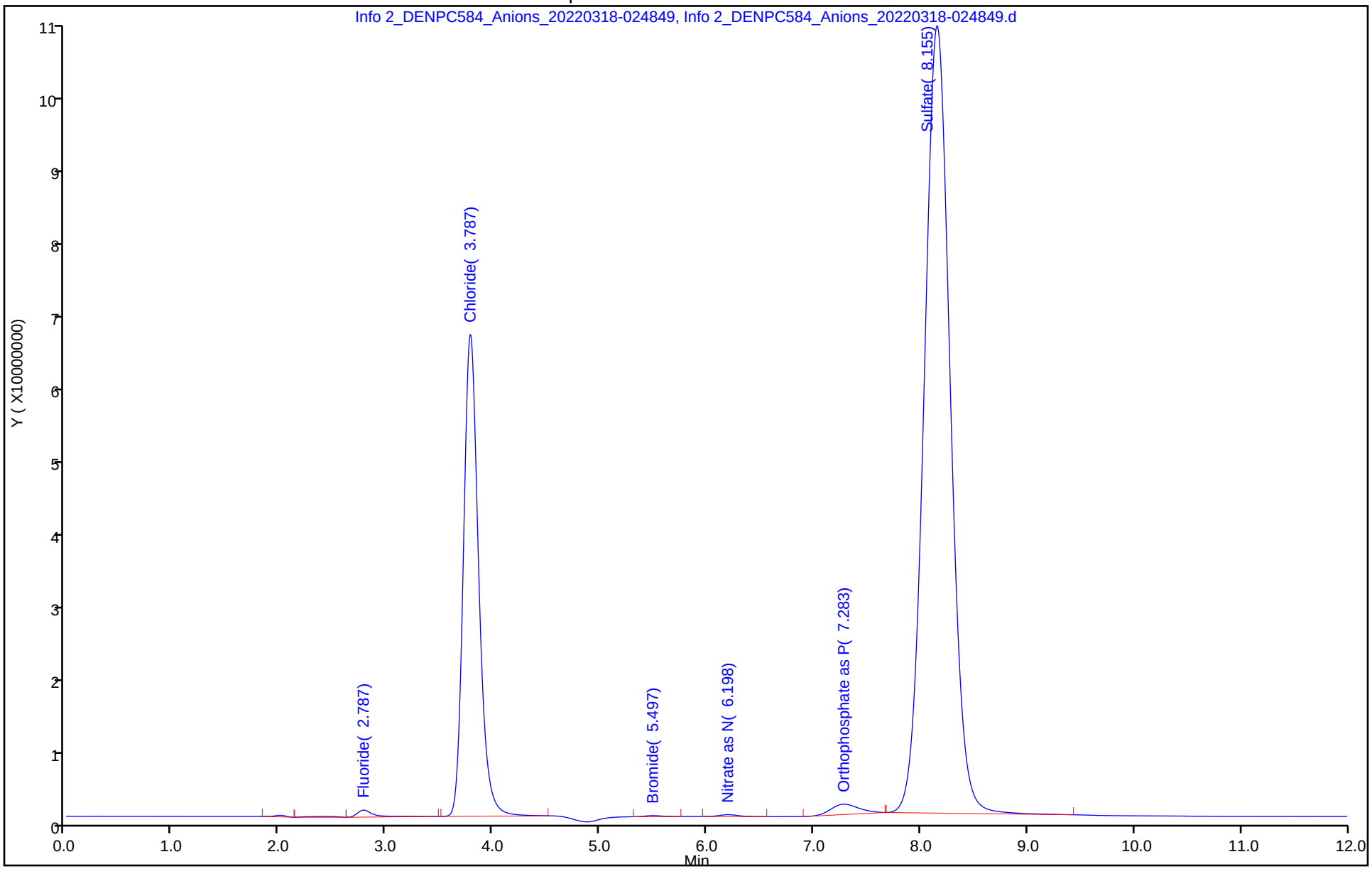
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 18-Mar-2022 13:33:53 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-024849.d

Injection Date:	18-Mar-2022 02:33:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159332-F-1	Lab Sample ID:	280-159332-1	Worklist Smp#:	48
Client ID:	G0081-8				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

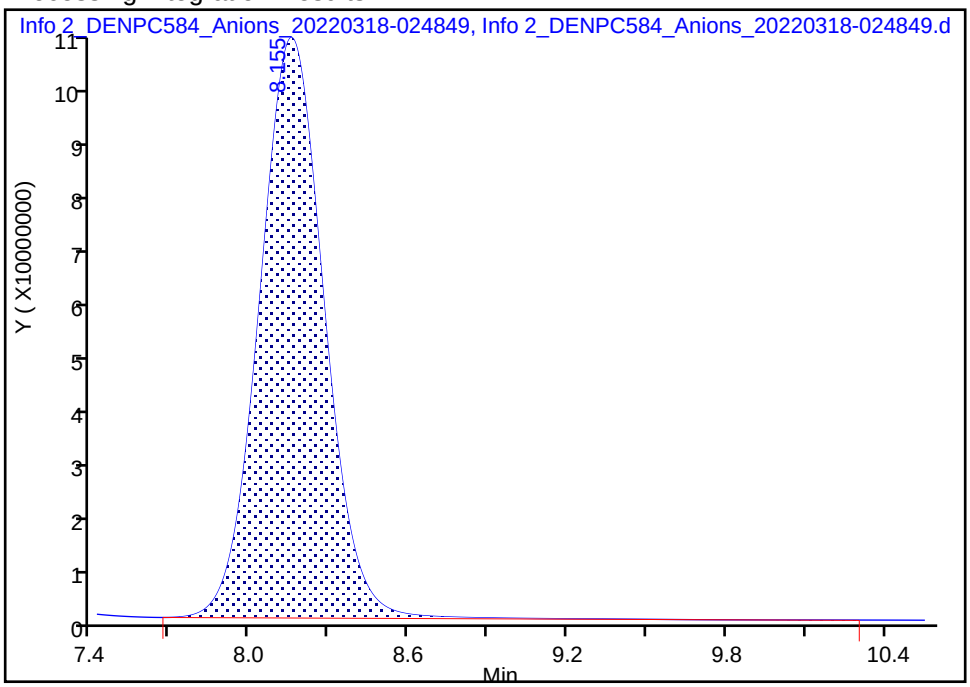
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-024				
Injection Date:	18-Mar-2022 02:33:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159332-F-1	Lab Sample ID:	280-159332-1		
Client ID:	G0081-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	48
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

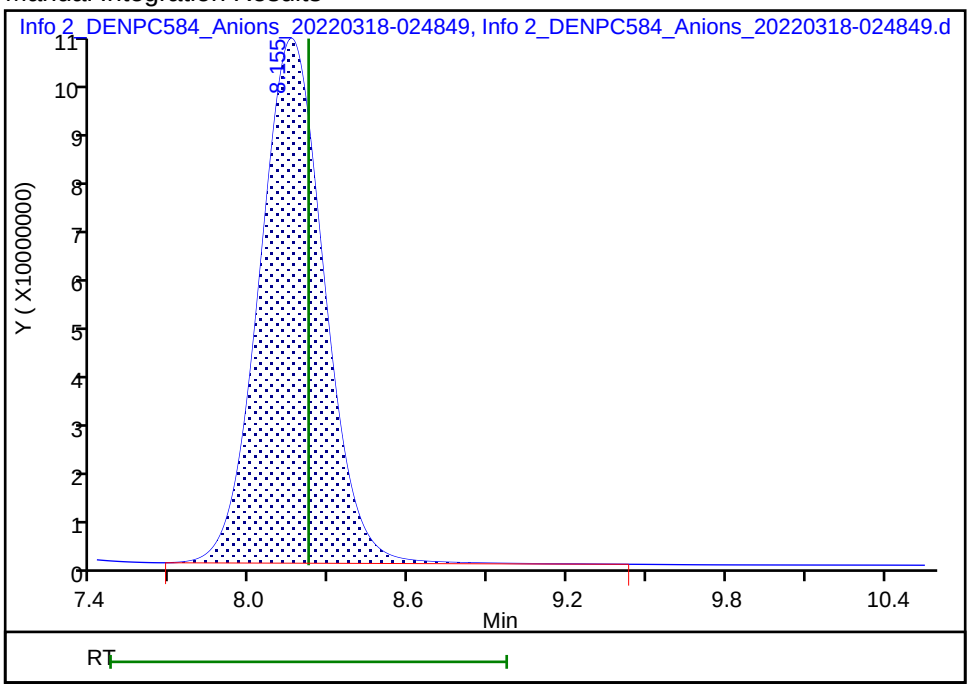
Processing Integration Results

RT: 8.16
Area: 1755852196
Amount: 168.8949
Amount Units: ug/ml



Manual Integration Results

RT: 8.16
Area: 1752009335
Amount: 168.5225
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:12:53

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-030
Lims ID: 280-159332-F-1 DU
Client ID:
Sample Type: DU
Inject. Date: 18-Mar-2022 02:48:00 ALS Bottle#: 0 Worklist Smp#: 49
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-049
Misc. Info.: 280-0109325-049
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:33:48 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:13:46

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.783	2.787	-0.004	9704788		0.3823	
2 Chloride	3.785	3.790	-0.005	628904084		44.5	M
3 Nitrite as N		4.357				ND	
4 Bromide	5.495	5.370	0.125	1429149		0.2317	M
5 Nitrate as N	6.200	6.020	0.180	2989223		NC	M
7 Orthophosphate as P	7.283	7.190	0.093	26251852		NC	
6 Sulfate	8.155	8.220	-0.065	1760042255		169.3	M

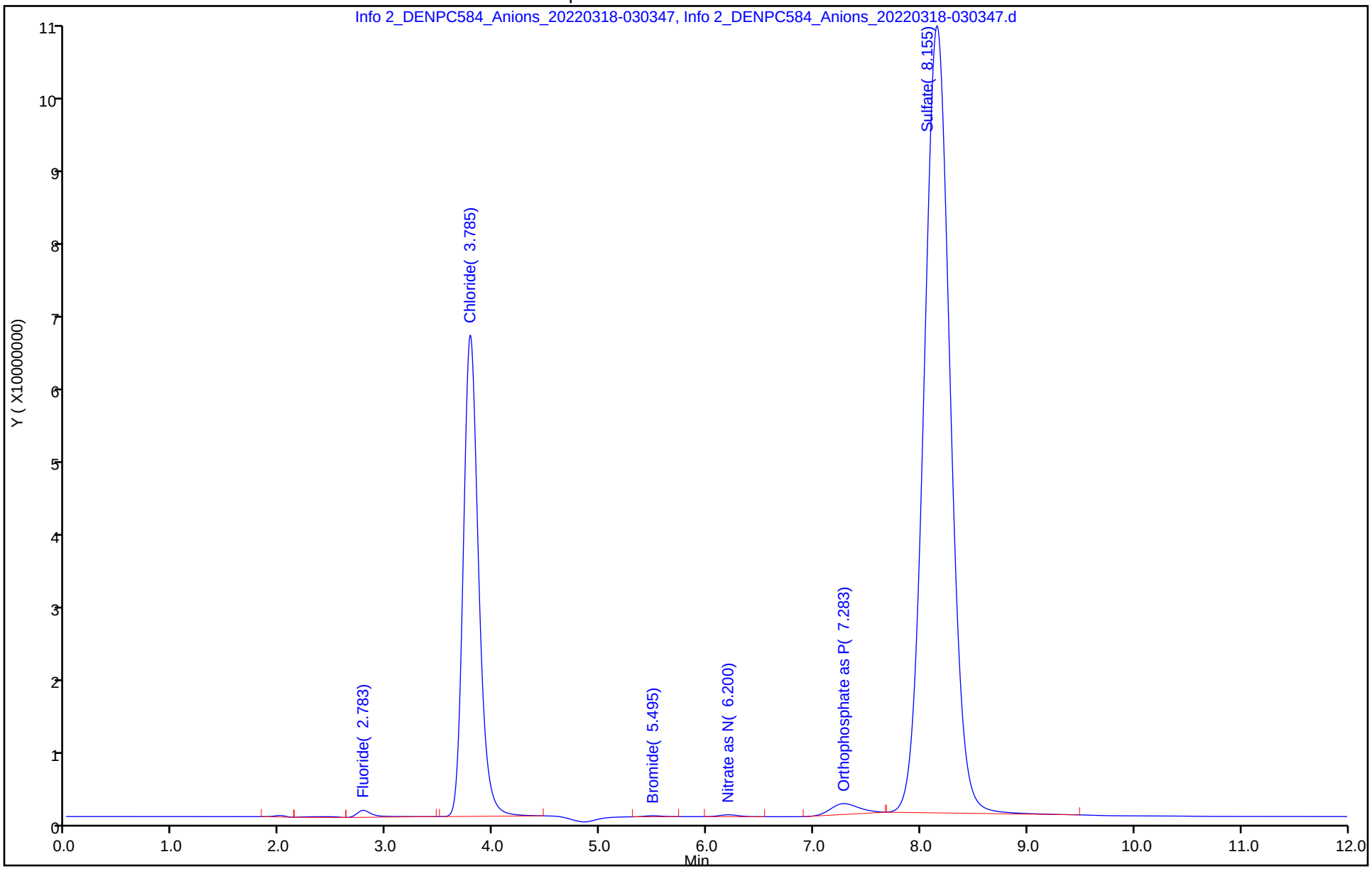
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 18-Mar-2022 13:33:54 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-030347.d				
Injection Date:	18-Mar-2022 02:48:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159332-F-1 DU			Worklist Smp#:	49
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

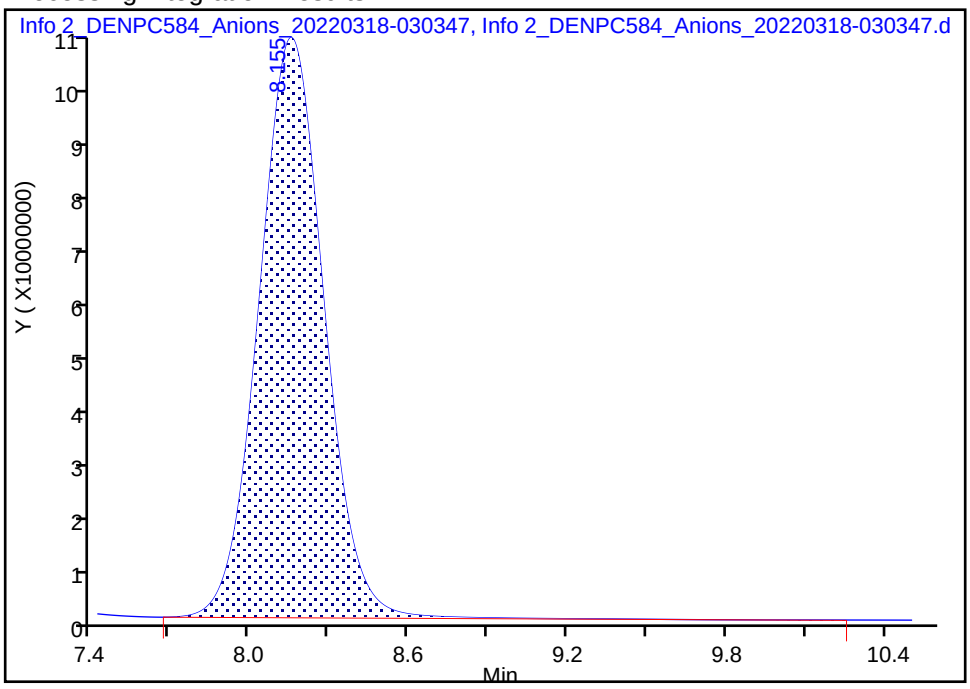
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-030				
Injection Date:	18-Mar-2022 02:48:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159332-F-1 DU				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	49
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

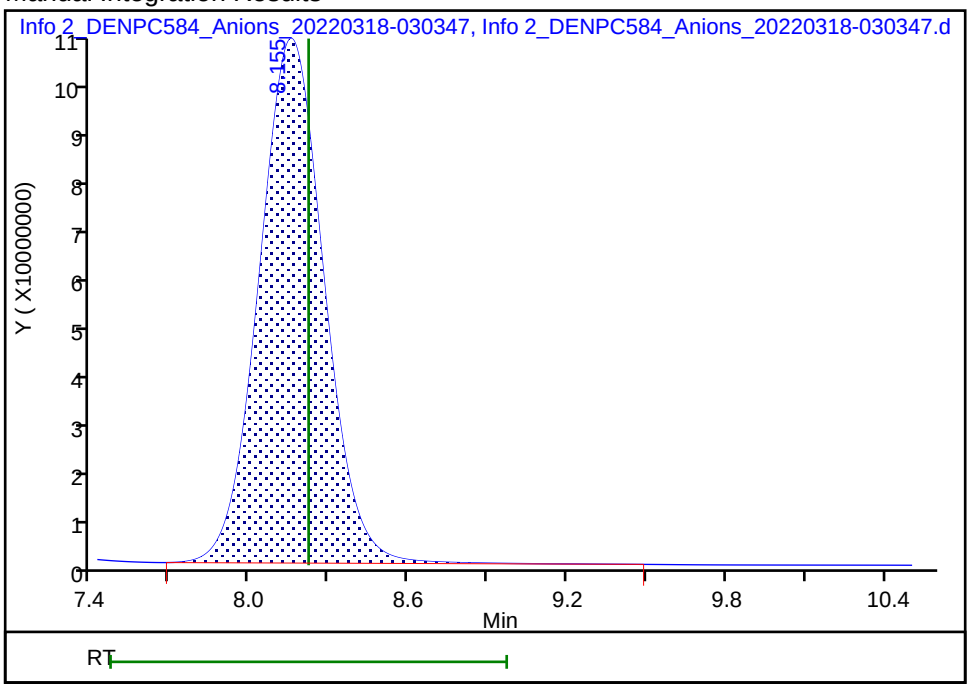
Processing Integration Results

RT: 8.16
Area: 1763799066
Amount: 169.6649
Amount Units: ug/ml



Manual Integration Results

RT: 8.16
Area: 1760042255
Amount: 169.3009
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:13:36
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-03
Lims ID: 280-159332-F-1 MS
Client ID:
Sample Type: MS
Inject. Date: 18-Mar-2022 03:03:00 ALS Bottle#: 0 Worklist Smp#: 50
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-050
Misc. Info.: 280-0109325-050
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:33:48 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:14:37

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.785	2.787	-0.002	141175275	5.00	5.24	
2 Chloride	3.788	3.790	-0.002	1393782839	50.0	98.5	
3 Nitrite as N	4.373	4.357	0.016	150583263	NC	NC	M
4 Bromide	5.458	5.370	0.088	31940309	5.00	5.22	
5 Nitrate as N	6.097	6.020	0.077	193135909	NC	NC	
7 Orthophosphate as P	7.250	7.190	0.060	129020452	NC	NC	
6 Sulfate	8.143	8.220	-0.077	2270453136	50.0	218.8	EM

QC Flag Legend

Processing Flags
NC - Not Calibrated
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated

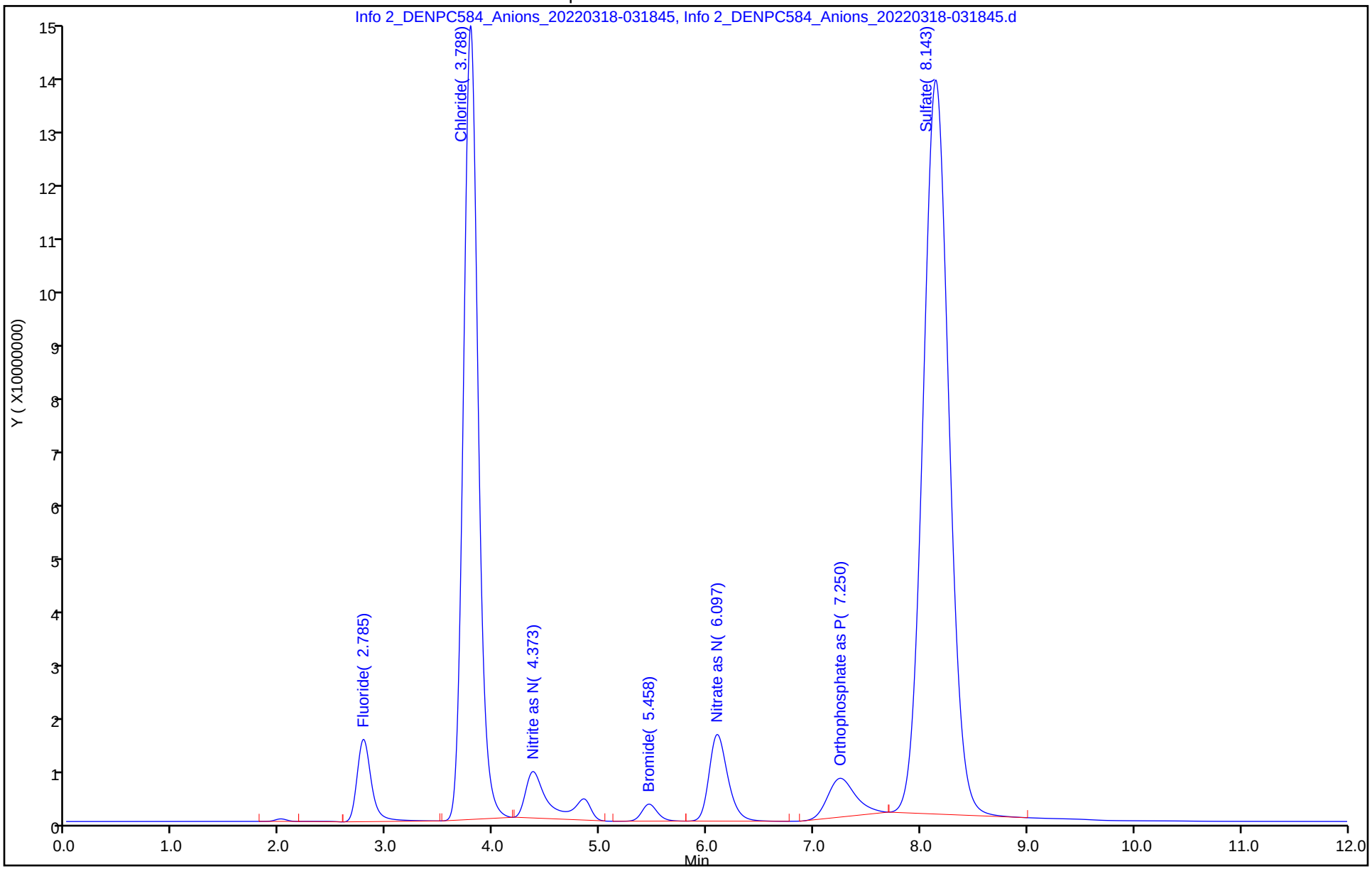
Reagents:

ICMS/MSD WEEK_00748 Amount Added: 0.10 Units: mL

Report Date: 18-Mar-2022 13:33:54 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-031845.d				
Injection Date:	18-Mar-2022 03:03:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159332-F-1 MS			Worklist Smp#:	50
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

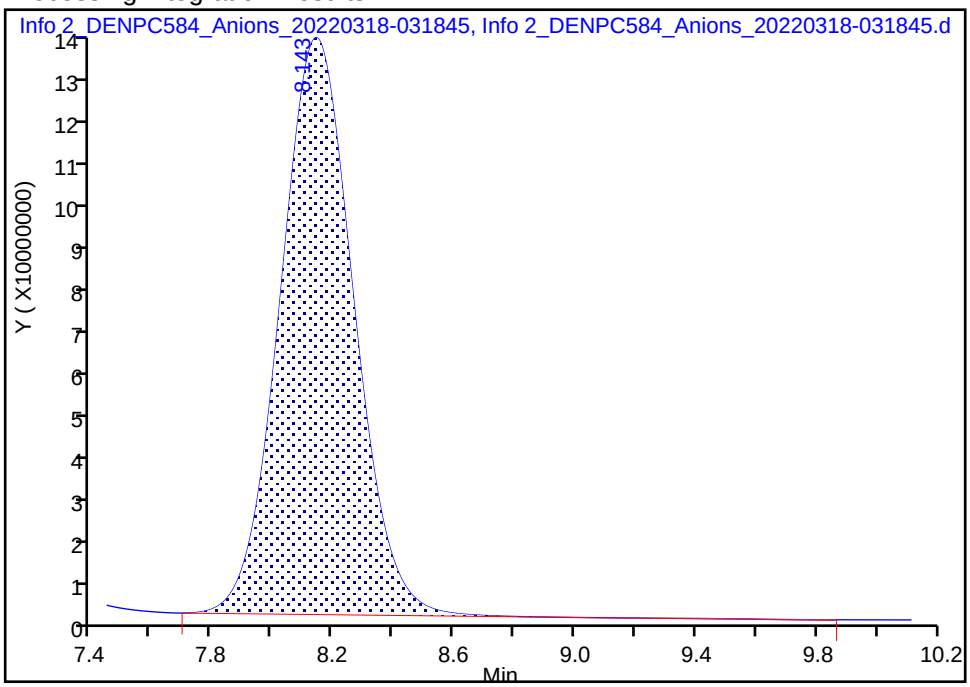
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-031				
Injection Date:	18-Mar-2022 03:03:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159332-F-1 MS				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	50
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

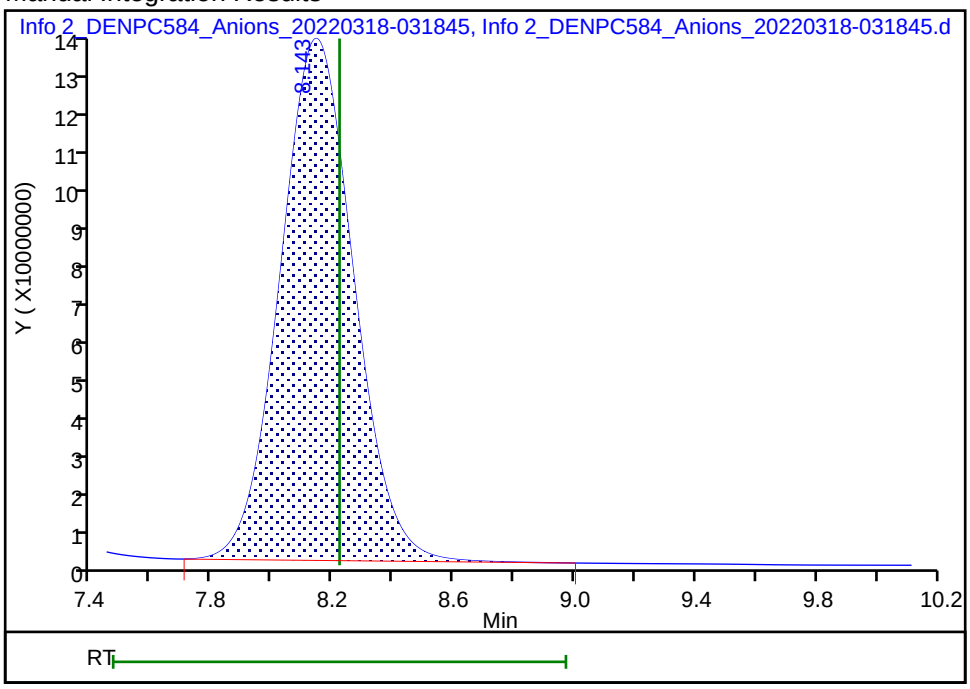
Processing Integration Results

RT: 8.14
Area: 2273525529
Amount: 219.0581
Amount Units: ug/ml



Manual Integration Results

RT: 8.14
Area: 2270453136
Amount: 218.7604
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:14:34

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-03
Lims ID: 280-159332-F-1 MSD
Client ID:
Sample Type: MSD
Inject. Date: 18-Mar-2022 03:18:00 ALS Bottle#: 0 Worklist Smp#: 51
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-051
Misc. Info.: 280-0109325-051
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:33:48 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:15:17

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.785	2.787	-0.002	141857601	5.00	5.26	
2 Chloride	3.788	3.790	-0.002	1399824285	50.0	98.9	
3 Nitrite as N	4.373	4.357	0.016	153480873	NC	NC	M
4 Bromide	5.460	5.370	0.090	32150390	5.00	5.26	
5 Nitrate as N	6.098	6.020	0.078	194554218	NC	NC	
7 Orthophosphate as P	7.250	7.190	0.060	131578942	NC	NC	
6 Sulfate	8.142	8.220	-0.078	2271692153	50.0	218.9	EM

QC Flag Legend

Processing Flags
NC - Not Calibrated
E - Exceeded Maximum Amount
Review Flags
M - Manually Integrated

Reagents:

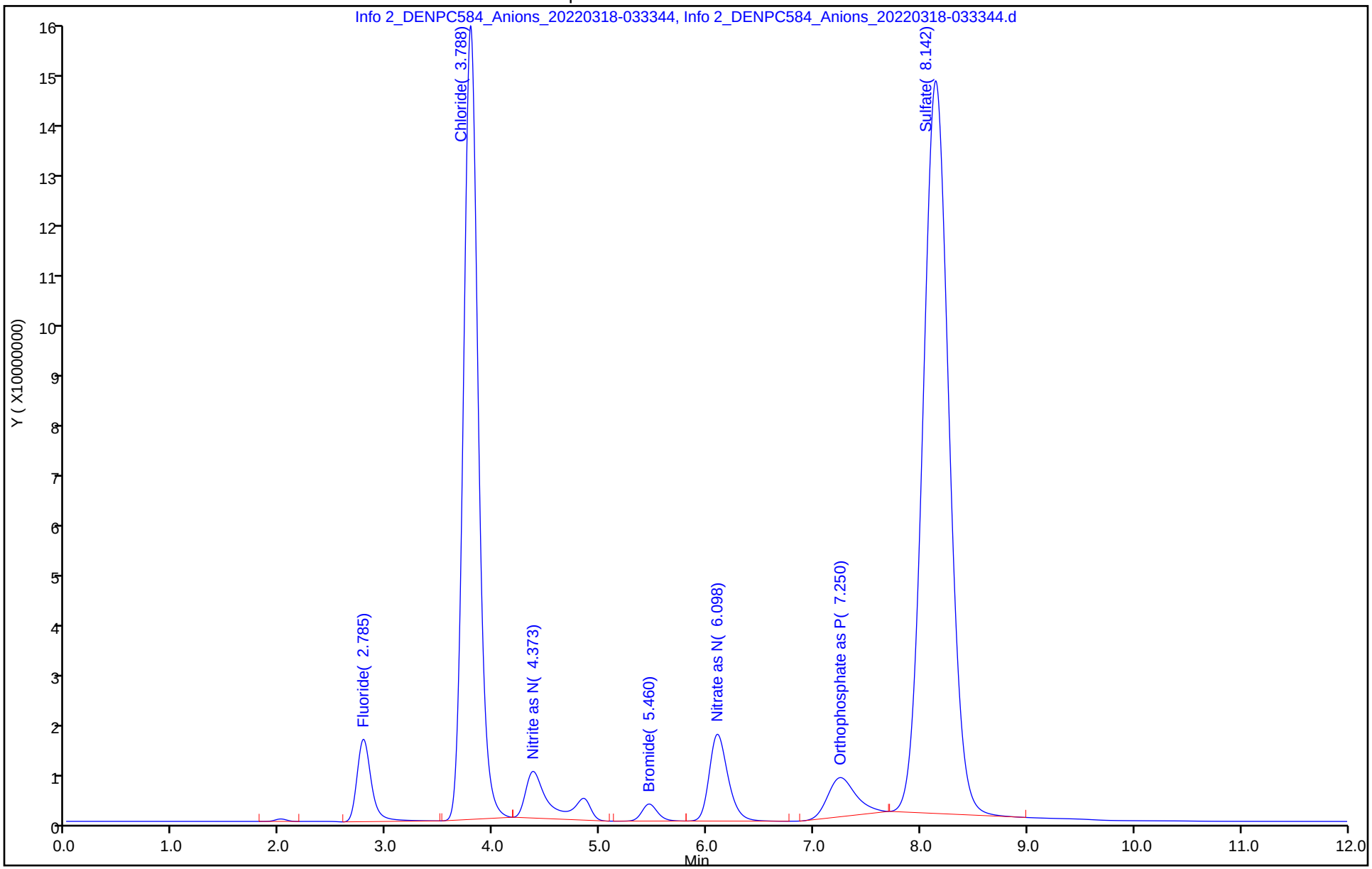
ICMS/MSD WEEK_00748 Amount Added: 0.10 Units: mL

Report Date: 18-Mar-2022 13:33:55 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-033344.d

Injection Date:	18-Mar-2022 03:18:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159332-F-1 MSD			Worklist Smp#:	51
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

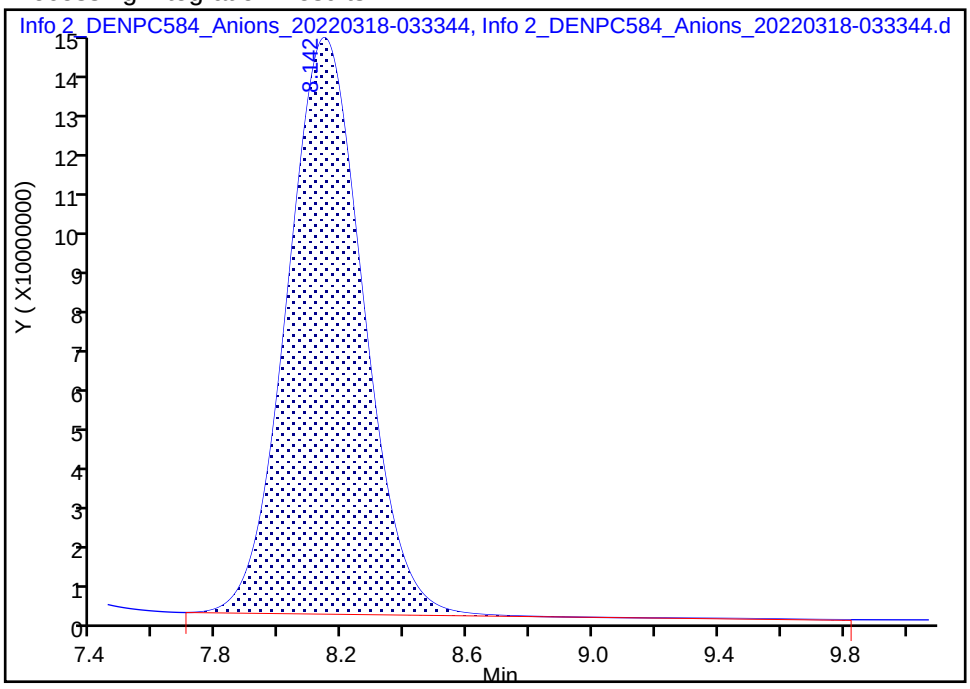
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-033				
Injection Date:	18-Mar-2022 03:18:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159332-F-1 MSD				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	51
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

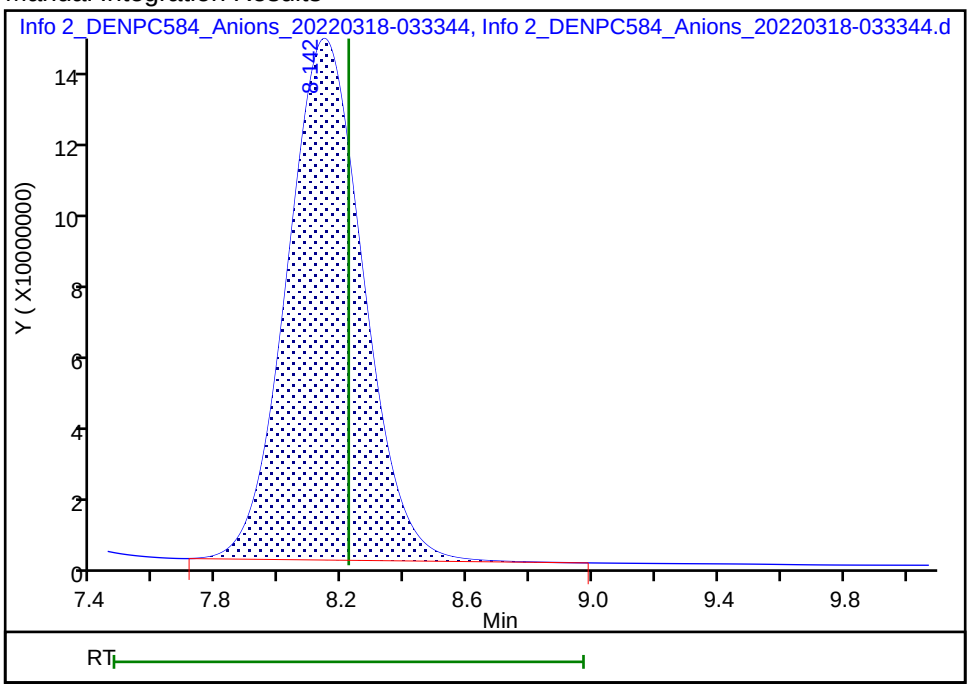
Processing Integration Results

RT: 8.14
Area: 2276525074
Amount: 219.3488
Amount Units: ug/ml



Manual Integration Results

RT: 8.14
Area: 2271692153
Amount: 218.8805
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:15:13
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-034
Lims ID: 280-159332-F-2
Client ID: G0082-8
Sample Type: Client
Inject. Date: 18-Mar-2022 03:33:00 ALS Bottle#: 0 Worklist Smp#: 52
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-052
Misc. Info.: 280-0109325-052
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:33:48 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:16:37

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.787	2.787	0.000	7546935	0.3026	
2 Chloride	3.785	3.790	-0.005	563124731	39.8	
3 Nitrite as N		4.357			ND	
4 Bromide	5.487	5.370	0.117	19645474	3.21	
5 Nitrate as N	6.107	6.020	0.087	154281709	NC	
7 Orthophosphate as P	7.290	7.190	0.100	16674094	NC	
6 Sulfate	8.152	8.220	-0.068	1641044213	157.8	M

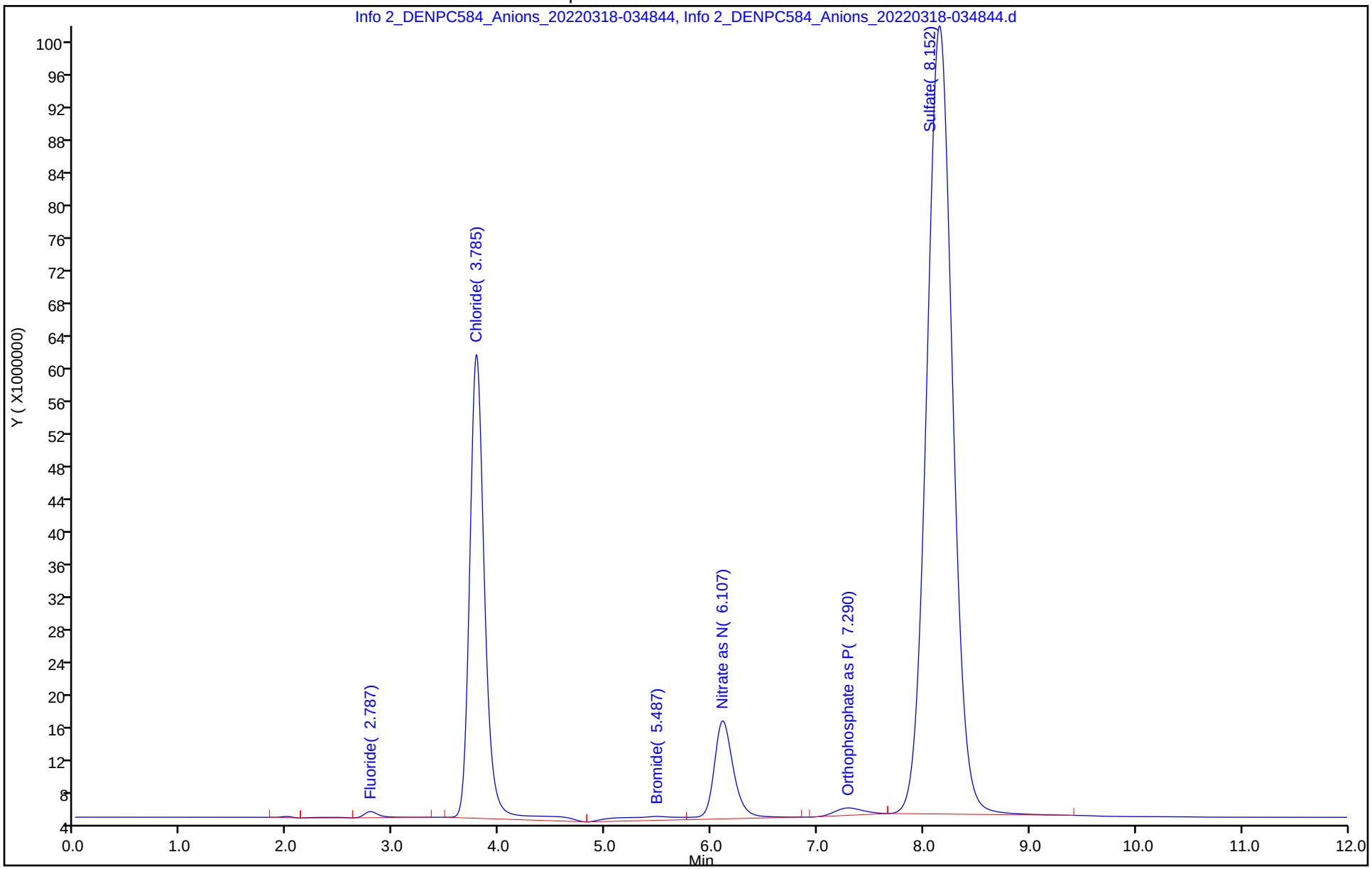
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 18-Mar-2022 13:33:55 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-034844.d				
Injection Date:	18-Mar-2022 03:33:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159332-F-2	Lab Sample ID:	280-159332-2	Worklist Smp#:	52
Client ID:	G0082-8				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

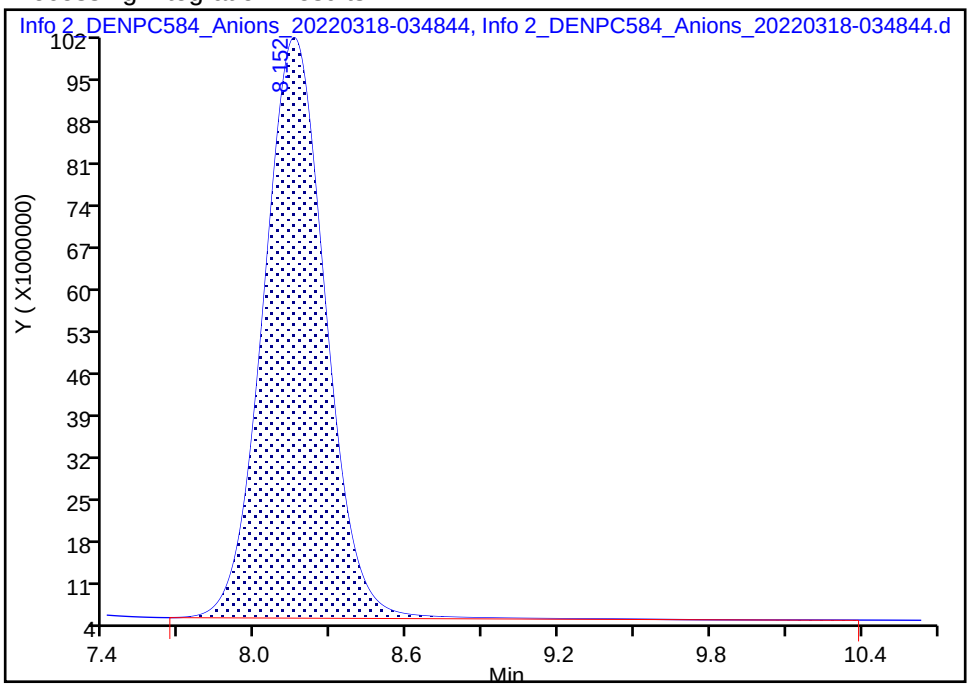
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-034				
Injection Date:	18-Mar-2022 03:33:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159332-F-2	Lab Sample ID:	280-159332-2		
Client ID:	G0082-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	52
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

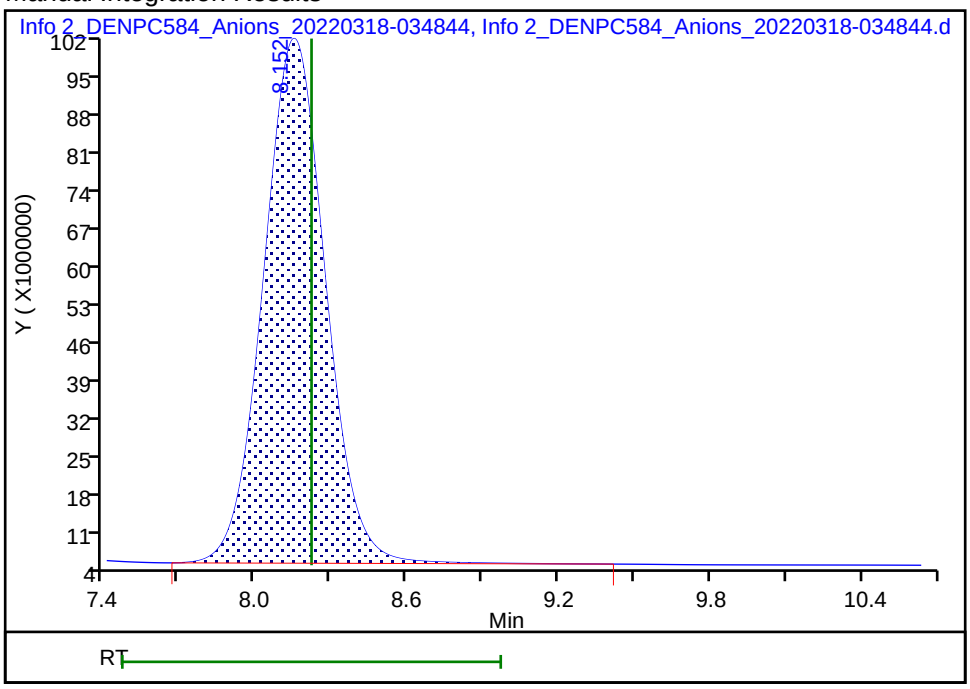
Processing Integration Results

RT: 8.15
Area: 1646296411
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 8.15
Area: 1641044213
Amount: 157.7698
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:16:34
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-040
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 18-Mar-2022 03:48:00 ALS Bottle#: 0 Worklist Smp#: 53
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-053
Misc. Info.: 280-0109325-053
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:33:56 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:18:04

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.790	2.787	0.003	123073846	5.00	4.57	M
2 Chloride	3.797	3.790	0.007	1382504801	100.0	97.7	
3 Nitrite as N	4.368	4.357	0.011	158689832	NC	NC	M
4 Bromide	5.385	5.370	0.015	28345557	5.00	4.63	M
5 Nitrate as N	6.047	6.020	0.027	169767434	NC	NC	
7 Orthophosphate as P	7.185	7.190	-0.005	101320931	NC	NC	
6 Sulfate	8.117	8.220	-0.103	1018430429	100.0	97.4	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

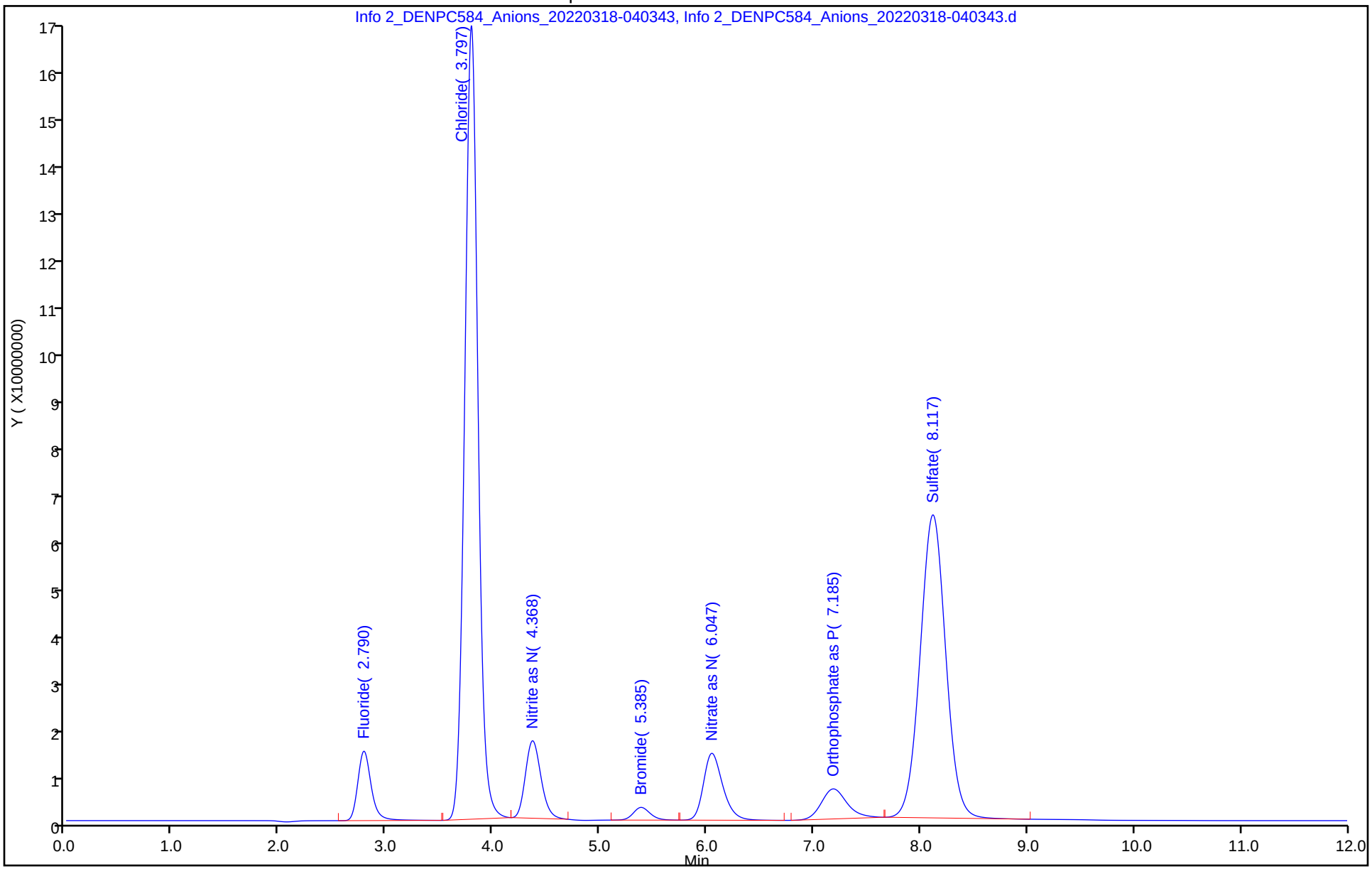
Reagents:

IC LCS_01863 Amount Added: 10.00 Units: mL

Report Date: 18-Mar-2022 13:33:56 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-040343.d				
Injection Date:	18-Mar-2022 03:48:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	53
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

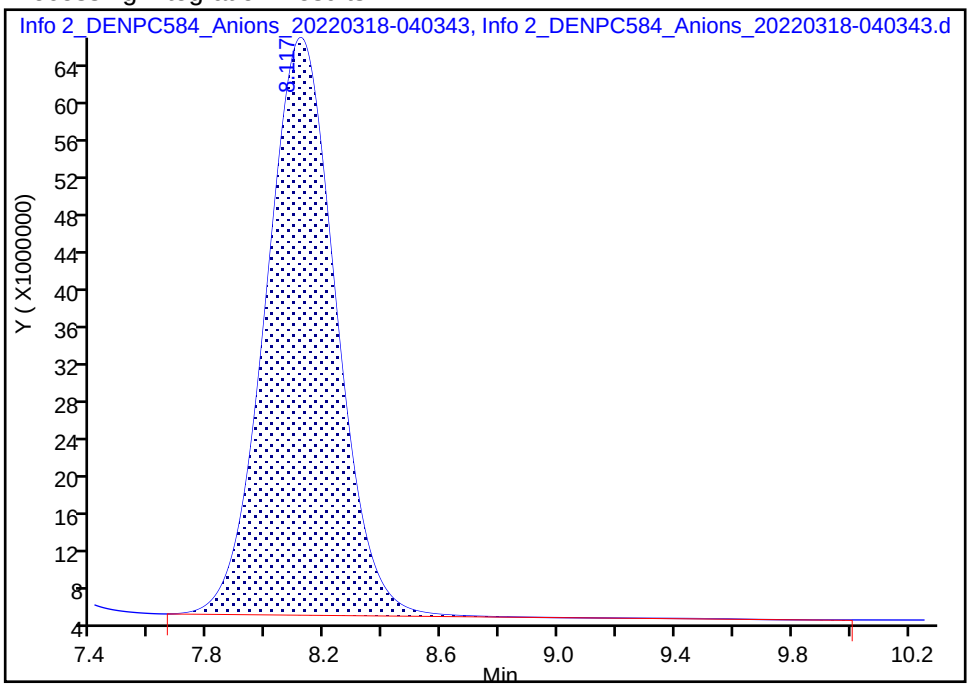
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-040				
Injection Date:	18-Mar-2022 03:48:00	Instrument ID:	WC_IonChrom13		
Lims ID:	ccv				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	53
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

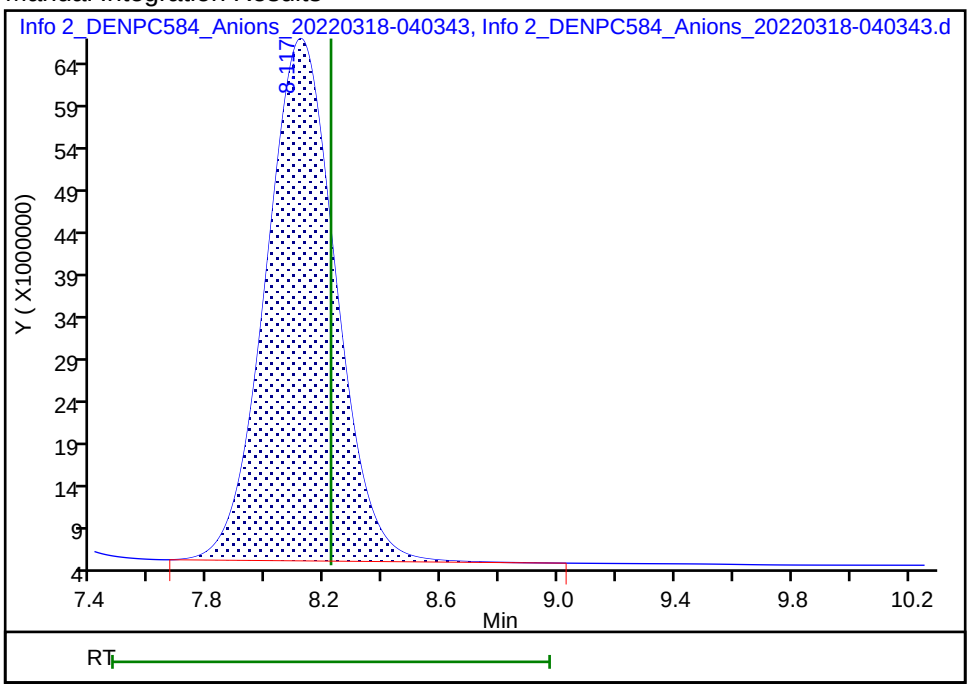
Processing Integration Results

RT: 8.12
Area: 1019665942
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 8.12
Area: 1018430429
Amount: 97.437642
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:17:16
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-041
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 18-Mar-2022 04:03:00 ALS Bottle#: 0 Worklist Smp#: 54
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-054
Misc. Info.: 280-0109325-054
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:33:56 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:18:29

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.787				ND	U
2 Chloride		3.790				ND	
3 Nitrite as N		4.357				ND	
4 Bromide		5.370				ND	
5 Nitrate as N		6.020				ND	U
7 Orthophosphate as P	7.258	7.190	0.068	1633030		NC	
6 Sulfate	8.210	8.220	-0.010	4911256		-0.7738	M

QC Flag Legend

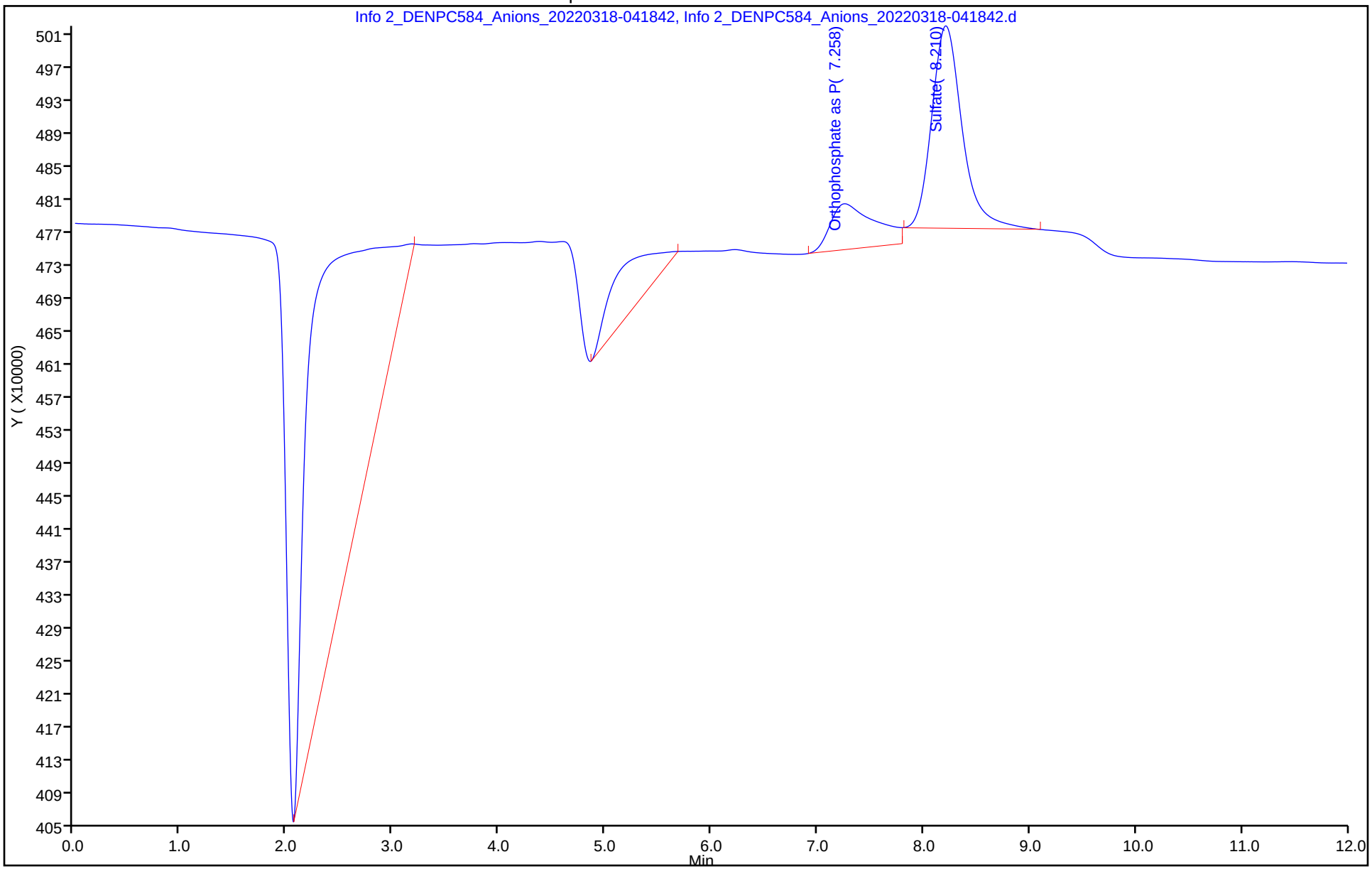
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 18-Mar-2022 13:33:57 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-041842.d

Injection Date:	18-Mar-2022 04:03:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	54
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-041

Injection Date: 18-Mar-2022 04:03:00 Instrument ID: WC_IonChrom13

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 54

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

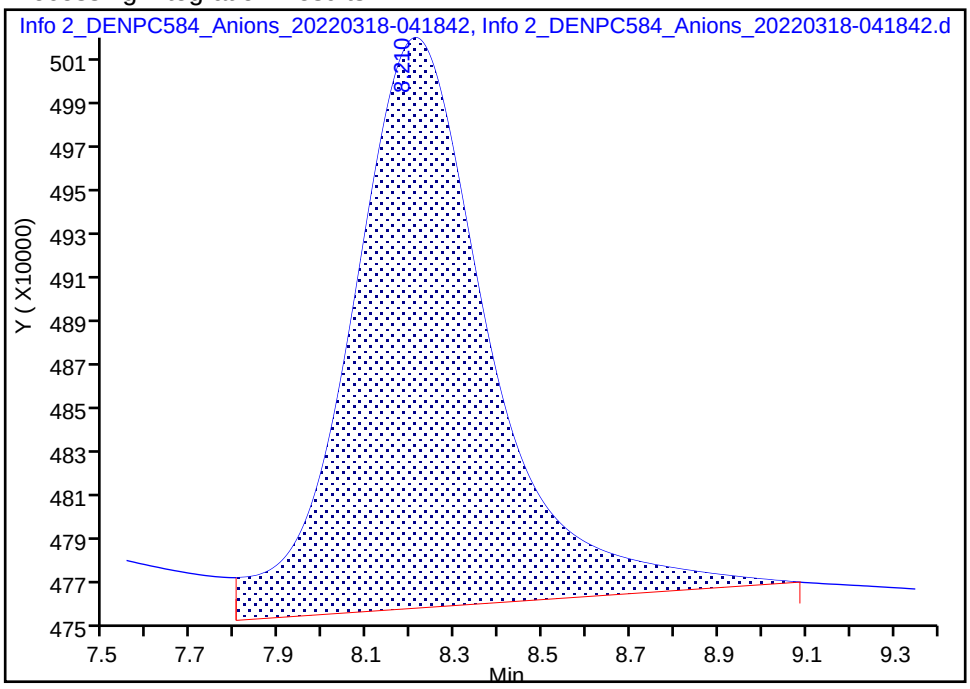
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

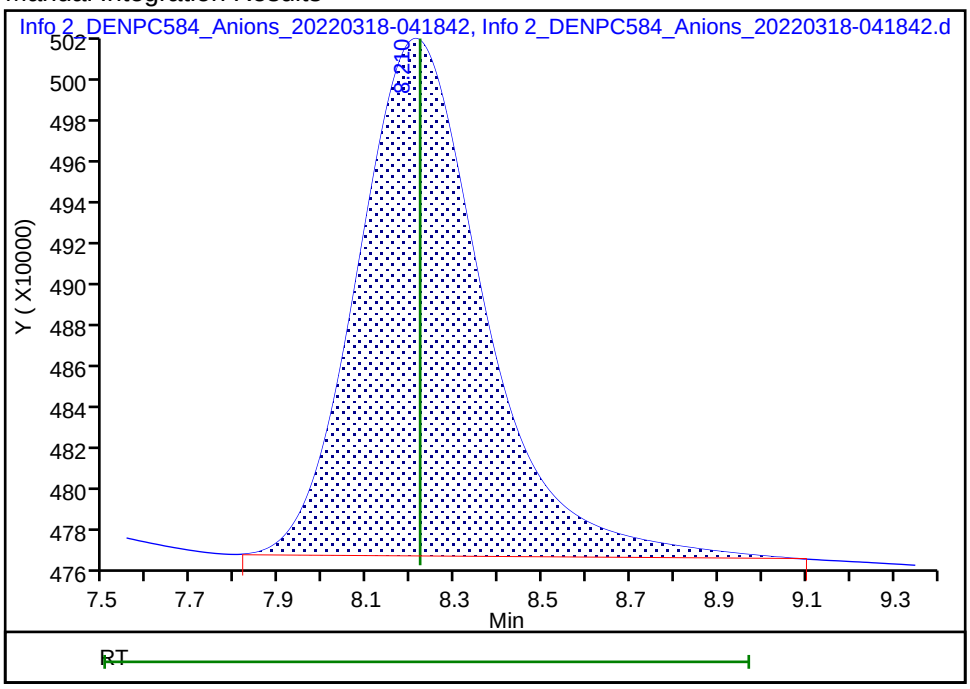
Processing Integration Results

RT: 8.21
Area: 5655256
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 8.21
Area: 4911256
Amount: -0.773799
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:18:27

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-043
Lims ID: 280-159332-F-3
Client ID: G0024-8
Sample Type: Client
Inject. Date: 18-Mar-2022 04:18:00 ALS Bottle#: 0 Worklist Smp#: 55
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-055
Misc. Info.: 280-0109325-055
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:33:56 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:18:52

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.787	2.787	0.000	7437616	0.2986	
2 Chloride	3.777	3.790	-0.013	210295604	14.9	
3 Nitrite as N		4.357			ND	
4 Bromide	5.462	5.370	0.092	14092564	2.30	
5 Nitrate as N	6.047	6.020	0.027	381834121	NC	
7 Orthophosphate as P	7.263	7.190	0.073	22304435	NC	
6 Sulfate	8.158	8.220	-0.062	573716154	54.3	M

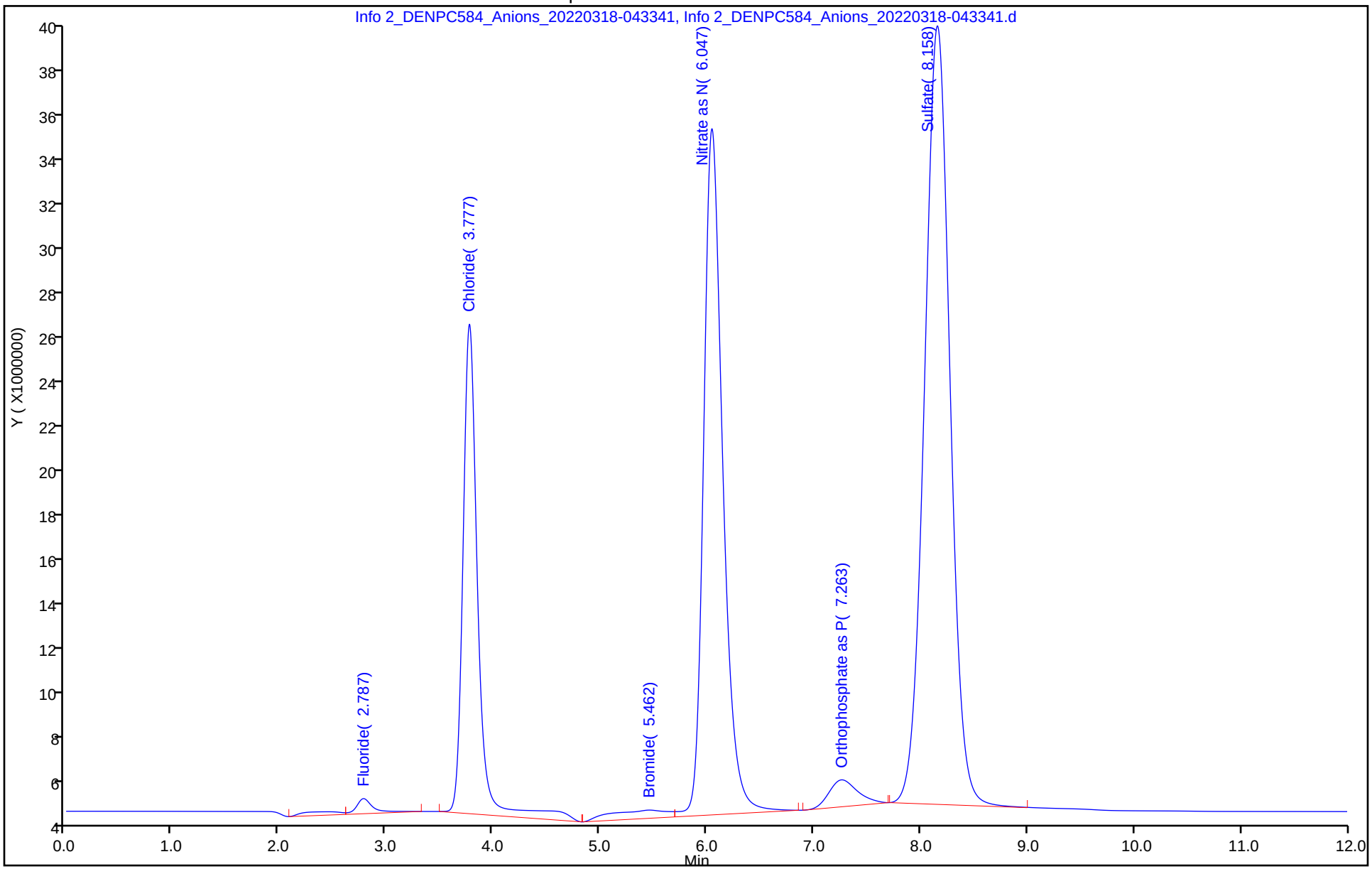
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 18-Mar-2022 13:33:57 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-043341.d				
Injection Date:	18-Mar-2022 04:18:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159332-F-3	Lab Sample ID:	280-159332-3	Worklist Smp#:	55
Client ID:	G0024-8				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

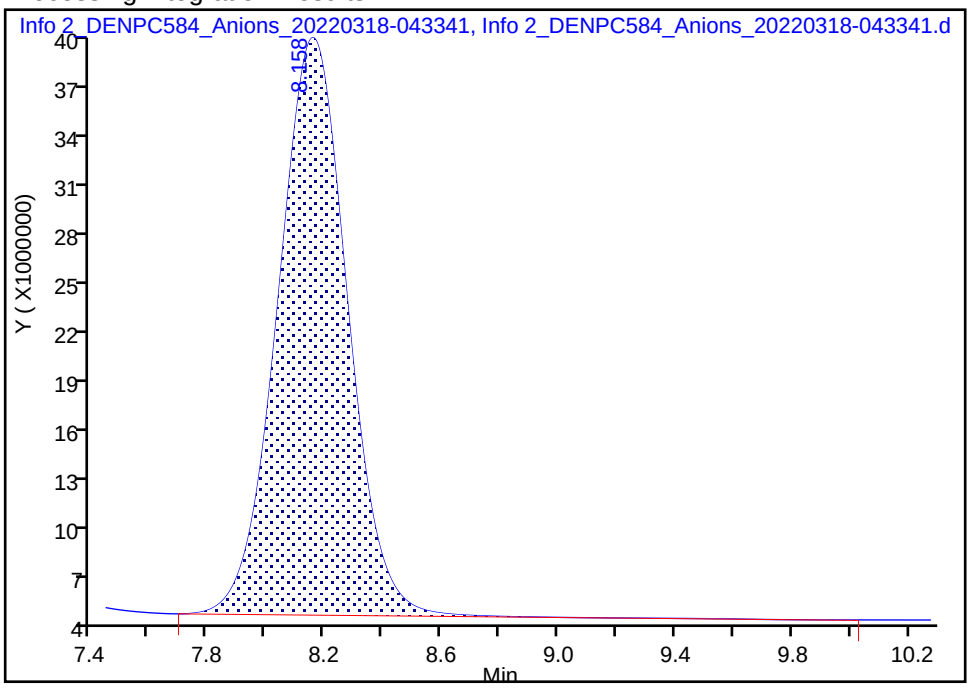
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-043				
Injection Date:	18-Mar-2022 04:18:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159332-F-3	Lab Sample ID:	280-159332-3		
Client ID:	G0024-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	55
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

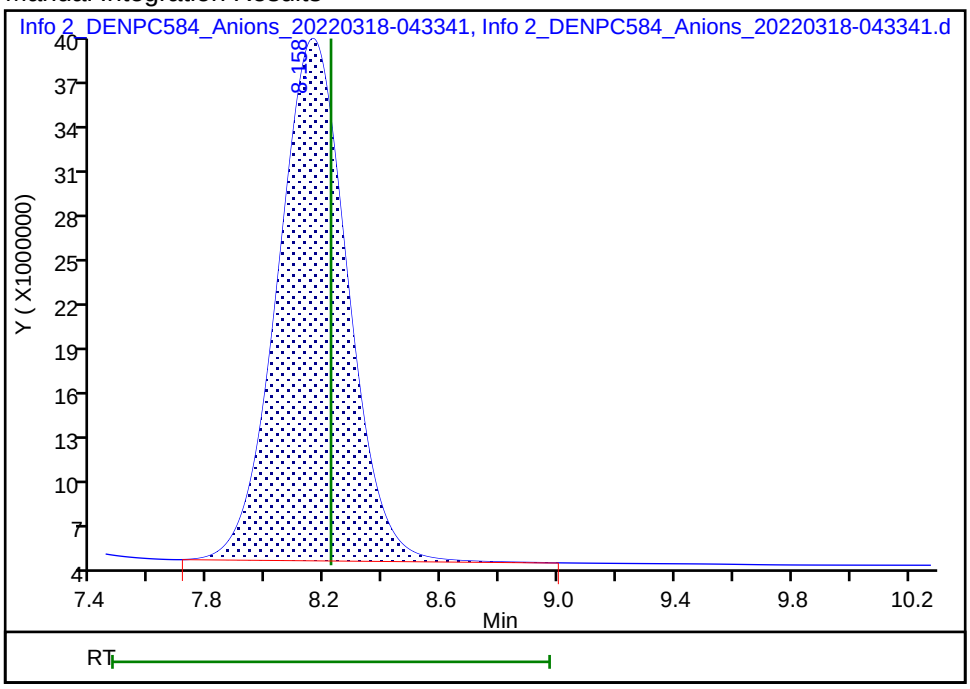
Processing Integration Results

RT: 8.16
Area: 574225583
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 8.16
Area: 573716154
Amount: 54.344200
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:18:49

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-044
Lims ID: 280-159332-F-4
Client ID: G0096-8
Sample Type: Client
Inject. Date: 18-Mar-2022 04:33:00 ALS Bottle#: 0 Worklist Smp#: 56
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-056
Misc. Info.: 280-0109325-056
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:33:56 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:19:08

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.783	2.787	-0.004	8840143	0.3504	
2 Chloride	3.785	3.790	-0.005	538340956	38.1	
3 Nitrite as N		4.357			ND	
4 Bromide	5.497	5.370	0.127	29268839	4.78	
5 Nitrate as N	6.117	6.020	0.097	146616972	NC	
7 Orthophosphate as P	7.327	7.190	0.137	20354695	NC	
6 Sulfate	8.163	8.220	-0.057	1177420152	112.8	M

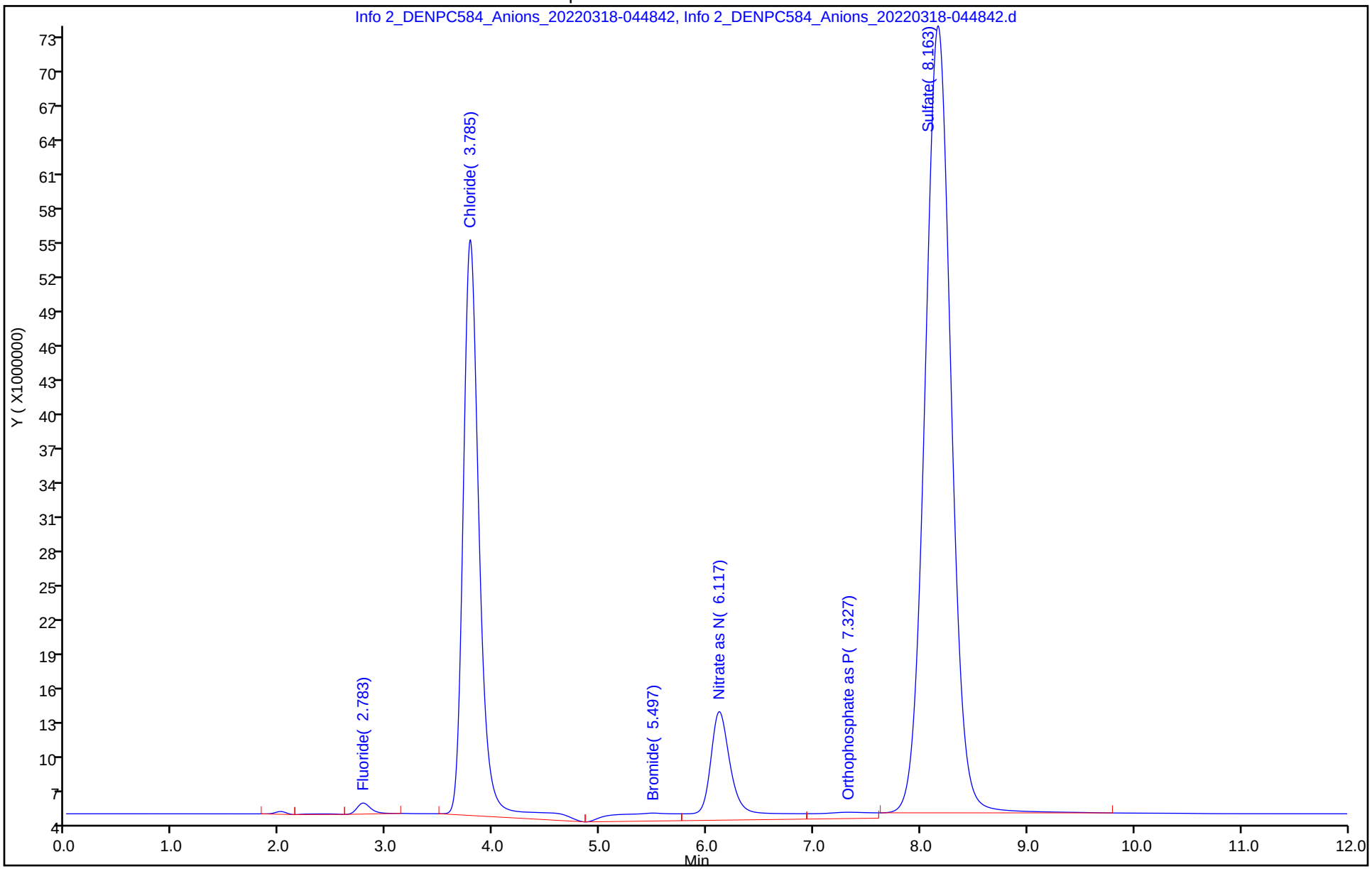
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 18-Mar-2022 13:33:58 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-044842.d				
Injection Date:	18-Mar-2022 04:33:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159332-F-4	Lab Sample ID:	280-159332-4	Worklist Smp#:	56
Client ID:	G0096-8				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

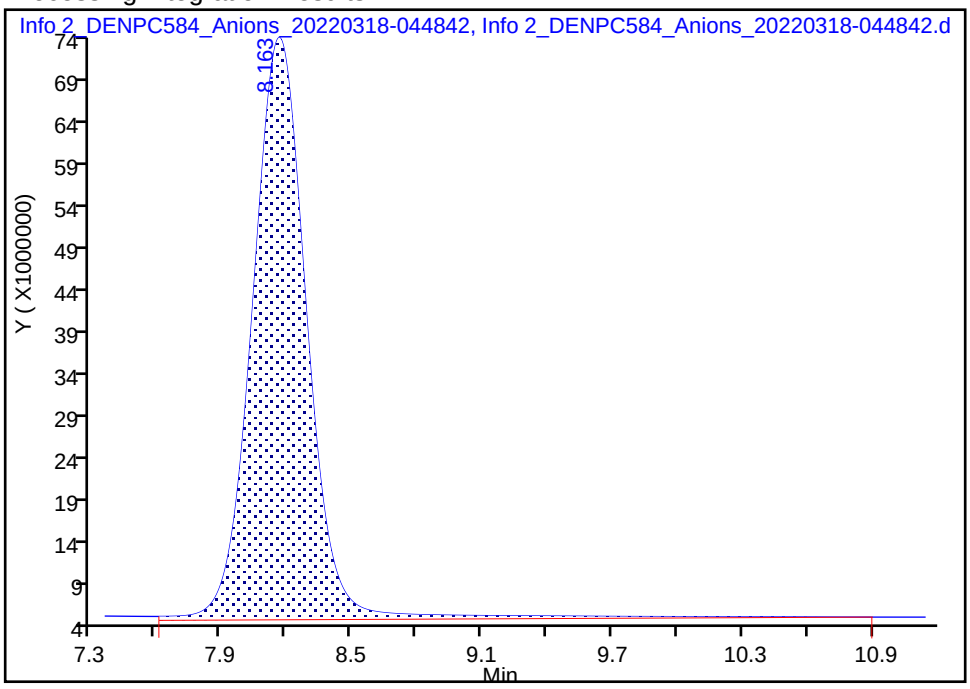
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-044				
Injection Date:	18-Mar-2022 04:33:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159332-F-4	Lab Sample ID:	280-159332-4		
Client ID:	G0096-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	56
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

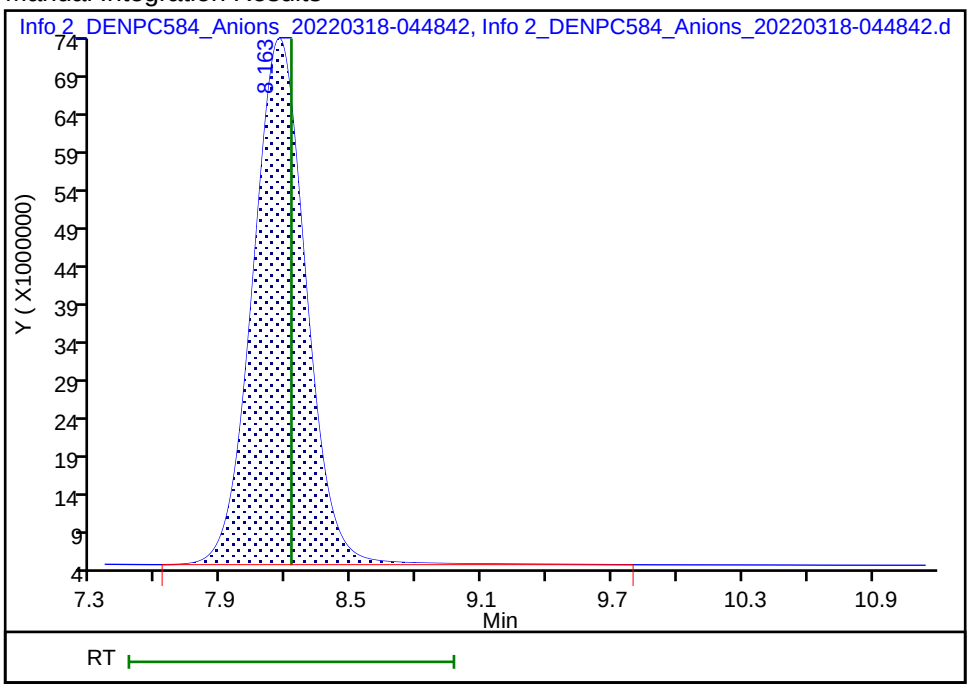
Processing Integration Results

RT: 8.16
Area: 1227978225
Amount: 117.7431
Amount Units: ug/ml



Manual Integration Results

RT: 8.16
Area: 1177420152
Amount: 112.8440
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:19:04
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-050
Lims ID: 280-159332-F-5
Client ID: G0296-8
Sample Type: Client
Inject. Date: 18-Mar-2022 04:48:00 ALS Bottle#: 0 Worklist Smp#: 57
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-057
Misc. Info.: 280-0109325-057
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:33:56 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:19:21

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.783	2.787	-0.004	8327159	0.3314	
2 Chloride	3.787	3.790	-0.003	523738648	37.0	
3 Nitrite as N	4.363	4.357	0.006	14684740	NC	
4 Bromide	5.500	5.370	0.130	26262853	4.29	
5 Nitrate as N	6.113	6.020	0.093	172861315	NC	
7 Orthophosphate as P	7.330	7.190	0.140	16257183	NC	
6 Sulfate	8.167	8.220	-0.053	1190203641	114.1	M

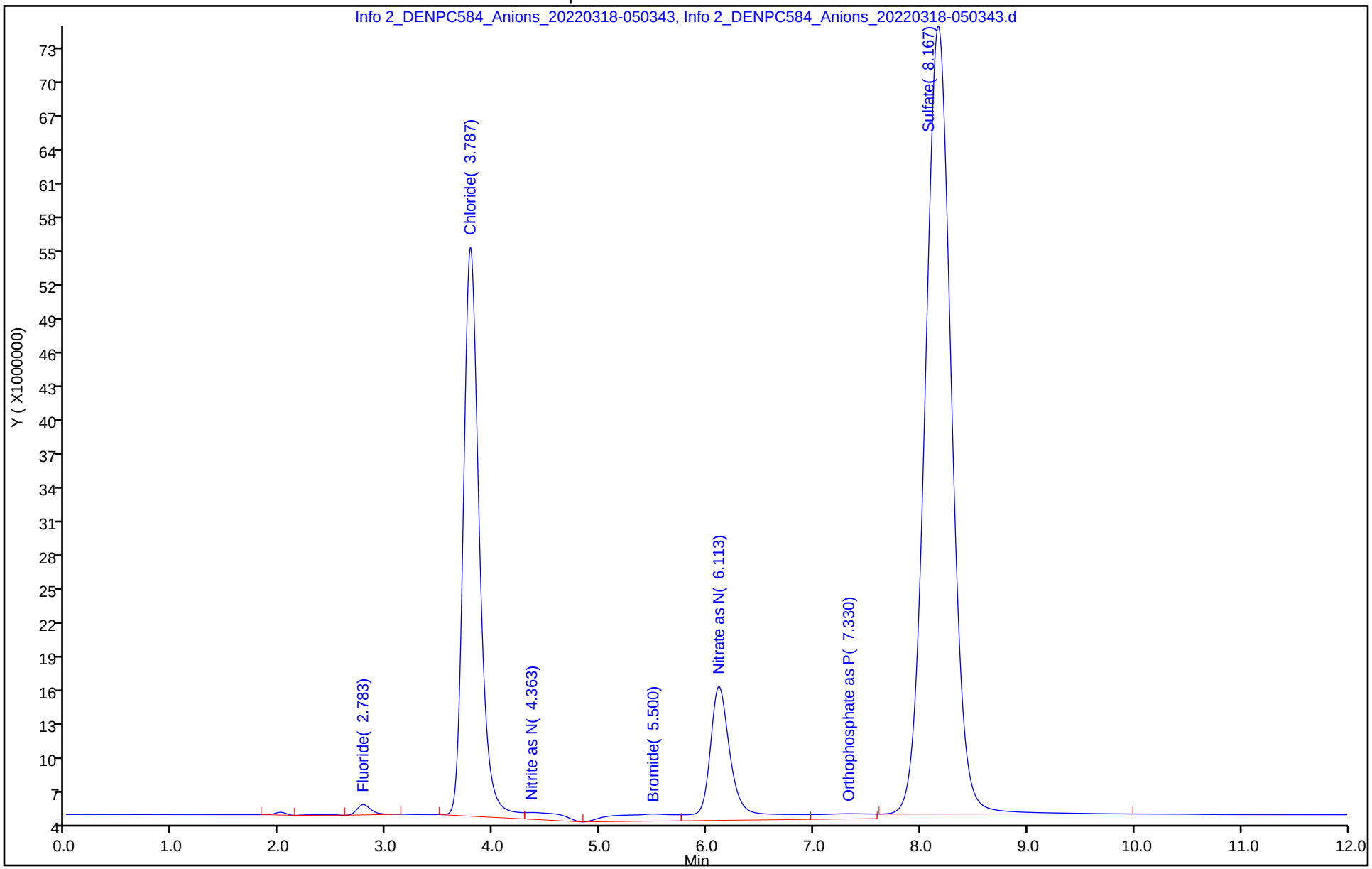
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 18-Mar-2022 13:33:58 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-050343.d				
Injection Date:	18-Mar-2022 04:48:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159332-F-5	Lab Sample ID:	280-159332-5	Worklist Smp#:	57
Client ID:	G0296-8				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

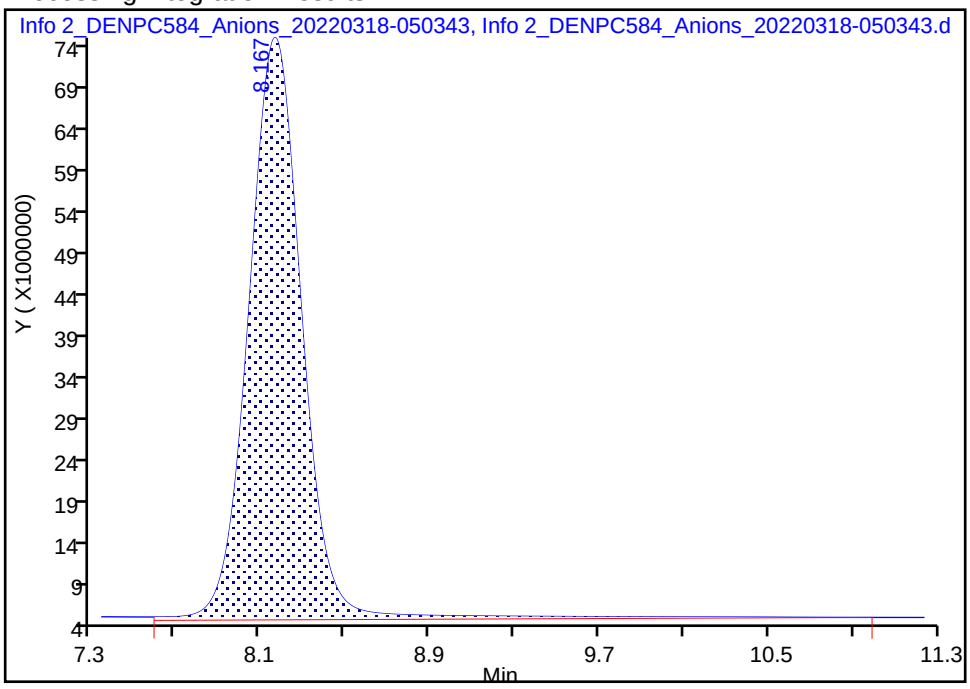
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-050				
Injection Date:	18-Mar-2022 04:48:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159332-F-5	Lab Sample ID:	280-159332-5		
Client ID:	G0296-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	57
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

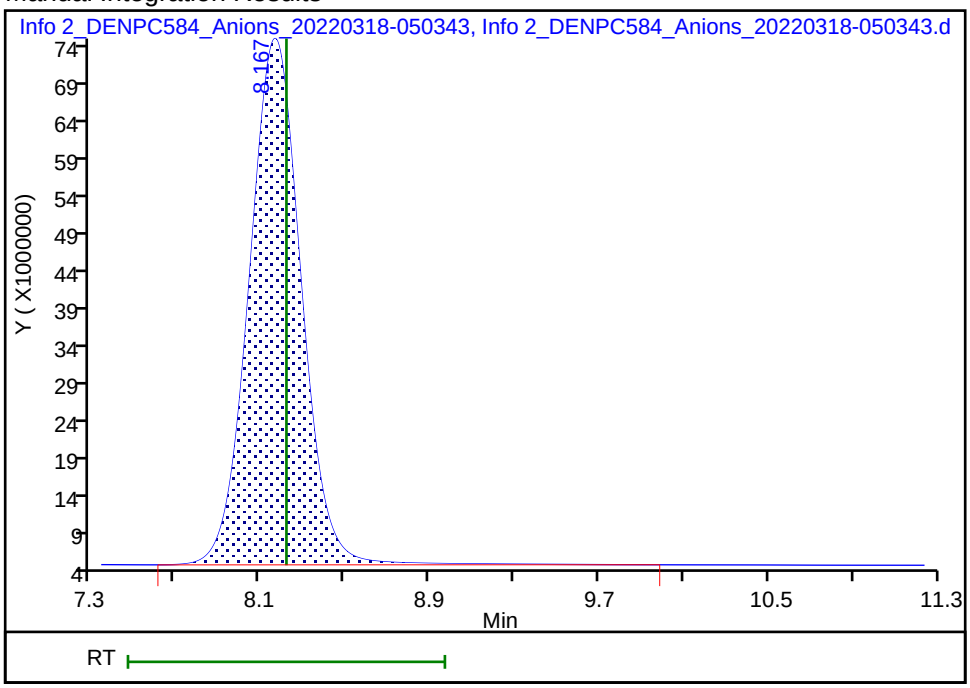
Processing Integration Results

RT: 8.17
Area: 1235818056
Amount: 118.5028
Amount Units: ug/ml



Manual Integration Results

RT: 8.17
Area: 1190203641
Amount: 114.0827
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:19:18
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-051				
Lims ID:	280-159332-F-6				
Client ID:	PZ020-8				
Sample Type:	Client				
Inject. Date:	18-Mar-2022 05:03:00	ALS Bottle#:	0	Worklist Smp#:	58
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0109325-058				
Misc. Info.:	280-0109325-058				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom13		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m				
Limit Group:	Wet - Anions 28D				
Last Update:	18-Mar-2022 13:33:56	Calib Date:	16-Mar-2022 15:34:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154				
Column 1 :			Det: 0005		
Process Host:	CTX1678				
First Level Reviewer: foxr		Date:	18-Mar-2022 13:19:34		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.780	2.787	-0.007	8422456	0.3350	
2 Chloride	3.777	3.790	-0.013	400456432	28.3	
3 Nitrite as N		4.357			ND	
4 Bromide	5.475	5.370	0.105	17249182	2.82	
5 Nitrate as N	6.045	6.020	0.025	574999708	NC	
7 Orthophosphate as P	7.282	7.190	0.092	9667033	NC	
6 Sulfate	8.148	8.220	-0.072	1484442212	142.6	M

QC Flag Legend

Processing Flags

NC - Not Calibrated

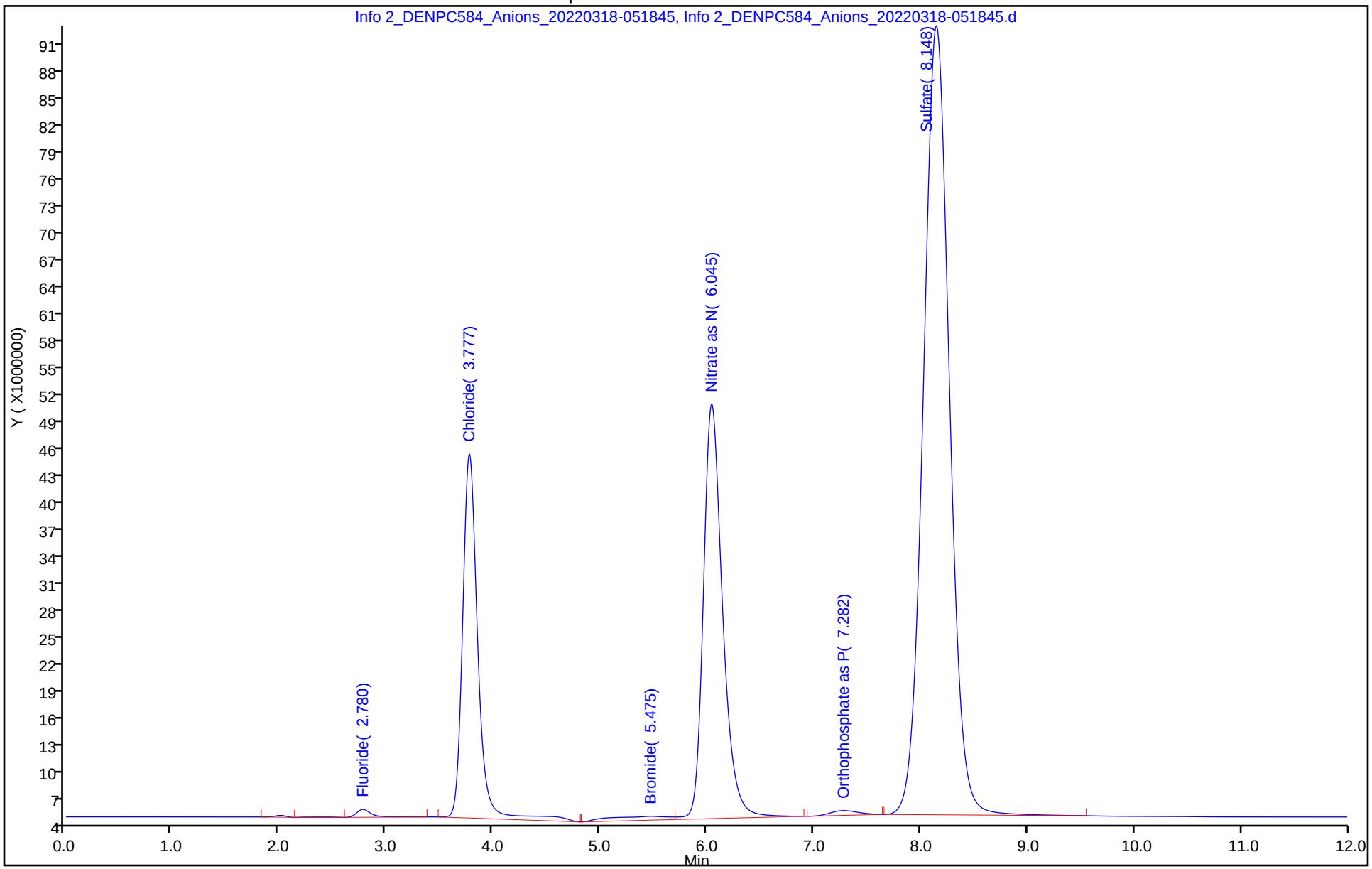
Review Flags

M - Manually Integrated

Report Date: 18-Mar-2022 13:33:59 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-051845.d				
Injection Date:	18-Mar-2022 05:03:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159332-F-6	Lab Sample ID:	280-159332-6	Worklist Smp#:	58
Client ID:	PZ020-8				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

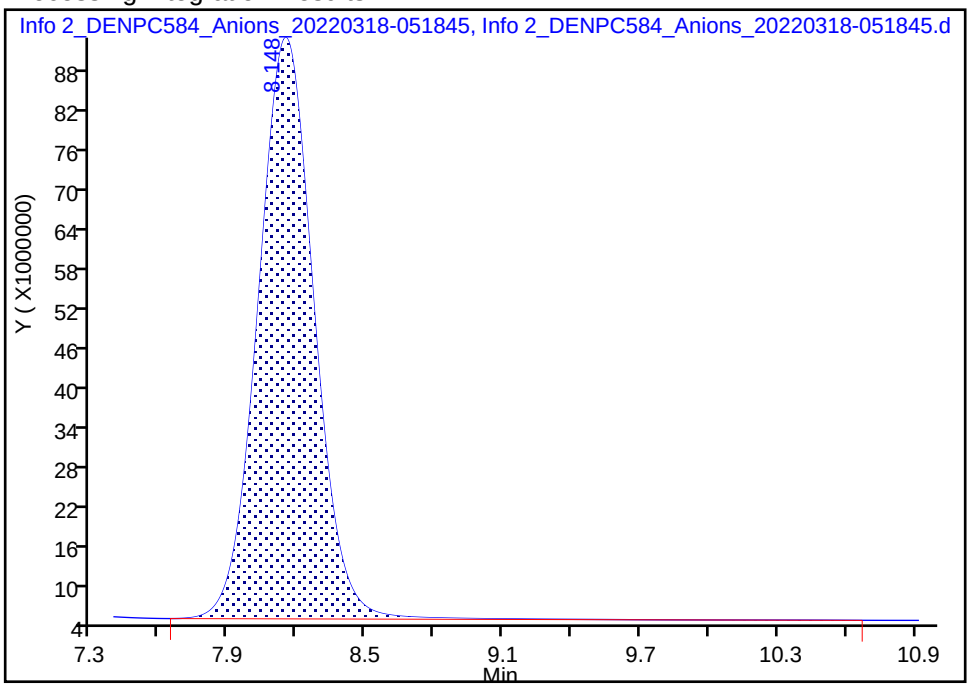
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-051				
Injection Date:	18-Mar-2022 05:03:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159332-F-6	Lab Sample ID:	280-159332-6		
Client ID:	PZ020-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	58
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

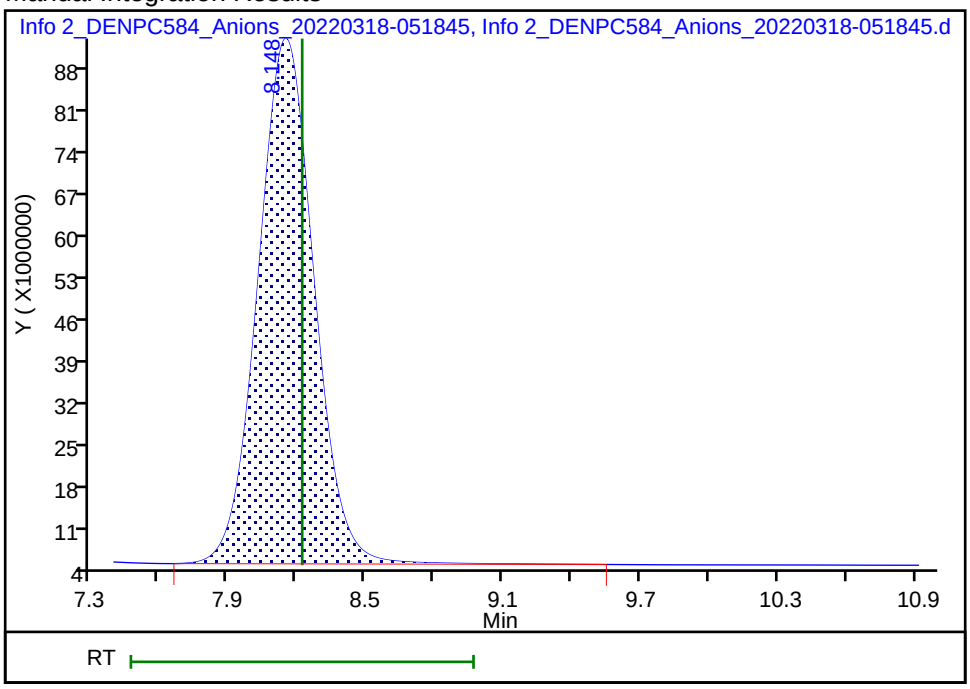
Processing Integration Results

RT: 8.15
Area: 1486827926
Amount: 142.8260
Amount Units: ug/ml



Manual Integration Results

RT: 8.15
Area: 1484442212
Amount: 142.5948
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:19:31

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-053
Lims ID: 280-159332-F-7
Client ID: G0077-8
Sample Type: Client
Inject. Date: 18-Mar-2022 05:18:00 ALS Bottle#: 0 Worklist Smp#: 59
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-059
Misc. Info.: 280-0109325-059
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:33:56 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:19:49

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.780	2.787	-0.007	7133353	0.2873	
2 Chloride	3.777	3.790	-0.013	425322877	30.1	
3 Nitrite as N		4.357			ND	
4 Bromide	5.470	5.370	0.100	16952222	2.77	
5 Nitrate as N	6.052	6.020	0.032	416188618	NC	
7 Orthophosphate as P	7.272	7.190	0.082	17343040	NC	
6 Sulfate	8.150	8.220	-0.070	1240783512	119.0	M

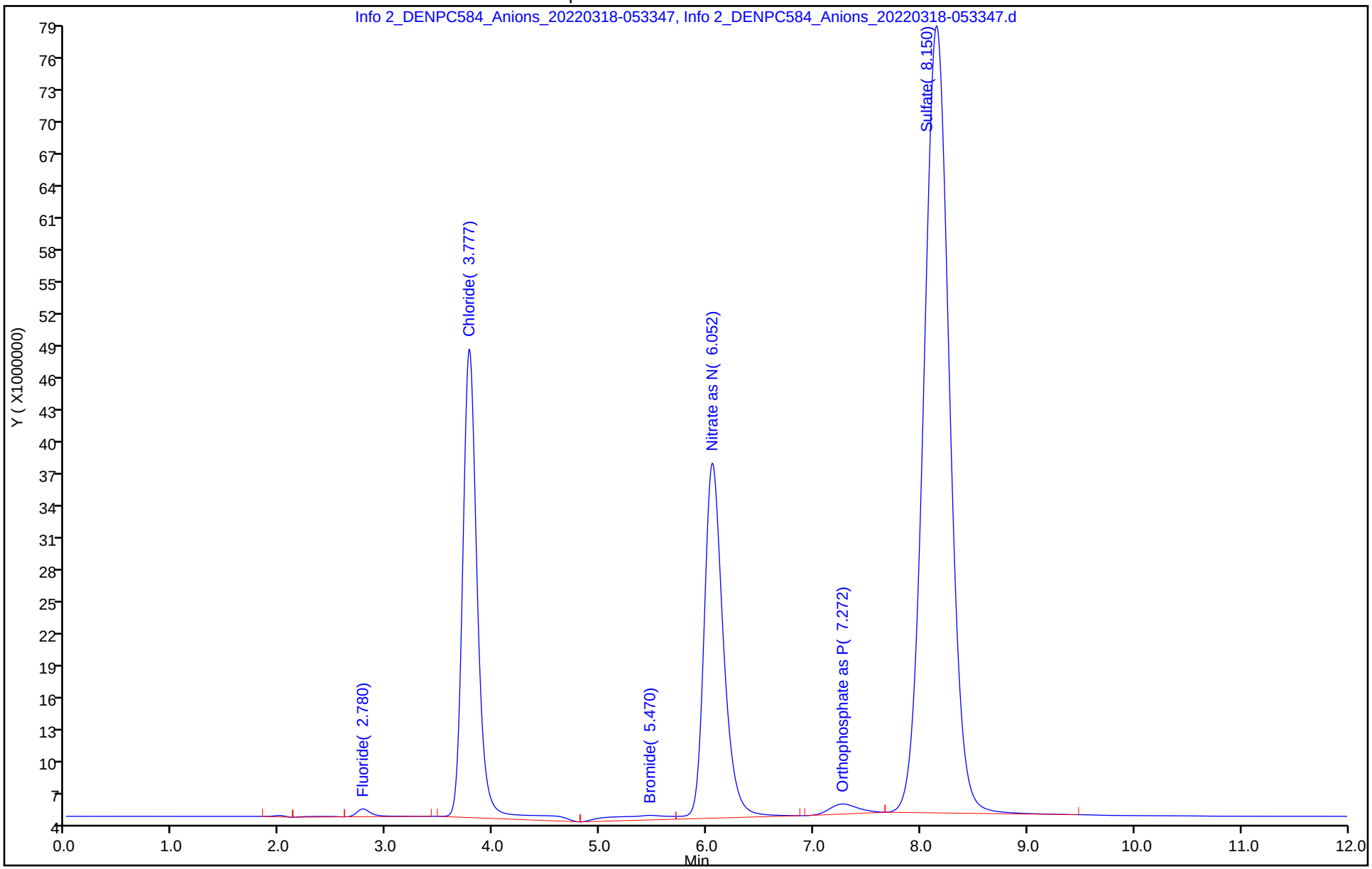
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 18-Mar-2022 13:33:59 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-053347.d				
Injection Date:	18-Mar-2022 05:18:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159332-F-7	Lab Sample ID:	280-159332-7	Worklist Smp#:	59
Client ID:	G0077-8				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

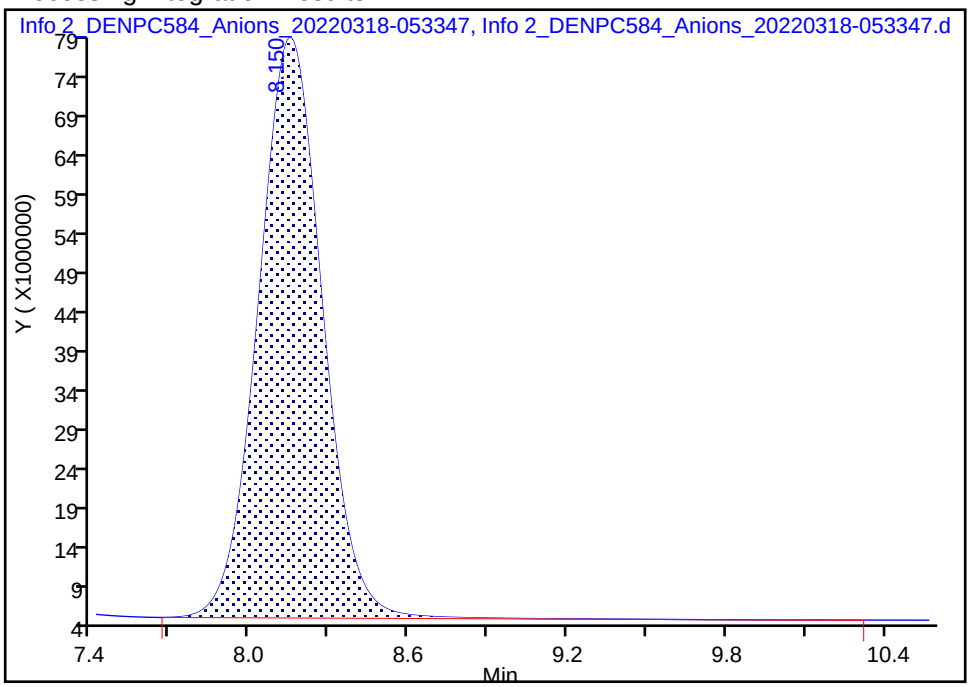
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-053				
Injection Date:	18-Mar-2022 05:18:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159332-F-7	Lab Sample ID:	280-159332-7		
Client ID:	G0077-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	59
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

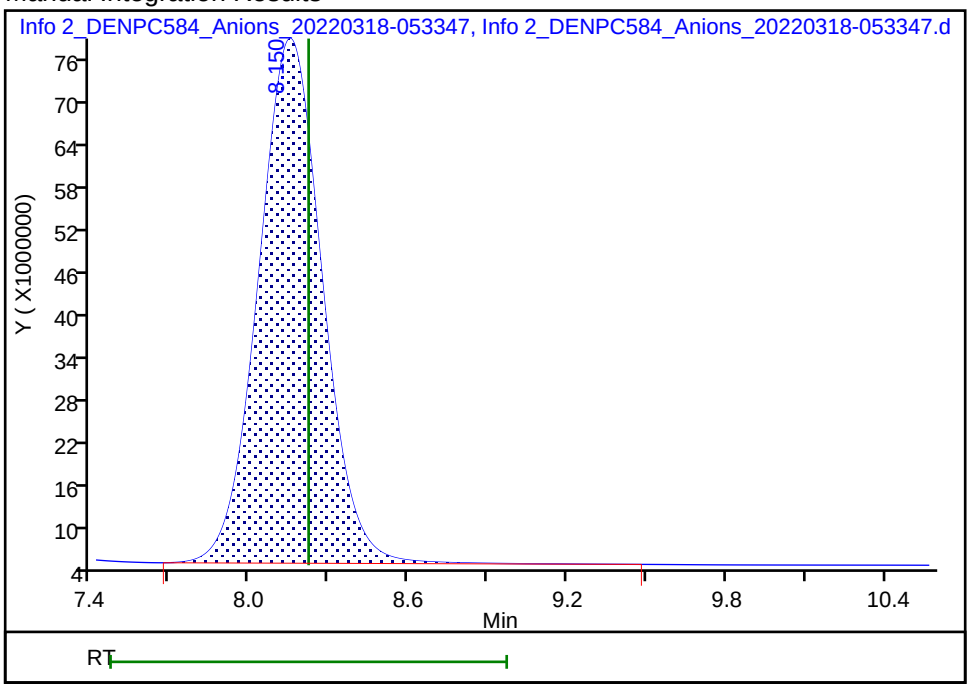
Processing Integration Results

RT: 8.15
Area: 1242827533
Amount: 119.1820
Amount Units: ug/ml



Manual Integration Results

RT: 8.15
Area: 1240783512
Amount: 118.9840
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:19:46
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-060
Lims ID: 280-159332-F-8
Client ID: G0078-8
Sample Type: Client
Inject. Date: 18-Mar-2022 05:48:00 ALS Bottle#: 0 Worklist Smp#: 61
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0109325-061
Misc. Info.: 280-0109325-061
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:33:56 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:20:18

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.785	2.787	-0.002	3389324	0.1490	
2 Chloride	3.773	3.790	-0.017	143177122	10.1	
3 Nitrite as N		4.357			ND	
4 Bromide	5.432	5.370	0.062	7263382	1.19	
5 Nitrate as N	6.163	6.020	0.143	2296635	NC	
7 Orthophosphate as P	7.292	7.190	0.102	962214	NC	
6 Sulfate	8.132	8.220	-0.088	540240052	51.1	M

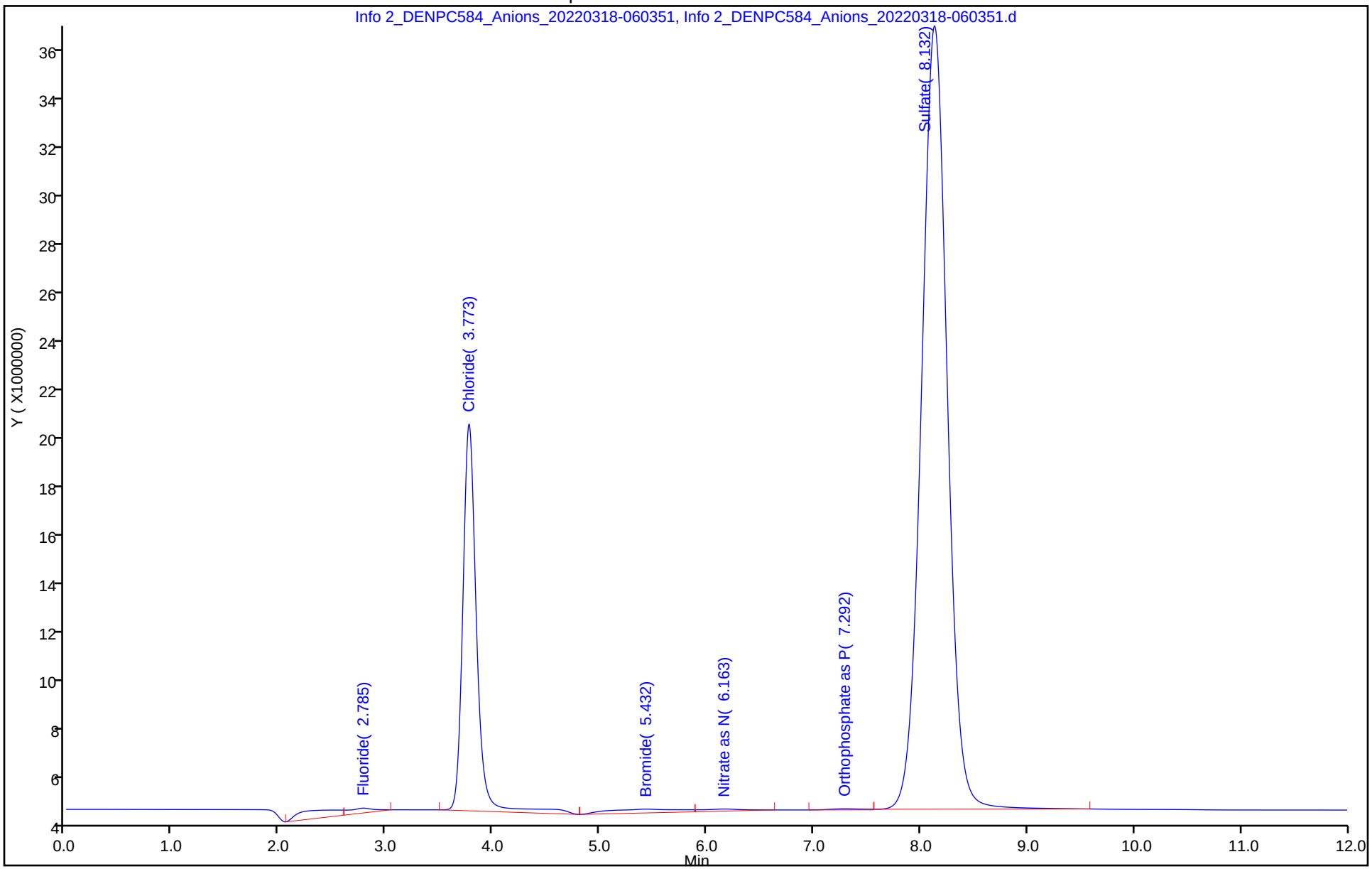
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 18-Mar-2022 13:34:00 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-060351.d				
Injection Date:	18-Mar-2022 05:48:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159332-F-8	Lab Sample ID:	280-159332-8	Worklist Smp#:	61
Client ID:	G0078-8				
Injection Vol:	5.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

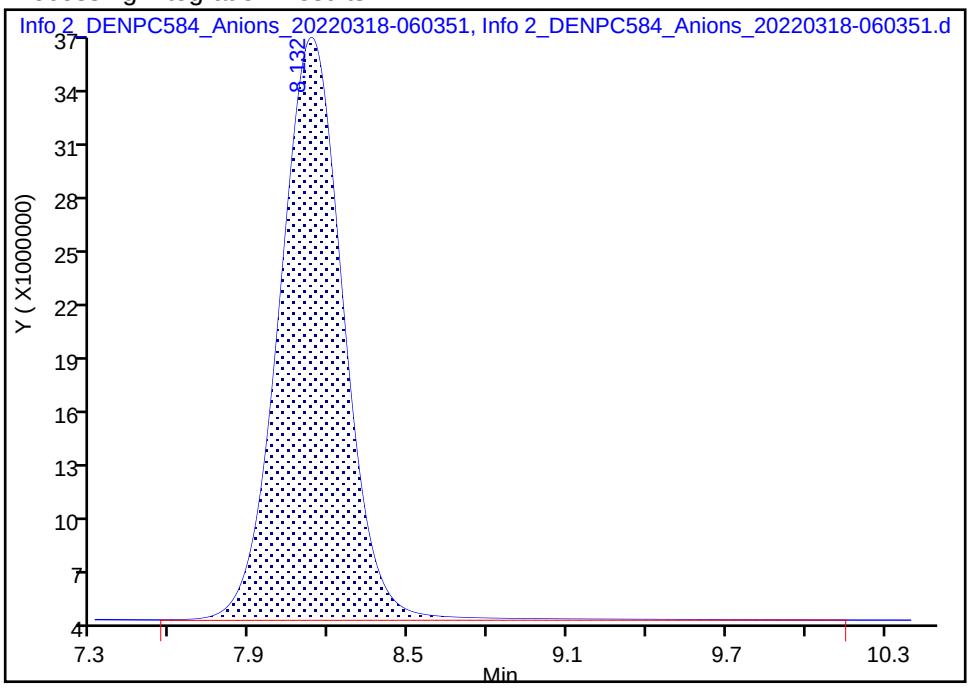
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-060				
Injection Date:	18-Mar-2022 05:48:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159332-F-8	Lab Sample ID:	280-159332-8		
Client ID:	G0078-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	61
Injection Vol:	5.0 ul	Dil. Factor:	5.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

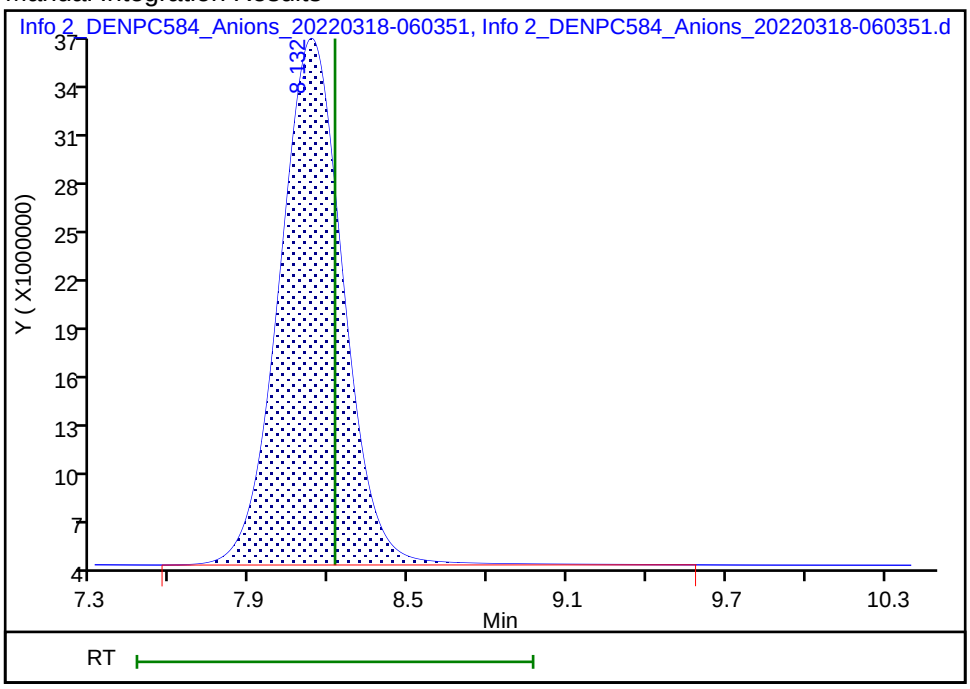
Processing Integration Results

RT: 8.13
Area: 543477984
Amount: 51.414078
Amount Units: ug/ml



Manual Integration Results

RT: 8.13
Area: 540240052
Amount: 51.100318
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:20:14
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-061
Lims ID: 280-159332-F-9
Client ID: G0094-8
Sample Type: Client
Inject. Date: 18-Mar-2022 06:03:00 ALS Bottle#: 0 Worklist Smp#: 62
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-062
Misc. Info.: 280-0109325-062
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:33:56 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:20:36

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.777	2.787	-0.010	10022456	0.3941	
2 Chloride	3.778	3.790	-0.012	689185505	48.7	
3 Nitrite as N	4.352	4.357	-0.005	13179189	NC	
4 Bromide	5.473	5.370	0.103	22872808	3.74	
5 Nitrate as N	6.052	6.020	0.032	483049882	NC	
7 Orthophosphate as P	7.303	7.190	0.113	12219810	NC	
6 Sulfate	8.152	8.220	-0.068	1353109719	129.9	M

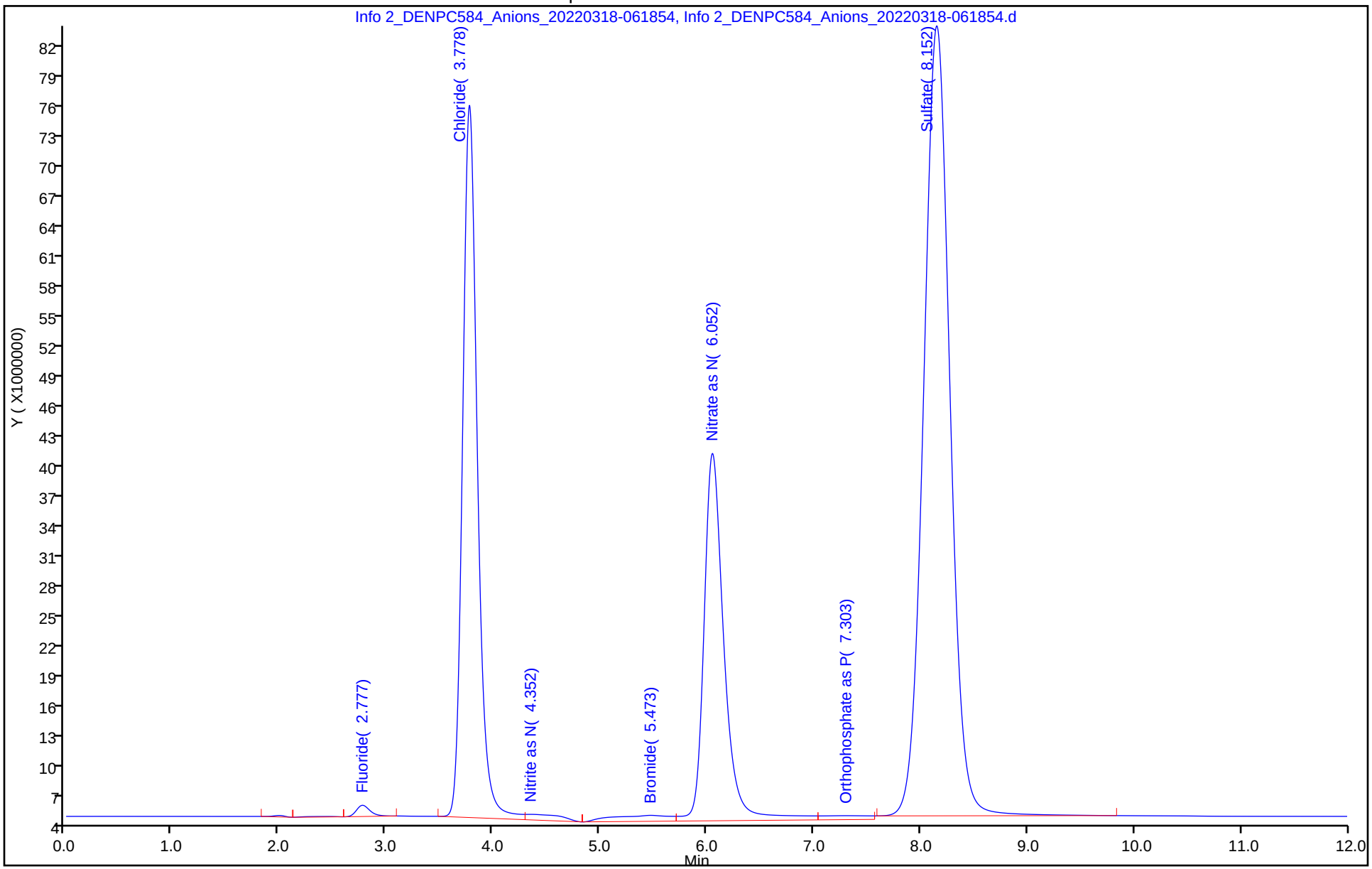
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 18-Mar-2022 13:34:00 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-061854.d				
Injection Date:	18-Mar-2022 06:03:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159332-F-9	Lab Sample ID:	280-159332-9	Worklist Smp#:	62
Client ID:	G0094-8				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

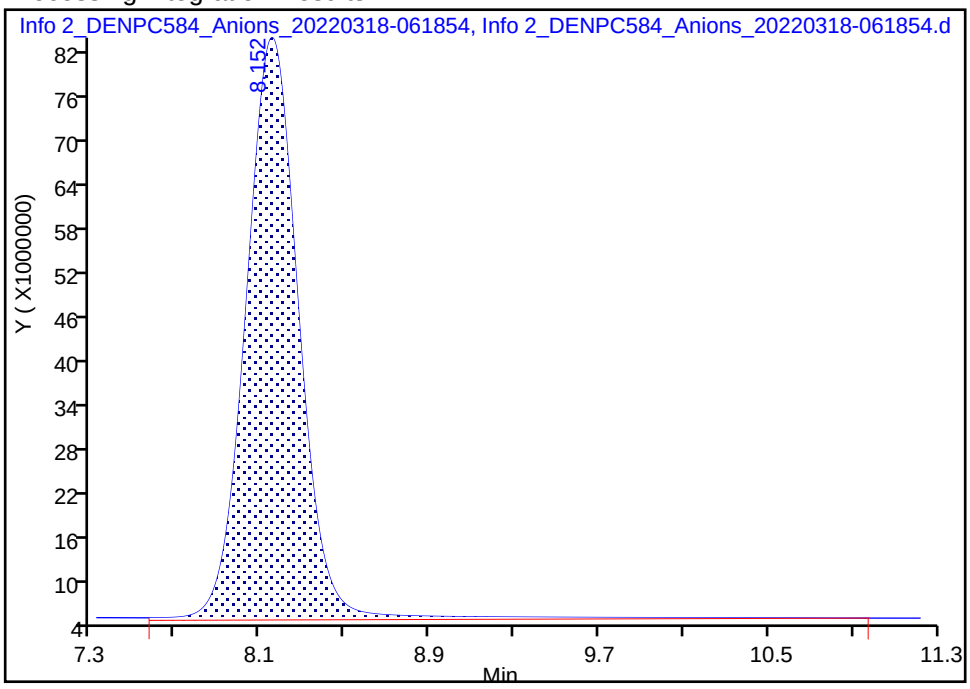
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-061				
Injection Date:	18-Mar-2022 06:03:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159332-F-9	Lab Sample ID:	280-159332-9		
Client ID:	G0094-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	62
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

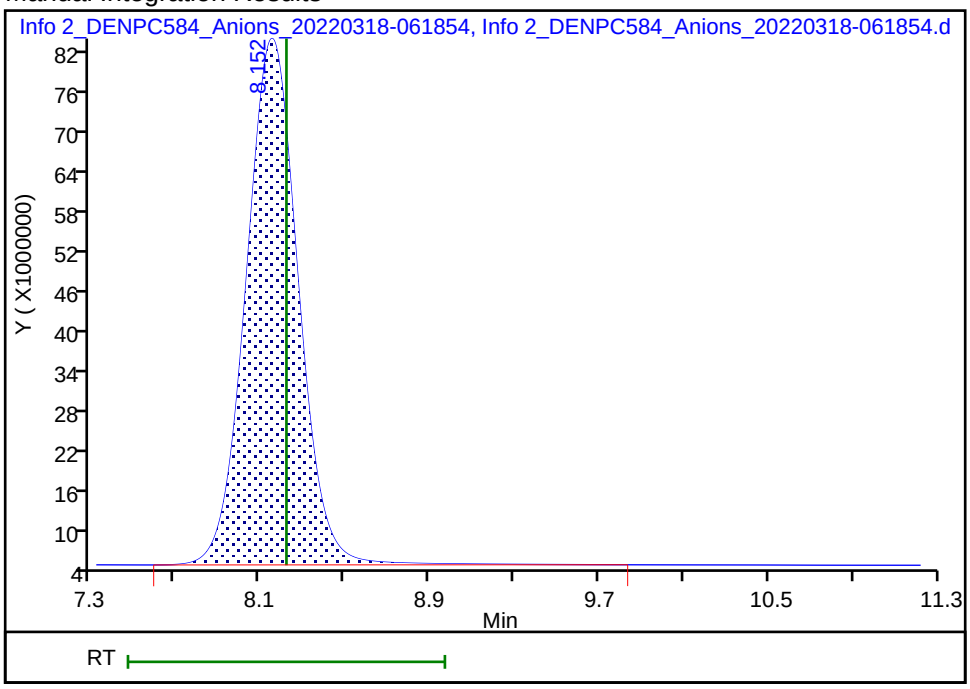
Processing Integration Results

RT: 8.15
Area: 1394734638
Amount: 133.9021
Amount Units: ug/ml



Manual Integration Results

RT: 8.15
Area: 1353109719
Amount: 129.8685
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:20:33
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-064
Lims ID: 280-159332-F-10
Client ID: PZ018-8
Sample Type: Client
Inject. Date: 18-Mar-2022 06:33:00 ALS Bottle#: 0 Worklist Smp#: 64
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-064
Misc. Info.: 280-0109325-064
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:34:09 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:21:02

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.792	2.787	0.005	10551969	0.4136	
2 Chloride	3.810	3.790	0.020	837353356	59.2	
3 Nitrite as N		4.357			ND	
4 Bromide	5.520	5.370	0.150	27945297	4.57	
5 Nitrate as N	6.222	6.020	0.202	6775383	NC	
7 Orthophosphate as P	7.522	7.190	0.332	1010381	NC	
6 Sulfate	8.200	8.220	-0.020	132428971	11.6	M

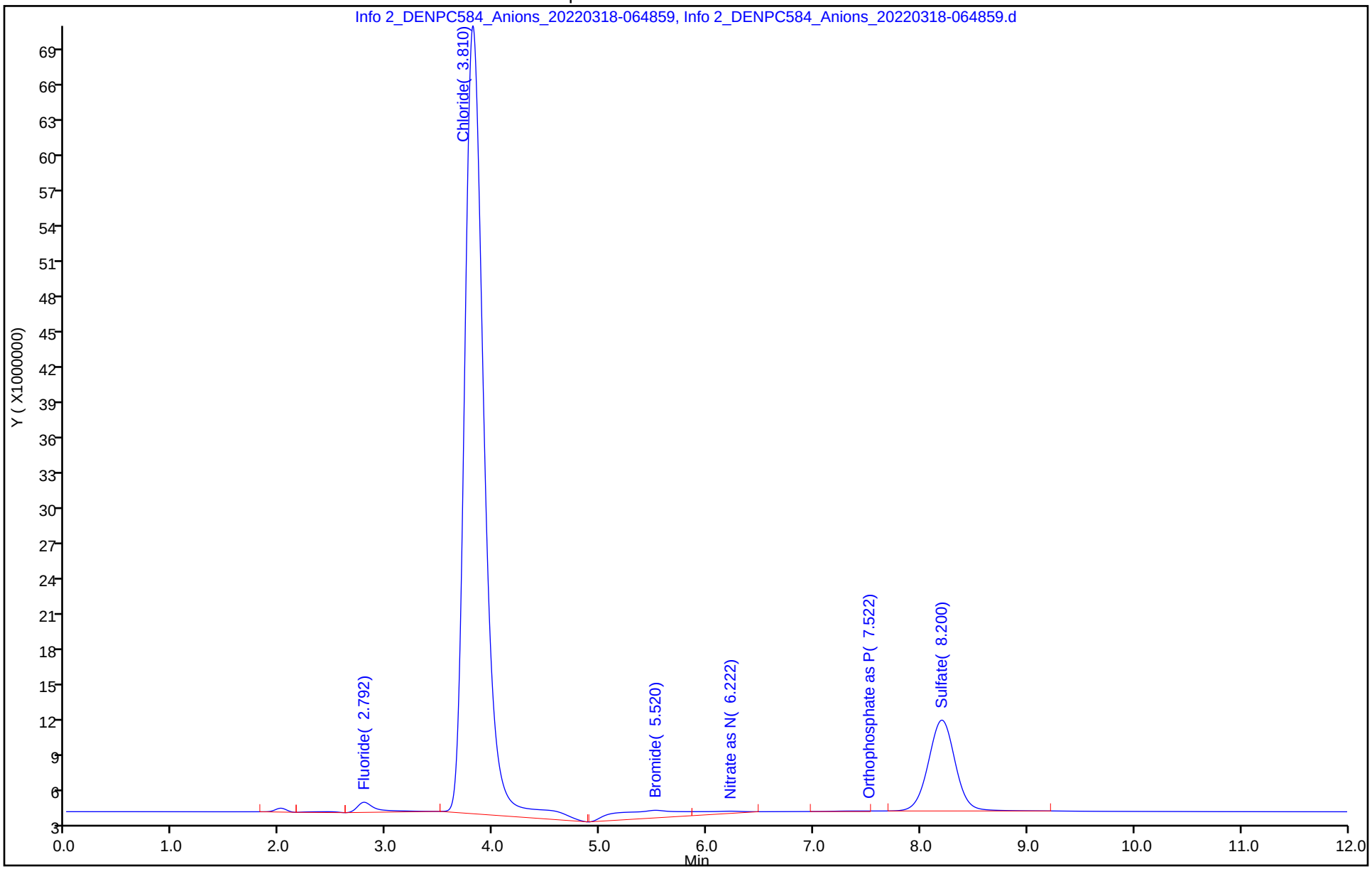
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 18-Mar-2022 13:34:53 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-064859.d				
Injection Date:	18-Mar-2022 06:33:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159332-F-10	Lab Sample ID:	280-159332-10	Worklist Smp#:	64
Client ID:	PZ018-8				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

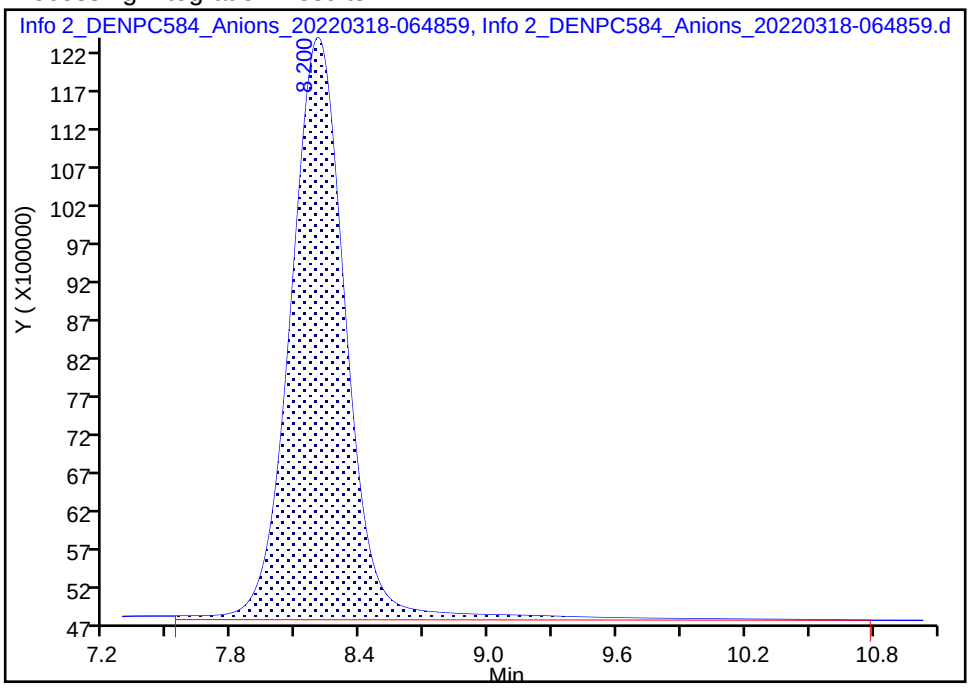
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-064				
Injection Date:	18-Mar-2022 06:33:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159332-F-10	Lab Sample ID:	280-159332-10		
Client ID:	PZ018-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	64
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

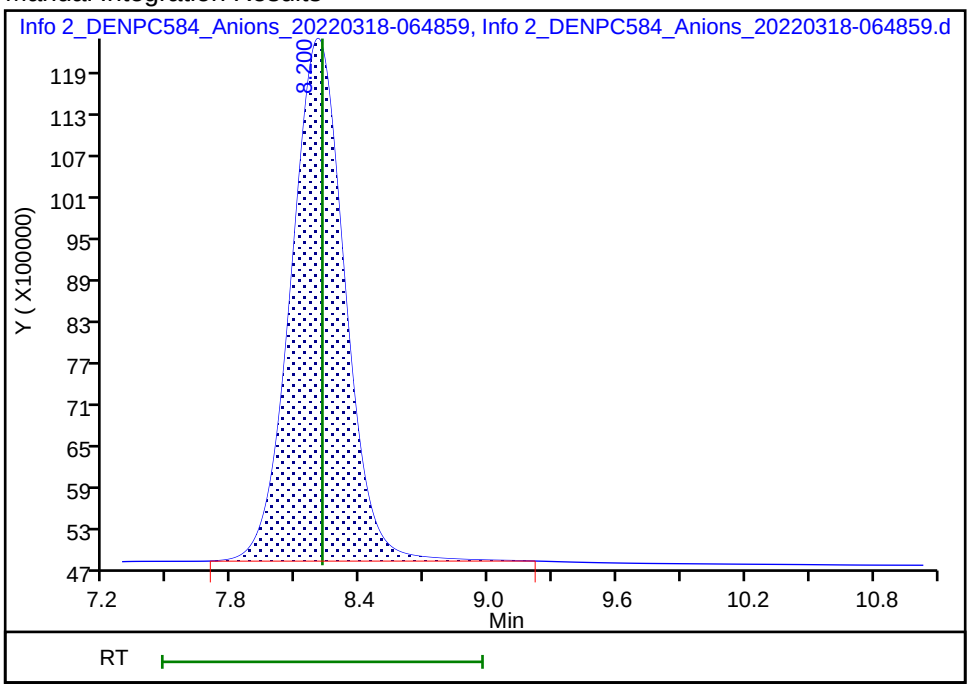
Processing Integration Results

RT: 8.20
Area: 139480736
Amount: 12.266174
Amount Units: ug/ml



Manual Integration Results

RT: 8.20
Area: 132428971
Amount: 11.582848
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:21:00
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-07(
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 18-Mar-2022 06:49:00 ALS Bottle#: 0 Worklist Smp#: 65
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-065
Misc. Info.: 280-0109325-065
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:34:53 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: jindaratc Date: 18-Mar-2022 09:58:36

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.787	2.787	0.000	123765170	5.00	4.60	M
2 Chloride	3.790	3.790	0.000	1386781016	100.0	98.0	
3 Nitrite as N	4.362	4.357	0.005	158296615	NC	NC	M
4 Bromide	5.377	5.370	0.007	27806312	5.00	4.55	M
5 Nitrate as N	6.037	6.020	0.017	170337381	NC	NC	
7 Orthophosphate as P	7.177	7.190	-0.013	96421692	NC	NC	
6 Sulfate	8.113	8.220	-0.107	1021690168	100.0	97.8	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

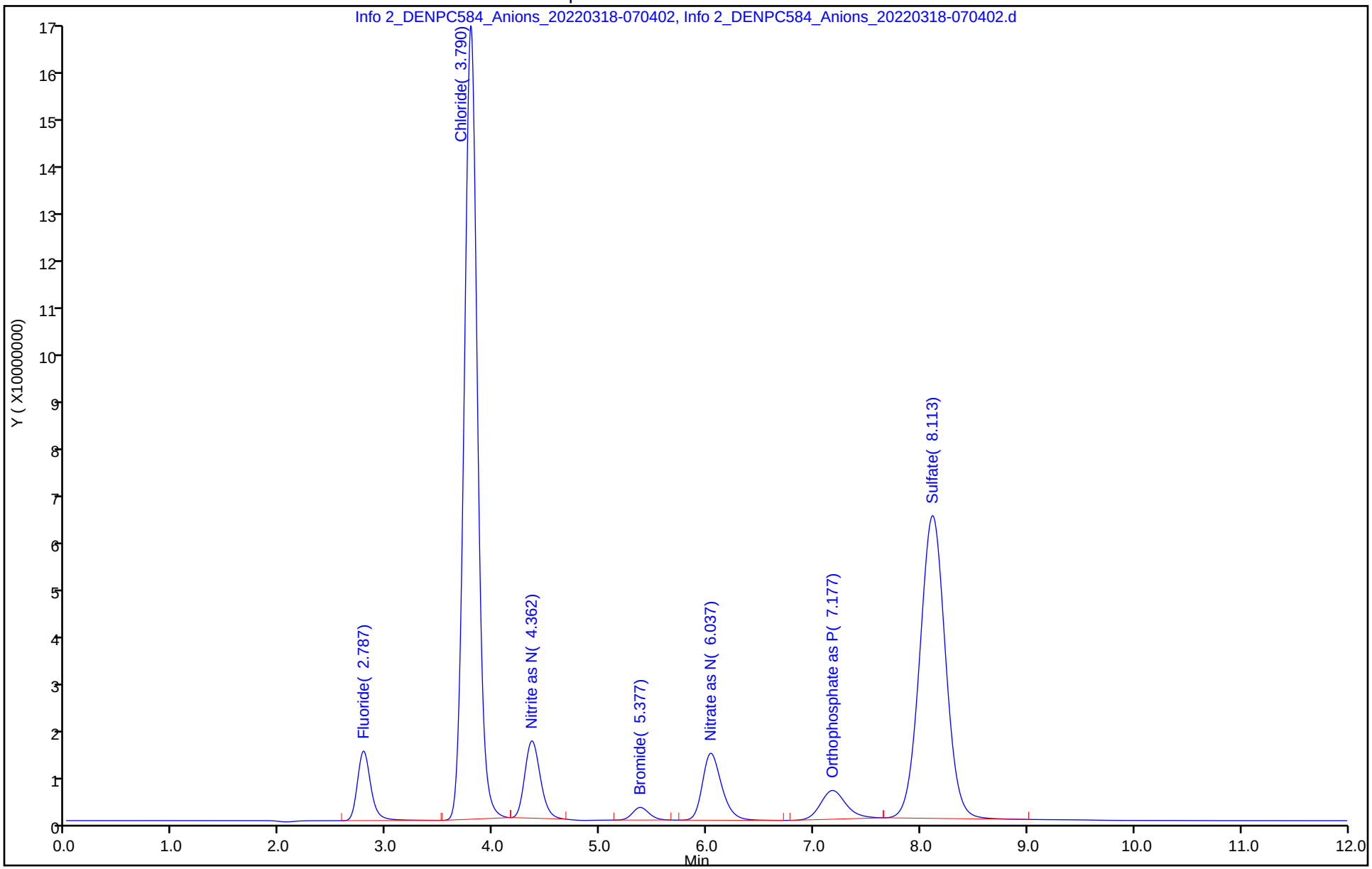
IC LCS_01863 Amount Added: 10.00 Units: mL

Report Date: 18-Mar-2022 13:34:53 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-070402.d

Injection Date:	18-Mar-2022 06:49:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	65
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

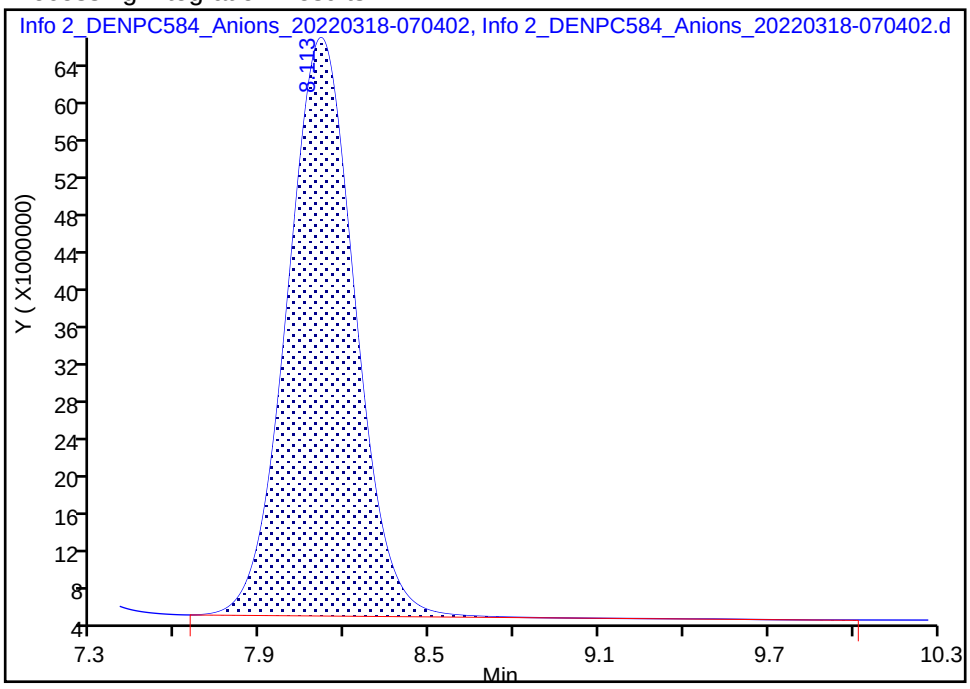
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-070				
Injection Date:	18-Mar-2022 06:49:00	Instrument ID:	WC_IonChrom13		
Lims ID:	ccv				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	65
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

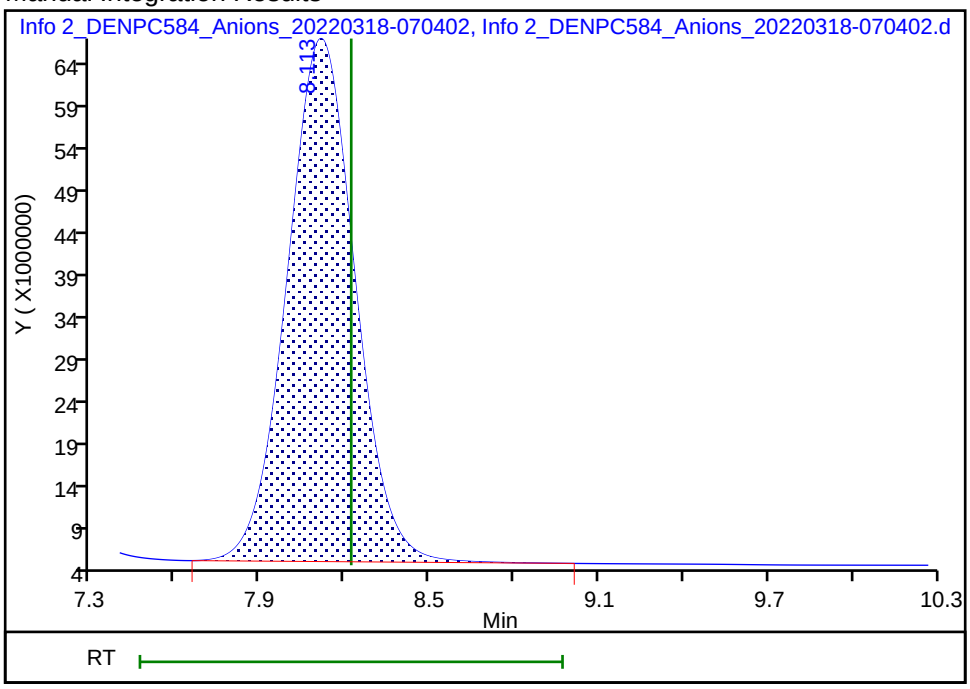
Processing Integration Results

RT: 8.11
Area: 1022628596
Amount: 97.844450
Amount Units: ug/ml



Manual Integration Results

RT: 8.11
Area: 1021690168
Amount: 97.753515
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:21:21

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-071
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 18-Mar-2022 07:04:00 ALS Bottle#: 0 Worklist Smp#: 66
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-066
Misc. Info.: 280-0109325-066
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:34:53 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:22:15

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.787				ND	U
2 Chloride		3.790				ND	
3 Nitrite as N		4.357				ND	
4 Bromide		5.370				ND	
5 Nitrate as N		6.020				ND	U
7 Orthophosphate as P	7.245	7.190	0.055	915220		NC	
6 Sulfate	8.208	8.220	-0.012	4968935		-0.7682	M

QC Flag Legend

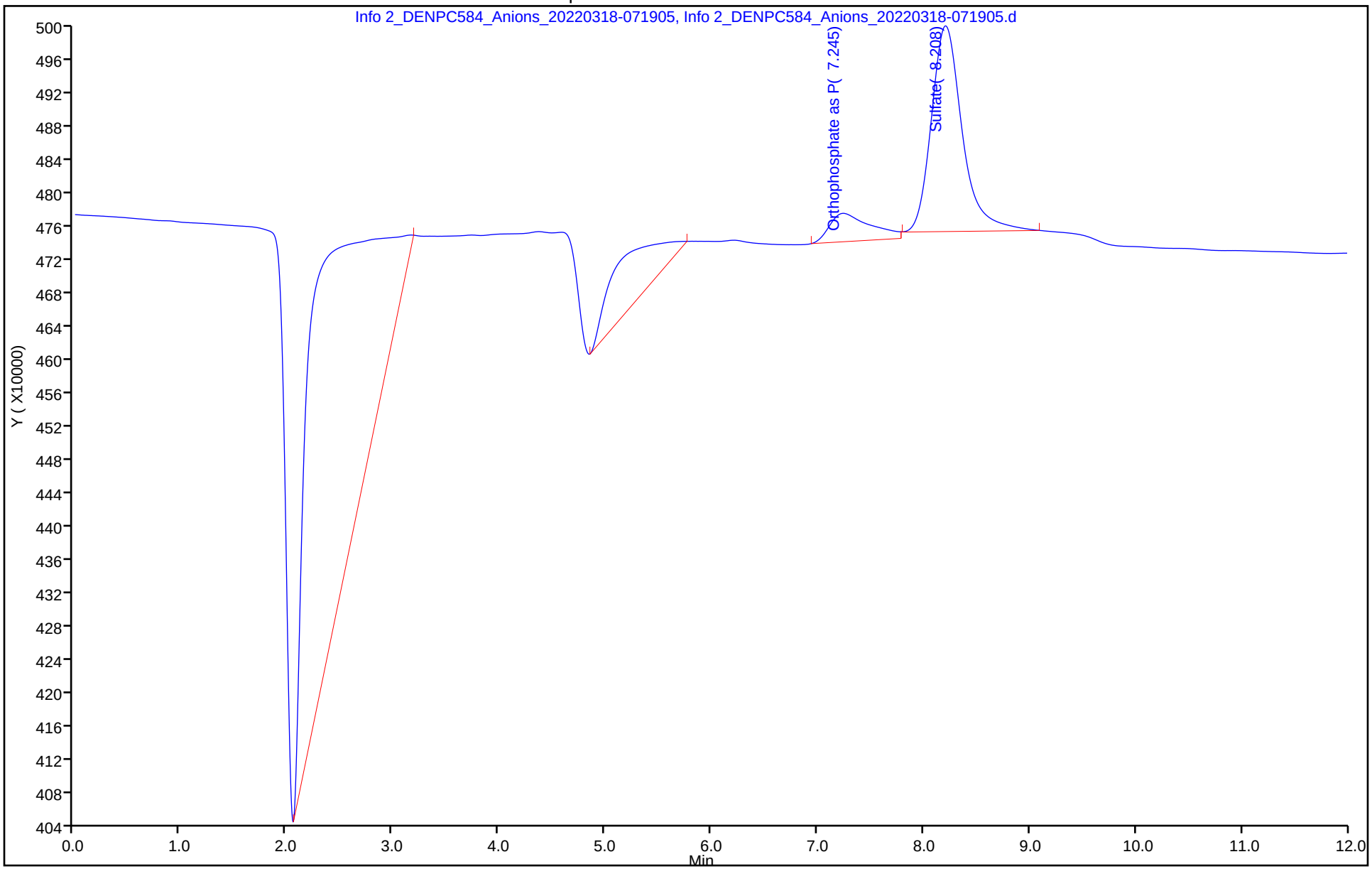
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 18-Mar-2022 13:34:54 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-071905.d

Injection Date:	18-Mar-2022 07:04:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	66
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-071

Injection Date: 18-Mar-2022 07:04:00 Instrument ID: WC_IonChrom13

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 66

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

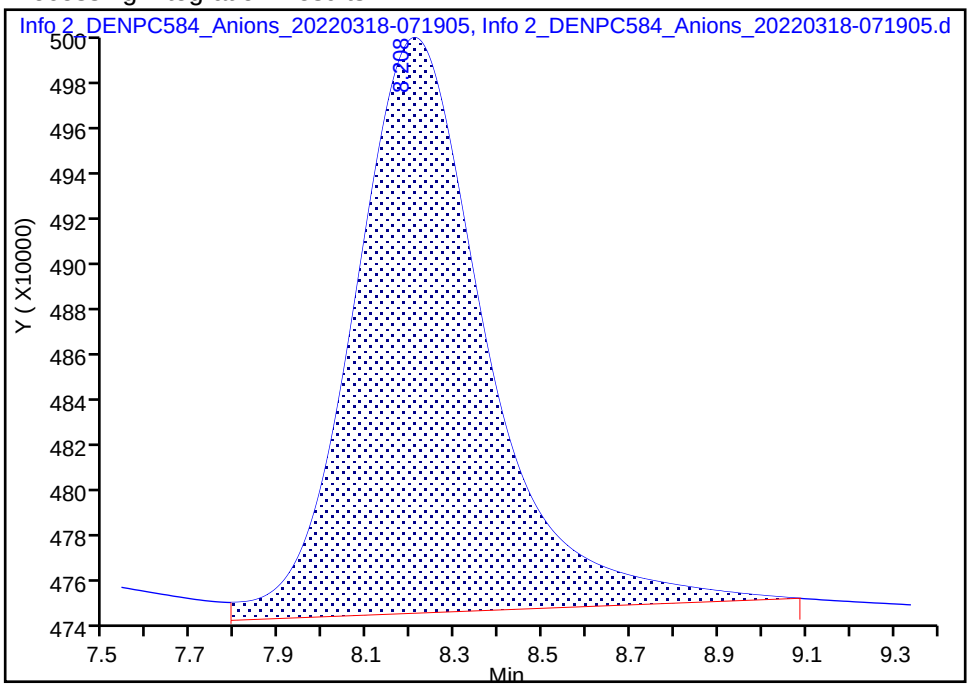
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

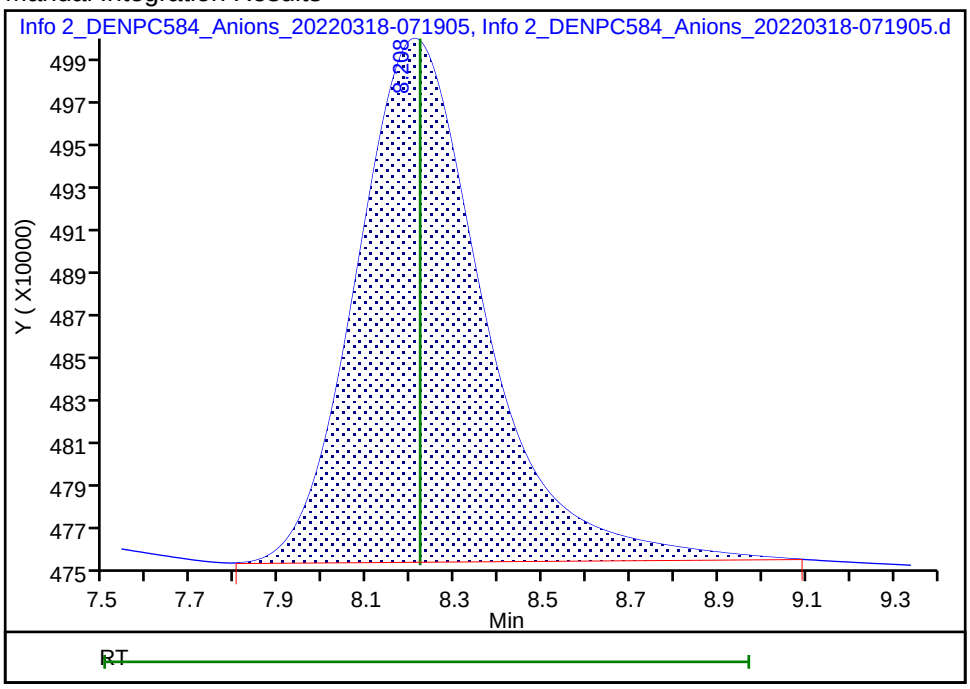
Processing Integration Results

RT: 8.21
Area: 5254338
Amount: -0.740554
Amount Units: ug/ml



Manual Integration Results

RT: 8.21
Area: 4968935
Amount: -0.768210
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:22:12

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-073
Lims ID: 280-159332-F-11
Client ID: PZ017R-8
Sample Type: Client
Inject. Date: 18-Mar-2022 07:19:00 ALS Bottle#: 0 Worklist Smp#: 67
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-067
Misc. Info.: 280-0109325-067
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:34:53 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:22:31

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.777	2.787	-0.010	7359763	0.2957	
2 Chloride	3.780	3.790	-0.010	508720431	36.0	
3 Nitrite as N		4.357			ND	
4 Bromide	5.487	5.370	0.117	30725925	5.02	
5 Nitrate as N	6.080	6.020	0.060	263723939	NC	
7 Orthophosphate as P	7.305	7.190	0.115	18326651	NC	
6 Sulfate	8.168	8.220	-0.052	759044201	72.3	M

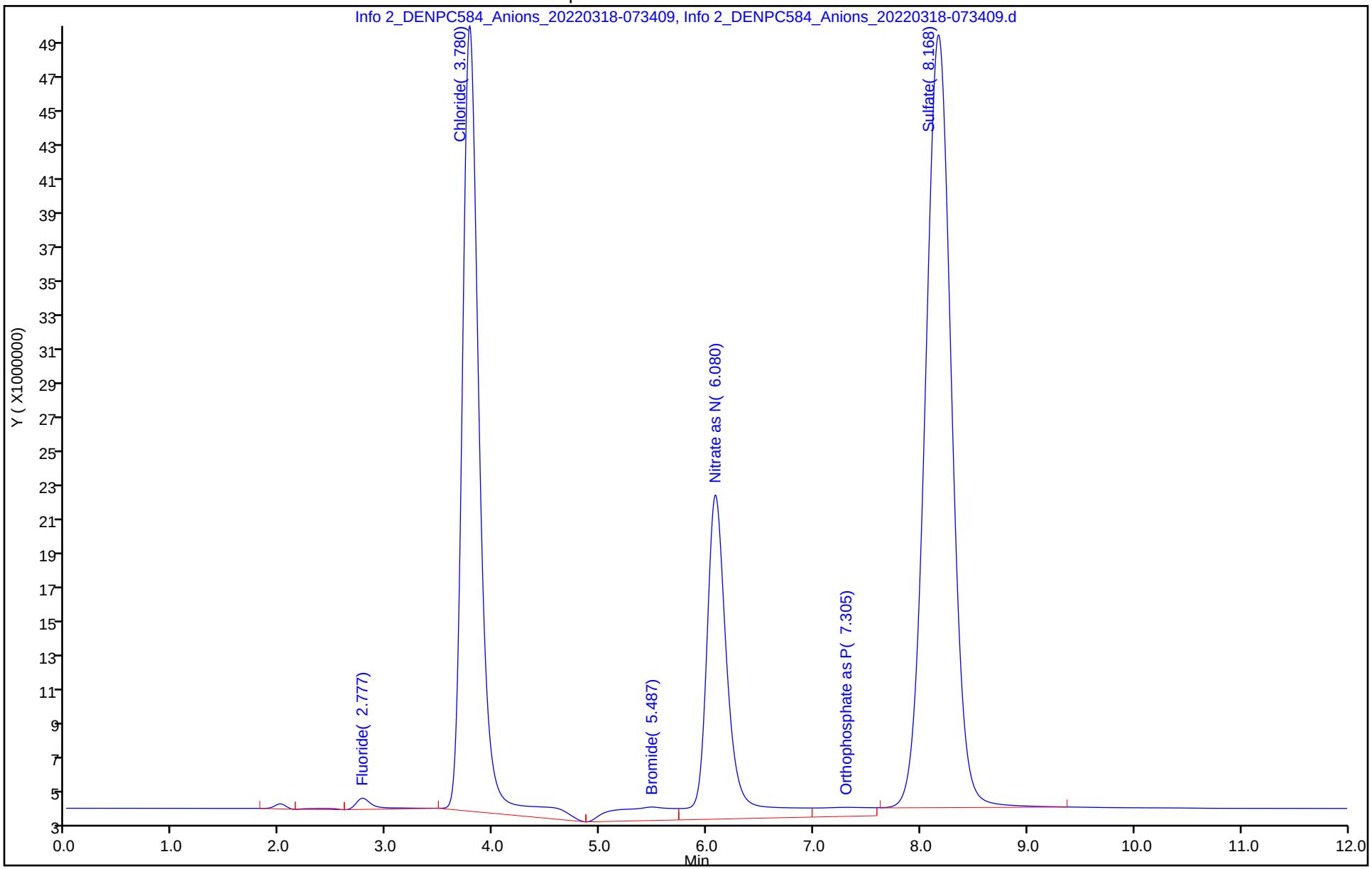
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 18-Mar-2022 13:34:55 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-073409.d				
Injection Date:	18-Mar-2022 07:19:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159332-F-11	Lab Sample ID:	280-159332-11	Worklist Smp#:	67
Client ID:	PZ017R-8				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

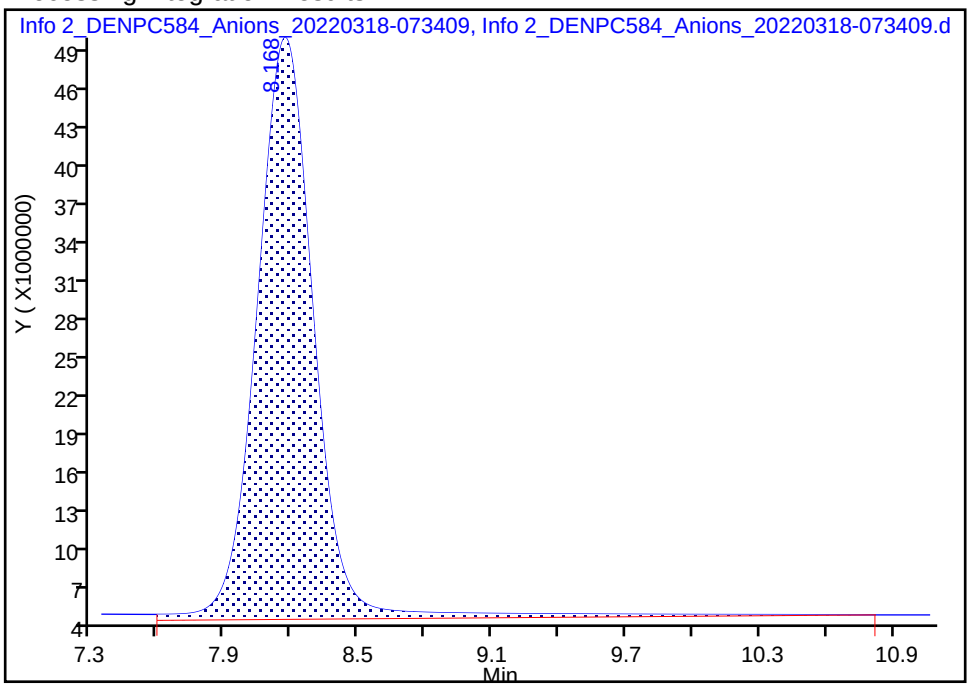
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-073				
Injection Date:	18-Mar-2022 07:19:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159332-F-11	Lab Sample ID:	280-159332-11		
Client ID:	PZ017R-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	67
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

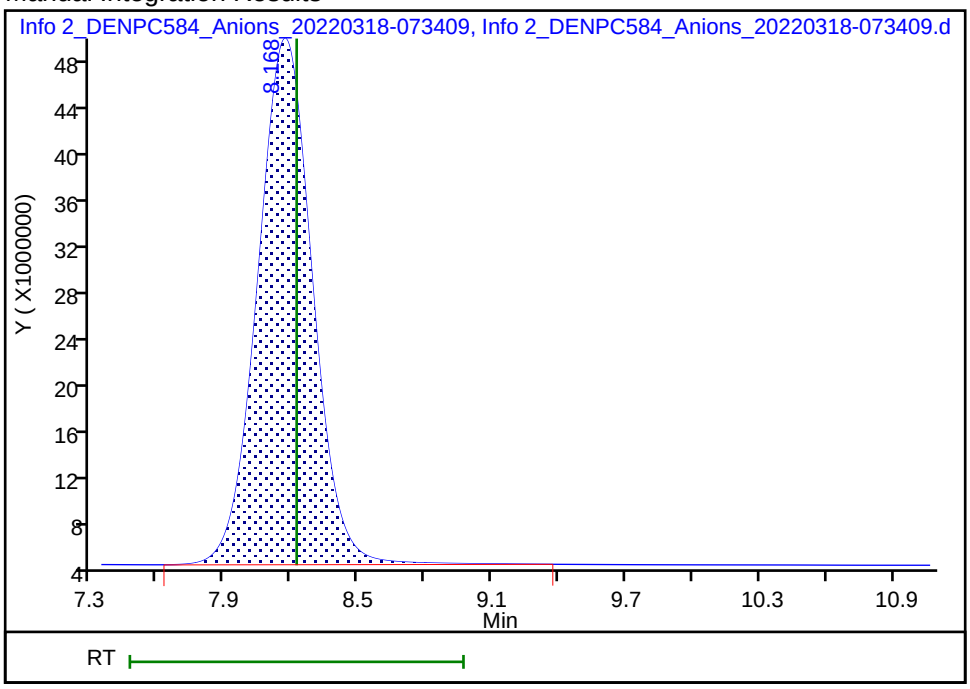
Processing Integration Results

RT: 8.17
Area: 808224119
Amount: 77.068353
Amount Units: ug/ml



Manual Integration Results

RT: 8.17
Area: 759044201
Amount: 72.302749
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:22:28
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-074
Lims ID: 280-159332-F-12
Client ID: PZ021-8
Sample Type: Client
Inject. Date: 18-Mar-2022 07:34:00 ALS Bottle#: 0 Worklist Smp#: 68
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-068
Misc. Info.: 280-0109325-068
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:34:53 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:22:44

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.778	2.787	-0.009	7395710	0.2970	
2 Chloride	3.783	3.790	-0.007	508149395	35.9	
3 Nitrite as N		4.357			ND	
4 Bromide	5.490	5.370	0.120	31537459	5.16	
5 Nitrate as N	6.087	6.020	0.067	263701482	NC	
7 Orthophosphate as P	7.308	7.190	0.118	17171280	NC	
6 Sulfate	8.173	8.220	-0.047	765499854	72.9	M

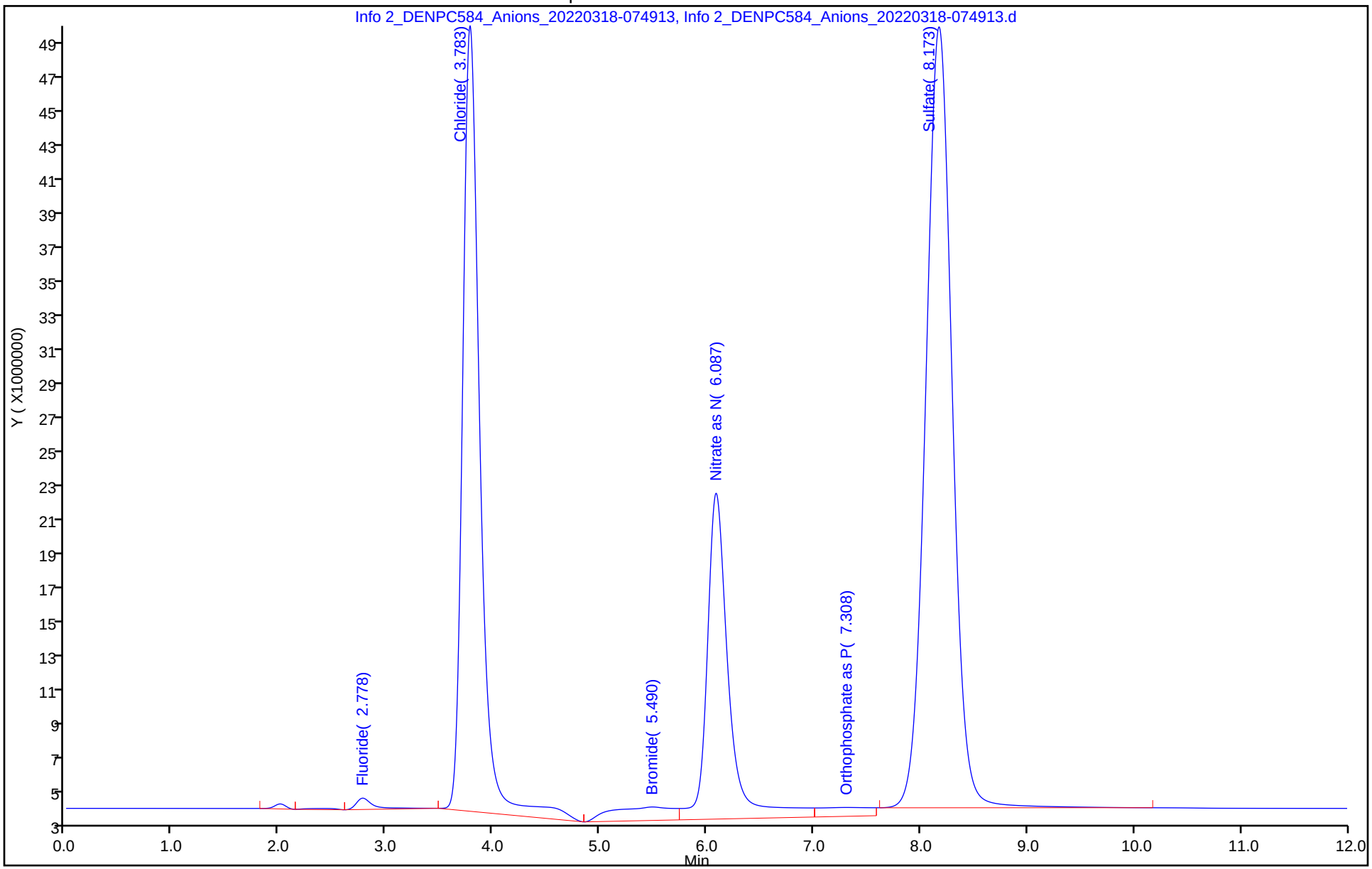
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 18-Mar-2022 13:34:55 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-074913.d				
Injection Date:	18-Mar-2022 07:34:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159332-F-12	Lab Sample ID:	280-159332-12	Worklist Smp#:	68
Client ID:	PZ021-8				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

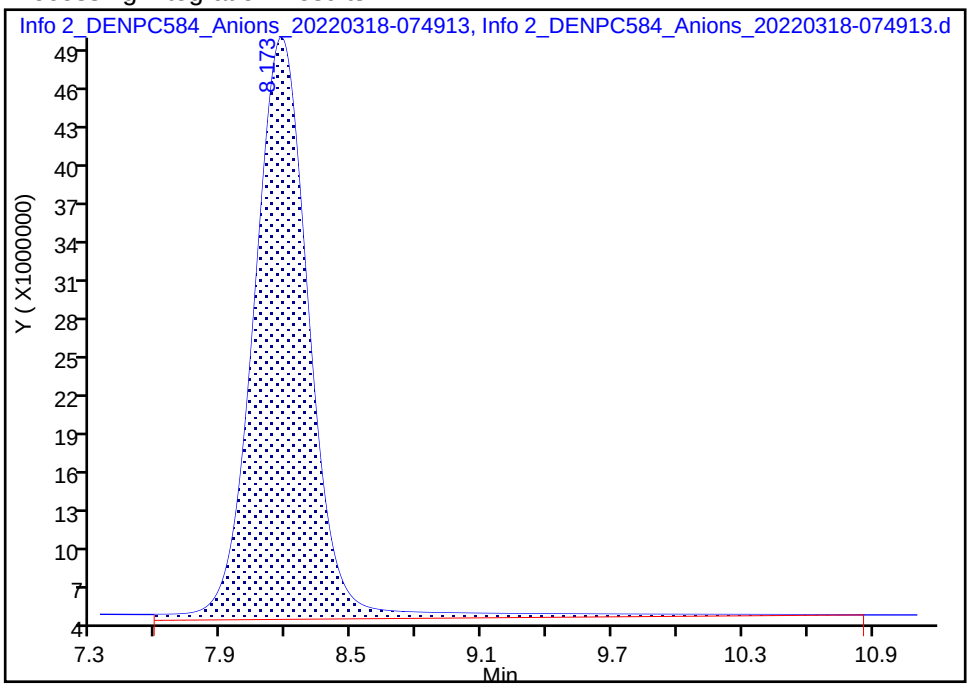
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-074				
Injection Date:	18-Mar-2022 07:34:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159332-F-12	Lab Sample ID:	280-159332-12		
Client ID:	PZ021-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	68
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

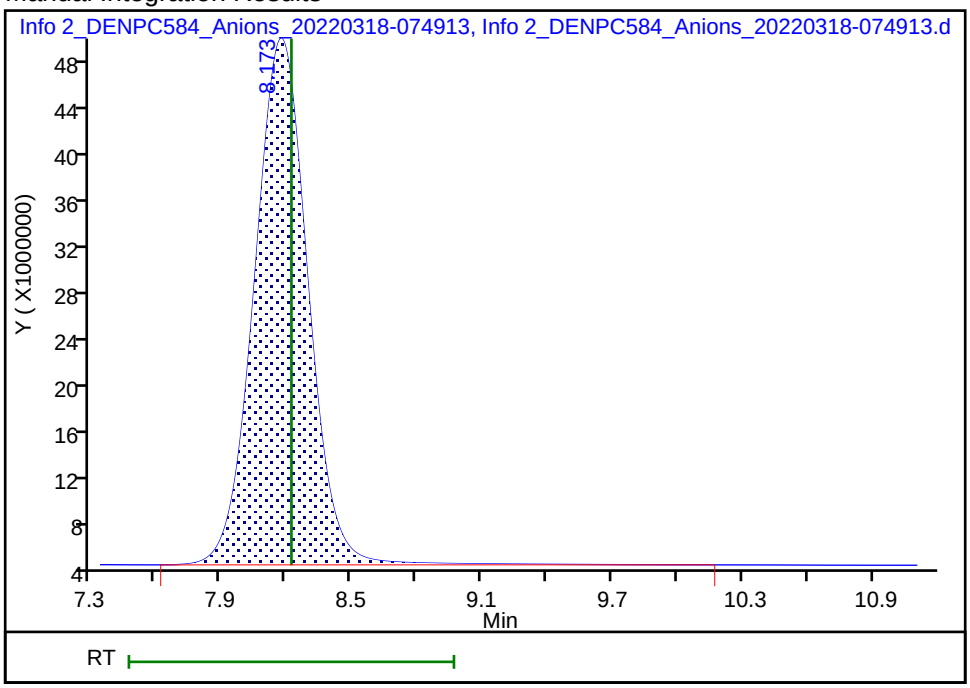
Processing Integration Results

RT: 8.17
Area: 812383524
Amount: 77.471405
Amount Units: ug/ml



Manual Integration Results

RT: 8.17
Area: 765499854
Amount: 72.928311
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:22:42
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-080
Lims ID: 280-159332-F-13
Client ID: PZ019-8
Sample Type: Client
Inject. Date: 18-Mar-2022 07:49:00 ALS Bottle#: 0 Worklist Smp#: 69
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-069
Misc. Info.: 280-0109325-069
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:34:53 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:22:59

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.782	2.787	-0.005	3064050	0.1370	
2 Chloride	3.768	3.790	-0.022	287754902	20.3	M
3 Nitrite as N		4.357			ND	
4 Bromide	5.433	5.370	0.063	660127	0.1059	Ma
5 Nitrate as N	6.003	6.020	-0.017	1576357971	NC	Ma
7 Orthophosphate as P	7.272	7.190	0.082	4778809	NC	
6 Sulfate	8.155	8.220	-0.065	872616741	83.3	M

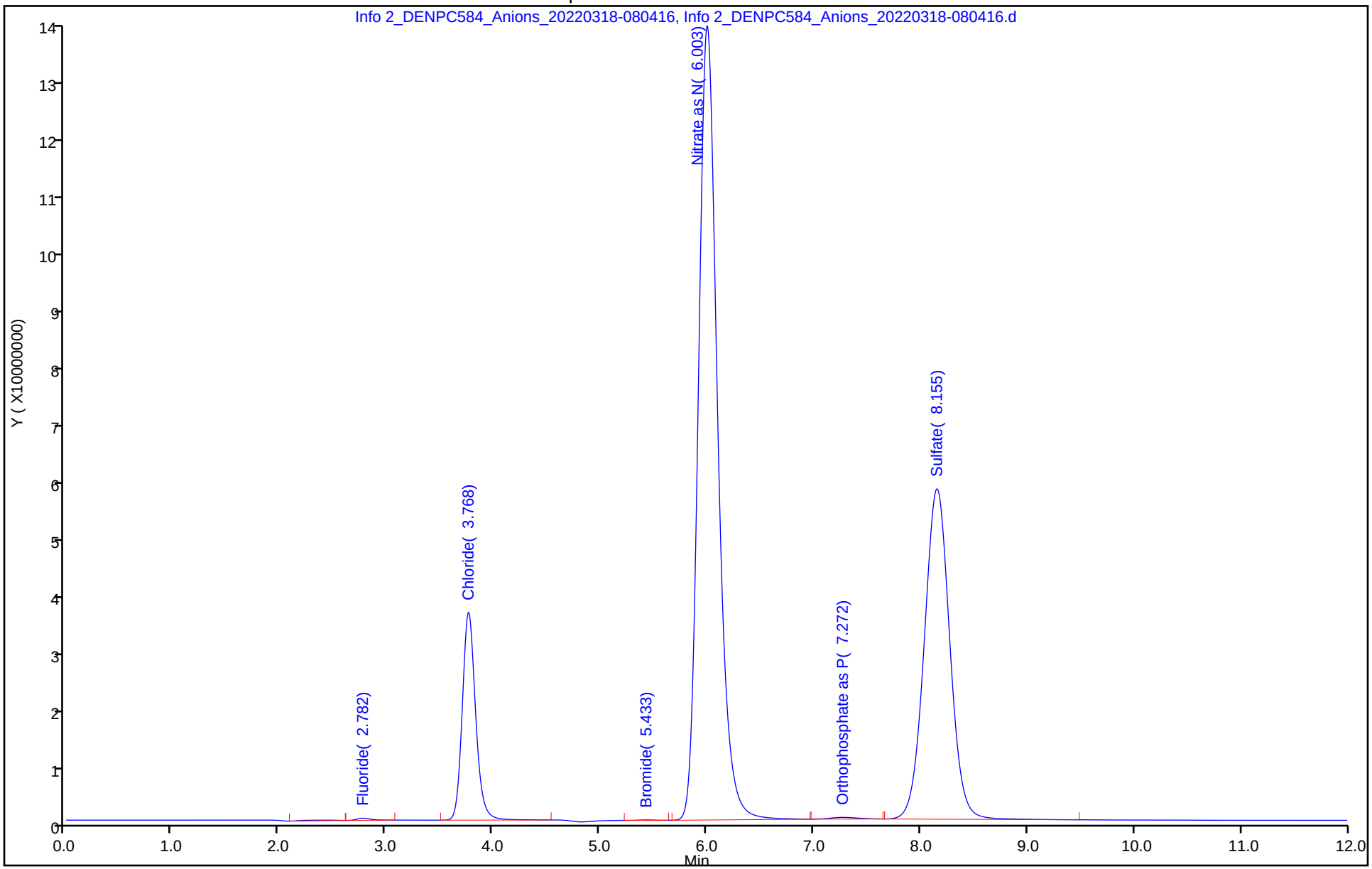
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 18-Mar-2022 13:34:55 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-080416.d				
Injection Date:	18-Mar-2022 07:49:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159332-F-13	Lab Sample ID:	280-159332-13	Worklist Smp#:	69
Client ID:	PZ019-8				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

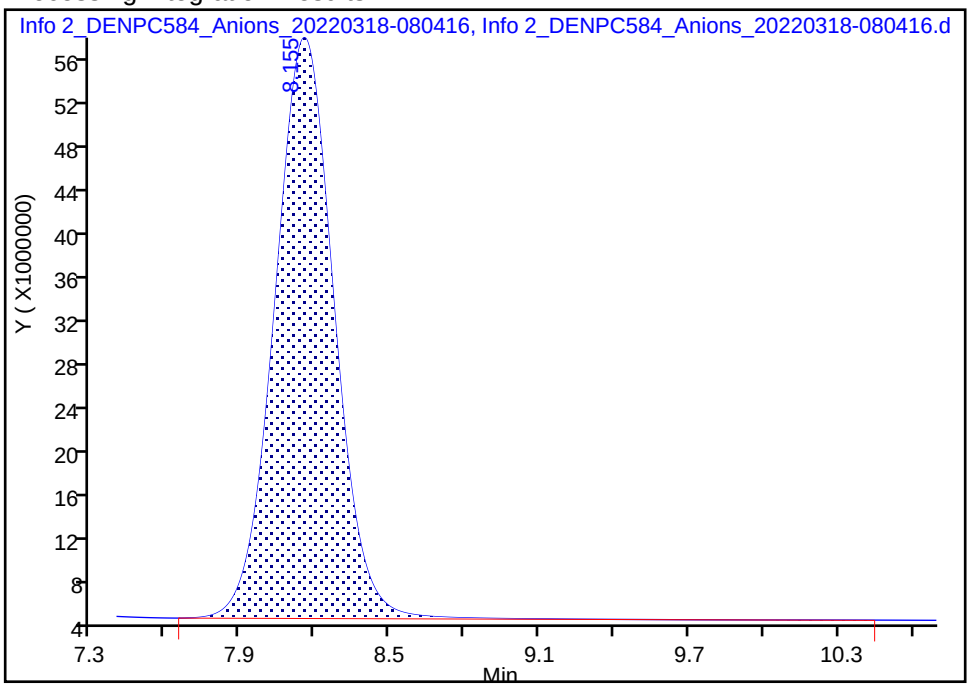
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-080				
Injection Date:	18-Mar-2022 07:49:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159332-F-13	Lab Sample ID:	280-159332-13		
Client ID:	PZ019-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	69
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

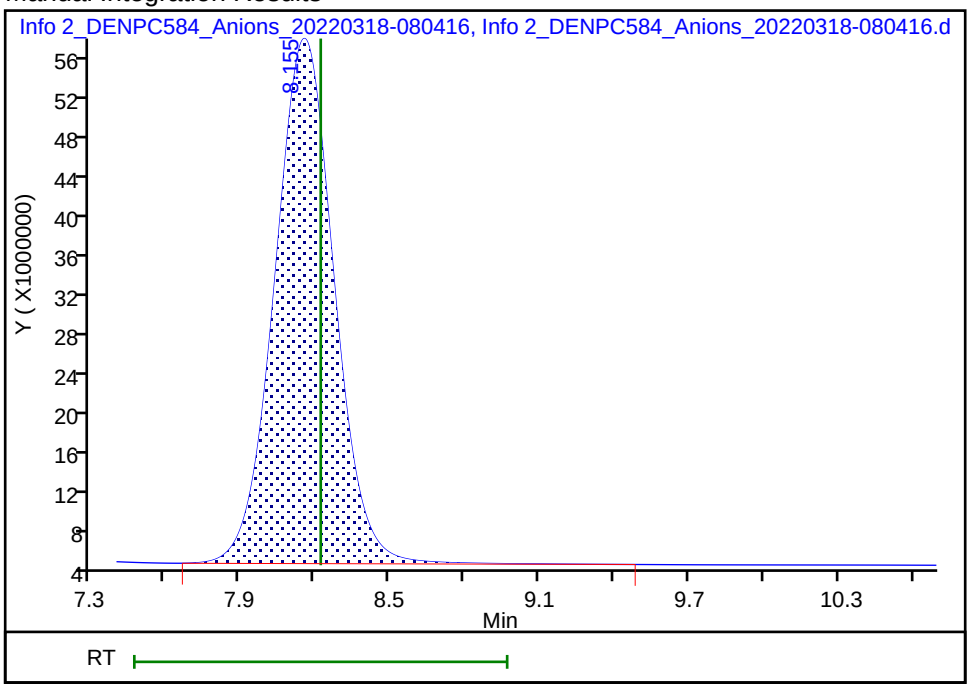
Processing Integration Results

RT: 8.16
Area: 873592508
Amount: 83.402642
Amount Units: ug/ml



Manual Integration Results

RT: 8.16
Area: 872616741
Amount: 83.308089
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:22:56
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-081
Lims ID: 280-159332-F-13 DU
Client ID:
Sample Type: DU
Inject. Date: 18-Mar-2022 08:04:00 ALS Bottle#: 0 Worklist Smp#: 70
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-070
Misc. Info.: 280-0109325-070
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:34:53 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:23:07

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.782	2.787	-0.005	3014762		0.1352	
2 Chloride	3.768	3.790	-0.022	284971680		20.1	M
3 Nitrite as N		4.357				ND	
4 Bromide	5.430	5.370	0.060	648583		0.1040	M
5 Nitrate as N	6.002	6.020	-0.018	1559858523		NC	M
7 Orthophosphate as P	7.272	7.190	0.082	5069390		NC	
6 Sulfate	8.155	8.220	-0.065	863492956		82.4	M

QC Flag Legend

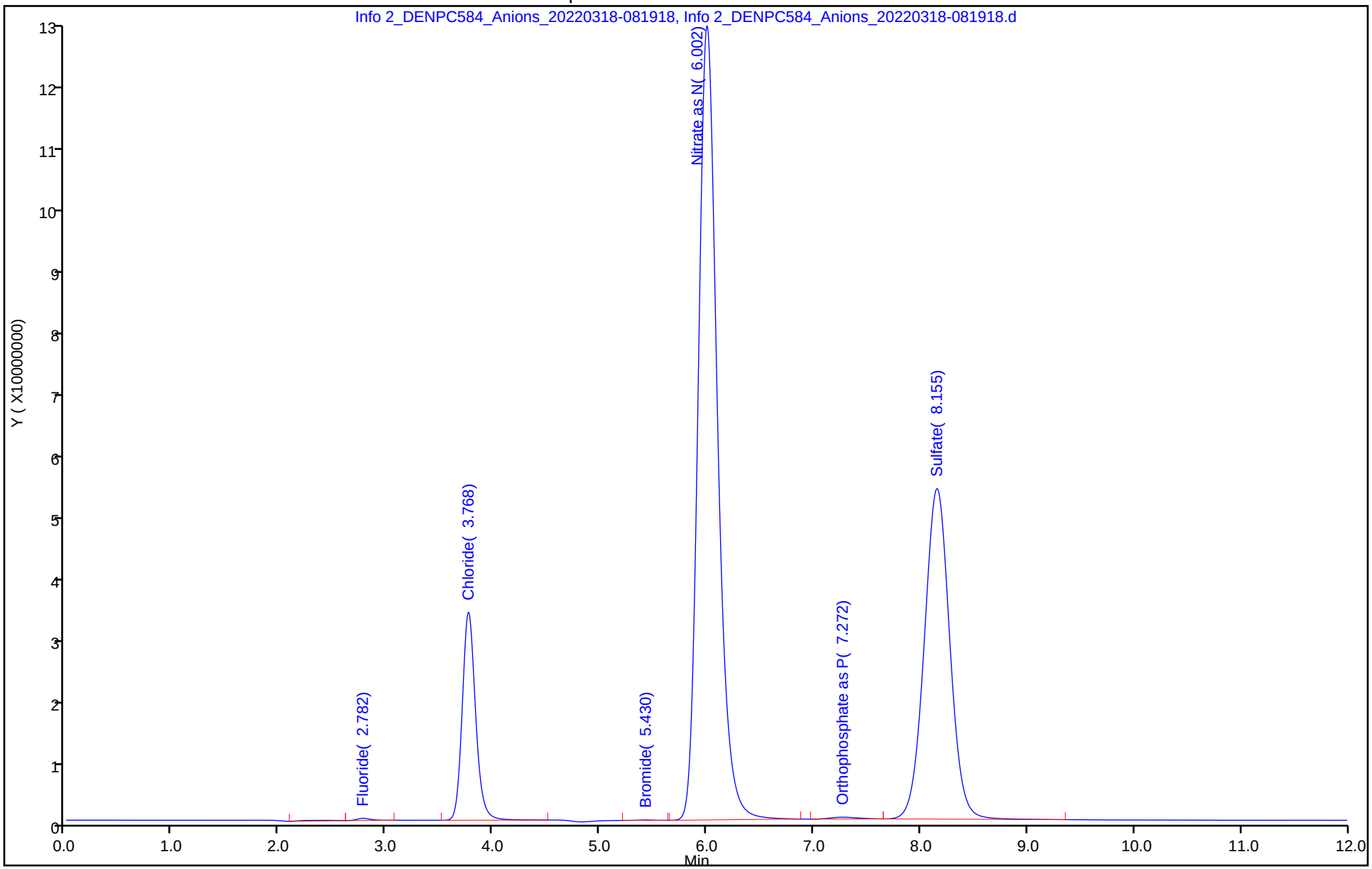
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 18-Mar-2022 13:34:56 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-081918.d

Injection Date:	18-Mar-2022 08:04:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159332-F-13 DU			Worklist Smp#:	70
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-081

Injection Date: 18-Mar-2022 08:04:00 Instrument ID: WC_IonChrom13

Lims ID: 280-159332-F-13 DU

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 70

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

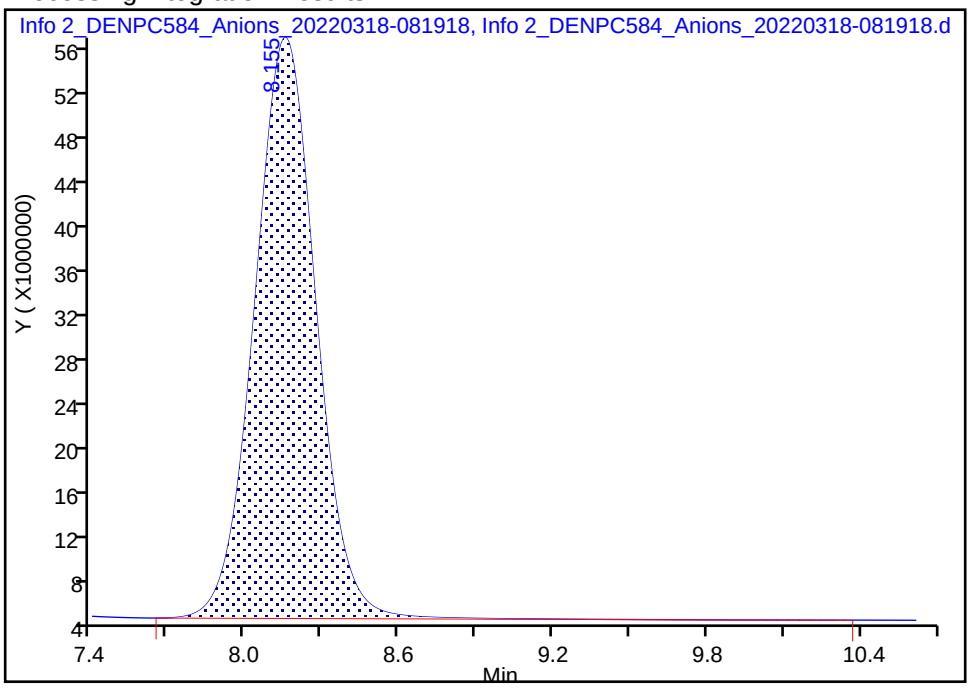
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

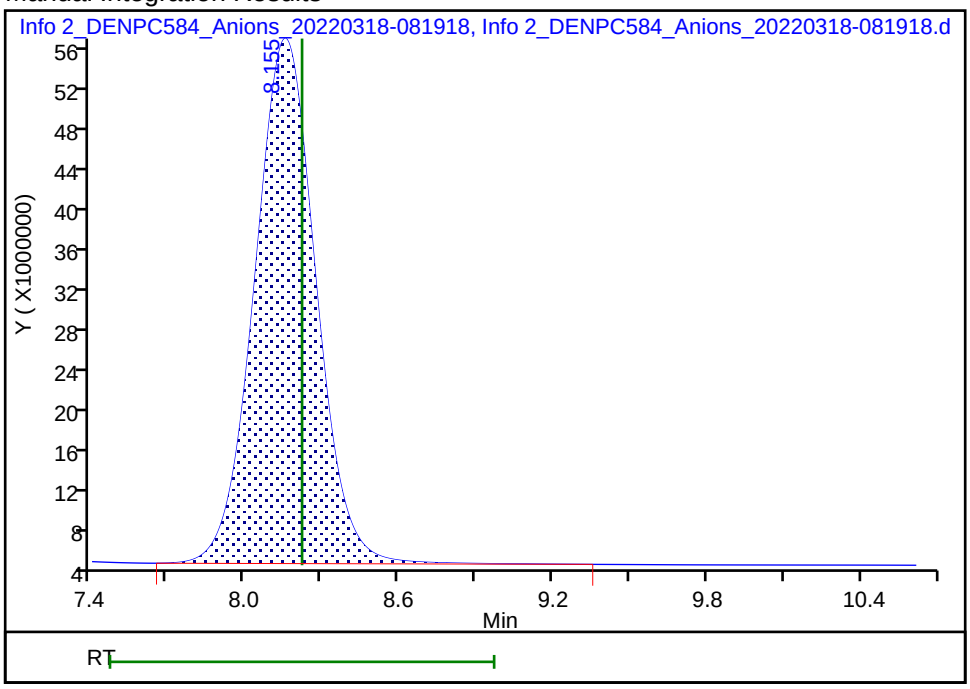
Processing Integration Results

RT: 8.16
Area: 864948705
Amount: 82.565045
Amount Units: ug/ml



Manual Integration Results

RT: 8.16
Area: 863492956
Amount: 82.423981
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:28:41

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-083
Lims ID: 280-159332-F-13 MS
Client ID: PZ019-8
Sample Type: MS
Inject. Date: 18-Mar-2022 08:19:00 ALS Bottle#: 0 Worklist Smp#: 71
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-071
Misc. Info.: 280-0109325-071
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:34:53 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:29:16

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.787	2.787	0.000	135811602	5.00	5.04	
2 Chloride	3.778	3.790	-0.012	1060321418	50.0	74.9	
3 Nitrite as N	4.357	4.357	0.000	164487814	NC	NC	M
4 Bromide	5.397	5.370	0.027	30124390	5.00	4.92	M
5 Nitrate as N	6.000	6.020	-0.020	1746626894	NC	NC	
7 Orthophosphate as P	7.230	7.190	0.040	114732190	NC	NC	
6 Sulfate	8.143	8.220	-0.077	1411606154	50.0	135.5	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

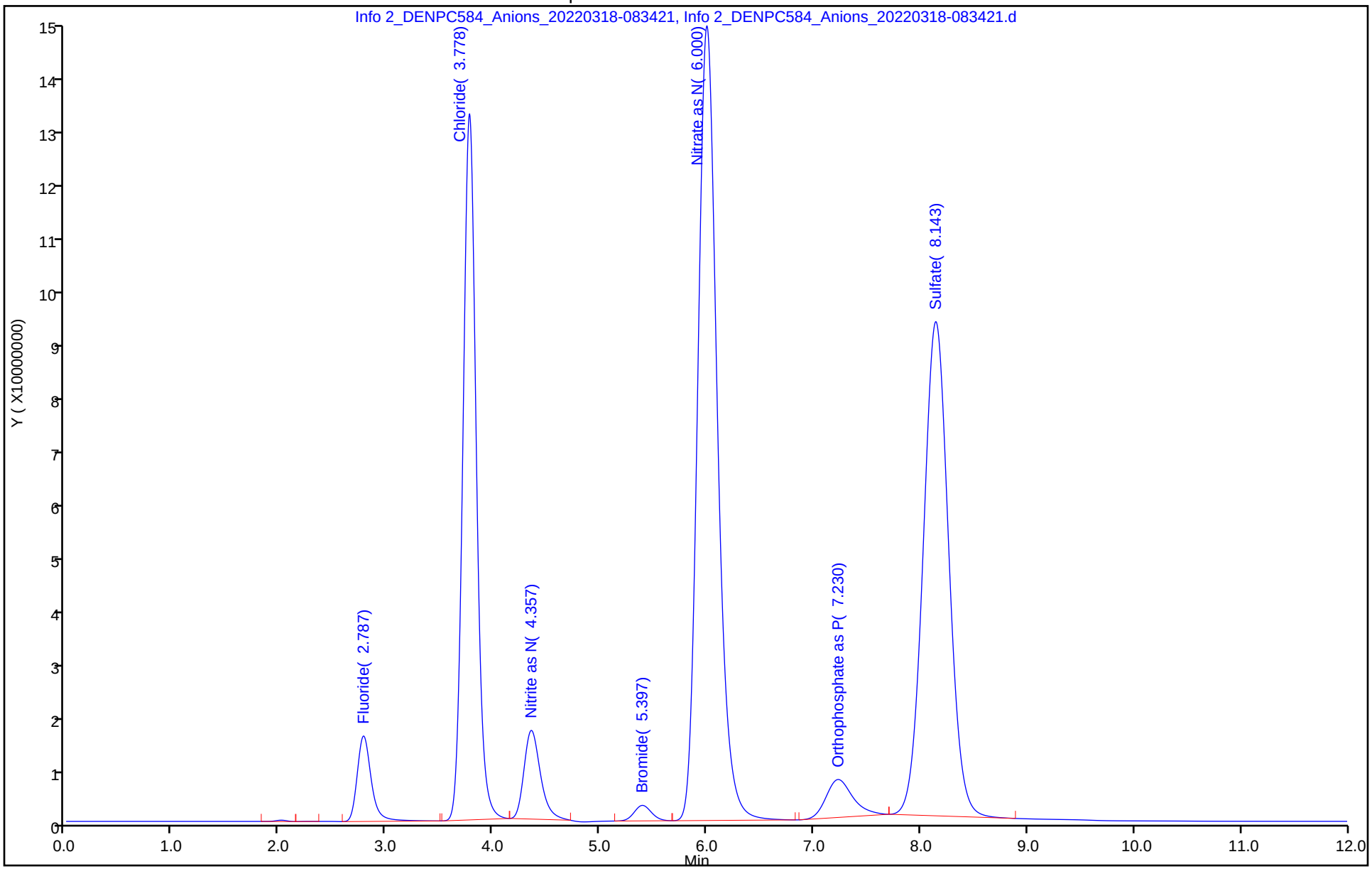
Reagents:

ICMS/MSD WEEK_00748 Amount Added: 0.10 Units: mL

Report Date: 18-Mar-2022 13:34:57 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-083421.d				
Injection Date:	18-Mar-2022 08:19:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159332-F-13 MS			Worklist Smp#:	71
Client ID:	PZ019-8				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

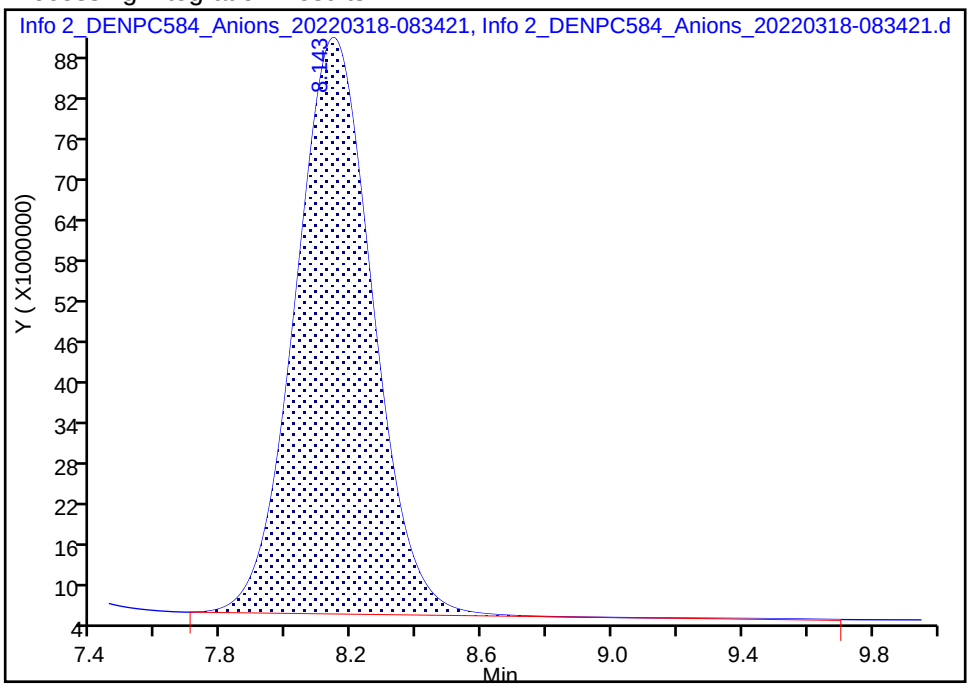
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-083				
Injection Date:	18-Mar-2022 08:19:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159332-F-13 MS				
Client ID:	PZ019-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	71
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

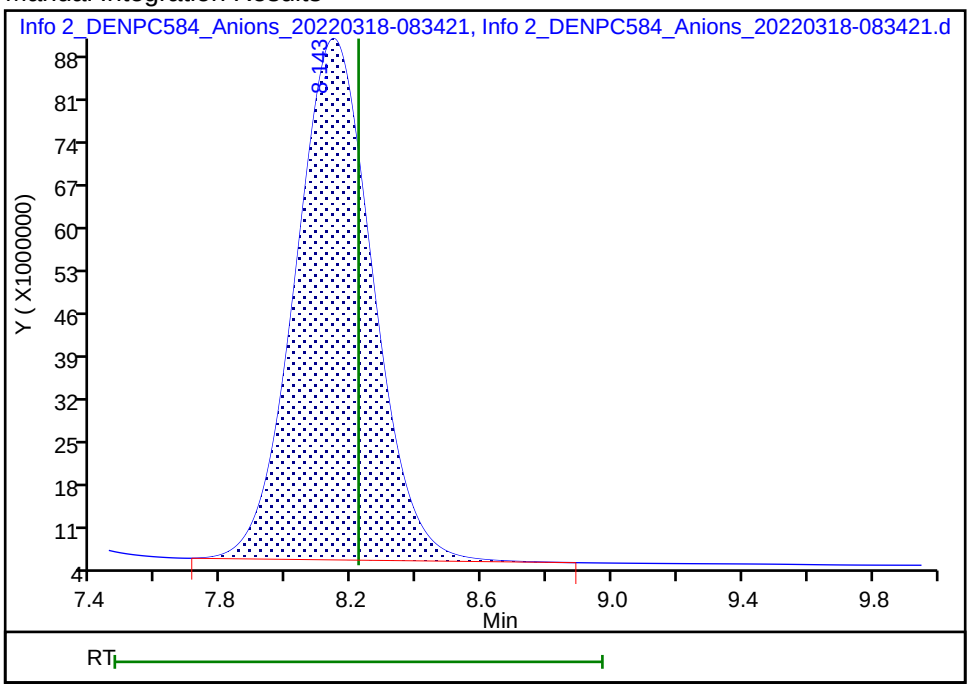
Processing Integration Results

RT: 8.14
Area: 1415195168
Amount: 135.8847
Amount Units: ug/ml



Manual Integration Results

RT: 8.14
Area: 1411606154
Amount: 135.5369
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:29:09

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-084
Lims ID: 280-159332-F-13 MSD
Client ID: PZ019-8
Sample Type: MSD
Inject. Date: 18-Mar-2022 08:34:00 ALS Bottle#: 0 Worklist Smp#: 72
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-072
Misc. Info.: 280-0109325-072
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:34:53 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:29:48

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.798	2.787	0.011	143645541	5.00	5.33	
2 Chloride	3.790	3.790	0.000	1108360287	50.0	78.3	
3 Nitrite as N	4.367	4.357	0.010	175004911	NC	NC	M
4 Bromide	5.400	5.370	0.030	32286897	5.00	5.28	M
5 Nitrate as N	6.005	6.020	-0.015	1740869565	NC	NC	
7 Orthophosphate as P	7.243	7.190	0.053	126451861	NC	NC	
6 Sulfate	8.152	8.220	-0.068	1430544147	50.0	137.4	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

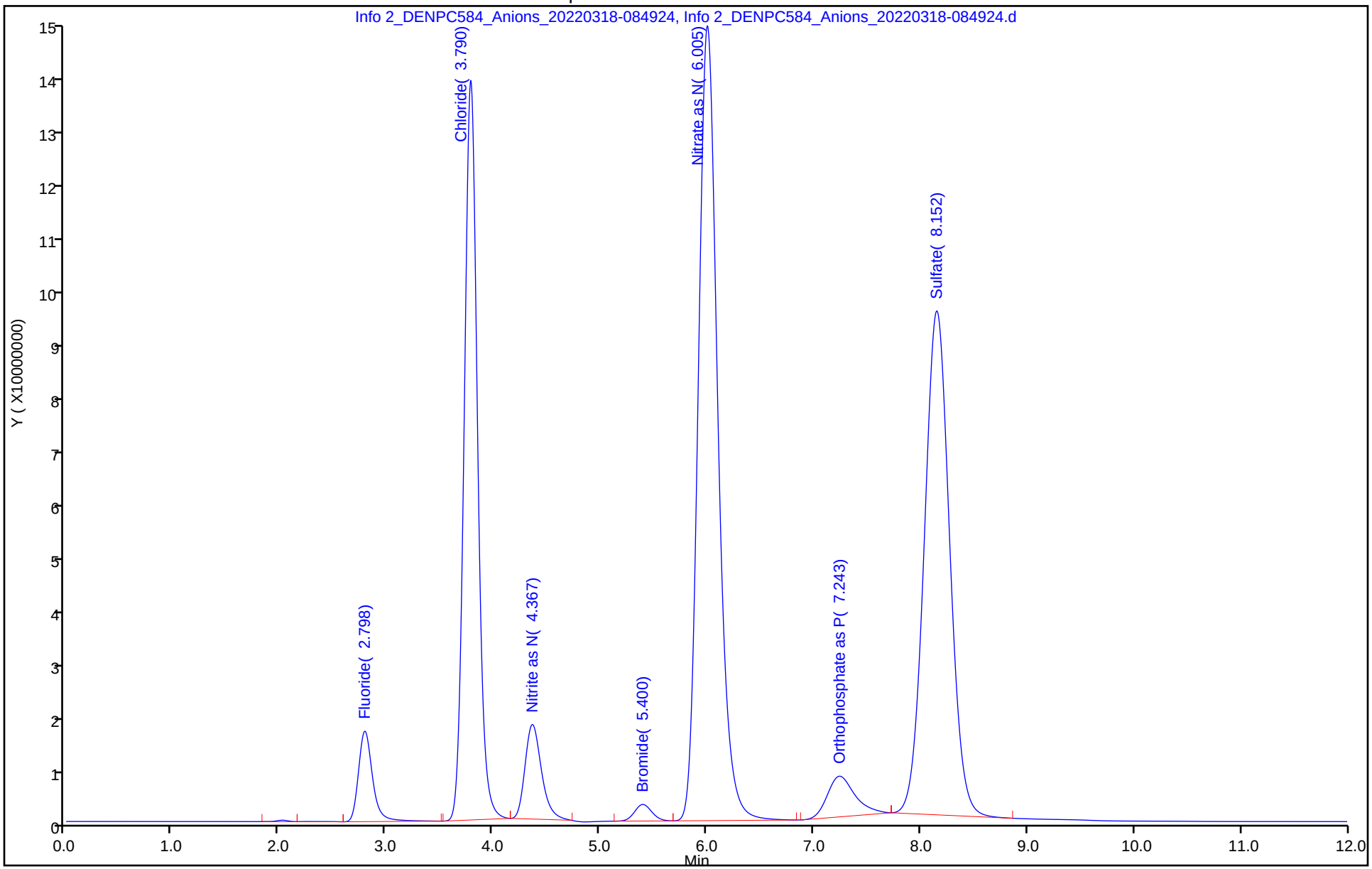
Reagents:

ICMS/MSD WEEK_00748 Amount Added: 0.10 Units: mL

Report Date: 18-Mar-2022 13:34:57 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-084924.d				
Injection Date:	18-Mar-2022 08:34:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159332-F-13 MSD			Worklist Smp#:	72
Client ID:	PZ019-8				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

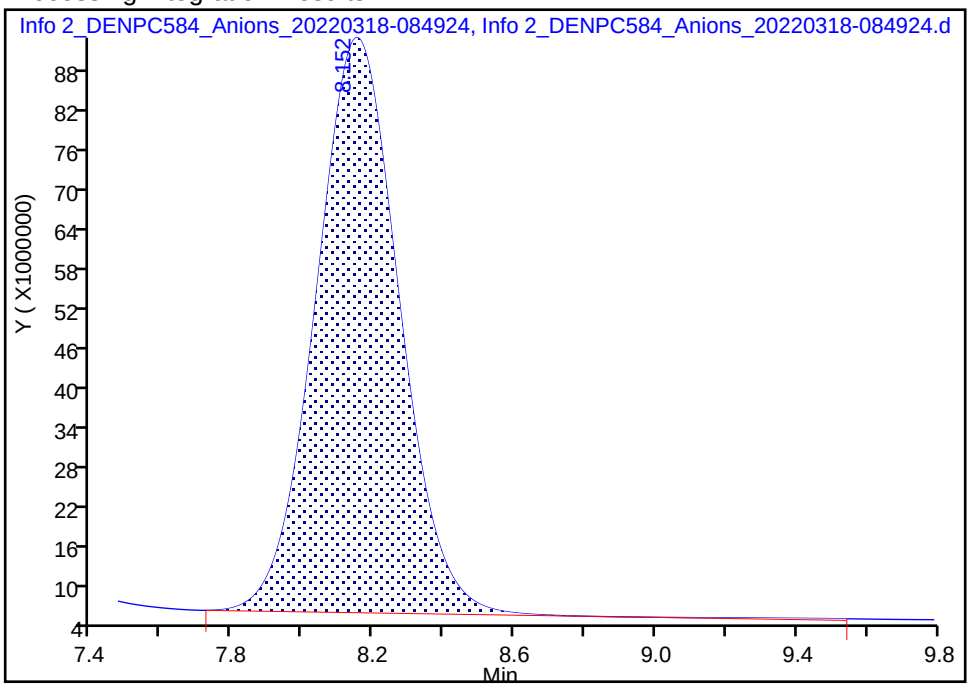
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-084				
Injection Date:	18-Mar-2022 08:34:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159332-F-13 MSD				
Client ID:	PZ019-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	72
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

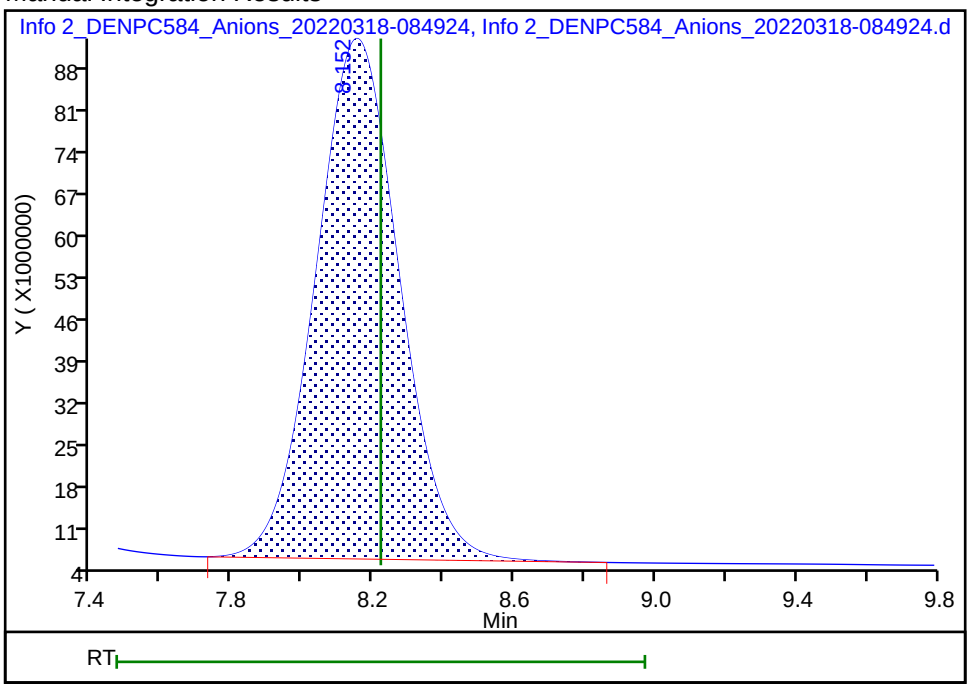
Processing Integration Results

RT: 8.15
Area: 1434697330
Amount: 137.7745
Amount Units: ug/ml



Manual Integration Results

RT: 8.15
Area: 1430544147
Amount: 137.3720
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:29:43

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-100
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 18-Mar-2022 09:49:00 ALS Bottle#: 0 Worklist Smp#: 77
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-077
Misc. Info.: 280-0109325-077
Operator ID: wetchemd Instrument ID: WC_IonChrom13
Sublist: chrom-Anions-IC13*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:35:00 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:32:25

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.790	2.787	0.003	123281055	5.00	4.58	M
2 Chloride	3.790	3.790	0.000	1390740943	100.0	98.3	
3 Nitrite as N	4.358	4.357	0.001	159180031	NC	NC	M
4 Bromide	5.360	5.370	-0.010	28108882	5.00	4.59	M
5 Nitrate as N	6.017	6.020	-0.003	170941562	NC	NC	
7 Orthophosphate as P	7.183	7.190	-0.007	96119680	NC	NC	
6 Sulfate	8.127	8.220	-0.093	1024522944	100.0	98.0	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

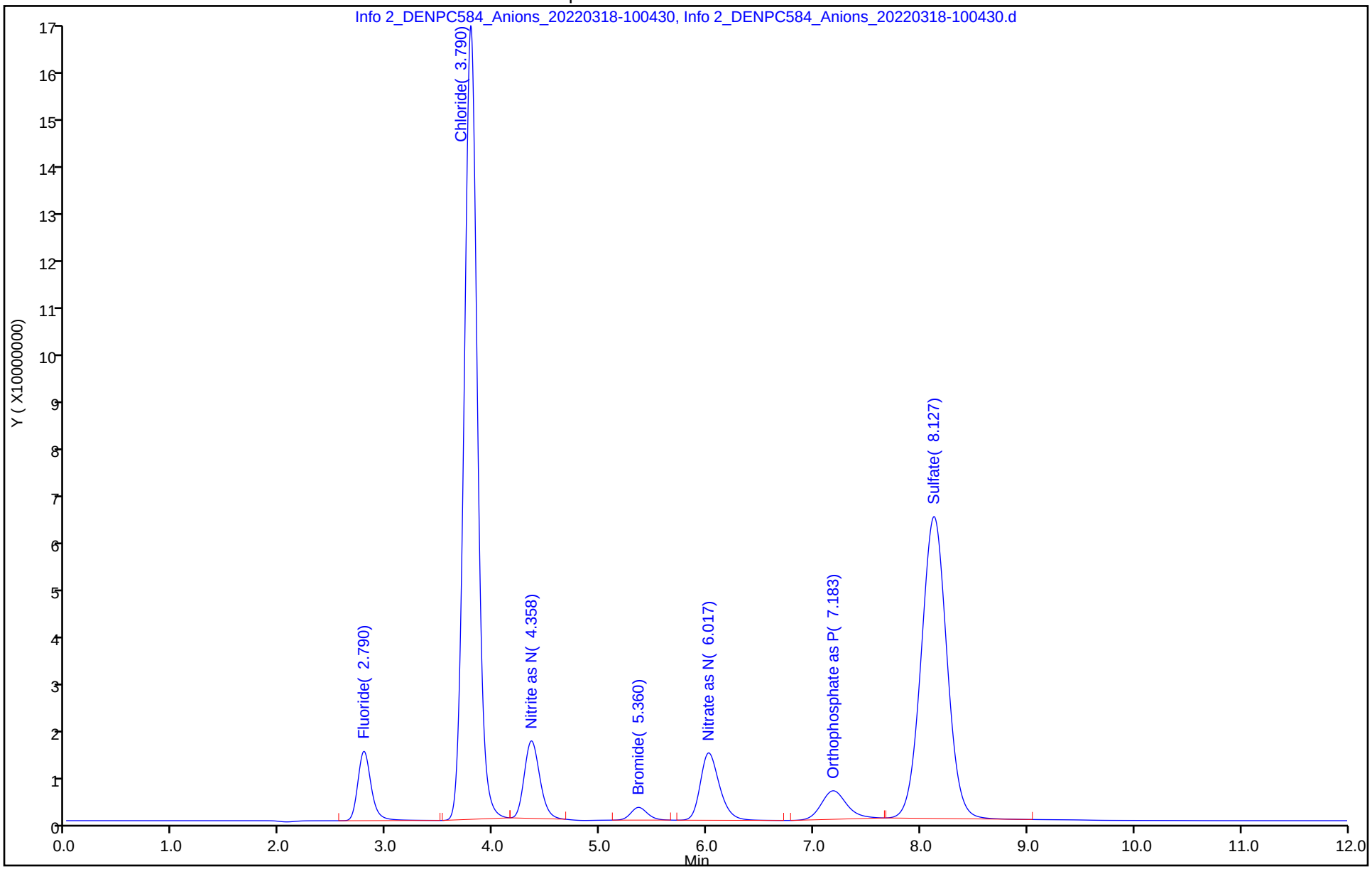
Reagents:

IC LCS_01863 Amount Added: 10.00 Units: mL

Report Date: 18-Mar-2022 13:35:00 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-100430.d				
Injection Date:	18-Mar-2022 09:49:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	77
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

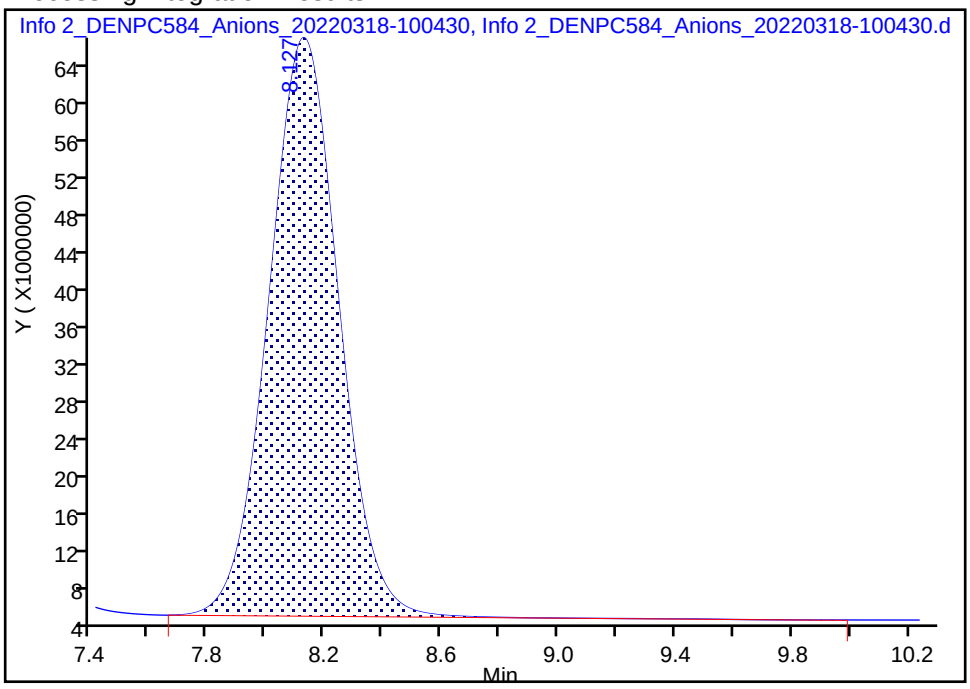
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-100				
Injection Date:	18-Mar-2022 09:49:00	Instrument ID:	WC_IonChrom13		
Lims ID:	ccv				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	77
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

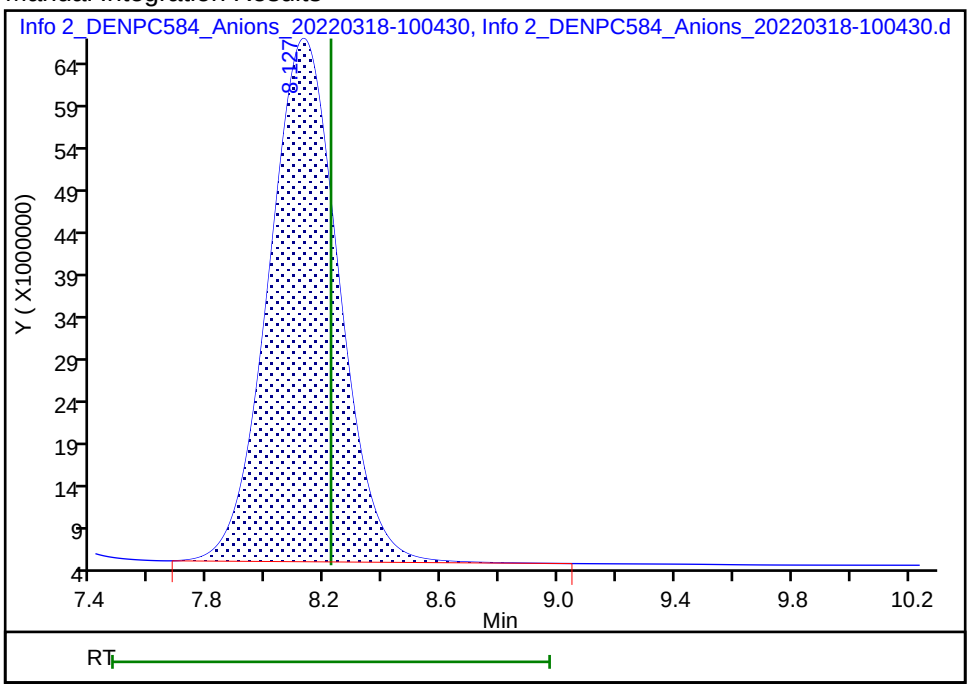
Processing Integration Results

RT: 8.13
Area: 1025867954
Amount: 98.158348
Amount Units: ug/ml



Manual Integration Results

RT: 8.13
Area: 1024522944
Amount: 98.028015
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:32:18
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-101
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 18-Mar-2022 10:04:00 ALS Bottle#: 0 Worklist Smp#: 78
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-078
Misc. Info.: 280-0109325-078
Operator ID: wetchemd Instrument ID: WC_IonChrom13

Method: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Anions-IC13.m
Limit Group: Wet - Anions 28D
Last Update: 18-Mar-2022 13:35:00 Calib Date: 16-Mar-2022 15:34:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-154

Column 1 : Det: 0005
Process Host: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:32:47

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.787				ND	U
2 Chloride		3.790				ND	
3 Nitrite as N		4.357				ND	
4 Bromide		5.370				ND	U
5 Nitrate as N		6.020				ND	
7 Orthophosphate as P	7.262	7.190	0.072	1008153		NC	
6 Sulfate	8.225	8.220	0.005	4736147		-0.7908	M

QC Flag Legend

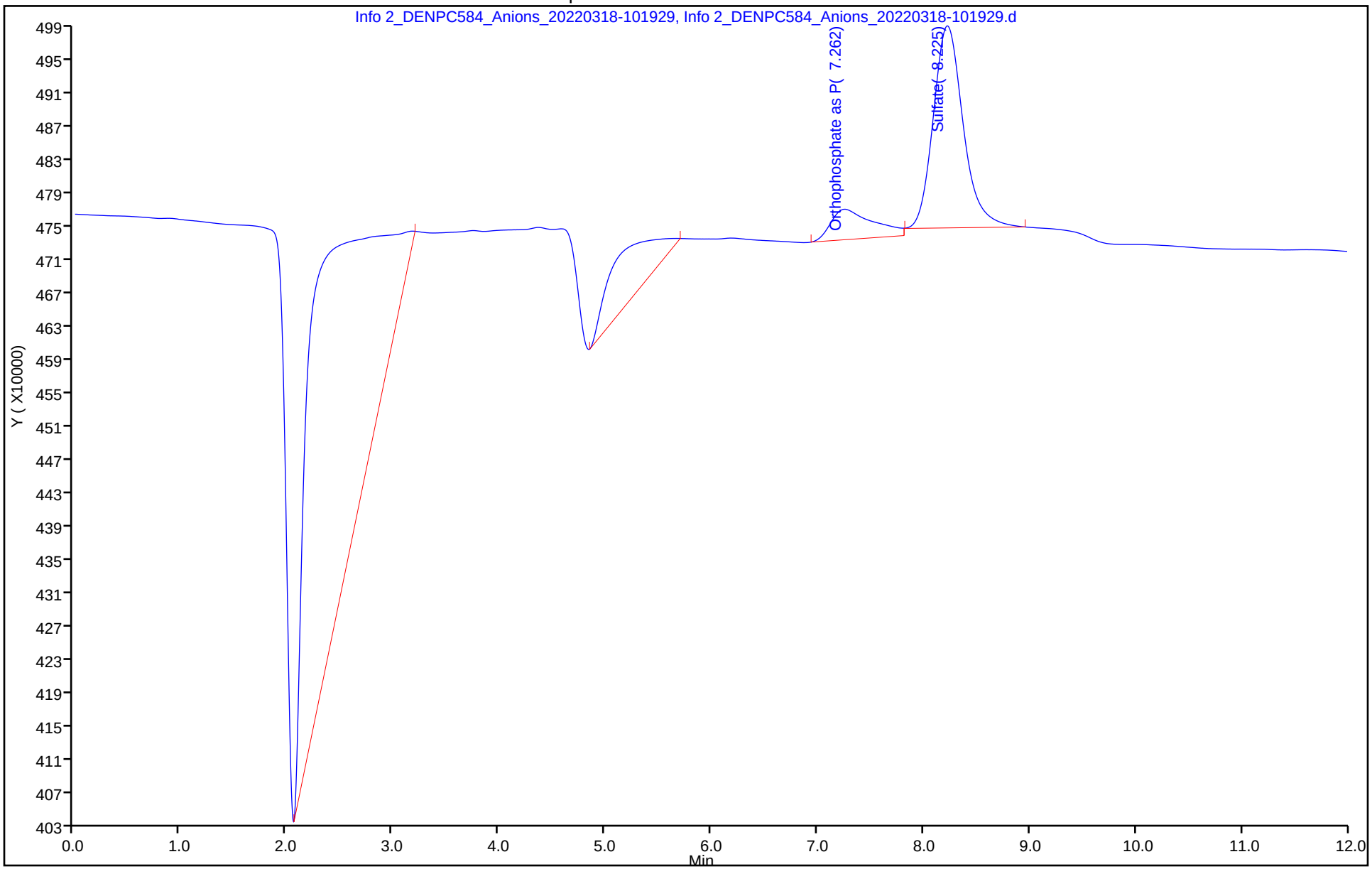
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 18-Mar-2022 13:35:01 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-101929.d

Injection Date:	18-Mar-2022 10:04:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	78
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-101

Injection Date: 18-Mar-2022 10:04:00 Instrument ID: WC_IonChrom13

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 78

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

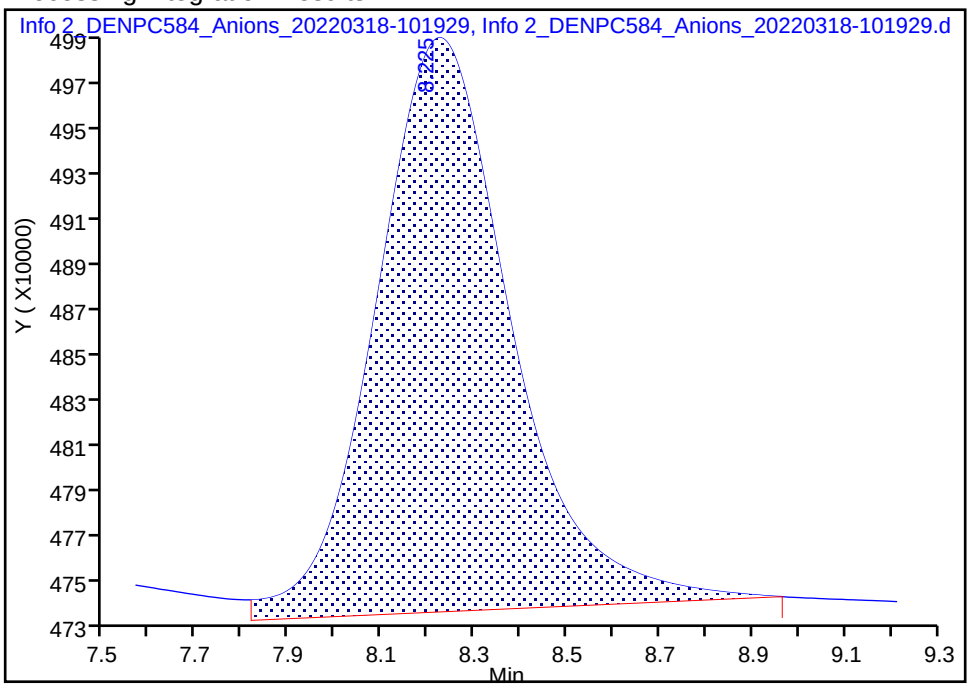
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

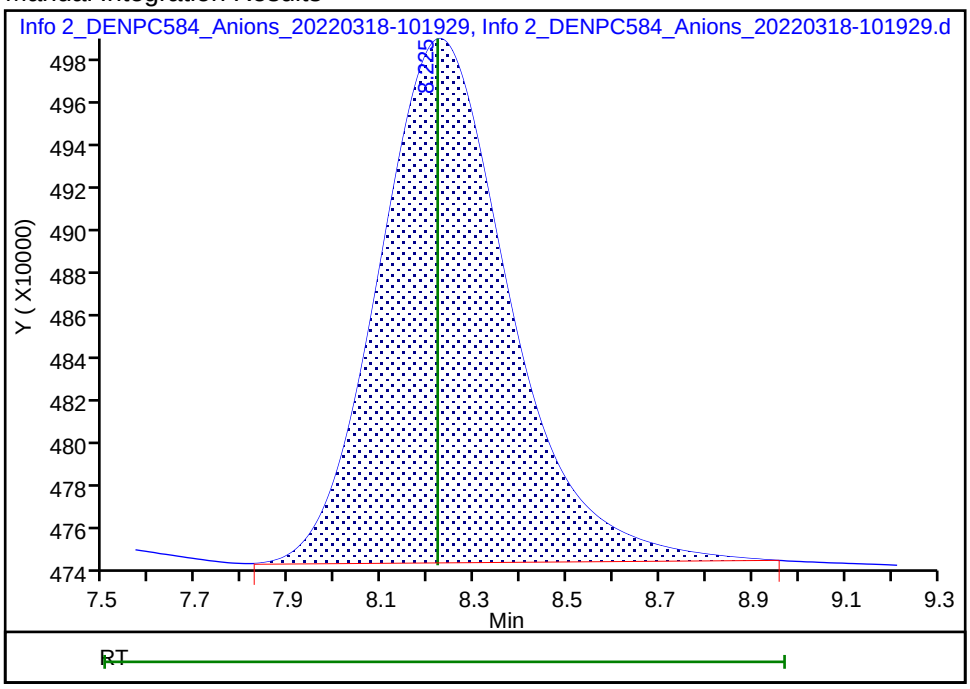
Processing Integration Results

RT: 8.23
Area: 5032353
Amount: -0.762065
Amount Units: ug/ml



Manual Integration Results

RT: 8.23
Area: 4736147
Amount: -0.790768
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:32:43

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

	Type	Analysi	Sample Name	Sample ID	Origin	Manual Dilution
1	Standard	NPOC	CAL		NPOC11.2022_03_14_15_53_52.	1.000
2	Unknown	NPOC	ICV		NPOC 2022.met	1.000
3	Unknown	NPOC	ICB		NPOC 2022.met	1.000
4	Unknown	NPOC	LCS		NPOC 2022.met	1.000
5	Unknown	NPOC	MB		NPOC 2022.met	1.000
6	Unknown	NPOC	TIC		NPOC 2022.met	1.000
7	Unknown	NPOC	lcs 280-568571/1-a		NPOC 2022.met	1.000
8	Unknown	NPOC	mb 280-568571/2-a		NPOC 2022.met	1.000
9	Unknown	NPOC	280-159234-m-1-a		NPOC 2022.met	1.000
10	Unknown	NPOC	280-159234-m-2-a		NPOC 2022.met	1.000
11	Unknown	NPOC	280-159234-m-3-a		NPOC 2022.met	1.000
12	Unknown	NPOC	280-159234-m-4-a		NPOC 2022.met	1.000
13	Unknown	NPOC	280-159234-m-5-a		NPOC 2022.met	1.000
14	Unknown	NPOC	280-159234-m-6-a		NPOC 2022.met	1.000
15	Unknown	NPOC	280-159234-m-7-a		NPOC 2022.met	1.000
16	Unknown	NPOC	CCV		NPOC 2022.met	1.000
17	Unknown	NPOC	CCB		NPOC 2022.met	1.000
18	Unknown	NPOC	280-159234-m-7-b ms		NPOC 2022.met	1.000
19	Unknown	NPOC	280-159234-m-7-c msd		NPOC 2022.met	1.000
20	Unknown	NPOC	280-159234-m-8-a		NPOC 2022.met	1.000
21	Unknown	NPOC	280-159234-m-9-a		NPOC 2022.met	1.000
22	Unknown	NPOC	280-159234-m-10-a		NPOC 2022.met	1.000
23	Unknown	NPOC	280-159332-d-1-a		NPOC 2022.met	1.000
24	Unknown	NPOC	280-159332-d-1-b ms		NPOC 2022.met	1.000
25	Unknown	NPOC	280-159332-d-1-c msd		NPOC 2022.met	1.000
26	Unknown	NPOC	280-159332-d-2-a		NPOC 2022.met	1.000
27	Unknown	NPOC	280-159332-d-3		NPOC 2022.met	1.000
28	Unknown	NPOC	CCV		NPOC 2022.met	1.000
29	Unknown	NPOC	CCB		NPOC 2022.met	1.000
30	Unknown	NPOC	280-159332-d-4-a		NPOC 2022.met	1.000
31	Unknown	NPOC	280-159332-d-5-a		NPOC 2022.met	1.000
32	Unknown	NPOC	280-159332-d-6-a		NPOC 2022.met	1.000
33	Unknown	NPOC	280-159332-d-7-a		NPOC 2022.met	1.000
34	Unknown	NPOC	280-159332-d-8-a		NPOC 2022.met	1.000
35	Unknown	NPOC	280-159332-d-9-a		NPOC 2022.met	1.000
36	Unknown	NPOC	280-159332-d-10-a		NPOC 2022.met	1.000
37	Unknown	NPOC	280-159332-d-11-a		NPOC 2022.met	1.000
38	Unknown	NPOC	280-159332-d-12-a		NPOC 2022.met	1.000
39	Unknown	NPOC	280-159332-d-13-a		NPOC 2022.met	1.000
40	Unknown	NPOC	CCV		NPOC 2022.met	1.000
41	Unknown	NPOC	CCB		NPOC 2022.met	1.000
42	Unknown	NPOC	280-159332-d-13-b ms		NPOC 2022.met	1.000
43	Unknown	NPOC	280-159332-d-13-c ms		NPOC 2022.met	1.000
44	Unknown	NPOC	CCV		NPOC 2022.met	1.000
45	Unknown	NPOC	CCB		NPOC 2022.met	1.000

	Result	Notes	Status	Date / Time	Vial
1		Cal Curve OK	Completed	3/14/2022 4:54:43 PM	90, 91, 91, 92, 92, 93
2	NPOC:20.28mg/L		Completed	3/14/2022 5:09:02 PM	1
3	NPOC:0.08539mg/L		Completed	3/14/2022 5:25:20 PM	2
4	NPOC:24.77mg/L		Completed	3/14/2022 5:39:46 PM	3
5	NPOC:0.05641mg/L		Completed	3/14/2022 5:58:10 PM	4
6	NPOC:0.04026mg/L		Completed	3/14/2022 6:12:16 PM	5
7	NPOC:25.68mg/L		Completed	3/14/2022 6:26:27 PM	6
8	NPOC:0.2042mg/L		Completed	3/14/2022 6:42:45 PM	7
9	NPOC:7.261mg/L		Completed	3/14/2022 7:01:06 PM	8
10	NPOC:3.134mg/L		Completed	3/14/2022 7:19:22 PM	9
11	NPOC:3.456mg/L		Completed	3/14/2022 7:33:28 PM	10
12	NPOC:5.057mg/L		Completed	3/14/2022 7:51:52 PM	11
13	NPOC:2.966mg/L		Completed	3/14/2022 8:10:36 PM	12
14	NPOC:3.614mg/L		Completed	3/14/2022 8:29:32 PM	13
15	NPOC:1.378mg/L		Completed	3/14/2022 8:47:54 PM	14
16	NPOC:24.36mg/L		Completed	3/14/2022 9:06:19 PM	15
17	NPOC:0.06800mg/L		Completed	3/14/2022 9:31:16 PM	16
18	NPOC:25.25mg/L		Completed	3/14/2022 9:49:53 PM	17
19	NPOC:25.90mg/L		Completed	3/14/2022 10:04:18 PM	18
20	NPOC:3.443mg/L		Completed	3/14/2022 10:20:32 PM	19
21	NPOC:3.296mg/L		Completed	3/14/2022 10:38:53 PM	20
22	NPOC:3.203mg/L		Completed	3/14/2022 10:57:09 PM	21
23	NPOC:5.887mg/L		Completed	3/14/2022 11:11:19 PM	22
24	NPOC:30.10mg/L		Completed	3/14/2022 11:30:07 PM	23
25	NPOC:29.85mg/L		Completed	3/14/2022 11:48:24 PM	24
26	NPOC:3.834mg/L		Completed	3/15/2022 12:06:41 AM	25
27	NPOC:3.576mg/L		Completed	3/15/2022 12:25:07 AM	26
28	NPOC:25.21mg/L		Completed	3/15/2022 12:39:27 AM	27
29	NPOC:0.08879mg/L		Completed	3/15/2022 12:53:44 AM	28
30	NPOC:6.115mg/L		Completed	3/15/2022 1:08:02 AM	29
31	NPOC:6.291mg/L		Completed	3/15/2022 1:26:25 AM	30
32	NPOC:3.950mg/L		Completed	3/15/2022 1:42:38 AM	31
33	NPOC:4.486mg/L		Completed	3/15/2022 2:01:00 AM	32
34	NPOC:3.078mg/L		Completed	3/15/2022 2:19:46 AM	33
35	NPOC:6.446mg/L		Completed	3/15/2022 2:38:23 AM	34
36	NPOC:22.41mg/L		Completed	3/15/2022 2:55:03 AM	35
37	NPOC:7.412mg/L		Completed	3/15/2022 3:09:16 AM	36
38	NPOC:7.230mg/L		Completed	3/15/2022 3:27:52 AM	37
39	NPOC:2.191mg/L		Completed	3/15/2022 3:46:16 AM	38
40	NPOC:25.33mg/L		Completed	3/15/2022 4:00:33 AM	39
41	NPOC:0.08737mg/L		Completed	3/15/2022 4:14:50 AM	40
42	NPOC:27.27mg/L		Completed	3/15/2022 4:29:08 AM	41
43	NPOC:26.80mg/L		Completed	3/15/2022 4:43:24 AM	42
44	NPOC:25.45mg/L		Completed	3/15/2022 4:57:34 AM	43
45	NPOC:-0.00468mg/L		Completed	3/15/2022 5:14:03 AM	44

TOC-L Cal Curve Information
C:\TOC-L\CalCurves\NPOC11.2022 03 14 15 53 52.cal

Date of Creation 3/14/2022 4:54:43 PM
User H
System TOC-LCSN

Cal. Curve

Sample Name: CAL
Sample ID:
Object ID 0L-10900100866-10101000-134899A253D4-0000
Cal. Curve: NPOC11.2022_03_14_15_53_52.cal
Status Completed
Comment:

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.1367	50uL	1.000	*******		3/14/2022 4:01:09 PM
2	0.1047	50uL	1.000	*******		3/14/2022 4:03:18 PM

Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 0.1207
SD Area 0.02263
CV Area 18.75%
Vial 90
No Washes 2

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	2.048	50uL	50.00	*******		3/14/2022 4:11:59 PM
2	2.033	50uL	50.00	*******		3/14/2022 4:14:08 PM

Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 2.040
SD Area 0.01061
CV Area 0.52%
Vial 91
No Washes 2

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	10.55	50uL	10.00	*******		3/14/2022 4:21:44 PM
2	10.42	50uL	10.00	*******		3/14/2022 4:23:58 PM

Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 10.48
SD Area 0.09192
CV Area 0.88%
Vial 91
No Washes 2

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	20.82	50uL	5.000	*******		3/14/2022 4:32:41 PM
2	20.74	50uL	5.000	*******		3/14/2022 4:34:50 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	20.78
SD Area	0.05657
CV Area	0.27%
Vial	92
No Washes	2

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	52.01	50uL	2.000	*******		3/14/2022 4:42:26 PM
2	51.51	50uL	2.000	*******		3/14/2022 4:44:35 PM

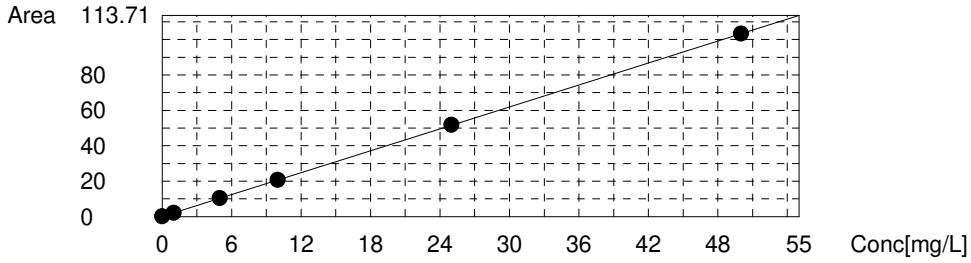
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	51.76
SD Area	0.3536
CV Area	0.68%
Vial	92
No Washes	2

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	103.2	50uL	1.000	*******		3/14/2022 4:52:38 PM
2	103.5	50uL	1.000	*******		3/14/2022 4:54:43 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	103.3
SD Area	0.2121
CV Area	0.21%
Vial	93
No Washes	2

Slope:	2.066
Intercept	0.09519
r^2	1.0000
r	1.0000
RSE(%)	N/A
Zero Shift	No



Instr.Information

Instrument Options	TOC/ASI/
Catalyst	Regular Sensitivity

Cal. Curve

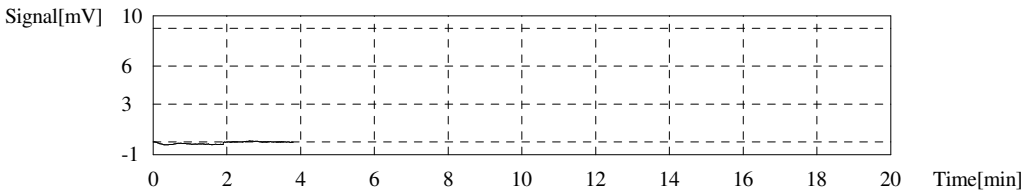
Sample Name:	CAL
Sample ID:	
Cal. Curve:	NPOC11.2022_03_14_15_53_52.cal
Status	Completed

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.1367	50uL	1.000	*******		3/14/2022 4:01:09 PM
2	0.1047	50uL	1.000	*******		3/14/2022 4:03:18 PM

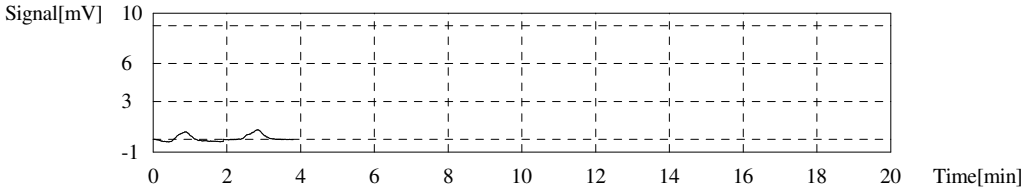
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	0.1207



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	2.048	50uL	50.00	*******		3/14/2022 4:11:59 PM
2	2.033	50uL	50.00	*******		3/14/2022 4:14:08 PM

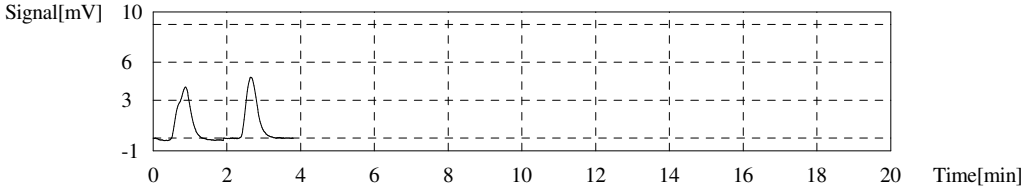
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	2.040



Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	10.55	50uL	10.00	*******		3/14/2022 4:21:44 PM
2	10.42	50uL	10.00	*******		3/14/2022 4:23:58 PM

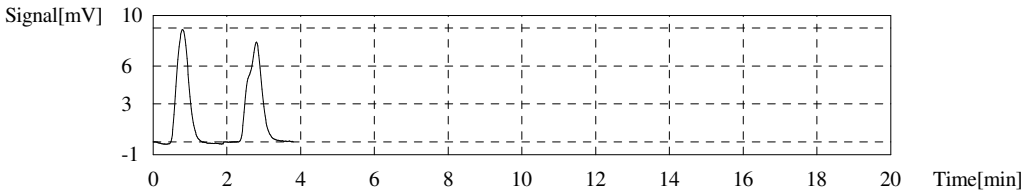
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	10.48



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	20.82	50uL	5.000	*******		3/14/2022 4:32:41 PM
2	20.74	50uL	5.000	*******		3/14/2022 4:34:50 PM

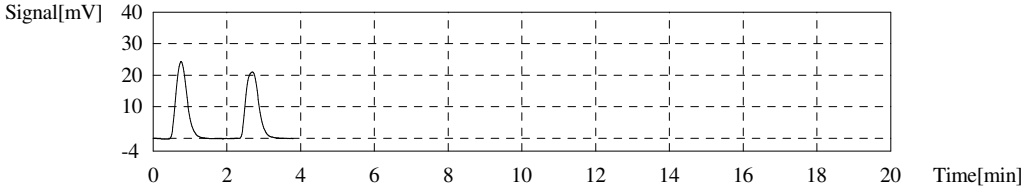
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 20.78



Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	52.01	50uL	2.000	*******		3/14/2022 4:42:26 PM
2	51.51	50uL	2.000	*******		3/14/2022 4:44:35 PM

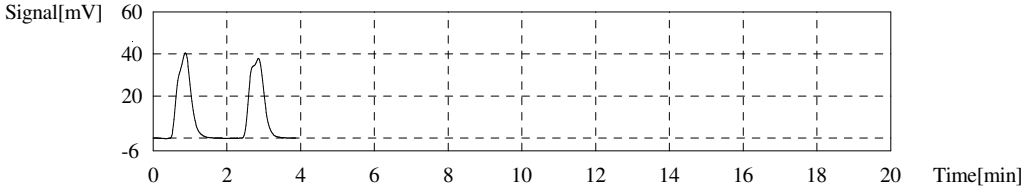
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 51.76



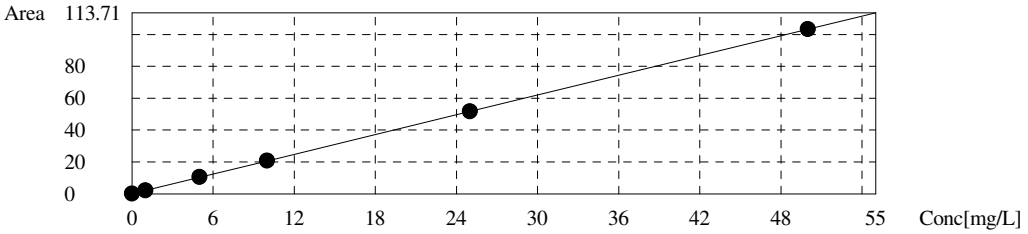
Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	103.2	50uL	1.000	*******		3/14/2022 4:52:38 PM
2	103.5	50uL	1.000	*******		3/14/2022 4:54:43 PM

Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 103.3



Slope: 2.066
Intercept 0.09519
r^2 1.0000
r 1.0000
RSE(%) N/A
Zero Shift No



Sample

Sample Name: ICV
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

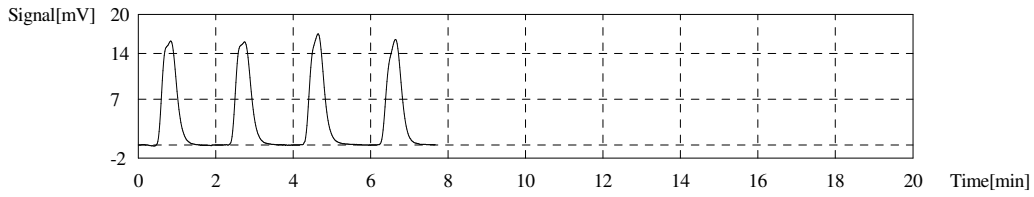
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.28mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	41.52	20.06mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 5:02:39 PM
2	42.29	20.43mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 5:04:48 PM
3	42.70	20.63mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 5:06:57 PM
4	41.41	20.00mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 5:09:02 PM

Mean Area 41.98
Mean Conc. 20.28mg/L



Sample

Sample Name: ICB
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

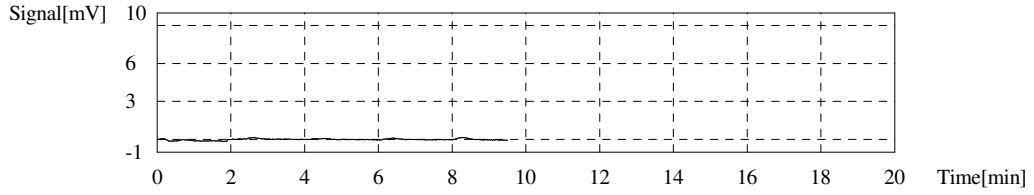
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.08539mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2397	0.06996mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 5:16:56 PM
2	0.1806	0.04135mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 5:19:05 PM
3	0.000	-0.04609mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 5:21:10 PM
4	0.2943	0.09639mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 5:23:15 PM
5	0.3717	0.1339mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 5:25:20 PM

Mean Area 0.2716
Mean Conc. 0.08539mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

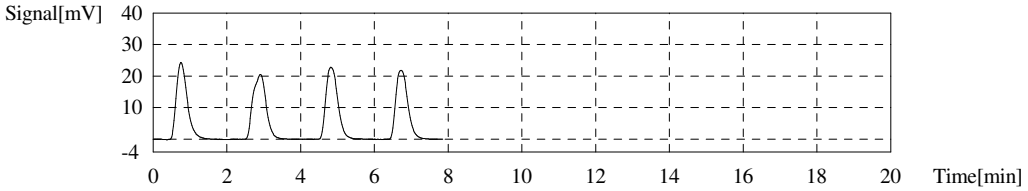
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.77mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	51.69	24.98mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 5:33:21 PM
2	51.62	24.94mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 5:35:36 PM
3	51.82	25.04mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 5:37:41 PM
4	49.93	24.13mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 5:39:46 PM

Mean Area 51.27
Mean Conc. 24.77mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

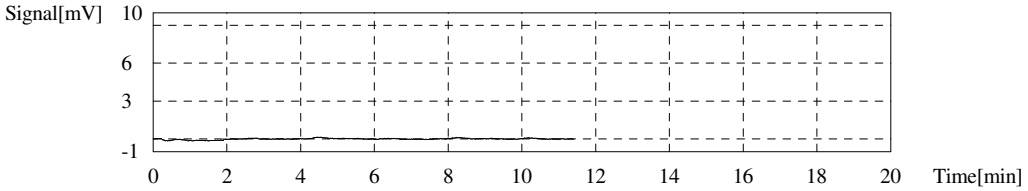
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.05641mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1486	0.02586mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 5:47:40 PM
2	0.000	-0.04609mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 5:49:50 PM
3	0.2599	0.07974mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 5:51:55 PM
4	0.000	-0.04609mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 5:54:00 PM
5	0.1967	0.04914mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 5:56:05 PM
6	0.2416	0.07088mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 5:58:10 PM

Mean Area 0.2117
Mean Conc. 0.05641mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

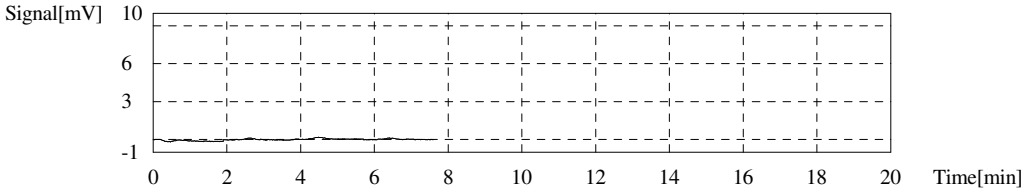
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.04026mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.1756	0.03893mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 6:05:57 PM
2	0.1853	0.04362mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 6:08:06 PM
3	0.2672	0.08327mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 6:10:11 PM
4	0.08530	-0.00479mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 6:12:16 PM

Mean Area 0.1784
Mean Conc. 0.04026mg/L



Sample

Sample Name: lcs 280-568571/1-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

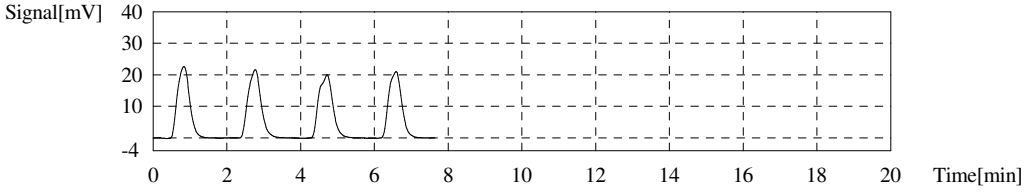
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.68mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	53.44	25.83mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 6:20:10 PM
2	53.53	25.87mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 6:22:17 PM
3	53.31	25.76mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 6:24:22 PM
4	52.26	25.25mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 6:26:27 PM

Mean Area 53.14
Mean Conc. 25.68mg/L



Sample

Sample Name: mb 280-568571/2-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

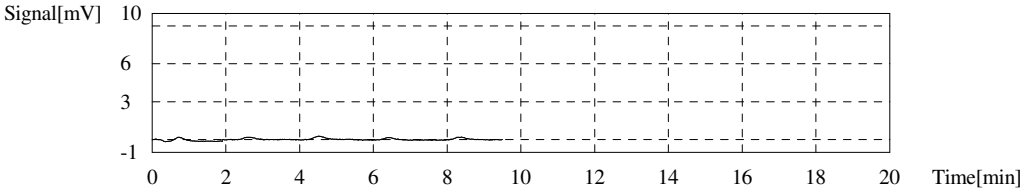
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2042mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6273	0.2576mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 6:34:21 PM
2	0.4307	0.1624mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 6:36:30 PM
3	0.5371	0.2139mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 6:38:35 PM
4	0.2991	0.09872mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 6:40:40 PM
5	0.4726	0.1827mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 6:42:45 PM

Mean Area 0.5169
Mean Conc. 0.2042mg/L



Sample

Sample Name: 280-159234-m-1-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

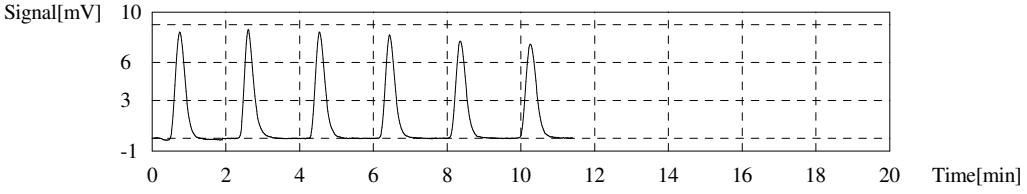
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.261mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.25	7.821mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 6:50:37 PM
2	15.38	7.400mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 6:52:46 PM
3	15.54	7.477mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 6:54:51 PM
4	14.88	7.158mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 6:56:56 PM
5	14.97	7.201mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 6:59:01 PM
6	15.14	7.284mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 7:01:06 PM

Mean Area 15.09
Mean Conc. 7.261mg/L



Sample

Sample Name: 280-159234-m-2-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

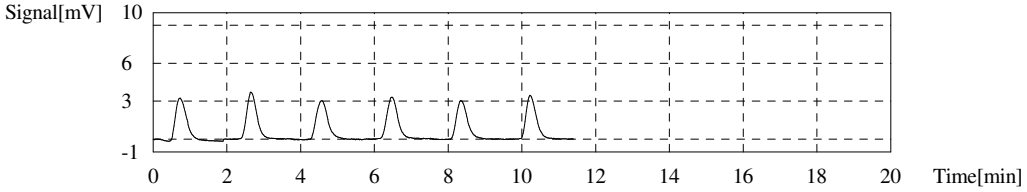
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.134mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.204	3.442mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 7:08:53 PM
2	7.039	3.362mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 7:11:02 PM
3	6.676	3.186mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 7:13:07 PM
4	6.674	3.185mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 7:15:12 PM
5	6.353	3.030mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 7:17:17 PM
6	6.572	3.136mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 7:19:22 PM

Mean Area 6.569
Mean Conc. 3.134mg/L



Sample

Sample Name: 280-159234-m-3-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

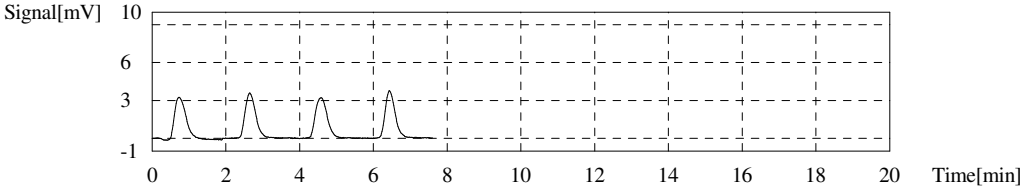
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.456mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.441	3.556mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 7:27:09 PM
2	7.148	3.414mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 7:29:18 PM
3	7.174	3.427mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 7:31:23 PM
4	7.171	3.426mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 7:33:28 PM

Mean Area 7.234
Mean Conc. 3.456mg/L



Sample

Sample Name: 280-159234-m-4-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

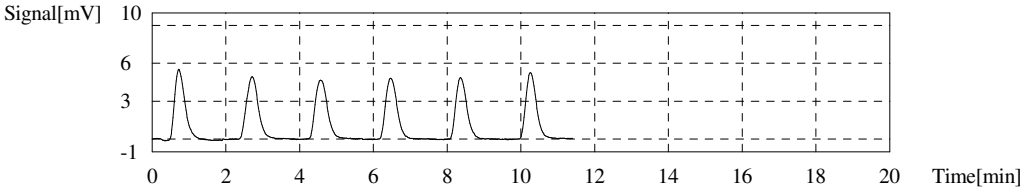
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.057mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.34	5.444mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 7:41:22 PM
2	11.14	5.347mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 7:43:31 PM
3	10.68	5.124mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 7:45:37 PM
4	10.53	5.052mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 7:47:42 PM
5	10.29	4.936mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 7:49:47 PM
6	10.66	5.115mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 7:51:52 PM

Mean Area 10.54
Mean Conc. 5.057mg/L



Sample

Sample Name: 280-159234-m-5-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

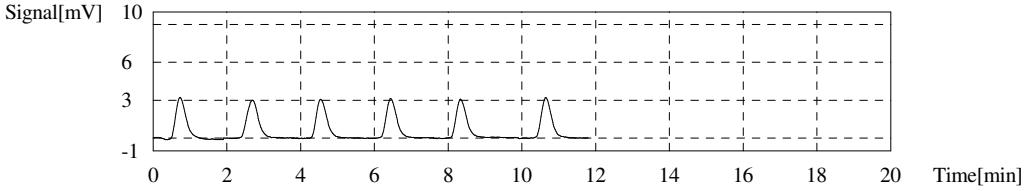
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.966mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.678	3.187mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 7:59:39 PM
2	6.608	3.153mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 8:01:48 PM
3	6.035	2.876mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 8:03:53 PM
4	6.184	2.948mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 8:05:58 PM
5	6.401	3.053mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 8:08:27 PM
6	6.267	2.988mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 8:10:36 PM

Mean Area 6.222
Mean Conc. 2.966mg/L



Sample

Sample Name: 280-159234-m-6-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

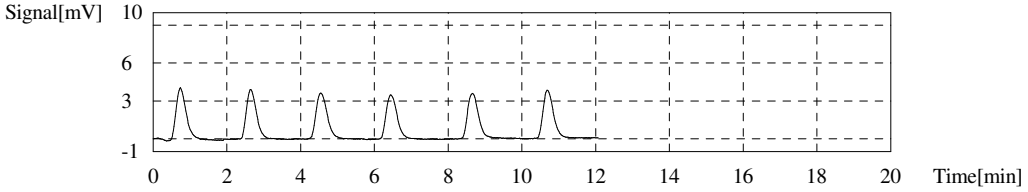
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.614mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.217	3.932mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 8:18:23 PM
2	7.431	3.552mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 8:20:32 PM
3	7.790	3.725mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 8:22:37 PM
4	7.470	3.570mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 8:25:00 PM
5	7.663	3.664mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 8:27:14 PM
6	7.678	3.671mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 8:29:32 PM

Mean Area 7.561
Mean Conc. 3.614mg/L



Sample

Sample Name: 280-159234-m-7-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

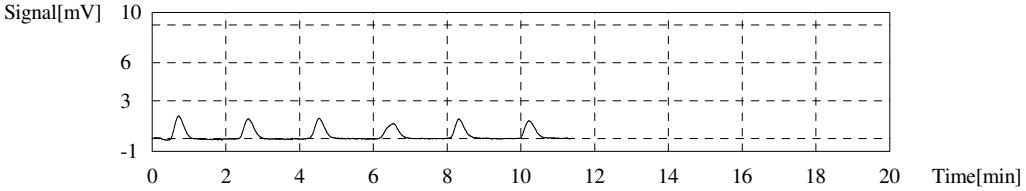
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.378mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.400	1.600mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 8:37:19 PM
2	3.054	1.432mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 8:39:29 PM
3	3.016	1.414mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 8:41:34 PM
4	2.875	1.346mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 8:43:39 PM
5	2.824	1.321mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 8:45:44 PM
6	2.697	1.260mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 8:47:54 PM

Mean Area 2.942
Mean Conc. 1.378mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

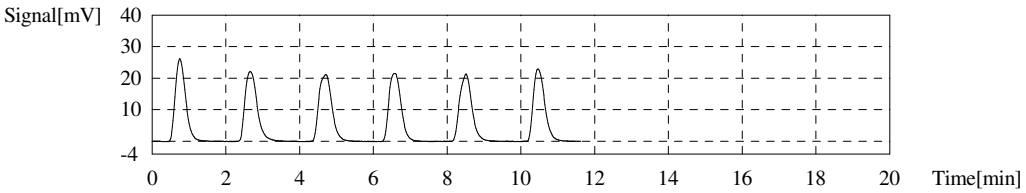
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.36mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	52.26	25.25mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 8:55:41 PM
2	51.38	24.83mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 8:57:51 PM
3	52.71	25.47mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 8:59:56 PM
4	50.01	24.17mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 9:02:01 PM
5	49.99	24.16mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 9:04:14 PM
6	50.26	24.29mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 9:06:19 PM

Mean Area 50.41
Mean Conc. 24.36mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

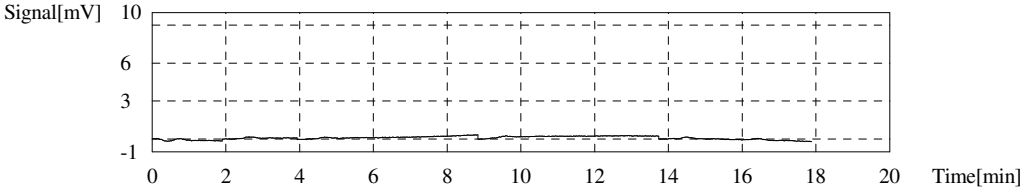
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06800mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2930	0.09577mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 9:14:06 PM
2	0.3385	0.1178mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 9:16:23 PM
3	0.000	-0.04609mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 9:21:32 PM
4	2.478	1.154mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 9:26:41 PM
5	0.2133	0.05718mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 9:28:50 PM
6	0.09780	0.00126mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 9:31:16 PM

Mean Area 0.2357
Mean Conc. 0.06800mg/L



Sample

Sample Name: 280-159234-m-7-b ms
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

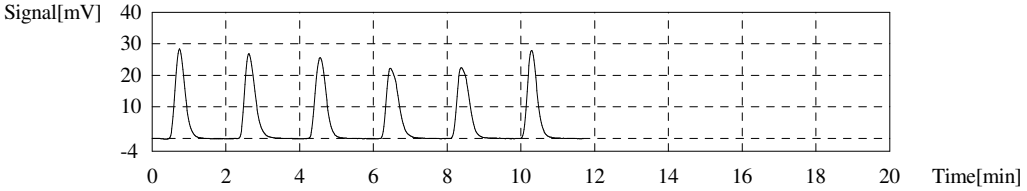
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.25mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	53.99	26.09mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 9:39:03 PM
2	54.18	26.18mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 9:41:12 PM
3	53.42	25.82mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 9:43:20 PM
4	51.69	24.98mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 9:45:25 PM
5	51.61	24.94mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 9:47:30 PM
6	52.26	25.25mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 9:49:53 PM

Mean Area 52.25
Mean Conc. 25.25mg/L



Sample

Sample Name: 280-159234-m-7-c msd
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

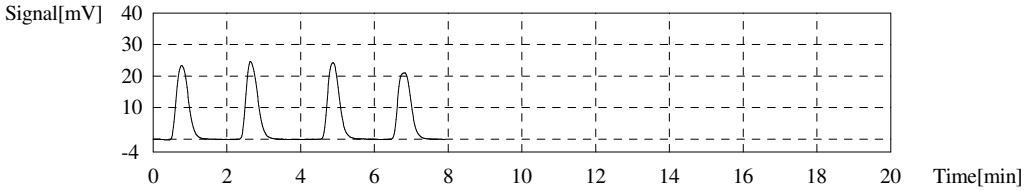
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.90mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	53.75	25.98mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 9:57:40 PM
2	54.57	26.37mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 10:00:04 PM
3	53.72	25.96mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 10:02:13 PM
4	52.35	25.30mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 10:04:18 PM

Mean Area 53.60
Mean Conc. 25.90mg/L



Sample

Sample Name: 280-159234-m-8-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

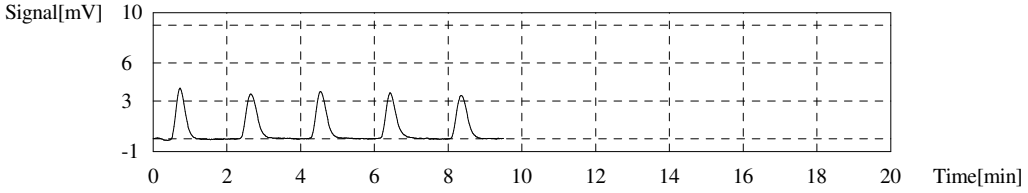
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.443mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.247	3.462mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 10:12:12 PM
2	7.528	3.598mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 10:14:17 PM
3	7.248	3.463mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 10:16:22 PM
4	7.117	3.399mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 10:18:27 PM
5	7.219	3.449mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 10:20:32 PM

Mean Area 7.208
Mean Conc. 3.443mg/L



Sample

Sample Name: 280-159234-m-9-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

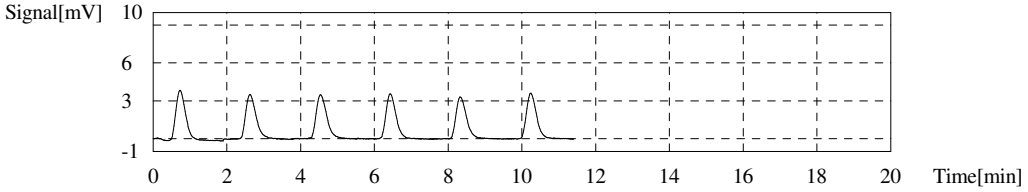
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.296mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.401	3.537mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 10:28:24 PM
2	7.020	3.353mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 10:30:33 PM
3	6.966	3.326mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 10:32:38 PM
4	6.785	3.239mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 10:34:43 PM
5	6.456	3.079mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 10:36:48 PM
6	6.840	3.265mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 10:38:53 PM

Mean Area 6.903
Mean Conc. 3.296mg/L



Sample

Sample Name: 280-159234-m-10-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

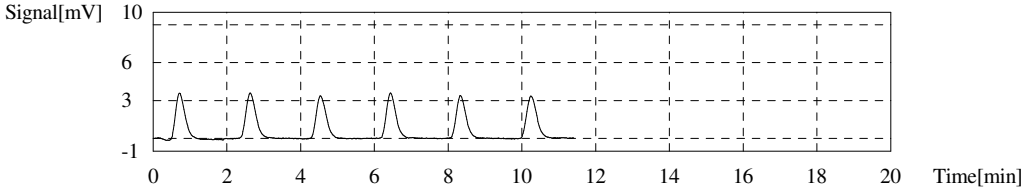
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.203mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.835	3.263mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 10:46:40 PM
2	6.816	3.254mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 10:48:49 PM
3	6.402	3.053mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 10:50:54 PM
4	6.592	3.145mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 10:52:59 PM
5	6.186	2.949mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 10:55:04 PM
6	6.605	3.152mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 10:57:09 PM

Mean Area 6.712
Mean Conc. 3.203mg/L



Sample

Sample Name: 280-159332-d-1-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

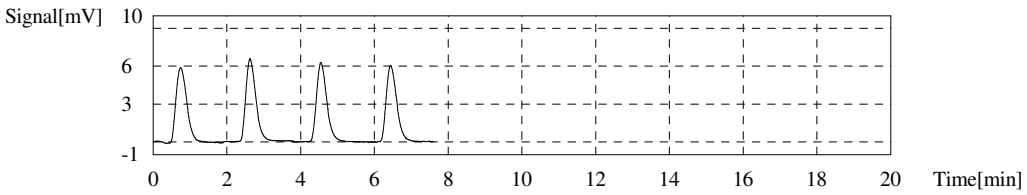
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.887mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.35	5.933mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 11:04:57 PM
2	12.33	5.923mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 11:07:05 PM
3	12.18	5.851mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 11:09:14 PM
4	12.16	5.841mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 11:11:19 PM

Mean Area 12.25
Mean Conc. 5.887mg/L



Sample

Sample Name: 280-159332-d-1-b ms
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

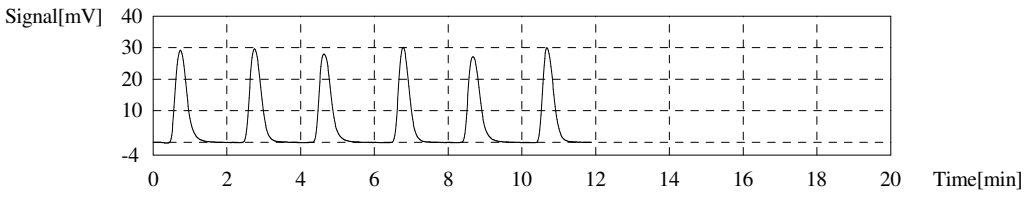
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.10mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	65.20	31.52mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 11:19:19 PM
2	64.28	31.07mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 11:21:24 PM
3	63.53	30.71mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 11:23:43 PM
4	61.64	29.80mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 11:25:48 PM
5	61.92	29.93mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 11:28:00 PM
6	61.97	29.96mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 11:30:07 PM

Mean Area 62.27
Mean Conc. 30.10mg/L



Sample

Sample Name: 280-159332-d-1-c msd
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

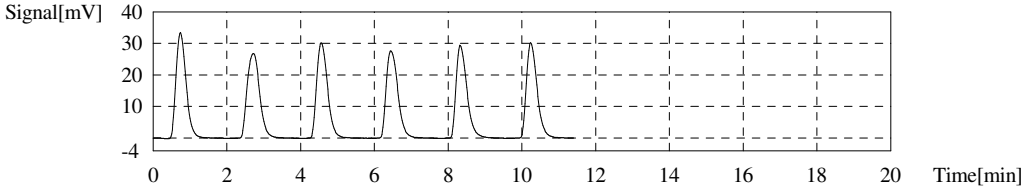
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.85mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	64.84	31.35mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 11:37:55 PM
2	64.14	31.01mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 11:40:00 PM
3	62.77	30.34mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 11:42:05 PM
4	61.63	29.79mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 11:44:10 PM
5	60.91	29.44mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 11:46:15 PM
6	61.73	29.84mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/14/2022 11:48:24 PM

Mean Area 61.76
Mean Conc. 29.85mg/L



Sample

Sample Name: 280-159332-d-2-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

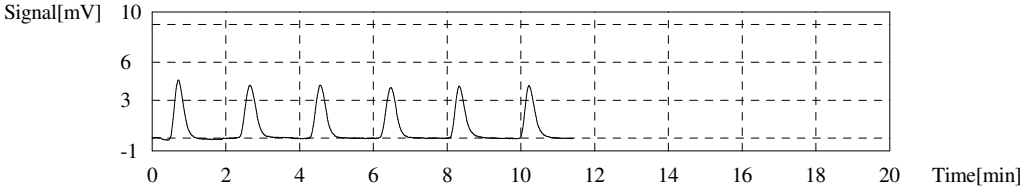
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.834mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.480	4.059mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 11:56:12 PM
2	8.691	4.162mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/14/2022 11:58:21 PM
3	8.258	3.952mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 12:00:26 AM
4	8.004	3.829mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 12:02:31 AM
5	7.874	3.766mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 12:04:36 AM
6	7.921	3.789mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 12:06:41 AM

Mean Area 8.014
Mean Conc. 3.834mg/L



Sample

Sample Name: 280-159332-d-3
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

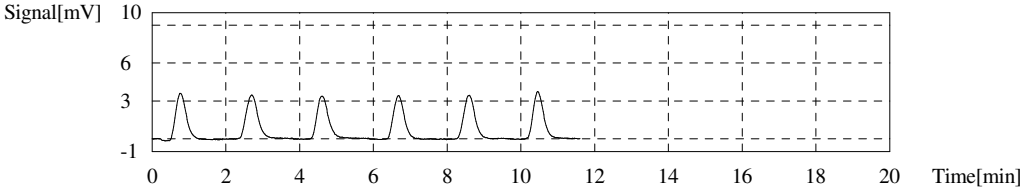
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.576mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.633	3.649mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 12:14:29 AM
2	7.902	3.780mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 12:16:36 AM
3	7.482	3.576mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 12:18:51 AM
4	7.079	3.381mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 12:20:57 AM
5	7.301	3.489mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 12:23:02 AM
6	7.508	3.589mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 12:25:07 AM

Mean Area 7.481
Mean Conc. 3.576mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

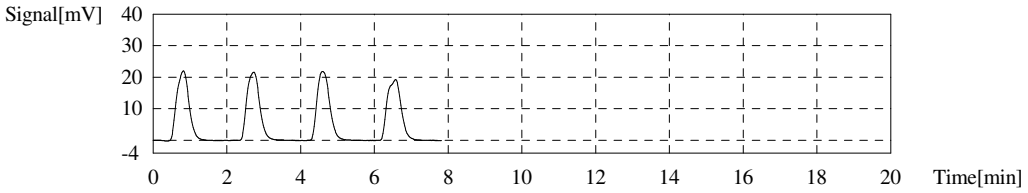
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.21mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	52.38	25.31mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 12:32:55 AM
2	52.27	25.26mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 12:35:04 AM
3	52.54	25.39mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 12:37:09 AM
4	51.51	24.89mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 12:39:27 AM

Mean Area 52.17
Mean Conc. 25.21mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

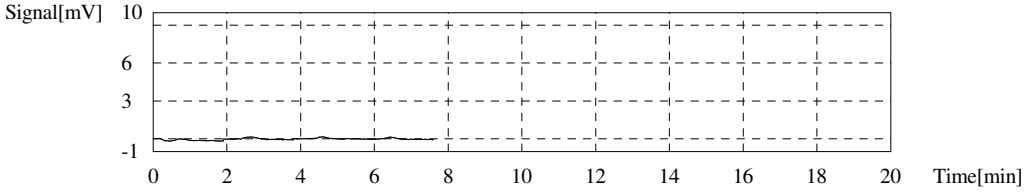
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.08879mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2583	0.07897mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 12:47:21 AM
2	0.3375	0.1173mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 12:49:30 AM
3	0.2324	0.06643mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 12:51:39 AM
4	0.2862	0.09247mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 12:53:44 AM

Mean Area 0.2786
Mean Conc. 0.08879mg/L



Sample

Sample Name: 280-159332-d-4-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

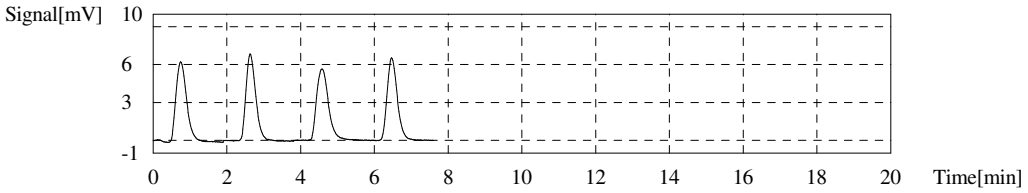
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.115mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.90	6.199mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 1:01:38 AM
2	12.71	6.107mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 1:03:48 AM
3	12.56	6.035mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 1:05:57 AM
4	12.73	6.117mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 1:08:02 AM

Mean Area 12.73
Mean Conc. 6.115mg/L



Sample

Sample Name: 280-159332-d-5-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

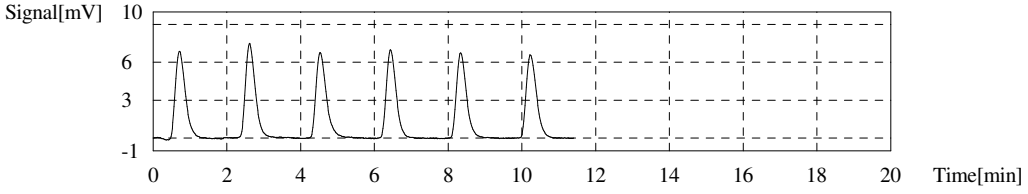
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.291mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.69	6.582mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 1:15:55 AM
2	13.81	6.640mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 1:18:06 AM
3	13.36	6.422mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 1:20:11 AM
4	13.11	6.301mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 1:22:16 AM
5	12.91	6.204mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 1:24:21 AM
6	12.98	6.238mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 1:26:25 AM

Mean Area 13.09
Mean Conc. 6.291mg/L



Sample

Sample Name: 280-159332-d-6-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

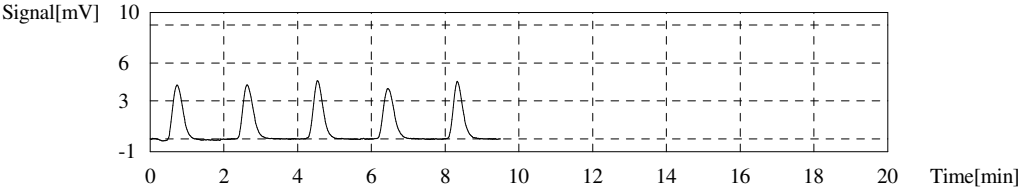
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.950mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.659	4.146mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 1:34:14 AM
2	8.359	4.001mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 1:36:22 AM
3	8.402	4.022mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 1:38:28 AM
4	8.055	3.854mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 1:40:33 AM
5	8.203	3.925mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 1:42:38 AM

Mean Area 8.255
Mean Conc. 3.950mg/L



Sample

Sample Name: 280-159332-d-7-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

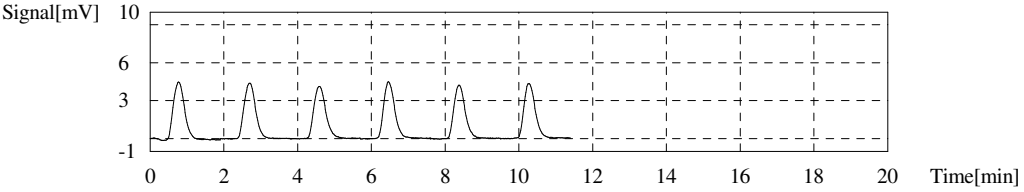
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.486mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.927	4.760mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 1:50:32 AM
2	9.495	4.551mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 1:52:40 AM
3	9.288	4.451mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 1:54:45 AM
4	9.332	4.472mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 1:56:50 AM
5	9.033	4.327mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 1:58:55 AM
6	9.333	4.472mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 2:01:00 AM

Mean Area 9.362
Mean Conc. 4.486mg/L



Sample

Sample Name: 280-159332-d-8-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

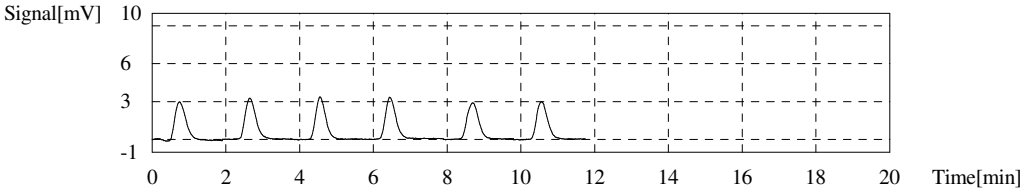
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.078mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.590	3.144mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 2:08:48 AM
2	6.511	3.106mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 2:10:57 AM
3	6.333	3.020mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 2:13:02 AM
4	6.824	3.258mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 2:15:25 AM
5	6.145	2.929mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 2:17:34 AM
6	6.376	3.041mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 2:19:46 AM

Mean Area 6.453
Mean Conc. 3.078mg/L



Sample

Sample Name: 280-159332-d-9-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

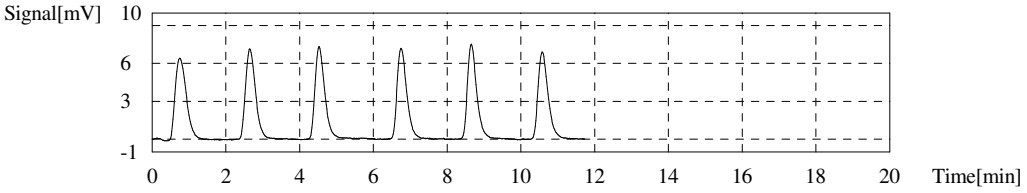
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.446mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.01	6.737mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 2:27:34 AM
2	13.63	6.553mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 2:29:39 AM
3	13.90	6.683mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 2:32:04 AM
4	13.37	6.427mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 2:34:13 AM
5	13.26	6.374mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 2:36:18 AM
6	13.38	6.432mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 2:38:23 AM

Mean Area 13.41
Mean Conc. 6.446mg/L



Sample

Sample Name: 280-159332-d-10-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

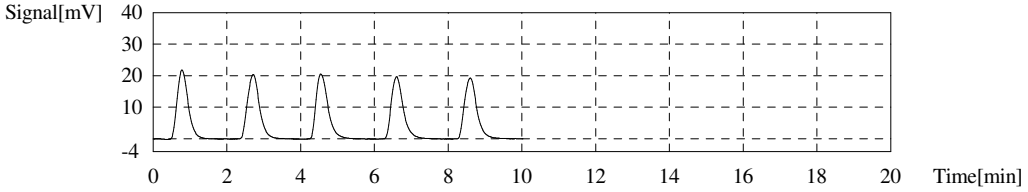
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:22.41mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	46.40	22.42mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 2:46:11 AM
2	46.61	22.52mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 2:48:16 AM
3	46.94	22.68mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 2:50:28 AM
4	44.82	21.65mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 2:52:38 AM
5	45.57	22.02mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 2:55:03 AM

Mean Area 46.38
Mean Conc. 22.41mg/L



Sample

Sample Name: 280-159332-d-11-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

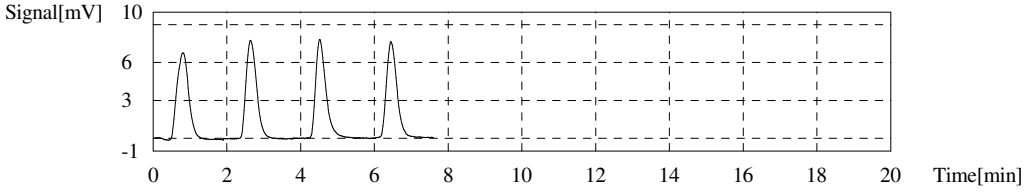
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.412mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.53	7.472mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:02:56 AM
2	15.66	7.535mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:05:05 AM
3	15.23	7.327mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:07:11 AM
4	15.20	7.313mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:09:16 AM

Mean Area 15.41
Mean Conc. 7.412mg/L



Sample

Sample Name: 280-159332-d-12-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

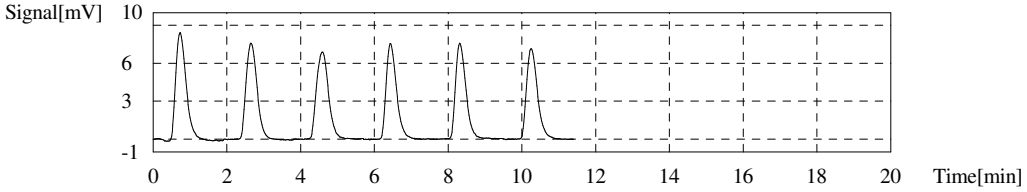
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.230mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.33	8.344mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:17:10 AM
2	15.97	7.686mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:19:19 AM
3	15.55	7.482mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:21:29 AM
4	14.93	7.182mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:23:34 AM
5	14.67	7.056mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:25:43 AM
6	14.97	7.201mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:27:52 AM

Mean Area 15.03
Mean Conc. 7.230mg/L



Sample

Sample Name: 280-159332-d-13-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

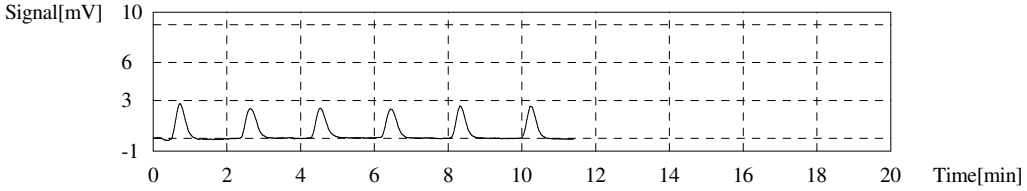
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.191mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.260	2.500mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:35:40 AM
2	4.899	2.326mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:37:49 AM
3	4.769	2.263mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:39:58 AM
4	4.552	2.158mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:42:06 AM
5	4.665	2.212mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:44:11 AM
6	4.498	2.132mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:46:16 AM

Mean Area 4.621
Mean Conc. 2.191mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

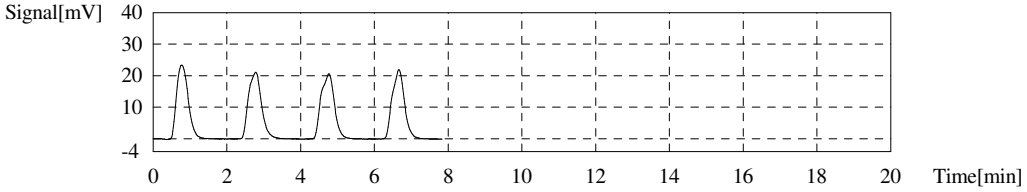
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.33mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	52.73	25.48mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:54:07 AM
2	52.75	25.49mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:56:14 AM
3	52.72	25.48mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:58:20 AM
4	51.49	24.88mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:00:33 AM

Mean Area 52.42
Mean Conc. 25.33mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

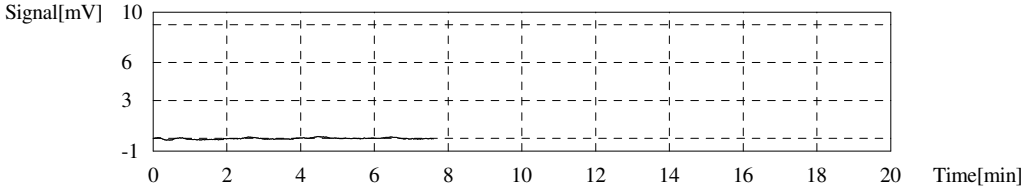
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.08737mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2861	0.09242mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:08:27 AM
2	0.2443	0.07219mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:10:37 AM
3	0.3275	0.1125mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:12:45 AM
4	0.2447	0.07238mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:14:50 AM

Mean Area 0.2757
Mean Conc. 0.08737mg/L



Sample

Sample Name: 280-159332-d-13-b ms
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

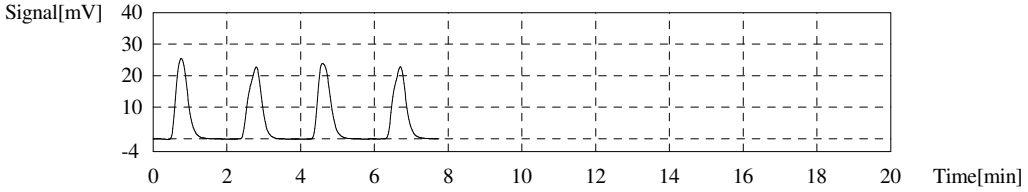
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:27.27mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	57.24	27.67mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:22:45 AM
2	56.62	27.37mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:24:52 AM
3	56.93	27.52mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:27:03 AM
4	54.88	26.52mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:29:08 AM

Mean Area 56.42
Mean Conc. 27.27mg/L



Sample

Sample Name: 280-159332-d-13-c msd
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

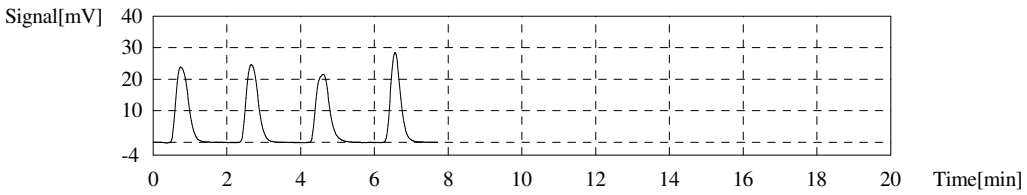
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.80mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.45	27.28mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:37:02 AM
2	55.99	27.06mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:39:07 AM
3	55.21	26.68mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:41:19 AM
4	54.13	26.16mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:43:24 AM

Mean Area 55.45
Mean Conc. 26.80mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

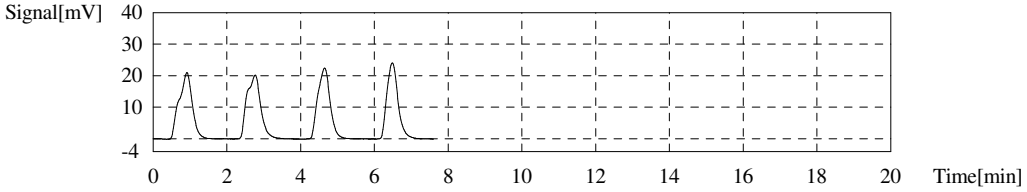
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.45mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	52.99	25.61mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:51:19 AM
2	53.38	25.80mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:53:24 AM
3	52.80	25.52mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:55:29 AM
4	51.46	24.87mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:57:34 AM

Mean Area 52.66
Mean Conc. 25.45mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.00468mg/L

1. Det

Anal.: NPOC

TOC-Control L Report

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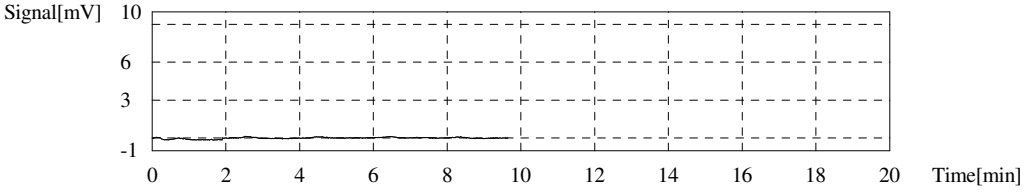
No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2554	0.07756mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:05:28 AM
2	0.1980	0.04977mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:07:38 AM
3	0.000	-0.04609mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:09:43 AM
4	0.1026	0.00359mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:11:48 AM
5	0.04150	-0.02599mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:14:03 AM

Mean Area 0.08553
Mean Conc. -0.00468mg/L



	Type	Analysis	Sample Name	Sample ID	Origin	Manual Dilution
1	Unknown	NPOC	ICV		NPOC 2022.met	1.000
2	Unknown	NPOC	ICB		NPOC 2022.met	1.000
3	Unknown	NPOC	LCS		NPOC 2022.met	1.000
4	Unknown	NPOC	MB		NPOC 2022.met	1.000
5	Unknown	NPOC	TIC		NPOC 2022.met	1.000
6	Unknown	NPOC	lcs 280-568705/1-a		NPOC 2022.met	1.000
7	Unknown	NPOC	mb 280-568705/2-a		NPOC 2022.met	1.000
8	Unknown	NPOC	280-159454-d-1-a		NPOC 2022.met	1.000
9	Unknown	NPOC	280-159454-d-1-b ms		NPOC 2022.met	1.000
10	Unknown	NPOC	280-159454-d-1-c msd		NPOC 2022.met	1.000
11	Unknown	NPOC	280-159454-d-2-a		NPOC 2022.met	1.000
12	Unknown	NPOC	280-159384-d-1-a		NPOC 2022.met	1.000
13	Unknown	NPOC	280-159384-d-2-a		NPOC 2022.met	1.000
14	Unknown	NPOC	280-159384-d-4-a		NPOC 2022.met	1.000
15	Unknown	NPOC	CCV		NPOC 2022.met	1.000
16	Unknown	NPOC	CCB		NPOC 2022.met	1.000
17	Unknown	NPOC	280-159384-d-5-a		NPOC 2022.met	1.000
18	Unknown	NPOC	280-159384-d-6-a		NPOC 2022.met	1.000
19	Unknown	NPOC	CCV		NPOC 2022.met	1.000
20	Unknown	NPOC	CCB		NPOC 2022.met	1.000

	Result	Notes	Status	Date / Time
1	NPOC:19.70mg/L		Completed	3/15/2022 3:51:24 PM
2	NPOC:0.08188mg/L		Completed	3/15/2022 4:05:36 PM
3	NPOC:24.61mg/L		Completed	3/15/2022 4:19:57 PM
4	NPOC:-0.03752mg/L		Completed	3/15/2022 4:34:15 PM
5	NPOC:0.1381mg/L		Completed	3/15/2022 4:48:29 PM
6	NPOC:24.89mg/L		Completed	3/15/2022 5:02:41 PM
7	NPOC:0.2674mg/L		Completed	3/15/2022 5:19:00 PM
8	NPOC:9.489mg/L		Completed	3/15/2022 5:33:09 PM
9	NPOC:33.42mg/L		Completed	3/15/2022 5:51:38 PM
10	NPOC:33.59mg/L		Completed	3/15/2022 6:10:09 PM
11	NPOC:9.110mg/L		Completed	3/15/2022 6:28:25 PM
12	NPOC:3.707mg/L		Completed	3/15/2022 6:46:41 PM
13	NPOC:5.557mg/L		Completed	3/15/2022 7:05:06 PM
14	NPOC:42.66mg/L		Completed	3/15/2022 7:23:34 PM
15	NPOC:24.70mg/L		Completed	3/15/2022 7:39:42 PM
16	NPOC:0.1077mg/L		Completed	3/15/2022 7:55:59 PM
17	NPOC:17.85mg/L		Completed	3/15/2022 8:10:11 PM
18	NPOC:7.941mg/L		Completed	3/15/2022 8:26:25 PM
19	NPOC:24.50mg/L		Completed	3/15/2022 8:42:45 PM
20	NPOC:0.3797mg/L		Completed	3/15/2022 9:01:07 PM

	Vial
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20

TOC-L Cal Curve Information
C:\TOC-L\CalCurves\NPOC11.2022 03 14 15 53 52.cal

Date of Creation	3/14/2022 4:54:43 PM
User	H
System	TOC-LCSN

Cal. Curve

Sample Name:	CAL
Sample ID:	
Object ID	0L-10900100866-10101000-134899A253D4-0000
Cal. Curve:	NPOC11.2022_03_14_15_53_52.cal
Status	Completed
Comment:	

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.1367	50uL	1.000	*******		3/14/2022 4:01:09 PM
2	0.1047	50uL	1.000	*******		3/14/2022 4:03:18 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	0.1207
SD Area	0.02263
CV Area	18.75%
Vial	90
No Washes	2

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	2.048	50uL	50.00	*******		3/14/2022 4:11:59 PM
2	2.033	50uL	50.00	*******		3/14/2022 4:14:08 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	2.040
SD Area	0.01061
CV Area	0.52%
Vial	91
No Washes	2

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	10.55	50uL	10.00	*******		3/14/2022 4:21:44 PM
2	10.42	50uL	10.00	*******		3/14/2022 4:23:58 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	10.48
SD Area	0.09192
CV Area	0.88%
Vial	91
No Washes	2

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	20.82	50uL	5.000	*******		3/14/2022 4:32:41 PM
2	20.74	50uL	5.000	*******		3/14/2022 4:34:50 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	20.78
SD Area	0.05657
CV Area	0.27%
Vial	92
No Washes	2

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	52.01	50uL	2.000	*******		3/14/2022 4:42:26 PM
2	51.51	50uL	2.000	*******		3/14/2022 4:44:35 PM

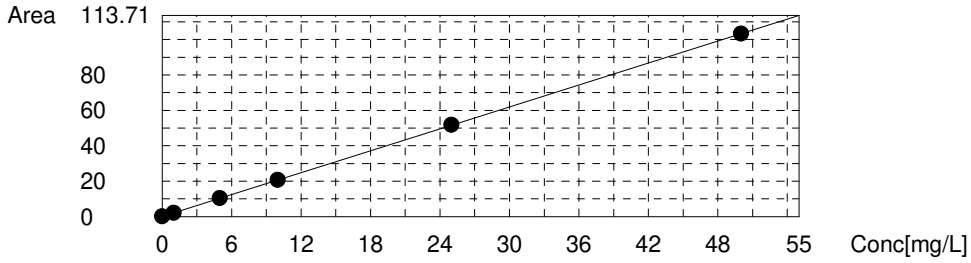
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	51.76
SD Area	0.3536
CV Area	0.68%
Vial	92
No Washes	2

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	103.2	50uL	1.000	*******		3/14/2022 4:52:38 PM
2	103.5	50uL	1.000	*******		3/14/2022 4:54:43 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	103.3
SD Area	0.2121
CV Area	0.21%
Vial	93
No Washes	2

Slope:	2.066
Intercept	0.09519
r^2	1.0000
r	1.0000
RSE(%)	N/A
Zero Shift	No



TOC-Control L Report

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2022_03_15_001.tlx

Instr.Information

Instrument Options TOC/ASI/
Catalyst Regular Sensitivity

Sample

Sample Name: ICV
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

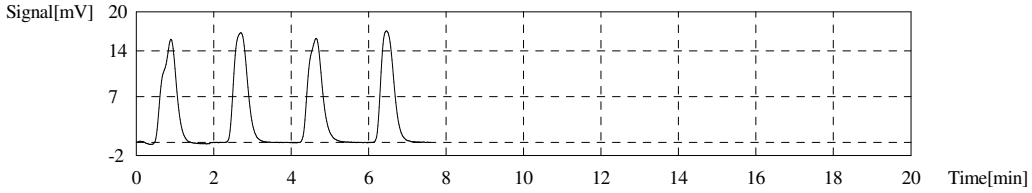
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.70mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	41.08	19.84mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:45:05 PM
2	41.43	20.01mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:47:14 PM
3	40.84	19.73mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:49:19 PM
4	39.82	19.23mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:51:24 PM

Mean Area 40.79
Mean Conc. 19.70mg/L



Sample

Sample Name: ICB
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

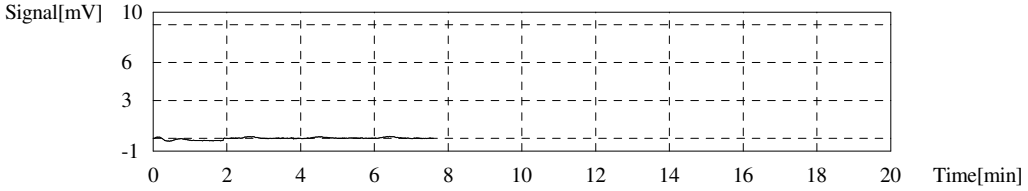
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.08188mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3305	0.1139mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 3:59:17 PM
2	0.2591	0.07935mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:01:26 PM
3	0.1759	0.03907mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:03:31 PM
4	0.2918	0.09518mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:05:36 PM

Mean Area 0.2643
Mean Conc. 0.08188mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

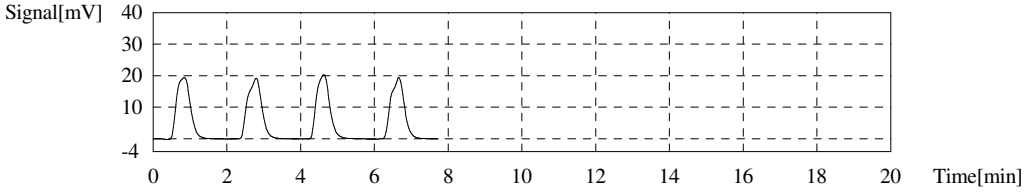
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.61mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	51.28	24.78mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:13:29 PM
2	51.42	24.85mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:15:34 PM
3	50.95	24.62mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:17:49 PM
4	50.08	24.20mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:19:57 PM

Mean Area 50.93
Mean Conc. 24.61mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

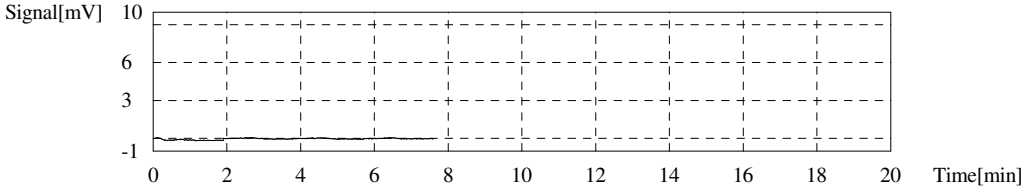
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:-0.03752mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.07080	-0.01181mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:27:51 PM
2	0.000	-0.04609mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:30:01 PM
3	0.000	-0.04609mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:32:06 PM
4	0.000	-0.04609mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:34:15 PM

Mean Area 0.01770
Mean Conc. -0.03752mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

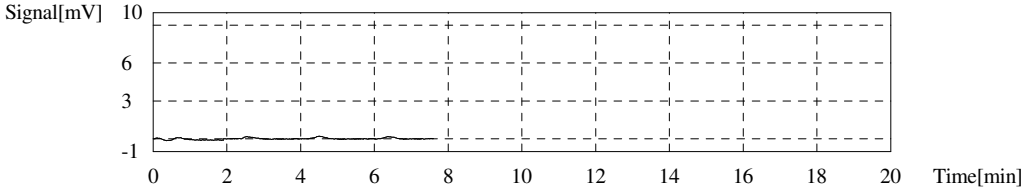
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1381mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4362	0.1651mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:42:09 PM
2	0.2692	0.08424mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:44:19 PM
3	0.4188	0.1567mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:46:24 PM
4	0.3976	0.1464mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:48:29 PM

Mean Area 0.3805
Mean Conc. 0.1381mg/L



Sample

Sample Name: lcs 280-568705/1-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

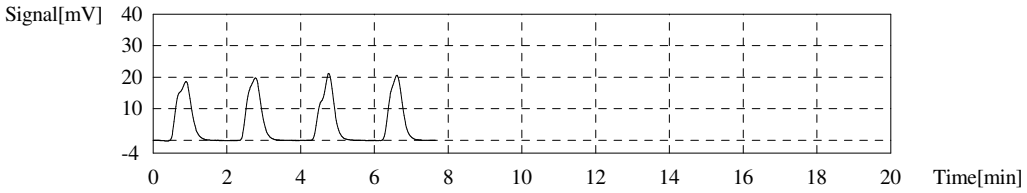
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.89mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	51.71	24.99mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:56:23 PM
2	51.98	25.12mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 4:58:31 PM
3	51.76	25.01mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:00:36 PM
4	50.59	24.45mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:02:41 PM

Mean Area 51.51
Mean Conc. 24.89mg/L



Sample

Sample Name: mb 280-568705/2-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

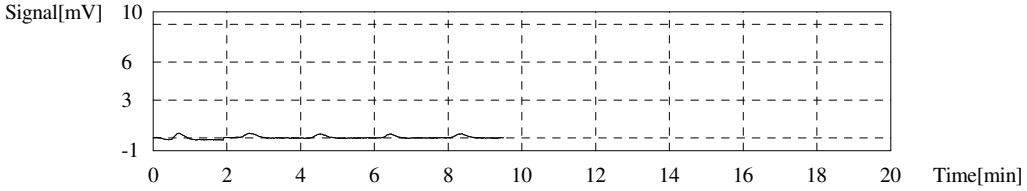
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2674mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9155	0.3971mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:10:35 PM
2	0.7335	0.3090mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:12:45 PM
3	0.6867	0.2864mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:14:50 PM
4	0.5394	0.2151mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:16:55 PM
5	0.6308	0.2593mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:19:00 PM

Mean Area 0.6476
Mean Conc. 0.2674mg/L



Sample

Sample Name: 280-159454-d-1-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

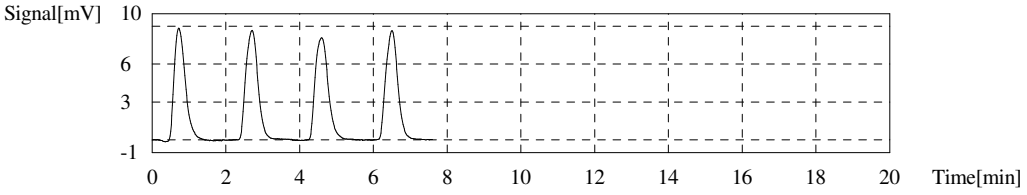
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.489mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.36	9.327mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:26:53 PM
2	19.87	9.574mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:28:58 PM
3	19.97	9.622mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:31:03 PM
4	19.58	9.433mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:33:09 PM

Mean Area 19.70
Mean Conc. 9.489mg/L



Sample

Sample Name: 280-159454-d-1-b ms
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

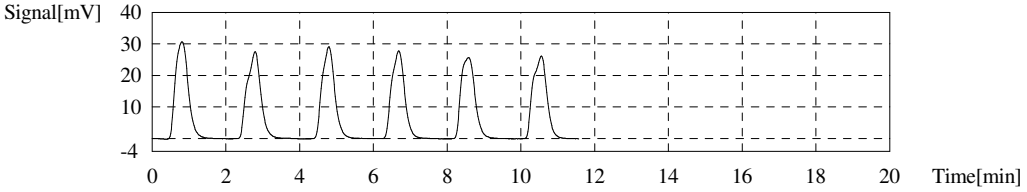
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:33.42mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.69	36.60mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:41:02 PM
2	71.66	34.65mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:43:16 PM
3	70.30	33.99mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:45:21 PM
4	68.41	33.07mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:47:27 PM
5	68.27	33.01mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:49:33 PM
6	69.50	33.60mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:51:38 PM

Mean Area 69.12
Mean Conc. 33.42mg/L



Sample

Sample Name: 280-159454-d-1-c msd
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

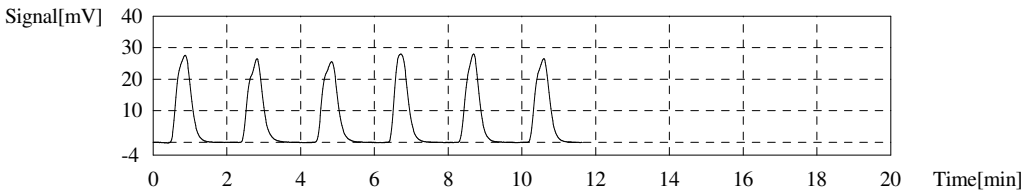
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:33.59mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.22	35.89mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 5:59:27 PM
2	70.84	34.25mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 6:01:40 PM
3	71.50	34.57mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 6:03:50 PM
4	68.88	33.30mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 6:05:55 PM
5	68.60	33.17mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 6:08:00 PM
6	69.60	33.65mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 6:10:09 PM

Mean Area 69.48
Mean Conc. 33.59mg/L



Sample

Sample Name: 280-159454-d-2-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

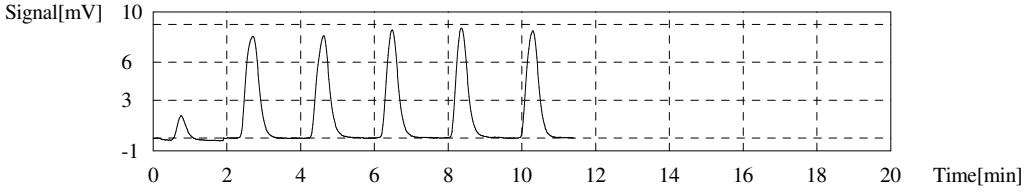
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.110mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.433	1.616mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 6:17:56 PM
2	19.82	9.549mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 6:20:05 PM
3	19.12	9.211mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 6:22:10 PM
4	18.49	8.906mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 6:24:15 PM
5	18.69	9.002mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 6:26:20 PM
6	19.35	9.322mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 6:28:25 PM

Mean Area 18.91
Mean Conc. 9.110mg/L



Sample

Sample Name: 280-159384-d-1-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

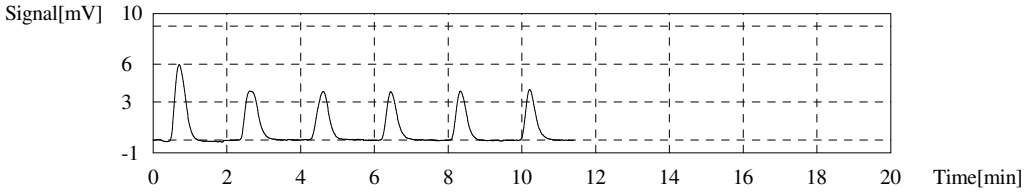
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.707mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.30	5.909mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 6:36:12 PM
2	9.692	4.646mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 6:38:21 PM
3	8.261	3.953mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 6:40:26 PM
4	7.599	3.633mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 6:42:31 PM
5	7.581	3.624mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 6:44:36 PM
6	7.567	3.617mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 6:46:41 PM

Mean Area 7.752
Mean Conc. 3.707mg/L



Sample

Sample Name: 280-159384-d-2-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

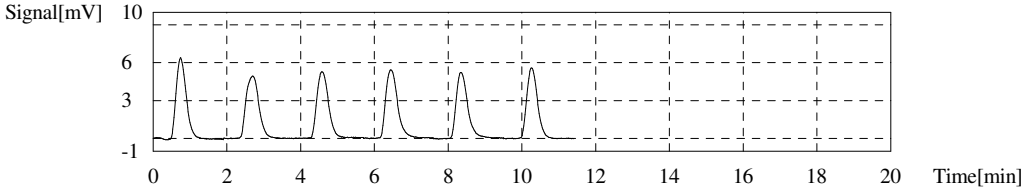
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.557mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.63	6.069mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 6:54:29 PM
2	12.04	5.783mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 6:56:38 PM
3	11.52	5.531mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 6:58:43 PM
4	12.21	5.865mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 7:00:52 PM
5	11.37	5.459mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 7:02:57 PM
6	11.36	5.454mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 7:05:06 PM

Mean Area 11.57
Mean Conc. 5.557mg/L



Sample

Sample Name: 280-159384-d-4-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

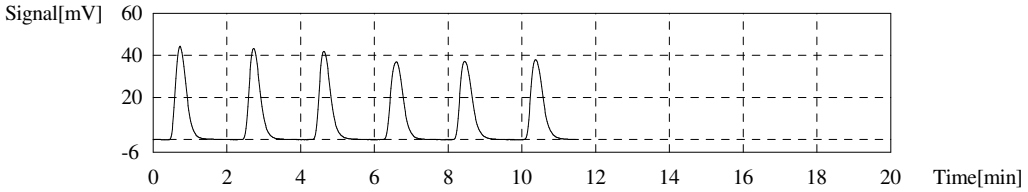
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:42.66mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	92.56	44.77mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 7:13:00 PM
2	90.75	43.89mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 7:15:09 PM
3	89.80	43.43mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 7:17:15 PM
4	87.80	42.46mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 7:19:23 PM
5	86.87	42.01mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 7:21:29 PM
6	88.37	42.74mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 7:23:34 PM

Mean Area 88.21
Mean Conc. 42.66mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

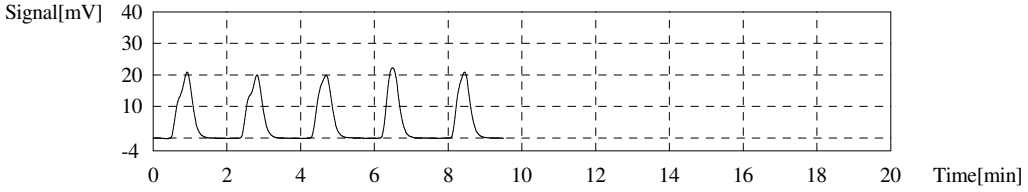
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.70mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	54.23	26.21mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 7:31:22 PM
2	51.82	25.04mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 7:33:27 PM
3	52.10	25.18mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 7:35:32 PM
4	50.46	24.38mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 7:37:37 PM
5	50.05	24.18mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 7:39:42 PM

Mean Area 51.11
Mean Conc. 24.70mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

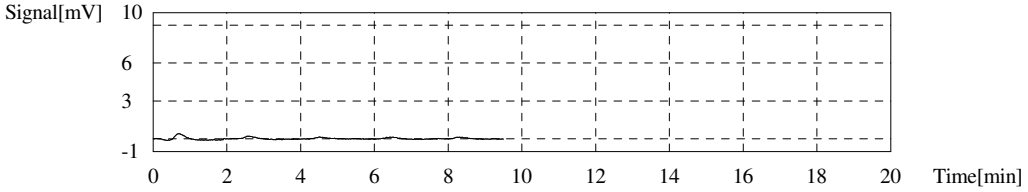
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1077mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.075	0.4744mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 7:47:35 PM
2	0.3829	0.1393mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 7:49:44 PM
3	0.2299	0.06522mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 7:51:49 PM
4	0.3384	0.1177mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 7:53:54 PM
5	0.3194	0.1085mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 7:55:59 PM

Mean Area 0.3176
Mean Conc. 0.1077mg/L



Sample

Sample Name: 280-159384-d-5-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

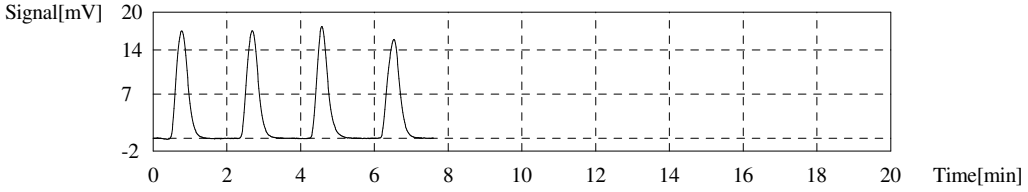
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:17.85mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	37.72	18.22mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 8:03:52 PM
2	37.19	17.96mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 8:06:01 PM
3	36.77	17.76mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 8:08:06 PM
4	36.18	17.47mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 8:10:11 PM

Mean Area 36.97
Mean Conc. 17.85mg/L



Sample

Sample Name: 280-159384-d-6-a
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

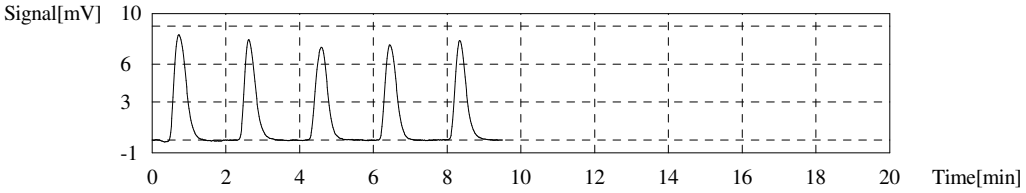
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.941mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.50	9.394mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 8:18:05 PM
2	16.58	7.981mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 8:20:10 PM
3	16.63	8.005mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 8:22:15 PM
4	16.39	7.889mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 8:24:20 PM
5	16.39	7.889mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 8:26:25 PM

Mean Area 16.50
Mean Conc. 7.941mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

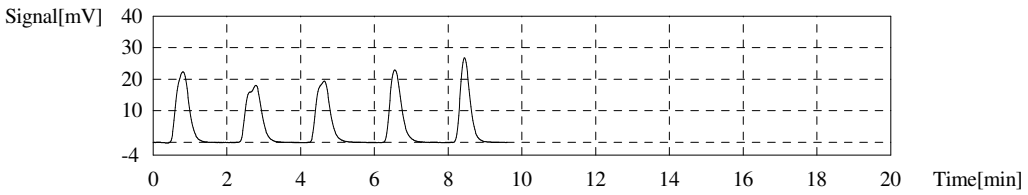
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.50mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	54.57	26.37mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 8:34:18 PM
2	51.98	25.12mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 8:36:24 PM
3	50.95	24.62mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 8:38:35 PM
4	50.00	24.16mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 8:40:40 PM
5	49.87	24.10mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 8:42:45 PM

Mean Area 50.70
Mean Conc. 24.50mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC 2022.met
Status Completed
Chk. Result

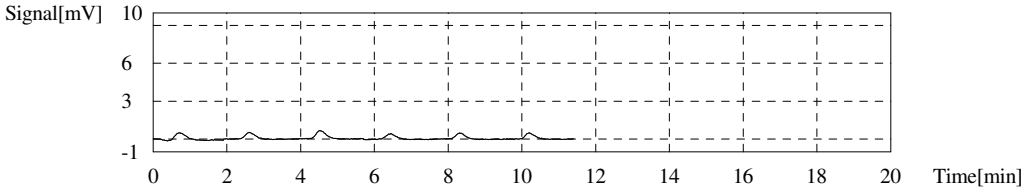
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3797mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.316	0.5910mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 8:50:38 PM
2	0.9730	0.4250mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 8:52:47 PM
3	1.185	0.5276mg/L	50uL	1.000	E	NPOC11.2022_03_14_15_53_52.cal	3/15/2022 8:54:52 PM
4	0.8787	0.3793mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 8:56:57 PM
5	0.7713	0.3273mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 8:59:02 PM
6	0.8949	0.3872mg/L	50uL	1.000		NPOC11.2022_03_14_15_53_52.cal	3/15/2022 9:01:07 PM

Mean Area 0.8795
Mean Conc. 0.3797mg/L



FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

03/21/2022

Batch Number: 280-568571

Analyst: Wondimu, Akewak B

Batch Open: 3/14/2022 11:57:00AM

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~280-568571/1 N/A	N/A				N/A	N/A	N/A		LCS 280-568571/1-A
2	MB~280-568571/2 N/A	N/A				N/A	N/A	N/A		MB 280-568571/2-A
3	280-159234-M-1 (9060A_Diss)	N/A (280-159234-1)	Water			3/20/22	18_Days	4		280-159234-M-1-A
4	280-159234-M-2 (9060A_Diss)	N/A (280-159234-1)	Water			3/20/22	18_Days	4		280-159234-M-2-A
5	280-159234-M-3 (9060A_Diss)	N/A (280-159234-1)	Water			3/20/22	18_Days	4		280-159234-M-3-A
6	280-159234-M-4 (9060A_Diss)	N/A (280-159234-1)	Water			3/20/22	18_Days	4		280-159234-M-4-A
7	280-159234-M-5 (9060A_Diss)	N/A (280-159234-1)	Water			3/20/22	18_Days	4		280-159234-M-5-A
8	280-159234-M-6 (9060A_Diss)	N/A (280-159234-1)	Water			3/20/22	18_Days	4		280-159234-M-6-A
9	280-159234-M-7 (9060A_Diss)	N/A (280-159234-1)	Water			3/20/22	18_Days	4		280-159234-M-7-A
10	280-159234-M-7~MS (9060A_Diss)	N/A (280-159234-1)	Water			3/20/22	18_Days	4		280-159234-M-7-B MS
11	280-159234-M-7~MSD (9060A_Diss)	N/A (280-159234-1)	Water			3/20/22	18_Days	4		280-159234-M-7-C MSD
12	280-159234-M-8 (9060A_Diss)	N/A (280-159234-1)	Water			3/20/22	18_Days	4		280-159234-M-8-A
13	280-159234-M-9 (9060A_Diss)	N/A (280-159234-1)	Water			3/20/22	18_Days	4		280-159234-M-9-A
14	280-159234-M-10 (9060A_Diss)	N/A (280-159234-1)	Water			3/20/22	18_Days	4		280-159234-M-10-A

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-568571 Analyst: Wondimu, Akewak B Batch Open: 3/14/2022 11:57:00AM

Batch End:

15	280-159332-D-1 (9060A_Diss)	N/A (280-159332-1)	Water			3/21/22	18_Days	4	280-159332-D-1-A
16	280-159332-D-1~MS (9060A_Diss)	N/A (280-159332-1)	Water			3/21/22	18_Days	4	280-159332-D-1-B MS
17	280-159332-D-1~MSD (9060A_Diss)	N/A (280-159332-1)	Water			3/21/22	18_Days	4	280-159332-D-1-C MSD
18	280-159332-D-2 (9060A_Diss)	N/A (280-159332-1)	Water			3/21/22	18_Days	4	280-159332-D-2-A
19	280-159332-D-3 (9060A_Diss)	N/A (280-159332-1)	Water			3/21/22	18_Days	4	280-159332-D-3-A
20	280-159332-D-4 (9060A_Diss)	N/A (280-159332-1)	Water			3/21/22	18_Days	4	280-159332-D-4-A
21	280-159332-D-5 (9060A_Diss)	N/A (280-159332-1)	Water			3/21/22	18_Days	4	280-159332-D-5-A
22	280-159332-D-6 (9060A_Diss)	N/A (280-159332-1)	Water			3/21/22	18_Days	4	280-159332-D-6-A
23	280-159332-D-7 (9060A_Diss)	N/A (280-159332-1)	Water			3/21/22	18_Days	4	280-159332-D-7-A
24	280-159332-D-8 (9060A_Diss)	N/A (280-159332-1)	Water			3/21/22	18_Days	4	280-159332-D-8-A
25	280-159332-D-9 (9060A_Diss)	N/A (280-159332-1)	Water			3/21/22	18_Days	4	280-159332-D-9-A
26	280-159332-D-10 (9060A_Diss)	N/A (280-159332-1)	Water			3/21/22	18_Days	4	280-159332-D-10-A
27	280-159332-D-11 (9060A_Diss)	N/A (280-159332-1)	Water			3/21/22	18_Days	4	280-159332-D-11-A
28	280-159332-D-12 (9060A_Diss)	N/A (280-159332-1)	Water			3/21/22	18_Days	4	280-159332-D-12-A
29	280-159332-D-13 (9060A_Diss)	N/A (280-159332-1)	Water			3/21/22	18_Days	4	280-159332-D-13-A
30	280-159332-D-13~MS (9060A_Diss)	N/A (280-159332-1)	Water			3/21/22	18_Days	4	280-159332-D-13-B MS
31	280-159332-D-13~MSD (9060A_Diss)	N/A (280-159332-1)	Water			3/21/22	18_Days	4	280-159332-D-13-C MSD

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-568571

Analyst: Wondimu, Akewak B

Batch Open: 3/14/2022 11:57:00AM

Batch End:

03/21/2022

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-568571

Analyst: Wondimu, Akewak B

Batch Open: 3/14/2022 11:57:00AM

Batch End:

Batch Notes

Pipette/Syringe/Dispenser ID	9086953
Filter ID	17233826
Nitric Acid ID	N/A
Batch Comment	DOC Filtration

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-568571

Analyst: Wondimu, Akewak B

Batch Open: 3/14/2022 11:57:00AM

Batch End:

03/21/2022

Comments

280-159234-M-1	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159234-M-2	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159234-M-3	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159234-M-4	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159234-M-5	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159234-M-6	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159234-M-7	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159234-M-7~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159234-M-7~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159234-M-8	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159234-M-9	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159234-M-10	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159332-D-1	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159332-D-1~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159332-D-1~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159332-D-2	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-568571 Analyst: Wondimu, Akewak B Batch Open: 3/14/2022 11:57:00AM

Batch End:

	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159332-D-3		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159332-D-4		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159332-D-5		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159332-D-6		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159332-D-7		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159332-D-8		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159332-D-9		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159332-D-10		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159332-D-11		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159332-D-12		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159332-D-13		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159332-D-13~M		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159332-D-13~M		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

03/21/2022

Batch Number: 280-568571

Analyst: Wondimu, Akewak B

Batch Open: 3/14/2022 11:57:00AM

Batch End:

Reagent Additions Worksheet

Lab ID	Reagent Code	Amount Added	Final Amount	By	Witness

Other Reagents:

Reagent	Amount/Units	Lot#:

9060A

Shi 5 pH Filtration.

	Type	Analysi	Sample Name	Sa	O	M	Result	Notes	S	D	Vial
1*	Unknown	NPOC	ICV		N	1	✓		D		1
2*	Unknown	NPOC	ICB		N	1	✓		D		2
3*	Unknown	NPOC	LCS		N	1	✓		D		3
4*	Unknown	NPOC	MB		N	1	✓		D		4
5*	Unknown	NPOC	TIC		N	1	✓		D		5
6*	Unknown	NPOC	lcs 280-568571/1-a		N	1	✓		D		6
7*	Unknown	NPOC	mb 280-568571/2-a		N	1	✓		D		7
8*	Unknown	NPOC	280-159234-m-1-a		N	1	>2		D		8
9*	Unknown	NPOC	280-159234-m-2-a		N	1	>2		D		9
10*	Unknown	NPOC	280-159234-m-3-a		N	1	>2		D		10
11*	Unknown	NPOC	280-159234-m-4-a		N	1	>2		D		11
12*	Unknown	NPOC	280-159234-m-5-a		N	1	>2		D		12
13*	Unknown	NPOC	280-159234-m-6-a		N	1	>2		D		13
14*	Unknown	NPOC	280-159234-m-7-a		N	1	>2		D		14
15*	Unknown	NPOC	CCV		N	1	✓		D		15
16*	Unknown	NPOC	CCB		N	1	✓		D		16
17*	Unknown	NPOC	280-159234-m-7-b ms		N	1	>2		D		17
18*	Unknown	NPOC	280-159234-m-7-c msd		N	1	>2		D		18
19*	Unknown	NPOC	280-159234-m-8-a		N	1	>2	Filtration DOC	D		19
20*	Unknown	NPOC	280-159234-m-9-a		N	1	>2		D		20
21*	Unknown	NPOC	280-159234-m-10-a		N	1	>2		D		21
22*	Unknown	NPOC	280-159332-d-1-a		N	1	>2		D		22
23*	Unknown	NPOC	280-159332-d-1-b ms		N	1	>2		D		23
24*	Unknown	NPOC	280-159332-d-1-c msd		N	1	>2		D		24
25*	Unknown	NPOC	280-159332-d-2-a		N	1	>2		D		25
26*	Unknown	NPOC	280-159332-d-3		N	1	>2		D		26
27*	Unknown	NPOC	CCV		N	1	✓		D		27
28*	Unknown	NPOC	CCB		N	1	✓		D		28
29*	Unknown	NPOC	280-159332-d-4-a		N	1	>2		D		29
30*	Unknown	NPOC	280-159332-d-5-a		N	1	>2		D		30
31*	Unknown	NPOC	280-159332-d-6-a		N	1	>2		D		31
32*	Unknown	NPOC	280-159332-d-7-a		N	1	>2		D		32
33*	Unknown	NPOC	280-159332-d-8-a		N	1	>2		D		33
34*	Unknown	NPOC	280-159332-d-9-a		N	1	>2		D		34
35*	Unknown	NPOC	280-159332-d-10-a		N	1	>2		D		35
36*	Unknown	NPOC	280-159332-d-11-a		N	1	>2		D		36
37*	Unknown	NPOC	280-159332-d-12-a		N	1	>2		D		37
38*	Unknown	NPOC	280-159332-d-13-a		N	1	>2		D		38
39*	Unknown	NPOC	CCV		N	1	✓		D		39
40*	Unknown	NPOC	CCB		N	1	✓		D		40
41*	Unknown	NPOC	280-159332-d-13-b ms		N	1	>2		D		41
42*	Unknown	NPOC	280-159332-d-13-c msd		N	1	>2		D		42
43*	Unknown	NPOC	CCV		N	1	✓		D		43
44*	Unknown	NPOC	CCB		N	1	✓		D		44

BWI 5000, MS 1000

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-568705

Analyst: Wondimu, Akewak B

Batch Open: 3/15/2022 1:56:00PM

Batch End:

03/21/2022

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~280-568705/1 N/A	N/A				N/A	N/A	N/A		
2	MB~280-568705/2 N/A	N/A				N/A	N/A	N/A		
3	280-159454-D-1 (9060A_Diss)	N/A (280-159454-1)	Water			3/25/22	18_Days	4		
4	280-159454-D-1~MS (9060A_Diss)	N/A (280-159454-1)	Water			3/25/22	18_Days	4		
5	280-159454-D-1~MSD (9060A_Diss)	N/A (280-159454-1)	Water			3/25/22	18_Days	4		
6	280-159454-D-2 (9060A_Diss)	N/A (280-159454-1)	Water			3/25/22	18_Days	4		
7	280-159384-D-1 (9060A_Diss)	N/A (280-159384-1)	Water			3/22/22	18_Days	4		
8	280-159384-D-2 (9060A_Diss)	N/A (280-159384-1)	Water			3/22/22	18_Days	4		
9	280-159384-D-4 (9060A_Diss)	N/A (280-159384-1)	Water			3/22/22	18_Days	4		
10	280-159384-D-5 (9060A_Diss)	N/A (280-159384-1)	Water			3/22/22	18_Days	4		
11	280-159384-D-6 (9060A_Diss)	N/A (280-159384-1)	Water			3/22/22	18_Days	4		

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-568705 Analyst: Wondimu, Akewak B Batch Open: 3/15/2022 1:56:00PM

Batch End:

Batch Notes

Pipette/Syringe/Dispenser ID	9086953
Filter ID	17233826
Nitric Acid ID	N/A
Batch Comment	DOC Filtration

Comments

280-159454-D-1	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159454-D-1~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159454-D-1~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159454-D-2	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159384-D-1	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159384-D-2	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159384-D-4	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159384-D-5	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159384-D-6	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

03/21/2022

Batch Number: 280-568705

Analyst: Wondimu, Akewak B

Batch Open: 3/15/2022 1:56:00PM

Batch End:

Reagent Additions Worksheet

Lab ID	Reagent Code	Amount Added	Final Amount	By	Witness

Other Reagents:

Reagent	Amount/Units	Lot#:

Shi 5 Filtration

9060A

	Type	A	Sample Name	Sa	O	M	Result (pH)	Notes	S	D	Vi
1*	Unknown	N	ICV		N	1	✓		D		1
2*	Unknown	N	ICB		N	1	✓		D		2
3*	Unknown	N	LCS		N	1	✓		D		3
4*	Unknown	N	MB		N	1	✓		D		4
5*	Unknown	N	TIC		N	1	✓		D		5
6*	Unknown	N	lcs 280-568705/1-a		N	1	✓		D		6
7*	Unknown	N	mb 280-568705/2-a		N	1	✓		D		7
8*	Unknown	N	280-159454-d-1-a		N	1	>2		D		8
9*	Unknown	N	280-159454-d-1-b ms		N	1	>2		D		9
10*	Unknown	N	280-159454-d-1-c msd		N	1	>2		D		1
11*	Unknown	N	280-159454-d-2-a		N	1	>2		D		1
12*	Unknown	N	280-159384-d-1-a		N	1	>2		D		1
13*	Unknown	N	280-159384-d-2-a		N	1	>2		D		1
14*	Unknown	N	280-159384-d-4-a		N	1	>2		D		1
15*	Unknown	N	CCV		N	1	✓		D		1
16*	Unknown	N	CCB		N	1	✓		D		1
17*	Unknown	N	280-159384-d-5-a		N	1	>2		D		1
18*	Unknown	N	280-159384-d-6-a		N	1	>2		D		1
19*	Unknown	N	CCV		N	1	✓		D		1
20*	Unknown	N	CCB		N	1	✓		D		2

BWH 5000

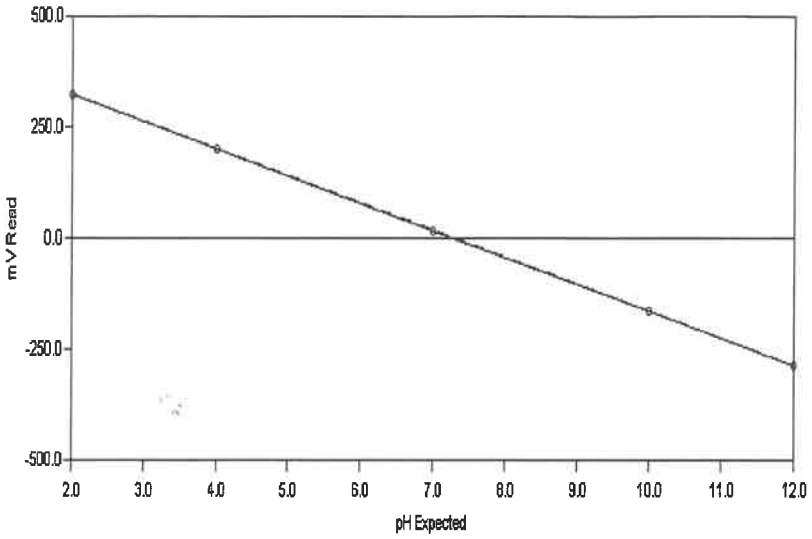
MANTECH

MANTECH INC.

Report Date: 3/8/2022 : 1:04 PM

Calibration Report

Calibration Record # 473



Calibration Settings

Calibration ID	PH	Date	3/8/2022	
Channel	1	Time	12:41 PM	
Probe Type	pH	Temperature	295.99 K	22.84 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit	

Calibration Results

Slope	-60.832	CorrCoeff	1.0000
Intercept	18.016	Equation:	Y = (-60.832) X + (18.016)

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-60.832	-65.00	-53.00
Intercept	18.016	-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	322.50
	4.00	200.07
	7.00	17.08
	10.00	-161.98
	12.00	-287.59

Test America
Water Analysis Report

AT4 Analyst:_____

03/21/2022

Run Number 1392 **Order Number** 20220308-2

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	3/8/2022	2:33 PM	22.96	-1.00	5.28	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
INITIAL CHECK	3/8/2022	2:40 PM	22.58	-1.00	10.66	103.62	197.04	.00	186.85	10.19	1.04	1.97	-1.00	.02
BUFFER 7	3/8/2022	2:43 PM	22.49	-1.00	7.01	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
LCS	3/8/2022	2:50 PM	22.20	-1.00	10.67	104.63	197.91	.00	186.56	11.35	1.05	1.98	-1.00	.02
LCSD	3/8/2022	2:57 PM	22.08	-1.00	10.69	105.14	197.07	.00	183.85	13.22	1.05	1.97	-1.00	.02
MB	3/8/2022	3:03 PM	22.28	-1.00	7.90	.00	.99	.99	.00	.00	.00	.03	.04	.02
280-159382-a-3	3/8/2022	3:08 PM	22.17	-1.00	6.85	.00	87.29	87.29	.00	.00	.00	.87	-1.00	.02
DU 280-159382-a-3	3/8/2022	3:13 PM	22.14	-1.00	6.92	.00	88.72	88.72	.00	.00	.00	.89	-1.00	.02
280-159384-f-2	3/8/2022	3:22 PM	22.23	-1.00	7.46	.00	509.71	509.71	.00	.00	.00	5.10	-1.00	.02
280-159384-f-4	3/8/2022	3:33 PM	22.34	-1.00	7.04	.00	707.82	707.82	.00	.00	.00	7.08	-1.00	.02
280-159384-f-5	3/8/2022	3:45 PM	22.58	-1.00	7.18	.00	849.32	849.32	.00	.00	.00	8.49	-1.00	.02
280-159384-f-6	3/8/2022	3:55 PM	22.67	-1.00	7.01	.00	670.77	670.77	.00	.00	.00	6.71	-1.00	.02
280-159401-b-1	3/8/2022	4:09 PM	22.57	-1.00	8.28	.00	1,130.70	1,130.70	.00	.00	.00	11.31	-1.00	.02
280-159401-b-2	3/8/2022	4:22 PM	22.37	-1.00	8.48	19.88	1,000.72	960.96	39.76	.00	.20	10.01	-1.00	.02
280-159419-d-1	3/8/2022	4:31 PM	22.29	-1.00	6.99	.00	519.53	519.53	.00	.00	.00	5.20	-1.00	.02
280-159419-d-2	3/8/2022	4:46 PM	22.11	-1.00	6.98	.00	1,249.83	1,249.83	.00	.00	.00	12.50	-1.00	.02
CCV	3/8/2022	4:53 PM	21.79	-1.00	10.60	102.93	197.81	.00	189.76	8.06	1.03	1.98	-1.00	.02
CCB	3/8/2022	4:59 PM	21.99	-1.00	7.63	.00	.99	.99	.00	.00	.00	.03	.04	.02
280-159419-d-3	3/8/2022	5:09 PM	22.02	-1.00	6.99	.00	643.34	643.34	.00	.00	.00	6.43	-1.00	.02
280-159419-d-4	3/8/2022	5:18 PM	22.11	-1.00	6.97	.00	513.03	513.03	.00	.00	.00	5.13	-1.00	.02
280-159419-d-5	3/8/2022	5:25 PM	22.17	-1.00	7.06	.00	296.77	296.77	.00	.00	.00	2.97	-1.00	.02
280-159419-d-6	3/8/2022	5:32 PM	22.45	-1.00	7.01	.00	220.56	220.56	.00	.00	.00	2.21	-1.00	.02
280-159432-c-1	3/8/2022	5:41 PM	22.80	-1.00	7.68	.00	542.76	542.76	.00	.00	.00	5.43	-1.00	.02
280-159431-a-1	3/8/2022	5:53 PM	22.57	-1.00	7.76	.00	903.76	903.76	.00	.00	.00	9.04	-1.00	.02
280-159431-a-2	3/8/2022	6:02 PM	22.32	-1.00	7.81	.00	395.38	395.38	.00	.00	.00	3.95	-1.00	.02
280-159332-f-1	3/8/2022	6:09 PM	22.14	-1.00	7.07	.00	324.60	324.60	.00	.00	.00	3.25	-1.00	.02
280-159332-f-2	3/8/2022	6:16 PM	22.07	-1.00	7.18	.00	300.22	300.22	.00	.00	.00	3.00	-1.00	.02

PC-TitratION PLUS by Man-Tech Associates, Inc.

GENERAL RESULTS REPORT.SRW

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Run Number 1392 **Order Number** 20220308-2

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)
280-159332-f-3	3/8/2022	6:23 PM	21.96	-1.00	7.13	.00	210.07	210.07	.00	.00	.00	2.10	-1.00	.02
CCV	3/8/2022	6:30 PM	21.93	-1.00	10.57	99.13	197.43	.00	196.60	.83	.99	1.97	-1.00	.02
CCB	3/8/2022	6:36 PM	21.98	-1.00	7.69	.00	1.06	1.06	.00	.00	.00	.03	.05	.02
LCS	3/8/2022	6:43 PM	21.70	-1.00	10.59	101.98	200.27	.00	196.59	3.69	1.02	2.00	-1.00	.02
MB	3/8/2022	6:48 PM	22.08	-1.00	7.58	.00	1.12	1.12	.00	.00	.00	.03	.05	.02
280-159332-f-4	3/8/2022	6:56 PM	22.22	-1.00	7.14	.00	397.84	397.84	.00	.00	.00	3.98	-1.00	.02
DU 280-159332-f-4	3/8/2022	7:04 PM	22.48	-1.00	7.09	.00	397.16	397.16	.00	.00	.00	3.97	-1.00	.02
280-159332-f-5	3/8/2022	7:12 PM	22.60	-1.00	7.13	.00	399.04	399.04	.00	.00	.00	3.99	-1.00	.02
280-159332-f-6	3/8/2022	7:20 PM	22.28	-1.00	7.42	.00	331.90	331.90	.00	.00	.00	3.32	-1.00	.02
280-159332-f-7	3/8/2022	7:27 PM	22.13	-1.00	7.29	.00	297.56	297.56	.00	.00	.00	2.98	-1.00	.02
280-159332-f-8	3/8/2022	7:35 PM	22.00	-1.00	7.51	.00	321.92	321.92	.00	.00	.00	3.22	-1.00	.02
280-159332-f-9	3/8/2022	7:42 PM	21.92	-1.00	6.88	.00	298.53	298.53	.00	.00	.00	2.99	-1.00	.02
280-159332-f-10	3/8/2022	7:51 PM	21.86	-1.00	6.96	.00	554.73	554.73	.00	.00	.00	5.55	-1.00	.02
280-159332-f-11	3/8/2022	8:00 PM	21.86	-1.00	7.03	.00	452.84	452.84	.00	.00	.00	4.53	-1.00	.02
280-159332-f-12	3/8/2022	8:09 PM	21.95	-1.00	7.01	.00	456.28	456.28	.00	.00	.00	4.56	-1.00	.02
CCV	3/8/2022	8:15 PM	21.74	-1.00	10.55	98.52	198.66	1.62	197.04	.00	.99	1.99	-1.00	.02
CCB	3/8/2022	8:21 PM	22.16	-1.00	7.68	.00	1.12	1.12	.00	.00	.00	.03	.04	.02
280-159332-f-13	3/8/2022	8:27 PM	22.37	-1.00	6.92	.00	138.21	138.21	.00	.00	.00	1.38	-1.00	.02
280-159361-a-2	3/8/2022	8:42 PM	22.74	-1.00	7.50	.00	1,293.82	1,293.82	.00	.00	.00	12.94	-1.00	.02
280-159361-a-3	3/8/2022	8:51 PM	22.52	-1.00	7.70	.00	526.85	526.85	.00	.00	.00	5.27	-1.00	.02
280-159361-a-4	3/8/2022	9:00 PM	22.31	-1.00	7.46	.00	450.83	450.83	.00	.00	.00	4.51	-1.00	.02
280-159361-a-5	3/8/2022	9:08 PM	22.10	-1.00	7.78	.00	385.36	385.36	.00	.00	.00	3.85	-1.00	.02
280-159361-a-6	3/8/2022	9:16 PM	22.05	-1.00	7.43	.00	438.60	438.60	.00	.00	.00	4.39	-1.00	.02
280-159361-a-7	3/8/2022	9:26 PM	22.07	-1.00	7.50	.00	604.13	604.13	.00	.00	.00	6.04	-1.00	.02
280-159361-a-8	3/8/2022	9:35 PM	22.02	-1.00	7.67	.00	426.20	426.20	.00	.00	.00	4.26	-1.00	.02
280-159346-d-3	3/8/2022	9:48 PM	21.85	-1.00	8.61	38.81	1,152.10	1,074.47	77.62	.00	.39	11.52	-1.00	.02
280-159441-a-2	3/8/2022	9:54 PM	22.08	-1.00	6.30	.00	82.11	82.11	.00	.00	.00	.82	-1.00	.02
CCV	3/8/2022	10:01 PM	21.83	-1.00	10.50	98.47	200.90	3.96	196.94	.00	.98	2.01	-1.00	.02
CCB	3/8/2022	10:06 PM	22.25	-1.00	7.64	.00	1.21	1.21	.00	.00	.00	.03	.04	.02
LCS	3/8/2022	10:13 PM	22.42	-1.00	10.51	98.35	203.13	6.43	196.71	.00	.98	2.03	-1.00	.02

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Run Number 1392 **Order Number** 20220308-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
MB	3/8/2022	10:19 PM	22.69	-1.00	7.67	.00	.94	.94	.00	.00	.00	.03	.04	.02
280-159441-a-3	3/8/2022	10:28 PM	22.46	-1.00	7.37	.00	582.10	582.10	.00	.00	.00	5.82	-1.00	.02
DU 280-159441-a-3	3/8/2022	10:38 PM	22.35	-1.00	7.27	.00	577.63	577.63	.00	.00	.00	5.78	-1.00	.02
280-159441-a-4	3/8/2022	10:44 PM	22.23	-1.00	6.84	.00	158.70	158.70	.00	.00	.00	1.59	-1.00	.02
280-159442-a-1	3/8/2022	10:53 PM	22.11	-1.00	7.17	.00	476.13	476.13	.00	.00	.00	4.76	-1.00	.02
280-159442-a-2	3/8/2022	11:05 PM	22.13	-1.00	7.38	.00	836.93	836.93	.00	.00	.00	8.37	-1.00	.02
280-159434-a-1	3/8/2022	11:16 PM	22.22	-1.00	7.87	.00	693.30	693.30	.00	.00	.00	6.93	-1.00	.02
280-159347-a-1	3/8/2022	11:26 PM	22.20	-1.00	8.28	.00	639.96	639.96	.00	.00	.00	6.40	-1.00	.02
280-159443-a-1	3/8/2022	11:36 PM	22.26	-1.00	7.39	.00	700.66	700.66	.00	.00	.00	7.01	-1.00	.02
280-159452-a-1	3/8/2022	11:42 PM	22.39	-1.00	6.56	.00	72.60	72.60	.00	.00	.00	.73	-1.00	.02
280-159452-a-2	3/8/2022	11:48 PM	22.52	-1.00	6.75	.00	118.55	118.55	.00	.00	.00	1.19	-1.00	.02
CCV	3/8/2022	11:54 PM	22.84	-1.00	10.46	97.41	206.86	12.05	194.81	.00	.97	2.07	-1.00	.02
CCB	3/9/2022	12:00 AM	22.78	-1.00	7.65	.00	.75	.75	.00	.00	.00	.03	.05	.02
280-159452-a-3	3/9/2022	12:05 AM	22.58	-1.00	5.91	.00	23.16	23.16	.00	.00	.00	.23	-1.00	.02
280-159452-a-4	3/9/2022	12:13 AM	22.43	-1.00	7.63	.00	335.20	335.20	.00	.00	.00	3.35	-1.00	.02
280-159452-a-5	3/9/2022	12:20 AM	22.49	-1.00	7.30	.00	276.90	276.90	.00	.00	.00	2.77	-1.00	.02
280-159454-f-1	3/9/2022	12:32 AM	22.34	-1.00	7.45	.00	970.09	970.09	.00	.00	.00	9.70	-1.00	.02
280-159454-f-2	3/9/2022	12:45 AM	22.49	-1.00	7.45	.00	973.28	973.28	.00	.00	.00	9.73	-1.00	.02
280-159421-a-1	3/9/2022	12:54 AM	22.54	-1.00	8.19	.00	367.67	367.67	.00	.00	.00	3.68	-1.00	.02
280-159421-a-2	3/9/2022	1:03 AM	22.35	-1.00	8.82	49.24	689.74	591.25	98.49	.00	.49	6.90	-1.00	.02
280-159421-a-4	3/9/2022	1:13 AM	22.66	-1.00	7.47	.00	517.27	517.27	.00	.00	.00	5.17	-1.00	.02
280-159421-a-3	3/9/2022	1:22 AM	22.74	-1.00	8.13	.00	604.01	604.01	.00	.00	.00	6.04	-1.00	.02
280-159450-h-1	3/9/2022	1:40 AM	22.90	-1.00	7.91	.00	.00	.00	.00	.00	.00	.00	.00	.02
CCV	3/9/2022	1:48 AM	23.09	-1.00	10.39	97.87	209.94	14.20	195.74	.00	.98	2.10	-1.00	.02
CCB	3/9/2022	1:53 AM	23.03	-1.00	7.79	.00	1.50	1.50	.00	.00	.00	.03	.05	.02
LCS	3/9/2022	2:01 AM	22.87	-1.00	10.42	96.13	205.30	13.03	192.27	.00	.96	2.05	-1.00	.02
MB	3/9/2022	2:06 AM	22.90	-1.00	7.84	.00	2.30	2.30	.00	.00	.00	.04	.06	.02
280-159450-g-2	3/9/2022	2:28 AM	22.87	-1.00	7.88	.00	.00	.00	.00	.00	.00	.00	.00	.02
DU 280-159450-g-2	3/9/2022	2:50 AM	22.92	-1.00	7.90	.00	.00	.00	.00	.00	.00	.00	.00	.02
CCV	3/9/2022	2:58 AM	22.89	-1.00	10.38	96.51	210.49	17.47	193.02	.00	.97	2.10	-1.00	.02

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Run Number 1392 **Order Number** 20220308-2

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)
CCB	3/9/2022	3:03 AM	22.83	-1.00	7.68	.00	6.50	6.50	.00	.00	.00	.07	.07	.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 GC BEAP

Bill to: Brice Engineering

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 standard TAT
3-1-22	1410		X	G0081-8	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
3-1-22	1525		X	G0082-8	↓	9	↓	X	X	X	X	X	X		↓
3-1-22	1310		X	G0024-8	↓	9	↓	X	X	X	X	X	X		↓

280-159332 Chain of Custody



Signatures	Date	Time
Relinquished by:	3-2-22	1600
Received by:	3/3/22	0925
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number: 923524188383

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

1-8 1R13(F-C.2

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2020620

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 GC BC AP	

Bill to: Brice Engineering

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 standard TAT
3-2-21	1110		X	G0096-8	AQ	9	ABCDEF								6°C
3-2-21	0800		X	G0296-8	AQ	9	↓								↓
3-1-21	1715		X	PZ020-8	AQ	9	↓								↓

Signatures	Date	Time
Relinquished by: [signature]	3-2-22	1600
Received by: [signature]	3/3/22	0905
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number: 923524188637

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

1.4 KBCFC 8

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2020623

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): BE, AP, KD, GC	

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)		Remarks
3-1-22	1440		X	GW0077-8	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
3-1-22	1600		X	GW0078-8	AQ	9	ABCDEF	X	X	X	X	X	X		↓
3-1-22	1000		X	GW0094-8	AQ	9	ABCDEF	X	X	X	X	X	X		↓

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	3-2-22	1600	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	3/2/22	0951	Airbill Number: 923524188567	(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)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
Received for Laboratory by:				TAL/Brice Project #: 28017805

1.1 IR3 CF-02

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2020618

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): BE AP	

Bill to: Brice Engineering

Remarks: standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Analytical Parameters: 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
3-2-22	1040		X	PZ018-S	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
3-2-22	1145		X	PZ017R-S		9	ABCDEF	X	X	X	X	X	X		
3-2-22	0800		X	PZ021-S		9	ABCDEF	X	X	X	X	X	X		

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	3-2-22	1600	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	3/3/22	0855	Airbill Number: 923524185648	(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)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
Received for Laboratory by:				TAL/Brice Project #: 28017805

4.9 IR13 CFCF

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2020619

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	Bill to: Brice Engineering
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse	Remarks: standard TAT
Sampler(s): BE AP		

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
3-2-22	0910		X	PZ019-8	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
3-2-22	0910		X	PZ019-8-MS/MSD	↓	18	ABCDEF	X	X	X	X	X	X		↓

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	3-2-22	1600	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	3/3/22	0805	Airbill Number: 923524188394	(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)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
Received for Laboratory by:				TAL/Brice Project #: 28017805

J.Q IR13 CF=0.8

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03/21/2022

2020621

Login Sample Receipt Checklist

Client: Brice Environmental Services, Corp

Job Number: 280-159332-1

Login Number: 159332
List Number: 1
Creator: Roehsner, Karen P

List Source: Eurofins Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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	