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ANALYTICAL REPORT

Job Number: 280-159190-1

Job Description: Cornhusker (CHAAP)

For:
Brice Environmental Services, Corp
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Attention: Corey Schwabenlander



Approved for release.
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3/21/2022 5:02 AM

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The Lab Certification ID# is 4025.

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

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Qualifiers

GC VOA

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

HPLC/IC

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

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TNTC	Too Numerous To Count

CASE NARRATIVE

Client: Brice Environmental Services, Corp

Project: Cornhusker (CHAAP)

Report Number: 280-159190-1

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 3/1/2022 9:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were 0.2º C, 0.8º C, 0.9º C, 1.4º C, 2.6º C and 4.1º C.

Receipt Exceptions

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): EW7-PM28A-8-25 (280-159190-13). The container labels list sample time 0935. COC list 0925. Logged per container labels according to client request.

DISSOLVED GASES (GC)

Samples NW071-8 (280-159190-1), NW060-8 (280-159190-2), NW061-8 (280-159190-3), EW7-PM24A-8-25 (280-159190-4), EW7-PM21A-8-25 (280-159190-5), NW070-8 (280-159190-6), CA210-8 (280-159190-7), CA212-8 (280-159190-8), CA213-8 (280-159190-9), G0092-8 (280-159190-10), G0091-8 (280-159190-11), CA211-8 (280-159190-12), EW7-PM28A-8-25 (280-159190-13), EW7-PM29A-8-25 (280-159190-14), EW7-PM27B-8-35 (280-159190-15) and NW062-8 (280-159190-16) were analyzed for Dissolved Gases (GC) in accordance with RSK_175. The samples were analyzed on 03/03/2022 and 03/08/2022.

Samples EW7-PM28A-8-25 (280-159190-13)[2X] and EW7-PM29A-8-25 (280-159190-14)[2X] 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.

NITROAROMATICS AND NITRAMINES (HPLC)

Samples NW071-8 (280-159190-1), NW060-8 (280-159190-2), NW061-8 (280-159190-3), EW7-PM24A-8-25 (280-159190-4), EW7-PM21A-8-25 (280-159190-5), NW070-8 (280-159190-6), CA210-8 (280-159190-7), CA212-8 (280-159190-8), CA213-8 (280-159190-9), G0092-8 (280-159190-10), G0091-8 (280-159190-11), CA211-8 (280-159190-12), EW7-PM28A-8-25 (280-159190-13), EW7-PM29A-8-25 (280-159190-14), EW7-PM27B-8-35 (280-159190-15) and NW062-8 (280-159190-16) were analyzed for Nitroaromatics and Nitramines (HPLC) in accordance with 8330A. The samples were prepared on 03/04/2022 and analyzed on 03/04/2022 and 03/05/2022.

The %RPD between the primary and confirmation column exceeded 40% for RDX for the following sample: EW7-PM24A-8-25 (280-159190-4) in preparation batch 280-567737 and analytical batch 280-567774. The results from both columns has been qualified and reported in accordance with the laboratory's QAS.

In preparation batch 280-567737, the following samples required filtration to reduce matrix interferences: NW061-8 (280-159190-3), EW7-PM24A-8-25 (280-159190-4), EW7-PM21A-8-25 (280-159190-5), EW7-PM28A-8-25 (280-159190-13), EW7-PM29A-8-25 (280-159190-14) and EW7-PM27B-8-35 (280-159190-15).

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

ALKALINITY

Samples NW071-8 (280-159190-1), NW060-8 (280-159190-2), NW061-8 (280-159190-3), EW7-PM24A-8-25 (280-159190-4), EW7-PM21A-8-25 (280-159190-5), NW070-8 (280-159190-6), CA210-8 (280-159190-7), CA212-8 (280-159190-8), CA213-8 (280-159190-9), G0092-8 (280-159190-10), G0091-8 (280-159190-11), CA211-8 (280-159190-12), EW7-PM28A-8-25 (280-159190-13), EW7-PM29A-8-25 (280-159190-14), EW7-PM27B-8-35 (280-159190-15) and NW062-8 (280-159190-16) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 03/02/2022.

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

AMMONIA

Samples NW071-8 (280-159190-1), NW060-8 (280-159190-2), NW061-8 (280-159190-3), EW7-PM24A-8-25 (280-159190-4), EW7-PM21A-8-25 (280-159190-5), NW070-8 (280-159190-6), CA210-8 (280-159190-7), CA212-8 (280-159190-8), CA213-8 (280-159190-9), G0092-8 (280-159190-10), G0091-8 (280-159190-11), CA211-8 (280-159190-12), EW7-PM28A-8-25 (280-159190-13), EW7-PM29A-8-25 (280-159190-14), EW7-PM27B-8-35 (280-159190-15) and NW062-8 (280-159190-16) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 03/17/2022.

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

TOTAL KJELDAHL NITROGEN

Samples NW071-8 (280-159190-1), NW060-8 (280-159190-2), NW061-8 (280-159190-3), EW7-PM24A-8-25 (280-159190-4), EW7-PM21A-8-25 (280-159190-5), NW070-8 (280-159190-6), CA210-8 (280-159190-7), CA212-8 (280-159190-8), CA213-8 (280-159190-9), G0092-8 (280-159190-10), G0091-8 (280-159190-11), CA211-8 (280-159190-12), EW7-PM28A-8-25 (280-159190-13), EW7-PM29A-8-25 (280-159190-14), EW7-PM27B-8-35 (280-159190-15) and NW062-8 (280-159190-16) were analyzed for total kjeldahl nitrogen in accordance with EPA Method 351.2. The samples were prepared on 03/02/2022 and analyzed on 03/03/2022.

Nitrogen, Total Kjeldahl failed the recovery criteria low for the MS of sample NW071-8MS (280-159190-1) in batch 280-567691. Nitrogen, Total Kjeldahl failed the recovery criteria low for the MSD of sample NW071-8MSD (280-159190-1) in batch 280-567691.

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

NITRATE-NITRITE AS NITROGEN

Samples NW071-8 (280-159190-1), NW060-8 (280-159190-2), NW061-8 (280-159190-3), EW7-PM24A-8-25 (280-159190-4), EW7-PM21A-8-25 (280-159190-5), NW070-8 (280-159190-6), CA210-8 (280-159190-7), CA212-8 (280-159190-8), CA213-8 (280-159190-9), G0092-8 (280-159190-10), G0091-8 (280-159190-11), CA211-8 (280-159190-12), EW7-PM28A-8-25 (280-159190-13), EW7-PM29A-8-25 (280-159190-14), EW7-PM27B-8-35 (280-159190-15) and NW062-8 (280-159190-16) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 03/13/2022 and 03/15/2022.

Samples NW071-8 (280-159190-1)[5X], EW7-PM21A-8-25 (280-159190-5)[5X], NW070-8 (280-159190-6)[2X], CA210-8 (280-159190-7)[5X], CA212-8 (280-159190-8)[2X], G0091-8 (280-159190-11)[10X] and CA211-8 (280-159190-12)[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.

SULFIDE

Samples NW071-8 (280-159190-1), NW060-8 (280-159190-2), NW061-8 (280-159190-3), EW7-PM24A-8-25 (280-159190-4), EW7-PM21A-8-25 (280-159190-5), NW070-8 (280-159190-6), CA210-8 (280-159190-7), CA212-8 (280-159190-8), CA213-8 (280-159190-9), G0092-8 (280-159190-10), G0091-8 (280-159190-11), CA211-8 (280-159190-12), EW7-PM28A-8-25 (280-159190-13), EW7-PM29A-8-25 (280-159190-14), EW7-PM27B-8-35 (280-159190-15) and NW062-8 (280-159190-16) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were prepared and analyzed on 03/04/2022 and 03/05/2022.

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

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

ANIONS (28 DAYS)

Samples NW071-8 (280-159190-1), NW060-8 (280-159190-2), NW061-8 (280-159190-3), EW7-PM24A-8-25 (280-159190-4), EW7-PM21A-8-25 (280-159190-5), NW070-8 (280-159190-6), CA210-8 (280-159190-7), CA212-8 (280-159190-8), CA213-8 (280-159190-9), G0092-8 (280-159190-10), G0091-8 (280-159190-11), CA211-8 (280-159190-12), EW7-PM28A-8-25 (280-159190-13), EW7-PM29A-8-25 (280-159190-14), EW7-PM27B-8-35 (280-159190-15) and NW062-8 (280-159190-16) were analyzed for anions (28 days) in accordance with 9056A (28 Days). The samples were analyzed on 03/16/2022, 03/17/2022 and 03/18/2022.

Samples CA210-8 (280-159190-7)[5X], G0092-8 (280-159190-10)[5X], G0091-8 (280-159190-11)[5X] and NW062-8 (280-159190-16)[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 NW071-8 (280-159190-1), NW060-8 (280-159190-2), NW061-8 (280-159190-3), EW7-PM24A-8-25 (280-159190-4), EW7-PM21A-8-25 (280-159190-5), NW070-8 (280-159190-6), CA210-8 (280-159190-7), CA212-8 (280-159190-8), CA213-8 (280-159190-9), G0092-8 (280-159190-10), G0091-8 (280-159190-11), CA211-8 (280-159190-12), EW7-PM28A-8-25 (280-159190-13), EW7-PM29A-8-25 (280-159190-14), EW7-PM27B-8-35 (280-159190-15) and NW062-8 (280-159190-16) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 03/12/2022.

The following samples were improperly preserved in the field: NW071-8 (280-159190-1), NW060-8 (280-159190-2), NW061-8 (280-159190-3), EW7-PM24A-8-25 (280-159190-4), EW7-PM21A-8-25 (280-159190-5), NW070-8 (280-159190-6), CA210-8

(280-159190-7), CA212-8 (280-159190-8), CA213-8 (280-159190-9), G0092-8 (280-159190-10), G0091-8 (280-159190-11), CA211-8 (280-159190-12), EW7-PM28A-8-25 (280-159190-13), EW7-PM29A-8-25 (280-159190-14), EW7-PM27B-8-35 (280-159190-15), NW062-8 (280-159190-16), NW062-8 (280-159190-16[MS]), NW062-8 (280-159190-16[MSD]), (280-159190-D-1-B MS) and (280-159190-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: 280-159190-1

Client Sample ID: NW071-8 — Lab Sample ID: 280-159190-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate Nitrite as N	35		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	58	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	98		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	2.9		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: NW060-8 — Lab Sample ID: 280-159190-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate Nitrite as N	4.2		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	26	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	45		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	2.0		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: NW061-8 — Lab Sample ID: 280-159190-3

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
Ammonia	4.6		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	4.8		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	5.4		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	330		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	6.0		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM24A-8-25 — Lab Sample ID: 280-159190-4

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
1,3,5-Trinitrobenzene	0.27	M	0.22	0.21	0.090	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.34		0.16	0.13	0.062	ug/L	1		8330A	Total/NA
RDX	0.90	M J1	0.22	0.21	0.055	ug/L	1		8330A	Total/NA
RDX	0.070	J M J1	0.22	0.21	0.055	ug/L	1		8330A	Total/NA
Ammonia	1.8		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	4.2		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	2.1		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	48	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	500		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	8.4		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM21A-8-25 — Lab Sample ID: 280-159190-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	12		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	9.1	M	0.22	0.21	0.090	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	4.1		0.12	0.11	0.048	ug/L	1		8330A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: EW7-PM21A-8-25 (Continued) — Lab Sample ID: 280-159190-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2-Amino-4,6-dinitrotoluene	3.2		0.12	0.11	0.054	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	2.2		0.16	0.13	0.062	ug/L	1		8330A	Total/NA
RDX	0.97	M	0.22	0.21	0.055	ug/L	1		8330A	Total/NA
Ammonia	1.9		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	0.80	J	1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	15		0.50	0.25	0.095	mg/L	5		353.2	Total/NA
Sulfate	100	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	5.1		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: NW070-8 — Lab Sample ID: 280-159190-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate Nitrite as N	11		0.20	0.10	0.038	mg/L	2		353.2	Total/NA
Sulfate	87	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	240		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	8.4		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: CA210-8 — Lab Sample ID: 280-159190-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Ammonia	0.15		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	31		0.50	0.25	0.095	mg/L	5		353.2	Total/NA
Sulfate	210	D M	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	440		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	10		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: CA212-8 — Lab Sample ID: 280-159190-8

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate Nitrite as N	15		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	72	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	170		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	2.3		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: CA213-8 — Lab Sample ID: 280-159190-9

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Ammonia	0.026	J	0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	3.6		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfide	1.6	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	65		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	130		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
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.

Detection Summary

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

Job ID: 280-159190-1

Client Sample ID: G0092-8 — Lab Sample ID: 280-159190-10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.090		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	390	D M	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	390		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.3		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0091-8 — Lab Sample ID: 280-159190-11

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2-Amino-4,6-dinitrotoluene	0.18		0.12	0.11	0.054	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.17		0.16	0.13	0.061	ug/L	1		8330A	Total/NA
RDX	0.21	J M	0.22	0.21	0.054	ug/L	1		8330A	Total/NA
Nitrate Nitrite as N	38		1.0	0.50	0.19	mg/L	10		353.2	Total/NA
Sulfate	200	D M	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	240		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.2		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: CA211-8 — Lab Sample ID: 280-159190-12

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate Nitrite as N	30		1.0	0.50	0.19	mg/L	10		353.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	96		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	180		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	4.3		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM28A-8-25 — Lab Sample ID: 280-159190-13

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	15	D	0.010	0.0026	0.0013	mg/L	2		RSK-175	Total/NA
Ammonia	3.6		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	7.6		5.0	5.0	3.4	mg/L	1		351.2	Total/NA
Sulfate	15		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	540		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	18		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: EW7-PM29A-8-25 — Lab Sample ID: 280-159190-14

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	15	D	0.010	0.0026	0.0013	mg/L	2		RSK-175	Total/NA
Ammonia	1.4		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	2.8		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Sulfate	62		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	370		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	7.8		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 280-159190-1

Client Sample ID: EW7-PM27B-8-35 — Lab Sample ID: 280-159190-15

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	11		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	3.9		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	5.6		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Sulfide	0.80	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	95	M	5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	410		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	8.5		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: NW062-8 — Lab Sample ID: 280-159190-16

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.024		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	1.8		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	2.0		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Sulfate	200	D M	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	270		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	2.9		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: NW071-8
Lab Sample ID: 280-159190-1

Date Collected: 02/27/22 10:40
Matrix: Water
Date Received: 03/01/22 09:20

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		03/03/22 15:42	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		03/04/22 21:14	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		03/04/22 21:14	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		03/04/22 21:14	1
2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029	ug/L		03/04/22 21:14	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.042	ug/L		03/04/22 21:14	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054	ug/L		03/04/22 21:14	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.090	ug/L		03/04/22 21:14	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.21	ug/L		03/04/22 21:14	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061	ug/L		03/04/22 21:14	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.11	ug/L		03/04/22 21:14	1
HMX	0.21	U	0.22	0.21	0.093	ug/L		03/04/22 21:14	1
MNX	0.42	U M	2.1	0.42	0.16	ug/L		03/04/22 21:14	1
Nitrobenzene	0.21	U	0.22	0.21	0.096	ug/L		03/04/22 21:14	1
RDX	0.21	U	0.22	0.21	0.055	ug/L		03/04/22 21:14	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		03/04/22 21:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*99*	*M*	*83 - 119*	*03/04/22 14:39*	*03/04/22 21:14*	*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		03/17/22 11:27	1
Nitrogen, Total Kjeldahl	1.0	U J1	1.0	1.0	0.69	mg/L		03/03/22 18:11	1
Nitrate Nitrite as N	**35**		0.50	0.25	0.095	mg/L		03/13/22 17:33	5
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		03/04/22 15:54	1
Sulfate	**58**	**M**	5.0	2.5	1.0	mg/L		03/16/22 20:01	1
Total Alkalinity as CaCO3	**98**		10	6.4	3.1	mg/L		03/02/22 17:16	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**2.9**		1.0	0.80	0.35	mg/L		03/12/22 08:27	1

Client Sample ID: NW060-8
Lab Sample ID: 280-159190-2

Date Collected: 02/27/22 11:50
Matrix: Water
Date Received: 03/01/22 09:20

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		03/03/22 16:08	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	0.090	ug/L		03/04/22 21:37	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		03/04/22 21:37	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		03/04/22 21:37	1
2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029	ug/L		03/04/22 21:37	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.043	ug/L		03/04/22 21:37	1

Client Sample ID: NW060-8
Lab Sample ID: 280-159190-2

Date Collected: 02/27/22 11:50
Matrix: Water
Date Received: 03/01/22 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054	ug/L		03/04/22 21:37	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.091	ug/L		03/04/22 21:37	1
3-Nitrotoluene	0.43	U	0.43	0.43	0.21	ug/L		03/04/22 21:37	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061	ug/L		03/04/22 21:37	1
4-Nitrotoluene	0.43	U	0.44	0.43	0.11	ug/L		03/04/22 21:37	1
HMX	0.21	U	0.22	0.21	0.093	ug/L		03/04/22 21:37	1
MNX	0.43	U	2.1	0.43	0.16	ug/L		03/04/22 21:37	1
Nitrobenzene	0.21	U	0.22	0.21	0.097	ug/L		03/04/22 21:37	1
RDX	0.21	U	0.22	0.21	0.055	ug/L		03/04/22 21:37	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		03/04/22 21:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*98*	*M*	*83 - 119*	*03/04/22 14:39*	*03/04/22 21:37*	*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		03/17/22 11:29	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		03/03/22 18:11	1
Nitrate Nitrite as N	**4.2**		0.10	0.050	0.019	mg/L		03/13/22 17:35	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/04/22 15:55	1
Sulfate	**26**	**M**	5.0	2.5	1.0	mg/L		03/16/22 20:51	1
Total Alkalinity as CaCO3	**45**		10	6.4	3.1	mg/L		03/02/22 17:47	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**2.0**		1.0	0.80	0.35	mg/L		03/12/22 09:15	1

Client Sample ID: NW061-8
Lab Sample ID: 280-159190-3

Date Collected: 02/27/22 13:05
Matrix: Water
Date Received: 03/01/22 09:20

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		03/03/22 16:22	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	0.088	ug/L		03/04/22 22:00	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		03/04/22 22:00	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.047	ug/L		03/04/22 22:00	1
2,4-Dinitrotoluene	0.084	U	0.11	0.084	0.029	ug/L		03/04/22 22:00	1
2,6-Dinitrotoluene	0.084	U	0.11	0.084	0.042	ug/L		03/04/22 22:00	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.053	ug/L		03/04/22 22:00	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.090	ug/L		03/04/22 22:00	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.20	ug/L		03/04/22 22:00	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061	ug/L		03/04/22 22:00	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.11	ug/L		03/04/22 22:00	1
HMX	0.21	U	0.22	0.21	0.092	ug/L		03/04/22 22:00	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		03/04/22 22:00	1
Nitrobenzene	0.21	U	0.22	0.21	0.096	ug/L		03/05/22 01:33	1
RDX	0.21	U	0.22	0.21	0.054	ug/L		03/04/22 22:00	1

Client Sample ID: NW061-8

Date Collected: 02/27/22 13:05
Date Received: 03/01/22 09:20

Lab Sample ID: 280-159190-3

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Tetryl	0.11	U M	0.12	0.11	0.033	ug/L		03/05/22 01:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*100*	*M*	*83 - 119*	*03/04/22 14:39*	*03/04/22 22:00*	*1*
1,2-Dinitrobenzene	*99*	*M*	*83 - 119*	*03/04/22 14:39*	*03/05/22 01:33*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**4.6**		0.10	0.050	0.022	mg/L		03/17/22 11:37	1
Nitrogen, Total Kjeldahl	**4.8**		1.0	1.0	0.69	mg/L		03/03/22 18:12	1
Nitrate Nitrite as N	**5.4**		0.10	0.050	0.019	mg/L		03/13/22 17:37	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		03/04/22 15:55	1
Sulfate	**160**	**M**	5.0	2.5	1.0	mg/L		03/16/22 21:07	1
Total Alkalinity as CaCO3	**330**		10	6.4	3.1	mg/L		03/02/22 17:59	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**6.0**		1.0	0.80	0.35	mg/L		03/12/22 09:34	1

Client Sample ID: EW7-PM24A-8-25

Date Collected: 02/26/22 14:30
Date Received: 03/01/22 09:20

Lab Sample ID: 280-159190-4

Matrix: Water

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		03/03/22 16:35	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**0.27**	**M**	0.22	0.21	0.090	ug/L		03/04/22 22:23	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		03/04/22 22:23	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		03/04/22 22:23	1
2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.029	ug/L		03/04/22 22:23	1
2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043	ug/L		03/04/22 22:23	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054	ug/L		03/05/22 02:08	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.092	ug/L		03/04/22 22:23	1
3-Nitrotoluene	0.43	U	0.43	0.43	0.21	ug/L		03/04/22 22:23	1
4-Amino-2,6-dinitrotoluene	**0.34**		0.16	0.13	0.062	ug/L		03/04/22 22:23	1
4-Nitrotoluene	0.43	U M	0.44	0.43	0.11	ug/L		03/04/22 22:23	1
HMX	0.21	U	0.22	0.21	0.094	ug/L		03/04/22 22:23	1
MNX	0.43	U M	2.1	0.43	0.16	ug/L		03/04/22 22:23	1
Nitrobenzene	0.21	U	0.22	0.21	0.097	ug/L		03/04/22 22:23	1
RDX	**0.90**	**M J1**	0.22	0.21	0.055	ug/L		03/04/22 22:23	1
RDX	**0.070**	**J M J1**	0.22	0.21	0.055	ug/L		03/05/22 02:08	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		03/04/22 22:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*100*		*83 - 119*	*03/04/22 14:39*	*03/04/22 22:23*	*1*
1,2-Dinitrobenzene	*100*		*83 - 119*	*03/04/22 14:39*	*03/05/22 02:08*	*1*

Client Sample ID: EW7-PM24A-8-25
Lab Sample ID: 280-159190-4

Date Collected: 02/26/22 14:30
Matrix: Water
Date Received: 03/01/22 09:20

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**1.8**		0.10	0.050	0.022	mg/L		03/17/22 11:39	1
Nitrogen, Total Kjeldahl	**4.2**		1.0	1.0	0.69	mg/L		03/03/22 18:13	1
Nitrate Nitrite as N	**2.1**		0.10	0.050	0.019	mg/L		03/13/22 17:51	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		03/04/22 15:54	1
Sulfate	**48**	**M**	5.0	2.5	1.0	mg/L		03/16/22 21:23	1
Total Alkalinity as CaCO3	**500**		10	6.4	3.1	mg/L		03/02/22 18:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**8.4**		1.0	0.80	0.35	mg/L		03/12/22 10:26	1

Client Sample ID: EW7-PM21A-8-25
Lab Sample ID: 280-159190-5

Date Collected: 02/26/22 15:55
Matrix: Water
Date Received: 03/01/22 09:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**12**		0.0050	0.0013	0.00063	mg/L		03/03/22 16:48	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**9.1**	**M**	0.22	0.21	0.090	ug/L		03/04/22 22:46	1
1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.040	ug/L		03/04/22 22:46	1
2,4,6-Trinitrotoluene	**4.1**		0.12	0.11	0.048	ug/L		03/04/22 22:46	1
2,4-Dinitrotoluene	0.086	U M	0.11	0.086	0.029	ug/L		03/04/22 22:46	1
2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043	ug/L		03/04/22 22:46	1
2-Amino-4,6-dinitrotoluene	**3.2**		0.12	0.11	0.054	ug/L		03/04/22 22:46	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.092	ug/L		03/04/22 22:46	1
3-Nitrotoluene	0.43	U	0.43	0.43	0.21	ug/L		03/04/22 22:46	1
4-Amino-2,6-dinitrotoluene	**2.2**		0.16	0.13	0.062	ug/L		03/04/22 22:46	1
4-Nitrotoluene	0.43	U M	0.44	0.43	0.11	ug/L		03/04/22 22:46	1
HMX	0.21	U	0.22	0.21	0.094	ug/L		03/04/22 22:46	1
MNX	0.43	U M	2.1	0.43	0.16	ug/L		03/04/22 22:46	1
Nitrobenzene	0.21	U M	0.22	0.21	0.097	ug/L		03/04/22 22:46	1
RDX	**0.97**	**M**	0.22	0.21	0.055	ug/L		03/04/22 22:46	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		03/04/22 22:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*99*	*M*	*83 - 119*	*03/04/22 14:39*	*03/04/22 22:46*	*1*
1,2-Dinitrobenzene	*103*		*83 - 119*	*03/04/22 14:39*	*03/05/22 02:43*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**1.9**		0.10	0.050	0.022	mg/L		03/17/22 11:41	1
Nitrogen, Total Kjeldahl	**0.80**	**J**	1.0	1.0	0.69	mg/L		03/03/22 18:14	1
Nitrate Nitrite as N	**15**		0.50	0.25	0.095	mg/L		03/15/22 16:59	5
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/04/22 15:54	1
Sulfate	**100**	**M**	5.0	2.5	1.0	mg/L		03/16/22 21:40	1
Total Alkalinity as CaCO3	**400**		10	6.4	3.1	mg/L		03/02/22 18:16	1

Client Sample ID: EW7-PM21A-8-25
Lab Sample ID: 280-159190-5
Date Collected: 02/26/22 15:55
Matrix: Water
Date Received: 03/01/22 09:20

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**5.1**		1.0	0.80	0.35	mg/L		03/12/22 10:40	1

Client Sample ID: NW070-8
Lab Sample ID: 280-159190-6
Date Collected: 02/27/22 09:40
Matrix: Water
Date Received: 03/01/22 09:20

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		03/03/22 17:01	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	0.093	ug/L		03/04/22 23:09	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.041	ug/L		03/04/22 23:09	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.050	ug/L		03/04/22 23:09	1
2,4-Dinitrotoluene	0.088	U	0.11	0.088	0.030	ug/L		03/04/22 23:09	1
2,6-Dinitrotoluene	0.088	U	0.11	0.088	0.044	ug/L		03/04/22 23:09	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.056	ug/L		03/04/22 23:09	1
2-Nitrotoluene	0.22	U	0.23	0.22	0.094	ug/L		03/04/22 23:09	1
3-Nitrotoluene	0.44	U	0.44	0.44	0.21	ug/L		03/04/22 23:09	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.17	0.13	0.063	ug/L		03/04/22 23:09	1
4-Nitrotoluene	0.44	U	0.45	0.44	0.11	ug/L		03/04/22 23:09	1
HMX	0.22	U	0.23	0.22	0.096	ug/L		03/04/22 23:09	1
MNX	0.44	U	2.2	0.44	0.17	ug/L		03/04/22 23:09	1
Nitrobenzene	0.22	U	0.23	0.22	0.10	ug/L		03/04/22 23:09	1
RDX	0.22	U	0.23	0.22	0.057	ug/L		03/04/22 23:09	1
Tetryl	0.11	U	0.12	0.11	0.035	ug/L		03/04/22 23:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*	*M*	*83 - 119*	*03/04/22 14:39*	*03/04/22 23:09*	*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		03/17/22 11:43	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		03/03/22 18:14	1
Nitrate Nitrite as N	**11**		0.20	0.10	0.038	mg/L		03/13/22 18:01	2
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/04/22 15:55	1
Sulfate	**87**	**M**	5.0	2.5	1.0	mg/L		03/16/22 21:56	1
Total Alkalinity as CaCO3	**240**		10	6.4	3.1	mg/L		03/02/22 18:23	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**8.4**		1.0	0.80	0.35	mg/L		03/12/22 10:55	1

Client Sample ID: CA210-8
Lab Sample ID: 280-159190-7
Date Collected: 02/28/22 11:10
Matrix: Water
Date Received: 03/01/22 09:20

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		03/03/22 17:14	1

Client Sample ID: CA210-8
Lab Sample ID: 280-159190-7

Date Collected: 02/28/22 11:10
Matrix: Water
Date Received: 03/01/22 09:20

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	0.090	ug/L		03/04/22 23:32	1
1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.040	ug/L		03/04/22 23:32	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		03/04/22 23:32	1
2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.029	ug/L		03/04/22 23:32	1
2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043	ug/L		03/04/22 23:32	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054	ug/L		03/04/22 23:32	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.092	ug/L		03/04/22 23:32	1
3-Nitrotoluene	0.43	U	0.43	0.43	0.21	ug/L		03/04/22 23:32	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.062	ug/L		03/04/22 23:32	1
4-Nitrotoluene	0.43	U	0.44	0.43	0.11	ug/L		03/04/22 23:32	1
HMX	0.21	U	0.22	0.21	0.094	ug/L		03/04/22 23:32	1
MNX	0.43	U	2.1	0.43	0.16	ug/L		03/04/22 23:32	1
Nitrobenzene	0.21	U M	0.22	0.21	0.097	ug/L		03/04/22 23:32	1
RDX	0.21	U	0.22	0.21	0.055	ug/L		03/04/22 23:32	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		03/04/22 23:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*93*	*M*	*83 - 119*	*03/04/22 14:39*	*03/04/22 23:32*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.15**		0.10	0.050	0.022	mg/L		03/17/22 11:45	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		03/03/22 18:15	1
Nitrate Nitrite as N	**31**		0.50	0.25	0.095	mg/L		03/13/22 18:03	5
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/05/22 13:13	1
Sulfate	**210**	**D M**	25	13	5.2	mg/L		03/17/22 23:34	5
Total Alkalinity as CaCO3	**440**		10	6.4	3.1	mg/L		03/02/22 18:31	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**10**		1.0	0.80	0.35	mg/L		03/12/22 11:14	1

Client Sample ID: CA212-8
Lab Sample ID: 280-159190-8

Date Collected: 02/28/22 11:55
Matrix: Water
Date Received: 03/01/22 09:20

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		03/03/22 17:27	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	0.092	ug/L		03/05/22 00:41	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.040	ug/L		03/05/22 00:41	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.049	ug/L		03/05/22 00:41	1
2,4-Dinitrotoluene	0.087	U	0.11	0.087	0.030	ug/L		03/05/22 00:41	1
2,6-Dinitrotoluene	0.087	U	0.11	0.087	0.044	ug/L		03/05/22 00:41	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.055	ug/L		03/05/22 00:41	1
2-Nitrotoluene	0.22	U	0.23	0.22	0.094	ug/L		03/05/22 00:41	1
3-Nitrotoluene	0.44	U	0.44	0.44	0.21	ug/L		03/05/22 00:41	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.063	ug/L		03/05/22 00:41	1

Client Sample ID: CA212-8
Lab Sample ID: 280-159190-8

Date Collected: 02/28/22 11:55
Matrix: Water
Date Received: 03/01/22 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
4-Nitrotoluene	0.44	U	0.45	0.44	0.11	ug/L		03/05/22 00:41	1
HMX	0.22	U	0.23	0.22	0.096	ug/L		03/05/22 00:41	1
MNX	0.44	U	2.2	0.44	0.17	ug/L		03/05/22 00:41	1
Nitrobenzene	0.22	U	0.23	0.22	0.10	ug/L		03/05/22 00:41	1
RDX	0.22	U	0.23	0.22	0.056	ug/L		03/05/22 00:41	1
Tetryl	0.11	U	0.12	0.11	0.035	ug/L		03/05/22 00:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*102*	*M*	*83 - 119*	*03/04/22 14:39*	*03/05/22 00:41*	*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		03/17/22 11:59	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		03/03/22 18:15	1
Nitrate Nitrite as N	**15**		0.20	0.10	0.038	mg/L		03/13/22 18:05	2
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		03/05/22 13:13	1
Sulfate	**72**	**M**	5.0	2.5	1.0	mg/L		03/17/22 00:57	1
Total Alkalinity as CaCO3	**170**		10	6.4	3.1	mg/L		03/02/22 18:37	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**2.3**		1.0	0.80	0.35	mg/L		03/12/22 11:28	1

Client Sample ID: CA213-8
Lab Sample ID: 280-159190-9

Date Collected: 02/28/22 12:45
Matrix: Water
Date Received: 03/01/22 09:20

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		03/03/22 17:40	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		03/05/22 01:04	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.040	ug/L		03/05/22 01:04	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.049	ug/L		03/05/22 01:04	1
2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.030	ug/L		03/05/22 01:04	1
2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043	ug/L		03/05/22 01:04	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.055	ug/L		03/05/22 01:04	1
2-Nitrotoluene	0.22	U M	0.23	0.22	0.092	ug/L		03/05/22 01:04	1
3-Nitrotoluene	0.43	U	0.43	0.43	0.21	ug/L		03/05/22 01:04	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.062	ug/L		03/05/22 01:04	1
4-Nitrotoluene	0.43	U M	0.44	0.43	0.11	ug/L		03/05/22 01:04	1
HMX	0.22	U M	0.23	0.22	0.094	ug/L		03/05/22 01:04	1
MNX	0.43	U	2.2	0.43	0.17	ug/L		03/05/22 01:04	1
Nitrobenzene	0.22	U M	0.23	0.22	0.098	ug/L		03/05/22 01:04	1
RDX	0.22	U	0.23	0.22	0.056	ug/L		03/05/22 01:04	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		03/05/22 01:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*101*		*83 - 119*	*03/04/22 14:39*	*03/05/22 01:04*	*1*

Client Sample ID: CA213-8
Lab Sample ID: 280-159190-9
Date Collected: 02/28/22 12:45
Matrix: Water
Date Received: 03/01/22 09:20

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.026**	**J**	0.10	0.050	0.022	mg/L		03/17/22 12:01	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		03/03/22 18:16	1
Nitrate Nitrite as N	**3.6**		0.10	0.050	0.019	mg/L		03/13/22 18:07	1
Sulfide	**1.6**	**J**	4.0	1.9	0.79	mg/L		03/05/22 13:13	1
Sulfate	**65**		5.0	2.5	1.0	mg/L		03/17/22 01:13	1
Total Alkalinity as CaCO3	**130**		10	6.4	3.1	mg/L		03/02/22 18:43	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		03/12/22 11:43	1

Client Sample ID: G0092-8
Lab Sample ID: 280-159190-10
Date Collected: 02/27/22 16:50
Matrix: Water
Date Received: 03/01/22 09:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.090**		0.0050	0.0013	0.00063	mg/L		03/03/22 18:06	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		03/05/22 01:27	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		03/05/22 01:27	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		03/05/22 01:27	1
2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029	ug/L		03/05/22 01:27	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.043	ug/L		03/05/22 01:27	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054	ug/L		03/05/22 01:27	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.091	ug/L		03/05/22 01:27	1
3-Nitrotoluene	0.43	U	0.43	0.43	0.21	ug/L		03/05/22 01:27	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061	ug/L		03/05/22 01:27	1
4-Nitrotoluene	0.43	U	0.44	0.43	0.11	ug/L		03/05/22 01:27	1
HMX	0.21	U M	0.22	0.21	0.093	ug/L		03/05/22 01:27	1
MNX	0.43	U	2.1	0.43	0.16	ug/L		03/05/22 01:27	1
Nitrobenzene	0.21	U M	0.22	0.21	0.097	ug/L		03/05/22 01:27	1
RDX	0.21	U	0.22	0.21	0.055	ug/L		03/05/22 01:27	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		03/05/22 01:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*100*	*M*	*83 - 119*	*03/04/22 14:39*	*03/05/22 01:27*	*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		03/17/22 12:03	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		03/03/22 18:16	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		03/13/22 18:09	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		03/05/22 13:13	1
Sulfate	**390**	**D M**	25	13	5.2	mg/L		03/17/22 23:49	5
Total Alkalinity as CaCO3	**390**		10	6.4	3.1	mg/L		03/02/22 18:51	1

Client Sample ID: G0092-8
Lab Sample ID: 280-159190-10
Date Collected: 02/27/22 16:50
Matrix: Water
Date Received: 03/01/22 09:20

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.3**		1.0	0.80	0.35	mg/L		03/12/22 12:02	1

Client Sample ID: G0091-8
Lab Sample ID: 280-159190-11
Date Collected: 02/27/22 15:55
Matrix: Water
Date Received: 03/01/22 09:20

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		03/03/22 18:19	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		03/05/22 01:50	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		03/05/22 01:50	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		03/05/22 01:50	1
2,4-Dinitrotoluene	0.084	U	0.11	0.084	0.029	ug/L		03/05/22 01:50	1
2,6-Dinitrotoluene	0.084	U	0.11	0.084	0.042	ug/L		03/05/22 01:50	1
2-Amino-4,6-dinitrotoluene	**0.18**		0.12	0.11	0.054	ug/L		03/05/22 01:50	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.090	ug/L		03/05/22 01:50	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.21	ug/L		03/05/22 01:50	1
4-Amino-2,6-dinitrotoluene	**0.17**		0.16	0.13	0.061	ug/L		03/05/22 01:50	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.11	ug/L		03/05/22 01:50	1
HMX	0.21	U M	0.22	0.21	0.093	ug/L		03/05/22 01:50	1
MNX	0.42	U M	2.1	0.42	0.16	ug/L		03/05/22 01:50	1
Nitrobenzene	0.21	U	0.22	0.21	0.096	ug/L		03/05/22 01:50	1
RDX	**0.21**	**J M**	0.22	0.21	0.054	ug/L		03/05/22 01:50	1
Tetryl	0.11	U M	0.12	0.11	0.034	ug/L		03/05/22 01:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*96*	*M*	*83 - 119*	*03/04/22 14:39*	*03/05/22 01:50*	*1*
1,2-Dinitrobenzene	*98*		*83 - 119*	*03/04/22 14:39*	*03/05/22 07:24*	*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		03/17/22 12:05	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		03/03/22 18:18	1
Nitrate Nitrite as N	**38**		1.0	0.50	0.19	mg/L		03/13/22 18:23	10
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/04/22 15:55	1
Sulfate	**200**	**D M**	25	13	5.2	mg/L		03/18/22 00:04	5
Total Alkalinity as CaCO3	**240**		10	6.4	3.1	mg/L		03/02/22 19:11	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.2**		1.0	0.80	0.35	mg/L		03/12/22 12:17	1

Client Sample ID: CA211-8
Lab Sample ID: 280-159190-12

Date Collected: 02/28/22 10:10
Matrix: Water
Date Received: 03/01/22 09:20

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		03/03/22 18:32	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		03/05/22 02:13	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039	ug/L		03/05/22 02:13	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048	ug/L		03/05/22 02:13	1
2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029	ug/L		03/05/22 02:13	1
2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.042	ug/L		03/05/22 02:13	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054	ug/L		03/05/22 02:13	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.091	ug/L		03/05/22 02:13	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.21	ug/L		03/05/22 02:13	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061	ug/L		03/05/22 02:13	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.11	ug/L		03/05/22 02:13	1
HMX	0.21	U	0.22	0.21	0.093	ug/L		03/05/22 02:13	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		03/05/22 02:13	1
Nitrobenzene	0.21	U	0.22	0.21	0.096	ug/L		03/05/22 02:13	1
RDX	0.21	U	0.22	0.21	0.055	ug/L		03/05/22 02:13	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		03/05/22 02:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*102*	*M*	*83 - 119*	*03/04/22 14:39*	*03/05/22 02:13*	*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		03/17/22 12:31	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		03/03/22 18:19	1
Nitrate Nitrite as N	**30**		1.0	0.50	0.19	mg/L		03/13/22 18:25	10
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		03/05/22 13:13	1
Sulfate	**96**		5.0	2.5	1.0	mg/L		03/17/22 02:03	1
Total Alkalinity as CaCO3	**180**		10	6.4	3.1	mg/L		03/02/22 19:18	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**4.3**		1.0	0.80	0.35	mg/L		03/12/22 12:31	1

Client Sample ID: EW7-PM28A-8-25
Lab Sample ID: 280-159190-13

Date Collected: 02/26/22 09:35
Matrix: Water
Date Received: 03/01/22 09:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**15**	**D**	0.010	0.0026	0.0013	mg/L		03/08/22 15:11	2

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.088	ug/L		03/05/22 08:34	1
1,3-Dinitrobenzene	0.10	U M	0.12	0.10	0.039	ug/L		03/05/22 02:36	1
2,4,6-Trinitrotoluene	0.10	U	0.12	0.10	0.047	ug/L		03/05/22 02:36	1
2,4-Dinitrotoluene	0.084	U	0.10	0.084	0.029	ug/L		03/05/22 02:36	1
2,6-Dinitrotoluene	0.084	U M	0.10	0.084	0.042	ug/L		03/05/22 02:36	1

Client Sample ID: EW7-PM28A-8-25
Lab Sample ID: 280-159190-13

Date Collected: 02/26/22 09:35
Matrix: Water
Date Received: 03/01/22 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Amino-4,6-dinitrotoluene	0.10	U	0.12	0.10	0.053	ug/L		03/05/22 02:36	1
2-Nitrotoluene	0.21	U M	0.22	0.21	0.090	ug/L		03/05/22 02:36	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.20	ug/L		03/05/22 02:36	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.060	ug/L		03/05/22 02:36	1
4-Nitrotoluene	0.42	U M	0.43	0.42	0.10	ug/L		03/05/22 02:36	1
HMX	0.21	U	0.22	0.21	0.092	ug/L		03/05/22 02:36	1
MNX	0.42	U M	2.1	0.42	0.16	ug/L		03/05/22 02:36	1
Nitrobenzene	0.21	U M	0.22	0.21	0.095	ug/L		03/05/22 02:36	1
RDX	0.21	U M	0.22	0.21	0.054	ug/L		03/05/22 02:36	1
Tetryl	0.10	U M	0.12	0.10	0.033	ug/L		03/05/22 02:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*98*	*M*	*83 - 119*	*03/04/22 14:39*	*03/05/22 02:36*	*1*
1,2-Dinitrobenzene	*91*		*83 - 119*	*03/04/22 14:39*	*03/05/22 08:34*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**3.6**		0.10	0.050	0.022	mg/L		03/17/22 12:33	1
Nitrogen, Total Kjeldahl	**7.6**		5.0	5.0	3.4	mg/L		03/03/22 18:19	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		03/13/22 18:27	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/04/22 15:54	1
Sulfate	**15**		5.0	2.5	1.0	mg/L		03/17/22 02:19	1
Total Alkalinity as CaCO3	**540**		10	6.4	3.1	mg/L		03/02/22 19:27	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**18**		1.0	0.80	0.35	mg/L		03/12/22 12:54	1

Client Sample ID: EW7-PM29A-8-25
Lab Sample ID: 280-159190-14

Date Collected: 02/26/22 11:05
Matrix: Water
Date Received: 03/01/22 09:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**15**	**D**	0.010	0.0026	0.0013	mg/L		03/08/22 15:25	2

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.087	ug/L		03/05/22 02:58	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038	ug/L		03/05/22 02:58	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046	ug/L		03/05/22 02:58	1
2,4-Dinitrotoluene	0.082	U	0.10	0.082	0.028	ug/L		03/05/22 02:58	1
2,6-Dinitrotoluene	0.082	U M	0.10	0.082	0.041	ug/L		03/05/22 02:58	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052	ug/L		03/05/22 02:58	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.088	ug/L		03/05/22 02:58	1
3-Nitrotoluene	0.41	U	0.41	0.41	0.20	ug/L		03/05/22 02:58	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.059	ug/L		03/05/22 02:58	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		03/05/22 02:58	1
HMX	0.21	U	0.22	0.21	0.090	ug/L		03/05/22 02:58	1
MNX	0.41	U M	2.1	0.41	0.16	ug/L		03/05/22 02:58	1
Nitrobenzene	0.21	U M	0.22	0.21	0.094	ug/L		03/05/22 02:58	1

Client Sample ID: EW7-PM29A-8-25
Lab Sample ID: 280-159190-14
Date Collected: 02/26/22 11:05
Matrix: Water
Date Received: 03/01/22 09:20

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
RDX	0.21	U M	0.22	0.21	0.053	ug/L		03/05/22 02:58	1
Tetryl	0.10	U M	0.11	0.10	0.033	ug/L		03/05/22 02:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*97*	*M*	*83 - 119*	*03/04/22 14:39*	*03/05/22 02:58*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**1.4**		0.10	0.050	0.022	mg/L		03/17/22 12:35	1
Nitrogen, Total Kjeldahl	**2.8**		1.0	1.0	0.69	mg/L		03/03/22 18:19	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		03/13/22 18:29	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/04/22 15:54	1
Sulfate	**62**		5.0	2.5	1.0	mg/L		03/17/22 02:35	1
Total Alkalinity as CaCO3	**370**		10	6.4	3.1	mg/L		03/02/22 19:35	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**7.8**		1.0	0.80	0.35	mg/L		03/12/22 13:42	1

Client Sample ID: EW7-PM27B-8-35
Lab Sample ID: 280-159190-15
Date Collected: 02/26/22 13:00
Matrix: Water
Date Received: 03/01/22 09:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**11**		0.0050	0.0013	0.00063	mg/L		03/03/22 19:12	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		03/05/22 09:44	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038	ug/L		03/05/22 03:21	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.047	ug/L		03/05/22 03:21	1
2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028	ug/L		03/05/22 03:21	1
2,6-Dinitrotoluene	0.083	U M	0.10	0.083	0.042	ug/L		03/05/22 03:21	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.053	ug/L		03/05/22 03:21	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.089	ug/L		03/05/22 03:21	1
3-Nitrotoluene	0.41	U	0.41	0.41	0.20	ug/L		03/05/22 03:21	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.16	0.12	0.060	ug/L		03/05/22 03:21	1
4-Nitrotoluene	0.41	U M	0.43	0.41	0.10	ug/L		03/05/22 03:21	1
HMX	0.21	U	0.22	0.21	0.091	ug/L		03/05/22 03:21	1
MNX	0.41	U M	2.1	0.41	0.16	ug/L		03/05/22 03:21	1
Nitrobenzene	0.21	U M	0.22	0.21	0.094	ug/L		03/05/22 03:21	1
RDX	0.21	U	0.22	0.21	0.053	ug/L		03/05/22 09:44	1
Tetryl	0.10	U M	0.11	0.10	0.033	ug/L		03/05/22 03:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*		*83 - 119*	*03/04/22 14:39*	*03/05/22 03:21*	*1*
1,2-Dinitrobenzene	*99*		*83 - 119*	*03/04/22 14:39*	*03/05/22 09:44*	*1*

Client Sample ID: EW7-PM27B-8-35
Lab Sample ID: 280-159190-15
Date Collected: 02/26/22 13:00
Matrix: Water
Date Received: 03/01/22 09:20

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**3.9**		0.10	0.050	0.022	mg/L		03/17/22 12:37	1
Nitrogen, Total Kjeldahl	**5.6**		1.0	1.0	0.69	mg/L		03/03/22 18:19	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		03/13/22 18:41	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		03/04/22 15:54	1
Sulfate	**95**	**M**	5.0	2.5	1.0	mg/L		03/17/22 01:05	1
Total Alkalinity as CaCO3	**410**		10	6.4	3.1	mg/L		03/02/22 19:43	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**8.5**		1.0	0.80	0.35	mg/L		03/12/22 13:57	1

Client Sample ID: NW062-8
Lab Sample ID: 280-159190-16
Date Collected: 02/27/22 14:15
Matrix: Water
Date Received: 03/01/22 09:20

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.024**		0.0050	0.0013	0.00063	mg/L		03/03/22 19:25	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		03/05/22 04:30	1
1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.040	ug/L		03/05/22 04:30	1
2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.049	ug/L		03/05/22 04:30	1
2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.030	ug/L		03/05/22 04:30	1
2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043	ug/L		03/05/22 04:30	1
2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.055	ug/L		03/05/22 04:30	1
2-Nitrotoluene	0.22	U M	0.23	0.22	0.092	ug/L		03/05/22 04:30	1
3-Nitrotoluene	0.43	U	0.43	0.43	0.21	ug/L		03/05/22 04:30	1
4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.062	ug/L		03/05/22 04:30	1
4-Nitrotoluene	0.43	U M	0.44	0.43	0.11	ug/L		03/05/22 04:30	1
HMX	0.22	U	0.23	0.22	0.095	ug/L		03/05/22 04:30	1
MNX	0.43	U	2.2	0.43	0.17	ug/L		03/05/22 04:30	1
Nitrobenzene	0.22	U M	0.23	0.22	0.098	ug/L		03/05/22 04:30	1
RDX	0.22	U	0.23	0.22	0.056	ug/L		03/05/22 04:30	1
Tetryl	0.11	U	0.12	0.11	0.034	ug/L		03/05/22 04:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*98*	*M*	*83 - 119*	*03/04/22 14:39*	*03/05/22 04:30*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**1.8**		0.10	0.050	0.022	mg/L		03/17/22 11:31	1
Nitrogen, Total Kjeldahl	**2.0**		1.0	1.0	0.69	mg/L		03/03/22 18:17	1
Nitrate Nitrite as N	0.050	U	0.10	0.050	0.019	mg/L		03/13/22 18:35	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/04/22 15:54	1
Sulfate	**200**	**D M**	25	13	5.2	mg/L		03/18/22 00:19	5
Total Alkalinity as CaCO3	**270**		10	6.4	3.1	mg/L		03/02/22 19:50	1

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

Job ID: 280-159190-1

Client Sample ID: NW062-8

Date Collected: 02/27/22 14:15
Date Received: 03/01/22 09:20

Lab Sample ID: 280-159190-16

Matrix: Water

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	2.9		1.0	0.80	0.35	mg/L		03/12/22 14:15	1

Default Detection Limits

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

Job ID: 280-159190-1

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: 280-159190-1

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)
280-159190-1	NW071-8	99 M
280-159190-2	NW060-8	98 M
280-159190-3	NW061-8	100 M
280-159190-4	EW7-PM24A-8-25	100
280-159190-5	EW7-PM21A-8-25	99 M
280-159190-6	NW070-8	95 M
280-159190-7	CA210-8	93 M
280-159190-8	CA212-8	102 M
280-159190-9	CA213-8	101
280-159190-10	G0092-8	100 M
280-159190-11	G0091-8	96 M
280-159190-12	CA211-8	102 M
280-159190-13	EW7-PM28A-8-25	98 M
280-159190-14	EW7-PM29A-8-25	97 M
280-159190-15	EW7-PM27B-8-35	95
280-159190-16	NW062-8	98 M
280-159190-16 MS	NW062-8	100
280-159190-16 MS	NW062-8	102 M
280-159190-16 MSD	NW062-8	104
280-159190-16 MSD	NW062-8	97 M
LCS 280-567737/2-A	Lab Control Sample	106
LCS 280-567737/3-A	Lab Control Sample	100
MB 280-567737/1-A	Method Blank	99

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)
280-159190-3	NW061-8	99 M
280-159190-4	EW7-PM24A-8-25	100
280-159190-5	EW7-PM21A-8-25	103
280-159190-11	G0091-8	98
280-159190-13	EW7-PM28A-8-25	91
280-159190-15	EW7-PM27B-8-35	99

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: RSK-175 - Dissolved Gases (GC)

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

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

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

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

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

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

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

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane			0.0657	0.0646		mg/L		98	73 - 125	3	20

Lab Sample ID: 280-159190-16 MS
Matrix: Water
Analysis Batch: 567659

Client Sample ID: NW062-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane	0.024		0.0657	0.0867		mg/L		96	73 - 125		

Lab Sample ID: 280-159190-16 MSD
Matrix: Water
Analysis Batch: 567659

Client Sample ID: NW062-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	0.024		0.0657	0.0868		mg/L		96	73 - 125	0	20

Lab Sample ID: 280-159190-1 DU
Matrix: Water
Analysis Batch: 567659

Client Sample ID: NW071-8
Prep Type: Total/NA

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

Lab Sample ID: 280-159190-16 DU
Matrix: Water
Analysis Batch: 567659

Client Sample ID: NW062-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Methane	0.024			0.0234		mg/L				0.8	20

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

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

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

Method: RSK-175 - Dissolved Gases (GC)

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

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

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

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

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	0.0657	0.0649		mg/L		99	73 - 125	0	20

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-567737/1-A
Matrix: Water
Analysis Batch: 567774

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 567737

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		03/04/22 20:06	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		03/04/22 20:06	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		03/04/22 20:06	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		03/04/22 20:06	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		03/04/22 20:06	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		03/04/22 20:06	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		03/04/22 20:06	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		03/04/22 20:06	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		03/04/22 20:06	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		03/04/22 20:06	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		03/04/22 20:06	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		03/04/22 20:06	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		03/04/22 20:06	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		03/04/22 20:06	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		03/04/22 20:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*99*		*83 - 119*	*03/04/22 14:39*	*03/04/22 20:06*	*1*

Lab Sample ID: LCS 280-567737/2-A
Matrix: Water
Analysis Batch: 567774

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 567737

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	2.00	2.20		ug/L		110	73 - 125
1,3-Dinitrobenzene	2.00	2.21		ug/L		110	78 - 120
2,4,6-Trinitrotoluene	2.00	2.18		ug/L		109	71 - 123
2,4-Dinitrotoluene	2.00	2.11		ug/L		105	78 - 120
2,6-Dinitrotoluene	2.00	2.16		ug/L		108	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	2.08		ug/L		104	79 - 120
2-Nitrotoluene	2.00	1.83		ug/L		91	70 - 127
3-Nitrotoluene	2.00	1.67		ug/L		83	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	2.07		ug/L		103	76 - 125

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

Lab Sample ID: LCS 280-567737/2-A
Matrix: Water
Analysis Batch: 567774

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 567737

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Nitrotoluene	2.00	2.07		ug/L		103	71 - 127
HMX	2.00	2.04	M	ug/L		102	65 - 135
Nitrobenzene	2.00	1.97	M	ug/L		98	65 - 134
RDX	2.00	2.18		ug/L		109	68 - 130
Tetryl	2.00	2.17		ug/L		108	64 - 128

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

Lab Sample ID: LCS 280-567737/3-A
Matrix: Water
Analysis Batch: 567774

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 567737

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
MNX	2.33	2.39	M	ug/L		102	57 - 132

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

Lab Sample ID: 280-159190-16 MS
Matrix: Water
Analysis Batch: 567774

Client Sample ID: NW062-8
Prep Type: Total/NA
Prep Batch: 567737

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	0.22	U	2.14	2.18		ug/L		102	73 - 125
1,3-Dinitrobenzene	0.11	U	2.14	2.22		ug/L		104	78 - 120
2,4,6-Trinitrotoluene	0.11	U	2.14	2.16		ug/L		101	71 - 123
2,4-Dinitrotoluene	0.086	U	2.14	2.06		ug/L		96	78 - 120
2,6-Dinitrotoluene	0.086	U	2.14	2.12		ug/L		99	77 - 127
2-Amino-4,6-dinitrotoluene	0.11	U	2.14	2.03		ug/L		95	79 - 120
2-Nitrotoluene	0.22	U M	2.14	1.91		ug/L		89	70 - 127
3-Nitrotoluene	0.43	U	2.14	1.67		ug/L		78	73 - 125
4-Amino-2,6-dinitrotoluene	0.13	U	2.14	2.05		ug/L		96	76 - 125
4-Nitrotoluene	0.43	U M	2.14	2.12		ug/L		99	71 - 127
HMX	0.22	U	2.14	2.03	M	ug/L		95	65 - 135
Nitrobenzene	0.22	U M	2.14	2.31		ug/L		108	65 - 134
RDX	0.22	U	2.14	1.90	M	ug/L		89	68 - 130
Tetryl	0.11	U	2.14	2.22		ug/L		104	64 - 128

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

Lab Sample ID: 280-159190-16 MS
Matrix: Water
Analysis Batch: 567774

Client Sample ID: NW062-8
Prep Type: Total/NA
Prep Batch: 567737

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
MNX	0.43	U	2.49	2.56	M	ug/L		103	57 - 132

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

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

Lab Sample ID: 280-159190-16 MSD — **Client Sample ID: NW062-8**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567774 — **Prep Batch: 567737**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	0.22	U	2.15	2.23		ug/L		104	73 - 125	2	30
1,3-Dinitrobenzene	0.11	U	2.15	2.28		ug/L		106	78 - 120	3	30
2,4,6-Trinitrotoluene	0.11	U	2.15	2.21		ug/L		103	71 - 123	2	30
2,4-Dinitrotoluene	0.086	U	2.15	2.13		ug/L		99	78 - 120	3	30
2,6-Dinitrotoluene	0.086	U	2.15	2.18		ug/L		102	77 - 127	3	30
2-Amino-4,6-dinitrotoluene	0.11	U	2.15	2.11		ug/L		98	79 - 120	4	30
2-Nitrotoluene	0.22	U M	2.15	2.03		ug/L		94	70 - 127	6	30
3-Nitrotoluene	0.43	U	2.15	1.80		ug/L		84	73 - 125	7	30
4-Amino-2,6-dinitrotoluene	0.13	U	2.15	2.11		ug/L		98	76 - 125	3	30
4-Nitrotoluene	0.43	U M	2.15	2.23		ug/L		104	71 - 127	5	30
HMX	0.22	U	2.15	2.13	M	ug/L		99	65 - 135	5	30
Nitrobenzene	0.22	U M	2.15	2.41		ug/L		112	65 - 134	4	30
RDX	0.22	U	2.15	1.99	M	ug/L		93	68 - 130	5	30
Tetryl	0.11	U	2.15	2.26		ug/L		105	64 - 128	2	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dinitrobenzene	*104*		*83 - 119*

Lab Sample ID: 280-159190-16 MSD — **Client Sample ID: NW062-8**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567774 — **Prep Batch: 567737**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
MNX	0.43	U	2.51	2.45	M	ug/L		98	57 - 132	4	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dinitrobenzene	*97*	*M*	*83 - 119*

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-568955/20 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 568955

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		03/17/22 10:52	1

Lab Sample ID: MB 280-568955/59 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 568955

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		03/17/22 12:11	1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 280-568955/18
Matrix: Water
Analysis Batch: 568955

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	2.57		mg/L		103	90 - 110		

Lab Sample ID: LCS 280-568955/57
Matrix: Water
Analysis Batch: 568955

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	2.68		mg/L		107	90 - 110		

Lab Sample ID: LCSD 280-568955/19
Matrix: Water
Analysis Batch: 568955

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	2.55		mg/L		102	90 - 110	1	10

Lab Sample ID: LCSD 280-568955/58
Matrix: Water
Analysis Batch: 568955

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	2.69		mg/L		107	90 - 110	0	10

Lab Sample ID: 280-159190-16 MS
Matrix: Water
Analysis Batch: 568955

Client Sample ID: NW062-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia	1.8		1.00	2.83		mg/L		107	90 - 110		

Lab Sample ID: 280-159190-16 MSD
Matrix: Water
Analysis Batch: 568955

Client Sample ID: NW062-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	1.8		1.00	2.83		mg/L		107	90 - 110	0	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-567536/2-A
Matrix: Water
Analysis Batch: 567691

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 567536

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		03/03/22 18:10	1

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: LCS 280-567536/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567691 — **Prep Batch: 567536**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrogen, Total Kjeldahl			6.00	5.84		mg/L		97	90 - 110		

Lab Sample ID: 280-159190-1 MS — **Client Sample ID: NW071-8**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567691 — **Prep Batch: 567536**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrogen, Total Kjeldahl	1.0	U J1	3.00	1.0	U J1	mg/L		0	90 - 110		

Lab Sample ID: 280-159190-1 MSD — **Client Sample ID: NW071-8**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567691 — **Prep Batch: 567536**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Total Kjeldahl	1.0	U J1	3.00	1.0	U J1	mg/L		0	90 - 110	NC	25

Lab Sample ID: 280-159190-16 MS — **Client Sample ID: NW062-8**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567691 — **Prep Batch: 567536**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrogen, Total Kjeldahl	2.0		3.00	4.99		mg/L		100	90 - 110		

Lab Sample ID: 280-159190-16 MSD — **Client Sample ID: NW062-8**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567691 — **Prep Batch: 567536**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Total Kjeldahl	2.0		3.00	5.01		mg/L		100	90 - 110	0	25

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-568508/22 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 568508

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		03/13/22 17:17	1

Lab Sample ID: MB 280-568508/60 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 568508

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		03/13/22 18:33	1

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: LCS 280-568508/21
Matrix: Water
Analysis Batch: 568508

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	5.25		mg/L		105	90 - 110		

Lab Sample ID: LCS 280-568508/59
Matrix: Water
Analysis Batch: 568508

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	4.96		mg/L		99	90 - 110		

Lab Sample ID: 280-159190-16 MS
Matrix: Water
Analysis Batch: 568508

Client Sample ID: NW062-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate Nitrite as N	0.050	U	4.00	3.98		mg/L		99	90 - 110		

Lab Sample ID: 280-159190-16 MSD
Matrix: Water
Analysis Batch: 568508

Client Sample ID: NW062-8
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	0.050	U	4.00	3.98		mg/L		99	90 - 110	0	10

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: 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		

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

Lab Sample ID: MB 280-567743/2-A
Matrix: Water
Analysis Batch: 567780

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 567743

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

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

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

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

Lab Sample ID: 280-159190-16 MS — **Client Sample ID: NW062-8**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567780 — **Prep Batch: 567743**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide	1.9	U	24.1	21.6		mg/L		89	44 - 110		

Lab Sample ID: 280-159190-16 MSD — **Client Sample ID: NW062-8**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567780 — **Prep Batch: 567743**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	1.9	U	24.1	20.0		mg/L		83	44 - 110	8	20

Lab Sample ID: MB 280-567762/3-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567781 — **Prep Batch: 567762**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		03/04/22 15:55	1

Lab Sample ID: LCS 280-567762/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567781 — **Prep Batch: 567762**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide			24.1	20.0		mg/L		83	44 - 110		

Lab Sample ID: LCSD 280-567762/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567781 — **Prep Batch: 567762**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide			24.1	21.6		mg/L		89	44 - 110	8	20

Lab Sample ID: 280-159190-11 MS — **Client Sample ID: G0091-8**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567781 — **Prep Batch: 567762**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide	1.9	U	24.1	22.0		mg/L		91	44 - 110		

Lab Sample ID: 280-159190-11 MSD — **Client Sample ID: G0091-8**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 567781 — **Prep Batch: 567762**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	1.9	U	24.1	21.6		mg/L		89	44 - 110	2	20

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

Lab Sample ID: MB 280-567789/3-A
Matrix: Water
Analysis Batch: 567799

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 567789

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		03/05/22 13:13	1

Lab Sample ID: LCS 280-567789/1-A
Matrix: Water
Analysis Batch: 567799

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 567789

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	22.2	18.4		mg/L		83	44 - 110

Lab Sample ID: LCSD 280-567789/2-A
Matrix: Water
Analysis Batch: 567799

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 567789

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	22.2	16.8		mg/L		76	44 - 110	9	20

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 280-568795/39
Matrix: Water
Analysis Batch: 568795

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	2.5	U M	5.0	2.5	1.0	mg/L		03/16/22 23:02	1

Lab Sample ID: MB 280-568795/6
Matrix: Water
Analysis Batch: 568795

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	2.5	U M	5.0	2.5	1.0	mg/L		03/16/22 11:27	1

Lab Sample ID: LCS 280-568795/37
Matrix: Water
Analysis Batch: 568795

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	100	99.6	M	mg/L		100	87 - 112

Lab Sample ID: LCS 280-568795/4
Matrix: Water
Analysis Batch: 568795

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	100	96.7	M	mg/L		97	87 - 112

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

Lab Sample ID: LCSD 280-568795/38
Matrix: Water
Analysis Batch: 568795

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	99.6	M	mg/L		100	87 - 112	0	10

Lab Sample ID: LCSD 280-568795/5
Matrix: Water
Analysis Batch: 568795

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	96.3	M	mg/L		96	87 - 112	0	10

Lab Sample ID: MRL 280-568795/3
Matrix: Water
Analysis Batch: 568795

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	4.02	J M	mg/L		80	50 - 150		

Lab Sample ID: MB 280-568842/13
Matrix: Water
Analysis Batch: 568842

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	2.5	U	5.0	2.5	1.0	mg/L		03/16/22 17:04	1

Lab Sample ID: LCS 280-568842/11
Matrix: Water
Analysis Batch: 568842

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			100	101		mg/L		101	87 - 112		

Lab Sample ID: LCSD 280-568842/12
Matrix: Water
Analysis Batch: 568842

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	100		mg/L		100	87 - 112	1	10

Lab Sample ID: MRL 280-568842/10
Matrix: Water
Analysis Batch: 568842

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	4.85	J	mg/L		97	50 - 150		

Lab Sample ID: MB 280-568946/6
Matrix: Water
Analysis Batch: 568946

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	2.5	U M	5.0	2.5	1.0	mg/L		03/17/22 13:22	1

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: LCS 280-568946/4
Matrix: Water
Analysis Batch: 568946

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			100	97.8	M	mg/L		98	87 - 112		

Lab Sample ID: LCSD 280-568946/5
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	98.0	M	mg/L		98	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: 280-159190-16 MS
Matrix: Water
Analysis Batch: 568946

Client Sample ID: NW062-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	200	D M	250	460	D M	mg/L		106	87 - 112		

Lab Sample ID: 280-159190-16 MSD
Matrix: Water
Analysis Batch: 568946

Client Sample ID: NW062-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	200	D M	250	457	D M	mg/L		105	87 - 112	1	10

Lab Sample ID: 280-159190-16 DU
Matrix: Water
Analysis Batch: 568946

Client Sample ID: NW062-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	200	D M		192	D M	mg/L				2	10

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

Lab Sample ID: MB 280-568437/2-A
Matrix: Water
Analysis Batch: 568513

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		03/12/22 08:12	1

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

Lab Sample ID: LCS 280-568437/1-A
Matrix: Water
Analysis Batch: 568513

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: 280-159190-1 MS
Matrix: Water
Analysis Batch: 568513

Client Sample ID: NW071-8
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Quad	2.9		25.0	29.9		mg/L		108	88 - 112

Lab Sample ID: 280-159190-1 MSD
Matrix: Water
Analysis Batch: 568513

Client Sample ID: NW071-8
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	2.9		25.0	28.9		mg/L		104	88 - 112	3	15

Lab Sample ID: 280-159190-16 MS
Matrix: Water
Analysis Batch: 568513

Client Sample ID: NW062-8
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Quad	2.9		25.0	29.2		mg/L		105	88 - 112

Lab Sample ID: 280-159190-16 MSD
Matrix: Water
Analysis Batch: 568513

Client Sample ID: NW062-8
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	2.9		25.0	28.5		mg/L		103	88 - 112	2	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-567583/32
Matrix: Water
Analysis Batch: 567583

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		03/02/22 17:42	1

Lab Sample ID: MB 280-567583/6
Matrix: Water
Analysis Batch: 567583

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		03/02/22 14:17	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 280-567583/31
Matrix: Water
Analysis Batch: 567583

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

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

Lab Sample ID: LCS 280-567583/4
Matrix: Water
Analysis Batch: 567583

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

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

Lab Sample ID: LCSD 280-567583/5
Matrix: Water
Analysis Batch: 567583

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	198		mg/L		99	89 - 109	1	10

Lab Sample ID: 280-159190-2 DU
Matrix: Water
Analysis Batch: 567583

Client Sample ID: NW060-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity as CaCO3	45			45.8		mg/L				0.9	10

GC VOA

Analysis Batch: 567659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-1	NW071-8	Total/NA	Water	RSK-175	
280-159190-2	NW060-8	Total/NA	Water	RSK-175	
280-159190-3	NW061-8	Total/NA	Water	RSK-175	
280-159190-4	EW7-PM24A-8-25	Total/NA	Water	RSK-175	
280-159190-5	EW7-PM21A-8-25	Total/NA	Water	RSK-175	
280-159190-6	NW070-8	Total/NA	Water	RSK-175	
280-159190-7	CA210-8	Total/NA	Water	RSK-175	
280-159190-8	CA212-8	Total/NA	Water	RSK-175	
280-159190-9	CA213-8	Total/NA	Water	RSK-175	
280-159190-10	G0092-8	Total/NA	Water	RSK-175	
280-159190-11	G0091-8	Total/NA	Water	RSK-175	
280-159190-12	CA211-8	Total/NA	Water	RSK-175	
280-159190-15	EW7-PM27B-8-35	Total/NA	Water	RSK-175	
280-159190-16	NW062-8	Total/NA	Water	RSK-175	
MB 280-567659/5	Method Blank	Total/NA	Water	RSK-175	
LCS 280-567659/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-567659/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	
280-159190-16 MS	NW062-8	Total/NA	Water	RSK-175	
280-159190-16 MSD	NW062-8	Total/NA	Water	RSK-175	
280-159190-1 DU	NW071-8	Total/NA	Water	RSK-175	
280-159190-16 DU	NW062-8	Total/NA	Water	RSK-175	

Analysis Batch: 567999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-13	EW7-PM28A-8-25	Total/NA	Water	RSK-175	
280-159190-14	EW7-PM29A-8-25	Total/NA	Water	RSK-175	
MB 280-567999/3	Method Blank	Total/NA	Water	RSK-175	
LCS 280-567999/4	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-567999/5	Lab Control Sample Dup	Total/NA	Water	RSK-175	

HPLC/IC

Prep Batch: 567737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-1	NW071-8	Total/NA	Water	3535	
280-159190-2	NW060-8	Total/NA	Water	3535	
280-159190-3	NW061-8	Total/NA	Water	3535	
280-159190-4	EW7-PM24A-8-25	Total/NA	Water	3535	
280-159190-5	EW7-PM21A-8-25	Total/NA	Water	3535	
280-159190-6	NW070-8	Total/NA	Water	3535	
280-159190-7	CA210-8	Total/NA	Water	3535	
280-159190-8	CA212-8	Total/NA	Water	3535	
280-159190-9	CA213-8	Total/NA	Water	3535	
280-159190-10	G0092-8	Total/NA	Water	3535	
280-159190-11	G0091-8	Total/NA	Water	3535	
280-159190-12	CA211-8	Total/NA	Water	3535	
280-159190-13	EW7-PM28A-8-25	Total/NA	Water	3535	
280-159190-14	EW7-PM29A-8-25	Total/NA	Water	3535	
280-159190-15	EW7-PM27B-8-35	Total/NA	Water	3535	
280-159190-16	NW062-8	Total/NA	Water	3535	
MB 280-567737/1-A	Method Blank	Total/NA	Water	3535	

HPLC/IC (Continued)

Prep Batch: 567737 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-567737/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-567737/3-A	Lab Control Sample	Total/NA	Water	3535	
280-159190-16 MS	NW062-8	Total/NA	Water	3535	
280-159190-16 MS	NW062-8	Total/NA	Water	3535	
280-159190-16 MSD	NW062-8	Total/NA	Water	3535	
280-159190-16 MSD	NW062-8	Total/NA	Water	3535	

Analysis Batch: 567774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-1	NW071-8	Total/NA	Water	8330A	567737
280-159190-2	NW060-8	Total/NA	Water	8330A	567737
280-159190-3	NW061-8	Total/NA	Water	8330A	567737
280-159190-4	EW7-PM24A-8-25	Total/NA	Water	8330A	567737
280-159190-5	EW7-PM21A-8-25	Total/NA	Water	8330A	567737
280-159190-6	NW070-8	Total/NA	Water	8330A	567737
280-159190-7	CA210-8	Total/NA	Water	8330A	567737
280-159190-8	CA212-8	Total/NA	Water	8330A	567737
280-159190-9	CA213-8	Total/NA	Water	8330A	567737
280-159190-10	G0092-8	Total/NA	Water	8330A	567737
280-159190-11	G0091-8	Total/NA	Water	8330A	567737
280-159190-12	CA211-8	Total/NA	Water	8330A	567737
280-159190-13	EW7-PM28A-8-25	Total/NA	Water	8330A	567737
280-159190-14	EW7-PM29A-8-25	Total/NA	Water	8330A	567737
280-159190-15	EW7-PM27B-8-35	Total/NA	Water	8330A	567737
280-159190-16	NW062-8	Total/NA	Water	8330A	567737
MB 280-567737/1-A	Method Blank	Total/NA	Water	8330A	567737
LCS 280-567737/2-A	Lab Control Sample	Total/NA	Water	8330A	567737
LCS 280-567737/3-A	Lab Control Sample	Total/NA	Water	8330A	567737
280-159190-16 MS	NW062-8	Total/NA	Water	8330A	567737
280-159190-16 MS	NW062-8	Total/NA	Water	8330A	567737
280-159190-16 MSD	NW062-8	Total/NA	Water	8330A	567737
280-159190-16 MSD	NW062-8	Total/NA	Water	8330A	567737

Analysis Batch: 567777

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-3	NW061-8	Total/NA	Water	8330A	567737
280-159190-4	EW7-PM24A-8-25	Total/NA	Water	8330A	567737
280-159190-5	EW7-PM21A-8-25	Total/NA	Water	8330A	567737
280-159190-11	G0091-8	Total/NA	Water	8330A	567737
280-159190-13	EW7-PM28A-8-25	Total/NA	Water	8330A	567737
280-159190-15	EW7-PM27B-8-35	Total/NA	Water	8330A	567737

General Chemistry

Prep Batch: 567536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-1	NW071-8	Total/NA	Water	351.2	
280-159190-2	NW060-8	Total/NA	Water	351.2	
280-159190-3	NW061-8	Total/NA	Water	351.2	
280-159190-4	EW7-PM24A-8-25	Total/NA	Water	351.2	
280-159190-5	EW7-PM21A-8-25	Total/NA	Water	351.2	

General Chemistry (Continued)

Prep Batch: 567536 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-6	NW070-8	Total/NA	Water	351.2	
280-159190-7	CA210-8	Total/NA	Water	351.2	
280-159190-8	CA212-8	Total/NA	Water	351.2	
280-159190-9	CA213-8	Total/NA	Water	351.2	
280-159190-10	G0092-8	Total/NA	Water	351.2	
280-159190-11	G0091-8	Total/NA	Water	351.2	
280-159190-12	CA211-8	Total/NA	Water	351.2	
280-159190-13	EW7-PM28A-8-25	Total/NA	Water	351.2	
280-159190-14	EW7-PM29A-8-25	Total/NA	Water	351.2	
280-159190-15	EW7-PM27B-8-35	Total/NA	Water	351.2	
280-159190-16	NW062-8	Total/NA	Water	351.2	
MB 280-567536/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-567536/1-A	Lab Control Sample	Total/NA	Water	351.2	
280-159190-1 MS	NW071-8	Total/NA	Water	351.2	
280-159190-1 MSD	NW071-8	Total/NA	Water	351.2	
280-159190-16 MS	NW062-8	Total/NA	Water	351.2	
280-159190-16 MSD	NW062-8	Total/NA	Water	351.2	

Analysis Batch: 567583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-1	NW071-8	Total/NA	Water	SM 2320B	
280-159190-2	NW060-8	Total/NA	Water	SM 2320B	
280-159190-3	NW061-8	Total/NA	Water	SM 2320B	
280-159190-4	EW7-PM24A-8-25	Total/NA	Water	SM 2320B	
280-159190-5	EW7-PM21A-8-25	Total/NA	Water	SM 2320B	
280-159190-6	NW070-8	Total/NA	Water	SM 2320B	
280-159190-7	CA210-8	Total/NA	Water	SM 2320B	
280-159190-8	CA212-8	Total/NA	Water	SM 2320B	
280-159190-9	CA213-8	Total/NA	Water	SM 2320B	
280-159190-10	G0092-8	Total/NA	Water	SM 2320B	
280-159190-11	G0091-8	Total/NA	Water	SM 2320B	
280-159190-12	CA211-8	Total/NA	Water	SM 2320B	
280-159190-13	EW7-PM28A-8-25	Total/NA	Water	SM 2320B	
280-159190-14	EW7-PM29A-8-25	Total/NA	Water	SM 2320B	
280-159190-15	EW7-PM27B-8-35	Total/NA	Water	SM 2320B	
280-159190-16	NW062-8	Total/NA	Water	SM 2320B	
MB 280-567583/32	Method Blank	Total/NA	Water	SM 2320B	
MB 280-567583/6	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-567583/31	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 280-567583/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 280-567583/5	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
280-159190-2 DU	NW060-8	Total/NA	Water	SM 2320B	

Analysis Batch: 567691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-1	NW071-8	Total/NA	Water	351.2	567536
280-159190-2	NW060-8	Total/NA	Water	351.2	567536
280-159190-3	NW061-8	Total/NA	Water	351.2	567536
280-159190-4	EW7-PM24A-8-25	Total/NA	Water	351.2	567536
280-159190-5	EW7-PM21A-8-25	Total/NA	Water	351.2	567536
280-159190-6	NW070-8	Total/NA	Water	351.2	567536

General Chemistry (Continued)

Analysis Batch: 567691 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-7	CA210-8	Total/NA	Water	351.2	567536
280-159190-8	CA212-8	Total/NA	Water	351.2	567536
280-159190-9	CA213-8	Total/NA	Water	351.2	567536
280-159190-10	G0092-8	Total/NA	Water	351.2	567536
280-159190-11	G0091-8	Total/NA	Water	351.2	567536
280-159190-12	CA211-8	Total/NA	Water	351.2	567536
280-159190-13	EW7-PM28A-8-25	Total/NA	Water	351.2	567536
280-159190-14	EW7-PM29A-8-25	Total/NA	Water	351.2	567536
280-159190-15	EW7-PM27B-8-35	Total/NA	Water	351.2	567536
280-159190-16	NW062-8	Total/NA	Water	351.2	567536
MB 280-567536/2-A	Method Blank	Total/NA	Water	351.2	567536
LCS 280-567536/1-A	Lab Control Sample	Total/NA	Water	351.2	567536
280-159190-1 MS	NW071-8	Total/NA	Water	351.2	567536
280-159190-1 MSD	NW071-8	Total/NA	Water	351.2	567536
280-159190-16 MS	NW062-8	Total/NA	Water	351.2	567536
280-159190-16 MSD	NW062-8	Total/NA	Water	351.2	567536

Prep Batch: 567743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-1	NW071-8	Total/NA	Water	9030B	
280-159190-4	EW7-PM24A-8-25	Total/NA	Water	9030B	
280-159190-5	EW7-PM21A-8-25	Total/NA	Water	9030B	
280-159190-13	EW7-PM28A-8-25	Total/NA	Water	9030B	
280-159190-14	EW7-PM29A-8-25	Total/NA	Water	9030B	
280-159190-15	EW7-PM27B-8-35	Total/NA	Water	9030B	
280-159190-16	NW062-8	Total/NA	Water	9030B	
MB 280-567743/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-567743/1-A	Lab Control Sample	Total/NA	Water	9030B	
280-159190-16 MS	NW062-8	Total/NA	Water	9030B	
280-159190-16 MSD	NW062-8	Total/NA	Water	9030B	

Prep Batch: 567762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-2	NW060-8	Total/NA	Water	9030B	
280-159190-3	NW061-8	Total/NA	Water	9030B	
280-159190-6	NW070-8	Total/NA	Water	9030B	
280-159190-11	G0091-8	Total/NA	Water	9030B	
MB 280-567762/3-A	Method Blank	Total/NA	Water	9030B	
LCS 280-567762/1-A	Lab Control Sample	Total/NA	Water	9030B	
LCSD 280-567762/2-A	Lab Control Sample Dup	Total/NA	Water	9030B	
280-159190-11 MS	G0091-8	Total/NA	Water	9030B	
280-159190-11 MSD	G0091-8	Total/NA	Water	9030B	

Analysis Batch: 567780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-1	NW071-8	Total/NA	Water	9034	567743
280-159190-4	EW7-PM24A-8-25	Total/NA	Water	9034	567743
280-159190-5	EW7-PM21A-8-25	Total/NA	Water	9034	567743
280-159190-13	EW7-PM28A-8-25	Total/NA	Water	9034	567743
280-159190-14	EW7-PM29A-8-25	Total/NA	Water	9034	567743
280-159190-15	EW7-PM27B-8-35	Total/NA	Water	9034	567743

General Chemistry (Continued)

Analysis Batch: 567780 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-16	NW062-8	Total/NA	Water	9034	567743
MB 280-567743/2-A	Method Blank	Total/NA	Water	9034	567743
LCS 280-567743/1-A	Lab Control Sample	Total/NA	Water	9034	567743
280-159190-16 MS	NW062-8	Total/NA	Water	9034	567743
280-159190-16 MSD	NW062-8	Total/NA	Water	9034	567743

Analysis Batch: 567781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-2	NW060-8	Total/NA	Water	9034	567762
280-159190-3	NW061-8	Total/NA	Water	9034	567762
280-159190-6	NW070-8	Total/NA	Water	9034	567762
280-159190-11	G0091-8	Total/NA	Water	9034	567762
MB 280-567762/3-A	Method Blank	Total/NA	Water	9034	567762
LCS 280-567762/1-A	Lab Control Sample	Total/NA	Water	9034	567762
LCSD 280-567762/2-A	Lab Control Sample Dup	Total/NA	Water	9034	567762
280-159190-11 MS	G0091-8	Total/NA	Water	9034	567762
280-159190-11 MSD	G0091-8	Total/NA	Water	9034	567762

Prep Batch: 567789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-7	CA210-8	Total/NA	Water	9030B	
280-159190-8	CA212-8	Total/NA	Water	9030B	
280-159190-9	CA213-8	Total/NA	Water	9030B	
280-159190-10	G0092-8	Total/NA	Water	9030B	
280-159190-12	CA211-8	Total/NA	Water	9030B	
MB 280-567789/3-A	Method Blank	Total/NA	Water	9030B	
LCS 280-567789/1-A	Lab Control Sample	Total/NA	Water	9030B	
LCSD 280-567789/2-A	Lab Control Sample Dup	Total/NA	Water	9030B	

Analysis Batch: 567799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-7	CA210-8	Total/NA	Water	9034	567789
280-159190-8	CA212-8	Total/NA	Water	9034	567789
280-159190-9	CA213-8	Total/NA	Water	9034	567789
280-159190-10	G0092-8	Total/NA	Water	9034	567789
280-159190-12	CA211-8	Total/NA	Water	9034	567789
MB 280-567789/3-A	Method Blank	Total/NA	Water	9034	567789
LCS 280-567789/1-A	Lab Control Sample	Total/NA	Water	9034	567789
LCSD 280-567789/2-A	Lab Control Sample Dup	Total/NA	Water	9034	567789

Filtration Batch: 568437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-1	NW071-8	Dissolved	Water	FILTRATION	
280-159190-2	NW060-8	Dissolved	Water	FILTRATION	
280-159190-3	NW061-8	Dissolved	Water	FILTRATION	
280-159190-4	EW7-PM24A-8-25	Dissolved	Water	FILTRATION	
280-159190-5	EW7-PM21A-8-25	Dissolved	Water	FILTRATION	
280-159190-6	NW070-8	Dissolved	Water	FILTRATION	
280-159190-7	CA210-8	Dissolved	Water	FILTRATION	
280-159190-8	CA212-8	Dissolved	Water	FILTRATION	
280-159190-9	CA213-8	Dissolved	Water	FILTRATION	

General Chemistry (Continued)

Filtration Batch: 568437 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-10	G0092-8	Dissolved	Water	FILTRATION	
280-159190-11	G0091-8	Dissolved	Water	FILTRATION	
280-159190-12	CA211-8	Dissolved	Water	FILTRATION	
280-159190-13	EW7-PM28A-8-25	Dissolved	Water	FILTRATION	
280-159190-14	EW7-PM29A-8-25	Dissolved	Water	FILTRATION	
280-159190-15	EW7-PM27B-8-35	Dissolved	Water	FILTRATION	
280-159190-16	NW062-8	Dissolved	Water	FILTRATION	
MB 280-568437/2-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-568437/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
280-159190-1 MS	NW071-8	Dissolved	Water	FILTRATION	
280-159190-1 MSD	NW071-8	Dissolved	Water	FILTRATION	
280-159190-16 MS	NW062-8	Dissolved	Water	FILTRATION	
280-159190-16 MSD	NW062-8	Dissolved	Water	FILTRATION	

Analysis Batch: 568508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-1	NW071-8	Total/NA	Water	353.2	
280-159190-2	NW060-8	Total/NA	Water	353.2	
280-159190-3	NW061-8	Total/NA	Water	353.2	
280-159190-4	EW7-PM24A-8-25	Total/NA	Water	353.2	
280-159190-6	NW070-8	Total/NA	Water	353.2	
280-159190-7	CA210-8	Total/NA	Water	353.2	
280-159190-8	CA212-8	Total/NA	Water	353.2	
280-159190-9	CA213-8	Total/NA	Water	353.2	
280-159190-10	G0092-8	Total/NA	Water	353.2	
280-159190-11	G0091-8	Total/NA	Water	353.2	
280-159190-12	CA211-8	Total/NA	Water	353.2	
280-159190-13	EW7-PM28A-8-25	Total/NA	Water	353.2	
280-159190-14	EW7-PM29A-8-25	Total/NA	Water	353.2	
280-159190-15	EW7-PM27B-8-35	Total/NA	Water	353.2	
280-159190-16	NW062-8	Total/NA	Water	353.2	
MB 280-568508/22	Method Blank	Total/NA	Water	353.2	
MB 280-568508/60	Method Blank	Total/NA	Water	353.2	
LCS 280-568508/21	Lab Control Sample	Total/NA	Water	353.2	
LCS 280-568508/59	Lab Control Sample	Total/NA	Water	353.2	
280-159190-16 MS	NW062-8	Total/NA	Water	353.2	
280-159190-16 MSD	NW062-8	Total/NA	Water	353.2	

Analysis Batch: 568513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-1	NW071-8	Dissolved	Water	9060A	568437
280-159190-2	NW060-8	Dissolved	Water	9060A	568437
280-159190-3	NW061-8	Dissolved	Water	9060A	568437
280-159190-4	EW7-PM24A-8-25	Dissolved	Water	9060A	568437
280-159190-5	EW7-PM21A-8-25	Dissolved	Water	9060A	568437
280-159190-6	NW070-8	Dissolved	Water	9060A	568437
280-159190-7	CA210-8	Dissolved	Water	9060A	568437
280-159190-8	CA212-8	Dissolved	Water	9060A	568437
280-159190-9	CA213-8	Dissolved	Water	9060A	568437
280-159190-10	G0092-8	Dissolved	Water	9060A	568437
280-159190-11	G0091-8	Dissolved	Water	9060A	568437

General Chemistry (Continued)

Analysis Batch: 568513 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-12	CA211-8	Dissolved	Water	9060A	568437
280-159190-13	EW7-PM28A-8-25	Dissolved	Water	9060A	568437
280-159190-14	EW7-PM29A-8-25	Dissolved	Water	9060A	568437
280-159190-15	EW7-PM27B-8-35	Dissolved	Water	9060A	568437
280-159190-16	NW062-8	Dissolved	Water	9060A	568437
MB 280-568437/2-A	Method Blank	Dissolved	Water	9060A	568437
LCS 280-568437/1-A	Lab Control Sample	Dissolved	Water	9060A	568437
280-159190-1 MS	NW071-8	Dissolved	Water	9060A	568437
280-159190-1 MSD	NW071-8	Dissolved	Water	9060A	568437
280-159190-16 MS	NW062-8	Dissolved	Water	9060A	568437
280-159190-16 MSD	NW062-8	Dissolved	Water	9060A	568437

Analysis Batch: 568761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-5	EW7-PM21A-8-25	Total/NA	Water	353.2	
MB 280-568761/22	Method Blank	Total/NA	Water	353.2	
LCS 280-568761/21	Lab Control Sample	Total/NA	Water	353.2	

Analysis Batch: 568795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-1	NW071-8	Total/NA	Water	9056A	
280-159190-2	NW060-8	Total/NA	Water	9056A	
280-159190-3	NW061-8	Total/NA	Water	9056A	
280-159190-4	EW7-PM24A-8-25	Total/NA	Water	9056A	
280-159190-5	EW7-PM21A-8-25	Total/NA	Water	9056A	
280-159190-6	NW070-8	Total/NA	Water	9056A	
280-159190-8	CA212-8	Total/NA	Water	9056A	
280-159190-9	CA213-8	Total/NA	Water	9056A	
280-159190-12	CA211-8	Total/NA	Water	9056A	
280-159190-13	EW7-PM28A-8-25	Total/NA	Water	9056A	
280-159190-14	EW7-PM29A-8-25	Total/NA	Water	9056A	
MB 280-568795/39	Method Blank	Total/NA	Water	9056A	
MB 280-568795/6	Method Blank	Total/NA	Water	9056A	
LCS 280-568795/37	Lab Control Sample	Total/NA	Water	9056A	
LCS 280-568795/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-568795/38	Lab Control Sample Dup	Total/NA	Water	9056A	
LCSD 280-568795/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-568795/3	Lab Control Sample	Total/NA	Water	9056A	

Analysis Batch: 568842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-15	EW7-PM27B-8-35	Total/NA	Water	9056A	
MB 280-568842/13	Method Blank	Total/NA	Water	9056A	
LCS 280-568842/11	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-568842/12	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-568842/10	Lab Control Sample	Total/NA	Water	9056A	

Analysis Batch: 568946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-7	CA210-8	Total/NA	Water	9056A	
280-159190-10	G0092-8	Total/NA	Water	9056A	

General Chemistry (Continued)

Analysis Batch: 568946 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-11	G0091-8	Total/NA	Water	9056A	
280-159190-16	NW062-8	Total/NA	Water	9056A	
MB 280-568946/6	Method Blank	Total/NA	Water	9056A	
LCS 280-568946/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-568946/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-568946/3	Lab Control Sample	Total/NA	Water	9056A	
280-159190-16 MS	NW062-8	Total/NA	Water	9056A	
280-159190-16 MSD	NW062-8	Total/NA	Water	9056A	
280-159190-16 DU	NW062-8	Total/NA	Water	9056A	

Analysis Batch: 568955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-159190-1	NW071-8	Total/NA	Water	350.1	
280-159190-2	NW060-8	Total/NA	Water	350.1	
280-159190-3	NW061-8	Total/NA	Water	350.1	
280-159190-4	EW7-PM24A-8-25	Total/NA	Water	350.1	
280-159190-5	EW7-PM21A-8-25	Total/NA	Water	350.1	
280-159190-6	NW070-8	Total/NA	Water	350.1	
280-159190-7	CA210-8	Total/NA	Water	350.1	
280-159190-8	CA212-8	Total/NA	Water	350.1	
280-159190-9	CA213-8	Total/NA	Water	350.1	
280-159190-10	G0092-8	Total/NA	Water	350.1	
280-159190-11	G0091-8	Total/NA	Water	350.1	
280-159190-12	CA211-8	Total/NA	Water	350.1	
280-159190-13	EW7-PM28A-8-25	Total/NA	Water	350.1	
280-159190-14	EW7-PM29A-8-25	Total/NA	Water	350.1	
280-159190-15	EW7-PM27B-8-35	Total/NA	Water	350.1	
280-159190-16	NW062-8	Total/NA	Water	350.1	
MB 280-568955/20	Method Blank	Total/NA	Water	350.1	
MB 280-568955/59	Method Blank	Total/NA	Water	350.1	
LCS 280-568955/18	Lab Control Sample	Total/NA	Water	350.1	
LCS 280-568955/57	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-568955/19	Lab Control Sample Dup	Total/NA	Water	350.1	
LCSD 280-568955/58	Lab Control Sample Dup	Total/NA	Water	350.1	
280-159190-16 MS	NW062-8	Total/NA	Water	350.1	
280-159190-16 MSD	NW062-8	Total/NA	Water	350.1	

Client Sample ID: NW071-8
Lab Sample ID: 280-159190-1

Date Collected: 02/27/22 10:40
Matrix: Water
Date Received: 03/01/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	567659	03/03/22 15:42	CAS	TAL DEN
Total/NA	Prep	3535			472.4 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567774	03/04/22 21:14	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568955	03/17/22 11:27	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	567536	03/02/22 14:50	SVC	TAL DEN
Total/NA	Analysis	351.2		1			567691	03/03/22 18:11	SVC	TAL DEN
Total/NA	Analysis	353.2		5	100 mL	100 mL	568508	03/13/22 17:33	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567743	03/04/22 11:13	JJM	TAL DEN
Total/NA	Analysis	9034		1			567780	03/04/22 15:54	JJM	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	568795	03/16/22 20:01	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568437	03/11/22 13:01	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568513	03/12/22 08:27	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			567583	03/02/22 17:16	KEG	TAL DEN

Client Sample ID: NW060-8
Lab Sample ID: 280-159190-2

Date Collected: 02/27/22 11:50
Matrix: Water
Date Received: 03/01/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	567659	03/03/22 16:08	CAS	TAL DEN
Total/NA	Prep	3535			469.3 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567774	03/04/22 21:37	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568955	03/17/22 11:29	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	567536	03/02/22 14:50	SVC	TAL DEN
Total/NA	Analysis	351.2		1			567691	03/03/22 18:11	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	568508	03/13/22 17:35	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567762	03/04/22 13:47	JJM	TAL DEN
Total/NA	Analysis	9034		1			567781	03/04/22 15:55	JJM	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	568795	03/16/22 20:51	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568437	03/11/22 13:01	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568513	03/12/22 09:15	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			567583	03/02/22 17:47	KEG	TAL DEN

Client Sample ID: NW061-8
Lab Sample ID: 280-159190-3

Date Collected: 02/27/22 13:05
Matrix: Water
Date Received: 03/01/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	567659	03/03/22 16:22	CAS	TAL DEN
Total/NA	Prep	3535			475.7 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567774	03/04/22 22:00	JZ	TAL DEN
Total/NA	Prep	3535			475.7 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567777	03/05/22 01:33	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568955	03/17/22 11:37	MMP	TAL DEN

Client Sample ID: NW061-8
Lab Sample ID: 280-159190-3

Date Collected: 02/27/22 13:05
Matrix: Water
Date Received: 03/01/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	351.2			25 mL	25 mL	567536	03/02/22 14:50	SVC	TAL DEN
Total/NA	Analysis	351.2		1			567691	03/03/22 18:12	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	568508	03/13/22 17:37	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567762	03/04/22 13:47	JJM	TAL DEN
Total/NA	Analysis	9034		1			567781	03/04/22 15:55	JJM	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	568795	03/16/22 21:07	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568437	03/11/22 13:01	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568513	03/12/22 09:34	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			567583	03/02/22 17:59	KEG	TAL DEN

Client Sample ID: EW7-PM24A-8-25
Lab Sample ID: 280-159190-4

Date Collected: 02/26/22 14:30
Matrix: Water
Date Received: 03/01/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	567659	03/03/22 16:35	CAS	TAL DEN
Total/NA	Prep	3535			467.2 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567774	03/04/22 22:23	JZ	TAL DEN
Total/NA	Prep	3535			467.2 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567777	03/05/22 02:08	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568955	03/17/22 11:39	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	567536	03/02/22 14:50	SVC	TAL DEN
Total/NA	Analysis	351.2		1			567691	03/03/22 18:13	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	568508	03/13/22 17:51	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567743	03/04/22 11:13	JJM	TAL DEN
Total/NA	Analysis	9034		1			567780	03/04/22 15:54	JJM	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	568795	03/16/22 21:23	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568437	03/11/22 13:01	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568513	03/12/22 10:26	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			567583	03/02/22 18:08	KEG	TAL DEN

Client Sample ID: EW7-PM21A-8-25
Lab Sample ID: 280-159190-5

Date Collected: 02/26/22 15:55
Matrix: Water
Date Received: 03/01/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	567659	03/03/22 16:48	CAS	TAL DEN
Total/NA	Prep	3535			466.8 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567774	03/04/22 22:46	JZ	TAL DEN
Total/NA	Prep	3535			466.8 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567777	03/05/22 02:43	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568955	03/17/22 11:41	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	567536	03/02/22 14:50	SVC	TAL DEN
Total/NA	Analysis	351.2		1			567691	03/03/22 18:14	SVC	TAL DEN

Client Sample ID: EW7-PM21A-8-25

Date Collected: 02/26/22 15:55
Date Received: 03/01/22 09:20

Lab Sample ID: 280-159190-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		5	100 mL	100 mL	568761	03/15/22 16:59	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567743	03/04/22 11:13	JJM	TAL DEN
Total/NA	Analysis	9034		1			567780	03/04/22 15:54	JJM	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	568795	03/16/22 21:40	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568437	03/11/22 13:01	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568513	03/12/22 10:40	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			567583	03/02/22 18:16	KEG	TAL DEN

Client Sample ID: NW070-8

Date Collected: 02/27/22 09:40
Date Received: 03/01/22 09:20

Lab Sample ID: 280-159190-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	567659	03/03/22 17:01	CAS	TAL DEN
Total/NA	Prep	3535			454.5 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567774	03/04/22 23:09	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568955	03/17/22 11:43	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	567536	03/02/22 14:50	SVC	TAL DEN
Total/NA	Analysis	351.2		1			567691	03/03/22 18:14	SVC	TAL DEN
Total/NA	Analysis	353.2		2	100 mL	100 mL	568508	03/13/22 18:01	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567762	03/04/22 13:47	JJM	TAL DEN
Total/NA	Analysis	9034		1			567781	03/04/22 15:55	JJM	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	568795	03/16/22 21:56	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568437	03/11/22 13:01	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568513	03/12/22 10:55	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			567583	03/02/22 18:23	KEG	TAL DEN

Client Sample ID: CA210-8

Date Collected: 02/28/22 11:10
Date Received: 03/01/22 09:20

Lab Sample ID: 280-159190-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	567659	03/03/22 17:14	CAS	TAL DEN
Total/NA	Prep	3535			466.9 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567774	03/04/22 23:32	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568955	03/17/22 11:45	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	567536	03/02/22 14:50	SVC	TAL DEN
Total/NA	Analysis	351.2		1			567691	03/03/22 18:15	SVC	TAL DEN
Total/NA	Analysis	353.2		5	100 mL	100 mL	568508	03/13/22 18:03	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567789	03/05/22 09:11	PEV	TAL DEN
Total/NA	Analysis	9034		1			567799	03/05/22 13:13	PEV	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	568946	03/17/22 23:34	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568437	03/11/22 13:01	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568513	03/12/22 11:14	ABW	TAL DEN

Client Sample ID: CA210-8
Date Collected: 02/28/22 11:10
Date Received: 03/01/22 09:20

Lab Sample ID: 280-159190-7
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	SM 2320B		1			567583	03/02/22 18:31	KEG	TAL DEN

Client Sample ID: CA212-8
Date Collected: 02/28/22 11:55
Date Received: 03/01/22 09:20

Lab Sample ID: 280-159190-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	567659	03/03/22 17:27	CAS	TAL DEN
Total/NA	Prep	3535			457.2 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567774	03/05/22 00:41	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568955	03/17/22 11:59	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	567536	03/02/22 14:50	SVC	TAL DEN
Total/NA	Analysis	351.2		1			567691	03/03/22 18:15	SVC	TAL DEN
Total/NA	Analysis	353.2		2	100 mL	100 mL	568508	03/13/22 18:05	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567789	03/05/22 09:11	PEV	TAL DEN
Total/NA	Analysis	9034		1			567799	03/05/22 13:13	PEV	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	568795	03/17/22 00:57	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568437	03/11/22 13:01	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568513	03/12/22 11:28	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			567583	03/02/22 18:37	KEG	TAL DEN

Client Sample ID: CA213-8
Date Collected: 02/28/22 12:45
Date Received: 03/01/22 09:20

Lab Sample ID: 280-159190-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	567659	03/03/22 17:40	CAS	TAL DEN
Total/NA	Prep	3535			463.9 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567774	03/05/22 01:04	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568955	03/17/22 12:01	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	567536	03/02/22 14:50	SVC	TAL DEN
Total/NA	Analysis	351.2		1			567691	03/03/22 18:16	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	568508	03/13/22 18:07	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567789	03/05/22 09:11	PEV	TAL DEN
Total/NA	Analysis	9034		1			567799	03/05/22 13:13	PEV	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	568795	03/17/22 01:13	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568437	03/11/22 13:01	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568513	03/12/22 11:43	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			567583	03/02/22 18:43	KEG	TAL DEN

Client Sample ID: G0092-8
Lab Sample ID: 280-159190-10

Date Collected: 02/27/22 16:50
Matrix: Water
Date Received: 03/01/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	567659	03/03/22 18:06	CAS	TAL DEN
Total/NA	Prep	3535			469.9 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567774	03/05/22 01:27	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568955	03/17/22 12:03	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	567536	03/02/22 14:50	SVC	TAL DEN
Total/NA	Analysis	351.2		1			567691	03/03/22 18:16	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	568508	03/13/22 18:09	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567789	03/05/22 09:11	PEV	TAL DEN
Total/NA	Analysis	9034		1			567799	03/05/22 13:13	PEV	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	568946	03/17/22 23:49	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568437	03/11/22 13:01	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568513	03/12/22 12:02	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			567583	03/02/22 18:51	KEG	TAL DEN

Client Sample ID: G0091-8
Lab Sample ID: 280-159190-11

Date Collected: 02/27/22 15:55
Matrix: Water
Date Received: 03/01/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	567659	03/03/22 18:19	CAS	TAL DEN
Total/NA	Prep	3535			473.4 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567774	03/05/22 01:50	JZ	TAL DEN
Total/NA	Prep	3535			473.4 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567777	03/05/22 07:24	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568955	03/17/22 12:05	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	567536	03/02/22 14:50	SVC	TAL DEN
Total/NA	Analysis	351.2		1			567691	03/03/22 18:18	SVC	TAL DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	568508	03/13/22 18:23	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567762	03/04/22 13:47	JJM	TAL DEN
Total/NA	Analysis	9034		1			567781	03/04/22 15:55	JJM	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	568946	03/18/22 00:04	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568437	03/11/22 13:01	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568513	03/12/22 12:17	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			567583	03/02/22 19:11	KEG	TAL DEN

Client Sample ID: CA211-8
Lab Sample ID: 280-159190-12

Date Collected: 02/28/22 10:10
Matrix: Water
Date Received: 03/01/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	567659	03/03/22 18:32	CAS	TAL DEN
Total/NA	Prep	3535			471.9 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567774	03/05/22 02:13	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568955	03/17/22 12:31	MMP	TAL DEN

Client Sample ID: CA211-8
Lab Sample ID: 280-159190-12

Date Collected: 02/28/22 10:10
Matrix: Water
Date Received: 03/01/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	351.2			25 mL	25 mL	567536	03/02/22 14:50	SVC	TAL DEN
Total/NA	Analysis	351.2		1			567691	03/03/22 18:19	SVC	TAL DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	568508	03/13/22 18:25	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567789	03/05/22 09:11	PEV	TAL DEN
Total/NA	Analysis	9034		1			567799	03/05/22 13:13	PEV	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	568795	03/17/22 02:03	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568437	03/11/22 13:01	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568513	03/12/22 12:31	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			567583	03/02/22 19:18	KEG	TAL DEN

Client Sample ID: EW7-PM28A-8-25
Lab Sample ID: 280-159190-13

Date Collected: 02/26/22 09:35
Matrix: Water
Date Received: 03/01/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		2	20 mL	20 mL	567999	03/08/22 15:11	CAS	TAL DEN
Total/NA	Prep	3535			477.5 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567774	03/05/22 02:36	JZ	TAL DEN
Total/NA	Prep	3535			477.5 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567777	03/05/22 08:34	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568955	03/17/22 12:33	MMP	TAL DEN
Total/NA	Prep	351.2			5 mL	25 mL	567536	03/02/22 14:50	SVC	TAL DEN
Total/NA	Analysis	351.2		1			567691	03/03/22 18:19	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	568508	03/13/22 18:27	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567743	03/04/22 11:13	JJM	TAL DEN
Total/NA	Analysis	9034		1			567780	03/04/22 15:54	JJM	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	568795	03/17/22 02:19	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568437	03/11/22 13:01	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568513	03/12/22 12:54	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			567583	03/02/22 19:27	KEG	TAL DEN

Client Sample ID: EW7-PM29A-8-25
Lab Sample ID: 280-159190-14

Date Collected: 02/26/22 11:05
Matrix: Water
Date Received: 03/01/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		2	20 mL	20 mL	567999	03/08/22 15:25	CAS	TAL DEN
Total/NA	Prep	3535			484.9 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567774	03/05/22 02:58	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568955	03/17/22 12:35	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	567536	03/02/22 14:50	SVC	TAL DEN
Total/NA	Analysis	351.2		1			567691	03/03/22 18:19	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	568508	03/13/22 18:29	SVC	TAL DEN

Client Sample ID: EW7-PM29A-8-25
Lab Sample ID: 280-159190-14

Date Collected: 02/26/22 11:05
Matrix: Water
Date Received: 03/01/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	9030B			50 mL	50 mL	567743	03/04/22 11:13	JJM	TAL DEN
Total/NA	Analysis	9034		1			567780	03/04/22 15:54	JJM	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	568795	03/17/22 02:35	RAF	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568437	03/11/22 13:01	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568513	03/12/22 13:42	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			567583	03/02/22 19:35	KEG	TAL DEN

Client Sample ID: EW7-PM27B-8-35
Lab Sample ID: 280-159190-15

Date Collected: 02/26/22 13:00
Matrix: Water
Date Received: 03/01/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	567659	03/03/22 19:12	CAS	TAL DEN
Total/NA	Prep	3535			482.2 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567774	03/05/22 03:21	JZ	TAL DEN
Total/NA	Prep	3535			482.2 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567777	03/05/22 09:44	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568955	03/17/22 12:37	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	567536	03/02/22 14:50	SVC	TAL DEN
Total/NA	Analysis	351.2		1			567691	03/03/22 18:19	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	568508	03/13/22 18:41	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567743	03/04/22 11:13	JJM	TAL DEN
Total/NA	Analysis	9034		1			567780	03/04/22 15:54	JJM	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	568842	03/17/22 01:05	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568437	03/11/22 13:01	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568513	03/12/22 13:57	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			567583	03/02/22 19:43	KEG	TAL DEN

Client Sample ID: NW062-8
Lab Sample ID: 280-159190-16

Date Collected: 02/27/22 14:15
Matrix: Water
Date Received: 03/01/22 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	20 mL	20 mL	567659	03/03/22 19:25	CAS	TAL DEN
Total/NA	Prep	3535			463.4 mL	5 mL	567737	03/04/22 14:39	DCL	TAL DEN
Total/NA	Analysis	8330A		1			567774	03/05/22 04:30	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	568955	03/17/22 11:31	MMP	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	567536	03/02/22 14:50	SVC	TAL DEN
Total/NA	Analysis	351.2		1			567691	03/03/22 18:17	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	568508	03/13/22 18:35	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	567743	03/04/22 11:13	JJM	TAL DEN
Total/NA	Analysis	9034		1			567780	03/04/22 15:54	JJM	TAL DEN
Total/NA	Analysis	9056A		5	10 mL	10 mL	568946	03/18/22 00:19	RAF	TAL DEN

Lab Chronicle

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

Job ID: 280-159190-1

Client Sample ID: NW062-8

Date Collected: 02/27/22 14:15
Date Received: 03/01/22 09:20

Lab Sample ID: 280-159190-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	568437	03/11/22 13:01	ABW	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	568513	03/12/22 14:15	ABW	TAL DEN
Total/NA	Analysis	SM 2320B		1			567583	03/02/22 19:50	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: 280-159190-1
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: 280-159190-1

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
Job ID: 280-159190-1
Project/Site: Cornhusker (CHAAP)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-159190-1	NW071-8	Water	02/27/22 10:40	03/01/22 09:20
280-159190-2	NW060-8	Water	02/27/22 11:50	03/01/22 09:20
280-159190-3	NW061-8	Water	02/27/22 13:05	03/01/22 09:20
280-159190-4	EW7-PM24A-8-25	Water	02/26/22 14:30	03/01/22 09:20
280-159190-5	EW7-PM21A-8-25	Water	02/26/22 15:55	03/01/22 09:20
280-159190-6	NW070-8	Water	02/27/22 09:40	03/01/22 09:20
280-159190-7	CA210-8	Water	02/28/22 11:10	03/01/22 09:20
280-159190-8	CA212-8	Water	02/28/22 11:55	03/01/22 09:20
280-159190-9	CA213-8	Water	02/28/22 12:45	03/01/22 09:20
280-159190-10	G0092-8	Water	02/27/22 16:50	03/01/22 09:20
280-159190-11	G0091-8	Water	02/27/22 15:55	03/01/22 09:20
280-159190-12	CA211-8	Water	02/28/22 10:10	03/01/22 09:20
280-159190-13	EW7-PM28A-8-25	Water	02/26/22 09:35	03/01/22 09:20
280-159190-14	EW7-PM29A-8-25	Water	02/26/22 11:05	03/01/22 09:20
280-159190-15	EW7-PM27B-8-35	Water	02/26/22 13:00	03/01/22 09:20
280-159190-16	NW062-8	Water	02/27/22 14:15	03/01/22 09:20

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

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.: 280-159190-1

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

RSK-175

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

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.: 280-159190-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 567659

Lab Sample ID: 280-159190-1 Client Sample ID: NW071-8

Date Analyzed: 03/03/22 15:42 Lab File ID: 007F0701.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	03/07/22 12:54

Lab Sample ID: 280-159190-1 Client Sample ID: NW071-8

Date Analyzed: 03/03/22 15:42 Lab File ID: 007F0701.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methane	1.66	Peak not integrated	sciannac	03/07/22 12:54

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

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

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

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

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

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

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

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

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

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 567659

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

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

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

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

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.: 280-159190-1

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.: 280-159190-1

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.: 280-159190-1

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.: 280-159190-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 567774

Lab Sample ID: CCV 280-567774/7 Client Sample ID:

Date Analyzed: 03/04/22 19:20 Lab File ID: 03040007.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	03/04/22 19:46

Lab Sample ID: CCV 280-567774/9 Client Sample ID:

Date Analyzed: 03/04/22 19:43 Lab File ID: 03040009.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.47	Baseline	zhangji	03/04/22 20:32
DNX	6.78	Baseline	zhangji	03/04/22 20:32
MNX	7.20	Baseline	zhangji	03/04/22 20:32

Lab Sample ID: LCS 280-567737/2-A Client Sample ID:

Date Analyzed: 03/04/22 20:29 Lab File ID: 03040012.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	03/04/22 20:53
Nitrobenzene	9.65	Baseline	zhangji	03/04/22 20:53

Lab Sample ID: LCS 280-567737/3-A Client Sample ID:

Date Analyzed: 03/04/22 20:51 Lab File ID: 03040013.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.21	Baseline	zhangji	03/05/22 10:19

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 567774

Lab Sample ID: 280-159190-1 Client Sample ID: NW071-8

Date Analyzed: 03/04/22 21:14 Lab File ID: 03040014.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.52	Baseline	zhangji	03/05/22 10:20
MNX		Invalid Compound ID	zhangji	03/05/22 10:19

Lab Sample ID: 280-159190-2 Client Sample ID: NW060-8

Date Analyzed: 03/04/22 21:37 Lab File ID: 03040015.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.50	Baseline	zhangji	03/05/22 10:20

Lab Sample ID: 280-159190-3 Client Sample ID: NW061-8

Date Analyzed: 03/04/22 22:00 Lab File ID: 03040016.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.51	Baseline	zhangji	03/05/22 10:20
Nitrobenzene	9.67	Baseline	zhangji	03/05/22 10:20
Tetryl	9.98	Baseline	zhangji	03/05/22 10:20

Lab Sample ID: 280-159190-4 Client Sample ID: EW7-PM24A-8-25

Date Analyzed: 03/04/22 22:23 Lab File ID: 03040017.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.60	Baseline	zhangji	03/05/22 10:20
1,3,5-Trinitrobenzene	8.65	Baseline	zhangji	03/05/22 10:21
4-Nitrotoluene		Invalid Compound ID	zhangji	03/05/22 10:20
MNX		Invalid Compound ID	zhangji	03/05/22 10:20
Tetryl		Invalid Compound ID	zhangji	03/05/22 10:20

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 567774

Lab Sample ID: 280-159190-5 Client Sample ID: EW7-PM21A-8-25

Date Analyzed: 03/04/22 22:46 Lab File ID: 03040018.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.60	Baseline	zhangji	03/05/22 10:24
1,2-Dinitrobenzene	8.52	Baseline	zhangji	03/05/22 10:24
1,3,5-Trinitrobenzene	8.65	Baseline	zhangji	03/05/22 10:24
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	03/05/22 10:24
2,4-Dinitrotoluene		Invalid Compound ID	zhangji	03/05/22 10:24
4-Nitrotoluene		Invalid Compound ID	zhangji	03/05/22 10:24
MNX		Invalid Compound ID	zhangji	03/05/22 10:24
Nitrobenzene		Invalid Compound ID	zhangji	03/05/22 10:24
Tetryl		Invalid Compound ID	zhangji	03/05/22 10:24

Lab Sample ID: 280-159190-6 Client Sample ID: NW070-8

Date Analyzed: 03/04/22 23:09 Lab File ID: 03040019.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.52	Baseline	zhangji	03/05/22 10:24

Lab Sample ID: 280-159190-7 Client Sample ID: CA210-8

Date Analyzed: 03/04/22 23:32 Lab File ID: 03040020.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/05/22 10:24
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	03/05/22 10:24
Nitrobenzene		Invalid Compound ID	zhangji	03/05/22 10:24

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 567774

Lab Sample ID: CCV 280-567774/21 Client Sample ID:

Date Analyzed: 03/04/22 23:55 Lab File ID: 03040021.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	03/05/22 10:25
Nitroglycerin	10.42	Baseline	zhangji	03/05/22 10:25

Lab Sample ID: CCV 280-567774/22 Client Sample ID:

Date Analyzed: 03/05/22 00:18 Lab File ID: 03040022.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	03/05/22 10:27
DNX	6.79	Baseline	zhangji	03/05/22 10:27
MNX	7.21	Baseline	zhangji	03/05/22 10:27

Lab Sample ID: 280-159190-8 Client Sample ID: CA212-8

Date Analyzed: 03/05/22 00:41 Lab File ID: 03040023.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/05/22 10:28

Lab Sample ID: 280-159190-9 Client Sample ID: CA213-8

Date Analyzed: 03/05/22 01:04 Lab File ID: 03040024.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene		Invalid Compound ID	zhangji	03/05/22 10:29
4-Nitrotoluene		Invalid Compound ID	zhangji	03/05/22 10:29
HMX		Invalid Compound ID	zhangji	03/05/22 10:29
Nitrobenzene		Invalid Compound ID	zhangji	03/05/22 10:29

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 567774

Lab Sample ID: 280-159190-10 Client Sample ID: G0092-8

Date Analyzed: 03/05/22 01:27 Lab File ID: 03040025.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/05/22 10:29
HMX		Invalid Compound ID	zhangji	03/05/22 10:29
Nitrobenzene		Invalid Compound ID	zhangji	03/05/22 10:29
Tetryl		Invalid Compound ID	zhangji	03/05/22 10:29

Lab Sample ID: 280-159190-11 Client Sample ID: G0091-8

Date Analyzed: 03/05/22 01:50 Lab File ID: 03040026.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.59	Baseline	zhangji	03/05/22 10:34
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/05/22 10:34
HMX		Invalid Compound ID	zhangji	03/05/22 10:34
MNX		Invalid Compound ID	zhangji	03/05/22 10:34
Tetryl		Invalid Compound ID	zhangji	03/05/22 10:34

Lab Sample ID: 280-159190-12 Client Sample ID: CA211-8

Date Analyzed: 03/05/22 02:13 Lab File ID: 03040027.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/05/22 10:34

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 567774

Lab Sample ID: 280-159190-13 Client Sample ID: EW7-PM28A-8-25

Date Analyzed: 03/05/22 02:36 Lab File ID: 03040028.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/05/22 10:43
1,3,5-Trinitrobenzene	8.67	Baseline	zhangji	03/05/22 10:44
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	03/05/22 10:43
2,6-Dinitrotoluene		Invalid Compound ID	zhangji	03/05/22 10:43
2-Nitrotoluene		Invalid Compound ID	zhangji	03/05/22 10:43
4-Nitrotoluene		Invalid Compound ID	zhangji	03/05/22 10:43
MNX		Invalid Compound ID	zhangji	03/05/22 10:43
Nitrobenzene		Invalid Compound ID	zhangji	03/05/22 10:43
RDX		Invalid Compound ID	zhangji	03/05/22 10:43
Tetryl		Invalid Compound ID	zhangji	03/05/22 10:43

Lab Sample ID: 280-159190-14 Client Sample ID: EW7-PM29A-8-25

Date Analyzed: 03/05/22 02:58 Lab File ID: 03040029.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/05/22 10:44
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	03/05/22 10:44
2,6-Dinitrotoluene		Invalid Compound ID	zhangji	03/05/22 10:44
MNX		Invalid Compound ID	zhangji	03/05/22 10:44
Nitrobenzene		Invalid Compound ID	zhangji	03/05/22 10:44
RDX		Invalid Compound ID	zhangji	03/05/22 10:44
Tetryl		Invalid Compound ID	zhangji	03/05/22 10:44

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 567774

Lab Sample ID: 280-159190-15 Client Sample ID: EW7-PM27B-8-35

Date Analyzed: 03/05/22 03:21 Lab File ID: 03040030.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.61	Baseline	zhangji	03/05/22 10:48
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	03/05/22 10:48
2,6-Dinitrotoluene		Invalid Compound ID	zhangji	03/05/22 10:48
4-Nitrotoluene		Invalid Compound ID	zhangji	03/05/22 10:48
MNX		Invalid Compound ID	zhangji	03/05/22 10:48
Nitrobenzene		Invalid Compound ID	zhangji	03/05/22 10:48
Tetryl		Invalid Compound ID	zhangji	03/05/22 10:48

Lab Sample ID: CCV 280-567774/31 Client Sample ID:

Date Analyzed: 03/05/22 03:44 Lab File ID: 03040031.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	03/05/22 10:48

Lab Sample ID: CCV 280-567774/32 Client Sample ID:

Date Analyzed: 03/05/22 04:07 Lab File ID: 03040032.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	03/05/22 10:49
DNX	6.79	Baseline	zhangji	03/05/22 10:49
MNX	7.21	Baseline	zhangji	03/05/22 10:49

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 567774

Lab Sample ID: 280-159190-16 Client Sample ID: NW062-8

Date Analyzed: 03/05/22 04:30 Lab File ID: 03040033.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/05/22 10:49
2-Nitrotoluene		Invalid Compound ID	zhangji	03/05/22 10:49
4-Nitrotoluene		Invalid Compound ID	zhangji	03/05/22 10:49
Nitrobenzene		Invalid Compound ID	zhangji	03/05/22 10:49

Lab Sample ID: 280-159190-16 MS Client Sample ID: NW062-8 MS

Date Analyzed: 03/05/22 04:53 Lab File ID: 03040034.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	03/05/22 10:49
RDX	7.59	Baseline	zhangji	03/05/22 10:49

Lab Sample ID: 280-159190-16 MSD Client Sample ID: NW062-8 MSD

Date Analyzed: 03/05/22 05:16 Lab File ID: 03040035.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	03/05/22 10:50
RDX	7.59	Baseline	zhangji	03/05/22 10:50

Lab Sample ID: 280-159190-16 MS Client Sample ID: NW062-8 MS

Date Analyzed: 03/05/22 05:39 Lab File ID: 03040036.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.21	Baseline	zhangji	03/05/22 10:51
1,2-Dinitrobenzene	8.53	Baseline	zhangji	03/05/22 10:51

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 567774

Lab Sample ID: 280-159190-16 MSD Client Sample ID: NW062-8 MSD

Date Analyzed: 03/05/22 06:02 Lab File ID: 03040037.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.21	Baseline	zhangji	03/05/22 10:51
1,2-Dinitrobenzene	8.54	Baseline	zhangji	03/05/22 10:52

Lab Sample ID: CCV 280-567774/42 Client Sample ID:

Date Analyzed: 03/05/22 07:57 Lab File ID: 03040042.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	03/05/22 10:55
DNX	6.79	Baseline	zhangji	03/05/22 10:55
MNX	7.21	Baseline	zhangji	03/05/22 10:55

Lab Sample ID: CCV 280-567774/43 Client Sample ID:

Date Analyzed: 03/05/22 08:20 Lab File ID: 03040043.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	03/05/22 10:56

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

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.: 280-159190-1

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.: 280-159190-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 567777

Lab Sample ID: CCV 280-567777/15 Client Sample ID:

Date Analyzed: 03/04/22 21:27 Lab File ID: 03040015.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Dinitrobenzene	15.73	Baseline Smoothing	zhangji	03/05/22 11:12
2-Nitrotoluene	16.93	Baseline Smoothing	zhangji	03/05/22 11:12
4-Nitrotoluene	17.23	Baseline Smoothing	zhangji	03/05/22 11:12
4-Amino-2,6-dinitrotoluene	17.89	Baseline Smoothing	zhangji	03/05/22 11:12
3-Nitrotoluene	18.21	Baseline Smoothing	zhangji	03/05/22 11:12
2-Amino-4,6-dinitrotoluene	18.92	Baseline Smoothing	zhangji	03/05/22 11:13
1,3,5-Trinitrobenzene	19.03	Baseline Smoothing	zhangji	03/05/22 11:13

Lab Sample ID: 280-159190-3 Client Sample ID: NW061-8

Date Analyzed: 03/05/22 01:33 Lab File ID: 03040022.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetryl		Invalid Compound ID	zhangji	03/05/22 11:14
1,2-Dinitrobenzene	13.36	Baseline Smoothing	zhangji	03/05/22 11:14

Lab Sample ID: 280-159190-4 Client Sample ID: EW7-PM24A-8-25

Date Analyzed: 03/05/22 02:08 Lab File ID: 03040023.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.93	Baseline Smoothing	zhangji	03/05/22 11:14
RDX	9.14	Baseline Smoothing	zhangji	03/05/22 11:14
2,4,6-Trinitrotoluene		Invalid Compound ID	zhangji	03/05/22 11:14

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 567777

Lab Sample ID: 280-159190-5 Client Sample ID: EW7-PM21A-8-25

Date Analyzed: 03/05/22 02:43 Lab File ID: 03040024.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Amino-4,6-dinitrotoluene	18.92	Unspecified		
1,3,5-Trinitrobenzene	19.05	Baseline Smoothing	zhangji	03/05/22 11:15

Lab Sample ID: CCV 280-567777/27 Client Sample ID:

Date Analyzed: 03/05/22 04:29 Lab File ID: 03040027.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene	16.93	Baseline Smoothing	zhangji	03/05/22 11:16
4-Nitrotoluene	17.24	Baseline Smoothing	zhangji	03/05/22 11:16
4-Amino-2,6-dinitrotoluene	17.90	Baseline Smoothing	zhangji	03/05/22 11:16
3-Nitrotoluene	18.22	Baseline Smoothing	zhangji	03/05/22 11:16
2-Amino-4,6-dinitrotoluene	18.93	Baseline Smoothing	zhangji	03/05/22 11:16
1,3,5-Trinitrobenzene	19.04	Unspecified		

Lab Sample ID: 280-159190-11 Client Sample ID: G0091-8

Date Analyzed: 03/05/22 07:24 Lab File ID: 03040032.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.94	Baseline Smoothing	zhangji	03/05/22 11:16
RDX	9.17	Baseline Smoothing	zhangji	03/05/22 11:16
Tetryl		Invalid Compound ID	zhangji	03/05/22 11:16
2,4,6-Trinitrotoluene	25.41	Baseline Smoothing	zhangji	03/05/22 11:16

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 567777

Lab Sample ID: 280-159190-13 Client Sample ID: EW7-PM28A-8-25

Date Analyzed: 03/05/22 08:34 Lab File ID: 03040034.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX		Invalid Compound ID	zhangji	03/05/22 11:17
MNX		Invalid Compound ID	zhangji	03/05/22 11:17
Tetryl		Invalid Compound ID	zhangji	03/05/22 11:16

Lab Sample ID: 280-159190-15 Client Sample ID: EW7-PM27B-8-35

Date Analyzed: 03/05/22 09:44 Lab File ID: 03040036.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene		Invalid Compound ID	zhangji	03/05/22 11:17

Lab Sample ID: CCV 280-567777/37 Client Sample ID:

Date Analyzed: 03/05/22 10:19 Lab File ID: 03040037.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene	16.93	Baseline Smoothing	zhangji	03/05/22 11:17
4-Nitrotoluene	17.24	Baseline Smoothing	zhangji	03/05/22 11:17
4-Amino-2,6-dinitrotoluene	17.90	Baseline Smoothing	zhangji	03/05/22 11:17
3-Nitrotoluene	18.21	Baseline Smoothing	zhangji	03/05/22 11:17
2-Amino-4,6-dinitrotoluene	18.94	Baseline Smoothing	zhangji	03/05/22 11:17
1,3,5-Trinitrobenzene	19.03	Unspecified		
Tetryl	24.66	Baseline Smoothing	zhangji	03/05/22 11:18
2,4,6-Trinitrotoluene	25.40	Baseline Smoothing	zhangji	03/05/22 11:18
PETN	26.32	Baseline Smoothing	zhangji	03/05/22 11:18

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Batch Number: 568008

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

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

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

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

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

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

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

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

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

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

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

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

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Batch Number: 568008

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

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

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

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

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

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

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

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

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

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

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

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

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Batch Number: 568795

Lab Sample ID: CCV 280-568795/1 Client Sample ID:

Date Analyzed: 03/16/22 10:06 Lab File ID: 0001.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.08	Baseline Smoothing	foxr	03/16/22 11:51

Lab Sample ID: MRL 280-568795/3 Client Sample ID:

Date Analyzed: 03/16/22 10:38 Lab File ID: 0003.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.96	Baseline Smoothing	foxr	03/16/22 11:53

Lab Sample ID: LCS 280-568795/4 Client Sample ID:

Date Analyzed: 03/16/22 10:54 Lab File ID: 0004.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.07	Baseline Smoothing	foxr	03/16/22 11:53

Lab Sample ID: LCSD 280-568795/5 Client Sample ID:

Date Analyzed: 03/16/22 11:11 Lab File ID: 0005.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.01	Baseline Smoothing	foxr	03/16/22 11:54

Lab Sample ID: MB 280-568795/6 Client Sample ID:

Date Analyzed: 03/16/22 11:27 Lab File ID: 0006.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.88	Baseline Smoothing	foxr	03/16/22 11:55

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Batch Number: 568795

Lab Sample ID: CCV 280-568795/17 Client Sample ID:

Date Analyzed: 03/16/22 17:01 Lab File ID: 0017.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.02	Baseline Smoothing	foxr	03/17/22 12:52

Lab Sample ID: CCB 280-568795/18 Client Sample ID:

Date Analyzed: 03/16/22 17:17 Lab File ID: 0018.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.96	Baseline Smoothing	foxr	03/17/22 12:53

Lab Sample ID: 280-159190-1 Client Sample ID: NW071-8

Date Analyzed: 03/16/22 20:01 Lab File ID: 0028.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.00	Baseline Smoothing	foxr	03/17/22 12:59

Lab Sample ID: CCV 280-568795/29 Client Sample ID:

Date Analyzed: 03/16/22 20:18 Lab File ID: 0029.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.03	Baseline Smoothing	foxr	03/17/22 12:59

Lab Sample ID: CCB 280-568795/30 Client Sample ID:

Date Analyzed: 03/16/22 20:34 Lab File ID: 0030.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.92	Baseline Smoothing	foxr	03/17/22 13:00

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Batch Number: 568795

Lab Sample ID: 280-159190-2 Client Sample ID: NW060-8

Date Analyzed: 03/16/22 20:51 Lab File ID: 0031.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.95	Baseline Smoothing	foxr	03/17/22 13:12

Lab Sample ID: 280-159190-3 Client Sample ID: NW061-8

Date Analyzed: 03/16/22 21:07 Lab File ID: 0032.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.12	Baseline Smoothing	foxr	03/17/22 13:12

Lab Sample ID: 280-159190-4 Client Sample ID: EW7-PM24A-8-25

Date Analyzed: 03/16/22 21:23 Lab File ID: 0033.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.03	Baseline Smoothing	foxr	03/17/22 13:13

Lab Sample ID: 280-159190-5 Client Sample ID: EW7-PM21A-8-25

Date Analyzed: 03/16/22 21:40 Lab File ID: 0034.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.08	Baseline Smoothing	foxr	03/17/22 13:14

Lab Sample ID: 280-159190-6 Client Sample ID: NW070-8

Date Analyzed: 03/16/22 21:56 Lab File ID: 0035.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.04	Baseline Smoothing	foxr	03/17/22 13:14

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Batch Number: 568795

Lab Sample ID: LCS 280-568795/37 Client Sample ID:

Date Analyzed: 03/16/22 22:29 Lab File ID: 0037.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.03	Baseline Smoothing	foxr	03/17/22 13:15

Lab Sample ID: LCSD 280-568795/38 Client Sample ID:

Date Analyzed: 03/16/22 22:46 Lab File ID: 0038.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.03	Baseline Smoothing	foxr	03/17/22 13:15

Lab Sample ID: MB 280-568795/39 Client Sample ID:

Date Analyzed: 03/16/22 23:02 Lab File ID: 0039.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.92	Baseline Smoothing	foxr	03/17/22 13:16

Lab Sample ID: CCV 280-568795/41 Client Sample ID:

Date Analyzed: 03/16/22 23:35 Lab File ID: 0041.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.03	Baseline Smoothing	foxr	03/17/22 13:16

Lab Sample ID: CCB 280-568795/42 Client Sample ID:

Date Analyzed: 03/16/22 23:51 Lab File ID: 0042.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.92	Baseline Smoothing	foxr	03/17/22 13:17

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Batch Number: 568795

Lab Sample ID: 280-159190-8 Client Sample ID: CA212-8

Date Analyzed: 03/17/22 00:57 Lab File ID: 0046.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.02	Baseline Smoothing	foxr	03/17/22 13:23

Lab Sample ID: CCV 280-568795/53 Client Sample ID:

Date Analyzed: 03/17/22 02:52 Lab File ID: 0053.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.03	Baseline Smoothing	foxr	03/17/22 13:24

Lab Sample ID: CCB 280-568795/54 Client Sample ID:

Date Analyzed: 03/17/22 03:08 Lab File ID: 0054.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.93	Baseline Smoothing	foxr	03/17/22 13:24

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

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.: 280-159190-1

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

Lab Sample ID: CCV 280-568842/24 Client Sample ID:

Date Analyzed: 03/16/22 19:49 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	jindaratc	03/17/22 12:51
Bromide	5.36	Baseline Smoothing	jindaratc	03/17/22 12:51
Sulfate	8.13	Peak assignment corrected	jindaratc	03/17/22 12:50

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 568842

Lab Sample ID: CCB 280-568842/25 Client Sample ID:

Date Analyzed: 03/16/22 20:05 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.22	Peak assignment corrected	jindaratc	03/17/22 13:07

Lab Sample ID: CCV 280-568842/36 Client Sample ID:

Date Analyzed: 03/16/22 22:50 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	jindaratc	03/17/22 12:51
Bromide	5.36	Baseline Smoothing	jindaratc	03/17/22 12:51
Sulfate	8.13	Baseline Smoothing	jindaratc	03/17/22 12:51

Lab Sample ID: CCB 280-568842/37 Client Sample ID:

Date Analyzed: 03/16/22 23:05 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.22	Peak assignment corrected	jindaratc	03/17/22 13:12

Lab Sample ID: 280-159190-15 Client Sample ID: EW7-PM27B-8-35

Date Analyzed: 03/17/22 01:05 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	Peak assignment corrected	jindaratc	03/17/22 13:12

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 568842

Lab Sample ID: CCV 280-568842/46 Client Sample ID:

Date Analyzed: 03/17/22 01:20 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	jindaratc	03/17/22 12:52
Bromide	5.36	Baseline Smoothing	jindaratc	03/17/22 12:52
Sulfate	8.13	Peak assignment corrected	jindaratc	03/17/22 12:51

Lab Sample ID: CCB 280-568842/47 Client Sample ID:

Date Analyzed: 03/17/22 01:35 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.22	Peak assignment corrected	jindaratc	03/17/22 13:13

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 568946

Lab Sample ID: CCV 280-568946/1 Client Sample ID:

Date Analyzed: 03/17/22 12:07 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	jindaratc	03/17/22 12:49
Bromide	5.37	Baseline Smoothing	jindaratc	03/17/22 12:49
Sulfate	8.11	Baseline Smoothing	foxr	03/17/22 14:10

Lab Sample ID: CCB 280-568946/2 Client Sample ID:

Date Analyzed: 03/17/22 12:22 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	Peak assignment corrected	foxr	03/17/22 14:11

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: LCS 280-568946/4 Client Sample ID:

Date Analyzed: 03/17/22 12:52 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	03/17/22 14:12

Lab Sample ID: LCSD 280-568946/5 Client Sample ID:

Date Analyzed: 03/17/22 13:07 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	03/17/22 14:13

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GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 568946

Lab Sample ID: MB 280-568946/6 Client Sample ID:

Date Analyzed: 03/17/22 13:22 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.22	Baseline Smoothing	foxr	03/18/22 12:48

Lab Sample ID: CCV 280-568946/17 Client Sample ID:

Date Analyzed: 03/17/22 18:48 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.78	Baseline Smoothing	jindaratc	03/17/22 19:34
Bromide	5.37	Baseline Smoothing	foxr	03/18/22 12:55
Sulfate	8.11	Baseline Smoothing	foxr	03/18/22 12:55

Lab Sample ID: CCB 280-568946/18 Client Sample ID:

Date Analyzed: 03/17/22 19:03 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.19	Baseline Smoothing	foxr	03/18/22 12:56

Lab Sample ID: CCV 280-568946/29 Client Sample ID:

Date Analyzed: 03/17/22 21:49 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 13:02
Bromide	5.38	Baseline Smoothing	foxr	03/18/22 13:02
Sulfate	8.11	Baseline Smoothing	foxr	03/18/22 13:02

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 568946

Lab Sample ID: CCB 280-568946/30 Client Sample ID:

Date Analyzed: 03/17/22 22:04 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

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

Lab Sample ID: 280-159190-7 Client Sample ID: CA210-8

Date Analyzed: 03/17/22 23:34 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.14	Baseline Smoothing	foxr	03/18/22 13:04

Lab Sample ID: 280-159190-10 Client Sample ID: G0092-8

Date Analyzed: 03/17/22 23:49 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 13:04

Lab Sample ID: 280-159190-11 Client Sample ID: G0091-8

Date Analyzed: 03/18/22 00:04 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.13	Baseline Smoothing	foxr	03/18/22 13:04

Lab Sample ID: 280-159190-16 Client Sample ID: NW062-8

Date Analyzed: 03/18/22 00:19 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.13	Baseline Smoothing	foxr	03/18/22 13:05

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 568946

Lab Sample ID: 280-159190-16 DU Client Sample ID: NW062-8 DU

Date Analyzed: 03/18/22 00:34 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.13	Baseline Smoothing	foxr	03/18/22 13:05

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: 280-159190-16 MS Client Sample ID: NW062-8 MS

Date Analyzed: 03/18/22 01:19 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.12	Baseline Smoothing	foxr	03/18/22 13:08

Lab Sample ID: 280-159190-16 MSD Client Sample ID: NW062-8 MSD

Date Analyzed: 03/18/22 01:34 Lab File ID: Info 2_DENPC584_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.12	Baseline Smoothing	foxr	03/18/22 13:09

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GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_IonChrom13 Analysis Batch Number: 568946

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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

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.: 280-159190-1

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.: 280-159190-1

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.: 280-159190-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.8330PAStkPS_00067	07/08/22	AccuStandard, Lot 218031154-02			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330Surrogate_00127	05/16/22	11/16/21	Acetonitrile, Lot Acetonitrile_00059	500 mL	8330SurrStkSS_00203	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00204	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00207	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00211	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00212	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00203	05/30/26	Restek, Lot A0172684			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00204	05/30/26	Restek, Lot A0172684			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00207	05/30/26	Restek, Lot A0172684			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00211	05/30/26	Restek, Lot A0172684			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00212	05/30/26	Restek, Lot A0172684			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
Alk daily lcs_01027	03/08/22	03/01/22	Di Water, Lot na	1000 mL	Alk stk std_00022	4 mL	Total Alkalinity as CaCO3	200 mg/L
.Alk stk std_00022	10/30/22	SPEX, Lot 2-85BT			(Purchased Reagent)		Total Alkalinity as CaCO3	50 g/L
IC CAL cl/so4_00409	03/09/22	03/02/22	Di Water, Lot na	100 mL	IC CL cal_00071	25 mL	Chloride	250 mg/L
					IC SO4 Cal_00003	25 mL	Sulfate	250 mg/L
.IC CL cal_00071	11/30/22	SPEX CertiPrep, Lot 5-67CL-2x			(Purchased Reagent)		Chloride	1000 mg/L
.IC SO4 Cal_00003	11/30/22	SPEX CertiPrep, Lot 5-118SO49-2X			(Purchased Reagent)		Sulfate	1000 mg/L
IC CAL cl/so4_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_00625	03/09/22	03/02/22	Di Water, Lot NA	100 mL	IC BR ICV_00021	5 mL	Bromide	50 mg/L
					IC FL cal_00019	5 mL	Fluoride	50 mg/L
.IC BR ICV_00021	04/01/22	ricca, Lot 4010N41			(Purchased Reagent)		Bromide	1000 mg/L
.IC FL cal_00019	01/31/23	Ricca, Lot 4108A94			(Purchased Reagent)		Fluoride	1000 mg/L
IC 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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.IC SPK 6 ANIO_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
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 CAL INT_02142	05/08/22	02/08/22	Di Water, Lot NA	500 mL	50% NaOH_00022	2 mL	Sodium Hydroxide	2000 mg/L
					SFD CAL STK_00008	4.16501 g	Sulfide	1112.06 mg/L
.50% NaOH_00022	06/30/23		RICCA, Lot 1006F87		(Purchased Reagent)		Sodium Hydroxide	50 %
.SFD CAL STK_00008	09/30/23		ACROS, Lot A0406399		(Purchased Reagent)		Sulfide	0.1335 g/g
SFD ICV INT_02088	05/08/22	02/08/22	Di Water, Lot N/A	500 mL	50% NaOH_00022	2 mL	Sodium Hydroxide	2000 mg/L
					SFD ICV STK_00008	4.5207 g	Sulfide	1207.03 mg/L
.50% NaOH_00022	06/30/23		RICCA, Lot 1006F87		(Purchased Reagent)		Sodium Hydroxide	50 %
.SFD ICV STK_00008	04/03/24		Acros, Lot A0412804		(Purchased Reagent)		Sulfide	0.1335 g/g
TKN 25ppm_00829	03/24/22	02/21/22	Di Water, Lot 1	100 mL	TKN 100PPM_00142	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN 100PPM_00142	03/24/22	02/21/22	Di Water, Lot 1	500 mL	TKN CAL STD_00019	50 mL	Nitrogen, Total Kjeldahl	100 mg/L
..TKN CAL STD_00019	08/31/24		nsi lab solutions, Lot 200817		(Purchased Reagent)		Nitrogen, Total Kjeldahl	1000 mg/L
TKN ICV 25_00115	03/24/22	02/21/22	DI water, Lot 1	100 mL	TKN ICV 100_00104	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN ICV 100_00104	03/24/22	02/21/22	Di Water, Lot 1	500 mL	TKN ICV_00013	50 mL	Nitrogen, Total Kjeldahl	100 mg/L
..TKN ICV_00013	07/02/22		ERA, Lot 200220m		(Purchased Reagent)		Nitrogen, Total Kjeldahl	1000 mg/L
TOC ICV Std_00049	01/31/23		Ricca, Lot 1201B45		(Purchased Reagent)		Dissolved Organic Carbon - Quad	1000 ppm
							DOC Result 1	1000 ppm
							DOC Result 2	1000 ppm
							DOC Result 3	1000 ppm
							DOC Result 4	1000 ppm
TOC LCS Std_00053	12/31/23		Agilent, Lot 0006645841		(Purchased Reagent)		Dissolved Organic Carbon - Quad	1001 ppm
							DOC Result 1	1001 ppm
							DOC Result 2	1001 ppm
							DOC Result 3	1001 ppm
							DOC Result 4	1001 ppm

Reagent

50% NaOH_00022

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customerservice@riccachemical.com

Certificate of Analysis

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

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

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

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

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

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	Passed	
Assay (vs. Sulfuric Acid/Phenolphthalein)	50-52 % (w/w)	50 % (w/w)	723
Chloride (Cl)	max 0.002 %	< 0.002 %	
Heavy Metals (as Ag)	max 0.001 %	< 0.001 %	
Iron (Fe)	max 5 ppm	0.2 ppm	3126
NH_4OH Precipitate	max 0.01 %	0.004 %	
Nickel (Ni)	max 5 ppm	0.04 ppm	3136
Nitrogen Compounds (as N)	max 5 ppm	< 5 ppm	
Phosphate (PO_4)	max 5 ppm	< 5 ppm	
Potassium (K)	max 0.01 %	0.001 %	3141
Sodium Carbonate (Na_2CO_3)	max 0.1 %	0.02 %	
Sulfate (SO_4)	max 0.001 %	< 0.001 %	

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

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
7291-16	500 mL natural poly	36 months
7291-5HP	20 L Ropak™	36 months

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



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

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

Reagent

8330 LCS_00111

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

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

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

Worklist ID: 280-0106450-021 Instrument: CHHPLC_X3

Method: 8330_X3

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

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

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

Reagent

8330 LCS_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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Certificate of Analysis

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** 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)

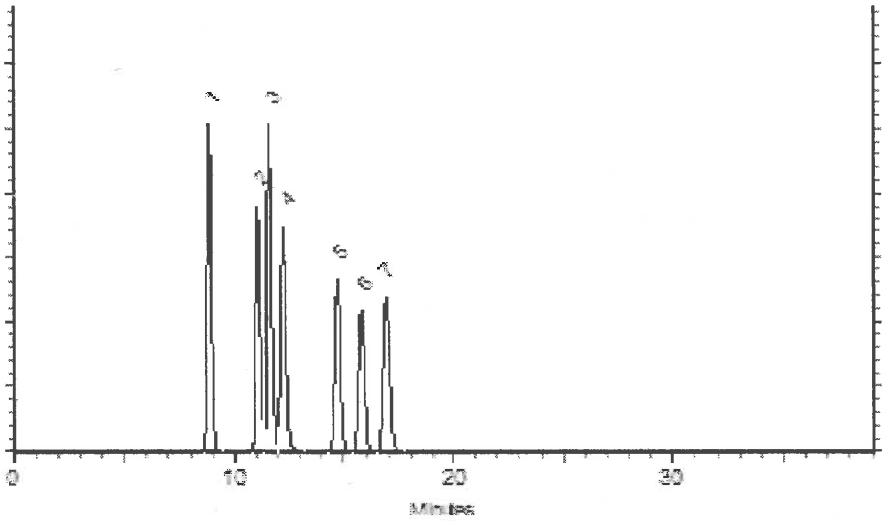
Flow Rate:
1.0 ml/min.

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

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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. : 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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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Nitroglycerin Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_OP_DMT_00012

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

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

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

Worklist ID: 280-0104924-005 Instrument: CHHPLC_X3

Method: 8330_X3

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

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

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

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

410-54873-B-6-B

Reagent

8330_OP_DMT_00013

Preliminary Report

Eurofins Denver

LCS, Lab Control Sample Report

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

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

Worklist ID: 280-0108600-011 Instrument: CHHPLC_X3

Method: 8330_X3

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

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

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

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

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

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

860-20476-C-1-A

Reagent

8330_PETN_Stk_00111

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom PETN Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	PETN	5,032.0 µg/mL	+/- 46.7949	µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 278.0096	µg/mL	Unstressed
	Purity 99%		+/- 323.4663	µg/mL	Stressed

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

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

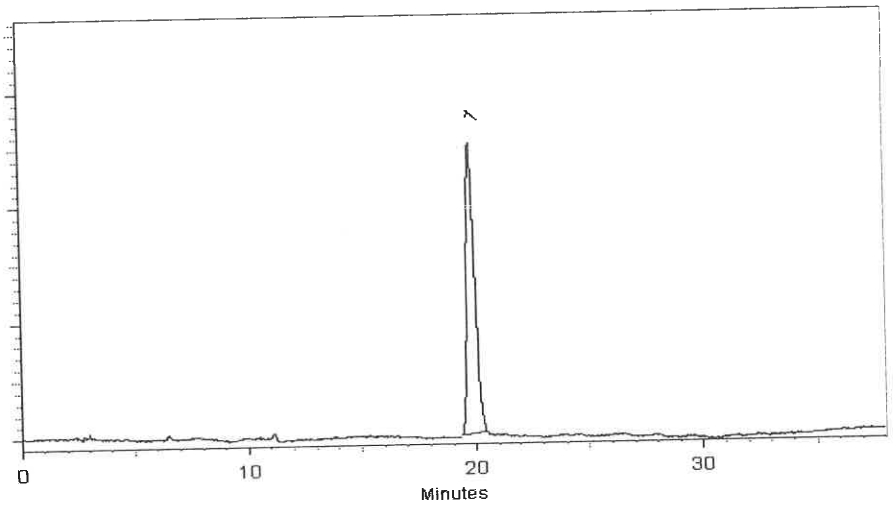
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Katelyn McGinni - Operations Tech I

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

Marlina Cowan - Operations Tech I

Date Passed: 27-May-2021

REVIEWED
By Jennifer Polimo at 2:38 pm, May 27, 2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- 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

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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:

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

Handling Notes:

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

Reagent

8330_PETN_Stk_00113

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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	5,032.0 µg/mL	+/- 46.7949	µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 278.0096	µg/mL	Unstressed
	Purity 99%		+/- 323.4663	µg/mL	Stressed

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

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

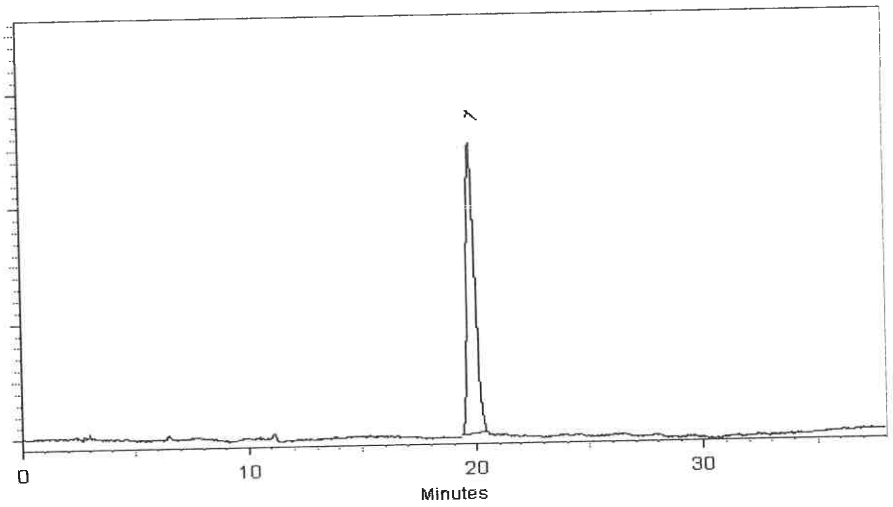
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Katelyn McGinni - Operations Tech I

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

Marlina Cowan - Operations Tech I

Date Passed: 27-May-2021

REVIEWED
By Jennifer Polimo at 2:38 pm, May 27, 2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_PETN1000_00006

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : PETN Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	PETN		1,006.8 µg/mL	+/- 10.1422	µg/mL	Gravimetric
	CAS # 78-11-5	(Lot 051108JLM)		+/- 55.7605	µg/mL	Unstressed
	Purity 99%			+/- 64.8363	µg/mL	Stressed

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

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- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

- 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_00126

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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. : 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)

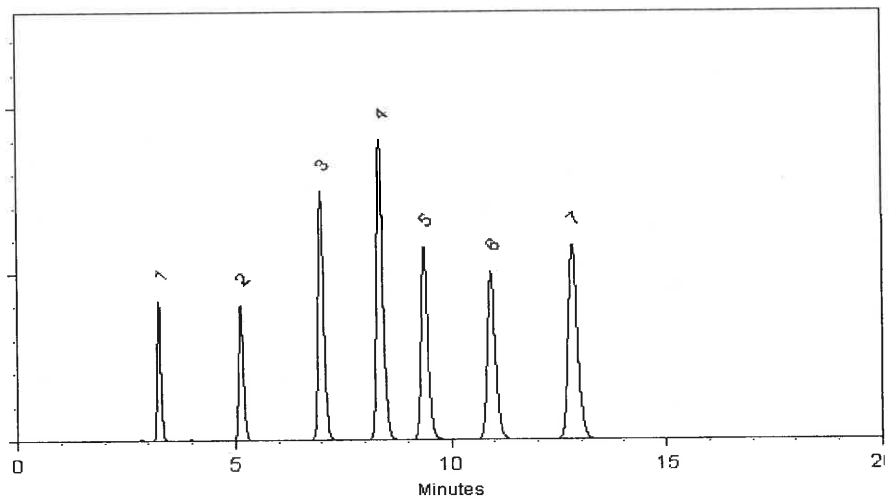
Flow Rate:
1.0 ml/min.

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

8330LCSMix1_00129

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

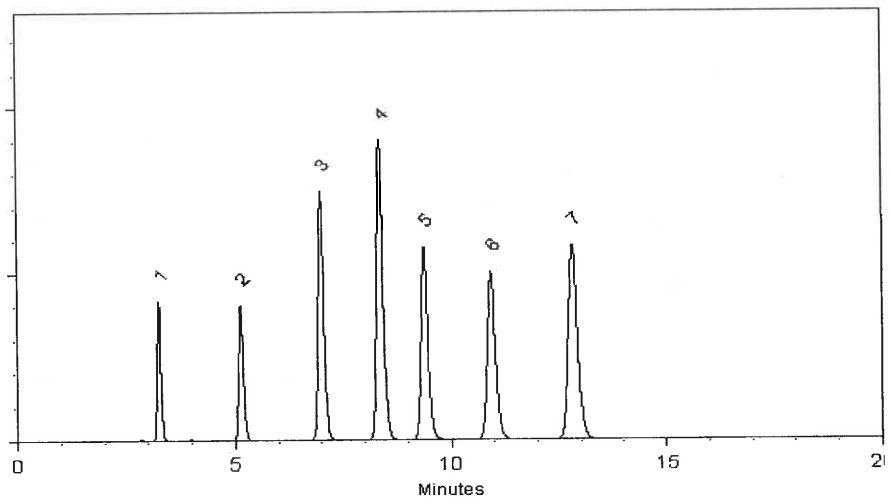
Flow Rate:
1.0 ml/min.

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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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 (Lot 091120JLM) **Purity** 99%	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 (Lot ER070908-01) **Purity** 99%	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 (Lot 29550-55) **Purity** 99%	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 (Lot 1437483V) **Purity** 99%	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 (Lot BCBZ7826) **Purity** 99%	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 (Lot FAU01) **Purity** 99%	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 (Lot 07329LG) **Purity** 99%	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)

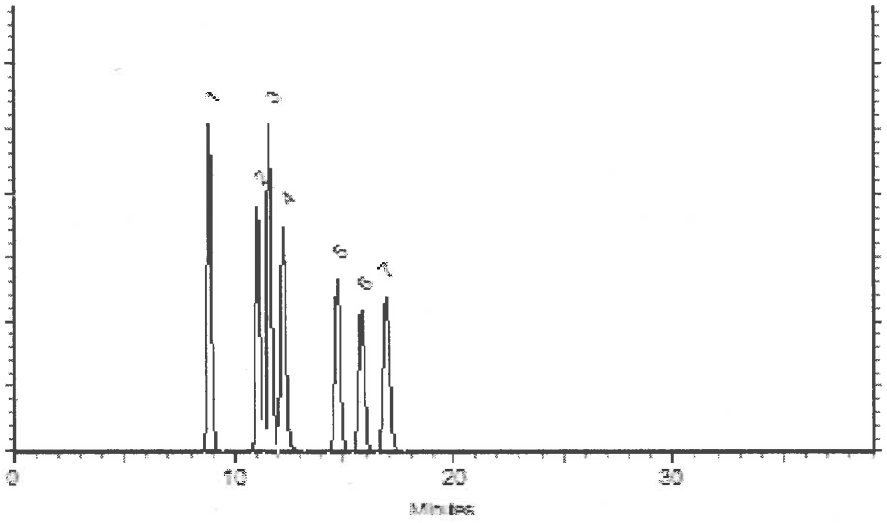
Flow Rate:
1.0 ml/min.

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

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New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-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

Page 1 of 1

For use in routine laboratory analysis.

Reagent

8330Surrogate_00127

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

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

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

Worklist ID: 280-0106552-072 Instrument: CHHPLC_X3

Method: 8330_X3

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

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

280-155547-B-1-A

Reagent

8330SurrStkSS_00203

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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:

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  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330SurrStkSS_00204

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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. : 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_00207

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

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** 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
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Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330SurrStkSS_00211

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

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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:

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Manufacturing Notes:

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Handling Notes:

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Reagent

8330SurrStkSS_00212

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

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ACCREDITED
ISO/IEC 17025 Accredited
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Manufacturing Notes:

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Handling Notes:

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

Reagent

8330SurrStock_00169

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

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



Signal Word: Danger

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

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED TESTING LABORATORY AT-1339

ilac-MRA

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

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

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

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

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

Reagent

Alk stk std_00022

spex certiprep

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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
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customerservice@riccachemical.com

Certificate of Analysis

Bromide Standard, 1000 ppm Br^-

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

Manufacture Date: OCT 26, 2020

Expiration Date: APR 2022

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

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

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

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

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

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

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

Chris Collins (10/26/2020)

Quality Control Supervisor

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

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

Reagent

IC CL cal_00071

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Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

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."

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

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

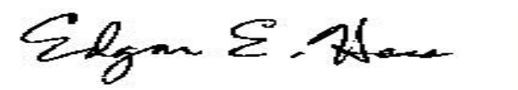
Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2008 standard by SAI Global Certificate Number CERT - 0064970

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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CSD-QA-015.1

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

Reagent

MNX,TNX,DNX_00062

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984

Lot Number: 0006599273

Lot Issue Date: 02-Apr-2021

Expiration Date: 30-Apr-2022

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

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

Matrix: acetonitrile

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

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

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

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

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

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

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

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

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

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

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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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
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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.

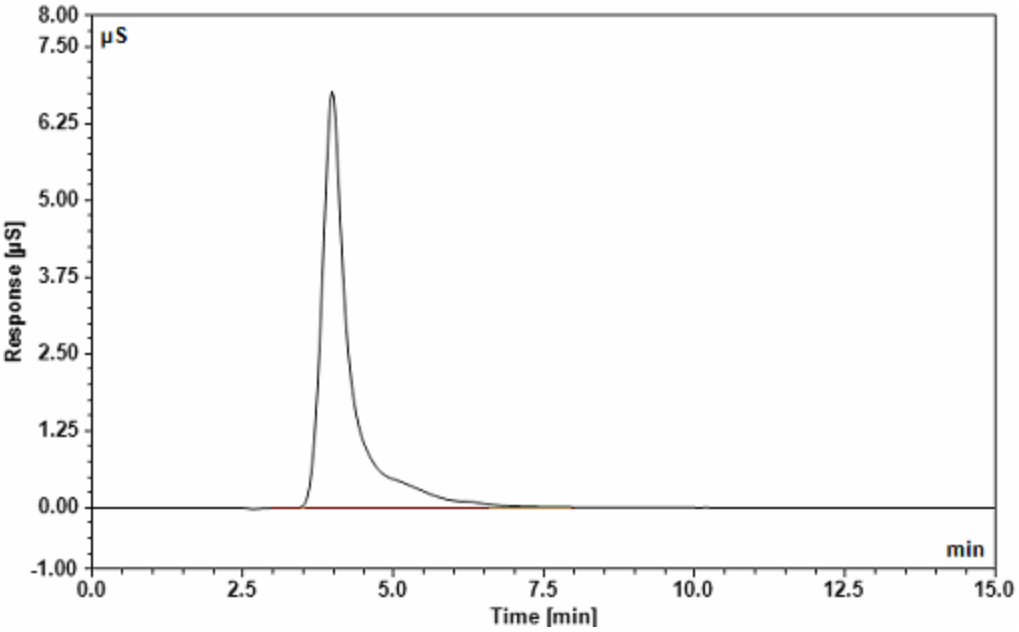
4.2 Balance Calibration

- 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)

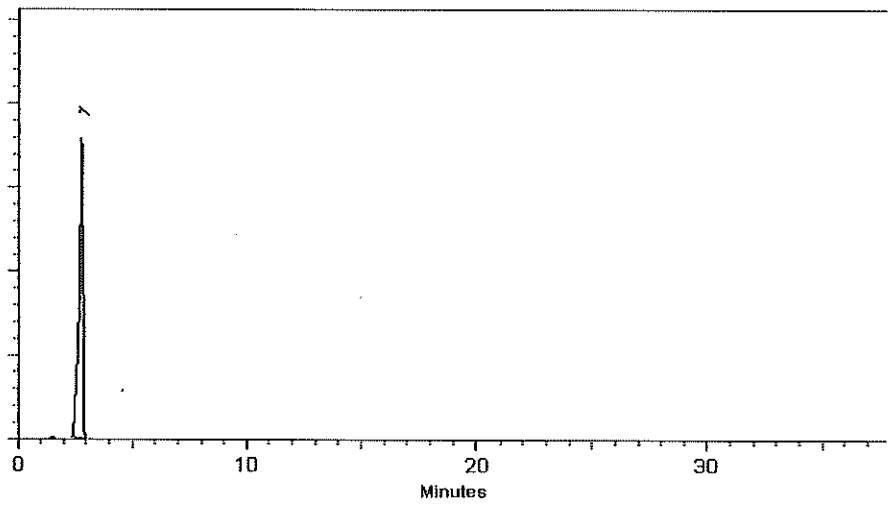
Flow Rate:
1.0 ml/min.

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)
*DI.039162

	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

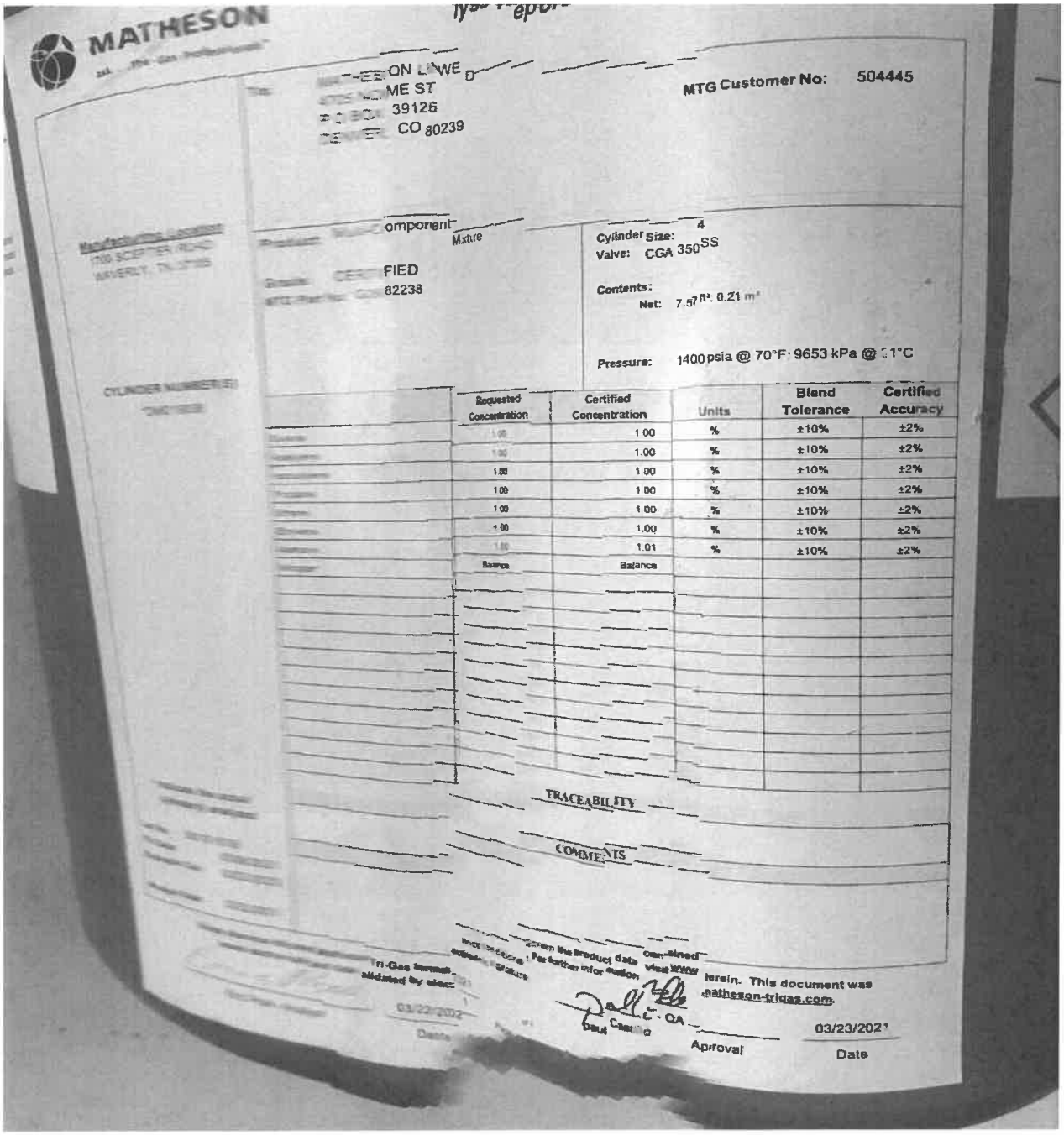
Unless otherwise indicated, Matheson Tri-Gas terms and conditions govern the product data contained herein. This document was issued electronically and data validated by electronic signature. For further information visit www.matheson-trigas.com.

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

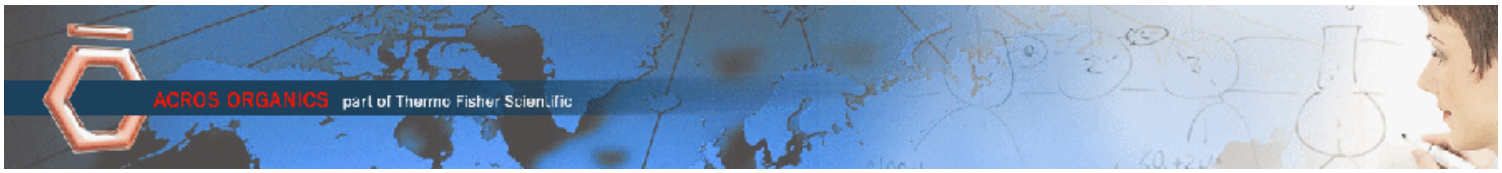
Paul Castillo - QA Approval — 03/23/2021 — Date

Page 1 of 1

[redacted]

Reagent

SFD CAL 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

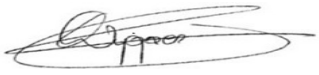
warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to human or animals. It is the responsiblity of the purchaser, formulator or those performing further manufacturing to determine suitability based 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**	19 September 2020
Lot Number	A0406399	**Suggested Retest Date**	September 2023
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)	32.8 % (Na2S)
Total nitrogen (as N)	=<0.005 %	=<0.005 %
Sulfite (as SO2)	=<2000 ppm	=<2000 ppm
Thiosulphate (S2O3)	=<5000 ppm	=<5000 ppm



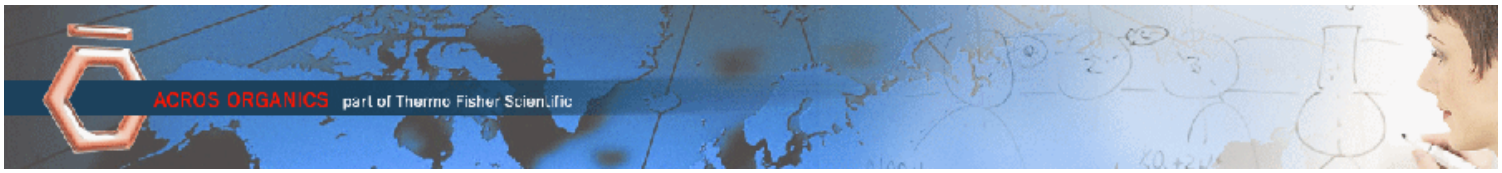


C. Wygaerts, QA Manager Issued: 27 April 2021

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

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

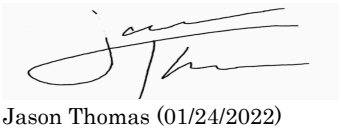
Test	Specification	Result
Appearance	Colorless liquid	Passed
Carbon (C)	995-1005 ppm	1000 ppm

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."

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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.: 280-159190-1

SDG No.:

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

Lab ID: LCS 280-567659/3 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0657	0.0667	101	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 002F0201.D

Lab ID: LCS 280-567999/4 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0657	0.0648	99	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

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

Lab ID: LCSD 280-567659/4 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0657	0.0646	98	3	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

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

Lab ID: LCSD 280-567999/5 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0657	0.0649	99	0	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 026F2601.D

Lab ID: 280-159190-16 MS Client ID: NW062-8 MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Methane	0.0657	0.024	0.0867	96	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.: 280-159190-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 027F2701.D

Lab ID: 280-159190-16 MSD Client ID: NW062-8 MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0657	0.0868	96	0	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: MB 280-567659/5

Matrix: Water Date Extracted:

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

Date Analyzed:(1) 03/03/2022 15:17 Date Analyzed:(2) 03/03/2022 15:17

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

GC Column:(1) HP-Plot Q ID: 0.53(mm) GC Column:(2) Rt-Alumina K ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-567659/3	03/03/2022 14:51	03/03/2022 14:51
	LCSD 280-567659/4	03/03/2022 15:04	03/03/2022 15:04
NW071-8	280-159190-1	03/03/2022 15:42	03/03/2022 15:42
NW071-8 DU	280-159190-1 DU	03/03/2022 15:55	03/03/2022 15:55
NW060-8	280-159190-2	03/03/2022 16:08	03/03/2022 16:08
NW061-8	280-159190-3	03/03/2022 16:22	03/03/2022 16:22
EW7-PM24A-8-25	280-159190-4	03/03/2022 16:35	03/03/2022 16:35
EW7-PM21A-8-25	280-159190-5	03/03/2022 16:48	03/03/2022 16:48
NW070-8	280-159190-6	03/03/2022 17:01	03/03/2022 17:01
CA210-8	280-159190-7	03/03/2022 17:14	03/03/2022 17:14
CA212-8	280-159190-8	03/03/2022 17:27	03/03/2022 17:27
CA213-8	280-159190-9	03/03/2022 17:40	03/03/2022 17:40
G0092-8	280-159190-10	03/03/2022 18:06	03/03/2022 18:06
G0091-8	280-159190-11	03/03/2022 18:19	03/03/2022 18:19
CA211-8	280-159190-12	03/03/2022 18:32	03/03/2022 18:32
EW7-PM27B-8-35	280-159190-15	03/03/2022 19:12	03/03/2022 19:12
NW062-8	280-159190-16	03/03/2022 19:25	03/03/2022 19:25
NW062-8 DU	280-159190-16 DU	03/03/2022 19:37	03/03/2022 19:37
NW062-8 MS	280-159190-16 MS	03/03/2022 19:50	03/03/2022 19:50
NW062-8 MSD	280-159190-16 MSD	03/03/2022 20:03	03/03/2022 20:03

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: MB 280-567999/3

Matrix: Water Date Extracted:

Lab File ID:(1) 001F0101.D Lab File ID:(2) 001F0101.D

Date Analyzed:(1) 03/08/2022 14:07 Date Analyzed:(2) 03/08/2022 14:07

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

GC Column:(1) HP-Plot Q ID: 0.53(mm) GC Column:(2) Rt-Alumina K ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-567999/4	03/08/2022 14:20	03/08/2022 14:20
	LCSD 280-567999/5	03/08/2022 14:32	03/08/2022 14:32
EW7-PM28A-8-25	280-159190-13	03/08/2022 15:11	03/08/2022 15:11
EW7-PM29A-8-25	280-159190-14	03/08/2022 15:25	03/08/2022 15:25

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Client Sample ID: NW061-8 Lab Sample ID: 280-159190-3

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

Date Analyzed (1): 03/03/2022 16:22 Date Analyzed (2): 03/03/2022 16:22

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		12.1
	2		1.25	1.22	1.30	0.15		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM24A-8-25 Lab Sample ID: 280-159190-4

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

Date Analyzed (1): 03/03/2022 16:35 Date Analyzed (2): 03/03/2022 16:35

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.63	1.71	13		9.9
	2		1.26	1.22	1.30	14		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM21A-8-25 Lab Sample ID: 280-159190-5

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

Date Analyzed (1): 03/03/2022 16:48 Date Analyzed (2): 03/03/2022 16:48

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	12		9.4
	2		1.25	1.22	1.30	13		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Client Sample ID: G0092-8 Lab Sample ID: 280-159190-10

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

Date Analyzed (1): 03/03/2022 18:06 Date Analyzed (2): 03/03/2022 18:06

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.63	1.71	0.090		11.0
	2		1.25	1.22	1.30	0.10		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM28A-8-25 Lab Sample ID: 280-159190-13

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

Date Analyzed (1): 03/08/2022 15:11 Date Analyzed (2): 03/08/2022 15:11

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.62	1.70	15		9.3
	2		1.25	1.22	1.30	16		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM29A-8-25 Lab Sample ID: 280-159190-14

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

Date Analyzed (1): 03/08/2022 15:25 Date Analyzed (2): 03/08/2022 15:25

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	1.62	1.70	15		8.9
	2		1.25	1.22	1.30	17		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM27B-8-35 Lab Sample ID: 280-159190-15

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

Date Analyzed (1): 03/03/2022 19:12 Date Analyzed (2): 03/03/2022 19:12

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	11		9.9
	2		1.26	1.22	1.30	12		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Client Sample ID: NW062-8 Lab Sample ID: 280-159190-16

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

Date Analyzed (1): 03/03/2022 19:25 Date Analyzed (2): 03/03/2022 19:25

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	0.024		12.9
	2		1.25	1.22	1.30	0.027		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Client Sample ID: NW062-8 MS Lab Sample ID: 280-159190-16 MS

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

Date Analyzed (1): 03/03/2022 19:50 Date Analyzed (2): 03/03/2022 19:50

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	0.0867		5.3
	2		1.25	1.22	1.30	0.0914		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Client Sample ID: NW062-8 MSD Lab Sample ID: 280-159190-16 MSD

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

Date Analyzed (1): 03/03/2022 20:03 Date Analyzed (2): 03/03/2022 20:03

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	0.0868		5.4
	2		1.26	1.22	1.30	0.0917		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Client Sample ID: NW062-8 DU Lab Sample ID: 280-159190-16 DU

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

Date Analyzed (1): 03/03/2022 19:37 Date Analyzed (2): 03/03/2022 19:37

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	0.0234		11.9
	2		1.25	1.22	1.30	0.0264		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-567659/3

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

Date Analyzed (1): 03/03/2022 14:51 Date Analyzed (2): 03/03/2022 14:51

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.63	1.71	0.0667		3.0
	2		1.26	1.22	1.30	0.0687		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-567659/4

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

Date Analyzed (1): 03/03/2022 15:04 Date Analyzed (2): 03/03/2022 15:04

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.63	1.71	0.0646		3.2
	2		1.26	1.22	1.30	0.0667		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-567999/4

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

Date Analyzed (1): 03/08/2022 14:20 Date Analyzed (2): 03/08/2022 14:20

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.62	1.70	0.0648		3.6
	2		1.26	1.22	1.30	0.0671		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-567999/5

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

Date Analyzed (1): 03/08/2022 14:32 Date Analyzed (2): 03/08/2022 14:32

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.62	1.70	0.0649		3.7
	2		1.25	1.22	1.30	0.0674		

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: NW071-8 | Lab Sample ID: 280-159190-1

Matrix: Water | Lab File ID: 007F0701.D

Analysis Method: RSK-175 | Date Collected: 02/27/2022 10:40

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 15:42

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U M	0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\007F0701.D
Lims ID: 280-159190-G-1
Client ID: NW071-8
Sample Type: Client
Inject. Date: 03-Mar-2022 15:42:57 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159190-G-1
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:54:59

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	1.249	1.262	-0.013	84379	0.5413	a
2	1.659	1.669	-0.010	55516	-0.1972	M
					RPD = 429.16	
LOD = 0.6300						
3 Ethane						
1		1.524			ND	
2		3.022				
4 Ethylene						
1		1.809			ND	
2		2.604				
5 Propane						
1		2.587			ND	
2		4.927				
6 Acetylene						
1		4.102			ND	
2		2.751				
7 Butane						
1		4.449			ND	
2		6.427				
8 isobutylene						
1		5.350			ND	
2		6.269				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

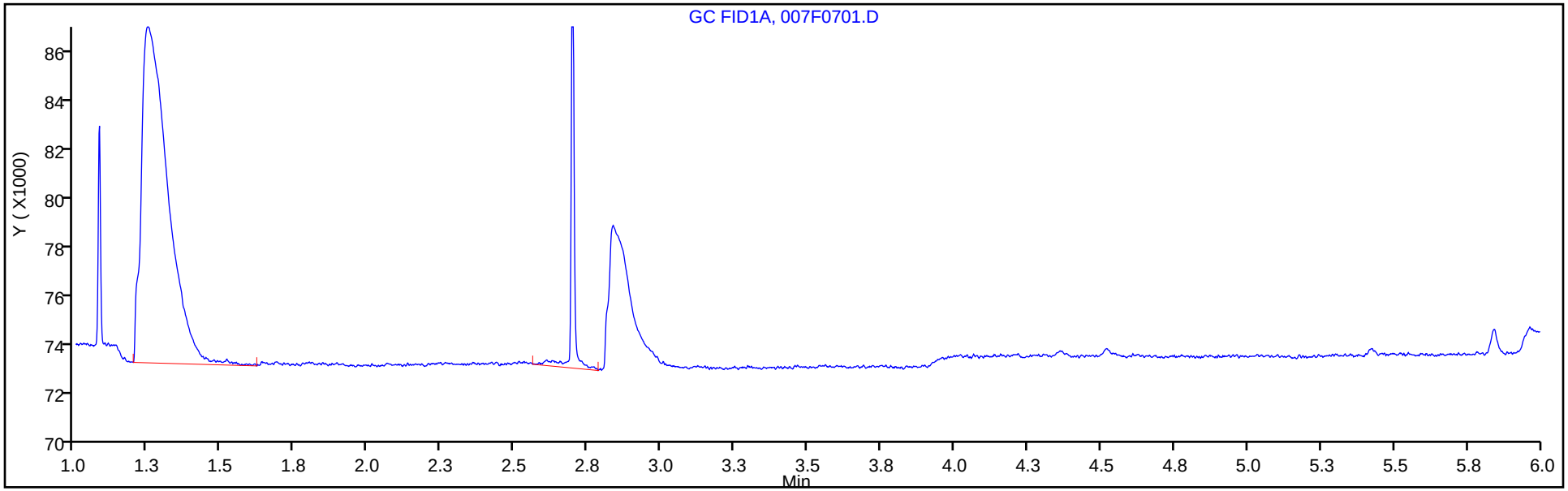
a - User Assigned ID

Report Date: 07-Mar-2022 13:05:11 Chrom Revision: 2.3 16-Feb-2022 17:52:00

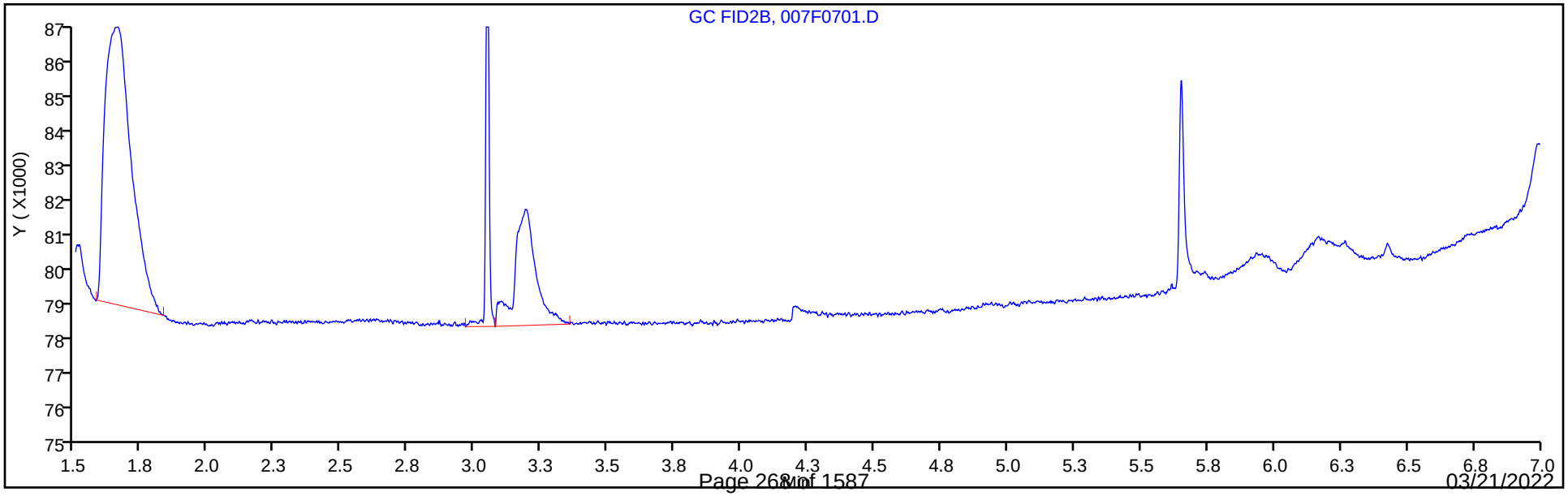
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\007F0701.D				
Injection Date:	03-Mar-2022 15:42:57	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159190-G-1	Lab Sample ID:	280-159190-1	Worklist Smp#:	7
Client ID:	NW071-8				
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 Denver

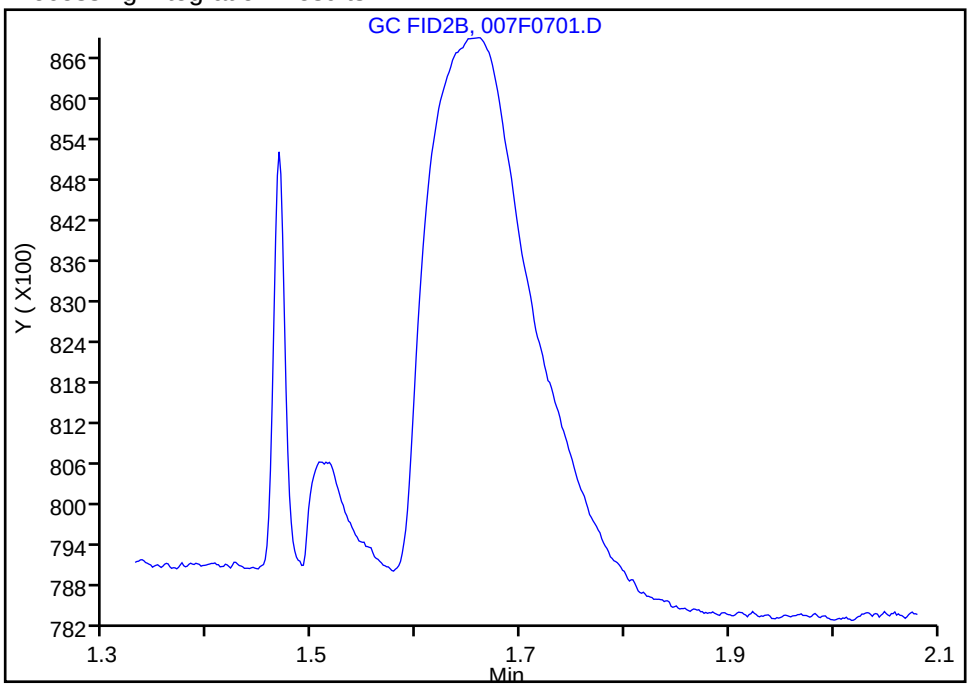
Data File:	\\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\007F0701.D				
Injection Date:	03-Mar-2022 15:42:57	Instrument ID:	VGC_J		
Lims ID:	280-159190-G-1	Lab Sample ID:	280-159190-1		
Client ID:	NW071-8				
Operator ID:	sciannac	ALS Bottle#:	7	Worklist Smp#:	7
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

2 Methane, CAS: 74-82-8

Signal: 2

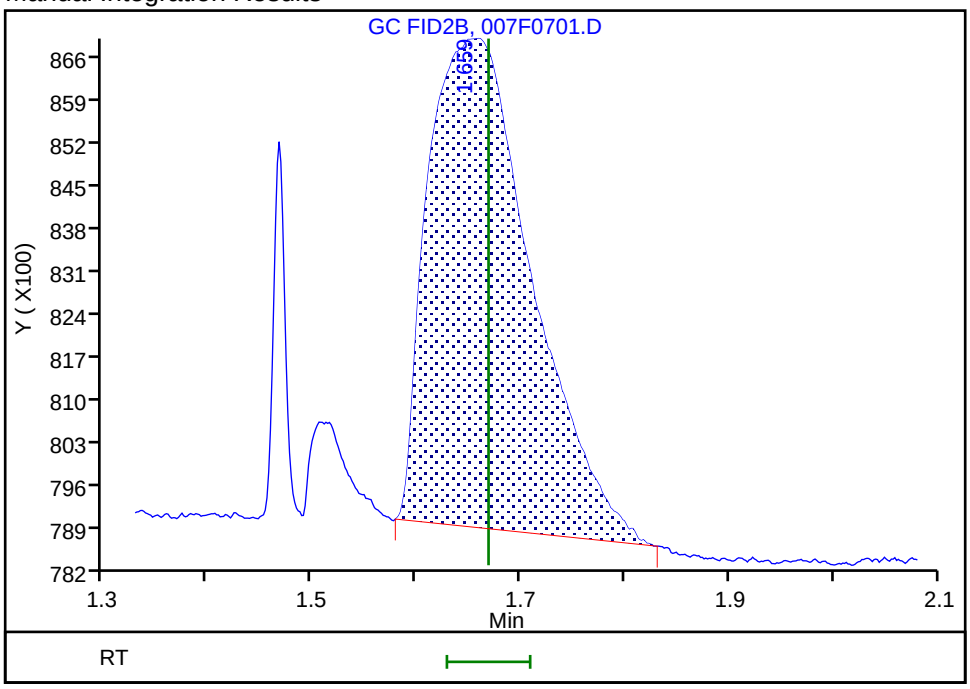
Not Detected
Expected RT: 1.67

Processing Integration Results



Manual Integration Results

RT: 1.66
Area: 55516
Amount: -0.197152
Amount Units: ug/l



Reviewer: sciannac, 07-Mar-2022 12:54:52
Audit Action: Manually Integrated Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: NW060-8 | Lab Sample ID: 280-159190-2

Matrix: Water | Lab File ID: 009F0901.D

Analysis Method: RSK-175 | Date Collected: 02/27/2022 11:50

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 16:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U	0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\009F0901.D
Lims ID: 280-159190-I-2
Client ID: NW060-8
Sample Type: Client
Inject. Date: 03-Mar-2022 16:08:53 ALS Bottle#: 9 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159190-I-2
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:55:23

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		1.262			ND	
2		1.669				
3 Ethane						
1		1.524			ND	
2		3.022				
4 Ethylene						
1		1.809			ND	
2		2.604				
5 Propane						
1		2.587			ND	
2		4.927				
6 Acetylene						
1		4.102			ND	
2		2.751				
7 Butane						
1		4.449			ND	
2		6.427				
8 isobutylene						
1		5.350			ND	
2		6.269				

QC Flag Legend

Processing Flags

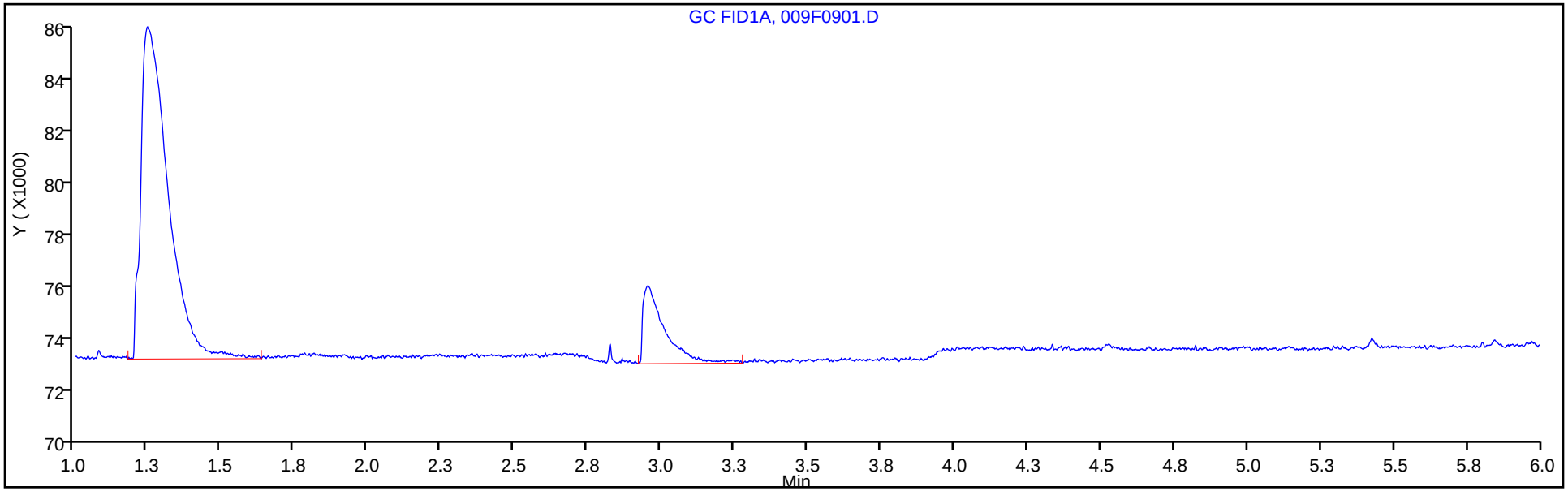
7 - Failed Limit of Detection

Report Date: 07-Mar-2022 13:05:12 Chrom Revision: 2.3 16-Feb-2022 17:52:00

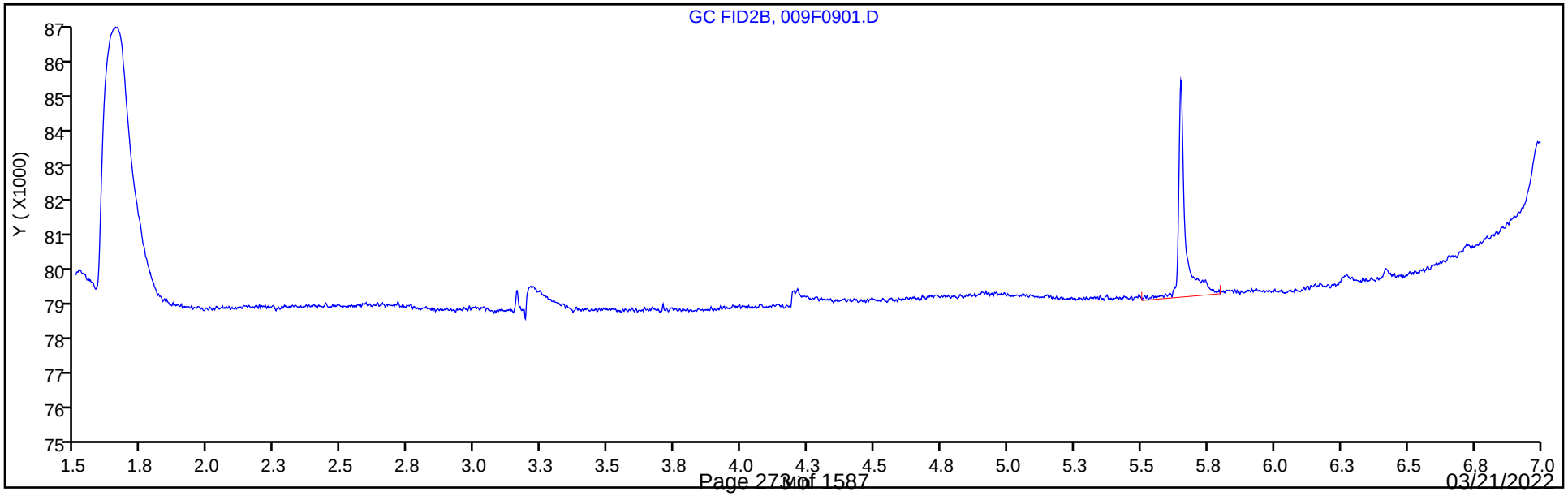
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\009F0901.D				
Injection Date:	03-Mar-2022 16:08:53	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159190-I-2	Lab Sample ID:	280-159190-2	Worklist Smp#:	9
Client ID:	NW060-8				
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.: 280-159190-1

SDG No.:

Client Sample ID: NW061-8 | Lab Sample ID: 280-159190-3

Matrix: Water | Lab File ID: 010F1001.D

Analysis Method: RSK-175 | Date Collected: 02/27/2022 13:05

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 16:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.14		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\010F1001.D
Lims ID: 280-159190-G-3
Client ID: NW061-8
Sample Type: Client
Inject. Date: 03-Mar-2022 16:22:10 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159190-G-3
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:55:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.254	1.262	-0.008	5424991	152.4	
2	1.660	1.669	-0.009	4938087	135.0	
					RPD = 12.07	
3 Ethane						
1		1.524			ND	
2		3.022				
4 Ethylene						
1		1.809			ND	
2		2.604				
5 Propane						
1		2.587			ND	
2		4.927				
6 Acetylene						
1		4.102			ND	
2		2.751				
7 Butane						
1		4.449			ND	
2		6.427				
8 isobutylene						
1		5.350			ND	
2		6.269				

QC Flag Legend

Processing Flags

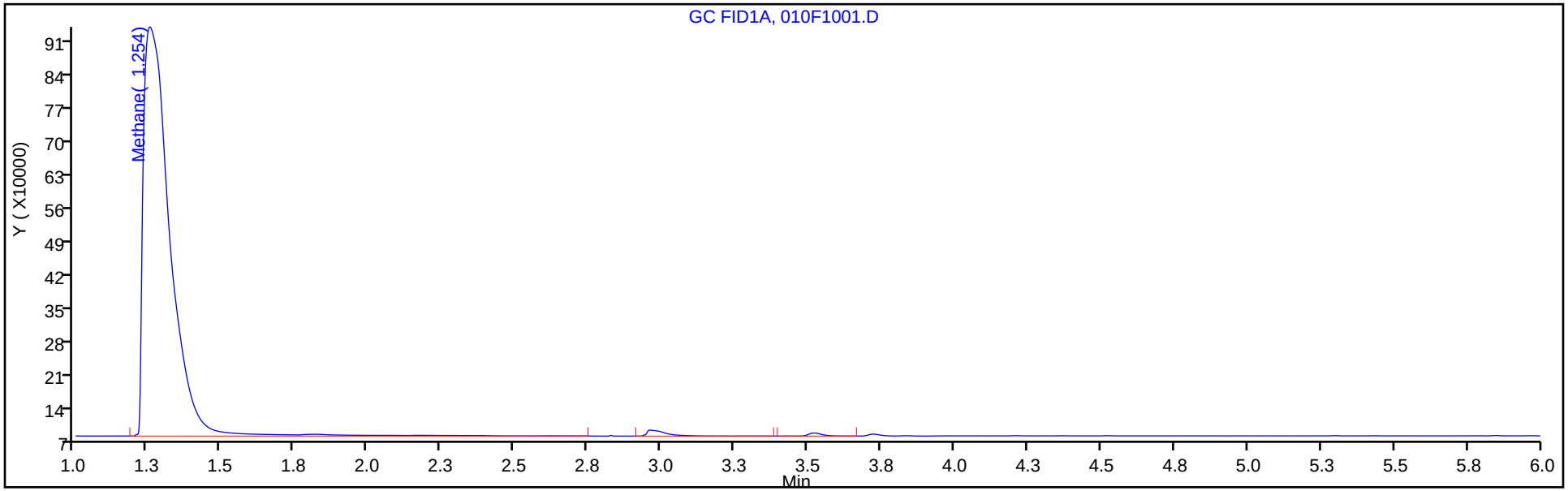
Report Date: 07-Mar-2022 13:05:13 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

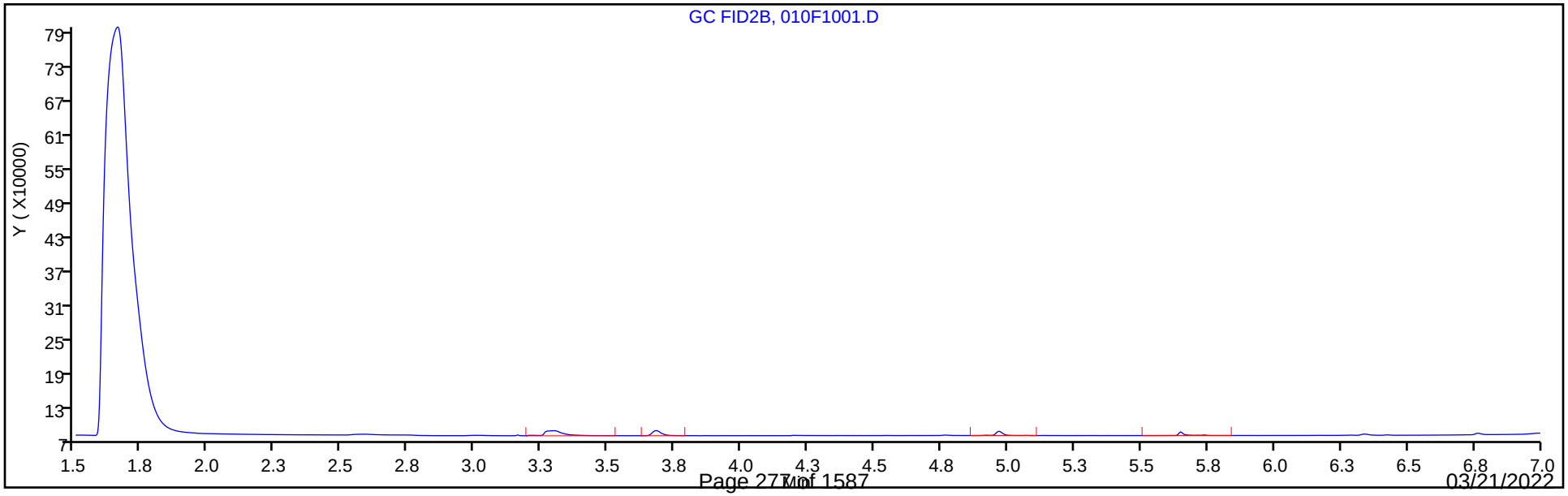
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\010F1001.D

Injection Date:	03-Mar-2022 16:22:10	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159190-G-3	Lab Sample ID:	280-159190-3	Worklist Smp#:	10
Client ID:	NW061-8				
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.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM24A-8-25 | Lab Sample ID: 280-159190-4

Matrix: Water | Lab File ID: 011F1101.D

Analysis Method: RSK-175 | Date Collected: 02/26/2022 14:30

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 16:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | 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\20220303-108981.b\011F1101.D
Lims ID: 280-159190-G-4
Client ID: EW7-PM24A-8-25
Sample Type: Client
Inject. Date: 03-Mar-2022 16:35:14 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159190-G-4
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:55:38

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	1.262	-0.007	494987957	14072	
2	1.656	1.669	-0.013	460205917	12745	
					RPD = 9.89	
3 Ethane						
1		1.524			ND	
2		3.022				
4 Ethylene						
1		1.809			ND	
2		2.604				
5 Propane						
1		2.587			ND	
2		4.927				
6 Acetylene						
1		4.102			ND	
2		2.751				
7 Butane						
1		4.449			ND	
2		6.427				
8 isobutylene						
1		5.350			ND	
2		6.269				

QC Flag Legend

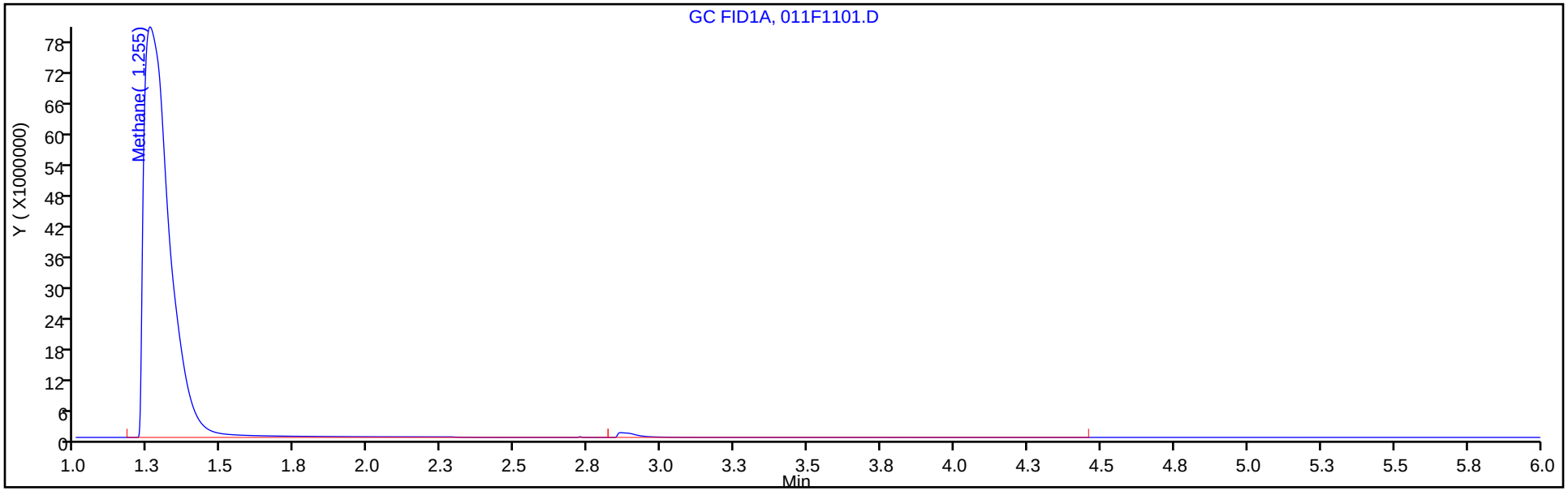
Processing Flags

Report Date: 07-Mar-2022 13:05:13 Chrom Revision: 2.3 16-Feb-2022 17:52:00

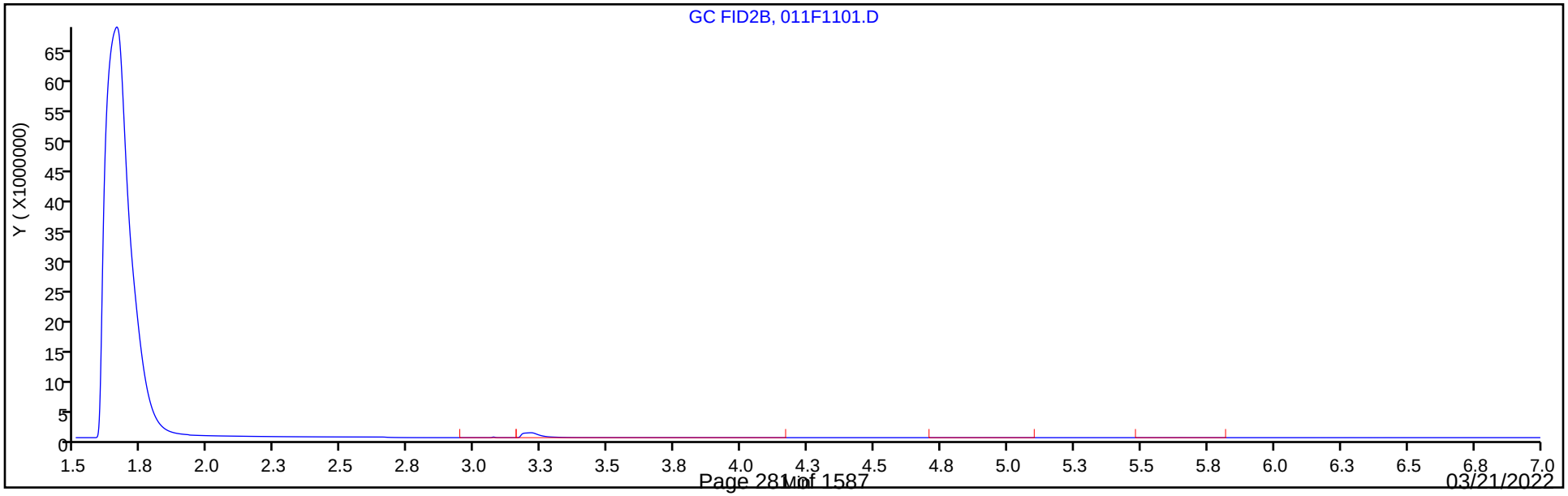
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\011F1101.D				
Injection Date:	03-Mar-2022 16:35:14	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159190-G-4	Lab Sample ID:	280-159190-4	Worklist Smp#:	11
Client ID:	EW7-PM24A-8-25				
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.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM21A-8-25 | Lab Sample ID: 280-159190-5

Matrix: Water | Lab File ID: 012F1201.D

Analysis Method: RSK-175 | Date Collected: 02/26/2022 15:55

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 16:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	12		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\012F1201.D
Lims ID: 280-159190-I-5
Client ID: EW7-PM21A-8-25
Sample Type: Client
Inject. Date: 03-Mar-2022 16:48:11 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159190-I-5
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:55:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.254	1.262	-0.008	449210279	12770	
2	1.657	1.669	-0.012	419590526	11620	
					RPD = 9.43	
3 Ethane						
1		1.524			ND	
2		3.022				
4 Ethylene						
1		1.809			ND	
2		2.604				
5 Propane						
1		2.587			ND	
2		4.927				
6 Acetylene						
1		4.102			ND	
2		2.751				
7 Butane						
1		4.449			ND	
2		6.427				
8 isobutylene						
1		5.350			ND	
2		6.269				

QC Flag Legend

Processing Flags

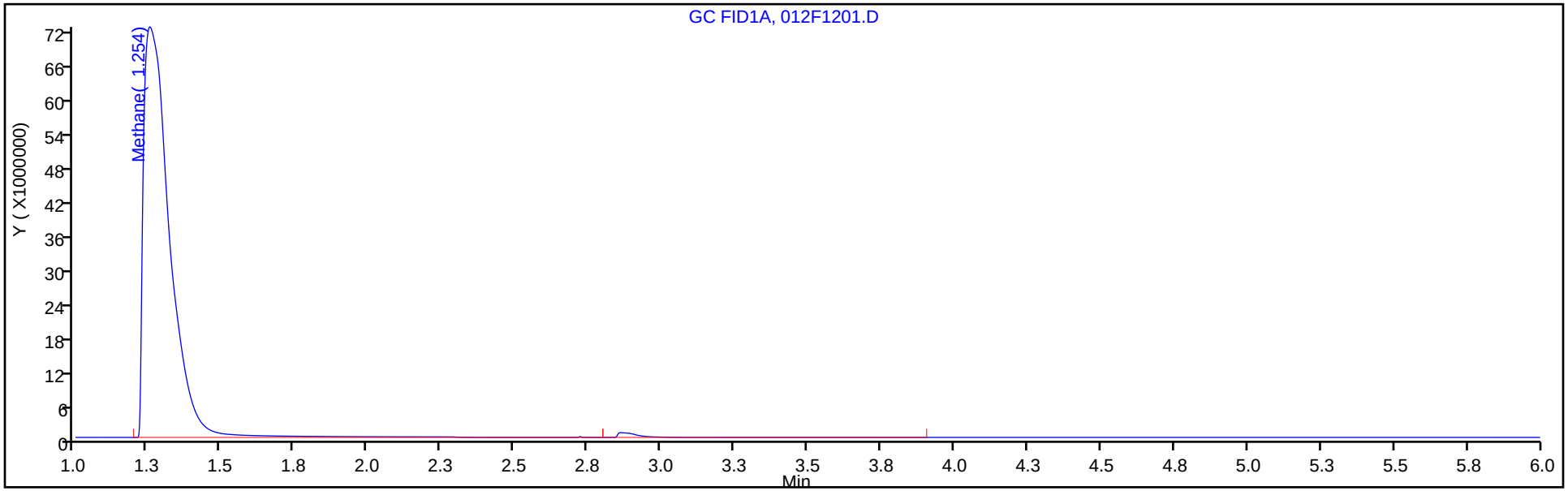
Report Date: 07-Mar-2022 13:05:13 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

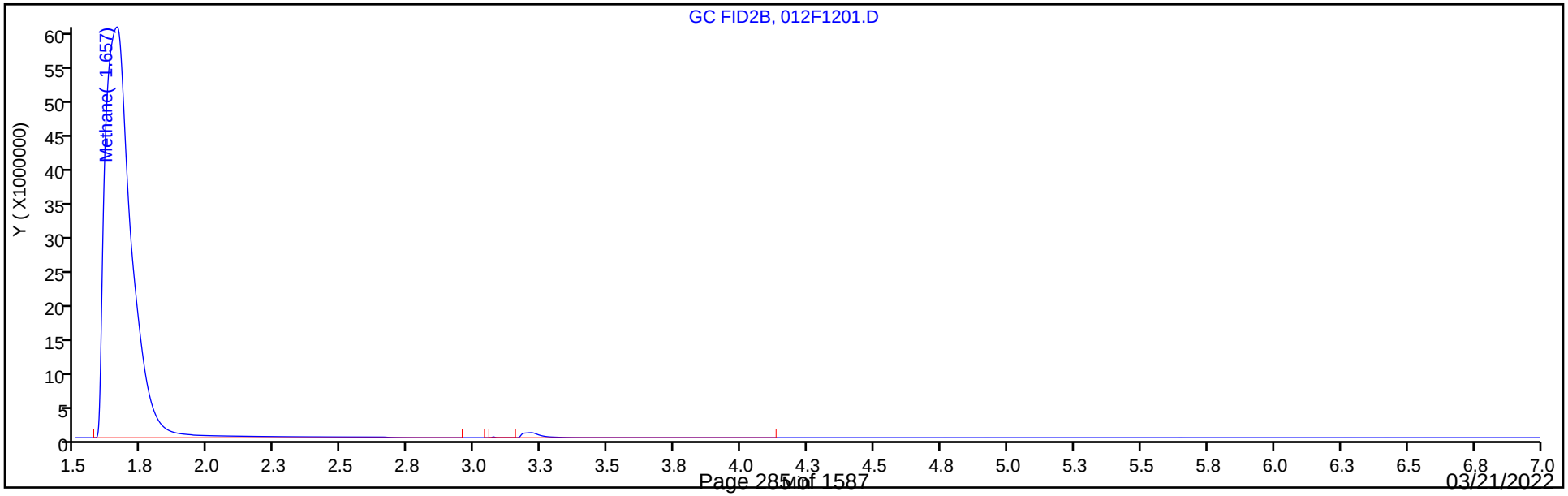
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\012F1201.D

Injection Date:	03-Mar-2022 16:48:11	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159190-I-5	Lab Sample ID:	280-159190-5	Worklist Smp#:	12
Client ID:	EW7-PM21A-8-25				
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.: 280-159190-1

SDG No.:

Client Sample ID: NW070-8 | Lab Sample ID: 280-159190-6

Matrix: Water | Lab File ID: 013F1301.D

Analysis Method: RSK-175 | Date Collected: 02/27/2022 09:40

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 17:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U	0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\013F1301.D
Lims ID: 280-159190-G-6
Client ID: NW070-8
Sample Type: Client
Inject. Date: 03-Mar-2022 17:01:20 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159190-G-6
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:55:46

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	1.246	1.262	-0.016	88248	0.6513	
2	1.653	1.669	-0.016	64478	0.0511	
					RPD = 170.91	
3 Ethane						
1		1.524			ND	
2		3.022				
4 Ethylene						
1		1.809			ND	
2		2.604				
5 Propane						
1		2.587			ND	
2		4.927				
6 Acetylene						
1		4.102			ND	
2		2.751				
7 Butane						
1		4.449			ND	
2		6.427				
8 isobutylene						
1		5.350			ND	
2		6.269				

QC Flag Legend

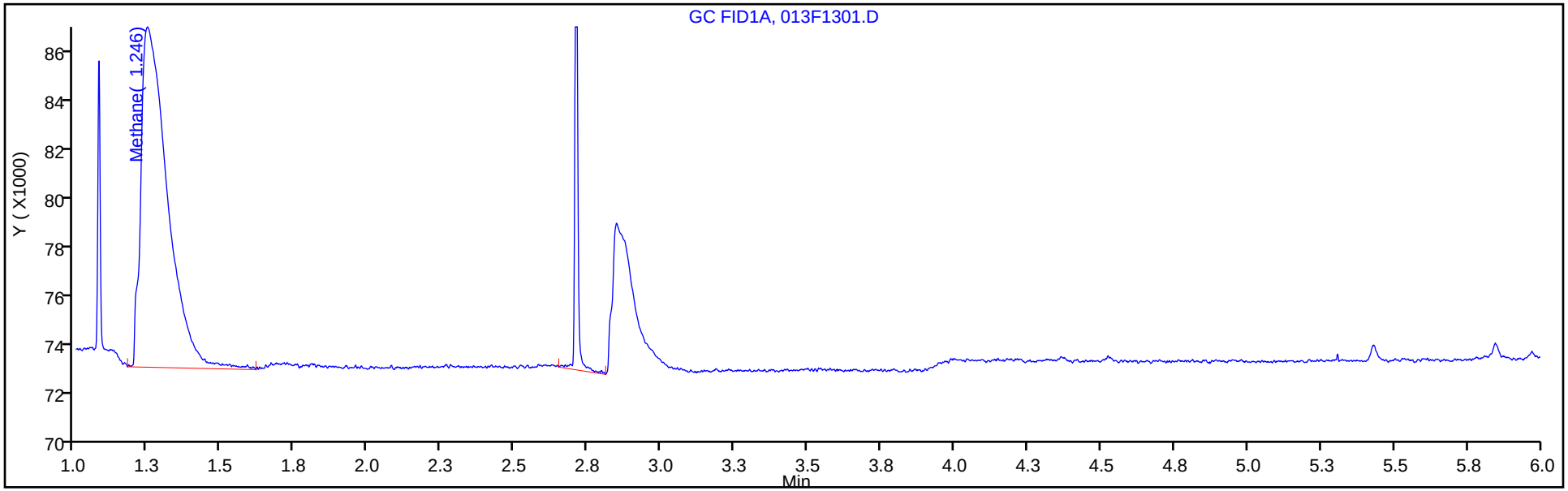
Processing Flags

Report Date: 07-Mar-2022 13:05:14 Chrom Revision: 2.3 16-Feb-2022 17:52:00

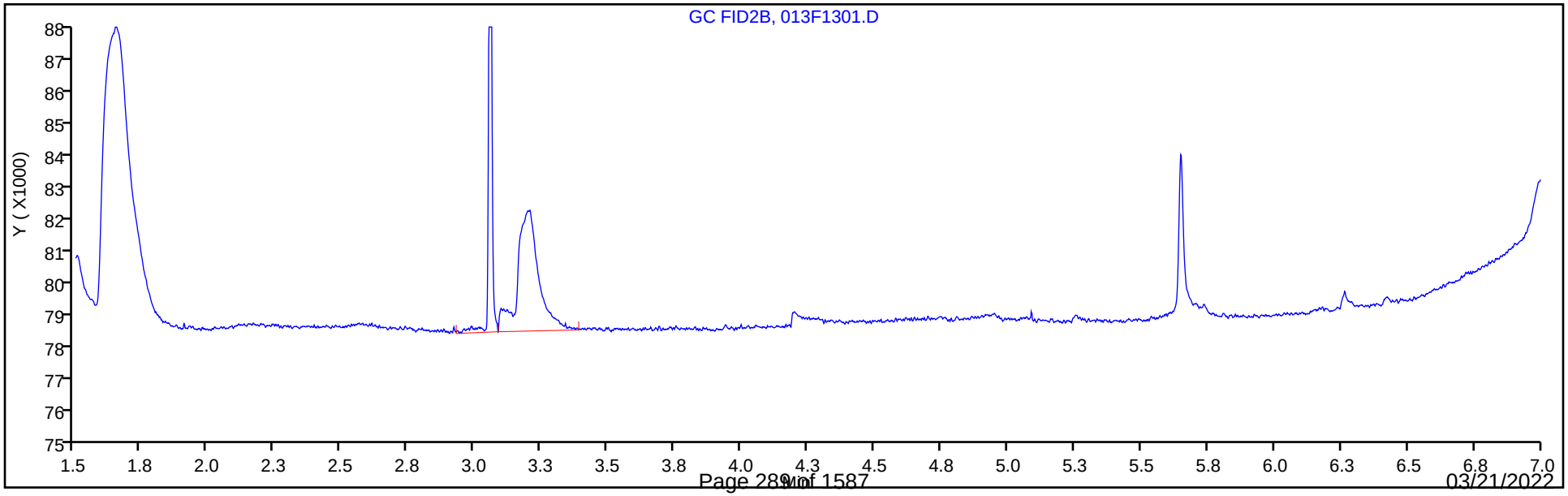
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\013F1301.D				
Injection Date:	03-Mar-2022 17:01:20	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159190-G-6	Lab Sample ID:	280-159190-6	Worklist Smp#:	13
Client ID:	NW070-8				
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.: 280-159190-1

SDG No.:

Client Sample ID: CA210-8 | Lab Sample ID: 280-159190-7

Matrix: Water | Lab File ID: 014F1401.D

Analysis Method: RSK-175 | Date Collected: 02/28/2022 11:10

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 17:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U	0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\014F1401.D
Lims ID: 280-159190-I-7
Client ID: CA210-8
Sample Type: Client
Inject. Date: 03-Mar-2022 17:14:28 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159190-I-7
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:55:50

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		1.262			ND	
2		1.669				
3 Ethane						
1		1.524			ND	
2		3.022				
4 Ethylene						
1		1.809			ND	
2		2.604				
5 Propane						
1		2.587			ND	
2		4.927				
6 Acetylene						
1		4.102			ND	
2		2.751				
7 Butane						
1		4.449			ND	
2		6.427				
8 isobutylene						
1		5.350			ND	
2		6.269				

QC Flag Legend

Processing Flags

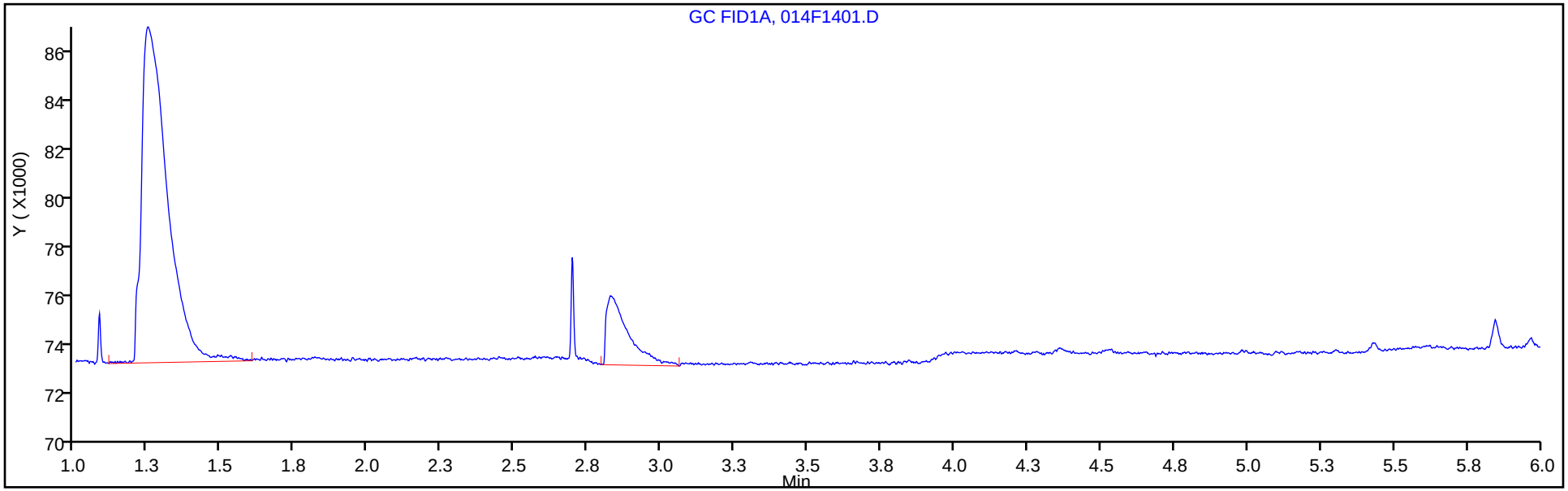
7 - Failed Limit of Detection

Report Date: 07-Mar-2022 13:05:14 Chrom Revision: 2.3 16-Feb-2022 17:52:00

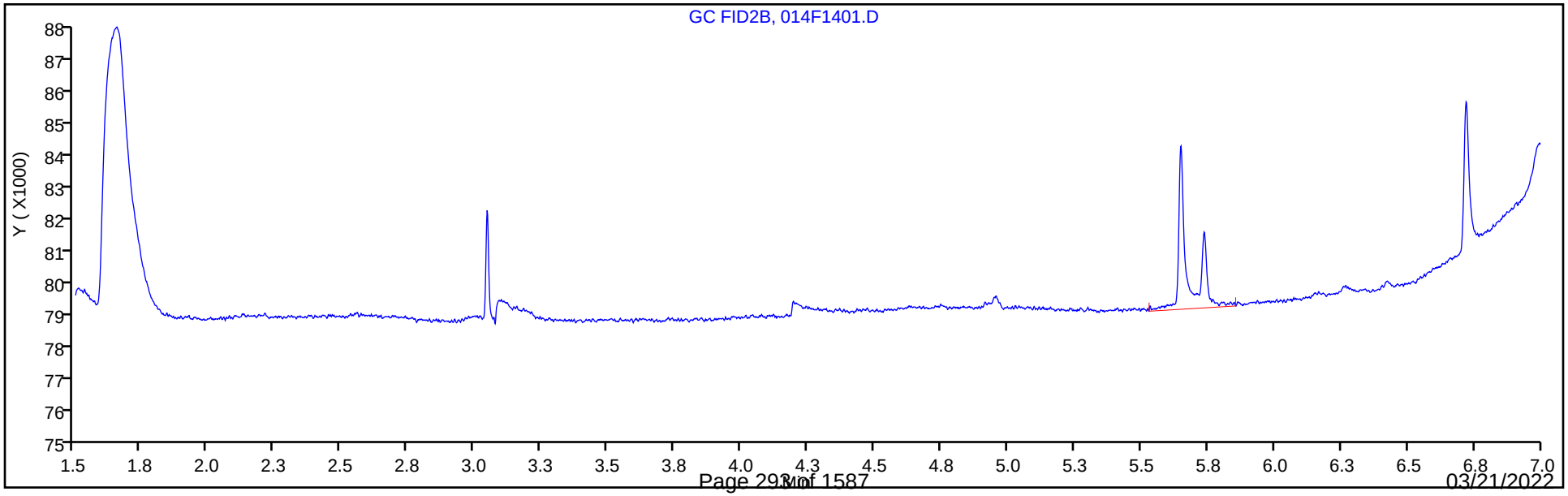
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\014F1401.D				
Injection Date:	03-Mar-2022 17:14:28	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159190-I-7	Lab Sample ID:	280-159190-7	Worklist Smp#:	14
Client ID:	CA210-8				
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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: CA212-8 | Lab Sample ID: 280-159190-8

Matrix: Water | Lab File ID: 015F1501.D

Analysis Method: RSK-175 | Date Collected: 02/28/2022 11:55

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 17:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U	0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\015F1501.D
Lims ID: 280-159190-G-8
Client ID: CA212-8
Sample Type: Client
Inject. Date: 03-Mar-2022 17:27:23 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159190-G-8
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:56:47

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		1.262		ND		
2		1.669				
3 Ethane						
1		1.524		ND		
2		3.022				
4 Ethylene						
1		1.809		ND		
2		2.604				
5 Propane						
1		2.587		ND		
2		4.927				
6 Acetylene						
1		4.102		ND		
2		2.751				
7 Butane						
1		4.449		ND		
2		6.427				
8 isobutylene						
1		5.350		ND		
2		6.269				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

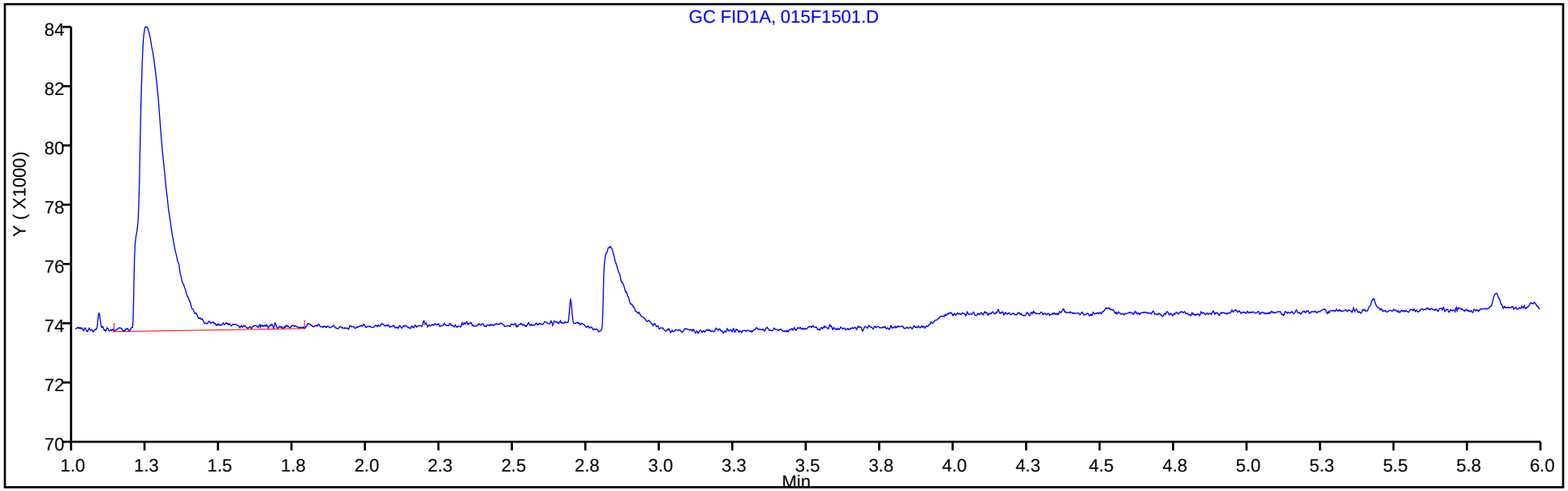
Report Date: 07-Mar-2022 13:05:15 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

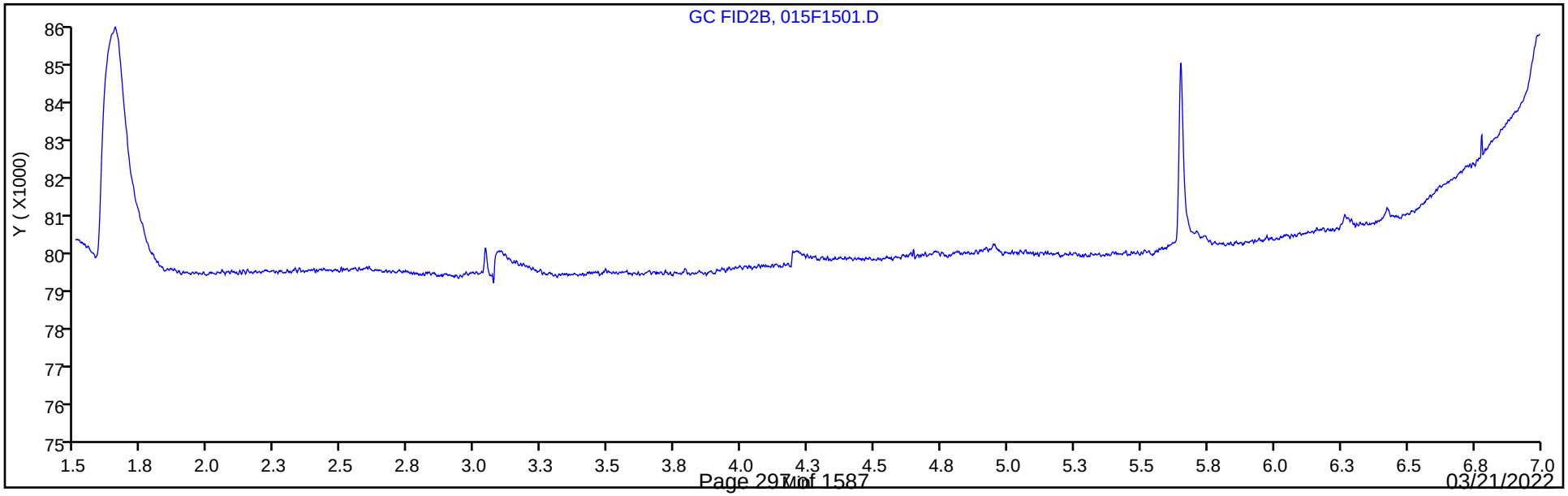
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\015F1501.D

Injection Date:	03-Mar-2022 17:27:23	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159190-G-8	Lab Sample ID:	280-159190-8	Worklist Smp#:	15
Client ID:	CA212-8				
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.: 280-159190-1

SDG No.:

Client Sample ID: CA213-8 | Lab Sample ID: 280-159190-9

Matrix: Water | Lab File ID: 016F1601.D

Analysis Method: RSK-175 | Date Collected: 02/28/2022 12:45

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 17:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U	0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\016F1601.D
Lims ID: 280-159190-I-9
Client ID: CA213-8
Sample Type: Client
Inject. Date: 03-Mar-2022 17:40:18 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159190-I-9
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:57:44

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	1.248	1.262	-0.014	95510	0.8578	
2	1.650	1.669	-0.019	77882	0.4224	
					RPD = 68.03	
3 Ethane						
1		1.524			ND	
2		3.022				
4 Ethylene						
1		1.809			ND	
2		2.604				
5 Propane						
1		2.587			ND	
2		4.927				
6 Acetylene						
1		4.102			ND	
2		2.751				
7 Butane						
1		4.449			ND	
2		6.427				
8 isobutylene						
1		5.350			ND	
2		6.269				

QC Flag Legend

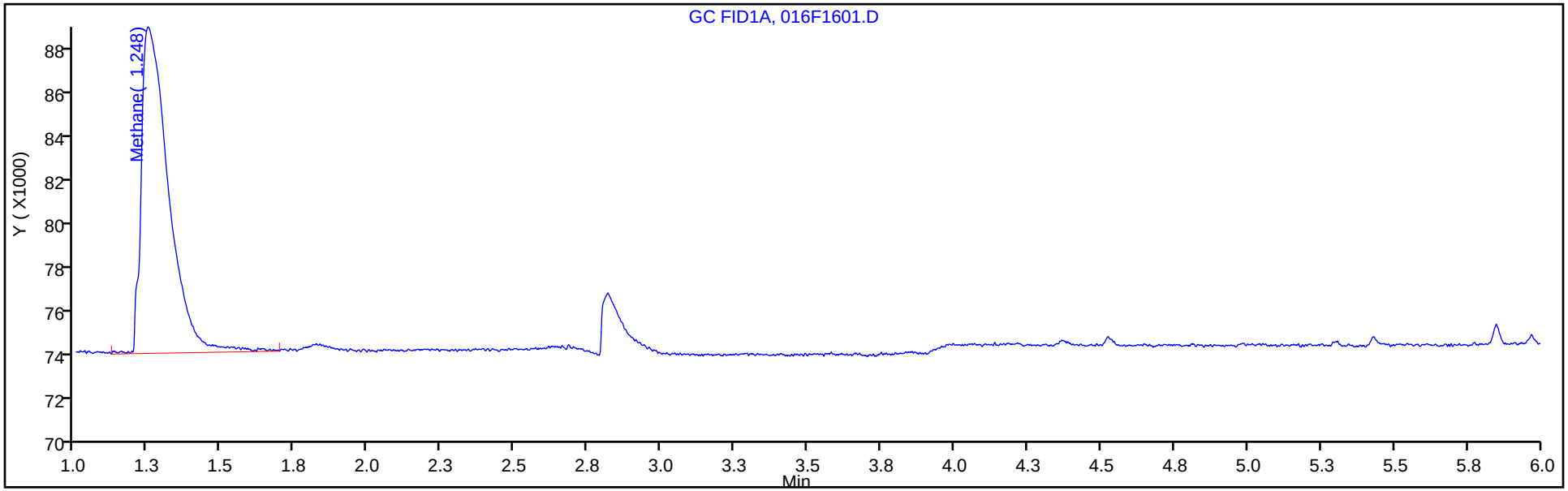
Processing Flags

Report Date: 07-Mar-2022 13:05:15 Chrom Revision: 2.3 16-Feb-2022 17:52:00

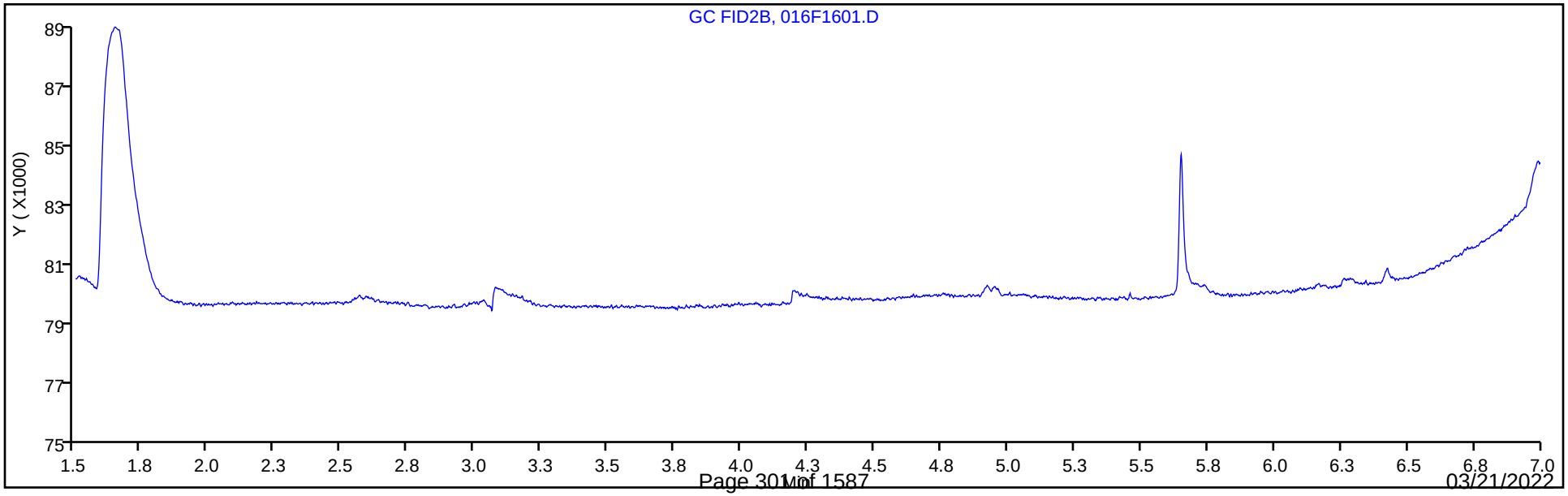
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\016F1601.D				
Injection Date:	03-Mar-2022 17:40:18	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159190-I-9	Lab Sample ID:	280-159190-9	Worklist Smp#:	16
Client ID:	CA213-8				
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.: 280-159190-1

SDG No.:

Client Sample ID: G0092-8 | Lab Sample ID: 280-159190-10

Matrix: Water | Lab File ID: 018F1801.D

Analysis Method: RSK-175 | Date Collected: 02/27/2022 16:50

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 18:06

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.090		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\018F1801.D
Lims ID: 280-159190-I-10
Client ID: G0092-8
Sample Type: Client
Inject. Date: 03-Mar-2022 18:06:23 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159190-I-10
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:15 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:58:20

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	1.254	1.262	-0.008	3581018	100.0	
2	1.658	1.669	-0.011	3294471	89.5	
					RPD = 11.02	
3 Ethane						
1		1.524			ND	
2		3.022				
4 Ethylene						
1		1.809			ND	
2		2.604				
5 Propane						
1		2.587			ND	
2		4.927				
6 Acetylene						
1		4.102			ND	
2		2.751				
7 Butane						
1		4.449			ND	
2		6.427				
8 isobutylene						
1		5.350			ND	
2		6.269				

QC Flag Legend

Processing Flags

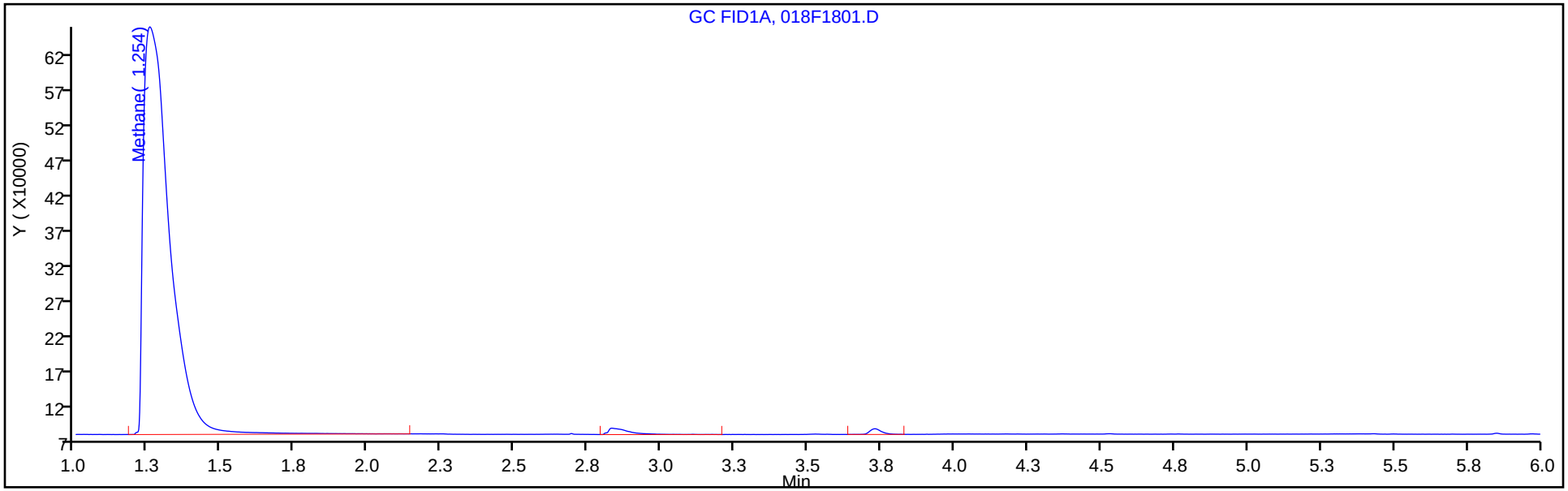
Report Date: 07-Mar-2022 13:05:16 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

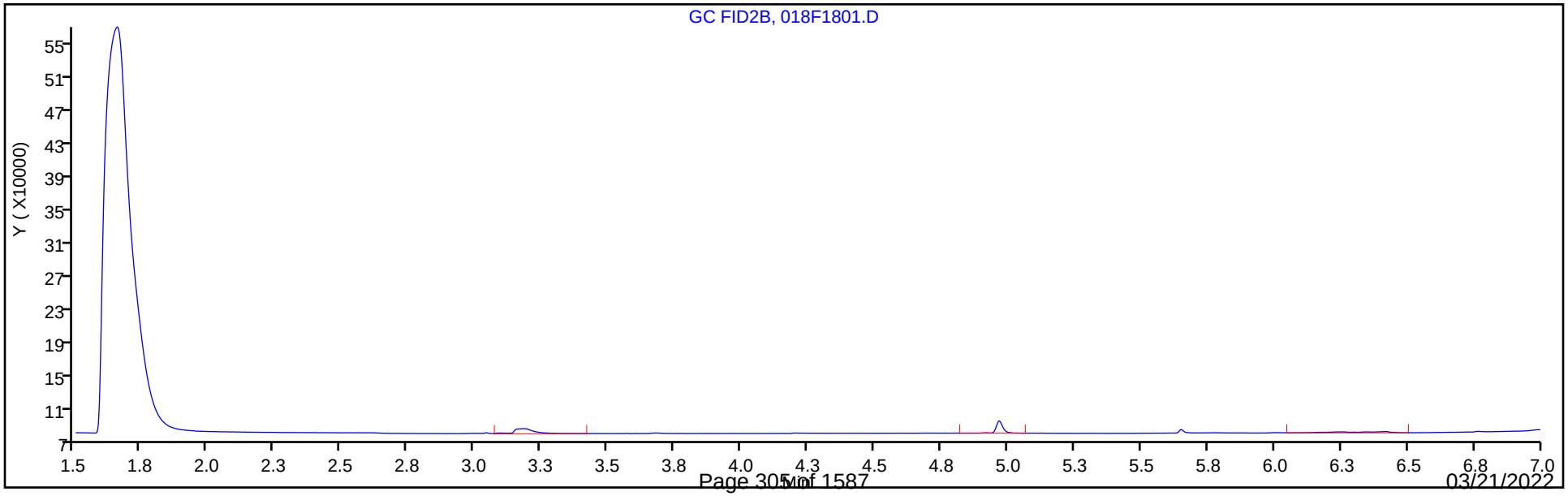
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\018F1801.D

Injection Date:	03-Mar-2022 18:06:23	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159190-I-10	Lab Sample ID:	280-159190-10	Worklist Smp#:	18
Client ID:	G0092-8				
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.: 280-159190-1

SDG No.:

Client Sample ID: G0091-8 | Lab Sample ID: 280-159190-11

Matrix: Water | Lab File ID: 019F1901.D

Analysis Method: RSK-175 | Date Collected: 02/27/2022 15:55

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 18:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U	0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\019F1901.D
Lims ID: 280-159190-I-11
Client ID: G0091-8
Sample Type: Client
Inject. Date: 03-Mar-2022 18:19:34 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159190-I-11
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:15 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:58:26

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						7
1		1.262			ND	
2		1.669				
3 Ethane						
1		1.524			ND	
2		3.022				
4 Ethylene						
1		1.809			ND	
2		2.604				
5 Propane						
1		2.587			ND	
2		4.927				
6 Acetylene						
1		4.102			ND	
2		2.751				
7 Butane						
1		4.449			ND	
2		6.427				
8 isobutylene						
1		5.350			ND	
2		6.269				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

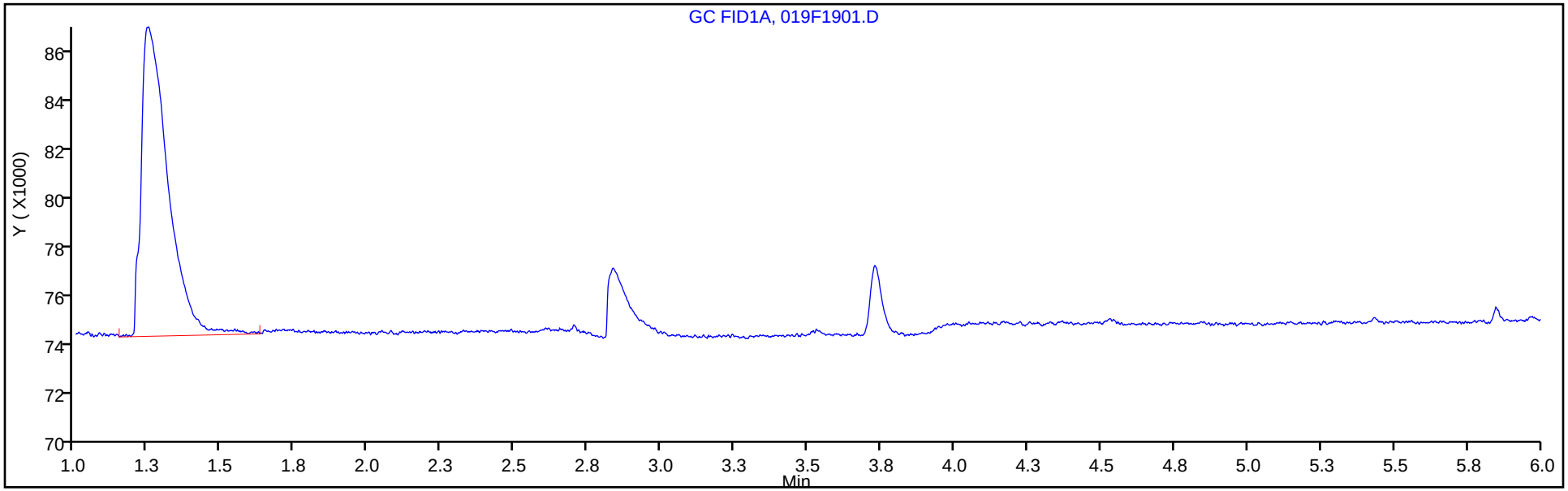
Report Date: 07-Mar-2022 13:05:17 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

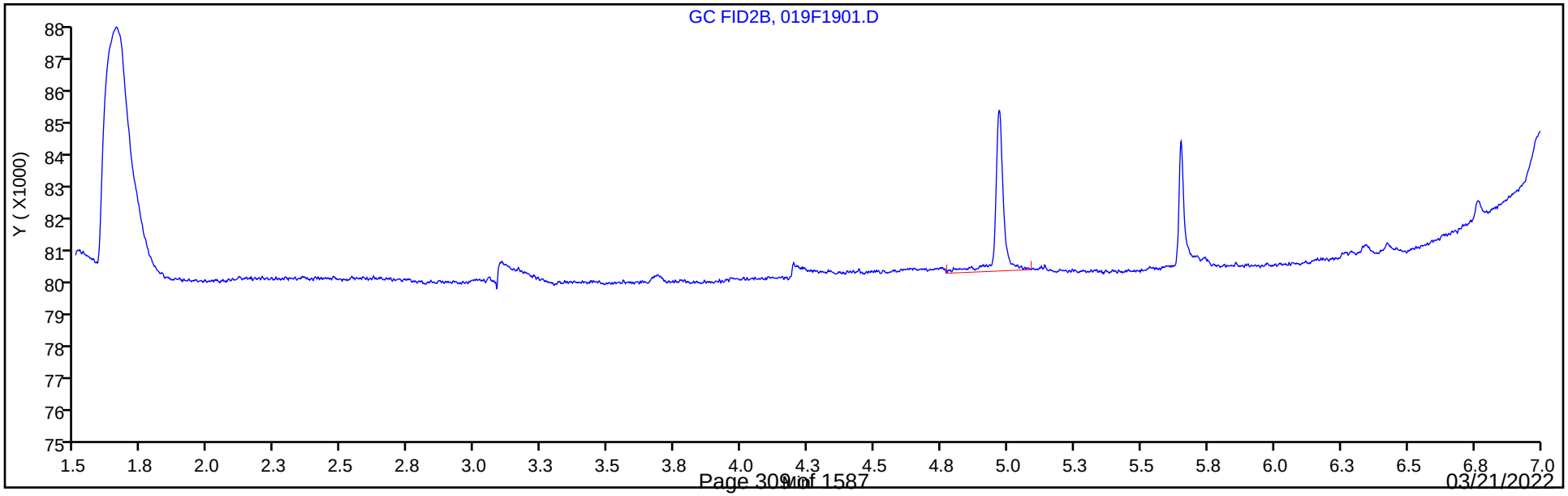
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\019F1901.D

Injection Date:	03-Mar-2022 18:19:34	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159190-I-11	Lab Sample ID:	280-159190-11	Worklist Smp#:	19
Client ID:	G0091-8				
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.: 280-159190-1

SDG No.:

Client Sample ID: CA211-8 | Lab Sample ID: 280-159190-12

Matrix: Water | Lab File ID: 020F2001.D

Analysis Method: RSK-175 | Date Collected: 02/28/2022 10:10

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 18:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U	0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\020F2001.D
Lims ID: 280-159190-I-12
Client ID: CA211-8
Sample Type: Client
Inject. Date: 03-Mar-2022 18:32:44 ALS Bottle#: 20 Worklist Smp#: 20
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159190-I-12
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:15 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:59:10

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		1.262			ND	
2		1.669				
3 Ethane						
1		1.524			ND	
2		3.022				
4 Ethylene						
1		1.809			ND	
2		2.604				
5 Propane						
1		2.587			ND	
2		4.927				
6 Acetylene						
1		4.102			ND	
2		2.751				
7 Butane						
1		4.449			ND	
2		6.427				
8 isobutylene						
1		5.350			ND	
2		6.269				

QC Flag Legend

Processing Flags

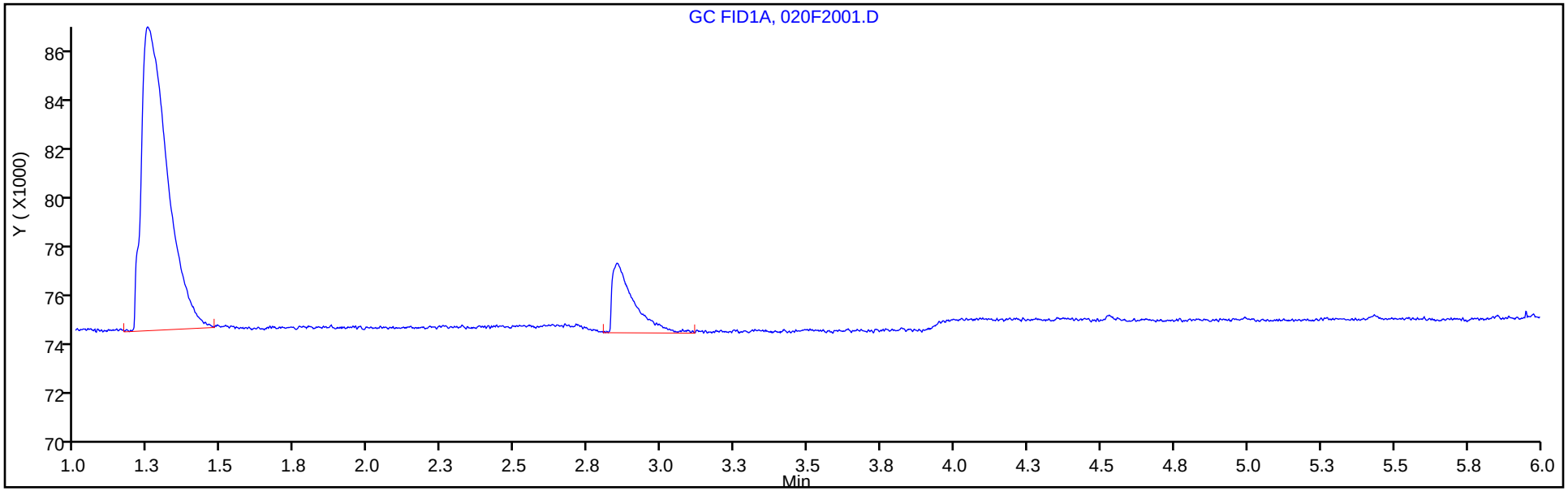
7 - Failed Limit of Detection

Report Date: 07-Mar-2022 13:05:17 Chrom Revision: 2.3 16-Feb-2022 17:52:00

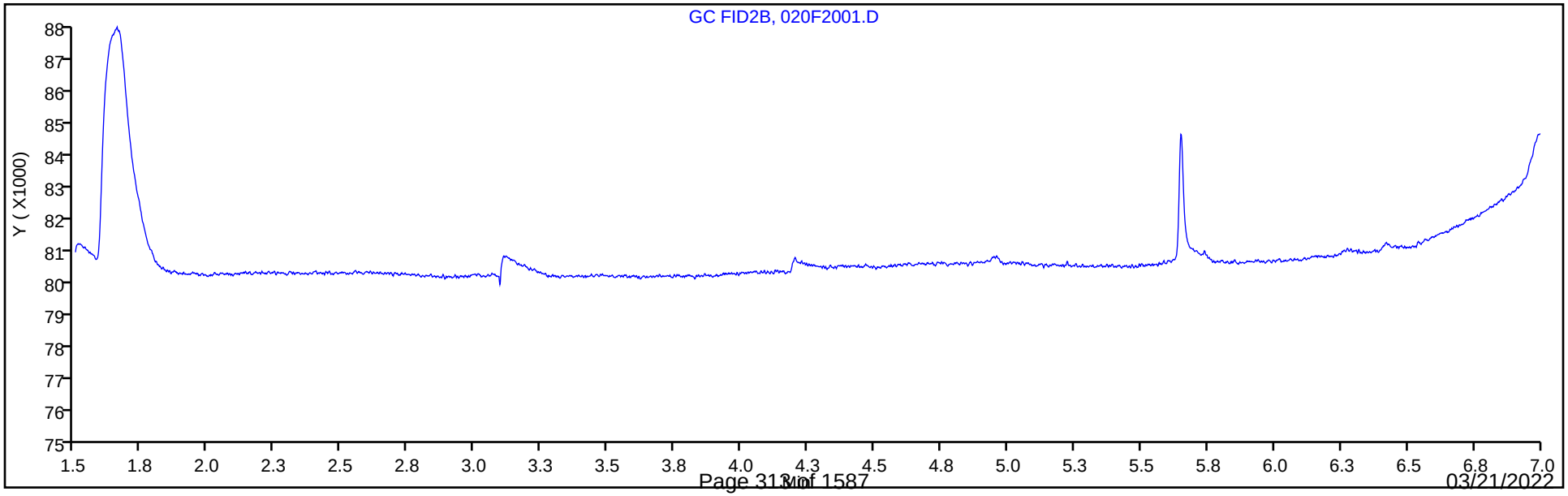
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\020F2001.D				
Injection Date:	03-Mar-2022 18:32:44	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159190-I-12	Lab Sample ID:	280-159190-12	Worklist Smp#:	20
Client ID:	CA211-8				
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.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM28A-8-25 | Lab Sample ID: 280-159190-13

Matrix: Water | Lab File ID: 010F0601.D

Analysis Method: RSK-175 | Date Collected: 02/26/2022 09:35

Sample wt/vol: 20(mL) | Date Analyzed: 03/08/2022 15:11

Soil Aliquot Vol: | Dilution Factor: 2

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567999 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	15	D	0.010	0.0026	0.0013

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\010F0601.D
Lims ID: 280-159190-G-13
Client ID: EW7-PM28A-8-25
Sample Type: Client
Inject. Date: 08-Mar-2022 15:11:56 ALS Bottle#: 10 Worklist Smp#: 8
Purge Vol: 18.000 mL Dil. Factor: 2.0000
Sample Info: 280-159190-G-13
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Mar-2022 13:35:04 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1645

First Level Reviewer: sciannac Date: 09-Mar-2022 13:02:52

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	1.258	-0.004	283142400	8048.6	
2	1.658	1.663	-0.005	264937291	7336.7	
					RPD = 9.26	
3 Ethane						
1		1.523			ND	
2		3.018				
4 Ethylene						
1		1.818			ND	
2		2.598				
5 Propane						
1		2.611			ND	
2		4.926				
6 Acetylene						
1		4.175			ND	
2		2.745				
7 Butane						
1		4.491			ND	
2		6.426				
8 isobutylene						
1		5.391			ND	
2		6.268				

QC Flag Legend

Processing Flags

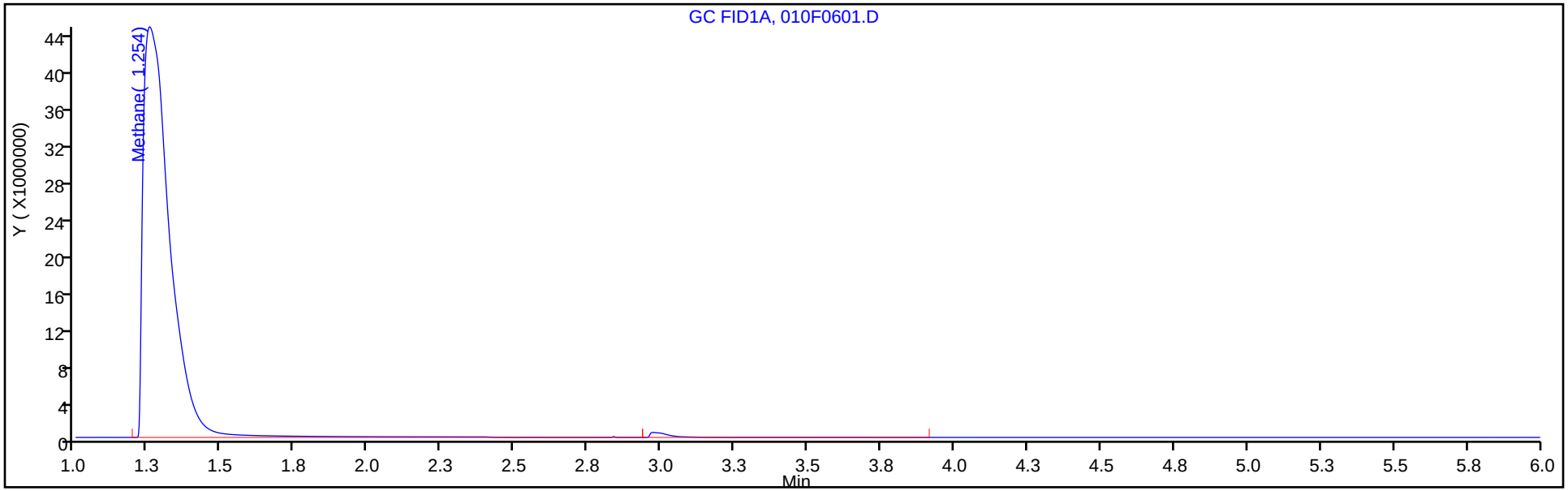
Report Date: 09-Mar-2022 13:35:09 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

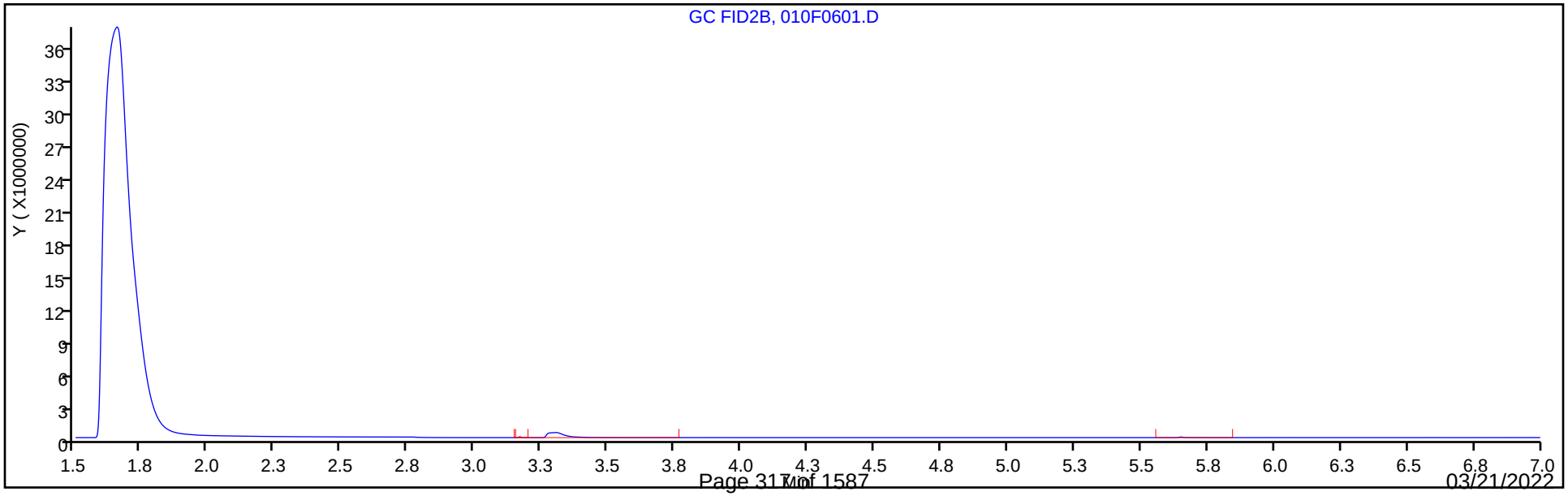
Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\010F0601.D

Injection Date:	08-Mar-2022 15:11:56	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159190-G-13	Lab Sample ID:	280-159190-13	Worklist Smp#:	8
Client ID:	EW7-PM28A-8-25				
Purge Vol:	18.000 mL	Dil. Factor:	2.0000	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.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM29A-8-25 | Lab Sample ID: 280-159190-14

Matrix: Water | Lab File ID: 011F0701.D

Analysis Method: RSK-175 | Date Collected: 02/26/2022 11:05

Sample wt/vol: 20(mL) | Date Analyzed: 03/08/2022 15:25

Soil Aliquot Vol: | Dilution Factor: 2

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567999 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	15	D	0.010	0.0026	0.0013

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\011F0701.D
Lims ID: 280-159190-H-14
Client ID: EW7-PM29A-8-25
Sample Type: Client
Inject. Date: 08-Mar-2022 15:25:16 ALS Bottle#: 11 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 2.0000
Sample Info: 280-159190-H-14
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Mar-2022 13:35:04 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1645

First Level Reviewer: sciannac Date: 09-Mar-2022 13:03:20

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	1.252	1.258	-0.006	297809768	8465.7	
2	1.655	1.663	-0.008	279721346	7746.1	
					RPD = 8.88	
3 Ethane						
1		1.523			ND	
2		3.018				
4 Ethylene						
1		1.818			ND	
2		2.598				
5 Propane						
1		2.611			ND	
2		4.926				
6 Acetylene						
1		4.175			ND	
2		2.745				
7 Butane						
1		4.491			ND	
2		6.426				
8 isobutylene						
1		5.391			ND	
2		6.268				

QC Flag Legend

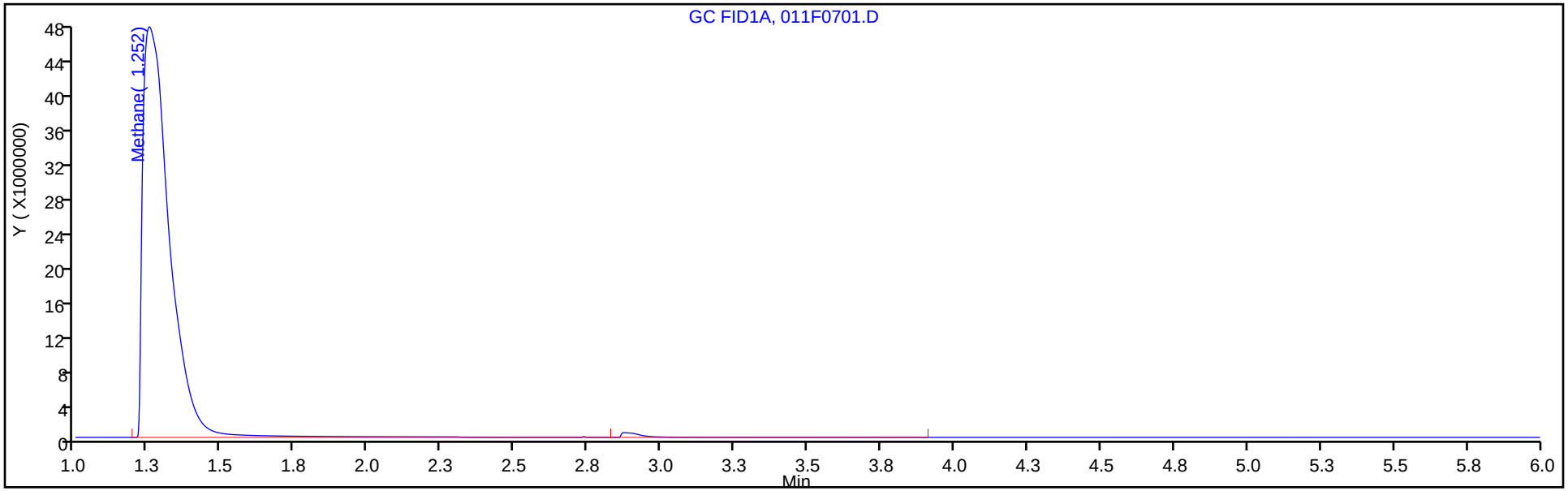
Processing Flags

Report Date: 09-Mar-2022 13:35:09 Chrom Revision: 2.3 16-Feb-2022 17:52:00

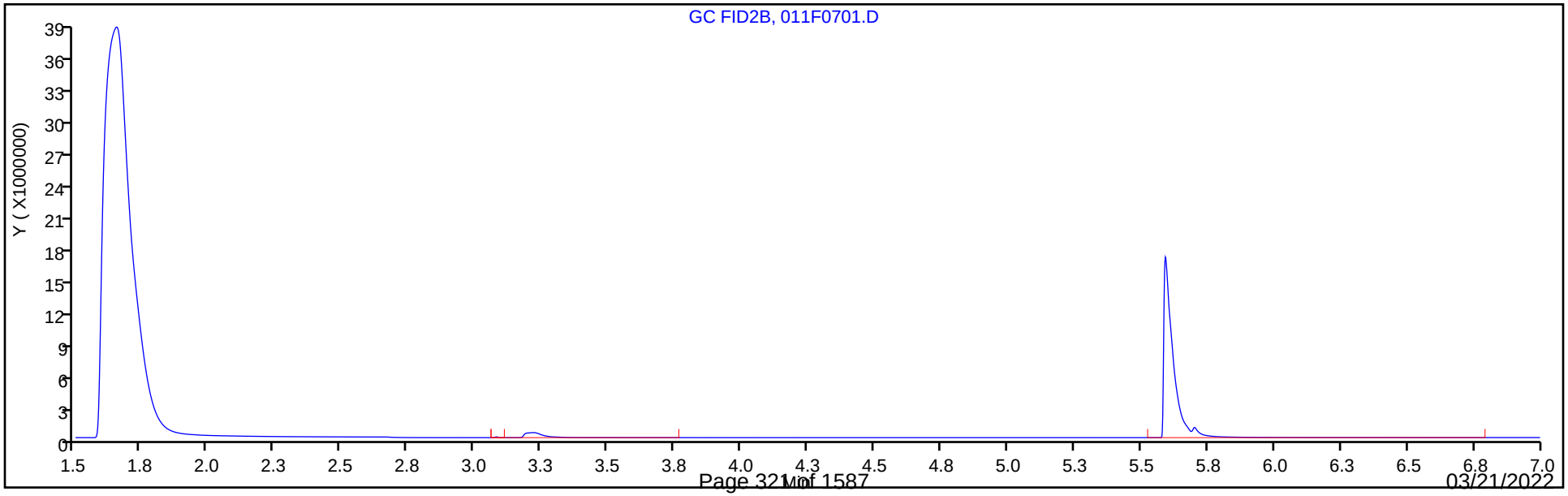
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\011F0701.D				
Injection Date:	08-Mar-2022 15:25:16	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159190-H-14	Lab Sample ID:	280-159190-14	Worklist Smp#:	9
Client ID:	EW7-PM29A-8-25				
Purge Vol:	18.000 mL	Dil. Factor:	2.0000	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.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM27B-8-35 | Lab Sample ID: 280-159190-15

Matrix: Water | Lab File ID: 023F2301.D

Analysis Method: RSK-175 | Date Collected: 02/26/2022 13:00

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 19:12

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.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	11		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\023F2301.D
Lims ID: 280-159190-I-15
Client ID: EW7-PM27B-8-35
Sample Type: Client
Inject. Date: 03-Mar-2022 19:12:04 ALS Bottle#: 23 Worklist Smp#: 23
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159190-I-15
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:15 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 13:00:46

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	1.262	-0.006	409866279	11652	
2	1.656	1.669	-0.013	381095517	10554	
					RPD = 9.89	
3 Ethane						
1		1.524			ND	
2		3.022				
4 Ethylene						
1		1.809			ND	
2		2.604				
5 Propane						
1		2.587			ND	
2		4.927				
6 Acetylene						
1		4.102			ND	
2		2.751				
7 Butane						
1		4.449			ND	
2		6.427				
8 isobutylene						
1		5.350			ND	
2		6.269				

QC Flag Legend

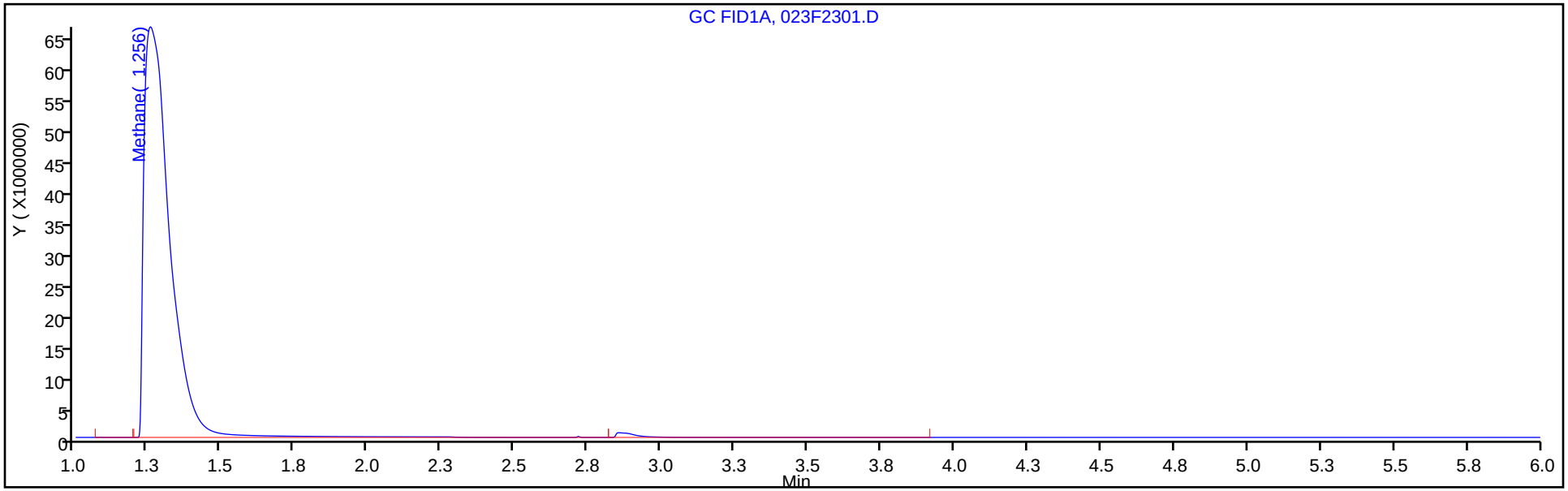
Processing Flags

Report Date: 07-Mar-2022 13:05:18 Chrom Revision: 2.3 16-Feb-2022 17:52:00

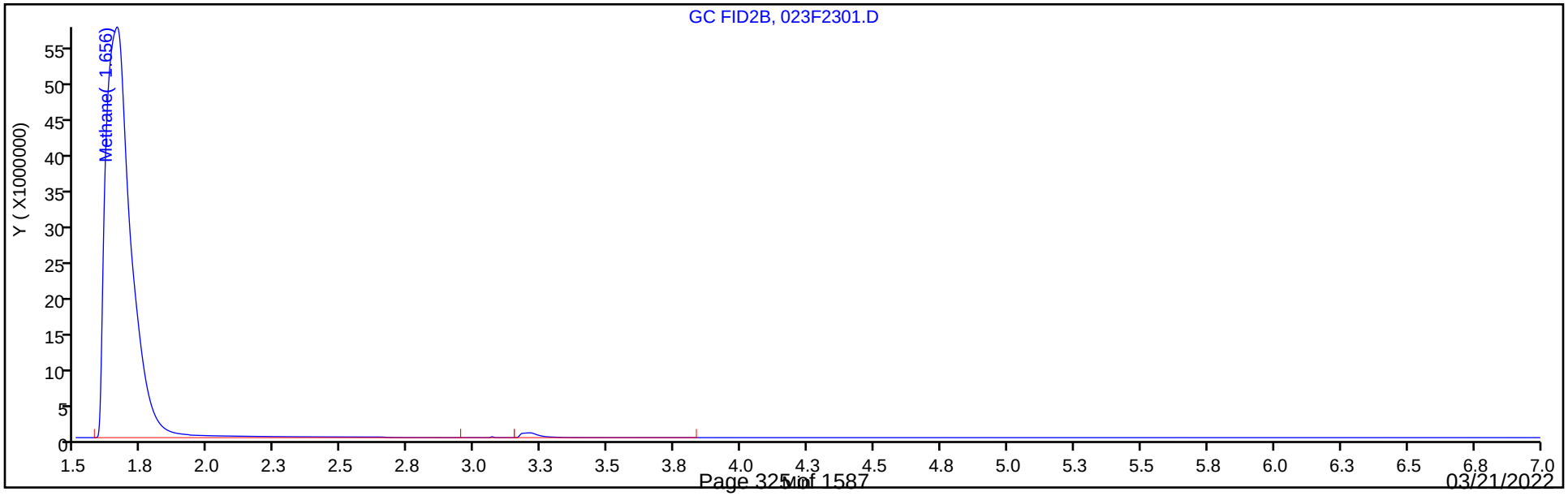
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\023F2301.D				
Injection Date:	03-Mar-2022 19:12:04	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159190-I-15	Lab Sample ID:	280-159190-15	Worklist Smp#:	23
Client ID:	EW7-PM27B-8-35				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: NW062-8 | Lab Sample ID: 280-159190-16

Matrix: Water | Lab File ID: 024F2401.D

Analysis Method: RSK-175 | Date Collected: 02/27/2022 14:15

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 19:25

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.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.024		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\024F2401.D
Lims ID: 280-159190-G-16
Client ID: NW062-8
Sample Type: Client
Inject. Date: 03-Mar-2022 19:25:01 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159190-G-16
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:15 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 13:00:51

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.254	1.262	-0.008	1008840	26.8	
2	1.659	1.669	-0.010	914098	23.6	
					RPD = 12.86	
3 Ethane						
1		1.524			ND	
2		3.022				
4 Ethylene						
1		1.809			ND	
2		2.604				
5 Propane						
1		2.587			ND	
2		4.927				
6 Acetylene						
1		4.102			ND	
2		2.751				
7 Butane						
1		4.449			ND	
2		6.427				
8 isobutylene						
1		5.350			ND	
2		6.269				

QC Flag Legend

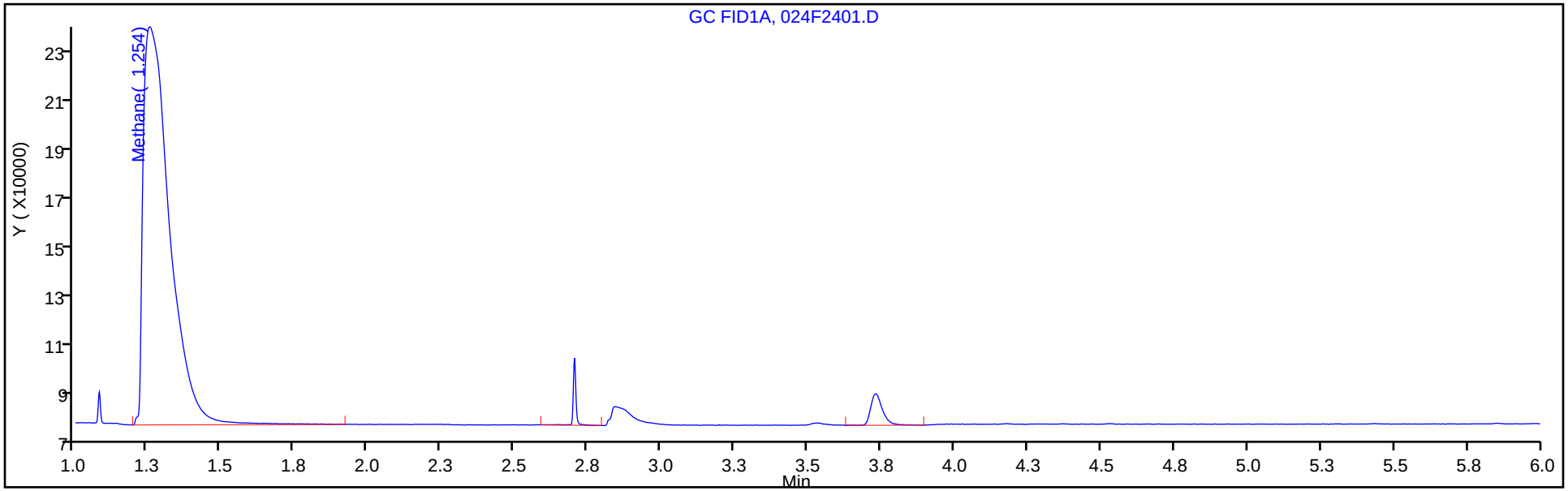
Processing Flags

Report Date: 07-Mar-2022 13:05:19 Chrom Revision: 2.3 16-Feb-2022 17:52:00

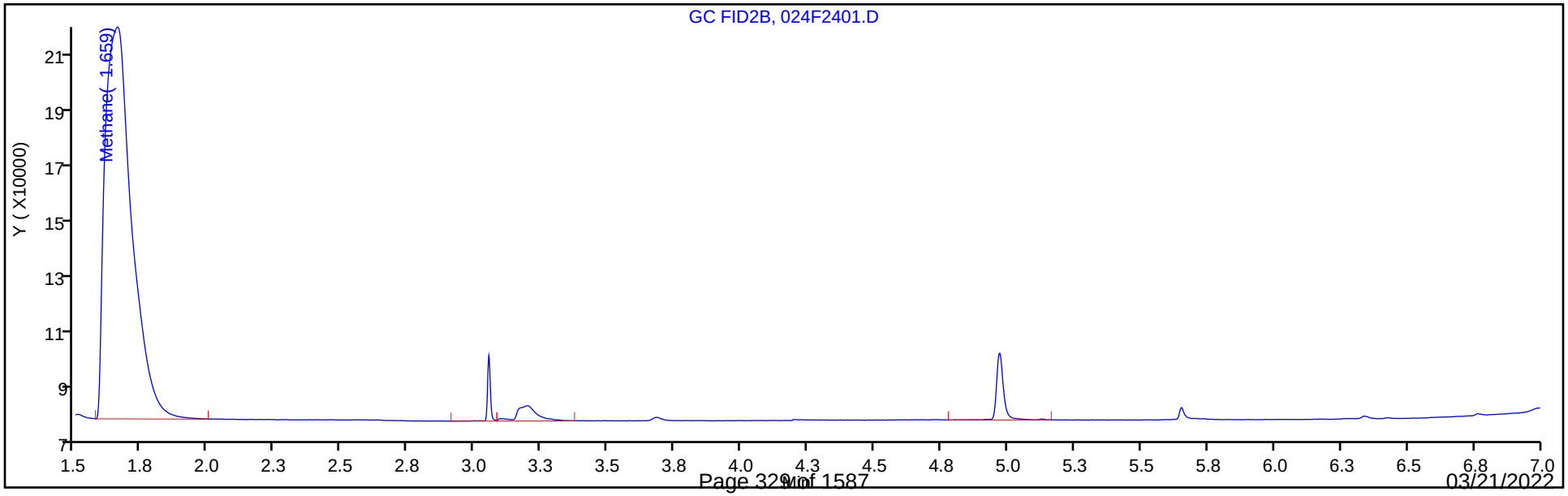
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\024F2401.D				
Injection Date:	03-Mar-2022 19:25:01	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159190-G-16	Lab Sample ID:	280-159190-16	Worklist Smp#:	24
Client ID:	NW062-8				
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 VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1 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.: 280-159190-1 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.: 280-159190-1 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

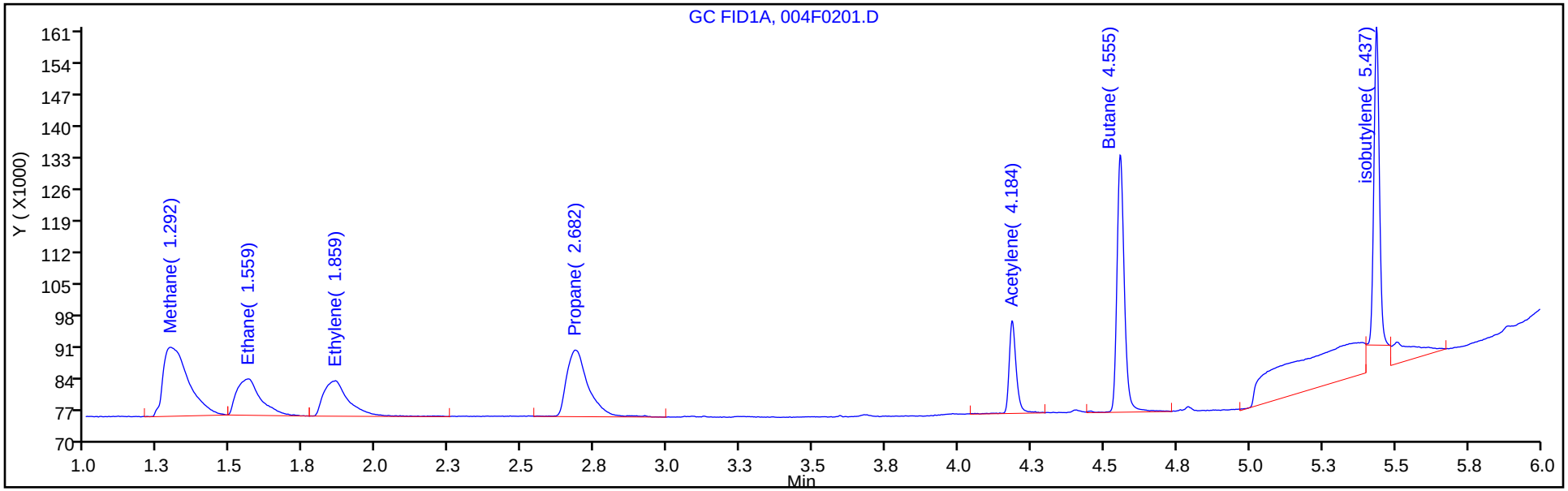
Report Date: 29-Sep-2021 10:55:12 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

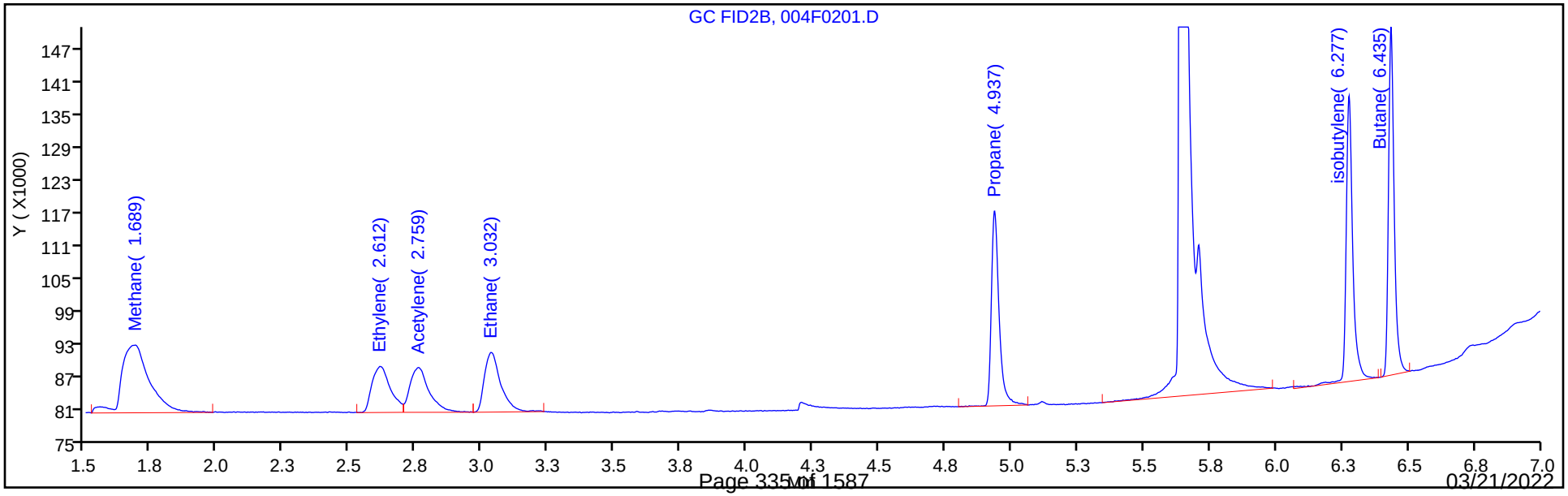
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D

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

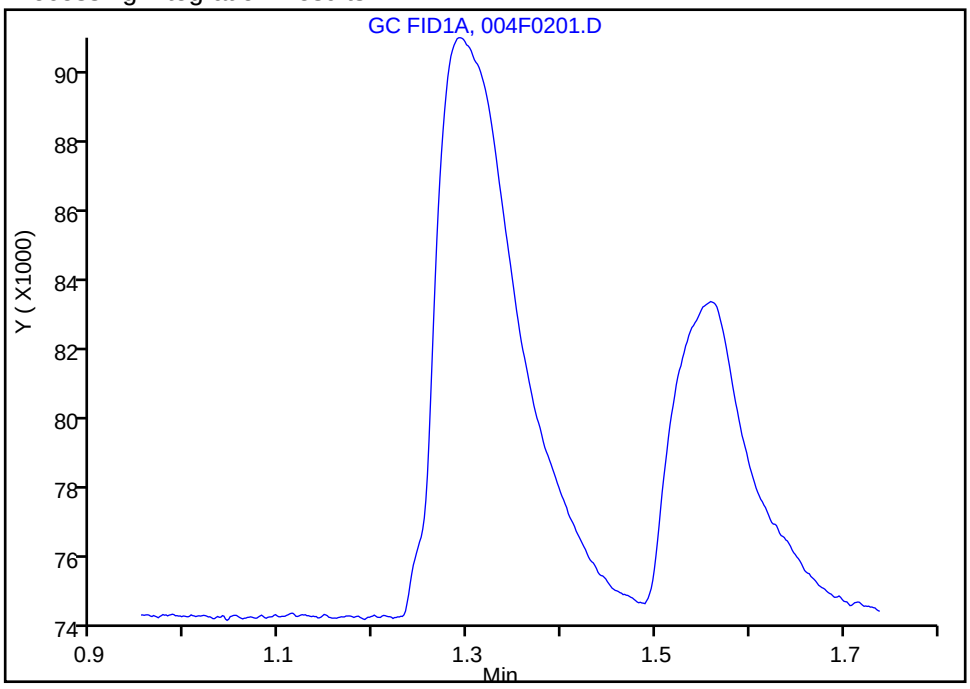
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D				
Injection Date:	24-Sep-2021 13:28:57	Instrument ID:	VGC_J		
Lims ID:	ic				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	4	Worklist Smp#:	2
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

2 Methane, CAS: 74-82-8

Signal: 1

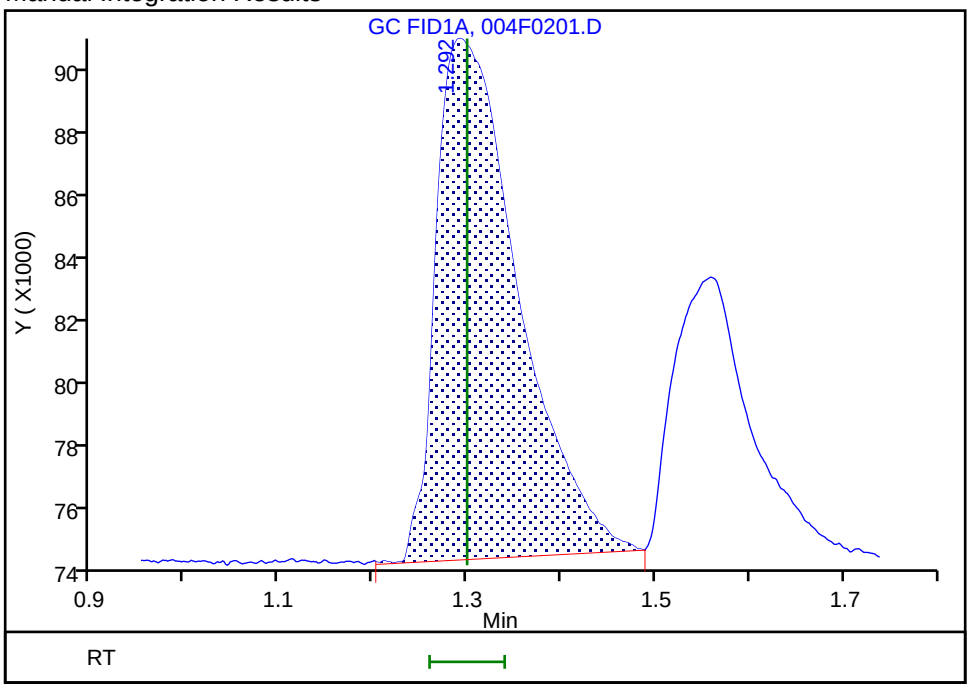
Not Detected
Expected RT: 1.30

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

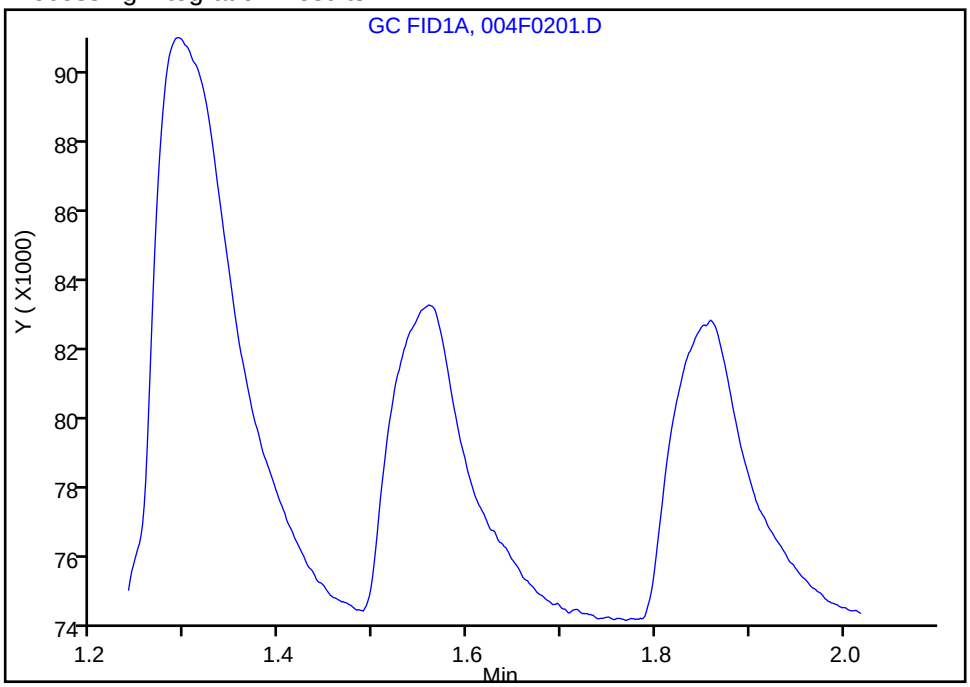
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

3 Ethane, CAS: 74-84-0

Signal: 1

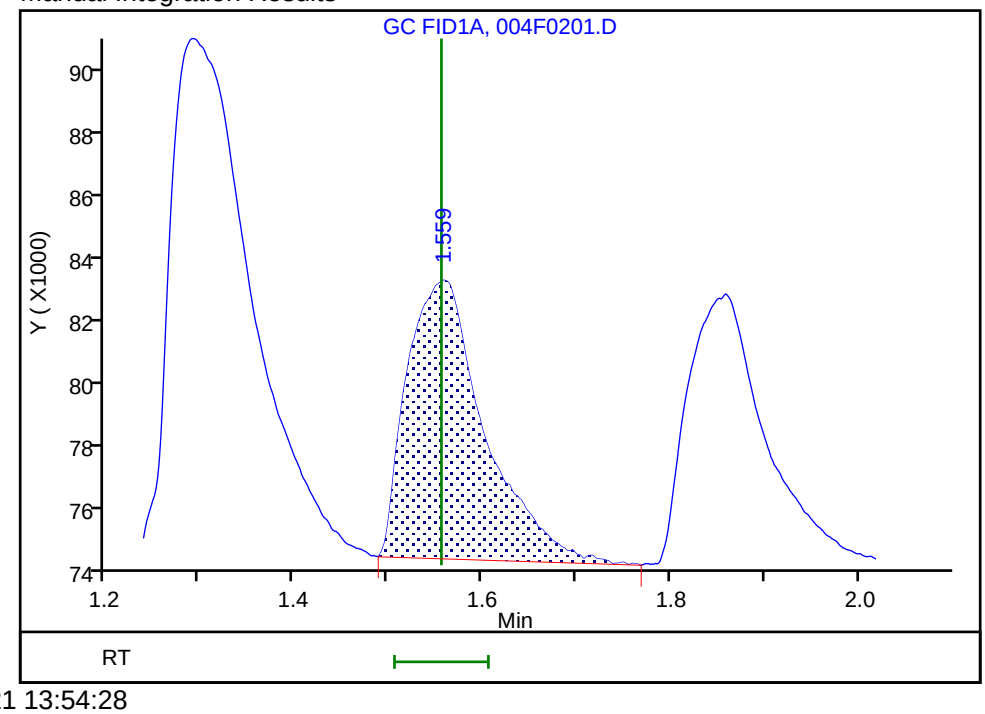
Not Detected
Expected RT: 1.56

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

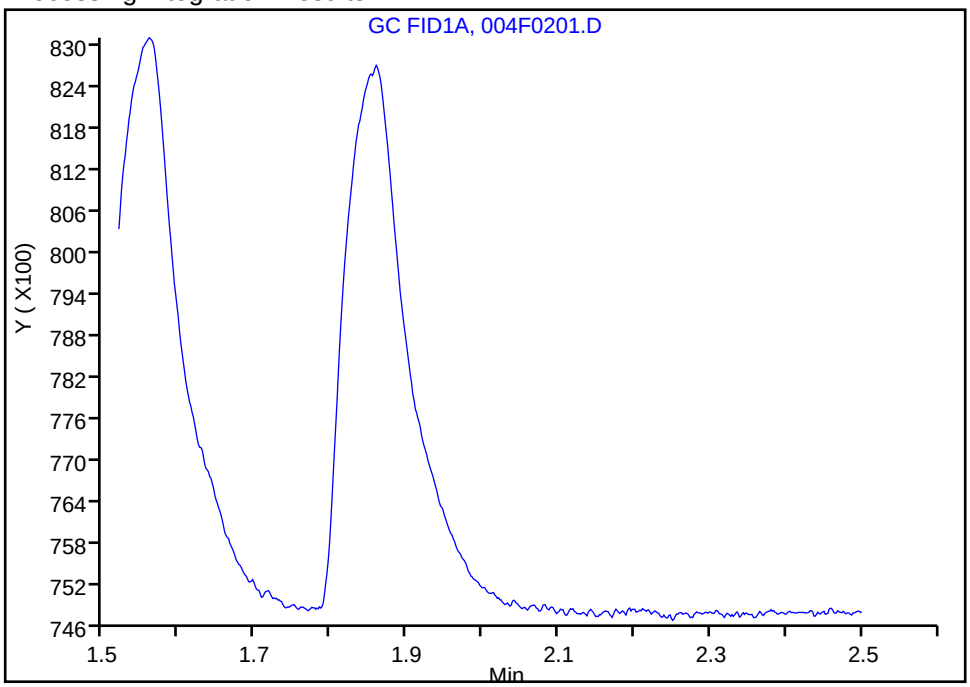
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D				
Injection Date:	24-Sep-2021 13:28:57	Instrument ID:	VGC_J		
Lims ID:	ic				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	4	Worklist Smp#:	2
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

4 Ethylene, CAS: 74-85-1

Signal: 1

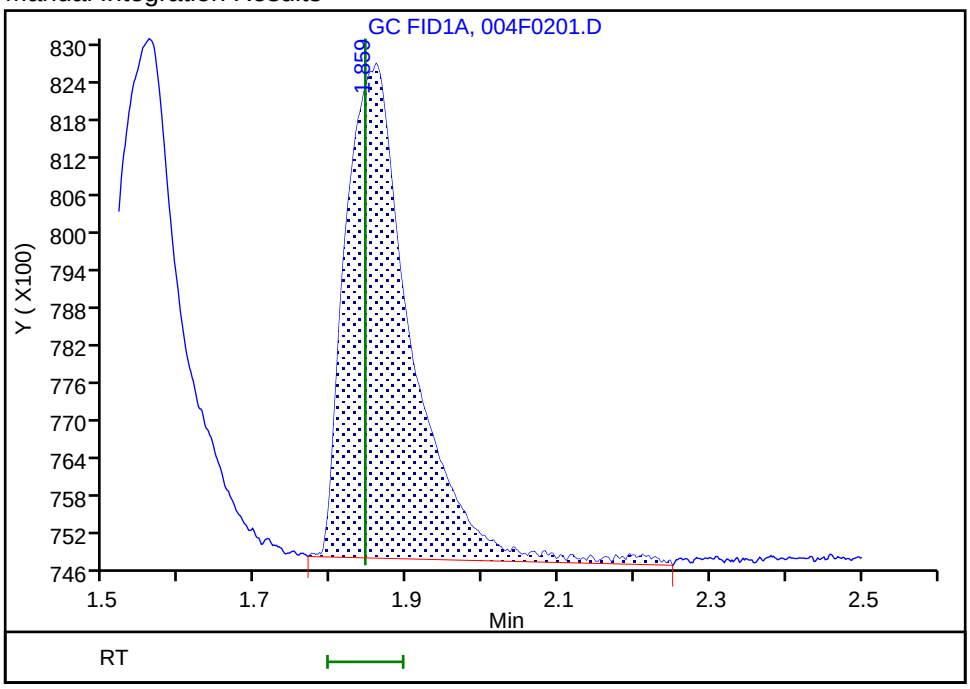
Not Detected
Expected RT: 1.84

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

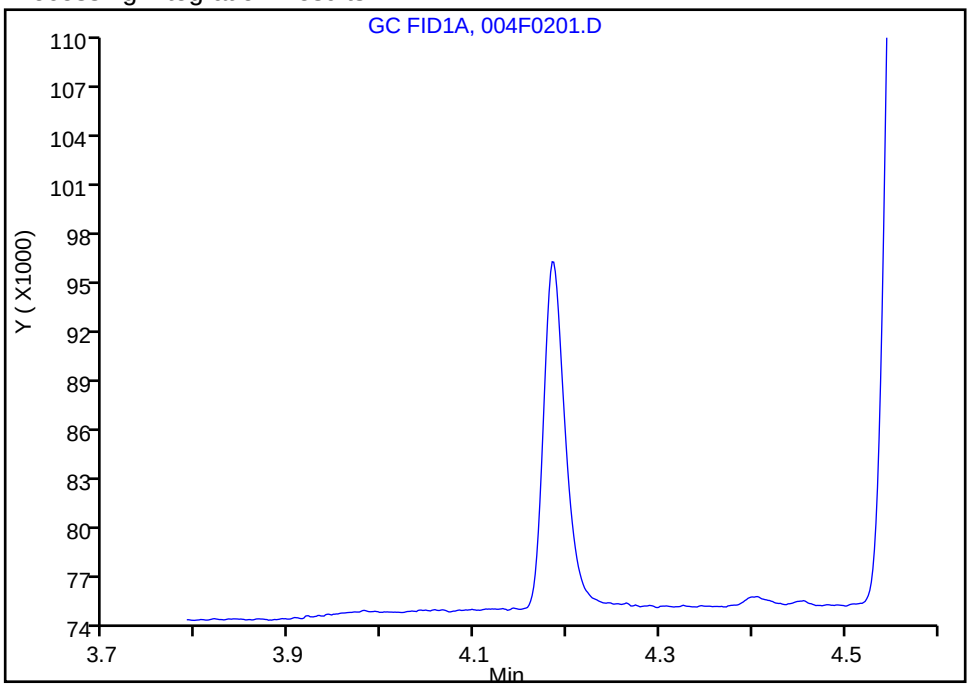
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D				
Injection Date:	24-Sep-2021 13:28:57	Instrument ID:	VGC_J		
Lims ID:	ic				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	4	Worklist Smp#:	2
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

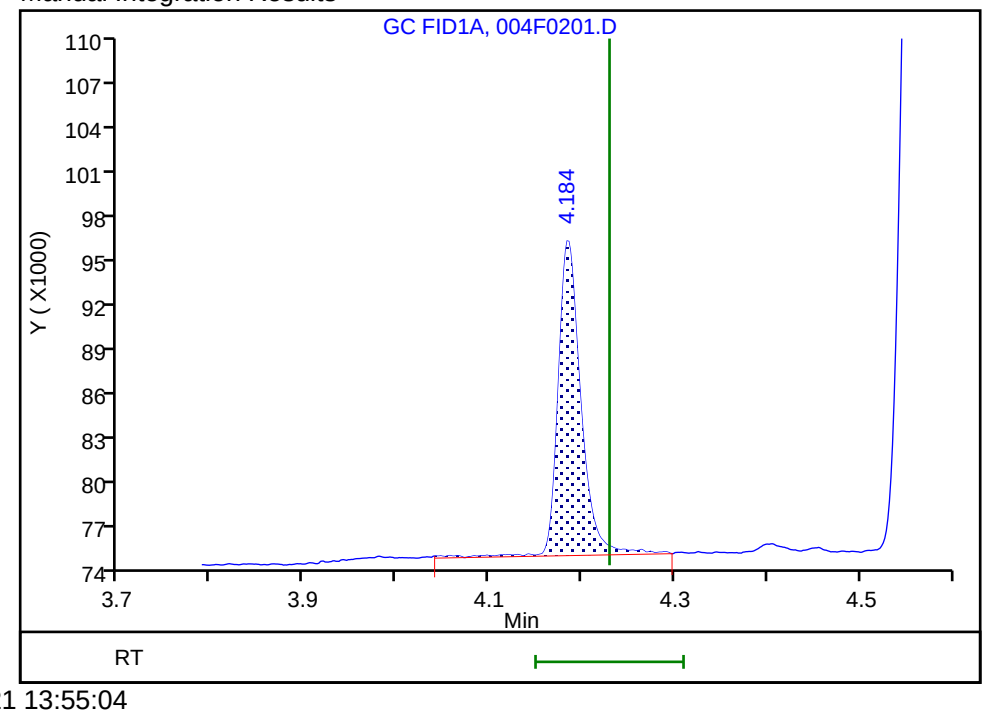
Not Detected
Expected RT: 4.23

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

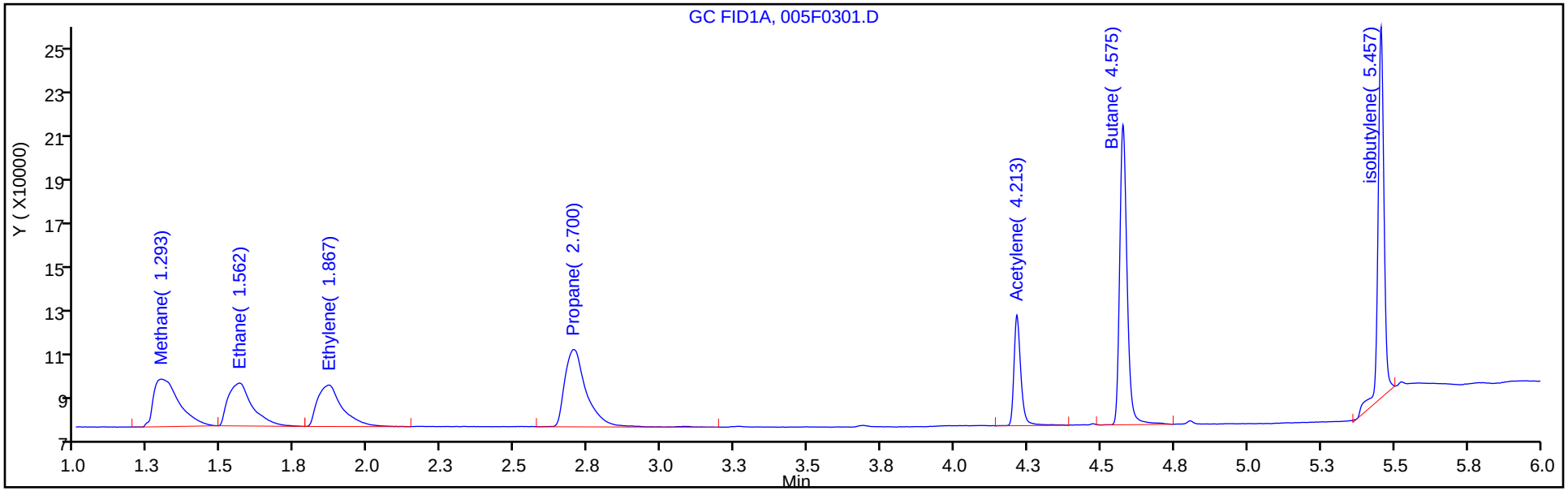
Report Date: 29-Sep-2021 10:55:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

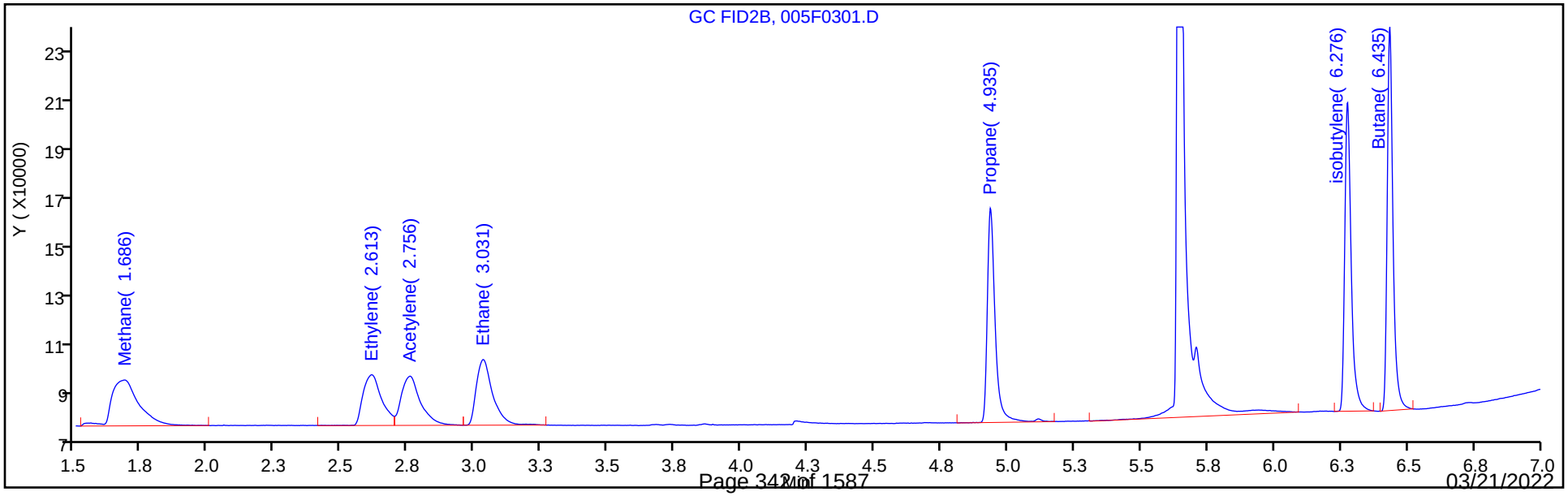
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\005F0301.D

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

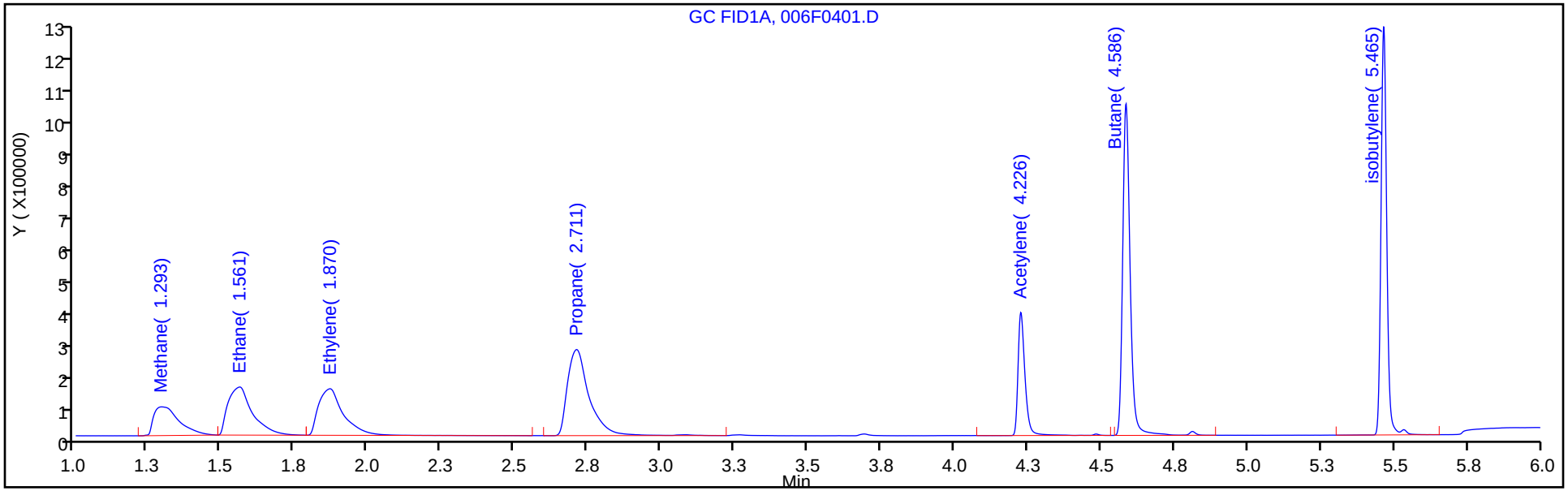
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

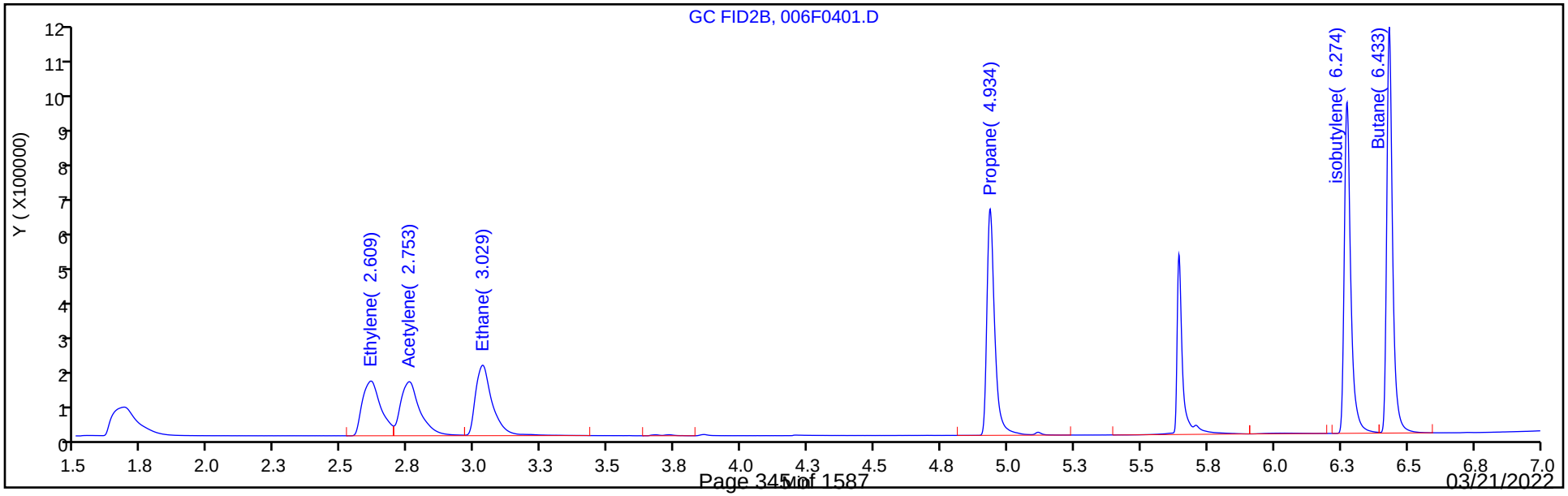
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D

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

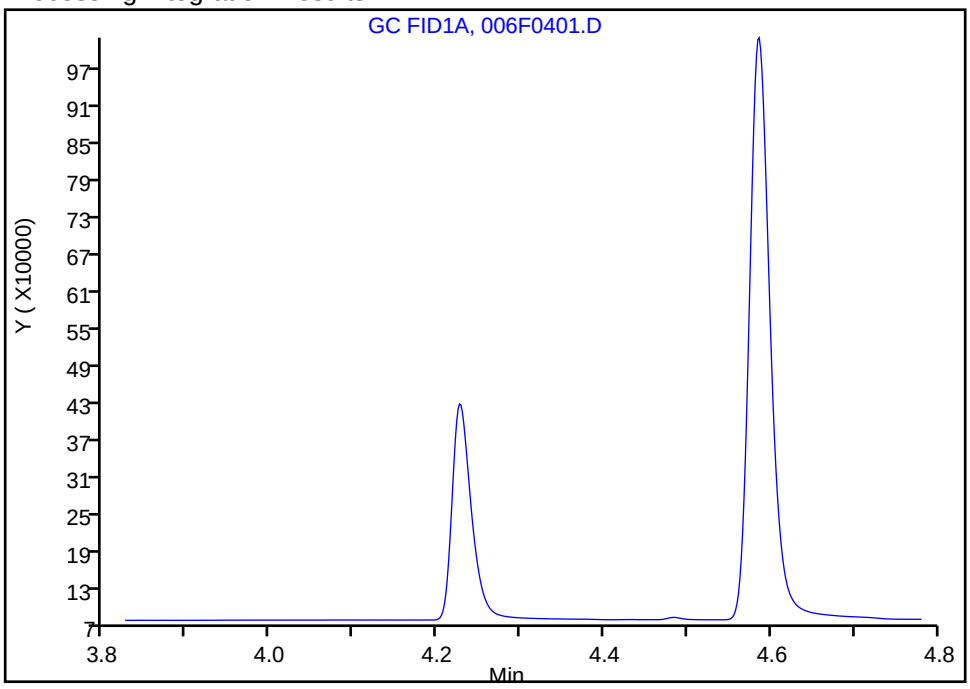
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D
Injection Date: 24-Sep-2021 13:54:46 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 6 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

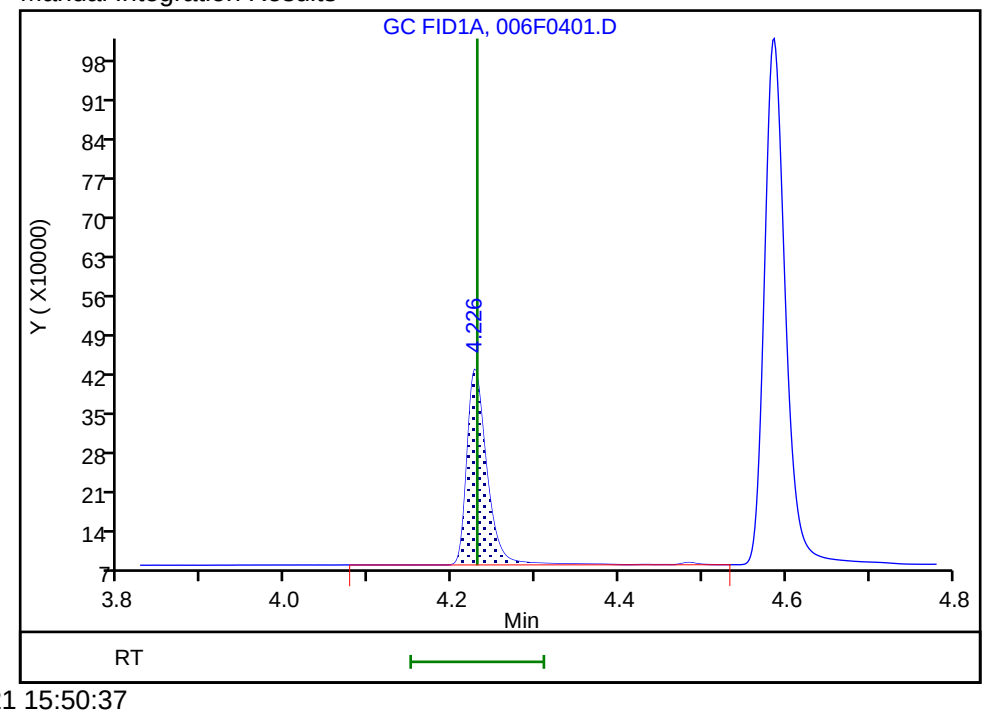
Not Detected
Expected RT: 4.23

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

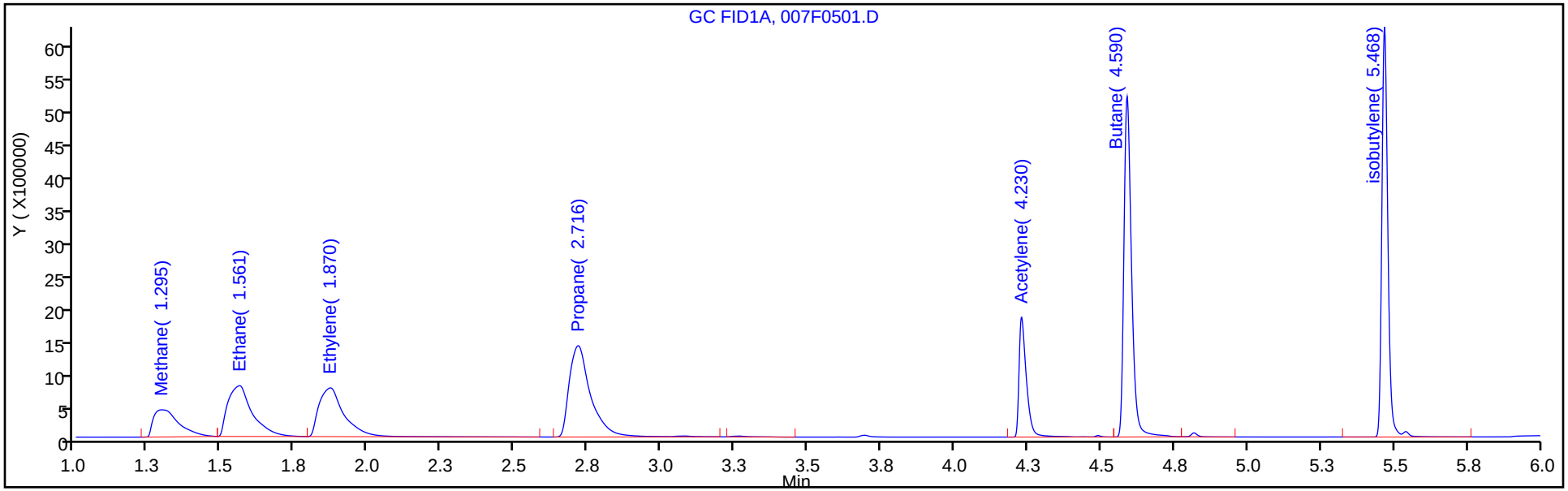
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

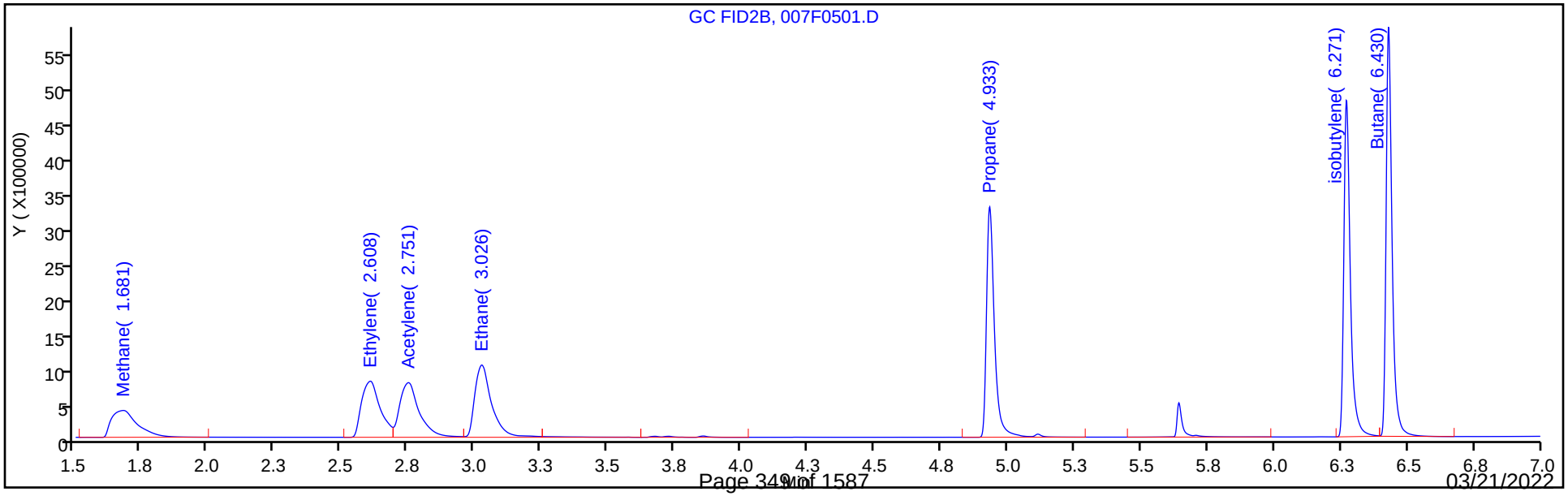
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D

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

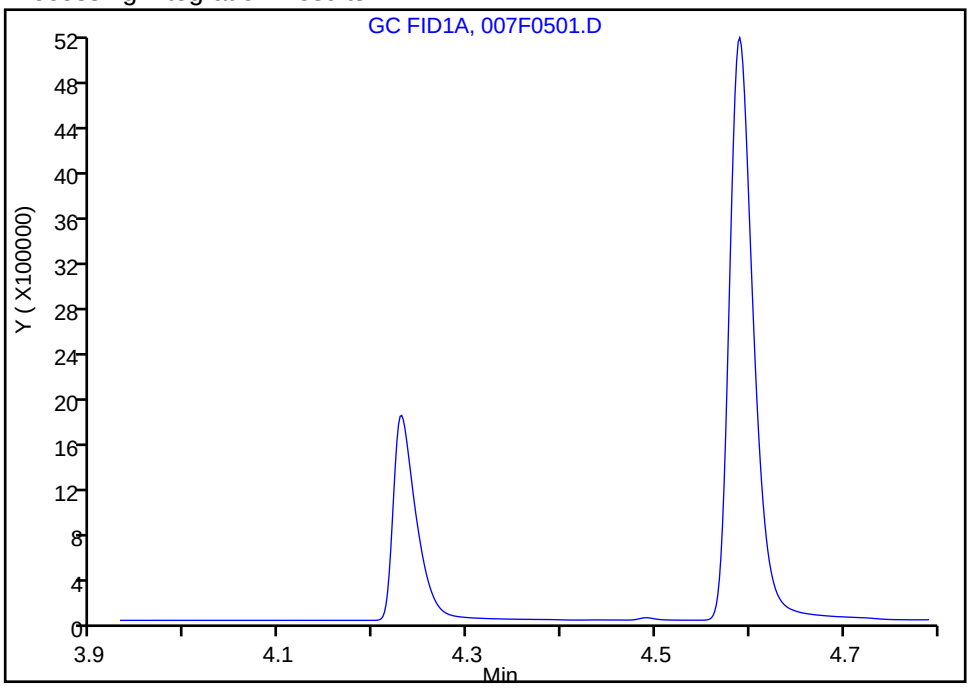
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

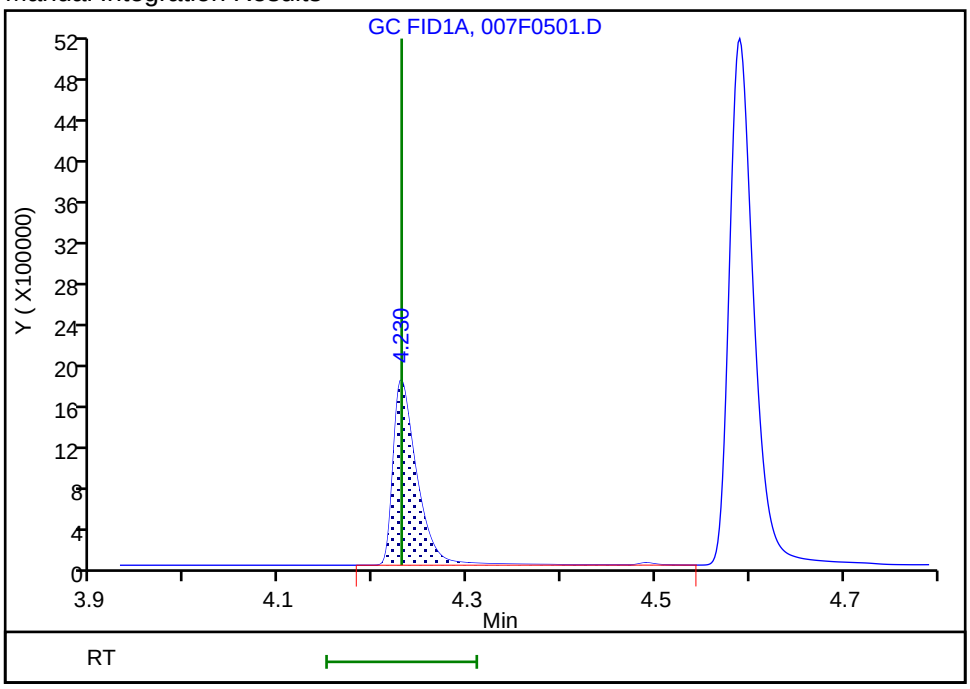
Not Detected
Expected RT: 4.23

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

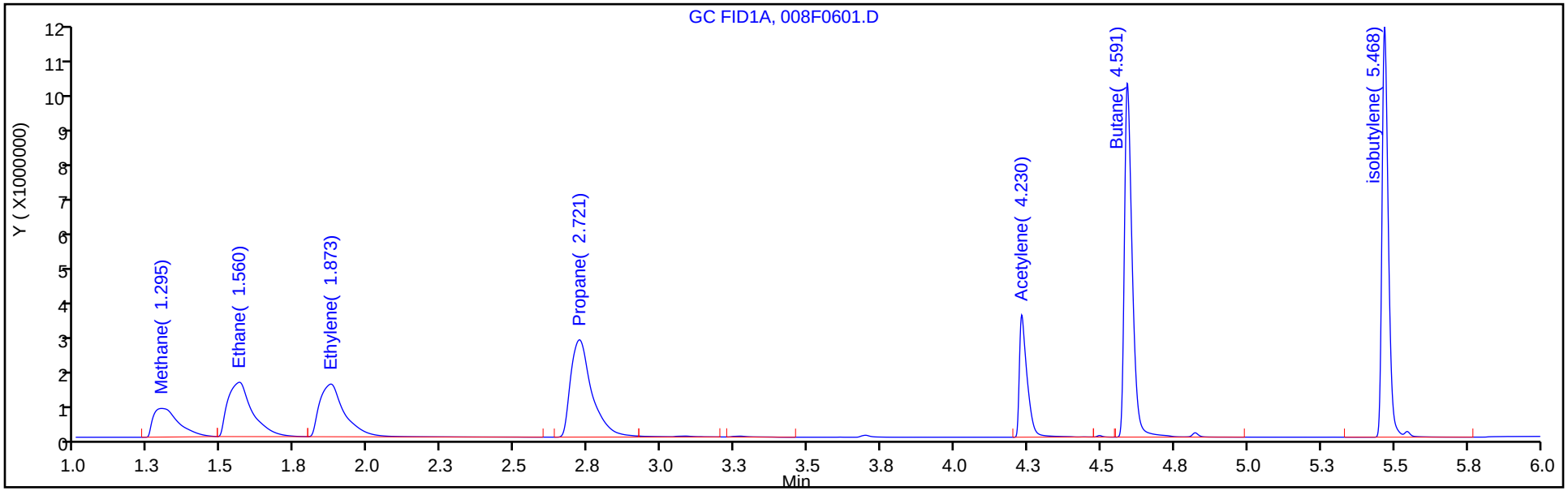
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

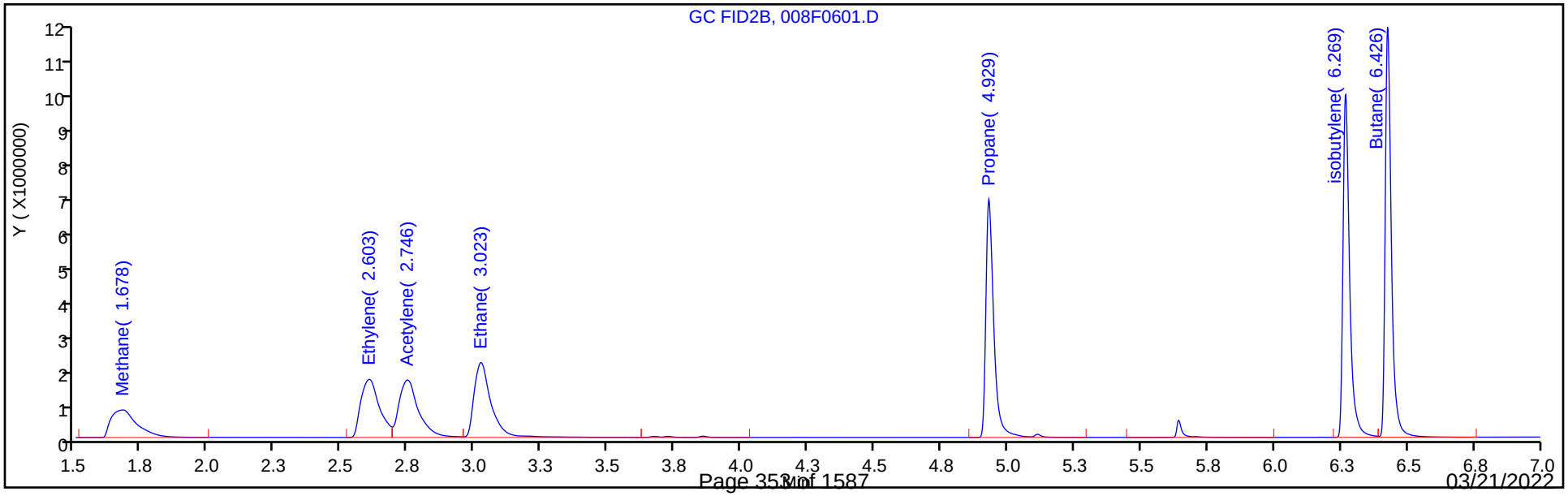
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D

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

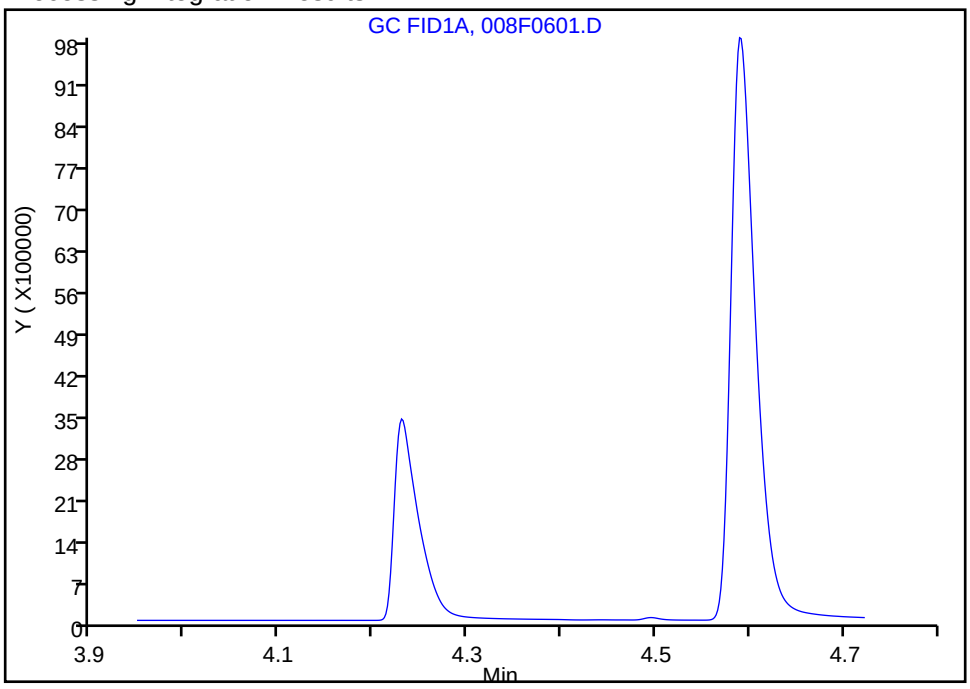
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Injection Date: 24-Sep-2021 14:20:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

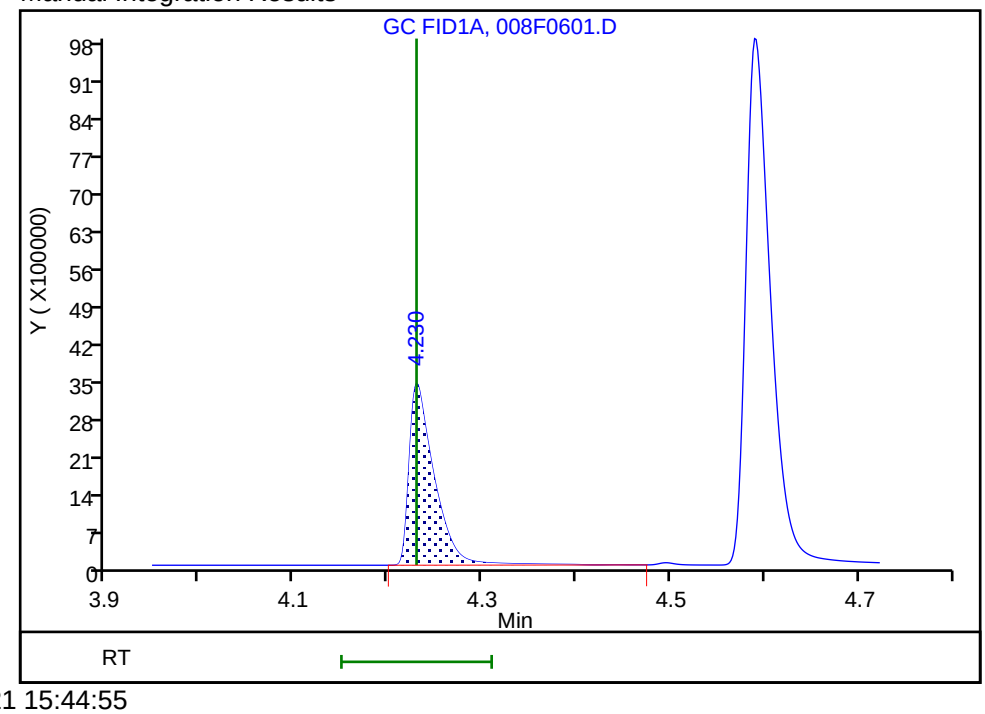
Not Detected
Expected RT: 4.23

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

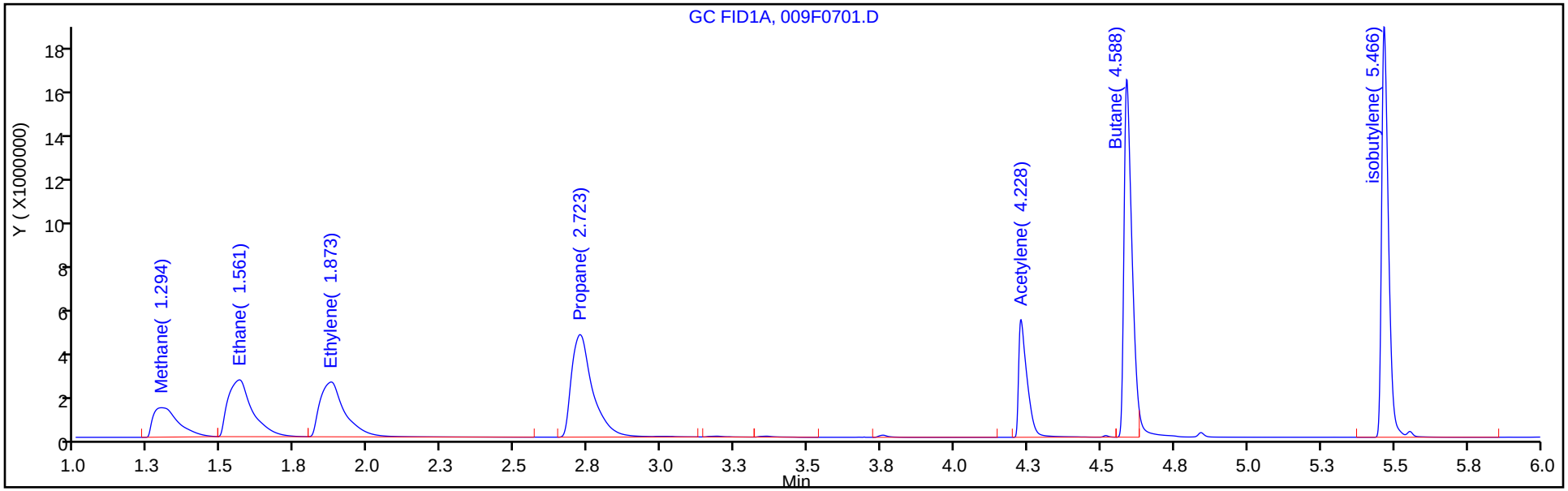
Report Date: 29-Sep-2021 10:55:16 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

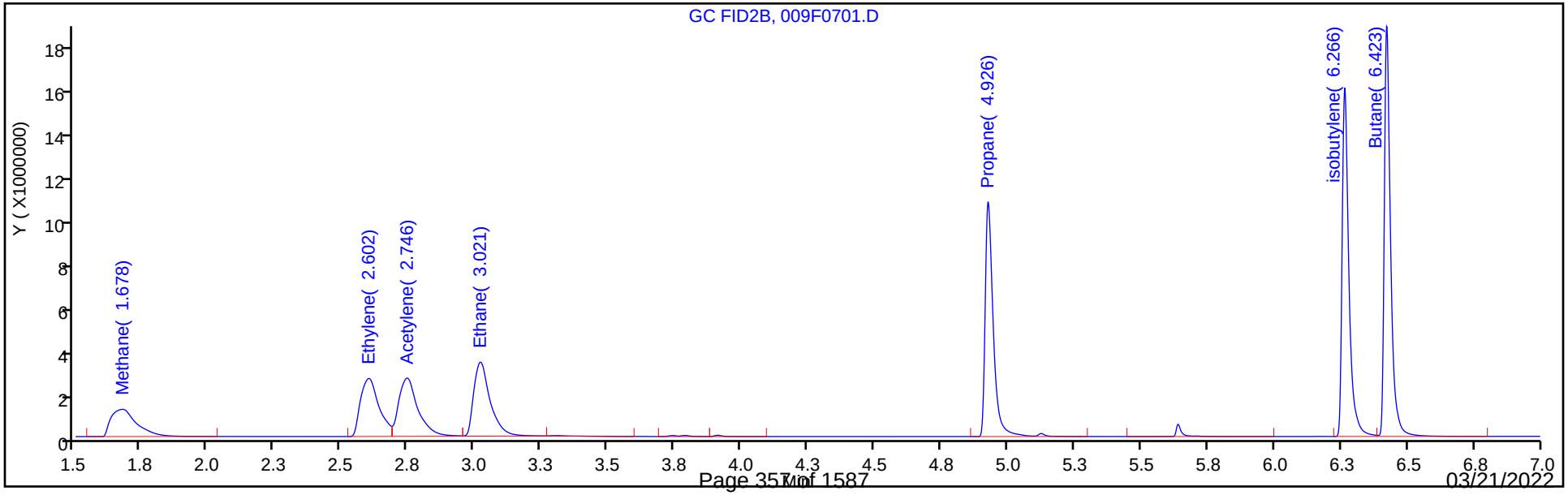
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D

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

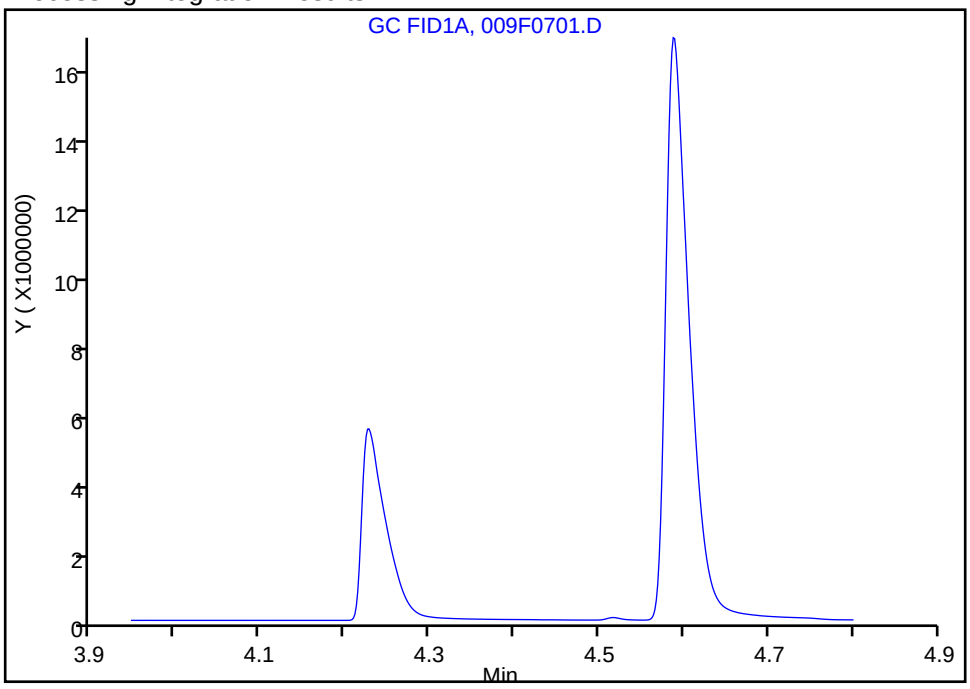
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D
Injection Date: 24-Sep-2021 14:33:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 9 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

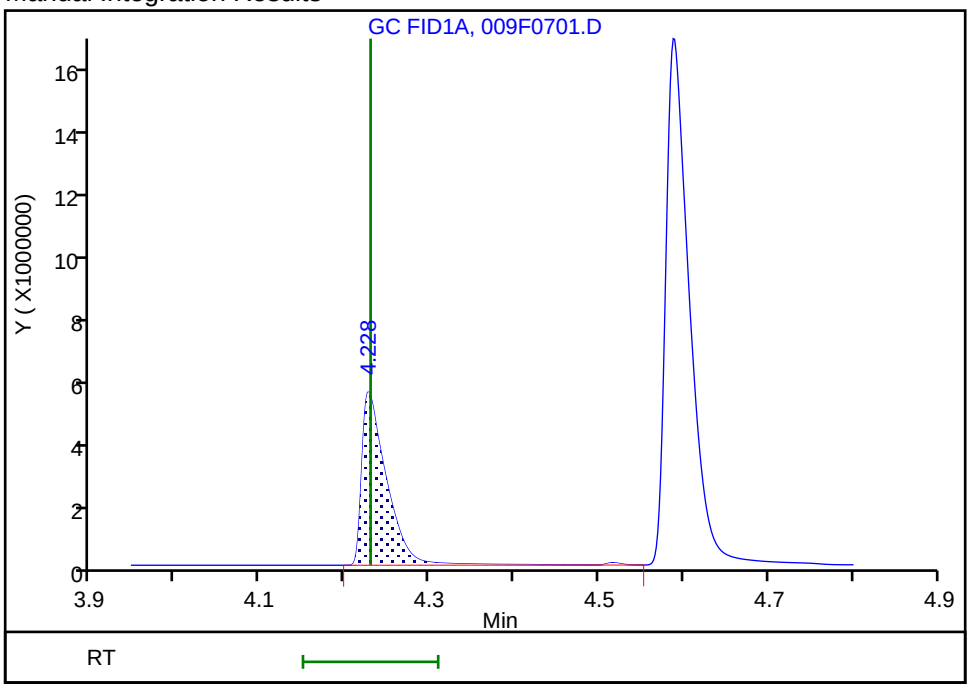
Not Detected
Expected RT: 4.23

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

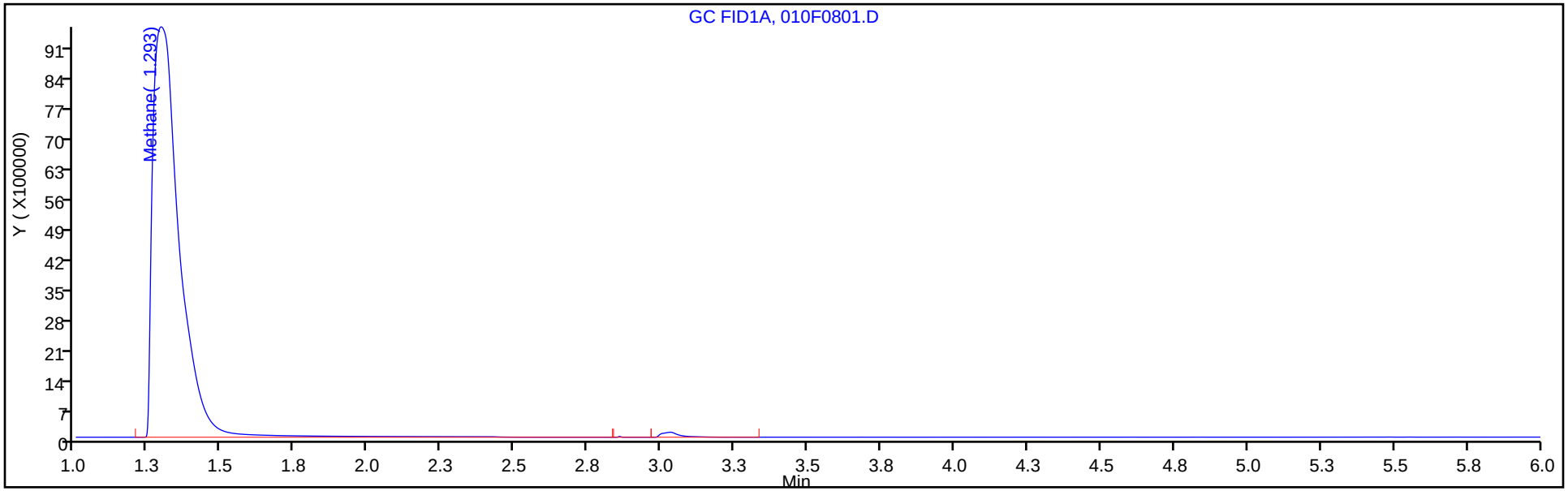
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

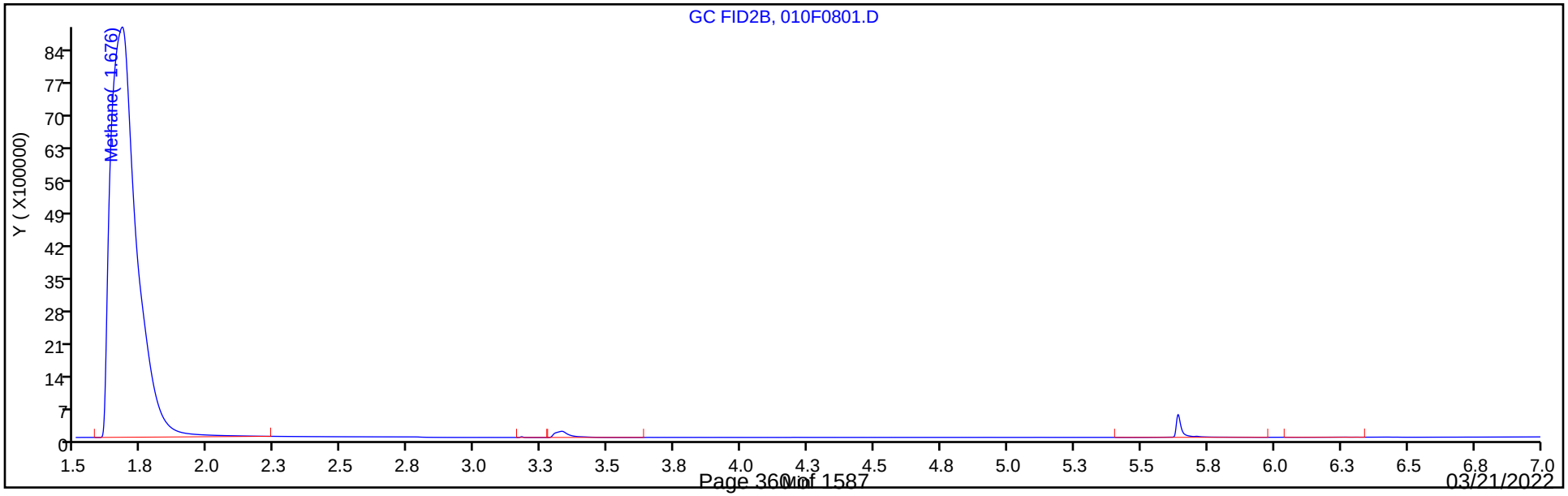
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\010F0801.D

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

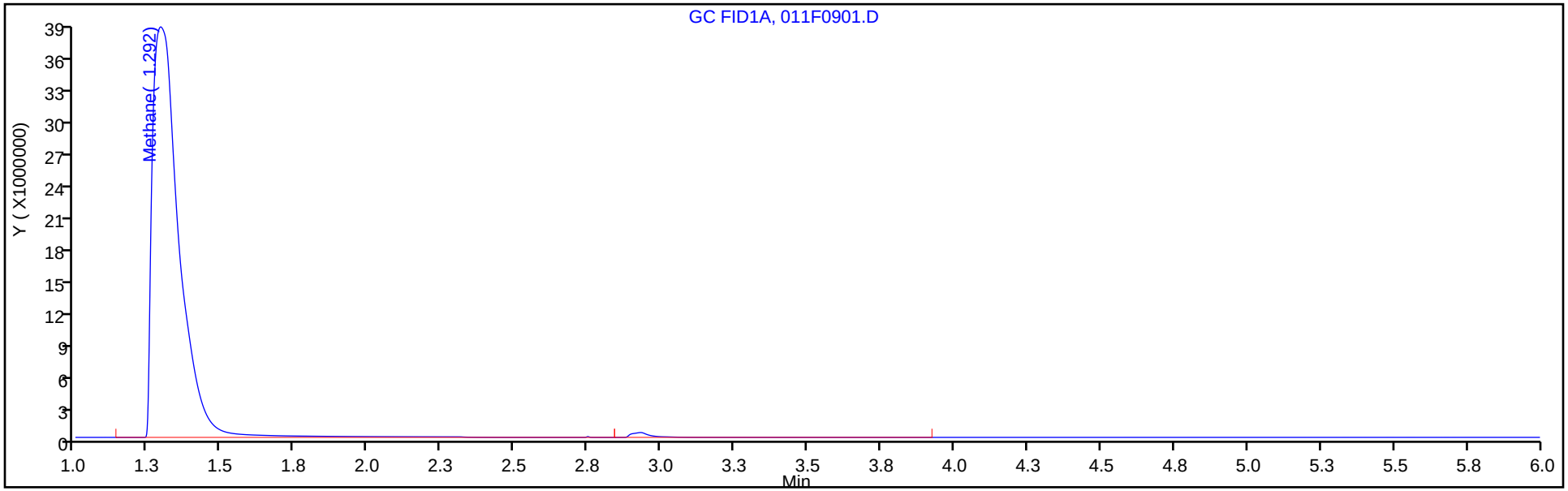
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

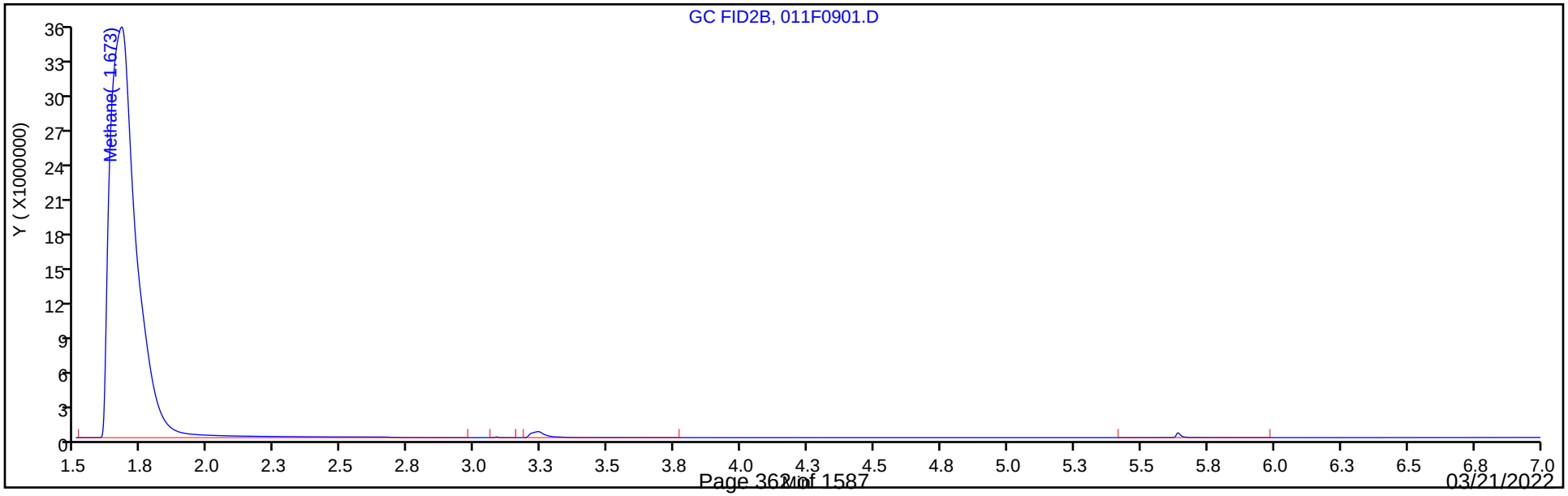
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\011F0901.D

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

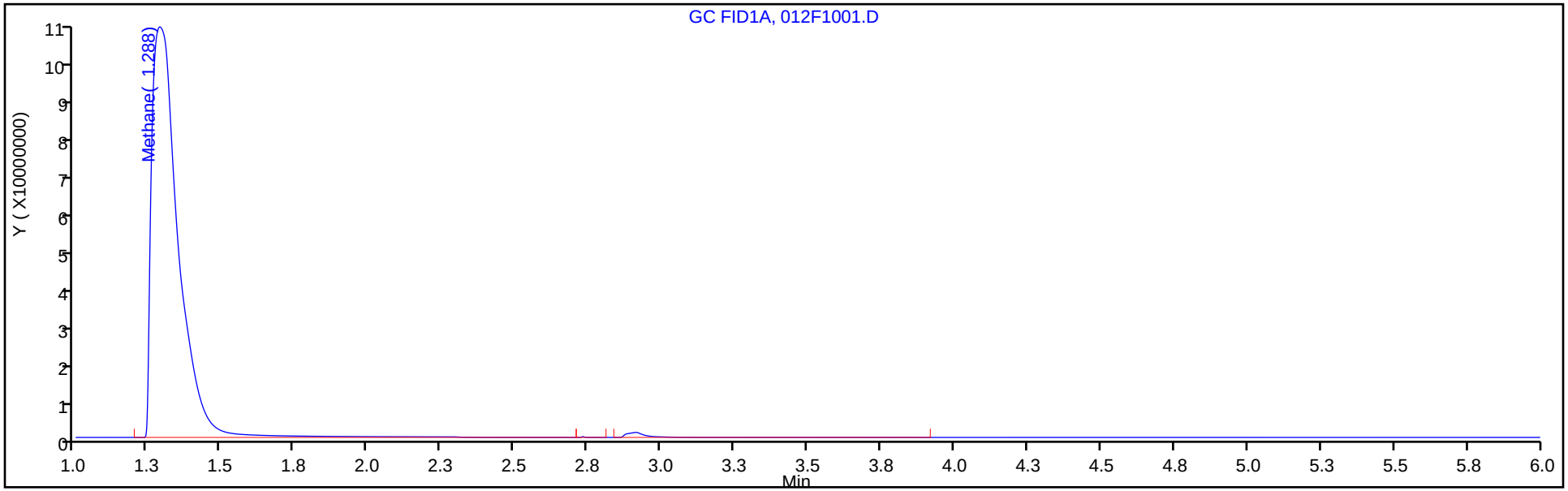
Report Date: 29-Sep-2021 10:55:18 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

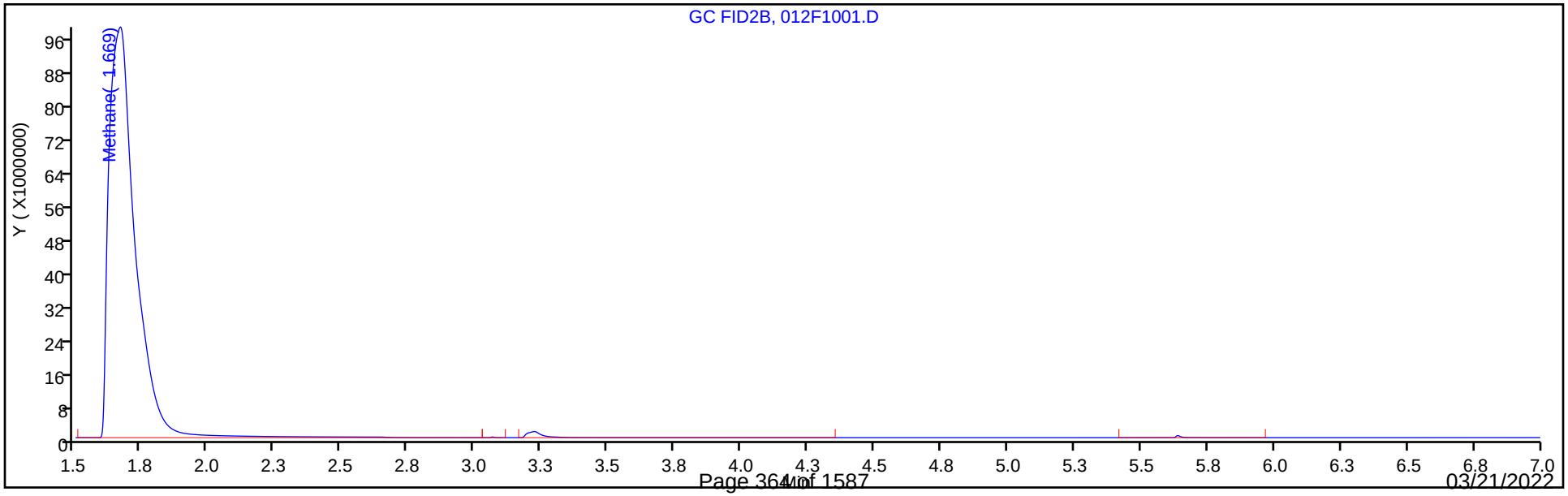
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

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

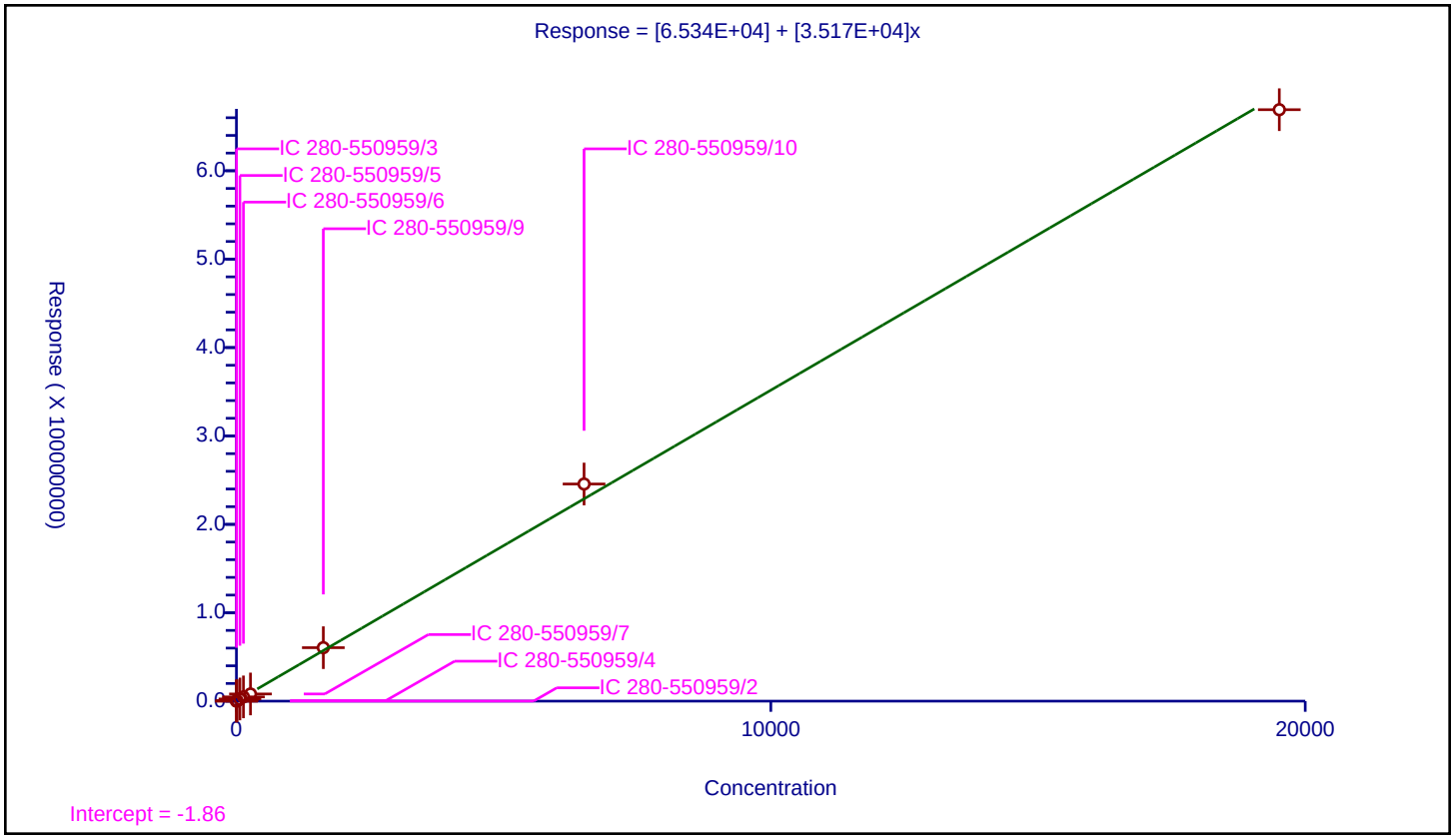
Curve Coefficients

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

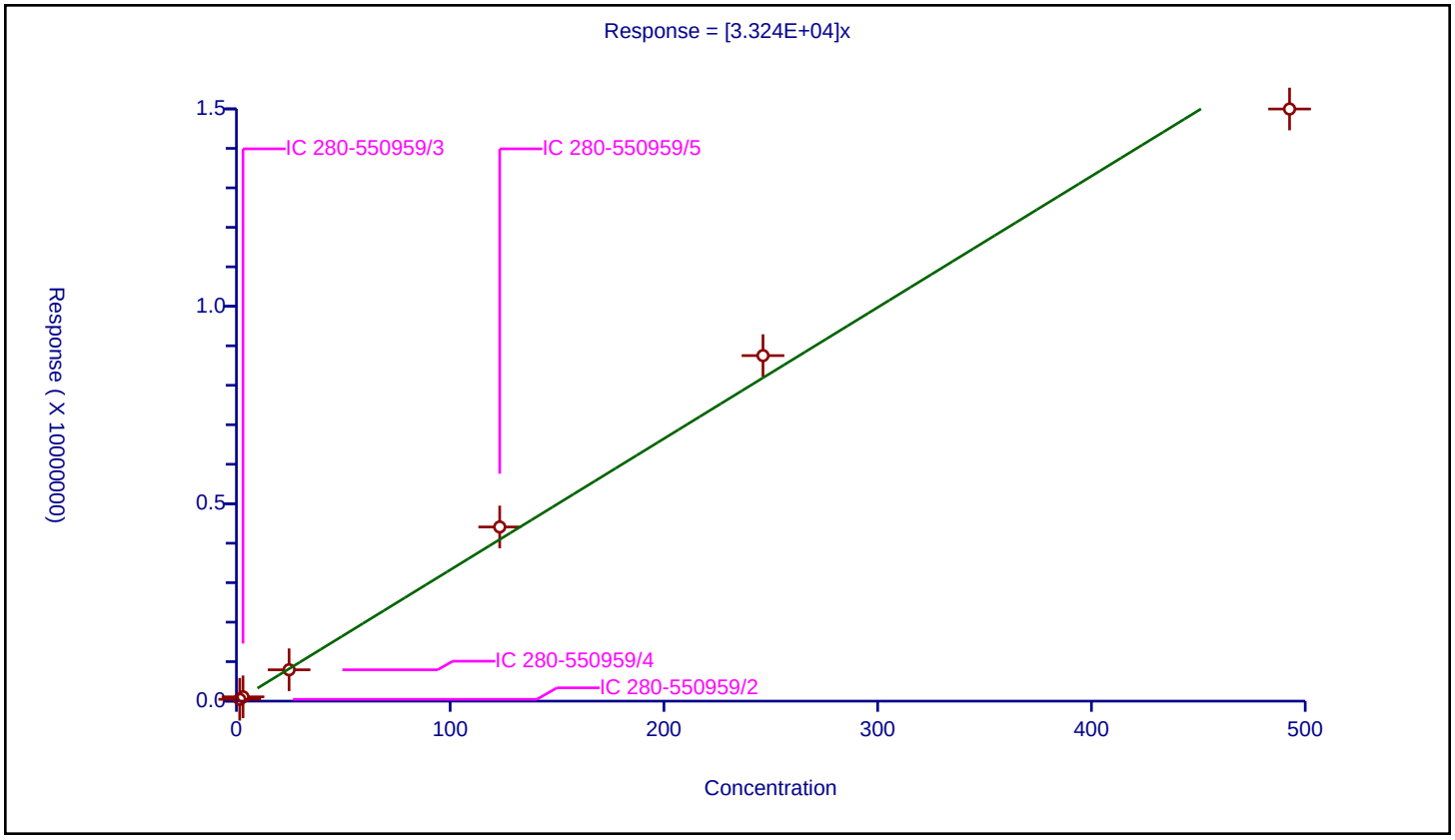
Curve Coefficients

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

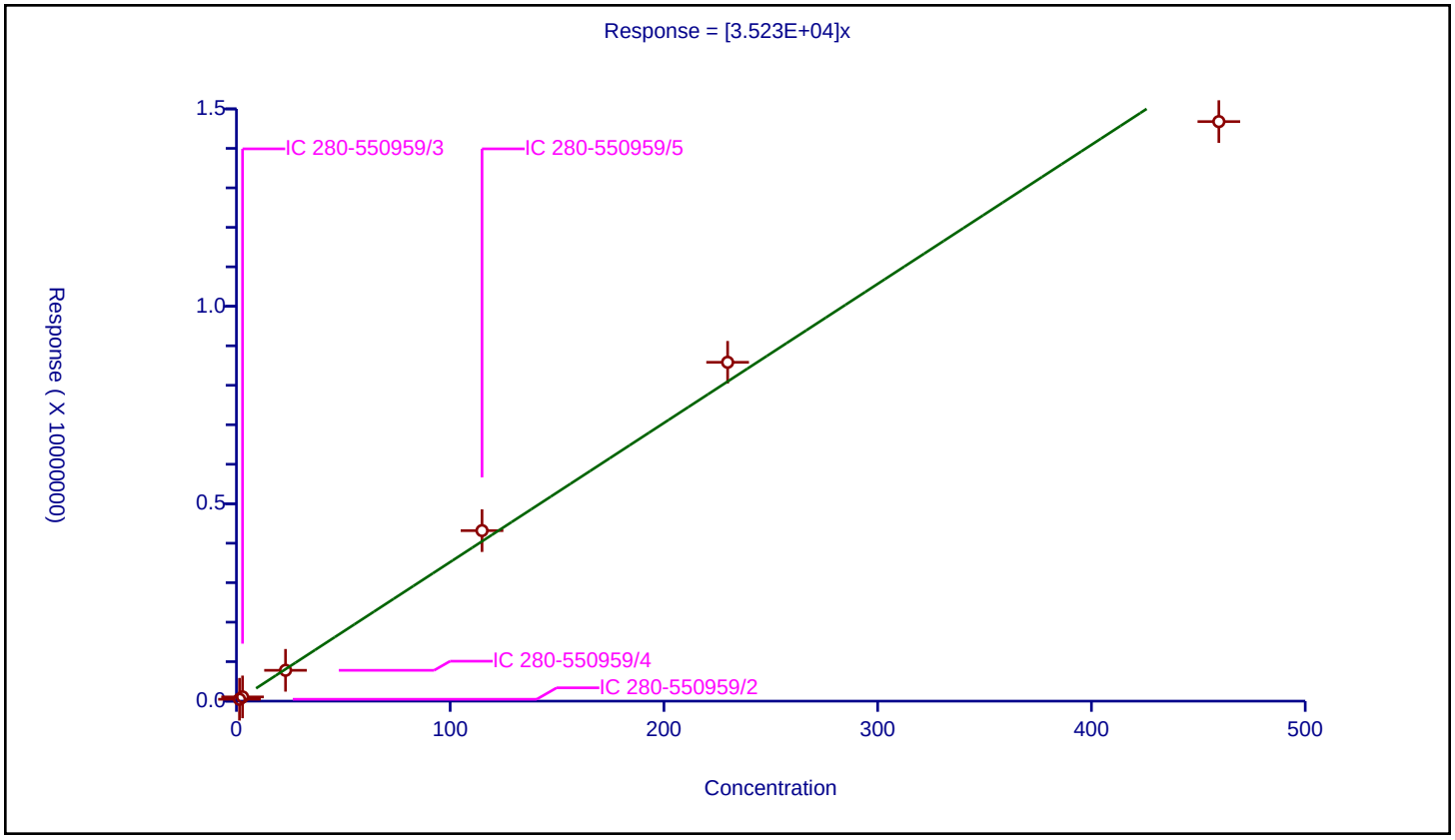
Curve Coefficients

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

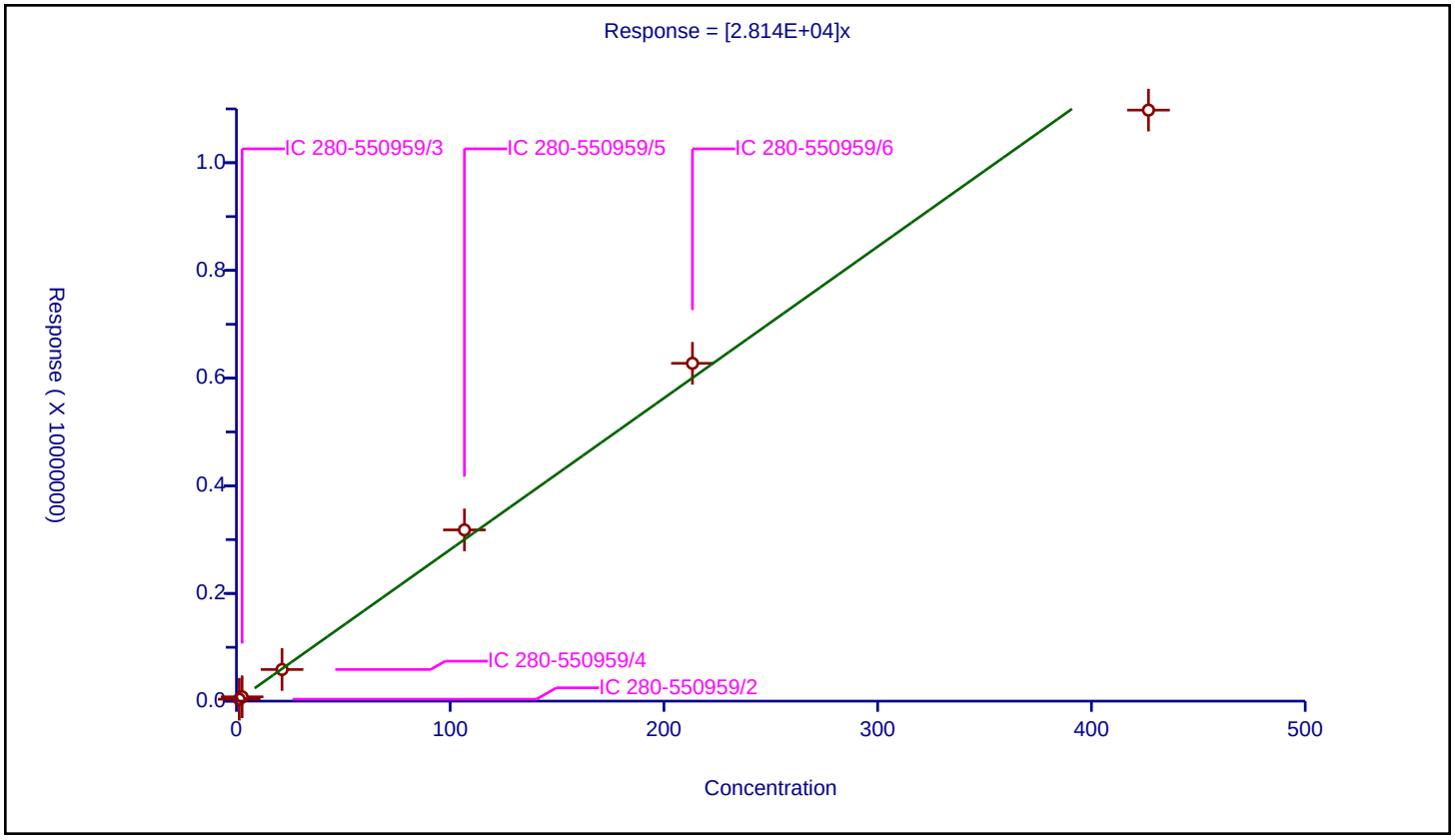
Curve Coefficients

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.: 280-159190-1 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.: 280-159190-1 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.: 280-159190-1 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

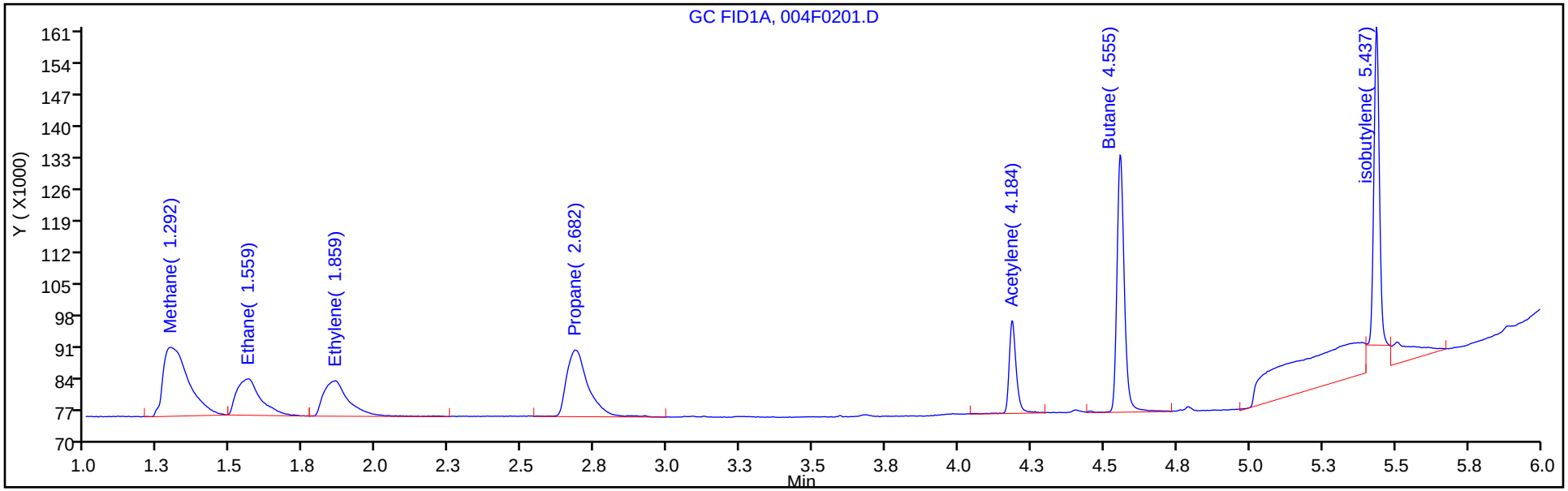
Report Date: 29-Sep-2021 10:55:12 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

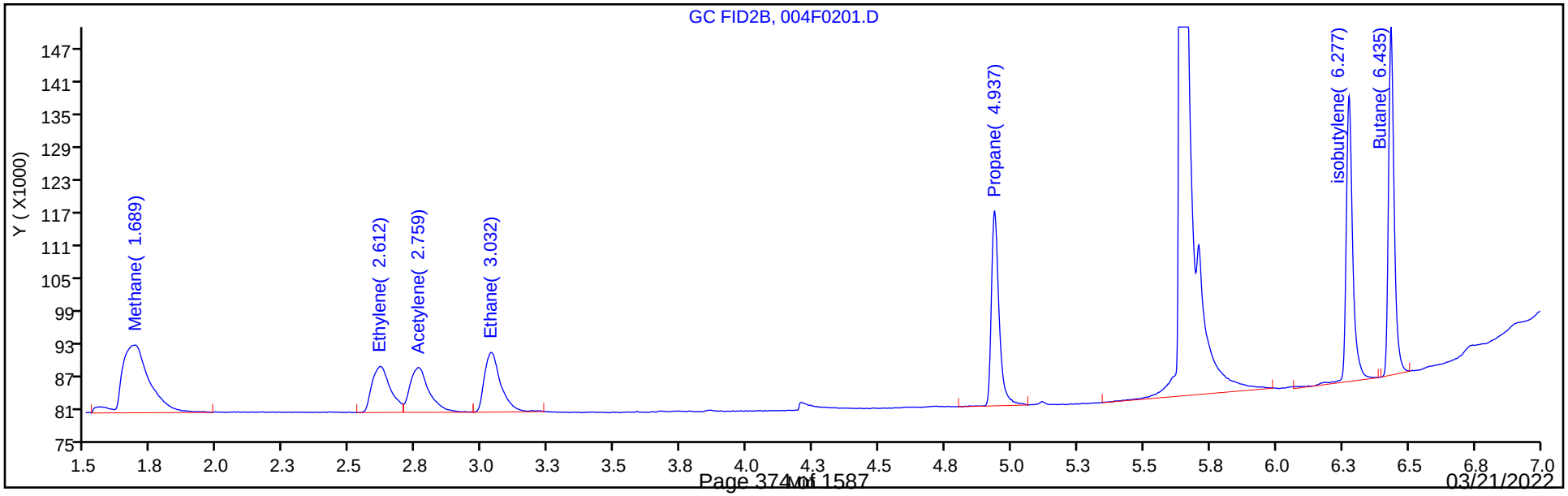
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D

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

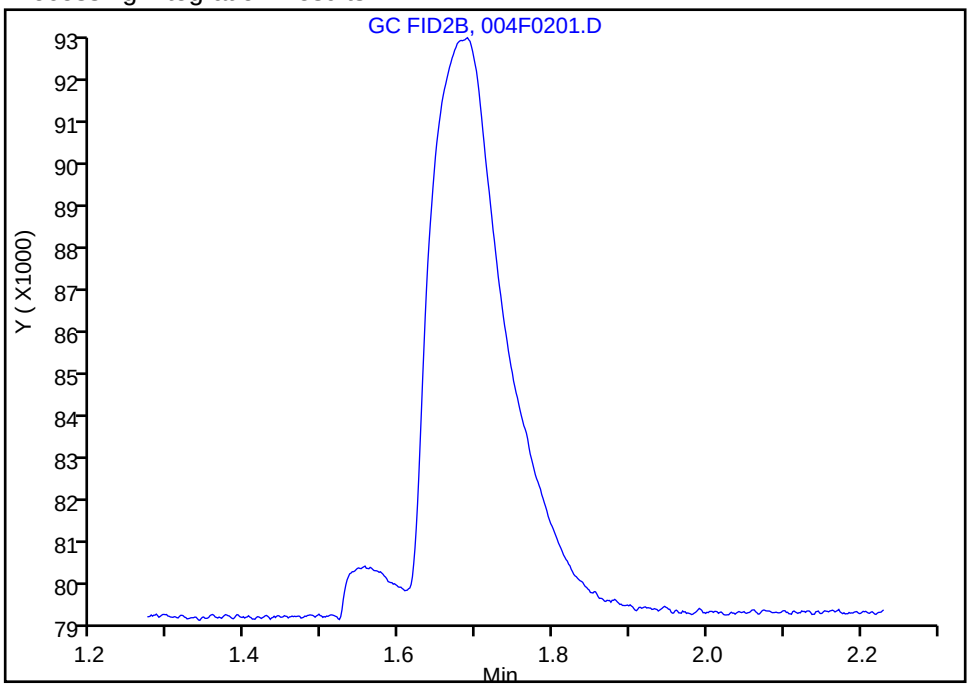
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

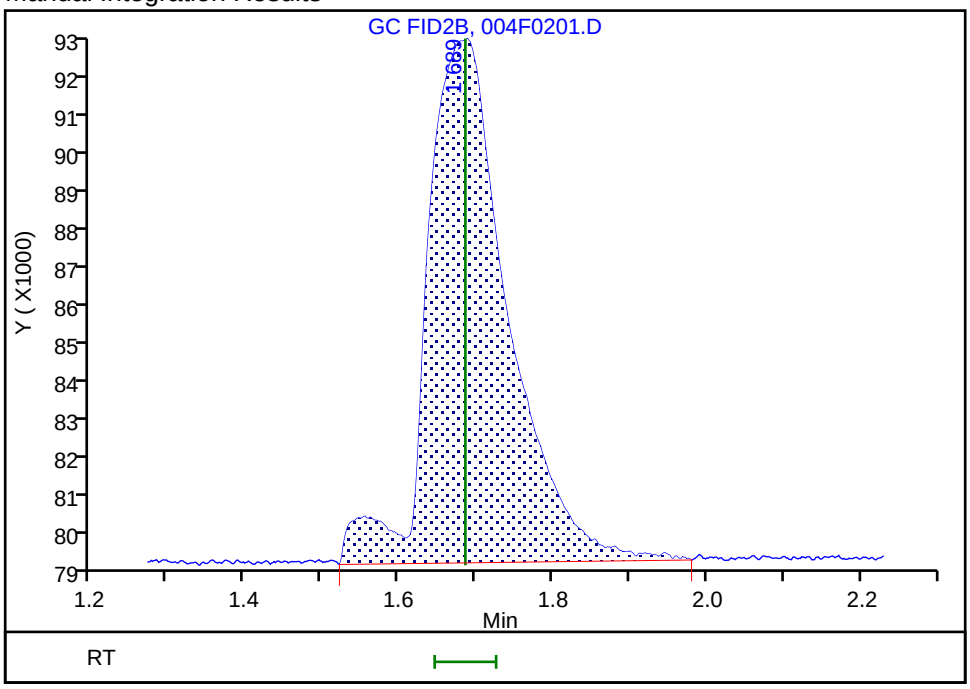
Not Detected
Expected RT: 1.69

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

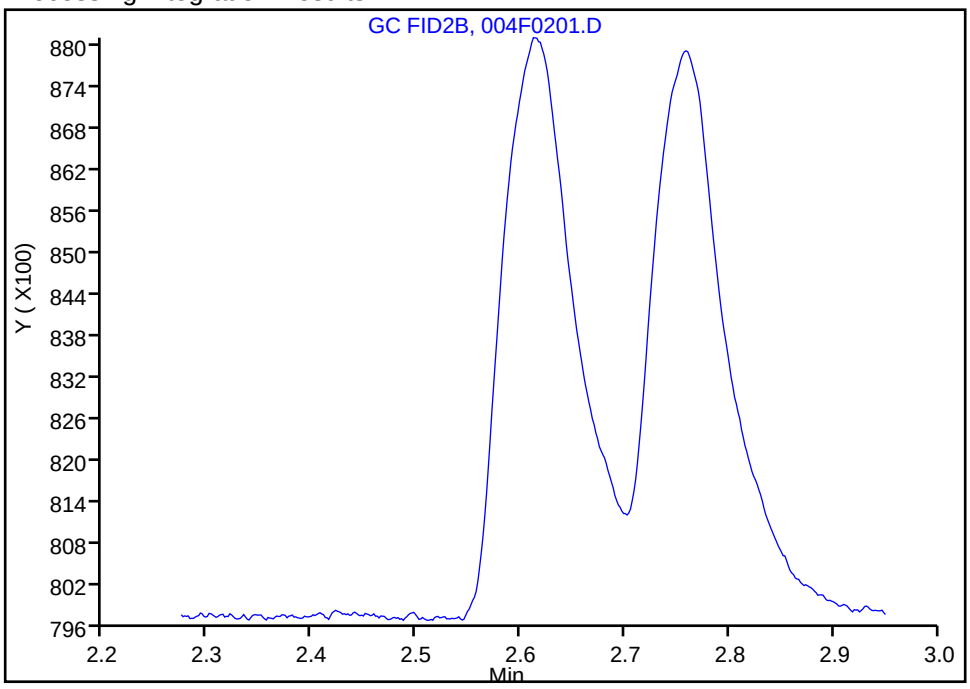
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

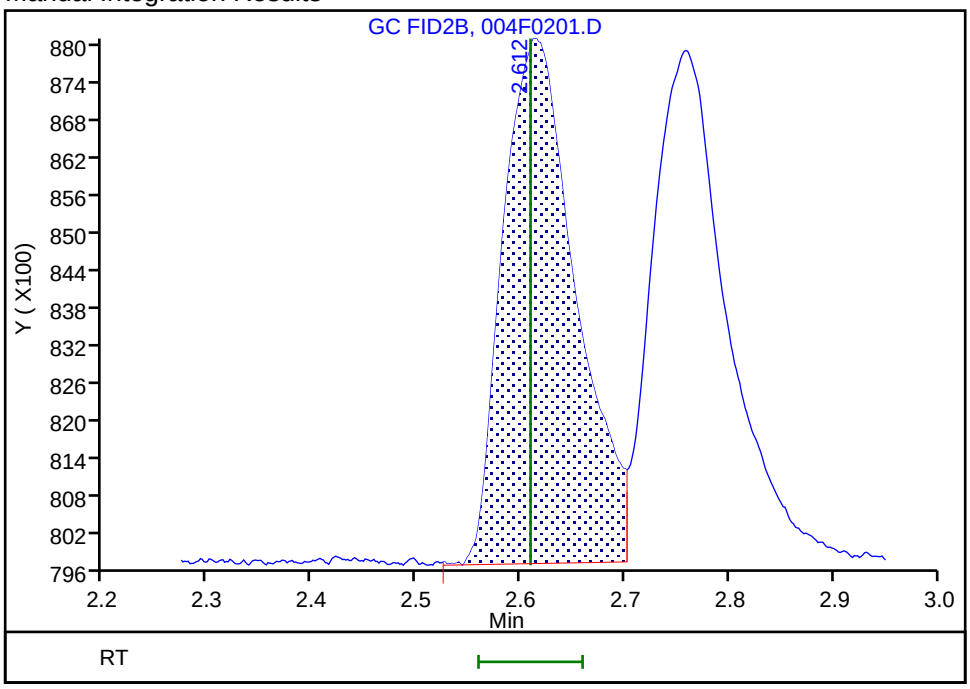
Not Detected
Expected RT: 2.61

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

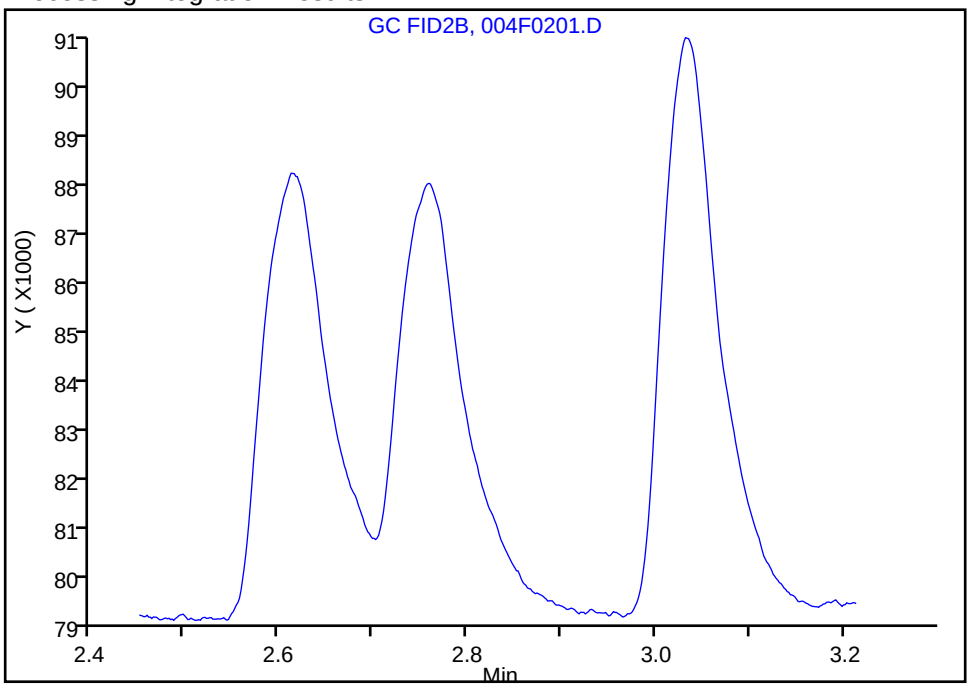
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

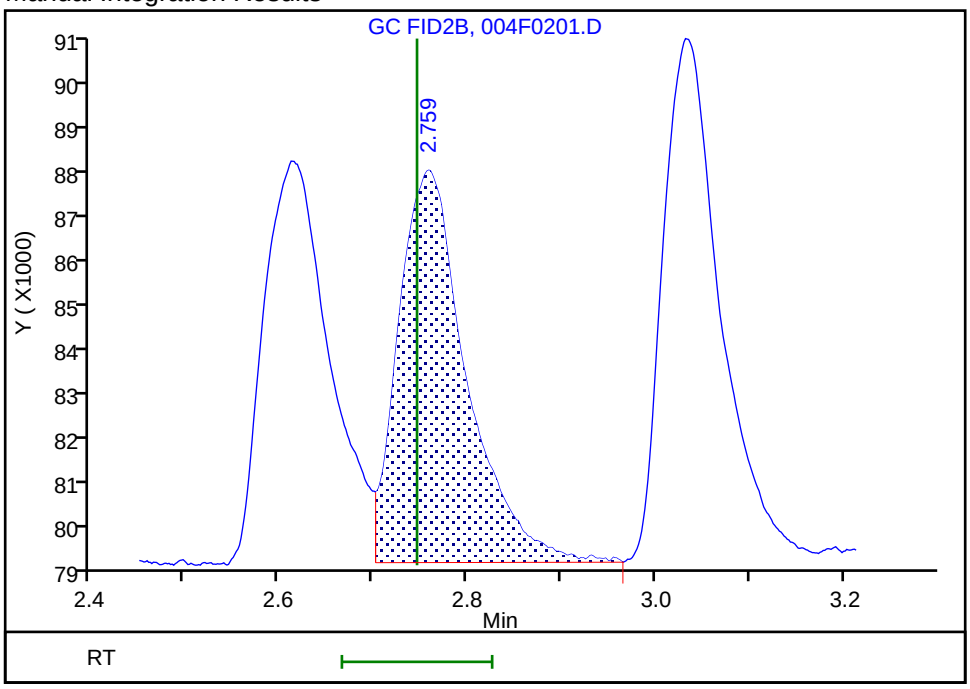
Not Detected
Expected RT: 2.75

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

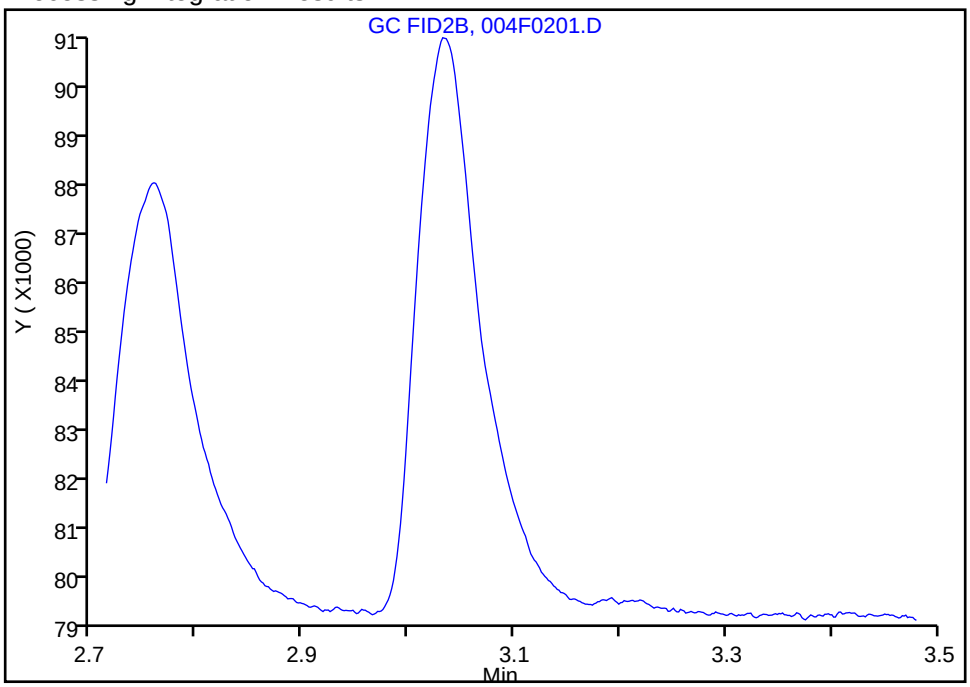
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

3 Ethane, CAS: 74-84-0

Signal: 2

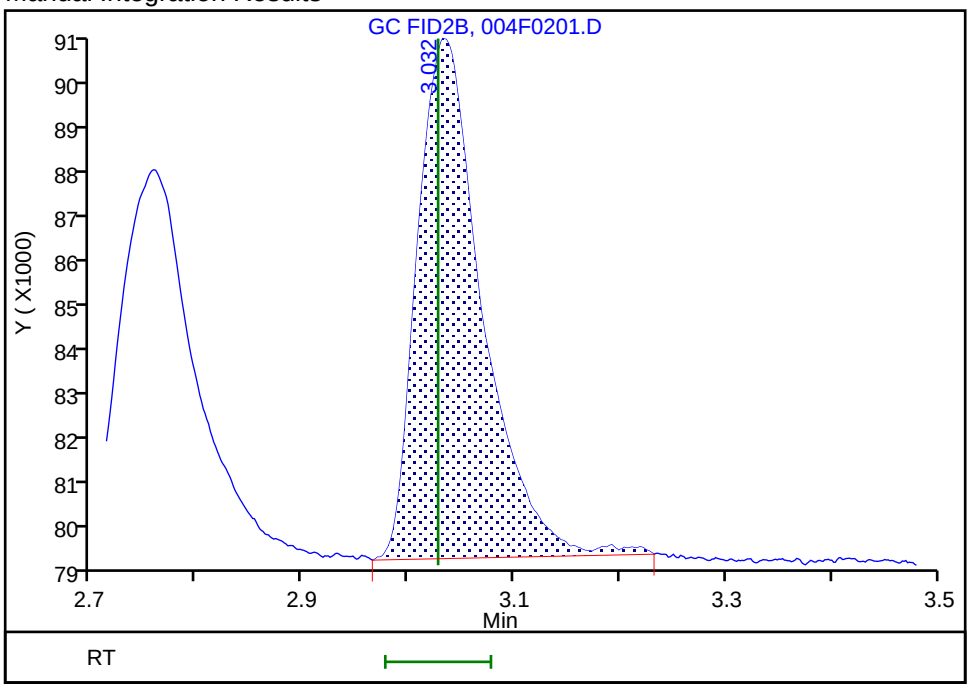
Not Detected
Expected RT: 3.03

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

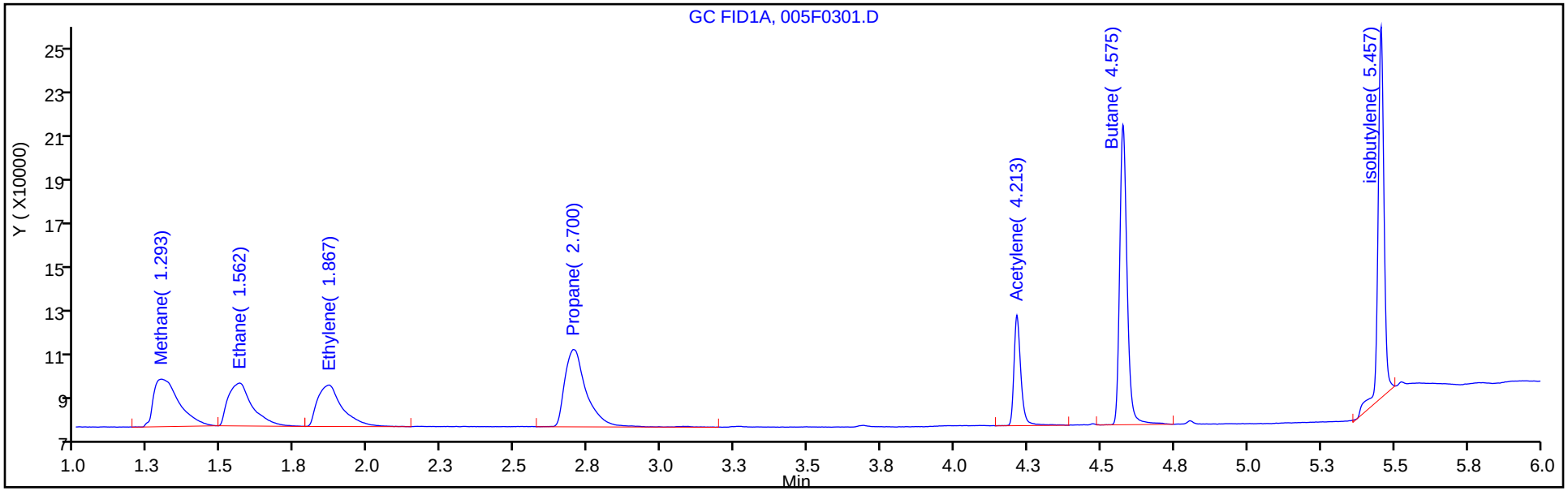
Report Date: 29-Sep-2021 10:55:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

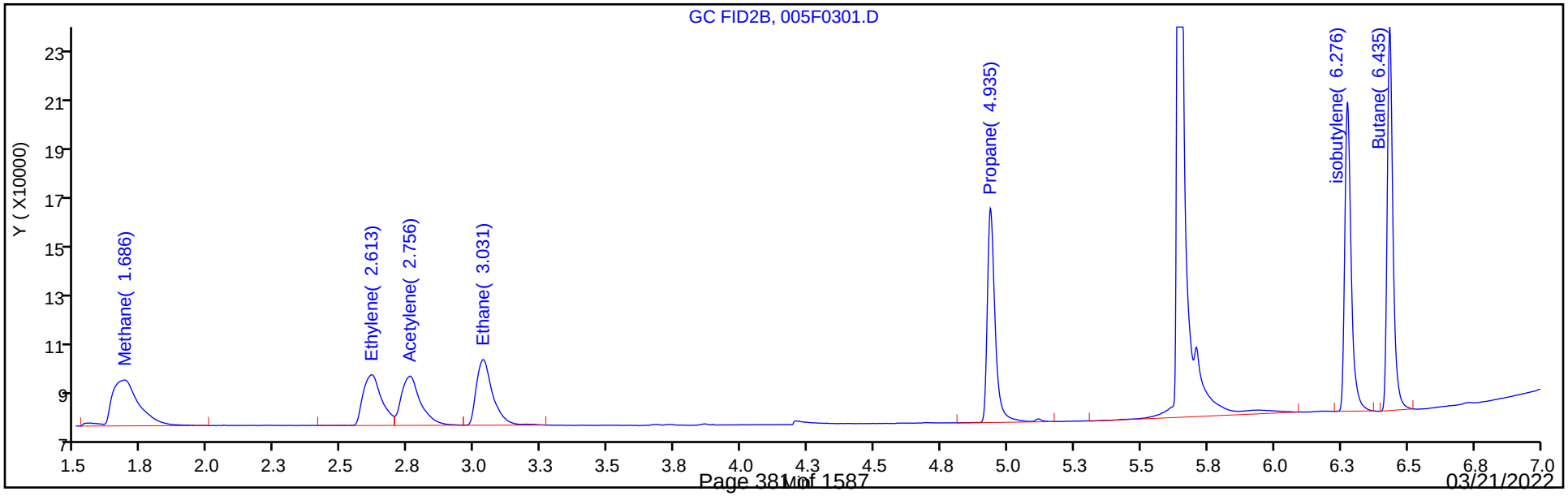
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\005F0301.D

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

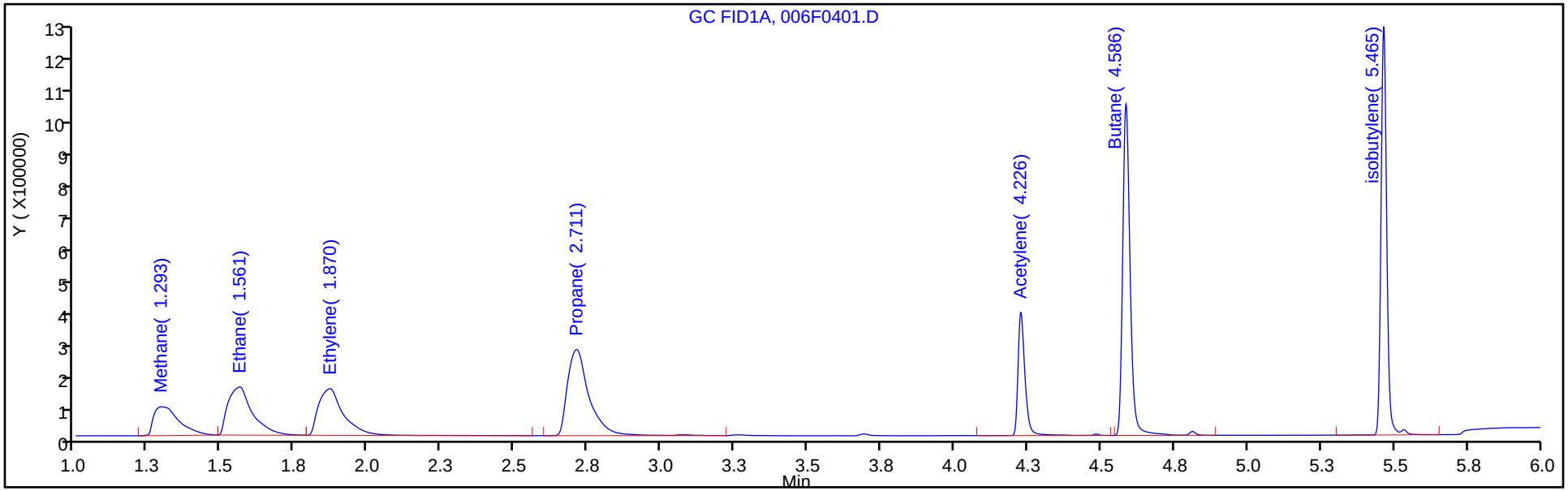
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

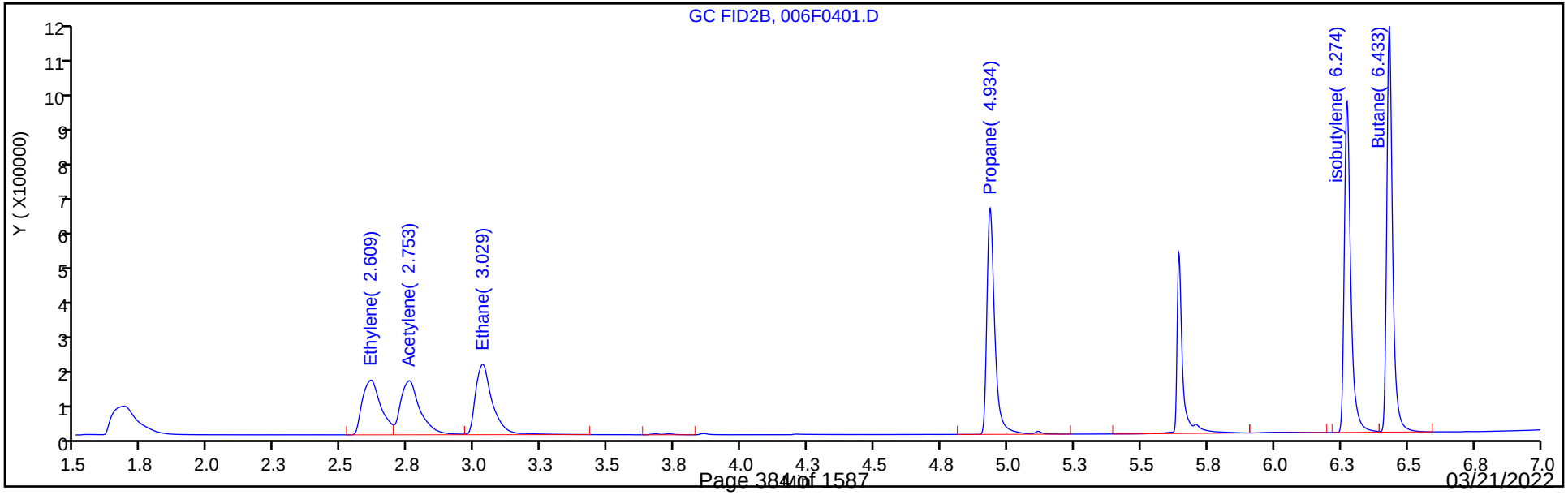
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D

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

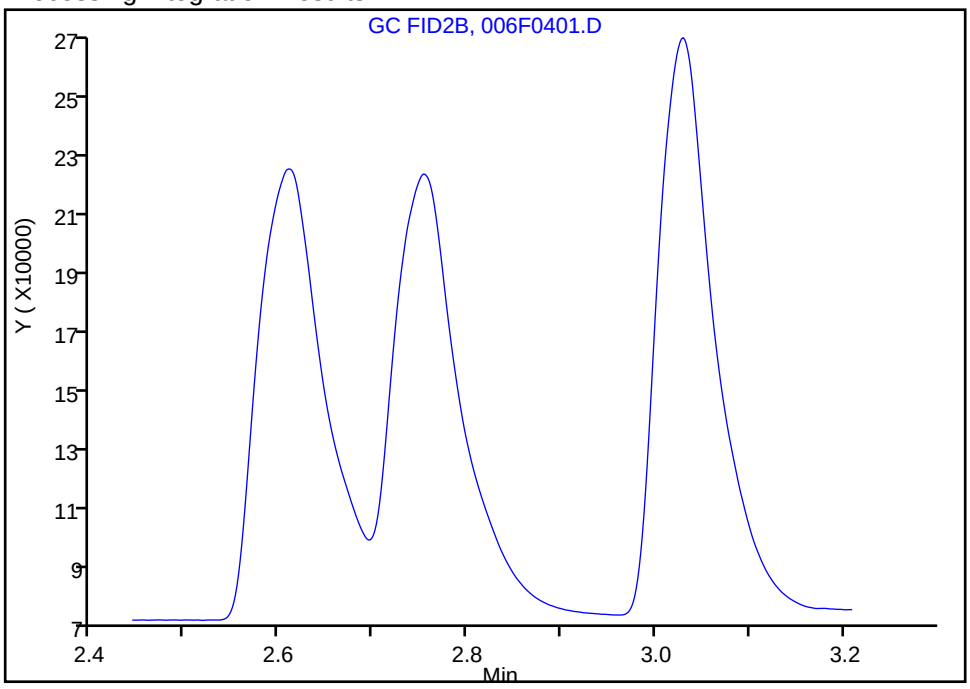
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D
Injection Date: 24-Sep-2021 13:54:46 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 6 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

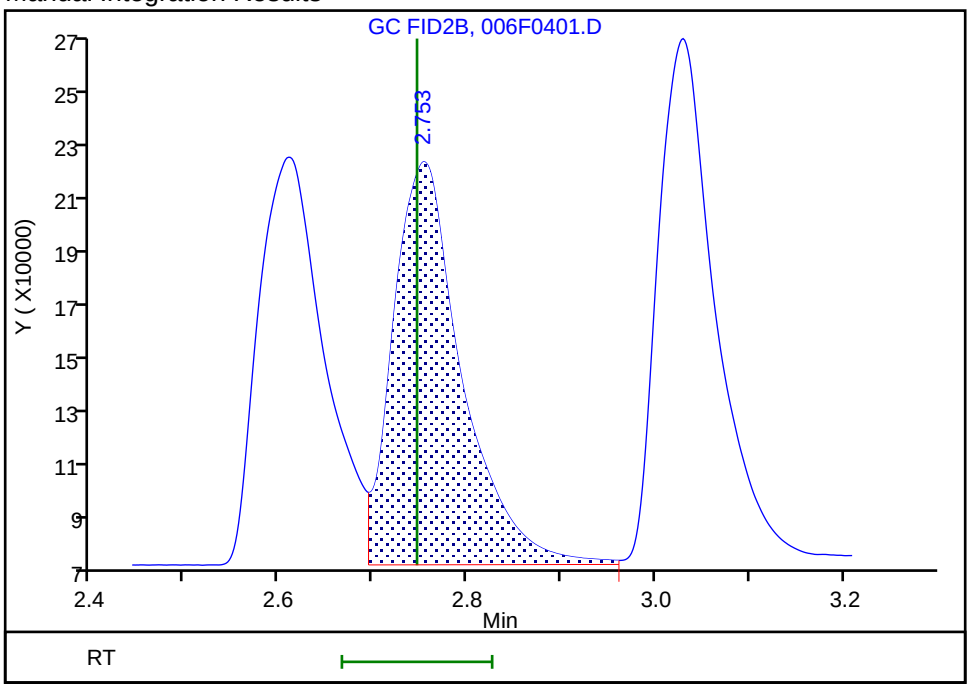
Not Detected
Expected RT: 2.75

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

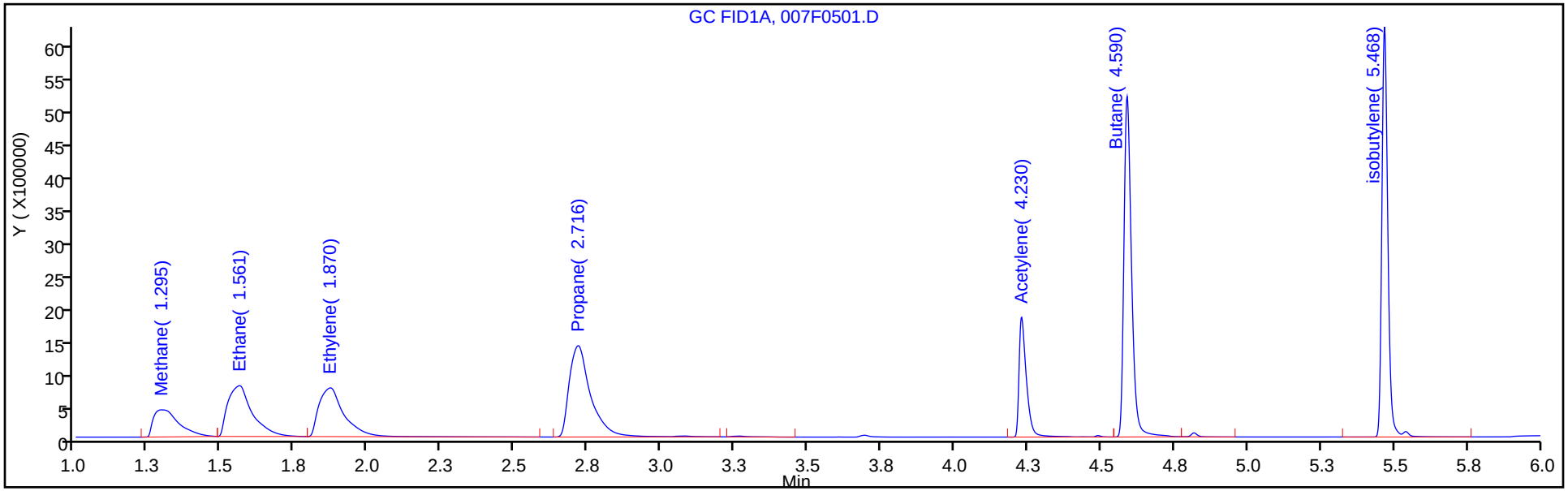
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

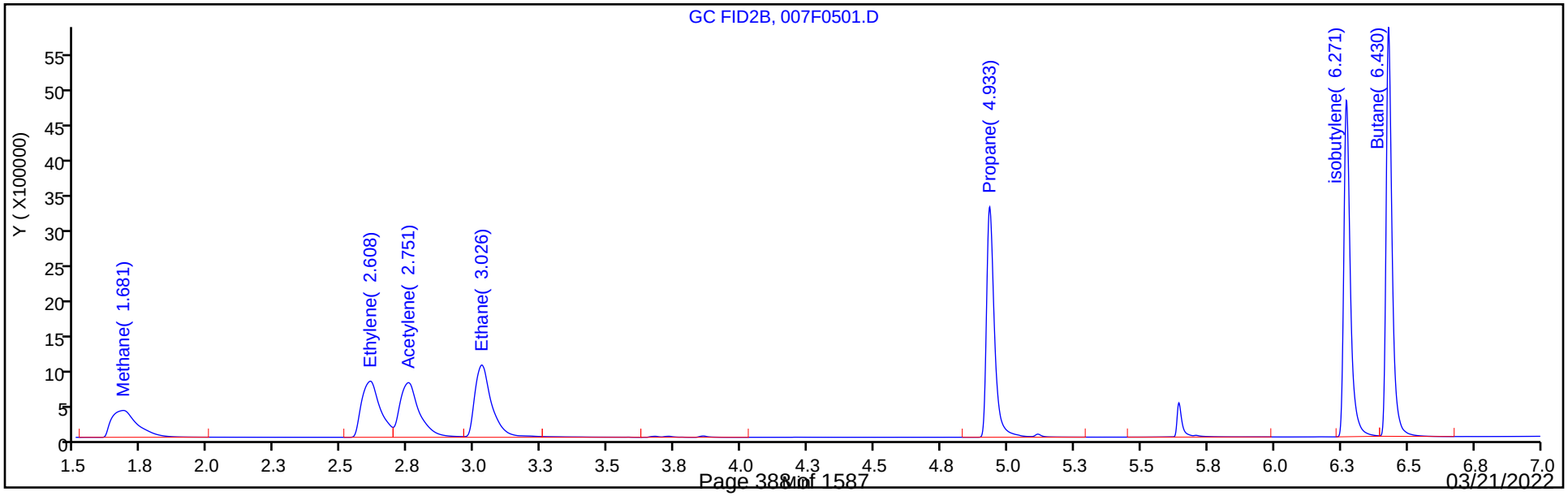
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D

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

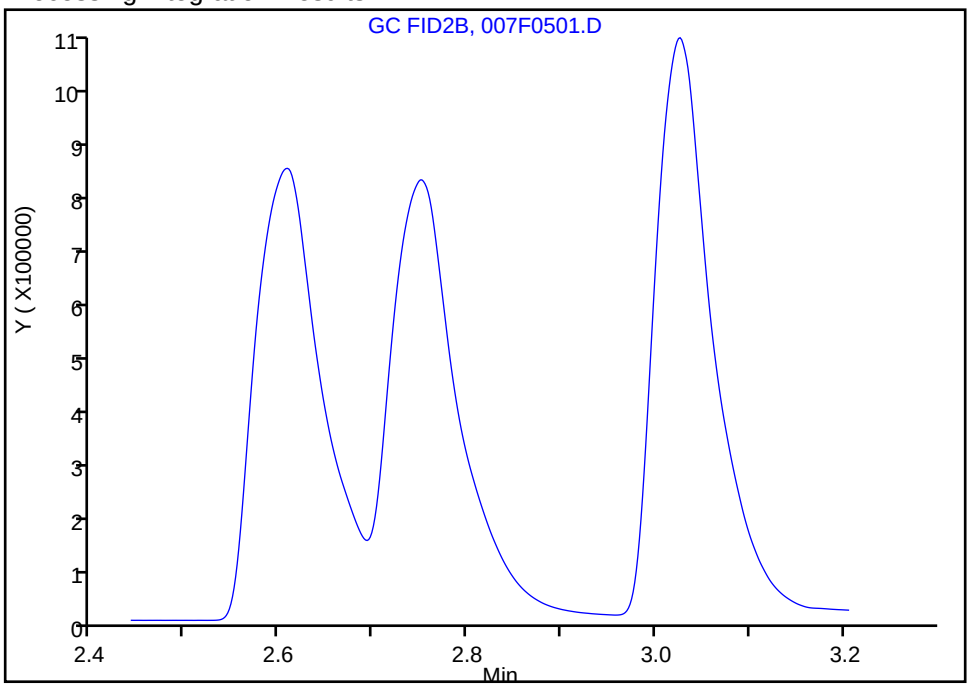
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

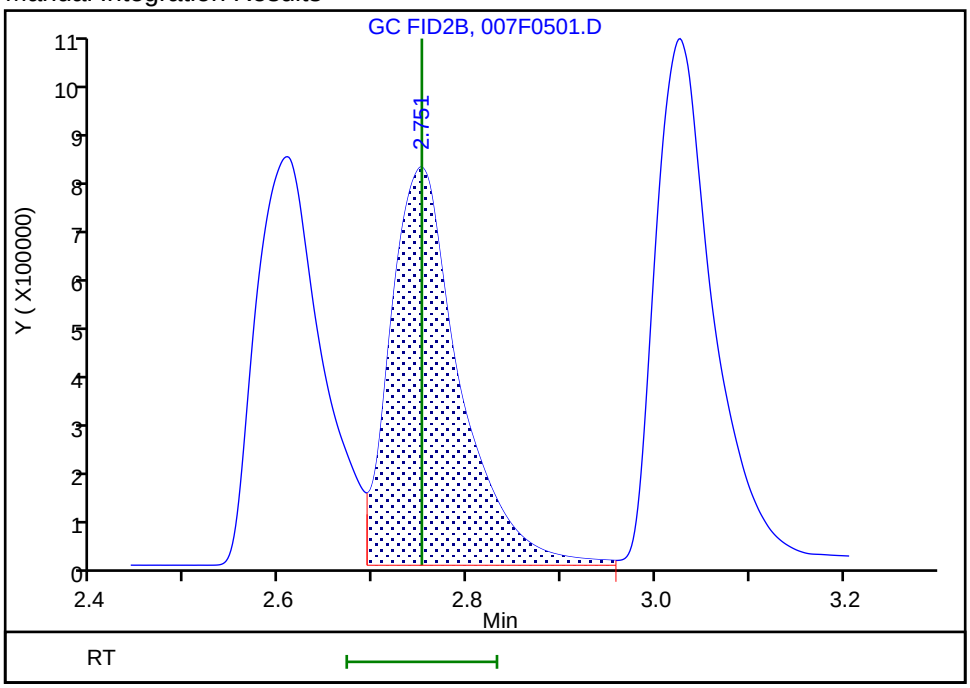
Not Detected
Expected RT: 2.75

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

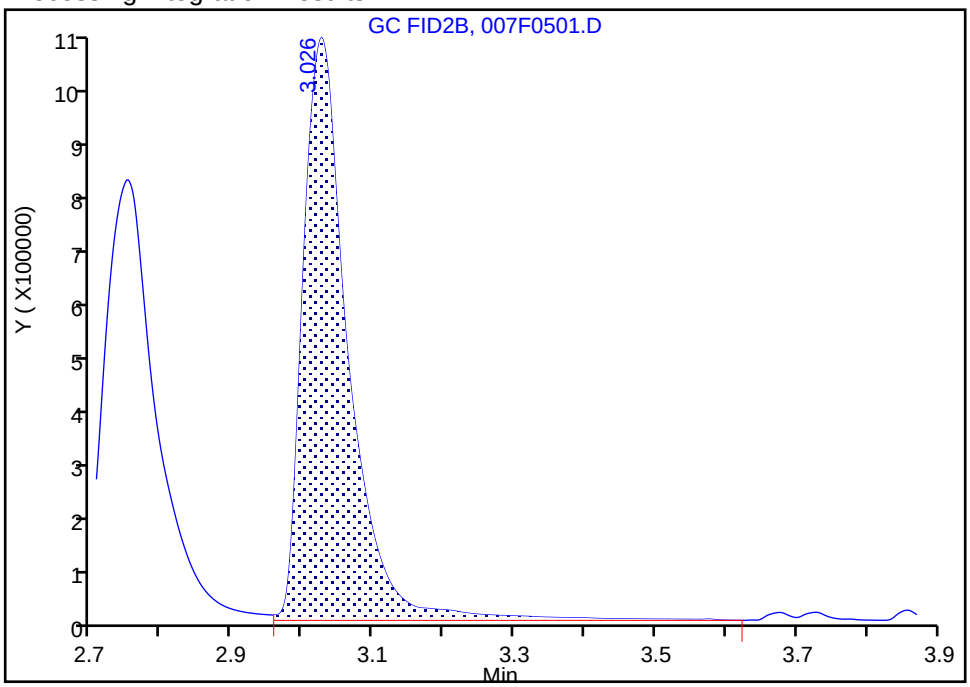
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

3 Ethane, CAS: 74-84-0

Signal: 2

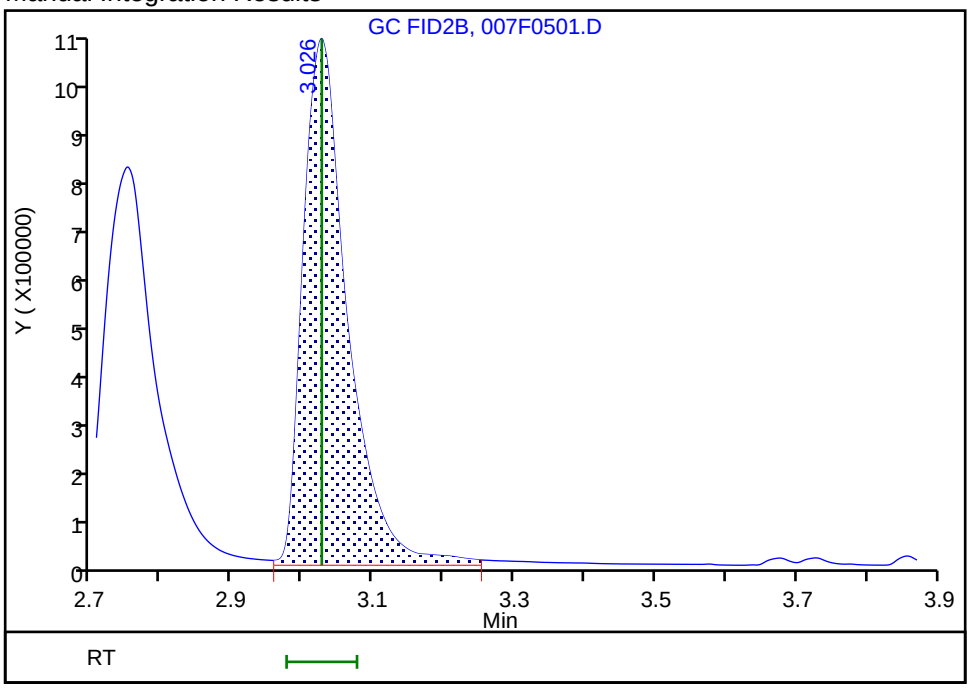
Processing Integration Results

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

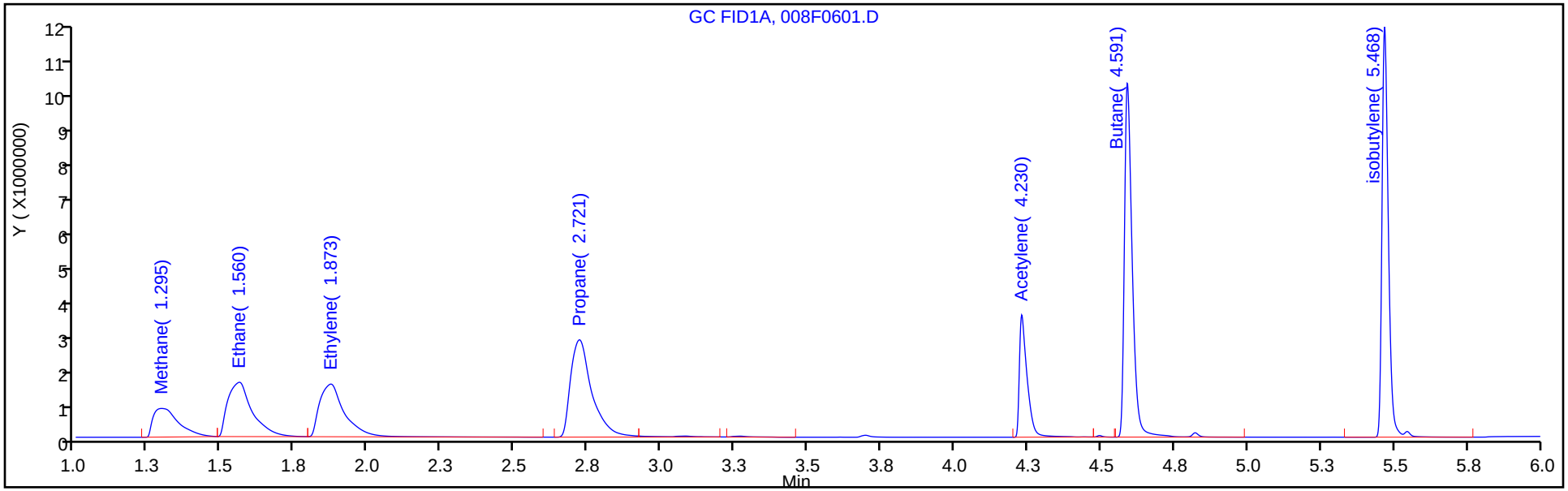
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

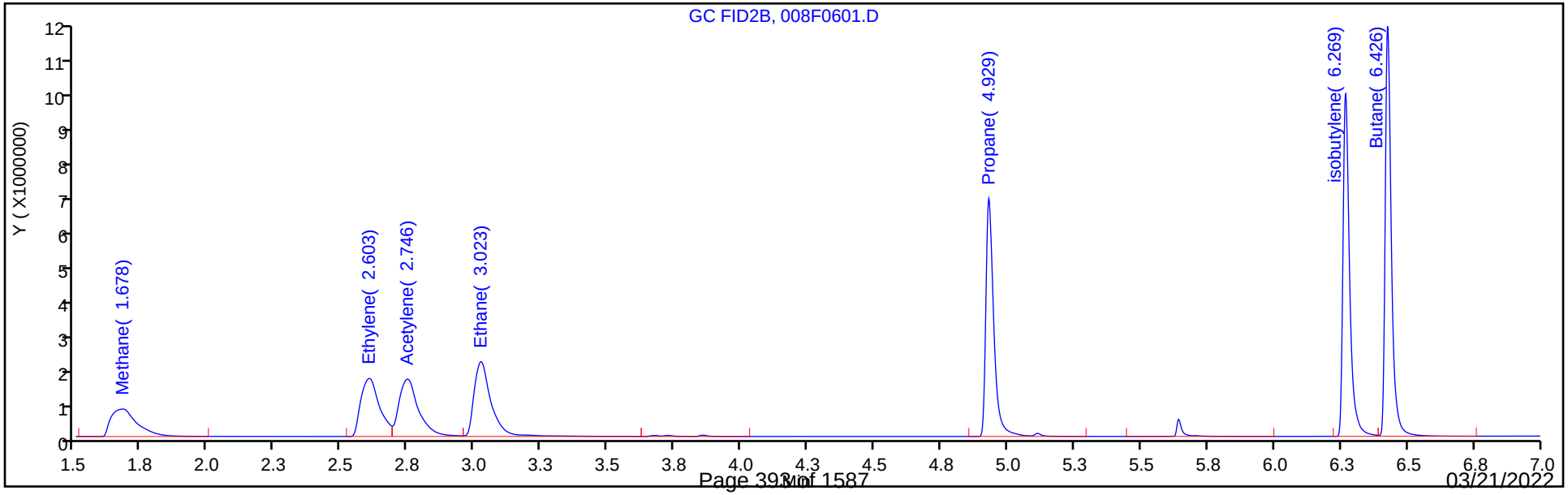
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D

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

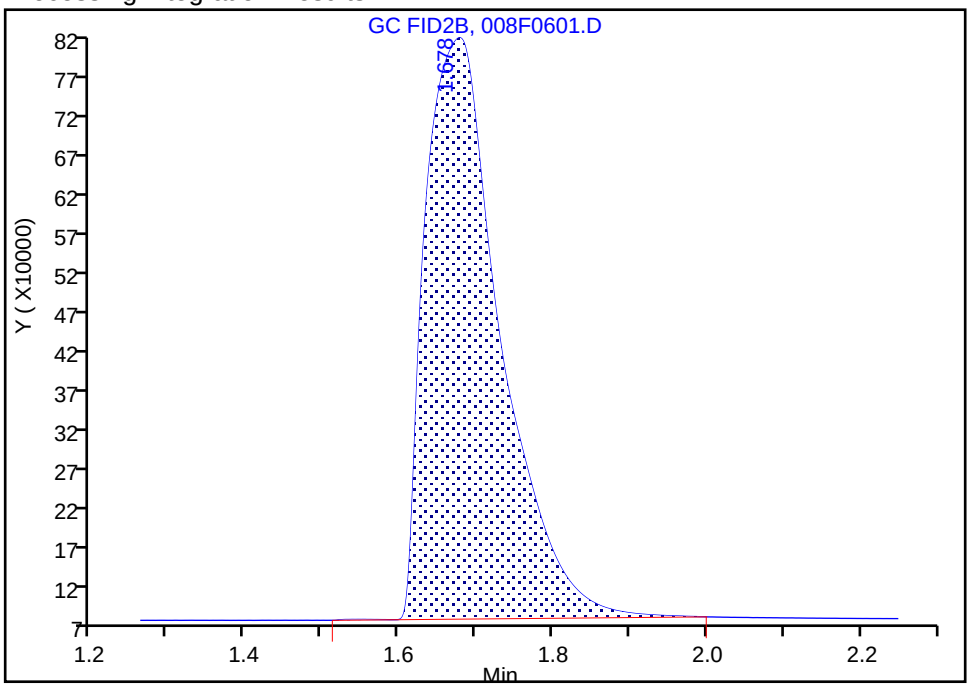
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Injection Date: 24-Sep-2021 14:20:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

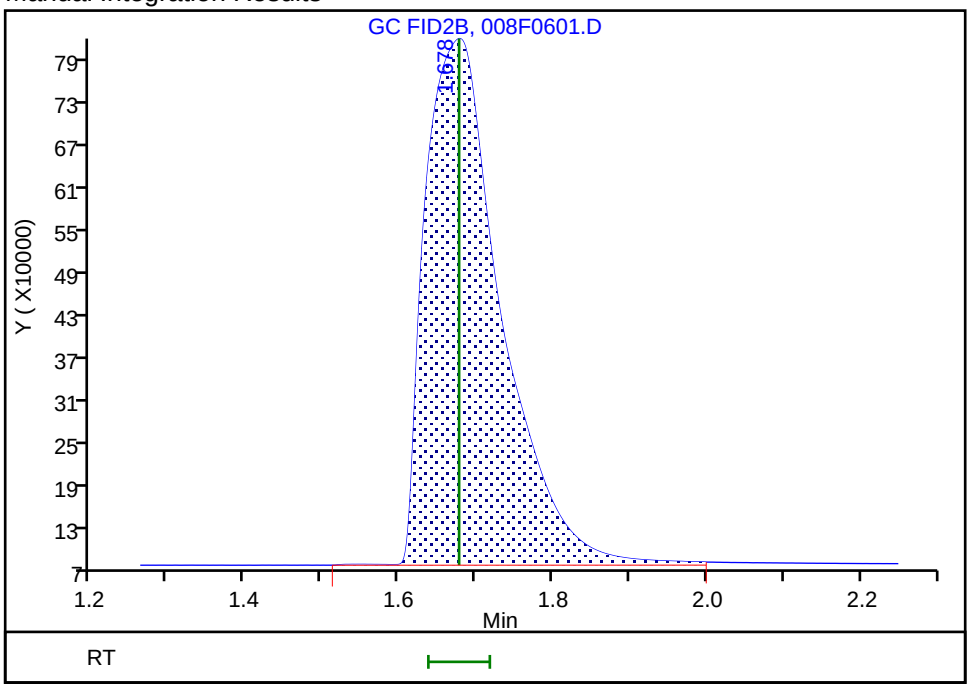
Processing Integration Results

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

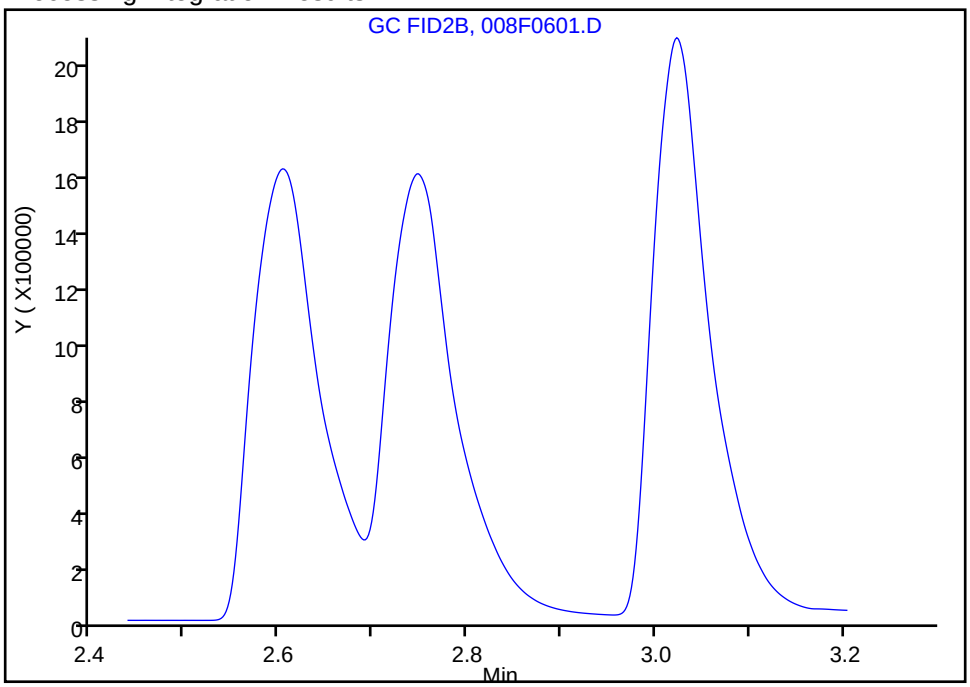
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Injection Date: 24-Sep-2021 14:20:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

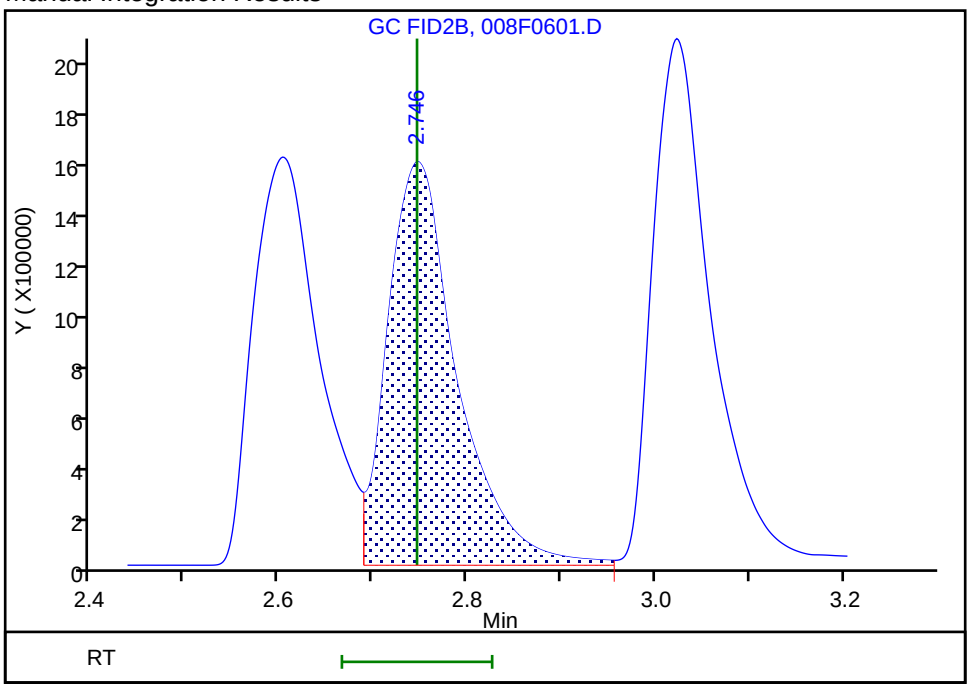
Not Detected
Expected RT: 2.75

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

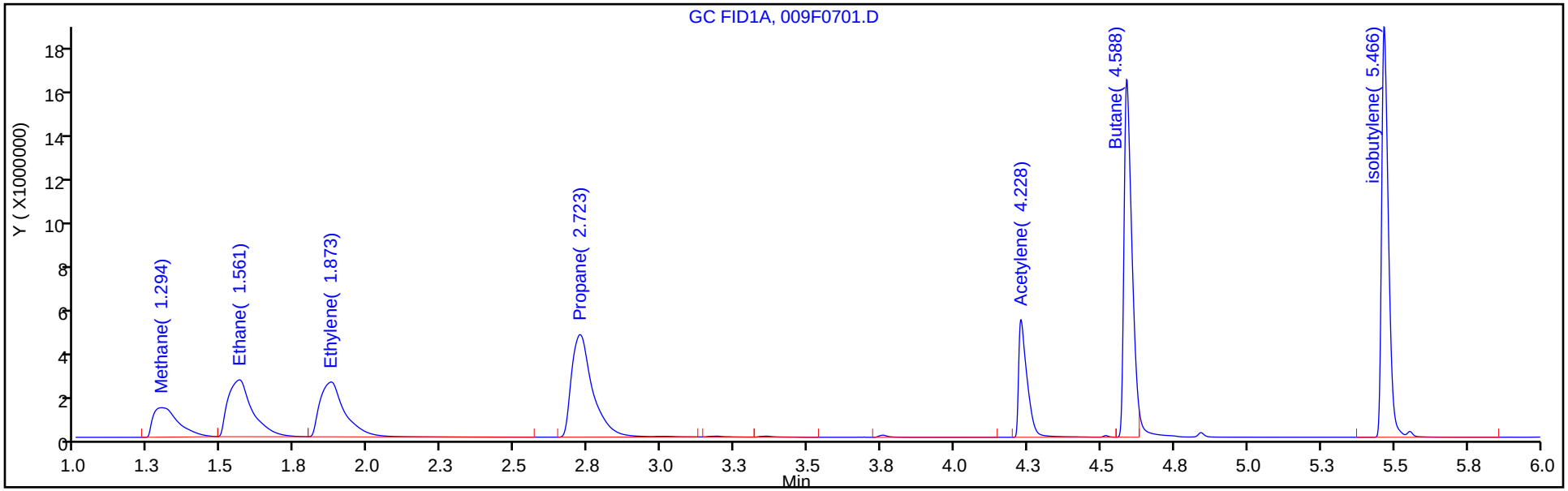
Report Date: 29-Sep-2021 10:55:16 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

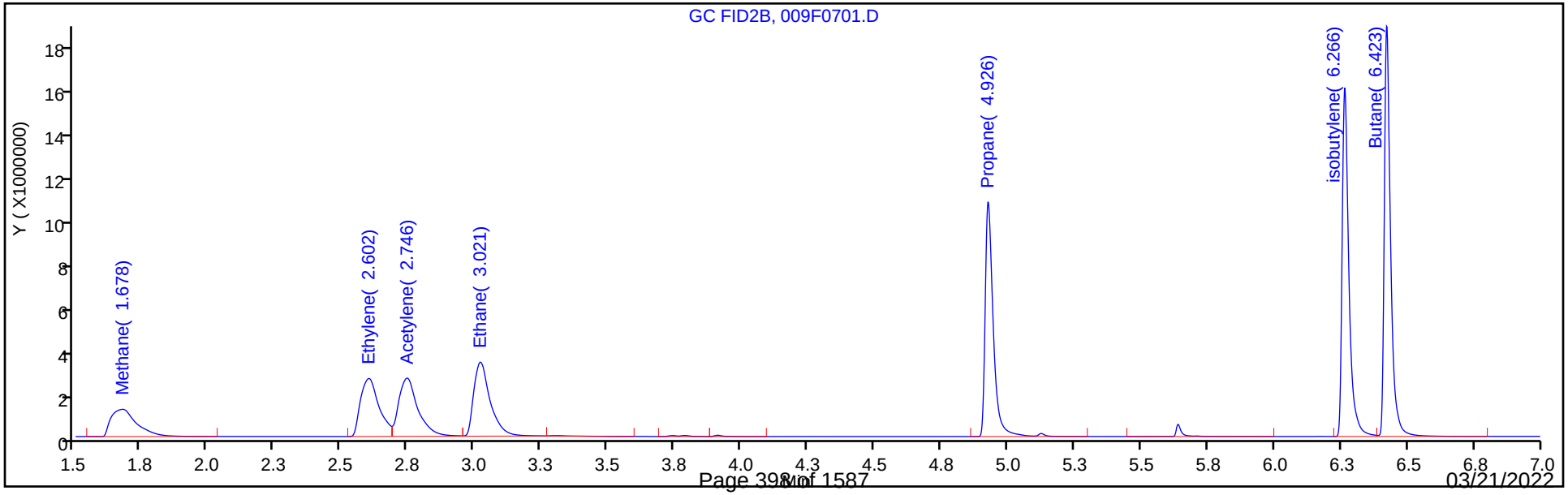
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D

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

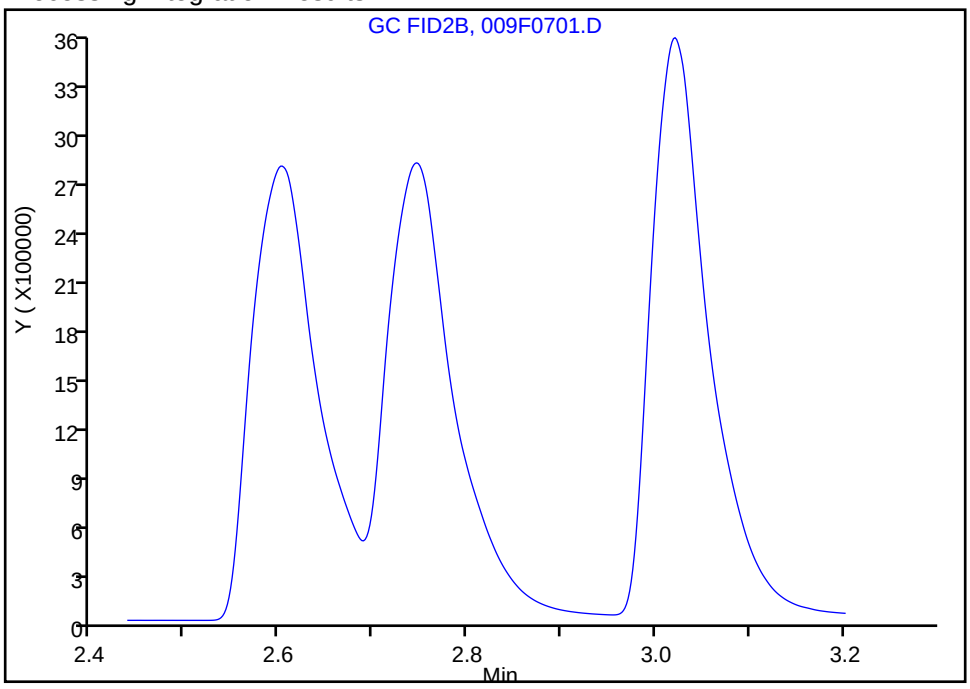
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D
Injection Date: 24-Sep-2021 14:33:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 9 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

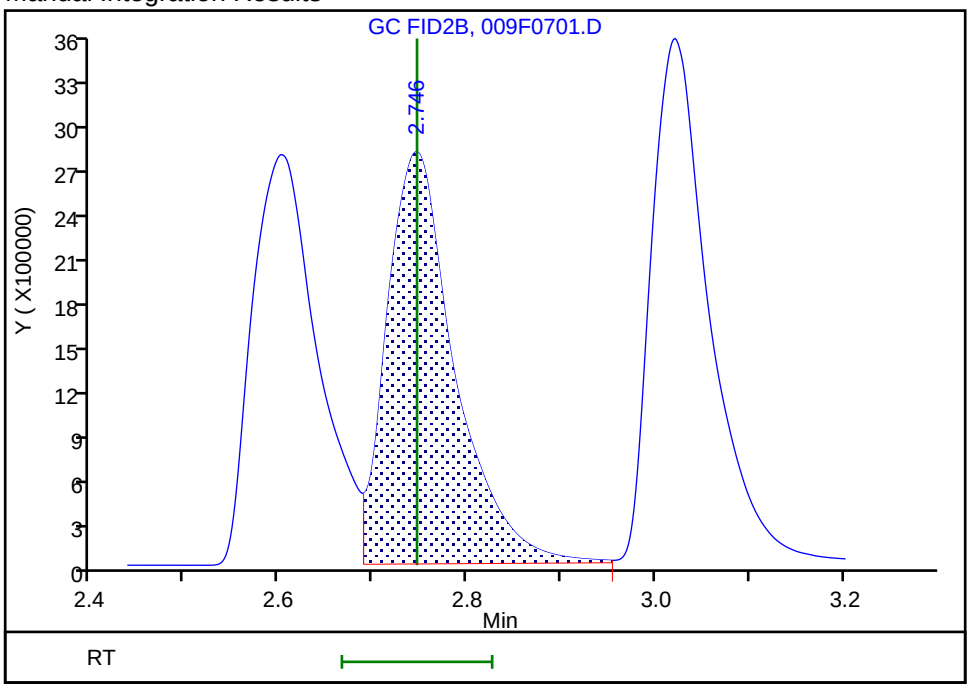
Not Detected
Expected RT: 2.75

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

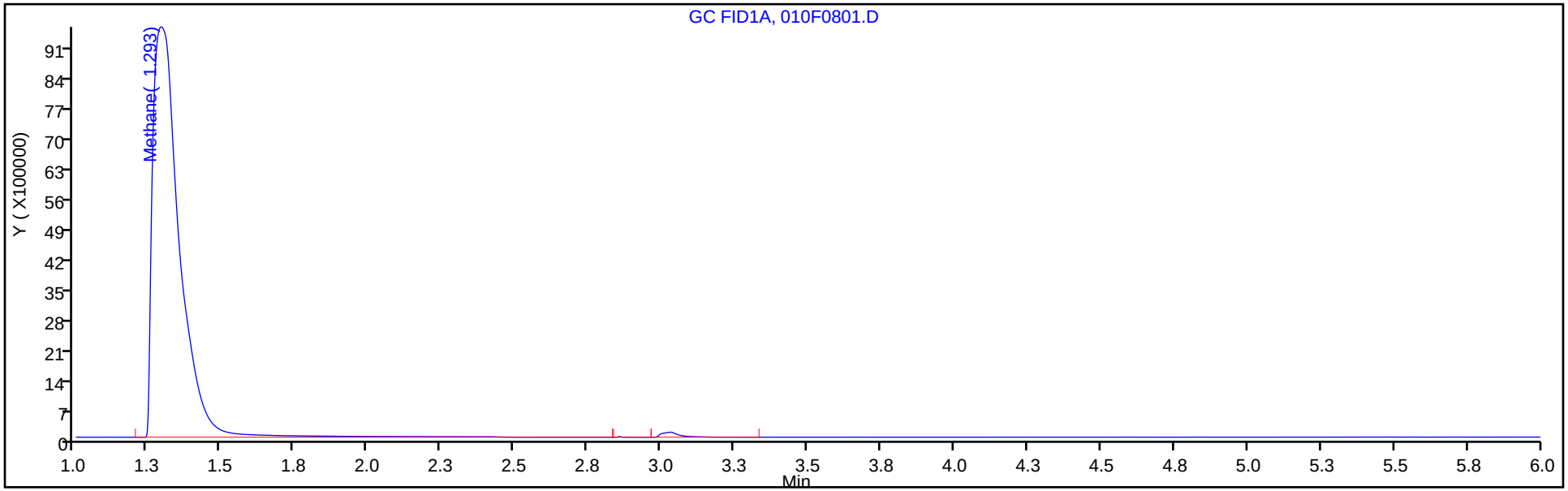
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

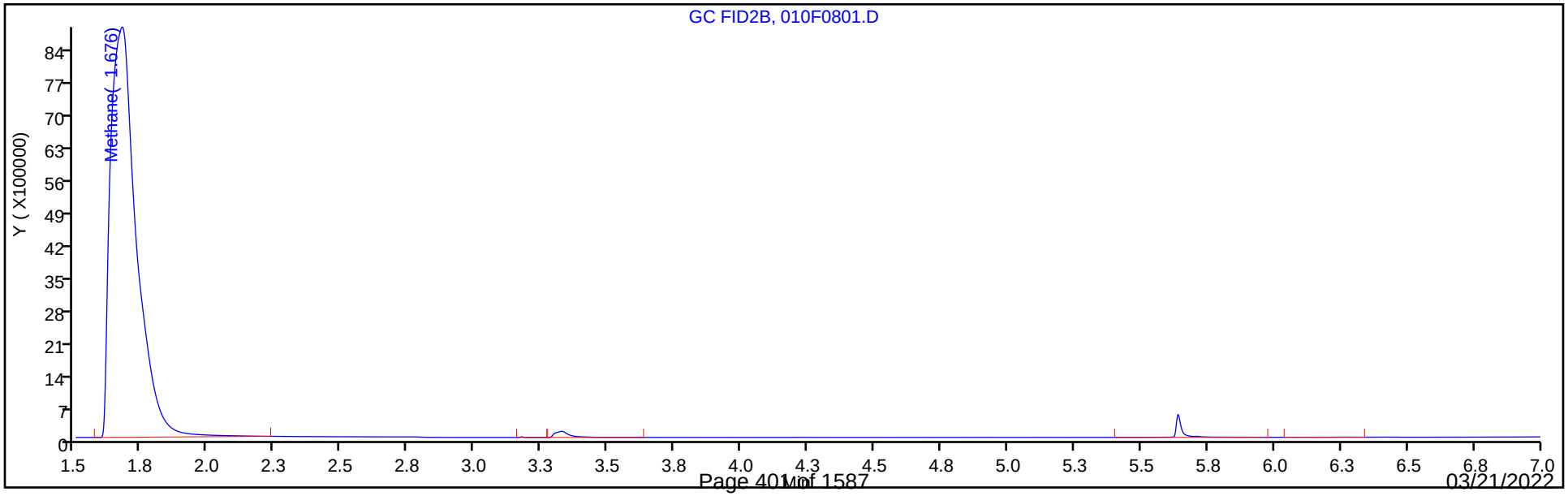
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\010F0801.D

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

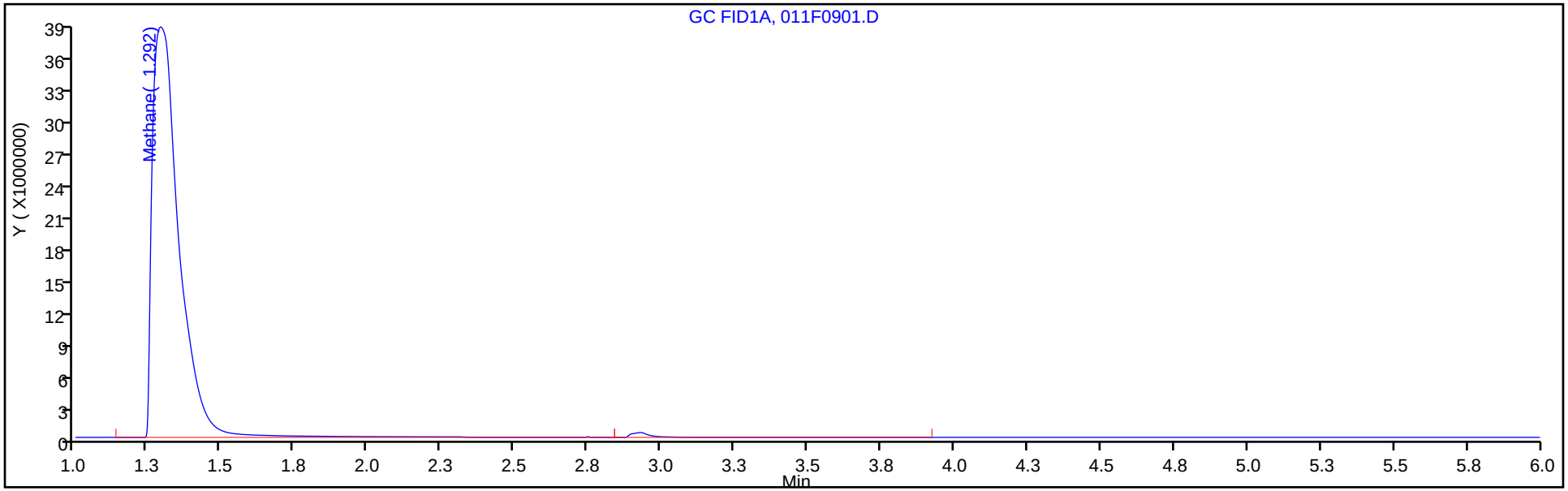
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

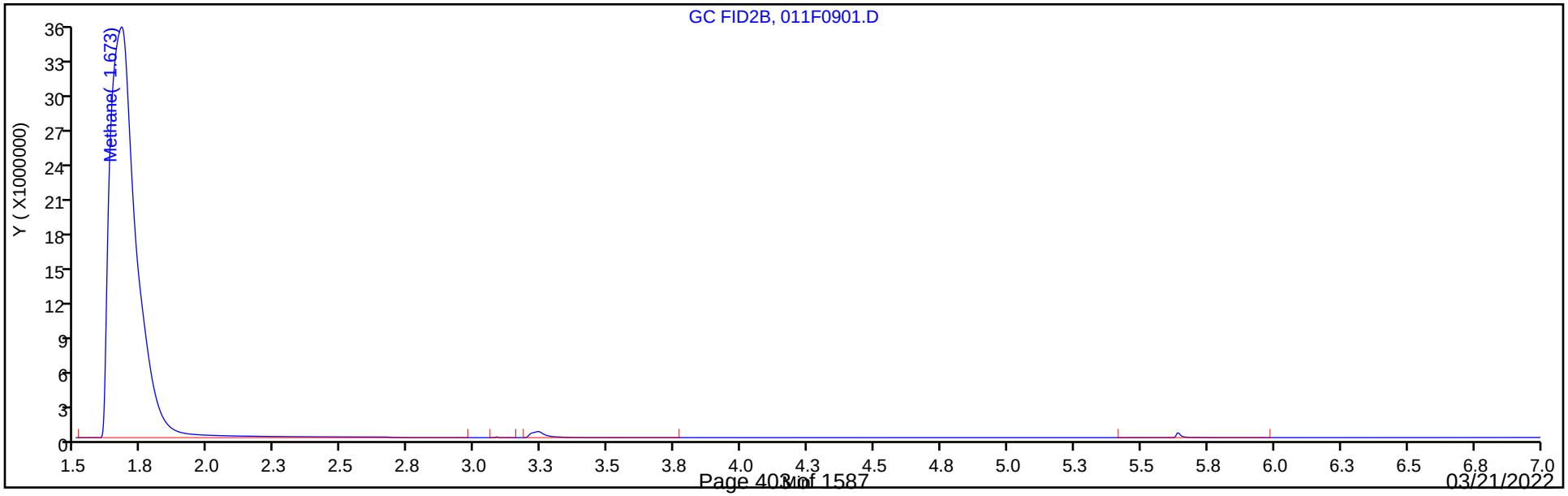
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\011F0901.D

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

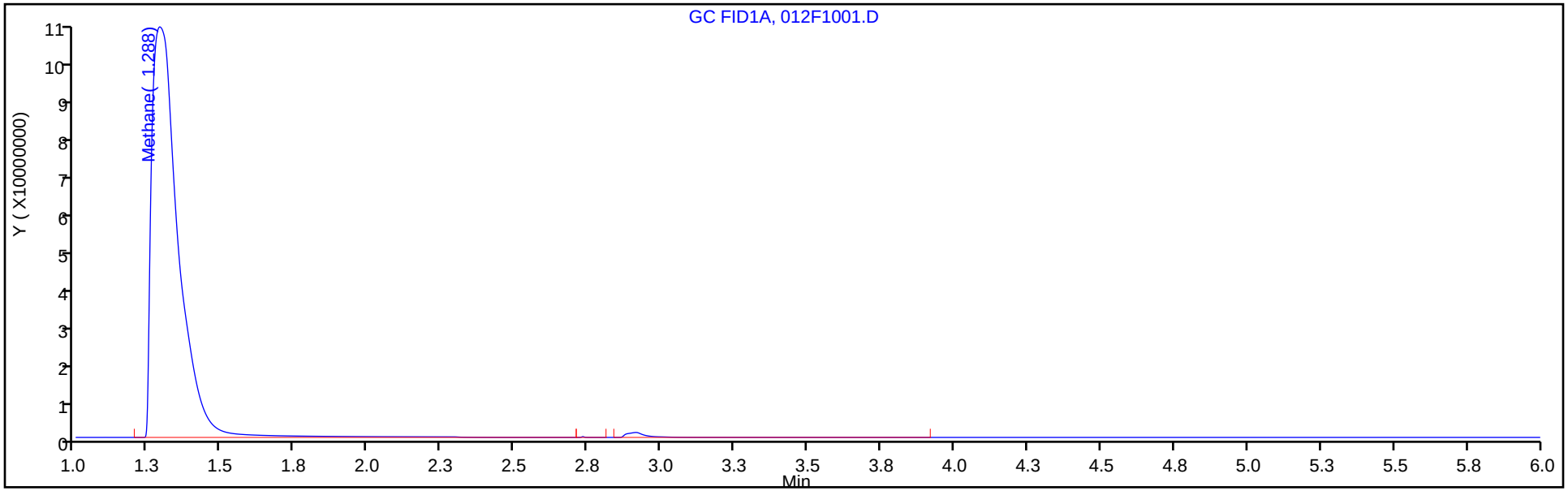
Report Date: 29-Sep-2021 10:55:18 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

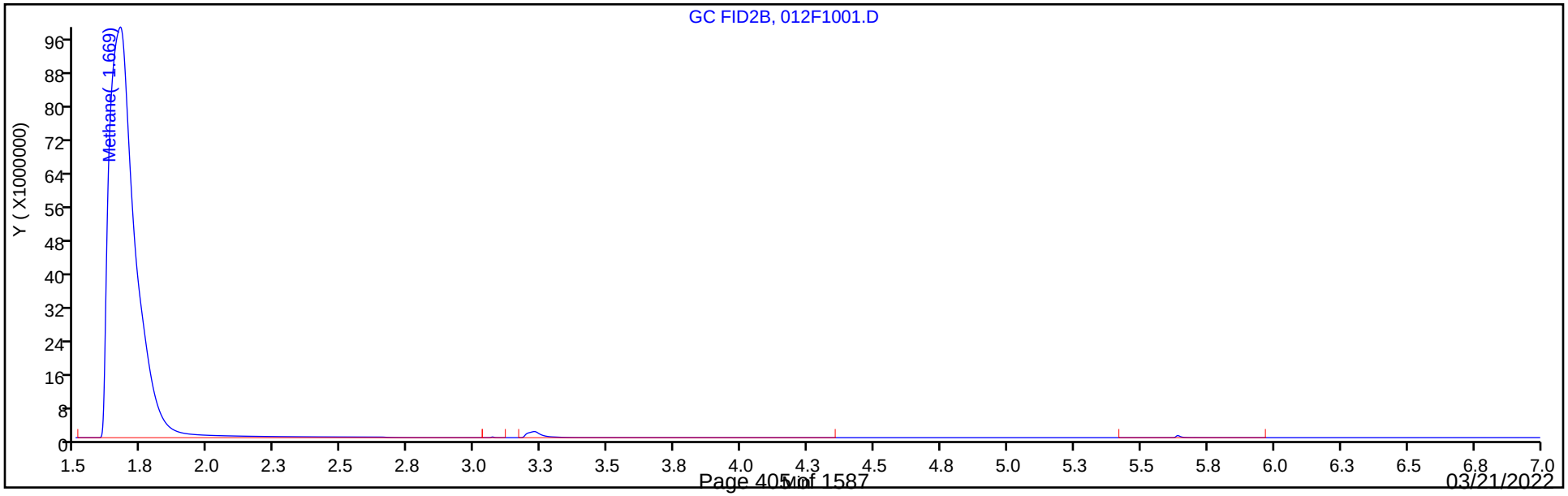
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

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

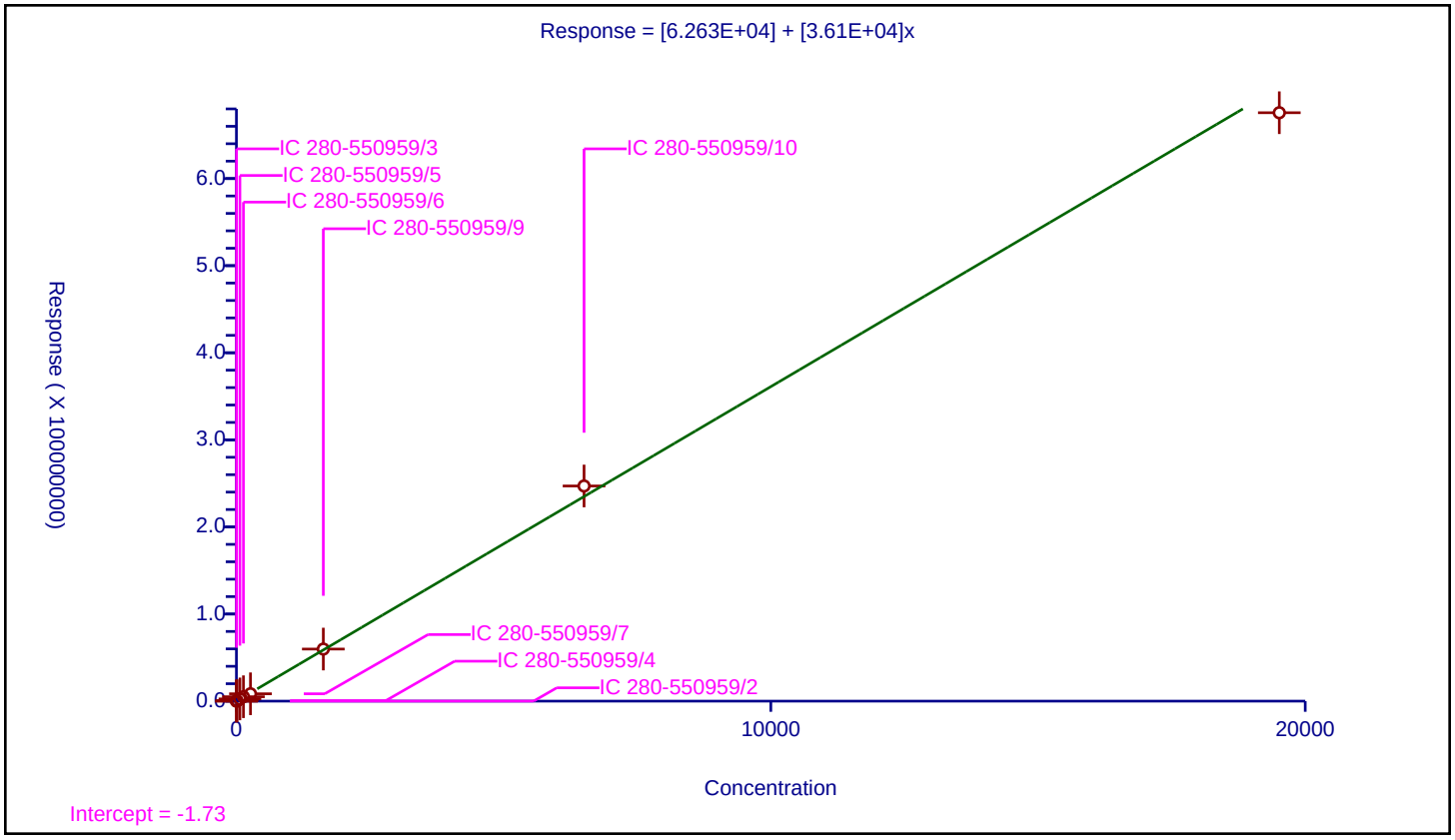
Curve Coefficients

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

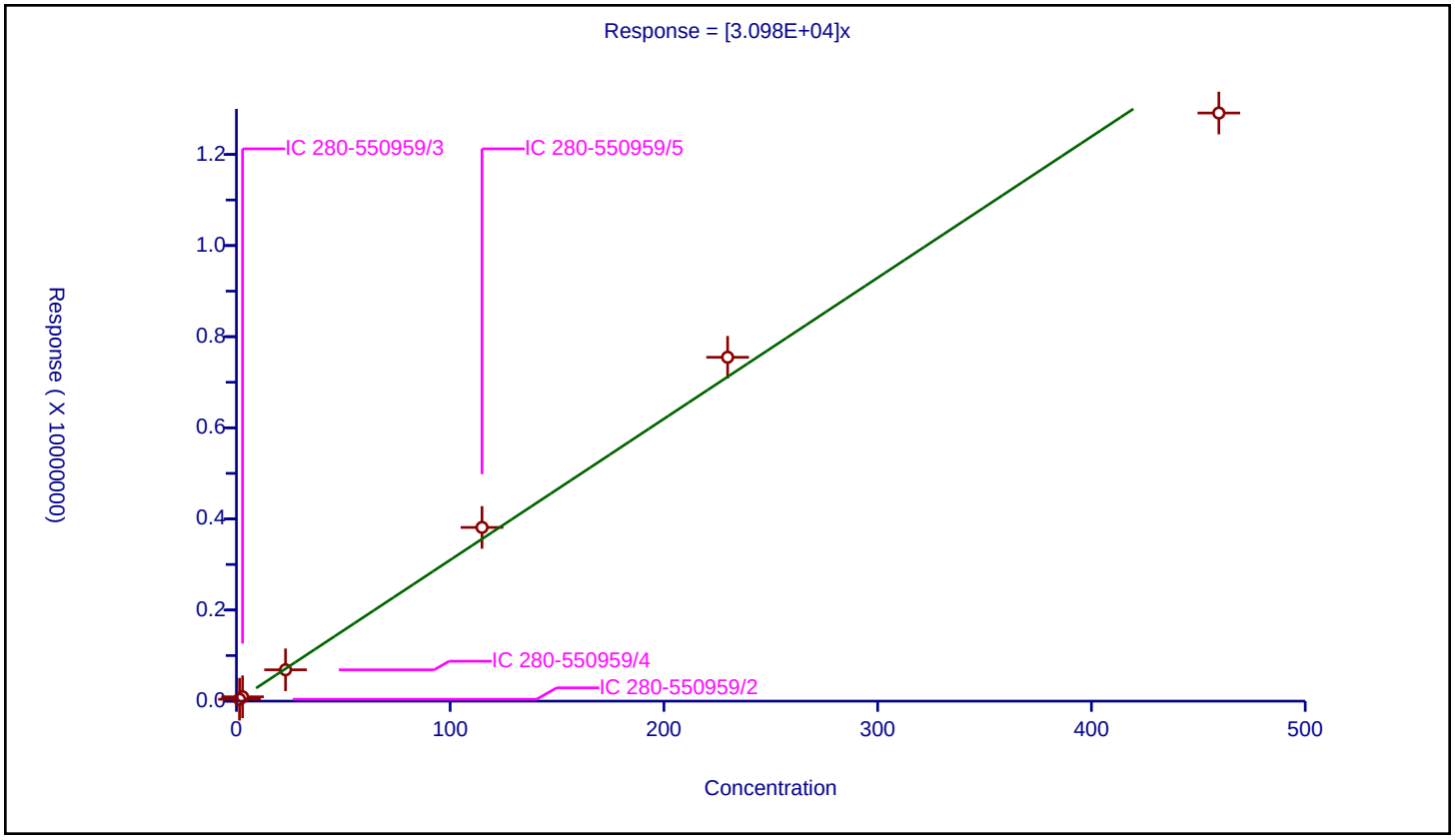
Curve Coefficients

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

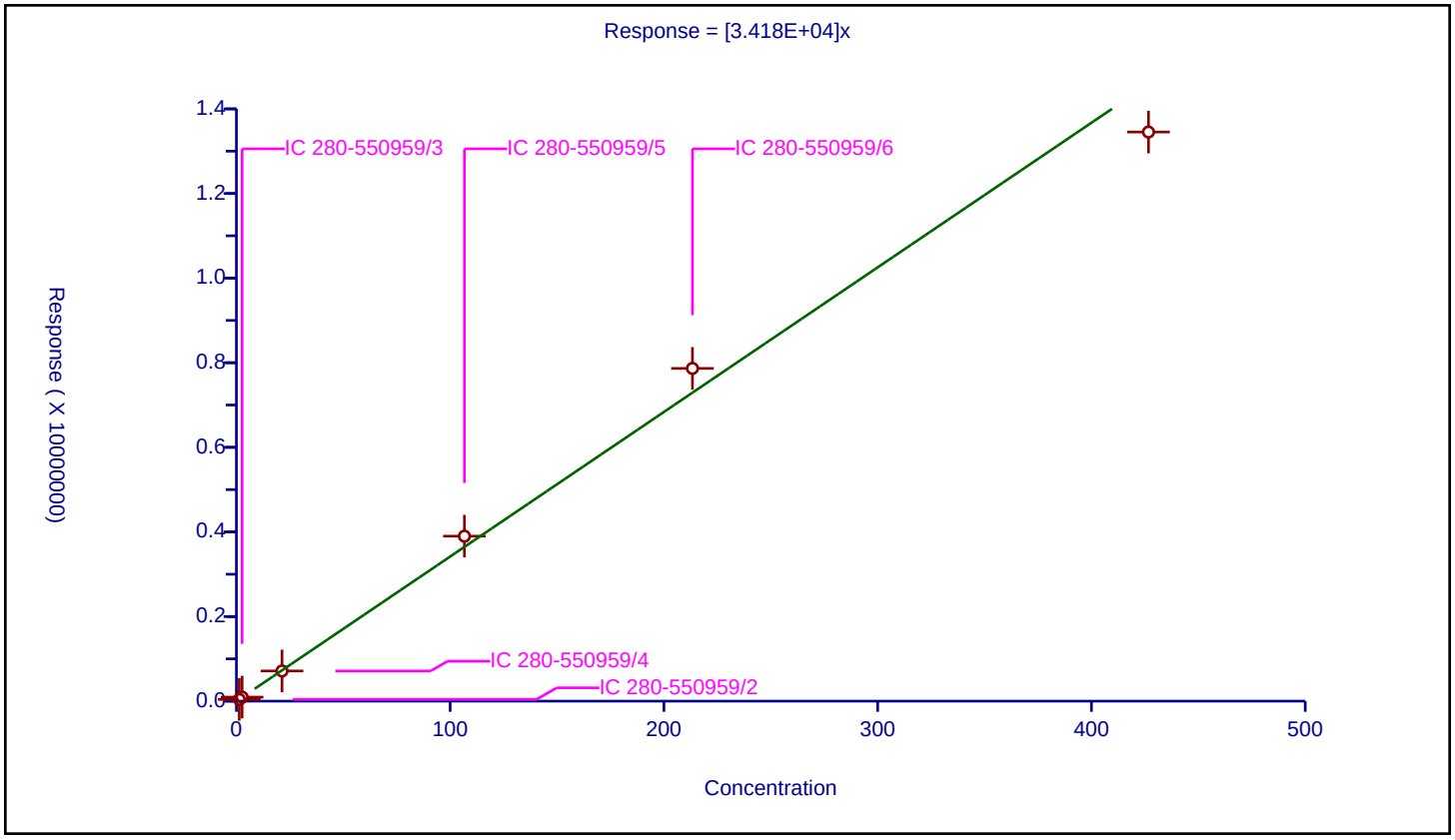
Curve Coefficients

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

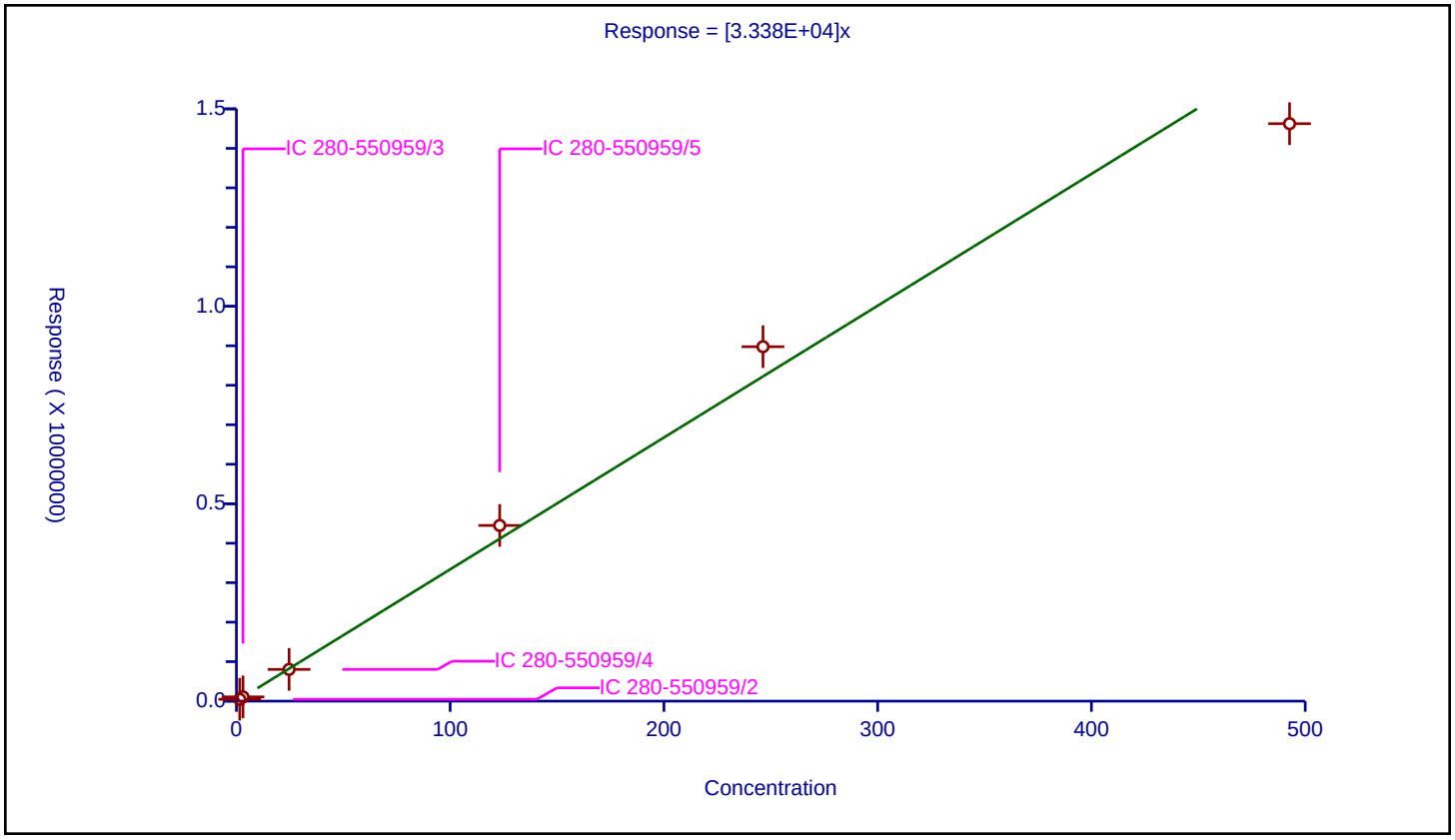
Curve Coefficients

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.: 280-159190-1

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.: 280-159190-1

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

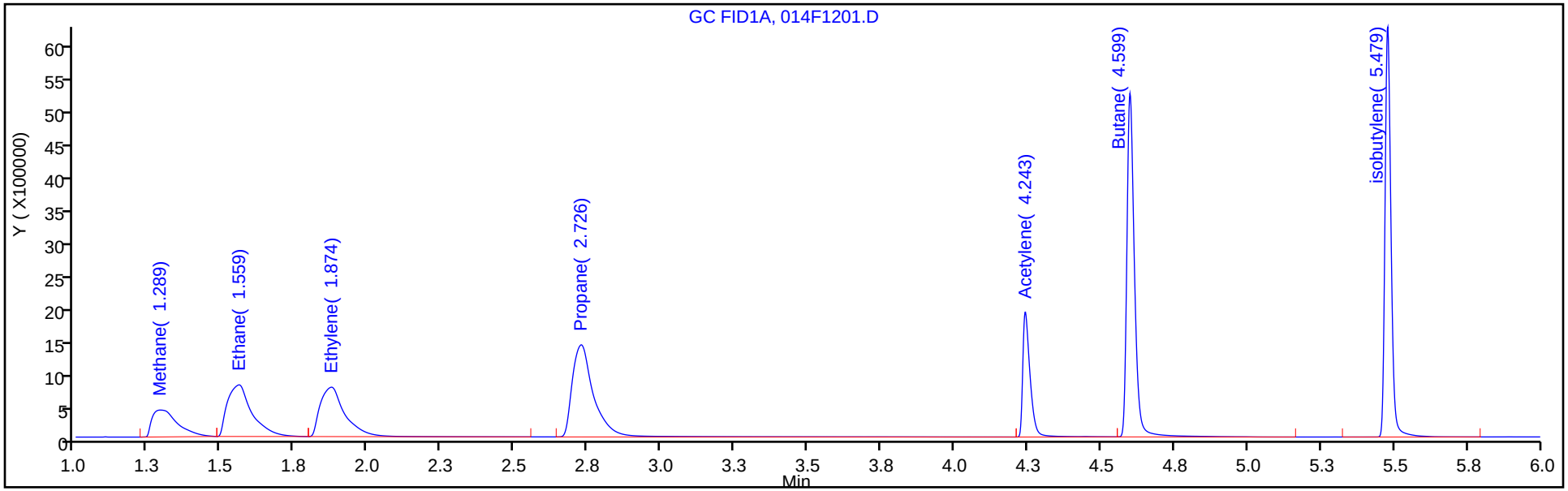
Report Date: 29-Sep-2021 10:58:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

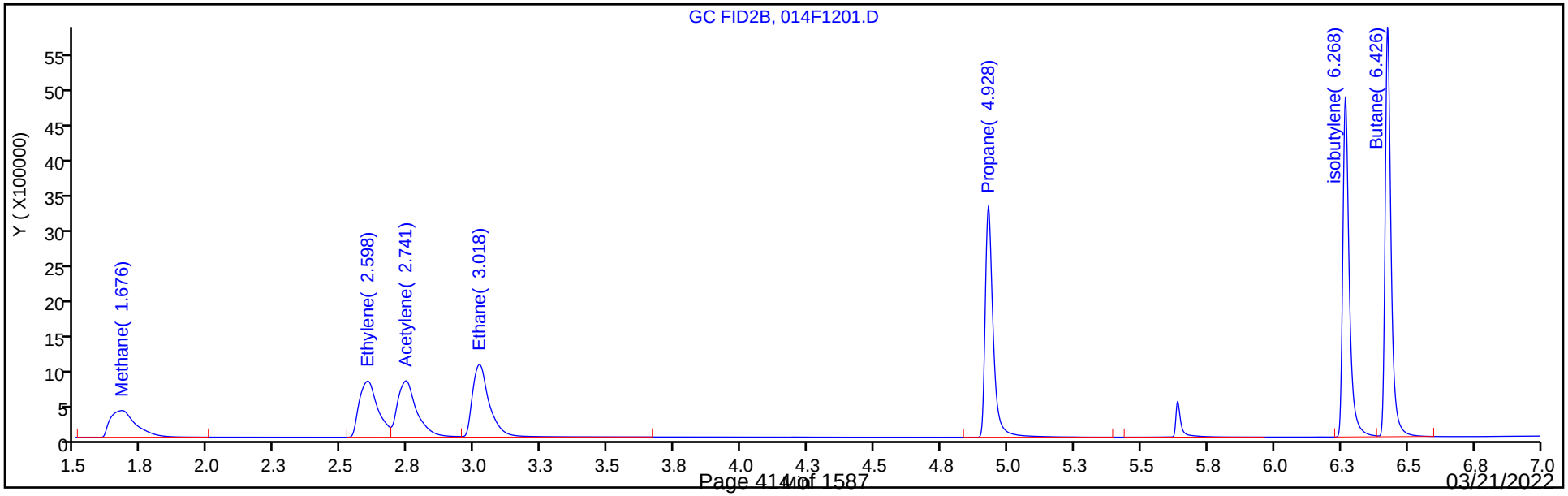
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\014F1201.D

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.: 280-159190-1

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.: 280-159190-1

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

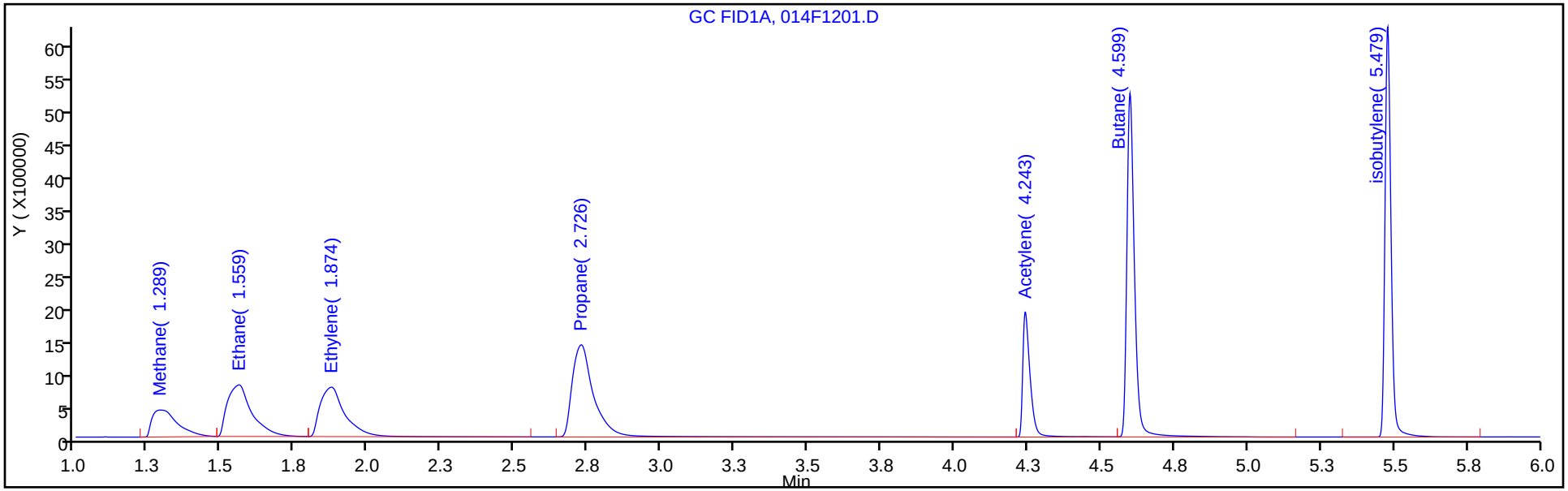
Report Date: 29-Sep-2021 10:58:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

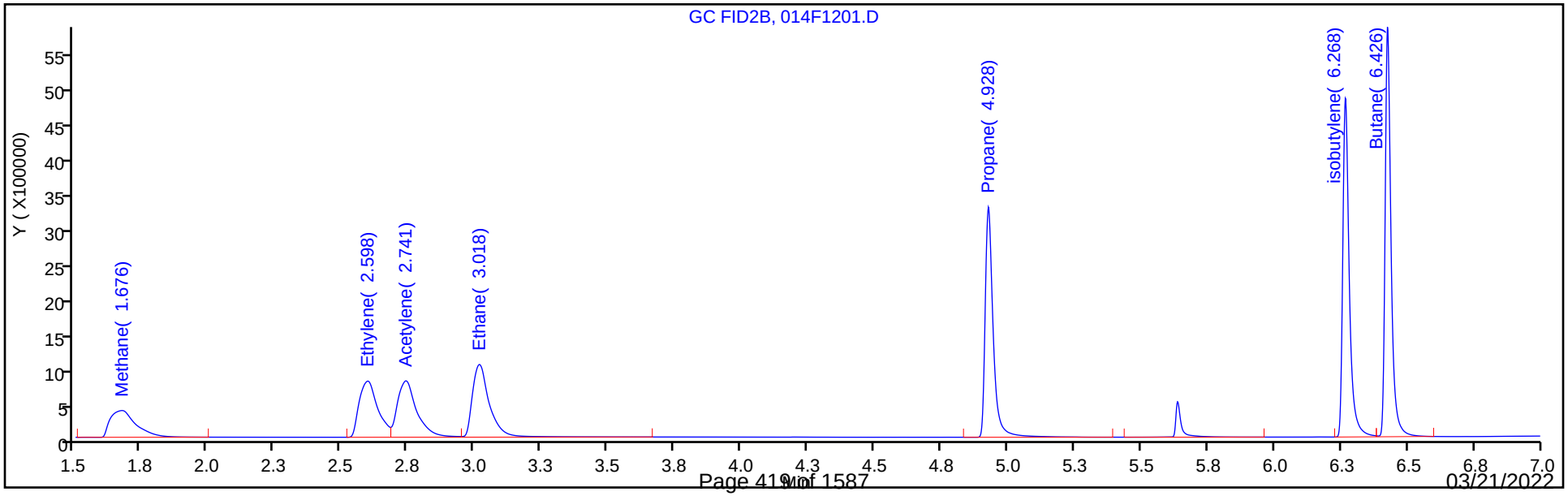
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\014F1201.D

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.: 280-159190-1

SDG No.:

Lab Sample ID: CCVRT 280-567659/2 Calibration Date: 03/03/2022 14:38

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37641		68.5	65.7	4.2	20.0
Ethane	Ave	33241	34529		128	123	3.9	20.0
Ethylene	Ave	35226	37200		121	115	5.6	20.0
Acetylene	Ave	28139	33510		127	107	19.1	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCVRT 280-567659/2 Calibration Date: 03/03/2022 14:38

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.22	1.30
Ethane	1.52	1.47	1.57
Ethylene	1.81	1.76	1.86
Acetylene	4.10	4.02	4.18

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\002F0201.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 03-Mar-2022 14:38:18 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:51:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.262	1.262	0.000	2473110	65.7	68.5	
2	1.669	1.669	0.000	2467010	65.7	66.6	
						RPD = 2.76	
3 Ethane							
1	1.524	1.524	0.000	4252993	123.2	127.9	
2	3.022	3.022	0.000	4340350	123.2	130.0	
						RPD = 1.61	
4 Ethylene							
1	1.809	1.809	0.000	4274242	114.9	121.3	
2	2.604	2.604	0.000	3727265	114.9	120.3	
						RPD = 0.85	
5 Propane							
1	2.587	2.587	0.000	6688251	180.6	185.7	
2	4.927	4.927	0.000	6399530	180.6	182.8	
						RPD = 1.60	
6 Acetylene							
1	4.102	4.102	0.000	3574492	106.7	127.0	
2	2.751	2.751	0.000	4424440	106.7	129.4	
						RPD = 1.89	
7 Butane							Ma
1	4.449	4.449	0.000	8997975	238.1	247.1	a
2	6.427	6.427	0.000	8632256	238.1	245.7	M
						RPD = 0.56	
8 isobutylene							Ma
1	5.350	5.350	0.000	8639180	229.8	239.1	
2	6.269	6.269	0.000	7817090	229.8	235.4	M
						RPD = 1.56	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

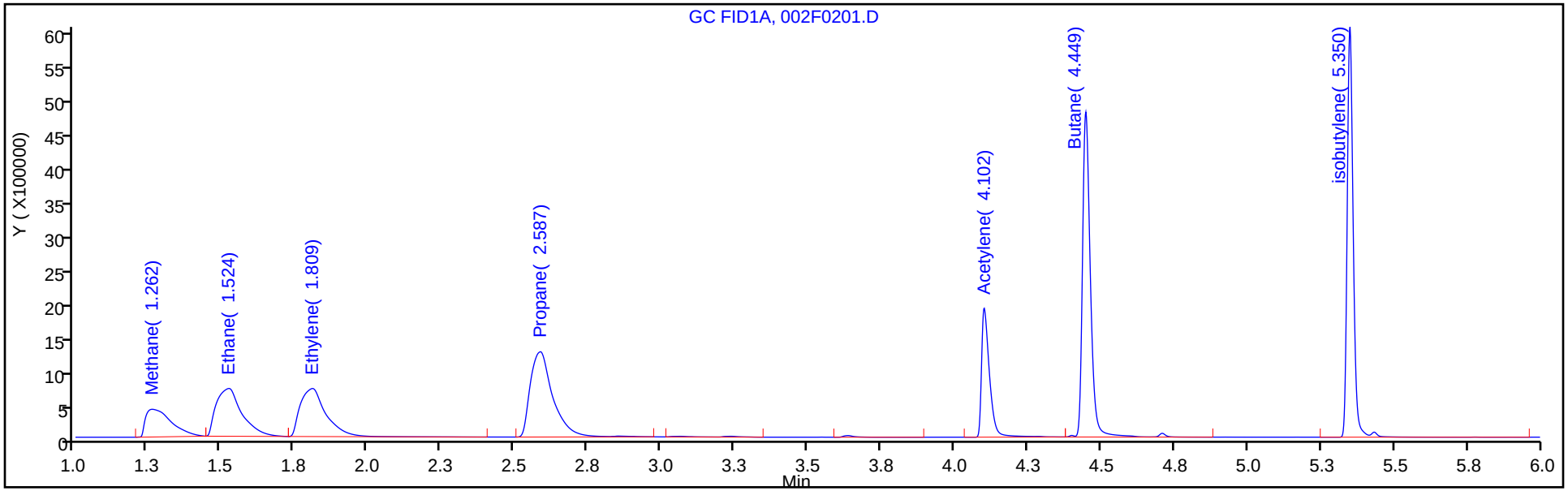
Report Date: 07-Mar-2022 13:05:09 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

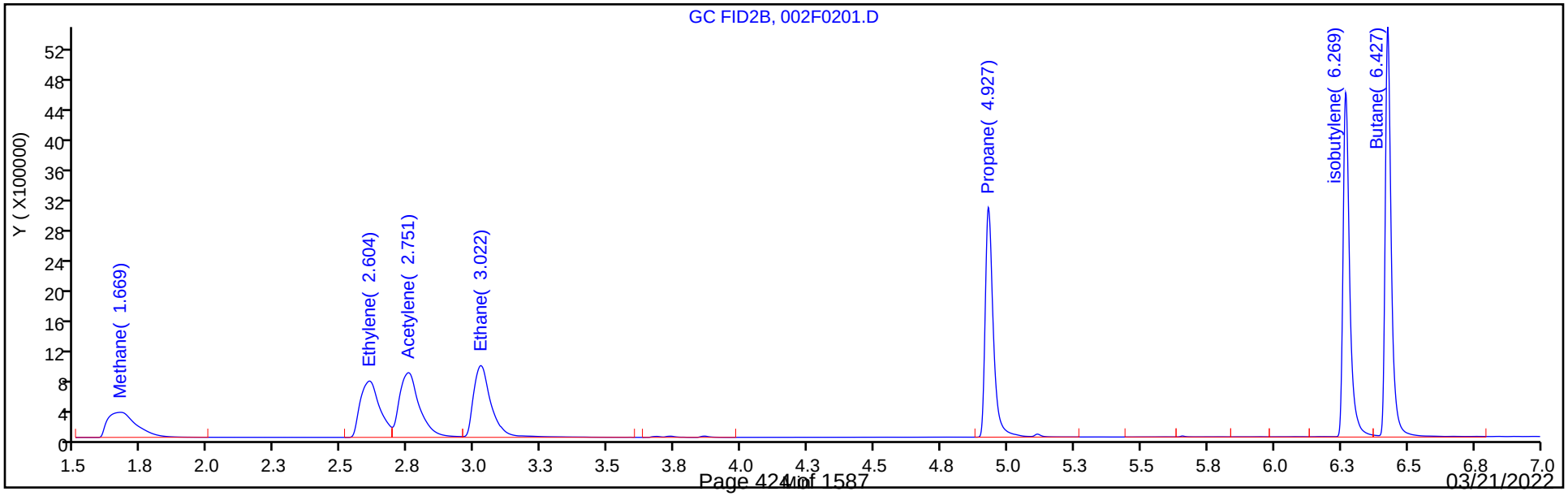
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\002F0201.D

Injection Date:	03-Mar-2022 14:38:18	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCVRT 280-567659/2 Calibration Date: 03/03/2022 14:38

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37548		66.6	65.7	1.4	20.0
Ethylene	Ave	30980	32439		120	115	4.7	20.0
Acetylene	Ave	34179	41478		129	107	21.4*	20.0
Ethane	Ave	33383	35239		130	123	5.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCVRT 280-567659/2 Calibration Date: 03/03/2022 14:38

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.63	1.71
Ethylene	2.60	2.55	2.65
Acetylene	2.75	2.67	2.83
Ethane	3.02	2.97	3.07

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\002F0201.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 03-Mar-2022 14:38:18 ALS Bottle#: 2 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:51:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.262	1.262	0.000	2473110	65.7	68.5	
2	1.669	1.669	0.000	2467010	65.7	66.6	
						RPD = 2.76	
3 Ethane							
1	1.524	1.524	0.000	4252993	123.2	127.9	
2	3.022	3.022	0.000	4340350	123.2	130.0	
						RPD = 1.61	
4 Ethylene							
1	1.809	1.809	0.000	4274242	114.9	121.3	
2	2.604	2.604	0.000	3727265	114.9	120.3	
						RPD = 0.85	
5 Propane							
1	2.587	2.587	0.000	6688251	180.6	185.7	
2	4.927	4.927	0.000	6399530	180.6	182.8	
						RPD = 1.60	
6 Acetylene							
1	4.102	4.102	0.000	3574492	106.7	127.0	
2	2.751	2.751	0.000	4424440	106.7	129.4	
						RPD = 1.89	
7 Butane							Ma
1	4.449	4.449	0.000	8997975	238.1	247.1	a
2	6.427	6.427	0.000	8632256	238.1	245.7	M
						RPD = 0.56	
8 isobutylene							Ma
1	5.350	5.350	0.000	8639180	229.8	239.1	
2	6.269	6.269	0.000	7817090	229.8	235.4	M
						RPD = 1.56	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

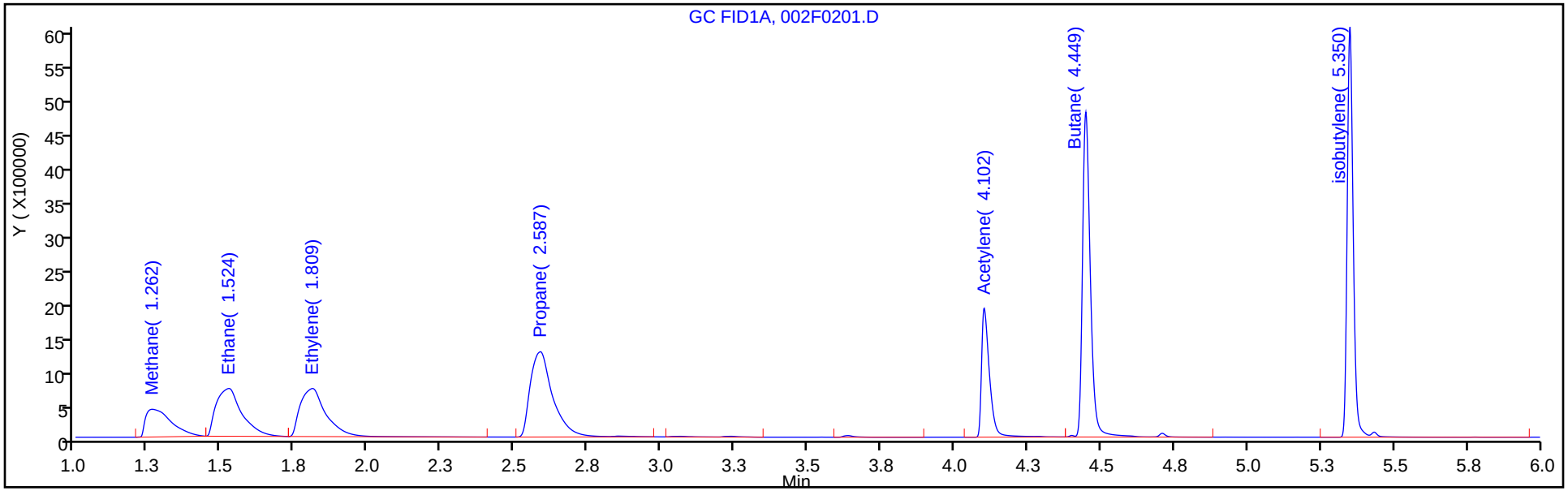
Report Date: 07-Mar-2022 13:05:09 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

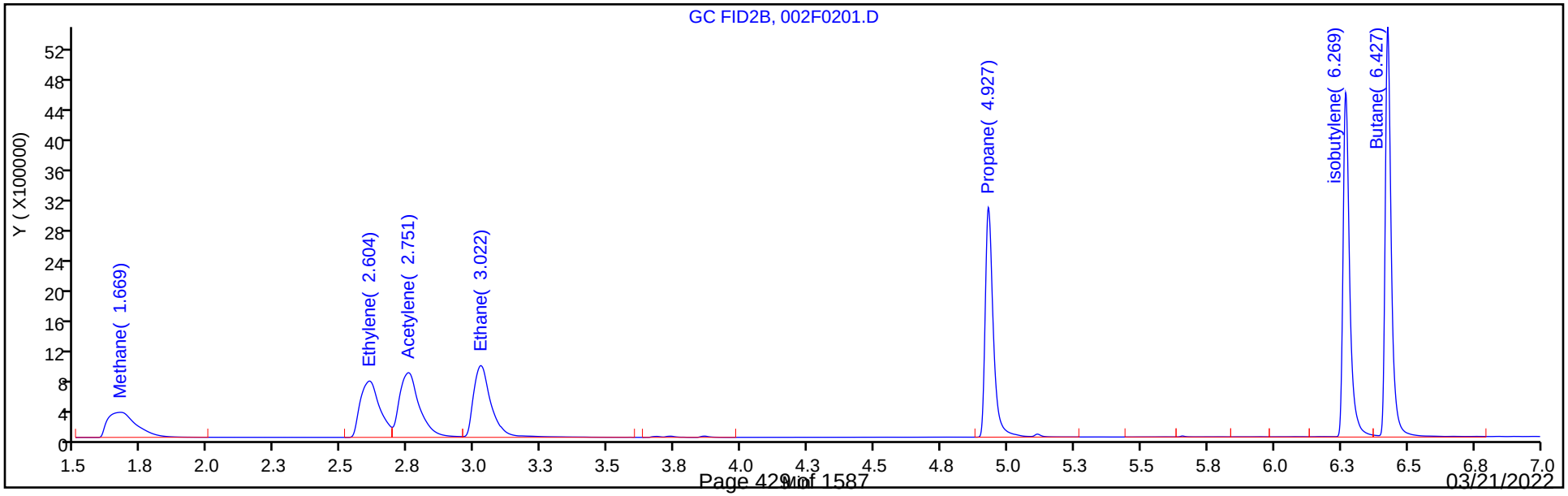
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\002F0201.D

Injection Date:	03-Mar-2022 14:38:18	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567659/17 Calibration Date: 03/03/2022 17:53

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 017F1701.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37741		68.6	65.7	4.5	20.0
Ethane	Ave	33241	33894		126	123	2.0	20.0
Ethylene	Ave	35226	35763		117	115	1.5	20.0
Acetylene	Ave	28139	26864		102	107	-4.5	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567659/17 Calibration Date: 03/03/2022 17:53

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 017F1701.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.22	1.30
Ethane	1.52	1.47	1.57
Ethylene	1.83	1.76	1.86
Acetylene	4.21	4.02	4.18

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\017F1701.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 03-Mar-2022 17:53:12 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:15 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:58:11

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.253	1.262	-0.009	2479674	65.7	68.6	
2	1.654	1.669	-0.015	2450557	65.7	66.1	
						RPD = 3.72	
3 Ethane							
1	1.523	1.524	-0.001	4174750	123.2	125.6	
2	3.006	3.022	-0.016	4182273	123.2	125.3	
						RPD = 0.24	
4 Ethylene							
1	1.831	1.809	0.022	4109138	114.9	116.7	
2	2.588	2.604	-0.016	3555582	114.9	114.8	
						RPD = 1.63	
5 Propane							
1	2.644	2.587	0.057	6471025	180.6	179.7	
2	4.921	4.927	-0.006	6114328	180.6	174.6	
						RPD = 2.85	
6 Acetylene							a
1	4.214	4.102	0.112	2865611	106.7	101.8	a
2	2.733	2.751	-0.018	3565529	106.7	104.3	a
						RPD = 2.41	
7 Butane							a
1	4.524	4.449	0.075	8089680	238.1	222.1	a
2	6.423	6.427	-0.004	7606345	238.1	216.5	a
						RPD = 2.57	
8 isobutylene							
1	5.424	5.350	0.074	7655781	229.8	211.9	
2	6.264	6.269	-0.005	6839226	229.8	206.0	
						RPD = 2.84	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

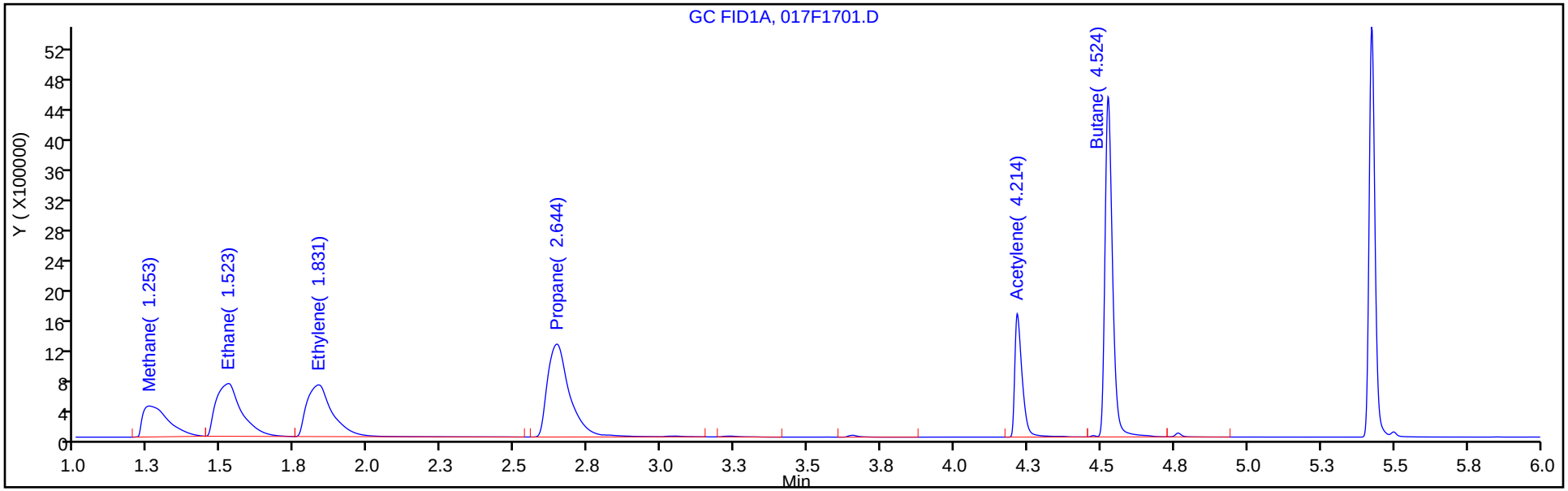
Report Date: 07-Mar-2022 13:05:15 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

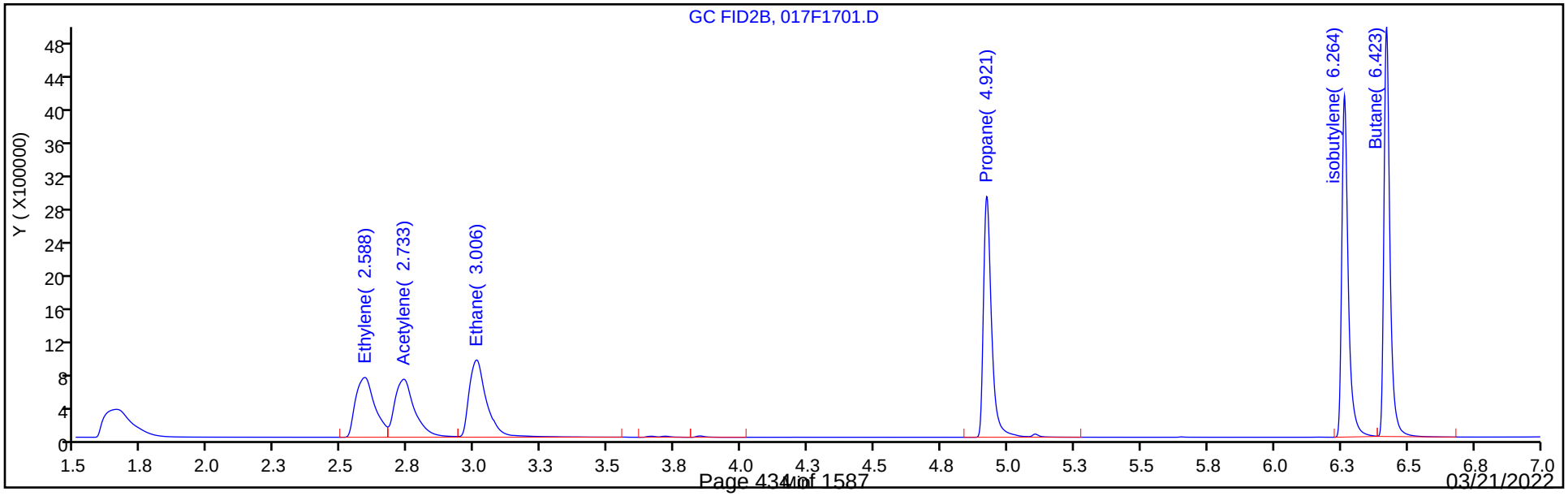
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\017F1701.D

Injection Date:	03-Mar-2022 17:53:12	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

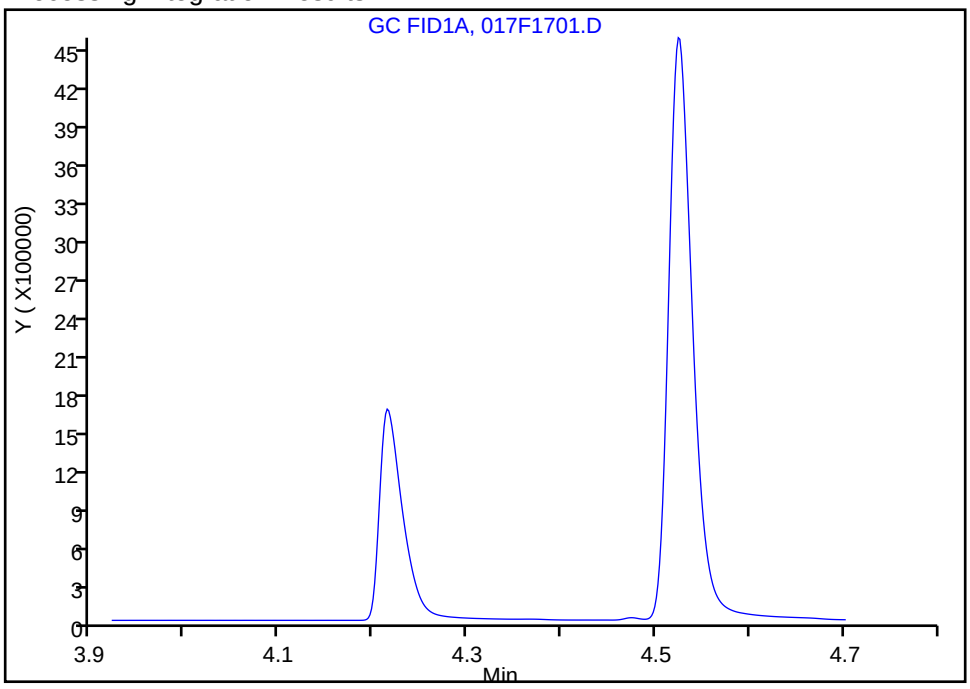
Data File:	\\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\017F1701.D				
Injection Date:	03-Mar-2022 17:53:12	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

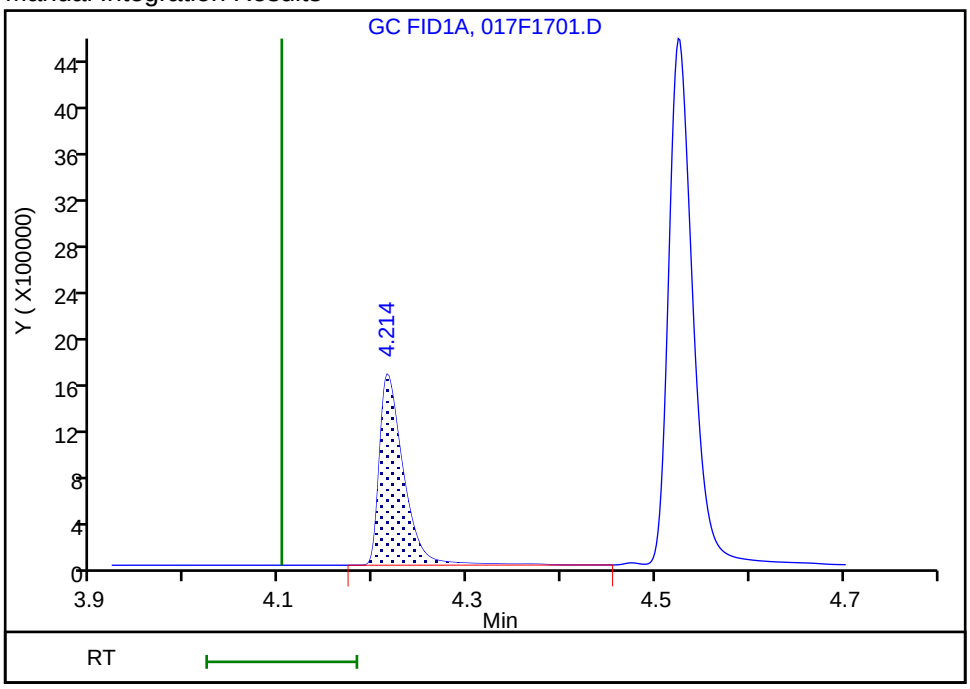
Not Detected
Expected RT: 4.10

Processing Integration Results



Manual Integration Results

RT: 4.21
Area: 2865611
Amount: 101.8376
Amount Units: ug/l



Reviewer: sciannac, 07-Mar-2022 12:57:56
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567659/17 Calibration Date: 03/03/2022 17:53

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 017F1701.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37297		66.1	65.7	0.7	20.0
Ethylene	Ave	30980	30945		115	115	-0.1	20.0
Acetylene	Ave	34179	33426		104	107	-2.2	20.0
Ethane	Ave	33383	33955		125	123	1.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567659/17 Calibration Date: 03/03/2022 17:53

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 017F1701.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.65	1.63	1.71
Ethylene	2.59	2.55	2.65
Acetylene	2.73	2.67	2.83
Ethane	3.01	2.97	3.07

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\017F1701.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 03-Mar-2022 17:53:12 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:15 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:58:11

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.253	1.262	-0.009	2479674	65.7	68.6	
2	1.654	1.669	-0.015	2450557	65.7	66.1	
						RPD = 3.72	
3 Ethane							
1	1.523	1.524	-0.001	4174750	123.2	125.6	
2	3.006	3.022	-0.016	4182273	123.2	125.3	
						RPD = 0.24	
4 Ethylene							
1	1.831	1.809	0.022	4109138	114.9	116.7	
2	2.588	2.604	-0.016	3555582	114.9	114.8	
						RPD = 1.63	
5 Propane							
1	2.644	2.587	0.057	6471025	180.6	179.7	
2	4.921	4.927	-0.006	6114328	180.6	174.6	
						RPD = 2.85	
6 Acetylene							a
1	4.214	4.102	0.112	2865611	106.7	101.8	a
2	2.733	2.751	-0.018	3565529	106.7	104.3	a
						RPD = 2.41	
7 Butane							a
1	4.524	4.449	0.075	8089680	238.1	222.1	a
2	6.423	6.427	-0.004	7606345	238.1	216.5	a
						RPD = 2.57	
8 isobutylene							
1	5.424	5.350	0.074	7655781	229.8	211.9	
2	6.264	6.269	-0.005	6839226	229.8	206.0	
						RPD = 2.84	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

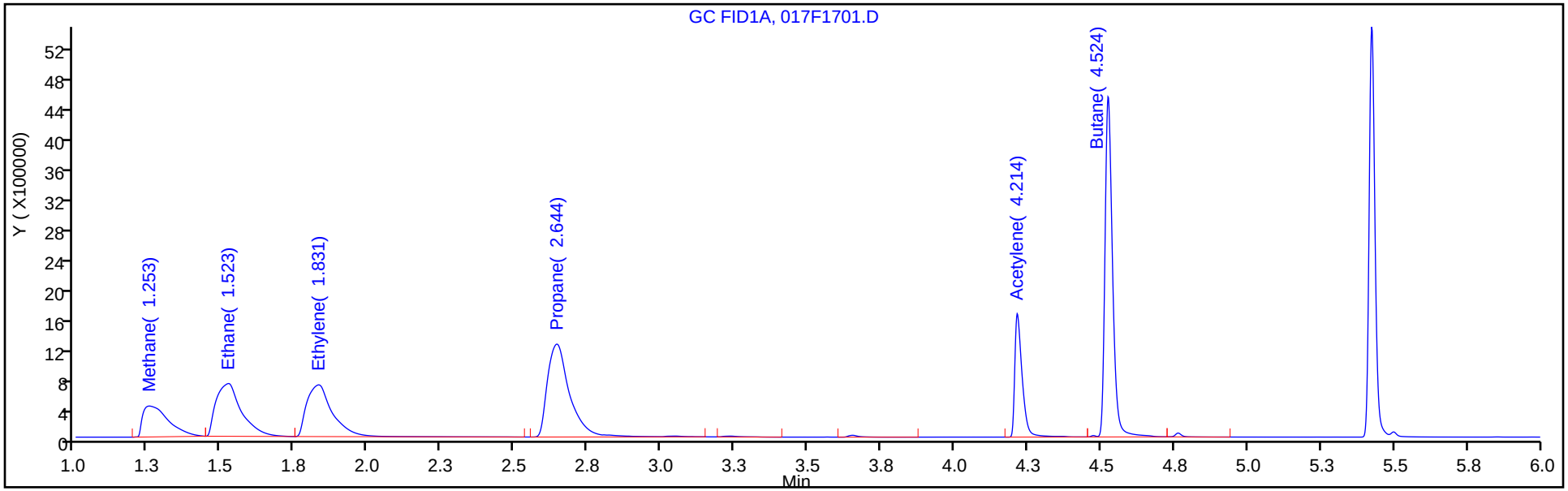
Report Date: 07-Mar-2022 13:05:16 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

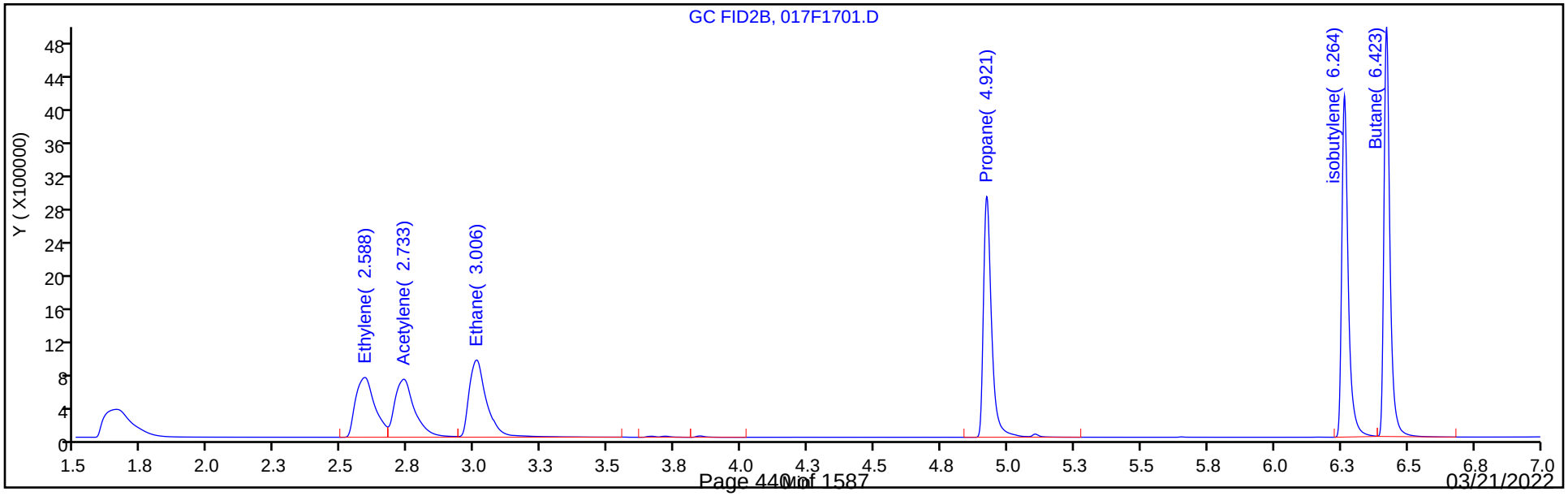
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\017F1701.D

Injection Date:	03-Mar-2022 17:53:12	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

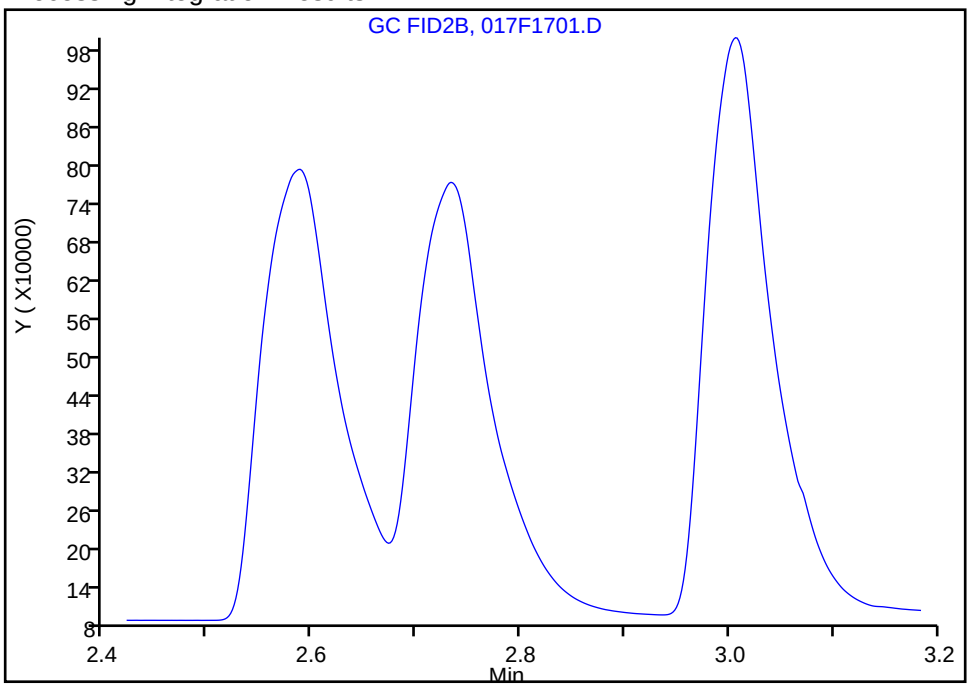
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\017F1701.D
Injection Date: 03-Mar-2022 17:53:12 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

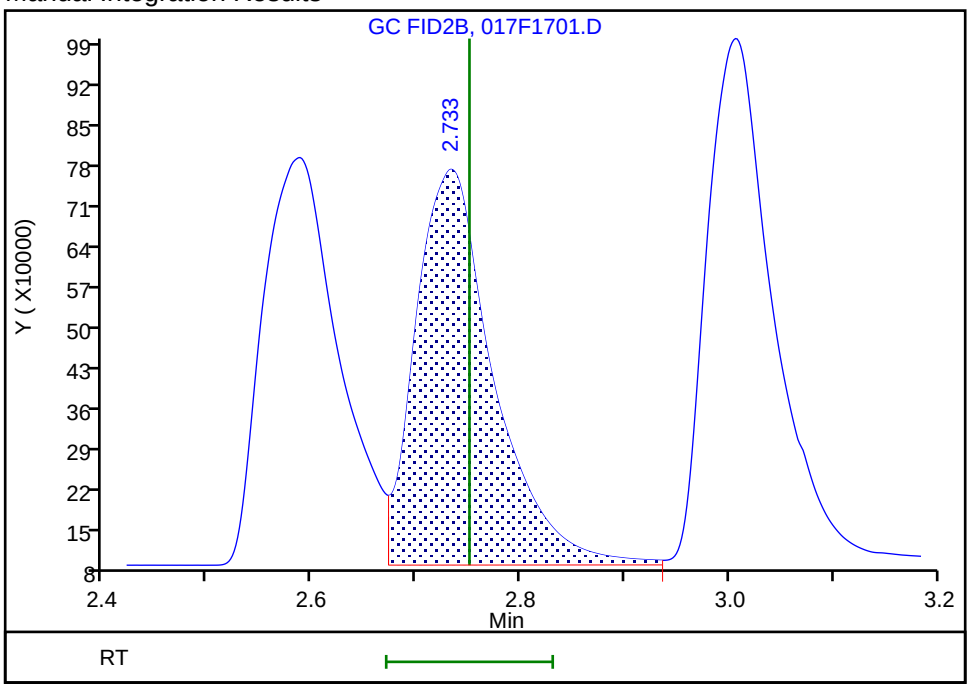
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.73
Area: 3565529
Amount: 104.3199
Amount Units: ug/l



Reviewer: sciannac, 07-Mar-2022 12:57:54
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567659/31 Calibration Date: 03/03/2022 20:56

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 031F3101.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37627		68.4	65.7	4.2	20.0
Ethane	Ave	33241	34349		127	123	3.3	20.0
Ethylene	Ave	35226	35939		117	115	2.0	20.0
Acetylene	Ave	28139	26062		98.8	107	-7.4	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567659/31 Calibration Date: 03/03/2022 20:56

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 031F3101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.22	1.30
Ethane	1.52	1.47	1.57
Ethylene	1.83	1.76	1.86
Acetylene	4.22	4.02	4.18

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\031F3101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 03-Mar-2022 20:56:20 ALS Bottle#: 31 Worklist Smp#: 31
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:22 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 13:04:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.252	1.262	-0.010	2472230	65.7	68.4	
2	1.657	1.669	-0.012	2441651	65.7	65.9	
						RPD = 3.78	
3 Ethane							
1	1.524	1.524	0.000	4230737	123.2	127.3	
2	3.007	3.022	-0.015	4193368	123.2	125.6	
						RPD = 1.31	
4 Ethylene							Ma
1	1.834	1.809	0.025	4129402	114.9	117.2	
2	2.586	2.604	-0.018	3570318	114.9	115.2	M
						RPD = 1.70	
5 Propane							
1	2.647	2.587	0.060	6782587	180.6	188.3	
2	4.921	4.927	-0.006	6338892	180.6	181.1	
						RPD = 3.95	
6 Acetylene							Ma
1	4.217	4.102	0.115	2780071	106.7	98.8	M
2	2.734	2.751	-0.017	3597669	106.7	105.3	M
						RPD = 6.33	
7 Butane							Ma
1	4.527	4.449	0.078	8804406	238.1	241.7	a
2	6.422	6.427	-0.005	8295684	238.1	236.1	M
						RPD = 2.37	
8 isobutylene							Ma
1	5.427	5.350	0.077	8205285	229.8	227.1	
2	6.264	6.269	-0.005	7353399	229.8	221.5	M
						RPD = 2.53	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

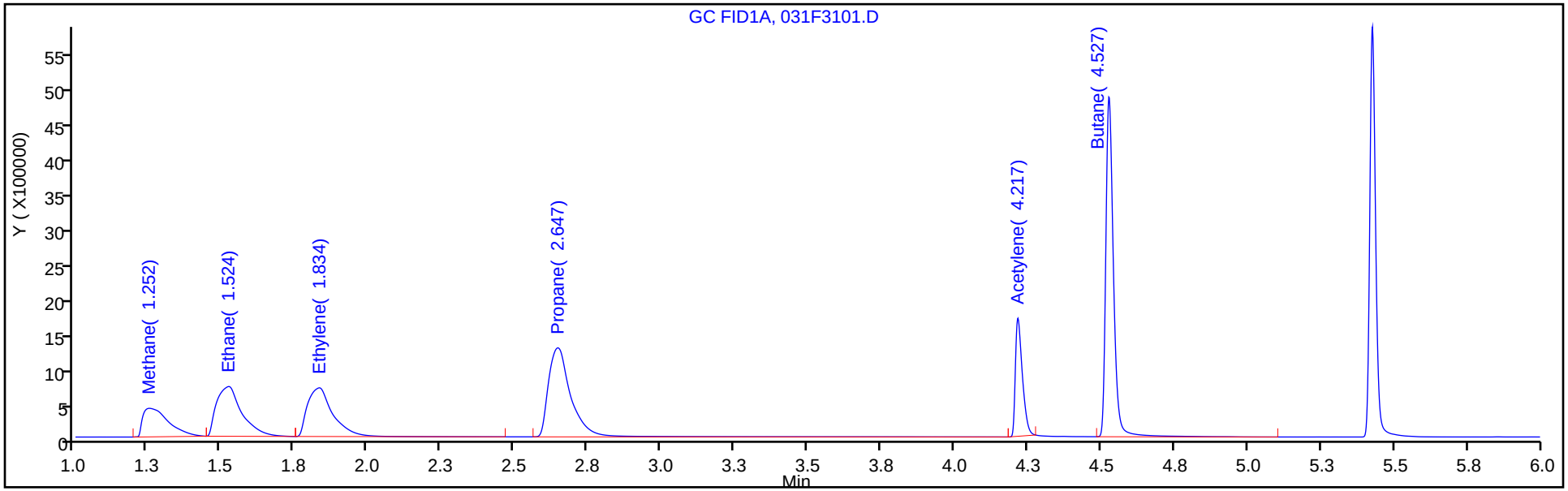
Report Date: 07-Mar-2022 13:05:22 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

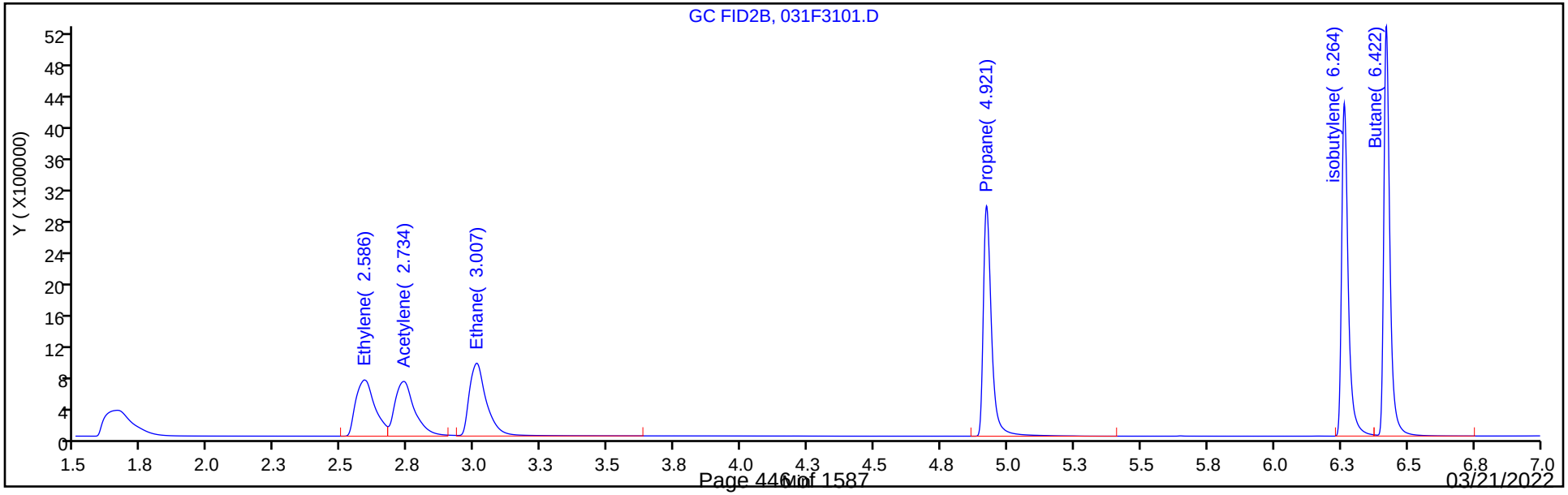
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\031F3101.D

Injection Date:	03-Mar-2022 20:56:20	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	31
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

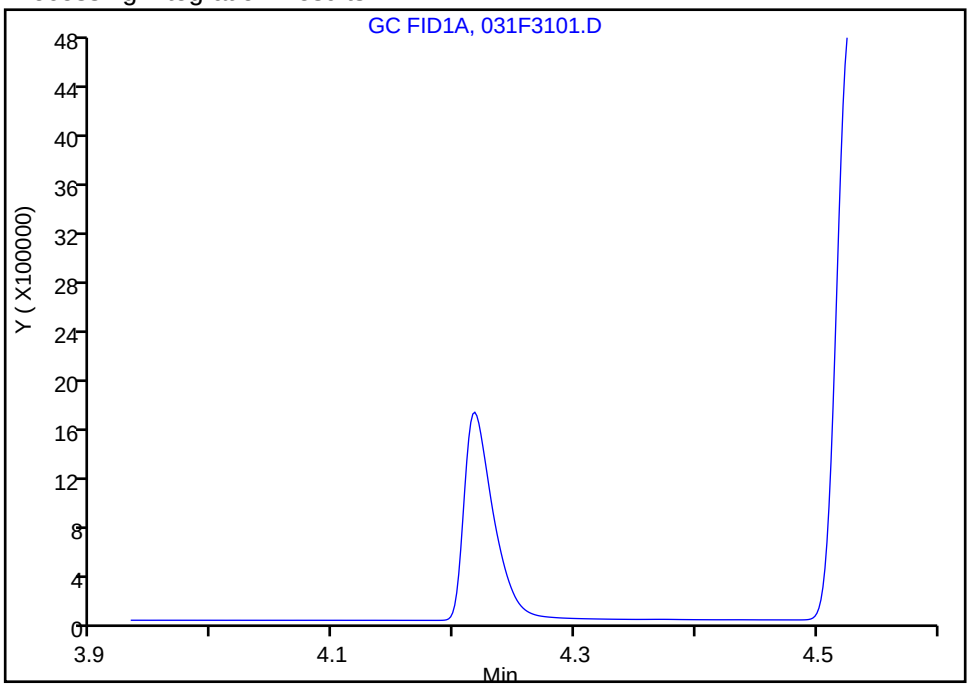
Data File:	\\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\031F3101.D				
Injection Date:	03-Mar-2022 20:56:20	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	31	Worklist Smp#:	31
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

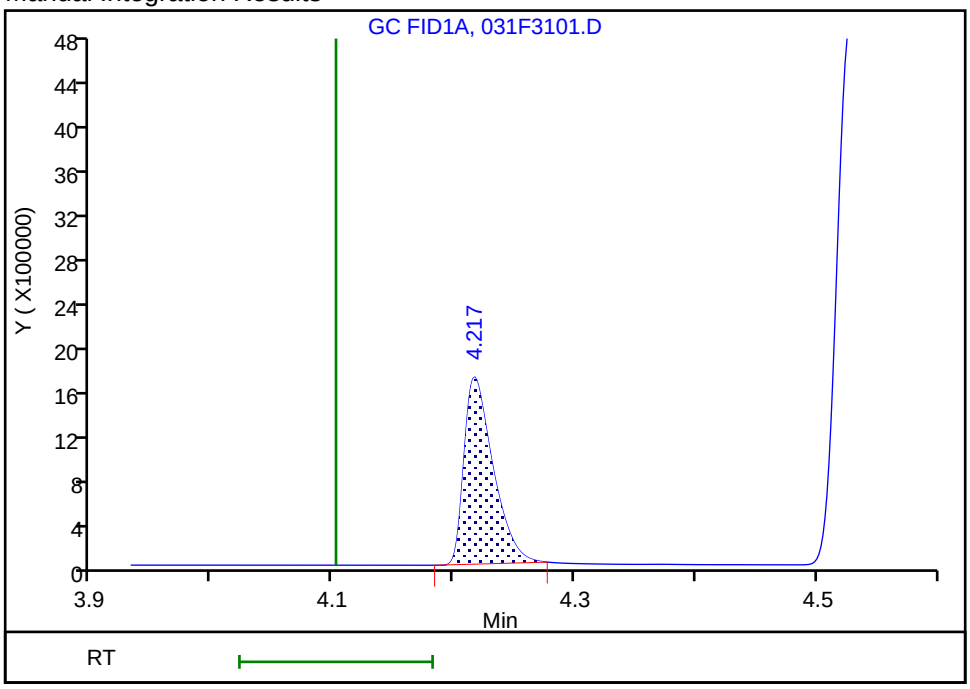
Not Detected
Expected RT: 4.10

Processing Integration Results



Manual Integration Results

RT: 4.22
Area: 2780071
Amount: 98.797721
Amount Units: ug/l



Reviewer: sciannac, 07-Mar-2022 13:03:48
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567659/31 Calibration Date: 03/03/2022 20:56

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 031F3101.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37162		65.9	65.7	0.3	20.0
Ethylene	Ave	30980	31073		115	115	0.3	20.0
Acetylene	Ave	34179	33727		105	107	-1.3	20.0
Ethane	Ave	33383	34045		126	123	2.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567659/31 Calibration Date: 03/03/2022 20:56

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 031F3101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.66	1.63	1.71
Ethylene	2.59	2.55	2.65
Acetylene	2.73	2.67	2.83
Ethane	3.01	2.97	3.07

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\031F3101.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 03-Mar-2022 20:56:20 ALS Bottle#: 31 Worklist Smp#: 31
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:22 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 13:04:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.252	1.262	-0.010	2472230	65.7	68.4	
2	1.657	1.669	-0.012	2441651	65.7	65.9	
						RPD = 3.78	
3 Ethane							
1	1.524	1.524	0.000	4230737	123.2	127.3	
2	3.007	3.022	-0.015	4193368	123.2	125.6	
						RPD = 1.31	
4 Ethylene							Ma
1	1.834	1.809	0.025	4129402	114.9	117.2	
2	2.586	2.604	-0.018	3570318	114.9	115.2	M
						RPD = 1.70	
5 Propane							
1	2.647	2.587	0.060	6782587	180.6	188.3	
2	4.921	4.927	-0.006	6338892	180.6	181.1	
						RPD = 3.95	
6 Acetylene							Ma
1	4.217	4.102	0.115	2780071	106.7	98.8	M
2	2.734	2.751	-0.017	3597669	106.7	105.3	M
						RPD = 6.33	
7 Butane							Ma
1	4.527	4.449	0.078	8804406	238.1	241.7	a
2	6.422	6.427	-0.005	8295684	238.1	236.1	M
						RPD = 2.37	
8 isobutylene							Ma
1	5.427	5.350	0.077	8205285	229.8	227.1	
2	6.264	6.269	-0.005	7353399	229.8	221.5	M
						RPD = 2.53	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

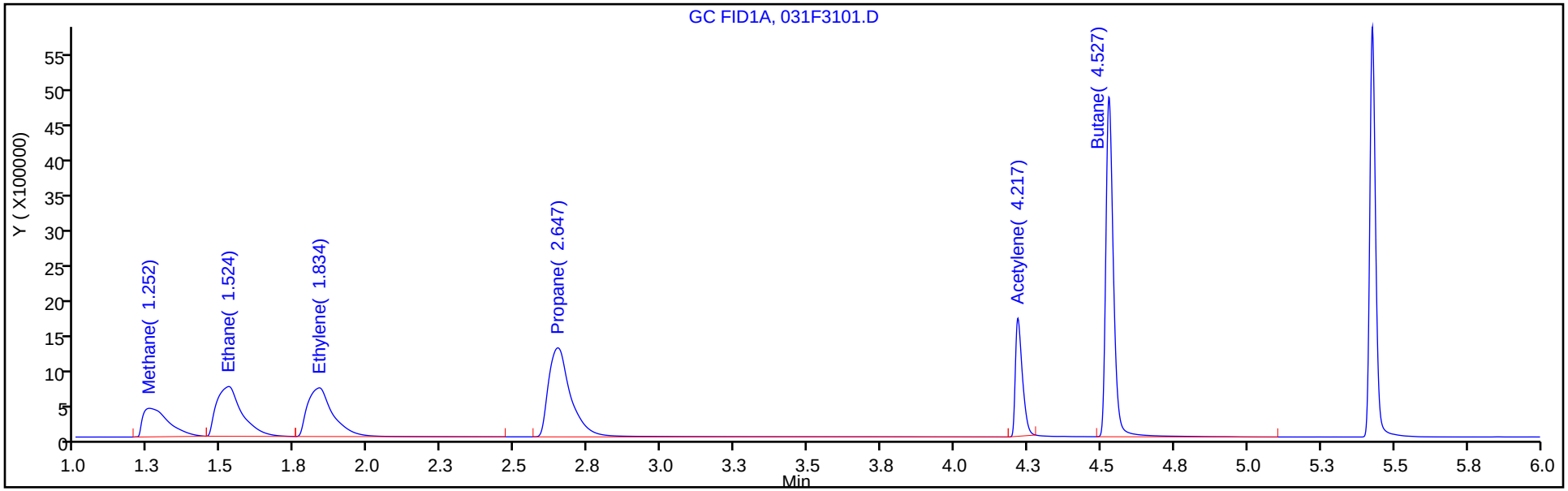
Report Date: 07-Mar-2022 13:05:22 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

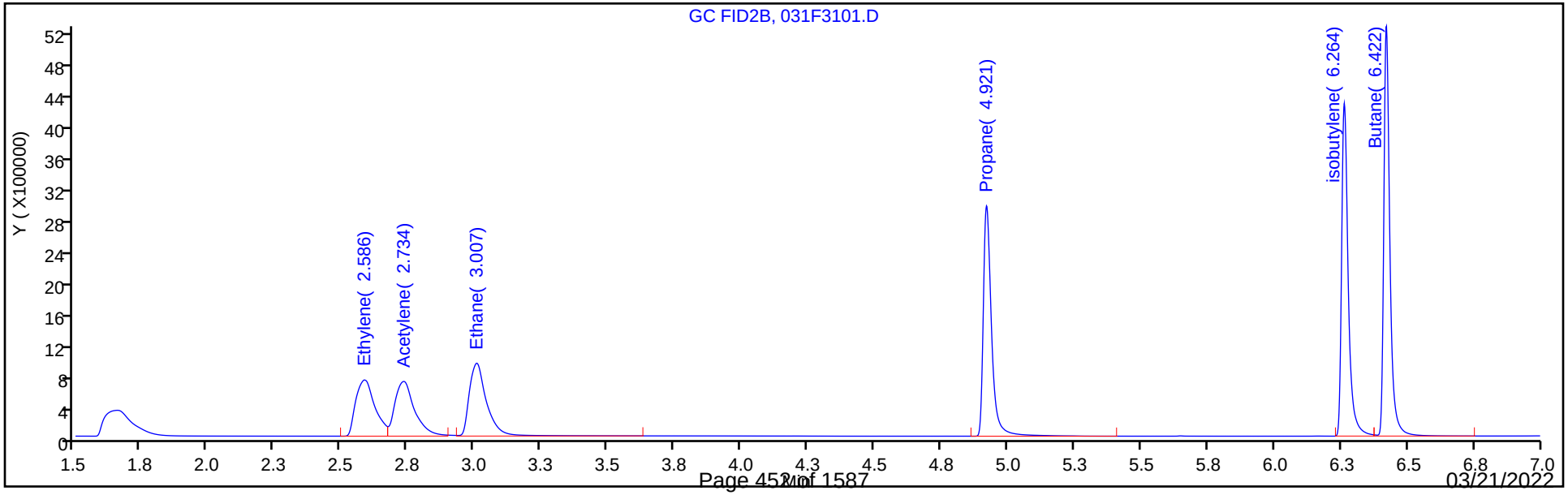
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\031F3101.D

Injection Date:	03-Mar-2022 20:56:20	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	31
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

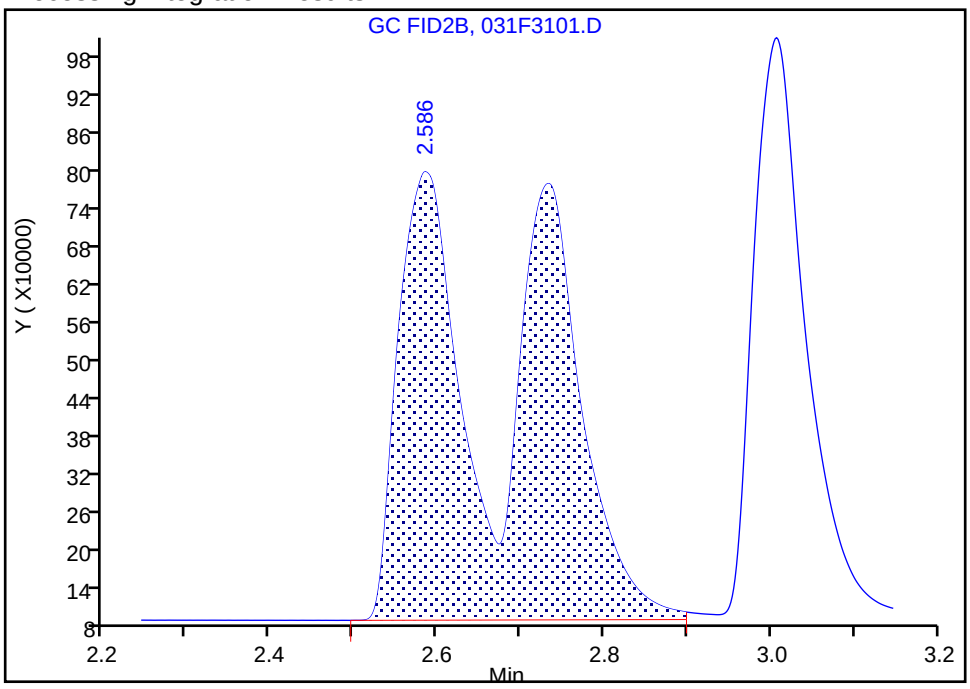
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\031F3101.D
Injection Date: 03-Mar-2022 20:56:20 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 31 Worklist Smp#: 31
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

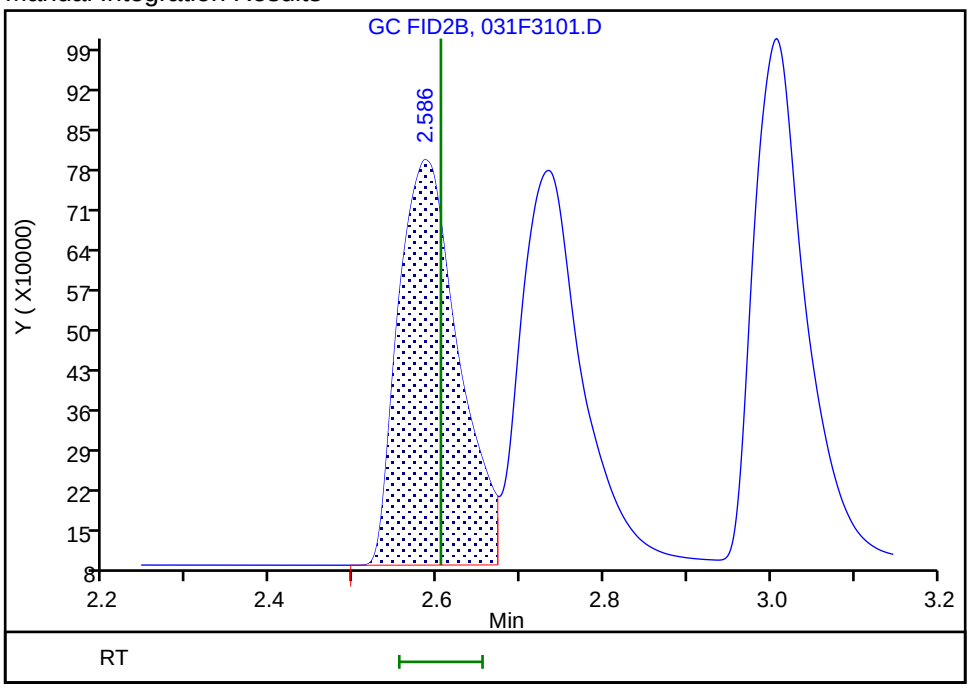
Processing Integration Results

RT: 2.59
Area: 7167983
Amount: 231.3725
Amount Units: ug/l



Manual Integration Results

RT: 2.59
Area: 3570318
Amount: 115.2449
Amount Units: ug/l



Reviewer: sciannac, 07-Mar-2022 13:04:41
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Denver

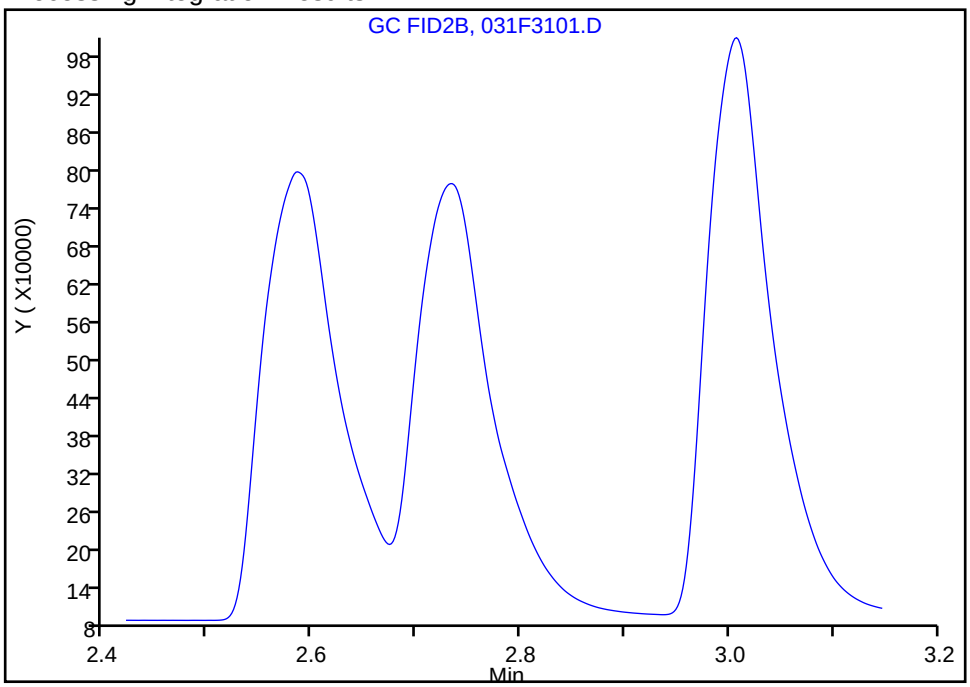
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\031F3101.D
Injection Date: 03-Mar-2022 20:56:20 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 31 Worklist Smp#: 31
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

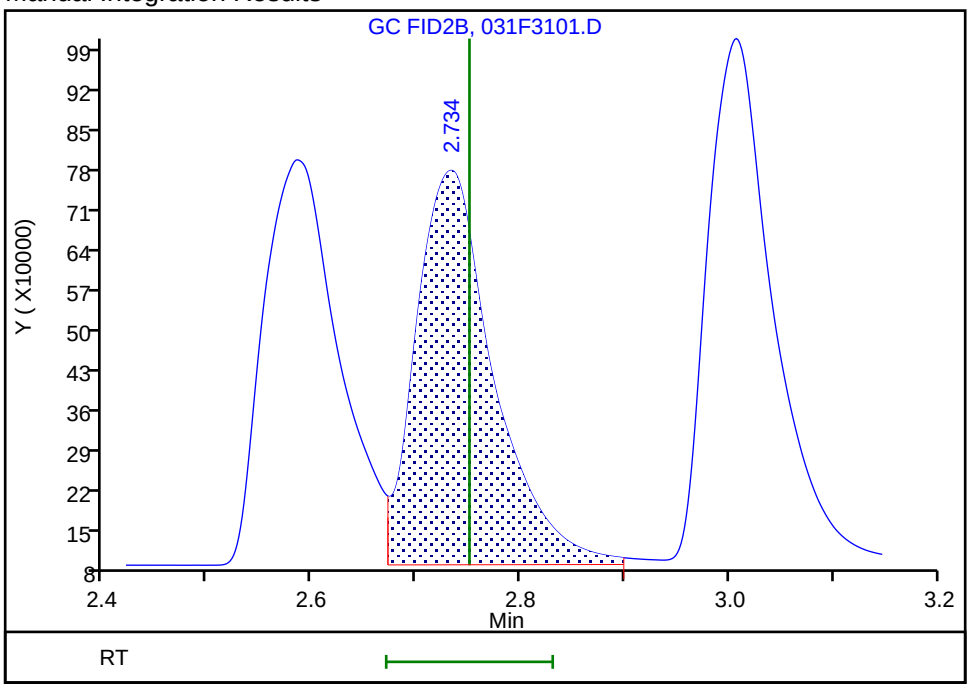
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.73
Area: 3597669
Amount: 105.2603
Amount Units: ug/l



Reviewer: sciannac, 07-Mar-2022 13:04:47
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCVRT 280-567999/2 Calibration Date: 03/08/2022 13:54

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 030822f01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		36565		66.4	65.7	1.1	20.0
Ethane	Ave	33241	33683		125	123	1.3	20.0
Ethylene	Ave	35226	36028		118	115	2.3	20.0
Acetylene	Ave	28139	30661		116	107	9.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCVRT 280-567999/2 Calibration Date: 03/08/2022 13:54

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 030822f01.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.26	1.22	1.30
Ethane	1.52	1.47	1.57
Ethylene	1.82	1.77	1.87
Acetylene	4.18	4.10	4.26

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\030822f01.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 08-Mar-2022 13:54:13 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Mar-2022 13:35:04 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1645

First Level Reviewer: sciannac Date: 08-Mar-2022 15:27:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.258	1.258	0.000	2402425	65.7	66.4	
2	1.663	1.663	0.000	2382769	65.7	64.3	
						RPD = 3.34	
3 Ethane							
1	1.523	1.523	0.000	4148680	123.2	124.8	
2	3.018	3.018	0.000	4227340	123.2	126.6	
						RPD = 1.45	
4 Ethylene							
1	1.818	1.818	0.000	4139628	114.9	117.5	
2	2.598	2.598	0.000	3603410	114.9	116.3	
						RPD = 1.03	
5 Propane							
1	2.611	2.611	0.000	6541399	180.6	181.7	
2	4.926	4.926	0.000	6251791	180.6	178.6	
						RPD = 1.71	
6 Acetylene							
1	4.175	4.175	0.000	3270605	106.7	116.2	
2	2.745	2.745	0.000	4011693	106.7	117.4	
						RPD = 0.98	
7 Butane							
1	4.491	4.491	0.000	8903447	238.1	244.5	
2	6.426	6.426	0.000	8310198	238.1	236.5	
						RPD = 3.31	
8 isobutylene							
1	5.391	5.391	0.000	8492113	229.8	235.1	
2	6.268	6.268	0.000	7613338	229.8	229.3	
						RPD = 2.49	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

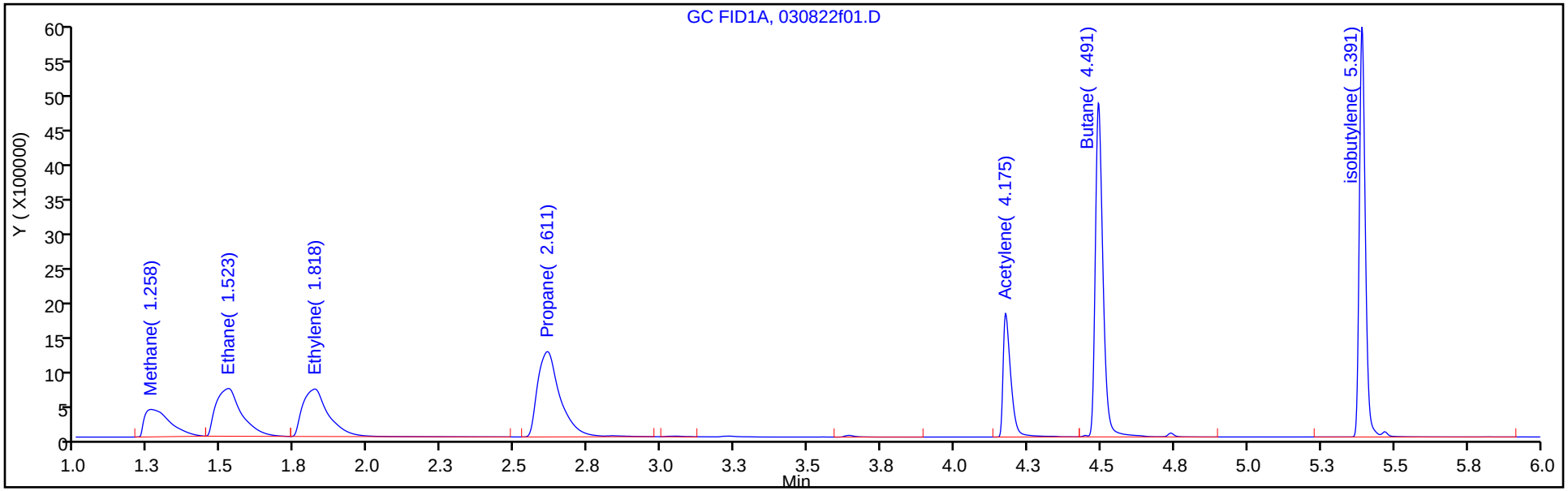
Report Date: 09-Mar-2022 13:35:04 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

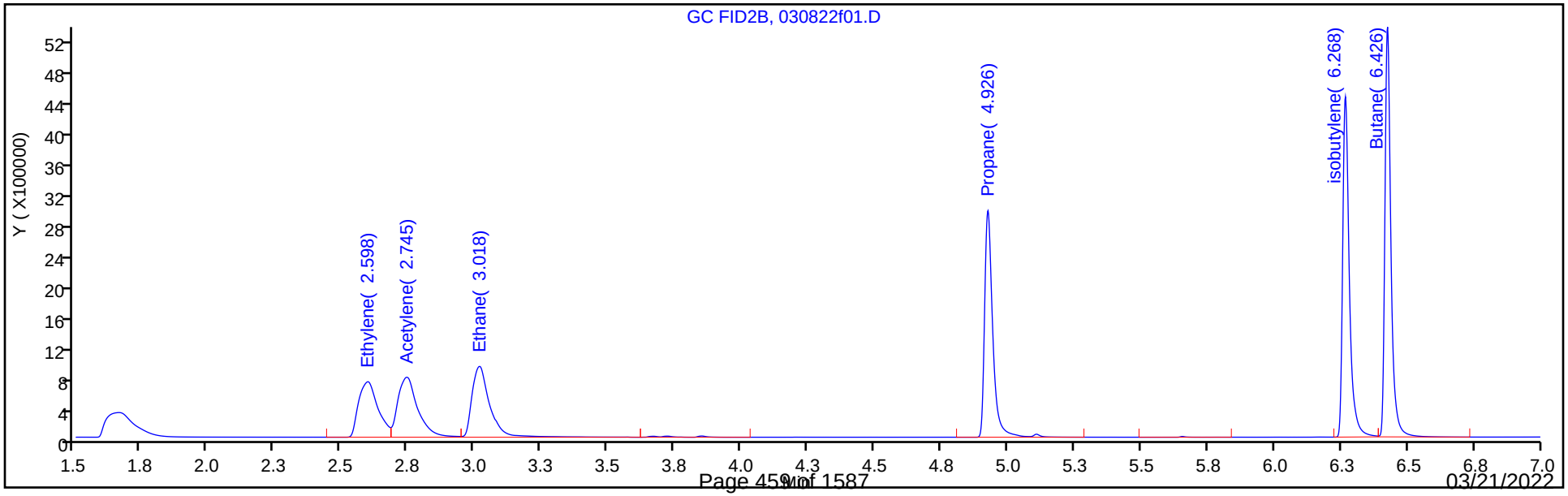
Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\030822f01.D

Injection Date:	08-Mar-2022 13:54:13	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCVRT 280-567999/2 Calibration Date: 03/08/2022 13:54

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 030822f01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		36266		64.3	65.7	-2.2	20.0
Ethylene	Ave	30980	31361		116	115	1.2	20.0
Acetylene	Ave	34179	37608		117	107	10.0	20.0
Ethane	Ave	33383	34321		127	123	2.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCVRT 280-567999/2 Calibration Date: 03/08/2022 13:54

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 030822f01.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.66	1.62	1.70
Ethylene	2.60	2.55	2.65
Acetylene	2.75	2.67	2.83
Ethane	3.02	2.97	3.07

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\030822f01.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 08-Mar-2022 13:54:13 ALS Bottle#: 1 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccvrt
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Mar-2022 13:35:04 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1645

First Level Reviewer: sciannac Date: 08-Mar-2022 15:27:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.258	1.258	0.000	2402425	65.7	66.4	
2	1.663	1.663	0.000	2382769	65.7	64.3	
						RPD = 3.34	
3 Ethane							
1	1.523	1.523	0.000	4148680	123.2	124.8	
2	3.018	3.018	0.000	4227340	123.2	126.6	
						RPD = 1.45	
4 Ethylene							
1	1.818	1.818	0.000	4139628	114.9	117.5	
2	2.598	2.598	0.000	3603410	114.9	116.3	
						RPD = 1.03	
5 Propane							
1	2.611	2.611	0.000	6541399	180.6	181.7	
2	4.926	4.926	0.000	6251791	180.6	178.6	
						RPD = 1.71	
6 Acetylene							
1	4.175	4.175	0.000	3270605	106.7	116.2	
2	2.745	2.745	0.000	4011693	106.7	117.4	
						RPD = 0.98	
7 Butane							
1	4.491	4.491	0.000	8903447	238.1	244.5	
2	6.426	6.426	0.000	8310198	238.1	236.5	
						RPD = 3.31	
8 isobutylene							
1	5.391	5.391	0.000	8492113	229.8	235.1	
2	6.268	6.268	0.000	7613338	229.8	229.3	
						RPD = 2.49	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

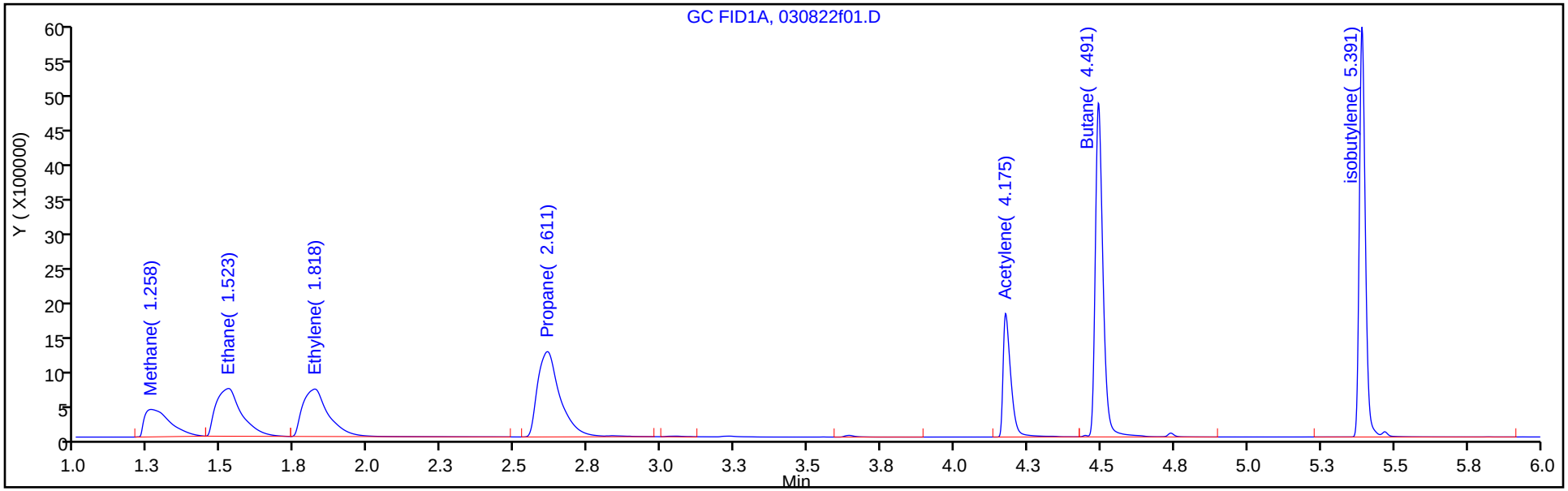
Report Date: 09-Mar-2022 13:35:05 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

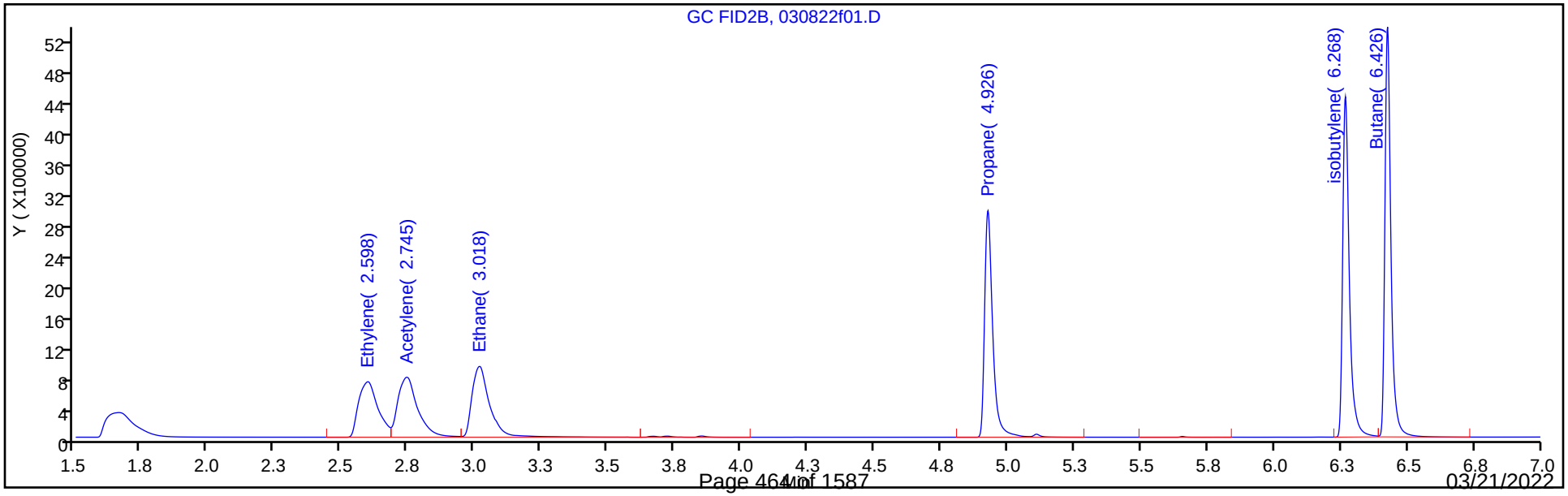
Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\030822f01.D

Injection Date:	08-Mar-2022 13:54:13	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	2
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567999/17 Calibration Date: 03/08/2022 17:09

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 019F1501.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37036		67.3	65.7	2.5	20.0
Ethane	Ave	33241	33527		124	123	0.9	20.0
Ethylene	Ave	35226	35724		117	115	1.4	20.0
Acetylene	Ave	28139	28657		109	107	1.8	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567999/17 Calibration Date: 03/08/2022 17:09

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 019F1501.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.25	1.22	1.30
Ethane	1.52	1.47	1.57
Ethylene	1.83	1.77	1.87
Acetylene	4.22	4.10	4.26

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\019F1501.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 08-Mar-2022 17:09:18 ALS Bottle#: 19 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Mar-2022 13:49:27 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1645

First Level Reviewer: sciannac Date: 09-Mar-2022 12:33:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.252	1.258	-0.006	2433386	65.7	67.3	
2	1.654	1.663	-0.009	2396656	65.7	64.6	
						RPD = 4.06	
3 Ethane							
1	1.522	1.523	-0.001	4129561	123.2	124.2	
2	3.004	3.018	-0.014	4137368	123.2	123.9	
						RPD = 0.24	
4 Ethylene							
1	1.830	1.818	0.012	4104713	114.9	116.5	
2	2.584	2.598	-0.014	3547871	114.9	114.5	
						RPD = 1.74	
5 Propane							
1	2.644	2.611	0.033	6451107	180.6	179.1	
2	4.921	4.926	-0.005	6076538	180.6	173.6	
						RPD = 3.17	
6 Acetylene							
1	4.217	4.175	0.042	3056871	106.7	108.6	
2	2.732	2.745	-0.013	3771648	106.7	110.4	
						RPD = 1.57	
7 Butane							Ma
1	4.525	4.491	0.034	8255239	238.1	226.7	a
2	6.421	6.426	-0.005	7824885	238.1	222.7	M
						RPD = 1.77	
8 isobutylene							Ma
1	5.424	5.391	0.033	7918984	229.8	219.2	
2	6.262	6.268	-0.006	7096475	229.8	213.7	M
						RPD = 2.53	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

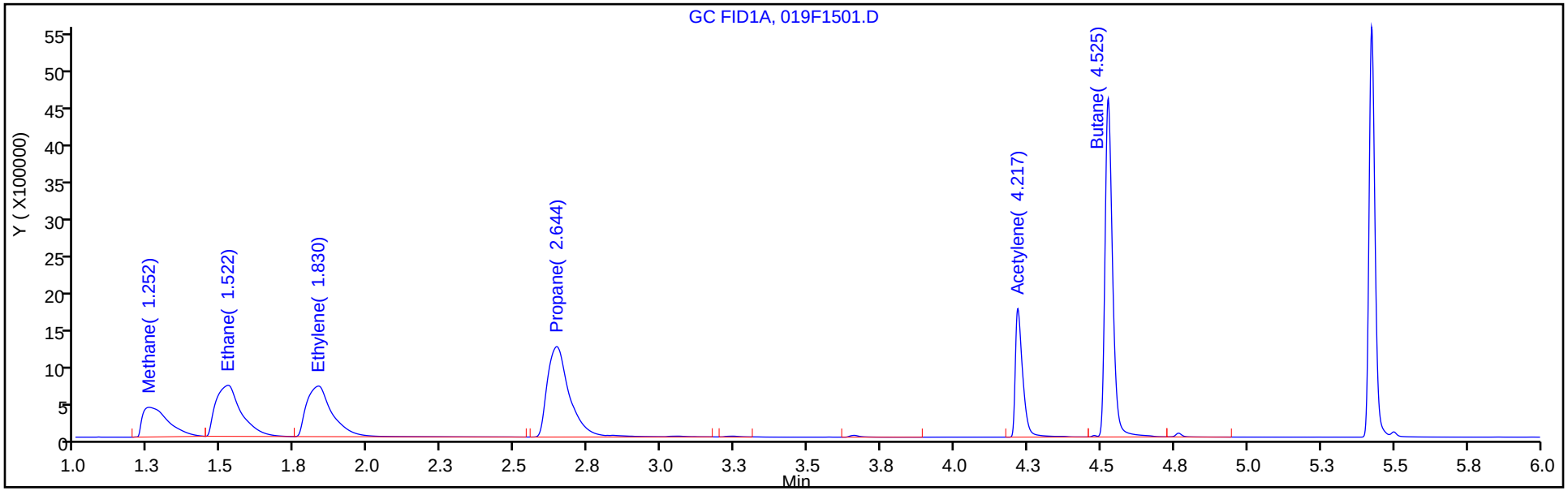
Report Date: 09-Mar-2022 13:49:28 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

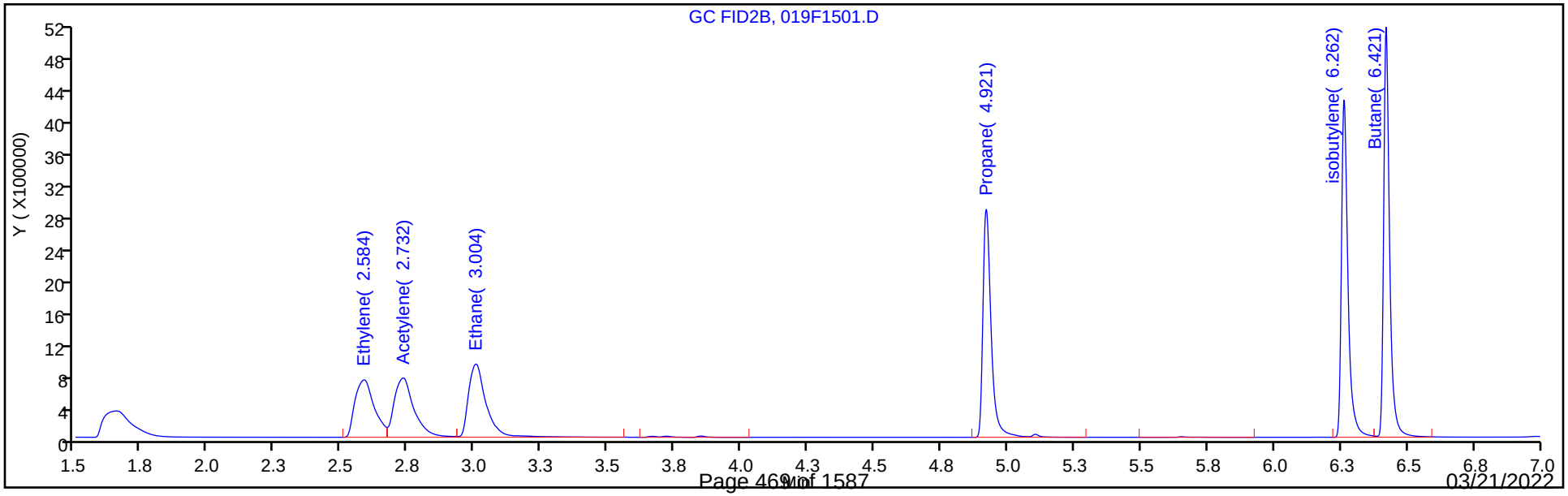
Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\019F1501.D

Injection Date:	08-Mar-2022 17:09:18	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567999/17 Calibration Date: 03/08/2022 17:09

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 019F1501.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		36477		64.6	65.7	-1.6	20.0
Ethylene	Ave	30980	30878		115	115	-0.3	20.0
Acetylene	Ave	34179	35358		110	107	3.5	20.0
Ethane	Ave	33383	33591		124	123	0.6	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567999/17 Calibration Date: 03/08/2022 17:09

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 019F1501.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.65	1.62	1.70
Ethylene	2.58	2.55	2.65
Acetylene	2.73	2.67	2.83
Ethane	3.00	2.97	3.07

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\019F1501.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 08-Mar-2022 17:09:18 ALS Bottle#: 19 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: ccv
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Mar-2022 13:49:27 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1645

First Level Reviewer: sciannac Date: 09-Mar-2022 12:33:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.252	1.258	-0.006	2433386	65.7	67.3	
2	1.654	1.663	-0.009	2396656	65.7	64.6	
						RPD = 4.06	
3 Ethane							
1	1.522	1.523	-0.001	4129561	123.2	124.2	
2	3.004	3.018	-0.014	4137368	123.2	123.9	
						RPD = 0.24	
4 Ethylene							
1	1.830	1.818	0.012	4104713	114.9	116.5	
2	2.584	2.598	-0.014	3547871	114.9	114.5	
						RPD = 1.74	
5 Propane							
1	2.644	2.611	0.033	6451107	180.6	179.1	
2	4.921	4.926	-0.005	6076538	180.6	173.6	
						RPD = 3.17	
6 Acetylene							
1	4.217	4.175	0.042	3056871	106.7	108.6	
2	2.732	2.745	-0.013	3771648	106.7	110.4	
						RPD = 1.57	
7 Butane							Ma
1	4.525	4.491	0.034	8255239	238.1	226.7	a
2	6.421	6.426	-0.005	7824885	238.1	222.7	M
						RPD = 1.77	
8 isobutylene							Ma
1	5.424	5.391	0.033	7918984	229.8	219.2	
2	6.262	6.268	-0.006	7096475	229.8	213.7	M
						RPD = 2.53	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

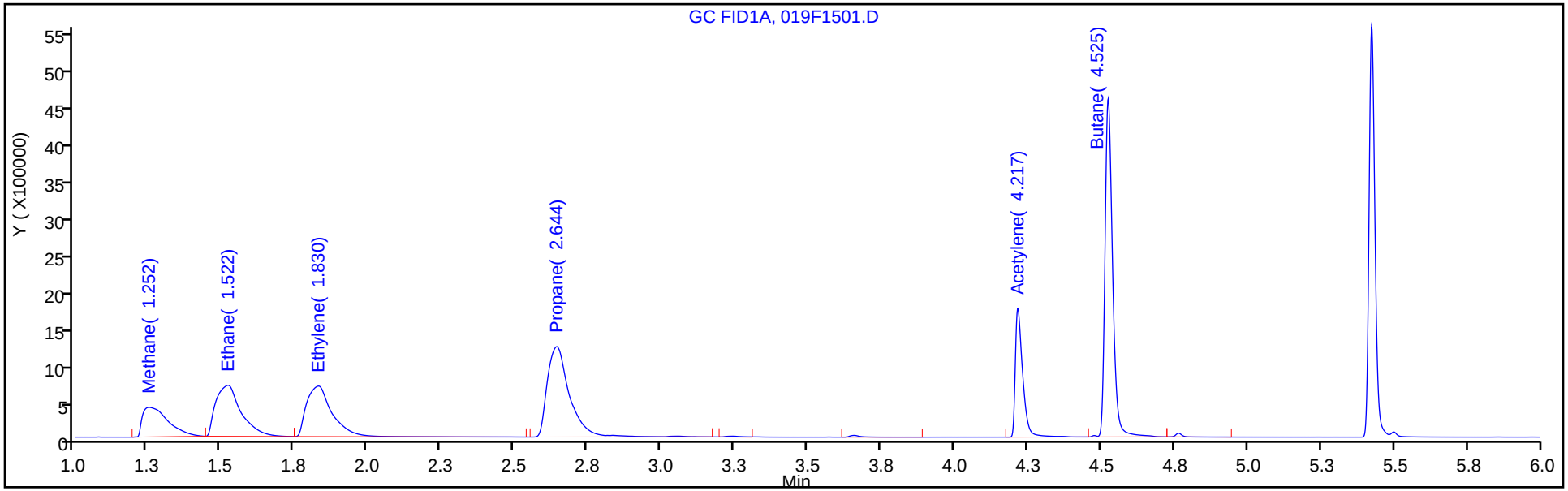
Report Date: 09-Mar-2022 13:49:28 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

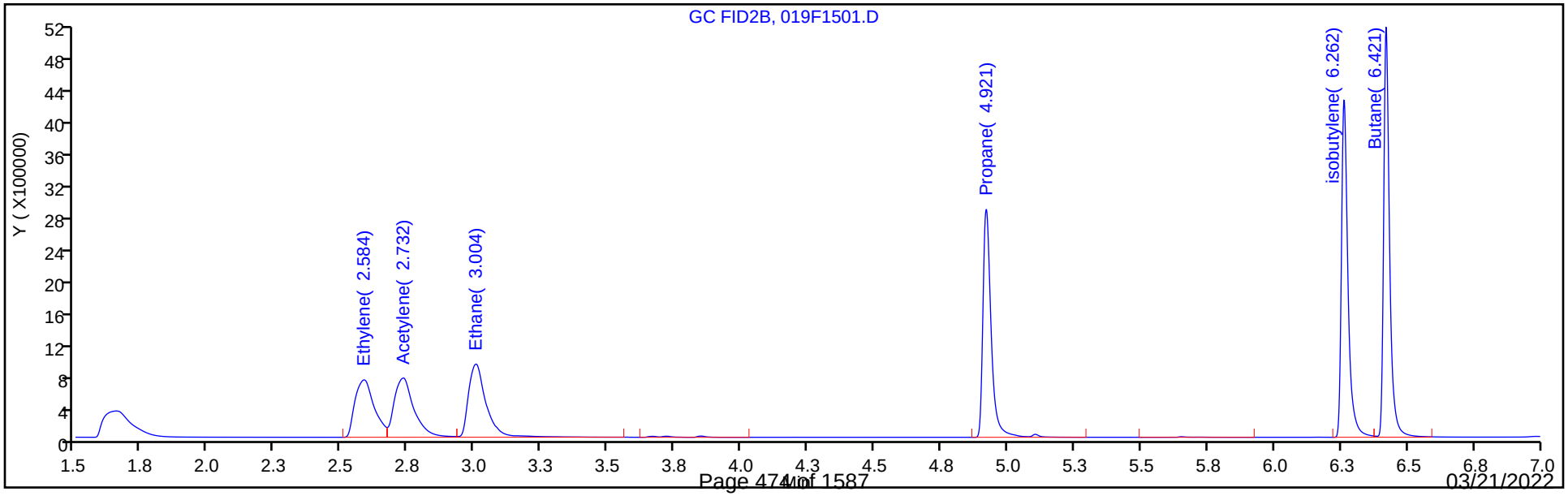
Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\019F1501.D

Injection Date:	08-Mar-2022 17:09:18	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-567659/5

Matrix: Water | Lab File ID: 005F0501.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 15:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U	0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\005F0501.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 03-Mar-2022 15:17:04 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:54:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.362				ND	
2		5.458					
2 Methane							7
1		1.262				ND	
2		1.669					
3 Ethane							
1		1.524				ND	
2		3.022					
4 Ethylene							
1		1.809				ND	
2		2.604					
5 Propane							
1		2.587				ND	
2		4.927					
6 Acetylene							
1		4.102				ND	
2		2.751					
7 Butane							
1		4.449				ND	
2		6.427					
8 isobutylene							
1		5.350				ND	
2		6.269					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

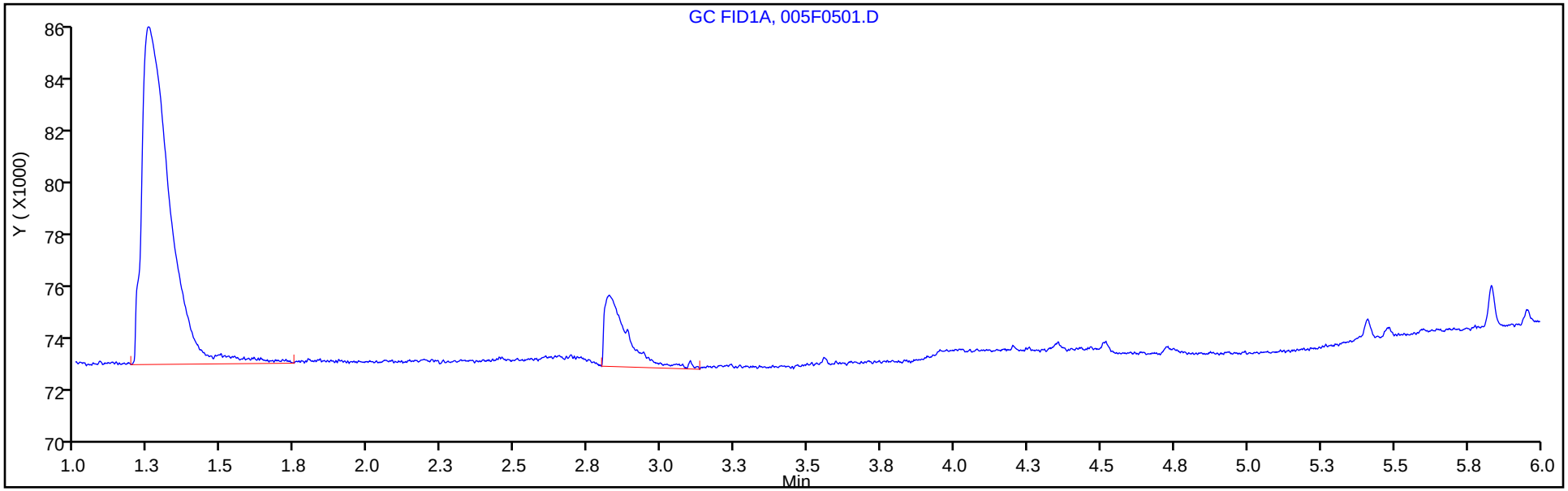
Report Date: 07-Mar-2022 13:05:11 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

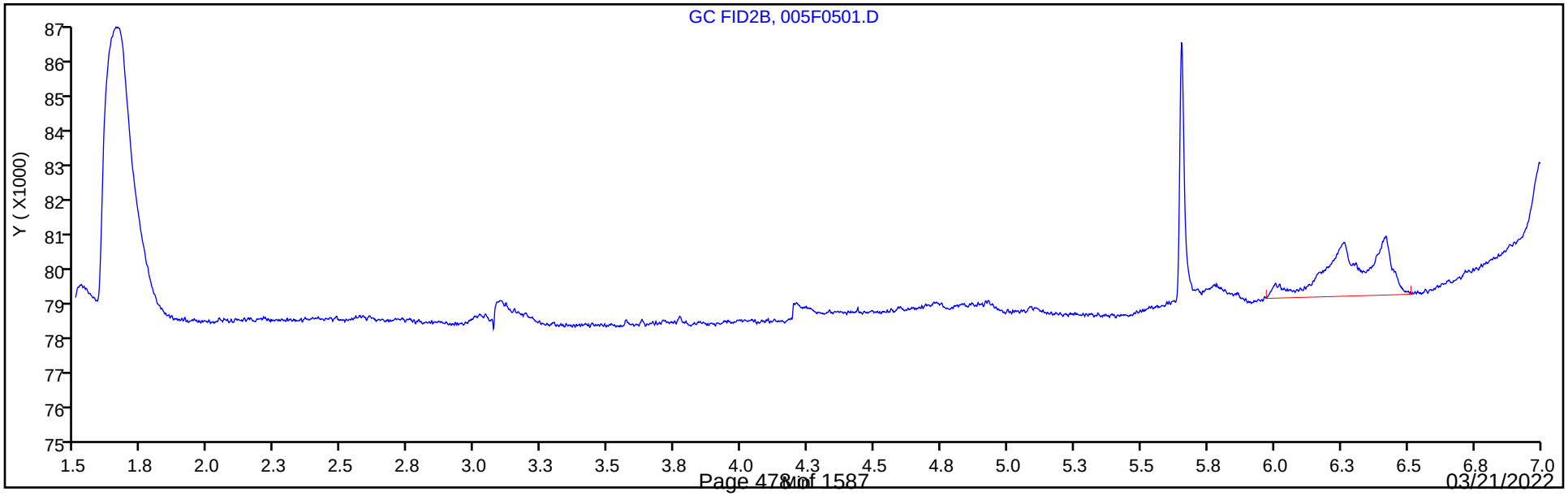
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\005F0501.D

Injection Date:	03-Mar-2022 15:17:04	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	mb			Worklist Smp#:	5
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-567999/3

Matrix: Water | Lab File ID: 001F0101.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 03/08/2022 14:07

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567999 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U	0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\001F0101.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 08-Mar-2022 14:07:08 ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: mb
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Mar-2022 13:35:04 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1645

First Level Reviewer: sciannac Date: 08-Mar-2022 15:34:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.362				ND	
2		5.458					
2 Methane							7
1		1.258				ND	
2		1.663					
3 Ethane							
1		1.523				ND	
2		3.018					
4 Ethylene							
1		1.818				ND	
2		2.598					
5 Propane							
1		2.611				ND	
2		4.926					
6 Acetylene							
1		4.175				ND	
2		2.745					
7 Butane							
1		4.491				ND	
2		6.426					
8 isobutylene							
1		5.391				ND	
2		6.268					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

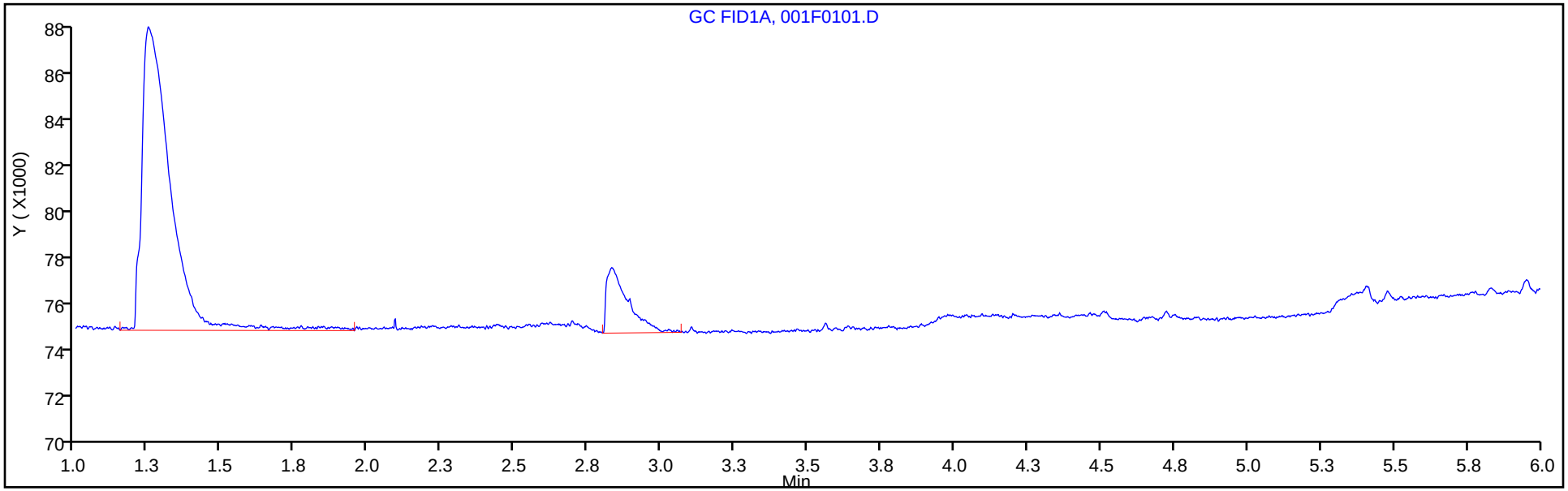
Report Date: 09-Mar-2022 13:35:05 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

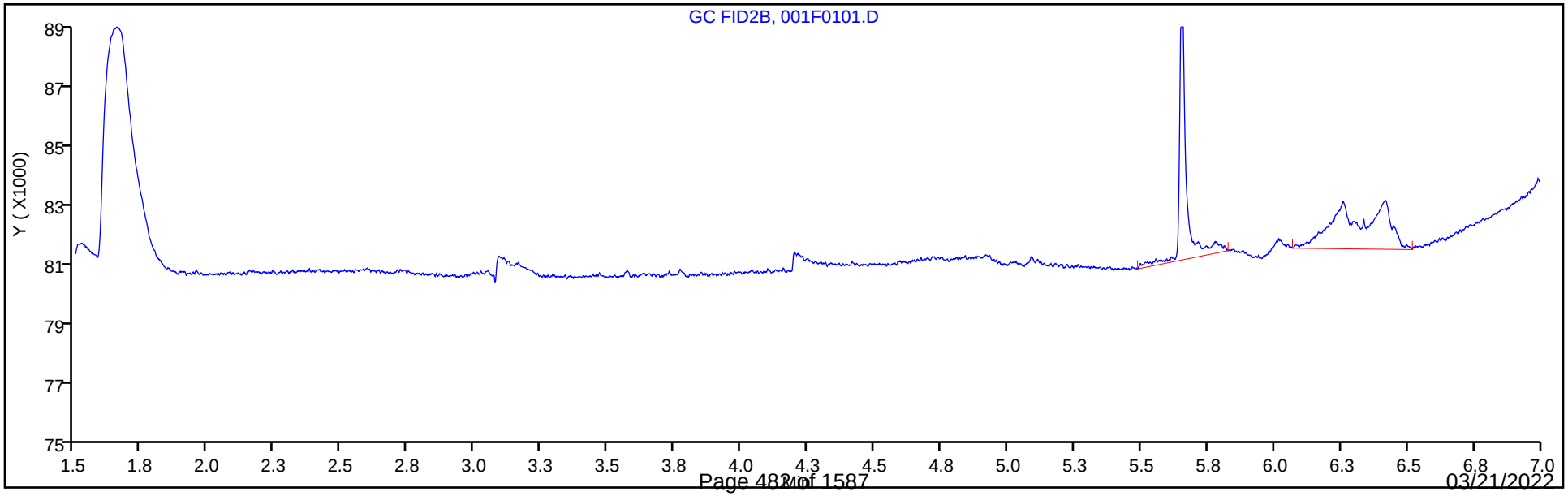
Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\001F0101.D

Injection Date:	08-Mar-2022 14:07:08	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	mb			Worklist Smp#:	3
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-567659/3

Matrix: Water | Lab File ID: 003F0301.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 14:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0667		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\003F0301.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 03-Mar-2022 14:51:14 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:52:18

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.259	1.262	-0.003	2480446	65.7	68.7	
2	1.666	1.669	-0.003	2469636	65.7	66.7	
						RPD = 2.95	
3 Ethane							
1	1.522	1.524	-0.002	4286335	123.2	128.9	
2	3.019	3.022	-0.003	4374857	123.2	131.1	
						RPD = 1.62	
4 Ethylene							
1	1.811	1.809	0.002	4271671	114.9	121.3	
2	2.599	2.604	-0.005	1677880	114.9	54.2	
						RPD = 76.51	
5 Propane							
1	2.599	2.587	0.012	6767537	180.6	187.9	
2	4.926	4.927	-0.001	6474110	180.6	184.9	
						RPD = 1.62	
6 Acetylene							
1	4.147	4.102	0.045	3323679	106.7	118.1	
2	2.746	2.751	-0.005	4121279	106.7	120.6	
						RPD = 2.06	
7 Butane							Ma
1	4.476	4.449	0.027	9090833	238.1	249.6	a
2	6.424	6.427	-0.003	8653047	238.1	246.3	M
						RPD = 1.35	
8 isobutylene							Ma
1	5.374	5.350	0.024	8741764	229.8	242.0	
2	6.268	6.269	-0.001	7856958	229.8	236.6	M
						RPD = 2.24	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

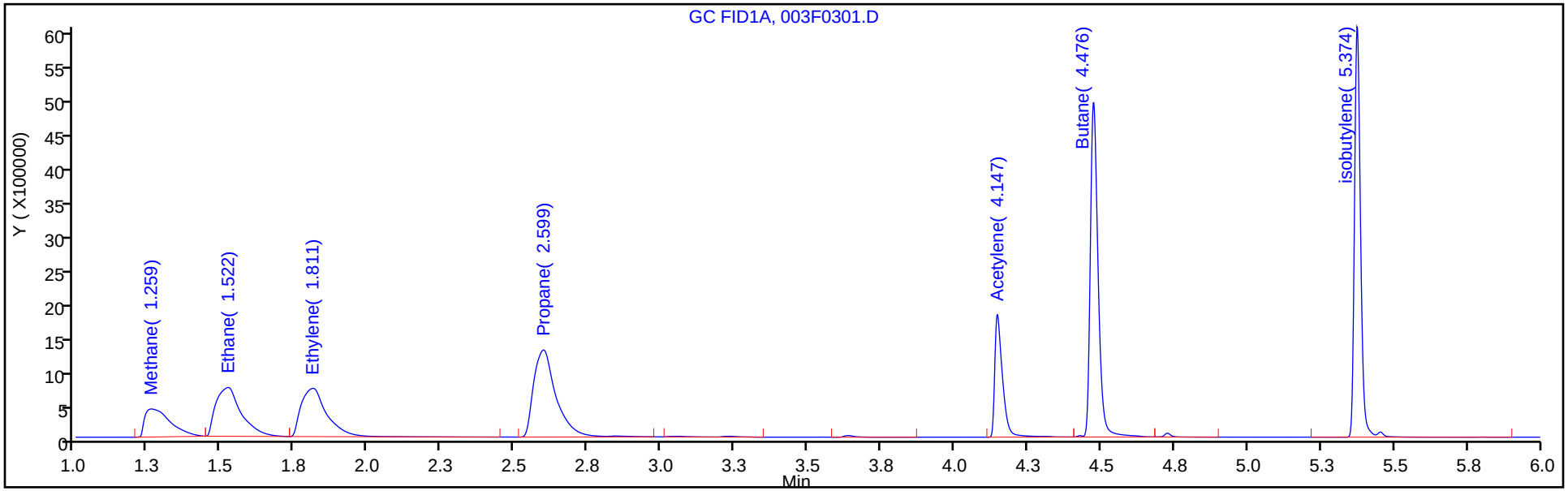
Report Date: 07-Mar-2022 13:05:09 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

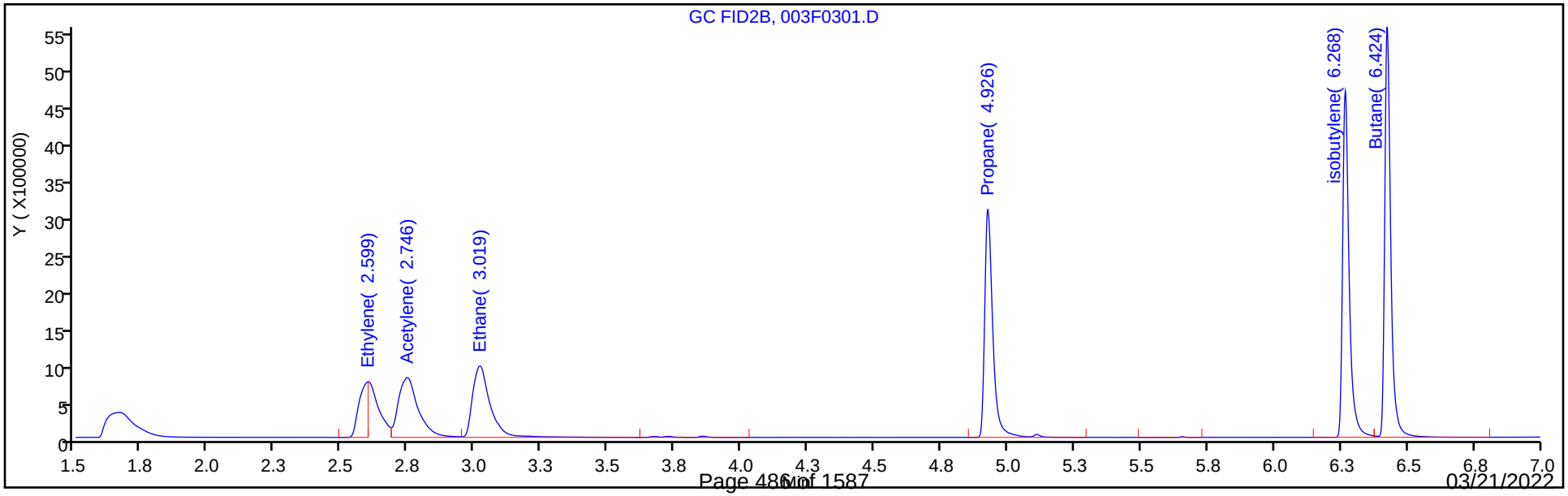
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\003F0301.D

Injection Date:	03-Mar-2022 14:51:14	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcs			Worklist Smp#:	3
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-567999/4

Matrix: Water | Lab File ID: 002F0201.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 03/08/2022 14:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567999 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0648		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\002F0201.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 08-Mar-2022 14:20:04 ALS Bottle#: 2 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Mar-2022 13:35:04 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1645

First Level Reviewer: sciannac Date: 08-Mar-2022 15:35:10

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.255	1.258	-0.003	2426108	65.7	67.1	
2	1.659	1.663	-0.004	2401148	65.7	64.8	
						RPD = 3.56	
3 Ethane							
1	1.522	1.523	-0.001	4181320	123.2	125.8	
2	3.012	3.018	-0.006	4248774	123.2	127.3	
						RPD = 1.18	
4 Ethylene							Ma
1	1.825	1.818	0.007	4167904	114.9	118.3	
2	2.592	2.598	-0.006	3784593	114.9	122.2	M
						RPD = 3.20	
5 Propane							
1	2.632	2.611	0.021	6625101	180.6	184.0	
2	4.924	4.926	-0.002	6258850	180.6	178.8	
						RPD = 2.87	
6 Acetylene							Ma
1	4.202	4.175	0.027	3233395	106.7	114.9	
2	2.739	2.745	-0.006	3562867	106.7	104.2	M
						RPD = 9.73	
7 Butane							Ma
1	4.512	4.491	0.021	8824227	238.1	242.3	a
2	6.424	6.426	-0.002	8309042	238.1	236.5	M
						RPD = 2.43	
8 isobutylene							Ma
1	5.410	5.391	0.019	8397630	229.8	232.5	
2	6.267	6.268	-0.001	7522383	229.8	226.6	M
						RPD = 2.57	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

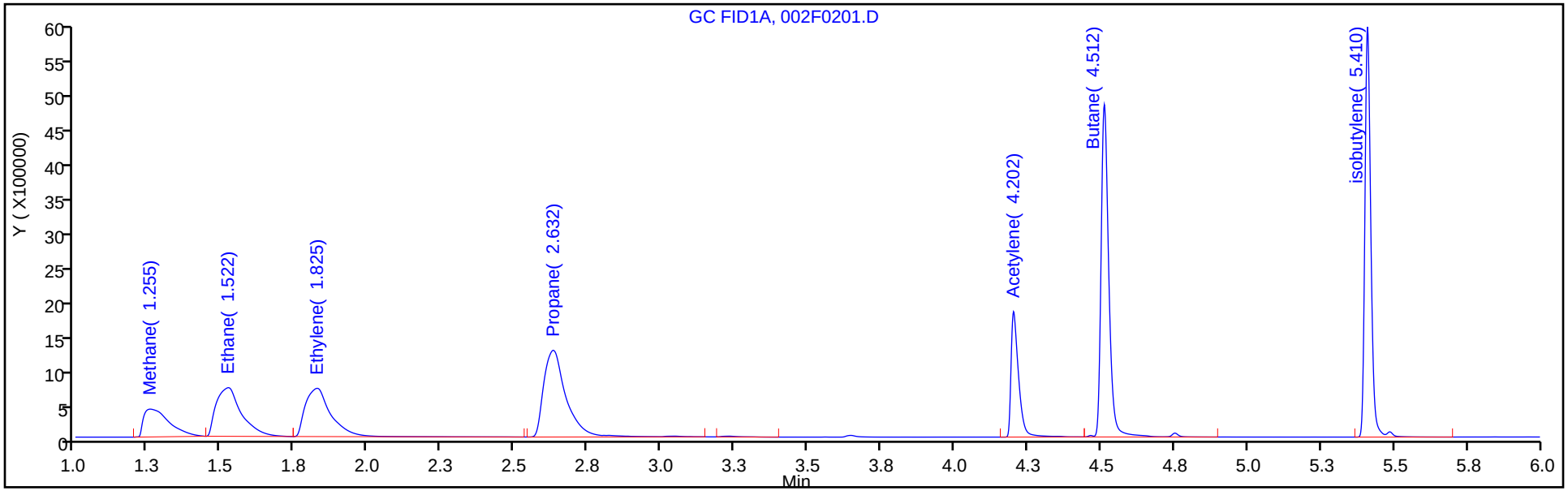
Report Date: 09-Mar-2022 13:35:06 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

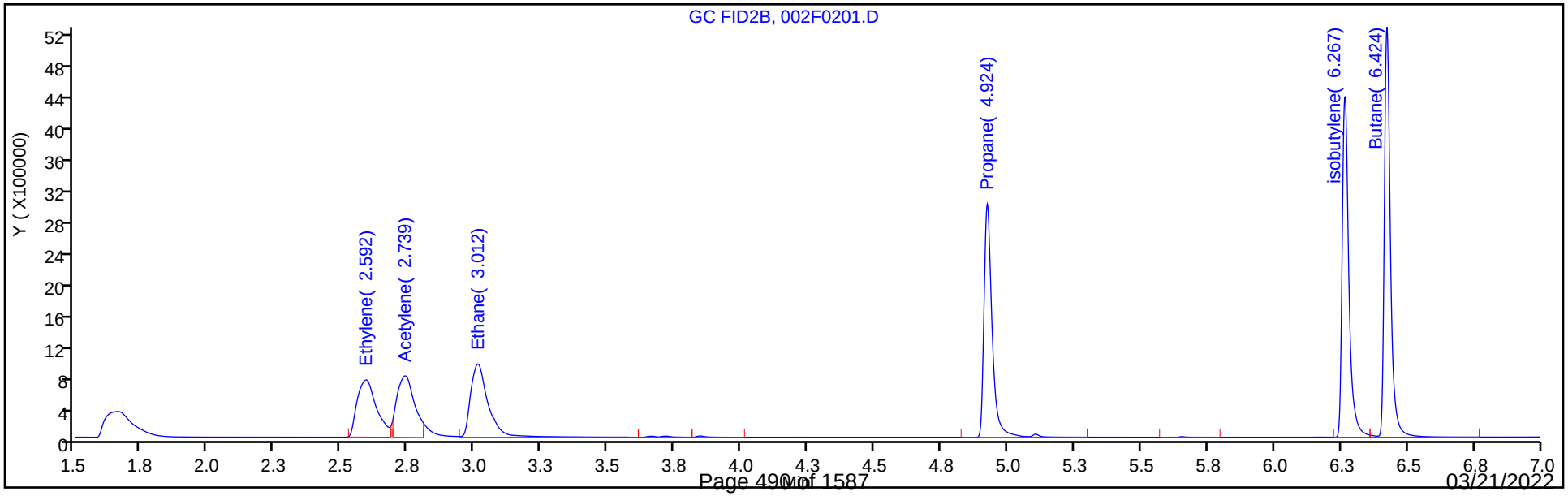
Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\002F0201.D

Injection Date:	08-Mar-2022 14:20:04	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcs			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-567659/4

Matrix: Water | Lab File ID: 004F0401.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 15:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0646		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\004F0401.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 03-Mar-2022 15:04:10 ALS Bottle#: 4 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcsd
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:54:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.258	1.262	-0.004	2412792	65.7	66.7	
2	1.662	1.669	-0.007	2395887	65.7	64.6	
						RPD = 3.22	
3 Ethane							
1	1.522	1.524	-0.002	4169871	123.2	125.4	
2	3.015	3.022	-0.007	4199701	123.2	125.8	
						RPD = 0.29	
4 Ethylene							
1	1.818	1.809	0.009	4148930	114.9	117.8	
2	2.597	2.604	-0.007	3596381	114.9	116.1	
						RPD = 1.45	
5 Propane							
1	2.613	2.587	0.026	6653965	180.6	184.8	
2	4.923	4.927	-0.004	6286237	180.6	179.5	
						RPD = 2.87	
6 Acetylene							
1	4.175	4.102	0.073	3194530	106.7	113.5	
2	2.743	2.751	-0.008	3956968	106.7	115.8	
						RPD = 1.96	
7 Butane							Ma
1	4.495	4.449	0.046	8949273	238.1	245.7	a
2	6.425	6.427	-0.002	8421652	238.1	239.7	M
						RPD = 2.49	
8 isobutylene							M
1	5.393	5.350	0.043	8498479	229.8	235.3	
2	6.268	6.269	-0.001	7618555	229.8	229.5	M
						RPD = 2.50	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

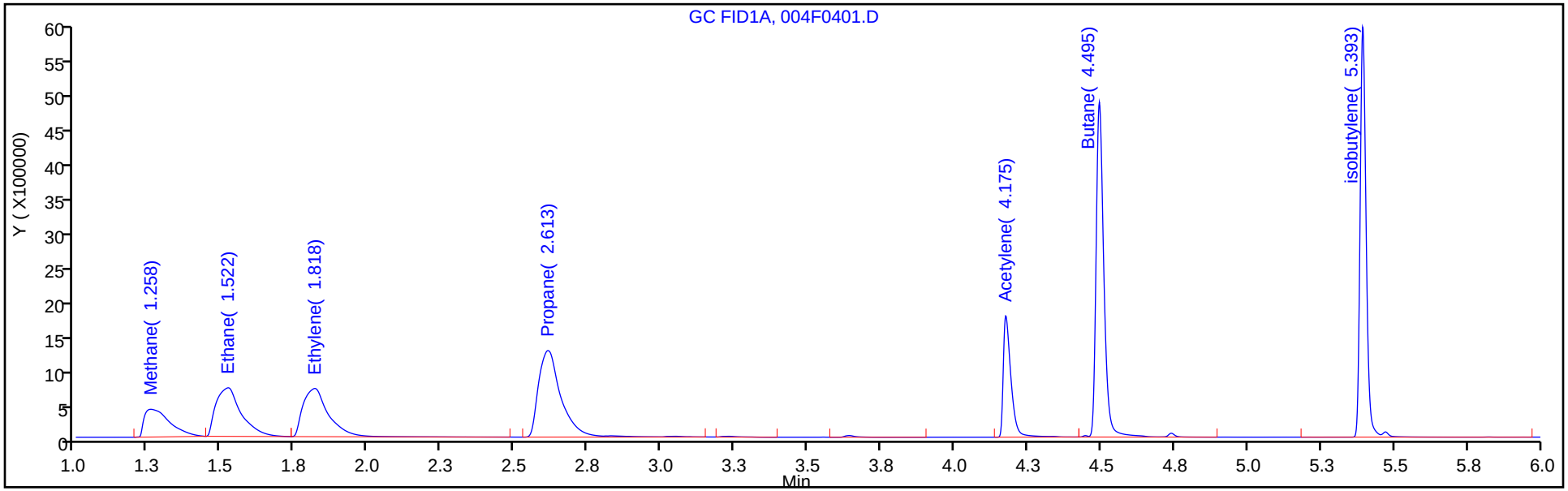
Report Date: 07-Mar-2022 13:05:10 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

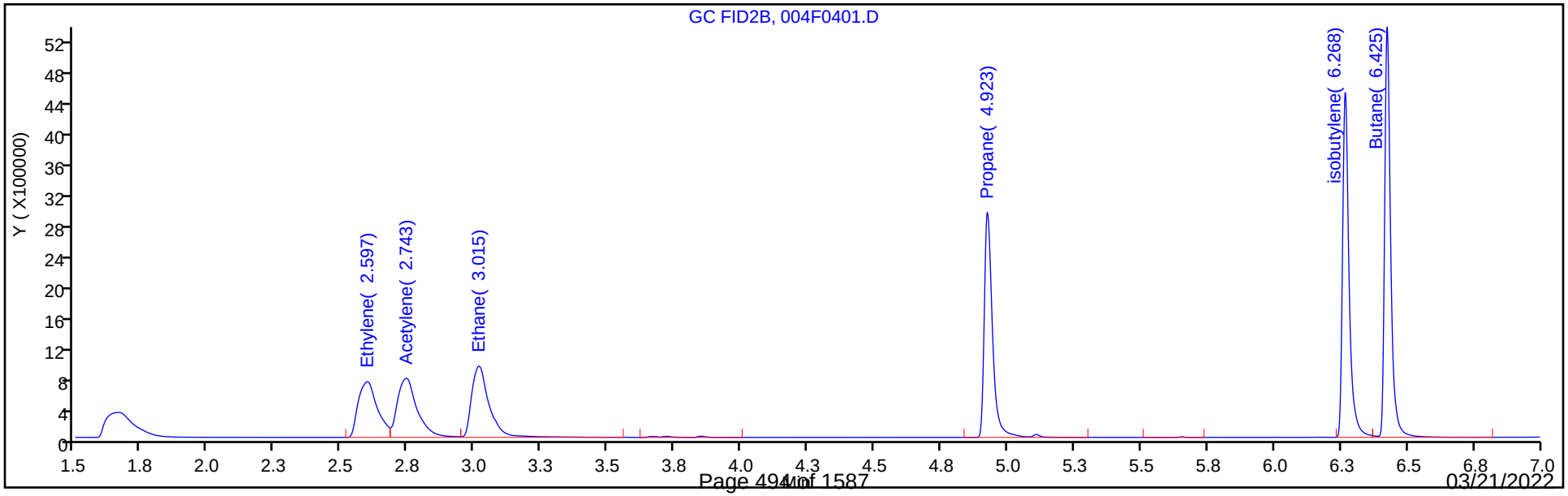
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\004F0401.D

Injection Date:	03-Mar-2022 15:04:10	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcsd			Worklist Smp#:	4
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-567999/5

Matrix: Water Lab File ID: 003F0301.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 03/08/2022 14:32

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 567999 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0649		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\003F0301.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 08-Mar-2022 14:32:58 ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: lcsd
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 09-Mar-2022 13:35:04 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1645

First Level Reviewer: sciannac Date: 08-Mar-2022 15:36:07

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.254	1.258	-0.004	2435059	65.7	67.4	
2	1.658	1.663	-0.005	2407106	65.7	64.9	
						RPD = 3.69	
3 Ethane							
1	1.523	1.523	0.000	4192782	123.2	126.1	
2	3.010	3.018	-0.008	4214363	123.2	126.2	
						RPD = 0.09	
4 Ethylene							
1	1.828	1.818	0.010	4193979	114.9	119.1	
2	2.590	2.598	-0.008	3628597	114.9	117.1	
						RPD = 1.64	
5 Propane							
1	2.634	2.611	0.023	6645224	180.6	184.5	
2	4.923	4.926	-0.003	6273229	180.6	179.2	
						RPD = 2.95	
6 Acetylene							
1	4.206	4.175	0.031	3355168	106.7	119.2	
2	2.738	2.745	-0.007	4119188	106.7	120.5	
						RPD = 1.07	
7 Butane							
1	4.514	4.491	0.023	8875771	238.1	243.7	
2	6.423	6.426	-0.003	8270543	238.1	235.4	
						RPD = 3.48	
8 isobutylene							
1	5.414	5.391	0.023	8468868	229.8	234.4	
2	6.265	6.268	-0.003	7586893	229.8	228.5	
						RPD = 2.56	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

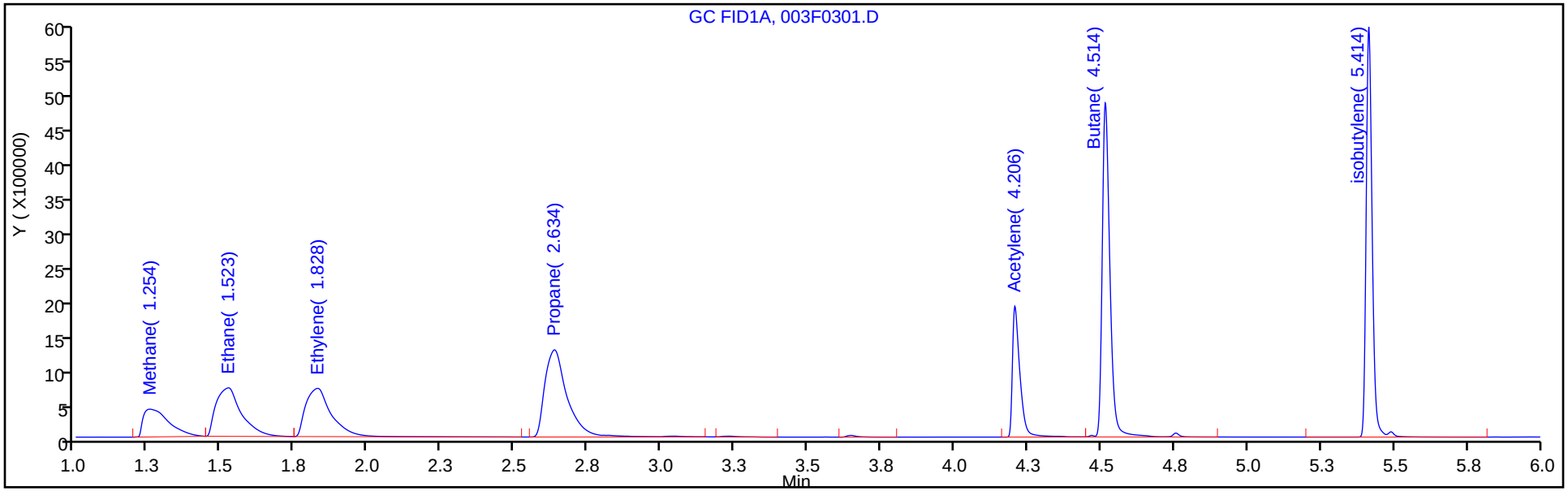
Report Date: 09-Mar-2022 13:35:06 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

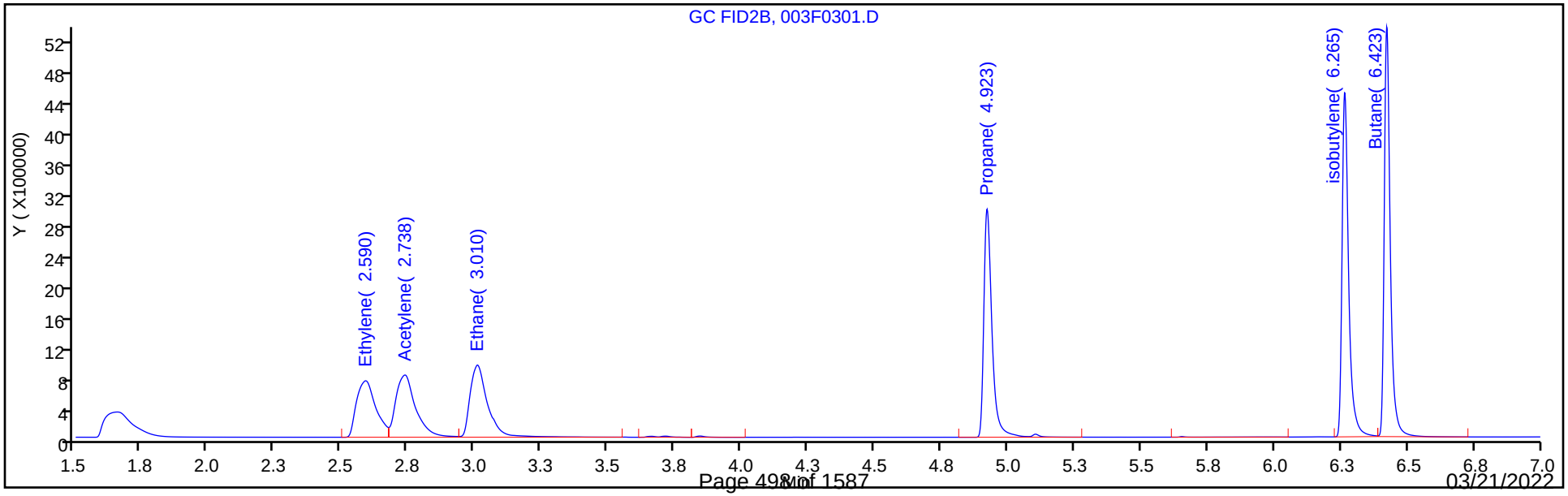
Data File: \\chromfs\Denver\ChromData\VGC_J\20220308-109074.b\003F0301.D

Injection Date:	08-Mar-2022 14:32:58	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcsd			Worklist Smp#:	5
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: NW062-8 MS | Lab Sample ID: 280-159190-16 MS

Matrix: Water | Lab File ID: 026F2601.D

Analysis Method: RSK-175 | Date Collected: 02/27/2022 14:15

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 19:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0867		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\026F2601.D
Lims ID: 280-159190-H-16 MS
Client ID: NW062-8
Sample Type: MS
Inject. Date: 03-Mar-2022 19:50:51 ALS Bottle#: 26 Worklist Smp#: 26
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159190-H-16M
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:15 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 13:01:19

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	1.254	1.262	-0.008	3281004	65.7	91.4	
2	1.657	1.669	-0.012	3192929	65.7	86.7	
						RPD = 5.31	
3 Ethane							
1	1.522	1.524	-0.002	4156582	123.2	125.0	
2	3.006	3.022	-0.016	4125337	123.2	123.6	
						RPD = 1.18	
4 Ethylene							
1	1.827	1.809	0.018	4075022	114.9	115.7	
2	2.584	2.604	-0.020	3456390	114.9	111.6	
						RPD = 3.62	
5 Propane							
1	2.631	2.587	0.044	6627298	180.6	184.0	
2	4.922	4.927	-0.005	6222196	180.6	177.7	
						RPD = 3.49	
6 Acetylene							a
1	4.207	4.102	0.105	2830154	106.7	100.6	a
2	2.732	2.751	-0.019	3499786	106.7	102.4	a
						RPD = 1.79	
7 Butane							a
1	4.526	4.449	0.077	8891013	238.1	244.1	a
2	6.422	6.427	-0.005	8204547	238.1	233.5	a
						RPD = 4.45	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 isobutylene							
1	5.429	5.350	0.079	8147758	229.8	225.5	
2	6.264	6.269	-0.005	7219559	229.8	217.4	
						RPD = 3.66	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

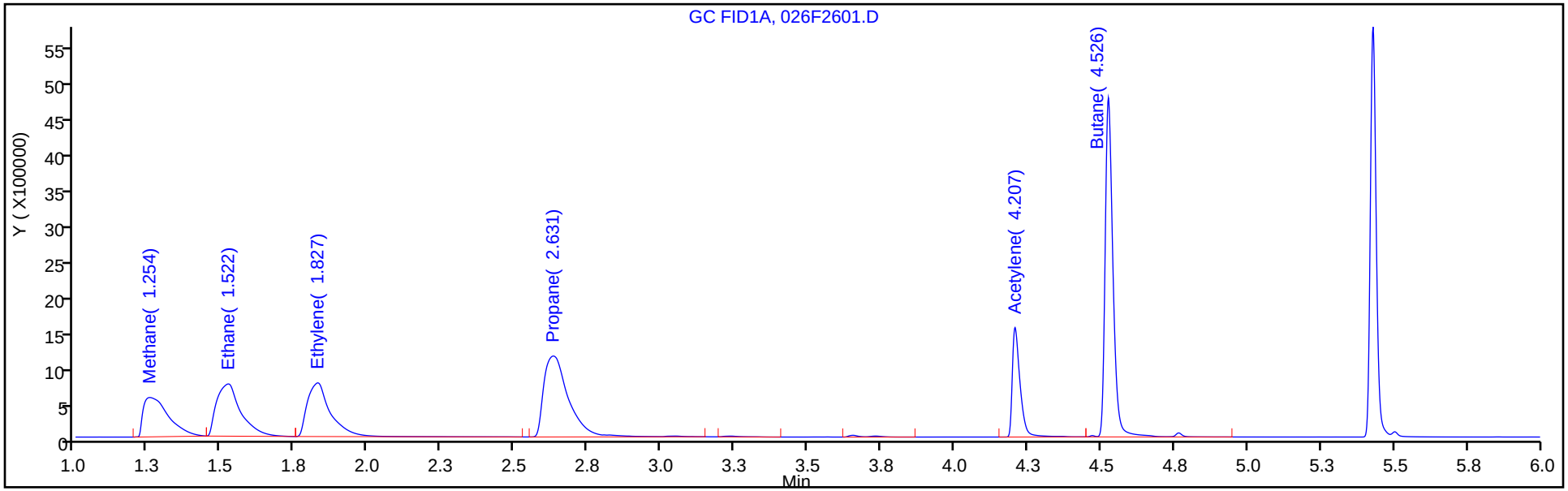
Report Date: 07-Mar-2022 13:05:20 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

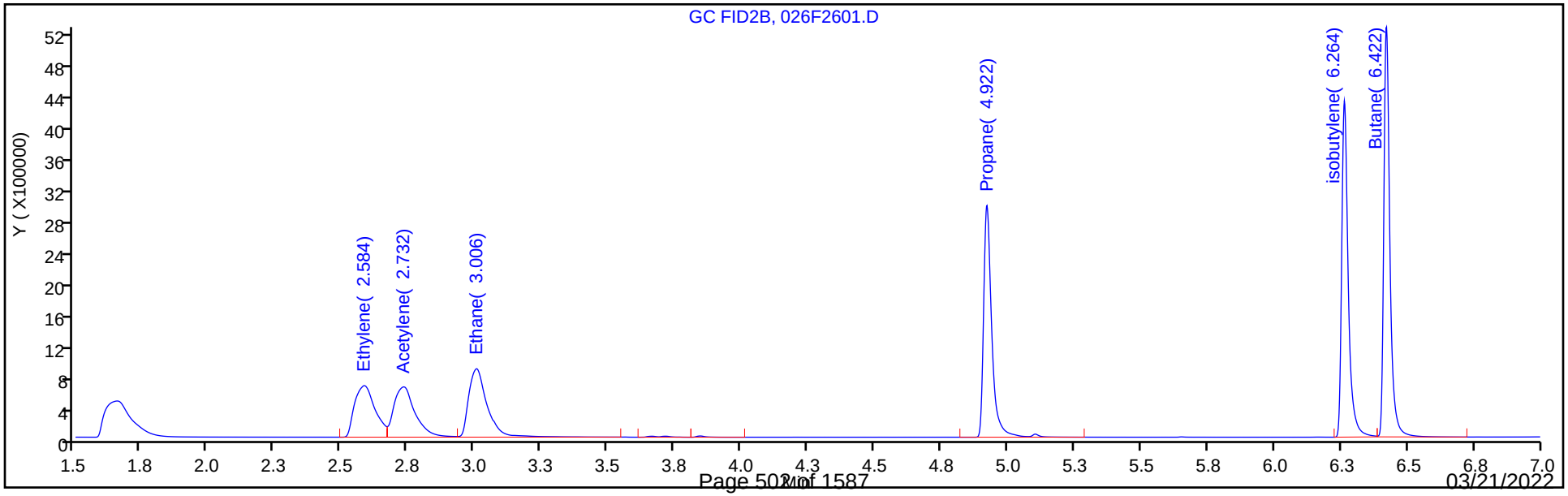
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\026F2601.D

Injection Date:	03-Mar-2022 19:50:51	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159190-H-16 MS			Worklist Smp#:	26
Client ID:	NW062-8				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
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.: 280-159190-1

SDG No.:

Client Sample ID: NW062-8 MSD | Lab Sample ID: 280-159190-16 MSD

Matrix: Water | Lab File ID: 027F2701.D

Analysis Method: RSK-175 | Date Collected: 02/27/2022 14:15

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 20:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0868		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\027F2701.D
Lims ID: 280-159190-H-16 MSD
Client ID: NW062-8
Sample Type: MSD
Inject. Date: 03-Mar-2022 20:03:46 ALS Bottle#: 27 Worklist Smp#: 27
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159190-H-16M
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:15 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 13:01:55

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	1.255	1.262	-0.007	3289176	65.7	91.7	
2	1.657	1.669	-0.012	3196804	65.7	86.8	
						RPD = 5.44	
3 Ethane							
1	1.523	1.524	-0.001	4194506	123.2	126.2	
2	3.007	3.022	-0.015	4199257	123.2	125.8	
						RPD = 0.31	
4 Ethylene							
1	1.828	1.809	0.019	4107708	114.9	116.6	
2	2.587	2.604	-0.017	3477689	114.9	112.3	
						RPD = 3.81	
5 Propane							
1	2.635	2.587	0.048	6699534	180.6	186.0	
2	4.920	4.927	-0.007	6284082	180.6	179.5	
						RPD = 3.59	
6 Acetylene							a
1	4.208	4.102	0.106	2854860	106.7	101.5	a
2	2.733	2.751	-0.018	3547392	106.7	103.8	a
						RPD = 2.27	
7 Butane							Ma
1	4.527	4.449	0.078	9018842	238.1	247.6	a
2	6.422	6.427	-0.005	8371113	238.1	238.2	M
						RPD = 3.87	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
8 isobutylene							M
1	5.428	5.350	0.078	8249407	229.8	228.4	
2	6.263	6.269	-0.006	7335070	229.8	220.9	M
						RPD = 3.31	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

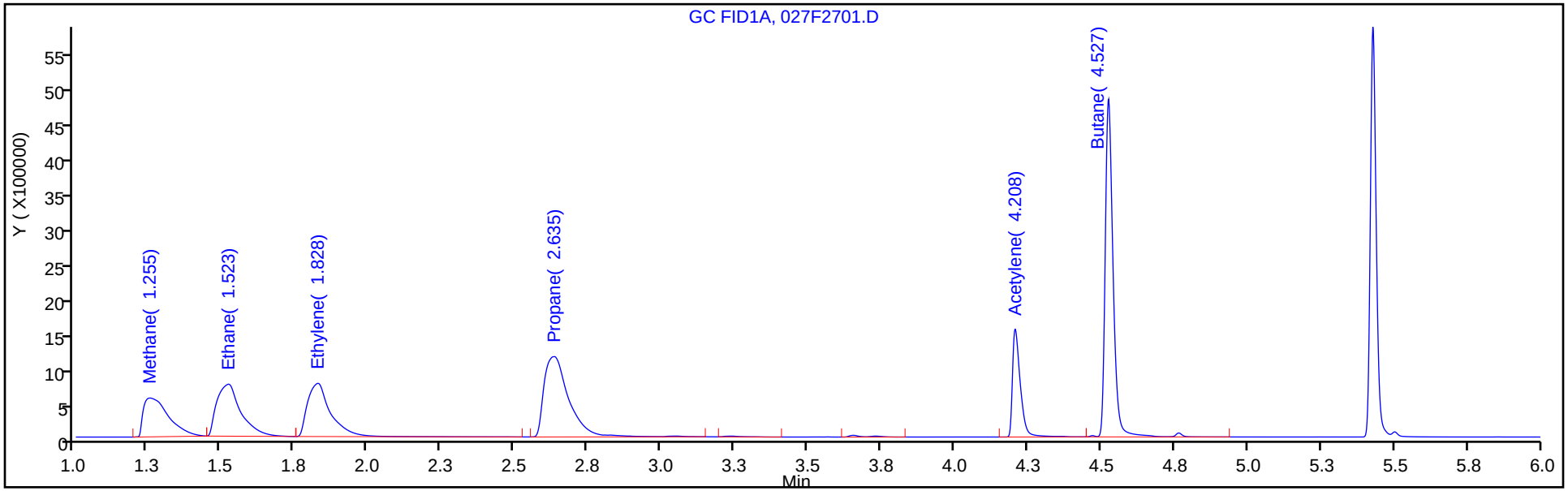
RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

Report Date: 07-Mar-2022 13:05:20 Chrom Revision: 2.3 16-Feb-2022 17:52:00

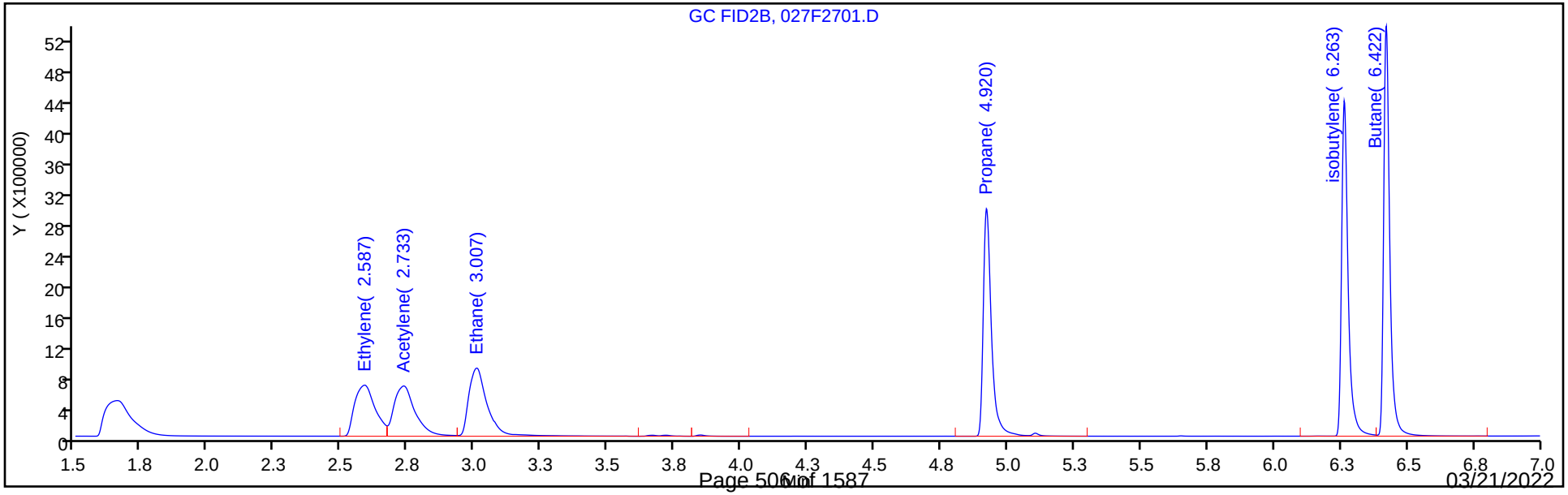
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\027F2701.D				
Injection Date:	03-Mar-2022 20:03:46	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159190-H-16 MSD			Worklist Smp#:	27
Client ID:	NW062-8				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
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.: 280-159190-1

SDG No.:

Client Sample ID: NW071-8 DU | Lab Sample ID: 280-159190-1 DU

Matrix: Water | Lab File ID: 008F0801.D

Analysis Method: RSK-175 | Date Collected: 02/27/2022 10:40

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 15:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0013	U	0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\008F0801.D
Lims ID: 280-159190-H-1 DU
Client ID:
Sample Type: DU
Inject. Date: 03-Mar-2022 15:55:53 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159190-H-1
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:08 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 12:55:16

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane							
1		4.362				ND	
2		5.458					
2 Methane							7
1		1.262				ND	
2		1.669					
3 Ethane							
1		1.524				ND	
2		3.022					
4 Ethylene							
1		1.809				ND	
2		2.604					
5 Propane							
1		2.587				ND	
2		4.927					
6 Acetylene							
1		4.102				ND	
2		2.751					
7 Butane							
1		4.449				ND	
2		6.427					
8 isobutylene							
1		5.350				ND	
2		6.269					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

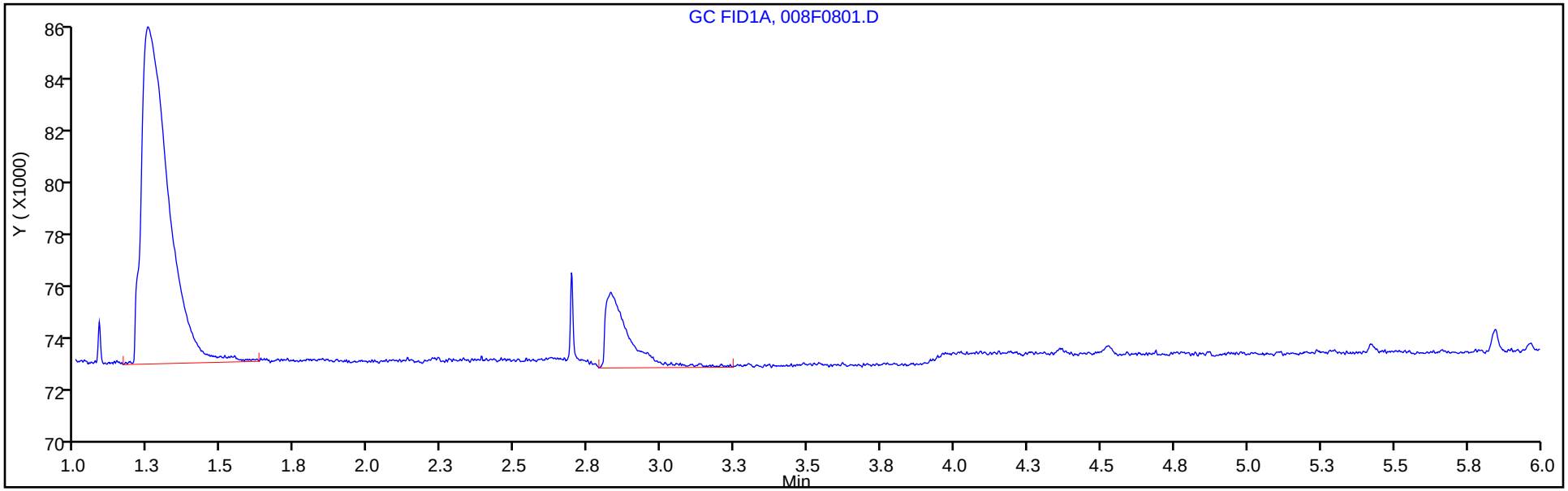
Report Date: 07-Mar-2022 13:05:12 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

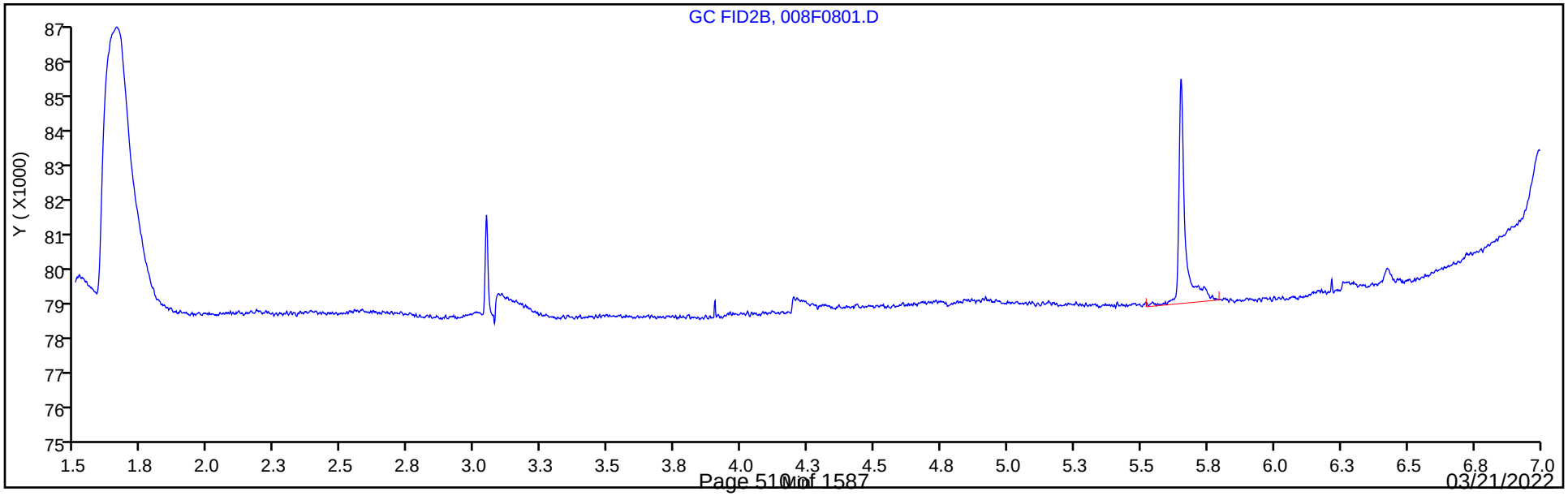
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\008F0801.D

Injection Date:	03-Mar-2022 15:55:53	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159190-H-1 DU			Worklist Smp#:	8
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



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: NW062-8 DU | Lab Sample ID: 280-159190-16 DU

Matrix: Water | Lab File ID: 025F2501.D

Analysis Method: RSK-175 | Date Collected: 02/27/2022 14:15

Sample wt/vol: 20(mL) | Date Analyzed: 03/03/2022 19:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 567659 | Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0234		0.0050	0.0013	0.00063

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\025F2501.D
Lims ID: 280-159190-G-16 DU
Client ID:
Sample Type: DU
Inject. Date: 03-Mar-2022 19:37:56 ALS Bottle#: 25 Worklist Smp#: 25
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-159190-G-16
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 07-Mar-2022 13:05:15 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1617

First Level Reviewer: sciannac Date: 07-Mar-2022 13:00:55

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	1.254	1.262	-0.008	993125		26.4	
2	1.658	1.669	-0.011	907710		23.4	
						RPD = 11.94	
3 Ethane							
1		1.524				ND	
2		3.022					
4 Ethylene							
1		1.809				ND	
2		2.604					
5 Propane							
1		2.587				ND	
2		4.927					
6 Acetylene							
1		4.102				ND	
2		2.751					
7 Butane							
1		4.449				ND	
2		6.427					
8 isobutylene							
1		5.350				ND	
2		6.269					

QC Flag Legend

Processing Flags

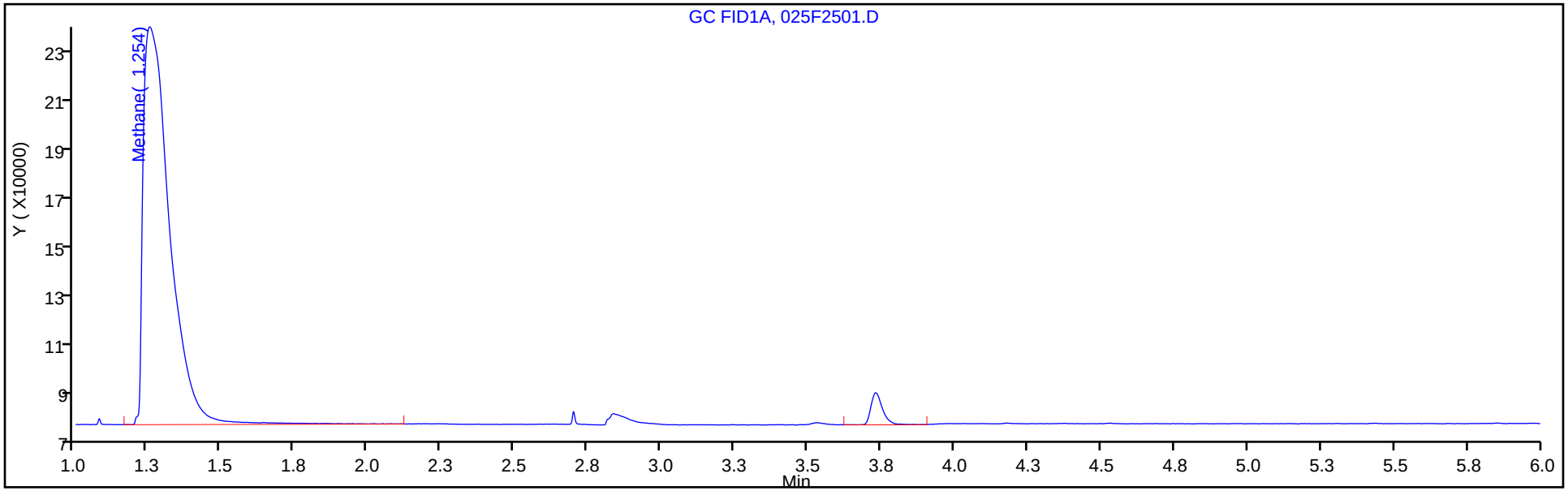
Report Date: 07-Mar-2022 13:05:19 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

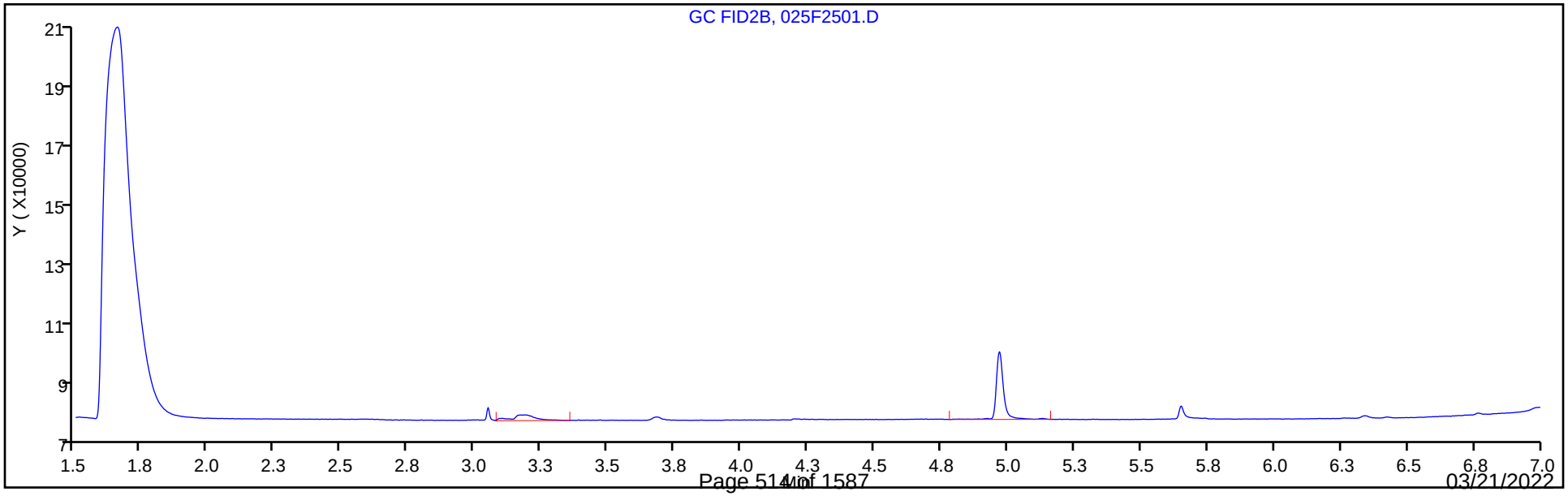
Data File: \\chromfs\Denver\ChromData\VGC_J\20220303-108981.b\025F2501.D

Injection Date:	03-Mar-2022 19:37:56	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-159190-G-16 DU			Worklist Smp#:	25
Client ID:					
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



GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159190-1

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.: 280-159190-1

SDG No.:

Instrument ID: VGC_J Start Date: 03/03/2022 14:38

Analysis Batch Number: 567659 End Date: 03/03/2022 20:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-567659/2		03/03/2022 14:38	1	002F0201.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-567659/2		03/03/2022 14:38	1	002F0201.D	HP-Plot Q 0.53(mm)
LCS 280-567659/3		03/03/2022 14:51	1	003F0301.D	Rt-Alumina KCl 0.53(mm)
LCS 280-567659/3		03/03/2022 14:51	1	003F0301.D	HP-Plot Q 0.53(mm)
LCSD 280-567659/4		03/03/2022 15:04	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-567659/4		03/03/2022 15:04	1	004F0401.D	HP-Plot Q 0.53(mm)
MB 280-567659/5		03/03/2022 15:17	1	005F0501.D	Rt-Alumina KCl 0.53(mm)
MB 280-567659/5		03/03/2022 15:17	1	005F0501.D	HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 15:30	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 15:30	1		HP-Plot Q 0.53(mm)
280-159190-1	NW071-8	03/03/2022 15:42	1	007F0701.D	Rt-Alumina KCl 0.53(mm)
280-159190-1	NW071-8	03/03/2022 15:42	1	007F0701.D	HP-Plot Q 0.53(mm)
280-159190-1 DU	NW071-8 DU	03/03/2022 15:55	1	008F0801.D	Rt-Alumina KCl 0.53(mm)
280-159190-1 DU	NW071-8 DU	03/03/2022 15:55	1	008F0801.D	HP-Plot Q 0.53(mm)
280-159190-2	NW060-8	03/03/2022 16:08	1	009F0901.D	Rt-Alumina KCl 0.53(mm)
280-159190-2	NW060-8	03/03/2022 16:08	1	009F0901.D	HP-Plot Q 0.53(mm)
280-159190-3	NW061-8	03/03/2022 16:22	1	010F1001.D	Rt-Alumina KCl 0.53(mm)
280-159190-3	NW061-8	03/03/2022 16:22	1	010F1001.D	HP-Plot Q 0.53(mm)
280-159190-4	EW7-PM24A-8-25	03/03/2022 16:35	1	011F1101.D	Rt-Alumina KCl 0.53(mm)
280-159190-4	EW7-PM24A-8-25	03/03/2022 16:35	1	011F1101.D	HP-Plot Q 0.53(mm)
280-159190-5	EW7-PM21A-8-25	03/03/2022 16:48	1	012F1201.D	Rt-Alumina KCl 0.53(mm)
280-159190-5	EW7-PM21A-8-25	03/03/2022 16:48	1	012F1201.D	HP-Plot Q 0.53(mm)
280-159190-6	NW070-8	03/03/2022 17:01	1	013F1301.D	Rt-Alumina KCl 0.53(mm)
280-159190-6	NW070-8	03/03/2022 17:01	1	013F1301.D	HP-Plot Q 0.53(mm)
280-159190-7	CA210-8	03/03/2022 17:14	1	014F1401.D	Rt-Alumina KCl 0.53(mm)
280-159190-7	CA210-8	03/03/2022 17:14	1	014F1401.D	HP-Plot Q 0.53(mm)
280-159190-8	CA212-8	03/03/2022 17:27	1	015F1501.D	Rt-Alumina KCl 0.53(mm)
280-159190-8	CA212-8	03/03/2022 17:27	1	015F1501.D	HP-Plot Q 0.53(mm)
280-159190-9	CA213-8	03/03/2022 17:40	1	016F1601.D	Rt-Alumina KCl 0.53(mm)
280-159190-9	CA213-8	03/03/2022 17:40	1	016F1601.D	HP-Plot Q 0.53(mm)
CCV 280-567659/17		03/03/2022 17:53	1	017F1701.D	Rt-Alumina KCl 0.53(mm)
CCV 280-567659/17		03/03/2022 17:53	1	017F1701.D	HP-Plot Q 0.53(mm)
280-159190-10	G0092-8	03/03/2022 18:06	1	018F1801.D	Rt-Alumina KCl 0.53(mm)
280-159190-10	G0092-8	03/03/2022 18:06	1	018F1801.D	HP-Plot Q 0.53(mm)
280-159190-11	G0091-8	03/03/2022 18:19	1	019F1901.D	Rt-Alumina KCl 0.53(mm)
280-159190-11	G0091-8	03/03/2022 18:19	1	019F1901.D	HP-Plot Q 0.53(mm)
280-159190-12	CA211-8	03/03/2022 18:32	1	020F2001.D	Rt-Alumina KCl 0.53(mm)
280-159190-12	CA211-8	03/03/2022 18:32	1	020F2001.D	HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 18:45	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 18:45	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 18:59	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 18:59	1		HP-Plot Q 0.53(mm)
280-159190-15	EW7-PM27B-8-35	03/03/2022 19:12	1	023F2301.D	Rt-Alumina KCl 0.53(mm)
280-159190-15	EW7-PM27B-8-35	03/03/2022 19:12	1	023F2301.D	HP-Plot Q 0.53(mm)
280-159190-16	NW062-8	03/03/2022 19:25	1	024F2401.D	Rt-Alumina KCl 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: VGC_J Start Date: 03/03/2022 14:38

Analysis Batch Number: 567659 End Date: 03/03/2022 20:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-159190-16	NW062-8	03/03/2022 19:25	1	024F2401.D	HP-Plot Q 0.53(mm)
280-159190-16 DU	NW062-8 DU	03/03/2022 19:37	1	025F2501.D	Rt-Alumina KCl 0.53(mm)
280-159190-16 DU	NW062-8 DU	03/03/2022 19:37	1	025F2501.D	HP-Plot Q 0.53(mm)
280-159190-16 MS	NW062-8 MS	03/03/2022 19:50	1	026F2601.D	Rt-Alumina KCl 0.53(mm)
280-159190-16 MS	NW062-8 MS	03/03/2022 19:50	1	026F2601.D	HP-Plot Q 0.53(mm)
280-159190-16 MSD	NW062-8 MSD	03/03/2022 20:03	1	027F2701.D	Rt-Alumina KCl 0.53(mm)
280-159190-16 MSD	NW062-8 MSD	03/03/2022 20:03	1	027F2701.D	HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 20:16	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 20:16	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 20:29	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 20:29	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/03/2022 20:43	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/03/2022 20:43	1		HP-Plot Q 0.53(mm)
CCV 280-567659/31		03/03/2022 20:56	1	031F3101.D	Rt-Alumina KCl 0.53(mm)
CCV 280-567659/31		03/03/2022 20:56	1	031F3101.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: VGC_J Start Date: 03/08/2022 13:54

Analysis Batch Number: 567999 End Date: 03/08/2022 19:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-567999/2		03/08/2022 13:54	1	030822f01.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-567999/2		03/08/2022 13:54	1	030822f01.D	HP-Plot Q 0.53(mm)
MB 280-567999/3		03/08/2022 14:07	1	001F0101.D	Rt-Alumina KCl 0.53(mm)
MB 280-567999/3		03/08/2022 14:07	1	001F0101.D	HP-Plot Q 0.53(mm)
LCS 280-567999/4		03/08/2022 14:20	1	002F0201.D	Rt-Alumina KCl 0.53(mm)
LCS 280-567999/4		03/08/2022 14:20	1	002F0201.D	HP-Plot Q 0.53(mm)
LCSD 280-567999/5		03/08/2022 14:32	1	003F0301.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-567999/5		03/08/2022 14:32	1	003F0301.D	HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 14:45	2		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 14:45	2		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 14:58	2		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 14:58	2		HP-Plot Q 0.53(mm)
280-159190-13	EW7-PM28A-8-25	03/08/2022 15:11	2	010F0601.D	Rt-Alumina KCl 0.53(mm)
280-159190-13	EW7-PM28A-8-25	03/08/2022 15:11	2	010F0601.D	HP-Plot Q 0.53(mm)
280-159190-14	EW7-PM29A-8-25	03/08/2022 15:25	2	011F0701.D	Rt-Alumina KCl 0.53(mm)
280-159190-14	EW7-PM29A-8-25	03/08/2022 15:25	2	011F0701.D	HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 15:38	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 15:38	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 15:51	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 15:51	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 16:04	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 16:04	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 16:17	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 16:17	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 16:30	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 16:30	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 16:43	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 16:43	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 16:56	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 16:56	1		HP-Plot Q 0.53(mm)
CCV 280-567999/17		03/08/2022 17:09	1	019F1501.D	Rt-Alumina KCl 0.53(mm)
CCV 280-567999/17		03/08/2022 17:09	1	019F1501.D	HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 17:22	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 17:22	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 17:35	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 17:35	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 17:48	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 17:48	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 18:01	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 18:01	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 18:14	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 18:14	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 18:27	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 18:27	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 18:40	1		Rt-Alumina KCl 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: VGC_J Start Date: 03/08/2022 13:54

Analysis Batch Number: 567999 End Date: 03/08/2022 19:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		03/08/2022 18:40	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 18:53	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 18:53	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 19:06	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 19:06	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 19:19	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 19:19	1		HP-Plot Q 0.53(mm)
ZZZZZ		03/08/2022 19:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		03/08/2022 19:32	1		HP-Plot Q 0.53(mm)
CCV 280-567999/29		03/08/2022 19:45	1		Rt-Alumina KCl 0.53(mm)
CCV 280-567999/29		03/08/2022 19:45	1		HP-Plot Q 0.53(mm)

GC VOA BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Batch Number: 567659 Batch Start Date: 03/03/22 14:38 Batch Analyst: Scianna, Charles A

Batch Method: RSK-175 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	RSK7gasMathes 00034		
CCVRT 280-567659/2		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCS 280-567659/3		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCSD 280-567659/4		RSK-175		20 mL	20 mL	5 SU	200 uL		
MB 280-567659/5		RSK-175		20 mL	20 mL	5 SU			
280-159190-G-1	NW071-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159190-H-1 DU	NW071-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159190-I-2	NW060-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159190-G-3	NW061-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159190-G-4	EW7-PM24A-8-25	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159190-I-5	EW7-PM21A-8-25	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159190-G-6	NW070-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159190-I-7	CA210-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159190-G-8	CA212-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159190-I-9	CA213-8	RSK-175	T	20 mL	20 mL	< 2 SU			
CCV 280-567659/17		RSK-175		20 mL	20 mL	5 SU	200 uL		
280-159190-I-10	G0092-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159190-I-11	G0091-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159190-I-12	CA211-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159190-I-15	EW7-PM27B-8-35	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159190-G-16	NW062-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159190-G-16 DU	NW062-8	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159190-H-16 MS	NW062-8	RSK-175	T	20 mL	20 mL	< 2 SU	200 uL		
280-159190-H-16 MSD	NW062-8	RSK-175	T	20 mL	20 mL	< 2 SU	200 uL		
CCV 280-567659/31		RSK-175		20 mL	20 mL	5 SU	200 uL		

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.: 280-159190-1

SDG No.:

Batch Number: 567659 Batch Start Date: 03/03/22 14:38 Batch Analyst: Scianna, Charles A

Batch Method: RSK-175 Batch End Date:

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC VOA BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Batch Number: 567999 Batch Start Date: 03/08/22 13:54 Batch Analyst: Scianna, Charles A

Batch Method: RSK-175 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	RSK7gasMathes 00034		
CCVRT 280-567999/2		RSK-175		20 mL	20 mL	5 SU	200 uL		
MB 280-567999/3		RSK-175		20 mL	20 mL	5 SU			
LCS 280-567999/4		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCSD 280-567999/5		RSK-175		20 mL	20 mL	5 SU	200 uL		
280-159190-G-13	EW7-PM28A-8-25	RSK-175	T	20 mL	20 mL	< 2 SU			
280-159190-H-14	EW7-PM29A-8-25	RSK-175	T	20 mL	20 mL	< 2 SU			
CCV 280-567999/17		RSK-175		20 mL	20 mL	5 SU	200 uL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8330A_DOD5

Nitroaromatics and Nitramines (HPLC)

FORM II
HPLC/IC SURROGATE RECOVERY

Lab Name: Eurofins Denver Job No.: 280-159190-1

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 #
NW071-8	280-159190-1	99 M	
NW060-8	280-159190-2	98 M	
NW061-8	280-159190-3	100 M	
NW061-8	280-159190-3		99 M
EW7-PM24A-8-25	280-159190-4	100	
EW7-PM24A-8-25	280-159190-4		100
EW7-PM21A-8-25	280-159190-5	99 M	
EW7-PM21A-8-25	280-159190-5		103
NW070-8	280-159190-6	95 M	
CA210-8	280-159190-7	93 M	
CA212-8	280-159190-8	102 M	
CA213-8	280-159190-9	101	
G0092-8	280-159190-10	100 M	
G0091-8	280-159190-11	96 M	
G0091-8	280-159190-11		98
CA211-8	280-159190-12	102 M	
EW7-PM28A-8-25	280-159190-13	98 M	
EW7-PM28A-8-25	280-159190-13		91
EW7-PM29A-8-25	280-159190-14	97 M	
EW7-PM27B-8-35	280-159190-15	95	
EW7-PM27B-8-35	280-159190-15		99
NW062-8	280-159190-16	98 M	
	MB 280-567737/1-A	99	
	LCS 280-567737/2-A	106	
	LCS 280-567737/3-A	100	
NW062-8 MS	280-159190-16 MS	100	
NW062-8 MS	280-159190-16 MS	102 M	
NW062-8 MSD	280-159190-16 MSD	104	
NW062-8 MSD	280-159190-16 MSD	97 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.: 280-159190-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03040012.D

Lab ID: LCS 280-567737/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.20	110	73-125	
1,3-Dinitrobenzene	2.00	2.21	110	78-120	
2,4,6-Trinitrotoluene	2.00	2.18	109	71-123	
2,4-Dinitrotoluene	2.00	2.11	105	78-120	
2,6-Dinitrotoluene	2.00	2.16	108	77-127	
2-Amino-4,6-dinitrotoluene	2.00	2.08	104	79-120	
2-Nitrotoluene	2.00	1.83	91	70-127	
3-Nitrotoluene	2.00	1.67	83	73-125	
4-Amino-2,6-dinitrotoluene	2.00	2.07	103	76-125	
4-Nitrotoluene	2.00	2.07	103	71-127	
HMX	2.00	2.04	102	65-135	M
Nitrobenzene	2.00	1.97	98	65-134	M
RDX	2.00	2.18	109	68-130	
Tetryl	2.00	2.17	108	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.: 280-159190-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03040013.D

Lab ID: LCS 280-567737/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
MNX	2.33	2.39	102	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.: 280-159190-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03040034.D

Lab ID: 280-159190-16 MS Client ID: NW062-8 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.14	0.22 U	2.18	102	73-125	
1,3-Dinitrobenzene	2.14	0.11 U	2.22	104	78-120	
2,4,6-Trinitrotoluene	2.14	0.11 U	2.16	101	71-123	
2,4-Dinitrotoluene	2.14	0.086 U	2.06	96	78-120	
2,6-Dinitrotoluene	2.14	0.086 U	2.12	99	77-127	
2-Amino-4,6-dinitrotoluene	2.14	0.11 U	2.03	95	79-120	
2-Nitrotoluene	2.14	0.22 U	1.91	89	70-127	
3-Nitrotoluene	2.14	0.43 U	1.67	78	73-125	
4-Amino-2,6-dinitrotoluene	2.14	0.13 U	2.05	96	76-125	
4-Nitrotoluene	2.14	0.43 U	2.12	99	71-127	
HMX	2.14	0.22 U	2.03	95	65-135	M
Nitrobenzene	2.14	0.22 U	2.31	108	65-134	
RDX	2.14	0.22 U	1.90	89	68-130	M
Tetryl	2.14	0.11 U	2.22	104	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.: 280-159190-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03040036.D

Lab ID: 280-159190-16 MS Client ID: NW062-8 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
MNX	2.49	0.43 U	2.56	103	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.: 280-159190-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03040035.D

Lab ID: 280-159190-16 MSD Client ID: NW062-8 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.15	2.23	104	2	30	73-125	
1,3-Dinitrobenzene	2.15	2.28	106	3	30	78-120	
2,4,6-Trinitrotoluene	2.15	2.21	103	2	30	71-123	
2,4-Dinitrotoluene	2.15	2.13	99	3	30	78-120	
2,6-Dinitrotoluene	2.15	2.18	102	3	30	77-127	
2-Amino-4,6-dinitrotoluene	2.15	2.11	98	4	30	79-120	
2-Nitrotoluene	2.15	2.03	94	6	30	70-127	
3-Nitrotoluene	2.15	1.80	84	7	30	73-125	
4-Amino-2,6-dinitrotoluene	2.15	2.11	98	3	30	76-125	
4-Nitrotoluene	2.15	2.23	104	5	30	71-127	
HMX	2.15	2.13	99	5	30	65-135	M
Nitrobenzene	2.15	2.41	112	4	30	65-134	
RDX	2.15	1.99	93	5	30	68-130	M
Tetryl	2.15	2.26	105	2	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.: 280-159190-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 03040037.D

Lab ID: 280-159190-16 MSD Client ID: NW062-8 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
MNX	2.51	2.45	98	4	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.: 280-159190-1

SDG No.:

Lab Sample ID: MB 280-567737/1-A

Matrix: Water Date Extracted: 03/04/2022 14:39

Lab File ID:(1) 03040011.D Lab File ID:(2)

Date Analyzed:(1) 03/04/2022 20:06 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 280-567737/2-A	03/04/2022 20:29	
	LCS 280-567737/3-A	03/04/2022 20:51	
NW071-8	280-159190-1	03/04/2022 21:14	
NW060-8	280-159190-2	03/04/2022 21:37	
NW061-8	280-159190-3	03/04/2022 22:00	03/05/2022 01:33
EW7-PM24A-8-25	280-159190-4	03/04/2022 22:23	03/05/2022 02:08
EW7-PM21A-8-25	280-159190-5	03/04/2022 22:46	03/05/2022 02:43
NW070-8	280-159190-6	03/04/2022 23:09	
CA210-8	280-159190-7	03/04/2022 23:32	
CA212-8	280-159190-8	03/05/2022 00:41	
CA213-8	280-159190-9	03/05/2022 01:04	
G0092-8	280-159190-10	03/05/2022 01:27	
G0091-8	280-159190-11	03/05/2022 01:50	03/05/2022 07:24
CA211-8	280-159190-12	03/05/2022 02:13	
EW7-PM28A-8-25	280-159190-13	03/05/2022 02:36	03/05/2022 08:34
EW7-PM29A-8-25	280-159190-14	03/05/2022 02:58	
EW7-PM27B-8-35	280-159190-15	03/05/2022 03:21	03/05/2022 09:44
NW062-8	280-159190-16	03/05/2022 04:30	
NW062-8 MS	280-159190-16 MS	03/05/2022 04:53	
NW062-8 MSD	280-159190-16 MSD	03/05/2022 05:16	
NW062-8 MS	280-159190-16 MS	03/05/2022 05:39	
NW062-8 MSD	280-159190-16 MSD	03/05/2022 06:02	

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM24A-8-25 Lab Sample ID: 280-159190-4

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

Date Analyzed (1): 03/04/2022 22:23 Date Analyzed (2): 03/05/2022 02:08

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	0.90		170.8
	2		9.14	9.05	9.35	0.070		
4-Amino-2,6-dinitrotoluene	1		11.03	10.95	11.15	0.34		11.9
	2		17.87	17.75	18.05	0.31		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM21A-8-25 Lab Sample ID: 280-159190-5

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

Date Analyzed (1): 03/04/2022 22:46 Date Analyzed (2): 03/05/2022 02:43

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	
RDX	1		7.60	7.43	7.73	0.97		29.1
	2		9.18	9.05	9.35	0.73		
1,3,5-Trinitrobenzene	1		8.65	8.49	8.79	9.1		2.4
	2		19.05	18.87	19.17	9.3		
2,4,6-Trinitrotoluene	1		10.85	10.76	10.96	4.1		16.5
	2		25.40	25.27	25.57	4.9		
4-Amino-2,6-dinitrotoluene	1		11.03	10.95	11.15	2.2		29.4
	2		17.87	17.75	18.05	2.9		
2-Amino-4,6-dinitrotoluene	1		11.28	11.20	11.40	3.2		2.1
	2		18.92	18.80	19.10	3.3		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Client Sample ID: G0091-8 Lab Sample ID: 280-159190-11

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

Date Analyzed (1): 03/05/2022 01:50 Date Analyzed (2): 03/05/2022 07:24

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
RDX	1		7.59	7.43	7.73	0.21		19.7
	2		9.17	9.05	9.35	0.26		
4-Amino-2,6-dinitrotoluene	1		11.08	10.95	11.15	0.17		17.8
	2		17.87	17.75	18.05	0.21		
2-Amino-4,6-dinitrotoluene	1		11.32	11.20	11.40	0.18		17.8
	2		18.88	18.80	19.10	0.22		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: NW071-8 | Lab Sample ID: 280-159190-1

Matrix: Water | Lab File ID: 03040014.D

Analysis Method: 8330A | Date Collected: 02/27/2022 10:40

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 472.4(mL) | Date Analyzed: 03/04/2022 21:14

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.: 567774 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.089
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029
606-20-2	2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	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	0.13	U	0.16	0.13	0.061
99-99-0	4-Nitrotoluene	0.42	U	0.43	0.42	0.11
2691-41-0	HMX	0.21	U	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	0.096
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	99	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040014.D
Lims ID: 280-159190-A-1-A
Client ID: NW071-8
Sample Type: Client
Inject. Date: 04-Mar-2022 21:14:48 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-A-1-A
Misc. Info.: 280-0109012-014
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:47 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: 05-Mar-2022 10:20:02

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.591			ND	
7 MNX	1		7.196			ND	U
8 RDX	1		7.578			ND	
$ 10 1,2-Dinitrobenzene	1	8.516	8.511	0.005	24662	0.1978	M
11 1,3,5-Trinitrobenzene	1		8.638			ND	
12 1,3-Dinitrobenzene	1		9.257			ND	
13 Nitrobenzene	1		9.644			ND	7
15 Tetryl	1		9.957			ND	
17 2,4,6-Trinitrotoluene	1		10.857			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.051			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.297			ND	
20 2,6-Dinitrotoluene	1		11.464			ND	
21 2,4-Dinitrotoluene	1		11.637			ND	
22 o-Nitrotoluene	1		12.477			ND	7
23 p-Nitrotoluene	1		12.897			ND	
24 m-Nitrotoluene	1		13.471			ND	

QC Flag Legend

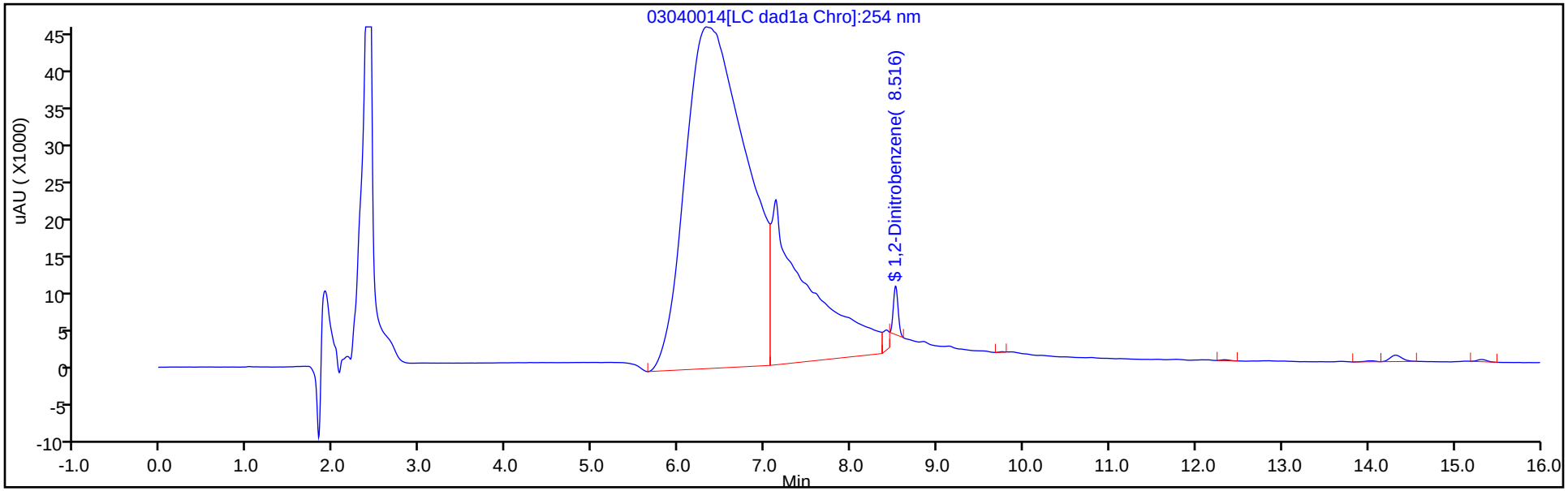
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Mar-2022 10:57:50 Chrom Revision: 2.3 16-Feb-2022 17:52:00

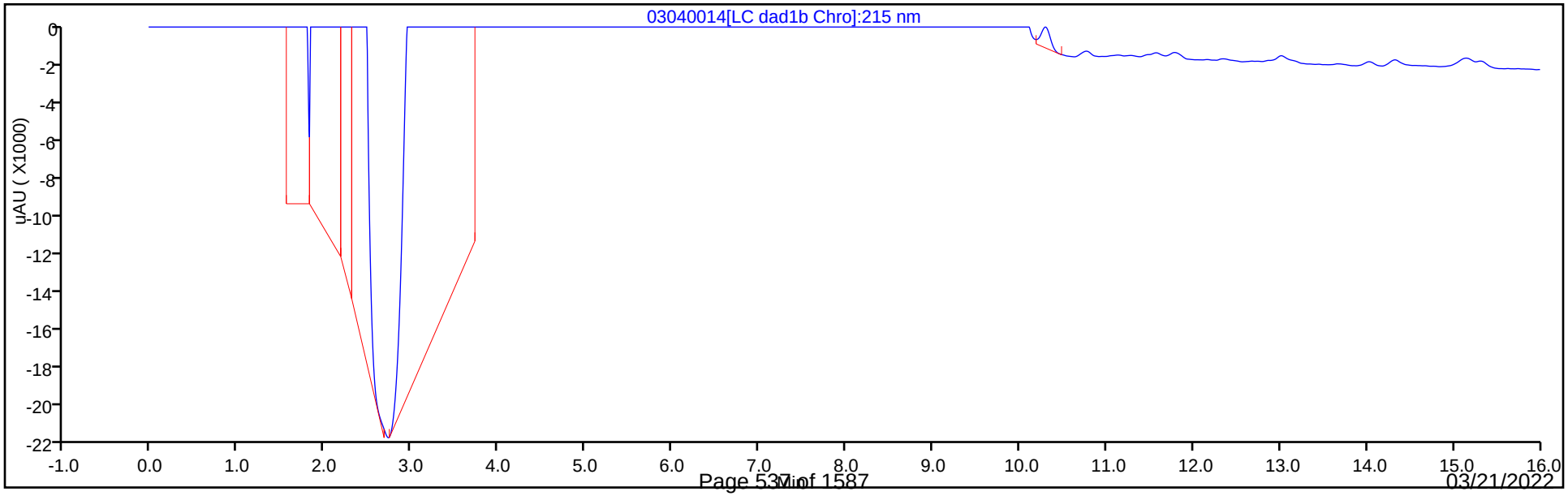
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040014.d				
Injection Date:	04-Mar-2022 21:14:48	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159190-A-1-A	Lab Sample ID:	280-159190-1	Worklist Smp#:	14
Client ID:	NW071-8				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040014.D				
Lims ID:	280-159190-A-1-A				
Client ID:	NW071-8				
Sample Type:	Client				
Inject. Date:	04-Mar-2022 21:14:48	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-A-1-A				
Misc. Info.:	280-0109012-014				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:47	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: 05-Mar-2022 10:20:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1978	98.89

Manual Integration/User Assign Peak Report

Eurofins Denver

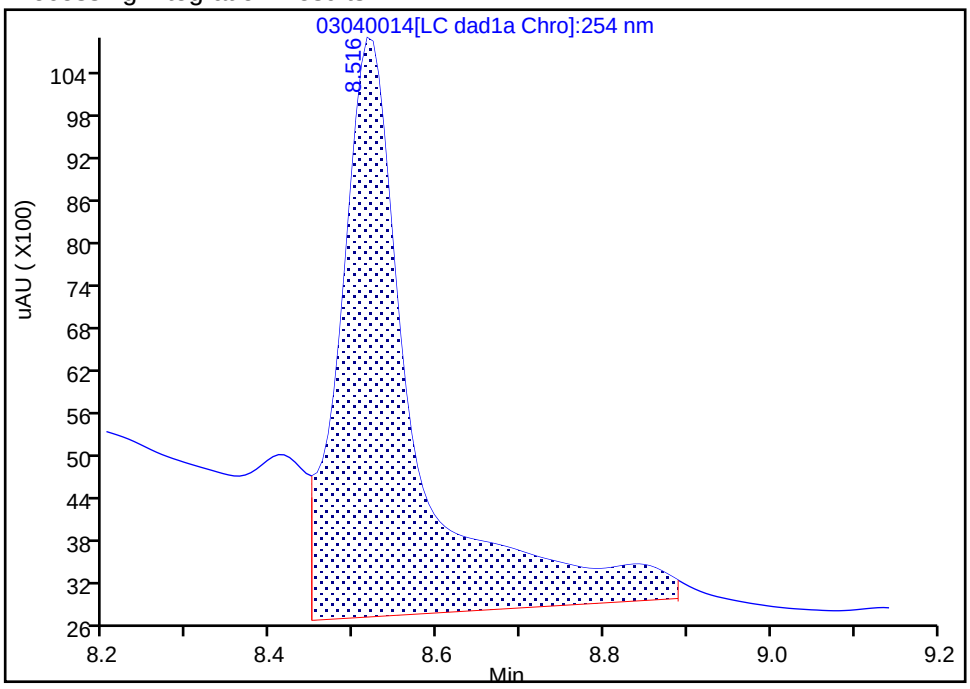
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040014.d				
Injection Date:	04-Mar-2022 21:14:48	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-1-A	Lab Sample ID:	280-159190-1		
Client ID:	NW071-8				
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

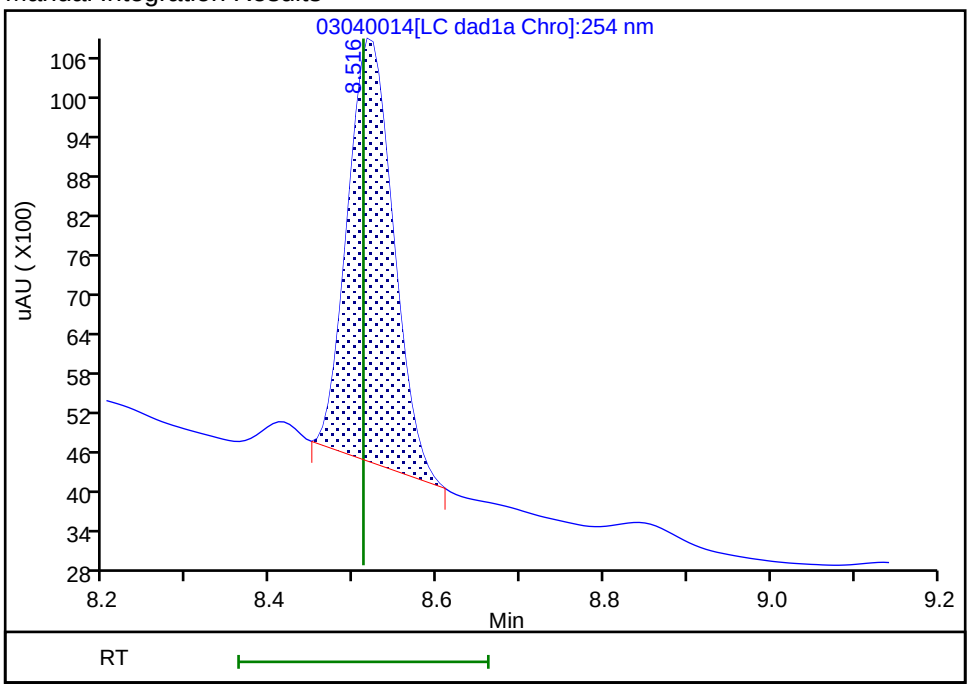
Processing Integration Results

RT: 8.52
Area: 51486
Amount: 0.412887
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 24662
Amount: 0.197774
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:20:01

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

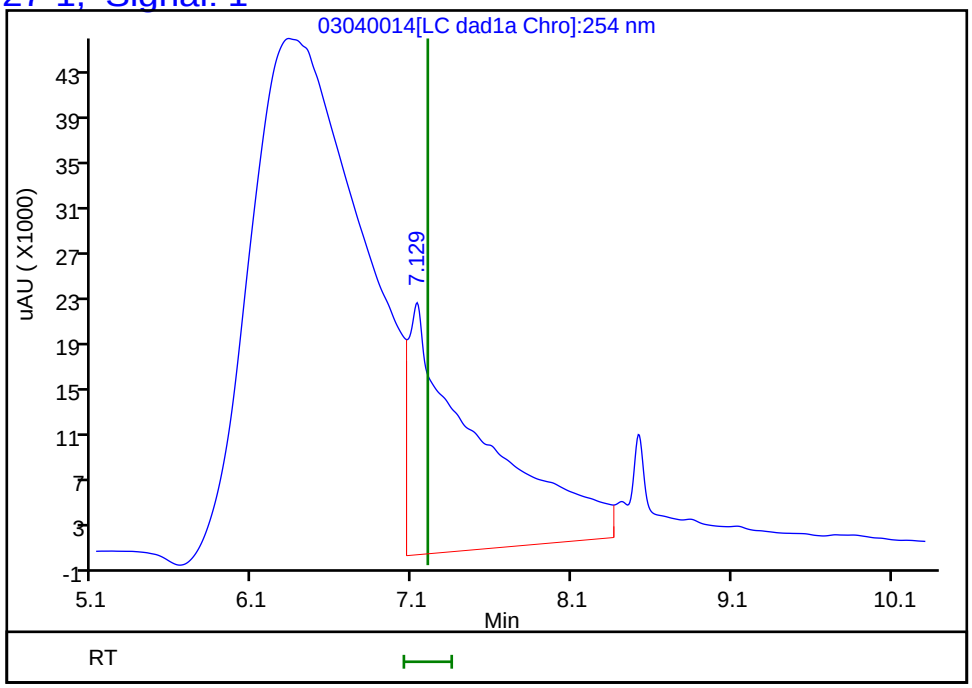
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040014.d
Injection Date: 04-Mar-2022 21:14:48 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-A-1-A Lab Sample ID: 280-159190-1
Client ID: NW071-8
Operator ID: JZ ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.13
Response: 679833
Amount: 5.395696



Reviewer: zhangji, 05-Mar-2022 10:20:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: NW060-8 | Lab Sample ID: 280-159190-2

Matrix: Water | Lab File ID: 03040015.D

Analysis Method: 8330A | Date Collected: 02/27/2022 11:50

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 469.3(mL) | Date Analyzed: 03/04/2022 21:37

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.: 567774 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.090
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048
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	0.44	0.43	0.11
2691-41-0	HMX	0.21	U	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	98	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040015.D
Lims ID: 280-159190-A-2-A
Client ID: NW060-8
Sample Type: Client
Inject. Date: 04-Mar-2022 21:37:44 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-A-2-A
Misc. Info.: 280-0109012-015
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:47 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: 05-Mar-2022 10:20:09

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.591			ND	
7 MNX	1		7.196			ND	
8 RDX	1		7.578			ND	
$ 10 1,2-Dinitrobenzene	1	8.504	8.511	-0.007	24492	0.1964	M
11 1,3,5-Trinitrobenzene	1		8.638			ND	
12 1,3-Dinitrobenzene	1		9.257			ND	
13 Nitrobenzene	1		9.644			ND	
15 Tetryl	1		9.957			ND	
17 2,4,6-Trinitrotoluene	1		10.857			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.051			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.297			ND	
20 2,6-Dinitrotoluene	1		11.464			ND	
21 2,4-Dinitrotoluene	1		11.637			ND	
22 o-Nitrotoluene	1		12.477			ND	
23 p-Nitrotoluene	1		12.897			ND	
24 m-Nitrotoluene	1		13.471			ND	7

QC Flag Legend

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

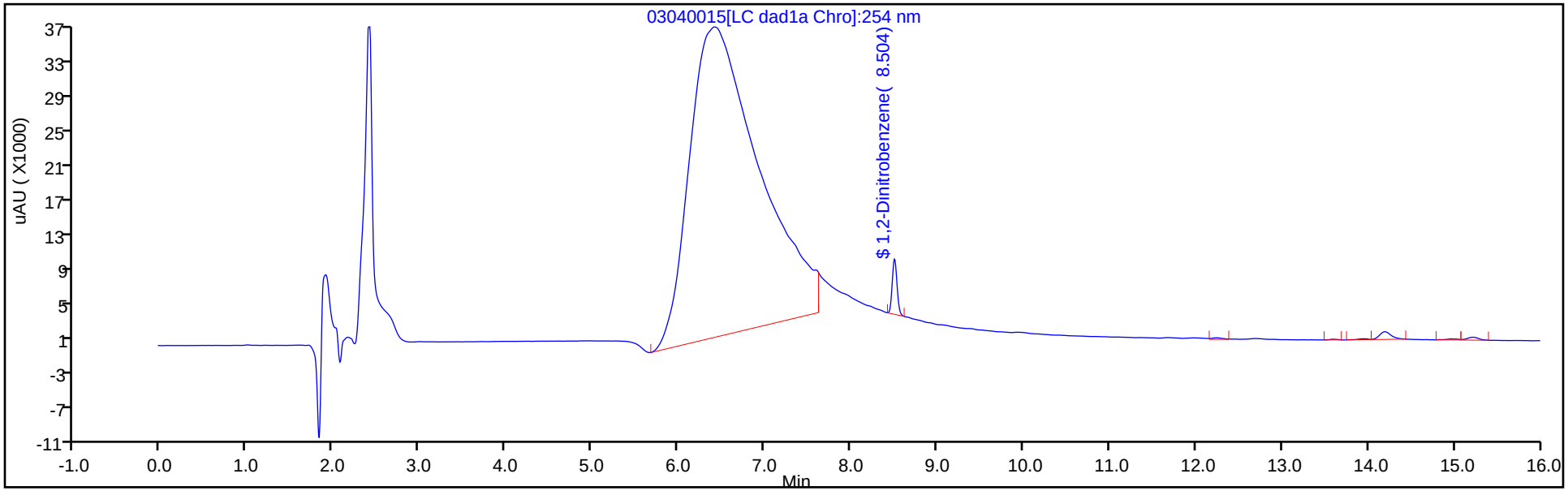
Report Date: 05-Mar-2022 10:57:49 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

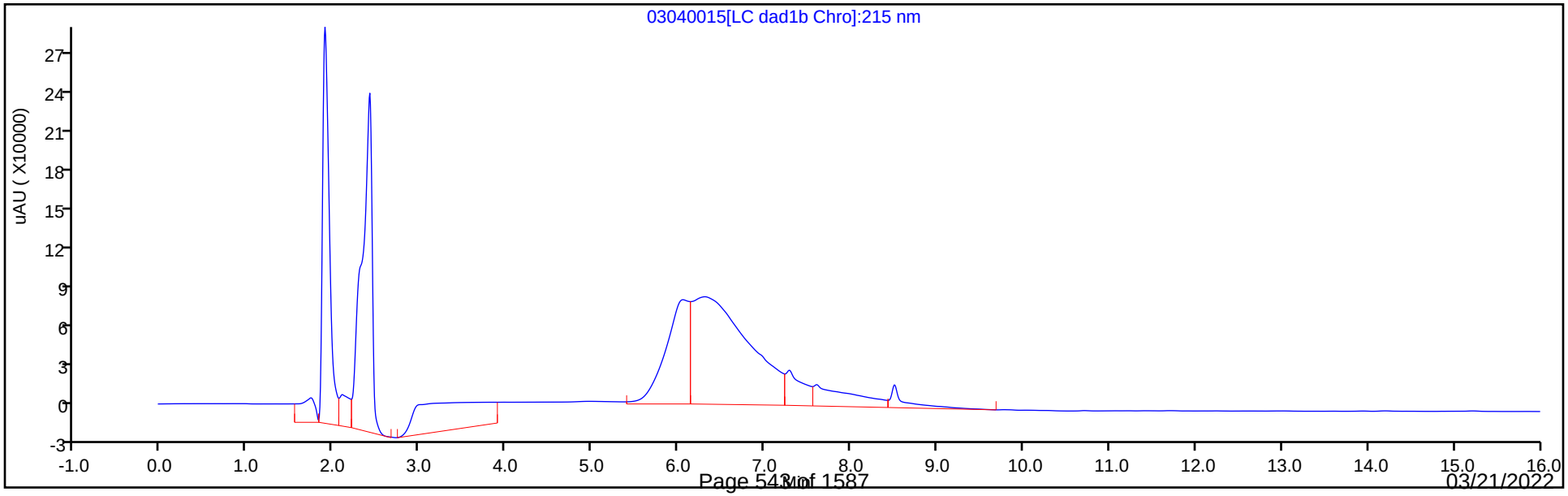
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040015.d

Injection Date:	04-Mar-2022 21:37:44	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159190-A-2-A	Lab Sample ID:	280-159190-2	Worklist Smp#:	15
Client ID:	NW060-8				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040015.D				
Lims ID:	280-159190-A-2-A				
Client ID:	NW060-8				
Sample Type:	Client				
Inject. Date:	04-Mar-2022 21:37:44	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-A-2-A				
Misc. Info.:	280-0109012-015				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:47	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:	05-Mar-2022 10:20:09		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1964	98.21

Manual Integration/User Assign Peak Report

Eurofins Denver

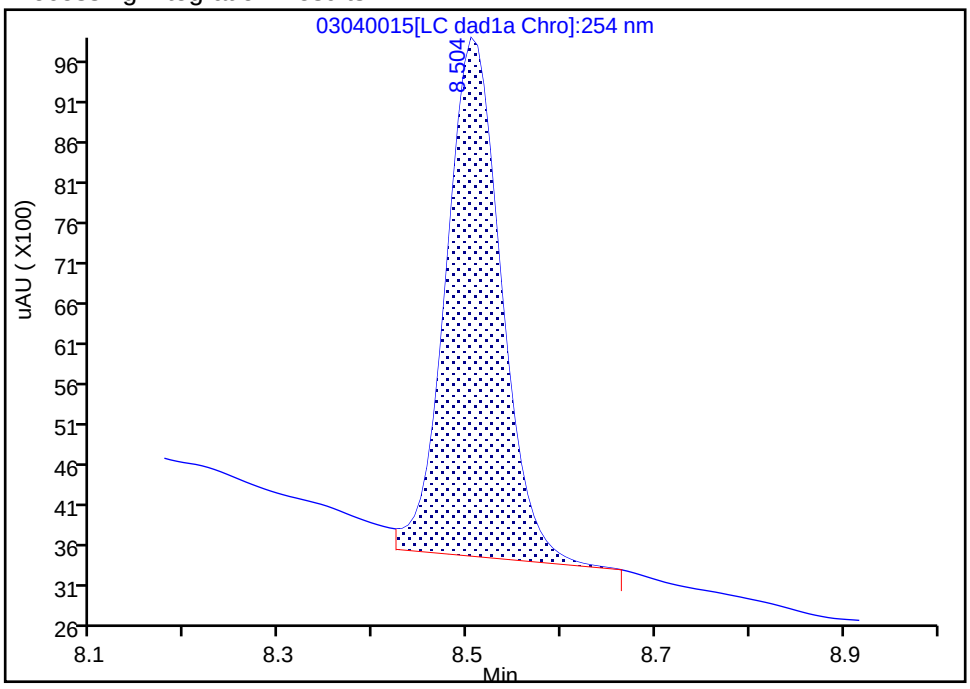
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040015.d				
Injection Date:	04-Mar-2022 21:37:44	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-2-A	Lab Sample ID:	280-159190-2		
Client ID:	NW060-8				
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

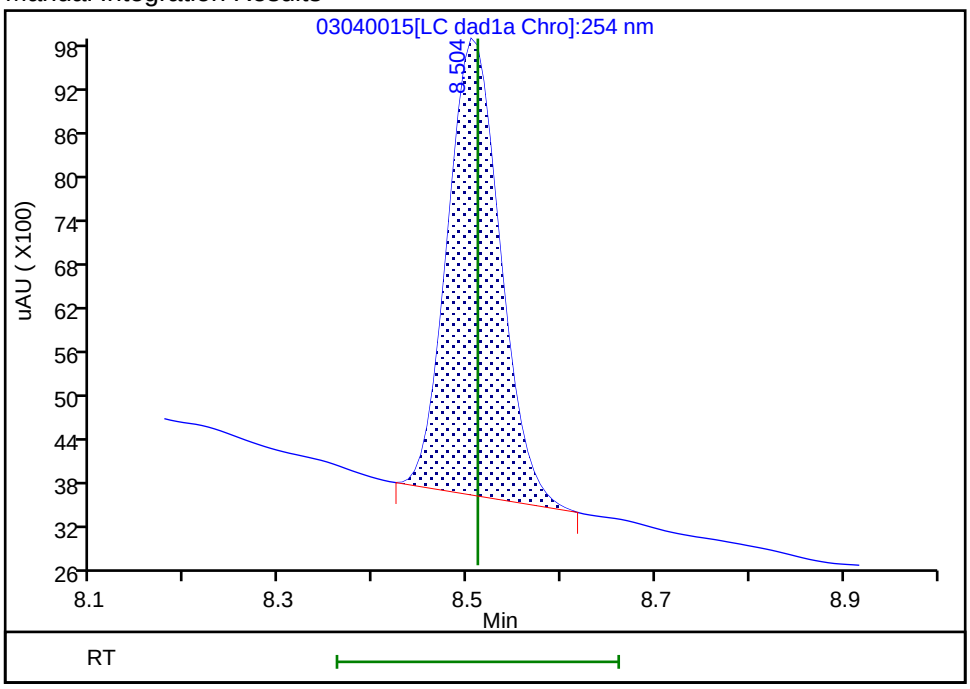
Processing Integration Results

RT: 8.50
Area: 26291
Amount: 0.210838
Amount Units: ug/mL



Manual Integration Results

RT: 8.50
Area: 24492
Amount: 0.196411
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:20:08

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: NW061-8 | Lab Sample ID: 280-159190-3

Matrix: Water | Lab File ID: 03040016.D

Analysis Method: 8330A | Date Collected: 02/27/2022 13:05

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 475.7(mL) | Date Analyzed: 03/04/2022 22:00

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.: 567774 | 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	0.088
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	0.047
121-14-2	2,4-Dinitrotoluene	0.084	U	0.11	0.084	0.029
606-20-2	2,6-Dinitrotoluene	0.084	U	0.11	0.084	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.053
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	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061
99-99-0	4-Nitrotoluene	0.42	U	0.43	0.42	0.11
2691-41-0	HMX	0.21	U	0.22	0.21	0.092
5755-27-1	MNX	0.42	U	2.1	0.42	0.16
121-82-4	RDX	0.21	U	0.22	0.21	0.054

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	100	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040016.D
Lims ID: 280-159190-A-3-A
Client ID: NW061-8
Sample Type: Client
Inject. Date: 04-Mar-2022 22:00:38 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-A-3-A
Misc. Info.: 280-0109012-016
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:47 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: 05-Mar-2022 10:20:30

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.591			ND	
7 MNX	1		7.196			ND	
8 RDX	1		7.578			ND	
$ 10 1,2-Dinitrobenzene	1	8.514	8.511	0.003	24912	0.1998	M
11 1,3,5-Trinitrobenzene	1		8.638			ND	
12 1,3-Dinitrobenzene	1		9.257			ND	
13 Nitrobenzene	1	9.674	9.644	0.030	2647	0.0138	M
15 Tetryl	1	9.981	9.957	0.024	1726	0.0101	M
17 2,4,6-Trinitrotoluene	1		10.857			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.051			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.297			ND	
20 2,6-Dinitrotoluene	1		11.464			ND	
21 2,4-Dinitrotoluene	1		11.637			ND	
22 o-Nitrotoluene	1		12.477			ND	
23 p-Nitrotoluene	1		12.897			ND	
24 m-Nitrotoluene	1		13.471			ND	

QC Flag Legend

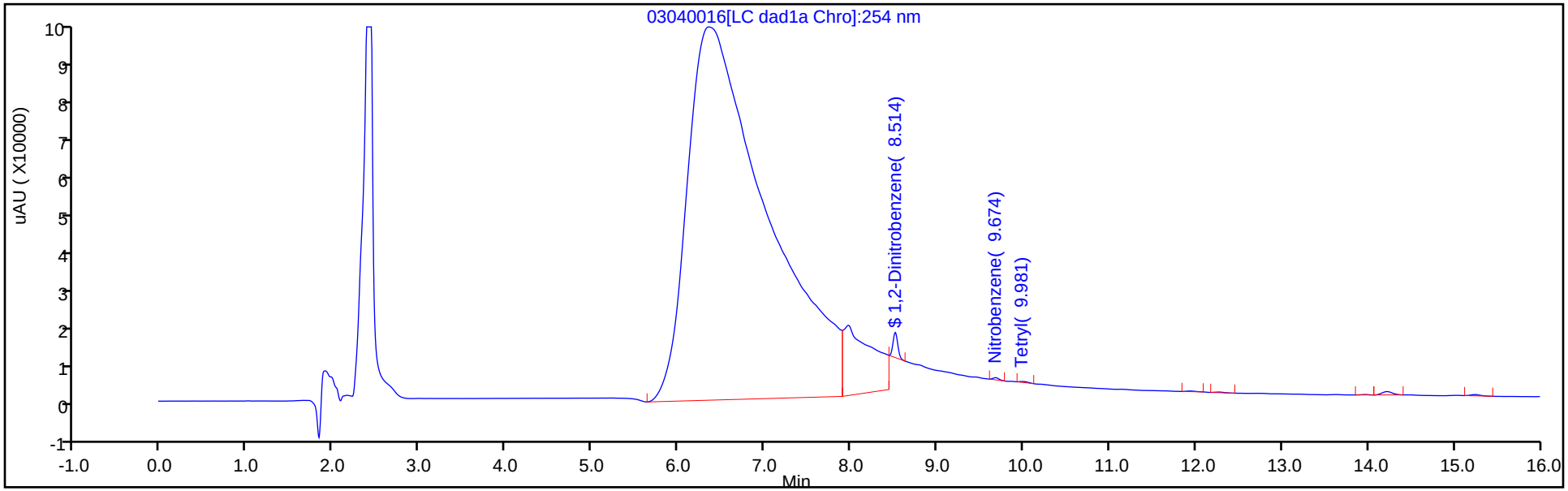
Processing Flags
Review Flags
M - Manually Integrated

Report Date: 05-Mar-2022 10:57:49 Chrom Revision: 2.3 16-Feb-2022 17:52:00

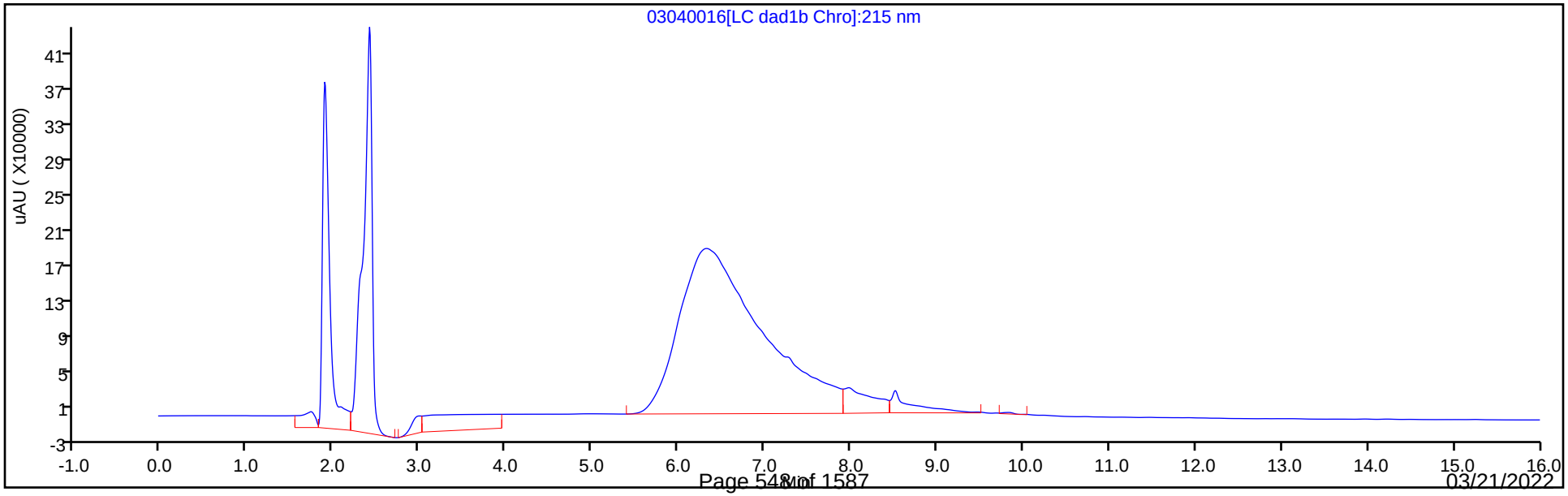
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040016.d				
Injection Date:	04-Mar-2022 22:00:38	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159190-A-3-A	Lab Sample ID:	280-159190-3	Worklist Smp#:	16
Client ID:	NW061-8				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040016.D				
Lims ID:	280-159190-A-3-A				
Client ID:	NW061-8				
Sample Type:	Client				
Inject. Date:	04-Mar-2022 22:00:38	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-A-3-A				
Misc. Info.:	280-0109012-016				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:47	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: 05-Mar-2022 10:20:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1998	99.89

Manual Integration/User Assign Peak Report

Eurofins Denver

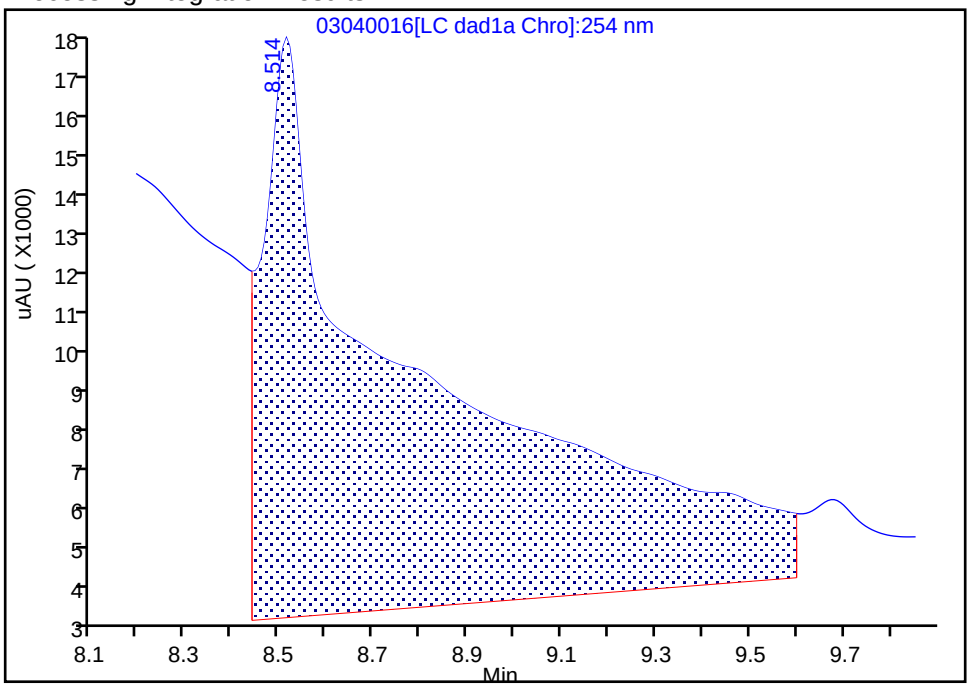
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040016.d				
Injection Date:	04-Mar-2022 22:00:38	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-3-A	Lab Sample ID:	280-159190-3		
Client ID:	NW061-8				
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

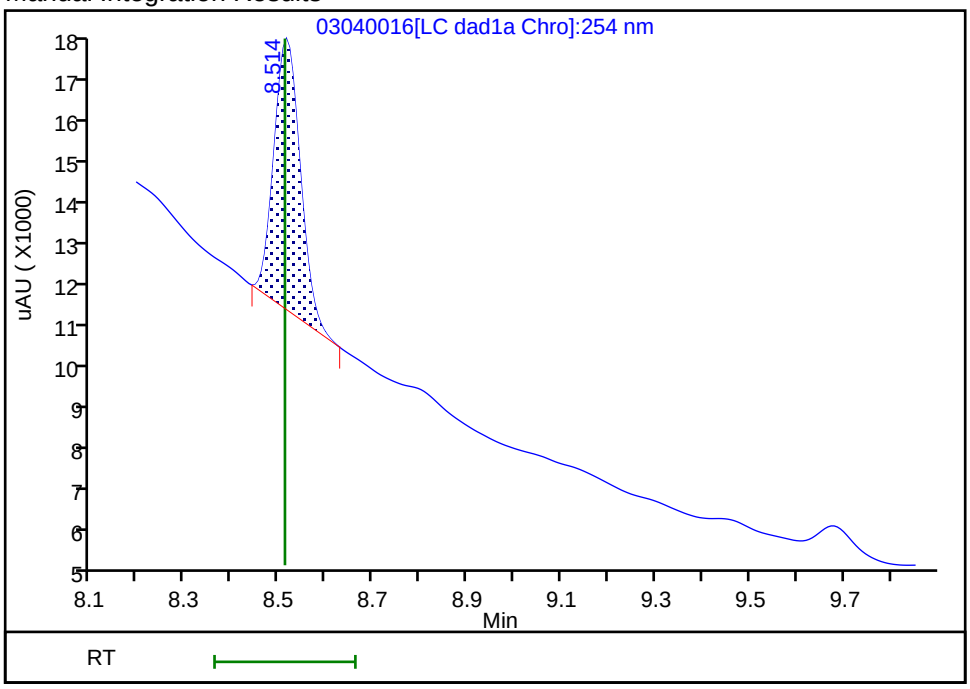
Processing Integration Results

RT: 8.51
Area: 345123
Amount: 2.767678
Amount Units: ug/mL



Manual Integration Results

RT: 8.51
Area: 24912
Amount: 0.199779
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:20:20

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

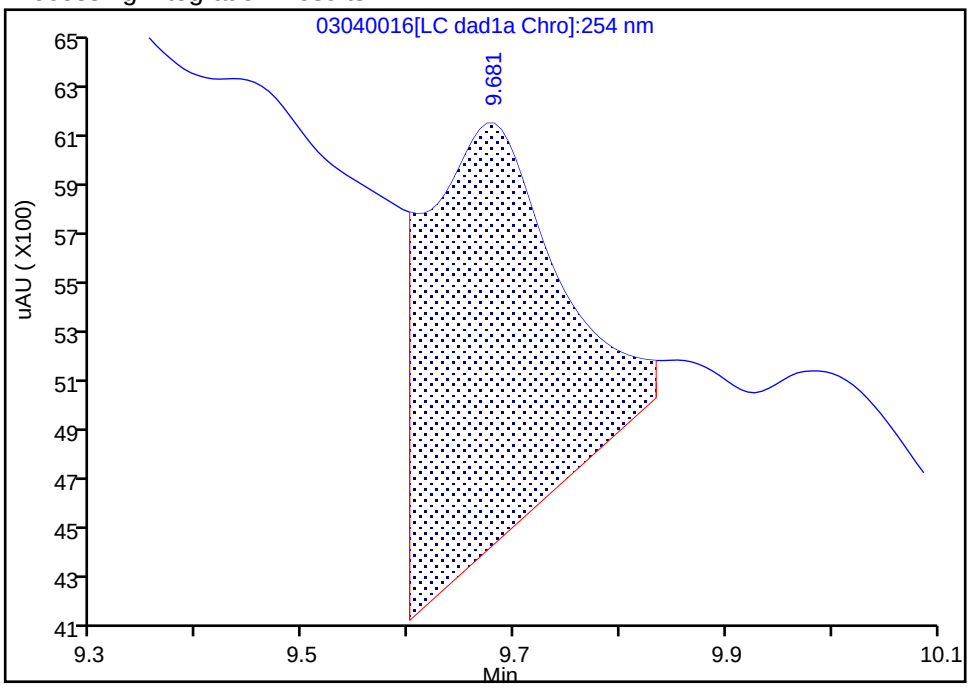
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040016.d				
Injection Date:	04-Mar-2022 22:00:38	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-3-A	Lab Sample ID:	280-159190-3		
Client ID:	NW061-8				
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

13 Nitrobenzene, CAS: 98-95-3

Signal: 1

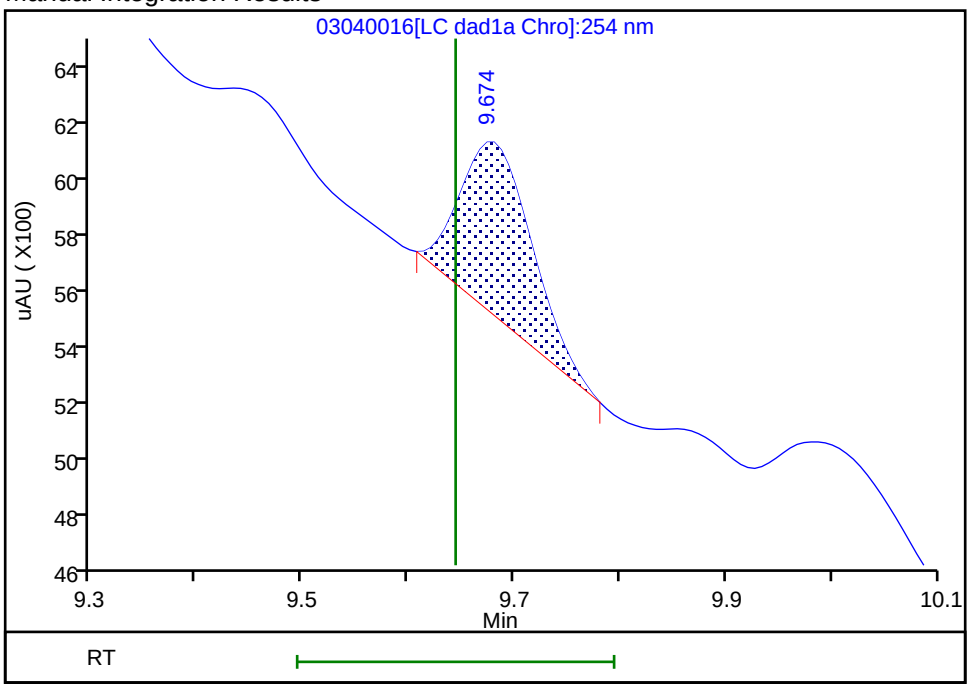
Processing Integration Results

RT: 9.68
Area: 14625
Amount: 0.076190
Amount Units: ug/mL



Manual Integration Results

RT: 9.67
Area: 2647
Amount: 0.013790
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:20:24

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

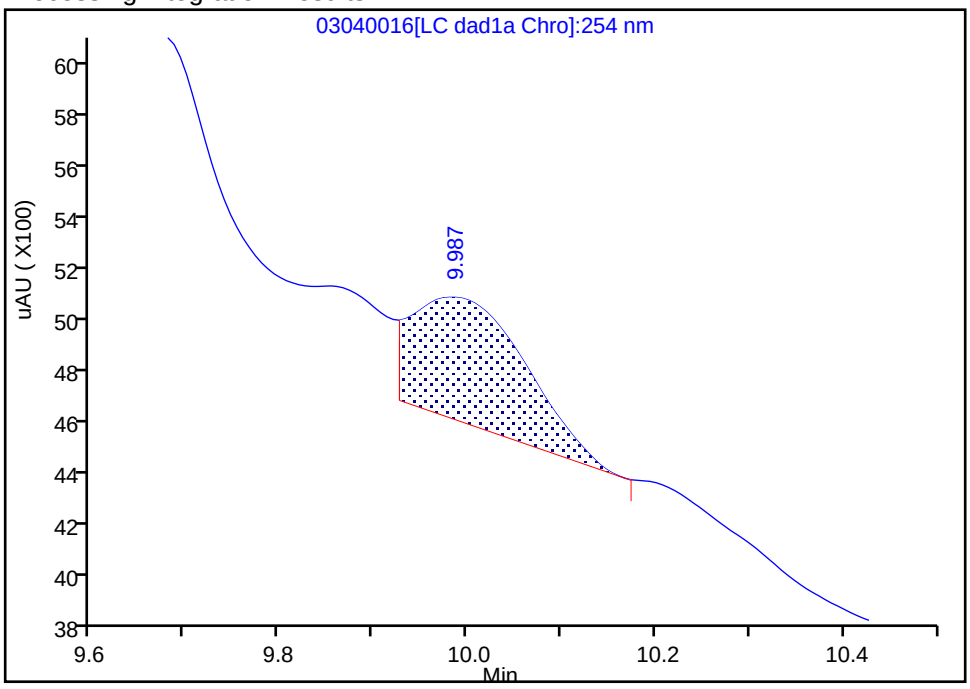
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040016.d				
Injection Date:	04-Mar-2022 22:00:38	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-3-A	Lab Sample ID:	280-159190-3		
Client ID:	NW061-8				
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

15 Tetryl, CAS: 479-45-8

Signal: 1

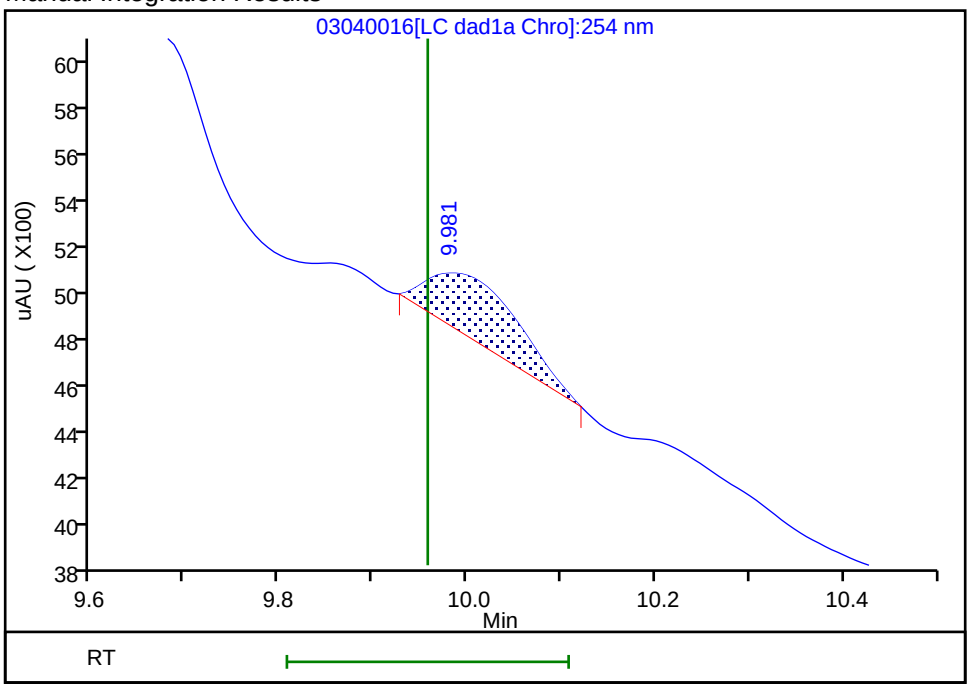
Processing Integration Results

RT: 9.99
Area: 3928
Amount: 0.023029
Amount Units: ug/mL



Manual Integration Results

RT: 9.98
Area: 1726
Amount: 0.010119
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:20:29

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: NW061-8 | Lab Sample ID: 280-159190-3

Matrix: Water | Lab File ID: 03040022.D

Analysis Method: 8330A | Date Collected: 02/27/2022 13:05

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 475.7(mL) | Date Analyzed: 03/05/2022 01:33

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.: 567777 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.096
479-45-8	Tetryl	0.11	U M	0.12	0.11	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	99	*M*	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040022.D				
Lims ID:	280-159190-A-3-A				
Client ID:	NW061-8				
Sample Type:	Client				
Inject. Date:	05-Mar-2022 01:33:42	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-A-3-A				
Misc. Info.:	280-0109013-022				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 11:24:33	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1616				
First Level Reviewer: zhangji		Date:	05-Mar-2022 11:14:31		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1		6.955			ND	
6 MNX	1		7.649			ND	
8 RDX	1		9.195			ND	
9 Nitrobenzene	1		12.135			ND	
$ 10 1,2-Dinitrobenzene	1	13.360	13.388	-0.028	49539	0.1984	M
12 1,3-Dinitrobenzene	1		15.735			ND	
14 o-Nitrotoluene	1		16.928			ND	
16 p-Nitrotoluene	1		17.235			ND	
17 4-Amino-2,6-dinitrotoluene	1		17.902			ND	
18 m-Nitrotoluene	1		18.215			ND	
19 2-Amino-4,6-dinitrotoluene	1		18.948			ND	
20 1,3,5-Trinitrobenzene	1		19.022			ND	
21 2,6-Dinitrotoluene	1		20.388			ND	
22 2,4-Dinitrotoluene	1		20.909			ND	
23 Tetryl	1		24.682			ND	U
24 2,4,6-Trinitrotoluene	1		25.415			ND	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

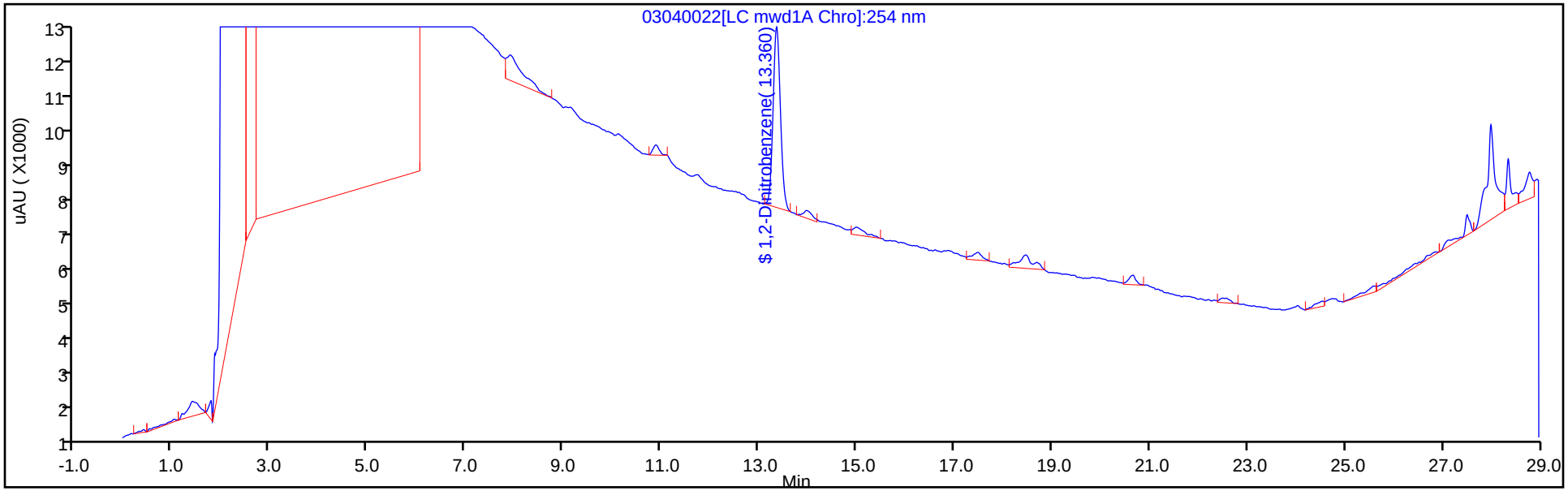
Report Date: 05-Mar-2022 11:24:34 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

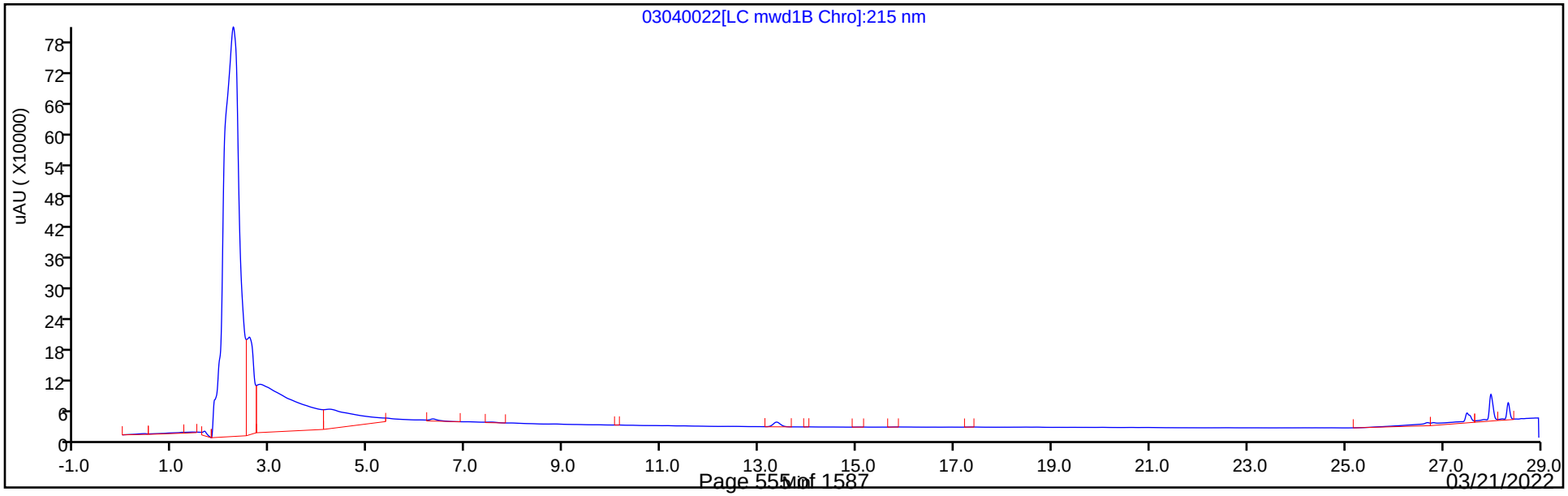
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040022.D

Injection Date:	05-Mar-2022 01:33:42	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159190-A-3-A	Lab Sample ID:	280-159190-3	Worklist Smp#:	22
Client ID:	NW061-8				
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\20220304-109013.b\03040022.D				
Lims ID:	280-159190-A-3-A				
Client ID:	NW061-8				
Sample Type:	Client				
Inject. Date:	05-Mar-2022 01:33:42	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-A-3-A				
Misc. Info.:	280-0109013-022				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 11:24:33	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1616				
First Level Reviewer: zhangji		Date:	05-Mar-2022 11:14:31		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1984	99.18

Manual Integration/User Assign Peak Report

Eurofins Denver

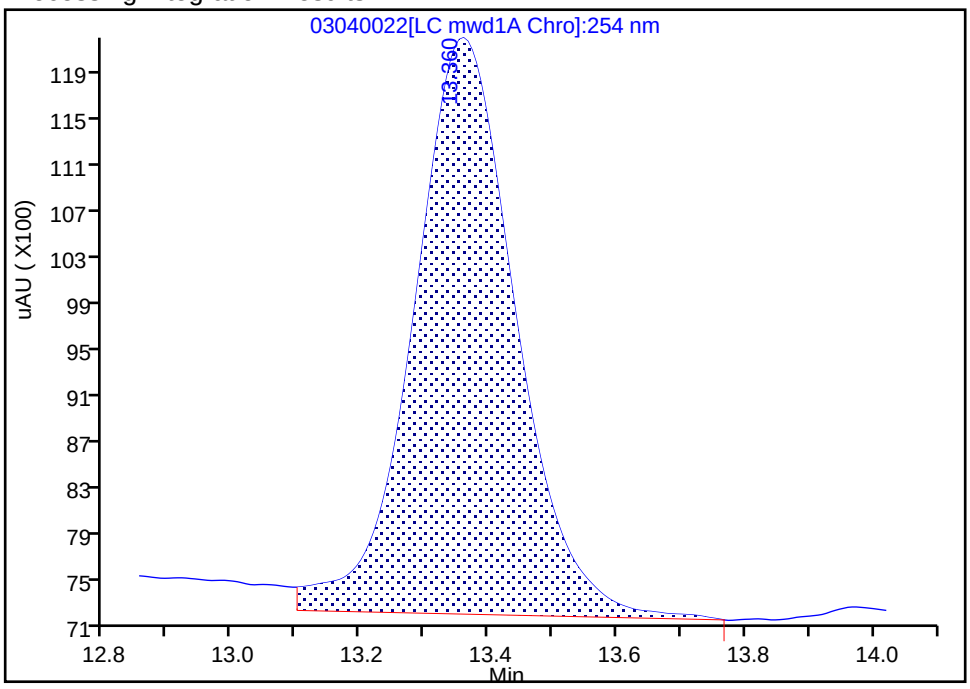
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040022.D				
Injection Date:	05-Mar-2022 01:33:42	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159190-A-3-A	Lab Sample ID:	280-159190-3		
Client ID:	NW061-8				
Operator ID:	JZ	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

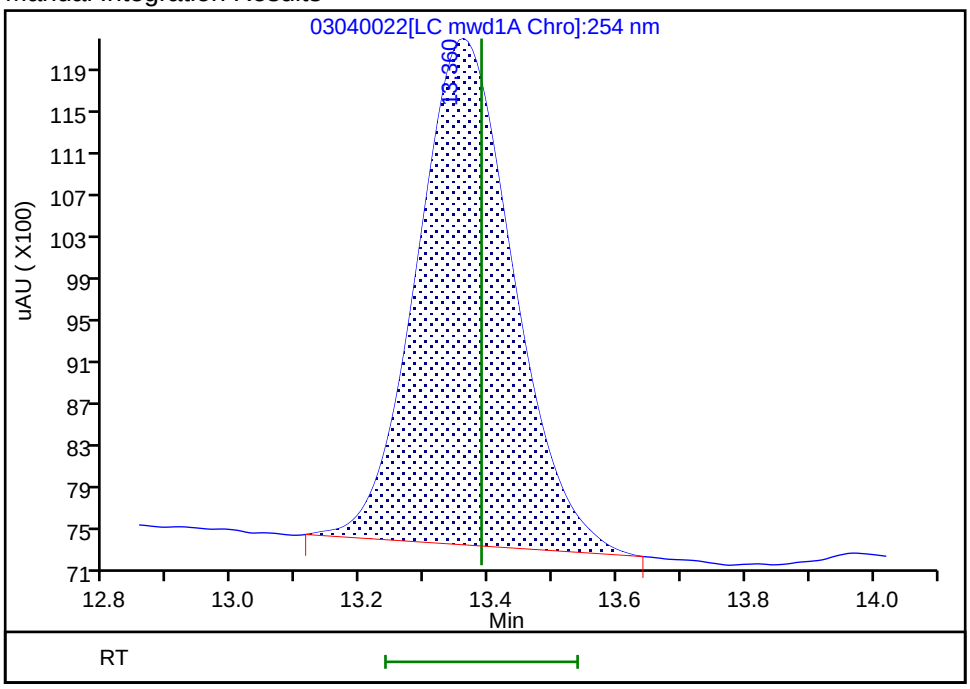
Processing Integration Results

RT: 13.36
Area: 54176
Amount: 0.216918
Amount Units: ug/ml



Manual Integration Results

RT: 13.36
Area: 49539
Amount: 0.198352
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:14:30

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

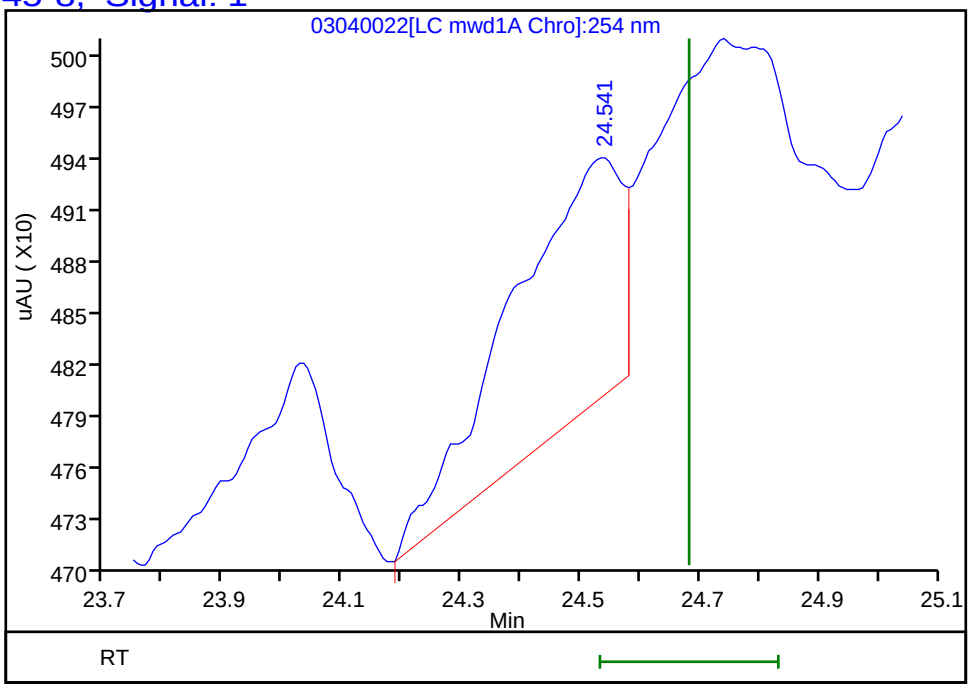
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040022.D				
Injection Date:	05-Mar-2022 01:33:42	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159190-A-3-A	Lab Sample ID:	280-159190-3		
Client ID:	NW061-8				
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: 24.54
Response: 1895
Amount: 0.005538



Reviewer: zhangji, 05-Mar-2022 11:14:31
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM24A-8-25 | Lab Sample ID: 280-159190-4

Matrix: Water | Lab File ID: 03040017.D

Analysis Method: 8330A | Date Collected: 02/26/2022 14:30

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 467.2(mL) | Date Analyzed: 03/04/2022 22:23

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.: 567774 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.27	M	0.22	0.21	0.090
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.029
606-20-2	2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.092
99-08-1	3-Nitrotoluene	0.43	U	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.34		0.16	0.13	0.062
99-99-0	4-Nitrotoluene	0.43	U M	0.44	0.43	0.11
2691-41-0	HMX	0.21	U	0.22	0.21	0.094
5755-27-1	MNX	0.43	U M	2.1	0.43	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.097
121-82-4	RDX	0.90	M J1	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	100		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040017.D
Lims ID: 280-159190-A-4-A
Client ID: EW7-PM24A-8-25
Sample Type: Client
Inject. Date: 04-Mar-2022 22:23:31 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-A-4-A
Misc. Info.: 280-0109012-017
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:47 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: 05-Mar-2022 10:21:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.591			ND	
7 MNX	1		7.196			ND	U
8 RDX	1	7.600	7.578	0.022	8666	0.0836	M
$ 10 1,2-Dinitrobenzene	1	8.513	8.511	0.002	24941	0.2000	
11 1,3,5-Trinitrobenzene	1	8.646	8.638	0.008	5446	0.0250	M
12 1,3-Dinitrobenzene	1		9.257			ND	
13 Nitrobenzene	1		9.644			ND	7
15 Tetryl	1		9.957			ND	U
17 2,4,6-Trinitrotoluene	1		10.857			ND	7
18 4-Amino-2,6-dinitrotoluene	1	11.026	11.051	-0.025	4863	0.0322	
19 2-Amino-4,6-dinitrotoluene	1	11.279	11.297	-0.018	5658	0.0280	
20 2,6-Dinitrotoluene	1		11.464			ND	
21 2,4-Dinitrotoluene	1		11.637			ND	
22 o-Nitrotoluene	1		12.477			ND	7
23 p-Nitrotoluene	1		12.897			ND	U
24 m-Nitrotoluene	1		13.471			ND	

QC Flag Legend

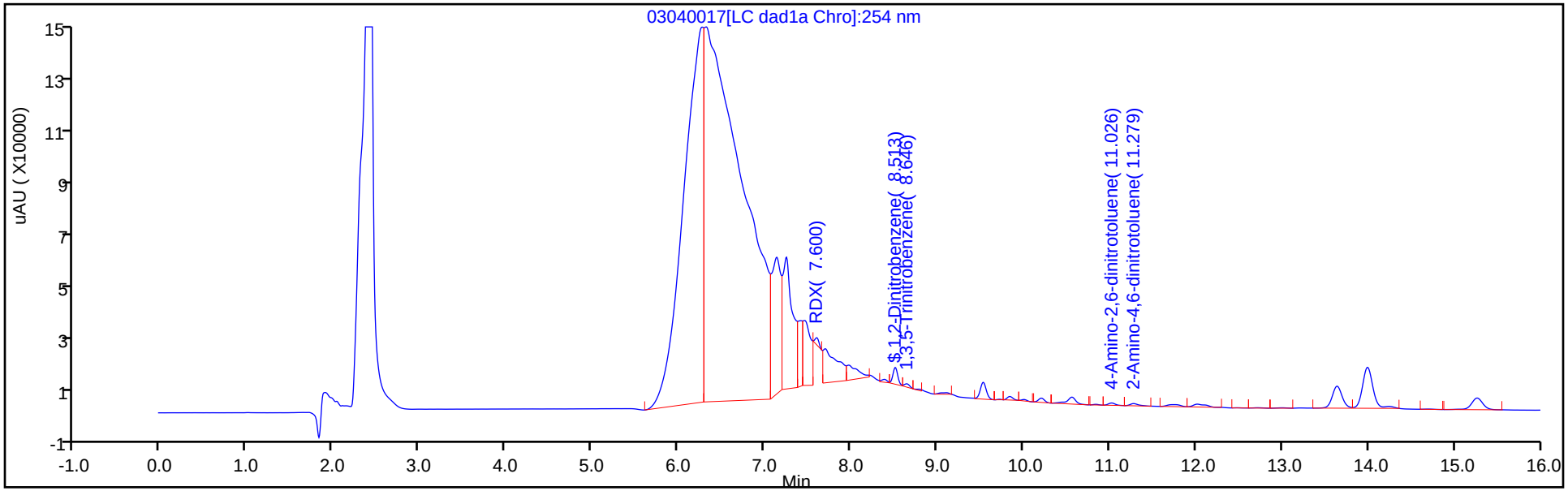
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Mar-2022 10:57:49 Chrom Revision: 2.3 16-Feb-2022 17:52:00

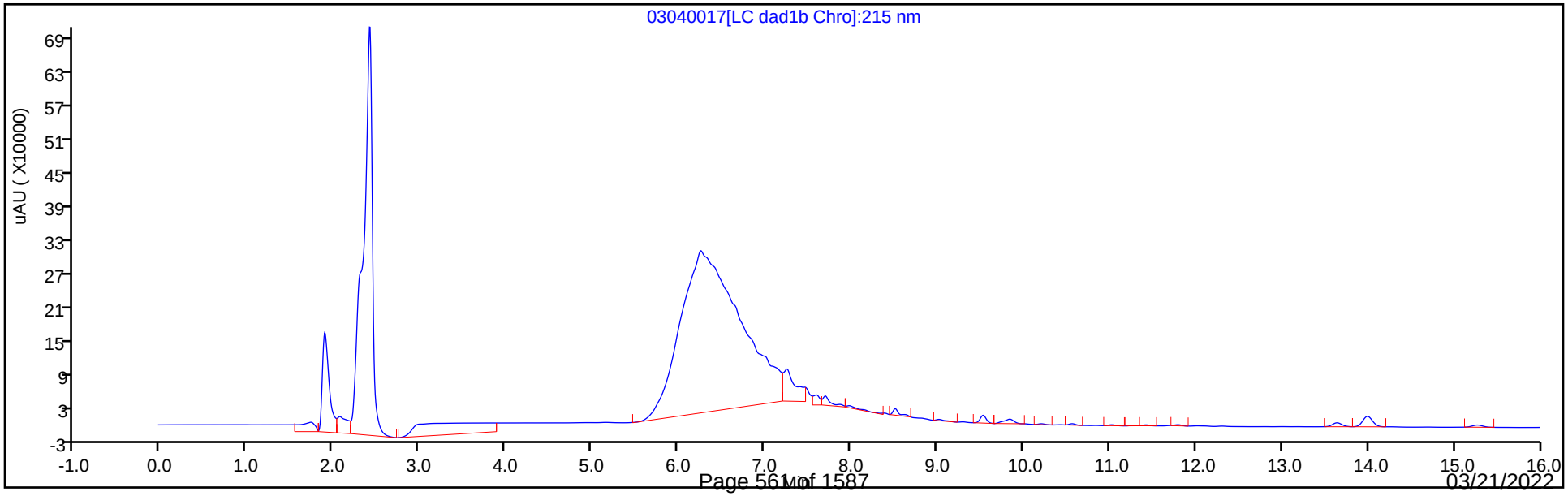
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040017.d				
Injection Date:	04-Mar-2022 22:23:31	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159190-A-4-A	Lab Sample ID:	280-159190-4	Worklist Smp#:	17
Client ID:	EW7-PM24A-8-25				
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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040017.D				
Lims ID:	280-159190-A-4-A				
Client ID:	EW7-PM24A-8-25				
Sample Type:	Client				
Inject. Date:	04-Mar-2022 22:23:31	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-A-4-A				
Misc. Info.:	280-0109012-017				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:47	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:	05-Mar-2022 10:21:04		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2000	100.01

Manual Integration/User Assign Peak Report

Eurofins Denver

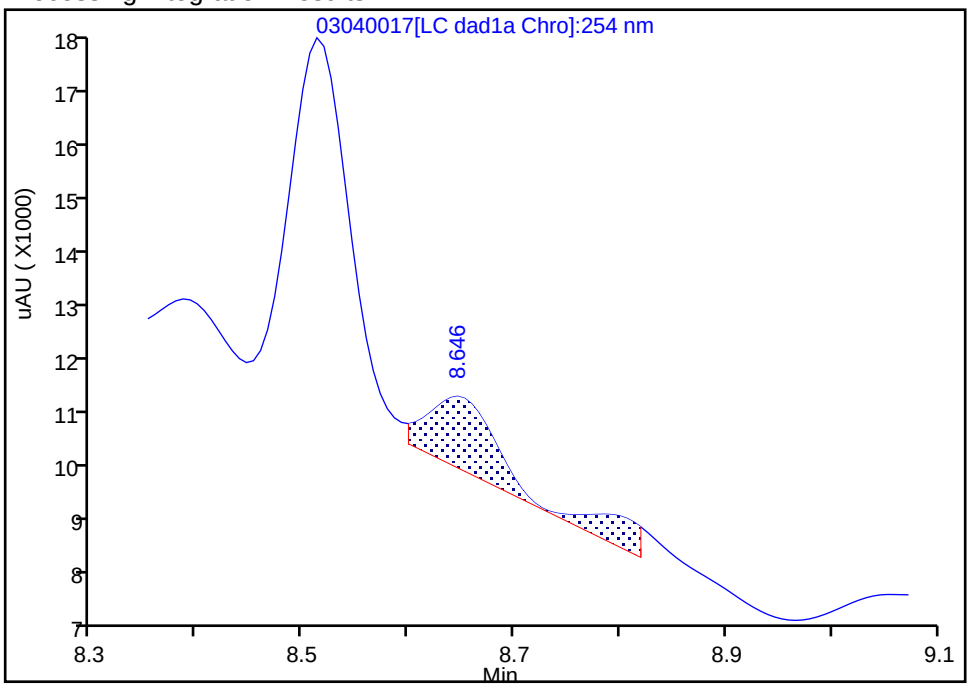
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040017.d				
Injection Date:	04-Mar-2022 22:23:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-4-A	Lab Sample ID:	280-159190-4		
Client ID:	EW7-PM24A-8-25				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

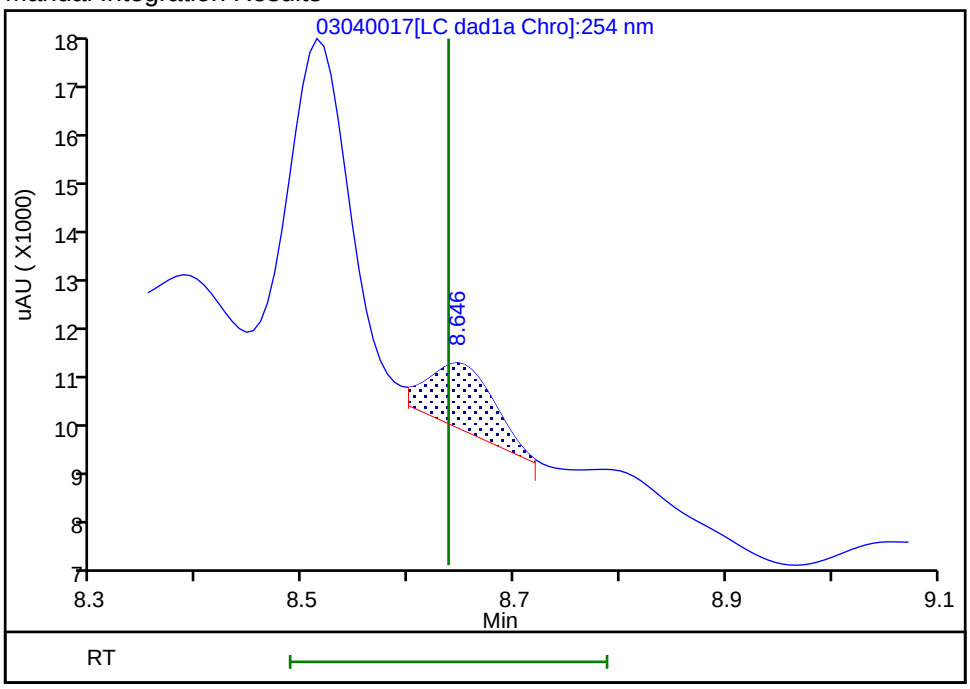
Processing Integration Results

RT: 8.65
Area: 7116
Amount: 0.032628
Amount Units: ug/mL



Manual Integration Results

RT: 8.65
Area: 5446
Amount: 0.024971
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:21:00

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

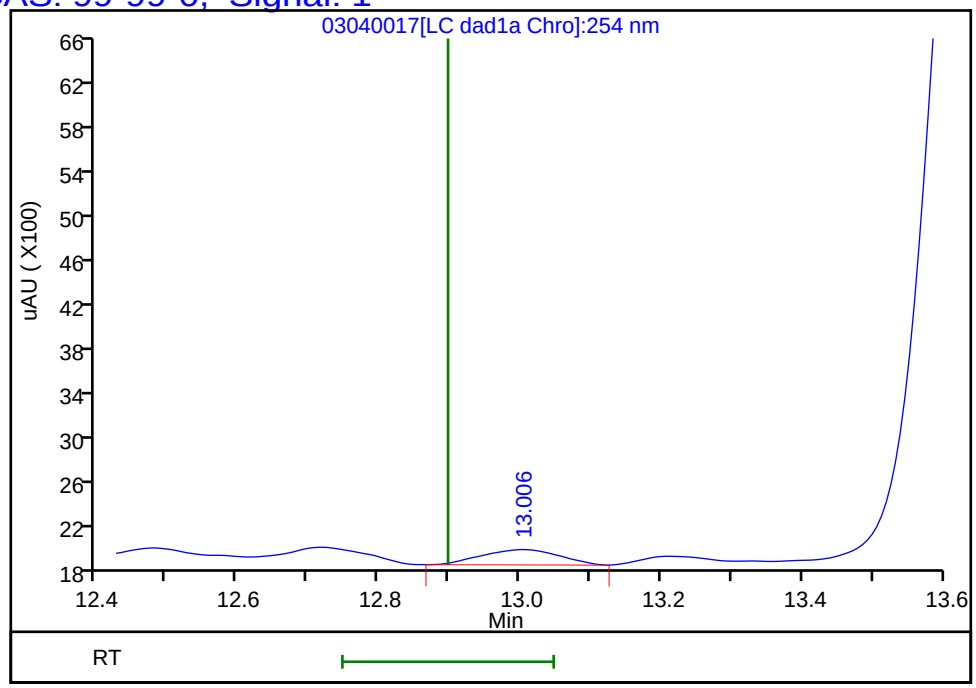
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040017.d
Injection Date: 04-Mar-2022 22:23:31 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-A-4-A Lab Sample ID: 280-159190-4
Client ID: EW7-PM24A-8-25
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 13.01
Response: 1051
Amount: 0.009893



Reviewer: zhangji, 05-Mar-2022 10:21:04
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

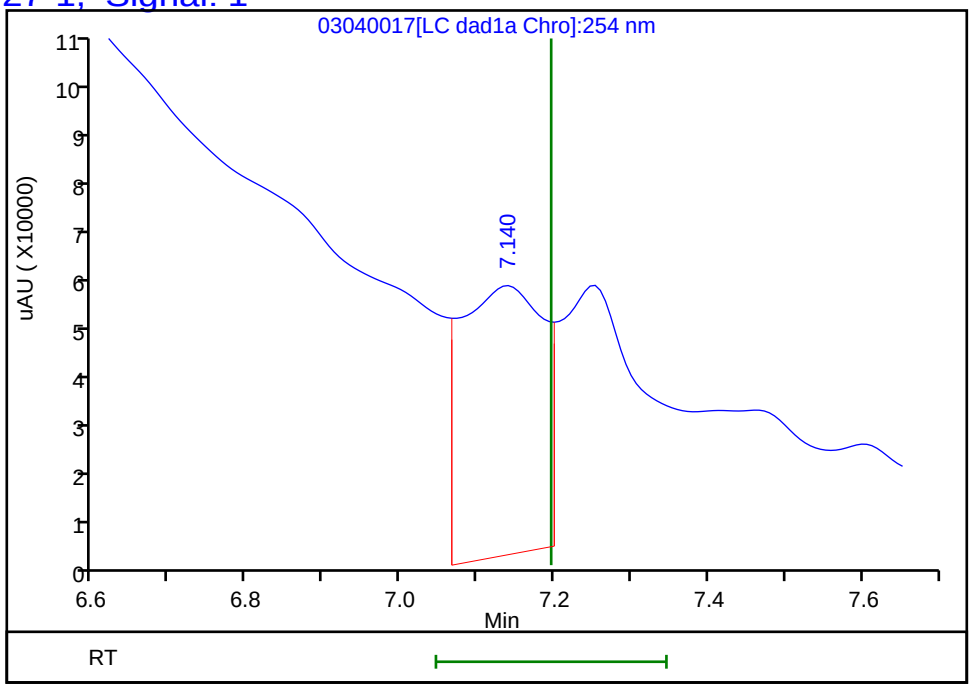
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040017.d
Injection Date: 04-Mar-2022 22:23:31 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-A-4-A Lab Sample ID: 280-159190-4
Client ID: EW7-PM24A-8-25
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.14
Response: 388100
Amount: 3.080271



Reviewer: zhangji, 05-Mar-2022 10:21:04
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

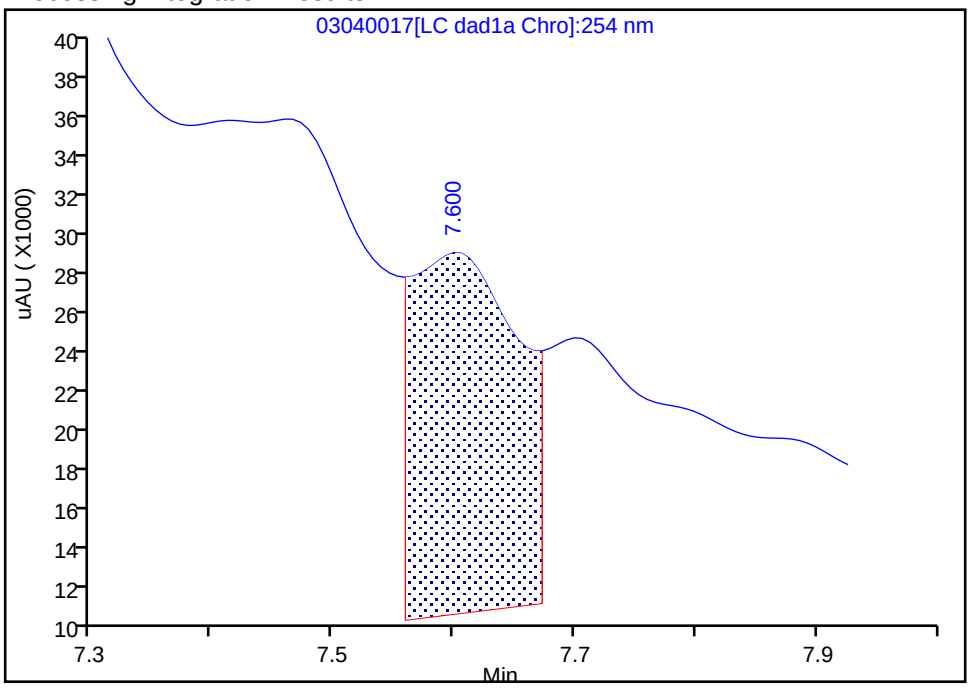
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040017.d				
Injection Date:	04-Mar-2022 22:23:31	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-4-A	Lab Sample ID:	280-159190-4		
Client ID:	EW7-PM24A-8-25				
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

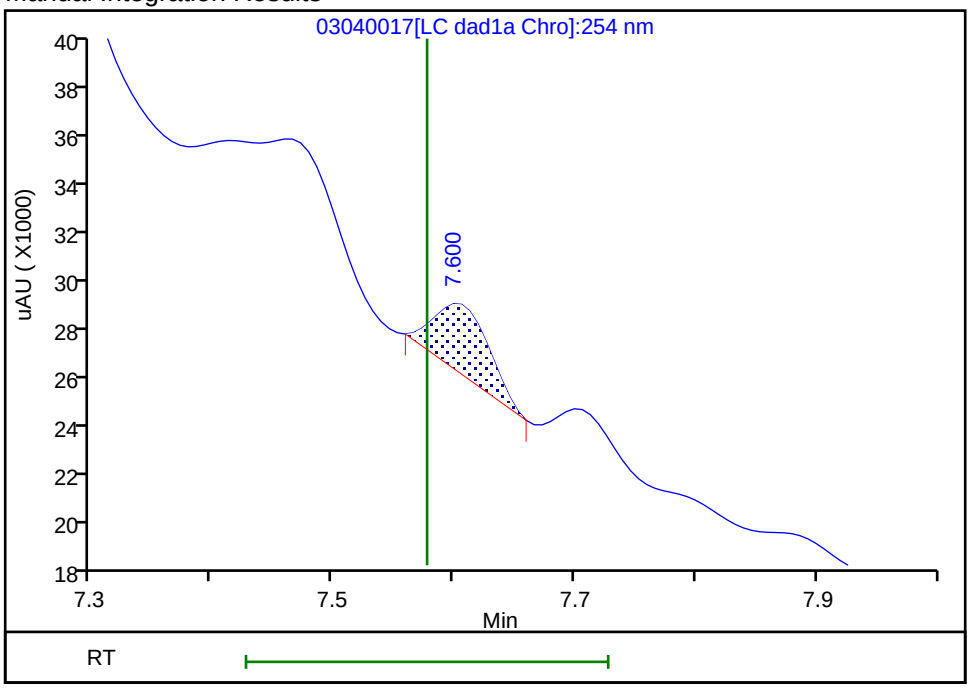
Processing Integration Results

RT: 7.60
Area: 107497
Amount: 1.037524
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 8666
Amount: 0.083641
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:20:46

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

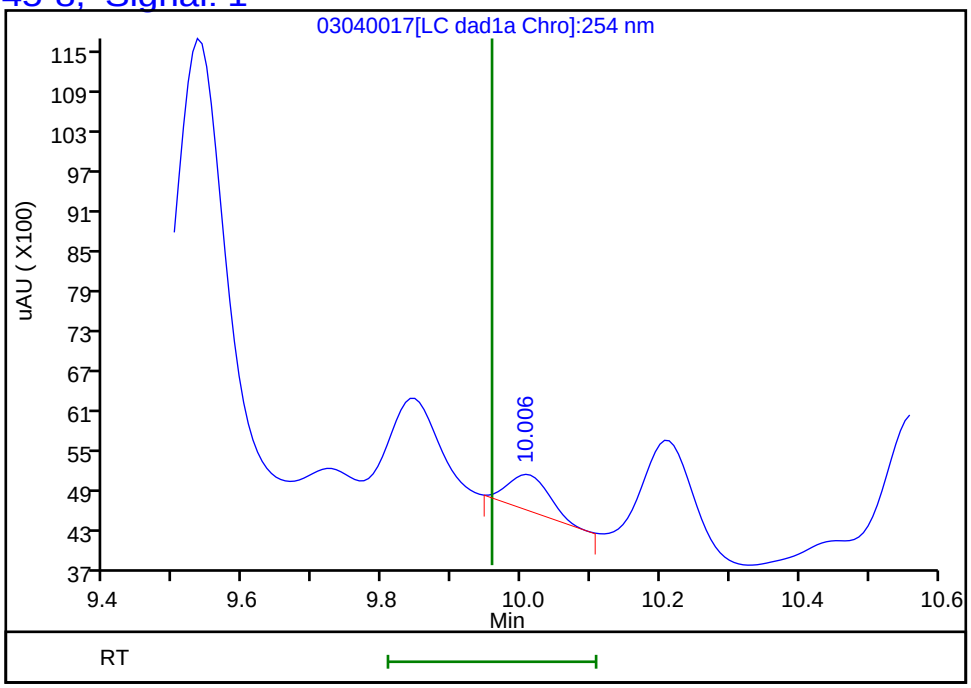
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040017.d
Injection Date: 04-Mar-2022 22:23:31 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-A-4-A Lab Sample ID: 280-159190-4
Client ID: EW7-PM24A-8-25
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 10.01
Response: 2203
Amount: 0.012916



Reviewer: zhangji, 05-Mar-2022 10:21:04
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM24A-8-25 | Lab Sample ID: 280-159190-4

Matrix: Water | Lab File ID: 03040023.D

Analysis Method: 8330A | Date Collected: 02/26/2022 14:30

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 467.2(mL) | Date Analyzed: 03/05/2022 02:08

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.: 567777 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054
121-82-4	*RDX*	*0.070*	*J M J1*	*0.22*	0.21	*0.055*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	100		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040023.D
Lims ID: 280-159190-A-4-A
Client ID: EW7-PM24A-8-25
Sample Type: Client
Inject. Date: 05-Mar-2022 02:08:47 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-A-4-A
Misc. Info.: 280-0109013-023
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 11:24:33 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1616

First Level Reviewer: zhangji Date: 05-Mar-2022 11:14:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1	6.927	6.955	-0.028	2215	0.0133	M
6 MNX	1		7.649			ND	
8 RDX	1	9.140	9.195	-0.055	1279	0.006582	M
9 Nitrobenzene	1		12.135			ND	
$ 10 1,2-Dinitrobenzene	1	13.354	13.388	-0.034	50113	0.2007	
12 1,3-Dinitrobenzene	1		15.735			ND	
14 o-Nitrotoluene	1	16.854	16.928	-0.074	137853	0.5874	
16 p-Nitrotoluene	1		17.235			ND	
17 4-Amino-2,6-dinitrotoluene	1	17.867	17.902	-0.035	7578	0.0286	
18 m-Nitrotoluene	1		18.215			ND	
19 2-Amino-4,6-dinitrotoluene	1		18.948			ND	
20 1,3,5-Trinitrobenzene	1		19.022			ND	
21 2,6-Dinitrotoluene	1		20.388			ND	
22 2,4-Dinitrotoluene	1		20.909			ND	
23 Tetryl	1		24.682			ND	
24 2,4,6-Trinitrotoluene	1		25.415			ND	U

QC Flag Legend

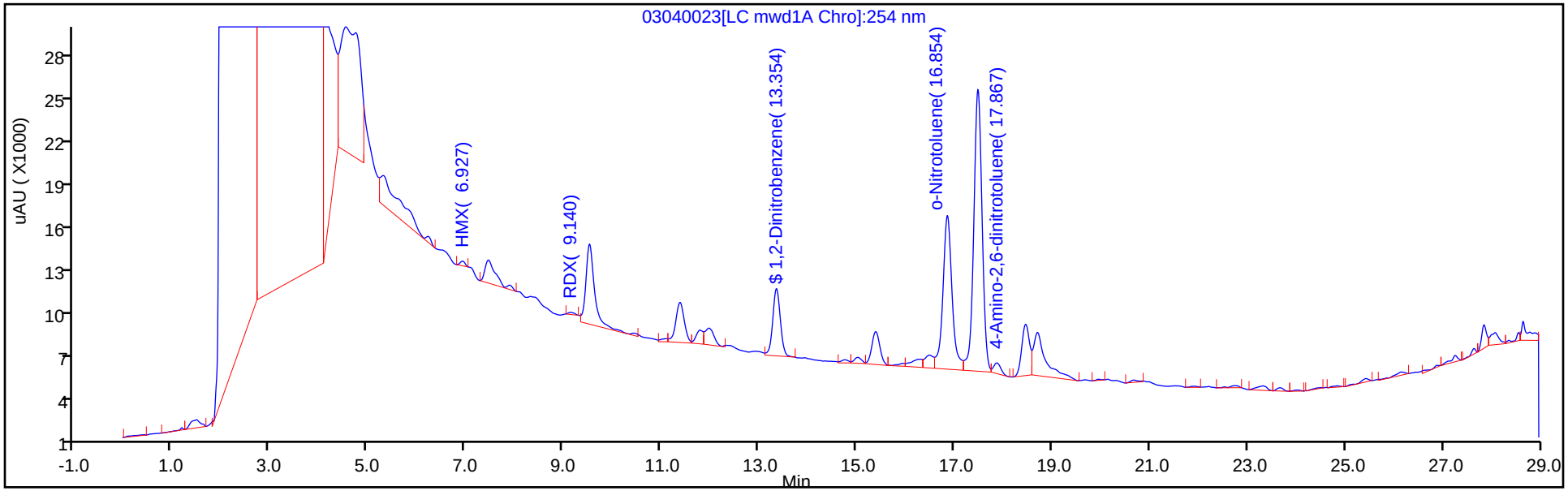
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Mar-2022 11:24:34 Chrom Revision: 2.3 16-Feb-2022 17:52:00

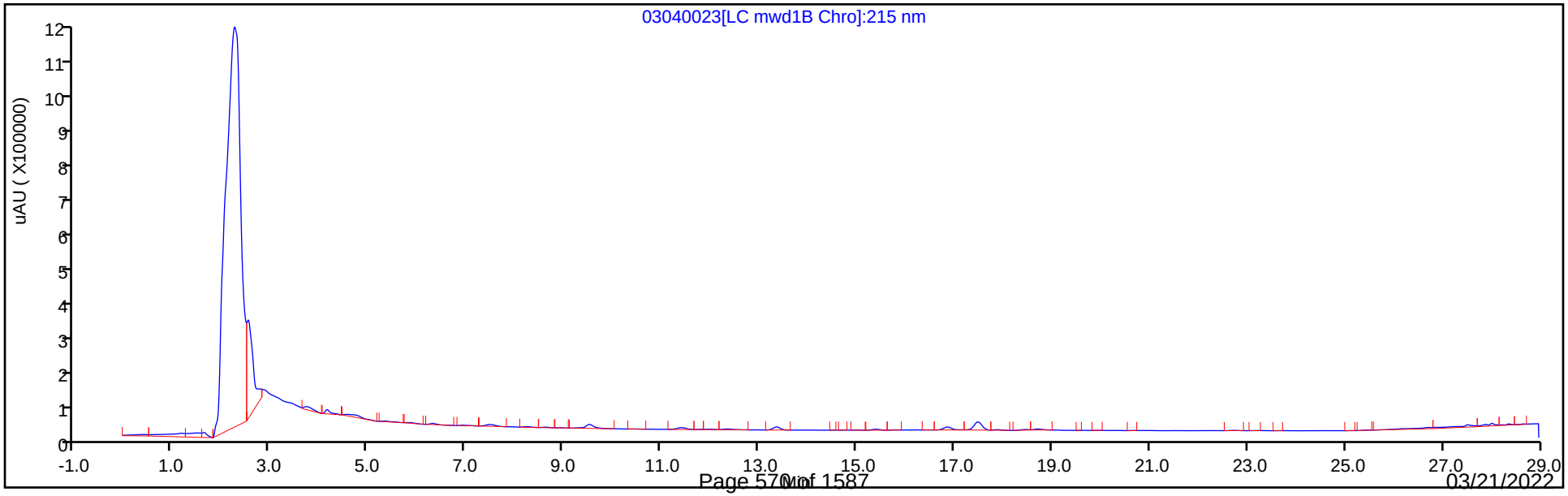
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040023.D				
Injection Date:	05-Mar-2022 02:08:47	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159190-A-4-A	Lab Sample ID:	280-159190-4	Worklist Smp#:	23
Client ID:	EW7-PM24A-8-25				
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
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040023.D				
Lims ID:	280-159190-A-4-A				
Client ID:	EW7-PM24A-8-25				
Sample Type:	Client				
Inject. Date:	05-Mar-2022 02:08:47	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-A-4-A				
Misc. Info.:	280-0109013-023				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 11:24:33	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1616				
First Level Reviewer: zhangji		Date:	05-Mar-2022 11:14:55		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2007	100.33

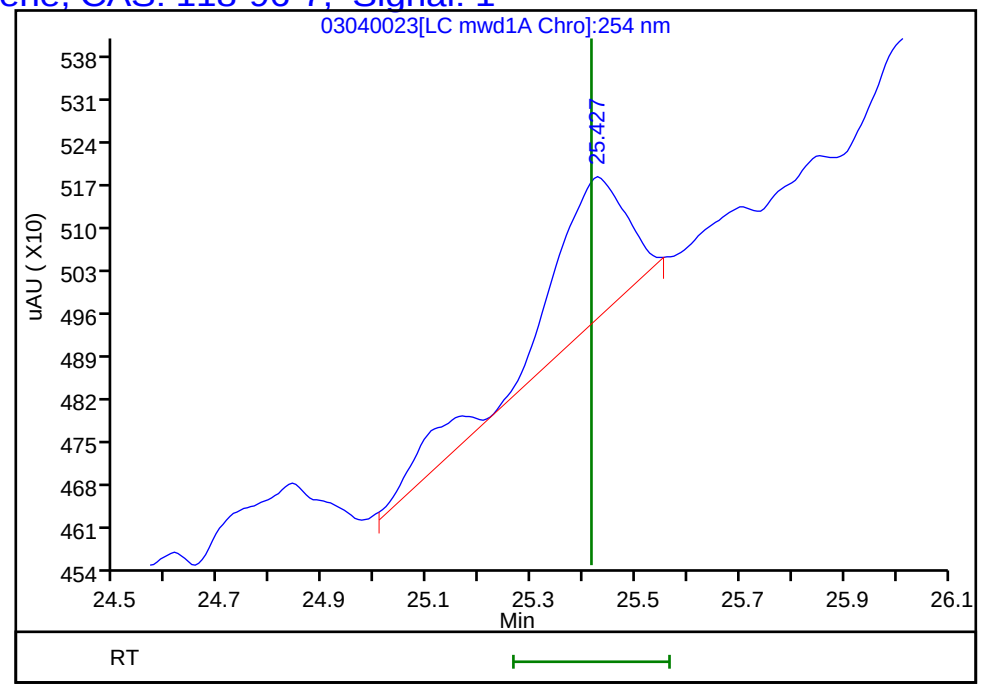
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040023.D				
Injection Date:	05-Mar-2022 02:08:47	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159190-A-4-A	Lab Sample ID:	280-159190-4		
Client ID:	EW7-PM24A-8-25				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
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

RT: 25.43
Response: 2615
Amount: 0.007083



Reviewer: zhangji, 05-Mar-2022 11:14:55
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

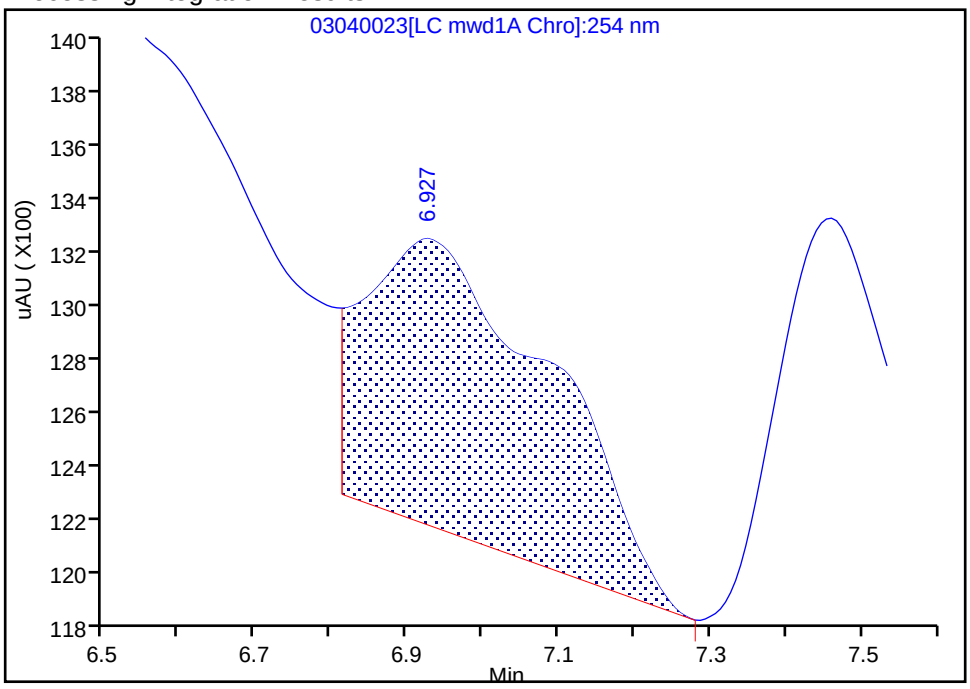
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040023.D				
Injection Date:	05-Mar-2022 02:08:47	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159190-A-4-A	Lab Sample ID:	280-159190-4		
Client ID:	EW7-PM24A-8-25				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 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

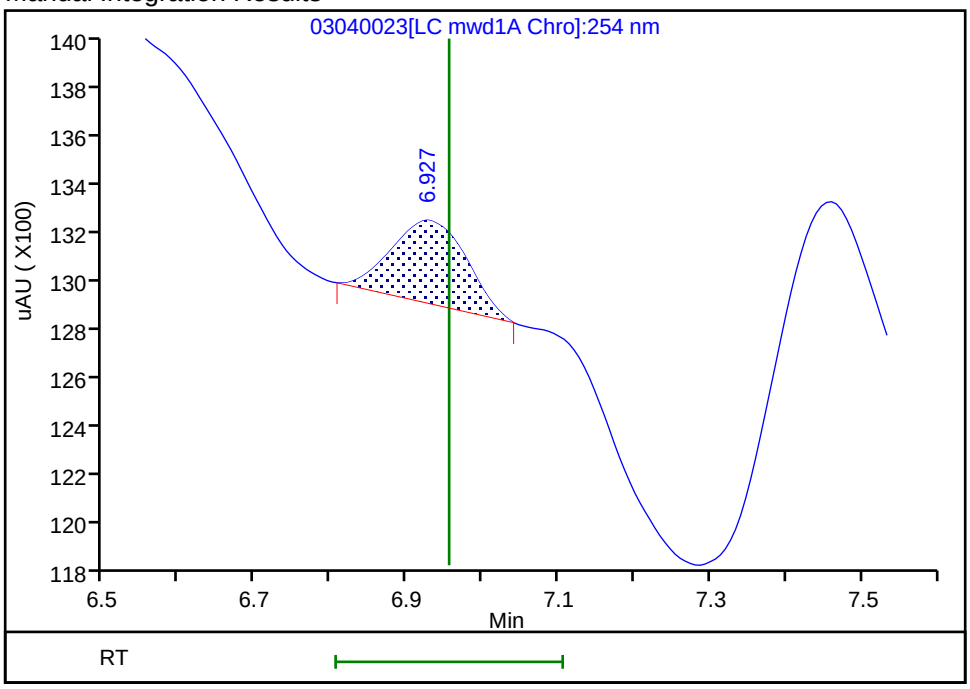
Processing Integration Results

RT: 6.93
Area: 17377
Amount: 0.104595
Amount Units: ug/ml



Manual Integration Results

RT: 6.93
Area: 2215
Amount: 0.013333
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:14:50

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

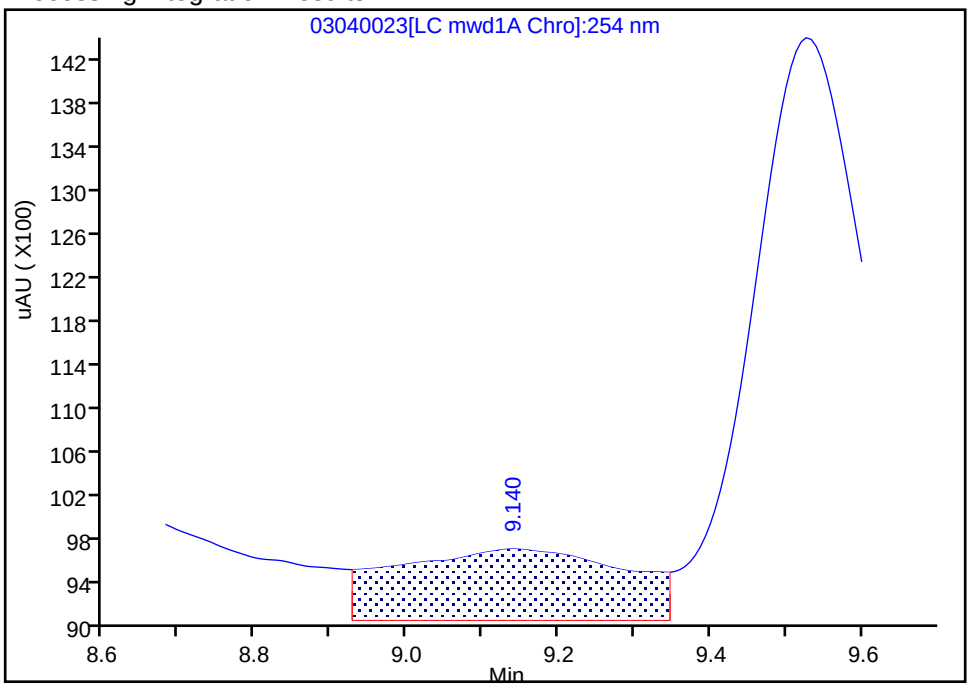
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040023.D				
Injection Date:	05-Mar-2022 02:08:47	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159190-A-4-A	Lab Sample ID:	280-159190-4		
Client ID:	EW7-PM24A-8-25				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 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

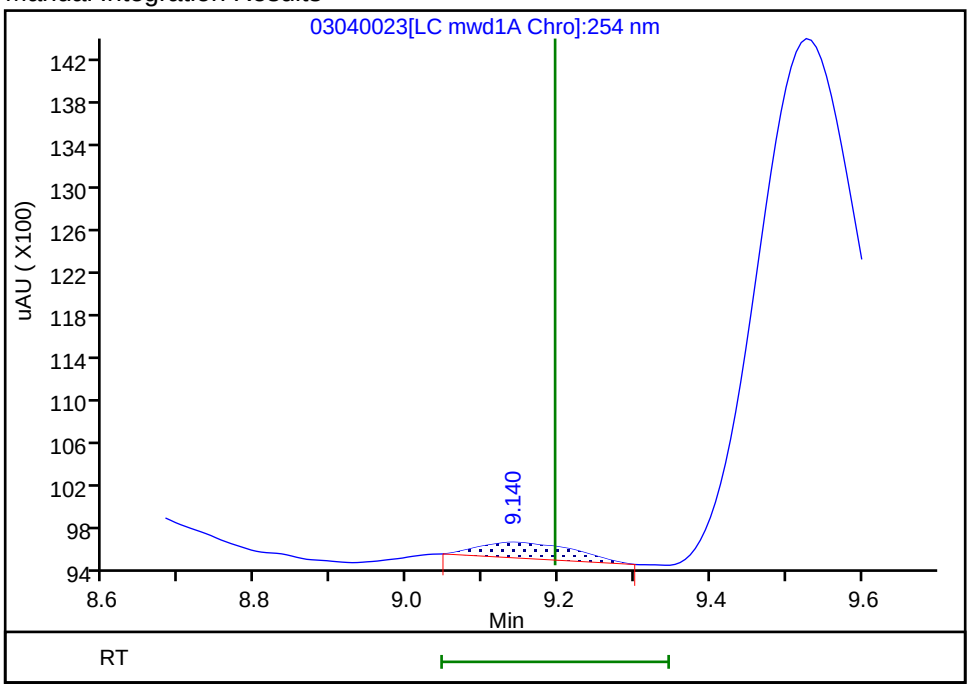
Processing Integration Results

RT: 9.14
Area: 13689
Amount: 0.070442
Amount Units: ug/ml



Manual Integration Results

RT: 9.14
Area: 1279
Amount: 0.006582
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:14:54
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM21A-8-25 | Lab Sample ID: 280-159190-5

Matrix: Water | Lab File ID: 03040018.D

Analysis Method: 8330A | Date Collected: 02/26/2022 15:55

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 466.8(mL) | Date Analyzed: 03/04/2022 22:46

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.: 567774 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	9.1	M	0.22	0.21	0.090
99-65-0	1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.040
118-96-7	2,4,6-Trinitrotoluene	4.1		0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.086	U M	0.11	0.086	0.029
606-20-2	2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	3.2		0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.092
99-08-1	3-Nitrotoluene	0.43	U	0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	2.2		0.16	0.13	0.062
99-99-0	4-Nitrotoluene	0.43	U M	0.44	0.43	0.11
2691-41-0	HMX	0.21	U	0.22	0.21	0.094
5755-27-1	MNX	0.43	U M	2.1	0.43	0.16
98-95-3	Nitrobenzene	0.21	U M	0.22	0.21	0.097
121-82-4	RDX	0.97	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	99	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040018.D
Lims ID: 280-159190-A-5-A
Client ID: EW7-PM21A-8-25
Sample Type: Client
Inject. Date: 04-Mar-2022 22:46:28 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-A-5-A
Misc. Info.: 280-0109012-018
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:47 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: 05-Mar-2022 10:24:38

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.591			ND	
7 MNX	1		7.196			ND	U
8 RDX	1	7.600	7.578	0.022	9414	0.0909	M
$ 10 1,2-Dinitrobenzene	1	8.520	8.511	0.009	24592	0.1972	M
11 1,3,5-Trinitrobenzene	1	8.647	8.638	0.009	184426	0.8456	M
12 1,3-Dinitrobenzene	1		9.257			ND	U
13 Nitrobenzene	1		9.644			ND	U
15 Tetryl	1		9.957			ND	U
17 2,4,6-Trinitrotoluene	1	10.853	10.857	-0.004	77830	0.3839	
18 4-Amino-2,6-dinitrotoluene	1	11.027	11.051	-0.024	30535	0.2022	
19 2-Amino-4,6-dinitrotoluene	1	11.280	11.297	-0.017	60916	0.3013	
20 2,6-Dinitrotoluene	1		11.464			ND	
21 2,4-Dinitrotoluene	1		11.637			ND	U
22 o-Nitrotoluene	1		12.477			ND	7
23 p-Nitrotoluene	1		12.897			ND	U
24 m-Nitrotoluene	1		13.471			ND	

QC Flag Legend

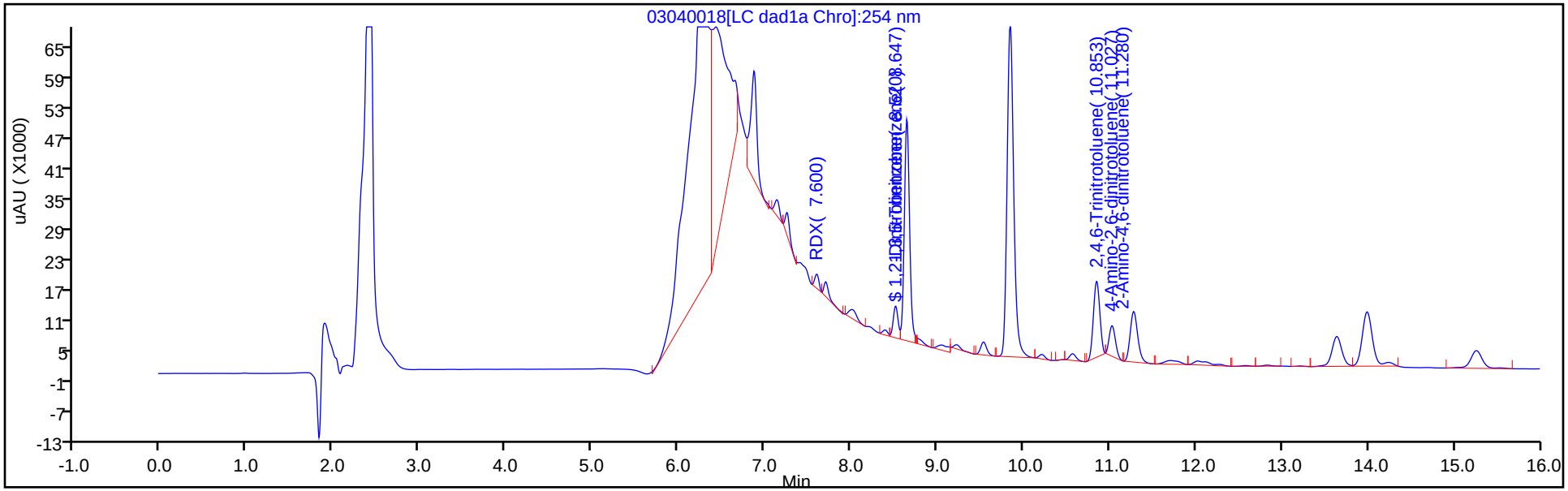
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Mar-2022 10:57:48 Chrom Revision: 2.3 16-Feb-2022 17:52:00

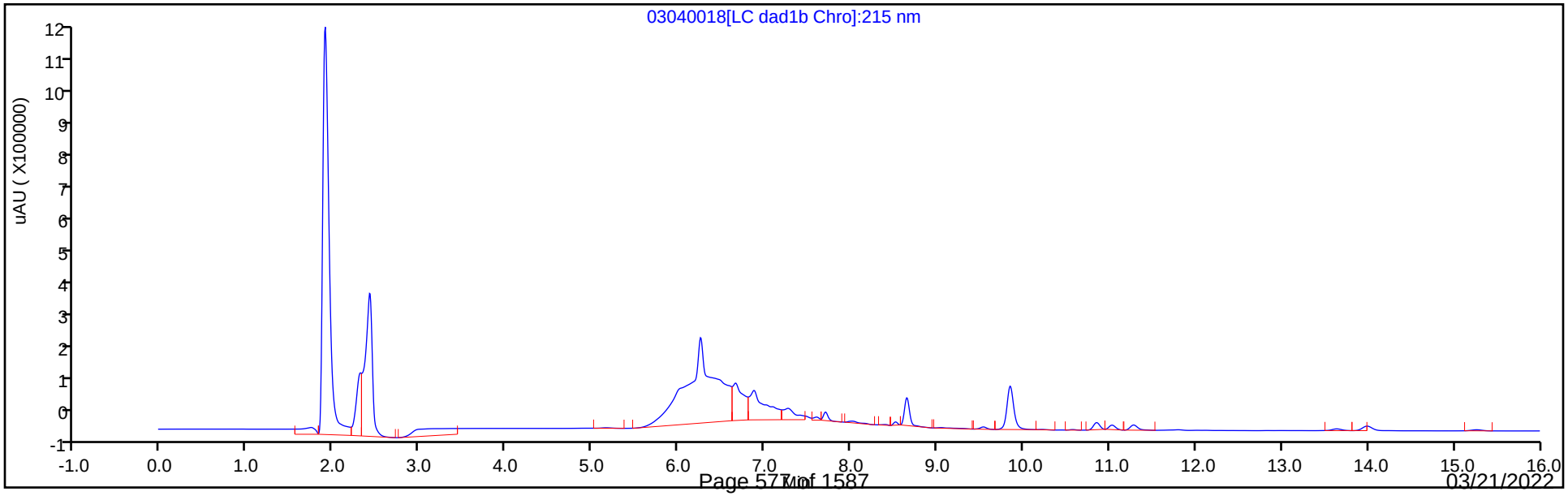
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040018.d				
Injection Date:	04-Mar-2022 22:46:28	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159190-A-5-A	Lab Sample ID:	280-159190-5	Worklist Smp#:	18
Client ID:	EW7-PM21A-8-25				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040018.D				
Lims ID:	280-159190-A-5-A				
Client ID:	EW7-PM21A-8-25				
Sample Type:	Client				
Inject. Date:	04-Mar-2022 22:46:28	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-A-5-A				
Misc. Info.:	280-0109012-018				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:47	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:	05-Mar-2022 10:24:38		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1972	98.61

Manual Integration/User Assign Peak Report

Eurofins Denver

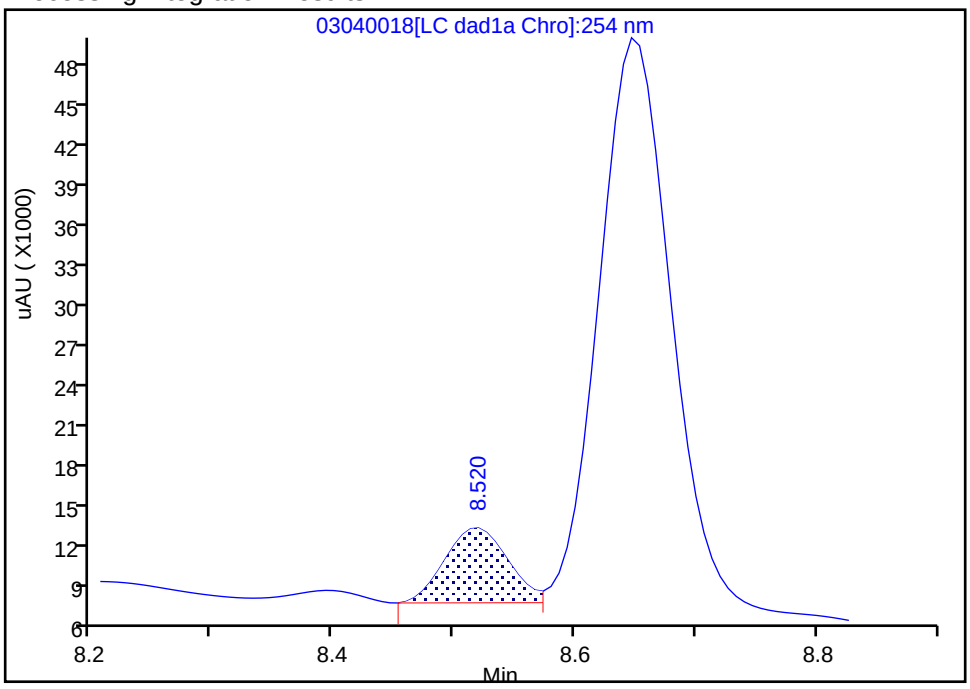
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040018.d				
Injection Date:	04-Mar-2022 22:46:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-5-A	Lab Sample ID:	280-159190-5		
Client ID:	EW7-PM21A-8-25				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

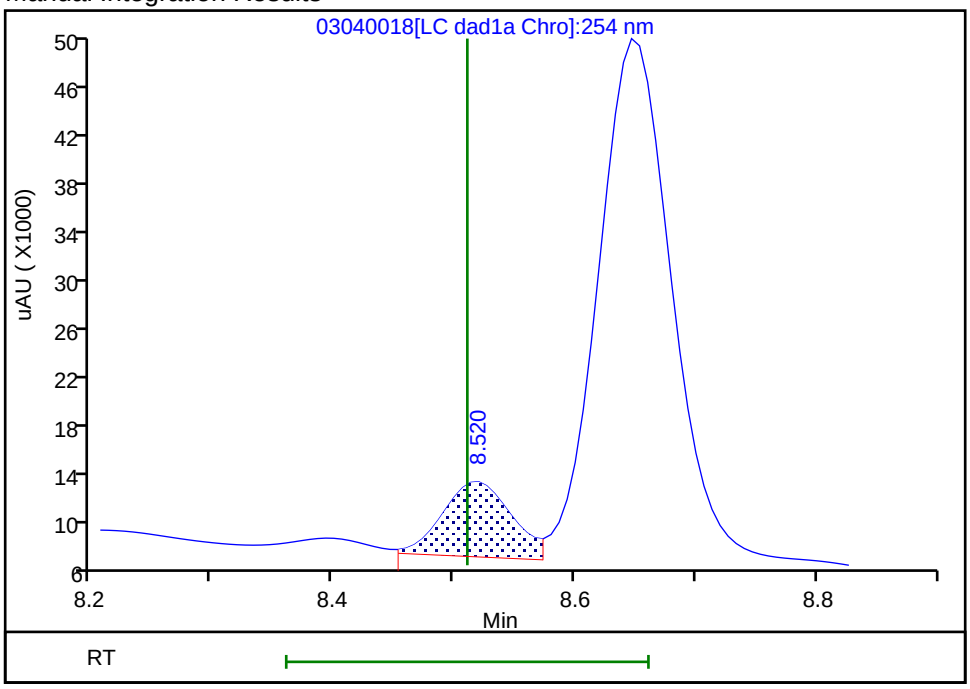
Processing Integration Results

RT: 8.52
Area: 20305
Amount: 0.162834
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 24592
Amount: 0.197213
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:24:30

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

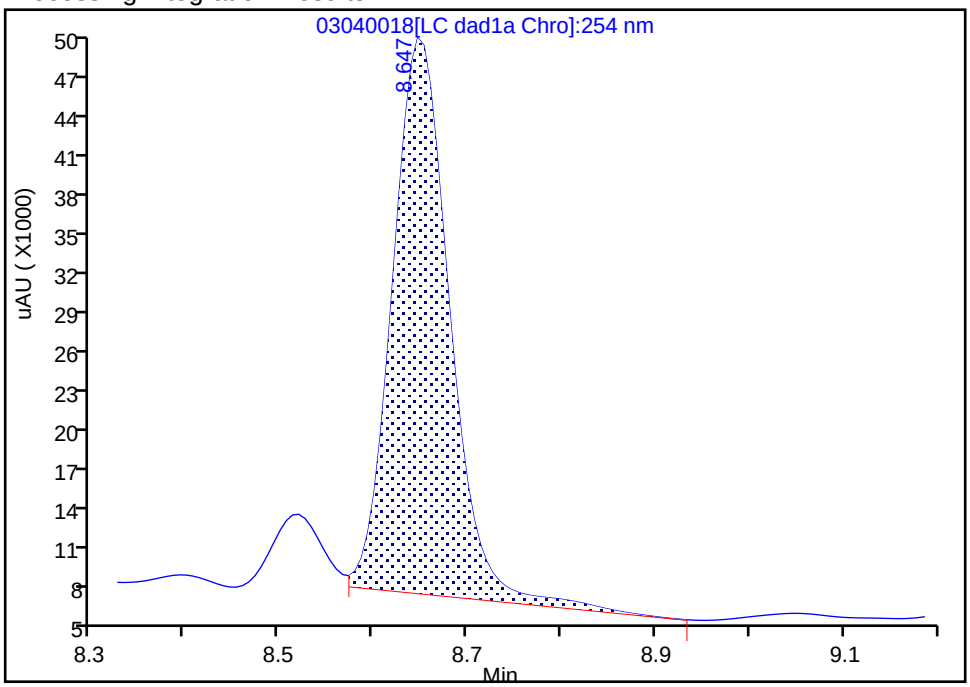
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040018.d				
Injection Date:	04-Mar-2022 22:46:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-5-A	Lab Sample ID:	280-159190-5		
Client ID:	EW7-PM21A-8-25				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

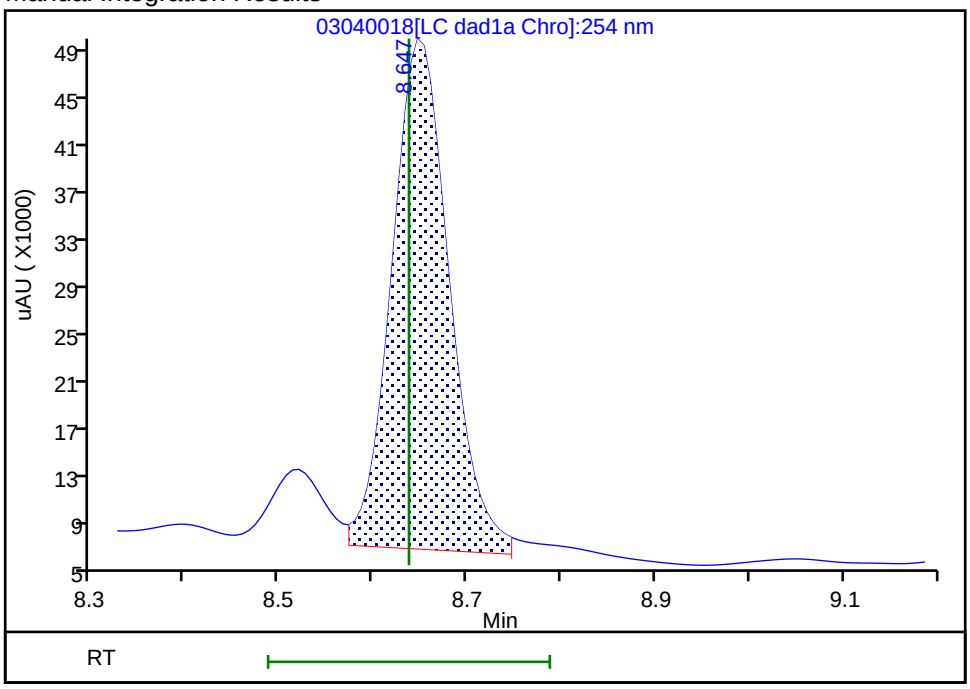
Processing Integration Results

RT: 8.65
Area: 182116
Amount: 0.835029
Amount Units: ug/mL



Manual Integration Results

RT: 8.65
Area: 184426
Amount: 0.845620
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:24:34

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

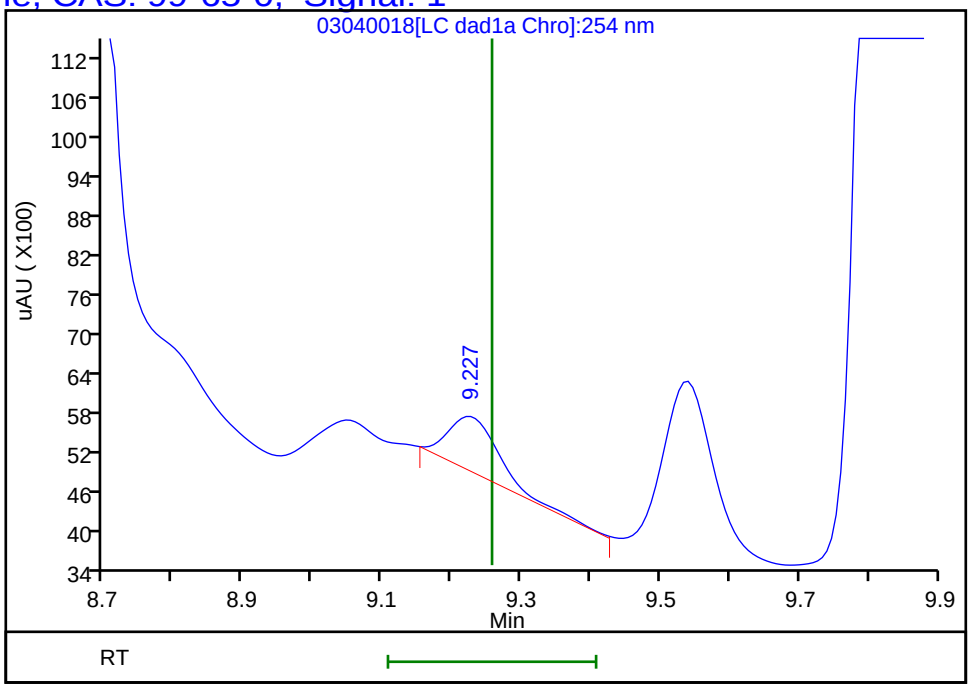
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040018.d
Injection Date: 04-Mar-2022 22:46:28 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-A-5-A Lab Sample ID: 280-159190-5
Client ID: EW7-PM21A-8-25
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

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

RT: 9.23
Response: 4243
Amount: 0.014712



Reviewer: zhangji, 05-Mar-2022 10:24:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

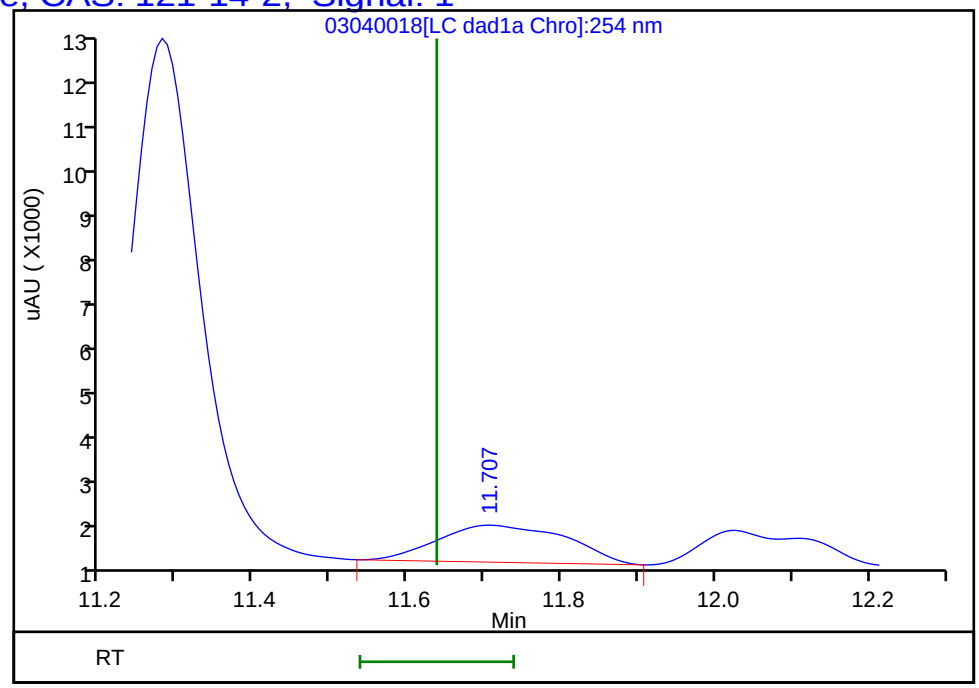
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040018.d
Injection Date: 04-Mar-2022 22:46:28 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-A-5-A Lab Sample ID: 280-159190-5
Client ID: EW7-PM21A-8-25
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

21 2,4-Dinitrotoluene, CAS: 121-14-2, Signal: 1

RT: 11.71
Response: 8583
Amount: 0.029663



Reviewer: zhangji, 05-Mar-2022 10:24:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

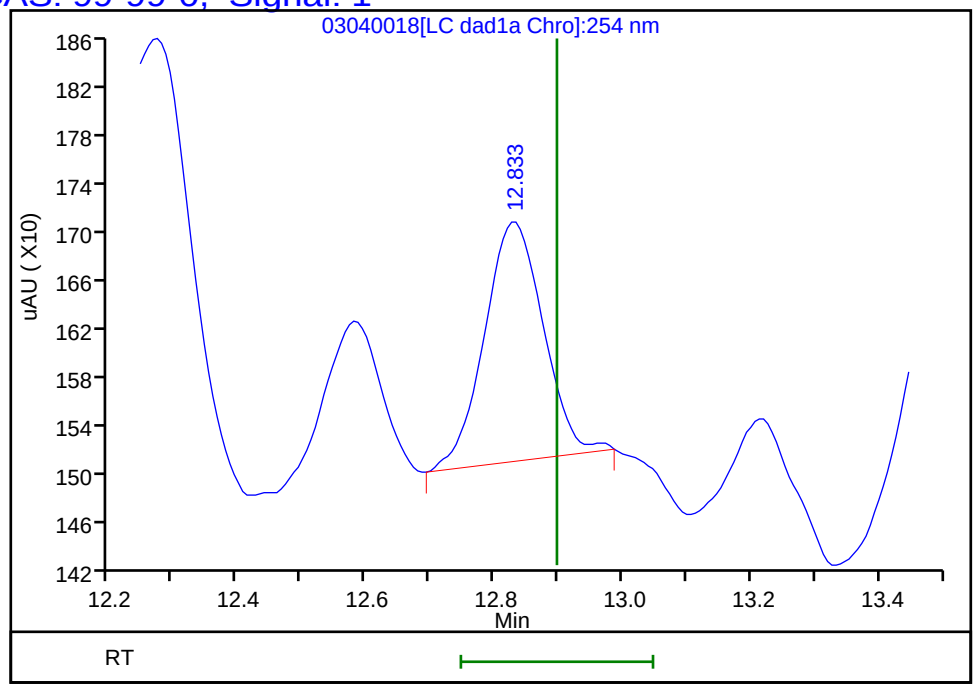
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040018.d
Injection Date: 04-Mar-2022 22:46:28 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-A-5-A Lab Sample ID: 280-159190-5
Client ID: EW7-PM21A-8-25
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

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

RT: 12.83
Response: 1267
Amount: 0.011926



Reviewer: zhangji, 05-Mar-2022 10:24:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

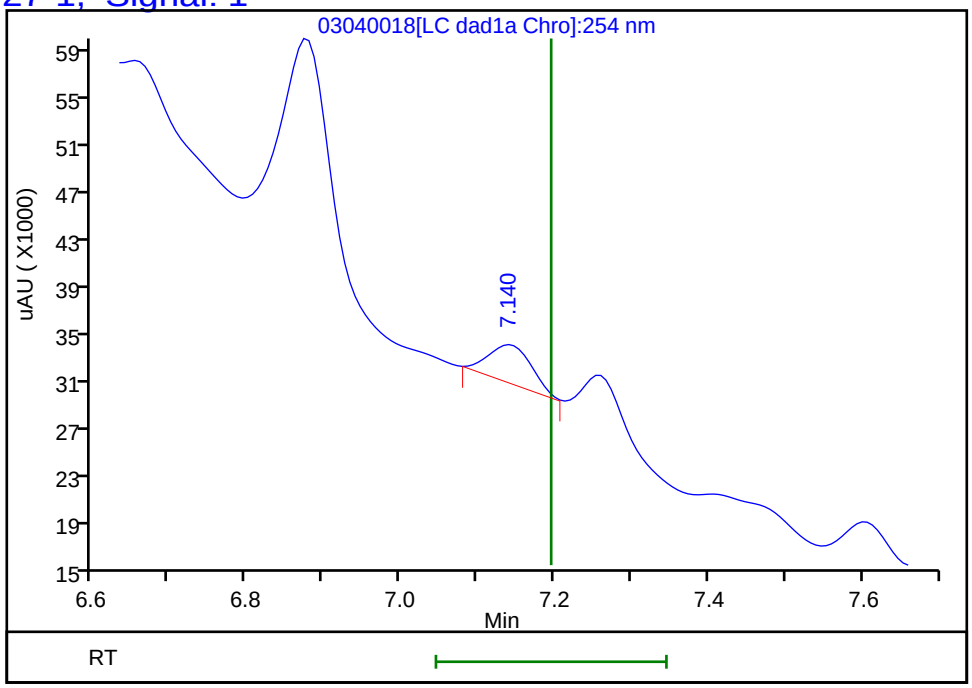
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040018.d
Injection Date: 04-Mar-2022 22:46:28 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-A-5-A Lab Sample ID: 280-159190-5
Client ID: EW7-PM21A-8-25
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

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.14
Response: 12304
Amount: 0.097654



Reviewer: zhangji, 05-Mar-2022 10:24:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

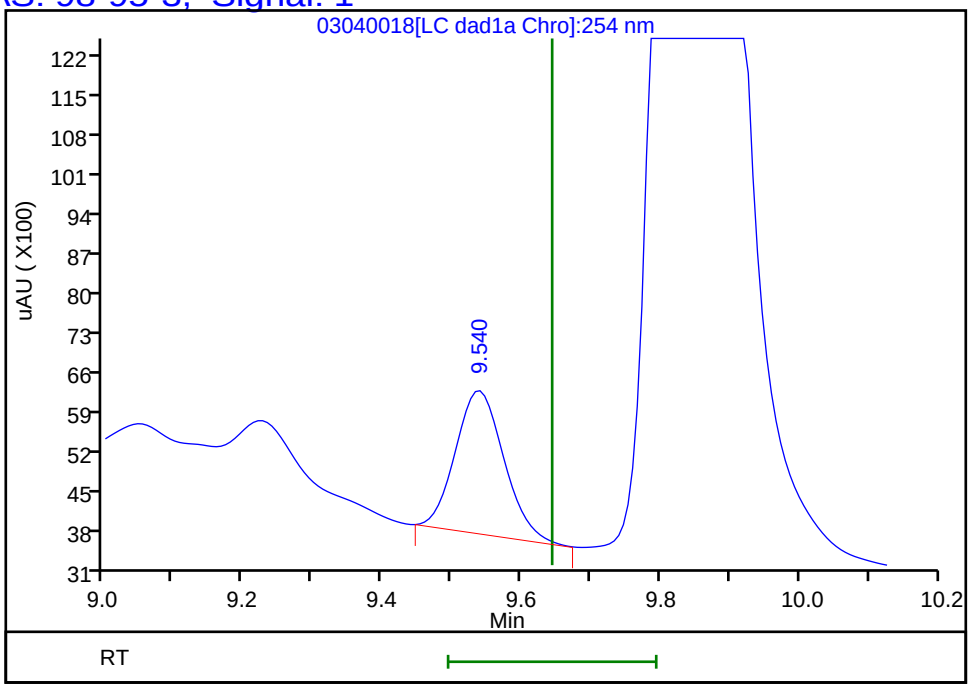
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040018.d
Injection Date: 04-Mar-2022 22:46:28 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-A-5-A Lab Sample ID: 280-159190-5
Client ID: EW7-PM21A-8-25
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

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

RT: 9.54
Response: 12400
Amount: 0.064599



Reviewer: zhangji, 05-Mar-2022 10:24:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

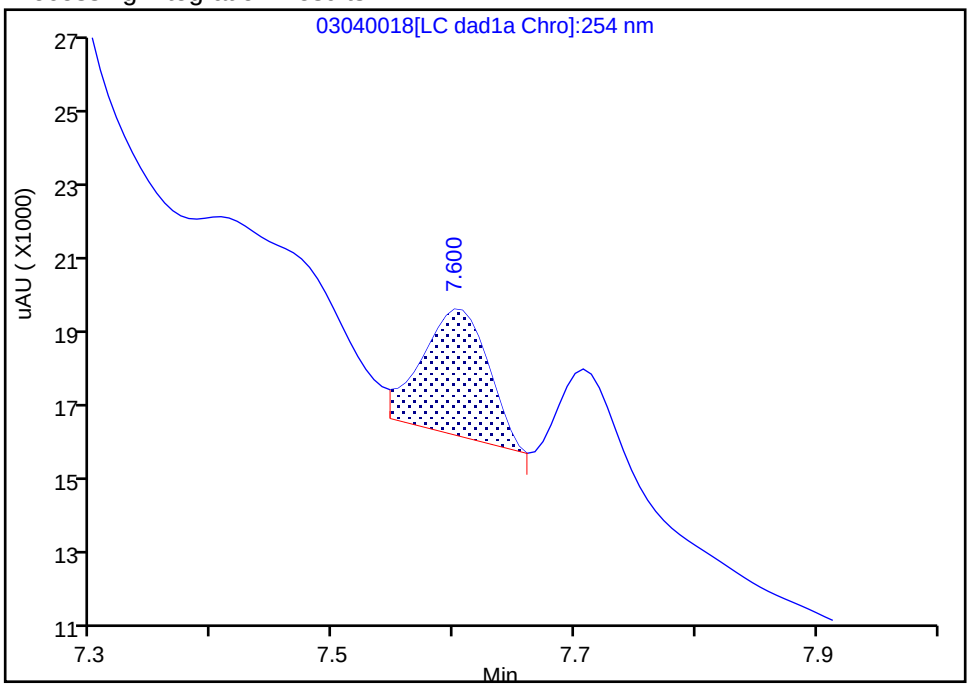
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040018.d				
Injection Date:	04-Mar-2022 22:46:28	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-5-A	Lab Sample ID:	280-159190-5		
Client ID:	EW7-PM21A-8-25				
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 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

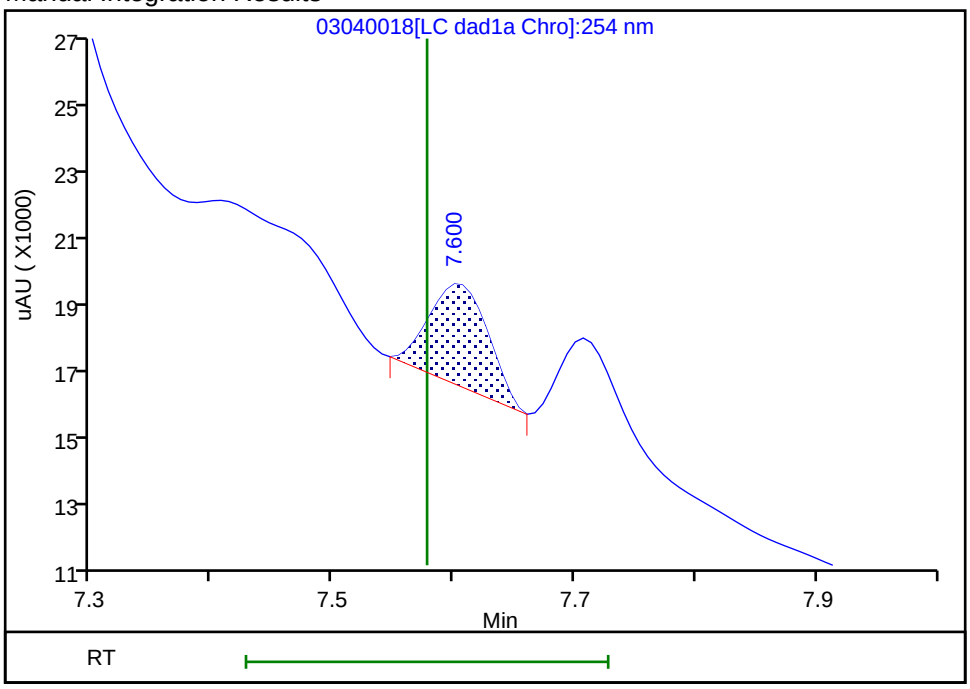
Processing Integration Results

RT: 7.60
Area: 11835
Amount: 0.114227
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 9414
Amount: 0.090861
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:24:22
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

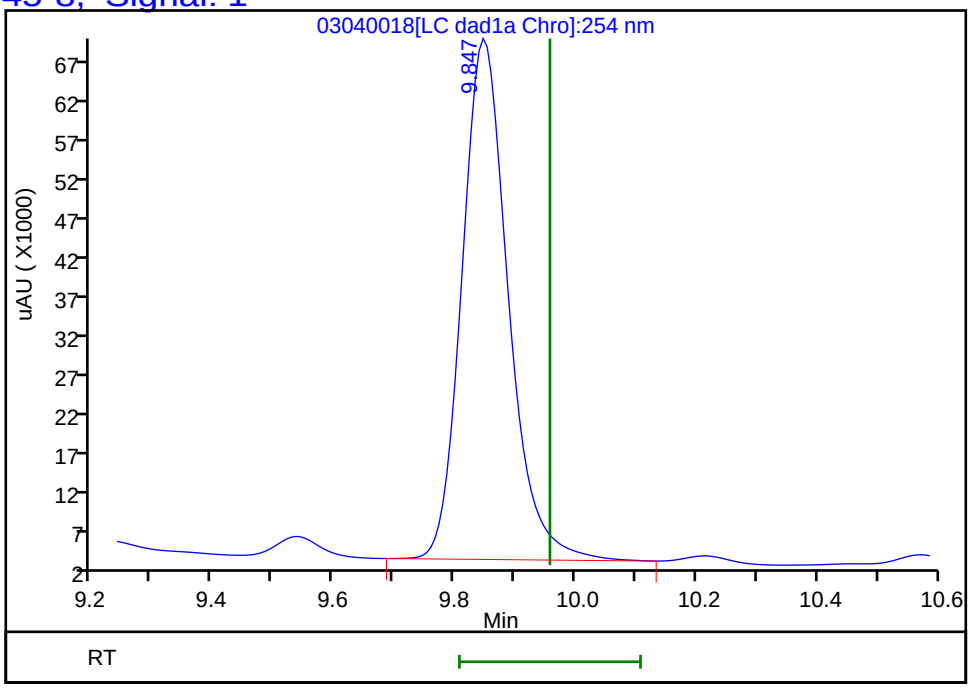
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040018.d
Injection Date: 04-Mar-2022 22:46:28 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-A-5-A Lab Sample ID: 280-159190-5
Client ID: EW7-PM21A-8-25
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

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

RT: 9.85
Response: 350021
Amount: 2.052106



Reviewer: zhangji, 05-Mar-2022 10:24:38
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM21A-8-25 | Lab Sample ID: 280-159190-5

Matrix: Water | Lab File ID: 03040024.D

Analysis Method: 8330A | Date Collected: 02/26/2022 15:55

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 466.8(mL) | Date Analyzed: 03/05/2022 02:43

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.: 567777 | Units: ug/L

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\20220304-109013.b\03040024.D
Lims ID: 280-159190-A-5-A
Client ID: EW7-PM21A-8-25
Sample Type: Client
Inject. Date: 05-Mar-2022 02:43:52 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-A-5-A
Misc. Info.: 280-0109013-024
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 11:24:33 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1616

First Level Reviewer: zhangji Date: 05-Mar-2022 09:58:31

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.946	6.955	-0.009	7988	0.0481	
	6 MNX	1		7.649			ND	
	8 RDX	1	9.180	9.195	-0.015	13171	0.0678	
	9 Nitrobenzene	1		12.135			ND	
$	10 1,2-Dinitrobenzene	1	13.359	13.388	-0.029	51250	0.2052	
	12 1,3-Dinitrobenzene	1		15.735			ND	
	14 o-Nitrotoluene	1	16.853	16.928	-0.075	83241	0.3547	
	16 p-Nitrotoluene	1		17.235			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.873	17.902	-0.029	72585	0.2718	
	18 m-Nitrotoluene	1		18.215			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.919	18.948	-0.029	110926	0.3077	M
	20 1,3,5-Trinitrobenzene	1	19.046	19.022	0.024	359973	0.8664	M
	21 2,6-Dinitrotoluene	1		20.388			ND	
	22 2,4-Dinitrotoluene	1		20.909			ND	
	23 Tetryl	1		24.682			ND	7
	24 2,4,6-Trinitrotoluene	1	25.400	25.415	-0.015	167305	0.4532	

QC Flag Legend

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

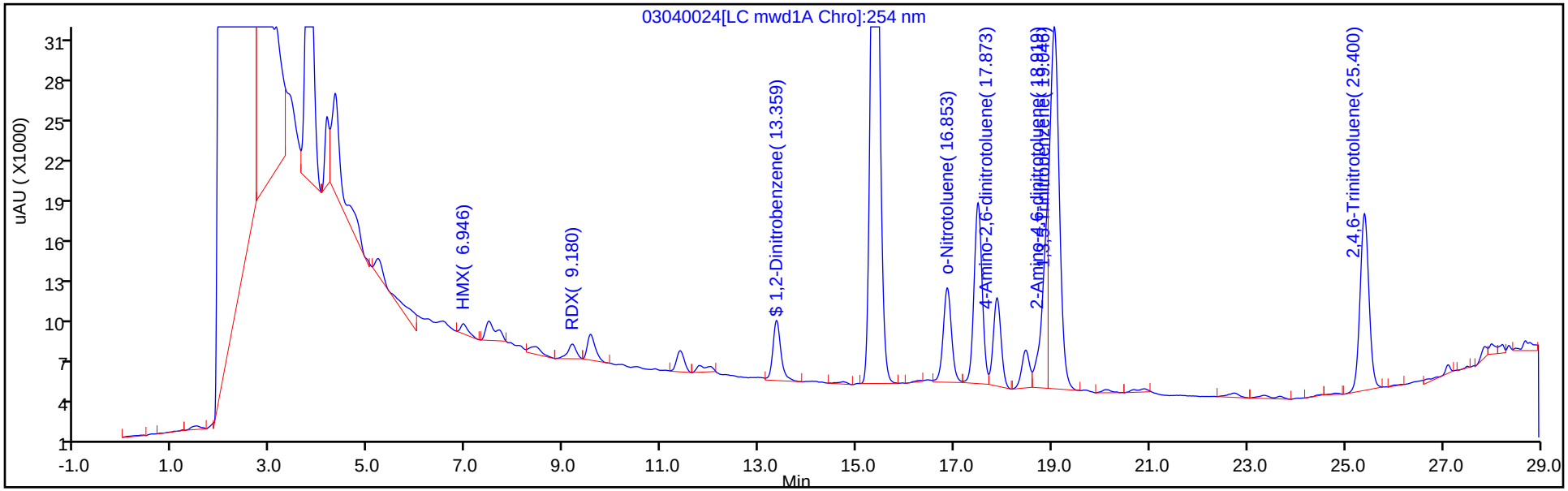
Report Date: 05-Mar-2022 11:24:35 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

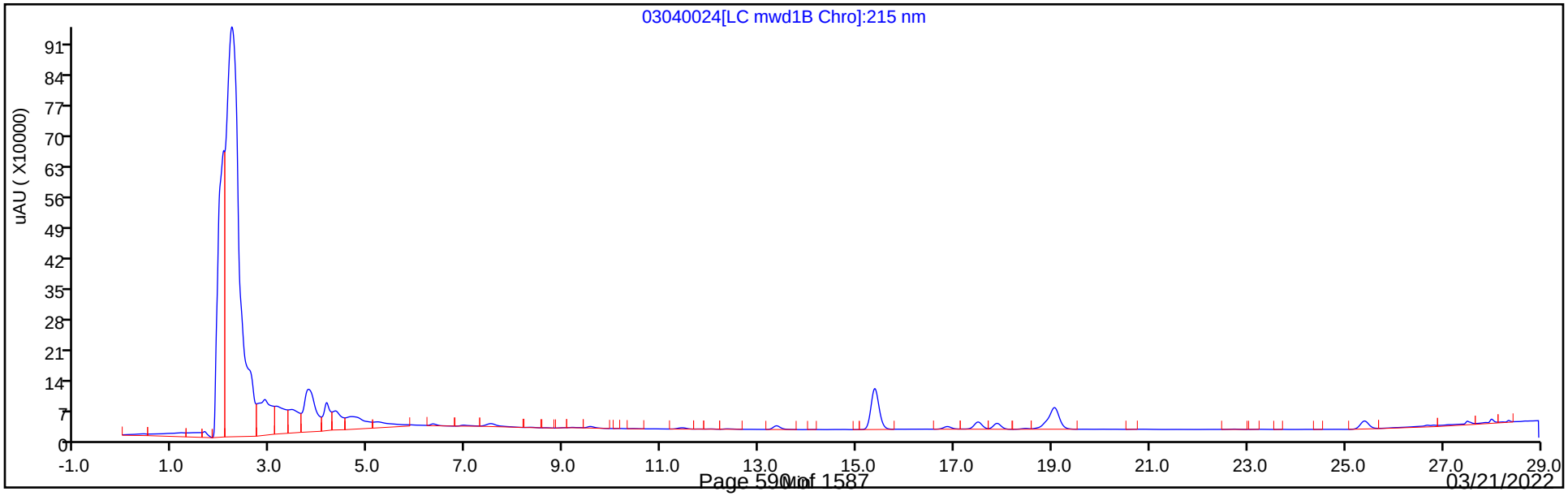
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040024.D

Injection Date:	05-Mar-2022 02:43:52	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159190-A-5-A	Lab Sample ID:	280-159190-5	Worklist Smp#:	24
Client ID:	EW7-PM21A-8-25				
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
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040024.D				
Lims ID:	280-159190-A-5-A				
Client ID:	EW7-PM21A-8-25				
Sample Type:	Client				
Inject. Date:	05-Mar-2022 02:43:52	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-A-5-A				
Misc. Info.:	280-0109013-024				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 11:24:33	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1616				
First Level Reviewer: zhangji		Date:	05-Mar-2022 09:58:31		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2052	102.60

Manual Integration/User Assign Peak Report

Eurofins Denver

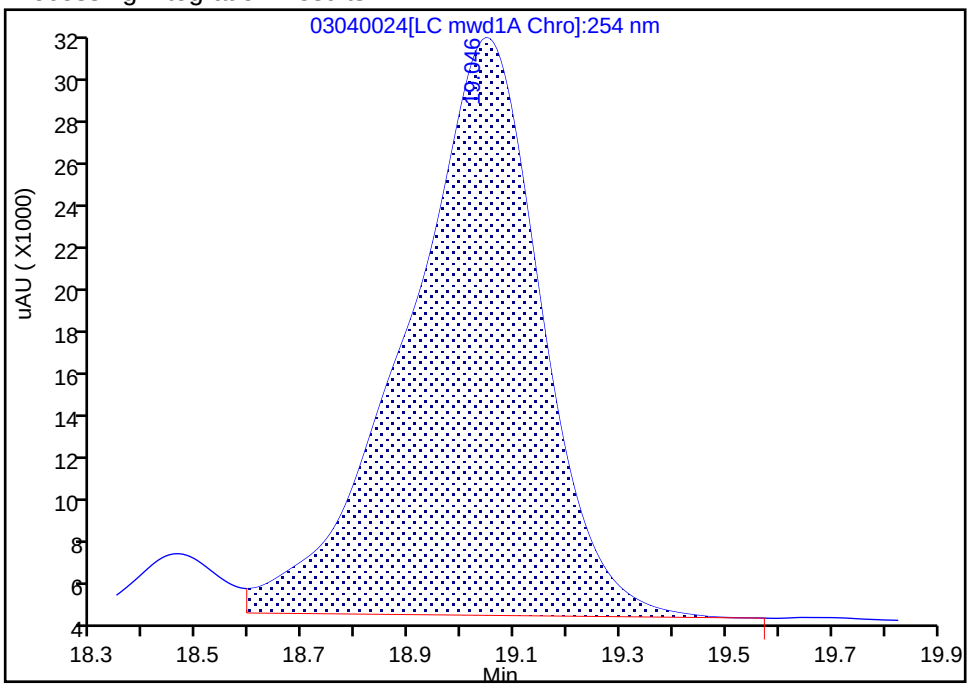
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040024.D				
Injection Date:	05-Mar-2022 02:43:52	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159190-A-5-A	Lab Sample ID:	280-159190-5		
Client ID:	EW7-PM21A-8-25				
Operator ID:	JZ	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 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

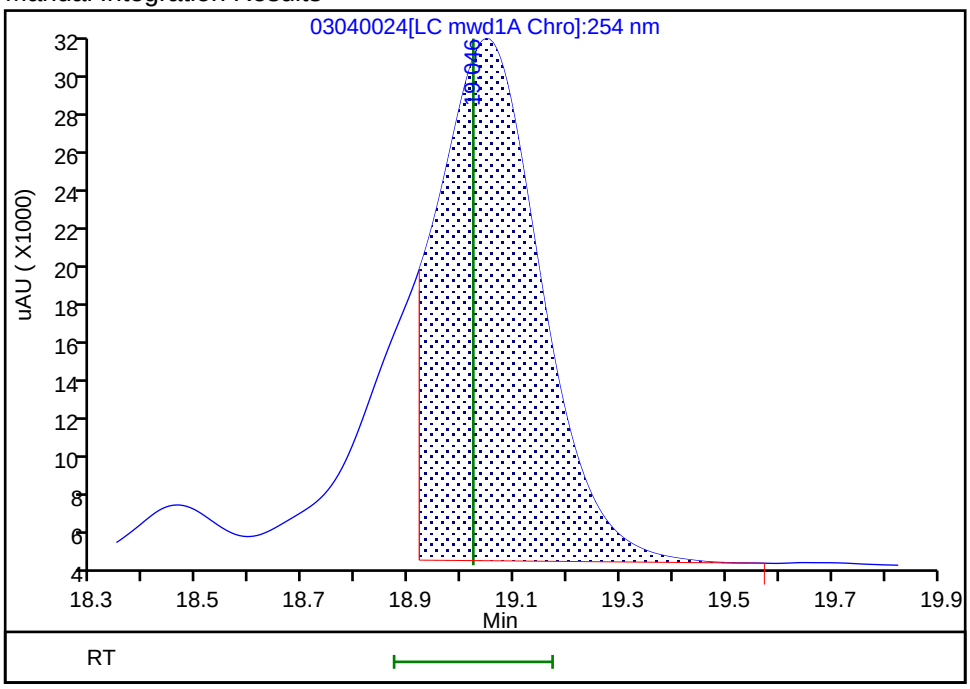
Processing Integration Results

RT: 19.05
Area: 470899
Amount: 1.133429
Amount Units: ug/ml



Manual Integration Results

RT: 19.05
Area: 359973
Amount: 0.866436
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:15:51

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: NW070-8 | Lab Sample ID: 280-159190-6

Matrix: Water | Lab File ID: 03040019.D

Analysis Method: 8330A | Date Collected: 02/27/2022 09:40

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 454.5(mL) | Date Analyzed: 03/04/2022 23:09

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.: 567774 | 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	0.093
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.041
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.050
121-14-2	2,4-Dinitrotoluene	0.088	U	0.11	0.088	0.030
606-20-2	2,6-Dinitrotoluene	0.088	U	0.11	0.088	0.044
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.056
88-72-2	2-Nitrotoluene	0.22	U	0.23	0.22	0.094
99-08-1	3-Nitrotoluene	0.44	U	0.44	0.44	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.17	0.13	0.063
99-99-0	4-Nitrotoluene	0.44	U	0.45	0.44	0.11
2691-41-0	HMX	0.22	U	0.23	0.22	0.096
5755-27-1	MNX	0.44	U	2.2	0.44	0.17
98-95-3	Nitrobenzene	0.22	U	0.23	0.22	0.10
121-82-4	RDX	0.22	U	0.23	0.22	0.057
479-45-8	Tetryl	0.11	U	0.12	0.11	0.035

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040019.D
Lims ID: 280-159190-A-6-A
Client ID: NW070-8
Sample Type: Client
Inject. Date: 04-Mar-2022 23:09:27 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-A-6-A
Misc. Info.: 280-0109012-019
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:47 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: 05-Mar-2022 10:24:46

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.591			ND	
7 MNX	1		7.196			ND	
8 RDX	1		7.578			ND	
$ 10 1,2-Dinitrobenzene	1	8.515	8.511	0.004	23632	0.1895	M
11 1,3,5-Trinitrobenzene	1		8.638			ND	
12 1,3-Dinitrobenzene	1		9.257			ND	
13 Nitrobenzene	1		9.644			ND	
15 Tetryl	1		9.957			ND	
17 2,4,6-Trinitrotoluene	1		10.857			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.051			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.297			ND	
20 2,6-Dinitrotoluene	1		11.464			ND	
21 2,4-Dinitrotoluene	1		11.637			ND	
22 o-Nitrotoluene	1		12.477			ND	
23 p-Nitrotoluene	1		12.897			ND	
24 m-Nitrotoluene	1		13.471			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

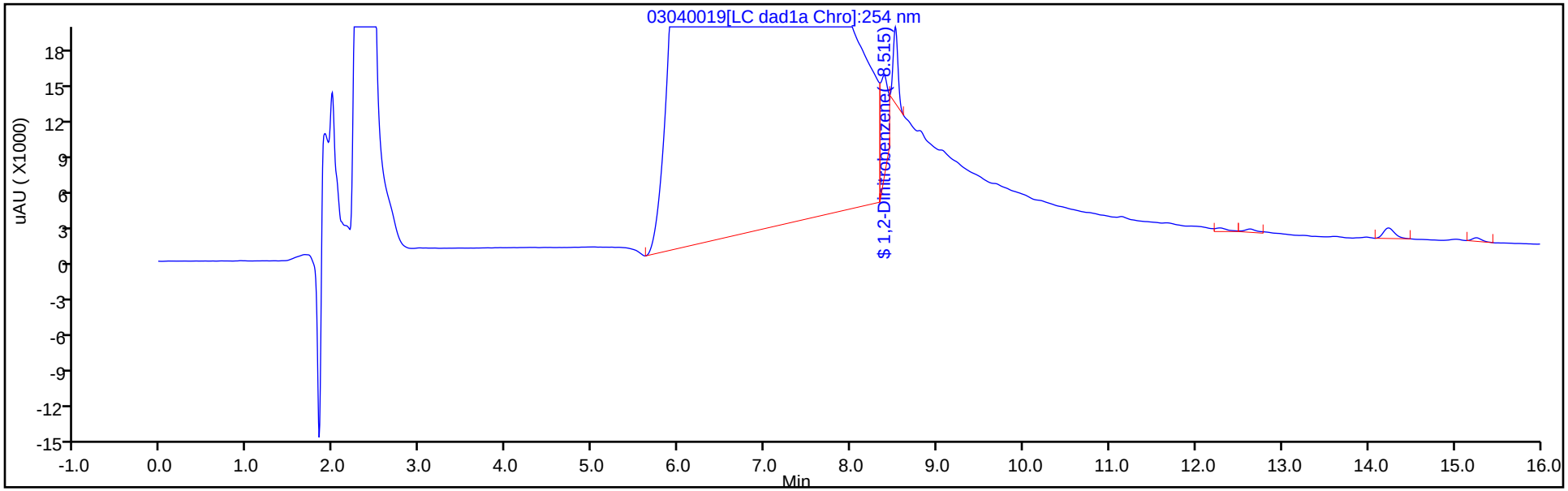
Report Date: 05-Mar-2022 10:57:48 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

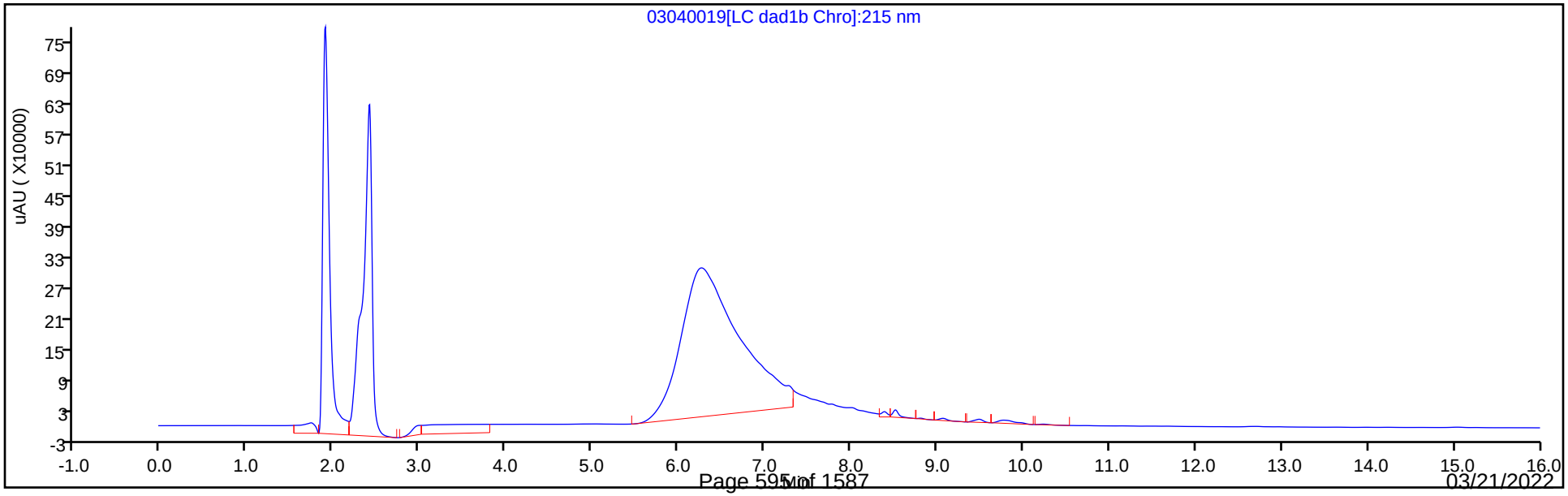
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040019.d

Injection Date:	04-Mar-2022 23:09:27	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159190-A-6-A	Lab Sample ID:	280-159190-6	Worklist Smp#:	19
Client ID:	NW070-8				
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\20220304-109012.b\03040019.D				
Lims ID:	280-159190-A-6-A				
Client ID:	NW070-8				
Sample Type:	Client				
Inject. Date:	04-Mar-2022 23:09:27	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-A-6-A				
Misc. Info.:	280-0109012-019				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:47	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:	05-Mar-2022 10:24:46		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1895	94.76

Manual Integration/User Assign Peak Report

Eurofins Denver

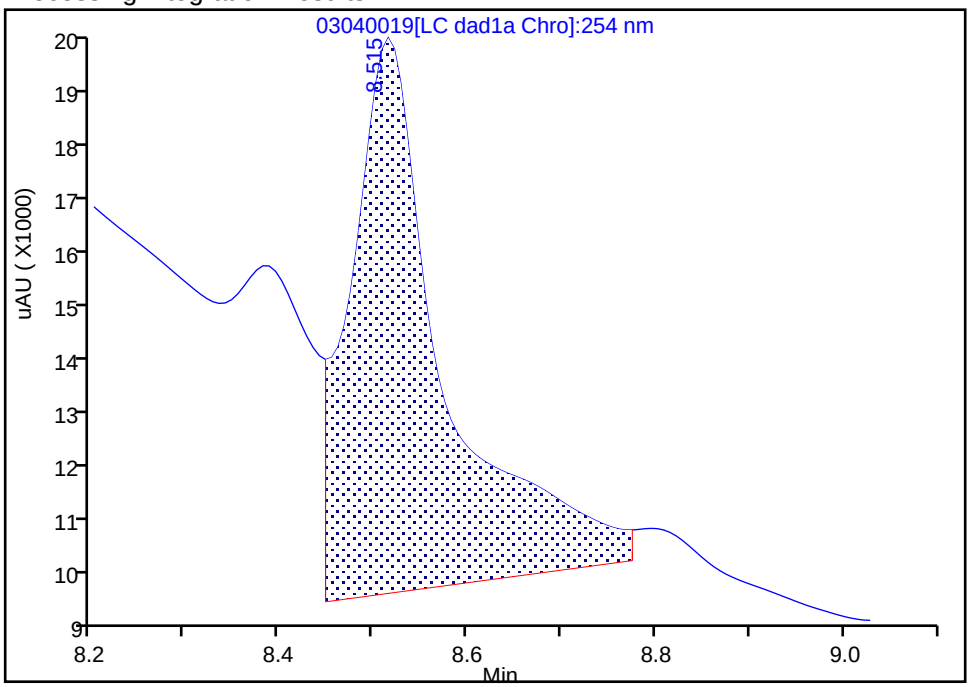
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040019.d				
Injection Date:	04-Mar-2022 23:09:27	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-6-A	Lab Sample ID:	280-159190-6		
Client ID:	NW070-8				
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. 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

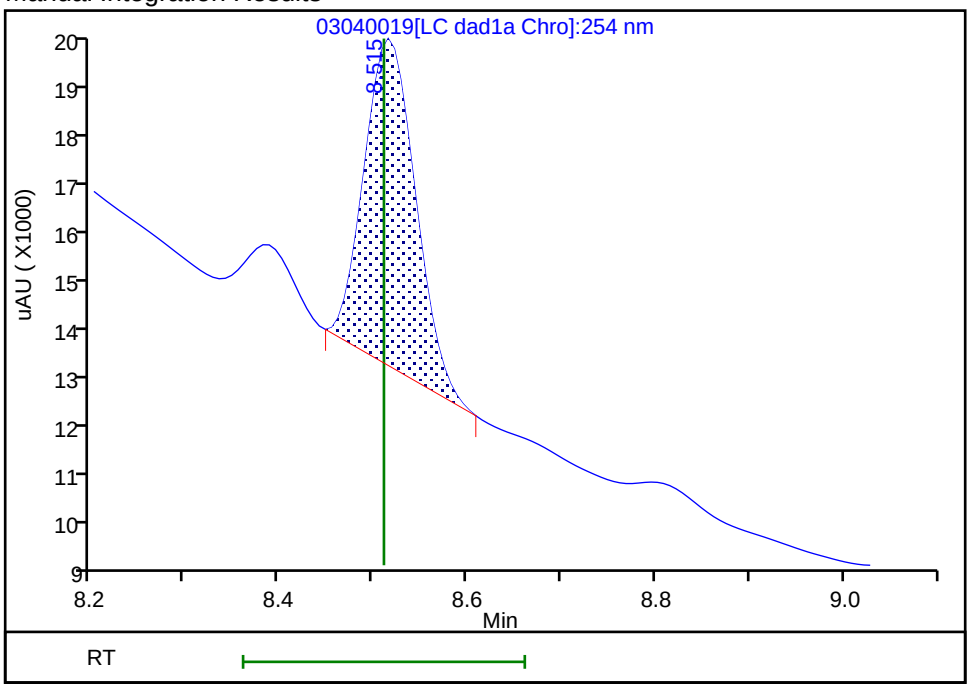
Processing Integration Results

RT: 8.52
Area: 66866
Amount: 0.536225
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 23632
Amount: 0.189514
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:24:45

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: CA210-8 | Lab Sample ID: 280-159190-7

Matrix: Water | Lab File ID: 03040020.D

Analysis Method: 8330A | Date Collected: 02/28/2022 11:10

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 466.9(mL) | Date Analyzed: 03/04/2022 23:32

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.: 567774 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.090
99-65-0	1,3-Dinitrobenzene	0.11	U M	0.12	0.11	0.040
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.086	U	0.11	0.086	0.029
606-20-2	2,6-Dinitrotoluene	0.086	U	0.11	0.086	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	U	0.12	0.11	0.054
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.092
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
99-99-0	4-Nitrotoluene	0.43	U	0.44	0.43	0.11
2691-41-0	HMX	0.21	U	0.22	0.21	0.094
5755-27-1	MNX	0.43	U	2.1	0.43	0.16
98-95-3	Nitrobenzene	0.21	U M	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	93	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040020.D
Lims ID: 280-159190-A-7-A
Client ID: CA210-8
Sample Type: Client
Inject. Date: 04-Mar-2022 23:32:33 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-A-7-A
Misc. Info.: 280-0109012-020
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:47 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: 05-Mar-2022 10:24:57

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.591			ND	
7 MNX	1		7.196			ND	
8 RDX	1		7.578			ND	
$ 10 1,2-Dinitrobenzene	1	8.529	8.511	0.018	23288	0.1868	M
11 1,3,5-Trinitrobenzene	1		8.638			ND	
12 1,3-Dinitrobenzene	1		9.257			ND	U
13 Nitrobenzene	1		9.644			ND	U
15 Tetryl	1		9.957			ND	
17 2,4,6-Trinitrotoluene	1		10.857			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.051			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.297			ND	
20 2,6-Dinitrotoluene	1		11.464			ND	
21 2,4-Dinitrotoluene	1		11.637			ND	
22 o-Nitrotoluene	1		12.477			ND	
23 p-Nitrotoluene	1		12.897			ND	
24 m-Nitrotoluene	1		13.471			ND	

QC Flag Legend

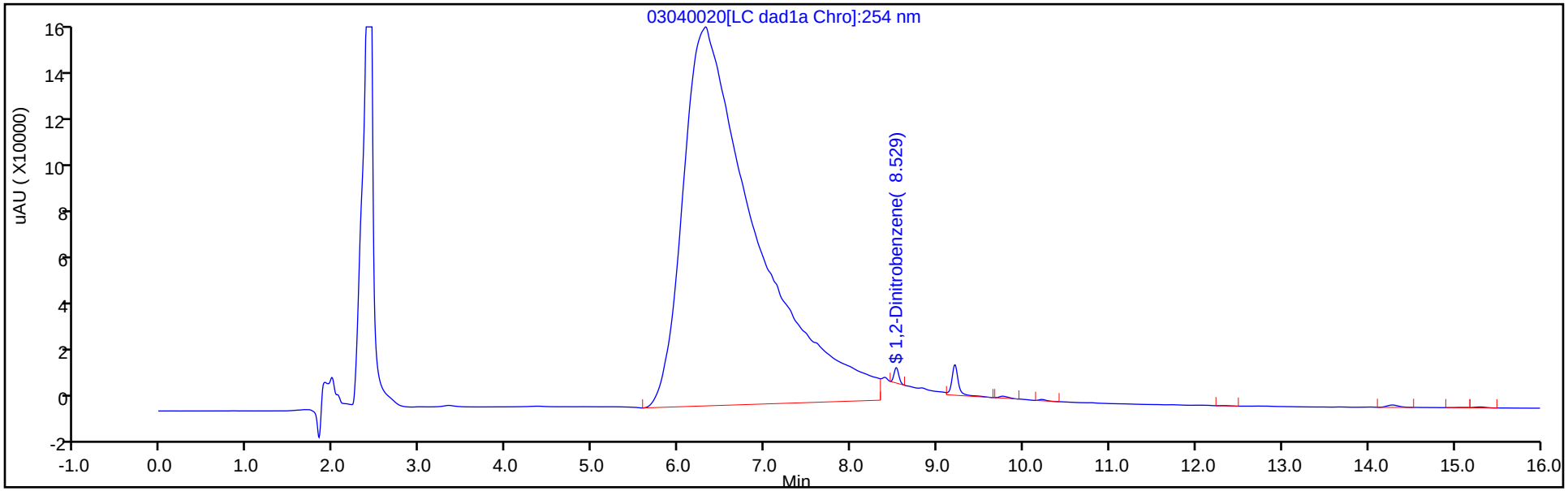
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Mar-2022 10:57:47 Chrom Revision: 2.3 16-Feb-2022 17:52:00

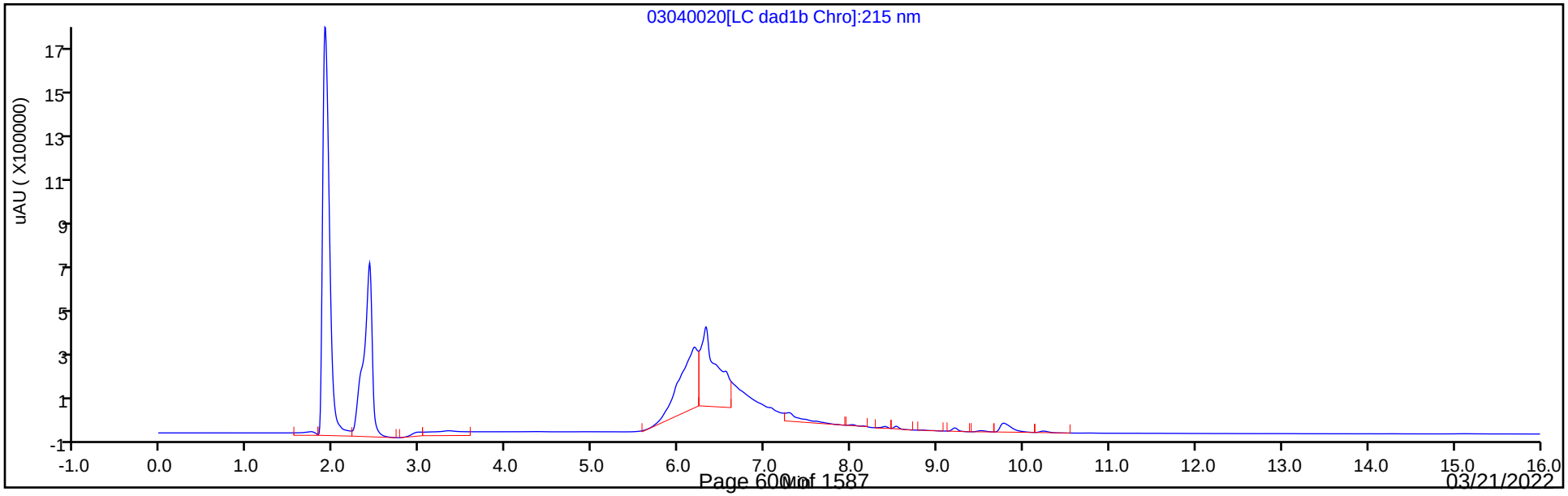
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040020.d				
Injection Date:	04-Mar-2022 23:32:33	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159190-A-7-A	Lab Sample ID:	280-159190-7	Worklist Smp#:	20
Client ID:	CA210-8				
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\20220304-109012.b\03040020.D				
Lims ID:	280-159190-A-7-A				
Client ID:	CA210-8				
Sample Type:	Client				
Inject. Date:	04-Mar-2022 23:32:33	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-A-7-A				
Misc. Info.:	280-0109012-020				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:47	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:	05-Mar-2022 10:24:57		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1868	93.38

Manual Integration/User Assign Peak Report

Eurofins Denver

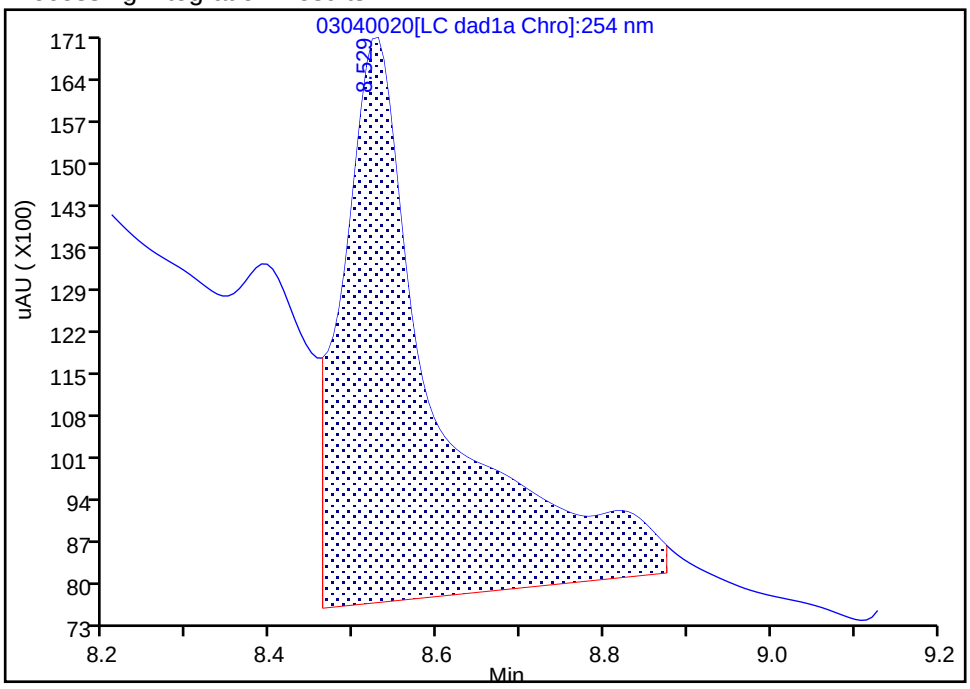
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040020.d				
Injection Date:	04-Mar-2022 23:32:33	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-7-A	Lab Sample ID:	280-159190-7		
Client ID:	CA210-8				
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. 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

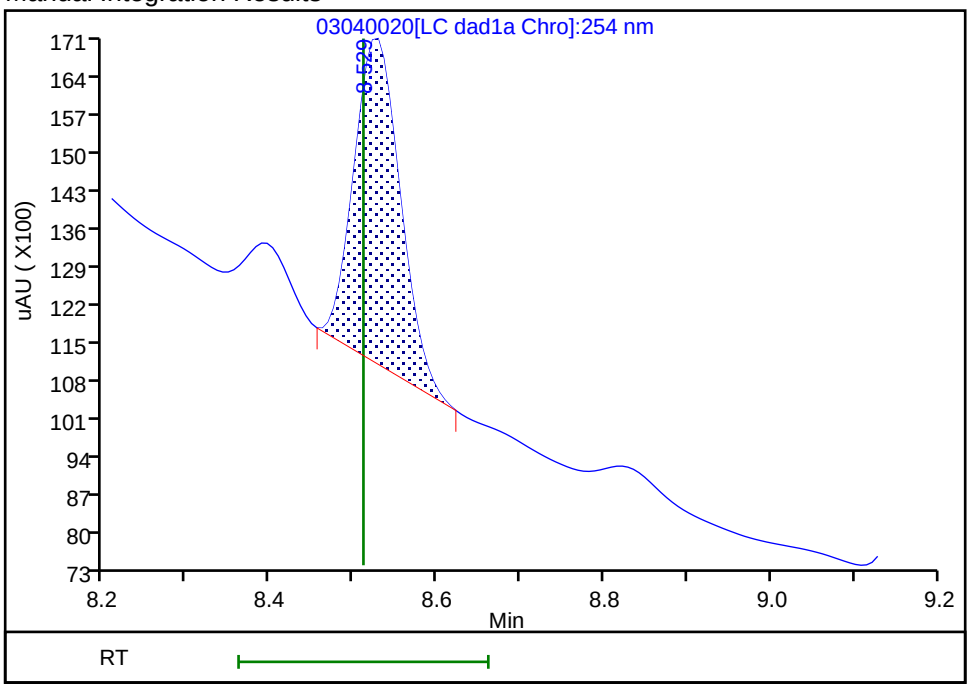
Processing Integration Results

RT: 8.53
Area: 76608
Amount: 0.614350
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 23288
Amount: 0.186756
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:24:56

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

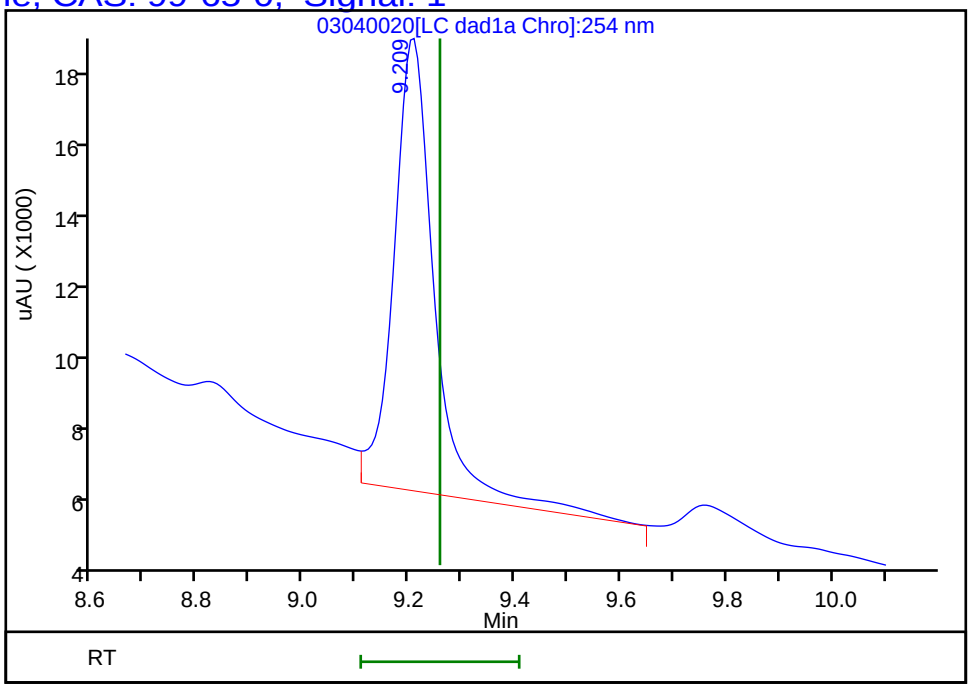
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040020.d
Injection Date: 04-Mar-2022 23:32:33 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-A-7-A Lab Sample ID: 280-159190-7
Client ID: CA210-8
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

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

RT: 9.21
Response: 64191
Amount: 0.222575



Reviewer: zhangji, 05-Mar-2022 10:24:57
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

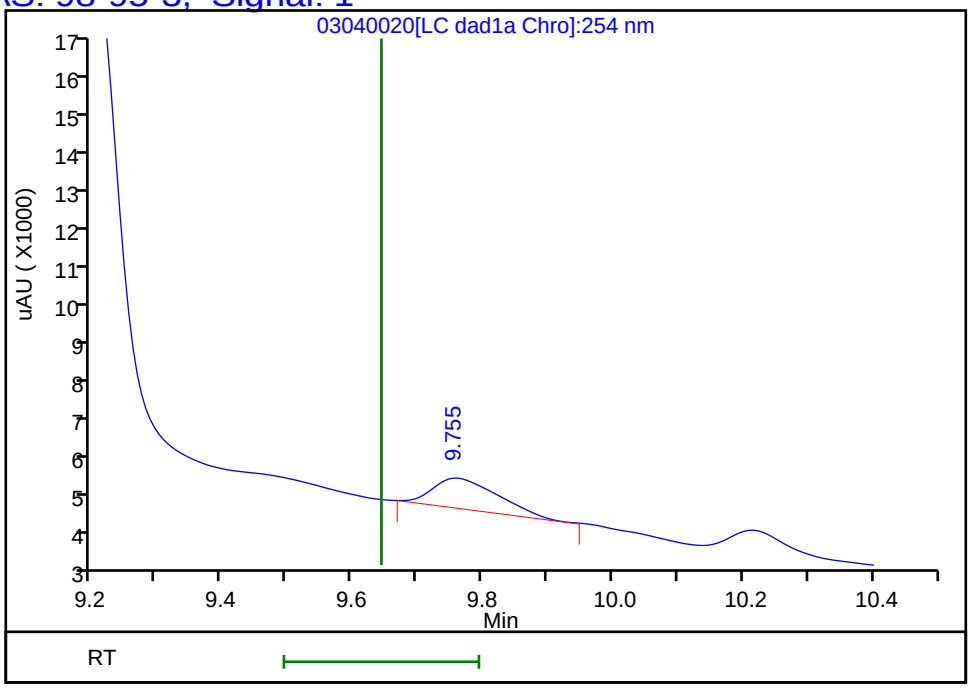
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040020.d				
Injection Date:	04-Mar-2022 23:32:33	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-7-A	Lab Sample ID:	280-159190-7		
Client ID:	CA210-8				
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		

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

RT: 9.76
Response: 5262
Amount: 0.027413



Reviewer: zhangji, 05-Mar-2022 10:24:57
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: CA212-8 | Lab Sample ID: 280-159190-8

Matrix: Water | Lab File ID: 03040023.D

Analysis Method: 8330A | Date Collected: 02/28/2022 11:55

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 457.2(mL) | Date Analyzed: 03/05/2022 00:41

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.: 567774 | 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	0.092
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	0.044
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	0.23	0.22	0.094
99-08-1	3-Nitrotoluene	0.44	U	0.44	0.44	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.063
99-99-0	4-Nitrotoluene	0.44	U	0.45	0.44	0.11
2691-41-0	HMX	0.22	U	0.23	0.22	0.096
5755-27-1	MNX	0.44	U	2.2	0.44	0.17
98-95-3	Nitrobenzene	0.22	U	0.23	0.22	0.10
121-82-4	RDX	0.22	U	0.23	0.22	0.056
479-45-8	Tetryl	0.11	U	0.12	0.11	0.035

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	102	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040023.D
Lims ID: 280-159190-A-8-A
Client ID: CA212-8
Sample Type: Client
Inject. Date: 05-Mar-2022 00:41:24 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-A-8-A
Misc. Info.: 280-0109012-023
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:42 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: 05-Mar-2022 10:28:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.591			ND	
7 MNX	1		7.196			ND	
8 RDX	1		7.578			ND	
$ 10 1,2-Dinitrobenzene	1	8.526	8.511	0.015	25361	0.2034	M
11 1,3,5-Trinitrobenzene	1		8.638			ND	
12 1,3-Dinitrobenzene	1		9.257			ND	
13 Nitrobenzene	1		9.644			ND	
15 Tetryl	1		9.957			ND	
17 2,4,6-Trinitrotoluene	1		10.857			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.051			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.297			ND	
20 2,6-Dinitrotoluene	1		11.464			ND	
21 2,4-Dinitrotoluene	1		11.637			ND	
22 o-Nitrotoluene	1		12.477			ND	7
23 p-Nitrotoluene	1		12.897			ND	
24 m-Nitrotoluene	1		13.471			ND	

QC Flag Legend

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

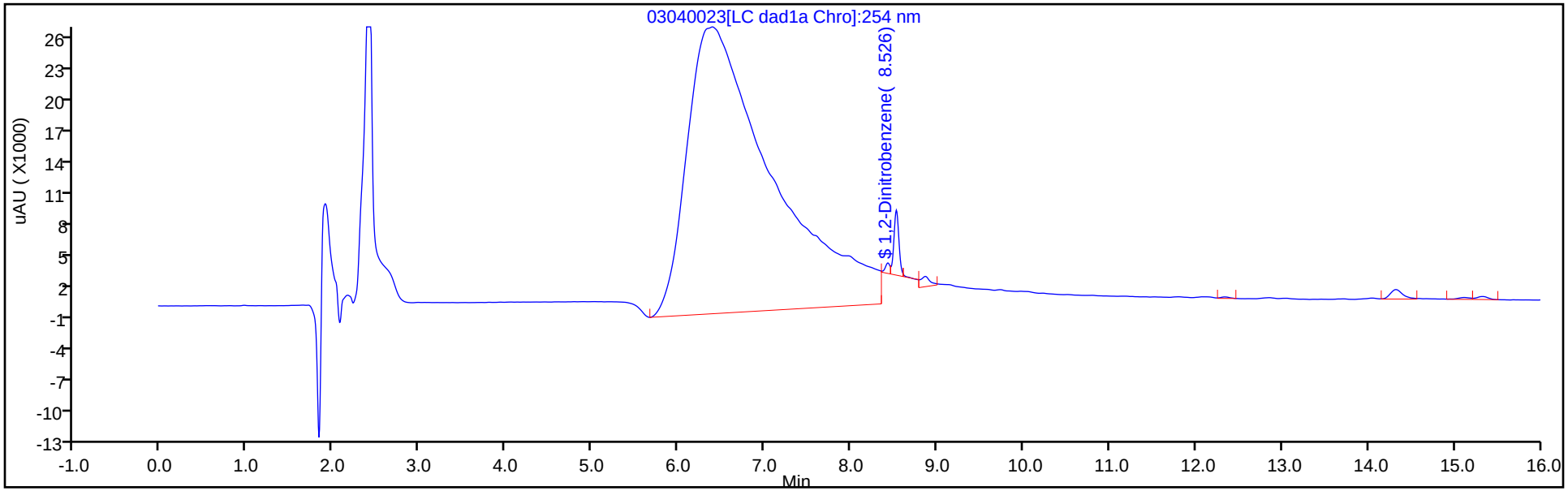
Report Date: 05-Mar-2022 10:57:46 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

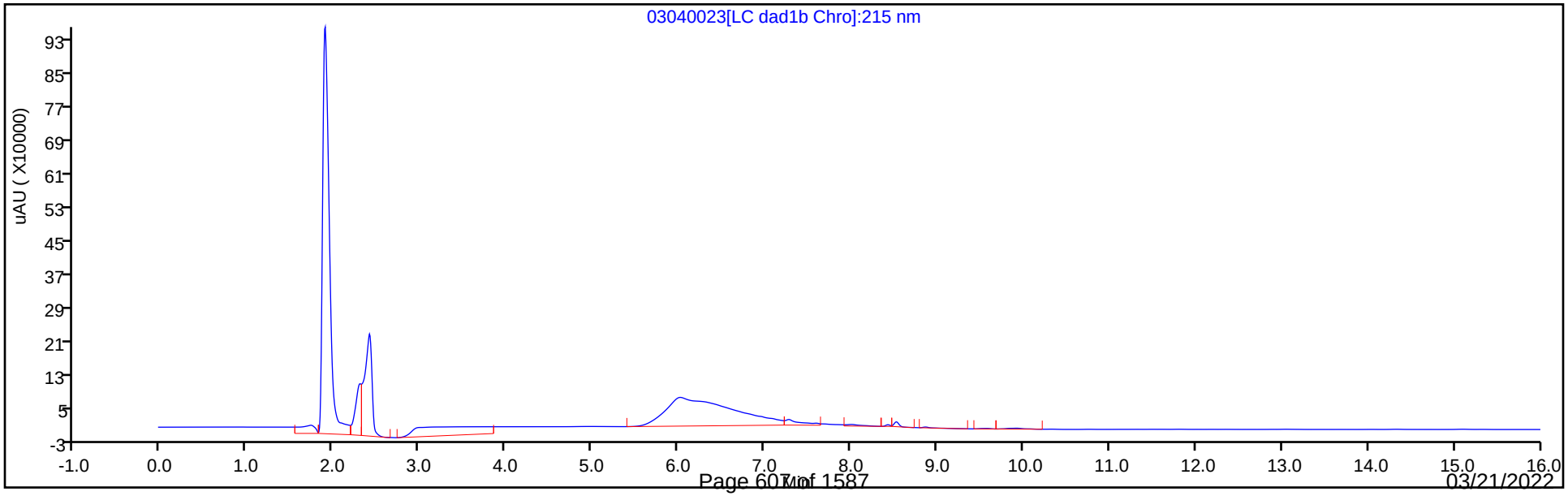
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040023.d

Injection Date:	05-Mar-2022 00:41:24	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159190-A-8-A	Lab Sample ID:	280-159190-8	Worklist Smp#:	23
Client ID:	CA212-8				
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\20220304-109012.b\03040023.D				
Lims ID:	280-159190-A-8-A				
Client ID:	CA212-8				
Sample Type:	Client				
Inject. Date:	05-Mar-2022 00:41:24	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-A-8-A				
Misc. Info.:	280-0109012-023				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:42	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:	05-Mar-2022 10:28:47		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2034	101.69

Manual Integration/User Assign Peak Report

Eurofins Denver

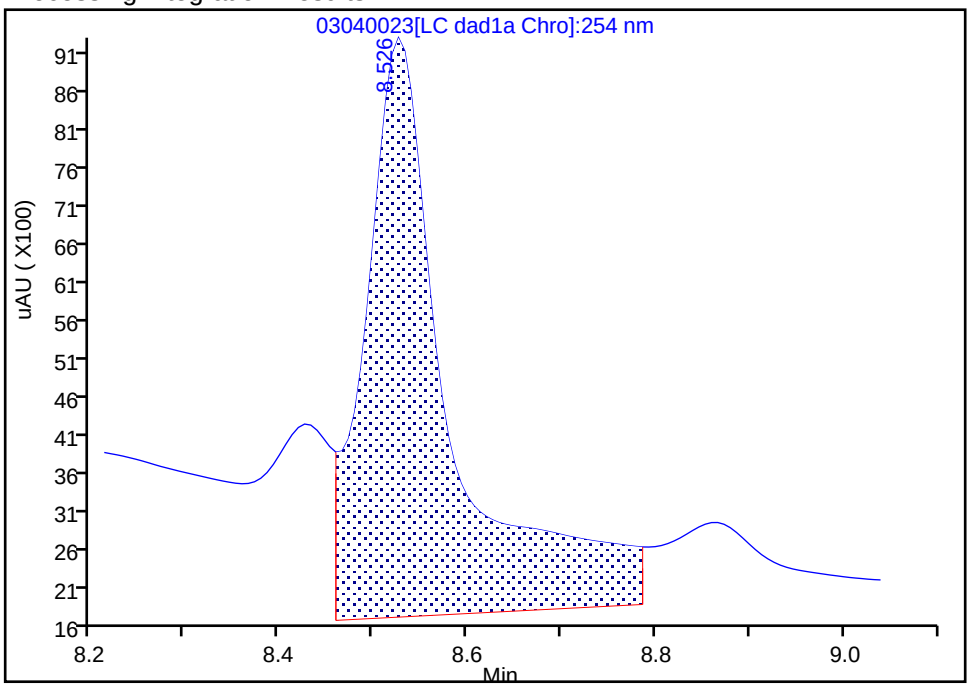
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040023.d				
Injection Date:	05-Mar-2022 00:41:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-8-A	Lab Sample ID:	280-159190-8		
Client ID:	CA212-8				
Operator ID:	JZ	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. 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

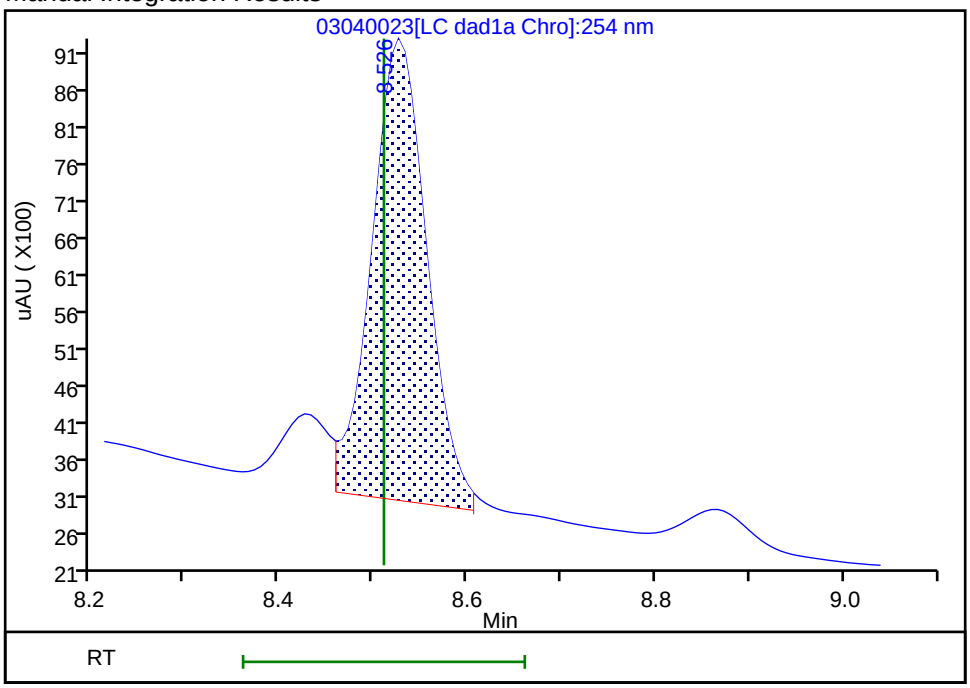
Processing Integration Results

RT: 8.53
Area: 48013
Amount: 0.385035
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 25361
Amount: 0.203380
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:28:45

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: CA213-8 | Lab Sample ID: 280-159190-9

Matrix: Water | Lab File ID: 03040024.D

Analysis Method: 8330A | Date Collected: 02/28/2022 12:45

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 463.9(mL) | Date Analyzed: 03/05/2022 01:04

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.: 567774 | 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	0.11	U	0.12	0.11	0.055
88-72-2	2-Nitrotoluene	0.22	U M	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	0.13	U	0.16	0.13	0.062
99-99-0	4-Nitrotoluene	0.43	U M	0.44	0.43	0.11
2691-41-0	HMX	0.22	U M	0.23	0.22	0.094
5755-27-1	MNX	0.43	U	2.2	0.43	0.17
98-95-3	Nitrobenzene	0.22	U M	0.23	0.22	0.098
121-82-4	RDX	0.22	U	0.23	0.22	0.056
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	101		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040024.D
Lims ID: 280-159190-A-9-A
Client ID: CA213-8
Sample Type: Client
Inject. Date: 05-Mar-2022 01:04:18 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-A-9-A
Misc. Info.: 280-0109012-024
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:42 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: 05-Mar-2022 10:29:15

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.591			ND	U
7 MNX	1		7.196			ND	
8 RDX	1		7.578			ND	
$ 10 1,2-Dinitrobenzene	1	8.530	8.511	0.019	25183	0.2020	
11 1,3,5-Trinitrobenzene	1		8.638			ND	
12 1,3-Dinitrobenzene	1		9.257			ND	
13 Nitrobenzene	1		9.644			ND	U
15 Tetryl	1		9.957			ND	
17 2,4,6-Trinitrotoluene	1		10.857			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.051			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.297			ND	
20 2,6-Dinitrotoluene	1		11.464			ND	
21 2,4-Dinitrotoluene	1		11.637			ND	
22 o-Nitrotoluene	1		12.477			ND	U
23 p-Nitrotoluene	1		12.897			ND	U
24 m-Nitrotoluene	1		13.471			ND	

QC Flag Legend

Processing Flags
Review Flags
U - Marked Undetected

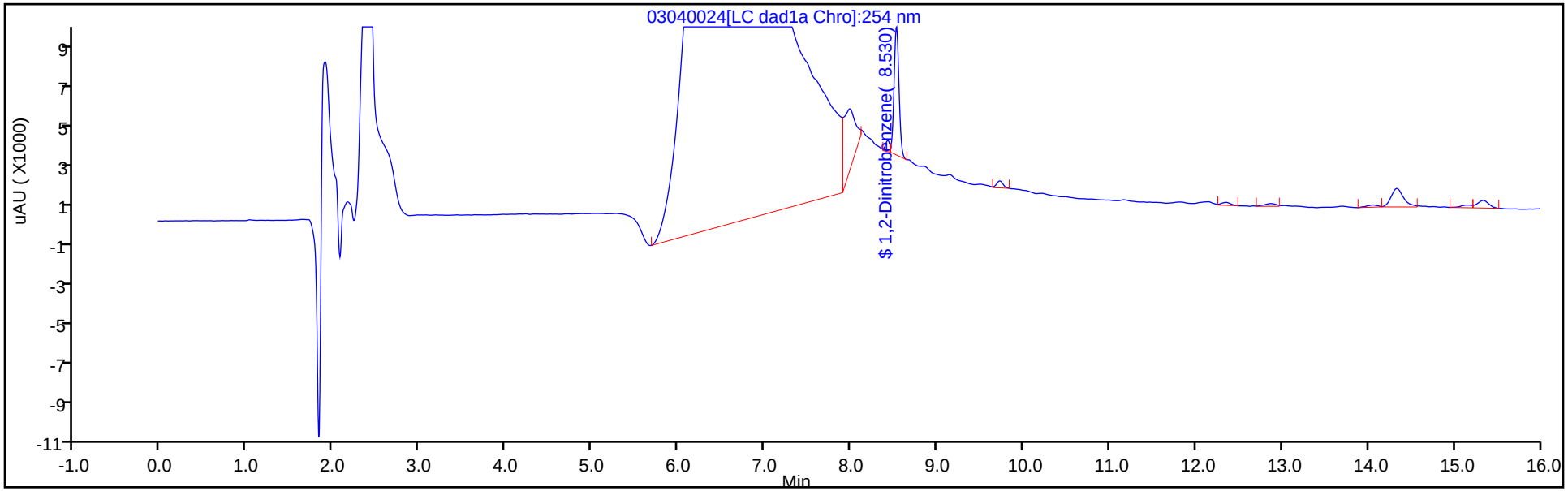
Report Date: 05-Mar-2022 10:57:45 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

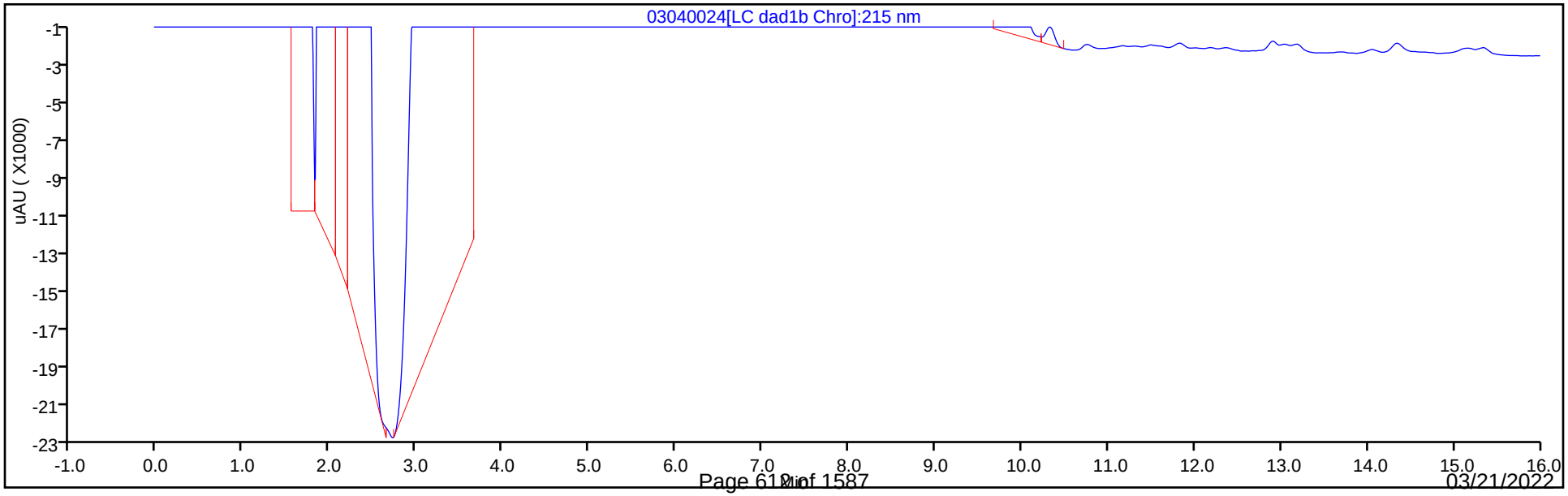
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040024.d

Injection Date:	05-Mar-2022 01:04:18	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159190-A-9-A	Lab Sample ID:	280-159190-9	Worklist Smp#:	24
Client ID:	CA213-8				
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\20220304-109012.b\03040024.D				
Lims ID:	280-159190-A-9-A				
Client ID:	CA213-8				
Sample Type:	Client				
Inject. Date:	05-Mar-2022 01:04:18	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-A-9-A				
Misc. Info.:	280-0109012-024				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:42	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: 05-Mar-2022 10:29:15

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2020	100.98

User Disabled Compound Report

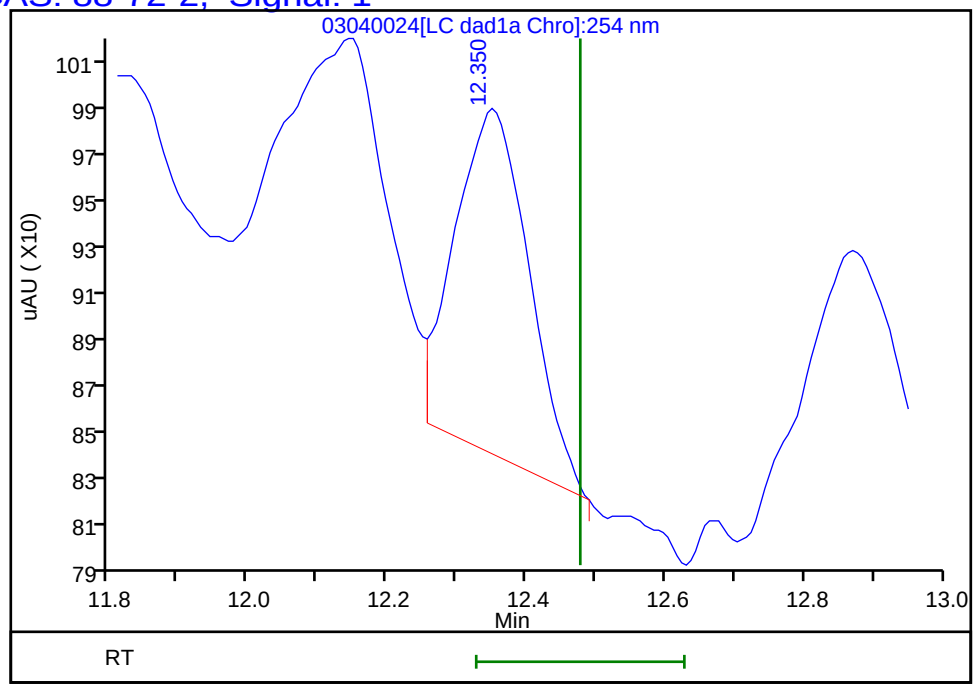
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040024.d
Injection Date: 05-Mar-2022 01:04:18 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-A-9-A Lab Sample ID: 280-159190-9
Client ID: CA213-8
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: 12.35
Response: 1093
Amount: 0.008565



Reviewer: zhangji, 05-Mar-2022 10:29:15
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

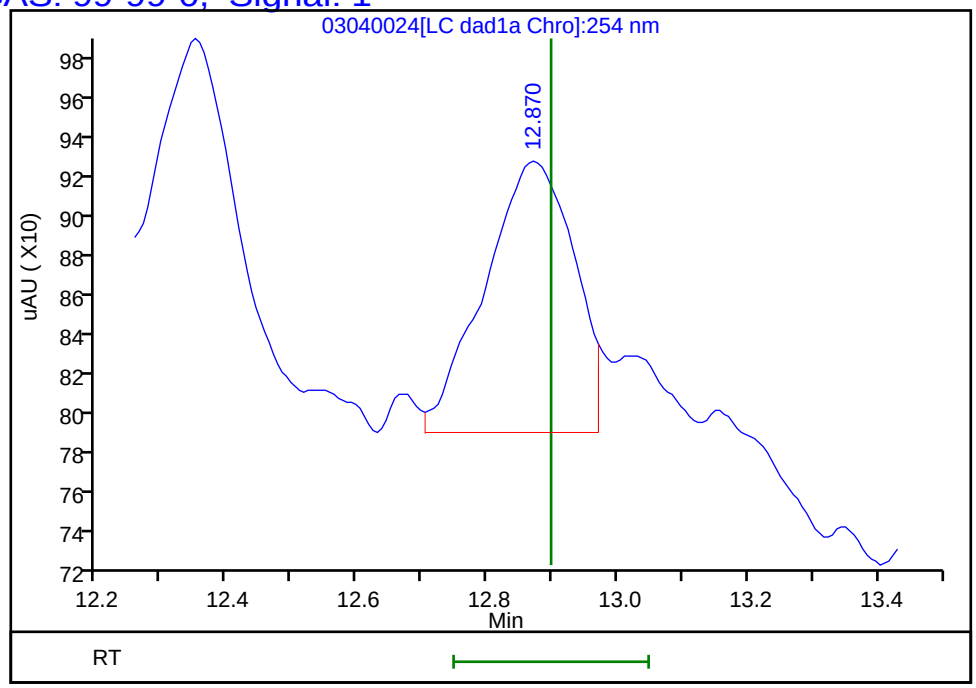
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040024.d
Injection Date: 05-Mar-2022 01:04:18 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-A-9-A Lab Sample ID: 280-159190-9
Client ID: CA213-8
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

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

RT: 12.87
Response: 1281
Amount: 0.012058



Reviewer: zhangji, 05-Mar-2022 10:29:15
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

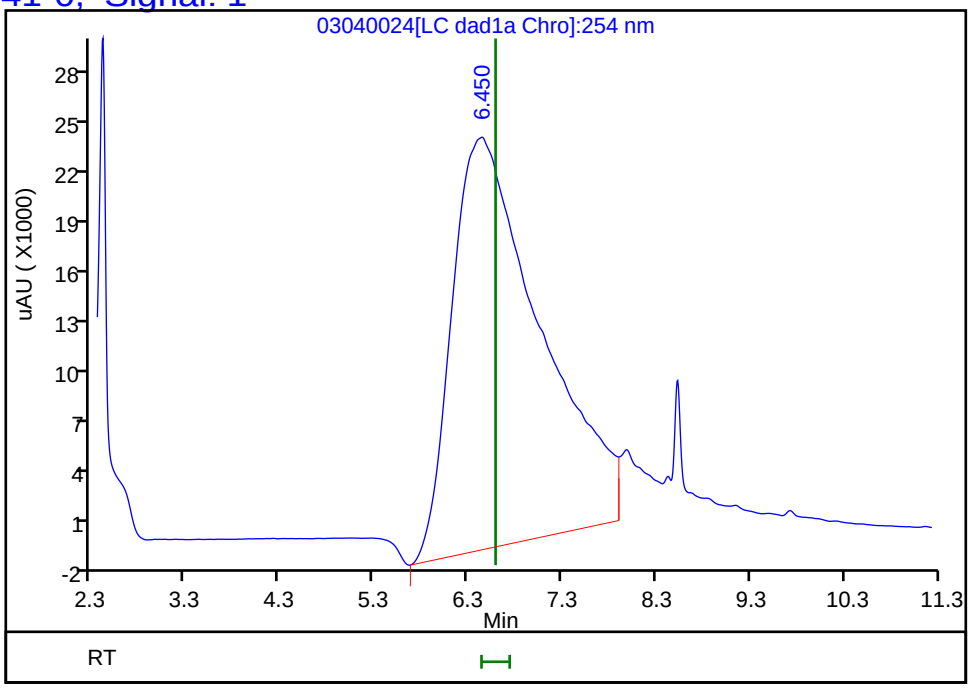
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040024.d				
Injection Date:	05-Mar-2022 01:04:18	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-9-A	Lab Sample ID:	280-159190-9		
Client ID:	CA213-8				
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

RT: 6.45
Response: 1568944
Amount: 18.716407



Reviewer: zhangji, 05-Mar-2022 10:29:15
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

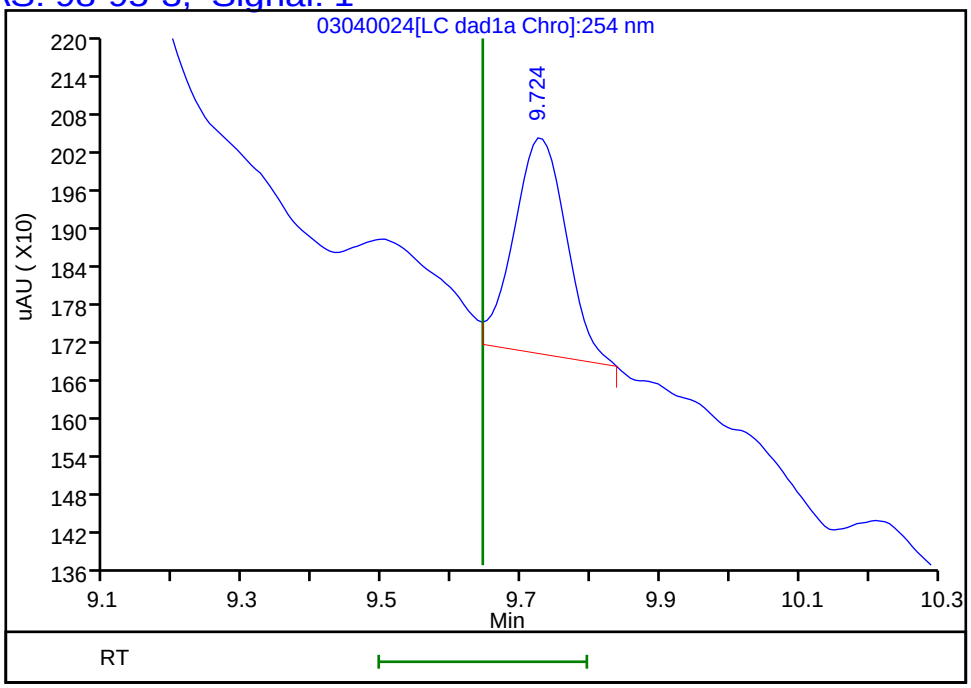
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040024.d
Injection Date: 05-Mar-2022 01:04:18 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-A-9-A Lab Sample ID: 280-159190-9
Client ID: CA213-8
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

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

RT: 9.72
Response: 1798
Amount: 0.009367



Reviewer: zhangji, 05-Mar-2022 10:29:15
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: G0092-8 | Lab Sample ID: 280-159190-10

Matrix: Water | Lab File ID: 03040025.D

Analysis Method: 8330A | Date Collected: 02/27/2022 16:50

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 469.9(mL) | Date Analyzed: 03/05/2022 01:27

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

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

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

Analysis Batch No.: 567774 | 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	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 M	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 M	0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	100	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040025.D
Lims ID: 280-159190-A-10-A
Client ID: G0092-8
Sample Type: Client
Inject. Date: 05-Mar-2022 01:27:16 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-A-10-
Misc. Info.: 280-0109012-025
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:42 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: 05-Mar-2022 10:29:29

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.591			ND	U
7 MNX	1		7.196			ND	
8 RDX	1		7.578			ND	
$ 10 1,2-Dinitrobenzene	1	8.530	8.511	0.019	24909	0.1998	M
11 1,3,5-Trinitrobenzene	1		8.638			ND	
12 1,3-Dinitrobenzene	1		9.257			ND	
13 Nitrobenzene	1		9.644			ND	U
15 Tetryl	1		9.957			ND	U
17 2,4,6-Trinitrotoluene	1		10.857			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.051			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.297			ND	
20 2,6-Dinitrotoluene	1		11.464			ND	
21 2,4-Dinitrotoluene	1		11.637			ND	
22 o-Nitrotoluene	1		12.477			ND	7
23 p-Nitrotoluene	1		12.897			ND	7
24 m-Nitrotoluene	1		13.471			ND	

QC Flag Legend

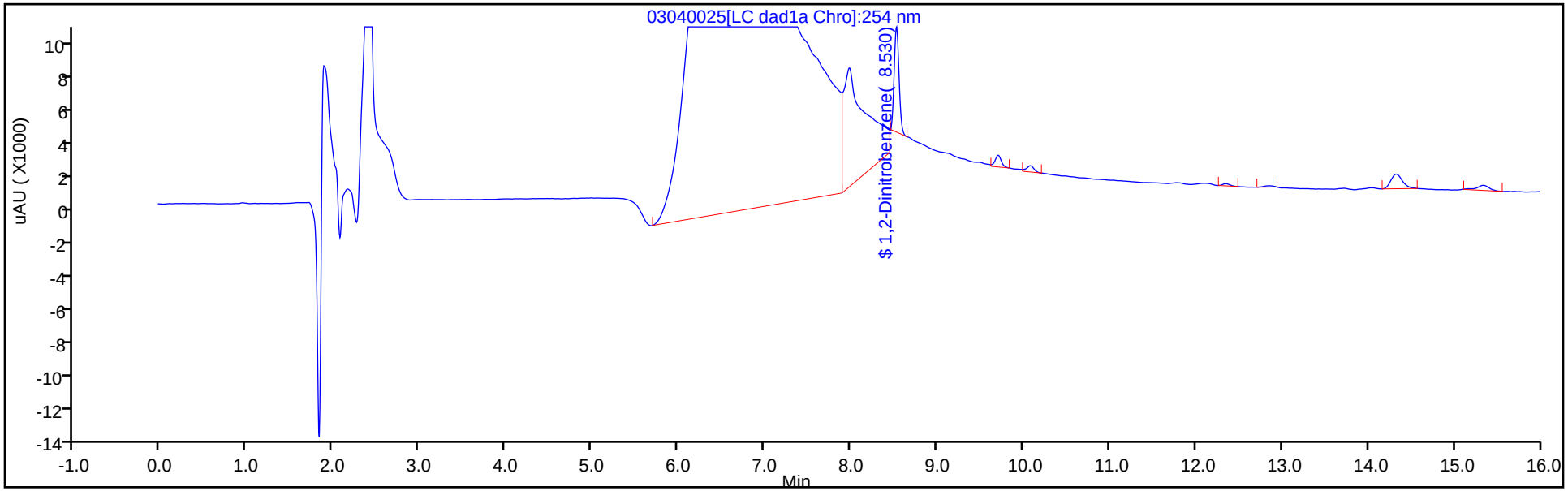
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Mar-2022 10:57:45 Chrom Revision: 2.3 16-Feb-2022 17:52:00

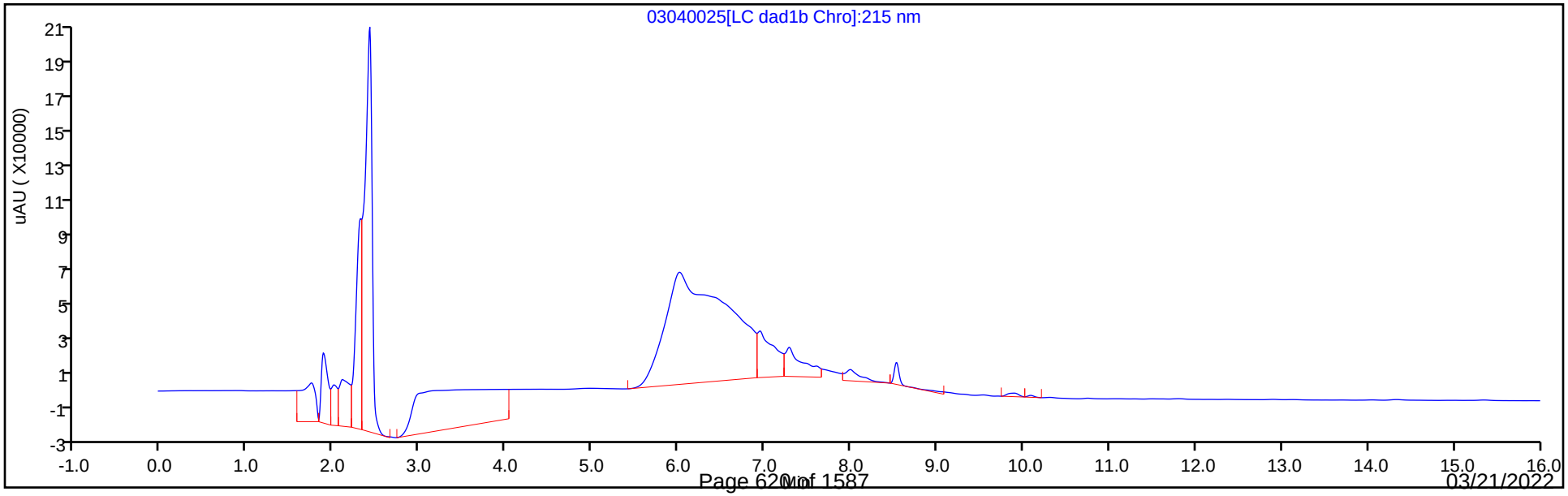
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040025.d				
Injection Date:	05-Mar-2022 01:27:16	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159190-A-10-A	Lab Sample ID:	280-159190-10	Worklist Smp#:	25
Client ID:	G0092-8				
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\20220304-109012.b\03040025.D				
Lims ID:	280-159190-A-10-A				
Client ID:	G0092-8				
Sample Type:	Client				
Inject. Date:	05-Mar-2022 01:27:16	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-A-10-				
Misc. Info.:	280-0109012-025				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:42	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: 05-Mar-2022 10:29:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1998	99.88

Manual Integration/User Assign Peak Report

Eurofins Denver

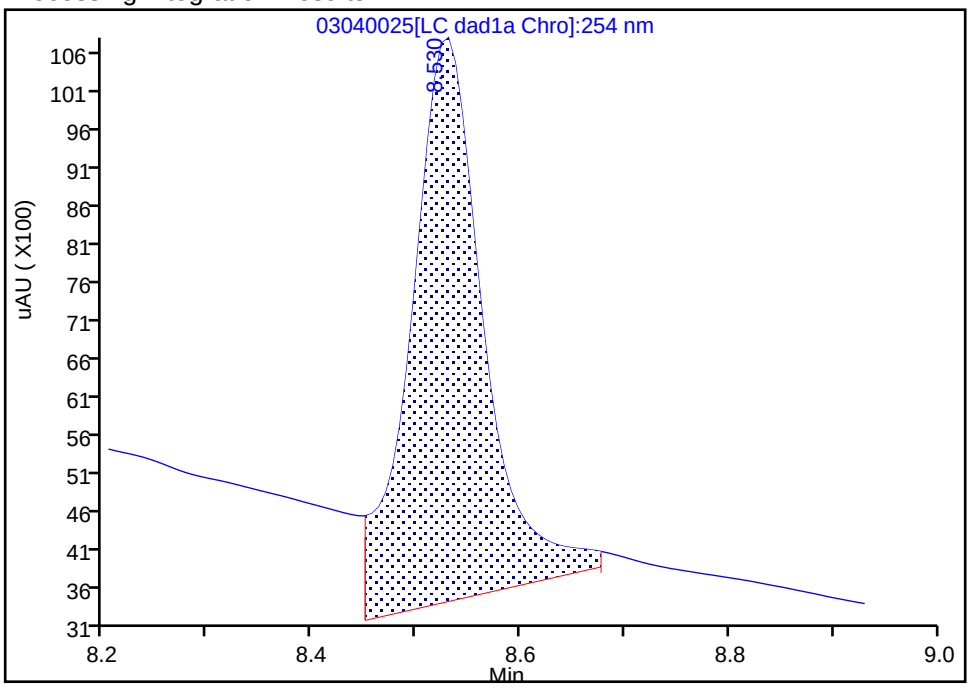
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040025.d				
Injection Date:	05-Mar-2022 01:27:16	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-10-A	Lab Sample ID:	280-159190-10		
Client ID:	G0092-8				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. 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

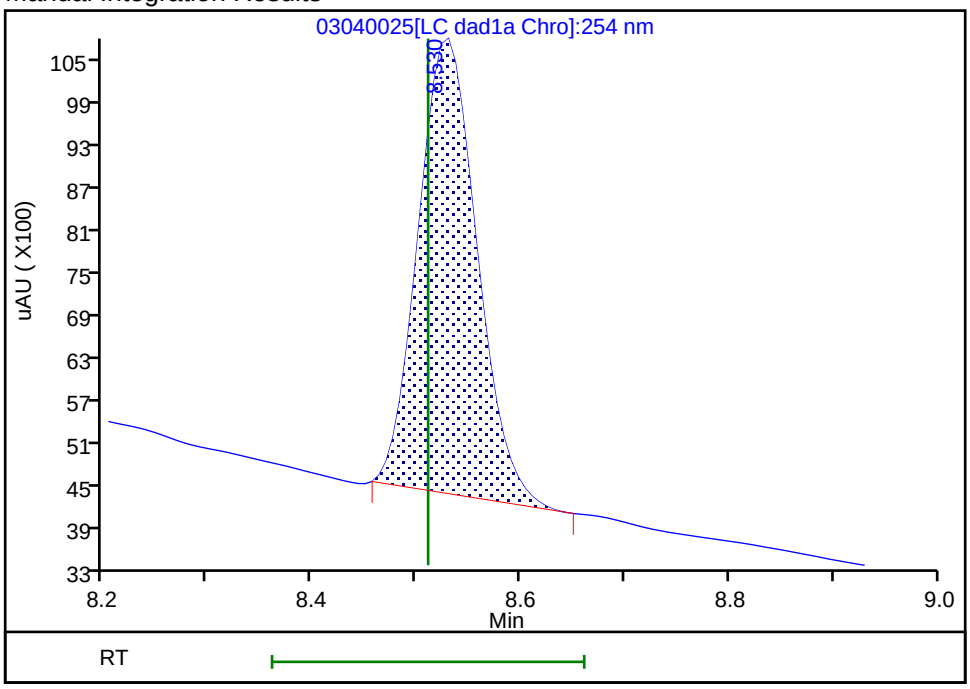
Processing Integration Results

RT: 8.53
Area: 35681
Amount: 0.286140
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 24909
Amount: 0.199755
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:29:28

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

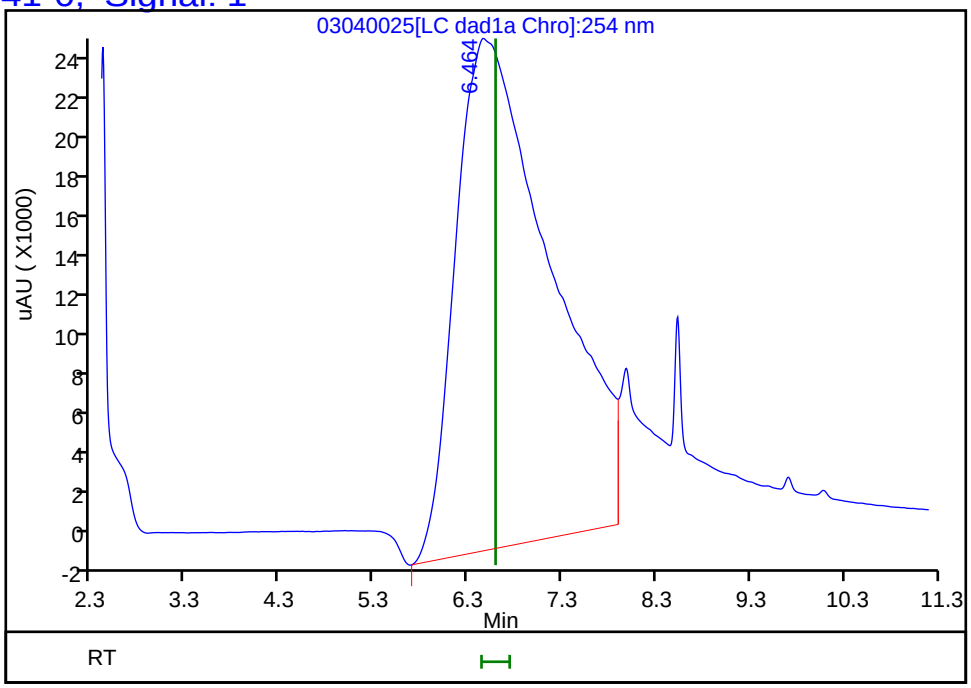
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040025.d
Injection Date: 05-Mar-2022 01:27:16 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-A-10-A Lab Sample ID: 280-159190-10
Client ID: G0092-8
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

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

RT: 6.46
Response: 1734451
Amount: 20.690790



Reviewer: zhangji, 05-Mar-2022 10:29:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

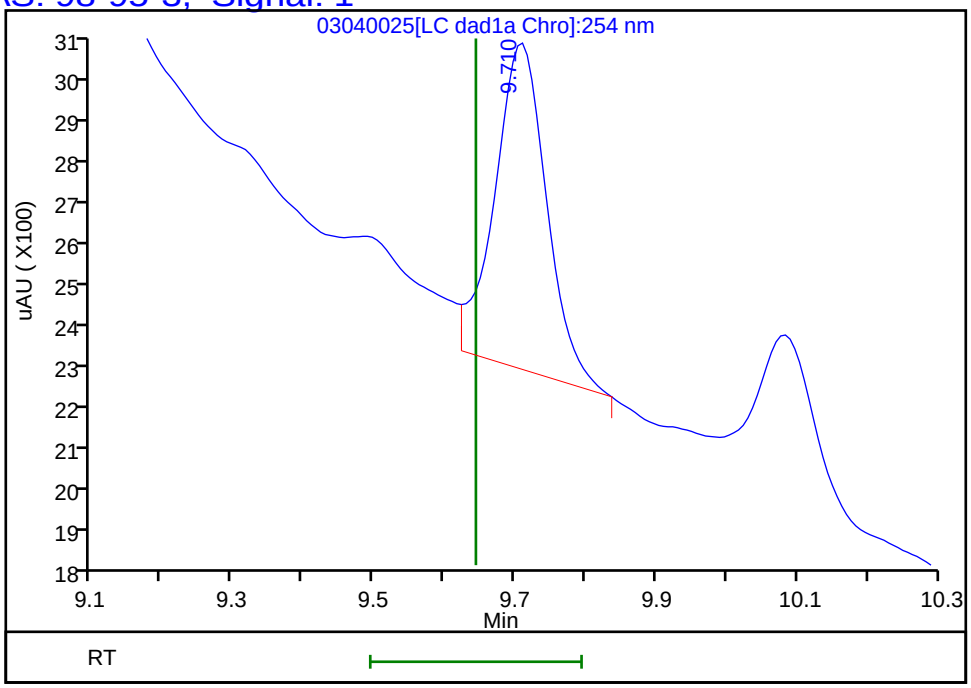
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040025.d
Injection Date: 05-Mar-2022 01:27:16 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-A-10-A Lab Sample ID: 280-159190-10
Client ID: G0092-8
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

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

RT: 9.71
Response: 3615
Amount: 0.018833



Reviewer: zhangji, 05-Mar-2022 10:29:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

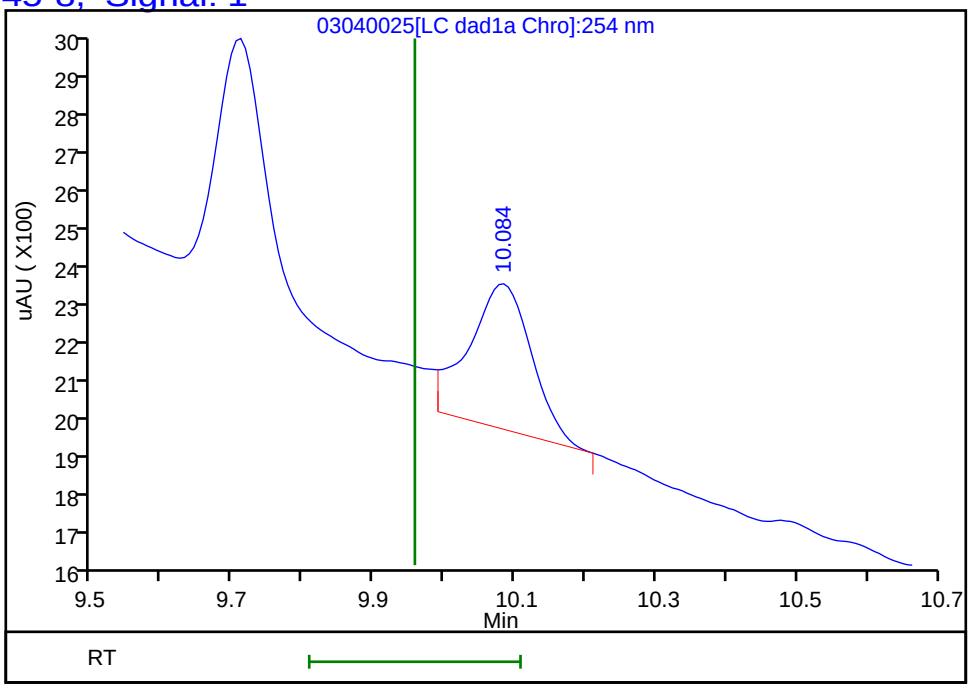
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040025.d
Injection Date: 05-Mar-2022 01:27:16 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-A-10-A Lab Sample ID: 280-159190-10
Client ID: G0092-8
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

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

RT: 10.08
Response: 2295
Amount: 0.013455



Reviewer: zhangji, 05-Mar-2022 10:29:29
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: G0091-8 | Lab Sample ID: 280-159190-11

Matrix: Water | Lab File ID: 03040026.D

Analysis Method: 8330A | Date Collected: 02/27/2022 15:55

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 473.4(mL) | Date Analyzed: 03/05/2022 01:50

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

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

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

Analysis Batch No.: 567774 | 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	0.084	U	0.11	0.084	0.029
606-20-2	2,6-Dinitrotoluene	0.084	U	0.11	0.084	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.18		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	0.17		0.16	0.13	0.061
99-99-0	4-Nitrotoluene	0.42	U	0.43	0.42	0.11
2691-41-0	HMX	0.21	U M	0.22	0.21	0.093
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	J 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	96	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040026.D
Lims ID: 280-159190-A-11-A
Client ID: G0091-8
Sample Type: Client
Inject. Date: 05-Mar-2022 01:50:08 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-A-11-
Misc. Info.: 280-0109012-026
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:42 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: 05-Mar-2022 10:34:36

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.591			ND	U
7 MNX	1		7.196			ND	U
8 RDX	1	7.589	7.578	0.011	2064	0.0199	M
$ 10 1,2-Dinitrobenzene	1	8.529	8.511	0.018	23859	0.1913	M
11 1,3,5-Trinitrobenzene	1		8.638			ND	
12 1,3-Dinitrobenzene	1		9.257			ND	
13 Nitrobenzene	1		9.644			ND	7
15 Tetryl	1		9.957			ND	U
17 2,4,6-Trinitrotoluene	1		10.857			ND	7
18 4-Amino-2,6-dinitrotoluene	1	11.076	11.051	0.025	2498	0.0165	
19 2-Amino-4,6-dinitrotoluene	1	11.322	11.297	0.025	3443	0.0170	
20 2,6-Dinitrotoluene	1		11.464			ND	
21 2,4-Dinitrotoluene	1		11.637			ND	
22 o-Nitrotoluene	1		12.477			ND	7
23 p-Nitrotoluene	1		12.897			ND	
24 m-Nitrotoluene	1		13.471			ND	

QC Flag Legend

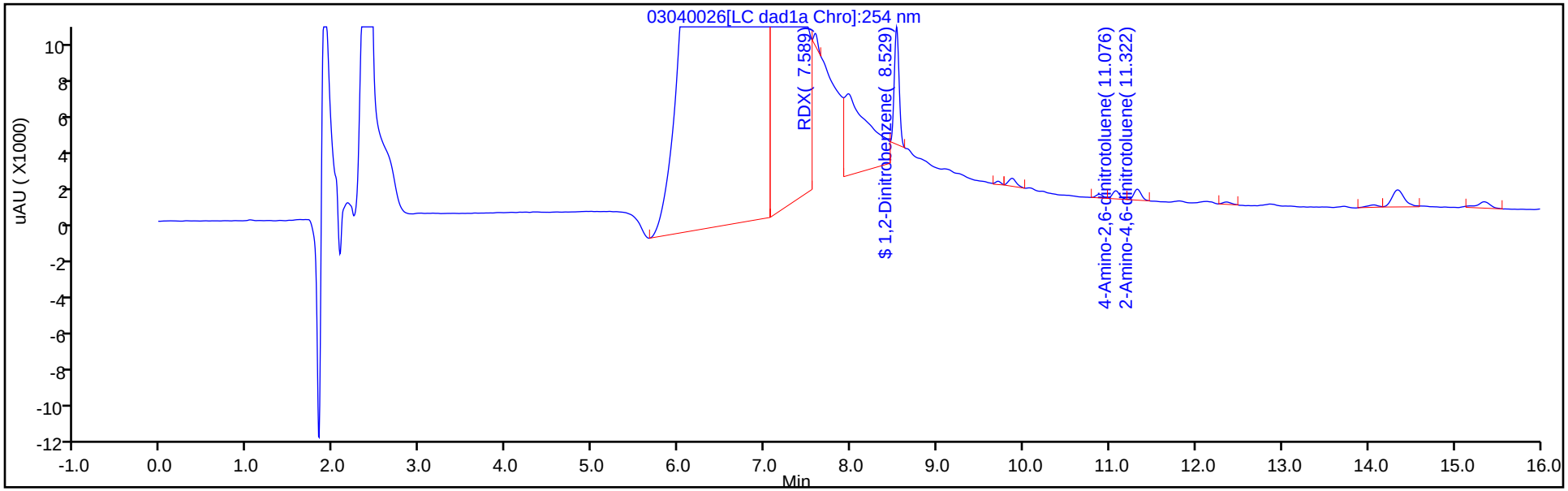
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Mar-2022 10:57:45 Chrom Revision: 2.3 16-Feb-2022 17:52:00

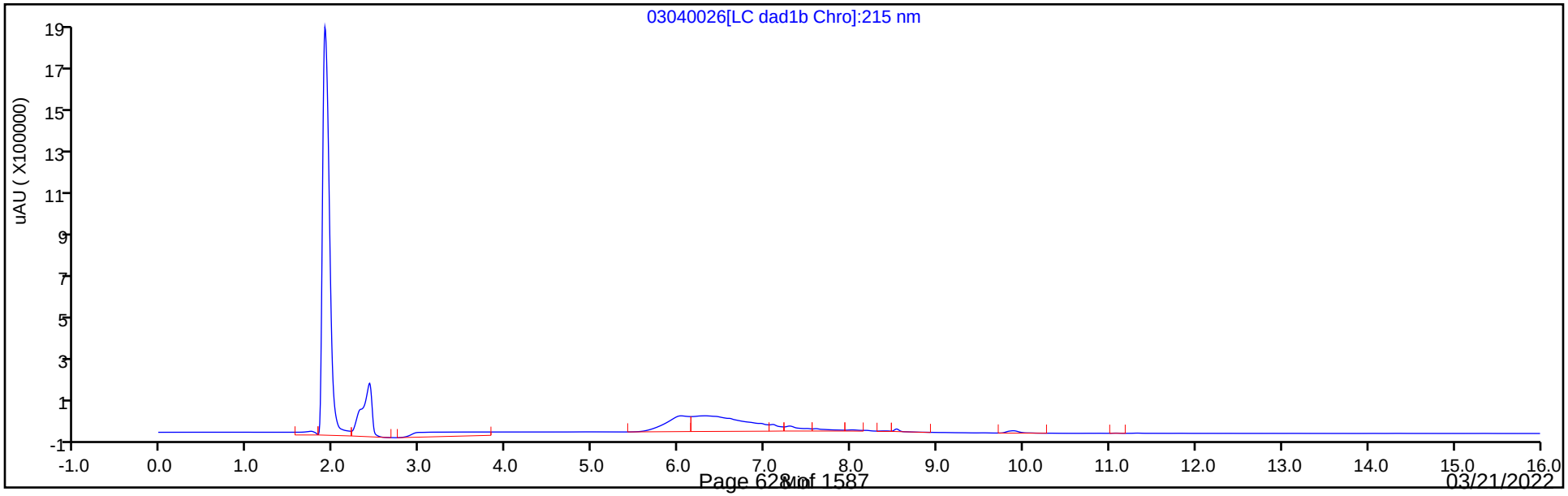
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040026.d				
Injection Date:	05-Mar-2022 01:50:08	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159190-A-11-A	Lab Sample ID:	280-159190-11	Worklist Smp#:	26
Client ID:	G0091-8				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040026.D				
Lims ID:	280-159190-A-11-A				
Client ID:	G0091-8				
Sample Type:	Client				
Inject. Date:	05-Mar-2022 01:50:08	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-A-11-				
Misc. Info.:	280-0109012-026				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:42	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: 05-Mar-2022 10:34:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1913	95.67

Manual Integration/User Assign Peak Report

Eurofins Denver

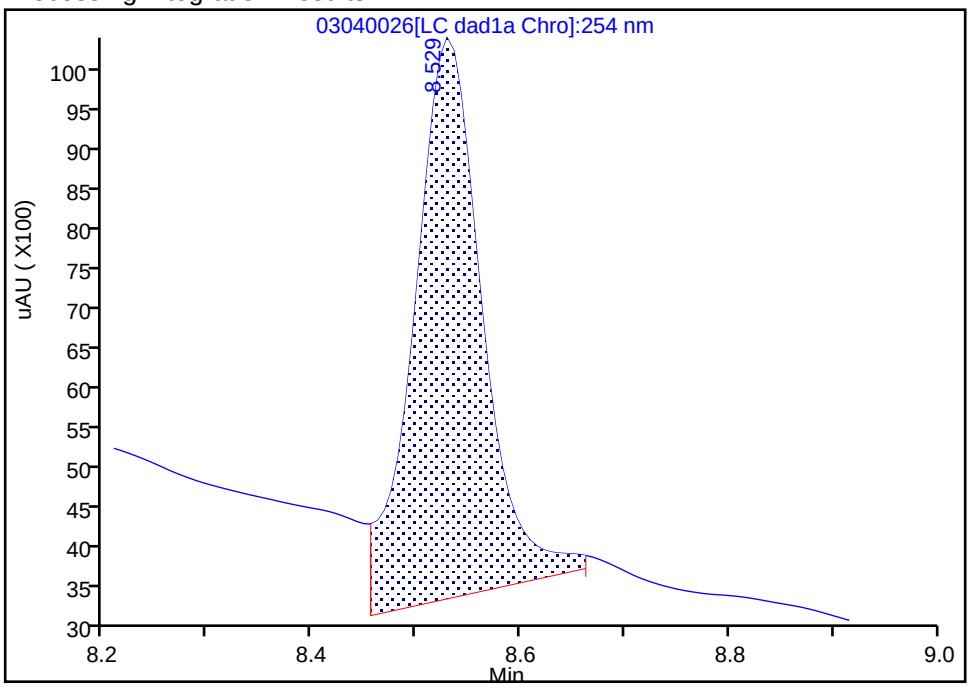
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040026.d				
Injection Date:	05-Mar-2022 01:50:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-11-A	Lab Sample ID:	280-159190-11		
Client ID:	G0091-8				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

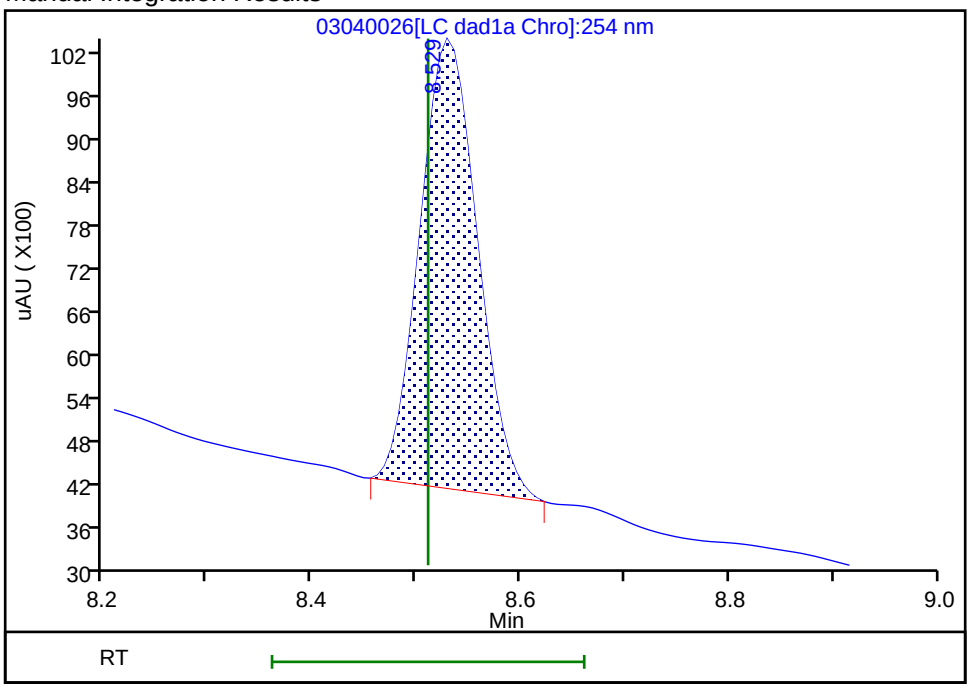
Processing Integration Results

RT: 8.53
Area: 31868
Amount: 0.255562
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 23859
Amount: 0.191335
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:34:33

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

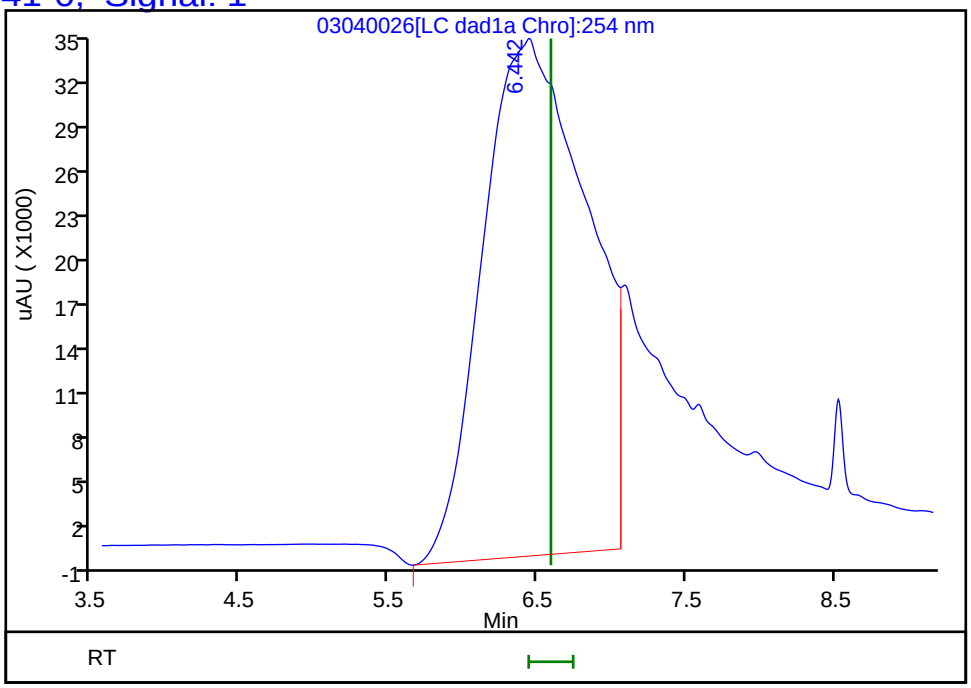
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040026.d
Injection Date: 05-Mar-2022 01:50:08 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-A-11-A Lab Sample ID: 280-159190-11
Client ID: G0091-8
Operator ID: JZ ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 6.44
Response: 1711560
Amount: 20.417716



Reviewer: zhangji, 05-Mar-2022 10:34:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

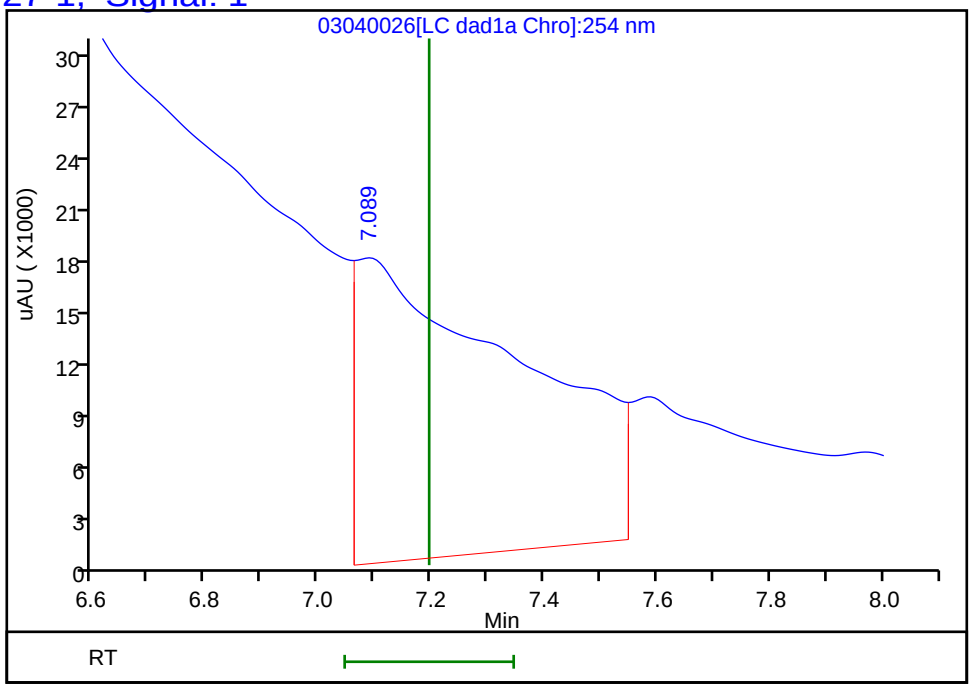
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040026.d				
Injection Date:	05-Mar-2022 01:50:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-11-A	Lab Sample ID:	280-159190-11		
Client ID:	G0091-8				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.09
Response: 354807
Amount: 2.816031



Reviewer: zhangji, 05-Mar-2022 10:34:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

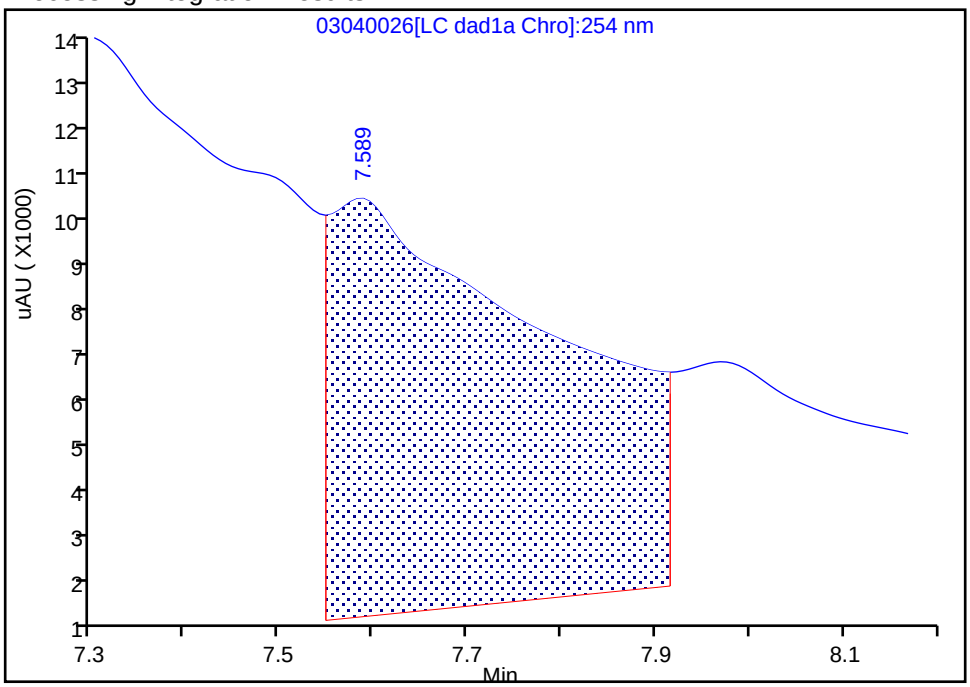
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040026.d				
Injection Date:	05-Mar-2022 01:50:08	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-11-A	Lab Sample ID:	280-159190-11		
Client ID:	G0091-8				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

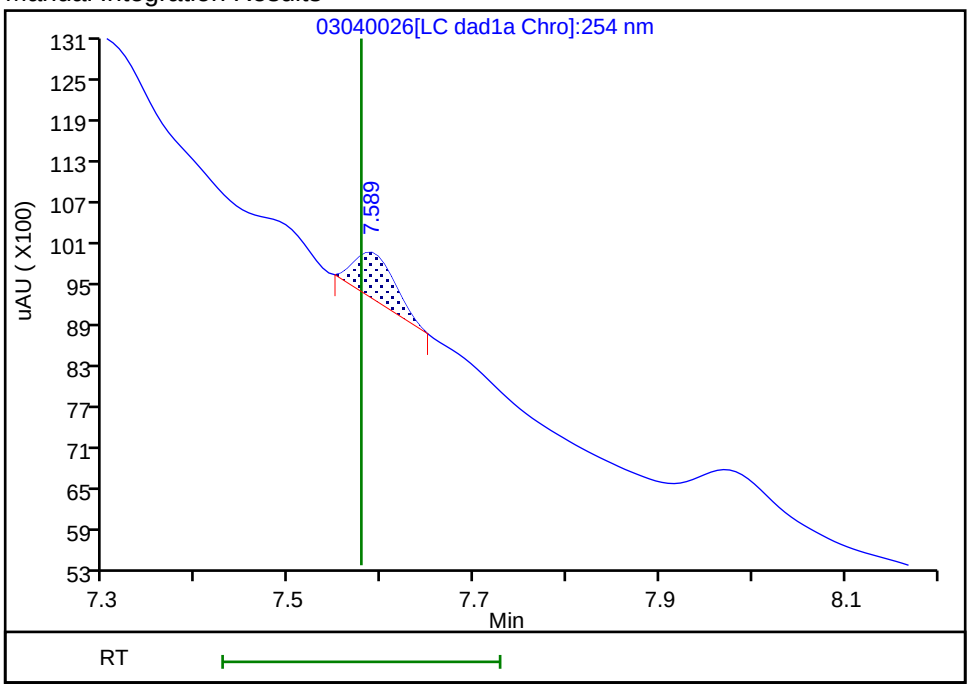
Processing Integration Results

RT: 7.59
Area: 131340
Amount: 1.267648
Amount Units: ug/mL



Manual Integration Results

RT: 7.59
Area: 2064
Amount: 0.019921
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:34:29

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

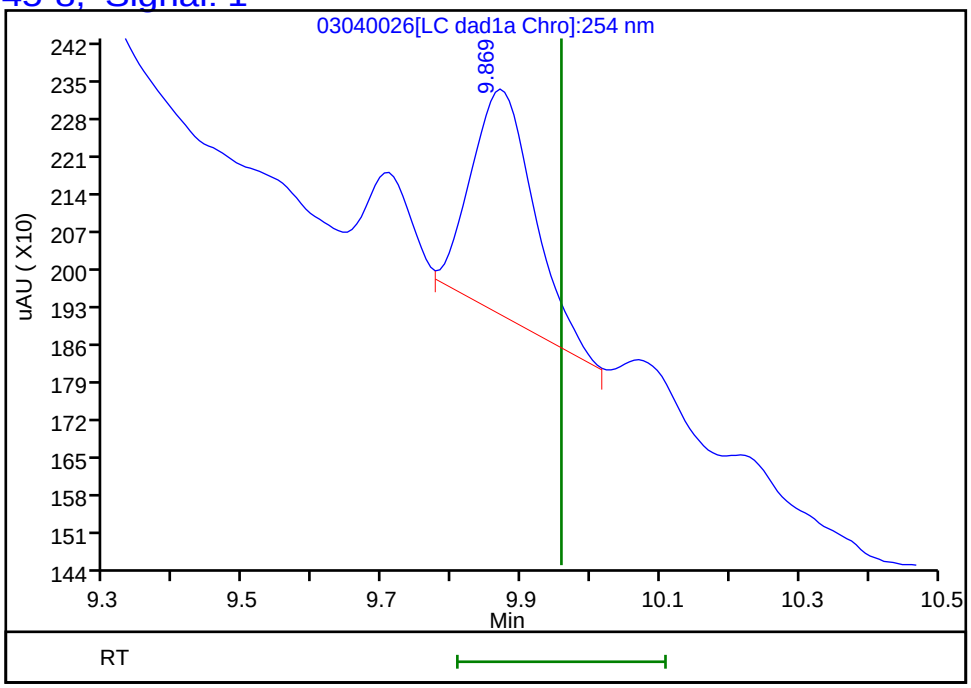
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040026.d
Injection Date: 05-Mar-2022 01:50:08 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-A-11-A Lab Sample ID: 280-159190-11
Client ID: G0091-8
Operator ID: JZ ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 9.87
Response: 2657
Amount: 0.015577



Reviewer: zhangji, 05-Mar-2022 10:34:36
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: G0091-8 | Lab Sample ID: 280-159190-11

Matrix: Water | Lab File ID: 03040032.D

Analysis Method: 8330A | Date Collected: 02/27/2022 15:55

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 473.4(mL) | Date Analyzed: 03/05/2022 07:24

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.: 567777 | 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\20220304-109013.b\03040032.D
Lims ID: 280-159190-A-11-A
Client ID: G0091-8
Sample Type: Client
Inject. Date: 05-Mar-2022 07:24:38 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-A-11-A
Misc. Info.: 280-0109013-032
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 11:24:38 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: 05-Mar-2022 11:16:50

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.940	6.955	-0.015	3613	0.0217	M
	6 MNX	1		7.649			ND	
	8 RDX	1	9.167	9.195	-0.028	4717	0.0243	M
	9 Nitrobenzene	1		12.135			ND	
$	10 1,2-Dinitrobenzene	1	13.353	13.388	-0.035	48859	0.1956	
	12 1,3-Dinitrobenzene	1		15.735			ND	
	14 o-Nitrotoluene	1		16.928			ND	
	16 p-Nitrotoluene	1		17.235			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.873	17.902	-0.029	5224	0.0198	
	18 m-Nitrotoluene	1		18.215			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.880	18.948	-0.068	7343	0.0204	
	20 1,3,5-Trinitrobenzene	1		19.022			ND	
	21 2,6-Dinitrotoluene	1		20.388			ND	
	22 2,4-Dinitrotoluene	1		20.909			ND	
	23 Tetryl	1		24.682			ND	U
	24 2,4,6-Trinitrotoluene	1	25.407	25.415	-0.008	1069	0.002896	7M

QC Flag Legend

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

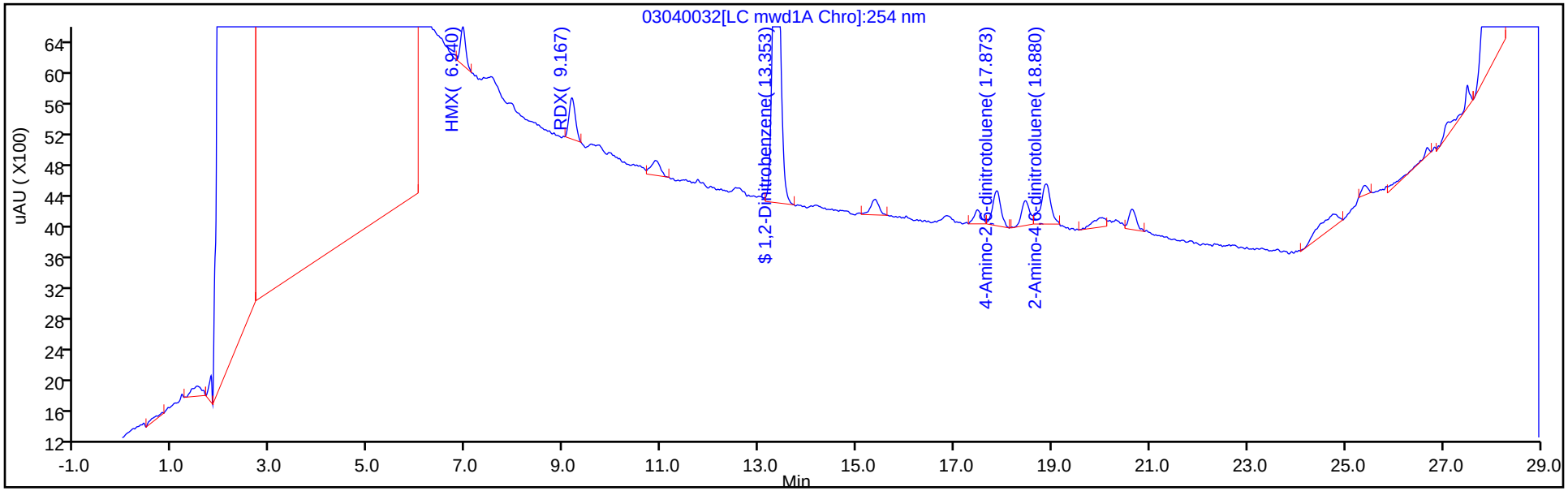
Report Date: 05-Mar-2022 11:24:40 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

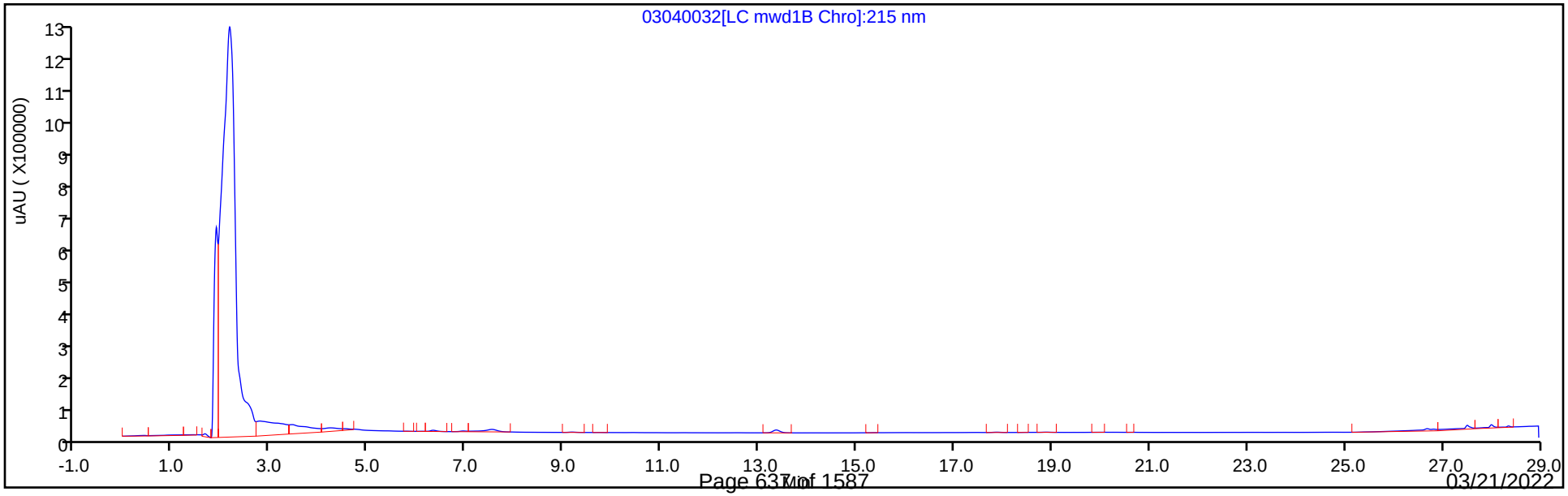
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040032.D

Injection Date:	05-Mar-2022 07:24:38	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159190-A-11-A	Lab Sample ID:	280-159190-11	Worklist Smp#:	32
Client ID:	G0091-8				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
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\20220304-109013.b\03040032.D				
Lims ID:	280-159190-A-11-A				
Client ID:	G0091-8				
Sample Type:	Client				
Inject. Date:	05-Mar-2022 07:24:38	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-A-11-A				
Misc. Info.:	280-0109013-032				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 11:24:38	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:	05-Mar-2022 11:16:50		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1956	97.81

Manual Integration/User Assign Peak Report

Eurofins Denver

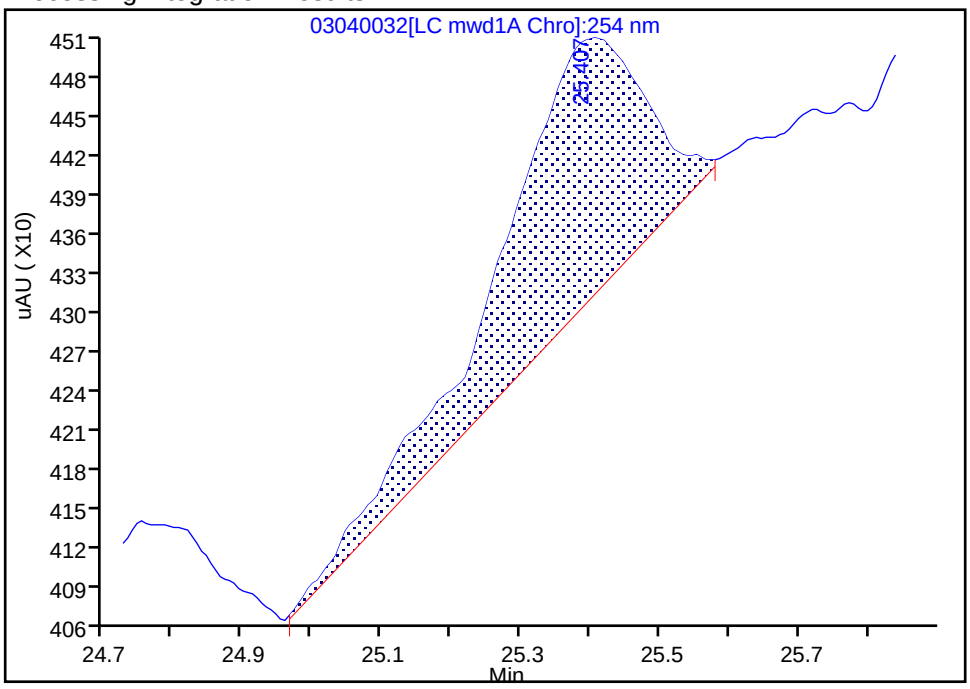
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040032.D				
Injection Date:	05-Mar-2022 07:24:38	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159190-A-11-A	Lab Sample ID:	280-159190-11		
Client ID:	G0091-8				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. 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

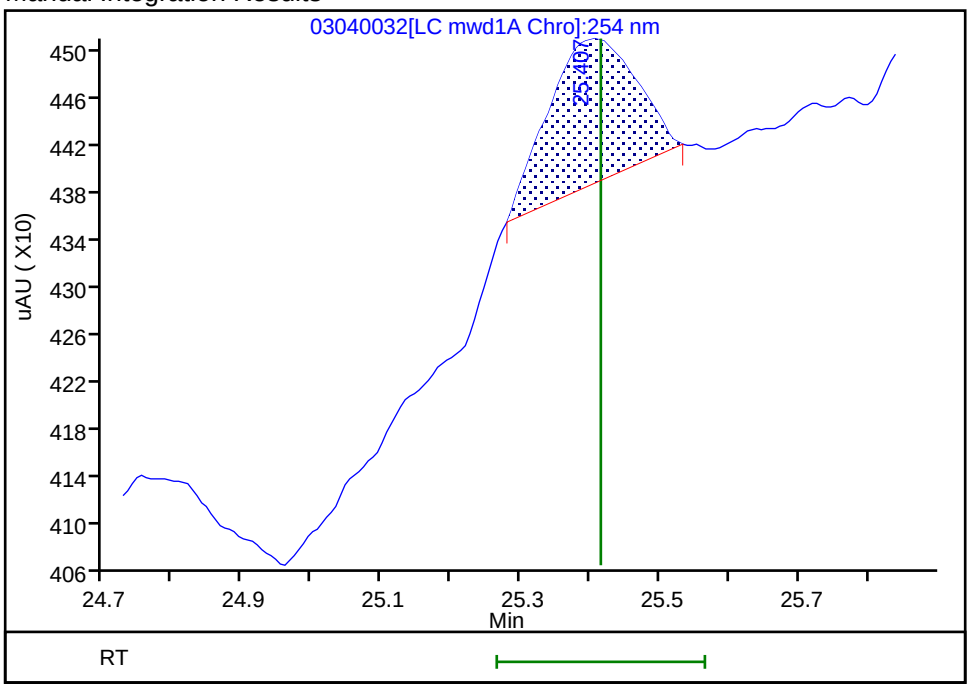
Processing Integration Results

RT: 25.41
Area: 2923
Amount: 0.007918
Amount Units: ug/ml



Manual Integration Results

RT: 25.41
Area: 1069
Amount: 0.002896
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:16:35

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

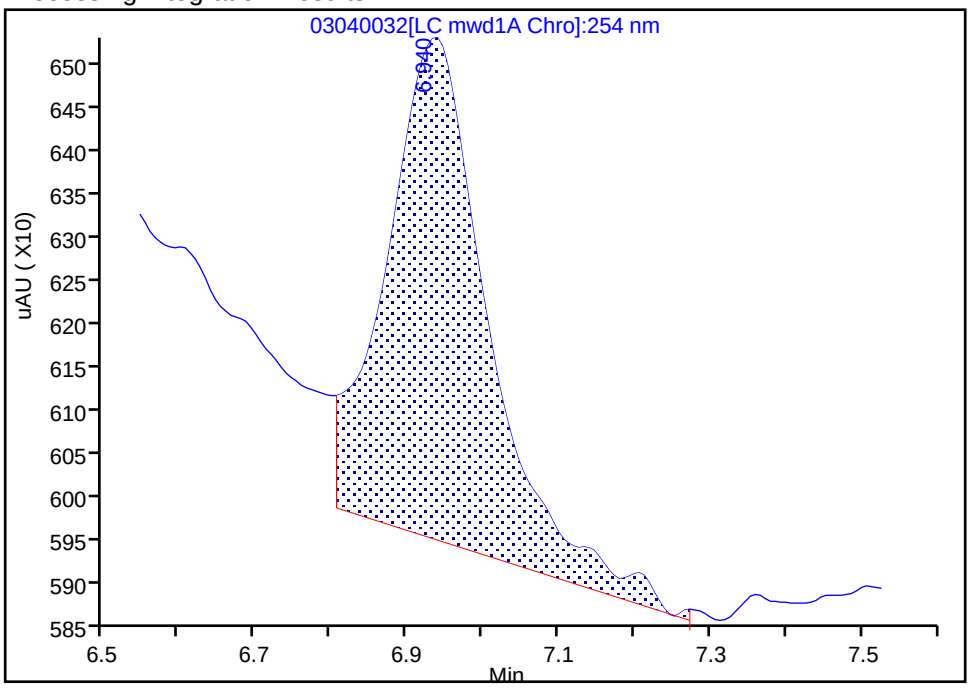
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040032.D				
Injection Date:	05-Mar-2022 07:24:38	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159190-A-11-A	Lab Sample ID:	280-159190-11		
Client ID:	G0091-8				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. 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

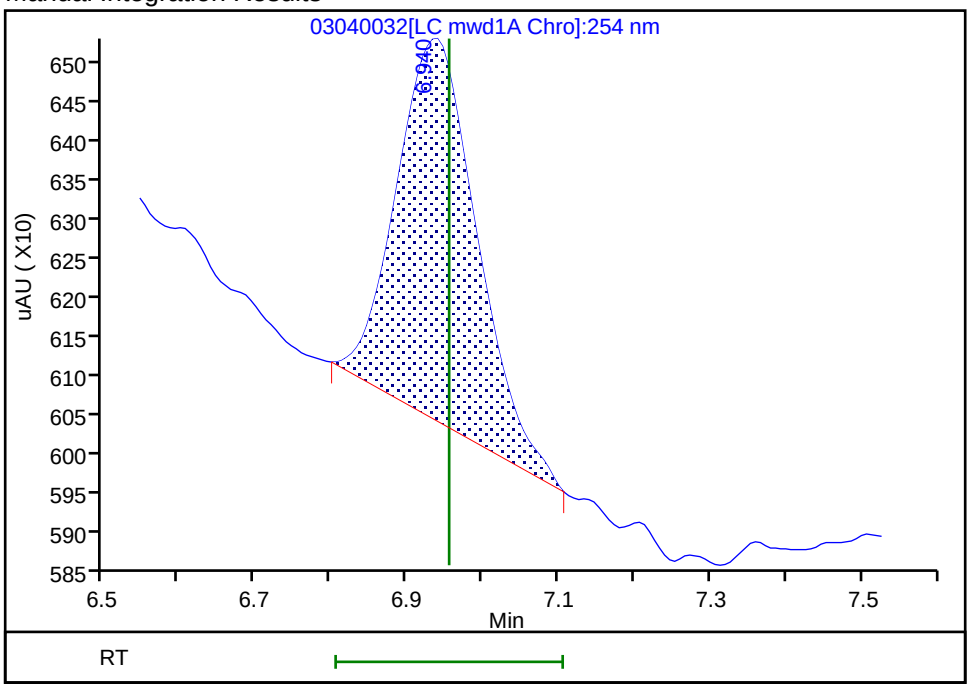
Processing Integration Results

RT: 6.94
Area: 5451
Amount: 0.032811
Amount Units: ug/ml



Manual Integration Results

RT: 6.94
Area: 3613
Amount: 0.021747
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:16:40

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

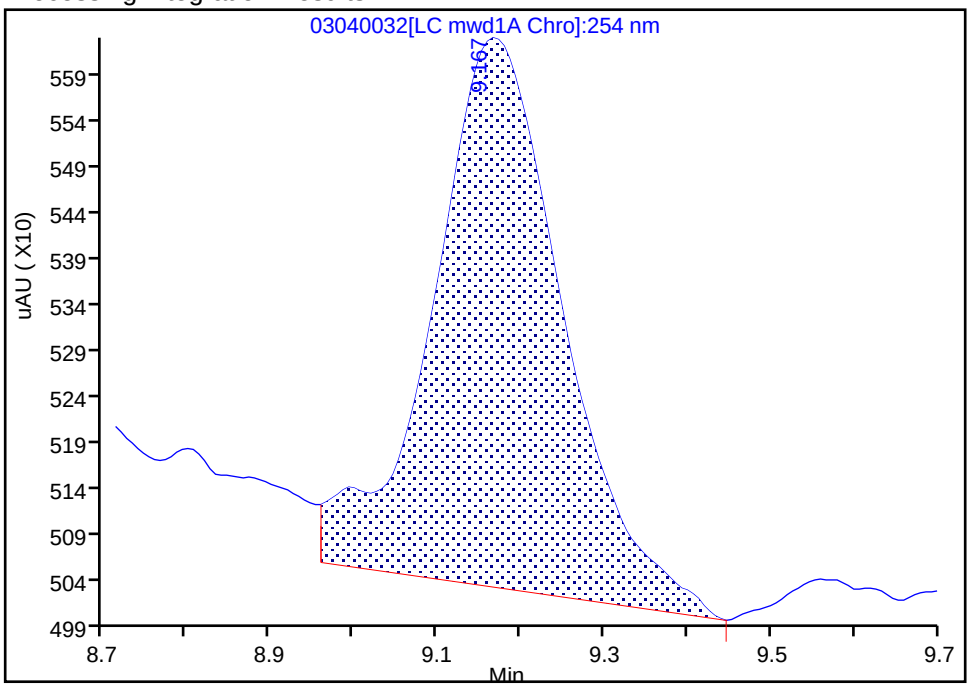
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040032.D				
Injection Date:	05-Mar-2022 07:24:38	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159190-A-11-A	Lab Sample ID:	280-159190-11		
Client ID:	G0091-8				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. 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

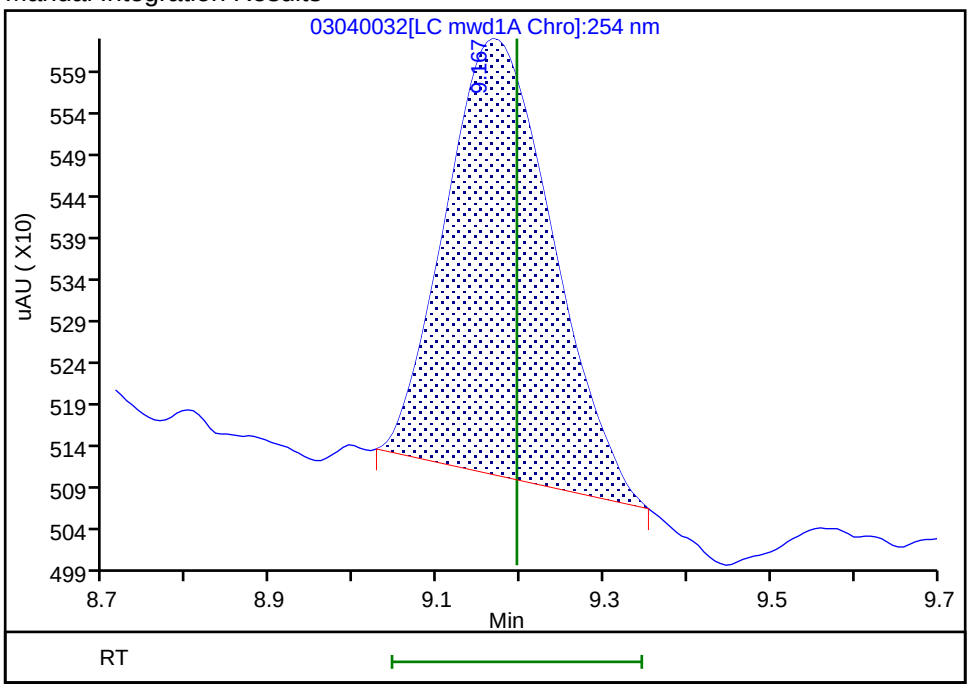
Processing Integration Results

RT: 9.17
Area: 6566
Amount: 0.033788
Amount Units: ug/ml



Manual Integration Results

RT: 9.17
Area: 4717
Amount: 0.024273
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:16:46

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

User Disabled Compound Report

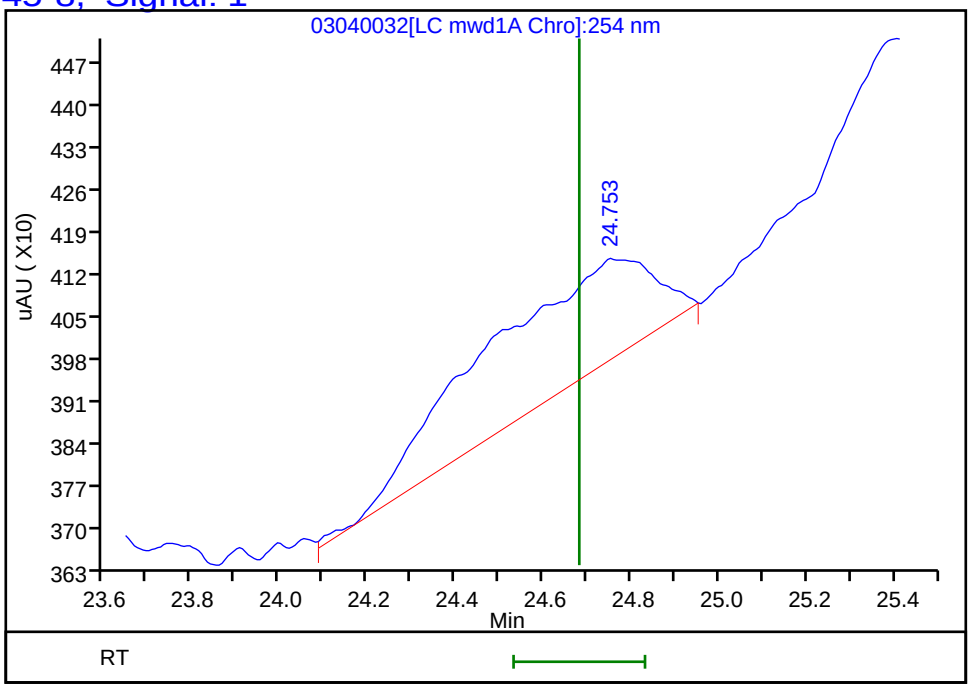
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040032.D

Injection Date:	05-Mar-2022 07:24:38	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159190-A-11-A	Lab Sample ID:	280-159190-11		
Client ID:	G0091-8				
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
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: 24.75
Response: 5279
Amount: 0.015428



Reviewer: zhangji, 05-Mar-2022 11:16:50
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: CA211-8 | Lab Sample ID: 280-159190-12

Matrix: Water | Lab File ID: 03040027.D

Analysis Method: 8330A | Date Collected: 02/28/2022 10:10

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 471.9(mL) | Date Analyzed: 03/05/2022 02:13

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

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

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

Analysis Batch No.: 567774 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.089
99-65-0	1,3-Dinitrobenzene	0.11	U	0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	0.11	U	0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	0.085	U	0.11	0.085	0.029
606-20-2	2,6-Dinitrotoluene	0.085	U	0.11	0.085	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.11	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	0.42	U	0.42	0.42	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.061
99-99-0	4-Nitrotoluene	0.42	U	0.43	0.42	0.11
2691-41-0	HMX	0.21	U	0.22	0.21	0.093
5755-27-1	MNX	0.42	U	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.096
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	102	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040027.D
Lims ID: 280-159190-A-12-A
Client ID: CA211-8
Sample Type: Client
Inject. Date: 05-Mar-2022 02:13:06 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-A-12-
Misc. Info.: 280-0109012-027
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:42 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: 05-Mar-2022 10:34:51

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.591			ND	
7 MNX	1		7.196			ND	
8 RDX	1		7.578			ND	
$ 10 1,2-Dinitrobenzene	1	8.526	8.511	0.015	25504	0.2045	M
11 1,3,5-Trinitrobenzene	1		8.638			ND	
12 1,3-Dinitrobenzene	1		9.257			ND	
13 Nitrobenzene	1		9.644			ND	
15 Tetryl	1		9.957			ND	
17 2,4,6-Trinitrotoluene	1		10.857			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.051			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.297			ND	
20 2,6-Dinitrotoluene	1		11.464			ND	
21 2,4-Dinitrotoluene	1		11.637			ND	
22 o-Nitrotoluene	1		12.477			ND	7
23 p-Nitrotoluene	1		12.897			ND	
24 m-Nitrotoluene	1		13.471			ND	

QC Flag Legend

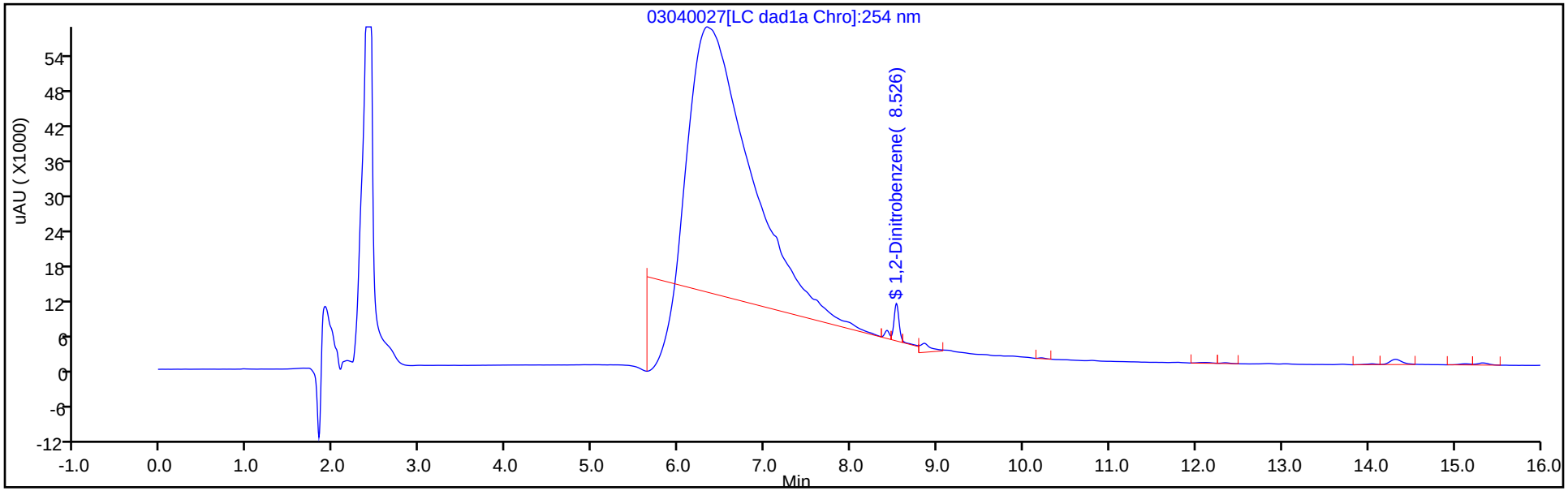
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated

Report Date: 05-Mar-2022 10:57:44 Chrom Revision: 2.3 16-Feb-2022 17:52:00

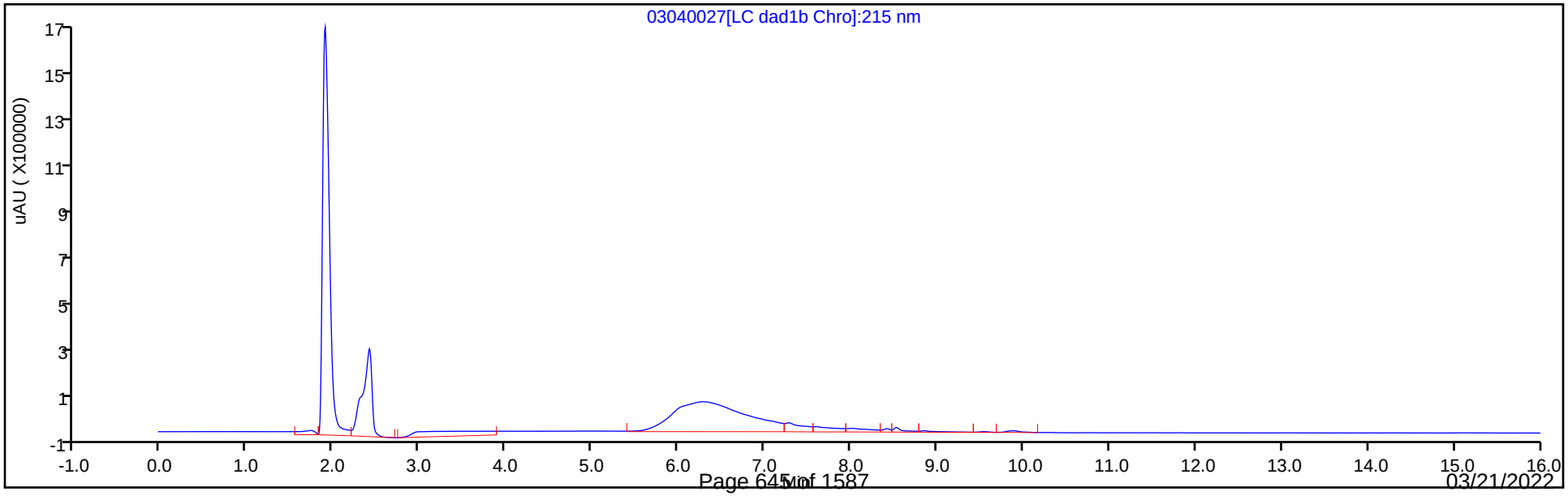
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040027.d				
Injection Date:	05-Mar-2022 02:13:06	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159190-A-12-A	Lab Sample ID:	280-159190-12	Worklist Smp#:	27
Client ID:	CA211-8				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040027.D				
Lims ID:	280-159190-A-12-A				
Client ID:	CA211-8				
Sample Type:	Client				
Inject. Date:	05-Mar-2022 02:13:06	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-A-12-				
Misc. Info.:	280-0109012-027				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:42	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: 05-Mar-2022 10:34:51

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2045	102.26

Manual Integration/User Assign Peak Report

Eurofins Denver

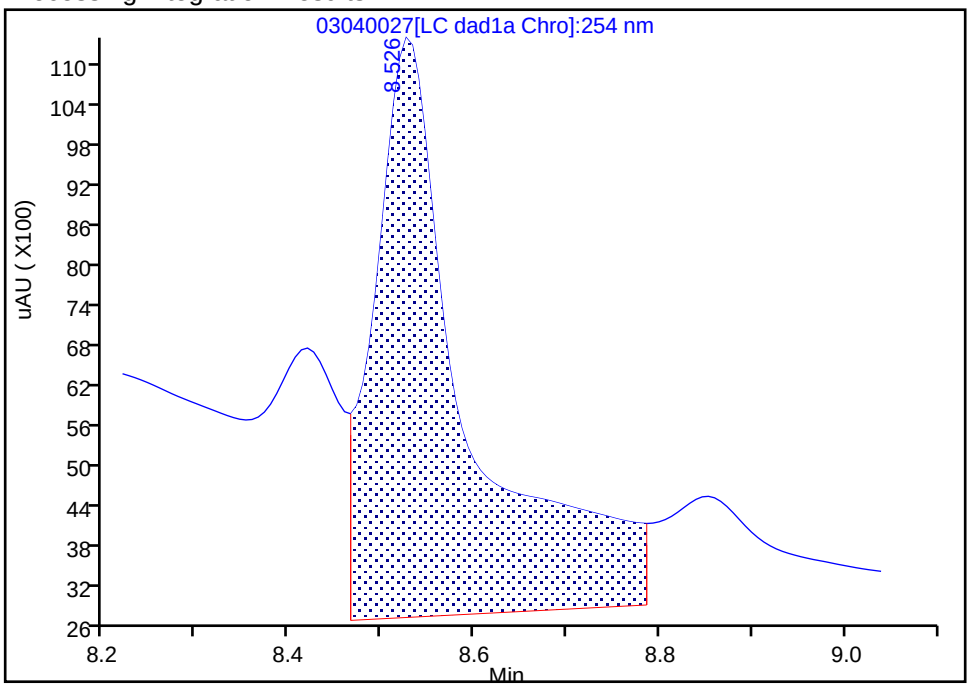
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040027.d				
Injection Date:	05-Mar-2022 02:13:06	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-12-A	Lab Sample ID:	280-159190-12		
Client ID:	CA211-8				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

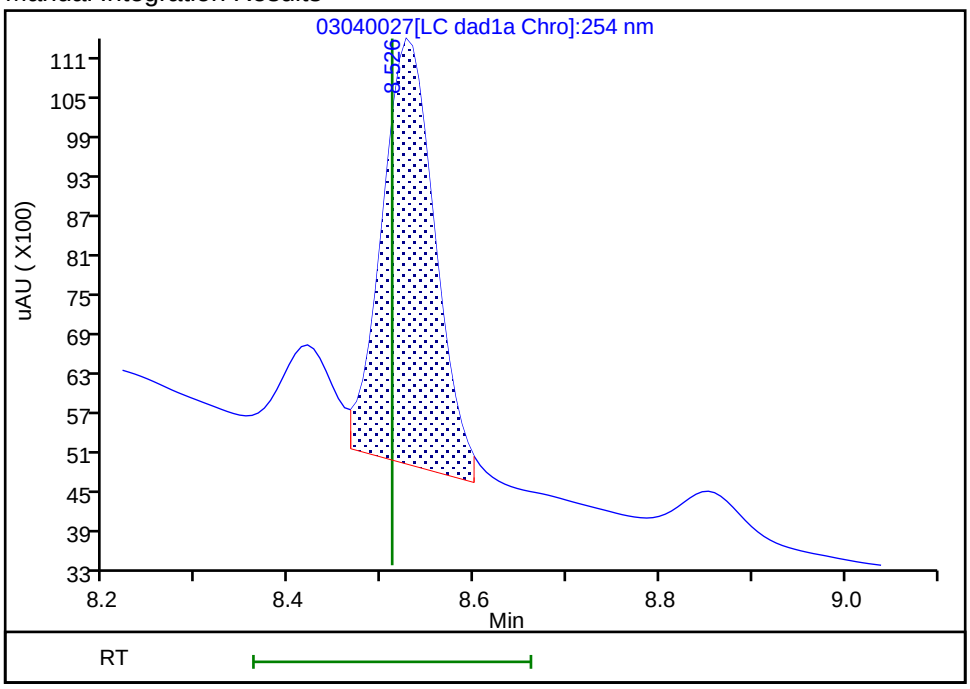
Processing Integration Results

RT: 8.53
Area: 60758
Amount: 0.487242
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 25504
Amount: 0.204527
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:34:50
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM28A-8-25 | Lab Sample ID: 280-159190-13

Matrix: Water | Lab File ID: 03040028.D

Analysis Method: 8330A | Date Collected: 02/26/2022 09:35

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 477.5(mL) | Date Analyzed: 03/05/2022 02:36

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

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

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

Analysis Batch No.: 567774 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.10	U M	0.12	0.10	0.039
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.12	0.10	0.047
121-14-2	2,4-Dinitrotoluene	0.084	U	0.10	0.084	0.029
606-20-2	2,6-Dinitrotoluene	0.084	U M	0.10	0.084	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.12	0.10	0.053
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
19406-51-0	4-Amino-2,6-dinitrotoluene	0.13	U	0.16	0.13	0.060
99-99-0	4-Nitrotoluene	0.42	U M	0.43	0.42	0.10
2691-41-0	HMX	0.21	U	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 M	0.22	0.21	0.095
121-82-4	RDX	0.21	U 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	98	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040028.D
Lims ID: 280-159190-B-13-A
Client ID: EW7-PM28A-8-25
Sample Type: Client
Inject. Date: 05-Mar-2022 02:36:01 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-B-13-
Misc. Info.: 280-0109012-028
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:42 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: 05-Mar-2022 10:44:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.591			ND	
7 MNX	1		7.196			ND	U
8 RDX	1		7.578			ND	U
$ 10 1,2-Dinitrobenzene	1	8.525	8.511	0.014	24523	0.1967	M
11 1,3,5-Trinitrobenzene	1	8.665	8.638	0.027	10694	0.0490	M
12 1,3-Dinitrobenzene	1		9.257			ND	U
13 Nitrobenzene	1		9.644			ND	U
15 Tetryl	1		9.957			ND	U
17 2,4,6-Trinitrotoluene	1		10.857			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.051			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.297			ND	
20 2,6-Dinitrotoluene	1		11.464			ND	U
21 2,4-Dinitrotoluene	1		11.637			ND	
22 o-Nitrotoluene	1		12.477			ND	U
23 p-Nitrotoluene	1		12.897			ND	U
24 m-Nitrotoluene	1		13.471			ND	

QC Flag Legend

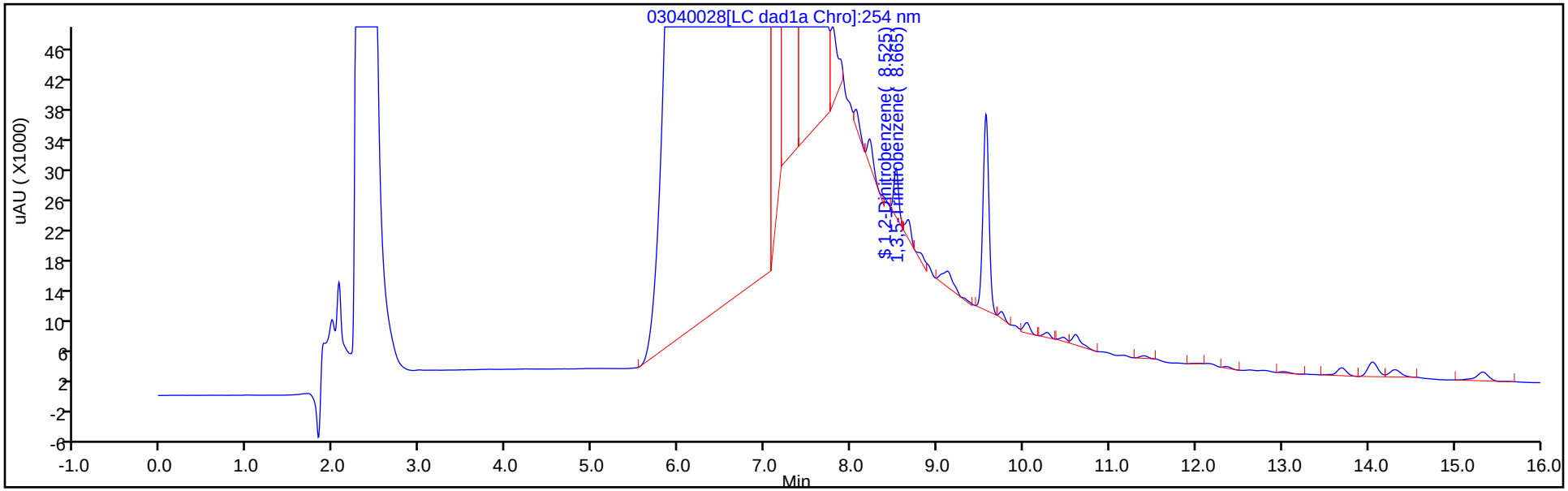
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Mar-2022 10:57:44 Chrom Revision: 2.3 16-Feb-2022 17:52:00

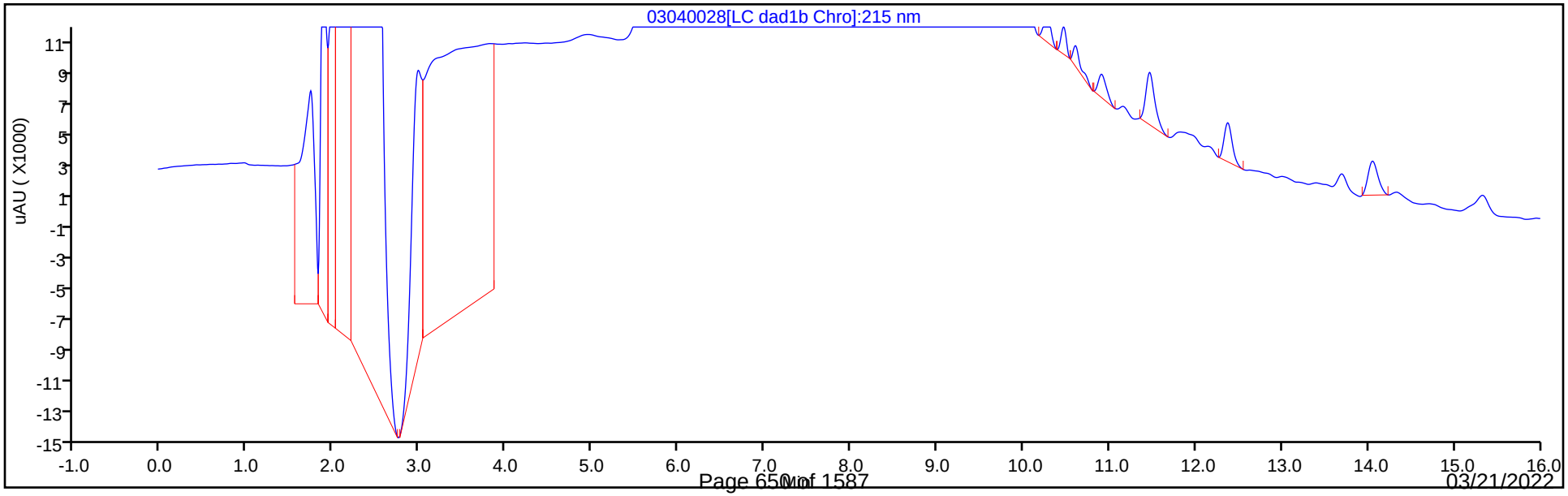
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040028.d				
Injection Date:	05-Mar-2022 02:36:01	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159190-B-13-A	Lab Sample ID:	280-159190-13	Worklist Smp#:	28
Client ID:	EW7-PM28A-8-25				
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\20220304-109012.b\03040028.D				
Lims ID:	280-159190-B-13-A				
Client ID:	EW7-PM28A-8-25				
Sample Type:	Client				
Inject. Date:	05-Mar-2022 02:36:01	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-B-13-				
Misc. Info.:	280-0109012-028				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:42	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: 05-Mar-2022 10:44:01

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1967	98.33

Manual Integration/User Assign Peak Report

Eurofins Denver

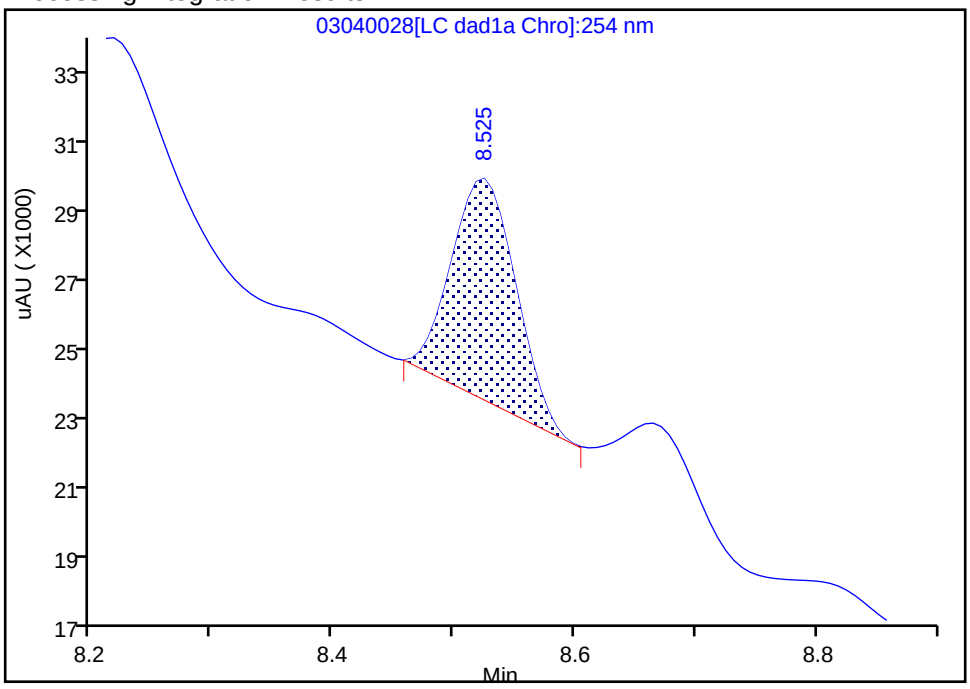
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040028.d				
Injection Date:	05-Mar-2022 02:36:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-B-13-A	Lab Sample ID:	280-159190-13		
Client ID:	EW7-PM28A-8-25				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 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

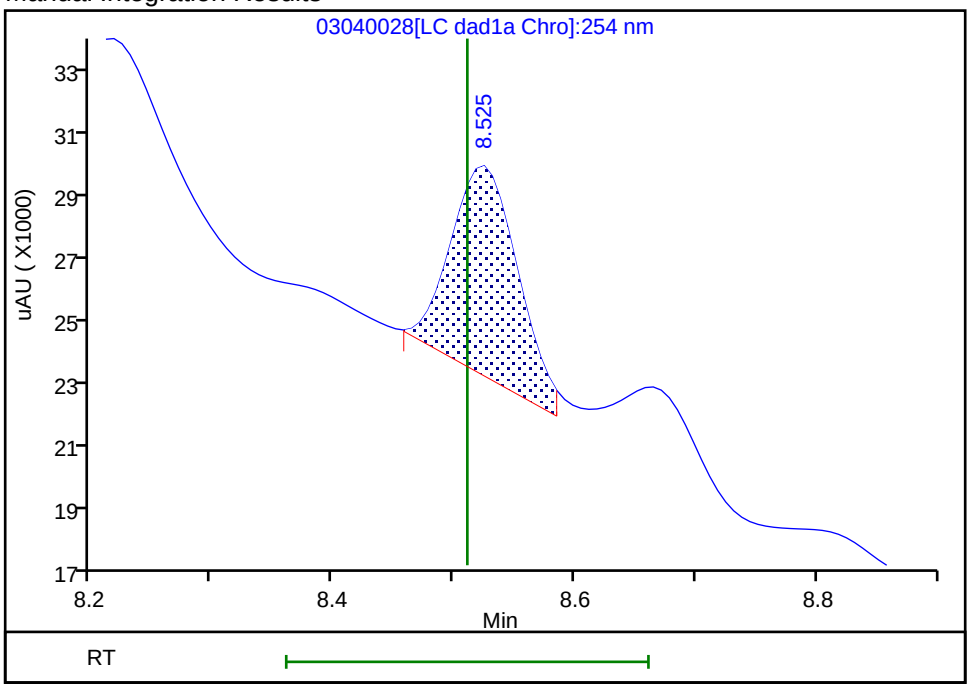
Processing Integration Results

RT: 8.52
Area: 22446
Amount: 0.180003
Amount Units: ug/mL



Manual Integration Results

RT: 8.52
Area: 24523
Amount: 0.196660
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:43:58
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

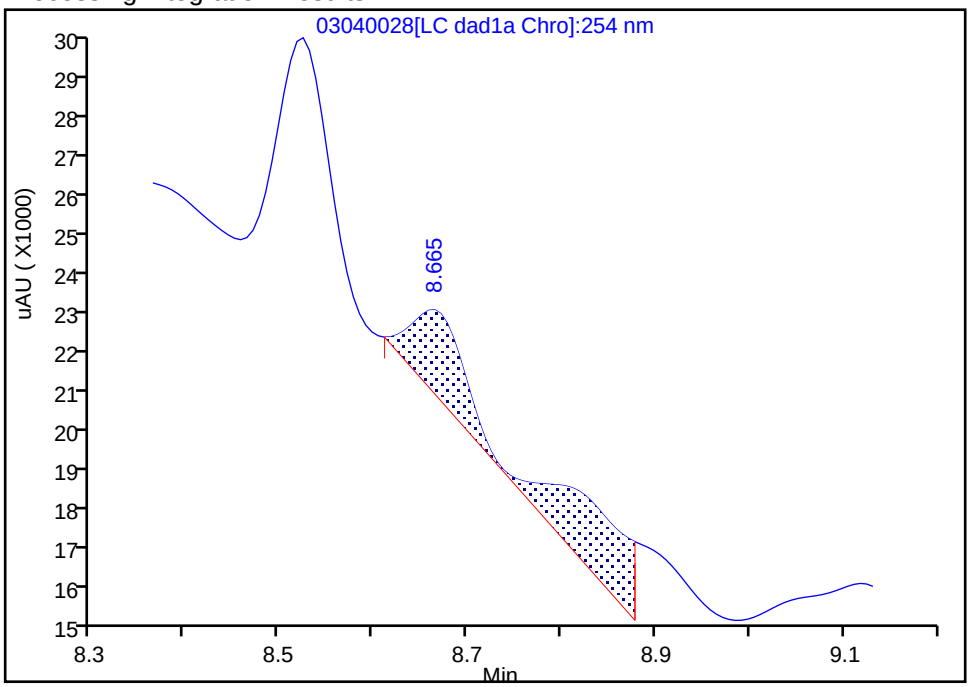
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040028.d				
Injection Date:	05-Mar-2022 02:36:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-B-13-A	Lab Sample ID:	280-159190-13		
Client ID:	EW7-PM28A-8-25				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 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

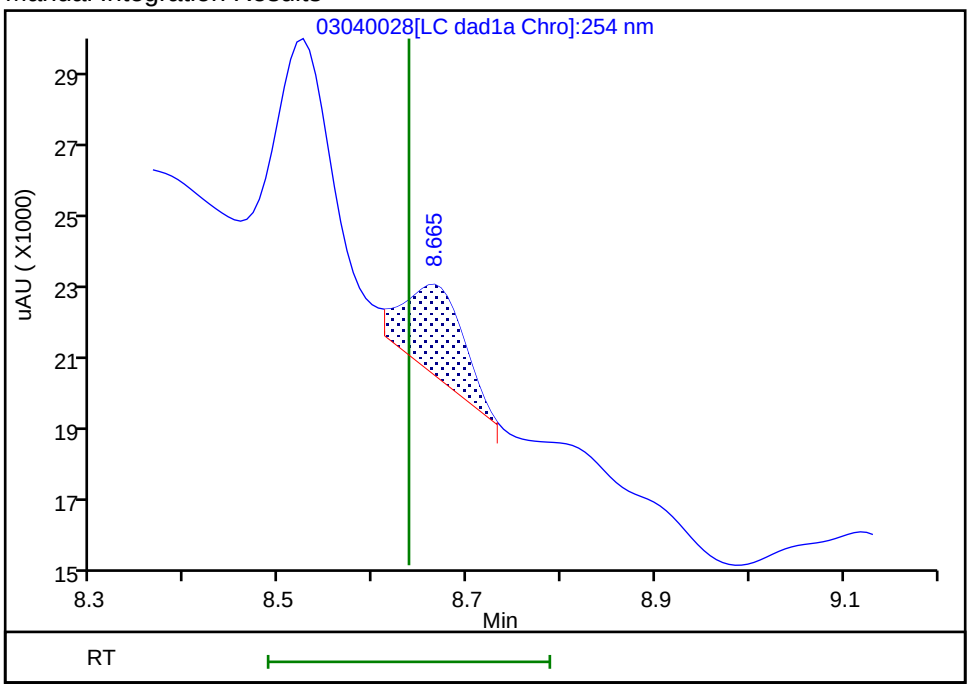
Processing Integration Results

RT: 8.66
Area: 18103
Amount: 0.083005
Amount Units: ug/mL



Manual Integration Results

RT: 8.66
Area: 10694
Amount: 0.049034
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:44:00

Audit Action: Split an Integrated Peak Audit Reason: Baseline

User Disabled Compound Report

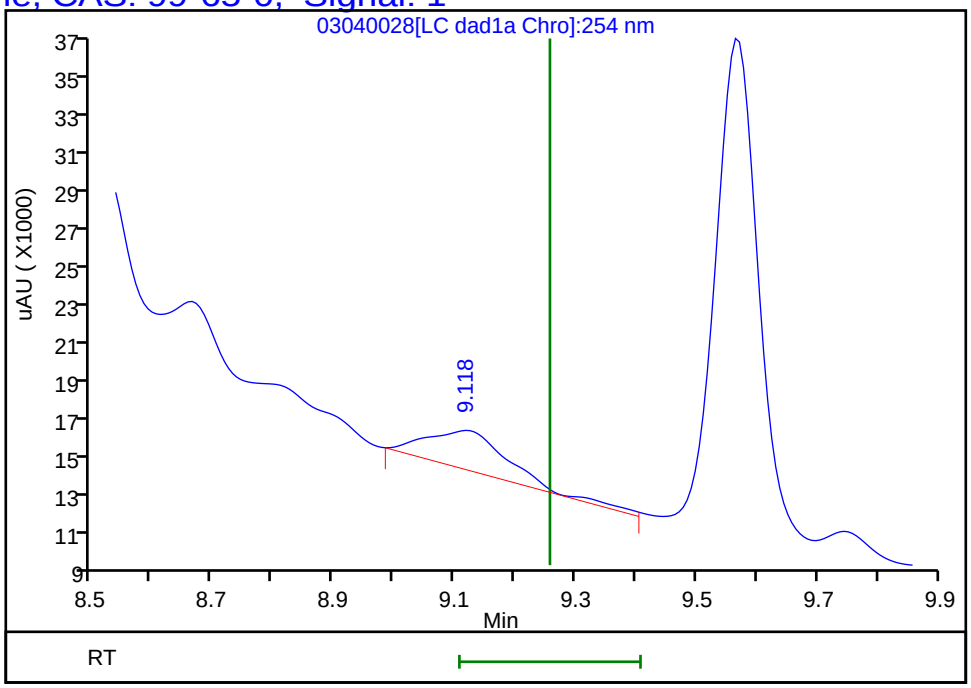
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040028.d
Injection Date: 05-Mar-2022 02:36:01 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-B-13-A Lab Sample ID: 280-159190-13
Client ID: EW7-PM28A-8-25
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

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

RT: 9.12
Response: 19788
Amount: 0.068613



Reviewer: zhangji, 05-Mar-2022 10:44:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

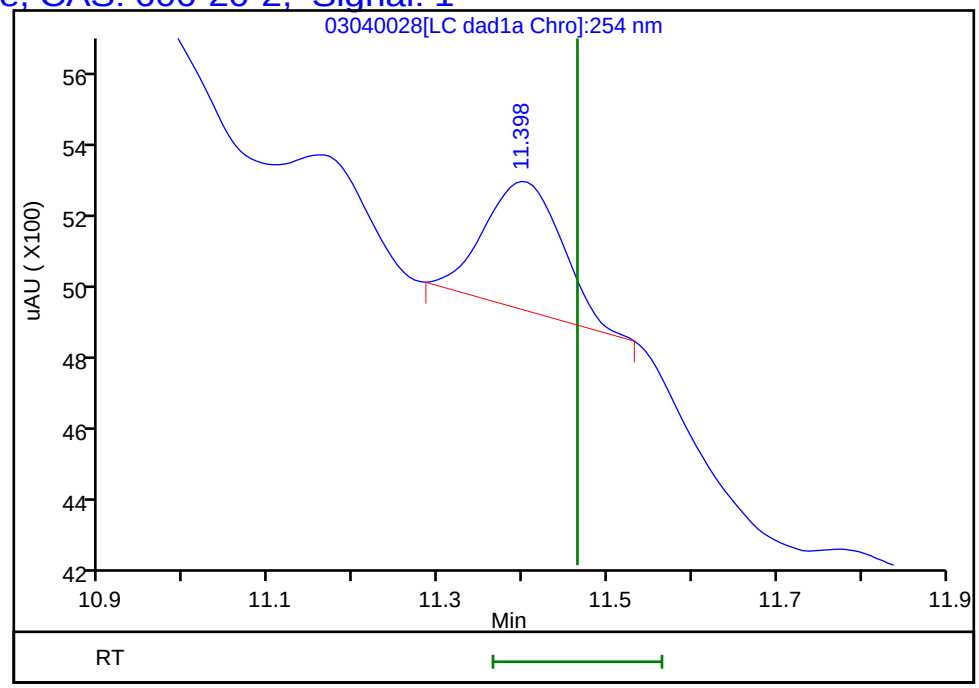
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040028.d				
Injection Date:	05-Mar-2022 02:36:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-B-13-A	Lab Sample ID:	280-159190-13		
Client ID:	EW7-PM28A-8-25				
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		

20 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 11.40
Response: 2111
Amount: 0.014750



Reviewer: zhangji, 05-Mar-2022 10:44:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

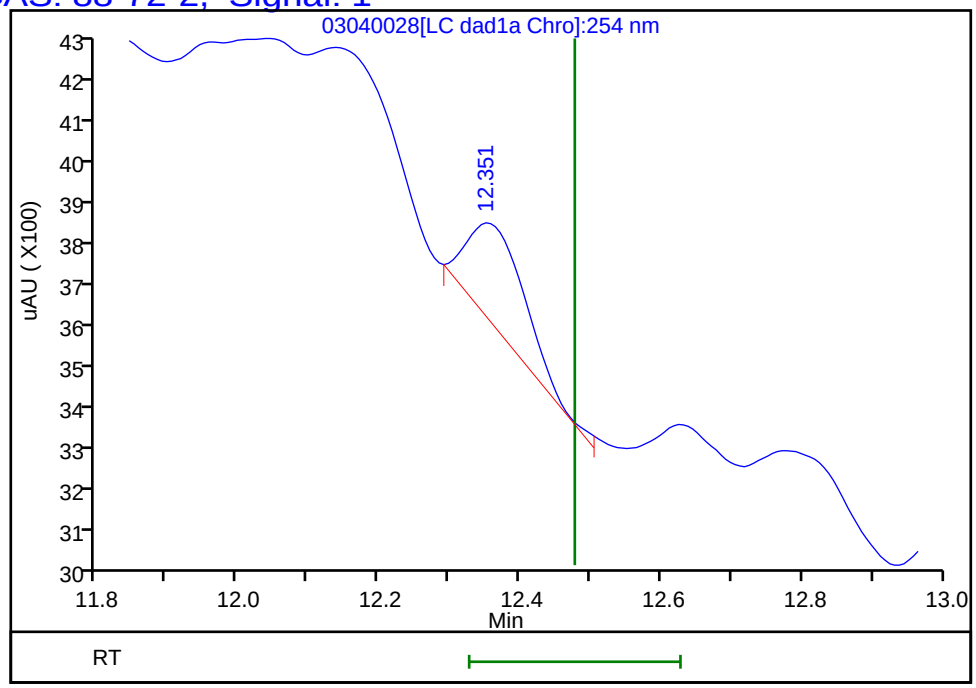
User Disabled Compound Report

Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040028.d
Injection Date: 05-Mar-2022 02:36:01 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-B-13-A Lab Sample ID: 280-159190-13
Client ID: EW7-PM28A-8-25
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

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

RT: 12.35
Response: 1294
Amount: 0.010140



Reviewer: zhangji, 05-Mar-2022 10:44:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

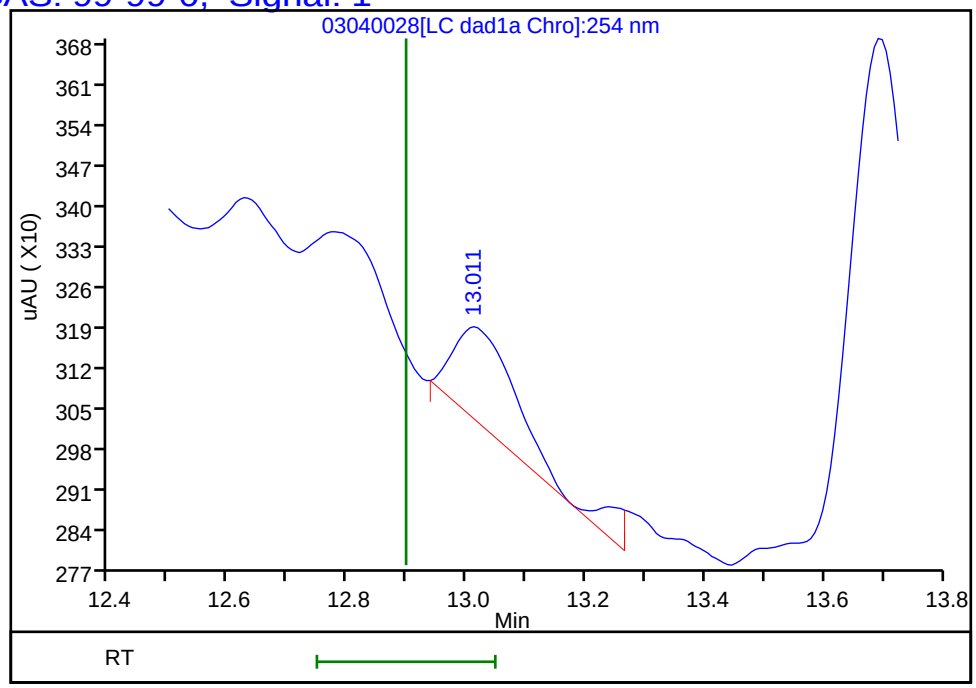
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040028.d
Injection Date: 05-Mar-2022 02:36:01 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-B-13-A Lab Sample ID: 280-159190-13
Client ID: EW7-PM28A-8-25
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

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

RT: 13.01
Response: 1379
Amount: 0.012981



Reviewer: zhangji, 05-Mar-2022 10:44:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

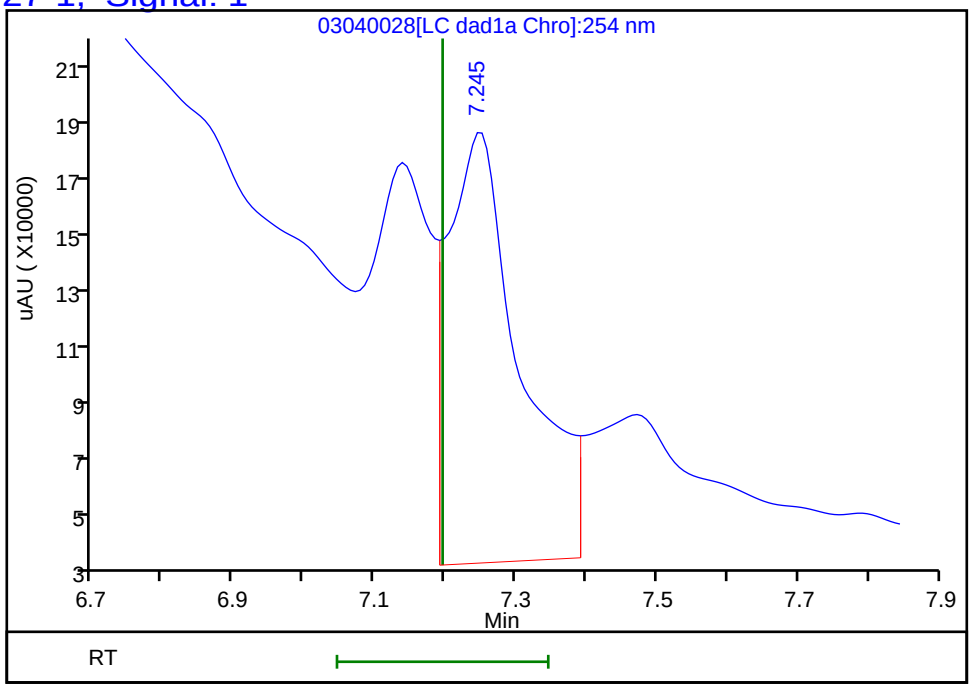
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040028.d				
Injection Date:	05-Mar-2022 02:36:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-B-13-A	Lab Sample ID:	280-159190-13		
Client ID:	EW7-PM28A-8-25				
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		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.24
Response: 1074481
Amount: 8.527937



Reviewer: zhangji, 05-Mar-2022 10:44:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

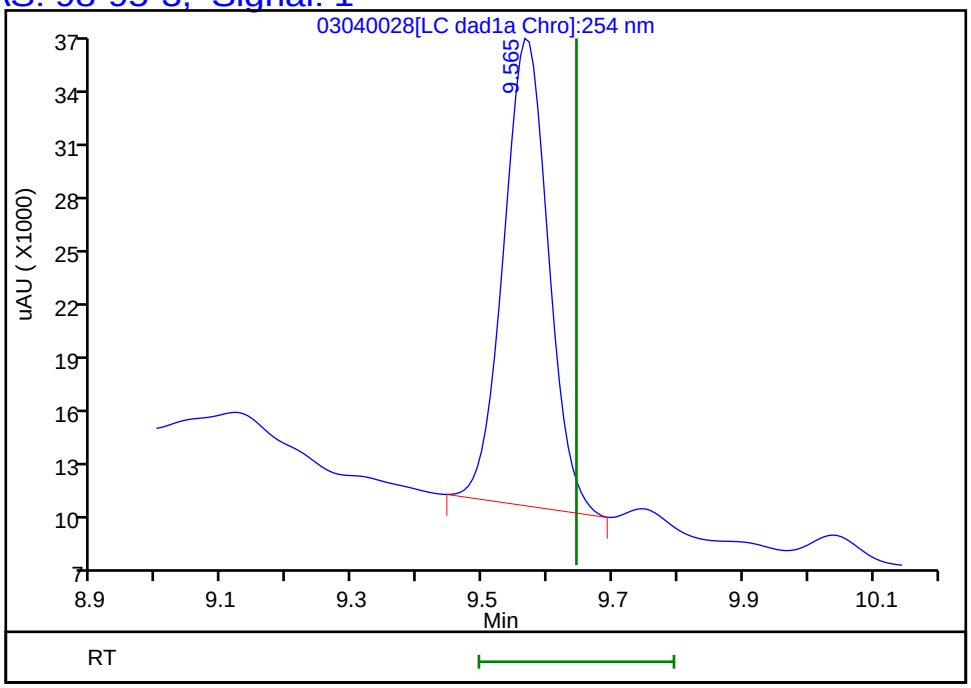
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040028.d				
Injection Date:	05-Mar-2022 02:36:01	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-B-13-A	Lab Sample ID:	280-159190-13		
Client ID:	EW7-PM28A-8-25				
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		

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

RT: 9.56
Response: 123593
Amount: 0.643870



Reviewer: zhangji, 05-Mar-2022 10:44:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

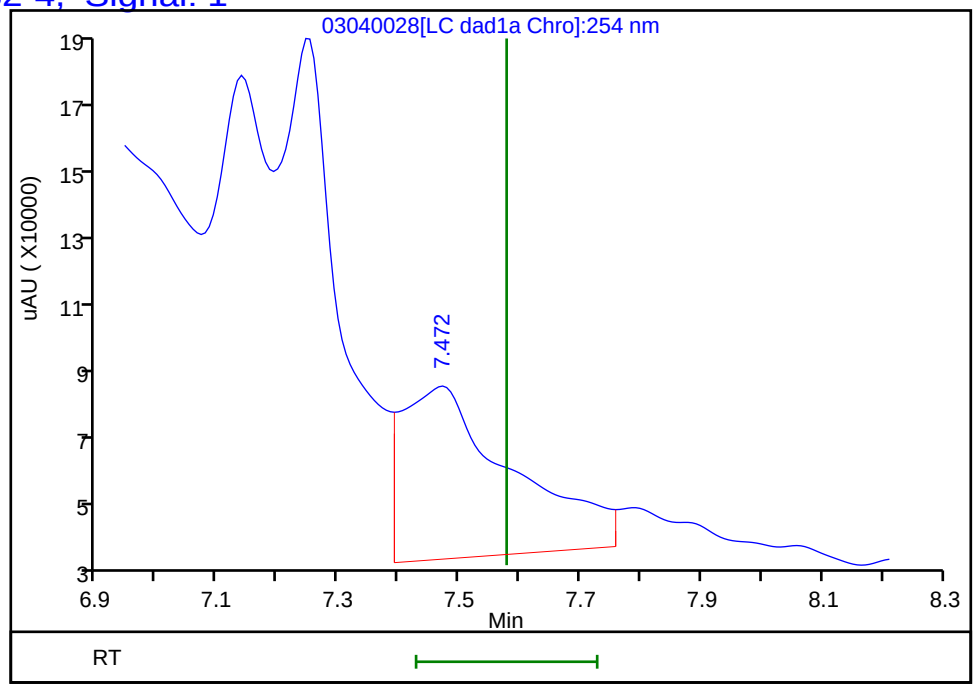
User Disabled Compound Report

Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040028.d
Injection Date: 05-Mar-2022 02:36:01 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-B-13-A Lab Sample ID: 280-159190-13
Client ID: EW7-PM28A-8-25
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

RT: 7.47
Response: 618695
Amount: 5.971429



Reviewer: zhangji, 05-Mar-2022 10:44:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

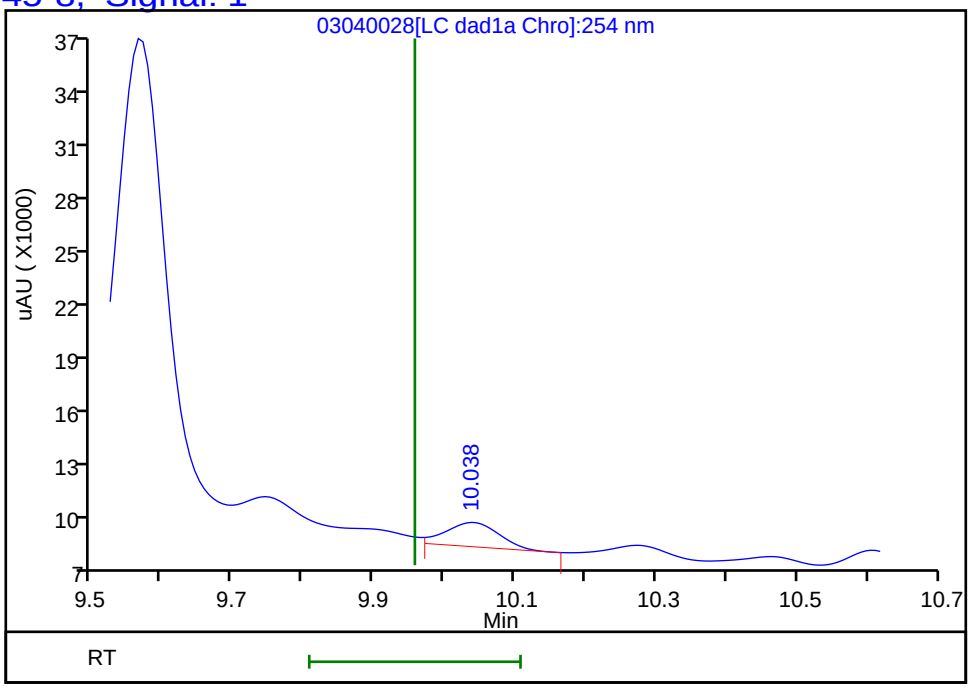
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040028.d
Injection Date: 05-Mar-2022 02:36:01 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-B-13-A Lab Sample ID: 280-159190-13
Client ID: EW7-PM28A-8-25
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

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

RT: 10.04
Response: 7114
Amount: 0.041708



Reviewer: zhangji, 05-Mar-2022 10:44:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM28A-8-25 | Lab Sample ID: 280-159190-13

Matrix: Water | Lab File ID: 03040034.D

Analysis Method: 8330A | Date Collected: 02/26/2022 09:35

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 477.5(mL) | Date Analyzed: 03/05/2022 08:34

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.: 567777 | 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	0.088

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040034.D
Lims ID: 280-159190-B-13-A
Client ID: EW7-PM28A-8-25
Sample Type: Client
Inject. Date: 05-Mar-2022 08:34:40 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-B-13-A
Misc. Info.: 280-0109013-034
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 11:24:38 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: 05-Mar-2022 11:17:06

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1		6.955			ND	U
6 MNX	1		7.649			ND	U
8 RDX	1		9.195			ND	
9 Nitrobenzene	1		12.135			ND	
$ 10 1,2-Dinitrobenzene	1	13.350	13.388	-0.038	45252	0.1812	
12 1,3-Dinitrobenzene	1		15.735			ND	
14 o-Nitrotoluene	1	16.850	16.928	-0.078	17788	0.0758	
16 p-Nitrotoluene	1		17.235			ND	
17 4-Amino-2,6-dinitrotoluene	1		17.902			ND	
18 m-Nitrotoluene	1		18.215			ND	
19 2-Amino-4,6-dinitrotoluene	1		18.948			ND	
20 1,3,5-Trinitrobenzene	1		19.022			ND	
21 2,6-Dinitrotoluene	1		20.388			ND	
22 2,4-Dinitrotoluene	1		20.909			ND	
23 Tetryl	1		24.682			ND	U
24 2,4,6-Trinitrotoluene	1		25.415			ND	

QC Flag Legend

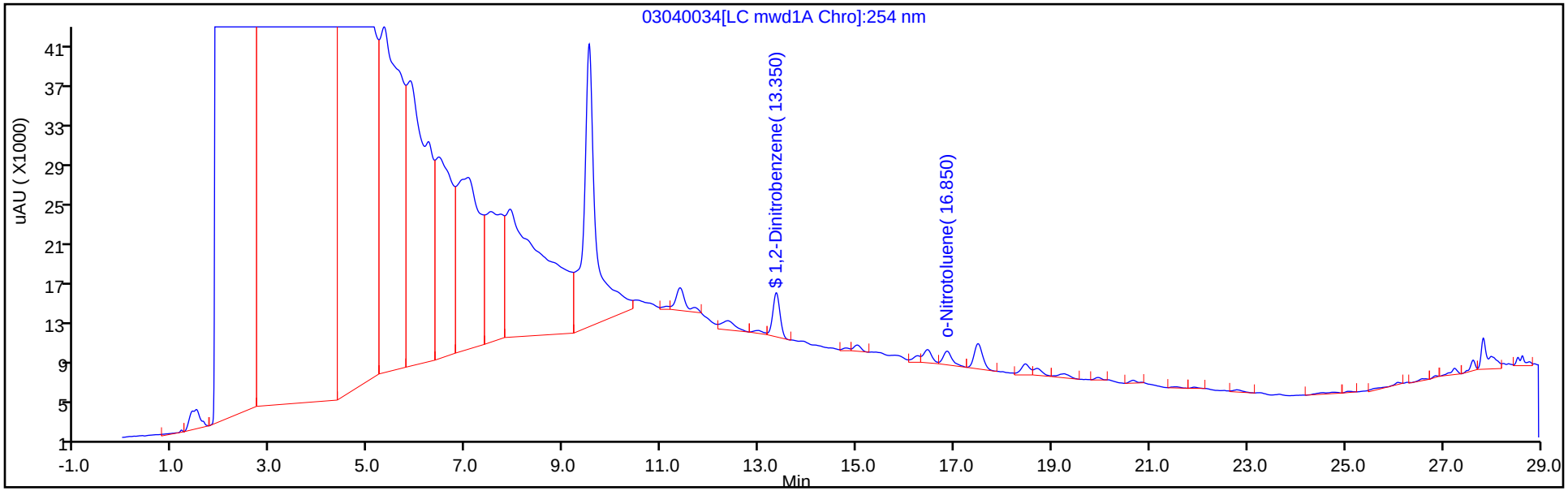
Processing Flags
Review Flags
U - Marked Undetected

Report Date: 05-Mar-2022 11:24:41 Chrom Revision: 2.3 16-Feb-2022 17:52:00

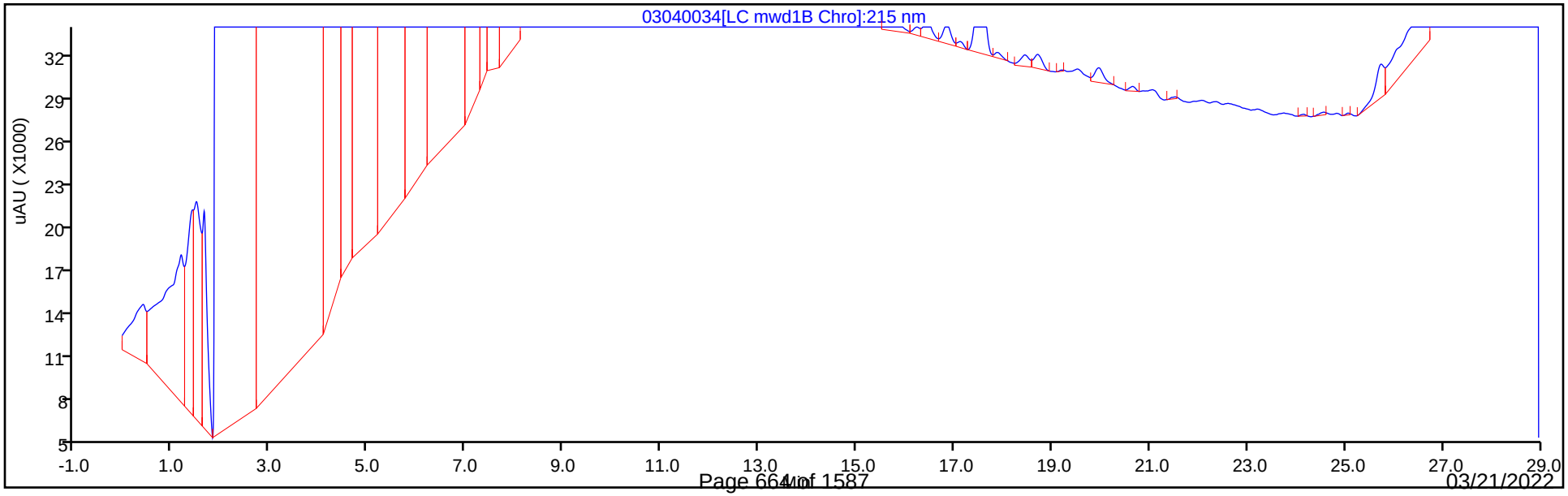
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040034.D				
Injection Date:	05-Mar-2022 08:34:40	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159190-B-13-A	Lab Sample ID:	280-159190-13	Worklist Smp#:	34
Client ID:	EW7-PM28A-8-25				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
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\20220304-109013.b\03040034.D				
Lims ID:	280-159190-B-13-A				
Client ID:	EW7-PM28A-8-25				
Sample Type:	Client				
Inject. Date:	05-Mar-2022 08:34:40	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-B-13-A				
Misc. Info.:	280-0109013-034				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 11:24:38	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:	05-Mar-2022 11:17:06		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1812	90.59

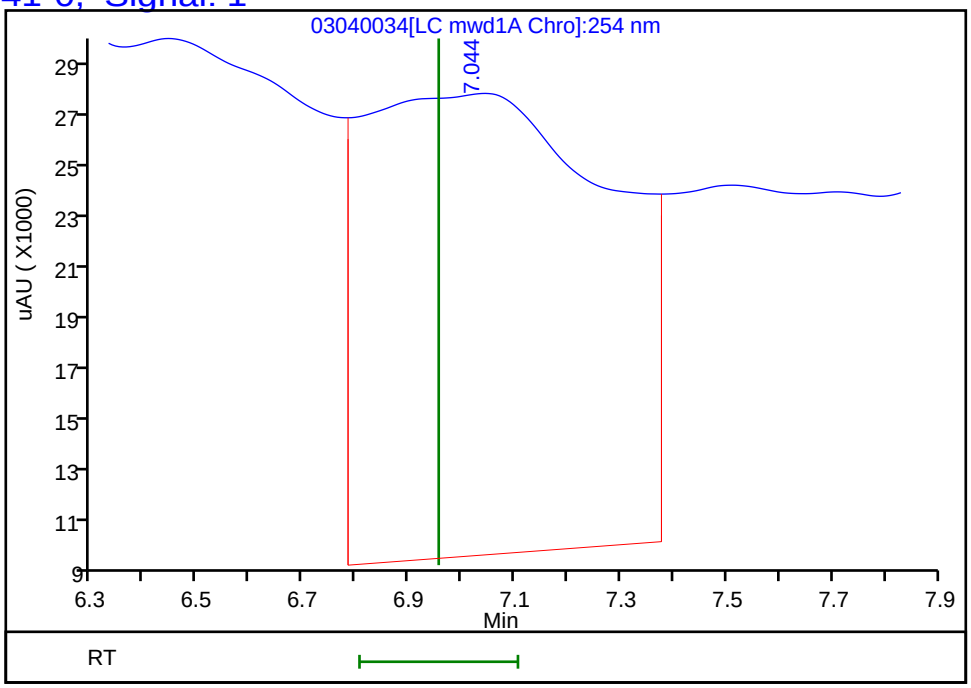
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040034.D				
Injection Date:	05-Mar-2022 08:34:40	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159190-B-13-A	Lab Sample ID:	280-159190-13		
Client ID:	EW7-PM28A-8-25				
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

RT: 7.04
Response: 562113
Amount: 3.383466



Reviewer: zhangji, 05-Mar-2022 11:17:06
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

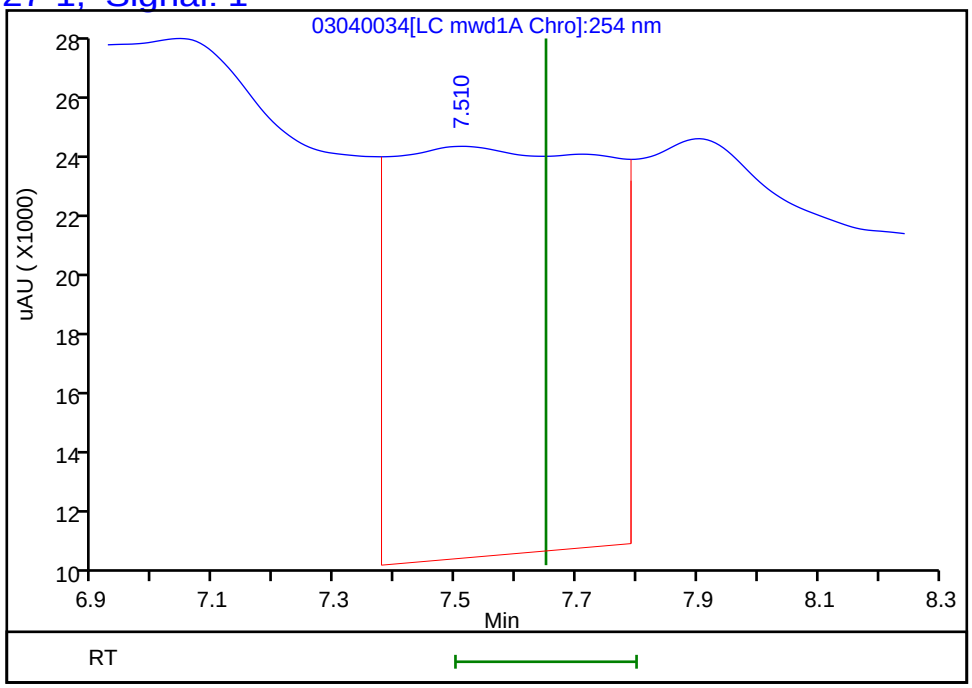
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040034.D				
Injection Date:	05-Mar-2022 08:34:40	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159190-B-13-A	Lab Sample ID:	280-159190-13		
Client ID:	EW7-PM28A-8-25				
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.51
Response: 317999
Amount: 1.271584



Reviewer: zhangji, 05-Mar-2022 11:17:06
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

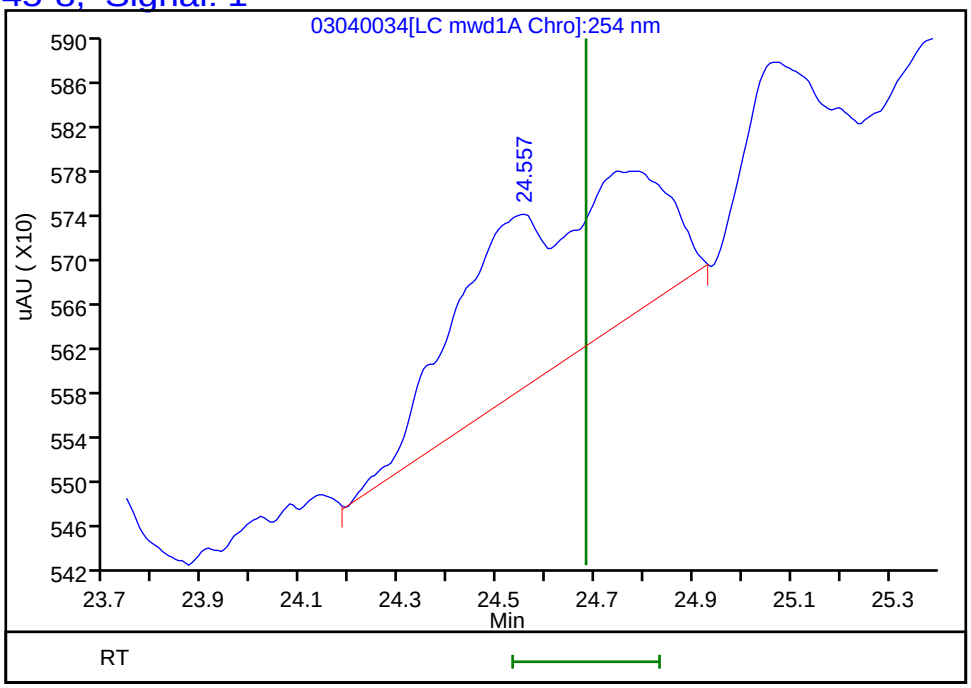
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040034.D				
Injection Date:	05-Mar-2022 08:34:40	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159190-B-13-A	Lab Sample ID:	280-159190-13		
Client ID:	EW7-PM28A-8-25				
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
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: 24.56
Response: 3994
Amount: 0.011673



Reviewer: zhangji, 05-Mar-2022 11:17:06
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM29A-8-25 | Lab Sample ID: 280-159190-14

Matrix: Water | Lab File ID: 03040029.D

Analysis Method: 8330A | Date Collected: 02/26/2022 11:05

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 484.9(mL) | Date Analyzed: 03/05/2022 02:58

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.: 567774 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.087
99-65-0	1,3-Dinitrobenzene	0.10	U M	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 M	0.10	0.082	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.088
99-08-1	3-Nitrotoluene	0.41	U	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.059
99-99-0	4-Nitrotoluene	0.41	U	0.42	0.41	0.10
2691-41-0	HMX	0.21	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 M	0.22	0.21	0.094
121-82-4	RDX	0.21	U M	0.22	0.21	0.053
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	97	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040029.D
Lims ID: 280-159190-B-14-A
Client ID: EW7-PM29A-8-25
Sample Type: Client
Inject. Date: 05-Mar-2022 02:58:58 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-B-14-
Misc. Info.: 280-0109012-029
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:42 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: 05-Mar-2022 10:44:17

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.591			ND	
7 MNX	1		7.196			ND	U
8 RDX	1		7.578			ND	U
$ 10 1,2-Dinitrobenzene	1	8.525	8.511	0.014	24259	0.1945	M
11 1,3,5-Trinitrobenzene	1		8.638			ND	
12 1,3-Dinitrobenzene	1		9.257			ND	U
13 Nitrobenzene	1		9.644			ND	U
15 Tetryl	1		9.957			ND	U
17 2,4,6-Trinitrotoluene	1		10.857			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.051			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.297			ND	
20 2,6-Dinitrotoluene	1		11.464			ND	U
21 2,4-Dinitrotoluene	1		11.637			ND	
22 o-Nitrotoluene	1		12.477			ND	
23 p-Nitrotoluene	1		12.897			ND	7
24 m-Nitrotoluene	1		13.471			ND	

QC Flag Legend

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

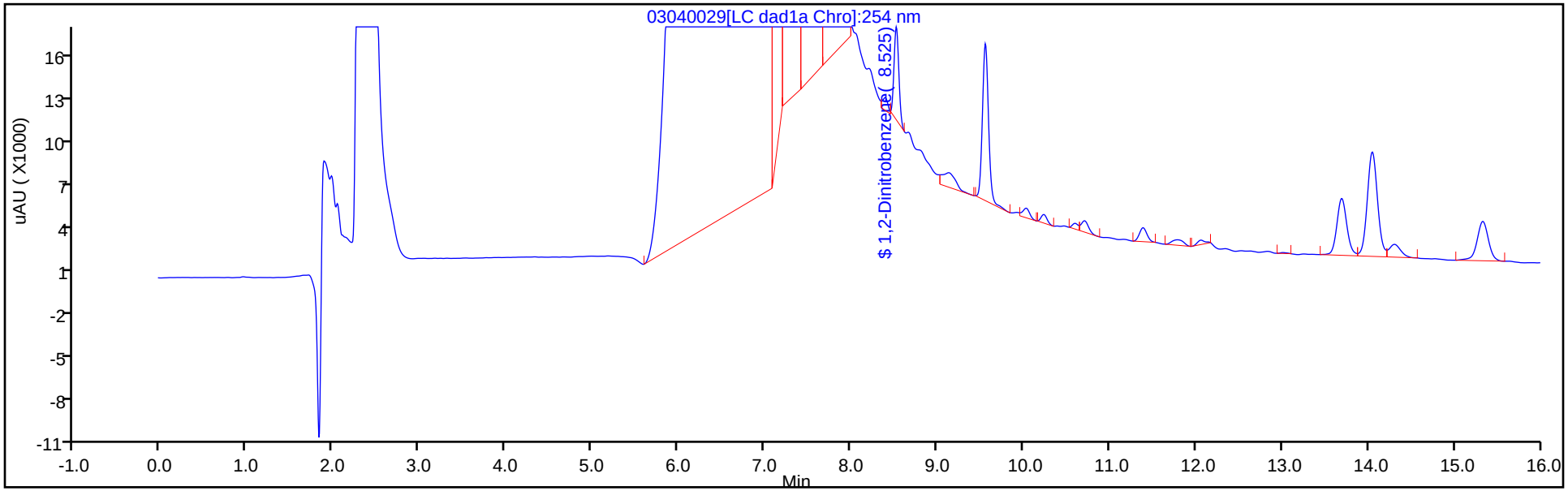
Report Date: 05-Mar-2022 10:57:43 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

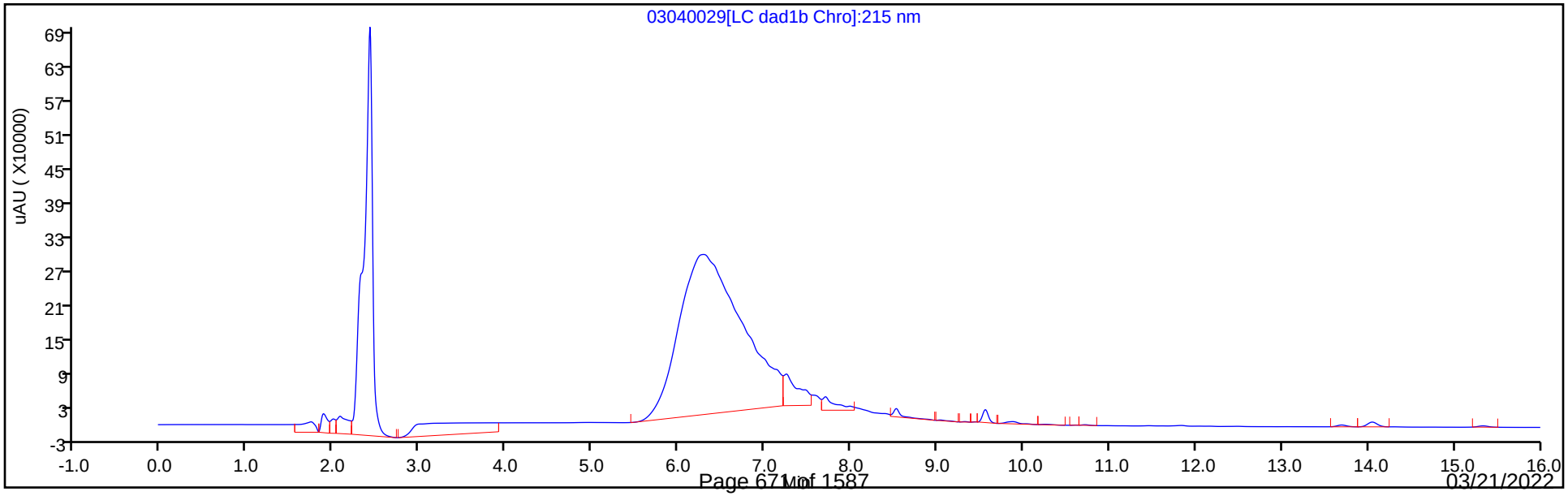
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040029.d

Injection Date:	05-Mar-2022 02:58:58	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159190-B-14-A	Lab Sample ID:	280-159190-14	Worklist Smp#:	29
Client ID:	EW7-PM29A-8-25				
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\20220304-109012.b\03040029.D				
Lims ID:	280-159190-B-14-A				
Client ID:	EW7-PM29A-8-25				
Sample Type:	Client				
Inject. Date:	05-Mar-2022 02:58:58	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-B-14-				
Misc. Info.:	280-0109012-029				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:42	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: 05-Mar-2022 10:44:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1945	97.27

Manual Integration/User Assign Peak Report

Eurofins Denver

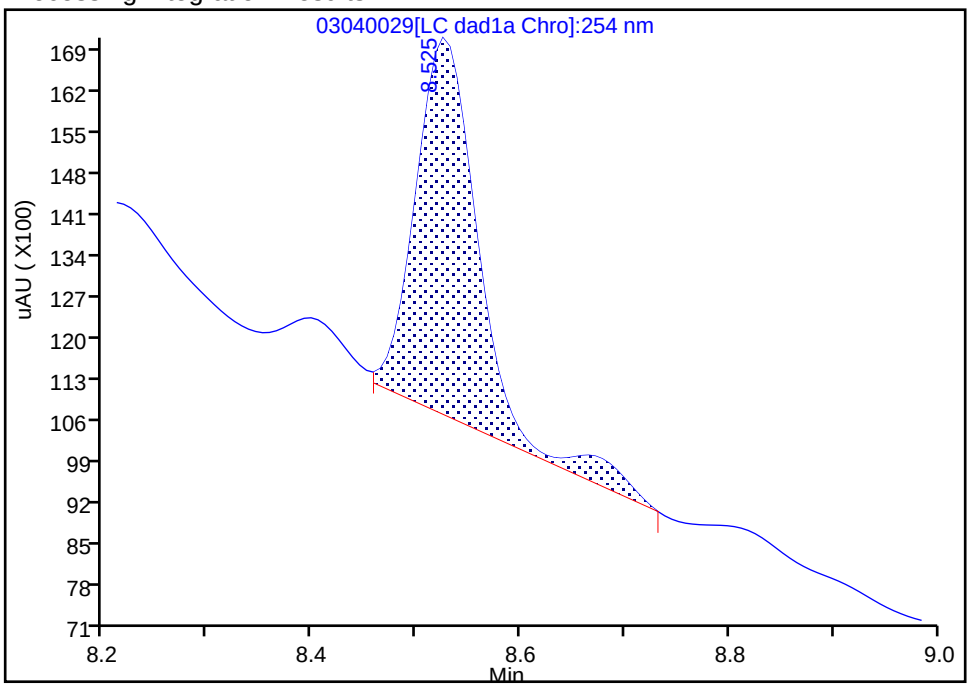
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040029.d				
Injection Date:	05-Mar-2022 02:58:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-B-14-A	Lab Sample ID:	280-159190-14		
Client ID:	EW7-PM29A-8-25				
Operator ID:	JZ	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 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

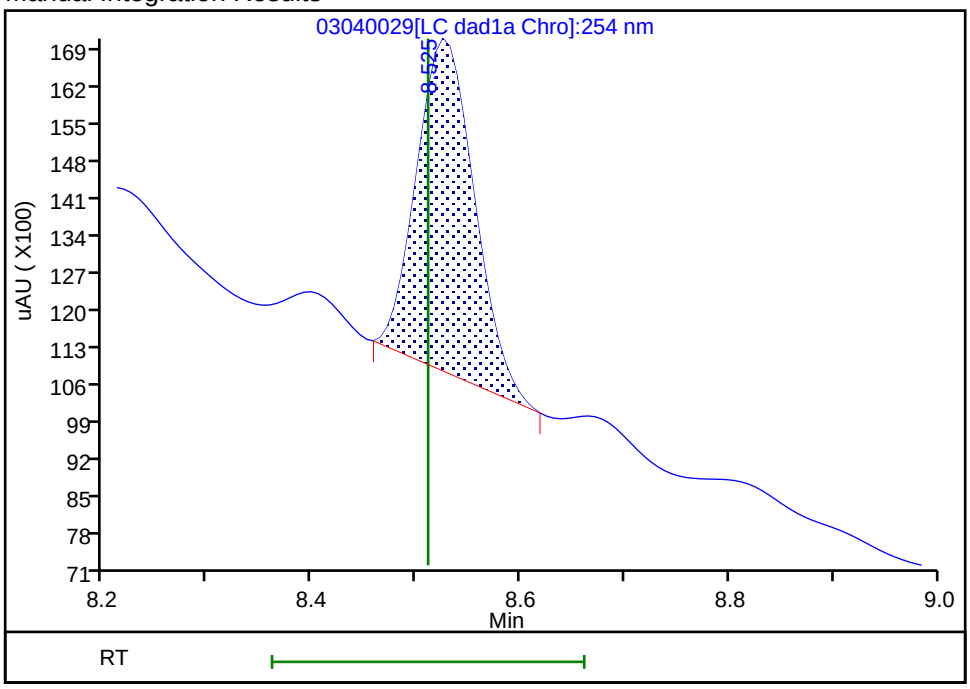
Processing Integration Results

RT: 8.53
Area: 27403
Amount: 0.219755
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 24259
Amount: 0.194543
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:44:16
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

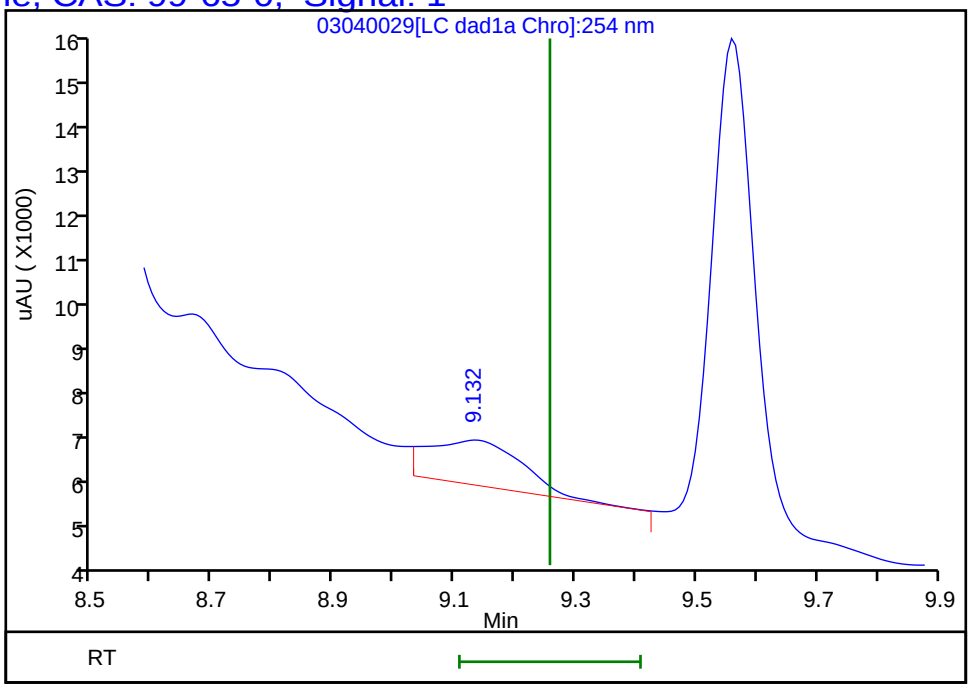
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040029.d
Injection Date: 05-Mar-2022 02:58:58 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-B-14-A Lab Sample ID: 280-159190-14
Client ID: EW7-PM29A-8-25
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

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

RT: 9.13
Response: 10427
Amount: 0.036154



Reviewer: zhangji, 05-Mar-2022 10:44:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

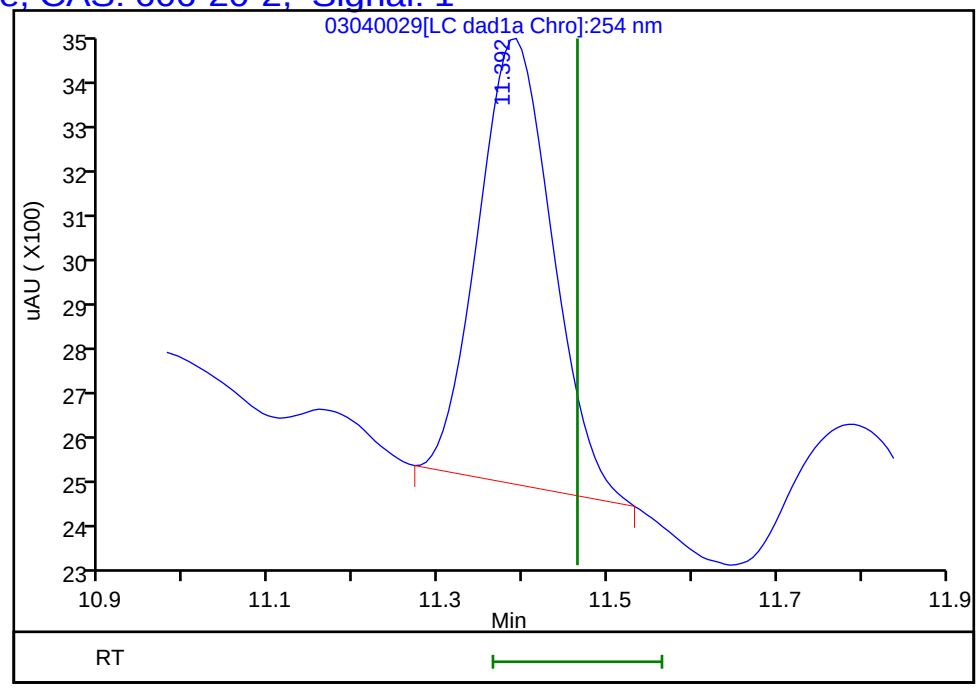
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040029.d
Injection Date: 05-Mar-2022 02:58:58 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-B-14-A Lab Sample ID: 280-159190-14
Client ID: EW7-PM29A-8-25
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

20 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 11.39
Response: 5771
Amount: 0.040324



Reviewer: zhangji, 05-Mar-2022 10:44:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

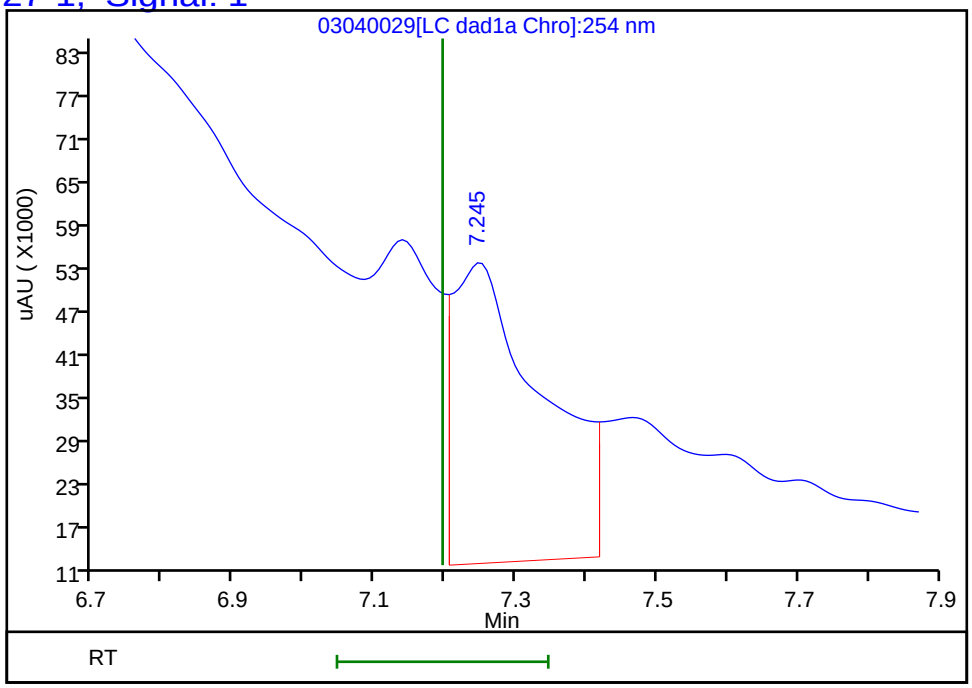
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040029.d				
Injection Date:	05-Mar-2022 02:58:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-B-14-A	Lab Sample ID:	280-159190-14		
Client ID:	EW7-PM29A-8-25				
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		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.25
Response: 362775
Amount: 2.879271



Reviewer: zhangji, 05-Mar-2022 10:44:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

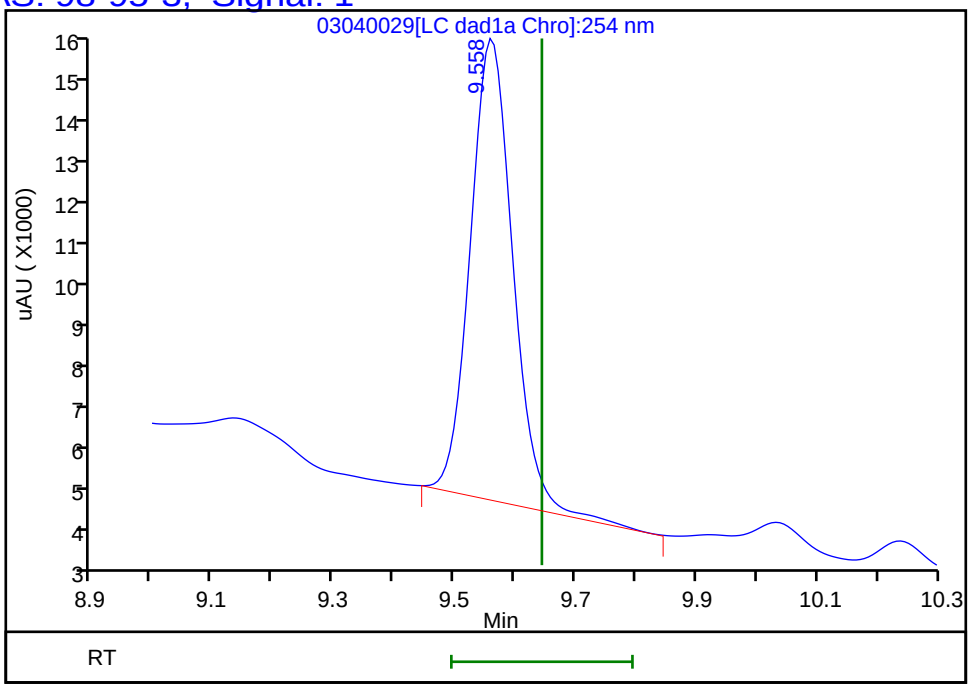
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040029.d				
Injection Date:	05-Mar-2022 02:58:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-B-14-A	Lab Sample ID:	280-159190-14		
Client ID:	EW7-PM29A-8-25				
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		

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

RT: 9.56
Response: 52335
Amount: 0.272645



Reviewer: zhangji, 05-Mar-2022 10:44:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

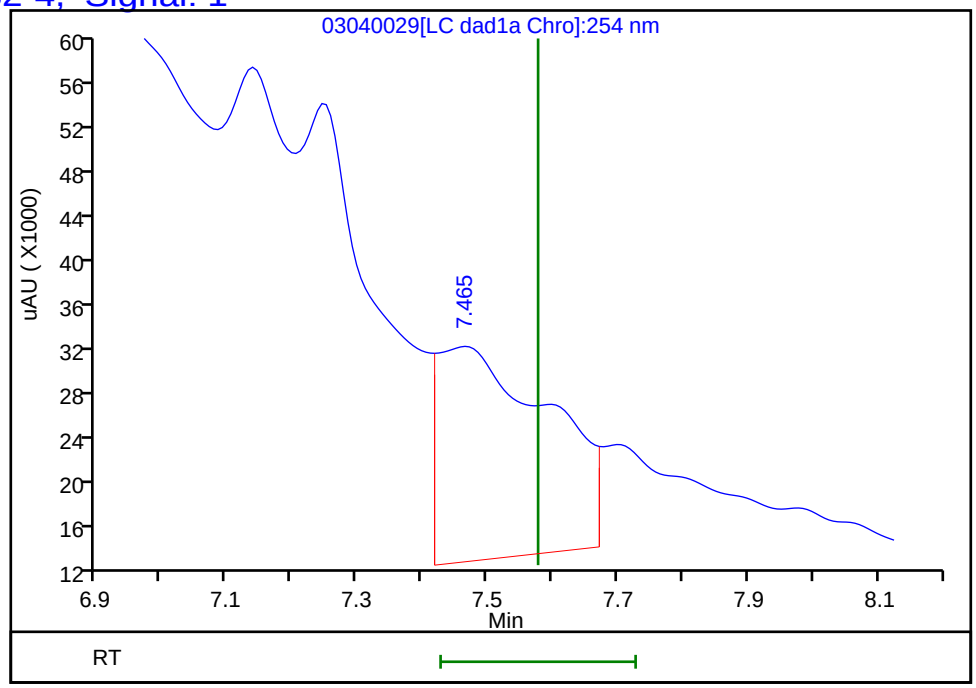
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040029.d
Injection Date: 05-Mar-2022 02:58:58 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-B-14-A Lab Sample ID: 280-159190-14
Client ID: EW7-PM29A-8-25
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

RT: 7.47
Response: 222207
Amount: 2.144665



Reviewer: zhangji, 05-Mar-2022 10:44:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

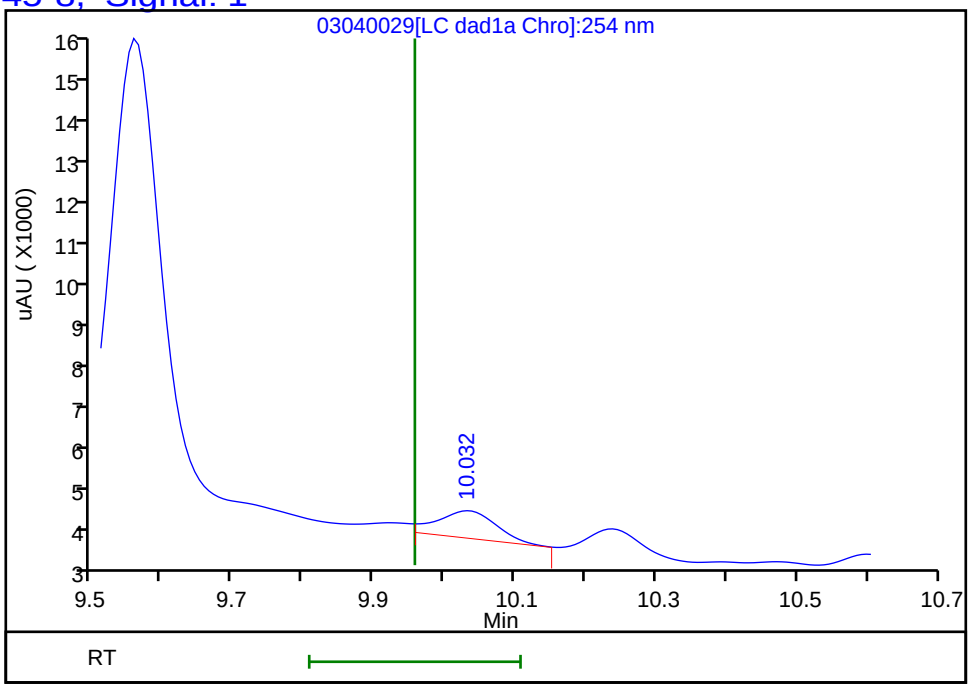
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040029.d
Injection Date: 05-Mar-2022 02:58:58 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-B-14-A Lab Sample ID: 280-159190-14
Client ID: EW7-PM29A-8-25
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

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

RT: 10.03
Response: 3702
Amount: 0.021704



Reviewer: zhangji, 05-Mar-2022 10:44:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM27B-8-35 | Lab Sample ID: 280-159190-15

Matrix: Water | Lab File ID: 03040030.D

Analysis Method: 8330A | Date Collected: 02/26/2022 13:00

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 482.2(mL) | Date Analyzed: 03/05/2022 03:21

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.: 567774 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-65-0	1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.047
121-14-2	2,4-Dinitrotoluene	0.083	U	0.10	0.083	0.028
606-20-2	2,6-Dinitrotoluene	0.083	U M	0.10	0.083	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.053
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.089
99-08-1	3-Nitrotoluene	0.41	U	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.16	0.12	0.060
99-99-0	4-Nitrotoluene	0.41	U M	0.43	0.41	0.10
2691-41-0	HMX	0.21	U	0.22	0.21	0.091
5755-27-1	MNX	0.41	U M	2.1	0.41	0.16
98-95-3	Nitrobenzene	0.21	U M	0.22	0.21	0.094
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	95		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040030.D
Lims ID: 280-159190-B-15-A
Client ID: EW7-PM27B-8-35
Sample Type: Client
Inject. Date: 05-Mar-2022 03:21:53 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-B-15-
Misc. Info.: 280-0109012-030
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:42 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: 05-Mar-2022 10:48:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.591			ND	
7 MNX	1		7.196			ND	U
8 RDX	1	7.605	7.578	0.027	7686	0.0742	M
$ 10 1,2-Dinitrobenzene	1	8.525	8.511	0.014	23781	0.1907	
11 1,3,5-Trinitrobenzene	1	8.672	8.638	0.034	2520	0.0116	
12 1,3-Dinitrobenzene	1		9.257			ND	U
13 Nitrobenzene	1		9.644			ND	U
15 Tetryl	1		9.957			ND	U
17 2,4,6-Trinitrotoluene	1		10.857			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.051			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.297			ND	
20 2,6-Dinitrotoluene	1		11.464			ND	U
21 2,4-Dinitrotoluene	1		11.637			ND	
22 o-Nitrotoluene	1		12.477			ND	
23 p-Nitrotoluene	1		12.897			ND	U
24 m-Nitrotoluene	1		13.471			ND	

QC Flag Legend

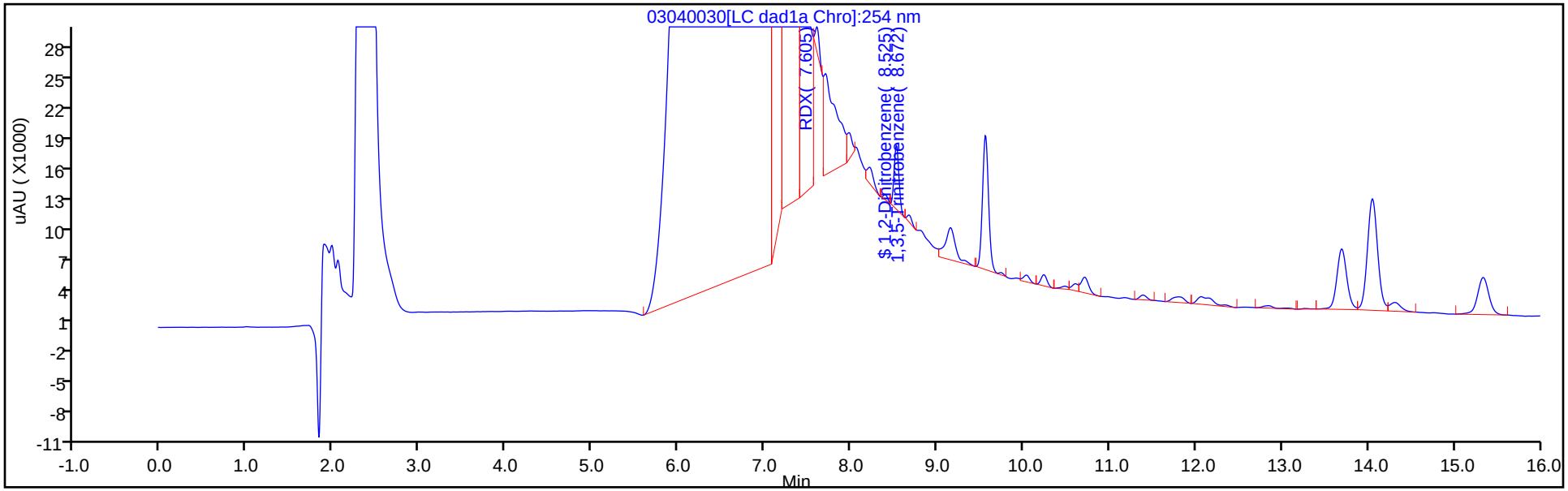
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 05-Mar-2022 10:57:43 Chrom Revision: 2.3 16-Feb-2022 17:52:00

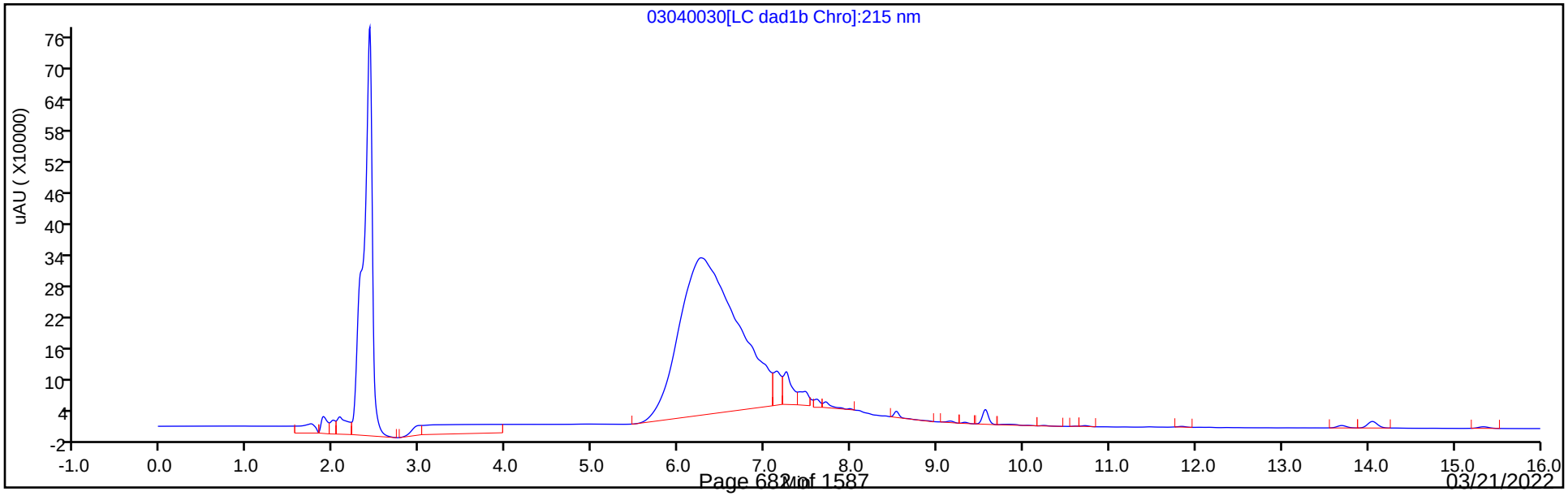
Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040030.d				
Injection Date:	05-Mar-2022 03:21:53	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159190-B-15-A	Lab Sample ID:	280-159190-15	Worklist Smp#:	30
Client ID:	EW7-PM27B-8-35				
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\20220304-109012.b\03040030.D				
Lims ID:	280-159190-B-15-A				
Client ID:	EW7-PM27B-8-35				
Sample Type:	Client				
Inject. Date:	05-Mar-2022 03:21:53	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-B-15-				
Misc. Info.:	280-0109012-030				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:42	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: 05-Mar-2022 10:48:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1907	95.35

User Disabled Compound Report

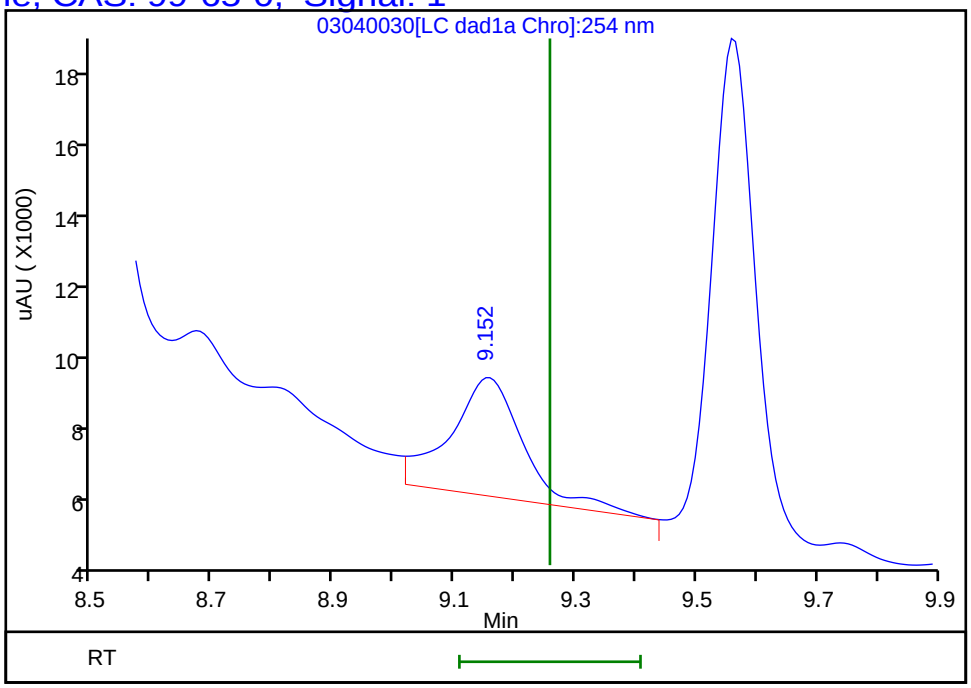
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040030.d
Injection Date: 05-Mar-2022 03:21:53 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-B-15-A Lab Sample ID: 280-159190-15
Client ID: EW7-PM27B-8-35
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

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

RT: 9.15
Response: 26137
Amount: 0.090627



Reviewer: zhangji, 05-Mar-2022 10:48:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

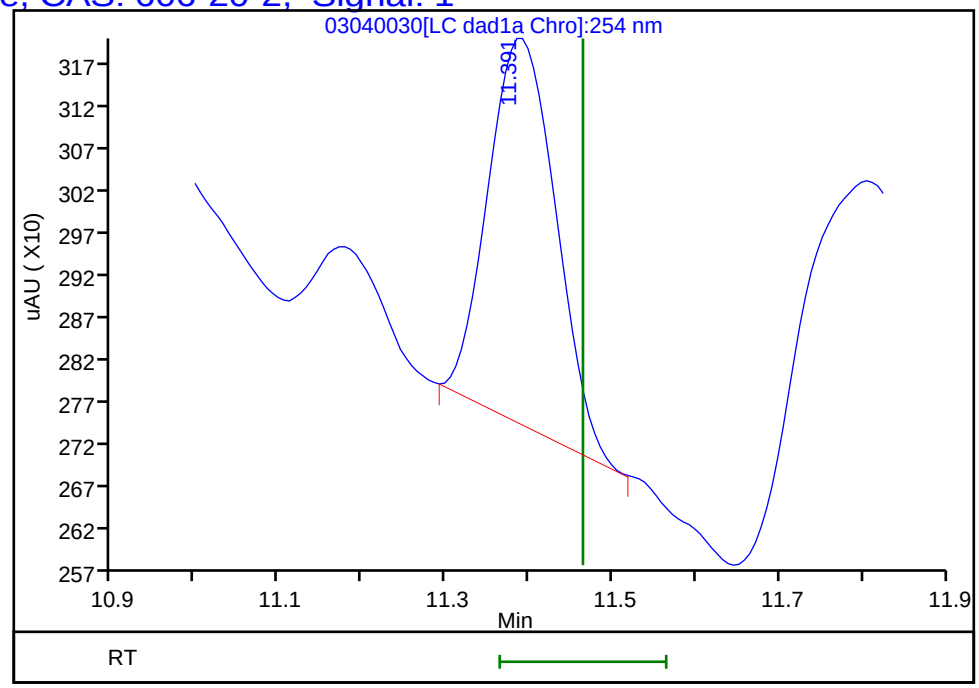
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040030.d
Injection Date: 05-Mar-2022 03:21:53 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-B-15-A Lab Sample ID: 280-159190-15
Client ID: EW7-PM27B-8-35
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

20 2,6-Dinitrotoluene, CAS: 606-20-2, Signal: 1

RT: 11.39
Response: 2595
Amount: 0.018132



Reviewer: zhangji, 05-Mar-2022 10:48:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

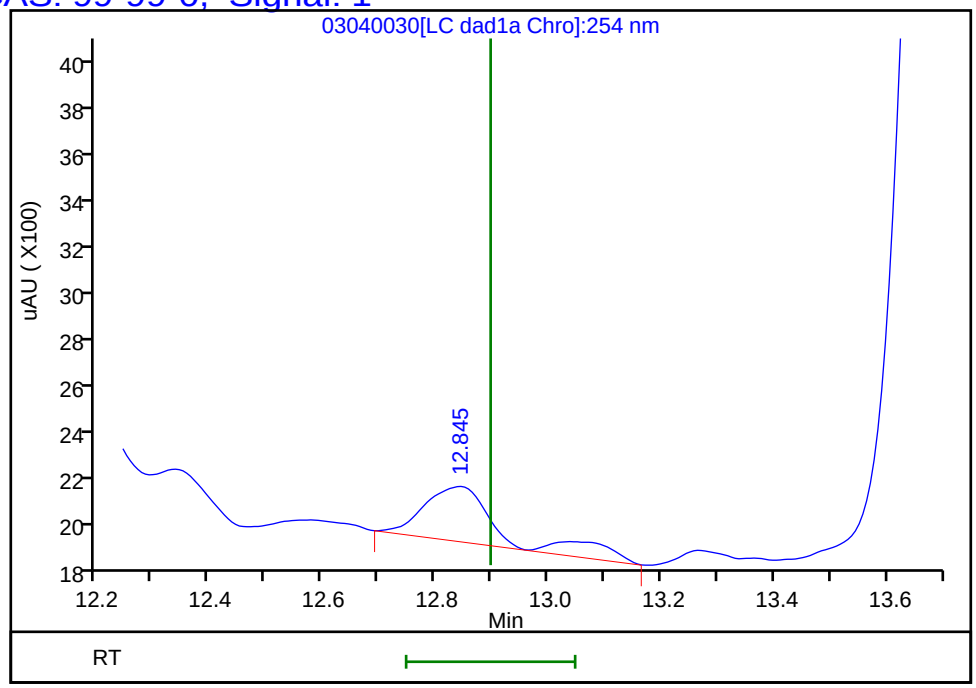
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040030.d
Injection Date: 05-Mar-2022 03:21:53 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-B-15-A Lab Sample ID: 280-159190-15
Client ID: EW7-PM27B-8-35
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

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

RT: 12.84
Response: 2255
Amount: 0.021226



Reviewer: zhangji, 05-Mar-2022 10:48:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

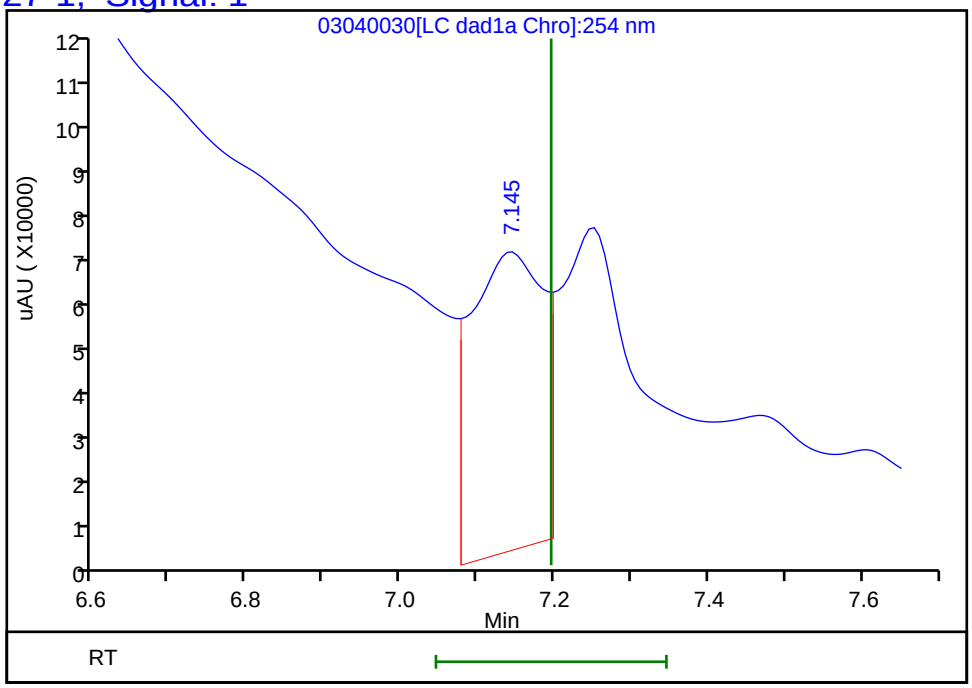
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040030.d
Injection Date: 05-Mar-2022 03:21:53 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-B-15-A Lab Sample ID: 280-159190-15
Client ID: EW7-PM27B-8-35
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

RT: 7.14
Response: 385620
Amount: 3.060588



Reviewer: zhangji, 05-Mar-2022 10:48:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

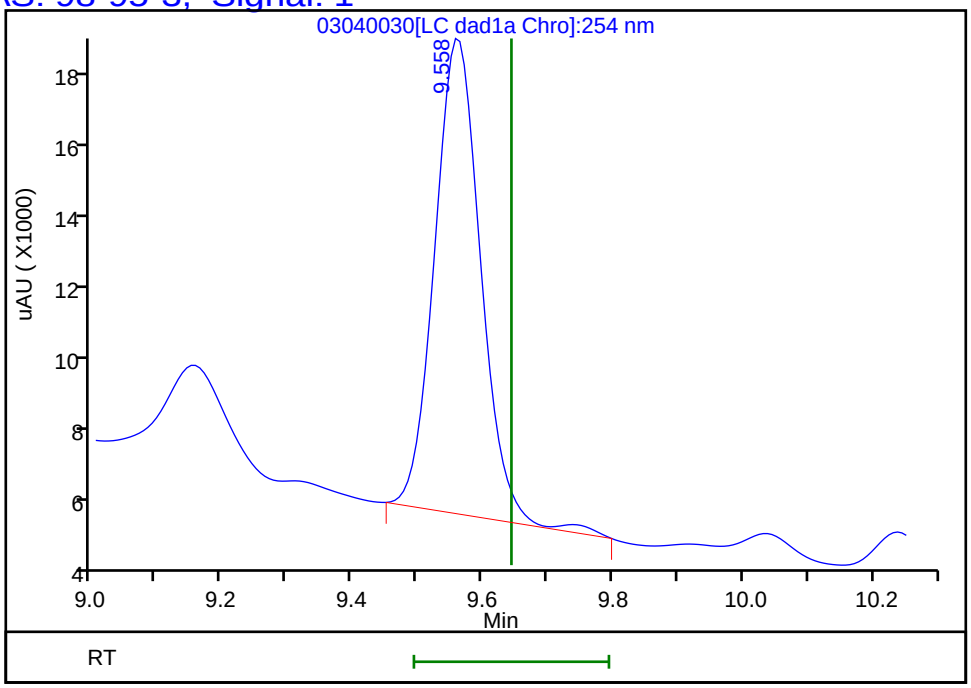
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040030.d				
Injection Date:	05-Mar-2022 03:21:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-B-15-A	Lab Sample ID:	280-159190-15		
Client ID:	EW7-PM27B-8-35				
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		

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

RT: 9.56
Response: 63864
Amount: 0.332706



Reviewer: zhangji, 05-Mar-2022 10:48:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Denver

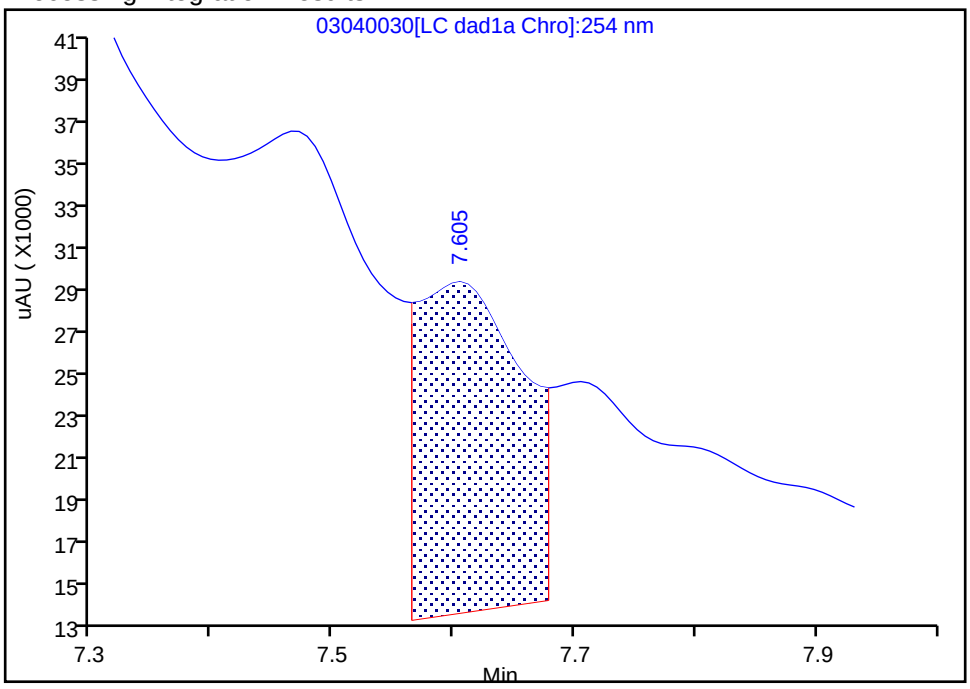
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040030.d				
Injection Date:	05-Mar-2022 03:21:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-B-15-A	Lab Sample ID:	280-159190-15		
Client ID:	EW7-PM27B-8-35				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

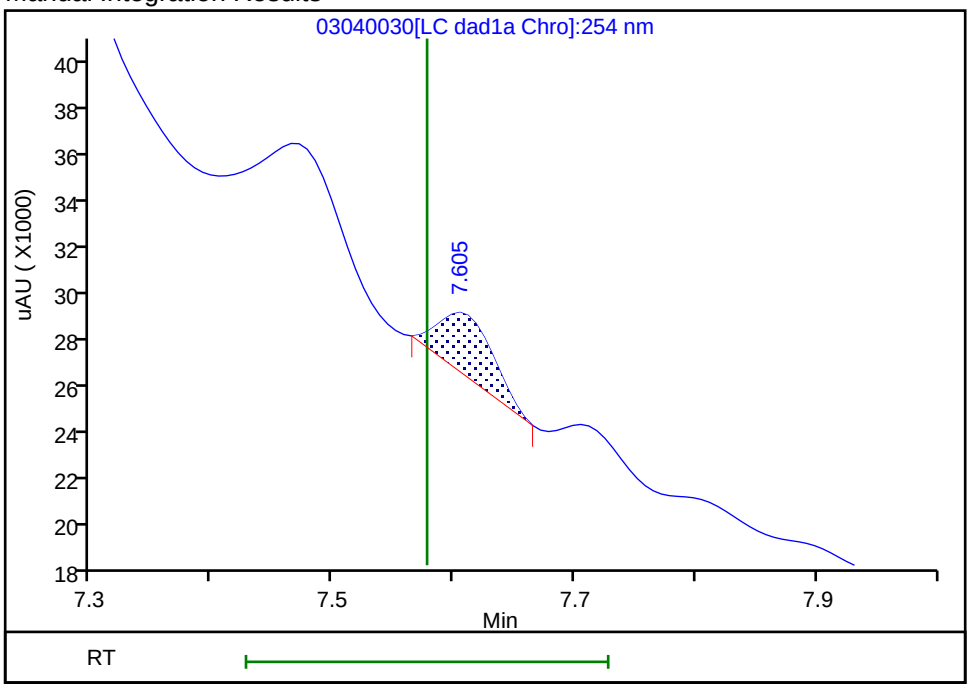
Processing Integration Results

RT: 7.60
Area: 88200
Amount: 0.851276
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 7686
Amount: 0.074183
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:48:39
Audit Action: Manually Integrated Audit Reason: Baseline

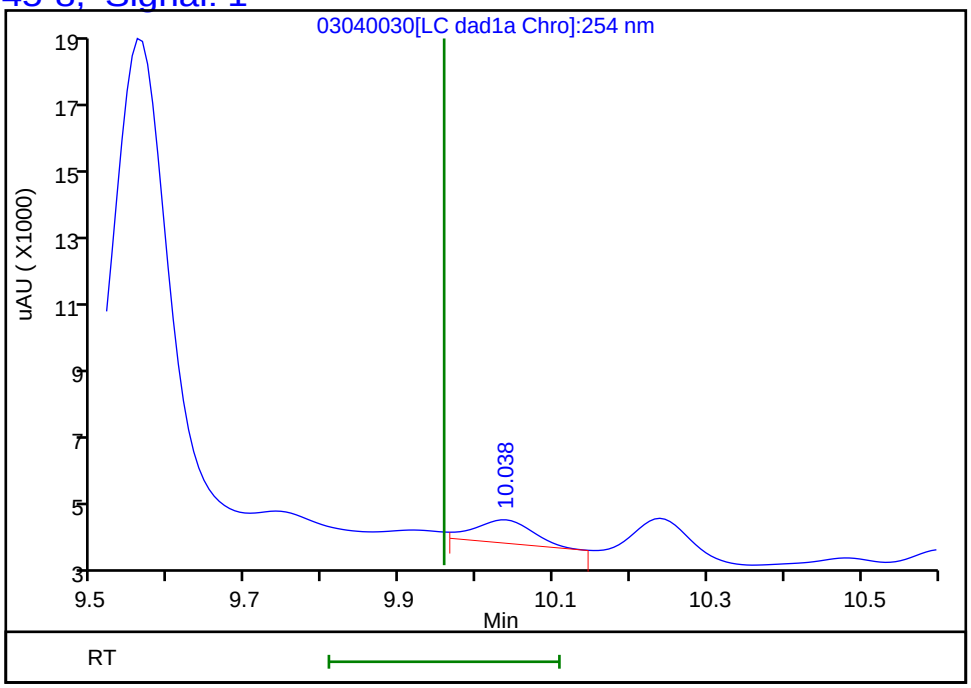
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040030.d				
Injection Date:	05-Mar-2022 03:21:53	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-B-15-A	Lab Sample ID:	280-159190-15		
Client ID:	EW7-PM27B-8-35				
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		

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

RT: 10.04
Response: 3380
Amount: 0.019816



Reviewer: zhangji, 05-Mar-2022 10:48:47
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: EW7-PM27B-8-35 | Lab Sample ID: 280-159190-15

Matrix: Water | Lab File ID: 03040036.D

Analysis Method: 8330A | Date Collected: 02/26/2022 13:00

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 482.2(mL) | Date Analyzed: 03/05/2022 09:44

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.: 567777 | 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
121-82-4	RDX	0.21	U	0.22	0.21	0.053

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	99		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040036.D
Lims ID: 280-159190-B-15-A
Client ID: EW7-PM27B-8-35
Sample Type: Client
Inject. Date: 05-Mar-2022 09:44:41 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-B-15-A
Misc. Info.: 280-0109013-036
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 11:24:38 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: 05-Mar-2022 11:17:34

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1		6.955			ND	
	6 MNX	1		7.649			ND	
	8 RDX	1		9.195			ND	
	9 Nitrobenzene	1		12.135			ND	
$	10 1,2-Dinitrobenzene	1	13.355	13.388	-0.033	49537	0.1983	
	12 1,3-Dinitrobenzene	1		15.735			ND	7
	14 o-Nitrotoluene	1		16.928			ND	U
	16 p-Nitrotoluene	1		17.235			ND	
	17 4-Amino-2,6-dinitrotoluene	1		17.902			ND	
	18 m-Nitrotoluene	1		18.215			ND	
	19 2-Amino-4,6-dinitrotoluene	1		18.948			ND	
	20 1,3,5-Trinitrobenzene	1		19.022			ND	
	21 2,6-Dinitrotoluene	1		20.388			ND	
	22 2,4-Dinitrotoluene	1		20.909			ND	
	23 Tetryl	1		24.682			ND	
	24 2,4,6-Trinitrotoluene	1		25.415			ND	

QC Flag Legend

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

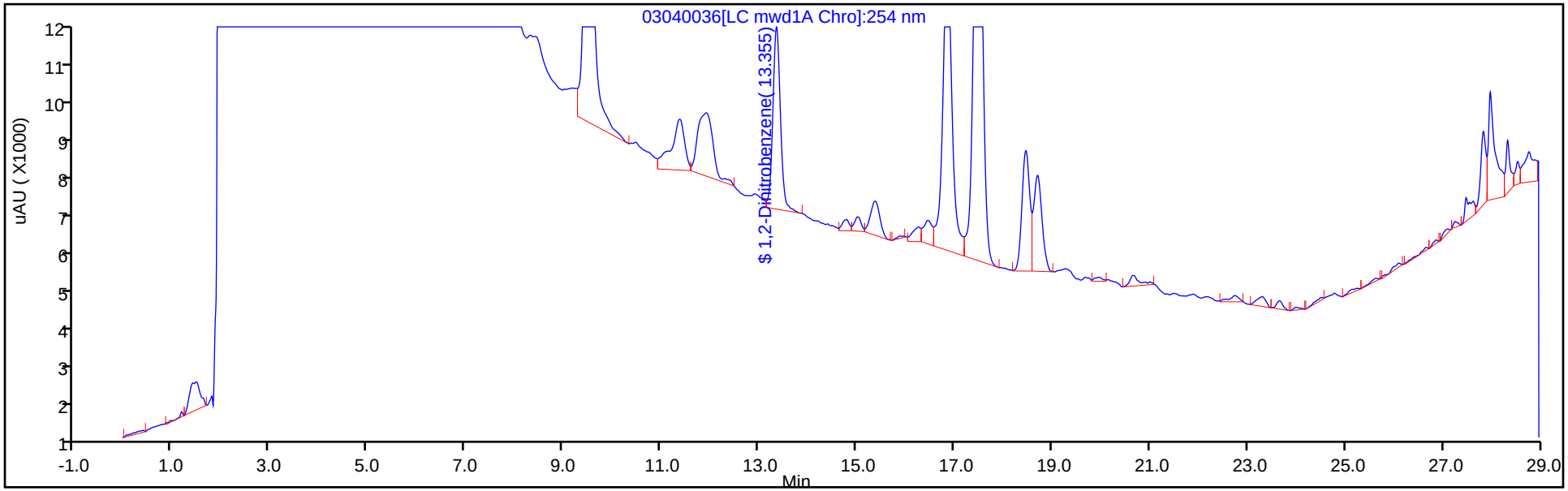
Report Date: 05-Mar-2022 11:24:41 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

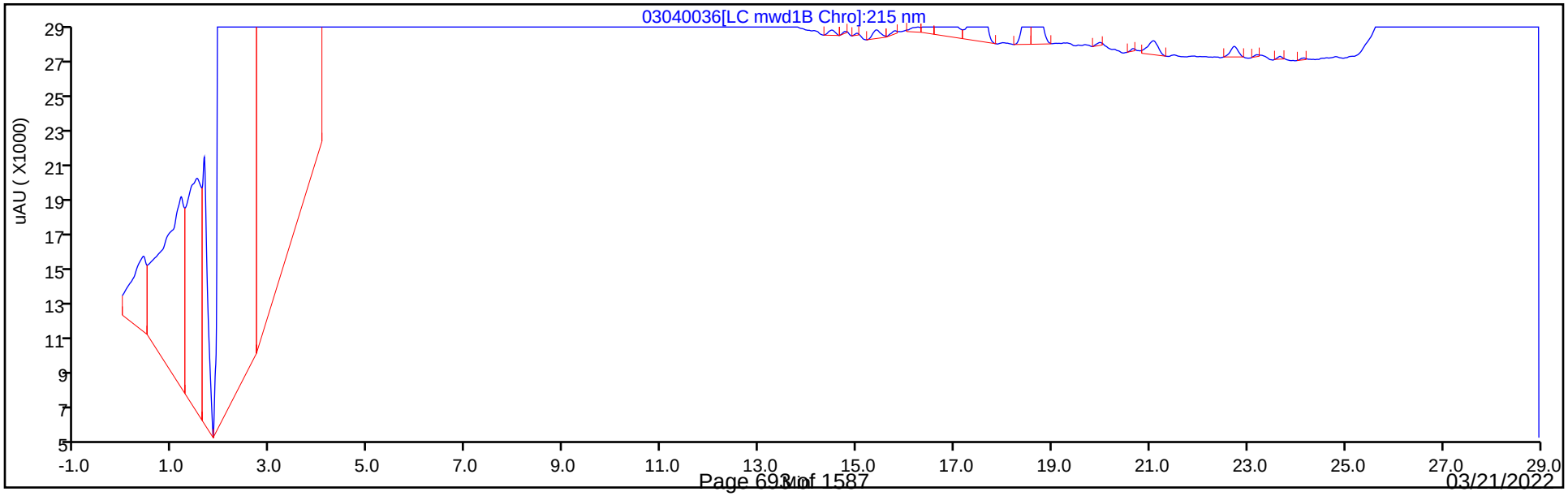
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040036.D

Injection Date:	05-Mar-2022 09:44:41	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-159190-B-15-A	Lab Sample ID:	280-159190-15	Worklist Smp#:	36
Client ID:	EW7-PM27B-8-35				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
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\20220304-109013.b\03040036.D				
Lims ID:	280-159190-B-15-A				
Client ID:	EW7-PM27B-8-35				
Sample Type:	Client				
Inject. Date:	05-Mar-2022 09:44:41	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-B-15-A				
Misc. Info.:	280-0109013-036				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 11:24:38	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:	05-Mar-2022 11:17:34		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1983	99.17

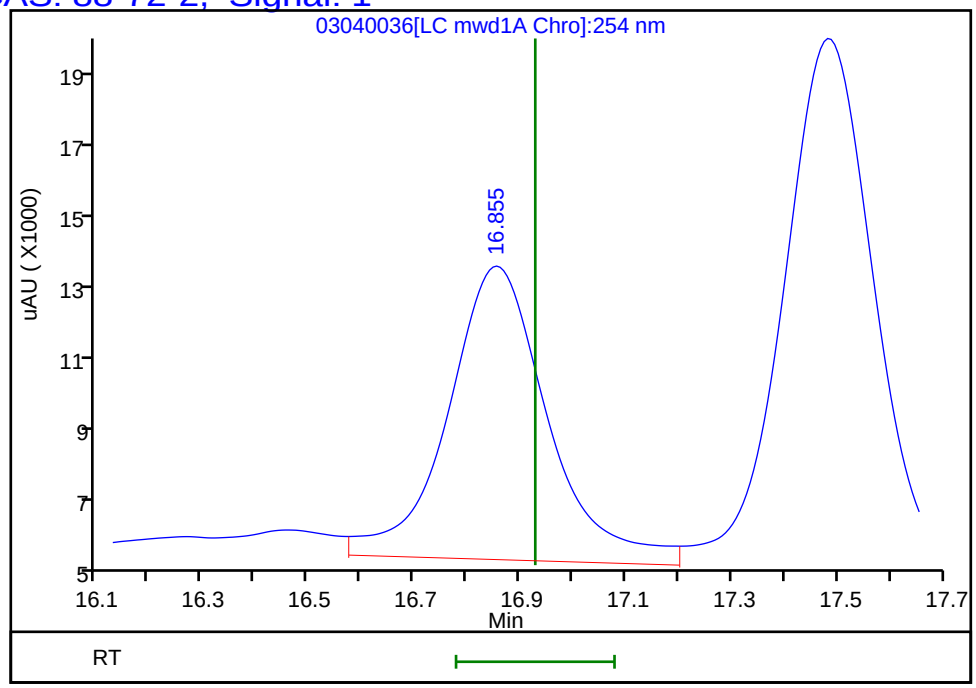
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040036.D				
Injection Date:	05-Mar-2022 09:44:41	Instrument ID:	CHHPLC_X5		
Lims ID:	280-159190-B-15-A	Lab Sample ID:	280-159190-15		
Client ID:	EW7-PM27B-8-35				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
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: 16.86
Response: 98282
Amount: 0.418805



Reviewer: zhangji, 05-Mar-2022 11:17:34
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: NW062-8 | Lab Sample ID: 280-159190-16

Matrix: Water | Lab File ID: 03040033.D

Analysis Method: 8330A | Date Collected: 02/27/2022 14:15

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 463.4(mL) | Date Analyzed: 03/05/2022 04:30

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.: 567774 | 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	0.11	U	0.12	0.11	0.055
88-72-2	2-Nitrotoluene	0.22	U M	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	0.13	U	0.16	0.13	0.062
99-99-0	4-Nitrotoluene	0.43	U M	0.44	0.43	0.11
2691-41-0	HMX	0.22	U	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 M	0.23	0.22	0.098
121-82-4	RDX	0.22	U	0.23	0.22	0.056
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	98	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040033.D
Lims ID: 280-159190-B-16-A
Client ID: NW062-8
Sample Type: Client
Inject. Date: 05-Mar-2022 04:30:37 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-B-16-
Misc. Info.: 280-0109012-033
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:37 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: CTX1616

First Level Reviewer: zhangji Date: 05-Mar-2022 10:49:28

	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		6.464			ND	U
	3 TNX	1		6.469			ND	
	4 HMX	1		6.591			ND	
	5 2,4-diamino-6-nitrotoluene	1		6.650			ND	
	6 DNX	1		6.782			ND	
	7 MNX	1		7.196			ND	
	8 RDX	1		7.578			ND	
	9 2,4,6-Trinitrophenol	1		7.898			ND	U
$	10 1,2-Dinitrobenzene	1	8.528	8.511	0.017	24427	0.1959	M
	11 1,3,5-Trinitrobenzene	1		8.638			ND	
	12 1,3-Dinitrobenzene	1		9.257			ND	
	13 Nitrobenzene	1		9.644			ND	U
	14 3,5-Dinitroaniline	1		9.877			ND	
	15 Tetryl	1		9.957			ND	
	16 Nitroglycerin	2		10.404			ND	
	17 2,4,6-Trinitrotoluene	1		10.857			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.051			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.297			ND	
	20 2,6-Dinitrotoluene	1		11.464			ND	
	21 2,4-Dinitrotoluene	1		11.637			ND	
	22 o-Nitrotoluene	1		12.477			ND	U
	23 p-Nitrotoluene	1		12.897			ND	U
	24 m-Nitrotoluene	1		13.471			ND	
	25 PETN	2		14.497			ND	
	26 Ammonium Picrate	1		0.000			ND	

QC Flag Legend
Processing Flags

Review Flags
M - Manually Integrated
U - Marked Undetected

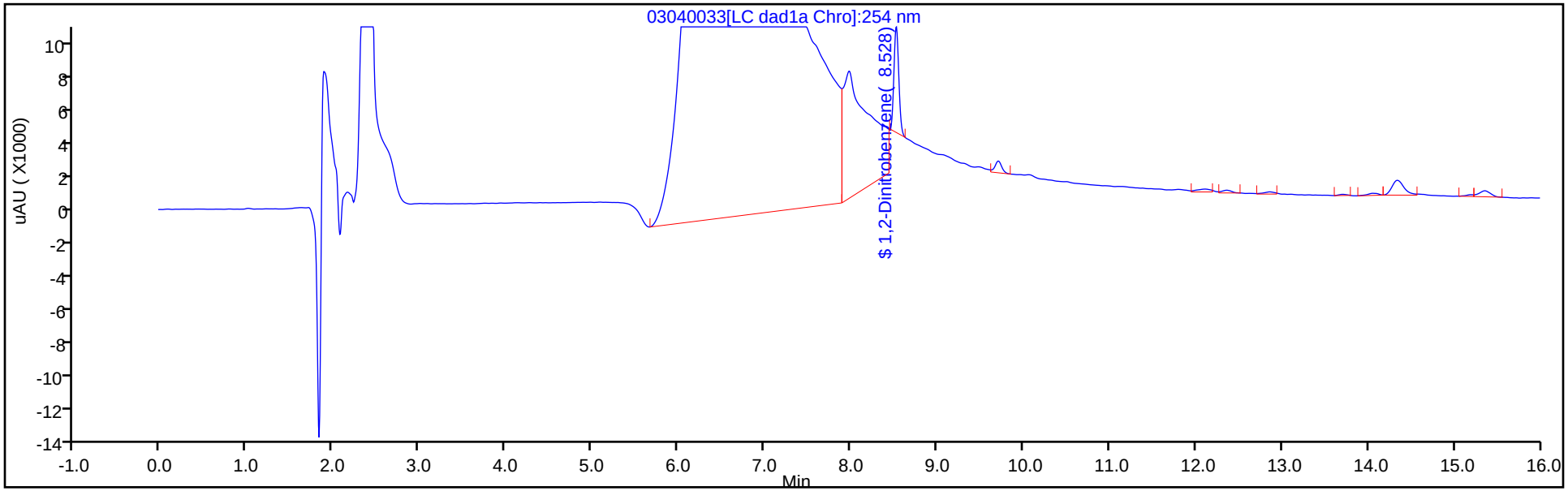
Report Date: 05-Mar-2022 10:57:41 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

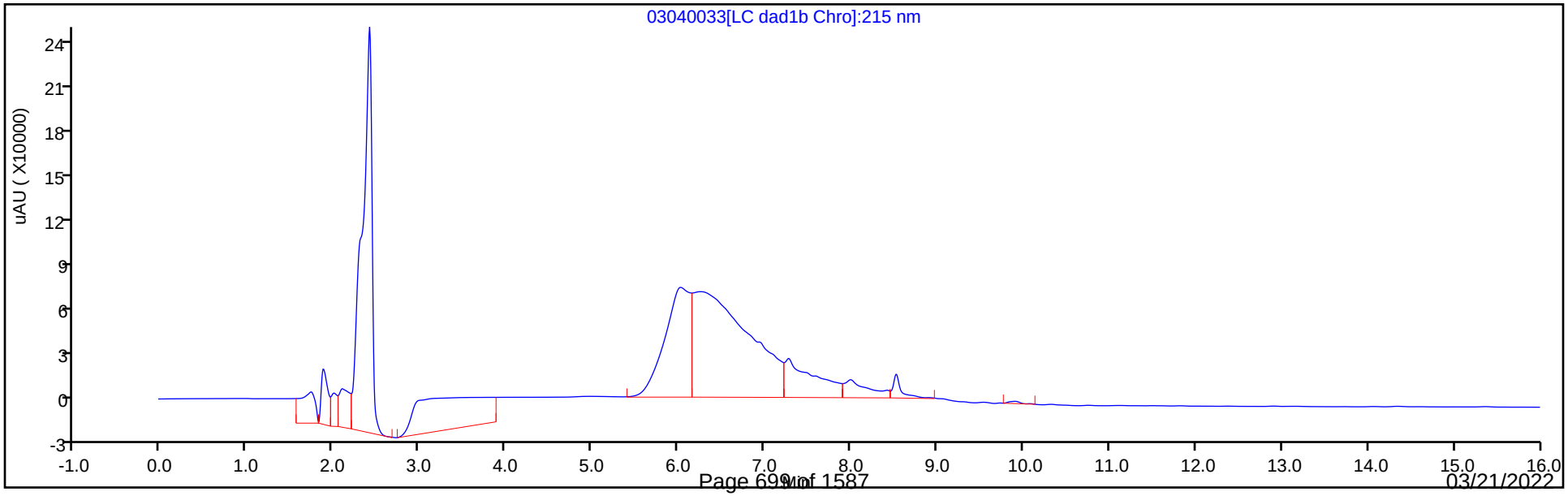
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040033.d

Injection Date:	05-Mar-2022 04:30:37	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159190-B-16-A	Lab Sample ID:	280-159190-16	Worklist Smp#:	33
Client ID:	NW062-8				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040033.D				
Lims ID:	280-159190-B-16-A				
Client ID:	NW062-8				
Sample Type:	Client				
Inject. Date:	05-Mar-2022 04:30:37	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-B-16-				
Misc. Info.:	280-0109012-033				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:37	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:	CTX1616				
First Level Reviewer: zhangji		Date:	05-Mar-2022 10:49:28		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1959	97.94

Manual Integration/User Assign Peak Report

Eurofins Denver

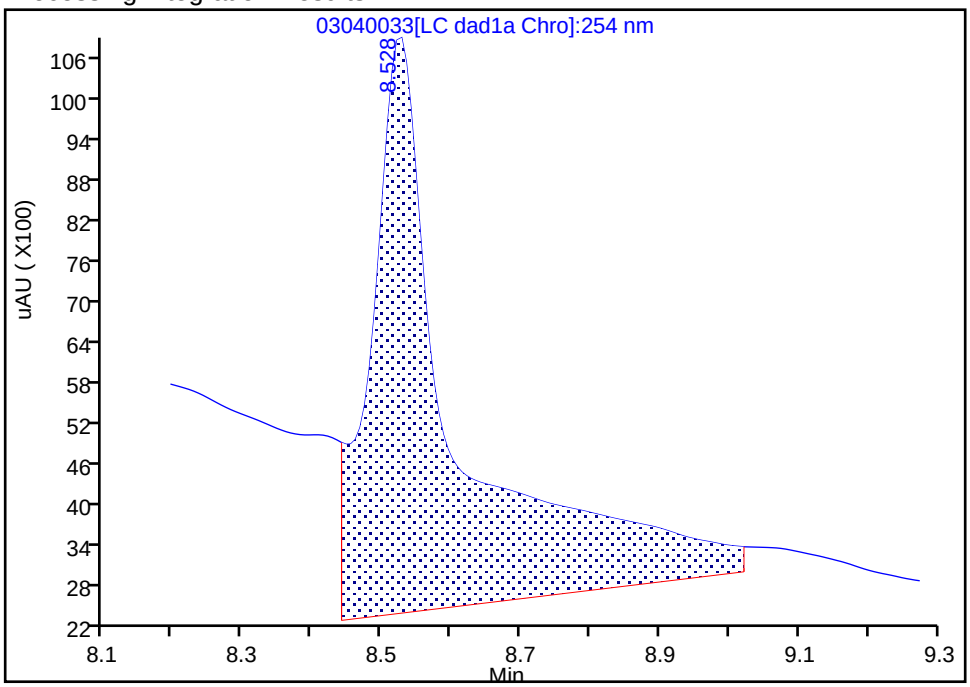
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040033.d				
Injection Date:	05-Mar-2022 04:30:37	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-B-16-A	Lab Sample ID:	280-159190-16		
Client ID:	NW062-8				
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

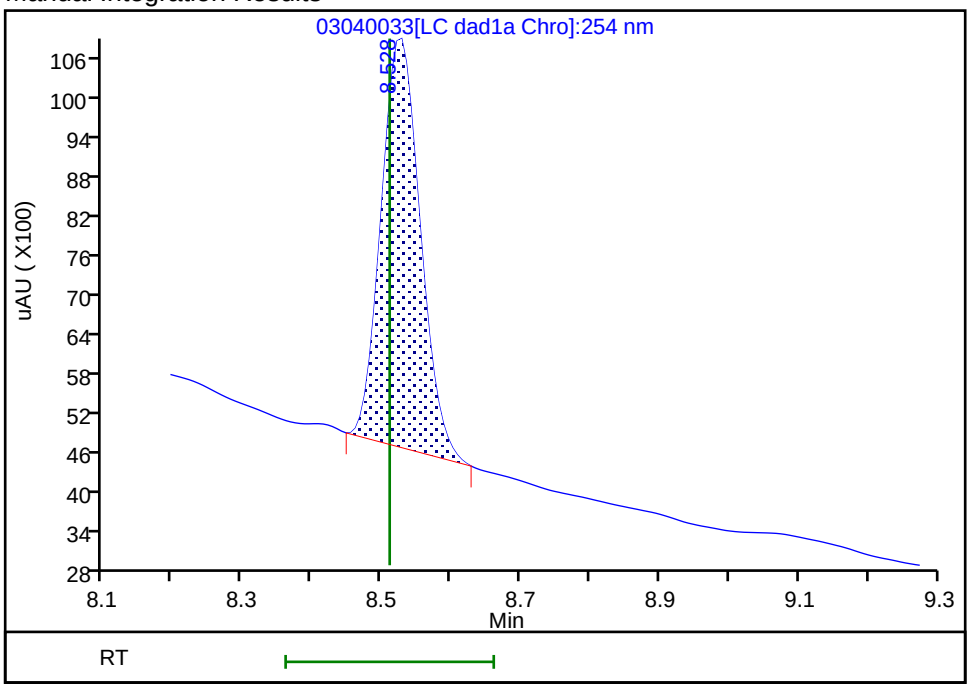
Processing Integration Results

RT: 8.53
Area: 74834
Amount: 0.600123
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 24427
Amount: 0.195890
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:49:27

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

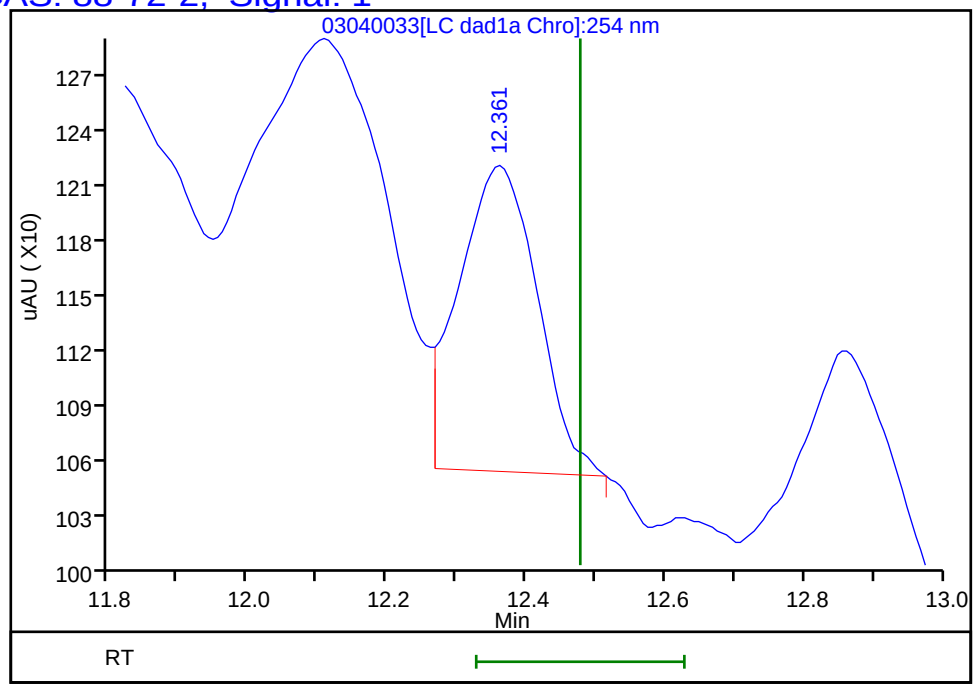
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040033.d
Injection Date: 05-Mar-2022 04:30:37 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-B-16-A Lab Sample ID: 280-159190-16
Client ID: NW062-8
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

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

RT: 12.36
Response: 1259
Amount: 0.009866



Reviewer: zhangji, 05-Mar-2022 10:49:28
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

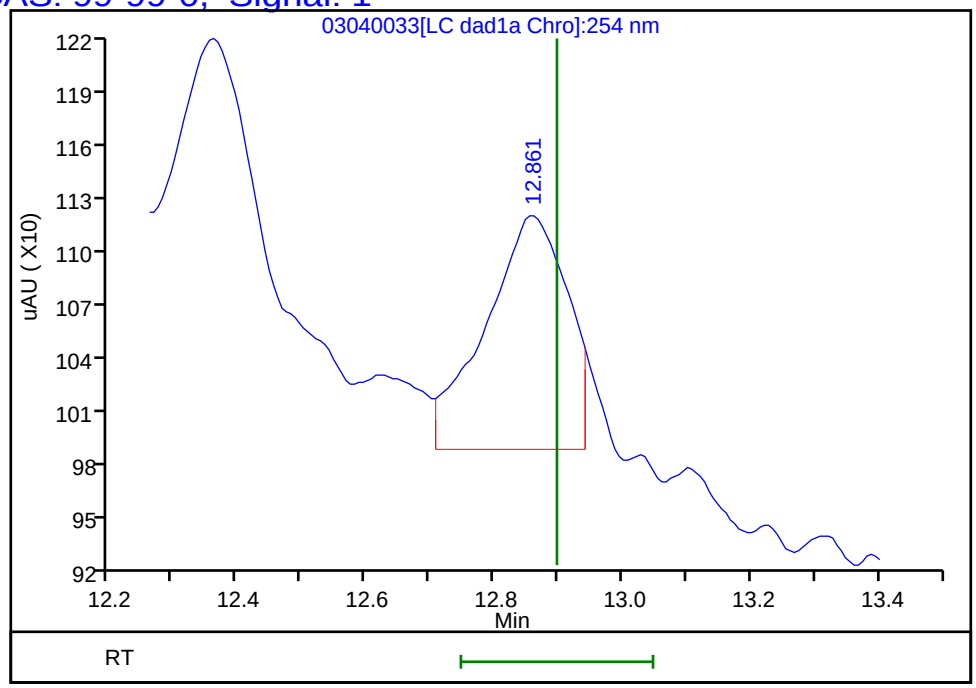
Eurofins Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040033.d
Injection Date: 05-Mar-2022 04:30:37 Instrument ID: CHHPLC_X3
Lims ID: 280-159190-B-16-A Lab Sample ID: 280-159190-16
Client ID: NW062-8
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

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

RT: 12.86
Response: 1138
Amount: 0.010712



Reviewer: zhangji, 05-Mar-2022 10:49:28
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

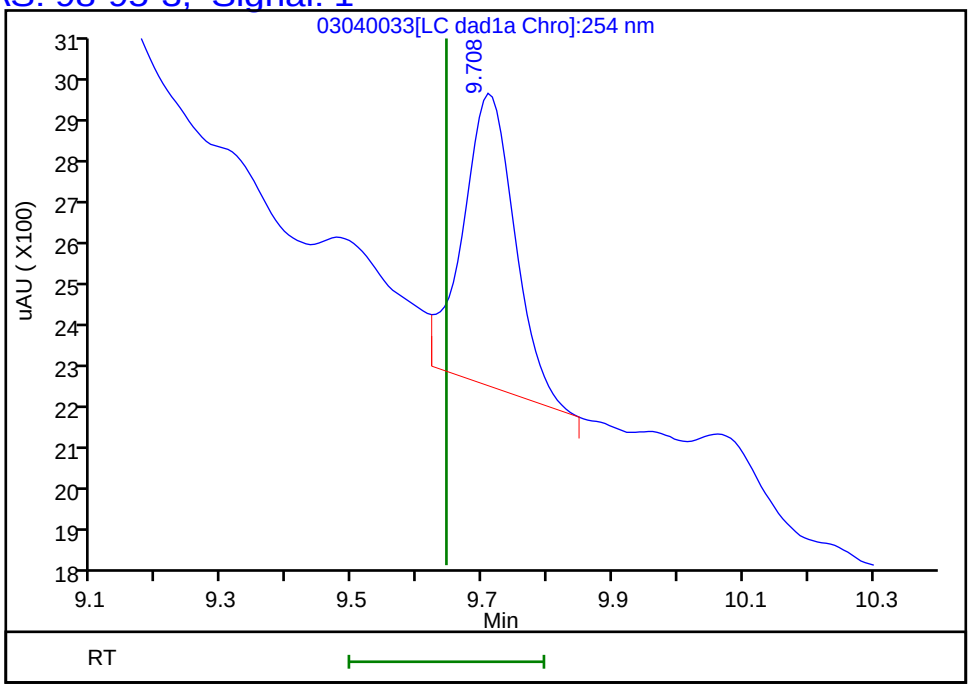
User Disabled Compound Report

Eurofins Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040033.d				
Injection Date:	05-Mar-2022 04:30:37	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-B-16-A	Lab Sample ID:	280-159190-16		
Client ID:	NW062-8				
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		

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

RT: 9.71
Response: 3856
Amount: 0.020088



Reviewer: zhangji, 05-Mar-2022 10:49:28
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.: 280-159190-1 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.: 280-159190-1 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.: 280-159190-1 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.: 280-159190-1 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	1735	4230	8489	20395	0.0100	0.0200	0.0500	0.100	0.250
		32925	57138	81295	203229		0.400	0.700	1.00	2.50	
RDX	Ave	1152	2084	5715	10447	24635	0.0100	0.0200	0.0500	0.100	0.250
		39126	69068	99016	250683		0.400	0.700	1.00	2.50	
Picric acid	Ave	716	1554	4029	7855	18560	0.0100	0.0200	0.0500	0.100	0.250
		30649	53408	77279	201210		0.400	0.700	1.00	2.50	
1,3,5-Trinitrobenzene	Ave	2197	4249	10711	21856	52589	0.0100	0.0200	0.0501	0.100	0.251
		87295	155681	224711	565374		0.401	0.701	1.00	2.51	
1,3-Dinitrobenzene	Ave	2633	5833	14683	29215	70569	0.0100	0.0200	0.0501	0.100	0.251
		116963	205039	295195	743133		0.401	0.701	1.00	2.51	
Nitrobenzene	Ave	2067	3845	9329	19287	46348	0.0100	0.0201	0.0502	0.100	0.251
		75688	134777	194325	486534		0.402	0.703	1.00	2.51	
Tetryl	Ave	1778	3498	8315	17238	40968	0.0100	0.0200	0.0501	0.100	0.251
		66706	118756	173941	431404		0.401	0.701	1.00	2.51	
Nitroglycerin	Ave	6348	12008	30651	63595	151977	0.100	0.200	0.500	1.00	2.50
		257287	449283	647703	1621311		4.00	7.00	10.0	25.0	
2,4,6-Trinitrotoluene	Ave	2126	4227	10202	20408	49067	0.0100	0.0201	0.0502	0.100	0.251
		79951	139377	201237	508173		0.402	0.703	1.00	2.51	
4-Amino-2,6-dinitrotoluene	Ave	1718	3150	7656	14975	35644	0.0100	0.0200	0.0501	0.100	0.250
		58489	101665	146703	368296		0.400	0.701	1.00	2.50	
2-Amino-4,6-dinitrotoluene	Ave	2287	4282	9600	20280	48486	0.0100	0.0201	0.0502	0.100	0.251
		79169	137894	200129	500581		0.402	0.703	1.00	2.51	
2,6-Dinitrotoluene	Ave	1551	2993	6908	14234	34177	0.0100	0.0201	0.0502	0.100	0.251
		57212	99747	140901	362011		0.402	0.703	1.00	2.51	
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.: 280-159190-1 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

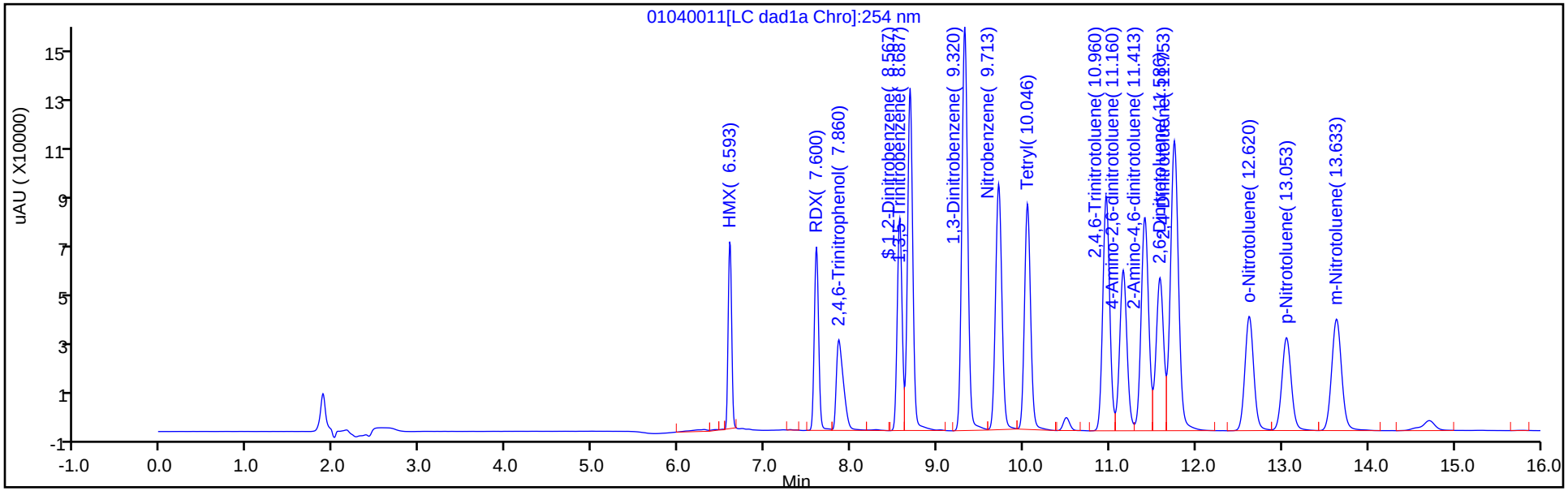
Report Date: 06-Jan-2022 20:05:10 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

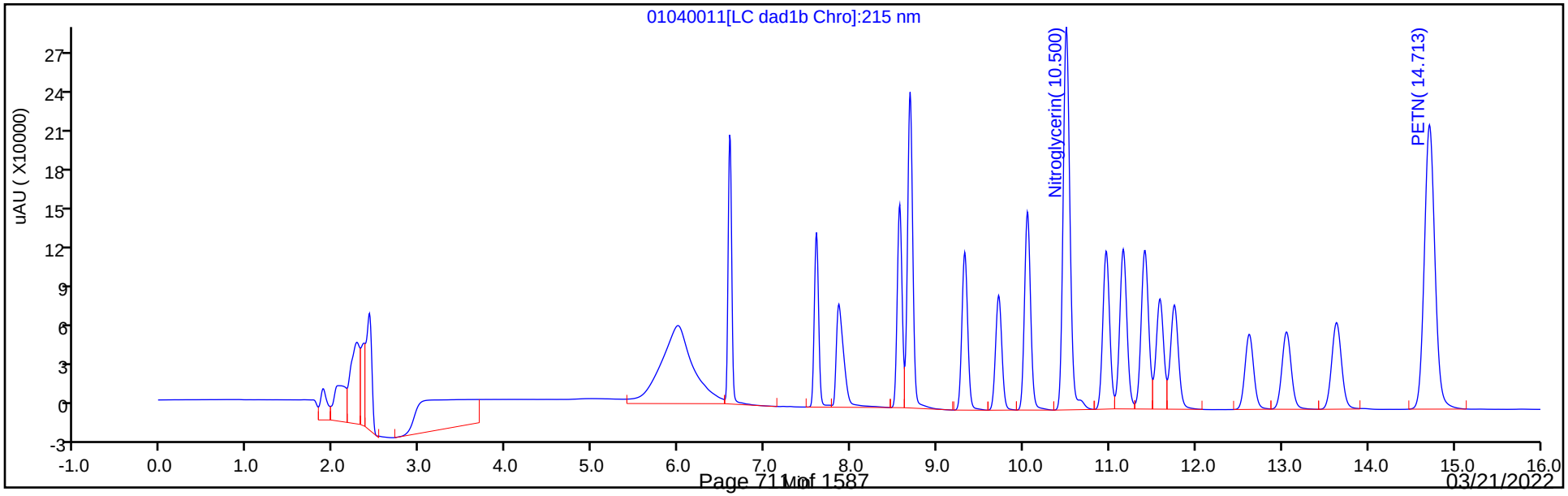
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040011.d

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

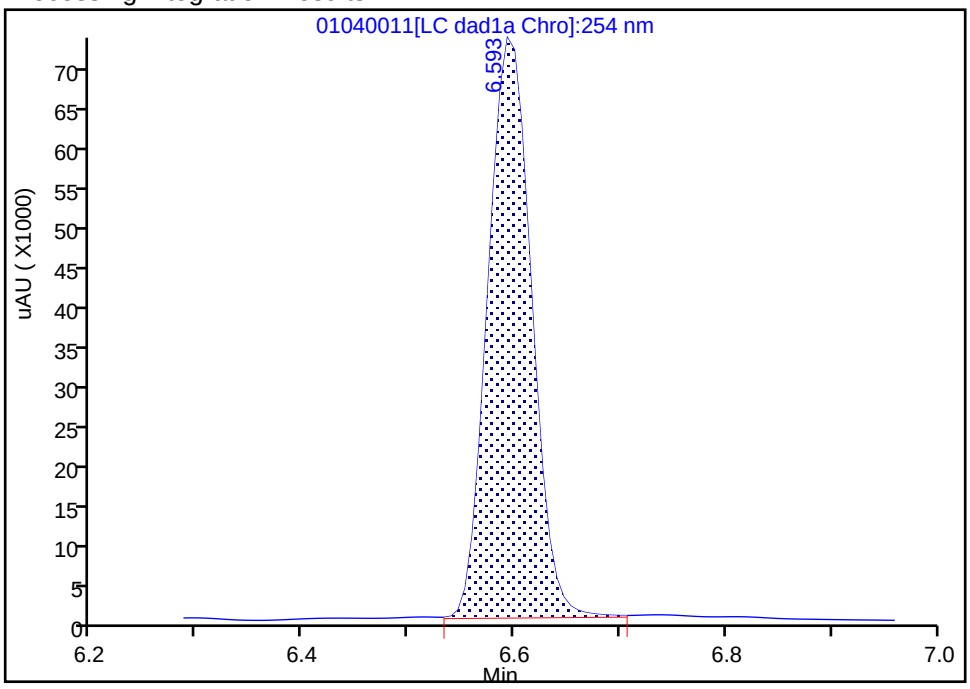
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040011.d				
Injection Date:	04-Jan-2022 18:28:10	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

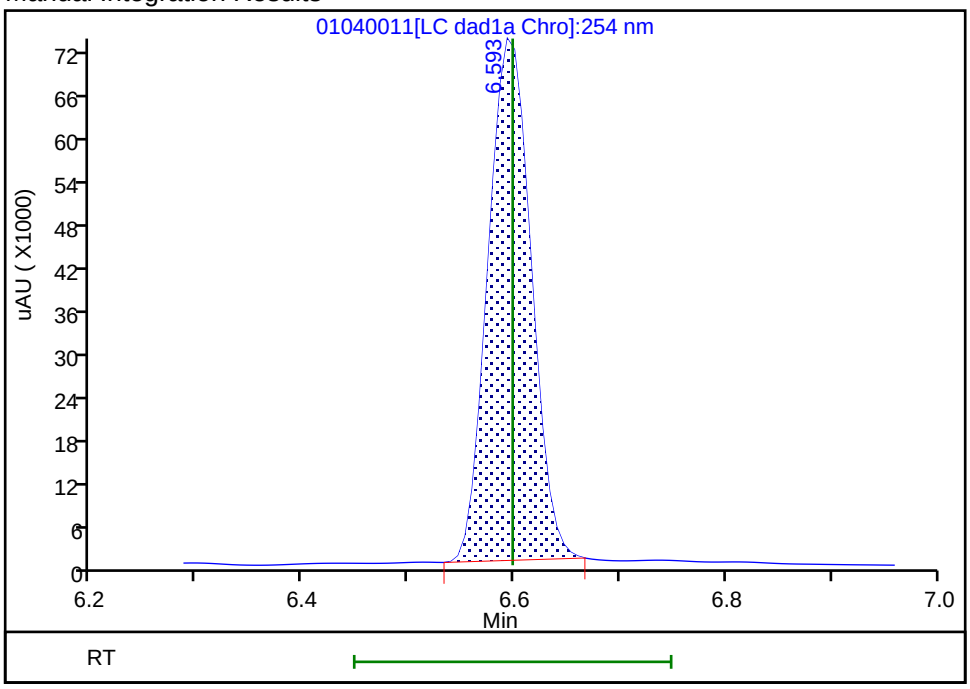
Processing Integration Results

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:

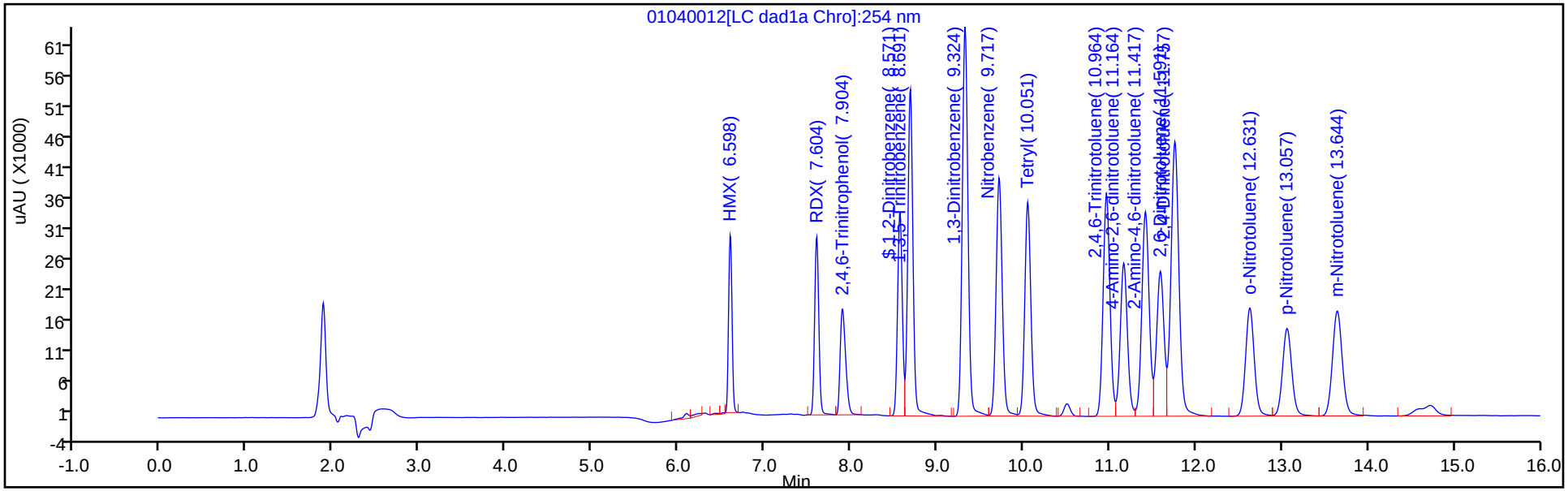
8330IntermStk_00070 Amount Added: 100.00 Units: uL

Report Date: 06-Jan-2022 20:05:11 Chrom Revision: 2.3 03-Jan-2022 17:03:12

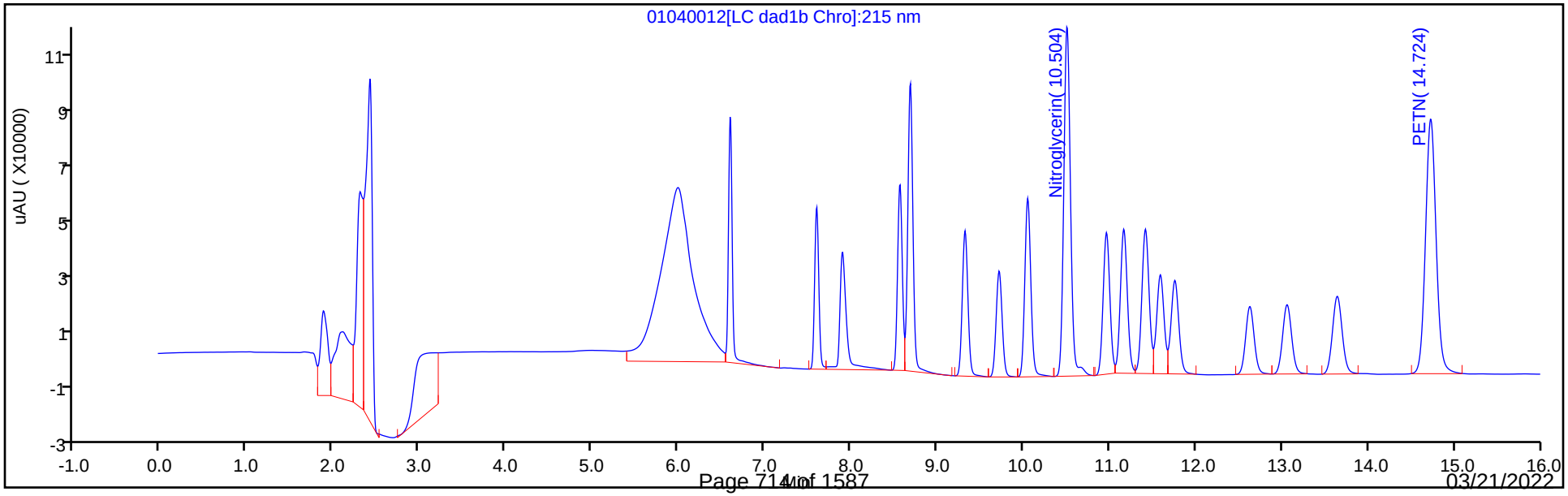
Eurofins TestAmerica, Denver

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

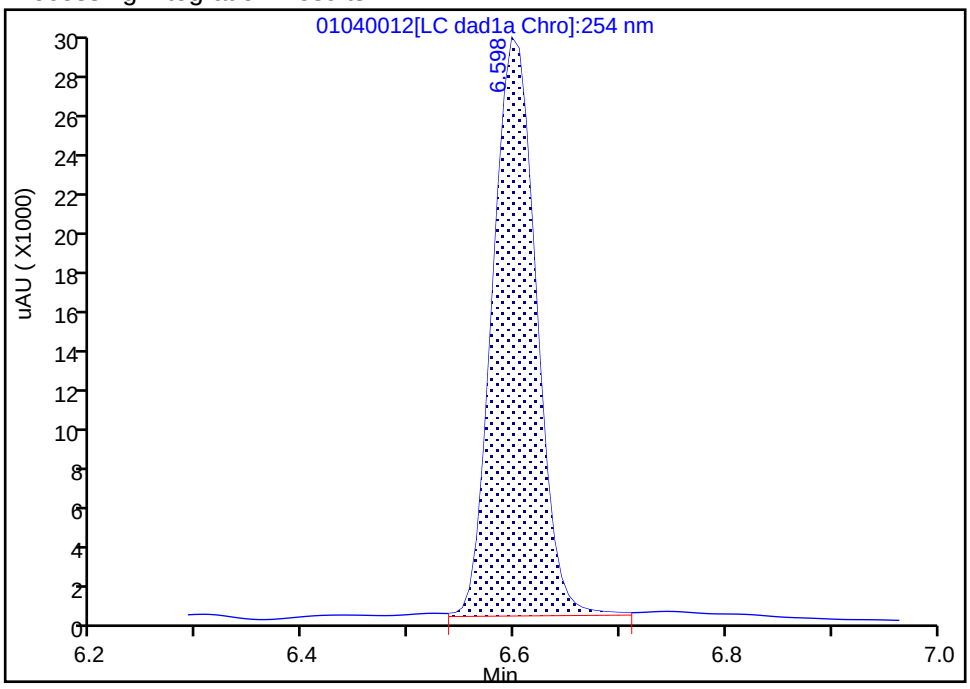
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040012.d				
Injection Date:	04-Jan-2022 18:51:00	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

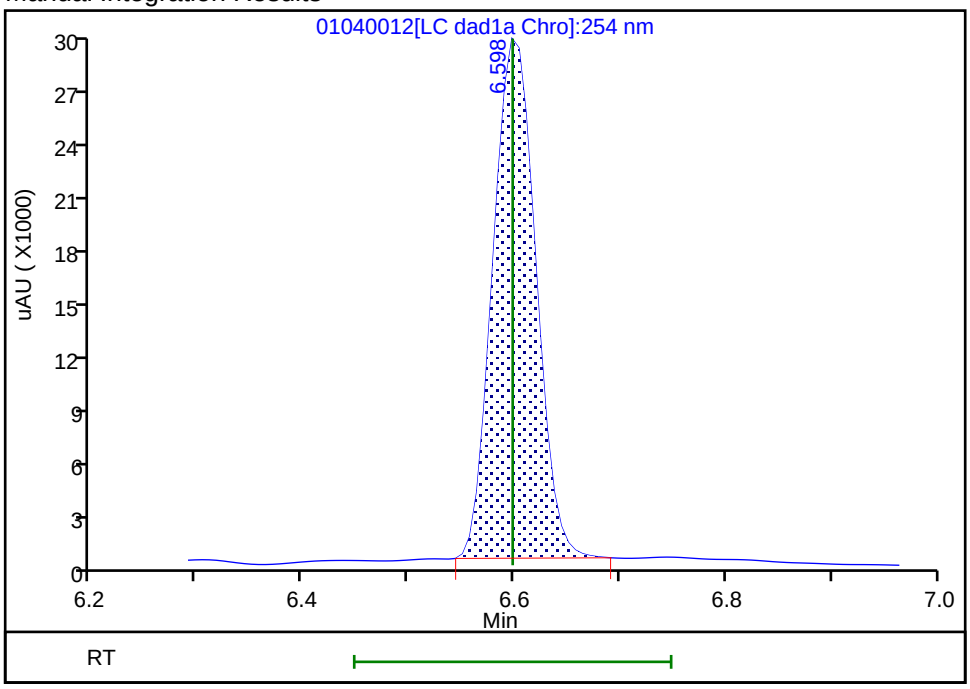
Processing Integration Results

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

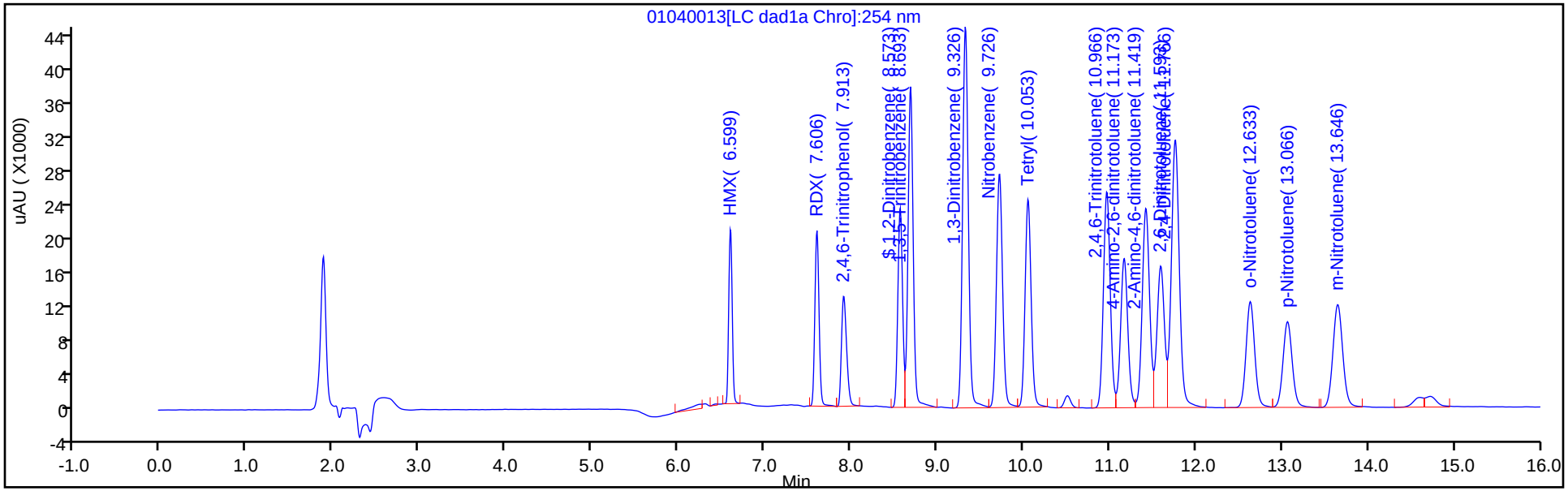
Report Date: 06-Jan-2022 20:05:11 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

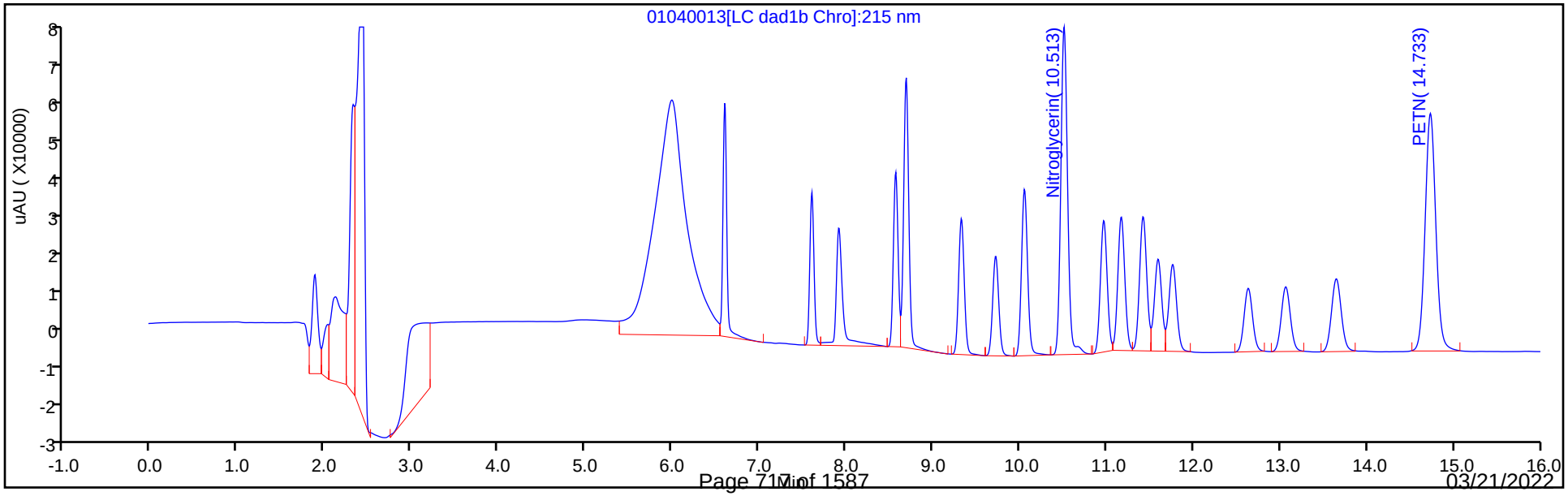
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040013.d

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

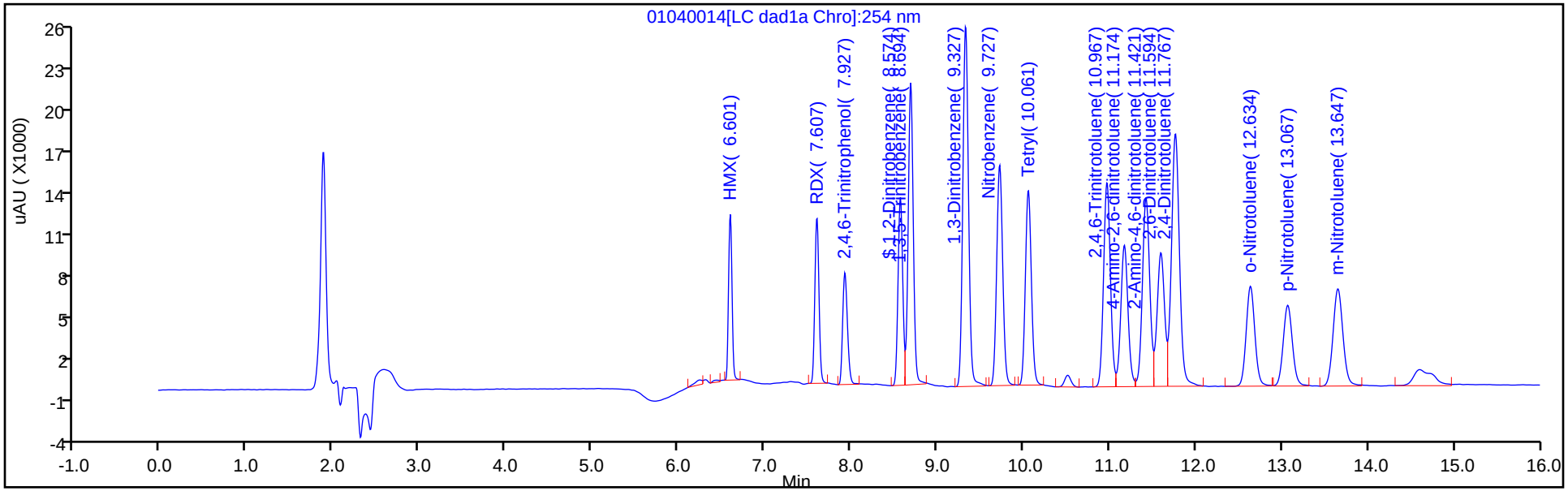
Report Date: 06-Jan-2022 20:05:12 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

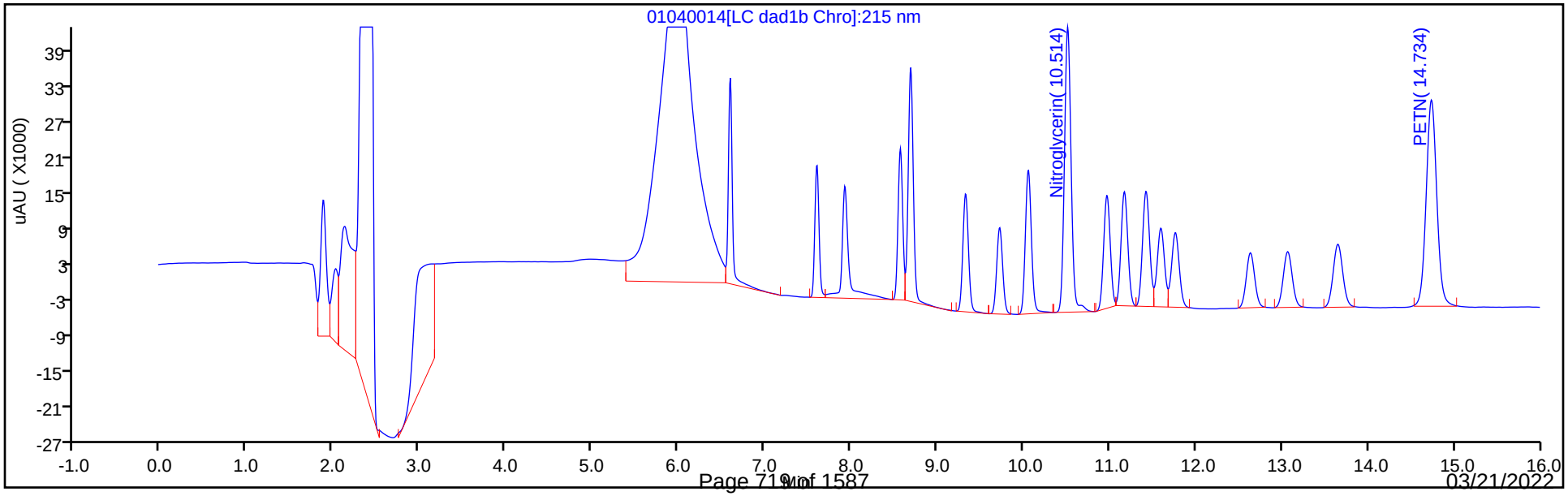
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040014.d

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

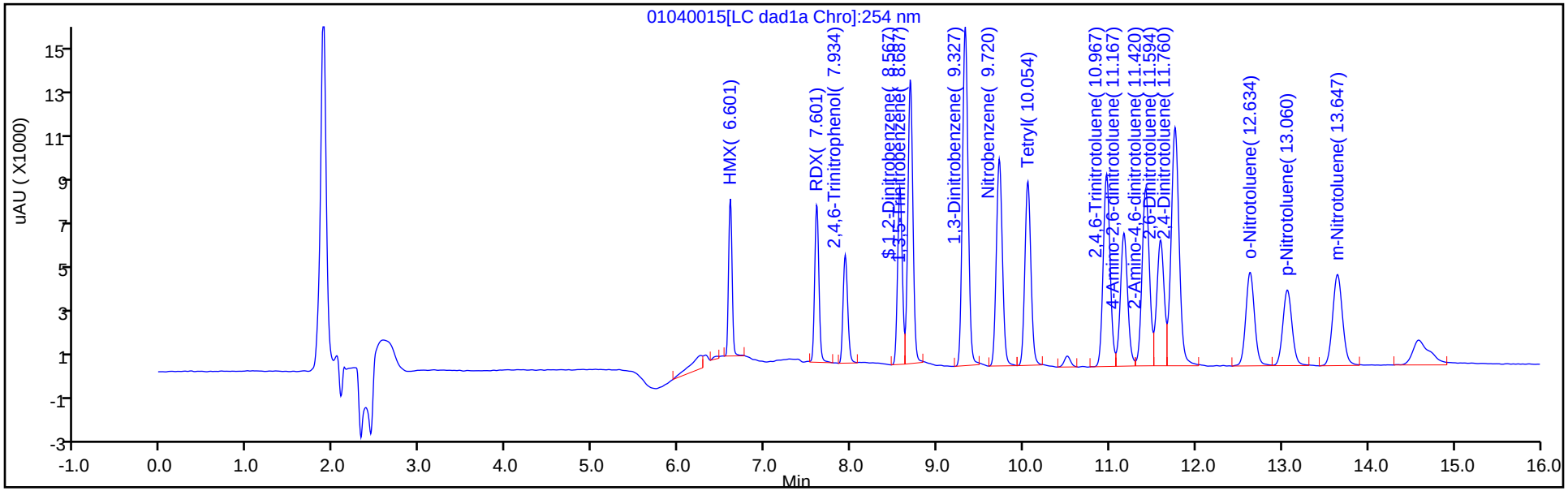
Report Date: 06-Jan-2022 20:05:12 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

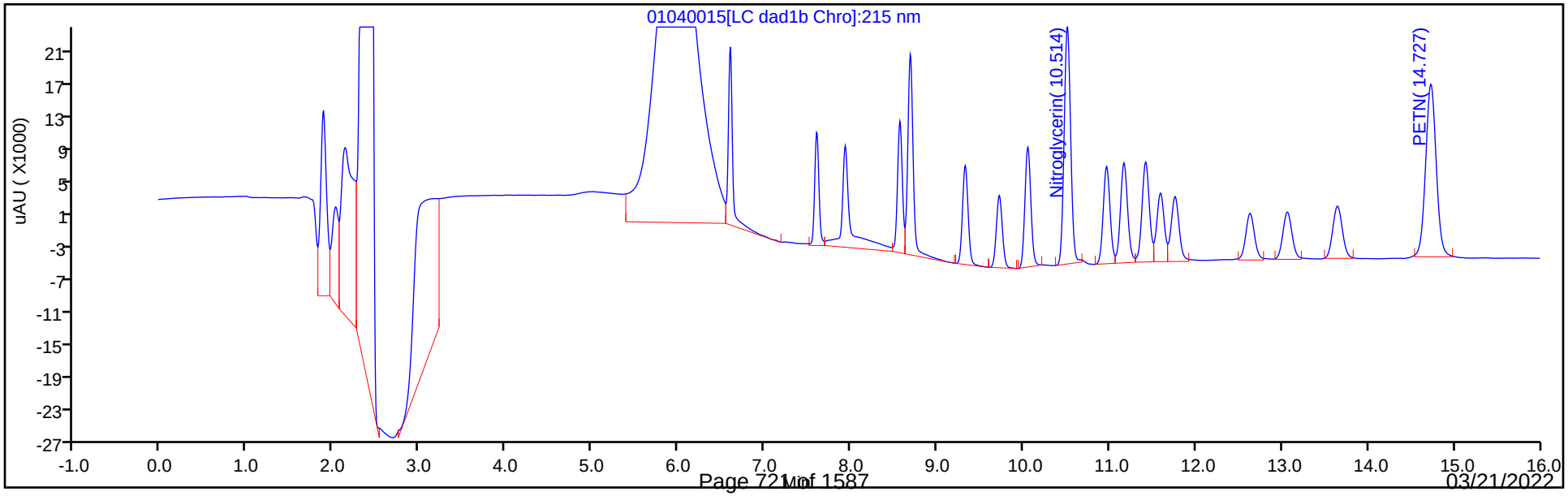
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040015.d

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

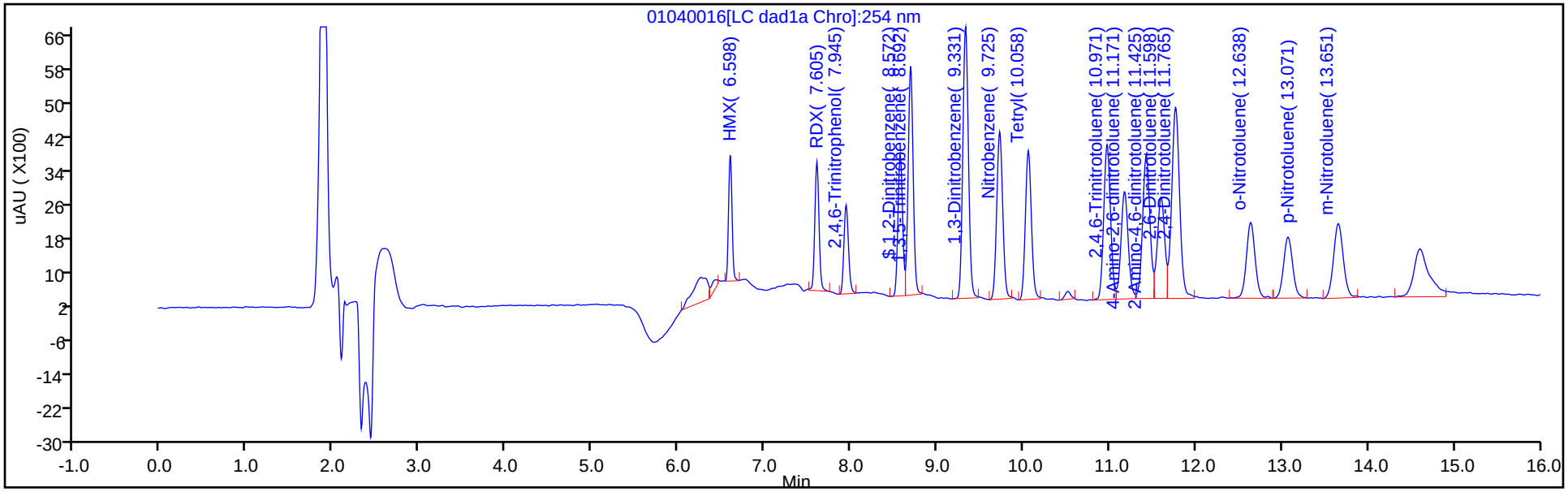
Report Date: 06-Jan-2022 20:05:13 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

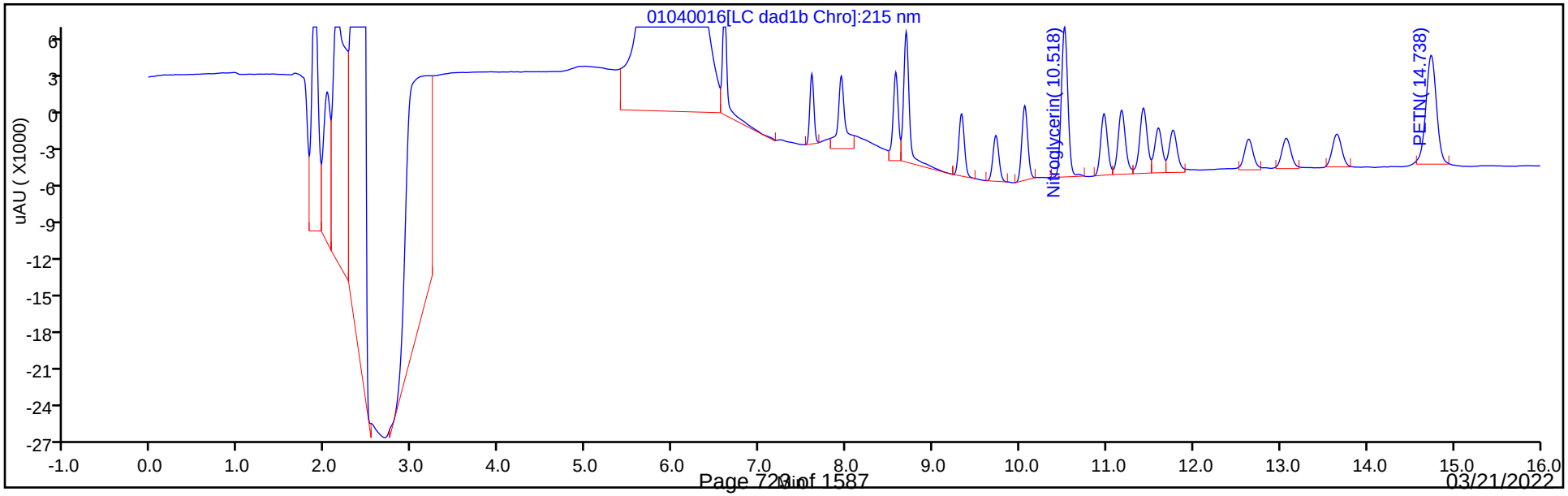
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040016.d

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

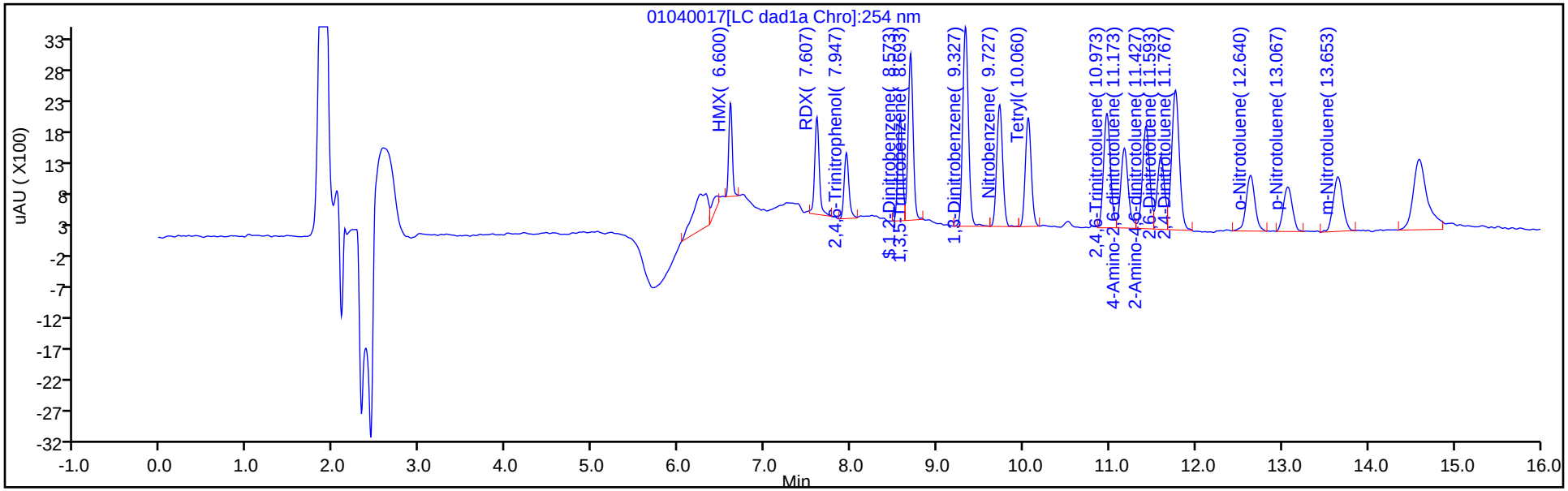
Report Date: 06-Jan-2022 20:05:13 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

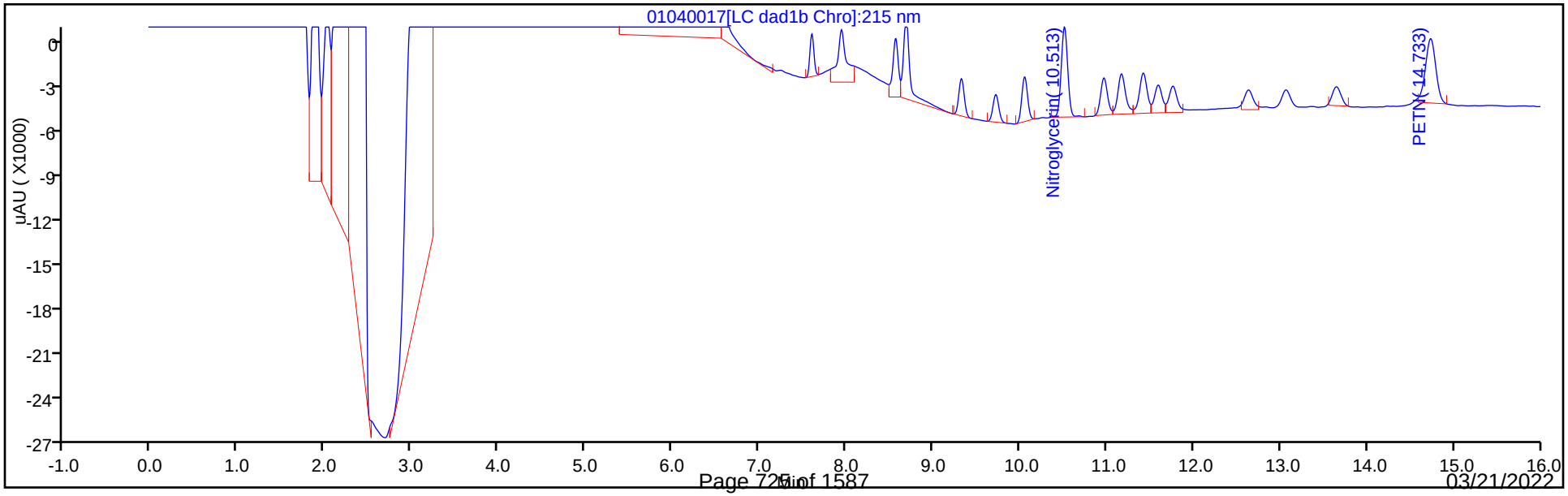
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040017.d

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

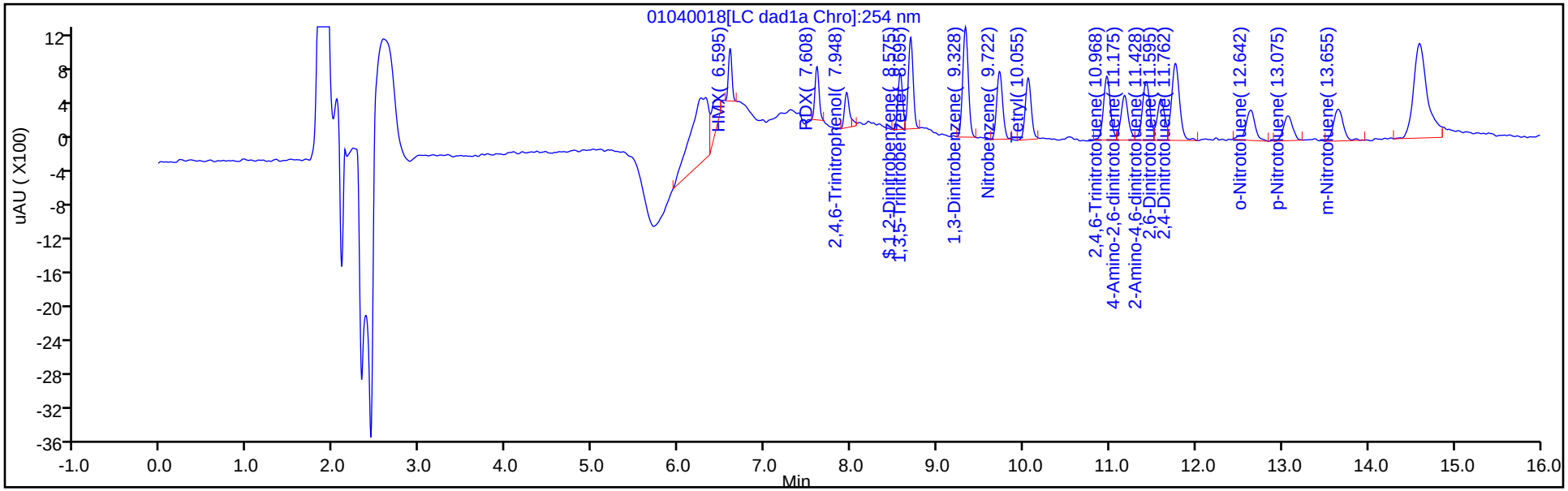
Report Date: 06-Jan-2022 20:05:13 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

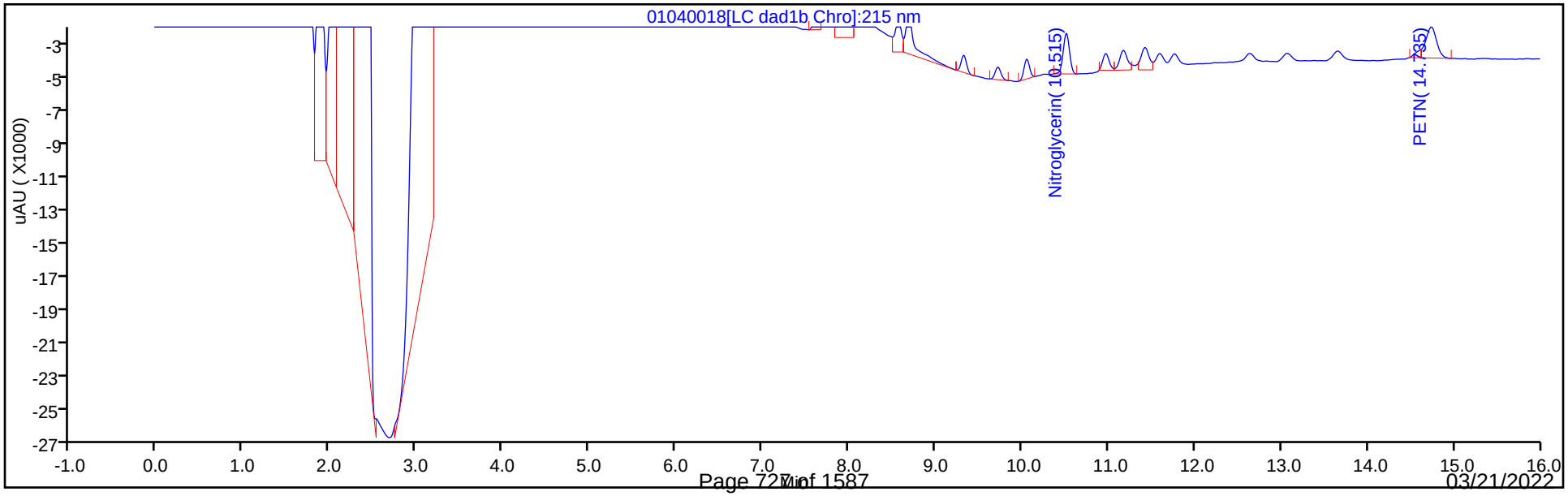
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040018.d

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

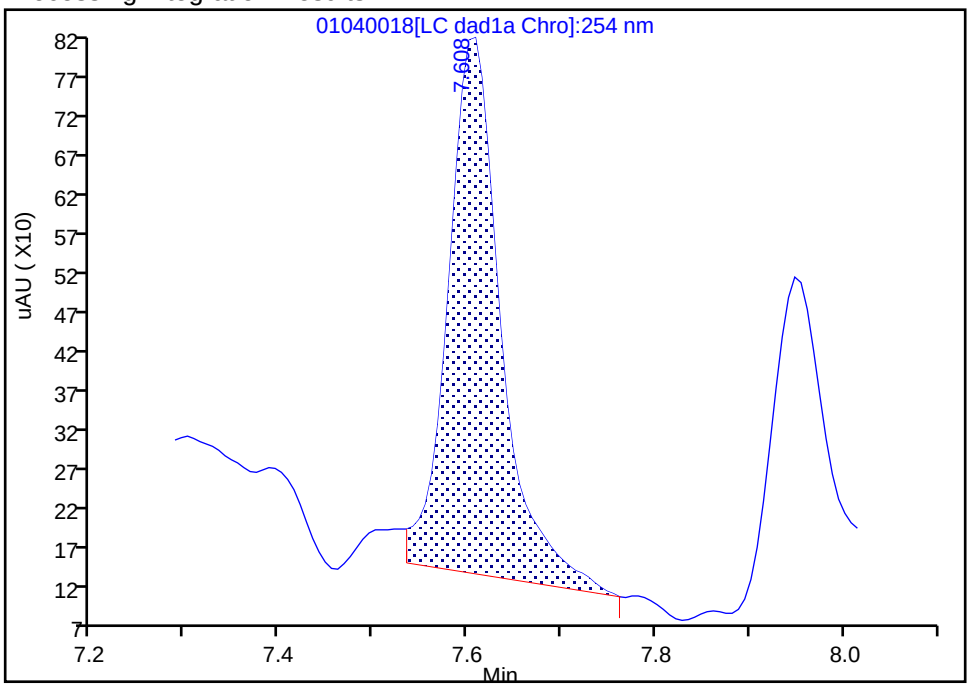
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040018.d				
Injection Date:	04-Jan-2022 21:08:26	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

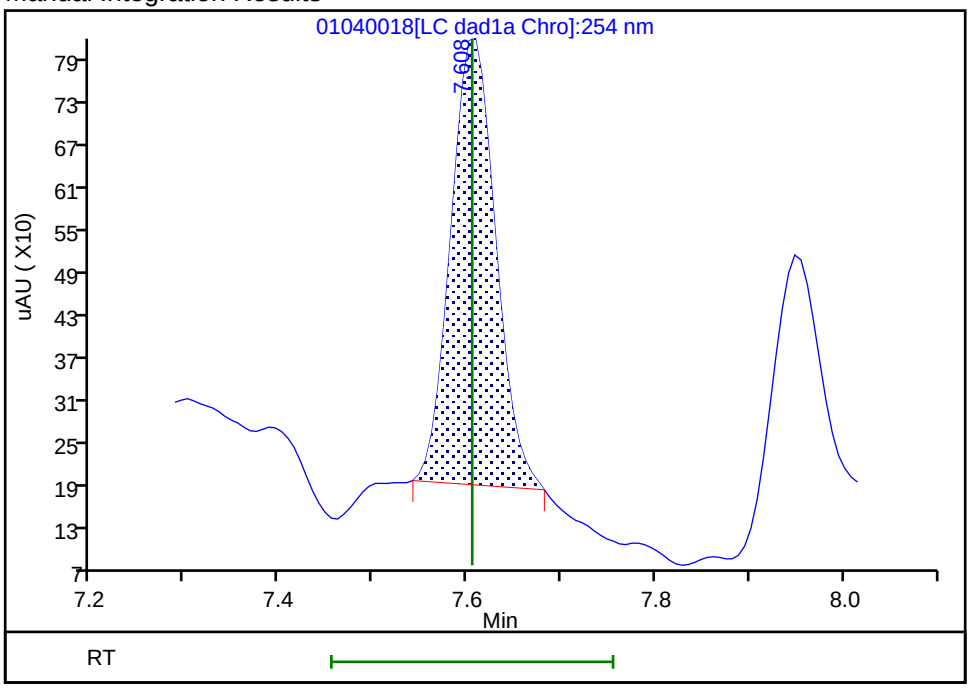
Processing Integration Results

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

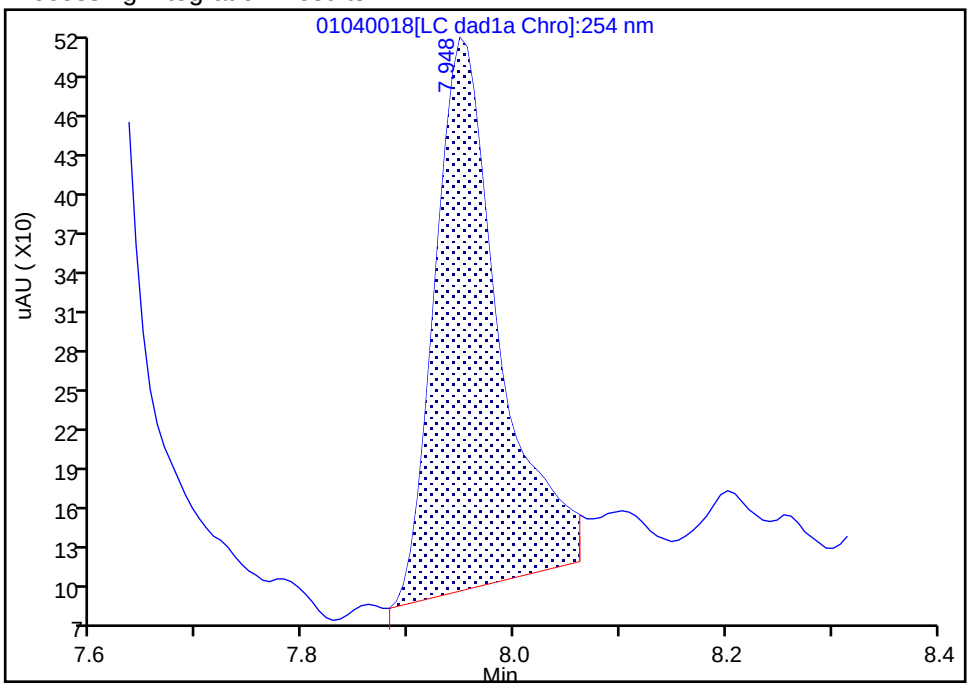
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040018.d				
Injection Date:	04-Jan-2022 21:08:26	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

9 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

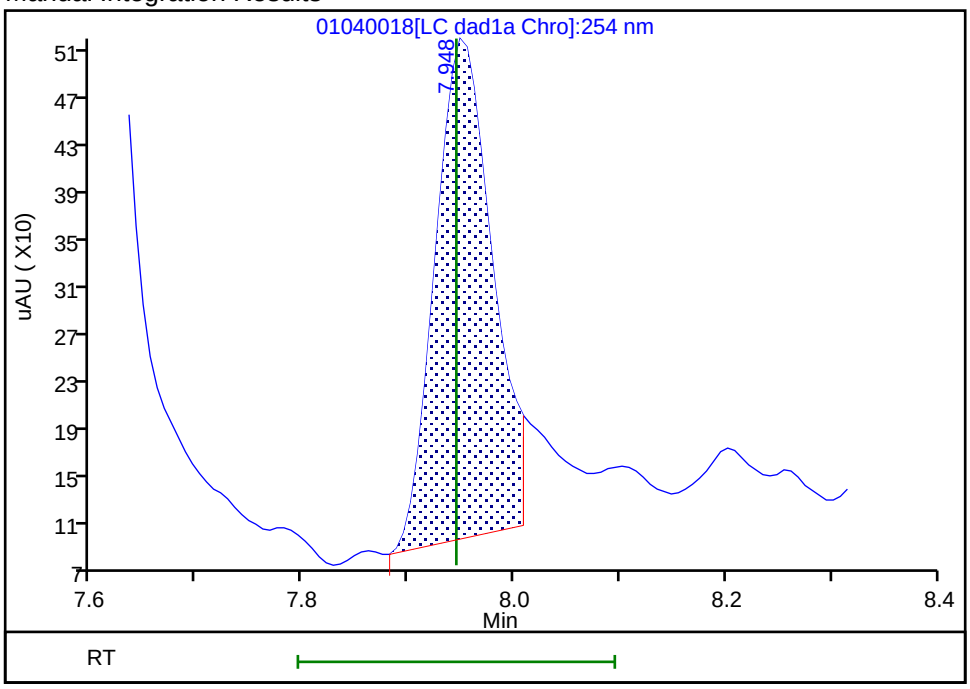
Processing Integration Results

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

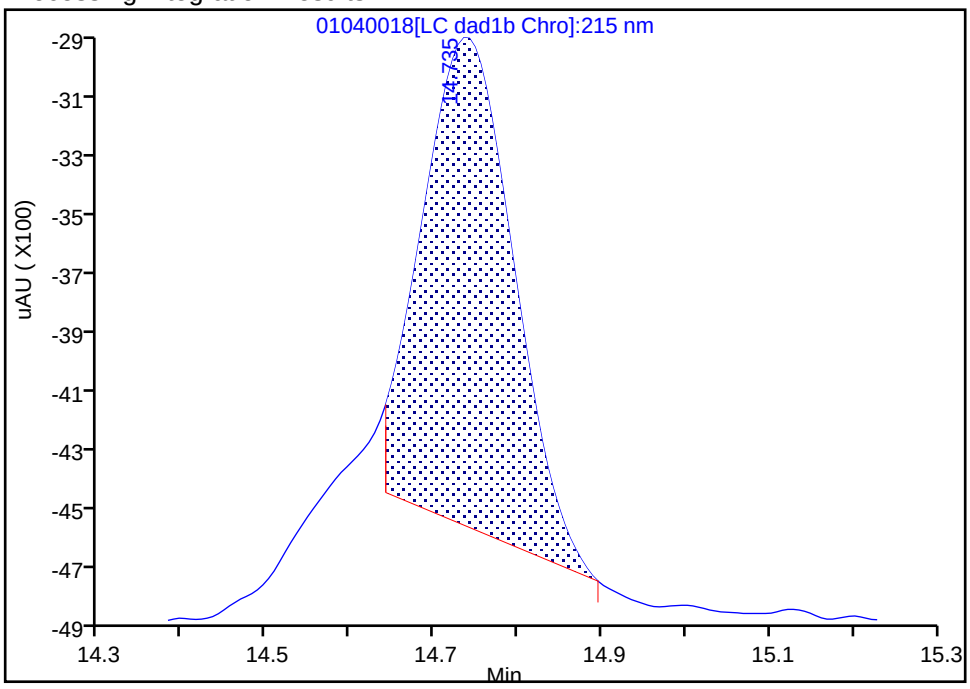
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040018.d
Injection Date: 04-Jan-2022 21:08:26 Instrument ID: CHHPLC_X3
Lims ID: IC INT 2
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

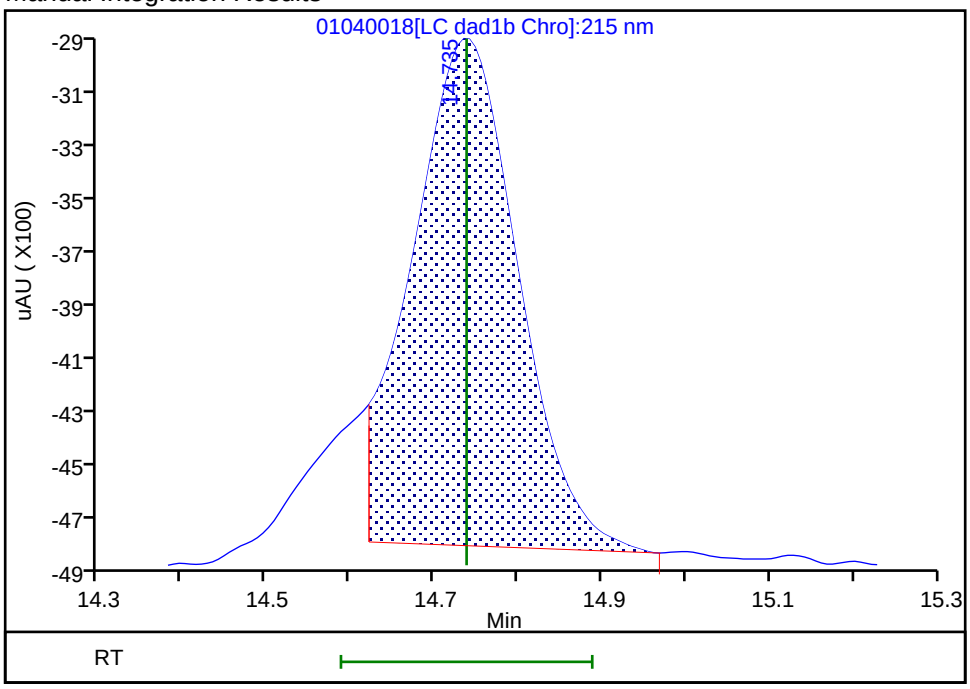
Processing Integration Results

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

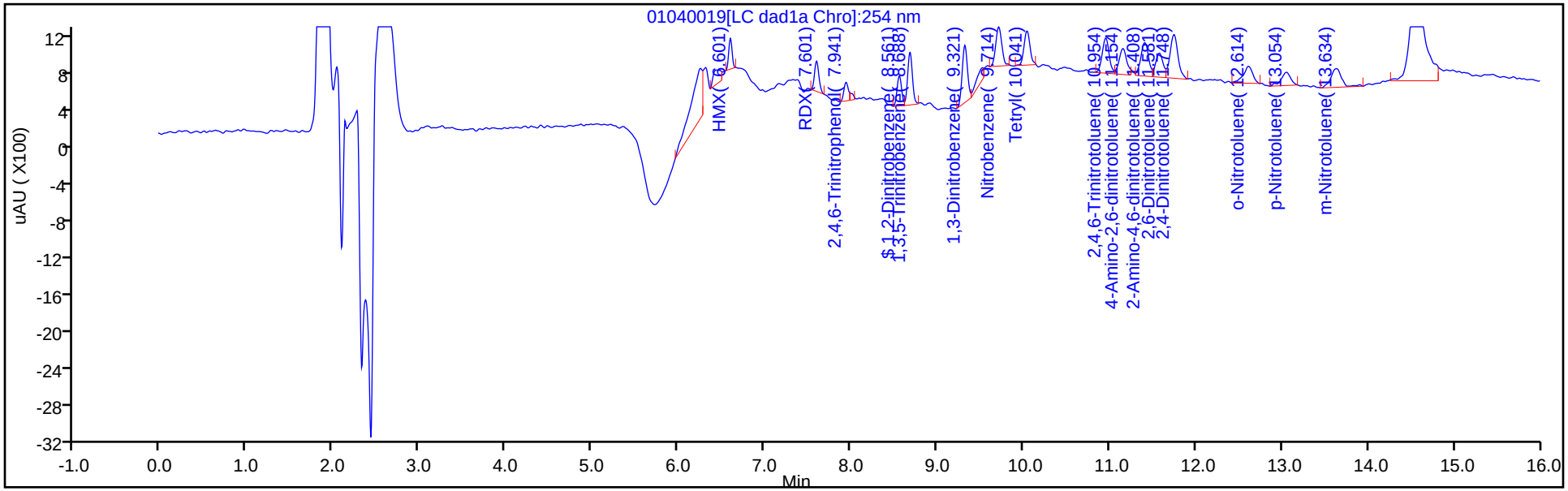
Report Date: 06-Jan-2022 20:05:14 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

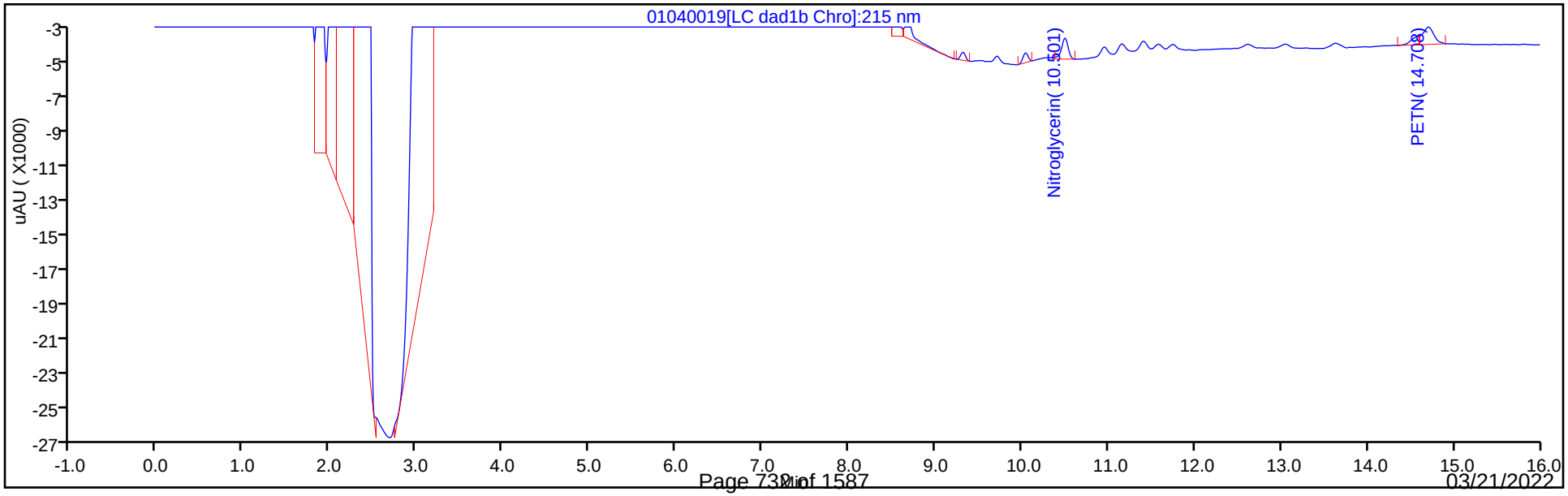
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d

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

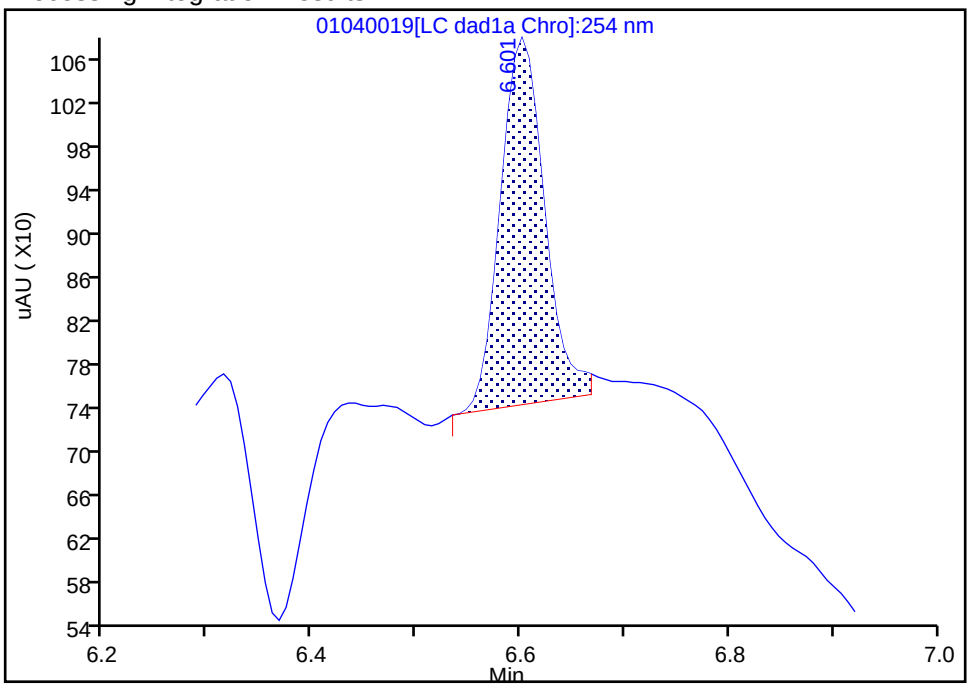
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

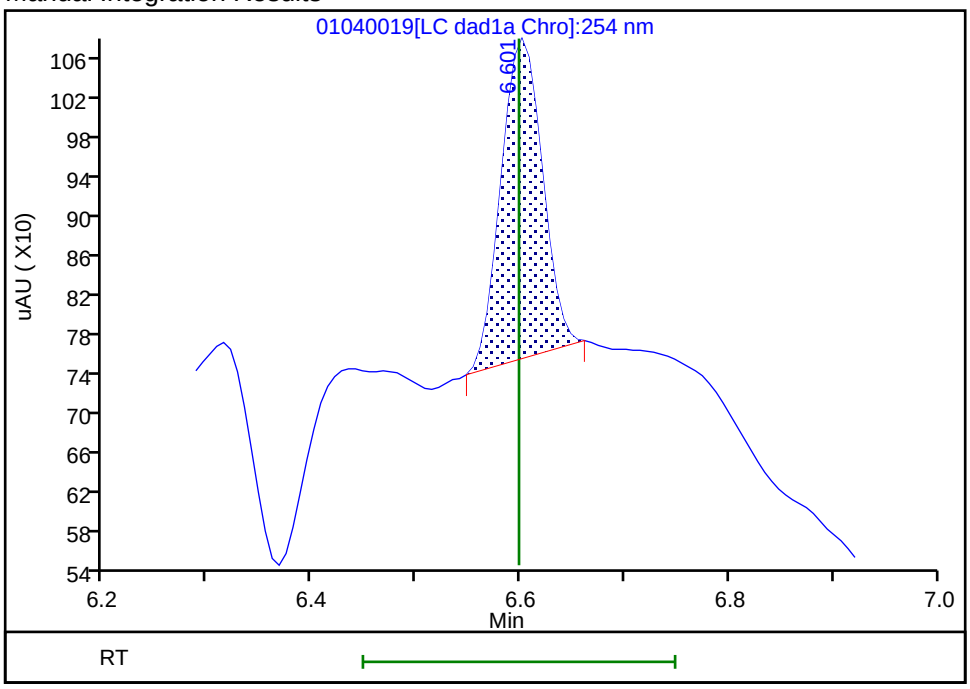
Processing Integration Results

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

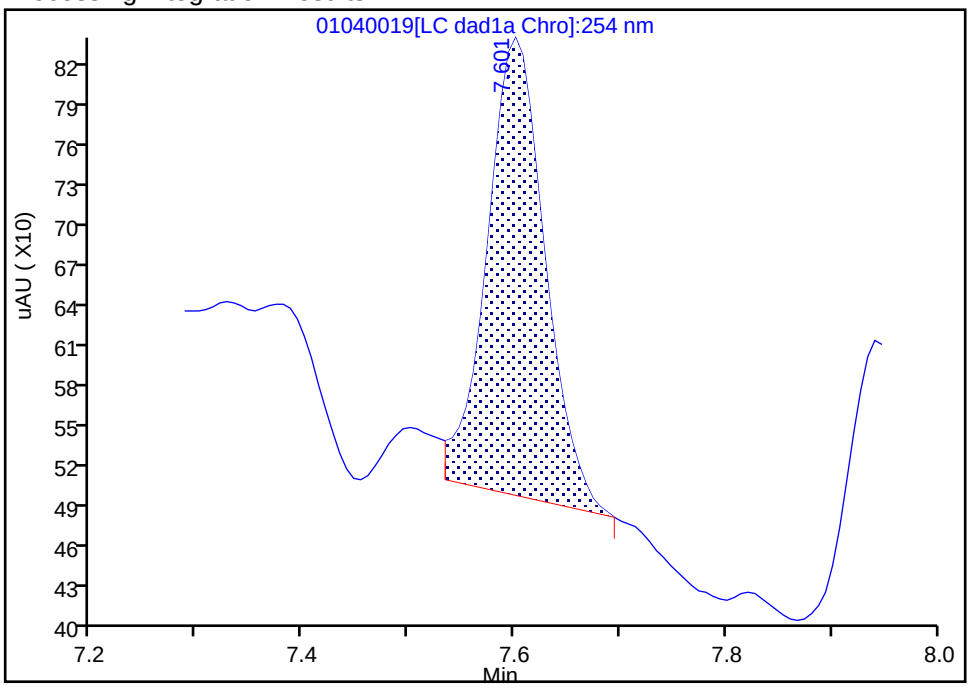
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

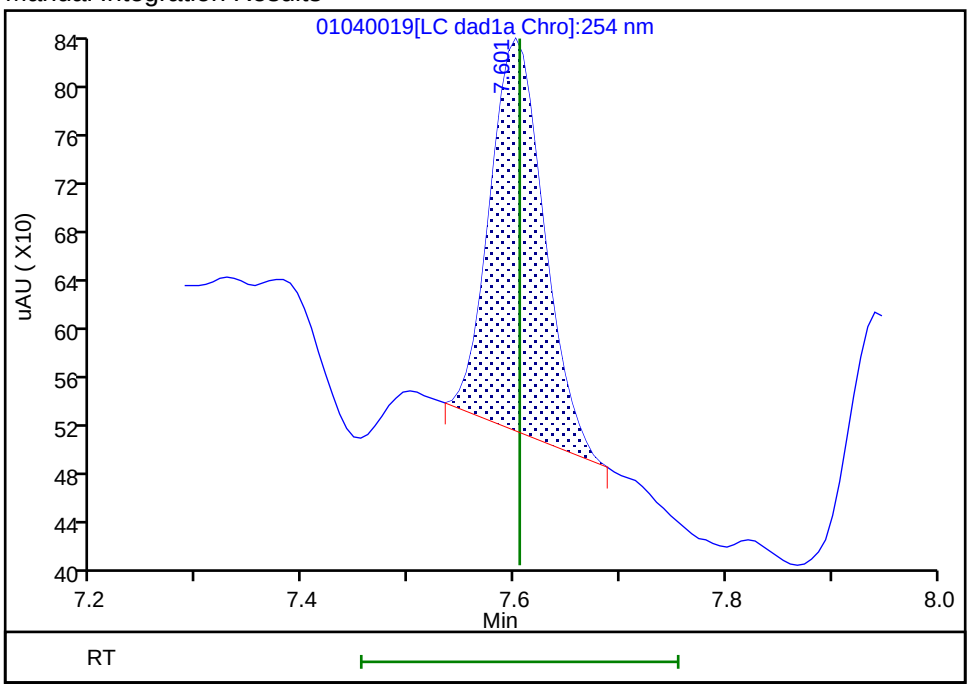
Processing Integration Results

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

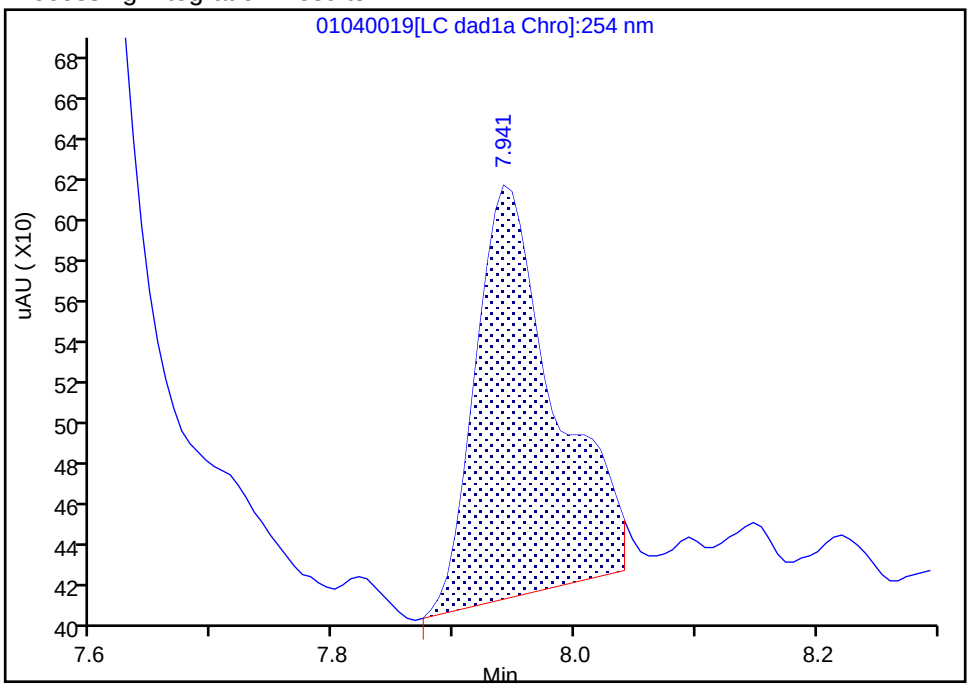
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

9 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

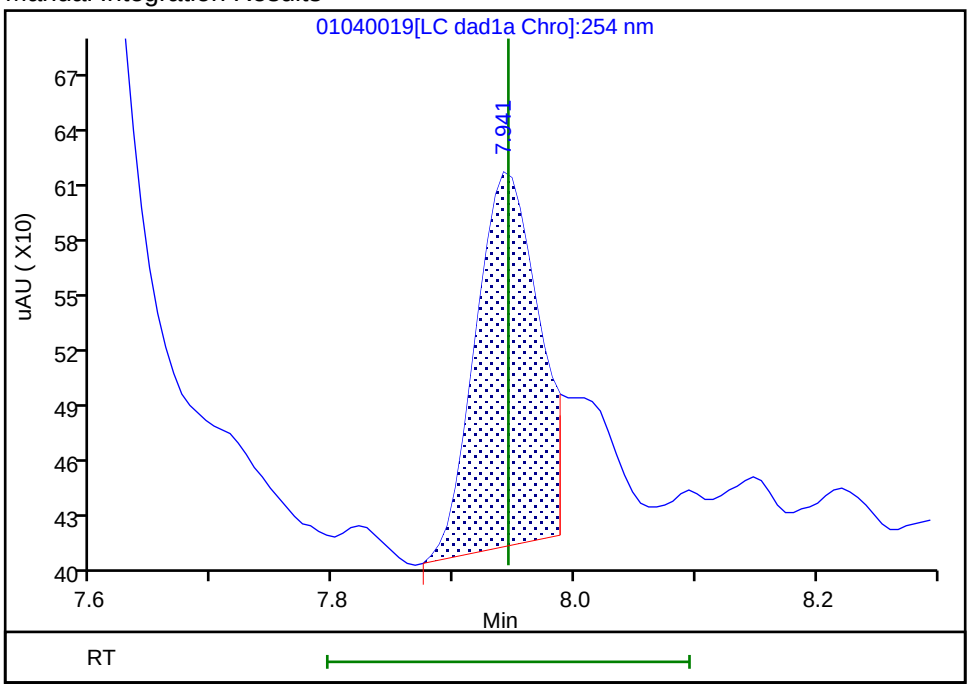
Processing Integration Results

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

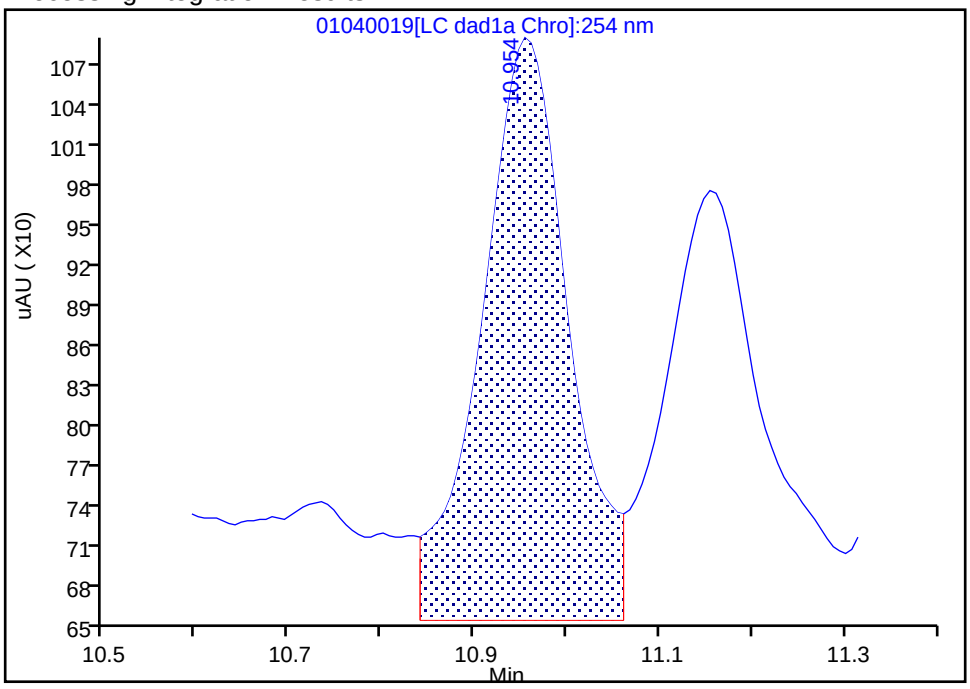
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

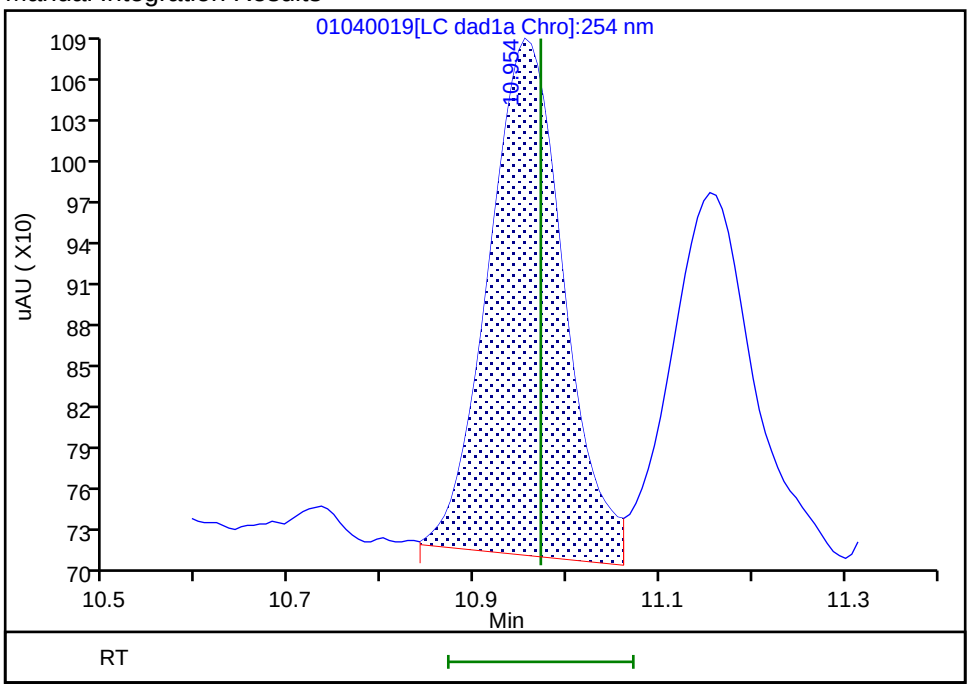
Processing Integration Results

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

Eurofins TestAmerica, Denver

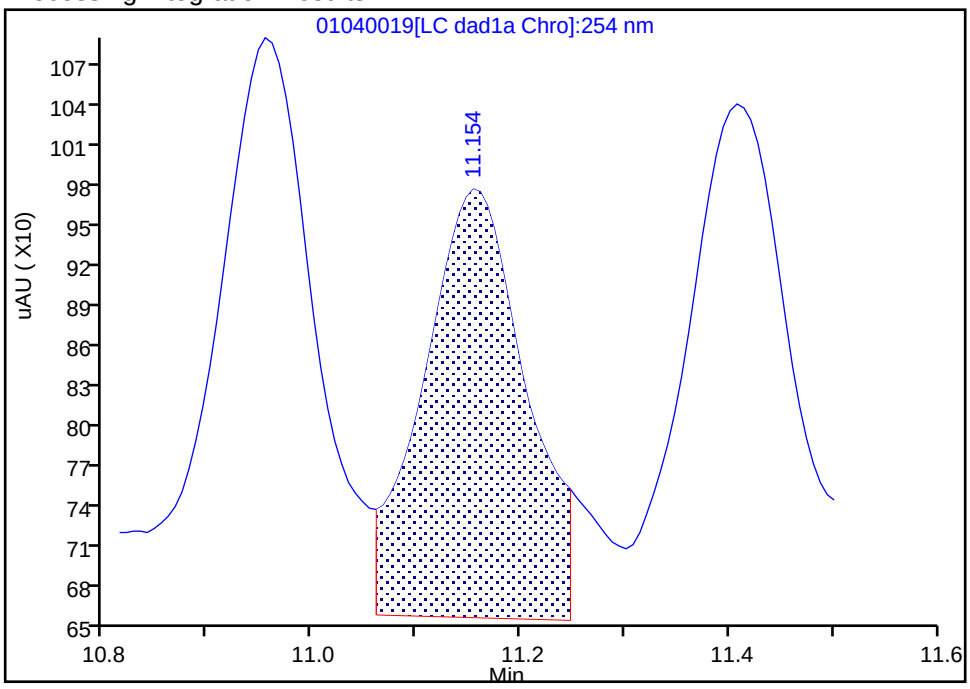
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	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

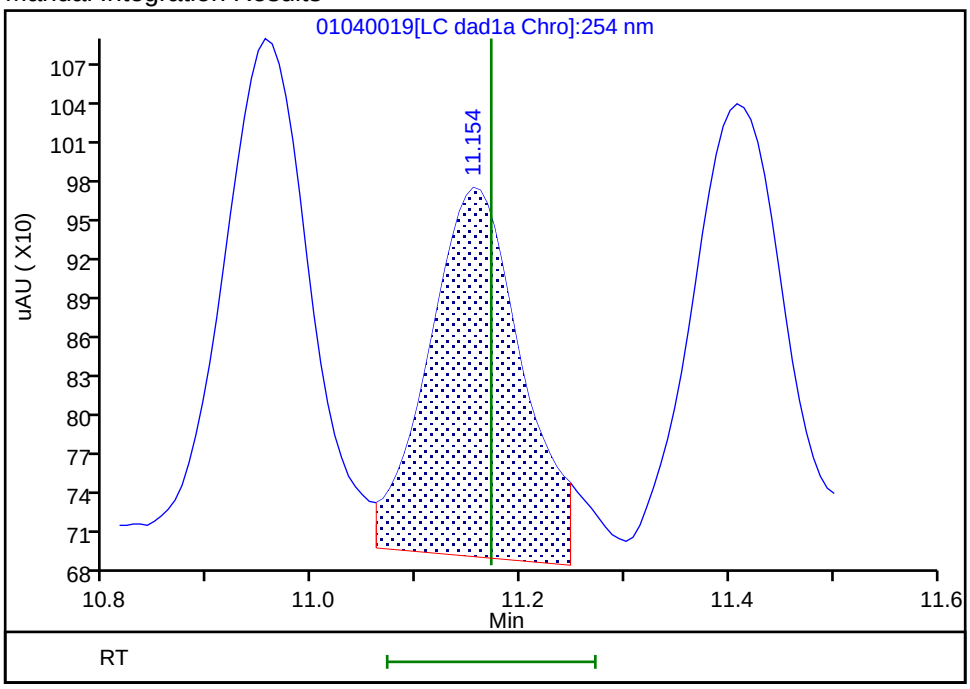
Processing Integration Results

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

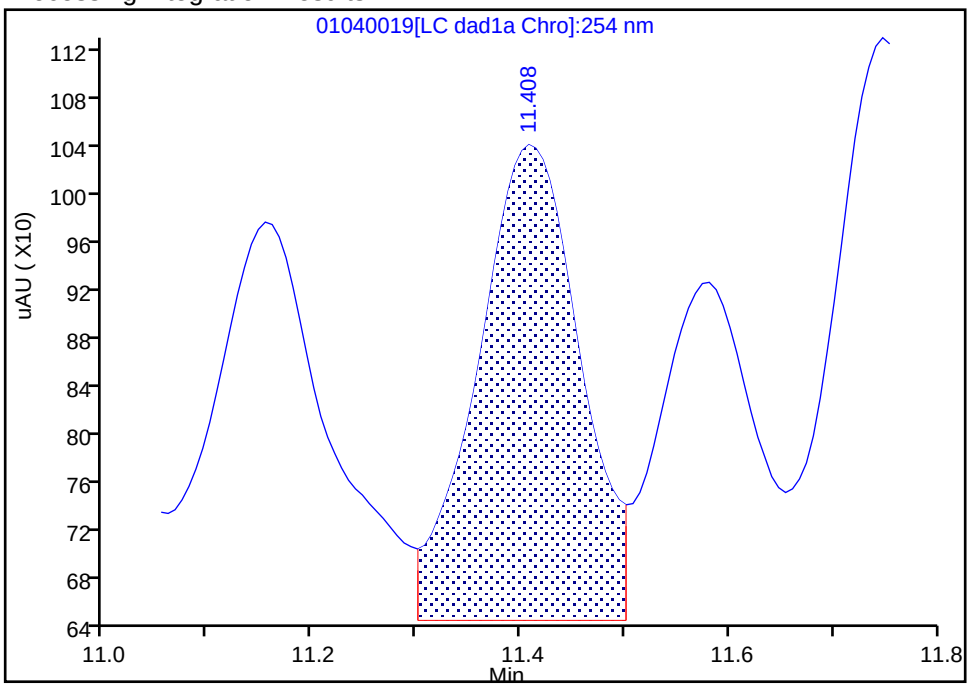
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	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

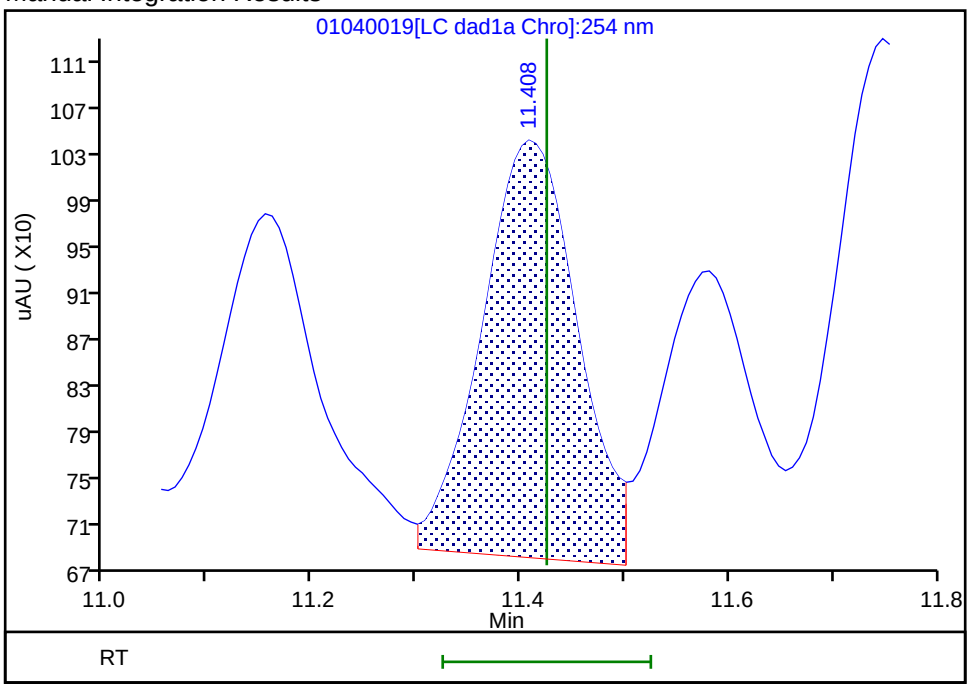
Processing Integration Results

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

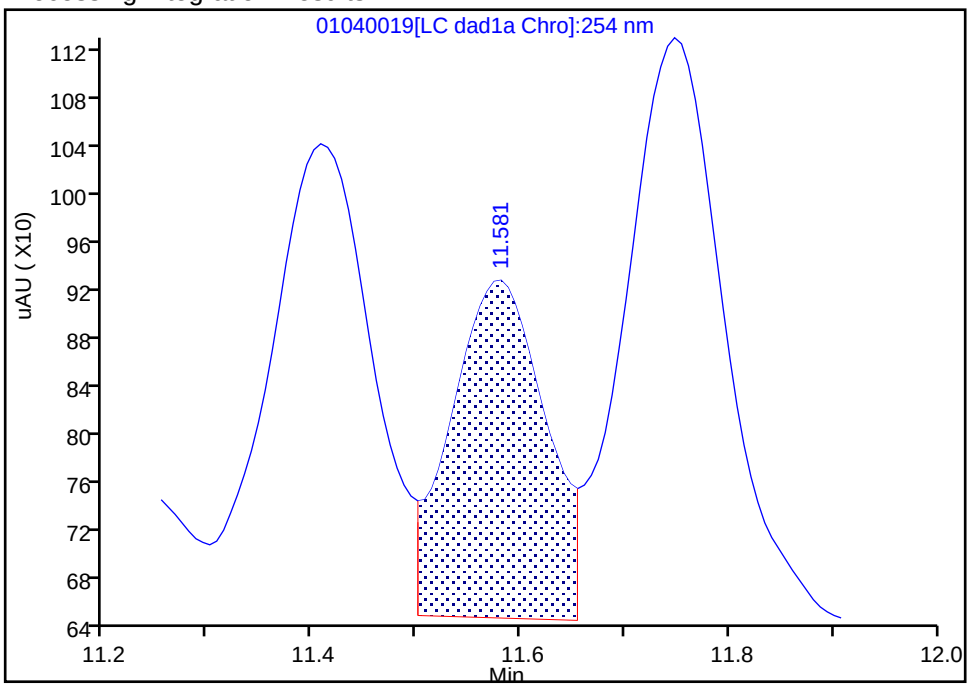
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

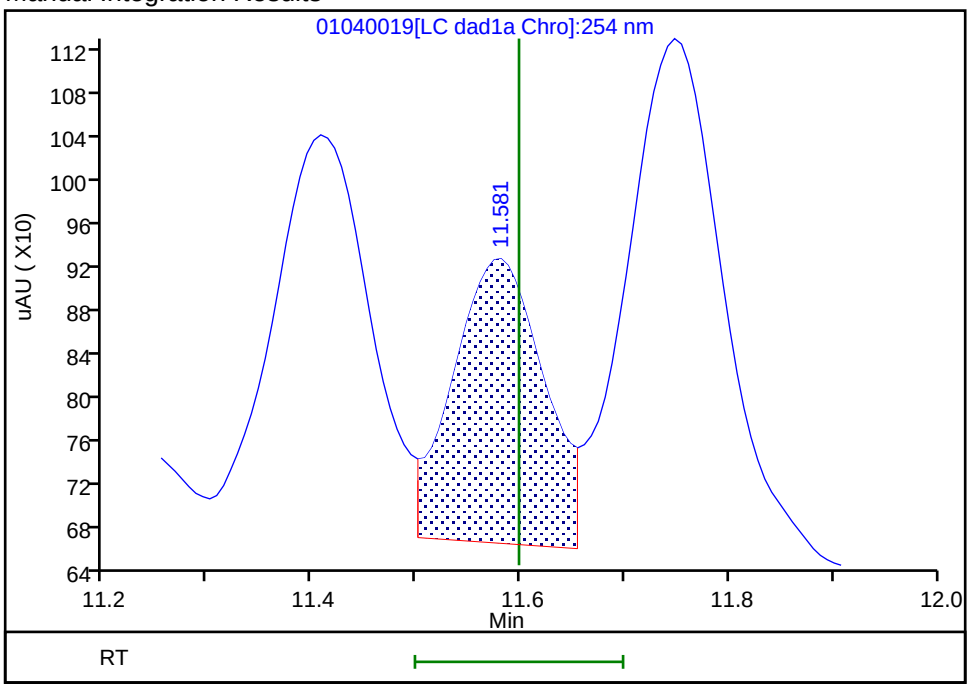
Processing Integration Results

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

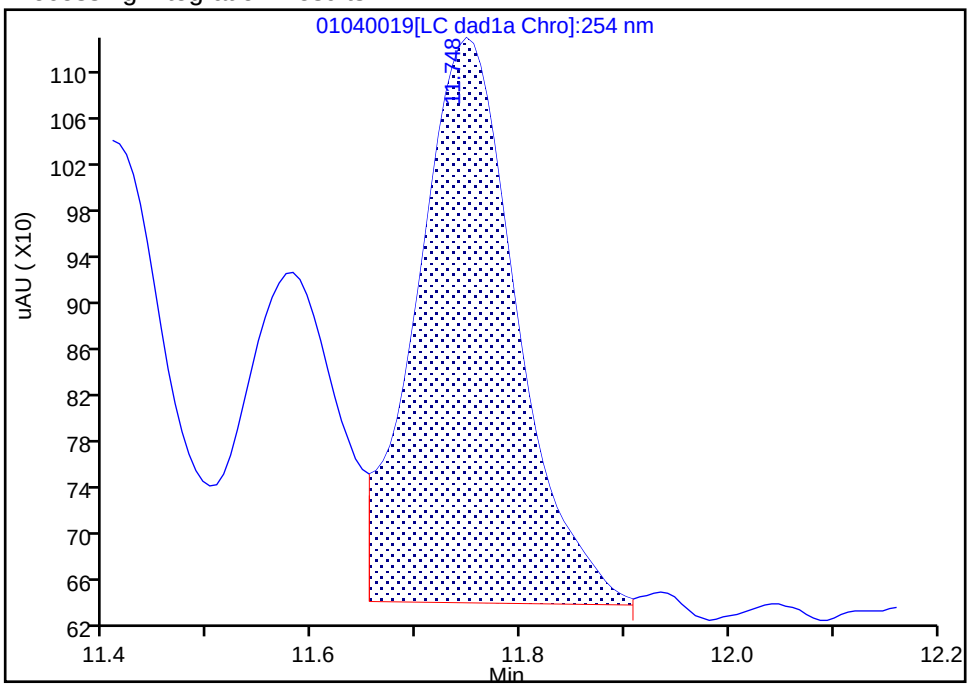
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d				
Injection Date:	04-Jan-2022 21:31:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

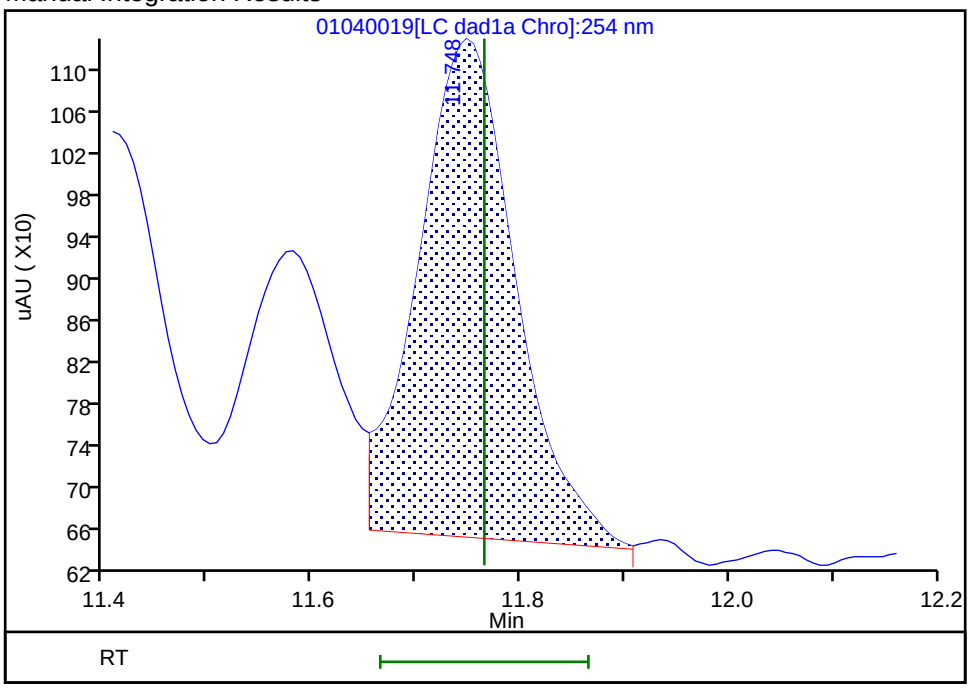
Processing Integration Results

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

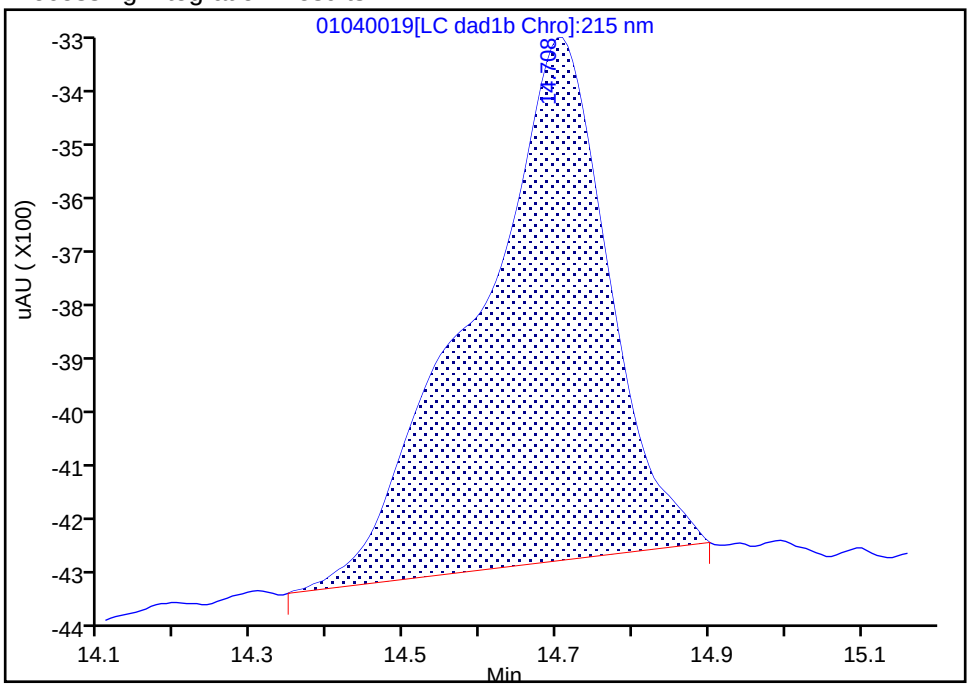
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040019.d
Injection Date: 04-Jan-2022 21:31:24 Instrument ID: CHHPLC_X3
Lims ID: IC INT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

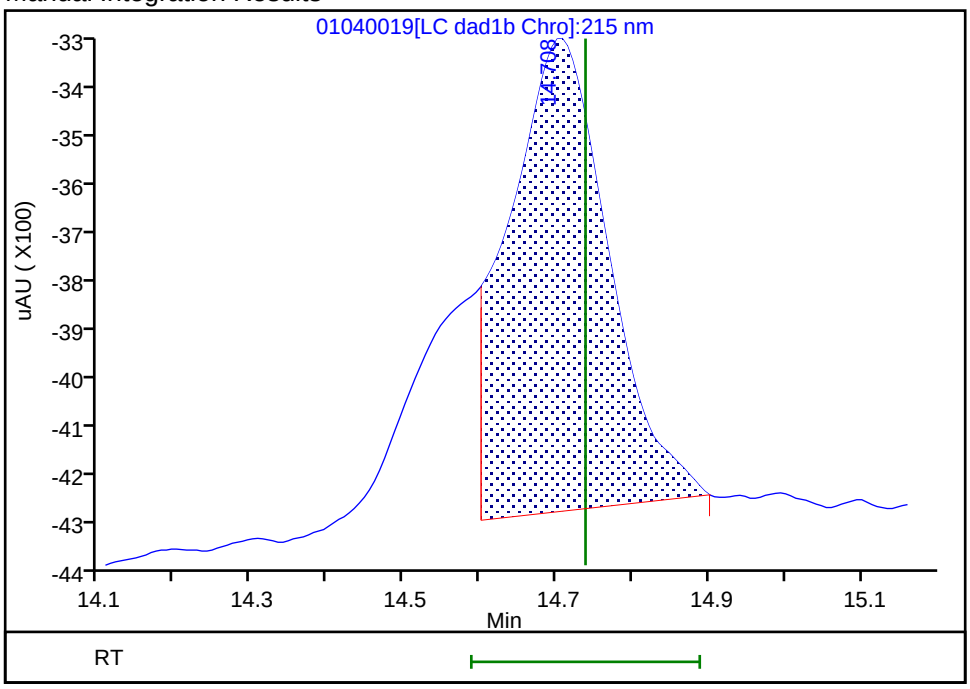
Processing Integration Results

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

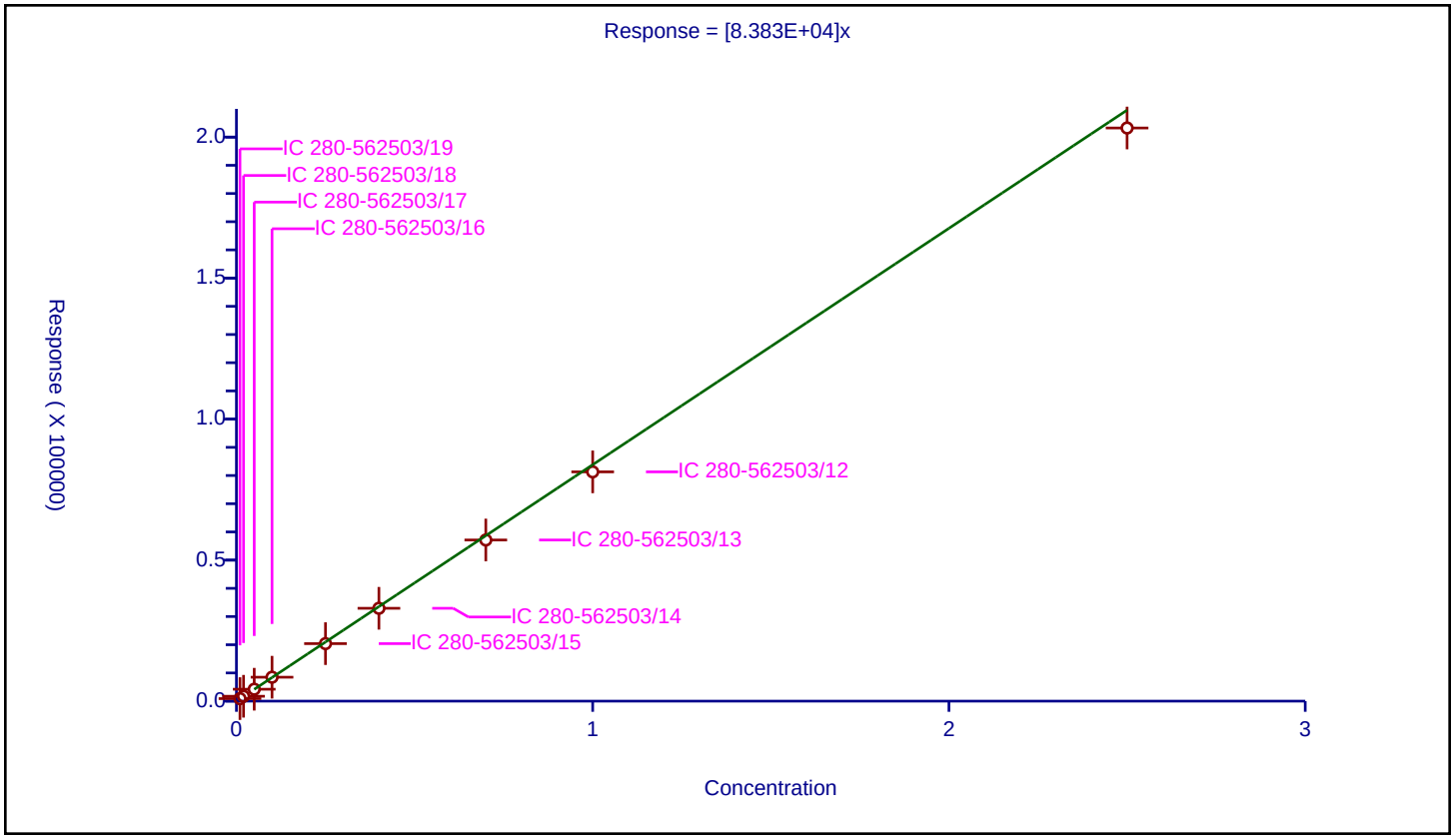
Curve Coefficients

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

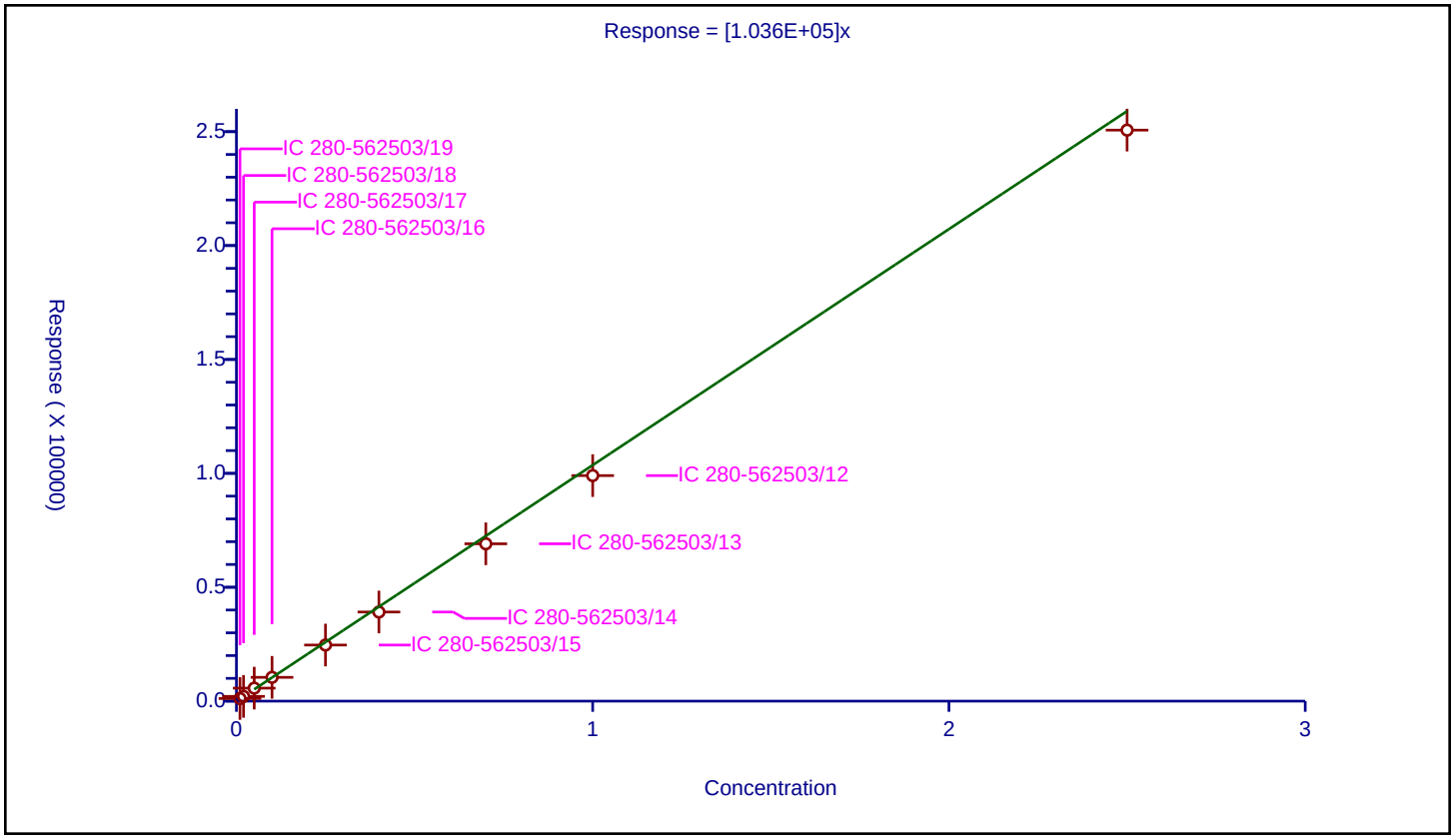
Curve Coefficients

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



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

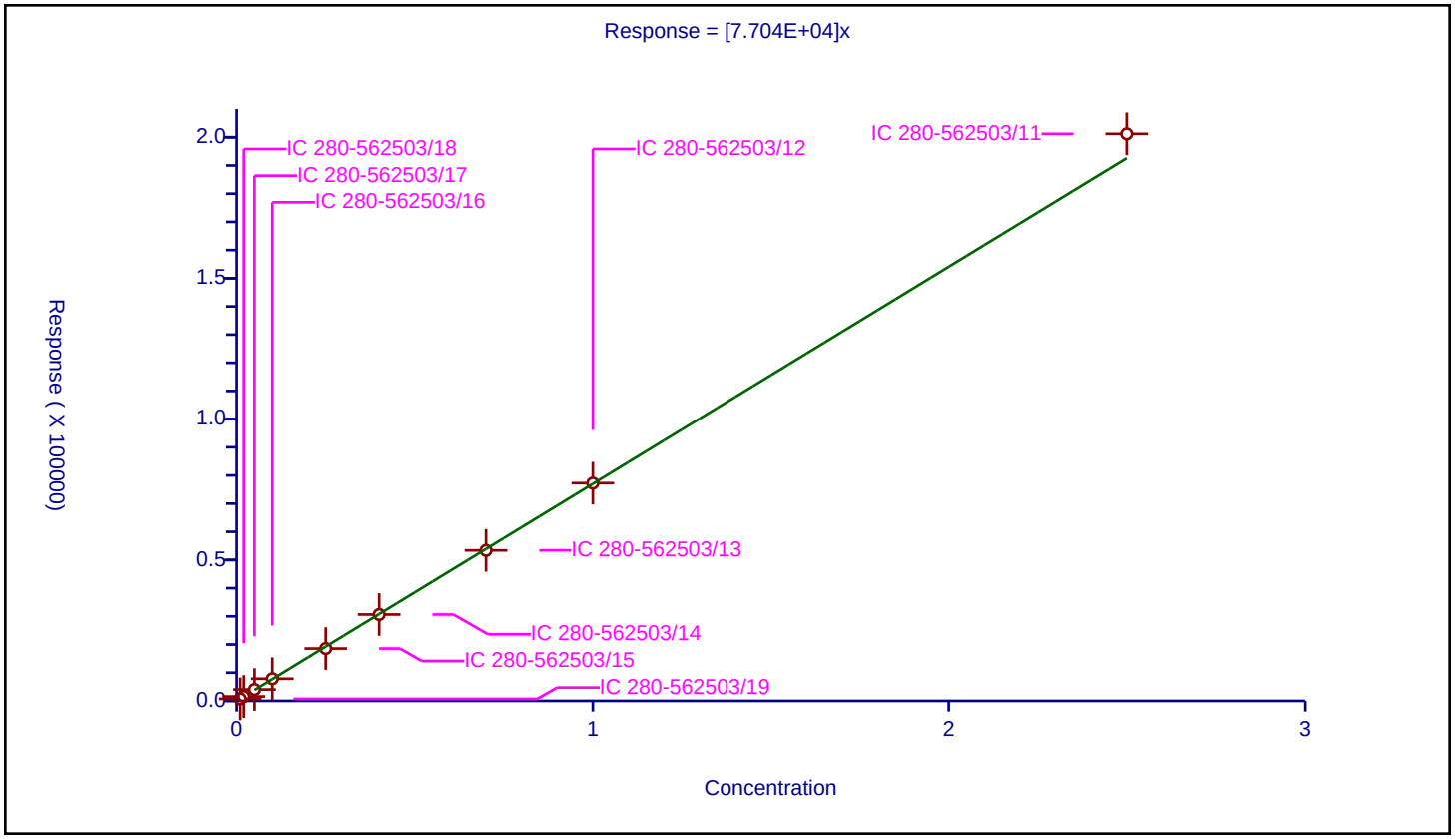
Curve Coefficients

Intercept:	0
Slope:	7.704E+04

Error Coefficients

Standard Error:	3060
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01	716.0			71600.0	Y
2	IC 280-562503/18	0.02	1554.0			77700.0	Y
3	IC 280-562503/17	0.05	4029.0			80580.0	Y
4	IC 280-562503/16	0.1	7855.0			78550.0	Y
5	IC 280-562503/15	0.25	18560.0			74240.0	Y
6	IC 280-562503/14	0.4	30649.0			76622.5	Y
7	IC 280-562503/13	0.7	53408.0			76297.142857	Y
8	IC 280-562503/12	1.0	77279.0			77279.0	Y
9	IC 280-562503/11	2.5	201210.0			80484.0	Y



Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

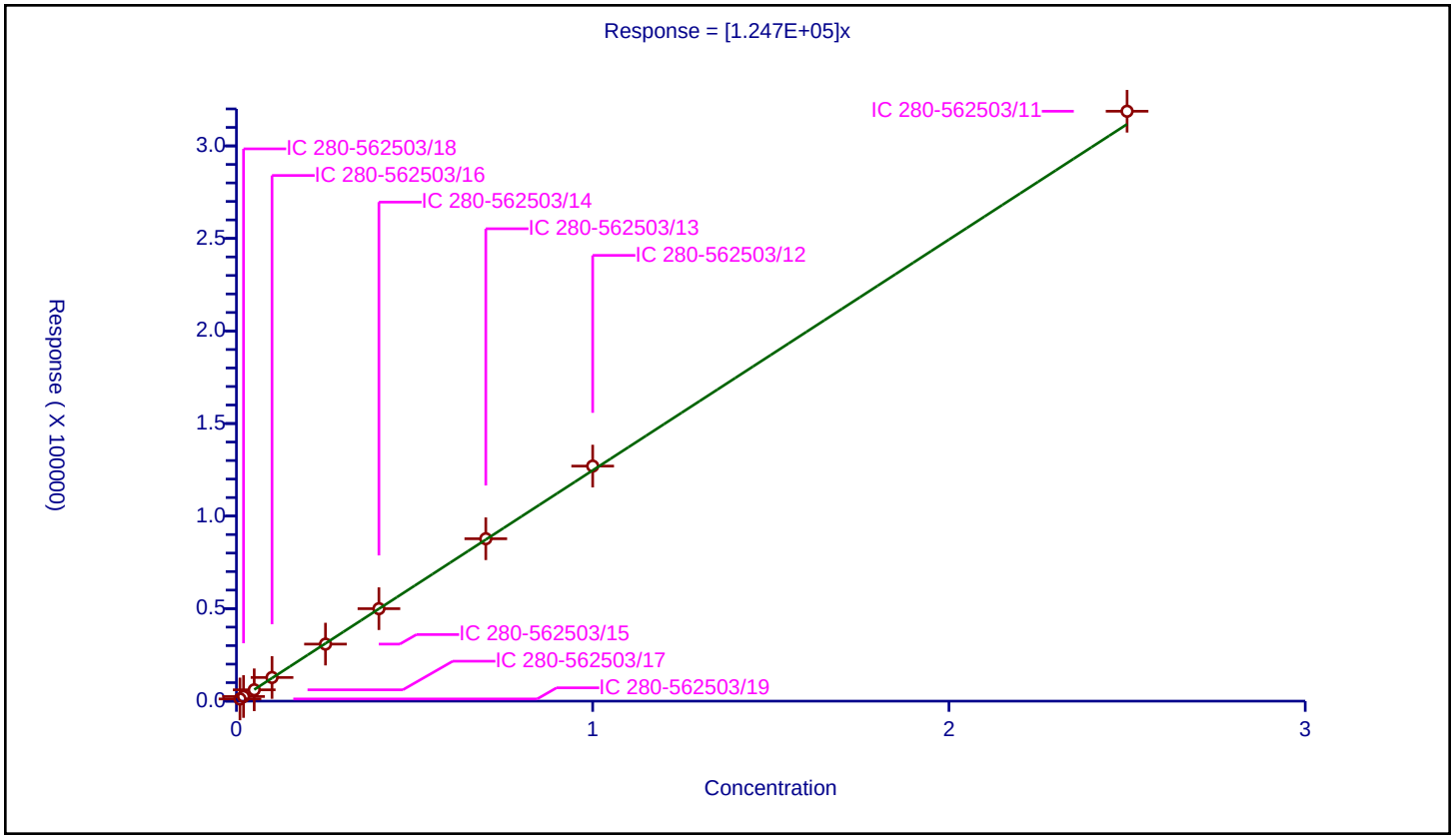
Curve Coefficients

Intercept:	0
Slope:	1.247E+05

Error Coefficients

Standard Error:	2620
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01	1188.0			118800.0	Y
2	IC 280-562503/18	0.02	2503.0			125150.0	Y
3	IC 280-562503/17	0.05	6127.0			122540.0	Y
4	IC 280-562503/16	0.1	12780.0			127800.0	Y
5	IC 280-562503/15	0.25	30811.0			123244.0	Y
6	IC 280-562503/14	0.4	49955.0			124887.5	Y
7	IC 280-562503/13	0.7	87746.0			125351.428571	Y
8	IC 280-562503/12	1.0	127011.0			127011.0	Y
9	IC 280-562503/11	2.5	318738.0			127495.2	Y



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

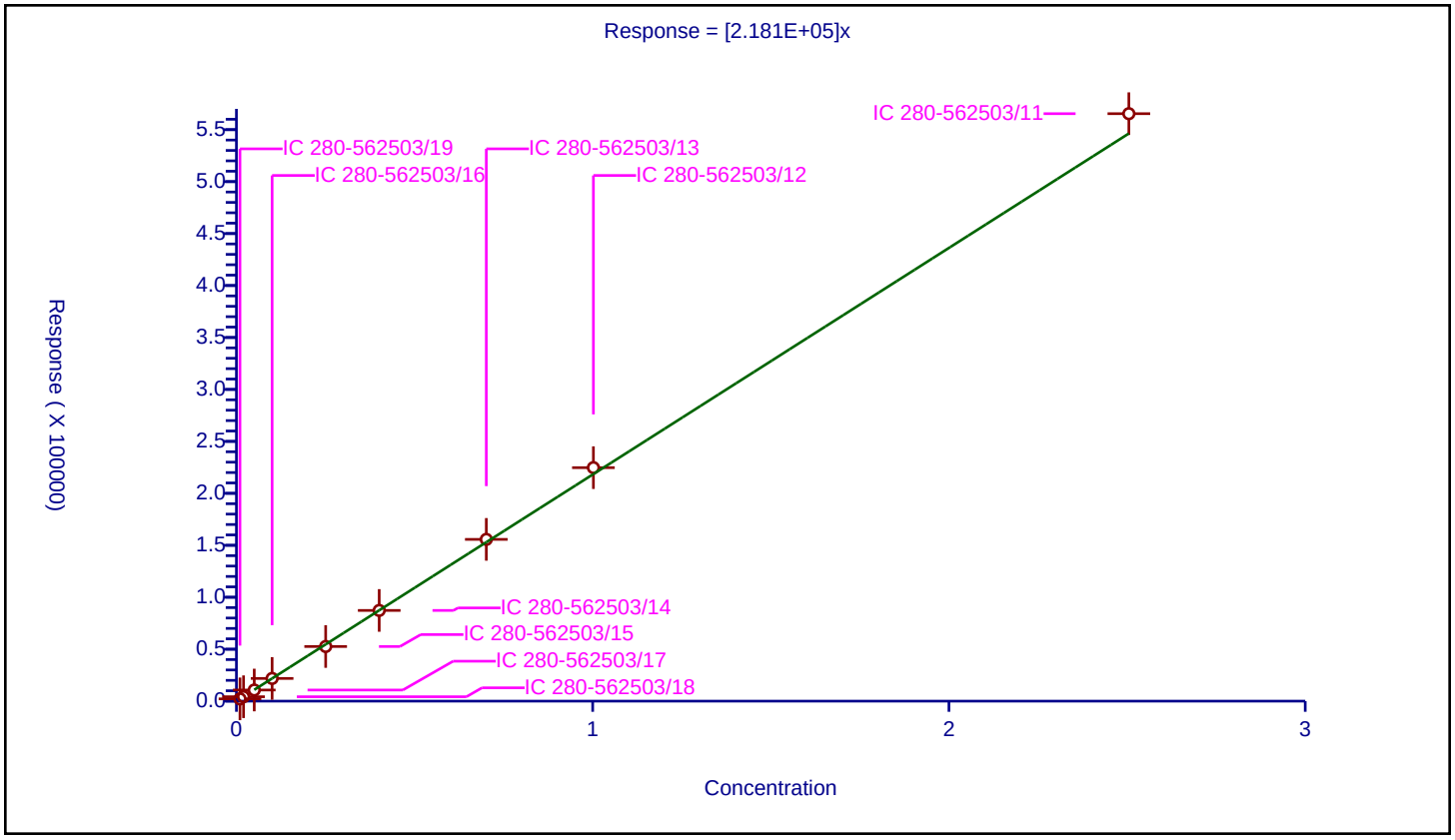
Curve Coefficients

Intercept:	0
Slope:	2.181E+05

Error Coefficients

Standard Error:	7180
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01002	2197.0			219261.477046	Y
2	IC 280-562503/18	0.02004	4249.0			212025.948104	Y
3	IC 280-562503/17	0.0501	10711.0			213792.41517	Y
4	IC 280-562503/16	0.1002	21856.0			218123.752495	Y
5	IC 280-562503/15	0.2505	52589.0			209936.127745	Y
6	IC 280-562503/14	0.4008	87295.0			217801.896208	Y
7	IC 280-562503/13	0.7014	155681.0			221957.513544	Y
8	IC 280-562503/12	1.002	224711.0			224262.47505	Y
9	IC 280-562503/11	2.505	565374.0			225698.203593	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

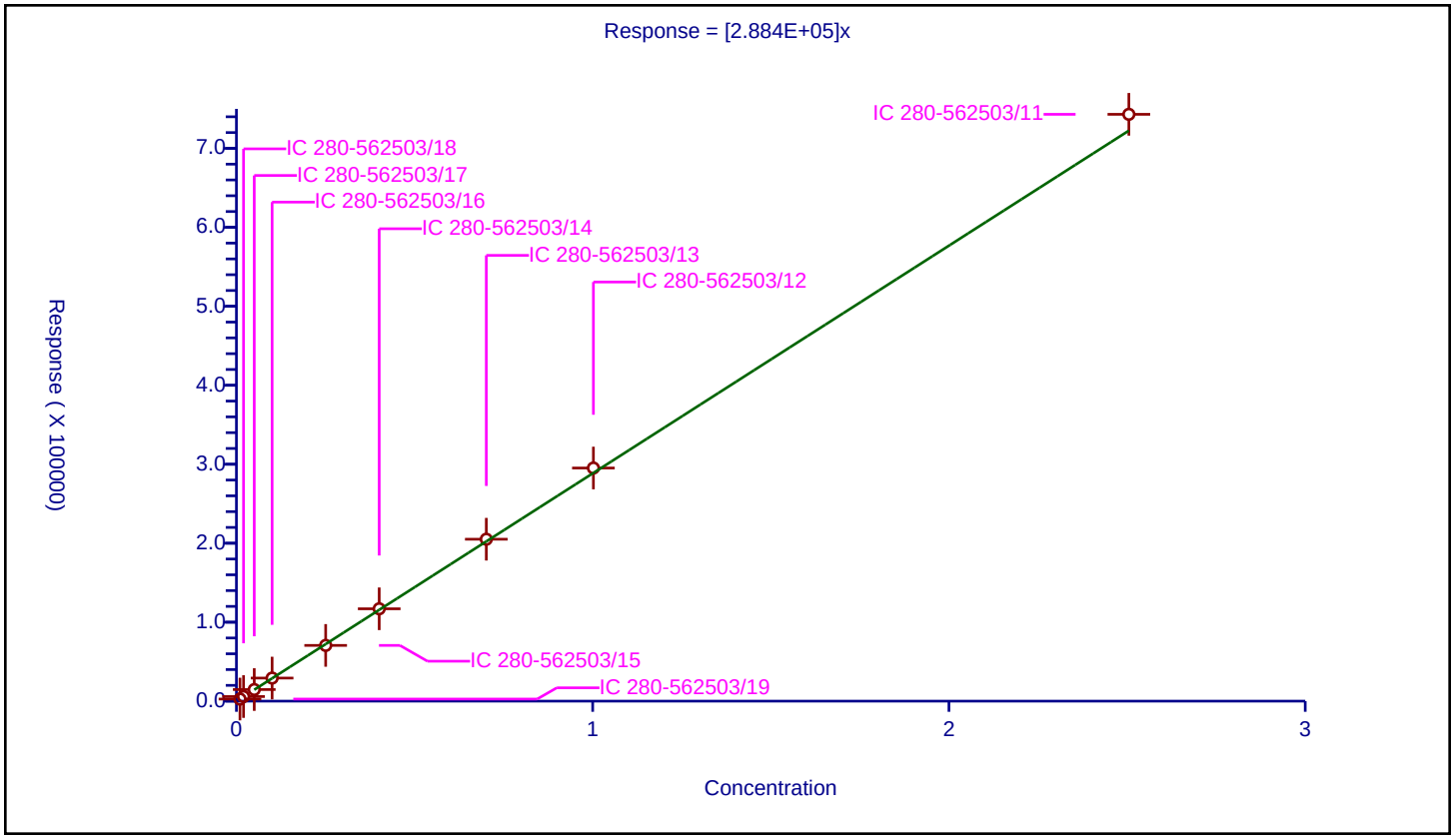
Curve Coefficients

Intercept:	0
Slope:	2.884E+05

Error Coefficients

Standard Error:	7740
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01002	2633.0			262774.451098	Y
2	IC 280-562503/18	0.02004	5833.0			291067.864271	Y
3	IC 280-562503/17	0.0501	14683.0			293073.852295	Y
4	IC 280-562503/16	0.1002	29215.0			291566.866267	Y
5	IC 280-562503/15	0.2505	70569.0			281712.57485	Y
6	IC 280-562503/14	0.4008	116963.0			291823.852295	Y
7	IC 280-562503/13	0.7014	205039.0			292328.200741	Y
8	IC 280-562503/12	1.002	295195.0			294605.788423	Y
9	IC 280-562503/11	2.505	743133.0			296659.88024	Y



Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

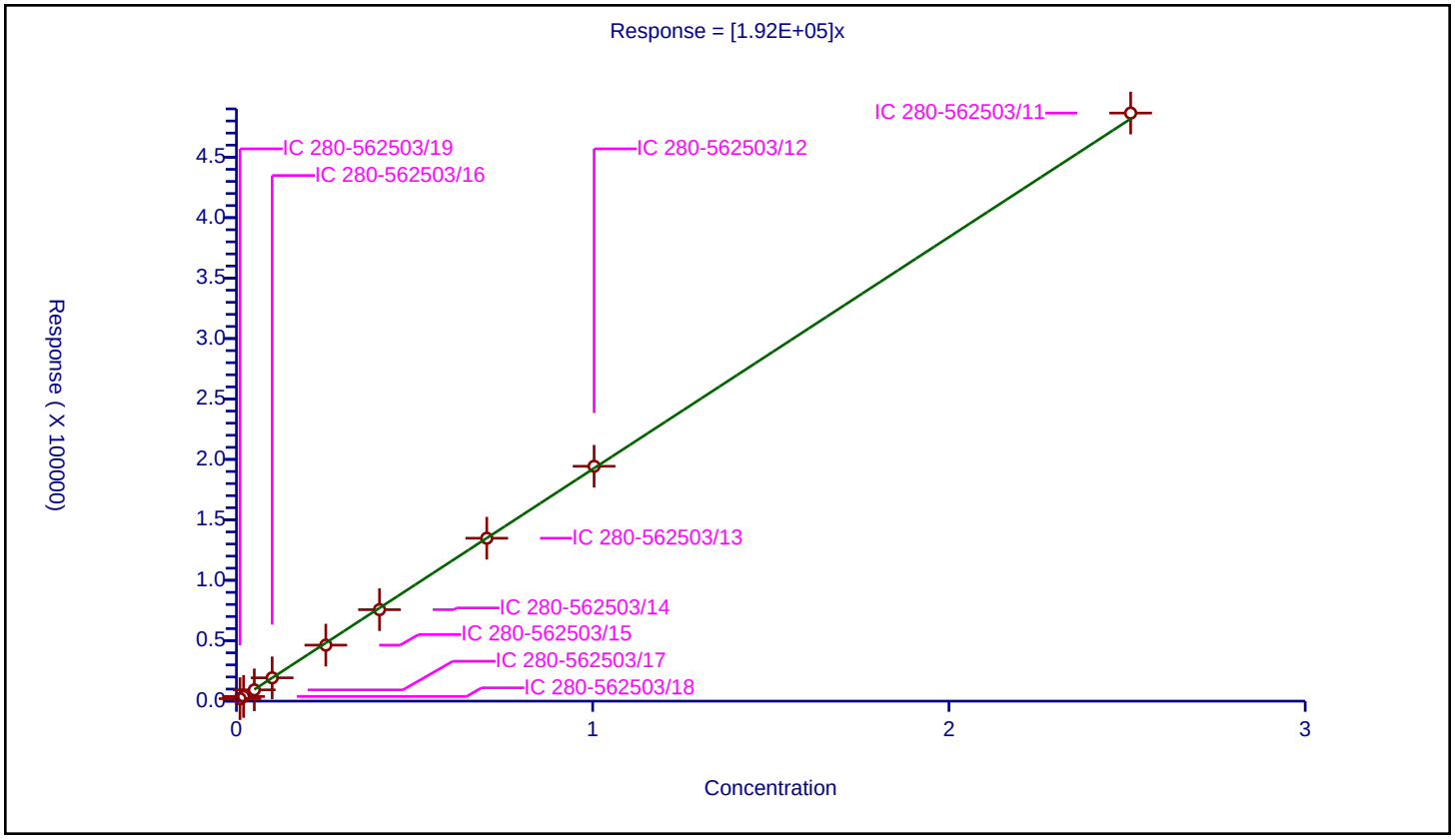
Curve Coefficients

Intercept:	0
Slope:	1.92E+05

Error Coefficients

Standard Error:	1950
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01004	2067.0			205876.494024	Y
2	IC 280-562503/18	0.02008	3845.0			191484.063745	Y
3	IC 280-562503/17	0.0502	9329.0			185836.653386	Y
4	IC 280-562503/16	0.1004	19287.0			192101.593625	Y
5	IC 280-562503/15	0.251	46348.0			184653.386454	Y
6	IC 280-562503/14	0.4016	75688.0			188466.135458	Y
7	IC 280-562503/13	0.7028	134777.0			191771.485487	Y
8	IC 280-562503/12	1.004	194325.0			193550.796813	Y
9	IC 280-562503/11	2.51	486534.0			193838.247012	Y



Calibration / Tetryl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

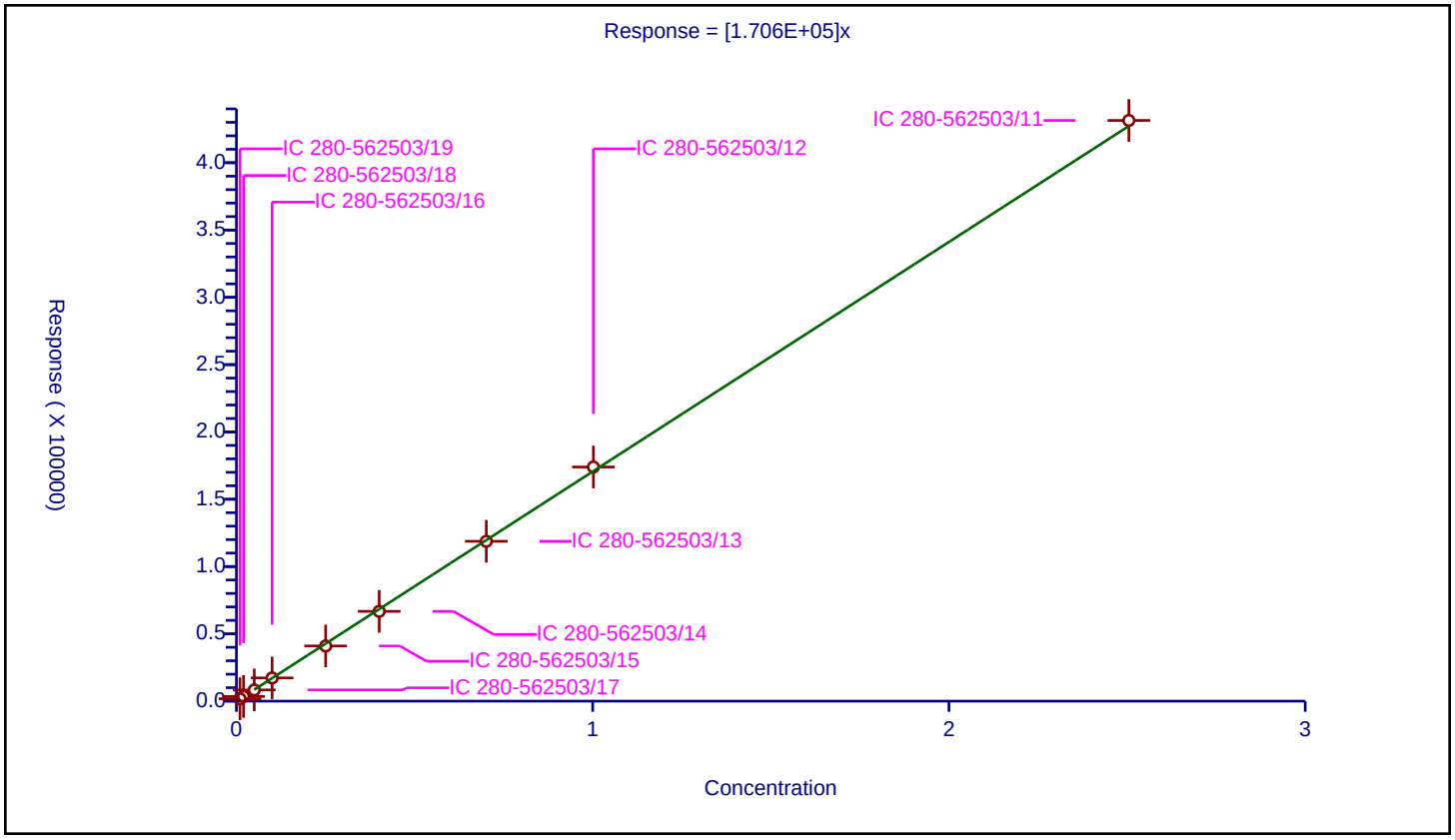
Curve Coefficients

Intercept:	0
Slope:	1.706E+05

Error Coefficients

Standard Error:	2030
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01002	1778.0			177445.10978	Y
2	IC 280-562503/18	0.02004	3498.0			174550.898204	Y
3	IC 280-562503/17	0.0501	8315.0			165968.063872	Y
4	IC 280-562503/16	0.1002	17238.0			172035.928144	Y
5	IC 280-562503/15	0.2505	40968.0			163544.91018	Y
6	IC 280-562503/14	0.4008	66706.0			166432.135729	Y
7	IC 280-562503/13	0.7014	118756.0			169312.802965	Y
8	IC 280-562503/12	1.002	173941.0			173593.812375	Y
9	IC 280-562503/11	2.505	431404.0			172217.165669	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

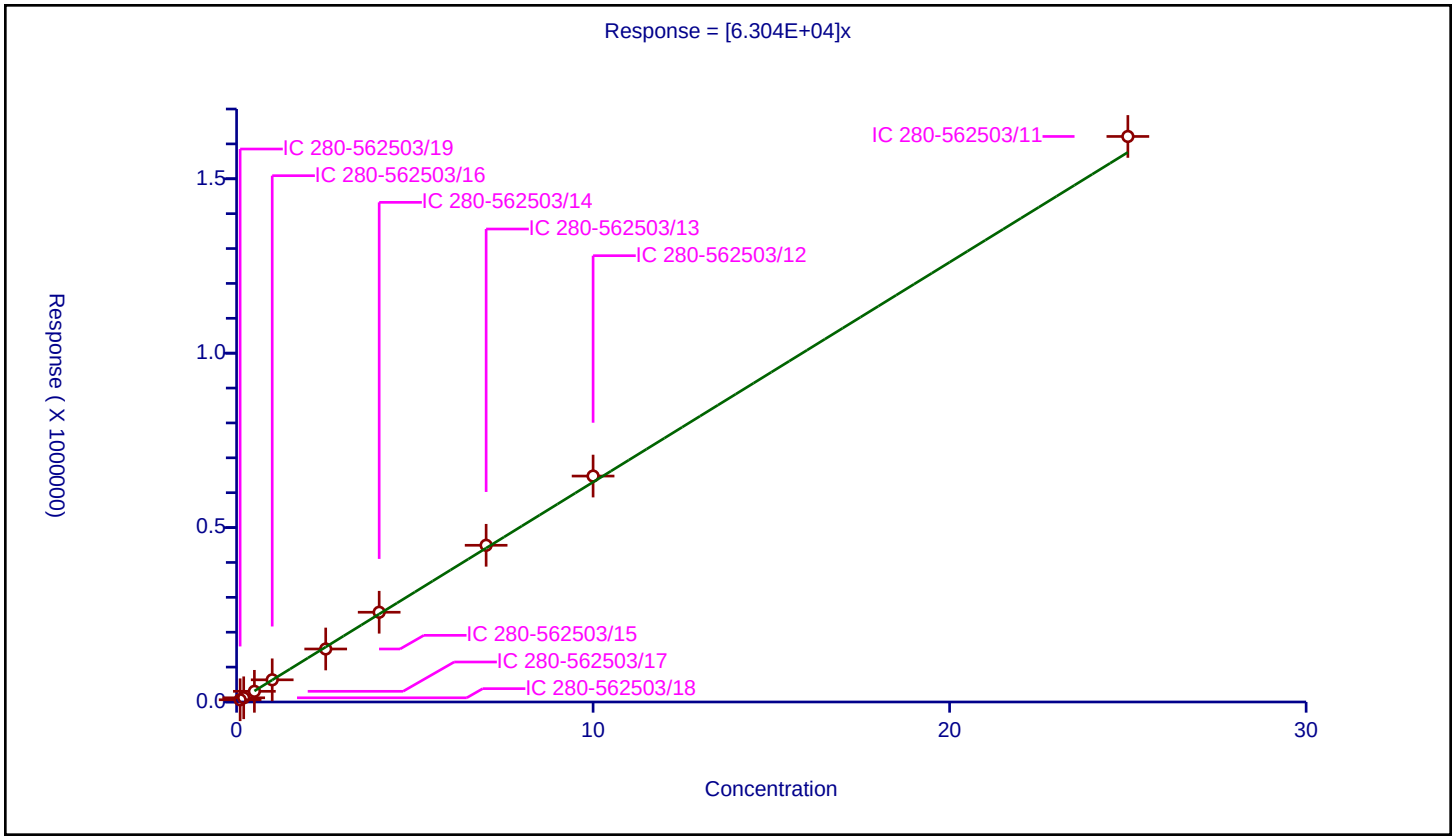
Curve Coefficients

Intercept:	0
Slope:	6.304E+04

Error Coefficients

Standard Error:	17600
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.1	6348.0			63480.0	Y
2	IC 280-562503/18	0.2	12008.0			60040.0	Y
3	IC 280-562503/17	0.5	30651.0			61302.0	Y
4	IC 280-562503/16	1.0	63595.0			63595.0	Y
5	IC 280-562503/15	2.5	151977.0			60790.8	Y
6	IC 280-562503/14	4.0	257287.0			64321.75	Y
7	IC 280-562503/13	7.0	449283.0			64183.285714	Y
8	IC 280-562503/12	10.0	647703.0			64770.3	Y
9	IC 280-562503/11	25.0	1621311.0			64852.44	Y



Calibration / 2,4,6-Trinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

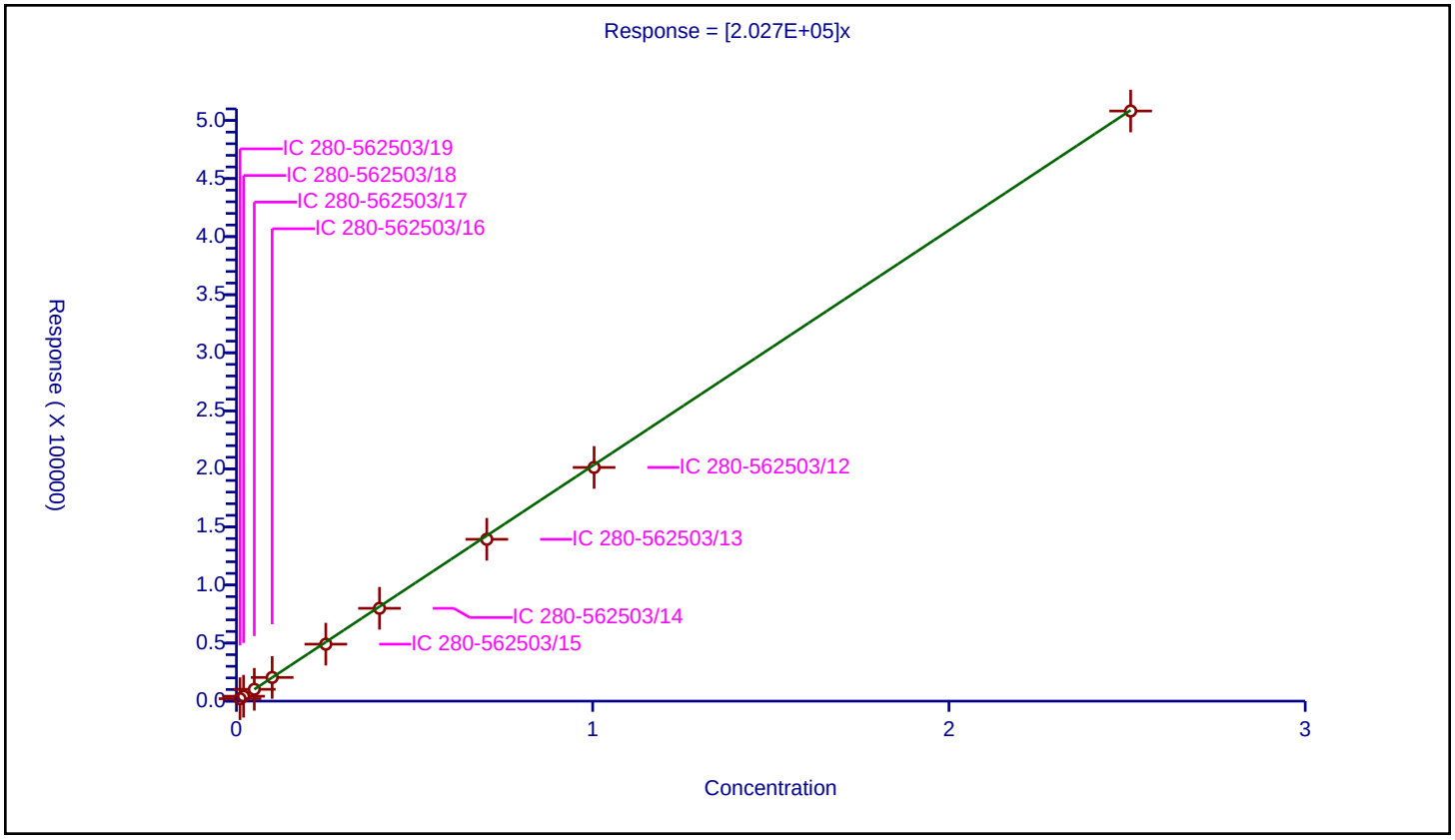
Curve Coefficients

Intercept:	0
Slope:	2.027E+05

Error Coefficients

Standard Error:	1610
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01004	2126.0			211752.988048	Y
2	IC 280-562503/18	0.02008	4227.0			210507.968127	Y
3	IC 280-562503/17	0.0502	10202.0			203227.091633	Y
4	IC 280-562503/16	0.1004	20408.0			203266.932271	Y
5	IC 280-562503/15	0.251	49067.0			195486.055777	Y
6	IC 280-562503/14	0.4016	79951.0			199081.175299	Y
7	IC 280-562503/13	0.7028	139377.0			198316.733068	Y
8	IC 280-562503/12	1.004	201237.0			200435.258964	Y
9	IC 280-562503/11	2.51	508173.0			202459.36255	Y



Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

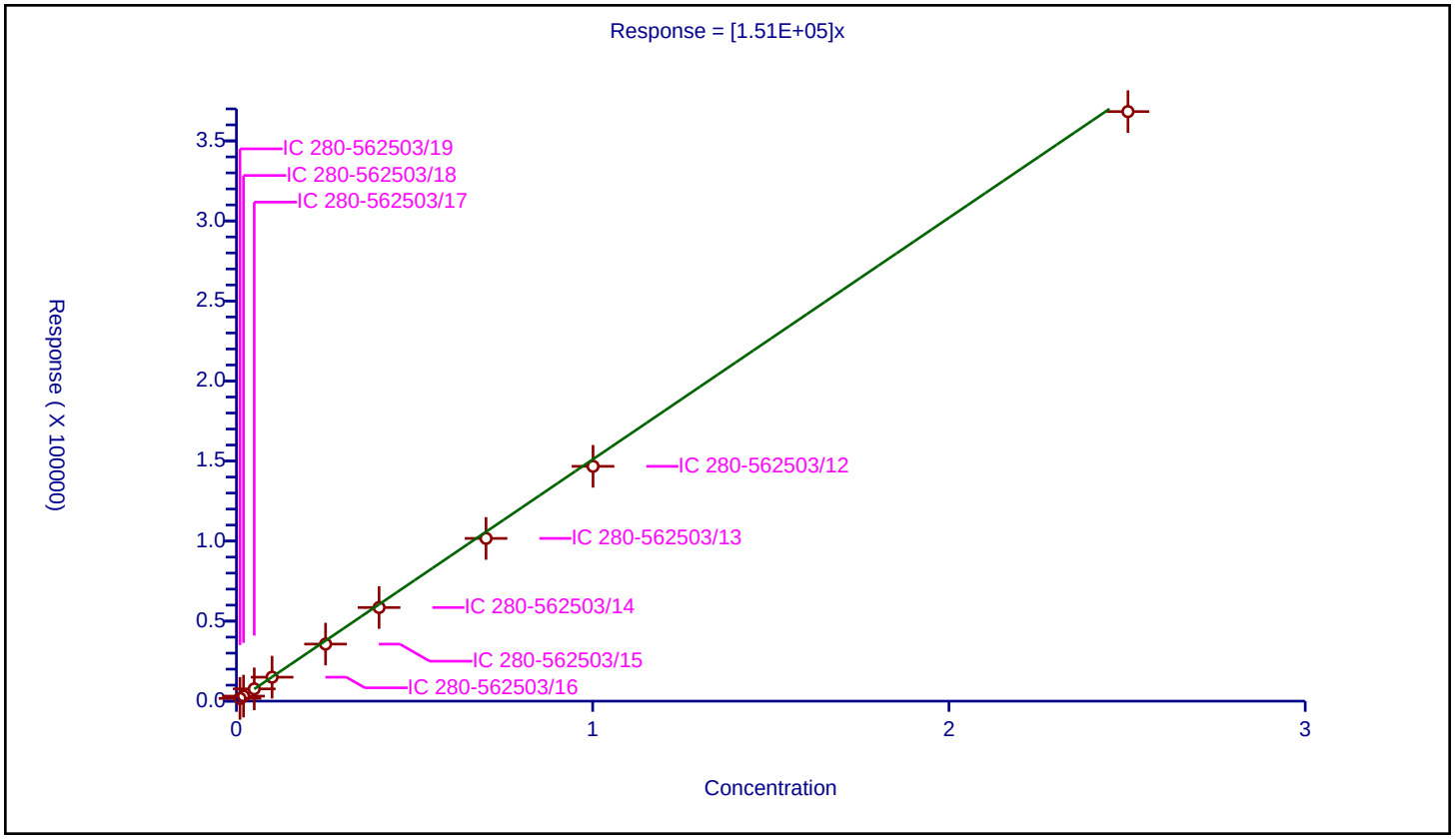
Curve Coefficients

Intercept:	0
Slope:	1.51E+05

Error Coefficients

Standard Error:	4130
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01001	1718.0			171628.371628	Y
2	IC 280-562503/18	0.02002	3150.0			157342.657343	Y
3	IC 280-562503/17	0.05005	7656.0			152967.032967	Y
4	IC 280-562503/16	0.1001	14975.0			149600.3996	Y
5	IC 280-562503/15	0.25025	35644.0			142433.566434	Y
6	IC 280-562503/14	0.4004	58489.0			146076.423576	Y
7	IC 280-562503/13	0.7007	101665.0			145090.623662	Y
8	IC 280-562503/12	1.001	146703.0			146556.443556	Y
9	IC 280-562503/11	2.5025	368296.0			147171.228771	Y



Calibration / 2-Amino-4,6-dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

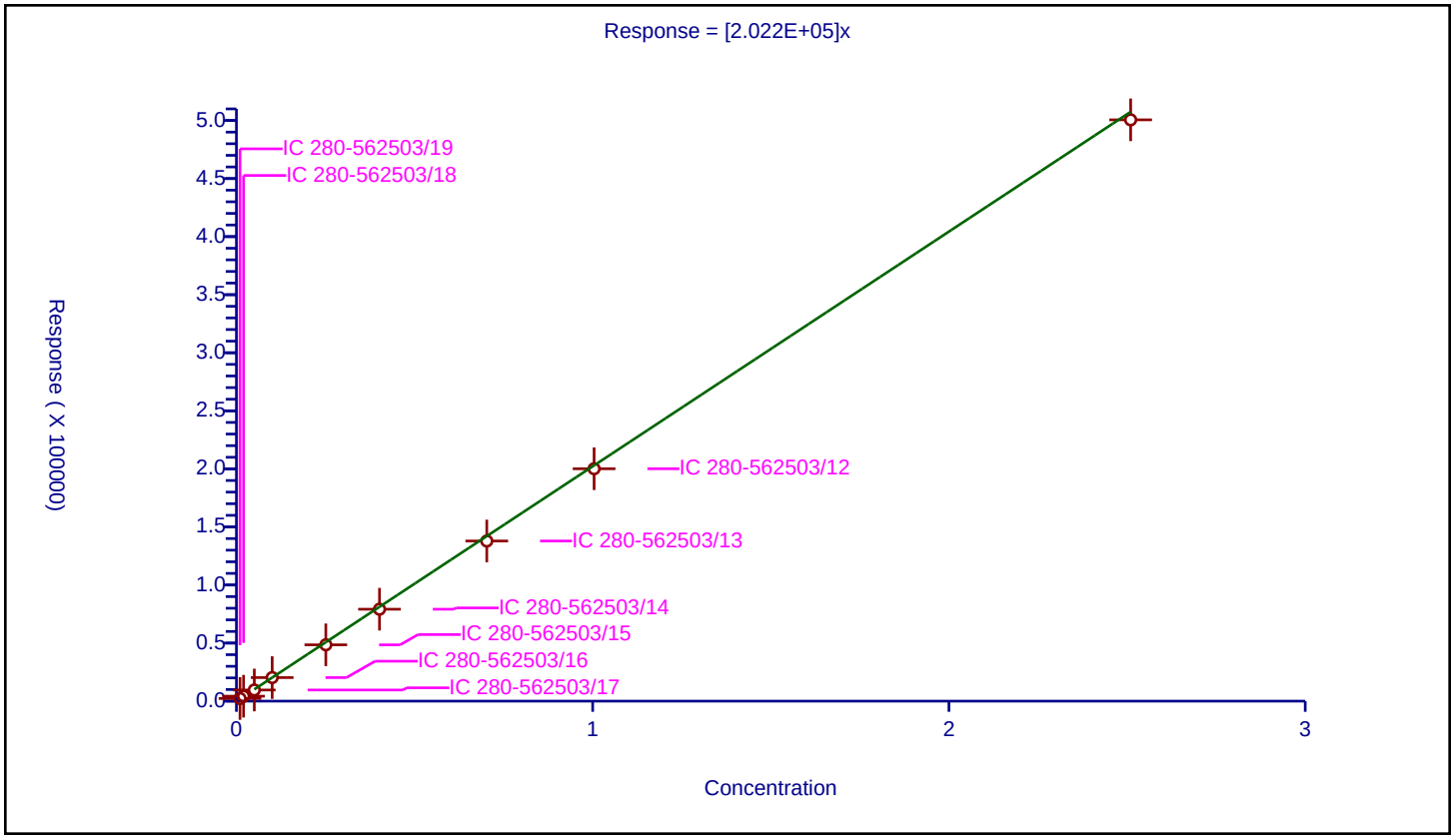
Curve Coefficients

Intercept:	0
Slope:	2.022E+05

Error Coefficients

Standard Error:	3210
Relative Standard Error:	5.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01004	2287.0			227788.844622	Y
2	IC 280-562503/18	0.02008	4282.0			213247.011952	Y
3	IC 280-562503/17	0.0502	9600.0			191235.059761	Y
4	IC 280-562503/16	0.1004	20280.0			201992.031873	Y
5	IC 280-562503/15	0.251	48486.0			193171.314741	Y
6	IC 280-562503/14	0.4016	79169.0			197133.964143	Y
7	IC 280-562503/13	0.7028	137894.0			196206.602163	Y
8	IC 280-562503/12	1.004	200129.0			199331.673307	Y
9	IC 280-562503/11	2.51	500581.0			199434.661355	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

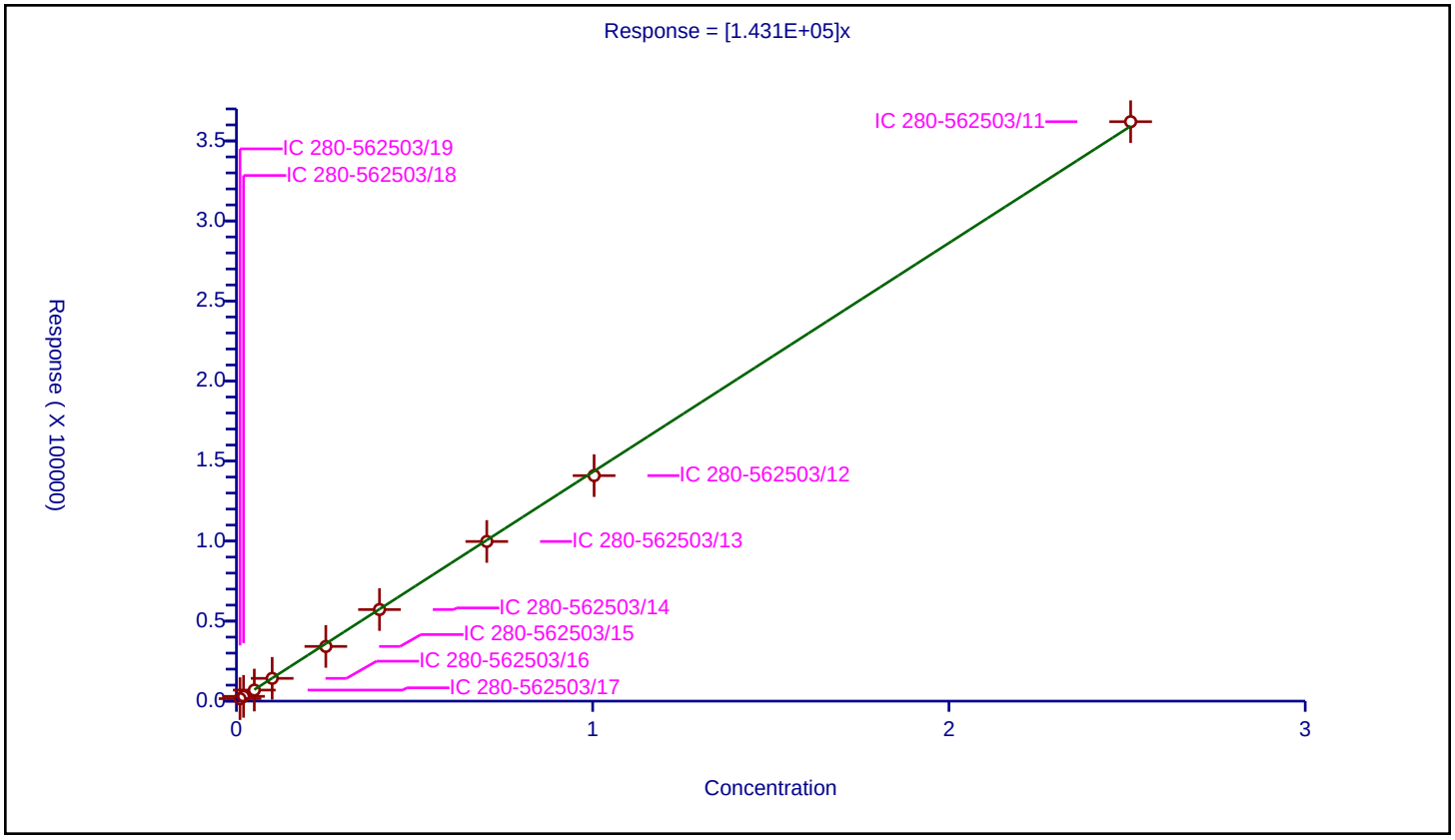
Curve Coefficients

Intercept:	0
Slope:	1.431E+05

Error Coefficients

Standard Error:	1560
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01004	1551.0			154482.071713	Y
2	IC 280-562503/18	0.02008	2993.0			149053.784861	Y
3	IC 280-562503/17	0.0502	6908.0			137609.561753	Y
4	IC 280-562503/16	0.1004	14234.0			141772.908367	Y
5	IC 280-562503/15	0.251	34177.0			136163.346614	Y
6	IC 280-562503/14	0.4016	57212.0			142460.159363	Y
7	IC 280-562503/13	0.7028	99747.0			141928.002277	Y
8	IC 280-562503/12	1.004	140901.0			140339.641434	Y
9	IC 280-562503/11	2.51	362011.0			144227.49004	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

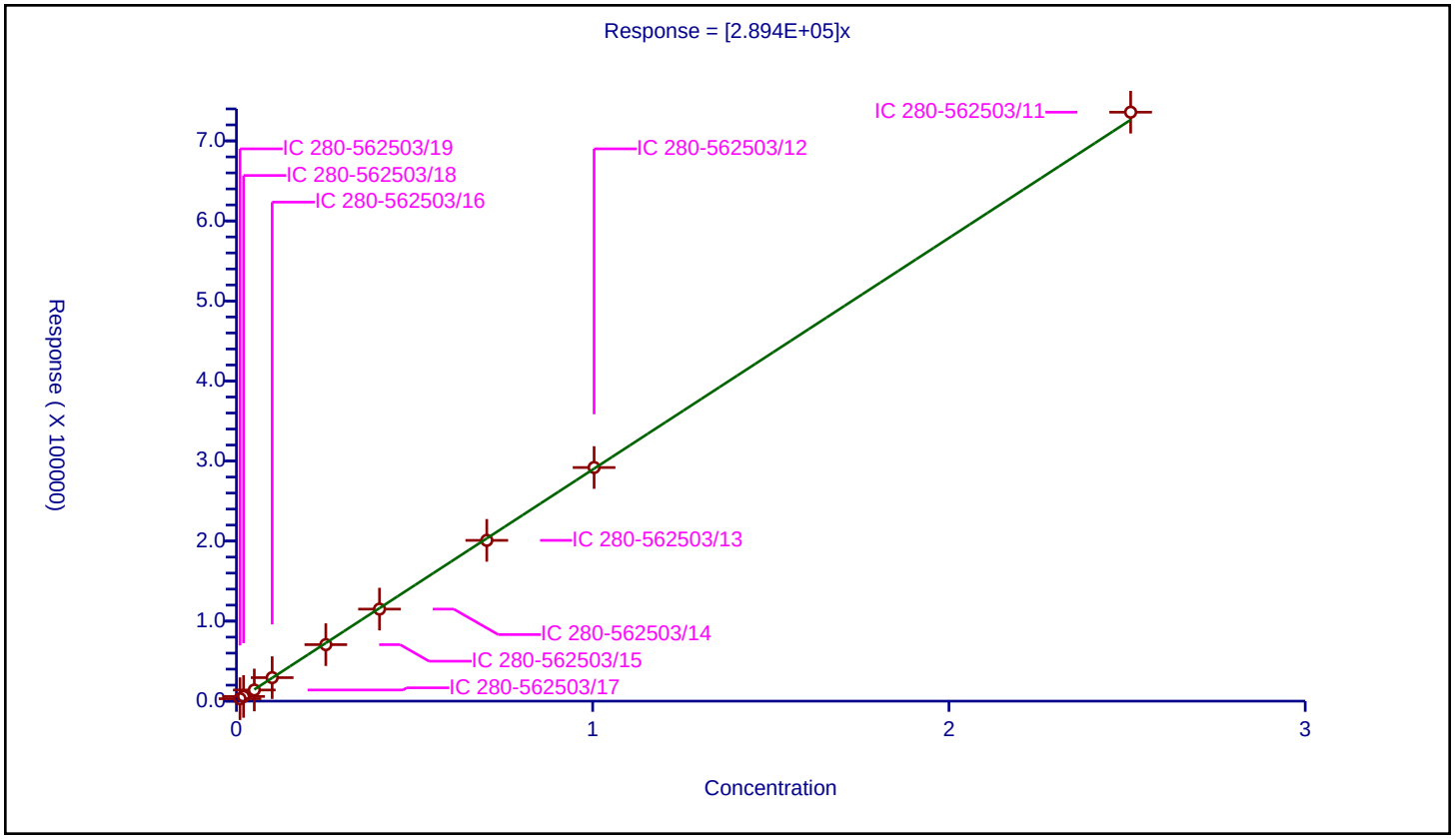
Curve Coefficients

Intercept:	0
Slope:	2.894E+05

Error Coefficients

Standard Error:	3650
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01004	3047.0			303486.055777	Y
2	IC 280-562503/18	0.02008	5890.0			293326.693227	Y
3	IC 280-562503/17	0.0502	13933.0			277549.800797	Y
4	IC 280-562503/16	0.1004	29355.0			292380.478088	Y
5	IC 280-562503/15	0.251	70605.0			281294.820717	Y
6	IC 280-562503/14	0.4016	115000.0			286354.581673	Y
7	IC 280-562503/13	0.7028	200883.0			285832.384747	Y
8	IC 280-562503/12	1.004	291912.0			290749.003984	Y
9	IC 280-562503/11	2.51	735887.0			293182.071713	Y



Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

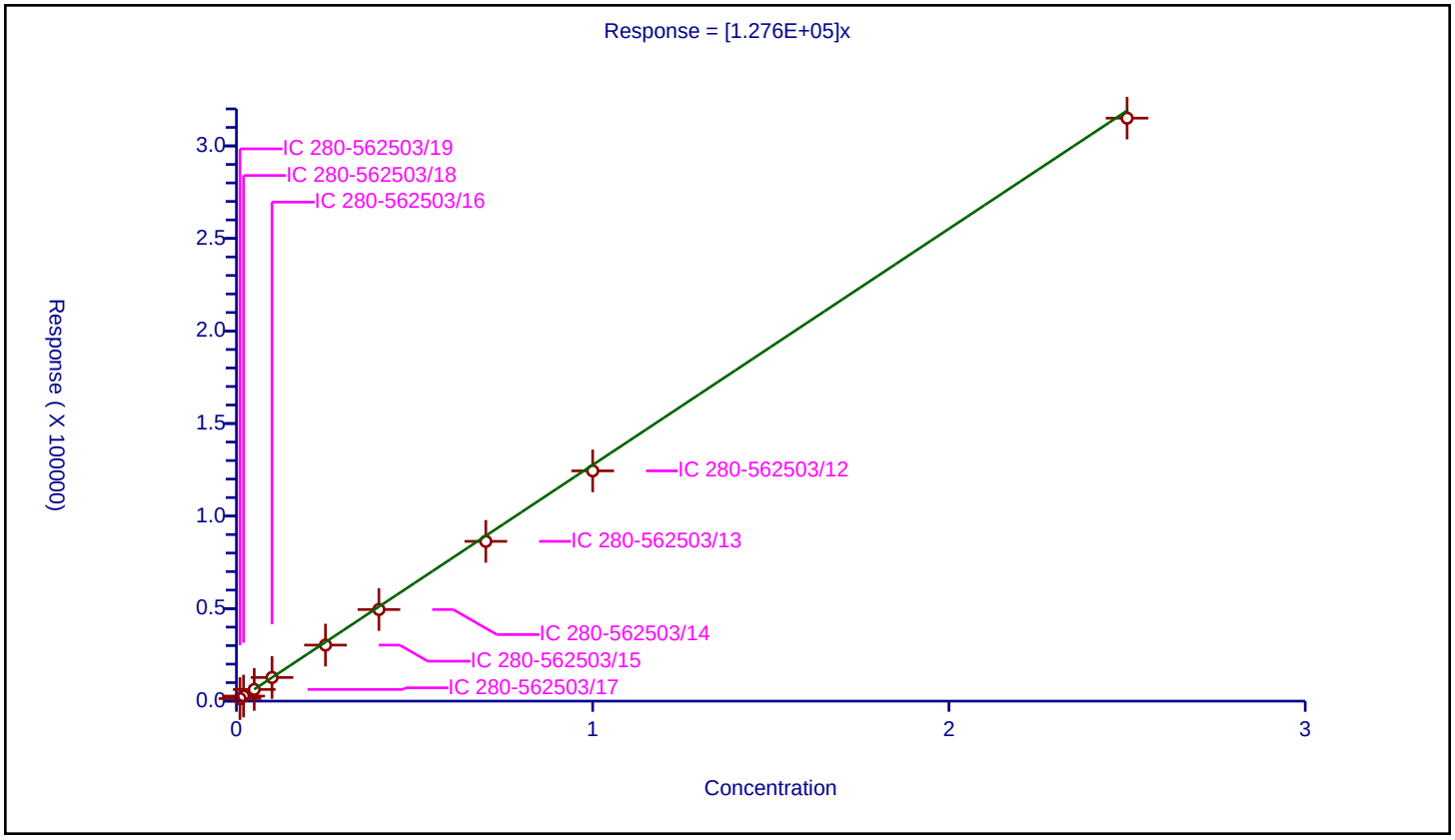
Curve Coefficients

Intercept:	0
Slope:	1.276E+05

Error Coefficients

Standard Error:	2250
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01	1387.0			138700.0	Y
2	IC 280-562503/18	0.02	2743.0			137150.0	Y
3	IC 280-562503/17	0.05	6314.0			126280.0	Y
4	IC 280-562503/16	0.1	12777.0			127770.0	Y
5	IC 280-562503/15	0.25	30280.0			121120.0	Y
6	IC 280-562503/14	0.4	49500.0			123750.0	Y
7	IC 280-562503/13	0.7	86333.0			123332.857143	Y
8	IC 280-562503/12	1.0	124418.0			124418.0	Y
9	IC 280-562503/11	2.5	315004.0			126001.6	Y



Calibration / p-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

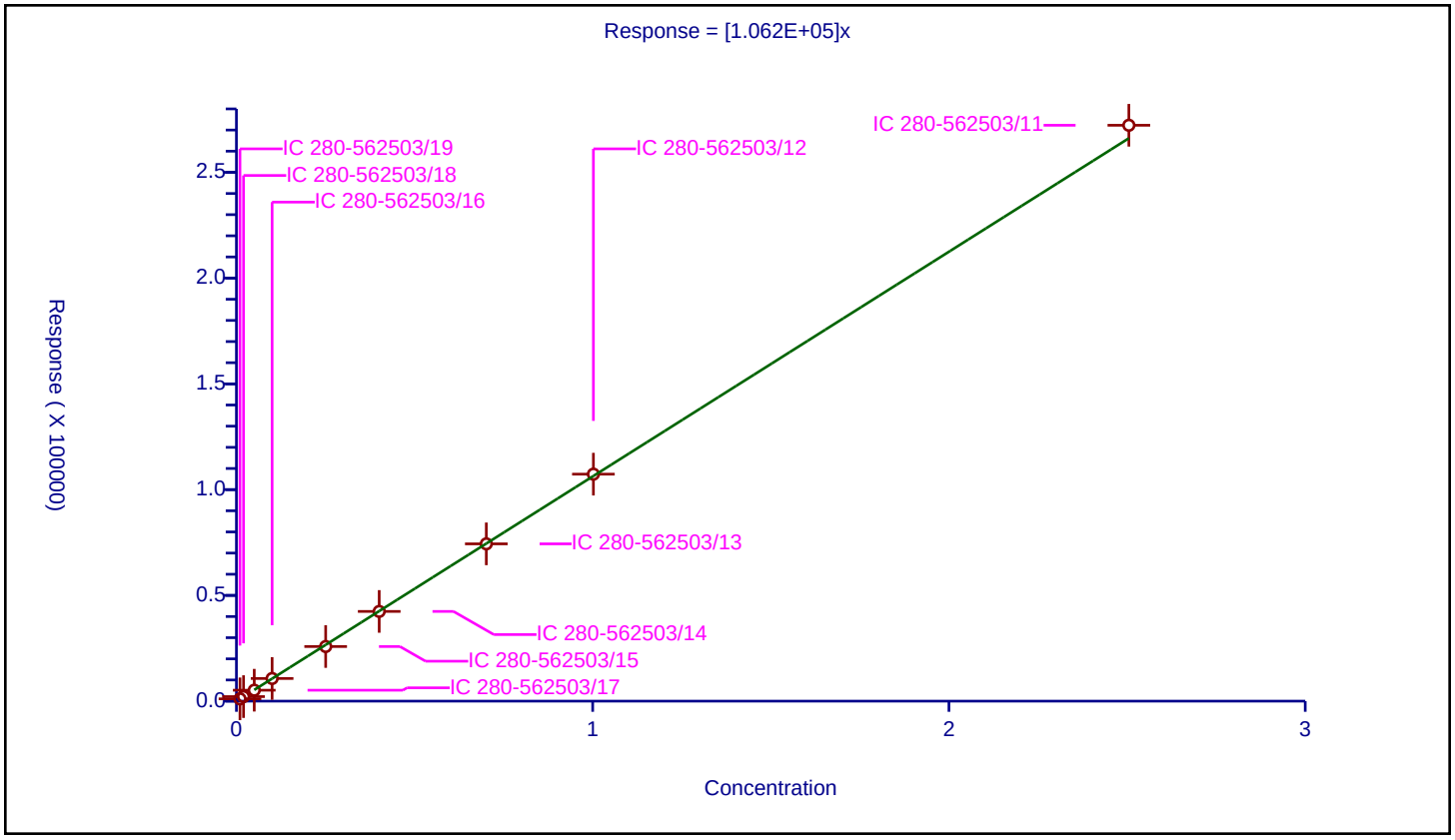
Curve Coefficients

Intercept:	0
Slope:	1.062E+05

Error Coefficients

Standard Error:	2210
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01002	1083.0			108083.832335	Y
2	IC 280-562503/18	0.02004	2151.0			107335.329341	Y
3	IC 280-562503/17	0.0501	5163.0			103053.892216	Y
4	IC 280-562503/16	0.1002	10715.0			106936.127745	Y
5	IC 280-562503/15	0.2505	25824.0			103089.820359	Y
6	IC 280-562503/14	0.4008	42415.0			105825.848303	Y
7	IC 280-562503/13	0.7014	74357.0			106012.261192	Y
8	IC 280-562503/12	1.002	107309.0			107094.810379	Y
9	IC 280-562503/11	2.505	272262.0			108687.42515	Y



Calibration / m-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

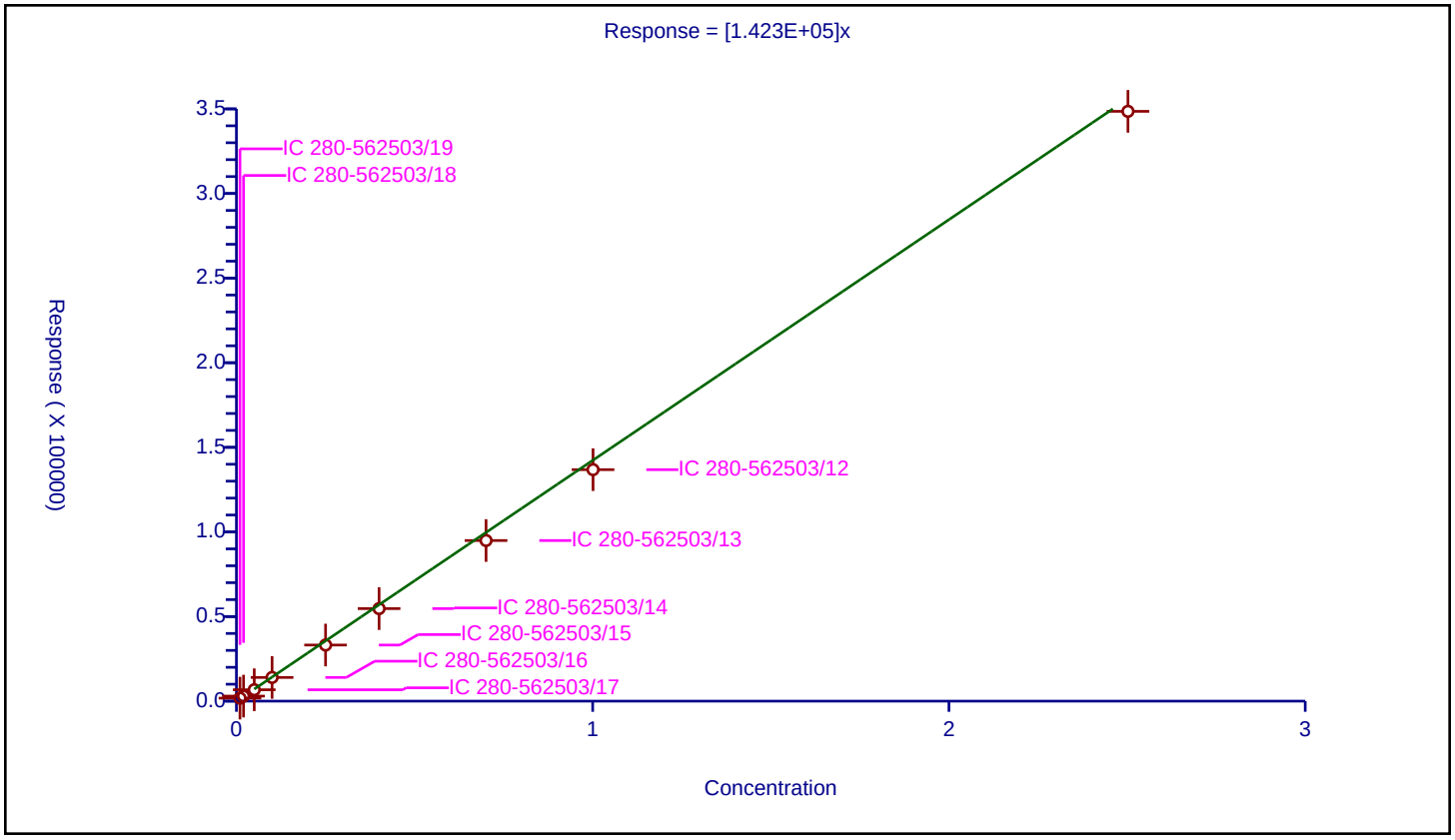
Curve Coefficients

Intercept:	0
Slope:	1.423E+05

Error Coefficients

Standard Error:	3900
Relative Standard Error:	9.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.01001	1764.0			176223.776224	Y
2	IC 280-562503/18	0.02002	2989.0			149300.699301	Y
3	IC 280-562503/17	0.05005	6733.0			134525.474525	Y
4	IC 280-562503/16	0.1001	14003.0			139890.10989	Y
5	IC 280-562503/15	0.25025	33160.0			132507.492507	Y
6	IC 280-562503/14	0.4004	54695.0			136600.899101	Y
7	IC 280-562503/13	0.7007	94920.0			135464.535465	Y
8	IC 280-562503/12	1.001	136801.0			136664.335664	Y
9	IC 280-562503/11	2.5025	348555.0			139282.717283	Y



Calibration / PETN

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

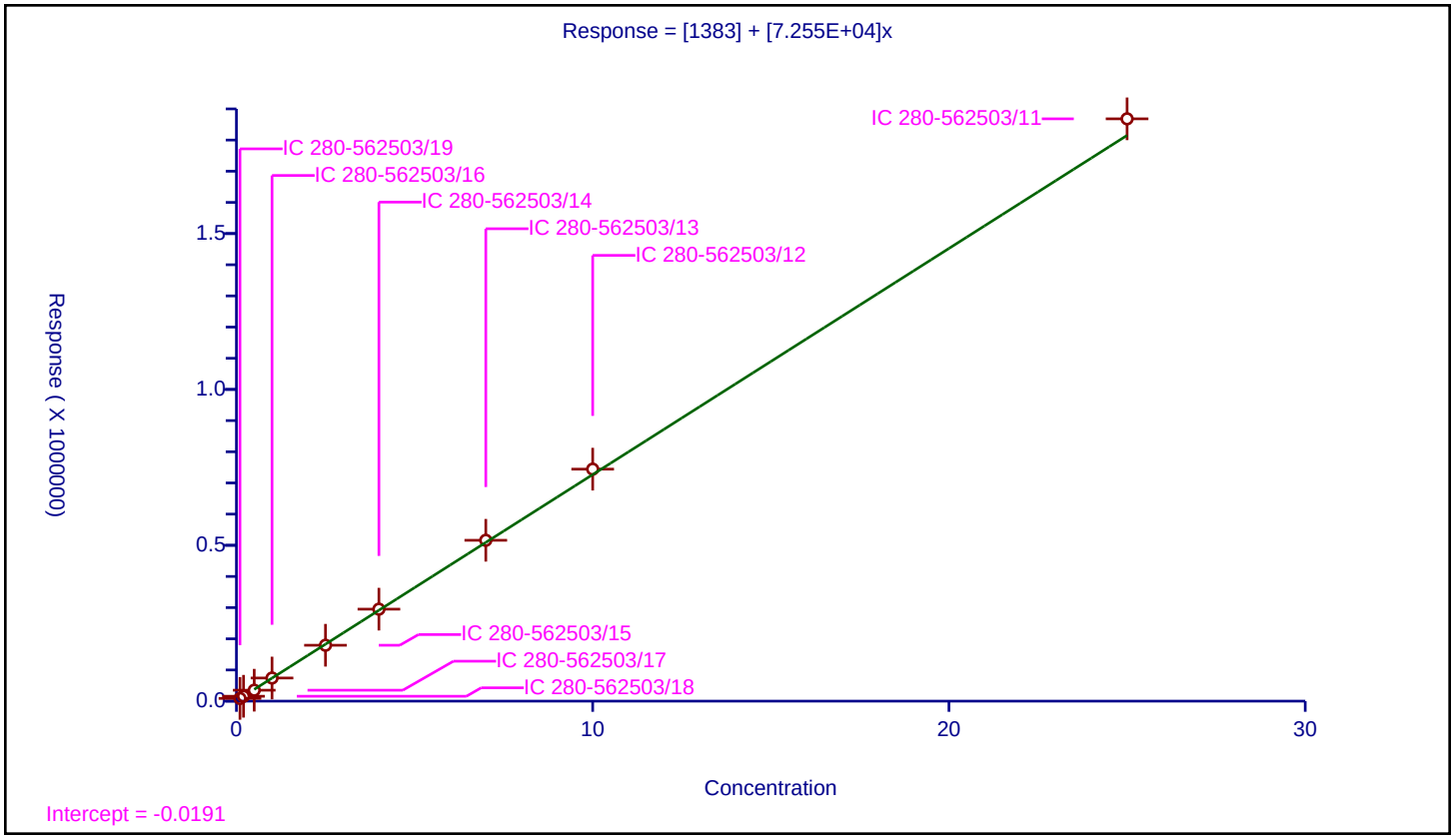
Curve Coefficients

Intercept:	1383
Slope:	7.255E+04

Error Coefficients

Standard Error:	21400
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-562503/19	0.1	8784.0			87840.0	Y
2	IC 280-562503/18	0.2	15705.0			78525.0	Y
3	IC 280-562503/17	0.5	35084.0			70168.0	Y
4	IC 280-562503/16	1.0	74208.0			74208.0	Y
5	IC 280-562503/15	2.5	179275.0			71710.0	Y
6	IC 280-562503/14	4.0	295082.0			73770.5	Y
7	IC 280-562503/13	7.0	516042.0			73720.285714	Y
8	IC 280-562503/12	10.0	744274.0			74427.4	Y
9	IC 280-562503/11	25.0	1868141.0			74725.64	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1 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.: 280-159190-1 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.: 280-159190-1 | 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

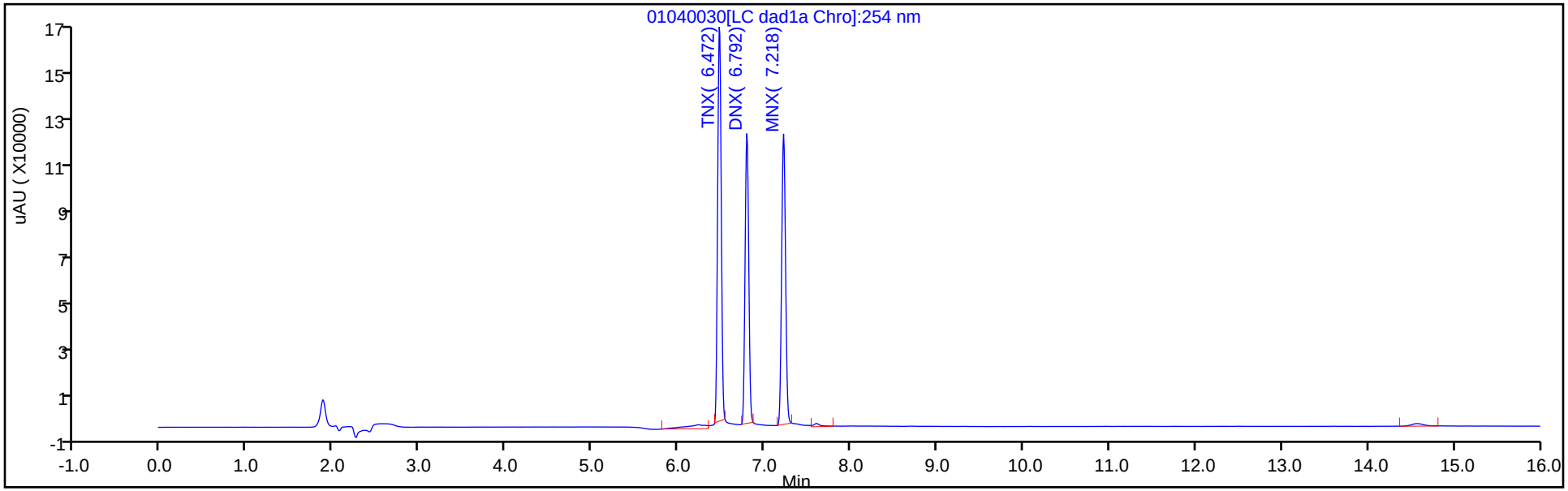
Report Date: 05-Jan-2022 12:10:05 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

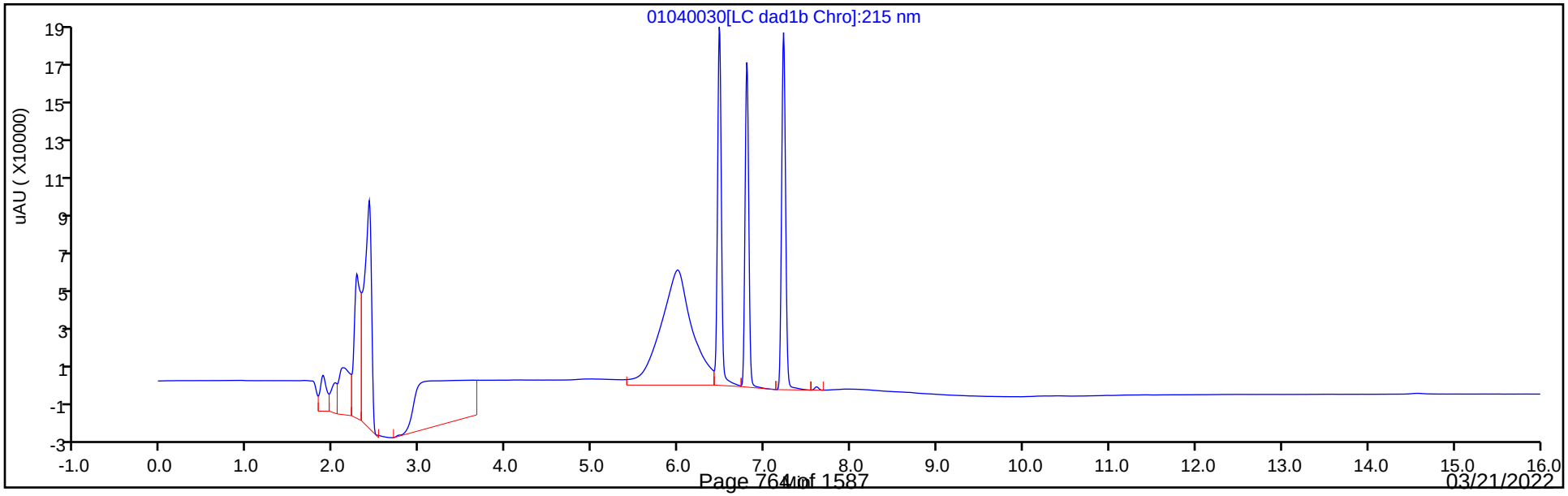
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040030.d

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

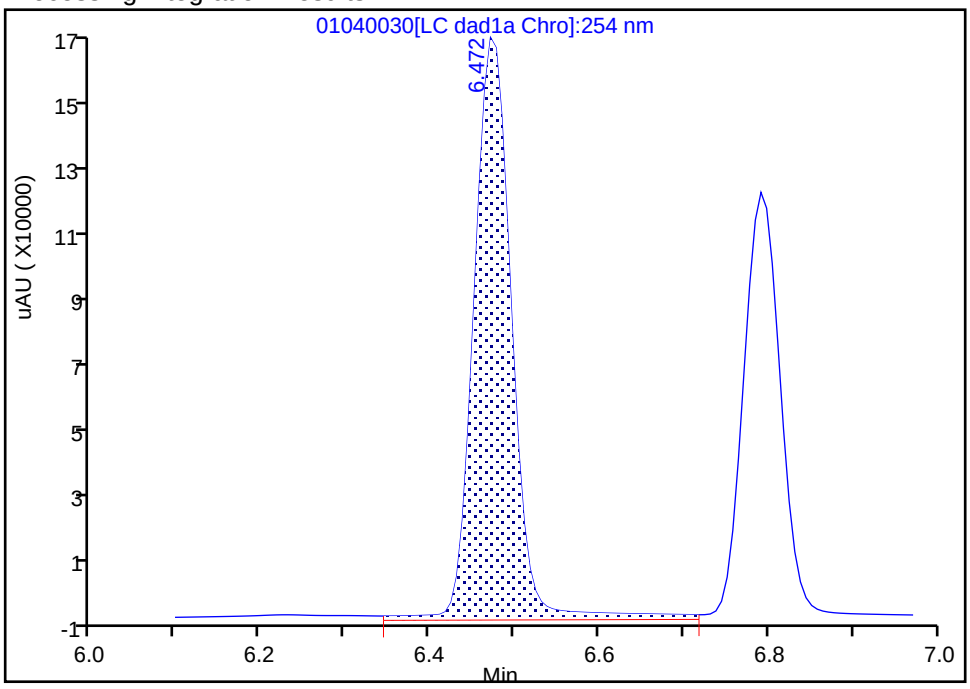
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040030.d				
Injection Date:	05-Jan-2022 01:43:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

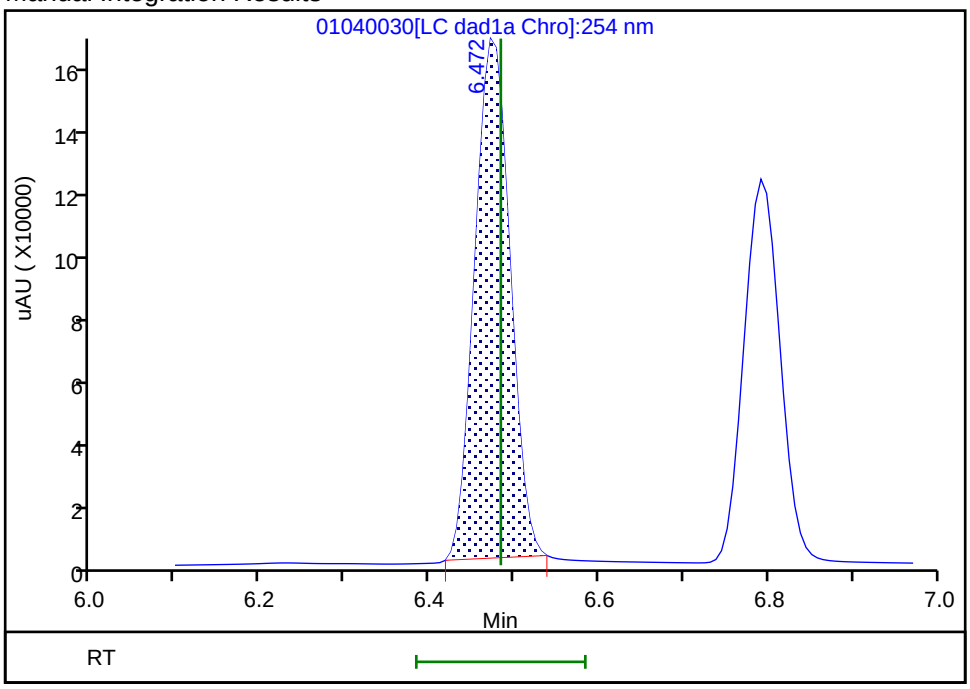
Processing Integration Results

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

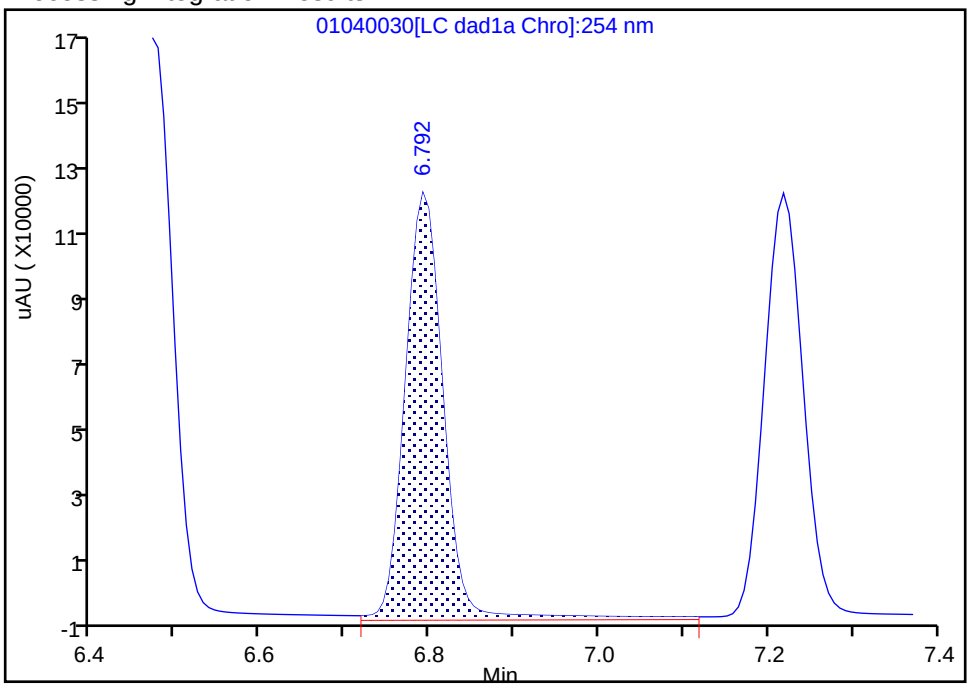
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040030.d				
Injection Date:	05-Jan-2022 01:43:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

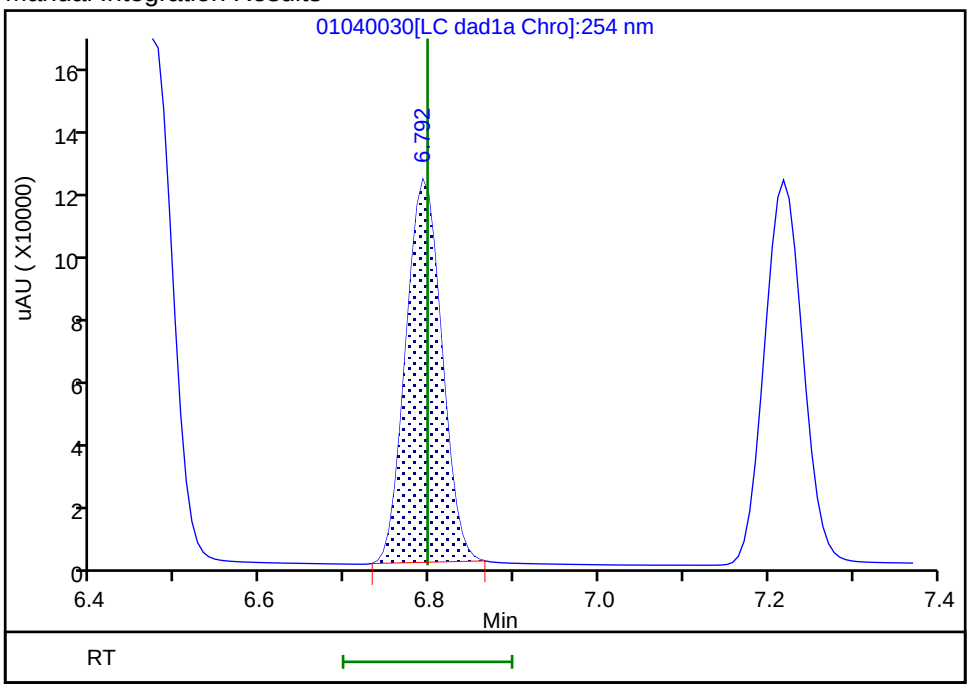
Processing Integration Results

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

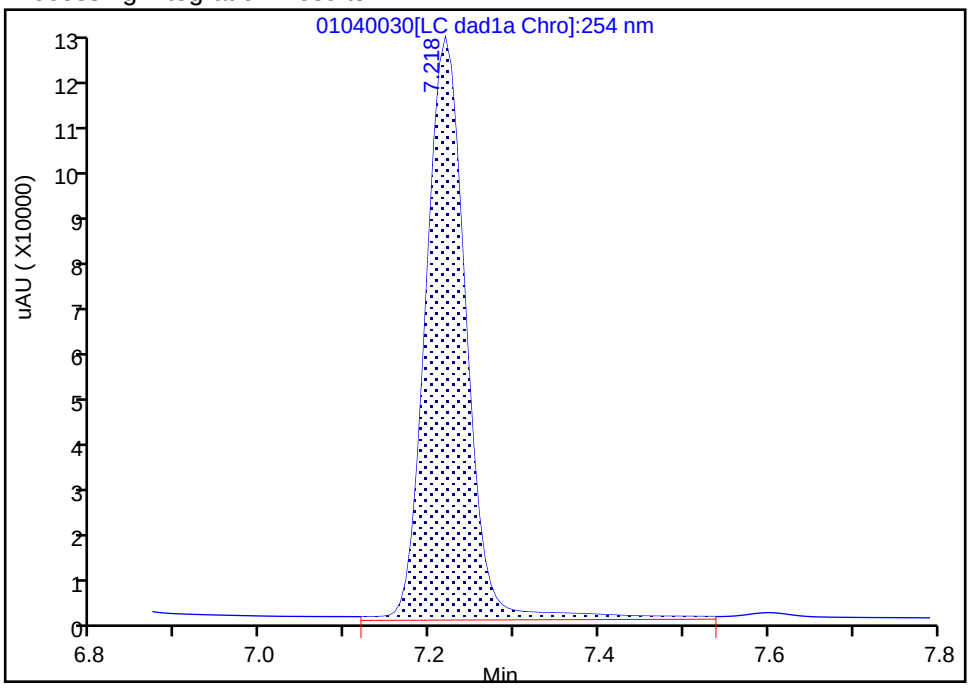
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040030.d				
Injection Date:	05-Jan-2022 01:43:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

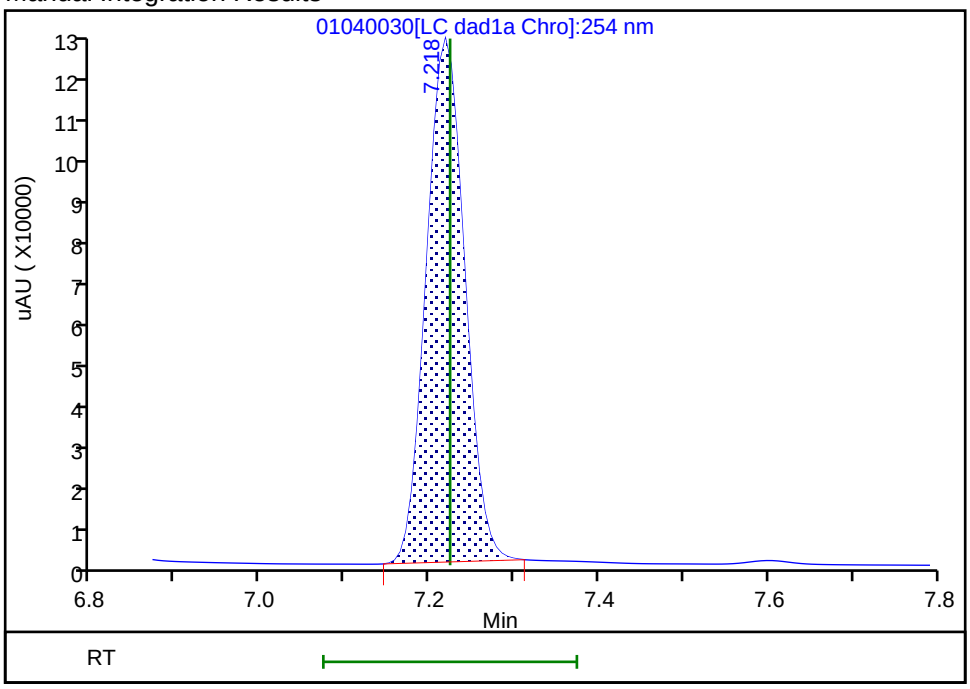
Processing Integration Results

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

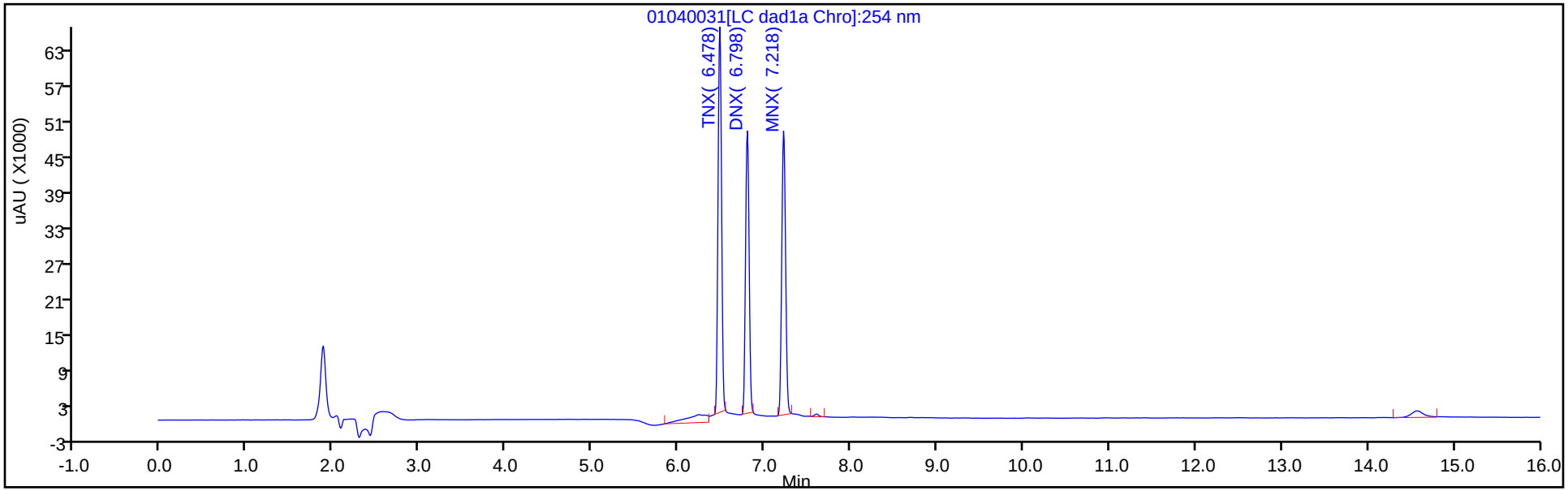
Report Date: 05-Jan-2022 12:10:06 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

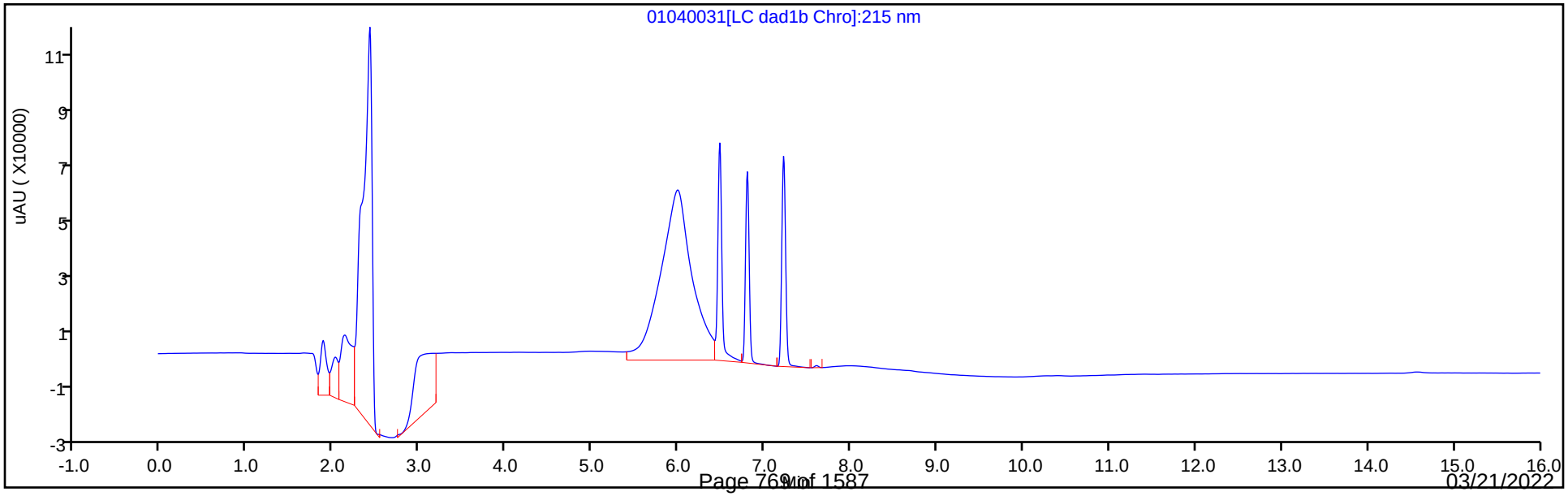
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040031.d

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

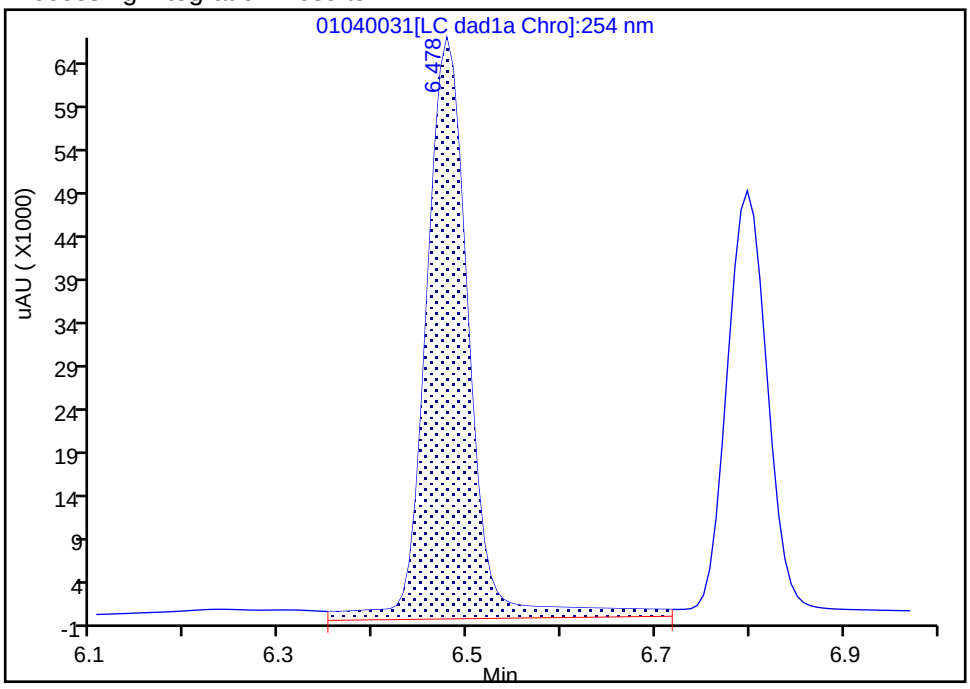
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040031.d				
Injection Date:	05-Jan-2022 02:06:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

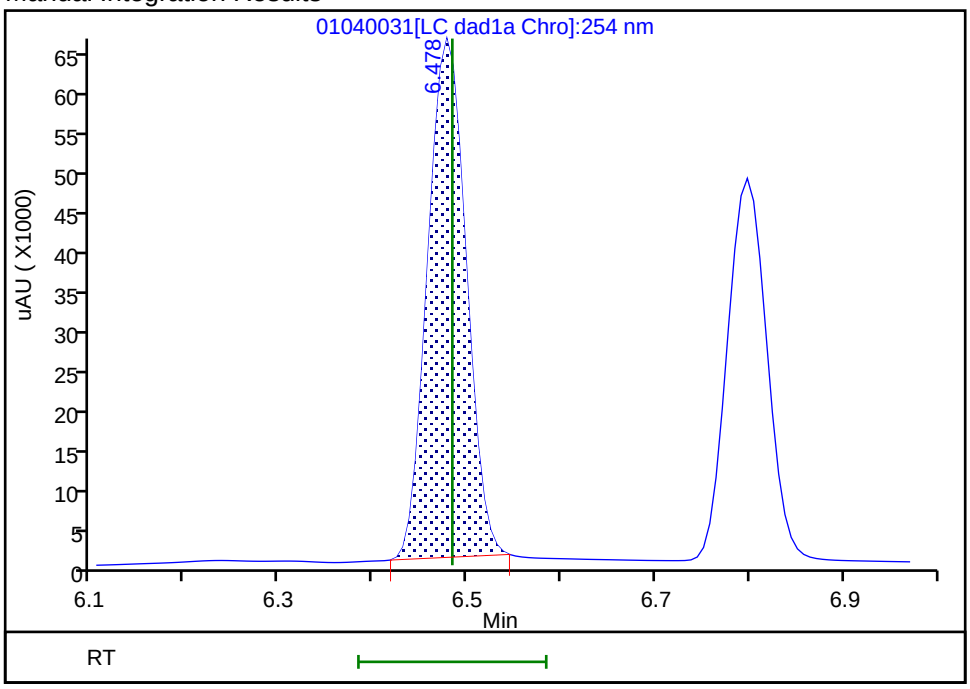
Processing Integration Results

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

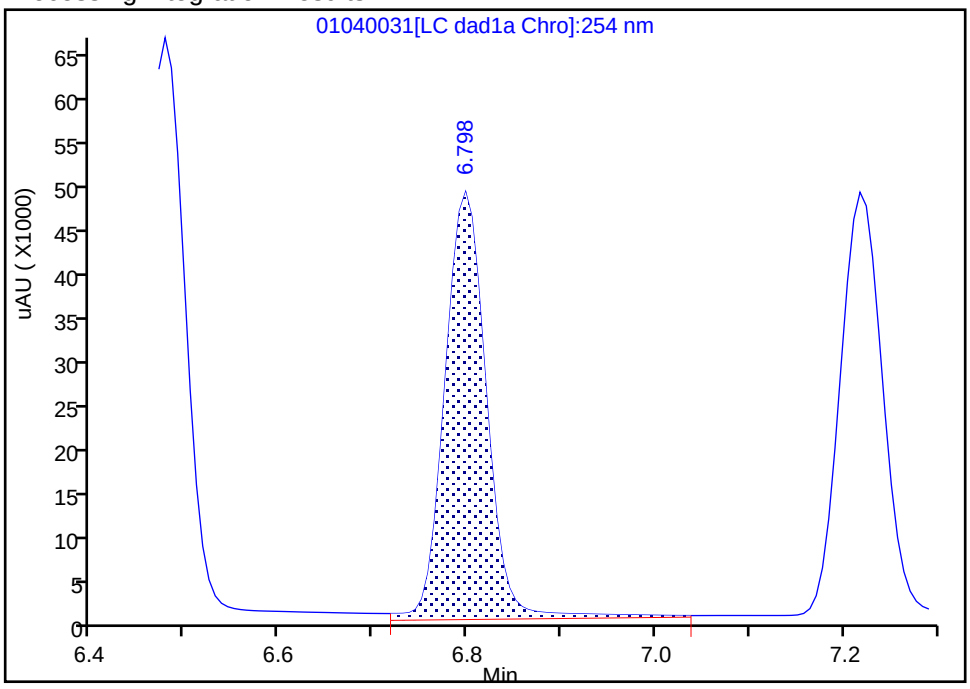
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040031.d				
Injection Date:	05-Jan-2022 02:06:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

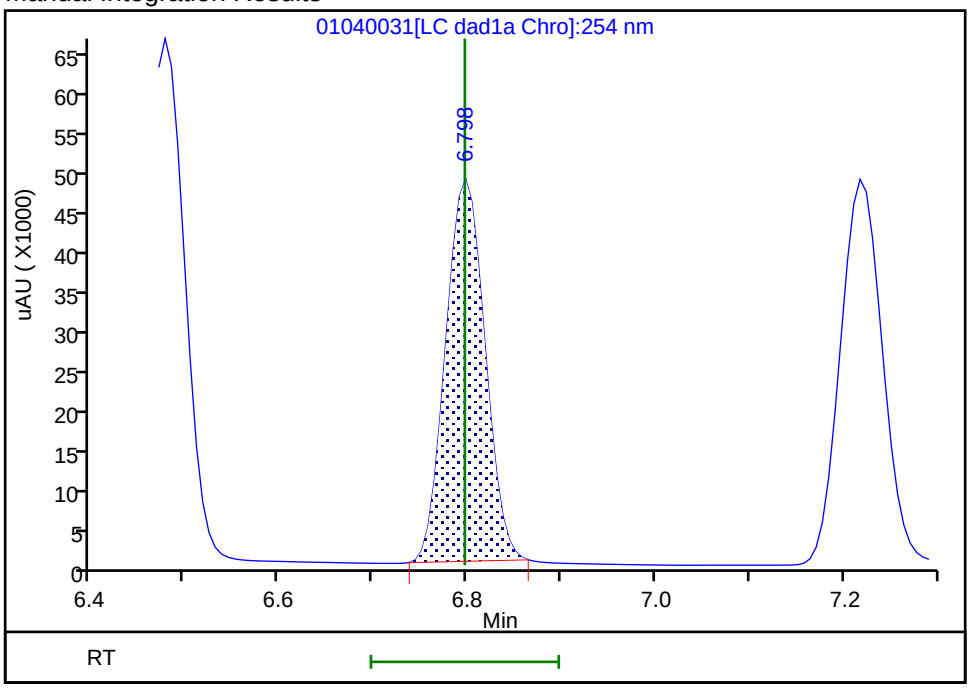
Processing Integration Results

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

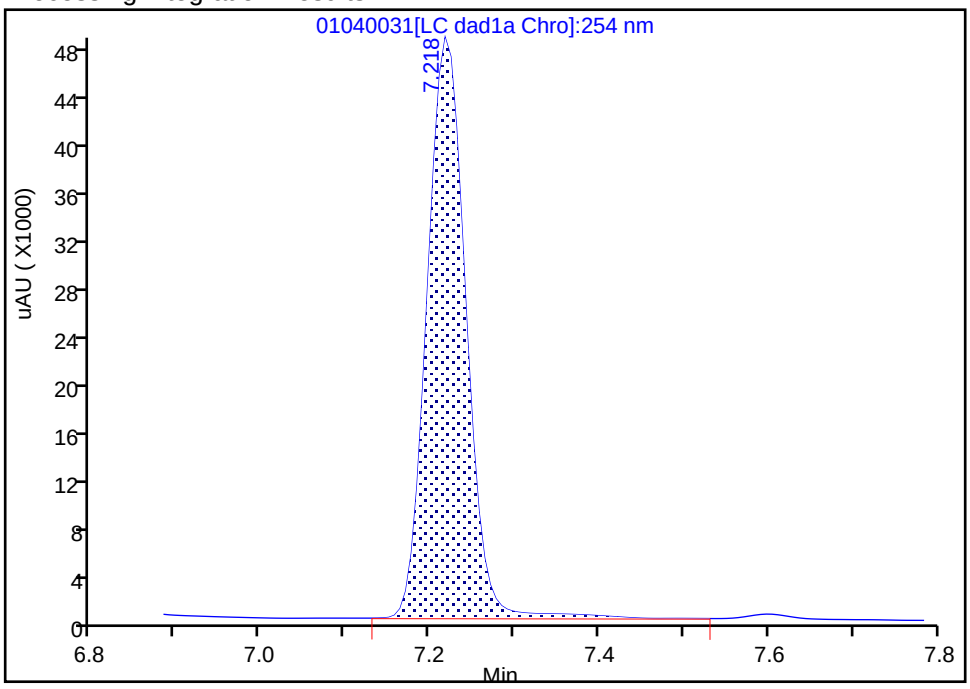
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040031.d				
Injection Date:	05-Jan-2022 02:06:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

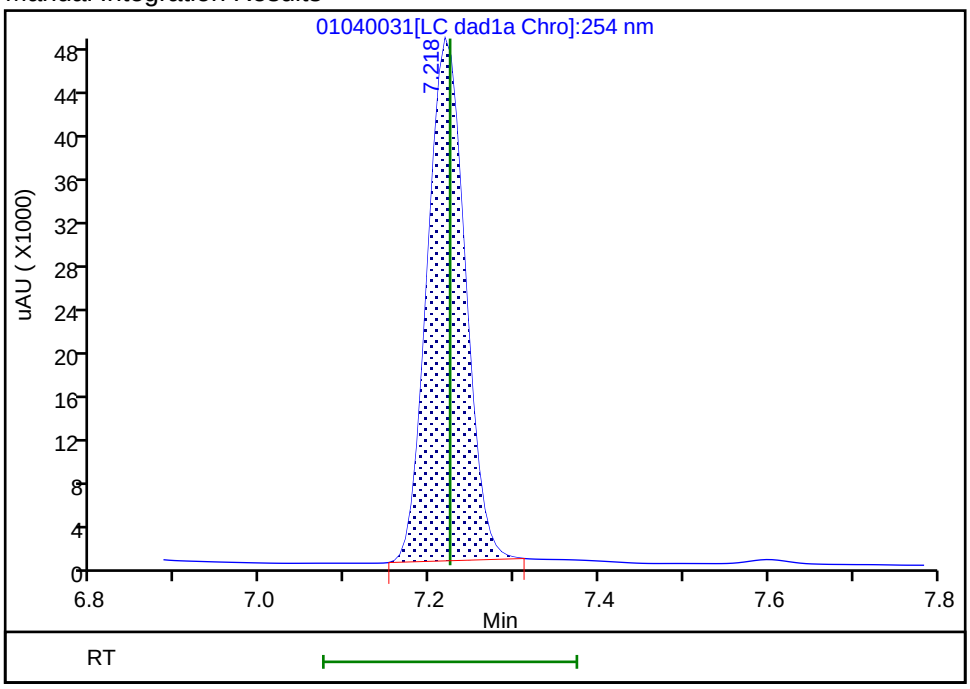
Processing Integration Results

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

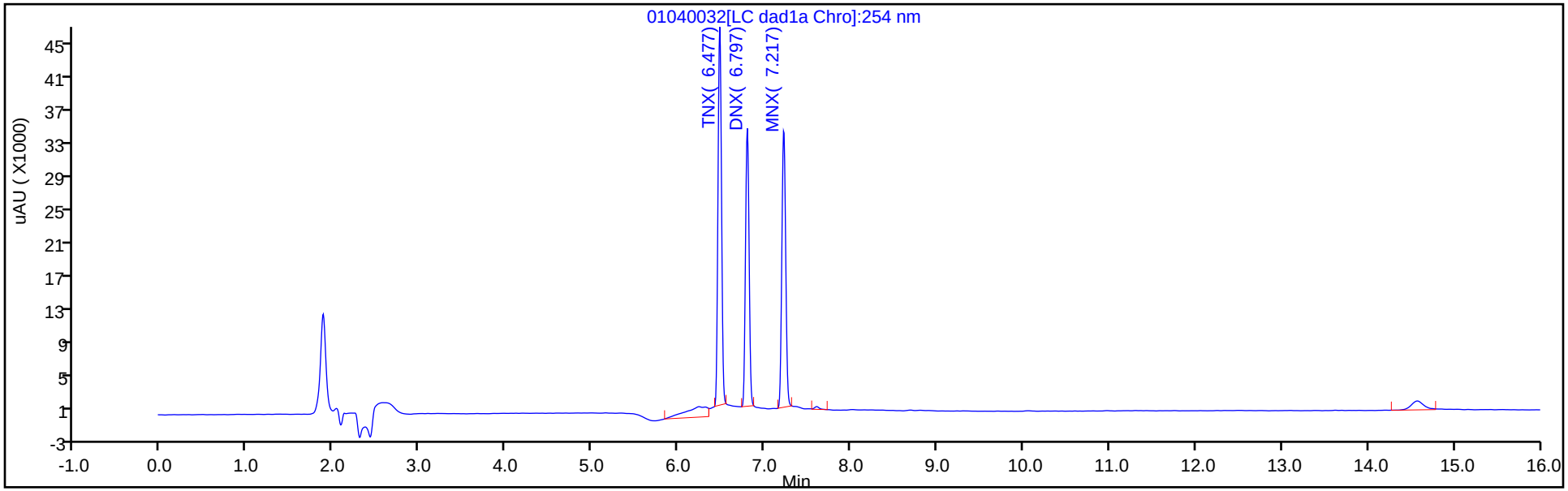
Report Date: 05-Jan-2022 12:10:06 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

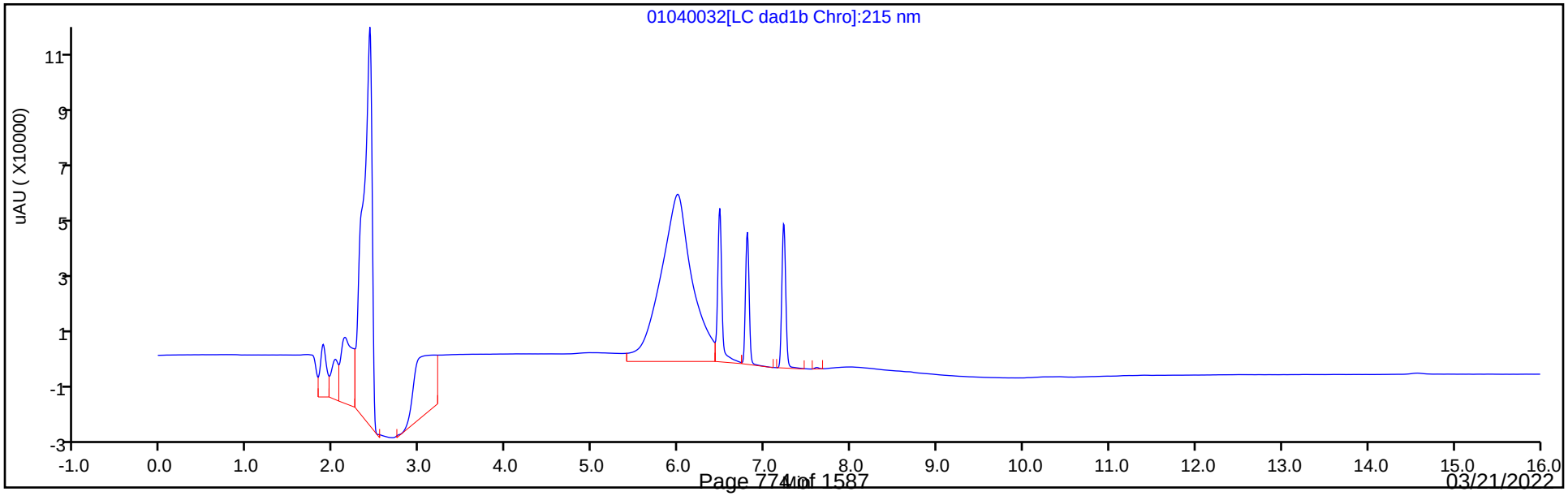
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040032.d

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

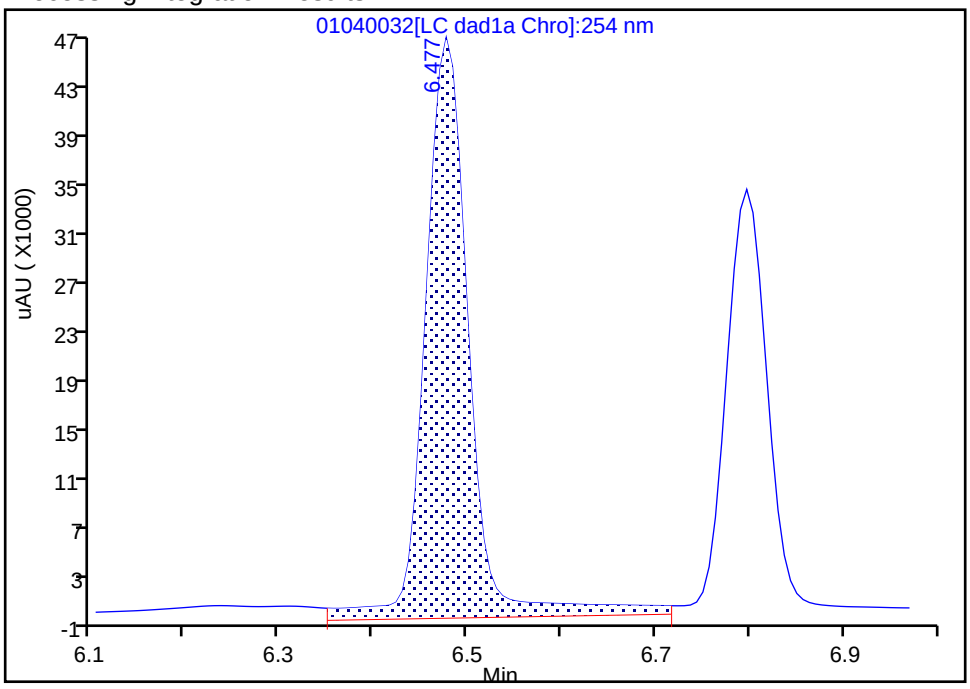
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040032.d				
Injection Date:	05-Jan-2022 02:29:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

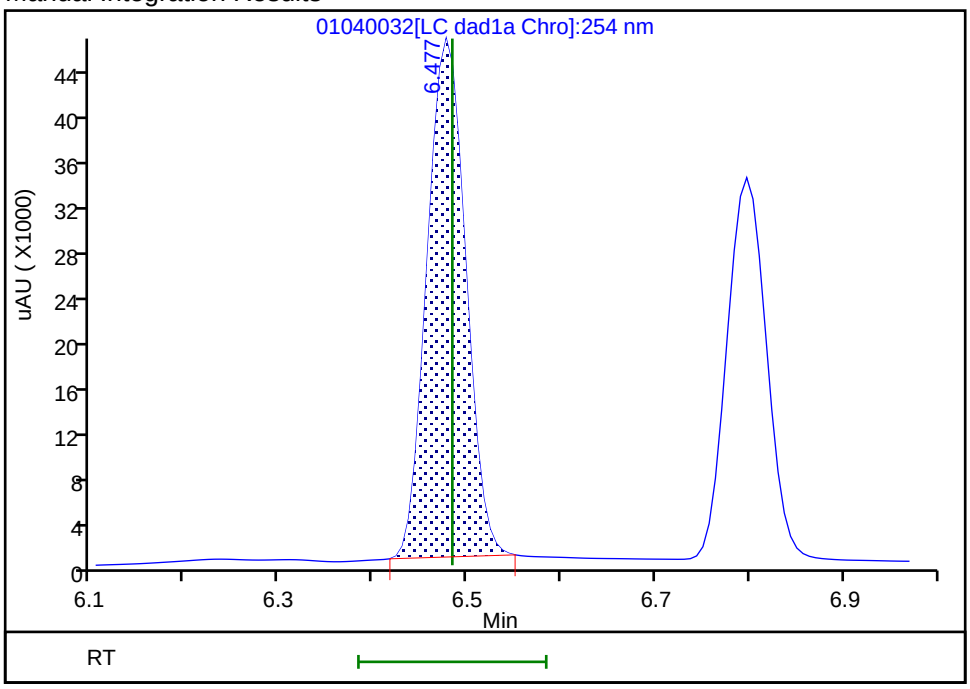
Processing Integration Results

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

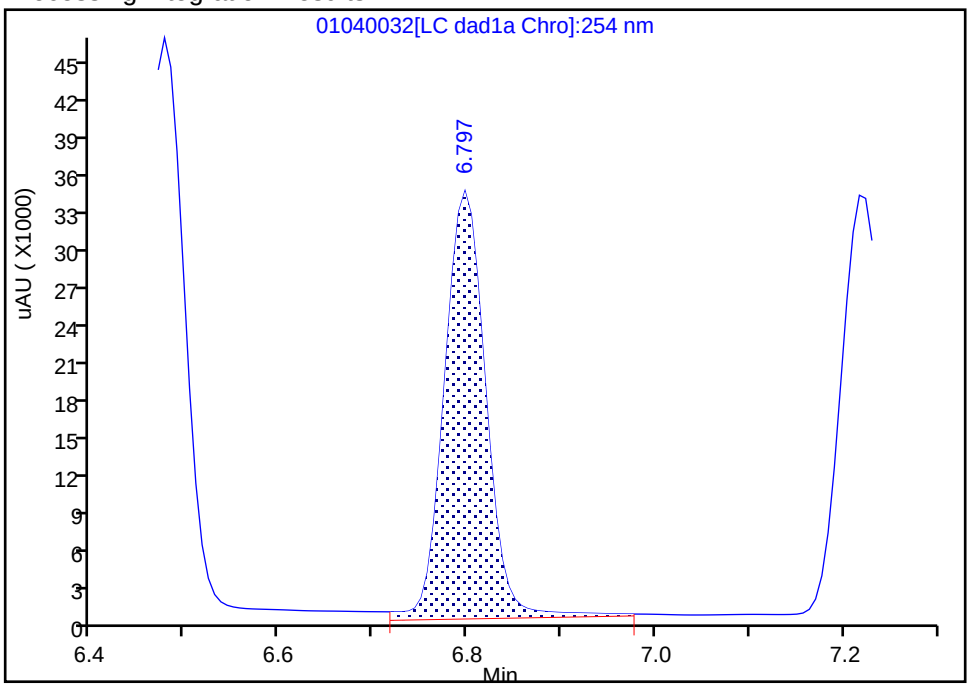
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040032.d				
Injection Date:	05-Jan-2022 02:29:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

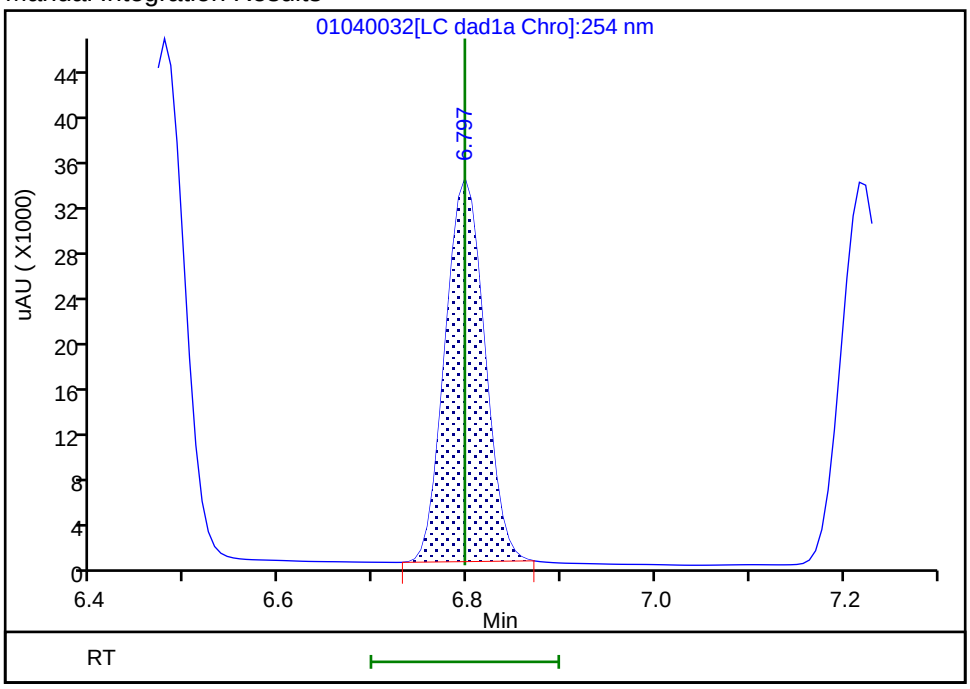
Processing Integration Results

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

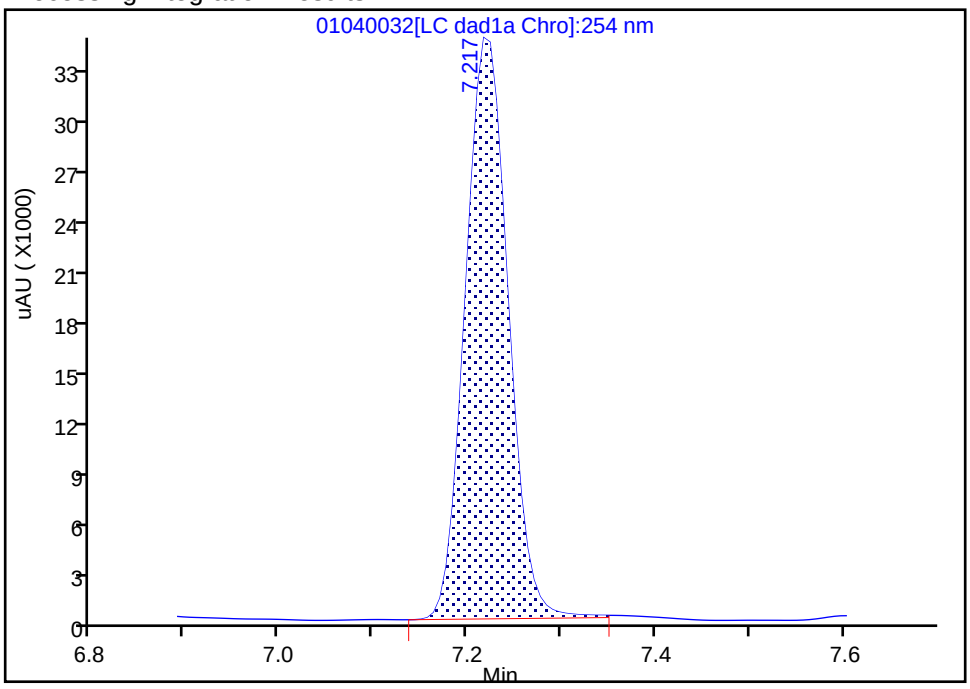
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040032.d				
Injection Date:	05-Jan-2022 02:29:42	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

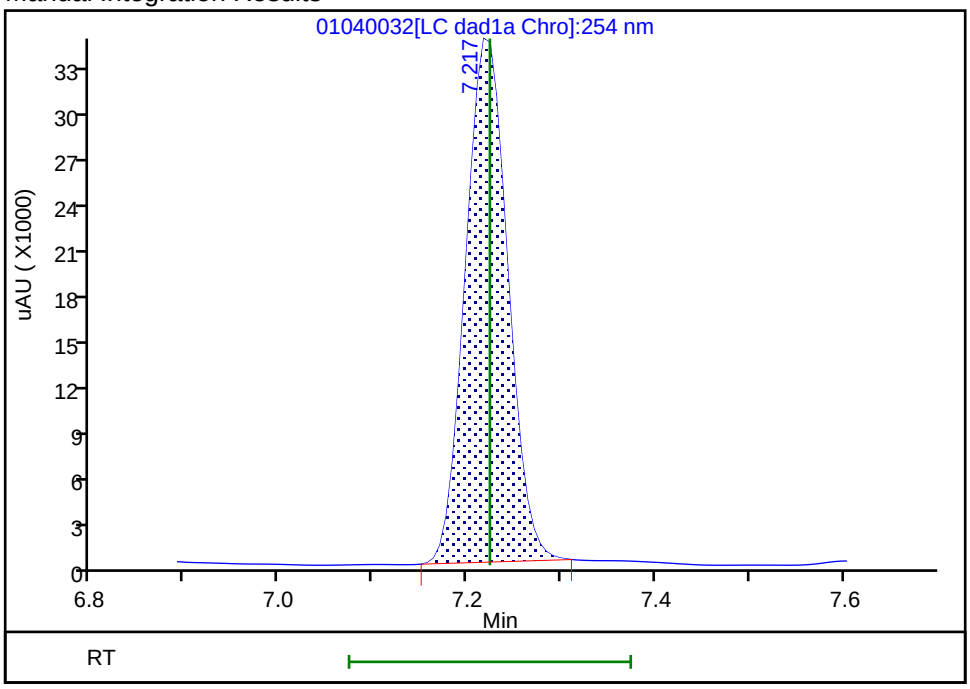
Processing Integration Results

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

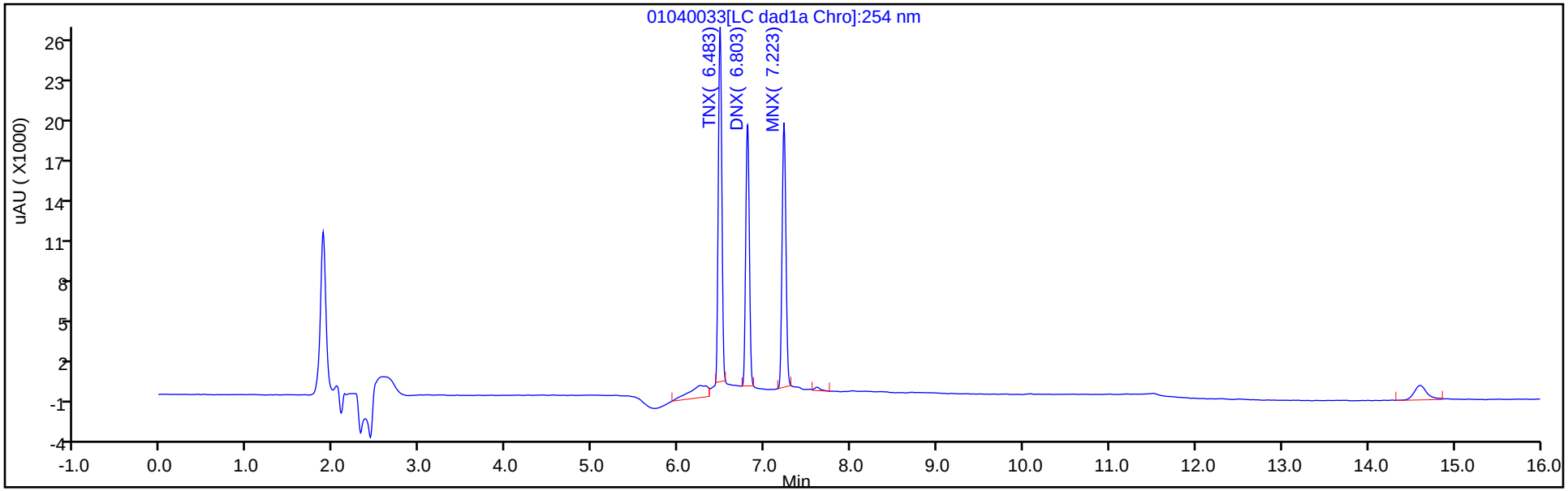
Report Date: 05-Jan-2022 12:10:07 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

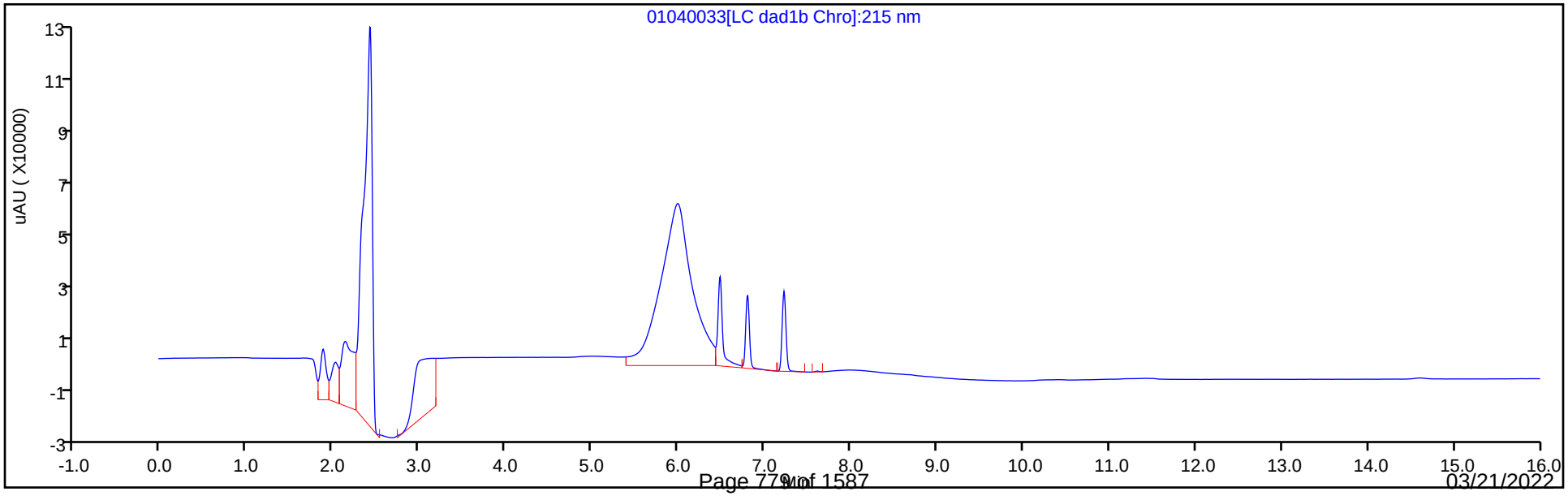
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040033.d

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

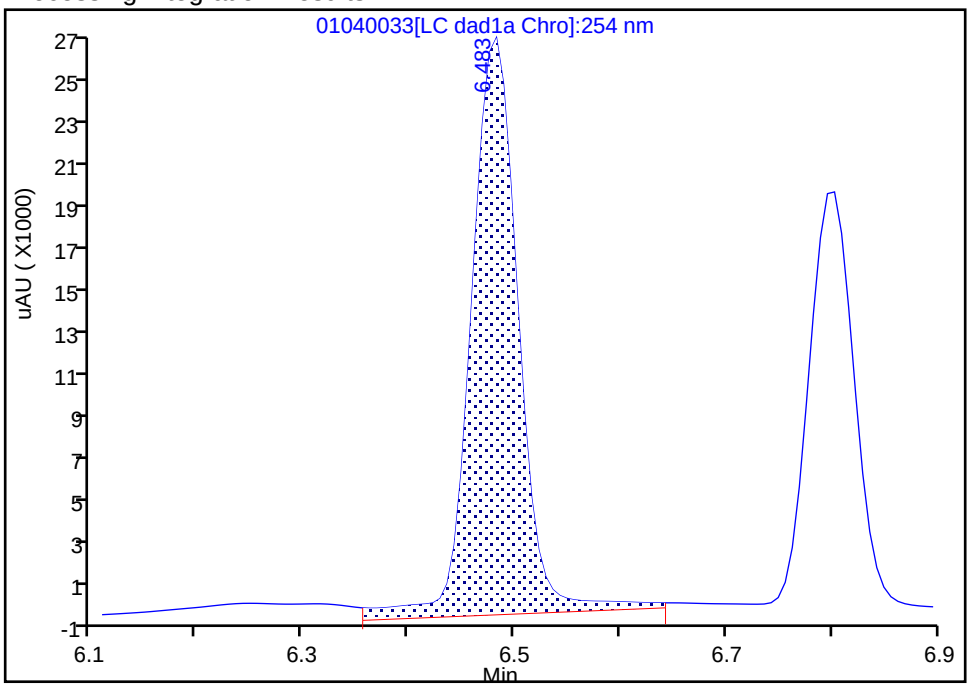
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040033.d				
Injection Date:	05-Jan-2022 02:52:35	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

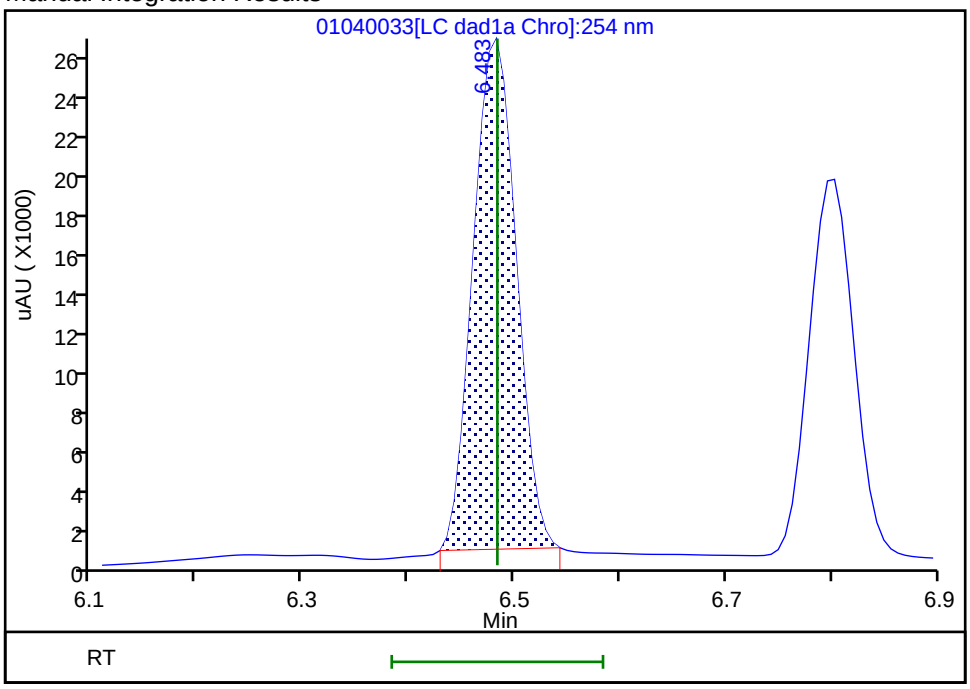
Processing Integration Results

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

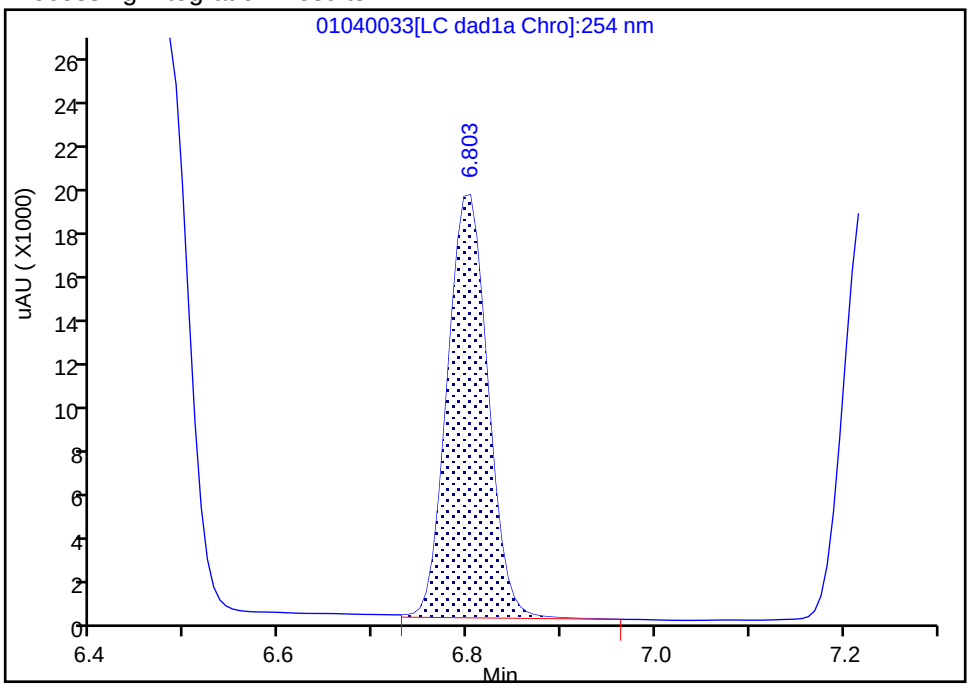
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040033.d				
Injection Date:	05-Jan-2022 02:52:35	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

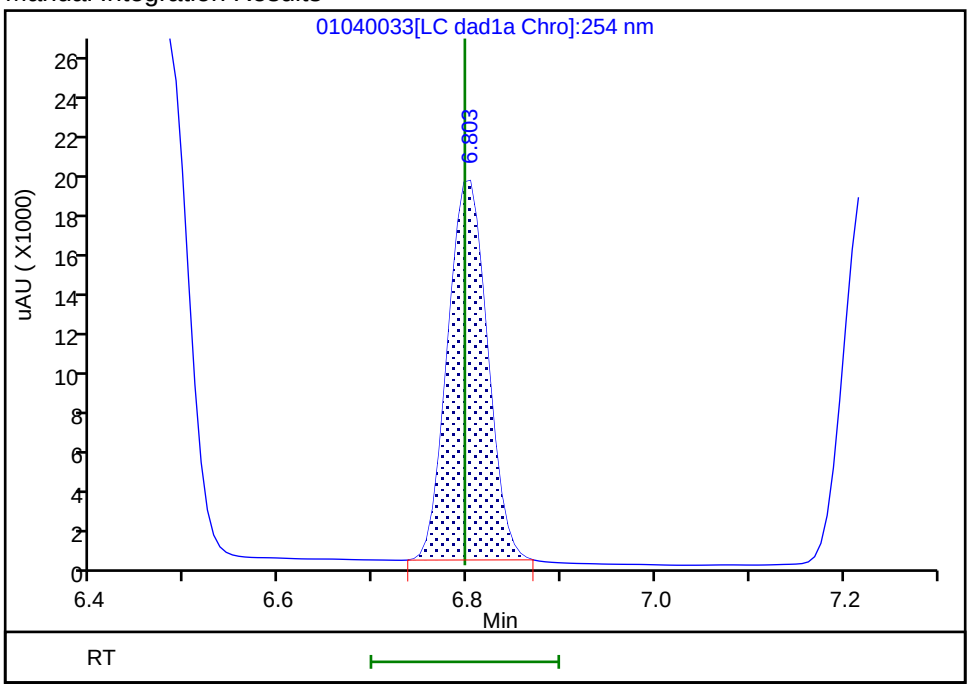
Processing Integration Results

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

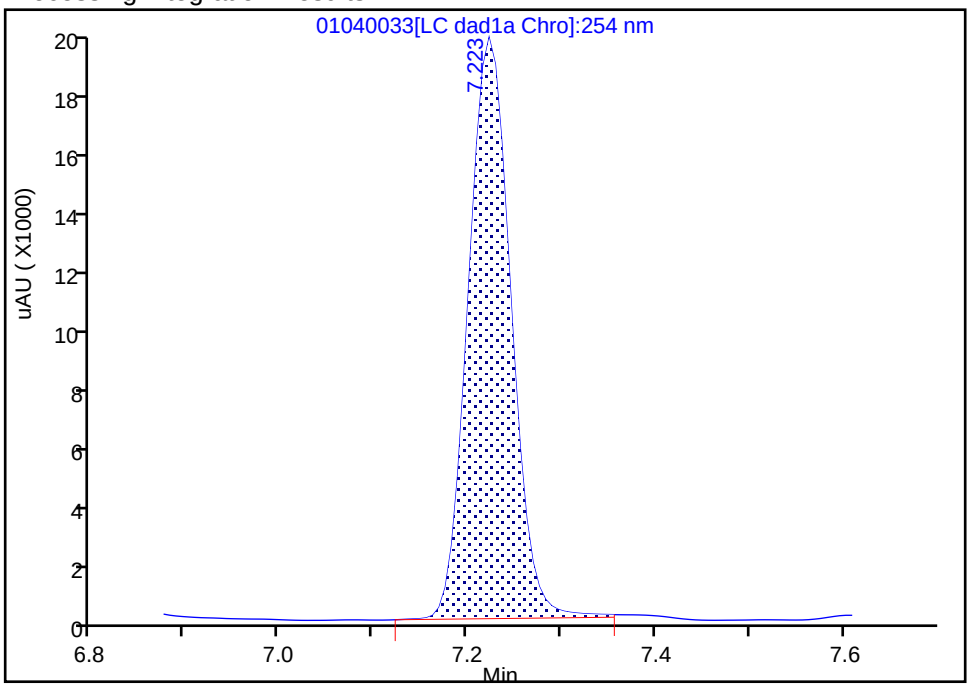
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040033.d				
Injection Date:	05-Jan-2022 02:52:35	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

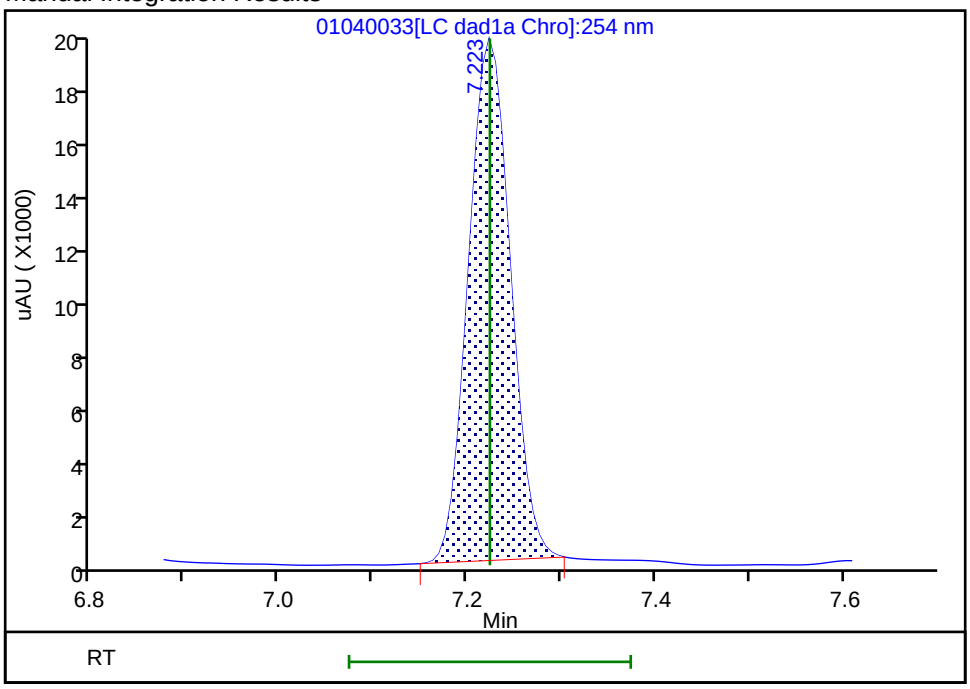
Processing Integration Results

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

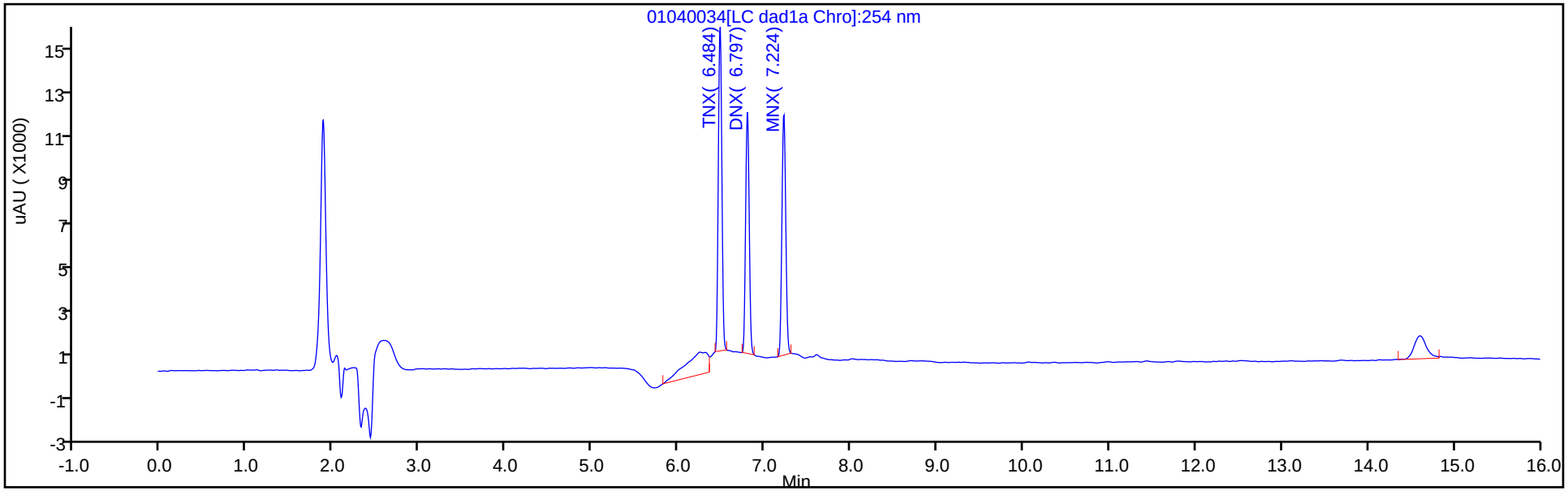
Report Date: 05-Jan-2022 12:10:07 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

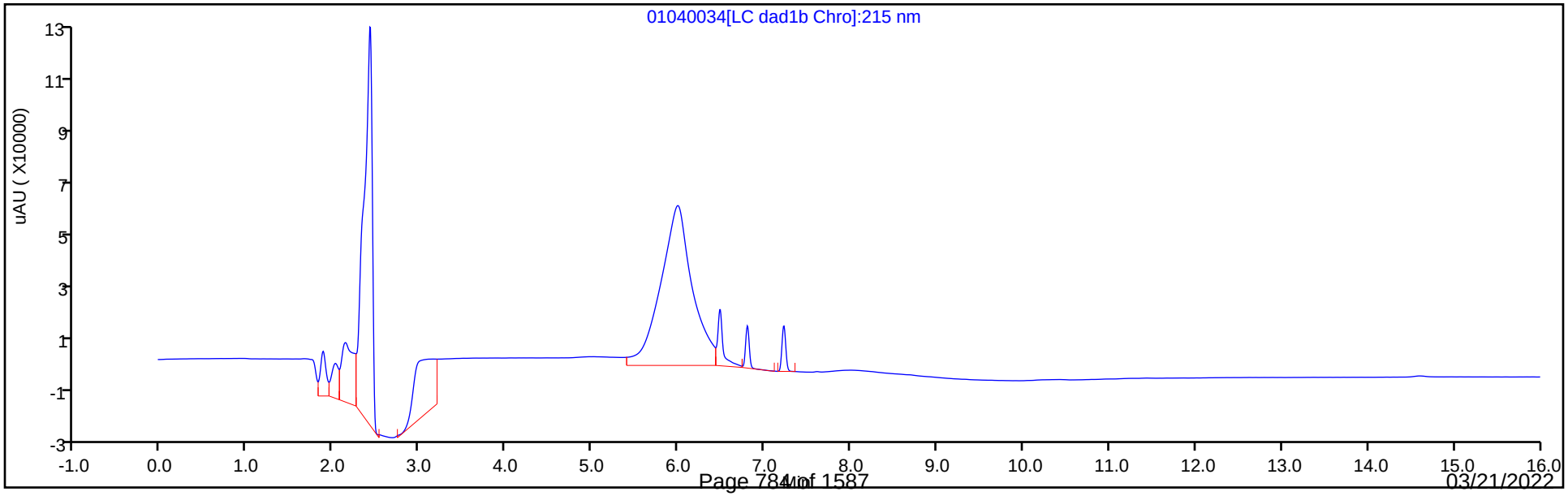
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040034.d

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

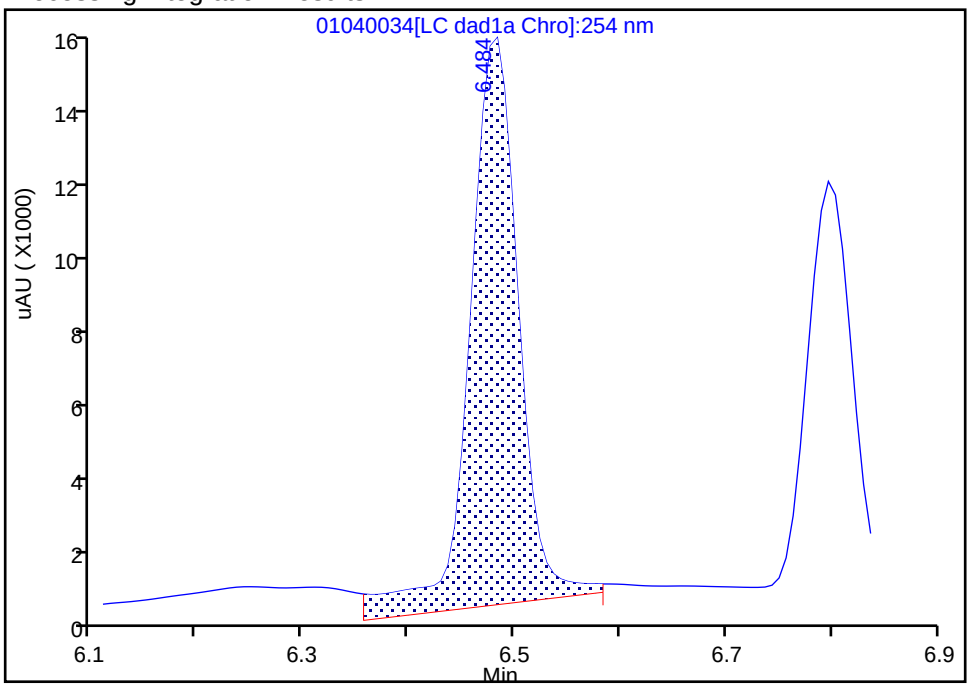
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040034.d				
Injection Date:	05-Jan-2022 03:15:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

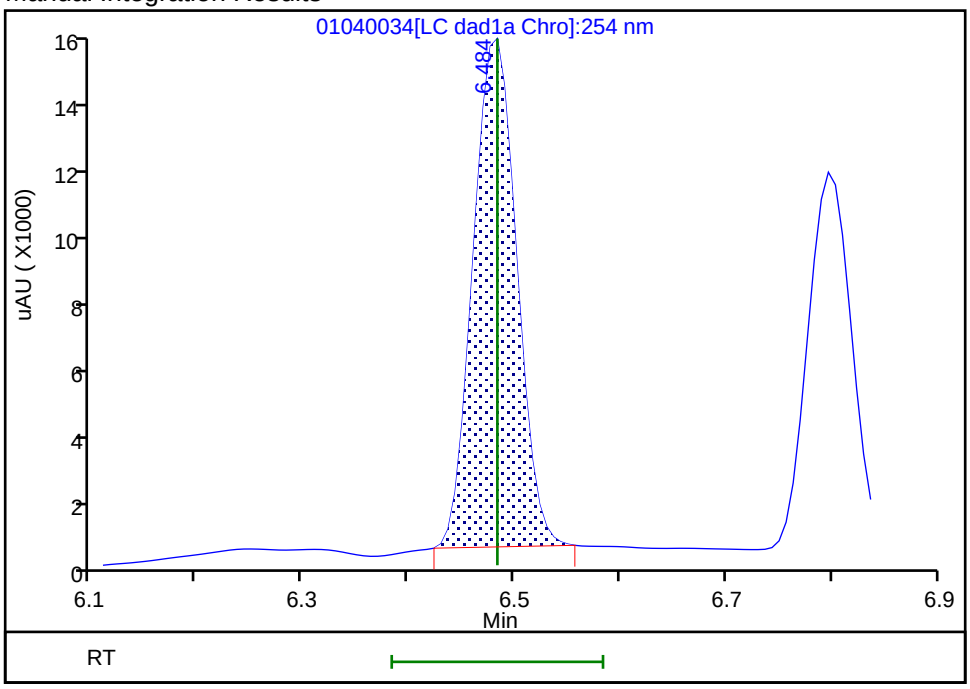
Processing Integration Results

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

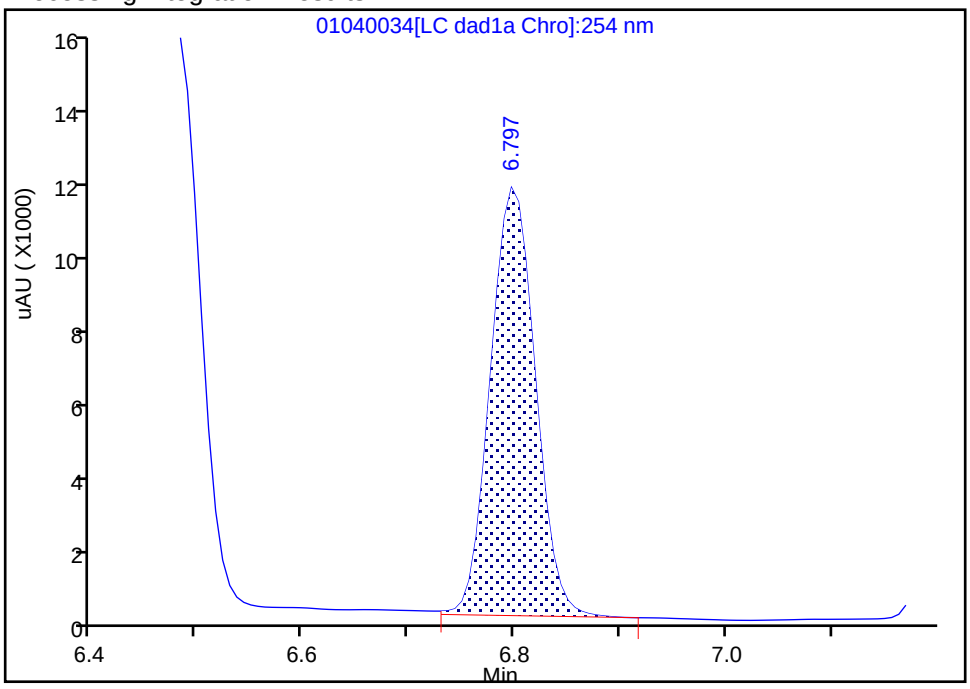
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040034.d				
Injection Date:	05-Jan-2022 03:15:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

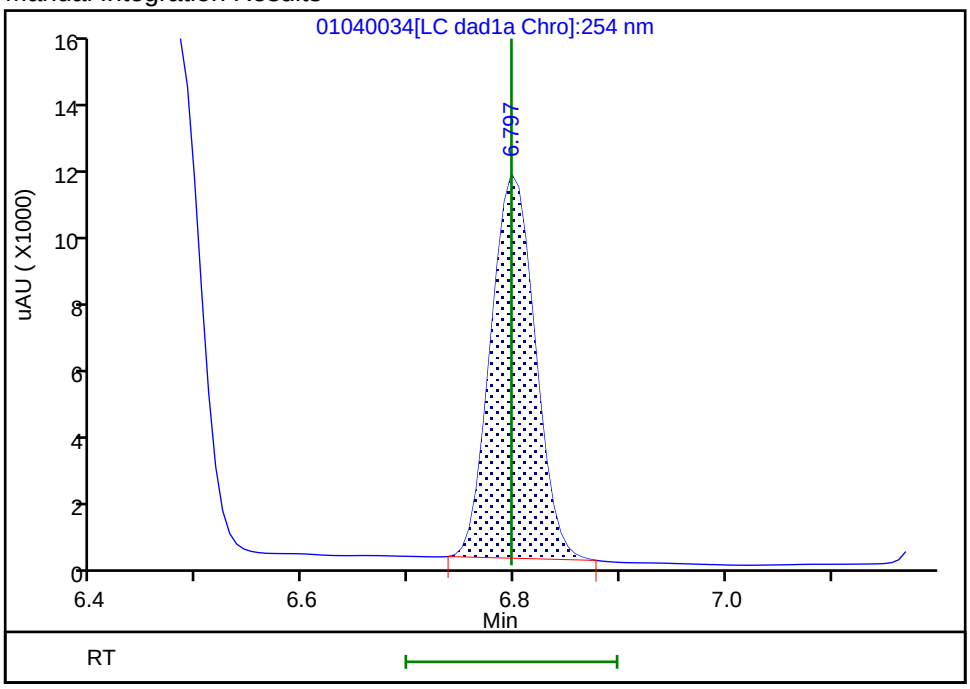
Processing Integration Results

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

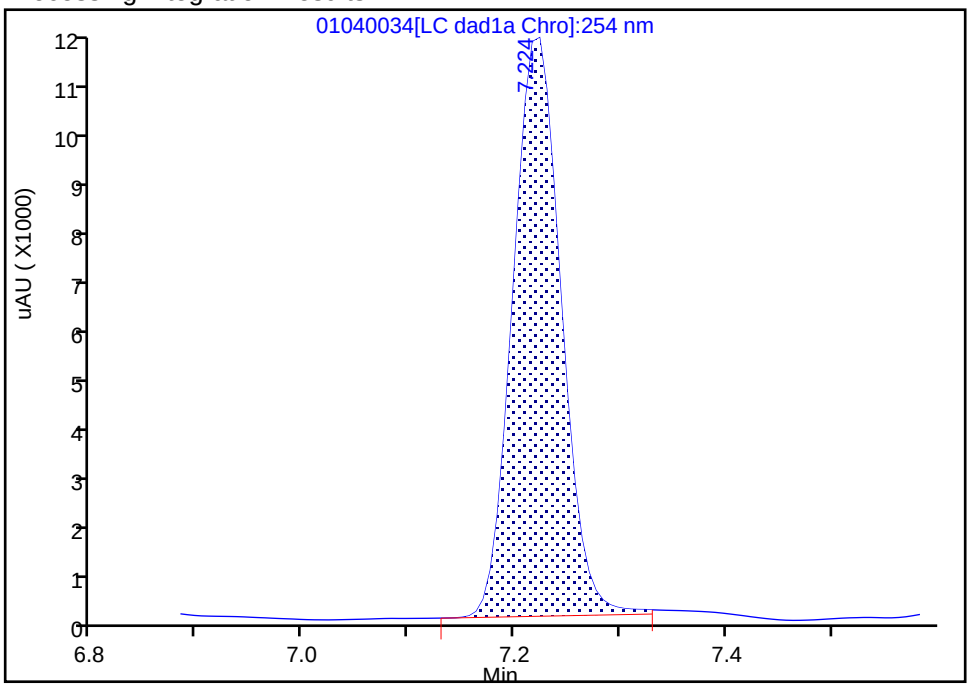
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040034.d				
Injection Date:	05-Jan-2022 03:15:30	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

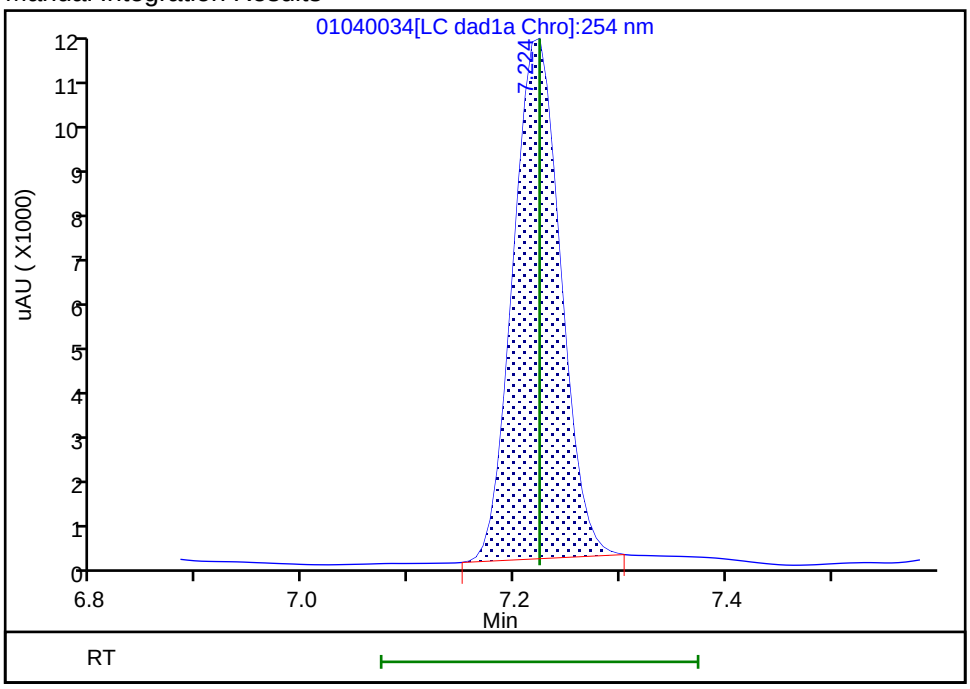
Processing Integration Results

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

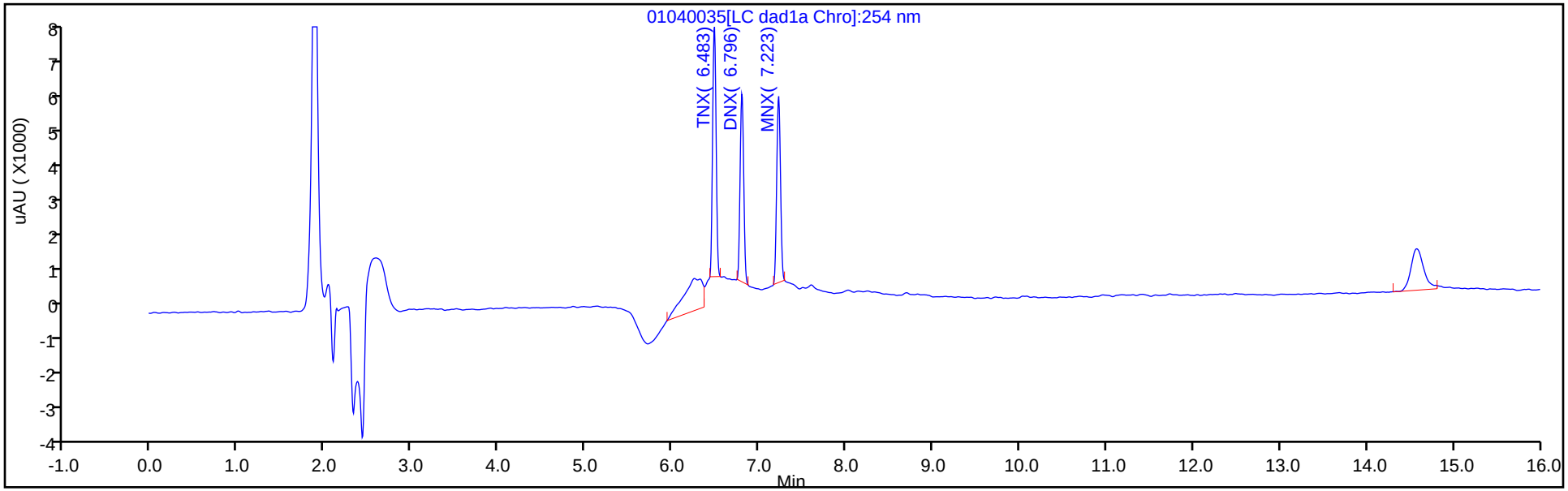
Report Date: 05-Jan-2022 12:10:08 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

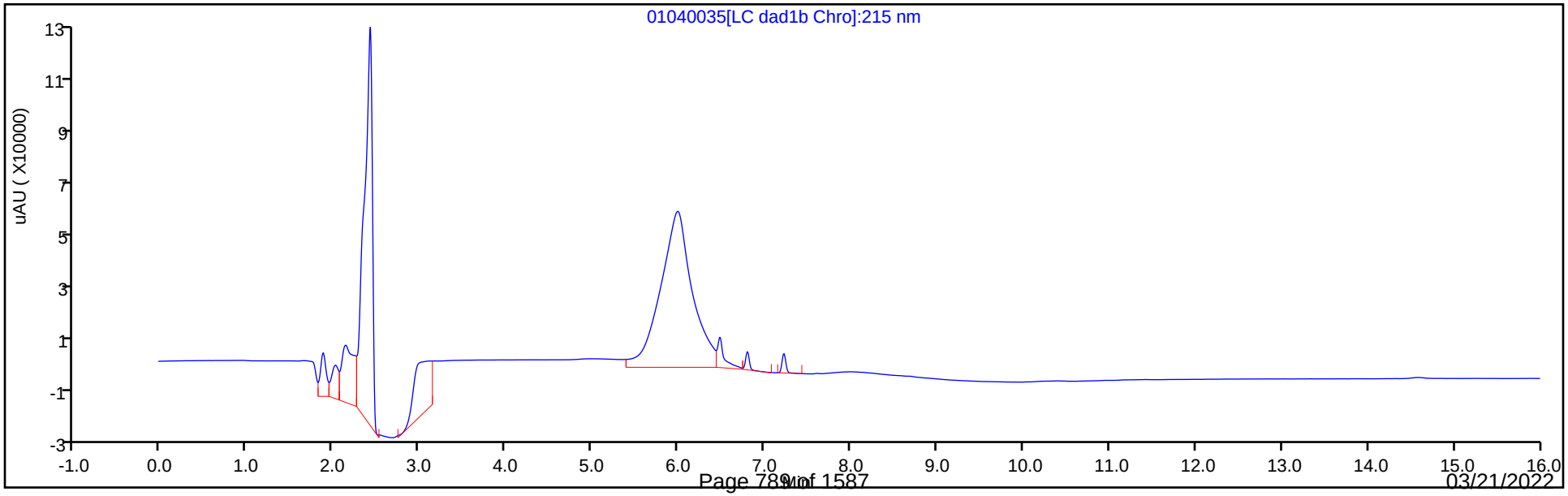
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040035.d

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

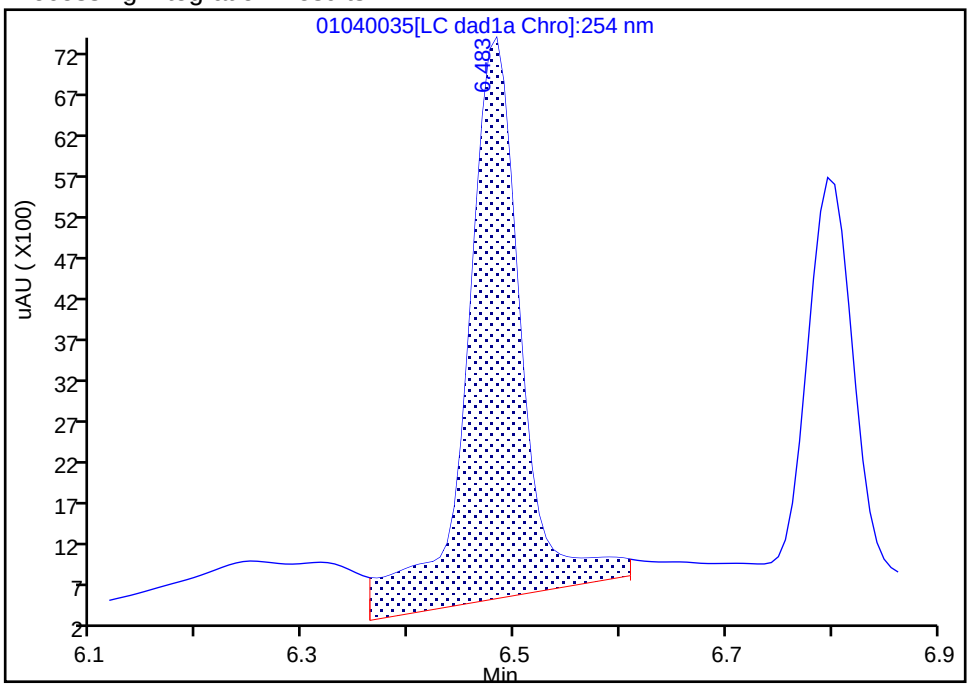
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040035.d				
Injection Date:	05-Jan-2022 03:38:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

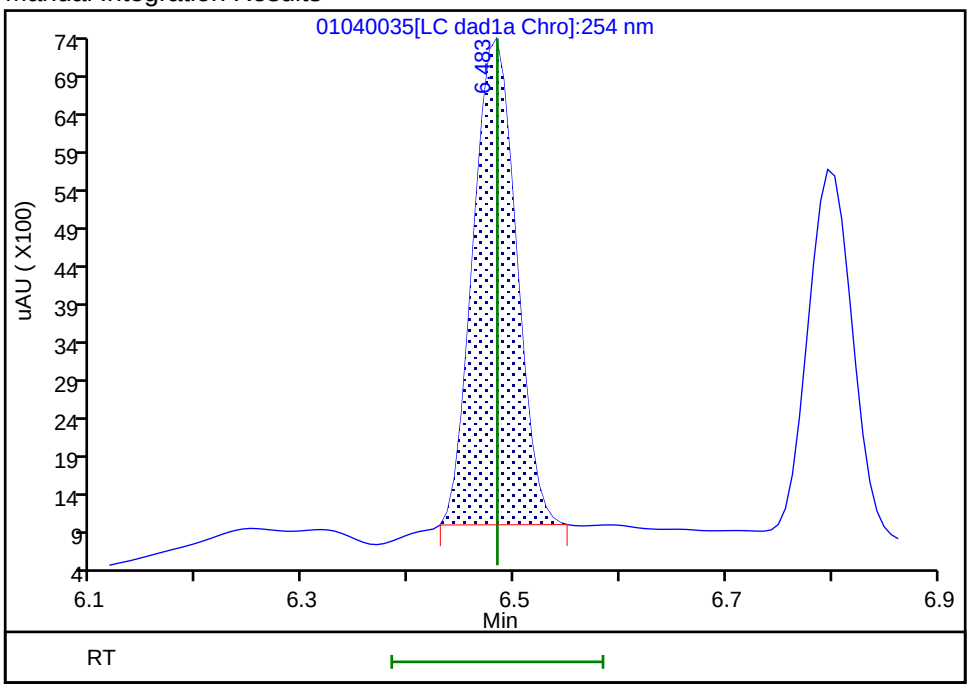
Processing Integration Results

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

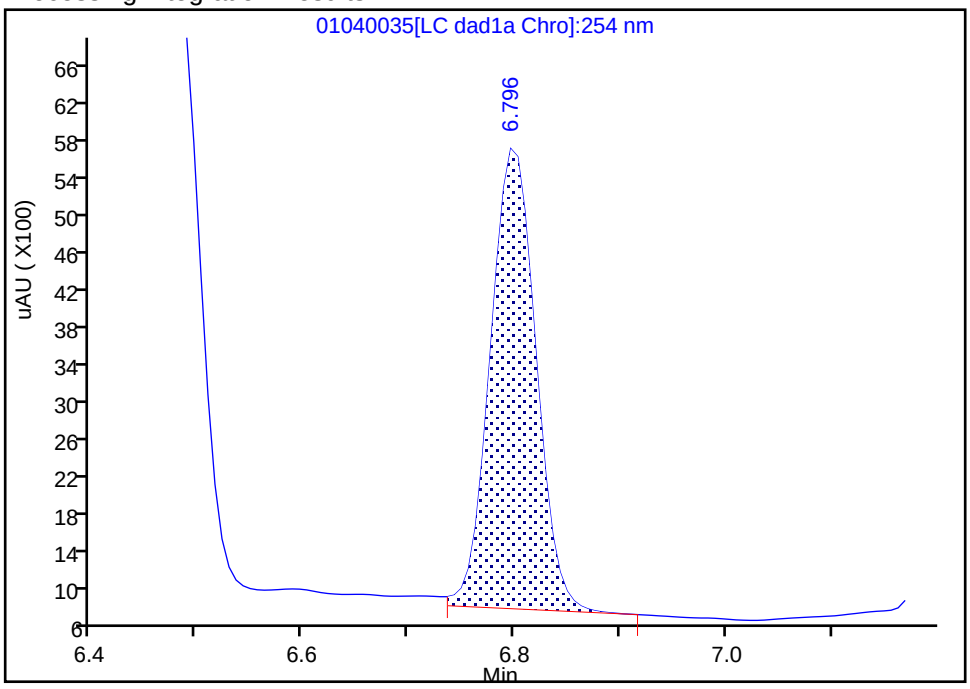
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040035.d				
Injection Date:	05-Jan-2022 03:38:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

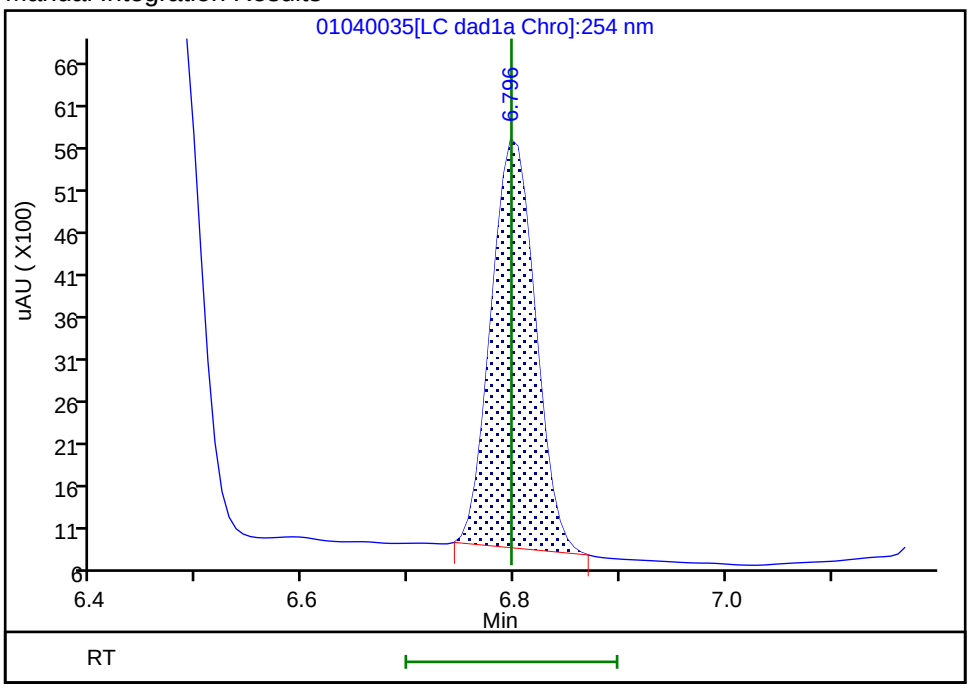
Processing Integration Results

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

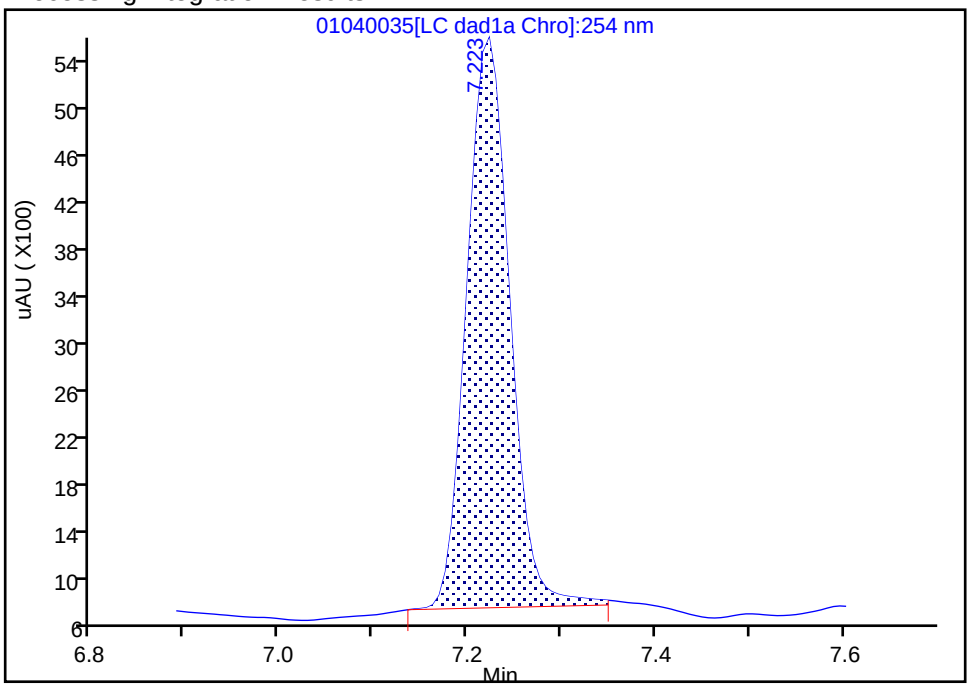
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040035.d				
Injection Date:	05-Jan-2022 03:38:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

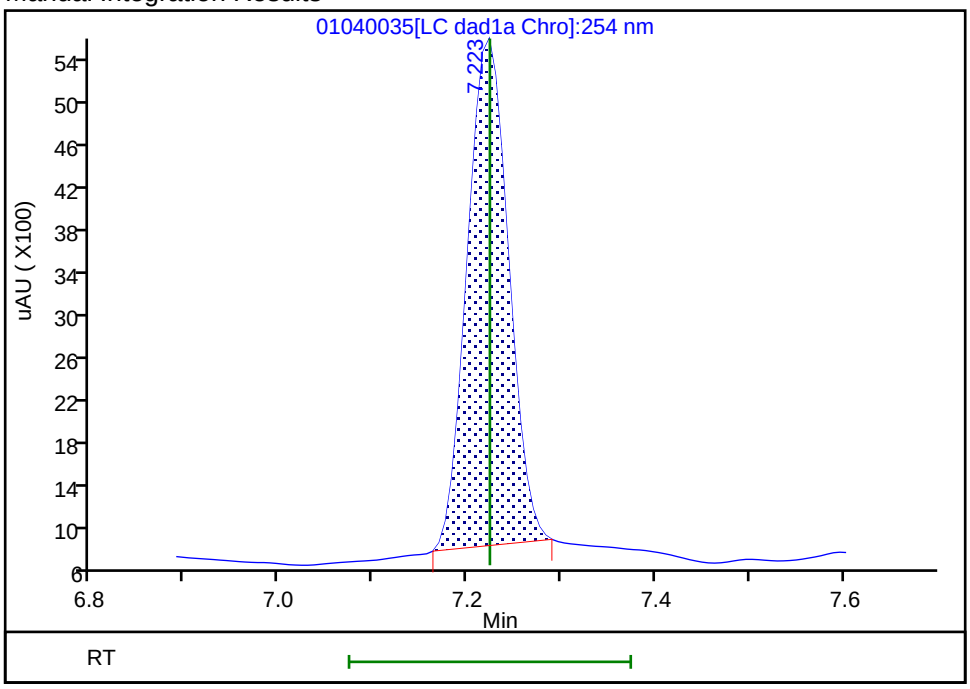
Processing Integration Results

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

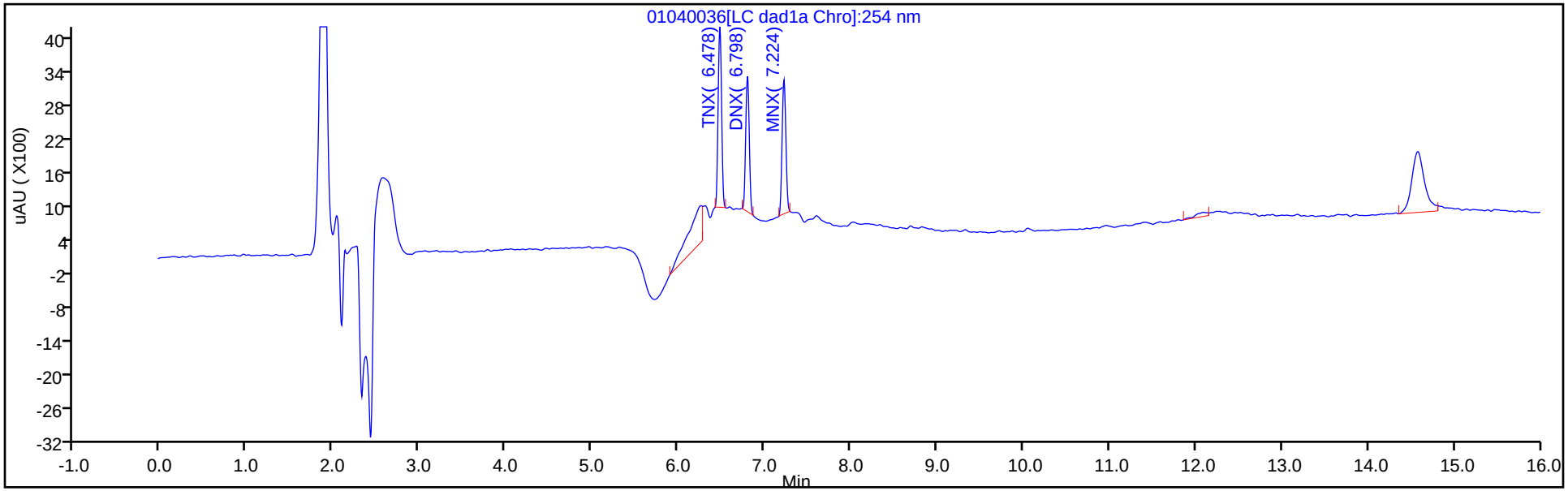
Report Date: 05-Jan-2022 12:10:08 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

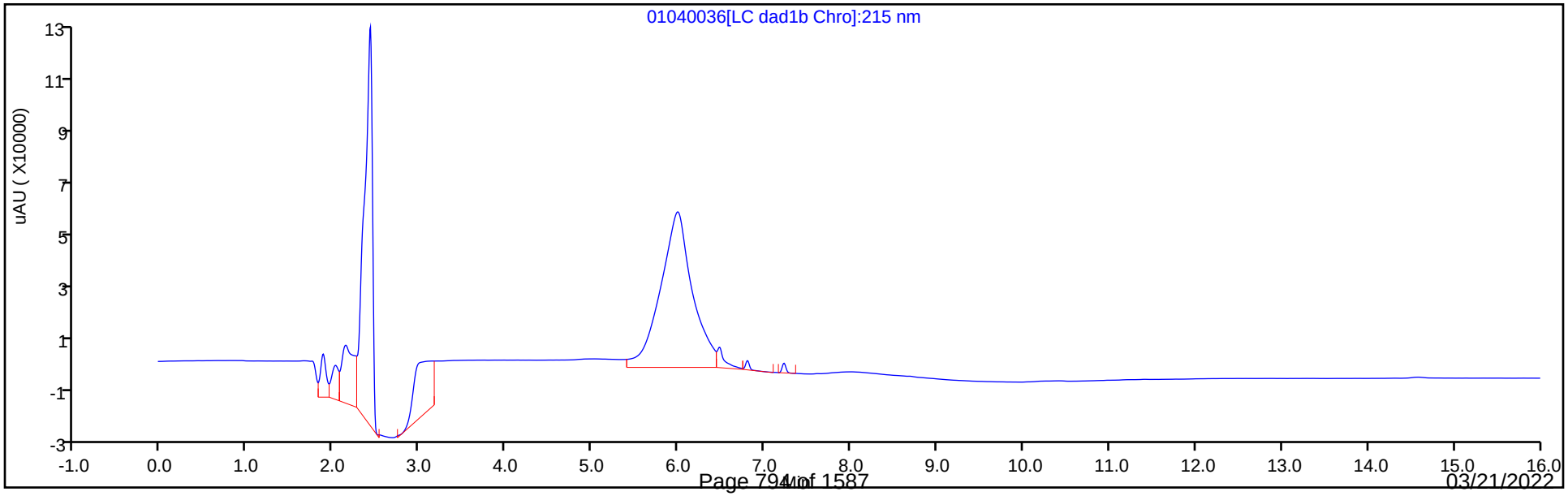
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040036.d

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

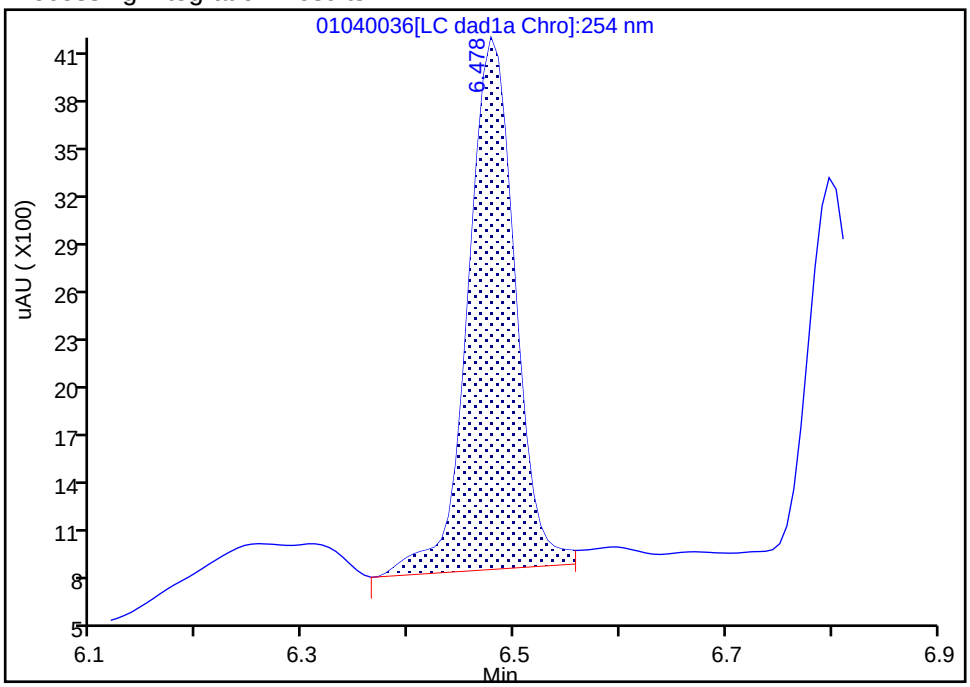
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040036.d				
Injection Date:	05-Jan-2022 04:01:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

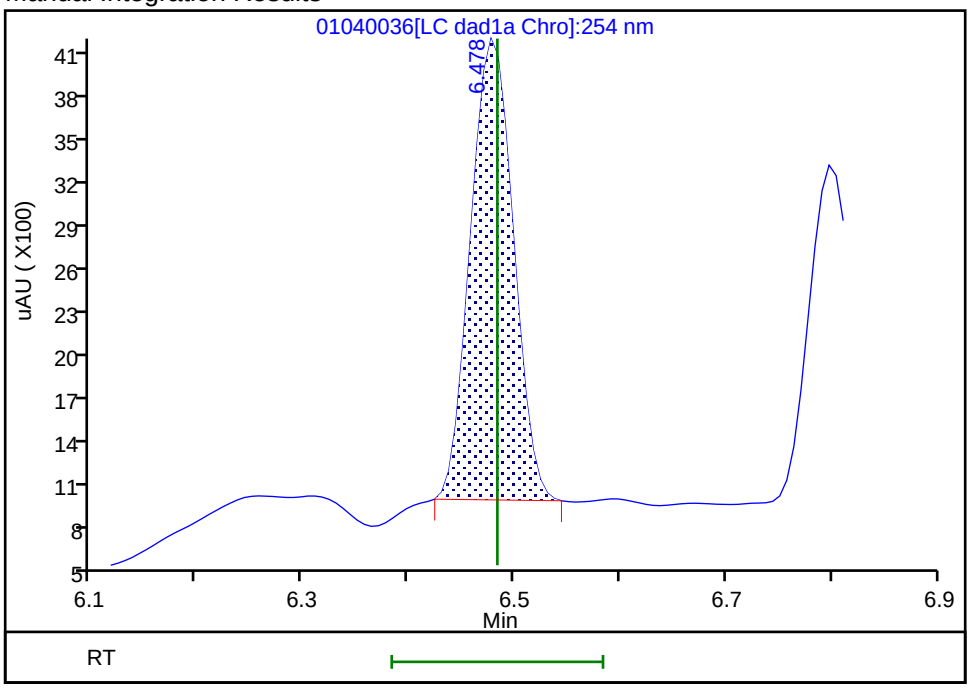
Processing Integration Results

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

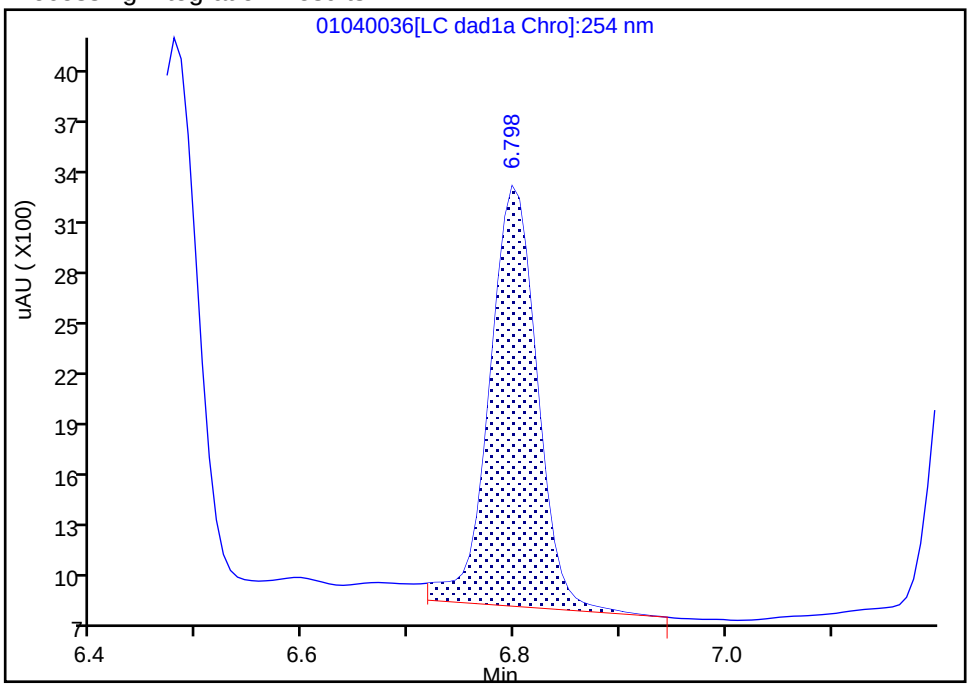
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040036.d				
Injection Date:	05-Jan-2022 04:01:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

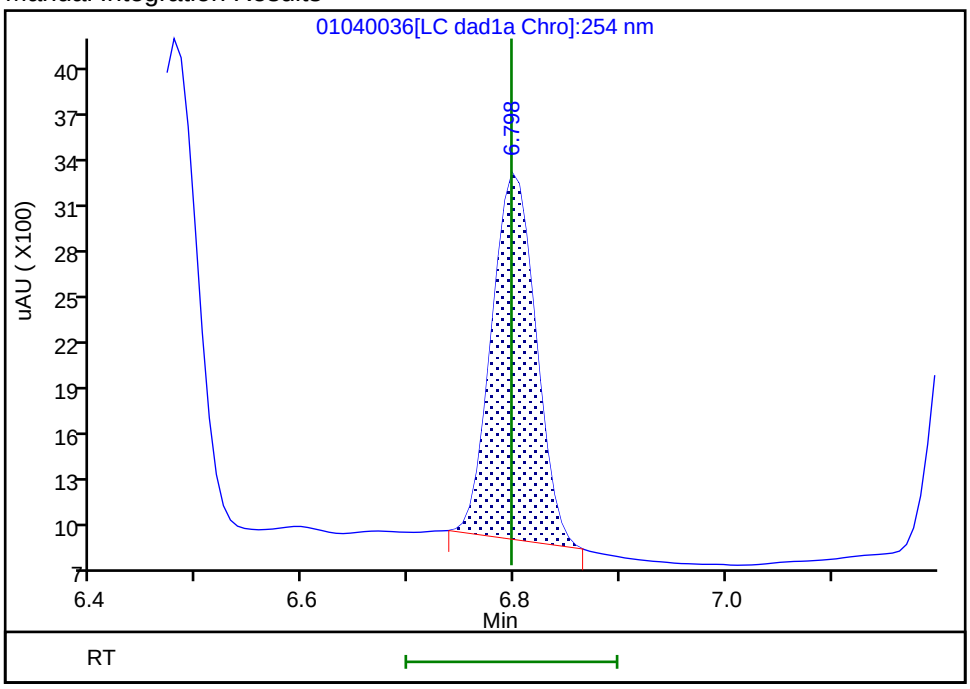
Processing Integration Results

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

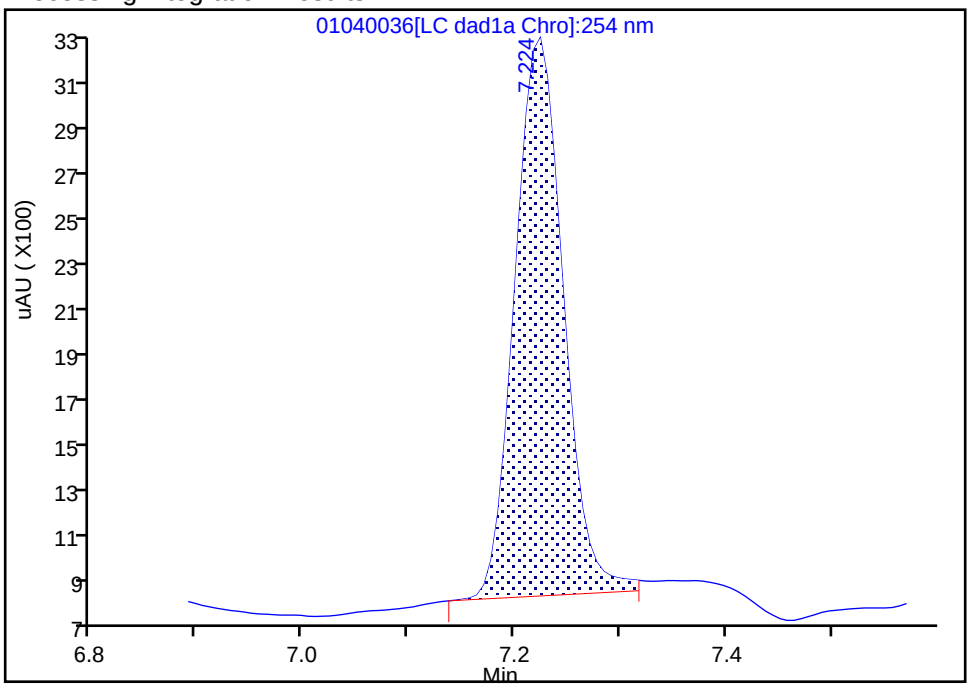
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040036.d				
Injection Date:	05-Jan-2022 04:01:20	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

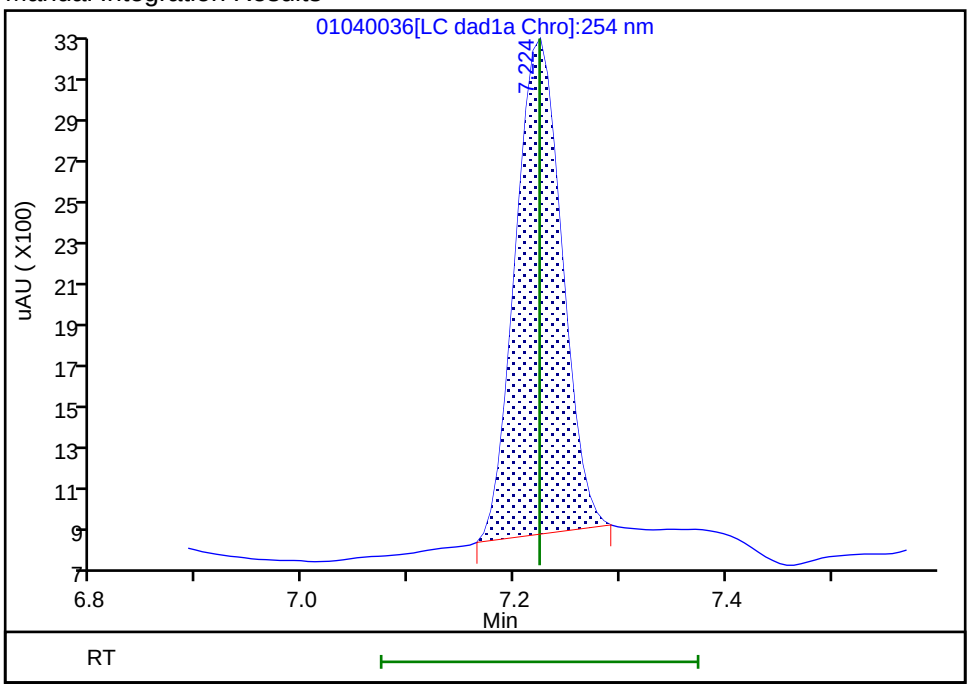
Processing Integration Results

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

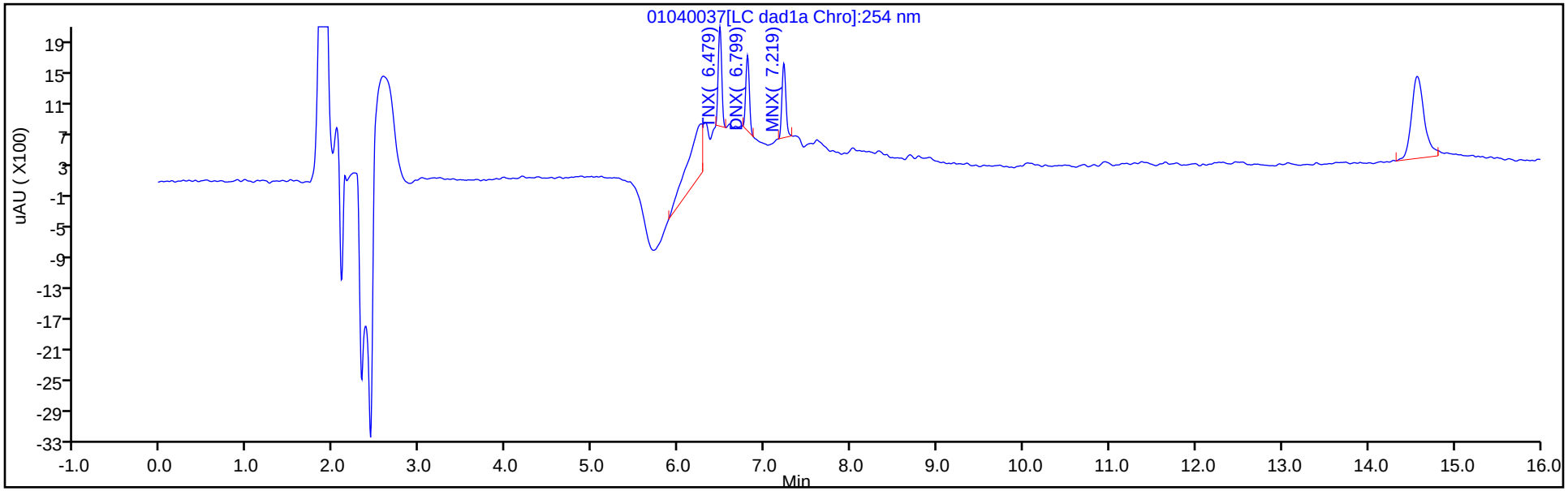
Report Date: 05-Jan-2022 12:10:09 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

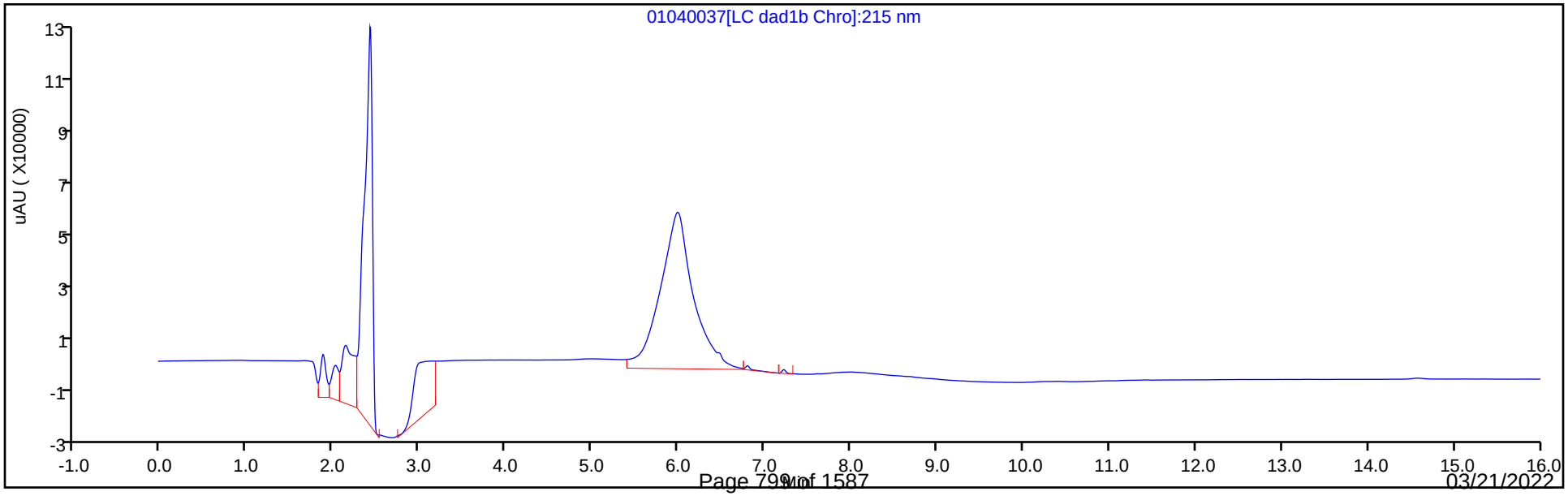
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040037.d

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

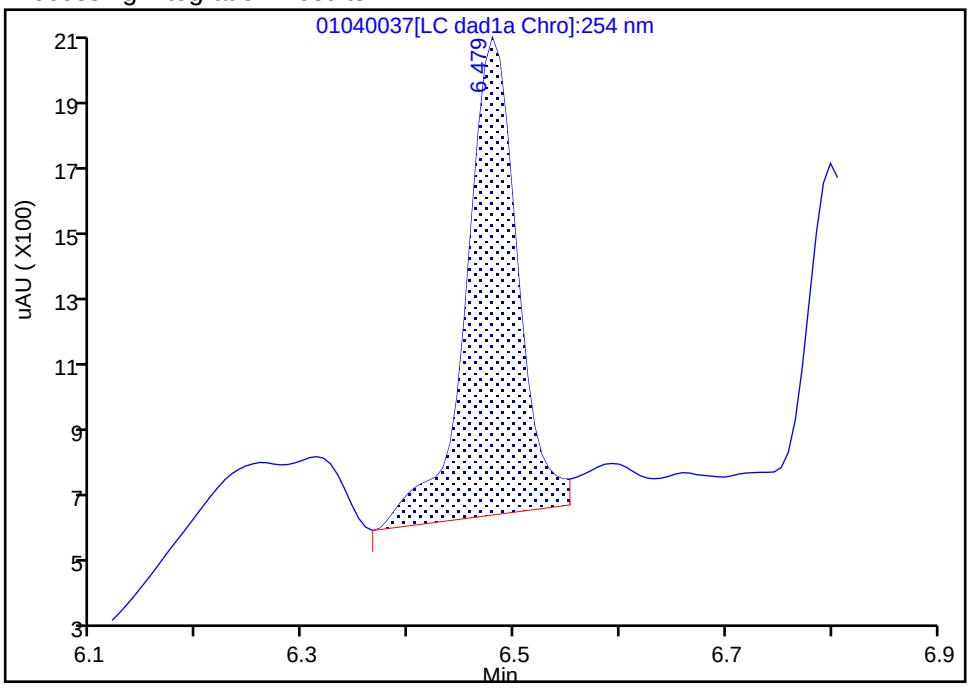
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040037.d				
Injection Date:	05-Jan-2022 04:24:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

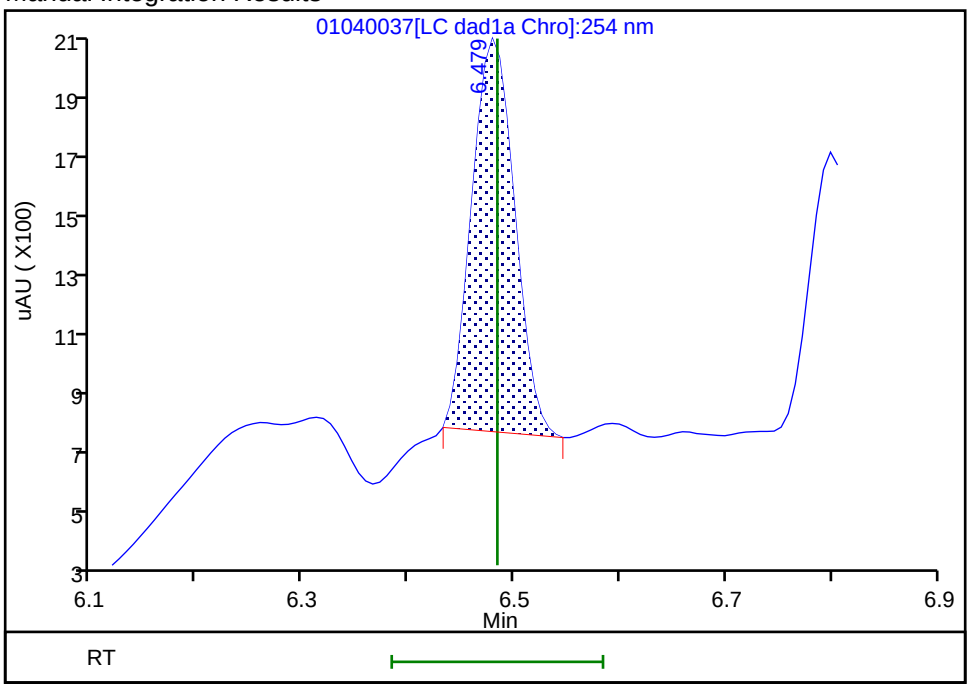
Processing Integration Results

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

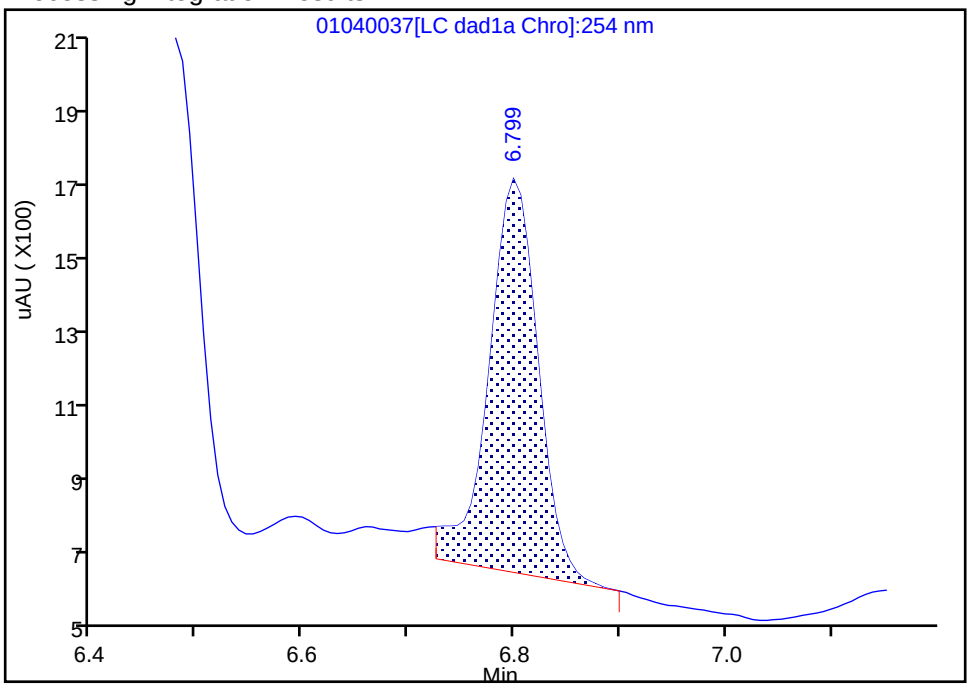
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040037.d				
Injection Date:	05-Jan-2022 04:24:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

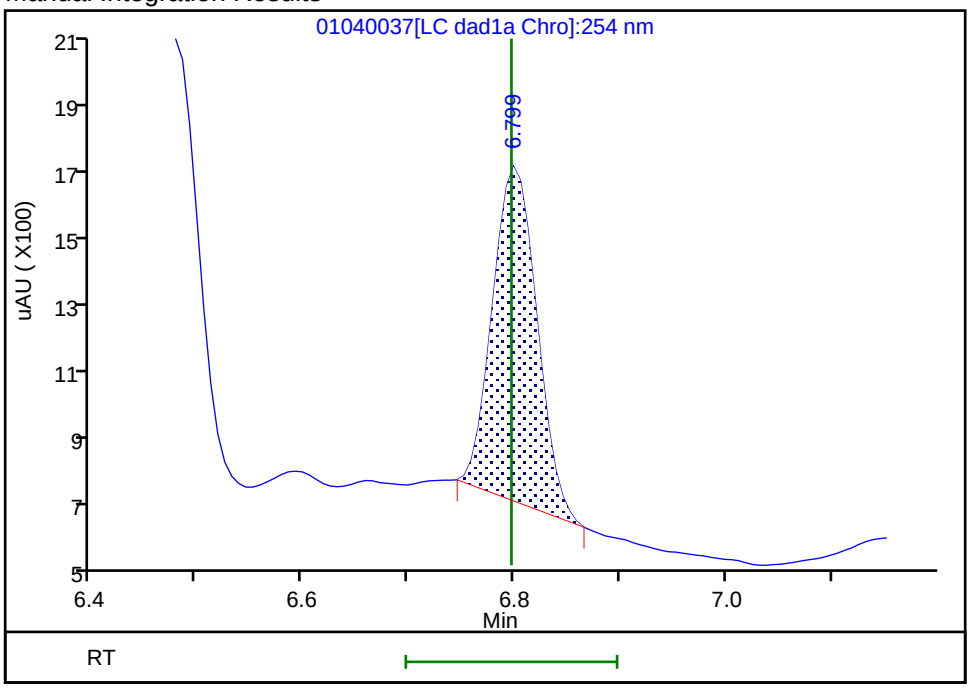
Processing Integration Results

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

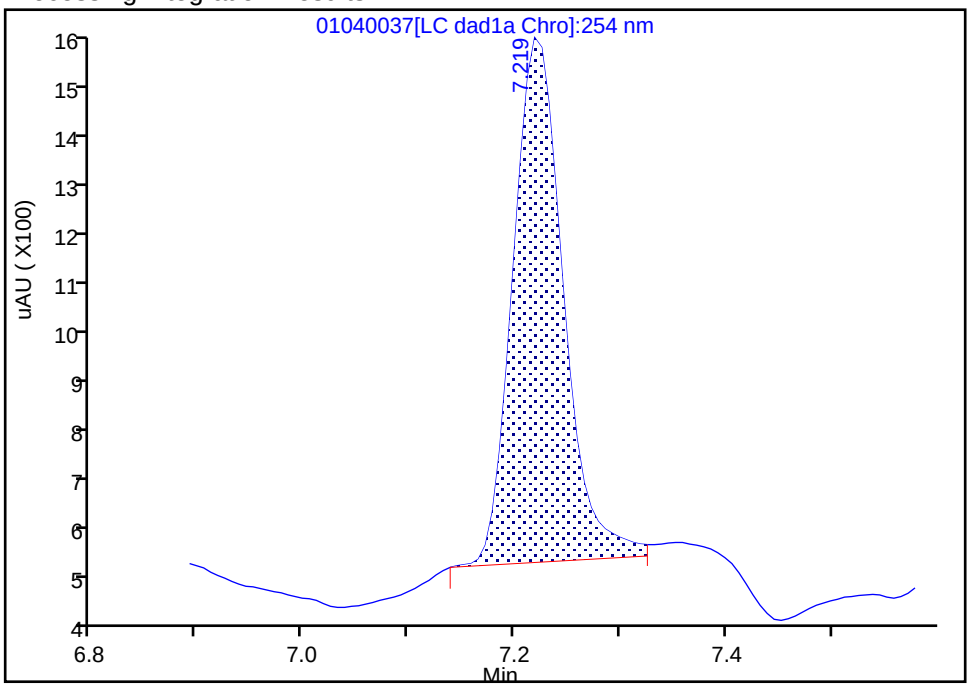
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040037.d				
Injection Date:	05-Jan-2022 04:24:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

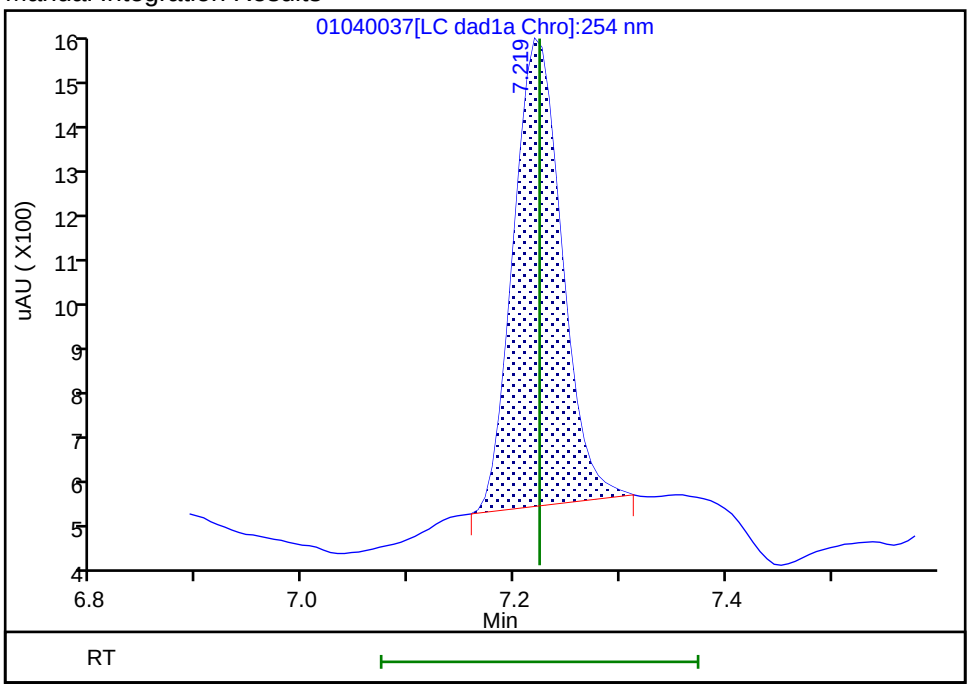
Processing Integration Results

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

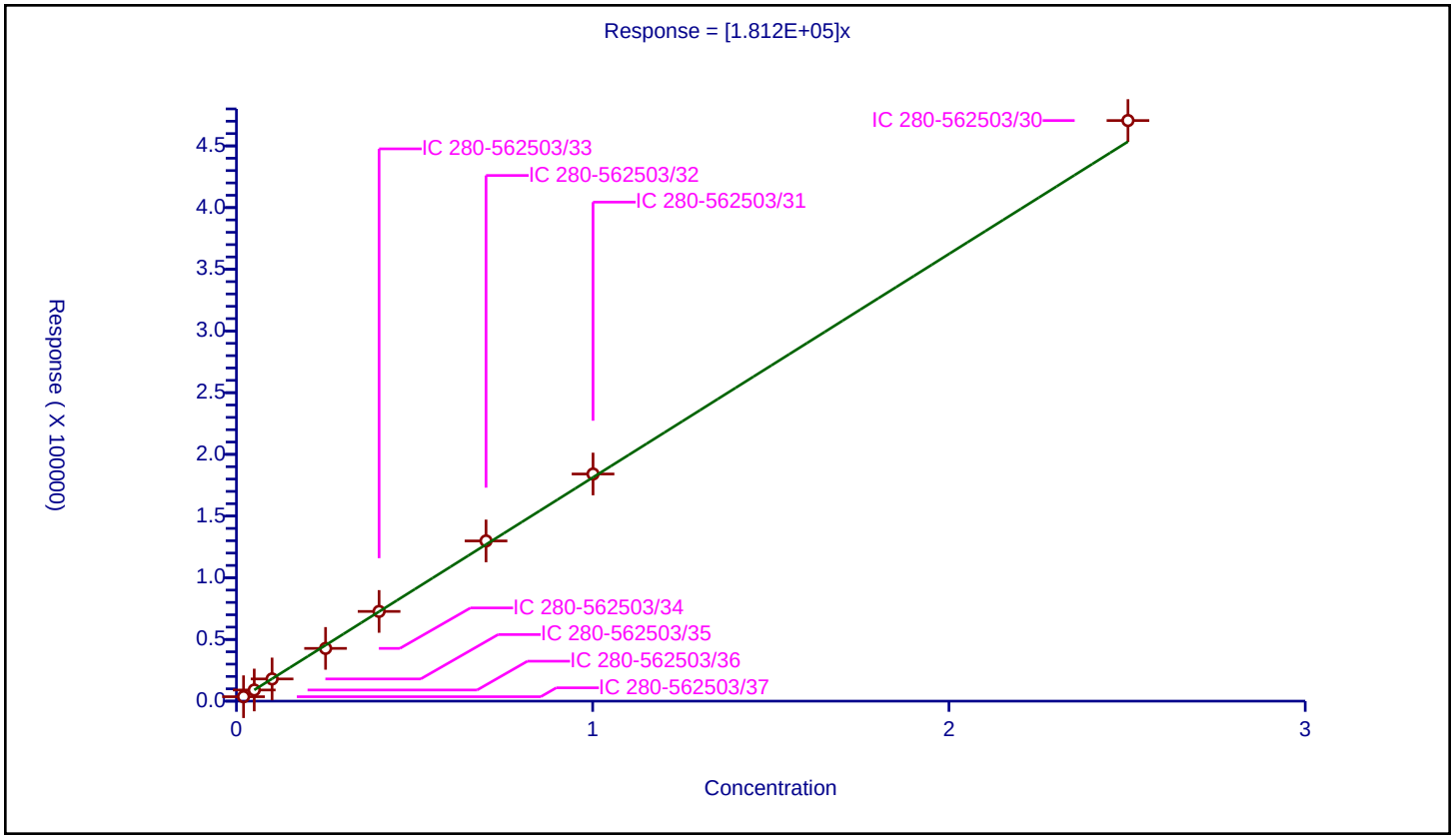
Curve Coefficients

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



Calibration / DNX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

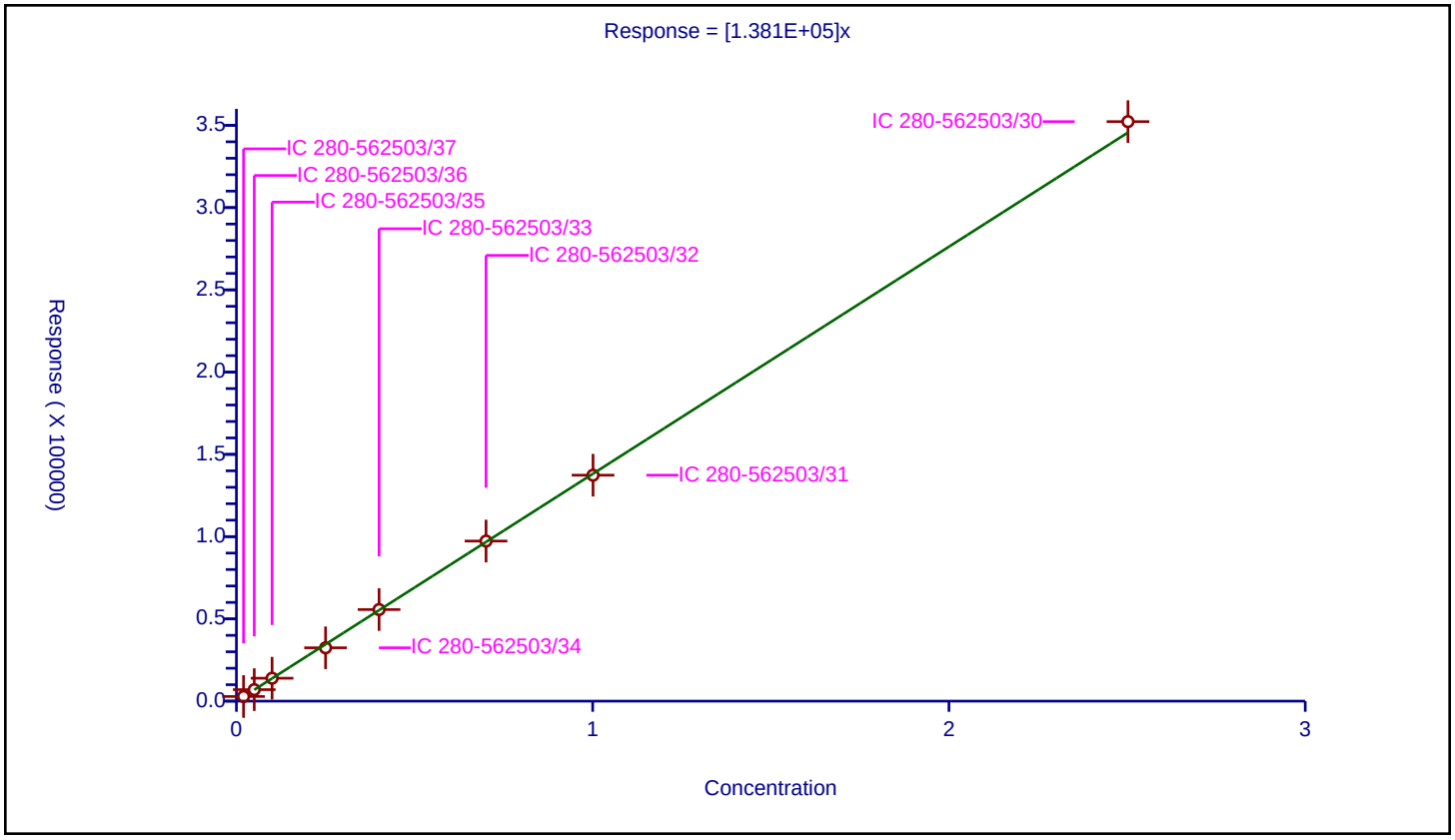
Curve Coefficients

Intercept:	0
Slope:	1.381E+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

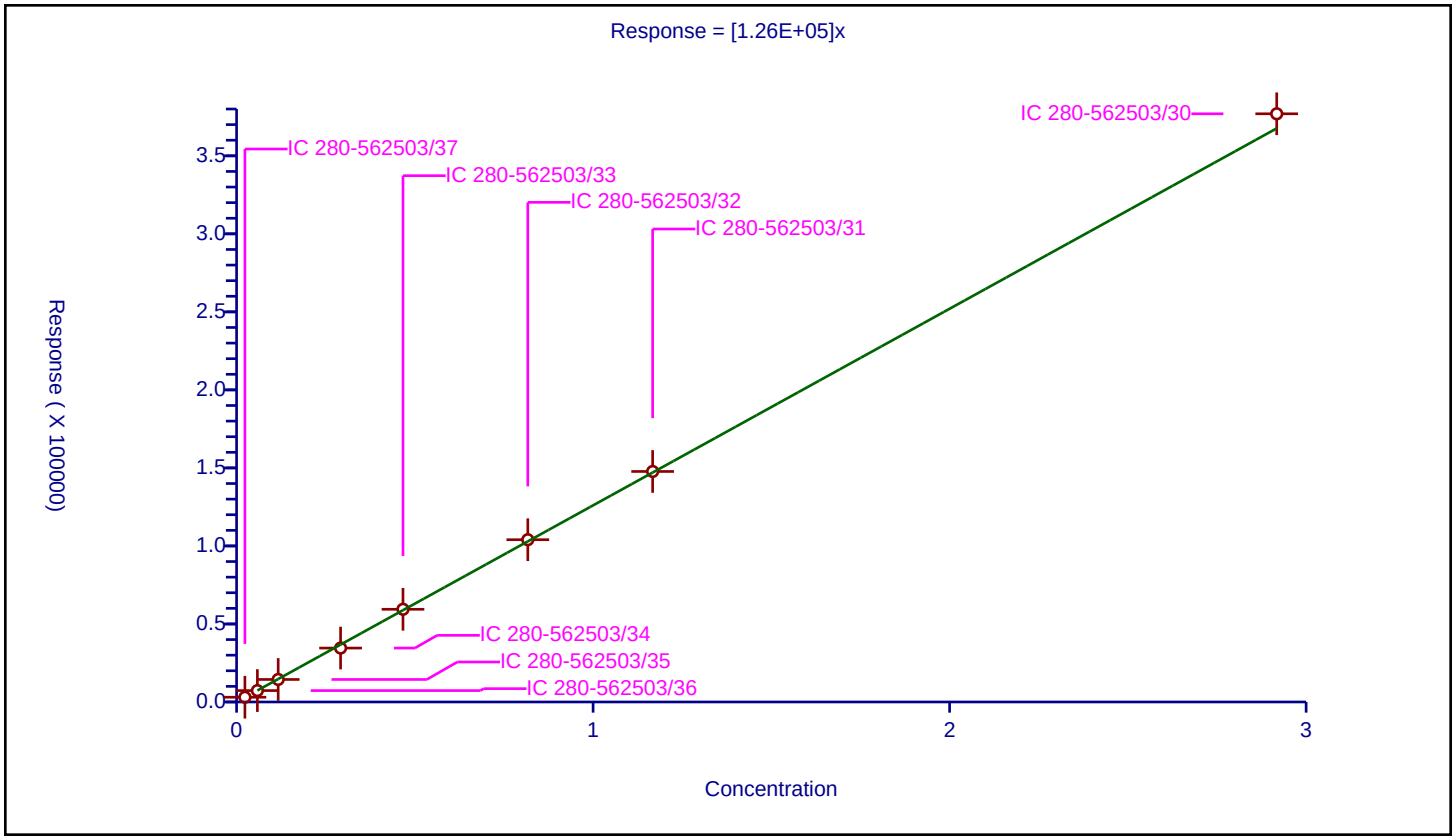
Curve Coefficients

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.: 280-159190-1 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.: 280-159190-1 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.: 280-159190-1 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.: 280-159190-1 Analy Batch No.: 567560

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2022 21:22 Calibration End Date: 03/03/2022 02:03 Calibration ID: 62762

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-567560/18	03020018.D
Level 2	IC 280-567560/17	03020017.D
Level 3	IC 280-567560/16	03020016.D
Level 4	IC 280-567560/15	03020015.D
Level 5	IC 280-567560/14	03020014.D
Level 6	IC 280-567560/13	03020013.D
Level 7	IC 280-567560/12	03020012.D
Level 8	IC 280-567560/11	03020011.D
Level 9	IC 280-567560/10	03020010.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
HMX	Ave	2040 62819	3127 109512	8053 158593	16109 468398	38318	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	 58358	2301 102939	6356 150719	14009 250000	34288	 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	2097 76711	3719 134031	10028 193402	19750 482372	46417	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	3890 148639	6686 259585	19149 367582	37271 944774	90246	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
1,3-Dinitrobenzene	Ave	5961 225815	10643 394707	30181 569212	59537 1461217	136486	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
Nitroglycerin	Ave	10664 519683	21750 888552	59894 1272015	133241 3158004	309657	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2-Nitrotoluene	Ave	2491 93064	4607 161534	12057 232476	23857 580270	56221	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Ave	2203 83857	4078 146563	10595 211344	21625 540531	50555	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
4-Amino-2,6-dinitrotoluene	Lin2	2610 107043	5271 186078	13425 269691	27216 672715	64569	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
3-Nitrotoluene	Lin2	2543 106661	4805 185839	13387 267812	26978 679800	64150	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	3705 146764	6899 257718	18562 374916	37178 843240	88010	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
1,3,5-Trinitrobenzene	Ave	3947 170012	6970 295298	21339 425388	42514 1172398	102576	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
2,6-Dinitrotoluene	Ave	2704	5233	13757	26687	64489	0.0100	0.0201	0.0502	0.100	0.251

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Denver Job No.: 280-159190-1 Analy Batch No.: 567560

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2022 21:22 Calibration End Date: 03/03/2022 02:03 Calibration ID: 62762

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
		106362	186150	268478	670482		0.402	0.703	1.00	2.51	
2,4-Dinitrotoluene	Lin2	11900 220828	16863 382059	33918 549112	64187 1368356	139375	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
Tetryl	Ave	4722 126546	6933 219675	18110 316900	33188 791703	77249	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
2,4,6-Trinitrotoluene	Ave	3720 151235	6507 265676	18556 385560	37205 967117	91338	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
PETN	Ave	10842 544987	21923 951206	67082 1369840	134076 3419168	329509	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
1,2-Dinitrobenzene	Ave	2461 99804	4809 175358	12864 251717	25499 631065	61198	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250

Curve Type Legend
Ave = Average
Lin2 = Linear 1/conc^2

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020010.D
Lims ID: IC INT/ADD 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 02-Mar-2022 21:22:03 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 9
Misc. Info.: 280-0108949-010
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:12 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:05:51

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.071	4.142	-0.071	1053484	2.50	2.59	M
2 2,4-diamino-6-nitrotoluene	1	4.698	4.669	0.029	475027	2.50	2.09	M
5 HMX	1	6.791	6.889	-0.098	468398	2.50	2.82	
7 2,4,6-Trinitrophenol	1	7.231	7.602	-0.371	250000	2.50	1.88	
8 RDX	1	8.985	9.115	-0.130	482372	2.50	2.48	
9 Nitrobenzene	1	11.925	12.062	-0.137	944774	2.51	2.57	
$ 10 1,2-Dinitrobenzene	1	13.158	13.282	-0.124	631065	2.50	2.53	
11 3,5-Dinitroaniline	1	15.151	15.269	-0.118	1039131	2.50	2.53	
12 1,3-Dinitrobenzene	1	15.525	15.635	-0.110	1461217	2.51	2.56	
13 Nitroglycerin	2	15.971	16.055	-0.084	3158004	25.0	25.8	
14 o-Nitrotoluene	1	16.725	16.822	-0.097	580270	2.50	2.47	
16 p-Nitrotoluene	1	17.018	17.129	-0.111	540531	2.51	2.56	
17 4-Amino-2,6-dinitrotoluene	1	17.651	17.755	-0.104	672715	2.50	2.52	
18 m-Nitrotoluene	1	18.005	18.102	-0.097	679800	2.50	2.56	
19 2-Amino-4,6-dinitrotoluene	1	18.725	18.742	-0.017	843240	2.51	2.34	M
20 1,3,5-Trinitrobenzene	1	18.851	18.949	-0.098	1172398	2.51	2.82	M
21 2,6-Dinitrotoluene	1	20.171	20.255	-0.084	670482	2.51	2.52	
22 2,4-Dinitrotoluene	1	20.671	20.762	-0.091	1368356	2.51	2.51	
23 Tetryl	1	24.425	24.489	-0.064	791703	2.51	2.31	
24 2,4,6-Trinitrotoluene	1	25.198	25.262	-0.064	967117	2.51	2.62	
25 PETN	2	26.185	26.215	-0.030	3419168	25.0	26.4	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

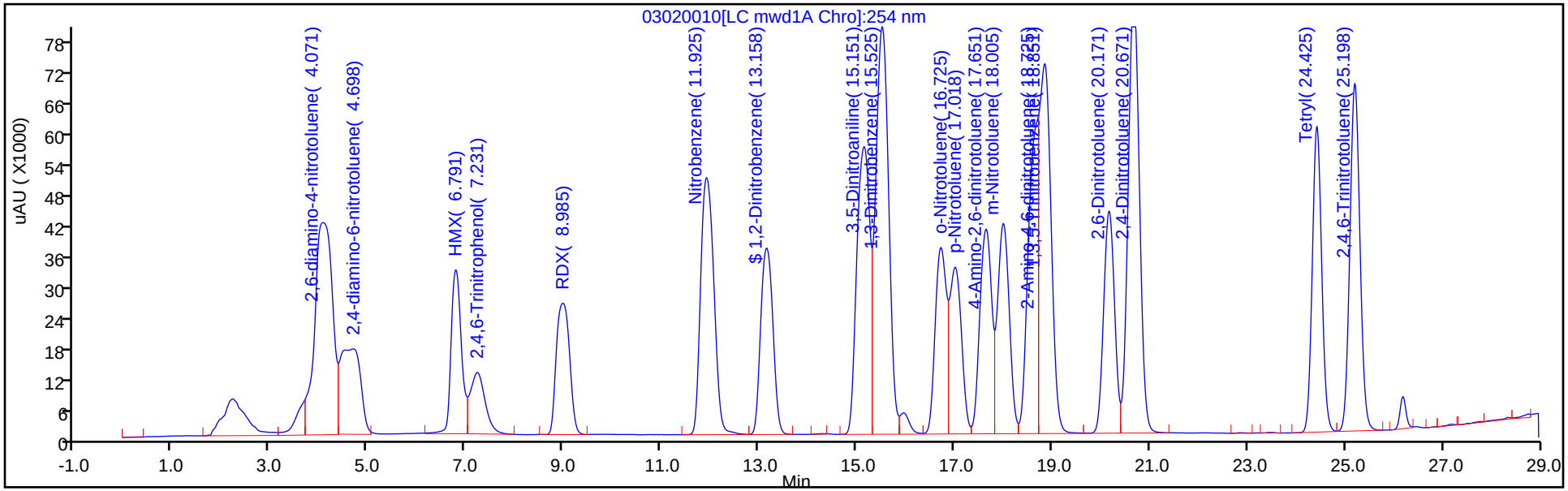
8330IntermStk_00070	Amount Added: 250.00	Units: uL
8330_ADDs_00031	Amount Added: 125.00	Units: uL

Report Date: 03-Mar-2022 12:49:12 Chrom Revision: 2.3 16-Feb-2022 17:52:00

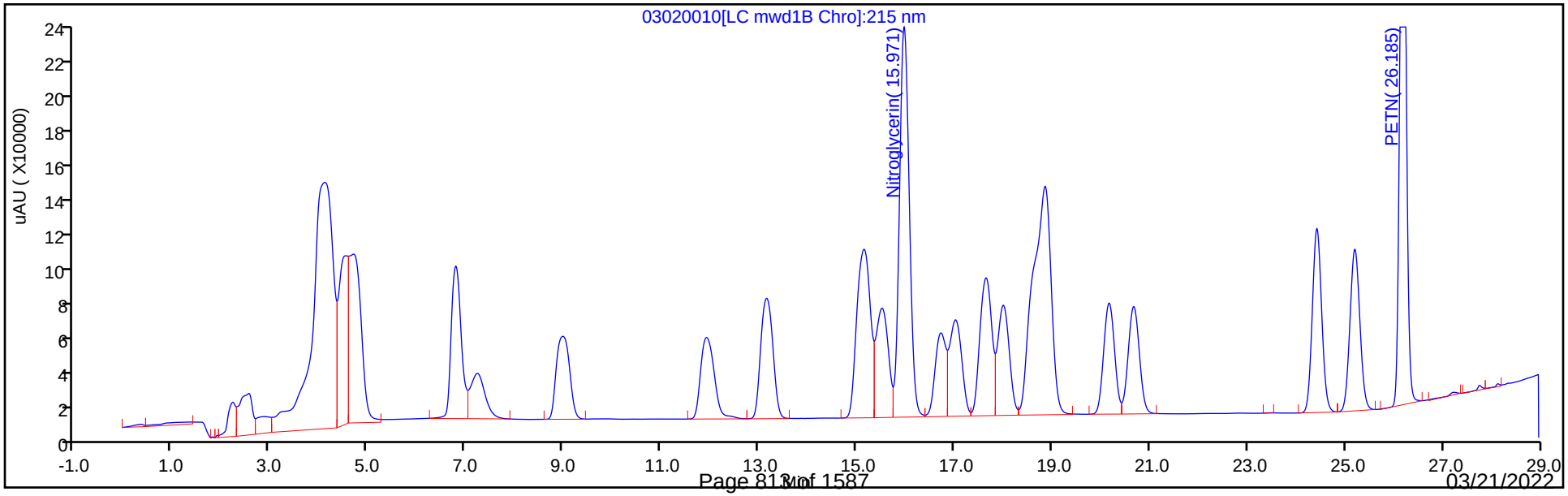
Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020010.D				
Injection Date:	02-Mar-2022 21:22:03	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 9			Worklist Smp#:	10
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Denver

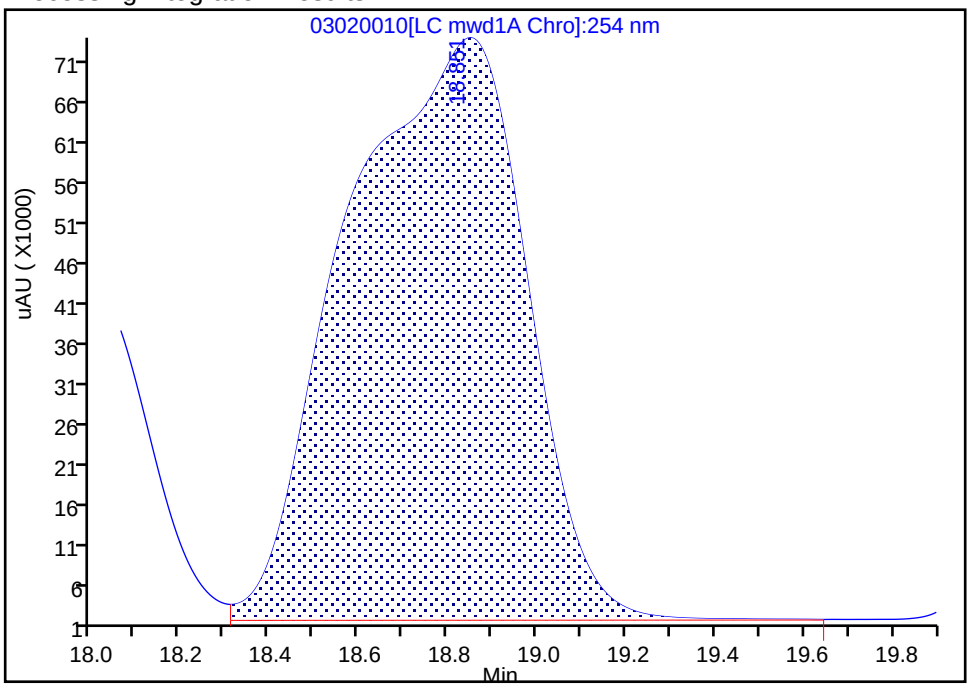
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020010.D
Injection Date: 02-Mar-2022 21:22:03 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 9
Client ID:
Operator ID: JZ ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

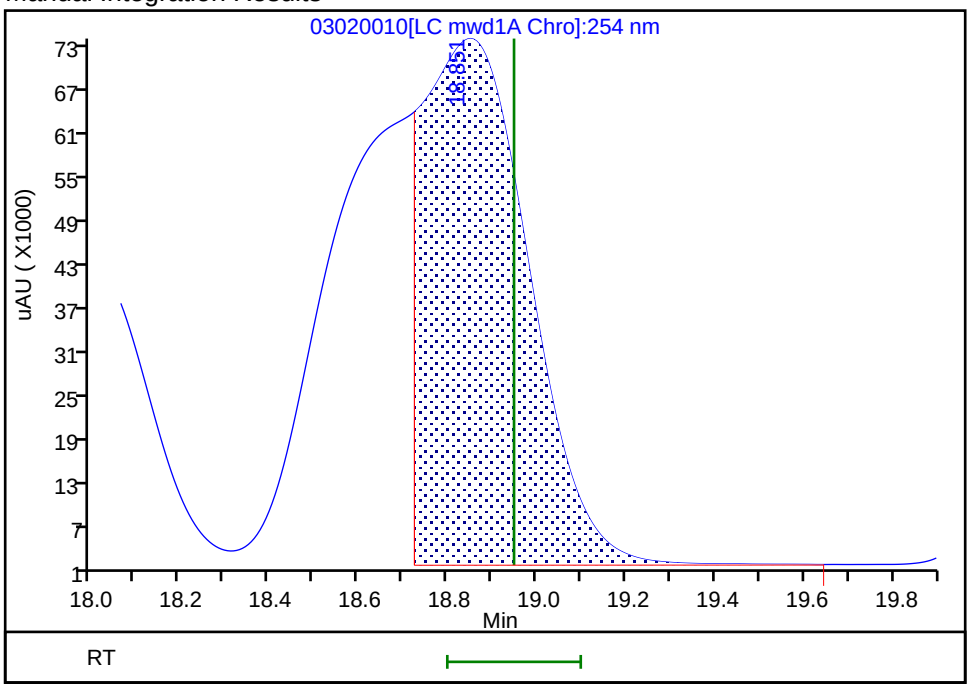
Processing Integration Results

RT: 18.85
Area: 2015640
Amount: 4.231891
Amount Units: ug/ml



Manual Integration Results

RT: 18.85
Area: 1172398
Amount: 2.821899
Amount Units: ug/ml



Reviewer: zhangji, 03-Mar-2022 12:08:36
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020011.D
Lims ID: IC INT/ADD 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 02-Mar-2022 21:57:13 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 8
Misc. Info.: 280-0108949-011
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:13 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:09:27

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.093	4.142	-0.049	386260	1.00	0.9503	M
2 2,4-diamino-6-nitrotoluene	1	4.713	4.669	0.044	247885	1.00	1.09	M
5 HMX	1	6.860	6.889	-0.029	158593	1.00	0.9546	
7 2,4,6-Trinitrophenol	1	7.346	7.602	-0.256	150719	1.00	1.13	
8 RDX	1	9.066	9.115	-0.049	193402	1.00	1.00	
9 Nitrobenzene	1	12.020	12.062	-0.042	367582	1.00	1.00	
$ 10 1,2-Dinitrobenzene	1	13.240	13.282	-0.042	251717	1.00	1.01	
11 3,5-Dinitroaniline	1	15.226	15.269	-0.043	419224	1.00	1.02	
12 1,3-Dinitrobenzene	1	15.600	15.635	-0.035	569212	1.00	1.00	
13 Nitroglycerin	2	16.033	16.055	-0.022	1272015	10.0	10.4	
14 o-Nitrotoluene	1	16.793	16.822	-0.029	232476	1.00	0.99	
16 p-Nitrotoluene	1	17.100	17.129	-0.029	211344	1.00	1.00	
17 4-Amino-2,6-dinitrotoluene	1	17.720	17.755	-0.035	269691	1.00	1.01	
18 m-Nitrotoluene	1	18.073	18.102	-0.029	267812	1.00	1.01	
19 2-Amino-4,6-dinitrotoluene	1	18.706	18.742	-0.036	374916	1.00	1.04	
20 1,3,5-Trinitrobenzene	1	18.920	18.949	-0.029	425388	1.00	1.02	
21 2,6-Dinitrotoluene	1	20.233	20.255	-0.022	268478	1.00	1.01	
22 2,4-Dinitrotoluene	1	20.733	20.762	-0.029	549112	1.00	1.00	
23 Tetryl	1	24.466	24.489	-0.023	316900	1.00	0.9261	
24 2,4,6-Trinitrotoluene	1	25.246	25.262	-0.016	385560	1.00	1.04	
25 PETN	2	26.206	26.215	-0.009	1369840	10.0	10.6	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070	Amount Added: 100.00	Units: uL
8330_ADDs_00031	Amount Added: 50.00	Units: uL

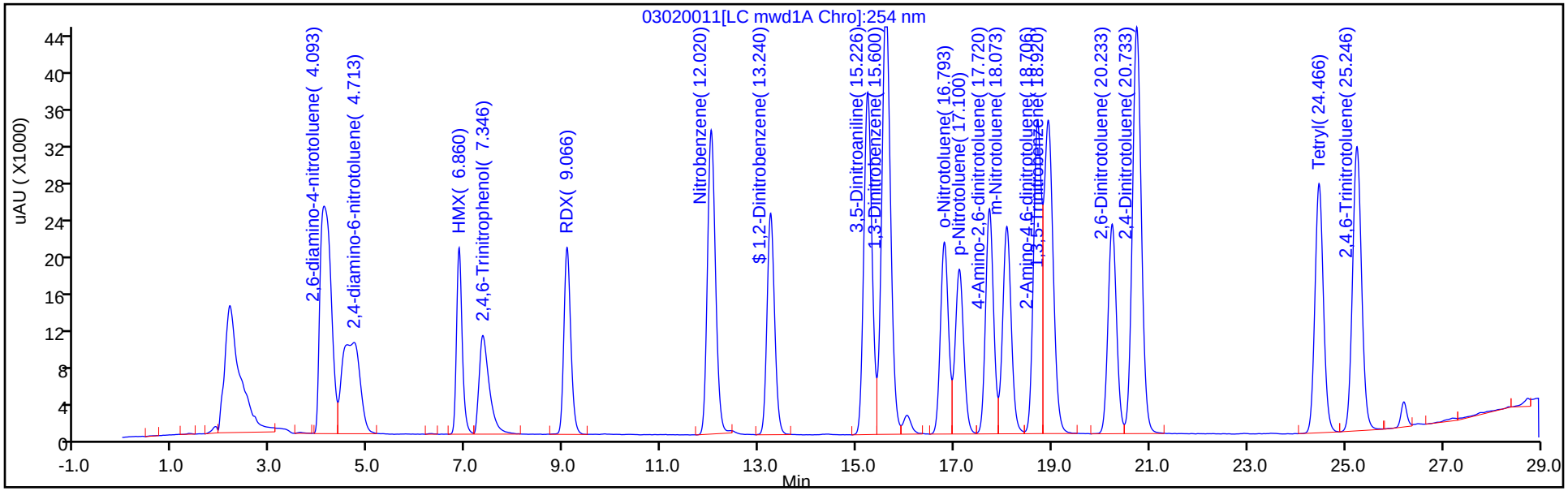
Report Date: 03-Mar-2022 12:49:13 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

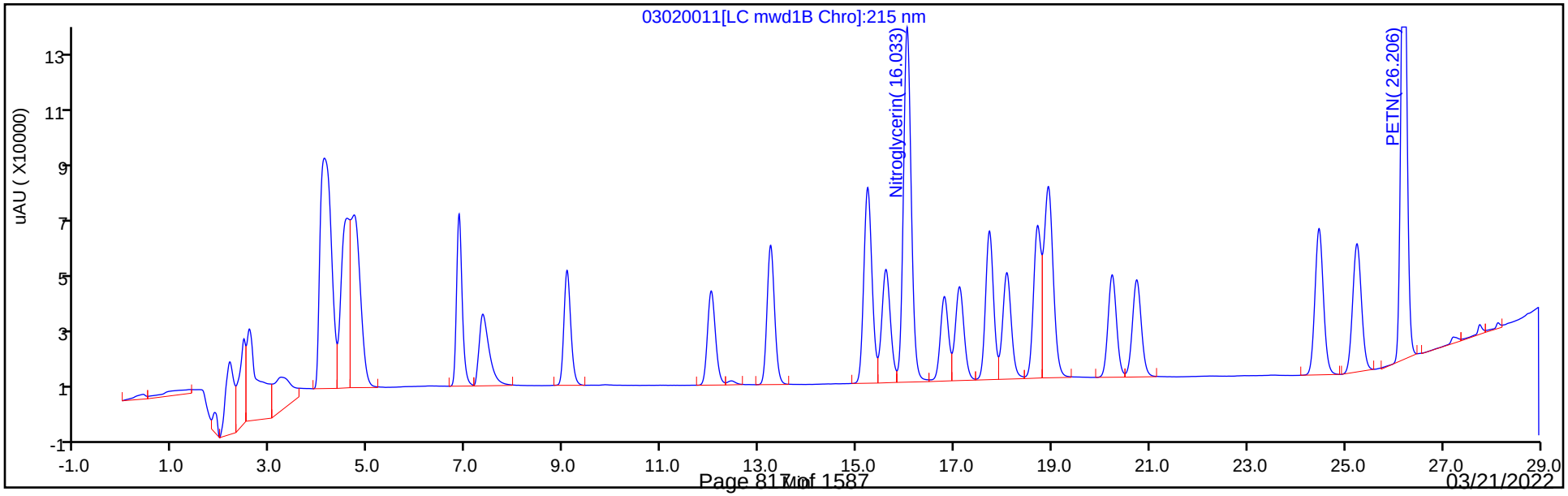
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020011.D

Injection Date:	02-Mar-2022 21:57:13	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 8			Worklist Smp#:	11
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020012.D
Lims ID: IC INT/ADD 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 02-Mar-2022 22:32:16 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 7
Misc. Info.: 280-0108949-012
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2022 12:49:14 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 03-Mar-2022 12:09:45

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.110	4.142	-0.032	273235	0.7000	0.6722	M
2 2,4-diamino-6-nitrotoluene	1	4.710	4.669	0.041	172644	0.7000	0.7557	M
5 HMX	1	6.863	6.889	-0.026	109512	0.7000	0.6592	
7 2,4,6-Trinitrophenol	1	7.430	7.602	-0.172	102939	0.7000	0.7746	
8 RDX	1	9.083	9.115	-0.032	134031	0.7000	0.6897	
9 Nitrobenzene	1	12.036	12.062	-0.026	259585	0.7028	0.7048	
$ 10 1,2-Dinitrobenzene	1	13.256	13.282	-0.026	175358	0.7000	0.7021	
11 3,5-Dinitroaniline	1	15.243	15.269	-0.026	294648	0.7000	0.7162	
12 1,3-Dinitrobenzene	1	15.616	15.635	-0.019	394707	0.7014	0.6904	
13 Nitroglycerin	2	16.050	16.055	-0.005	888552	7.00	7.25	
14 o-Nitrotoluene	1	16.810	16.822	-0.012	161534	0.7000	0.6883	
16 p-Nitrotoluene	1	17.123	17.129	-0.006	146563	0.7014	0.6952	
17 4-Amino-2,6-dinitrotoluene	1	17.736	17.755	-0.019	186078	0.7007	0.6965	
18 m-Nitrotoluene	1	18.090	18.102	-0.012	185839	0.7007	0.6993	
19 2-Amino-4,6-dinitrotoluene	1	18.730	18.742	-0.012	257718	0.7028	0.7148	
20 1,3,5-Trinitrobenzene	1	18.936	18.949	-0.013	295298	0.7014	0.7108	
21 2,6-Dinitrotoluene	1	20.243	20.255	-0.012	186150	0.7028	0.7007	
22 2,4-Dinitrotoluene	1	20.750	20.762	-0.012	382059	0.7028	0.6937	
23 Tetryl	1	24.483	24.489	-0.006	219675	0.7014	0.6420	
24 2,4,6-Trinitrotoluene	1	25.257	25.262	-0.005	265676	0.7028	0.7196	
25 PETN	2	26.217	26.215	0.002	951206	7.00	7.35	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070	Amount Added:	70.00	Units: uL
8330_ADDs_00031	Amount Added:	35.00	Units: uL

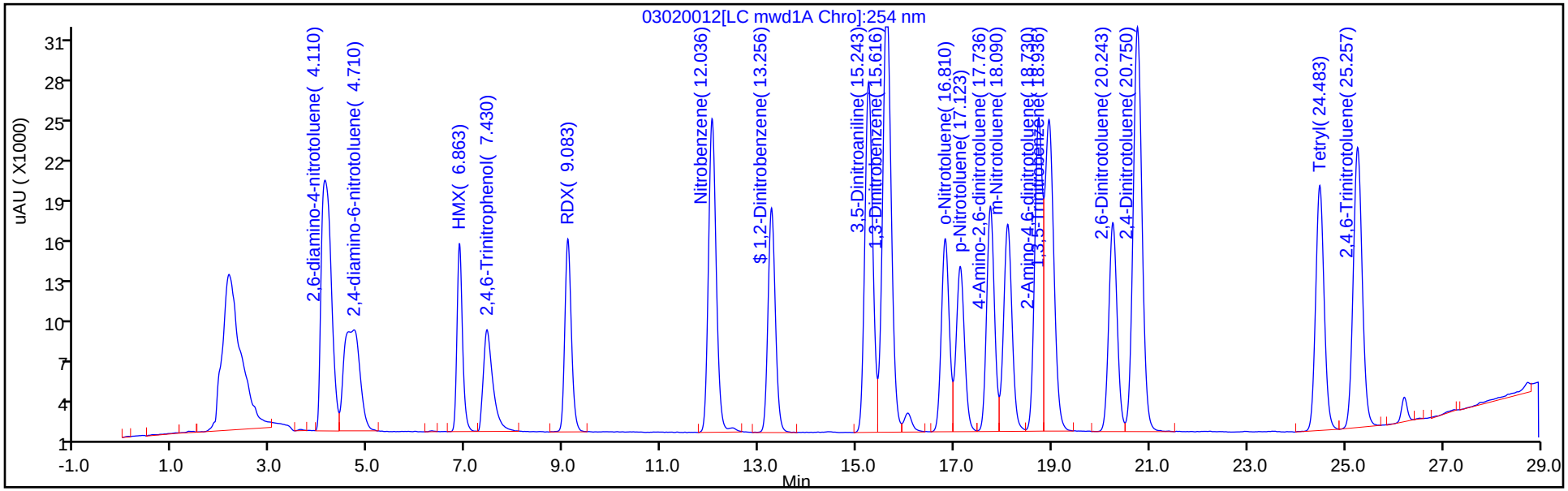
Report Date: 03-Mar-2022 12:49:14 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

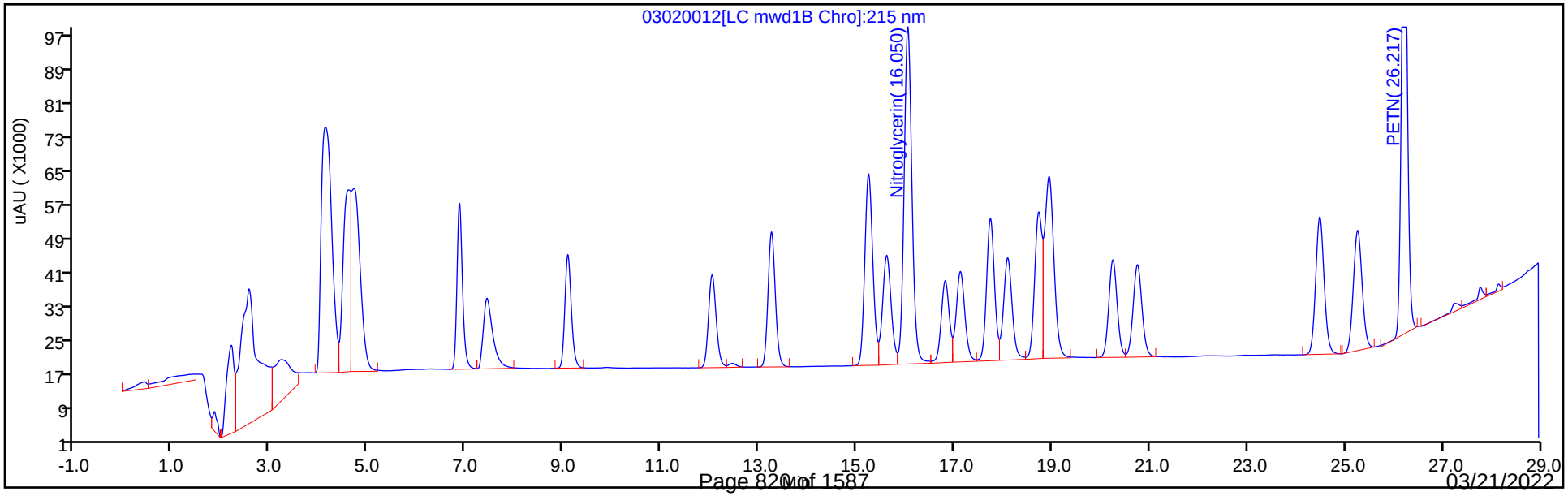
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020012.D

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

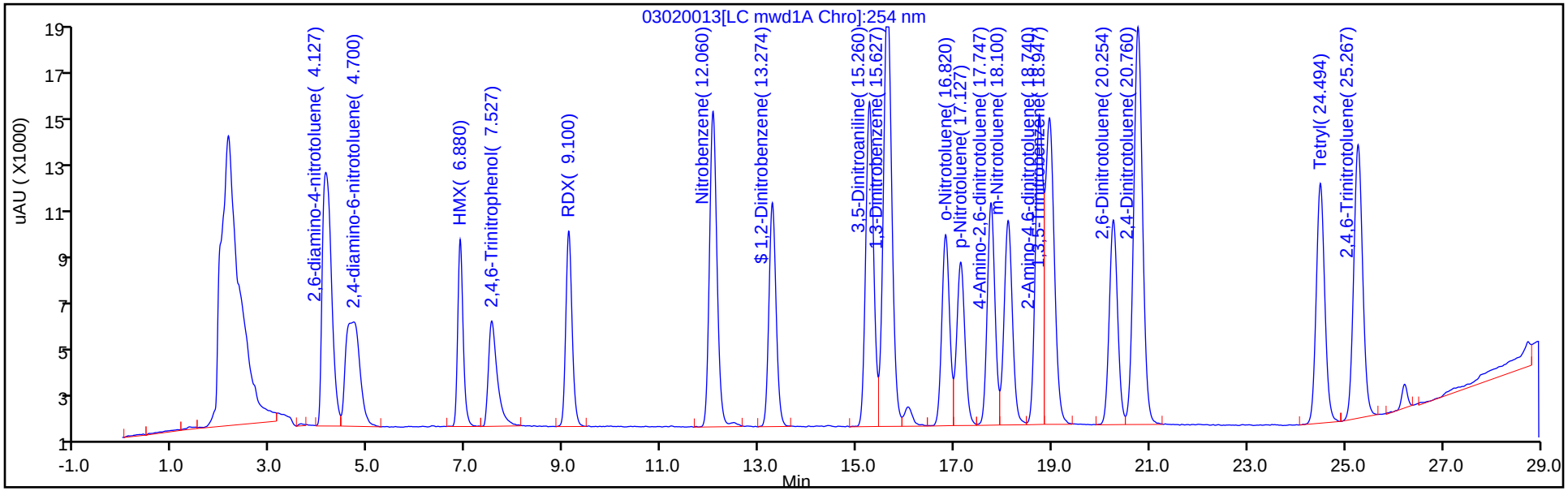
Report Date: 03-Mar-2022 12:49:14 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

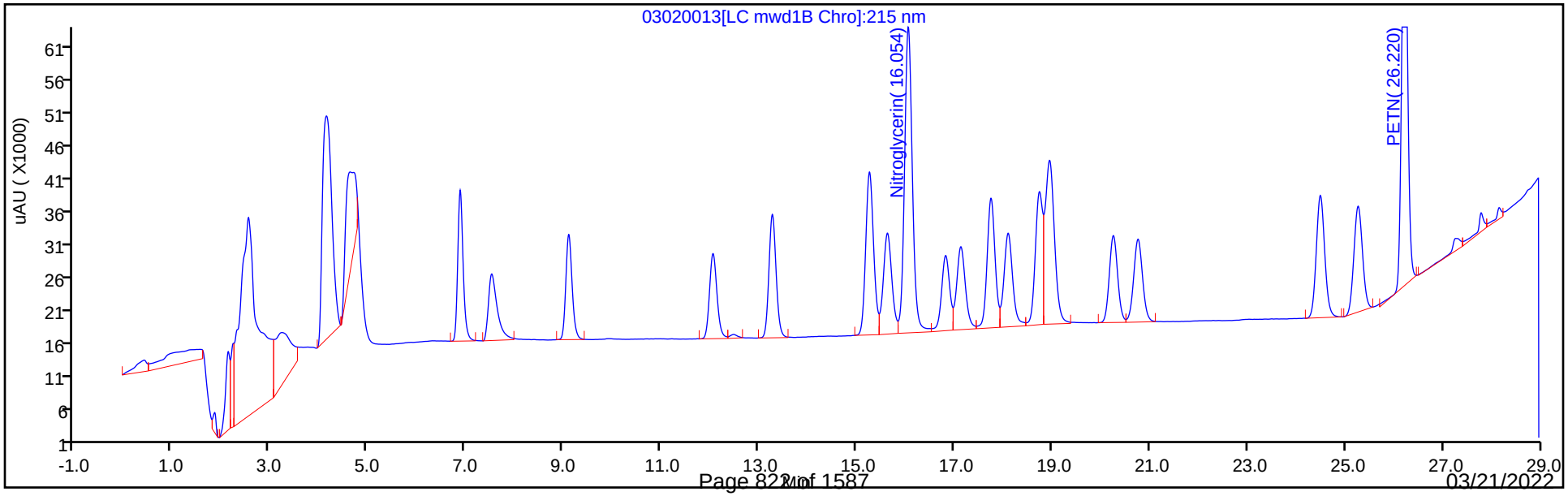
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020013.D

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

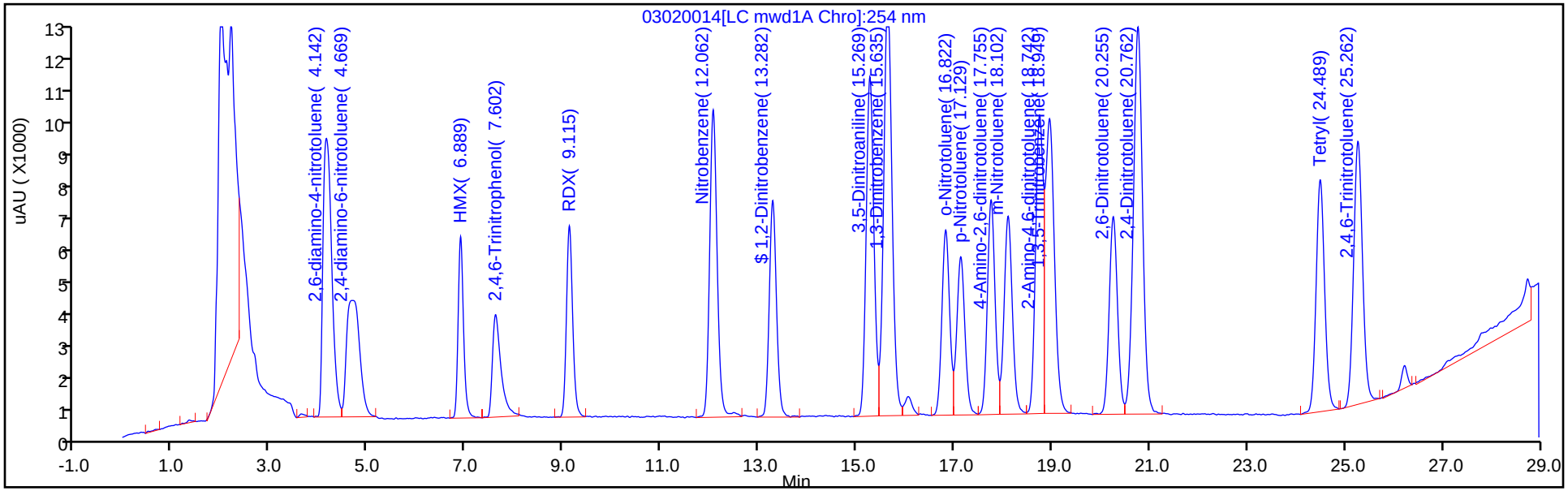
Report Date: 03-Mar-2022 12:49:15 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

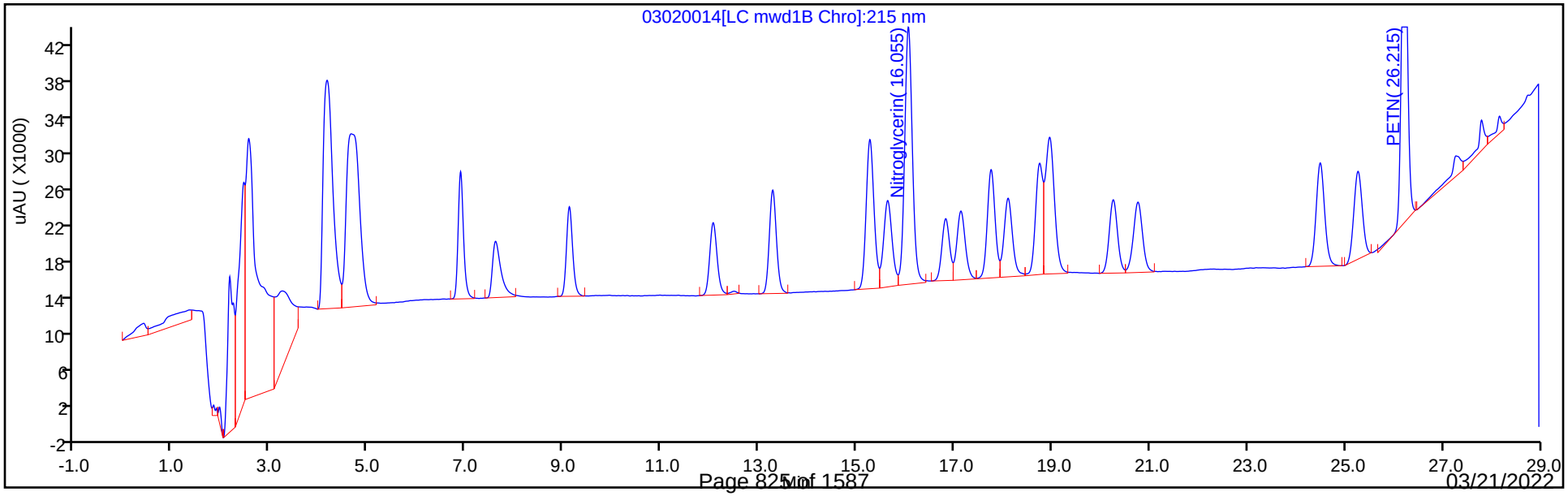
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020014.D

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

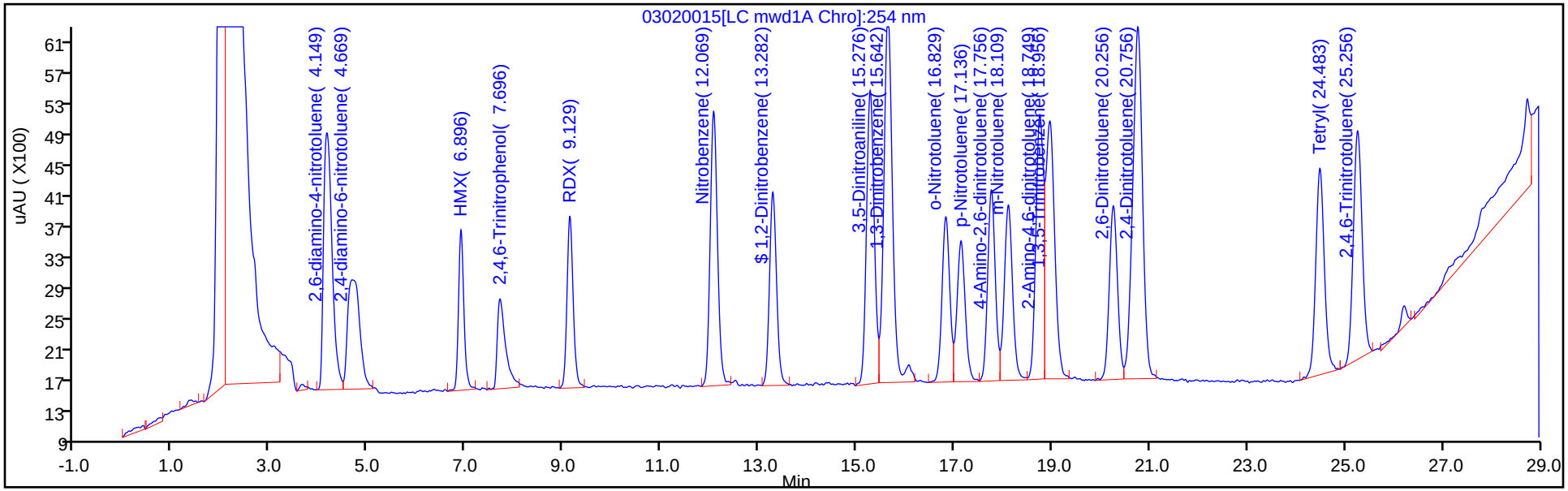
Report Date: 03-Mar-2022 12:49:16 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

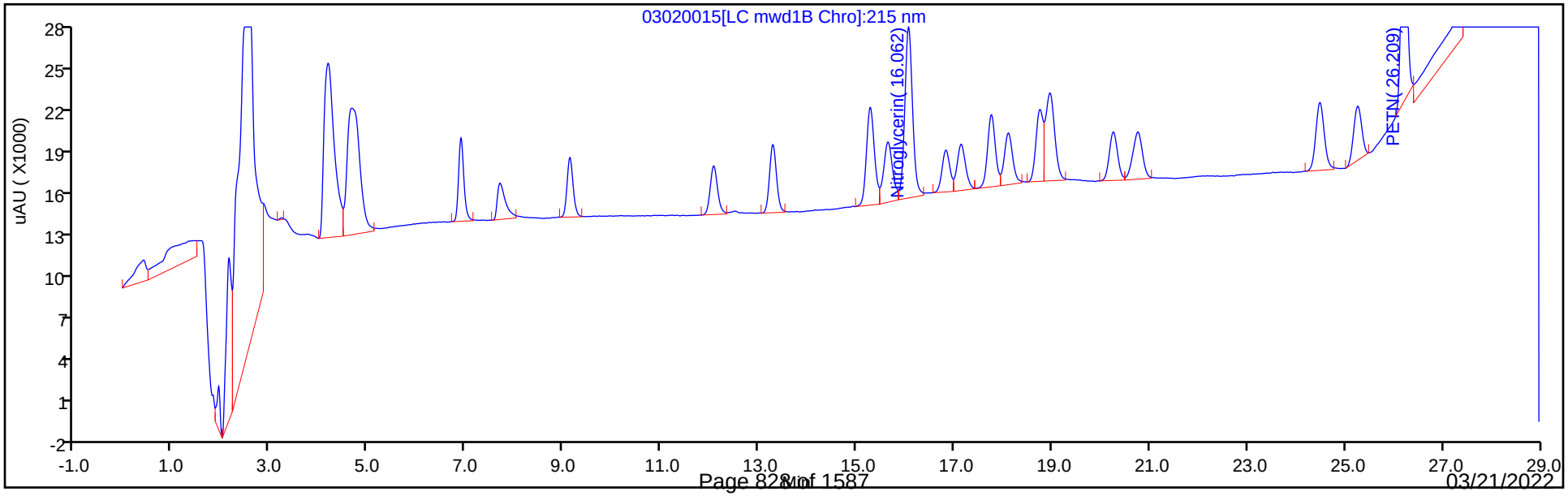
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020015.D

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

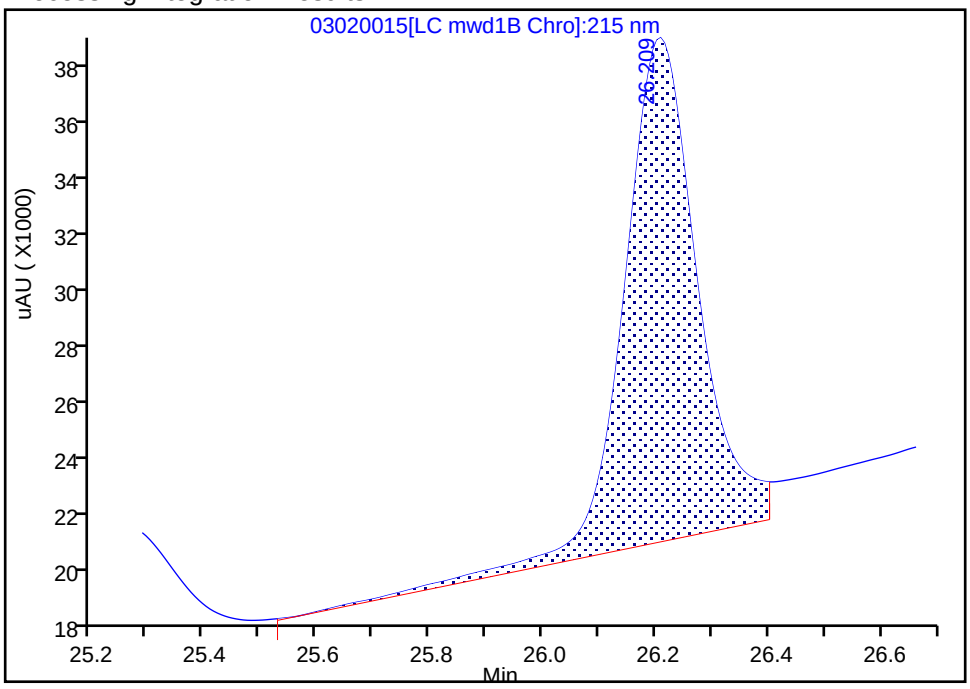
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020015.D
Injection Date: 03-Mar-2022 00:17:55 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 4
Client ID:
Operator ID: JZ ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

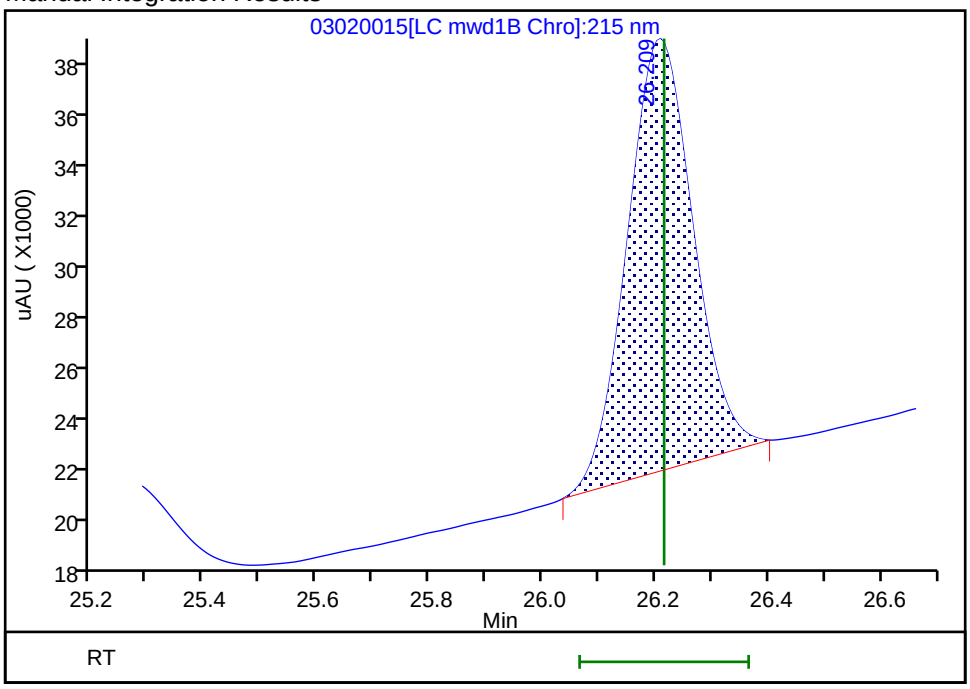
Processing Integration Results

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

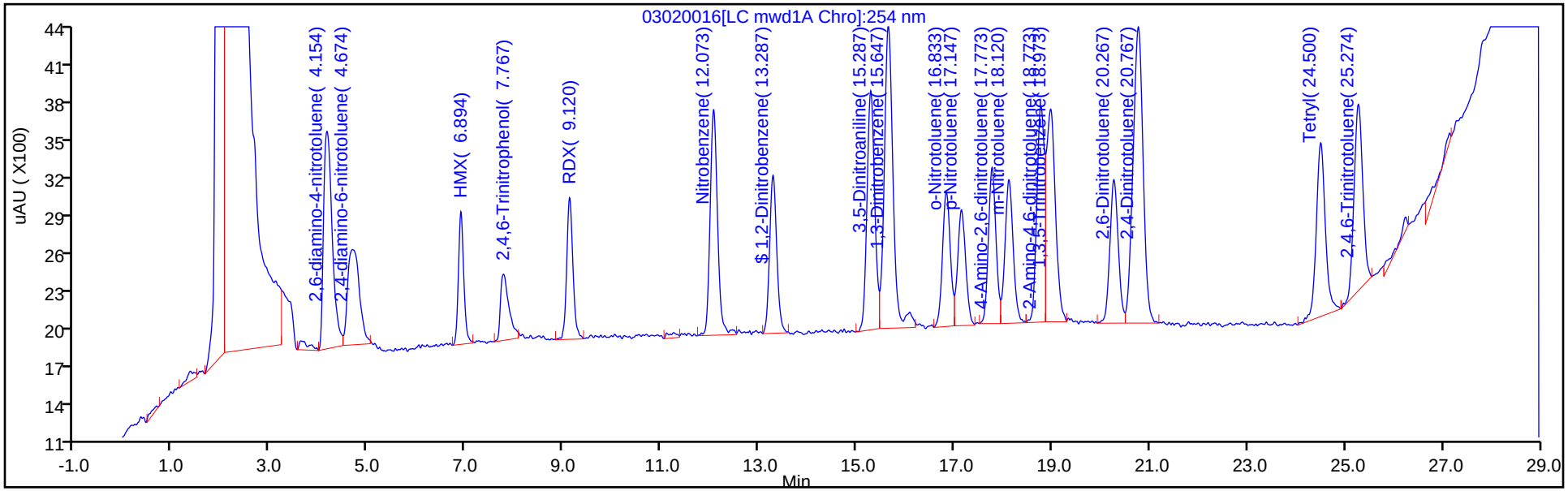
Eurofins Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020016.D

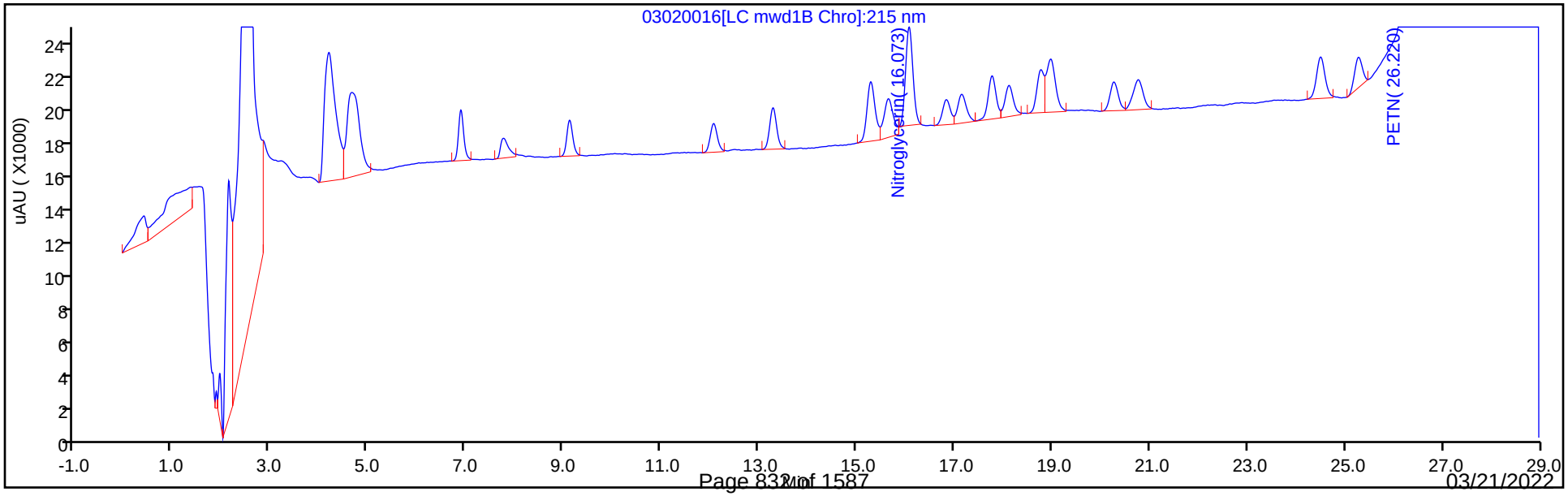
Injection Date:	03-Mar-2022 00:53:03	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 3			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

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



03/21/2022

Manual Integration/User Assign Peak Report

Eurofins Denver

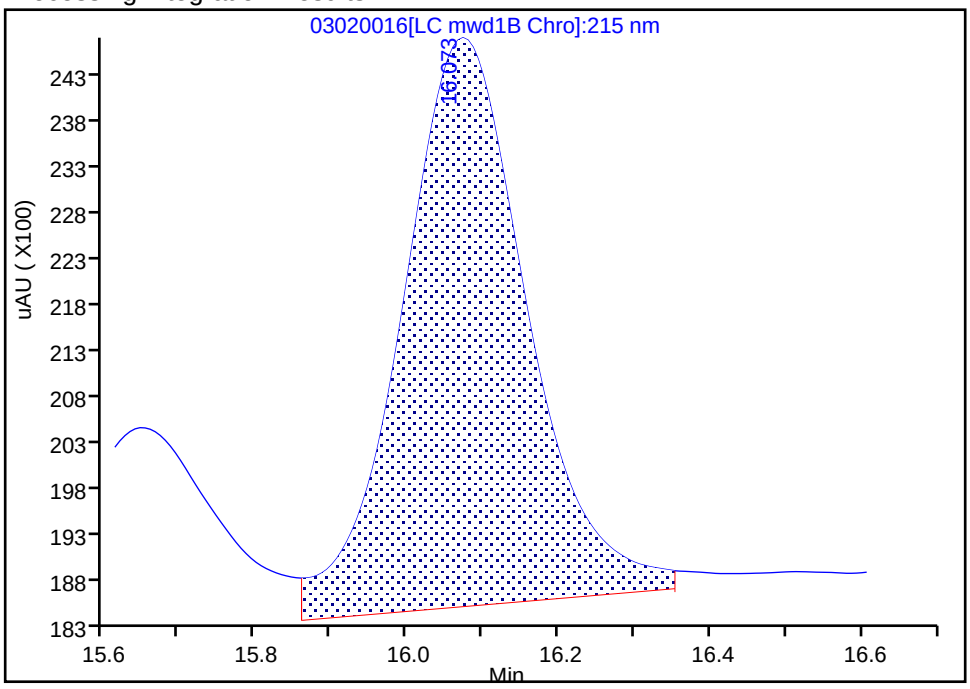
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020016.D
Injection Date: 03-Mar-2022 00:53:03 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 3
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

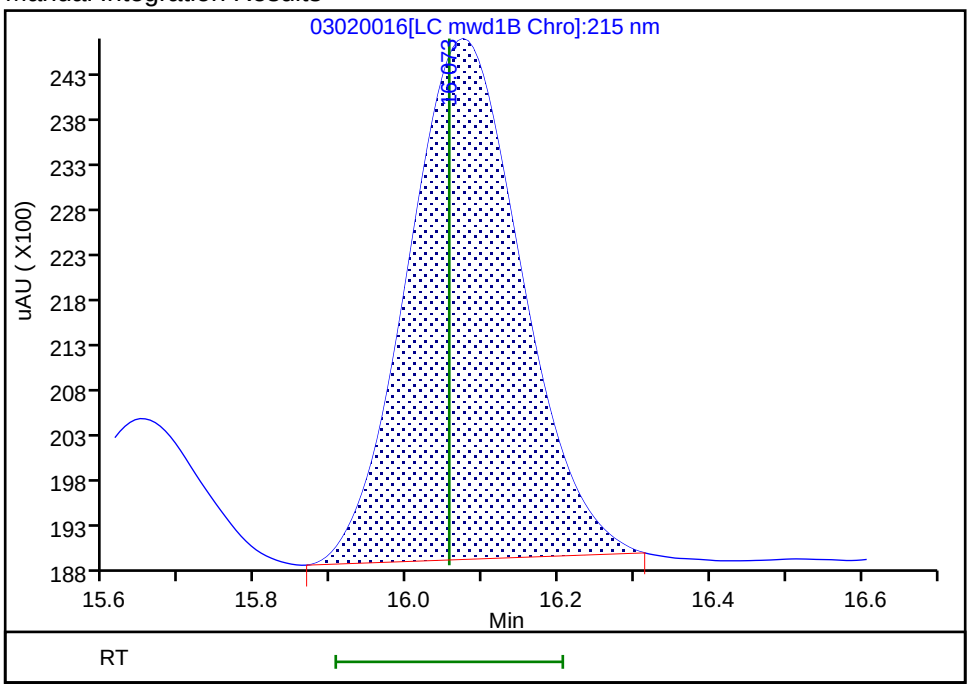
Processing Integration Results

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

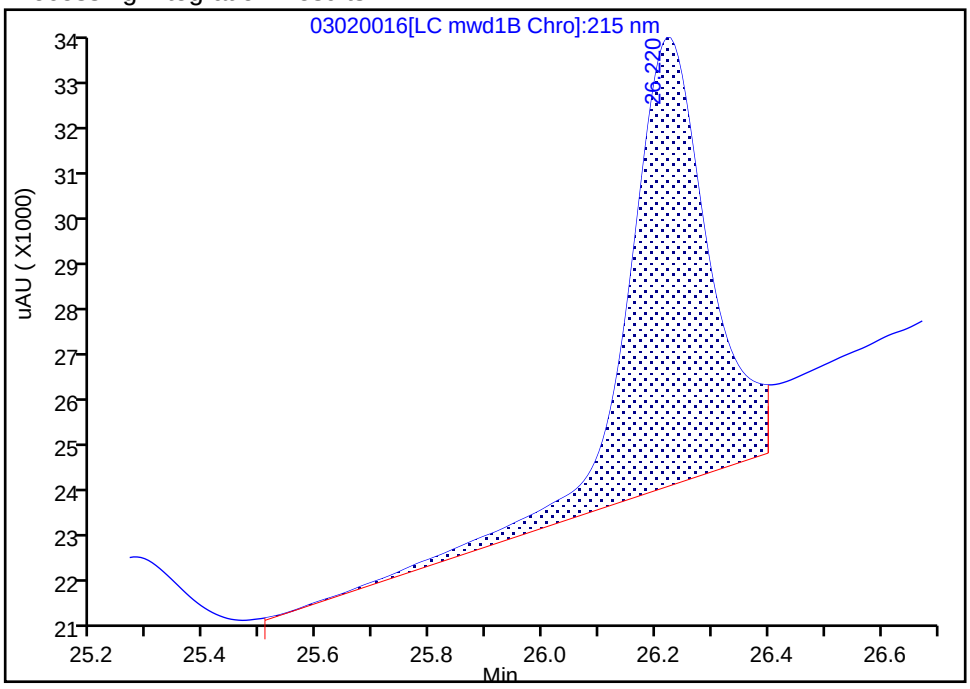
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020016.D
Injection Date: 03-Mar-2022 00:53:03 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 3
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

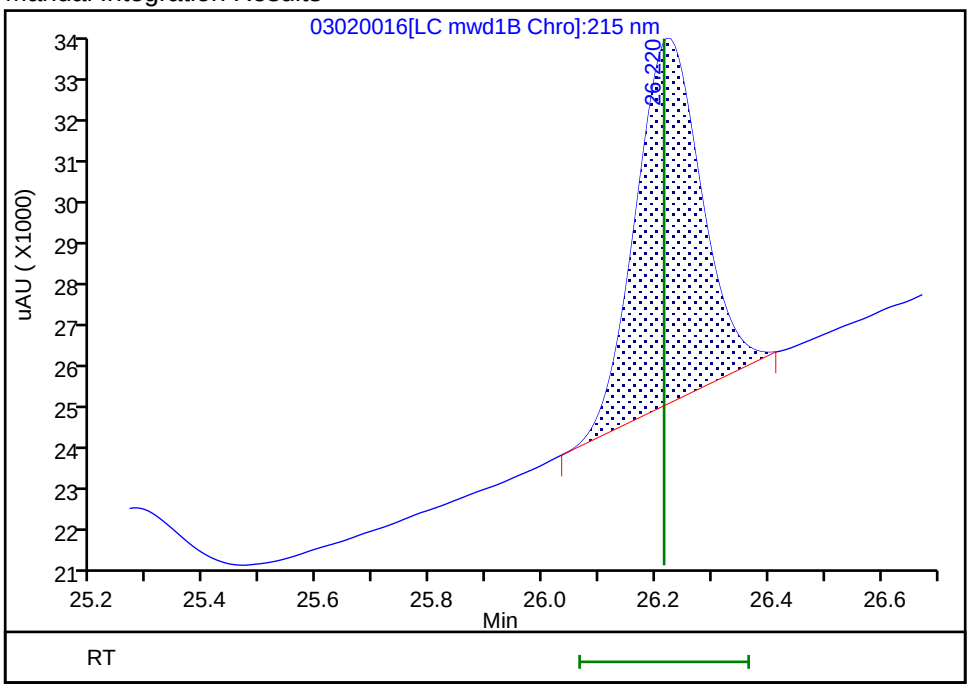
Processing Integration Results

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

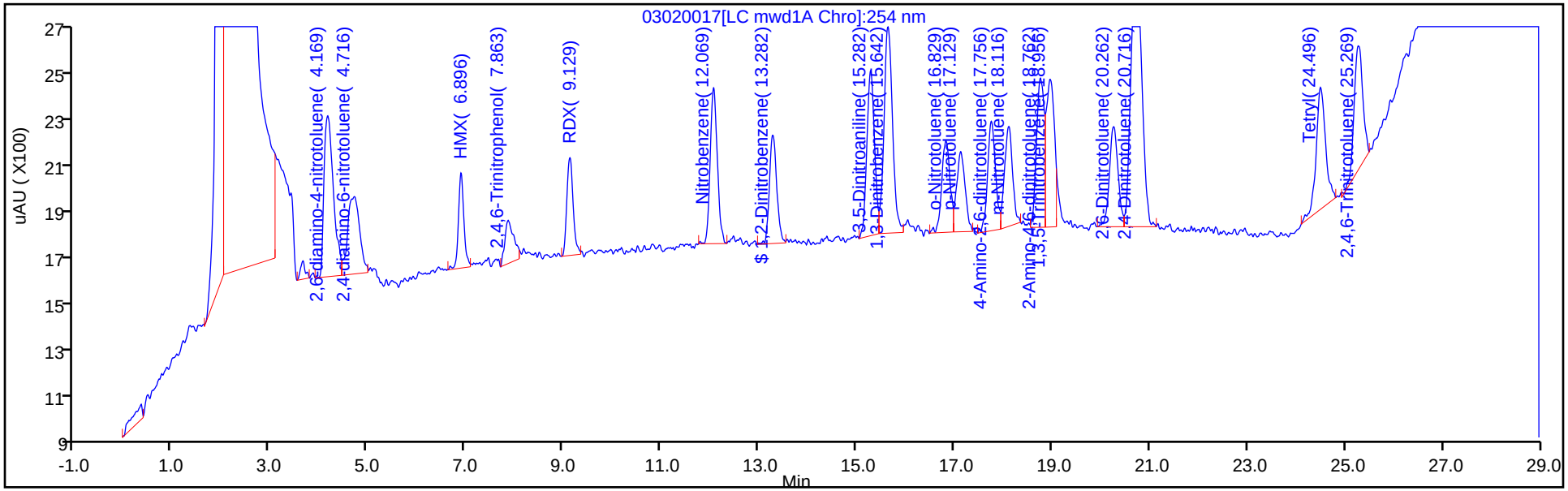
Report Date: 03-Mar-2022 12:49:17 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

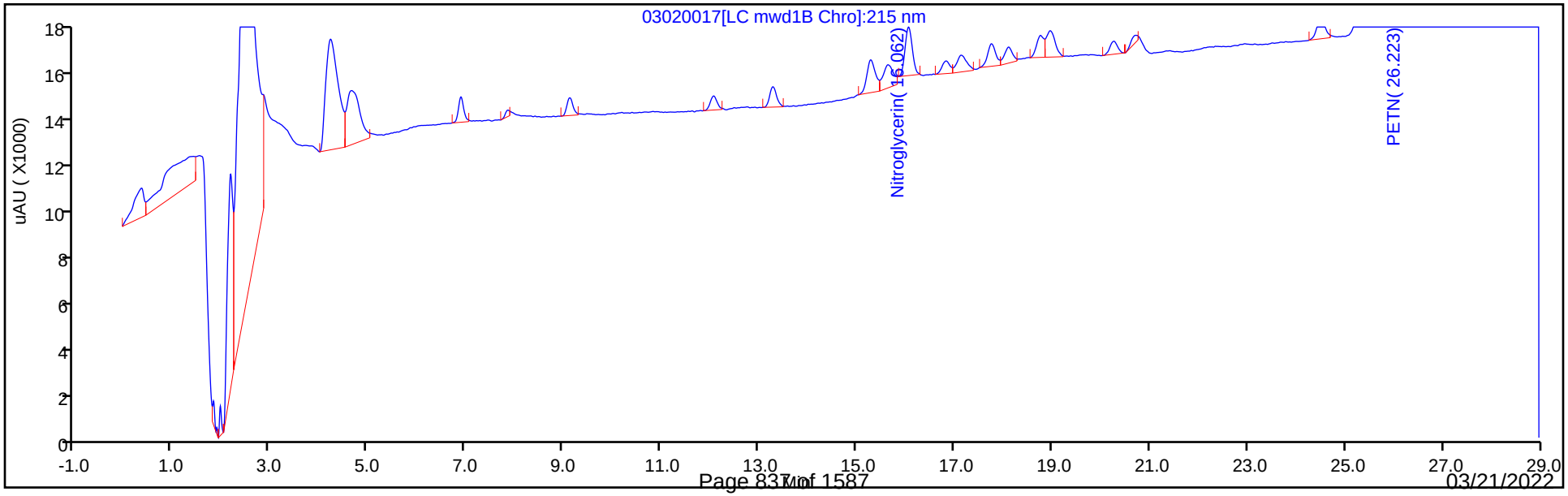
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D

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

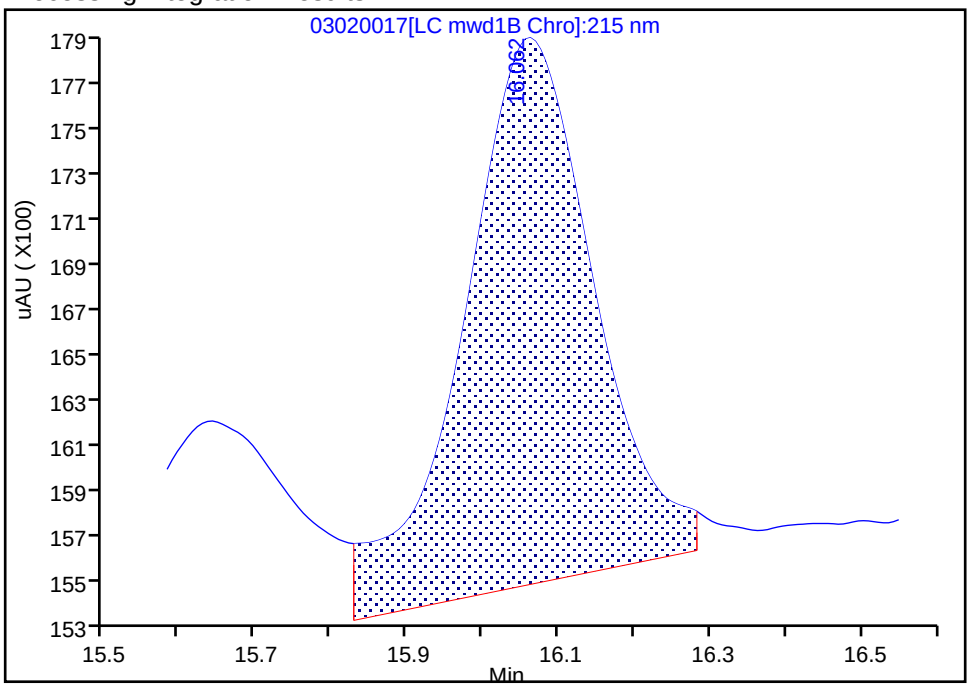
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D
Injection Date: 03-Mar-2022 01:28:22 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 2
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

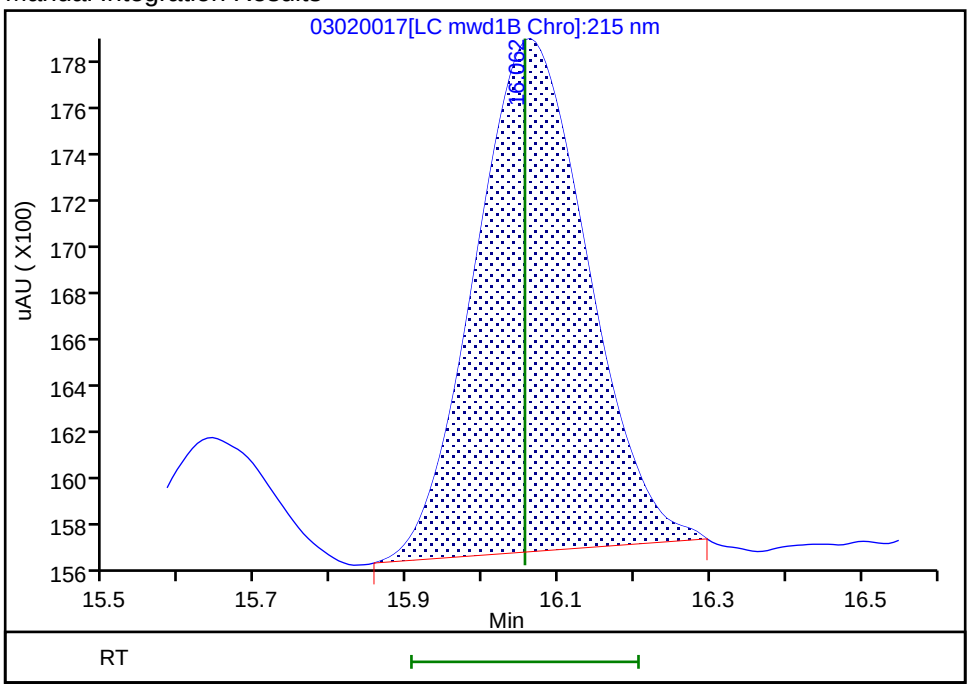
Processing Integration Results

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

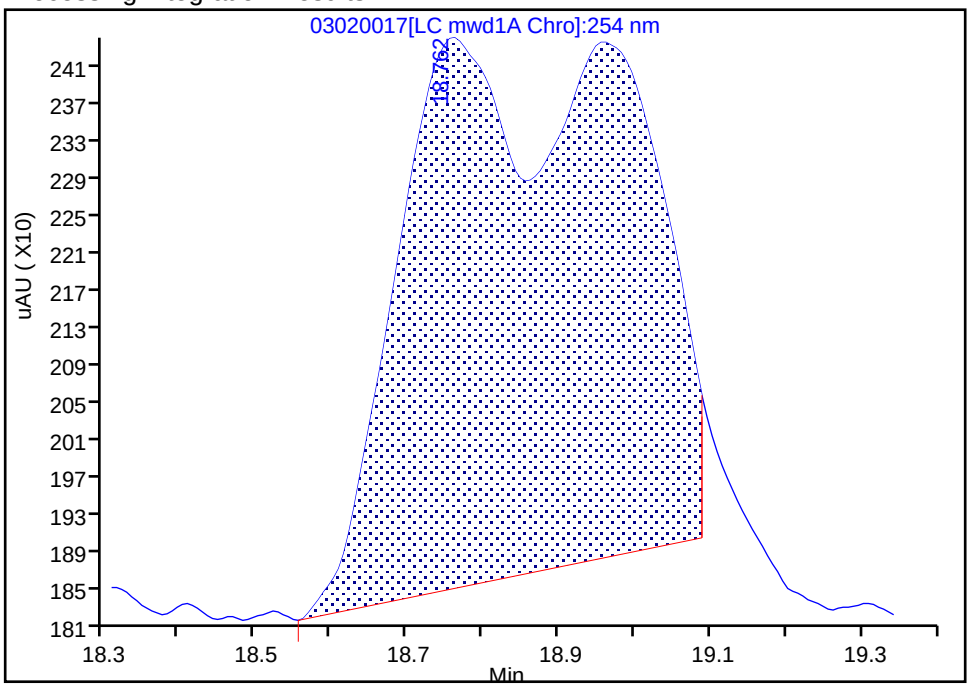
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D				
Injection Date:	03-Mar-2022 01:28:22	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

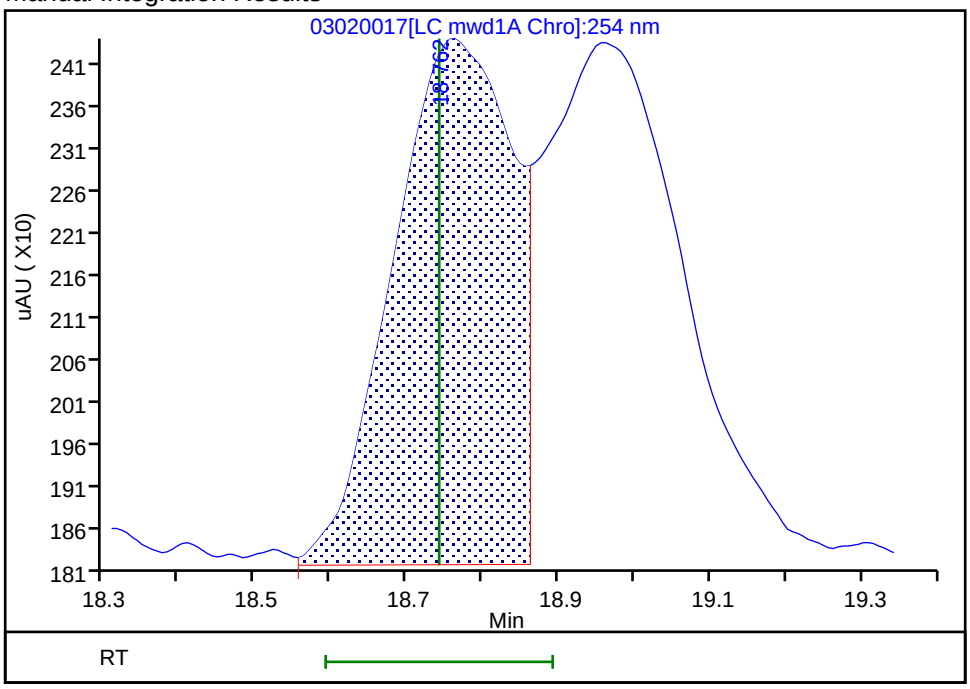
Processing Integration Results

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

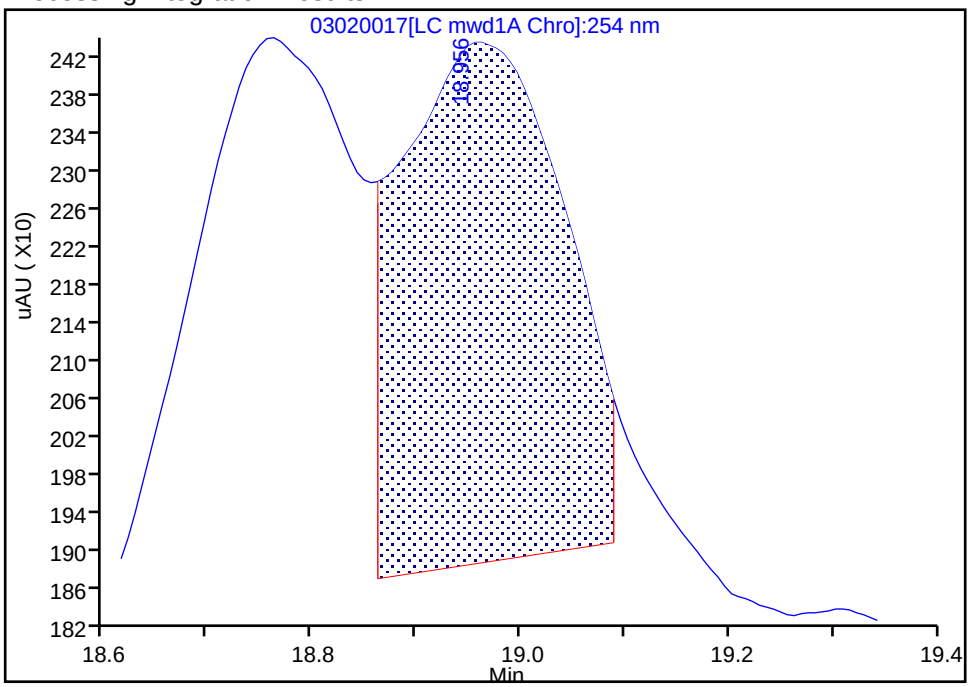
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D				
Injection Date:	03-Mar-2022 01:28:22	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

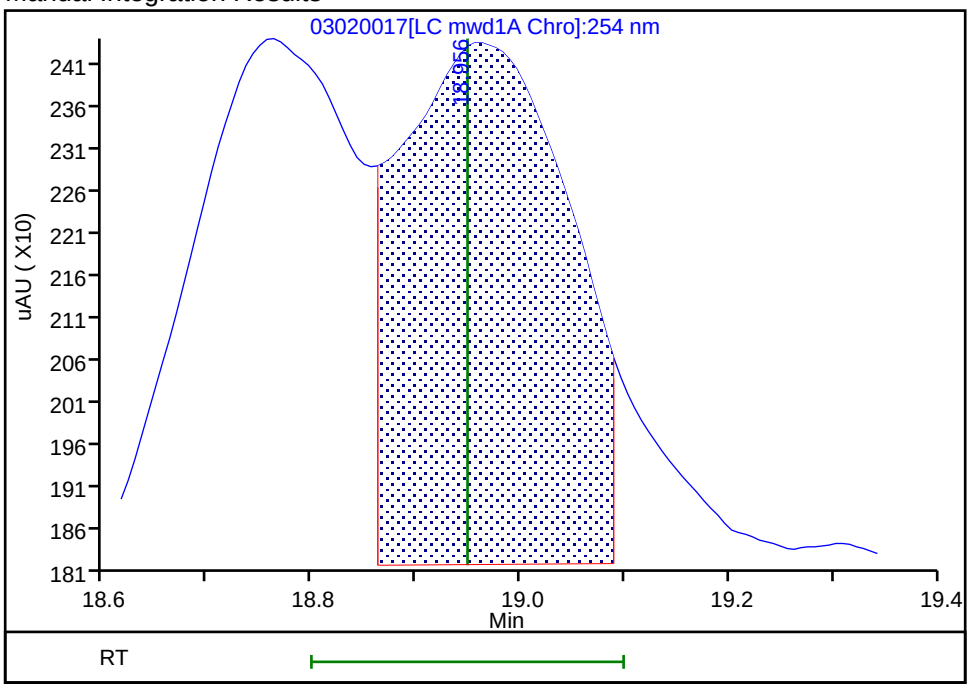
Processing Integration Results

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

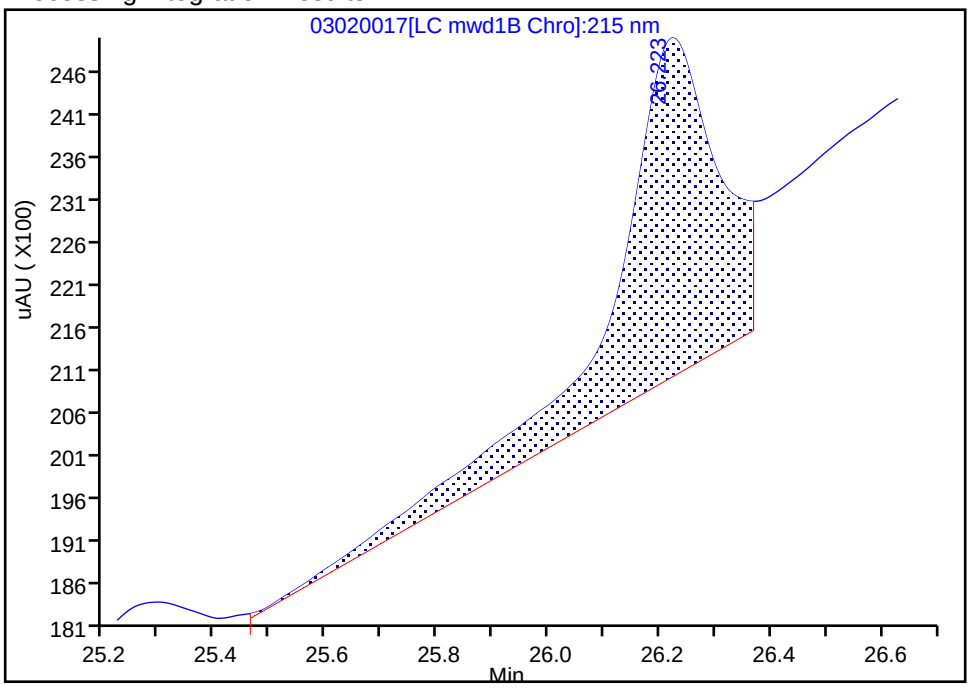
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020017.D
Injection Date: 03-Mar-2022 01:28:22 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 2
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

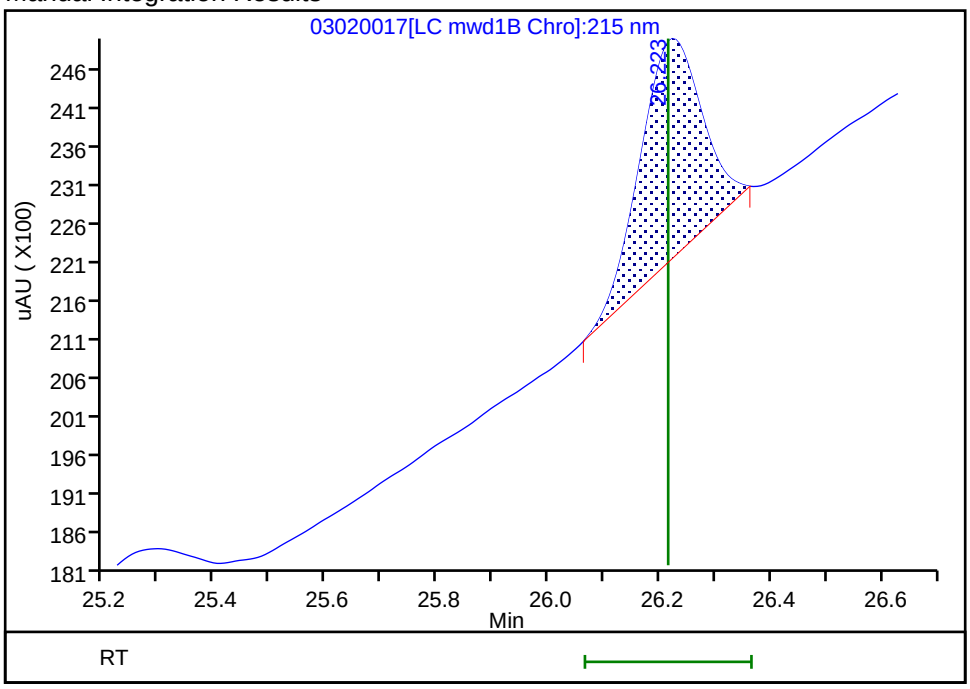
Processing Integration Results

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

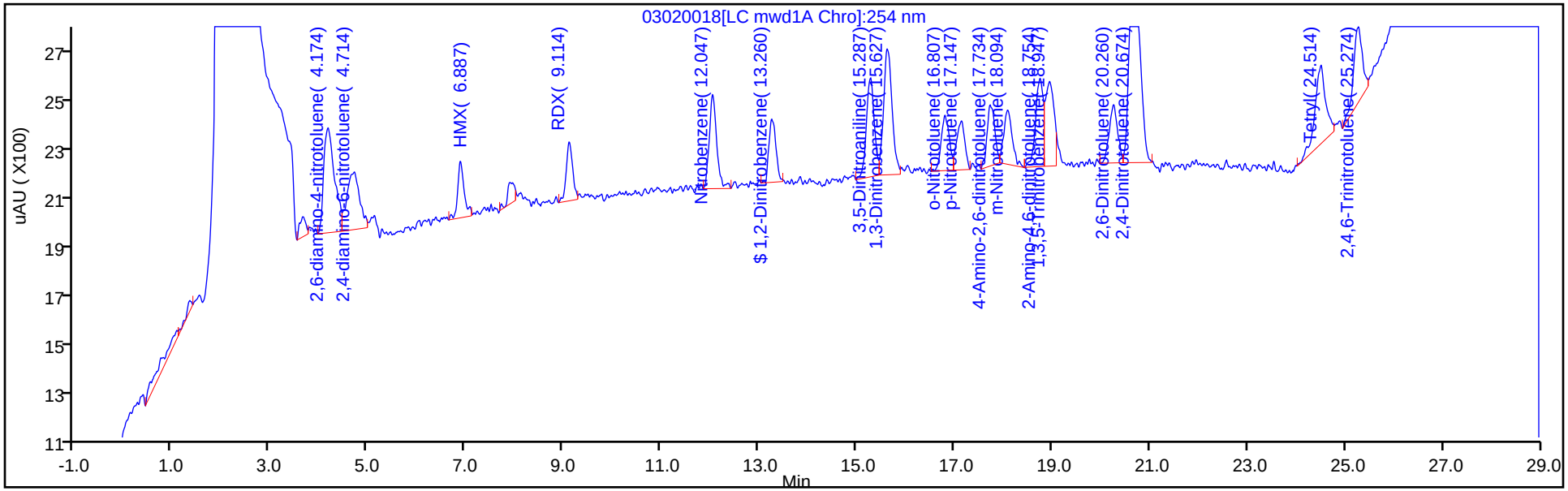
Report Date: 03-Mar-2022 12:49:18 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

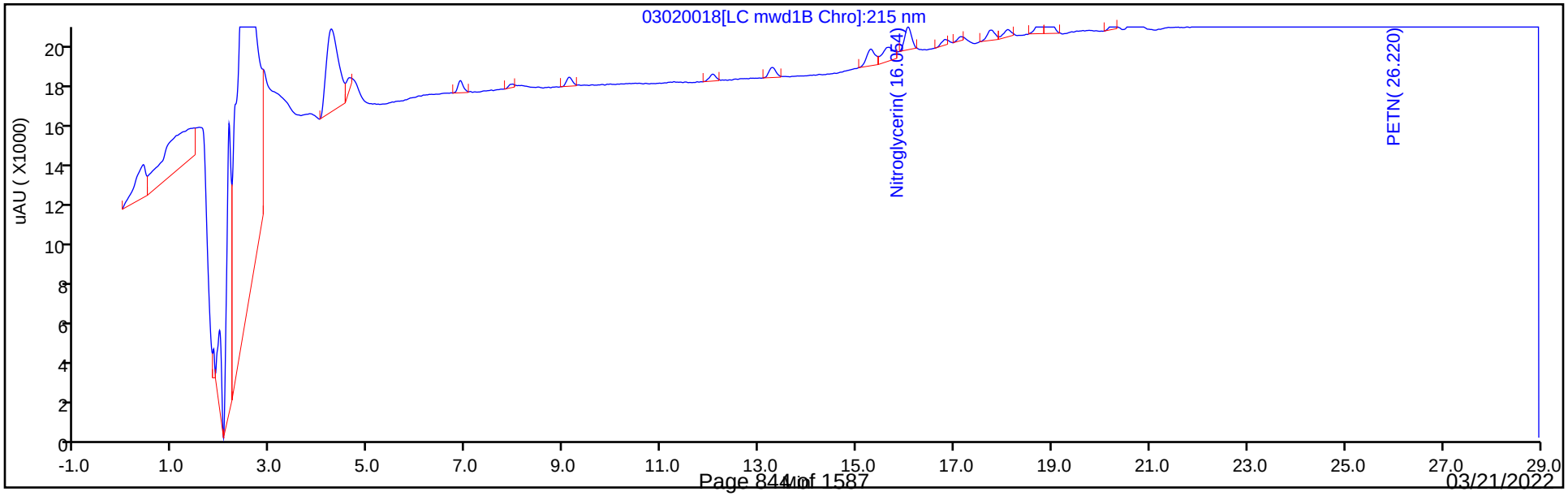
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D

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

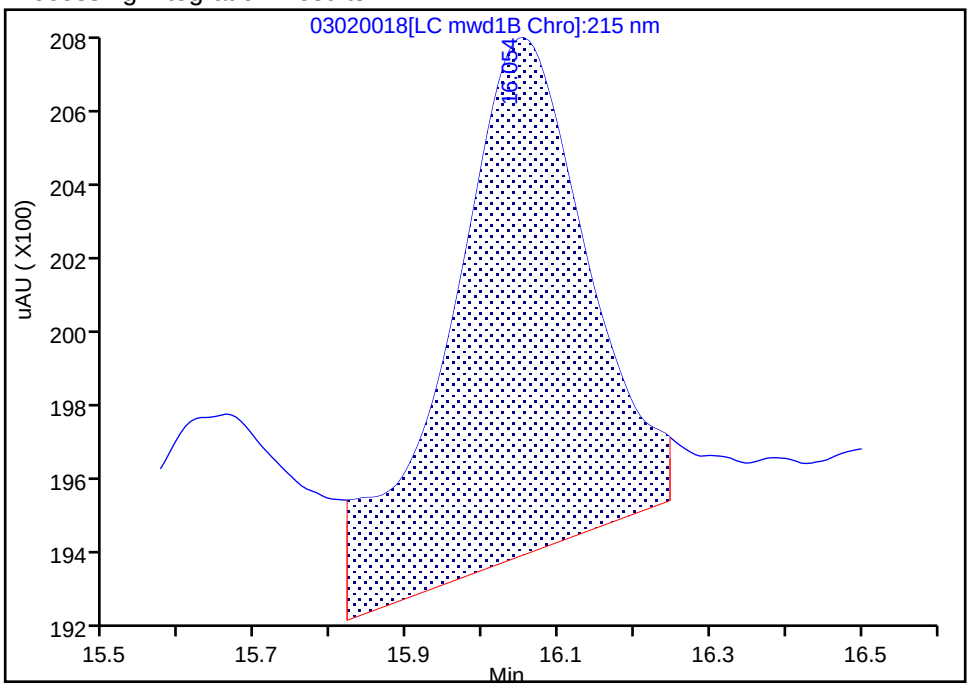
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D
Injection Date: 03-Mar-2022 02:03:29 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 1
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

13 Nitroglycerin, CAS: 55-63-0

Signal: 1

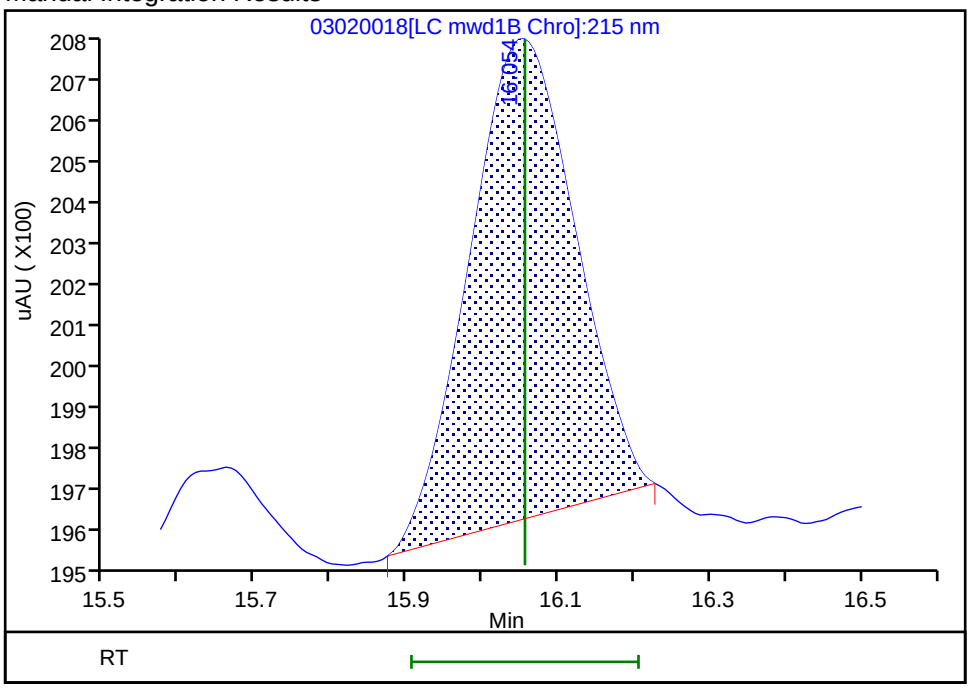
Processing Integration Results

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

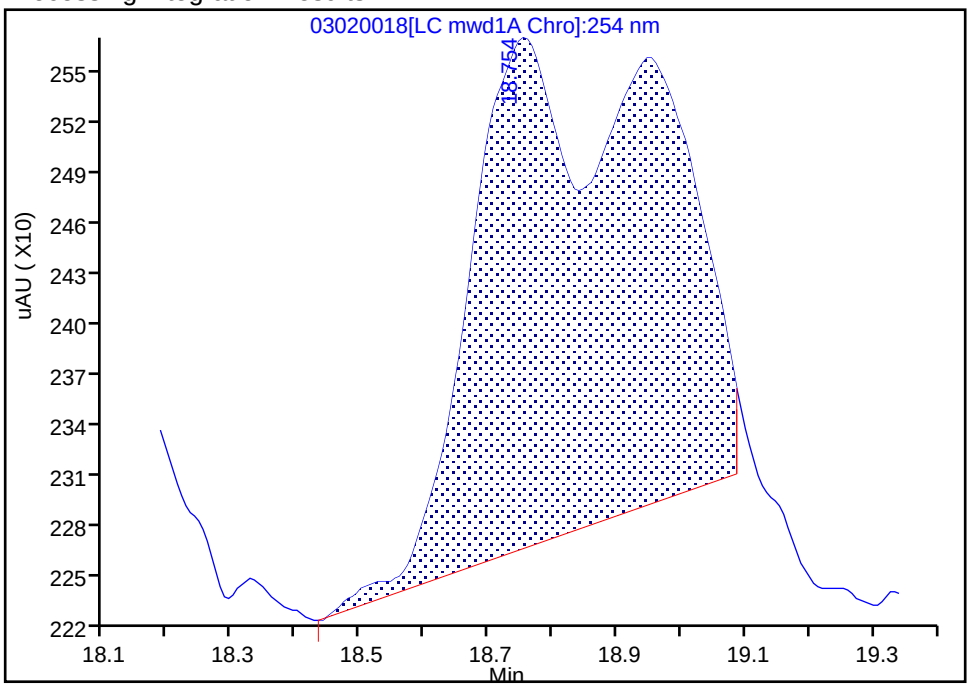
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D
Injection Date: 03-Mar-2022 02:03:29 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 1
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 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

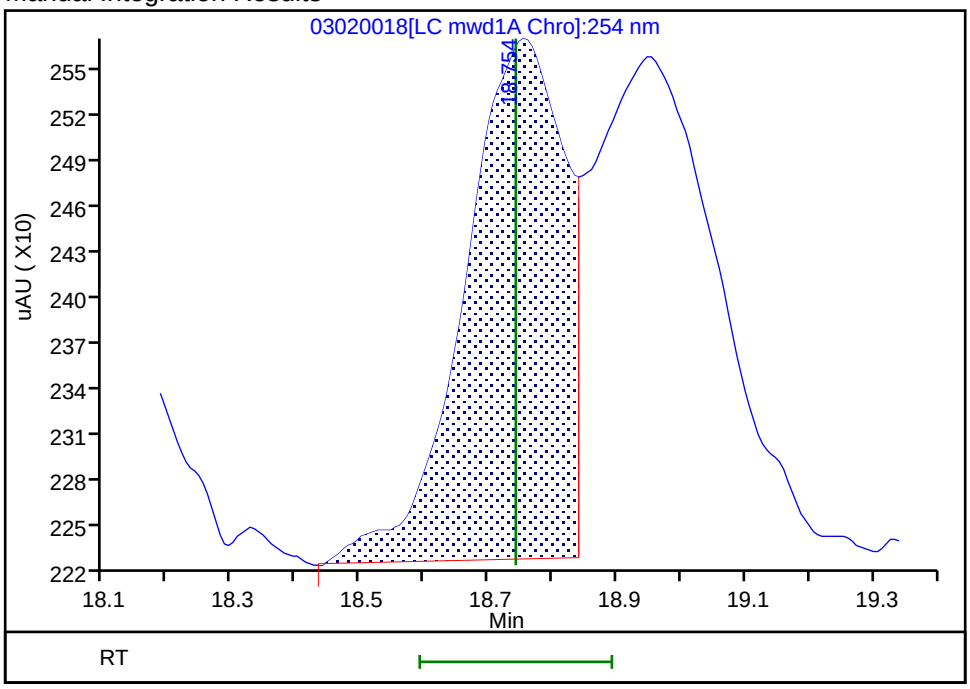
Processing Integration Results

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

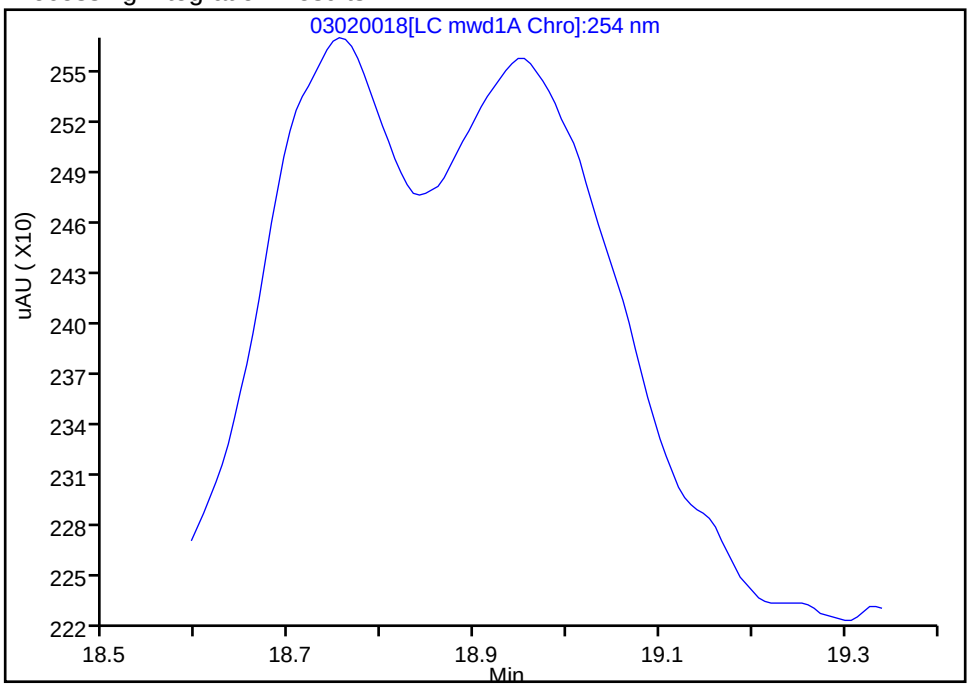
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D				
Injection Date:	03-Mar-2022 02:03:29	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	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

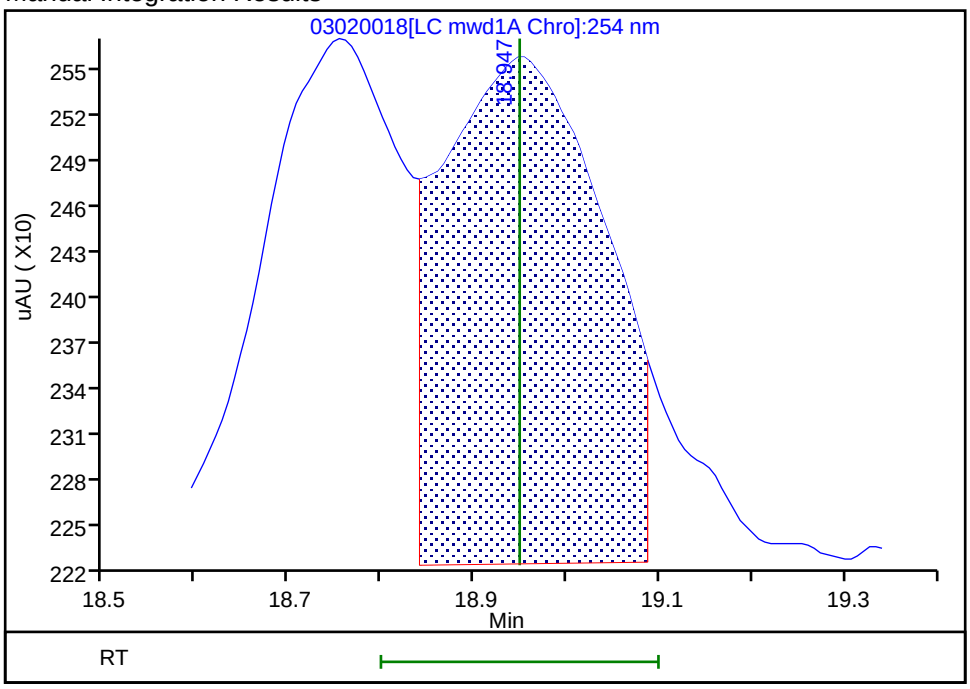
Not Detected
Expected RT: 18.95

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

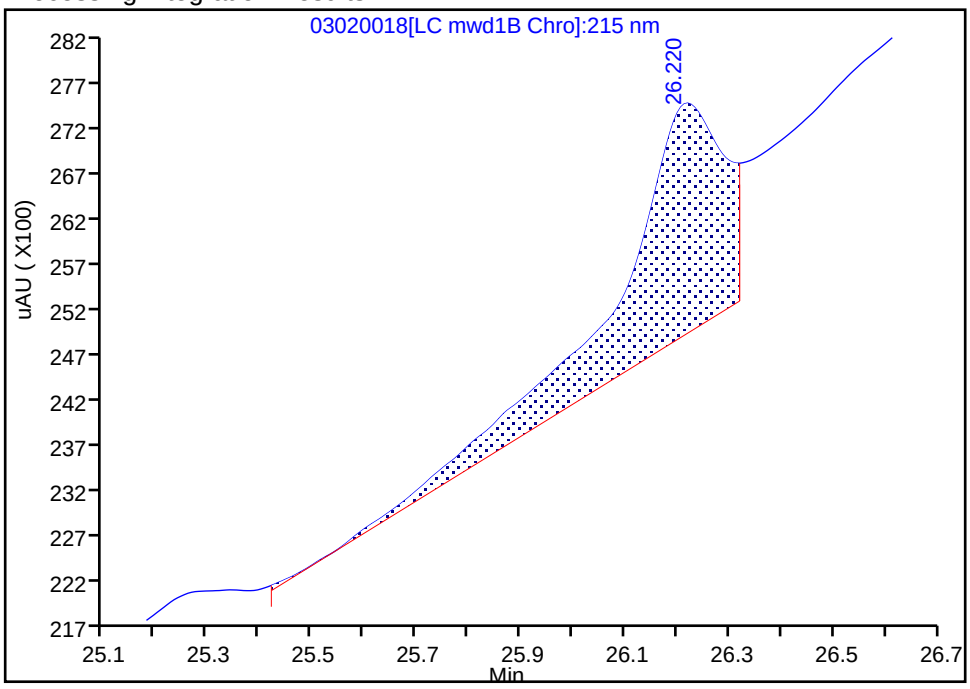
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020018.D
Injection Date: 03-Mar-2022 02:03:29 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 1
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

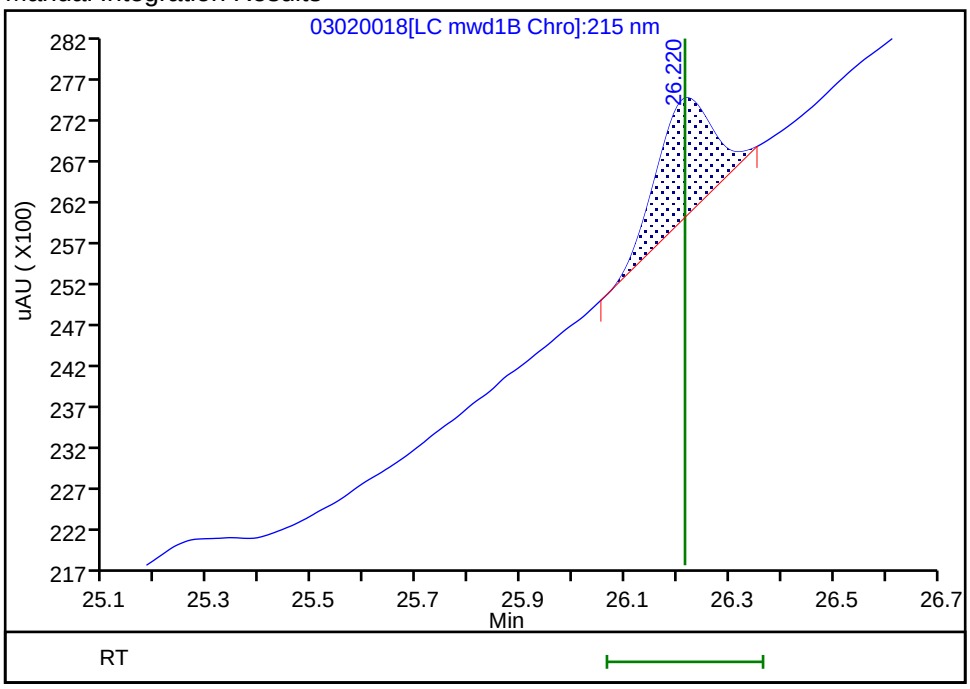
Processing Integration Results

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

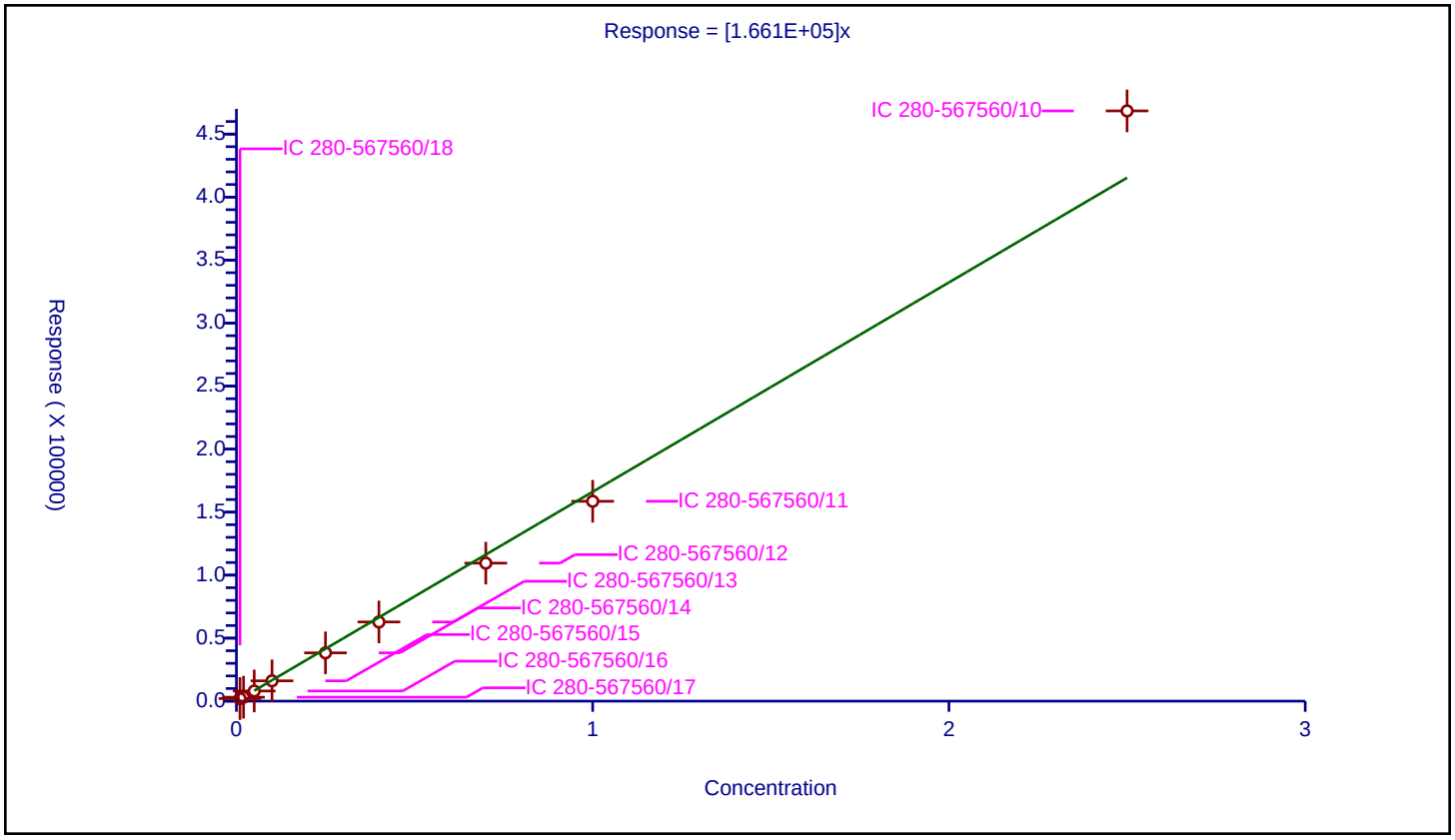
Curve Coefficients

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

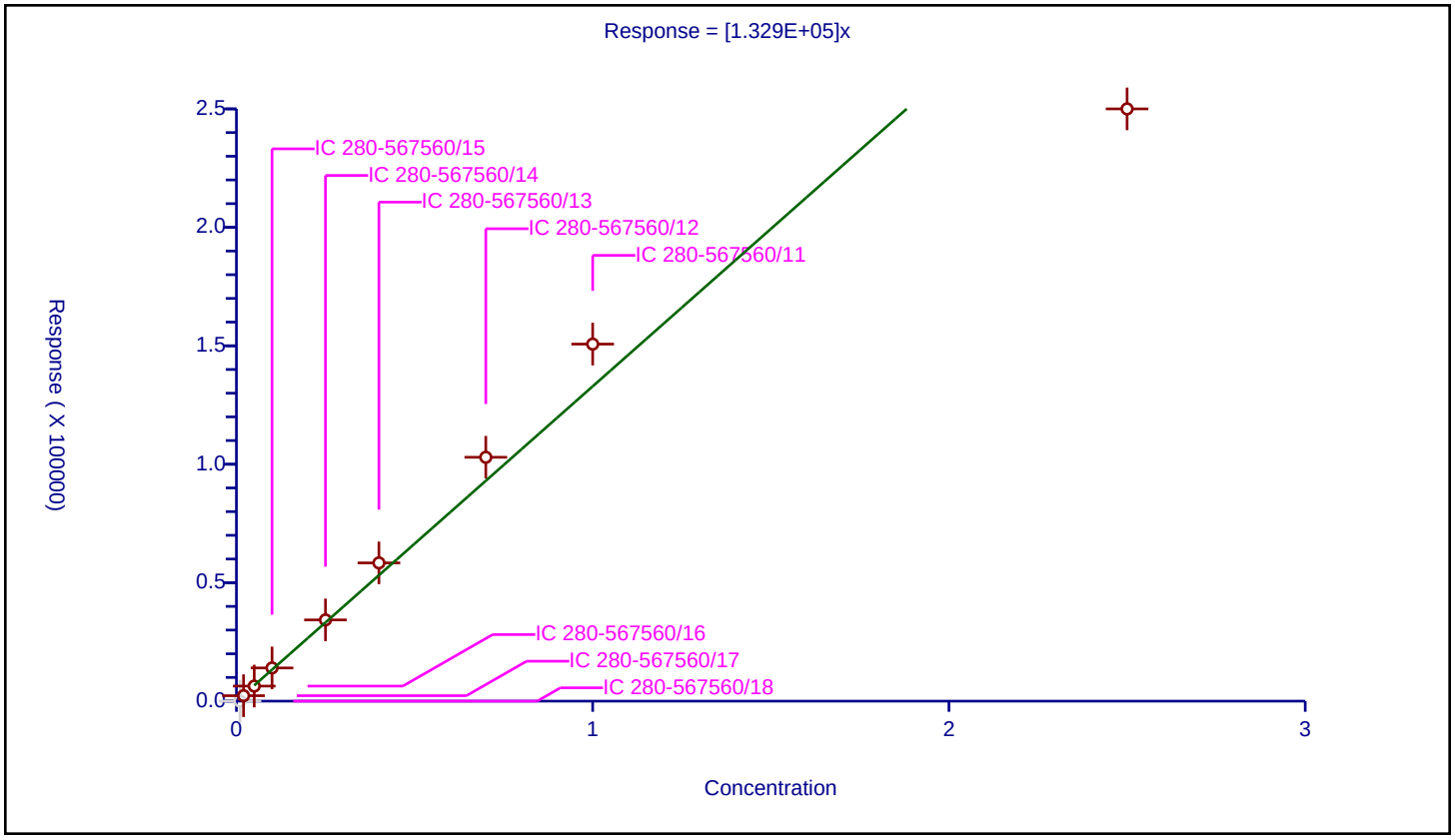
Curve Coefficients

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

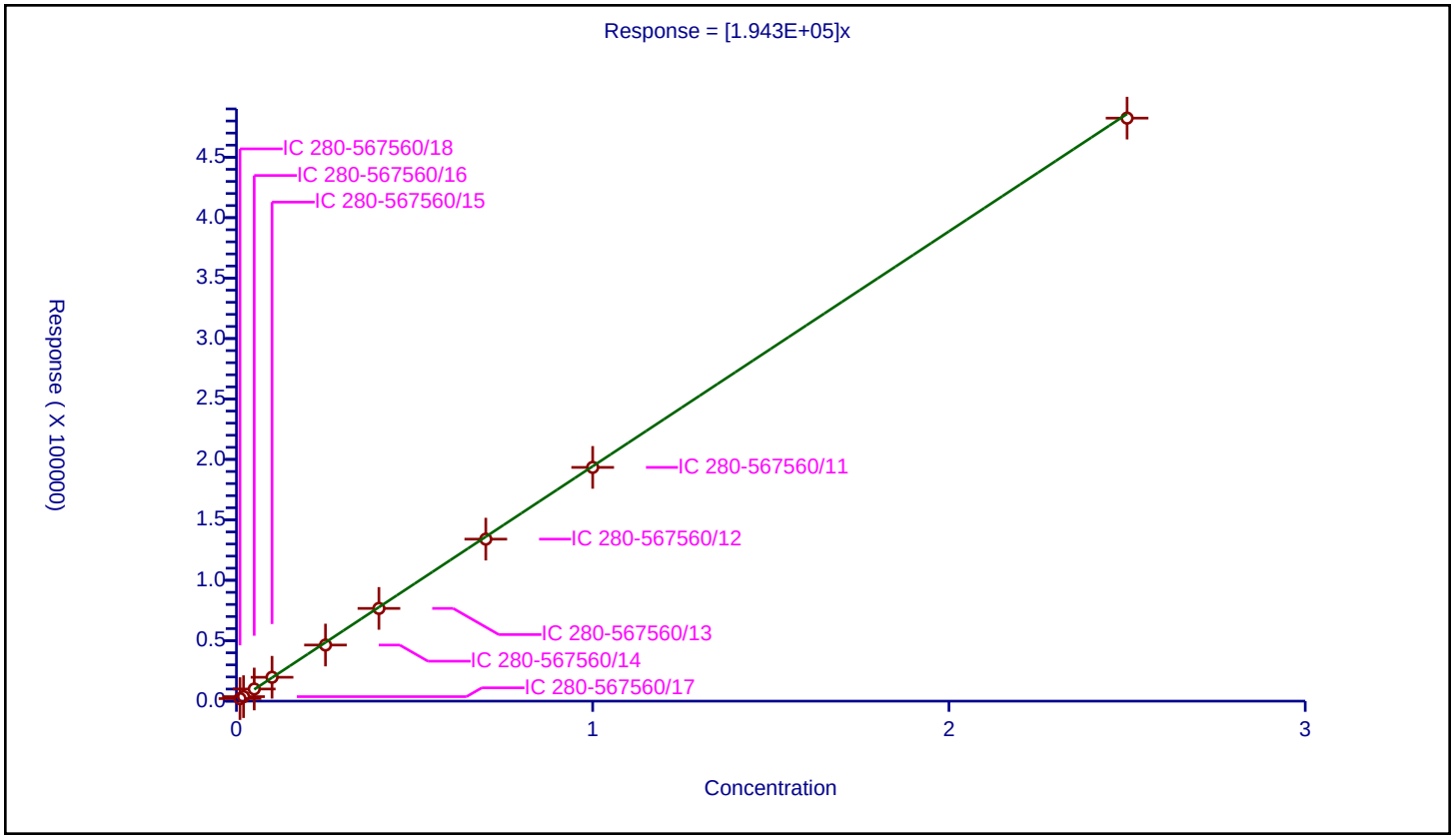
Curve Coefficients

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

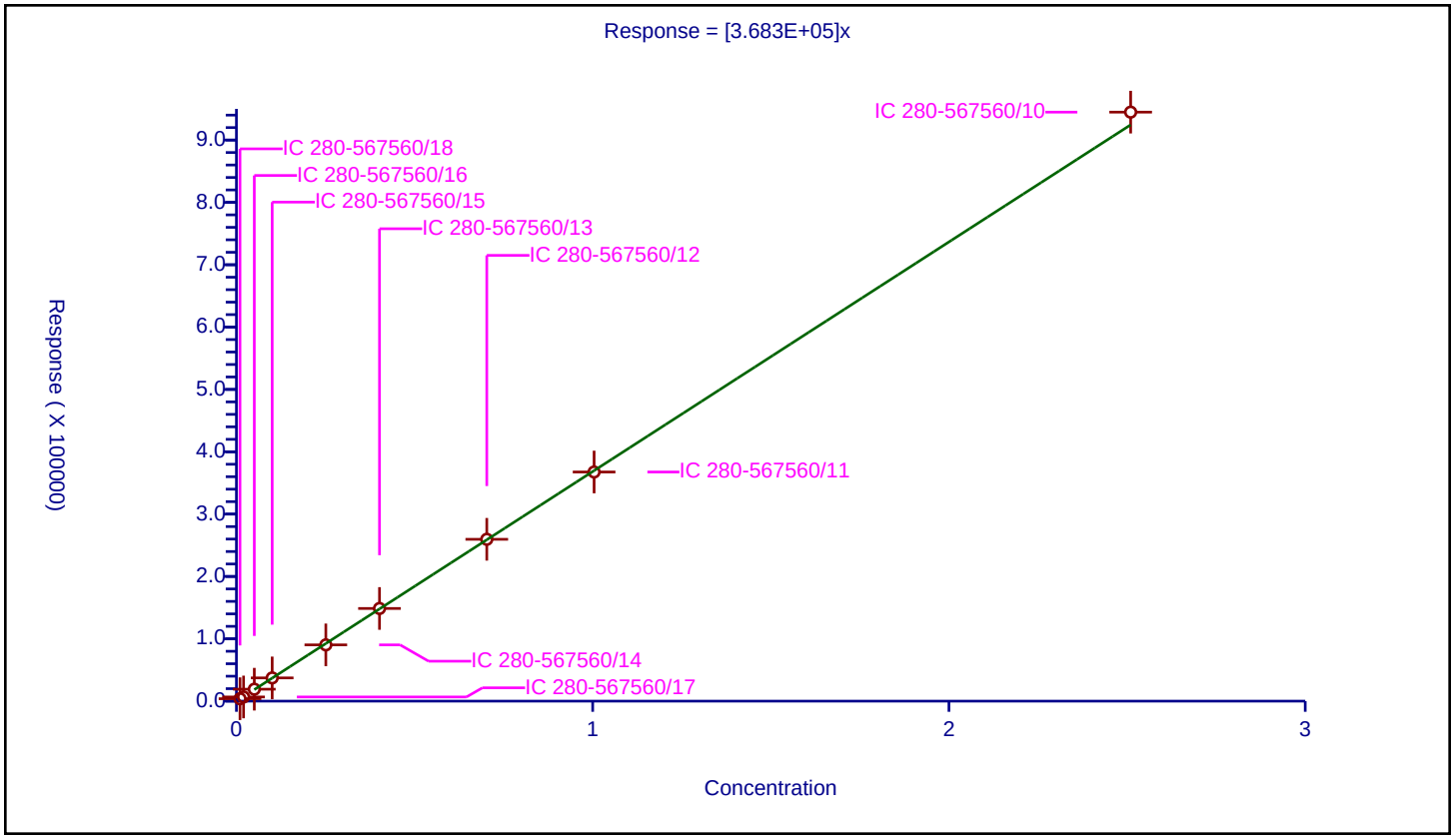
Curve Coefficients

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

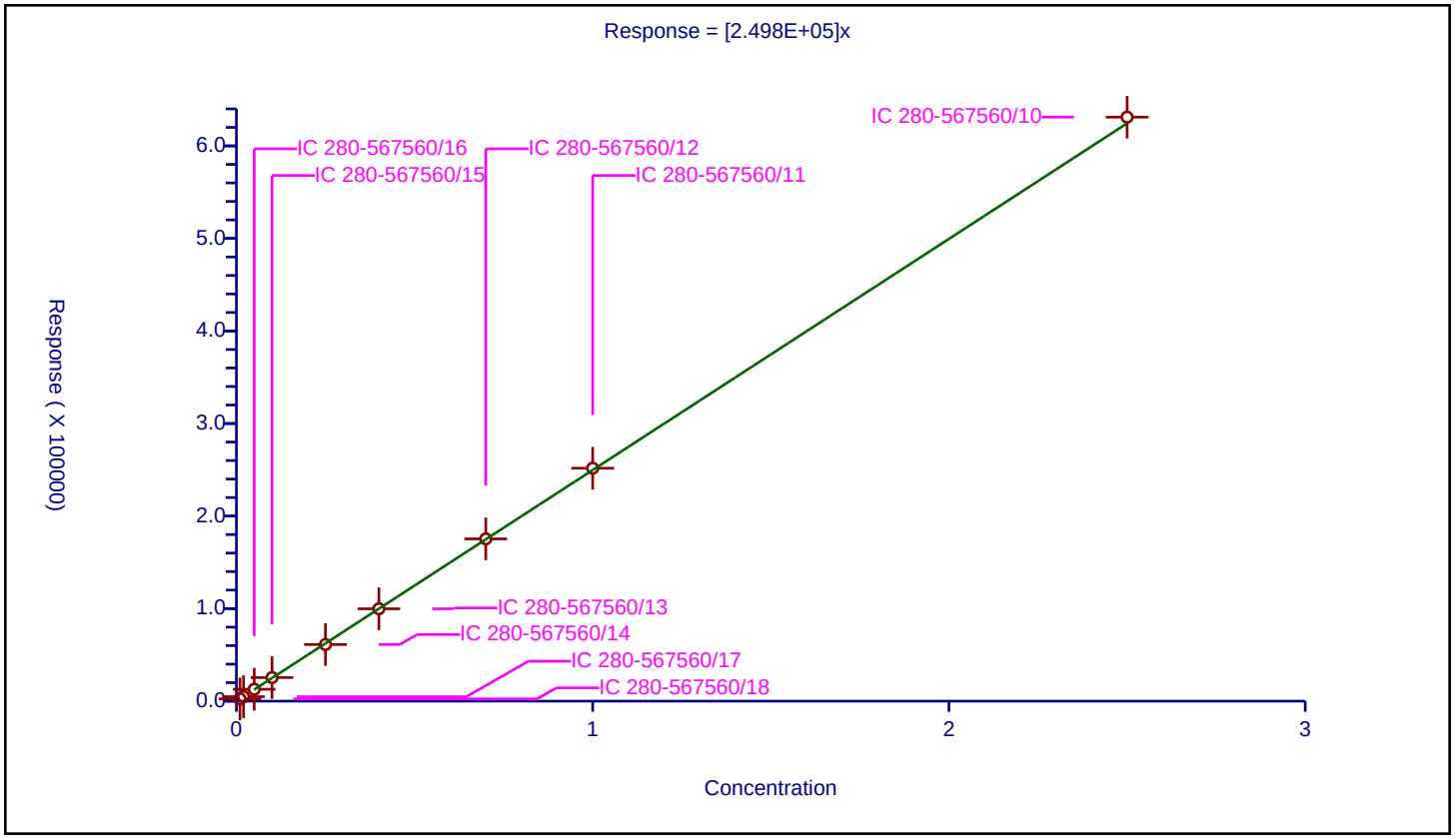
Curve Coefficients

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

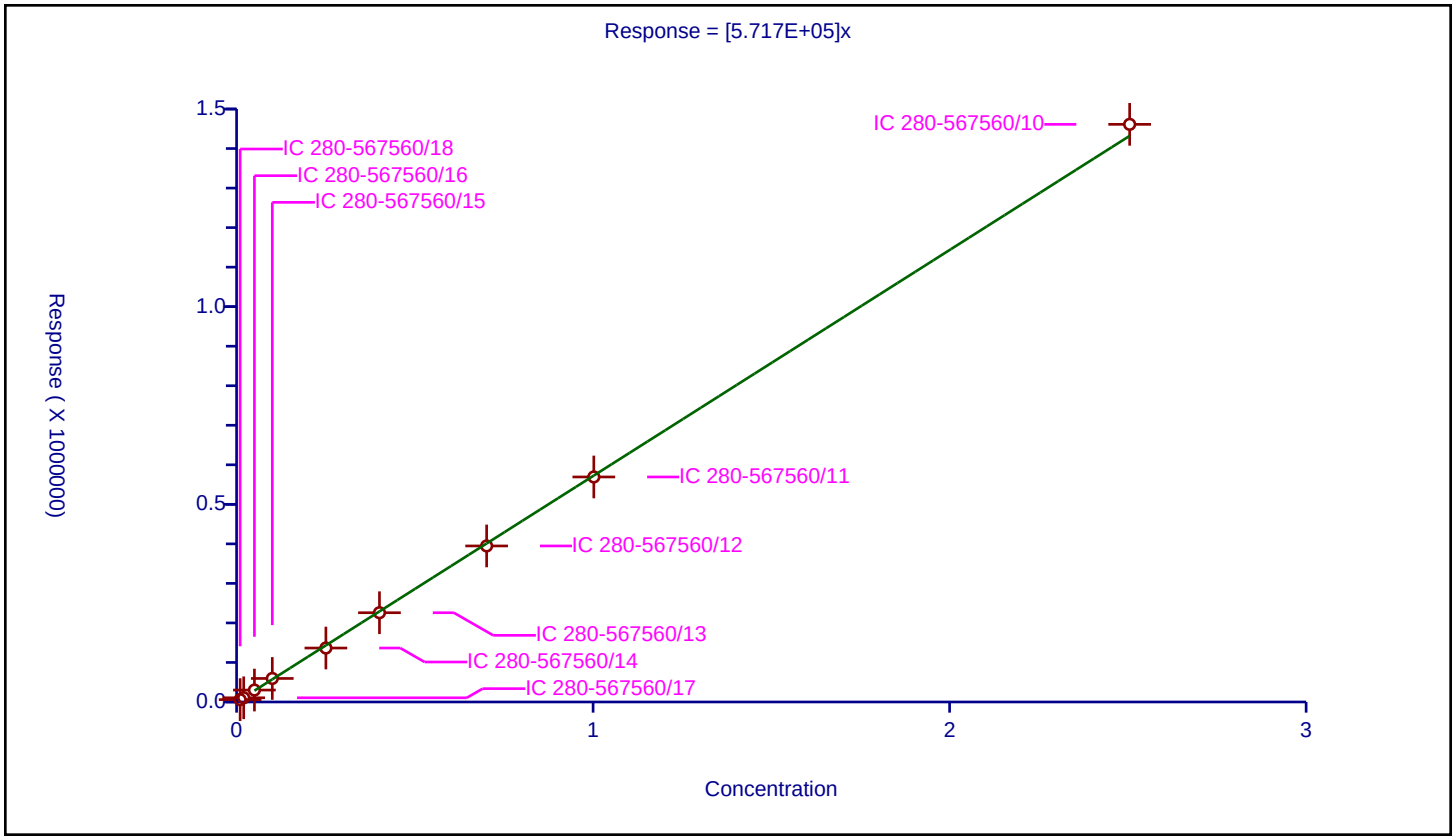
Curve Coefficients

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

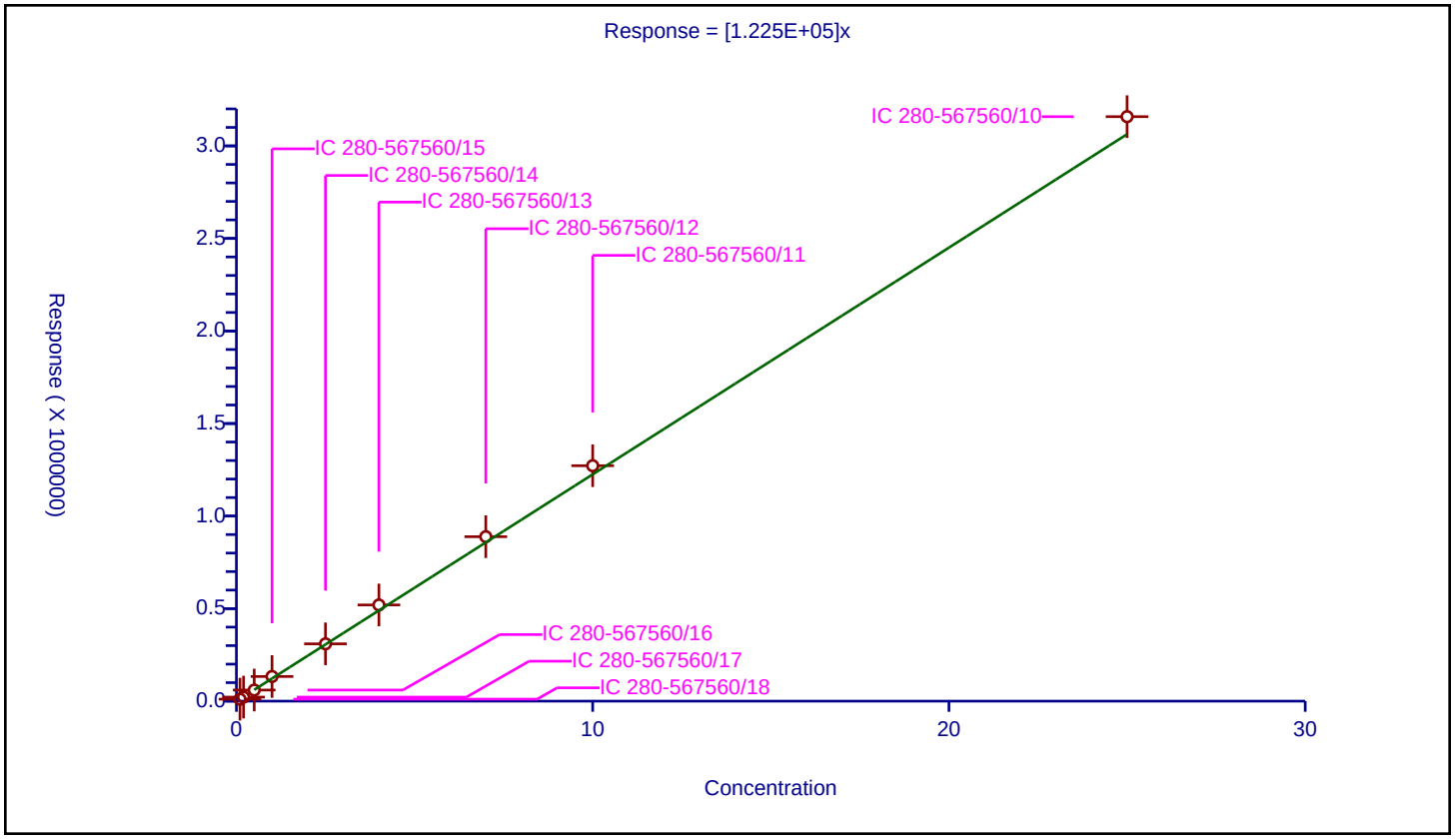
Curve Coefficients

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

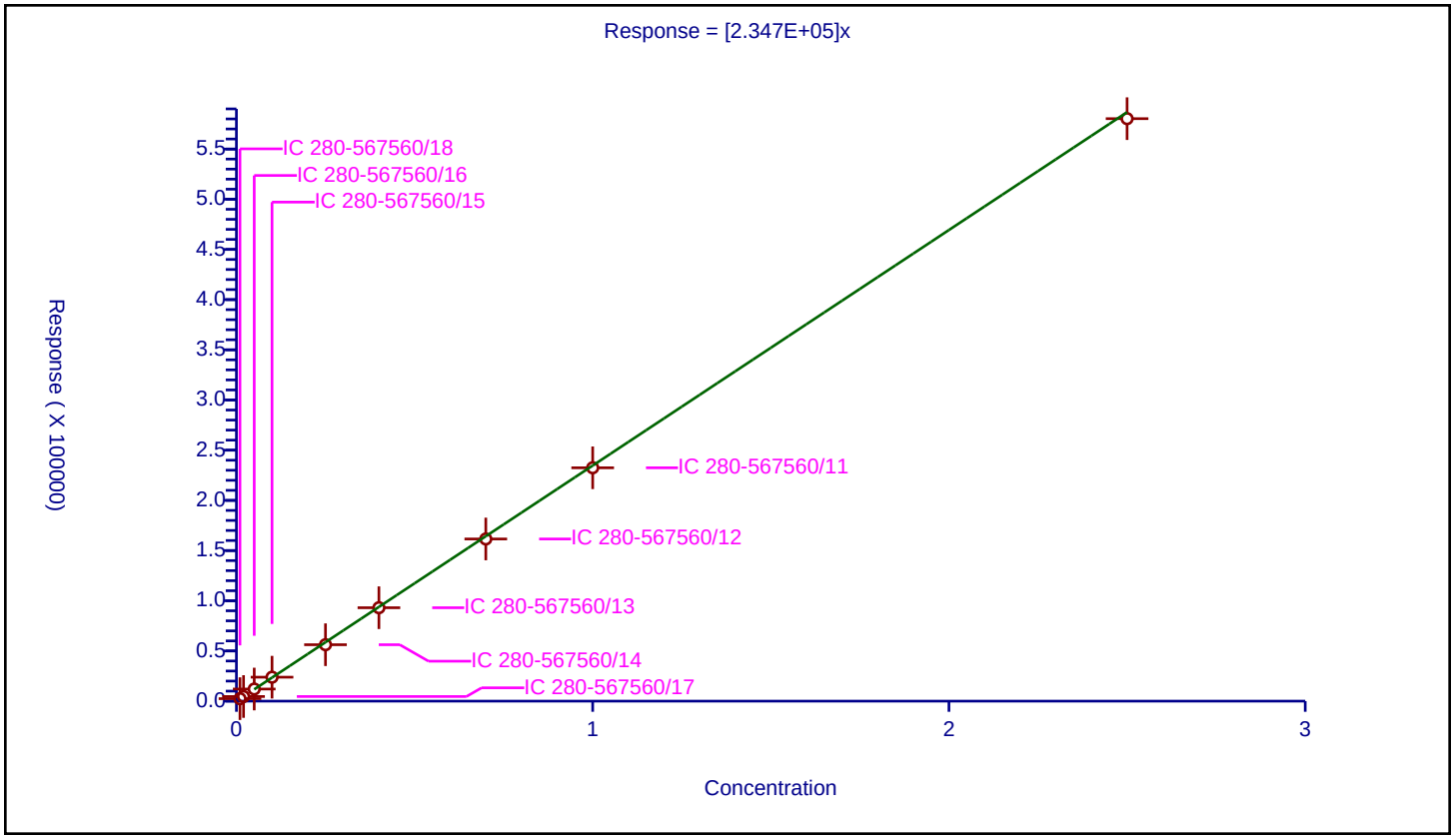
Curve Coefficients

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

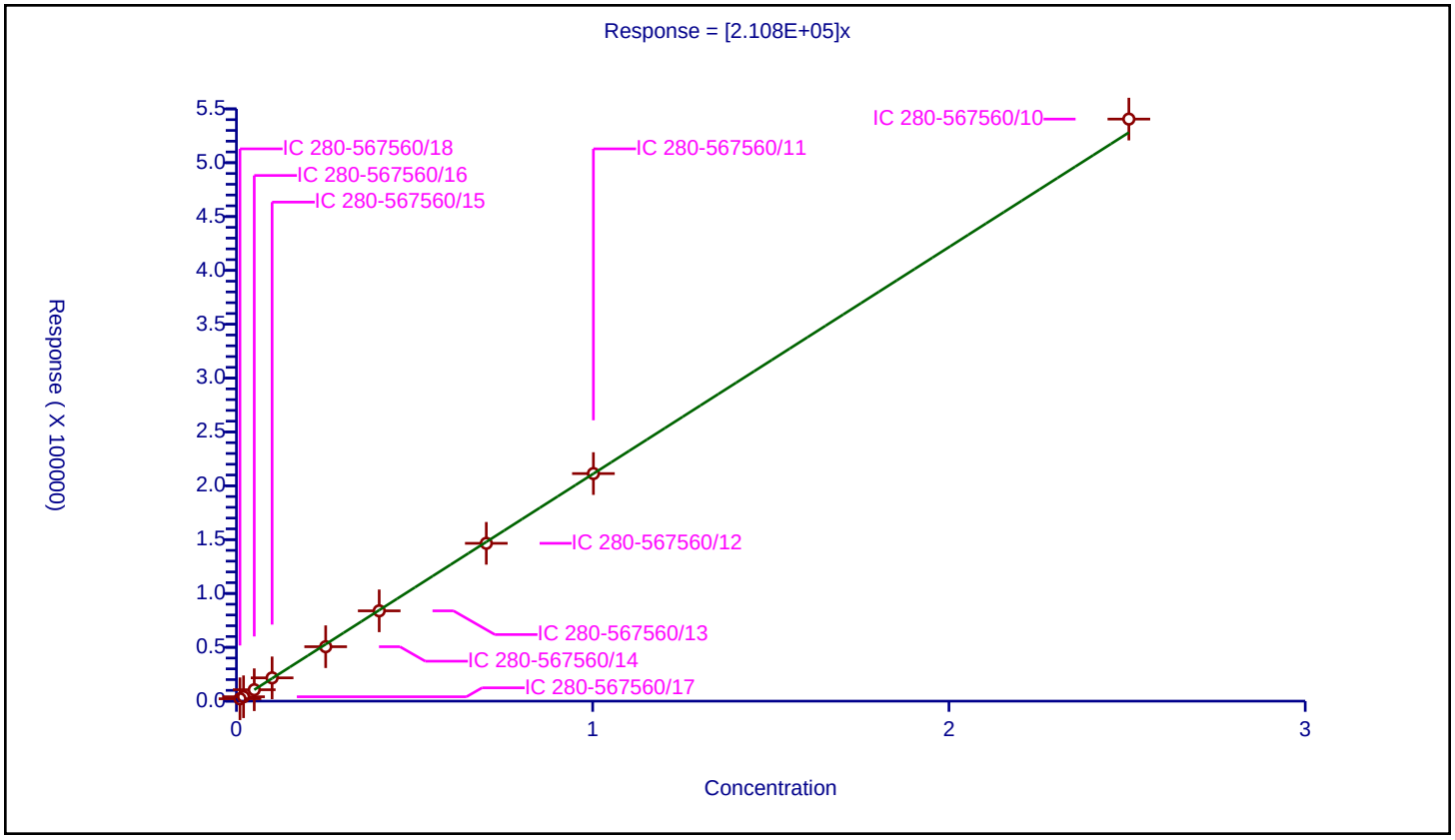
Curve Coefficients

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

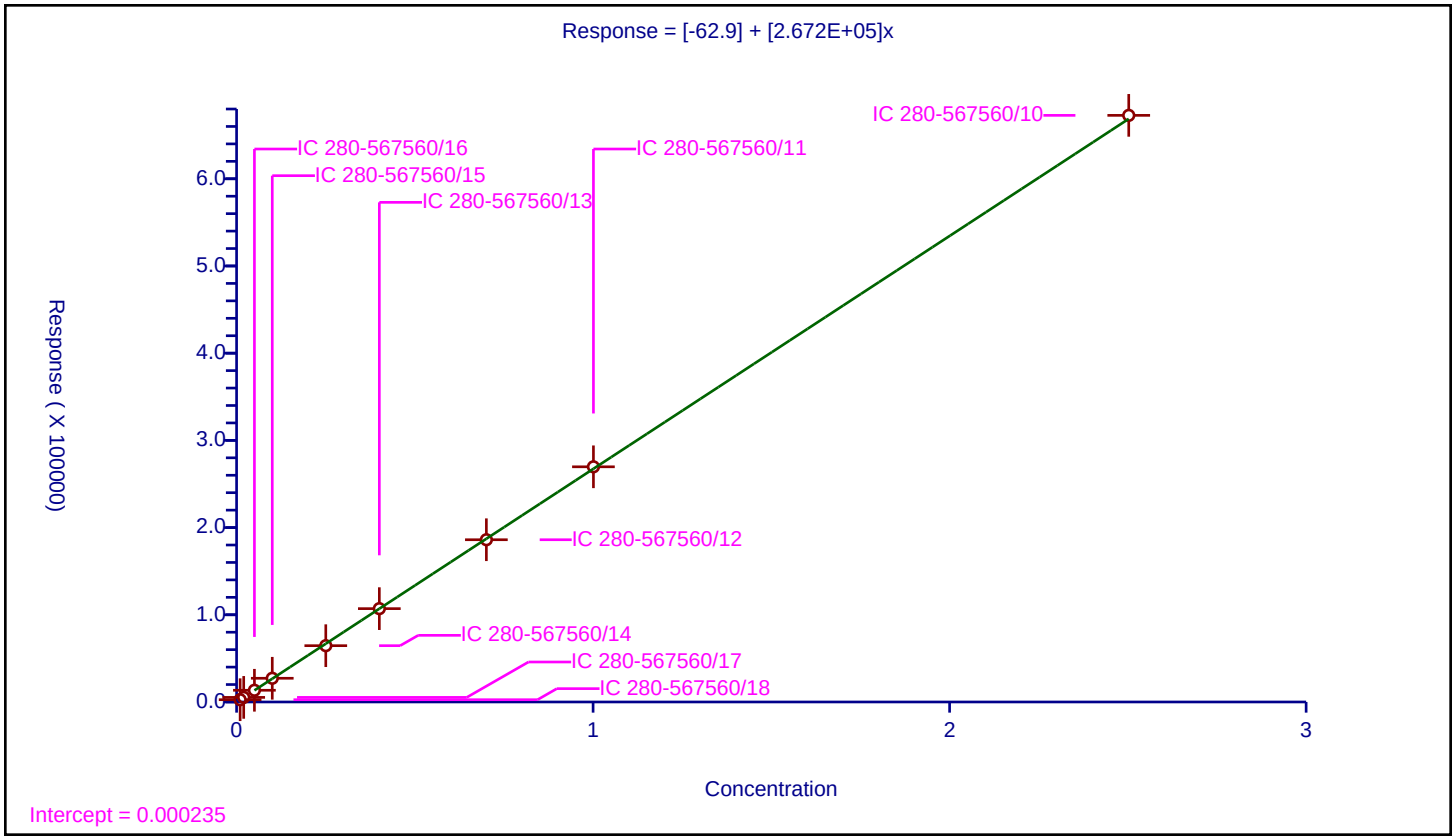
Curve Coefficients

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

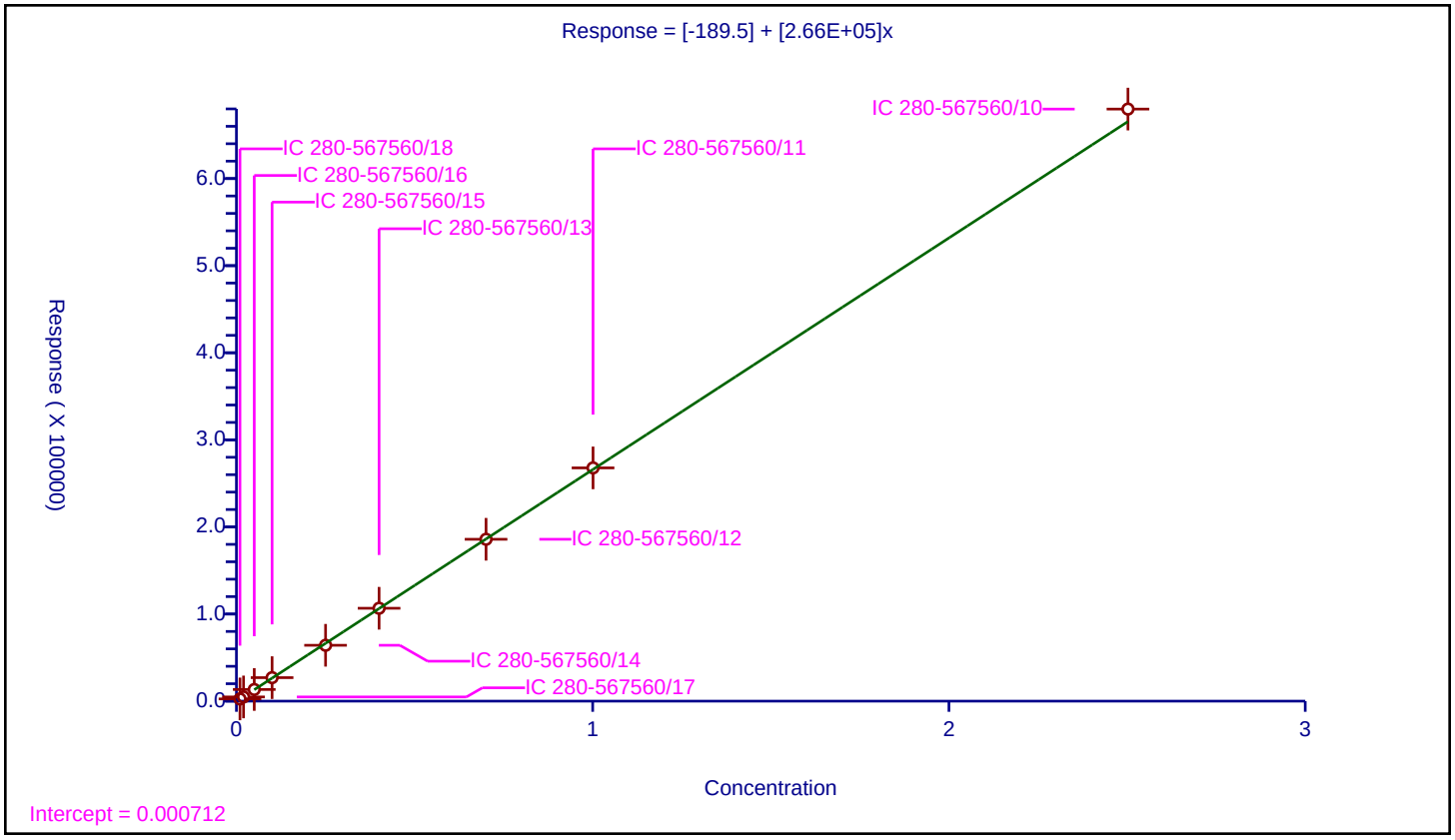
Curve Coefficients

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

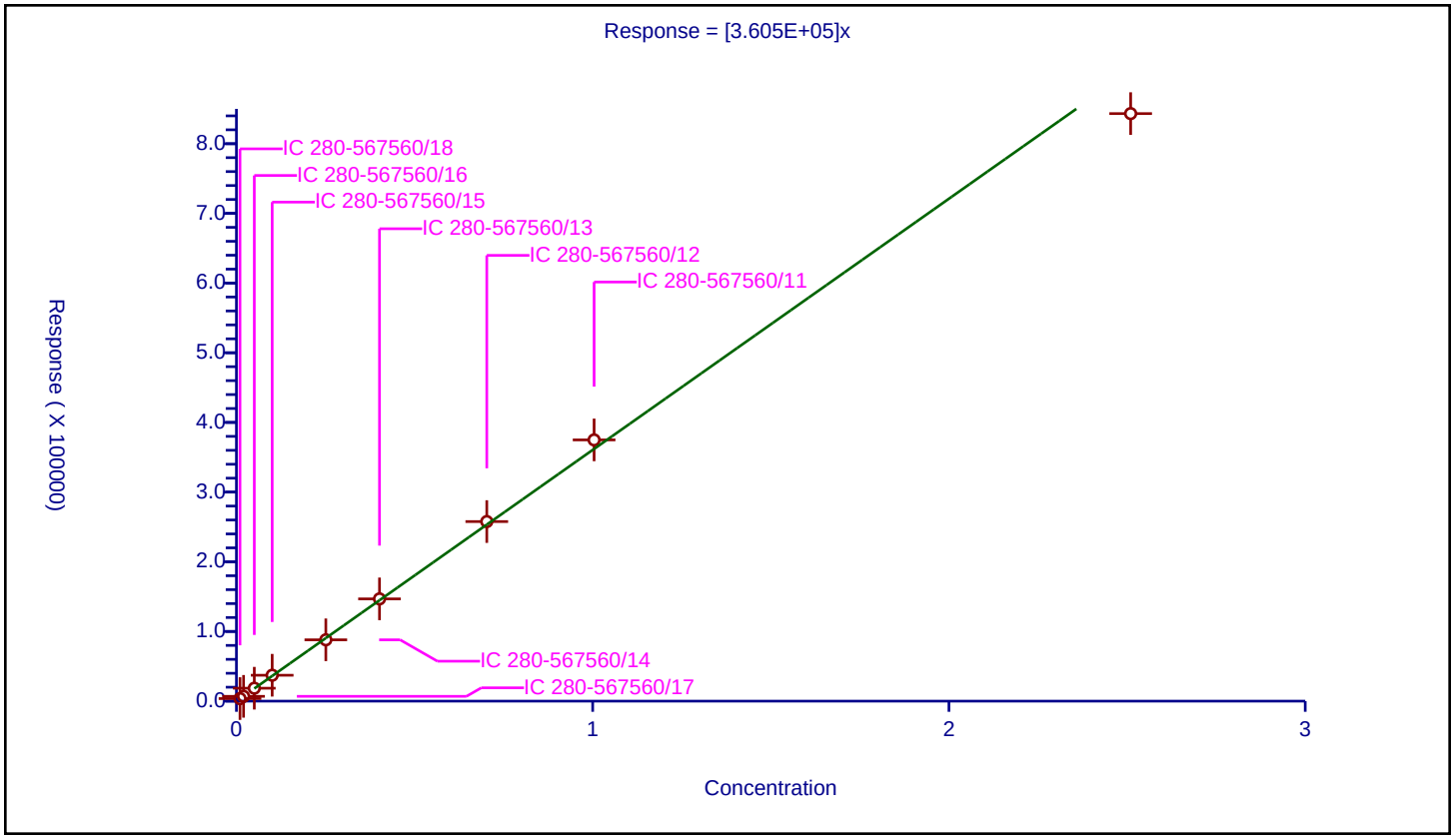
Curve Coefficients

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

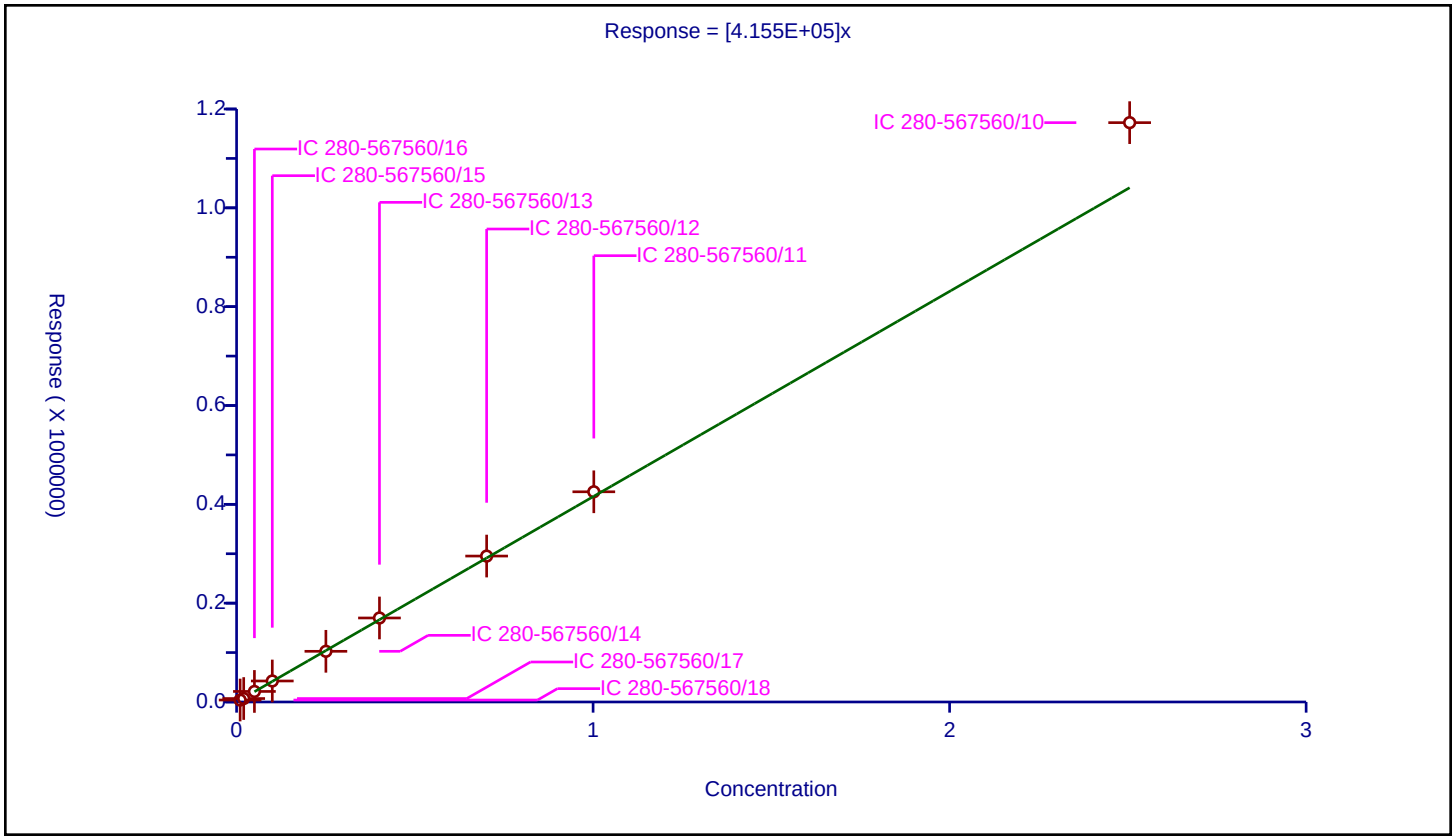
Curve Coefficients

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

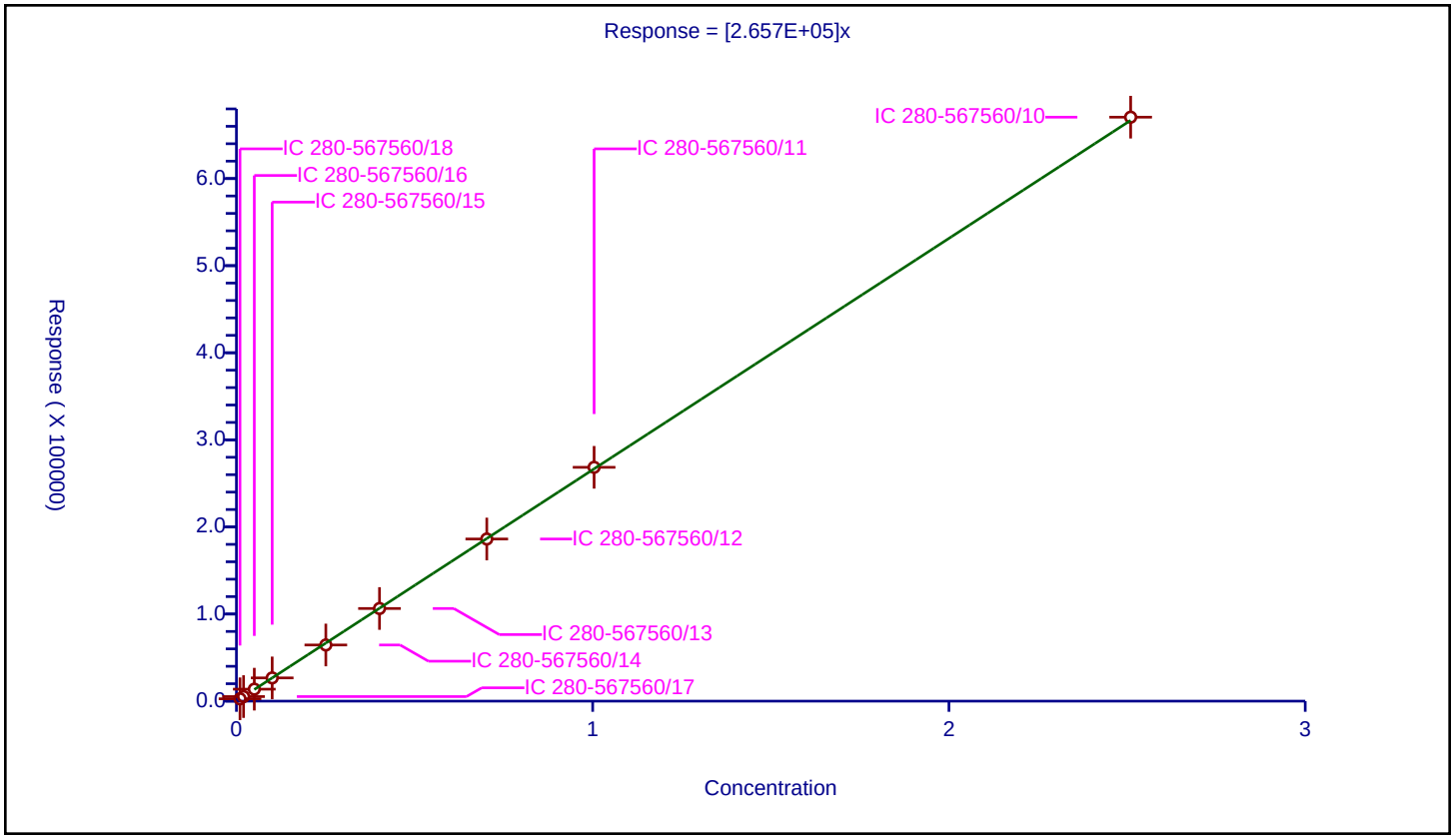
Curve Coefficients

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

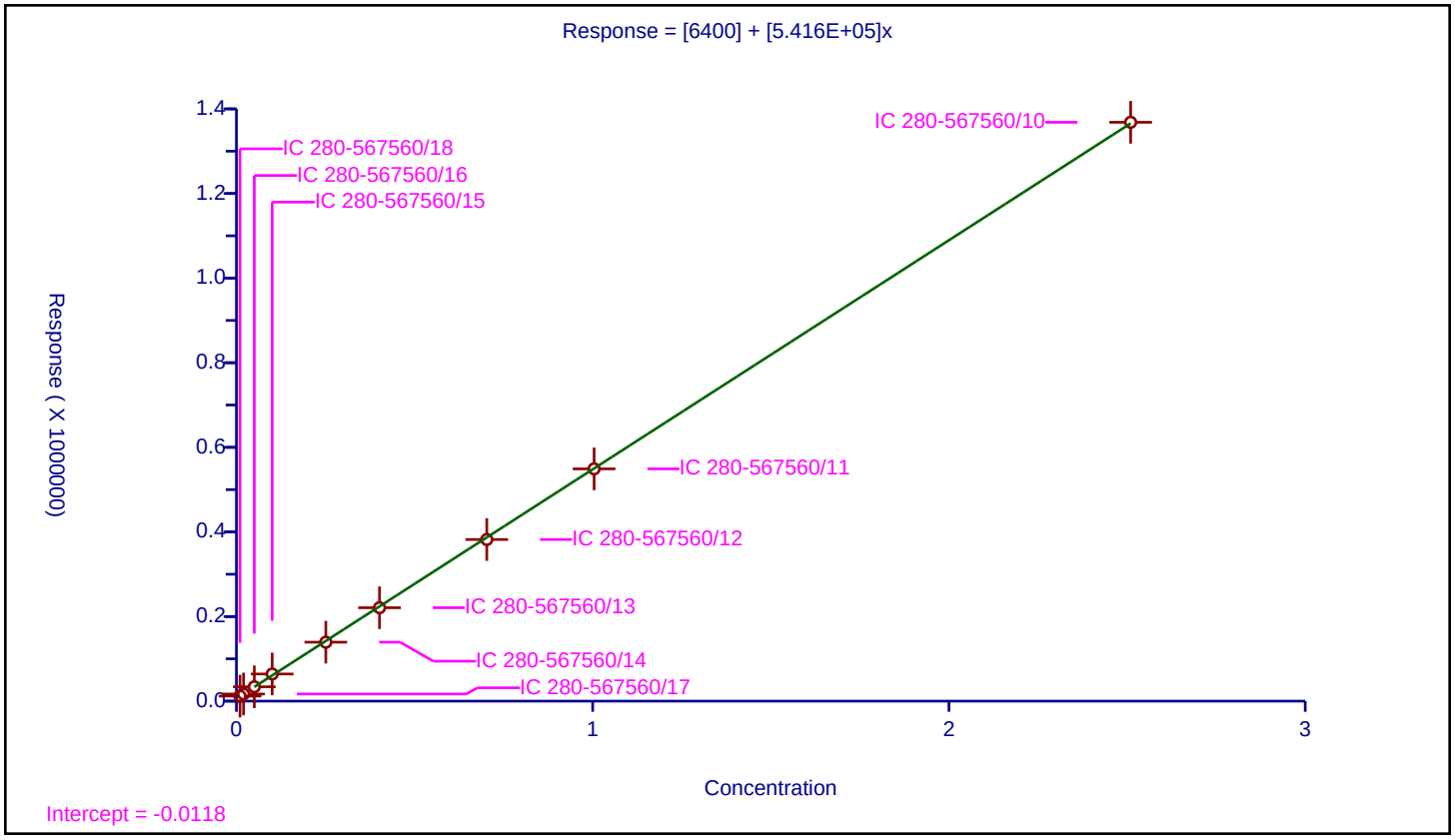
Curve Coefficients

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

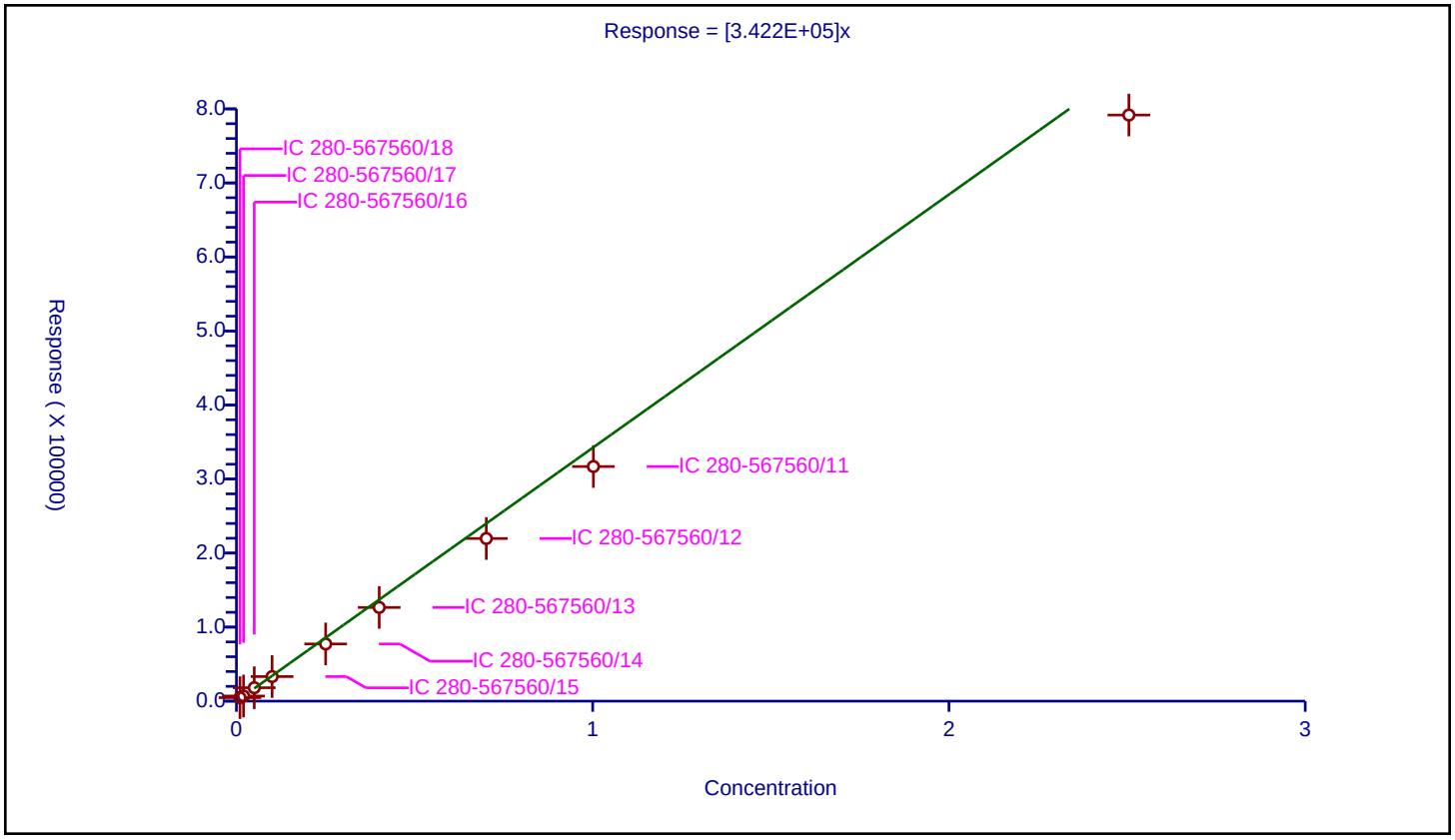
Curve Coefficients

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

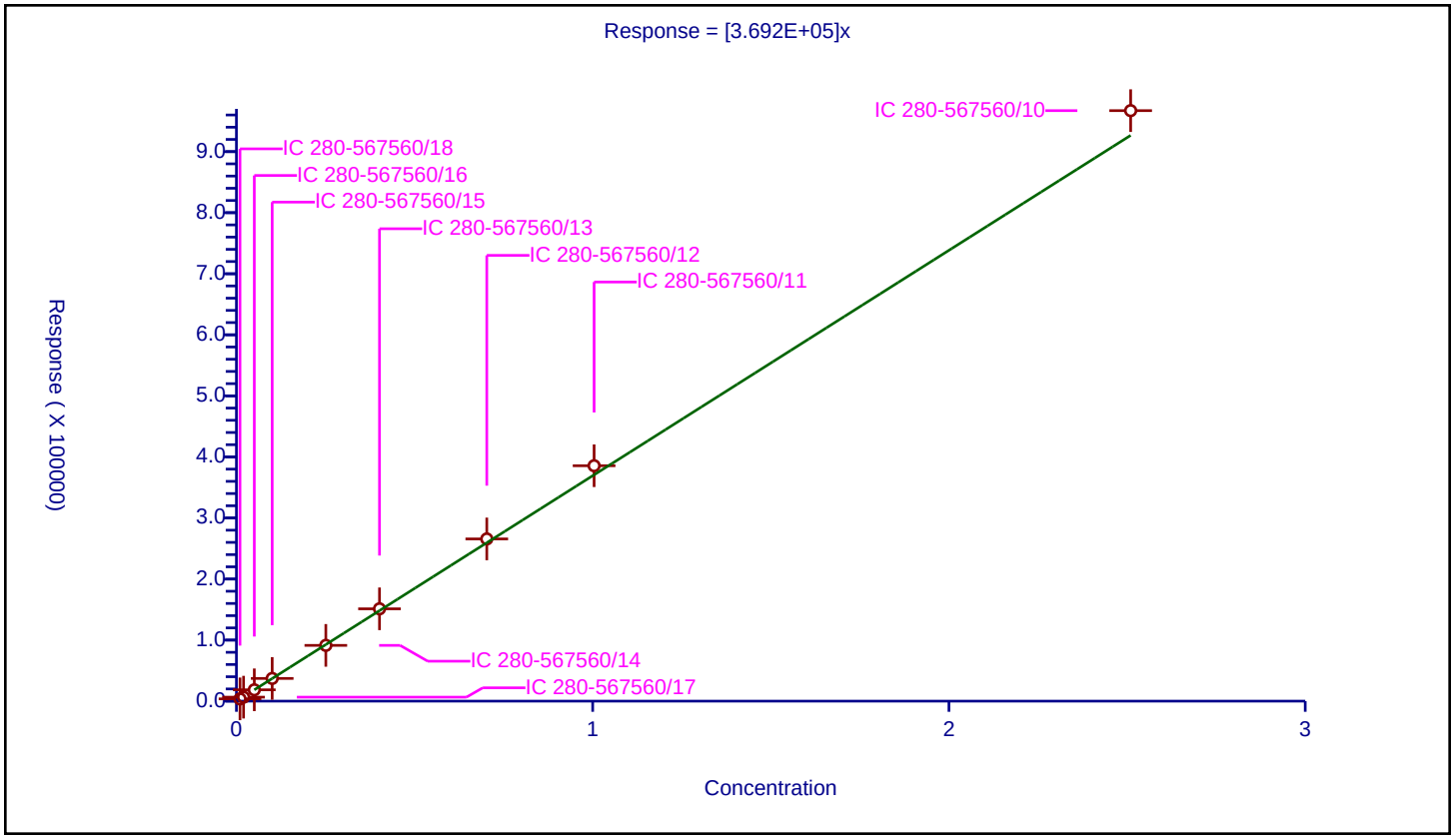
Curve Coefficients

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



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

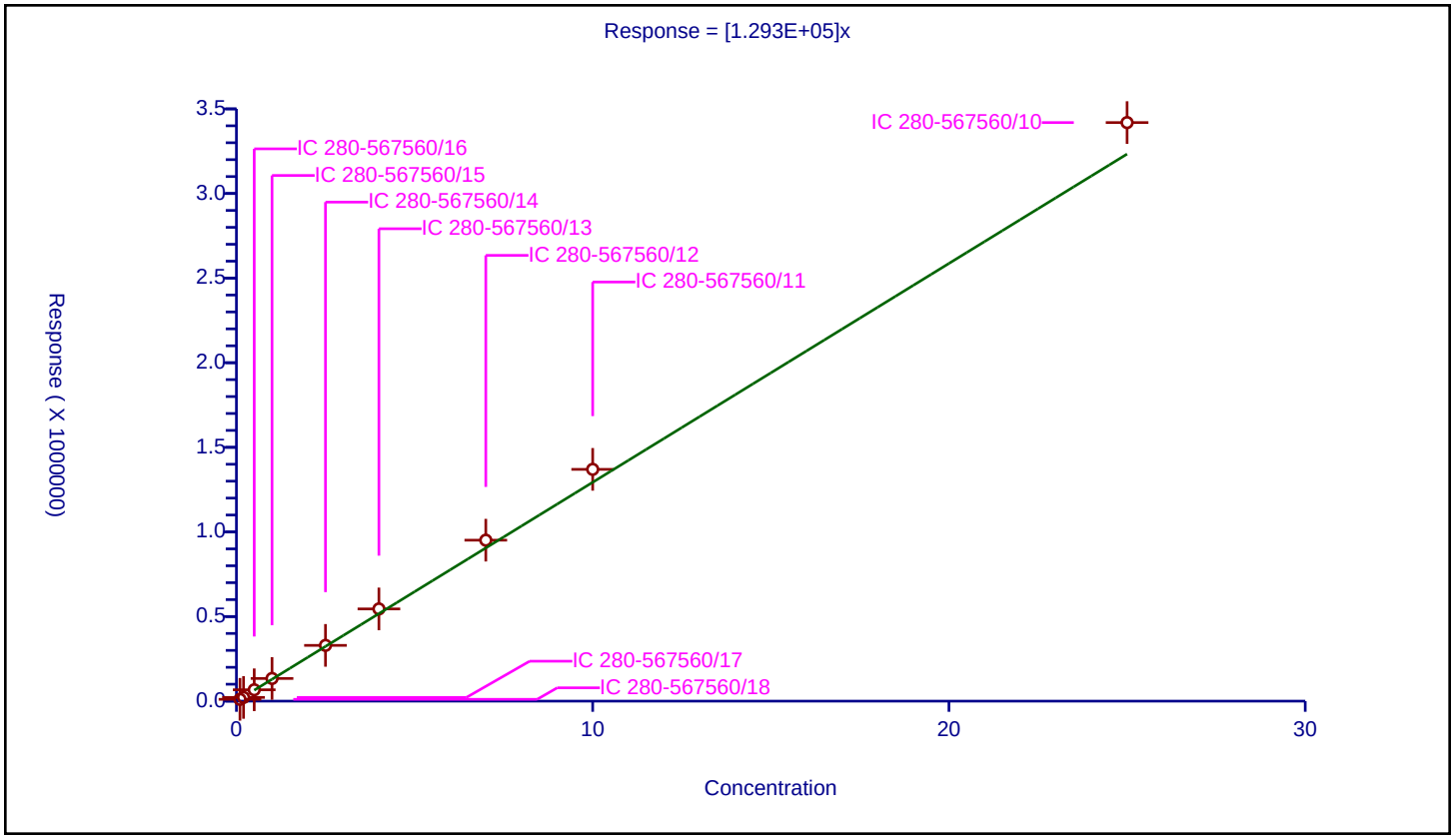
Curve Coefficients

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.: 280-159190-1 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.: 280-159190-1 | 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.: 280-159190-1 | 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

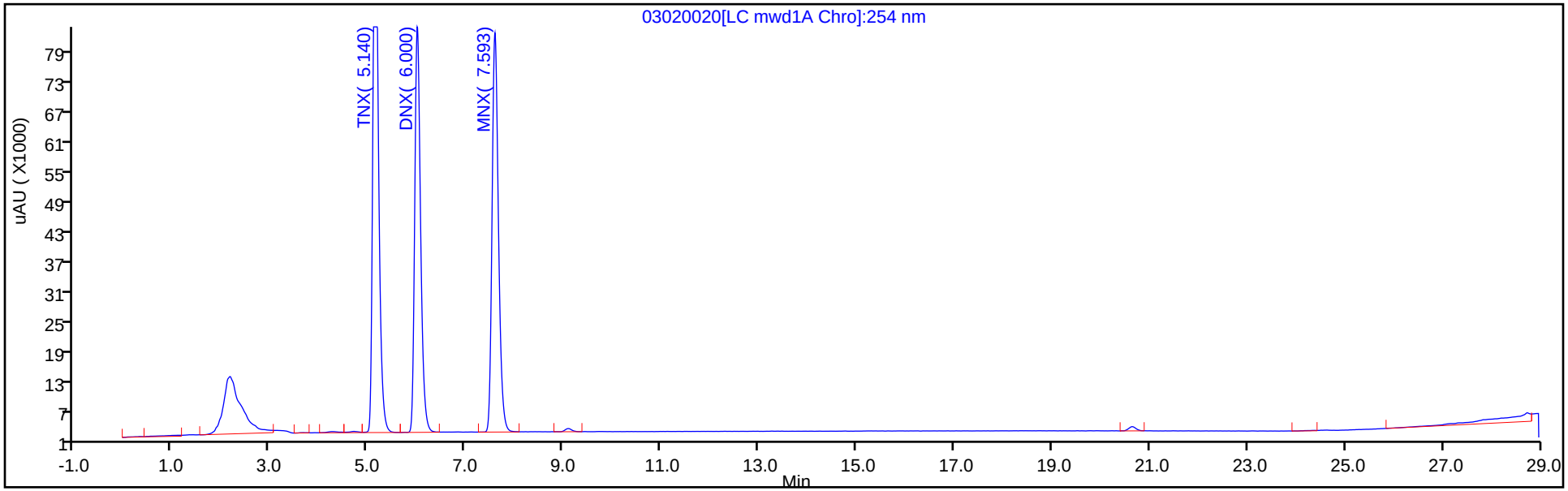
Report Date: 03-Mar-2022 12:49:19 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

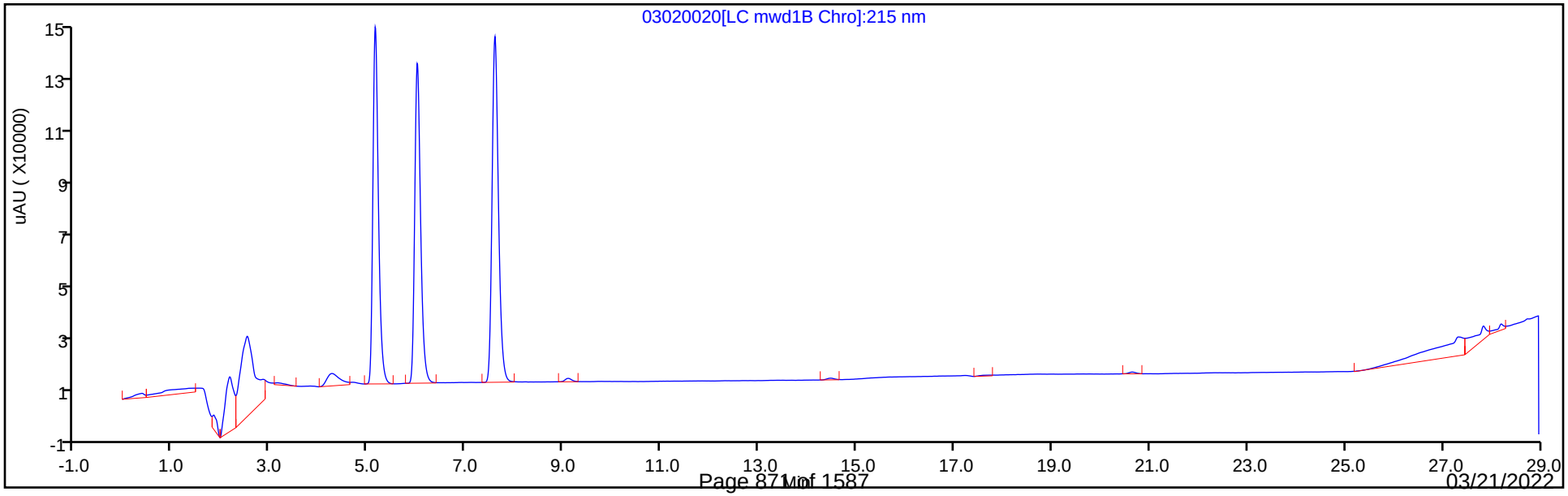
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020020.D

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

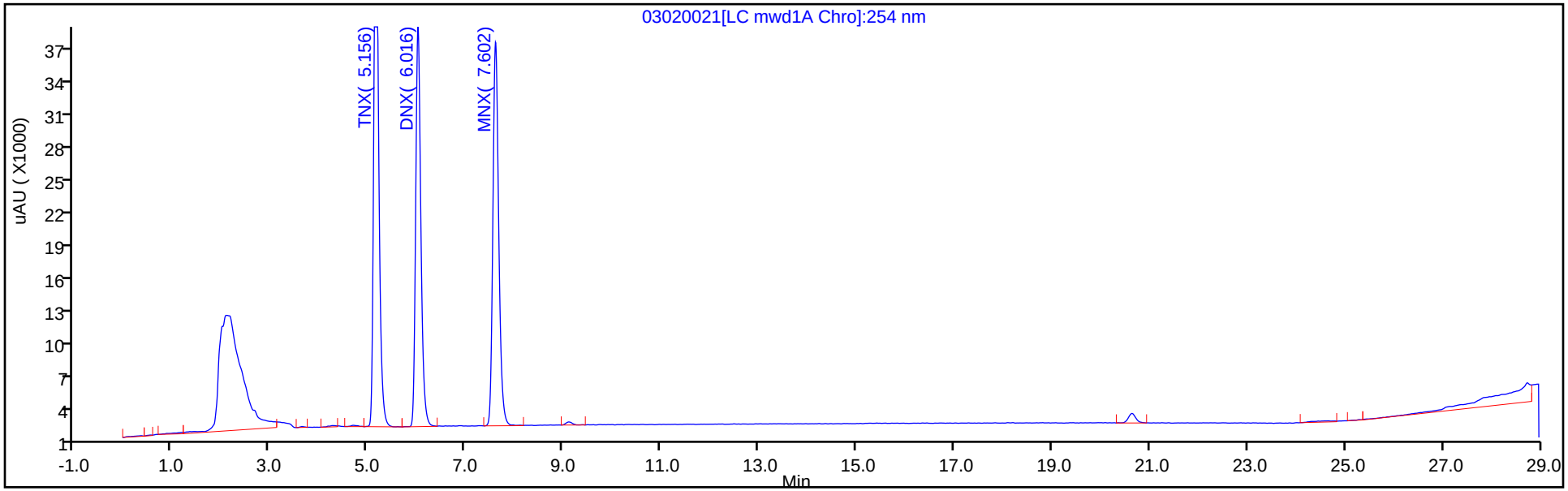
Report Date: 03-Mar-2022 12:49:19 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

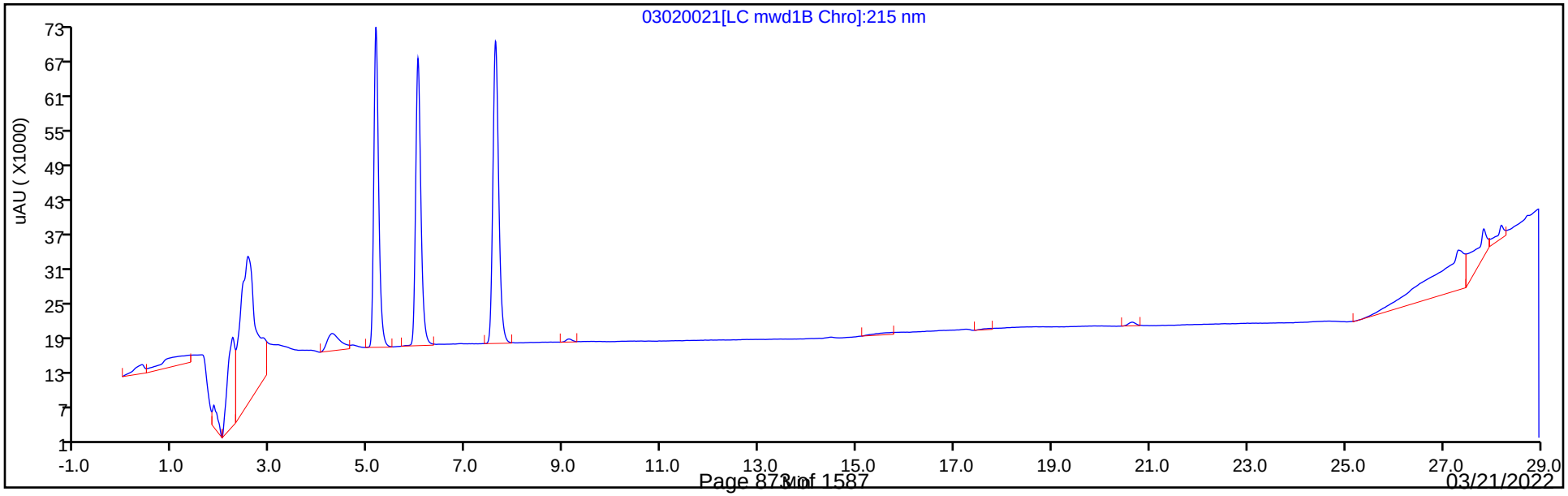
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020021.D

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

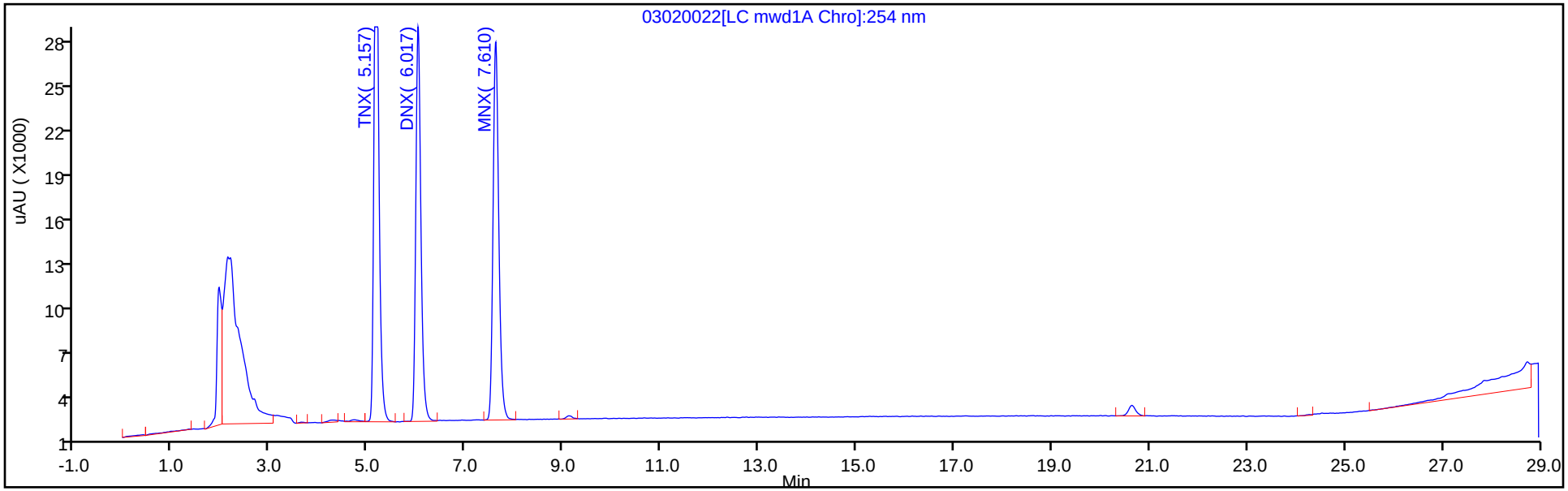
Report Date: 03-Mar-2022 12:49:19 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

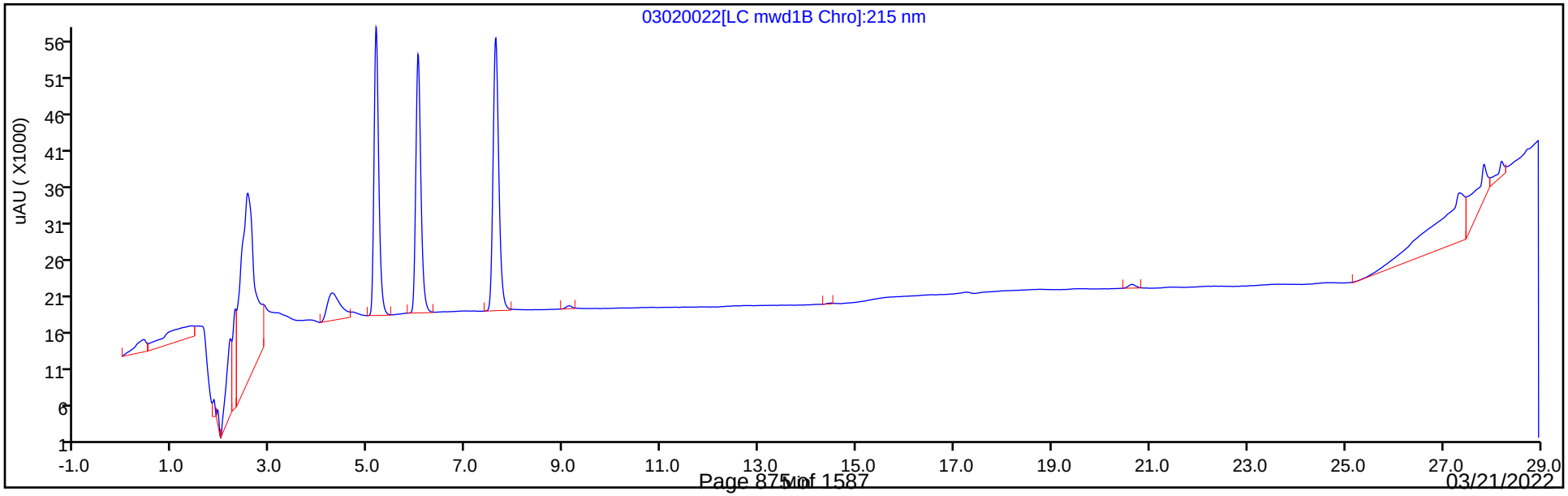
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020022.D

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

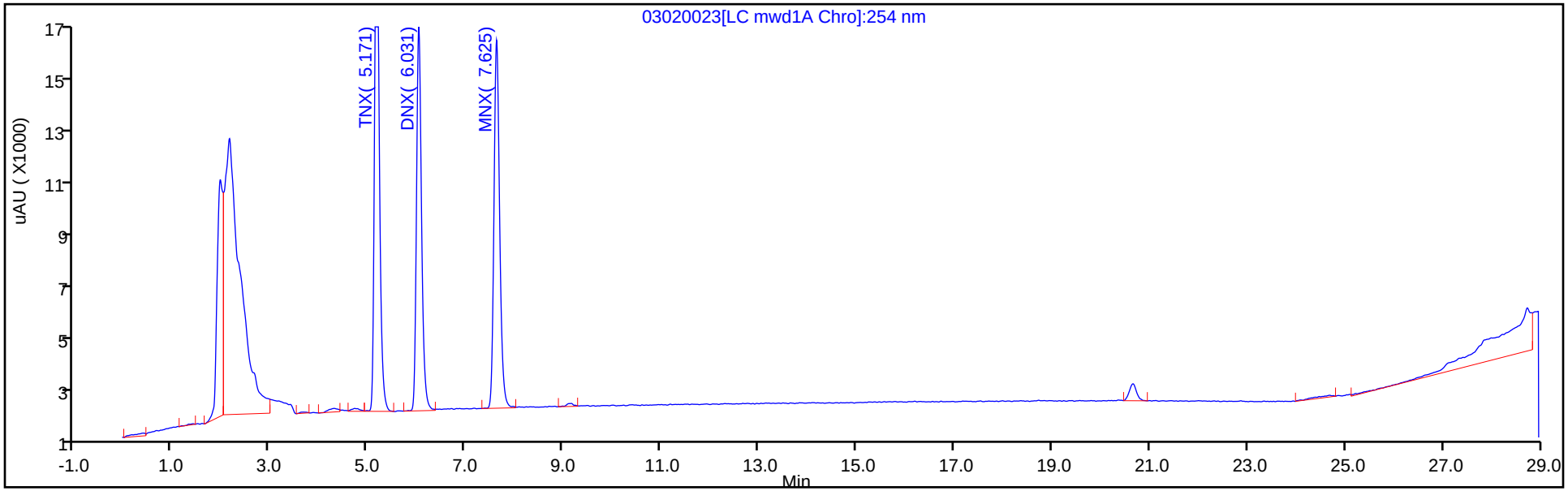
Report Date: 03-Mar-2022 12:49:20 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

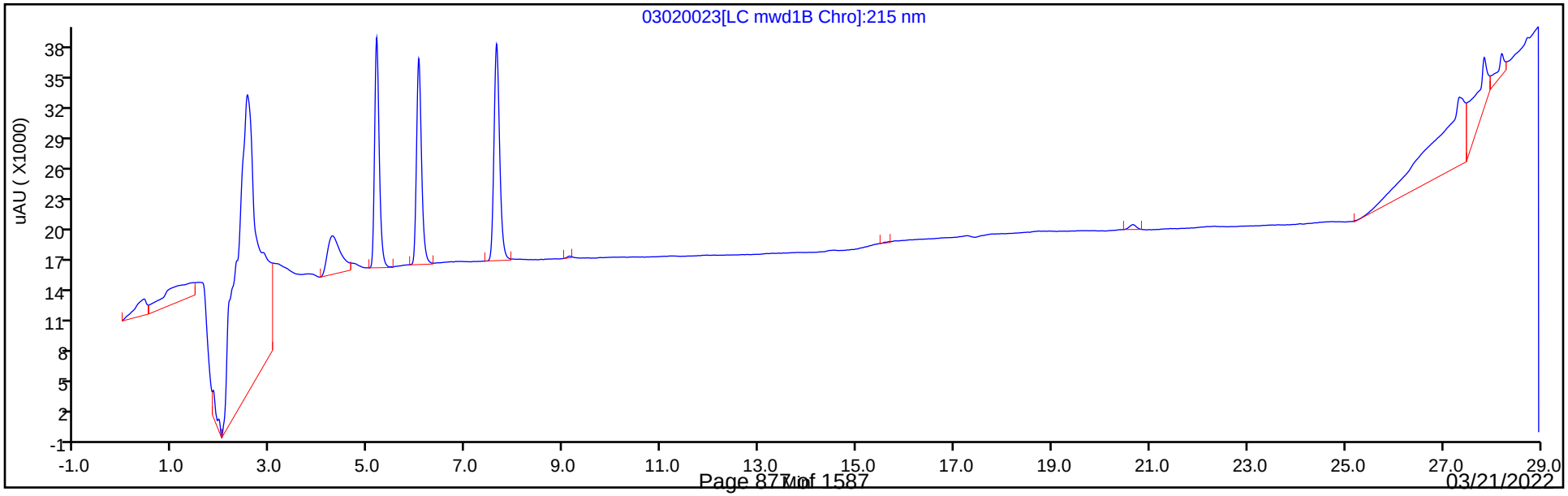
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020023.D

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

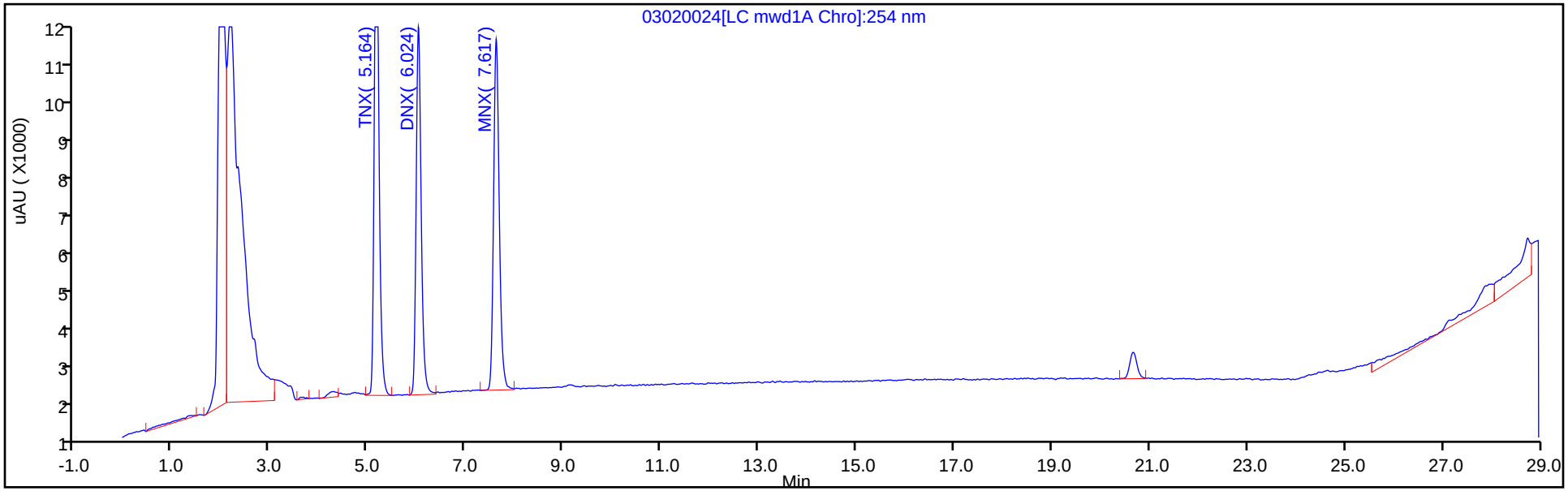
Report Date: 03-Mar-2022 12:49:20 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

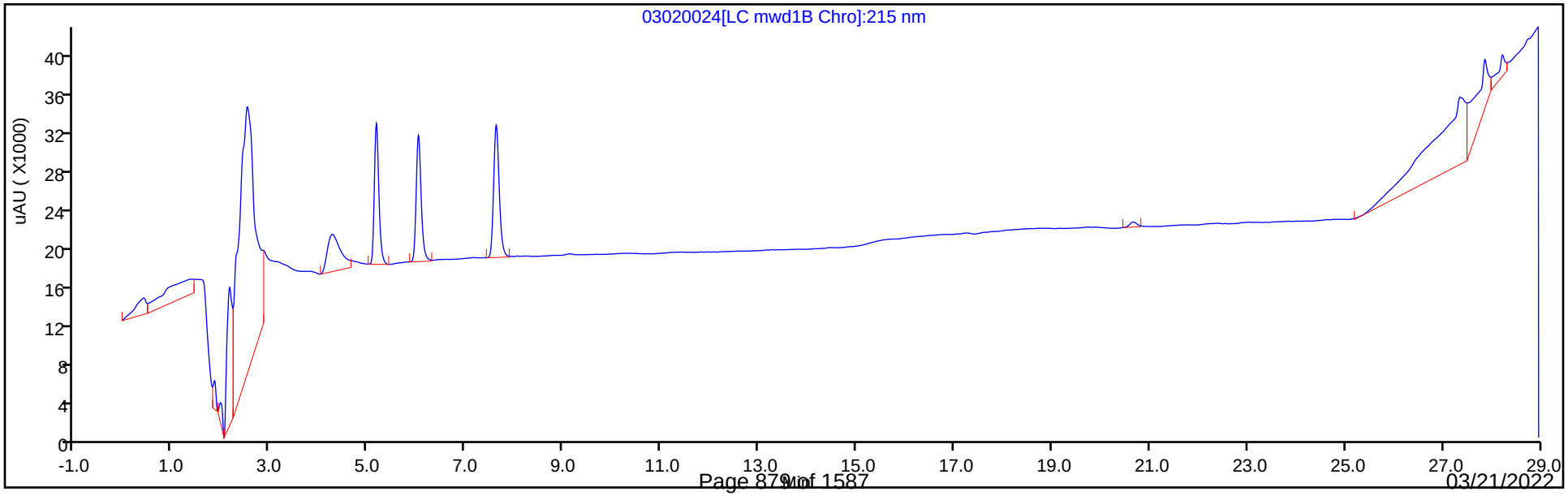
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020024.D

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

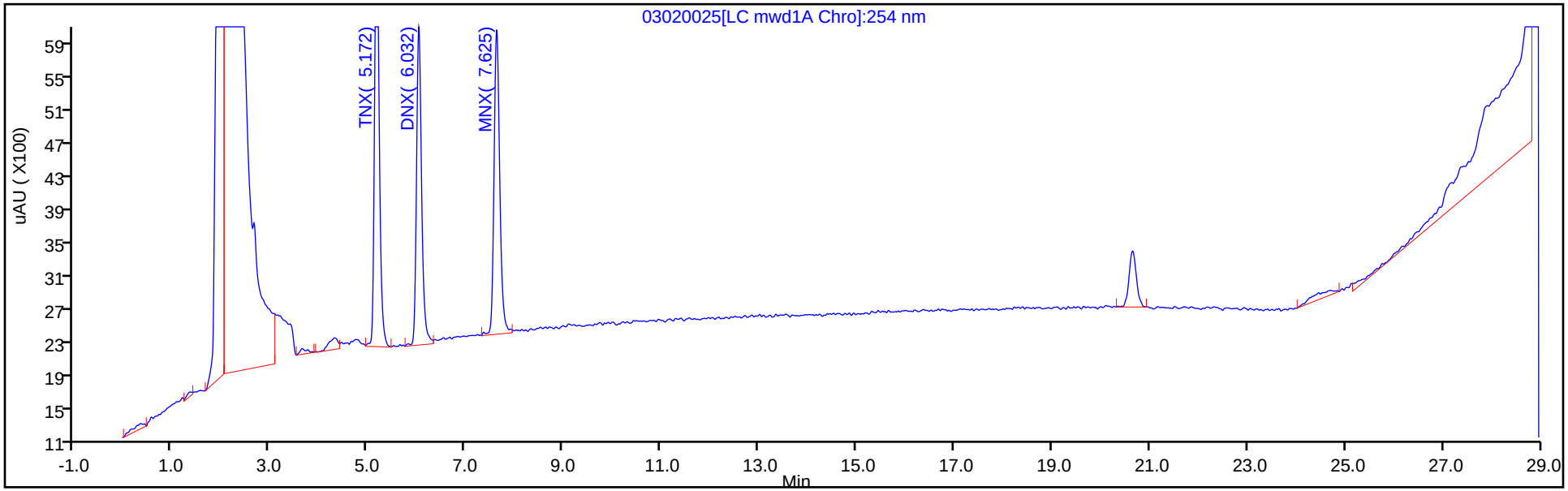
Report Date: 03-Mar-2022 12:49:21 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

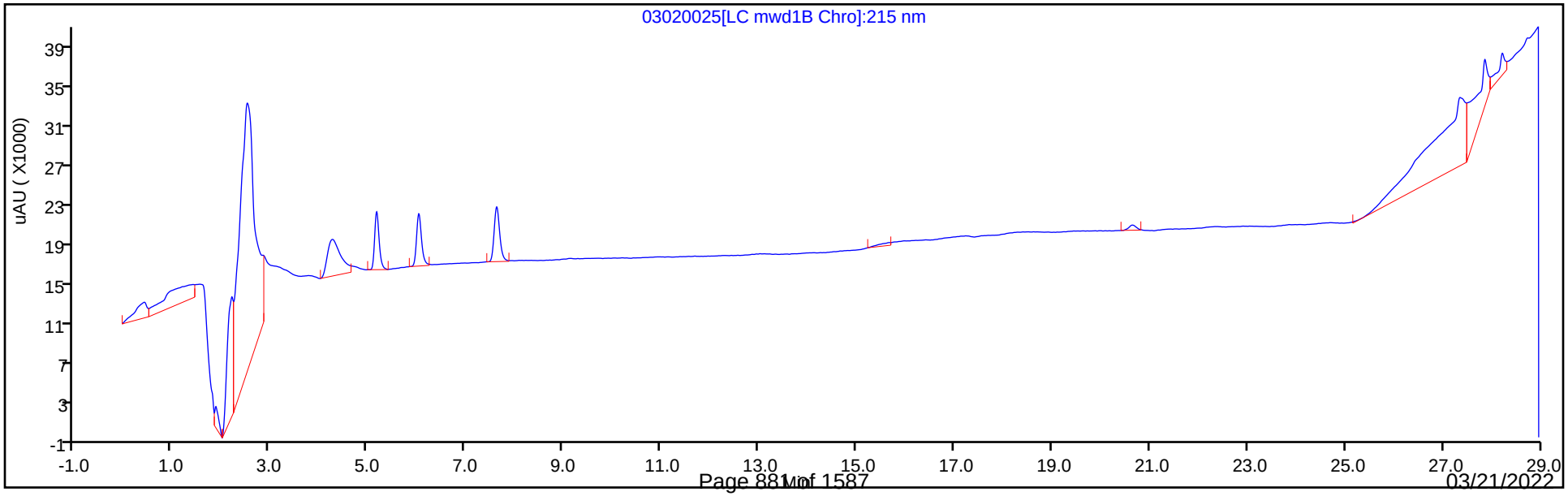
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020025.D

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

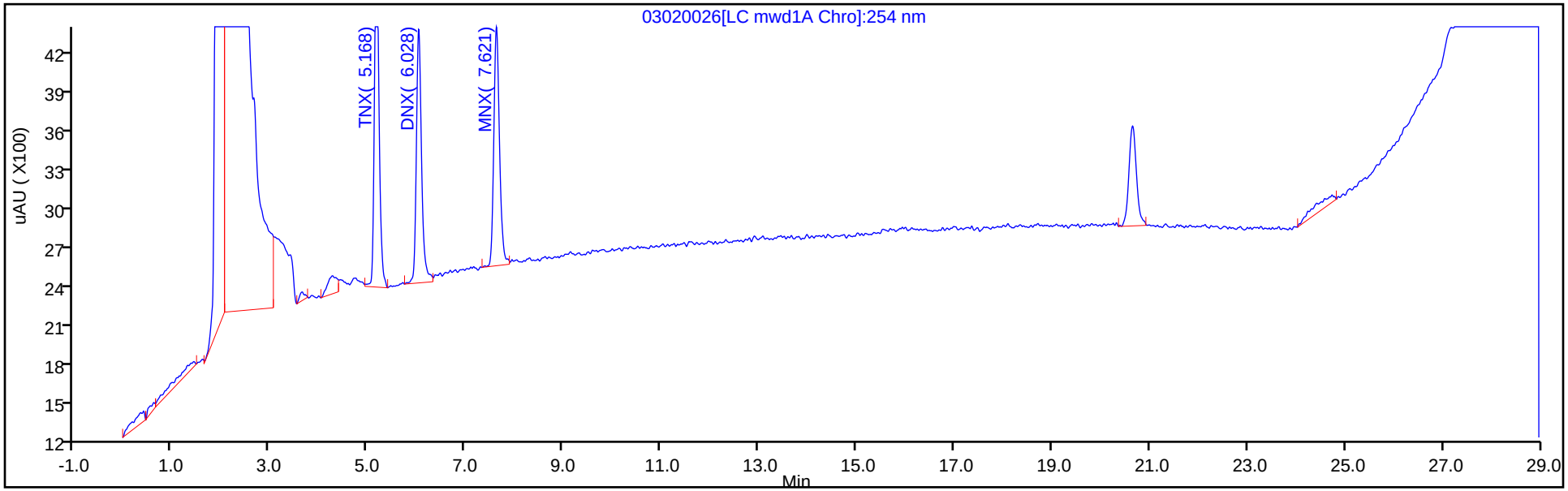
Report Date: 03-Mar-2022 12:49:21 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

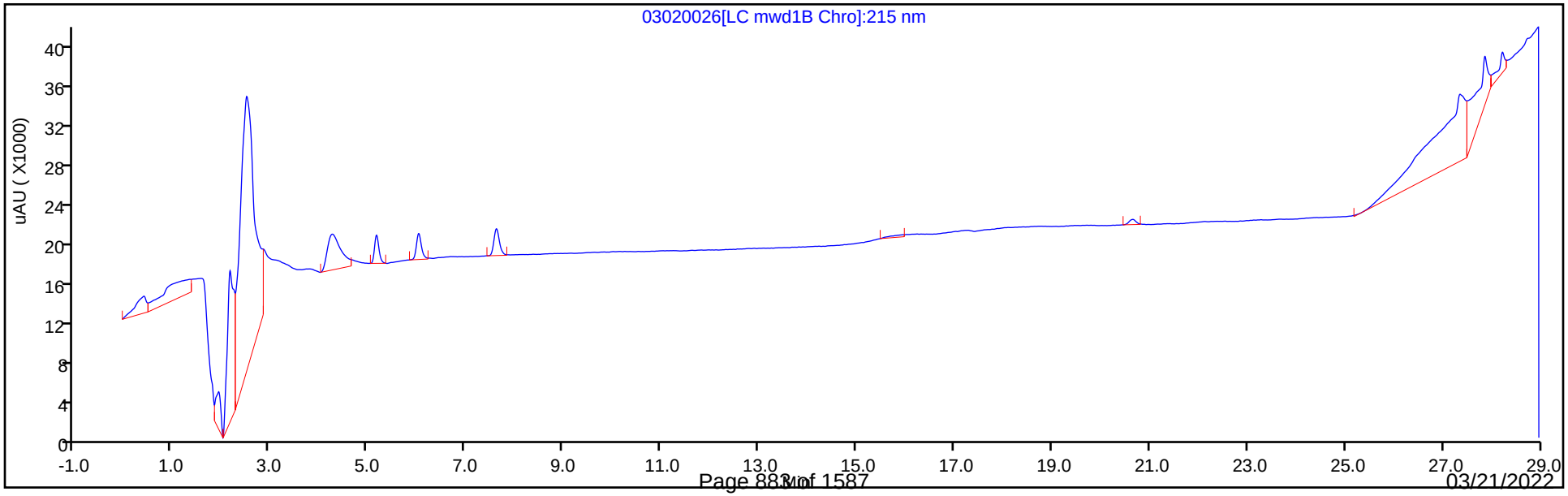
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020026.D

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

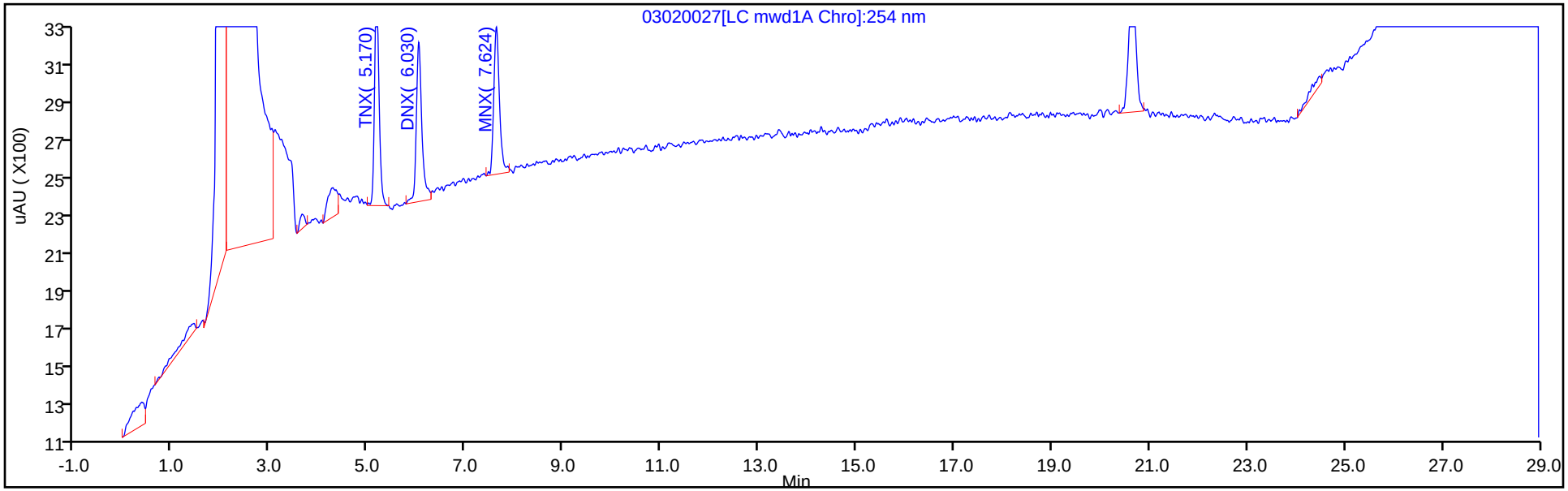
Report Date: 03-Mar-2022 12:49:22 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

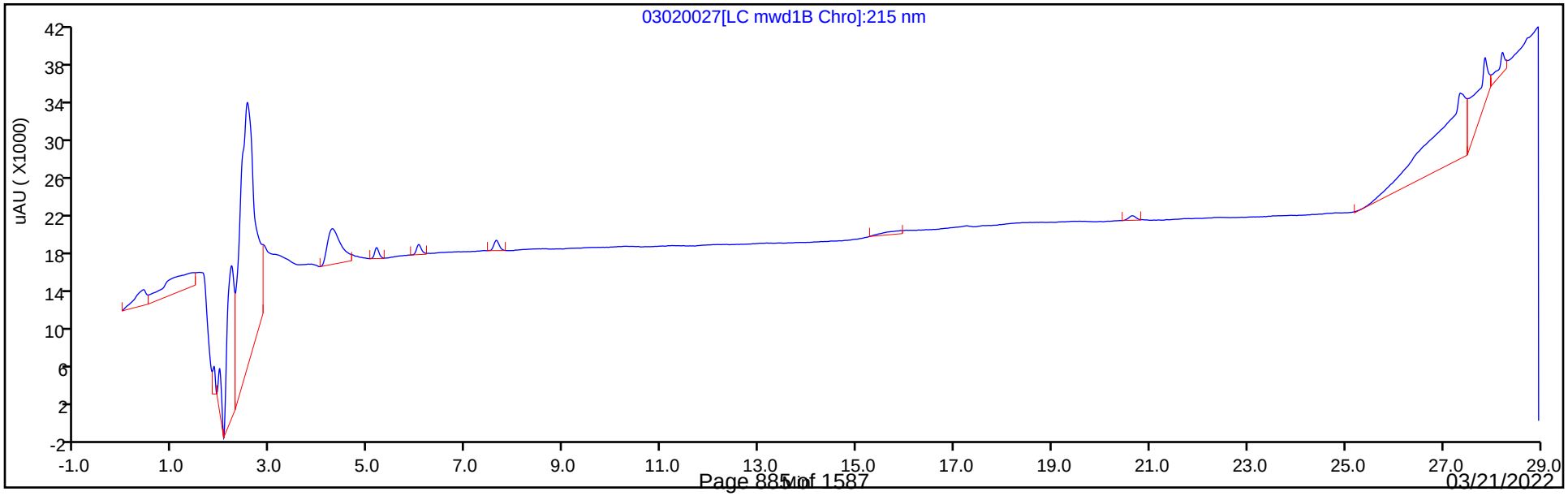
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

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

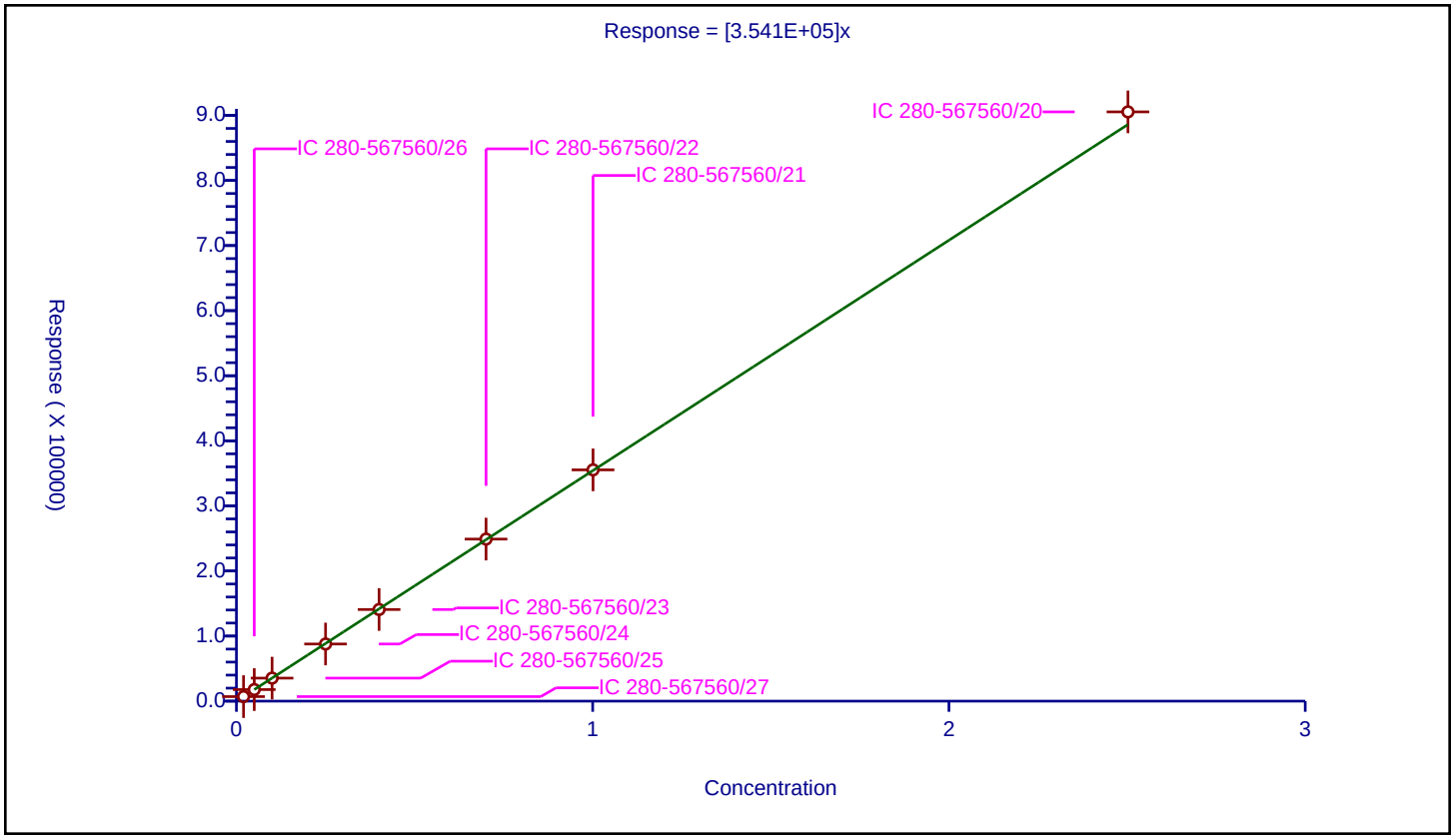
Curve Coefficients

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

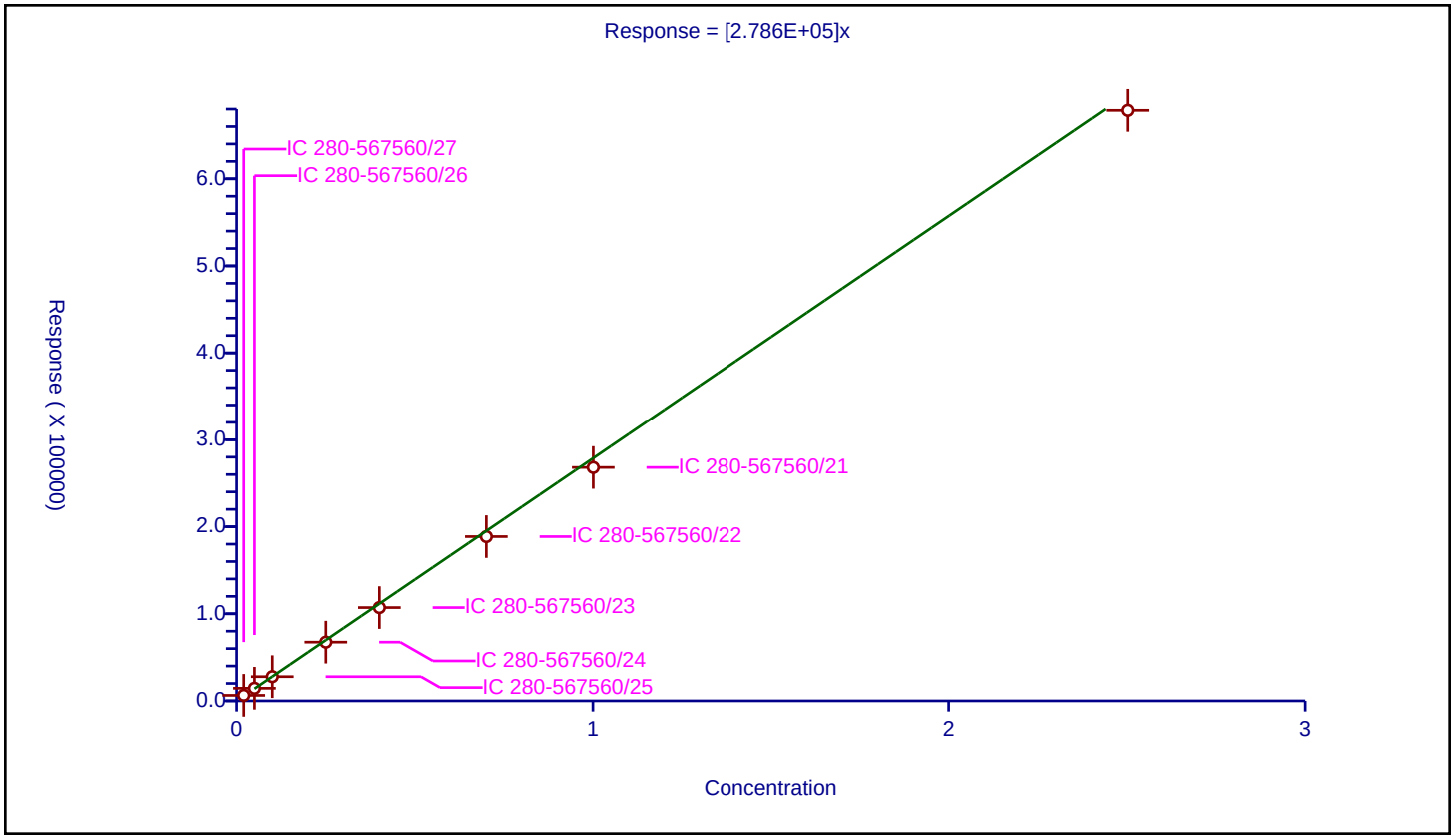
Curve Coefficients

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

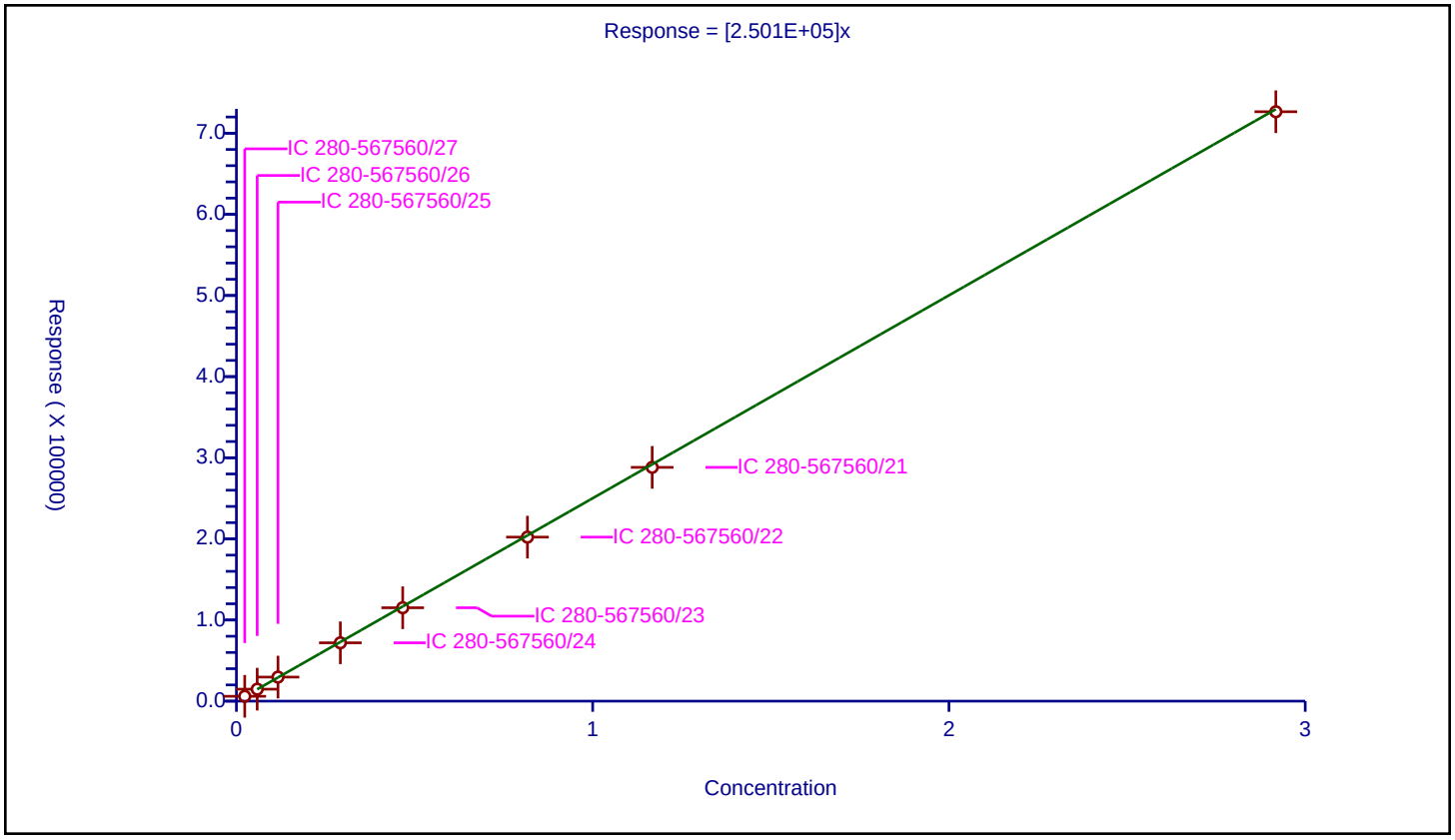
Curve Coefficients

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.: 280-159190-1

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.: 280-159190-1

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

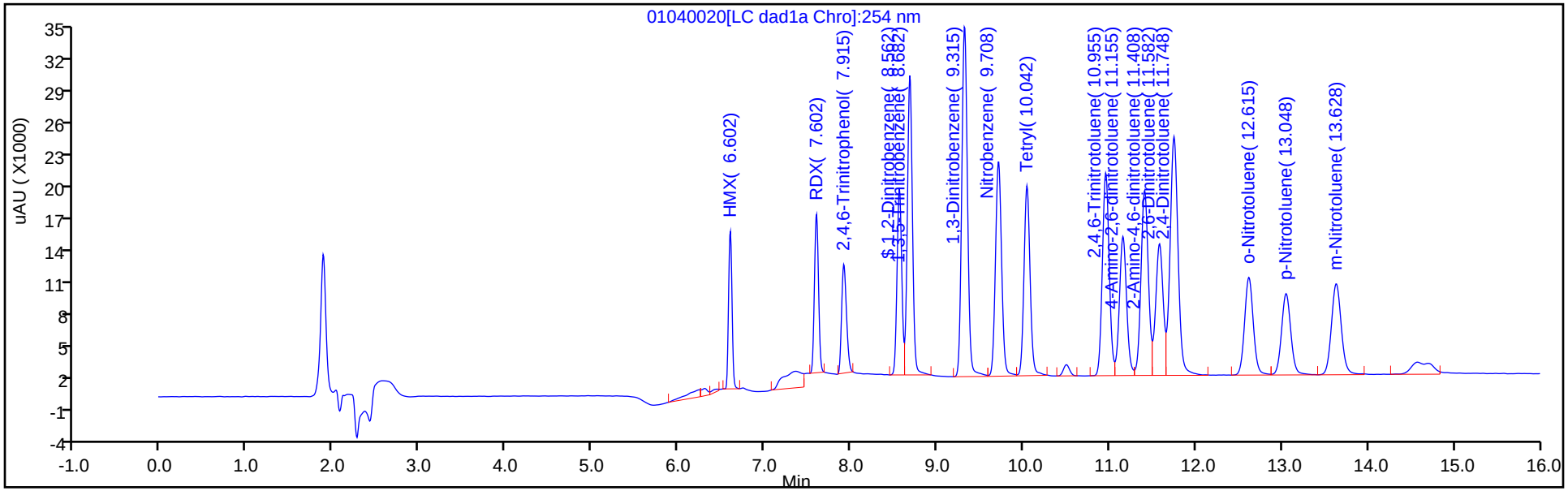
Report Date: 06-Jan-2022 20:08:00 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

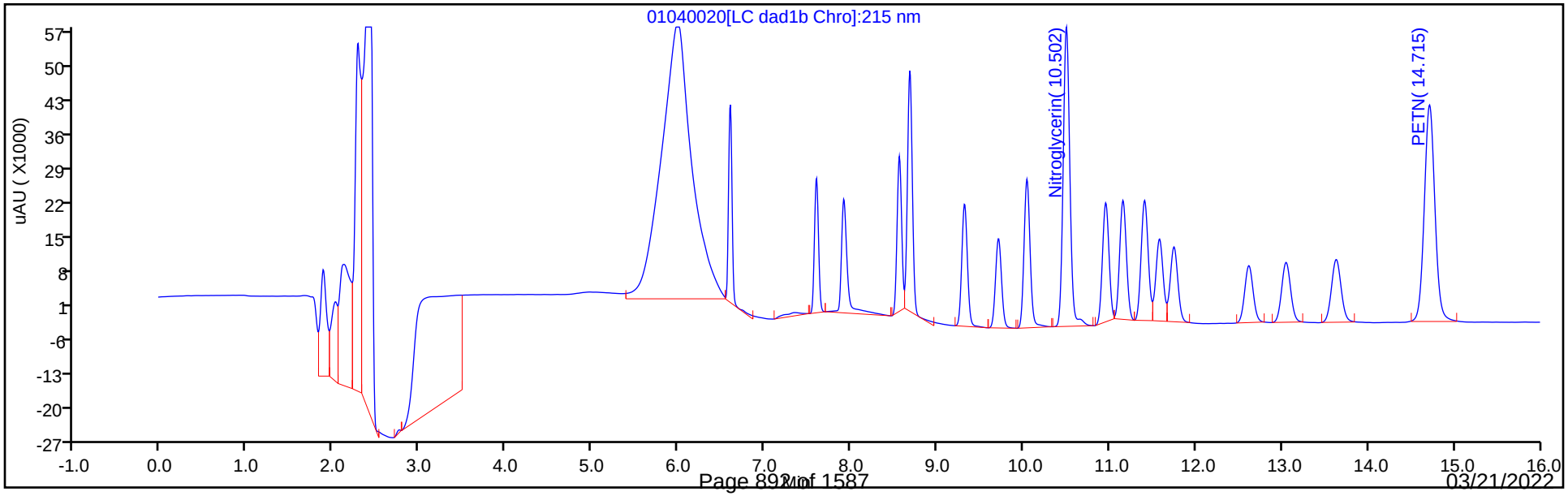
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040020.d

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

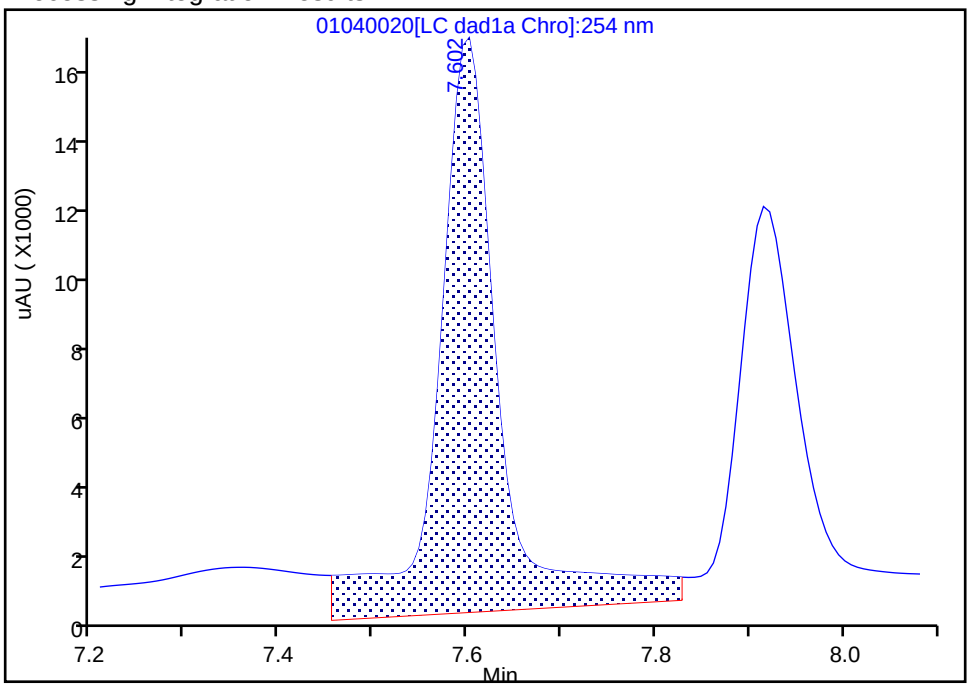
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040020.d				
Injection Date:	04-Jan-2022 21:54:19	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

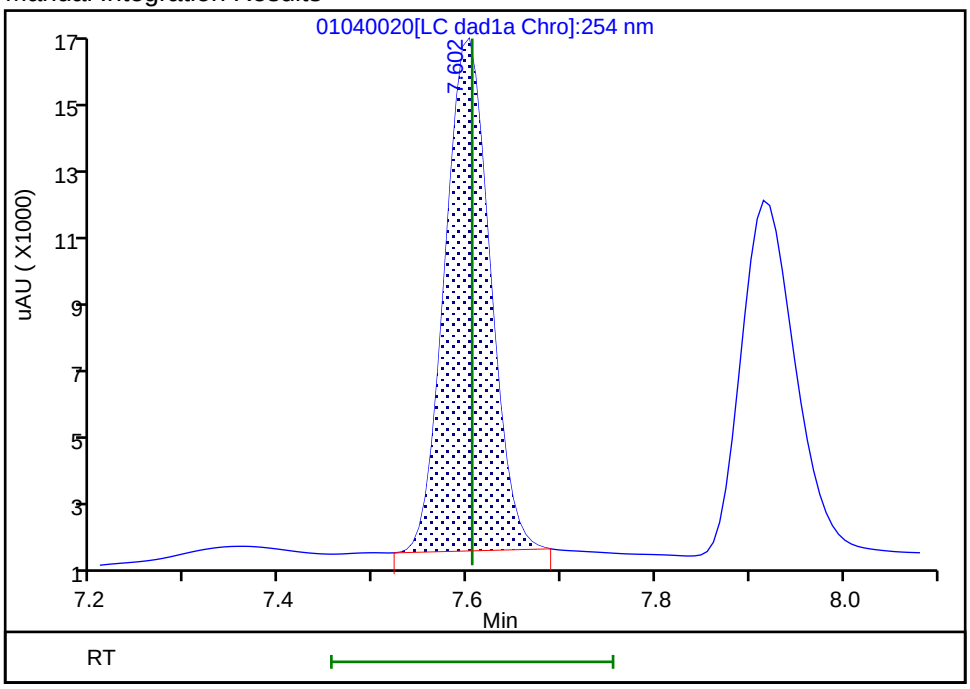
Processing Integration Results

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

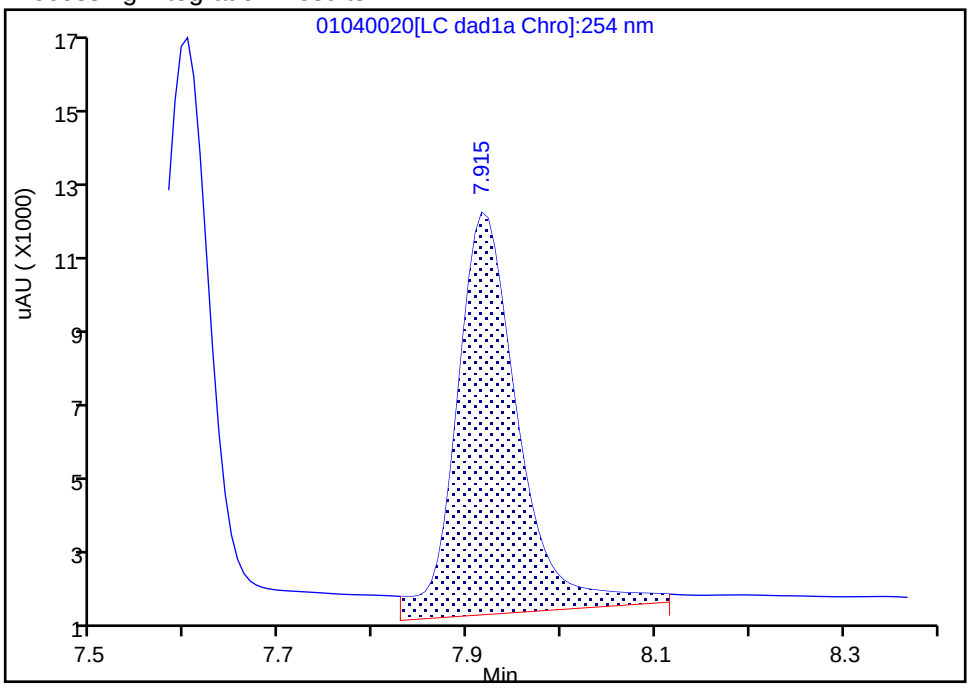
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040020.d				
Injection Date:	04-Jan-2022 21:54:19	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

9 2,4,6-Trinitrophenol, CAS: 88-89-1

Signal: 1

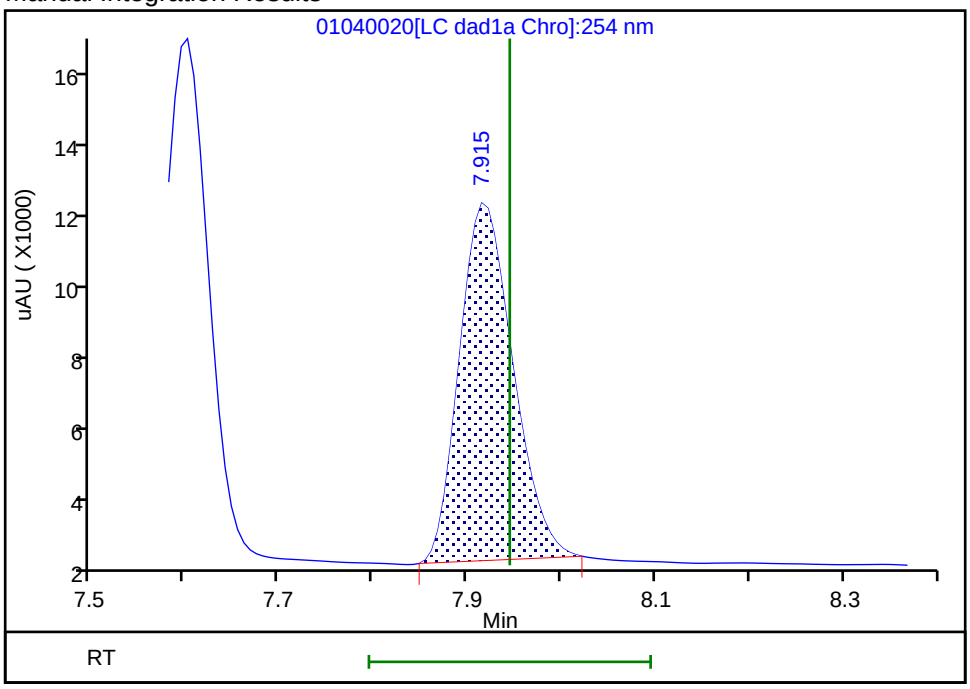
Processing Integration Results

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.: 280-159190-1

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.: 280-159190-1

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

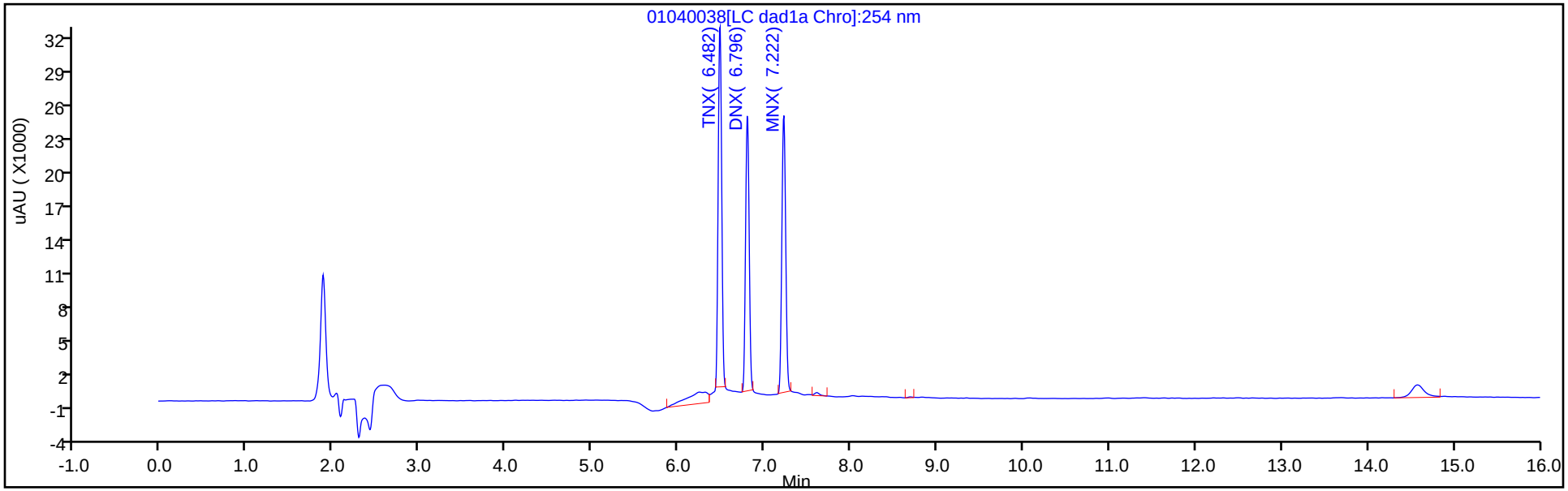
Report Date: 05-Jan-2022 12:19:19 Chrom Revision: 2.3 03-Jan-2022 17:03:12

Eurofins TestAmerica, Denver

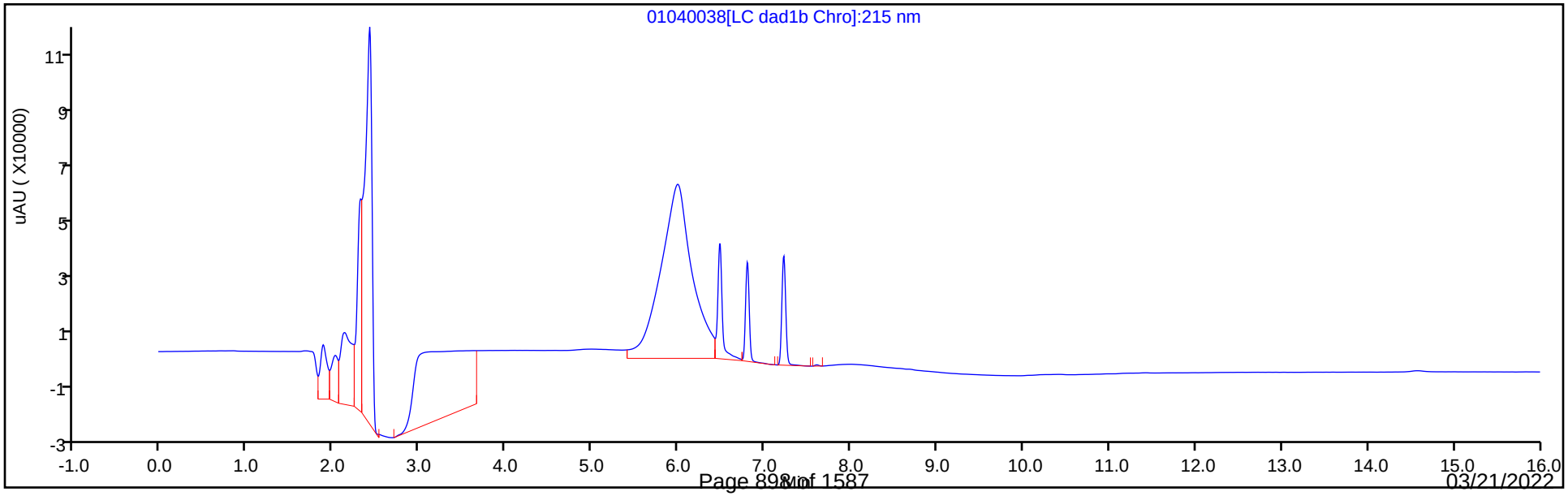
Data File: \\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040038.d

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

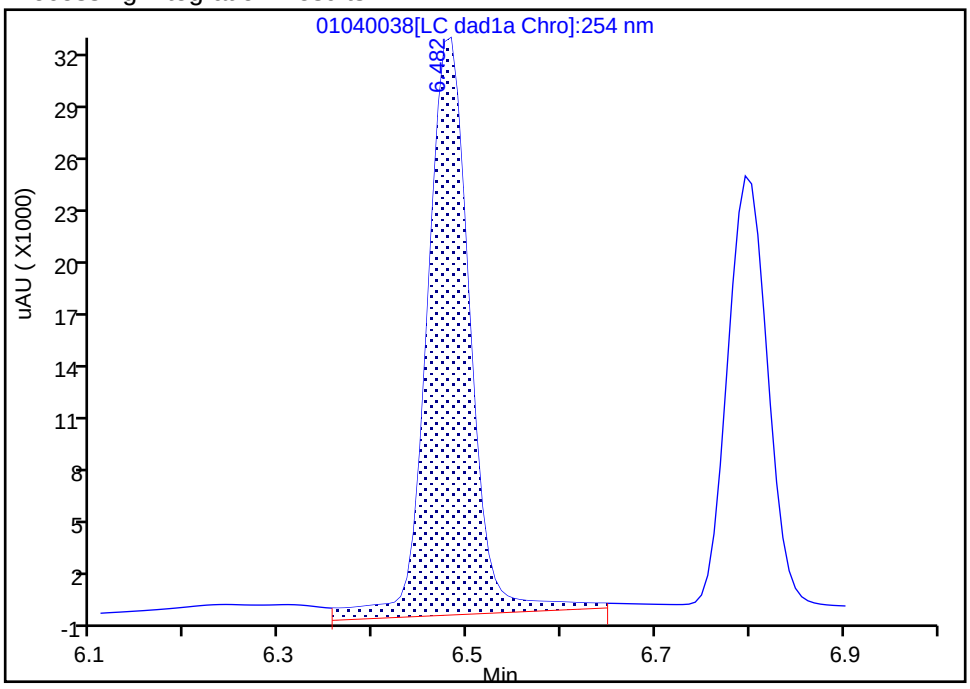
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040038.d				
Injection Date:	05-Jan-2022 04:47:17	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

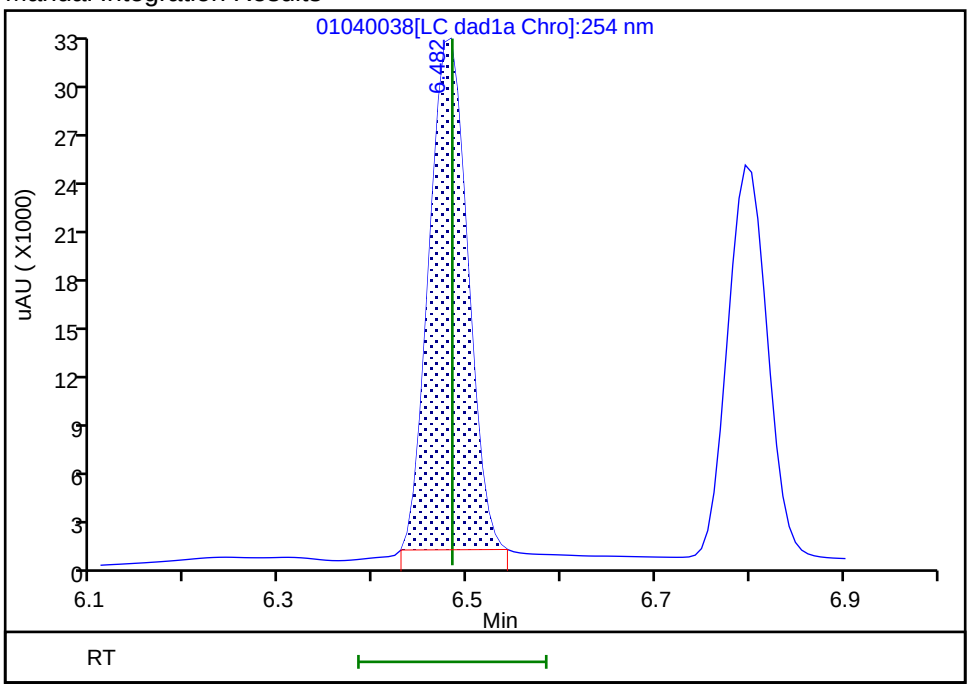
Processing Integration Results

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

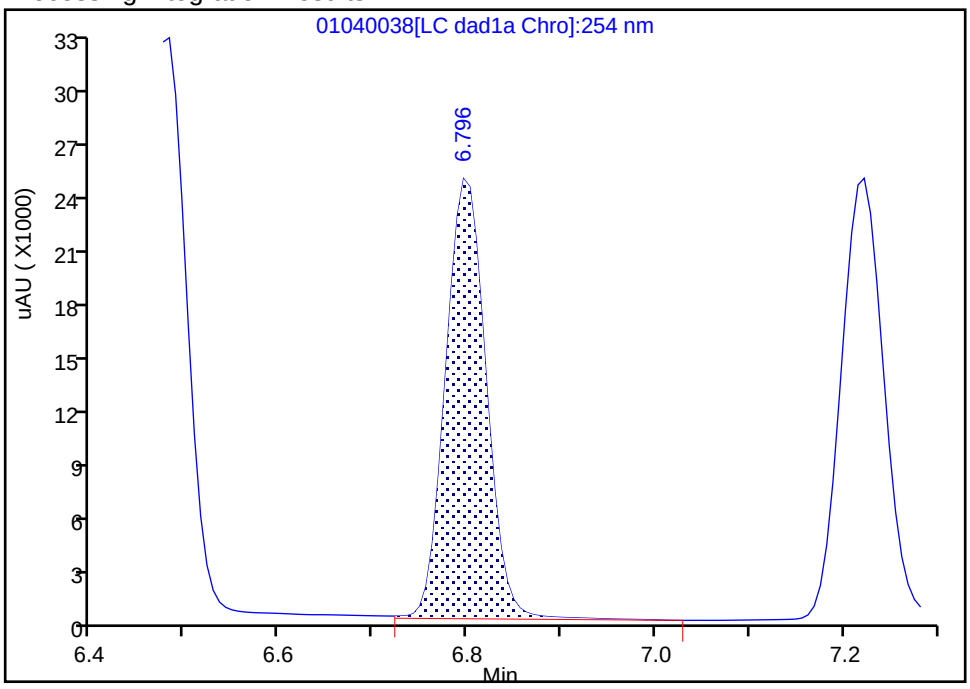
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040038.d				
Injection Date:	05-Jan-2022 04:47:17	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

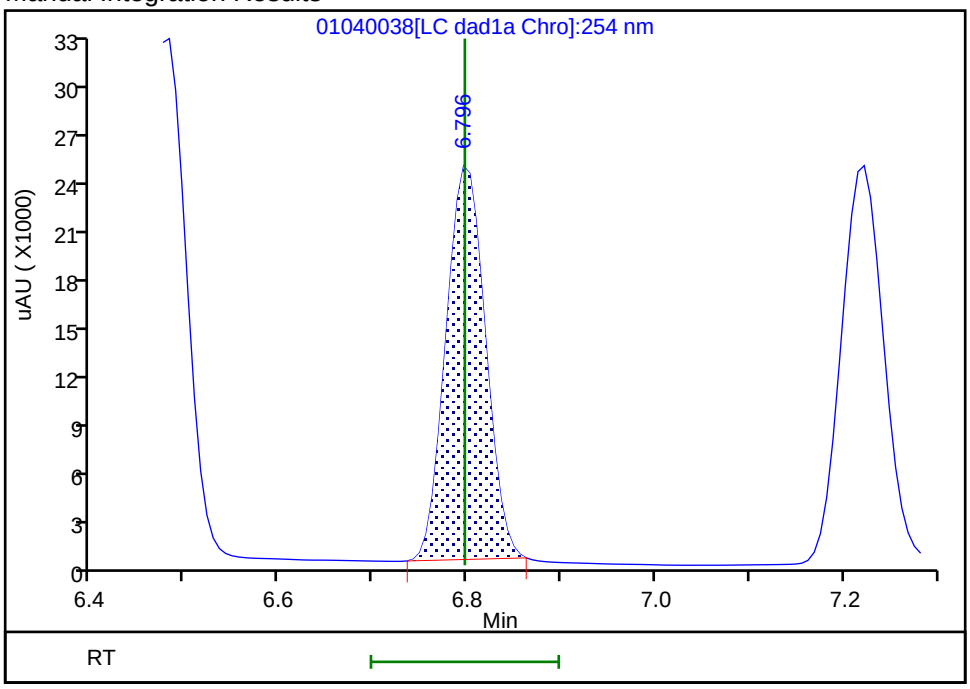
Processing Integration Results

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

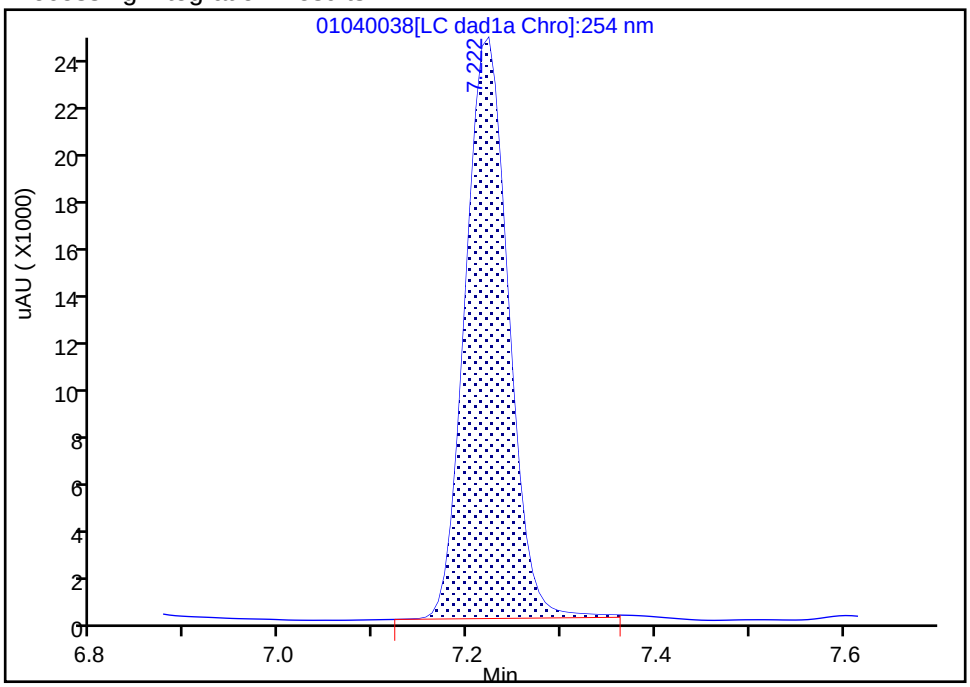
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220104-107731.b\01040038.d				
Injection Date:	05-Jan-2022 04:47:17	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

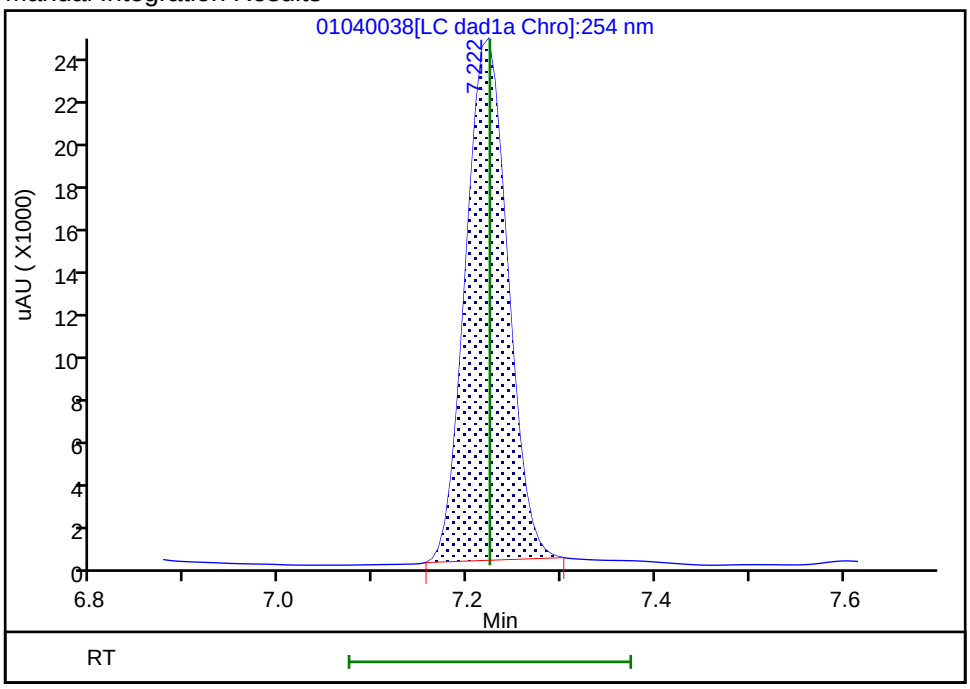
Processing Integration Results

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.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567774/7 Calibration Date: 03/04/2022 19:20

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: 03040007.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	82896		247	250	-1.1	15.0
RDX	Ave	103609	105048		253	250	1.4	15.0
Picric acid	Ave	77039	82260		267	250	6.8	15.0
1,3,5-Trinitrobenzene	Ave	218096	227361		261	251	4.2	15.0
1,3-Dinitrobenzene	Ave	288401	302822		263	251	5.0	15.0
Nitrobenzene	Ave	191953	197833		259	251	3.1	15.0
Tetryl	Ave	170567	174004		256	251	2.0	15.0
Nitroglycerin	Ave	63037	66806		2650	2500	6.0	15.0
2,4,6-Trinitrotoluene	Ave	202726	205183		254	251	1.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	150893		250	250	-0.0	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	203219		252	251	0.5	15.0
2,6-Dinitrotoluene	Ave	143115	146550		257	251	2.4	15.0
2,4-Dinitrotoluene	Ave	289351	297167		258	251	2.7	15.0
2-Nitrotoluene	Ave	127614	130064		255	250	1.9	15.0
4-Nitrotoluene	Ave	106235	112267		265	251	5.7	15.0
3-Nitrotoluene	Ave	142273	138729		244	250	-2.5	15.0
PETN	Lin2		76850		2630	2500	5.2	15.0
1,2-Dinitrobenzene	Ave	124698	130672		262	250	4.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567774/7 Calibration Date: 03/04/2022 19:20

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: 03040007.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.59	6.44	6.74
RDX	7.58	7.43	7.73
Picric acid	7.90	7.75	8.05
1,3,5-Trinitrobenzene	8.64	8.49	8.79
1,3-Dinitrobenzene	9.26	9.11	9.41
Nitrobenzene	9.64	9.49	9.79
Tetryl	9.96	9.81	10.11
Nitroglycerin	10.40	10.25	10.55
2,4,6-Trinitrotoluene	10.86	10.76	10.96
4-Amino-2,6-dinitrotoluene	11.05	10.95	11.15
2-Amino-4,6-dinitrotoluene	11.30	11.20	11.40
2,6-Dinitrotoluene	11.46	11.36	11.56
2,4-Dinitrotoluene	11.64	11.54	11.74
2-Nitrotoluene	12.48	12.33	12.63
4-Nitrotoluene	12.90	12.75	13.05
3-Nitrotoluene	13.47	13.32	13.62
PETN	14.50	14.35	14.65
1,2-Dinitrobenzene	8.51	8.36	8.66

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040007.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 04-Mar-2022 19:20:13 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0109012-007
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:52 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: 04-Mar-2022 19:46:48

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.591	6.591	0.000	20724	0.2500	0.2472	M
8 RDX	1	7.578	7.578	0.000	26262	0.2500	0.2535	
9 2,4,6-Trinitrophenol	1	7.898	7.898	0.000	20565	0.2500	0.2669	
$ 10 1,2-Dinitrobenzene	1	8.511	8.511	0.000	32668	0.2500	0.2620	
11 1,3,5-Trinitrobenzene	1	8.638	8.638	0.000	56954	0.2505	0.2611	
12 1,3-Dinitrobenzene	1	9.257	9.257	0.000	75857	0.2505	0.2630	
13 Nitrobenzene	1	9.644	9.644	0.000	49656	0.2510	0.2587	
15 Tetryl	1	9.957	9.957	0.000	43588	0.2505	0.2555	
16 Nitroglycerin	2	10.404	10.404	0.000	167015	2.50	2.65	
17 2,4,6-Trinitrotoluene	1	10.857	10.857	0.000	51501	0.2510	0.2540	
18 4-Amino-2,6-dinitrotoluene	1	11.051	11.051	0.000	37761	0.2503	0.2501	
19 2-Amino-4,6-dinitrotoluene	1	11.297	11.297	0.000	51008	0.2510	0.2523	
20 2,6-Dinitrotoluene	1	11.464	11.464	0.000	36784	0.2510	0.2570	
21 2,4-Dinitrotoluene	1	11.637	11.637	0.000	74589	0.2510	0.2578	
22 o-Nitrotoluene	1	12.477	12.477	0.000	32516	0.2500	0.2548	
23 p-Nitrotoluene	1	12.897	12.897	0.000	28123	0.2505	0.2647	
24 m-Nitrotoluene	1	13.471	13.471	0.000	34717	0.2503	0.2440	
25 PETN	2	14.497	14.497	0.000	192125	2.50	2.63	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070 Amount Added: 25.00 Units: uL

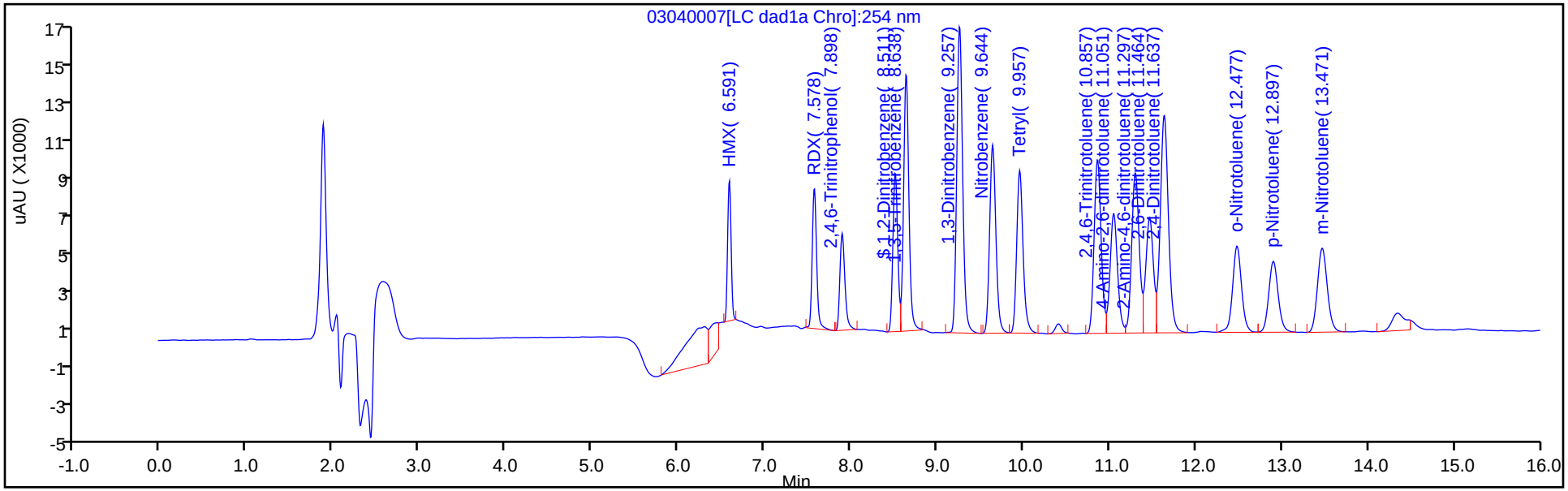
Report Date: 05-Mar-2022 10:57:52 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

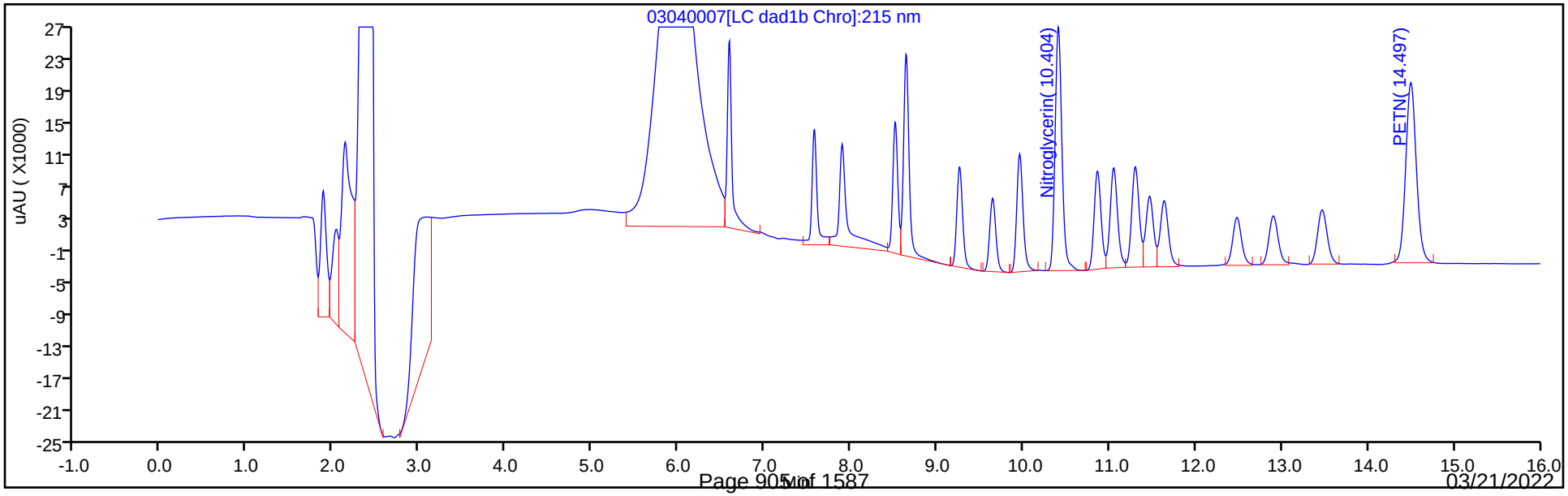
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040007.d

Injection Date:	04-Mar-2022 19:20:13	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	7
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

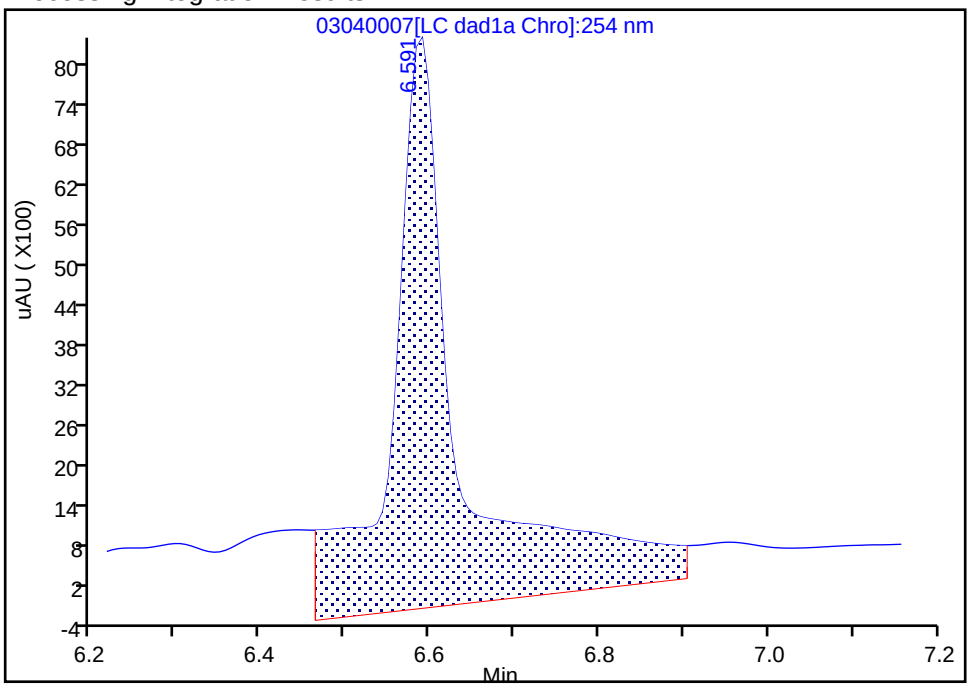
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040007.d				
Injection Date:	04-Mar-2022 19:20:13	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

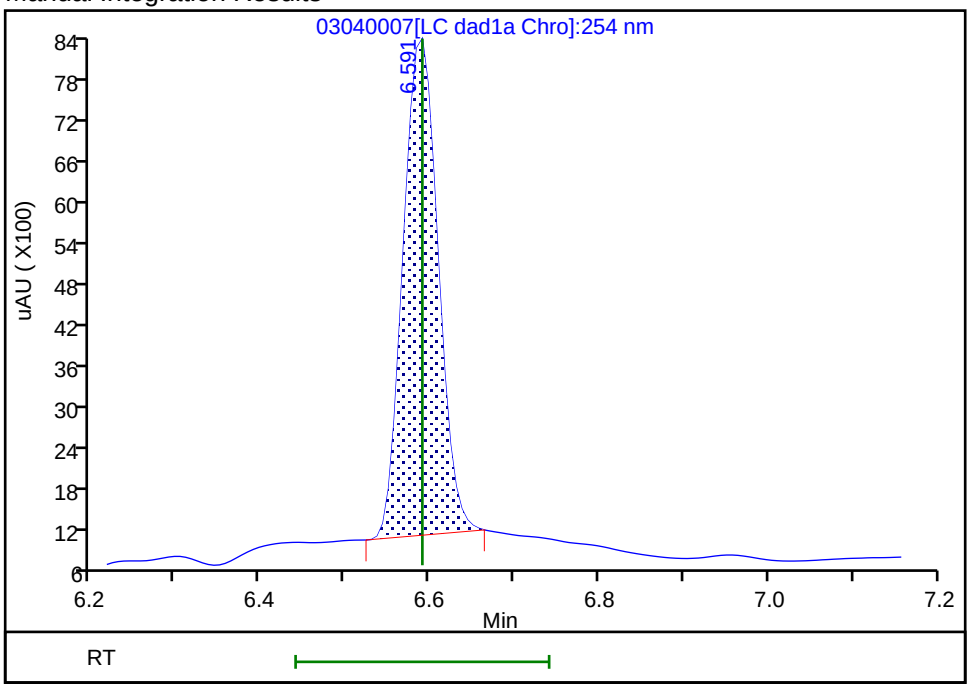
Processing Integration Results

RT: 6.59
Area: 48545
Amount: 0.579108
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 20724
Amount: 0.247223
Amount Units: ug/mL



Reviewer: zhangji, 04-Mar-2022 19:46:46
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567774/9 Calibration Date: 03/04/2022 19:43

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: 03040009.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	189283		261	250	4.5	15.0
DNX	Ave	138113	139181		252	250	0.8	15.0
MNX	Ave	125995	125649		291	292	-0.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567774/9 Calibration Date: 03/04/2022 19:43

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: 03040009.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.47	6.37	6.57
DNX	6.78	6.68	6.88
MNX	7.20	7.05	7.35

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040009.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	04-Mar-2022 19:43:10	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0109012-009				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:51	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:	04-Mar-2022 20:32:21		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.469	6.469	0.000	47368	0.2503	0.2614	M
6 DNX	1	6.782	6.782	0.000	34830	0.2503	0.2522	M
7 MNX	1	7.196	7.196	0.000	36658	0.2918	0.2909	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

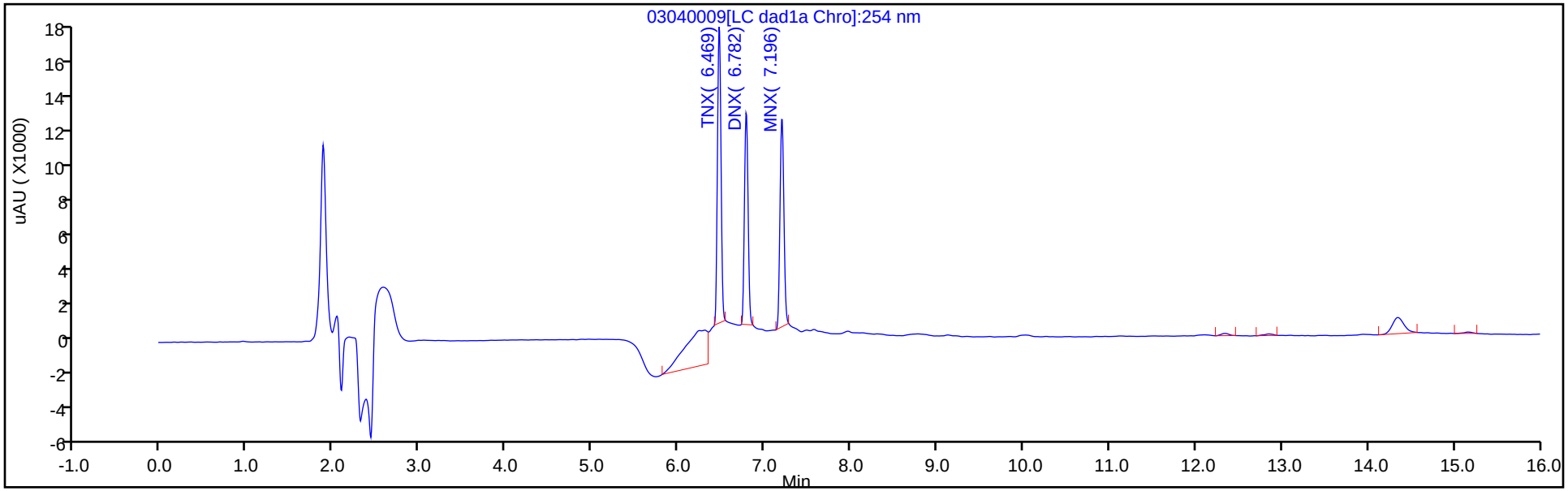
Report Date: 05-Mar-2022 10:57:52 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

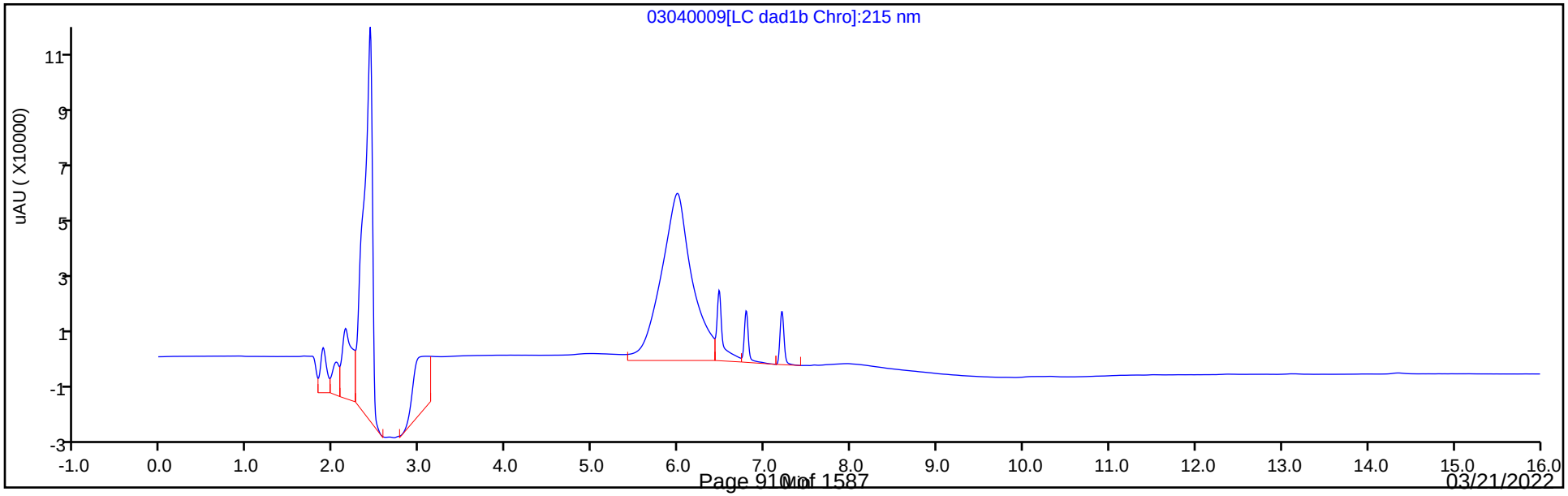
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040009.d

Injection Date:	04-Mar-2022 19:43:10	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	9
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

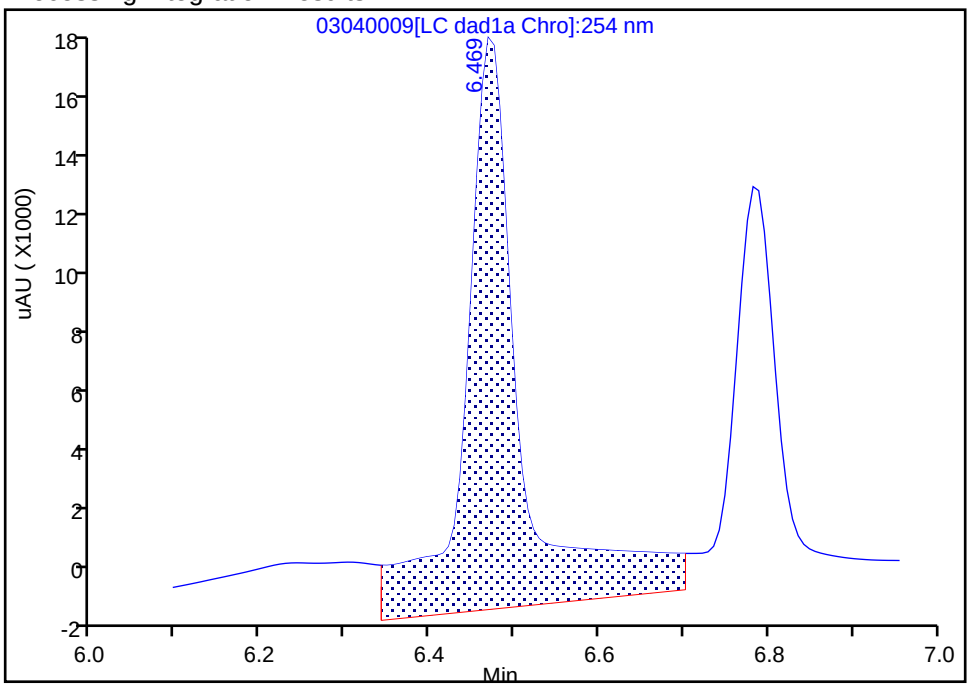
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040009.d				
Injection Date:	04-Mar-2022 19:43:10	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

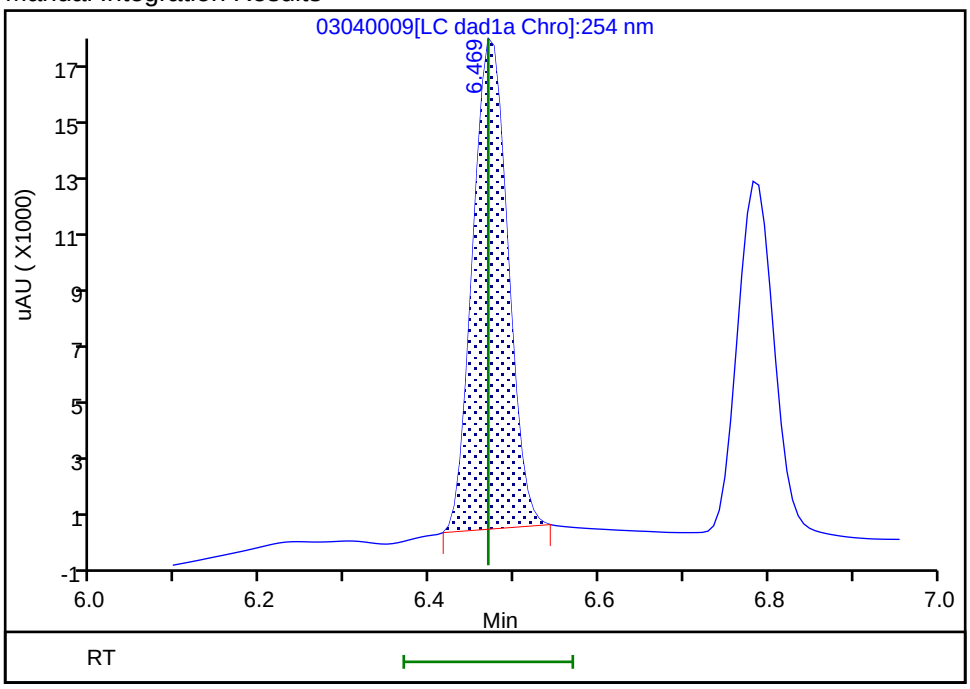
Processing Integration Results

RT: 6.47
Area: 84125
Amount: 0.464247
Amount Units: ug/mL



Manual Integration Results

RT: 6.47
Area: 47368
Amount: 0.261402
Amount Units: ug/mL



Reviewer: zhangji, 04-Mar-2022 20:32:12
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

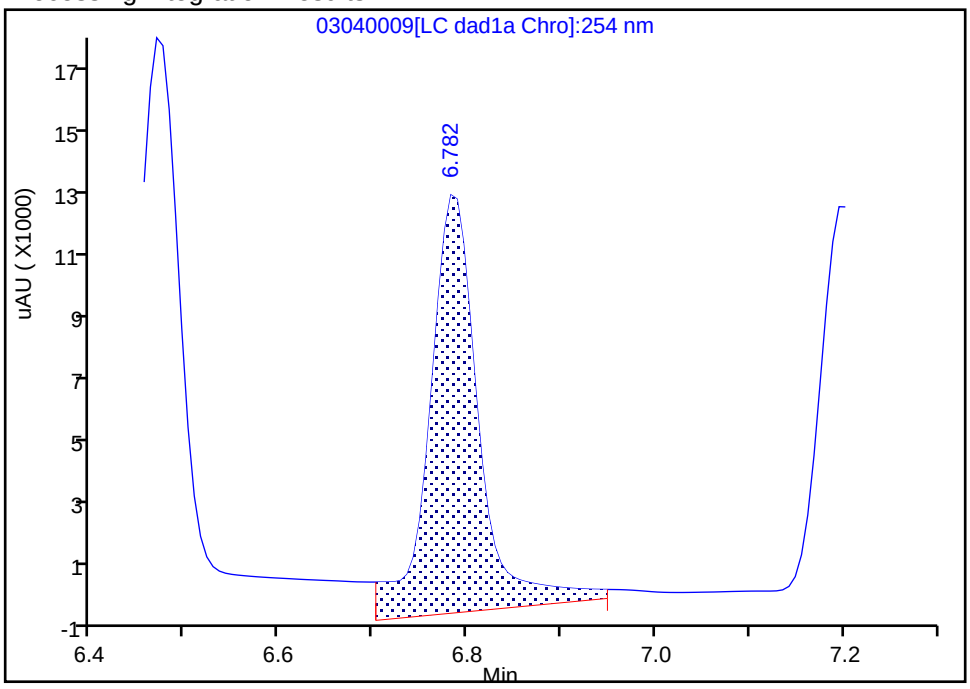
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040009.d				
Injection Date:	04-Mar-2022 19:43:10	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

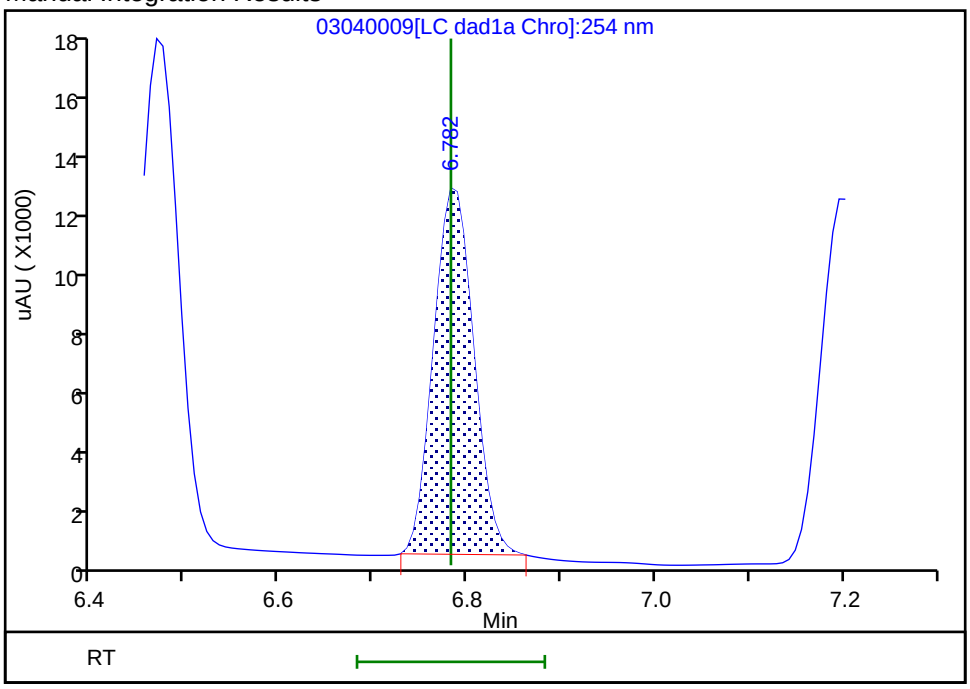
Processing Integration Results

RT: 6.78
Area: 46578
Amount: 0.337246
Amount Units: ug/mL



Manual Integration Results

RT: 6.78
Area: 34830
Amount: 0.252185
Amount Units: ug/mL



Reviewer: zhangji, 04-Mar-2022 20:32:15

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

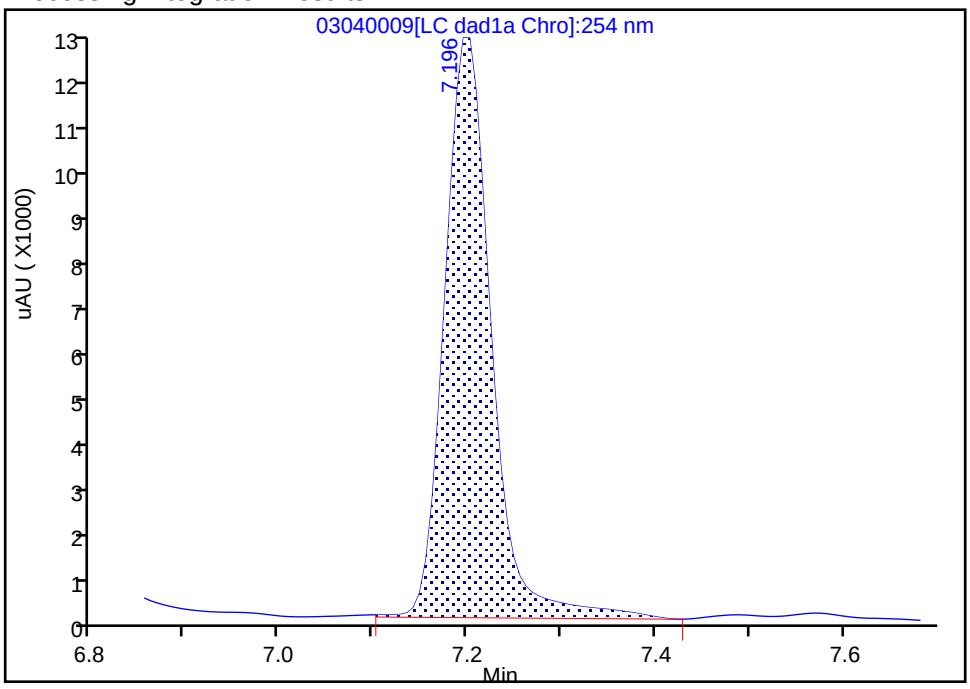
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040009.d				
Injection Date:	04-Mar-2022 19:43:10	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

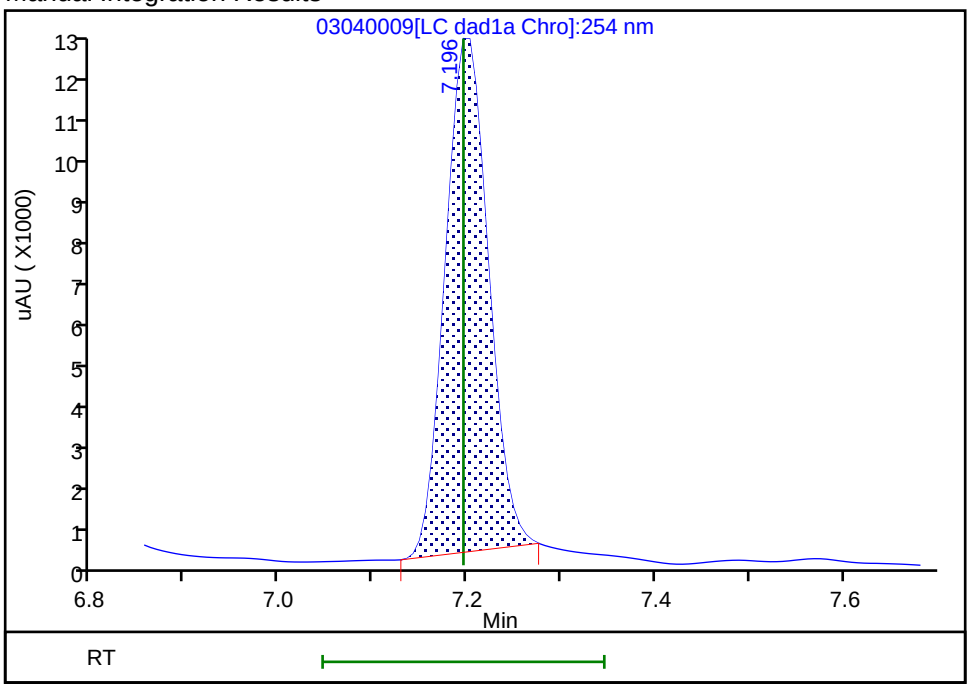
Processing Integration Results

RT: 7.20
Area: 40608
Amount: 0.322297
Amount Units: ug/mL



Manual Integration Results

RT: 7.20
Area: 36658
Amount: 0.290947
Amount Units: ug/mL



Reviewer: zhangji, 04-Mar-2022 20:32:18
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567774/21 Calibration Date: 03/04/2022 23:55

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: 03040021.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	83004		248	250	-1.0	15.0
RDX	Ave	103609	105396		254	250	1.7	15.0
Picric acid	Ave	77039	81992		266	250	6.4	15.0
1,3,5-Trinitrobenzene	Ave	218096	230786		265	251	5.8	15.0
1,3-Dinitrobenzene	Ave	288401	304970		265	251	5.7	15.0
Nitrobenzene	Ave	191953	195916		256	251	2.1	15.0
Tetryl	Ave	170567	174802		257	251	2.5	15.0
Nitroglycerin	Ave	63037	66682		2640	2500	5.8	15.0
2,4,6-Trinitrotoluene	Ave	202726	203837		252	251	0.5	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	153143		254	250	1.4	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	203486		253	251	0.7	15.0
2,6-Dinitrotoluene	Ave	143115	146534		257	251	2.4	15.0
2,4-Dinitrotoluene	Ave	289351	299669		260	251	3.6	15.0
2-Nitrotoluene	Ave	127614	128392		252	250	0.6	15.0
4-Nitrotoluene	Ave	106235	111928		264	251	5.4	15.0
3-Nitrotoluene	Ave	142273	136663		240	250	-3.9	15.0
PETN	Lin2		76760		2630	2500	5.0	15.0
1,2-Dinitrobenzene	Ave	124698	128840		258	250	3.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567774/21 Calibration Date: 03/04/2022 23:55

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: 03040021.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.44	6.74
RDX	7.59	7.43	7.73
Picric acid	7.91	7.75	8.05
1,3,5-Trinitrobenzene	8.65	8.49	8.79
1,3-Dinitrobenzene	9.28	9.11	9.41
Nitrobenzene	9.66	9.49	9.79
Tetryl	9.97	9.81	10.11
Nitroglycerin	10.42	10.25	10.55
2,4,6-Trinitrotoluene	10.87	10.76	10.96
4-Amino-2,6-dinitrotoluene	11.06	10.95	11.15
2-Amino-4,6-dinitrotoluene	11.31	11.20	11.40
2,6-Dinitrotoluene	11.48	11.36	11.56
2,4-Dinitrotoluene	11.65	11.54	11.74
2-Nitrotoluene	12.49	12.33	12.63
4-Nitrotoluene	12.91	12.75	13.05
3-Nitrotoluene	13.48	13.32	13.62
PETN	14.51	14.35	14.65
1,2-Dinitrobenzene	8.53	8.36	8.66

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040021.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 04-Mar-2022 23:55:31 ALS Bottle#: 7 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0109012-021
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:47 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: 05-Mar-2022 10:25:11

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	6.591	0.008	20751	0.2500	0.2475	M
8 RDX	1	7.586	7.578	0.008	26349	0.2500	0.2543	
9 2,4,6-Trinitrophenol	1	7.906	7.898	0.008	20498	0.2500	0.2661	
$ 10 1,2-Dinitrobenzene	1	8.526	8.511	0.015	32210	0.2500	0.2583	
11 1,3,5-Trinitrobenzene	1	8.652	8.638	0.014	57812	0.2505	0.2651	
12 1,3-Dinitrobenzene	1	9.279	9.257	0.022	76395	0.2505	0.2649	
13 Nitrobenzene	1	9.659	9.644	0.015	49175	0.2510	0.2562	
15 Tetryl	1	9.972	9.957	0.015	43788	0.2505	0.2567	
16 Nitroglycerin	2	10.419	10.404	0.015	166706	2.50	2.64	M
17 2,4,6-Trinitrotoluene	1	10.872	10.857	0.015	51163	0.2510	0.2524	
18 4-Amino-2,6-dinitrotoluene	1	11.059	11.051	0.008	38324	0.2503	0.2538	
19 2-Amino-4,6-dinitrotoluene	1	11.312	11.297	0.015	51075	0.2510	0.2526	
20 2,6-Dinitrotoluene	1	11.479	11.464	0.015	36780	0.2510	0.2570	
21 2,4-Dinitrotoluene	1	11.652	11.637	0.015	75217	0.2510	0.2600	
22 o-Nitrotoluene	1	12.492	12.477	0.015	32098	0.2500	0.2515	
23 p-Nitrotoluene	1	12.912	12.897	0.015	28038	0.2505	0.2639	
24 m-Nitrotoluene	1	13.479	13.471	0.008	34200	0.2503	0.2404	
25 PETN	2	14.512	14.497	0.015	191900	2.50	2.63	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070 Amount Added: 25.00 Units: uL

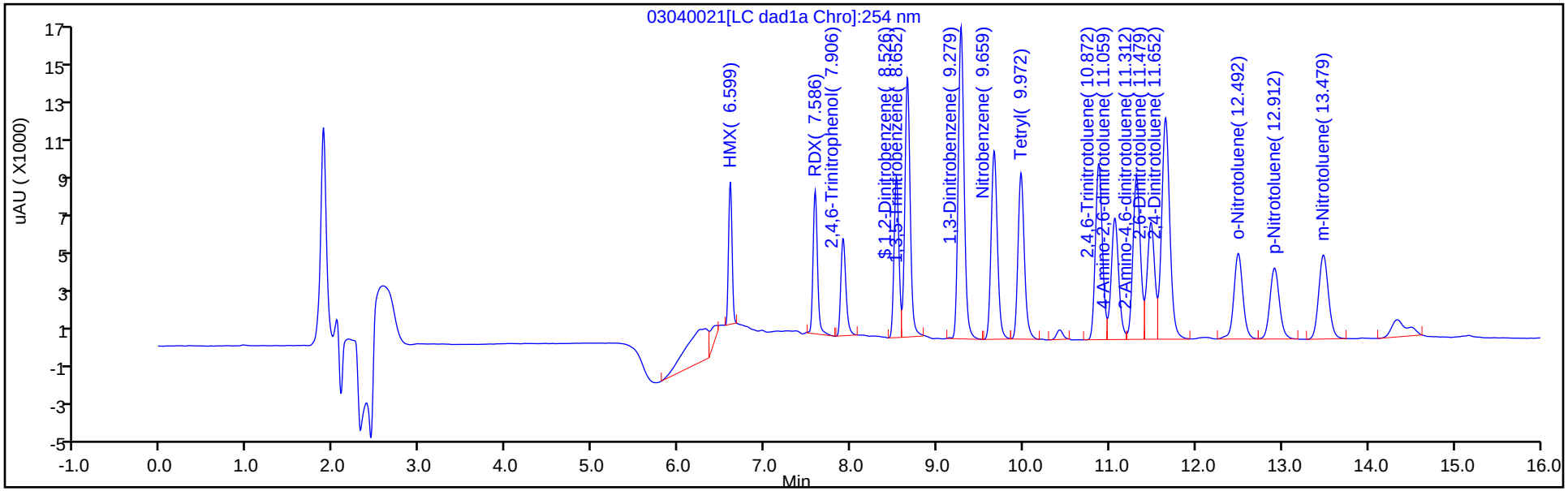
Report Date: 05-Mar-2022 10:57:47 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

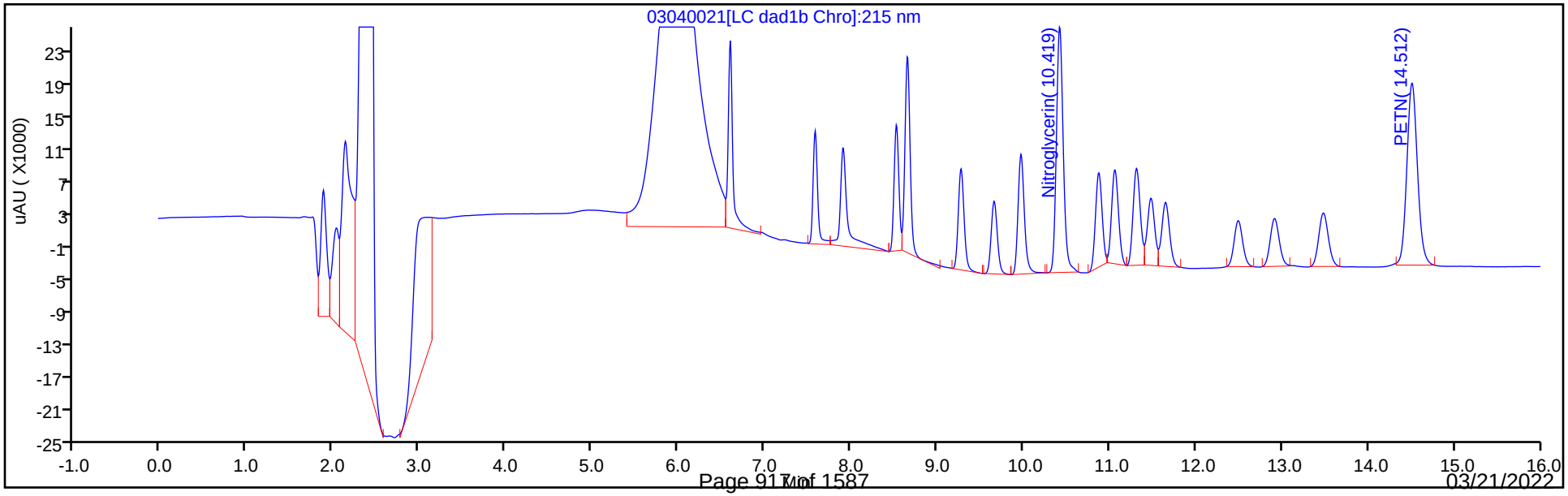
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040021.d

Injection Date:	04-Mar-2022 23:55:31	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

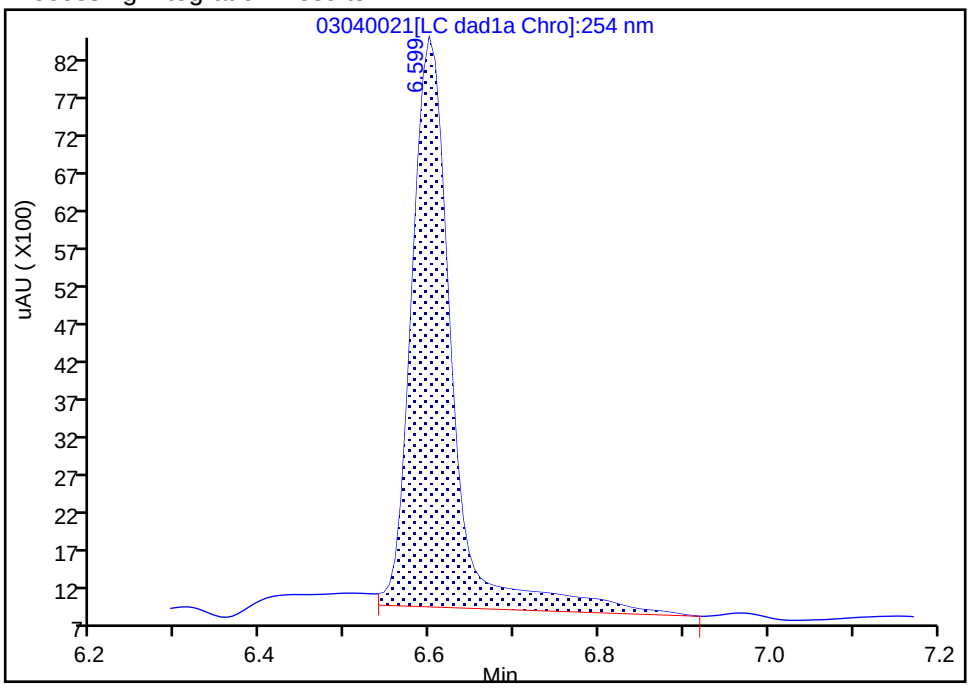
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040021.d				
Injection Date:	04-Mar-2022 23:55:31	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

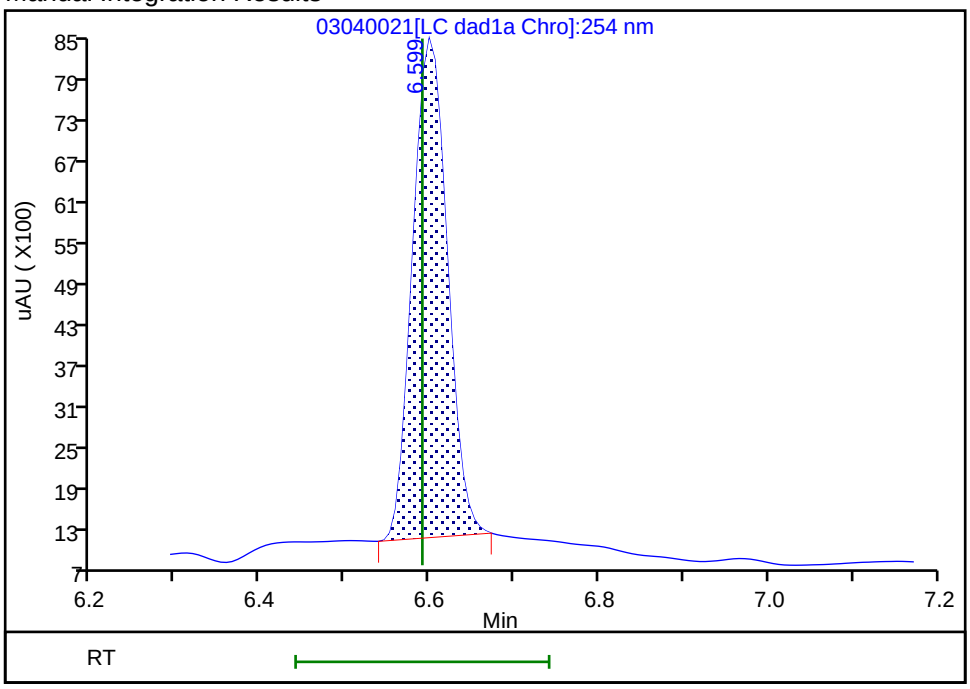
Processing Integration Results

RT: 6.60
Area: 24932
Amount: 0.297421
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 20751
Amount: 0.247545
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:25:05
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

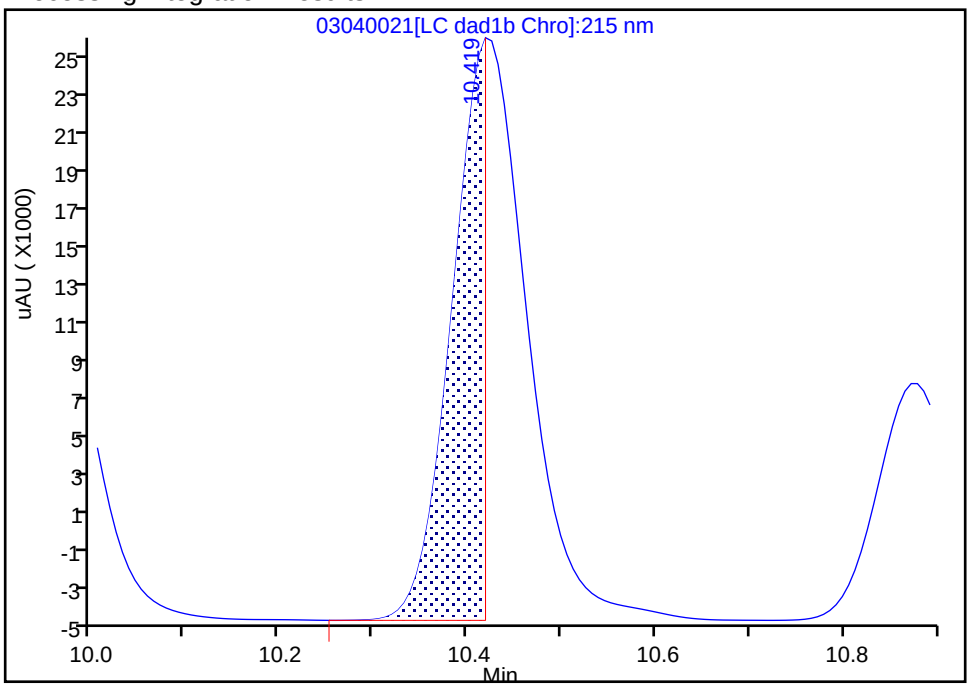
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040021.d
Injection Date: 04-Mar-2022 23:55:31 Instrument ID: CHHPLC_X3
Lims ID: CCV INT
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 21
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

16 Nitroglycerin, CAS: 55-63-0

Signal: 1

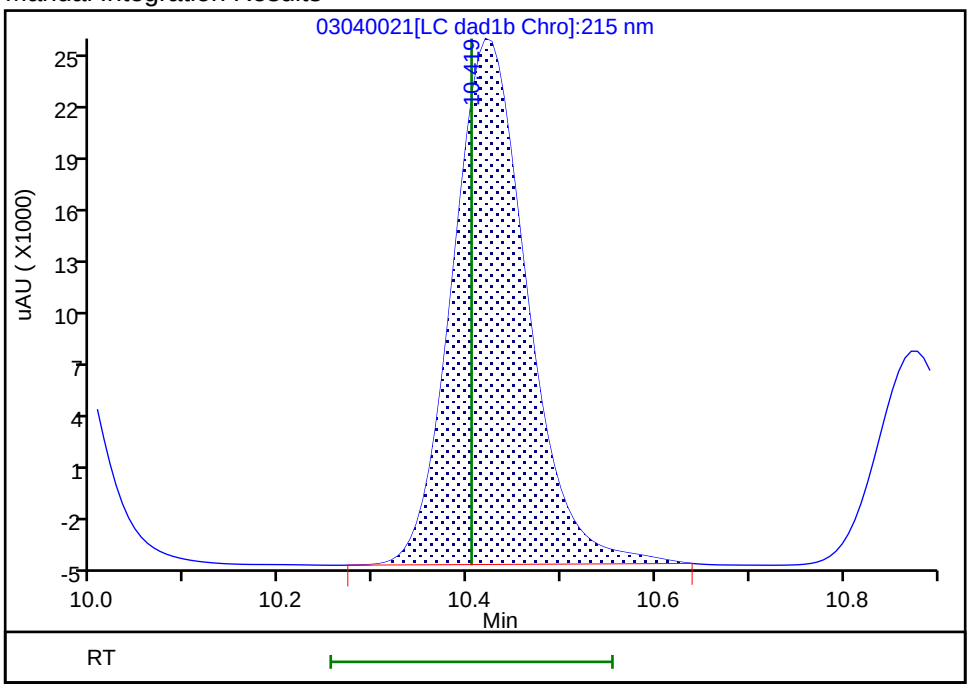
Processing Integration Results

RT: 10.42
Area: 73122
Amount: 1.159980
Amount Units: ug/mL



Manual Integration Results

RT: 10.42
Area: 166706
Amount: 2.644562
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:25:10
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567774/22 Calibration Date: 03/05/2022 00:18

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: 03040022.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	188024		260	250	3.8	15.0
DNX	Ave	138113	138913		252	250	0.6	15.0
MNX	Ave	125995	128723		298	292	2.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567774/22 Calibration Date: 03/05/2022 00:18

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: 03040022.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.37	6.57
DNX	6.79	6.68	6.88
MNX	7.21	7.05	7.35

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040022.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	05-Mar-2022 00:18:27	ALS Bottle#:	9	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0109012-022				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:46	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:	05-Mar-2022 10:27:55		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.480	6.469	0.011	47053	0.2503	0.2597	M
6 DNX	1	6.794	6.782	0.012	34763	0.2503	0.2517	M
7 MNX	1	7.214	7.196	0.018	37555	0.2918	0.2981	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

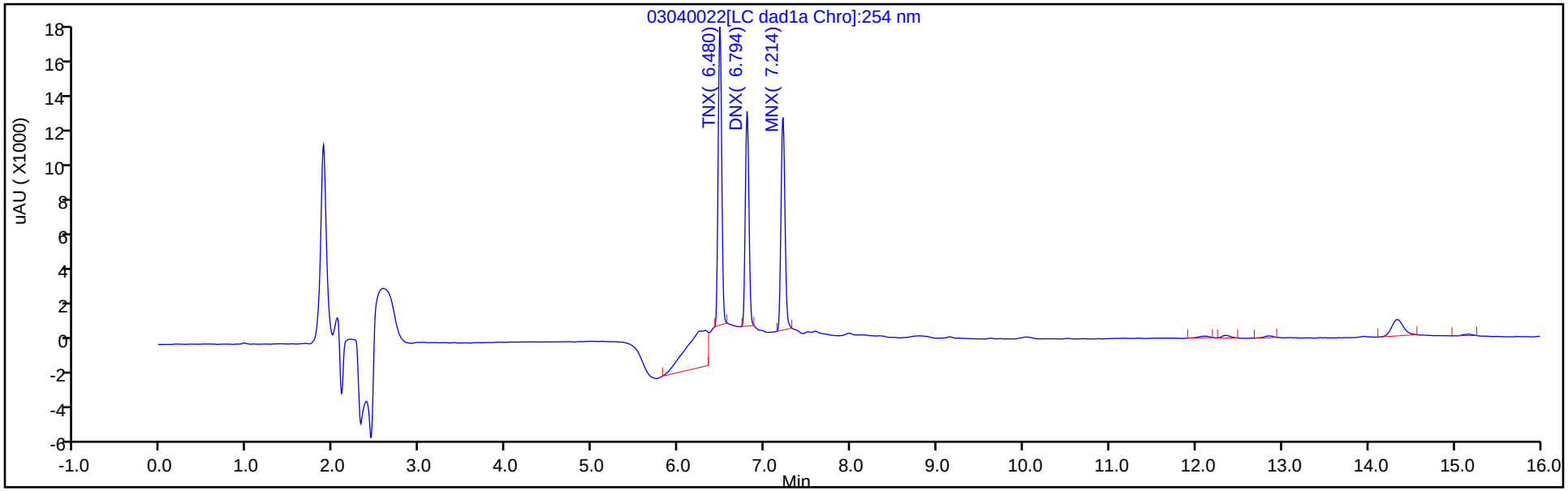
Report Date: 05-Mar-2022 10:57:46 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

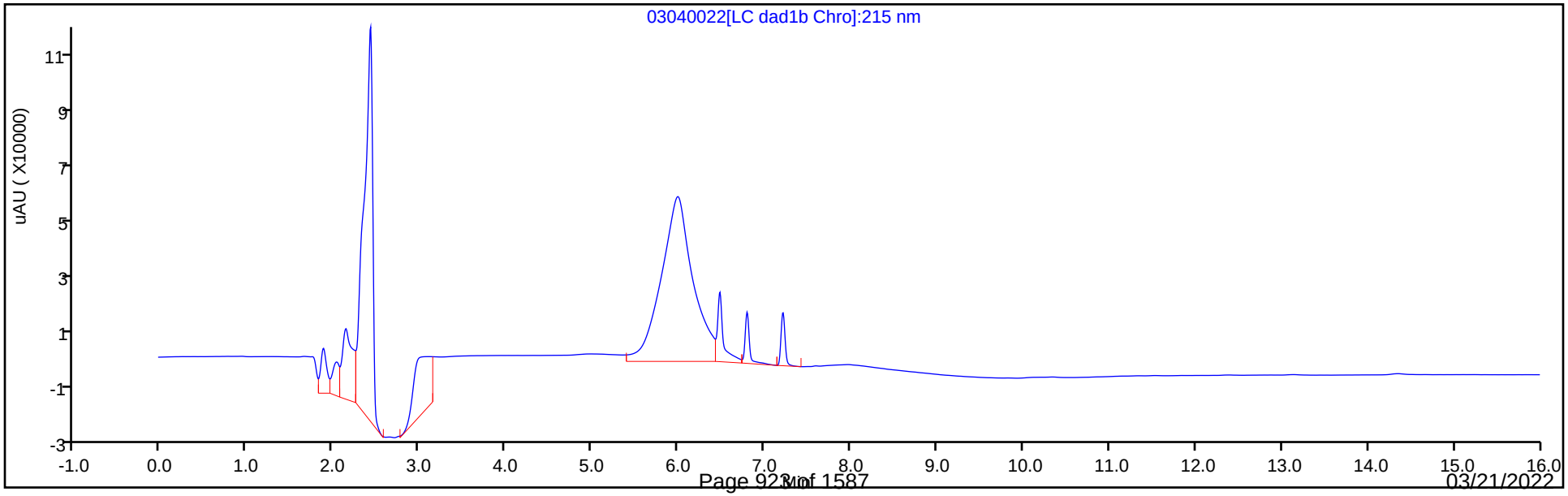
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040022.d

Injection Date:	05-Mar-2022 00:18:27	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	22
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

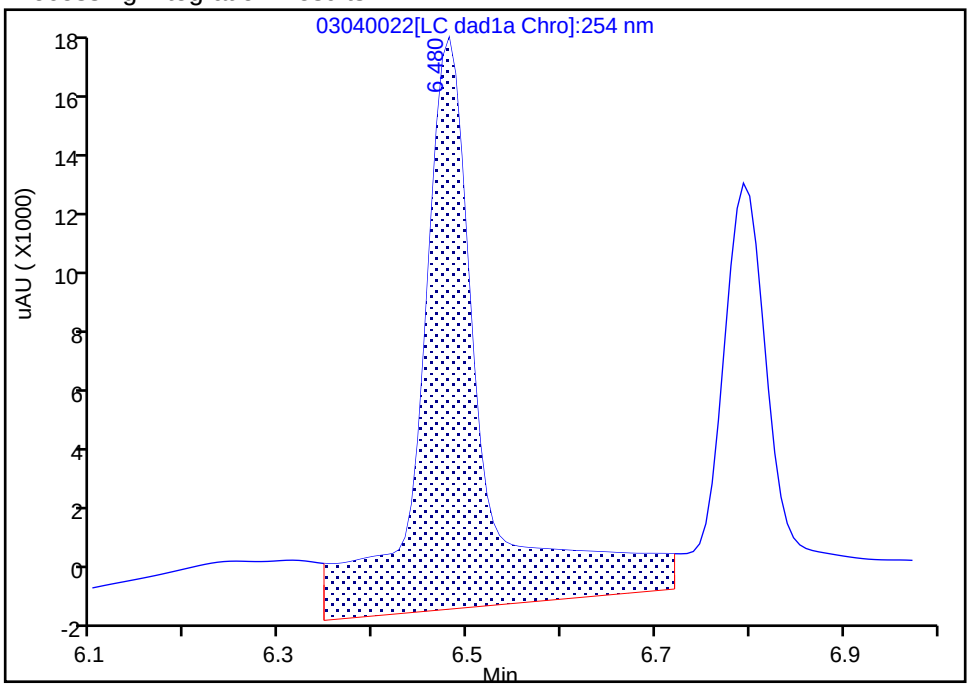
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040022.d				
Injection Date:	05-Mar-2022 00:18:27	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

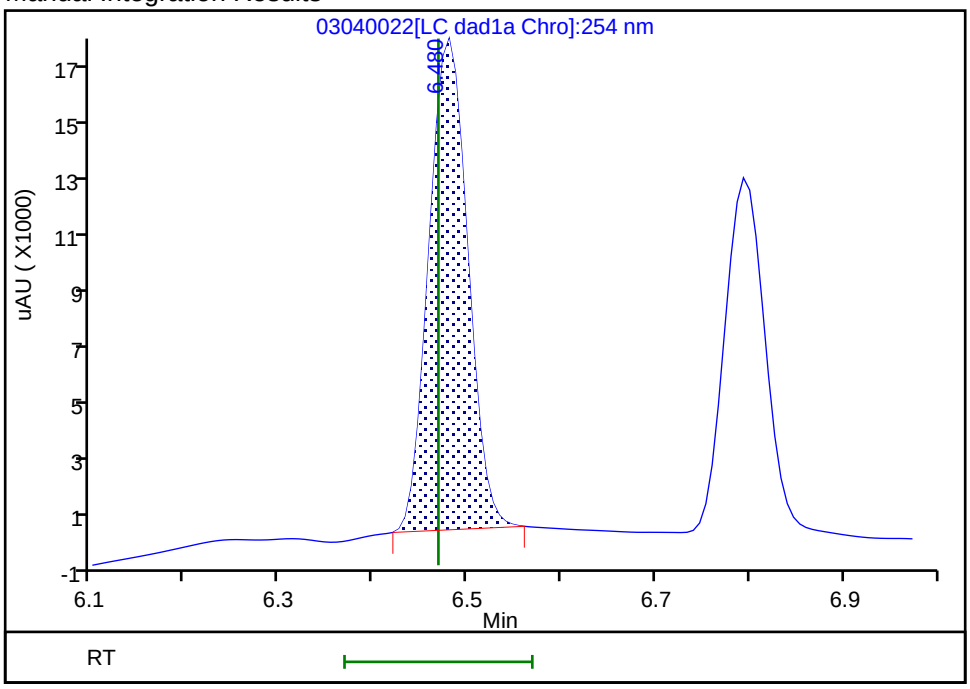
Processing Integration Results

RT: 6.48
Area: 84112
Amount: 0.464175
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 47053
Amount: 0.259664
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:27:45

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

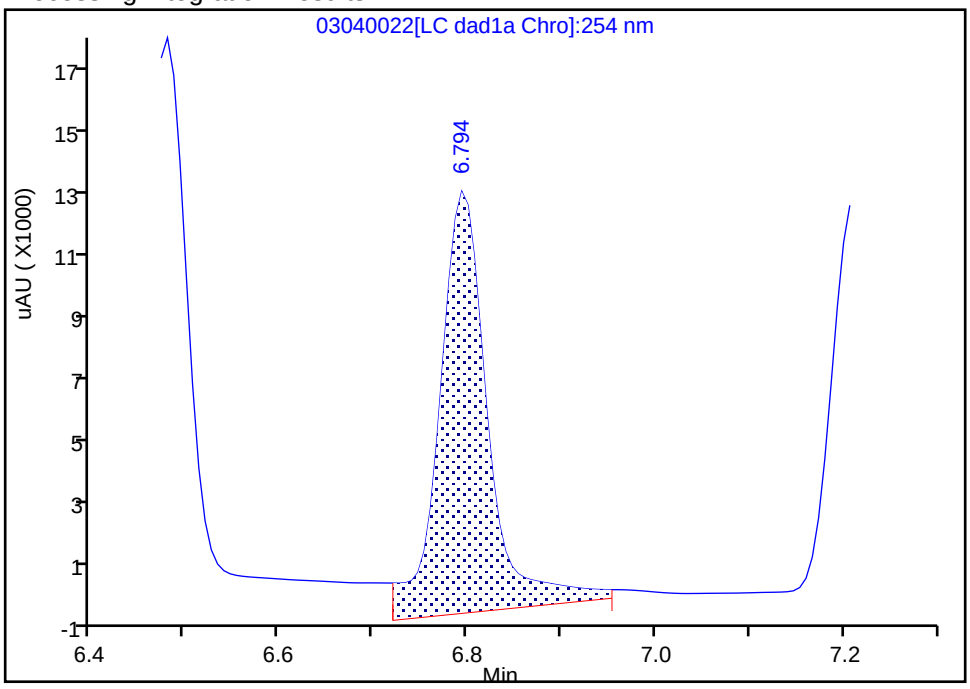
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040022.d				
Injection Date:	05-Mar-2022 00:18:27	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

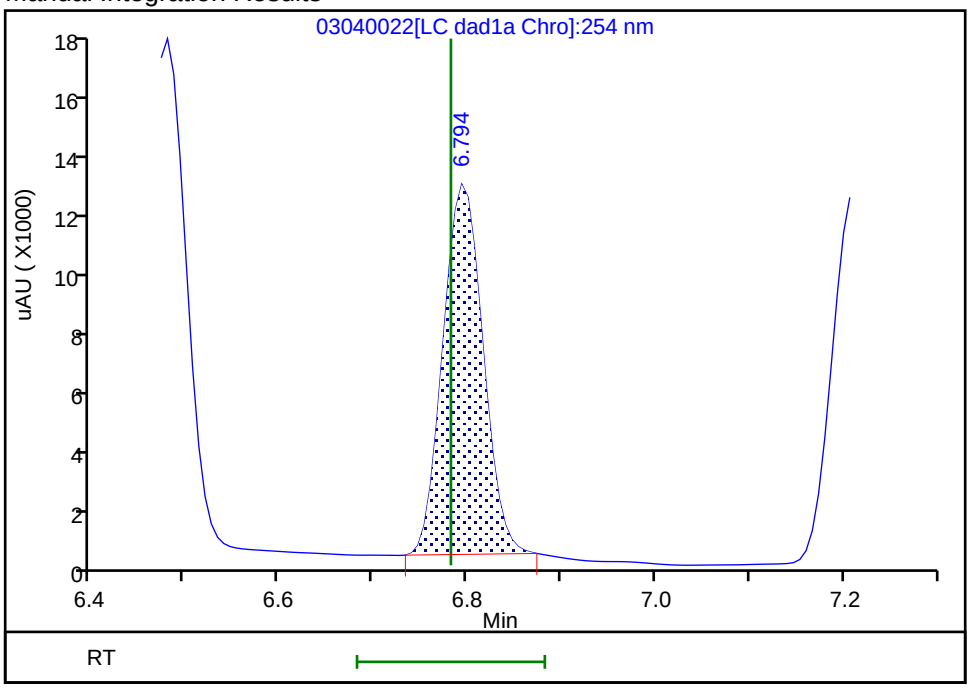
Processing Integration Results

RT: 6.79
Area: 45567
Amount: 0.329926
Amount Units: ug/mL



Manual Integration Results

RT: 6.79
Area: 34763
Amount: 0.251700
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:27:48

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

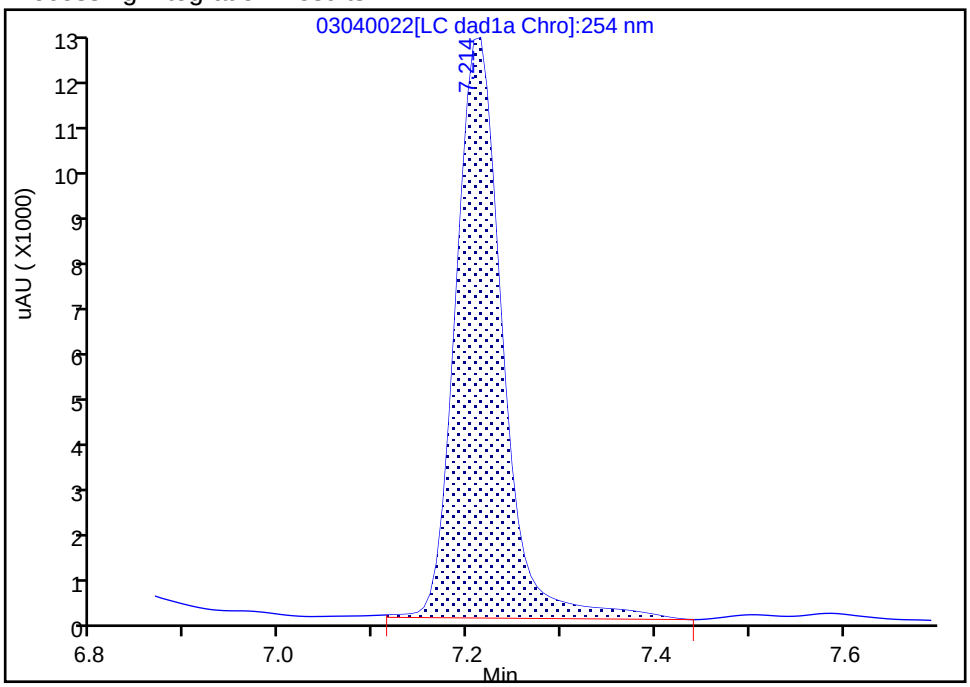
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040022.d				
Injection Date:	05-Mar-2022 00:18:27	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	22
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

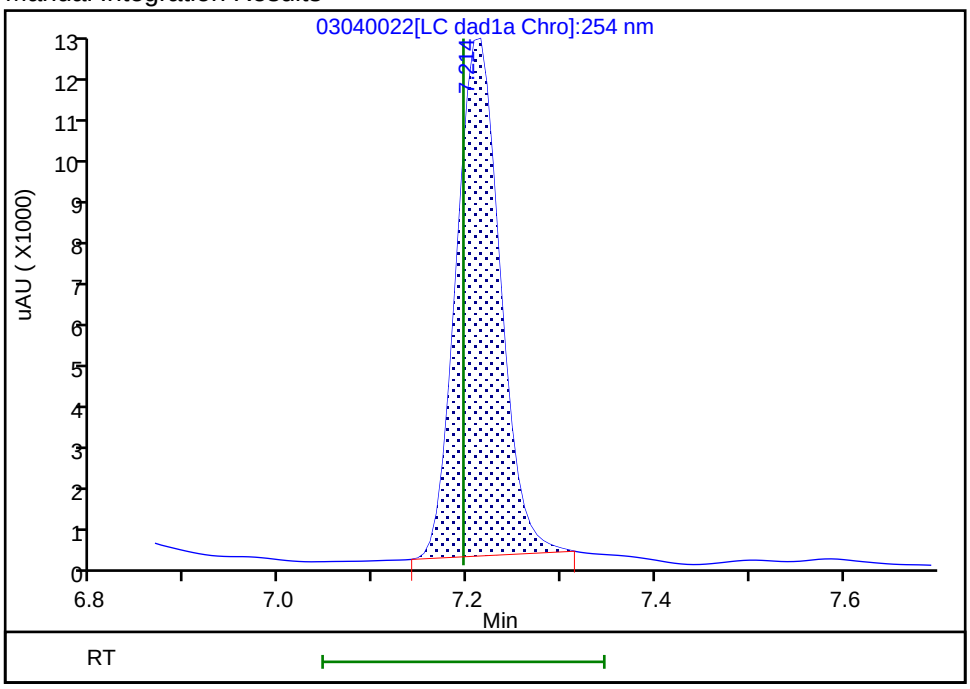
Processing Integration Results

RT: 7.21
Area: 40566
Amount: 0.321964
Amount Units: ug/mL



Manual Integration Results

RT: 7.21
Area: 37555
Amount: 0.298066
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:27:54
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567774/31 Calibration Date: 03/05/2022 03:44

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: 03040031.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	83780		250	250	-0.0	15.0
RDX	Ave	103609	105872		255	250	2.2	15.0
Picric acid	Ave	77039	82892		269	250	7.6	15.0
1,3,5-Trinitrobenzene	Ave	218096	231625		266	251	6.2	15.0
1,3-Dinitrobenzene	Ave	288401	304240		264	251	5.5	15.0
Nitrobenzene	Ave	191953	192386		252	251	0.2	15.0
Tetryl	Ave	170567	174563		256	251	2.3	15.0
Nitroglycerin	Ave	63037	67107		2660	2500	6.5	15.0
2,4,6-Trinitrotoluene	Ave	202726	206084		255	251	1.7	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	151948		252	250	0.6	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	204371		254	251	1.1	15.0
2,6-Dinitrotoluene	Ave	143115	147594		259	251	3.1	15.0
2,4-Dinitrotoluene	Ave	289351	299414		260	251	3.5	15.0
2-Nitrotoluene	Ave	127614	126716		248	250	-0.7	15.0
4-Nitrotoluene	Ave	106235	111745		263	251	5.2	15.0
3-Nitrotoluene	Ave	142273	135964		239	250	-4.4	15.0
PETN	Lin2		76820		2630	2500	5.1	15.0
1,2-Dinitrobenzene	Ave	124698	129072		259	250	3.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567774/31 Calibration Date: 03/05/2022 03:44

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: 03040031.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.44	6.74
RDX	7.59	7.43	7.73
Picric acid	7.91	7.75	8.05
1,3,5-Trinitrobenzene	8.65	8.49	8.79
1,3-Dinitrobenzene	9.28	9.11	9.41
Nitrobenzene	9.66	9.49	9.79
Tetryl	9.97	9.81	10.11
Nitroglycerin	10.42	10.25	10.55
2,4,6-Trinitrotoluene	10.87	10.76	10.96
4-Amino-2,6-dinitrotoluene	11.07	10.95	11.15
2-Amino-4,6-dinitrotoluene	11.31	11.20	11.40
2,6-Dinitrotoluene	11.48	11.36	11.56
2,4-Dinitrotoluene	11.65	11.54	11.74
2-Nitrotoluene	12.49	12.33	12.63
4-Nitrotoluene	12.91	12.75	13.05
3-Nitrotoluene	13.48	13.32	13.62
PETN	14.51	14.35	14.65
1,2-Dinitrobenzene	8.53	8.36	8.66

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040031.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 05-Mar-2022 03:44:49 ALS Bottle#: 7 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0109012-031
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:42 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: 05-Mar-2022 10:48:55

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.601	6.591	0.010	20945	0.2500	0.2499	M
8 RDX	1	7.587	7.578	0.009	26468	0.2500	0.2555	
9 2,4,6-Trinitrophenol	1	7.914	7.898	0.016	20723	0.2500	0.2690	
$ 10 1,2-Dinitrobenzene	1	8.527	8.511	0.016	32268	0.2500	0.2588	
11 1,3,5-Trinitrobenzene	1	8.654	8.638	0.016	58022	0.2505	0.2660	
12 1,3-Dinitrobenzene	1	9.280	9.257	0.023	76212	0.2505	0.2643	
13 Nitrobenzene	1	9.660	9.644	0.016	48289	0.2510	0.2516	
15 Tetryl	1	9.974	9.957	0.017	43728	0.2505	0.2564	
16 Nitroglycerin	2	10.420	10.404	0.016	167768	2.50	2.66	
17 2,4,6-Trinitrotoluene	1	10.874	10.857	0.017	51727	0.2510	0.2552	
18 4-Amino-2,6-dinitrotoluene	1	11.067	11.051	0.016	38025	0.2503	0.2518	
19 2-Amino-4,6-dinitrotoluene	1	11.314	11.297	0.017	51297	0.2510	0.2537	
20 2,6-Dinitrotoluene	1	11.480	11.464	0.016	37046	0.2510	0.2589	
21 2,4-Dinitrotoluene	1	11.647	11.637	0.010	75153	0.2510	0.2597	
22 o-Nitrotoluene	1	12.494	12.477	0.017	31679	0.2500	0.2482	
23 p-Nitrotoluene	1	12.914	12.897	0.017	27992	0.2505	0.2635	
24 m-Nitrotoluene	1	13.480	13.471	0.009	34025	0.2503	0.2392	
25 PETN	2	14.507	14.497	0.010	192050	2.50	2.63	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070 Amount Added: 25.00 Units: uL

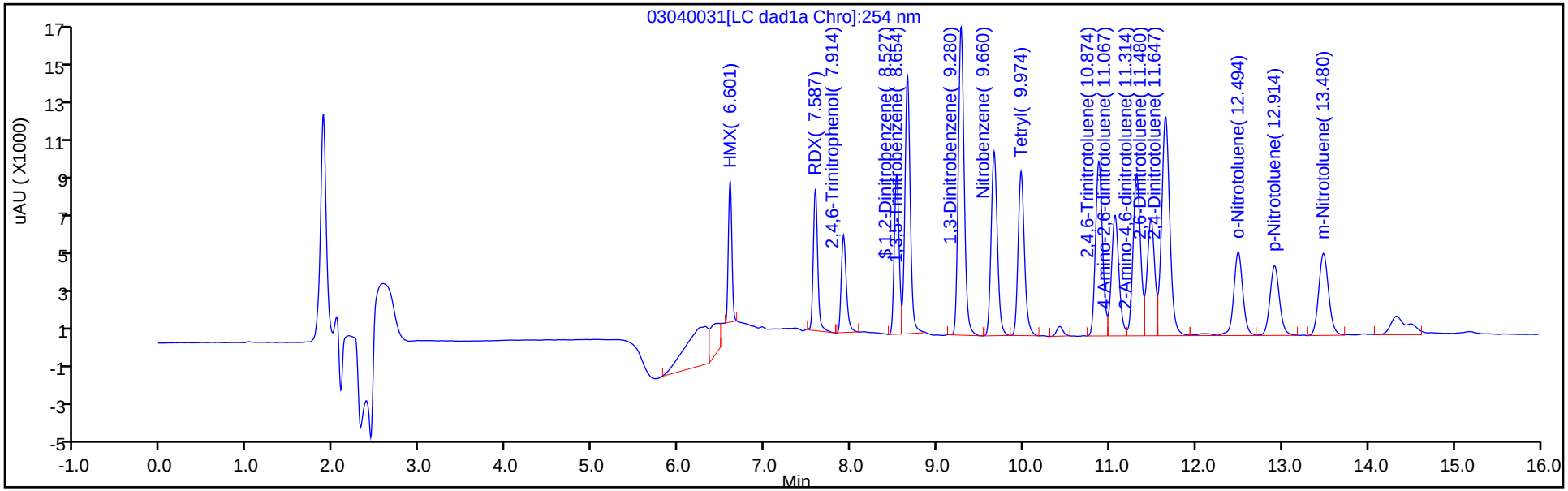
Report Date: 05-Mar-2022 10:57:42 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

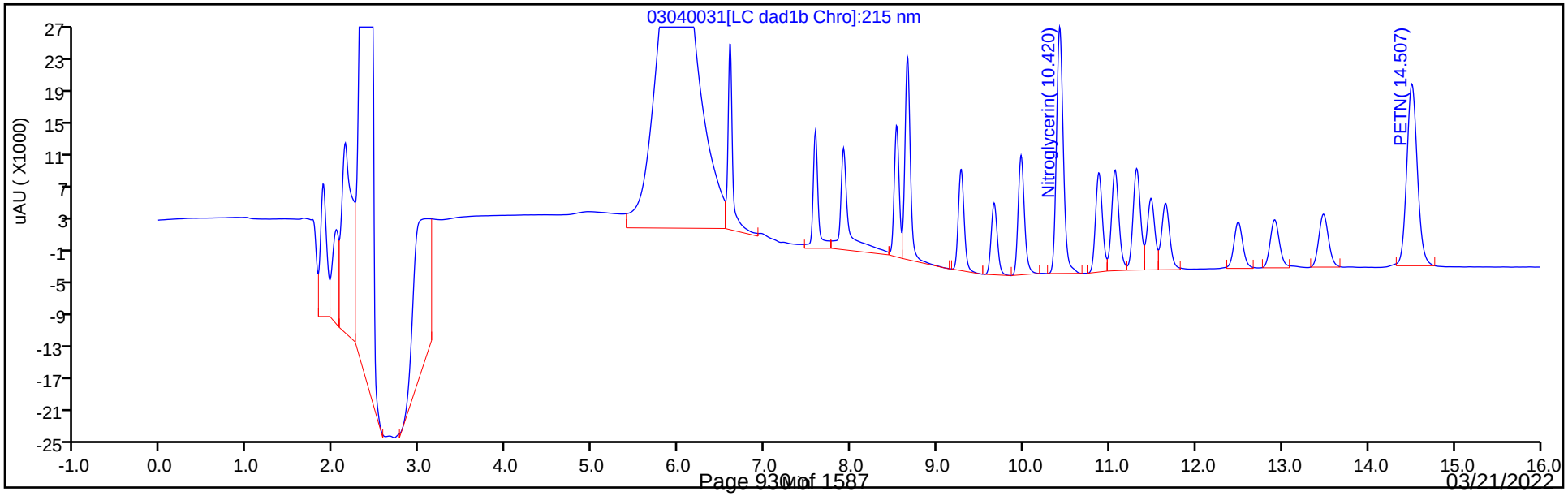
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040031.d

Injection Date:	05-Mar-2022 03:44:49	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	31
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

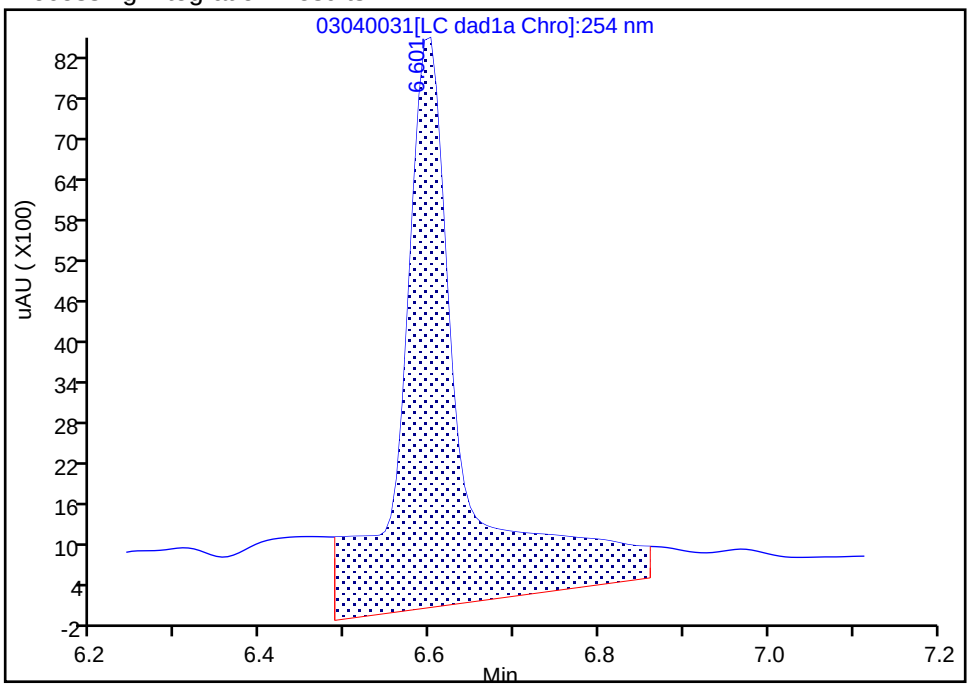
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040031.d				
Injection Date:	05-Mar-2022 03:44:49	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

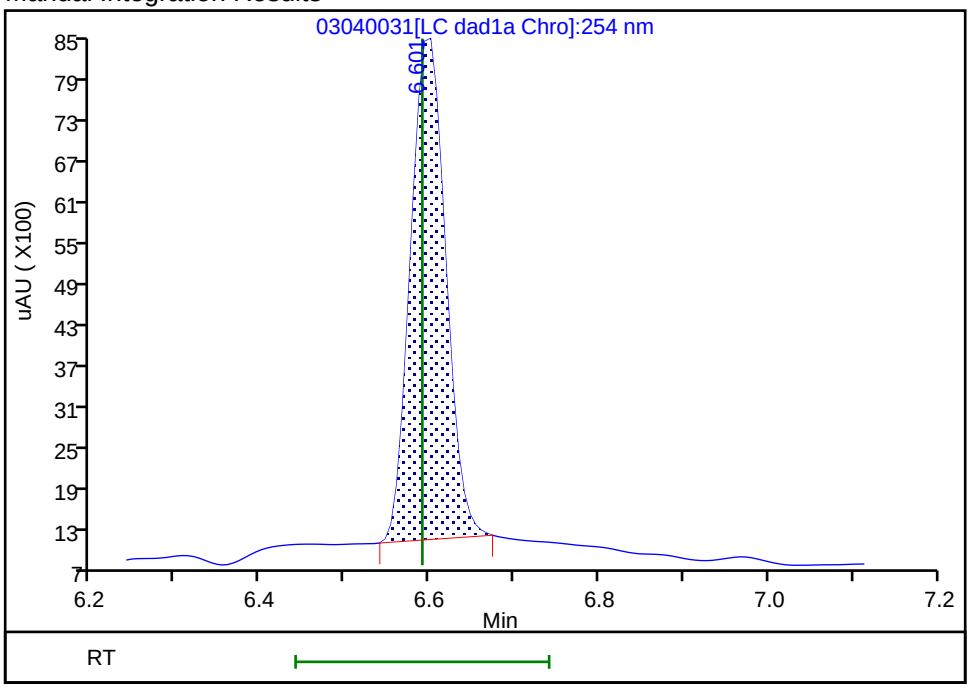
Processing Integration Results

RT: 6.60
Area: 41998
Amount: 0.501007
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 20945
Amount: 0.249859
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:48:54
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567774/32 Calibration Date: 03/05/2022 04:07

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: 03040032.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	182525		252	250	0.7	15.0
DNX	Ave	138113	137614		249	250	-0.4	15.0
MNX	Ave	125995	126769		294	292	0.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567774/32 Calibration Date: 03/05/2022 04:07

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: 03040032.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.37	6.57
DNX	6.79	6.68	6.88
MNX	7.21	7.05	7.35

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040032.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	05-Mar-2022 04:07:43	ALS Bottle#:	9	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0109012-032				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:42	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:	05-Mar-2022 10:49:09		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.480	6.469	0.011	45677	0.2503	0.2521	M
6 DNX	1	6.794	6.782	0.012	34438	0.2503	0.2493	M
7 MNX	1	7.207	7.196	0.011	36985	0.2918	0.2935	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

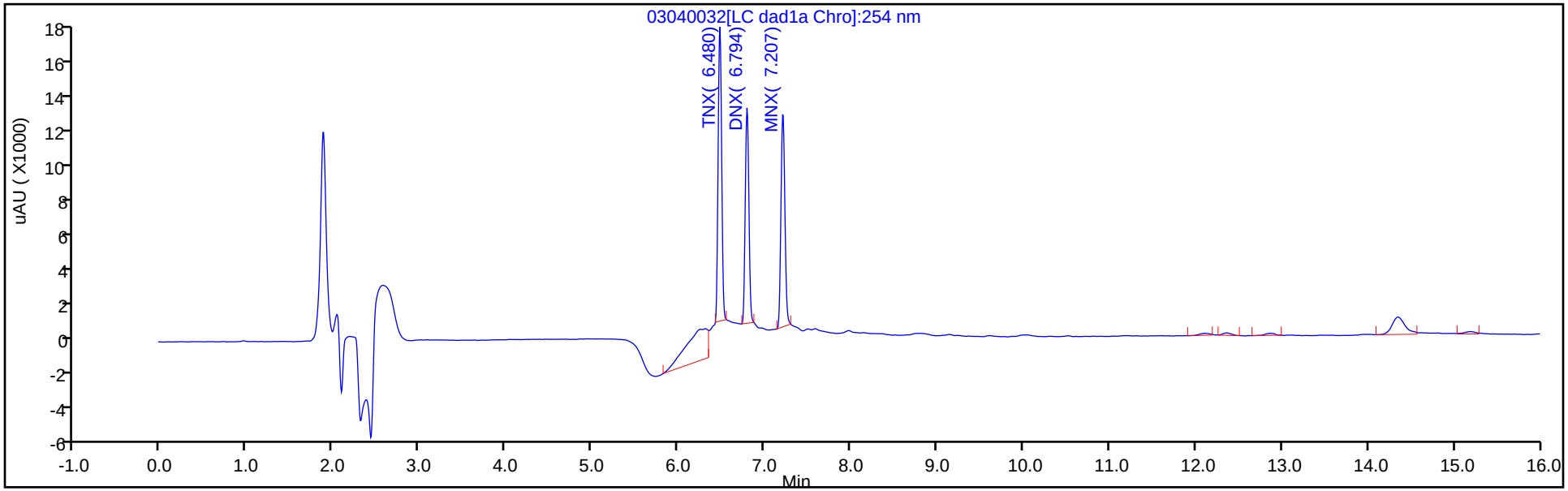
Report Date: 05-Mar-2022 10:57:42 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

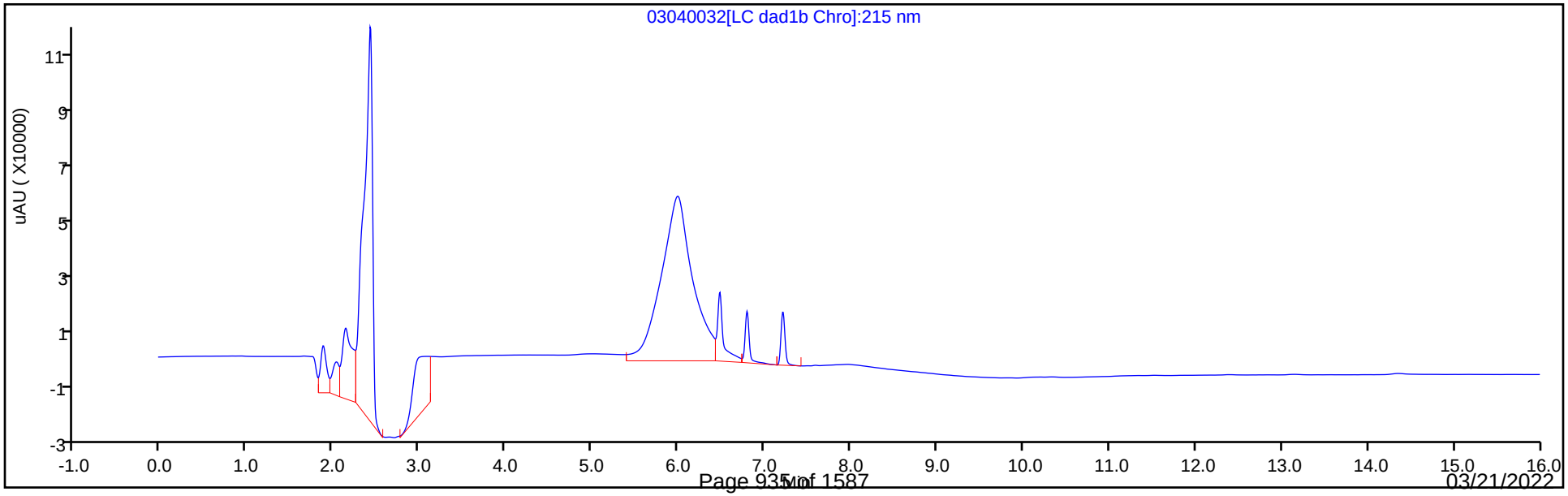
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040032.d

Injection Date:	05-Mar-2022 04:07:43	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	32
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

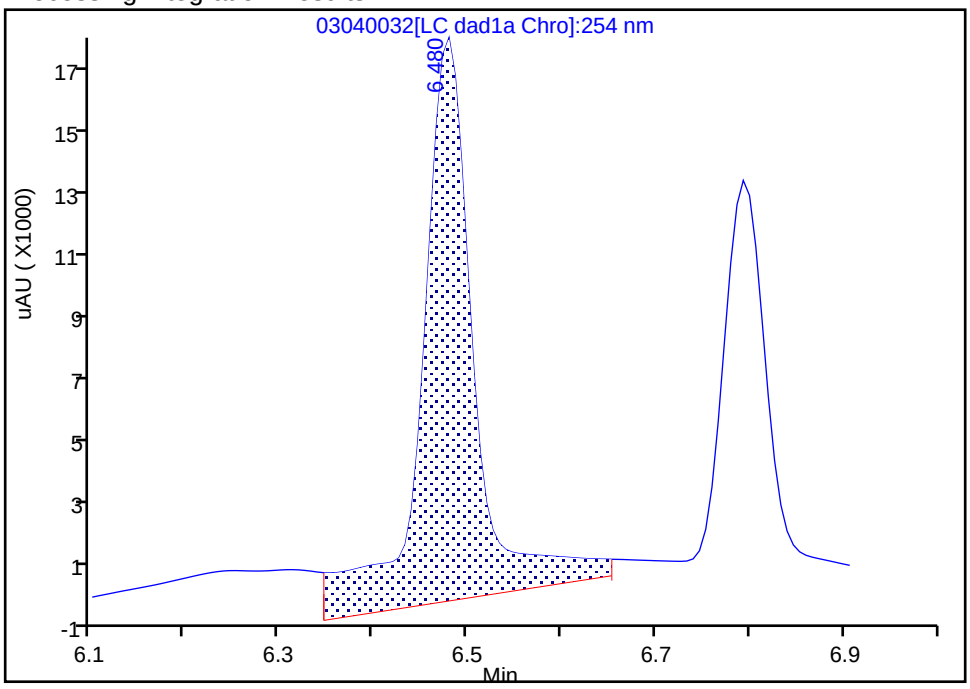
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040032.d
Injection Date: 05-Mar-2022 04:07:43 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

3 TNX, CAS: 13980-04-6

Signal: 1

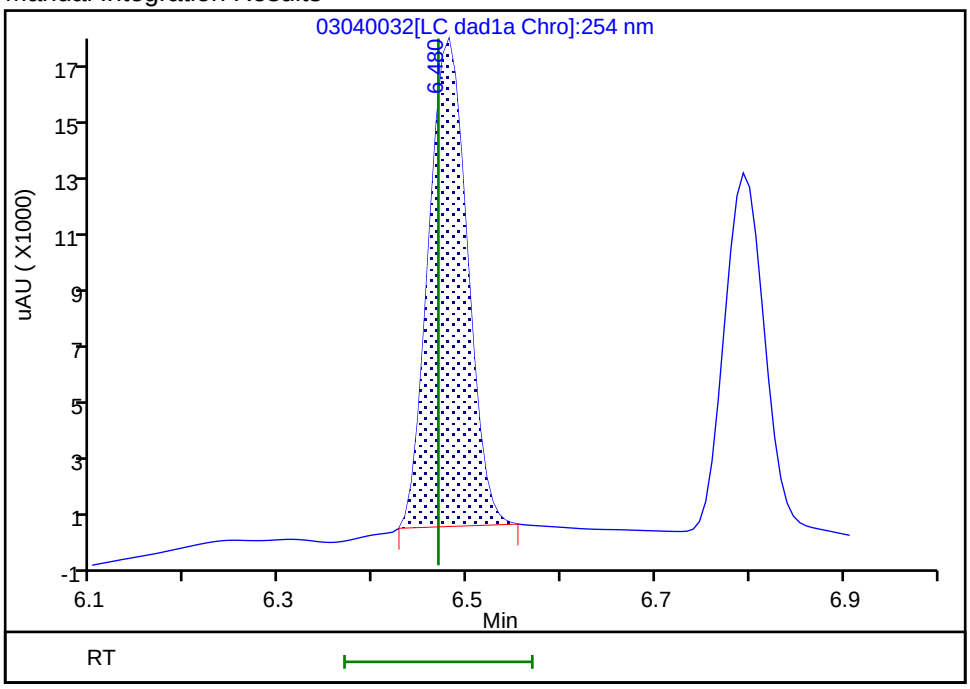
Processing Integration Results

RT: 6.48
Area: 67709
Amount: 0.373655
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 45677
Amount: 0.252070
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:49:01
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

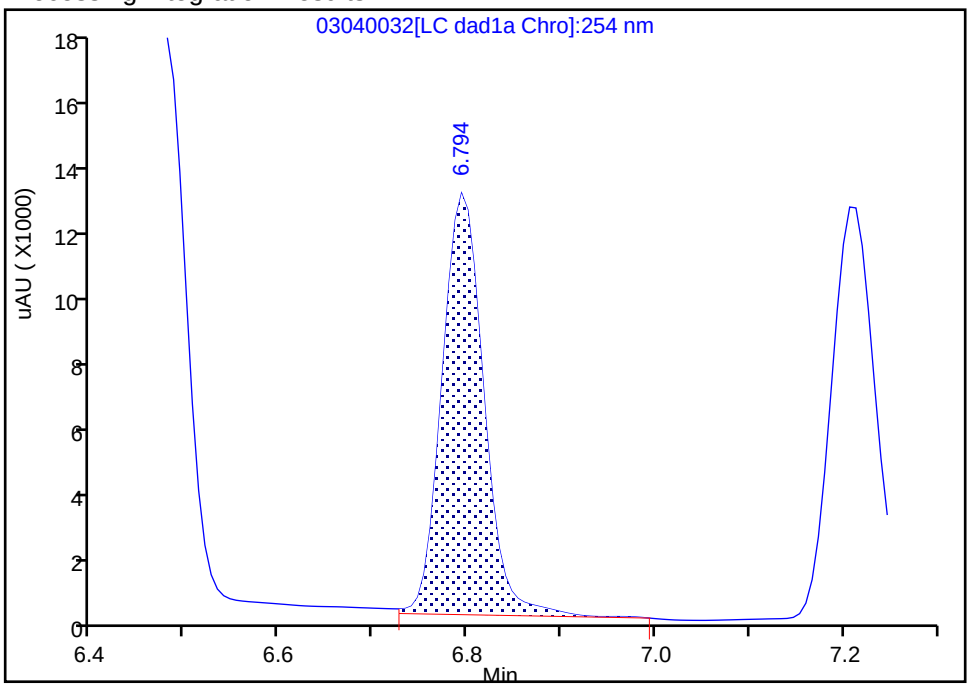
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040032.d				
Injection Date:	05-Mar-2022 04:07:43	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

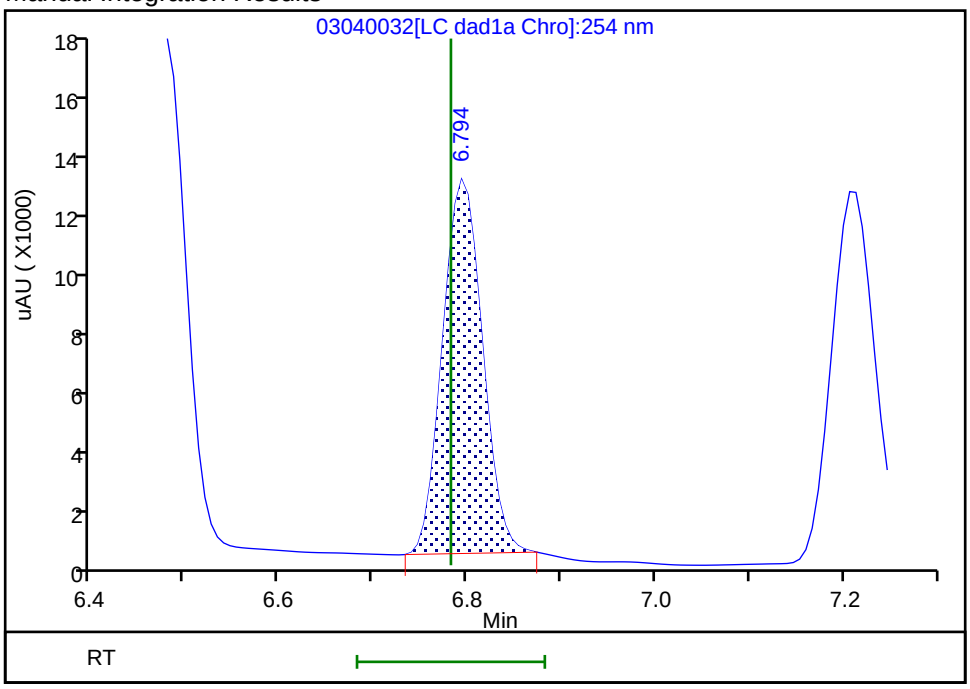
Processing Integration Results

RT: 6.79
Area: 36826
Amount: 0.266637
Amount Units: ug/mL



Manual Integration Results

RT: 6.79
Area: 34438
Amount: 0.249347
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:49:05
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

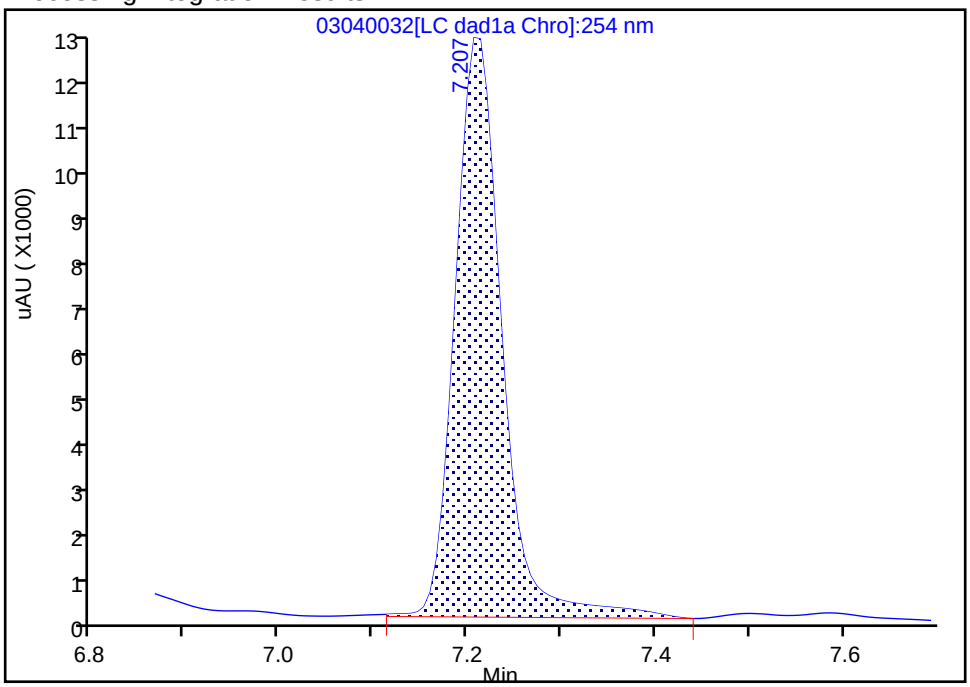
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040032.d
Injection Date: 05-Mar-2022 04:07:43 Instrument ID: CHHPLC_X3
Lims ID: CCV DMT
Client ID:
Operator ID: JZ ALS Bottle#: 9 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

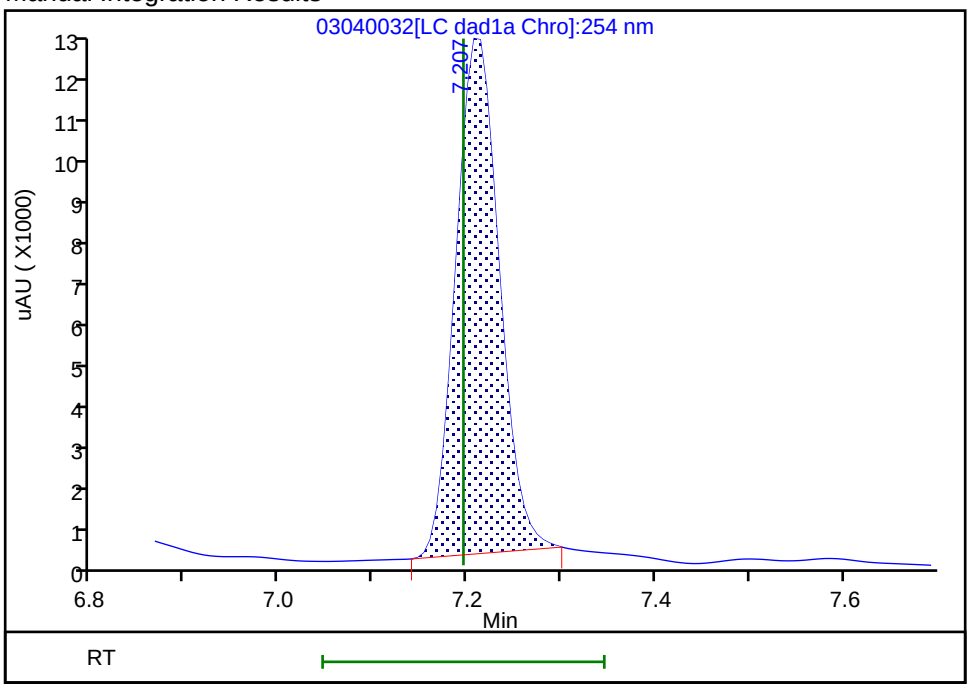
Processing Integration Results

RT: 7.21
Area: 40487
Amount: 0.321337
Amount Units: ug/mL



Manual Integration Results

RT: 7.21
Area: 36985
Amount: 0.293542
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:49:08
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567774/42 Calibration Date: 03/05/2022 07:57

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: 03040042.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	181207	181163		250	250	-0.0	15.0
DNX	Ave	138113	135784		246	250	-1.7	15.0
MNX	Ave	125995	127174		294	292	0.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567774/42 Calibration Date: 03/05/2022 07:57

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: 03040042.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.37	6.57
DNX	6.79	6.68	6.88
MNX	7.21	7.05	7.35

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040042.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	05-Mar-2022 07:57:12	ALS Bottle#:	9	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0109012-042				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:37	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:	CTX1616				
First Level Reviewer: zhangji		Date:	05-Mar-2022 10:55:45		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.481	6.469	0.012	45336	0.2503	0.2502	M
6 DNX	1	6.794	6.782	0.012	33980	0.2503	0.2460	M
7 MNX	1	7.214	7.196	0.018	37103	0.2918	0.2945	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

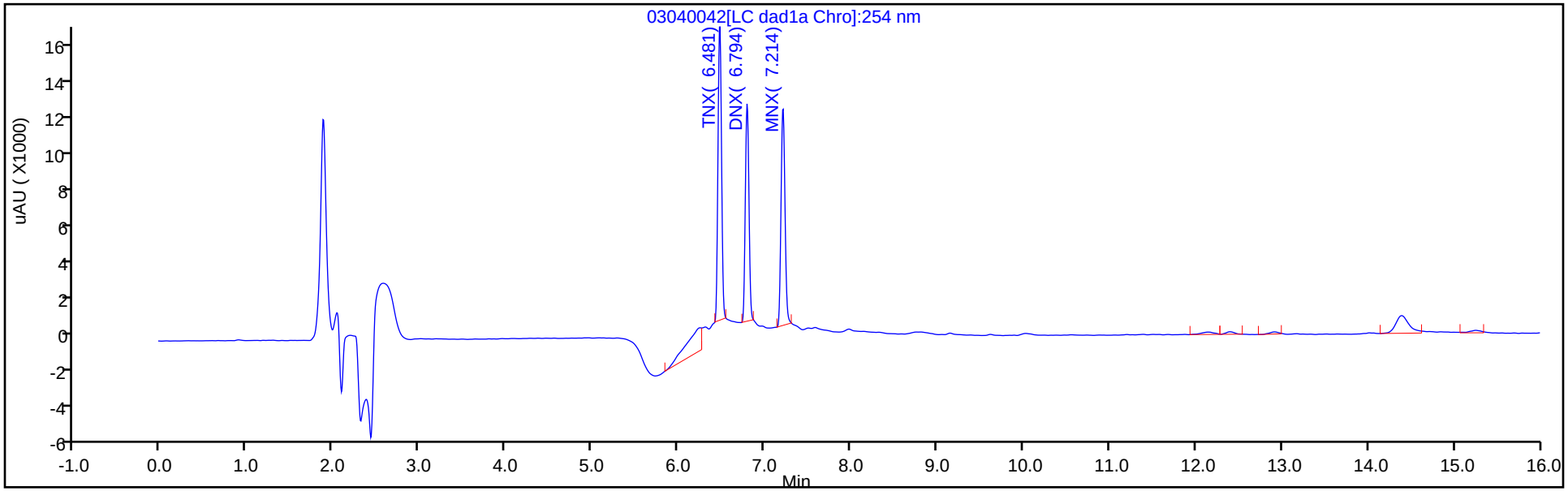
Report Date: 05-Mar-2022 10:57:37 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

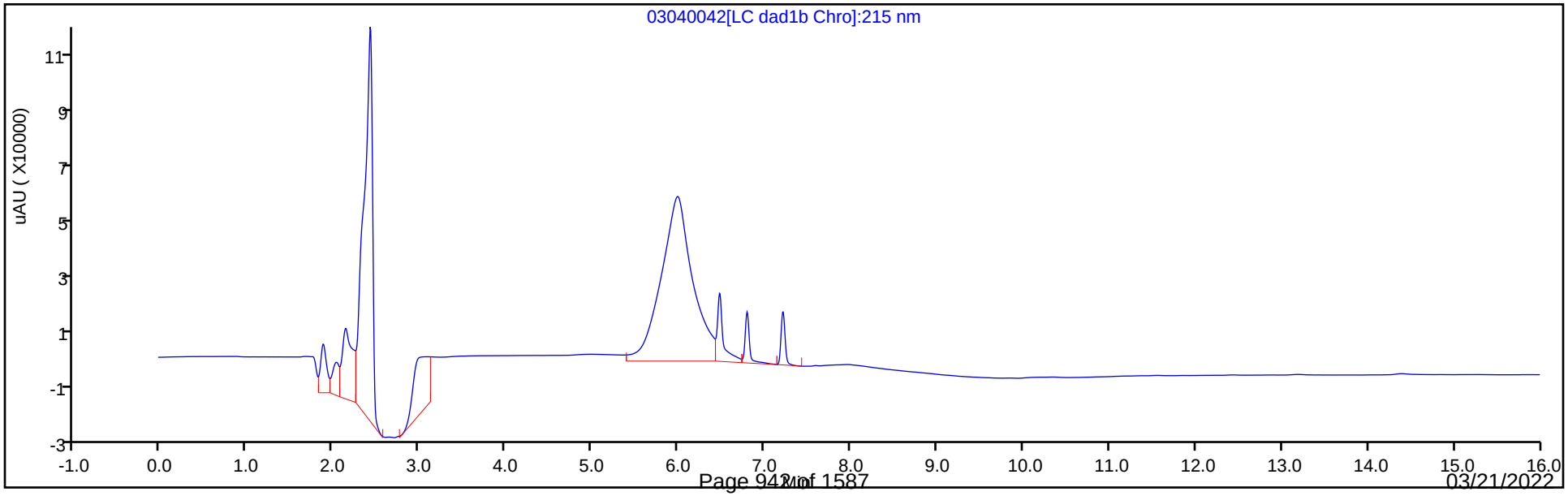
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040042.d

Injection Date:	05-Mar-2022 07:57:12	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	42
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Denver

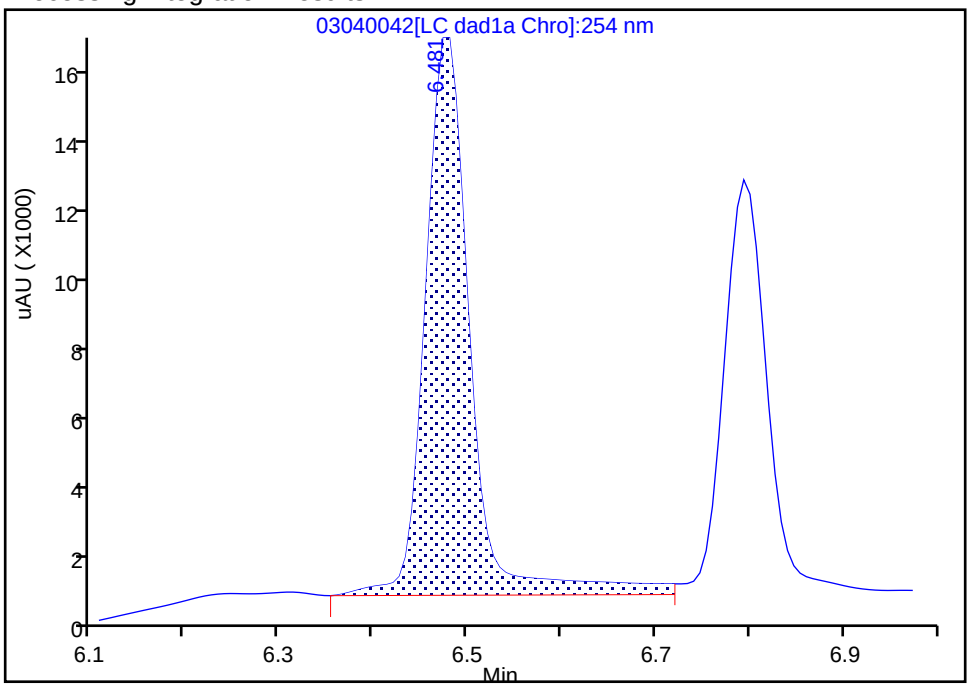
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040042.d				
Injection Date:	05-Mar-2022 07:57:12	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

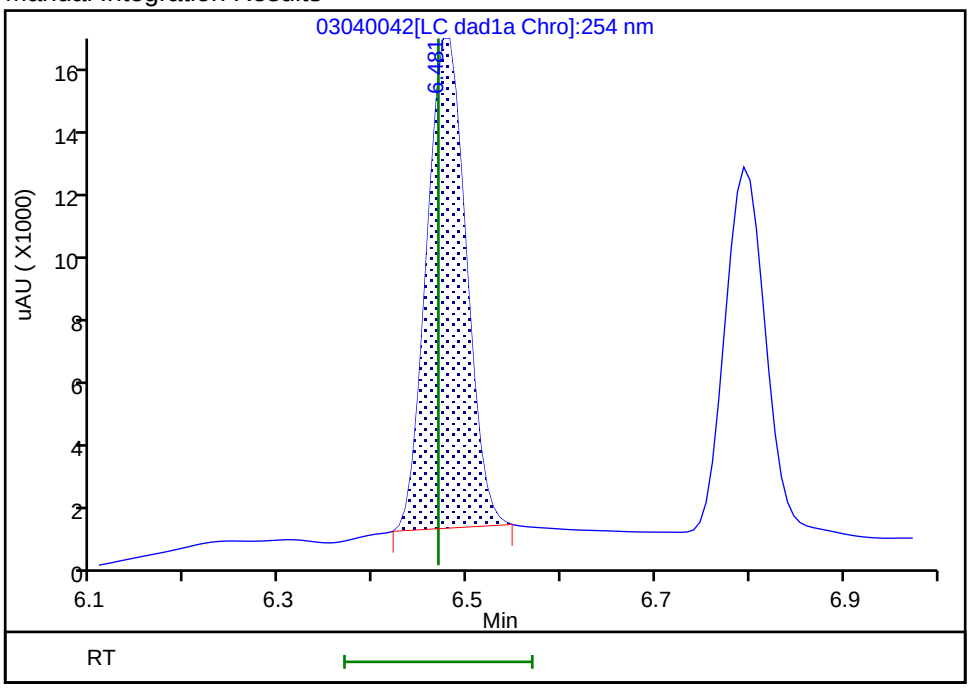
Processing Integration Results

RT: 6.48
Area: 53633
Amount: 0.295976
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 45336
Amount: 0.250188
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:55:38
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

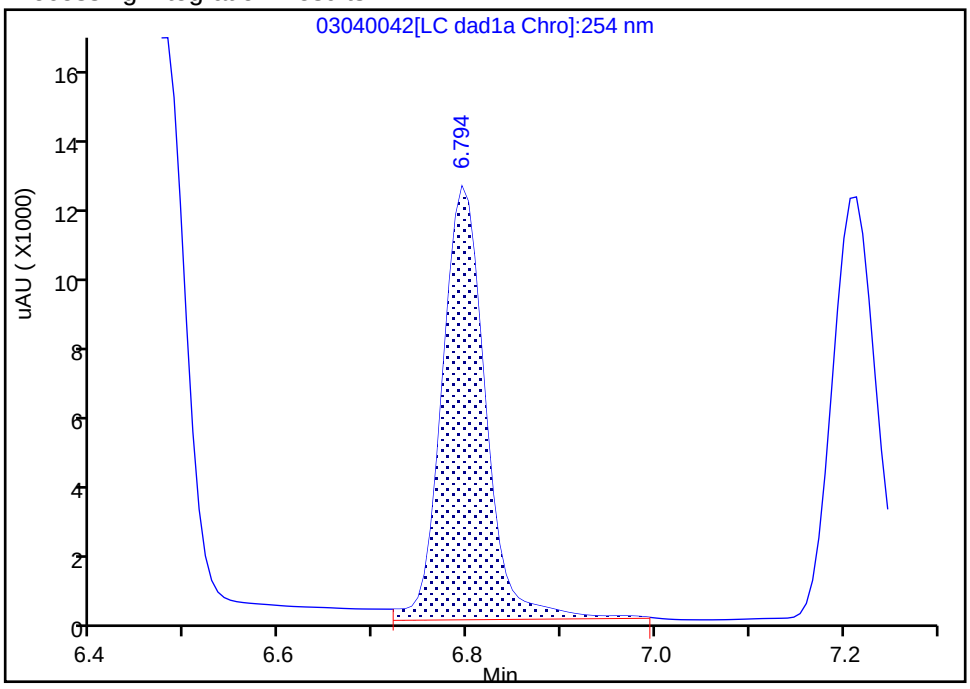
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040042.d				
Injection Date:	05-Mar-2022 07:57:12	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

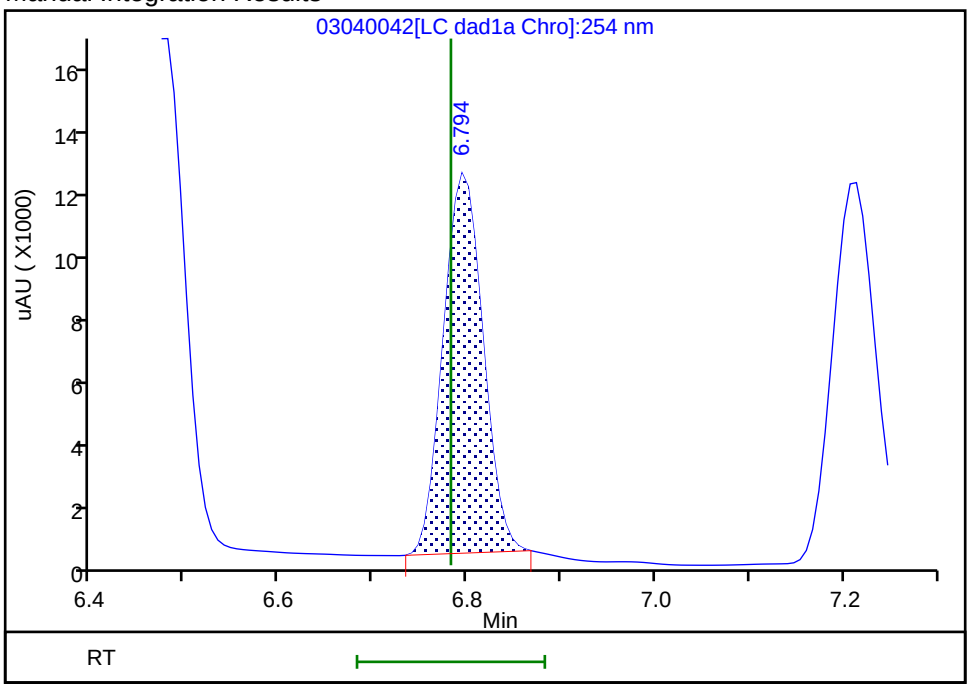
Processing Integration Results

RT: 6.79
Area: 38345
Amount: 0.277635
Amount Units: ug/mL



Manual Integration Results

RT: 6.79
Area: 33980
Amount: 0.246031
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:55:41
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

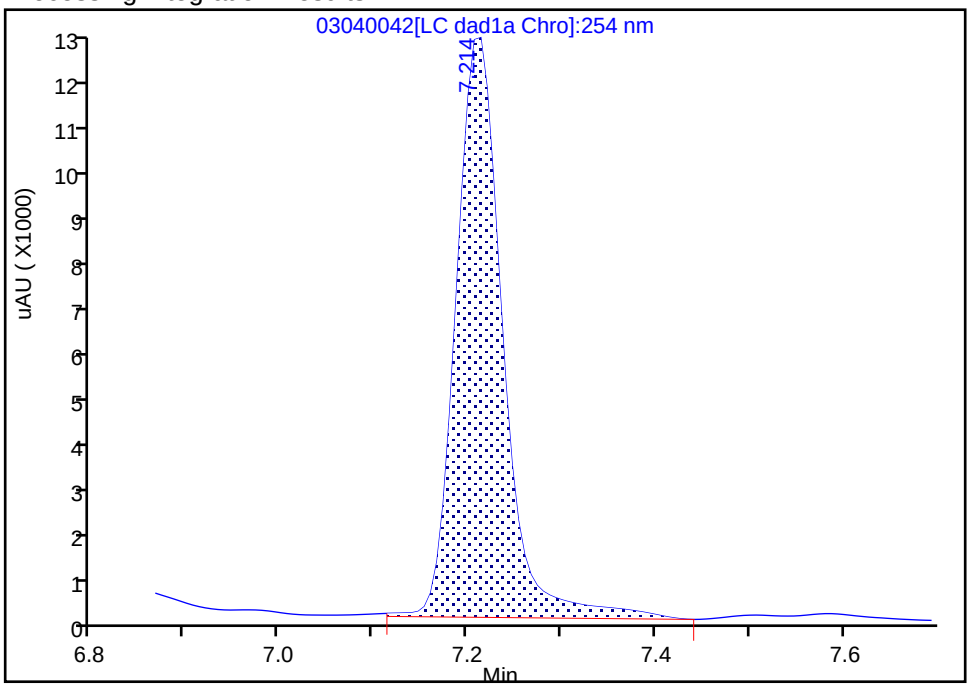
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040042.d				
Injection Date:	05-Mar-2022 07:57:12	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

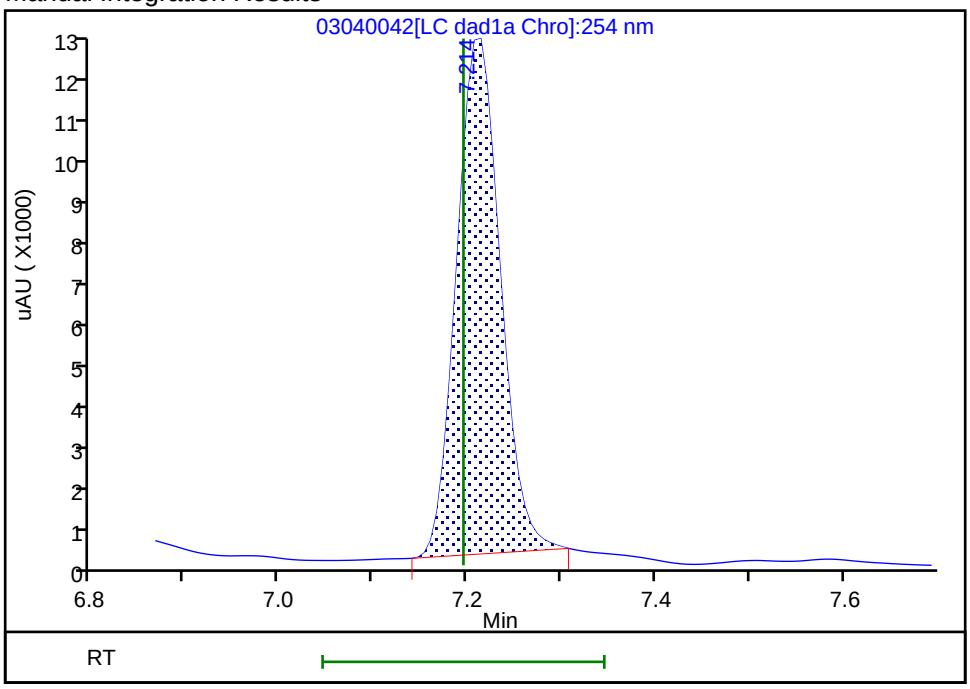
Processing Integration Results

RT: 7.21
Area: 40519
Amount: 0.321591
Amount Units: ug/mL



Manual Integration Results

RT: 7.21
Area: 37103
Amount: 0.294479
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:55:44

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567774/43 Calibration Date: 03/05/2022 08:20

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: 03040043.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	83827	84196		251	250	0.4	15.0
RDX	Ave	103609	106428		257	250	2.7	15.0
Picric acid	Ave	77039	82280		267	250	6.8	15.0
1,3,5-Trinitrobenzene	Ave	218096	228084		262	251	4.6	15.0
1,3-Dinitrobenzene	Ave	288401	305289		265	251	5.9	15.0
Nitrobenzene	Ave	191953	189183		247	251	-1.4	15.0
Tetryl	Ave	170567	174571		256	251	2.3	15.0
Nitroglycerin	Ave	63037	67244		2670	2500	6.7	15.0
2,4,6-Trinitrotoluene	Ave	202726	205777		255	251	1.5	15.0
4-Amino-2,6-dinitrotoluene	Ave	150985	151804		252	250	0.5	15.0
2-Amino-4,6-dinitrotoluene	Ave	202171	201235		250	251	-0.5	15.0
2,6-Dinitrotoluene	Ave	143115	147765		259	251	3.2	15.0
2,4-Dinitrotoluene	Ave	289351	303466		263	251	4.9	15.0
2-Nitrotoluene	Ave	127614	124976		245	250	-2.1	15.0
4-Nitrotoluene	Ave	106235	110204		260	251	3.7	15.0
3-Nitrotoluene	Ave	142273	132715		233	250	-6.7	15.0
PETN	Lin2		76550		2620	2500	4.8	15.0
1,2-Dinitrobenzene	Ave	124698	130556		262	250	4.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567774/43 Calibration Date: 03/05/2022 08:20

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: 03040043.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.44	6.74
RDX	7.58	7.43	7.73
Picric acid	7.91	7.75	8.05
1,3,5-Trinitrobenzene	8.65	8.49	8.79
1,3-Dinitrobenzene	9.27	9.11	9.41
Nitrobenzene	9.65	9.49	9.79
Tetryl	9.97	9.81	10.11
Nitroglycerin	10.42	10.25	10.55
2,4,6-Trinitrotoluene	10.87	10.76	10.96
4-Amino-2,6-dinitrotoluene	11.07	10.95	11.15
2-Amino-4,6-dinitrotoluene	11.32	11.20	11.40
2,6-Dinitrotoluene	11.49	11.36	11.56
2,4-Dinitrotoluene	11.65	11.54	11.74
2-Nitrotoluene	12.50	12.33	12.63
4-Nitrotoluene	12.93	12.75	13.05
3-Nitrotoluene	13.49	13.32	13.62
PETN	14.53	14.35	14.65
1,2-Dinitrobenzene	8.53	8.36	8.66

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040043.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 05-Mar-2022 08:20:07 ALS Bottle#: 7 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0109012-043
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 11:26:47 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: 05-Mar-2022 11:26:47

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.600	6.591	0.009	21049	0.2500	0.2511	M
8 RDX	1	7.580	7.578	0.002	26607	0.2500	0.2568	
9 2,4,6-Trinitrophenol	1	7.907	7.898	0.009	20570	0.2500	0.2670	
$ 10 1,2-Dinitrobenzene	1	8.527	8.511	0.016	32639	0.2500	0.2617	
11 1,3,5-Trinitrobenzene	1	8.647	8.638	0.009	57135	0.2505	0.2620	
12 1,3-Dinitrobenzene	1	9.273	9.257	0.016	76475	0.2505	0.2652	
13 Nitrobenzene	1	9.653	9.644	0.009	47485	0.2510	0.2474	
15 Tetryl	1	9.973	9.957	0.016	43730	0.2505	0.2564	
16 Nitroglycerin	2	10.420	10.404	0.016	168110	2.50	2.67	
17 2,4,6-Trinitrotoluene	1	10.873	10.857	0.016	51650	0.2510	0.2548	
18 4-Amino-2,6-dinitrotoluene	1	11.067	11.051	0.016	37989	0.2503	0.2516	
19 2-Amino-4,6-dinitrotoluene	1	11.320	11.297	0.023	50510	0.2510	0.2498	
20 2,6-Dinitrotoluene	1	11.487	11.464	0.023	37089	0.2510	0.2592	
21 2,4-Dinitrotoluene	1	11.653	11.637	0.016	76170	0.2510	0.2632	
22 o-Nitrotoluene	1	12.500	12.477	0.023	31244	0.2500	0.2448	
23 p-Nitrotoluene	1	12.927	12.897	0.030	27606	0.2505	0.2599	
24 m-Nitrotoluene	1	13.493	13.471	0.022	33212	0.2503	0.2334	
25 PETN	2	14.533	14.497	0.036	191374	2.50	2.62	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00070 Amount Added: 25.00 Units: uL

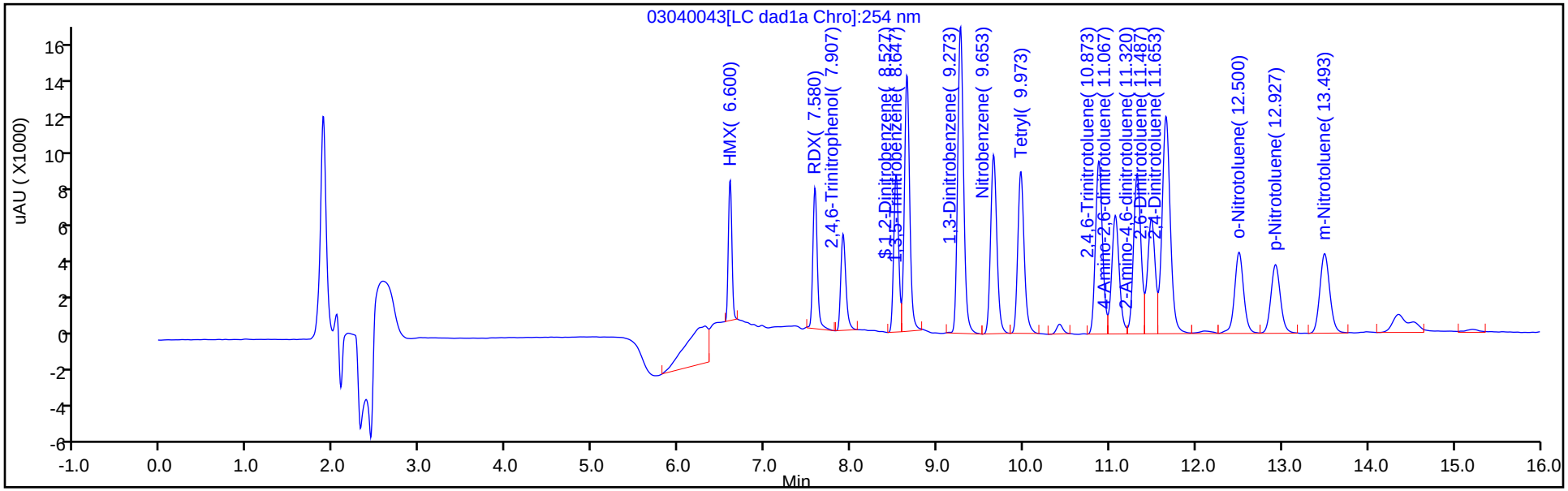
Report Date: 05-Mar-2022 11:26:47 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

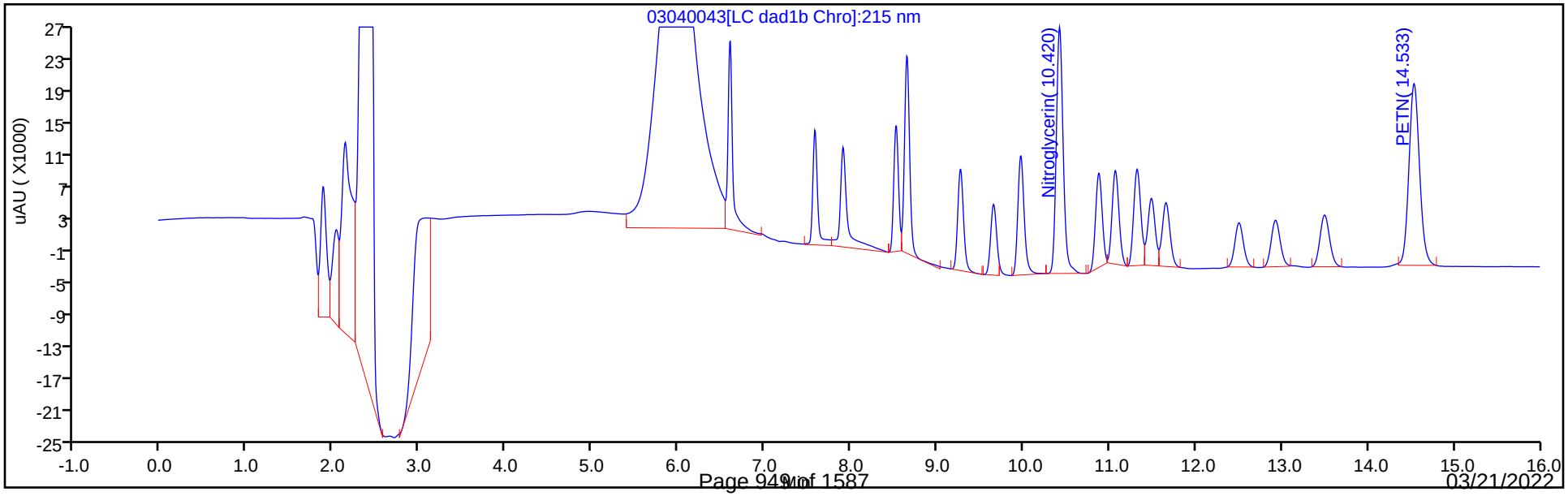
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040043.d

Injection Date:	05-Mar-2022 08:20:07	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	43
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

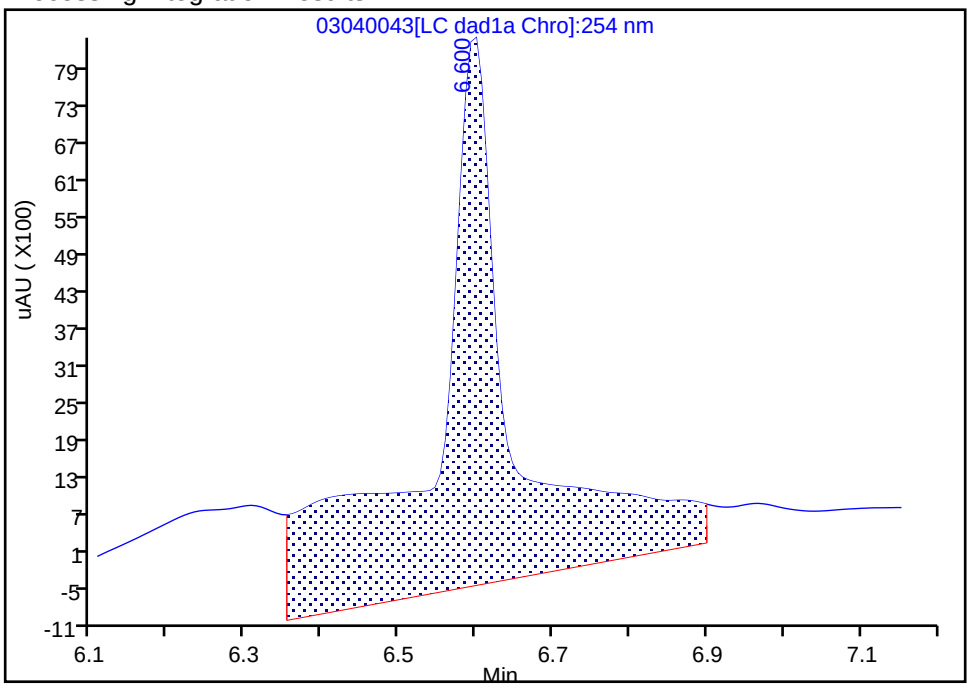
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040043.d				
Injection Date:	05-Mar-2022 08:20:07	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

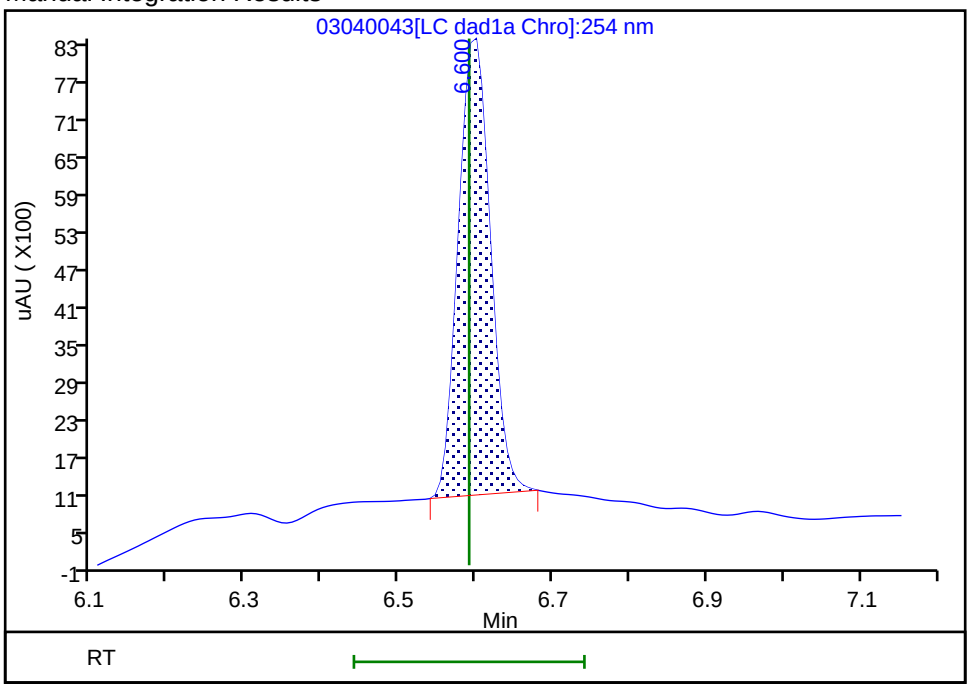
Processing Integration Results

RT: 6.60
Area: 68125
Amount: 0.812684
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 21049
Amount: 0.251100
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:56:13

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver | Job No.: 280-159190-1

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.: 280-159190-1

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

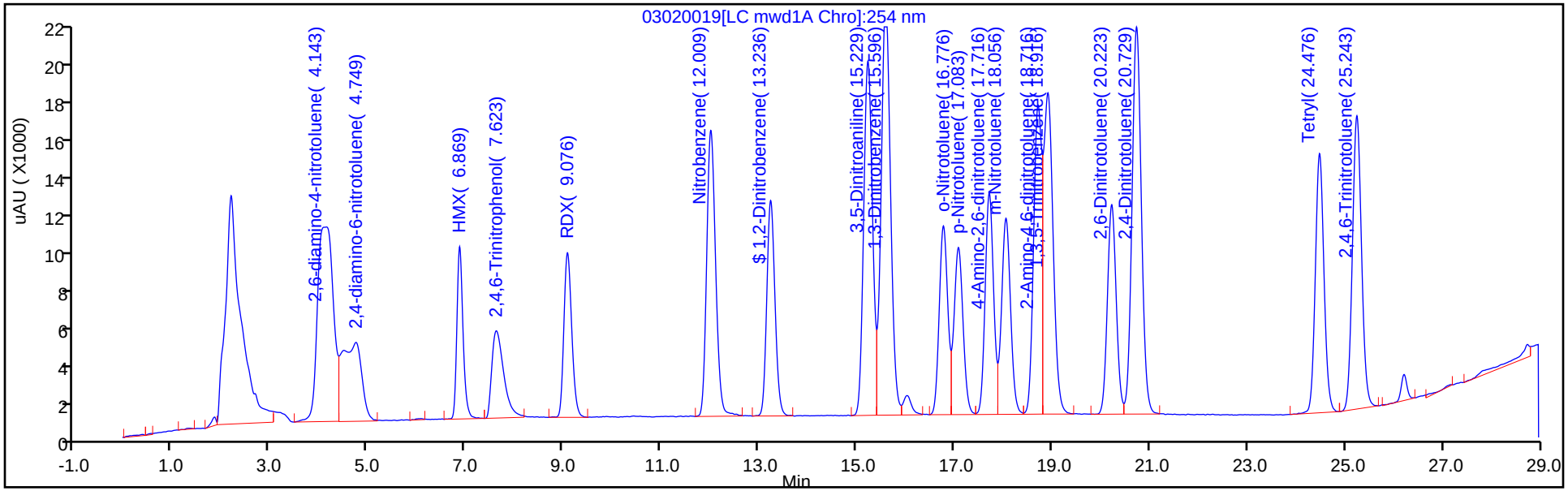
Report Date: 03-Mar-2022 12:52:29 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

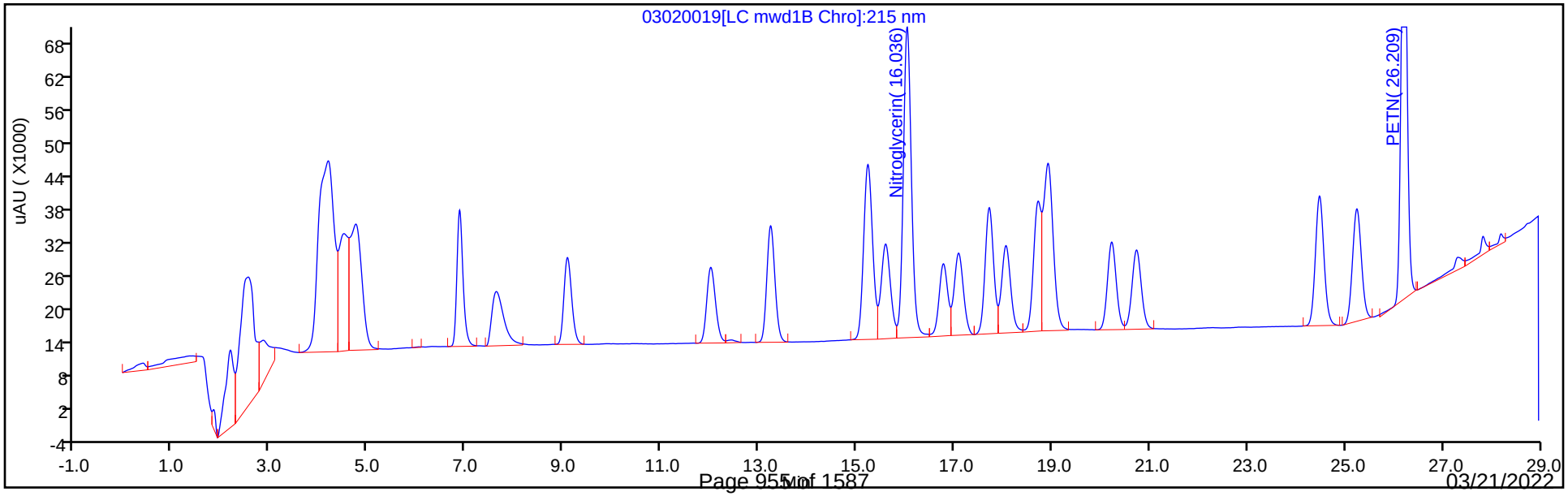
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020019.D

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.: 280-159190-1

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.: 280-159190-1

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

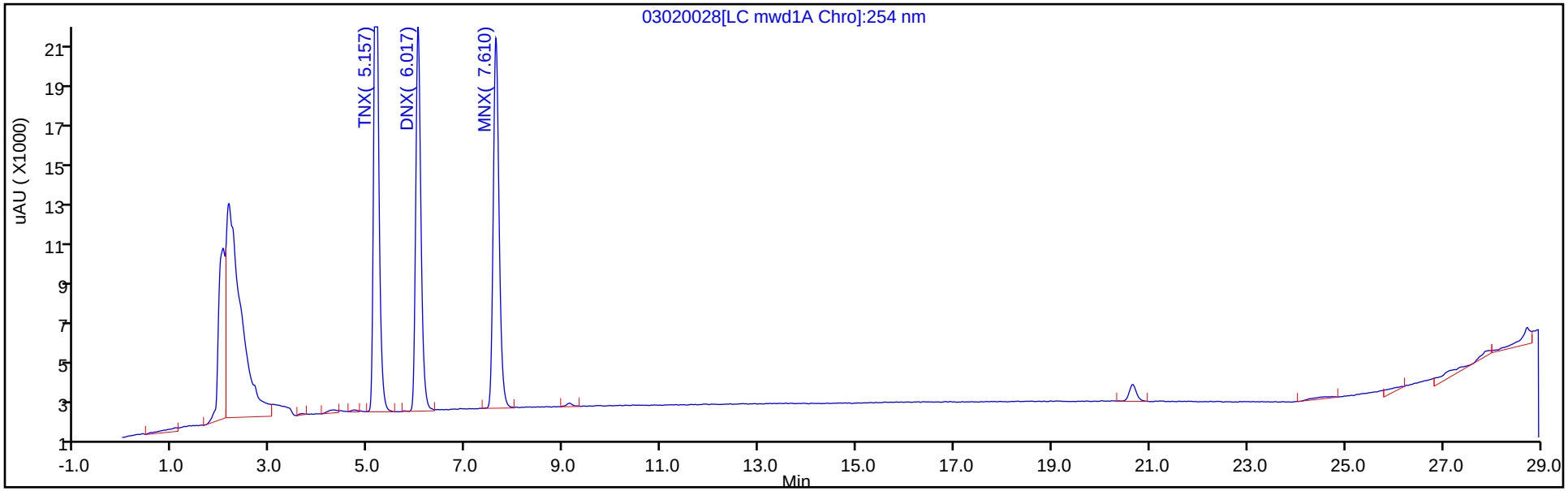
Report Date: 03-Mar-2022 13:02:44 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

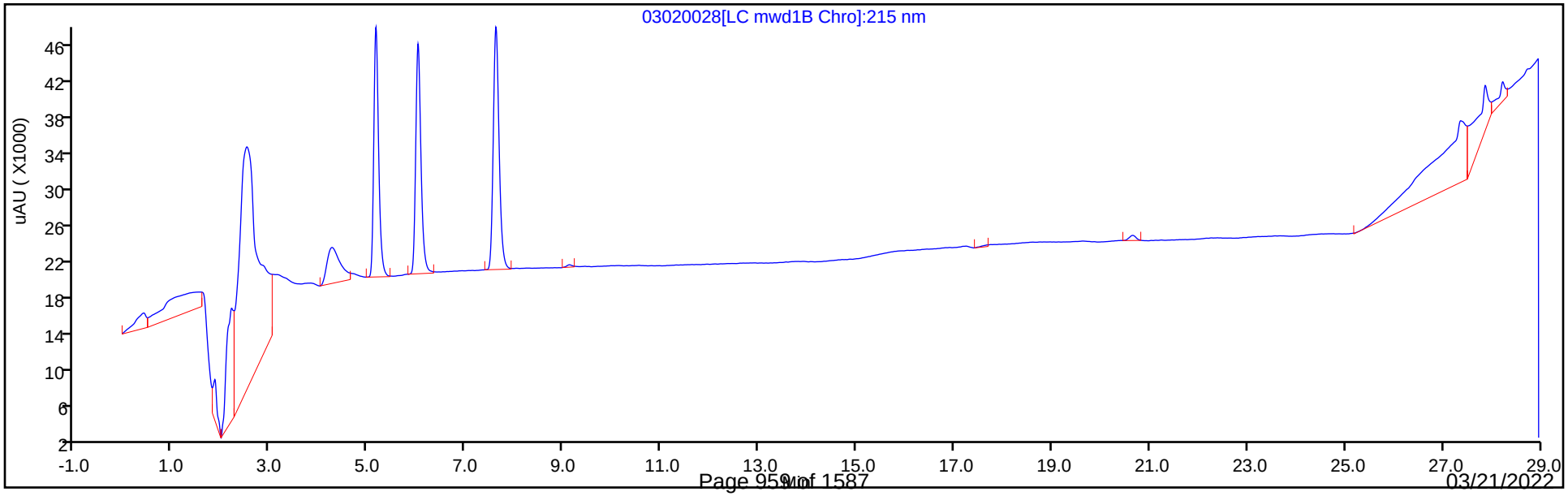
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020028.D

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.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567777/15 | Calibration Date: 03/04/2022 21:27

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: 03040015.D | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	166135	164000		247	250	-1.3	15.0
Picric acid	Ave	132885	150540		283	250	13.3	15.0
RDX	Ave	194331	199344		256	250	2.6	15.0
Nitrobenzene	Ave	368293	387012		264	251	5.1	15.0
1,3-Dinitrobenzene	Ave	571666	584088		256	251	2.2	15.0
Nitroglycerin	Ave	122518	135038		2760	2500	10.2	15.0
2-Nitrotoluene	Ave	234672	239516		255	250	2.1	15.0
4-Nitrotoluene	Ave	210817	212802		253	251	0.9	15.0
4-Amino-2,6-dinitrotoluene	Lin2		274194		257	250	2.7	15.0
3-Nitrotoluene	Lin2		273878		258	250	3.2	15.0
2-Amino-4,6-dinitrotoluene	Ave	360536	378853		264	251	5.1	15.0
1,3,5-Trinitrobenzene	Ave	415464	432543		261	251	4.1	15.0
2,6-Dinitrotoluene	Ave	265662	274526		259	251	3.3	15.0
2,4-Dinitrotoluene	Lin2		578637		256	251	2.1	15.0
Tetryl	Ave	342171	334890		245	251	-2.1	15.0
2,4,6-Trinitrotoluene	Ave	369179	390633		266	251	5.8	15.0
PETN	Ave	129329	138743		2680	2500	7.3	15.0
1,2-Dinitrobenzene	Ave	249753	257164		257	250	3.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567777/15 Calibration Date: 03/04/2022 21:27

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: 03040015.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.95	6.81	7.11
Picric acid	8.23	8.16	8.46
RDX	9.19	9.05	9.35
Nitrobenzene	12.13	11.99	12.29
1,3-Dinitrobenzene	15.73	15.59	15.89
Nitroglycerin	16.17	16.03	16.33
2-Nitrotoluene	16.93	16.78	17.08
4-Nitrotoluene	17.23	17.09	17.39
4-Amino-2,6-dinitrotoluene	17.89	17.75	18.05
3-Nitrotoluene	18.21	18.07	18.37
2-Amino-4,6-dinitrotoluene	18.92	18.80	19.10
1,3,5-Trinitrobenzene	19.03	18.87	19.17
2,6-Dinitrotoluene	20.37	20.24	20.54
2,4-Dinitrotoluene	20.89	20.76	21.06
Tetryl	24.65	24.53	24.83
2,4,6-Trinitrotoluene	25.40	25.27	25.57
PETN	26.33	26.19	26.49
1,2-Dinitrobenzene	13.38	13.24	13.54

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040015.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 04-Mar-2022 21:27:56 ALS Bottle#: 7 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0109013-015
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 11:24:37 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: 05-Mar-2022 11:13:34

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.160	4.162	-0.002	85889	0.2500	0.2113	M
	2 2,4-diamino-6-nitrotoluene	1	4.666	4.682	-0.016	22569	0.2500	0.0924	M
	5 HMX	1	6.946	6.955	-0.009	41000	0.2500	0.2468	
	7 2,4,6-Trinitrophenol	1	8.233	8.309	-0.076	37635	0.2500	0.2832	
	8 RDX	1	9.186	9.195	-0.009	49836	0.2500	0.2564	
	9 Nitrobenzene	1	12.126	12.135	-0.009	97140	0.2510	0.2638	
$	10 1,2-Dinitrobenzene	1	13.379	13.388	-0.009	64291	0.2500	0.2574	
	11 3,5-Dinitroaniline	1	15.399	15.408	-0.009	104590	0.2500	0.2541	M
	12 1,3-Dinitrobenzene	1	15.733	15.735	-0.002	146314	0.2505	0.2559	M
	13 Nitroglycerin	2	16.173	16.175	-0.002	337596	2.50	2.76	
	14 o-Nitrotoluene	1	16.926	16.928	-0.002	59879	0.2500	0.2552	M
	16 p-Nitrotoluene	1	17.233	17.235	-0.002	53307	0.2505	0.2529	M
	17 4-Amino-2,6-dinitrotoluene	1	17.886	17.902	-0.016	68617	0.2503	0.2570	M
	18 m-Nitrotoluene	1	18.206	18.215	-0.009	68538	0.2503	0.2584	M
	19 2-Amino-4,6-dinitrotoluene	1	18.919	18.948	-0.029	95092	0.2510	0.2638	M
	20 1,3,5-Trinitrobenzene	1	19.026	19.022	0.004	108352	0.2505	0.2608	M
	21 2,6-Dinitrotoluene	1	20.373	20.388	-0.015	68906	0.2510	0.2594	
	22 2,4-Dinitrotoluene	1	20.886	20.909	-0.023	145238	0.2510	0.2564	
	23 Tetryl	1	24.653	24.682	-0.029	83890	0.2505	0.2452	
	24 2,4,6-Trinitrotoluene	1	25.400	25.415	-0.015	98049	0.2510	0.2656	
	25 PETN	2	26.326	26.342	-0.016	346858	2.50	2.68	

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

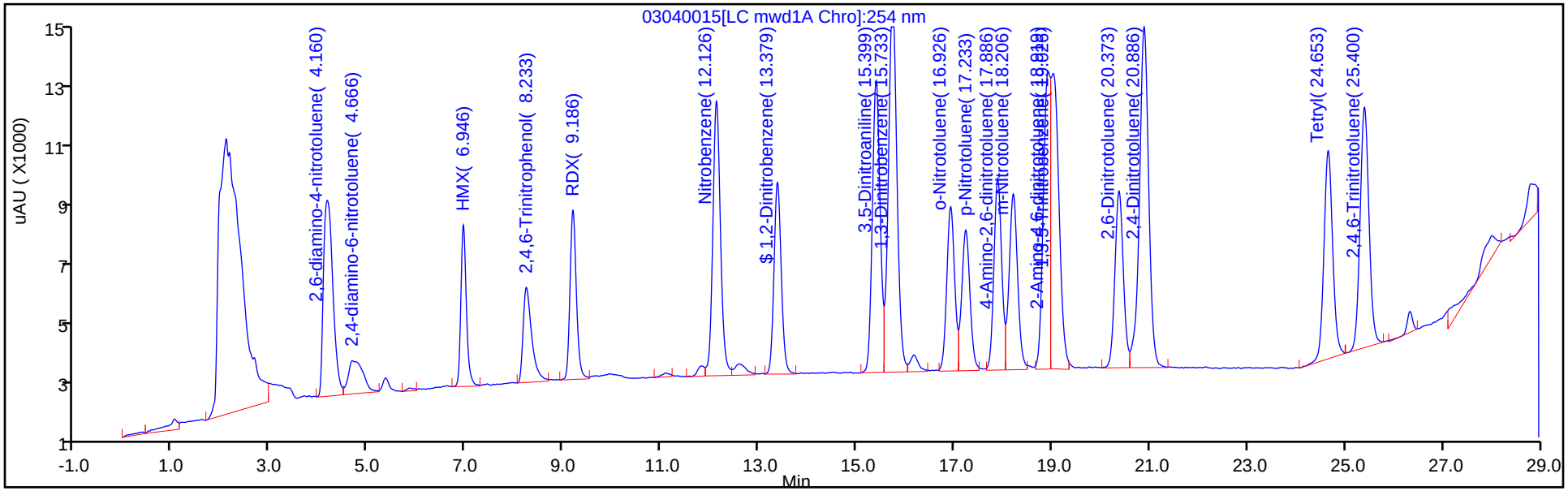
Report Date: 05-Mar-2022 11:24:38 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

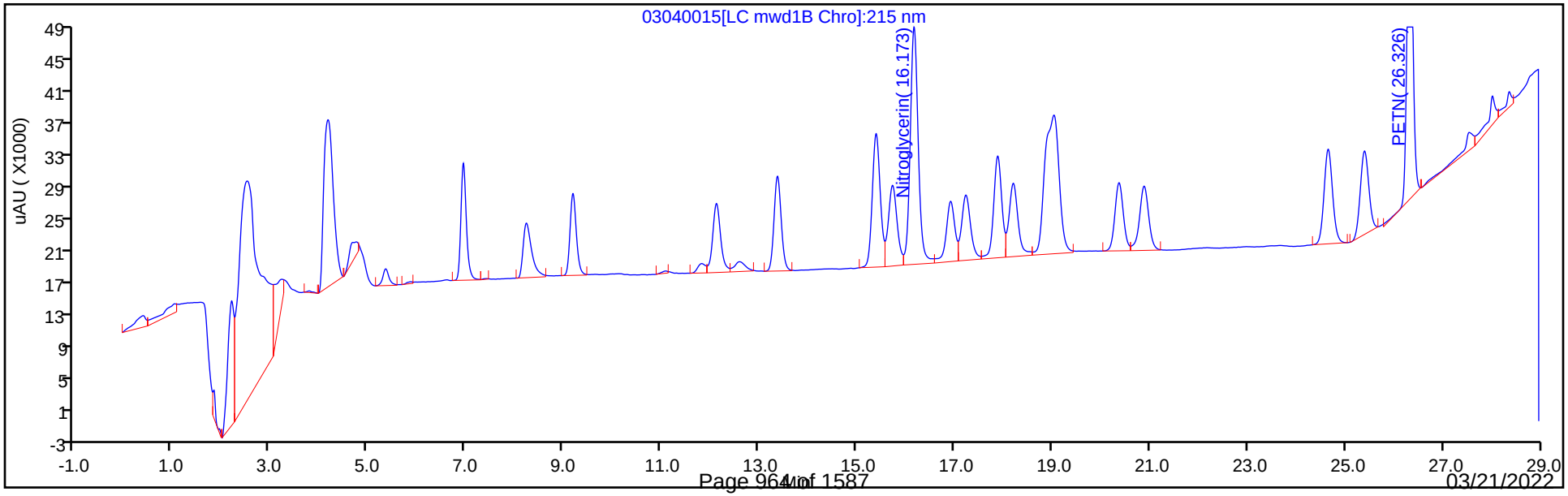
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040015.D

Injection Date:	04-Mar-2022 21:27:56	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	15
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

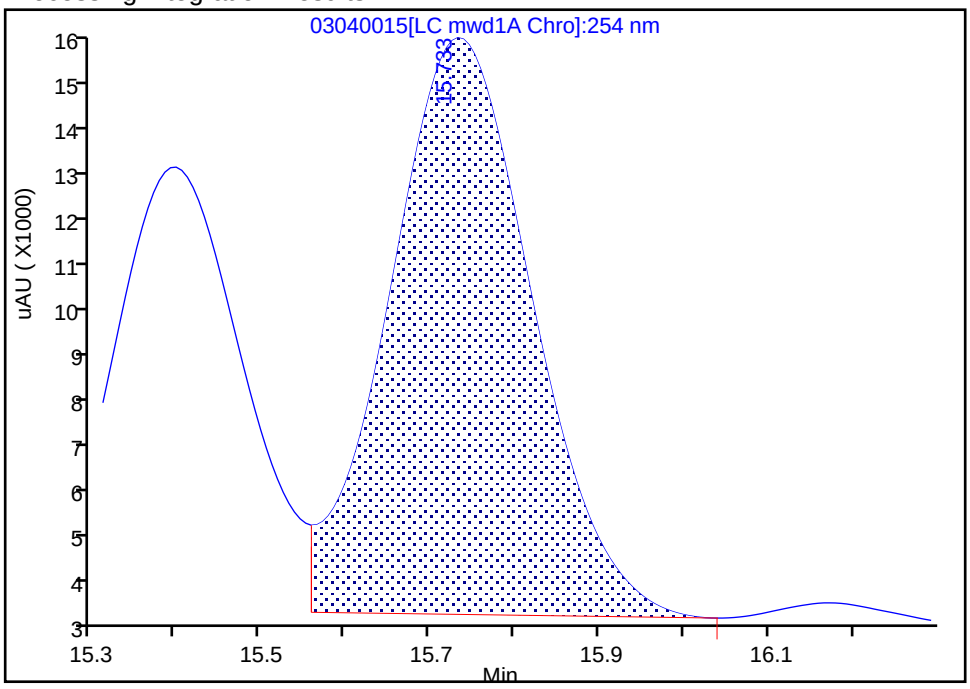
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040015.D
Injection Date: 04-Mar-2022 21:27:56 Instrument ID: CHHPLC_X5
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

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

Signal: 1

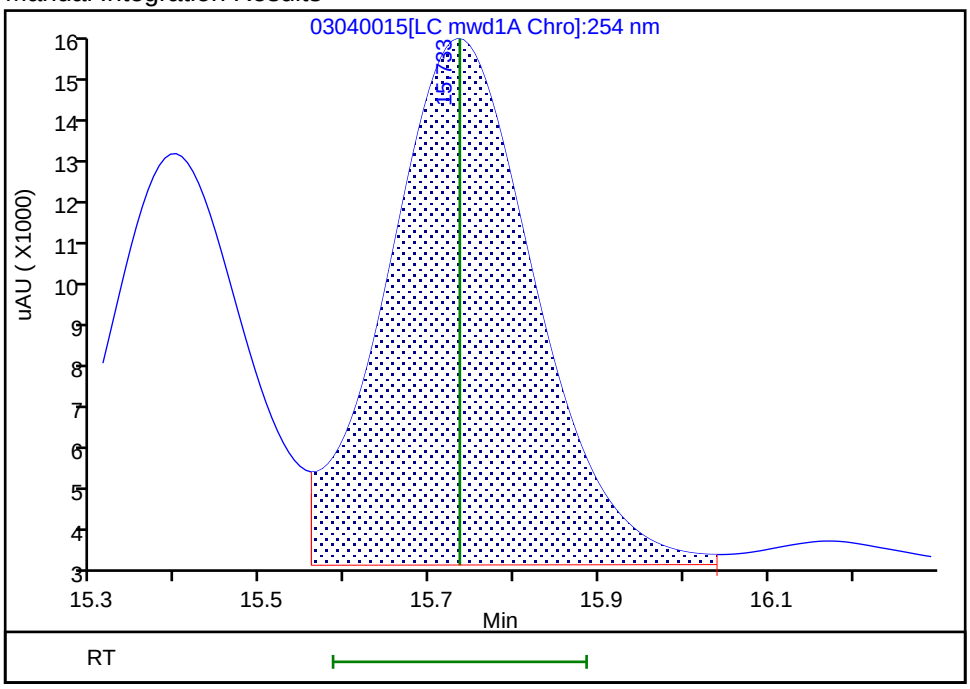
Processing Integration Results

RT: 15.73
Area: 137818
Amount: 0.241081
Amount Units: ug/ml



Manual Integration Results

RT: 15.73
Area: 146314
Amount: 0.255943
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:12:58
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

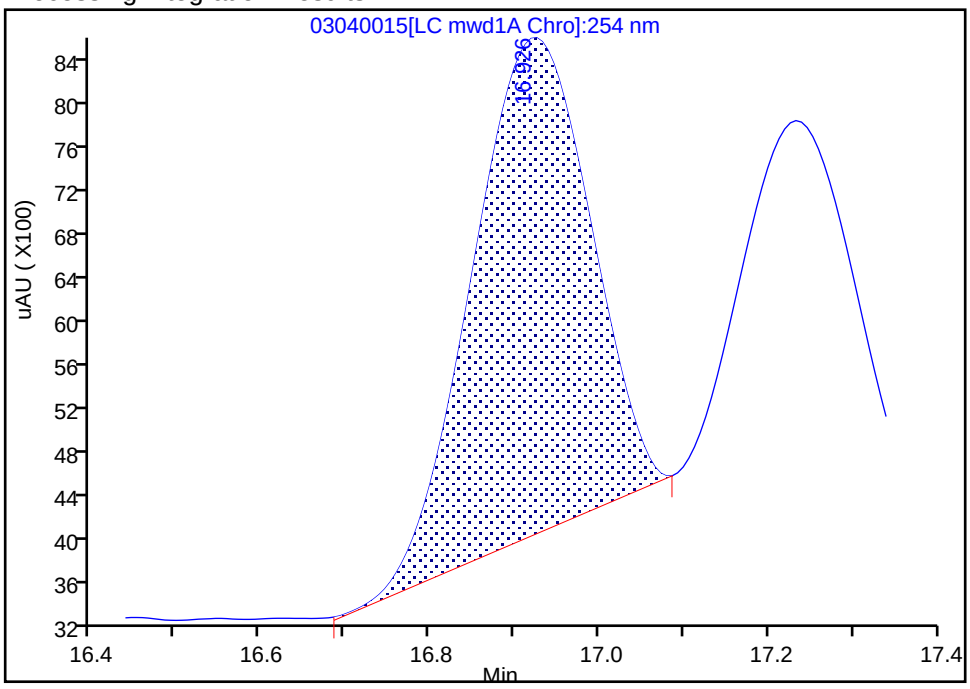
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040015.D				
Injection Date:	04-Mar-2022 21:27:56	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

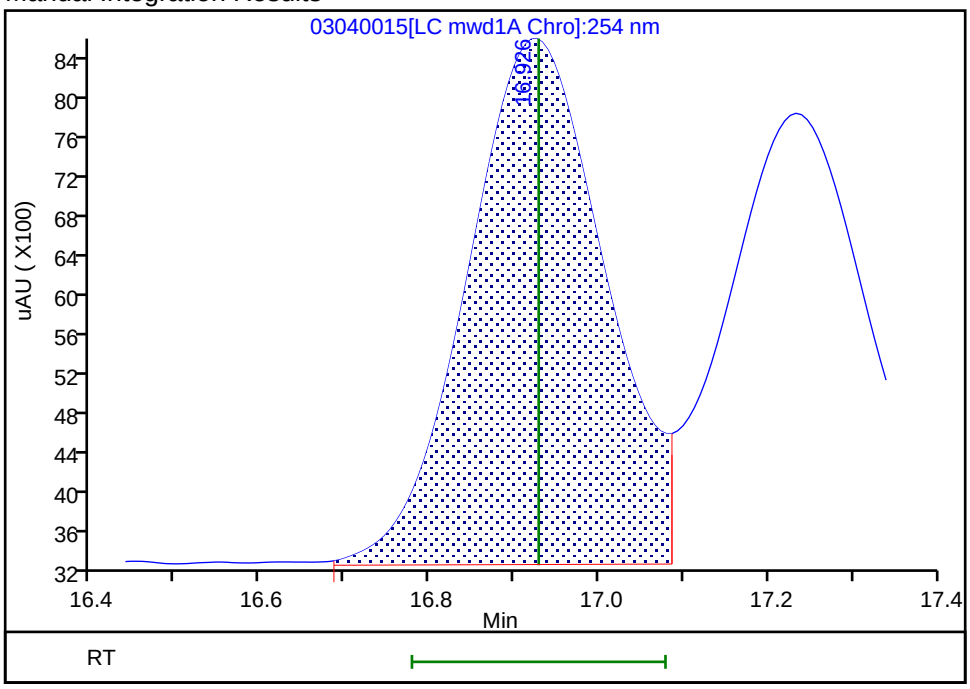
Processing Integration Results

RT: 16.93
Area: 43979
Amount: 0.187406
Amount Units: ug/ml



Manual Integration Results

RT: 16.93
Area: 59879
Amount: 0.255160
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:12:58
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

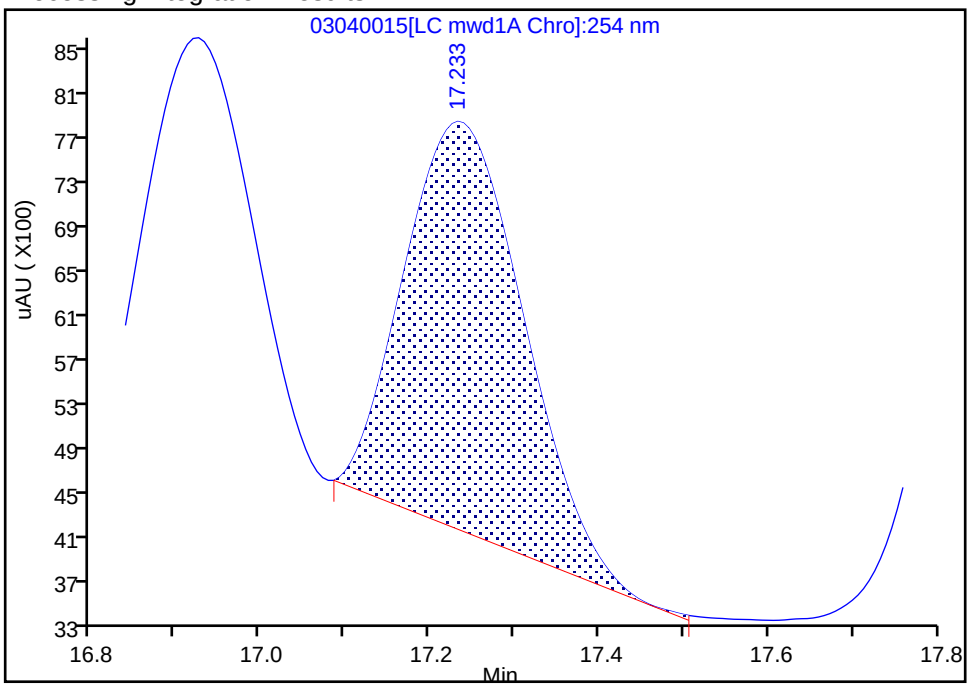
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040015.D				
Injection Date:	04-Mar-2022 21:27:56	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

16 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

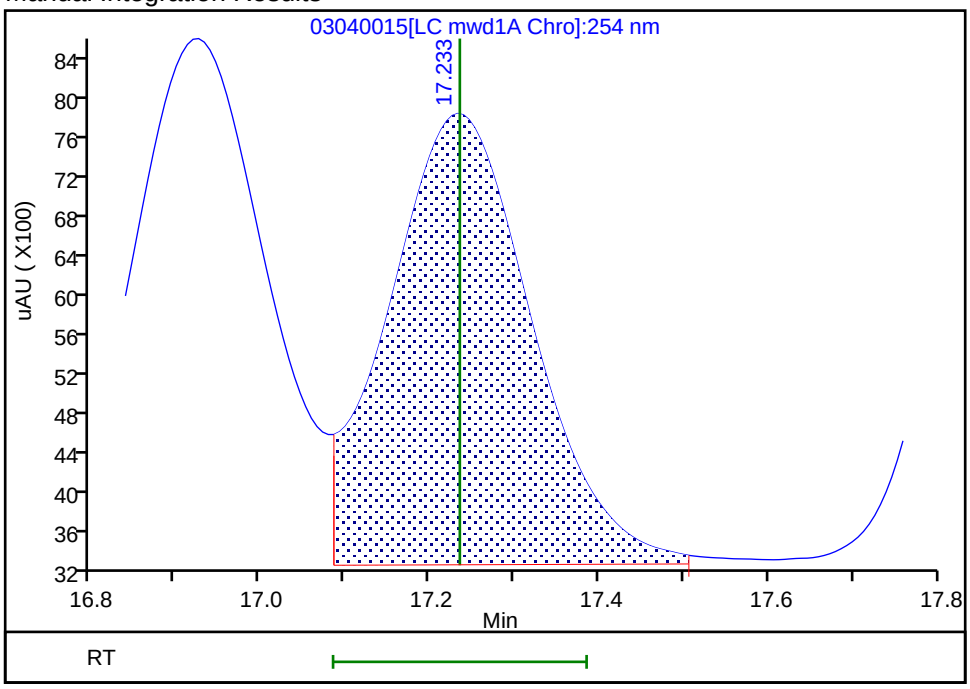
Processing Integration Results

RT: 17.23
Area: 36259
Amount: 0.171993
Amount Units: ug/ml



Manual Integration Results

RT: 17.23
Area: 53307
Amount: 0.252860
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:12:58
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

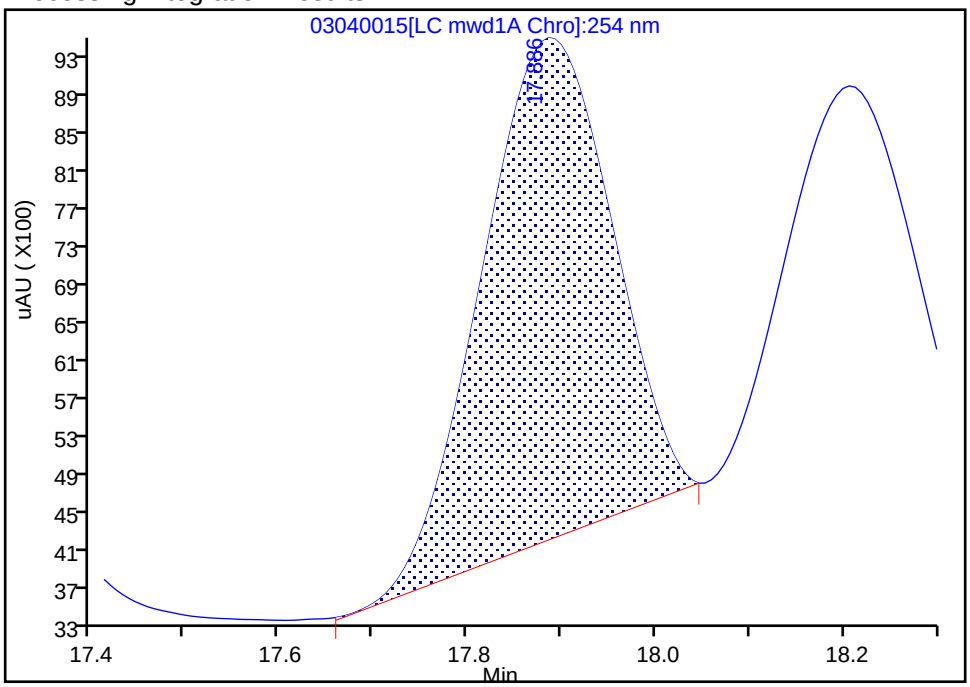
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040015.D				
Injection Date:	04-Mar-2022 21:27:56	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

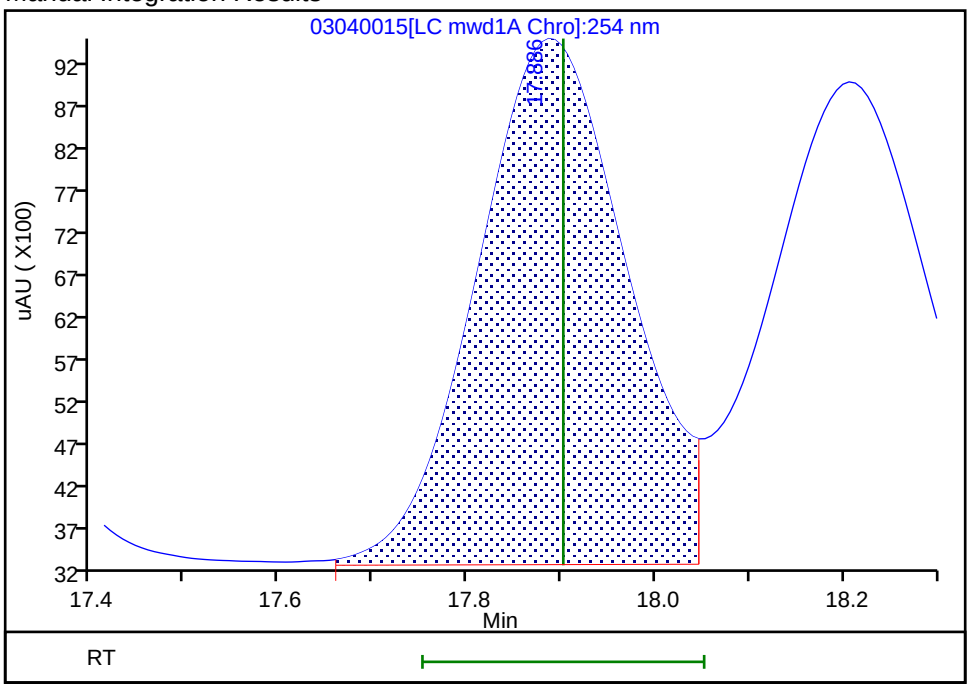
Processing Integration Results

RT: 17.89
Area: 51124
Amount: 0.191536
Amount Units: ug/ml



Manual Integration Results

RT: 17.89
Area: 68617
Amount: 0.256993
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:12:58
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

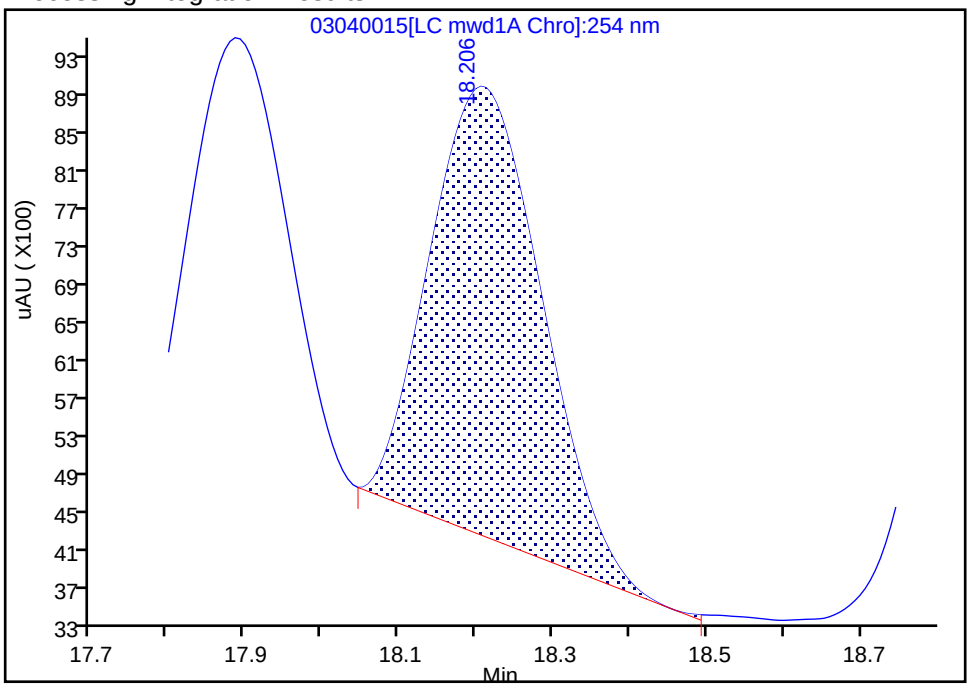
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040015.D				
Injection Date:	04-Mar-2022 21:27:56	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

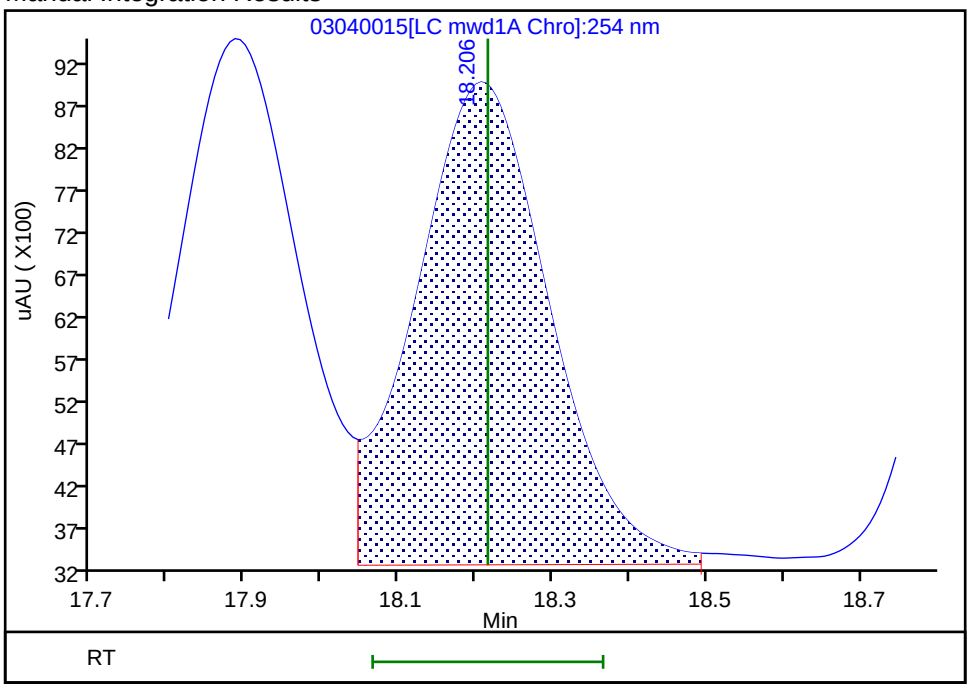
Processing Integration Results

RT: 18.21
Area: 47875
Amount: 0.180692
Amount Units: ug/ml



Manual Integration Results

RT: 18.21
Area: 68538
Amount: 0.258372
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:12:58
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

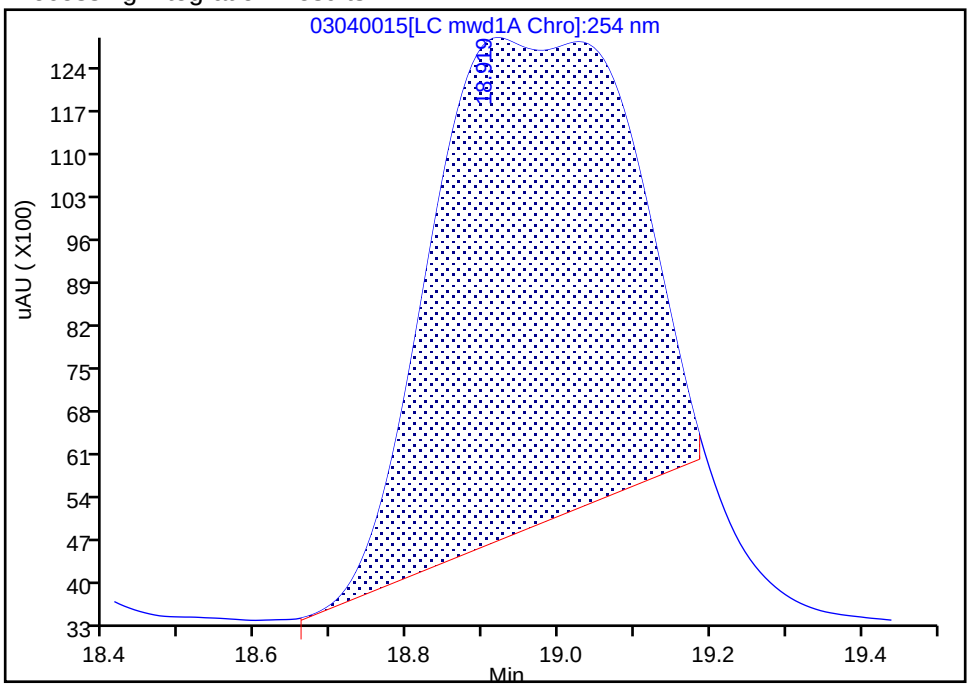
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040015.D				
Injection Date:	04-Mar-2022 21:27:56	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

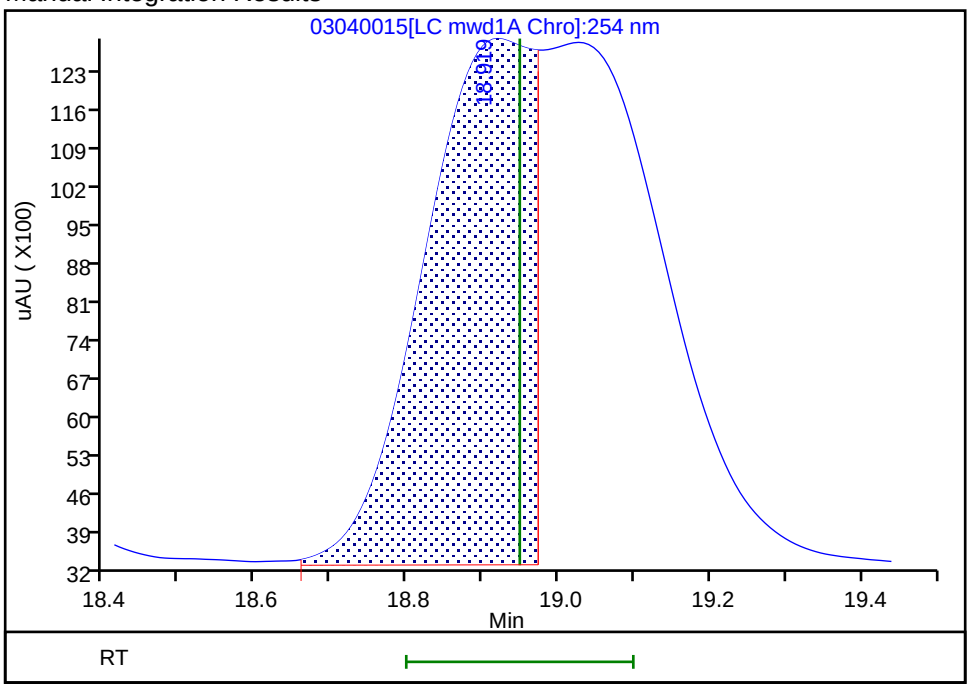
Processing Integration Results

RT: 18.92
Area: 149313
Amount: 0.414142
Amount Units: ug/ml



Manual Integration Results

RT: 18.92
Area: 95092
Amount: 0.263752
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:13:12
Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

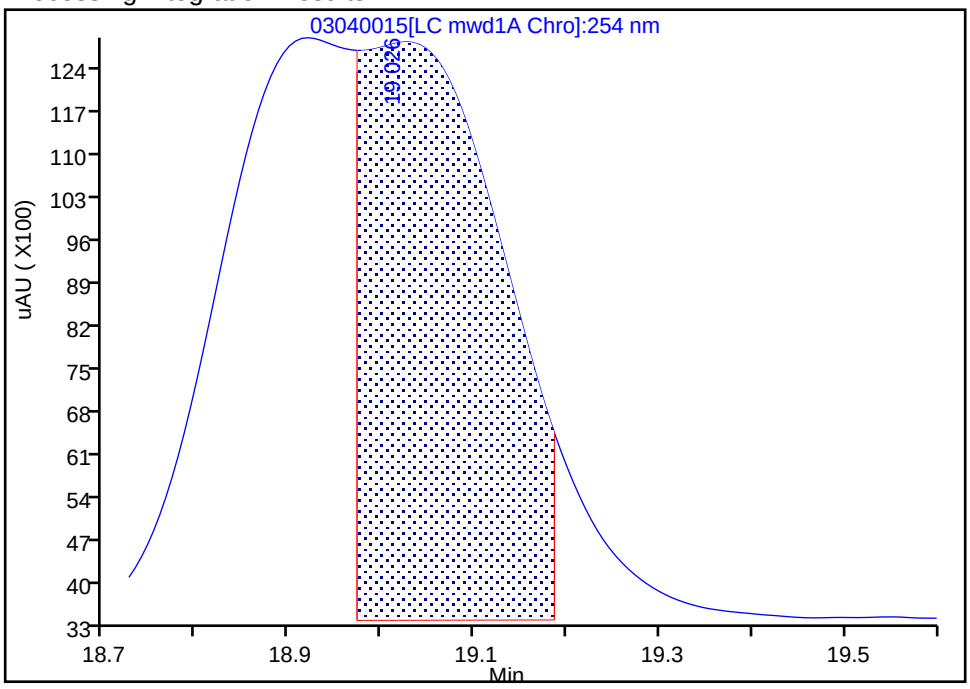
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040015.D				
Injection Date:	04-Mar-2022 21:27:56	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

20 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

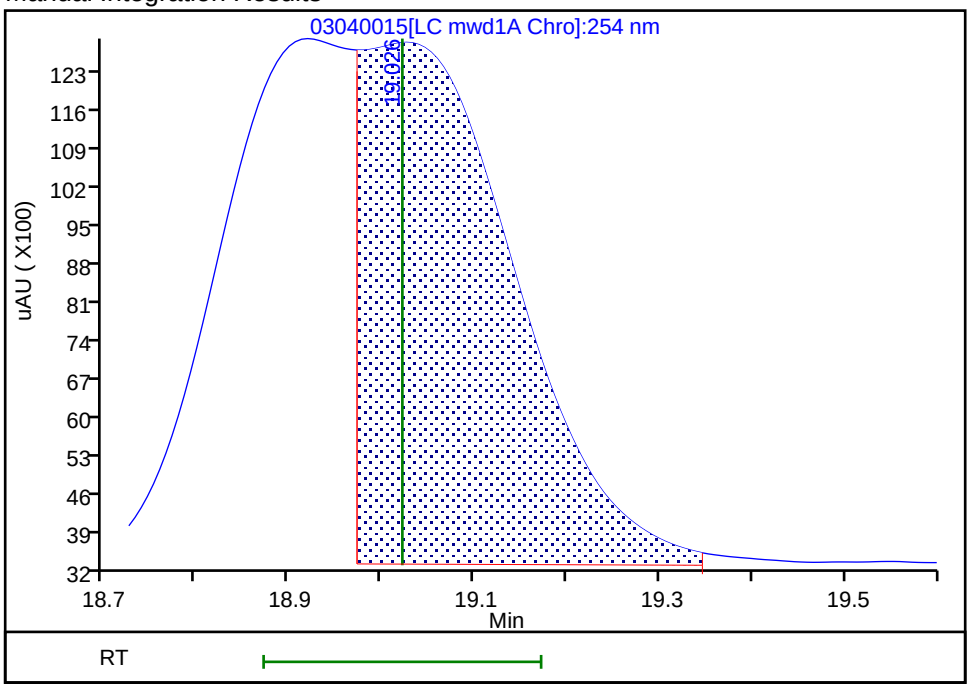
Processing Integration Results

RT: 19.03
Area: 97663
Amount: 0.235070
Amount Units: ug/ml



Manual Integration Results

RT: 19.03
Area: 108352
Amount: 0.260797
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:13:32
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567777/16 Calibration Date: 03/04/2022 22:03

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: 03040016.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	354070	325063		230	250	-8.2	15.0
DNX	Ave	278639	248072		223	250	-11.0	15.0
MNX	Ave	250081	225844		263	292	-9.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567777/16 Calibration Date: 03/04/2022 22:03

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: 03040016.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.19	5.03	5.33
DNX	6.07	5.90	6.20
MNX	7.67	7.50	7.80

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040016.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	04-Mar-2022 22:03:06	ALS Bottle#:	8	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0109013-016				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 11:24:38	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				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.193	5.183	0.010	81347	0.2503	0.2297	
4 DNX	1	6.066	6.049	0.017	62080	0.2503	0.2228	
6 MNX	1	7.673	7.649	0.024	65890	0.2918	0.2635	

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

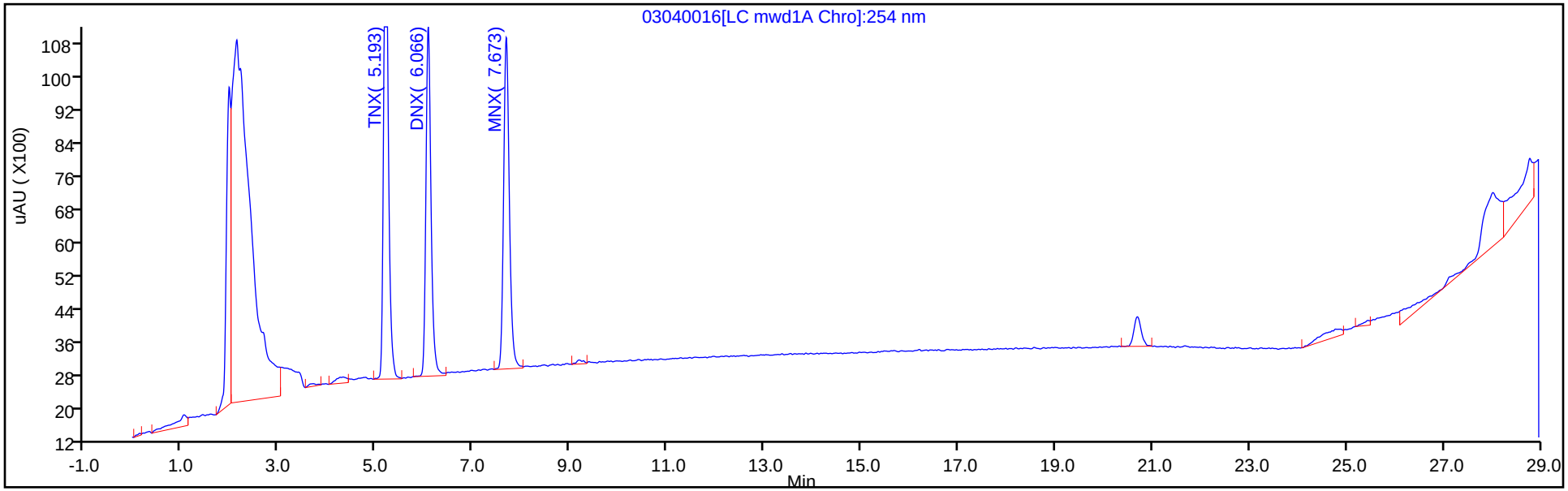
Report Date: 05-Mar-2022 11:24:39 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

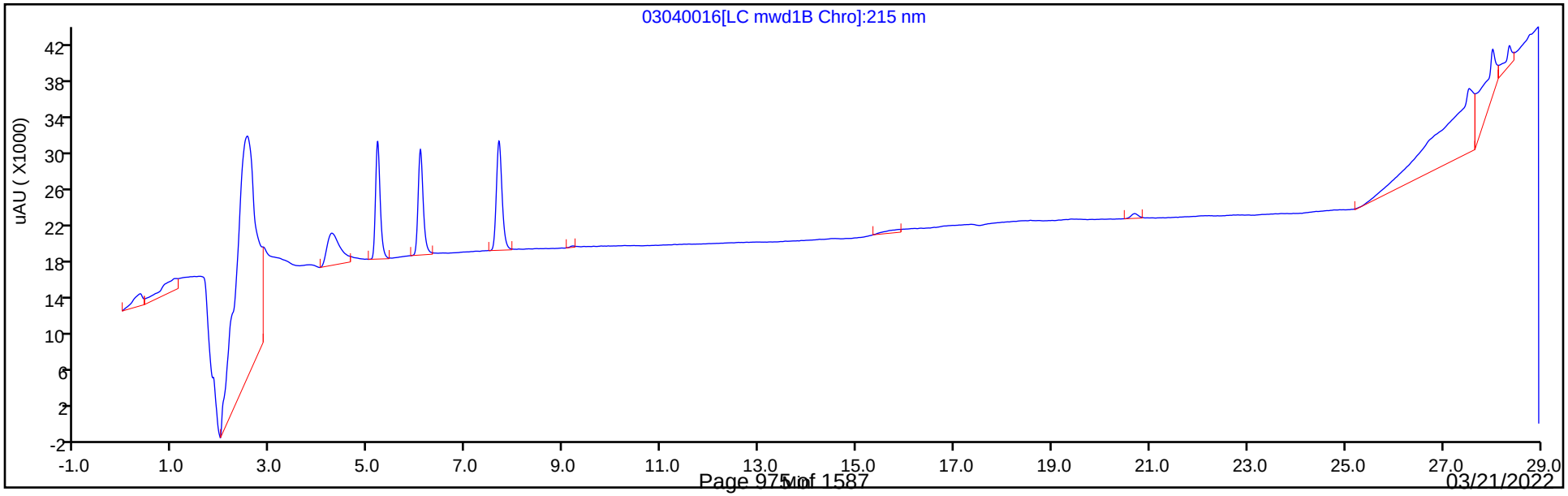
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040016.D

Injection Date:	04-Mar-2022 22:03:06	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	16
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.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567777/27 Calibration Date: 03/05/2022 04:29

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: 03040027.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	166135	169180		255	250	1.8	15.0
Picric acid	Ave	132885	153660		289	250	15.6*	15.0
RDX	Ave	194331	199716		257	250	2.8	15.0
Nitrobenzene	Ave	368293	398355		271	251	8.2	15.0
1,3-Dinitrobenzene	Ave	571666	584255		256	251	2.2	15.0
Nitroglycerin	Ave	122518	133960		2730	2500	9.3	15.0
2-Nitrotoluene	Ave	234672	231356		246	250	-1.4	15.0
4-Nitrotoluene	Ave	210817	210200		250	251	-0.3	15.0
4-Amino-2,6-dinitrotoluene	Lin2		272476		255	250	2.1	15.0
3-Nitrotoluene	Lin2		266222		251	250	0.4	15.0
2-Amino-4,6-dinitrotoluene	Ave	360536	376582		262	251	4.5	15.0
1,3,5-Trinitrobenzene	Ave	415464	402088		242	251	-3.2	15.0
2,6-Dinitrotoluene	Ave	265662	273231		258	251	2.8	15.0
2,4-Dinitrotoluene	Lin2		577243		256	251	1.9	15.0
Tetryl	Ave	342171	339756		249	251	-0.7	15.0
2,4,6-Trinitrotoluene	Ave	369179	395849		269	251	7.2	15.0
PETN	Ave	129329	139224		2690	2500	7.7	15.0
1,2-Dinitrobenzene	Ave	249753	261736		262	250	4.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567777/27 Calibration Date: 03/05/2022 04:29

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: 03040027.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.95	6.81	7.11
Picric acid	8.22	8.16	8.46
RDX	9.20	9.05	9.35
Nitrobenzene	12.13	11.99	12.29
1,3-Dinitrobenzene	15.74	15.59	15.89
Nitroglycerin	16.18	16.03	16.33
2-Nitrotoluene	16.93	16.78	17.08
4-Nitrotoluene	17.24	17.09	17.39
4-Amino-2,6-dinitrotoluene	17.90	17.75	18.05
3-Nitrotoluene	18.22	18.07	18.37
2-Amino-4,6-dinitrotoluene	18.93	18.80	19.10
1,3,5-Trinitrobenzene	19.04	18.87	19.17
2,6-Dinitrotoluene	20.38	20.24	20.54
2,4-Dinitrotoluene	20.90	20.76	21.06
Tetryl	24.65	24.53	24.83
2,4,6-Trinitrotoluene	25.40	25.27	25.57
PETN	26.32	26.19	26.49
1,2-Dinitrobenzene	13.38	13.24	13.54

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040027.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-Mar-2022 04:29:08 ALS Bottle#: 7 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0109013-027
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 11:24:32 Calib Date: 03-Mar-2022 07:19:48
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1616

First Level Reviewer: zhangji Date: 05-Mar-2022 09:58:17

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.170	4.162	0.008	79892	0.2500	0.1966	
	2 2,4-diamino-6-nitrotoluene	1	4.676	4.682	-0.006	18409	0.2500	0.0740	
	5 HMX	1	6.950	6.955	-0.005	42295	0.2500	0.2546	
	7 2,4,6-Trinitrophenol	1	8.223	8.309	-0.086	38415	0.2500	0.2891	
	8 RDX	1	9.196	9.195	0.001	49929	0.2500	0.2569	
	9 Nitrobenzene	1	12.130	12.135	-0.005	99987	0.2510	0.2715	
$	10 1,2-Dinitrobenzene	1	13.376	13.388	-0.012	65434	0.2500	0.2620	
	11 3,5-Dinitroaniline	1	15.396	15.408	-0.012	104747	0.2500	0.2545	
	12 1,3-Dinitrobenzene	1	15.736	15.735	0.001	146356	0.2505	0.2560	
	13 Nitroglycerin	2	16.176	16.175	0.001	334901	2.50	2.73	
	14 o-Nitrotoluene	1	16.930	16.928	0.002	57839	0.2500	0.2465	M
	16 p-Nitrotoluene	1	17.243	17.235	0.008	52655	0.2505	0.2498	M
	17 4-Amino-2,6-dinitrotoluene	1	17.896	17.902	-0.006	68187	0.2503	0.2554	M
	18 m-Nitrotoluene	1	18.216	18.215	0.001	66622	0.2503	0.2512	M
	19 2-Amino-4,6-dinitrotoluene	1	18.930	18.948	-0.018	94522	0.2510	0.2622	M
	20 1,3,5-Trinitrobenzene	1	19.036	19.022	0.014	100723	0.2505	0.2424	M
	21 2,6-Dinitrotoluene	1	20.383	20.388	-0.005	68581	0.2510	0.2582	
	22 2,4-Dinitrotoluene	1	20.896	20.909	-0.013	144888	0.2510	0.2557	
	23 Tetryl	1	24.650	24.682	-0.032	85109	0.2505	0.2487	
	24 2,4,6-Trinitrotoluene	1	25.396	25.415	-0.019	99358	0.2510	0.2691	
	25 PETN	2	26.316	26.342	-0.026	348060	2.50	2.69	

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

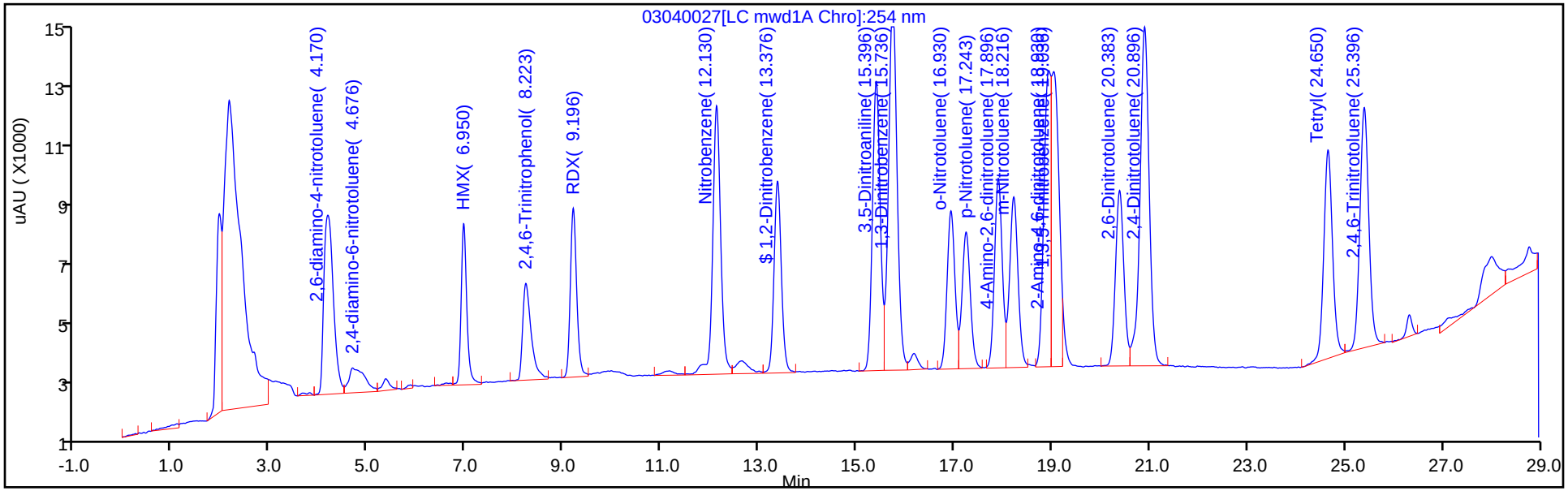
Report Date: 05-Mar-2022 11:24:33 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

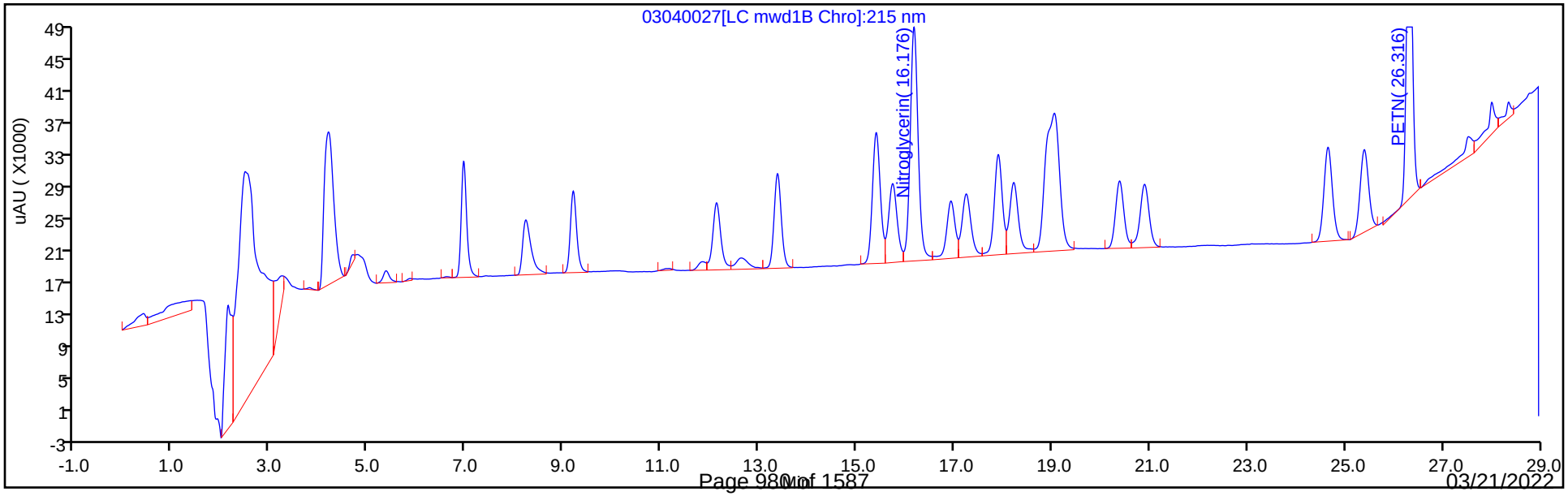
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040027.D

Injection Date:	05-Mar-2022 04:29:08	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	27
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

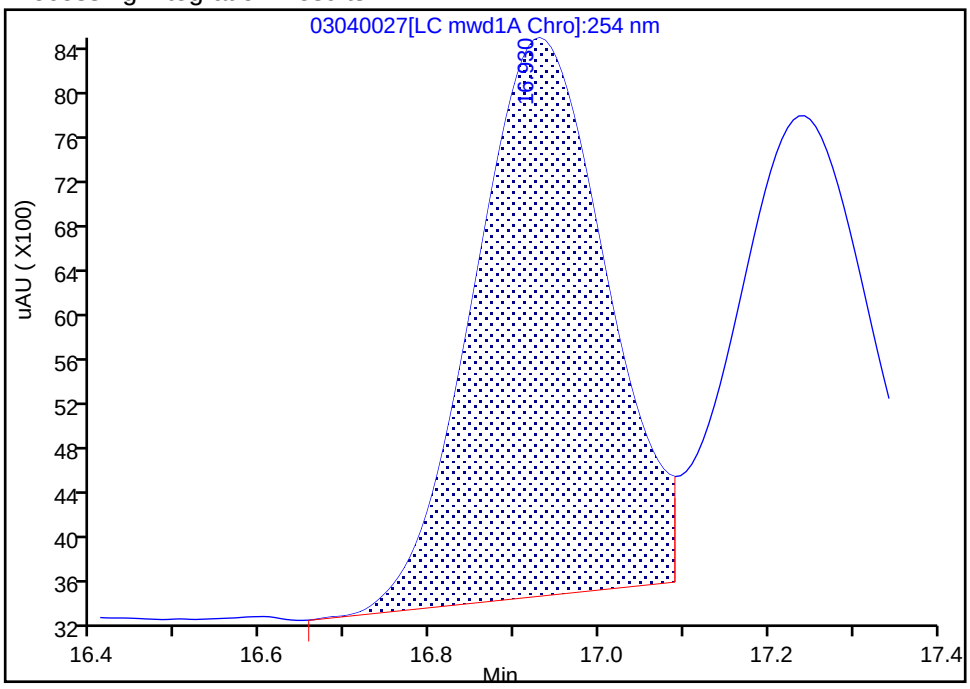
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040027.D				
Injection Date:	05-Mar-2022 04:29:08	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

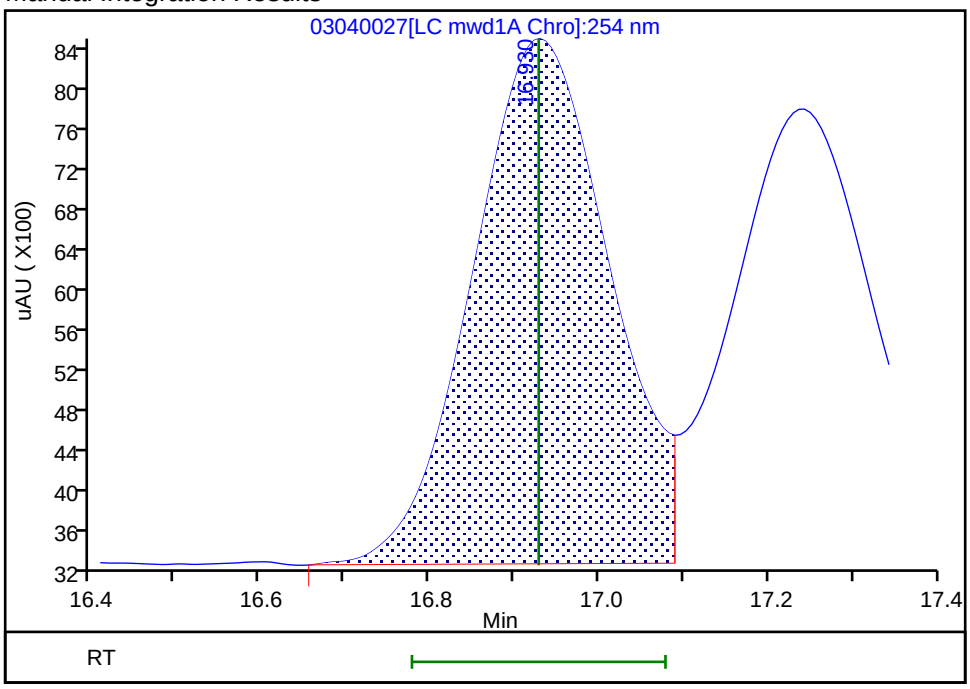
Processing Integration Results

RT: 16.93
Area: 53757
Amount: 0.229073
Amount Units: ug/ml



Manual Integration Results

RT: 16.93
Area: 57839
Amount: 0.246467
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:16:10
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

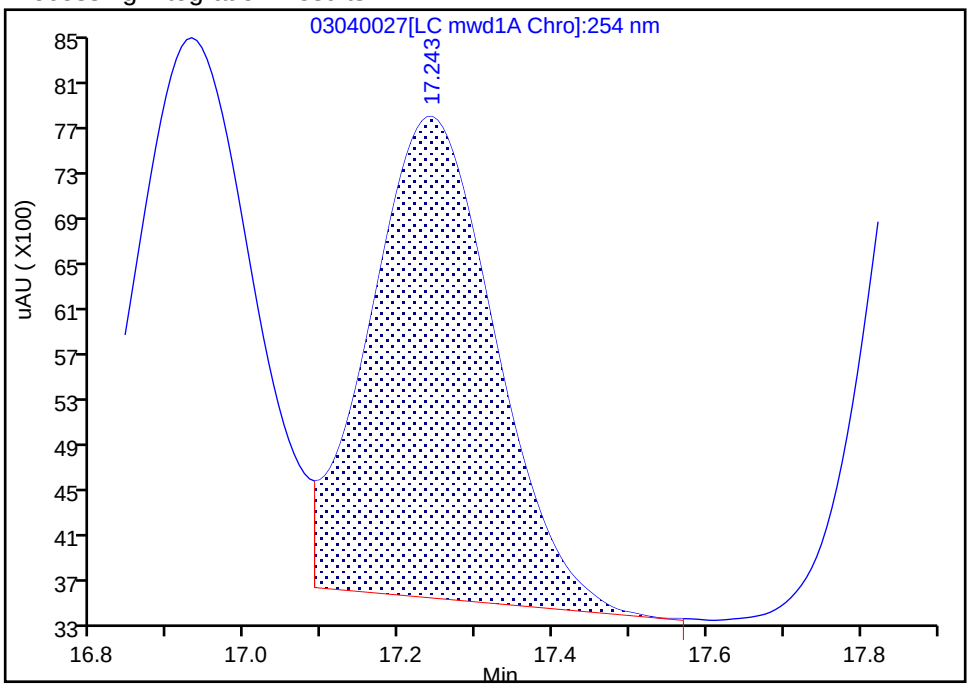
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040027.D				
Injection Date:	05-Mar-2022 04:29:08	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

16 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

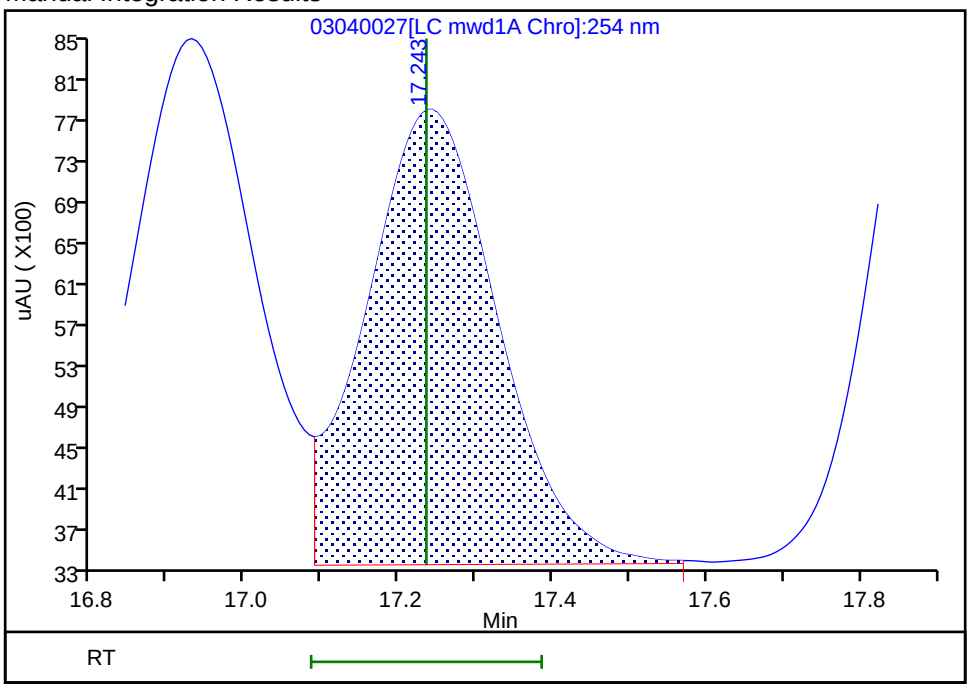
Processing Integration Results

RT: 17.24
Area: 47874
Amount: 0.227088
Amount Units: ug/ml



Manual Integration Results

RT: 17.24
Area: 52655
Amount: 0.249767
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:16:10
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

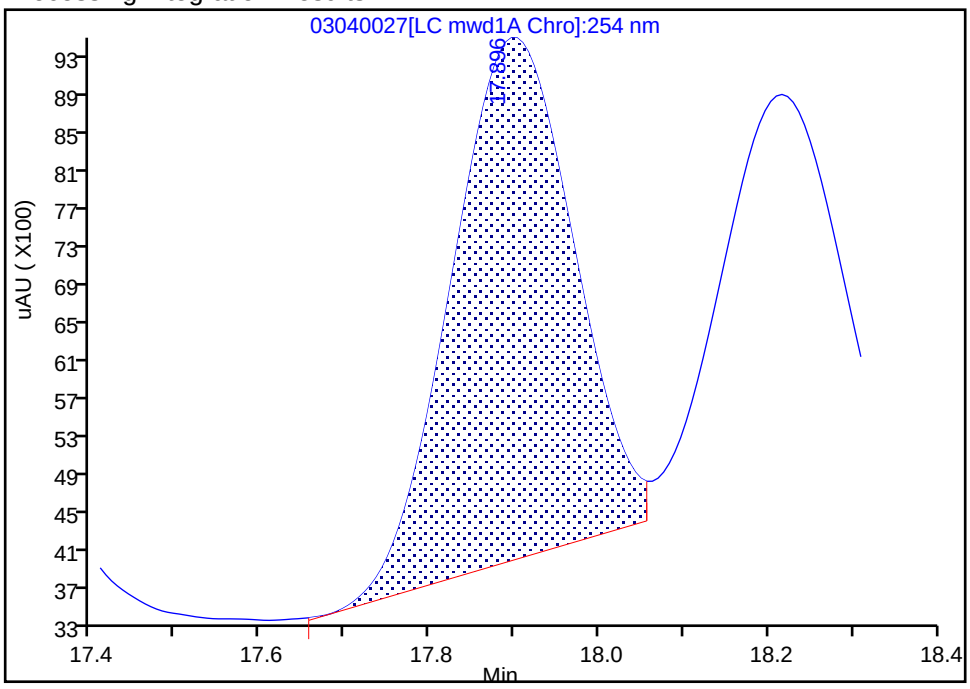
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040027.D				
Injection Date:	05-Mar-2022 04:29:08	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

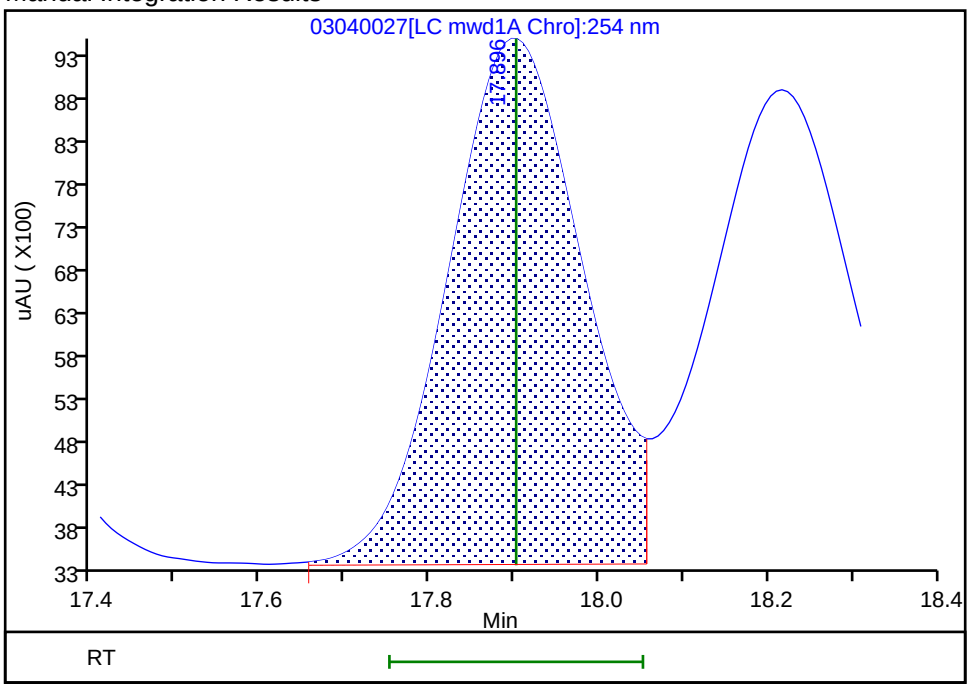
Processing Integration Results

RT: 17.90
Area: 55515
Amount: 0.207967
Amount Units: ug/ml



Manual Integration Results

RT: 17.90
Area: 68187
Amount: 0.255384
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:16:10
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

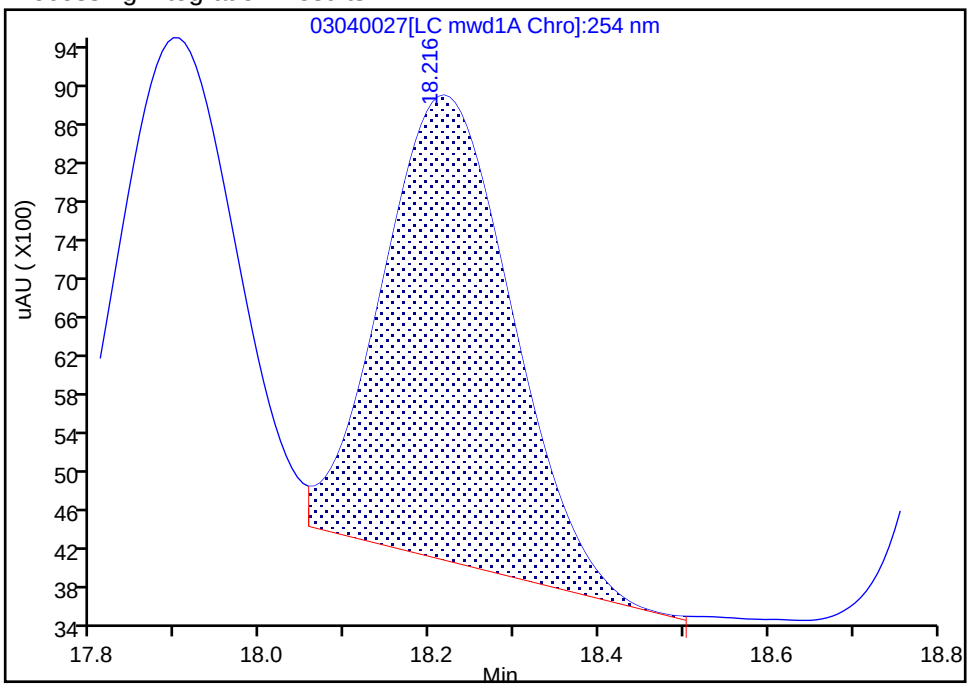
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040027.D				
Injection Date:	05-Mar-2022 04:29:08	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

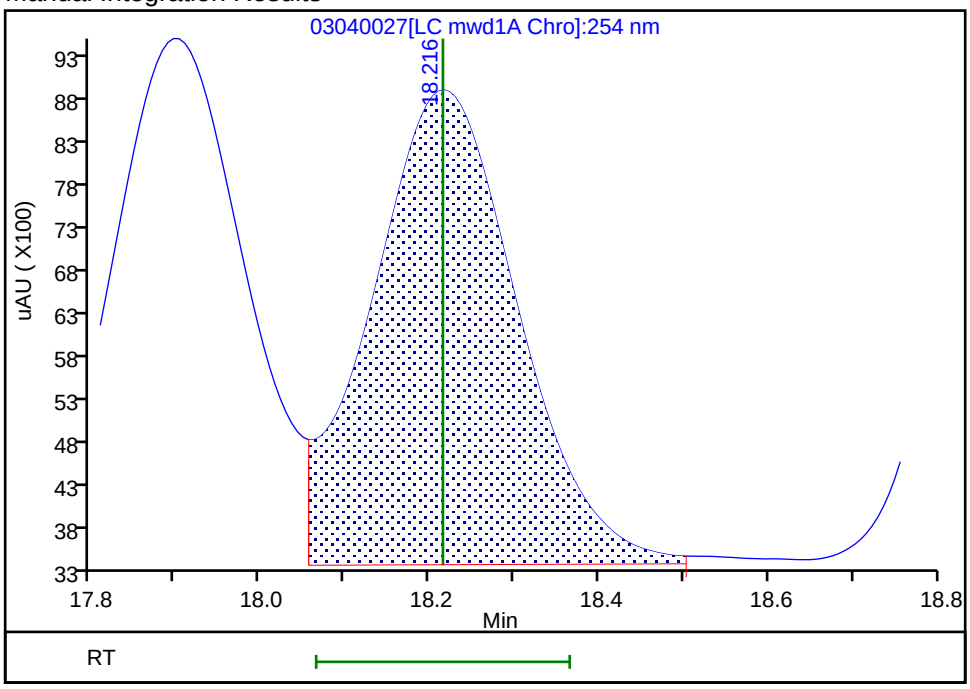
Processing Integration Results

RT: 18.22
Area: 51975
Amount: 0.196105
Amount Units: ug/ml



Manual Integration Results

RT: 18.22
Area: 66622
Amount: 0.251169
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:16:10

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

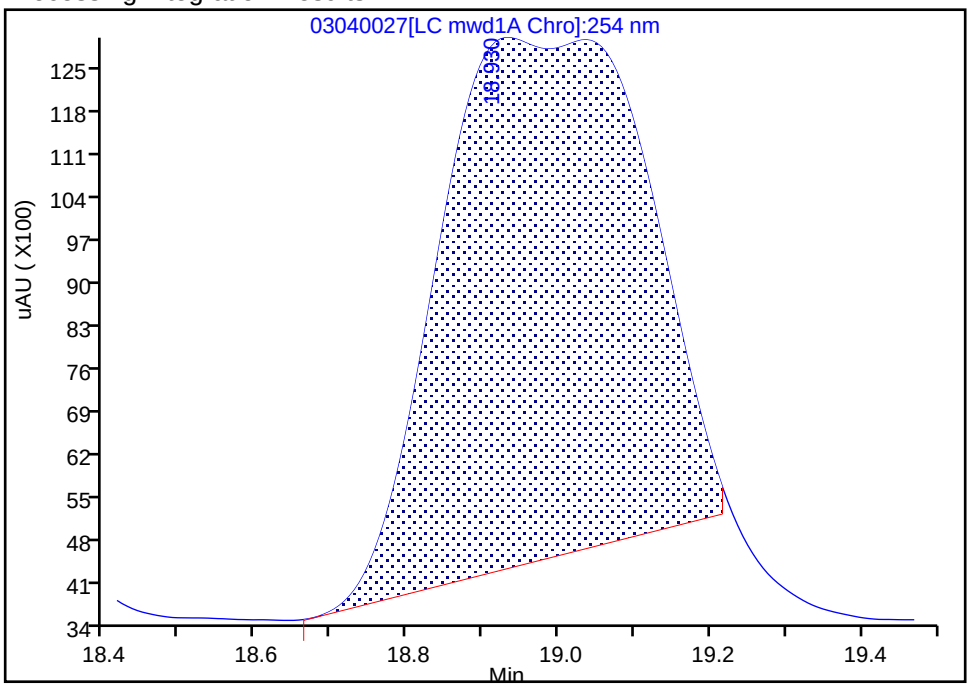
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040027.D				
Injection Date:	05-Mar-2022 04:29:08	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

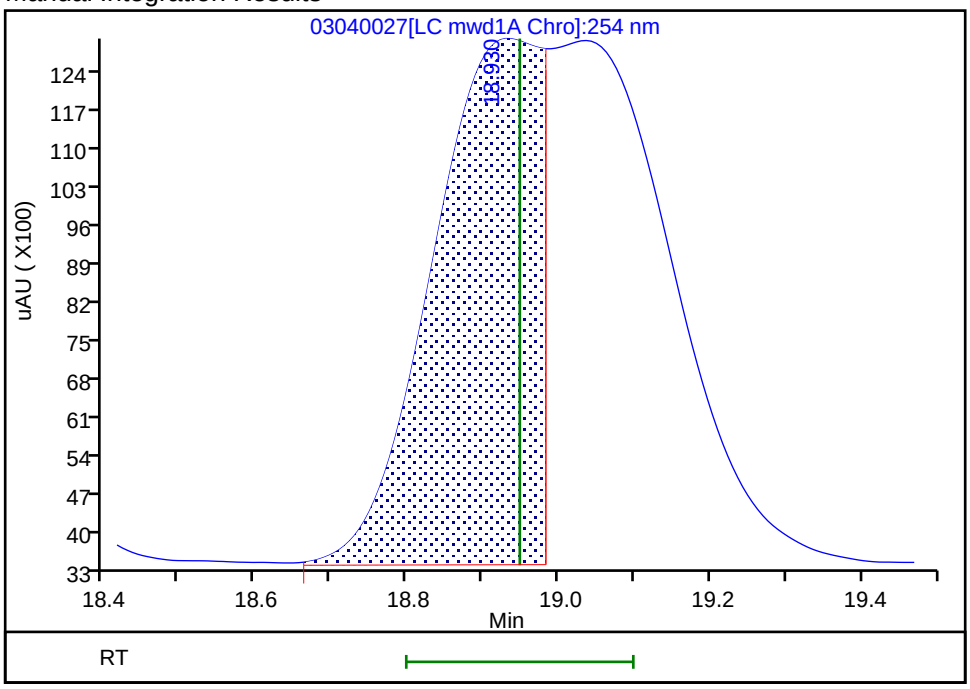
Processing Integration Results

RT: 18.93
Area: 165157
Amount: 0.458088
Amount Units: ug/ml



Manual Integration Results

RT: 18.93
Area: 94522
Amount: 0.262171
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:16:14

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567777/28 Calibration Date: 03/05/2022 05:04

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: 03040028.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	354070	319692		226	250	-9.7	15.0
DNX	Ave	278639	247728		222	250	-11.1	15.0
MNX	Ave	250081	224967		262	292	-10.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567777/28 Calibration Date: 03/05/2022 05:04

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: 03040028.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.19	5.03	5.33
DNX	6.07	5.90	6.20
MNX	7.67	7.50	7.80

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040028.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	05-Mar-2022 05:04:08	ALS Bottle#:	8	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0109013-028				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 11:24:33	Calib Date:	03-Mar-2022 07:19:48		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220302-108949.b\03020027.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1616				

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.193	5.183	0.010	80003	0.2503	0.2260	
4 DNX	1	6.066	6.049	0.017	61994	0.2503	0.2225	
6 MNX	1	7.673	7.649	0.024	65634	0.2918	0.2625	

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

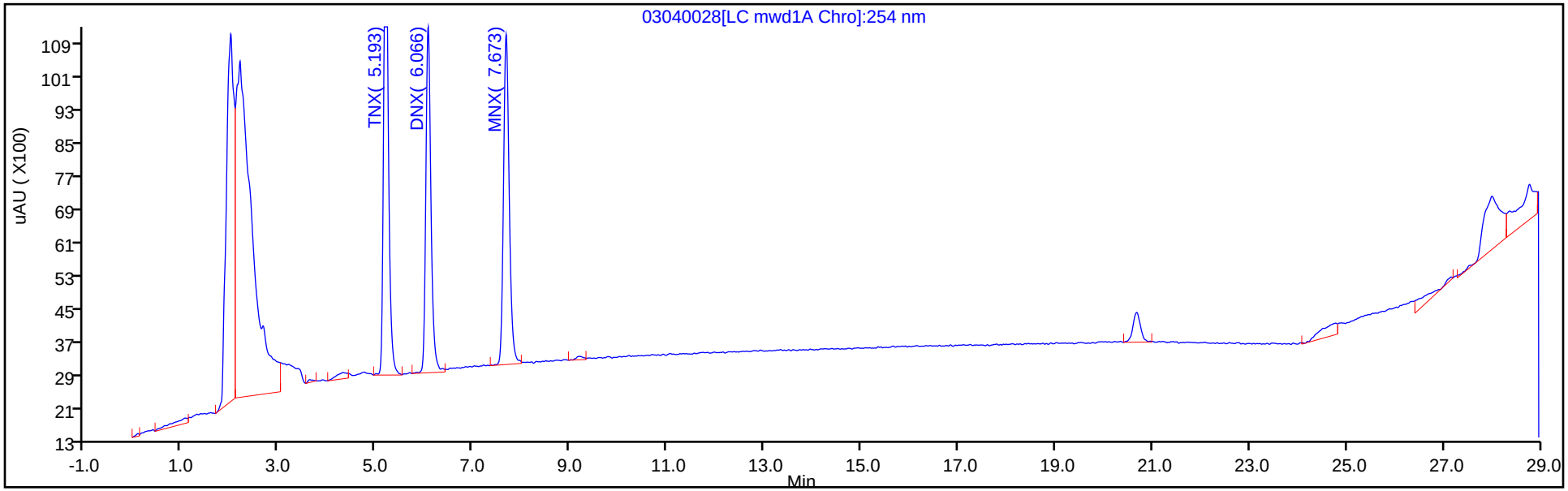
Report Date: 05-Mar-2022 11:24:33 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

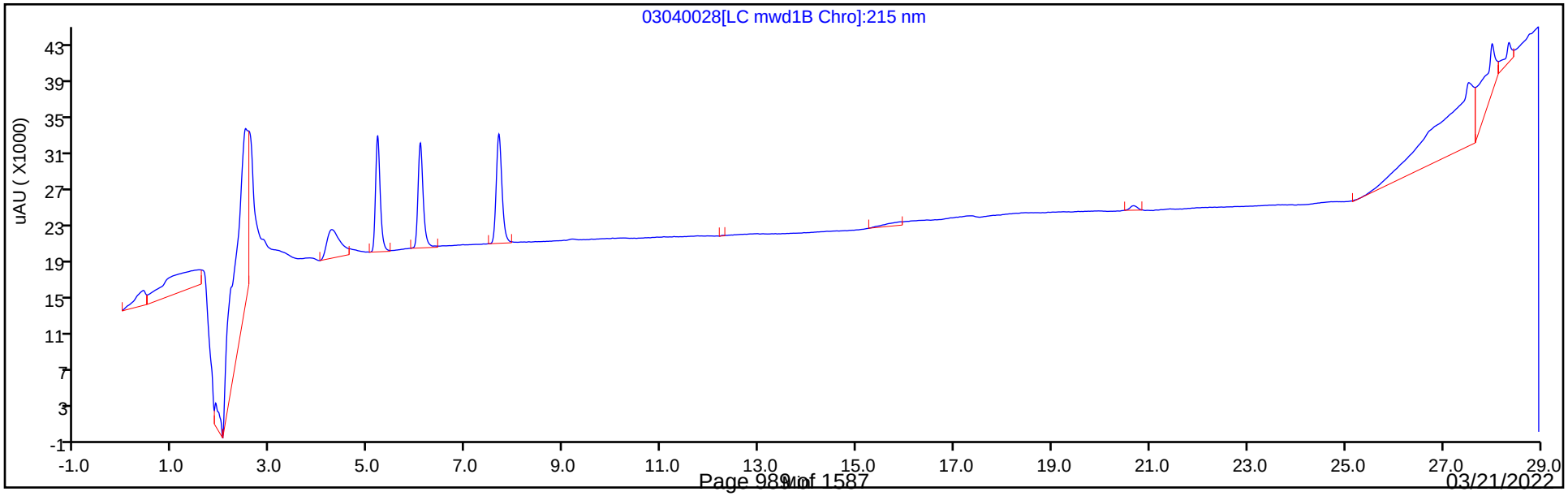
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040028.D

Injection Date:	05-Mar-2022 05:04:08	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	28
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.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567777/37 Calibration Date: 03/05/2022 10:19

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: 03040037.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	166135	164092		247	250	-1.2	15.0
Picric acid	Ave	132885	152056		286	250	14.4	15.0
RDX	Ave	194331	198308		255	250	2.0	15.0
Nitrobenzene	Ave	368293	376753		257	251	2.3	15.0
1,3-Dinitrobenzene	Ave	571666	582271		255	251	1.9	15.0
Nitroglycerin	Ave	122518	130532		2660	2500	6.5	15.0
2-Nitrotoluene	Ave	234672	226260		241	250	-3.6	15.0
4-Nitrotoluene	Ave	210817	207214		246	251	-1.7	15.0
4-Amino-2,6-dinitrotoluene	Lin2		273487		256	250	2.4	15.0
3-Nitrotoluene	Lin2		260635		246	250	-1.7	15.0
2-Amino-4,6-dinitrotoluene	Ave	360536	392733		273	251	8.9	15.0
1,3,5-Trinitrobenzene	Ave	415464	390367		235	251	-6.0	15.0
2,6-Dinitrotoluene	Ave	265662	275287		260	251	3.6	15.0
2,4-Dinitrotoluene	Lin2		579036		257	251	2.2	15.0
Tetryl	Ave	342171	325210		238	251	-5.0	15.0
2,4,6-Trinitrotoluene	Ave	369179	387876		264	251	5.1	15.0
PETN	Ave	129329	136936		2650	2500	5.9	15.0
1,2-Dinitrobenzene	Ave	249753	263444		264	250	5.5	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567777/37 Calibration Date: 03/05/2022 10:19

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: 03040037.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.95	6.81	7.11
Picric acid	8.23	8.16	8.46
RDX	9.19	9.05	9.35
Nitrobenzene	12.13	11.99	12.29
1,3-Dinitrobenzene	15.74	15.59	15.89
Nitroglycerin	16.17	16.03	16.33
2-Nitrotoluene	16.93	16.78	17.08
4-Nitrotoluene	17.24	17.09	17.39
4-Amino-2,6-dinitrotoluene	17.90	17.75	18.05
3-Nitrotoluene	18.21	18.07	18.37
2-Amino-4,6-dinitrotoluene	18.94	18.80	19.10
1,3,5-Trinitrobenzene	19.03	18.87	19.17
2,6-Dinitrotoluene	20.39	20.24	20.54
2,4-Dinitrotoluene	20.91	20.76	21.06
Tetryl	24.66	24.53	24.83
2,4,6-Trinitrotoluene	25.40	25.27	25.57
PETN	26.32	26.19	26.49
1,2-Dinitrobenzene	13.38	13.24	13.54

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040037.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-Mar-2022 10:19:42 ALS Bottle#: 7 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0109013-037
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 12:11:53 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: 05-Mar-2022 11:31:49

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.153	4.162	-0.009	87632	0.2500	0.2156	
	2 2,4-diamino-6-nitrotoluene	1	4.667	4.682	-0.015	26682	0.2500	0.1106	
	5 HMX	1	6.947	6.955	-0.008	41023	0.2500	0.2469	
	7 2,4,6-Trinitrophenol	1	8.233	8.309	-0.076	38014	0.2500	0.2861	
	8 RDX	1	9.193	9.195	-0.002	49577	0.2500	0.2551	
	9 Nitrobenzene	1	12.127	12.135	-0.008	94565	0.2510	0.2568	
$	10 1,2-Dinitrobenzene	1	13.380	13.388	-0.008	65861	0.2500	0.2637	
	11 3,5-Dinitroaniline	1	15.407	15.408	-0.001	104270	0.2500	0.2533	
	12 1,3-Dinitrobenzene	1	15.740	15.735	0.005	145859	0.2505	0.2551	
	13 Nitroglycerin	2	16.173	16.175	-0.002	326330	2.50	2.66	
	14 o-Nitrotoluene	1	16.927	16.928	-0.001	56565	0.2500	0.2410	M
	16 p-Nitrotoluene	1	17.240	17.235	0.005	51907	0.2505	0.2462	M
	17 4-Amino-2,6-dinitrotoluene	1	17.900	17.902	-0.002	68440	0.2503	0.2563	M
	18 m-Nitrotoluene	1	18.213	18.215	-0.002	65224	0.2503	0.2459	M
	19 2-Amino-4,6-dinitrotoluene	1	18.940	18.948	-0.008	98576	0.2510	0.2734	M
	20 1,3,5-Trinitrobenzene	1	19.033	19.022	0.011	97787	0.2505	0.2354	M
	21 2,6-Dinitrotoluene	1	20.393	20.388	0.005	69097	0.2510	0.2601	
	22 2,4-Dinitrotoluene	1	20.907	20.909	-0.002	145338	0.2510	0.2566	
	23 Tetryl	1	24.660	24.682	-0.022	81465	0.2505	0.2381	M
	24 2,4,6-Trinitrotoluene	1	25.400	25.415	-0.015	97357	0.2510	0.2637	M
	25 PETN	2	26.320	26.342	-0.022	342339	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

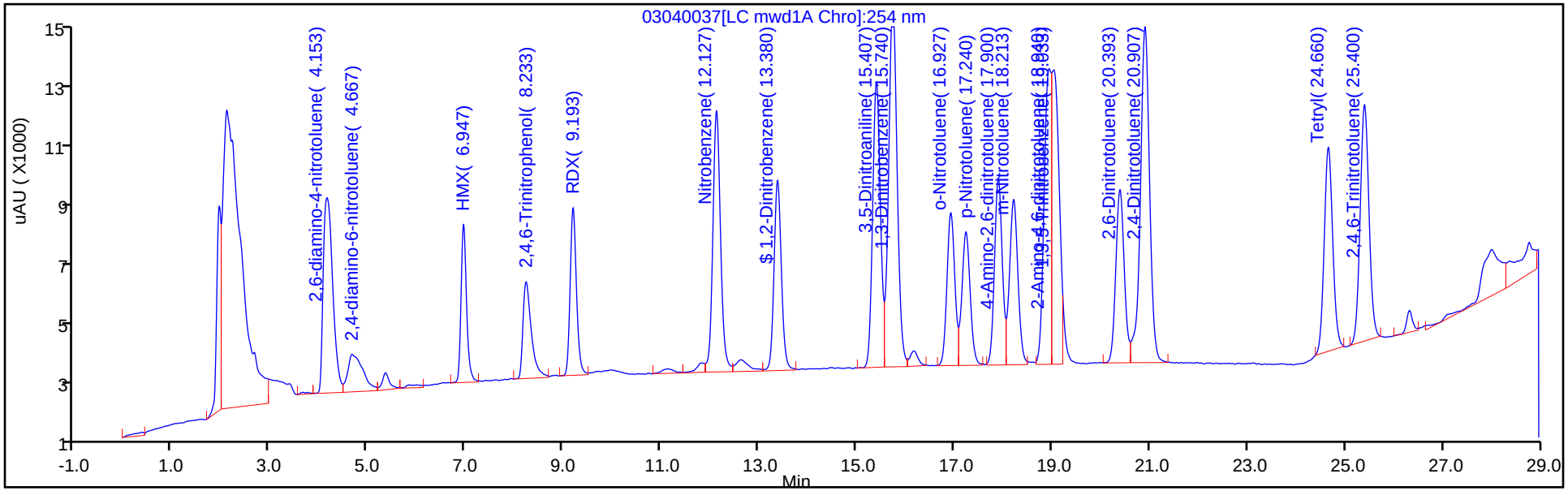
Report Date: 05-Mar-2022 12:11:53 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

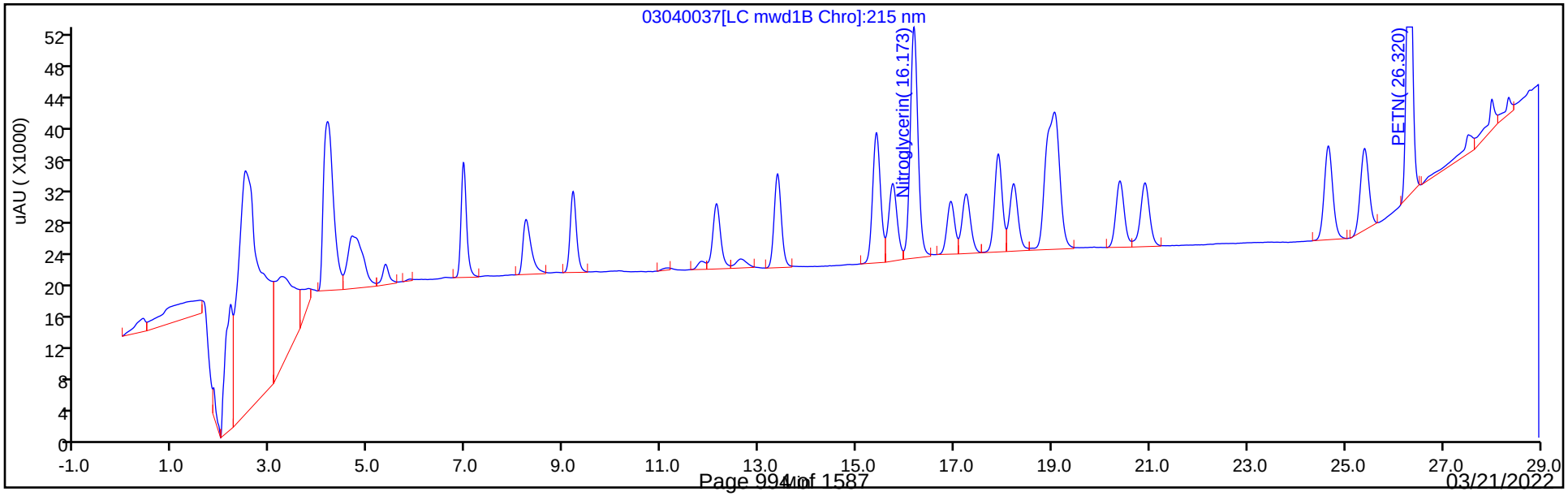
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040037.D

Injection Date:	05-Mar-2022 10:19:42	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	37
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

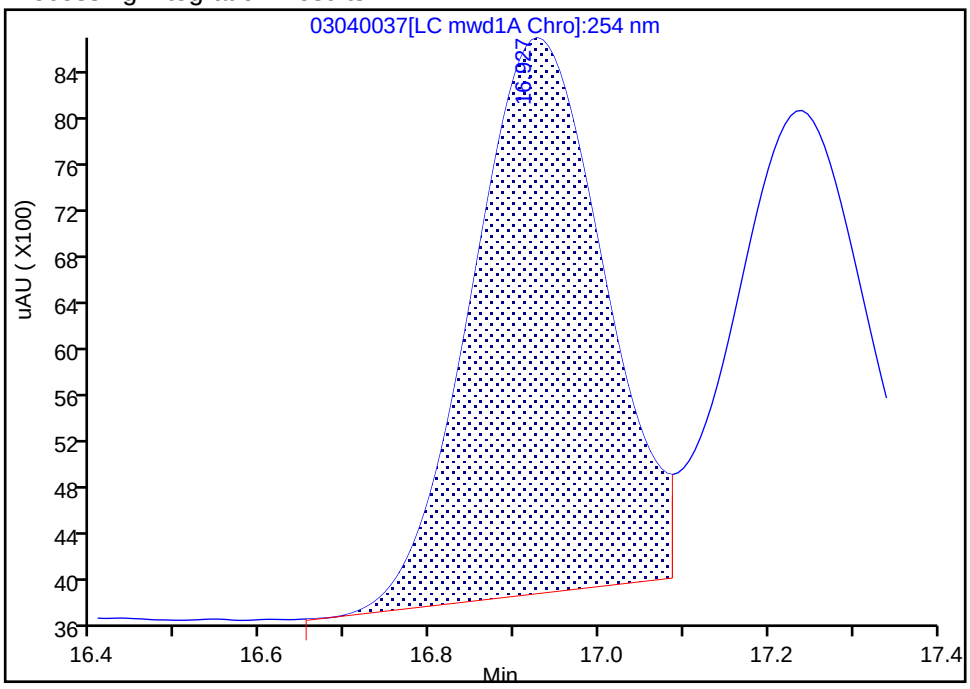
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040037.D
Injection Date: 05-Mar-2022 10:19:42 Instrument ID: CHHPLC_X5
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

14 o-Nitrotoluene, CAS: 88-72-2

Signal: 1

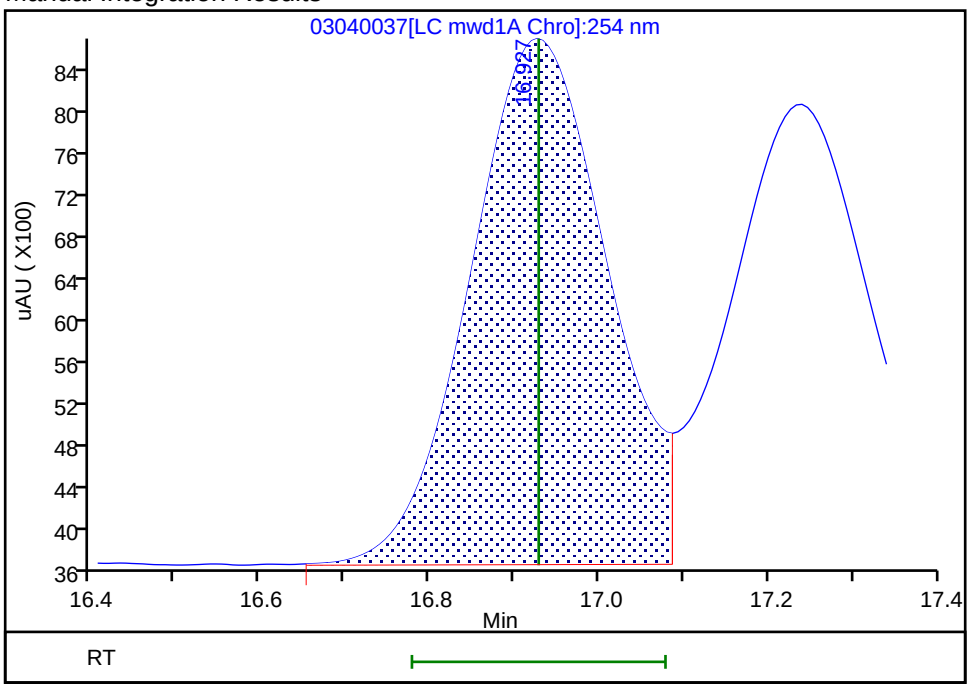
Processing Integration Results

RT: 16.93
Area: 51924
Amount: 0.221262
Amount Units: ug/ml



Manual Integration Results

RT: 16.93
Area: 56565
Amount: 0.241038
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:17:46
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

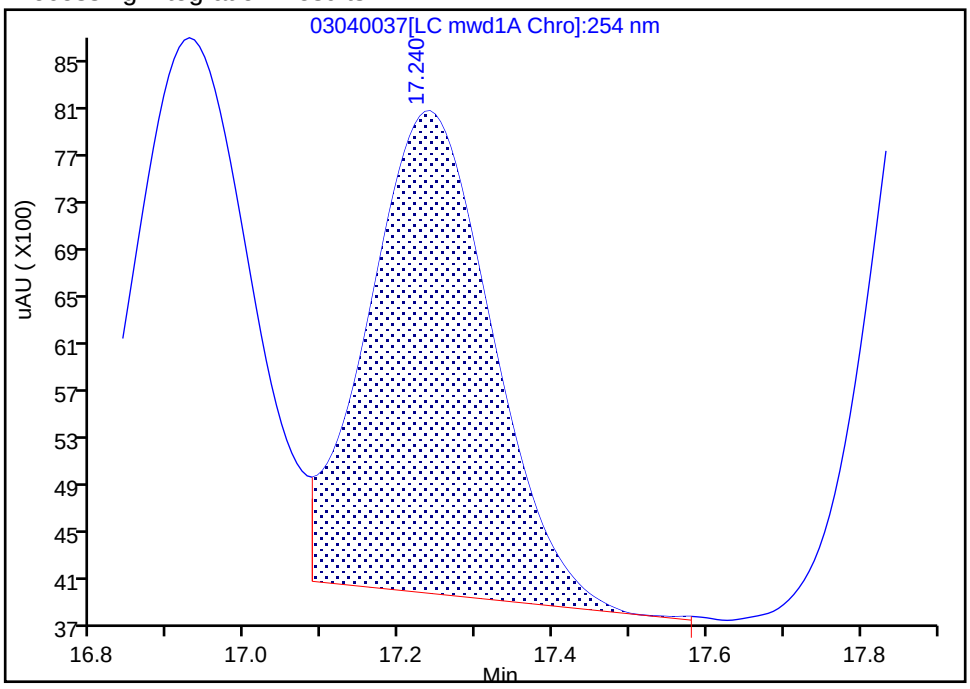
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040037.D
Injection Date: 05-Mar-2022 10:19:42 Instrument ID: CHHPLC_X5
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

16 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

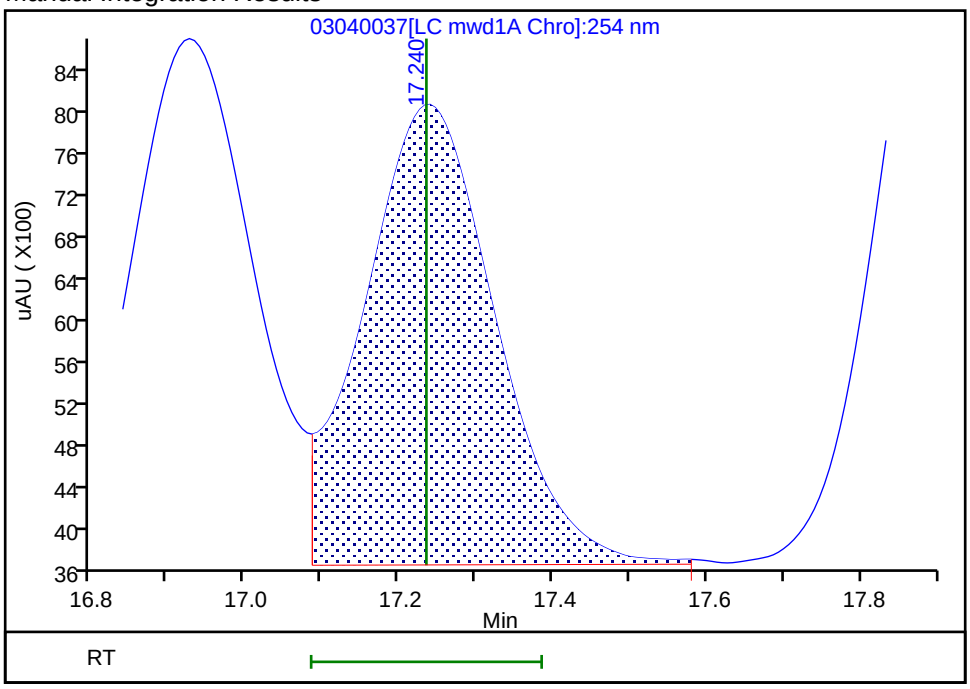
Processing Integration Results

RT: 17.24
Area: 46431
Amount: 0.220244
Amount Units: ug/ml



Manual Integration Results

RT: 17.24
Area: 51907
Amount: 0.246219
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:17:46
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

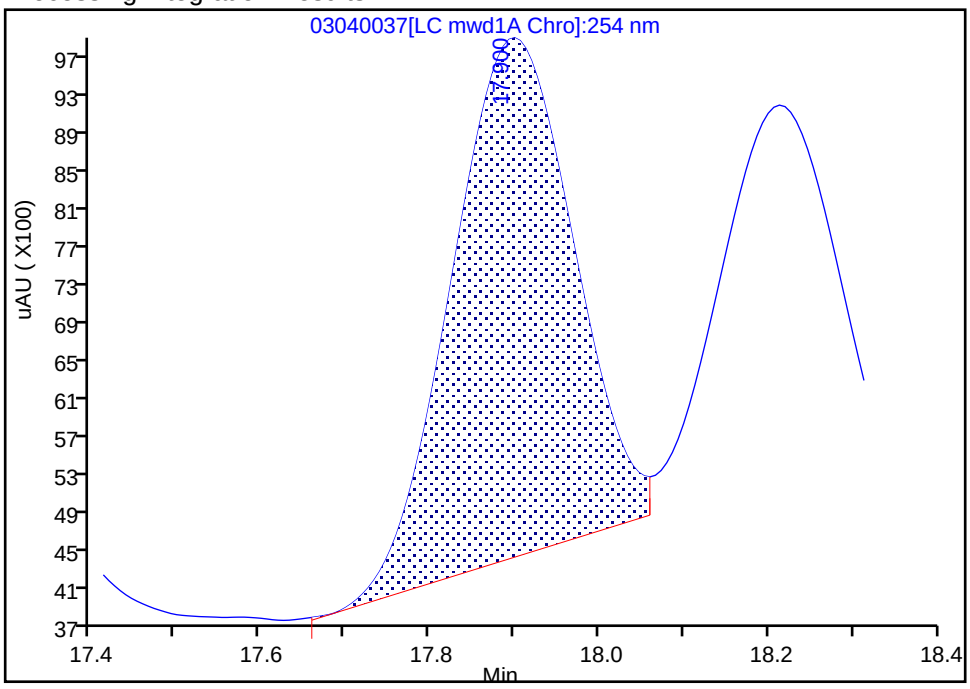
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040037.D				
Injection Date:	05-Mar-2022 10:19:42	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

17 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

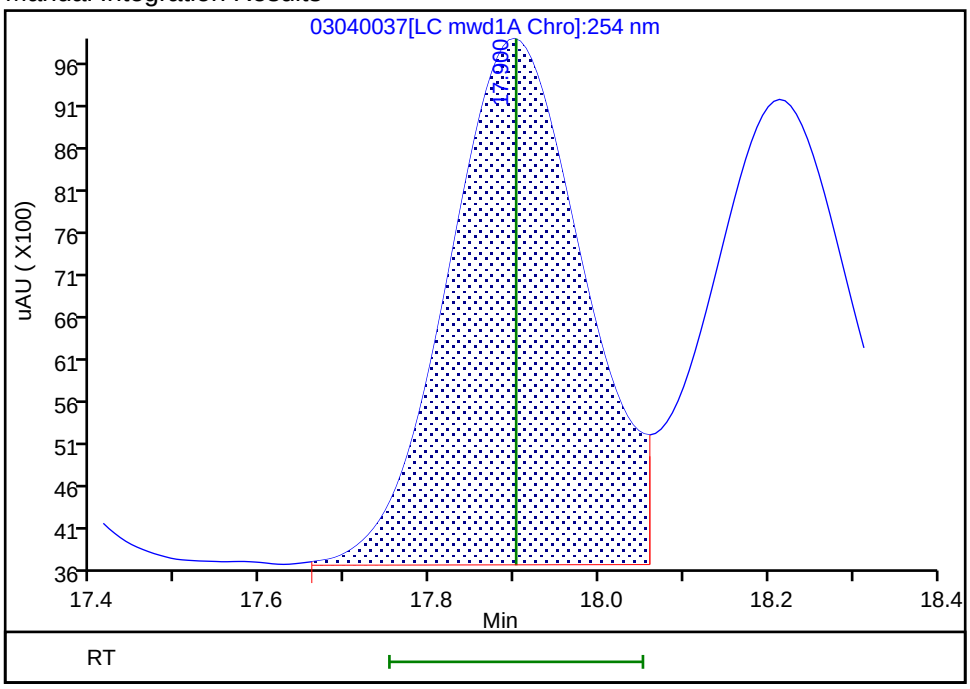
Processing Integration Results

RT: 17.90
Area: 54988
Amount: 0.205995
Amount Units: ug/ml



Manual Integration Results

RT: 17.90
Area: 68440
Amount: 0.256331
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:17:46

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

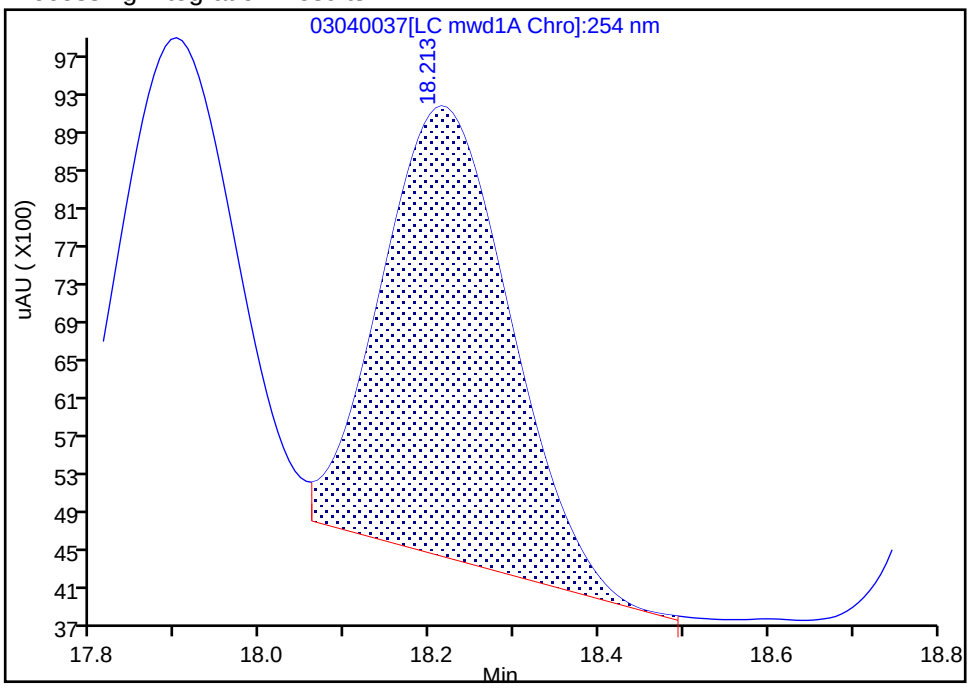
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040037.D
Injection Date: 05-Mar-2022 10:19:42 Instrument ID: CHHPLC_X5
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

18 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

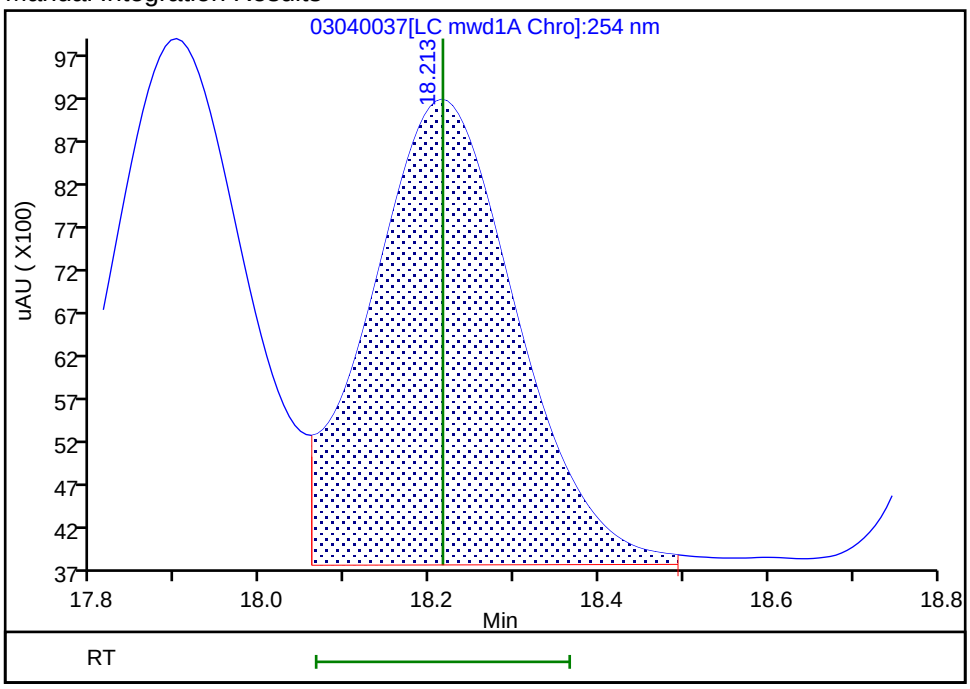
Processing Integration Results

RT: 18.21
Area: 49949
Amount: 0.188489
Amount Units: ug/ml



Manual Integration Results

RT: 18.21
Area: 65224
Amount: 0.245913
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:17:46
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

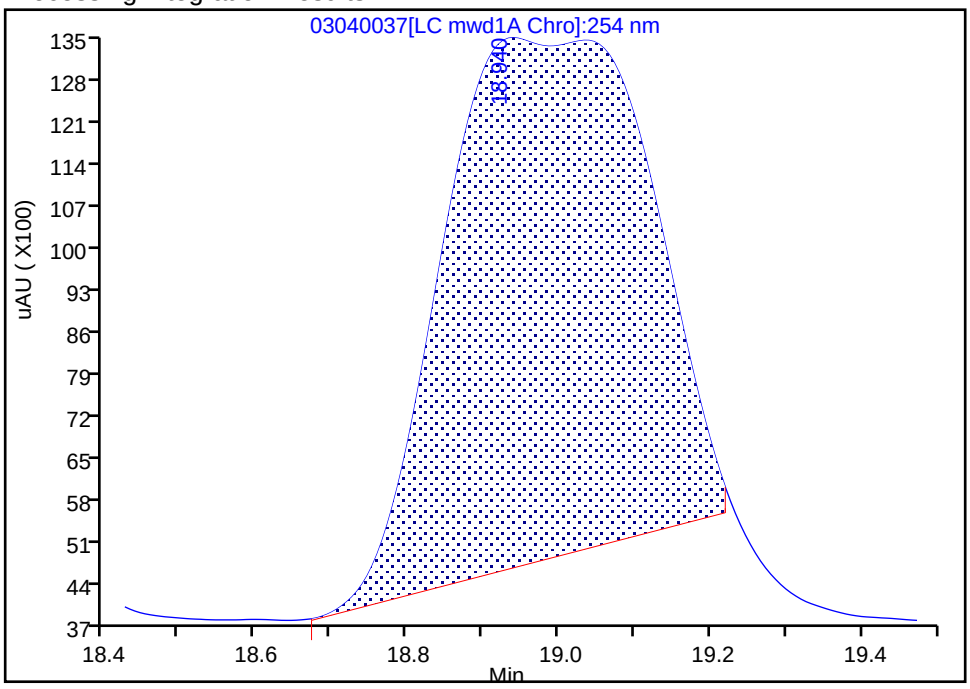
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040037.D				
Injection Date:	05-Mar-2022 10:19:42	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	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

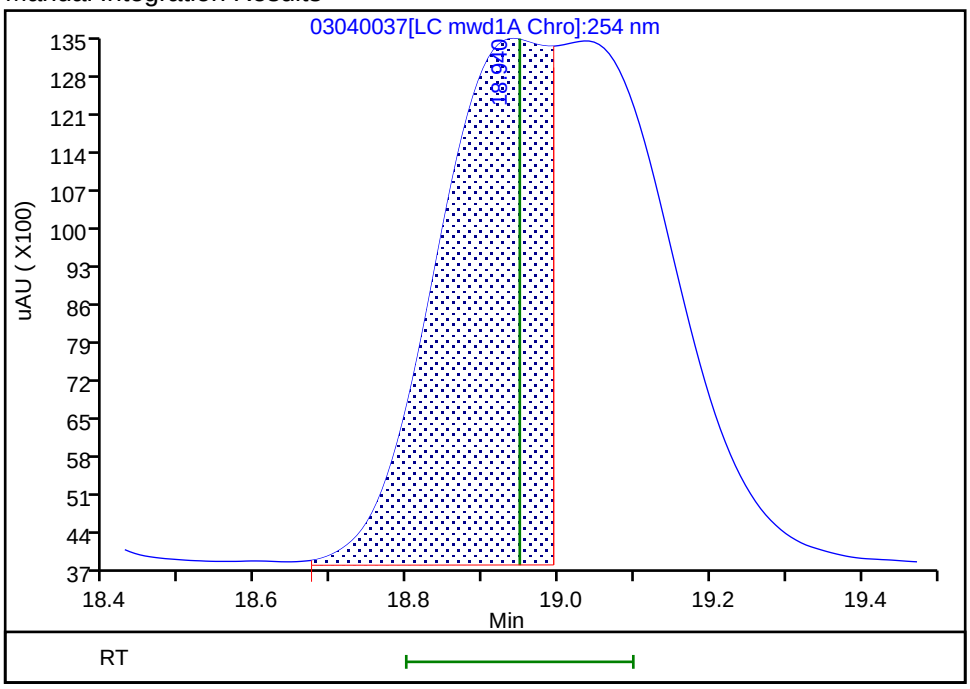
Processing Integration Results

RT: 18.94
Area: 165268
Amount: 0.458396
Amount Units: ug/ml



Manual Integration Results

RT: 18.94
Area: 98576
Amount: 0.273415
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:17:51

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

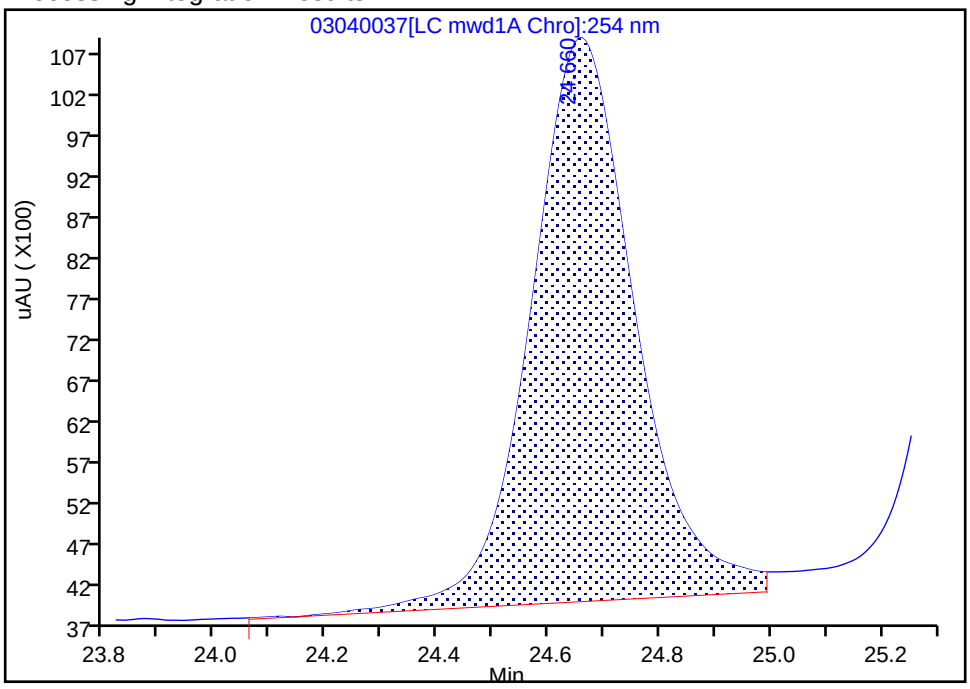
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040037.D
Injection Date: 05-Mar-2022 10:19:42 Instrument ID: CHHPLC_X5
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Luna-Phenyl hexyl (4.60 mm) Detector LC mwd1A, 254 nm

23 Tetryl, CAS: 479-45-8

Signal: 1

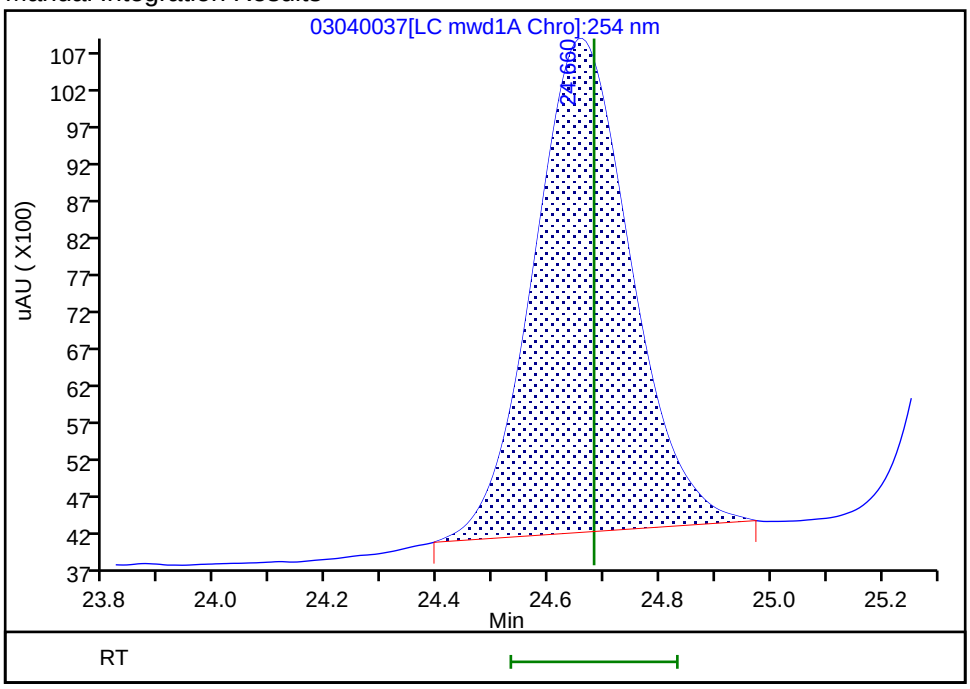
Processing Integration Results

RT: 24.66
Area: 90414
Amount: 0.264237
Amount Units: ug/ml



Manual Integration Results

RT: 24.66
Area: 81465
Amount: 0.238083
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:18:09
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

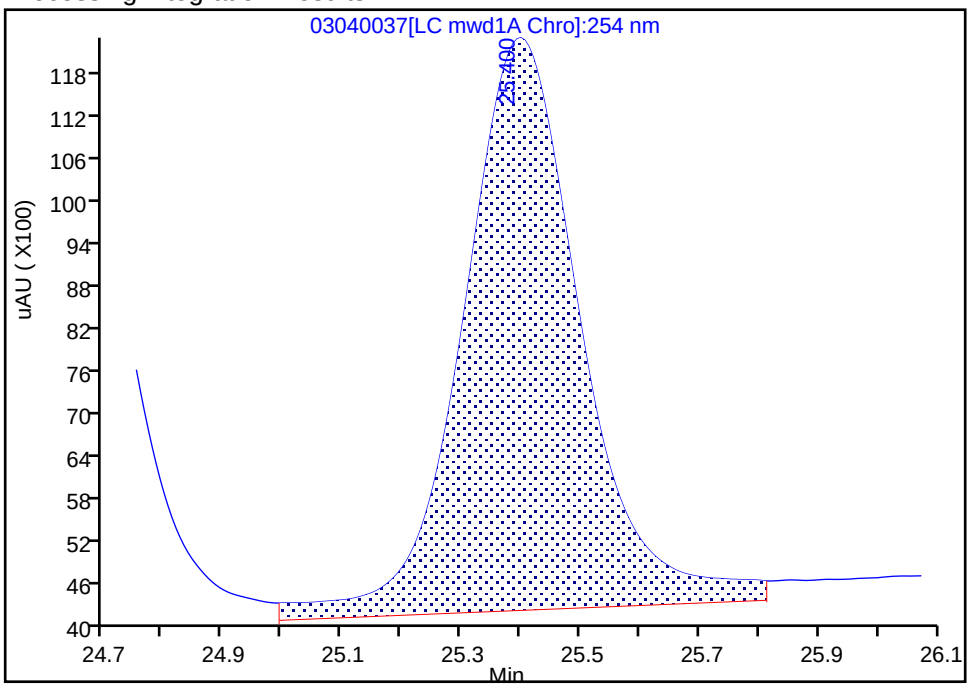
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040037.D				
Injection Date:	05-Mar-2022 10:19:42	Instrument ID:	CHHPLC_X5		
Lims ID:	CCV				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	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

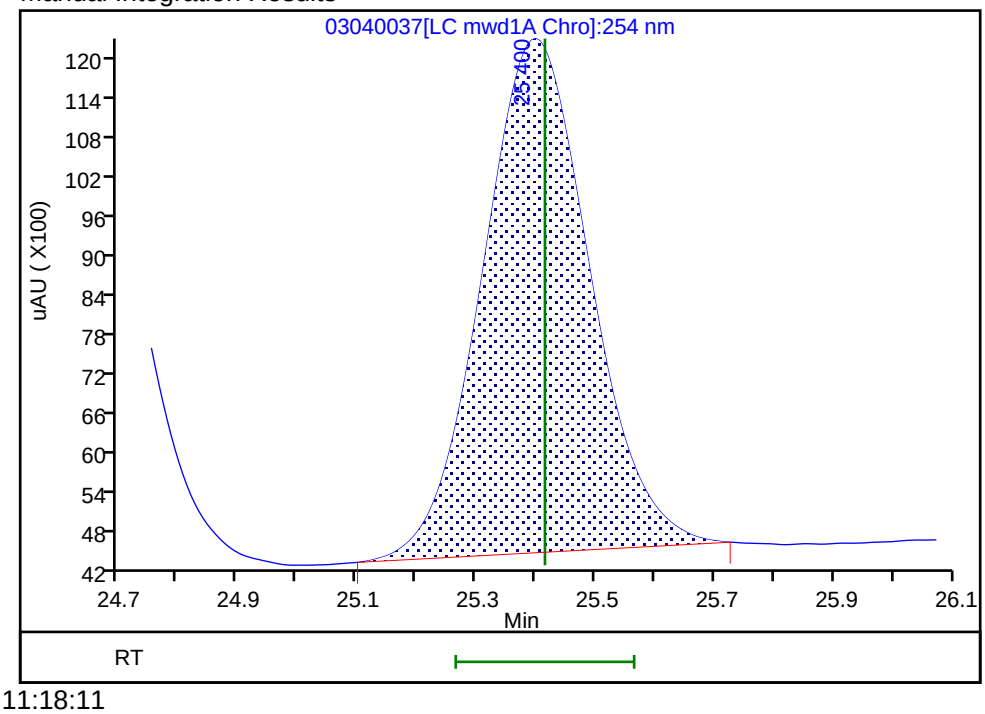
Processing Integration Results

RT: 25.40
Area: 111511
Amount: 0.302051
Amount Units: ug/ml



Manual Integration Results

RT: 25.40
Area: 97357
Amount: 0.263712
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:18:11

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

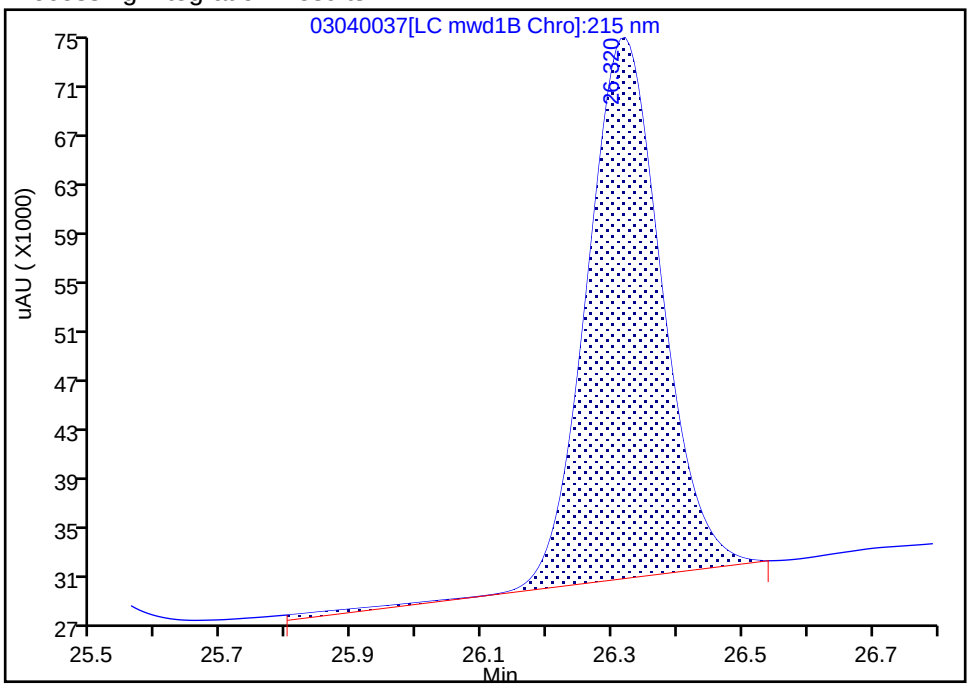
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040037.D
Injection Date: 05-Mar-2022 10:19:42 Instrument ID: CHHPLC_X5
Lims ID: CCV
Client ID:
Operator ID: JZ ALS Bottle#: 7 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

25 PETN, CAS: 78-11-5

Signal: 1

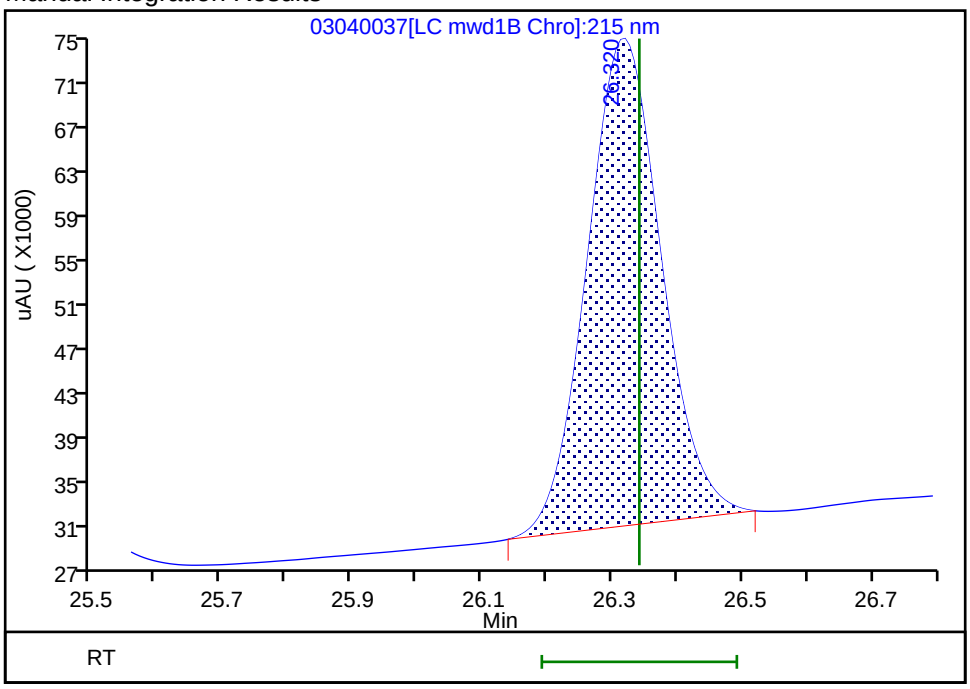
Processing Integration Results

RT: 26.32
Area: 349345
Amount: 2.701208
Amount Units: ug/ml



Manual Integration Results

RT: 26.32
Area: 342339
Amount: 2.647036
Amount Units: ug/ml



Reviewer: zhangji, 05-Mar-2022 11:18:15
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567777/38 Calibration Date: 03/05/2022 10:54

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: 03040038.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	354070	313239		221	250	-11.5	15.0
DNX	Ave	278639	245407		220	250	-11.9	15.0
MNX	Ave	250081	225429		263	292	-9.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Lab Sample ID: CCV 280-567777/38 Calibration Date: 03/05/2022 10:54

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: 03040038.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.19	5.03	5.33
DNX	6.07	5.90	6.20
MNX	7.68	7.50	7.80

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040038.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 05-Mar-2022 10:54:41 ALS Bottle#: 8 Worklist Smp#: 38
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0109013-038
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub2

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 12:11:53 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

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.193	5.183	0.010	78388	0.2503	0.2214	
4 DNX	1	6.066	6.049	0.017	61413	0.2503	0.2204	
6 MNX	1	7.679	7.649	0.030	65769	0.2918	0.2630	

Reagents:

8330 DMT_00010 Amount Added: 12.50 Units: uL

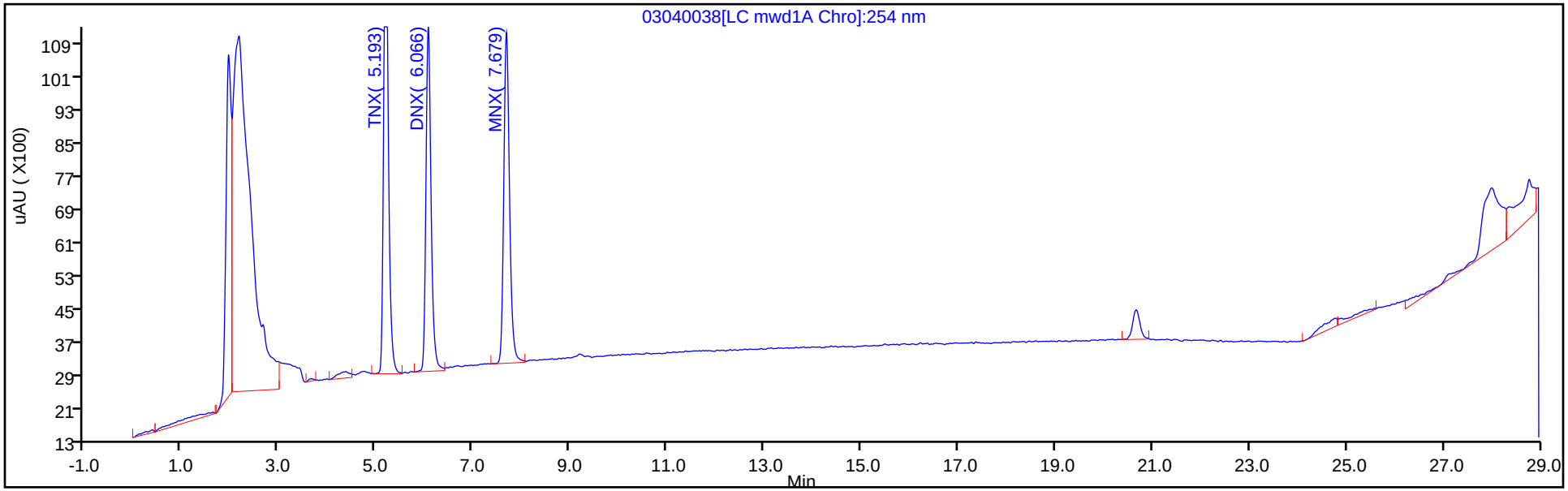
Report Date: 05-Mar-2022 12:11:53 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

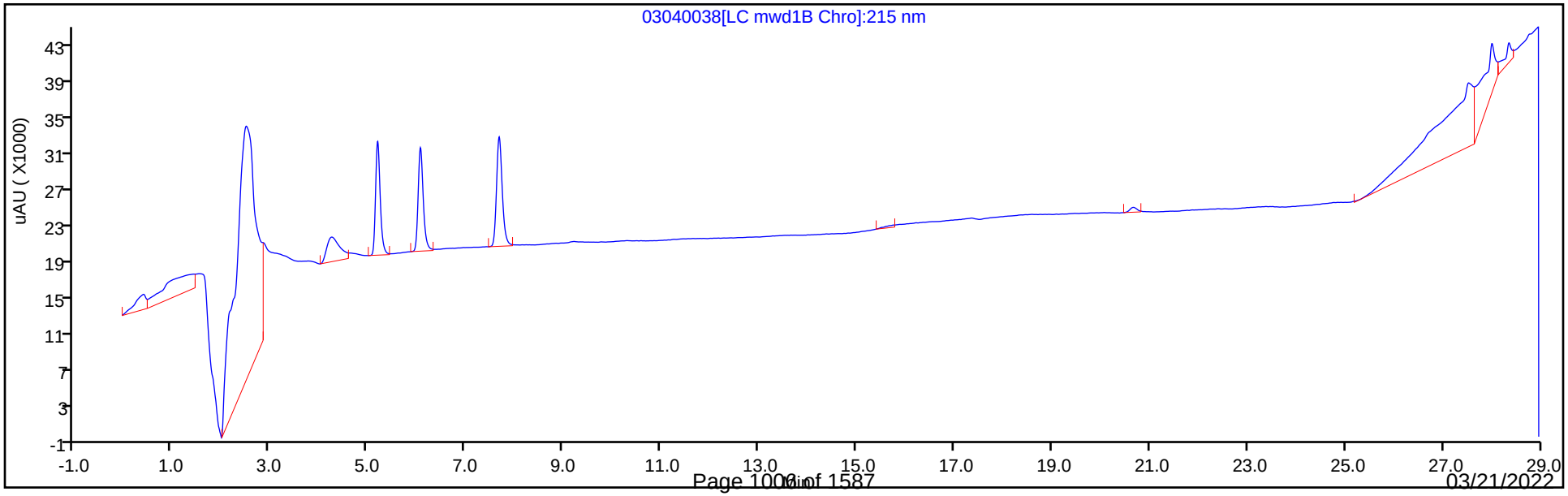
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20220304-109013.b\03040038.D

Injection Date:	05-Mar-2022 10:54:41	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	38
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.: 280-159190-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 280-567737/1-A
Matrix: Water | Lab File ID: 03040011.D
Analysis Method: 8330A | Date Collected:
Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39
Sample wt/vol: 500(mL) | Date Analyzed: 03/04/2022 20:06
Con. Extract Vol.: 5(mL) | Dilution Factor: 1
Injection Volume: 100(uL) | GC Column: UltraCarb5uODS ID: 4.6(mm)
% Moisture: | GPC Cleanup:(Y/N) N
Analysis Batch No.: 567774 | 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	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	99		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040011.D
Lims ID: MB 280-567737/1-A
Client ID:
Sample Type: MB
Inject. Date: 04-Mar-2022 20:06:07 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-567737/1-
Misc. Info.: 280-0109012-011
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:47 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: 04-Mar-2022 20:32:27

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	1 Triamine Trinitrobenzene	1		2.447				ND	
	2 2,6-diamino-4-nitrotoluene	1		6.464				ND	U
	3 TNX	1		6.469				ND	
	4 HMX	1		6.591				ND	
	5 2,4-diamino-6-nitrotoluene	1		6.650				ND	
	6 DNX	1		6.782				ND	
	7 MNX	1		7.196				ND	
	8 RDX	1		7.578				ND	
	9 2,4,6-Trinitrophenol	1		7.898				ND	
$	10 1,2-Dinitrobenzene	1	8.516	8.511	0.005	24685	0.2000	0.1980	
	11 1,3,5-Trinitrobenzene	1		8.638				ND	
	12 1,3-Dinitrobenzene	1		9.257				ND	
	13 Nitrobenzene	1		9.644				ND	
	14 3,5-Dinitroaniline	1		9.877				ND	
	15 Tetryl	1		9.957				ND	
	16 Nitroglycerin	2		10.404				ND	
	17 2,4,6-Trinitrotoluene	1		10.857				ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.051				ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.297				ND	
	20 2,6-Dinitrotoluene	1		11.464				ND	
	21 2,4-Dinitrotoluene	1		11.637				ND	
	22 o-Nitrotoluene	1		12.477				ND	7
	23 p-Nitrotoluene	1		12.897				ND	7
	24 m-Nitrotoluene	1		13.471				ND	
	25 PETN	2		14.497				ND	
	26 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

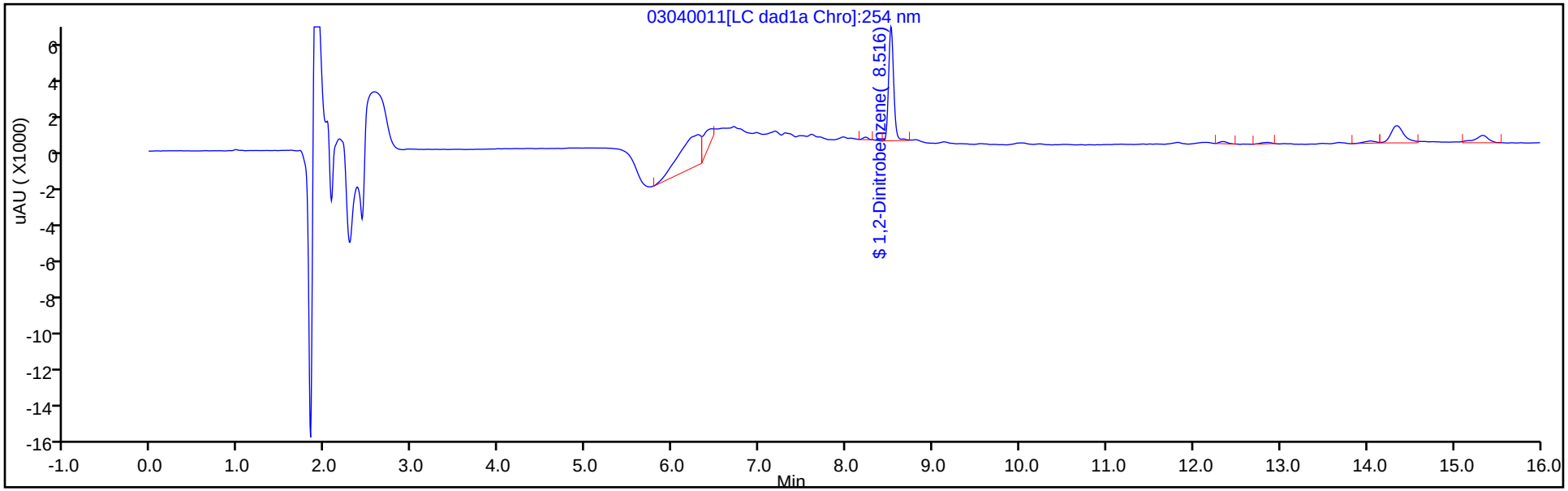
Report Date: 05-Mar-2022 10:57:51 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

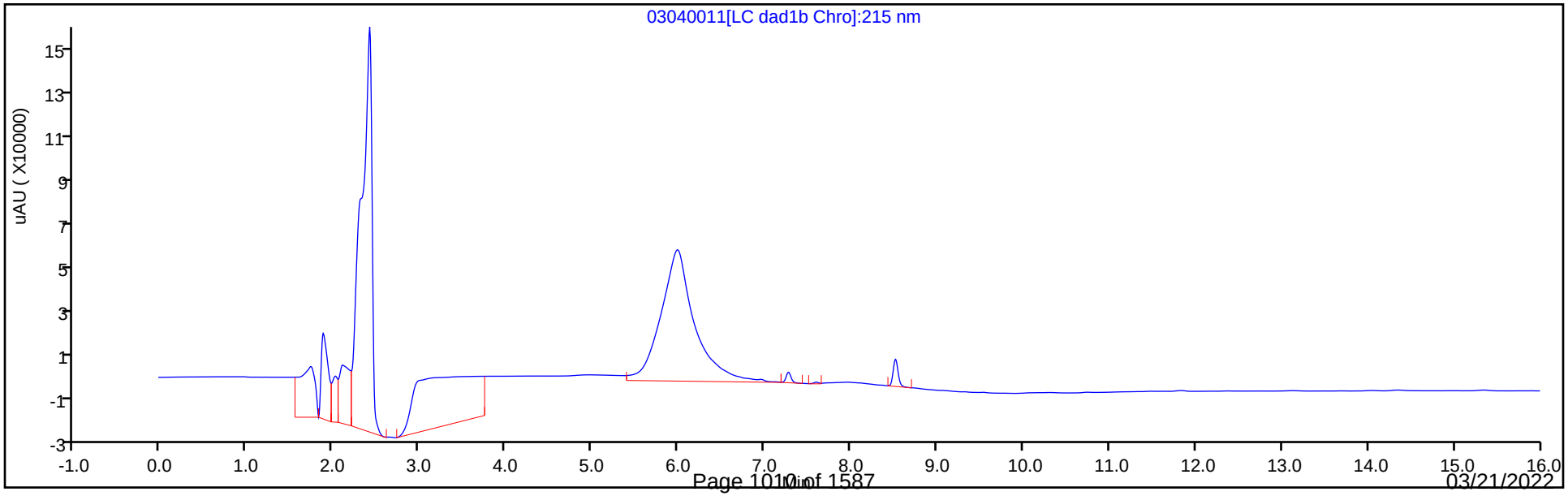
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040011.d

Injection Date:	04-Mar-2022 20:06:07	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	MB 280-567737/1-A			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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040011.D				
Lims ID:	MB 280-567737/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	04-Mar-2022 20:06:07	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-567737/1-				
Misc. Info.:	280-0109012-011				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:47	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:	04-Mar-2022 20:32:27		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1980	98.98

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-567737/2-A

Matrix: Water | Lab File ID: 03040012.D

Analysis Method: 8330A | Date Collected:

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 500(mL) | Date Analyzed: 03/04/2022 20:29

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

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

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

Analysis Batch No.: 567774 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.20		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	2.21		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	2.18		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	2.11		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	2.16		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	2.08		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.83		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.67		0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	2.07		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	2.07		0.41	0.40	0.10
2691-41-0	HMX	2.04	M	0.21	0.20	0.088
98-95-3	Nitrobenzene	1.97	M	0.21	0.20	0.091
121-82-4	RDX	2.18		0.21	0.20	0.052
479-45-8	Tetryl	2.17		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	106		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040012.D
Lims ID: LCS 280-567737/2-A
Client ID:
Sample Type: LCS
Inject. Date: 04-Mar-2022 20:29:02 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-567737/2
Misc. Info.: 280-0109012-012
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:47 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: 04-Mar-2022 20:53:12

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.588	6.591	-0.003	17098	0.2000	0.2040	M
8 RDX	1	7.581	7.578	0.003	22587	0.2000	0.2180	
9 2,4,6-Trinitrophenol	1	7.895	7.898	-0.003	17291	0.2000	0.2244	
$ 10 1,2-Dinitrobenzene	1	8.521	8.511	0.010	26539	0.2000	0.2128	
11 1,3,5-Trinitrobenzene	1	8.648	8.638	0.010	48077	0.2000	0.2204	
12 1,3-Dinitrobenzene	1	9.268	9.257	0.011	63636	0.2000	0.2207	
13 Nitrobenzene	1	9.648	9.644	0.004	37781	0.2000	0.1968	M
15 Tetryl	1	9.961	9.957	0.004	36941	0.2000	0.2166	
16 Nitroglycerin	2	10.414	10.404	0.010	142258	2.00	2.26	
17 2,4,6-Trinitrotoluene	1	10.868	10.857	0.011	44185	0.2000	0.2180	
18 4-Amino-2,6-dinitrotoluene	1	11.054	11.051	0.003	31226	0.2000	0.2068	
19 2-Amino-4,6-dinitrotoluene	1	11.308	11.297	0.011	42131	0.2000	0.2084	
20 2,6-Dinitrotoluene	1	11.474	11.464	0.010	30865	0.2000	0.2157	
21 2,4-Dinitrotoluene	1	11.641	11.637	0.004	60917	0.2000	0.2105	
22 o-Nitrotoluene	1	12.481	12.477	0.004	23301	0.2000	0.1826	
23 p-Nitrotoluene	1	12.908	12.897	0.011	21952	0.2000	0.2066	
24 m-Nitrotoluene	1	13.474	13.471	0.003	23699	0.2000	0.1666	
25 PETN	2	14.508	14.497	0.011	163932	2.00	2.24	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

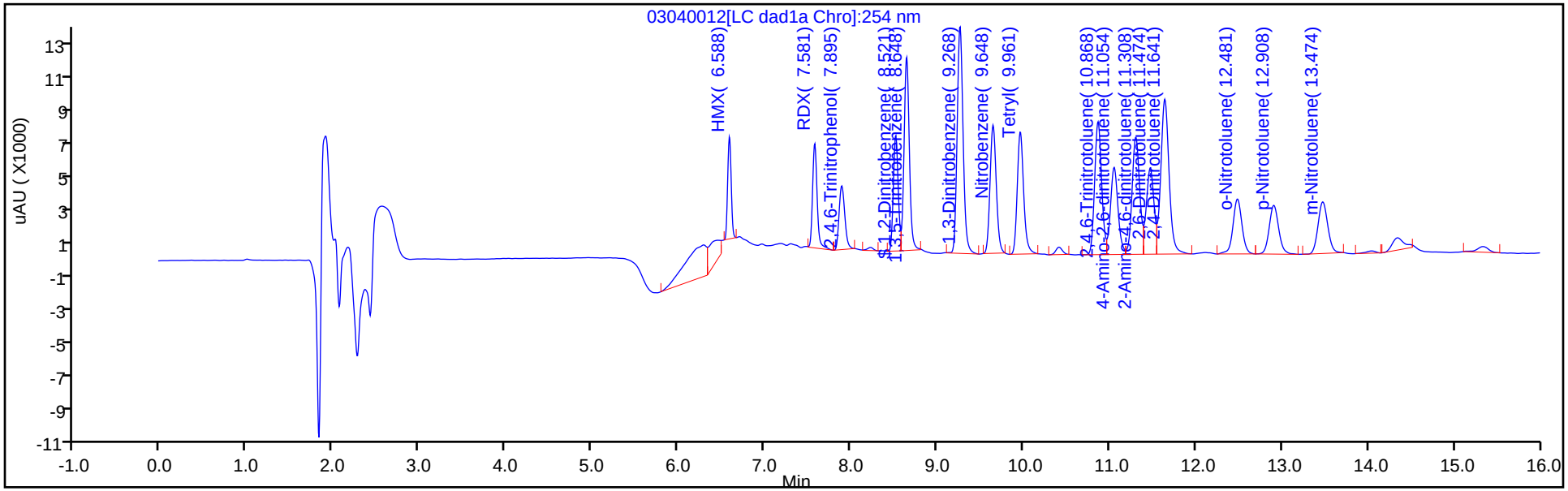
Report Date: 05-Mar-2022 10:57:51 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

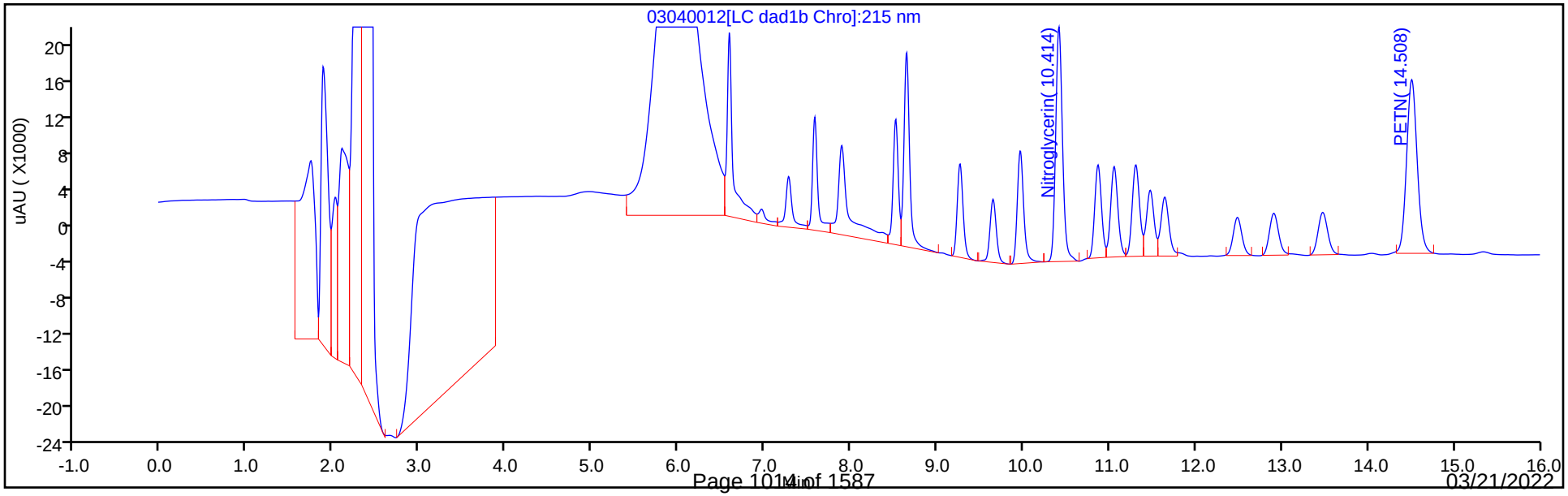
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040012.d

Injection Date:	04-Mar-2022 20:29:02	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-567737/2-A			Worklist Smp#:	12
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040012.D				
Lims ID:	LCS 280-567737/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	04-Mar-2022 20:29:02	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-567737/2				
Misc. Info.:	280-0109012-012				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:47	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:	04-Mar-2022 20:53:12		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2128	106.41

Manual Integration/User Assign Peak Report

Eurofins Denver

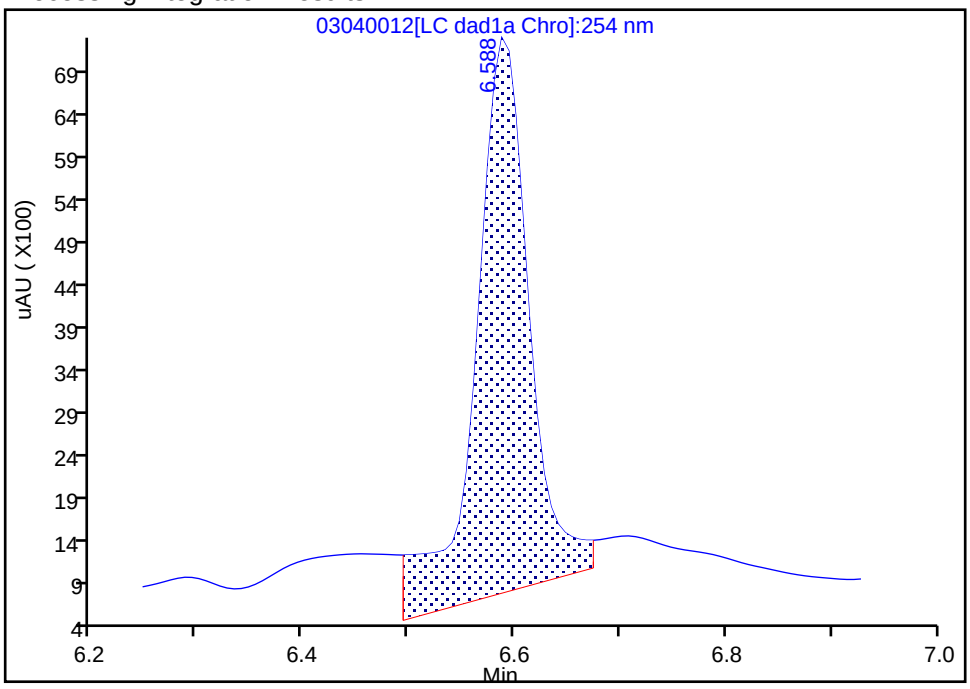
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040012.d
Injection Date: 04-Mar-2022 20:29:02 Instrument ID: CHHPLC_X3
Lims ID: LCS 280-567737/2-A
Client ID:
Operator ID: JZ ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

4 HMX, CAS: 2691-41-0

Signal: 1

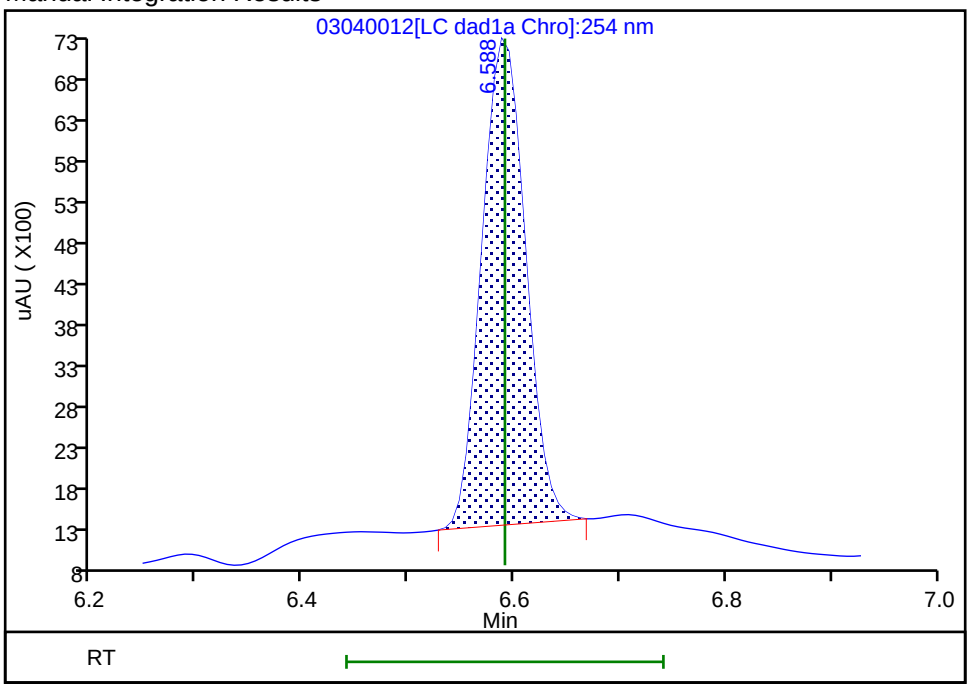
Processing Integration Results

RT: 6.59
Area: 23001
Amount: 0.274386
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 17098
Amount: 0.203967
Amount Units: ug/mL



Reviewer: zhangji, 04-Mar-2022 20:53:06
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

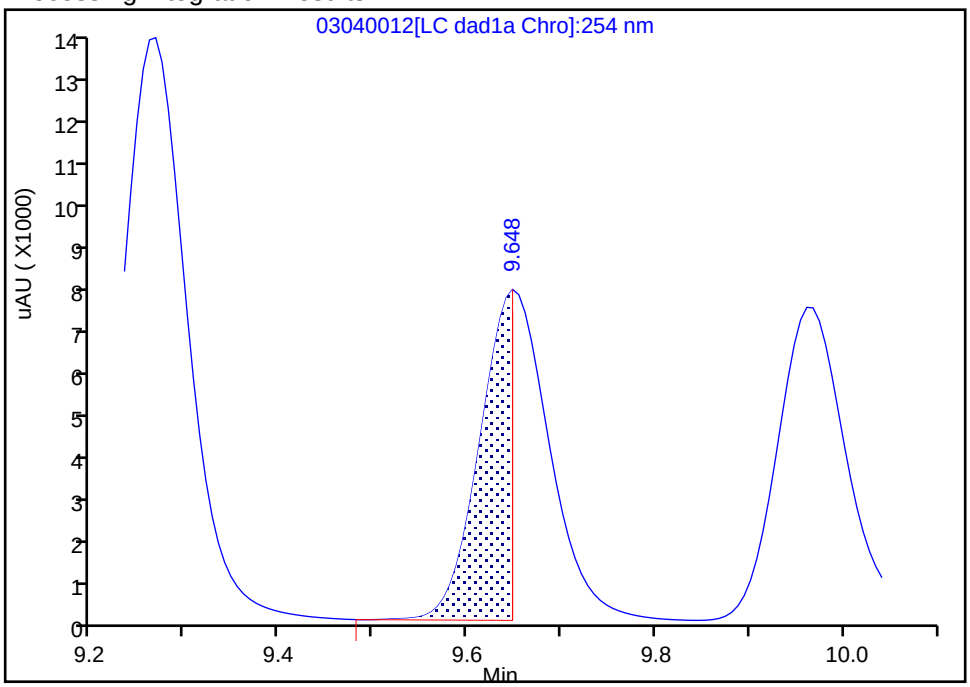
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040012.d				
Injection Date:	04-Mar-2022 20:29:02	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-567737/2-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

13 Nitrobenzene, CAS: 98-95-3

Signal: 1

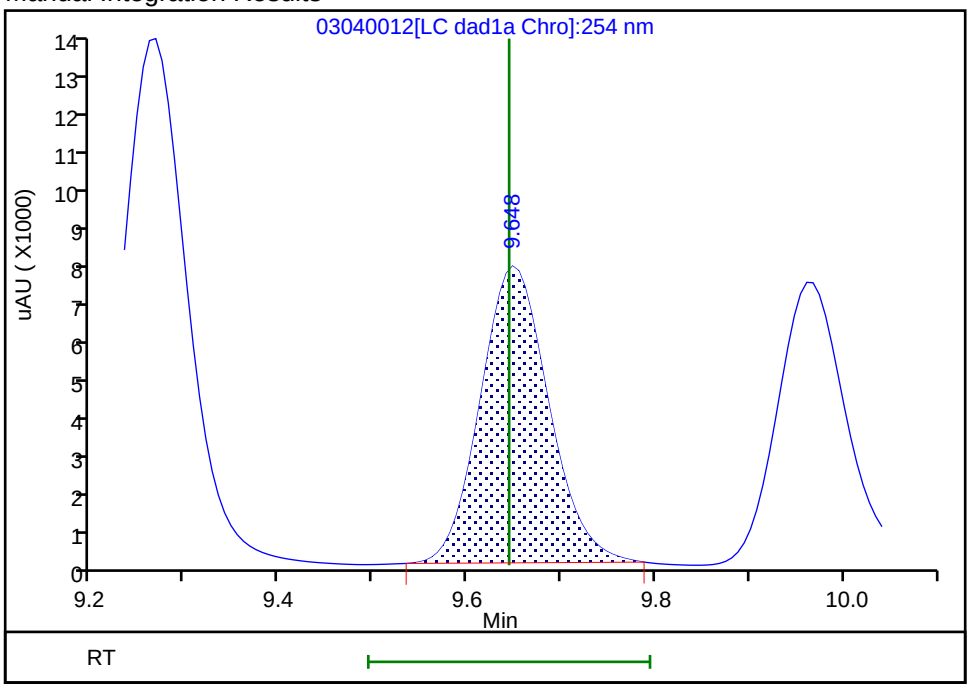
Processing Integration Results

RT: 9.65
Area: 17964
Amount: 0.093585
Amount Units: ug/mL



Manual Integration Results

RT: 9.65
Area: 37781
Amount: 0.196824
Amount Units: ug/mL



Reviewer: zhangji, 04-Mar-2022 20:53:10
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-567737/3-A

Matrix: Water | Lab File ID: 03040013.D

Analysis Method: 8330A | Date Collected:

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 500(mL) | Date Analyzed: 03/04/2022 20:51

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.: 567774 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.39	M	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	100		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040013.D
Lims ID: LCS 280-567737/3-A
Client ID:
Sample Type: LCS
Inject. Date: 04-Mar-2022 20:51:56 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-567737/3
Misc. Info.: 280-0109012-013
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:47 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: 05-Mar-2022 10:19:52

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.471	6.469	0.002	36715	0.2002	0.2026	M
6 DNX	1	6.785	6.782	0.003	28368	0.2002	0.2054	M
7 MNX	1	7.205	7.196	0.009	30057	0.2334	0.2386	M
$ 10 1,2-Dinitrobenzene	1	8.518	8.511	0.007	24954	0.2000	0.2001	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

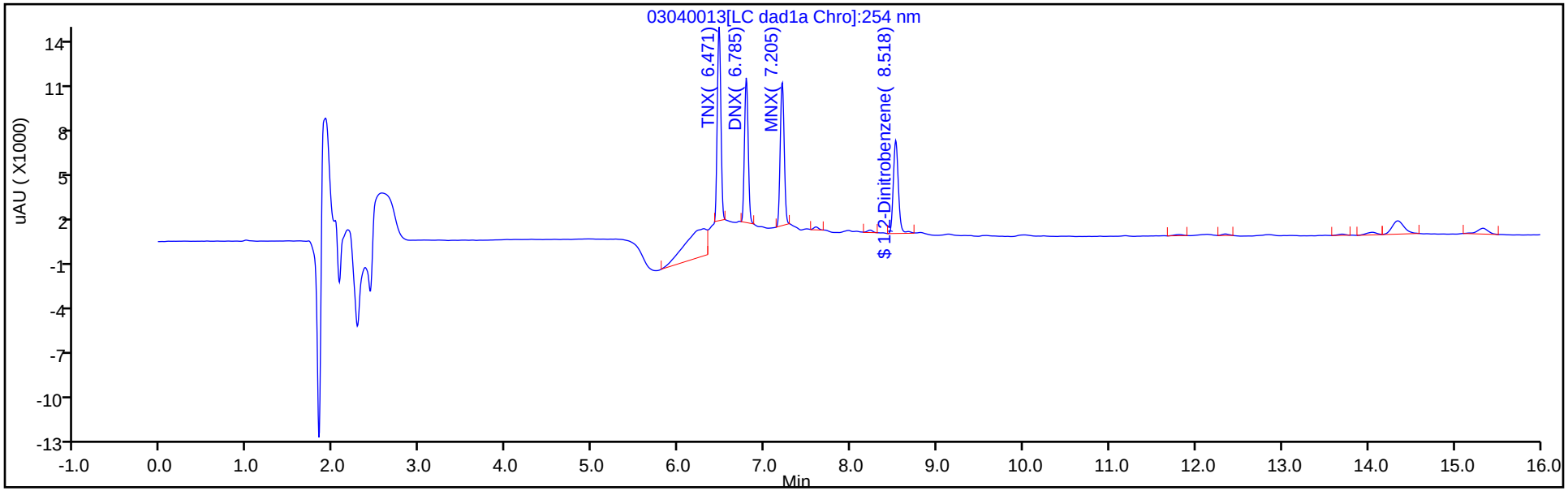
Report Date: 05-Mar-2022 10:57:50 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

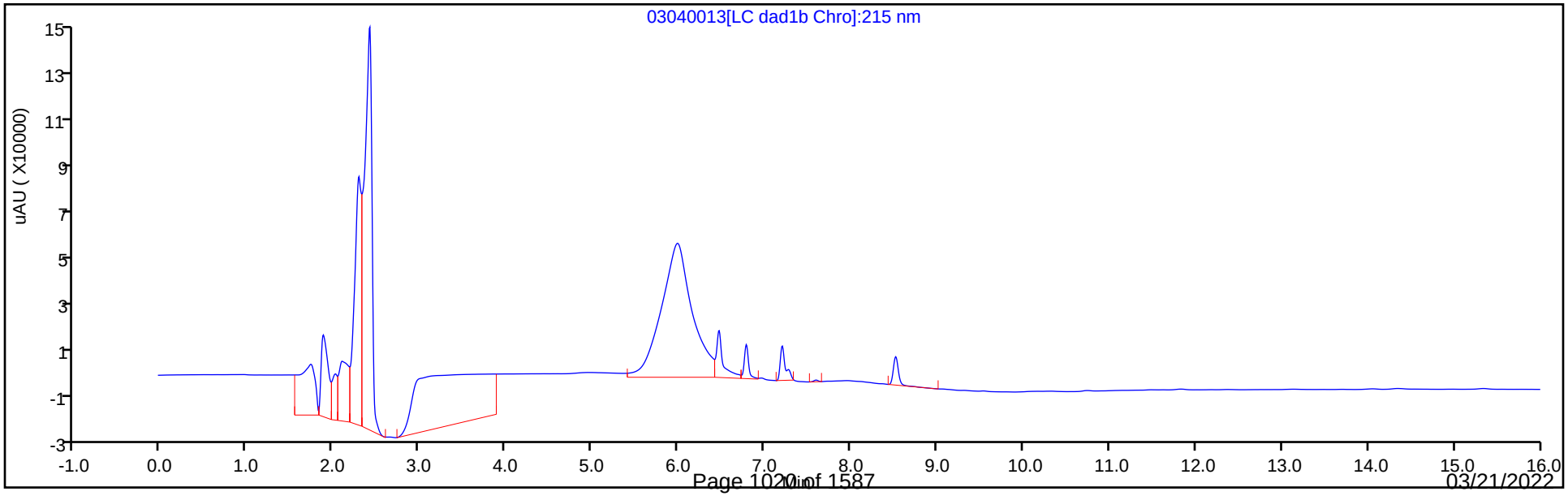
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040013.d

Injection Date:	04-Mar-2022 20:51:56	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-567737/3-A			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 Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040013.D				
Lims ID:	LCS 280-567737/3-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	04-Mar-2022 20:51:56	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-567737/3				
Misc. Info.:	280-0109012-013				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:47	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:	05-Mar-2022 10:19:52		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2001	100.06

Manual Integration/User Assign Peak Report

Eurofins Denver

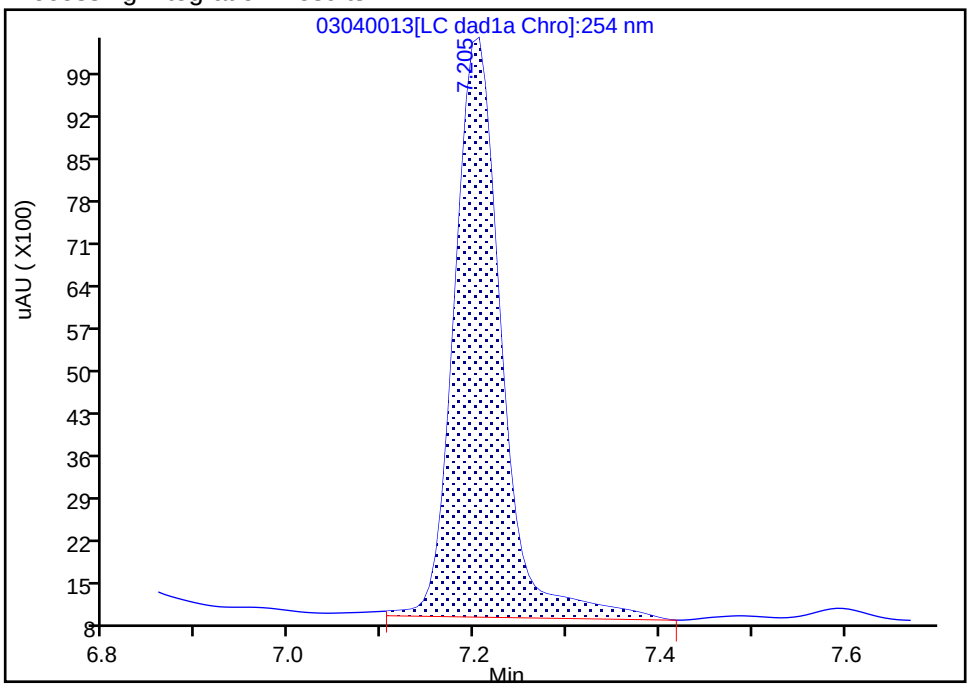
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040013.d
Injection Date: 04-Mar-2022 20:51:56 Instrument ID: CHHPLC_X3
Lims ID: LCS 280-567737/3-A
Client ID:
Operator ID: JZ ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

7 MNX, CAS: 5755-27-1

Signal: 1

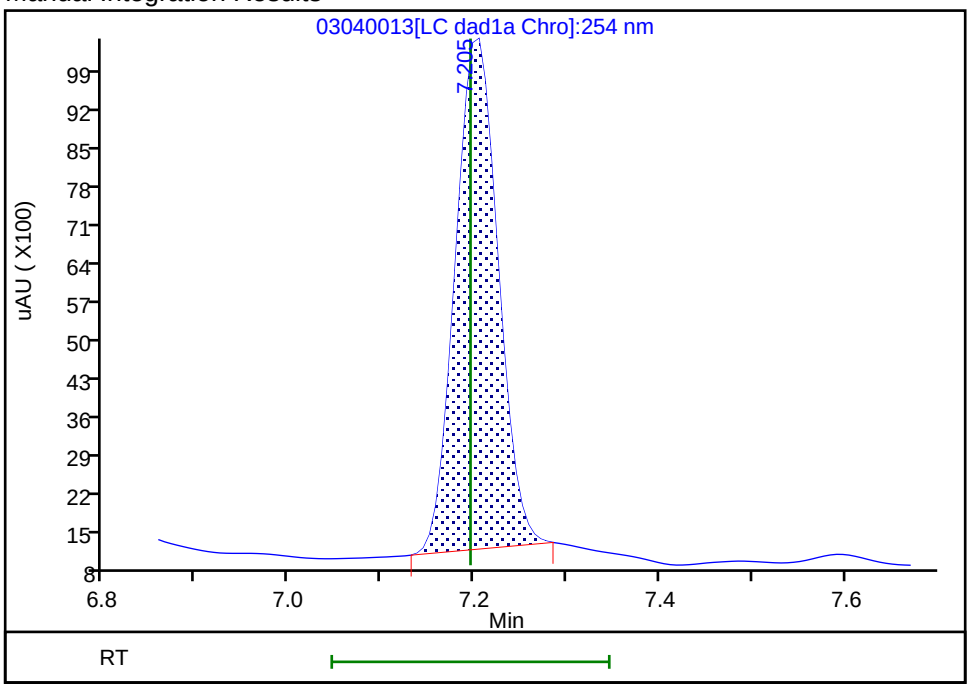
Processing Integration Results

RT: 7.20
Area: 34017
Amount: 0.269986
Amount Units: ug/mL



Manual Integration Results

RT: 7.20
Area: 30057
Amount: 0.238556
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:19:47
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: NW062-8 MS | Lab Sample ID: 280-159190-16 MS

Matrix: Water | Lab File ID: 03040034.D

Analysis Method: 8330A | Date Collected: 02/27/2022 14:15

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 467.3(mL) | Date Analyzed: 03/05/2022 04:53

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.: 567774 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.18		0.22	0.21	0.090
99-65-0	1,3-Dinitrobenzene	2.22		0.12	0.11	0.039
118-96-7	2,4,6-Trinitrotoluene	2.16		0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	2.06		0.11	0.086	0.029
606-20-2	2,6-Dinitrotoluene	2.12		0.11	0.086	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	2.03		0.12	0.11	0.054
88-72-2	2-Nitrotoluene	1.91		0.22	0.21	0.091
99-08-1	3-Nitrotoluene	1.67		0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	2.05		0.16	0.13	0.062
99-99-0	4-Nitrotoluene	2.12		0.44	0.43	0.11
2691-41-0	HMX	2.03	M	0.22	0.21	0.094
98-95-3	Nitrobenzene	2.31		0.22	0.21	0.097
121-82-4	RDX	1.90	M	0.22	0.21	0.055
479-45-8	Tetryl	2.22		0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	100		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040034.D
Lims ID: 280-159190-B-16-B MS
Client ID: NW062-8
Sample Type: MS
Inject. Date: 05-Mar-2022 04:53:30 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-B-16-
Misc. Info.: 280-0109012-034
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:37 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: CTX1616

First Level Reviewer: zhangji Date: 05-Mar-2022 10:50:19

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.591	6.591	0.000	15917	0.2000	0.1899	M
8 RDX	1	7.585	7.578	0.007	18369	0.2000	0.1773	M
9 2,4,6-Trinitrophenol	1	7.885	7.898	-0.013	15459	0.2000	0.2007	M
$ 10 1,2-Dinitrobenzene	1	8.531	8.511	0.020	25006	0.2000	0.2005	
11 1,3,5-Trinitrobenzene	1	8.658	8.638	0.020	44416	0.2000	0.2037	
12 1,3-Dinitrobenzene	1	9.278	9.257	0.021	59761	0.2000	0.2072	
13 Nitrobenzene	1	9.665	9.644	0.021	41412	0.2000	0.2157	
15 Tetryl	1	9.978	9.957	0.021	35421	0.2000	0.2077	
16 Nitroglycerin	2	10.431	10.404	0.027	137368	2.00	2.18	
17 2,4,6-Trinitrotoluene	1	10.885	10.857	0.028	41005	0.2000	0.2023	
18 4-Amino-2,6-dinitrotoluene	1	11.071	11.051	0.020	28884	0.2000	0.1913	
19 2-Amino-4,6-dinitrotoluene	1	11.325	11.297	0.028	38426	0.2000	0.1901	
20 2,6-Dinitrotoluene	1	11.491	11.464	0.027	28357	0.2000	0.1981	
21 2,4-Dinitrotoluene	1	11.658	11.637	0.021	55648	0.2000	0.1923	
22 o-Nitrotoluene	1	12.505	12.477	0.028	22831	0.2000	0.1789	
23 p-Nitrotoluene	1	12.925	12.897	0.028	21047	0.2000	0.1981	
24 m-Nitrotoluene	1	13.498	13.471	0.027	22171	0.2000	0.1558	
25 PETN	2	14.531	14.497	0.034	152318	2.00	2.08	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

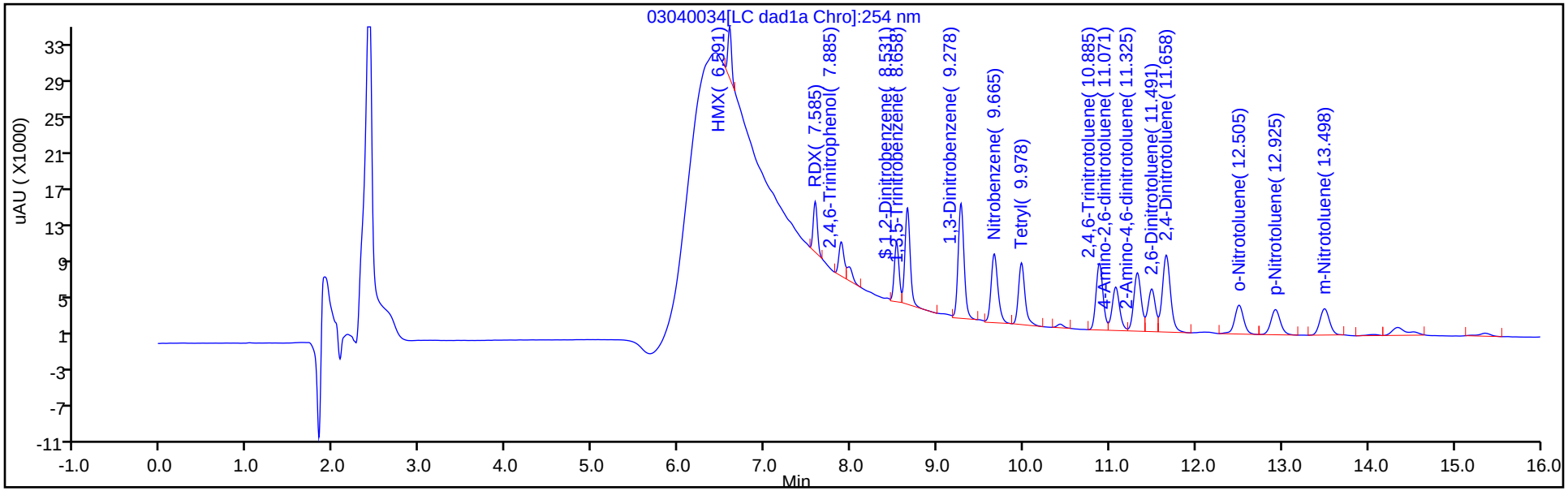
Report Date: 05-Mar-2022 10:57:41 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

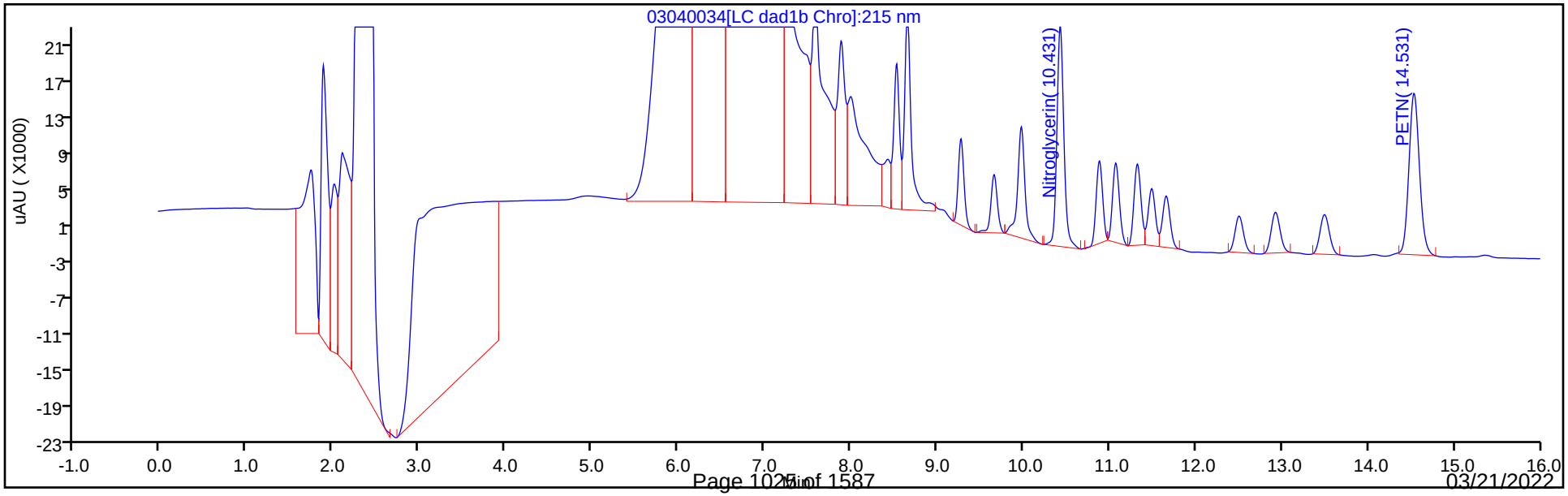
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040034.d

Injection Date:	05-Mar-2022 04:53:30	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159190-B-16-B MS			Worklist Smp#:	34
Client ID:	NW062-8				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040034.D				
Lims ID:	280-159190-B-16-B MS				
Client ID:	NW062-8				
Sample Type:	MS				
Inject. Date:	05-Mar-2022 04:53:30	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-B-16-				
Misc. Info.:	280-0109012-034				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:37	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:	CTX1616				

First Level Reviewer: zhangji Date: 05-Mar-2022 10:50:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2005	100.27

Manual Integration/User Assign Peak Report

Eurofins Denver

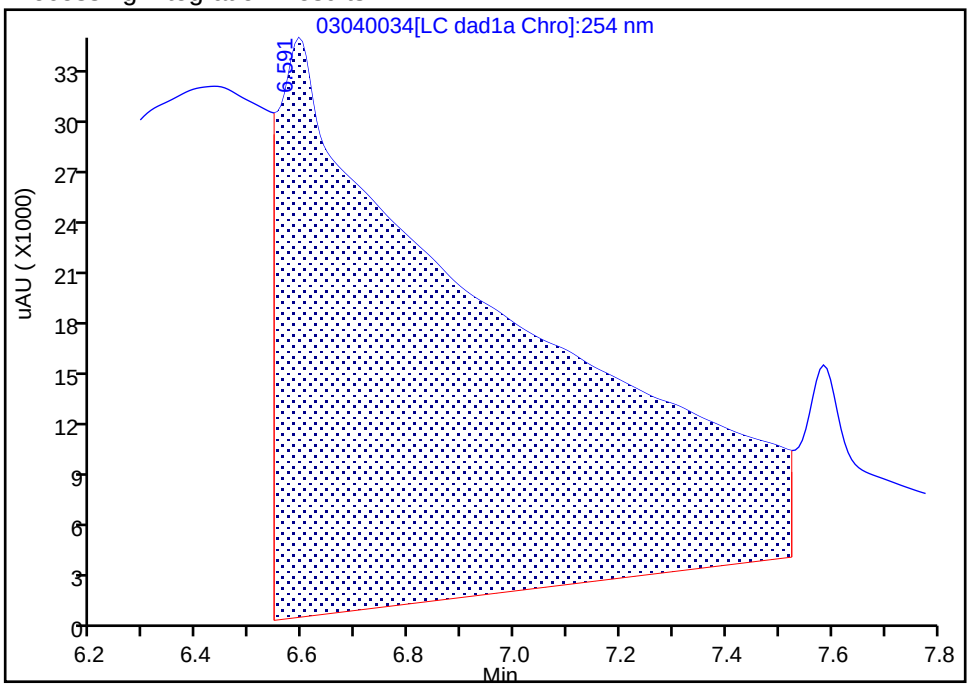
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040034.d				
Injection Date:	05-Mar-2022 04:53:30	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-B-16-B MS				
Client ID:	NW062-8				
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

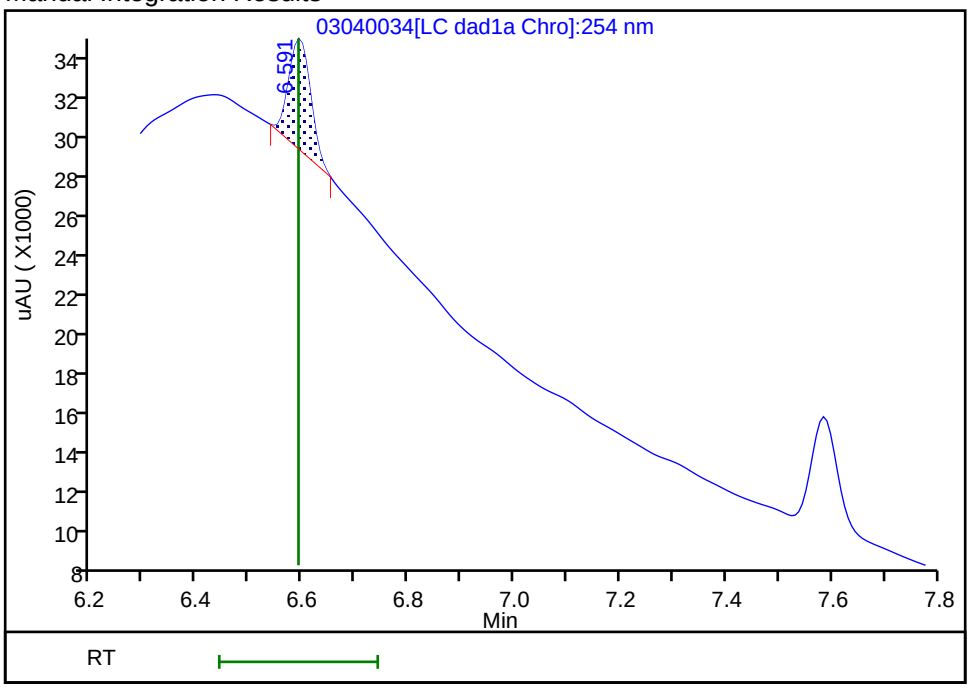
Processing Integration Results

RT: 6.59
Area: 955551
Amount: 11.399056
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 15917
Amount: 0.189879
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:49:34
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

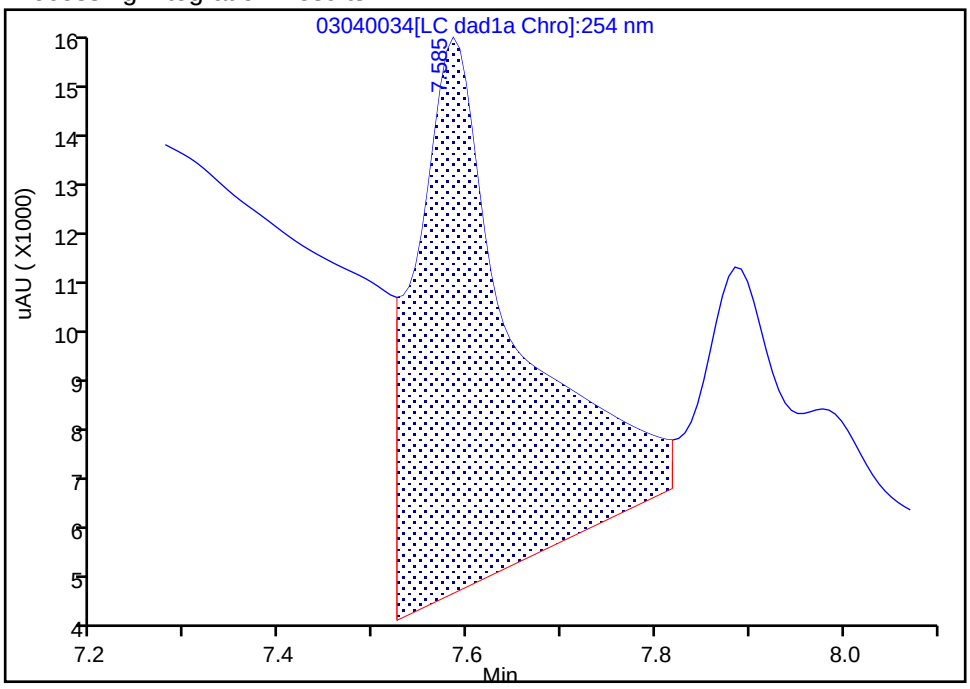
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040034.d				
Injection Date:	05-Mar-2022 04:53:30	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-B-16-B MS				
Client ID:	NW062-8				
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

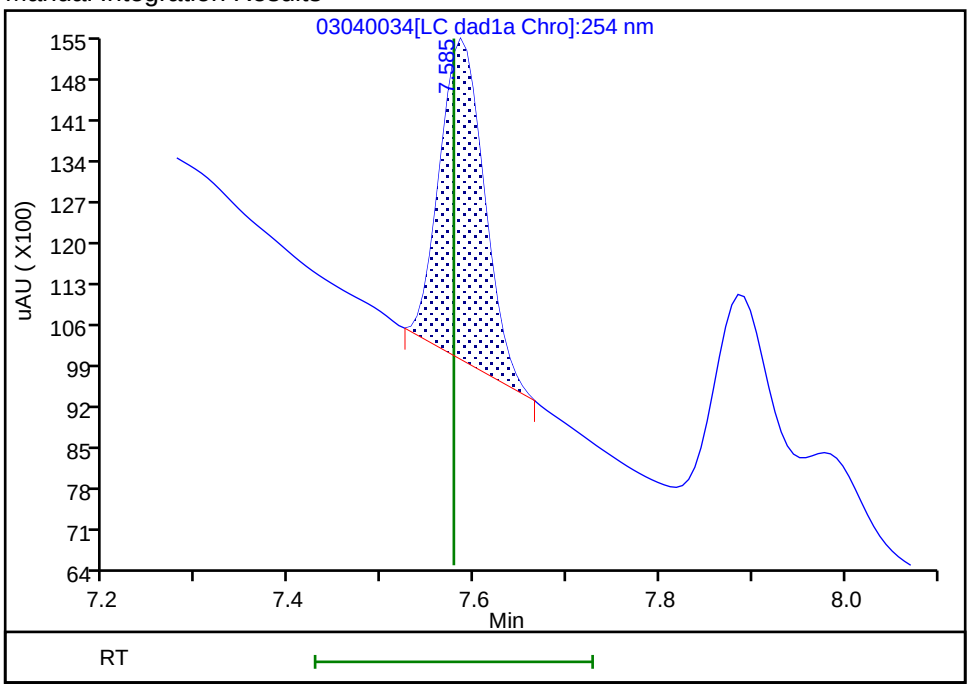
Processing Integration Results

RT: 7.58
Area: 80534
Amount: 0.777286
Amount Units: ug/mL



Manual Integration Results

RT: 7.58
Area: 18369
Amount: 0.177291
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:49:38
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: NW062-8 MS | Lab Sample ID: 280-159190-16 MS

Matrix: Water | Lab File ID: 03040036.D

Analysis Method: 8330A | Date Collected: 02/27/2022 14:15

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 469.1(mL) | Date Analyzed: 03/05/2022 05:39

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.: 567774 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.56	M	2.1	0.43	0.16

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	102	M	83-119

Eurofins Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040036.D				
Lims ID:	280-159190-A-16-A MS				
Client ID:	NW062-8				
Sample Type:	MS				
Inject. Date:	05-Mar-2022 05:39:19	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-A-16-				
Misc. Info.:	280-0109012-036				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:37	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:	CTX1616				
First Level Reviewer: zhangji		Date:	05-Mar-2022 10:51:28		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.474	6.469	0.005	39299	0.2002	0.2169	M
6 DNX	1	6.794	6.782	0.012	29247	0.2002	0.2118	M
7 MNX	1	7.207	7.196	0.011	30278	0.2334	0.2403	M
$ 10 1,2-Dinitrobenzene	1	8.527	8.511	0.016	25409	0.2000	0.2038	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

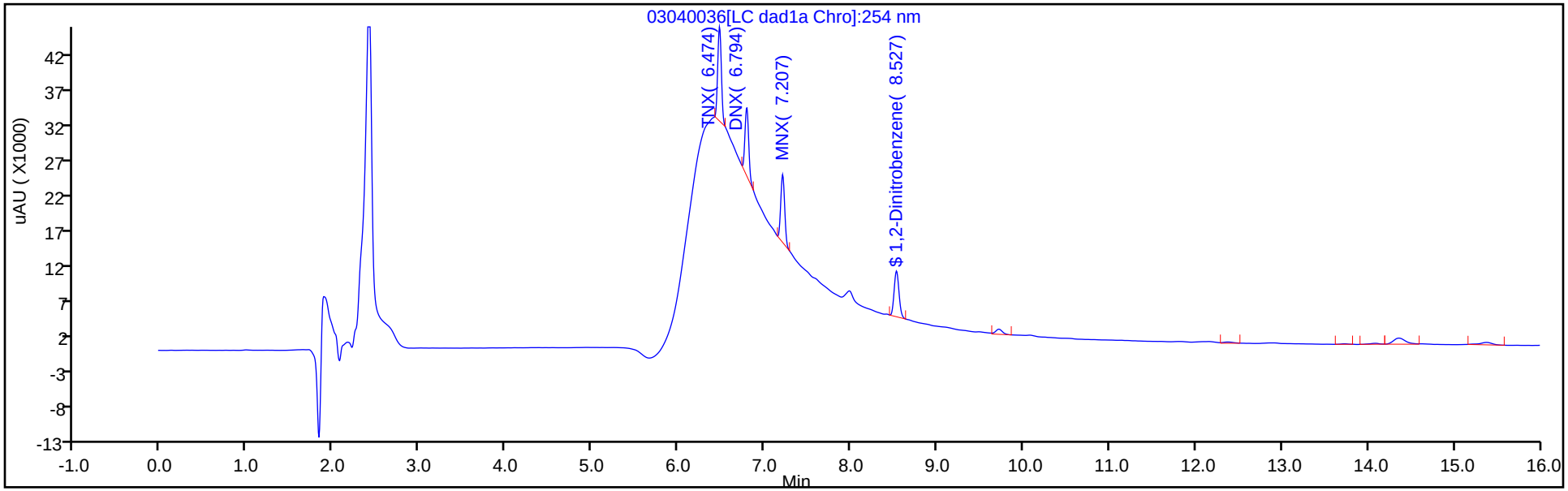
Report Date: 05-Mar-2022 10:57:40 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

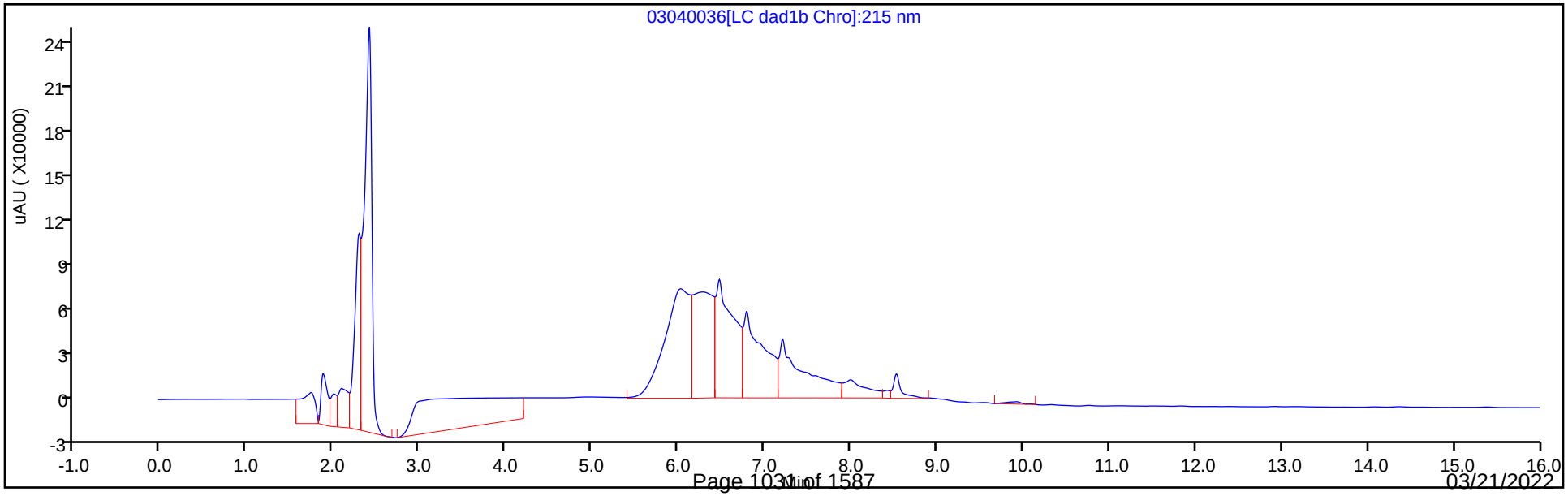
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040036.d

Injection Date:	05-Mar-2022 05:39:19	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159190-A-16-A MS			Worklist Smp#:	36
Client ID:	NW062-8				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040036.D				
Lims ID:	280-159190-A-16-A MS				
Client ID:	NW062-8				
Sample Type:	MS				
Inject. Date:	05-Mar-2022 05:39:19	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-A-16-				
Misc. Info.:	280-0109012-036				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:37	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:	CTX1616				
First Level Reviewer: zhangji		Date:	05-Mar-2022 10:51:28		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2038	101.88

Manual Integration/User Assign Peak Report

Eurofins Denver

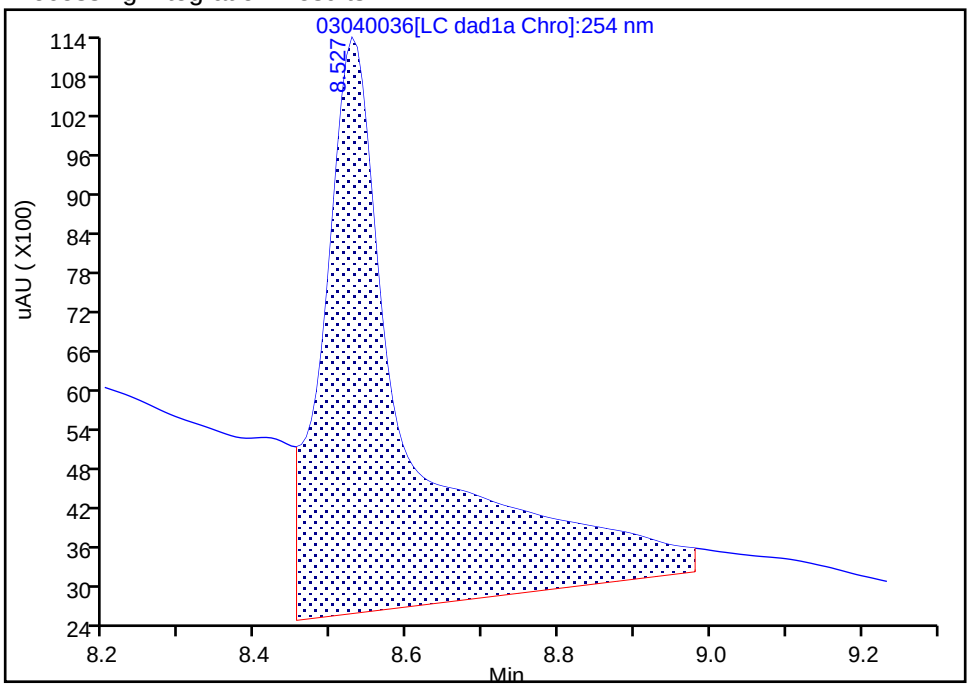
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040036.d				
Injection Date:	05-Mar-2022 05:39:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-16-A MS				
Client ID:	NW062-8				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

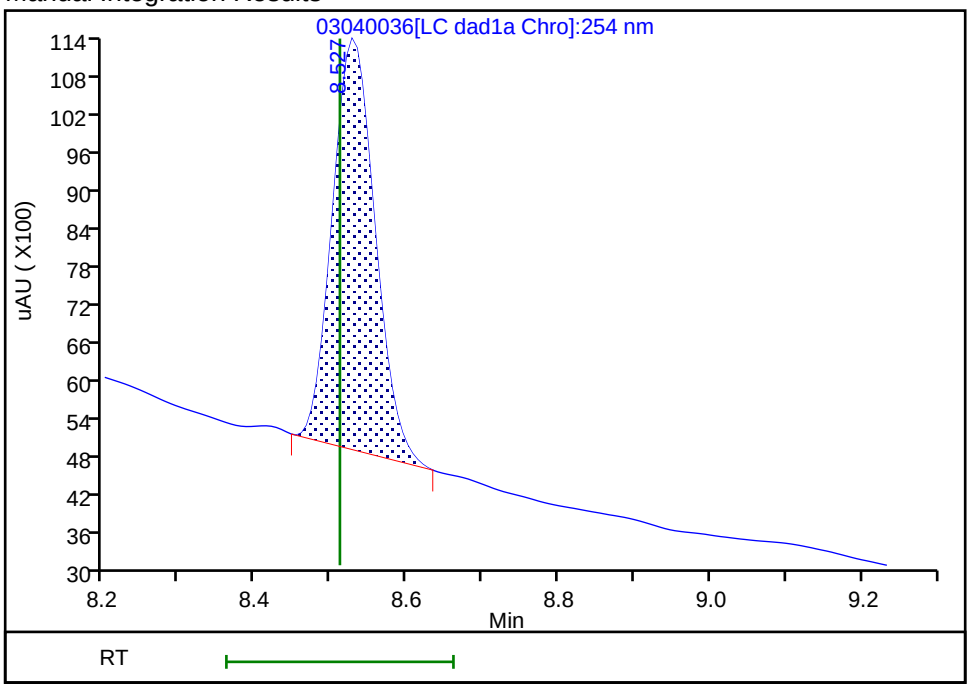
Processing Integration Results

RT: 8.53
Area: 71569
Amount: 0.573940
Amount Units: ug/mL



Manual Integration Results

RT: 8.53
Area: 25409
Amount: 0.203765
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:51:27

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

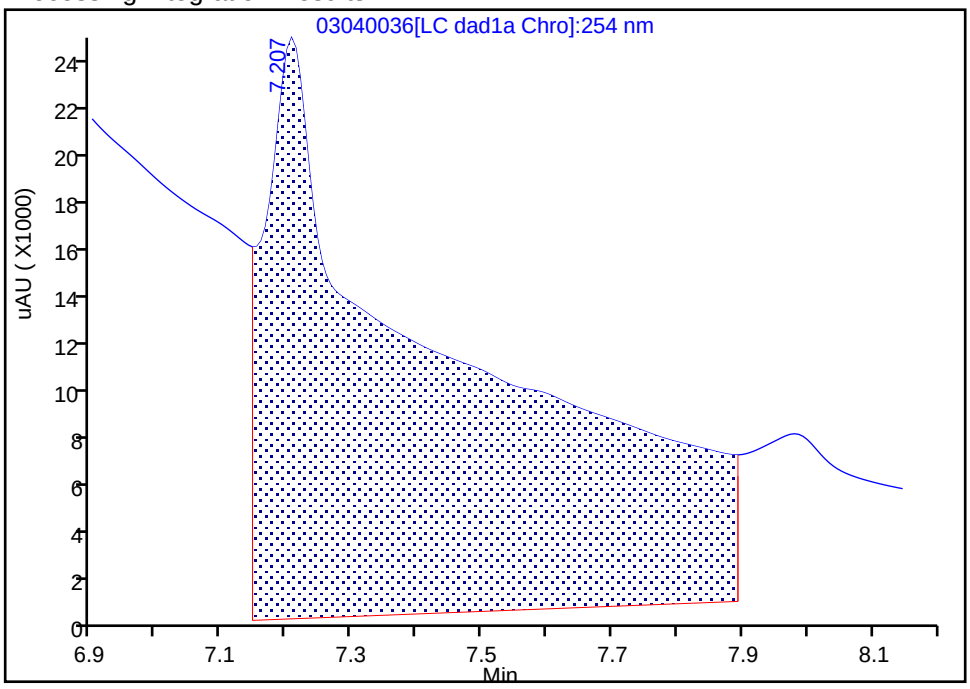
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040036.d				
Injection Date:	05-Mar-2022 05:39:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-16-A MS				
Client ID:	NW062-8				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	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

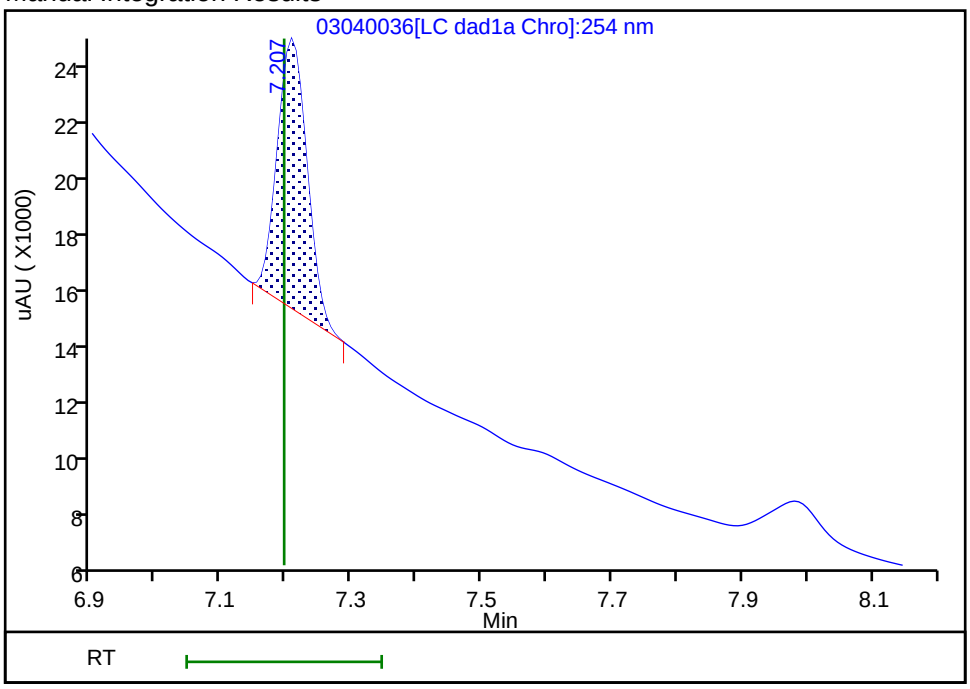
Processing Integration Results

RT: 7.21
Area: 483162
Amount: 3.834759
Amount Units: ug/mL



Manual Integration Results

RT: 7.21
Area: 30278
Amount: 0.240310
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:51:23

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: NW062-8 MSD | Lab Sample ID: 280-159190-16 MSD

Matrix: Water | Lab File ID: 03040035.D

Analysis Method: 8330A | Date Collected: 02/27/2022 14:15

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 465.9(mL) | Date Analyzed: 03/05/2022 05:16

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.: 567774 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.23		0.23	0.21	0.090
99-65-0	1,3-Dinitrobenzene	2.28		0.12	0.11	0.040
118-96-7	2,4,6-Trinitrotoluene	2.21		0.12	0.11	0.048
121-14-2	2,4-Dinitrotoluene	2.13		0.11	0.086	0.029
606-20-2	2,6-Dinitrotoluene	2.18		0.11	0.086	0.043
35572-78-2	2-Amino-4,6-dinitrotoluene	2.11		0.12	0.11	0.054
88-72-2	2-Nitrotoluene	2.03		0.23	0.21	0.092
99-08-1	3-Nitrotoluene	1.80		0.43	0.43	0.21
19406-51-0	4-Amino-2,6-dinitrotoluene	2.11		0.16	0.13	0.062
99-99-0	4-Nitrotoluene	2.23		0.44	0.43	0.11
2691-41-0	HMX	2.13	M	0.23	0.21	0.094
98-95-3	Nitrobenzene	2.41		0.23	0.21	0.098
121-82-4	RDX	1.99	M	0.23	0.21	0.055
479-45-8	Tetryl	2.26		0.12	0.11	0.034

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	104		83-119

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040035.D
Lims ID: 280-159190-B-16-C MSD
Client ID: NW062-8
Sample Type: MSD
Inject. Date: 05-Mar-2022 05:16:24 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-B-16-
Misc. Info.: 280-0109012-035
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:37 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: CTX1616

First Level Reviewer: zhangji Date: 05-Mar-2022 10:51:07

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.594	6.591	0.003	16641	0.2000	0.1985	M
8 RDX	1	7.587	7.578	0.009	19238	0.2000	0.1857	M
9 2,4,6-Trinitrophenol	1	7.887	7.898	-0.011	16145	0.2000	0.2096	M
$ 10 1,2-Dinitrobenzene	1	8.527	8.511	0.016	25956	0.2000	0.2082	
11 1,3,5-Trinitrobenzene	1	8.654	8.638	0.016	45332	0.2000	0.2079	
12 1,3-Dinitrobenzene	1	9.280	9.257	0.023	61222	0.2000	0.2123	
13 Nitrobenzene	1	9.660	9.644	0.016	43022	0.2000	0.2241	
15 Tetryl	1	9.980	9.957	0.023	35918	0.2000	0.2106	
16 Nitroglycerin	2	10.427	10.404	0.023	139553	2.00	2.21	
17 2,4,6-Trinitrotoluene	1	10.887	10.857	0.030	41831	0.2000	0.2063	
18 4-Amino-2,6-dinitrotoluene	1	11.074	11.051	0.023	29645	0.2000	0.1963	
19 2-Amino-4,6-dinitrotoluene	1	11.327	11.297	0.030	39793	0.2000	0.1968	
20 2,6-Dinitrotoluene	1	11.494	11.464	0.030	29115	0.2000	0.2034	
21 2,4-Dinitrotoluene	1	11.660	11.637	0.023	57439	0.2000	0.1985	
22 o-Nitrotoluene	1	12.507	12.477	0.030	24088	0.2000	0.1888	
23 p-Nitrotoluene	1	12.934	12.897	0.037	22091	0.2000	0.2079	
24 m-Nitrotoluene	1	13.500	13.471	0.029	23817	0.2000	0.1674	
25 PETN	2	14.540	14.497	0.043	154773	2.00	2.11	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

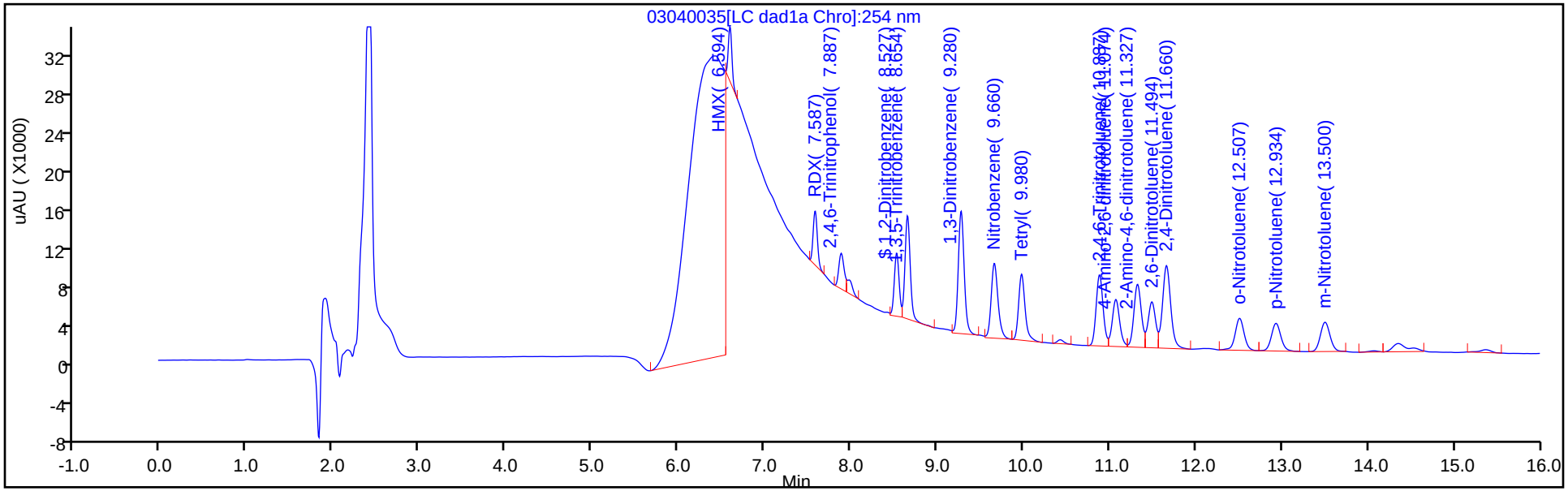
Report Date: 05-Mar-2022 10:57:40 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

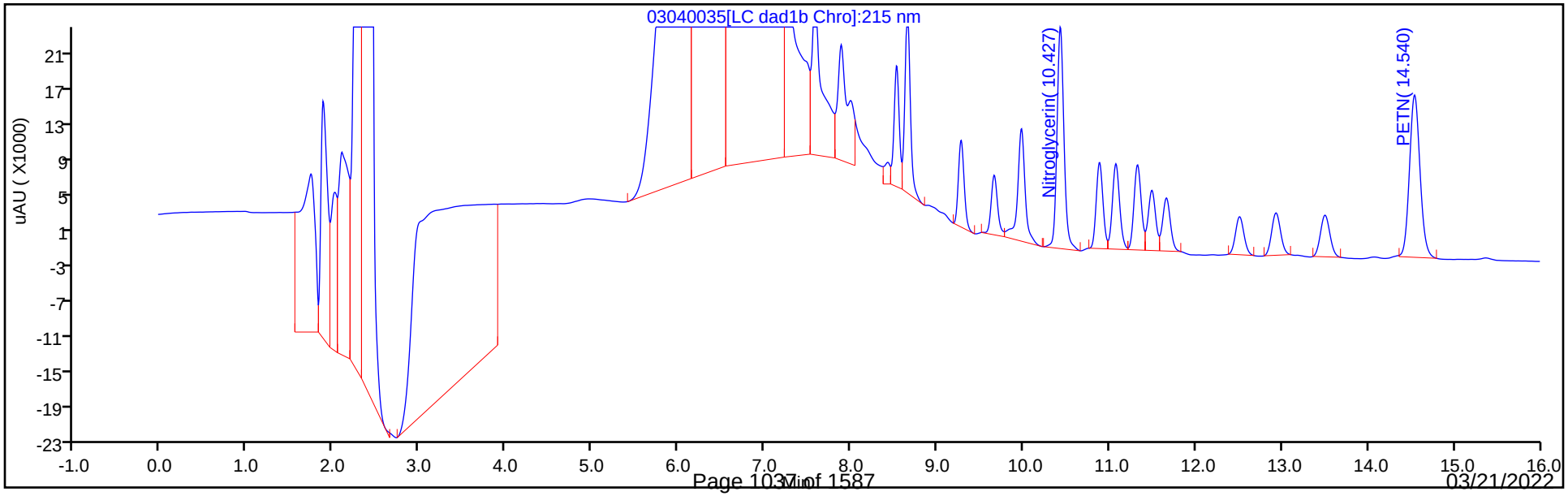
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040035.d

Injection Date:	05-Mar-2022 05:16:24	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159190-B-16-C MSD			Worklist Smp#:	35
Client ID:	NW062-8				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040035.D				
Lims ID:	280-159190-B-16-C MSD				
Client ID:	NW062-8				
Sample Type:	MSD				
Inject. Date:	05-Mar-2022 05:16:24	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-B-16-				
Misc. Info.:	280-0109012-035				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:37	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:	CTX1616				

First Level Reviewer: zhangji Date: 05-Mar-2022 10:51:07

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2082	104.08

Manual Integration/User Assign Peak Report

Eurofins Denver

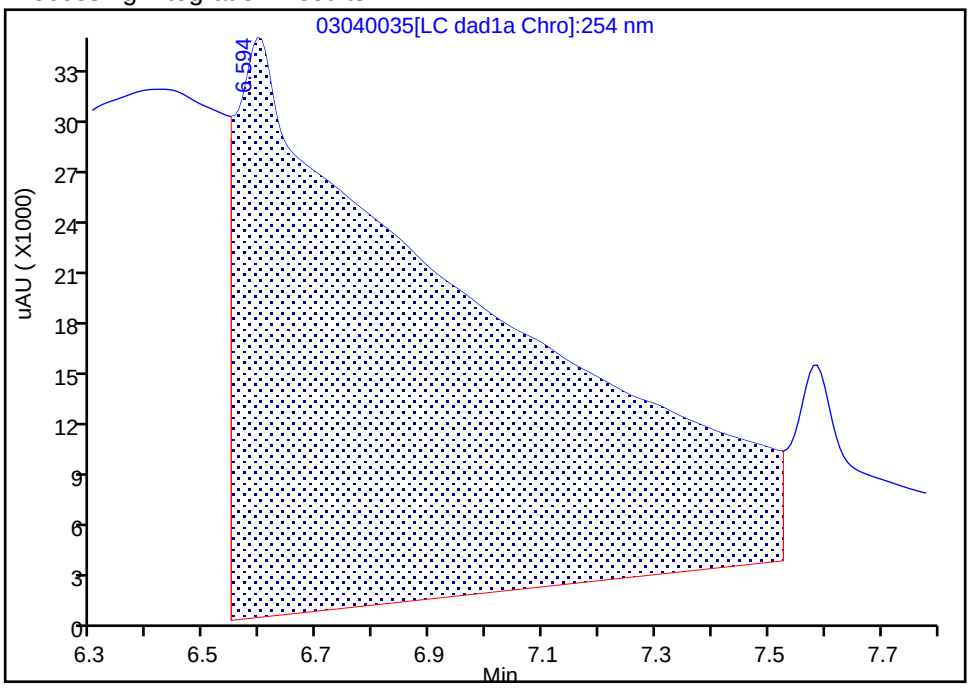
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040035.d				
Injection Date:	05-Mar-2022 05:16:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-B-16-C MSD				
Client ID:	NW062-8				
Operator ID:	JZ	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

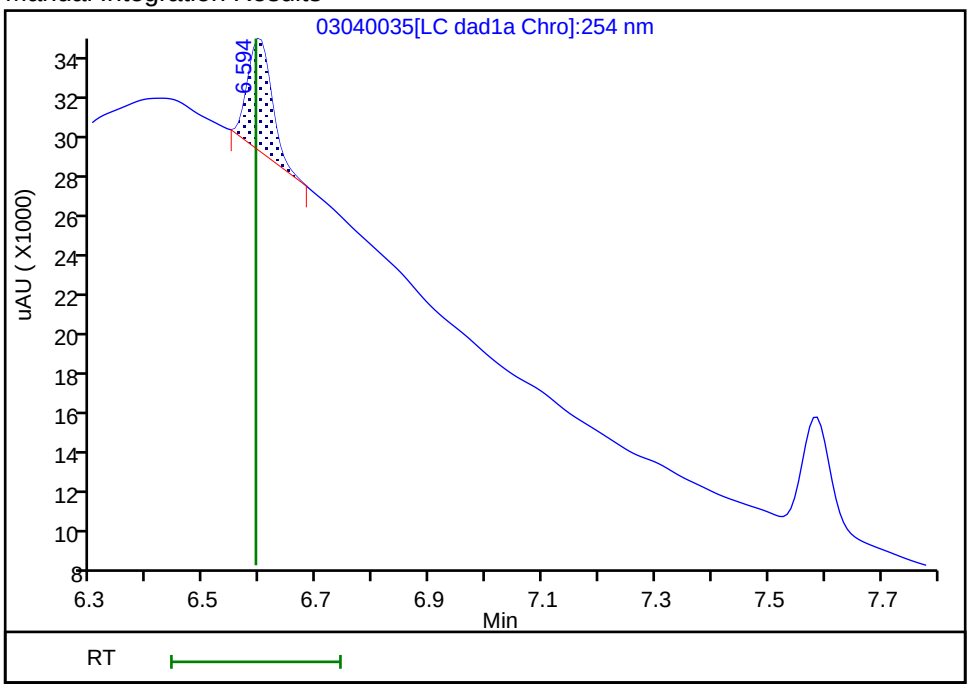
Processing Integration Results

RT: 6.59
Area: 990583
Amount: 11.816964
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 16641
Amount: 0.198516
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:50:56
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

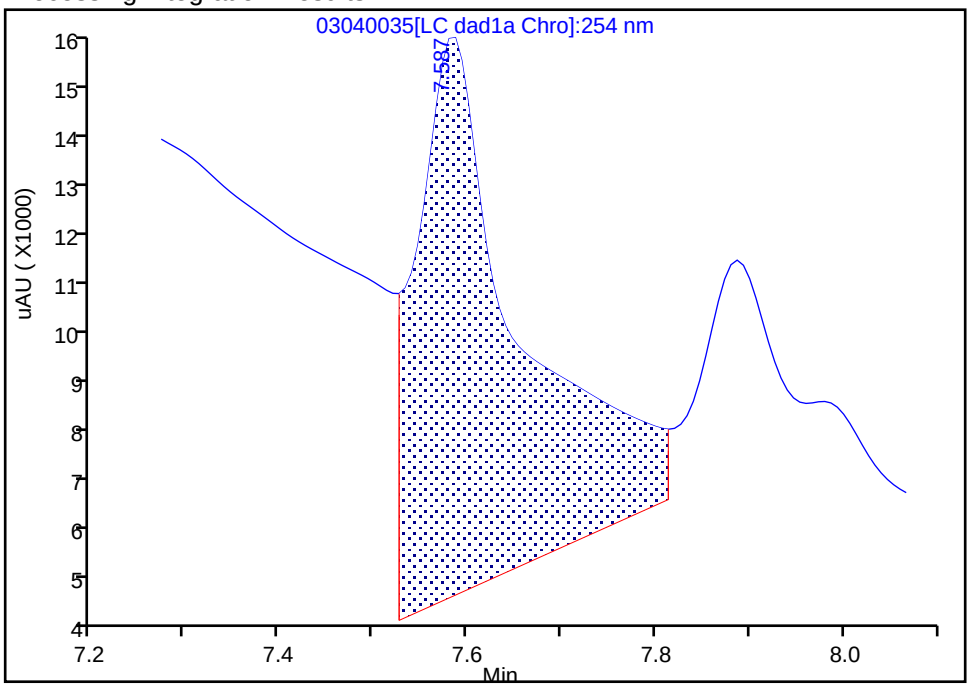
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040035.d				
Injection Date:	05-Mar-2022 05:16:24	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-B-16-C MSD				
Client ID:	NW062-8				
Operator ID:	JZ	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

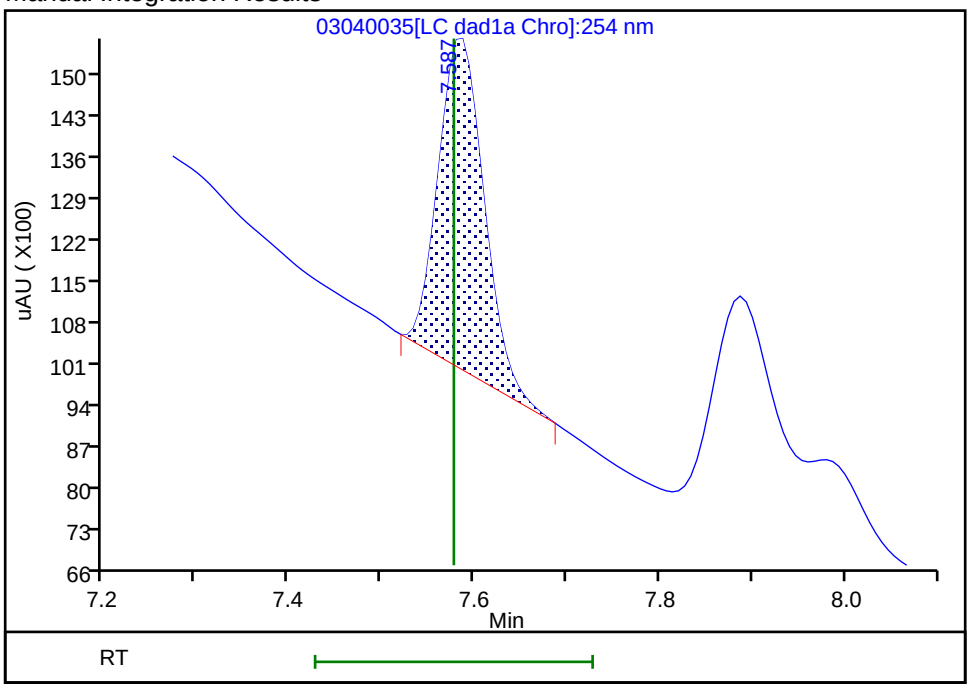
Processing Integration Results

RT: 7.59
Area: 85292
Amount: 0.823209
Amount Units: ug/mL



Manual Integration Results

RT: 7.59
Area: 19238
Amount: 0.185678
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:50:59
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG No.:

Client Sample ID: NW062-8 MSD | Lab Sample ID: 280-159190-16 MSD

Matrix: Water | Lab File ID: 03040037.D

Analysis Method: 8330A | Date Collected: 02/27/2022 14:15

Extraction Method: 3535 | Date Extracted: 03/04/2022 14:39

Sample wt/vol: 464.4(mL) | Date Analyzed: 03/05/2022 06:02

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.: 567774 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.45	M	2.2	0.43	0.17

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_X\20220304-109012.b\03040037.D
Lims ID: 280-159190-A-16-B MSD
Client ID: NW062-8
Sample Type: MSD
Inject. Date: 05-Mar-2022 06:02:17 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-159190-A-16-
Misc. Info.: 280-0109012-037
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 05-Mar-2022 10:57:37 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: CTX1616

First Level Reviewer: zhangji Date: 05-Mar-2022 10:52:14

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	6.469	0.007	37460	0.2002	0.2067	M
6 DNX	1	6.796	6.782	0.014	26918	0.2002	0.1949	M
7 MNX	1	7.209	7.196	0.013	28712	0.2334	0.2279	M
$ 10 1,2-Dinitrobenzene	1	8.536	8.511	0.025	24279	0.2000	0.1947	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

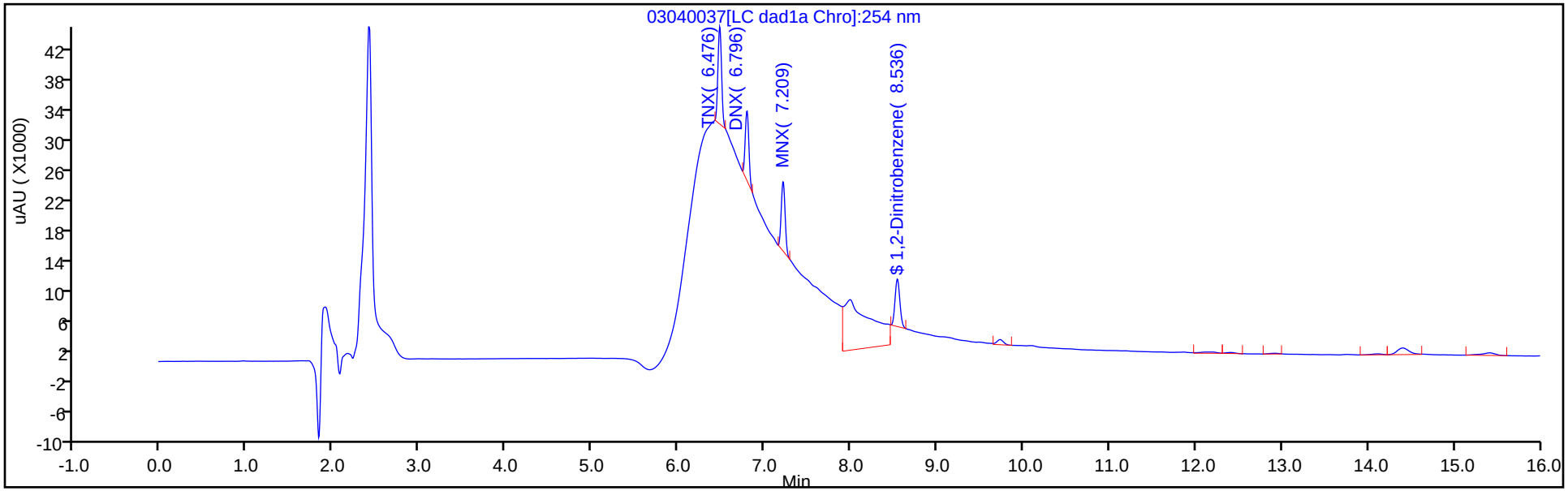
Report Date: 05-Mar-2022 10:57:39 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

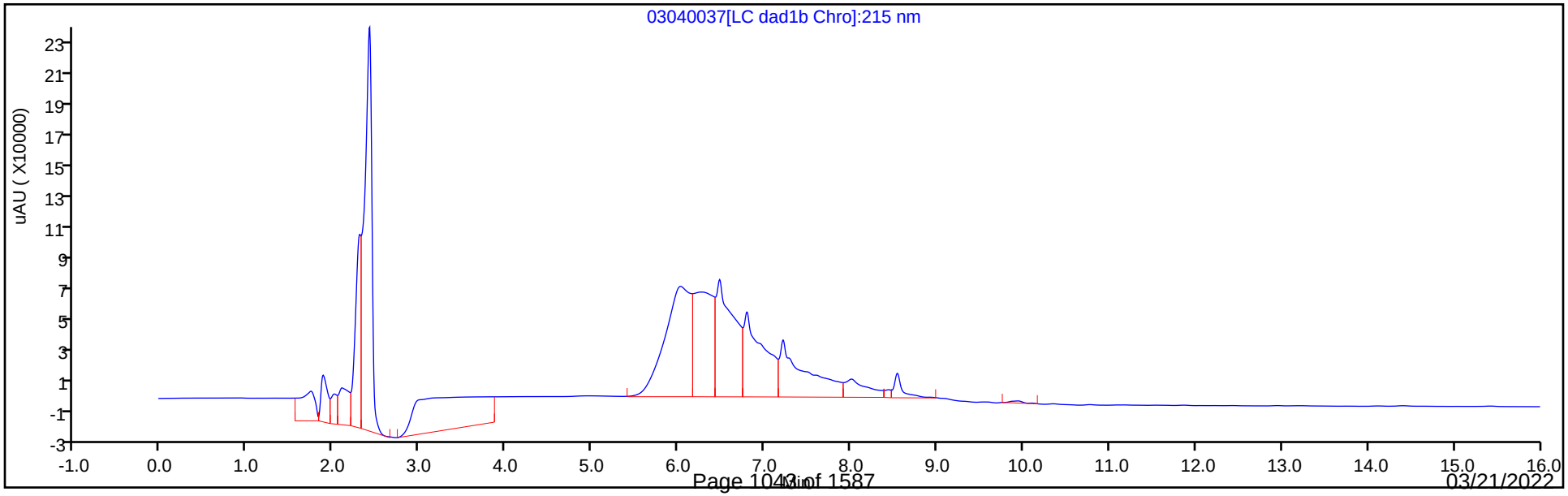
Data File: \\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040037.d

Injection Date:	05-Mar-2022 06:02:17	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-159190-A-16-B MSD			Worklist Smp#:	37
Client ID:	NW062-8				
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



Eurofins Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\03040037.D				
Lims ID:	280-159190-A-16-B MSD				
Client ID:	NW062-8				
Sample Type:	MSD				
Inject. Date:	05-Mar-2022 06:02:17	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-159190-A-16-				
Misc. Info.:	280-0109012-037				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20220304-109012.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	05-Mar-2022 10:57:37	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:	CTX1616				

First Level Reviewer: zhangji Date: 05-Mar-2022 10:52:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1947	97.35

Manual Integration/User Assign Peak Report

Eurofins Denver

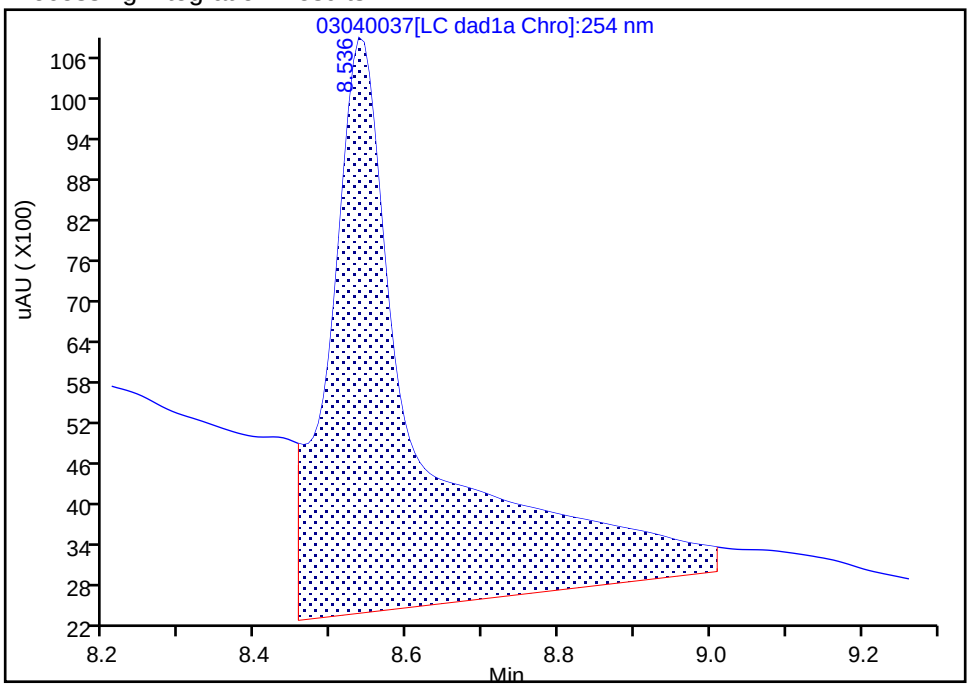
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040037.d				
Injection Date:	05-Mar-2022 06:02:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-16-B MSD				
Client ID:	NW062-8				
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

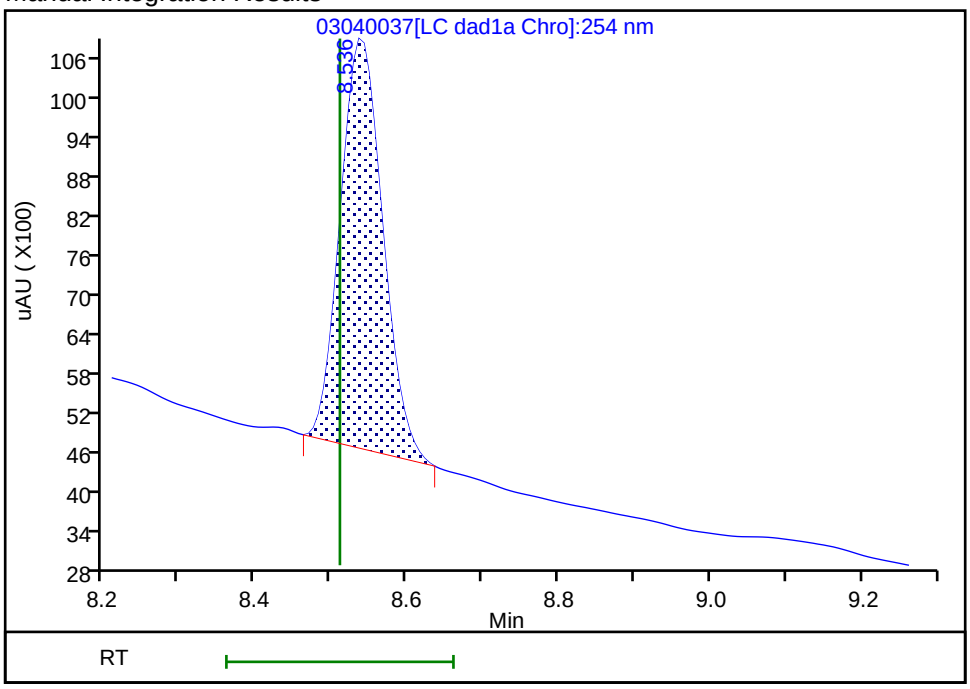
Processing Integration Results

RT: 8.54
Area: 72460
Amount: 0.581085
Amount Units: ug/mL



Manual Integration Results

RT: 8.54
Area: 24279
Amount: 0.194703
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:52:01

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Denver

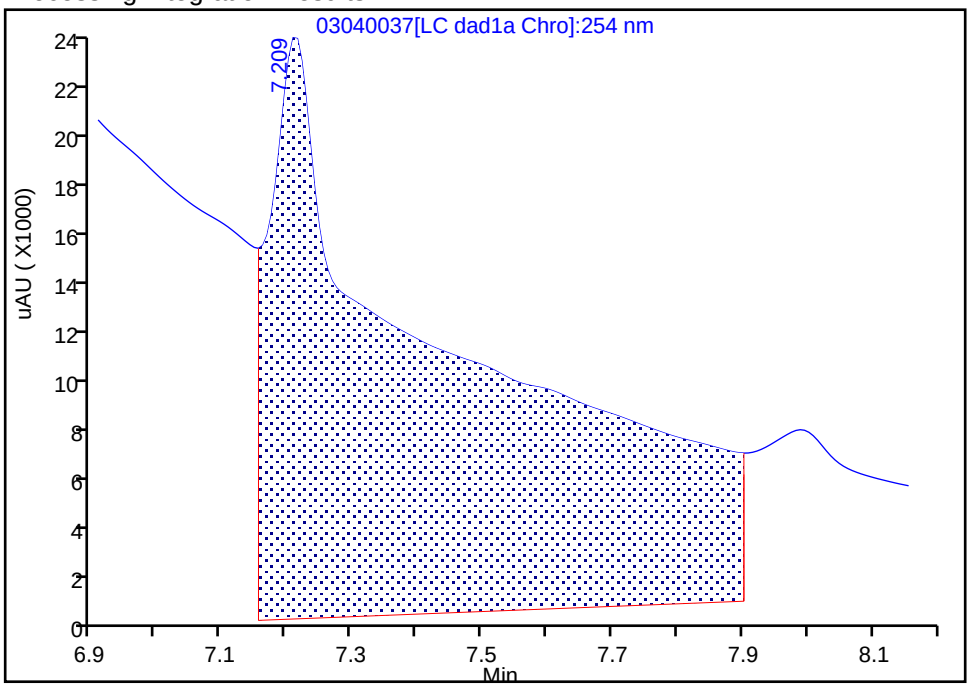
Data File:	\\chromfs\denver\chromdata\chhplc_x\20220304-109012.b\03040037.d				
Injection Date:	05-Mar-2022 06:02:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-159190-A-16-B MSD				
Client ID:	NW062-8				
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	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

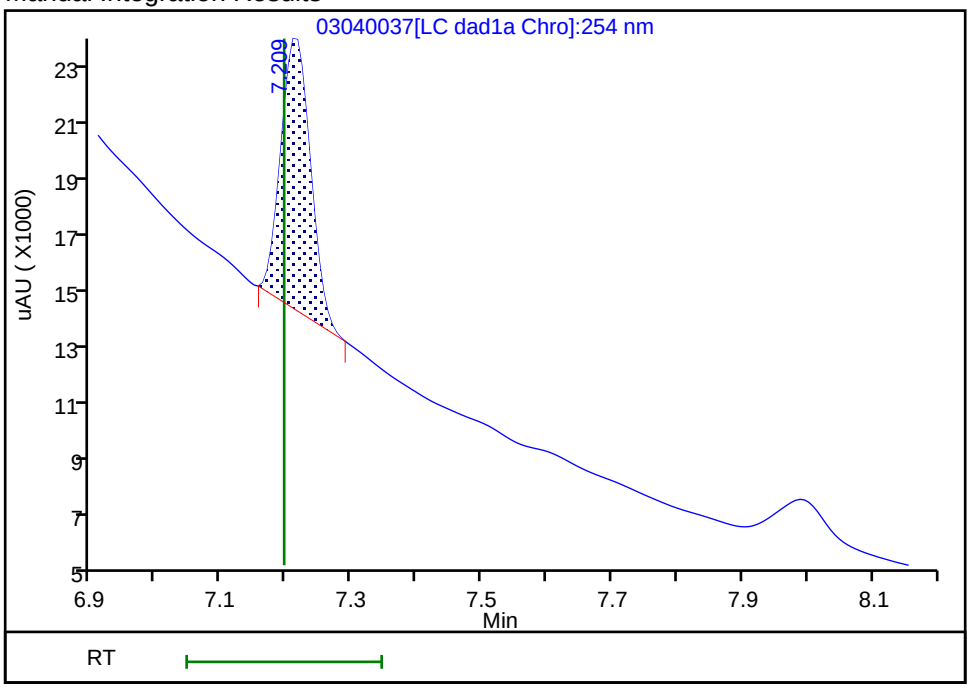
Processing Integration Results

RT: 7.21
Area: 462068
Amount: 3.667340
Amount Units: ug/mL



Manual Integration Results

RT: 7.21
Area: 28712
Amount: 0.227881
Amount Units: ug/mL



Reviewer: zhangji, 05-Mar-2022 10:51:41

Audit Action: Manually Integrated Audit Reason: Baseline

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159190-1

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.: 280-159190-1

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.: 280-159190-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 03/04/2022 19:20

Analysis Batch Number: 567774 End Date: 03/05/2022 08:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-567774/7		03/04/2022 19:20	1	03040007.D	UltraCarb5uODS 4.6(mm)
CCV 280-567774/9		03/04/2022 19:43	1	03040009.D	UltraCarb5uODS 4.6(mm)
MB 280-567737/1-A		03/04/2022 20:06	1	03040011.D	UltraCarb5uODS 4.6(mm)
LCS 280-567737/2-A		03/04/2022 20:29	1	03040012.D	UltraCarb5uODS 4.6(mm)
LCS 280-567737/3-A		03/04/2022 20:51	1	03040013.D	UltraCarb5uODS 4.6(mm)
280-159190-1	NW071-8	03/04/2022 21:14	1	03040014.D	UltraCarb5uODS 4.6(mm)
280-159190-2	NW060-8	03/04/2022 21:37	1	03040015.D	UltraCarb5uODS 4.6(mm)
280-159190-3	NW061-8	03/04/2022 22:00	1	03040016.D	UltraCarb5uODS 4.6(mm)
280-159190-4	EW7-PM24A-8-25	03/04/2022 22:23	1	03040017.D	UltraCarb5uODS 4.6(mm)
280-159190-5	EW7-PM21A-8-25	03/04/2022 22:46	1	03040018.D	UltraCarb5uODS 4.6(mm)
280-159190-6	NW070-8	03/04/2022 23:09	1	03040019.D	UltraCarb5uODS 4.6(mm)
280-159190-7	CA210-8	03/04/2022 23:32	1	03040020.D	UltraCarb5uODS 4.6(mm)
CCV 280-567774/21		03/04/2022 23:55	1	03040021.D	UltraCarb5uODS 4.6(mm)
CCV 280-567774/22		03/05/2022 00:18	1	03040022.D	UltraCarb5uODS 4.6(mm)
280-159190-8	CA212-8	03/05/2022 00:41	1	03040023.D	UltraCarb5uODS 4.6(mm)
280-159190-9	CA213-8	03/05/2022 01:04	1	03040024.D	UltraCarb5uODS 4.6(mm)
280-159190-10	G0092-8	03/05/2022 01:27	1	03040025.D	UltraCarb5uODS 4.6(mm)
280-159190-11	G0091-8	03/05/2022 01:50	1	03040026.D	UltraCarb5uODS 4.6(mm)
280-159190-12	CA211-8	03/05/2022 02:13	1	03040027.D	UltraCarb5uODS 4.6(mm)
280-159190-13	EW7-PM28A-8-25	03/05/2022 02:36	1	03040028.D	UltraCarb5uODS 4.6(mm)
280-159190-14	EW7-PM29A-8-25	03/05/2022 02:58	1	03040029.D	UltraCarb5uODS 4.6(mm)
280-159190-15	EW7-PM27B-8-35	03/05/2022 03:21	1	03040030.D	UltraCarb5uODS 4.6(mm)
CCV 280-567774/31		03/05/2022 03:44	1	03040031.D	UltraCarb5uODS 4.6(mm)
CCV 280-567774/32		03/05/2022 04:07	1	03040032.D	UltraCarb5uODS 4.6(mm)
280-159190-16	NW062-8	03/05/2022 04:30	1	03040033.D	UltraCarb5uODS 4.6(mm)
280-159190-16 MS	NW062-8 MS	03/05/2022 04:53	1	03040034.D	UltraCarb5uODS 4.6(mm)
280-159190-16 MSD	NW062-8 MSD	03/05/2022 05:16	1	03040035.D	UltraCarb5uODS 4.6(mm)
280-159190-16 MS	NW062-8 MS	03/05/2022 05:39	1	03040036.D	UltraCarb5uODS 4.6(mm)
280-159190-16 MSD	NW062-8 MSD	03/05/2022 06:02	1	03040037.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2022 06:25	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2022 06:48	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2022 07:11	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		03/05/2022 07:34	1		UltraCarb5uODS 4.6(mm)
CCV 280-567774/42		03/05/2022 07:57	1	03040042.D	UltraCarb5uODS 4.6(mm)
CCV 280-567774/43		03/05/2022 08:20	1	03040043.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 03/04/2022 21:27

Analysis Batch Number: 567777 End Date: 03/05/2022 14:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-567777/15		03/04/2022 21:27	1	03040015.D	Luna-phenylhex 4.6(mm)
CCV 280-567777/16		03/04/2022 22:03	1	03040016.D	Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2022 22:38	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2022 23:13	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/04/2022 23:48	1		Luna-phenylhex 4.6(mm)
280-159190-3	NW061-8	03/05/2022 01:33	1	03040022.D	Luna-phenylhex 4.6(mm)
280-159190-4	EW7-PM24A-8-25	03/05/2022 02:08	1	03040023.D	Luna-phenylhex 4.6(mm)
280-159190-5	EW7-PM21A-8-25	03/05/2022 02:43	1	03040024.D	Luna-phenylhex 4.6(mm)
CCV 280-567777/27		03/05/2022 04:29	1	03040027.D	Luna-phenylhex 4.6(mm)
CCV 280-567777/28		03/05/2022 05:04	1	03040028.D	Luna-phenylhex 4.6(mm)
280-159190-11	G0091-8	03/05/2022 07:24	1	03040032.D	Luna-phenylhex 4.6(mm)
280-159190-13	EW7-PM28A-8-25	03/05/2022 08:34	1	03040034.D	Luna-phenylhex 4.6(mm)
280-159190-15	EW7-PM27B-8-35	03/05/2022 09:44	1	03040036.D	Luna-phenylhex 4.6(mm)
CCV 280-567777/37		03/05/2022 10:19	1	03040037.D	Luna-phenylhex 4.6(mm)
CCV 280-567777/38		03/05/2022 10:54	1	03040038.D	Luna-phenylhex 4.6(mm)
ZZZZZ		03/05/2022 11:29	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/05/2022 12:04	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/05/2022 12:39	1		Luna-phenylhex 4.6(mm)
ZZZZZ		03/05/2022 13:14	1		Luna-phenylhex 4.6(mm)
CCV 280-567777/48		03/05/2022 13:49	1		Luna-phenylhex 4.6(mm)
CCV 280-567777/49		03/05/2022 14:24	1		Luna-phenylhex 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Batch Number: 567737 Batch Start Date: 03/04/22 14:39 Batch Analyst: Lee, David C

Batch Method: 3535 Batch End Date: 03/04/22 18:01

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00113	8330_OP_DMT 00013
MB 280-567737/1		3535, 8330A				500 mL	5 mL		
LCS 280-567737/2		3535, 8330A				500 mL	5 mL	0.1 mL	
LCS 280-567737/3		3535, 8330A				500 mL	5 mL		0.1 mL
280-159190-A-1	NW071-8	3535, 8330A	T	728.1 g	255.7 g	472.4 mL	5 mL		
280-159190-A-2	NW060-8	3535, 8330A	T	726.9 g	257.6 g	469.3 mL	5 mL		
280-159190-A-3	NW061-8	3535, 8330A	T	731.8 g	256.1 g	475.7 mL	5 mL		
280-159190-A-4	EW7-PM24A-8-25	3535, 8330A	T	722.6 g	255.4 g	467.2 mL	5 mL		
280-159190-A-5	EW7-PM21A-8-25	3535, 8330A	T	722.3 g	255.5 g	466.8 mL	5 mL		
280-159190-A-6	NW070-8	3535, 8330A	T	710.6 g	256.1 g	454.5 mL	5 mL		
280-159190-A-7	CA210-8	3535, 8330A	T	722.5 g	255.6 g	466.9 mL	5 mL		
280-159190-A-8	CA212-8	3535, 8330A	T	719.0 g	261.8 g	457.2 mL	5 mL		
280-159190-A-9	CA213-8	3535, 8330A	T	725.8 g	261.9 g	463.9 mL	5 mL		
280-159190-A-10	G0092-8	3535, 8330A	T	725.9 g	256.0 g	469.9 mL	5 mL		
280-159190-A-11	G0091-8	3535, 8330A	T	729.5 g	256.1 g	473.4 mL	5 mL		
280-159190-A-12	CA211-8	3535, 8330A	T	727.8 g	255.9 g	471.9 mL	5 mL		
280-159190-B-13	EW7-PM28A-8-25	3535, 8330A	T	764.9 g	287.4 g	477.5 mL	5 mL		
280-159190-B-14	EW7-PM29A-8-25	3535, 8330A	T	771.4 g	286.5 g	484.9 mL	5 mL		
280-159190-B-15	EW7-PM27B-8-35	3535, 8330A	T	768.9 g	286.7 g	482.2 mL	5 mL		
280-159190-B-16	NW062-8	3535, 8330A	T	719.4 g	256.0 g	463.4 mL	5 mL		
280-159190-B-16 MS	NW062-8	3535, 8330A	T	723.5 g	256.2 g	467.3 mL	5 mL	0.1 mL	
280-159190-B-16 MSD	NW062-8	3535, 8330A	T	717.8 g	251.9 g	465.9 mL	5 mL	0.1 mL	
280-159190-A-16 MS	NW062-8	3535, 8330A	T	721.9 g	252.8 g	469.1 mL	5 mL		0.1 mL
280-159190-A-16 MSD	NW062-8	3535, 8330A	T	720.2 g	255.8 g	464.4 mL	5 mL		0.1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00127	AnalysisComment				
MB 280-567737/1		3535, 8330A		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.: 280-159190-1

SDG No.:

Batch Number: 567737 Batch Start Date: 03/04/22 14:39 Batch Analyst: Lee, David C

Batch Method: 3535 Batch End Date: 03/04/22 18:01

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00127	AnalysisComment				
LCS 280-567737/2		3535, 8330A		0.1 mL	8330 LCS				
LCS 280-567737/3		3535, 8330A		0.1 mL	DMT				
280-159190-A-1	NW071-8	3535, 8330A	T	0.1 mL					
280-159190-A-2	NW060-8	3535, 8330A	T	0.1 mL					
280-159190-A-3	NW061-8	3535, 8330A	T	0.1 mL					
280-159190-A-4	EW7-PM24A-8-25	3535, 8330A	T	0.1 mL					
280-159190-A-5	EW7-PM21A-8-25	3535, 8330A	T	0.1 mL					
280-159190-A-6	NW070-8	3535, 8330A	T	0.1 mL					
280-159190-A-7	CA210-8	3535, 8330A	T	0.1 mL					
280-159190-A-8	CA212-8	3535, 8330A	T	0.1 mL					
280-159190-A-9	CA213-8	3535, 8330A	T	0.1 mL					
280-159190-A-10	G0092-8	3535, 8330A	T	0.1 mL					
280-159190-A-11	G0091-8	3535, 8330A	T	0.1 mL					
280-159190-A-12	CA211-8	3535, 8330A	T	0.1 mL					
280-159190-B-13	EW7-PM28A-8-25	3535, 8330A	T	0.1 mL					
280-159190-B-14	EW7-PM29A-8-25	3535, 8330A	T	0.1 mL					
280-159190-B-15	EW7-PM27B-8-35	3535, 8330A	T	0.1 mL					
280-159190-B-16	NW062-8	3535, 8330A	T	0.1 mL					
280-159190-B-16 MS	NW062-8	3535, 8330A	T	0.1 mL	8330 LCS				
280-159190-B-16 MSD	NW062-8	3535, 8330A	T	0.1 mL	8330 LCS				
280-159190-A-16 MS	NW062-8	3535, 8330A	T	0.1 mL	DMT				
280-159190-A-16 MSD	NW062-8	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.: 280-159190-1

SDG No.:

Batch Number: 567737 Batch Start Date: 03/04/22 14:39 Batch Analyst: Lee, David C

Batch Method: 3535 Batch End Date: 03/04/22 18:01

Batch Notes	
First Start time	03/04/2022 15:07
First End time	03/04/2022 17:31
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_00178
Acid Name	Ca2Cl
Acid ID	Ca2Cl_Sol_00079
Analyst ID - Spike Analyst	DL
Analyst ID - Spike Witness Analyst	Reviewer: EW
Batch Comment	DV-OP-0017; Mantel: B/A

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-159190-1

SDG No.:

Project: Cornhusker (CHAAP)

Client Sample ID	Lab Sample ID
NW071-8	280-159190-1
NW060-8	280-159190-2
NW061-8	280-159190-3
EW7-PM24A-8-25	280-159190-4
EW7-PM21A-8-25	280-159190-5
NW070-8	280-159190-6
CA210-8	280-159190-7
CA212-8	280-159190-8
CA213-8	280-159190-9
G0092-8	280-159190-10
G0091-8	280-159190-11
CA211-8	280-159190-12
EW7-PM28A-8-25	280-159190-13
EW7-PM29A-8-25	280-159190-14
EW7-PM27B-8-35	280-159190-15
NW062-8	280-159190-16

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NW071-8 Lab Sample ID: 280-159190-1

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/27/2022 10:40

Reporting Basis: WET Date Received: 03/01/2022 09:20

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	1.0	1.0	1.0	0.69	mg/L	U	J1	1	351.2
Nitrate Nitrite as N	35	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	58	5.0	2.5	1.0	mg/L		M	1	9056A
Total Alkalinity as CaCO3	98	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: NW071-8 Lab Sample ID: 280-159190-1

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/27/2022 10:40

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	2.9	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NW060-8 Lab Sample ID: 280-159190-2

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/27/2022 11:50

Reporting Basis: WET Date Received: 03/01/2022 09:20

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	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	4.2	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	26	5.0	2.5	1.0	mg/L		M	1	9056A
Total Alkalinity as CaCO3	45	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: NW060-8 Lab Sample ID: 280-159190-2

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/27/2022 11:50

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	2.0	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NW061-8 | Lab Sample ID: 280-159190-3

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG ID.:

Matrix: Water | Date Sampled: 02/27/2022 13:05

Reporting Basis: WET | Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	4.6	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	4.8	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	5.4	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	330	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: NW061-8 Lab Sample ID: 280-159190-3

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/27/2022 13:05

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	6.0	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM24A-8-25 Lab Sample ID: 280-159190-4

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/26/2022 14:30

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.8	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	4.2	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	2.1	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	48	5.0	2.5	1.0	mg/L		M	1	9056A
Total Alkalinity as CaCO3	500	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM24A-8-25 Lab Sample ID: 280-159190-4

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/26/2022 14:30

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	8.4	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM21A-8-25 Lab Sample ID: 280-159190-5

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/26/2022 15:55

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.9	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	0.80	1.0	1.0	0.69	mg/L	J		1	351.2
Nitrate Nitrite as N	15	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	100	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: EW7-PM21A-8-25 Lab Sample ID: 280-159190-5

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/26/2022 15:55

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	5.1	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NW070-8 Lab Sample ID: 280-159190-6

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/27/2022 09:40

Reporting Basis: WET Date Received: 03/01/2022 09:20

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	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	11	0.20	0.10	0.038	mg/L			2	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	87	5.0	2.5	1.0	mg/L		M	1	9056A
Total Alkalinity as CaCO3	240	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: NW070-8 Lab Sample ID: 280-159190-6

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/27/2022 09:40

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	8.4	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: CA210-8 | Lab Sample ID: 280-159190-7

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG ID.:

Matrix: Water | Date Sampled: 02/28/2022 11:10

Reporting Basis: WET | Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.15	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	31	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	210	25	13	5.2	mg/L		D M	5	9056A
Total Alkalinity as CaCO3	440	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: CA210-8 Lab Sample ID: 280-159190-7

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/28/2022 11:10

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	10	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: CA212-8 Lab Sample ID: 280-159190-8

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/28/2022 11:55

Reporting Basis: WET Date Received: 03/01/2022 09:20

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	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	15	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	72	5.0	2.5	1.0	mg/L		M	1	9056A
Total Alkalinity as CaCO3	170	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: CA212-8 Lab Sample ID: 280-159190-8

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/28/2022 11:55

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	2.3	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: CA213-8 Lab Sample ID: 280-159190-9

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/28/2022 12:45

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.026	0.10	0.050	0.022	mg/L	J		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	3.6	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	1.6	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	65	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	130	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: CA213-8 Lab Sample ID: 280-159190-9

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/28/2022 12:45

Reporting Basis: WET Date Received: 03/01/2022 09:20

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

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0092-8 | Lab Sample ID: 280-159190-10

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG ID.:

Matrix: Water | Date Sampled: 02/27/2022 16:50

Reporting Basis: WET | Date Received: 03/01/2022 09:20

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	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	390	25	13	5.2	mg/L		D M	5	9056A
Total Alkalinity as CaCO3	390	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0092-8 Lab Sample ID: 280-159190-10

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/27/2022 16:50

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.3	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0091-8 Lab Sample ID: 280-159190-11

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/27/2022 15:55

Reporting Basis: WET Date Received: 03/01/2022 09:20

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	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	38	1.0	0.50	0.19	mg/L			10	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	200	25	13	5.2	mg/L		D M	5	9056A
Total Alkalinity as CaCO3	240	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0091-8 Lab Sample ID: 280-159190-11

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/27/2022 15:55

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.2	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: CA211-8 Lab Sample ID: 280-159190-12

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/28/2022 10:10

Reporting Basis: WET Date Received: 03/01/2022 09:20

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	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	30	1.0	0.50	0.19	mg/L			10	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	96	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	180	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: CA211-8 Lab Sample ID: 280-159190-12

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/28/2022 10:10

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.3	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM28A-8-25 Lab Sample ID: 280-159190-13

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/26/2022 09:35

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	3.6	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	7.6	5.0	5.0	3.4	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	15	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	540	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM28A-8-25 Lab Sample ID: 280-159190-13

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/26/2022 09:35

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	18	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM29A-8-25 Lab Sample ID: 280-159190-14

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/26/2022 11:05

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.4	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	2.8	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	62	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	370	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM29A-8-25 Lab Sample ID: 280-159190-14

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/26/2022 11:05

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	7.8	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EW7-PM27B-8-35 Lab Sample ID: 280-159190-15

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/26/2022 13:00

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	3.9	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	5.6	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	95	5.0	2.5	1.0	mg/L		M	1	9056A
Total Alkalinity as CaCO3	410	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: EW7-PM27B-8-35 Lab Sample ID: 280-159190-15

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/26/2022 13:00

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	8.5	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NW062-8 | Lab Sample ID: 280-159190-16

Lab Name: Eurofins Denver | Job No.: 280-159190-1

SDG ID.:

Matrix: Water | Date Sampled: 02/27/2022 14:15

Reporting Basis: WET | Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.8	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	2.0	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.050	0.10	0.050	0.019	mg/L	U		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	200	25	13	5.2	mg/L		D M	5	9056A
Total Alkalinity as CaCO3	270	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: NW062-8 Lab Sample ID: 280-159190-16

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG ID.:

Matrix: Water Date Sampled: 02/27/2022 14:15

Reporting Basis: WET Date Received: 03/01/2022 09:20

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	2.9	1.0	0.80	0.35	mg/L			1	9060A

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Analyst: MMP Batch Start Date: 03/17/2022

Reporting Units: mg/L Analytical Batch No.: 568955

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	10:40	Ammonia	0.494	0.501	99	90-110		350.1 ICV_00509
15	ICV	10:42	Ammonia	2.54	2.51	102	90-110		350.1 ICV_00509
16	ICB	10:44	Ammonia	0.050				U	
33	CCVL	11:18	Ammonia	0.520	0.500	104	90-110		350.1 cal_00525
34	CCV	11:20	Ammonia	2.64	2.50	105	90-110		350.1 cal_00525
35	CCB	11:22	Ammonia	0.050				U	
49	CCVL	11:51	Ammonia	0.532	0.500	106	90-110		350.1 cal_00525
50	CCV	11:53	Ammonia	2.64	2.50	106	90-110		350.1 cal_00525
51	CCB	11:55	Ammonia	0.050				U	
65	CCVL	12:23	Ammonia	0.535	0.500	107	90-110		350.1 cal_00525
66	CCV	12:25	Ammonia	2.68	2.50	107	90-110		350.1 cal_00525
67	CCB	12:27	Ammonia	0.050				U	
80	CCVL	12:53	Ammonia	0.536	0.500	107	90-110		350.1 cal_00525
81	CCV	12:55	Ammonia	2.66	2.50	107	90-110		350.1 cal_00525
82	CCB	12:57	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.: 280-159190-1

SDG No.:

Analyst: SVC Batch Start Date: 03/03/2022

Reporting Units: mg/L Analytical Batch No.: 567691

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
7	ICV	18:10	Nitrogen, Total Kjeldahl	5.27	5.00	105	90-110		TKN ICV 25_00115
8	ICB	18:10	Nitrogen, Total Kjeldahl	1.0				U	
21	CCV	18:15	Nitrogen, Total Kjeldahl	5.31	5.00	106	90-110		TKN 25ppm_00829
22	CCB	18:15	Nitrogen, Total Kjeldahl	1.0				U	
33	CCV	18:21	Nitrogen, Total Kjeldahl	5.36	5.00	107	90-110		TKN 25ppm_00829
34	CCB	18:21	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.: 280-159190-1

SDG No.:

Analyst: SVC Batch Start Date: 03/13/2022

Reporting Units: mg/L Analytical Batch No.: 568508

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	ICV	17:07	Nitrate Nitrite as N	5.17	5.00	103	90-110		NXN ICV INT_00590
18	ICVL	17:09	Nitrate Nitrite as N	2.13	2.00	106	90-110		NXN ICV INT_00590
19	ICB	17:11	Nitrate Nitrite as N	0.050				U	
35	CCV	17:43	Nitrate Nitrite as N	5.05	5.00	101	90-110		NXN CAL INT_00614
36	CCVL	17:45	Nitrate Nitrite as N	1.05	1.00	105	90-110		NXN CAL INT_00614
37	CCB	17:47	Nitrate Nitrite as N	0.050				U	
51	CCV	18:15	Nitrate Nitrite as N	5.00	5.00	100	90-110		NXN CAL INT_00614
52	CCVL	18:17	Nitrate Nitrite as N	1.05	1.00	105	90-110		NXN CAL INT_00614
53	CCB	18:19	Nitrate Nitrite as N	0.050				U	
67	CCV	18:47	Nitrate Nitrite as N	4.95	5.00	99	90-110		NXN CAL INT_00614
68	CCVL	18:49	Nitrate Nitrite as N	1.05	1.00	105	90-110		NXN CAL INT_00614
69	CCB	18:51	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.: 280-159190-1

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
36	CCVL	17:15	Nitrate Nitrite as N	1.04	1.00	104	90-110		NXN CAL INT_00614
37	CCB	17:17	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.: 280-159190-1

SDG No.:

Analyst: RAF Batch Start Date: 03/08/2022

Reporting Units: mg/L Analytical Batch No.: 568008

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICV	15:51	Sulfate	80.3	80.0	100	90-110		IC SO4 ICV_00022
9	ICB	16:08	Sulfate	2.5				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Analyst: RAF Batch Start Date: 03/16/2022

Reporting Units: mg/L Analytical Batch No.: 568795

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	10:06	Sulfate	96.7	100	97	90-110		IC LCS_01863
2	CCB	10:22	Sulfate	2.5				U	
17	CCV	17:01	Sulfate	99.1	100	99	90-110		IC LCS_01863
18	CCB	17:17	Sulfate	2.5				U	
29	CCV	20:18	Sulfate	99.3	100	99	90-110		IC LCS_01863
30	CCB	20:34	Sulfate	2.5				U	
41	CCV	23:35	Sulfate	99.5	100	100	90-110		IC LCS_01863
42	CCB	23:51	Sulfate	2.5				U	
53	CCV	02:52	Sulfate	99.7	100	100	90-110		IC LCS_01863
54	CCB	03:08	Sulfate	2.5				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

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	
24	CCV	19:49	Sulfate	98.5	100	99	90-110		IC LCS_01863
25	CCB	20:05	Sulfate	2.5				U	
36	CCV	22:50	Sulfate	98.6	100	99	90-110		IC LCS_01863
37	CCB	23:05	Sulfate	2.5				U	
46	CCV	01:20	Sulfate	98.8	100	99	90-110		IC LCS_01863
47	CCB	01:35	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.: 280-159190-1

SDG No.:

Analyst: RAF Batch Start Date: 03/17/2022

Reporting Units: mg/L Analytical Batch No.: 568946

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	12:07	Sulfate	98.9	100	99	90-110		IC LCS_01863
2	CCB	12:22	Sulfate	2.5				U	
17	CCV	18:48	Sulfate	97.5	100	97	90-110		IC LCS_01863
18	CCB	19:03	Sulfate	2.5				U	
29	CCV	21:49	Sulfate	97.4	100	97	90-110		IC LCS_01863
30	CCB	22:04	Sulfate	2.5				U	
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	

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.: 280-159190-1

SDG No.:

Analyst: ABW Batch Start Date: 03/11/2022

Reporting Units: mg/L Analytical Batch No.: 568513

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	17:04	Dissolved Organic Carbon - Quad	21.2	20.0	106	90-110		TOC ICV Std_00049
2	ICB	17:21	Dissolved Organic Carbon - Quad	0.80				U	
51	CCV	06:32	Dissolved Organic Carbon - Quad	26.0	25.0	104	90-110		TOC LCS Std_00053
52	CCB	06:47	Dissolved Organic Carbon - Quad	0.80				U	
63	CCV	09:52	Dissolved Organic Carbon - Quad	25.0	25.0	100	90-110		TOC LCS Std_00053
64	CCB	10:07	Dissolved Organic Carbon - Quad	0.80				U	
75	CCV	13:09	Dissolved Organic Carbon - Quad	25.2	25.0	101	90-110		TOC LCS Std_00053
76	CCB	13:23	Dissolved Organic Carbon - Quad	0.80				U	
82	CCV	15:08	Dissolved Organic Carbon - Quad	25.8	25.0	103	90-110		TOC LCS Std_00053
83	CCB	15:22	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.: 280-159190-1

SDG No.:

Analyst: KEG Batch Start Date: 03/02/2022

Reporting Units: mg/L Analytical Batch No.: 567583

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	CCV	15:28	Total Alkalinity as CaCO3	196	200	98	90-110		Alk daily lcs 01027
18	CCB	15:33	Total Alkalinity as CaCO3	6.4				U	
29	CCV	17:23	Total Alkalinity as CaCO3	197	200	99	90-110		Alk daily lcs 01027
30	CCB	17:29	Total Alkalinity as CaCO3	6.4				U	
43	CCV	18:59	Total Alkalinity as CaCO3	199	200	99	90-110		Alk daily lcs 01027
44	CCB	19:04	Total Alkalinity as CaCO3	6.4				U	
51	CCV	19:57	Total Alkalinity as CaCO3	200	200	100	90-110		Alk daily lcs 01027
52	CCB	20:03	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.: 280-159190-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 568955 Date: 03/17/2022 10:52							
350.1	MB 280-568955/20	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 568955 Date: 03/17/2022 12:11							
350.1	MB 280-568955/59	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 567691 Date: 03/03/2022 18:10 Prep Batch: 567536 Date: 03/02/2022 14:50							
351.2	MB 280-567536/2-A	Nitrogen, Total Kjeldahl	1.0	U	mg/L	1.0	1
Batch ID: 568508 Date: 03/13/2022 17:17							
353.2	MB 280-568508/22	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 568508 Date: 03/13/2022 18:33							
353.2	MB 280-568508/60	Nitrate Nitrite as N	0.050	U	mg/L	0.10	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: 567780 Date: 03/04/2022 15:54 Prep Batch: 567743 Date: 03/04/2022 11:13							
9034	MB 280-567743/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 567781 Date: 03/04/2022 15:55 Prep Batch: 567762 Date: 03/04/2022 13:47							
9034	MB 280-567762/3-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 567799 Date: 03/05/2022 13:13 Prep Batch: 567789 Date: 03/05/2022 09:11							
9034	MB 280-567789/3-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 568795 Date: 03/16/2022 11:27							
9056A	MB 280-568795/6	Sulfate	2.5	U M	mg/L	5.0	1
Batch ID: 568842 Date: 03/16/2022 17:04							
9056A	MB 280-568842/13	Sulfate	2.5	U	mg/L	5.0	1
Batch ID: 568795 Date: 03/16/2022 23:02							
9056A	MB 280-568795/39	Sulfate	2.5	U M	mg/L	5.0	1
Batch ID: 568946 Date: 03/17/2022 13:22							
9056A	MB 280-568946/6	Sulfate	2.5	U M	mg/L	5.0	1
Batch ID: 568513 Date: 03/12/2022 08:12							
9060A	MB 280-568437/2-A	Dissolved Organic Carbon - Quad	0.80	U	mg/L	1.0	1
Batch ID: 567583 Date: 03/02/2022 14:17							
SM 2320B	MB 280-567583/6	Total Alkalinity as CaCO3	6.4	U	mg/L	10	1
Batch ID: 567583 Date: 03/02/2022 17:42							
SM 2320B	MB 280-567583/32	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.: 280-159190-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 568955 Date: 03/17/2022 11:33											
350.1	280-159190-16	Ammonia	1.8		mg/L						
350.1	280-159190-16 MS	Ammonia	2.83		mg/L	1.00	107	90-110			
Batch ID: 567691 Date: 03/03/2022 18:11 Prep Batch: 567536 Date: 03/02/2022 14:50											
351.2	280-159190-1	Nitrogen, Total Kjeldahl	1.0	U	mg/L						J1
351.2	280-159190-1 MS	Nitrogen, Total Kjeldahl	1.0	U	mg/L	3.00	0	90-110			J1
Batch ID: 567691 Date: 03/03/2022 18:18 Prep Batch: 567536 Date: 03/02/2022 14:50											
351.2	280-159190-16	Nitrogen, Total Kjeldahl	2.0		mg/L						
351.2	280-159190-16 MS	Nitrogen, Total Kjeldahl	4.99		mg/L	3.00	100	90-110			
Batch ID: 568508 Date: 03/13/2022 18:37											
353.2	280-159190-16	Nitrate Nitrite as N	0.050	U	mg/L						
353.2	280-159190-16 MS	Nitrate Nitrite as N	3.98		mg/L	4.00	99	90-110			
Batch ID: 567780 Date: 03/04/2022 15:54 Prep Batch: 567743 Date: 03/04/2022 11:13											
9034	280-159190-16	Sulfide	1.9	U	mg/L						
9034	280-159190-16 MS	Sulfide	21.6		mg/L	24.1	89	44-110			
Batch ID: 567781 Date: 03/04/2022 15:55 Prep Batch: 567762 Date: 03/04/2022 13:47											
9034	280-159190-11	Sulfide	1.9	U	mg/L						
9034	280-159190-11 MS	Sulfide	22.0		mg/L	24.1	91	44-110			
Batch ID: 568946 Date: 03/18/2022 01:19											
9056A	280-159190-16	Sulfate	200		mg/L						D M
9056A	280-159190-16 MS	Sulfate	460		mg/L	250	106	87-112			D M
Batch ID: 568513 Date: 03/12/2022 08:46											
9060A	280-159190-1	Dissolved Organic Carbon - Quad	2.9		mg/L						
9060A	280-159190-1 MS	Dissolved Organic Carbon - Quad	29.9		mg/L	25.0	108	88-112			
Batch ID: 568513 Date: 03/12/2022 14:34											
9060A	280-159190-16	Dissolved Organic Carbon - Quad	2.9		mg/L						
9060A	280-159190-16 MS	Dissolved Organic Carbon - Quad	29.2		mg/L	25.0	105	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.: 280-159190-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 568955 Date: 03/17/2022 11:35											
350.1	280-159190-16 MSD	Ammonia	2.83		mg/L	1.00	107	90-110	0	10	
Batch ID: 567691 Date: 03/03/2022 18:11			Prep Batch: 567536			Date: 03/02/2022 14:50					
351.2	280-159190-1 MSD	Nitrogen, Total Kjeldahl	1.0	U	mg/L	3.00	0	90-110	NC	25	J1
Batch ID: 567691 Date: 03/03/2022 18:18			Prep Batch: 567536			Date: 03/02/2022 14:50					
351.2	280-159190-16 MSD	Nitrogen, Total Kjeldahl	5.01		mg/L	3.00	100	90-110	0	25	
Batch ID: 568508 Date: 03/13/2022 18:39											
353.2	280-159190-16 MSD	Nitrate Nitrite as N	3.98		mg/L	4.00	99	90-110	0	10	
Batch ID: 567780 Date: 03/04/2022 15:54			Prep Batch: 567743			Date: 03/04/2022 11:13					
9034	280-159190-16 MSD	Sulfide	20.0		mg/L	24.1	83	44-110	8	20	
Batch ID: 567781 Date: 03/04/2022 15:55			Prep Batch: 567762			Date: 03/04/2022 13:47					
9034	280-159190-11 MSD	Sulfide	21.6		mg/L	24.1	89	44-110	2	20	
Batch ID: 568946 Date: 03/18/2022 01:34											
9056A	280-159190-16 MSD	Sulfate	457		mg/L	250	105	87-112	1	10	D M
Batch ID: 568513 Date: 03/12/2022 09:00											
9060A	280-159190-1 MSD	Dissolved Organic Carbon - Quad	28.9		mg/L	25.0	104	88-112	3	15	
Batch ID: 568513 Date: 03/12/2022 14:49											
9060A	280-159190-16 MSD	Dissolved Organic Carbon - Quad	28.5		mg/L	25.0	103	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.: 280-159190-1

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 00:34							
9056A	NW062-8	280-159190-16	Sulfate	200	mg/L			
9056A	NW062-8	280-159190-16 DU	Sulfate	192	mg/L	2	10	D M
Batch ID: 567583	Date: 03/02/2022 17:52							
SM 2320B	NW060-8	280-159190-2	Total Alkalinity as CaCO3	45	mg/L			
SM 2320B	NW060-8	280-159190-2 DU	Total Alkalinity as CaCO3	45.8	mg/L	0.9	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.: 280-159190-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 568955	Date: 03/17/2022 10:48										
						LCS Source: 350.1 cal_00525					
350.1	LCS 280-568955/18	Ammonia	2.57		mg/L	2.50	103	90-110	1	10	
Batch ID: 568955	Date: 03/17/2022 12:07										
						LCS Source: 350.1 cal_00525					
350.1	LCS 280-568955/57	Ammonia	2.68		mg/L	2.50	107	90-110	0	10	
Batch ID: 567691	Date: 03/03/2022 18:10	Prep Batch: 567536	Date: 03/02/2022 14:50								
						LCS Source: TKN 25ppm_00829					
351.2	LCS 280-567536/1-A	Nitrogen, Total Kjeldahl	5.84		mg/L	6.00	97	90-110			
Batch ID: 568508	Date: 03/13/2022 17:15										
						LCS Source: NXN CAL INT_00614					
353.2	LCS 280-568508/21	Nitrate Nitrite as N	5.25		mg/L	5.00	105	90-110			
Batch ID: 568508	Date: 03/13/2022 18:31										
						LCS Source: NXN CAL INT_00614					
353.2	LCS 280-568508/59	Nitrate Nitrite as N	4.96		mg/L	5.00	99	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: 567780	Date: 03/04/2022 15:54	Prep Batch: 567743	Date: 03/04/2022 11:13								
						LCS Source: SFD ICV INT_02088					
9034	LCS 280-567743/1-A	Sulfide	17.6		mg/L	24.1	73	44-110			
Batch ID: 567781	Date: 03/04/2022 15:55	Prep Batch: 567762	Date: 03/04/2022 13:47								
						LCS Source: SFD ICV INT_02088					
9034	LCS 280-567762/1-A	Sulfide	20.0		mg/L	24.1	83	44-110	8	20	
Batch ID: 567799	Date: 03/05/2022 13:13	Prep Batch: 567789	Date: 03/05/2022 09:11								
						LCS Source: SFD CAL INT_02142					
9034	LCS 280-567789/1-A	Sulfide	18.4		mg/L	22.2	83	44-110	9	20	
Batch ID: 568795	Date: 03/16/2022 10:54										
						LCS Source: IC LCS_01863					
9056A	LCS 280-568795/4	Sulfate	96.7		mg/L	100	97	87-112	0	10	M
Batch ID: 568842	Date: 03/16/2022 16:34										
						LCS Source: IC LCS_01863					
9056A	LCS 280-568842/11	Sulfate	101		mg/L	100	101	87-112	1	10	

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.: 280-159190-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 568795	Date: 03/16/2022 22:29										
						LCS Source: IC LCS_01863					
9056A	LCS 280-568795/37	Sulfate	99.6		mg/L	100	100	87-112	0	10	M
Batch ID: 568946	Date: 03/17/2022 12:52										
						LCS Source: IC LCS_01863					
9056A	LCS 280-568946/4	Sulfate	97.8		mg/L	100	98	87-112	0	10	M
Batch ID: 568513	Date: 03/12/2022 07:54										
						LCS Source: TOC LCS Std_00053					
9060A	LCS 280-568437/1-A	Dissolved Organic Carbon - Quad	25.7		mg/L	25.0	103	88-112			
Batch ID: 567583	Date: 03/02/2022 14:04										
						LCS Source: Alk daily lcs_01027					
SM 2320B	LCS 280-567583/4	Total Alkalinity as CaCO3	197		mg/L	200	98	89-109	1	10	
Batch ID: 567583	Date: 03/02/2022 17:36										
						LCS Source: Alk daily lcs_01027					
SM 2320B	LCS 280-567583/31	Total Alkalinity as CaCO3	197		mg/L	200	98	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.: 280-159190-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 568955	Date: 03/17/2022 10:50										
						LCSD Source: 350.1 cal_00525					
350.1	LCSD 280-568955/19	Ammonia	2.55		mg/L	2.50	102	90-110	1	10	
Batch ID: 568955	Date: 03/17/2022 12:09										
						LCSD Source: 350.1 cal_00525					
350.1	LCSD 280-568955/58	Ammonia	2.69		mg/L	2.50	107	90-110	0	10	
Batch ID: 567781	Date: 03/04/2022 15:55	Prep Batch: 567762	Date: 03/04/2022 13:47								
						LCSD Source: SFD ICV INT_02088					
9034	LCSD 280-567762/2-A	Sulfide	21.6		mg/L	24.1	89	44-110	8	20	
Batch ID: 567799	Date: 03/05/2022 13:13	Prep Batch: 567789	Date: 03/05/2022 09:11								
						LCSD Source: SFD CAL INT_02142					
9034	LCSD 280-567789/2-A	Sulfide	16.8		mg/L	22.2	76	44-110	9	20	
Batch ID: 568795	Date: 03/16/2022 11:11										
						LCSD Source: IC LCS_01863					
9056A	LCSD 280-568795/5	Sulfate	96.3		mg/L	100	96	87-112	0	10	M
Batch ID: 568842	Date: 03/16/2022 16:49										
						LCSD Source: IC LCS_01863					
9056A	LCSD 280-568842/12	Sulfate	100		mg/L	100	100	87-112	1	10	
Batch ID: 568795	Date: 03/16/2022 22:46										
						LCSD Source: IC LCS_01863					
9056A	LCSD 280-568795/38	Sulfate	99.6		mg/L	100	100	87-112	0	10	M
Batch ID: 568946	Date: 03/17/2022 13:07										
						LCSD Source: IC LCS_01863					
9056A	LCSD 280-568946/5	Sulfate	98.0		mg/L	100	98	87-112	0	10	M
Batch ID: 567583	Date: 03/02/2022 14:12										
						LCSD Source: Alk daily lcs_01027					
SM 2320B	LCSD 280-567583/5	Total Alkalinity as CaCO3	198		mg/L	200	99	89-109	1	10	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

7A-IN
METHOD REPORTING LIMIT CHECK
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 568795	Date: 03/16/2022 10:38										
						LCS Source: IC CAL cl/so4_00411					
9056A	MRL 280-568795/3	Sulfate	4.02	J	mg/L	5.00	80	50-150			M
Batch ID: 568842	Date: 03/16/2022 16:19										
						LCS Source: IC CAL cl/so4_00411					
9056A	MRL 280-568842/10	Sulfate	4.85	J	mg/L	5.00	97	50-150			
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: 280-159190-1

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: 280-159190-1

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: 280-159190-1

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: 280-159190-1

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: 280-159190-1

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: 280-159190-1

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: 280-159190-1

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: 280-159190-1

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: 280-159190-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom11

Method: 9056A DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Sulfate		5	1.03

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-159190-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom11

Method: 9056A XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfate		5	1.03

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-159190-1

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: 280-159190-1

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: 280-159190-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI3

Method: 9060A DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Dissolved Organic Carbon - Quad		1	0.345

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins Denver Job Number: 280-159190-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI3

Method: 9060A XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Dissolved Organic Carbon - Quad		1	0.345

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job Number: 280-159190-1

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: 280-159190-1

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.: 280-159190-1

SDG No.:

Prep Method: 351.2

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-567536/1-A	03/02/2022 14:50	567536		25	25
MB 280-567536/2-A	03/02/2022 14:50	567536		25	25
280-159190-1	03/02/2022 14:50	567536		25	25
280-159190-1 MS	03/02/2022 14:50	567536		25	25
280-159190-1 MSD	03/02/2022 14:50	567536		25	25
280-159190-2	03/02/2022 14:50	567536		25	25
280-159190-3	03/02/2022 14:50	567536		25	25
280-159190-4	03/02/2022 14:50	567536		25	25
280-159190-5	03/02/2022 14:50	567536		25	25
280-159190-6	03/02/2022 14:50	567536		25	25
280-159190-7	03/02/2022 14:50	567536		25	25
280-159190-8	03/02/2022 14:50	567536		25	25
280-159190-9	03/02/2022 14:50	567536		25	25
280-159190-10	03/02/2022 14:50	567536		25	25
280-159190-16	03/02/2022 14:50	567536		25	25
280-159190-16 MS	03/02/2022 14:50	567536		25	25
280-159190-16 MSD	03/02/2022 14:50	567536		25	25
280-159190-11	03/02/2022 14:50	567536		25	25
280-159190-12	03/02/2022 14:50	567536		25	25
280-159190-13	03/02/2022 14:50	567536		5	25
280-159190-14	03/02/2022 14:50	567536		25	25
280-159190-15	03/02/2022 14:50	567536		25	25

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-567743/1-A	03/04/2022 11:13	567743		50	50
MB 280-567743/2-A	03/04/2022 11:13	567743		50	50
280-159190-16	03/04/2022 11:13	567743		50	50
280-159190-16 MS	03/04/2022 11:13	567743		50	50
280-159190-16 MSD	03/04/2022 11:13	567743		50	50
280-159190-4	03/04/2022 11:13	567743		50	50
280-159190-5	03/04/2022 11:13	567743		50	50
280-159190-13	03/04/2022 11:13	567743		50	50
280-159190-14	03/04/2022 11:13	567743		50	50
280-159190-15	03/04/2022 11:13	567743		50	50
280-159190-1	03/04/2022 11:13	567743		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-567762/1-A	03/04/2022 13:47	567762		50	50
LCSD 280-567762/2-A	03/04/2022 13:47	567762		50	50
MB 280-567762/3-A	03/04/2022 13:47	567762		50	50
280-159190-11	03/04/2022 13:47	567762		50	50
280-159190-11 MS	03/04/2022 13:47	567762		50	50
280-159190-11 MSD	03/04/2022 13:47	567762		50	50
280-159190-2	03/04/2022 13:47	567762		50	50
280-159190-3	03/04/2022 13:47	567762		50	50
280-159190-6	03/04/2022 13:47	567762		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-567789/1-A	03/05/2022 09:11	567789		50	50
LCSD 280-567789/2-A	03/05/2022 09:11	567789		50	50
MB 280-567789/3-A	03/05/2022 09:11	567789		50	50
280-159190-7	03/05/2022 09:11	567789		50	50
280-159190-8	03/05/2022 09:11	567789		50	50
280-159190-9	03/05/2022 09:11	567789		50	50
280-159190-10	03/05/2022 09:11	567789		50	50
280-159190-12	03/05/2022 09:11	567789		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 03/17/2022 10:14 End Date: 03/17/2022 13:27

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			10:14																									
ZZZZZZ			10:16																									
ZZZZZZ			10:18																									
IC 280-568955/4			10:20	X																								
IC 280-568955/5			10:22	X																								
IC 280-568955/6			10:24	X																								
IC 280-568955/7			10:26	X																								
IC 280-568955/8			10:28	X																								
IC 280-568955/9			10:30	X																								
IC 280-568955/10			10:32	X																								
IC 280-568955/11			10:34	X																								
ZZZZZZ			10:36																									
ZZZZZZ			10:38																									
ICVL 280-568955/14	1		10:40	X																								
ICV 280-568955/15	1		10:42	X																								
ICB 280-568955/16	1		10:44	X																								
ZZZZZZ			10:46																									
LCS 280-568955/18	1	T	10:48	X																								
LCSD 280-568955/19	1	T	10:50	X																								
MB 280-568955/20	1	T	10:52	X																								
ZZZZZZ			10:54																									
ZZZZZZ			10:56																									
ZZZZZZ			10:58																									
ZZZZZZ			11:00																									
ZZZZZZ			11:02																									
ZZZZZZ			11:04																									
ZZZZZZ			11:06																									
ZZZZZZ			11:08																									
ZZZZZZ			11:10																									
ZZZZZZ			11:12																									
ZZZZZZ			11:14																									
ZZZZZZ			11:16																									
CCVL 280-568955/33	1		11:18	X																								
CCV 280-568955/34	1		11:20	X																								
CCB 280-568955/35	1		11:22	X																								
ZZZZZZ			11:25																									
280-159190-1	1	T	11:27	X																								
280-159190-2	1	T	11:29	X																								
280-159190-16	1	T	11:31	X																								
280-159190-16 MS	1	T	11:33	X																								
280-159190-16 MSD	1	T	11:35	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 03/17/2022 10:14 End Date: 03/17/2022 13:27

Lab Sample Id	D/F	Type	Time	Analytes
				NH3
280-159190-3	1	T	11:37	X
280-159190-4	1	T	11:39	X
280-159190-5	1	T	11:41	X
280-159190-6	1	T	11:43	X
280-159190-7	1	T	11:45	X
ZZZZZZ			11:47	
ZZZZZZ			11:49	
CCVL 280-568955/49	1		11:51	X
CCV 280-568955/50	1		11:53	X
CCB 280-568955/51	1		11:55	X
ZZZZZZ			11:57	
280-159190-8	1	T	11:59	X
280-159190-9	1	T	12:01	X
280-159190-10	1	T	12:03	X
280-159190-11	1	T	12:05	X
LCS 280-568955/57	1	T	12:07	X
LCSD 280-568955/58	1	T	12:09	X
MB 280-568955/59	1	T	12:11	X
ZZZZZZ			12:13	
ZZZZZZ			12:15	
ZZZZZZ			12:17	
ZZZZZZ			12:19	
ZZZZZZ			12:21	
CCVL 280-568955/65	1		12:23	X
CCV 280-568955/66	1		12:25	X
CCB 280-568955/67	1		12:27	X
ZZZZZZ			12:29	
280-159190-12	1	T	12:31	X
280-159190-13	1	T	12:33	X
280-159190-14	1	T	12:35	X
280-159190-15	1	T	12:37	X
ZZZZZZ			12:39	
ZZZZZZ			12:41	
ZZZZZZ			12:43	
ZZZZZZ			12:45	
ZZZZZZ			12:47	
ZZZZZZ			12:49	
ZZZZZZ			12:51	
CCVL 280-568955/80	1		12:53	X
CCV 280-568955/81	1		12:55	X
CCB 280-568955/82	1		12:57	X

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 03/17/2022 10:14 End Date: 03/17/2022 13:27

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			12:59																									
ZZZZZZ			13:05																									
ZZZZZZ			13:07																									
ZZZZZZ			13:09																									
ZZZZZZ			13:11																									
ZZZZZZ			13:13																									
ZZZZZZ			13:15																									
ZZZZZZ			13:17																									
ZZZZZZ			13:19																									
CCVL 280-568955/92			13:21																									
CCV 280-568955/93			13:23																									
CCB 280-568955/94			13:25																									
ZZZZZZ			13:27																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_GAL1 Analysis Method: 351.2

Start Date: 02/22/2022 16:21 End Date: 03/03/2022 18:56

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		18:10	X																								
ICB 280-566632/22-A	1		18:10	X																								
LCS 280-567536/1-A	1	T	18:10	X																								
MB 280-567536/2-A	1	T	18:10	X																								
280-159190-1	1	T	18:11	X																								
280-159190-1 MS	1	T	18:11	X																								
280-159190-1 MSD	1	T	18:11	X																								
280-159190-2	1	T	18:11	X																								
280-159190-3	1	T	18:12	X																								
280-159190-4	1	T	18:13	X																								
280-159190-5	1	T	18:14	X																								
280-159190-6	1	T	18:14	X																								
280-159190-7	1	T	18:15	X																								
280-159190-8	1	T	18:15	X																								
CCV 280-566632/23-A	1		18:15	X																								
CCB 280-566632/24-A	1		18:15	X																								
280-159190-9	1	T	18:16	X																								
280-159190-10	1	T	18:16	X																								
280-159190-16	1	T	18:17	X																								
280-159190-16 MS	1	T	18:18	X																								
280-159190-16 MSD	1	T	18:18	X																								
280-159190-11	1	T	18:18	X																								
280-159190-12	1	T	18:19	X																								
280-159190-13	1	T	18:19	X																								
280-159190-14	1	T	18:19	X																								
280-159190-15	1	T	18:19	X																								
CCV 280-566632/23-A	1		18:21	X																								
CCB 280-566632/24-A	1		18:21	X																								
ZZZZZZ			18:22																									
ZZZZZZ			18:23																									
CCV 280-566632/23-A			18:23																									
CCB 280-566632/24-A			18:23																									
ZZZZZZ			18:35																									
ZZZZZZ			18:36																									
CCV 280-566632/23-A			18:55																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_GAL1 Analysis Method: 351.2

Start Date: 02/22/2022 16:21 End Date: 03/03/2022 18:56

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
CCB 280-566632/24-A			18:56																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 03/13/2022 16:35 End Date: 03/13/2022 19:57

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			16:35	
ZZZZZZ			16:37	
ZZZZZZ			16:39	
ZZZZZZ			16:41	
IC 280-568508/5			16:43	X
IC 280-568508/6			16:45	X
IC 280-568508/7			16:47	X
IC 280-568508/8			16:49	X
IC 280-568508/9			16:51	X
IC 280-568508/10			16:53	X
IC 280-568508/11			16:55	X
IC 280-568508/12			16:57	X
IC 280-568508/13			16:59	X
ZZZZZZ			17:01	
ZZZZZZ			17:03	
ZZZZZZ			17:05	
ICV 280-568508/17	1		17:07	X
ICVL 280-568508/18	1		17:09	X
ICB 280-568508/19	1		17:11	X
ZZZZZZ			17:13	
LCS 280-568508/21	1	T	17:15	X
MB 280-568508/22	1	T	17:17	X
ZZZZZZ			17:19	
ZZZZZZ			17:21	
ZZZZZZ			17:23	
ZZZZZZ			17:25	
ZZZZZZ			17:27	
ZZZZZZ			17:29	
ZZZZZZ			17:31	
280-159190-1	5	T	17:33	X
280-159190-2	1	T	17:35	X
280-159190-3	1	T	17:37	X
RINSE 280-568508/33			17:39	
ZZZZZZ			17:41	
CCV 280-568508/35	1		17:43	X
CCVL 280-568508/36	1		17:45	X
CCB 280-568508/37	1		17:47	X
ZZZZZZ			17:49	
280-159190-4	1	T	17:51	X

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 03/13/2022 16:35 End Date: 03/13/2022 19:57

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			17:53	
ZZZZZZ			17:55	
ZZZZZZ			17:57	
ZZZZZZ			17:59	
280-159190-6	2	T	18:01	X
280-159190-7	5	T	18:03	X
280-159190-8	2	T	18:05	X
280-159190-9	1	T	18:07	X
280-159190-10	1	T	18:09	X
RINSE 280-568508/49			18:11	
ZZZZZZ			18:13	
CCV 280-568508/51	1		18:15	X
CCVL 280-568508/52	1		18:17	X
CCB 280-568508/53	1		18:19	X
ZZZZZZ			18:21	
280-159190-11	10	T	18:23	X
280-159190-12	10	T	18:25	X
280-159190-13	1	T	18:27	X
280-159190-14	1	T	18:29	X
LCS 280-568508/59	1	T	18:31	X
MB 280-568508/60	1	T	18:33	X
280-159190-16	1	T	18:35	X
280-159190-16 MS	1	T	18:37	X
280-159190-16 MSD	1	T	18:39	X
280-159190-15	1	T	18:41	X
RINSE 280-568508/65			18:43	
ZZZZZZ			18:45	
CCV 280-568508/67	1		18:47	X
CCVL 280-568508/68	1		18:49	X
CCB 280-568508/69	1		18:51	X
ZZZZZZ			18:53	
ZZZZZZ			18:55	
ZZZZZZ			18:57	
ZZZZZZ			18:59	
ZZZZZZ			19:01	
ZZZZZZ			19:03	
ZZZZZZ			19:05	
ZZZZZZ			19:07	
ZZZZZZ			19:09	

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 03/13/2022 16:35 End Date: 03/13/2022 19:57

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			19:11	
ZZZZZZ			19:13	
RINSE 280-568508/81			19:15	
ZZZZZZ			19:17	
CCV 280-568508/83			19:19	
CCVL 280-568508/84			19:21	
CCB 280-568508/85			19:23	
ZZZZZZ			19:25	
ZZZZZZ			19:27	
ZZZZZZ			19:29	
ZZZZZZ			19:31	
ZZZZZZ			19:33	
ZZZZZZ			19:35	
ZZZZZZ			19:37	
ZZZZZZ			19:39	
ZZZZZZ			19:41	
ZZZZZZ			19:43	
ZZZZZZ			19:45	
RINSE 280-568508/97			19:47	
ZZZZZZ			19:49	
CCV 280-568508/99			19:51	
CCVL 280-568508/100			19:53	
CCB 280-568508/101			19:55	
ZZZZZZ			19:57	

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

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	
280-159190-5	5	T	16:59	X
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	1		17:15	X
CCB 280-568761/37	1		17:17	X
ZZZZZZ			17:19	
ZZZZZZ			17:21	

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

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			17:45	
CCVL 280-568761/52			17:47	
CCB 280-568761/53			17:49	
ZZZZZZ			17:51	
ZZZZZZ			17:53	
ZZZZZZ			17:55	
ZZZZZZ			17:57	
ZZZZZZ			17:59	
ZZZZZZ			18:01	
ZZZZZZ			18:03	
ZZZZZZ			18:05	
ZZZZZZ			18:07	
ZZZZZZ			18:09	
ZZZZZZ			18:11	
ZZZZZZ			18:13	
RINSE 280-568761/66			18:15	
ZZZZZZ			18:17	
CCV 280-568761/68			18:19	
CCVL 280-568761/69			18:21	
RINSE 280-568761/70			18:23	
ZZZZZZ			18:25	
ZZZZZZ			18:27	
ZZZZZZ			18:29	
ZZZZZZ			18:31	
ZZZZZZ			18:33	
ZZZZZZ			18:35	
ZZZZZZ			18:37	
ZZZZZZ			18:39	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

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			18:41	
ZZZZZZ			18:43	
ZZZZZZ			18:45	
RINSE 280-568761/82			18:47	
ZZZZZZ			18:49	
CCV 280-568761/84			18:51	
CCVL 280-568761/85			18:53	
CCB 280-568761/86			18:55	
ZZZZZZ			18:57	

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 03/04/2022 15:54 End Date: 03/04/2022 15:54

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-567743/1-A	1	T	15:54	X																								
MB 280-567743/2-A	1	T	15:54	X																								
280-159190-16	1	T	15:54	X																								
280-159190-16 MS	1	T	15:54	X																								
280-159190-16 MSD	1	T	15:54	X																								
ZZZZZZ			15:54																									
ZZZZZZ			15:54																									
ZZZZZZ			15:54																									
ZZZZZZ			15:54																									
280-159190-4	1	T	15:54	X																								
280-159190-5	1	T	15:54	X																								
280-159190-13	1	T	15:54	X																								
280-159190-14	1	T	15:54	X																								
280-159190-15	1	T	15:54	X																								
280-159190-1	1	T	15:54	X																								

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 03/04/2022 15:55 End Date: 03/04/2022 15:55

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-567762/1-A	1	T	15:55	X																								
LCSD 280-567762/2-A	1	T	15:55	X																								
MB 280-567762/3-A	1	T	15:55	X																								
280-159190-11	1	T	15:55	X																								
280-159190-11 MS	1	T	15:55	X																								
280-159190-11 MSD	1	T	15:55	X																								
280-159190-2	1	T	15:55	X																								
ZZZZZZ			15:55																									
280-159190-3	1	T	15:55	X																								
280-159190-6	1	T	15:55	X																								

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 03/05/2022 13:13 End Date: 03/05/2022 13:13

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-567789/1-A	1	T	13:13	X																								
LCSD 280-567789/2-A	1	T	13:13	X																								
MB 280-567789/3-A	1	T	13:13	X																								
ZZZZZZ			13:13																									
ZZZZZZ			13:13																									
ZZZZZZ			13:13																									
280-159190-7	1	T	13:13	X																								
280-159190-8	1	T	13:13	X																								
280-159190-9	1	T	13:13	X																								
ZZZZZZ			13:13																									
ZZZZZZ			13:13																									
ZZZZZZ			13:13																									
ZZZZZZ			13:13																									
280-159190-10	1	T	13:13	X																								
280-159190-12	1	T	13:13	X																								

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Method: 9056A

Start Date: 03/08/2022 14:13 End Date: 03/09/2022 09:06

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
STD 280-568008/2 IC	1		14:13	X																								
STD 280-568008/3 IC	1		14:29	X																								
STD 280-568008/4 IC	1		14:46	X																								
STD 280-568008/5 IC	1		15:02	X																								
STD 280-568008/6 IC	1		15:19	X																								
STD 280-568008/7 IC	1		15:35	X																								
ICV 280-568008/8	1		15:51	X																								
ICB 280-568008/9	1		16:08	X																								
ZZZZZZ			16:24																									
ZZZZZZ			16:41																									
ZZZZZZ			16:57																									
ZZZZZZ			17:14																									
ZZZZZZ			17:30																									
ZZZZZZ			17:46																									
ZZZZZZ			18:03																									
ZZZZZZ			18:19																									
ZZZZZZ			18:36																									
ZZZZZZ			18:52																									
ZZZZZZ			19:08																									
ZZZZZZ			19:25																									
ZZZZZZ			19:41																									
ZZZZZZ			19:58																									
CCV 280-568008/24			20:14																									
CCB 280-568008/25			20:30																									
ZZZZZZ			20:47																									
ZZZZZZ			21:03																									
ZZZZZZ			21:20																									
ZZZZZZ			21:36																									
ZZZZZZ			21:53																									
ZZZZZZ			22:09																									
ZZZZZZ			22:25																									
ZZZZZZ			22:42																									
ZZZZZZ			22:58																									
ZZZZZZ			23:15																									
CCV 280-568008/36			23:31																									
CCB 280-568008/37			23:47																									
ZZZZZZ			00:04																									
ZZZZZZ			00:20																									
ZZZZZZ			00:37																									
ZZZZZZ			00:53																									
ZZZZZZ			01:10																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Method: 9056A

Start Date: 03/08/2022 14:13 End Date: 03/09/2022 09:06

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			01:26																									
ZZZZZZ			01:42																									
ZZZZZZ			01:59																									
ZZZZZZ			02:15																									
CCV 280-568008/47			02:32																									
CCB 280-568008/48			09:06																									

Prep Types:
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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Method: 9056A

Start Date: 03/16/2022 10:06 End Date: 03/17/2022 03:08

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCV 280-568795/1	1		10:06	X																								
CCB 280-568795/2	1		10:22	X																								
MRL 280-568795/3	1	T	10:38	X																								
LCS 280-568795/4	1	T	10:54	X																								
LCSD 280-568795/5	1	T	11:11	X																								
MB 280-568795/6	1	T	11:27	X																								
ZZZZZZ			14:17																									
ZZZZZZ			14:33																									
ZZZZZZ			14:50																									
ZZZZZZ			15:06																									
ZZZZZZ			15:22																									
ZZZZZZ			15:39																									
ZZZZZZ			15:55																									
ZZZZZZ			16:12																									
ZZZZZZ			16:28																									
ZZZZZZ			16:44																									
CCV 280-568795/17	1		17:01	X																								
CCB 280-568795/18	1		17:17	X																								
ZZZZZZ			17:34																									
ZZZZZZ			17:50																									
ZZZZZZ			18:06																									
ZZZZZZ			18:23																									
ZZZZZZ			18:39																									
ZZZZZZ			18:56																									
ZZZZZZ			19:12																									
ZZZZZZ			19:29																									
ZZZZZZ			19:45																									
280-159190-1	1	T	20:01	X																								
CCV 280-568795/29	1		20:18	X																								
CCB 280-568795/30	1		20:34	X																								
280-159190-2	1	T	20:51	X																								
280-159190-3	1	T	21:07	X																								
280-159190-4	1	T	21:23	X																								
280-159190-5	1	T	21:40	X																								
280-159190-6	1	T	21:56	X																								
ZZZZZZ			22:13																									
LCS 280-568795/37	1	T	22:29	X																								
LCSD 280-568795/38	1	T	22:46	X																								
MB 280-568795/39	1	T	23:02	X																								
ZZZZZZ			23:18																									
CCV 280-568795/41	1		23:35	X																								

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Method: 9056A

Start Date: 03/16/2022 10:06 End Date: 03/17/2022 03:08

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCB 280-568795/42	1		23:51	X																								
ZZZZZZ			00:08																									
ZZZZZZ			00:24																									
ZZZZZZ			00:40																									
280-159190-8	1	T	00:57	X																								
280-159190-9	1	T	01:13	X																								
ZZZZZZ			01:30																									
ZZZZZZ			01:46																									
280-159190-12	1	T	02:03	X																								
280-159190-13	1	T	02:19	X																								
280-159190-14	1	T	02:35	X																								
CCV 280-568795/53	1		02:52	X																								
CCB 280-568795/54	1		03:08	X																								

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

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																								
MRL 280-568842/10	1	T	16:19	X																								
LCS 280-568842/11	1	T	16:34	X																								
LCSD 280-568842/12	1	T	16:49	X																								
MB 280-568842/13	1	T	17:04	X																								
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	1		19:49	X																								
CCB 280-568842/25	1		20:05	X																								
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	1		22:50	X																								
CCB 280-568842/37	1		23:05	X																								
ZZZZZZ			23:20																									
ZZZZZZ			23:35																									
ZZZZZZ			23:50																									
ZZZZZZ			00:05																									
ZZZZZZ			00:20																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

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																									
280-159190-15	1	T	01:05	X																								
CCV 280-568842/46	1		01:20	X																								
CCB 280-568842/47	1		01:35	X																								

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

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	1		12:07	X																								
CCB 280-568946/2	1		12:22	X																								
MRL 280-568946/3	1	T	12:37	X																								
LCS 280-568946/4	1	T	12:52	X																								
LCSD 280-568946/5	1	T	13:07	X																								
MB 280-568946/6	1	T	13:22	X																								
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	1		18:48	X																								
CCB 280-568946/18	1		19:03	X																								
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	1		21:49	X																								
CCB 280-568946/30	1		22:04	X																								
ZZZZZZ			22:19																									
ZZZZZZ			22:34																									
ZZZZZZ			22:49																									
ZZZZZZ			23:04																									
ZZZZZZ			23:19																									
280-159190-7	5	T	23:34	X																								
280-159190-10	5	T	23:49	X																								
280-159190-11	5	T	00:04	X																								
280-159190-16	5	T	00:19	X																								
280-159190-16 DU	5	T	00:34	X																								
CCV 280-568946/41	1		00:49	X																								

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

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																								
280-159190-16 MS	5	T	01:19	X																								
280-159190-16 MSD	5	T	01:34	X																								
ZZZZZZ			01:49																									
ZZZZZZ			02:04																									
ZZZZZZ			02:18																									
ZZZZZZ			02:33																									
ZZZZZZ			02:48																									
ZZZZZZ			03:03																									
ZZZZZZ			03:18																									
ZZZZZZ			03:33																									
CCV 280-568946/53	1		03:48	X																								
CCB 280-568946/54	1		04:03	X																								
ZZZZZZ			04:18																									
ZZZZZZ			04:33																									
ZZZZZZ			04:48																									
ZZZZZZ			05:03																									
ZZZZZZ			05:18																									
ZZZZZZ			05:33																									
ZZZZZZ			05:48																									
ZZZZZZ			06:03																									
ZZZZZZ			06:18																									
ZZZZZZ			06:33																									
CCV 280-568946/65			06:49																									
CCB 280-568946/66			07:04																									
ZZZZZZ			07:19																									
ZZZZZZ			07:34																									
ZZZZZZ			07:49																									
ZZZZZZ			08:04																									
ZZZZZZ			08:19																									
ZZZZZZ			08:34																									
ZZZZZZ			08:49																									
ZZZZZZ			09:04																									
ZZZZZZ			09:19																									
ZZZZZZ			09:34																									
CCV 280-568946/77			09:49																									
CCB 280-568946/78			10:04																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 03/11/2022 17:04 End Date: 03/12/2022 15:22

Lab Sample Id	D/F	Type	Time	Analytes
				DOCQ
ICV 280-568513/1	1		17:04	X
ICB 280-568513/2	1		17:21	X
ZZZZZZ			17:36	
ZZZZZZ			17:54	
ZZZZZZ			18:09	
ZZZZZZ			18:26	
ZZZZZZ			18:40	
ZZZZZZ			18:55	
ZZZZZZ			19:10	
ZZZZZZ			19:26	
ZZZZZZ			19:41	
ZZZZZZ			19:56	
ZZZZZZ			20:14	
ZZZZZZ			20:29	
CCV 280-568513/15			20:43	
CCB 280-568513/16			20:58	
ZZZZZZ			21:17	
ZZZZZZ			21:31	
ZZZZZZ			21:50	
ZZZZZZ			22:05	
ZZZZZZ			22:23	
ZZZZZZ			22:42	
ZZZZZZ			23:01	
ZZZZZZ			23:15	
ZZZZZZ			23:34	
ZZZZZZ			23:51	
CCV 280-568513/27			00:05	
CCB 280-568513/28			00:24	
ZZZZZZ			00:39	
ZZZZZZ			00:53	
ZZZZZZ			01:12	
ZZZZZZ			01:29	
ZZZZZZ			01:50	
ZZZZZZ			02:04	
ZZZZZZ			02:19	
ZZZZZZ			02:34	
ZZZZZZ			02:52	
ZZZZZZ			03:07	
CCV 280-568513/39			03:26	
CCB 280-568513/40			03:41	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 03/11/2022 17:04 End Date: 03/12/2022 15:22

Lab Sample Id	D/F	Type	Time	Analytes
				DOCQ
ZZZZZZ			03:55	
ZZZZZZ			04:10	
ZZZZZZ			04:25	
ZZZZZZ			04:39	
ZZZZZZ			04:54	
ZZZZZZ			05:11	
ZZZZZZ			05:25	
ZZZZZZ			05:42	
ZZZZZZ			05:57	
ZZZZZZ			06:11	
CCV 280-568513/51	1		06:32	X
CCB 280-568513/52	1		06:47	X
ZZZZZZ			07:03	
ZZZZZZ			07:18	
ZZZZZZ			07:33	
LCS 280-568437/1-A	1	D	07:54	X
MB 280-568437/2-A	1	D	08:12	X
280-159190-1	1	D	08:27	X
280-159190-1 MS	1	D	08:46	X
280-159190-1 MSD	1	D	09:00	X
280-159190-2	1	D	09:15	X
280-159190-3	1	D	09:34	X
CCV 280-568513/63	1		09:52	X
CCB 280-568513/64	1		10:07	X
280-159190-4	1	D	10:26	X
280-159190-5	1	D	10:40	X
280-159190-6	1	D	10:55	X
280-159190-7	1	D	11:14	X
280-159190-8	1	D	11:28	X
280-159190-9	1	D	11:43	X
280-159190-10	1	D	12:02	X
280-159190-11	1	D	12:17	X
280-159190-12	1	D	12:31	X
280-159190-13	1	D	12:54	X
CCV 280-568513/75	1		13:09	X
CCB 280-568513/76	1		13:23	X
280-159190-14	1	D	13:42	X
280-159190-15	1	D	13:57	X
280-159190-16	1	D	14:15	X
280-159190-16 MS	1	D	14:34	X

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 03/11/2022 17:04 End Date: 03/12/2022 15:22

Lab Sample Id	D/F	Type	Time	Analytes																									
				DOCQ																									
280-159190-16 MSD	1	D	14:49	X																									
CCV 280-568513/82	1		15:08	X																									
CCB 280-568513/83	1		15:22	X																									

Prep Types:
D = Dissolved

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 03/02/2022 13:47 End Date: 03/02/2022 20:03

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
RINSE 280-567583/1			13:47																									
ZZZZZZ			13:55																									
ZZZZZZ			13:57																									
LCS 280-567583/4	1	T	14:04	X																								
LCSD 280-567583/5	1	T	14:12	X																								
MB 280-567583/6	1	T	14:17	X																								
ZZZZZZ			14:23																									
ZZZZZZ			14:29																									
ZZZZZZ			14:35																									
ZZZZZZ			14:41																									
ZZZZZZ			14:46																									
ZZZZZZ			14:52																									
ZZZZZZ			14:57																									
ZZZZZZ			15:02																									
ZZZZZZ			15:07																									
ZZZZZZ			15:20																									
CCV 280-567583/17	1		15:28	X																								
CCB 280-567583/18	1		15:33	X																								
ZZZZZZ			15:46																									
ZZZZZZ			16:01																									
ZZZZZZ			16:17																									
ZZZZZZ			16:31																									
ZZZZZZ			16:42																									
ZZZZZZ			16:52																									
ZZZZZZ			17:00																									
ZZZZZZ			17:06																									
ZZZZZZ			17:11																									
280-159190-1	1	T	17:16	X																								
CCV 280-567583/29	1		17:23	X																								
CCB 280-567583/30	1		17:29	X																								
LCS 280-567583/31	1	T	17:36	X																								
MB 280-567583/32	1	T	17:42	X																								
280-159190-2	1	T	17:47	X																								
280-159190-2 DU	1	T	17:52	X																								
280-159190-3	1	T	17:59	X																								
280-159190-4	1	T	18:08	X																								
280-159190-5	1	T	18:16	X																								
280-159190-6	1	T	18:23	X																								
280-159190-7	1	T	18:31	X																								
280-159190-8	1	T	18:37	X																								
280-159190-9	1	T	18:43	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 03/02/2022 13:47 End Date: 03/02/2022 20:03

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
280-159190-10	1	T	18:51	X																								
CCV 280-567583/43	1		18:59	X																								
CCB 280-567583/44	1		19:04	X																								
280-159190-11	1	T	19:11	X																								
280-159190-12	1	T	19:18	X																								
280-159190-13	1	T	19:27	X																								
280-159190-14	1	T	19:35	X																								
280-159190-15	1	T	19:43	X																								
280-159190-16	1	T	19:50	X																								
CCV 280-567583/51	1		19:57	X																								
CCB 280-567583/52	1		20:03	X																								

Prep Types:
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Batch Number: 568955 Batch Start Date: 03/17/22 10:14 Batch Analyst: Peterson, McKenzy M

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00525	350.1 ICV 00509
ICVL 280-568955/14		350.1		no	100 mL	100 mL	<2 SU		0.5 mL
ICV 280-568955/15		350.1		no	100 mL	100 mL	<2 SU		2.5 mL
ICB 280-568955/16		350.1		no	10 mL	10 mL	<2 SU		
LCS 280-568955/18		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
LCSD 280-568955/19		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
MB 280-568955/20		350.1		no	10 mL	10 mL	<2 SU		
CCVL 280-568955/33		350.1		no	100 mL	100 mL	<2 SU	0.5 mL	
CCV 280-568955/34		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
CCB 280-568955/35		350.1		no	10 mL	10 mL	<2 SU		
280-159190-C-1	NW071-8	350.1	T	no	10 mL	10 mL	<2 SU		
280-159190-C-2	NW060-8	350.1	T	no	10 mL	10 mL	<2 SU		
280-159190-C-16	NW062-8	350.1	T	no	10 mL	10 mL	<2 SU		
280-159190-C-16 MS	NW062-8	350.1	T	no	10 mL	10 mL	<2 SU	0.1 mL	
280-159190-C-16 MSD	NW062-8	350.1	T	no	10 mL	10 mL	<2 SU	0.1 mL	
280-159190-C-3	NW061-8	350.1	T	no	10 mL	10 mL	<2 SU		
280-159190-C-4	EW7-PM24A-8-25	350.1	T	no	10 mL	10 mL	<2 SU		
280-159190-C-5	EW7-PM21A-8-25	350.1	T	no	10 mL	10 mL	<2 SU		
280-159190-C-6	NW070-8	350.1	T	no	10 mL	10 mL	<2 SU		
280-159190-C-7	CA210-8	350.1	T	no	10 mL	10 mL	<2 SU		
CCVL 280-568955/49		350.1		no	100 mL	100 mL	<2 SU	0.5 mL	
CCV 280-568955/50		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
CCB 280-568955/51		350.1		no	10 mL	10 mL	<2 SU		
280-159190-C-8	CA212-8	350.1	T	no	10 mL	10 mL	<2 SU		
280-159190-C-9	CA213-8	350.1	T	no	10 mL	10 mL	<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.: 280-159190-1

SDG No.:

Batch Number: 568955 Batch Start Date: 03/17/22 10:14 Batch Analyst: Peterson, McKenzy M

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00525	350.1 ICV 00509
280-159190-C-10	G0092-8	350.1	T	no	10 mL	10 mL	<2 SU		
280-159190-C-11	G0091-8	350.1	T	no	10 mL	10 mL	<2 SU		
LCS 280-568955/57		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
LCSD 280-568955/58		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
MB 280-568955/59		350.1		no	10 mL	10 mL	<2 SU		
CCVL 280-568955/65		350.1		no	100 mL	100 mL	<2 SU	0.5 mL	
CCV 280-568955/66		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
CCB 280-568955/67		350.1		no	10 mL	10 mL	<2 SU		
280-159190-C-12	CA211-8	350.1	T	no	10 mL	10 mL	<2 SU		
280-159190-C-13	EW7-PM28A-8-25	350.1	T	no	10 mL	10 mL	<2 SU		
280-159190-C-14	EW7-PM29A-8-25	350.1	T	no	10 mL	10 mL	<2 SU		
280-159190-C-15	EW7-PM27B-8-35	350.1	T	no	10 mL	10 mL	<2 SU		
CCVL 280-568955/80		350.1		no	100 mL	100 mL	<2 SU	0.5 mL	
CCV 280-568955/81		350.1		no	100 mL	100 mL	<2 SU	2.5 mL	
CCB 280-568955/82		350.1		no	10 mL	10 mL	<2 SU		

Batch Notes	
Acid used for pH adjustment	Sulfuric Acid_00264
Sodium Nitroprusside ID	350.1 color_00277
Hypochlorite ID	350.1 bleach_01586
Carrier Identification	350.1 complex_00603
Sodium Salicylate ID	Sodium Sal_00023
Pipette/Syringe/Dispenser ID	SAH5000, 1000INTERCESSOR, BWH 200

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159190-1

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.: 280-159190-1

SDG No.:

Batch Number: 567536 Batch Start Date: 03/02/22 14:50 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 280-567536/1		351.2, 351.2			25 mL	25 mL	6 mL		
MB 280-567536/2		351.2, 351.2			25 mL	25 mL			
280-159190-C-1	NW071-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159190-C-1 MS	NW071-8	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-159190-C-1 MSD	NW071-8	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-159190-C-2	NW060-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159190-C-3	NW061-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159190-C-4	EW7-PM24A-8-25	351.2, 351.2	T	<2	25 mL	25 mL			
280-159190-C-5	EW7-PM21A-8-25	351.2, 351.2	T	<2	25 mL	25 mL			
280-159190-C-6	NW070-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159190-C-7	CA210-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159190-C-8	CA212-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159190-C-9	CA213-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159190-C-10	G0092-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159190-C-16	NW062-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159190-C-16 MS	NW062-8	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-159190-C-16 MSD	NW062-8	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-159190-C-11	G0091-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159190-C-12	CA211-8	351.2, 351.2	T	<2	25 mL	25 mL			
280-159190-C-13	EW7-PM28A-8-25	351.2, 351.2	T	<2	5 mL	25 mL			
280-159190-C-14	EW7-PM29A-8-25	351.2, 351.2	T	<2	25 mL	25 mL			
280-159190-C-15	EW7-PM27B-8-35	351.2, 351.2	T	<2	25 mL	25 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.: 280-159190-1

SDG No.:

Batch Number: 567536 Batch Start Date: 03/02/22 14:50 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

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	03/02/2022 16:00
Oven, Bath or Block Temperature 2	380 Degrees C
Bl;ock Digestion Temperature End Date	03/02/2022 22:00
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
pH Indicator ID	hc902937

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Batch Number: 567691 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 280-567536/1-A		351.2		2 mL					
MB 280-567536/2-A		351.2		2 mL					
280-159190-C-1-A	NW071-8	351.2	T	2 mL					
280-159190-C-1-B MS	NW071-8	351.2	T	2 mL					
280-159190-C-1-C MSD	NW071-8	351.2	T	2 mL					
280-159190-C-2-A	NW060-8	351.2	T	2 mL					
280-159190-C-3-A	NW061-8	351.2	T	2 mL					
280-159190-C-4-A	EW7-PM24A-8-25	351.2	T	2 mL					
280-159190-C-5-A	EW7-PM21A-8-25	351.2	T	2 mL					
280-159190-C-6-A	NW070-8	351.2	T	2 mL					
280-159190-C-7-A	CA210-8	351.2	T	2 mL					
280-159190-C-8-A	CA212-8	351.2	T	2 mL					
CCV 280-566632/23-A		351.2		2 mL					
CCB 280-566632/24-A		351.2		2 mL					
280-159190-C-9-A	CA213-8	351.2	T	2 mL					
280-159190-C-10-A	G0092-8	351.2	T	2 mL					
280-159190-C-16-A	NW062-8	351.2	T	2 mL					
280-159190-C-16-B MS	NW062-8	351.2	T	2 mL					
280-159190-C-16-C MSD	NW062-8	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.: 280-159190-1

SDG No.:

Batch Number: 567691 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					
280-159190-C-11-A	G0091-8	351.2	T	2 mL					
280-159190-C-12-A	CA211-8	351.2	T	2 mL					
280-159190-C-13-A	EW7-PM28A-8-25	351.2	T	2 mL					
280-159190-C-14-A	EW7-PM29A-8-25	351.2	T	2 mL					
280-159190-C-15-A	EW7-PM27B-8-35	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.: 280-159190-1

SDG No.:

Batch Number: 568508 Batch Start Date: 03/13/22 16:35 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 280-568508/17		353.2		100 mL	100 mL		5 mL		
ICVL 280-568508/18		353.2		100 mL	100 mL		2 mL		
ICB 280-568508/19		353.2		100 mL	100 mL				
LCS 280-568508/21		353.2		100 mL	100 mL	5 mL			
MB 280-568508/22		353.2		100 mL	100 mL				
280-159190-C-1	NW071-8	353.2	T	100 mL	100 mL				
280-159190-C-2	NW060-8	353.2	T	100 mL	100 mL				
280-159190-C-3	NW061-8	353.2	T	100 mL	100 mL				
CCV 280-568508/35		353.2		100 mL	100 mL	5 mL			
CCVL 280-568508/36		353.2		100 mL	100 mL	1 mL			
CCB 280-568508/37		353.2		100 mL	100 mL				
280-159190-C-4	EW7-PM24A-8-25	353.2	T	100 mL	100 mL				
280-159190-C-6	NW070-8	353.2	T	100 mL	100 mL				
280-159190-C-7	CA210-8	353.2	T	100 mL	100 mL				
280-159190-C-8	CA212-8	353.2	T	100 mL	100 mL				
280-159190-C-9	CA213-8	353.2	T	100 mL	100 mL				
280-159190-C-10	G0092-8	353.2	T	100 mL	100 mL				
CCV 280-568508/51		353.2		100 mL	100 mL	5 mL			
CCVL 280-568508/52		353.2		100 mL	100 mL	1 mL			
CCB 280-568508/53		353.2		100 mL	100 mL				
280-159190-C-11	G0091-8	353.2	T	100 mL	100 mL				
280-159190-C-12	CA211-8	353.2	T	100 mL	100 mL				
280-159190-C-13	EW7-PM28A-8-25	353.2	T	100 mL	100 mL				
280-159190-C-14	EW7-PM29A-8-25	353.2	T	100 mL	100 mL				
LCS 280-568508/59		353.2		100 mL	100 mL	5 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Batch Number: 568508 Batch Start Date: 03/13/22 16:35 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		
MB 280-568508/60		353.2		100 mL	100 mL				
280-159190-C-16	NW062-8	353.2	T	100 mL	100 mL				
280-159190-C-16 MS	NW062-8	353.2	T	5 mL	5 mL	0.2 mL			
280-159190-C-16 MSD	NW062-8	353.2	T	5 mL	5 mL	0.2 mL			
280-159190-C-15	EW7-PM27B-8-35	353.2	T	100 mL	100 mL				
CCV 280-568508/67		353.2		100 mL	100 mL	5 mL			
CCVL 280-568508/68		353.2		100 mL	100 mL	1 mL			
CCB 280-568508/69		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.: 280-159190-1

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				
280-159190-C-5	EW7-PM21A-8-25	353.2	T	100 mL	100 mL				
CCV 280-568761/35		353.2		100 mL	100 mL	5 mL			
CCVL 280-568761/36		353.2		100 mL	100 mL	1 mL			
CCB 280-568761/37		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.: 280-159190-1

SDG No.:

Batch Number: 567743 Batch Start Date: 03/04/22 11:30 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 03/04/22 13:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-567743/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
MB 280-567743/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-159190-E-16	NW062-8	9030B, 9034	T	50 mL	50 mL	3	>9 SU	<2 SU	5 mL
280-159190-E-16 MS	NW062-8	9030B, 9034	T	50 mL	50 mL	4	>9 SU	<2 SU	5 mL
280-159190-E-16 MSD	NW062-8	9030B, 9034	T	50 mL	50 mL	5	>9 SU	<2 SU	5 mL
280-159190-E-4	EW7-PM24A-8-25	9030B, 9034	T	50 mL	50 mL	10	>9 SU	<2 SU	5 mL
280-159190-E-5	EW7-PM21A-8-25	9030B, 9034	T	50 mL	50 mL	11	>9 SU	<2 SU	5 mL
280-159190-E-13	EW7-PM28A-8-25	9030B, 9034	T	50 mL	50 mL	12	>9 SU	<2 SU	5 mL
280-159190-E-14	EW7-PM29A-8-25	9030B, 9034	T	50 mL	50 mL	13	>9 SU	<2 SU	5 mL
280-159190-E-15	EW7-PM27B-8-35	9030B, 9034	T	50 mL	50 mL	14	>9 SU	<2 SU	5 mL
280-159190-E-1	NW071-8	9030B, 9034	T	50 mL	50 mL	15	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 02088					
LCS 280-567743/1		9030B, 9034		1 mL					
MB 280-567743/2		9030B, 9034							
280-159190-E-16	NW062-8	9030B, 9034	T						
280-159190-E-16 MS	NW062-8	9030B, 9034	T	1 mL					
280-159190-E-16 MSD	NW062-8	9030B, 9034	T	1 mL					
280-159190-E-4	EW7-PM24A-8-25	9030B, 9034	T						
280-159190-E-5	EW7-PM21A-8-25	9030B, 9034	T						
280-159190-E-13	EW7-PM28A-8-25	9030B, 9034	T						
280-159190-E-14	EW7-PM29A-8-25	9030B, 9034	T						
280-159190-E-15	EW7-PM27B-8-35	9030B, 9034	T						
280-159190-E-1	NW071-8	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.: 280-159190-1

SDG No.:

Batch Number: 567743 Batch Start Date: 03/04/22 11:30 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 03/04/22 13:00

Batch Notes	
Formaldehyde ID	none, see NCM
Zinc Acetate Buffer ID	znac_00121
Pipette/Syringe/Dispenser ID	5Hz4, ARM1000
Sulfuric Acid Reagent ID Number	SulfuricAcid_00288
pH Indicator ID	HC157843
Oven, Bath or Block Temperature 1	80 Degrees C
Distillation Start Time	03/04/2022 11:30
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	03/04/2022 13:00
Batch Comment	JM training MG

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.: 280-159190-1

SDG No.:

Batch Number: 567762 Batch Start Date: 03/04/22 14:00 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 03/04/22 15:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-567762/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
LCSD 280-567762/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
MB 280-567762/3		9030B, 9034		50 mL	50 mL	3	>9 SU	<2 SU	5 mL
280-159190-E-11	G0091-8	9030B, 9034	T	50 mL	50 mL	4	>9 SU	<2 SU	5 mL
280-159190-E-11 MS	G0091-8	9030B, 9034	T	50 mL	50 mL	5	>9 SU	<2 SU	5 mL
280-159190-E-11 MSD	G0091-8	9030B, 9034	T	50 mL	50 mL	6	>9 SU	<2 SU	5 mL
280-159190-E-2	NW060-8	9030B, 9034	T	50 mL	50 mL	7	>9 SU	<2 SU	5 mL
280-159190-E-3	NW061-8	9030B, 9034	T	50 mL	50 mL	9	>9 SU	<2 SU	5 mL
280-159190-E-6	NW070-8	9030B, 9034	T	50 mL	50 mL	10	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 02088					
LCS 280-567762/1		9030B, 9034		1 mL					
LCSD 280-567762/2		9030B, 9034		1 mL					
MB 280-567762/3		9030B, 9034							
280-159190-E-11	G0091-8	9030B, 9034	T						
280-159190-E-11 MS	G0091-8	9030B, 9034	T	1 mL					
280-159190-E-11 MSD	G0091-8	9030B, 9034	T	1 mL					
280-159190-E-2	NW060-8	9030B, 9034	T						
280-159190-E-3	NW061-8	9030B, 9034	T						
280-159190-E-6	NW070-8	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.: 280-159190-1

SDG No.:

Batch Number: 567762 Batch Start Date: 03/04/22 14:00 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 03/04/22 15:30

Batch Notes	
Formaldehyde ID	None, see NCM
Zinc Acetate Buffer ID	znac_00121
Pipette/Syringe/Dispenser ID	5Hz4, ARM1000
Sulfuric Acid Reagent ID Number	SulfuricAcid_00288
pH Indicator ID	HC157843
Oven, Bath or Block Temperature 1	80 Degrees C
Distillation Start Time	03/04/2022 14:30
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	03/04/2022 15:30
Batch Comment	JM training MG

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Batch Number: 567780 Batch Start Date: 03/04/22 11:30 Batch Analyst: Mitchell, Jacob J

Batch Method: 9034 Batch End Date: 03/04/22 13:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-567743/1-A		9034		0 mL	2.8 mL	5 mL	2.8 mL	50 mL	
MB 280-567743/2-A		9034		2.8 mL	3.8 mL	1 mL	1 mL	50 mL	
280-159190-E-16-A	NW062-8	9034	T	3.8 mL	4.8 mL	1 mL	1 mL	50 mL	
280-159190-E-16-B MS	NW062-8	9034	T	4.8 mL	7.1 mL	5 mL	2.3 mL	50 mL	
280-159190-E-16-C MSD	NW062-8	9034	T	7.1 mL	9.6 mL	5 mL	2.5 mL	50 mL	
280-159190-E-4-A	EW7-PM24A-8-25	9034	T	13.5 mL	14.4 mL	1 mL	0.9 mL	50 mL	
280-159190-E-5-A	EW7-PM21A-8-25	9034	T	14.4 mL	15.4 mL	1 mL	1 mL	50 mL	
280-159190-E-13-A	EW7-PM28A-8-25	9034	T	15.4 mL	16.4 mL	1 mL	0.999999999999998 mL	50 mL	
280-159190-E-14-A	EW7-PM29A-8-25	9034	T	16.4 mL	17.4 mL	1 mL	1 mL	50 mL	
280-159190-E-15-A	EW7-PM27B-8-35	9034	T	17.4 mL	18.3 mL	1 mL	0.900000000000002 mL	50 mL	
280-159190-E-1-A	NW071-8	9034	T	18.3 mL	19.2 mL	1 mL	0.899999999999999 mL	50 mL	

Batch Notes	
Normality of First Titrant	0.025 N
Normality of Iodine Solution	0.025 N
Iodine ID	WCIODINE_01326
Hydrochloric Acid ID	HCl Sol_00197
Sodium Thiosulfate ID	Na Thio_00177
Starch Reagent ID	Starch Ind_00067
Pipette/Syringe/Dispenser ID	5Hz4, ARM1000
Batch Comment	JM training MG

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Batch Number: 567781 Batch Start Date: 03/04/22 14:00 Batch Analyst: Mitchell, Jacob J

Batch Method: 9034 Batch End Date: 03/04/22 15:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-567762/1-A		9034		0 mL	2.5 mL	5 mL	2.5 mL	50 mL	
LCSD 280-567762/2-A		9034		2.5 mL	4.8 mL	5 mL	2.3 mL	50 mL	
MB 280-567762/3-A		9034		4.8 mL	5.8 mL	1 mL	1 mL	50 mL	
280-159190-E-11-A	G0091-8	9034	T	5.8 mL	6.75 mL	1 mL	0.95 mL	50 mL	
280-159190-E-11-B MS	G0091-8	9034	T	6.75 mL	9.0 mL	5 mL	2.25 mL	50 mL	
280-159190-E-11-C MSD	G0091-8	9034	T	9.0 mL	11.3 mL	5 mL	2.3 mL	50 mL	
280-159190-E-2-A	NW060-8	9034	T	11.3 mL	12.25 mL	1 mL	0.949999999999999 mL	50 mL	
280-159190-E-3-A	NW061-8	9034	T	13.2 mL	14.1 mL	1 mL	0.9 mL	50 mL	
280-159190-E-6-A	NW070-8	9034	T	14.1 mL	15.1 mL	1 mL	1 mL	50 mL	

Batch Notes	
Normality of First Titrant	0.025 N
Normality of Iodine Solution	0.025 N
Iodine ID	WCIODINE_01326
Hydrochloric Acid ID	HCl Sol_00197
Sodium Thiosulfate ID	Na Thio_00177
Starch Reagent ID	Starch Ind_00067
Pipette/Syringe/Dispenser ID	5Hz4, ARM1000
Batch Comment	JM training MG

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Batch Number: 567789 Batch Start Date: 03/05/22 09:11 Batch Analyst: Ventura, Phoenix E

Batch Method: 9030B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-567789/1		9030B, 9034		50 mL	50 mL	4	>9 SU	<2 SU	5 mL
LCSD 280-567789/2		9030B, 9034		50 mL	50 mL	5	>9 SU	<2 SU	5 mL
MB 280-567789/3		9030B, 9034		50 mL	50 mL	6	>9 SU	<2 SU	5 mL
280-159190-E-7	CA210-8	9030B, 9034	T	50 mL	50 mL	10	>9 SU	<2 SU	5 mL
280-159190-E-8	CA212-8	9030B, 9034	T	50 mL	50 mL	11	>9 SU	<2 SU	5 mL
280-159190-E-9	CA213-8	9030B, 9034	T	50 mL	50 mL	12	>9 SU	<2 SU	5 mL
280-159190-E-10	G0092-8	9030B, 9034	T	50 mL	50 mL	17	>9 SU	<2 SU	5 mL
280-159190-E-12	CA211-8	9030B, 9034	T	50 mL	50 mL	18	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD CAL INT 02142					
LCS 280-567789/1		9030B, 9034		1 mL					
LCSD 280-567789/2		9030B, 9034		1 mL					
MB 280-567789/3		9030B, 9034							
280-159190-E-7	CA210-8	9030B, 9034	T						
280-159190-E-8	CA212-8	9030B, 9034	T						
280-159190-E-9	CA213-8	9030B, 9034	T						
280-159190-E-10	G0092-8	9030B, 9034	T						
280-159190-E-12	CA211-8	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.: 280-159190-1

SDG No.:

Batch Number: 567789 Batch Start Date: 03/05/22 09:11 Batch Analyst: Ventura, Phoenix E

Batch Method: 9030B Batch End Date:

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	03/04/2022 10:00
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	03/04/2022 11:30
Batch Comment	PEV

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.: 280-159190-1

SDG No.:

Batch Number: 567799 Batch Start Date: 03/05/22 12:00 Batch Analyst: Ventura, Phoenix E

Batch Method: 9034 Batch End Date: 03/05/22 13:18

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-567789/1-A		9034		0.00 mL	1.70 mL	4 mL	1.7 mL	50 mL	
LCSD 280-567789/2-A		9034		1.70 mL	3.60 mL	4 mL	1.9 mL	50 mL	
MB 280-567789/3-A		9034		3.60 mL	5.60 mL	2 mL	2 mL	50 mL	
280-159190-E-7-A	CA210-8	9034	T	11.49 mL	13.50 mL	2 mL	2.01 mL	50 mL	
280-159190-E-8-A	CA212-8	9034	T	13.50 mL	15.40 mL	2 mL	1.9 mL	50 mL	
280-159190-E-9-A	CA213-8	9034	T	15.40 mL	17.20 mL	2 mL	1.8 mL	50 mL	
280-159190-E-10-A	G0092-8	9034	T	10.80 mL	12.70 mL	2 mL	1.9 mL	50 mL	
280-159190-E-12-A	CA211-8	9034	T	12.70 mL	14.60 mL	2 mL	1.9 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_00198
Sodium Thiosulfate ID	Na Thio_00176
Starch Reagent ID	Starch Ind_00067
Pipette/Syringe/Dispenser ID	5Hz4, ARM1000
Batch Comment	PEV

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.: 280-159190-1

SDG No.:

Batch Number: 568008 Batch Start Date: 03/08/22 14:13 Batch Analyst: Fox, Regan A

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Cl ICV Std 00002	IC CAL cl/so4 00409	IC Cal low 00625	IC ICV 5 00353
STD 280-568008/2 IC		9056A		5 mL	5 mL		0.02 mL	0.02 mL	
STD 280-568008/3 IC		9056A		5 mL	5 mL		0.05 mL	0.05 mL	
STD 280-568008/4 IC		9056A		5 mL	5 mL		0.1 mL	0.1 mL	
STD 280-568008/5 IC		9056A		5 mL	5 mL		1.2 mL	0.4 mL	
STD 280-568008/6 IC		9056A		5 mL	5 mL		2.4 mL	0.8 mL	
STD 280-568008/7 IC		9056A		5 mL	5 mL		4 mL	1 mL	
ICV 280-568008/8		9056A		5 mL	5 mL	0.4 mL			0.4 mL
ICB 280-568008/9		9056A		5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00022					
STD 280-568008/2 IC		9056A							
STD 280-568008/3 IC		9056A							
STD 280-568008/4 IC		9056A							
STD 280-568008/5 IC		9056A							
STD 280-568008/6 IC		9056A							
STD 280-568008/7 IC		9056A							
ICV 280-568008/8		9056A		0.4 mL					
ICB 280-568008/9		9056A							

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Batch Number: 568008 Batch Start Date: 03/08/22 14:13 Batch Analyst: Fox, Regan A

Batch Method: 9056A Batch End Date:

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, BMF1000, 200CJ, IC100
Sufficient Volume for Batch QC	yes
Eluent 1 ID	AS14 Eluent_00021
Batch Comment	Run and reviewed by RAF, RAF in training

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Batch Number: 568795 Batch Start Date: 03/16/22 10:06 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	
CCV 280-568795/1		9056A		5 mL	5 mL			5 mL	
CCB 280-568795/2		9056A		5 mL	5 mL				
MRL 280-568795/3		9056A		5 mL	5 mL	0.1 mL	0.05 mL		
LCS 280-568795/4		9056A		5 mL	5 mL			5 mL	
LCSD 280-568795/5		9056A		5 mL	5 mL			5 mL	
MB 280-568795/6		9056A		5 mL	5 mL				
CCV 280-568795/17		9056A		5 mL	5 mL			5 mL	
CCB 280-568795/18		9056A		5 mL	5 mL				
280-159190-F-1	NW071-8	9056A	T	5 mL	5 mL				
CCV 280-568795/29		9056A		5 mL	5 mL			5 mL	
CCB 280-568795/30		9056A		5 mL	5 mL				
280-159190-F-2	NW060-8	9056A	T	5 mL	5 mL				
280-159190-F-3	NW061-8	9056A	T	5 mL	5 mL				
280-159190-F-4	EW7-PM24A-8-25	9056A	T	5 mL	5 mL				
280-159190-F-5	EW7-PM21A-8-25	9056A	T	5 mL	5 mL				
280-159190-F-6	NW070-8	9056A	T	5 mL	5 mL				
LCS 280-568795/37		9056A		5 mL	5 mL			5 mL	
LCSD 280-568795/38		9056A		5 mL	5 mL			5 mL	
MB 280-568795/39		9056A		5 mL	5 mL				
CCV 280-568795/41		9056A		5 mL	5 mL			5 mL	
CCB 280-568795/42		9056A		5 mL	5 mL				
280-159190-F-8	CA212-8	9056A	T	5 mL	5 mL				
280-159190-F-9	CA213-8	9056A	T	5 mL	5 mL				
280-159190-F-12	CA211-8	9056A	T	5 mL	5 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Batch Number: 568795 Batch Start Date: 03/16/22 10:06 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	
280-159190-F-13	EW7-PM28A-8-25	9056A	T	5 mL	5 mL				
280-159190-F-14	EW7-PM29A-8-25	9056A	T	5 mL	5 mL				
CCV 280-568795/53		9056A		5 mL	5 mL			5 mL	
CCB 280-568795/54		9056A		5 mL	5 mL				

Batch Notes	
Filter ID	SF020E
Pipette/Syringe/Dispenser ID	ARM5000, HEX1000, 200CJ, IC100
Sufficient Volume for Batch QC	yes
Eluent 1 ID	AS14 Eluent_00021
Batch Comment	RAF

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.: 280-159190-1

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				
MRL 280-568842/10		9056A		5 mL	5 mL		0.2 mL	0.1 mL	
LCS 280-568842/11		9056A		5 mL	5 mL				
LCSD 280-568842/12		9056A		5 mL	5 mL				
MB 280-568842/13		9056A		5 mL	5 mL				
CCV 280-568842/24		9056A		5 mL	5 mL				
CCB 280-568842/25		9056A		5 mL	5 mL				
CCV 280-568842/36		9056A		5 mL	5 mL				
CCB 280-568842/37		9056A		5 mL	5 mL				
280-159190-F-15	EW7-PM27B-8-35	9056A	T	5 mL	5 mL				
CCV 280-568842/46		9056A		5 mL	5 mL				
CCB 280-568842/47		9056A		5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC LCS 01863	IC SO4 ICV 00022				

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.: 280-159190-1

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	IC LCS 01863	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							
MRL 280-568842/10		9056A							
LCS 280-568842/11		9056A		5 mL					
LCSD 280-568842/12		9056A		5 mL					
MB 280-568842/13		9056A							
CCV 280-568842/24		9056A		10 mL					
CCB 280-568842/25		9056A							
CCV 280-568842/36		9056A		10 mL					
CCB 280-568842/37		9056A							
280-159190-F-15	EW7-PM27B-8-35	9056A	T						
CCV 280-568842/46		9056A		10 mL					
CCB 280-568842/47		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.: 280-159190-1

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
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.: 280-159190-1

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
CCV 280-568946/1		9056A		10 mL	10 mL			10 mL	
CCB 280-568946/2		9056A		10 mL	10 mL				
MRL 280-568946/3		9056A		10 mL	10 mL	0.2 mL	0.1 mL		
LCS 280-568946/4		9056A		10 mL	10 mL			10 mL	
LCSD 280-568946/5		9056A		10 mL	10 mL			10 mL	
MB 280-568946/6		9056A		10 mL	10 mL				
CCV 280-568946/17		9056A		10 mL	10 mL			10 mL	
CCB 280-568946/18		9056A		10 mL	10 mL				
CCV 280-568946/29		9056A		10 mL	10 mL			10 mL	
CCB 280-568946/30		9056A		10 mL	10 mL				
280-159190-F-7	CA210-8	9056A	T	10 mL	10 mL				
280-159190-F-10	G0092-8	9056A	T	10 mL	10 mL				
280-159190-F-11	G0091-8	9056A	T	10 mL	10 mL				
280-159190-F-16	NW062-8	9056A	T	10 mL	10 mL				
280-159190-F-16 DU	NW062-8	9056A	T	10 mL	10 mL				
CCV 280-568946/41		9056A		10 mL	10 mL			10 mL	
CCB 280-568946/42		9056A		10 mL	10 mL				
280-159190-F-16 MS	NW062-8	9056A	T	10 mL	10 mL				0.1 mL
280-159190-F-16 MSD	NW062-8	9056A	T	10 mL	10 mL				0.1 mL
CCV 280-568946/53		9056A		10 mL	10 mL			10 mL	
CCB 280-568946/54		9056A		10 mL	10 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Batch Number: 568946 Batch Start Date: 03/17/22 12:07 Batch Analyst: Fox, Regan A

Batch Method: 9056A Batch End Date:

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.: 280-159190-1

SDG No.:

Batch Number: 568512 Batch Start Date: 03/11/22 17:04 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC LCS Std 00053	AnalysisComment
LCS 280-568437/1-A		9060A		200 mL	200 mL	<2 SU	<2 SU	5 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
MB 280-568437/2-A		9060A		20 mL	20 mL	<2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159190-D-1-A	NW071-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159190-D-1-B MS	NW071-8	9060A	D	50 mL	50 mL	>2 SU	<2 SU	1.25 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159190-D-1-C MSD	NW071-8	9060A	D	50 mL	50 mL	>2 SU	<2 SU	1.25 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159190-D-2-A	NW060-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159190-D-3-A	NW061-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Batch Number: 568512 Batch Start Date: 03/11/22 17:04 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC LCS Std 00053	AnalysisComment
280-159190-D-4-A	EW7-PM24A-8-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159190-D-5-A	EW7-PM21A-8-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159190-D-6-A	NW070-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159190-D-7-A	CA210-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159190-D-8-A	CA212-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159190-D-9-A	CA213-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159190-D-10-A	G0092-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Batch Number: 568512 Batch Start Date: 03/11/22 17:04 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC LCS Std 00053	AnalysisComment
280-159190-D-11-A	G0091-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159190-D-12-A	CA211-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159190-D-13-A	EW7-PM28A-8-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159190-D-14-A	EW7-PM29A-8-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159190-D-15-A	EW7-PM27B-8-35	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159190-D-16-A	NW062-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-159190-D-16-B MS	NW062-8	9060A	D	50 mL	50 mL	>2 SU	<2 SU	1.25 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.

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.: 280-159190-1

SDG No.:

Batch Number: 568512 Batch Start Date: 03/11/22 17:04 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC LCS Std 00053	AnalysisComment
280-159190-D-16-C MSD	NW062-8	9060A	D	50 mL	50 mL	>2 SU	<2 SU	1.25 mL	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.

Batch Notes	
Acid ID	0.2% H2SO4_00421, H2SO4_00210
Combustion Catylyst ID	19003D-03
Pipette/Syringe/Dispenser ID	BWH 5000, 1000 MS, 9086953
pH Paper ID	HC169501
Filter ID	17233826
Batch Comment	Run and reviewed by ABW

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Denver Job No.: 280-159190-1

SDG No.:

Batch Number: 568513 Batch Start Date: 03/11/22 17:04 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 280-568513/1		9060A		50 mL	50 mL	<2 SU	<2 SU	1 mL	
ICB 280-568513/2		9060A		20 mL	20 mL	<2 SU	<2 SU		
CCV 280-568513/51		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-568513/52		9060A		20 mL	20 mL	<2 SU	<2 SU		
LCS 280-568437/1-A		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
MB 280-568437/2-A		9060A		20 mL	20 mL	<2 SU	<2 SU		
280-159190-D-1-A	NW071-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-159190-D-1-B MS	NW071-8	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL
280-159190-D-1-C MSD	NW071-8	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL
280-159190-D-2-A	NW060-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-159190-D-3-A	NW061-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
CCV 280-568513/63		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-568513/64		9060A		20 mL	20 mL	<2 SU	<2 SU		
280-159190-D-4-A	EW7-PM24A-8-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-159190-D-5-A	EW7-PM21A-8-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-159190-D-6-A	NW070-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-159190-D-7-A	CA210-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-159190-D-8-A	CA212-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-159190-D-9-A	CA213-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-159190-D-10-A	G0092-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-159190-D-11-A	G0091-8	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.: 280-159190-1

SDG No.:

Batch Number: 568513 Batch Start Date: 03/11/22 17:04 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
280-159190-D-12 -A	CA211-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-159190-D-13 -A	EW7-PM28A-8-25	9060A	D	20 mL	20 mL	>2	<2 SU		
CCV 280-568513/75		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-568513/76		9060A		20 mL	20 mL	<2 SU	<2 SU		
280-159190-D-14 -A	EW7-PM29A-8-25	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-159190-D-15 -A	EW7-PM27B-8-35	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-159190-D-16 -A	NW062-8	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-159190-D-16 -B MS	NW062-8	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL
280-159190-D-16 -C MSD	NW062-8	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL
CCV 280-568513/82		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-568513/83		9060A		20 mL	20 mL	<2 SU	<2 SU		

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
ICV 280-568513/1		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
ICB 280-568513/2		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.: 280-159190-1

SDG No.:

Batch Number: 568513 Batch Start Date: 03/11/22 17:04 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
CCV 280-568513/51		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-568513/52		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
LCS 280-568437/1-A		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
MB 280-568437/2-A		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159190-D-1-A	NW071-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159190-D-1-B MS	NW071-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159190-D-1-C MSD	NW071-8	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.: 280-159190-1

SDG No.:

Batch Number: 568513 Batch Start Date: 03/11/22 17:04 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-159190-D-2-A	NW060-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159190-D-3-A	NW061-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-568513/63		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-568513/64		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159190-D-4-A	EW7-PM24A-8-25	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159190-D-5-A	EW7-PM21A-8-25	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159190-D-6-A	NW070-8	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.: 280-159190-1

SDG No.:

Batch Number: 568513 Batch Start Date: 03/11/22 17:04 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-159190-D-7-A	CA210-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159190-D-8-A	CA212-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159190-D-9-A	CA213-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159190-D-10-A	G0092-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159190-D-11-A	G0091-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159190-D-12-A	CA211-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159190-D-13-A	EW7-PM28A-8-25	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.: 280-159190-1

SDG No.:

Batch Number: 568513 Batch Start Date: 03/11/22 17:04 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
CCV 280-568513/75		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-568513/76		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159190-D-14 -A	EW7-PM29A-8-25	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159190-D-15 -A	EW7-PM27B-8-35	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159190-D-16 -A	NW062-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159190-D-16 -B MS	NW062-8	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-159190-D-16 -C MSD	NW062-8	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.: 280-159190-1

SDG No.:

Batch Number: 568513 Batch Start Date: 03/11/22 17:04 Batch Analyst: Wondimu, Akewak B

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
CCV 280-568513/82		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-568513/83		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					

Batch Notes	
Acid ID	0.2% H2SO4_00421, H2SO4_00210
Combustion Catylyst ID	19003D-03
Pipette/Syringe/Dispenser ID	BWH 5000, 1000 MS, 9086953
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.: 280-159190-1

SDG No.:

Batch Number: 567583 Batch Start Date: 03/02/22 13:47 Batch Analyst: Guillen, Kristela E

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 01027				
LCS 280-567583/4		SM 2320B		InitialAmount is blank	10 mL				
LCSD 280-567583/5		SM 2320B		InitialAmount is blank	10 mL				
MB 280-567583/6		SM 2320B		InitialAmount is blank					
CCV 280-567583/17		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-567583/18		SM 2320B		InitialAmount is blank					
280-159190-F-1	NW071-8	SM 2320B	T	InitialAmount is blank					
CCV 280-567583/29		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-567583/30		SM 2320B		InitialAmount is blank					
LCS 280-567583/31		SM 2320B		InitialAmount is blank	10 mL				
MB 280-567583/32		SM 2320B		InitialAmount is blank					
280-159190-F-2	NW060-8	SM 2320B	T	InitialAmount is blank					
280-159190-F-2 DU	NW060-8	SM 2320B	T	InitialAmount is blank					
280-159190-F-3	NW061-8	SM 2320B	T	InitialAmount is blank					
280-159190-F-4	EW7-PM24A-8-25	SM 2320B	T	InitialAmount is blank					
280-159190-F-5	EW7-PM21A-8-25	SM 2320B	T	InitialAmount is blank					
280-159190-F-6	NW070-8	SM 2320B	T	InitialAmount is blank					
280-159190-F-7	CA210-8	SM 2320B	T	InitialAmount is blank					
280-159190-F-8	CA212-8	SM 2320B	T	InitialAmount is blank					
280-159190-F-9	CA213-8	SM 2320B	T	InitialAmount is blank					
280-159190-F-10	G0092-8	SM 2320B	T	InitialAmount is blank					
CCV 280-567583/43		SM 2320B		InitialAmount is blank	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.: 280-159190-1

SDG No.:

Batch Number: 567583 Batch Start Date: 03/02/22 13:47 Batch Analyst: Guillen, Kristela E

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 01027				
CCB 280-567583/44		SM 2320B		InitialAmount is blank					
280-159190-F-11	G0091-8	SM 2320B	T	InitialAmount is blank					
280-159190-F-12	CA211-8	SM 2320B	T	InitialAmount is blank					
280-159190-F-13	EW7-PM28A-8-25	SM 2320B	T	InitialAmount is blank					
280-159190-F-14	EW7-PM29A-8-25	SM 2320B	T	InitialAmount is blank					
280-159190-F-15	EW7-PM27B-8-35	SM 2320B	T	InitialAmount is blank					
280-159190-F-16	NW062-8	SM 2320B	T	InitialAmount is blank					
CCV 280-567583/51		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-567583/52		SM 2320B		InitialAmount is blank					

Batch Notes	
Nominal Amount Used	10 mL
Acid ID	0.02 H2SO4_00293
Normality of First Titrant	0.02 N
Sodium Carbonate ID	Alk Stk Std_00022
pH Buffer 1 ID	pH 2.0 buffer_00095
pH Buffer 2 ID	pH 4.0 buffer_00202
pH Buffer 3 ID	pH 7.0 buffer_00309
pH Buffer 4 ID	pH 10 buffer_00159
pH Buffer 5 ID	pH 12 buffer_00179
pH Buffer 6 ID	pH 7.0 buffer_00310
Probe ID	PCE 80 pH 1200D_8918
Batch Comment	KG

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: 17-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	280-159466-H-1	U	1	1	1		pH<2, Cl- non-detect
202	ms 280-159466-H-1	U	1	1	1		pH<2, Cl- non-detect
203	msd 280-159466-H-1	U	1	1	1		pH<2, Cl- non-detect
204	280-159466-H-2	U	1	1	1		pH<2, Cl- non-detect
205	280-159466-G-3	U	1	1	1		pH<2, Cl- non-detect
206	590-17032-D-1	U	1	10	1		pH<2, Cl- non-detect
207	280-159223-G-1	U	1	20	1		pH<2, Cl- non-detect
208	280-159223-I-2	U	1	200	1		pH<2, Cl- non-detect (Composite 1-4)
209	280-159223-J-3	U	1	100	1		pH<2, Cl- non-detect
210	280-159470-G-1	U	1	200	1		pH<2, Cl- non-detect
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
211	280-159190-C-1	U	1	1	1		pH<2, Cl- non-detect
212	280-159190-C-2	U	1	1	1		pH<2, Cl- non-detect
213	280-159190-C-16	U	1	1	1		pH<2, Cl- non-detect
214	ms 280-159190-C-16	U	1	1	1		pH<2, Cl- non-detect
215	msd 280-159190-C-16	U	1	1	1		pH<2, Cl- non-detect
216	280-159190-C-3	U	1	1	1		pH<2, Cl- non-detect
217	280-159190-C-4	U	1	1	1		pH<2, Cl- non-detect
218	280-159190-C-5	U	1	1	1		pH<2, Cl- non-detect
219	280-159190-C-6	U	1	1	1		pH<2, Cl- non-detect
220	280-159190-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		
221	280-159190-C-8	U	1	1	1		pH<2, Cl- non-detect
222	280-159190-C-9	U	1	1	1		pH<2, Cl- non-detect
223	280-159190-C-10	U	1	1	1		pH<2, Cl- non-detect
224	280-159190-C-11	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	280-159234-L-7	U	1	1	1		pH<2, Cl- non-detect
226	ms 280-159234-L-7	U	1	1	1		pH<2, Cl- non-detect

Cup	Name	Type	R	Dil	Wt	Vial	Comment
227	msd 280-159234-L-7 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	280-159190-C-12	U	1	1	1		pH<2, Cl- non-detect
229	280-159190-C-13	U	1	1	1		pH<2, Cl- non-detect
230	280-159190-C-14	U	1	1	1		pH<2, Cl- non-detect
231	280-159190-C-15	U	1	1	1		pH<2, Cl- non-detect
232	280-159234-L-1	U	1	1	1		pH<2, Cl- non-detect
233	280-159234-L-2	U	1	1	1		pH<2, Cl- non-detect
234	280-159234-L-3	U	1	1	1		pH<2, Cl- non-detect
235	280-159234-L-4	U	1	1	1		pH<2, Cl- non-detect
236	280-159234-L-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		
237	280-159234-l-6	U	1	1	1		pH<2, Cl- non-detect
238	MS 280-159234-l-6 U		1	1	1	1	pH<2, Cl- non-detect
239	MSD 280-159234-l-6 U		1	1	1	1	pH<2, Cl- non-detect
240	280-159234-l-8	U	1	1	1		pH<2, Cl- non-detect
241	280-159234-l-9	U	1	1	1		pH<2, Cl- non-detect
242	280-159234-l-10	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\031722.RST
Date: 17-Mar-22
Operator: MP

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	106	Sync	1	SYNC	1	1	13430	1012.103943	
2	0	Carry Over	1	CO	1	1	124	-17.229790	LO
3	0	Blank	1	BLNK	1	1	58	-22.308357	LO
4	101	Cal 0 ppb	1	C	1	1	485	10.405656	
5	102	Cal 25 ppb	1	C	1	1	627	21.247494	
6	103	Cal 50 ppb	1	C	1	1	967	47.285343	
7	104	Cal 100 ppb	1	C	1	1	1567	93.304039	
8	105	Cal 500 ppb	1	C	1	1	6824	498.191620	
9	106	Cal 1000 ppb	1	C	1	1	13374	1007.718628	
10	107	Cal 2500 ppb	1	C	1	1	32119	2496.144531	
11	108	Cal 5000 ppb	1	C	1	1	62458	5000.671875	HI
12	0	Blank	1	BLNK	1	1	-498	-64.761337	LO
B	0	Read Baseline	1	RB	1	1	0	-26.723074	BL
14	109	ICVL 500.0 ppb	1	U	1	1	6767	493.834045	
15	110	ICV 2500.0 ppb	1	U	1	1	32715	2544.196777	
16	111	ICB	1	U	1	1	-31	-29.120417	LO
B	0	read baseline	1	RB	1	1	0	-26.723074	BL
18	107	LCS	1	U	1	1	33015	2568.418457	
19	107	LCSD	1	U	1	1	32776	2549.133789	
20	111	MB	1	U	1	1	-10	-27.525055	LO
21	201	280-159466-H-1	1	U	1	1	3403	234.275604	
22	202	ms 280-159466-H-1	1	U	1	1	17532	1333.956177	
23	203	msd 280-159466-H-1	1	U	1	1	17290	1314.942871	
24	204	280-159466-H-2	1	U	1	1	4491	318.080261	
25	205	280-159466-G-3	1	U	1	1	14686	1110.387085	
26	206	590-17032-D-1	1	U	10	1	26454	20415.458984	
27	207	280-159223-G-1	1	U	20	1	30301	46996.308594	
28	208	280-159223-I-2	1	U	200	1	16502	250593.062500	
29	209	280-159223-J-3	1	U	100	1	27784	214793.578125	
30	210	280-159470-G-1	1	U	200	1	18416	280725.062500	
31	0	Blank	1	BLNK	1	1	-140	-37.429966	LO
B	0	Read Baseline	1	RB	1	1	0	-26.723074	BL
33	105	CCVL 500.0 ppb	1	U	1	1	7111	520.423096	
34	107	CCV 2500.0 ppb	1	U	1	1	33863	2636.969727	
35	111	CCB	1	U	1	1	133	-16.563250	LO
B	0	read baseline	1	RB	1	1	0	-26.723074	BL
37	211	280-159190-C-1	1	U	1	1	211	-10.606258	LO
38	212	280-159190-C-2	1	U	1	1	267	-6.310347	LO
39	213	280-159190-C-16	1	U	1	1	22945	1762.089233	
40	214	ms 280-159190-C-16	1	U	1	1	36232	2828.747803	
41	215	msd 280-159190-C-16	1	U	1	1	36248	2830.106201	
42	216	280-159190-C-3	1	U	1	1	57762	4605.285645	
43	217	280-159190-C-4	1	U	1	1	23948	1841.790161	
44	218	280-159190-C-5	1	U	1	1	25278	1947.694702	
45	219	280-159190-C-6	1	U	1	1	171	-13.640791	LO
46	220	280-159190-C-7	1	U	1	1	2271	147.304962	
47	0	Blank	1	BLNK	1	1	26	-24.764338	LO
B	0	Read Baseline	1	RB	1	1	0	-26.723074	BL
49	105	CCVL 500.0 ppb	1	U	1	1	7259	531.922058	
50	107	CCV 2500.0 ppb	1	U	1	1	33927	2642.098145	
51	111	CCB	1	U	1	1	73	-21.163399	LO
B	0	read baseline	1	RB	1	1	0	-26.723074	BL
53	221	280-159190-C-8	1	U	1	1	333	-1.206944	LO
54	222	280-159190-C-9	1	U	1	1	685	25.665569	
55	223	280-159190-C-10	1	U	1	1	196	-11.697756	LO
56	224	280-159190-C-11	1	U	1	1	203	-11.204345	LO
57	107	LCS	1	U	1	1	34427	2682.566162	
58	107	LCSD	1	U	1	1	34484	2687.168701	
59	111	MB	1	U	1	1	53	-22.678280	LO
60	225	280-159234-L-7	1	U	1	1	730	29.157597	
61	226	ms 280-159234-L-7	1	U	1	1	15362	1163.467896	
62	227	msd 280-159234-L-7	1	U	1	1	15179	1149.081299	
63	0	Blank	1	BLNK	1	1	-94	-33.910316	LO
B	0	Read Baseline	1	RB	1	1	0	-26.723074	BL
65	105	CCVL 500.0 ppb	1	U	1	1	7303	535.286865	
66	107	CCV 2500.0 ppb	1	U	1	1	34336	2675.197998	
67	111	CCB	1	U	1	1	58	-22.273819	LO
B	0	read baseline	1	RB	1	1	0	-26.723074	BL
69	228	280-159190-C-12	1	U	1	1	382	2.529077	
70	229	280-159190-C-13	1	U	1	1	45811	3611.830811	

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	230	280-159190-C-14	1	U	1	1	18128	1380.910278	
72	231	280-159190-C-15	1	U	1	1	49420	3909.955811	
73	232	280-159234-L-1	1	U	1	1	8	-26.149189	LO
74	233	280-159234-L-2	1	U	1	1	31367	2435.551025	
75	234	280-159234-L-3	1	U	1	1	14381	1086.500610	
76	235	280-159234-L-4	1	U	1	1	244	-8.063900	LO
77	236	280-159234-L-5	1	U	1	1	965	47.180569	
78	0	Blank	1	BLNK	1	1	18	-25.313227	LO
B	0	Read Baseline	1	RB	1	1	0	-26.723074	BL
80	105	CCVL 500.0 ppb	1	U	1	1	7314	536.149170	
81	107	CCV 2500.0 ppb	1	U	1	1	34205	2664.618896	
82	111	CCB	1	U	1	1	51	-22.856031	LO
B	0	read baseline	1	RB	1	1	0	-26.723074	BL
84	237	280-159234-l-6	1	U	1	1	29344	2272.929932	
85	238	MS 280-159234-l-6	1	U	1	1	42292	3322.833740	
86	239	MSD 280-159234-l-6	1	U	1	1	42404	3331.985840	
87	240	280-159234-l-8	1	U	1	1	25667	1978.780640	
88	241	280-159234-l-9	1	U	1	1	16	-25.481323	LO
89	242	280-159234-l-10	1	U	1	1	534	14.141357	
90	0	Blank	1	BLNK	1	1	-29	-28.921432	LO
B	0	Read Baseline	1	RB	1	1	0	-26.723074	BL
92	105	CCVL 500.0 ppb	1	U	1	1	7259	531.857178	
93	107	CCV 2500.0 ppb	1	U	1	1	33701	2623.865723	
94	111	CCB	1	U	1	1	94	-19.564497	LO
B	0	read baseline	1	RB	1	1	0	-26.723074	BL

NH3:Calibration 1: Peak 4-95

File name: C:\FLOW_4\031722.RST
Date: 17-Mar-22
Operator: MP

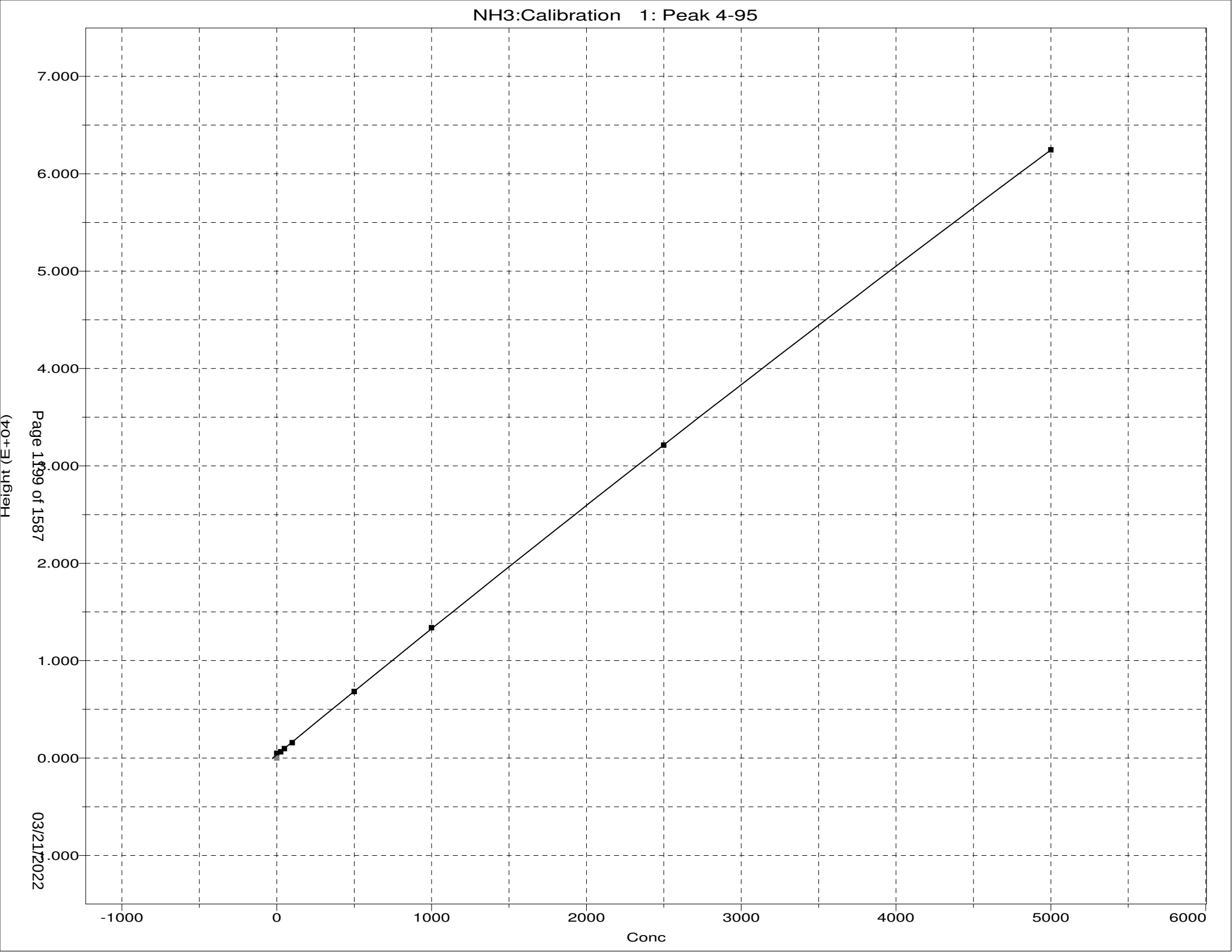
*	Name	Conc	Height
*	Cal 0 ppb	0.000000	485.212250
*	Cal 25 ppb	25.000000	626.823120
*	Cal 50 ppb	50.000000	966.779968
*	Cal 100 ppb	100.000000	1567.139404
*	Cal 500 ppb	500.000000	6823.559570
*	Cal 1000 ppb	1000.000000	13374.101562
*	Cal 2500 ppb	2500.000000	32118.814453
*	Cal 5000 ppb	5000.000000	62458.027344

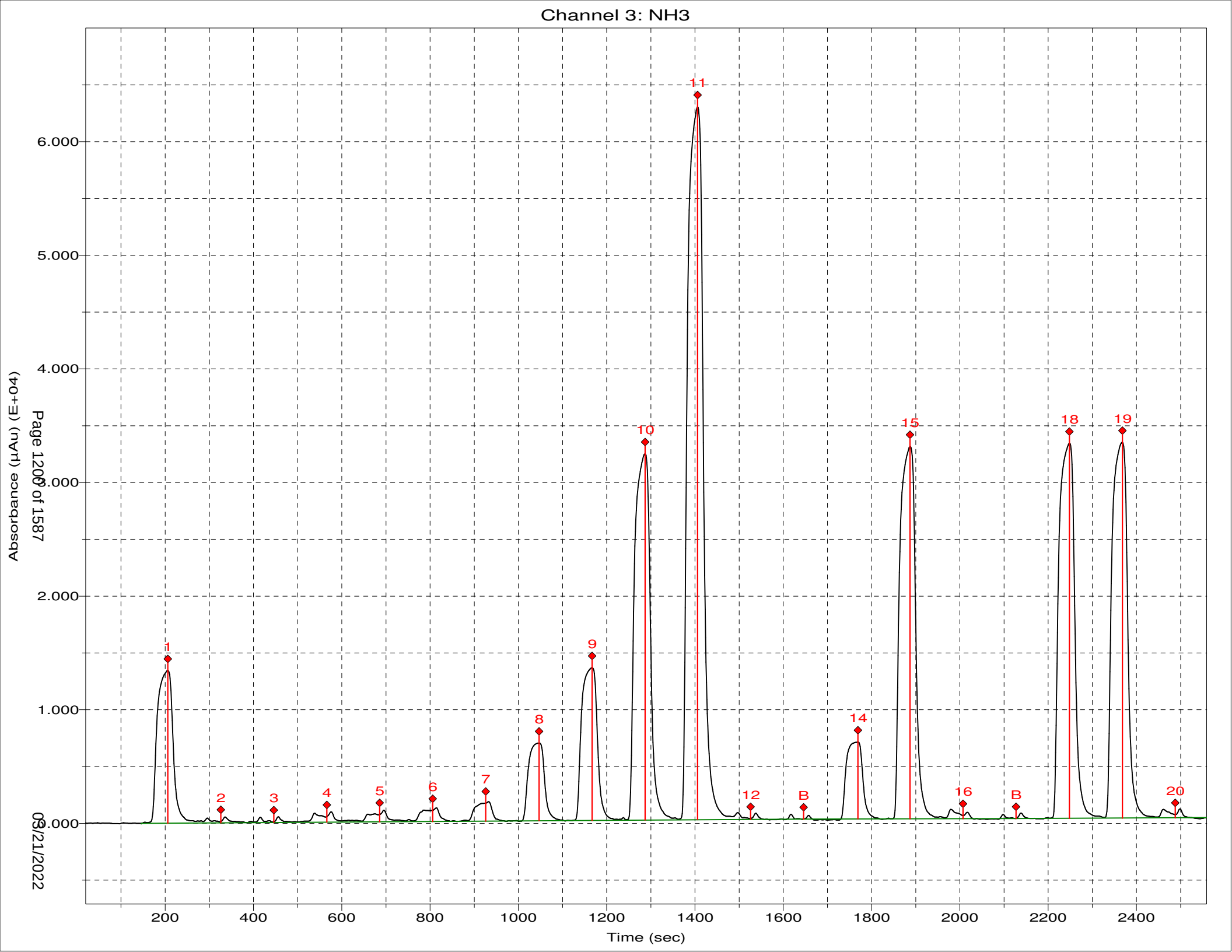
Calib Coef:
x=cyy+by+a
a: (intercept) -2.6723e+01
b: 7.6490e-02
c: 6.4089e-08

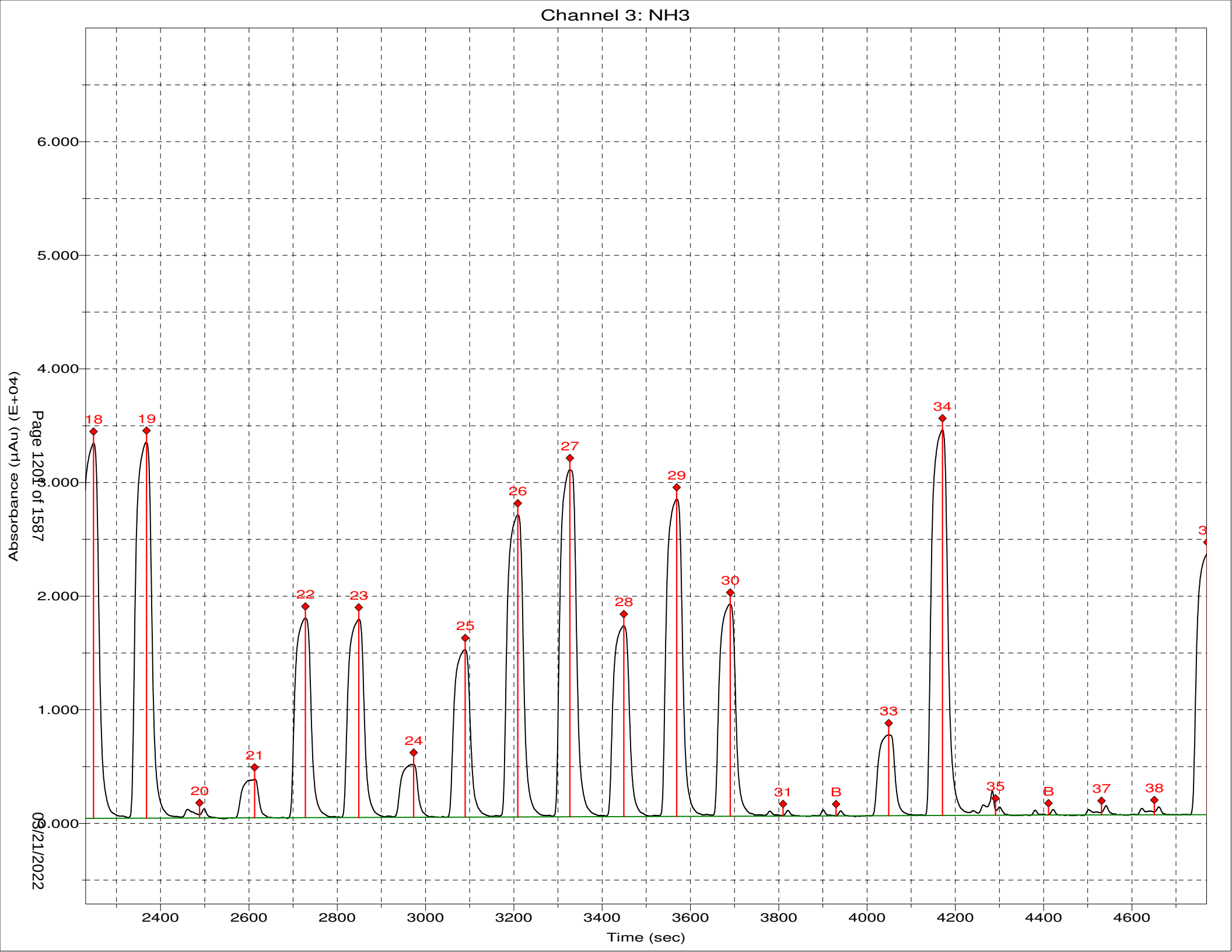
Corr Coef: 0.999994

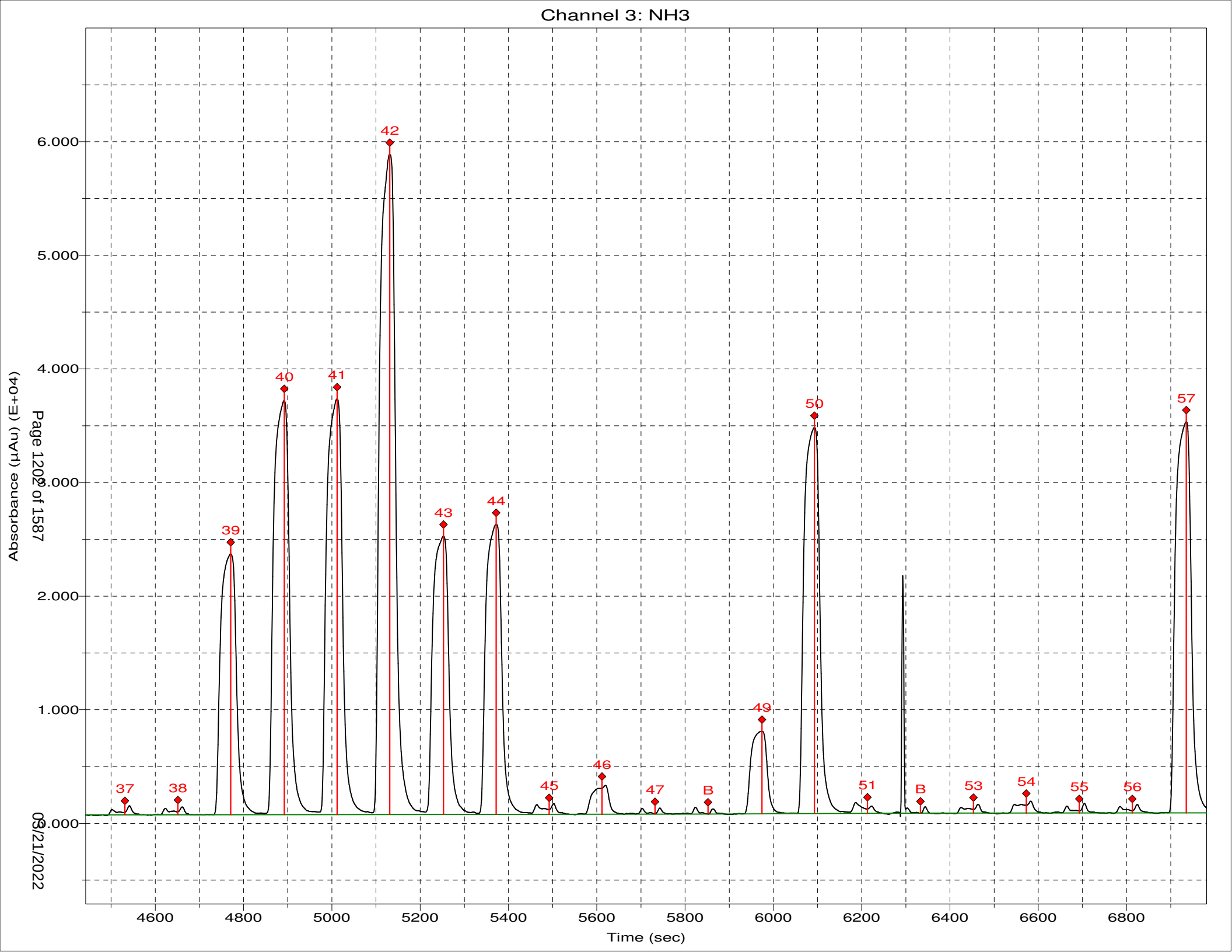
Carryover: 0.924%

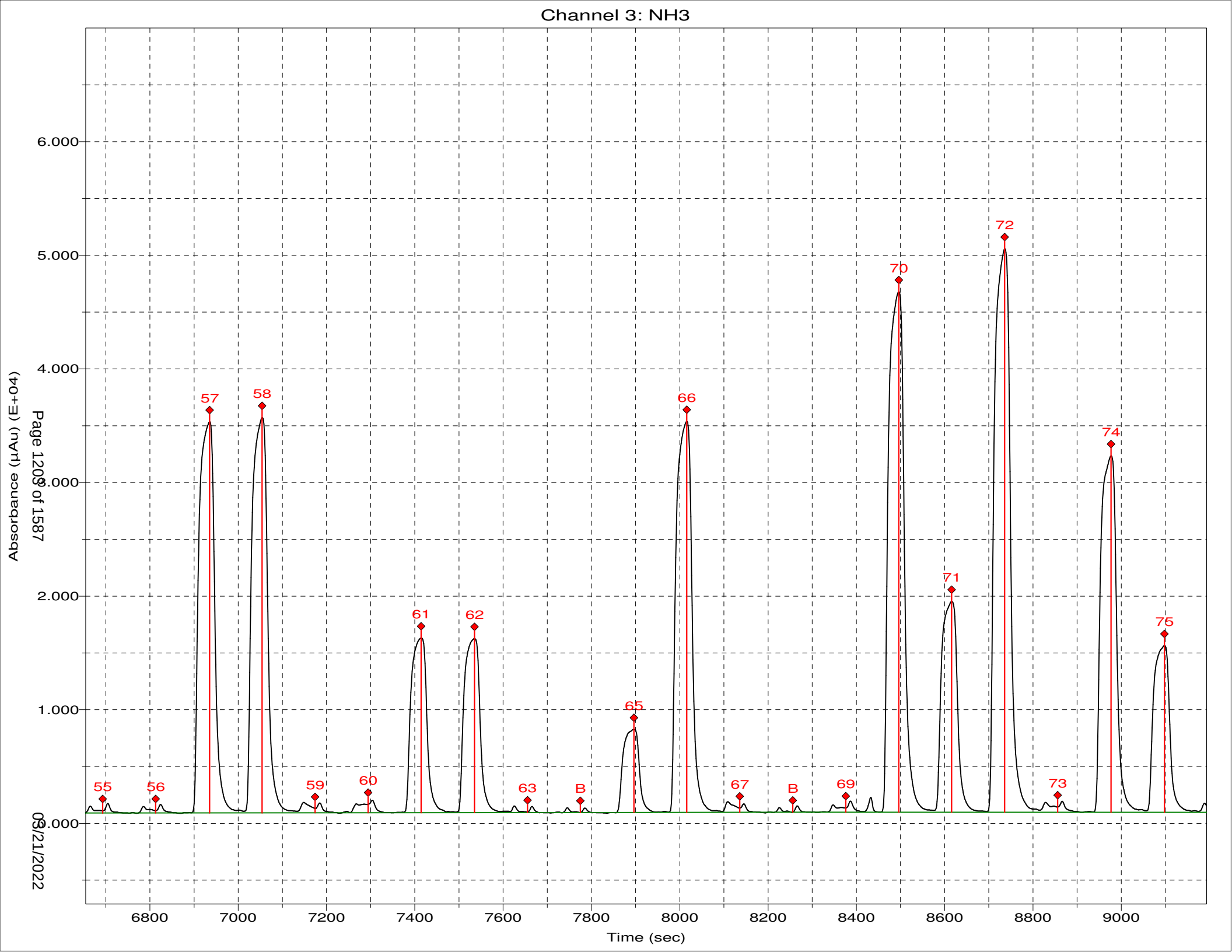
No Drift Peaks

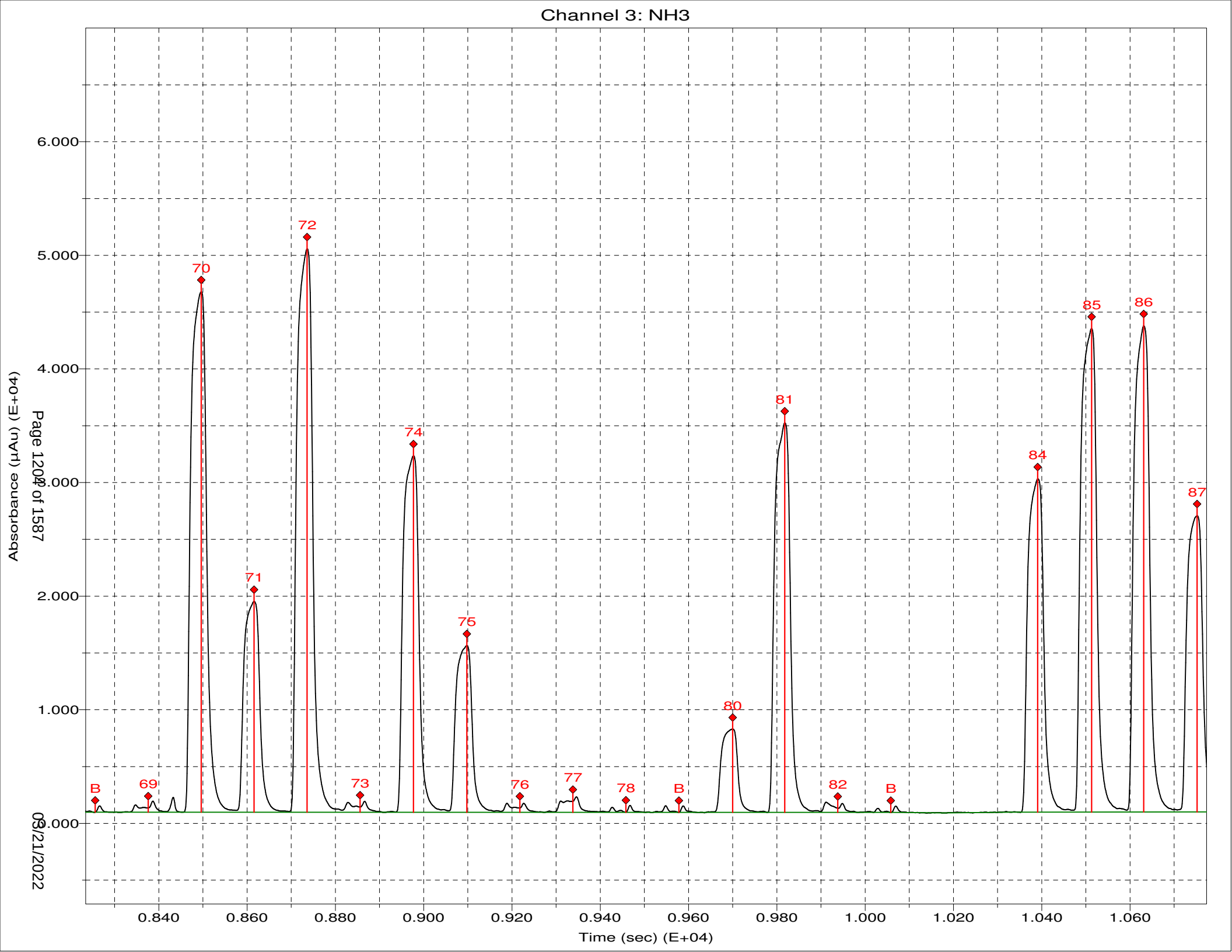

NH3:Calibration 1: Peak 4-95
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
-1.000
Height (E+04)
-1000
0
1000
2000
3000
4000
5000
6000
Conc
Page 1199 of 1587
03/21/2022

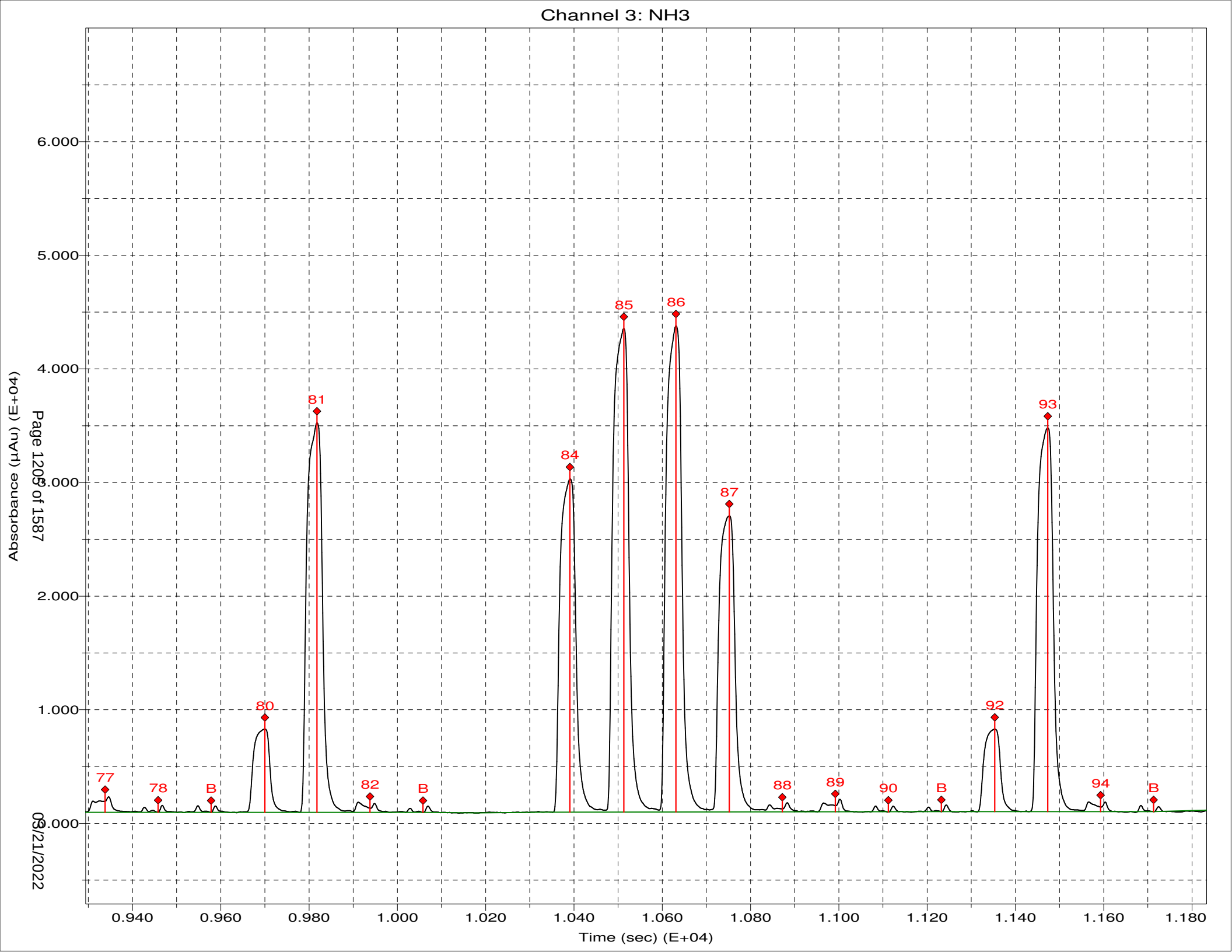

Channel 3: NH3
Absorbance (µAu) (E+04)
6.000
5.000
4.000
3.000
2.000
1.000
0.000
Page 1200 of 1587
03/21/2022
1
2
3
4
5
6
7
8
9
10
11
12
B
14
15
16
B
18
19
20
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
Time (sec)


Channel 3: NH3
Absorbance (µAu) (E+04)
6.000
5.000
4.000
3.000
2.000
1.000
0.000
18
19
20
21
22
23
24
25
26
27
28
29
30
31
B
33
34
35
B
37
38
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
4600
Time (sec)
Page 1201 of 1587
03/21/2022


Channel 3: NH3
Absorbance (µAu) (E+04)
6.000
5.000
4.000
3.000
2.000
1.000
0.000
Time (sec)
4600
4800
5000
5200
5400
5600
5800
6000
6200
6400
6600
6800
37
38
39
40
41
42
43
44
45
46
47
B
49
50
51
B
53
54
55
56
57


Channel 3: NH3
Absorbance (µAu) (E+04)
6.000
5.000
4.000
3.000
2.000
1.000
0.000
55
56
57
58
59
60
61
62
63
B
65
66
67
B
69
70
71
72
73
74
75
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
Time (sec)
Page 1209 of 1587
03/21/2022


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec) (E+04)
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
B
69
70
71
72
73
74
75
76
77
78
B
80
81
82
B
84
85
86
87


Channel 3: NH3
Absorbance (µAu) (E+04)
6.000
5.000
4.000
3.000
2.000
1.000
0.000
Page 1205 of 1587
03/21/2022
77
78
B
80
81
82
B
84
85
86
87
88
89
90
B
92
93
94
B
0.940
0.960
0.980
1.000
1.020
1.040
1.060
1.080
1.100
1.120
1.140
1.160
1.180
Time (sec) (E+04)

TestAmerica Calibration Spreadsheet, Work Instruction No. CA-Q-WI-13; dated 8/10/2011

Method		350.1
Analyte/Da	NH3	3/17/2022

Input Calibration Data

Amount	Response	ISTD Amt	ISTD Resp	Response
0.000	485.212			485.21200
25.000	626.823			626.82300
50.000	966.780			966.77997
100.000	1567.139			1567.13900
500.000	6823.560			6823.55950
1000.000	13374.102			13374.10150
2500.000	32118.814			32118.81445
5000.000	62458.027			62458.02730
				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!	93.60%	-30.01%	-11.15%
	#DIV/0!	#DIV/0!	#DIV/0!	49.30%	-11.58%	-3.90%
	#DIV/0!	#DIV/0!	#DIV/0!	21.00%	-8.62%	-6.28%
	#DIV/0!	#DIV/0!	#DIV/0!	5.37%	0.88%	-0.78%
	#DIV/0!	#DIV/0!	#DIV/0!	3.27%	1.91%	0.40%
	#DIV/0!	#DIV/0!	#DIV/0!	-0.80%	-0.32%	-0.02%
	#DIV/0!	#DIV/0!	#DIV/0!	-3.55%	-2.48%	1.44%
RSE in X:	#DIV/0!	#DIV/0!	#DIV/0!	44.1%	15.0%	6.7%

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		1.2951E+01		0	0.99881	0.99940
Linear	4.0414E+02	1.2727E+01		-31.76	0.99924	0.99962
Quadratic	3.3434E+02	1.3171E+01	-1.8195E-04	-25.38	0.99979	0.99990
	c	b	a			

Sample Results

	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Instrum.Responses:	626.823	6,823.560			
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:	48.399	526.869	0.000	0.000	0.000
Linear Result:	17.498	504.411	-31.756	-31.756	-31.756
Quad Result (no IS):	22.214	496.089	-25.375	-25.375	-25.375
Quad Result (with IS):					

*** Sample Table from Analysis ***

568955

File name: *** Sample Table from Analysis ***
Date: 17-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	280-159466-H-1	U	1	1	1		pH<2, Cl- non-detect
202	ms 280-159466-H-1	U	1	1	1		pH<2, Cl- non-detect
203	msd 280-159466-H-1	U	1	1	1		pH<2, Cl- non-detect
204	280-159466-H-2	U	1	1	1		pH<2, Cl- non-detect
205	280-159466-G-3	U	1	1	1		pH<2, Cl- non-detect
206	590-17032-D-1	U	1	10	1		pH<2, Cl- non-detect
207	280-159223-G-1	U	1	20	1		pH<2, Cl- non-detect
208	280-159223-I-2	U	1	200	1		pH<2, Cl- non-detect
209	280-159223-J-3	U	1	100	1		pH<2, Cl- non-detect
210	280-159470-G-1	U	1	200	1		pH<2, Cl- non-detect
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	CCVL 500.0 ppb	U	1	1	1		
107	CCV 2500.0 ppb	U	1	1	1		
111	CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
211	280-159190-C-1	U	1	1	1		pH<2, Cl- non-detect
212	280-159190-C-2	U	1	1	1		pH<2, Cl- non-detect
213	280-159190-C-16	U	1	1	1		pH<2, Cl- non-detect
214	ms 280-159190-C-16	U	1	1	1		pH<2, Cl- non-detect
215	msd 280-159190-C-16	U	1	1	1		pH<2, Cl- non-detect
216	280-159190-C-3	U	1	1	1		pH<2, Cl- non-detect
217	280-159190-C-4	U	1	1	1		pH<2, Cl- non-detect
218	280-159190-C-5	U	1	1	1		pH<2, Cl- non-detect
219	280-159190-C-6	U	1	1	1		pH<2, Cl- non-detect
220	280-159190-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		
221	280-159190-C-8	U	1	1	1		pH<2, Cl- non-detect
222	280-159190-C-9	U	1	1	1		pH<2, Cl- non-detect
223	280-159190-C-10	U	1	1	1		pH<2, Cl- non-detect
224	280-159190-C-11	U	1	1	1		pH<2, Cl- non-detect

350.1 color_00277
350.1 complex_00603
350.1 bleach_01586

SAHS000
1000 INTERCESSOR
BWH 200

MP 3-17-22

Cup	Name	Type	R	Dil	Wt	Vial	Comment
107	LCS	U	1	1	1		
107	LCSD	U	1	1	1		
111	MB	U	1	1	1		
225	280-159234-L-7	U	1	1	1		pH<2, Cl- non-detect
226	ms 280-159234-L-7	U	1	1	1		pH<2, Cl- non-detect
227	msd 280-159234-L-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	280-159190-C-12	U	1	1	1		pH<2, Cl- non-detect
229	280-159190-C-13	U	1	1	1		pH<2, Cl- non-detect
230	280-159190-C-14	U	1	1	1		pH<2, Cl- non-detect
231	280-159190-C-15	U	1	1	1		pH<2, Cl- non-detect
232	280-159234-L-1	U	1	1	1		pH<2, Cl- non-detect
233	280-159234-L-2	U	1	1	1		pH<2, Cl- non-detect
234	280-159234-L-3	U	1	1	1		pH<2, Cl- non-detect
235	280-159234-L-4	U	1	1	1		pH<2, Cl- non-detect
236	280-159234-L-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		
237	280-159234-l-6	U	1	1	1		pH<2, Cl- non-detect
238	MS 280-159234-l-6	U	1	1	1		pH<2, Cl- non-detect
239	MSD 280-159234-l-6	U	1	1	1		pH<2, Cl- non-detect
240	280-159234-l-8	U	1	1	1		pH<2, Cl- non-detect
241	280-159234-l-9	U	1	1	1		pH<2, Cl- non-detect
242	280-159234-l-10	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		

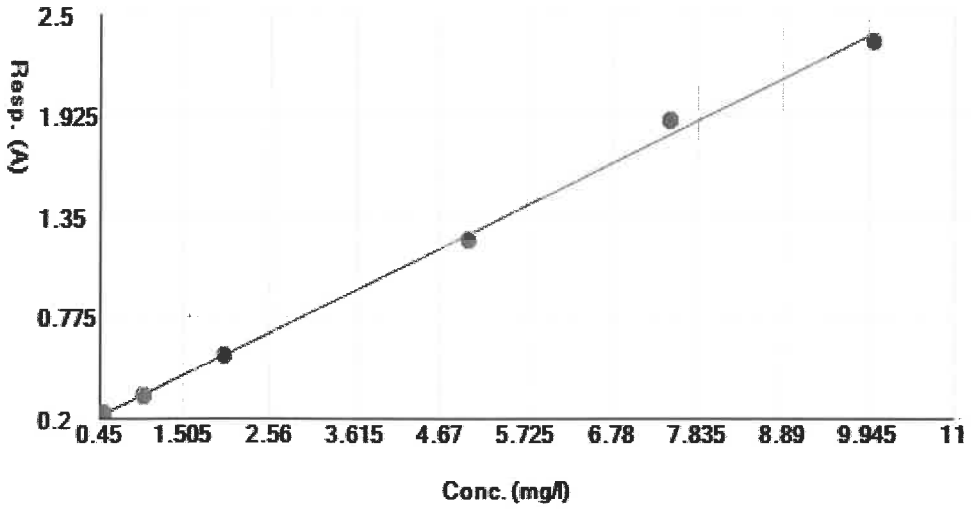
Calibration results

TKN Version number 1.5 WC_GAL1

Date	3/3/2022	**User**	Dealer
Time	5:45:50PM	**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 3/3/2022 **User** Dealer

Time 7:08:56PM **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	5.2663320	mg/l		0.0	calc	
TKN	icb	1.5	-0.0530163	mg/l		0.0	calc	
TKN	LCS 280-567536/1-A	1.5	5.8401290	mg/l		0.0	calc	
TKN	MB 280-567536/2-A	1.5	-0.0562004	mg/l		0.0	calc	
TKN	280-159190-C-1-A	1.5	-0.1792141	mg/l		0.0	calc	
TKN	280-159190-C-1-B MS	1.5	-0.1664547	mg/l		0.0	calc	
TKN	280-159190-C-1-C MSD	1.5	-0.1698247	mg/l		0.0	calc	
TKN	280-159190-C-2-A	1.5	-0.0985817	mg/l		0.0	calc	
TKN	280-159190-C-3-A	1.5	4.7903890	mg/l		0.0	calc	
TKN	280-159190-C-4-A	1.5	4.2360550	mg/l		0.0	calc	
TKN	280-159190-C-5-A	1.5	0.7963846	mg/l		0.0	calc	
TKN	280-159190-C-6-A	1.5	0.2926321	mg/l		0.0	calc	
TKN	280-159190-C-7-A	1.5	-0.1185824	mg/l		0.0	calc	
TKN	280-159190-C-8-A	1.5	-0.1641928	mg/l		0.0	calc	
TKN	ccv1	1.5	5.3090520	mg/l		0.0	calc	
TKN	ccb1	1.5	0.0207452	mg/l		0.0	calc	
TKN	280-159190-C-9-A	1.5	-0.0782188	mg/l		0.0	calc	
TKN	280-159190-C-10-A	1.5	0.2232486	mg/l		0.0	calc	
TKN	280-159190-C-16-A	1.5	1.9972970	mg/l		0.0	calc	
TKN	280-159190-C-16-B MS	1.5	4.9923440	mg/l		0.0	calc	
TKN	280-159190-C-16-C MS	1.5	5.0060950	mg/l		0.0	calc	

Test	Sample/ctrl ID	Test version	Result	Unit	Note	Dil. 1 +	Status	Errors
TKN	280-159190-C-11-A	1.5	-0.1880408	mg/l		0.0	calc	
TKN	280-159190-C-12-A	1.5	-0.1594167	mg/l		0.0	calc	
TKN	280-159190-C-13-A	1.5	1.5177360	mg/l		0.0	calc	
TKN	280-159190-C-14-A	1.5	2.8244540	mg/l		0.0	calc	
TKN	280-159190-C-15-A	1.5	5.6377600	mg/l		0.0	calc	
TKN	ccv2	1.5	5.3577110	mg/l		0.0	calc	
TKN	ccb2	1.5	-0.0316799	mg/l		0.0	calc	
TKN	280-159223-G-1-A	1.5	5.8186550	mg/l		0.0	calc	
TKN	280-159223-I-3-A	1.5	9.6700300	mg/l		0.0	calc	
TKN	ccv3	1.5	5.3408970	mg/l		0.0	calc	
TKN	ccb3	1.5	-0.0363946	mg/l		0.0	calc	
TKN	280-159002-D-1-A	1.5	18.8586500	mg/l		4.0	calc	
TKN	280-159223-I-2-A	1.5	11.8028300	mg/l		4.0	calc	
TKN	ccv4	1.5	5.3259850	mg/l		0.0	calc	
TKN	ccb4	1.5	-0.0493933	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\031322.RST
Sample table path	C:\FLOW_4\031322.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	13-Mar-22
Time acquired	20:04

Date	Time	Cup	Name
13-Mar-22	16:35	109	SYNC
13-Mar-22	16:37	0	Carryover
13-Mar-22	16:39	0	Carryover (Statistics)
13-Mar-22	16:41	0	read baseline
13-Mar-22	16:43	101	Cal 0.00 ppb
13-Mar-22	16:45	102	Cal 50.0 ppb
13-Mar-22	16:47	103	Cal 100 ppb
13-Mar-22	16:49	104	Cal 500 ppb
13-Mar-22	16:51	105	Cal 1000 ppb
13-Mar-22	16:53	106	Cal 2500 ppb
13-Mar-22	16:55	107	Cal 5000 ppb
13-Mar-22	16:57	108	Cal 7500 ppb
13-Mar-22	16:59	109	Cal 10000 ppb
13-Mar-22	17:01	0	Blank
13-Mar-22	17:03	0	Read Baseline
13-Mar-22	17:05	110	5000 PPB NO2
13-Mar-22	17:07	111	ICV 5000 PPB
13-Mar-22	17:09	112	ICV 2000 PPB
13-Mar-22	17:11	0	ICB
13-Mar-22	17:13	0	Read Baseline
13-Mar-22	17:15	107	LCS
13-Mar-22	17:17	0	MB
13-Mar-22	17:19	113	280-159180-A-4
13-Mar-22	17:21	114	ms 280-159180-A-4
13-Mar-22	17:23	115	msd 280-159180-A-4
13-Mar-22	17:25	116	280-159180-A-11
13-Mar-22	17:27	117	580-111014-A-3
13-Mar-22	17:29	118	550-180483-B-1
13-Mar-22	17:31	119	550-180483-B-3
13-Mar-22	17:33	120	280-159190-C-1
13-Mar-22	17:35	121	280-159190-C-2
13-Mar-22	17:37	122	280-159190-C-3
13-Mar-22	17:39	0	Rinse
13-Mar-22	17:41	0	Read Baseline
13-Mar-22	17:43	107	CCV 5000 ppb
13-Mar-22	17:45	105	CCVL 1000 ppb
13-Mar-22	17:47	0	CCB
13-Mar-22	17:49	0	Read Baseline
13-Mar-22	17:51	123	280-159190-C-4
13-Mar-22	17:53	124	280-159190-C-5
13-Mar-22	17:55	125	280-159382-A-4
13-Mar-22	17:57	126	ms 280-159382-A-4
13-Mar-22	17:59	127	msd 280-159382-A-4
13-Mar-22	18:01	128	280-159190-C-6

Result path C:\FLOW_4\031322.RST
Sample table path C:\FLOW_4\031322.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 13-Mar-22
Time acquired 20:04

Date	Time	Cup	Name
13-Mar-22	18:03	129	280-159190-C-7
13-Mar-22	18:05	130	280-159190-C-8
13-Mar-22	18:07	131	280-159190-C-9
13-Mar-22	18:09	132	280-159190-C-10
13-Mar-22	18:11	0	Rinse
13-Mar-22	18:13	0	Read Baseline
13-Mar-22	18:15	107	CCV 5000 ppb
13-Mar-22	18:17	105	CCVL 1000 ppb
13-Mar-22	18:19	0	CCB
13-Mar-22	18:21	0	Read Baseline
13-Mar-22	18:23	133	280-159190-C-11
13-Mar-22	18:25	134	280-159190-C-12
13-Mar-22	18:27	135	280-159190-C-13
13-Mar-22	18:29	136	280-159190-C-14
13-Mar-22	18:31	107	LCS
13-Mar-22	18:33	0	MB
13-Mar-22	18:35	137	280-159190-C-16
13-Mar-22	18:37	138	ms 280-159190-C-16
13-Mar-22	18:39	139	msd 280-159190-C-16
13-Mar-22	18:41	140	280-159190-C-15
13-Mar-22	18:43	0	Rinse
13-Mar-22	18:45	0	Read Baseline
13-Mar-22	18:47	107	CCV 5000 ppb
13-Mar-22	18:49	105	CCVL 1000 ppb
13-Mar-22	18:51	0	CCB
13-Mar-22	18:53	0	Read Baseline
13-Mar-22	18:55	141	280-159234-L-1
13-Mar-22	18:57	142	280-159234-L-2
13-Mar-22	18:59	143	280-159234-L-3
13-Mar-22	19:01	144	280-159234-L-4
13-Mar-22	19:03	145	280-159234-L-5
13-Mar-22	19:05	146	280-159234-L-6
13-Mar-22	19:07	147	280-159234-L-8
13-Mar-22	19:09	148	280-159234-L-9
13-Mar-22	19:11	149	280-159234-L-7
13-Mar-22	19:13	150	ms 280-159234-L-7
13-Mar-22	19:15	0	Rinse
13-Mar-22	19:17	0	Read Baseline
13-Mar-22	19:19	107	CCV 5000 ppb
13-Mar-22	19:21	105	CCVL 1000 ppb
13-Mar-22	19:23	0	CCB
13-Mar-22	19:25	0	Read Baseline
13-Mar-22	19:27	151	msd 280-159234-L-7
13-Mar-22	19:29	152	280-159234-L-10
13-Mar-22	19:31	153	280-159452-C-1
13-Mar-22	19:33	154	280-159452-C-2
13-Mar-22	19:35	155	280-159452-C-3
13-Mar-22	19:37	156	280-159452-C-4
13-Mar-22	19:39	157	280-159452-C-5
13-Mar-22	19:41	158	d
13-Mar-22	19:43	159	d
13-Mar-22	19:45	160	d
13-Mar-22	19:47	0	Rinse
13-Mar-22	19:49	0	Read Baseline
13-Mar-22	19:51	107	CCV 5000 ppb
13-Mar-22	19:53	105	CCVL 1000 ppb
13-Mar-22	19:55	0	CCB

Result path	C:\FLOW_4\031322.RST
Sample table path	C:\FLOW_4\031322.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	13-Mar-22
Time acquired	20:04

Date	Time	Cup	Name
13-Mar-22	19:57	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\031322.RST
Sample table path C:\FLOW_4\031322.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 13-Mar-22
Time acquired 20:04

	Nitrate as N					
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	
SYNC	2549081	9960.570				
Carryover	2845	-16.232	LO			
Carryover	186	-26.649	LO			
(Statistics)				1516	-21.440	N
read baseline	0	-27.380	BL			
Cal 0.00 ppb	1550	-21.305	LO			
Cal 50.0 ppb	14839	30.763				
Cal 100 ppb	28073	82.618				
Cal 500 ppb	133670	496.373				
Cal 1000 ppb	274719	1049.041				
Cal 2500 ppb	658703	2553.584				
Cal 5000 ppb	1275626	4970.849				
Cal 7500 ppb	1912277	7465.410				
Cal 10000 ppb	2564930	10022.668	HI			
Blank	-365	-28.812	LO			
Read Baseline	0	-27.380	BL			
5000 PPB NO2	1267800	4940.182				
ICV 5000 PPB	1327235	5173.065				
ICV 2000 PPB	549802	2126.885				
ICB	454	-25.600	LO			
Read Baseline	0	-27.380	BL			
LCS	1347786	5253.587				
MB	-6	-27.404	LO			
280-159180-A-4	121221	447.593				
ms 280-159180-A-4	1157592	4508.361				
msd 280-159180-A-4	1153544	4492.499				
280-159180-A-11	179783	677.056				
580-111014-A-3	166545	625.186				
550-180483-B-1	6896	-0.361	LO			
550-180483-B-3	18319	44.398				
280-159190-C-1	1799643	35120.395				
280-159190-C-2	1077185	4193.306				
280-159190-C-3	1384624	5397.929				
Rinse	-198	-28.155	LO			
Read Baseline	0	-27.380	BL			
CCV 5000 ppb	1295706	5049.527				
CCVL 1000 ppb	274284	1047.334				
CCB	537	-25.275	LO			
Read Baseline	0	-27.380	BL			
280-159190-C-4	533515	2063.067				
280-159190-C-5	3417973	13365.109	HI			
280-159382-A-4	38728	124.368	FL			
ms 280-159382-A-4	1106741	4309.115				
msd 280-159382-A-4	1070745	4168.071				
280-159190-C-6	1392111	10854.333				

Result path	C:\FLOW_4\031322.RST
Sample table path	C:\FLOW_4\031322.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	13-Mar-22
Time acquired	20:04

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
280-159190-C-7	1599622	31201.740			
280-159190-C-8	1888047	14740.938			
280-159190-C-9	920360	3578.824			
280-159190-C-10	-198	-28.156	LO		
Rinse	391	-25.849	LO		
Read Baseline	0	-27.380	BL		
CCV 5000 ppb	1284171	5004.330			
CCVL 1000 ppb	276220	1054.922			
CCB	-63	-27.626	LO		
Read Baseline	0	-27.380	BL		
280-159190-C-11	969518	37714.406			
280-159190-C-12	784394	30460.752			
280-159190-C-13	4061	-11.466	LO		
280-159190-C-14	3682	-12.953	LO		
LCS	1273147	4961.134			
MB	-1311	-32.516	LO		
280-159190-C-16	1802	-20.321	LO		
ms 280-159190-C-16	1021916	3976.748			
msd 280-159190-C-16	1022490	3978.997			
280-159190-C-15	1670	-20.838	LO		
Rinse	90	-27.026	LO		
Read Baseline	0	-27.380	BL		
CCV 5000 ppb	1271212	4953.552			
CCVL 1000 ppb	275526	1052.200			
CCB	-715	-30.182	LO		
Read Baseline	0	-27.380	BL		
280-159234-L-1	573463	55489.863			
280-159234-L-2	165834	622.399			
280-159234-L-3	93492	338.947			
280-159234-L-4	748759	2906.450			
280-159234-L-5	1676700	6542.356			
280-159234-L-6	-957	-31.128	LO		
280-159234-L-8	1247986	4862.549			
280-159234-L-9	1730937	6754.873			
280-159234-L-7	1711	-20.676	LO		
ms 280-159234-L-7	1059724	4124.890			
Rinse	200	-26.597	LO		
Read Baseline	0	-27.380	BL		
CCV 5000 ppb	1266296	4934.292			
CCVL 1000 ppb	272214	1039.225			
CCB	145	-26.810	LO		
Read Baseline	0	-27.380	BL		
msd 280-159234-L-7	1050811	4089.965			
280-159234-L-10	1311547	5111.595			
280-159452-C-1	3469	-13.787	LO		
280-159452-C-2	17053	39.439			
280-159452-C-3	3394	-14.081	LO		
280-159452-C-4	487260	1881.828			
280-159452-C-5	4085	-11.375	LO		
d	647	-24.843	LO		
d	537	-25.275	LO		
d	447	-25.630	LO		
Rinse	-407	-28.973	LO		
Read Baseline	0	-27.380	BL		
CCV 5000 ppb	1262630	4919.928			
CCVL 1000 ppb	272028	1038.497			
CCB	4	-27.365	LO		

Result path C:\FLOW_4\031322.RST
Sample table path C:\FLOW_4\031322.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 13-Mar-22
Time acquired 20:04

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
Read Baseline	0	-27.380	BL		

Peak Table:Nitrate as N

File name: C:\FLOW_4\031322.RST
Date: 13-Mar-22
Operator: svc

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	109	SYNC	1	SYNC	1	1	2549081	9960.570312	
2	0	Carryover	1	CO	1	1	2845	-16.231773	LO
3	0	Carryover	2	CO	1	1	186	-26.649183	LO
B	0	read baseline	1	RB	1	1	0	-27.379919	BL
5	101	Cal 0.00 ppb	1	C	1	1	1550	-21.305428	LO
6	102	Cal 50.0 ppb	1	C	1	1	14839	30.763014	
7	103	Cal 100 ppb	1	C	1	1	28073	82.617867	
8	104	Cal 500 ppb	1	C	1	1	133670	496.372528	
9	105	Cal 1000 ppb	1	C	1	1	274719	1049.040771	
10	106	Cal 2500 ppb	1	C	1	1	658703	2553.584473	
11	107	Cal 5000 ppb	1	C	1	1	1275626	4970.849121	
12	108	Cal 7500 ppb	1	C	1	1	1912277	7465.409668	
13	109	Cal 10000 ppb	1	C	1	1	2564930	10022.667969	HI
14	0	Blank	1	BLNK	1	1	-365	-28.811863	LO
B	0	Read Baseline	1	RB	1	1	0	-27.379919	BL
16	110	5000 PPB NO2	1	U	1	1	1267800	4940.181641	
17	111	ICV 5000 PPB	1	CCV	1	1	1327235	5173.065430	
18	112	ICV 2000 PPB	1	CCV	1	1	549802	2126.885010	
19	0	ICB	1	U	1	1	454	-25.599943	LO
B	0	Read Baseline	1	RB	1	1	0	-27.379919	BL
21	107	LCS	1	U	1	1	1347786	5253.586914	
22	0	MB	1	U	1	1	-6	-27.404320	LO
23	113	280-159180-A-4	1	U	1	1	121221	447.593201	
24	114	ms 280-159180-A-4	1	U	1	1	1157592	4508.360840	
25	115	msd 280-159180-A-4	1	U	1	1	1153544	4492.498535	
26	116	280-159180-A-11	1	U	1	1	179783	677.055908	
27	117	580-111014-A-3	1	U	1	1	166545	625.186279	
28	118	550-180483-B-1	1	U	1	1	6896	-0.360916	LO
29	119	550-180483-B-3	1	U	1	1	18319	44.398064	
30	120	280-159190-C-1	1	U	5	1	1799643	35120.394531	
31	121	280-159190-C-2	1	U	1	1	1077185	4193.305664	
32	122	280-159190-C-3	1	U	1	1	1384624	5397.929199	
33	0	Rinse	1	U	1	1	-198	-28.154881	LO
B	0	Read Baseline	1	RB	1	1	0	-27.379919	BL
35	107	CCV 5000 ppb	1	CCV	1	1	1295706	5049.527344	
36	105	CCVL 1000 ppb	1	CCV	1	1	274284	1047.334106	
37	0	CCB	1	U	1	1	537	-25.275076	LO
B	0	Read Baseline	1	RB	1	1	0	-27.379919	BL
39	123	280-159190-C-4	1	U	1	1	533515	2063.067139	
40	124	280-159190-C-5	1	U	1	1	3417973	13365.109375	HI
41	125	280-159382-A-4	1	U	1	1	38728	124.368088	FL
42	126	ms 280-159382-A-4	1	U	1	1	1106741	4309.114746	
43	127	msd 280-159382-A-4	1	U	1	1	1070745	4168.071289	
44	128	280-159190-C-6	1	U	2	1	1392111	10854.533203	
45	129	280-159190-C-7	1	U	5	1	1599622	31201.740234	
46	130	280-159190-C-8	1	U	2	1	1888047	14740.937500	
47	131	280-159190-C-9	1	U	1	1	920360	3578.824219	
48	132	280-159190-C-10	1	U	1	1	-198	-28.156311	LO
49	0	Rinse	1	U	1	1	391	-25.849487	LO
B	0	Read Baseline	1	RB	1	1	0	-27.379919	BL
51	107	CCV 5000 ppb	1	CCV	1	1	1284171	5004.329590	
52	105	CCVL 1000 ppb	1	CCV	1	1	276220	1054.922363	
53	0	CCB	1	U	1	1	-63	-27.626354	LO
B	0	Read Baseline	1	RB	1	1	0	-27.379919	BL
55	133	280-159190-C-11	1	U	10	1	969518	37714.406250	
56	134	280-159190-C-12	1	U	10	1	784394	30460.751953	
57	135	280-159190-C-13	1	U	1	1	4061	-11.466082	LO
58	136	280-159190-C-14	1	U	1	1	3682	-12.952952	LO
59	107	LCS	1	U	1	1	1273147	4961.134277	
60	0	MB	1	U	1	1	-1311	-32.516438	LO
61	137	280-159190-C-16	1	U	1	1	1802	-20.320805	LO
62	138	ms 280-159190-C-16	1	U	1	1	1021916	3976.747559	
63	139	msd 280-159190-C-16	1	U	1	1	1022490	3978.997070	
64	140	280-159190-C-15	1	U	1	1	1670	-20.838308	LO
65	0	Rinse	1	U	1	1	90	-27.025791	LO
B	0	Read Baseline	1	RB	1	1	0	-27.379919	BL
67	107	CCV 5000 ppb	1	CCV	1	1	1271212	4953.551758	
68	105	CCVL 1000 ppb	1	CCV	1	1	275526	1052.199951	
69	0	CCB	1	U	1	1	-715	-30.182215	LO
B	0	Read Baseline	1	RB	1	1	0	-27.379919	BL

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	141	280-159234-L-1	1	U	25	1	573463	55489.863281	
72	142	280-159234-L-2	1	U	1	1	165834	622.399292	
73	143	280-159234-L-3	1	U	1	1	93492	338.947205	
74	144	280-159234-L-4	1	U	1	1	748759	2906.450195	
75	145	280-159234-L-5	1	U	1	1	1676700	6542.355957	
76	146	280-159234-L-6	1	U	1	1	-957	-31.127937	LO
77	147	280-159234-L-8	1	U	1	1	1247986	4862.549316	
78	148	280-159234-L-9	1	U	1	1	1730937	6754.873047	
79	149	280-159234-L-7	1	U	1	1	1711	-20.675531	LO
80	150	ms 280-159234-L-7	1	U	1	1	1059724	4124.890137	
81	0	Rinse	1	U	1	1	200	-26.596869	LO
B	0	Read Baseline	1	RB	1	1	0	-27.379919	BL
83	107	CCV 5000 ppb	1	CCV	1	1	1266296	4934.291504	
84	105	CCVL 1000 ppb	1	CCV	1	1	272214	1039.224731	
85	0	CCB	1	U	1	1	145	-26.810165	LO
B	0	Read Baseline	1	RB	1	1	0	-27.379919	BL
87	151	msd 280-159234-L-7	1	U	1	1	1050811	4089.965088	
88	152	280-159234-L-10	1	U	1	1	1311547	5111.595215	
89	153	280-159452-C-1	1	U	1	1	3469	-13.787220	LO
90	154	280-159452-C-2	1	U	1	1	17053	39.438602	
91	155	280-159452-C-3	1	U	1	1	3394	-14.081184	LO
92	156	280-159452-C-4	1	U	1	1	487260	1881.828369	
93	157	280-159452-C-5	1	U	1	1	4085	-11.374798	LO
94	158	d	1	U	1	1	647	-24.843283	LO
95	159	d	1	U	1	1	537	-25.274542	LO
96	160	d	1	U	1	1	447	-25.629896	LO
97	0	Rinse	1	U	1	1	-407	-28.972750	LO
B	0	Read Baseline	1	RB	1	1	0	-27.379919	BL
99	107	CCV 5000 ppb	1	CCV	1	1	1262630	4919.927734	
100	105	CCVL 1000 ppb	1	CCV	1	1	272028	1038.496704	
101	0	CCB	1	U	1	1	4	-27.364576	LO
B	0	Read Baseline	1	RB	1	1	0	-27.379919	BL

Nitrate as N:Calibration 1: Peak 5-102

File name: C:\FLOW_4\031322.RST
Date: 13-Mar-22
Operator: svc

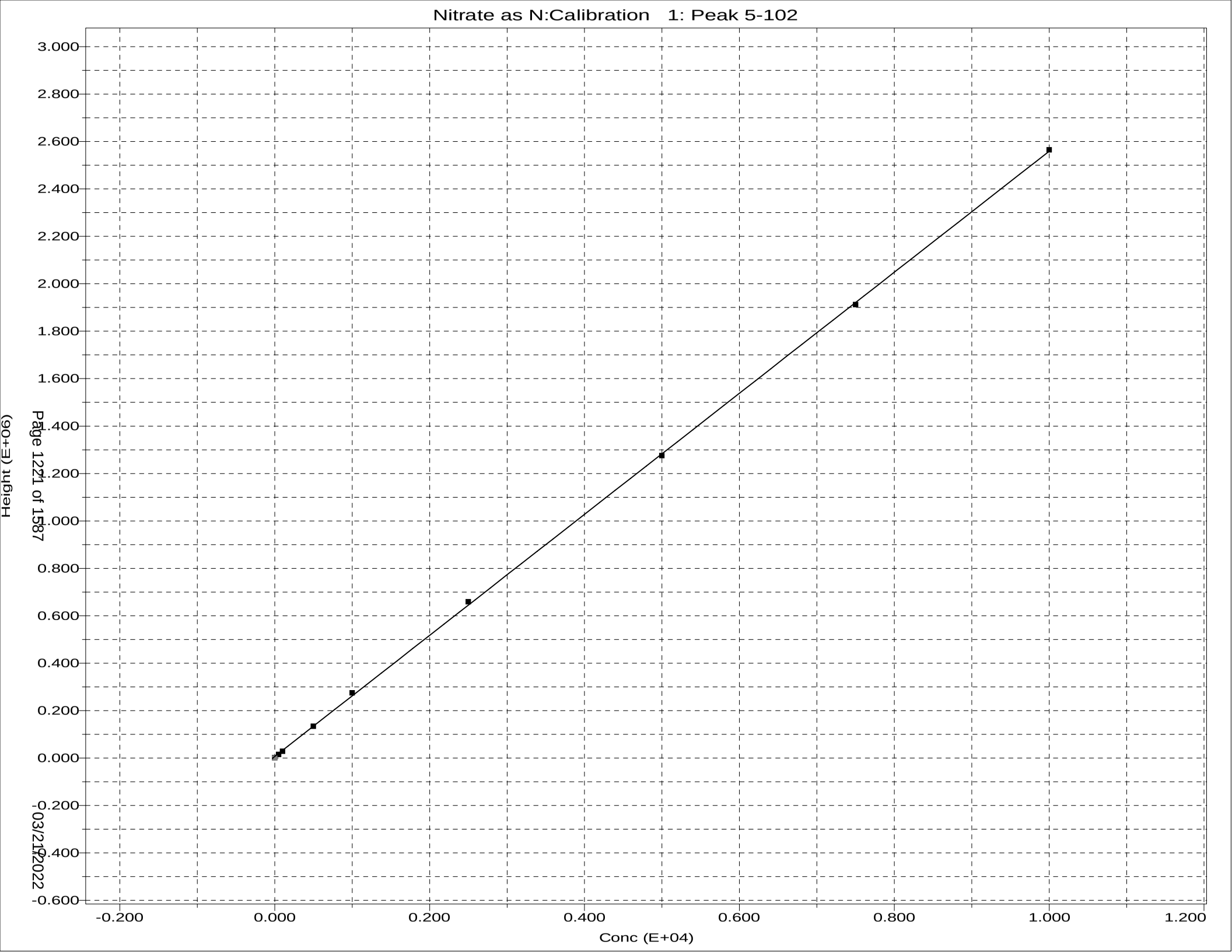
*	Name	Conc	Height
*	Cal 0.00 ppb	0.000000	1550.305176
*	Cal 50.0 ppb	50.000000	14838.987305
*	Cal 100 ppb	100.000000	28073.158203
*	Cal 500 ppb	500.000000	133669.828125
*	Cal 1000 ppb	1000.000000	274719.406250
*	Cal 2500 ppb	2500.000000	658702.562500
*	Cal 5000 ppb	5000.000000	1275626.250000
*	Cal 7500 ppb	7500.000000	1912277.250000
*	Cal 10000 ppb	10000.000000	2564929.500000

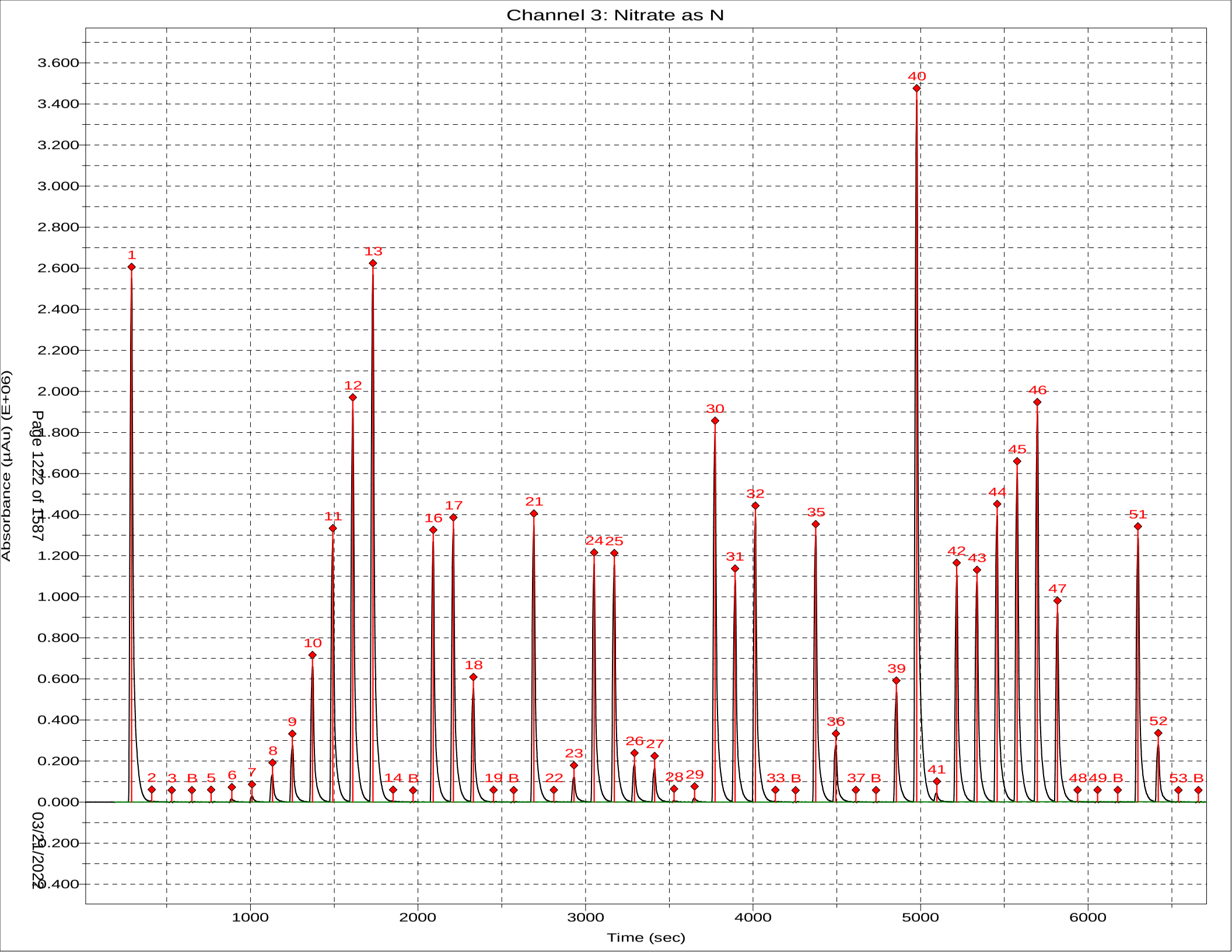
Calib Coef:
y=bx+a
a: (intercept) 6.9878e+03
b: 2.5522e+02

Corr Coef: 0.999959

Carryover: 0.112%

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)


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec)
Page 1222 of 1587
03/23/2022
3.600
3.400
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
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7
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9
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11
12
13
14
B
16
17
18
19
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22
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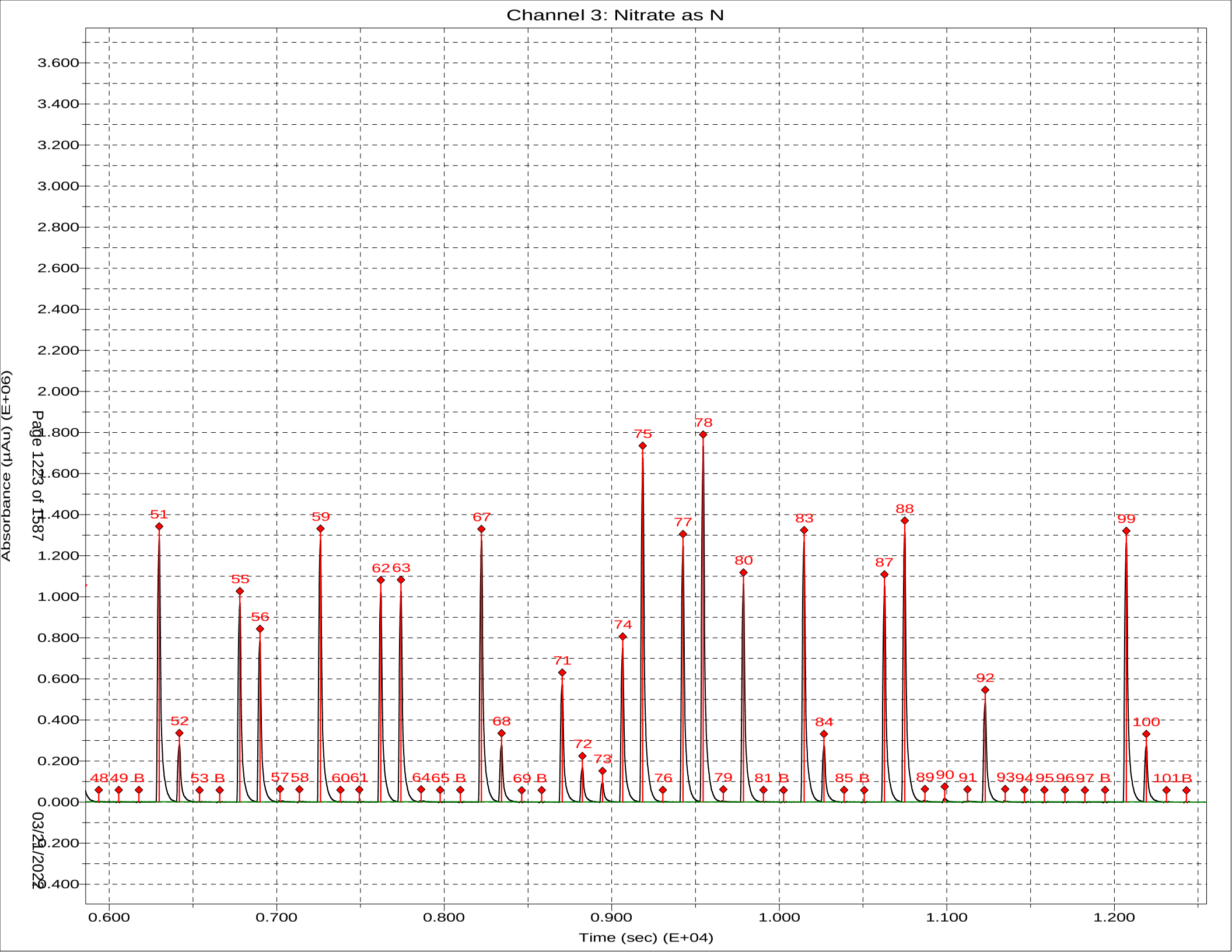
52
53
B


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec) (E+04)
Page 1223 of 1587
03/23/2022
3.600
3.400
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
0.600
0.700
0.800
0.900
1.000
1.100
1.200
48 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
101 B

Sample Table - 031322.tbl

File name: C:\FLOW_4\031322.TBL
Date: 13-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		pH
107	LCS	U	1	1	1		
0	MB	U	1	1	1		
113	280-159180-A-4	U	1	1	1		∠2
114	ms 280-159180-A-4	U	1	1	1		∠2
115	msd 280-159180-A-4	U	1	1	1		∠2
116	280-159180-A-11	U	1	1	1		∠2
117	580-111014-A-3	U	1	1	1		∠2
118	550-180483-B-1	U	1	1	1		∠2
119	550-180483-B-3	U	1	1	1		∠2
120	280-159190-C-1	U	1	5 ±	1		∠2
121	280-159190-C-2	U	1	1	1		∠2
122	280-159190-C-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	280-159190-C-4	U	1	1	1		∠2
124	280-159190-C-5	U	1	1	1		∠2
125	280-159382-A-4	U	1	1	1		∠2
126	ms 280-159382-A-4	U	1	1	1		∠2
127	msd 280-159382-A-4	U	1	1	1		∠2
128	280-159190-C-6	U	1	2 ±	1		∠2
129	280-159190-C-7	U	1	5 ±	1		∠2
130	280-159190-C-8	U	1	2 ±	1		∠2
131	280-159190-C-9	U	1	1	1		∠2
132	280-159190-C-10	U	1	1	1		∠2
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
133	280-159190-C-11	U	1	10 ±	1		∠2
134	280-159190-C-12	U	1	10 ±	1		∠2

Cup	Name	Type	R	Dil	Wt	Vial	Comment
135	280-159190-C-13	U	1	1	1		<2
136	280-159190-C-14	U	1	1	1		<2
107	LCS	U	1	1	1		
0	MB	U	1	1	1		
137	280-159190-C-16	U	1	1	1		<2
138	ms 280-159190-C-16	U	1	1	1		<2
139	msd 280-159190-C-16	U	1	1	1		<2
140	280-159190-C-15	U	1	1	1		<2
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
141	280-159234-L-1	U	1	25 1	1		<2
142	280-159234-L-2	U	1	1	1		<2
143	280-159234-L-3	U	1	1	1		<2
144	280-159234-L-4	U	1	1	1		<2
145	280-159234-L-5	U	1	1	1		<2
146	280-159234-L-6	U	1	1	1		<2
147	280-159234-L-8	U	1	1	1		<2
148	280-159234-L-9	U	1	1	1		<2
149	280-159234-L-7	U	1	1	1		<2
150	ms 280-159234-L-7	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 280-159234-L-7	U	1	1	1		<2
152	280-159234-L-10	U	1	1	1		<2
153	280-159452-C-1	U	1	1	1		<2
154	280-159452-C-2	U	1	1	1		<2
155	280-159452-C-3	U	1	1	1		<2
156	280-159452-C-4	U	1	1	1		<2
157	280-159452-C-5	U	1	1	1		<2
158	d	U	1	1	1		
159	d	U	1	1	1		
160	d	U	1	1	1		
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		

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

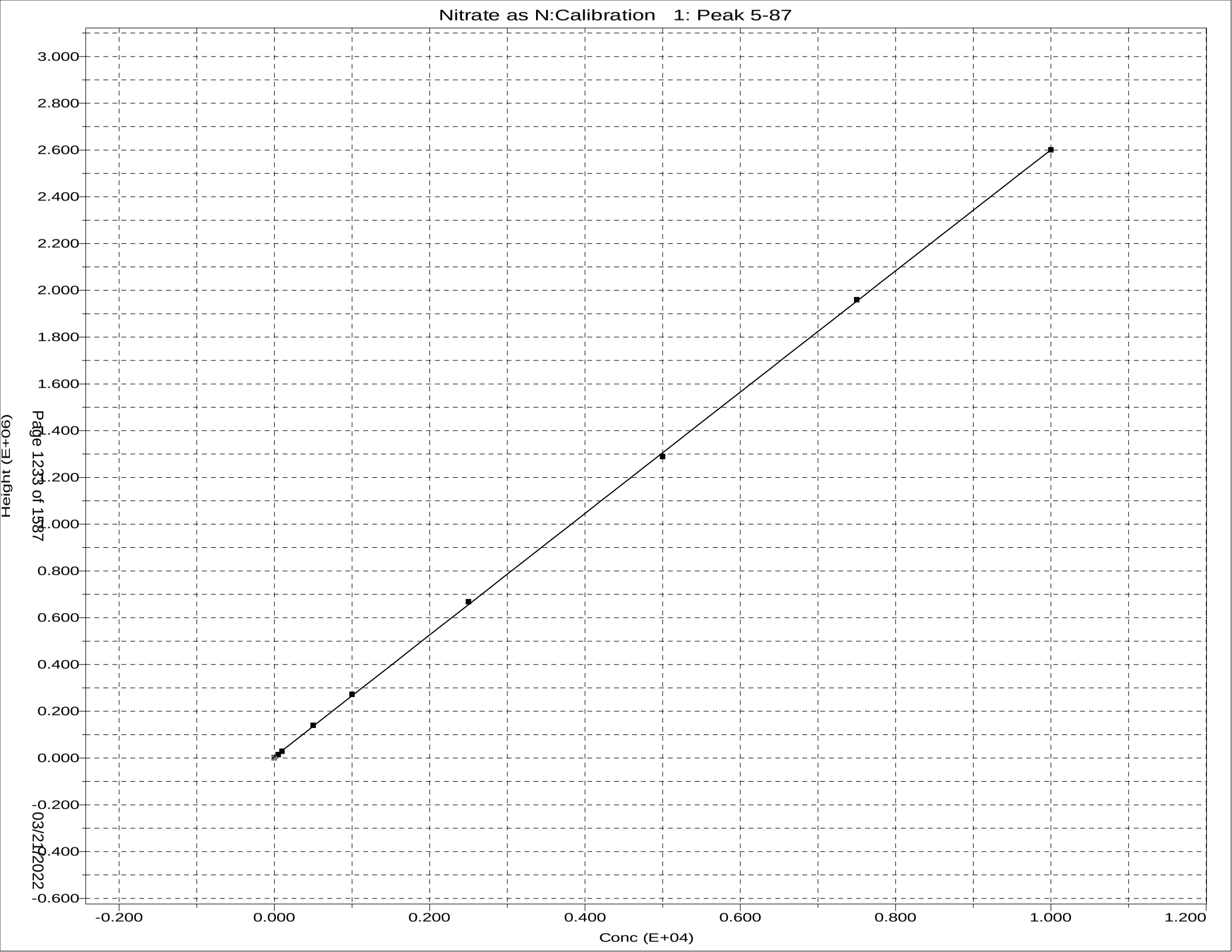
*	Name	Conc	Height
*	Cal 0.00 ppb	0.000000	1696.152100
*	Cal 50.0 ppb	50.000000	14621.230469
*	Cal 100 ppb	100.000000	28683.000000
*	Cal 500 ppb	500.000000	139833.015625
*	Cal 1000 ppb	1000.000000	271946.375000
*	Cal 2500 ppb	2500.000000	668400.437500
*	Cal 5000 ppb	5000.000000	1289020.000000
*	Cal 7500 ppb	7500.000000	1959759.750000
*	Cal 10000 ppb	10000.000000	2600815.000000

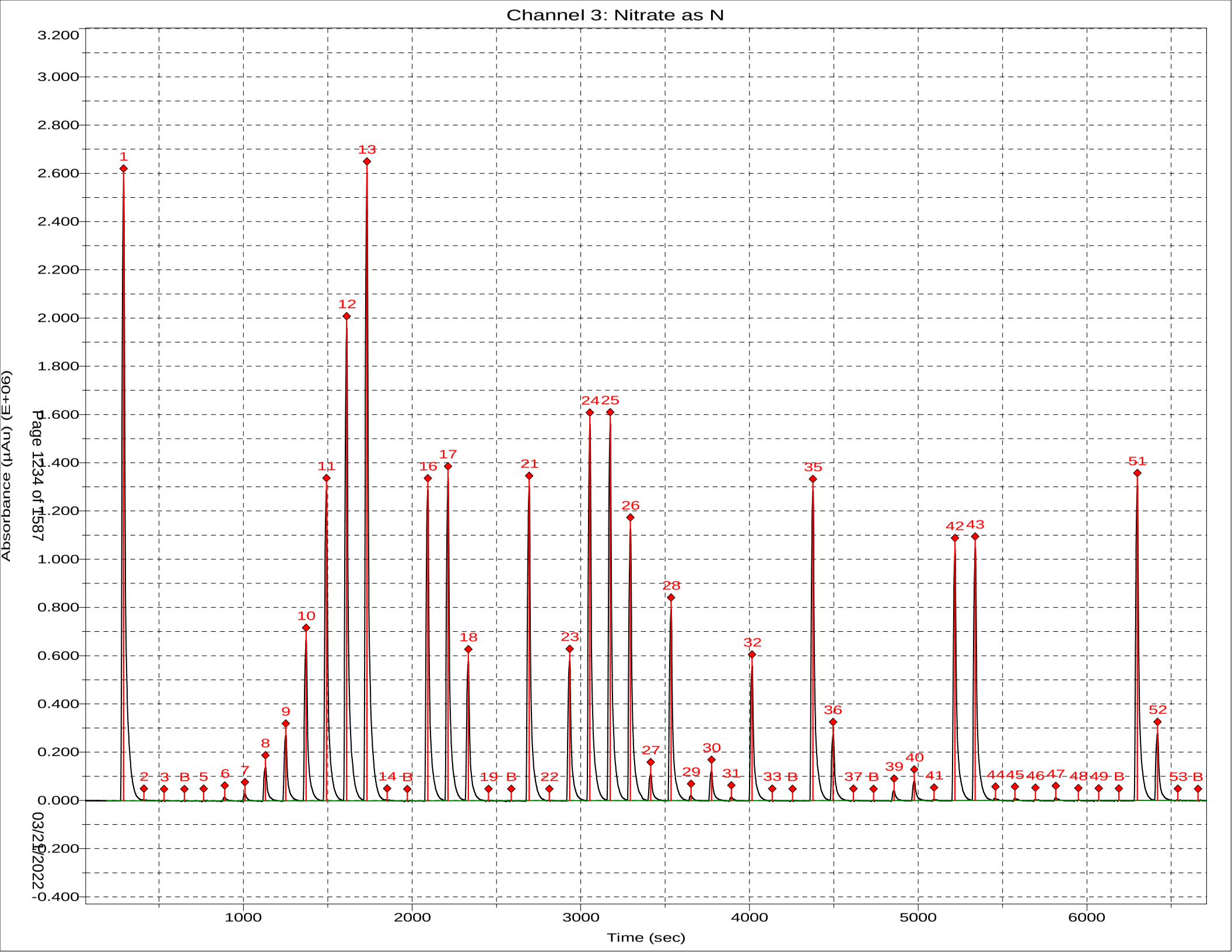
Calib Coef:
x=cyy+by+a
a: (intercept) -2.2040e+01
b: 3.8403e-03
c: 4.9243e-12

Corr Coef: 0.999963

Carryover: 0.0658%

No Drift Peaks


Nitrate as N:Calibration 1: Peak 5-87
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
Height (E+06)
-0.200
0.000
0.200
0.400
0.600
0.800
1.000
1.200
Conc (E+04)
Page 1233 of 1587
03/21/2022


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec)
Page 1234 of 1587
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
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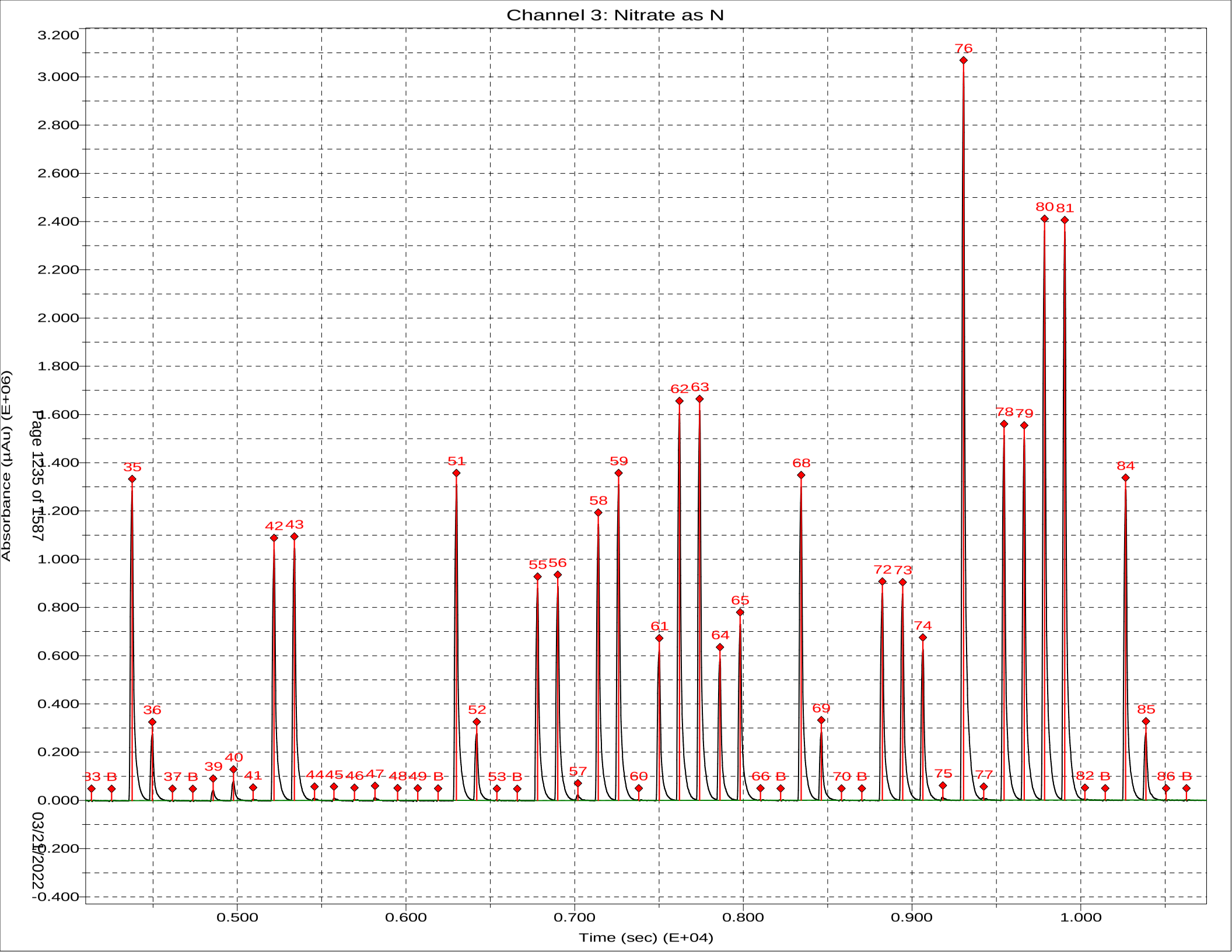
B
51
52
53
B


Channel 3: Nitrate as N
Absorbance (µAu) (E+06)
Time (sec) (E+04)
Page 1235 of 1587
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		

General Chemistry Raw Data Report

Job ID: 280-159190-1

Batch: 567780 **Analyst Initials: JJM**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-567743/1-A **Analysis Date: Mar 04, 2022 15:54**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	17.6	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-567743/2-A **Analysis Date: Mar 04, 2022 15:54**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-159190-E-16-A **Analysis Date: Mar 04, 2022 15:54**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-159190-E-16-B MS **Analysis Date: Mar 04, 2022 15:54**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	21.6	mg/L	50 mL	50 mL

Lab Sample ID: 280-159190-E-16-C MSD **Analysis Date: Mar 04, 2022 15:54**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	20	mg/L	50 mL	50 mL

Lab Sample ID: 280-159190-E-4-A **Analysis Date: Mar 04, 2022 15:54**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-159190-E-5-A **Analysis Date: Mar 04, 2022 15:54**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-159190-E-13-A **Analysis Date: Mar 04, 2022 15:54**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-159190-E-14-A **Analysis Date: Mar 04, 2022 15:54**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-159190-E-15-A **Analysis Date: Mar 04, 2022 15:54**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.799999999999968	mg/L	50 mL	50 mL

Lab Sample ID: 280-159190-E-1-A **Analysis Date: Mar 04, 2022 15:54**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Sulfide by Titration

Analyst:	JM	SOP Information:	
Date:	3/4/2022	Number:	91
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_0209
TALS ID	WCIODINE_01326	Prep Date:	2/8/2022
Normality:	0.025	Made By:	MMP
Solution 2:	sodium thiosulfate	Concentration:	1189
TALS ID	Na Thio_00176	Expiration Date:	5/8/2022
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch IND_00067		

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	4.92	10.10	20	5.18	1185.600
CAL	5	10.10	15.20	20	5.10	1192.000

ICV Information	
Source/Ver-Lot#:	INT_0204
Prep Date:	2/8/2022
Made By:	MMP
Concentration:	1207
Expiration Date:	5/8/2022

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	4.90	20	4.90	1208.000
ICV	5	0.00	4.92	20	4.92	1206.400

TALS Raw Data Report

Job Number: 280-159137-1
LIMS Batch: 567780
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-567743/1-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		17.6 mg/L	mg/L	73	44 110		
Sulfide as H2S		18.7 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-567743/2-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-159190-E-16-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-159190-E-16-B MS** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		21.6 mg/L	mg/L	89	44 110		
Sulfide as H2S		22.95 mg/L	mg/L				

RS# 5 Lab ID: **280-159190-E-16-C MSD** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		20 mg/L	mg/L	83	44 110	8	20
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 6 Lab ID: **280-159137-E-2-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 7 Lab ID: **280-159137-E-3-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 8 Lab ID: **280-159137-E-4-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 9 Lab ID: **280-159137-E-5-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

TALS Raw Data Report

Job Number: 280-159190-1
LIMS Batch: 567780
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-567743/1-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		17.6 mg/L	mg/L	73	44 110		
Sulfide as H2S		18.7 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-567743/2-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 3 Lab ID: **280-159190-E-16-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-159190-E-16-B MS** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		21.6 mg/L	mg/L	89	44 110		
Sulfide as H2S		22.95 mg/L	mg/L				

RS# 5 Lab ID: **280-159190-E-16-C MSD** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		20 mg/L	mg/L	83	44 110	8	20
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 10 Lab ID: **280-159190-E-4-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 11 Lab ID: **280-159190-E-5-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 12 Lab ID: **280-159190-E-13-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 13 Lab ID: **280-159190-E-14-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 14 Lab ID: **280-159190-E-15-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		999999968 mg/L	0.80 J mg/L				
Sulfide as H2S		999999966 mg/L	0.85 J mg/L				

TALS Raw Data Report

RS# 15 Lab ID: **280-159190-E-1-A** Inj Date: 3/4/2022 3:54:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

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Titration Data Review Checklist

LIMS Batch Number: 567780	**Method (circle one):**	**QC Type (circle):**
Analyst/1st Reviewer: SM	2310B 2320B 2340C	Standard DoD QAPP Other
Date: 3/12/22	4500 S2 F 4500 SO3 B 9030B/9034	
Matrix (circle): Water Solid	**Automated or Manual (circle one)**	**Instrument ID (circle one if applicable):** AT2 AT3

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
A. Sample Storage and Pretreatment				
1. Is sample pH verified and documented prior to analysis? (if required)	√		✓	
2. For samples requiring pH adjustment is the amount of acid/base used documented?	N/A		✓	If no, list details:
3. Are samples analyzed within the required hold time?	√		✓	NCM:
4. Pre-treatment reagents used to remove interferences are documented.	N/A		✓	
B. Calibration / Instrument				
5. Was the normality of the titrant verified and found acceptable?	√		✓	Comments:
6. For potentiometric titration, the pH meter is calibrated with 5 buffers bracketing range of samples and QC.	N/A		✓	Comments:
7. Calibration standards are analyzed at the beginning and end of the analytical sequence and after every 10 sample analyses. (samples/dilutions/reanalyses).	N/A		✓	Comments:
8. Calibrations standards (ICV/CCV) are within 90-110% recovery.	N/A		✓	
C. Sample and Batch QC				
9. Blanks are analyzed at the beginning, end and after every 10 sample analyses in the sequence.	√		✓	
10. Results of blank analyses (MB, ICB, CCB) are < ½ RL (<RL for alkalinity unless DoD)	√		✓	□ No analyte > ½ RL in associated samples □ Sample results >10x blank
11. A standard from a second source (SRM, CRM, LCS) is included in the analytical sequence.	√		✓	
12. The recovery of the 2nd source material falls within 90-110% or manufacturer's limits.	√		✓	
13. Samples analyses are bracketing by acceptable CCV/CCBs.	N/A		✓	□ No analyte > RL in associated samples □ Sample results >10x blank □ Sample results qualified
14. MS/MSD analyzed at required frequency and recoveries within limits. (If recoveries out of limits, verify not due to lab error) (Required for 2340C, 4500 S2 F, 9030B/9034)	√		✓	□ Non-conformance (NCM) added □ Sample results >4X spike conc.
15. Duplicate analyzed at required frequency and RPD within limits. (Required for 2310B, 2320B, 4500 SO3 B)	N/A		✓	□ Non-conformance (NCM) added □ Sample results ND or <2X RL

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
16. Are all MS/MSD RPDs <50%? Note: Excessive RPDs (>50%) require evaluation, correction or explanation.	✓		✓	□ Non-conformance (NCM) added
D. Raw Data & TALS Data Entry				
17. Raw Data			✓	
a. Unused data is clearly identified with reason	✓		✓	
b. All crossed out data is initialed and dated	✓		✓	
c. Out of control QC is clearly identified	✓		✓	
d. Any data that has a qualifier is commented on with appropriate action taken	✓		✓	
e. The first page of the run includes the filename, instrument, and analyst initials/signature	✓		✓	
f. 100% of manual calculations are verified.	✓		✓	
18. TALS Samples Tab			✓	
a. LIMS Sample IDs / Containers are correct	✓		✓	
b. Method and matrix are correct	✓		✓	
c. Date and time match raw data	✓		✓	
d. Dilutions are correct	✓		✓	
e. Correct suffix designated (where applicable)	✓		✓	
19. TALS Worksheet Tab is complete and correct	✓		✓	
20. TALS Reagent Tab is complete and correct	✓		✓	
21. TALS QC Links Tab is correct	✓		✓	
22. TALS Sample Results Tab			✓	
a. All unused data are marked Rejected or Accepted	✓		✓	
b. All reported analytes are marked Primary or Secondary	✓		✓	
c. Data manually transcribed from benchsheet into TALS verified 100% including significant figures SM 4500 SO3 B).	✓		✓	
d. TALS Batch Information Screen documentation is complete	✓		✓	
e. TALS Status set to appropriate review level	✓		✓	
E. Final Report and NCMs (2nd level review only)				
f. Were all job/project requirements met?			✓	
g. Results for samples and QC correct on final report?			✓	
h. Are all necessary scanned documents in TALS?			✓	
i. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?			✓	

Comments: _____

2nd Reviewer: SAH **Review Date:** 03/14/22

General Chemistry Raw Data Report

Job ID: 280-159190-1

Batch: 567781 **Analyst Initials: JJM**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-567762/1-A **Analysis Date: Mar 04, 2022 15:55**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	20	mg/L	50 mL	50 mL

Lab Sample ID: LCSD 280-567762/2-A **Analysis Date: Mar 04, 2022 15:55**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	21.6	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-567762/3-A **Analysis Date: Mar 04, 2022 15:55**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-159190-E-11-A **Analysis Date: Mar 04, 2022 15:55**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.4	mg/L	50 mL	50 mL

Lab Sample ID: 280-159190-E-11-B MS **Analysis Date: Mar 04, 2022 15:55**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	22	mg/L	50 mL	50 mL

Lab Sample ID: 280-159190-E-11-C MSD **Analysis Date: Mar 04, 2022 15:55**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	21.6	mg/L	50 mL	50 mL

Lab Sample ID: 280-159190-E-2-A **Analysis Date: Mar 04, 2022 15:55**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.4	mg/L	50 mL	50 mL

Lab Sample ID: 280-159190-E-3-A **Analysis Date: Mar 04, 2022 15:55**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-159190-E-6-A **Analysis Date: Mar 04, 2022 15:55**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Sulfide by Titration

Analyst:	JM	SOP Information:	
Date:	3/4/2022	Number:	91
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_0209
TALS ID	WCIODINE_01326	Prep Date:	2/8/2022
Normality:	0.025	Made By:	MMP
Solution 2:	sodium thiosulfate	Concentration:	1189
TALS ID	Na Thio_00176	Expiration Date:	5/8/2022
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch IND_00067		

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	4.92	10.10	20	5.18	1185.600
CAL	5	10.10	15.20	20	5.10	1192.000

ICV Information	
Source/Ver-Lot#:	INT_0204
Prep Date:	2/8/2022
Made By:	MMP
Concentration:	1207
Expiration Date:	5/8/2022

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	4.90	20	4.90	1208.000
ICV	5	0.00	4.92	20	4.92	1206.400

TALS Raw Data Report

Job Number: 280-159169-1
LIMS Batch: 567781
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-567762/1-A** Inj Date: 3/4/2022 3:55:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		20 mg/L	mg/L	83	44 110		
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 2 Lab ID: **LCSD 280-567762/2-A** Inj Date: 3/4/2022 3:55:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		21.6 mg/L	mg/L	89	44 110	8	20
Sulfide as H2S		22.95 mg/L	mg/L				

RS# 3 Lab ID: **MB 280-567762/3-A** Inj Date: 3/4/2022 3:55:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	0.79 U mg/L				
Sulfide as H2S		0 mg/L	0.84 U mg/L				

RS# 4 Lab ID: **280-159190-E-11-A** Inj Date: 3/4/2022 3:55:00PM 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	0.79 U mg/L				
Sulfide as H2S		0.425 mg/L	0.84 U mg/L				

RS# 5 Lab ID: **280-159190-E-11-B MS** Inj Date: 3/4/2022 3:55:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		22 mg/L	mg/L	91	44 110		
Sulfide as H2S		23.375 mg/L	mg/L				

RS# 6 Lab ID: **280-159190-E-11-C MSD** Inj Date: 3/4/2022 3:55:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		21.6 mg/L	mg/L	89	44 110	2	20
Sulfide as H2S		22.95 mg/L	mg/L				

RS# 8 Lab ID: **280-159169-R-5-A** Inj Date: 3/4/2022 3:55:00PM 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	0.79 U mg/L				
Sulfide as H2S		0.425 mg/L	0.84 U mg/L				

TALS Raw Data Report

Job Number: 280-159190-1
LIMS Batch: 567781
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-567762/1-A** Inj Date: 3/4/2022 3:55:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		20 mg/L	mg/L	83	44 110		
Sulfide as H2S		21.25 mg/L	mg/L				

RS# 2 Lab ID: **LCSD 280-567762/2-A** Inj Date: 3/4/2022 3:55:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		21.6 mg/L	mg/L	89	44 110	8	20
Sulfide as H2S		22.95 mg/L	mg/L				

RS# 3 Lab ID: **MB 280-567762/3-A** Inj Date: 3/4/2022 3:55:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **280-159190-E-11-A** Inj Date: 3/4/2022 3:55:00PM 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# 5 Lab ID: **280-159190-E-11-B MS** Inj Date: 3/4/2022 3:55:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		22 mg/L	mg/L	91	44 110		
Sulfide as H2S		23.375 mg/L	mg/L				

RS# 6 Lab ID: **280-159190-E-11-C MSD** Inj Date: 3/4/2022 3:55:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		21.6 mg/L	mg/L	89	44 110	2	20
Sulfide as H2S		22.95 mg/L	mg/L				

RS# 7 Lab ID: **280-159190-E-2-A** Inj Date: 3/4/2022 3:55:00PM 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: **280-159190-E-3-A** Inj Date: 3/4/2022 3:55:00PM 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# 10 Lab ID: **280-159190-E-6-A** Inj Date: 3/4/2022 3:55:00PM 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: 567781	**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: 280-159190-1

Batch: 567799 **Analyst Initials: PEV**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-567789/1-A **Analysis Date: Mar 05, 2022 13:13**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	18.4	mg/L	50 mL	50 mL

Lab Sample ID: LCSD 280-567789/2-A **Analysis Date: Mar 05, 2022 13:13**

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 280-567789/3-A **Analysis Date: Mar 05, 2022 13:13**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-159190-E-7-A **Analysis Date: Mar 05, 2022 13:13**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	-0.08	mg/L	50 mL	50 mL

Lab Sample ID: 280-159190-E-8-A **Analysis Date: Mar 05, 2022 13:13**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-159190-E-9-A **Analysis Date: Mar 05, 2022 13:13**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	1.6	mg/L	50 mL	50 mL

Lab Sample ID: 280-159190-E-10-A **Analysis Date: Mar 05, 2022 13:13**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-159190-E-12-A **Analysis Date: Mar 05, 2022 13:13**

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:	PEV	SOP Information:	
Date:	3/5/2022	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:	1112
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	5.40	20	5.40	1168.000
CAL	5	5.40	12.20	20	6.80	1056.000

ICV Information	
Source/Ver-Lot#:	INT_0204
Prep Date:	2/8/2022
Made By:	MMP
Concentration:	1084
Expiration Date:	5/8/2022

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	5.60	20	5.60	1152.000
ICV	5	5.60	12.91	20	7.31	1015.200

Titration Data Review Checklist

LIMS Batch Number: 567799	**Method (circle one):**	**QC Type (circle):**
Analyst/1st Reviewer: PEV	**2310B 2320B 2340C**	**Standard DoD QAPP Other**
Date: 3-5-2022	**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)	NA		Y	
2. For samples requiring pH adjustment is the amount of acid/base used documented?	NA		n/a	If no, list details:
3. Are samples analyzed within the required hold time?	Y		Y	NCM:
4. Pre-treatment reagents used to remove interferences are documented.	NA		n/a	
B. Calibration / Instrument				
5. Was the normality of the titrant verified and found acceptable?	Y		Y	Comments:
6. For potentiometric titration, the pH meter is calibrated with 5 buffers bracketing range of samples and QC.	NA		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).	NA		n/a	Comments:
8. Calibrations standards (ICV/CCV) are within 90-110% recovery.	NA		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		Y	
10. Results of blank analyses (MB, ICB, CCB) are < ½ RL (<RL for alkalinity unless DoD)	Y		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		Y	
12. The recovery of the 2nd source material falls within 90-110% or manufacturer's limits.	Y		Y	
13. Samples analyses are bracketing by acceptable CCV/CCBs.	NA		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		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)	NA		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		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: WRD **Review Date:** 03/8/22

TALS Raw Data Report

Job Number: 280-159190-1
LIMS Batch: 567799
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-567789/1-A** Inj Date: 3/5/2022 1:13:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		18.4 mg/L	mg/L	83	44 110		
Sulfide as H2S		19.55 mg/L	mg/L				

RS# 2 Lab ID: **LCSD 280-567789/2-A** Inj Date: 3/5/2022 1:13:00PM 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	76	44 110	9	20
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 3 Lab ID: **MB 280-567789/3-A** Inj Date: 3/5/2022 1:13:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **550-179924-L-1-A** Inj Date: 3/5/2022 1:13:00PM 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# 5 Lab ID: **550-179924-L-1-B MS** Inj Date: 3/5/2022 1:13:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.92 mg/L	mg/L	68	44 110		
Sulfide as H2S		16.915 mg/L	mg/L				

RS# 6 Lab ID: **550-179924-L-1-C MSD** Inj Date: 3/5/2022 1:13:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		14.56 mg/L	mg/L	62	44 110	9	20
Sulfide as H2S		15.47 mg/L	mg/L				

RS# 7 Lab ID: **280-159190-E-7-A** Inj Date: 3/5/2022 1:13:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		-0.08 mg/L	1.9 U mg/L				
Sulfide as H2S		-0.085 mg/L	2.0 U mg/L				

RS# 8 Lab ID: **280-159190-E-8-A** Inj Date: 3/5/2022 1:13:00PM 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# 9 Lab ID: **280-159190-E-9-A** Inj Date: 3/5/2022 1:13:00PM 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	1.6 J mg/L				
Sulfide as H2S		1.7 mg/L	1.7 J mg/L				

RS# 14 Lab ID: **280-159190-E-10-A** Inj Date: 3/5/2022 1:13:00PM 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

RS# 15 Lab ID: **280-159190-E-12-A** Inj Date: 3/5/2022 1:13:00PM 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: 280-159215-1
LIMS Batch: 567799
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-567789/1-A** Inj Date: 3/5/2022 1:13:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		18.4 mg/L	mg/L	83	44 110		
Sulfide as H2S		19.55 mg/L	mg/L				

RS# 2 Lab ID: **LCSD 280-567789/2-A** Inj Date: 3/5/2022 1:13:00PM 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	76	44 110	9	20
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 3 Lab ID: **MB 280-567789/3-A** Inj Date: 3/5/2022 1:13:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	0.79 U mg/L				
Sulfide as H2S		0 mg/L	0.84 U mg/L				

RS# 4 Lab ID: **550-179924-L-1-A** Inj Date: 3/5/2022 1:13:00PM 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# 5 Lab ID: **550-179924-L-1-B MS** Inj Date: 3/5/2022 1:13:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.92 mg/L	mg/L	68	44 110		
Sulfide as H2S		16.915 mg/L	mg/L				

RS# 6 Lab ID: **550-179924-L-1-C MSD** Inj Date: 3/5/2022 1:13:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		14.56 mg/L	mg/L	62	44 110	9	20
Sulfide as H2S		15.47 mg/L	mg/L				

RS# 10 Lab ID: **280-159215-V-5-A** Inj Date: 3/5/2022 1:13:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.72 mg/L	0.79 U mg/L				
Sulfide as H2S		0.765 mg/L	0.84 U mg/L				

TALS Raw Data Report

Job Number: 280-159234-1
LIMS Batch: 567799
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-567789/1-A** Inj Date: 3/5/2022 1:13:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		18.4 mg/L	mg/L	83	44 110		
Sulfide as H2S		19.55 mg/L	mg/L				

RS# 2 Lab ID: **LCSD 280-567789/2-A** Inj Date: 3/5/2022 1:13:00PM 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	76	44 110	9	20
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 3 Lab ID: **MB 280-567789/3-A** Inj Date: 3/5/2022 1:13:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 4 Lab ID: **550-179924-L-1-A** Inj Date: 3/5/2022 1:13:00PM 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# 5 Lab ID: **550-179924-L-1-B MS** Inj Date: 3/5/2022 1:13:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.92 mg/L	mg/L	68	44 110		
Sulfide as H2S		16.915 mg/L	mg/L				

RS# 6 Lab ID: **550-179924-L-1-C MSD** Inj Date: 3/5/2022 1:13:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		14.56 mg/L	mg/L	62	44 110	9	20
Sulfide as H2S		15.47 mg/L	mg/L				

RS# 11 Lab ID: **280-159234-N-3-A** Inj Date: 3/5/2022 1:13:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.88 mg/L	0.88 J mg/L				
Sulfide as H2S		0.935 mg/L	0.94 J mg/L				

RS# 12 Lab ID: **280-159234-N-2-A** Inj Date: 3/5/2022 1:13:00PM 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: **280-159234-N-1-A** Inj Date: 3/5/2022 1:13:00PM 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	1.6 J mg/L				
Sulfide as H2S		1.7 mg/L	1.7 J mg/L				

TALS Raw Data Report

Job Number: 280-179924-1
LIMS Batch: 567799
Equipment: NOEQUIP

Laboratory: Eurofins Denver

RS# 1 Lab ID: **LCS 280-567789/1-A** Inj Date: 3/5/2022 1:13:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		18.4 mg/L	mg/L	83	44 110		
Sulfide as H2S		19.55 mg/L	mg/L				

RS# 2 Lab ID: **LCSD 280-567789/2-A** Inj Date: 3/5/2022 1:13:00PM 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	76	44 110	9	20
Sulfide as H2S		17.85 mg/L	mg/L				

RS# 3 Lab ID: **MB 280-567789/3-A** Inj Date: 3/5/2022 1:13:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 4 Lab ID: **550-179924-L-1-A** Inj Date: 3/5/2022 1:13:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	mg/L				
Sulfide as H2S		0.85 mg/L	mg/L				

RS# 5 Lab ID: **550-179924-L-1-B MS** Inj Date: 3/5/2022 1:13:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.92 mg/L	mg/L	68	44 110		
Sulfide as H2S		16.915 mg/L	mg/L				

RS# 6 Lab ID: **550-179924-L-1-C MSD** Inj Date: 3/5/2022 1:13:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		14.56 mg/L	mg/L	62	44 110	9	20
Sulfide as H2S		15.47 mg/L	mg/L				

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0004.d
Lims ID: std L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 08-Mar-2022 14:13:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109076-002
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 09-Mar-2022 11:31:17 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1639

First Level Reviewer: jindaratc Date: 08-Mar-2022 15:44:15

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.534	2.534	0.000	1646666	0.2000	0.1767	M
2 Chloride	3.675	3.675	0.000	11341567	1.00	1.32	M
3 Nitrite as N	4.459	4.459	0.000	5094673	NC	NC	M
4 Bromide	5.384	5.384	0.000	952446	0.2000	0.2138	
5 Nitrate as N	6.067	6.067	0.000	5701638	NC	NC	M
7 Orthophosphate as P	9.209	9.209	0.000	1483080	NC	NC	
6 Sulfate	10.059	10.059	0.000	8014777	1.00	1.33	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

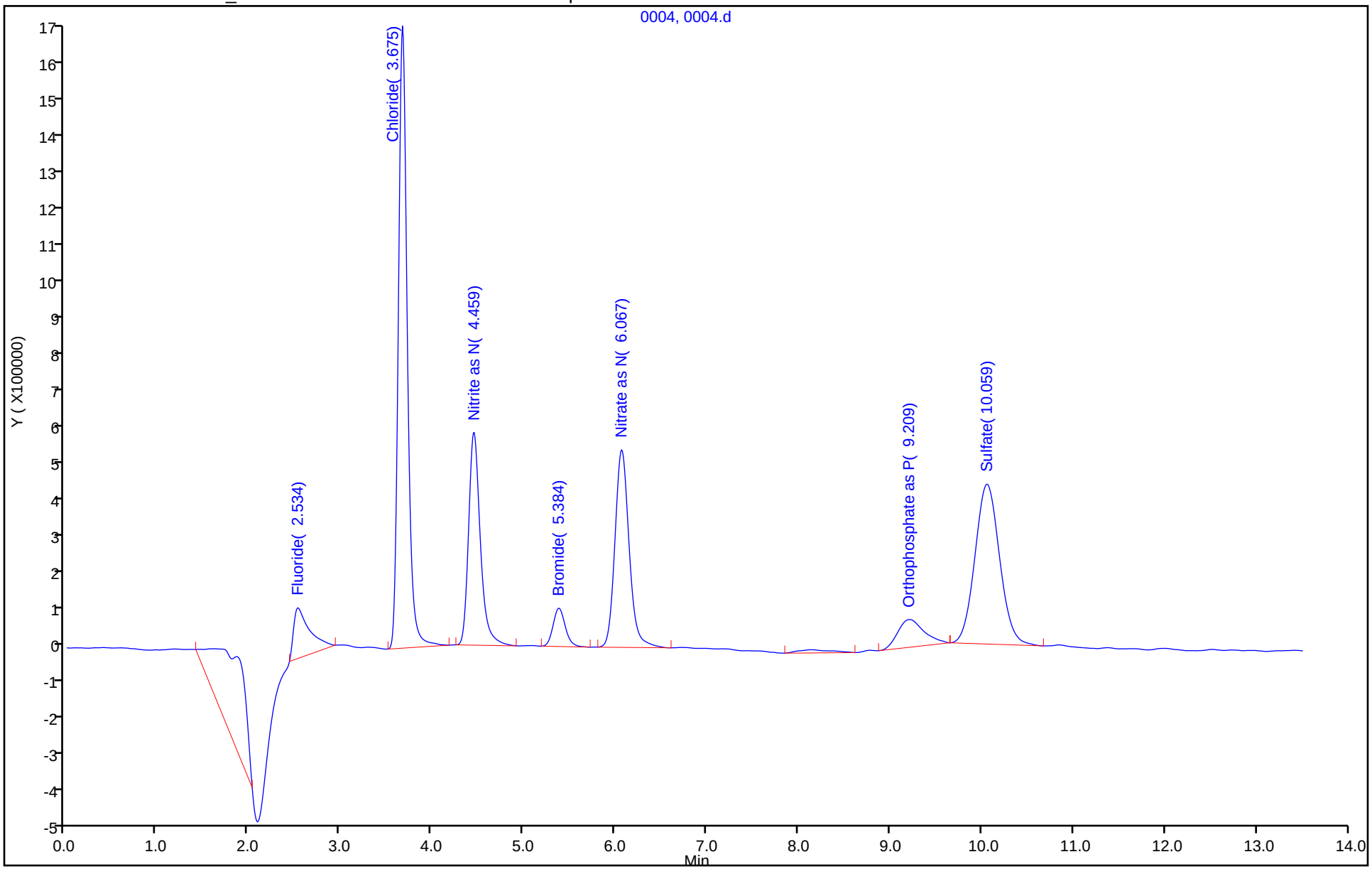
IC Cal low_00625 Amount Added: 0.02 Units: mL
IC CAL cl/so4_00409 Amount Added: 0.02 Units: mL

Report Date: 09-Mar-2022 11:31:17 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0004.d

Injection Date:	08-Mar-2022 14:13:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	std L1			Worklist Smp#:	2
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

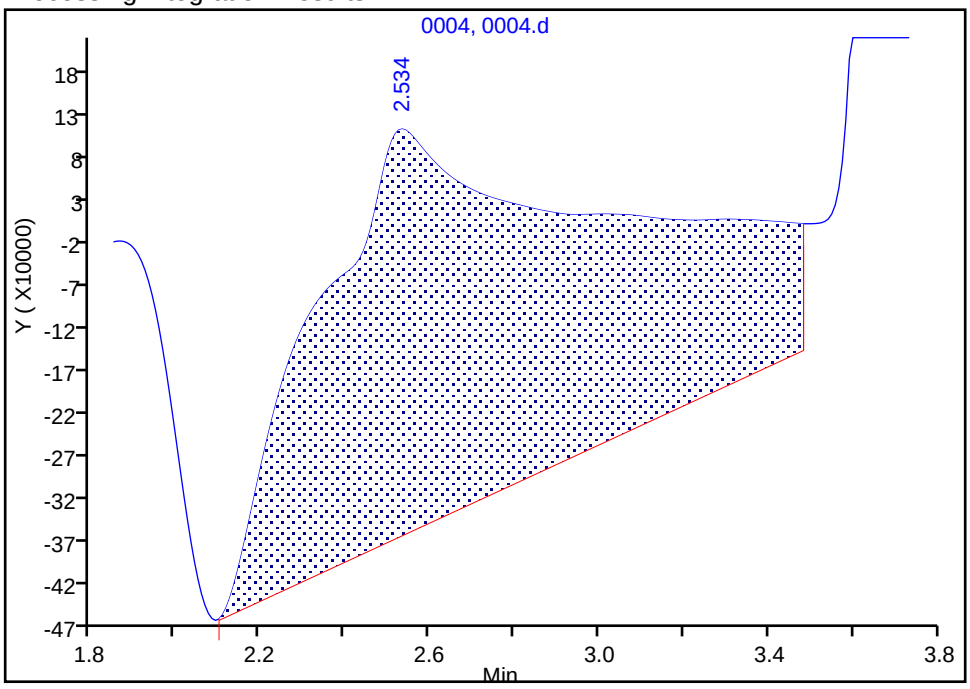
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0004.d				
Injection Date:	08-Mar-2022 14:13:00	Instrument ID:	WC_IonChrom11		
Lims ID:	std L1				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

1 Fluoride, CAS: 16984-48-8

Signal: 1

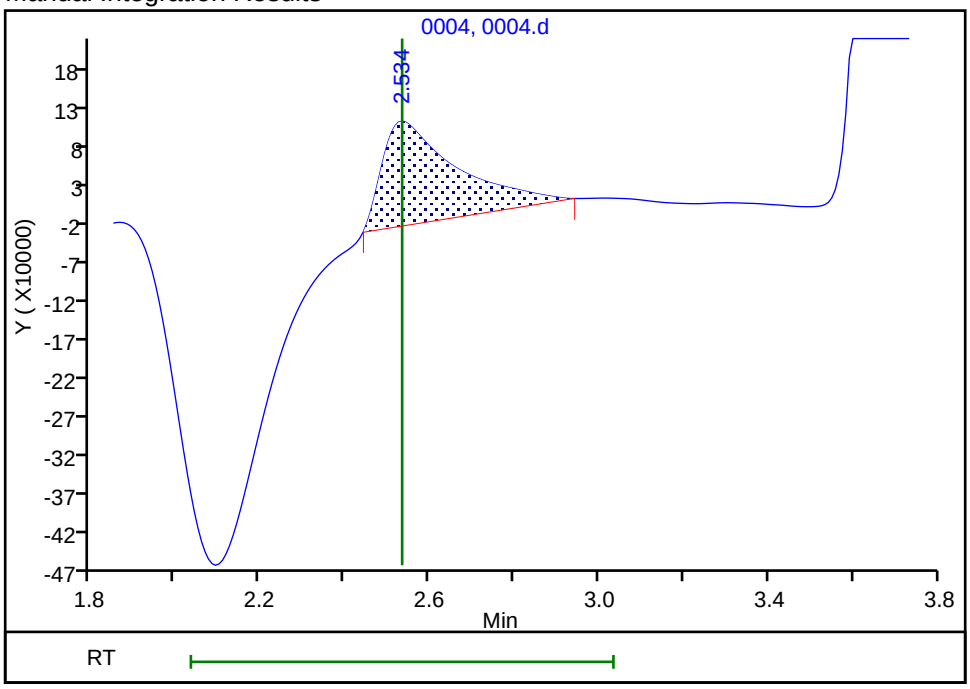
Processing Integration Results

RT: 2.53
Area: 22790097
Amount: 0.350640
Amount Units: ug/ml



Manual Integration Results

RT: 2.53
Area: 1646666
Amount: 0.176654
Amount Units: ug/ml



Reviewer: foxr, 09-Mar-2022 11:13:26
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

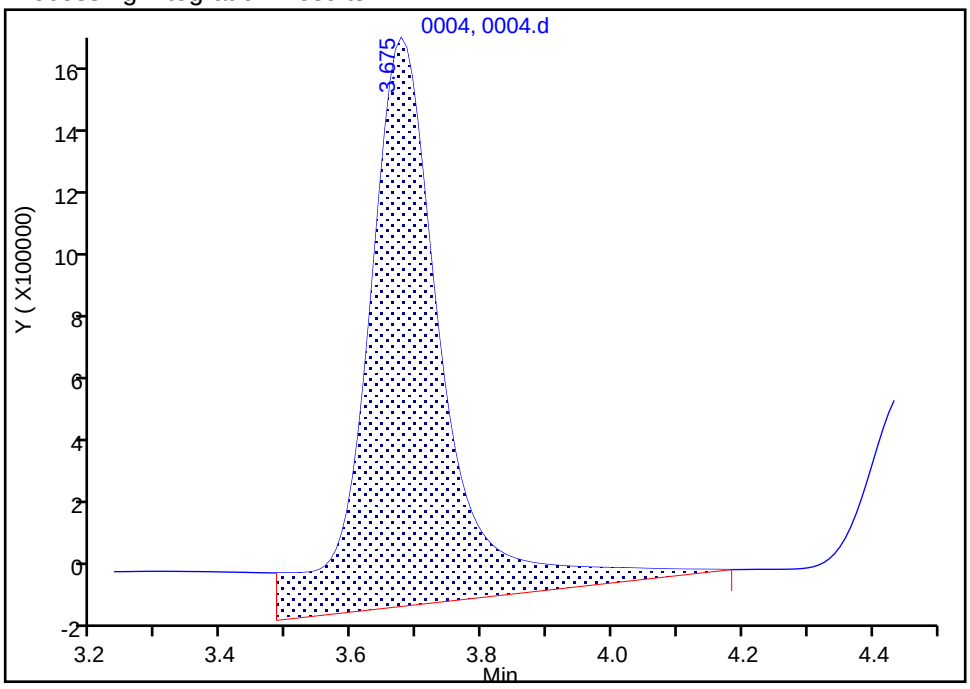
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0004.d				
Injection Date:	08-Mar-2022 14:13:00	Instrument ID:	WC_IonChrom11		
Lims ID:	std L1				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

2 Chloride, CAS: 16887-00-6

Signal: 1

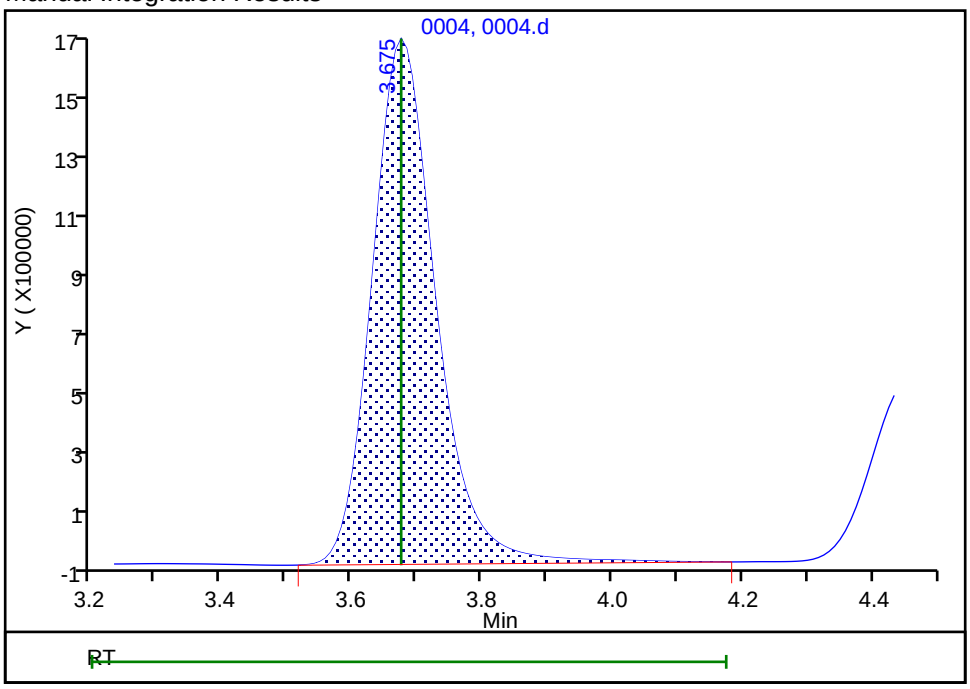
Processing Integration Results

RT: 3.68
Area: 14439673
Amount: 1.047151
Amount Units: ug/ml



Manual Integration Results

RT: 3.68
Area: 11341567
Amount: 1.323186
Amount Units: ug/ml



Reviewer: jindaratc, 08-Mar-2022 15:44:10
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

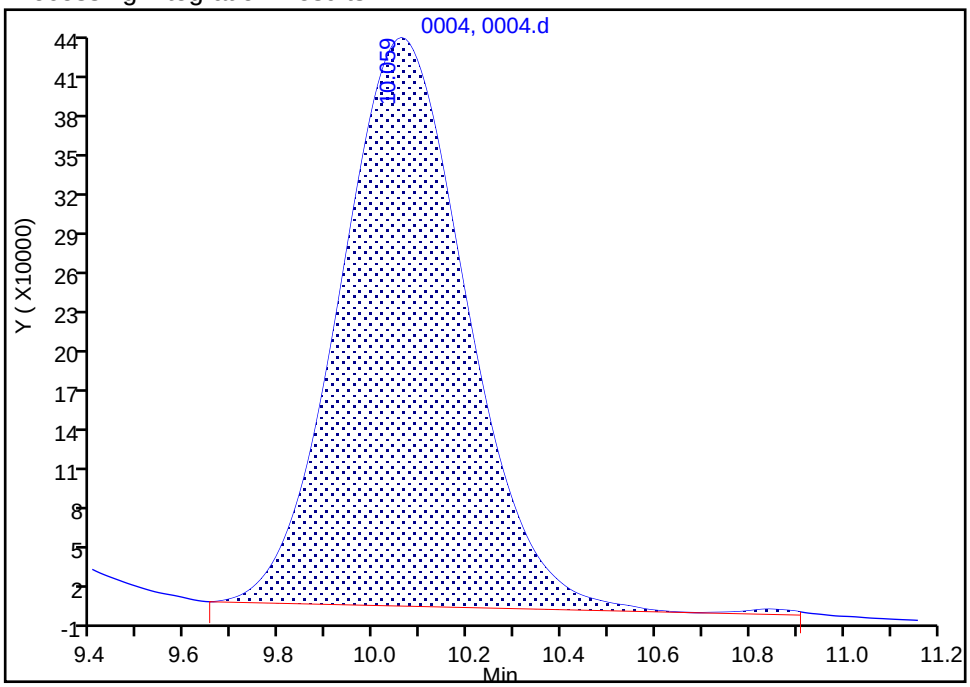
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0004.d		
Injection Date:	08-Mar-2022 14:13:00	Instrument ID:	WC_IonChrom11
Lims ID:	std L1		
Client ID:			
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 2
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D
Column:		Detector	0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

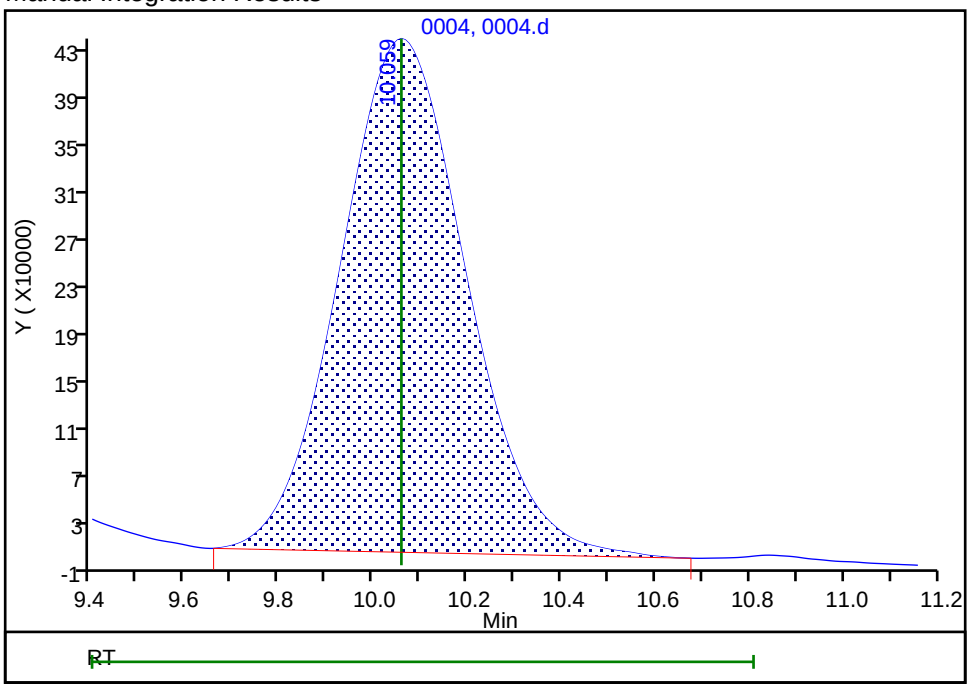
Processing Integration Results

RT: 10.06
Area: 8044694
Amount: 1.332642
Amount Units: ug/ml



Manual Integration Results

RT: 10.06
Area: 8014777
Amount: 1.334690
Amount Units: ug/ml



Reviewer: foxr, 09-Mar-2022 11:14:00
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0005.d
Lims ID: std L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 08-Mar-2022 14:29:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109076-003
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 09-Mar-2022 11:31:17 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1639

First Level Reviewer: jindaratc Date: 08-Mar-2022 15:44:31

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.525	2.525	0.000	7024294	0.5000	0.5652	M
2 Chloride	3.675	3.675	0.000	28064265	2.50	2.27	
3 Nitrite as N	4.450	4.450	0.000	12662706	NC	NC	M
4 Bromide	5.375	5.375	0.000	2392640	0.5000	0.5011	
5 Nitrate as N	6.059	6.059	0.000	13833916	NC	NC	M
7 Orthophosphate as P	9.192	9.192	0.000	3340262	NC	NC	
6 Sulfate	10.050	10.050	0.000	19383975	2.50	2.32	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

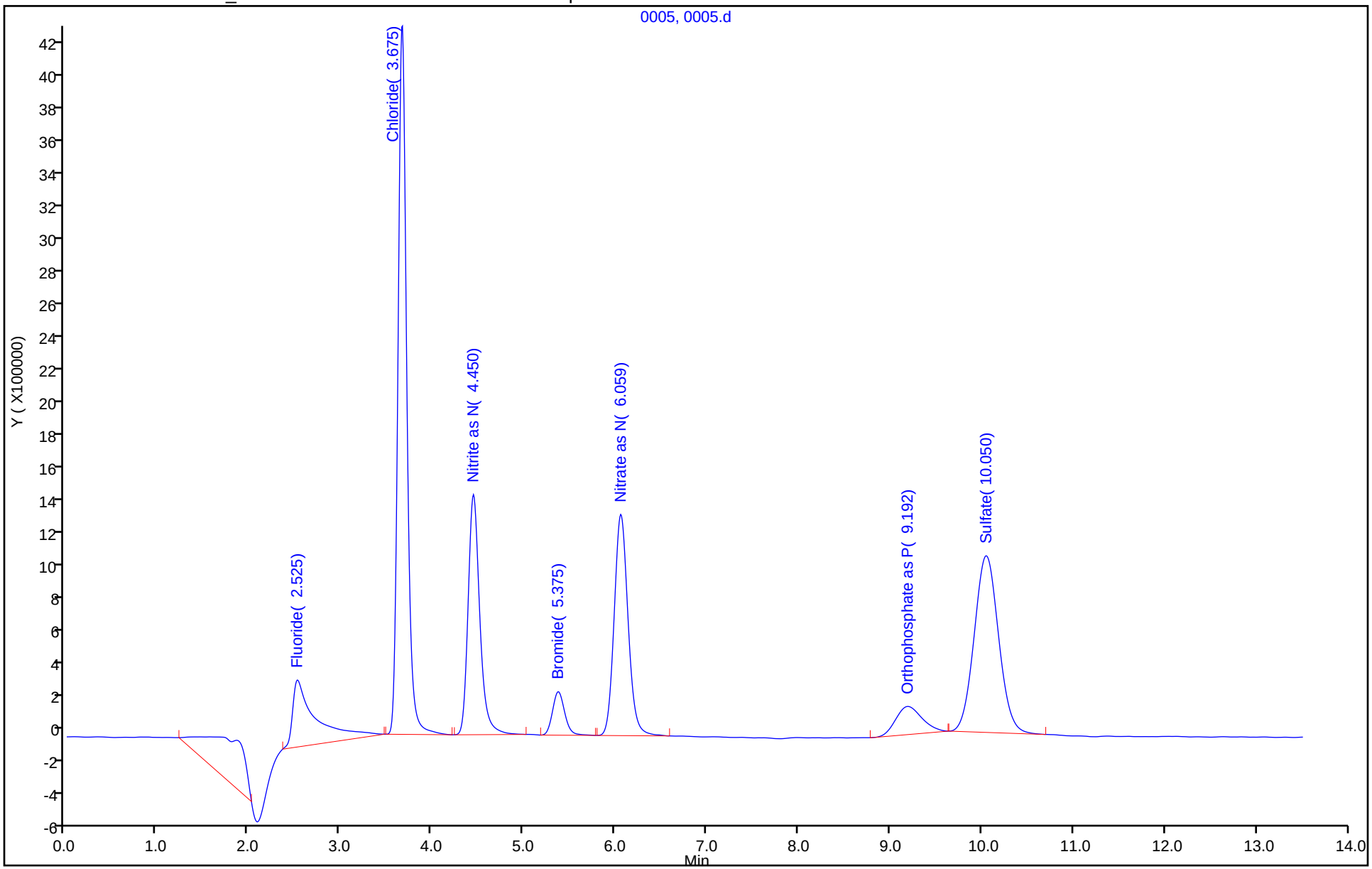
IC Cal low_00625 Amount Added: 0.05 Units: mL
IC CAL cl/so4_00409 Amount Added: 0.05 Units: mL

Report Date: 09-Mar-2022 11:31:17 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0005.d

Injection Date:	08-Mar-2022 14:29:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	std L2			Worklist Smp#:	3
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

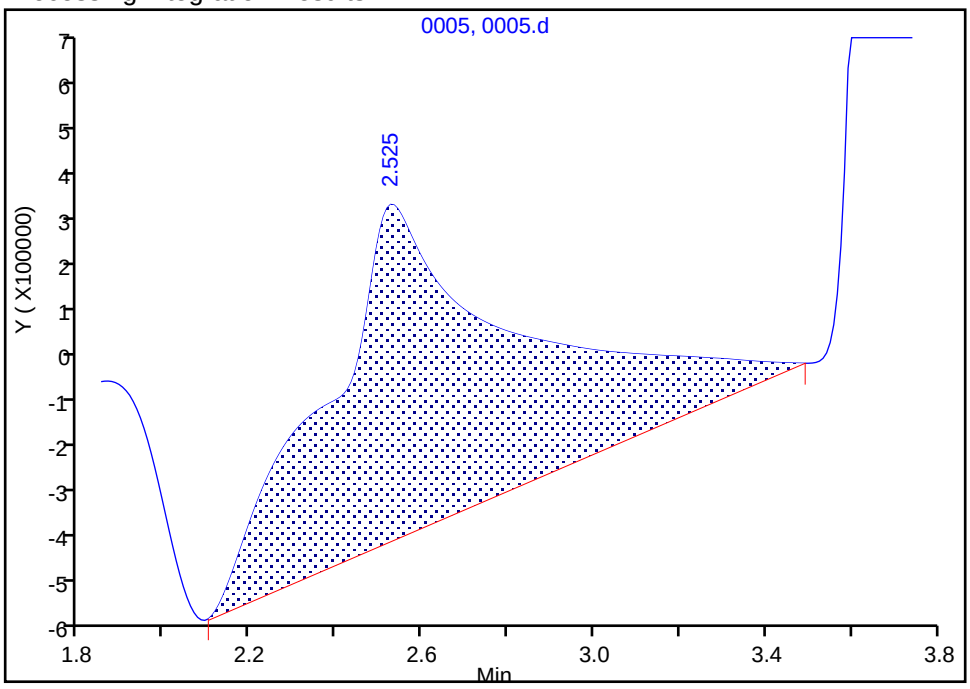
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0005.d
Injection Date: 08-Mar-2022 14:29:00 Instrument ID: WC_IonChrom11
Lims ID: std L2
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

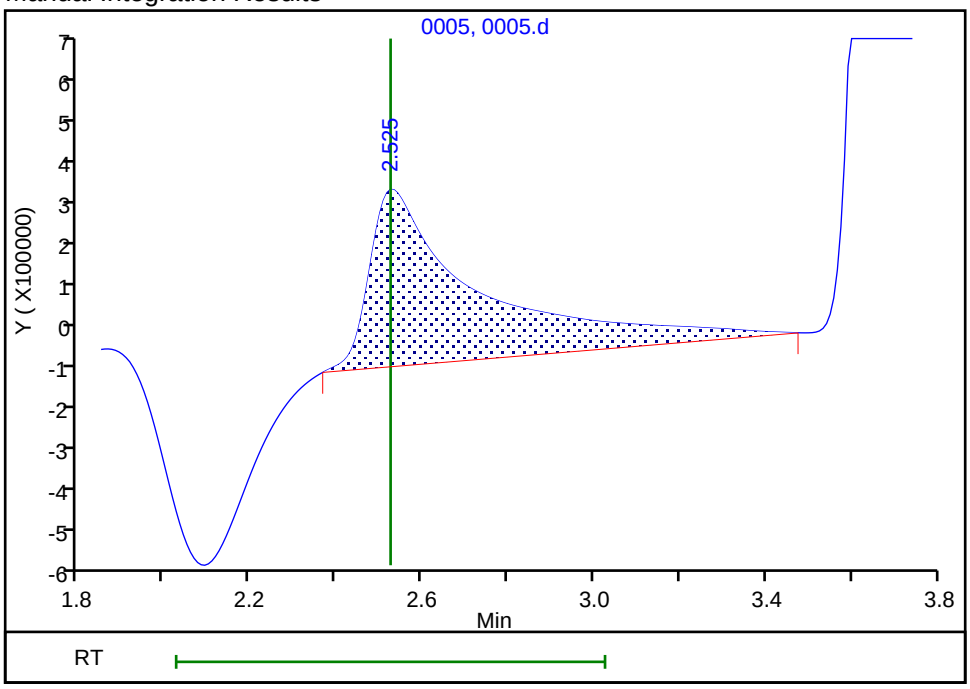
Processing Integration Results

RT: 2.53
Area: 21469742
Amount: 0.710501
Amount Units: ug/ml



Manual Integration Results

RT: 2.53
Area: 7024294
Amount: 0.565222
Amount Units: ug/ml



Reviewer: jindaratc, 08-Mar-2022 15:44:26
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

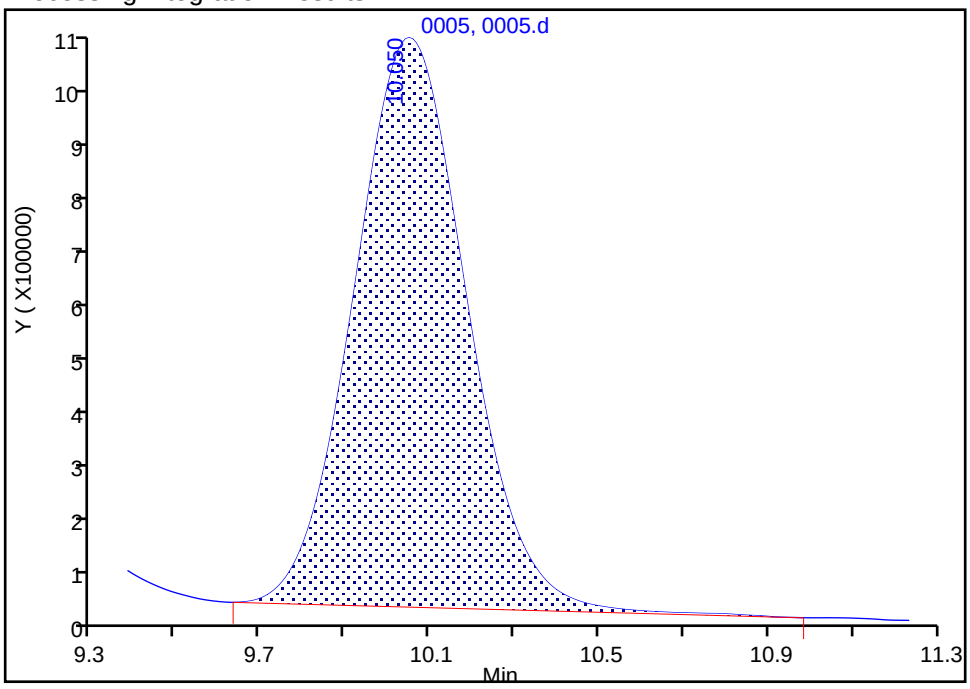
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0005.d				
Injection Date:	08-Mar-2022 14:29:00	Instrument ID:	WC_IonChrom11		
Lims ID:	std L2				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	3
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

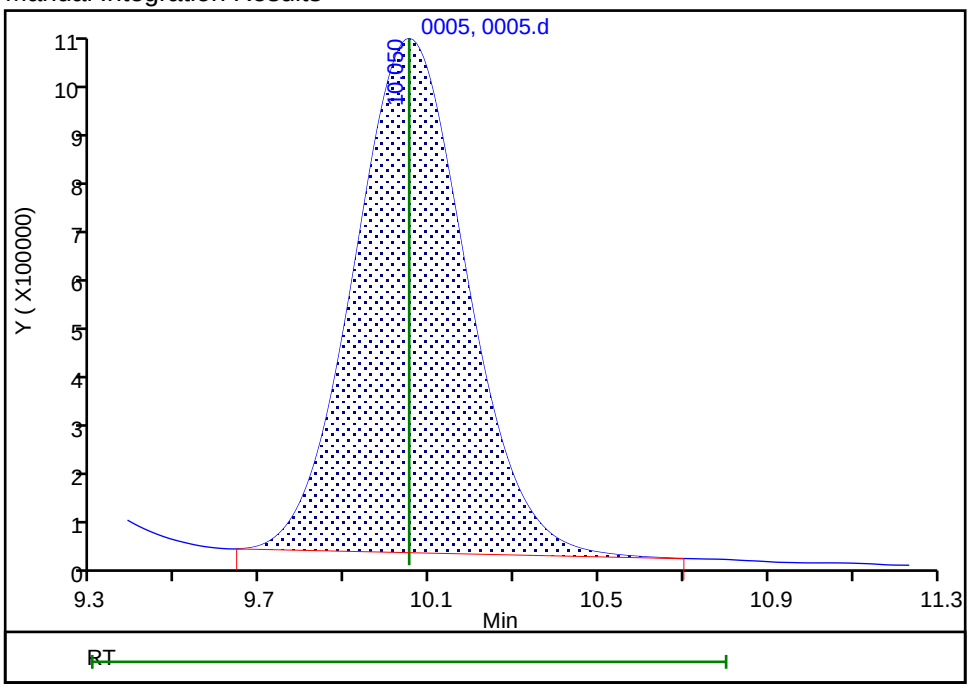
Processing Integration Results

RT: 10.05
Area: 19511199
Amount: 2.329131
Amount Units: ug/ml



Manual Integration Results

RT: 10.05
Area: 19383975
Amount: 2.321534
Amount Units: ug/ml



Reviewer: foxr, 09-Mar-2022 11:18:40
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0006.d
Lims ID: std L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 08-Mar-2022 14:46:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109076-004
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 09-Mar-2022 11:31:18 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1639

First Level Reviewer: jindaratc Date: 08-Mar-2022 15:44:47

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.534	2.534	0.000	13388194	1.00	1.03	M
2 Chloride	3.675	3.675	0.000	58563476	5.00	3.99	
3 Nitrite as N	4.459	4.459	0.000	25870651	NC	NC	M
4 Bromide	5.375	5.375	0.000	4606452	1.00	0.9428	M
5 Nitrate as N	6.059	6.059	0.000	28097540	NC	NC	M
7 Orthophosphate as P	9.192	9.192	0.000	7048847	NC	NC	
6 Sulfate	10.050	10.050	0.000	39343151	5.00	4.05	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

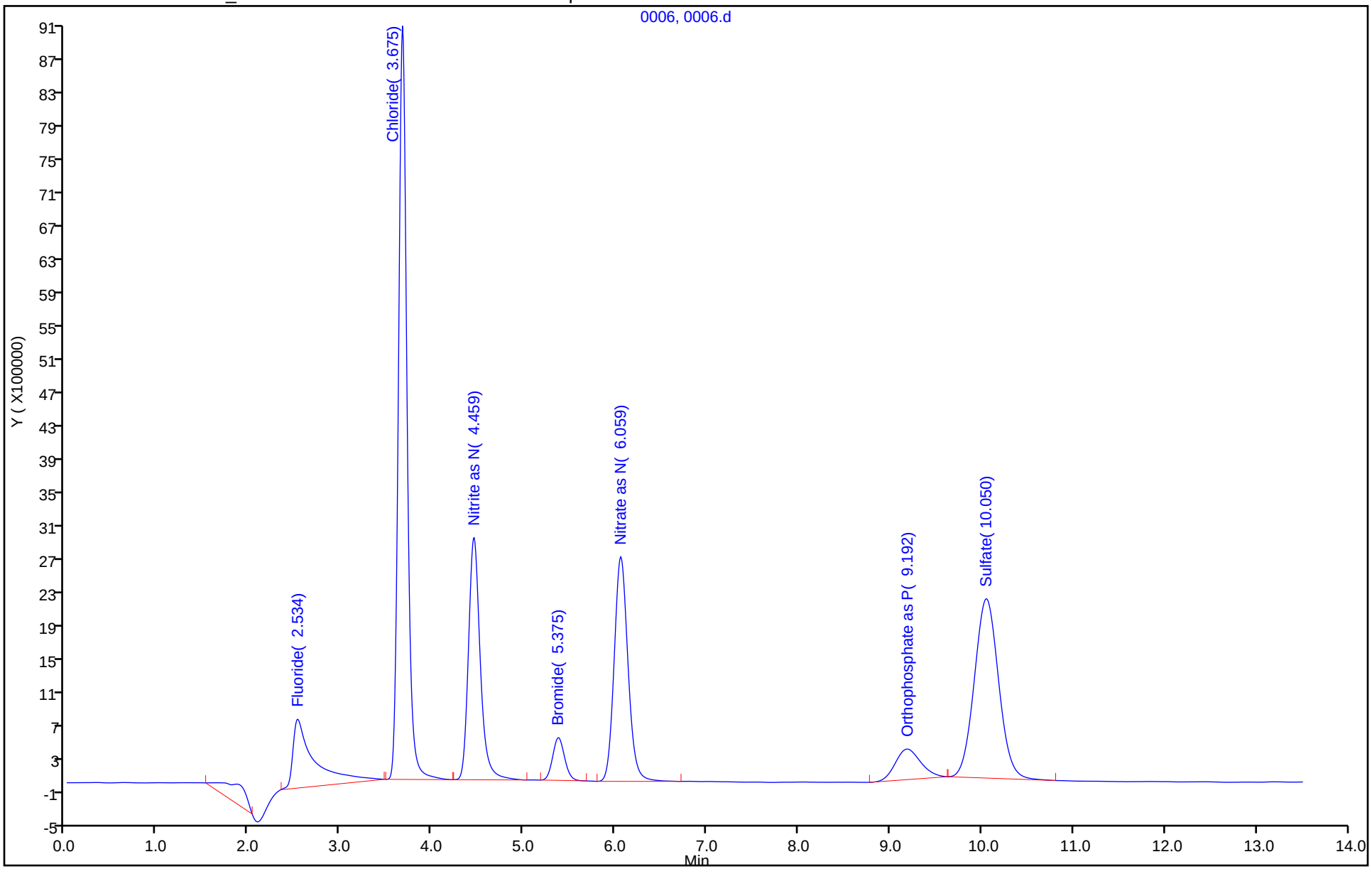
IC Cal low_00625 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00409 Amount Added: 0.10 Units: mL

Report Date: 09-Mar-2022 11:31:18 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0006.d

Injection Date:	08-Mar-2022 14:46:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	std L3			Worklist Smp#:	4
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

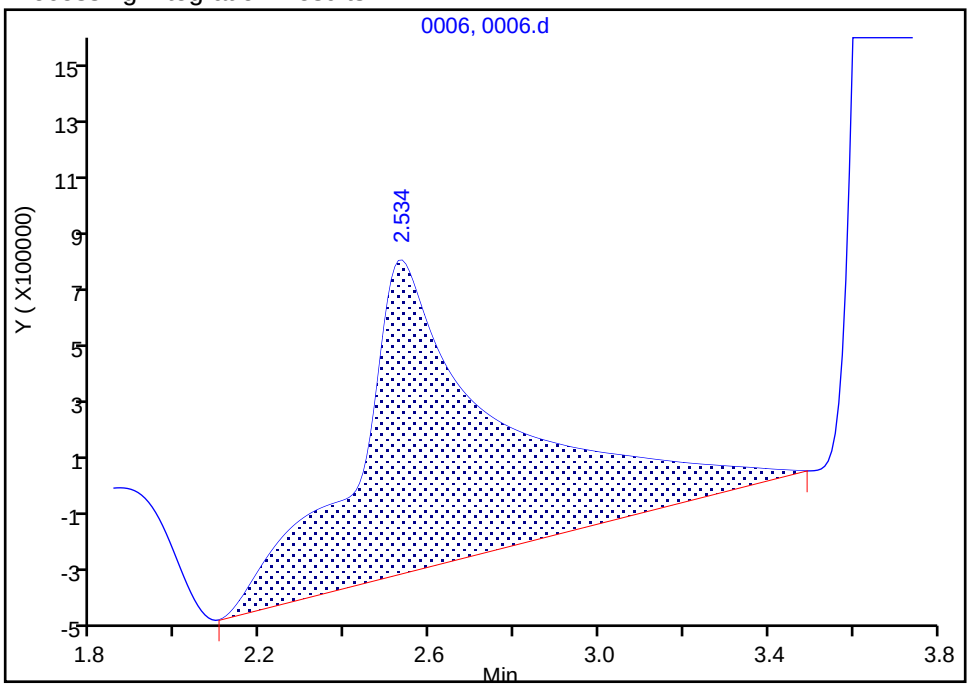
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0006.d
Injection Date: 08-Mar-2022 14:46:00 Instrument ID: WC_IonChrom11
Lims ID: std L3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

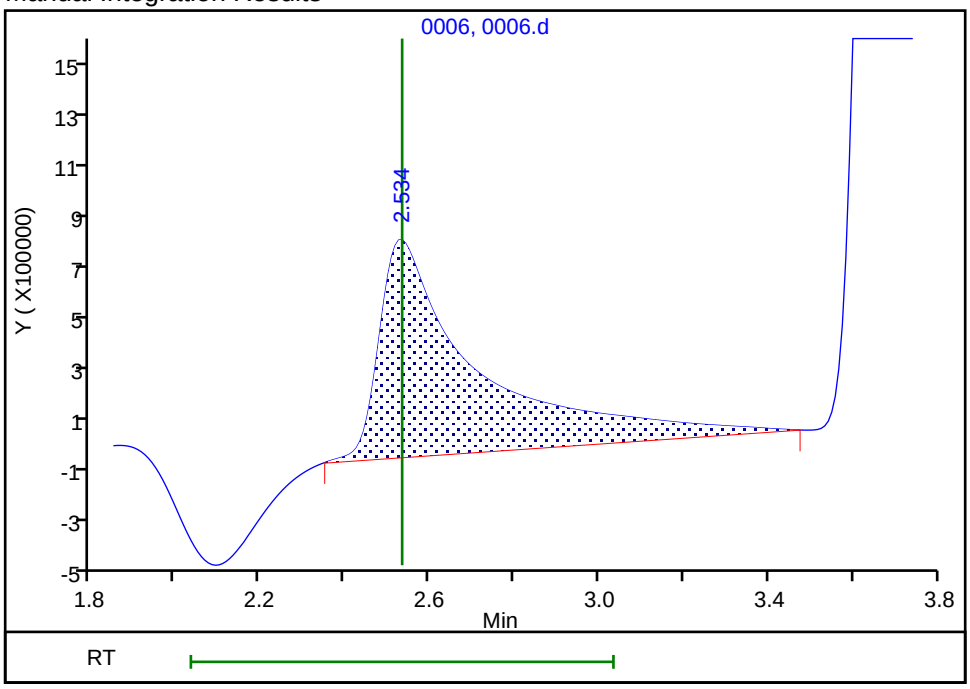
Processing Integration Results

RT: 2.53
Area: 25998570
Amount: 1.074827
Amount Units: ug/ml



Manual Integration Results

RT: 2.53
Area: 13388194
Amount: 1.025055
Amount Units: ug/ml



Reviewer: jindaratc, 08-Mar-2022 15:44:42
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

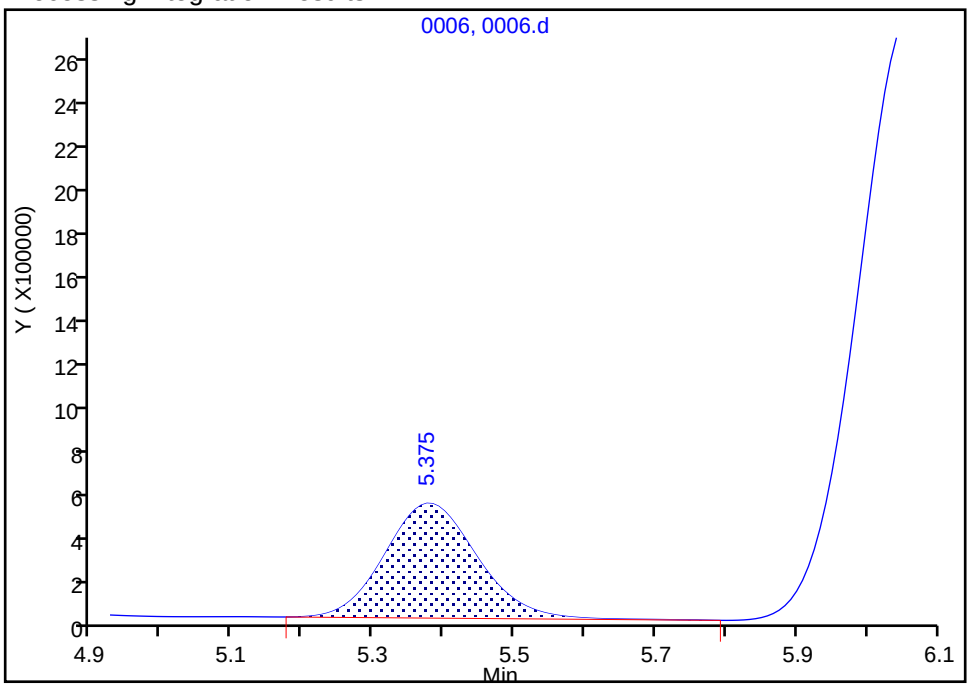
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0006.d				
Injection Date:	08-Mar-2022 14:46:00	Instrument ID:	WC_IonChrom11		
Lims ID:	std L3				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	4
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

4 Bromide, CAS: 24959-67-9

Signal: 1

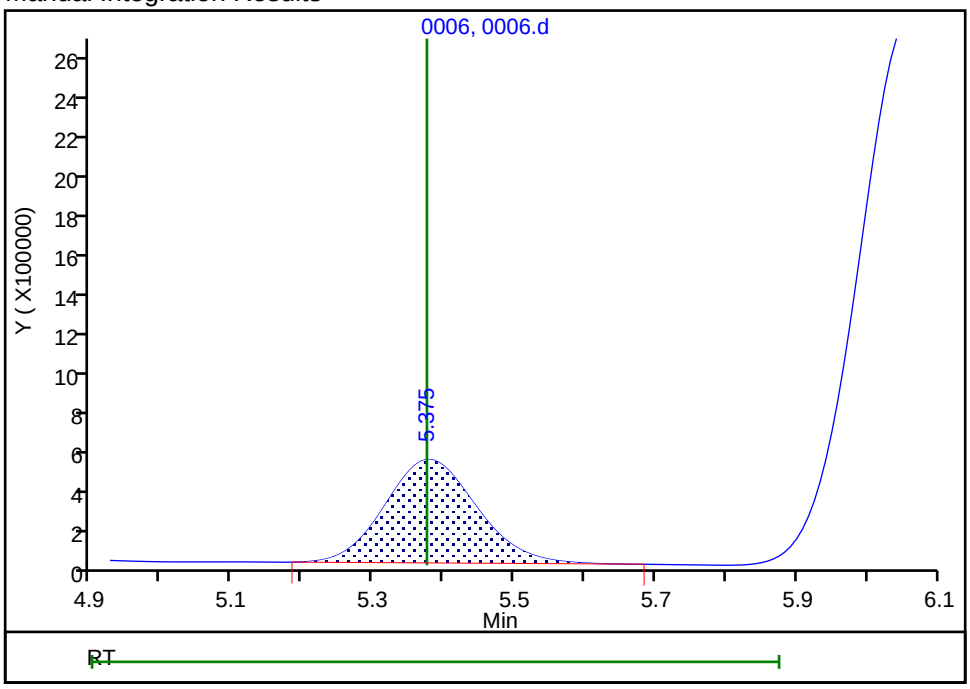
Processing Integration Results

RT: 5.38
Area: 4661697
Amount: 0.952475
Amount Units: ug/ml



Manual Integration Results

RT: 5.38
Area: 4606452
Amount: 0.942794
Amount Units: ug/ml



Reviewer: foxr, 09-Mar-2022 11:19:23
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

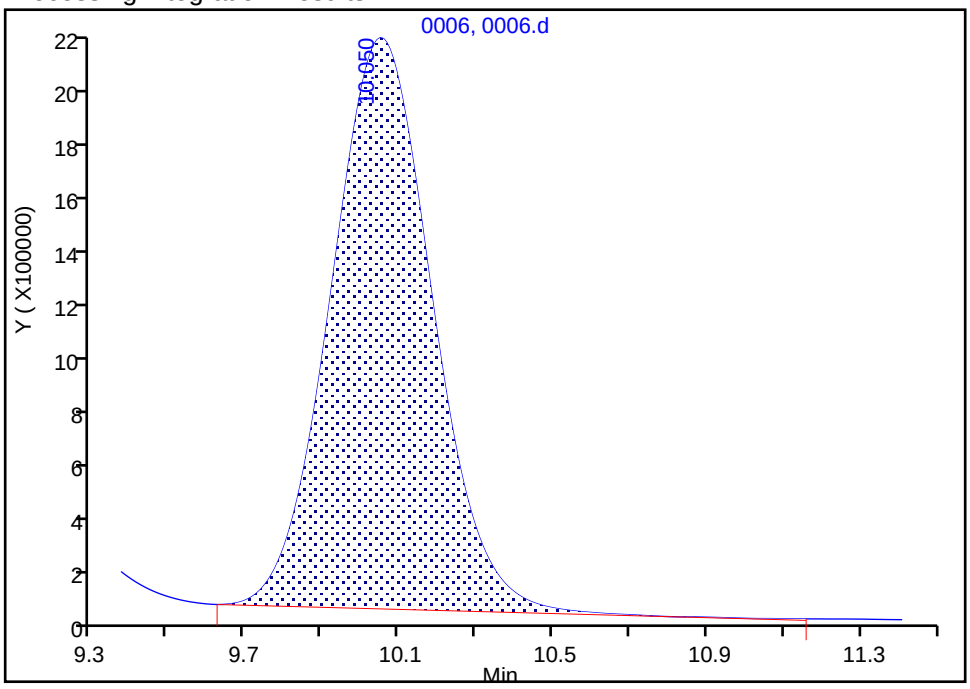
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0006.d				
Injection Date:	08-Mar-2022 14:46:00	Instrument ID:	WC_IonChrom11		
Lims ID:	std L3				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	4
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

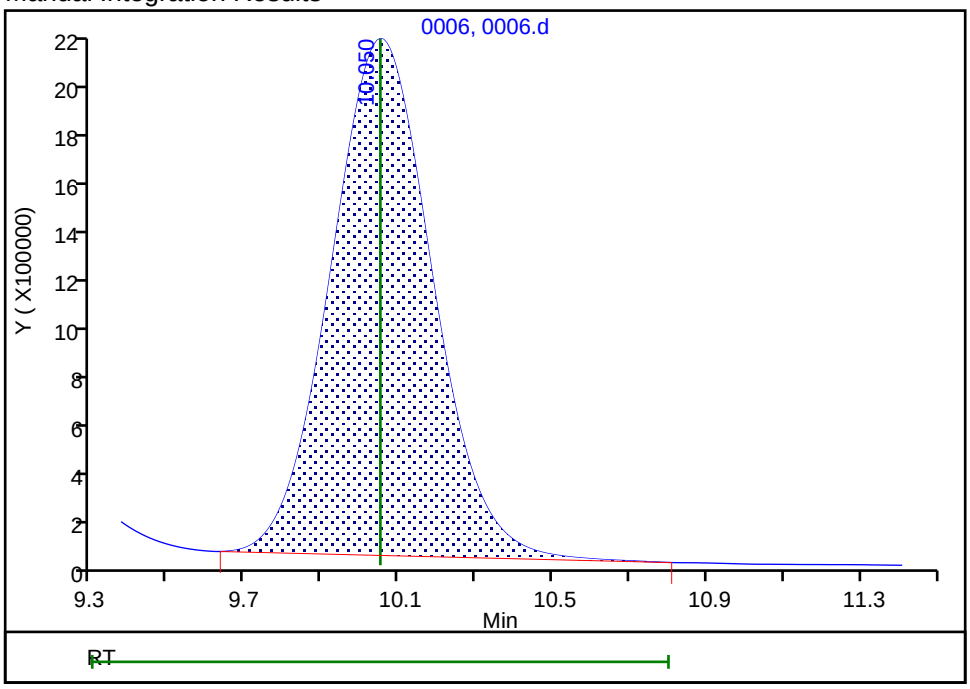
Processing Integration Results

RT: 10.05
Area: 39401244
Amount: 4.057525
Amount Units: ug/ml



Manual Integration Results

RT: 10.05
Area: 39343151
Amount: 4.053988
Amount Units: ug/ml



Reviewer: foxr, 09-Mar-2022 11:19:38
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0007.d
Lims ID: std L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 08-Mar-2022 15:02:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109076-005
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 09-Mar-2022 11:31:18 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1639

First Level Reviewer: foxr Date: 08-Mar-2022 16:01:22

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.534	2.534	0.000	51621142	4.00	3.79	M
2 Chloride	3.734	3.734	0.000	998570762	60.0	57.2	
3 Nitrite as N	4.475	4.475	0.000	112259404	NC	NC	
4 Bromide	5.375	5.375	0.000	19297450	4.00	3.87	
5 Nitrate as N	6.042	6.042	0.000	124364709	NC	NC	M
7 Orthophosphate as P	9.150	9.150	0.000	33293978	NC	NC	
6 Sulfate	10.109	10.109	0.000	612727524	60.0	53.8	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

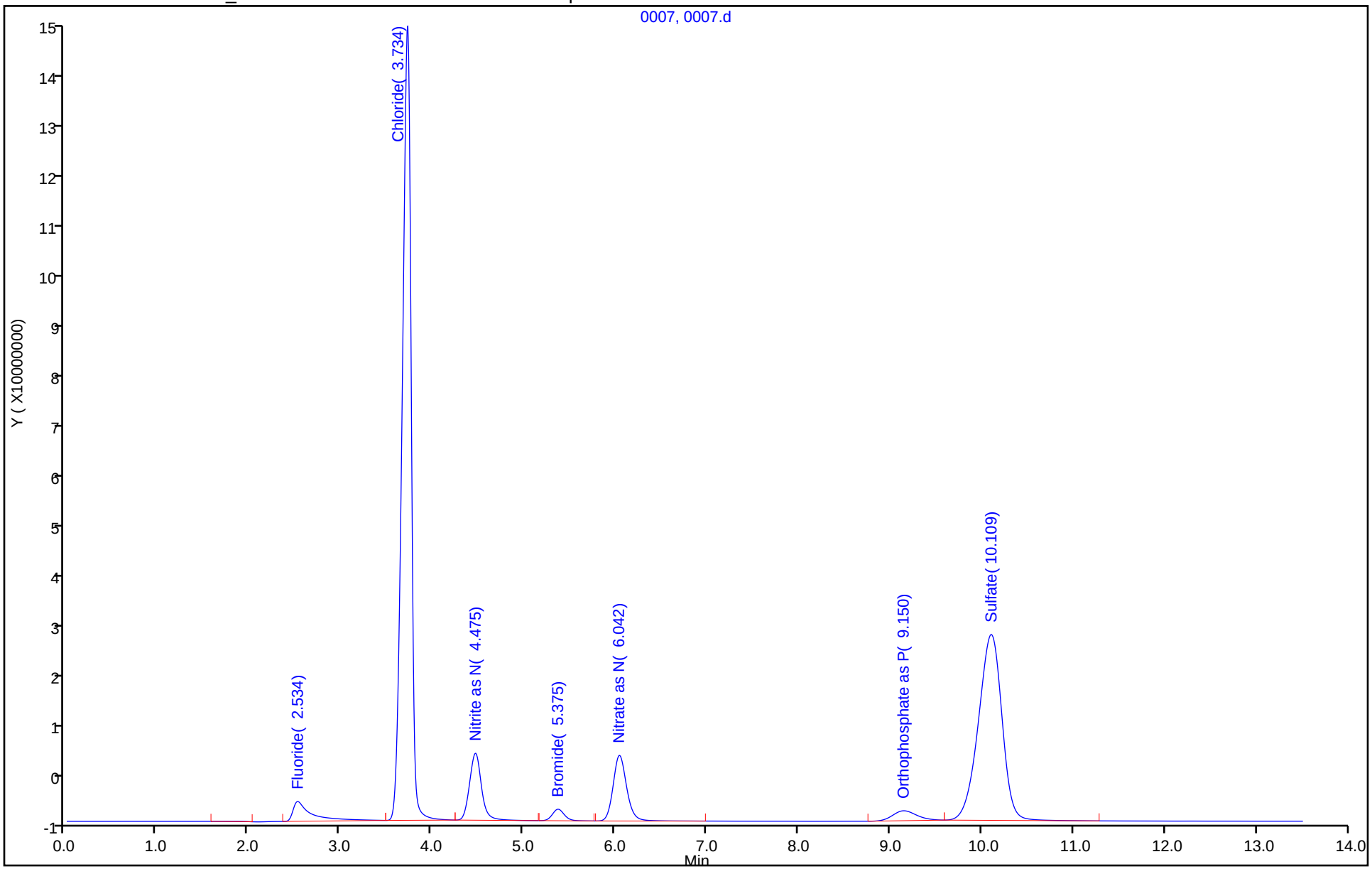
IC Cal low_00625 Amount Added: 0.40 Units: mL
IC CAL cl/so4_00409 Amount Added: 1.20 Units: mL

Report Date: 09-Mar-2022 11:31:18 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0007.d

Injection Date:	08-Mar-2022 15:02:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	std L4			Worklist Smp#:	5
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

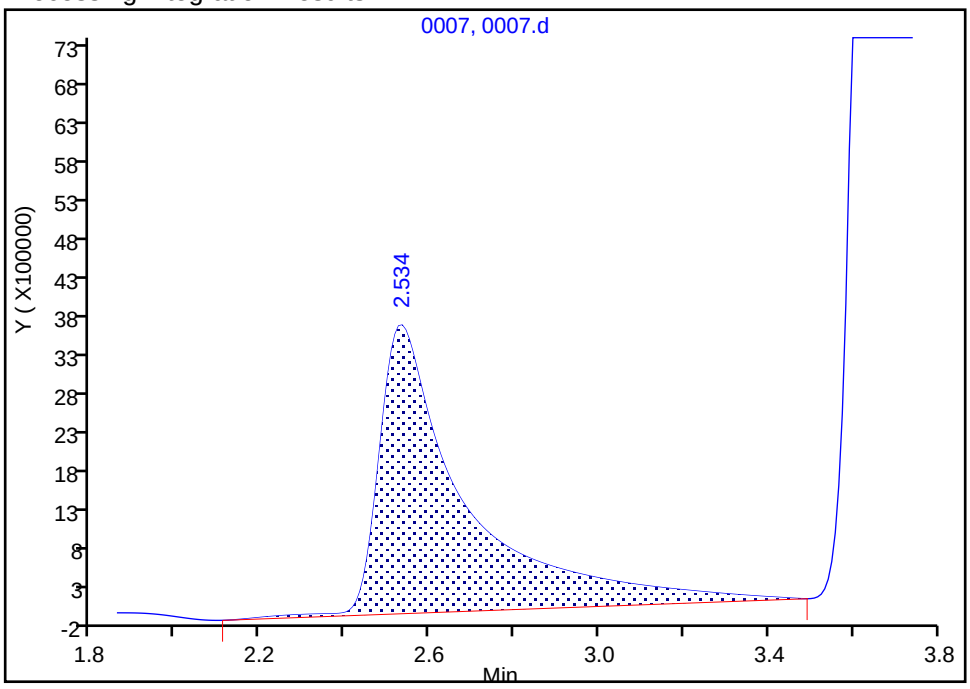
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0007.d
Injection Date: 08-Mar-2022 15:02:00 Instrument ID: WC_IonChrom11
Lims ID: std L4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

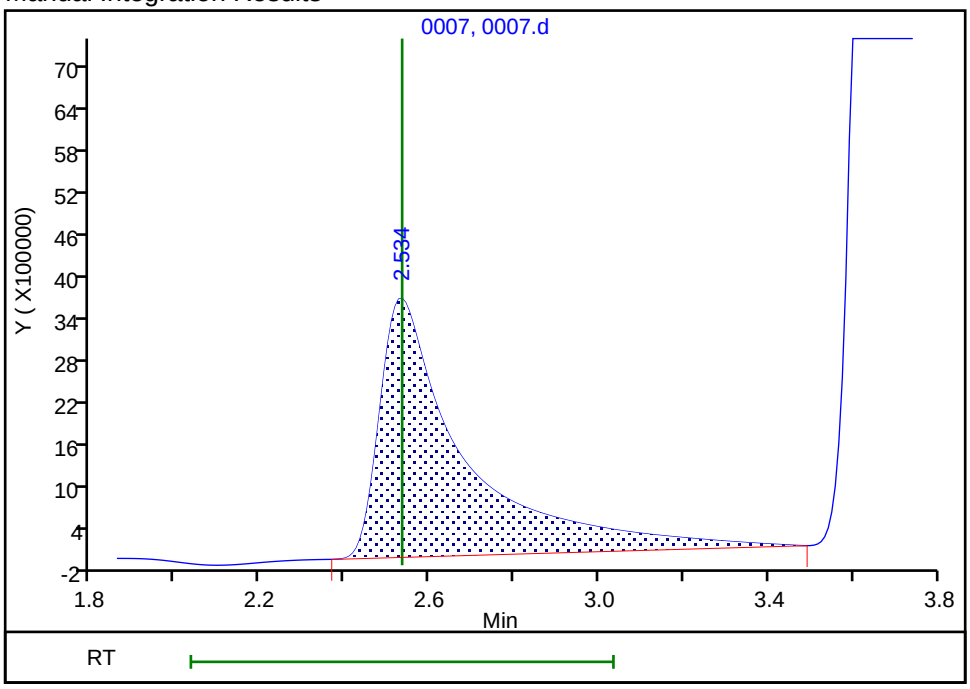
Processing Integration Results

RT: 2.53
Area: 53003247
Amount: 3.865466
Amount Units: ug/ml



Manual Integration Results

RT: 2.53
Area: 51621142
Amount: 3.787631
Amount Units: ug/ml



Reviewer: foxr, 08-Mar-2022 16:01:14
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins Denver

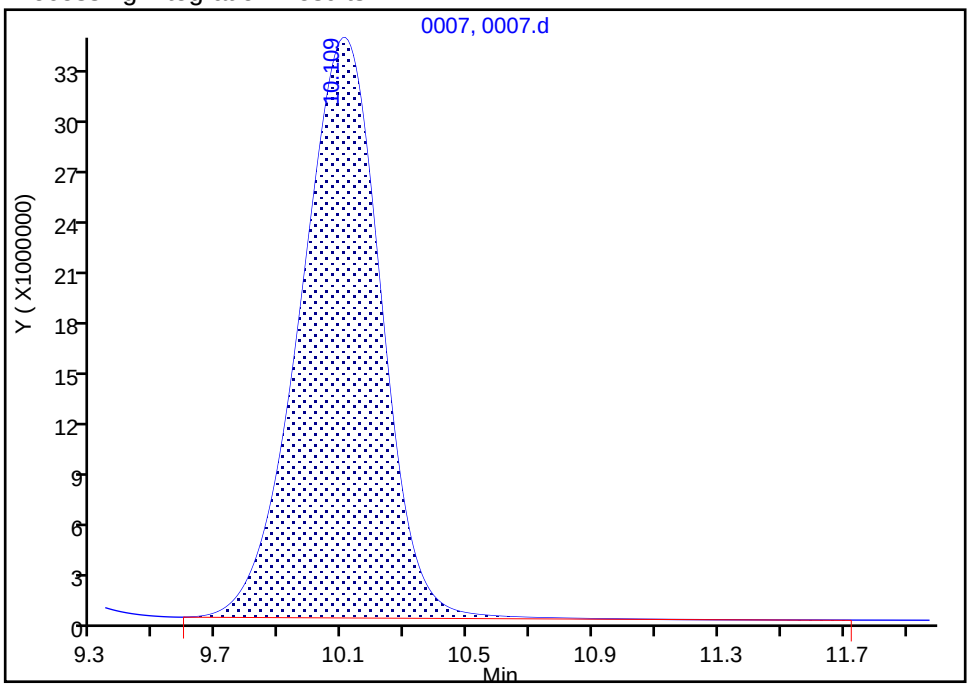
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0007.d
Injection Date: 08-Mar-2022 15:02:00 Instrument ID: WC_IonChrom11
Lims ID: std L4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

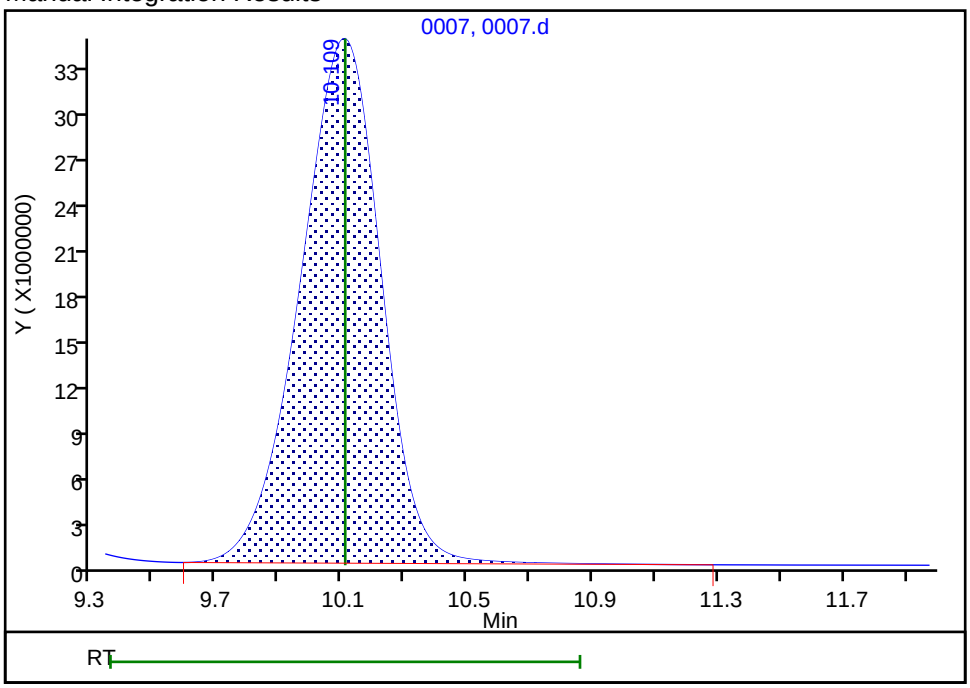
Processing Integration Results

RT: 10.11
Area: 612876229
Amount: 53.813182
Amount Units: ug/ml



Manual Integration Results

RT: 10.11
Area: 612727524
Amount: 53.823674
Amount Units: ug/ml



Reviewer: foxr, 09-Mar-2022 11:20:22
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0008.d
Lims ID: std L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 08-Mar-2022 15:19:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109076-006
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 09-Mar-2022 11:31:19 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1639

First Level Reviewer: foxr Date: 09-Mar-2022 11:21:07

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.534	2.534	0.000	109795474	8.00	7.99	
2 Chloride	3.775	3.775	0.000	2103914382	120.0	119.7	
3 Nitrite as N	4.492	4.492	0.000	238601878	NC	NC	
4 Bromide	5.367	5.367	0.000	40085540	8.00	8.02	
5 Nitrate as N	6.025	6.025	0.000	275281788	NC	NC	M
7 Orthophosphate as P	9.117	9.117	0.000	75213800	NC	NC	
6 Sulfate	10.167	10.167	0.000	1354416160	120.0	118.2	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

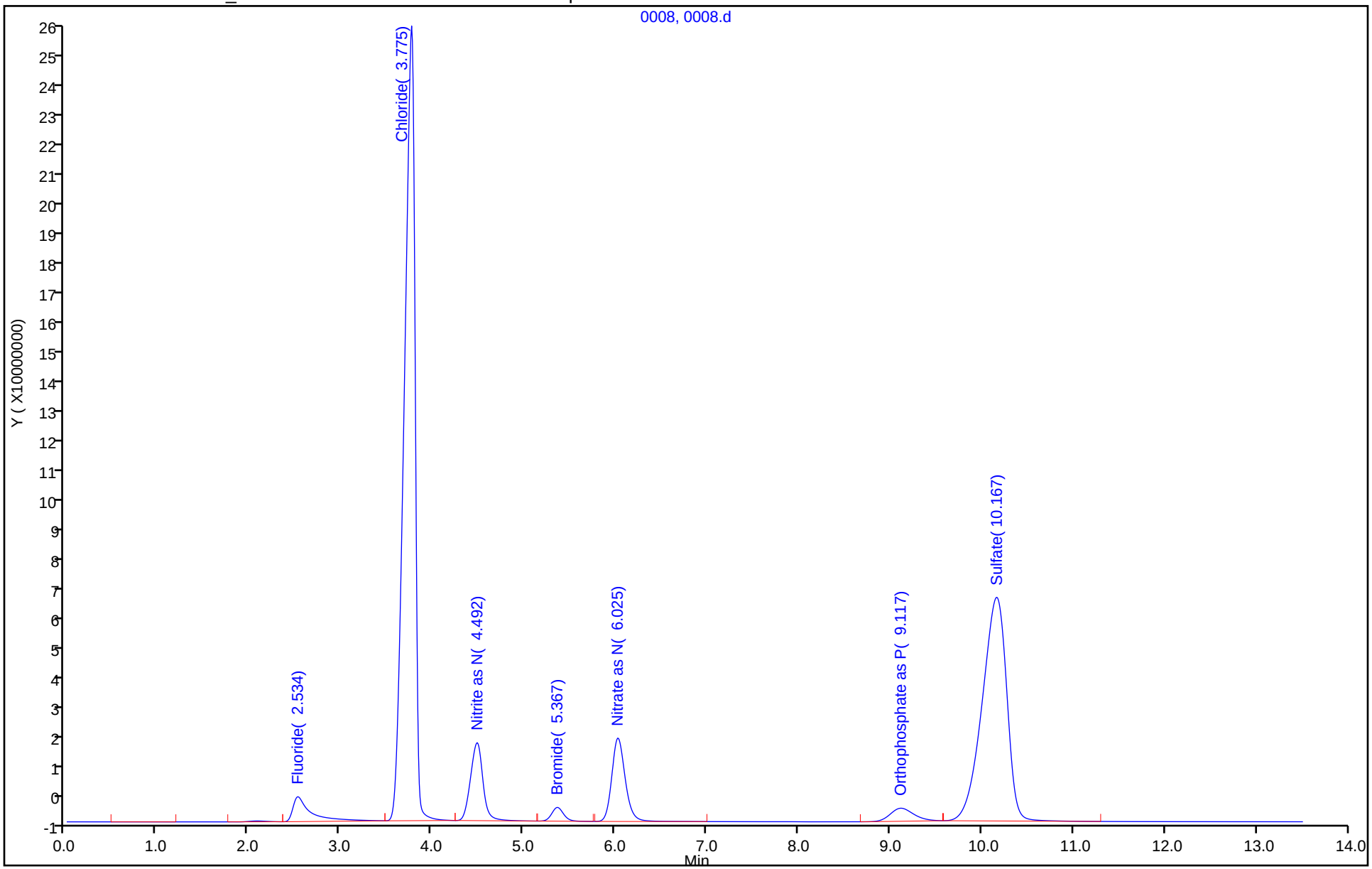
IC Cal low_00625 Amount Added: 0.80 Units: mL
IC CAL cl/so4_00409 Amount Added: 2.40 Units: mL

Report Date: 09-Mar-2022 11:31:19 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0008.d

Injection Date:	08-Mar-2022 15:19:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	std L5			Worklist Smp#:	6
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

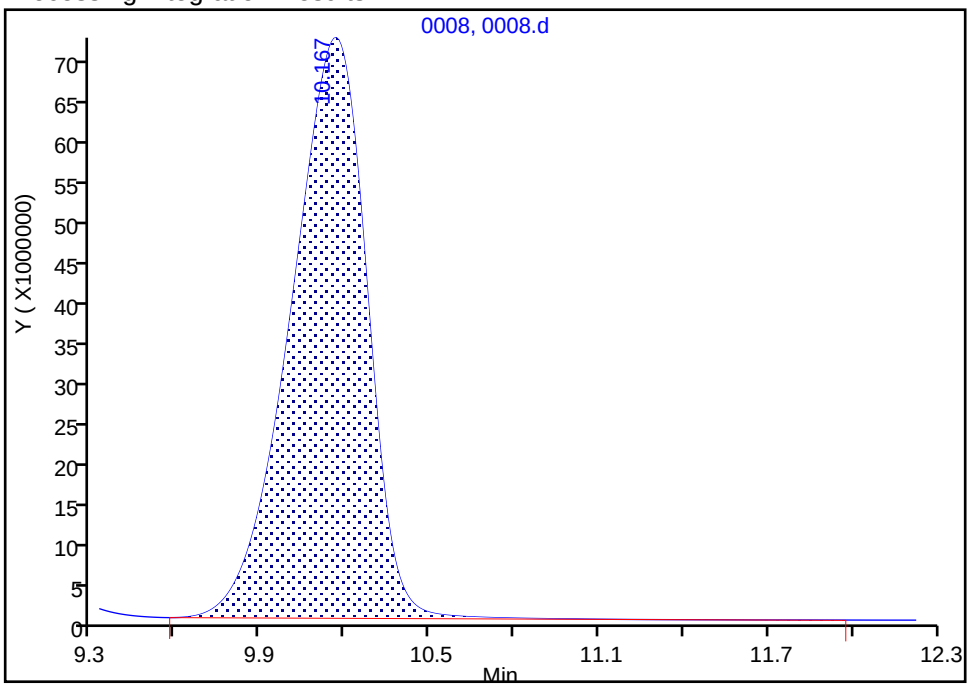
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0008.d
Injection Date: 08-Mar-2022 15:19:00 Instrument ID: WC_IonChrom11
Lims ID: std L5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

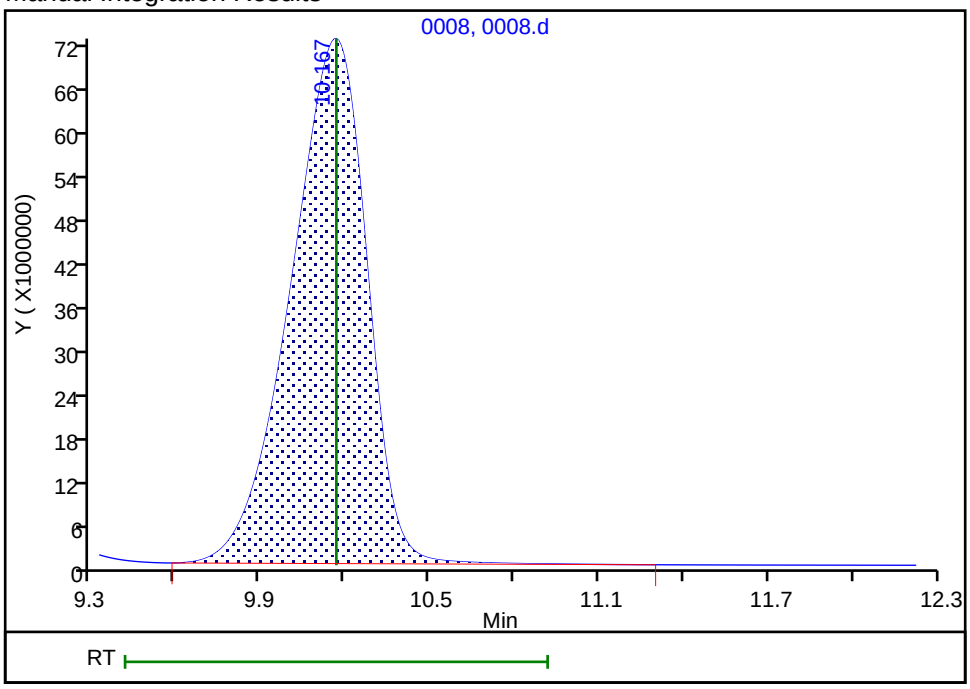
Processing Integration Results

RT: 10.17
Area: 1354987494
Amount: 118.2031
Amount Units: ug/ml



Manual Integration Results

RT: 10.17
Area: 1354416160
Amount: 118.2021
Amount Units: ug/ml



Reviewer: foxr, 09-Mar-2022 11:21:03
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d
Lims ID: std L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 08-Mar-2022 15:35:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109076-007
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 09-Mar-2022 11:31:19 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1639

First Level Reviewer: foxr Date: 09-Mar-2022 11:21:53

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.534	2.534	0.000	139733828	10.0	10.2	
2 Chloride	3.825	3.825	0.000	3595975763	200.0	204.1	
3 Nitrite as N	4.500	4.500	0.000	304414034	NC	NC	
4 Bromide	5.367	5.367	0.000	50747249	10.0	10.1	
5 Nitrate as N	6.025	6.025	0.000	354275020	NC	NC	M
7 Orthophosphate as P	9.109	9.109	0.000	97428311	NC	NC	M
6 Sulfate	10.242	10.242	0.000	2397756746	200.0	208.8	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

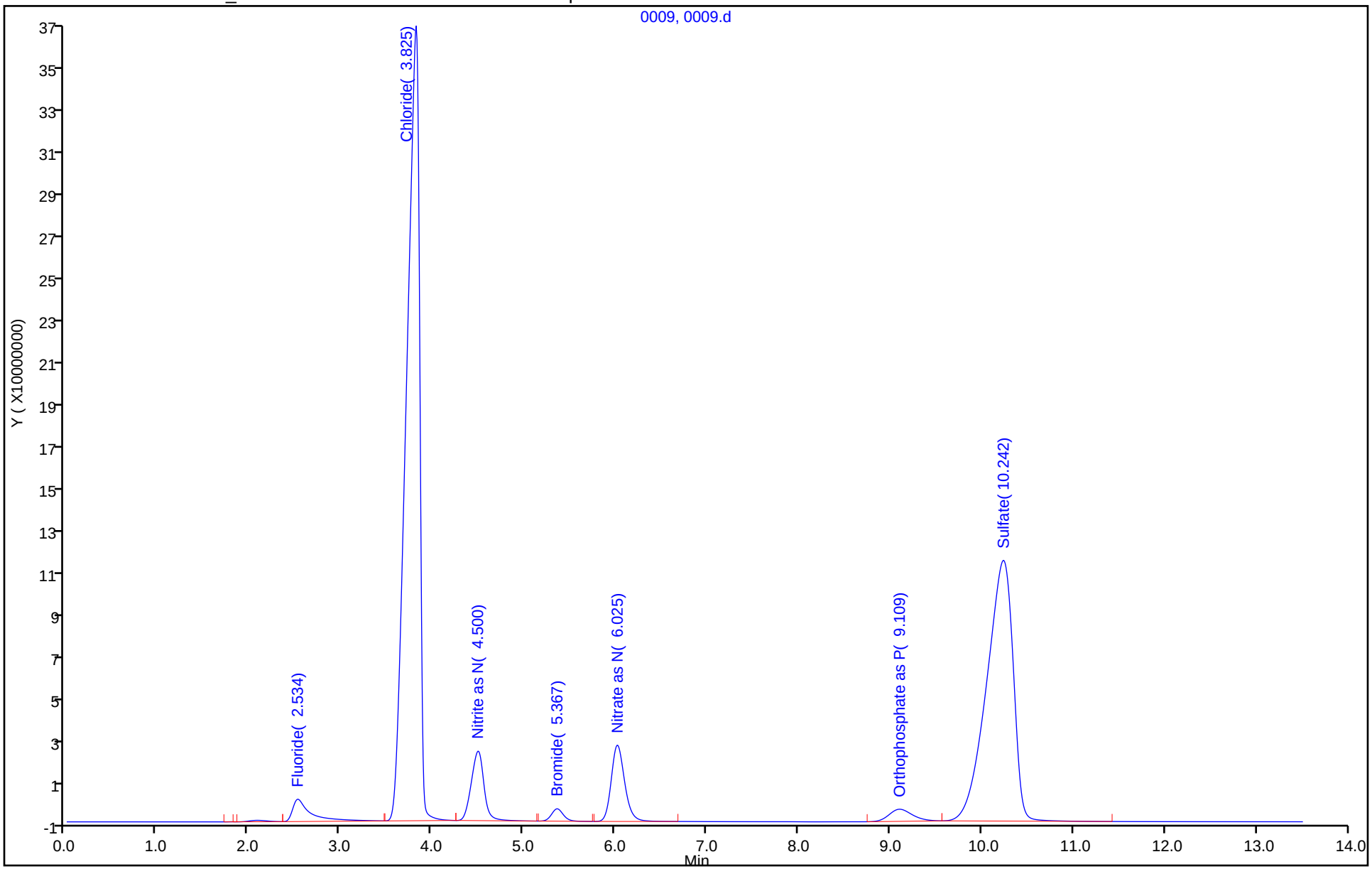
IC Cal low_00625 Amount Added: 1.00 Units: mL
IC CAL cl/so4_00409 Amount Added: 4.00 Units: mL

Report Date: 09-Mar-2022 11:31:19 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Injection Date:	08-Mar-2022 15:35:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	std L6			Worklist Smp#:	7
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

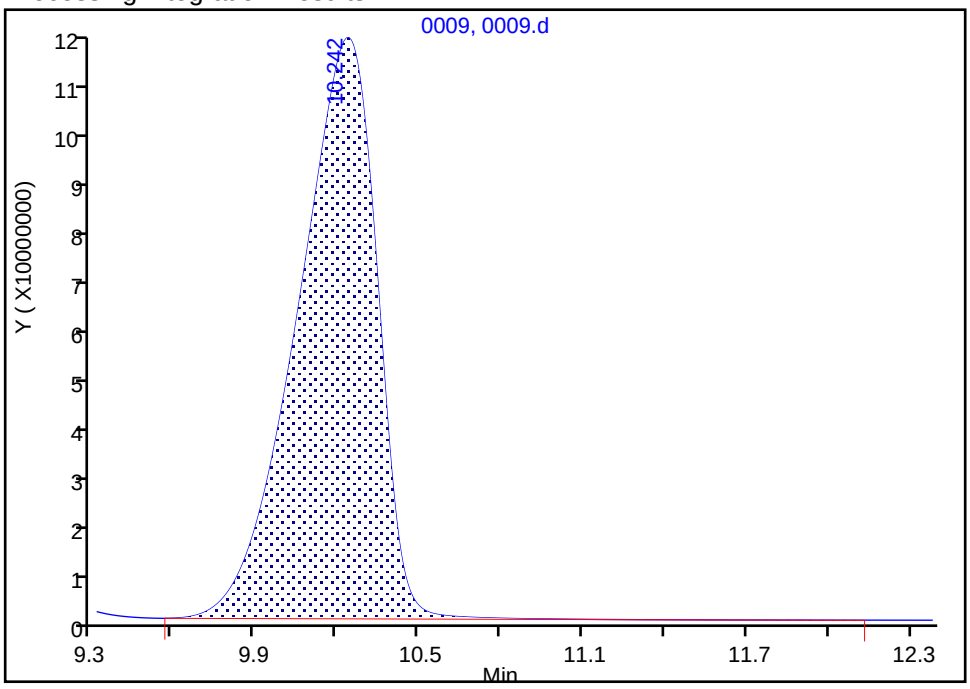
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d				
Injection Date:	08-Mar-2022 15:35:00	Instrument ID:	WC_IonChrom11		
Lims ID:	std L6				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	7
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

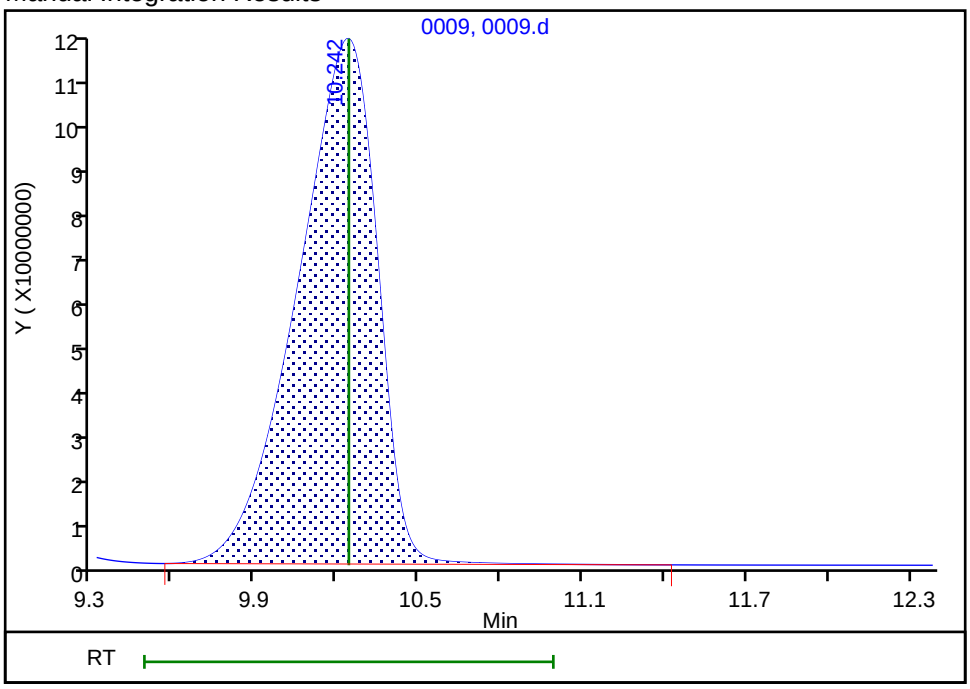
Processing Integration Results

RT: 10.24
Area: 2398996237
Amount: 208.8121
Amount Units: ug/ml



Manual Integration Results

RT: 10.24
Area: 2397756746
Amount: 208.7640
Amount Units: ug/ml



Reviewer: foxr, 09-Mar-2022 11:21:42

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

IC Instrument Information

WL: 109076 **Inst ID:** IC11 **Analysis Date:** 3-08-22 **Analyst:** RF

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	158860	3	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	158895	2	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	158899	3	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	158900	2	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	159346	3	F (Cl) NO2 Br NO3 PO4 SO4	MS/D	
☐	159155	1	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	157444	1	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
860	2	F (Cl) NO2 Br NO3 PO4 (SO4)	10X	test strip
895	2	F (Cl) NO2 Br NO3 PO4 (SO4)	5X 20X	test strip
899	2	F (Cl) NO2 Br NO3 PO4 (SO4)	10X 20X	test strip
900	2	F (Cl) NO2 Br NO3 PO4 (SO4)	5X 20X	test strip
346	3	F (Cl) NO2 Br NO3 PO4 SO4	5X	test strip
155	1	F Cl NO2 Br NO3 PO4 (SO4)	5X	RERUN
444	1	F Cl NO2 Br NO3 PO4 (SO4)	10X	test strip
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		

Eurofins Environment Testing America
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	09-Mar-2022 11:32:17

No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b
Inj Date : 08-Mar-2022 14:13:00, Sublist: chrom-Anions_IC11*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-798158	138396(		0.999
2 Chloride					-120525'	176801(		1.000
3 Nitrite as N	-171601'	2992402		0.999				
4 Bromide					-119376	5012575		1.000
5 Nitrate as N	-254783.	3446589		0.998				
7 Orthophosphate as P	-938543	9427828		0.995				
6 Sulfate					-736185(	1152075		0.996

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	09-Mar-2022 11:32:17

No.Compounds:7
Sublist: chrom-Anions_IC11*sub1
Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0004.d		
	Inj Date: 08-Mar-2022 14:13:00	Worklist: 109076	Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0005.d		
	Inj Date: 08-Mar-2022 14:29:00	Worklist: 109076	Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0006.d		
	Inj Date: 08-Mar-2022 14:46:00	Worklist: 109076	Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0007.d		
	Inj Date: 08-Mar-2022 15:02:00	Worklist: 109076	Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0008.d		
	Inj Date: 08-Mar-2022 15:19:00	Worklist: 109076	Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d		
	Inj Date: 08-Mar-2022 15:35:00	Worklist: 109076	Sample#: 7

Start Cal Date: 08-Mar-2022 13:57:00 End Cal Date: 08-Mar-2022 15:35:00

Individual Compound Calibration Parameters

Quant Method: ESTD	RF Calibration: Replace	
Rule Name: Linear1	Curve: Linear	Weighting: Conc
Origin: None	Error: raw_COD	Error Limit: 1.00
RF %Dif: 0.0	SPCC Limit: 0.0	CCC Limit: 0.0
Dependent Variable: Resp		

Number of Compounds: 3

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
3 Nitrite as N				Signal: 1					
25473365	25325412	25870651	28064851	29825235	30441403	-1716017			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		29924027		
M5094673	M12662706	M25870651	112259404	238601878	304414034				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				
5 Nitrate as N				Signal: 1					
Error: CorrCoef									
28508190	27667832	28097540	31091177	34410224	35427502	-2547832			0.998
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		34465890		
M5701638	M13833916	M28097540	M124364709	M275281788	M354275020				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				
7 Orthophosphate as P				Signal: 1					
7415400	6680524	7048847	8323495	9401725	9742831	-938543			0.995
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		9427828		
1483080	3340262	7048847	33293978	75213800	M97428311				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	09-Mar-2022 11:32:17

No.Compounds:7
Sublist: chrom-Anions_IC11*sub1
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0004.d		
	Inj Date: 08-Mar-2022 14:13:00	Worklist: 109076	Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0005.d		
	Inj Date: 08-Mar-2022 14:29:00	Worklist: 109076	Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0006.d		
	Inj Date: 08-Mar-2022 14:46:00	Worklist: 109076	Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0007.d		
	Inj Date: 08-Mar-2022 15:02:00	Worklist: 109076	Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0008.d		
	Inj Date: 08-Mar-2022 15:19:00	Worklist: 109076	Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d		
	Inj Date: 08-Mar-2022 15:35:00	Worklist: 109076	Sample#: 7

Start Cal Date: 08-Mar-2022 13:57:00 End Cal Date: 08-Mar-2022 15:35:00

Individual Compound Calibration Parameters

Quant Method: ESTD	RF Calibration: Replace	
Rule Name: Linear1	Curve: Linear	Weighting: Conc
Origin: None	Error: CorrCoef	Error Limit: 1.00
RF %Dif: 0.0	SPCC Limit: 0.0	CCC Limit: 0.0
Dependent Variable: Resp		

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
Error: raw_COD									
8233330	14048588	13388194	12905286	13724434	13973383	-798158			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		13839601		
M1646666	M7024294	M13388194	M51621142	109795474	139733828				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				
2 Chloride				Signal: 1					
11341567	11225706	11712695	16642846	17532620	17979879	-12052578			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		17680169		
M11341567	28064265	58563476	998570762	2103914382	3595975763				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				
4 Bromide				Signal: 1					
4762230	4785280	4606452	4824363	5010693	5074725	-119376			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		5012575		
952446	2392640	M4606452	19297450	40085540	50747249				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				
6 Sulfate				Signal: 1					
Error: raw_COD									
8014777	7753590	7868630	10212125	11286801	11988784	-7361856			0.996
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		11520755		
M8014777	M19383975	M39343151	M612727524	M1354416160	M2397756746				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0010.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 08-Mar-2022 15:51:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109076-008
Misc. Info.: 10
Operator ID: Instrument ID: WC_IonChrom11
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 09-Mar-2022 12:41:24 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1639

First Level Reviewer: foxr Date: 08-Mar-2022 16:13:58

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.534	2.534	0.000	51012589	4.00	3.74	
2 Chloride	3.750	3.750	0.000	1443605729	80.0	82.3	
3 Nitrite as N	4.475	4.475	0.000	112277946	NC	NC	
4 Bromide	5.375	5.375	0.000	19912278	4.00	4.00	
5 Nitrate as N	6.042	6.042	0.000	128038278	NC	NC	M
7 Orthophosphate as P	9.150	9.150	0.000	33508065	NC	NC	M
6 Sulfate	10.134	10.134	0.000	917570809	80.0	80.3	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

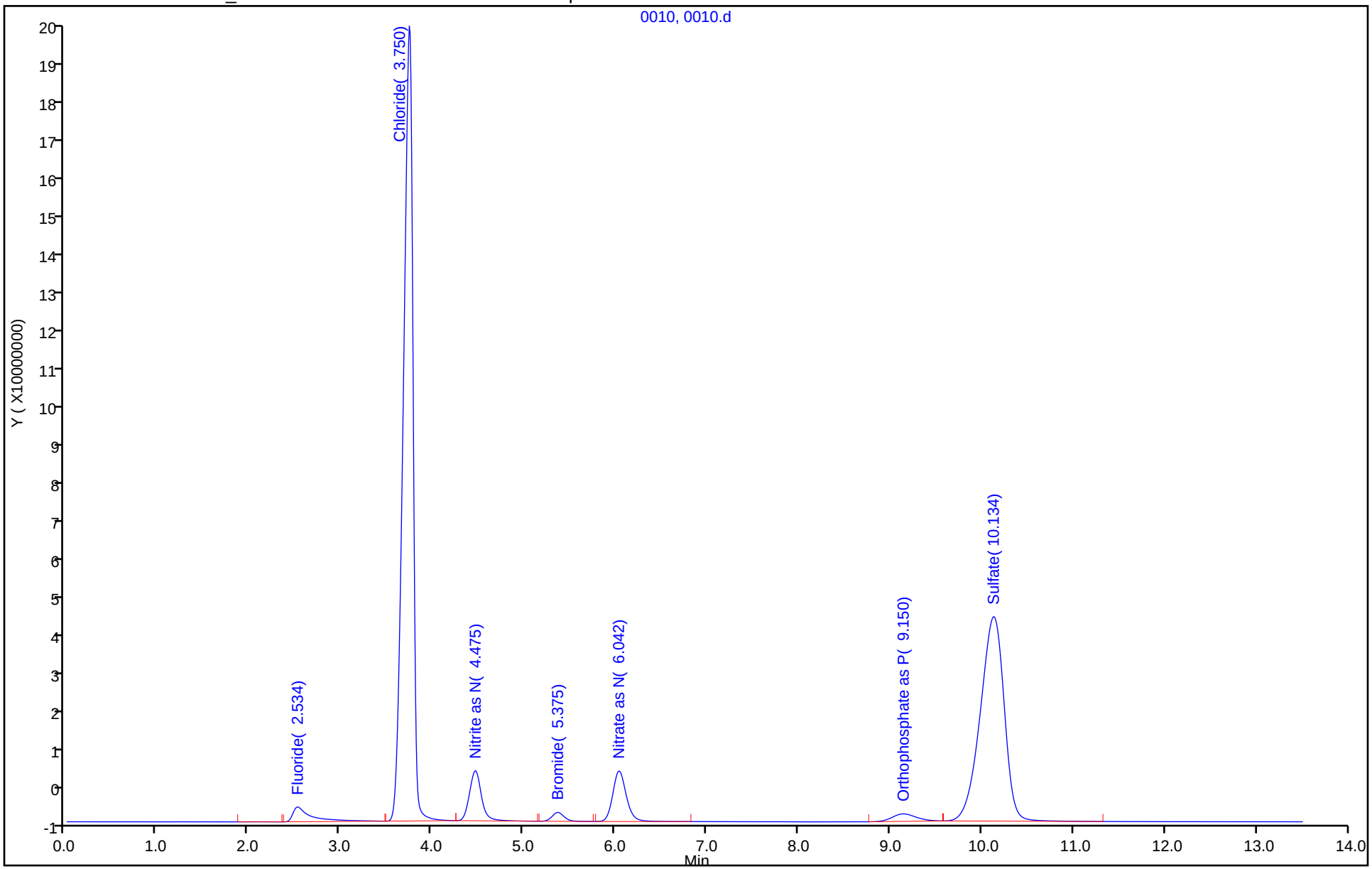
IC SO4 ICV_00022	Amount Added:	0.40	Units: mL
Cl ICV Std_00002	Amount Added:	0.40	Units: mL
IC ICV 5_00353	Amount Added:	0.40	Units: mL

Report Date: 09-Mar-2022 12:41:24 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0010.d

Injection Date:	08-Mar-2022 15:51:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ICV			Worklist Smp#:	8
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

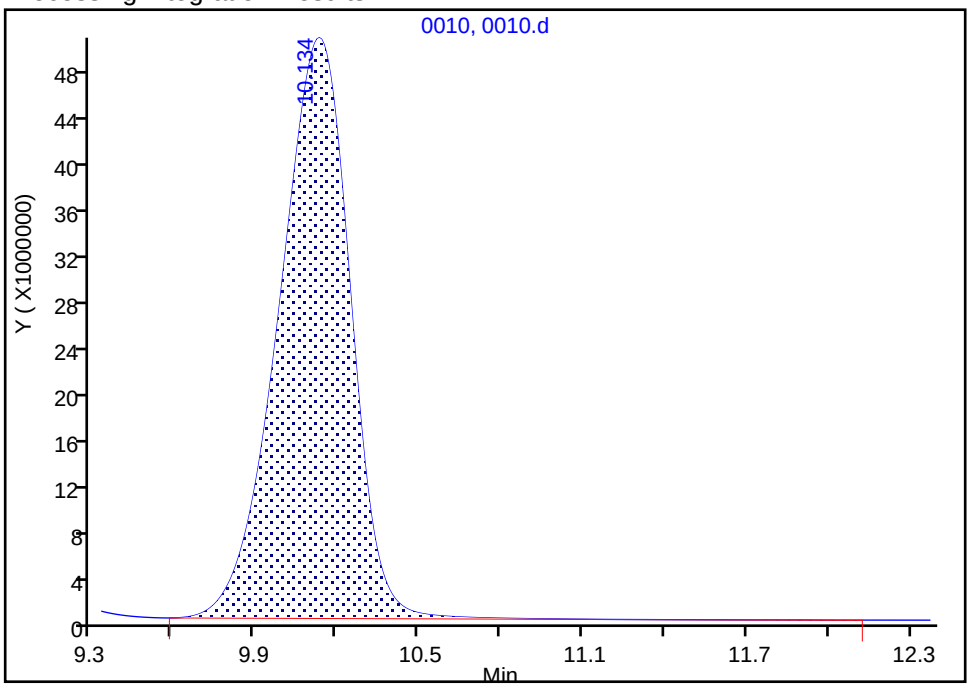
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0010.d
Injection Date: 08-Mar-2022 15:51:00 Instrument ID: WC_IonChrom11
Lims ID: ICV
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

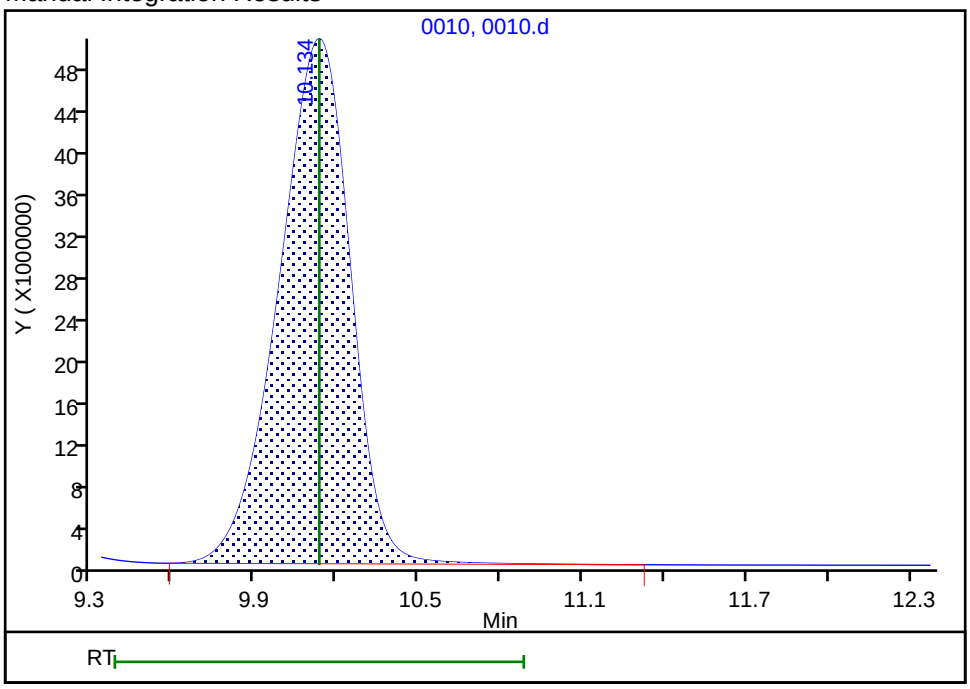
Processing Integration Results

RT: 10.13
Area: 918109132
Amount: 80.330756
Amount Units: ug/ml



Manual Integration Results

RT: 10.13
Area: 917570809
Amount: 80.284029
Amount Units: ug/ml



Reviewer: foxr, 09-Mar-2022 11:22:35
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0011.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 08-Mar-2022 16:08:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109076-009
Misc. Info.: 11
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 09-Mar-2022 12:41:24 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1639

First Level Reviewer: foxr Date: 09-Mar-2022 11:23:33

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.534				ND	U
2 Chloride	3.675	3.750	-0.075	210728		0.6936	M
3 Nitrite as N	4.467	4.475	-0.008	81068		NC	M
4 Bromide		5.375				ND	U
5 Nitrate as N	6.075	6.042	0.033	80089		NC	M
7 Orthophosphate as P	9.209	9.150	0.059	354632		NC	M
6 Sulfate	10.009	10.134	-0.125	201253		0.6565	M

QC Flag Legend

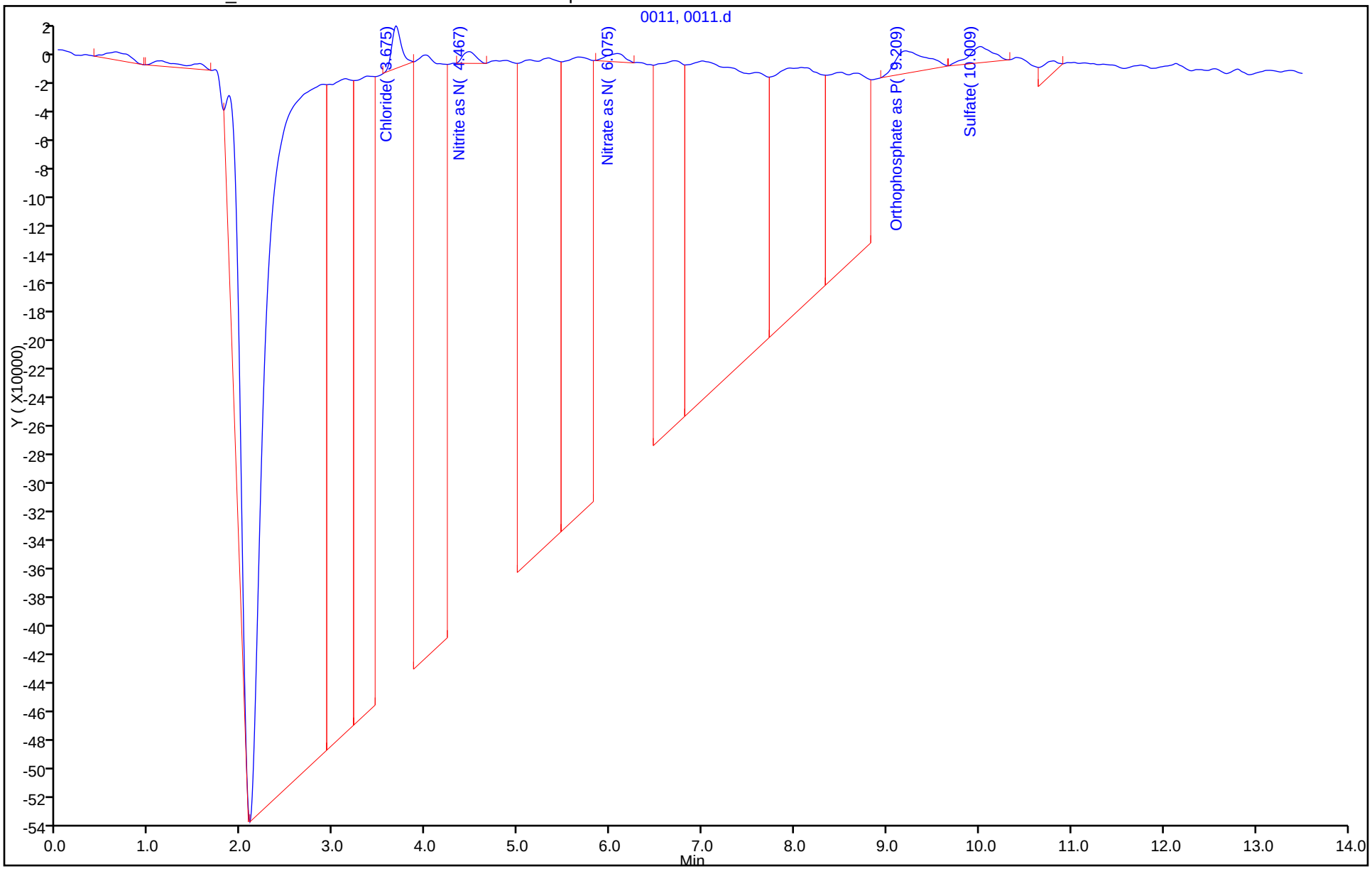
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 09-Mar-2022 12:41:25 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0011.d

Injection Date:	08-Mar-2022 16:08:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ICB			Worklist Smp#:	9
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

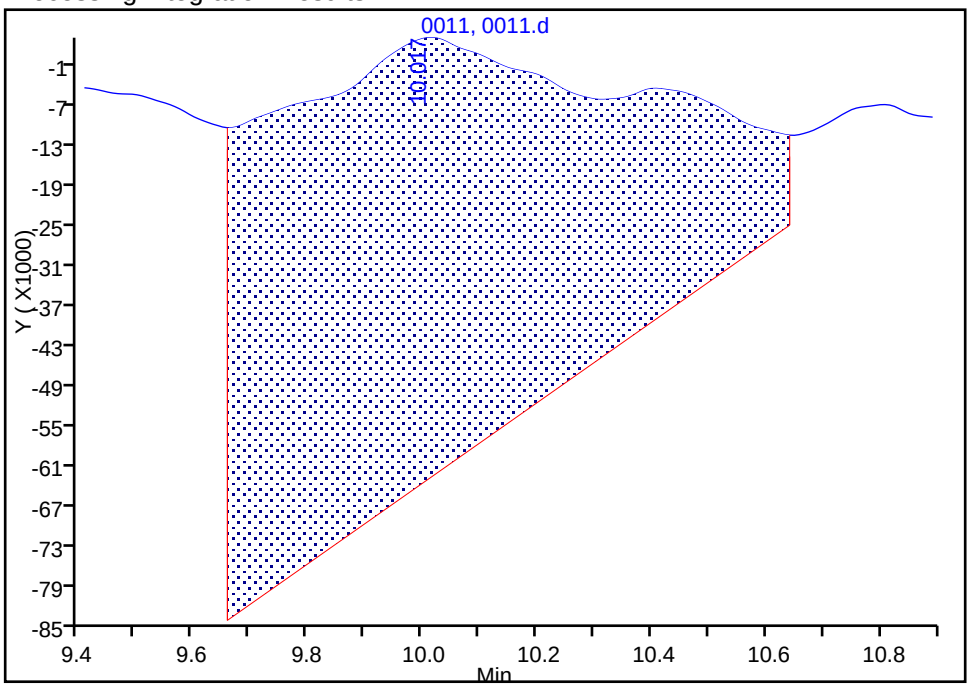
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0011.d
Injection Date: 08-Mar-2022 16:08:00 Instrument ID: WC_IonChrom11
Lims ID: ICB
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

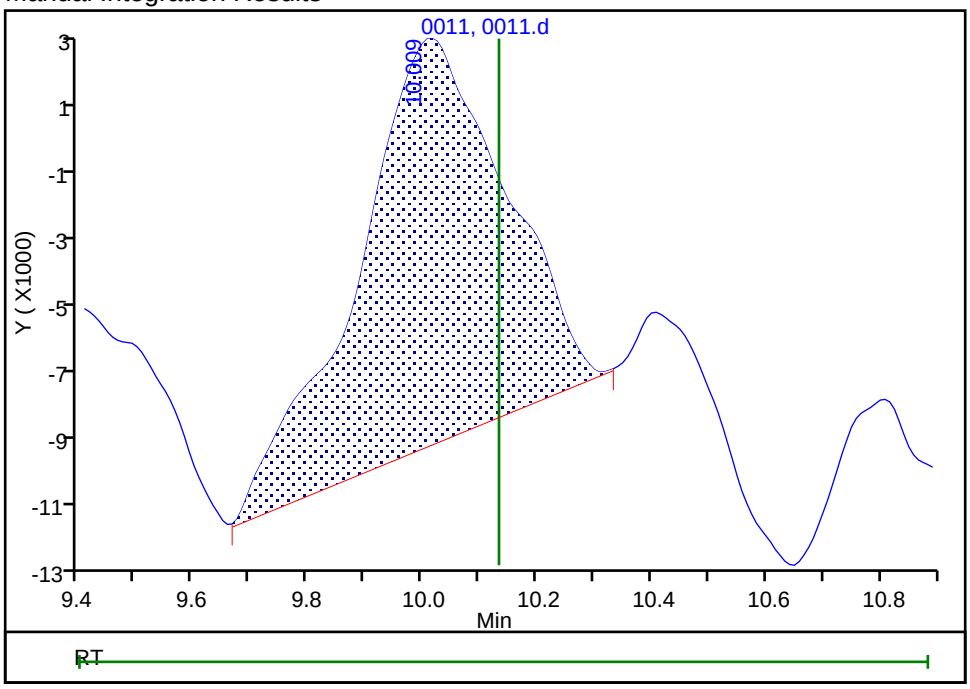
Processing Integration Results

RT: 10.02
Area: 2918704
Amount: 0.892351
Amount Units: ug/ml



Manual Integration Results

RT: 10.01
Area: 201253
Amount: 0.656477
Amount Units: ug/ml



Reviewer: foxr, 09-Mar-2022 11:23:22
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

IC Instrument Information

WL: 109286 **Inst ID:** IC11 **Analysis Date:** 3-16-22 **Analyst:** RF

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	159469	6	F Cl NO2 (Br) NO3 PO4 SO4	MS/D	
☐	159461	1	F (Cl) NO2 Br NO3 PO4 SO4	MS/D	
☐	159219	1	F Cl NO2 (Br) NO3 PO4 SO4	MS/D	
☐	159511	1	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	159470	1	F (Cl) NO2 Br NO3 PO4 SO4	MS/D	
☐	159466	3	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	159190	15	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
461	1	F (Cl) NO2 Br NO3 PO4 SO4	100X	reRN
219	1	F Cl NO2 (Br) NO3 PO4 SO4	5X	reRN
470	1	F (Cl) NO2 Br NO3 PO4 SO4	10X	test
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		

Eurofins Environment Testing America
Initial Calibration Summary Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	09-Mar-2022 11:32:17

No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b
Inj Date : 08-Mar-2022 14:13:00, Sublist: chrom-Anions_IC11*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-798158	138396(		0.999
2 Chloride					-120525	176801(		1.000
3 Nitrite as N	-171601	2992402		0.999				
4 Bromide					-119376	5012575		1.000
5 Nitrate as N	-254783	3446589		0.998				
7 Orthophosphate as P	-938543	9427828		0.995				
6 Sulfate					-736185	1152075		0.996

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	09-Mar-2022 11:32:17

No.Compounds:7
Sublist: chrom-Anions_IC11*sub1
Limit Group: Wet - Anions

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0004.d		
	Inj Date: 08-Mar-2022 14:13:00	Worklist: 109076	Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0005.d		
	Inj Date: 08-Mar-2022 14:29:00	Worklist: 109076	Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0006.d		
	Inj Date: 08-Mar-2022 14:46:00	Worklist: 109076	Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0007.d		
	Inj Date: 08-Mar-2022 15:02:00	Worklist: 109076	Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0008.d		
	Inj Date: 08-Mar-2022 15:19:00	Worklist: 109076	Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d		
	Inj Date: 08-Mar-2022 15:35:00	Worklist: 109076	Sample#: 7

Start Cal Date: 08-Mar-2022 13:57:00 End Cal Date: 08-Mar-2022 15:35:00

Individual Compound Calibration Parameters

Quant Method: ESTD	RF Calibration: Replace	
Rule Name: Linear1	Curve: Linear	Weighting: Conc
Origin: None	Error: raw_COD	Error Limit: 1.00
RF %Dif: 0.0	SPCC Limit: 0.0	CCC Limit: 0.0
Dependent Variable: Resp		

Number of Compounds: 3

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
3 Nitrite as N				Signal: 1					
25473365	25325412	25870651	28064851	29825235	30441403	-1716017			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		29924027		
M5094673	M12662706	M25870651	112259404	238601878	304414034				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				
5 Nitrate as N				Signal: 1					
Error: CorrCoef									
28508190	27667832	28097540	31091177	34410224	35427502	-2547832			0.998
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		34465890		
M5701638	M13833916	M28097540	M124364709	M275281788	M354275020				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				
7 Orthophosphate as P				Signal: 1					
7415400	6680524	7048847	8323495	9401725	9742831	-938543			0.995
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		9427828		
1483080	3340262	7048847	33293978	75213800	M97428311				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	09-Mar-2022 11:32:17

No.Compounds:7
Sublist: chrom-Anions_IC11*sub1
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, 0005
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.500 No. Points: 1561

Calibration File Names

Level: 1	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0004.d		
	Inj Date: 08-Mar-2022 14:13:00	Worklist: 109076	Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0005.d		
	Inj Date: 08-Mar-2022 14:29:00	Worklist: 109076	Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0006.d		
	Inj Date: 08-Mar-2022 14:46:00	Worklist: 109076	Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0007.d		
	Inj Date: 08-Mar-2022 15:02:00	Worklist: 109076	Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0008.d		
	Inj Date: 08-Mar-2022 15:19:00	Worklist: 109076	Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d		
	Inj Date: 08-Mar-2022 15:35:00	Worklist: 109076	Sample#: 7

Start Cal Date: 08-Mar-2022 13:57:00 End Cal Date: 08-Mar-2022 15:35:00

Individual Compound Calibration Parameters

Quant Method: ESTD	RF Calibration: Replace	
Rule Name: Linear1	Curve: Linear	Weighting: Conc
Origin: None	Error: CorrCoef	Error Limit: 1.00
RF %Dif: 0.0	SPCC Limit: 0.0	CCC Limit: 0.0
Dependent Variable: Resp		

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
Error: raw_COD									
8233330	14048588	13388194	12905286	13724434	13973383	-798158			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		13839601		
M1646666	M7024294	M13388194	M51621142	109795474	139733828				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				
2 Chloride				Signal: 1					
11341567	11225706	11712695	16642846	17532620	17979879	-12052578			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		17680169		
M11341567	28064265	58563476	998570762	2103914382	3595975763				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				
4 Bromide				Signal: 1					
4762230	4785280	4606452	4824363	5010693	5074725	-119376			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		5012575		
952446	2392640	M4606452	19297450	40085540	50747249				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				
6 Sulfate				Signal: 1					
Error: raw_COD									
8014777	7753590	7868630	10212125	11286801	11988784	-7361856			0.996
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		11520755		
M8014777	M19383975	M39343151	M612727524	M1354416160	M2397756746				
109076(2)	109076(3)	109076(4)	109076(5)	109076(6)	109076(7)				

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0001.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 16-Mar-2022 10:06:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-001
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:25:45 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 16-Mar-2022 11:52:19

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.517	2.517	0.000	59610246	5.00	4.36	a
2 Chloride	3.734	3.734	0.000	1758461057	100.0	100.1	
3 Nitrite as N	4.450	4.450	0.000	143385321	NC	NC	
4 Bromide	5.342	5.342	0.000	24034346	5.00	4.82	
5 Nitrate as N	6.009	6.009	0.000	156270804	NC	NC	M
7 Orthophosphate as P	9.050	9.050	0.000	43708102	NC	NC	
6 Sulfate	10.075	10.075	0.000	1106814913	100.0	96.7	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

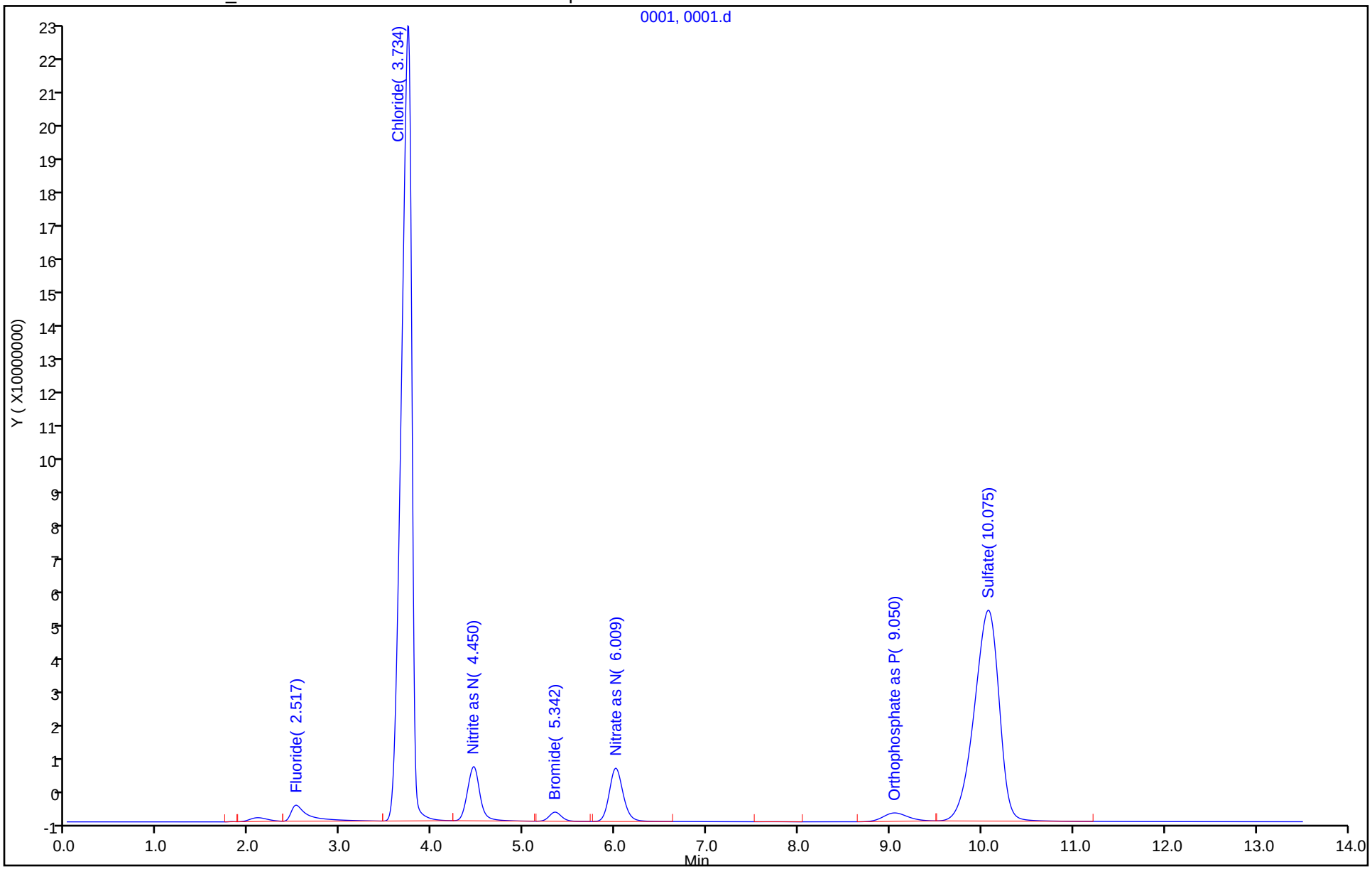
IC LCS_01862 Amount Added: 5.00 Units: mL

Report Date: 17-Mar-2022 13:25:45 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0001.d

Injection Date:	16-Mar-2022 10:06:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	CCV			Worklist Smp#:	1
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

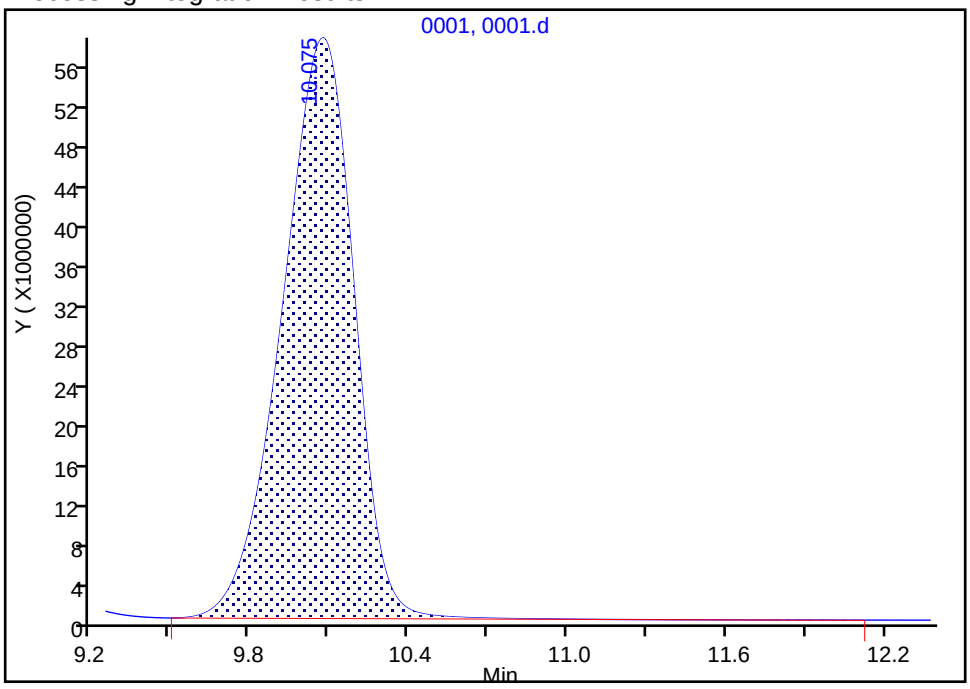
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0001.d
Injection Date: 16-Mar-2022 10:06:00 Instrument ID: WC_IonChrom11
Lims ID: CCV
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

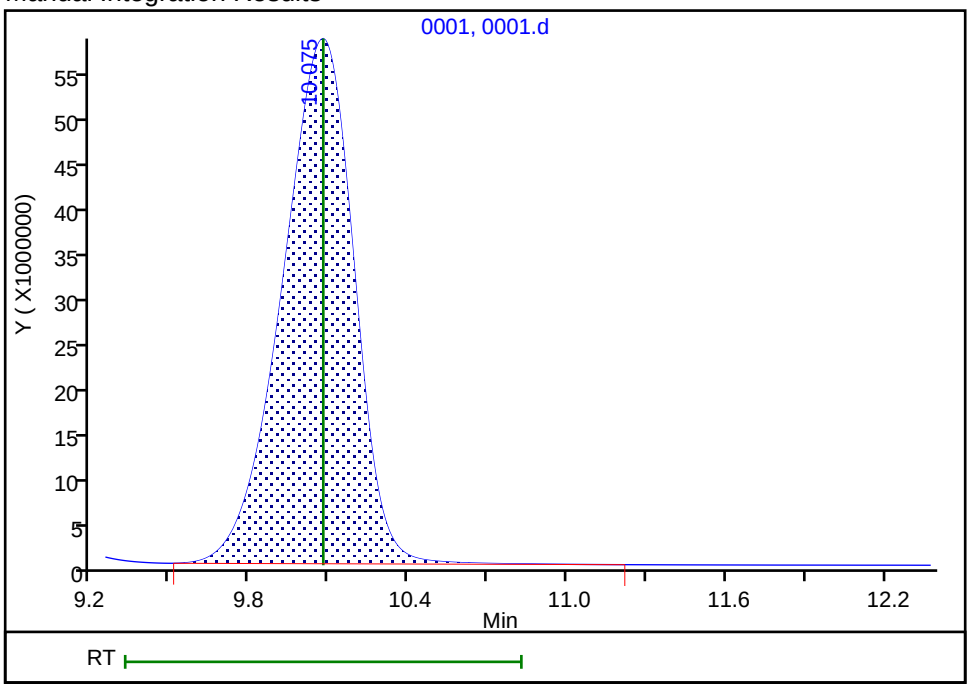
Processing Integration Results

RT: 10.08
Area: 1107436855
Amount: 96.764376
Amount Units: ug/ml



Manual Integration Results

RT: 10.08
Area: 1106814913
Amount: 96.710392
Amount Units: ug/ml



Reviewer: foxr, 16-Mar-2022 11:51:43
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0002.d
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 16-Mar-2022 10:22:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-002
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:25:45 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 16-Mar-2022 11:52:48

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.092	2.092	0.000	5395236		0.4475	M
2 Chloride	3.659	3.659	0.000	269511		0.6969	
3 Nitrite as N		4.450				ND	
4 Bromide		5.342				ND	
5 Nitrate as N		6.009				ND	
7 Orthophosphate as P	9.134	9.134	0.000	390124		NC	
6 Sulfate	9.975	9.975	0.000	936813		0.7203	

QC Flag Legend

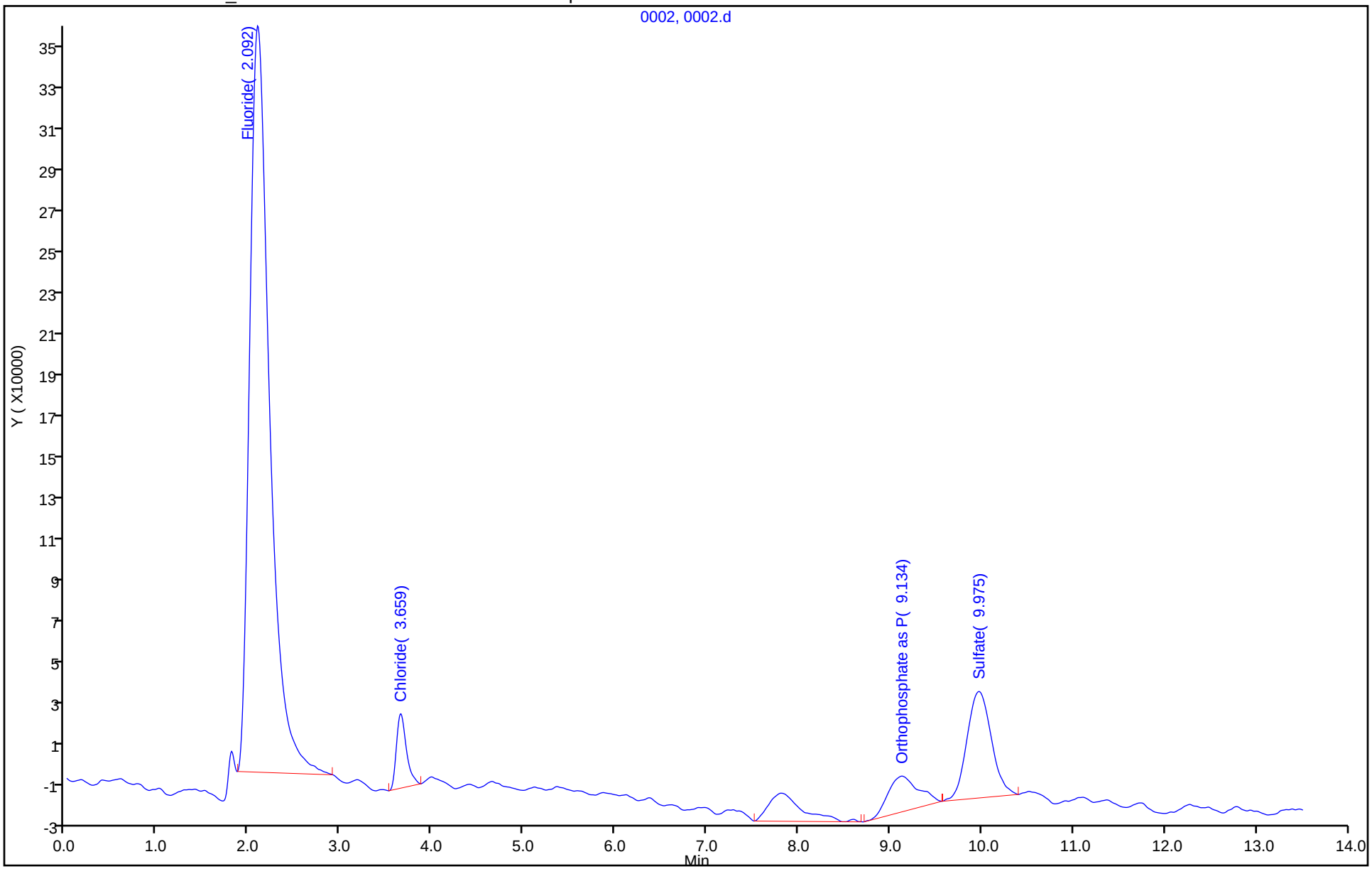
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 17-Mar-2022 13:25:45 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0002.d

Injection Date:	16-Mar-2022 10:22:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	CCB			Worklist Smp#:	2
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0003.d
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 16-Mar-2022 10:38:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-003
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:25:46 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 16-Mar-2022 11:53:31

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.509	0.000	3562142	0.5000	0.3151	a
2 Chloride	3.651	3.651	0.000	57068533	5.00	3.91	
3 Nitrite as N	4.426	4.426	0.000	12256764	NC	NC	
4 Bromide	5.342	5.342	0.000	2280785	0.5000	0.4788	
5 Nitrate as N	6.017	6.017	0.000	13142129	NC	NC	
7 Orthophosphate as P	9.092	9.092	0.000	4068629	NC	NC	
6 Sulfate	9.959	9.959	0.000	38954745	5.00	4.02	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

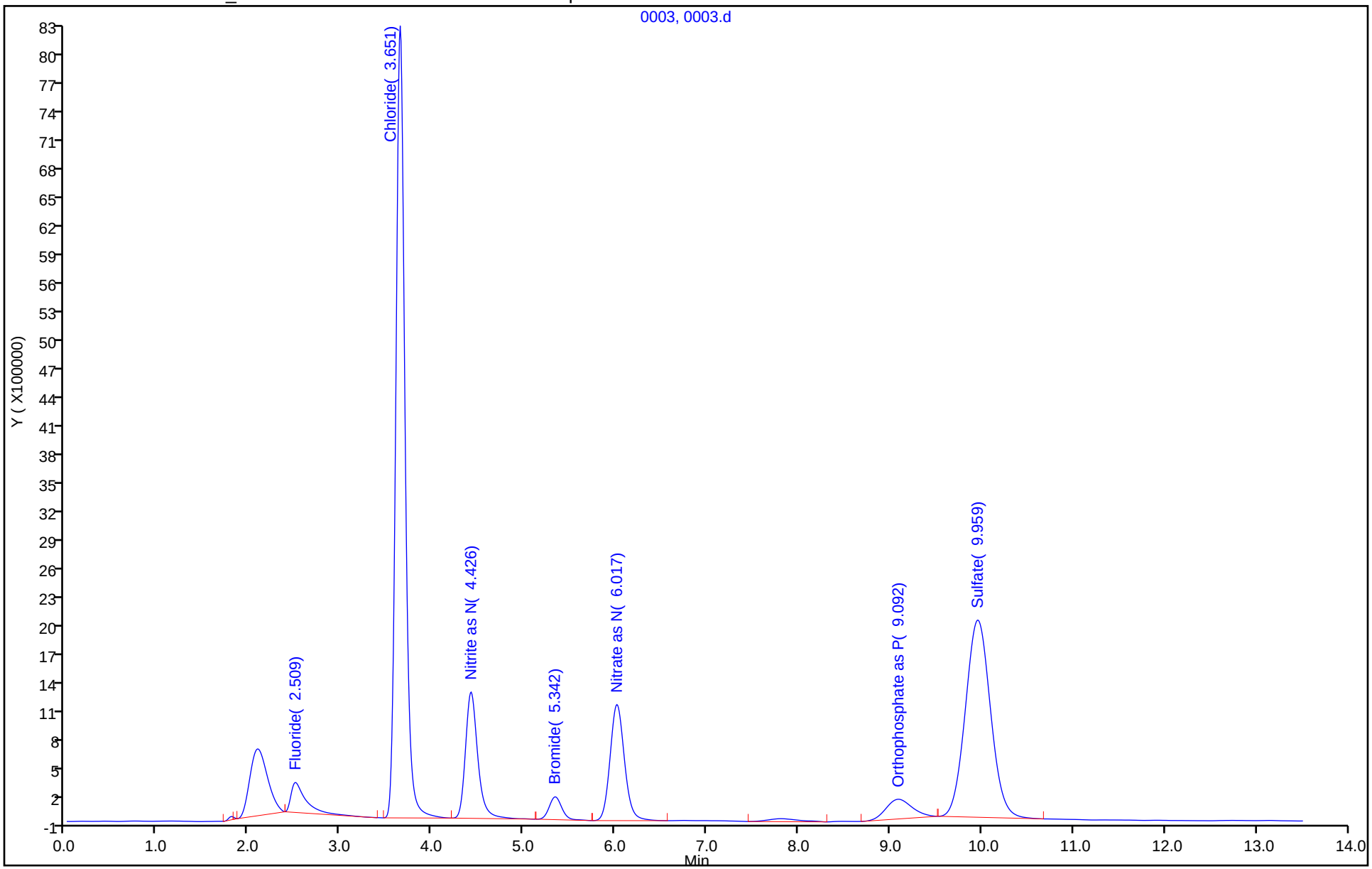
IC CAL cl/so4_00410 Amount Added: 0.10 Units: mL
IC Cal low_00626 Amount Added: 0.05 Units: mL

Report Date: 17-Mar-2022 13:25:46 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0003.d

Injection Date:	16-Mar-2022 10:38:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	MRL			Worklist Smp#:	3
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

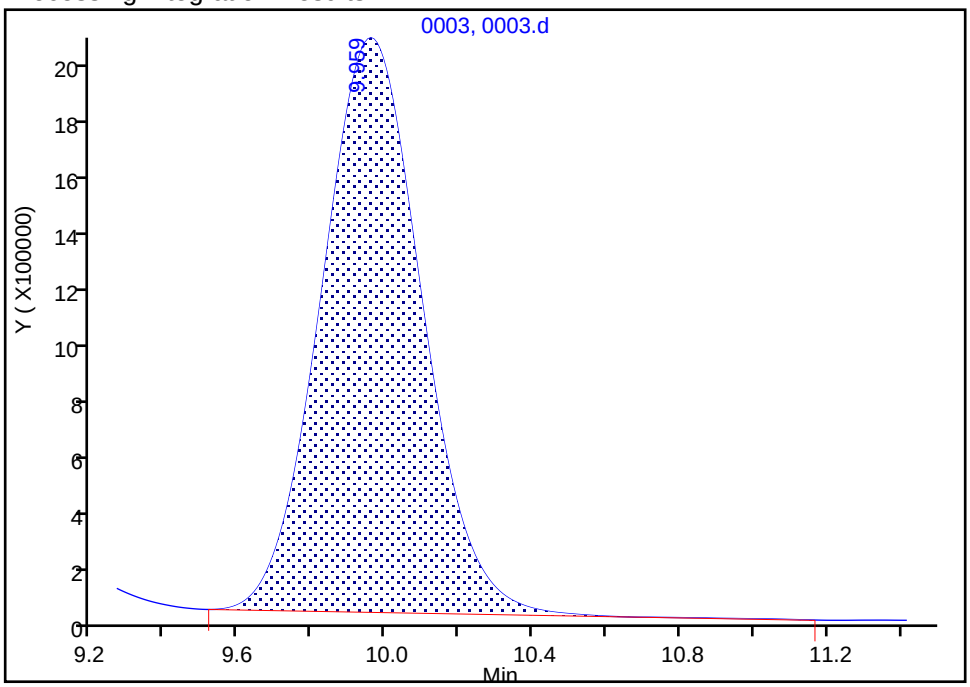
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0003.d
Injection Date: 16-Mar-2022 10:38:00 Instrument ID: WC_IonChrom11
Lims ID: MRL
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

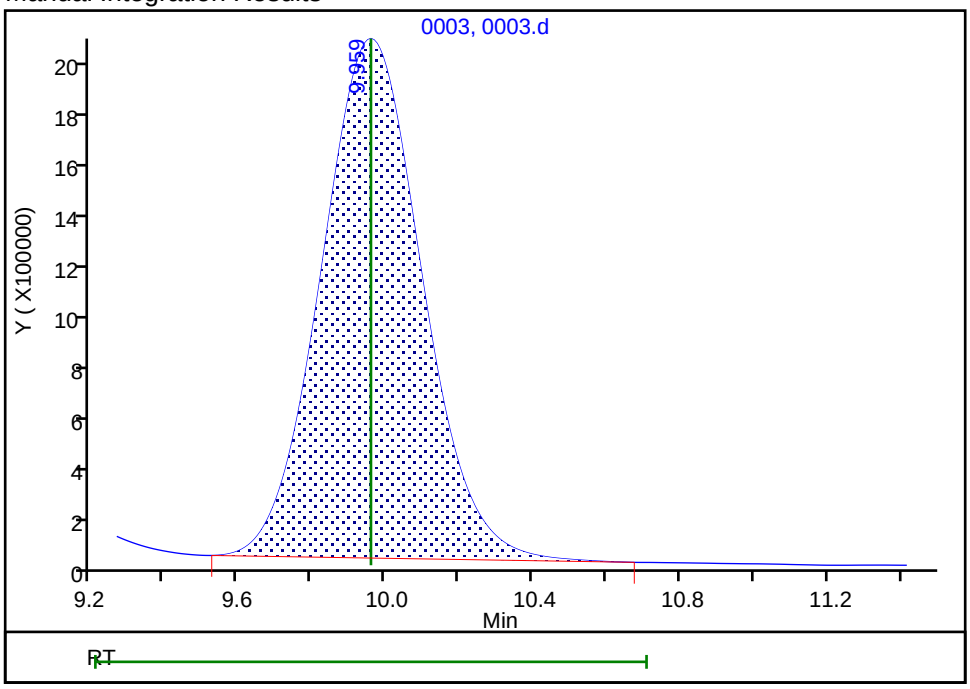
Processing Integration Results

RT: 9.96
Area: 39011073
Amount: 4.025164
Amount Units: ug/ml



Manual Integration Results

RT: 9.96
Area: 38954745
Amount: 4.020275
Amount Units: ug/ml



Reviewer: foxr, 16-Mar-2022 11:53:28
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0004.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 16-Mar-2022 10:54:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-004
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:25:46 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 16-Mar-2022 11:54:17

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.509	0.000	60045335	5.00	4.40	a
2 Chloride	3.734	3.734	0.000	1755506248	100.0	100.0	
3 Nitrite as N	4.450	4.450	0.000	142865414	NC	NC	
4 Bromide	5.334	5.334	0.000	23923902	5.00	4.80	
5 Nitrate as N	5.992	5.992	0.000	155932004	NC	NC	M
7 Orthophosphate as P	9.042	9.042	0.000	44085498	NC	NC	
6 Sulfate	10.067	10.067	0.000	1106778775	100.0	96.7	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

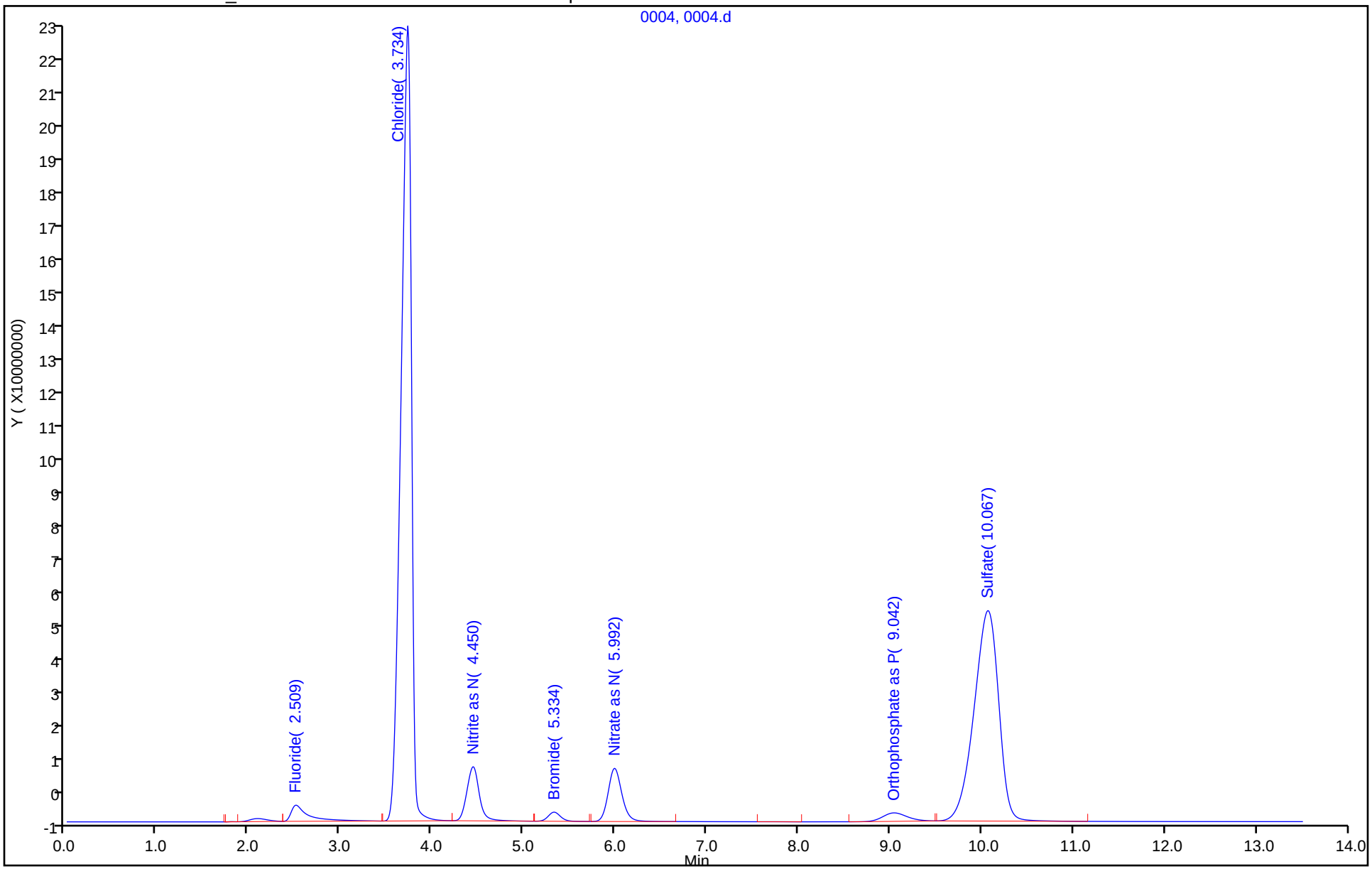
IC LCS_01862 Amount Added: 5.00 Units: mL

Report Date: 17-Mar-2022 13:25:47 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0004.d

Injection Date:	16-Mar-2022 10:54:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

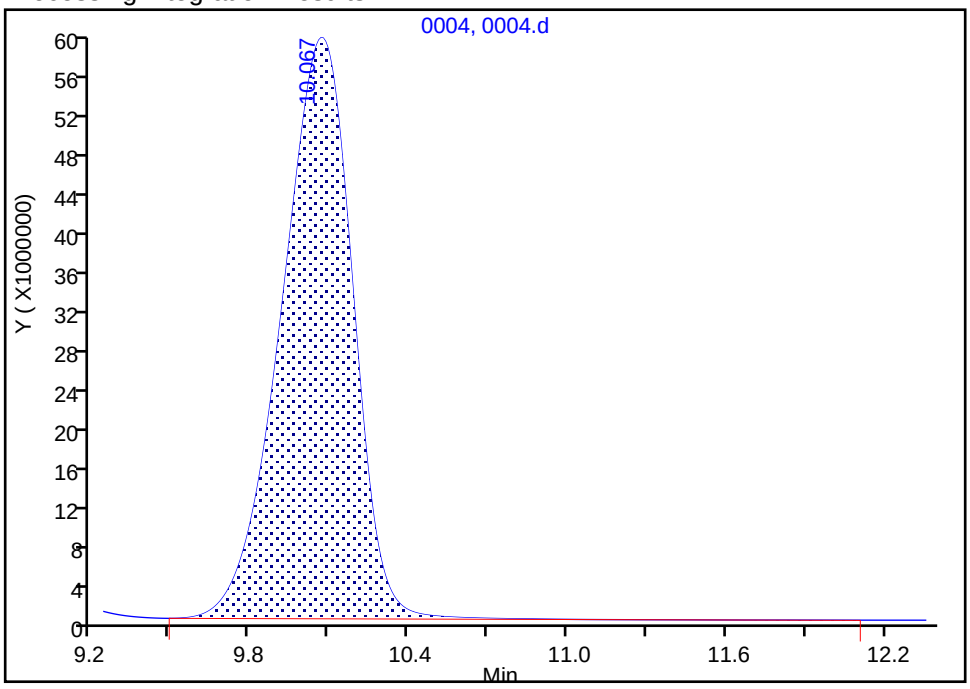
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0004.d				
Injection Date:	16-Mar-2022 10:54:00	Instrument ID:	WC_IonChrom11		
Lims ID:	LCS				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	4
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

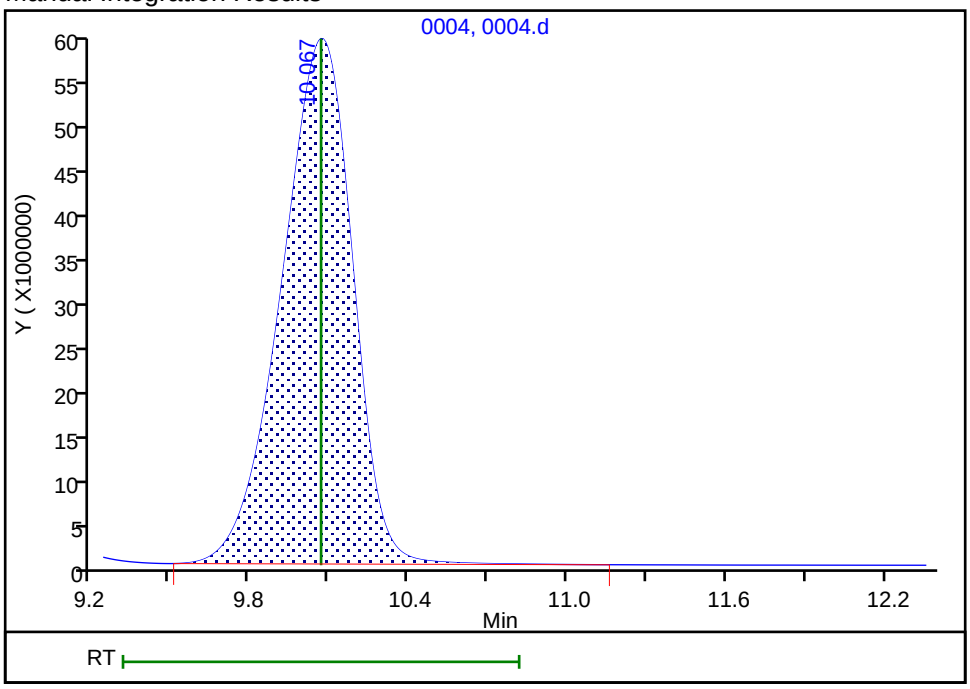
Processing Integration Results

RT: 10.07
Area: 1107015434
Amount: 96.727797
Amount Units: ug/ml



Manual Integration Results

RT: 10.07
Area: 1106778775
Amount: 96.707255
Amount Units: ug/ml



Reviewer: foxr, 16-Mar-2022 11:53:55
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0005.d
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 16-Mar-2022 11:11:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-005
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:25:47 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 16-Mar-2022 11:55:04

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.509	0.000	59655058	5.00	4.37	a
2 Chloride	3.726	3.726	0.000	1749410579	100.0	99.6	
3 Nitrite as N	4.434	4.434	0.000	142649581	NC	NC	
4 Bromide	5.317	5.317	0.000	23924441	5.00	4.80	
5 Nitrate as N	5.976	5.976	0.000	155140202	NC	NC	M
7 Orthophosphate as P	9.001	9.001	0.000	44337770	NC	NC	
6 Sulfate	10.009	10.009	0.000	1102086138	100.0	96.3	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

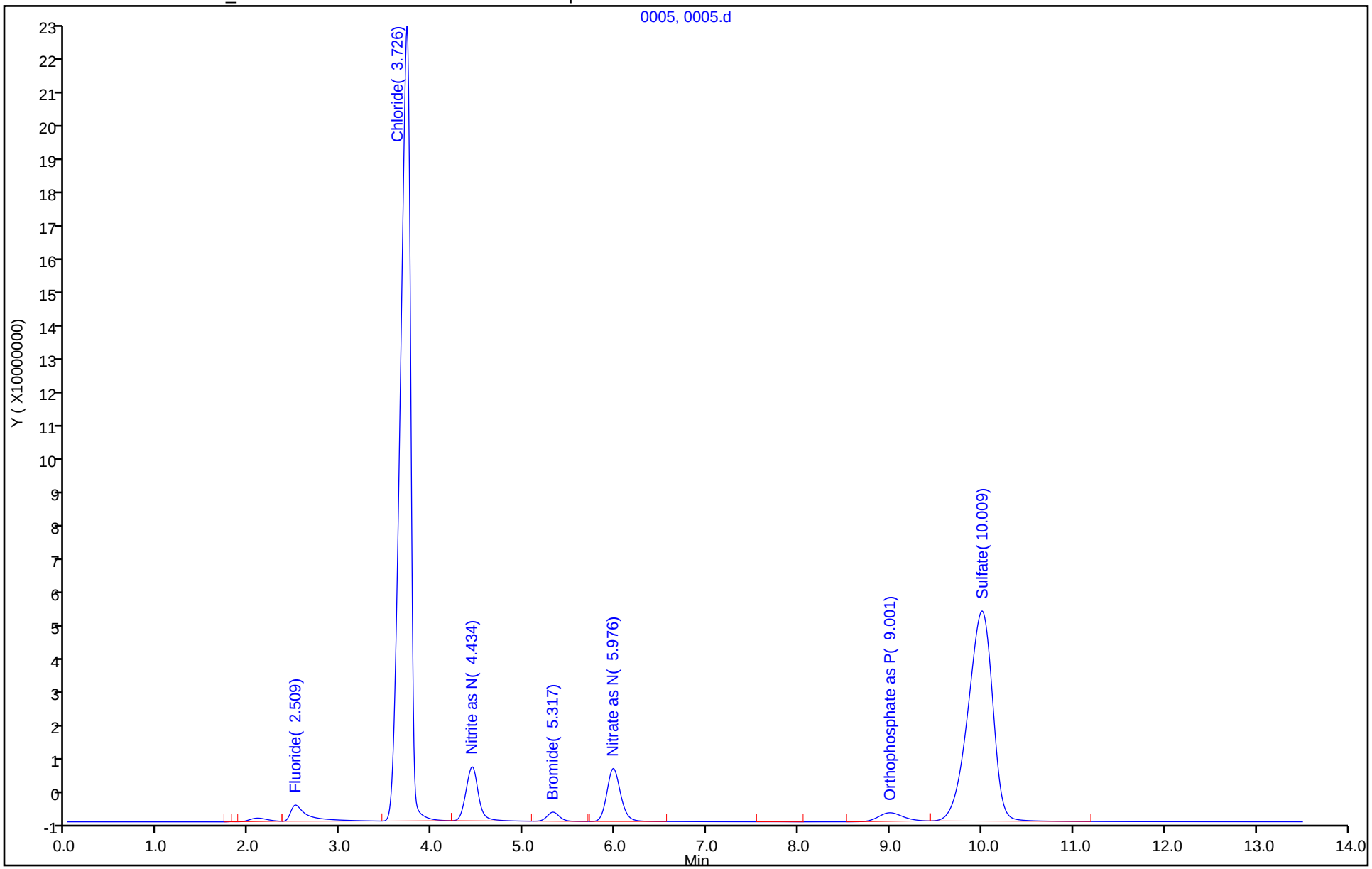
IC LCS_01862 Amount Added: 5.00 Units: mL

Report Date: 17-Mar-2022 13:25:47 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0005.d

Injection Date:	16-Mar-2022 11:11:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

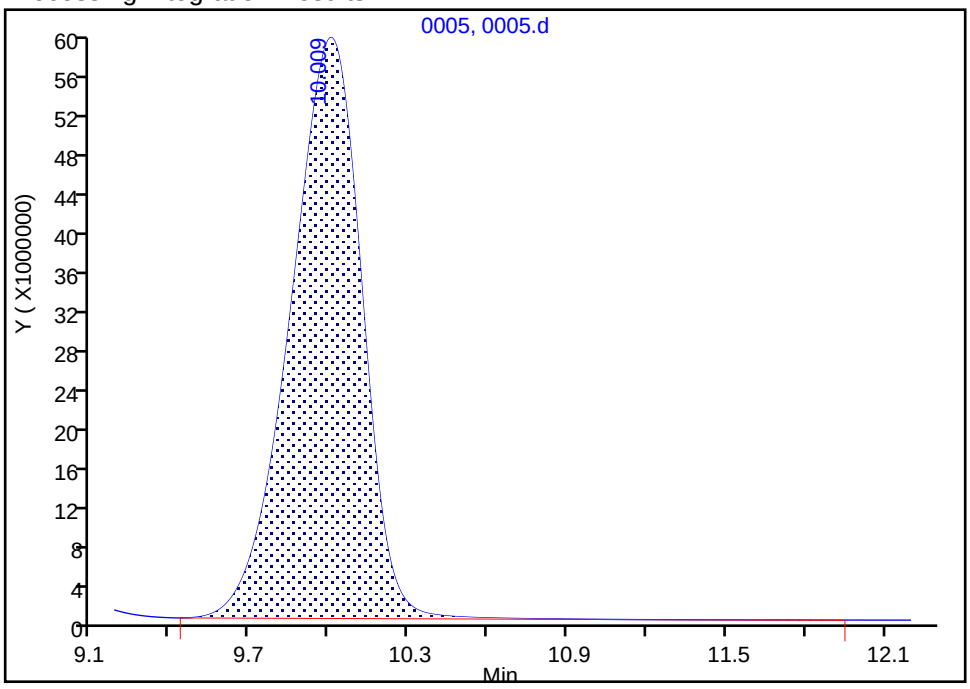
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0005.d
Injection Date: 16-Mar-2022 11:11:00 Instrument ID: WC_IonChrom11
Lims ID: LCSD
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

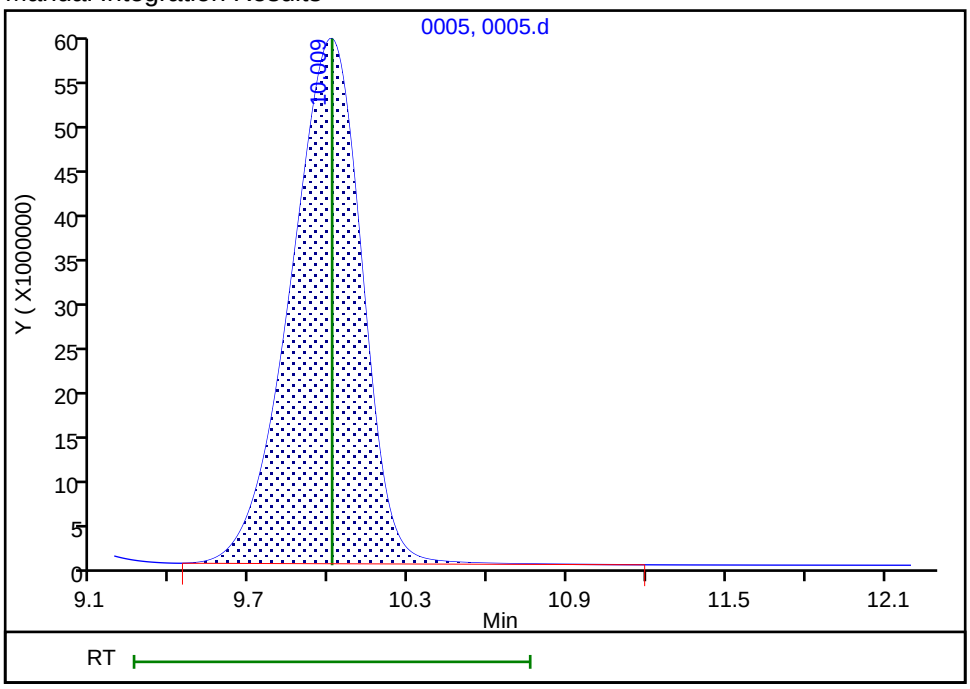
Processing Integration Results

RT: 10.01
Area: 1102878724
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.01
Area: 1102086138
Amount: 96.299935
Amount Units: ug/ml



Reviewer: foxr, 16-Mar-2022 11:54:41
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0006.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 16-Mar-2022 11:27:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-006
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:25:47 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 16-Mar-2022 11:55:40

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.092	2.092	0.000	6505268		0.5277	M
2 Chloride	3.642	3.642	0.000	223809		0.6944	M
3 Nitrite as N		4.434				ND	
4 Bromide		5.317				ND	
5 Nitrate as N		5.976				ND	
7 Orthophosphate as P	9.084	9.084	0.000	305472		NC	
6 Sulfate	9.875	9.875	0.000	272220		0.6626	M

QC Flag Legend

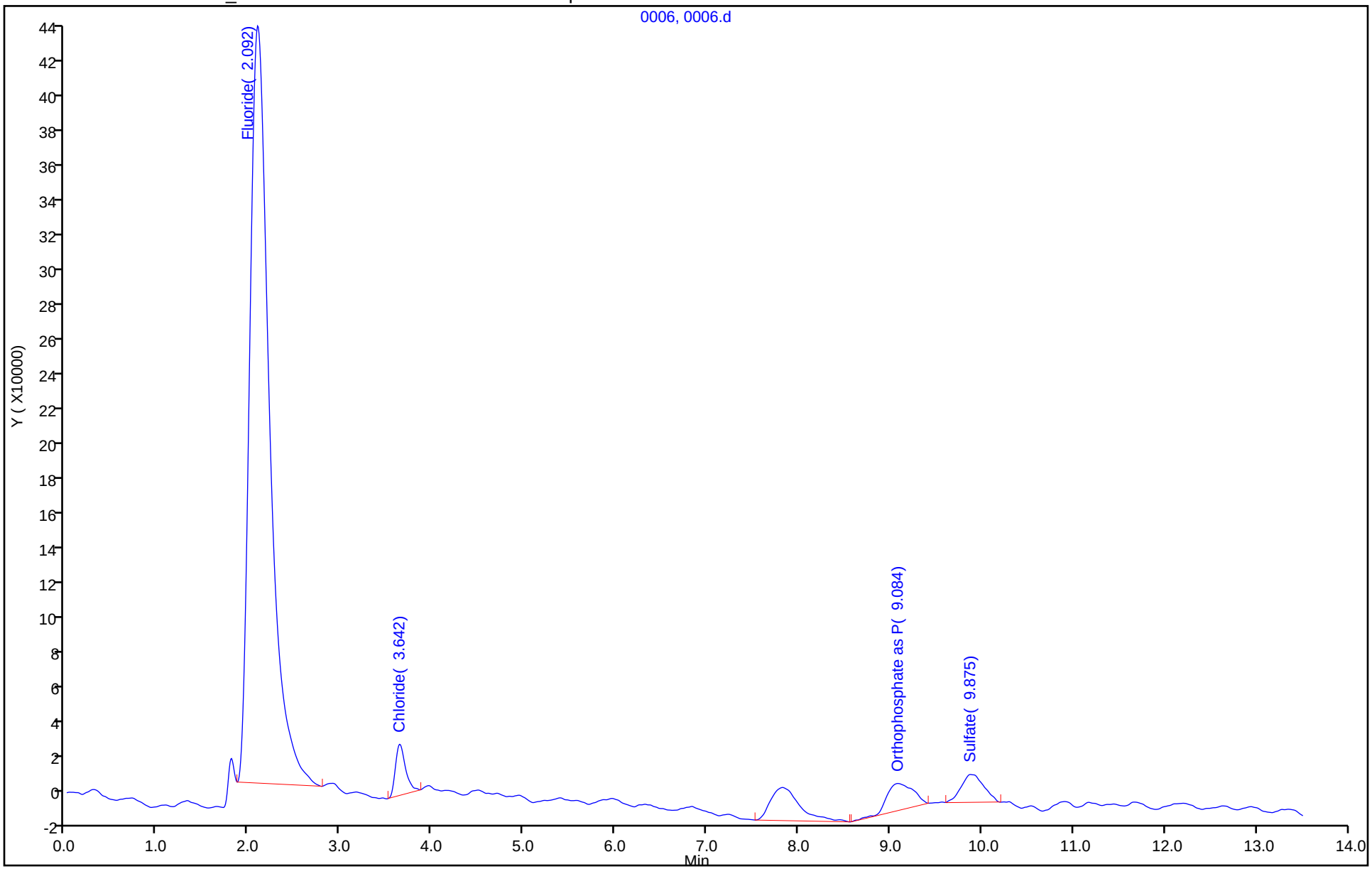
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 17-Mar-2022 13:25:48 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0006.d

Injection Date:	16-Mar-2022 11:27:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

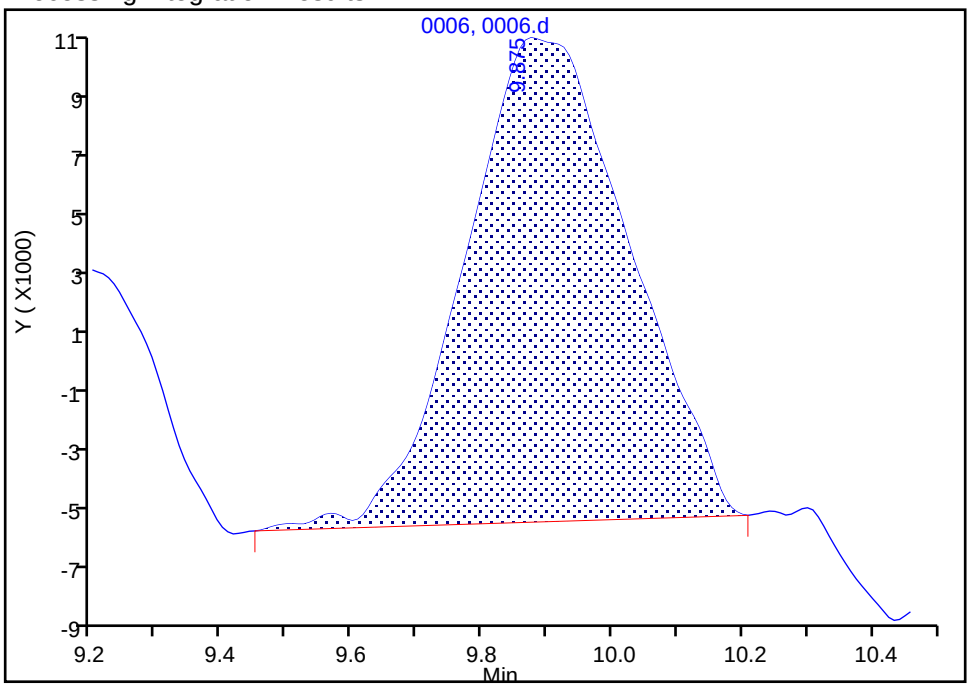
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0006.d
Injection Date: 16-Mar-2022 11:27:00 Instrument ID: WC_IonChrom11
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

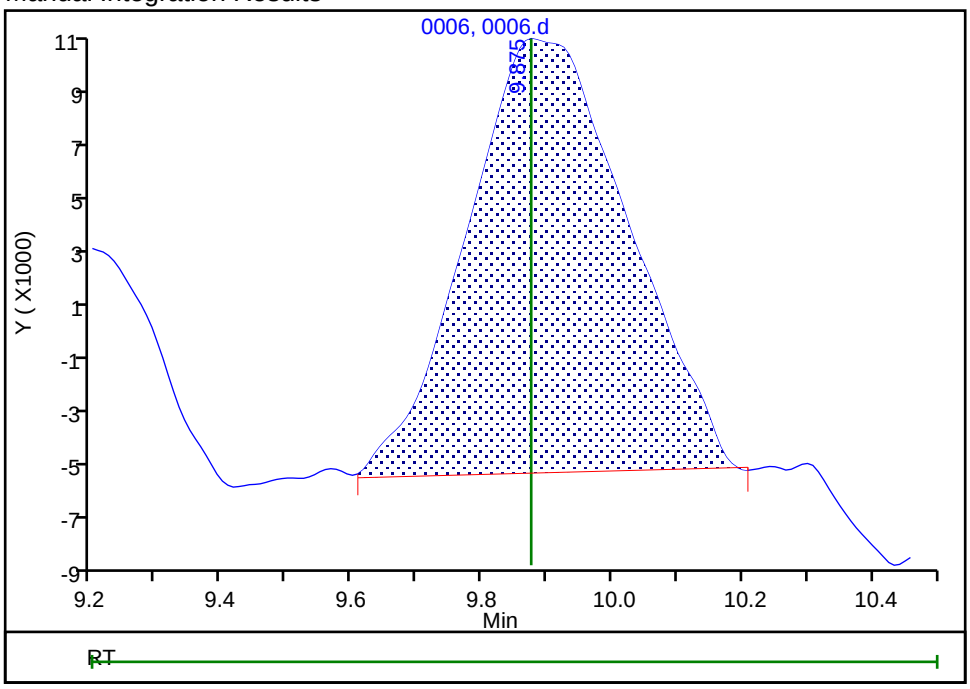
Processing Integration Results

RT: 9.88
Area: 278914
Amount: 0.663218
Amount Units: ug/ml



Manual Integration Results

RT: 9.88
Area: 272220
Amount: 0.662637
Amount Units: ug/ml



Reviewer: foxr, 16-Mar-2022 11:55:38
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0017.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 16-Mar-2022 17:01:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-017
Misc. Info.: 13674
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:25:53 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 17-Mar-2022 12:52:26

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.517	2.092	0.425	66929529	5.00	4.89	
2 Chloride	3.742	3.642	0.100	1799543107	100.0	102.5	
3 Nitrite as N	4.451	4.434	0.017	146577523	NC	NC	
4 Bromide	5.334	5.317	0.017	24650912	5.00	4.94	
5 Nitrate as N	5.992	5.976	0.016	160580587	NC	NC	M
7 Orthophosphate as P	9.009	9.084	-0.075	45583907	NC	NC	
6 Sulfate	10.017	9.875	0.142	1134347348	100.0	99.1	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

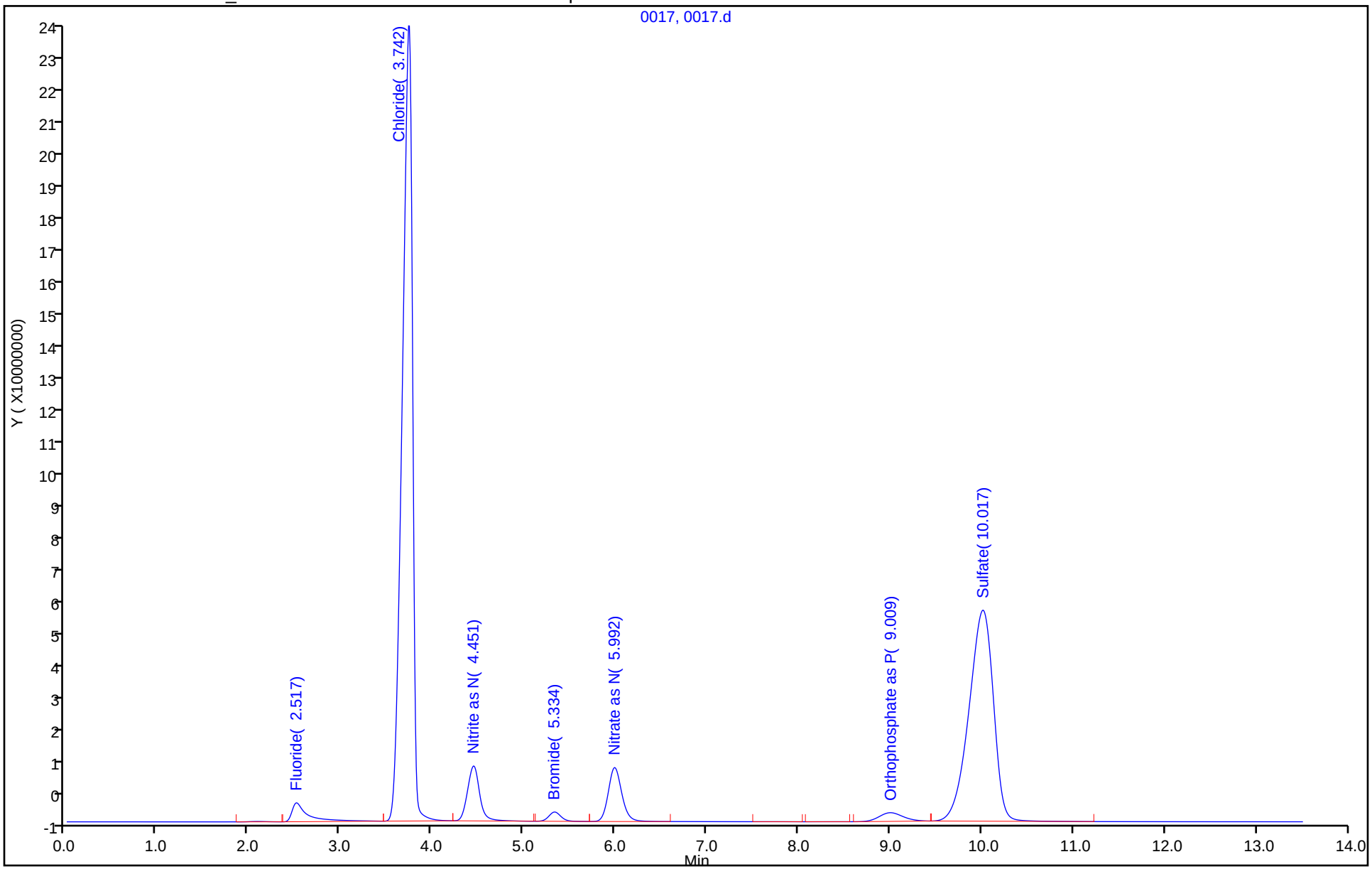
IC LCS_01862 Amount Added: 5.00 Units: mL

Report Date: 17-Mar-2022 13:25:54 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0017.d

Injection Date:	16-Mar-2022 17:01:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

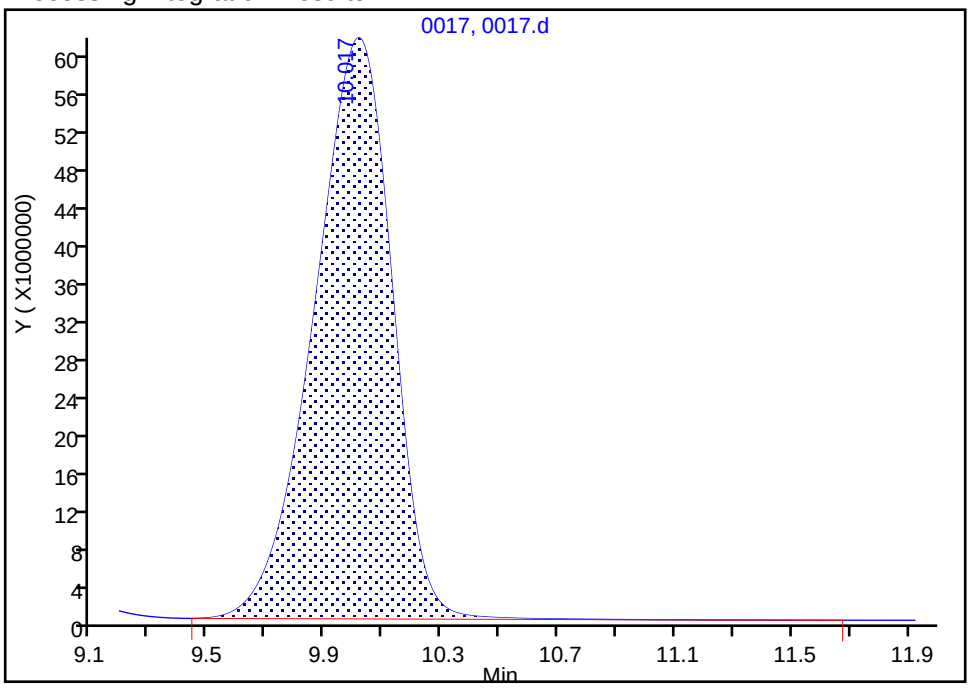
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0017.d
Injection Date: 16-Mar-2022 17:01:00 Instrument ID: WC_IonChrom11
Lims ID: ccv
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

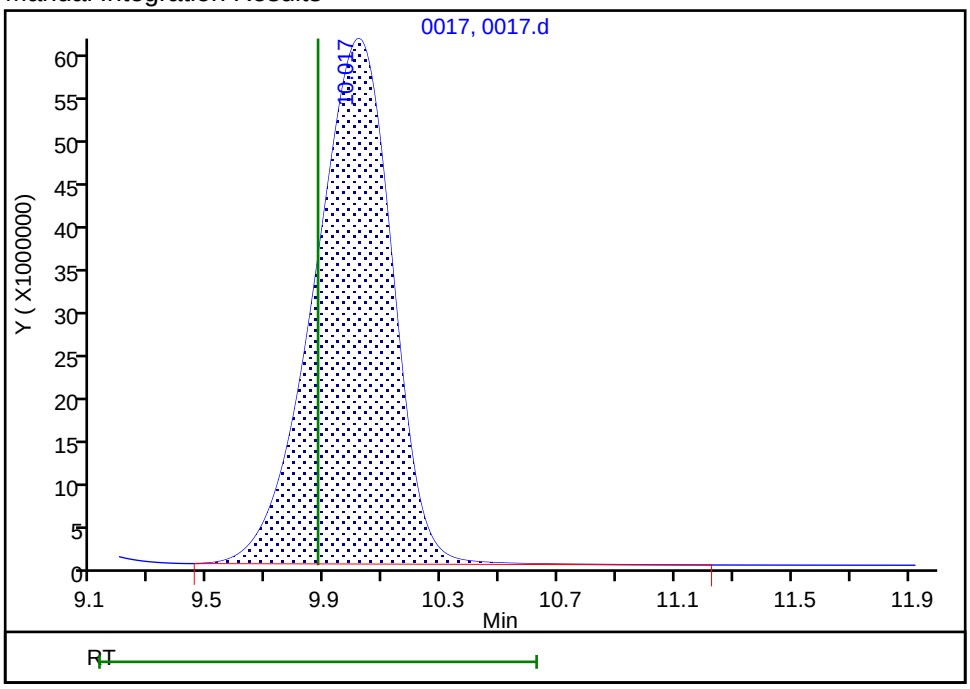
Processing Integration Results

RT: 10.02
Area: 1134649583
Amount: 99.126438
Amount Units: ug/ml



Manual Integration Results

RT: 10.02
Area: 1134347348
Amount: 99.100204
Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 12:52:23
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0018.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 16-Mar-2022 17:17:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-018
Misc. Info.: 7232
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:25:53 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 17-Mar-2022 12:53:05

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.842	2.092	0.750	72533		0.0629	M
2 Chloride	3.659	3.642	0.017	228901		0.6946	M
3 Nitrite as N		4.434				ND	U
4 Bromide		5.317				ND	U
5 Nitrate as N	6.042	5.976	0.066	80126		NC	M
7 Orthophosphate as P	9.100	9.084	0.016	367209		NC	
6 Sulfate	9.959	9.875	0.084	165096		0.6533	M

QC Flag Legend

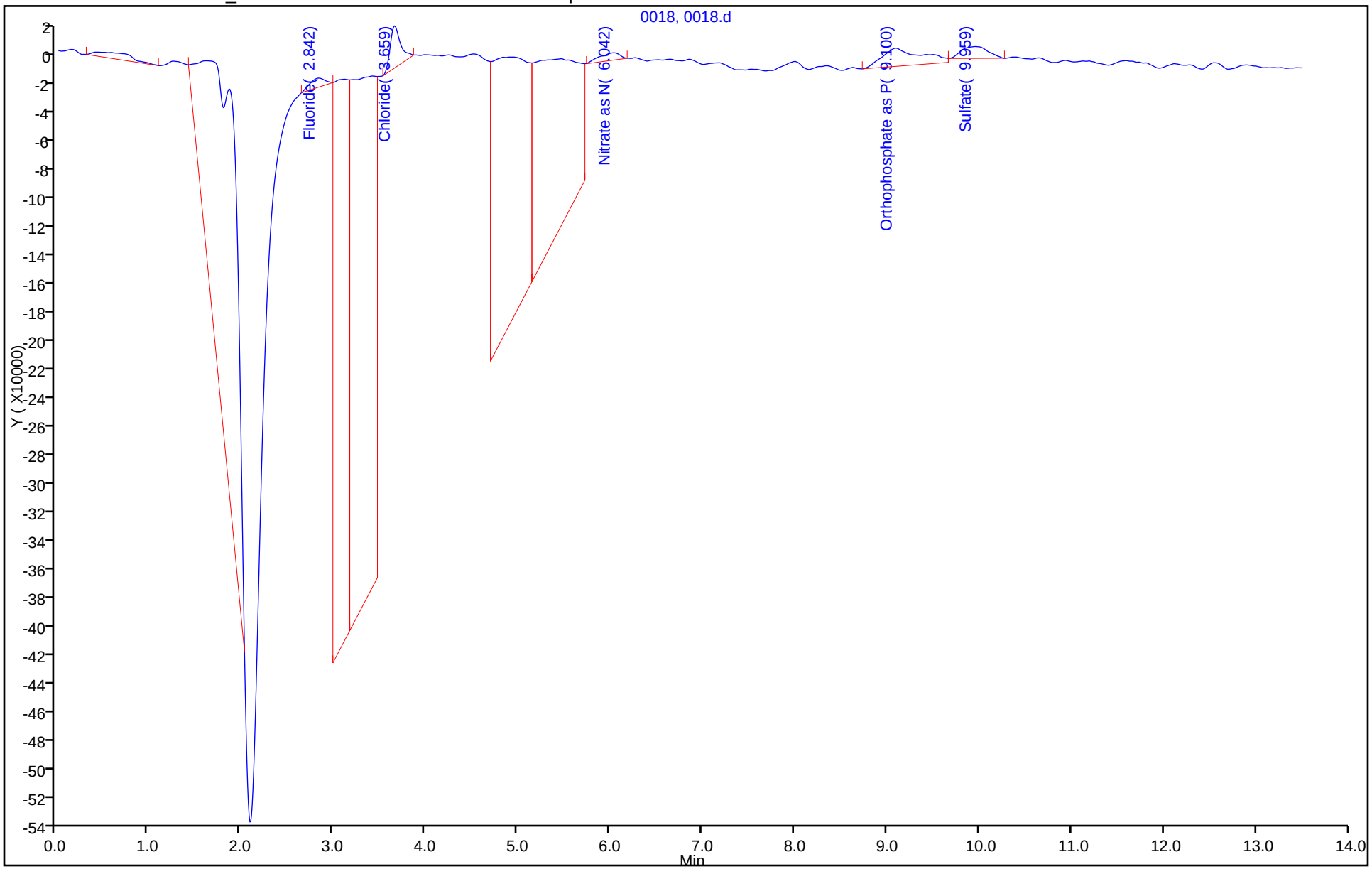
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 17-Mar-2022 13:25:54 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0018.d

Injection Date:	16-Mar-2022 17:17:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	18
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

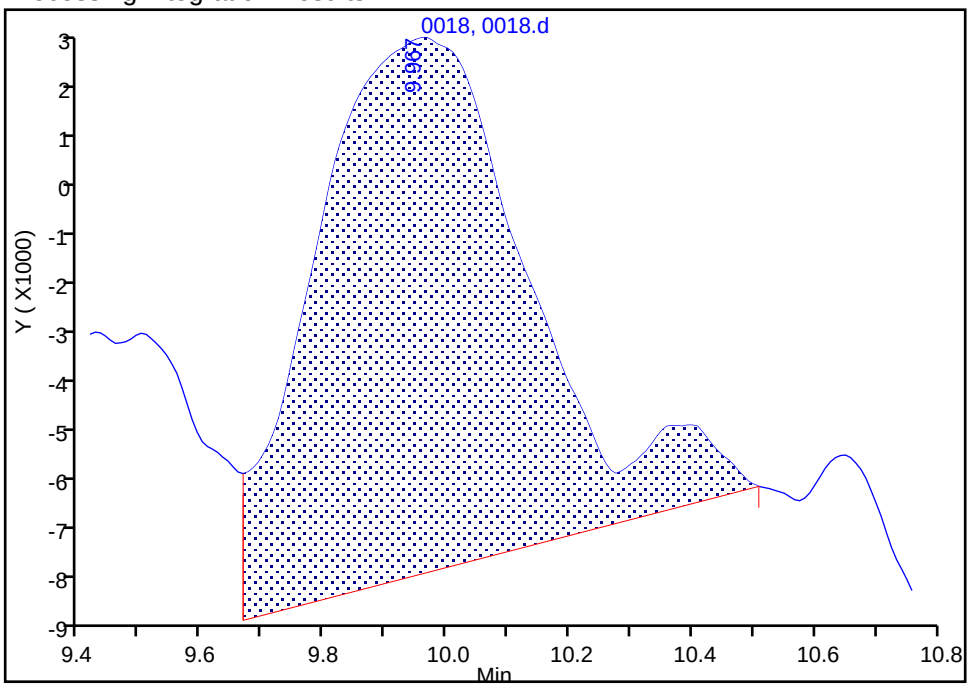
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0018.d
Injection Date: 16-Mar-2022 17:17:00 Instrument ID: WC_IonChrom11
Lims ID: ccb
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

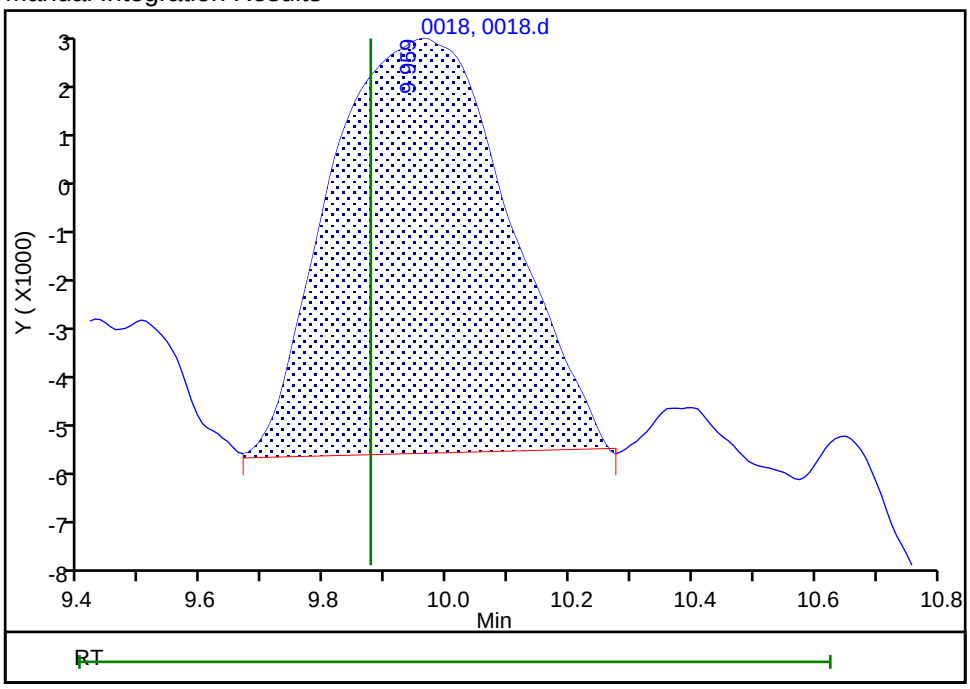
Processing Integration Results

RT: 9.97
Area: 247486
Amount: 0.660490
Amount Units: ug/ml



Manual Integration Results

RT: 9.96
Area: 165096
Amount: 0.653338
Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 12:53:00
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0028.d
Lims ID: 280-159190-F-1
Client ID: NW071-8
Sample Type: Client
Inject. Date: 16-Mar-2022 20:01:00 ALS Bottle#: 0 Worklist Smp#: 28
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-028
Misc. Info.: 21294
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:25:53 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 17-Mar-2022 12:59:36

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.092	0.417	900653	0.1228	
2 Chloride	3.692	3.642	0.050	715437850	41.1	
3 Nitrite as N	4.392	4.434	-0.042	2896515	NC	
4 Bromide	5.334	5.317	0.017	401384	0.1039	
5 Nitrate as N	5.967	5.976	-0.009	1491182907	NC	
7 Orthophosphate as P	9.167	9.084	0.083	5488508	NC	
6 Sulfate	10.000	9.875	0.125	655174996	57.5	M

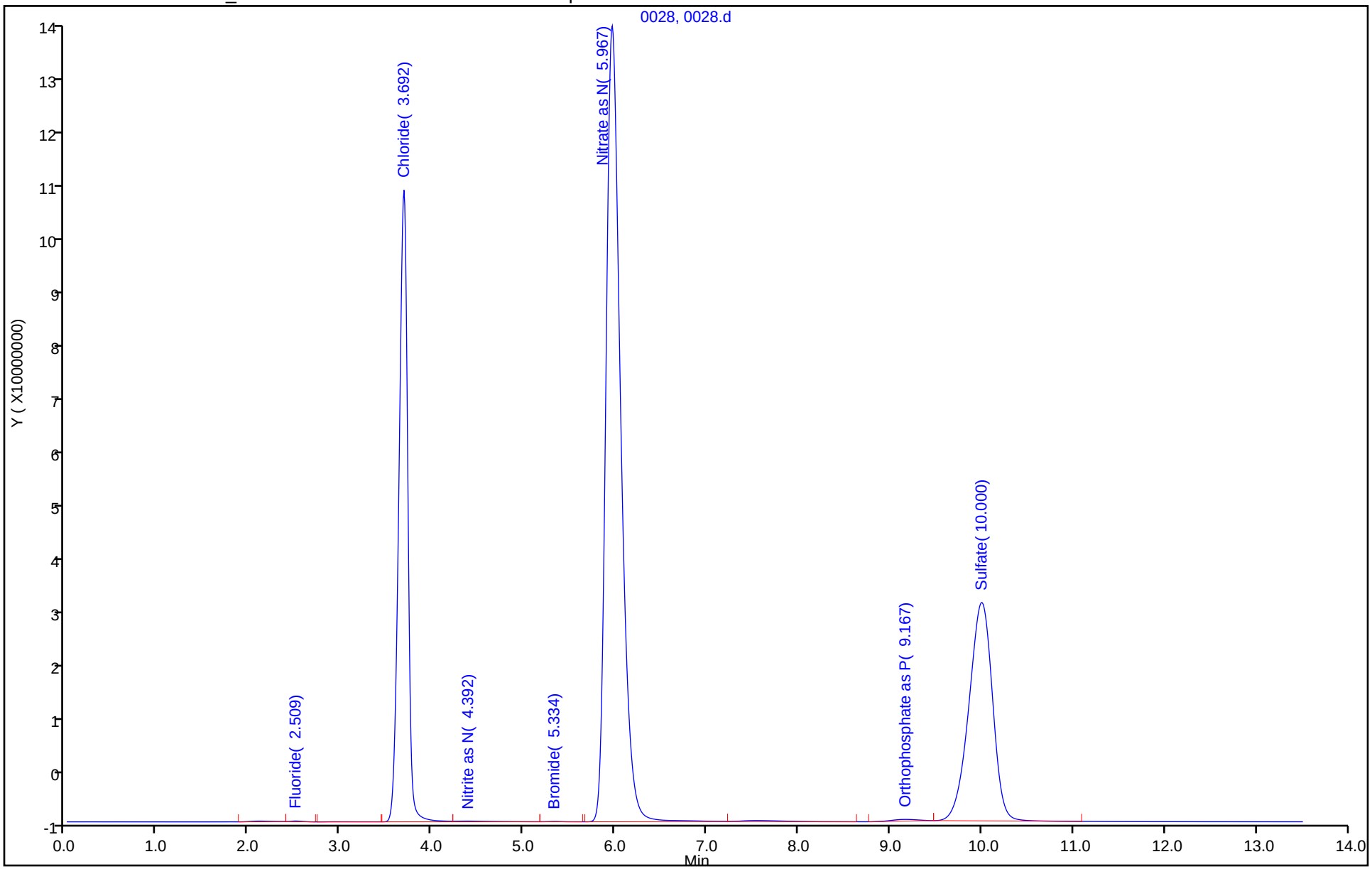
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 17-Mar-2022 13:25:59 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0028.d				
Injection Date:	16-Mar-2022 20:01:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-159190-F-1	Lab Sample ID:	280-159190-1	Worklist Smp#:	28
Client ID:	NW071-8				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

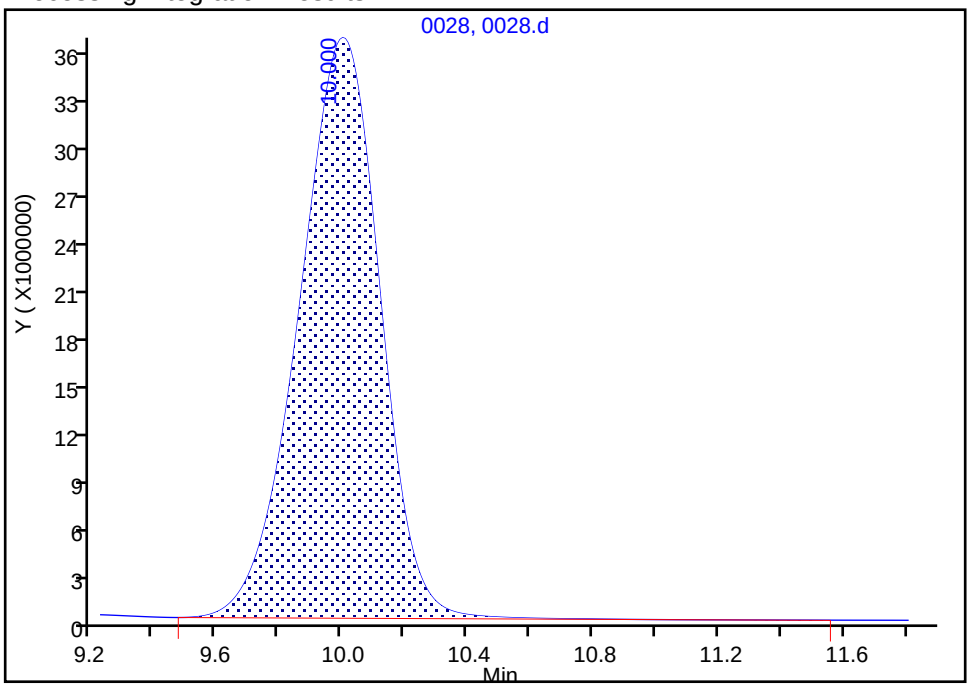
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0028.d				
Injection Date:	16-Mar-2022 20:01:00	Instrument ID:	WC_IonChrom11		
Lims ID:	280-159190-F-1	Lab Sample ID:	280-159190-1		
Client ID:	NW071-8				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	28
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

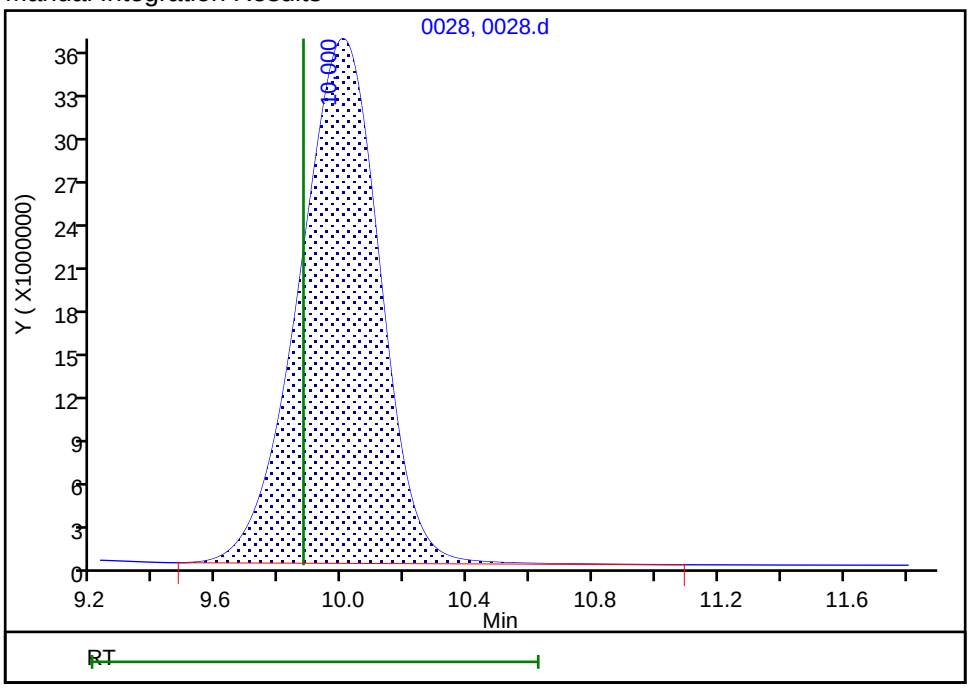
Processing Integration Results

RT: 10.00
Area: 655393039
Amount: 57.527035
Amount Units: ug/ml



Manual Integration Results

RT: 10.00
Area: 655174996
Amount: 57.508109
Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 12:59:33
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0029.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 16-Mar-2022 20:18:00 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-029
Misc. Info.: 5481
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:25:59 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 17-Mar-2022 12:59:51

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.517	2.092	0.425	67740967	5.00	4.95	
2 Chloride	3.742	3.642	0.100	1801787511	100.0	102.6	
3 Nitrite as N	4.450	4.434	0.016	147283817	NC	NC	
4 Bromide	5.325	5.317	0.008	24671295	5.00	4.95	
5 Nitrate as N	5.984	5.976	0.008	163880825	NC	NC	
7 Orthophosphate as P	9.017	9.084	-0.067	48443240	NC	NC	
6 Sulfate	10.034	9.875	0.159	1136764978	100.0	99.3	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

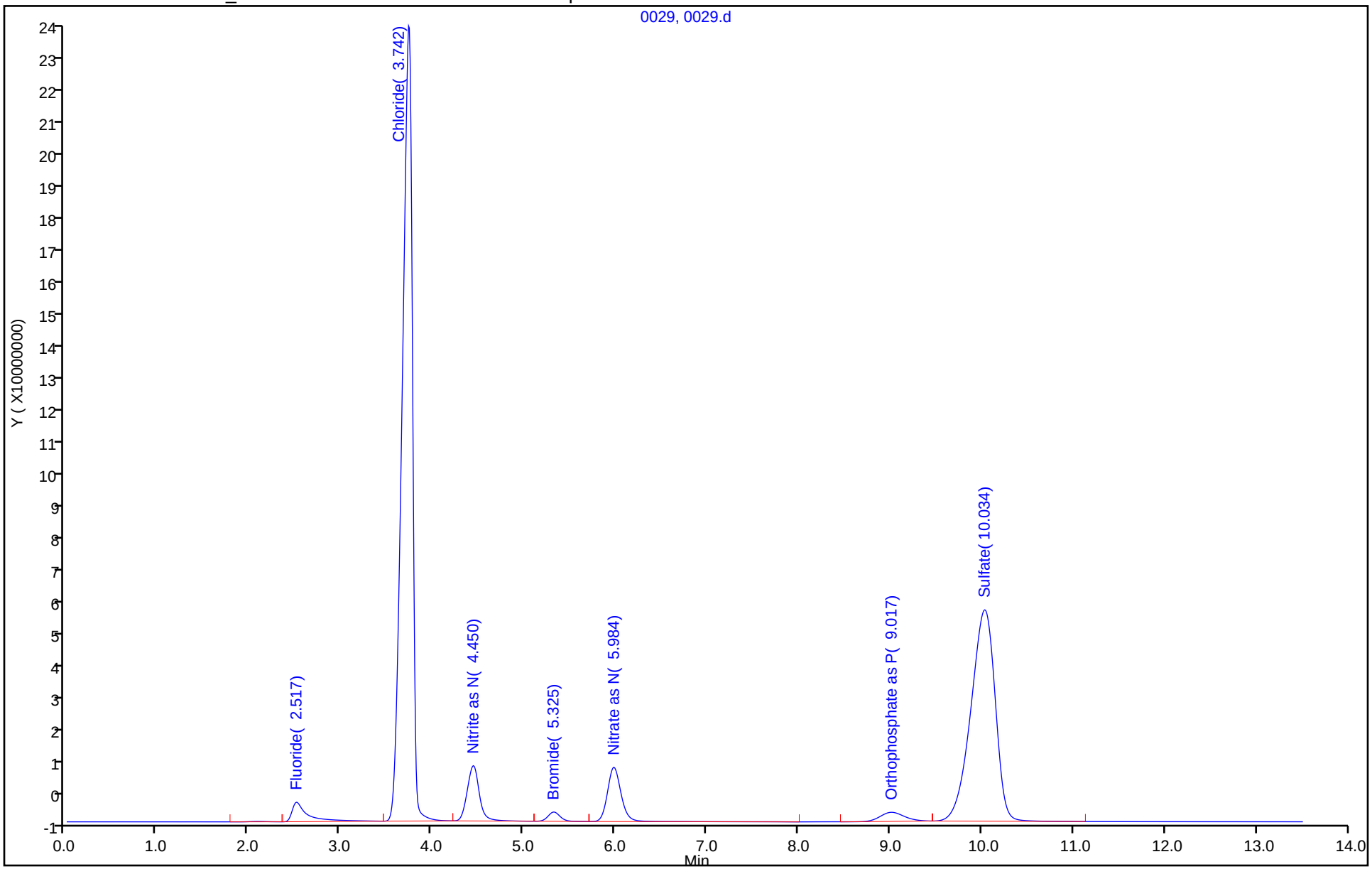
IC LCS_01862 Amount Added: 5.00 Units: mL

Report Date: 17-Mar-2022 13:25:59 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0029.d

Injection Date:	16-Mar-2022 20:18:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	29
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

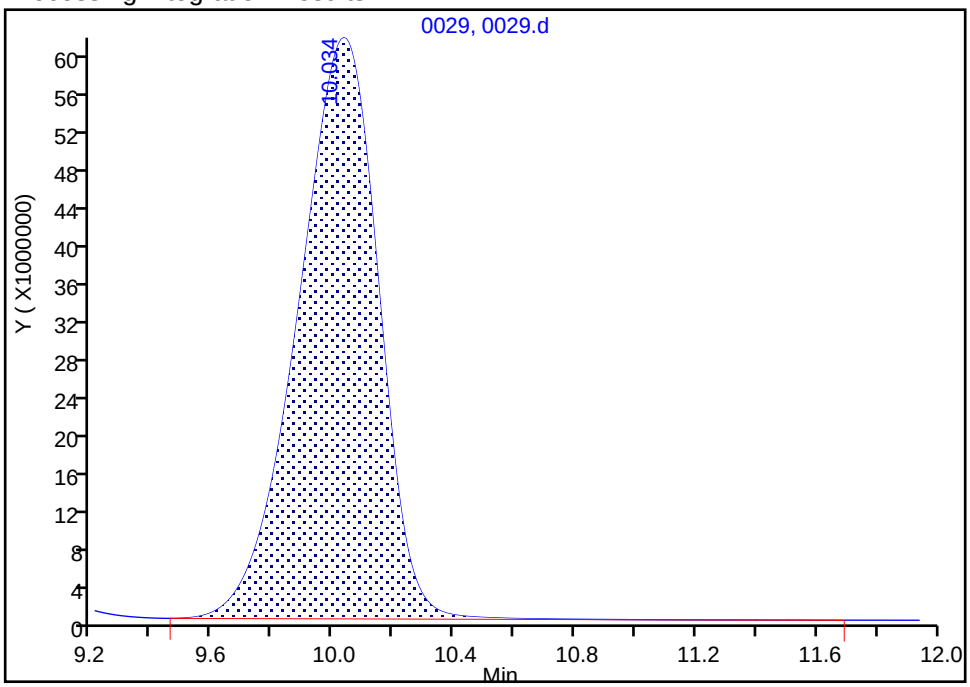
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0029.d
Injection Date: 16-Mar-2022 20:18:00 Instrument ID: WC_IonChrom11
Lims ID: ccv
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

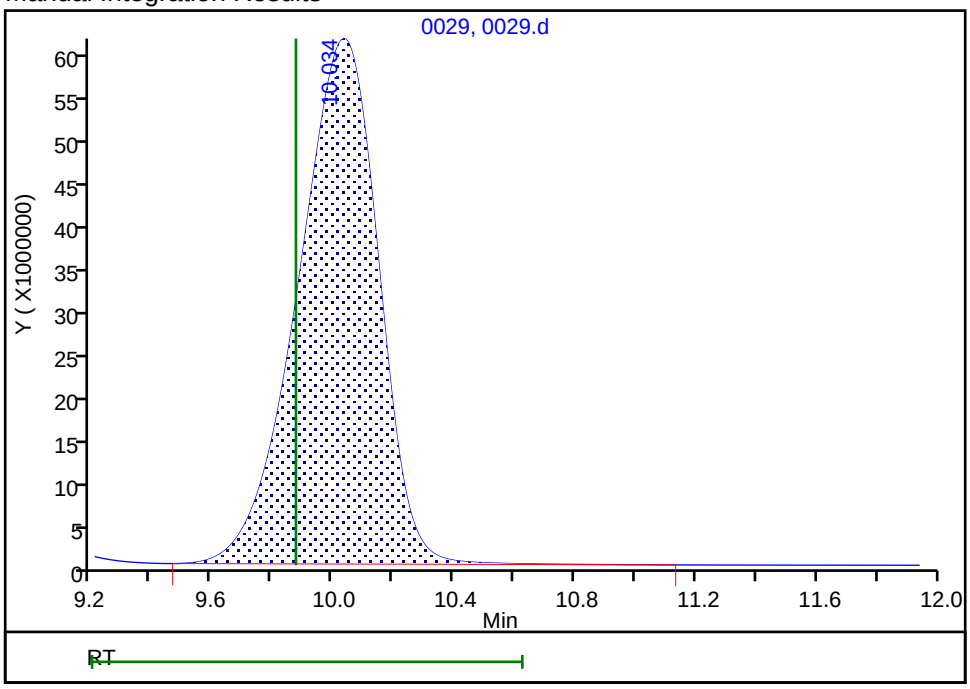
Processing Integration Results

RT: 10.03
Area: 1137333201
Amount: 99.359375
Amount Units: ug/ml



Manual Integration Results

RT: 10.03
Area: 1136764978
Amount: 99.310054
Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 12:59:48
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0030.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 16-Mar-2022 20:34:00 ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-030
Misc. Info.: 5074
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:25:59 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 17-Mar-2022 13:00:21

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.092				ND	U
2 Chloride	3.659	3.642	0.017	120381		0.6885	M
3 Nitrite as N		4.434				ND	U
4 Bromide		5.317				ND	
5 Nitrate as N		5.976				ND	
7 Orthophosphate as P	9.100	9.084	0.016	539067		NC	
6 Sulfate	9.917	9.875	0.042	166367		0.6534	M

QC Flag Legend

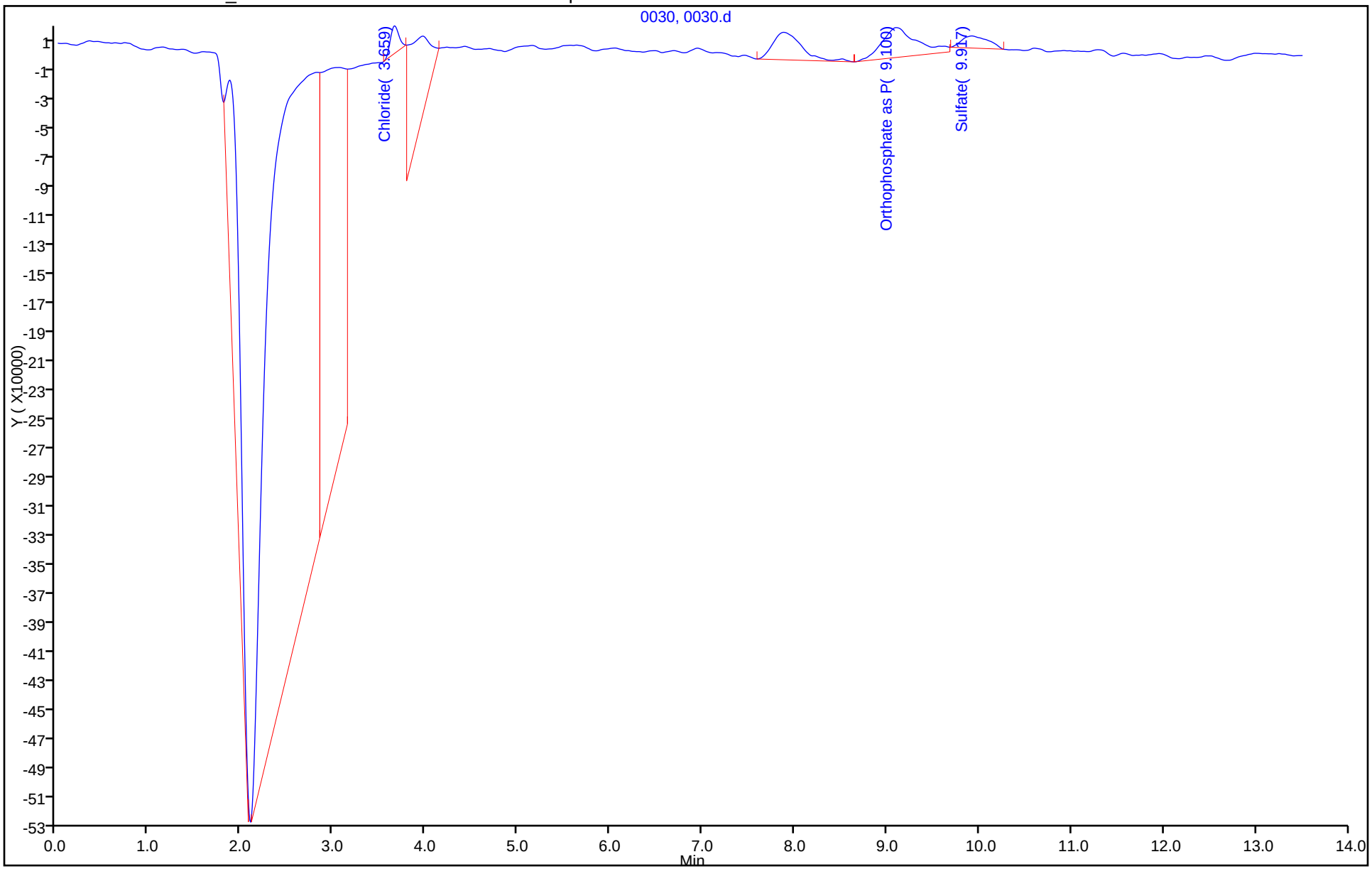
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 17-Mar-2022 13:26:00 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0030.d

Injection Date:	16-Mar-2022 20:34:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	30
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

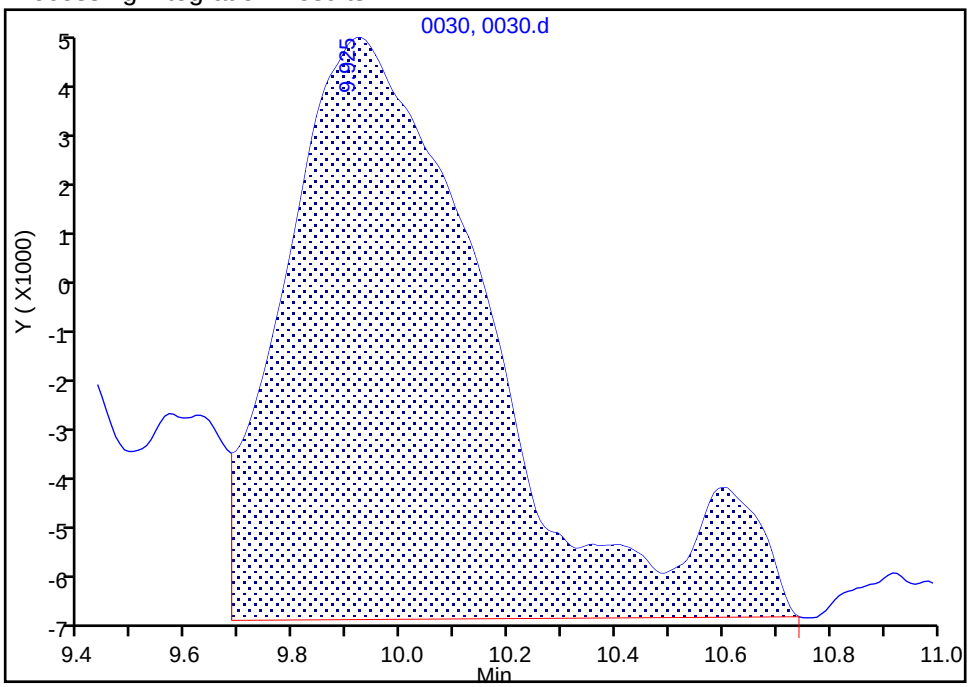
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0030.d
Injection Date: 16-Mar-2022 20:34:00 Instrument ID: WC_IonChrom11
Lims ID: ccb
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

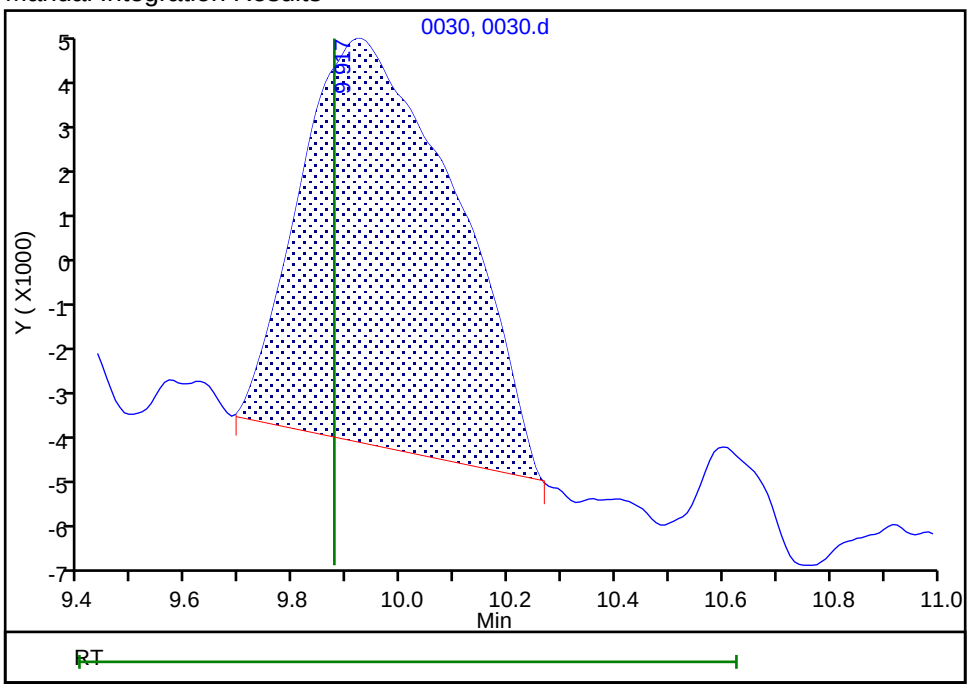
Processing Integration Results

RT: 9.93
Area: 290137
Amount: 0.664192
Amount Units: ug/ml



Manual Integration Results

RT: 9.92
Area: 166367
Amount: 0.653449
Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 13:00:18
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0031.d
Lims ID: 280-159190-F-2
Client ID: NW060-8
Sample Type: Client
Inject. Date: 16-Mar-2022 20:51:00 ALS Bottle#: 0 Worklist Smp#: 31
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-031
Misc. Info.: 11261
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:25:59 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 17-Mar-2022 13:12:29

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.517	2.092	0.425	9229051	0.7245	
2 Chloride	3.659	3.642	0.017	153664462	9.37	
3 Nitrite as N	4.401	4.434	-0.033	8929579	NC	
4 Bromide	5.342	5.317	0.025	3012845	0.6249	
5 Nitrate as N	6.001	5.976	0.025	132194951	NC	
7 Orthophosphate as P	9.117	9.084	0.033	3564865	NC	
6 Sulfate	9.951	9.875	0.076	291619238	26.0	M

QC Flag Legend

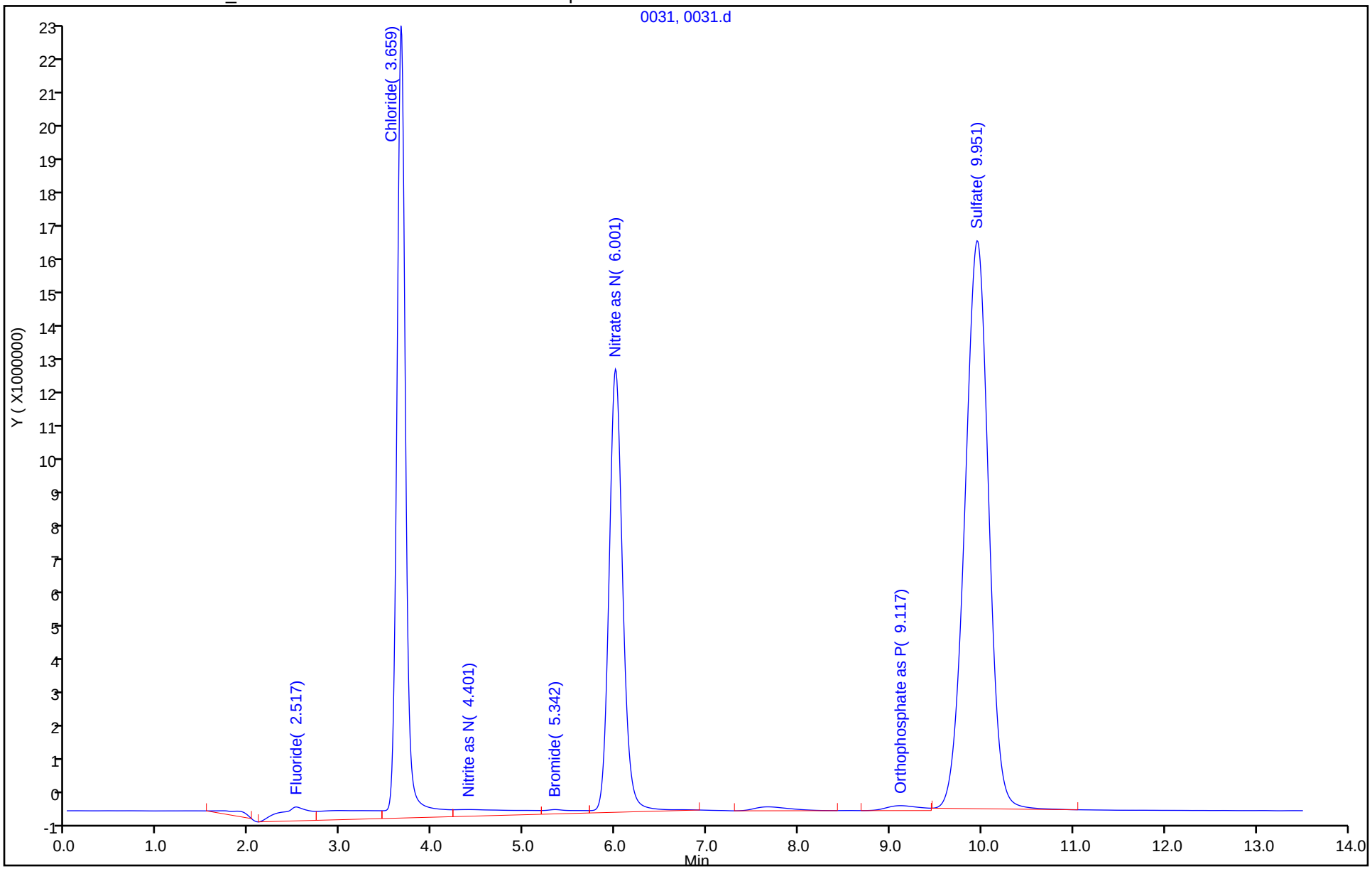
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 17-Mar-2022 13:26:01 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0031.d

Injection Date:	16-Mar-2022 20:51:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-159190-F-2	Lab Sample ID:	280-159190-2	Worklist Smp#:	31
Client ID:	NW060-8				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

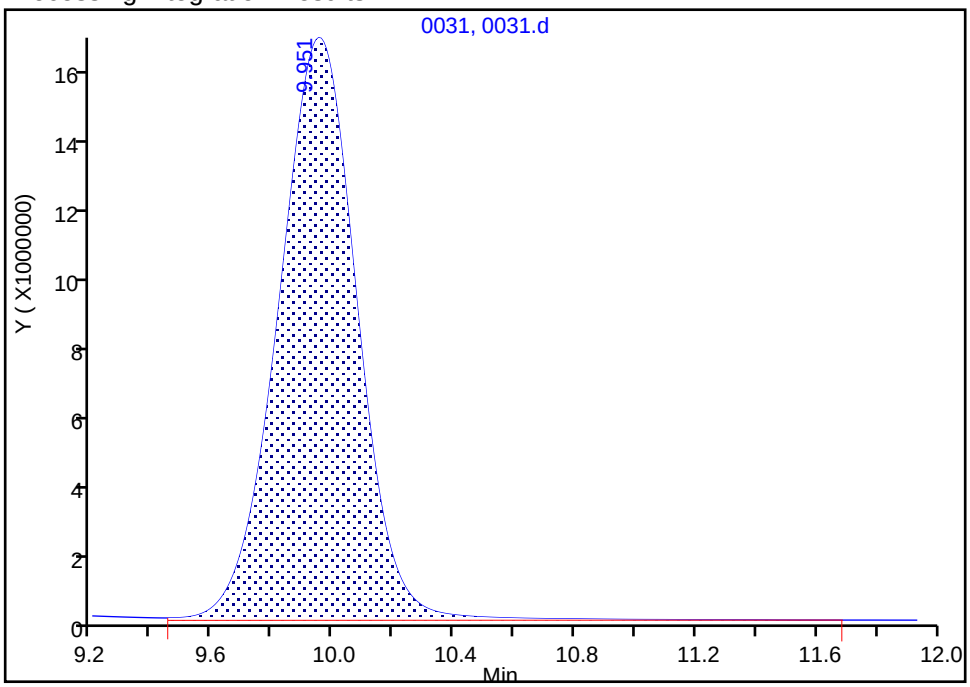
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0031.d				
Injection Date:	16-Mar-2022 20:51:00	Instrument ID:	WC_IonChrom11		
Lims ID:	280-159190-F-2	Lab Sample ID:	280-159190-2		
Client ID:	NW060-8				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	31
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

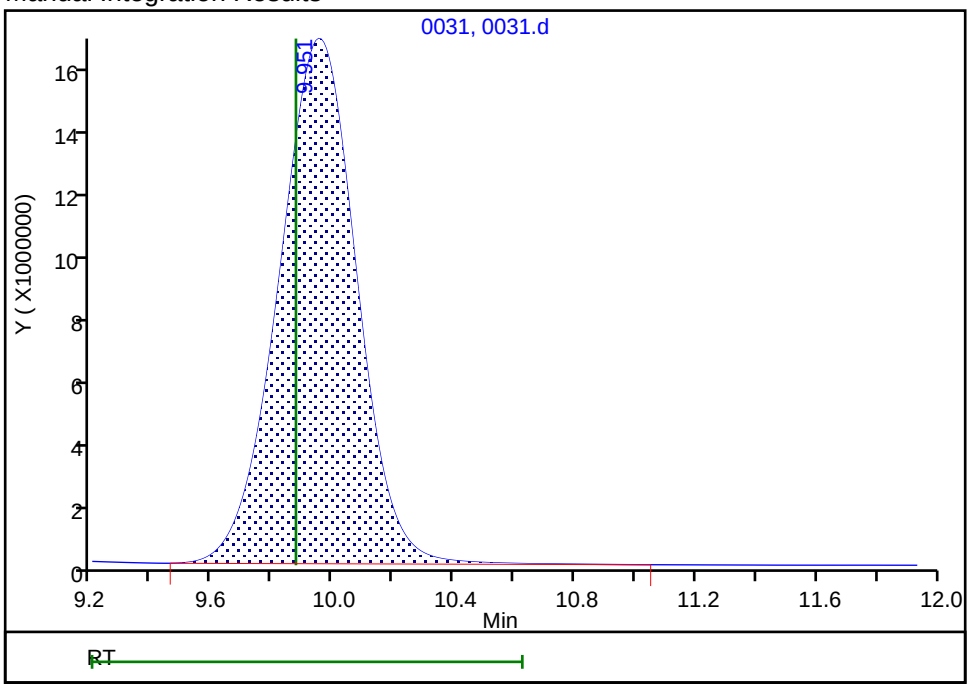
Processing Integration Results

RT: 9.95
Area: 295801246
Amount: 26.314516
Amount Units: ug/ml



Manual Integration Results

RT: 9.95
Area: 291619238
Amount: 25.951518
Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 13:12:25
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0032.d
Lims ID: 280-159190-F-3
Client ID: NW061-8
Sample Type: Client
Inject. Date: 16-Mar-2022 21:07:00 ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-032
Misc. Info.: 16700
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:25:59 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 17-Mar-2022 13:12:50

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.092	0.417	2008317	0.2028	
2 Chloride	3.700	3.642	0.058	885240574	50.8	
3 Nitrite as N	4.459	4.434	0.025	1217062	NC	
4 Bromide	5.409	5.317	0.092	1087646	0.2408	
5 Nitrate as N	6.067	5.976	0.091	176476505	NC	
7 Orthophosphate as P	9.184	9.084	0.100	5821116	NC	
6 Sulfate	10.117	9.875	0.242	1793723440	156.3	M

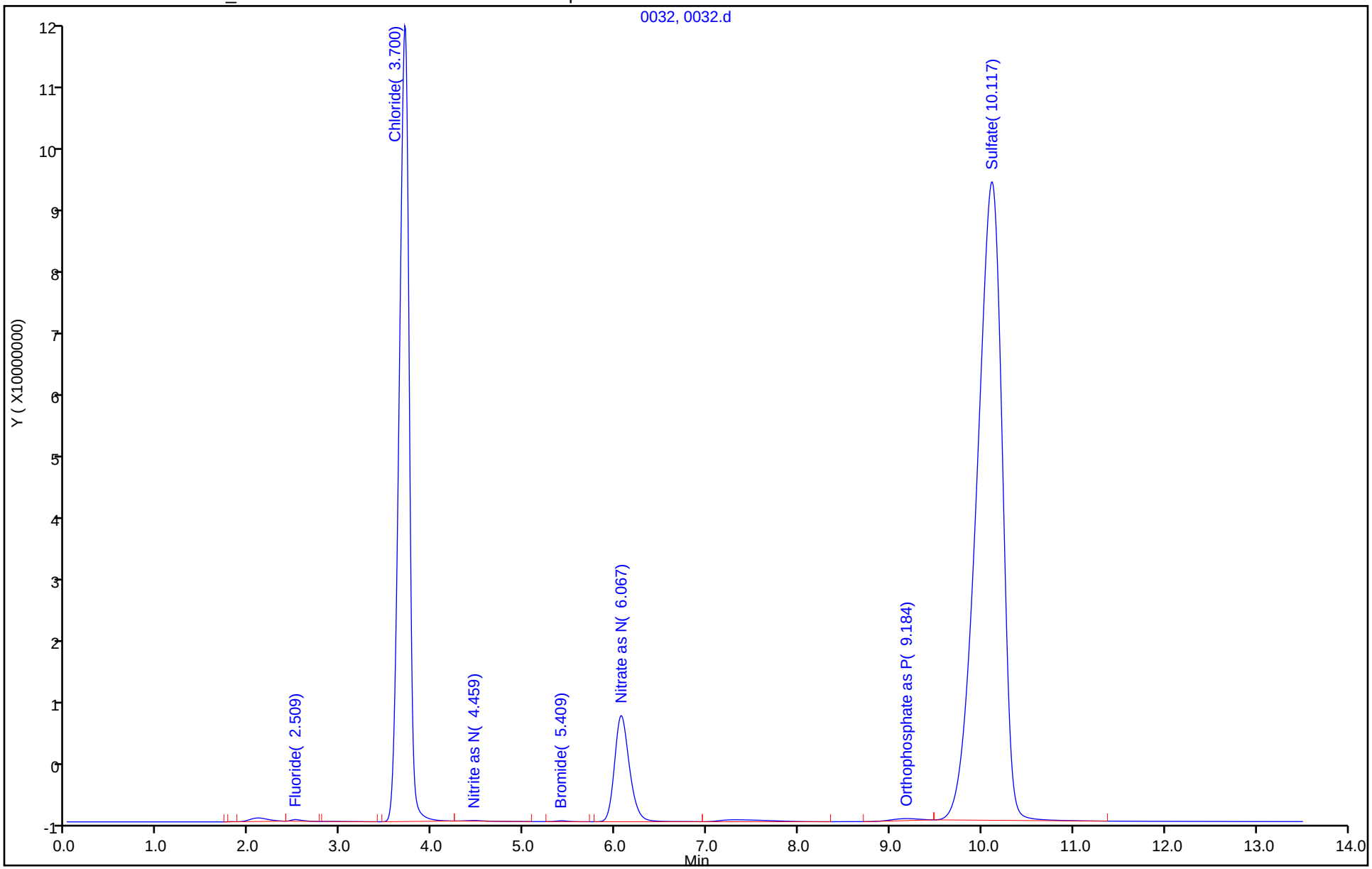
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 17-Mar-2022 13:26:01 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0032.d				
Injection Date:	16-Mar-2022 21:07:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-159190-F-3	Lab Sample ID:	280-159190-3	Worklist Smp#:	32
Client ID:	NW061-8				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

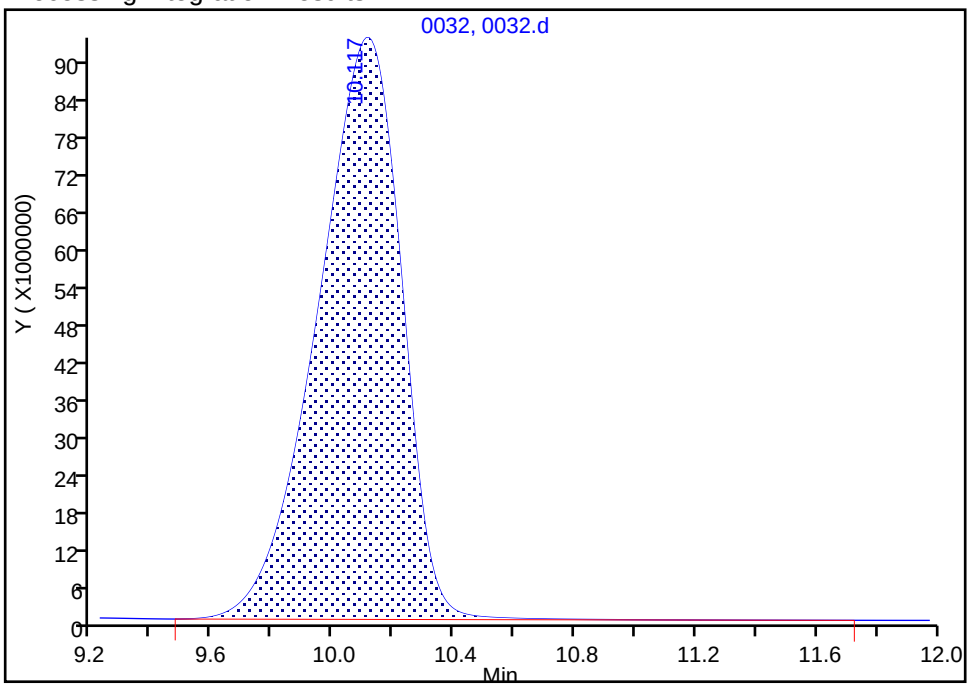
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0032.d				
Injection Date:	16-Mar-2022 21:07:00	Instrument ID:	WC_IonChrom11		
Lims ID:	280-159190-F-3	Lab Sample ID:	280-159190-3		
Client ID:	NW061-8				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	32
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

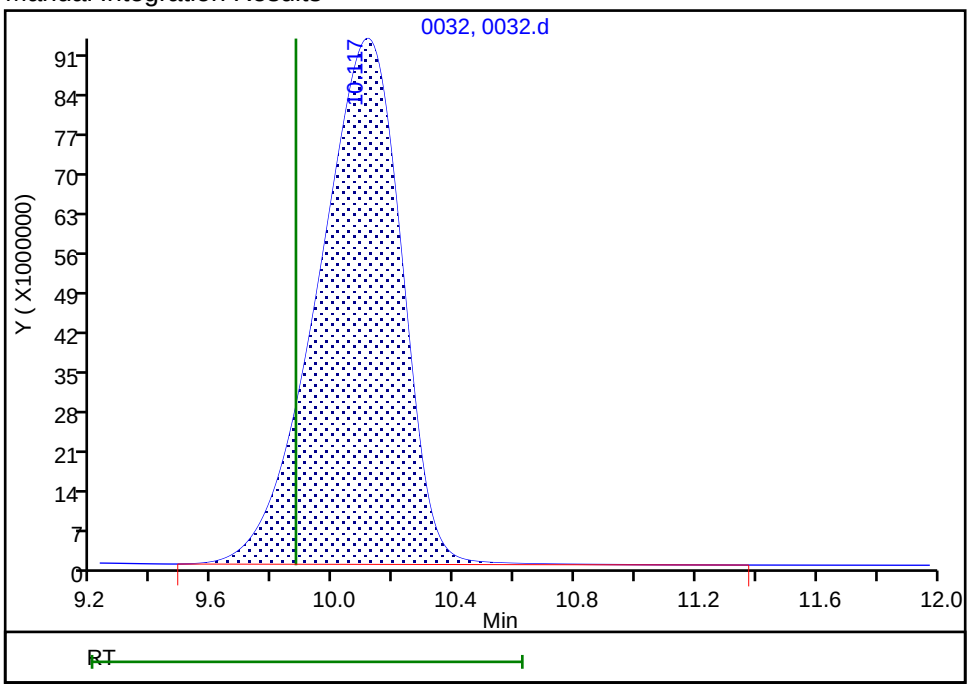
Processing Integration Results

RT: 10.12
Area: 1793923705
Amount: 156.3513
Amount Units: ug/ml



Manual Integration Results

RT: 10.12
Area: 1793723440
Amount: 156.3340
Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 13:12:47
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0033.d
Lims ID: 280-159190-F-4
Client ID: EW7-PM24A-8-25
Sample Type: Client
Inject. Date: 16-Mar-2022 21:23:00 ALS Bottle#: 0 Worklist Smp#: 33
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-033
Misc. Info.: 24685
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:25:59 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 17-Mar-2022 13:13:07

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.092	0.417	2503742	0.2386	
2 Chloride	3.709	3.642	0.067	522357951	30.2	
3 Nitrite as N	4.401	4.434	-0.033	1179569	NC	
4 Bromide	5.576	5.317	0.259	1038601	0.2310	
5 Nitrate as N	6.201	5.976	0.225	77578244	NC	
7 Orthophosphate as P	8.676	9.084	-0.408	1094218	NC	
6 Sulfate	10.026	9.875	0.151	543114971	47.8	M

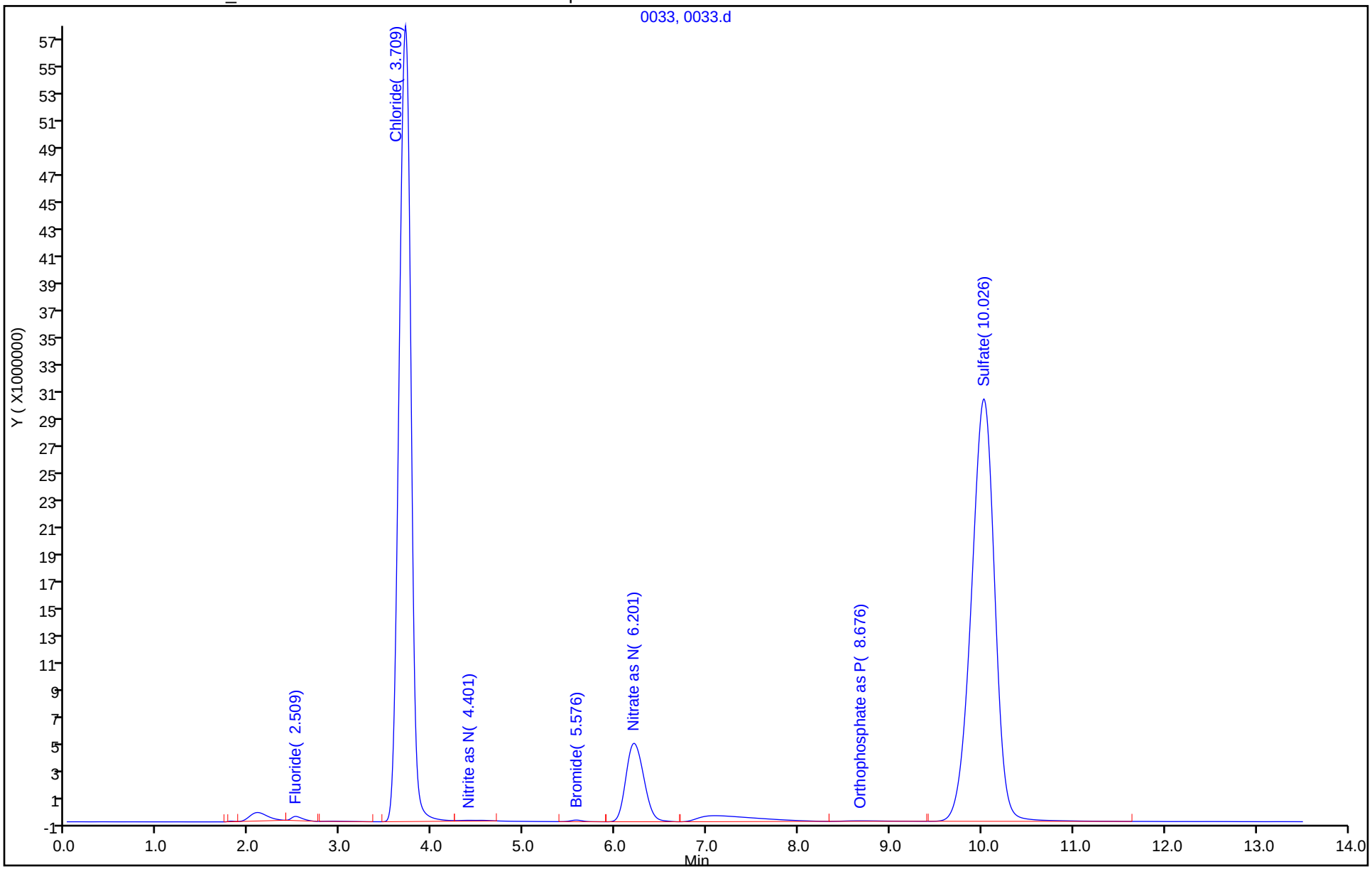
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 17-Mar-2022 13:26:02 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0033.d				
Injection Date:	16-Mar-2022 21:23:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-159190-F-4	Lab Sample ID:	280-159190-4	Worklist Smp#:	33
Client ID:	EW7-PM24A-8-25				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

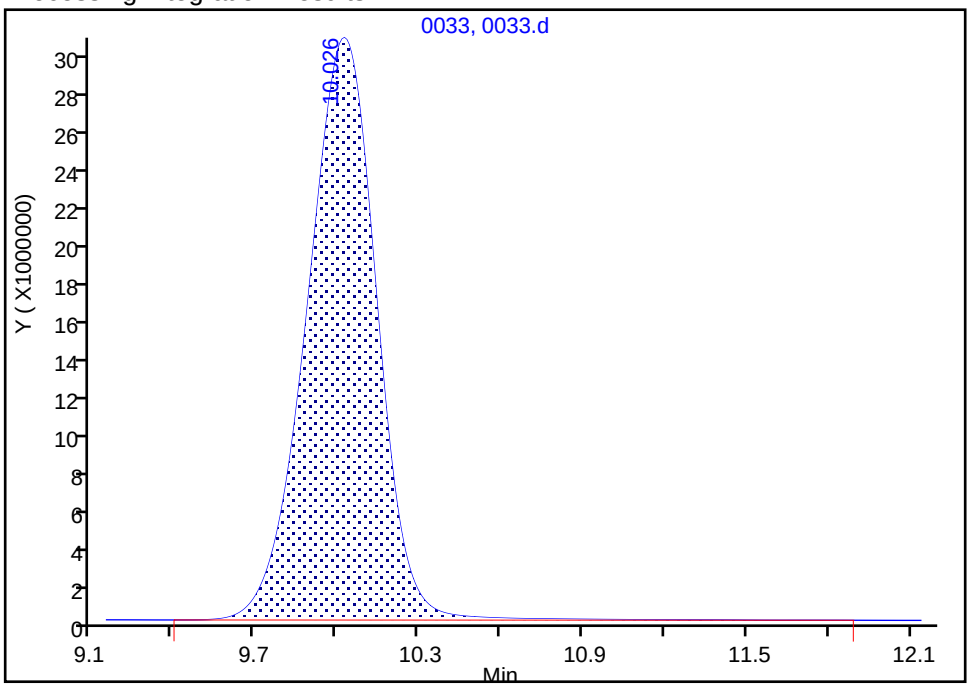
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0033.d				
Injection Date:	16-Mar-2022 21:23:00	Instrument ID:	WC_IonChrom11		
Lims ID:	280-159190-F-4	Lab Sample ID:	280-159190-4		
Client ID:	EW7-PM24A-8-25				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	33
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

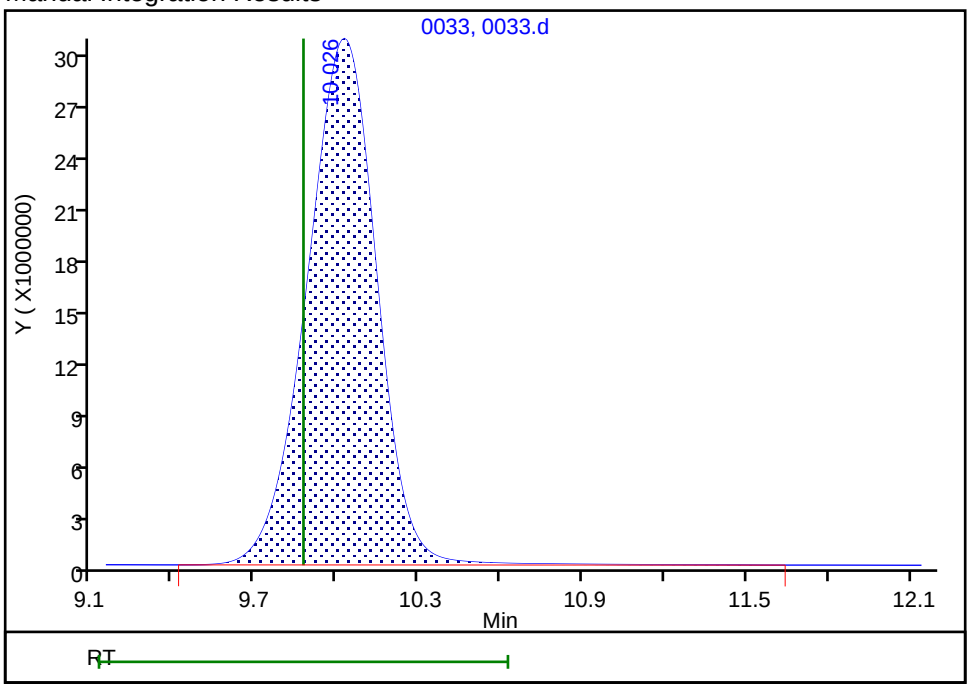
Processing Integration Results

RT: 10.03
Area: 543161651
Amount: 47.785365
Amount Units: ug/ml



Manual Integration Results

RT: 10.03
Area: 543114971
Amount: 47.781314
Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 13:13:03
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0034.d
Lims ID: 280-159190-F-5
Client ID: EW7-PM21A-8-25
Sample Type: Client
Inject. Date: 16-Mar-2022 21:40:00 ALS Bottle#: 0 Worklist Smp#: 34
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-034
Misc. Info.: 15741
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:25:59 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 17-Mar-2022 13:14:12

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.092	0.417	1881332	0.1936	
2 Chloride	3.684	3.642	0.042	345949495	20.2	
3 Nitrite as N	4.500	4.434	0.066	889541	NC	
4 Bromide	5.459	5.317	0.142	574544	0.1384	
5 Nitrate as N	6.059	5.976	0.083	570030141	NC	
7 Orthophosphate as P	9.175	9.084	0.091	555976	NC	
6 Sulfate	10.075	9.875	0.200	1200964673	104.9	M

QC Flag Legend

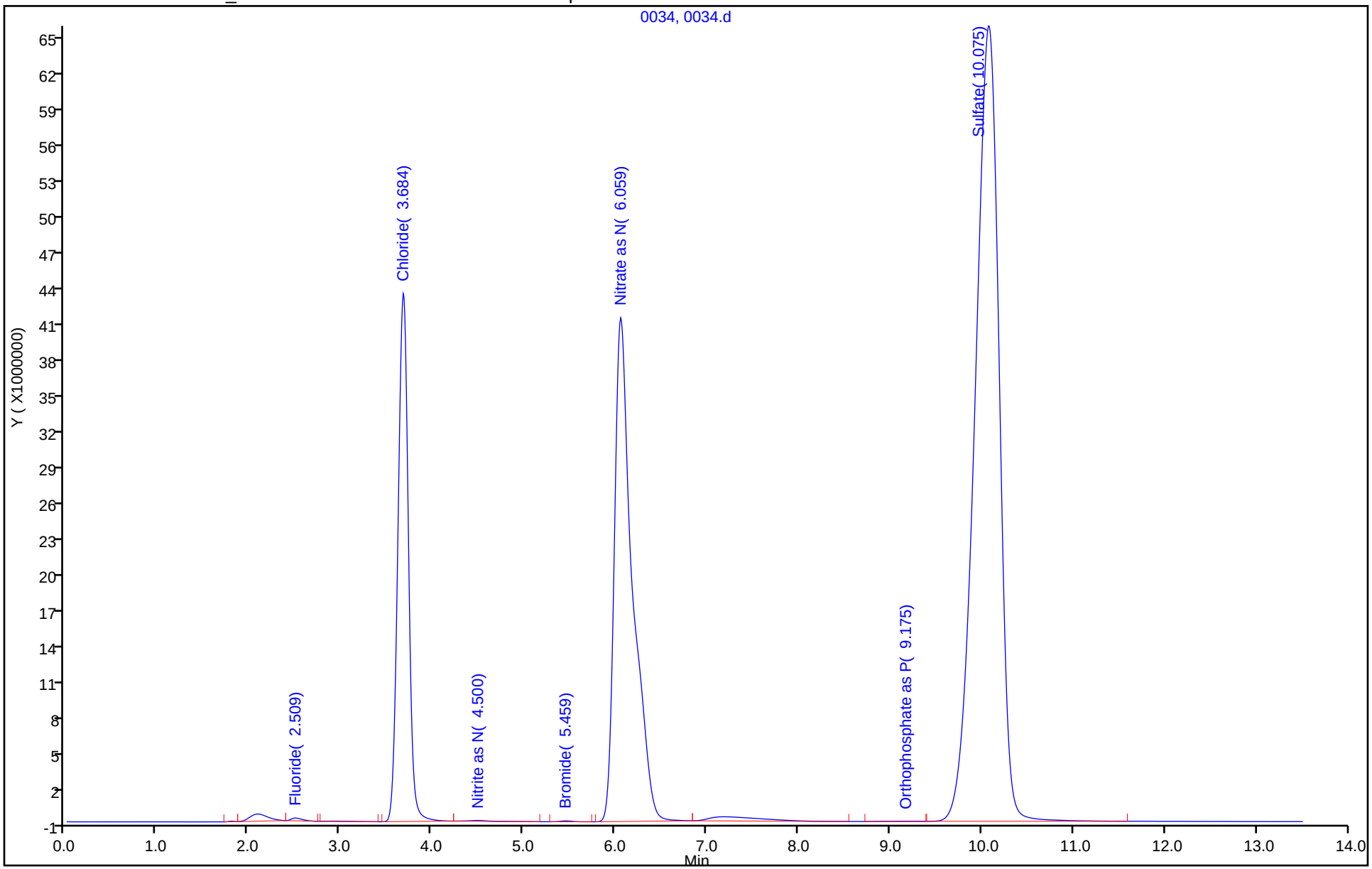
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 17-Mar-2022 13:26:02 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0034.d

Injection Date:	16-Mar-2022 21:40:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-159190-F-5	Lab Sample ID:	280-159190-5	Worklist Smp#:	34
Client ID:	EW7-PM21A-8-25				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

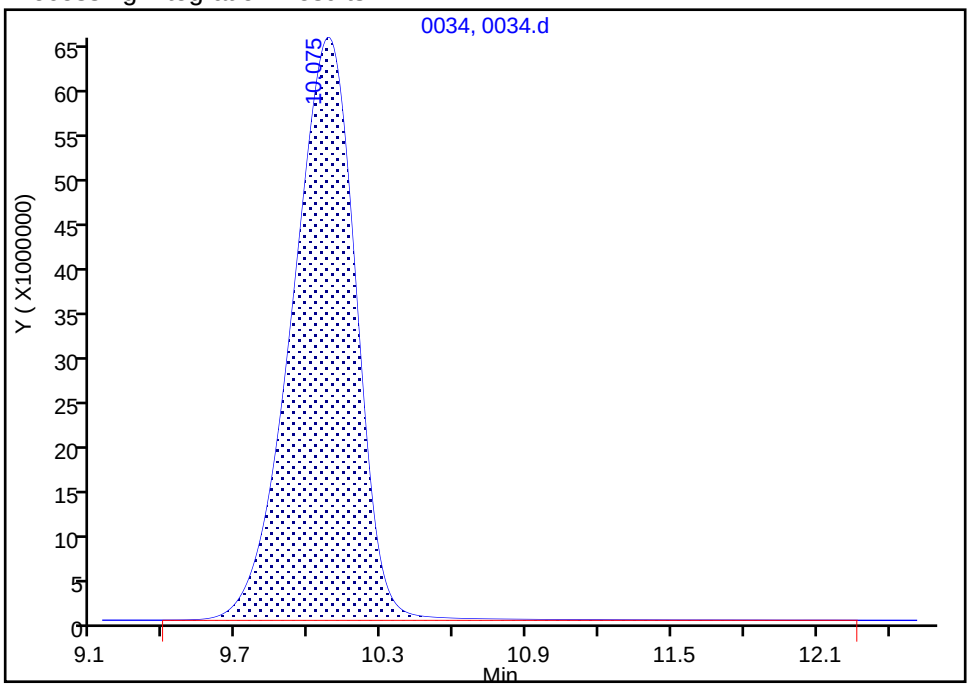
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0034.d				
Injection Date:	16-Mar-2022 21:40:00	Instrument ID:	WC_IonChrom11		
Lims ID:	280-159190-F-5	Lab Sample ID:	280-159190-5		
Client ID:	EW7-PM21A-8-25				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	34
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

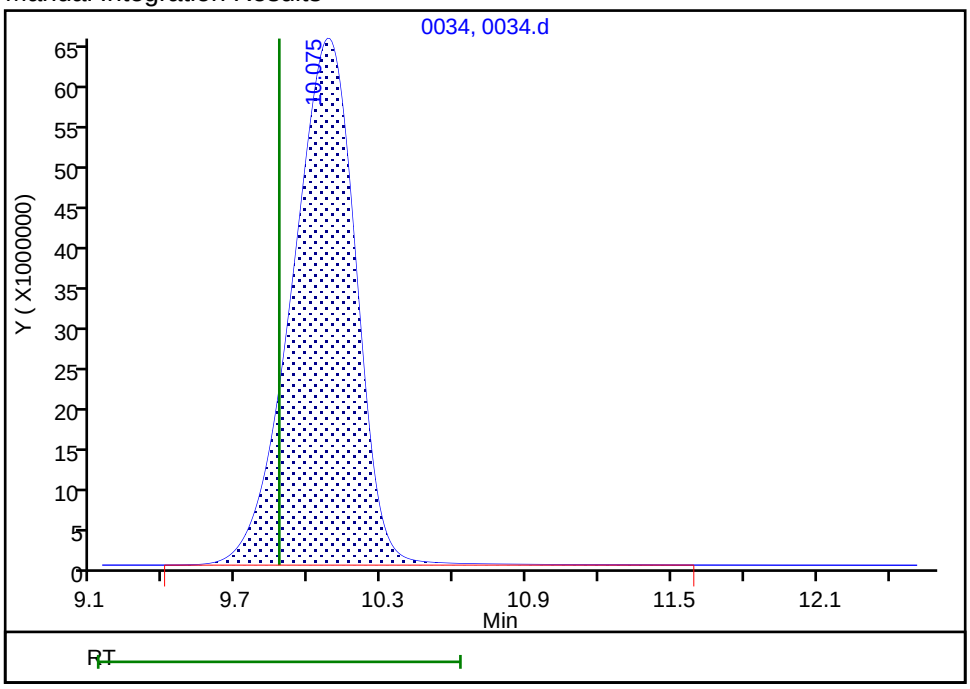
Processing Integration Results

RT: 10.08
Area: 1203537413
Amount: 105.1059
Amount Units: ug/ml



Manual Integration Results

RT: 10.08
Area: 1200964673
Amount: 104.8826
Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 13:14:08

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0035.d
Lims ID: 280-159190-F-6
Client ID: NW070-8
Sample Type: Client
Inject. Date: 16-Mar-2022 21:56:00 ALS Bottle#: 0 Worklist Smp#: 35
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-035
Misc. Info.: 12310
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:25:59 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 17-Mar-2022 13:14:27

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.500	2.092	0.408	735446	0.1108	
2 Chloride	3.709	3.642	0.067	999900247	57.2	
3 Nitrite as N	4.450	4.434	0.016	33048381	NC	
4 Bromide	5.367	5.317	0.050	466065	0.1168	
5 Nitrate as N	6.025	5.976	0.049	348156196	NC	
7 Orthophosphate as P	9.175	9.084	0.091	10443865	NC	
6 Sulfate	10.042	9.875	0.167	995385983	87.0	M

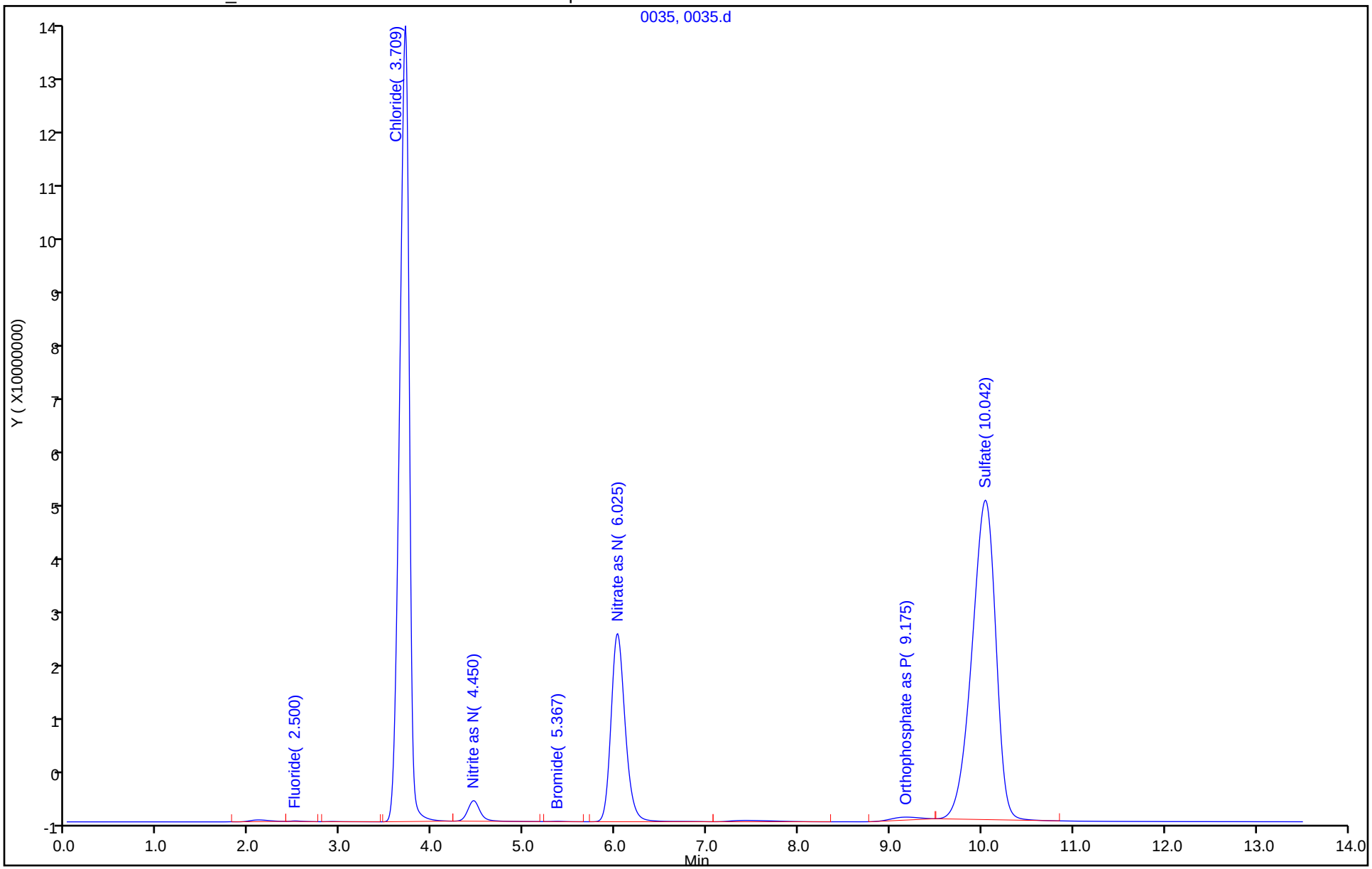
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 17-Mar-2022 13:26:03 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0035.d				
Injection Date:	16-Mar-2022 21:56:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-159190-F-6	Lab Sample ID:	280-159190-6	Worklist Smp#:	35
Client ID:	NW070-8				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

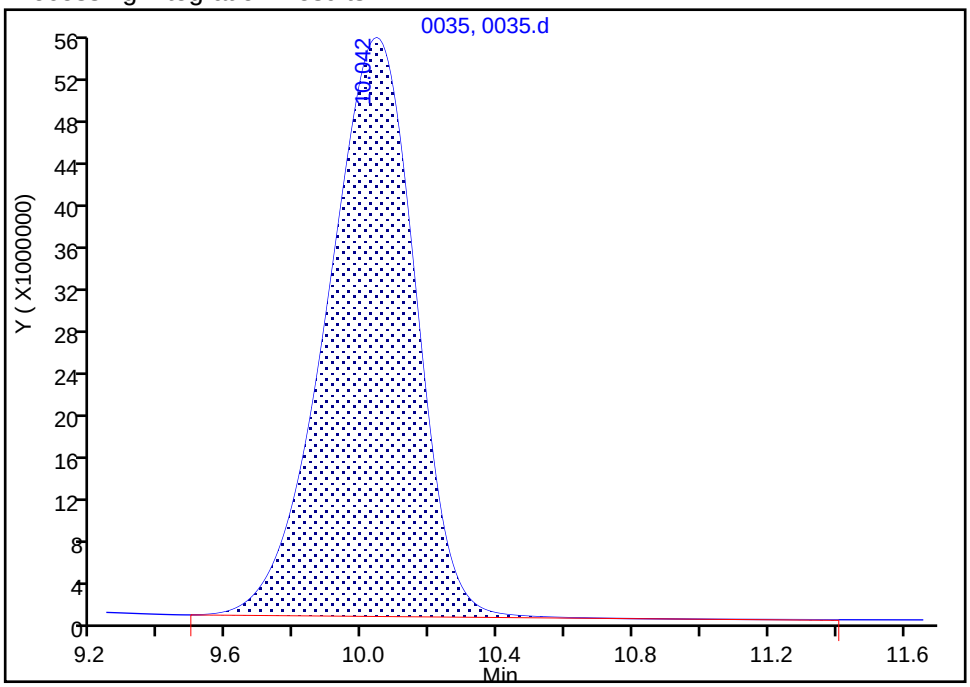
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0035.d				
Injection Date:	16-Mar-2022 21:56:00	Instrument ID:	WC_IonChrom11		
Lims ID:	280-159190-F-6	Lab Sample ID:	280-159190-6		
Client ID:	NW070-8				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	35
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

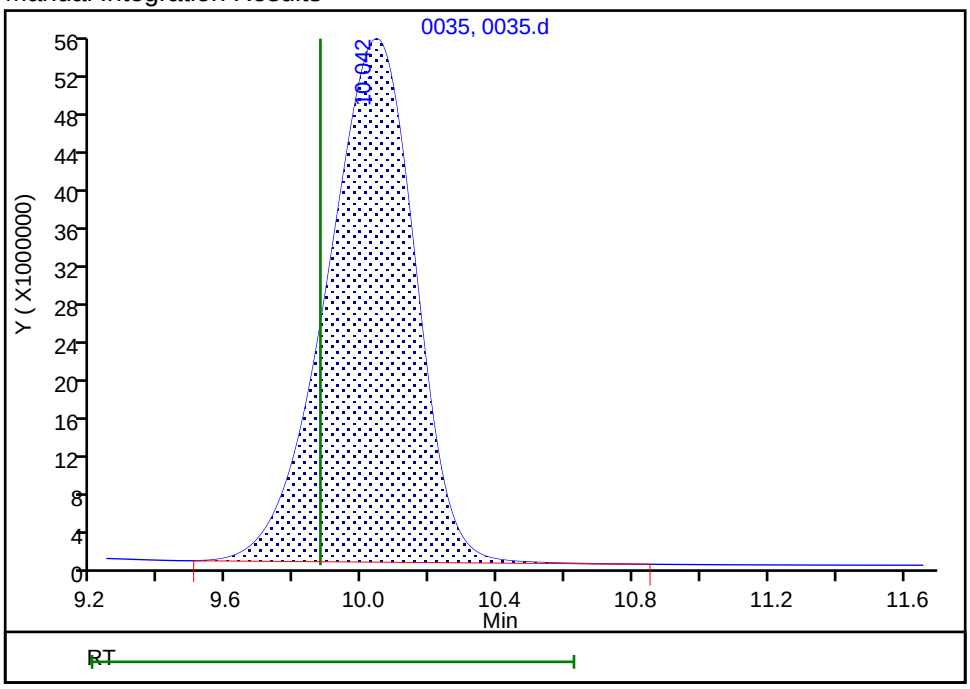
Processing Integration Results

RT: 10.04
Area: 996154449
Amount: 87.105079
Amount Units: ug/ml



Manual Integration Results

RT: 10.04
Area: 995385983
Amount: 87.038376
Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 13:14:23
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0037.d
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 16-Mar-2022 22:29:00 ALS Bottle#: 0 Worklist Smp#: 37
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-037
Misc. Info.: 6887
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:25:59 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 17-Mar-2022 13:15:12

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.517	2.092	0.425	68521947	5.00	5.01	
2 Chloride	3.742	3.642	0.100	1804344914	100.0	102.7	
3 Nitrite as N	4.450	4.434	0.016	146854039	NC	NC	
4 Bromide	5.325	5.317	0.008	24765053	5.00	4.96	
5 Nitrate as N	5.984	5.976	0.008	162332896	NC	NC	
7 Orthophosphate as P	9.009	9.084	-0.075	49444331	NC	NC	
6 Sulfate	10.025	9.875	0.150	1139699348	100.0	99.6	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

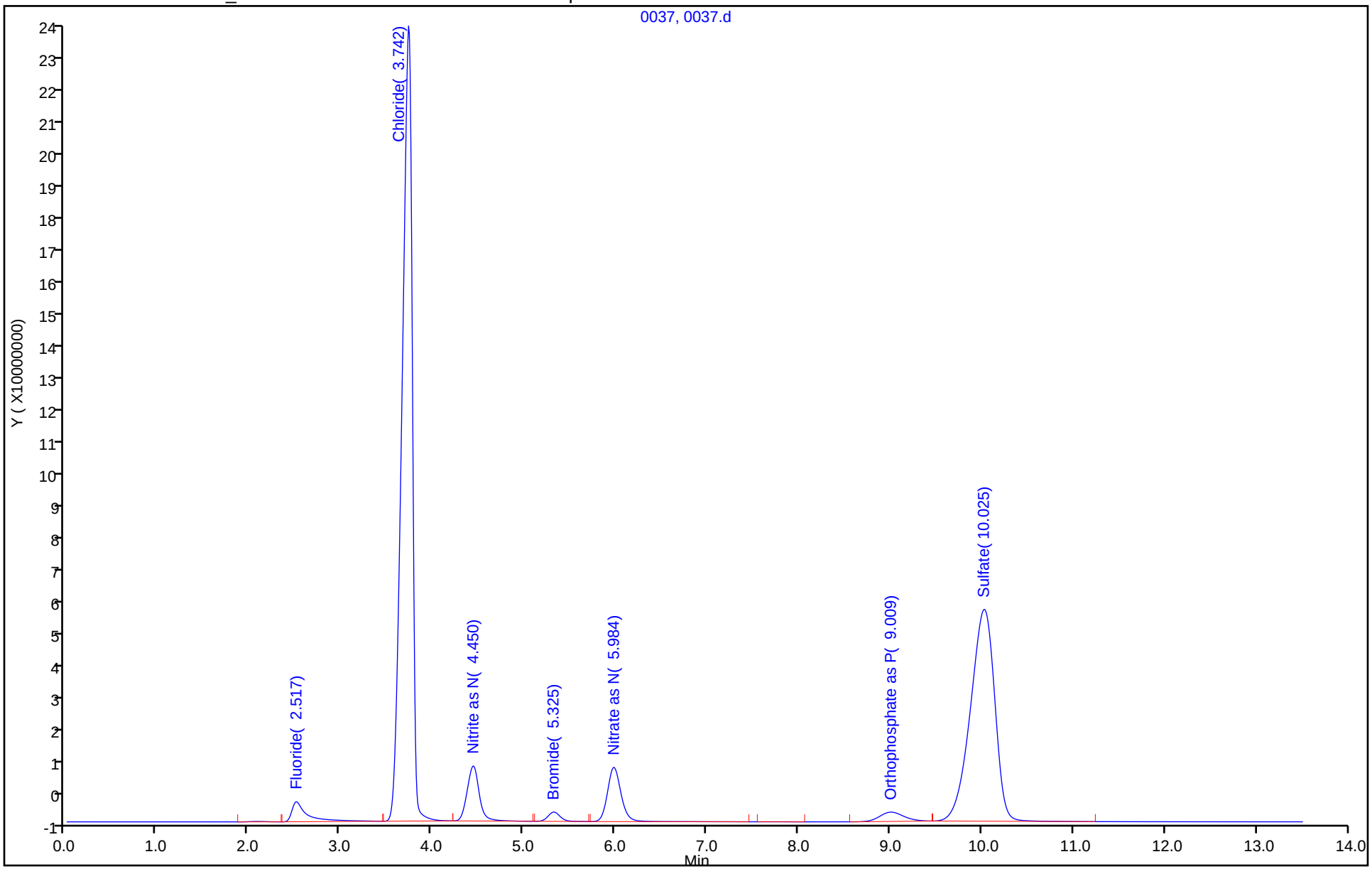
IC LCS_01862 Amount Added: 5.00 Units: mL

Report Date: 17-Mar-2022 13:26:04 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0037.d

Injection Date:	16-Mar-2022 22:29:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	lcs			Worklist Smp#:	37
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

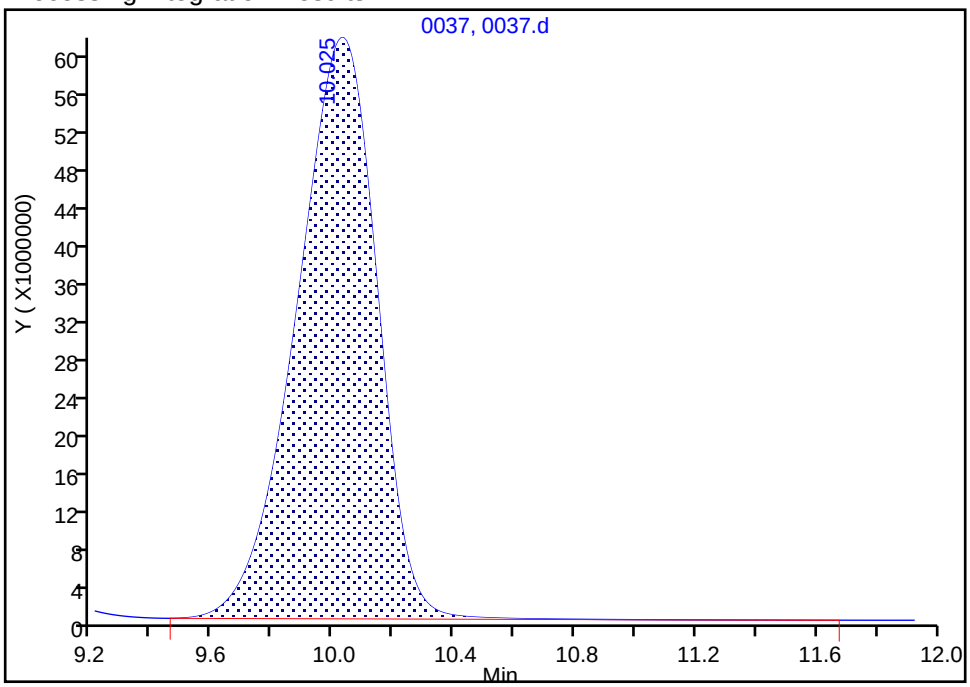
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0037.d
Injection Date: 16-Mar-2022 22:29:00 Instrument ID: WC_IonChrom11
Lims ID: lcs
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 37
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

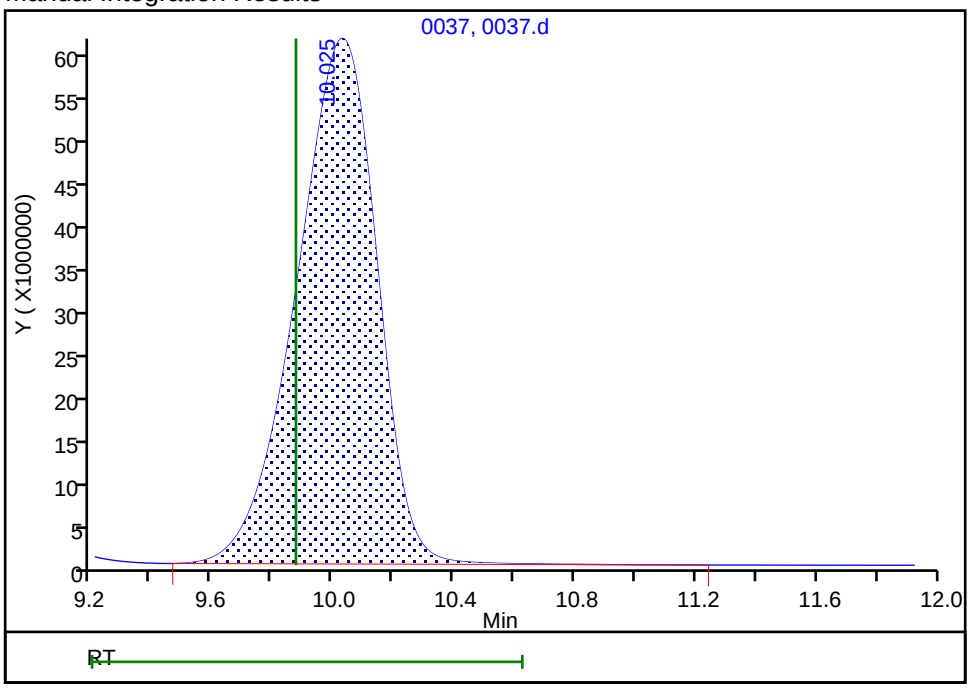
Processing Integration Results

RT: 10.03
Area: 1140020377
Amount: 99.592622
Amount Units: ug/ml



Manual Integration Results

RT: 10.03
Area: 1139699348
Amount: 99.564756
Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 13:15:08
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0038.d
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 16-Mar-2022 22:46:00 ALS Bottle#: 0 Worklist Smp#: 38
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-038
Misc. Info.: 27406
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:25:59 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 17-Mar-2022 13:15:41

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.517	2.092	0.425	68476515	5.00	5.01	
2 Chloride	3.742	3.642	0.100	1803313788	100.0	102.7	
3 Nitrite as N	4.451	4.434	0.017	147652297	NC	NC	
4 Bromide	5.326	5.317	0.009	24815314	5.00	4.97	
5 Nitrate as N	5.984	5.976	0.008	161839918	NC	NC	
7 Orthophosphate as P	9.009	9.084	-0.075	48573230	NC	NC	
6 Sulfate	10.026	9.875	0.151	1140044823	100.0	99.6	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

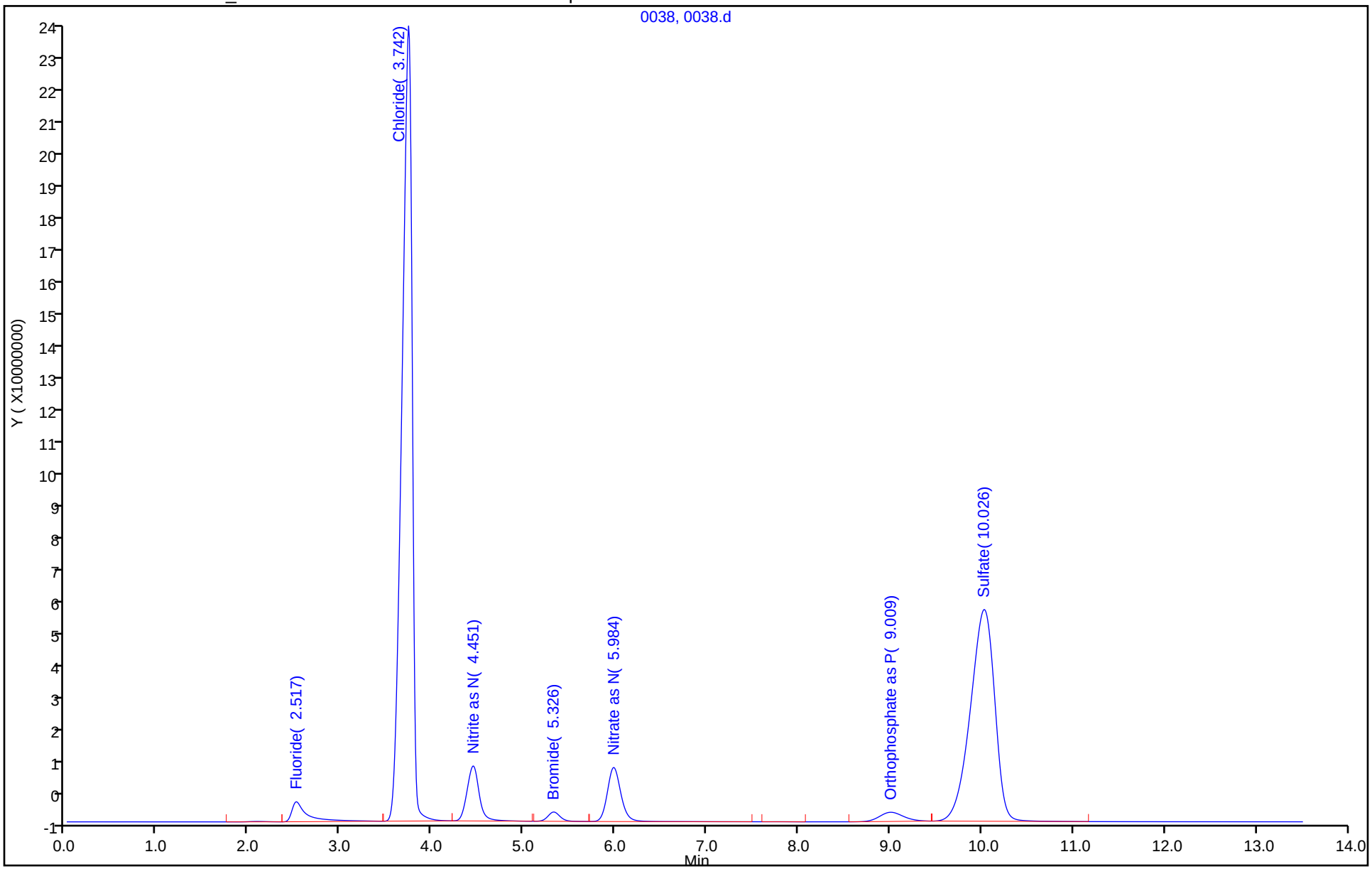
IC LCS_01862 Amount Added: 5.00 Units: mL

Report Date: 17-Mar-2022 13:26:04 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0038.d

Injection Date:	16-Mar-2022 22:46:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	lcsd			Worklist Smp#:	38
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

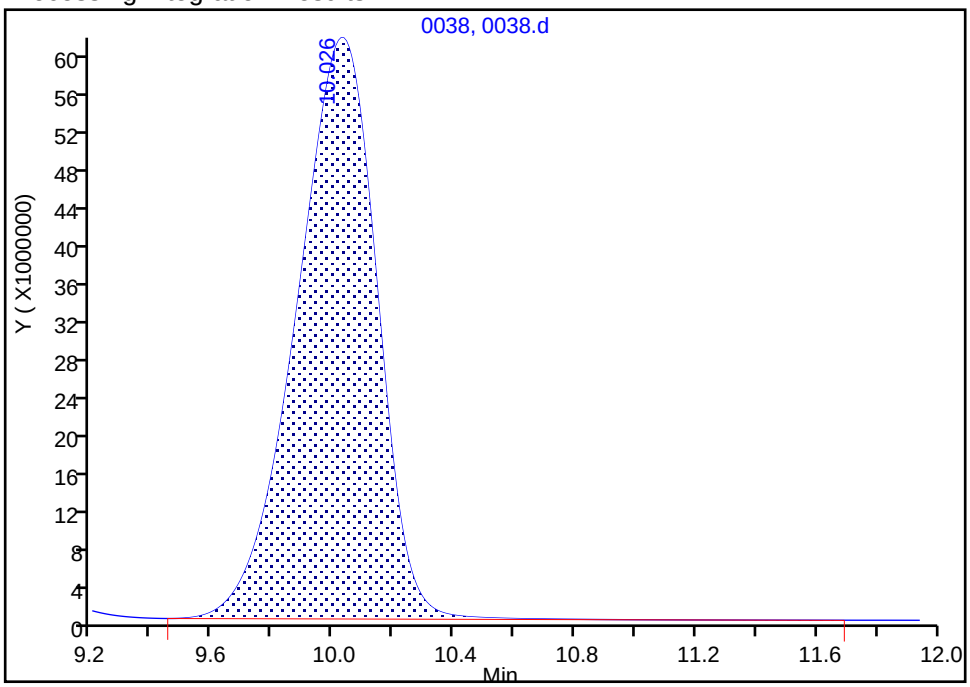
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0038.d
Injection Date: 16-Mar-2022 22:46:00 Instrument ID: WC_IonChrom11
Lims ID: lcsd
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 38
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

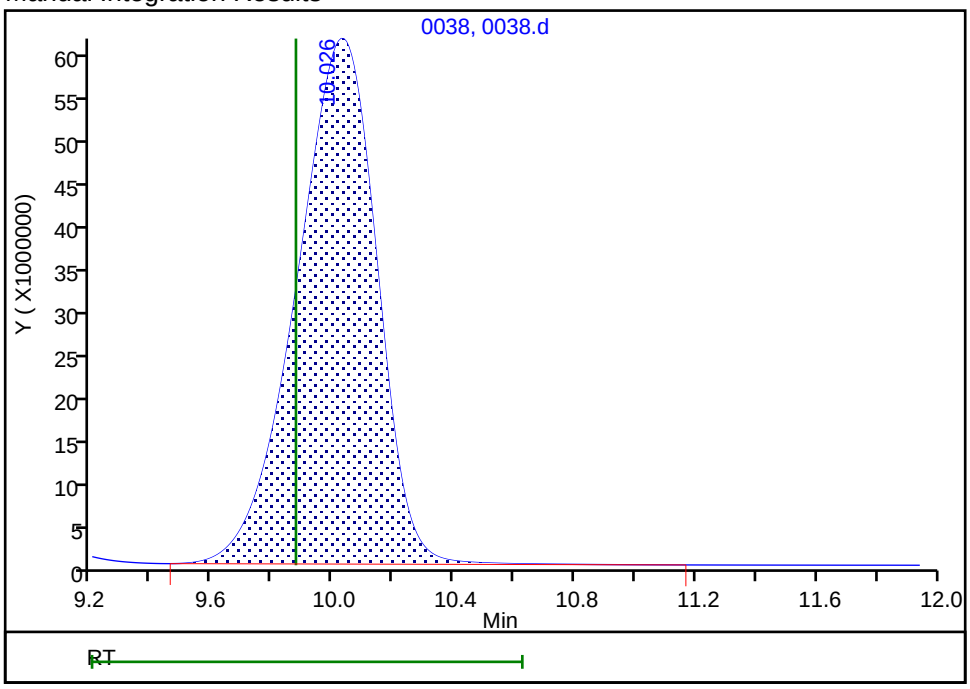
Processing Integration Results

RT: 10.03
Area: 1140480522
Amount: 99.632562
Amount Units: ug/ml



Manual Integration Results

RT: 10.03
Area: 1140044823
Amount: 99.594744
Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 13:15:37
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0039.d
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 16-Mar-2022 23:02:00 ALS Bottle#: 0 Worklist Smp#: 39
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-039
Misc. Info.: 5536
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:25:59 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 17-Mar-2022 13:16:27

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.092				ND	
2 Chloride	3.659	3.642	0.017	191934		0.6926	M
3 Nitrite as N		4.434				ND	U
4 Bromide		5.317				ND	
5 Nitrate as N	5.984	5.976	0.008	117028		NC	
7 Orthophosphate as P	9.100	9.084	0.016	555185		NC	
6 Sulfate	9.917	9.875	0.042	284810		0.6637	M

QC Flag Legend

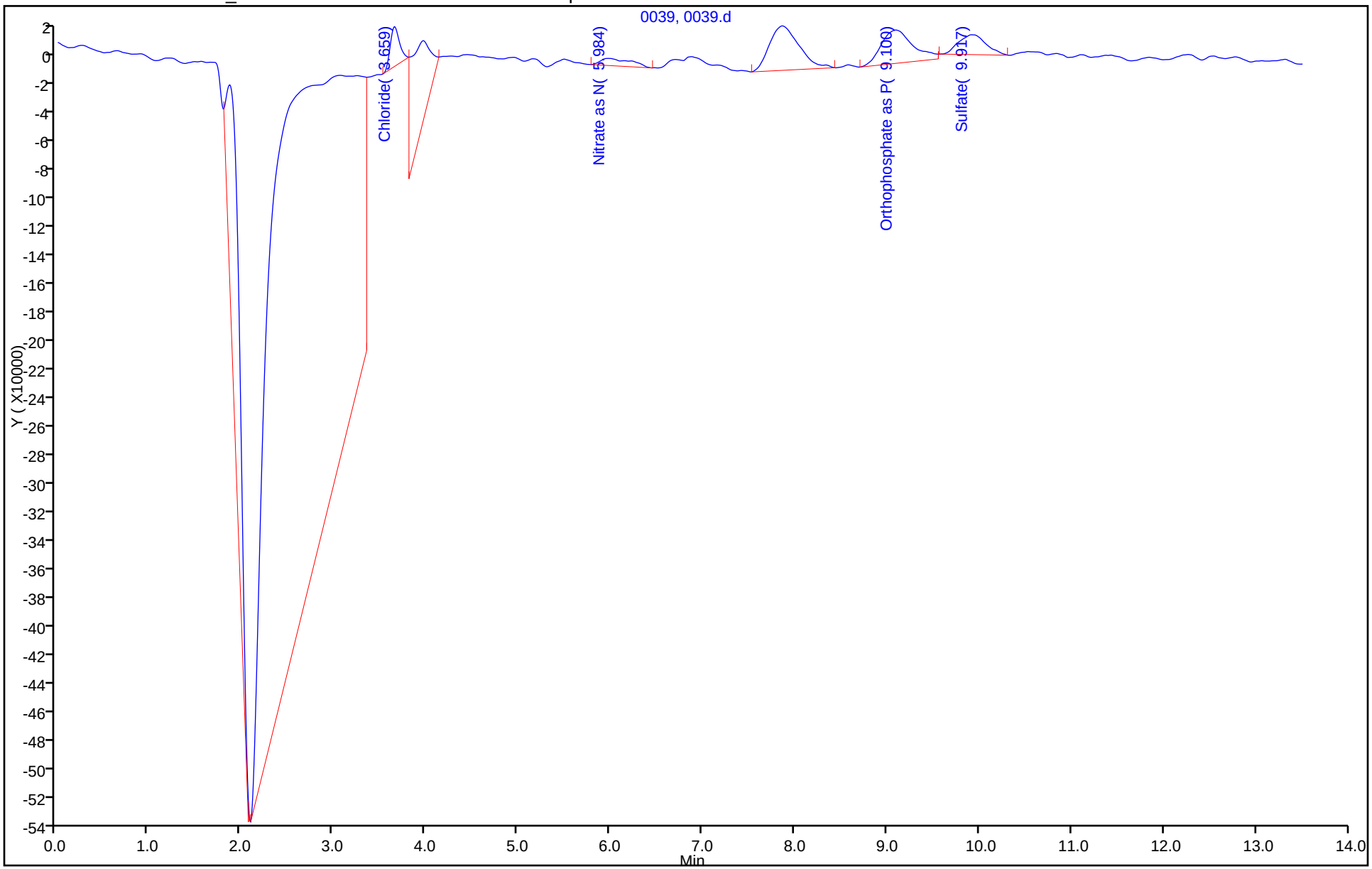
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 17-Mar-2022 13:26:05 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0039.d

Injection Date:	16-Mar-2022 23:02:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	mb			Worklist Smp#:	39
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

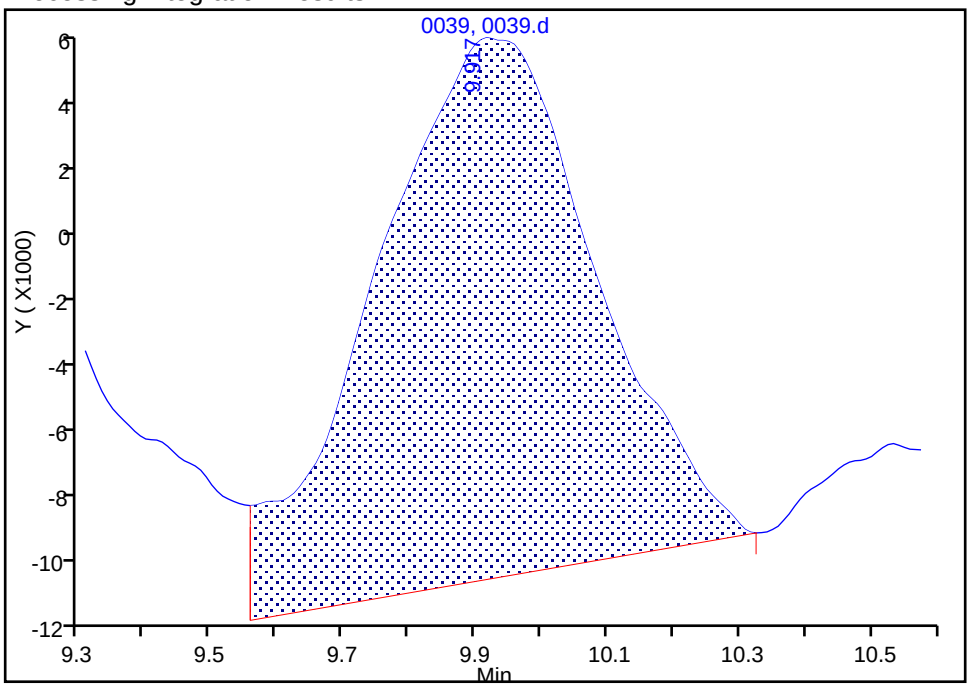
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0039.d
Injection Date: 16-Mar-2022 23:02:00 Instrument ID: WC_IonChrom11
Lims ID: mb
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 39
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

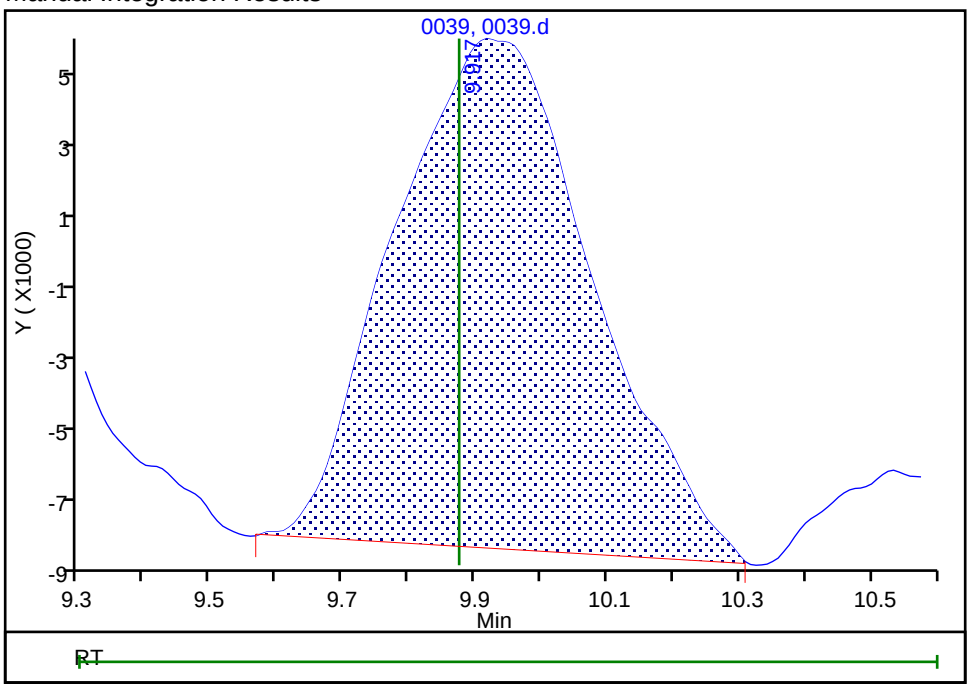
Processing Integration Results

RT: 9.92
Area: 362201
Amount: 0.670447
Amount Units: ug/ml



Manual Integration Results

RT: 9.92
Area: 284810
Amount: 0.663730
Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 13:16:24
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0041.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 16-Mar-2022 23:35:00 ALS Bottle#: 0 Worklist Smp#: 41
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-041
Misc. Info.: 31467
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:26:06 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 17-Mar-2022 13:17:14

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.517	2.092	0.425	68150124	5.00	4.98	
2 Chloride	3.742	3.642	0.100	1803734159	100.0	102.7	
3 Nitrite as N	4.450	4.434	0.016	147321855	NC	NC	
4 Bromide	5.325	5.317	0.008	24698280	5.00	4.95	
5 Nitrate as N	5.984	5.976	0.008	161184980	NC	NC	M
7 Orthophosphate as P	9.009	9.084	-0.075	48272368	NC	NC	
6 Sulfate	10.025	9.875	0.150	1138993642	100.0	99.5	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

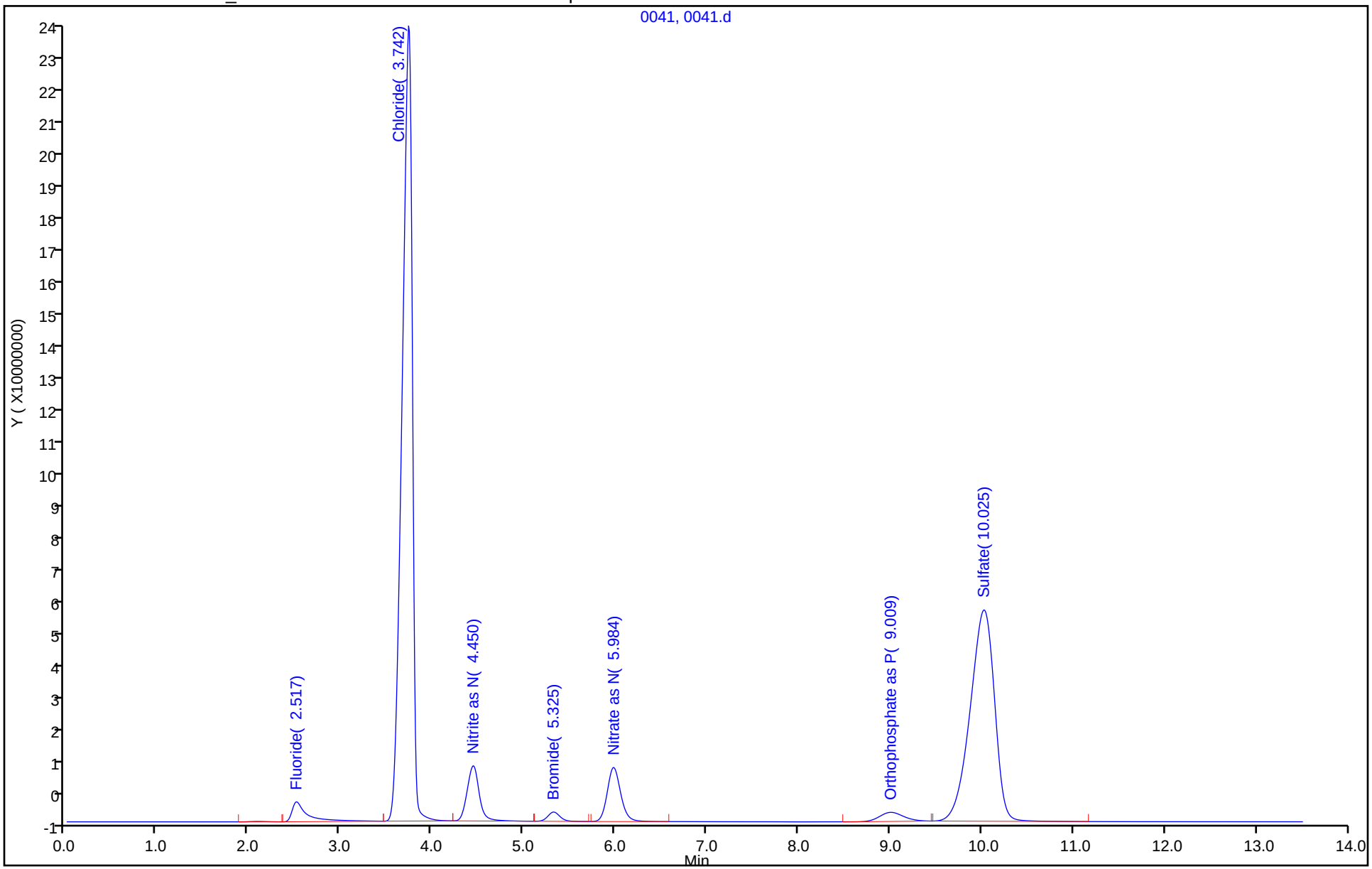
IC LCS_01862 Amount Added: 5.00 Units: mL

Report Date: 17-Mar-2022 13:26:06 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0041.d

Injection Date:	16-Mar-2022 23:35:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	41
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

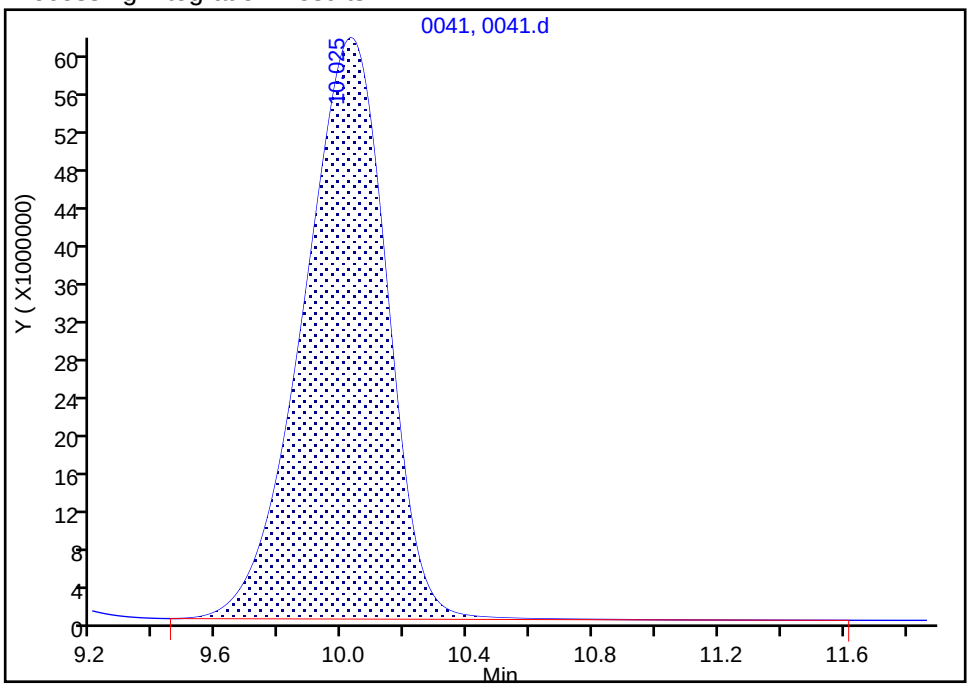
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0041.d
Injection Date: 16-Mar-2022 23:35:00 Instrument ID: WC_IonChrom11
Lims ID: ccv
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 41
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

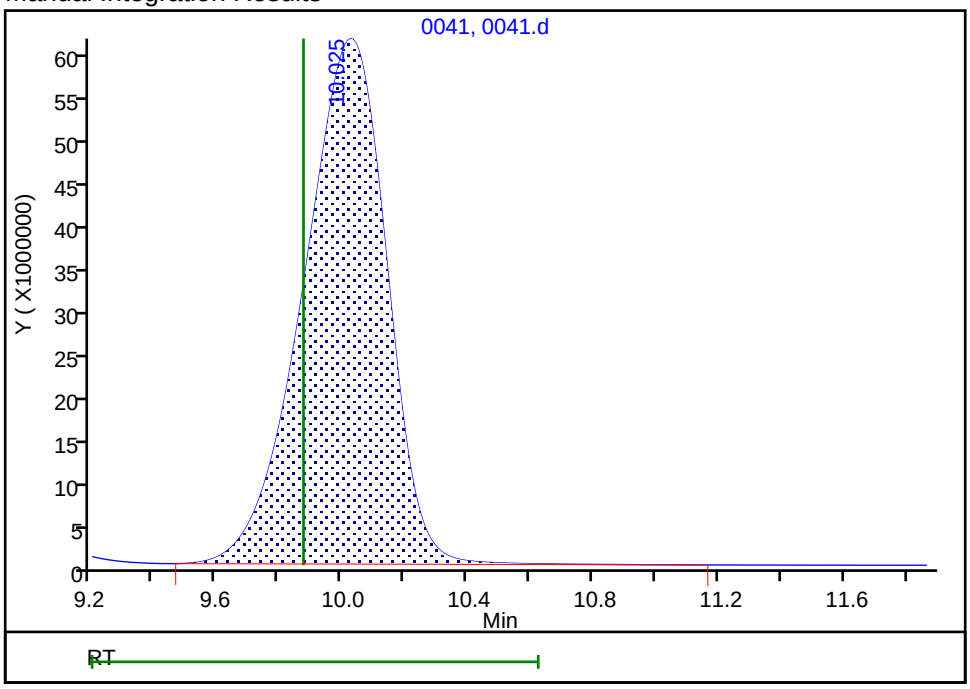
Processing Integration Results

RT: 10.03
Area: 1138981369
Amount: 99.502436
Amount Units: ug/ml



Manual Integration Results

RT: 10.03
Area: 1138993642
Amount: 99.503501
Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 13:16:58
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0042.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 16-Mar-2022 23:51:00 ALS Bottle#: 0 Worklist Smp#: 42
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-042
Misc. Info.: 285
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:26:06 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 17-Mar-2022 13:17:46

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.092				ND	
2 Chloride	3.659	3.642	0.017	136481		0.6894	M
3 Nitrite as N		4.434				ND	U
4 Bromide		5.317				ND	
5 Nitrate as N		5.976				ND	U
7 Orthophosphate as P	9.109	9.084	0.025	375813		NC	
6 Sulfate	9.917	9.875	0.042	151204		0.6521	M

QC Flag Legend

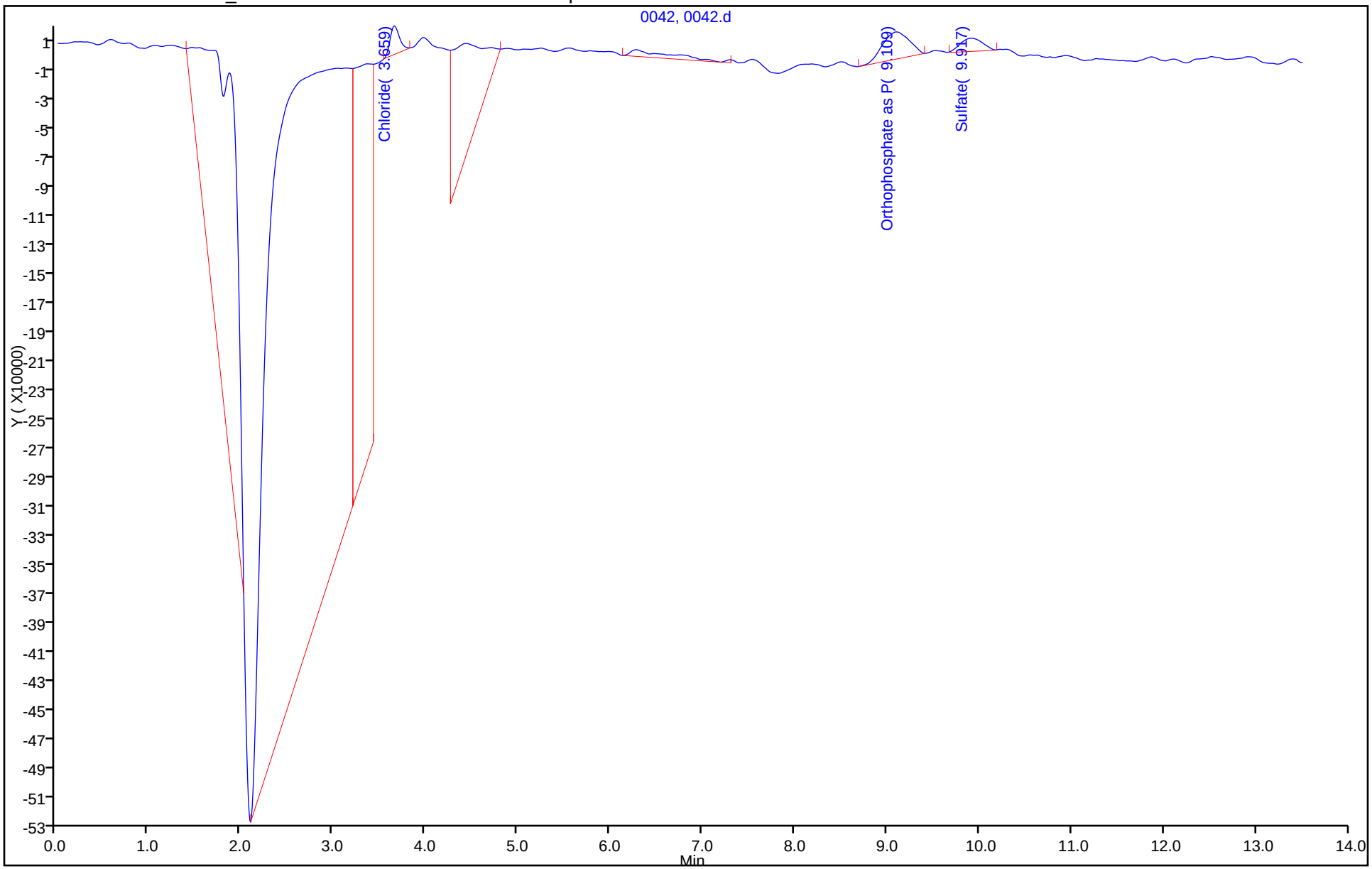
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 17-Mar-2022 13:26:07 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0042.d

Injection Date:	16-Mar-2022 23:51:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	42
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

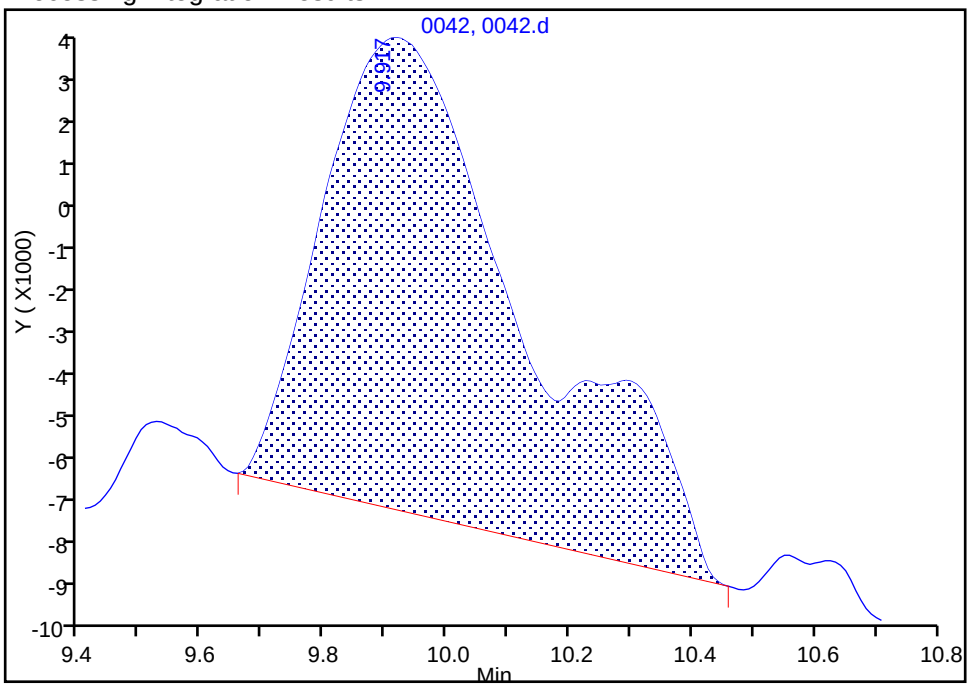
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0042.d
Injection Date: 16-Mar-2022 23:51:00 Instrument ID: WC_IonChrom11
Lims ID: ccb
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 42
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

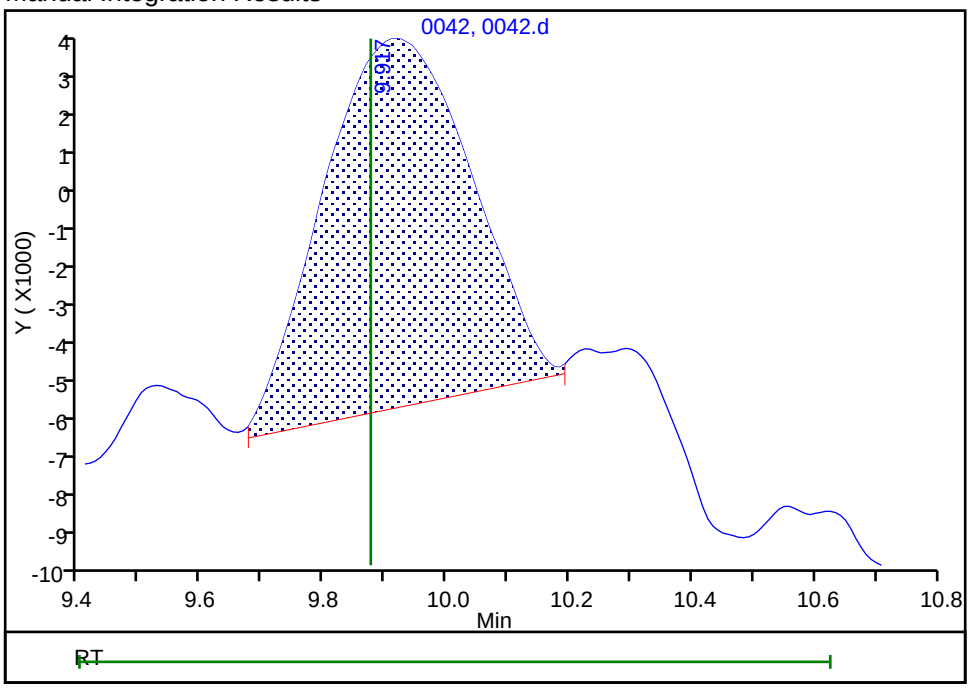
Processing Integration Results

RT: 9.92
Area: 241138
Amount: 0.659939
Amount Units: ug/ml



Manual Integration Results

RT: 9.92
Area: 151204
Amount: 0.652133
Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 13:17:43
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0046.d
Lims ID: 280-159190-F-8
Client ID: CA212-8
Sample Type: Client
Inject. Date: 17-Mar-2022 00:57:00 ALS Bottle#: 0 Worklist Smp#: 46
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-046
Misc. Info.: 29249
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:26:06 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 17-Mar-2022 13:23:08

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.092	0.417	2903140	0.2674	
2 Chloride	3.667	3.642	0.025	226776945	13.5	
3 Nitrite as N	4.434	4.434	0.000	912708	NC	
4 Bromide	5.359	5.317	0.042	347051	0.0931	
5 Nitrate as N	6.000	5.976	0.024	558201621	NC	
7 Orthophosphate as P	9.225	9.084	0.141	892847	NC	
6 Sulfate	10.017	9.875	0.142	824533737	72.2	M

QC Flag Legend

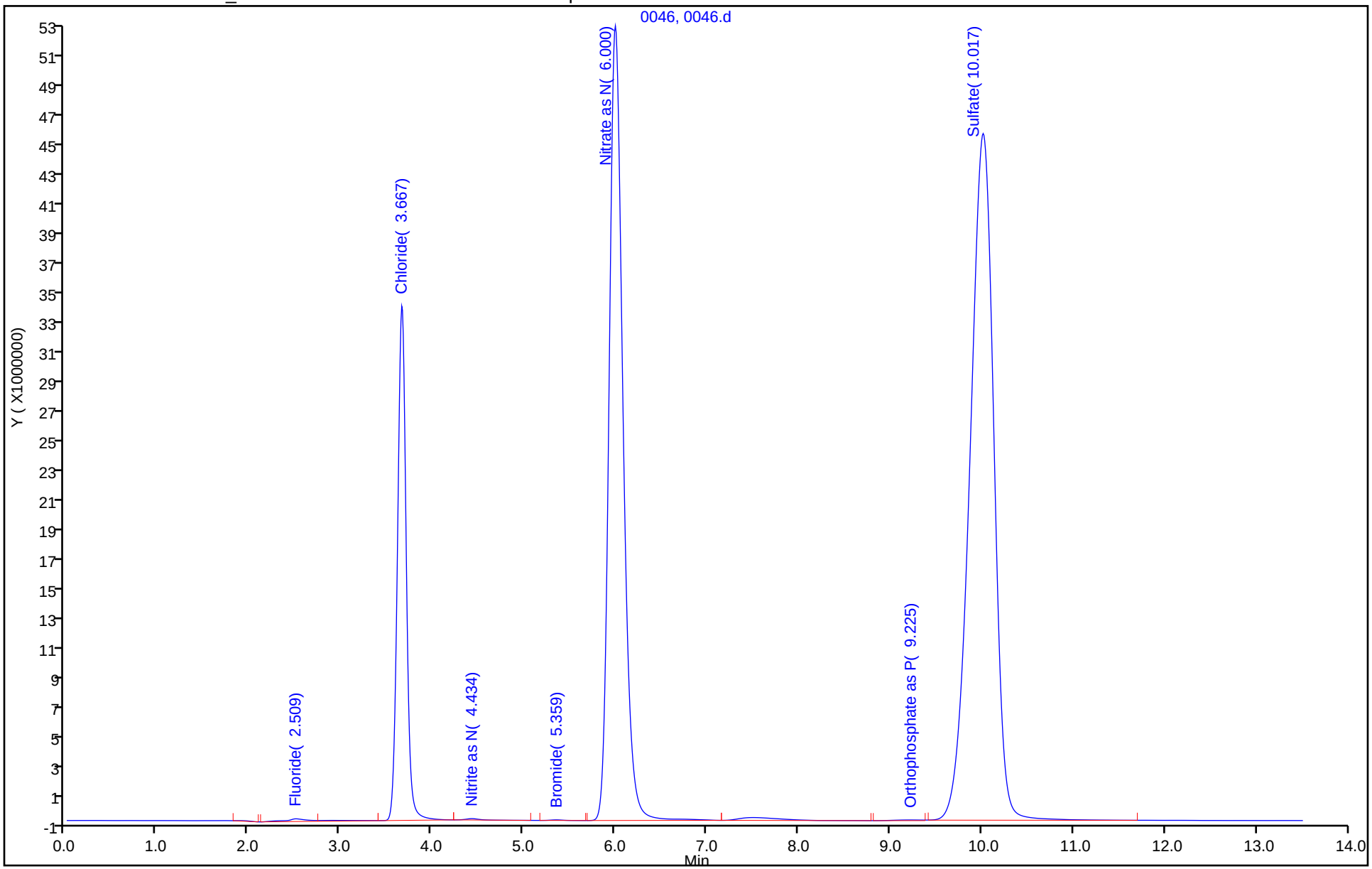
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 17-Mar-2022 13:26:09 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0046.d

Injection Date:	17-Mar-2022 00:57:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-159190-F-8	Lab Sample ID:	280-159190-8	Worklist Smp#:	46
Client ID:	CA212-8				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

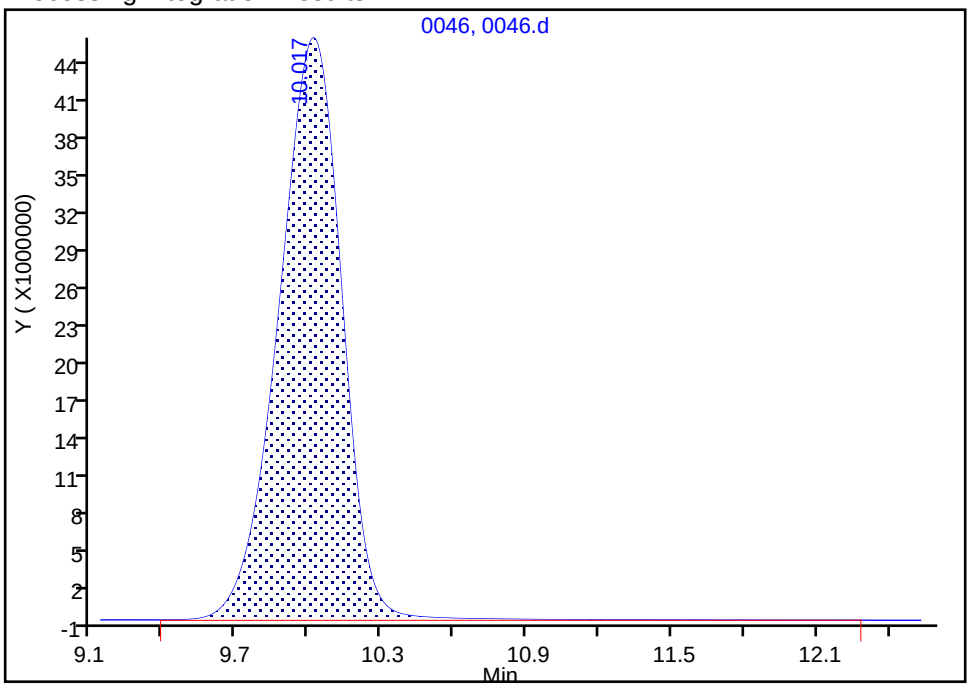
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0046.d				
Injection Date:	17-Mar-2022 00:57:00	Instrument ID:	WC_IonChrom11		
Lims ID:	280-159190-F-8	Lab Sample ID:	280-159190-8		
Client ID:	CA212-8				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	46
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

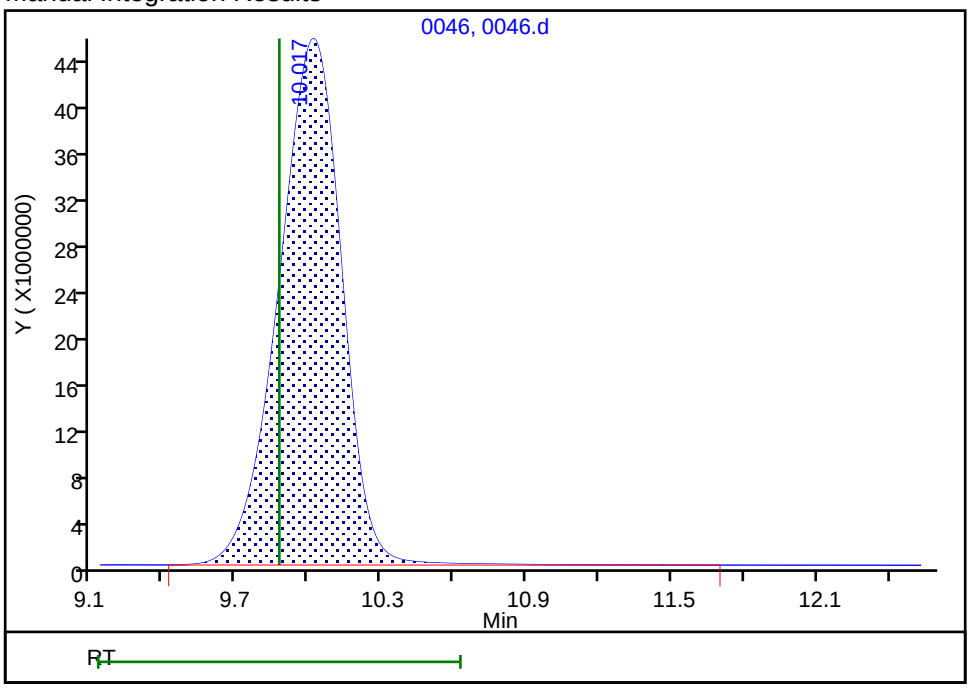
Processing Integration Results

RT: 10.02
Area: 827336549
Amount: 72.451708
Amount Units: ug/ml



Manual Integration Results

RT: 10.02
Area: 824533737
Amount: 72.208424
Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 13:23:04
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0047.d
Lims ID: 280-159190-F-9
Client ID: CA213-8
Sample Type: Client
Inject. Date: 17-Mar-2022 01:13:00 ALS Bottle#: 0 Worklist Smp#: 47
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-047
Misc. Info.: 28469
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:26:06 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.517	2.092	0.425	9014731	0.7090	
2 Chloride	3.684	3.642	0.042	518766259	30.0	
3 Nitrite as N	4.426	4.434	-0.008	1344668	NC	
4 Bromide	5.351	5.317	0.034	378133	0.0993	
5 Nitrate as N	6.017	5.976	0.041	105396989	NC	
7 Orthophosphate as P	9.159	9.084	0.075	170994	NC	
6 Sulfate	10.009	9.875	0.134	737016145	64.6	

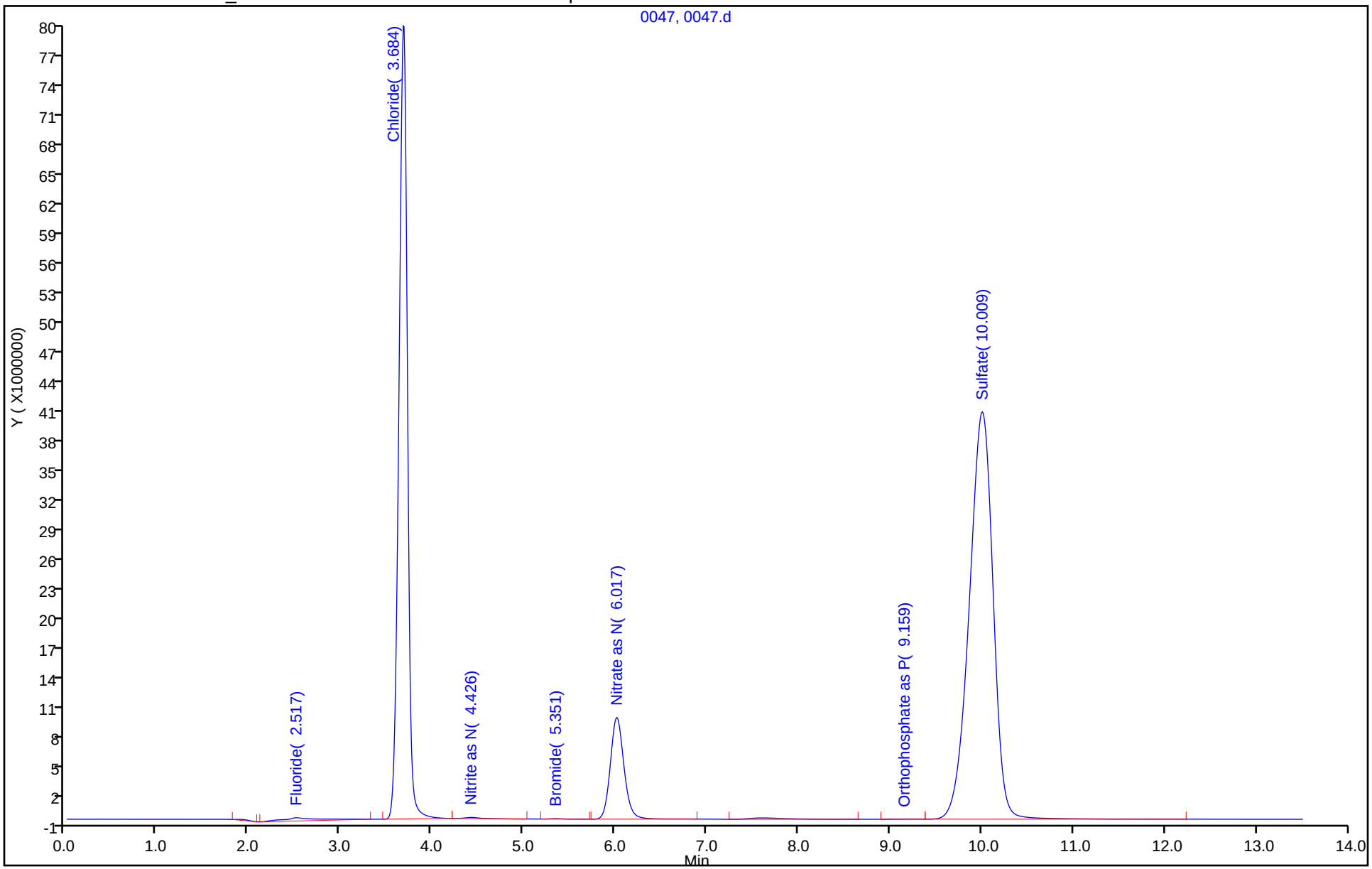
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 17-Mar-2022 13:26:09 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0047.d				
Injection Date:	17-Mar-2022 01:13:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-159190-F-9	Lab Sample ID:	280-159190-9	Worklist Smp#:	47
Client ID:	CA213-8				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0050.d
Lims ID: 280-159190-F-12
Client ID: CA211-8
Sample Type: Client
Inject. Date: 17-Mar-2022 02:03:00 ALS Bottle#: 0 Worklist Smp#: 50
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-050
Misc. Info.: 25627
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:26:06 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.092	0.417	1123567	0.1389	
2 Chloride	3.684	3.642	0.042	650617440	37.5	
3 Nitrite as N	4.376	4.434	-0.058	603965	NC	
4 Bromide	5.359	5.317	0.042	500586	0.1237	
5 Nitrate as N	5.984	5.976	0.008	1179131327	NC	
7 Orthophosphate as P	9.201	9.084	0.117	476603	NC	
6 Sulfate	10.051	9.875	0.176	1101735101	96.3	

QC Flag Legend

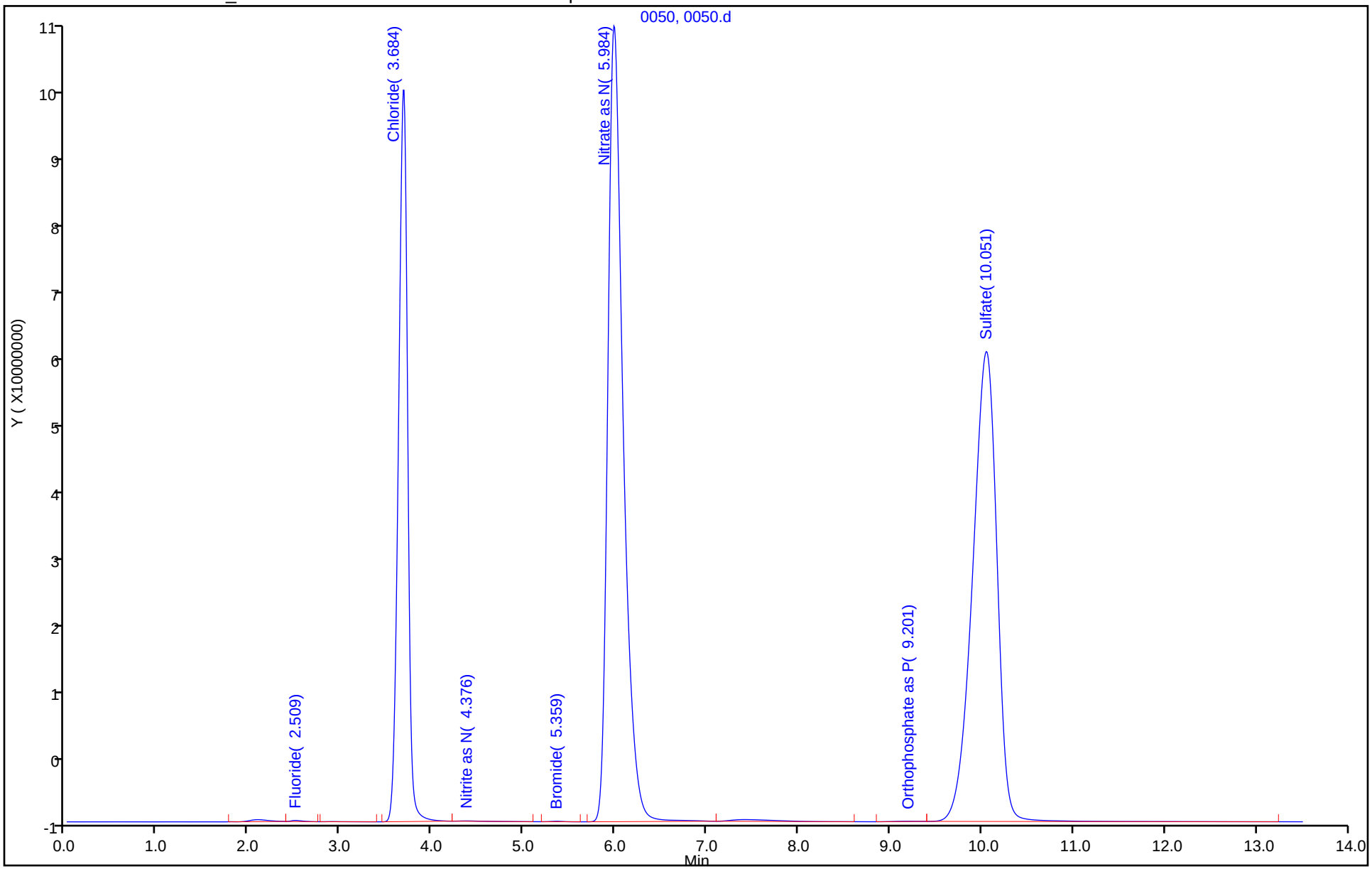
Processing Flags
NC - Not Calibrated

Report Date: 17-Mar-2022 13:26:10 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0050.d

Injection Date:	17-Mar-2022 02:03:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-159190-F-12	Lab Sample ID:	280-159190-12	Worklist Smp#:	50
Client ID:	CA211-8				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0051.d
Lims ID: 280-159190-F-13
Client ID: EW7-PM28A-8-25
Sample Type: Client
Inject. Date: 17-Mar-2022 02:19:00 ALS Bottle#: 0 Worklist Smp#: 51
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-051
Misc. Info.: 22709
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:26:06 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.509	2.092	0.417	2477633	0.2367	
2 Chloride	3.734	3.642	0.092	946818169	54.2	
3 Nitrite as N	4.409	4.434	-0.025	4453399	NC	
4 Bromide	5.634	5.317	0.317	1279390	0.2791	
5 Nitrate as N	6.267	5.976	0.291	747723	NC	
7 Orthophosphate as P	9.292	9.084	0.208	980510	NC	
6 Sulfate	9.984	9.875	0.109	166991541	15.1	

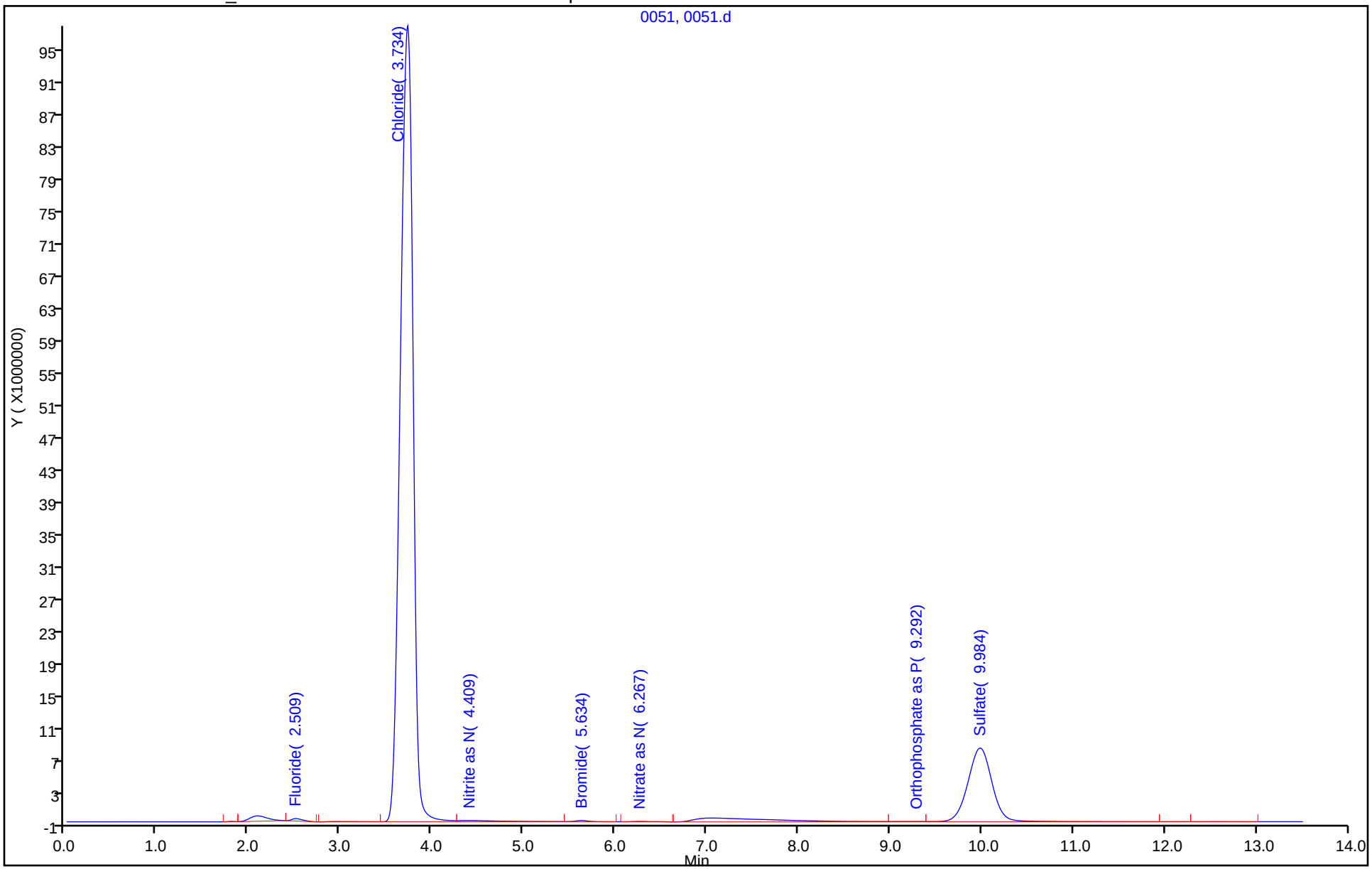
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 17-Mar-2022 13:26:10 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0051.d				
Injection Date:	17-Mar-2022 02:19:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-159190-F-13	Lab Sample ID:	280-159190-13	Worklist Smp#:	51
Client ID:	EW7-PM28A-8-25				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0052.d
Lims ID: 280-159190-F-14
Client ID: EW7-PM29A-8-25
Sample Type: Client
Inject. Date: 17-Mar-2022 02:35:00 ALS Bottle#: 0 Worklist Smp#: 52
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-052
Misc. Info.: 14229
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:26:06 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.517	2.092	0.425	2068485	0.2071	
2 Chloride	3.709	3.642	0.067	547332918	31.6	
3 Nitrite as N	4.392	4.434	-0.042	2557887	NC	
4 Bromide	5.501	5.317	0.184	926576	0.2087	
5 Nitrate as N	6.184	5.976	0.208	597943	NC	
7 Orthophosphate as P	9.201	9.084	0.117	489272	NC	
6 Sulfate	10.034	9.875	0.159	707351513	62.0	

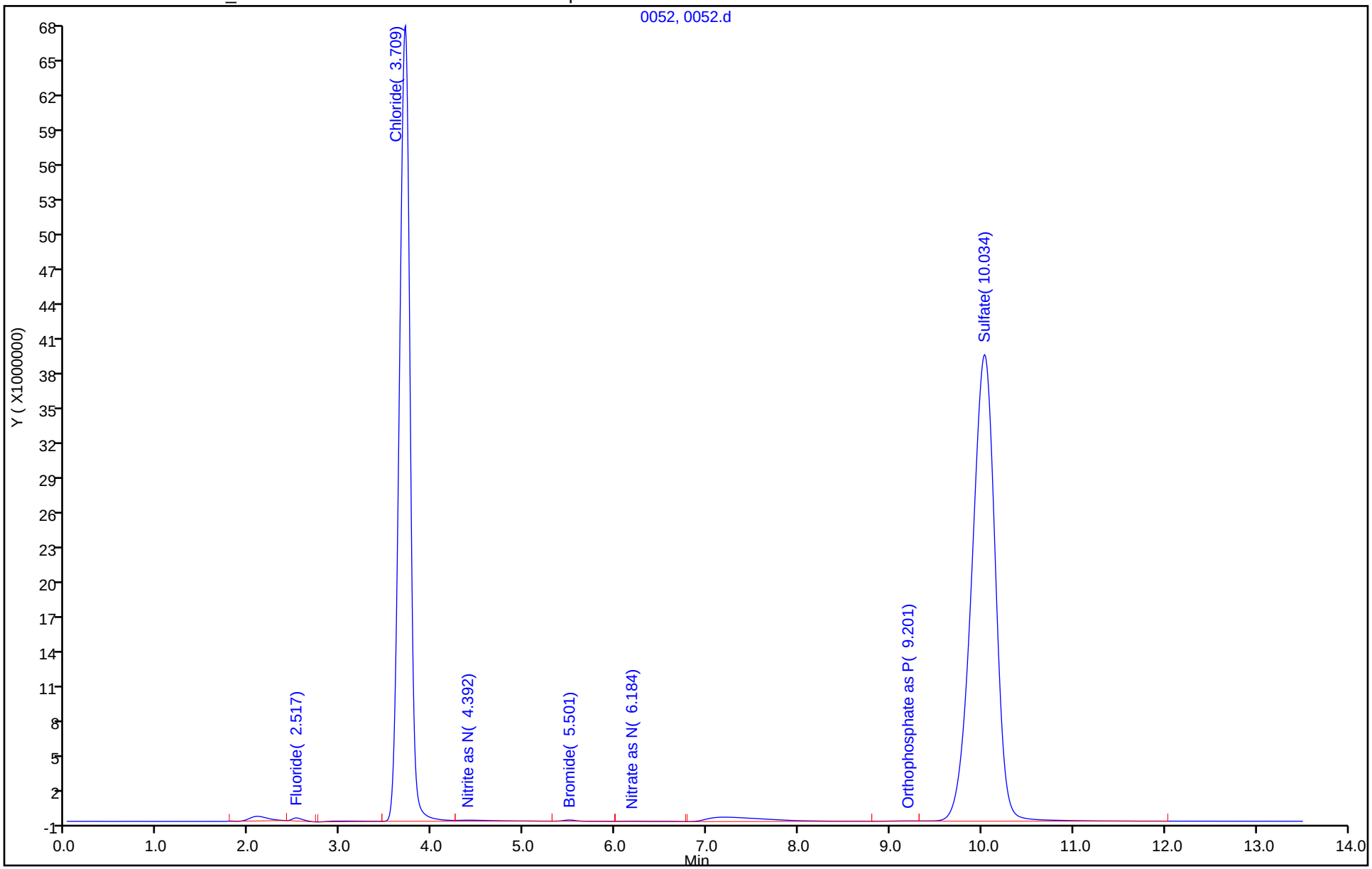
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 17-Mar-2022 13:26:10 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0052.d				
Injection Date:	17-Mar-2022 02:35:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-159190-F-14	Lab Sample ID:	280-159190-14	Worklist Smp#:	52
Client ID:	EW7-PM29A-8-25				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0053.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 17-Mar-2022 02:52:00 ALS Bottle#: 0 Worklist Smp#: 53
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-053
Misc. Info.: 2073
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:26:11 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 17-Mar-2022 13:24:21

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.517	2.092	0.425	68581633	5.00	5.01	
2 Chloride	3.742	3.642	0.100	1805011163	100.0	102.8	
3 Nitrite as N	4.450	4.434	0.016	147265216	NC	NC	
4 Bromide	5.325	5.317	0.008	24683262	5.00	4.95	
5 Nitrate as N	5.984	5.976	0.008	161812730	NC	NC	
7 Orthophosphate as P	9.009	9.084	-0.075	48318282	NC	NC	
6 Sulfate	10.034	9.875	0.159	1140861093	100.0	99.7	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

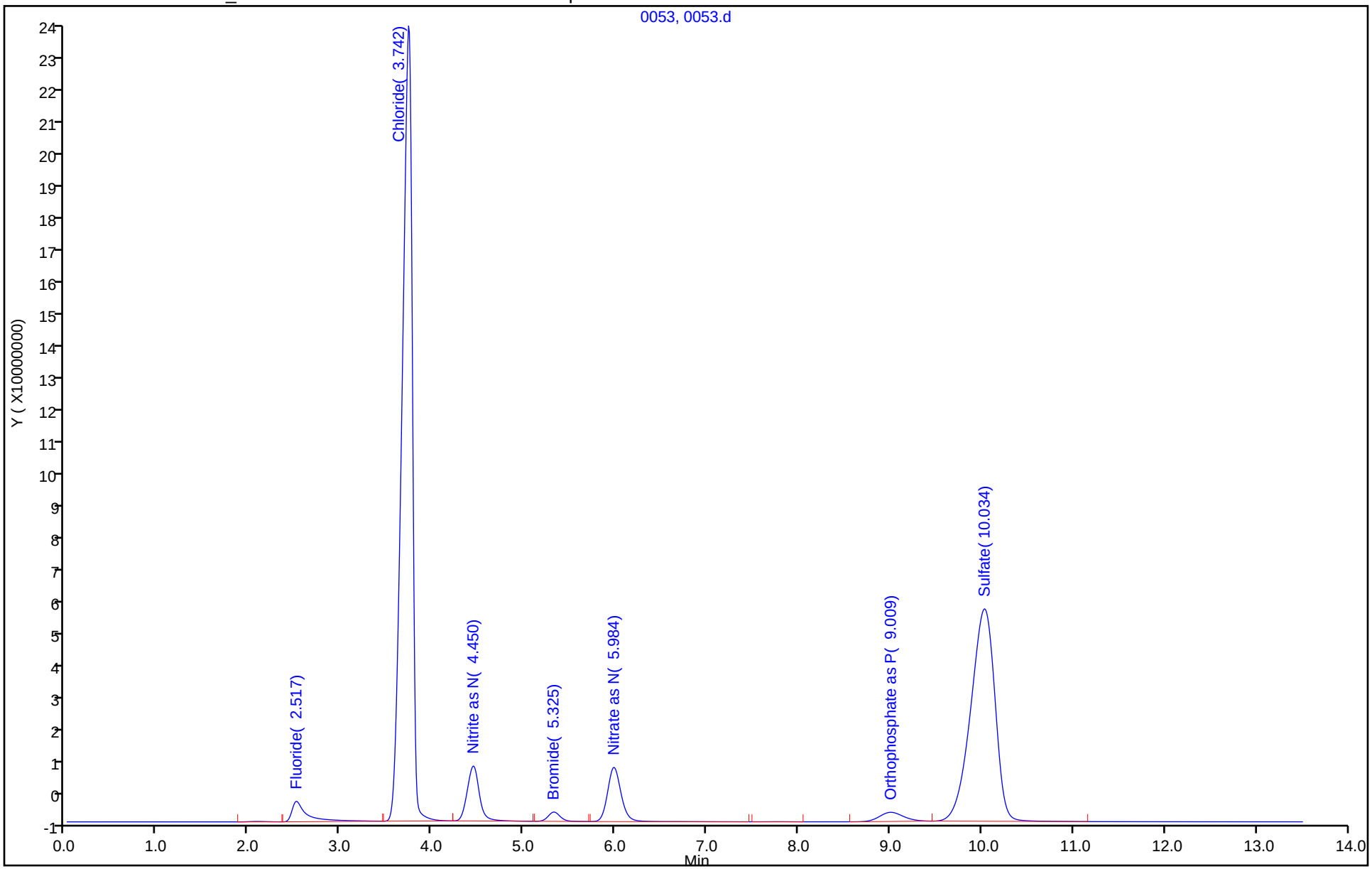
IC LCS_01862 Amount Added: 5.00 Units: mL

Report Date: 17-Mar-2022 13:26:11 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0053.d

Injection Date:	17-Mar-2022 02:52:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	53
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

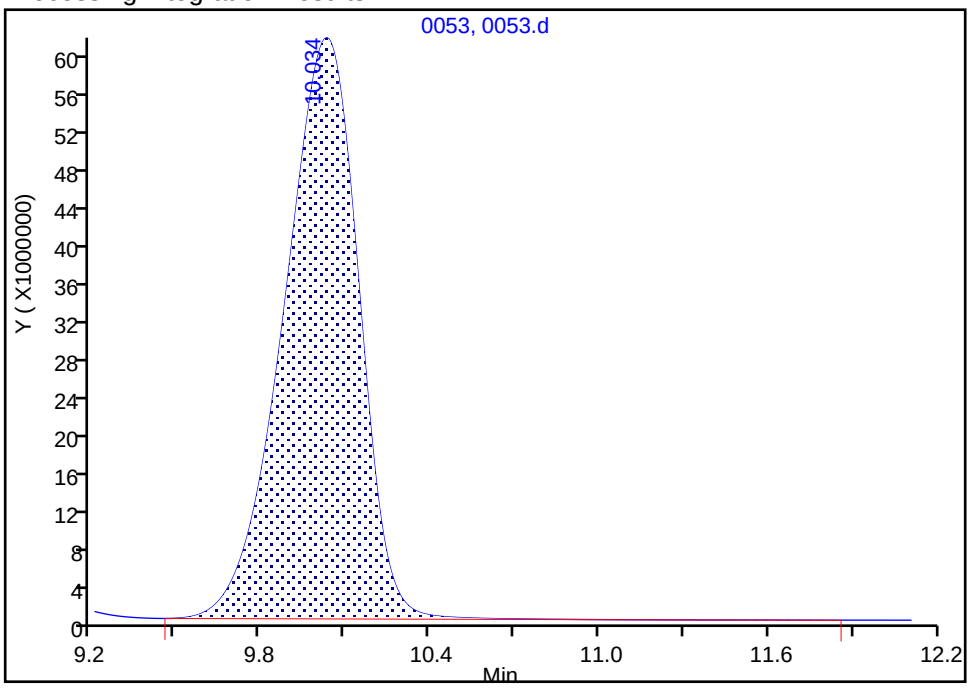
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0053.d				
Injection Date:	17-Mar-2022 02:52:00	Instrument ID:	WC_IonChrom11		
Lims ID:	ccv				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	53
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

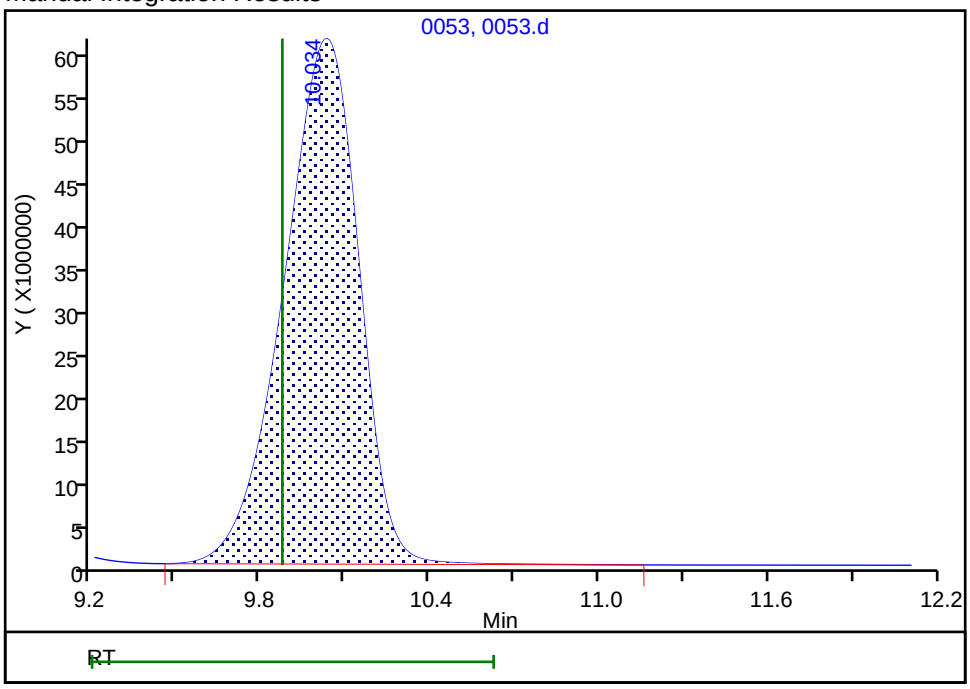
Processing Integration Results

RT: 10.03
Area: 1141370107
Amount: 99.709778
Amount Units: ug/ml



Manual Integration Results

RT: 10.03
Area: 1140861093
Amount: 99.665596
Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 13:24:17
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0054.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 17-Mar-2022 03:08:00 ALS Bottle#: 0 Worklist Smp#: 54
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109286-054
Misc. Info.: 9622
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 17-Mar-2022 13:26:11 Calib Date: 08-Mar-2022 15:35:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220308-109076.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1606

First Level Reviewer: foxr Date: 17-Mar-2022 13:24:58

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.092				ND	U
2 Chloride	3.659	3.642	0.017	189966		0.6924	M
3 Nitrite as N		4.434				ND	U
4 Bromide		5.317				ND	
5 Nitrate as N		5.976				ND	U
7 Orthophosphate as P	9.084	9.084	0.000	538066		NC	
6 Sulfate	9.925	9.875	0.050	286750		0.6639	M

QC Flag Legend

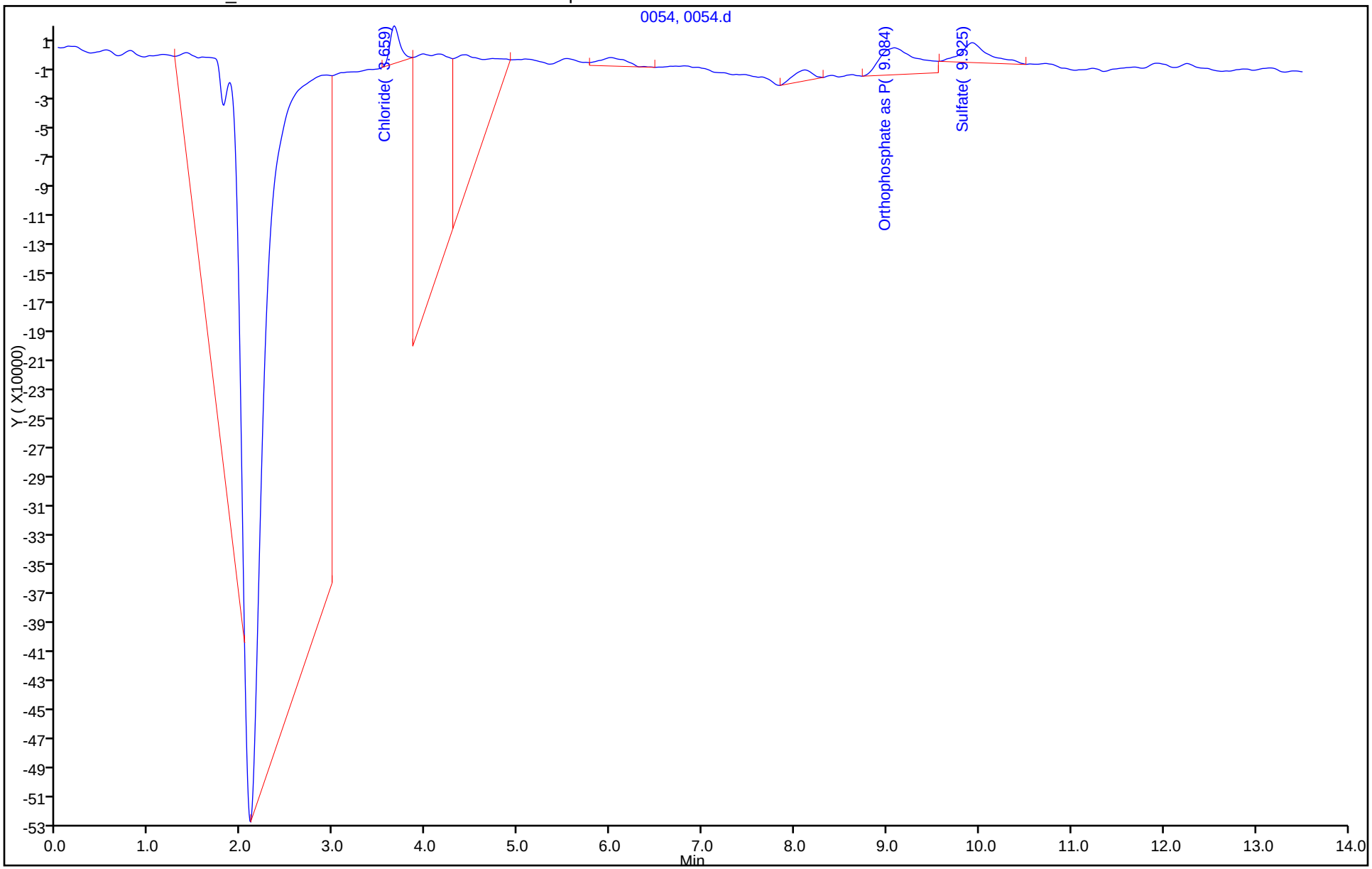
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 17-Mar-2022 13:27:13 Chrom Revision: 2.3 14-Mar-2022 17:58:38

Eurofins Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0054.d

Injection Date:	17-Mar-2022 03:08:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	54
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

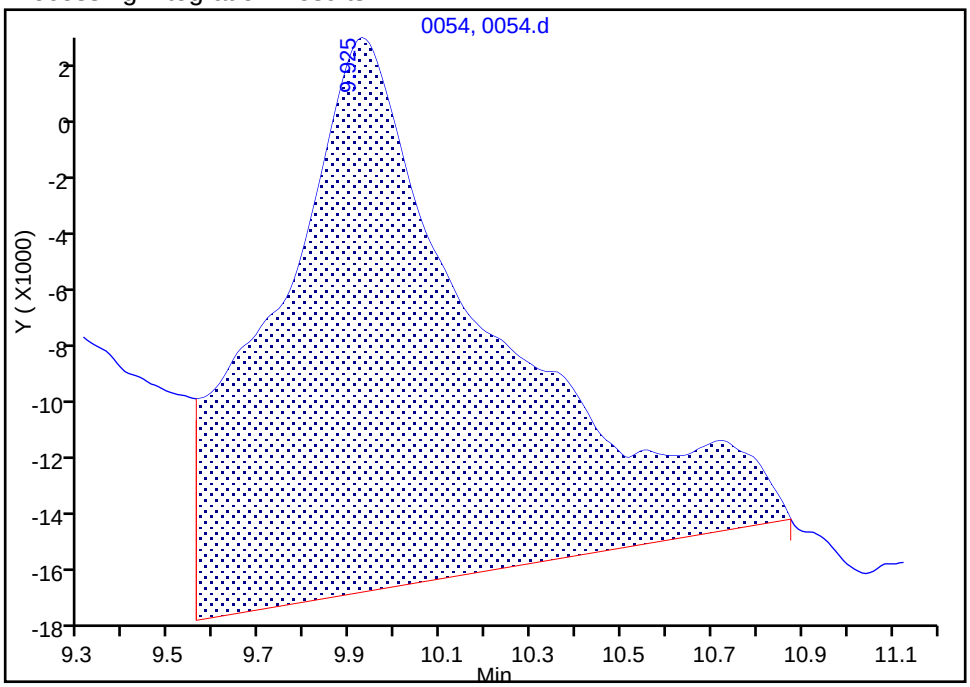
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20220316-109286.b\0054.d
Injection Date: 17-Mar-2022 03:08:00 Instrument ID: WC_IonChrom11
Lims ID: ccb
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 54
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

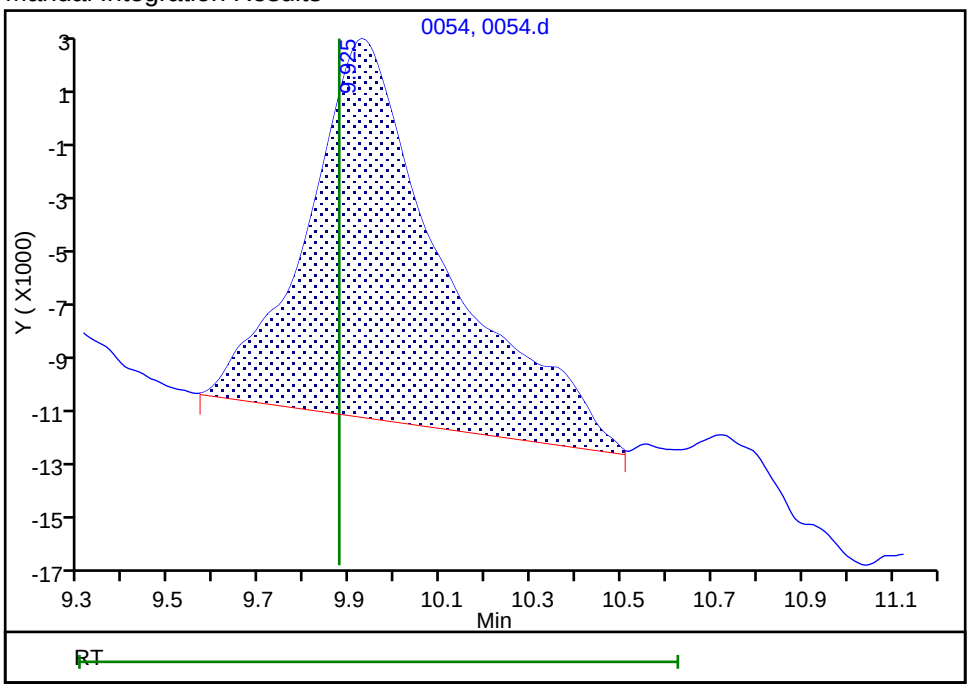
Processing Integration Results

RT: 9.93
Area: 652119
Amount: 0.695612
Amount Units: ug/ml



Manual Integration Results

RT: 9.93
Area: 286750
Amount: 0.663898
Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 13:24:54
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_20220316-143
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

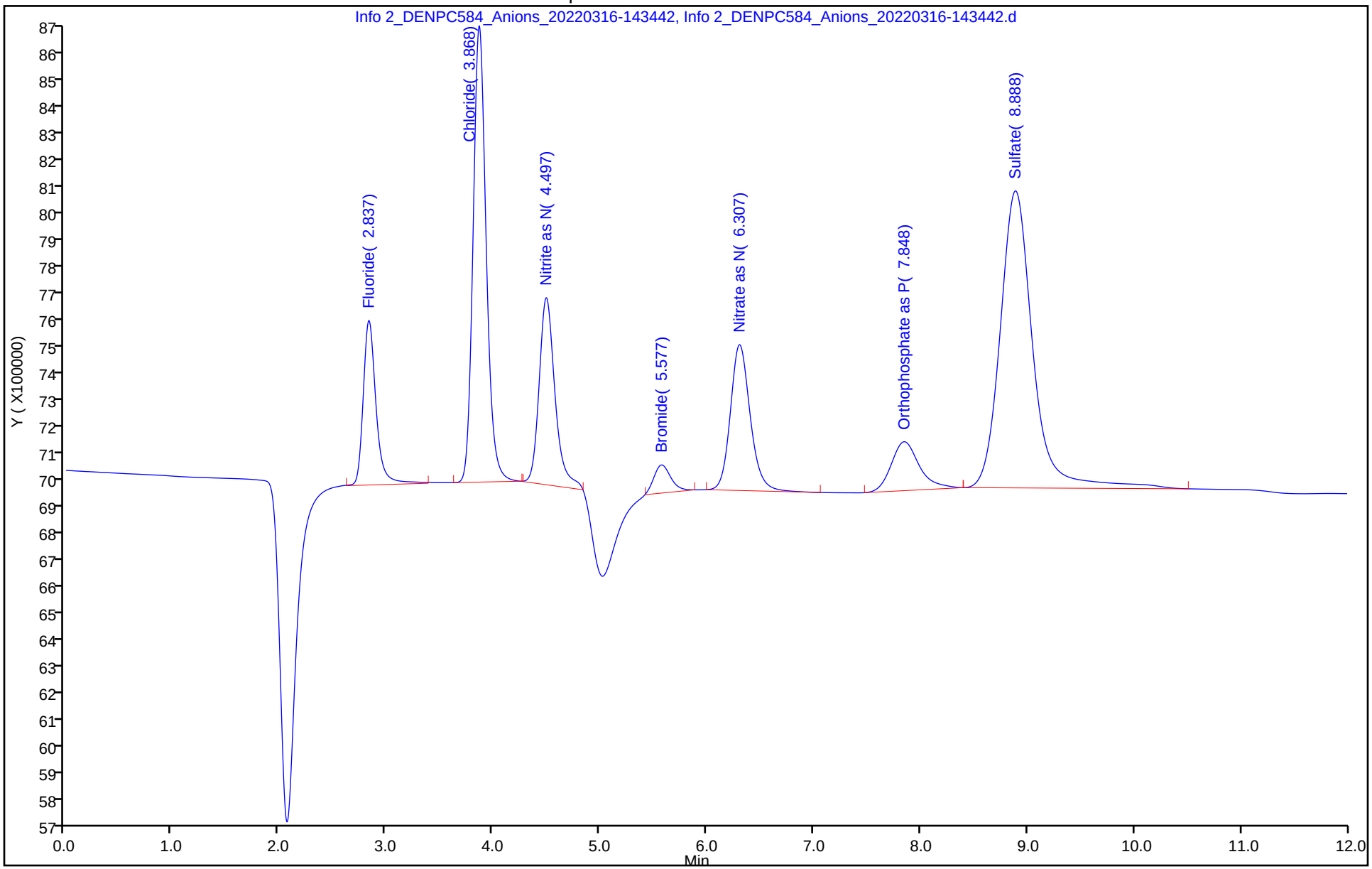
Reagents:

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

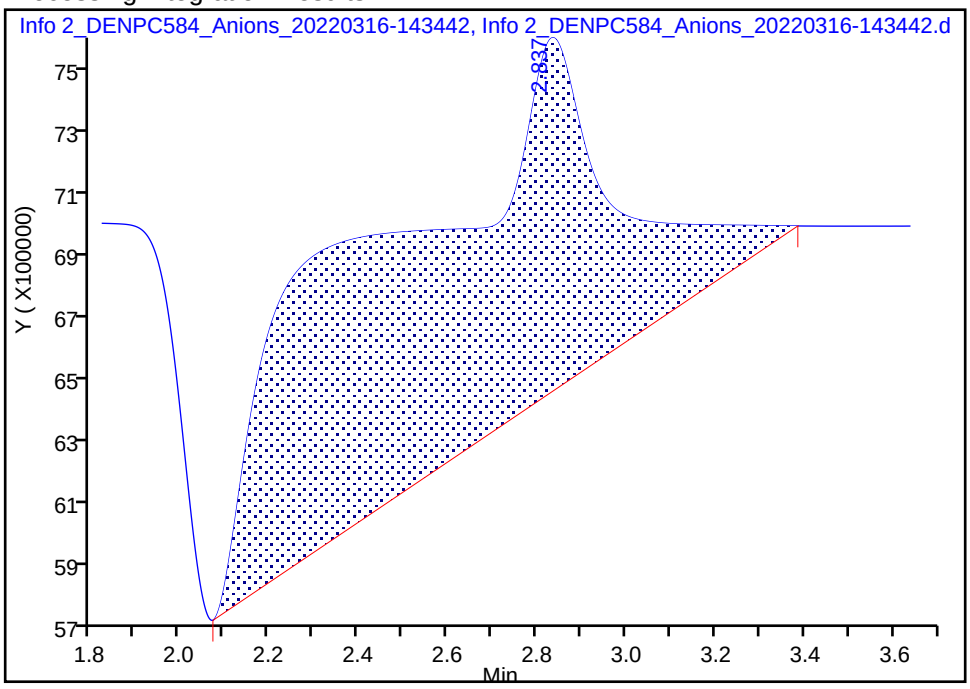
Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-143
Injection Date: 16-Mar-2022 14:19:00 Instrument ID: WC_IonChrom13
Lims ID: std L1
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions-IC13 Limit Group: Wet - Anions 28D
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

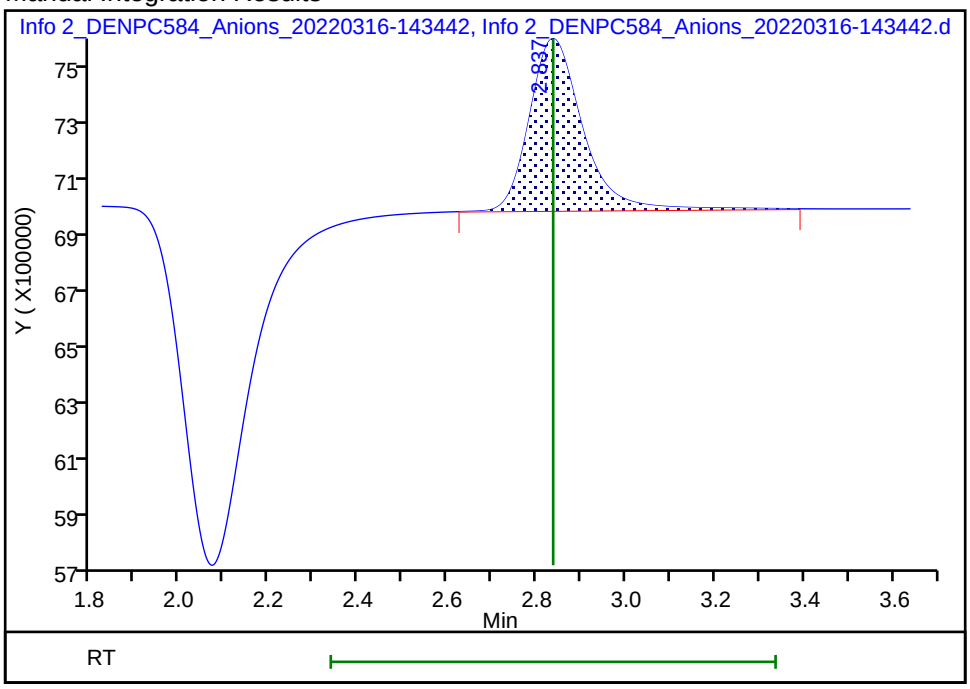
RT: 2.84
Area: 46750380
Amount: 0
Amount Units: ug/ml

Processing Integration Results



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

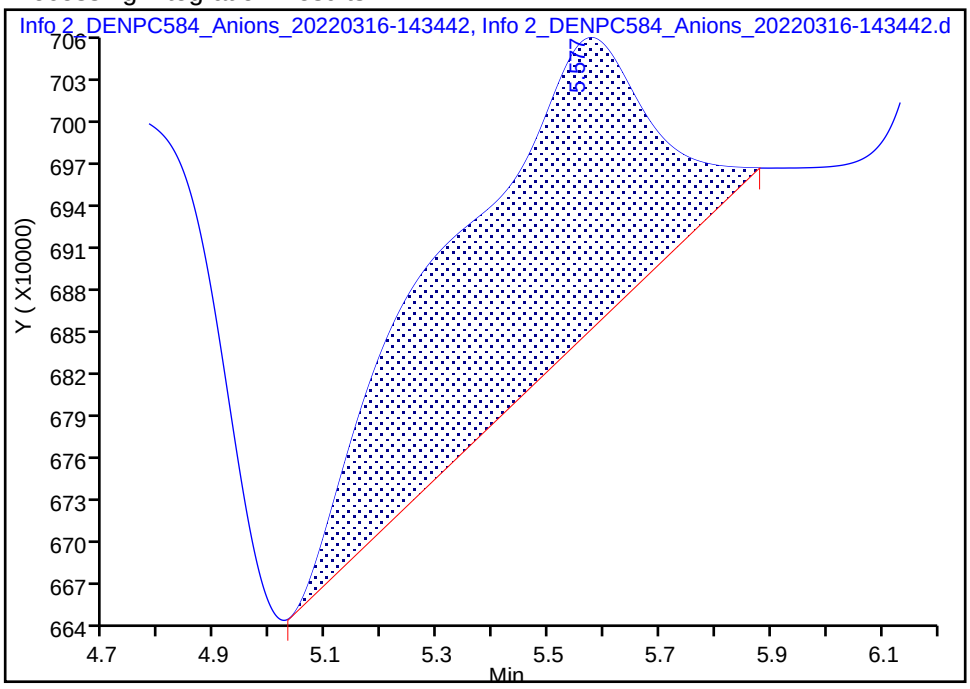
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-143				
Injection Date:	16-Mar-2022 14:19:00	Instrument ID:	WC_IonChrom13		
Lims ID:	std L1				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	2
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

4 Bromide, CAS: 24959-67-9

Signal: 1

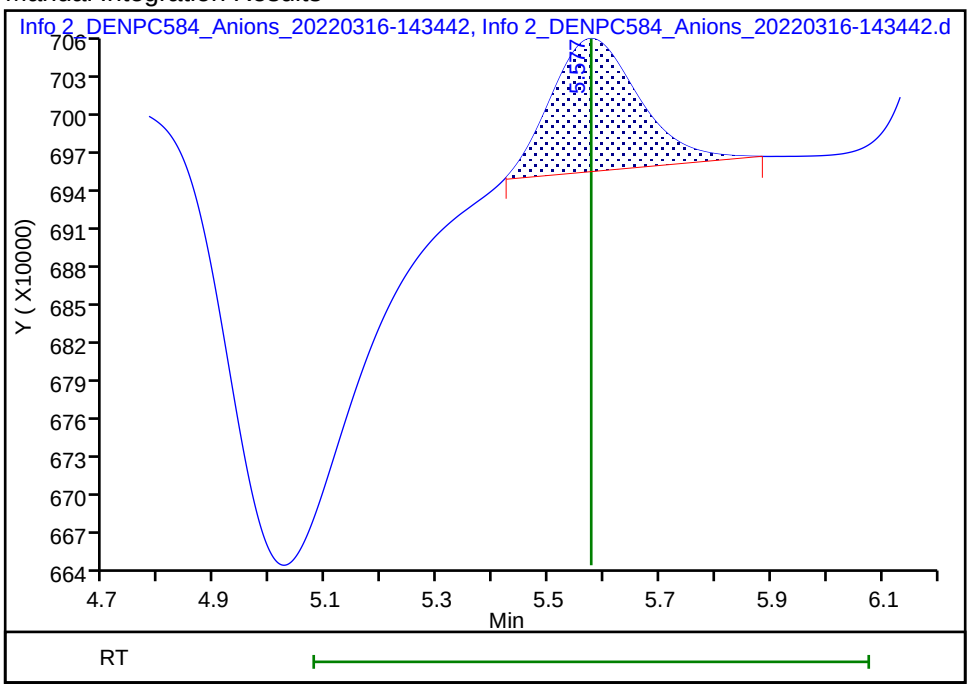
RT: 5.58
Area: 5914078
Amount: 0
Amount Units: ug/ml

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

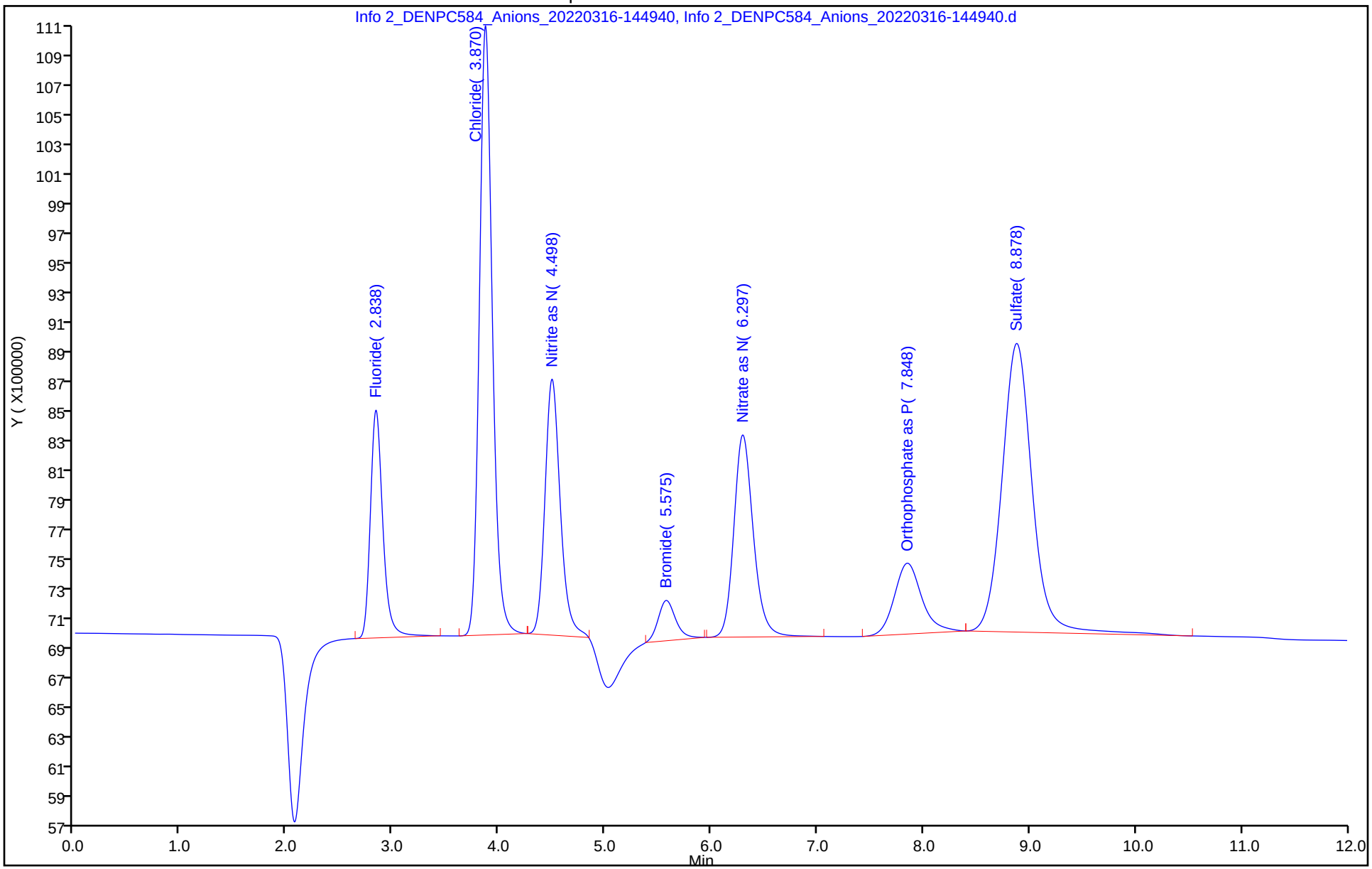
Reagents:

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

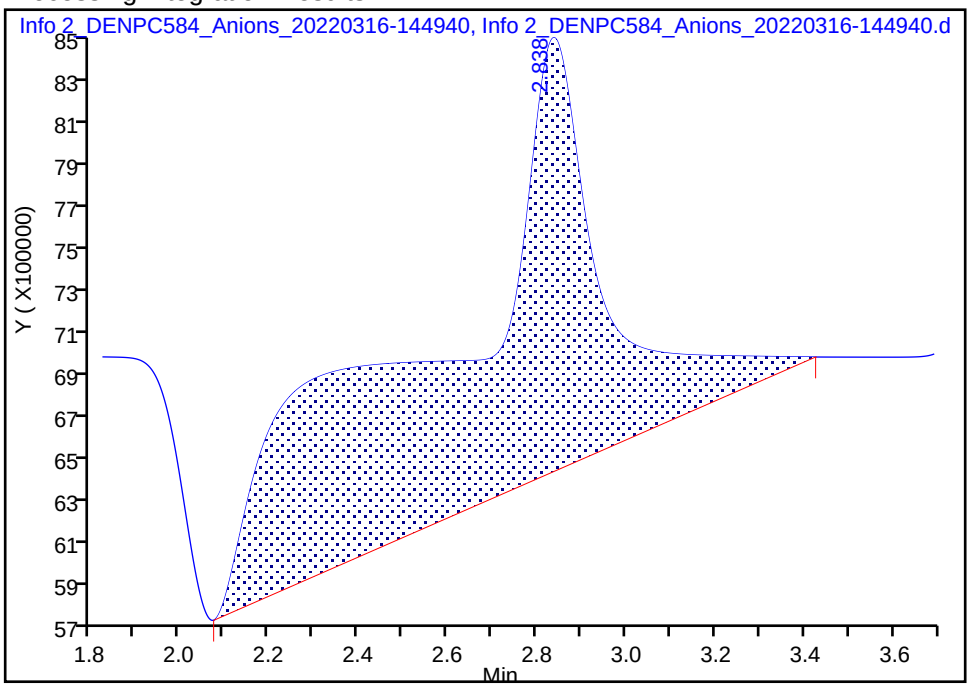
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

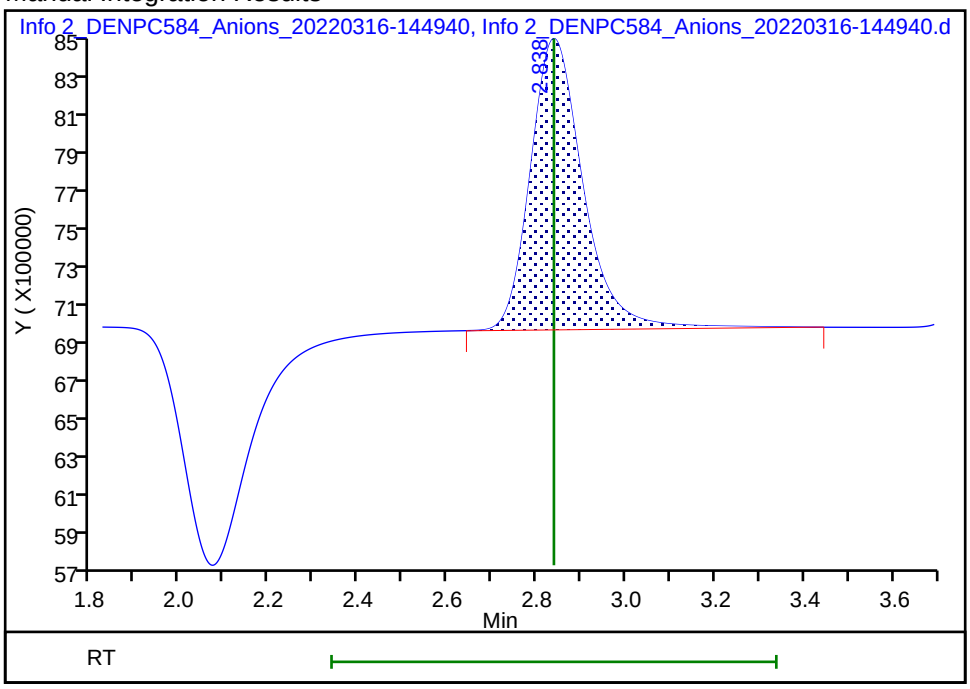
Processing Integration Results

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

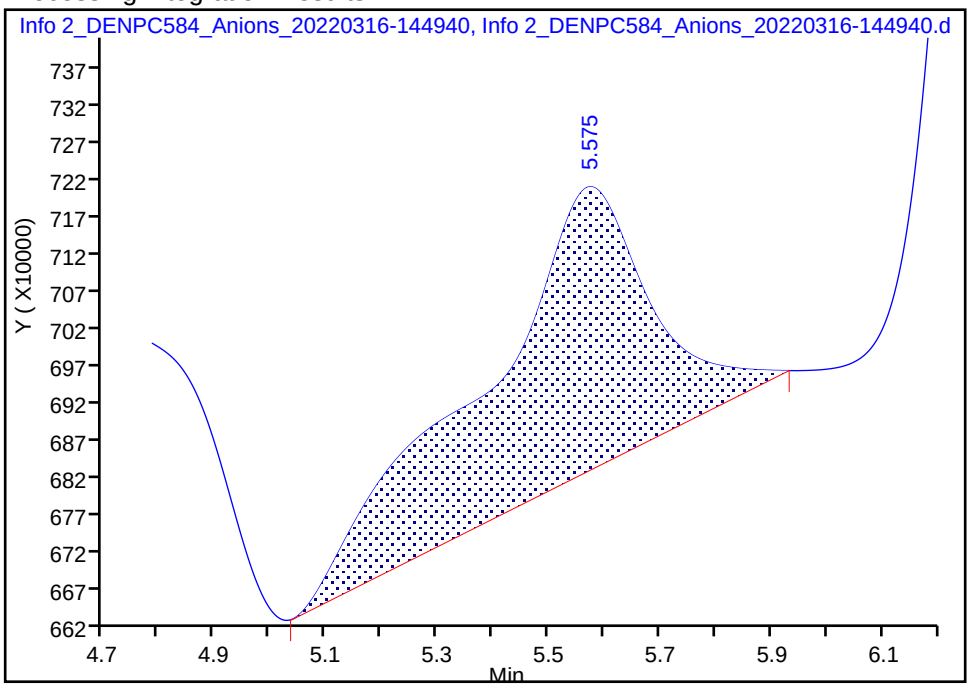
Column: Detector 0005

4 Bromide, CAS: 24959-67-9

Signal: 1

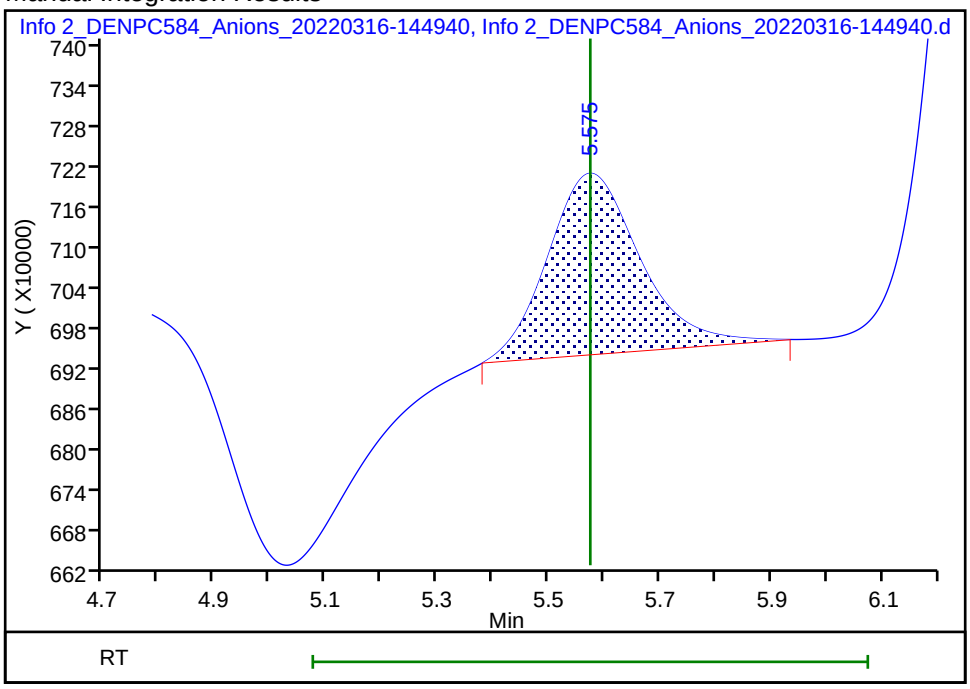
Processing Integration Results

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

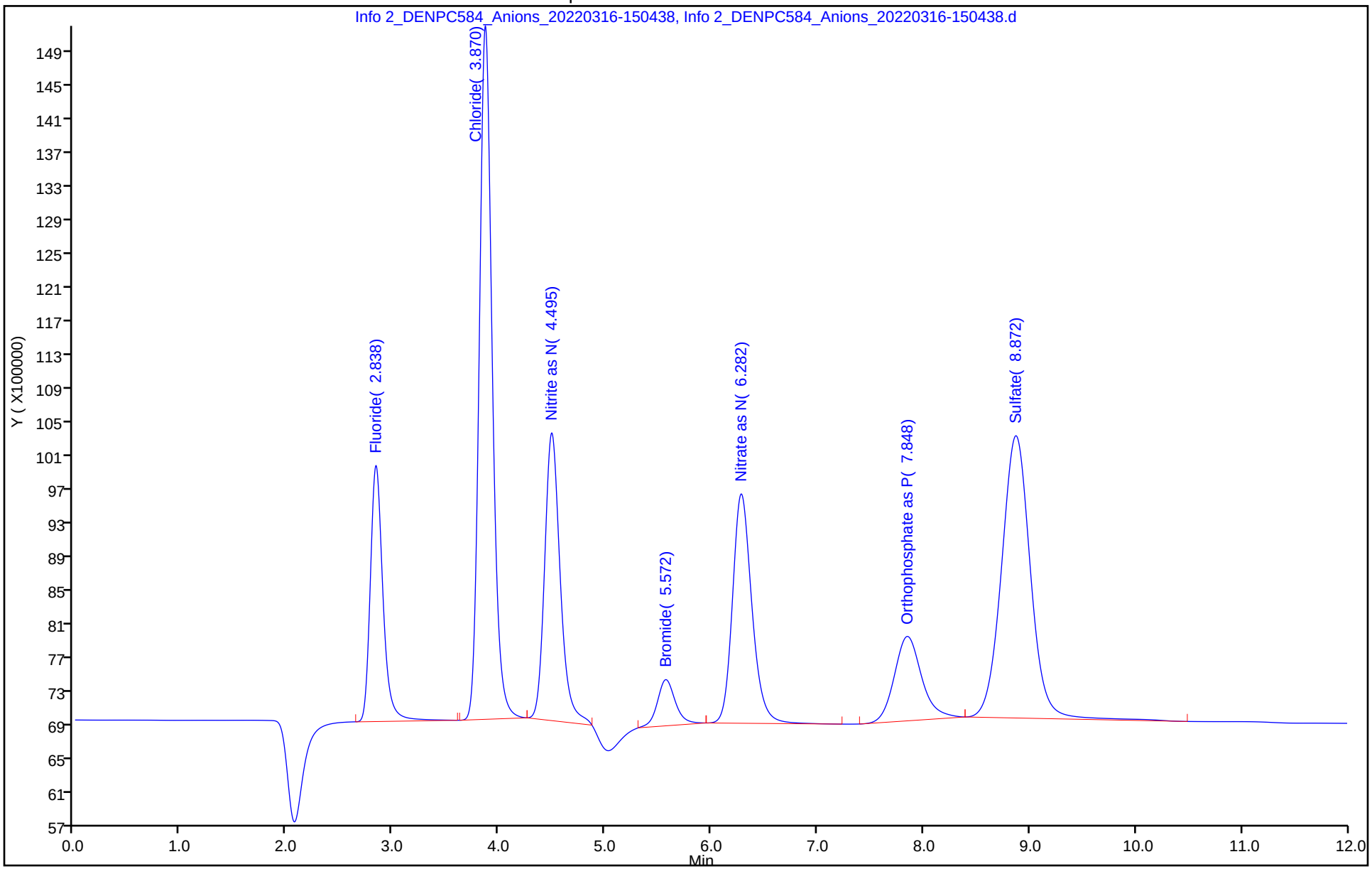
Reagents:

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

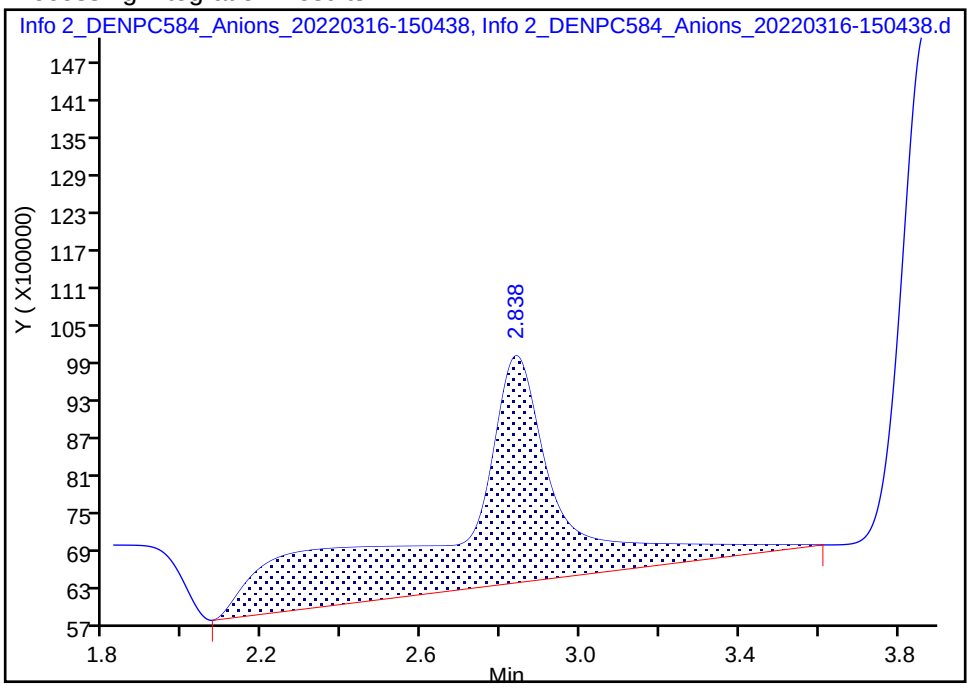
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

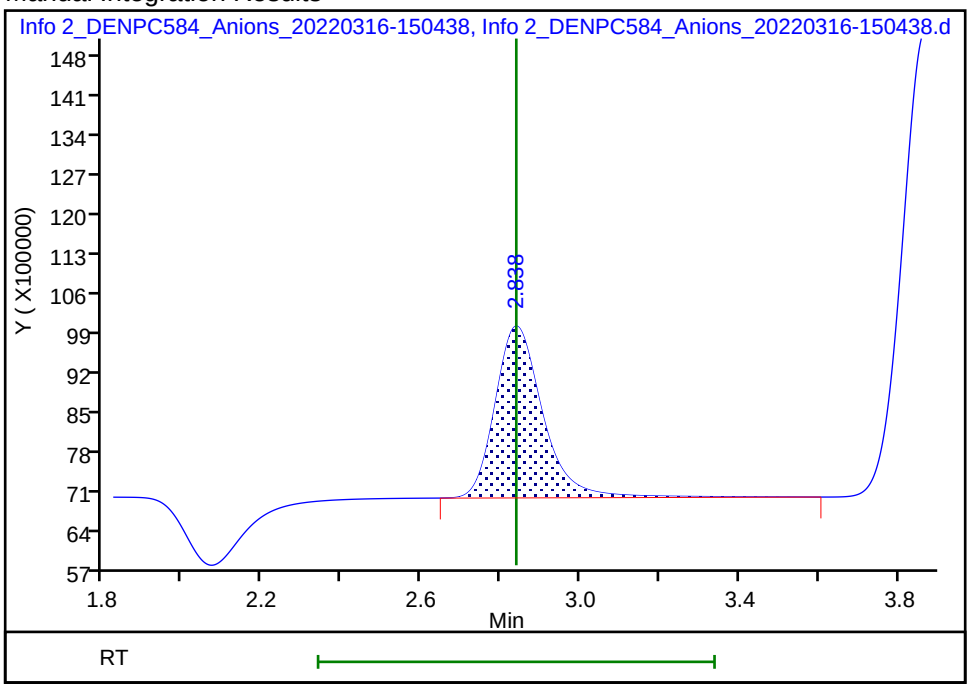
RT: 2.84
Area: 72396522
Amount: 1.122375
Amount Units: ug/ml

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

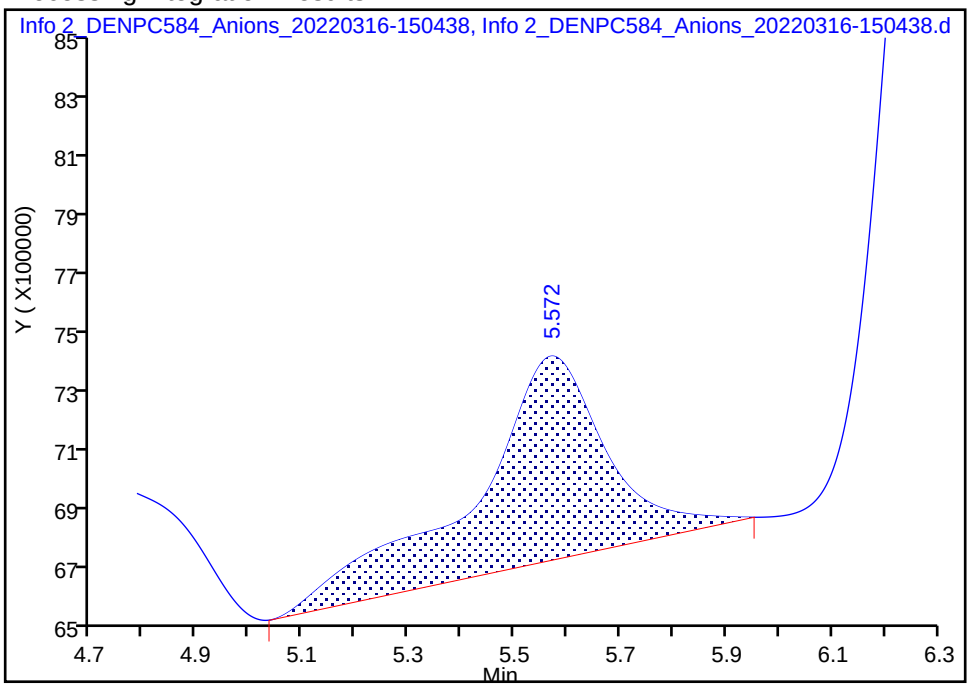
Column: Detector 0005

4 Bromide, CAS: 24959-67-9

Signal: 1

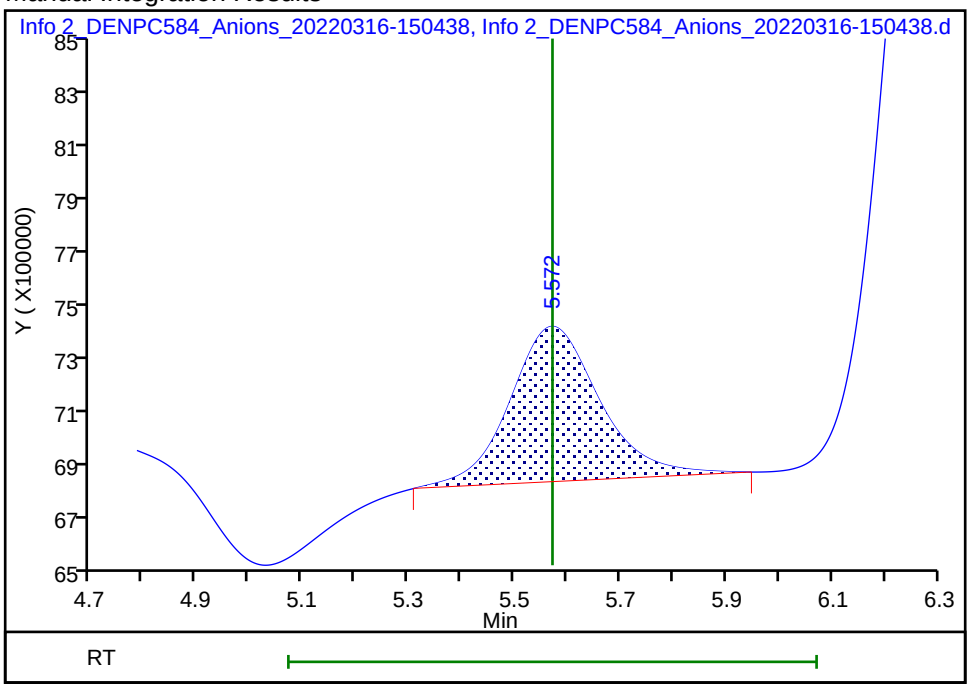
RT: 5.57
Area: 11449018
Amount: 1.082951
Amount Units: ug/ml

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

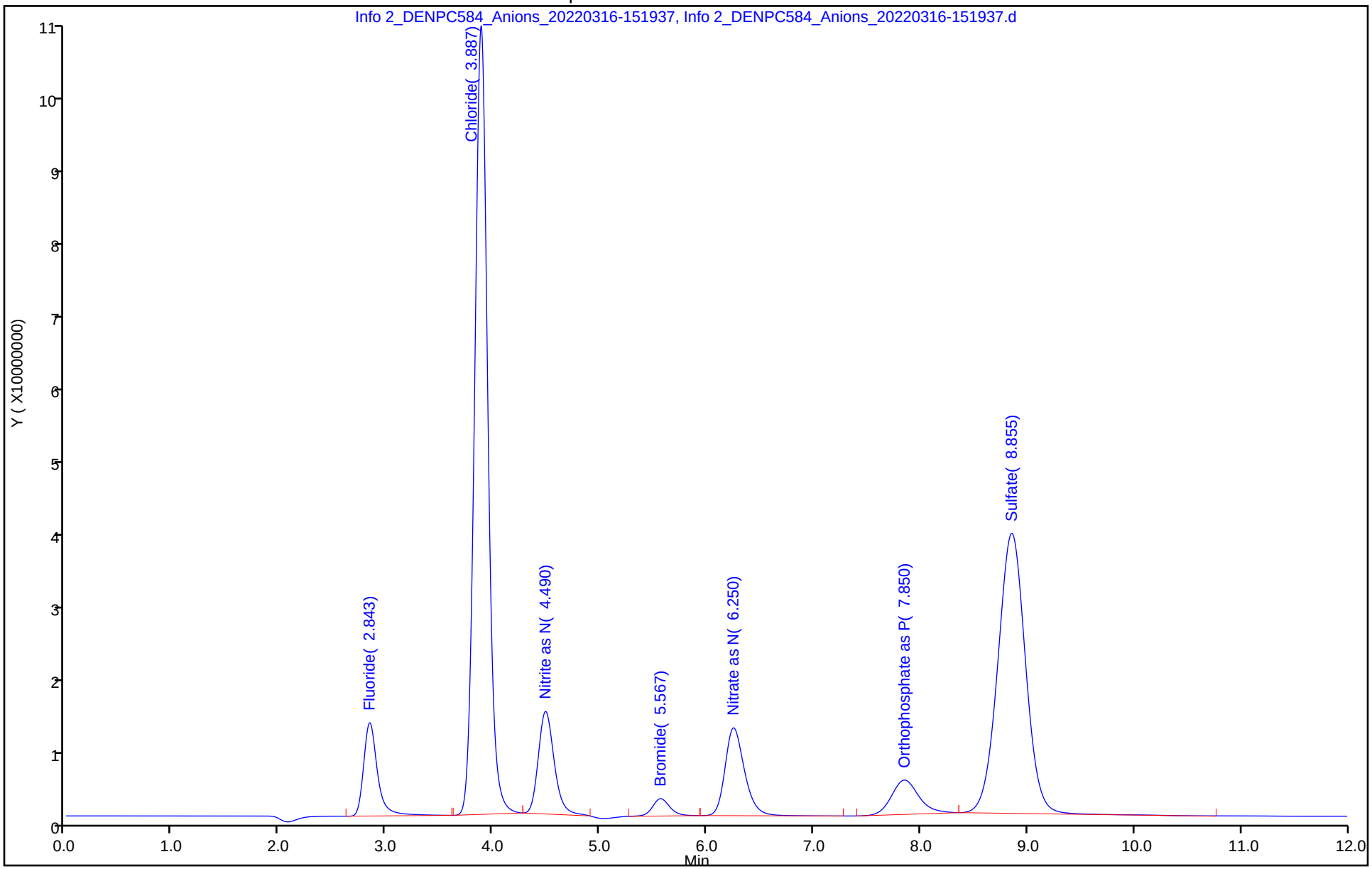
Reagents:

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

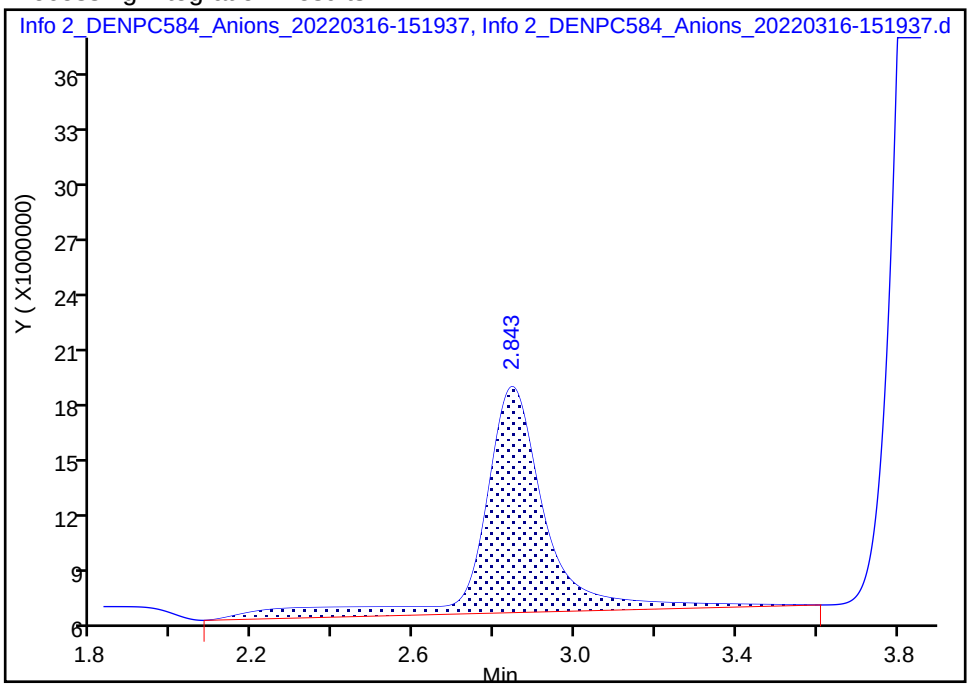
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

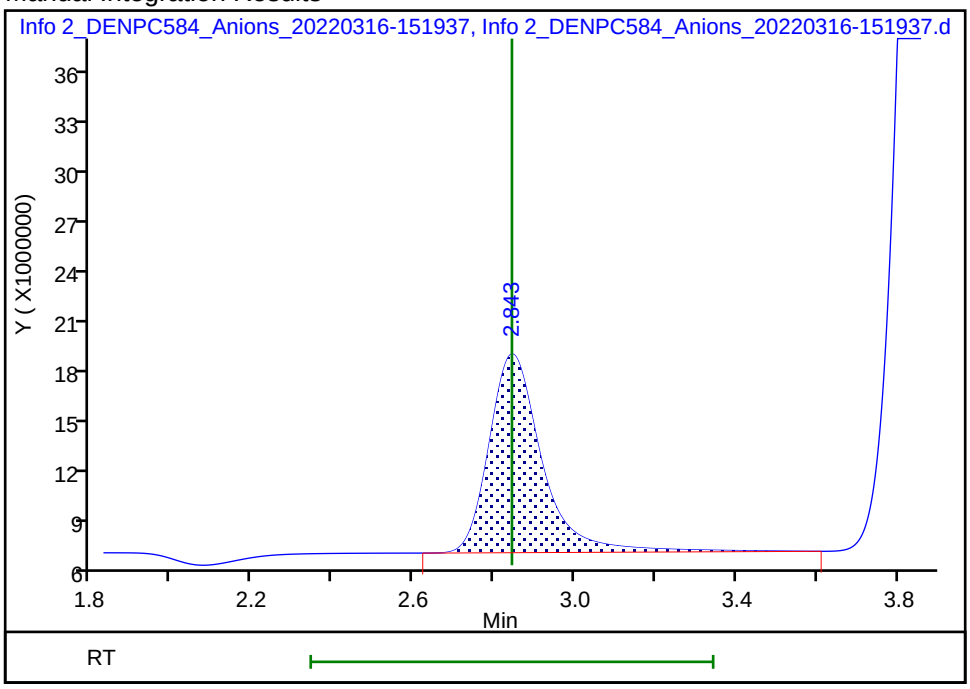
Processing Integration Results

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

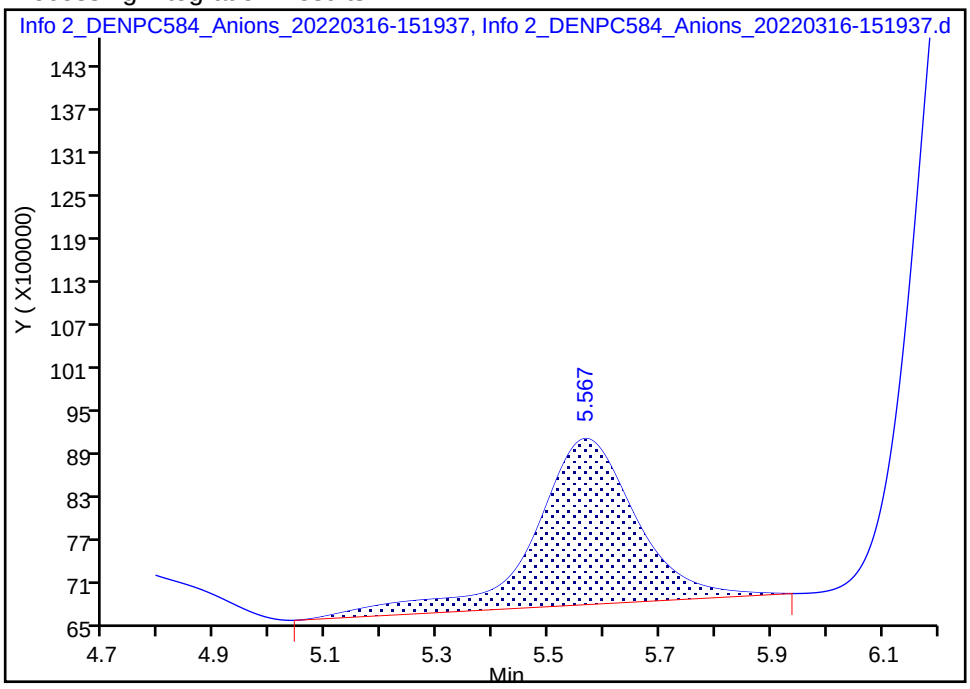
Column: Detector 0005

4 Bromide, CAS: 24959-67-9

Signal: 1

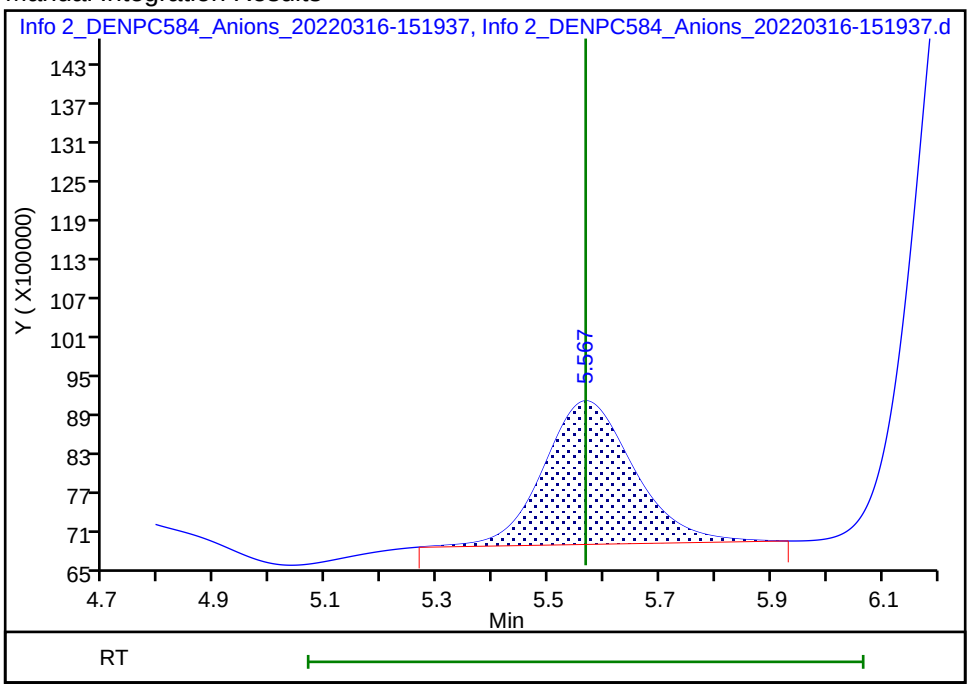
Processing Integration Results

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

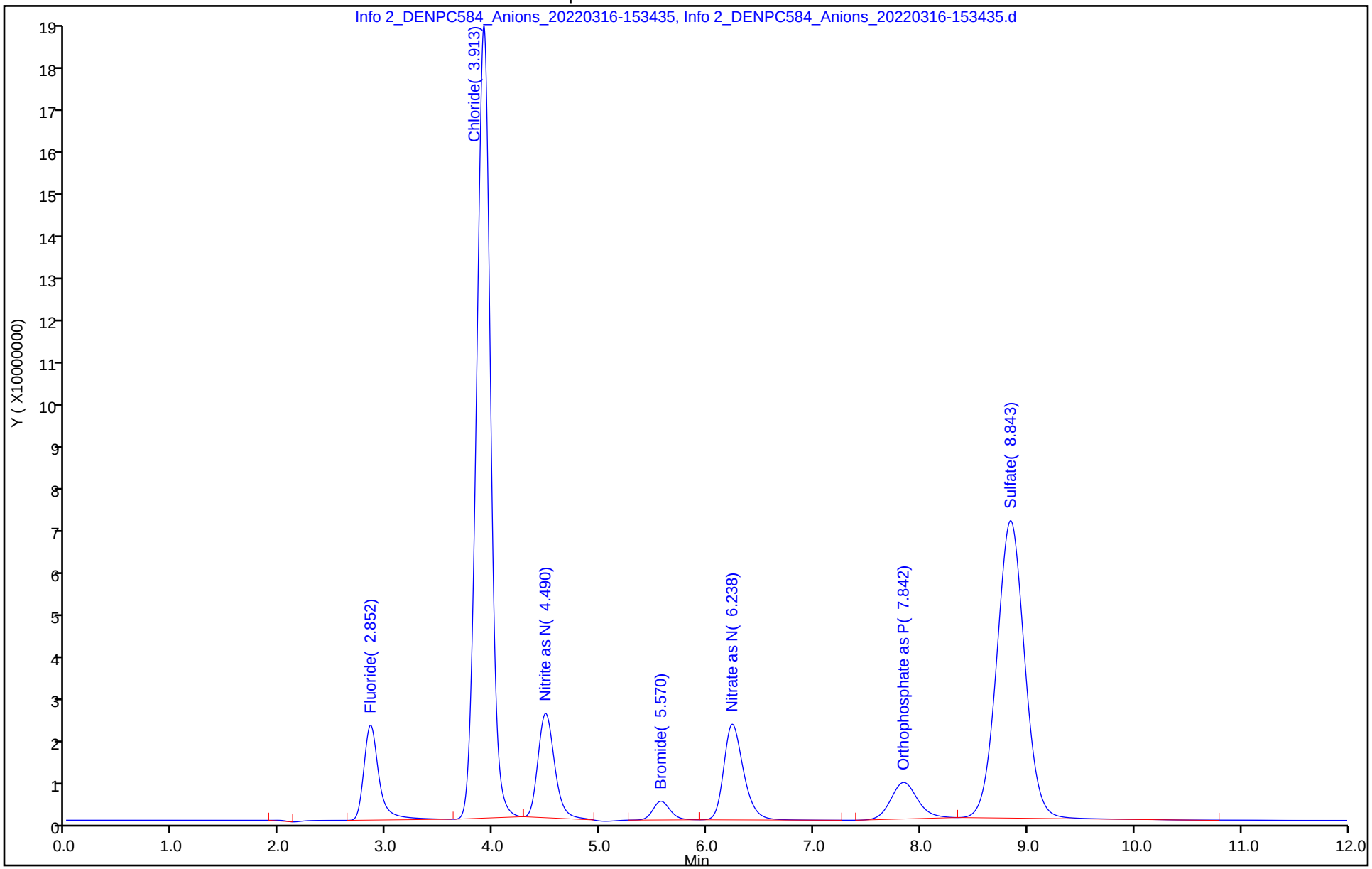
Reagents:

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

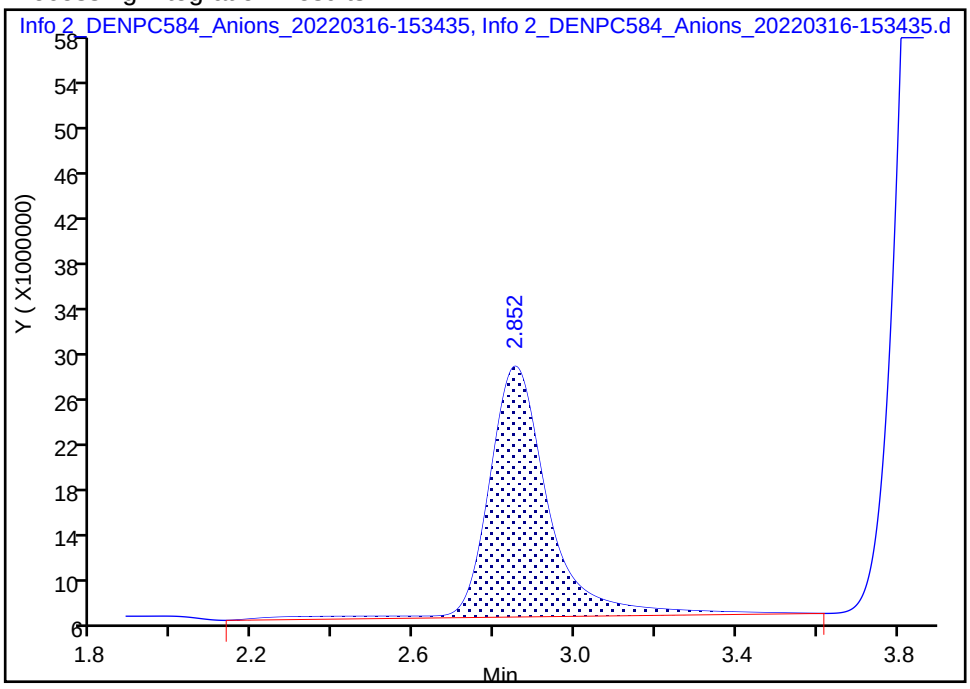
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

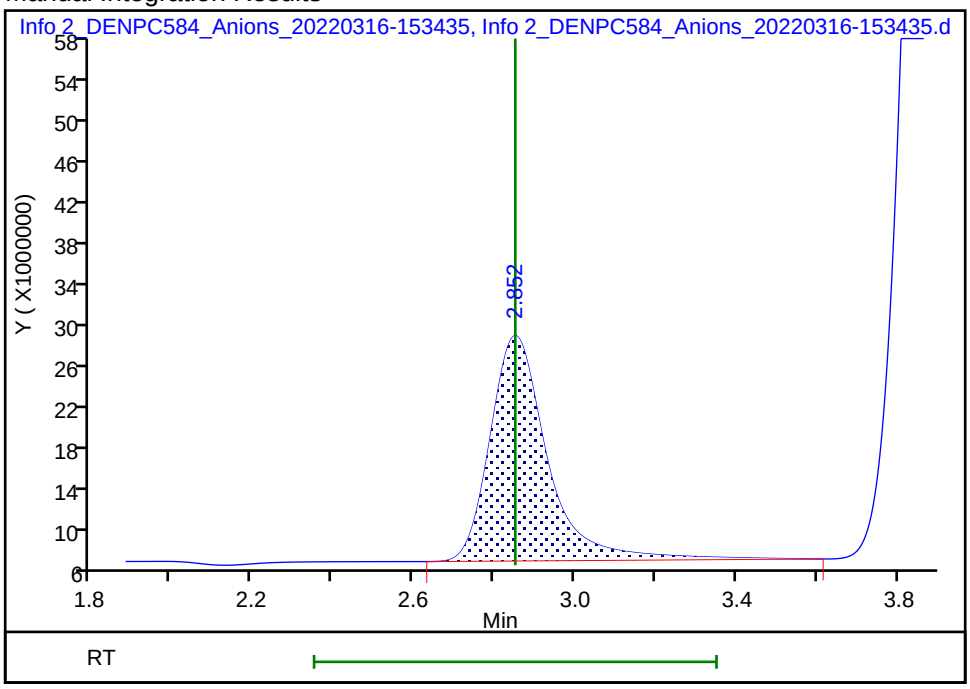
RT: 2.85
Area: 226873547
Amount: 8.241492
Amount Units: ug/ml

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

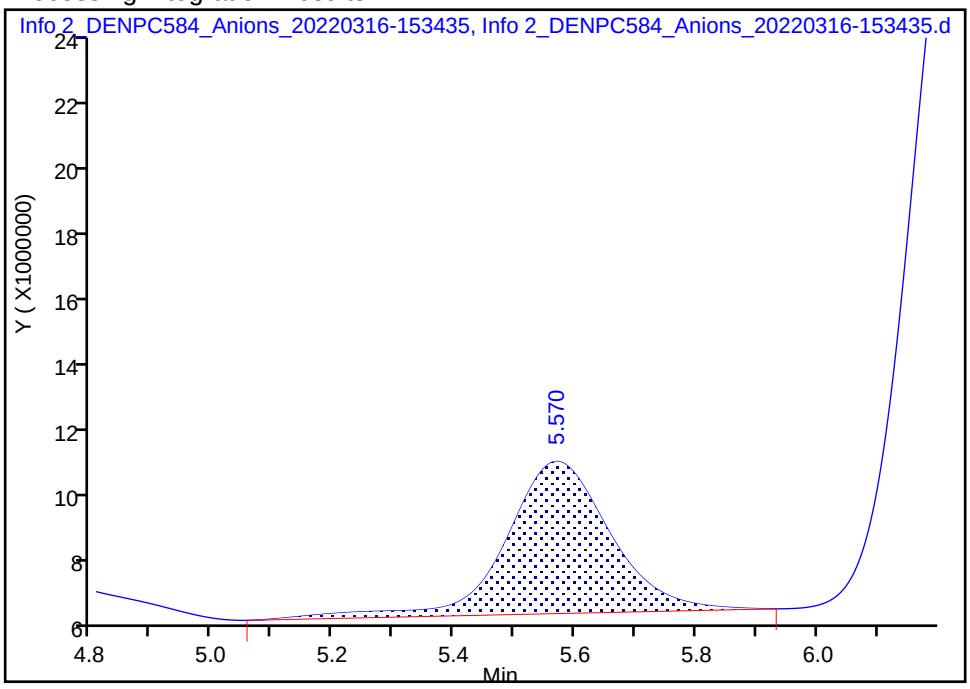
Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-153
Injection Date: 16-Mar-2022 15:19:00 Instrument ID: WC_IonChrom13
Lims ID: std L5
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions-IC13 Limit Group: Wet - Anions 28D
Column: Detector 0005

4 Bromide, CAS: 24959-67-9

Signal: 1

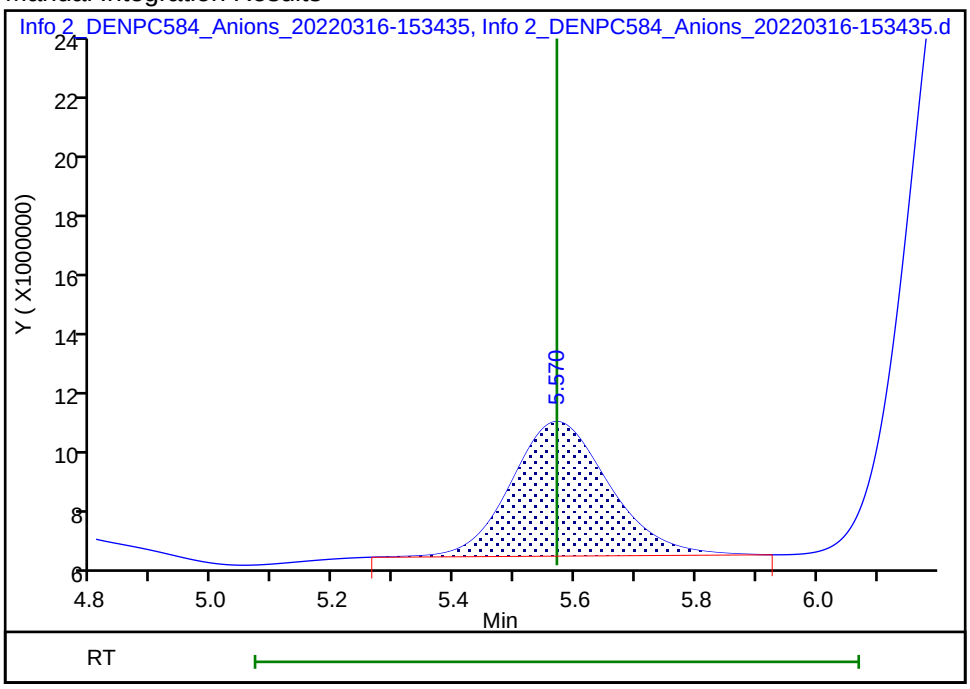
RT: 5.57
Area: 53437781
Amount: 8.205898
Amount Units: ug/ml

Processing Integration Results



RT: 5.57
Area: 48716159
Amount: 7.964502
Amount Units: ug/ml

Manual Integration Results



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

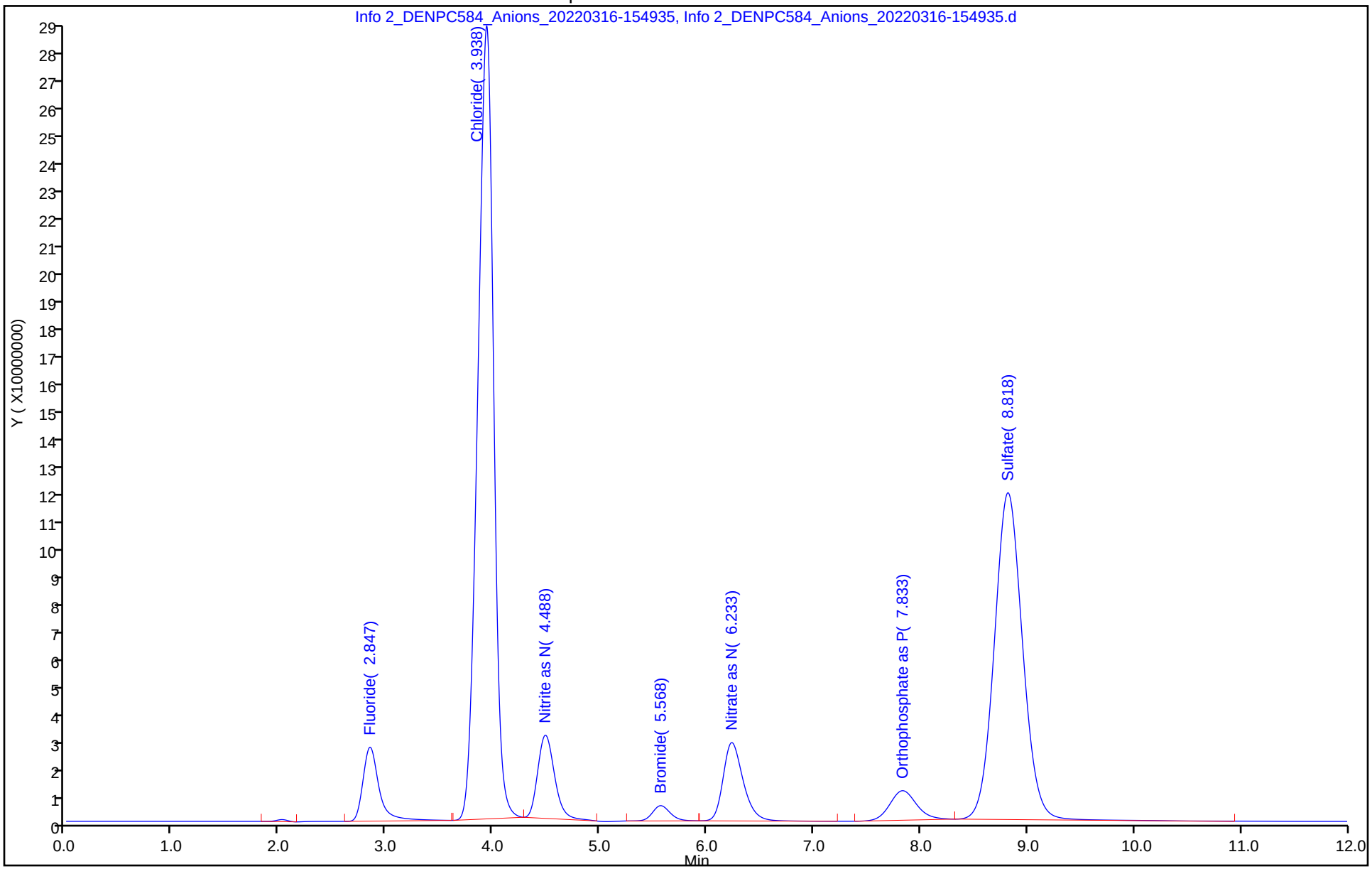
Reagents:

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

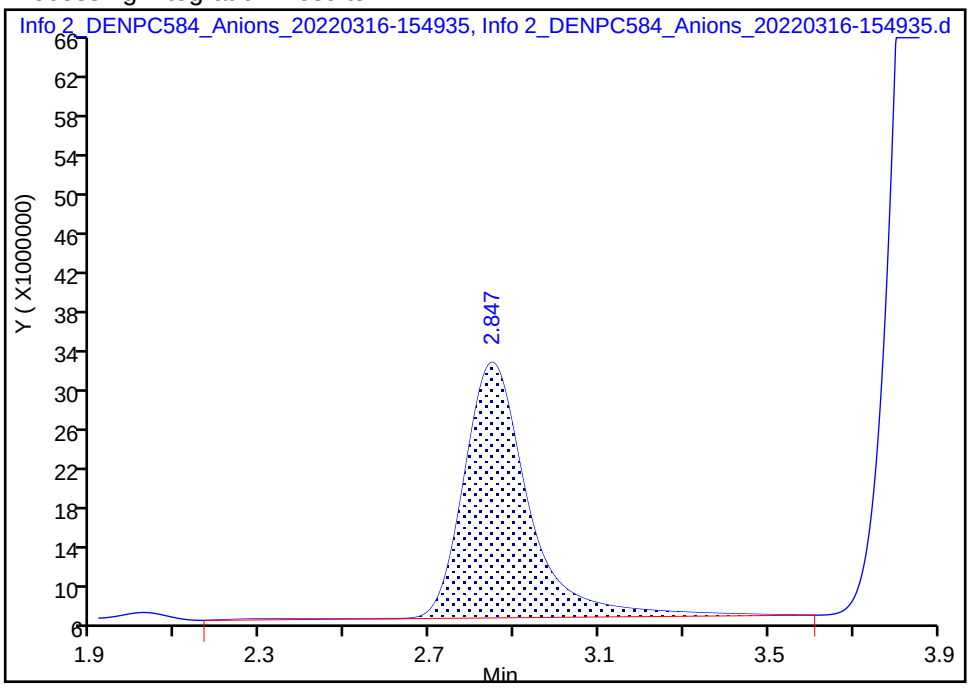
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

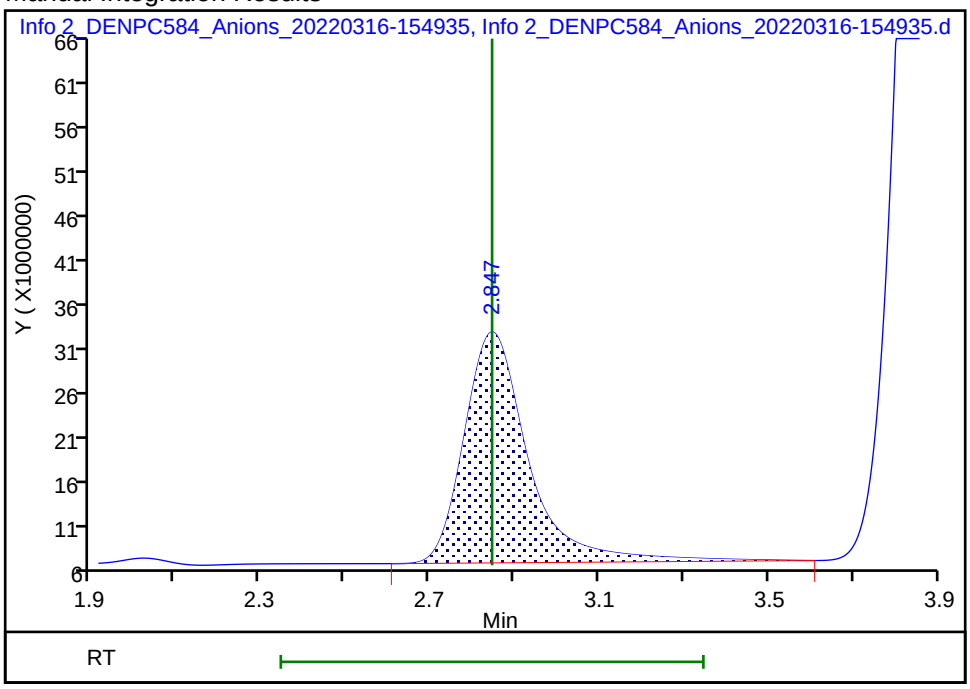
Processing Integration Results

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

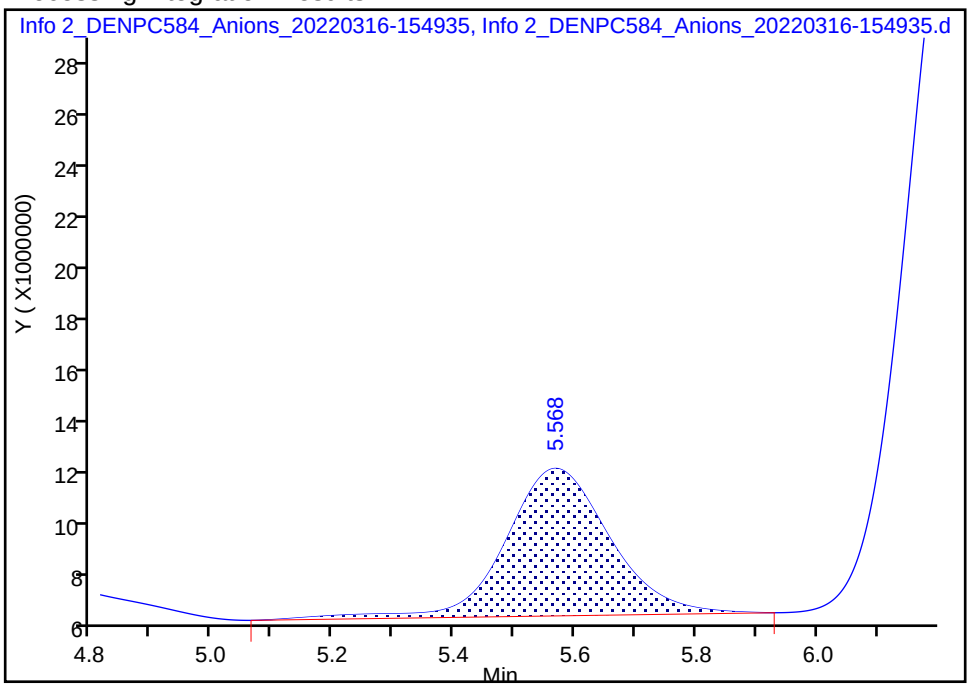
Column: Detector 0005

4 Bromide, CAS: 24959-67-9

Signal: 1

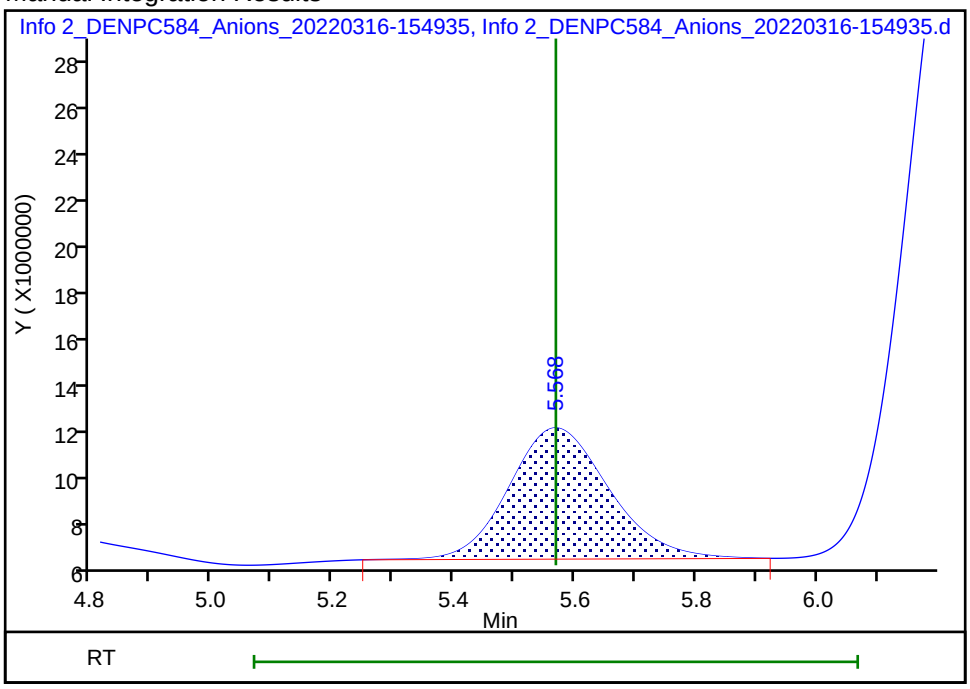
Processing Integration Results

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, 1000 X	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:

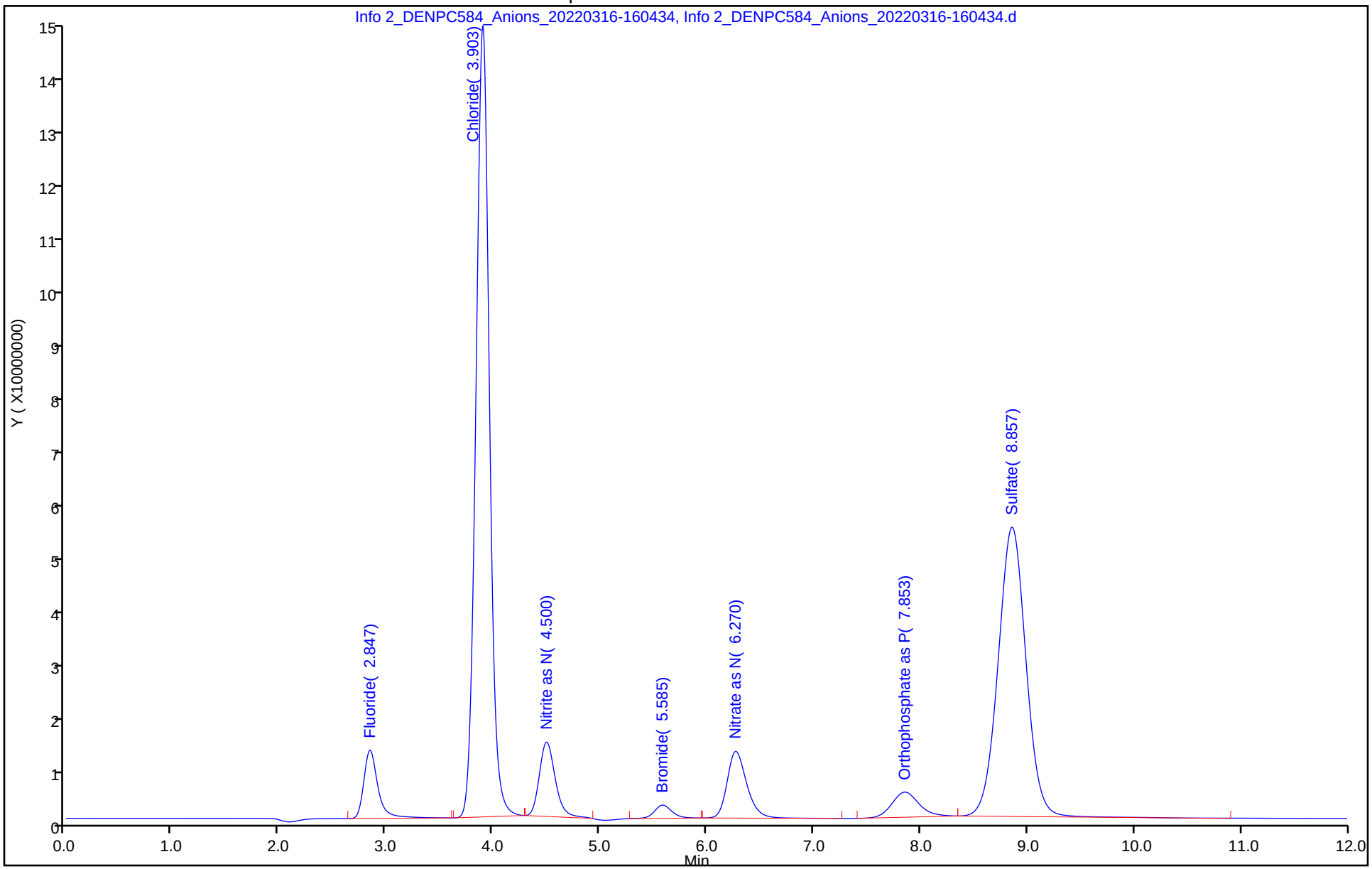
IC SO4 ICV_00022	Amount Added:	0.40	Units: mL
Cl ICV Std_00002	Amount Added:	0.40	Units: mL
IC ICV 5_00355	Amount Added:	0.40	Units: mL

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

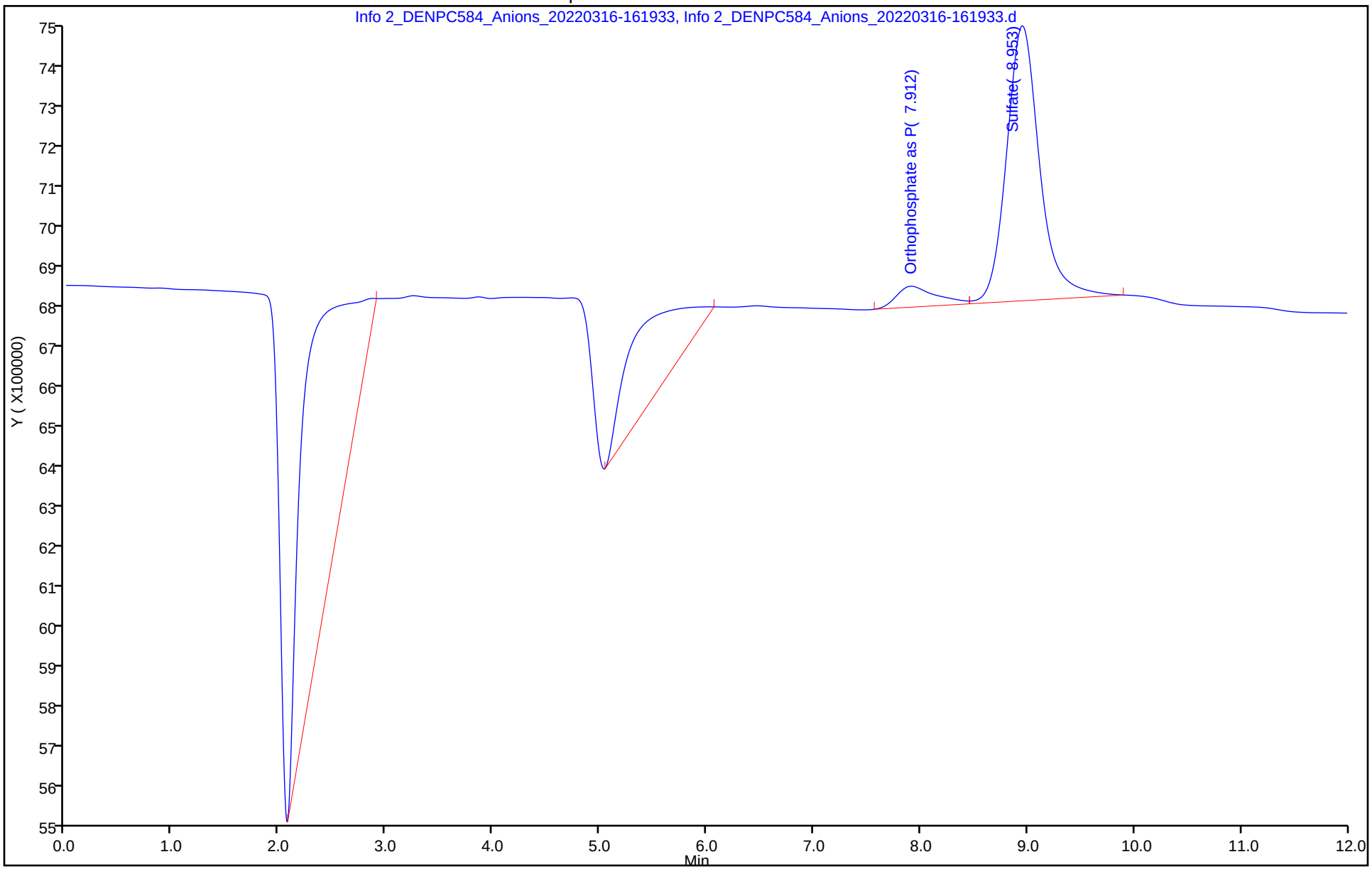
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

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		



Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-163
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 16-Mar-2022 16:19:00 ALS Bottle#: 0 Worklist Smp#: 10
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109293-010
Misc. Info.: 280-0109293-010
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 13:02:48

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.838	2.847	-0.009	13044495	0.5000	0.5057	M
2 Chloride	3.875	3.903	-0.028	65974620	5.00	4.67	
3 Nitrite as N	4.508	4.500	0.008	17113640	NC	NC	M
4 Bromide	5.603	5.585	0.018	3346637	0.5000	0.5452	M
5 Nitrate as N	6.328	6.270	0.058	17191174	NC	NC	
7 Orthophosphate as P	7.853	7.853	0.000	8722804	NC	NC	
6 Sulfate	8.892	8.857	0.035	62929797	5.00	4.85	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

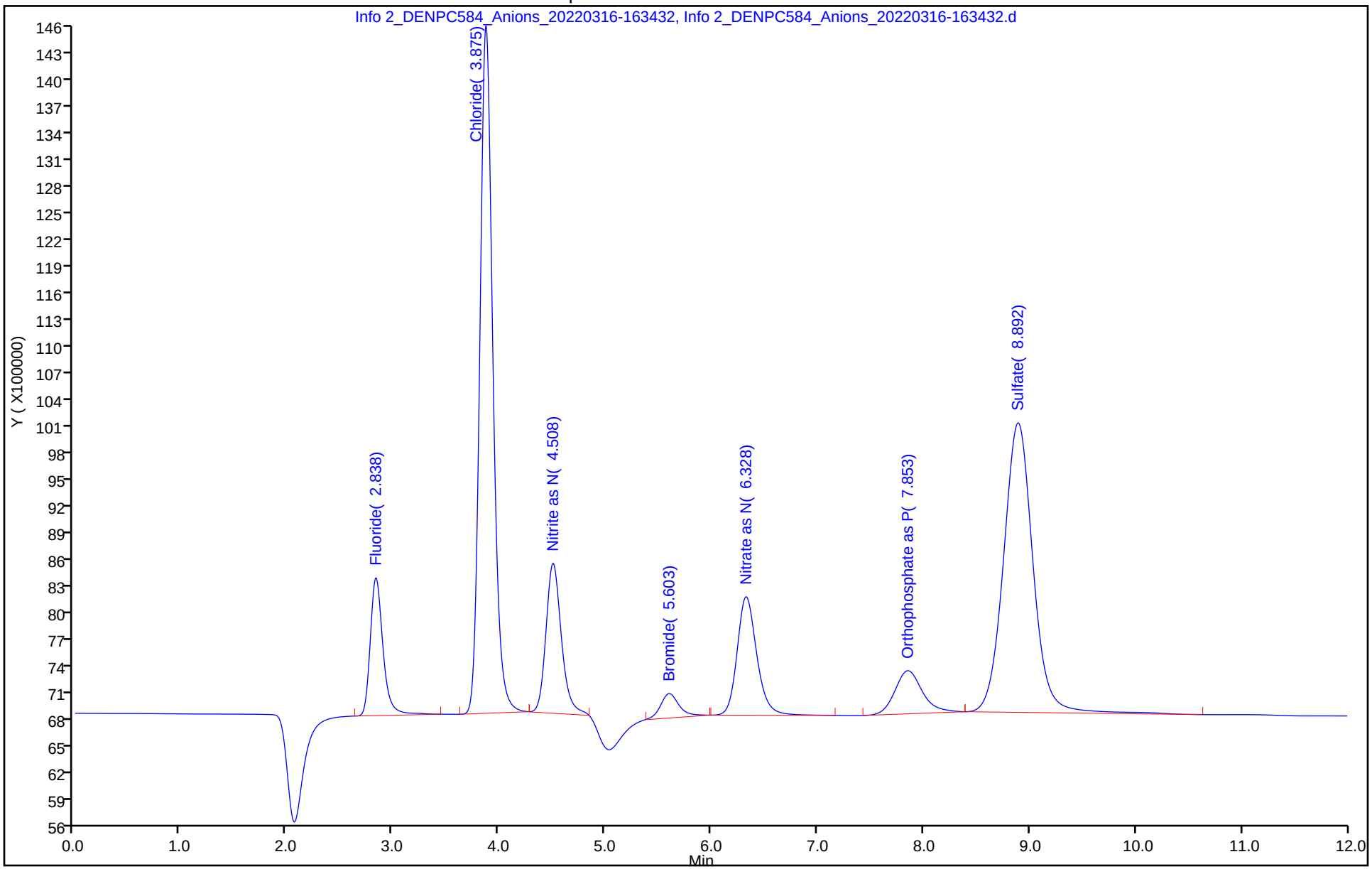
Reagents:

IC CAL cl/so4_00411 Amount Added: 0.20 Units: mL
IC Cal low_00627 Amount Added: 0.10 Units: mL

Report Date: 17-Mar-2022 13:14:05 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_20220316-163432.d				
Injection Date:	16-Mar-2022 16:19:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	MRL			Worklist Smp#:	10
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_20220316-164
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 16-Mar-2022 16:34:00 ALS Bottle#: 0 Worklist Smp#: 11
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109293-011
Misc. Info.: 280-0109293-011
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: 16-Mar-2022 17:08:17

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	134217495	5.00	4.98	M
2 Chloride	3.907	3.903	0.004	1421881538	100.0	100.5	Ma
3 Nitrite as N	4.497	4.500	-0.003	166463812	NC	NC	M
4 Bromide	5.583	5.585	-0.002	31372771	5.00	5.13	M
5 Nitrate as N	6.263	6.270	-0.007	175506684	NC	NC	
7 Orthophosphate as P	7.852	7.853	-0.001	94070084	NC	NC	
6 Sulfate	8.862	8.857	0.005	1055273483	100.0	101.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

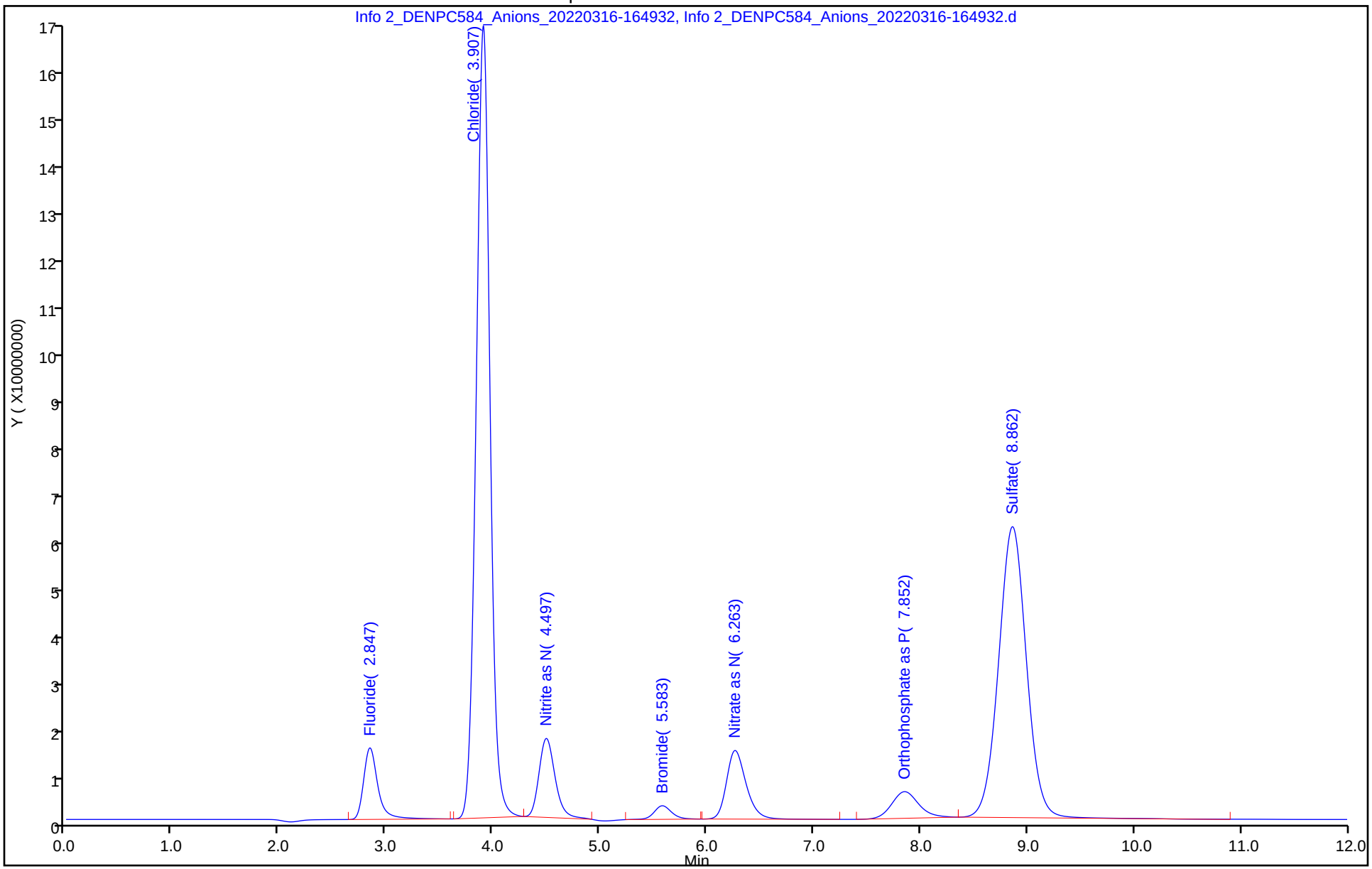
Reagents:

IC LCS_01863 Amount Added: 5.00 Units: mL

Report Date: 17-Mar-2022 13:14:05 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_20220316-164932.d				
Injection Date:	16-Mar-2022 16:34:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	LCS			Worklist Smp#:	11
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_20220316-170
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 16-Mar-2022 16:49:00 ALS Bottle#: 0 Worklist Smp#: 12
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109293-012
Misc. Info.: 280-0109293-012
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: 16-Mar-2022 17:08:42

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.845	2.847	-0.002	128066025	5.00	4.76	M
2 Chloride	3.905	3.903	0.002	1412512853	100.0	99.8	
3 Nitrite as N	4.493	4.500	-0.007	168552900	NC	NC	
4 Bromide	5.572	5.585	-0.013	30918177	5.00	5.05	M
5 Nitrate as N	6.253	6.270	-0.017	174310098	NC	NC	
7 Orthophosphate as P	7.847	7.853	-0.006	88833369	NC	NC	
6 Sulfate	8.858	8.857	0.001	1046844399	100.0	100.2	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

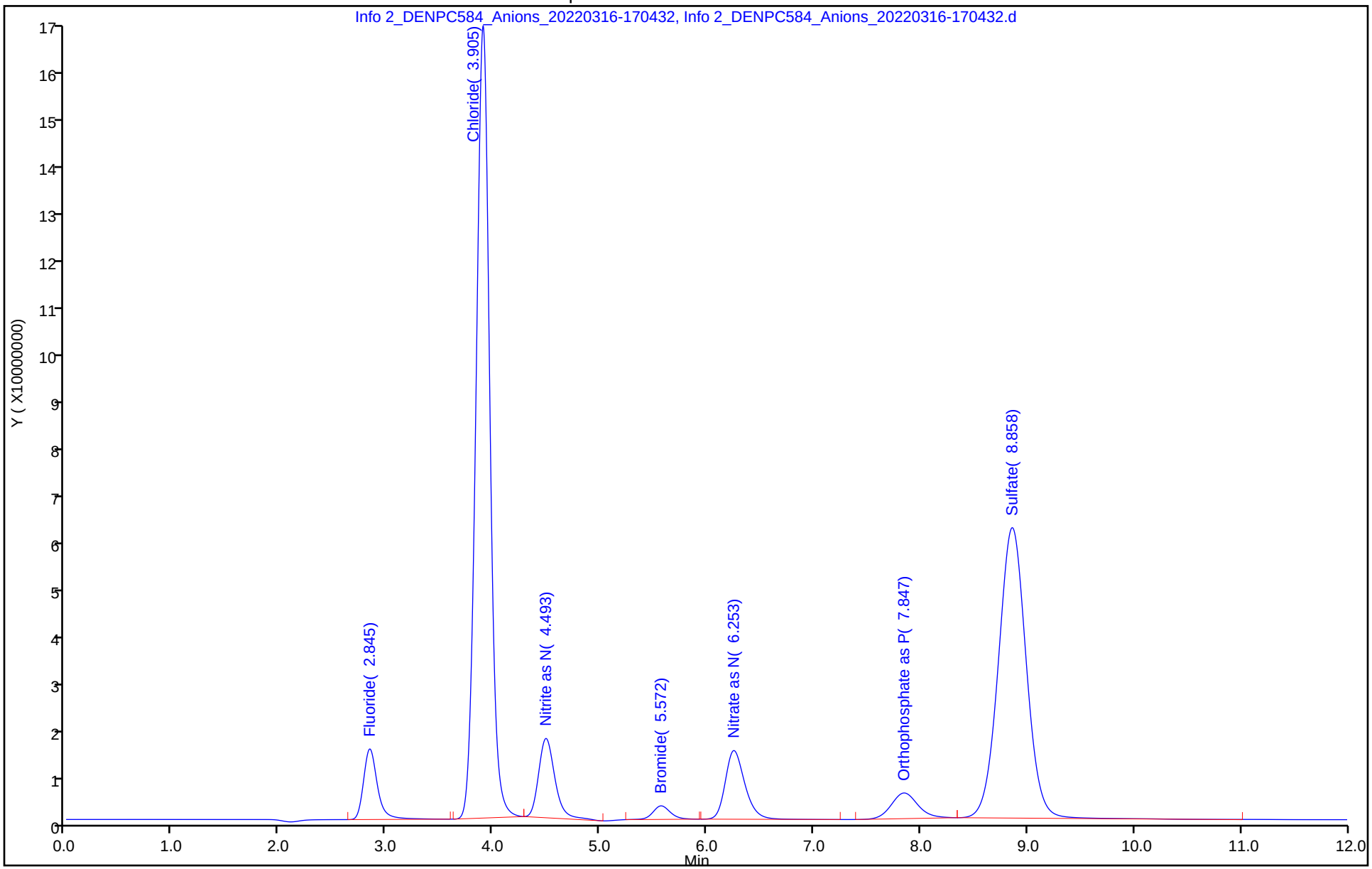
Reagents:

IC LCS_01863 Amount Added: 5.00 Units: mL

Report Date: 17-Mar-2022 13:14:06 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_20220316-170432.d				
Injection Date:	16-Mar-2022 16:49:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	LCSD			Worklist Smp#:	12
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_20220316-171
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 16-Mar-2022 17:04:00 ALS Bottle#: 0 Worklist Smp#: 13
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109293-013
Misc. Info.: 280-0109293-013
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 13:03:05

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	7.922	7.853	0.069	1311086		NC	
6 Sulfate	8.962	8.857	0.105	15500981		0.2524	

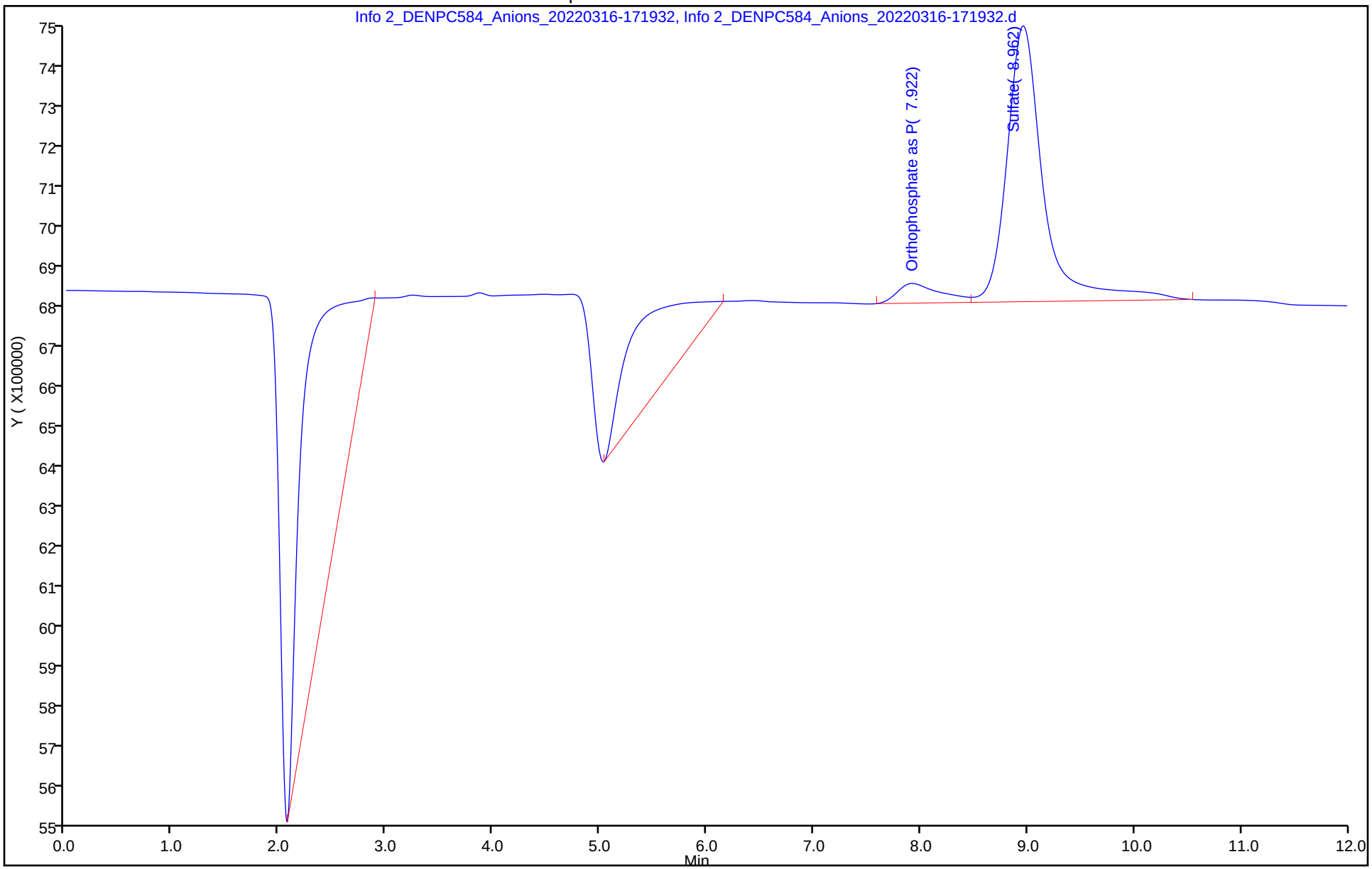
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 17-Mar-2022 13:14:07 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_20220316-171932.d				
Injection Date:	16-Mar-2022 17:04:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	MB			Worklist Smp#:	13
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_20220316-200
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 16-Mar-2022 19:49:00 ALS Bottle#: 0 Worklist Smp#: 24
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109293-024
Misc. Info.: 280-0109293-024
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 13:14:13 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 12:51:18

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.793	2.847	-0.054	123651898	5.00	4.59	M
2 Chloride	3.795	3.903	-0.108	1408421455	100.0	99.5	
3 Nitrite as N	4.358	4.500	-0.142	163121661	NC	NC	
4 Bromide	5.363	5.585	-0.222	29246986	5.00	4.78	M
5 Nitrate as N	6.010	6.270	-0.260	171762123	NC	NC	
7 Orthophosphate as P	7.212	7.853	-0.641	91611253	NC	NC	a
6 Sulfate	8.128	8.857	-0.729	1029638459	100.0	98.5	a

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

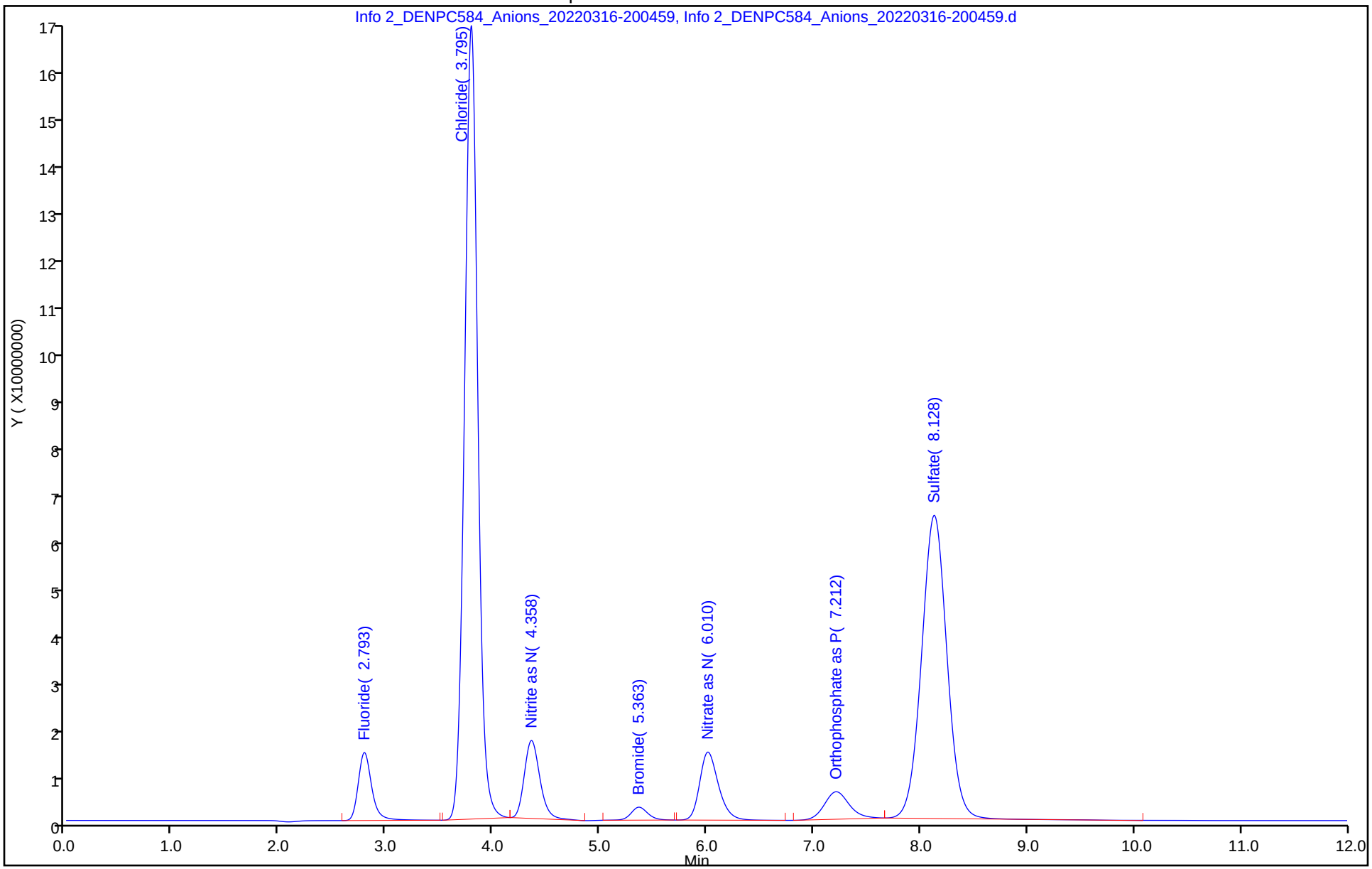
Reagents:

IC LCS_01863 Amount Added: 10.00 Units: mL

Report Date: 17-Mar-2022 13:14:13 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_20220316-200459.d				
Injection Date:	16-Mar-2022 19:49:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	24
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_20220316-200

Injection Date: 16-Mar-2022 19:49:00 Instrument ID: WC_IonChrom13

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 24

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

Column: Detector 0005

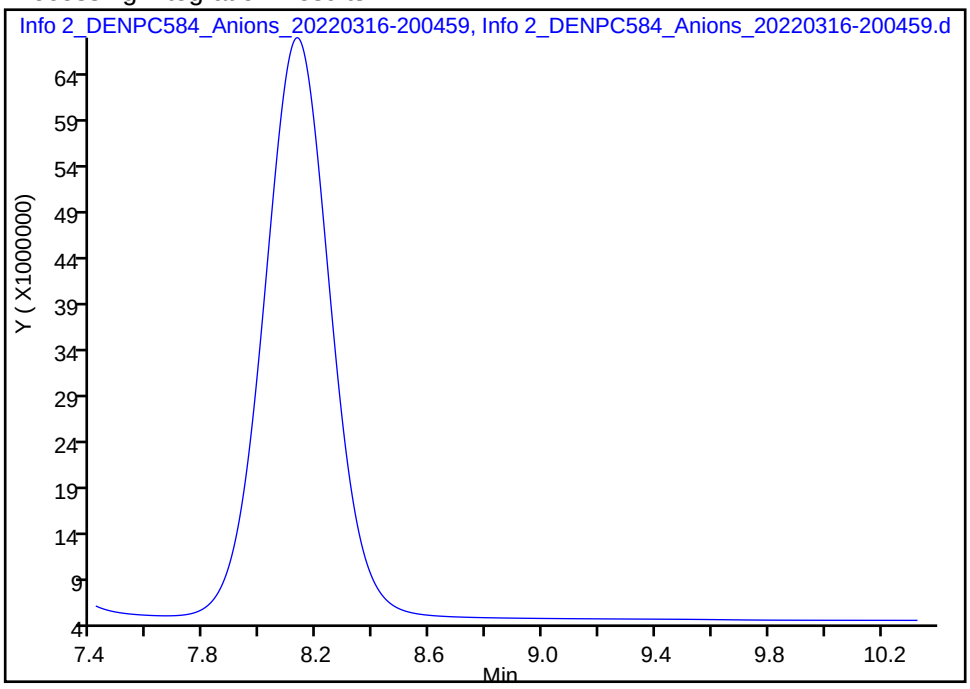
6 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 8.86

Processing Integration Results



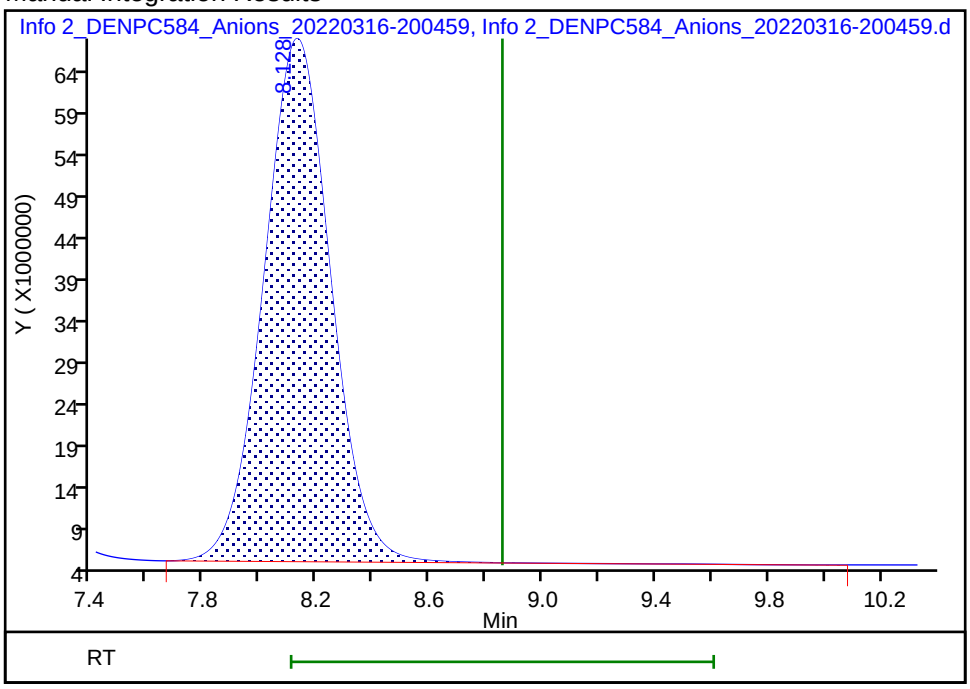
Manual Integration Results

RT: 8.13

Area: 1029638459

Amount: 98.523715

Amount Units: ug/ml



Reviewer: jindaratc, 17-Mar-2022 12:50:44

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-202
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 16-Mar-2022 20:05:00 ALS Bottle#: 0 Worklist Smp#: 25
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109293-025
Misc. Info.: 280-0109293-025
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 13:14:13 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 13:07:42

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		7.853				ND	a
6 Sulfate	8.218	8.857	-0.639	6913025		-0.5798	a

QC Flag Legend

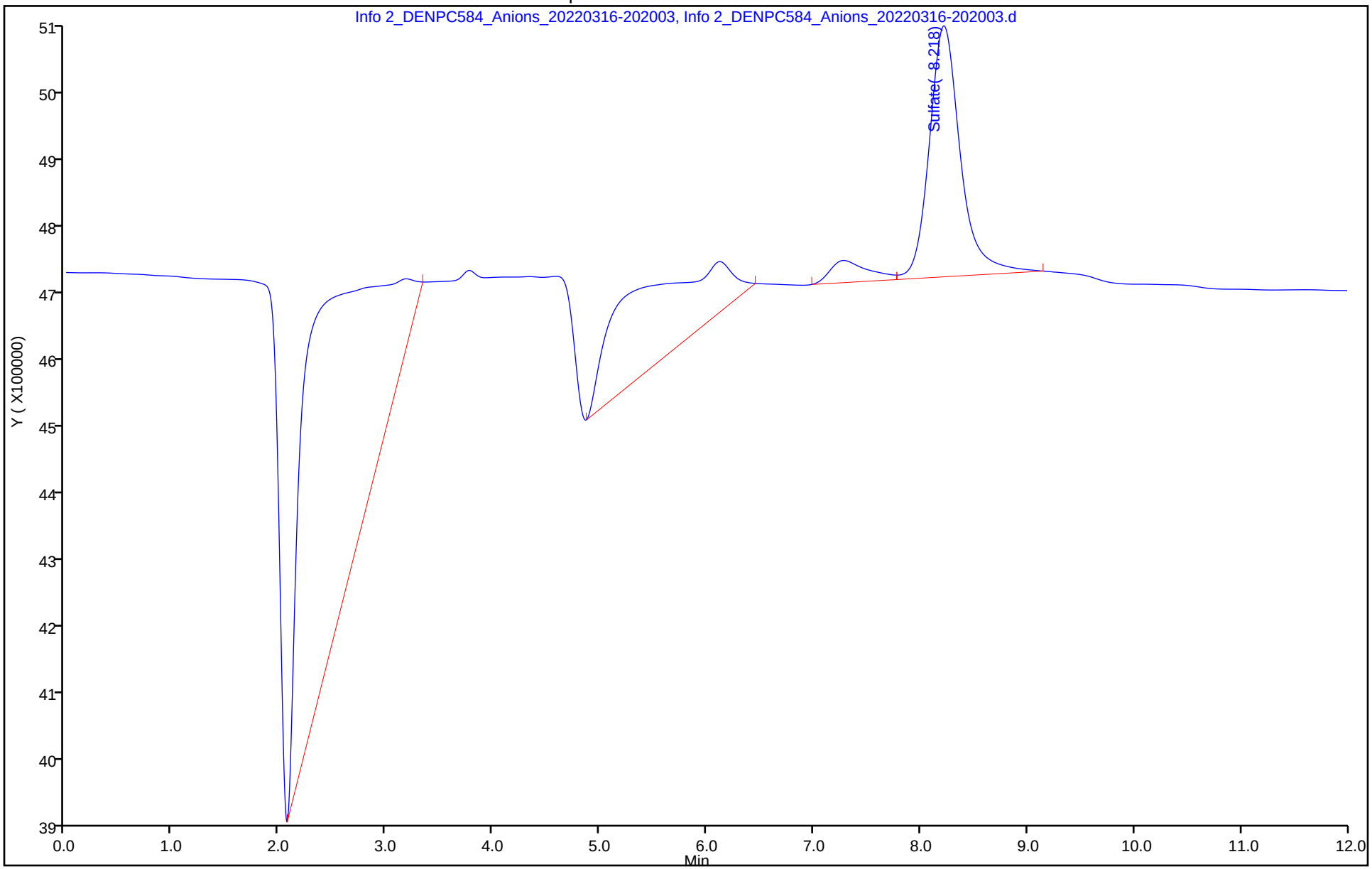
Processing Flags
Review Flags
U - Marked Undetected
a - User Assigned ID

Report Date: 17-Mar-2022 13:14:13 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_20220316-202003.d

Injection Date:	16-Mar-2022 20:05:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	25
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_20220316-202

Injection Date: 16-Mar-2022 20:05:00 Instrument ID: WC_IonChrom13

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 25

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

Column: Detector 0005

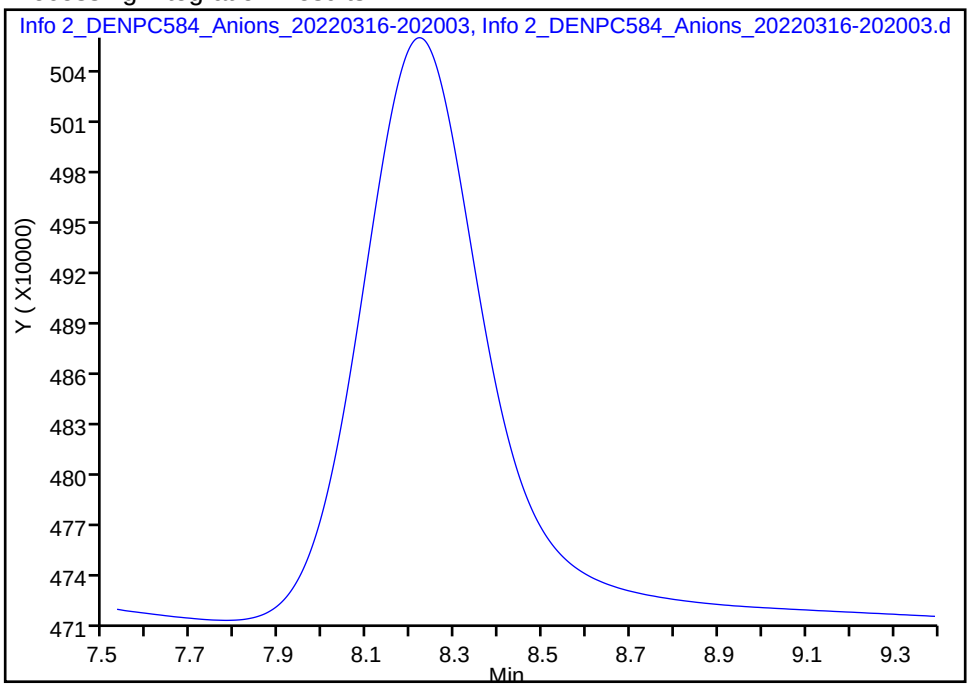
6 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 8.86

Processing Integration Results



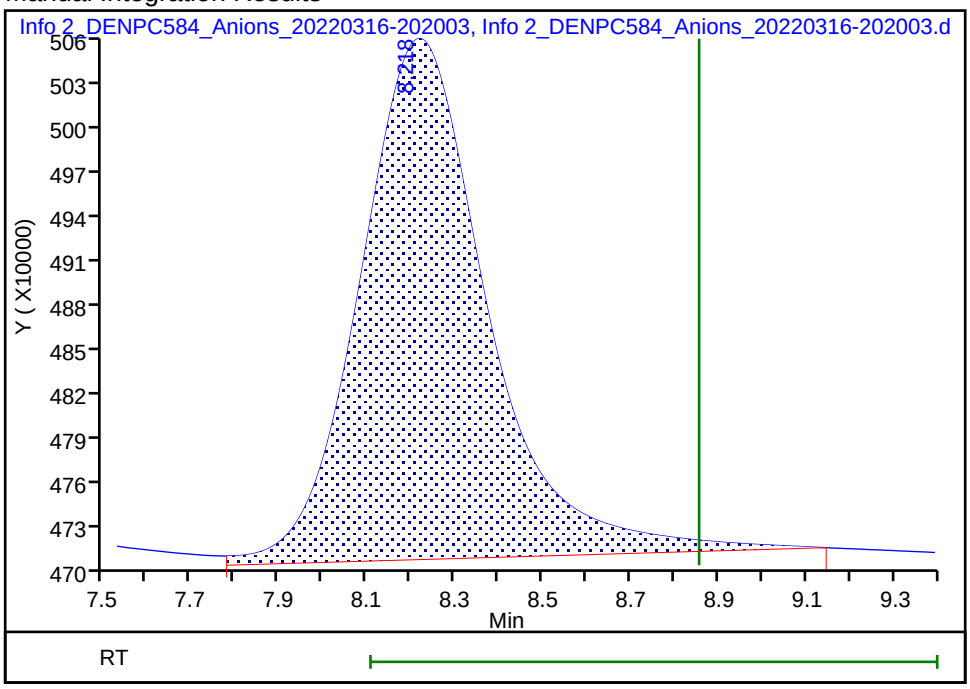
Manual Integration Results

RT: 8.22

Area: 6913025

Amount: -0.579825

Amount Units: ug/ml



Reviewer: jindaratc, 17-Mar-2022 13:07:39

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-230
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 16-Mar-2022 22:50:00 ALS Bottle#: 0 Worklist Smp#: 36
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109293-036
Misc. Info.: 280-0109293-036
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 13:14:18 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 12:51:54

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.793	2.847	-0.054	122104880	5.00	4.53	M
2 Chloride	3.797	3.903	-0.106	1411013799	100.0	99.7	
3 Nitrite as N	4.362	4.500	-0.138	162743380	NC	NC	
4 Bromide	5.362	5.585	-0.223	29039152	5.00	4.75	M
5 Nitrate as N	6.013	6.270	-0.257	171892834	NC	NC	
7 Orthophosphate as P	7.207	7.853	-0.646	91987464	NC	NC	a
6 Sulfate	8.128	8.857	-0.729	1030187483	100.0	98.6	a

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

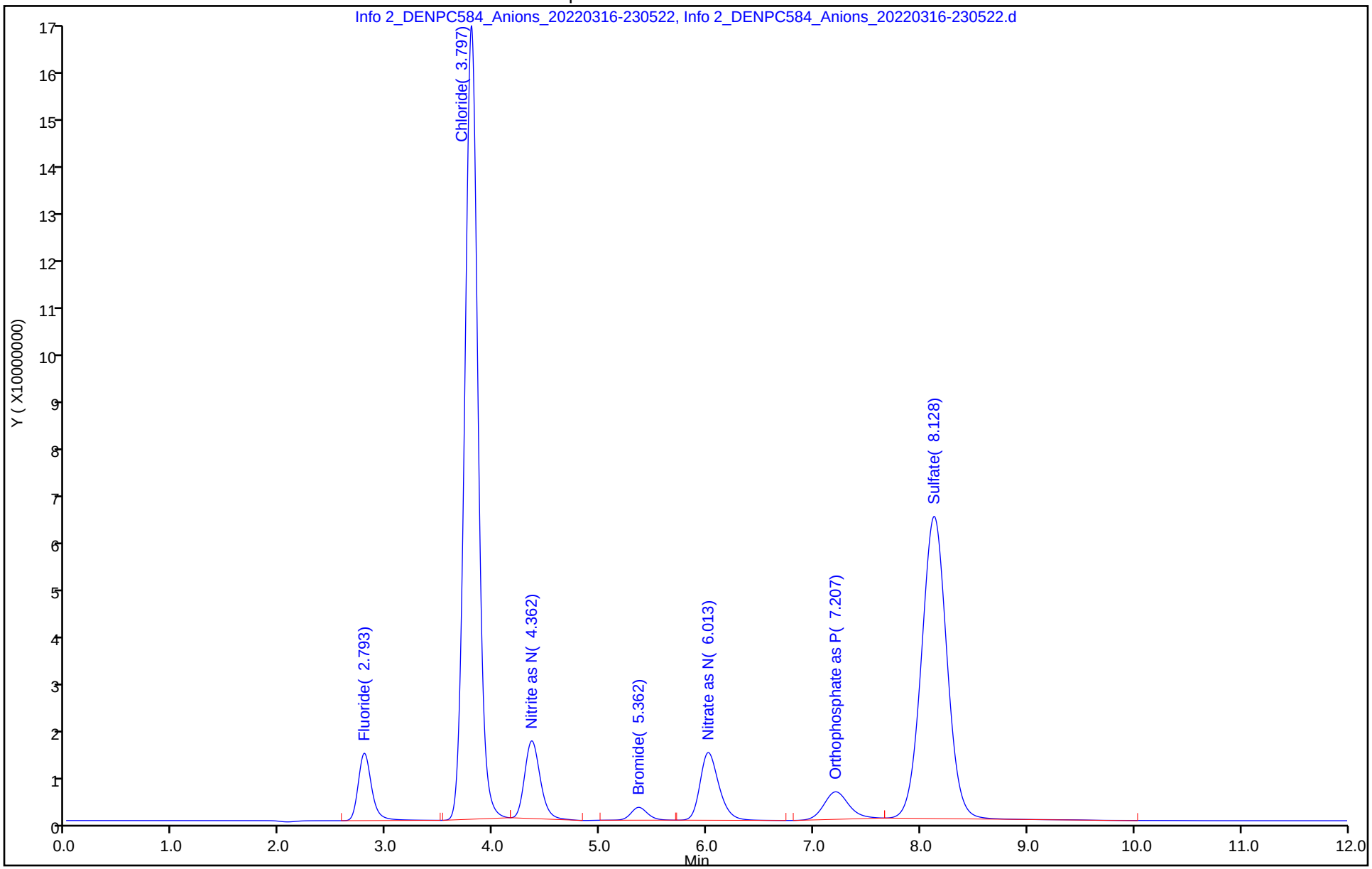
IC LCS_01863 Amount Added: 10.00 Units: mL

Report Date: 17-Mar-2022 13:14:18 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_20220316-230522.d

Injection Date:	16-Mar-2022 22:50:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	36
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_20220316-230

Injection Date: 16-Mar-2022 22:50:00 Instrument ID: WC_IonChrom13

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 36

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

Column: Detector 0005

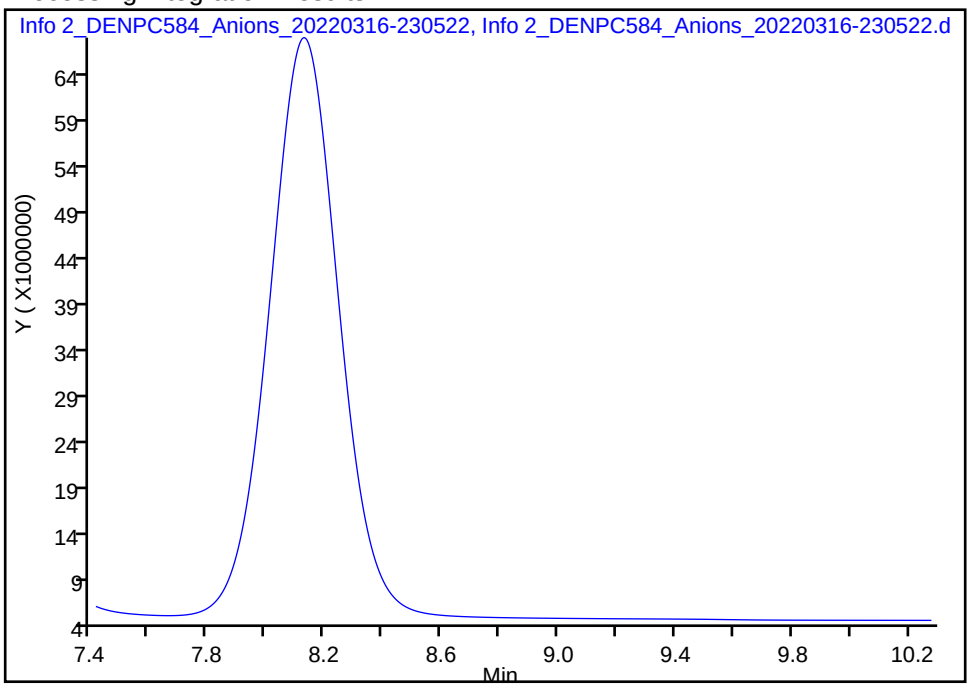
6 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 8.86

Processing Integration Results



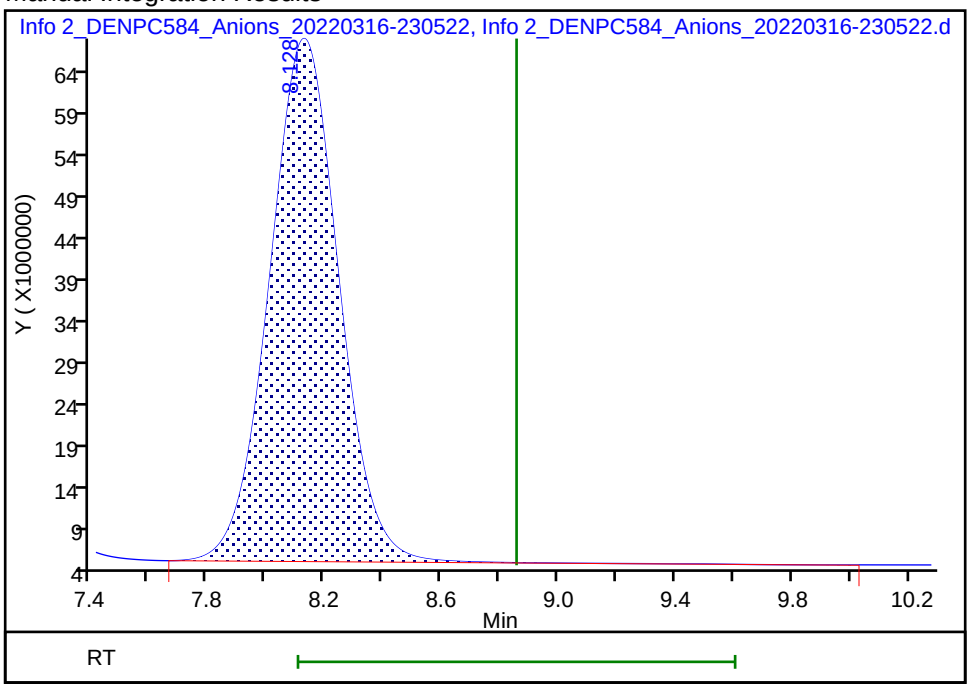
Manual Integration Results

RT: 8.13

Area: 1030187483

Amount: 98.576917

Amount Units: ug/ml



Reviewer: jindaratc, 17-Mar-2022 12:51:47

Audit Action: Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220316-232
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 16-Mar-2022 23:05:00 ALS Bottle#: 0 Worklist Smp#: 37
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109293-037
Misc. Info.: 280-0109293-037
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 13:14:18 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 13:12:14

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	U
5 Nitrate as N		6.270				ND	
7 Orthophosphate as P		7.853				ND	a
6 Sulfate	8.223	8.857	-0.634	5657785		-0.7015	a

QC Flag Legend

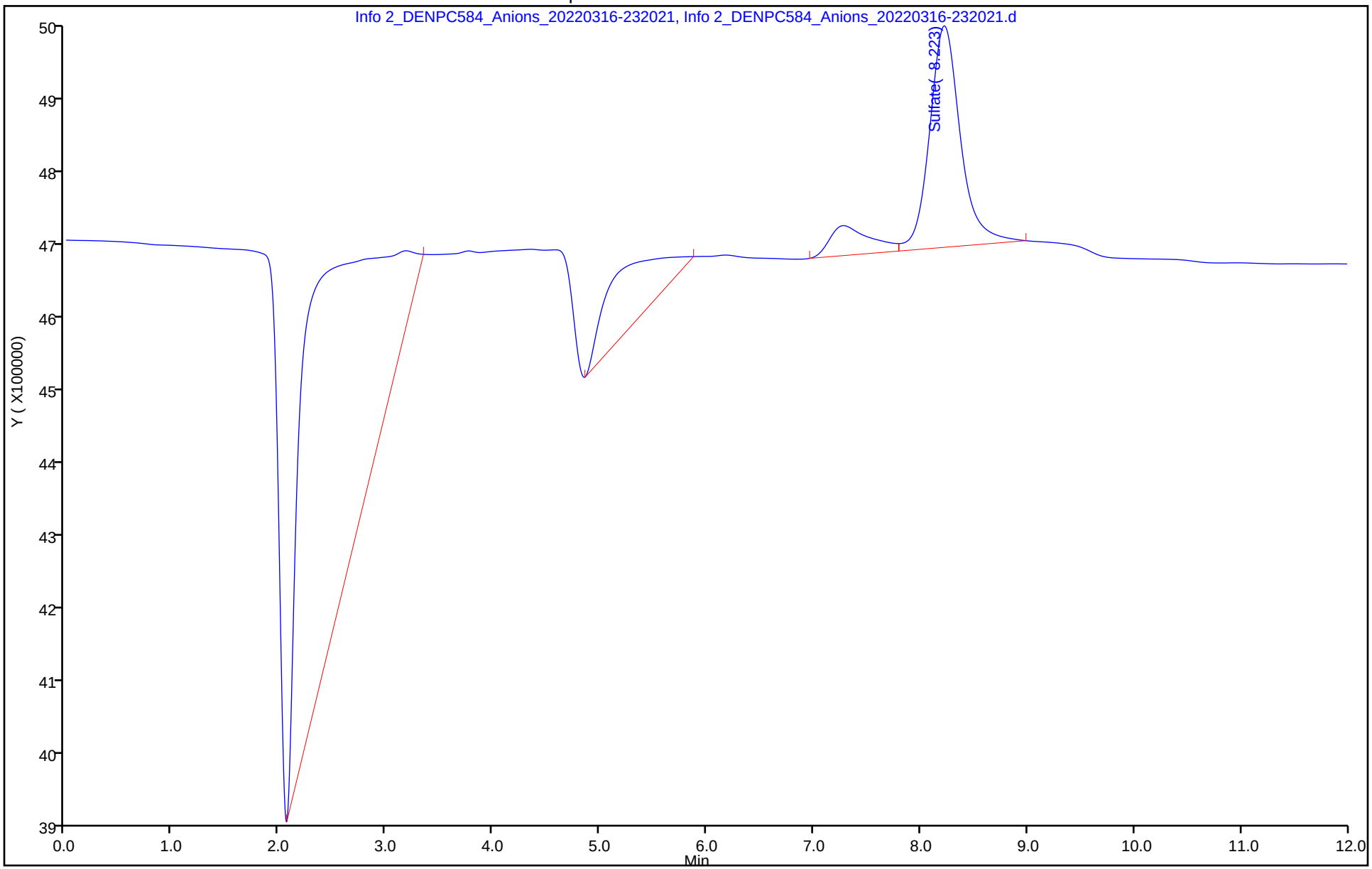
Processing Flags
Review Flags
U - Marked Undetected
a - User Assigned ID

Report Date: 17-Mar-2022 13:14:19 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_20220316-232021.d

Injection Date:	16-Mar-2022 23:05:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	37
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_20220316-232

Injection Date: 16-Mar-2022 23:05:00 Instrument ID: WC_IonChrom13

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 37

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

Column: Detector 0005

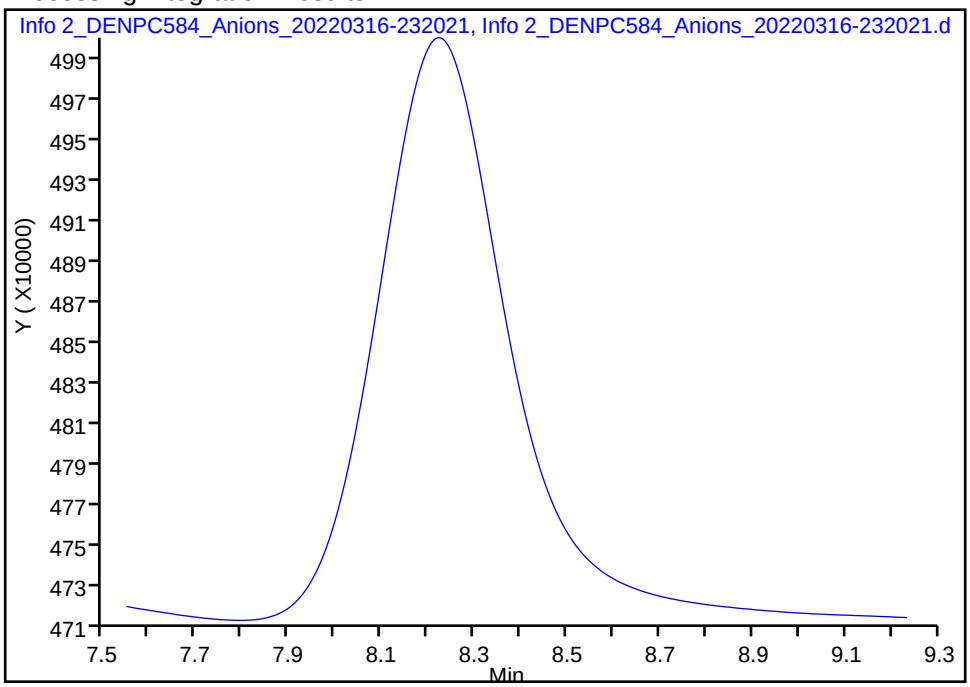
6 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 8.86

Processing Integration Results



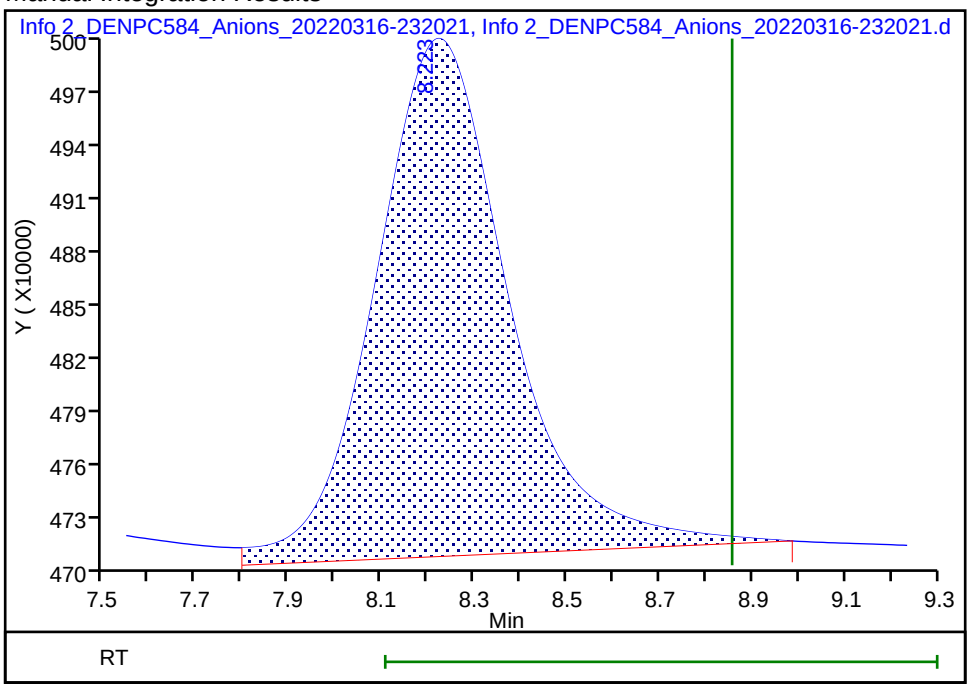
Manual Integration Results

RT: 8.22

Area: 5657785

Amount: -0.701460

Amount Units: ug/ml



Reviewer: jindaratc, 17-Mar-2022 13:12:12

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220317-012
Lims ID: 280-159190-F-15
Client ID: EW7-PM27B-8-35
Sample Type: Client
Inject. Date: 17-Mar-2022 01:05:00 ALS Bottle#: 0 Worklist Smp#: 45
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109293-045
Misc. Info.: 280-0109293-045
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 13:14:18 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 13:12:54

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.777	2.847	-0.070	10076134	0.3961	
2 Chloride	3.780	3.903	-0.123	706153623	49.9	
3 Nitrite as N		4.500			ND	
4 Bromide	5.468	5.585	-0.117	27123950	4.43	
5 Nitrate as N	6.157	6.270	-0.113	4226457	NC	
7 Orthophosphate as P		7.853			ND	a
6 Sulfate	8.173	8.857	-0.684	996841184	95.3	a

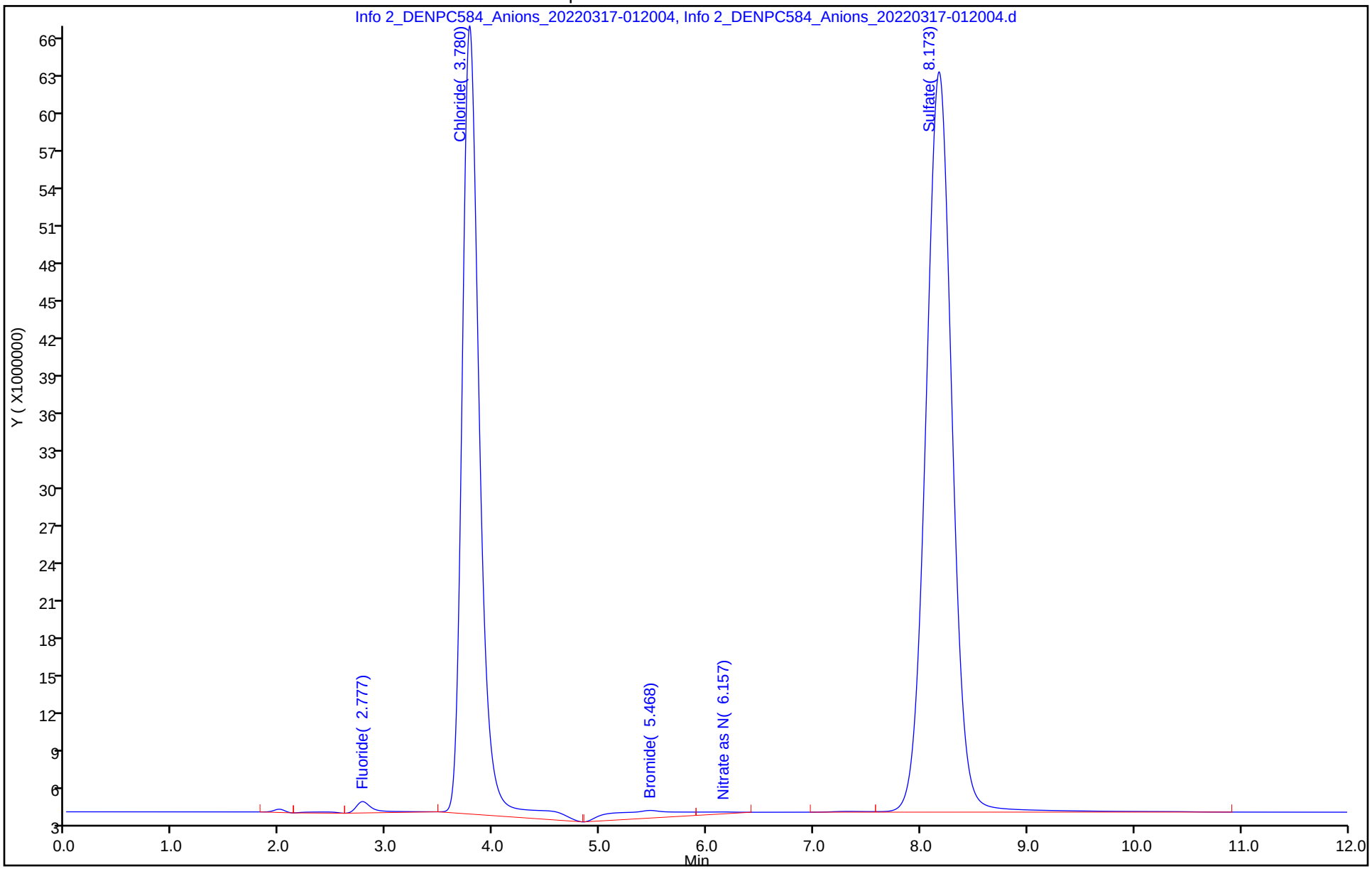
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
a - User Assigned ID

Report Date: 17-Mar-2022 13:14:23 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_20220317-012004.d				
Injection Date:	17-Mar-2022 01:05:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159190-F-15	Lab Sample ID:	280-159190-15	Worklist Smp#:	45
Client ID:	EW7-PM27B-8-35				
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

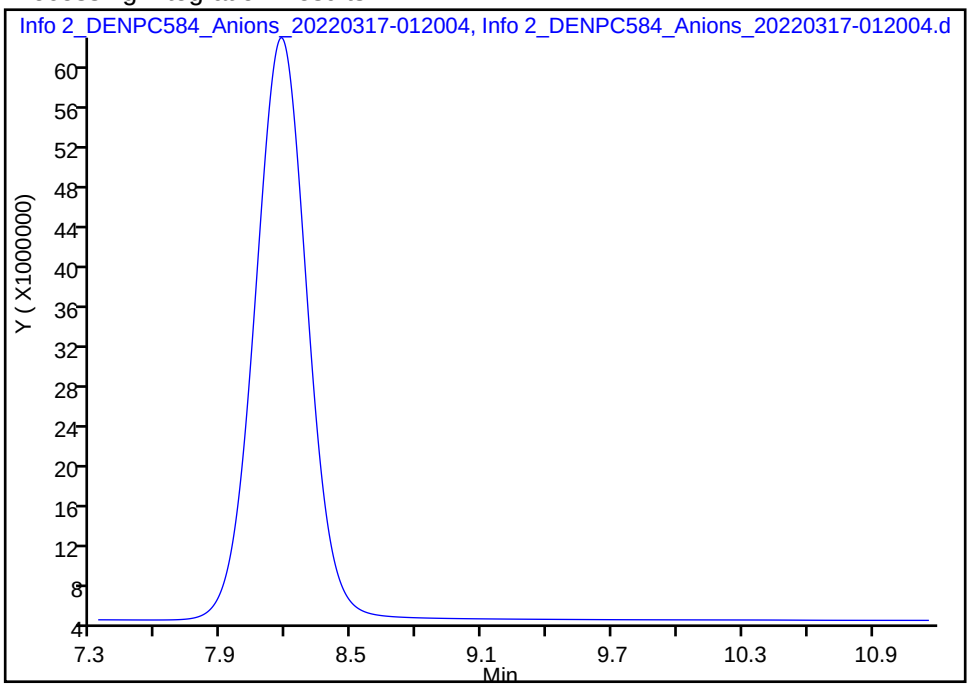
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220317-012				
Injection Date:	17-Mar-2022 01:05:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159190-F-15	Lab Sample ID:	280-159190-15		
Client ID:	EW7-PM27B-8-35				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	45
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

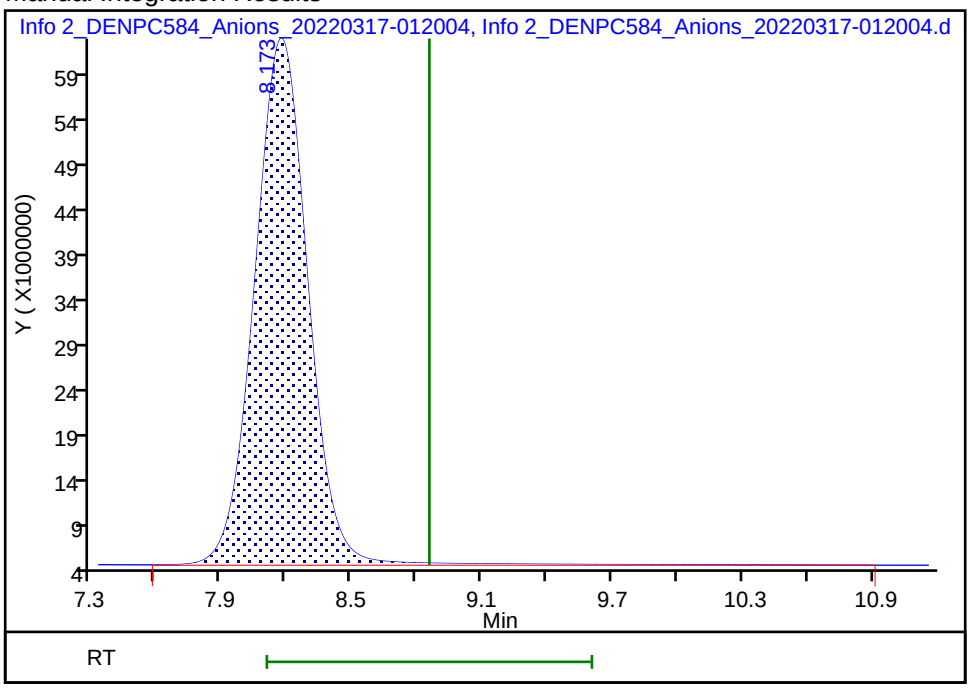
Not Detected
Expected RT: 8.86

Processing Integration Results



Manual Integration Results

RT: 8.17
Area: 996841184
Amount: 95.345613
Amount Units: ug/ml



Reviewer: jindaratc, 17-Mar-2022 13:12:52
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220317-013
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 17-Mar-2022 01:20:00 ALS Bottle#: 0 Worklist Smp#: 46
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109293-046
Misc. Info.: 280-0109293-046
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 13:14:23 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 12:55:13

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.792	2.847	-0.055	122646430	5.00	4.55	M
2 Chloride	3.795	3.903	-0.108	1414478230	100.0	100.0	
3 Nitrite as N	4.360	4.500	-0.140	162987039	NC	NC	
4 Bromide	5.362	5.585	-0.223	29069385	5.00	4.75	M
5 Nitrate as N	6.013	6.270	-0.257	172361313	NC	NC	
7 Orthophosphate as P	7.205	7.853	-0.648	90081008	NC	NC	a
6 Sulfate	8.128	8.857	-0.729	1032170157	100.0	98.8	a

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

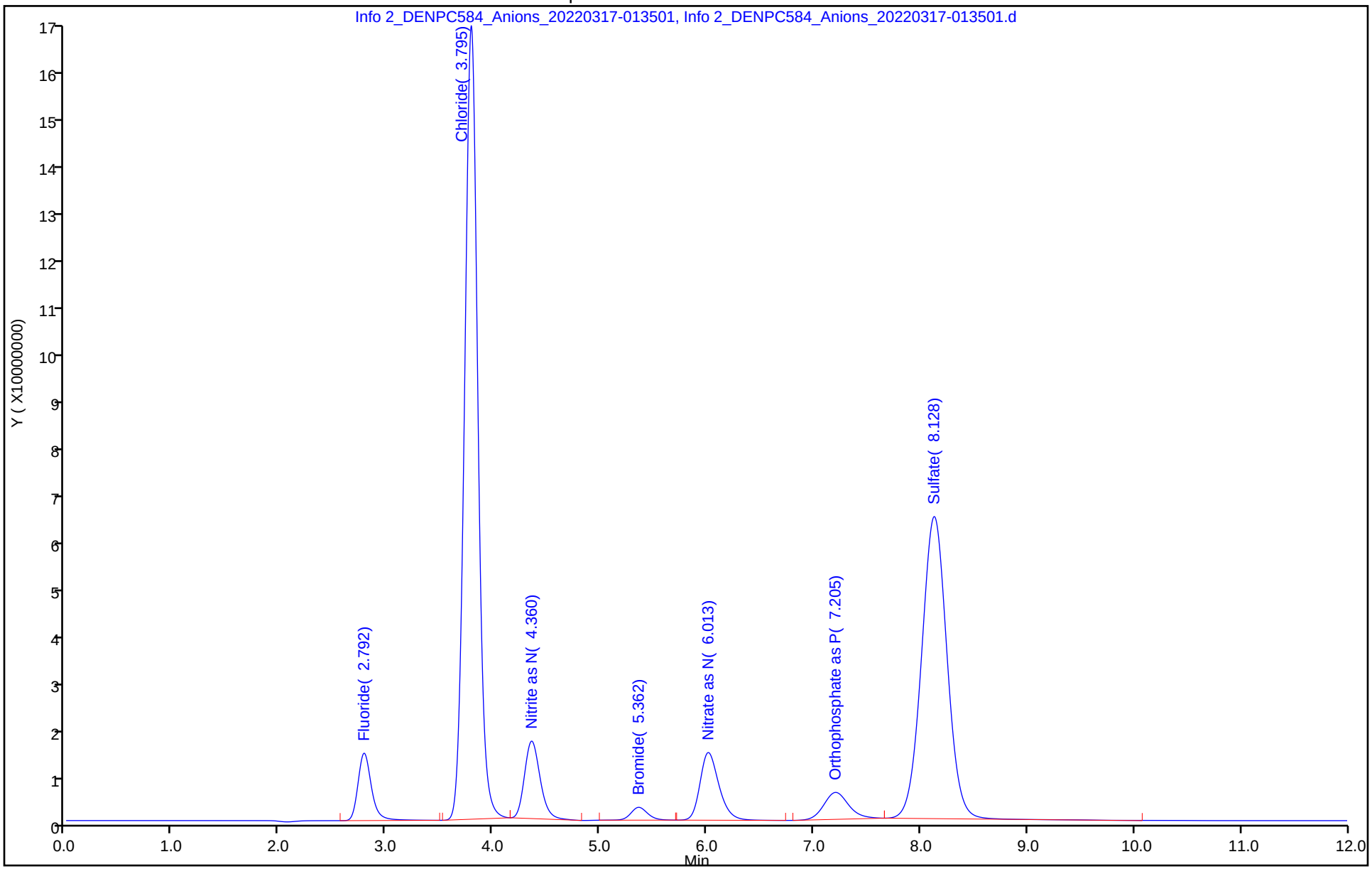
Reagents:

IC LCS_01863 Amount Added: 10.00 Units: mL

Report Date: 17-Mar-2022 13:14:23 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_20220317-013501.d				
Injection Date:	17-Mar-2022 01:20:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	46
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_20220317-013

Injection Date: 17-Mar-2022 01:20:00 Instrument ID: WC_IonChrom13

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 46

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

Column: Detector 0005

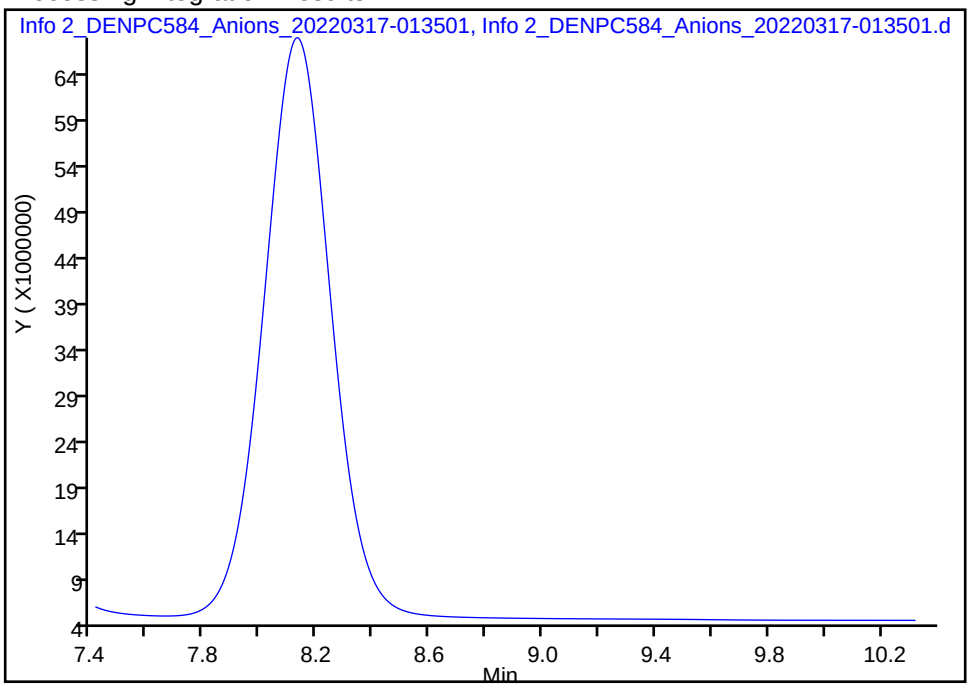
6 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 8.86

Processing Integration Results



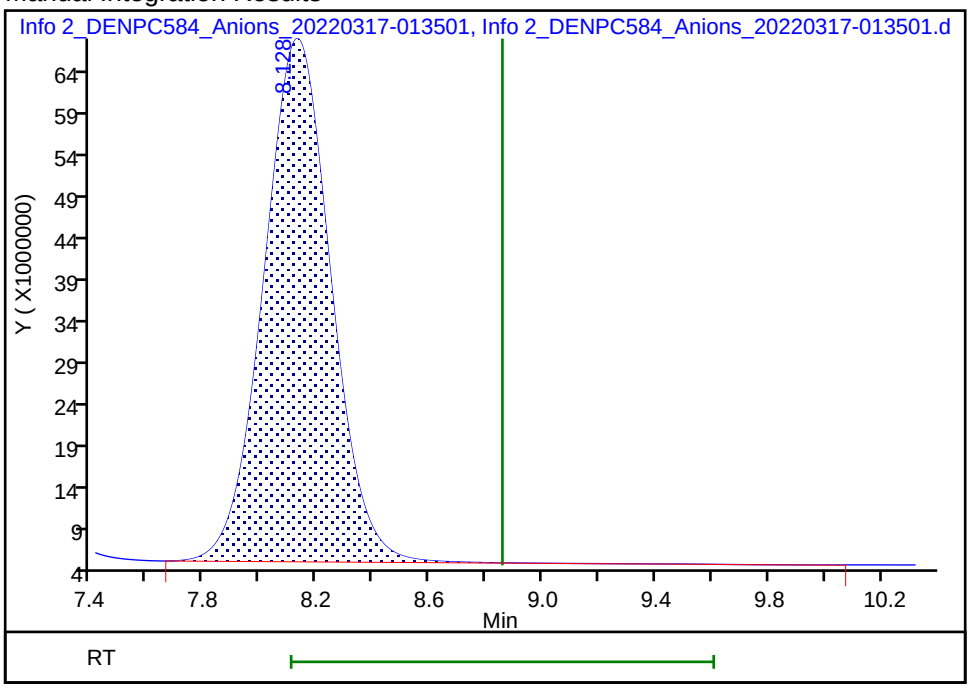
Manual Integration Results

RT: 8.13

Area: 1032170157

Amount: 98.769041

Amount Units: ug/ml



Reviewer: jindaratc, 17-Mar-2022 12:51:58

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220316-109293.b\Info 2_DENPC584_Anions_20220317-014
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 17-Mar-2022 01:35:00 ALS Bottle#: 0 Worklist Smp#: 47
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109293-047
Misc. Info.: 280-0109293-047
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 13:14:23 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 13:13:07

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	U
5 Nitrate as N		6.270				ND	
7 Orthophosphate as P		7.853				ND	a
6 Sulfate	8.223	8.857	-0.634	5651322		-0.7021	a

QC Flag Legend

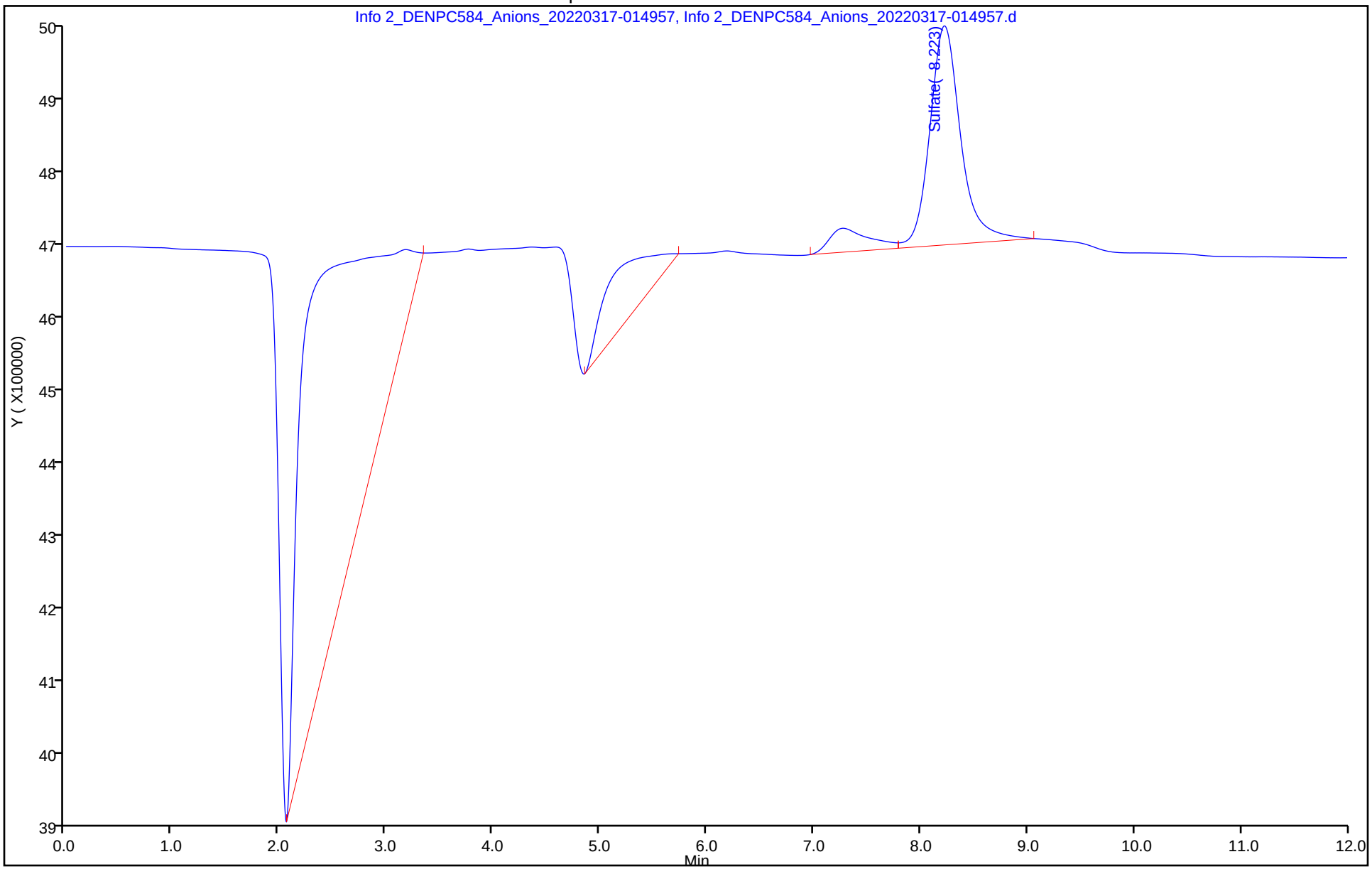
Processing Flags
Review Flags
U - Marked Undetected
a - User Assigned ID

Report Date: 17-Mar-2022 13:14:24 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_20220317-014957.d

Injection Date:	17-Mar-2022 01:35:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	47
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_20220317-014

Injection Date: 17-Mar-2022 01:35:00 Instrument ID: WC_IonChrom13

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 47

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

Column: Detector 0005

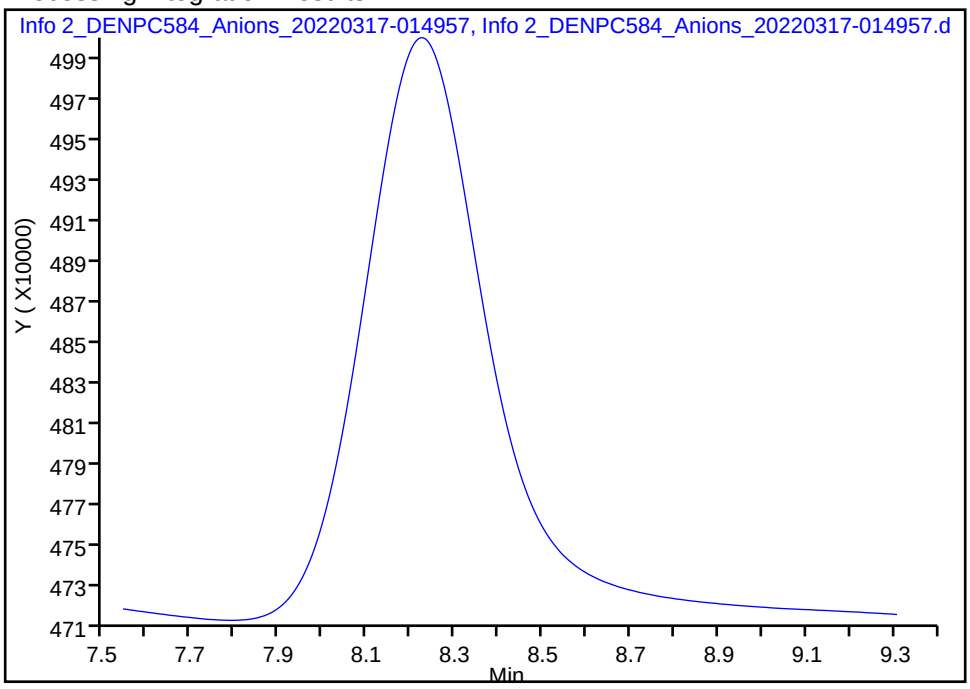
6 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 8.86

Processing Integration Results



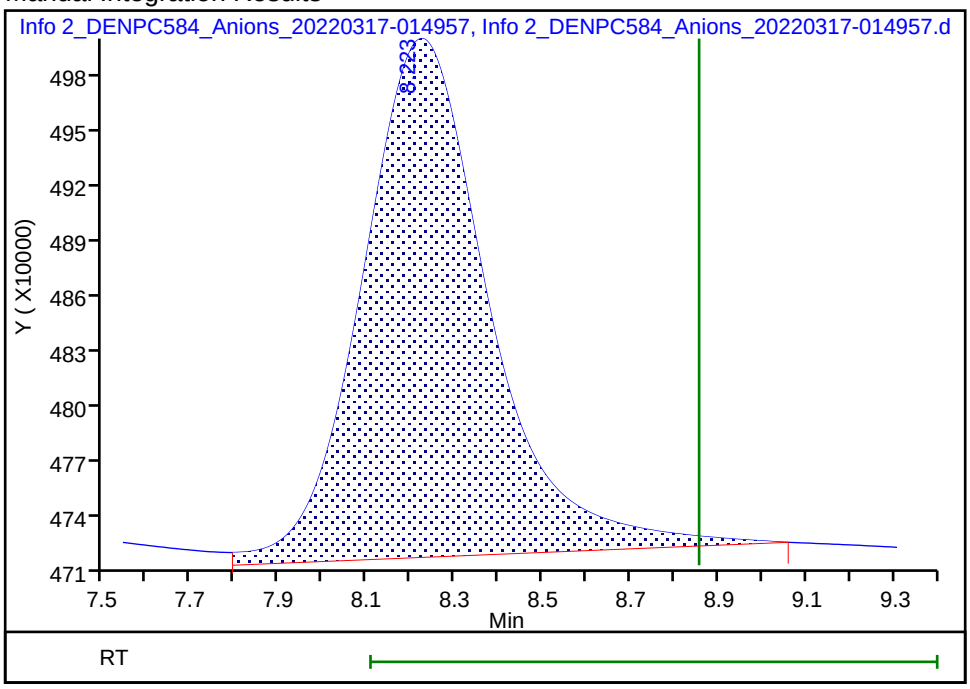
Manual Integration Results

RT: 8.22

Area: 5651322

Amount: -0.702086

Amount Units: ug/ml



Reviewer: jindaratc, 17-Mar-2022 13:13:00

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

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	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\20220317-109325.b\Info 2_DENPC584_Anions_20220317-122
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 17-Mar-2022 12:07:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-001
Misc. Info.: 280-0109325-001
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 13:33:27 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 12:49:46

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	128207040	5.00	4.76	M
2 Chloride	3.790	3.790	0.000	1397989156	100.0	98.8	
3 Nitrite as N	4.357	4.357	0.000	163656010	NC	NC	
4 Bromide	5.370	5.370	0.000	29147488	5.00	4.76	M
5 Nitrate as N	6.020	6.020	0.000	171844347	NC	NC	
7 Orthophosphate as P	7.190	7.190	0.000	91619782	NC	NC	a
6 Sulfate	8.113	8.113	0.000	1033554370	100.0	98.9	Ma

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

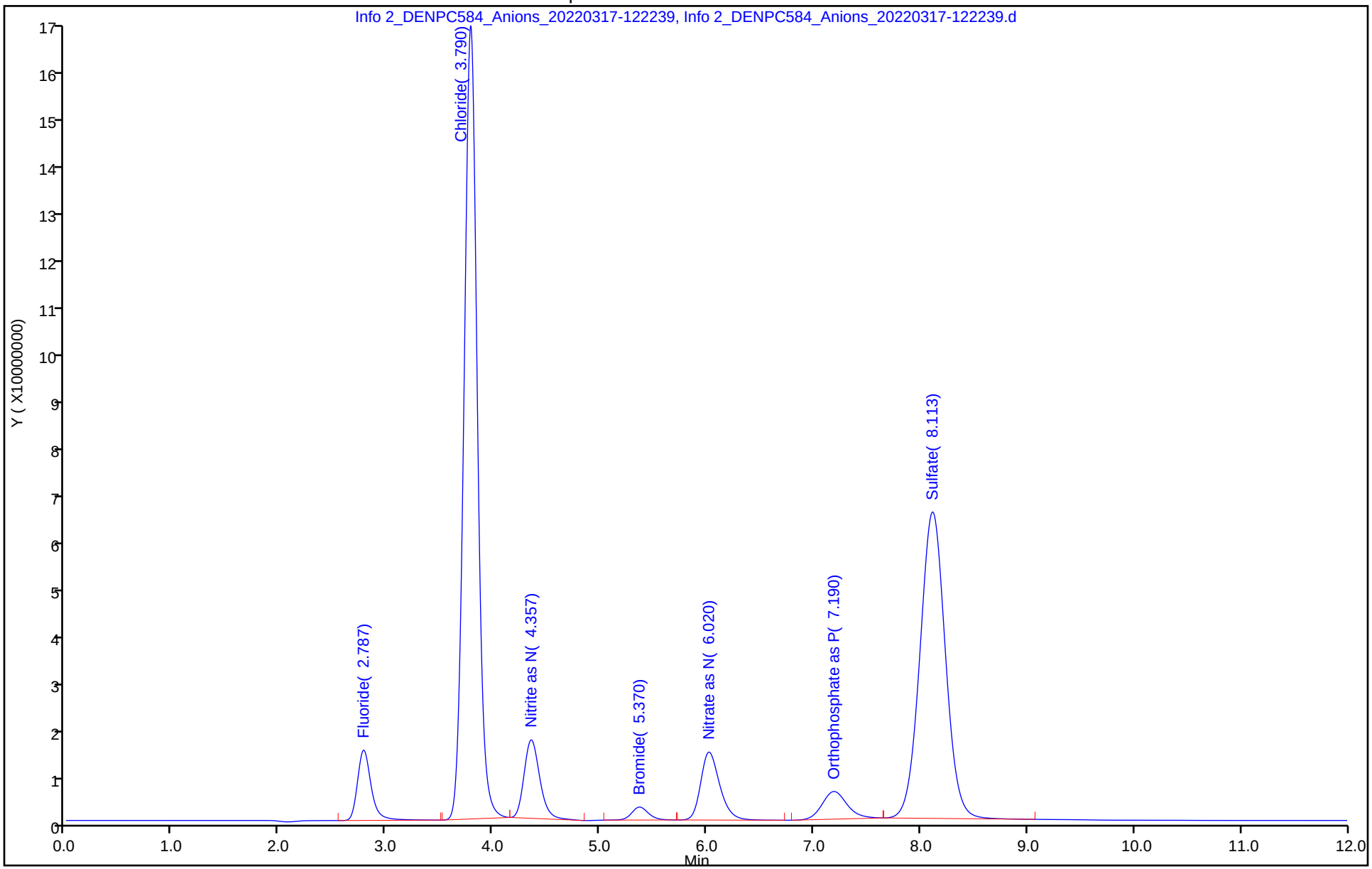
Reagents:

IC LCS_01863 Amount Added: 10.00 Units: mL

Report Date: 18-Mar-2022 13:33:27 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_20220317-122239.d				
Injection Date:	17-Mar-2022 12:07:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	CCV			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-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_20220317-122

Injection Date: 17-Mar-2022 12:07:00 Instrument ID: WC_IonChrom13

Lims ID: CCV

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 1

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

Column: Detector 0005

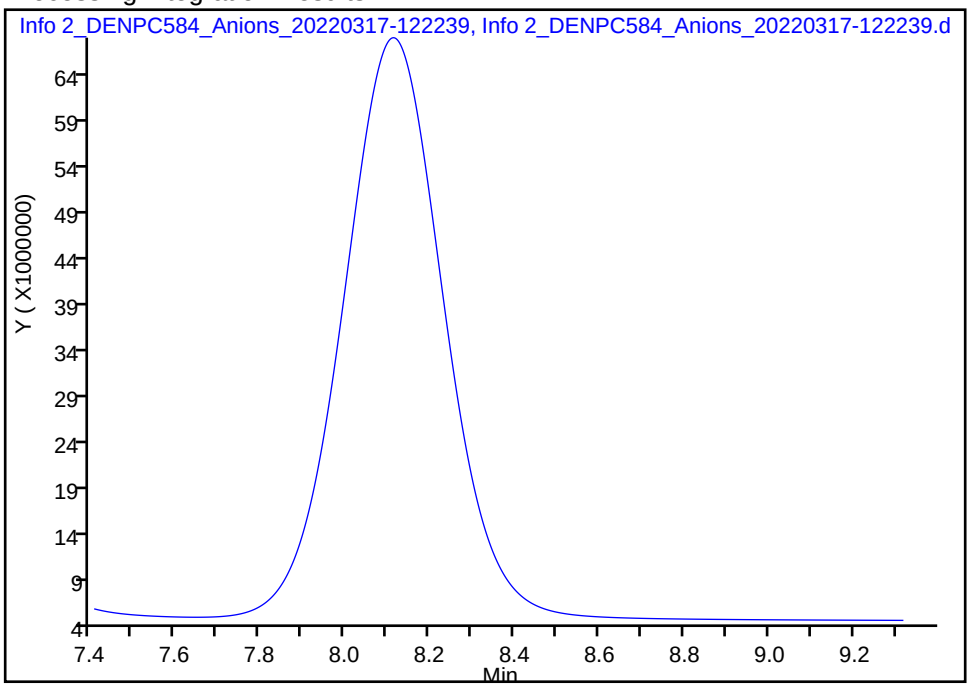
6 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 8.11

Processing Integration Results



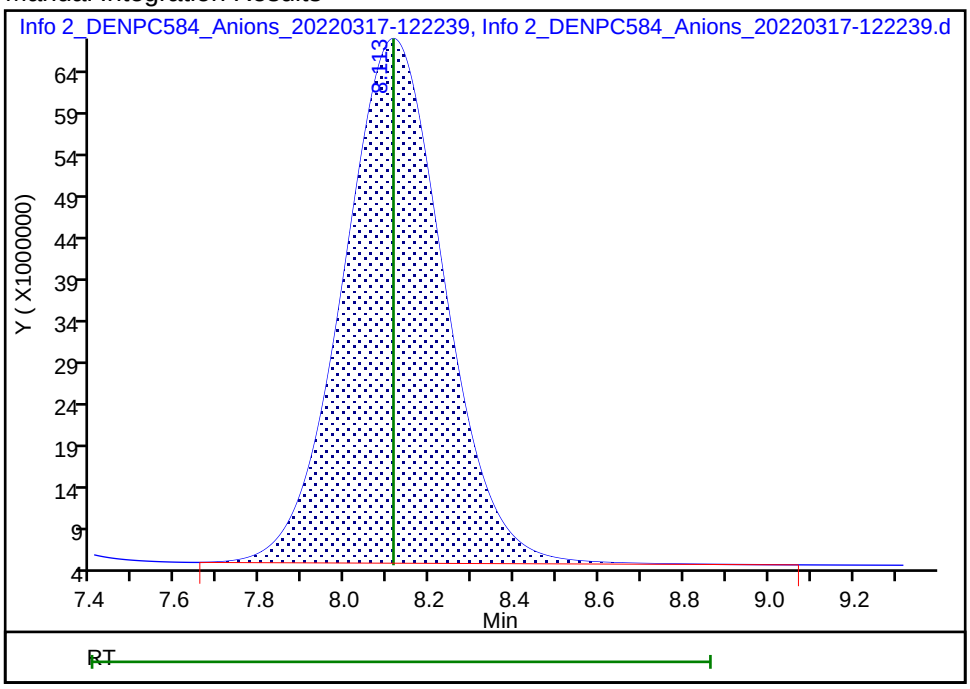
Manual Integration Results

RT: 8.11

Area: 1033554370

Amount: 98.903173

Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 14:10:17

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_20220317-123
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 17-Mar-2022 12:22:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-002
Misc. Info.: 280-0109325-002
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: foxr Date: 17-Mar-2022 14:11:11

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		7.190				ND	a
6 Sulfate	8.210	8.113	0.097	6332483		-0.6361	a

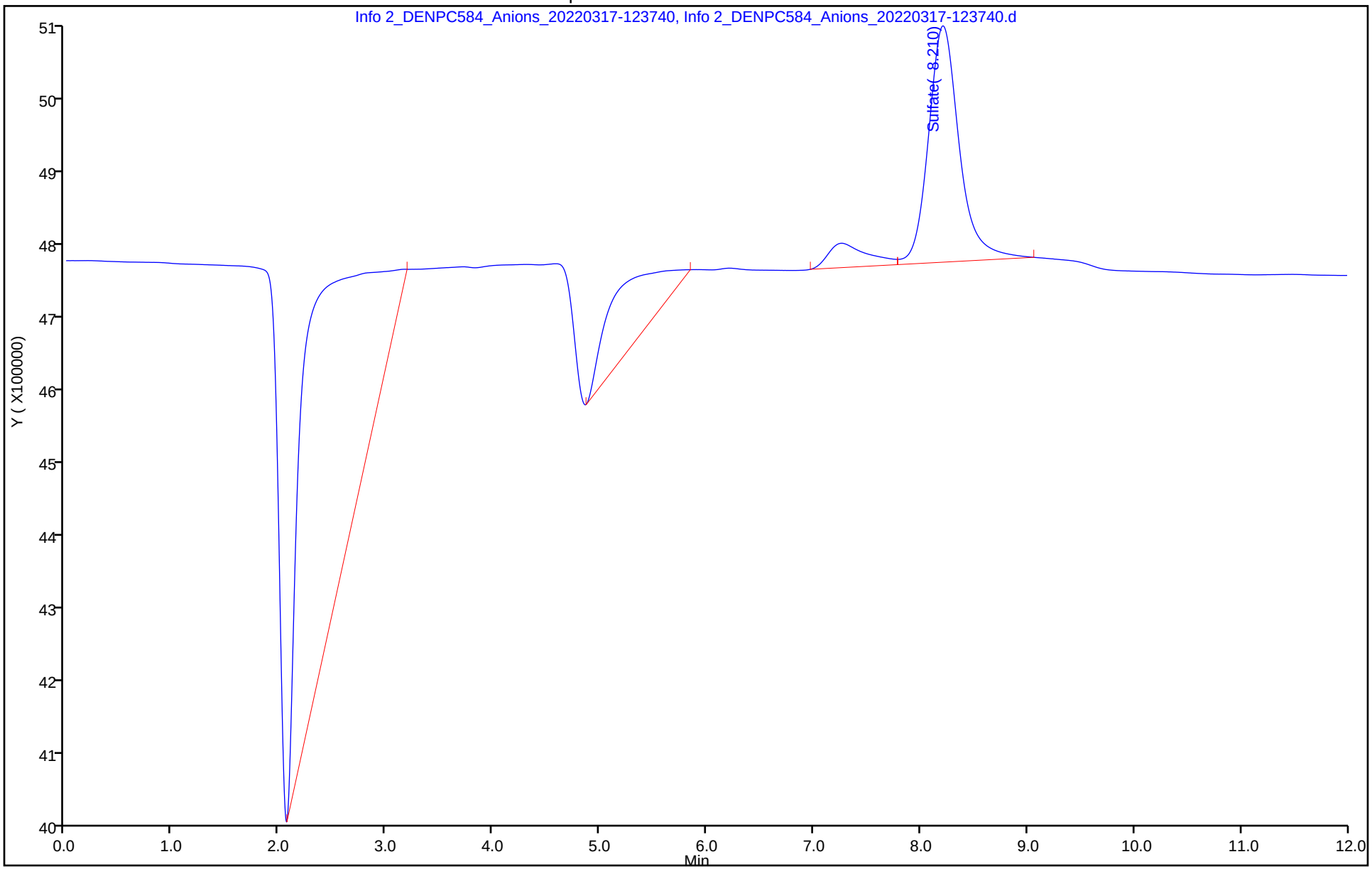
QC Flag Legend

Processing Flags
Review Flags
U - Marked Undetected
a - User Assigned ID

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_20220317-123740.d				
Injection Date:	17-Mar-2022 12:22:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	CCB			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-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_20220317-123

Injection Date: 17-Mar-2022 12:22:00 Instrument ID: WC_IonChrom13

Lims ID: CCB

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

Column: Detector 0005

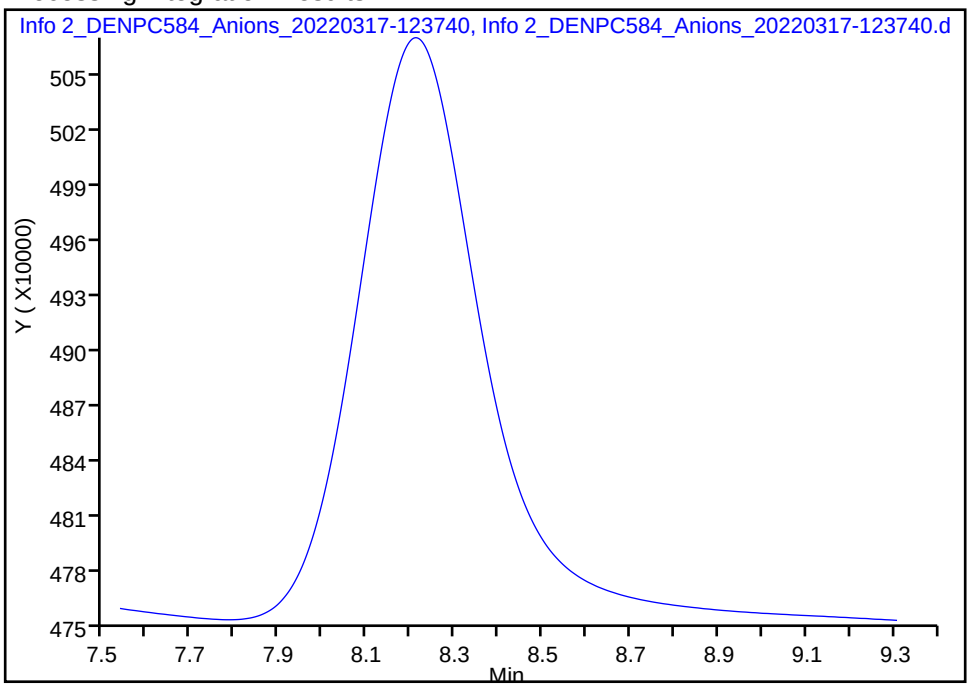
6 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 8.11

Processing Integration Results



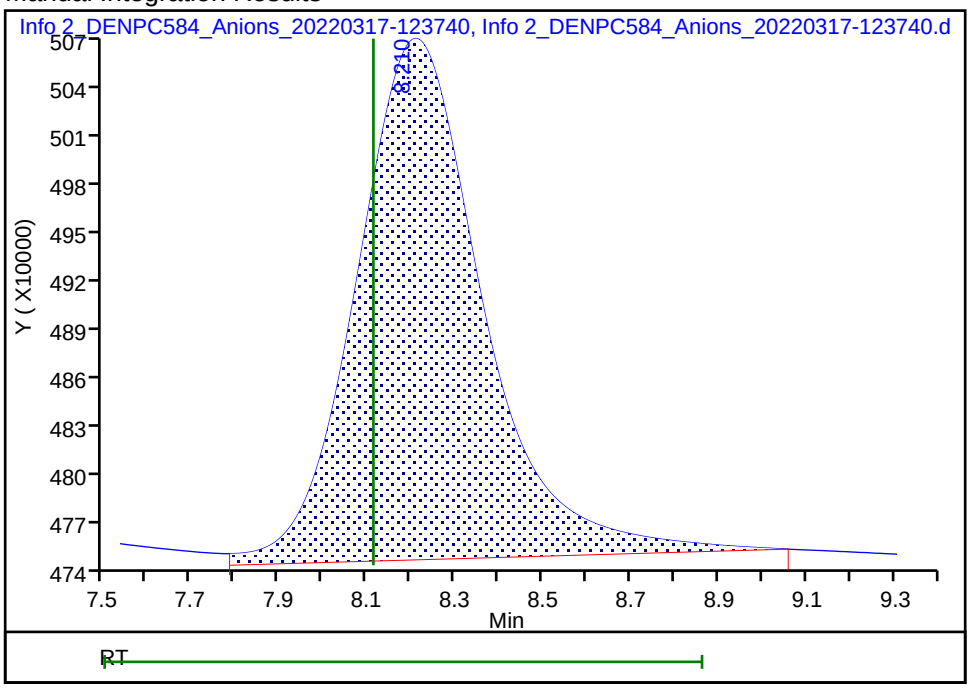
Manual Integration Results

RT: 8.21

Area: 6332483

Amount: -0.636080

Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 14:11:06

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

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

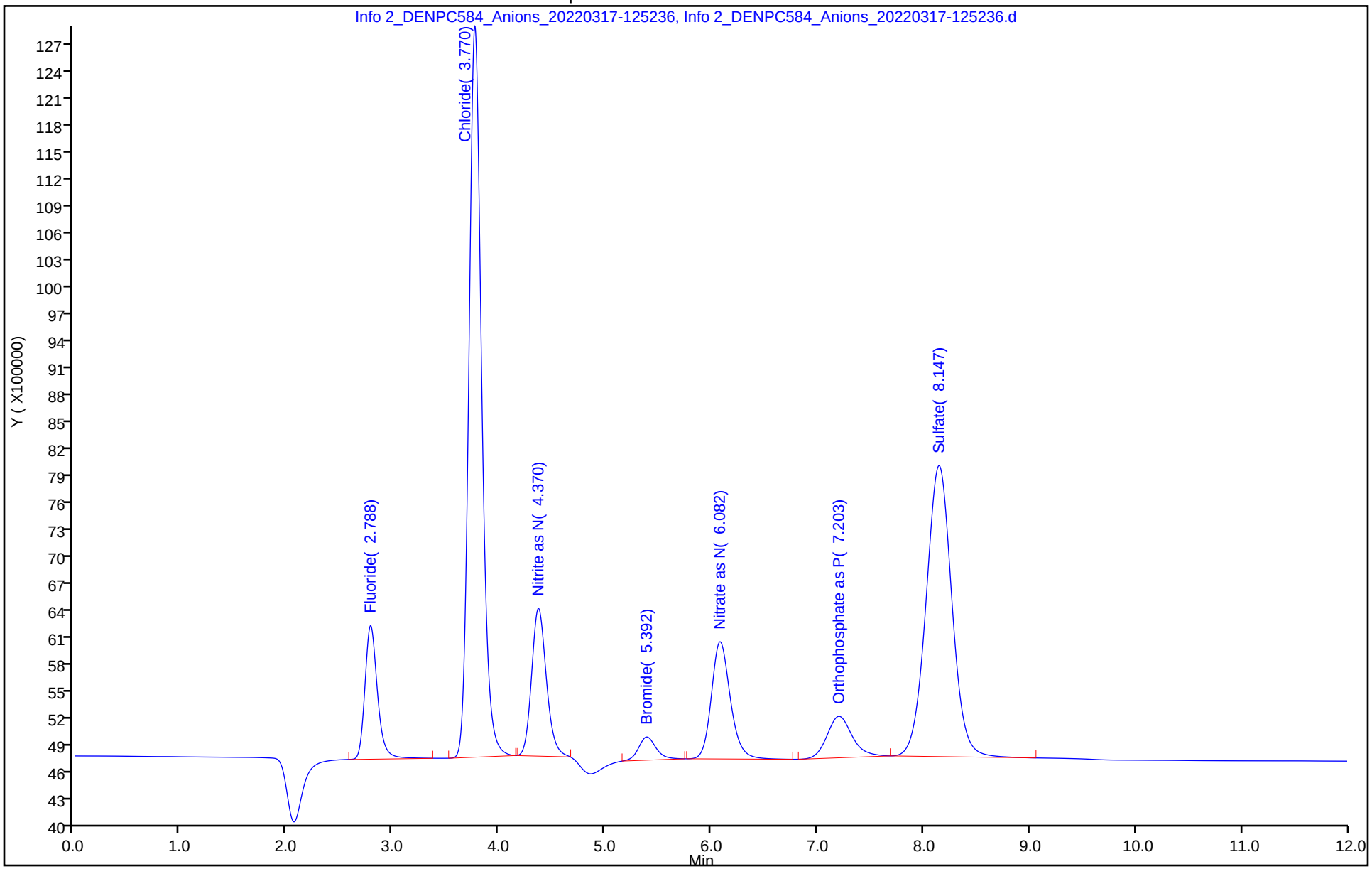
Reagents:

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

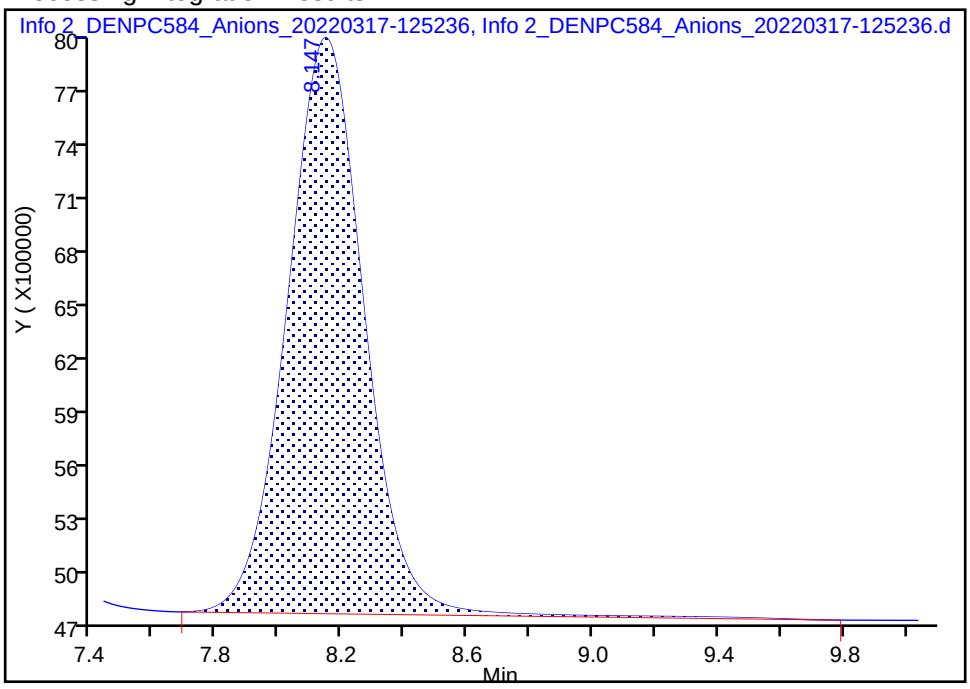
Data File: \\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220317-125
Injection Date: 17-Mar-2022 12:37:00 Instrument ID: WC_IonChrom13
Lims ID: MRL
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions-IC13 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

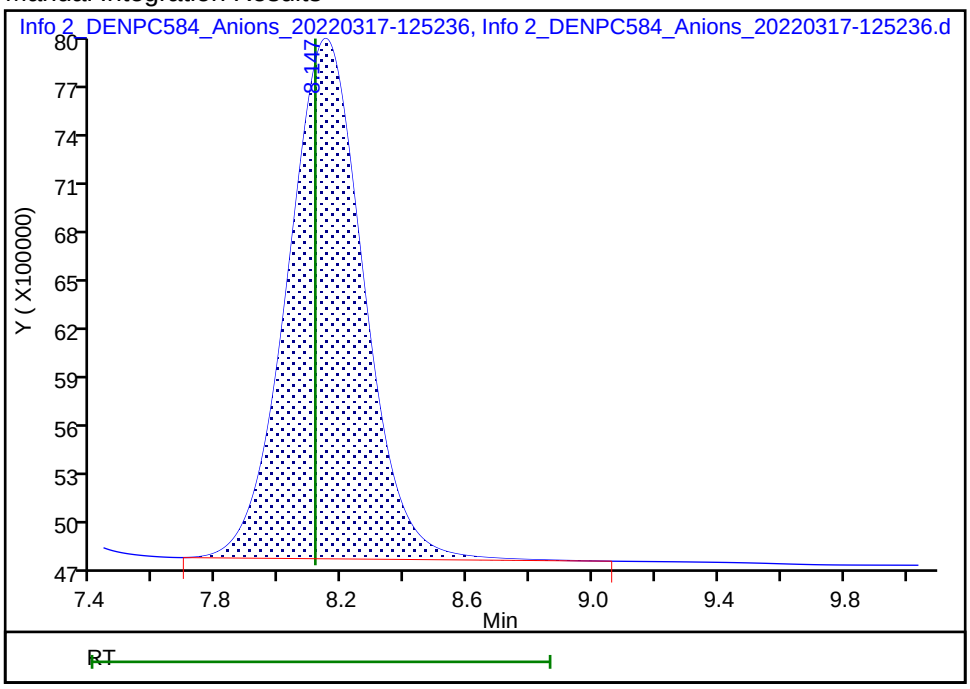
Processing Integration Results

RT: 8.15
Area: 55029829
Amount: 4.082761
Amount Units: ug/ml



Manual Integration Results

RT: 8.15
Area: 54457012
Amount: 4.027254
Amount Units: ug/ml



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_20220317-130
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 17-Mar-2022 12:52:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-004
Misc. Info.: 280-0109325-004
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 13:13:53

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	131621385	5.00	4.89	M
2 Chloride	3.792	3.790	0.002	1380357362	100.0	97.6	
3 Nitrite as N	4.357	4.357	0.000	158816117	NC	NC	M
4 Bromide	5.373	5.370	0.003	28329544	5.00	4.63	M
5 Nitrate as N	6.020	6.020	0.000	169779261	NC	NC	
7 Orthophosphate as P	7.203	7.190	0.013	93052153	NC	NC	a
6 Sulfate	8.127	8.113	0.014	1022581678	100.0	97.8	Ma

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

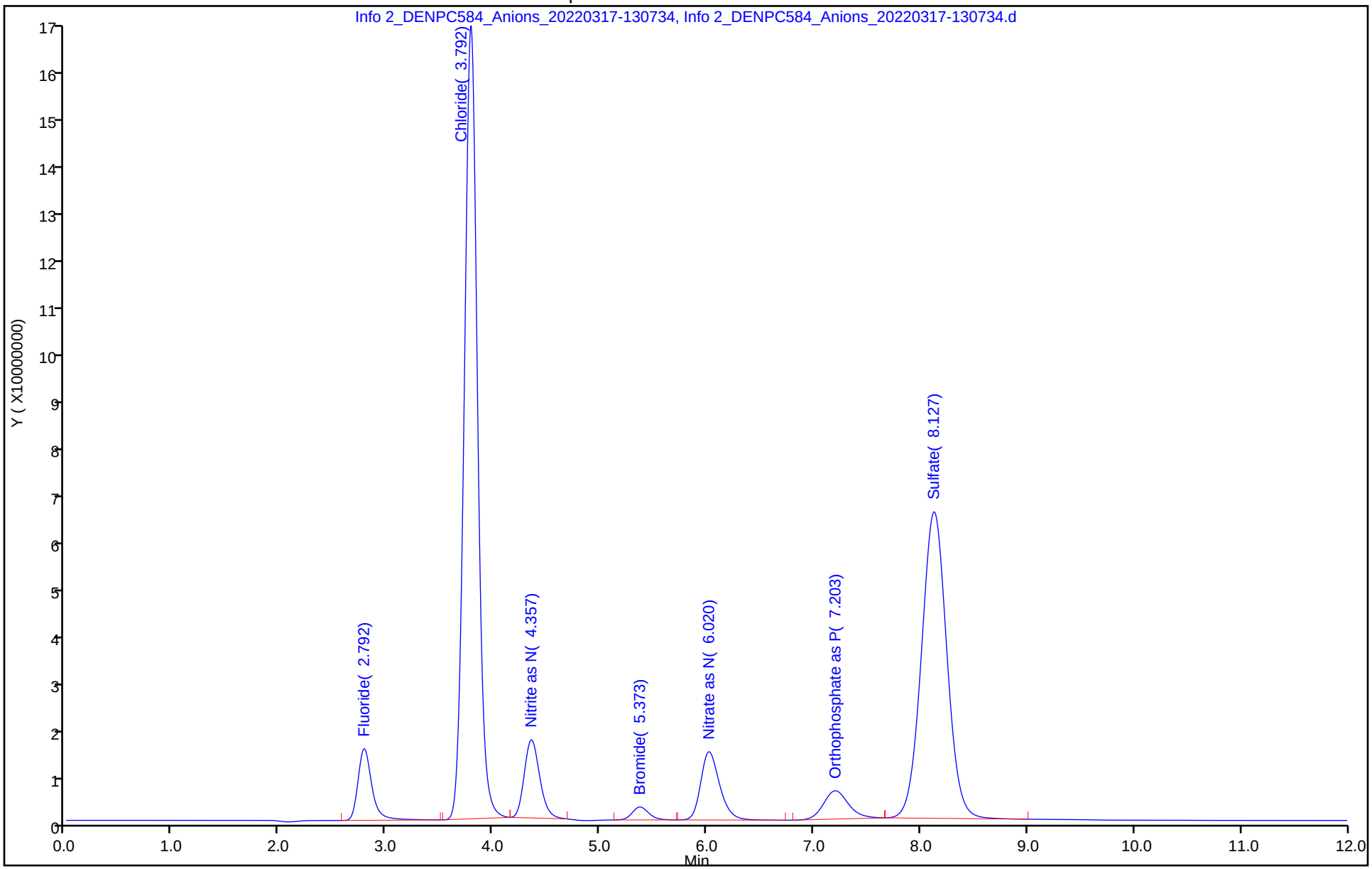
Reagents:

IC LCS_01863 Amount Added: 10.00 Units: mL

Report Date: 18-Mar-2022 13:33:29 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_20220317-130734.d				
Injection Date:	17-Mar-2022 12:52:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-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_20220317-130

Injection Date: 17-Mar-2022 12:52:00 Instrument ID: WC_IonChrom13

Lims ID: LCS

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

Column: Detector 0005

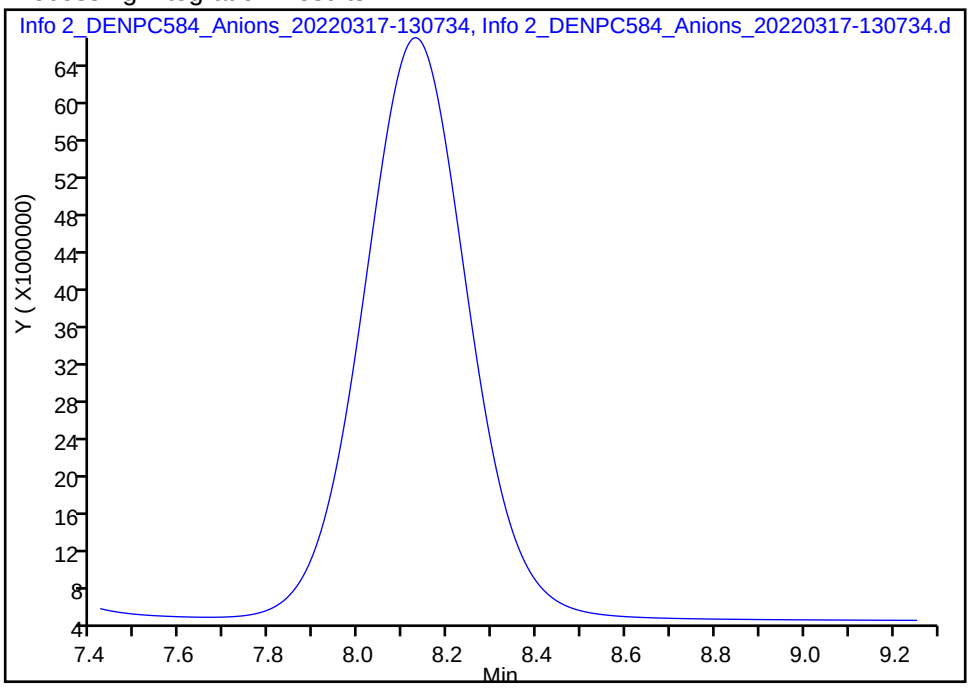
6 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 8.11

Processing Integration Results



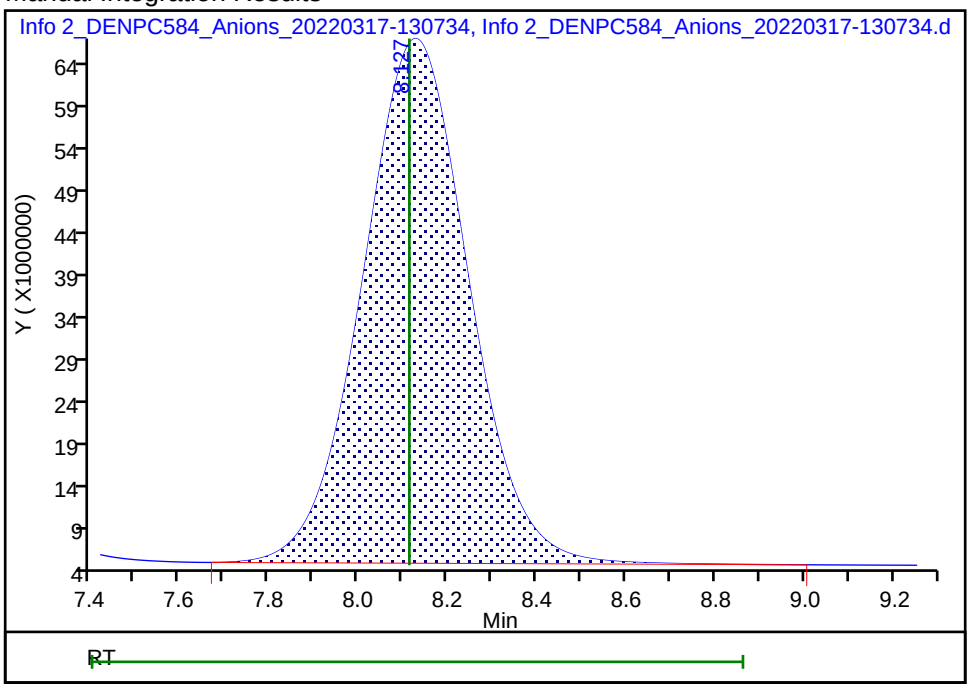
Manual Integration Results

RT: 8.13

Area: 1022581678

Amount: 97.839903

Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 14:12:26

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_20220317-132
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 17-Mar-2022 13:07:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-005
Misc. Info.: 280-0109325-005
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 13:30:25

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	131507591	5.00	4.88	M
2 Chloride	3.792	3.790	0.002	1380709178	100.0	97.6	
3 Nitrite as N	4.357	4.357	0.000	158191535	NC	NC	M
4 Bromide	5.375	5.370	0.005	28530031	5.00	4.66	M
5 Nitrate as N	6.020	6.020	0.000	169859709	NC	NC	
7 Orthophosphate as P	7.207	7.190	0.017	92209805	NC	NC	a
6 Sulfate	8.132	8.113	0.019	1023932380	100.0	98.0	Ma

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

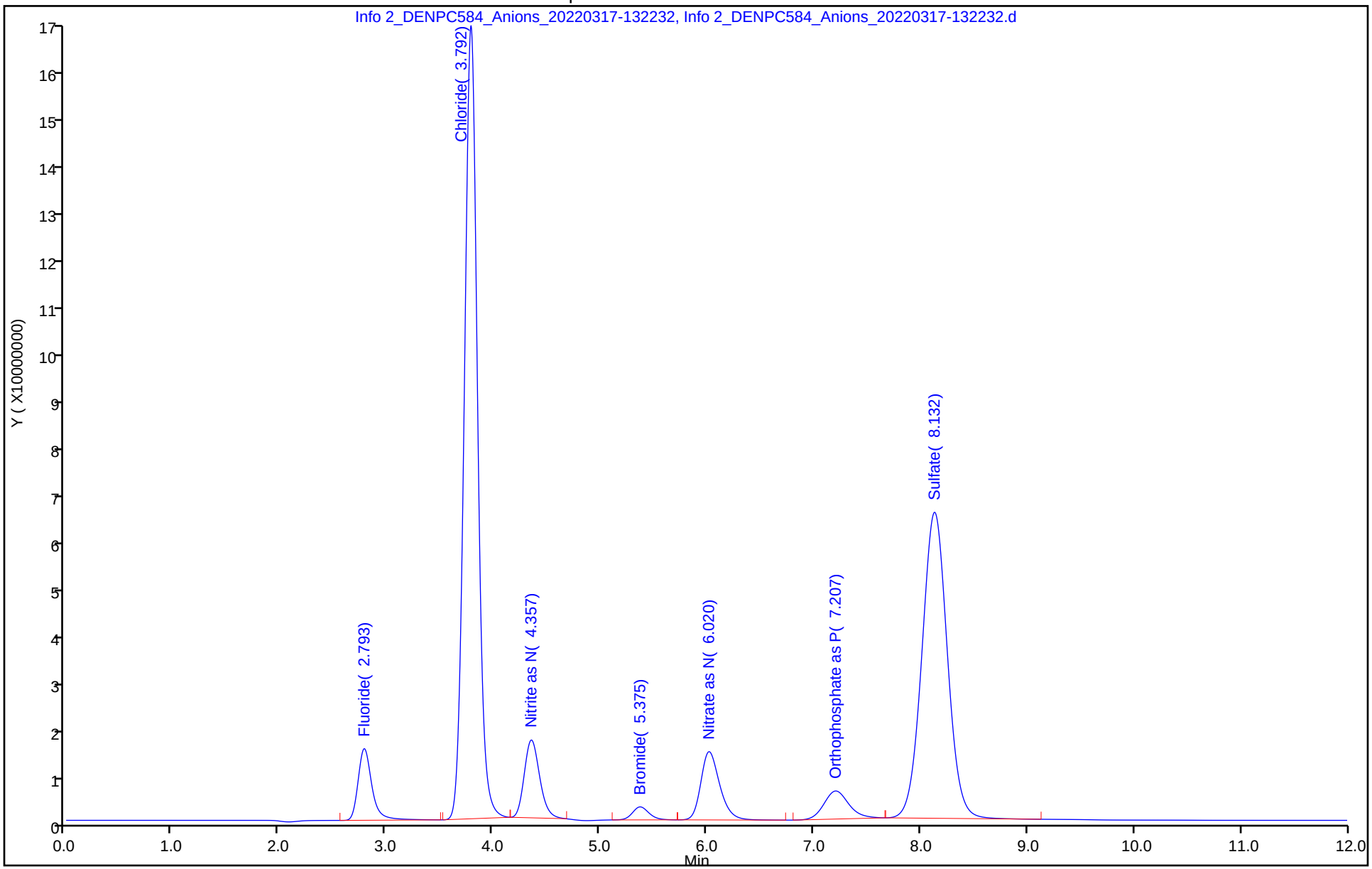
IC LCS_01863 Amount Added: 10.00 Units: mL

Report Date: 18-Mar-2022 13:33:30 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_20220317-132232.d

Injection Date:	17-Mar-2022 13:07:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-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_20220317-132

Injection Date: 17-Mar-2022 13:07:00 Instrument ID: WC_IonChrom13

Lims ID: LCSD

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 5

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

Column: Detector 0005

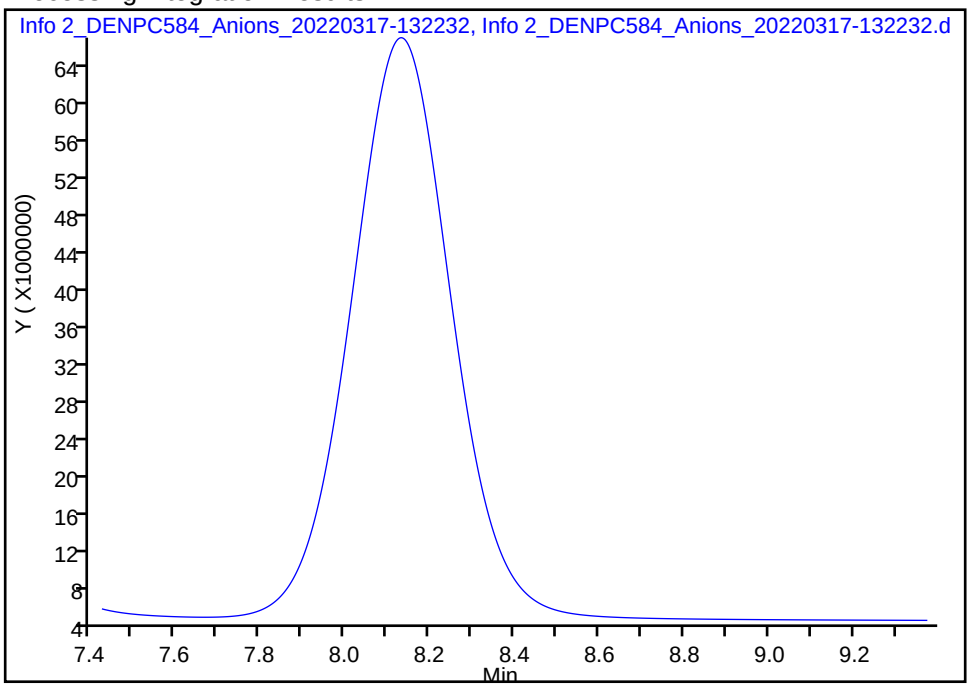
6 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 8.11

Processing Integration Results



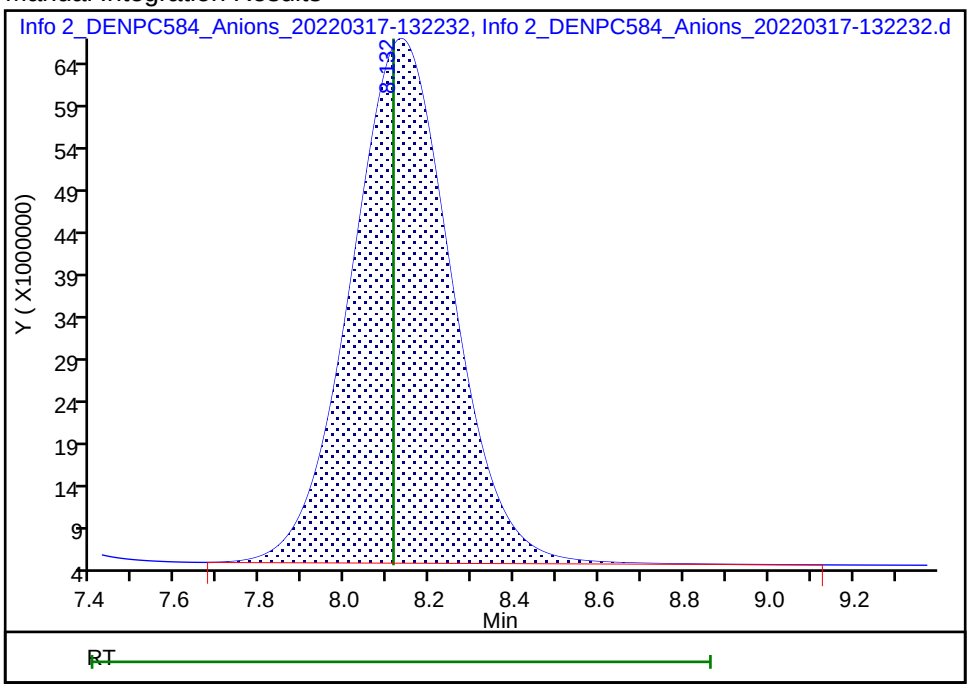
Manual Integration Results

RT: 8.13

Area: 1023932380

Amount: 97.970788

Amount Units: ug/ml



Reviewer: foxr, 17-Mar-2022 14:13:46

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_20220317-133
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 17-Mar-2022 13:22:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-006
Misc. Info.: 280-0109325-006
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 13:33:30 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: 17-Mar-2022 14:14:25

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		7.190				ND	a
6 Sulfate	8.220	8.220	0.000	7086824		-0.5630	Ma

QC Flag Legend

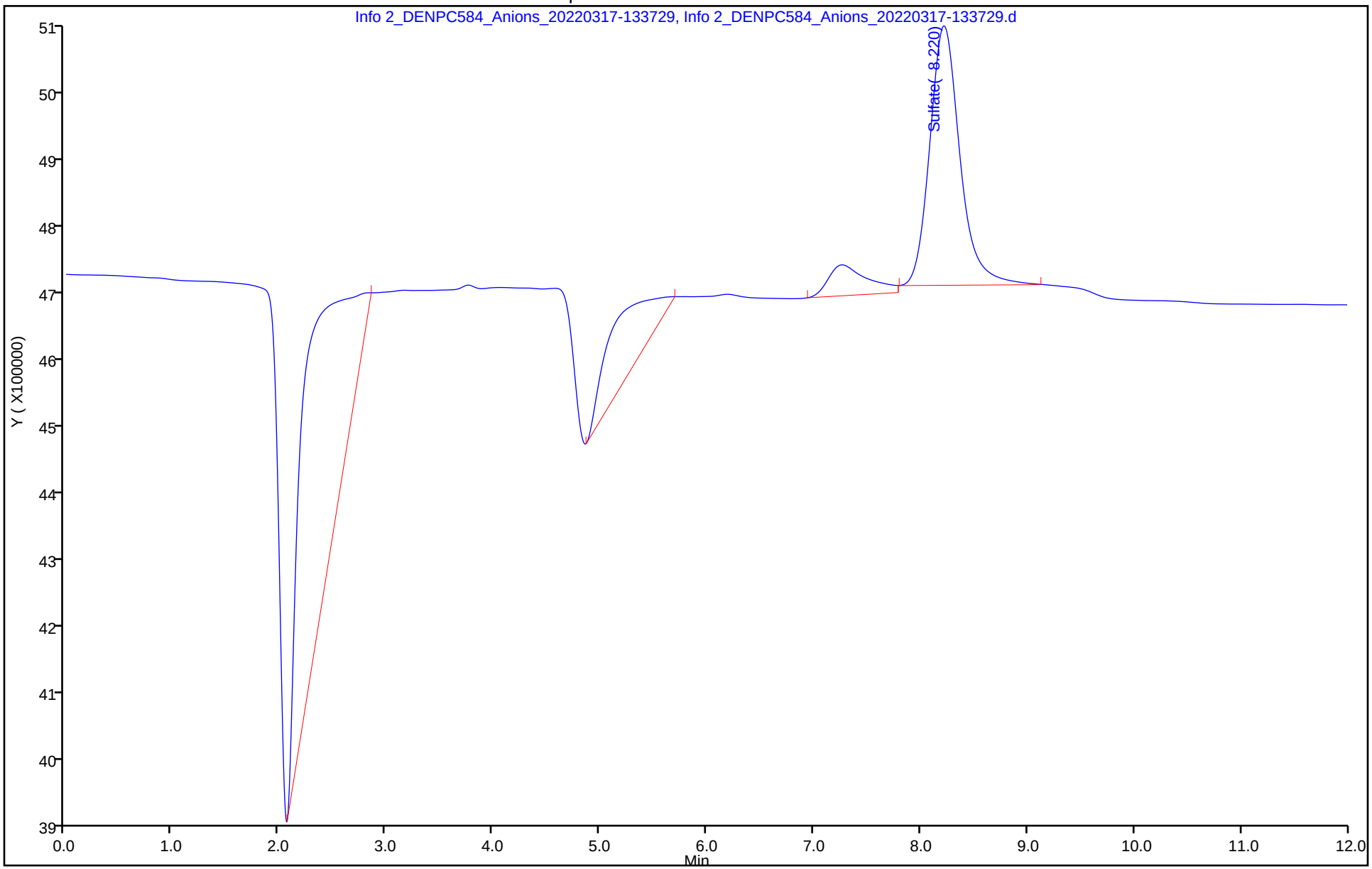
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected
a - User Assigned ID

Report Date: 18-Mar-2022 13:33:30 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_20220317-133729.d

Injection Date:	17-Mar-2022 13:22:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-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_20220317-133

Injection Date: 17-Mar-2022 13:22:00 Instrument ID: WC_IonChrom13

Lims ID: MB

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 6

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

Column: Detector 0005

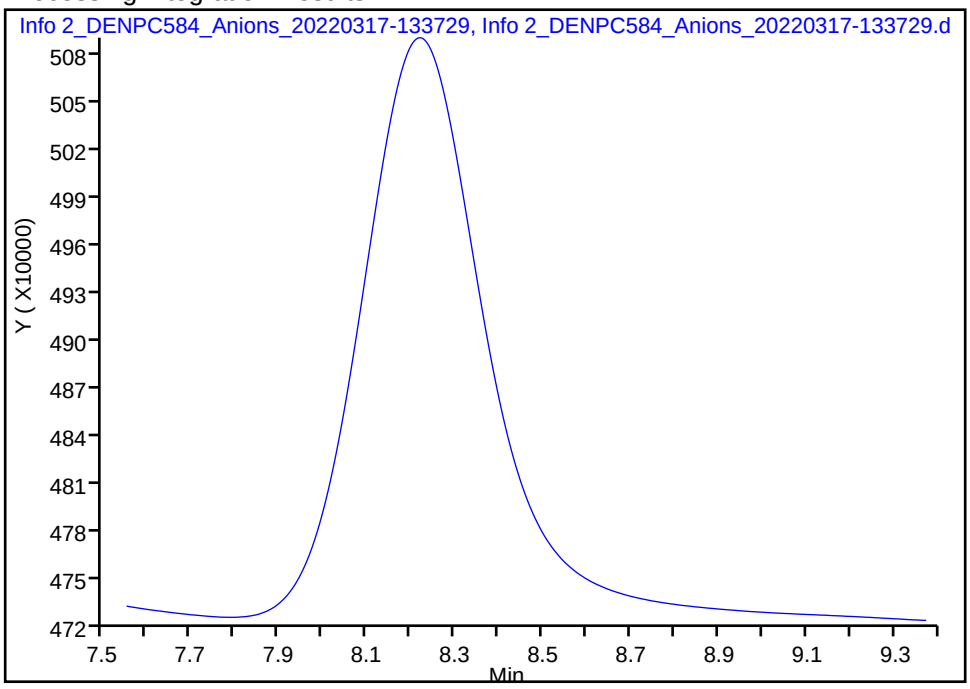
6 Sulfate, CAS: 14808-79-8

Signal: 1

Not Detected

Expected RT: 8.22

Processing Integration Results



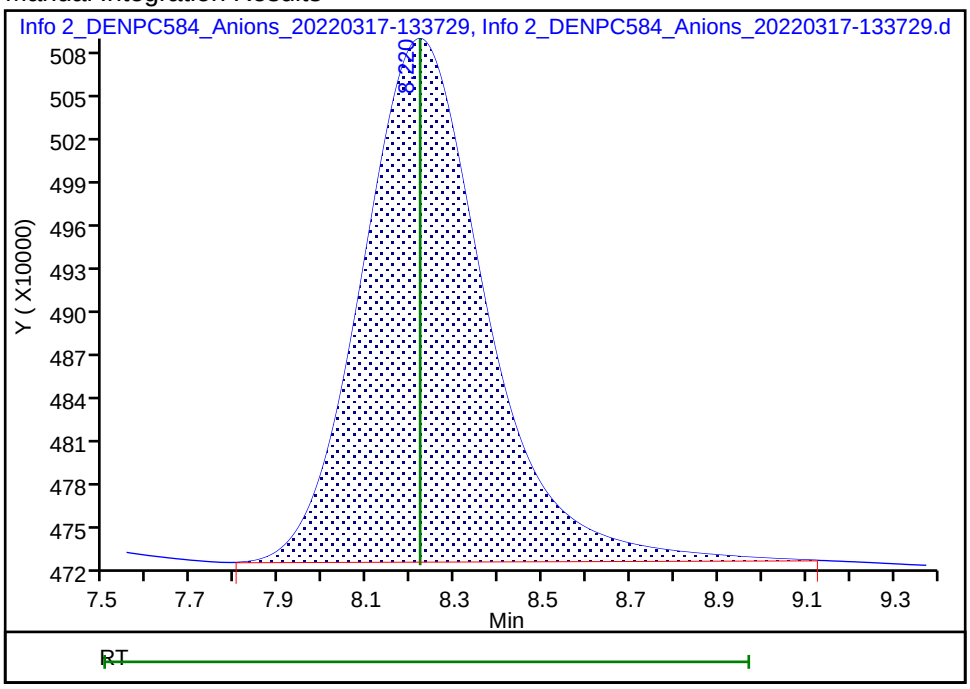
Manual Integration Results

RT: 8.22

Area: 7086824

Amount: -0.562984

Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 12:48:43

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_20220317-190
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 17-Mar-2022 18:48:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-017
Misc. Info.: 280-0109325-017
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 13:33:36 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 19:34:25

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.778	2.787	-0.009	124614061	5.00	4.63	M
2 Chloride	3.785	3.790	-0.005	1383445117	100.0	97.8	
3 Nitrite as N	4.355	4.357	-0.002	158485376	NC	NC	M
4 Bromide	5.373	5.370	0.003	27831495	5.00	4.55	M
5 Nitrate as N	6.032	6.020	0.012	170092644	NC	NC	
7 Orthophosphate as P	7.187	7.190	-0.003	104906069	NC	NC	
6 Sulfate	8.107	8.220	-0.113	1018625683	100.0	97.5	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

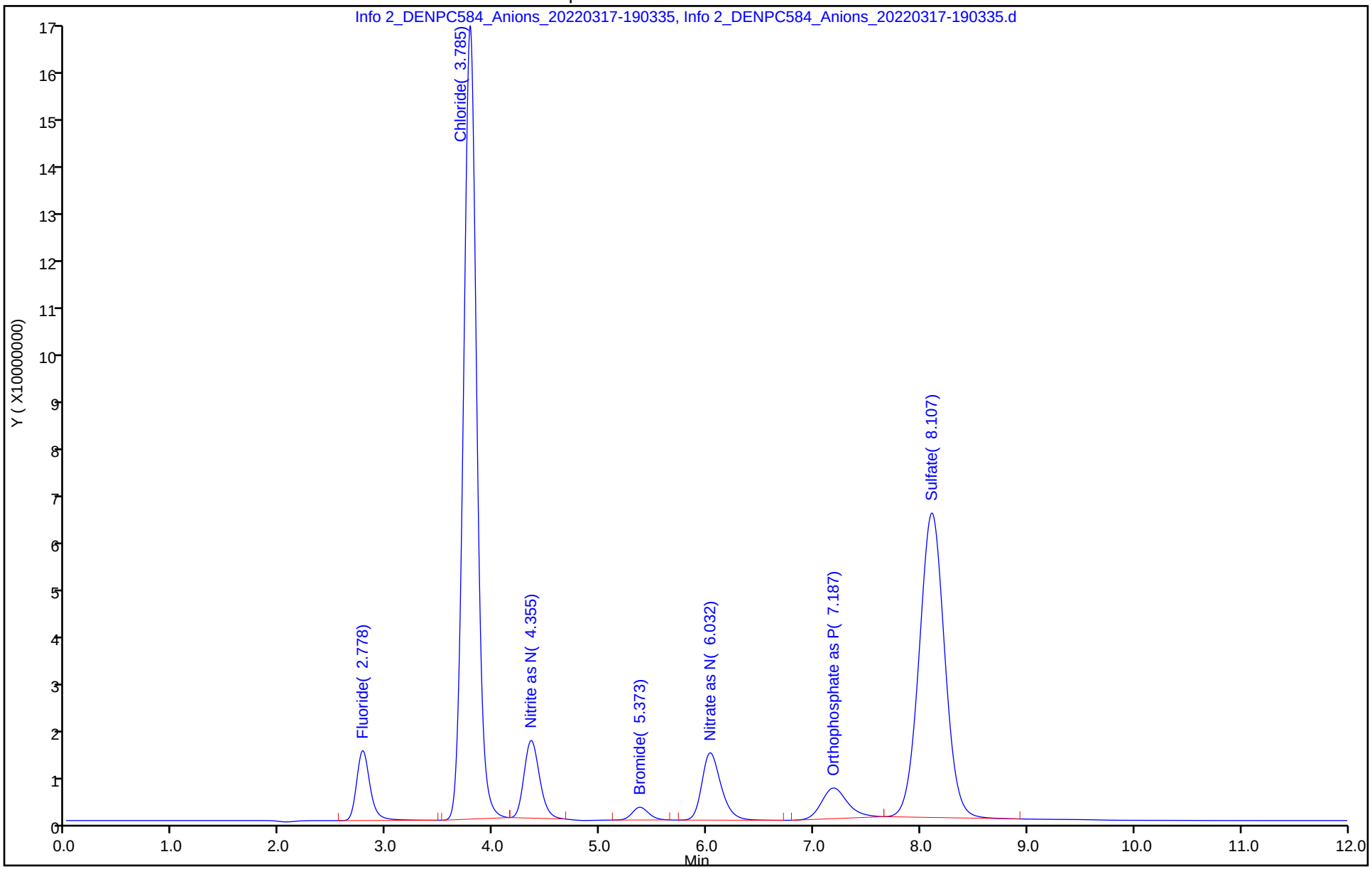
Reagents:

IC LCS_01863 Amount Added: 10.00 Units: mL

Report Date: 18-Mar-2022 13:33:36 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_20220317-190335.d				
Injection Date:	17-Mar-2022 18:48:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins Denver

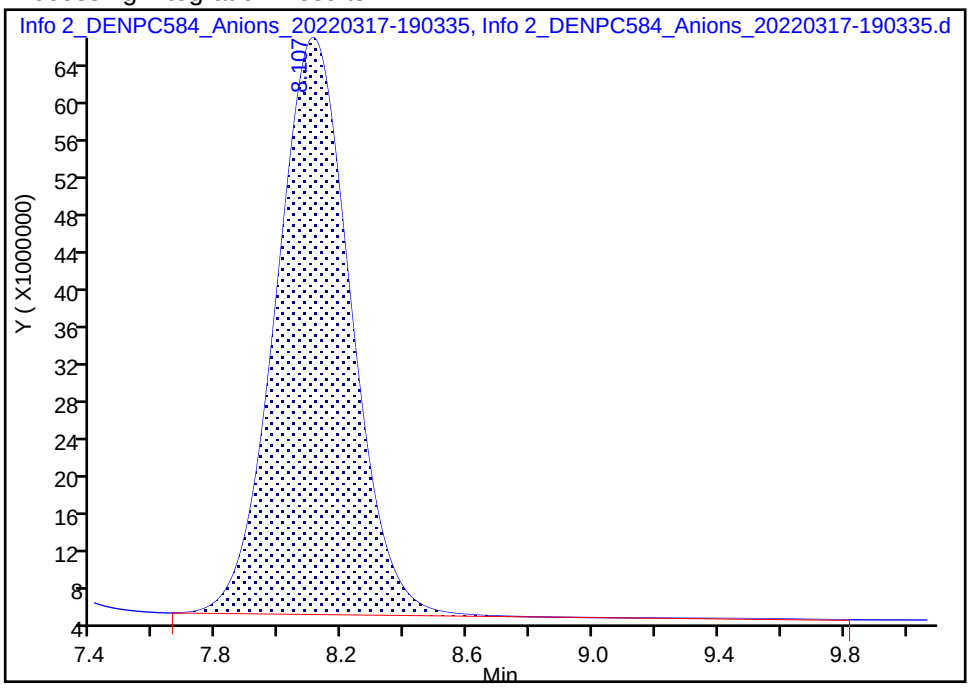
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220317-190				
Injection Date:	17-Mar-2022 18:48:00	Instrument ID:	WC_IonChrom13		
Lims ID:	ccv				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	17
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

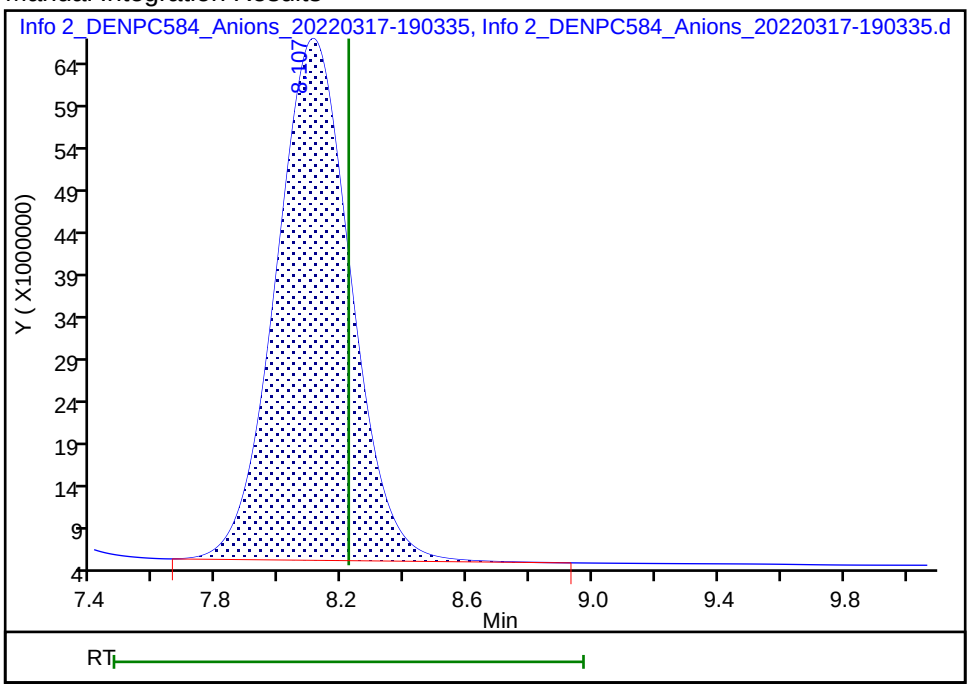
Processing Integration Results

RT: 8.11
Area: 1020856141
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 8.11
Area: 1018625683
Amount: 97.456562
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 12:55:40
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_20220317-191
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 17-Mar-2022 19:03:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-018
Misc. Info.: 280-0109325-018
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 13:33:36 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 12:56:34

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	3.770	3.790	-0.020	135700		0.0134	
3 Nitrite as N		4.357				ND	
4 Bromide		5.370				ND	U
5 Nitrate as N	6.150	6.020	0.130	234183		NC	
7 Orthophosphate as P	7.270	7.190	0.080	1383785		NC	
6 Sulfate	8.192	8.220	-0.028	6140484		-0.6547	M

QC Flag Legend

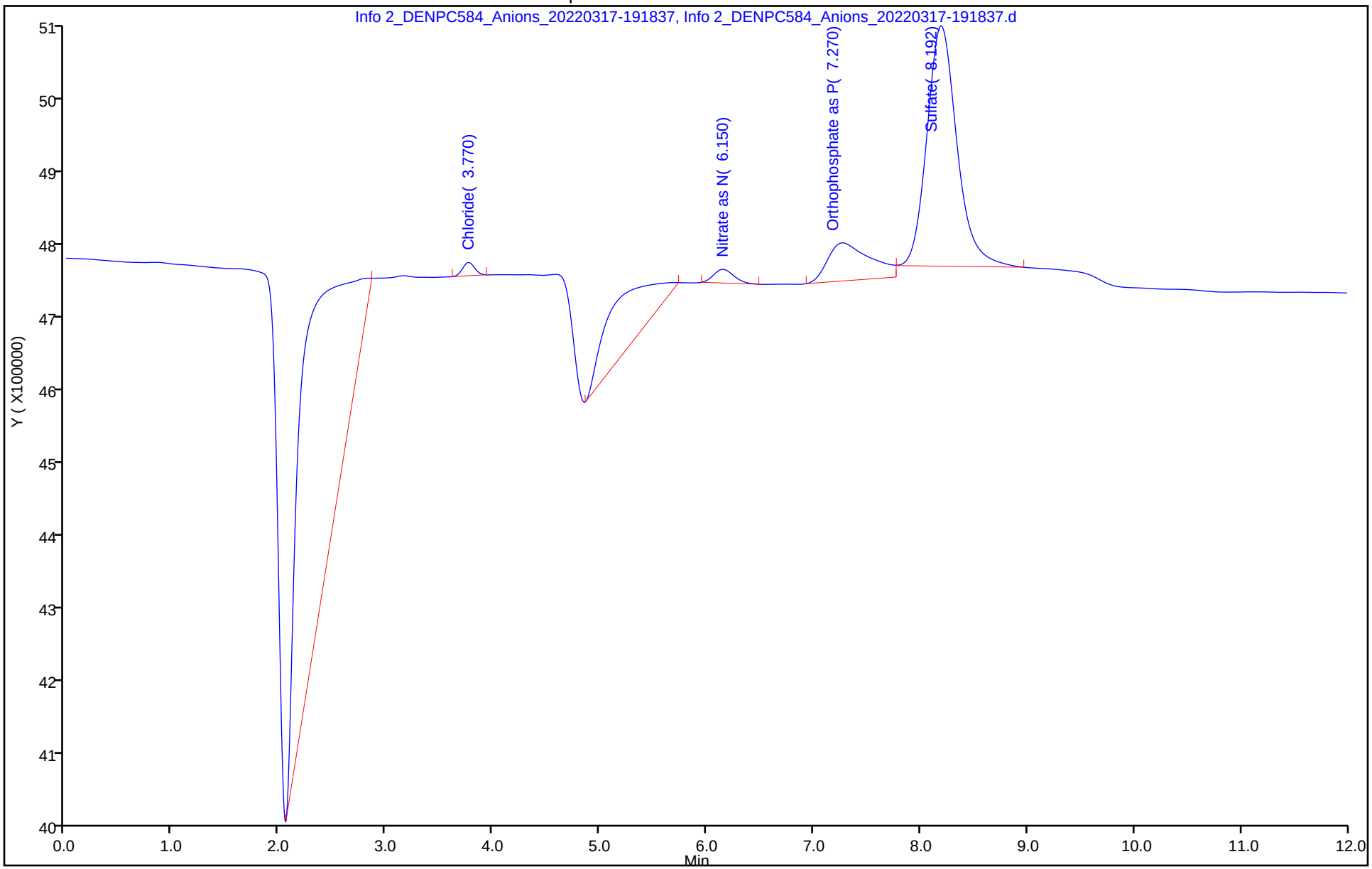
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 18-Mar-2022 13:33:37 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_20220317-191837.d

Injection Date:	17-Mar-2022 19:03:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	18
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-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_20220317-191

Injection Date: 17-Mar-2022 19:03:00 Instrument ID: WC_IonChrom13

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 18

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

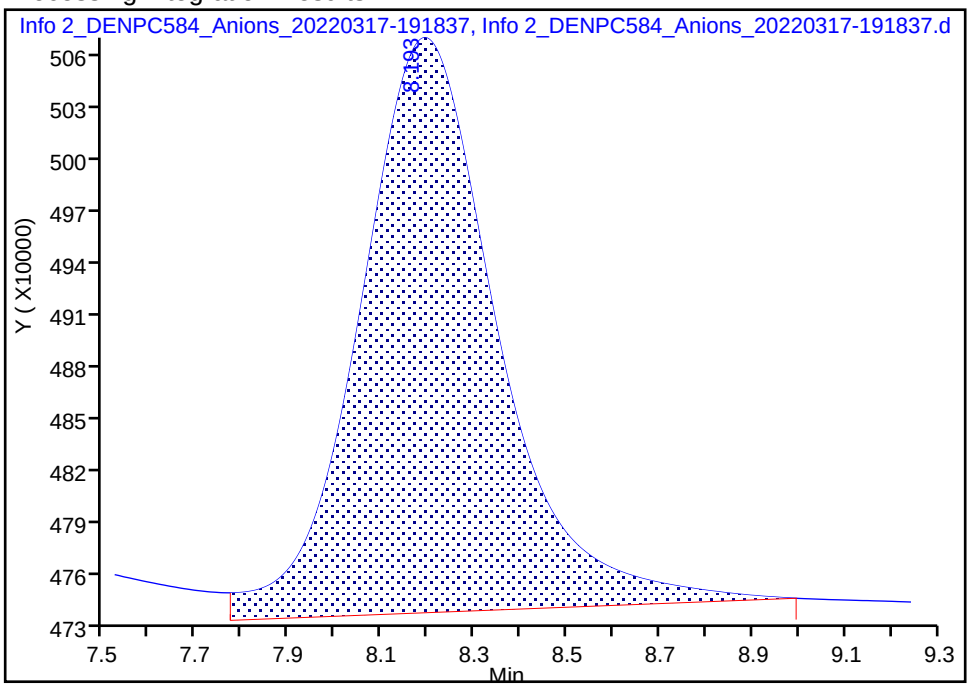
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

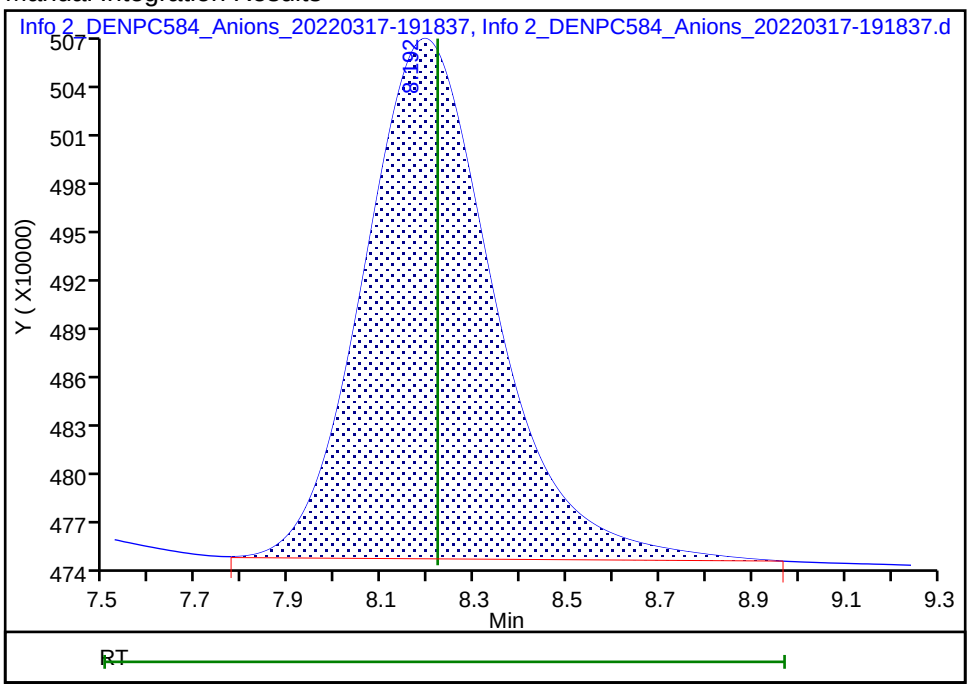
Processing Integration Results

RT: 8.19
Area: 6700744
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 8.19
Area: 6140484
Amount: -0.654685
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 12:56:30

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_20220317-220
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 17-Mar-2022 21:49:00 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-029
Misc. Info.: 280-0109325-029
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 13:33:42 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: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:02:34

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	124696616	5.00	4.63	M
2 Chloride	3.790	3.790	0.000	1381990690	100.0	97.7	
3 Nitrite as N	4.360	4.357	0.003	159165504	NC	NC	M
4 Bromide	5.377	5.370	0.007	28023546	5.00	4.58	M
5 Nitrate as N	6.035	6.020	0.015	169701070	NC	NC	
7 Orthophosphate as P	7.187	7.190	-0.003	102322880	NC	NC	
6 Sulfate	8.112	8.220	-0.108	1018356871	100.0	97.4	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

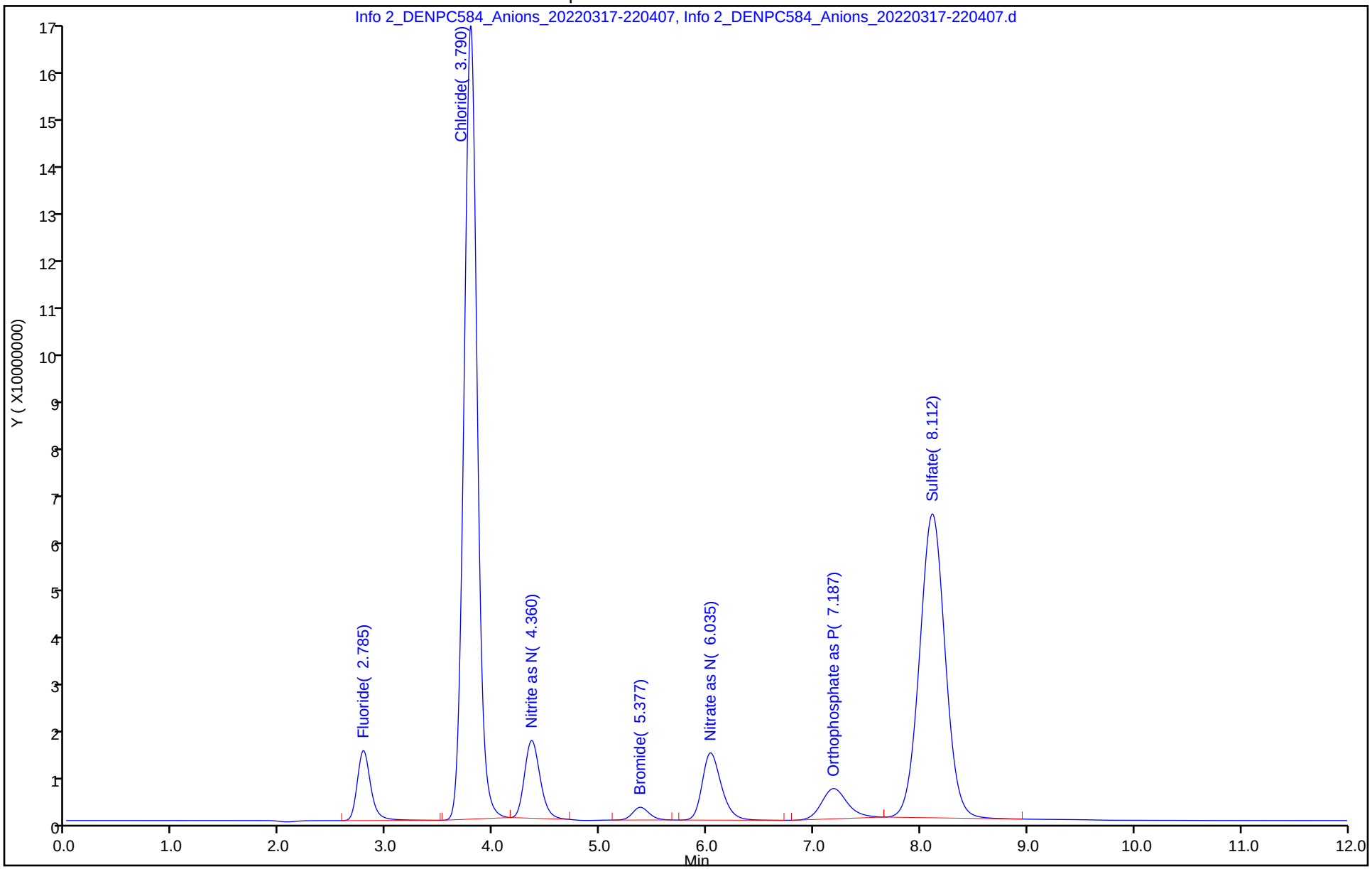
Reagents:

IC LCS_01863 Amount Added: 10.00 Units: mL

Report Date: 18-Mar-2022 13:33:42 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_20220317-220407.d				
Injection Date:	17-Mar-2022 21:49:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	29
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-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_20220317-220

Injection Date: 17-Mar-2022 21:49:00 Instrument ID: WC_IonChrom13

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 29

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

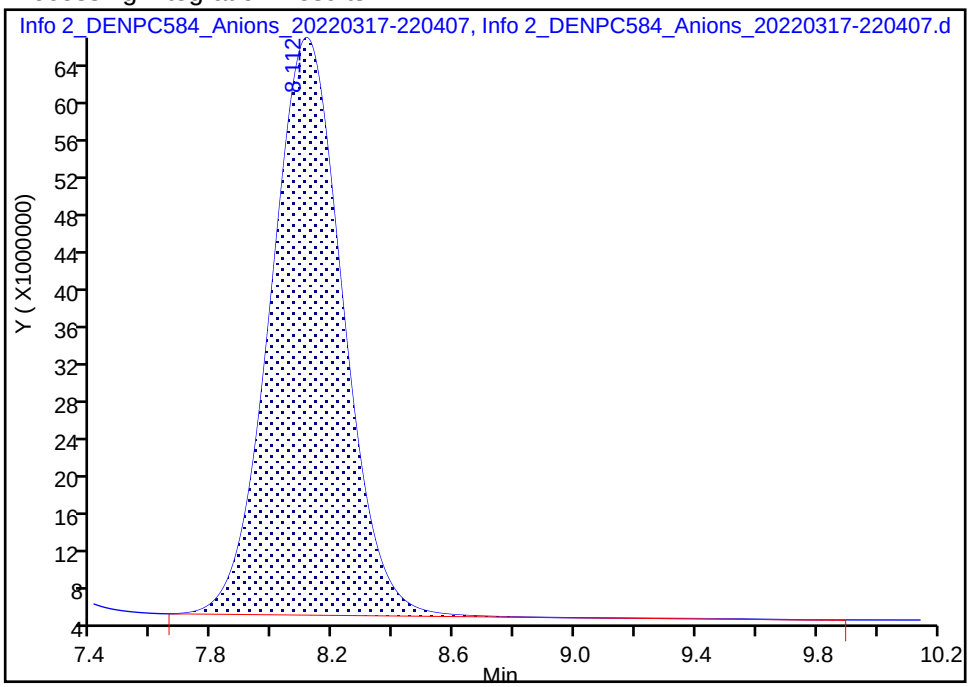
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

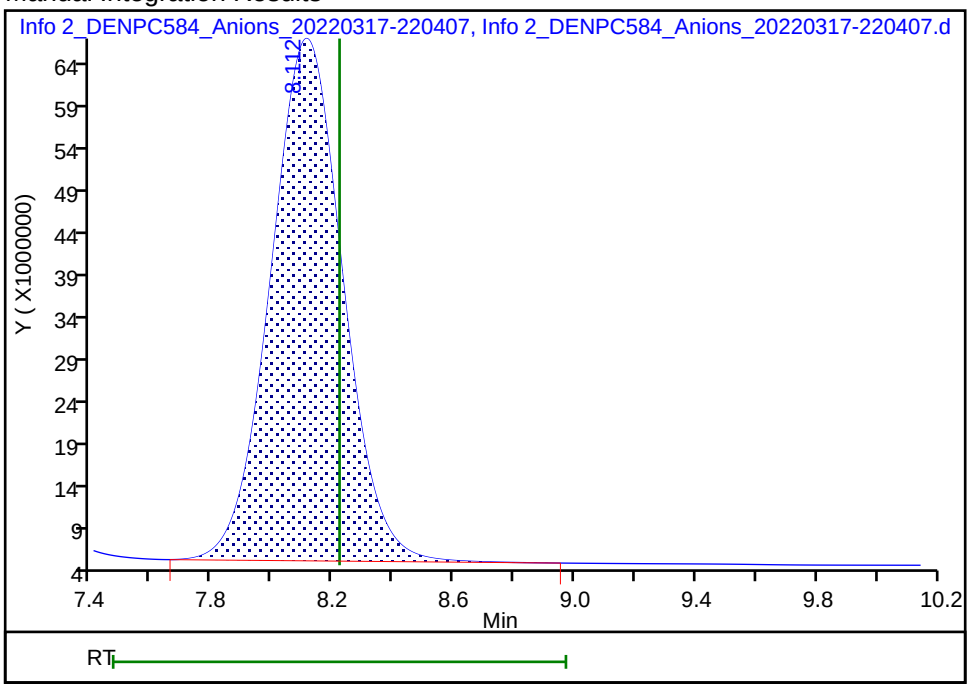
Processing Integration Results

RT: 8.11
Area: 1019701245
Amount: 97.560785
Amount Units: ug/ml



Manual Integration Results

RT: 8.11
Area: 1018356871
Amount: 97.430514
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:02:21

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_20220317-221
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 17-Mar-2022 22:04:00 ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0109325-030
Misc. Info.: 280-0109325-030
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 13:33:42 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: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:03:14

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	3.160	2.787	0.373	28496		0.0249	Ma
2 Chloride	3.770	3.790	-0.020	116106		0.0121	
3 Nitrite as N		4.357				ND	
4 Bromide		5.370				ND	
5 Nitrate as N	6.163	6.020	0.143	94426		NC	Ma
7 Orthophosphate as P	7.263	7.190	0.073	1103869		NC	
6 Sulfate	8.202	8.220	-0.018	5707959		-0.6966	M

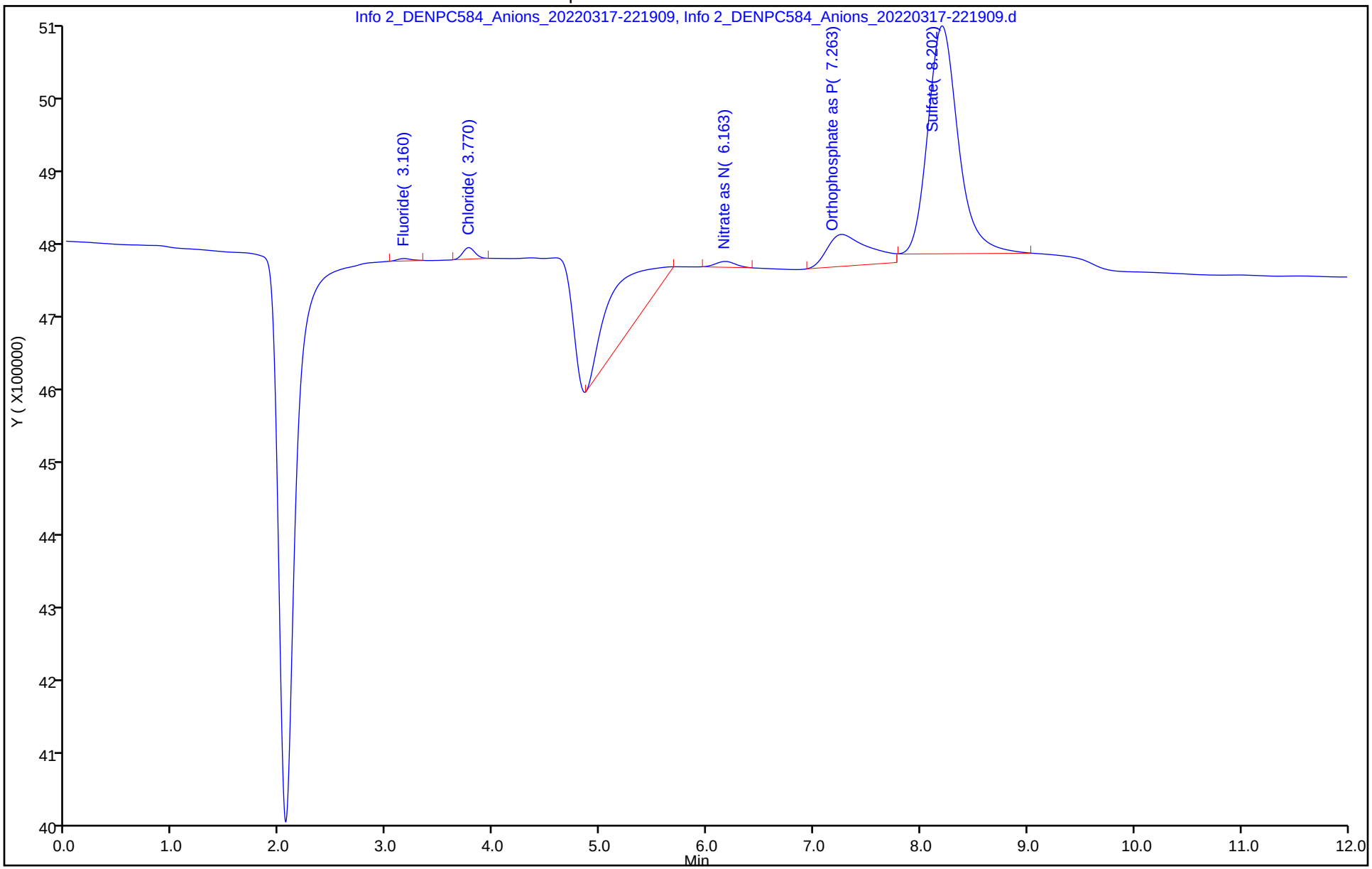
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 18-Mar-2022 13:33:43 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_20220317-221909.d				
Injection Date:	17-Mar-2022 22:04:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	30
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions-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_20220317-221

Injection Date: 17-Mar-2022 22:04:00 Instrument ID: WC_IonChrom13

Lims ID: ccb

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 30

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions-IC13 Limit Group: Wet - Anions 28D

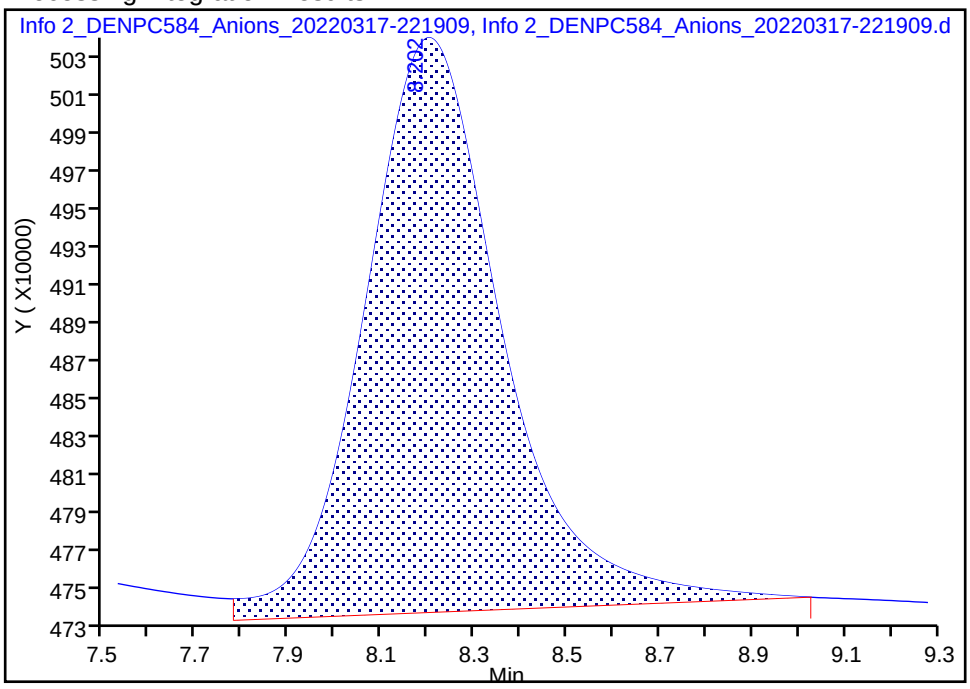
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

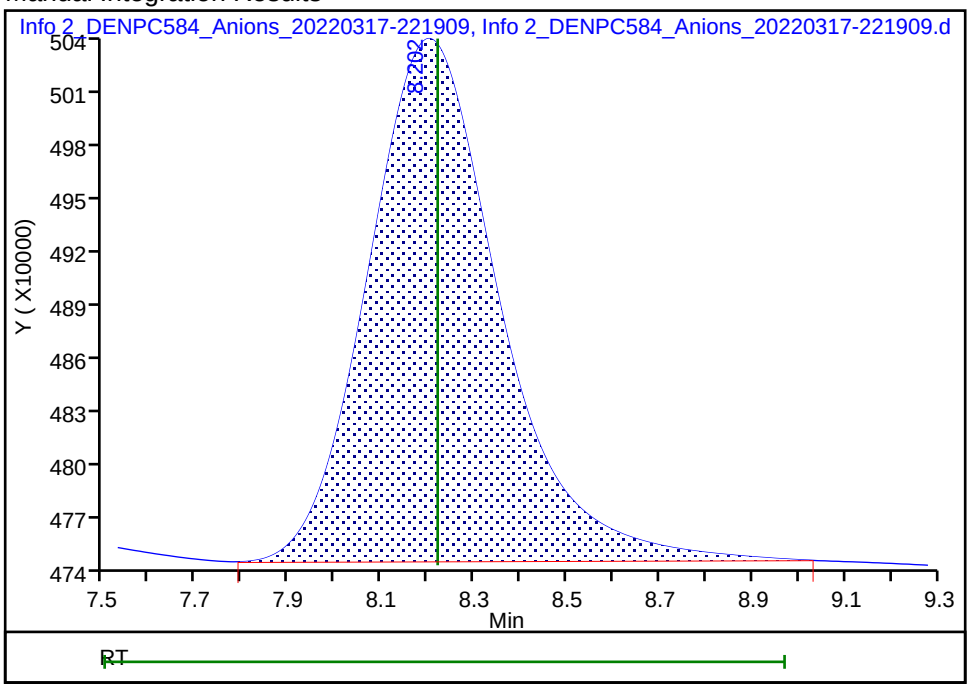
Processing Integration Results

RT: 8.20
Area: 6098111
Amount: -0.658791
Amount Units: ug/ml



Manual Integration Results

RT: 8.20
Area: 5707959
Amount: -0.696598
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:03:05

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_20220317-234
Lims ID: 280-159190-F-7
Client ID: CA210-8
Sample Type: Client
Inject. Date: 17-Mar-2022 23:34:00 ALS Bottle#: 0 Worklist Smp#: 36
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0109325-036
Misc. Info.: 280-0109325-036
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 13:33:42 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: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:04:32

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.780	2.787	-0.007	3997706	0.1715	
2 Chloride	3.772	3.790	-0.018	421473353	29.8	
3 Nitrite as N		4.357			ND	
4 Bromide	5.432	5.370	0.062	8179766	1.34	
5 Nitrate as N	6.040	6.020	0.020	216333315	NC	
7 Orthophosphate as P	7.260	7.190	0.070	7426374	NC	
6 Sulfate	8.135	8.220	-0.085	436019723	41.0	M

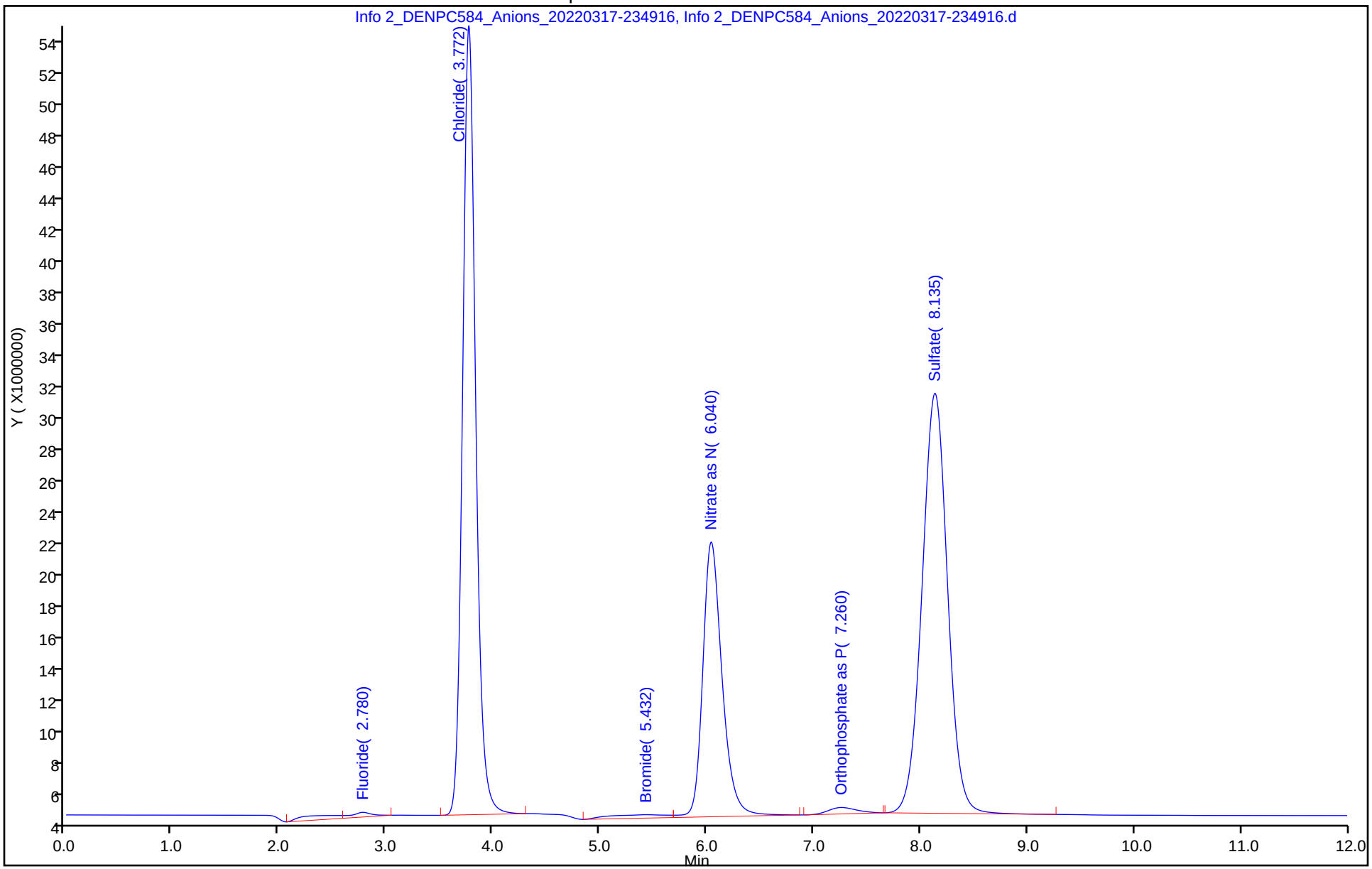
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 18-Mar-2022 13:33:46 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_20220317-234916.d				
Injection Date:	17-Mar-2022 23:34:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159190-F-7	Lab Sample ID:	280-159190-7	Worklist Smp#:	36
Client ID:	CA210-8				
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

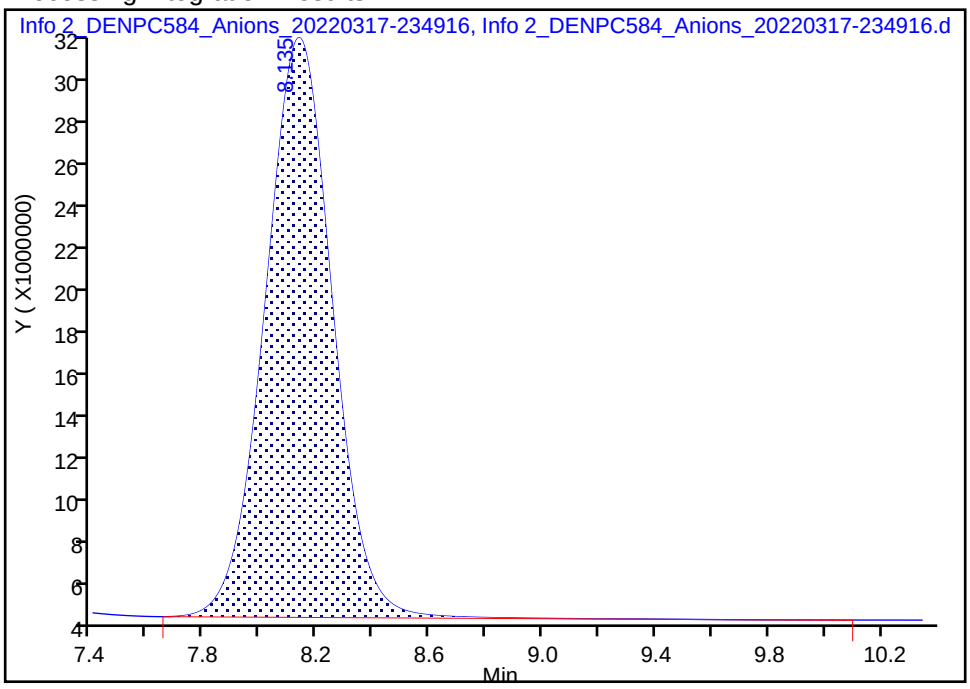
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220317-234				
Injection Date:	17-Mar-2022 23:34:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159190-F-7	Lab Sample ID:	280-159190-7		
Client ID:	CA210-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	36
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

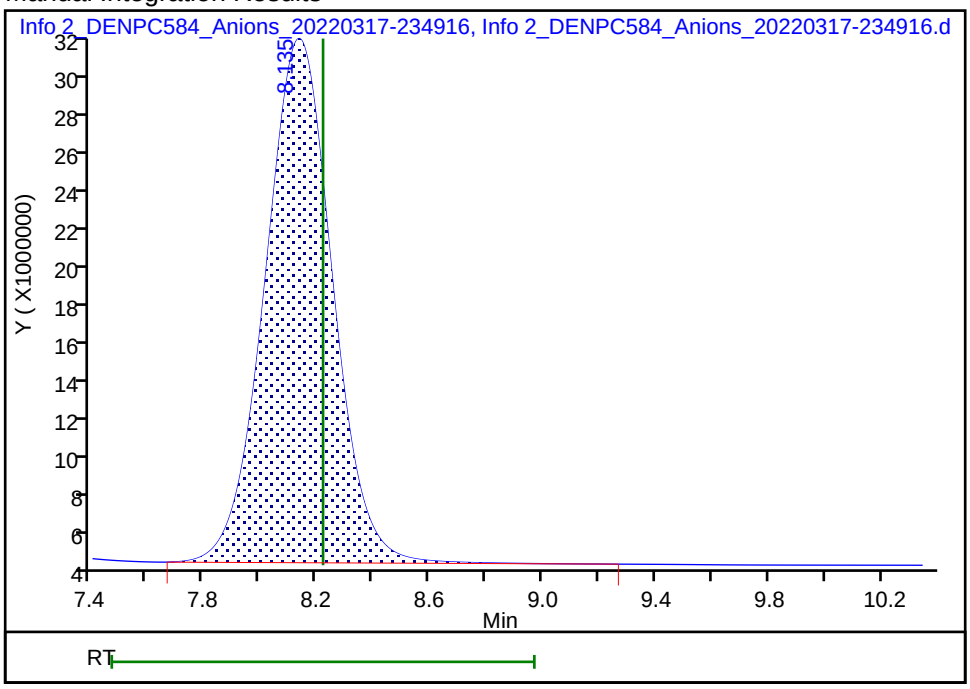
Processing Integration Results

RT: 8.14
Area: 436947678
Amount: 41.091141
Amount Units: ug/ml



Manual Integration Results

RT: 8.14
Area: 436019723
Amount: 41.001221
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:04:29
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_20220318-000
Lims ID: 280-159190-F-10
Client ID: G0092-8
Sample Type: Client
Inject. Date: 17-Mar-2022 23:49:00 ALS Bottle#: 0 Worklist Smp#: 37
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0109325-037
Misc. Info.: 280-0109325-037
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 13:33:42 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: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:04:48

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.780	2.787	-0.007	3213338	0.1425	
2 Chloride	3.768	3.790	-0.022	157171976	11.1	
3 Nitrite as N		4.357			ND	
4 Bromide	5.432	5.370	0.062	4650226	0.7584	
5 Nitrate as N		6.020			ND	
7 Orthophosphate as P	7.293	7.190	0.103	1051340	NC	
6 Sulfate	8.122	8.220	-0.098	808819135	77.1	M

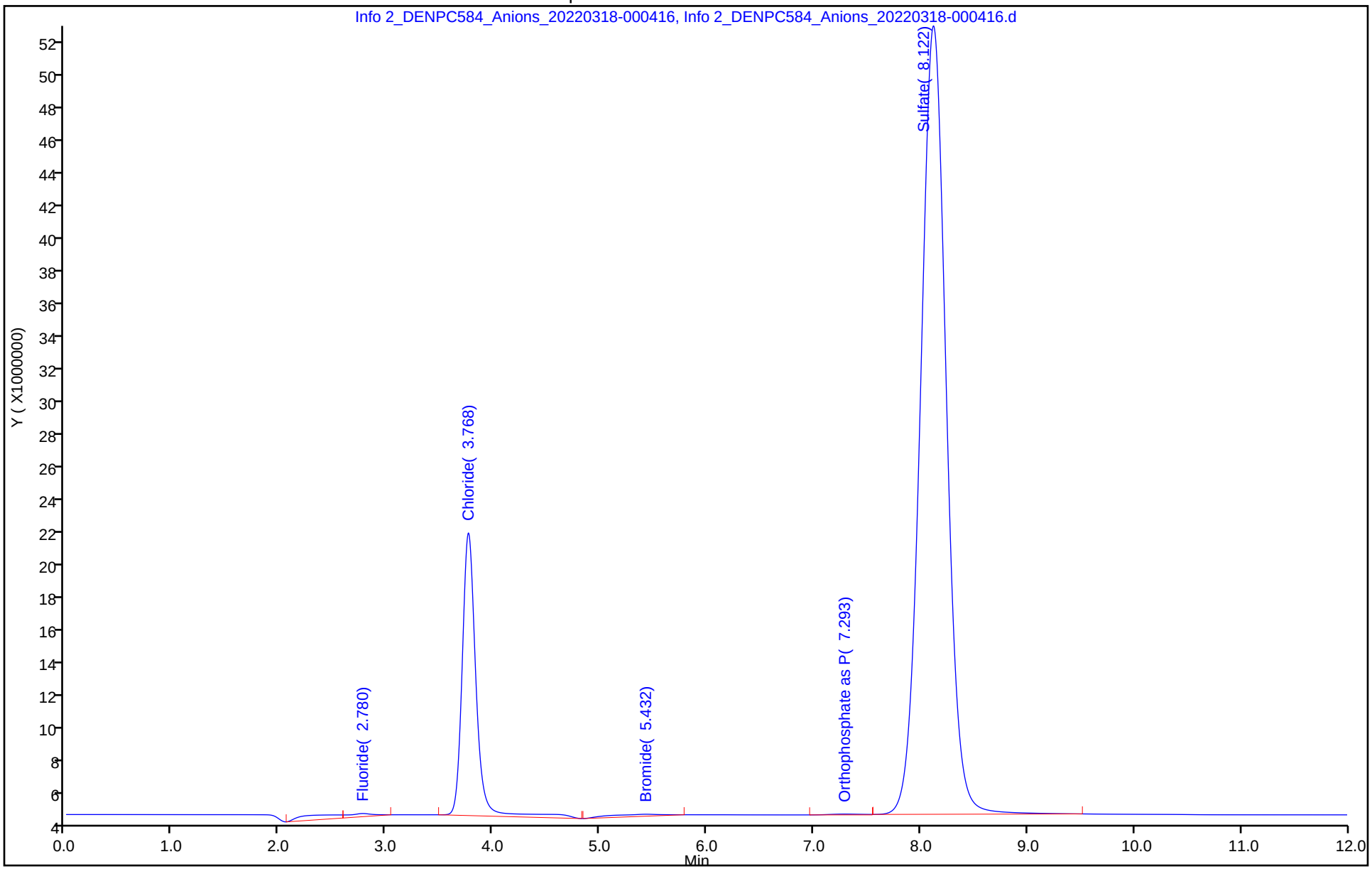
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 18-Mar-2022 13:33:46 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_20220318-000416.d				
Injection Date:	17-Mar-2022 23:49:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159190-F-10	Lab Sample ID:	280-159190-10	Worklist Smp#:	37
Client ID:	G0092-8				
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

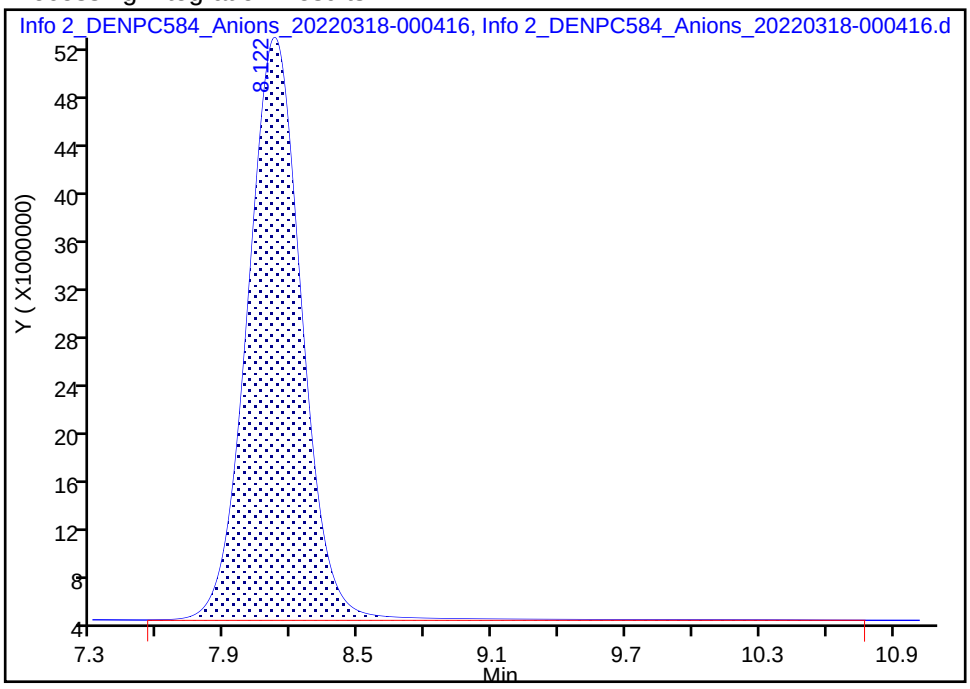
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-000				
Injection Date:	17-Mar-2022 23:49:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159190-F-10	Lab Sample ID:	280-159190-10		
Client ID:	G0092-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	37
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

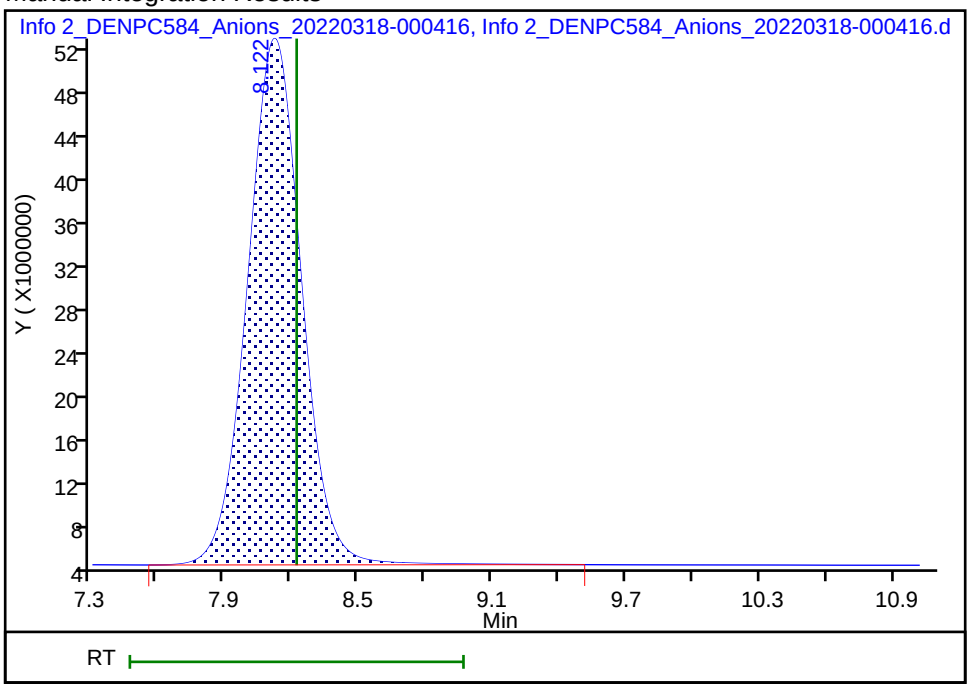
Processing Integration Results

RT: 8.12
Area: 815610802
Amount: 77.784133
Amount Units: ug/ml



Manual Integration Results

RT: 8.12
Area: 808819135
Amount: 77.126011
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:04:44
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_20220318-001
Lims ID: 280-159190-F-11
Client ID: G0091-8
Sample Type: Client
Inject. Date: 18-Mar-2022 00:04:00 ALS Bottle#: 0 Worklist Smp#: 38
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0109325-038
Misc. Info.: 280-0109325-038
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 13:33:42 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: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:05:03

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.782	2.787	-0.005	3962553	0.1702	
2 Chloride	3.772	3.790	-0.018	122820319	8.68	
3 Nitrite as N		4.357			ND	
4 Bromide	5.428	5.370	0.058	5251974	0.8568	
5 Nitrate as N	6.032	6.020	0.012	252116308	NC	
7 Orthophosphate as P	7.258	7.190	0.068	1582182	NC	
6 Sulfate	8.132	8.220	-0.088	431427315	40.6	M

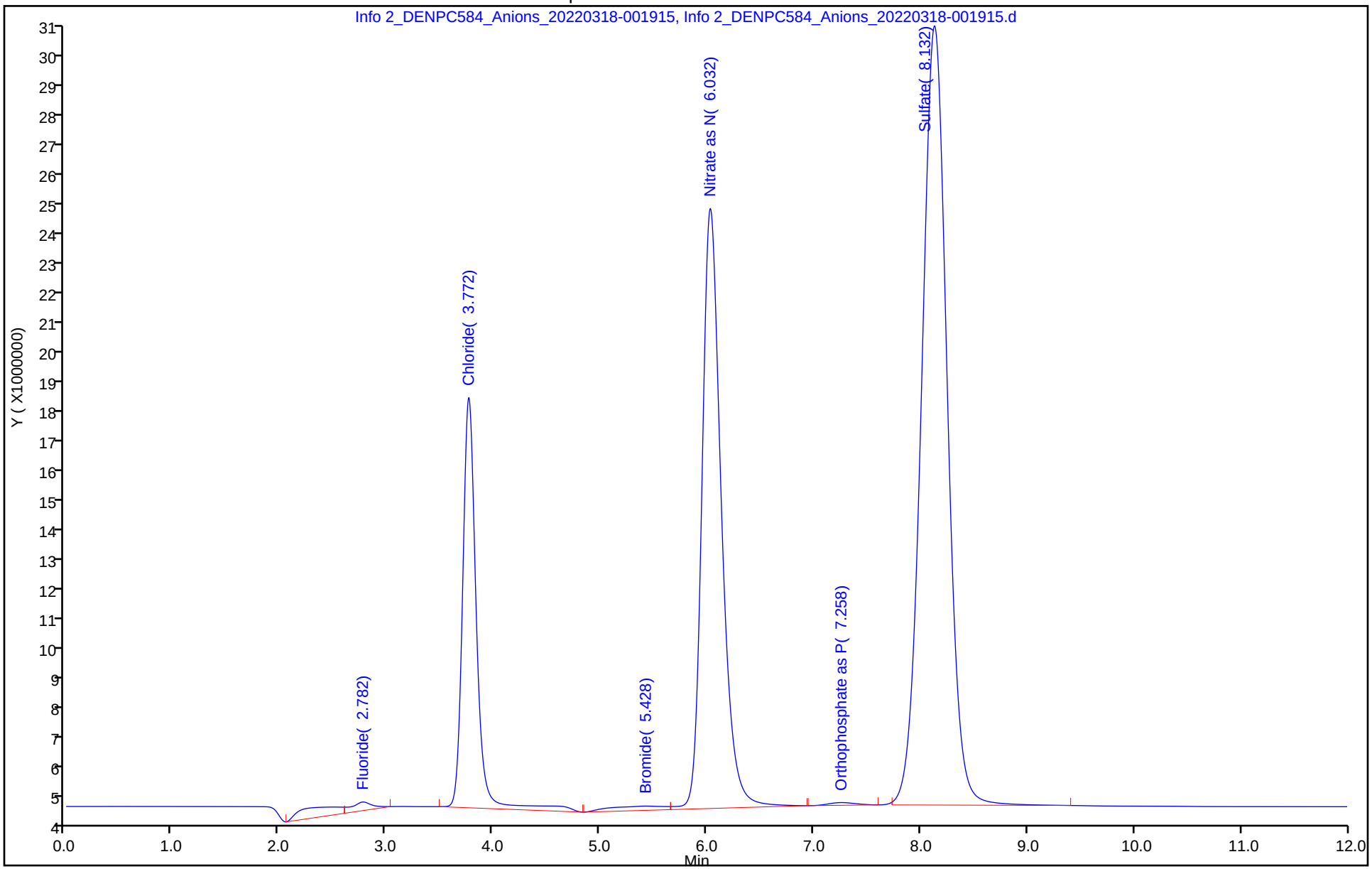
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 18-Mar-2022 13:33:47 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_20220318-001915.d				
Injection Date:	18-Mar-2022 00:04:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159190-F-11	Lab Sample ID:	280-159190-11	Worklist Smp#:	38
Client ID:	G0091-8				
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

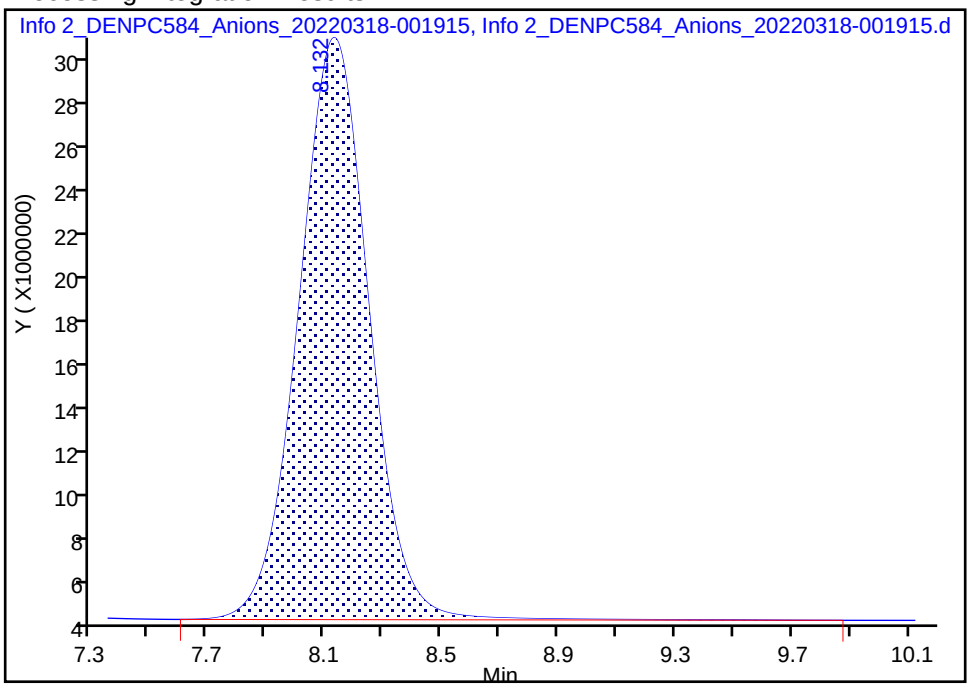
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-001				
Injection Date:	18-Mar-2022 00:04:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159190-F-11	Lab Sample ID:	280-159190-11		
Client ID:	G0091-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	38
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

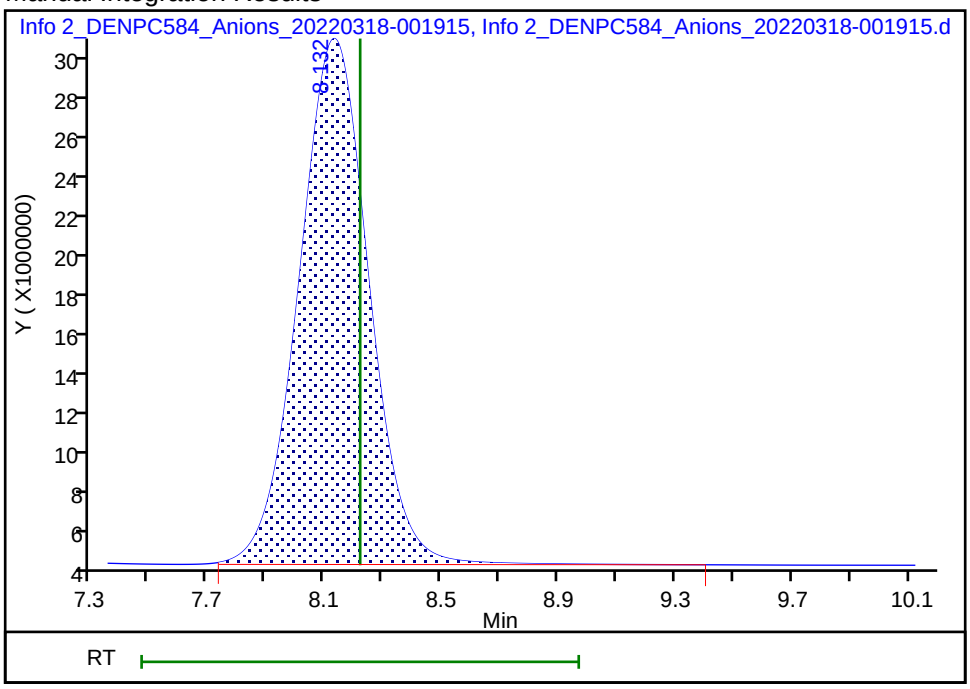
Processing Integration Results

RT: 8.13
Area: 432510738
Amount: 40.661195
Amount Units: ug/ml



Manual Integration Results

RT: 8.13
Area: 431427315
Amount: 40.556210
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:04:59

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_20220318-003
Lims ID: 280-159190-F-16
Client ID: NW062-8
Sample Type: Client
Inject. Date: 18-Mar-2022 00:19:00 ALS Bottle#: 0 Worklist Smp#: 39
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0109325-039
Misc. Info.: 280-0109325-039
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 13:33:42 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: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:05:18

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.782	2.787	-0.005	1964092	0.0964	M
2 Chloride	3.770	3.790	-0.020	100129176	7.08	M
3 Nitrite as N		4.357			ND	
4 Bromide	5.432	5.370	0.062	157715	0.0237	M
5 Nitrate as N		6.020			ND	
7 Orthophosphate as P	7.260	7.190	0.070	1364511	NC	
6 Sulfate	8.128	8.220	-0.092	415930391	39.1	M

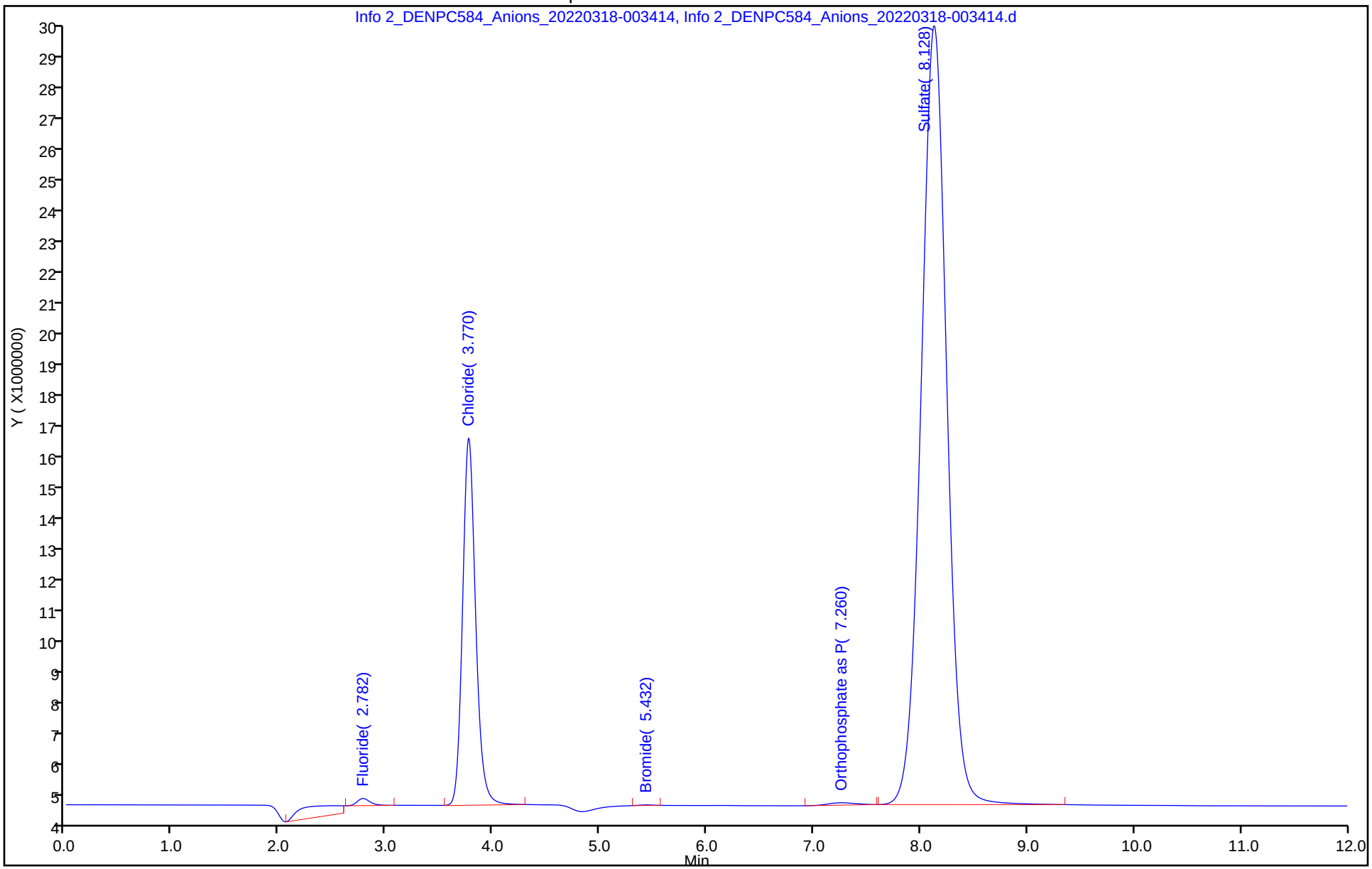
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 18-Mar-2022 13:33:47 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_20220318-003414.d				
Injection Date:	18-Mar-2022 00:19:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159190-F-16	Lab Sample ID:	280-159190-16	Worklist Smp#:	39
Client ID:	NW062-8				
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

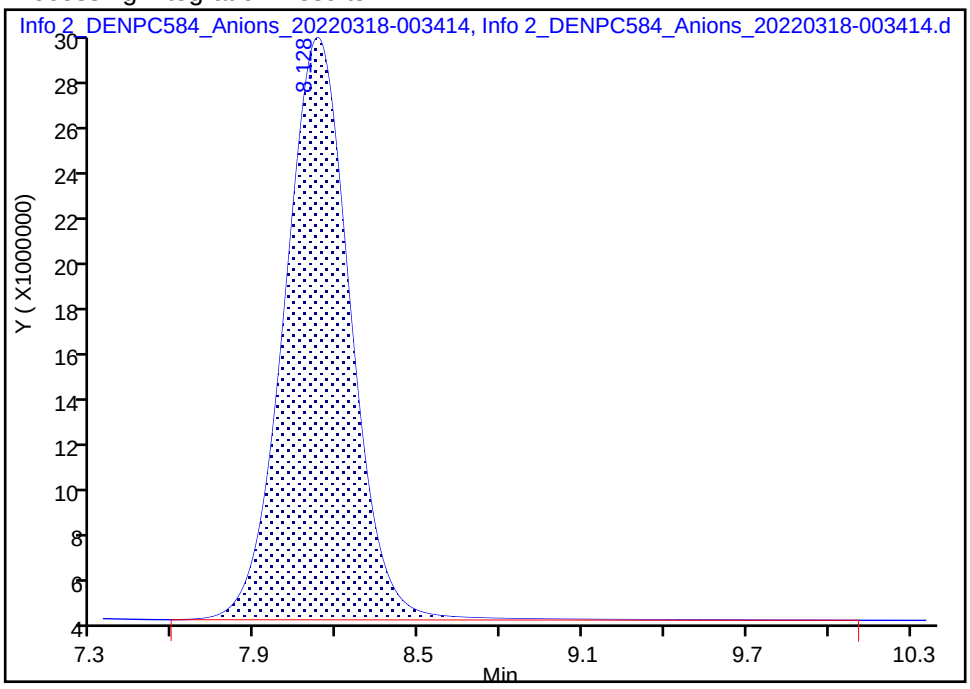
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-003				
Injection Date:	18-Mar-2022 00:19:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159190-F-16	Lab Sample ID:	280-159190-16		
Client ID:	NW062-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	39
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

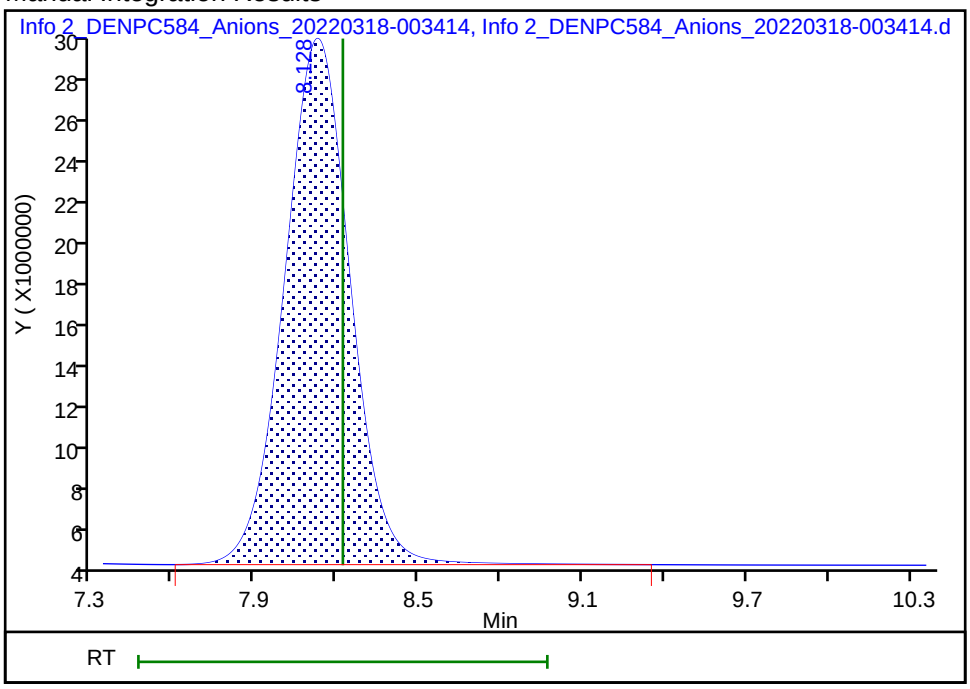
Processing Integration Results

RT: 8.13
Area: 417085087
Amount: 39.166428
Amount Units: ug/ml



Manual Integration Results

RT: 8.13
Area: 415930391
Amount: 39.054536
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:05:15
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_20220318-004
Lims ID: 280-159190-F-16 DU
Client ID:
Sample Type: DU
Inject. Date: 18-Mar-2022 00:34:00 ALS Bottle#: 0 Worklist Smp#: 40
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0109325-040
Misc. Info.: 280-0109325-040
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 13:33:42 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: CTX1678

First Level Reviewer: foxr Date: 18-Mar-2022 13:05:35

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	1895671		0.0938	M
2 Chloride	3.773	3.790	-0.017	98459940		6.96	M
3 Nitrite as N		4.357				ND	
4 Bromide	5.437	5.370	0.067	231402		0.0358	M
5 Nitrate as N		6.020				ND	
7 Orthophosphate as P	7.262	7.190	0.072	2027777		NC	
6 Sulfate	8.130	8.220	-0.090	409581061		38.4	M

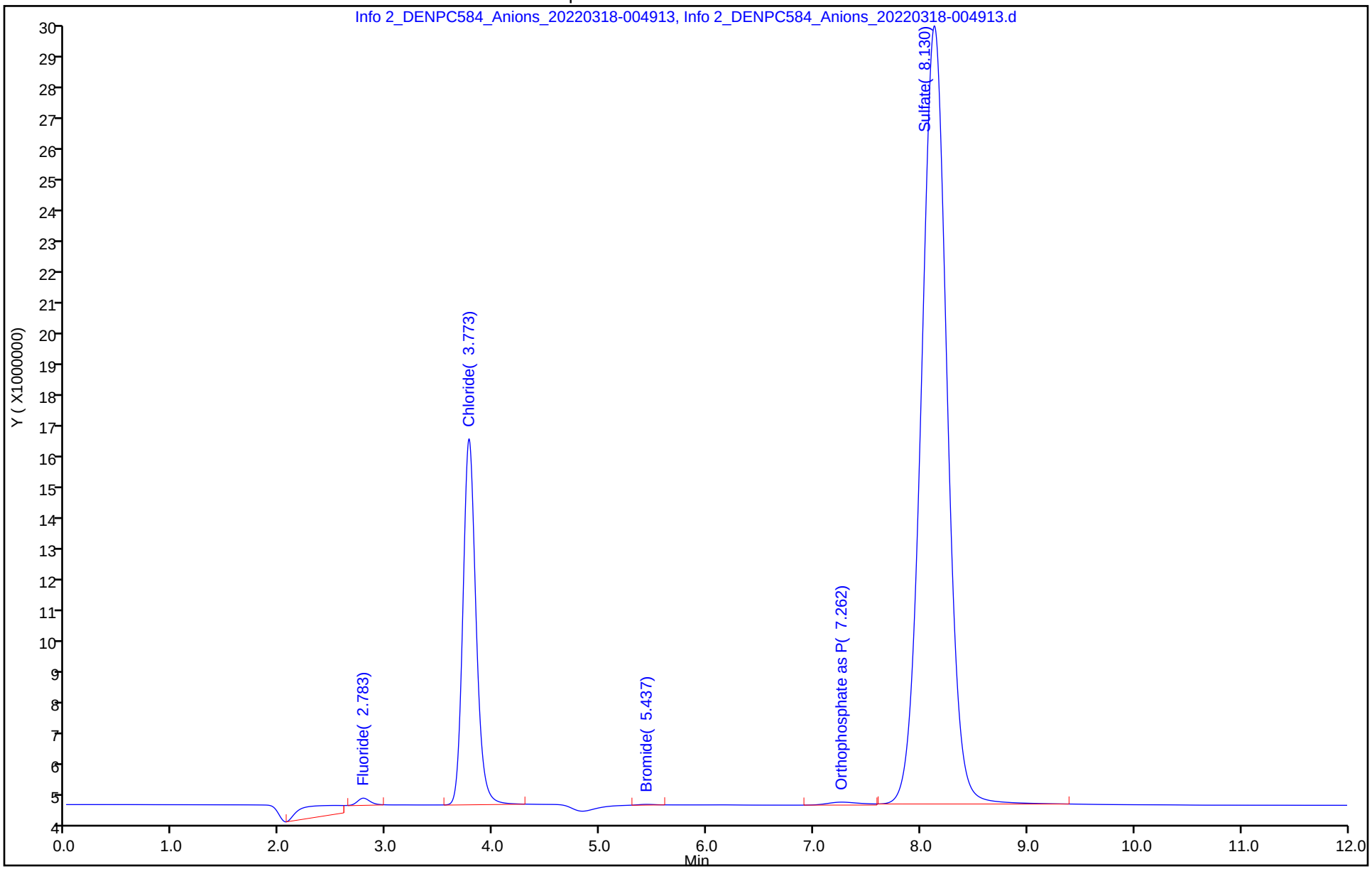
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 18-Mar-2022 13:33:48 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_20220318-004913.d				
Injection Date:	18-Mar-2022 00:34:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159190-F-16 DU			Worklist Smp#:	40
Client ID:					
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

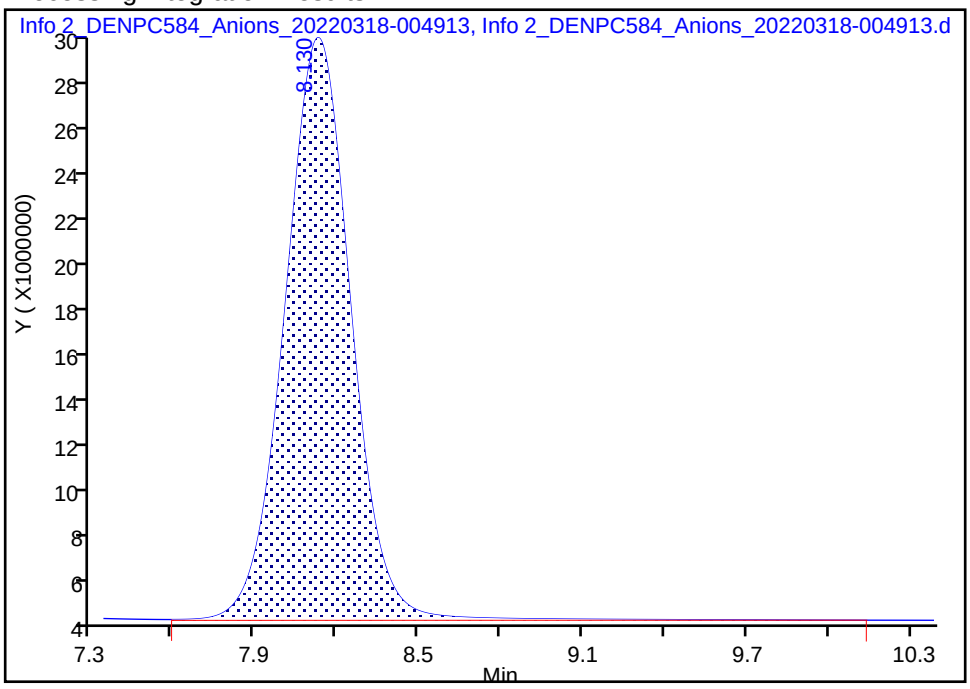
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-004				
Injection Date:	18-Mar-2022 00:34:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159190-F-16 DU				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	40
Injection Vol:	5.0 ul	Dil. Factor:	5.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

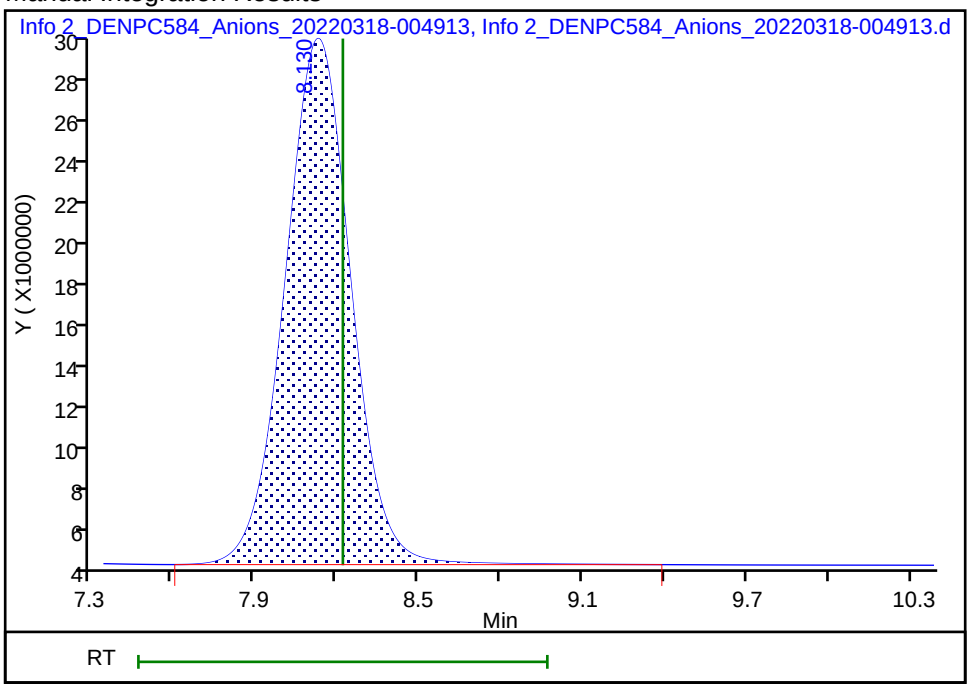
Processing Integration Results

RT: 8.13
Area: 413265065
Amount: 38.796262
Amount Units: ug/ml



Manual Integration Results

RT: 8.13
Area: 409581061
Amount: 38.439277
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:05:31

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_20220318-010
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

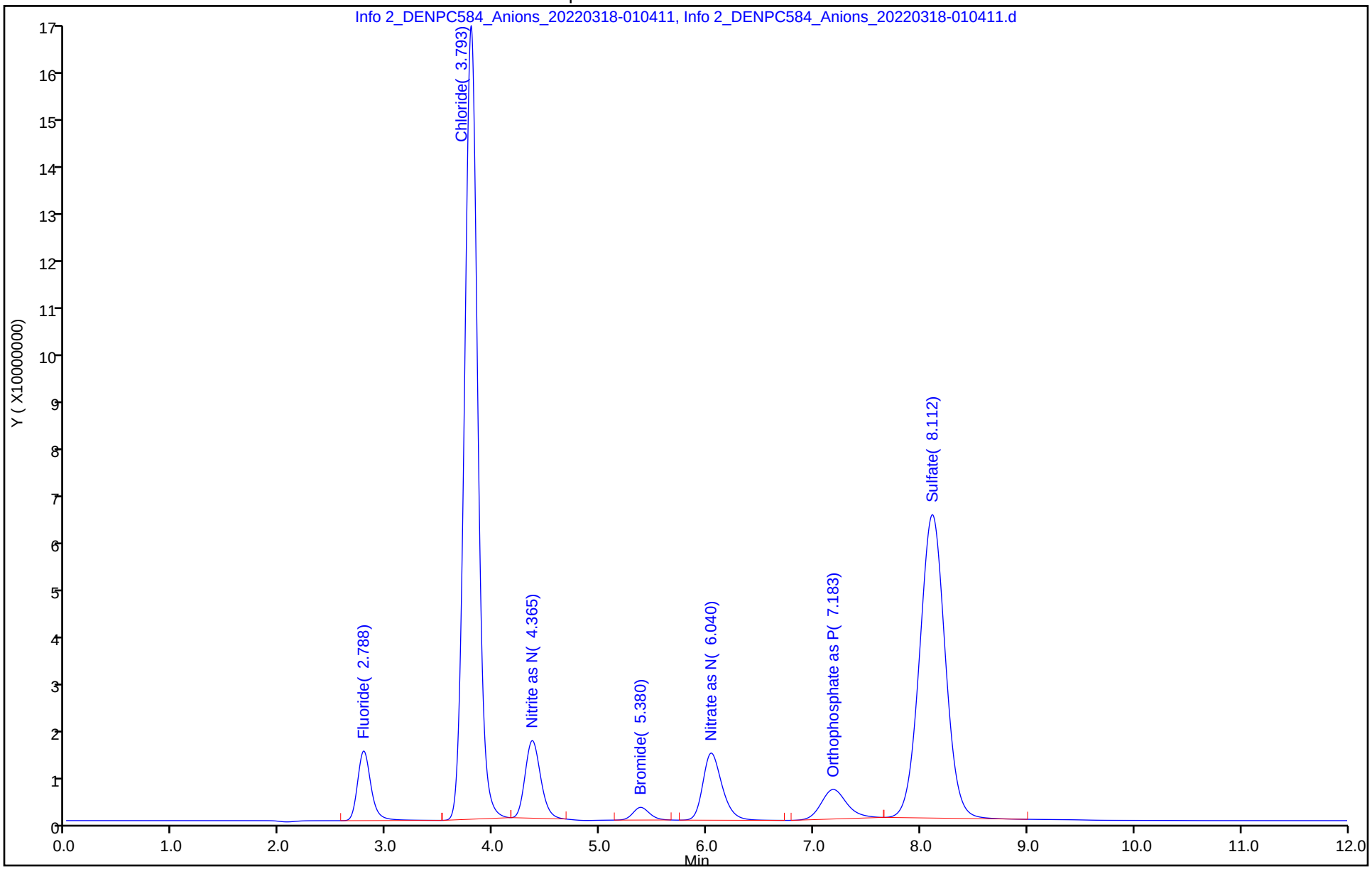
Reagents:

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

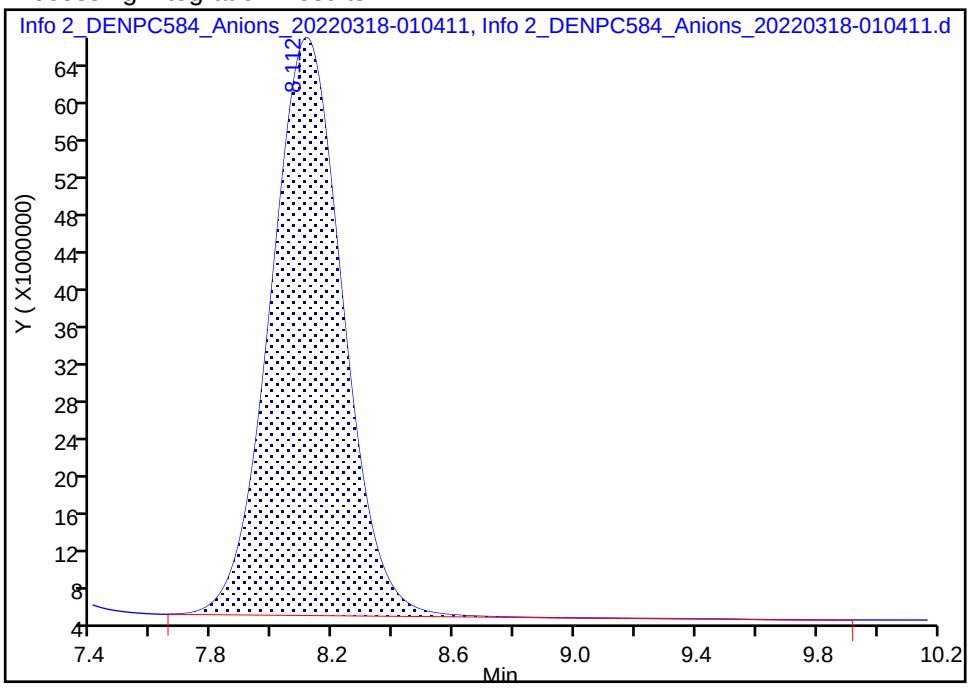
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-010				
Injection Date:	18-Mar-2022 00:49:00	Instrument ID:	WC_IonChrom13		
Lims ID:	ccv				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	41
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

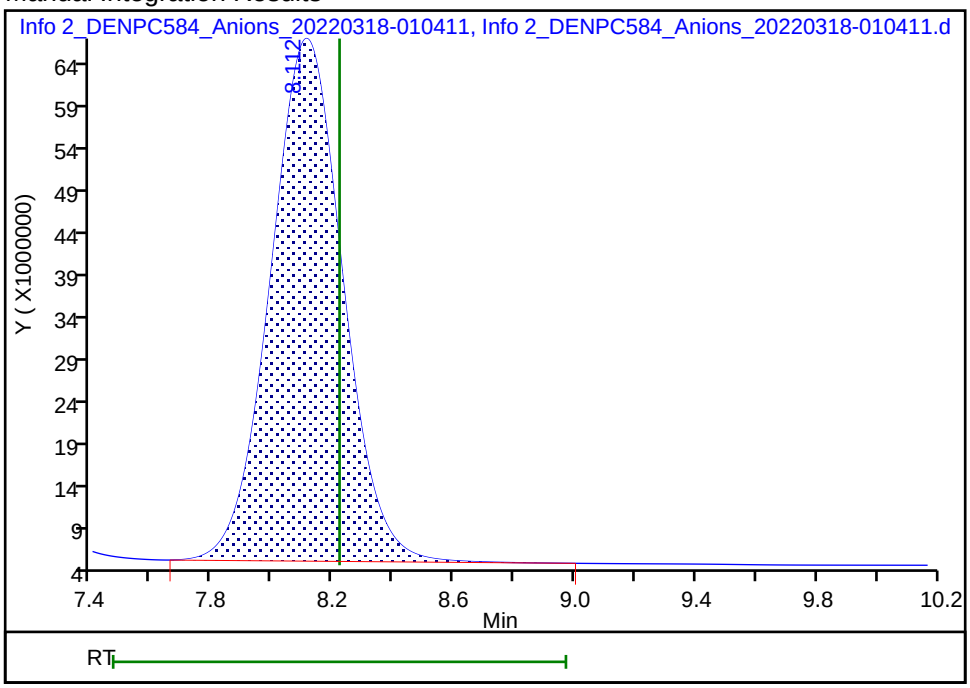
Processing Integration Results

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

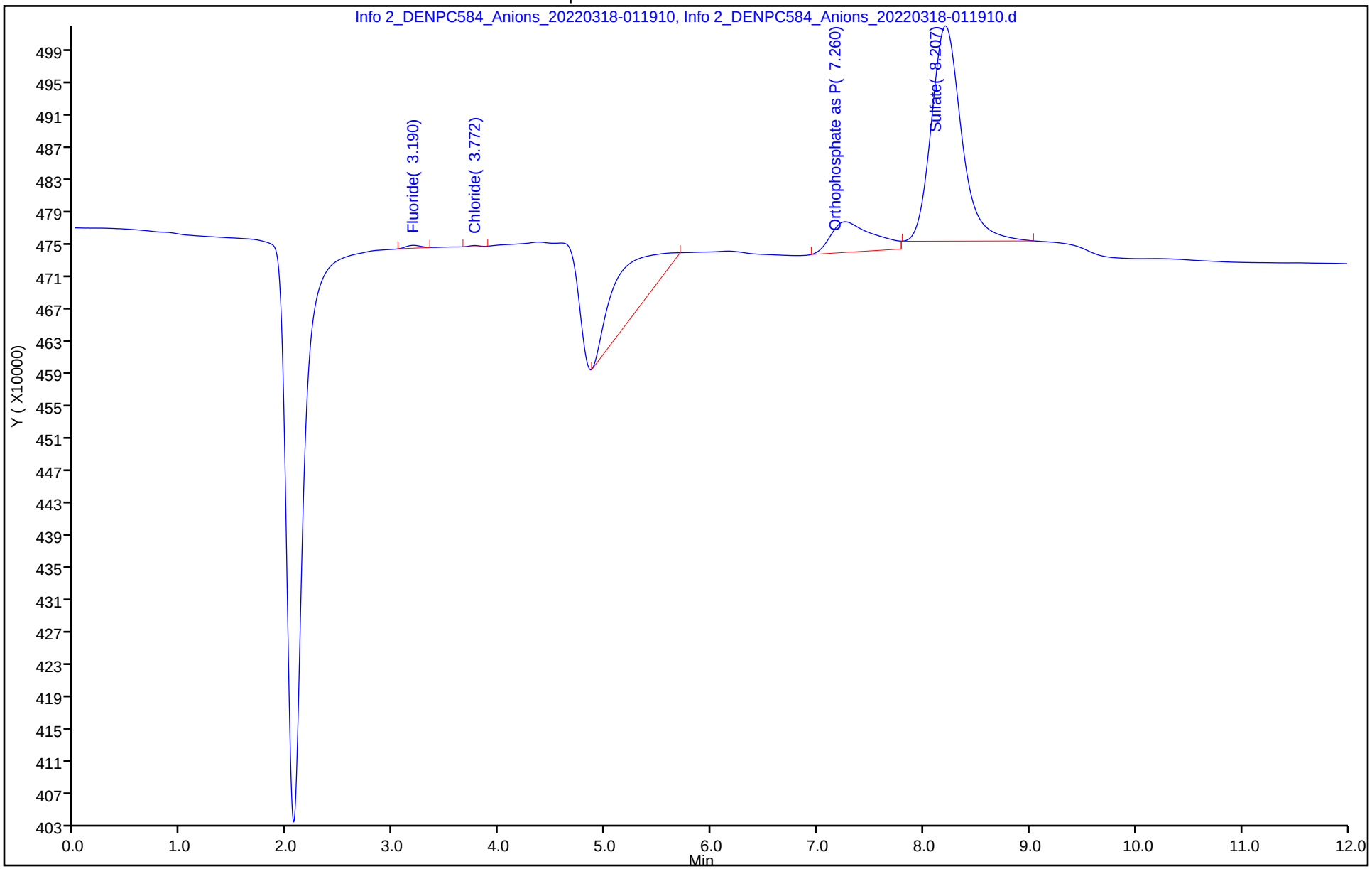
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected
a - User Assigned ID

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

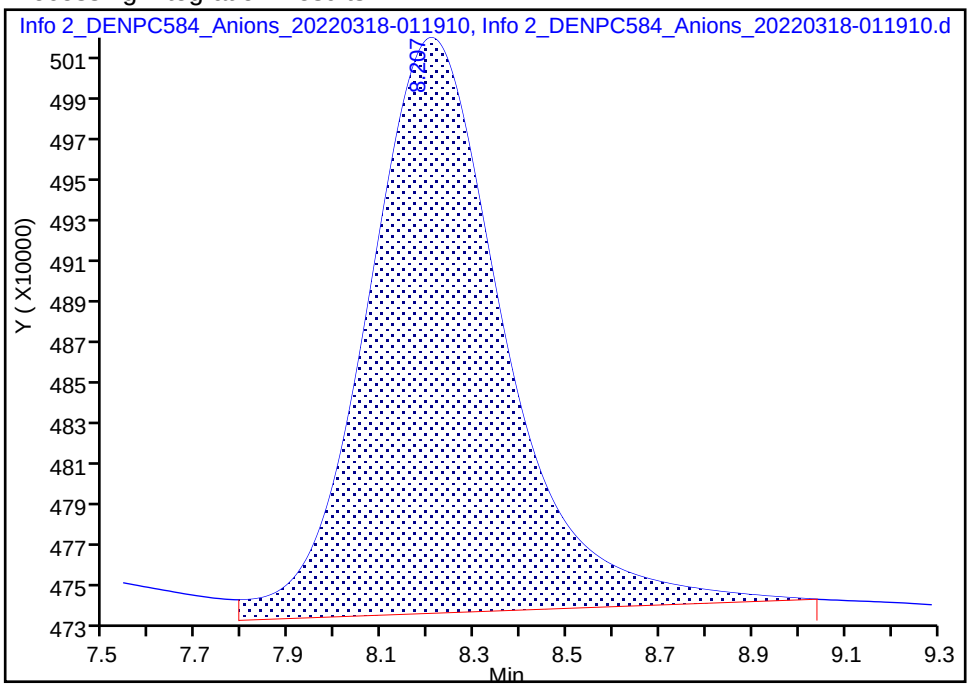
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

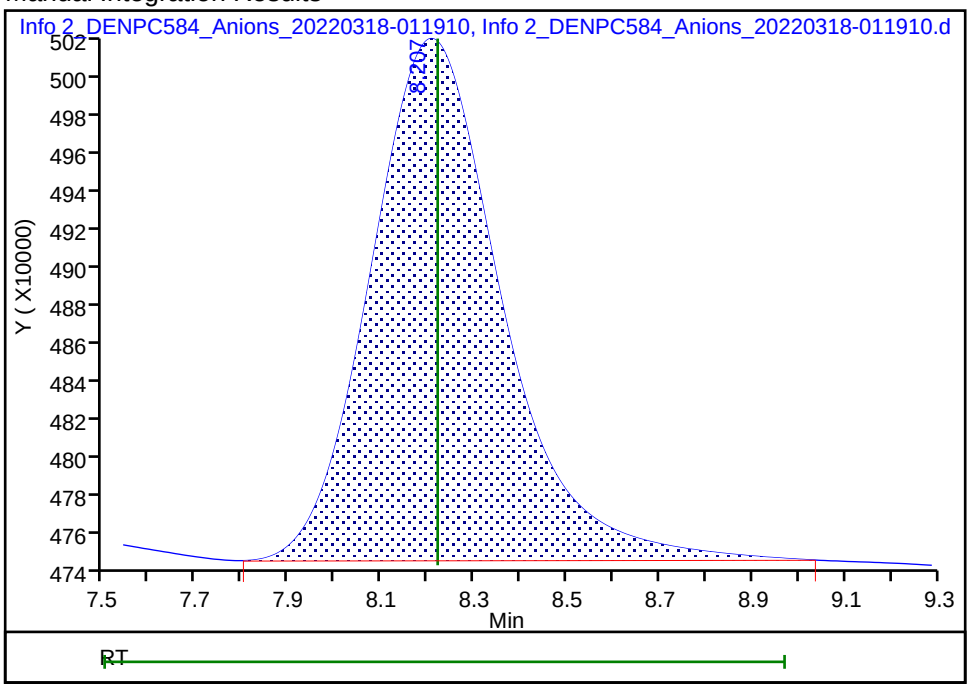
Processing Integration Results

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_20220318-013
Lims ID: 280-159190-F-16 MS
Client ID: NW062-8
Sample Type: MS
Inject. Date: 18-Mar-2022 01:19:00 ALS Bottle#: 0 Worklist Smp#: 43
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0109325-043
Misc. Info.: 280-0109325-043
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 13:08:48

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	133270112	1.00	4.95	M
2 Chloride	3.782	3.790	-0.008	873301932	10.0	61.7	
3 Nitrite as N	4.365	4.357	0.008	163110569	NC	NC	M
4 Bromide	5.393	5.370	0.023	30112536	1.00	4.92	M
5 Nitrate as N	6.045	6.020	0.025	188392719	NC	NC	
7 Orthophosphate as P	7.198	7.190	0.008	120533424	NC	NC	
6 Sulfate	8.120	8.220	-0.100	962638153	10.0	92.0	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

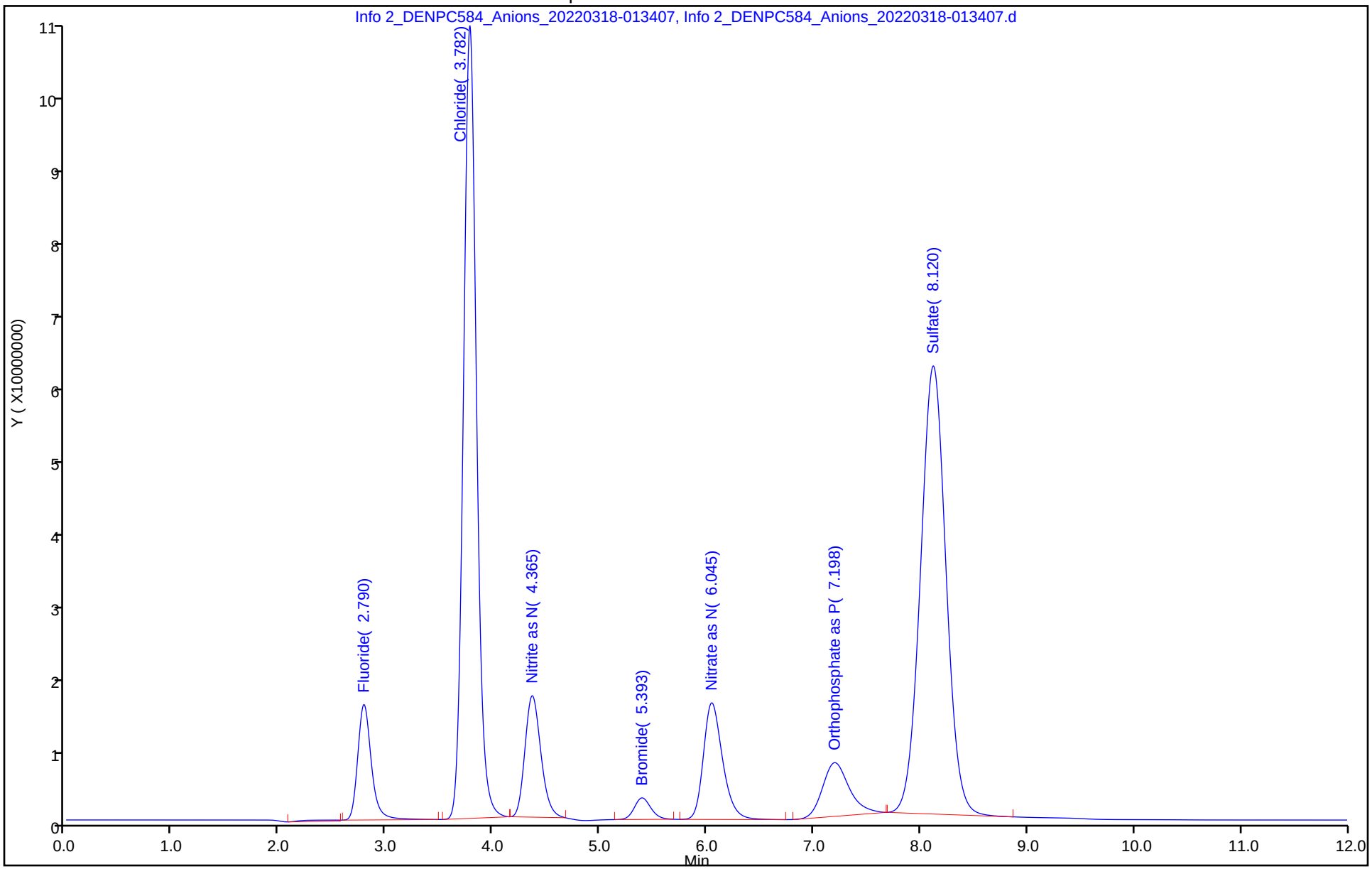
Reagents:

ICMS/MSD WEEK_00748 Amount Added: 0.10 Units: mL

Report Date: 18-Mar-2022 13:33:50 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_20220318-013407.d				
Injection Date:	18-Mar-2022 01:19:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159190-F-16 MS			Worklist Smp#:	43
Client ID:	NW062-8				
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

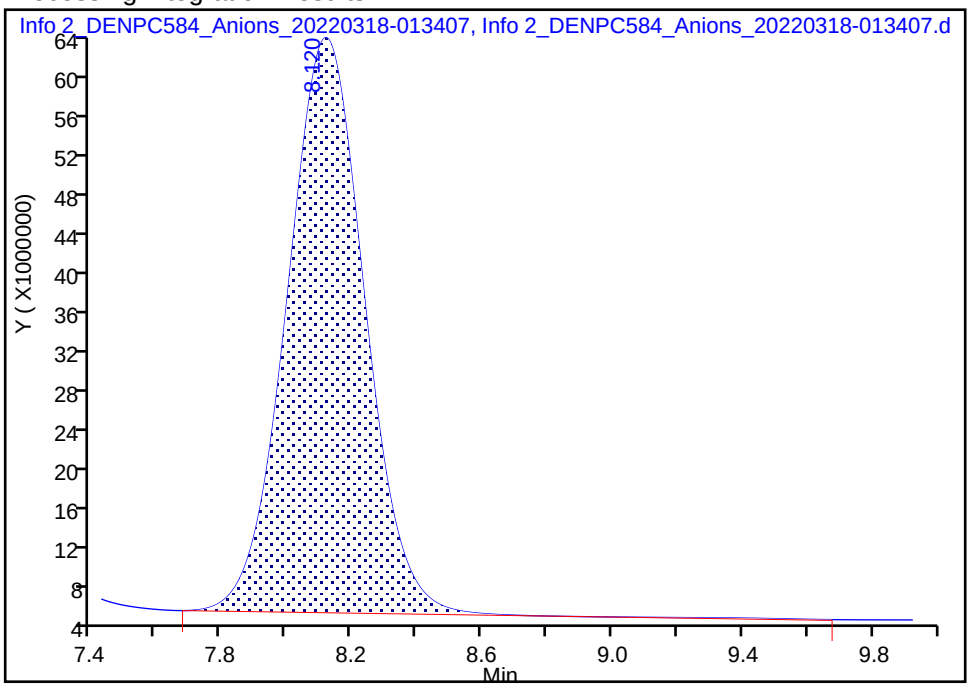
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-013				
Injection Date:	18-Mar-2022 01:19:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159190-F-16 MS				
Client ID:	NW062-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	43
Injection Vol:	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

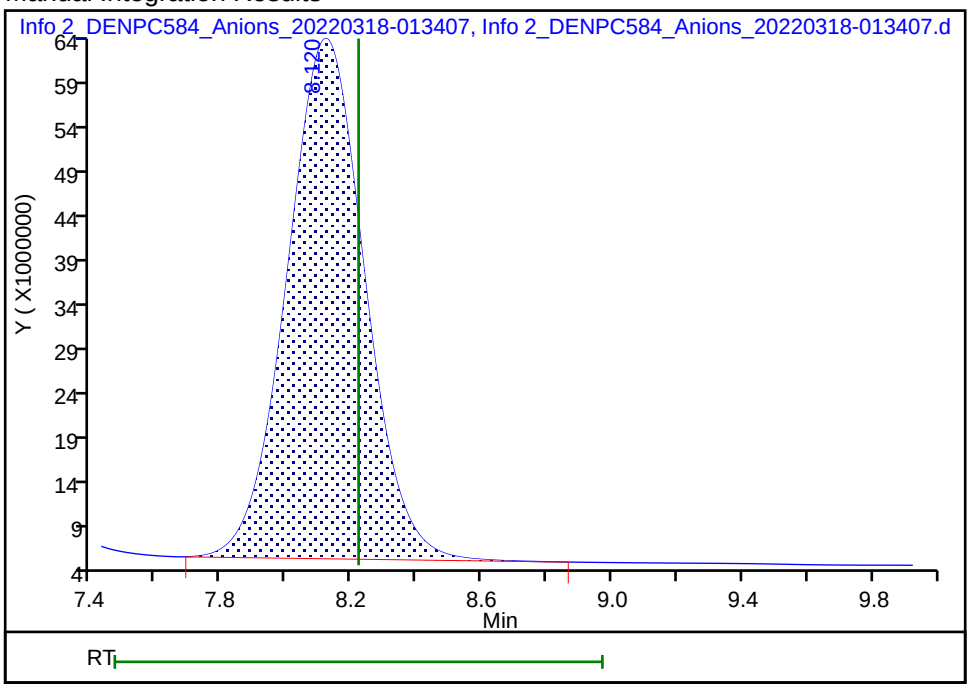
Processing Integration Results

RT: 8.12
Area: 965045840
Amount: 92.264599
Amount Units: ug/ml



Manual Integration Results

RT: 8.12
Area: 962638153
Amount: 92.031291
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:08:41
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_20220318-014
Lims ID: 280-159190-F-16 MSD
Client ID: NW062-8
Sample Type: MSD
Inject. Date: 18-Mar-2022 01:34:00 ALS Bottle#: 0 Worklist Smp#: 44
Injection Vol: 5.0 ul Dil. Factor: 5.0000
Sample Info: 280-0109325-044
Misc. Info.: 280-0109325-044
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 13:09:35

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	130787997	1.00	4.86	M
2 Chloride	3.780	3.790	-0.010	873382958	10.0	61.7	
3 Nitrite as N	4.365	4.357	0.008	164240670	NC	NC	M
4 Bromide	5.387	5.370	0.017	30203687	1.00	4.94	M
5 Nitrate as N	6.040	6.020	0.020	188659131	NC	NC	
7 Orthophosphate as P	7.192	7.190	0.002	119675509	NC	NC	
6 Sulfate	8.115	8.220	-0.105	956290754	10.0	91.4	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

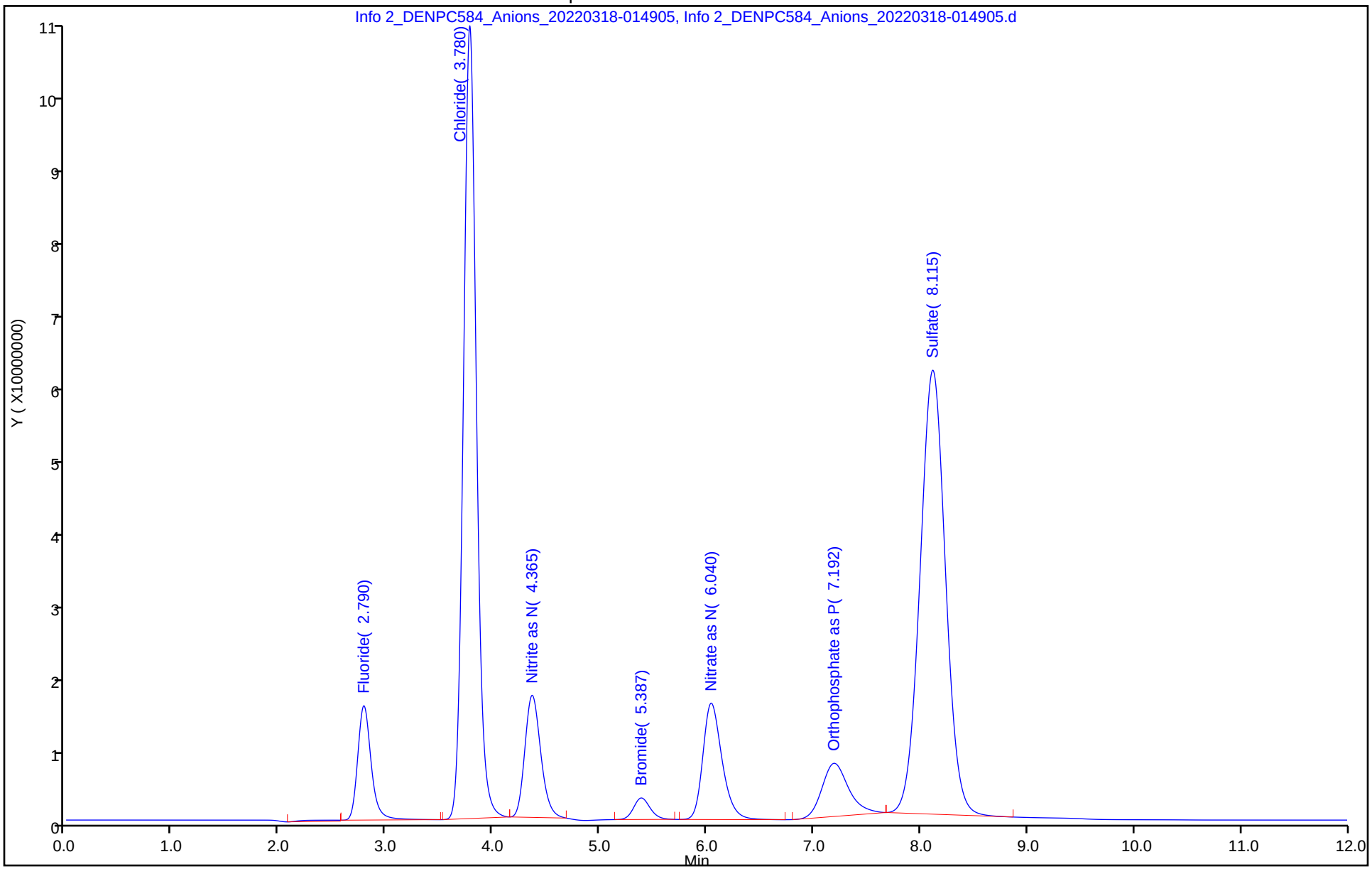
Reagents:

ICMS/MSD WEEK_00748 Amount Added: 0.10 Units: mL

Report Date: 18-Mar-2022 13:33:51 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_20220318-014905.d				
Injection Date:	18-Mar-2022 01:34:00	Instrument ID:	WC_IonChrom13	Operator ID:	wetchemd
Lims ID:	280-159190-F-16 MSD			Worklist Smp#:	44
Client ID:	NW062-8				
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

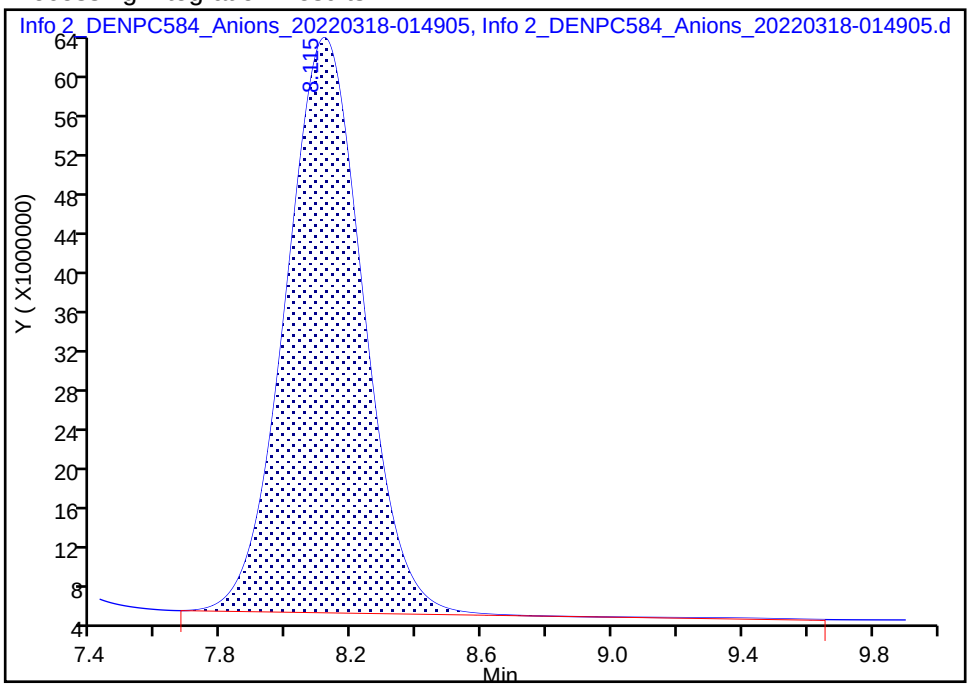
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-014				
Injection Date:	18-Mar-2022 01:34:00	Instrument ID:	WC_IonChrom13		
Lims ID:	280-159190-F-16 MSD				
Client ID:	NW062-8				
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	44
Injection Vol:	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

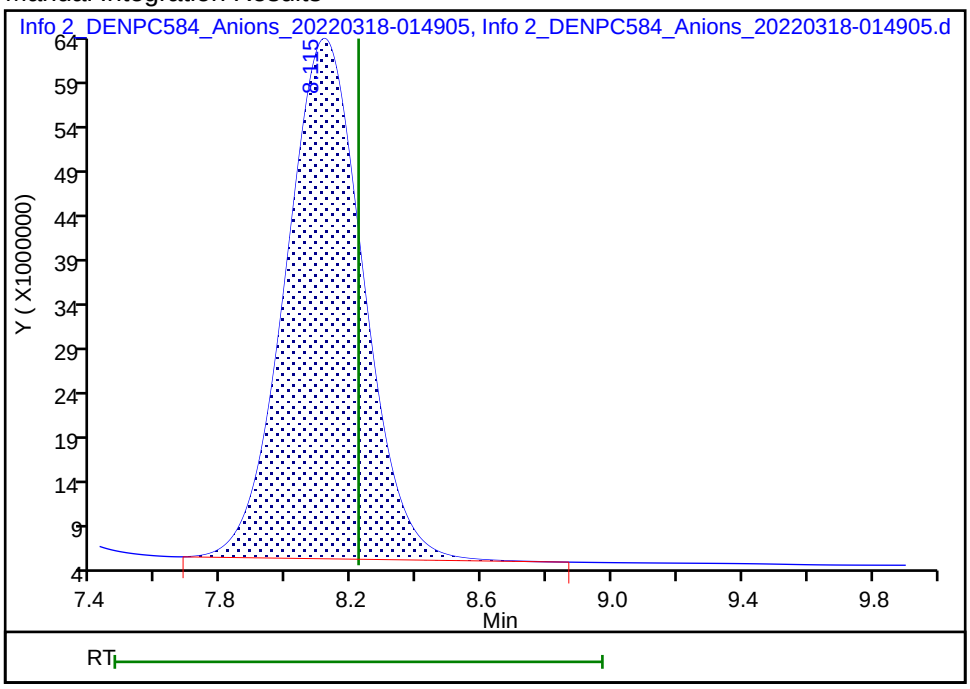
Processing Integration Results

RT: 8.12
Area: 959126264
Amount: 91.690984
Amount Units: ug/ml



Manual Integration Results

RT: 8.12
Area: 956290754
Amount: 91.416219
Amount Units: ug/ml



Reviewer: foxr, 18-Mar-2022 13:09:28
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_20220318-040
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

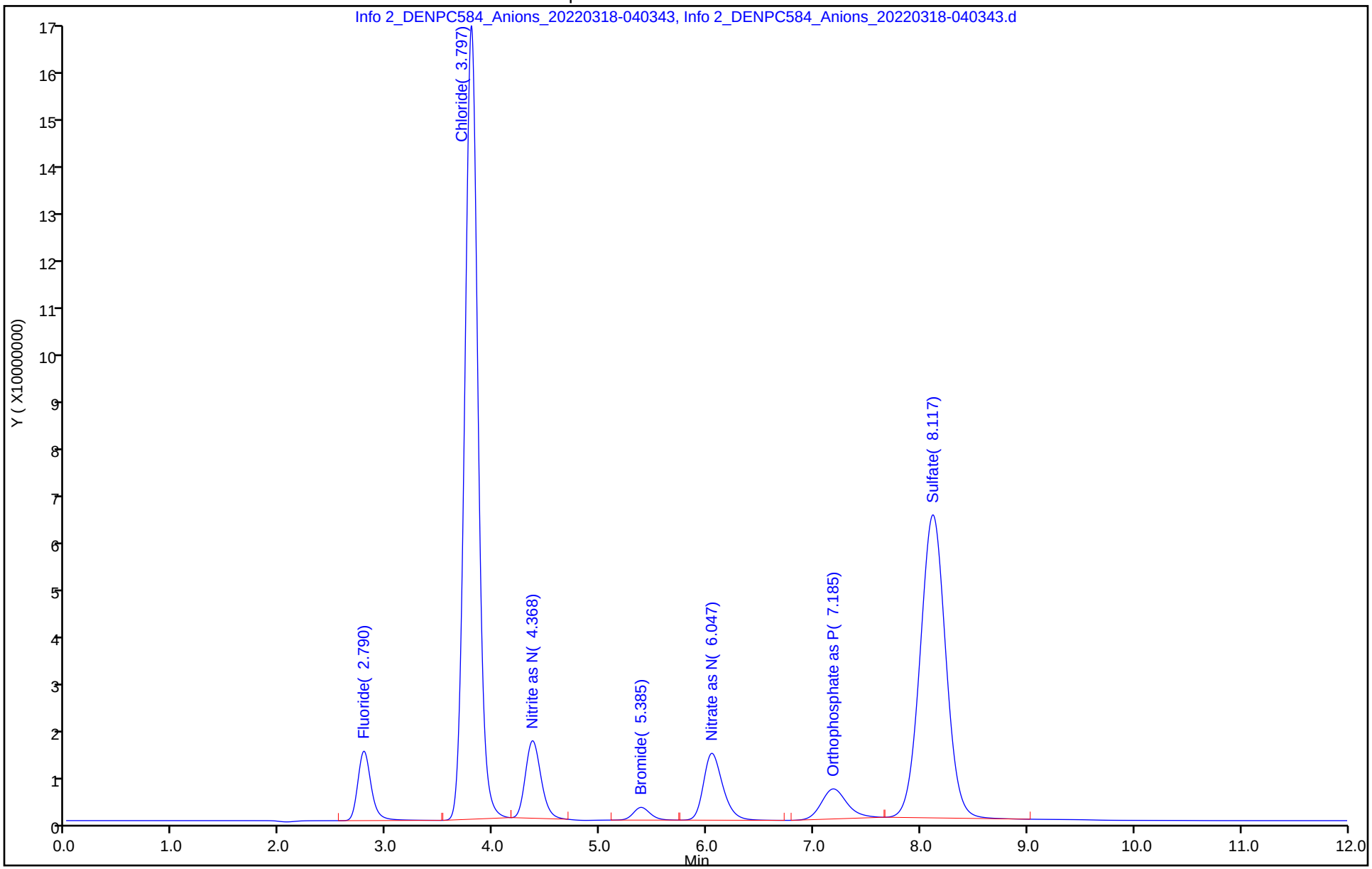
Reagents:

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

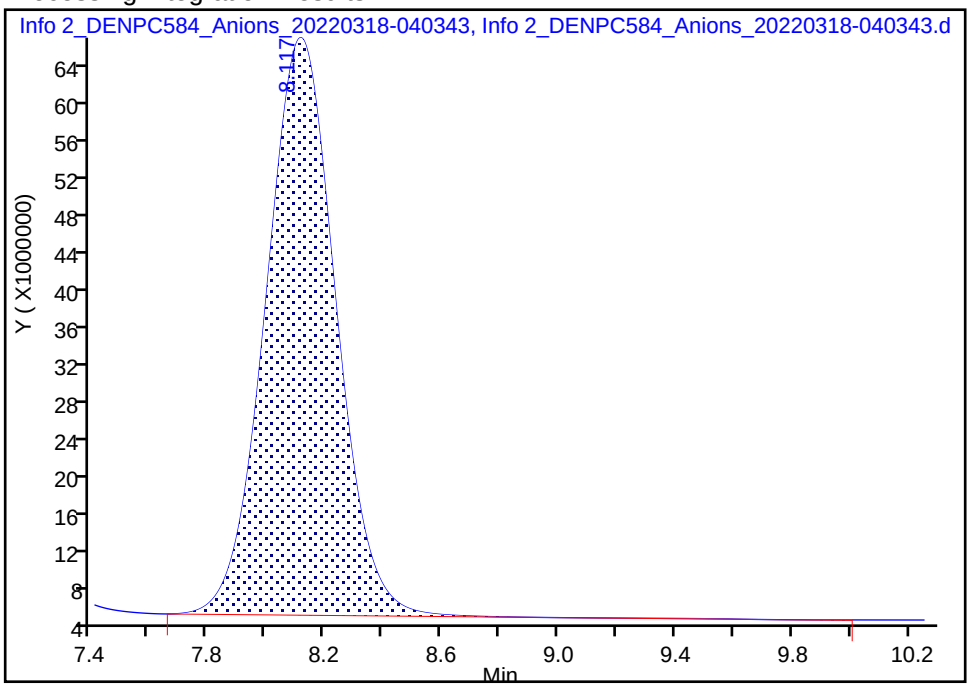
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom13\20220317-109325.b\Info 2_DENPC584_Anions_20220318-040				
Injection Date:	18-Mar-2022 03:48:00	Instrument ID:	WC_IonChrom13		
Lims ID:	ccv				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	53
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions-IC13	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

6 Sulfate, CAS: 14808-79-8

Signal: 1

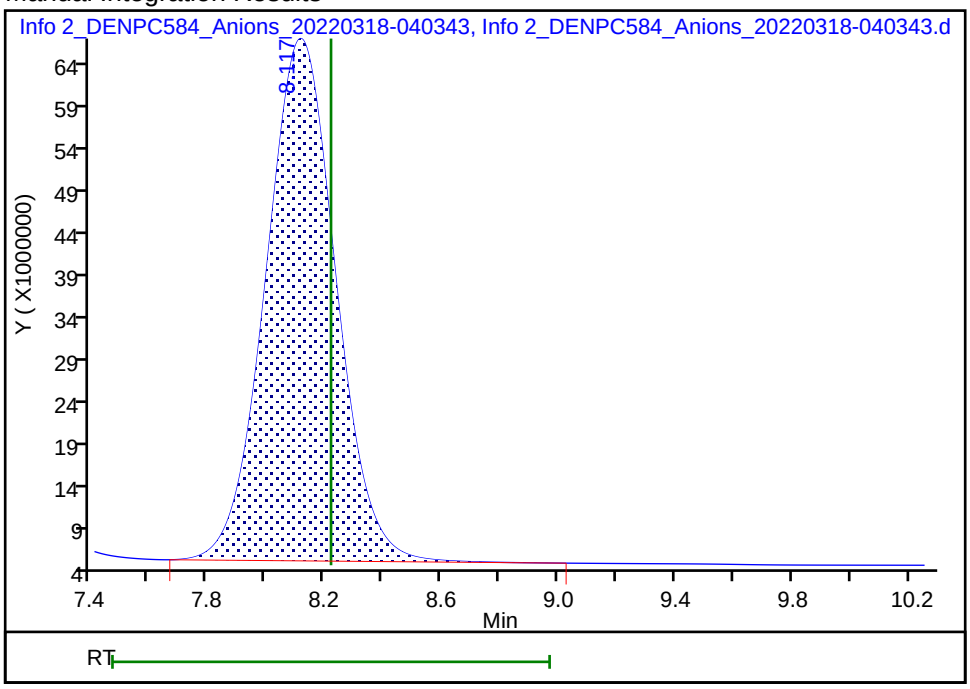
Processing Integration Results

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

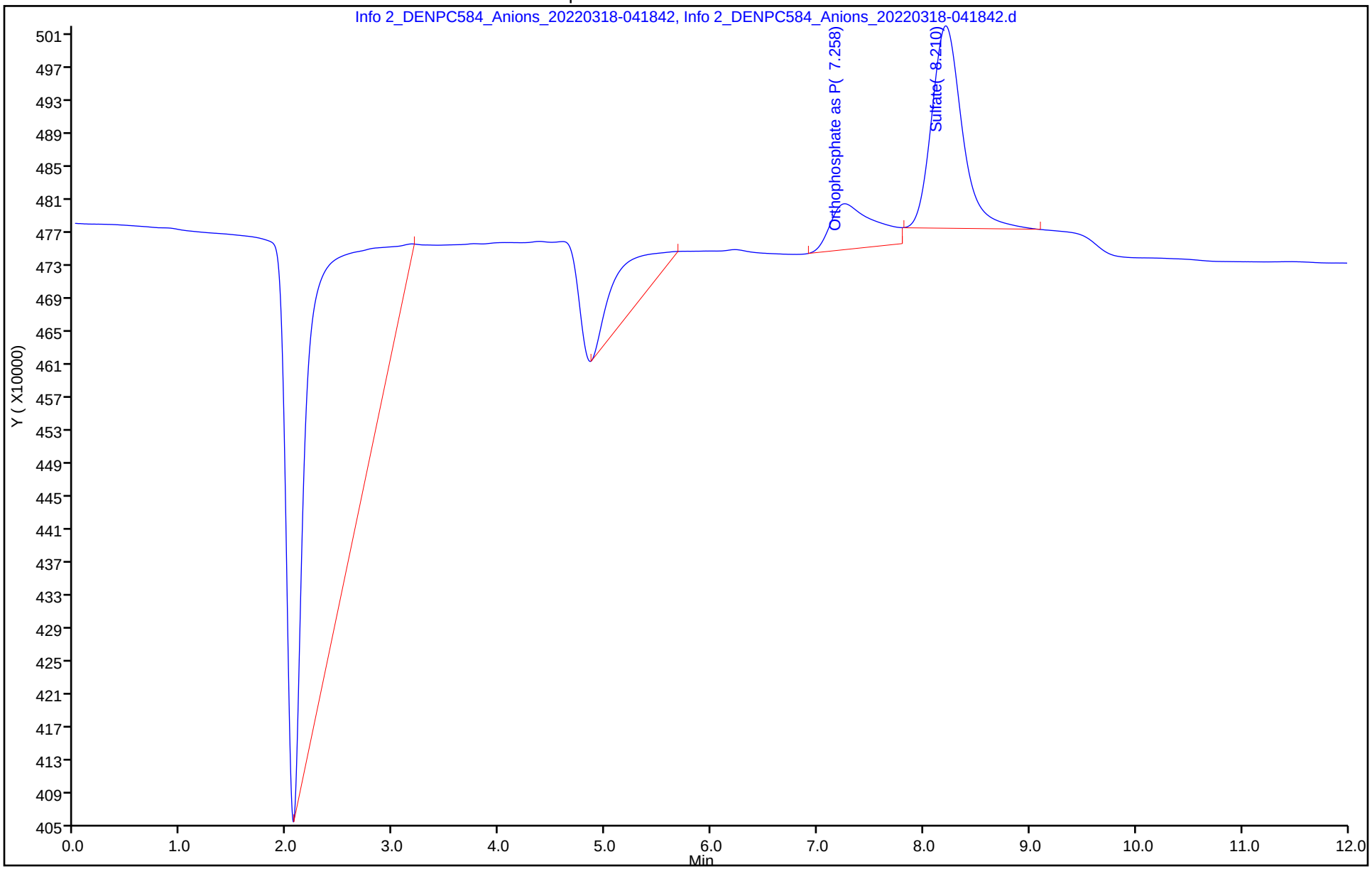
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

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

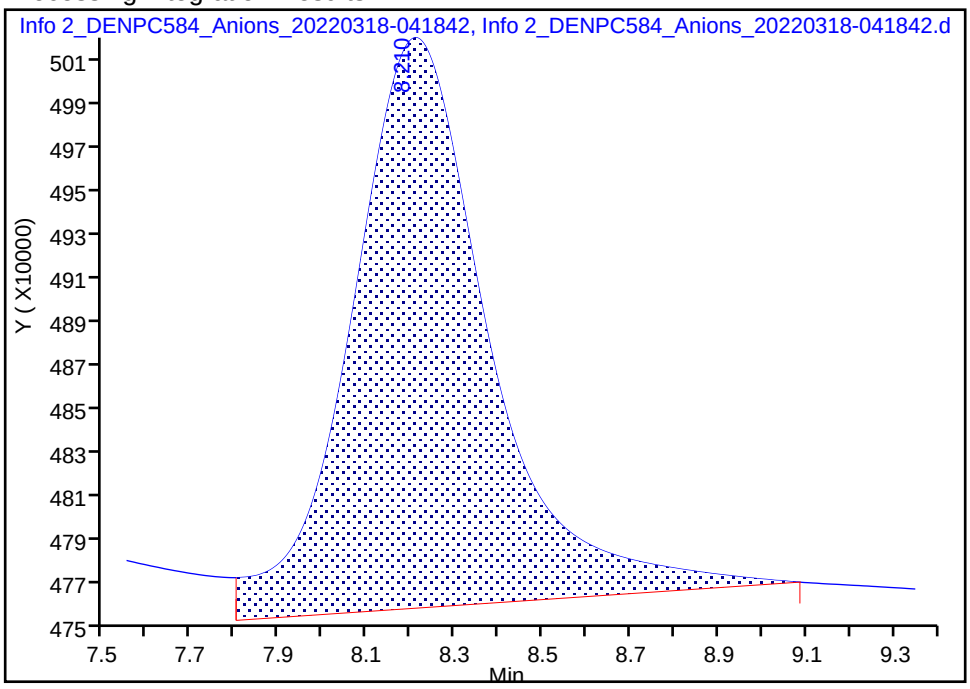
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

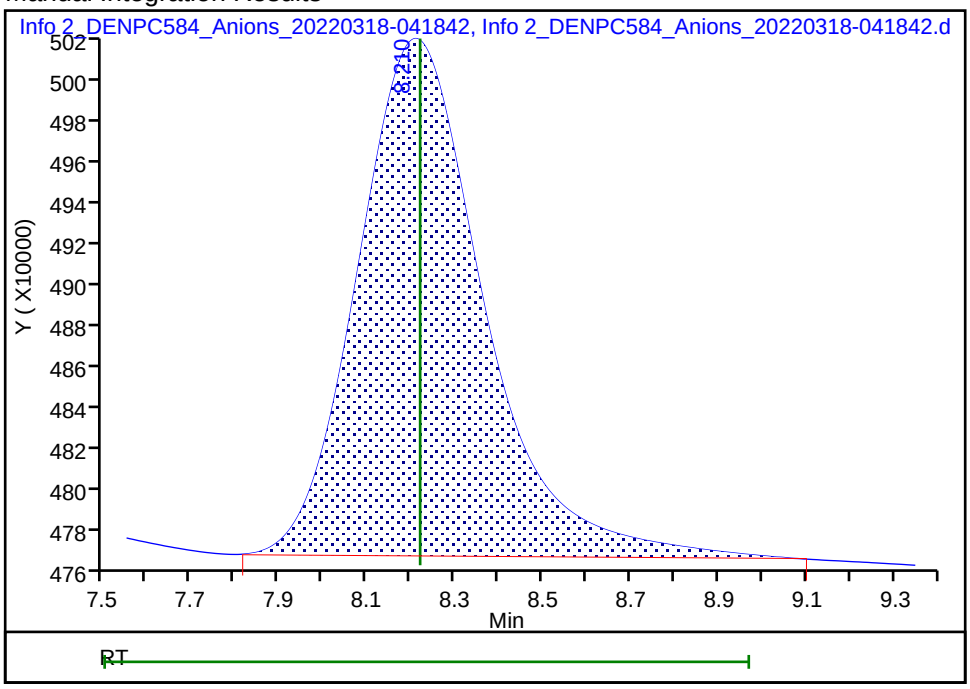
Processing Integration Results

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

	Type	Analysi	Sample Name	Sample I	ObjectID	Origin	Manual Dilution	Result
1	Unkno	NPOC	ICV		0A-103108-04335027-134899720C4E-0000	NPOC.met	1.000	NPOC:21.20m
2	Unkno	NPOC	ICB		0A-103108-04335027-134899720C4E-0001	NPOC.met	1.000	NPOC:0.02884
3	Unkno	NPOC	LCS		0A-103108-04335027-134899720C4E-0002	NPOC.met	1.000	NPOC:24.85m
4	Unkno	NPOC	MB		0A-103108-04335027-134899720C4E-0003	NPOC.met	1.000	NPOC:0.07001
5	Unkno	NPOC	TIC		0A-103108-04335027-134899720C4E-0004	NPOC.met	1.000	NPOC:0.1153
6	Unkno	NPOC	280-159225-b-1		0A-103108-04335027-134899720C4E-0005	NPOC.met	1.000	NPOC:0.2276
7	Unkno	NPOC	MS 280-159225-b-1		0A-103108-04335027-134899720C4E-0006	NPOC.met	1.000	NPOC:25.51m
8	Unkno	NPOC	MSD 280-159225-b-1		0A-103108-04335027-134899720C4E-0007	NPOC.met	1.000	NPOC:25.25m
9	Unkno	NPOC	280-159225-b-2		0A-103108-04335027-134899720C4E-0008	NPOC.met	1.000	NPOC:1.181m
10	Unkno	NPOC	280-159225-b-3		0A-103108-04335027-134899720C4E-0009	NPOC.met	1.000	NPOC:0.2255
11	Unkno	NPOC	280-159225-c-4		0A-103108-04335027-134899720C4E-000	NPOC.met	1.000	NPOC:0.3995
12	Unkno	NPOC	280-159225-b-5		0A-103108-04335027-134899720C4E-000	NPOC.met	1.000	NPOC:4.764m
13	Unkno	NPOC	280-159225-b-6		0A-103108-04335027-134899720C4E-000	NPOC.met	1.000	NPOC:0.2972
14	Unkno	NPOC	280-159225-b-7		0A-103108-04335027-134899720C4E-000	NPOC.met	1.000	NPOC:0.2585
15	Unkno	NPOC	CCV		0A-103108-04335027-134899720C4E-000	NPOC.met	1.000	NPOC:24.95m
16	Unkno	NPOC	CCB		0A-103108-04335027-134899720C4E-000F	NPOC.met	1.000	NPOC:0.05466
17	Unkno	NPOC	280-159223-j-1		0A-103108-04335027-134899720C4E-0010	NPOC.met	2.000	NPOC:68.73m
18	Unkno	NPOC	280-159223-g-3		0A-103108-04335027-134899720C4E-0011	NPOC.met	10.00	NPOC:150.4m
19	Unkno	NPOC	280-159275-c-2		0A-103108-04335027-134899720C4E-0012	NPOC.met	1.000	NPOC:0.9431
20	Unkno	NPOC	280-159275-c-3		0A-103108-04335027-134899720C4E-0013	NPOC.met	1.000	NPOC:11.39m
21	Unkno	NPOC	MS 280-159275-c-3		0A-103108-04335027-134899720C4E-0014	NPOC.met	1.000	NPOC:38.06m
22	Unkno	NPOC	MSD 280-159275-c-3		0A-103108-04335027-134899720C4E-0015	NPOC.met	1.000	NPOC:37.35m
23	Unkno	NPOC	280-159275-c-4		0A-103108-04335027-134899720C4E-0016	NPOC.met	1.000	NPOC:1.560m
24	Unkno	NPOC	280-159275-c-5		0A-103108-04335027-134899720C4E-0017	NPOC.met	1.000	NPOC:2.277m
25	Unkno	NPOC	280-159275-b-6		0A-103108-04335027-134899720C4E-0018	NPOC.met	1.000	NPOC:0.7779
26	Unkno	NPOC	280-159276-b-2		0A-103108-04335027-134899720C4E-0019	NPOC.met	1.000	NPOC:2.791m
27	Unkno	NPOC	CCV		0A-103108-04335027-134899720C4E-001	NPOC.met	1.000	NPOC:24.93m
28	Unkno	NPOC	CCB		0A-103108-04335027-134899720C4E-001	NPOC.met	1.000	NPOC:0.08327
29	Unkno	NPOC	280-159276-b-3		0A-103108-04335027-134899720C4E-001	NPOC.met	1.000	NPOC:0.6554
30	Unkno	NPOC	280-159276-b-4		0A-103108-04335027-134899720C4E-001	NPOC.met	1.000	NPOC:1.047m
31	Unkno	NPOC	280-159466-g-1		0A-103108-04335027-134899720C4E-001	NPOC.met	1.000	NPOC:5.254m
32	Unkno	NPOC	280-159466-g-2		0A-103108-04335027-134899720C4E-001F	NPOC.met	1.000	NPOC:5.660m
33	Unkno	NPOC	280-159466-h-3		0A-103108-04335027-134899720C4E-0020	NPOC.met	1.000	NPOC:6.220m
34	Unkno	NPOC	LCS		0A-103108-04335027-134899720C4E-0021	NPOC.met	1.000	NPOC:24.98m
35	Unkno	NPOC	MB		0A-103108-04335027-134899720C4E-0022	NPOC.met	1.000	NPOC:0.08517
36	Unkno	NPOC	TIC		0A-103108-04335027-134899720C4E-0023	NPOC.met	1.000	NPOC:0.1243
37	Unkno	NPOC	280-159149-b-1		0A-103108-04335027-134899720C4E-0024	NPOC.met	1.000	NPOC:11.54m
38	Unkno	NPOC	MS 280-159149-b-1		0A-103108-04335027-134899720C4E-0025	NPOC.met	1.000	NPOC:36.57m
39	Unkno	NPOC	CCV		0A-103108-04335027-134899720C4E-0026	NPOC.met	1.000	NPOC:26.18m
40	Unkno	NPOC	CCB		0A-103108-04335027-134899720C4E-0027	NPOC.met	1.000	NPOC:0.06701
41	Unkno	NPOC	MSD 280-159149-b-1		0A-103108-04335027-134899720C4E-0028	NPOC.met	1.000	NPOC:36.67m
42	Unkno	NPOC	280-159473-d-1		0A-103108-04335027-134899720C4E-0029	NPOC.met	1.000	NPOC:0.5652
43	Unkno	NPOC	280-159473-e-2		0A-103108-04335027-134899720C4E-002	NPOC.met	1.000	NPOC:0.6033
44	Unkno	NPOC	280-159473-e-3		0A-103108-04335027-134899720C4E-002	NPOC.met	1.000	NPOC:0.6340
45	Unkno	NPOC	280-159473-e-7		0A-103108-04335027-134899720C4E-002	NPOC.met	1.000	NPOC:0.4334
46	Unkno	NPOC	280-159242-b-1		0A-103108-04335027-134899720C4E-002	NPOC.met	500.0	NPOC:14815m
47	Unkno	NPOC	MS 280-159242-b-1		0A-103108-04335027-134899720C4E-002	NPOC.met	500.0	NPOC:27810m
48	Unkno	NPOC	MSD 280-159242-b-1		0A-103108-04335027-134899720C4E-002F	NPOC.met	500.0	NPOC:27547m
49	Unkno	NPOC	280-159242-b-2		0A-103108-04335027-134899720C4E-0030	NPOC.met	500.0	NPOC:1884mg
50	Unkno	NPOC	280-159242-b-3		0A-103108-04335027-134899720C4E-0031	NPOC.met	500.0	NPOC:5971mg
51	Unkno	NPOC	CCV		0A-103108-04335027-134899720C4E-0032	NPOC.met	1.000	NPOC:26.03m
52	Unkno	NPOC	CCB		0A-103108-04335027-134899720C4E-0033	NPOC.met	1.000	NPOC:0.06268
53	Unkno	NPOC	280-159221-c-6		0A-103108-04335027-134899720C4E-0034	NPOC.met	1.000	NPOC:0.8920

	N	Status	Date / Time	Vial
1		Completed	3/11/2022 5:12:59 PM	1
2		Completed	3/11/2022 5:27:33 PM	2
3		Completed	3/11/2022 5:46:18 PM	3
4		Completed	3/11/2022 6:00:50 PM	4
5		Completed	3/11/2022 6:17:33 PM	5
6		Completed	3/11/2022 6:32:11 PM	6
7		Completed	3/11/2022 6:46:51 PM	7
8		Completed	3/11/2022 7:01:30 PM	8
9		Completed	3/11/2022 7:18:12 PM	9
10		Completed	3/11/2022 7:32:51 PM	10
11		Completed	3/11/2022 7:47:30 PM	11
12		Completed	3/11/2022 8:06:15 PM	12
13		Completed	3/11/2022 8:20:48 PM	13
14		Completed	3/11/2022 8:35:28 PM	14
15		Completed	3/11/2022 8:50:08 PM	15
16		Completed	3/11/2022 9:04:46 PM	16
17		Completed	3/11/2022 9:23:31 PM	17
18		Completed	3/11/2022 9:42:10 PM	18
19		Completed	3/11/2022 9:56:43 PM	19
20		Completed	3/11/2022 10:15:28 P	20
21		Completed	3/11/2022 10:34:07 P	21
22		Completed	3/11/2022 10:52:54 P	22
23		Completed	3/11/2022 11:07:27 P	23
24		Completed	3/11/2022 11:26:12 P	24
25		Completed	3/11/2022 11:40:45 P	25
26		Completed	3/11/2022 11:57:27 P	26
27		Completed	3/12/2022 12:16:11 A	27
28		Completed	3/12/2022 12:30:44 A	28
29		Completed	3/12/2022 12:45:24 A	29
30		Completed	3/12/2022 1:00:03 AM	30
31		Completed	3/12/2022 1:18:49 AM	31
32		Completed	3/12/2022 1:37:48 AM	32
33		Completed	3/12/2022 1:56:28 AM	33
34		Completed	3/12/2022 2:11:02 AM	34
35		Completed	3/12/2022 2:25:42 AM	35
36		Completed	3/12/2022 2:40:22 AM	36
37		Completed	3/12/2022 2:59:08 AM	37
38		Completed	3/12/2022 3:13:51 AM	38
39		Completed	3/12/2022 3:32:37 AM	39
40		Completed	3/12/2022 3:47:11 AM	40
41		Completed	3/12/2022 4:01:51 AM	41
42		Completed	3/12/2022 4:16:31 AM	42
43		Completed	3/12/2022 4:31:11 AM	43
44		Completed	3/12/2022 4:45:51 AM	44
45		Completed	3/12/2022 5:02:34 AM	45
46		Completed	3/12/2022 5:17:13 AM	46
47		Completed	3/12/2022 5:34:00 AM	47
48		Completed	3/12/2022 5:48:43 AM	48
49		Completed	3/12/2022 6:03:23 AM	49
50		Completed	3/12/2022 6:20:06 AM	50
51		Completed	3/12/2022 6:38:51 AM	51
52		Completed	3/12/2022 6:53:25 AM	52
53		Completed	3/12/2022 7:10:08 AM	53

	Type	Analysi	Sample Name	Sample I	ObjectID	Origin	Manual Dilution	Result
54	Unkno	NPOC	MS 280-159221-c-6		0A-103108-04335027-134899720C4E-0035	NPOC.met	1.000	NPOC:26.33m
55	Unkno	NPOC	MSD 280-159221-c-6		0A-103108-04335027-134899720C4E-0036	NPOC.met	1.000	NPOC:26.26m
56	Unkno	NPOC	lcs 280-568437/1-a		0A-103108-04335027-134899720C4E-0037	NPOC.met	1.000	NPOC:25.69m
57	Unkno	NPOC	mb 280-568437/2-a		0A-103108-04335027-134899720C4E-0038	NPOC.met	1.000	NPOC:0.1227
58	Unkno	NPOC	280-159190-d-1-a		0A-103108-04335027-134899720C4E-0039	NPOC.met	1.000	NPOC:2.918m
59	Unkno	NPOC	280-159190-d-1-b ms		0A-103108-04335027-134899720C4E-003	NPOC.met	1.000	NPOC:29.92m
60	Unkno	NPOC	280-159190-d-1-c msd		0A-103108-04335027-134899720C4E-003	NPOC.met	1.000	NPOC:28.92m
61	Unkno	NPOC	280-159190-d-2-a		0A-103108-04335027-134899720C4E-003	NPOC.met	1.000	NPOC:2.013m
62	Unkno	NPOC	280-159190-d-3-a		0A-103108-04335027-134899720C4E-003	NPOC.met	1.000	NPOC:5.951m
63	Unkno	NPOC	CCV		0A-103108-04335027-134899720C4E-003	NPOC.met	1.000	NPOC:25.00m
64	Unkno	NPOC	CCB		0A-103108-04335027-134899720C4E-003F	NPOC.met	1.000	NPOC:0.04308
65	Unkno	NPOC	280-159190-d-4-a		0A-103108-04335027-134899720C4E-0040	NPOC.met	1.000	NPOC:8.398m
66	Unkno	NPOC	280-159190-d-5-a		0A-103108-04335027-134899720C4E-0041	NPOC.met	1.000	NPOC:5.097m
67	Unkno	NPOC	280-159190-d-6-a		0A-103108-04335027-134899720C4E-0042	NPOC.met	1.000	NPOC:8.436m
68	Unkno	NPOC	280-159190-d-7-a		0A-103108-04335027-134899720C4E-0043	NPOC.met	1.000	NPOC:10.24m
69	Unkno	NPOC	280-159190-d-8-a		0A-103108-04335027-134899720C4E-0044	NPOC.met	1.000	NPOC:2.258m
70	Unkno	NPOC	280-159190-d-9-a		0A-103108-04335027-134899720C4E-0045	NPOC.met	1.000	NPOC:2.164m
71	Unkno	NPOC	280-159190-d-10-a		0A-103108-04335027-134899720C4E-0046	NPOC.met	1.000	NPOC:3.297m
72	Unkno	NPOC	280-159190-d-11-a		0A-103108-04335027-134899720C4E-0047	NPOC.met	1.000	NPOC:3.181m
73	Unkno	NPOC	280-159190-d-12-a		0A-103108-04335027-134899720C4E-0048	NPOC.met	1.000	NPOC:4.289m
74	Unkno	NPOC	280-159190-d-13-a		0A-103108-04335027-134899720C4E-0049	NPOC.met	1.000	NPOC:18.47m
75	Unkno	NPOC	CCV		0A-103108-04335027-134899720C4E-004	NPOC.met	1.000	NPOC:25.22m
76	Unkno	NPOC	CCB		0A-103108-04335027-134899720C4E-004	NPOC.met	1.000	NPOC:0.07787
77	Unkno	NPOC	280-159190-d-14-a		0A-103108-04335027-134899720C4E-004	NPOC.met	1.000	NPOC:7.804m
78	Unkno	NPOC	280-159190-d-15-a		0A-103108-04335027-134899720C4E-004	NPOC.met	1.000	NPOC:8.536m
79	Unkno	NPOC	280-159190-d-16-a		0A-103108-04335027-134899720C4E-004	NPOC.met	1.000	NPOC:2.856m
80	Unkno	NPOC	280-159190-d-16-b ms		0A-103108-04335027-134899720C4E-004F	NPOC.met	1.000	NPOC:29.20m
81	Unkno	NPOC	280-159190-d-16-c ms		0A-103108-04335027-134899720C4E-0050	NPOC.met	1.000	NPOC:28.55m
82	Unkno	NPOC	CCV		0A-103108-04335027-134899720C4E-0051	NPOC.met	1.000	NPOC:25.84m
83	Unkno	NPOC	CCB		0A-103108-04335027-134899720C4E-0052	NPOC.met	1.000	NPOC:0.08656

	N	Status	Date / Time	Vial
54		Completed	3/12/2022 7:24:47 AM	54
55		Completed	3/12/2022 7:43:34 AM	55
56		Completed	3/12/2022 8:02:14 AM	56
57		Completed	3/12/2022 8:18:51 AM	57
58		Completed	3/12/2022 8:33:31 AM	58
59		Completed	3/12/2022 8:52:18 AM	59
60		Completed	3/12/2022 9:06:52 AM	60
61		Completed	3/12/2022 9:25:39 AM	61
62		Completed	3/12/2022 9:44:19 AM	62
63		Completed	3/12/2022 9:59:03 AM	63
64		Completed	3/12/2022 10:17:50 A	64
65		Completed	3/12/2022 10:32:24 A	65
66		Completed	3/12/2022 10:47:05 A	66
67		Completed	3/12/2022 11:05:52 A	67
68		Completed	3/12/2022 11:20:26 A	68
69		Completed	3/12/2022 11:35:07 A	69
70		Completed	3/12/2022 11:53:54 A	70
71		Completed	3/12/2022 12:08:28 P	71
72		Completed	3/12/2022 12:23:09 P	72
73		Completed	3/12/2022 12:41:57 P	73
74		Completed	3/12/2022 1:00:38 PM	74
75		Completed	3/12/2022 1:15:13 PM	75
76		Completed	3/12/2022 1:29:55 PM	76
77		Completed	3/12/2022 1:48:43 PM	77
78		Completed	3/12/2022 2:07:24 PM	78
79		Completed	3/12/2022 2:21:59 PM	79
80		Completed	3/12/2022 2:40:53 PM	80
81		Completed	3/12/2022 2:55:28 PM	81
82		Completed	3/12/2022 3:14:16 PM	82
83		Completed	3/12/2022 3:28:51 PM	83

TOC-V Cal Curve Information
C:¥TOC3201¥CalCurves¥TOC3.2021_12_07_11_32_20.cal

Date of Creation 12:36:09 PM 12/7/2021
User
System TOC-V cpn 3

Cal. Curve

Sample Name: CAL 110716
Sample ID: Untitled
Object ID 0A-103108-04335027-13466071B919-0000
Cal. Curve: TOC3.2021_12_07_11_32_20.cal
Status Completed
Comment:

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.6248	50uL	1	*******		12/7/2021 11:40:11 A
2	0.5787	50uL	1	*******		12/7/2021 11:42:14 A

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 0.6018
SD Area 0.03260
CV Area 5.42%
Vial 1

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	2.583	50uL	1	*******		12/7/2021 11:50:58 A
2	2.619	50uL	1	*******		12/7/2021 11:53:01 A

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 2.601
SD Area 0.02546
CV Area 0.98%
Vial 2

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	11.75	50uL	1	*******		12/7/2021 12:01:46 P
2	11.60	50uL	1	*******		12/7/2021 12:03:48 P

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 11.68
SD Area 0.1061
CV Area 0.91%
Vial 3

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	23.27	50uL	1	*******		12/7/2021 12:12:33 P
2	23.01	50uL	1	*******		12/7/2021 12:14:36 P

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 23.14
SD Area 0.1838
CV Area 0.79%
Vial 4

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	57.10	50uL	1	*******		12/7/2021 12:23:19 P
2	56.62	50uL	1	*******		12/7/2021 12:25:22 P

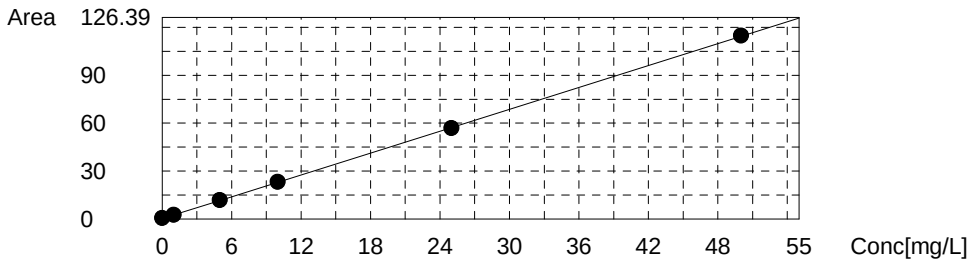
Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 56.86
SD Area 0.3394
CV Area 0.60%
Vial 5

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	115.7	50uL	1	*******		12/7/2021 12:34:07 P
2	114.1	50uL	1	*******		12/7/2021 12:36:09 P

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 114.9
SD Area 1.131
CV Area 0.98%
Vial 6

Slope: 2.286
Intercept 0.2877
r^2 0.9999
r 1.0000
Zero Shift No



Instr.Information

System TOC-V cpn 3
Instrument Options TOC/ASI/
Catalyst Regular Sensitivity

Sample

Sample Name: ICV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

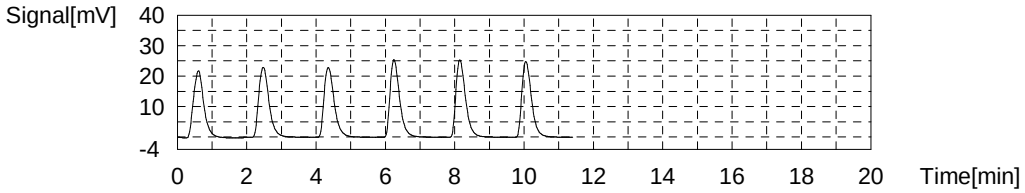
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:21.20mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	46.24	20.10mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:02:45 PM
2	47.80	20.78mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:04:48 PM
3	47.03	20.44mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:06:51 PM
4	49.28	21.43mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:08:54 PM
5	49.48	21.52mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:10:56 PM
6	48.49	21.08mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:12:59 PM

Mean Area 48.76
Mean Conc. 21.20mg/L



Sample

Sample Name: ICB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

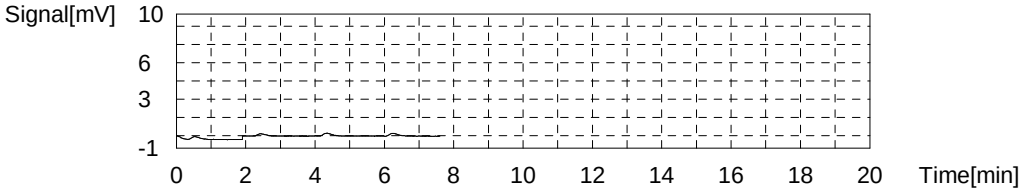
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.02884mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3513	0.02781mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:21:24 PM
2	0.2962	0.00371mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:23:27 PM
3	0.4008	0.04946mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:25:30 PM
4	0.3664	0.03441mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:27:33 PM

Mean Area 0.3537
Mean Conc. 0.02884mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

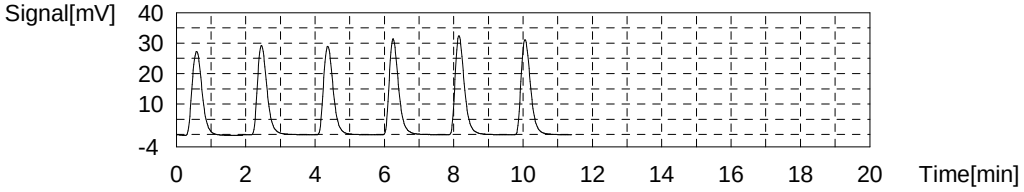
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.85mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.36	24.53mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:36:03 PM
2	56.39	24.54mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:38:06 PM
3	56.49	24.58mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:40:09 PM
4	59.18	25.76mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:42:12 PM
5	60.41	26.30mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:44:15 PM
6	59.64	25.96mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:46:18 PM

Mean Area 57.11
Mean Conc. 24.85mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

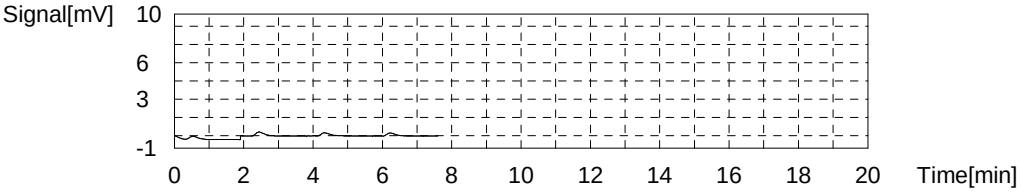
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.07001mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3914	0.04535mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:54:42 PM
2	0.5516	0.1154mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:56:45 PM
3	0.4244	0.05978mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 5:58:48 PM
4	0.4238	0.05952mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:00:50 PM

Mean Area 0.4478
Mean Conc. 0.07001mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

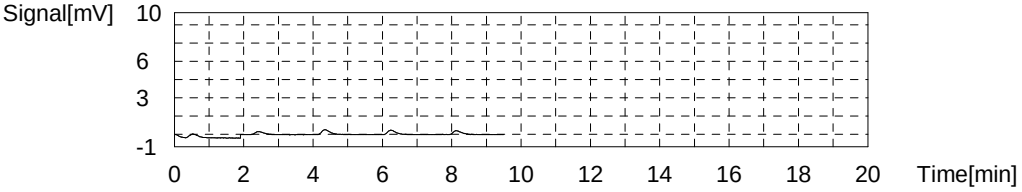
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1153mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4565	0.07382mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:09:21 PM
2	0.3945	0.04670mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:11:24 PM
3	0.6310	0.1501mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:13:27 PM
4	0.5990	0.1361mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:15:30 PM
5	0.5191	0.1012mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:17:33 PM

Mean Area 0.5514
Mean Conc. 0.1153mg/L



Sample

Sample Name: 280-159225-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

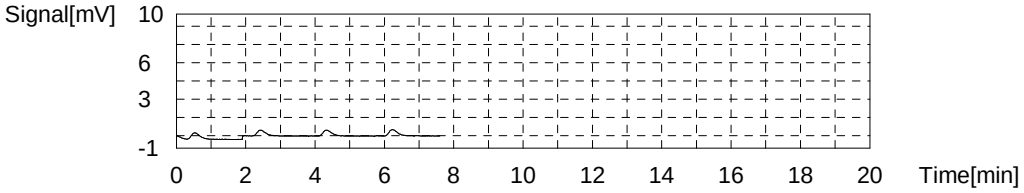
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2276mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8289	0.2367mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:26:02 PM
2	0.7874	0.2186mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:28:05 PM
3	0.7560	0.2048mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:30:08 PM
4	0.8596	0.2501mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:32:11 PM

Mean Area 0.8080
Mean Conc. 0.2276mg/L



Sample

Sample Name: MS 280-159225-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

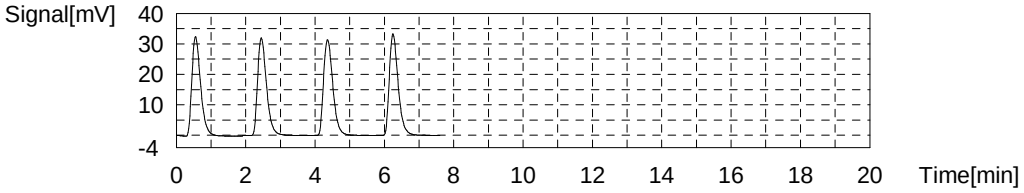
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.51mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	57.90	25.20mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:40:42 PM
2	57.72	25.12mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:42:45 PM
3	59.08	25.72mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:44:48 PM
4	59.74	26.00mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:46:51 PM

Mean Area 58.61
Mean Conc. 25.51mg/L



Sample

Sample Name: MSD 280-159225-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

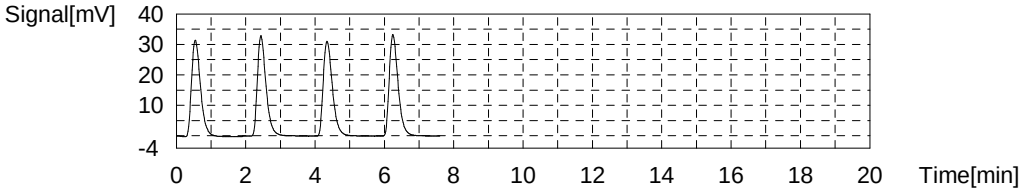
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.25mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	57.46	25.01mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:55:21 PM
2	57.32	24.95mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:57:24 PM
3	57.62	25.08mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 6:59:27 PM
4	59.67	25.97mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:01:30 PM

Mean Area 58.02
Mean Conc. 25.25mg/L



Sample

Sample Name: 280-159225-b-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

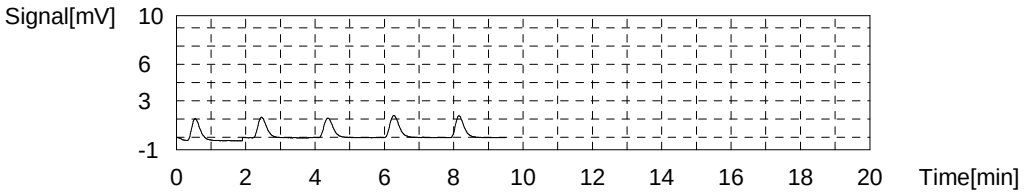
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.181mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.030	1.199mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:10:01 PM
2	2.921	1.152mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:12:04 PM
3	2.908	1.146mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:14:07 PM
4	3.385	1.355mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:16:09 PM
5	3.092	1.227mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:18:12 PM

Mean Area 2.988
Mean Conc. 1.181mg/L



Sample

Sample Name: 280-159225-b-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

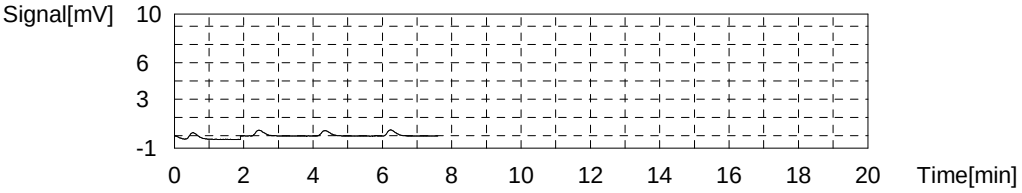
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2255mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8609	0.2507mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:26:42 PM
2	0.7771	0.2140mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:28:45 PM
3	0.7608	0.2069mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:30:48 PM
4	0.8142	0.2303mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:32:51 PM

Mean Area 0.8033
Mean Conc. 0.2255mg/L



Sample

Sample Name: 280-159225-c-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

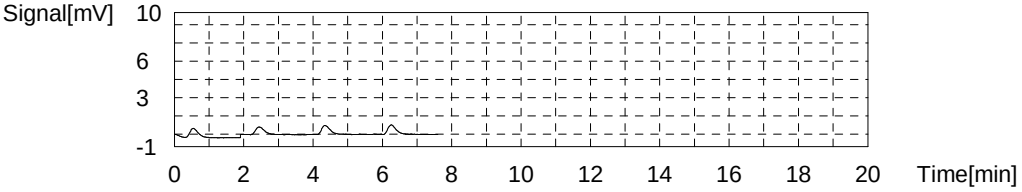
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3995mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.192	0.3955mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:41:21 PM
2	1.086	0.3492mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:43:24 PM
3	1.245	0.4187mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:45:27 PM
4	1.281	0.4344mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:47:30 PM

Mean Area 1.201
Mean Conc. 0.3995mg/L



Sample

Sample Name: 280-159225-b-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

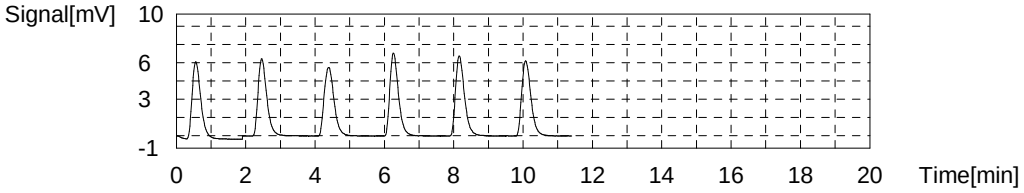
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.764mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.10	4.729mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:56:01 PM
2	11.12	4.738mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 7:58:04 PM
3	11.10	4.729mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:00:07 PM
4	11.83	5.048mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:02:10 PM
5	11.82	5.044mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:04:12 PM
6	11.40	4.860mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:06:15 PM

Mean Area 11.18
Mean Conc. 4.764mg/L



Sample

Sample Name: 280-159225-b-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

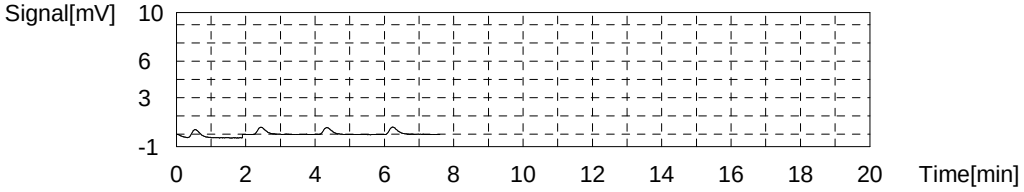
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2972mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9923	0.3082mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:14:40 PM
2	0.9568	0.2926mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:16:43 PM
3	0.9081	0.2713mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:18:46 PM
4	1.012	0.3168mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:20:48 PM

Mean Area 0.9673
Mean Conc. 0.2972mg/L



Sample

Sample Name: 280-159225-b-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

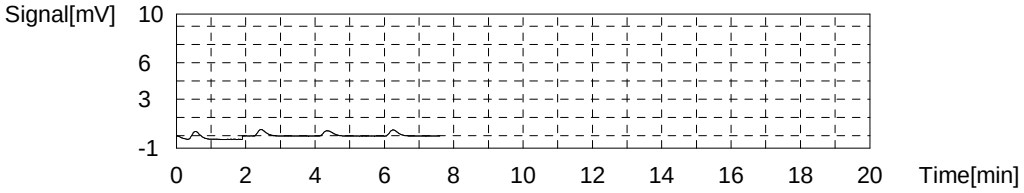
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2585mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.013	0.3172mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:29:20 PM
2	0.8337	0.2388mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:31:23 PM
3	0.8175	0.2317mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:33:26 PM
4	0.8506	0.2462mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:35:28 PM

Mean Area 0.8787
Mean Conc. 0.2585mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

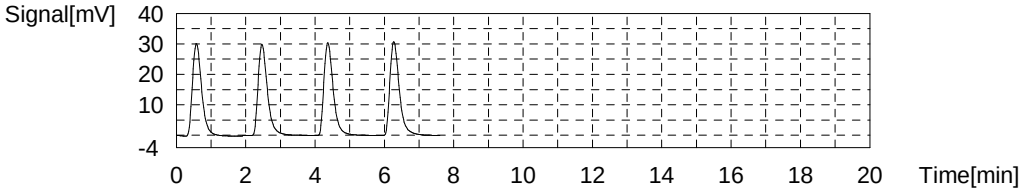
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.95mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	57.00	24.81mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:43:59 PM
2	56.28	24.49mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:46:02 PM
3	57.21	24.90mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:48:05 PM
4	58.86	25.62mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:50:08 PM

Mean Area 57.34
Mean Conc. 24.95mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

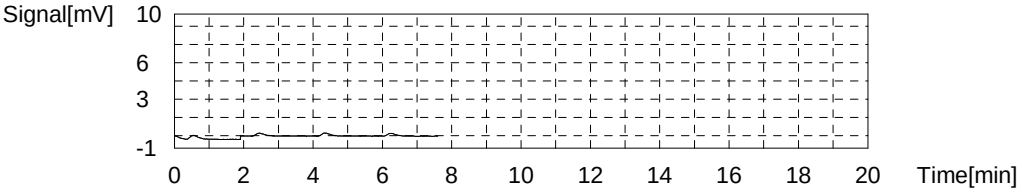
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.05466mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4704	0.07990mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 8:58:38 PM
2	0.3886	0.04412mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:00:41 PM
3	0.4222	0.05882mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:02:44 PM
4	0.3696	0.03581mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:04:46 PM

Mean Area 0.4127
Mean Conc. 0.05466mg/L



Sample

Sample Name: 280-159223-j-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

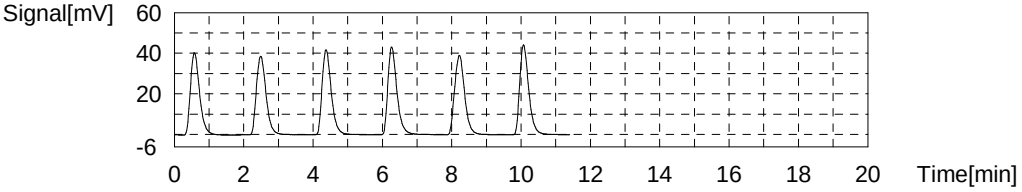
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:68.73mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.39	65.70mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:13:17 PM
2	75.00	65.36mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:15:20 PM
3	77.21	67.29mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:17:23 PM
4	79.00	68.86mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:19:26 PM
5	78.91	68.78mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:21:29 PM
6	80.32	70.01mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:23:31 PM

Mean Area 78.86
Mean Conc. 68.73mg/L



Sample

Sample Name: 280-159223-g-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

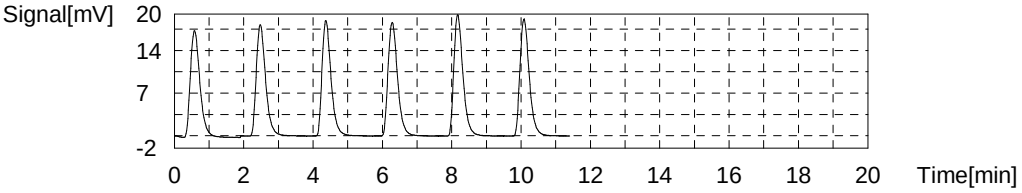
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:150.4mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.97	147.3mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:31:56 PM
2	34.38	149.1mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:33:59 PM
3	34.48	149.6mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:36:02 PM
4	35.89	155.7mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:38:04 PM
5	36.64	159.0mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:40:07 PM
6	36.31	157.6mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:42:10 PM

Mean Area 34.68
Mean Conc. 150.4mg/L



Sample

Sample Name: 280-159275-c-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

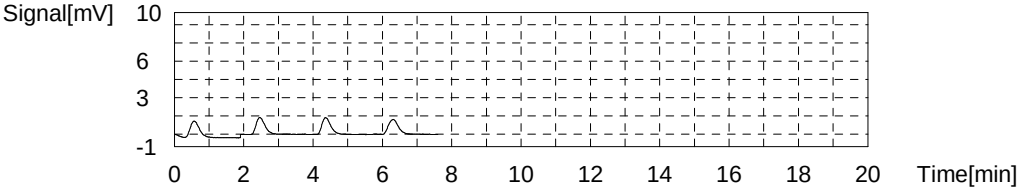
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.9431mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.460	0.9501mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:50:35 PM
2	2.479	0.9584mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:52:38 PM
3	2.447	0.9444mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:54:41 PM
4	2.390	0.9195mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 9:56:43 PM

Mean Area 2.444
Mean Conc. 0.9431mg/L



Sample

Sample Name: 280-159275-c-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

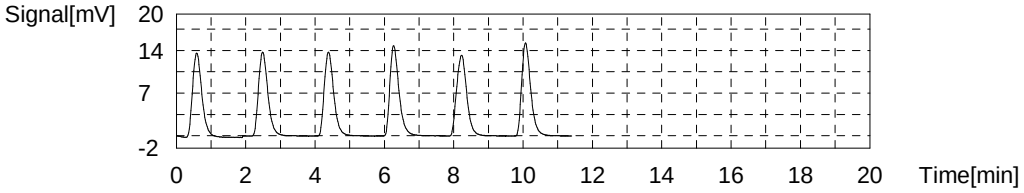
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.39mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	25.98	11.24mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 10:05:14 PM
2	26.00	11.25mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 10:07:17 PM
3	26.16	11.32mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 10:09:20 PM
4	27.32	11.82mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 10:11:22 PM
5	27.18	11.76mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 10:13:25 PM
6	27.90	12.08mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 10:15:28 PM

Mean Area 26.33
Mean Conc. 11.39mg/L



Sample

Sample Name: MS 280-159275-c-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

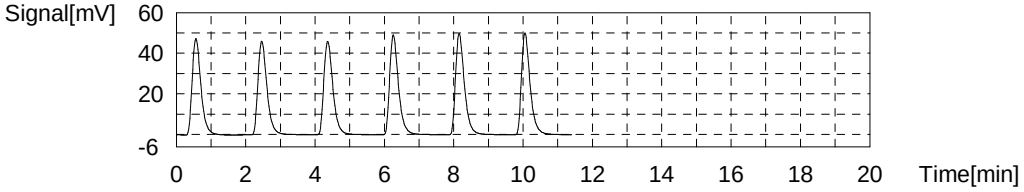
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:38.06mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	84.86	36.99mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 10:23:53 PM
2	83.56	36.42mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 10:25:56 PM
3	84.24	36.72mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 10:27:59 PM
4	87.68	38.22mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 10:30:02 PM
5	88.99	38.80mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 10:32:04 PM
6	87.72	38.24mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 10:34:07 PM

Mean Area 87.31
Mean Conc. 38.06mg/L



Sample

Sample Name: MSD 280-159275-c-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

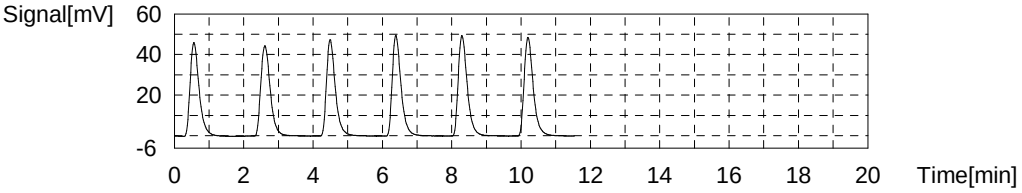
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:37.35mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	84.94	37.03mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 10:42:40 PM
2	84.67	36.91mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 10:44:43 PM
3	84.72	36.93mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 10:46:46 PM
4	88.40	38.54mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 10:48:48 PM
5	89.87	39.18mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 10:50:51 PM
6	89.62	39.07mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 10:52:54 PM

Mean Area 85.68
Mean Conc. 37.35mg/L



Sample

Sample Name: 280-159275-c-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

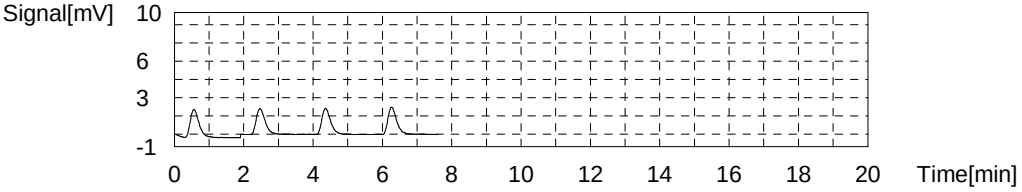
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.560mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.979	1.615mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 11:01:19 PM
2	3.810	1.541mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 11:03:22 PM
3	3.746	1.513mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 11:05:25 PM
4	3.881	1.572mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 11:07:27 PM

Mean Area 3.854
Mean Conc. 1.560mg/L



Sample

Sample Name: 280-159275-c-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

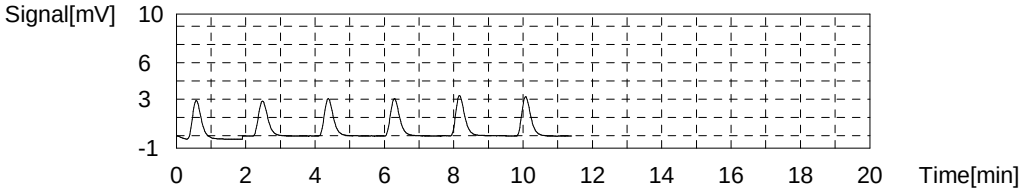
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.277mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.458	2.261mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 11:15:58 PM
2	5.394	2.233mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 11:18:01 PM
3	5.460	2.262mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 11:20:04 PM
4	5.661	2.350mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 11:22:06 PM
5	5.768	2.397mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 11:24:09 PM
6	5.723	2.377mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 11:26:12 PM

Mean Area 5.493
Mean Conc. 2.277mg/L



Sample

Sample Name: 280-159275-b-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

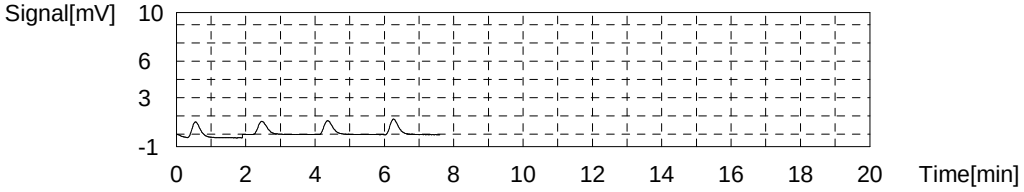
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7779mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.114	0.7988mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 11:34:37 PM
2	1.966	0.7341mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 11:36:40 PM
3	2.032	0.7629mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 11:38:43 PM
4	2.153	0.8159mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 11:40:45 PM

Mean Area 2.066
Mean Conc. 0.7779mg/L



Sample

Sample Name: 280-159276-b-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

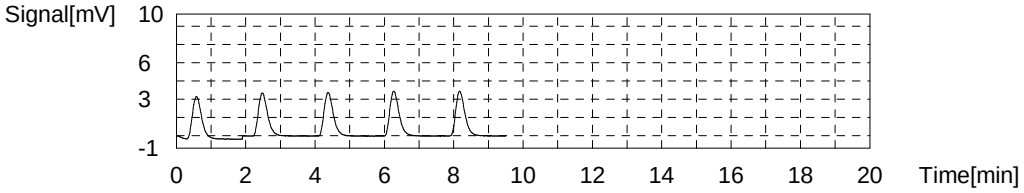
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.791mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.288	2.624mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/11/2022 11:49:16 PM
2	6.539	2.734mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 11:51:19 PM
3	6.613	2.767mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 11:53:22 PM
4	6.819	2.857mg/L	50uL	1		TOC3.2021_12_07_11_55:24 PM	3/11/2022 11:55:24 PM
5	6.706	2.807mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/11/2022 11:57:27 PM

Mean Area 6.669
Mean Conc. 2.791mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

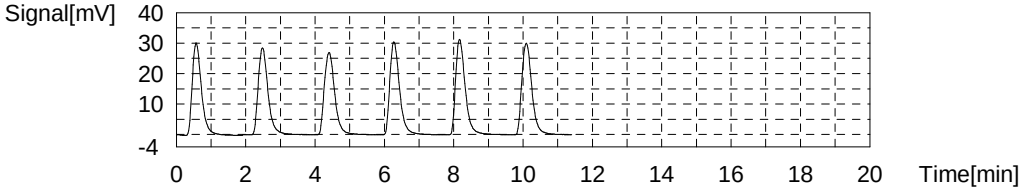
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.93mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.69	24.67mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:05:57 AM
2	56.23	24.47mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:08:00 AM
3	56.34	24.52mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:10:02 AM
4	59.84	26.05mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:12:05 AM
5	60.30	26.25mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:14:08 AM
6	60.92	26.52mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:16:11 AM

Mean Area 57.28
Mean Conc. 24.93mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

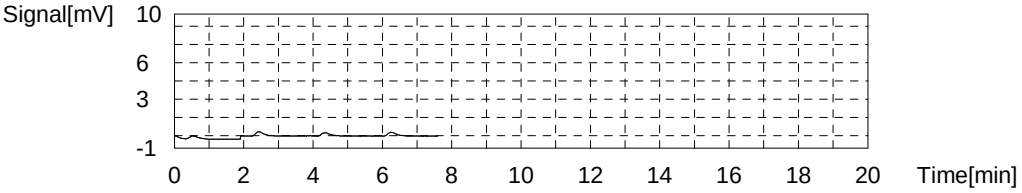
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.08327mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3959	0.04731mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:24:36 AM
2	0.5658	0.1216mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:26:39 AM
3	0.4505	0.07120mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:28:41 AM
4	0.5002	0.09293mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:30:44 AM

Mean Area 0.4781
Mean Conc. 0.08327mg/L



Sample

Sample Name: 280-159276-b-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

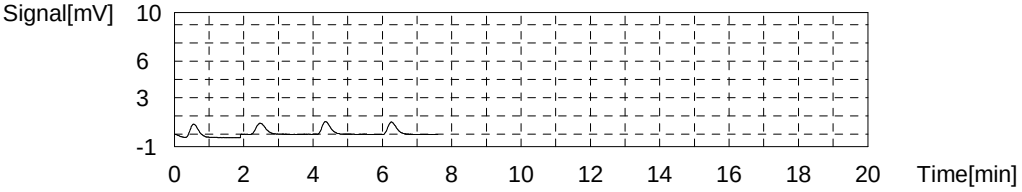
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6554mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.825	0.6724mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:39:16 AM
2	1.755	0.6418mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:41:19 AM
3	1.768	0.6475mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:43:22 AM
4	1.797	0.6601mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:45:24 AM

Mean Area 1.786
Mean Conc. 0.6554mg/L



Sample

Sample Name: 280-159276-b-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

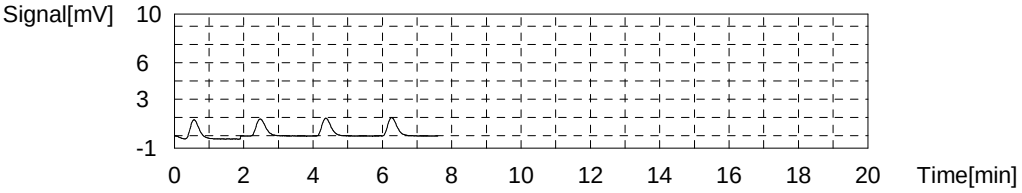
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.047mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.736	1.071mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:53:55 AM
2	2.593	1.008mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:55:58 AM
3	2.671	1.042mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:58:01 AM
4	2.729	1.068mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:00:03 AM

Mean Area 2.682
Mean Conc. 1.047mg/L



Sample

Sample Name: 280-159466-g-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

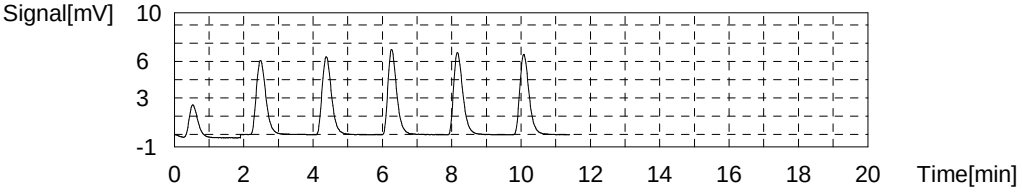
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.254mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.578	1.877mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:08:35 AM
2	11.66	4.974mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:10:38 AM
3	12.12	5.175mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:12:41 AM
4	12.35	5.276mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:14:43 AM
5	12.47	5.328mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:16:46 AM
6	12.26	5.237mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:18:49 AM

Mean Area 12.30
Mean Conc. 5.254mg/L



Sample

Sample Name: 280-159466-g-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

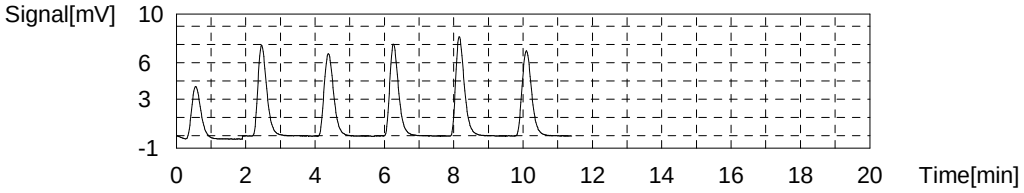
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.660mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.000	3.373mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:27:34 AM
2	13.18	5.639mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:29:37 AM
3	12.97	5.547mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:31:39 AM
4	13.32	5.700mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:33:42 AM
5	14.29	6.124mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:35:45 AM
6	13.44	5.753mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:37:48 AM

Mean Area 13.23
Mean Conc. 5.660mg/L



Sample

Sample Name: 280-159466-h-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

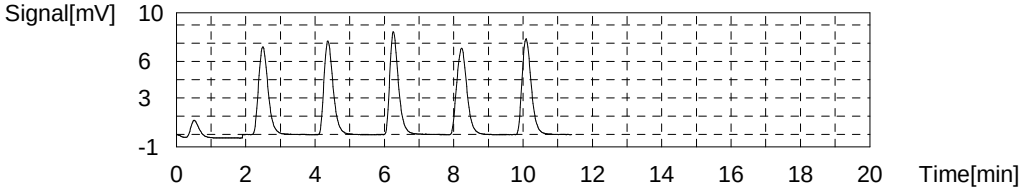
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.220mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.324	0.8906mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:46:14 AM
2	13.74	5.884mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:48:17 AM
3	14.18	6.076mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:50:19 AM
4	14.60	6.260mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:52:22 AM
5	14.68	6.295mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:54:25 AM
6	14.57	6.247mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:56:28 AM

Mean Area 14.51
Mean Conc. 6.220mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

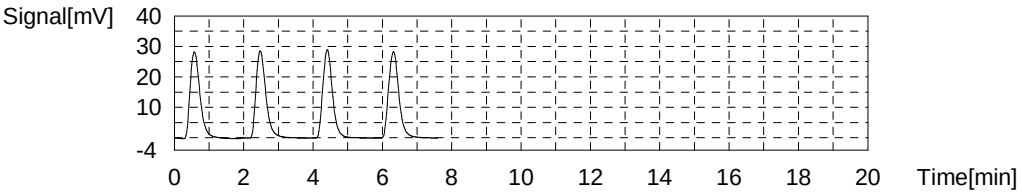
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.98mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	57.34	24.95mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:04:54 AM
2	56.78	24.71mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:06:57 AM
3	56.48	24.58mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:09:00 AM
4	58.99	25.68mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:11:02 AM

Mean Area 57.40
Mean Conc. 24.98mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

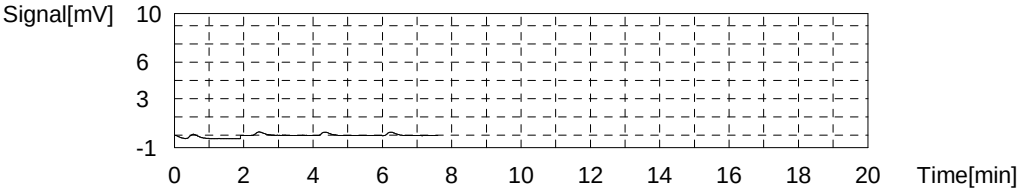
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.08517mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5587	0.1185mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:19:34 AM
2	0.4666	0.07824mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:21:37 AM
3	0.4606	0.07561mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:23:40 AM
4	0.4439	0.06831mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:25:42 AM

Mean Area 0.4824
Mean Conc. 0.08517mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

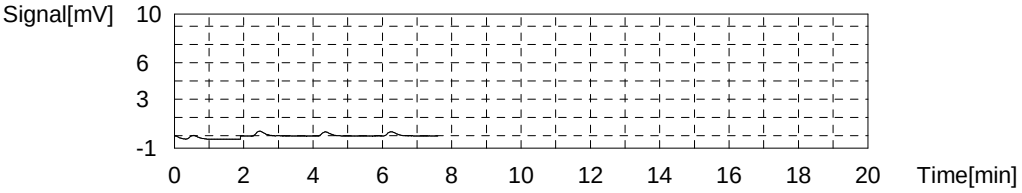
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1243mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4731	0.08108mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:34:14 AM
2	0.6357	0.1522mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:36:17 AM
3	0.5780	0.1270mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:38:20 AM
4	0.6006	0.1368mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:40:22 AM

Mean Area 0.5718
Mean Conc. 0.1243mg/L



Sample

Sample Name: 280-159149-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

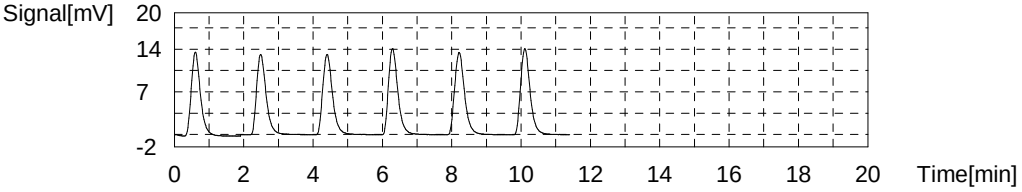
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.54mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	25.41	10.99mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:48:54 AM
2	25.00	10.81mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:50:57 AM
3	25.88	11.19mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:52:59 AM
4	26.82	11.61mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:55:02 AM
5	26.97	11.67mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:57:05 AM
6	27.01	11.69mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:59:08 AM

Mean Area 26.67
Mean Conc. 11.54mg/L



Sample

Sample Name: MS 280-159149-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

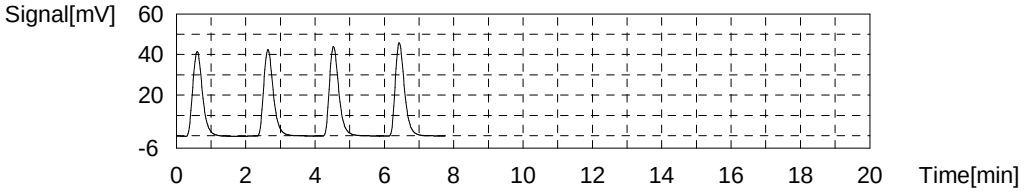
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:36.57mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	82.92	36.14mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:07:43 AM
2	82.71	36.05mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:09:46 AM
3	83.91	36.58mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:11:48 AM
4	86.03	37.50mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:13:51 AM

Mean Area 83.89
Mean Conc. 36.57mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

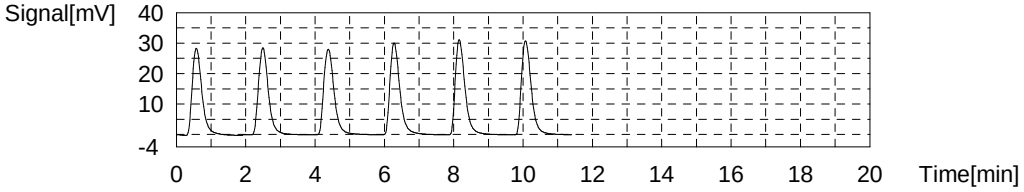
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.18mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.50	24.59mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:22:23 AM
2	56.58	24.62mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:24:26 AM
3	58.22	25.34mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:26:29 AM
4	60.37	26.28mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:28:31 AM
5	60.94	26.53mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:30:34 AM
6	61.05	26.58mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:32:37 AM

Mean Area 60.15
Mean Conc. 26.18mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

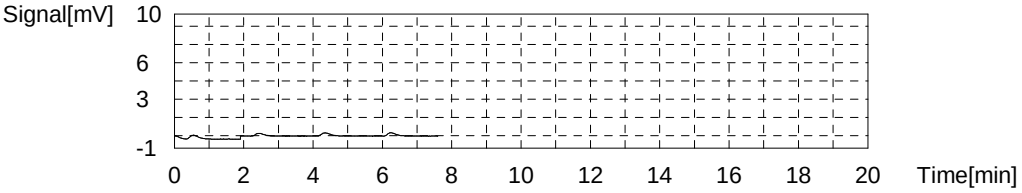
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06701mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4914	0.08908mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:41:03 AM
2	0.3825	0.04145mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:43:06 AM
3	0.4358	0.06477mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:45:09 AM
4	0.4540	0.07273mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:47:11 AM

Mean Area 0.4409
Mean Conc. 0.06701mg/L



Sample

Sample Name: MSD 280-159149-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

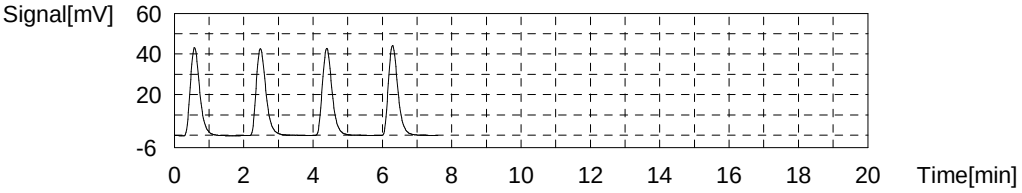
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:36.67mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	83.26	36.29mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:55:43 AM
2	83.80	36.53mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:57:46 AM
3	83.95	36.59mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:59:48 AM
4	85.48	37.26mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 4:01:51 AM

Mean Area 84.12
Mean Conc. 36.67mg/L



Sample

Sample Name: 280-159473-d-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

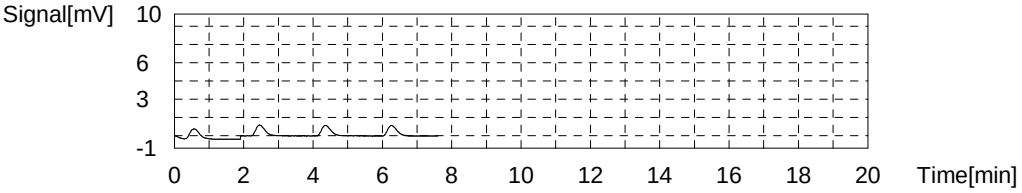
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5652mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.542	0.5486mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 4:10:23 AM
2	1.604	0.5757mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 4:12:26 AM
3	1.568	0.5600mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 4:14:28 AM
4	1.606	0.5766mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 4:16:31 AM

Mean Area 1.580
Mean Conc. 0.5652mg/L



Sample

Sample Name: 280-159473-e-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

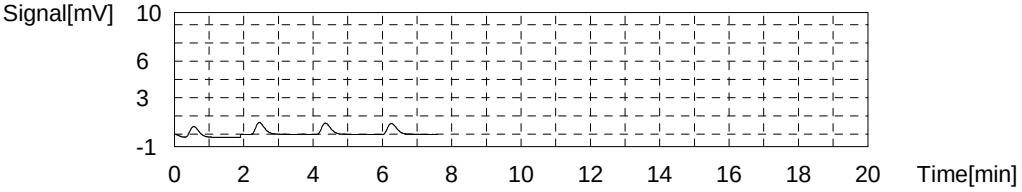
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6033mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.547	0.5508mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 4:25:03 AM
2	1.747	0.6383mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 4:27:06 AM
3	1.704	0.6195mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 4:29:08 AM
4	1.670	0.6046mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 4:31:11 AM

Mean Area 1.667
Mean Conc. 0.6033mg/L



Sample

Sample Name: 280-159473-e-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

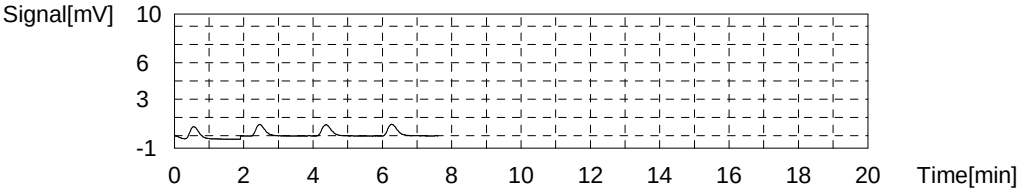
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6340mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.756	0.6422mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 4:39:43 AM
2	1.691	0.6138mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 4:41:46 AM
3	1.697	0.6164mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 4:43:48 AM
4	1.805	0.6636mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 4:45:51 AM

Mean Area 1.737
Mean Conc. 0.6340mg/L



Sample

Sample Name: 280-159473-e-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

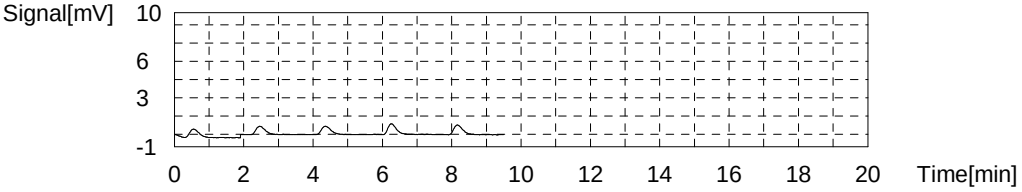
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4334mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.196	0.3973mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 4:54:23 AM
2	1.230	0.4121mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 4:56:26 AM
3	1.284	0.4358mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 4:58:29 AM
4	1.490	0.5259mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 5:00:31 AM
5	1.404	0.4882mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 5:02:34 AM

Mean Area 1.279
Mean Conc. 0.4334mg/L



Sample

Sample Name: 280-159242-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

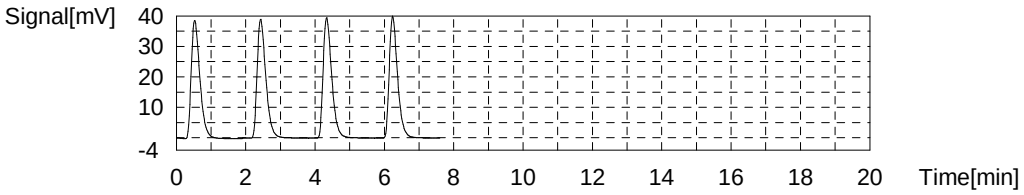
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	500.0	NPOC:14815mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	68.10	14830mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 5:11:05 AM
2	68.15	14841mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 5:13:08 AM
3	68.54	14926mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 5:15:10 AM
4	67.33	14662mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 5:17:13 AM

Mean Area 68.03
Mean Conc. 14815mg/L



Sample

Sample Name: MS 280-159242-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

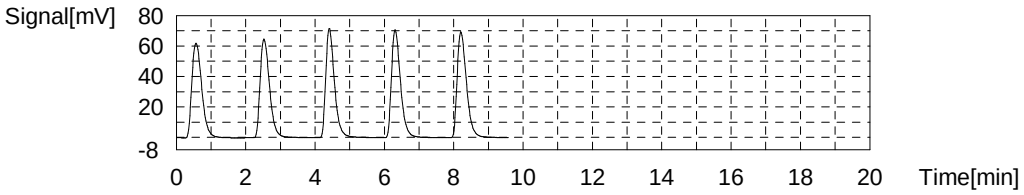
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	500.0	NPOC:27810mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	125.3	27340mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 5:25:49 AM
2	122.3	26684mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 5:27:52 AM
3	125.5	27383mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 5:29:54 AM
4	128.9	28127mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 5:31:57 AM
5	130.1	28389mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 5:34:00 AM

Mean Area 127.5
Mean Conc. 27810mg/L



Sample

Sample Name: MSD 280-159242-b-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

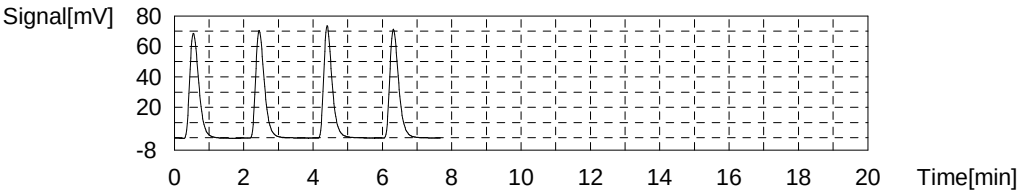
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	500.0	NPOC:27547mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	126.7	27646mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 5:42:31 AM
2	125.2	27318mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 5:44:37 AM
3	124.2	27099mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 5:46:40 AM
4	128.9	28127mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 5:48:43 AM

Mean Area 126.3
Mean Conc. 27547mg/L



Sample

Sample Name: 280-159242-b-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

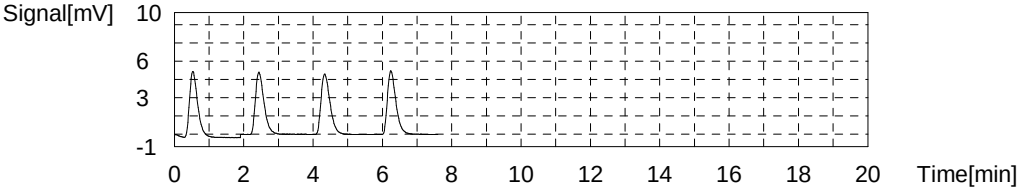
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	500.0	NPOC:1884mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.835	1869mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 5:57:15 AM
2	8.793	1860mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 5:59:18 AM
3	8.999	1905mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 6:01:20 AM
4	8.975	1900mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 6:03:23 AM

Mean Area 8.901
Mean Conc. 1884mg/L



Sample

Sample Name: 280-159242-b-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

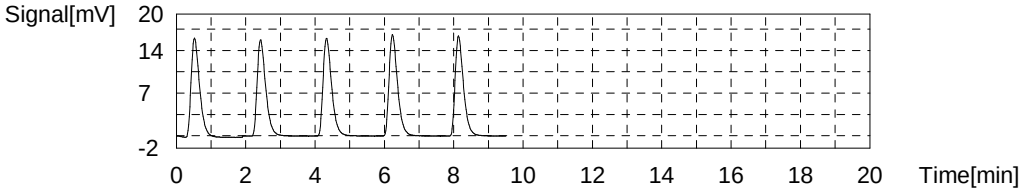
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	500.0	NPOC:5971mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	27.74	6004mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 6:11:55 AM
2	27.18	5881mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 6:13:58 AM
3	27.72	5999mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 6:16:00 AM
4	28.63	6198mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 6:18:03 AM
5	27.72	5999mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 6:20:06 AM

Mean Area 27.59
Mean Conc. 5971mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

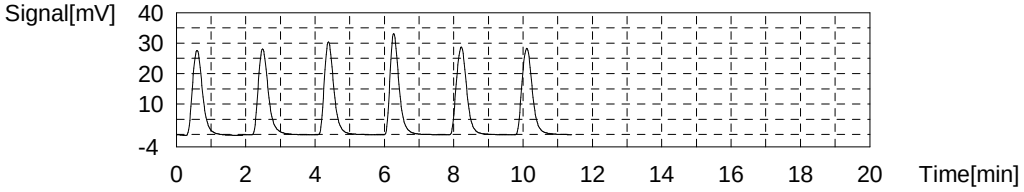
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.03mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.93	24.77mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 6:28:37 AM
2	57.42	24.99mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 6:30:39 AM
3	58.33	25.39mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 6:32:42 AM
4	60.36	26.28mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 6:34:45 AM
5	60.52	26.35mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 6:36:48 AM
6	59.97	26.10mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 6:38:51 AM

Mean Area 59.80
Mean Conc. 26.03mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

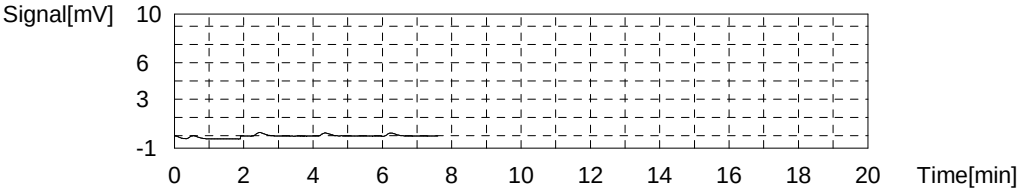
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.06268mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4040	0.05086mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 6:47:17 AM
2	0.5079	0.09630mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 6:49:20 AM
3	0.3907	0.04504mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 6:51:22 AM
4	0.4215	0.05851mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 6:53:25 AM

Mean Area 0.4310
Mean Conc. 0.06268mg/L



Sample

Sample Name: 280-159221-c-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

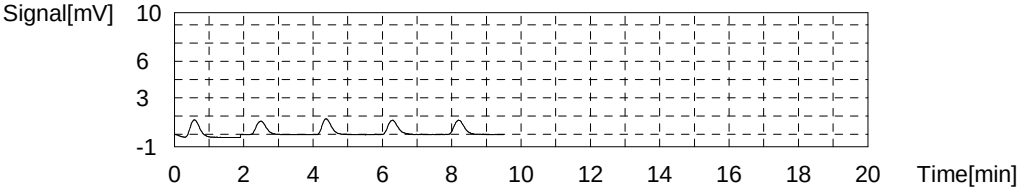
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8920mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.579	1.002mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 7:01:57 AM
2	2.213	0.8421mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 7:03:59 AM
3	2.397	0.9226mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 7:06:02 AM
4	2.367	0.9095mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 7:08:05 AM
5	2.331	0.8937mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 7:10:08 AM

Mean Area 2.327
Mean Conc. 0.8920mg/L



Sample

Sample Name: MS 280-159221-c-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

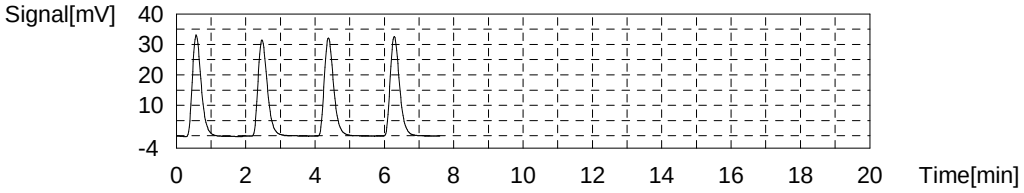
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.33mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	60.00	26.12mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 7:18:39 AM
2	59.25	25.79mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 7:20:42 AM
3	60.92	26.52mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 7:22:44 AM
4	61.76	26.89mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 7:24:47 AM

Mean Area 60.48
Mean Conc. 26.33mg/L



Sample

Sample Name: MSD 280-159221-c-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

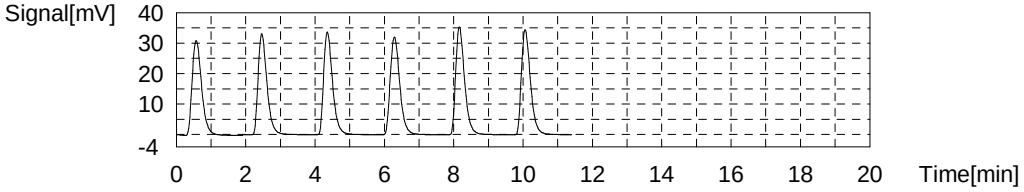
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.26mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	59.53	25.91mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 7:33:20 AM
2	59.25	25.79mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 7:35:23 AM
3	60.55	26.36mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 7:37:25 AM
4	61.97	26.98mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 7:39:28 AM
5	63.63	27.71mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 7:41:31 AM
6	62.95	27.41mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 7:43:34 AM

Mean Area 60.33
Mean Conc. 26.26mg/L



Sample

Sample Name: lcs 280-568437/1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

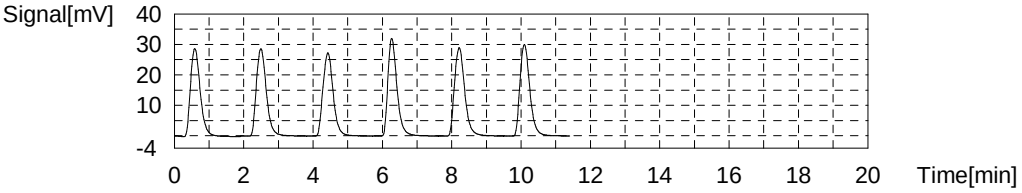
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.69mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.93	24.77mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 7:52:00 AM
2	57.50	25.02mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 7:54:02 AM
3	55.97	24.35mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 7:56:05 AM
4	58.78	25.58mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 7:58:08 AM
5	59.97	26.10mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 8:00:11 AM
6	59.80	26.03mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 8:02:14 AM

Mean Area 59.01
Mean Conc. 25.69mg/L



Sample

Sample Name: mb 280-568437/2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

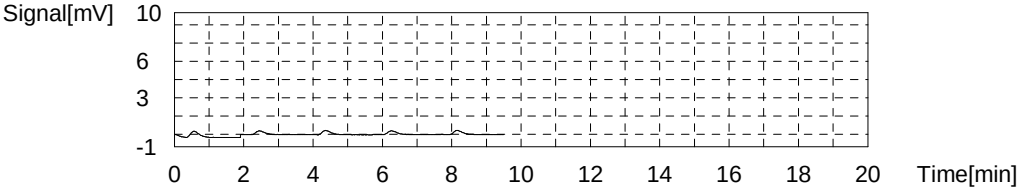
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1227mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8214	0.2334mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 8:10:40 AM
2	0.5101	0.09726mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 8:12:42 AM
3	0.6242	0.1472mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 8:14:45 AM
4	0.5591	0.1187mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 8:16:48 AM
5	0.5792	0.1275mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 8:18:51 AM

Mean Area 0.5682
Mean Conc. 0.1227mg/L



Sample

Sample Name: 280-159190-d-1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

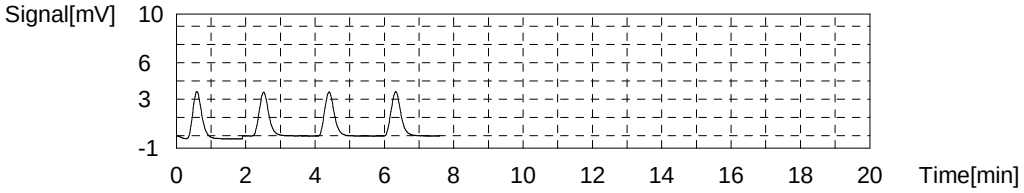
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.918mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.988	2.931mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 8:27:23 AM
2	6.785	2.842mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 8:29:25 AM
3	6.976	2.925mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 8:31:28 AM
4	7.091	2.976mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 8:33:31 AM

Mean Area 6.960
Mean Conc. 2.918mg/L



Sample

Sample Name: 280-159190-d-1-b ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

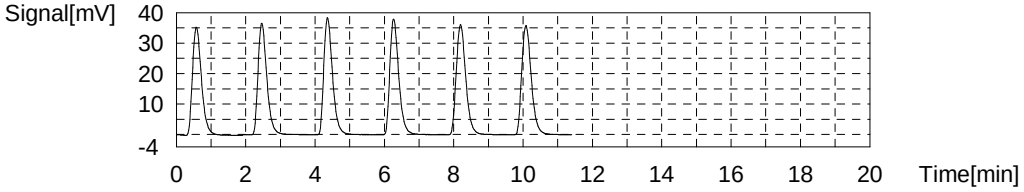
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.92mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	65.02	28.31mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 8:42:04 AM
2	64.73	28.19mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 8:44:07 AM
3	67.58	29.43mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 8:46:09 AM
4	68.51	29.84mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 8:48:12 AM
5	69.39	30.22mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 8:50:15 AM
6	69.27	30.17mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 8:52:18 AM

Mean Area 68.69
Mean Conc. 29.92mg/L



Sample

Sample Name: 280-159190-d-1-c msd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

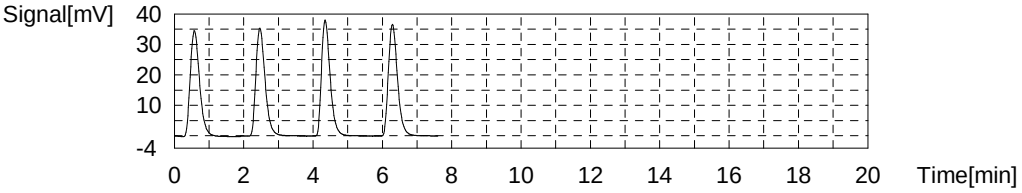
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.92mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	65.89	28.69mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 9:00:44 AM
2	65.60	28.57mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 9:02:47 AM
3	66.39	28.91mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 9:04:49 AM
4	67.78	29.52mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 9:06:52 AM

Mean Area 66.41
Mean Conc. 28.92mg/L



Sample

Sample Name: 280-159190-d-2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

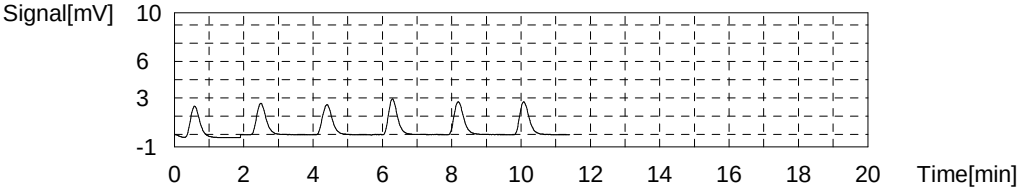
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.013mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.720	1.939mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 9:15:25 AM
2	4.875	2.006mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 9:17:27 AM
3	4.873	2.006mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 9:19:30 AM
4	5.243	2.167mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 9:21:33 AM
5	5.178	2.139mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 9:23:36 AM
6	5.094	2.102mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 9:25:39 AM

Mean Area 4.891
Mean Conc. 2.013mg/L



Sample

Sample Name: 280-159190-d-3-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

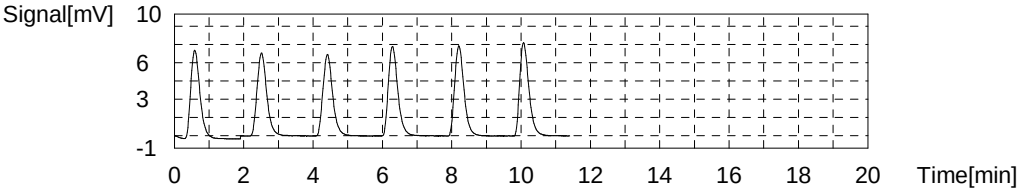
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.951mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.39	5.731mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 9:34:05 AM
2	13.24	5.665mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 9:36:07 AM
3	13.10	5.604mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 9:38:10 AM
4	14.03	6.011mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 9:40:13 AM
5	13.93	5.967mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 9:42:16 AM
6	14.22	6.094mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 9:44:19 AM

Mean Area 13.89
Mean Conc. 5.951mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

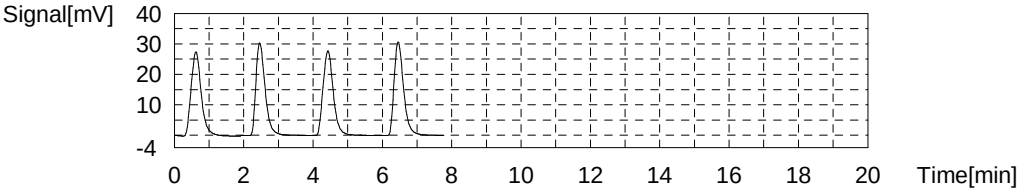
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.00mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.97	24.79mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 9:52:45 AM
2	56.38	24.53mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 9:54:47 AM
3	57.52	25.03mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 9:57:00 AM
4	58.91	25.64mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 9:59:03 AM

Mean Area 57.45
Mean Conc. 25.00mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

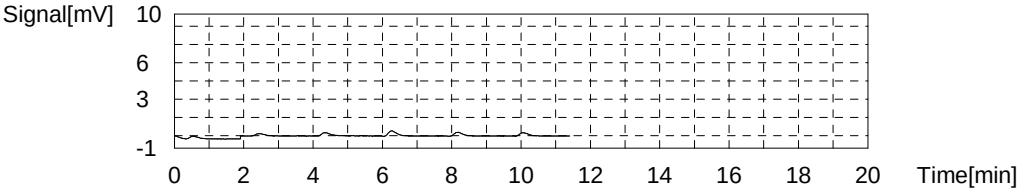
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.04308mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3274	0.01735mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 10:07:36 AM
2	0.3152	0.01202mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 10:09:38 AM
3	0.4646	0.07736mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 10:11:41 AM
4	0.7373	0.1966mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 10:13:44 AM
5	0.5304	0.1061mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 10:15:47 AM
6	0.4377	0.06560mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 10:17:50 AM

Mean Area 0.3862
Mean Conc. 0.04308mg/L



Sample

Sample Name: 280-159190-d-4-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

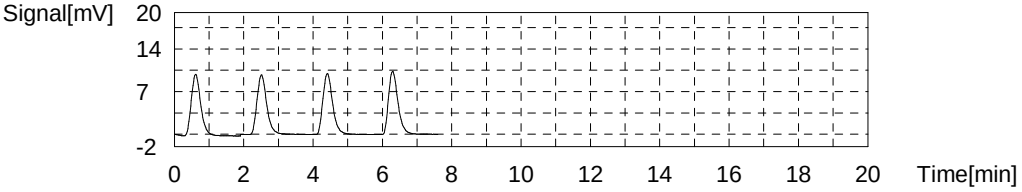
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.398mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.22	8.281mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 10:26:16 AM
2	19.20	8.272mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 10:28:18 AM
3	19.66	8.473mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 10:30:21 AM
4	19.87	8.565mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 10:32:24 AM

Mean Area 19.49
Mean Conc. 8.398mg/L



Sample

Sample Name: 280-159190-d-5-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

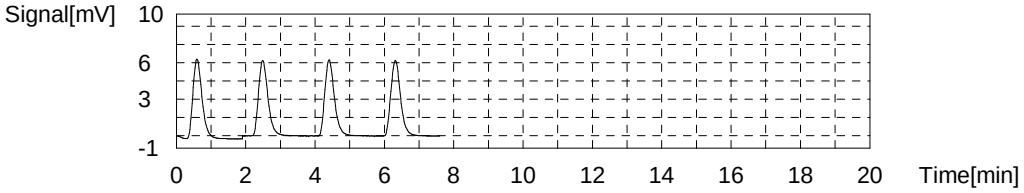
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.097mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.97	5.110mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 10:40:57 AM
2	11.68	4.983mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 10:42:59 AM
3	11.97	5.110mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 10:45:02 AM
4	12.14	5.184mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 10:47:05 AM

Mean Area 11.94
Mean Conc. 5.097mg/L



Sample

Sample Name: 280-159190-d-6-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

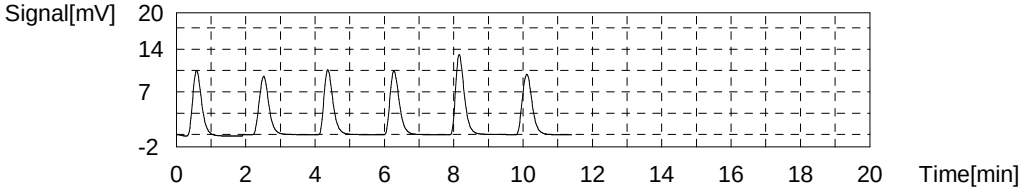
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.436mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.51	8.408mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 10:55:38 AM
2	18.60	8.010mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 10:57:40 AM
3	19.35	8.338mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 10:59:43 AM
4	19.66	8.473mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 11:01:46 AM
5	23.09	9.974mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 11:03:49 AM
6	19.78	8.526mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 11:05:52 AM

Mean Area 19.57
Mean Conc. 8.436mg/L



Sample

Sample Name: 280-159190-d-7-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

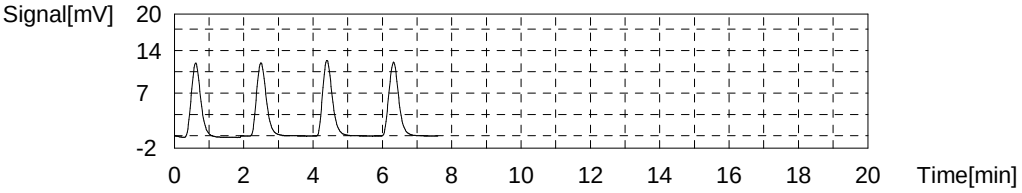
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.24mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	23.20	10.02mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 11:14:18 AM
2	23.46	10.14mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 11:16:20 AM
3	23.97	10.36mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 11:18:23 AM
4	24.14	10.43mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 11:20:26 AM

Mean Area 23.69
Mean Conc. 10.24mg/L



Sample

Sample Name: 280-159190-d-8-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

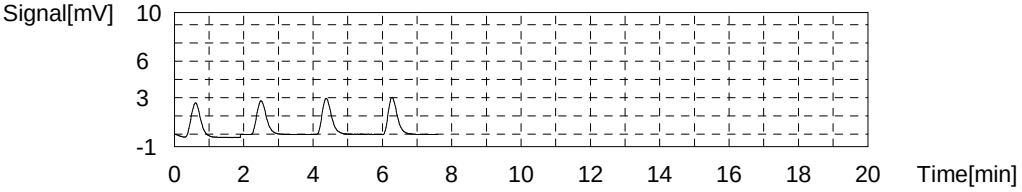
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.258mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.358	2.218mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 11:28:59 AM
2	5.361	2.219mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 11:31:01 AM
3	5.545	2.299mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 11:33:04 AM
4	5.536	2.296mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 11:35:07 AM

Mean Area 5.450
Mean Conc. 2.258mg/L



Sample

Sample Name: 280-159190-d-9-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

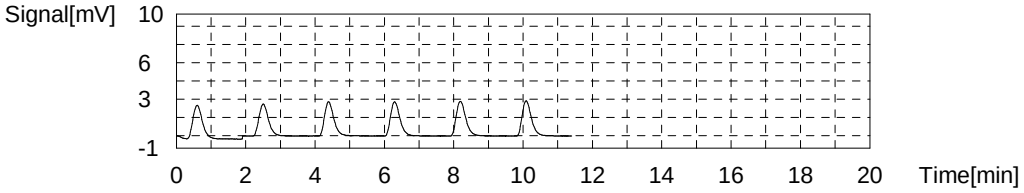
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.164mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.208	2.152mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 11:43:40 AM
2	4.990	2.057mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 11:45:42 AM
3	5.168	2.135mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 11:47:45 AM
4	5.253	2.172mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 11:49:48 AM
5	5.473	2.268mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 11:51:51 AM
6	5.314	2.198mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 11:53:54 AM

Mean Area 5.236
Mean Conc. 2.164mg/L



Sample

Sample Name: 280-159190-d-10-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

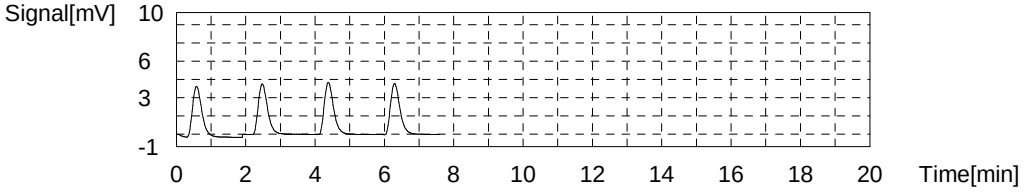
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.297mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.733	3.257mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:02:20 PM
2	7.706	3.245mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:04:22 PM
3	7.882	3.322mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:06:25 PM
4	7.981	3.365mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:08:28 PM

Mean Area 7.826
Mean Conc. 3.297mg/L



Sample

Sample Name: 280-159190-d-11-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

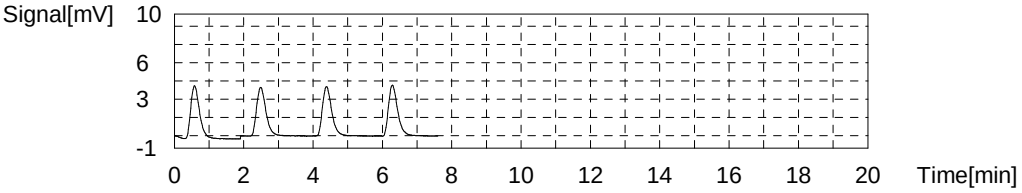
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.181mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.656	3.223mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:17:01 PM
2	7.419	3.119mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:19:04 PM
3	7.464	3.139mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:21:06 PM
4	7.704	3.244mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:23:09 PM

Mean Area 7.561
Mean Conc. 3.181mg/L



Sample

Sample Name: 280-159190-d-12-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

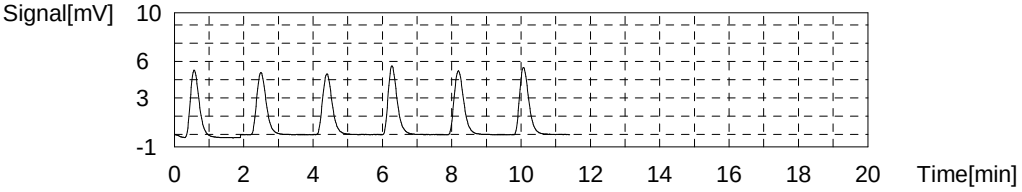
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.289mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.846	4.181mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:31:43 PM
2	9.728	4.129mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:33:45 PM
3	9.541	4.047mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:35:48 PM
4	10.18	4.327mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:37:51 PM
5	10.11	4.296mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:39:54 PM
6	10.24	4.353mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:41:57 PM

Mean Area 10.09
Mean Conc. 4.289mg/L



Sample

Sample Name: 280-159190-d-13-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

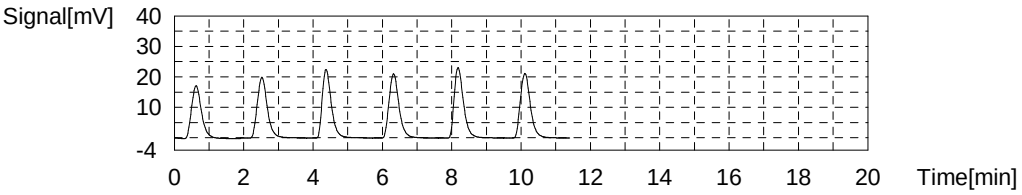
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:18.47mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	35.05	15.20mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:50:24 PM
2	40.12	17.42mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:52:26 PM
3	41.20	17.89mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:54:29 PM
4	42.28	18.37mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:56:32 PM
5	43.49	18.90mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 12:58:35 PM
6	43.09	18.72mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:00:38 PM

Mean Area 42.52
Mean Conc. 18.47mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

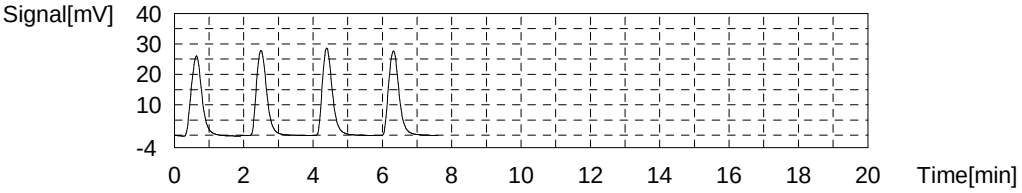
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.22mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.94	24.78mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:09:04 PM
2	57.96	25.23mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:11:07 PM
3	58.05	25.26mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:13:10 PM
4	58.86	25.62mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:15:13 PM

Mean Area 57.95
Mean Conc. 25.22mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

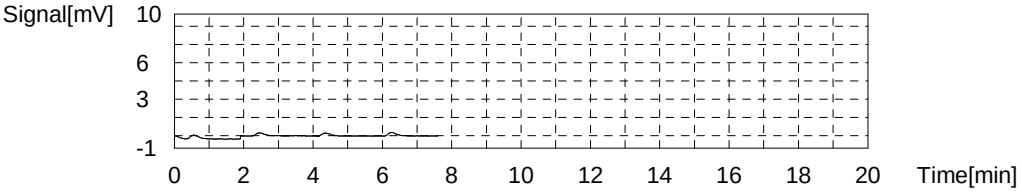
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.07787mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5147	0.09928mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:23:47 PM
2	0.4200	0.05785mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:25:49 PM
3	0.4412	0.06713mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:27:52 PM
4	0.4871	0.08720mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:29:55 PM

Mean Area 0.4658
Mean Conc. 0.07787mg/L



Sample

Sample Name: 280-159190-d-14-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

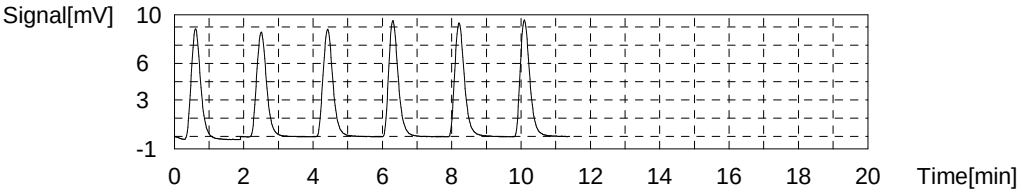
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.804mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.33	7.454mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:38:28 PM
2	17.10	7.354mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:40:31 PM
3	17.50	7.529mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:42:34 PM
4	18.36	7.905mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:44:37 PM
5	18.25	7.857mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:46:40 PM
6	18.41	7.927mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:48:43 PM

Mean Area 18.13
Mean Conc. 7.804mg/L



Sample

Sample Name: 280-159190-d-15-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

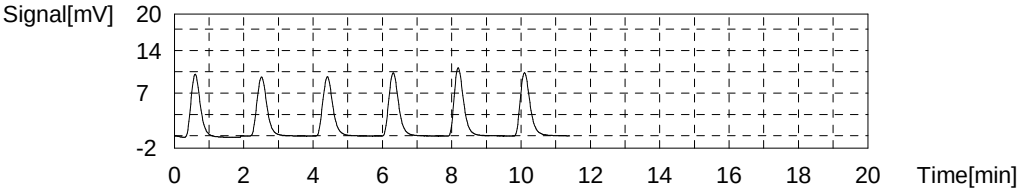
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.536mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.59	8.443mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:57:10 PM
2	19.37	8.346mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 1:59:12 PM
3	19.69	8.486mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:01:15 PM
4	20.56	8.867mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:03:18 PM
5	21.16	9.129mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:05:21 PM
6	20.57	8.871mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:07:24 PM

Mean Area 19.80
Mean Conc. 8.536mg/L



Sample

Sample Name: 280-159190-d-16-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

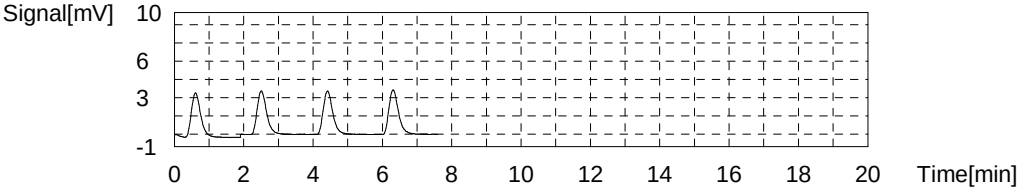
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.856mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.729	2.817mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:15:51 PM
2	6.745	2.824mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:17:53 PM
3	6.809	2.852mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:19:56 PM
4	6.989	2.931mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:21:59 PM

Mean Area 6.818
Mean Conc. 2.856mg/L



Sample

Sample Name: 280-159190-d-16-b ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

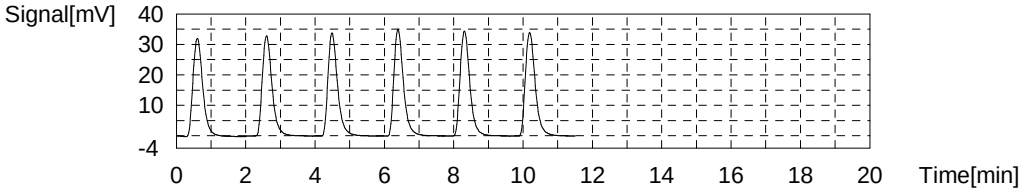
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.20mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	63.85	27.80mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:30:38 PM
2	64.19	27.95mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:32:41 PM
3	65.41	28.48mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:34:44 PM
4	67.37	29.34mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:36:47 PM
5	67.55	29.42mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:38:50 PM
6	67.86	29.56mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:40:53 PM

Mean Area 67.05
Mean Conc. 29.20mg/L



Sample

Sample Name: 280-159190-d-16-c msd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

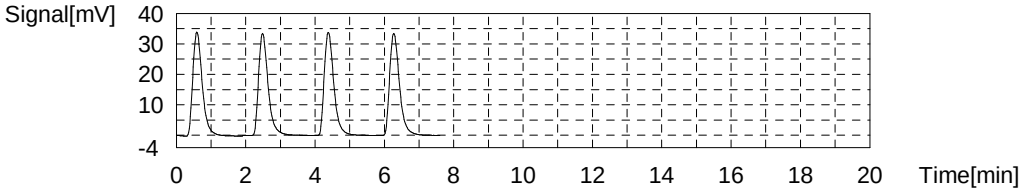
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.55mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	65.41	28.48mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:49:19 PM
2	64.38	28.03mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:51:22 PM
3	65.57	28.55mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:53:25 PM
4	66.85	29.11mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 2:55:28 PM

Mean Area 65.55
Mean Conc. 28.55mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

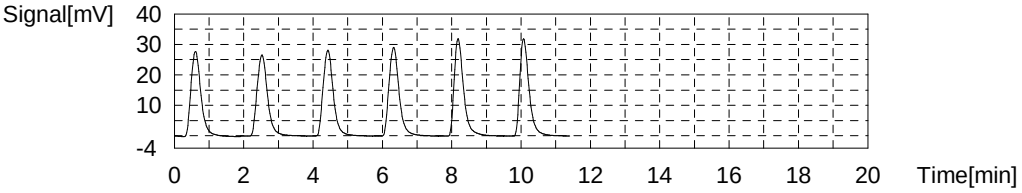
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.84mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.46	24.57mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:04:02 PM
2	56.03	24.38mg/L	50uL	1	E	TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:06:04 PM
3	57.54	25.04mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:08:07 PM
4	59.67	25.97mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:10:10 PM
5	60.65	26.40mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:12:13 PM
6	59.64	25.96mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:14:16 PM

Mean Area 59.38
Mean Conc. 25.84mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

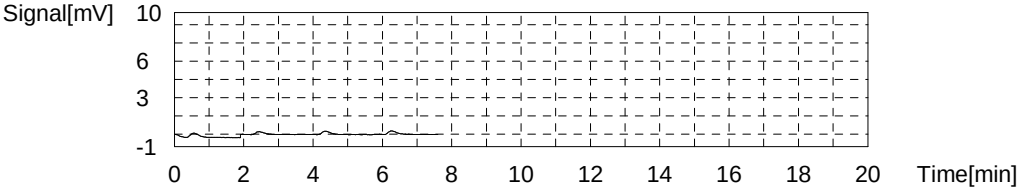
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.08656mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5438	0.1120mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:22:42 PM
2	0.4136	0.05506mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:24:45 PM
3	0.4766	0.08261mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:26:48 PM
4	0.5085	0.09656mg/L	50uL	1		TOC3.2021_12_07_11_32_20.cal	3/12/2022 3:28:51 PM

Mean Area 0.4856
Mean Conc. 0.08656mg/L



FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-568437

Analyst: Wondimu, Akewak B

Batch Open: 3/11/2022 1:01:00PM

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~280-568437/1 N/A	N/A				N/A	N/A	N/A		
2	MB~280-568437/2 N/A	N/A				N/A	N/A	N/A		
3	280-159190-D-1 (9060A_Diss)	N/A (280-159190-1)	Water			3/19/22	18_Days	4		
4	280-159190-D-1~MS (9060A_Diss)	N/A (280-159190-1)	Water			3/19/22	18_Days	4		
5	280-159190-D-1~MSD (9060A_Diss)	N/A (280-159190-1)	Water			3/19/22	18_Days	4		
6	280-159190-D-2 (9060A_Diss)	N/A (280-159190-1)	Water			3/19/22	18_Days	4		
7	280-159190-D-3 (9060A_Diss)	N/A (280-159190-1)	Water			3/19/22	18_Days	4		
8	280-159190-D-4 (9060A_Diss)	N/A (280-159190-1)	Water			3/19/22	18_Days	4		
9	280-159190-D-5 (9060A_Diss)	N/A (280-159190-1)	Water			3/19/22	18_Days	4		
10	280-159190-D-6 (9060A_Diss)	N/A (280-159190-1)	Water			3/19/22	18_Days	4		
11	280-159190-D-7 (9060A_Diss)	N/A (280-159190-1)	Water			3/19/22	18_Days	4		
12	280-159190-D-8 (9060A_Diss)	N/A (280-159190-1)	Water			3/19/22	18_Days	4		
13	280-159190-D-9 (9060A_Diss)	N/A (280-159190-1)	Water			3/19/22	18_Days	4		
14	280-159190-D-10 (9060A_Diss)	N/A (280-159190-1)	Water			3/19/22	18_Days	4		

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-568437 Analyst: Wondimu, Akewak B Batch Open: 3/11/2022 1:01:00PM

Batch End:

15	280-159190-D-11 (9060A_Diss)	N/A (280-159190-1)	Water			3/19/22	18_Days	4	
16	280-159190-D-12 (9060A_Diss)	N/A (280-159190-1)	Water			3/19/22	18_Days	4	
17	280-159190-D-13 (9060A_Diss)	N/A (280-159190-1)	Water			3/19/22	18_Days	4	
18	280-159190-D-14 (9060A_Diss)	N/A (280-159190-1)	Water			3/19/22	18_Days	4	
19	280-159190-D-15 (9060A_Diss)	N/A (280-159190-1)	Water			3/19/22	18_Days	4	
20	280-159190-D-16 (9060A_Diss)	N/A (280-159190-1)	Water			3/19/22	18_Days	4	
21	280-159190-D-16~MS (9060A_Diss)	N/A (280-159190-1)	Water			3/19/22	18_Days	4	
22	280-159190-D-16~MSD (9060A_Diss)	N/A (280-159190-1)	Water			3/19/22	18_Days	4	

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-568437

Analyst: Wondimu, Akewak B

Batch Open: 3/11/2022 1:01:00PM

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: 280-568437

Analyst: Wondimu, Akewak B

Batch Open: 3/11/2022 1:01:00PM

Batch End:

03/21/2022

Comments

280-159190-D-1	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159190-D-1~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159190-D-1~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159190-D-2	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159190-D-3	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159190-D-4	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159190-D-5	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159190-D-6	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159190-D-7	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159190-D-8	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159190-D-9	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159190-D-10	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159190-D-11	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159190-D-12	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159190-D-13	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159190-D-14		

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

03/21/2022

Batch Number: 280-568437

Analyst: Wondimu, Akewak B

Batch Open: 3/11/2022 1:01:00PM

Batch End:

	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159190-D-15		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159190-D-16		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159190-D-16~M		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-159190-D-16~M		
	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-568437

Analyst: Wondimu, Akewak B

Batch Open: 3/11/2022 1:01:00PM

Batch End:

03/21/2022

Reagent Additions Worksheet

Lab ID	Reagent Code	Amount Added	Final Amount	By	Witness

Other Reagents:

Reagent	Amount/Units	Lot#:

Shi 3

PH

5310 B

	Type	Analysis	Sample Name	S	O	C	M	Result <2	Notes	SD	Vial
1*	Unknown	NPOC	ICV		0	N	1	✓			1
2*	Unknown	NPOC	ICB		0	N	1	✓			2
3*	Unknown	NPOC	LCS		0	N	1	✓			3
4*	Unknown	NPOC	MB		0	N	1	✓			4
5*	Unknown	NPOC	TIC		0	N	1	✓			5
6*	Unknown	NPOC	280-159225-b-1		0	N	1	✓			6
7*	Unknown	NPOC	MS 280-159225-b-1		0	N	1	✓			7
8*	Unknown	NPOC	MSD 280-159225-b-1		0	N	1	✓			8
9*	Unknown	NPOC	280-159225-b-2		0	N	1	✓			9
10*	Unknown	NPOC	280-159225-b-3		0	N	1	✓			10
11*	Unknown	NPOC	280-159225-c-4		0	N	1	✓			11
12*	Unknown	NPOC	280-159225-b-5		0	N	1	✓			12
13*	Unknown	NPOC	280-159225-b-6		0	N	1	✓			13
14*	Unknown	NPOC	280-159225-b-7		0	N	1	✓			14
15*	Unknown	NPOC	CCV		0	N	1	✓			15
16*	Unknown	NPOC	CCB		0	N	1	✓			16
17*	Unknown	NPOC	280-159223-j-1		0	N	1	✓	2x Dil RR		17
18*	Unknown	NPOC	280-159223-g-3		0	N	1	✓	10X Dil color odor		18
19*	Unknown	NPOC	280-159275-c-2		0	N	1	✓			19
20*	Unknown	NPOC	280-159275-c-3		0	N	1	✓			20
21*	Unknown	NPOC	MS 280-159275-c-3		0	N	1	✓			21
22*	Unknown	NPOC	MSD 280-159275-c-3		0	N	1	✓			22
23*	Unknown	NPOC	280-159275-c-4		0	N	1	✓			23
24*	Unknown	NPOC	280-159275-c-5		0	N	1	✓			24
25*	Unknown	NPOC	280-159275-b-6		0	N	1	✓			25
26*	Unknown	NPOC	280-159276-b-2		0	N	1	✓			26
27*	Unknown	NPOC	CCV		0	N	1	✓			27
28*	Unknown	NPOC	CCB		0	N	1	✓			28
29*	Unknown	NPOC	280-159276-b-3		0	N	1	✓			29
30*	Unknown	NPOC	280-159276-b-4		0	N	1	✓			30
31*	Unknown	NPOC	280-159466-g-1		0	N	1	✓			31
32*	Unknown	NPOC	280-159466-g-2		0	N	1	✓			32
33*	Unknown	NPOC	280-159466-h-3		0	N	1	✓			33
34*	Unknown	NPOC	LCS		0	N	1	✓			34
35*	Unknown	NPOC	MB		0	N	1	✓			35
36*	Unknown	NPOC	TIC		0	N	1	✓			36
37*	Unknown	NPOC	280-159149-b-1		0	N	1	✓			37
38*	Unknown	NPOC	MS 280-159149-b-1		0	N	1	✓			38
39*	Unknown	NPOC	CCV		0	N	1	✓			39
40*	Unknown	NPOC	CCB		0	N	1	✓			40
41*	Unknown	NPOC	MSD 280-159149-b-1		0	N	1	✓			41
42*	Unknown	NPOC	280-159473-d-1		0	N	1	✓			42
43*	Unknown	NPOC	280-159473-e-2		0	N	1	✓			43
44*	Unknown	NPOC	280-159473-e-3		0	N	1	✓			44
45*	Unknown	NPOC	280-159473-e-7		0	N	1	✓			45
46*	Unknown	NPOC	280-159242-b-1		0	N	1	✓	500x Dil color odor		46
47*	Unknown	NPOC	MS 280-159242-b-1		0	N	1	✓	500x Dil "		47
48*	Unknown	NPOC	MSD 280-159242-b-1		0	N	1	✓	500x Dil "		48
49*	Unknown	NPOC	280-159242-b-2		0	N	1	✓	500x Dil "		49
50*	Unknown	NPOC	280-159242-b-3		0	N	1	✓	500x Dil "		50
51*	Unknown	NPOC	CCV		0	N	1	✓			51

9060A

9060A

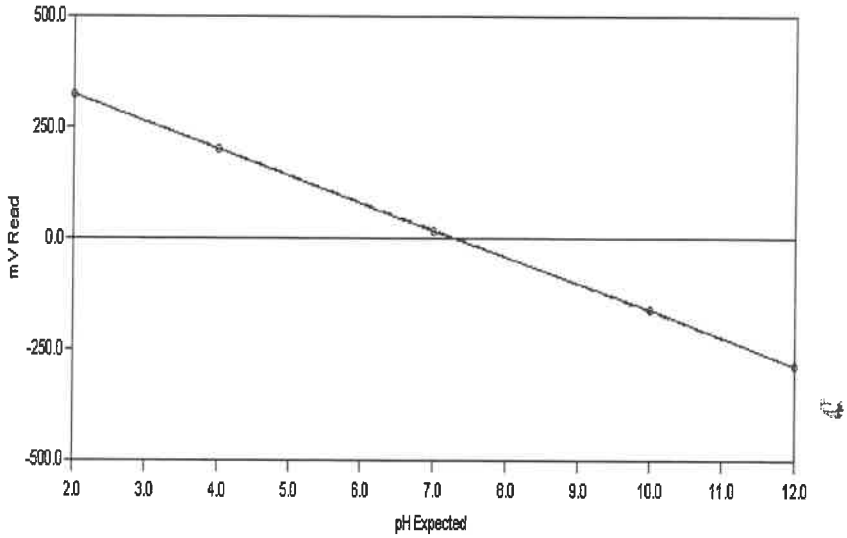
shi 3 PH

	Type	Analysi	Sample Name	S	O	C	M	Result	Notes	SD	Vial
52*	Unknown	NPOC	CCB		0	N	1	✓			52
53*	Unknown	NPOC	280-159221-c-6		0	N	1	✓			53
54*	Unknown	NPOC	MS 280-159221-c-6		0	N	1	✓			54
55*	Unknown	NPOC	MSD 280-159221-c-6		0	N	1	✓			55
56*	Unknown	NPOC	lcs 280-568437/1-a		0	N	1	✓			56
57*	Unknown	NPOC	mb 280-568437/2-a		0	N	1	✓			57
58*	Unknown	NPOC	280-159190-d-1-a		0	N	1	>2			58
59*	Unknown	NPOC	280-159190-d-1-b ms		0	N	1	>2			59
60*	Unknown	NPOC	280-159190-d-1-c msd		0	N	1	>2			60
61*	Unknown	NPOC	280-159190-d-2-a		0	N	1	>2			61
62*	Unknown	NPOC	280-159190-d-3-a		0	N	1	>2			62
63*	Unknown	NPOC	CCV		0	N	1	✓			63
64*	Unknown	NPOC	CCB		0	N	1	✓			64
65*	Unknown	NPOC	280-159190-d-4-a		0	N	1	>2			65
66*	Unknown	NPOC	280-159190-d-5-a		0	N	1	>2			66
67*	Unknown	NPOC	280-159190-d-6-a		0	N	1	>2			67
68*	Unknown	NPOC	280-159190-d-7-a		0	N	1	>2	Filtration		68
69*	Unknown	NPOC	280-159190-d-8-a		0	N	1	>2			69
70*	Unknown	NPOC	280-159190-d-9-a		0	N	1	>2			70
71*	Unknown	NPOC	280-159190-d-10-a		0	N	1	>2			71
72*	Unknown	NPOC	280-159190-d-11-a		0	N	1	>2			72
73*	Unknown	NPOC	280-159190-d-12-a		0	N	1	>2			73
74*	Unknown	NPOC	280-159190-d-13-a		0	N	1	>2			74
75*	Unknown	NPOC	CCV		0	N	1	✓			75
76*	Unknown	NPOC	CCB		0	N	1	✓			76
77*	Unknown	NPOC	280-159190-d-14-a		0	N	1	>2			77
78*	Unknown	NPOC	280-159190-d-15-a		0	N	1	>2			78
79*	Unknown	NPOC	280-159190-d-16-a		0	N	1	>2			79
80*	Unknown	NPOC	280-159190-d-16-b ms		0	N	1	>2			80
81*	Unknown	NPOC	280-159190-d-16-c ms		0	N	1	>2			81
82*	Unknown	NPOC	CCV		0	N	1	✓			82
83*	Unknown	NPOC	CCB		0	N	1	✓			83

BWH 5000. MS 1000

Calibration Report

Calibration Record # 469



Calibration Settings

Calibration ID	PH	Date	3/2/2022
Channel	1	Time	9:55 AM
Probe Type	pH	Temperature	296.11 K 22.96 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit

Calibration Results

Slope	-60.761	CorrCoeff	1.0000
Intercept	18.504	Equation:	Y = (-60.761) X + (18.504)

Calibration Validity True Operator

	Result	Minimum	Maximum
Slope	-60.761	-65.00	-53.00
Intercept	18.504	-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	322.63
	4.00	200.31
	7.00	17.57
	10.00	-161.13
	12.00	-286.86

Test America
Water Analysis Report

AT4 Analyst:_____

03/21/2022

Run Number 1384 **Order Number** 20220302-2

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	3/2/2022	1:47 PM	21.79	-1.00	5.26	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
INITIAL CHECK	3/2/2022	1:55 PM	21.31	-1.00	10.69	106.51	196.15	.00	179.28	16.87	1.07	1.96	-1.00	.02
BUFFER 7	3/2/2022	1:57 PM	21.25	-1.00	7.02	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
LCS	3/2/2022	2:04 PM	21.21	-1.00	10.71	104.38	196.89	.00	185.01	11.88	1.04	1.97	-1.00	.02
LCSD	3/2/2022	2:12 PM	21.37	-1.00	10.71	107.38	198.13	.00	181.50	16.63	1.07	1.98	-1.00	.02
MB	3/2/2022	2:17 PM	21.51	-1.00	7.84	.00	.76	.76	.00	.00	.00	.03	.04	.02
280-159178-a-2	3/2/2022	2:23 PM	21.30	-1.00	6.99	.00	130.84	130.84	.00	.00	.00	1.31	-1.00	.02
DU 280-159178-a-2	3/2/2022	2:29 PM	21.21	-1.00	7.03	.00	131.20	131.20	.00	.00	.00	1.31	-1.00	.02
280-159178-a-6	3/2/2022	2:35 PM	21.22	-1.00	7.56	.00	177.16	177.16	.00	.00	.00	1.77	-1.00	.02
280-159178-a-8	3/2/2022	2:41 PM	21.43	-1.00	7.08	.00	104.71	104.71	.00	.00	.00	1.05	-1.00	.02
280-159178-a-11	3/2/2022	2:46 PM	21.93	-1.00	7.08	.00	103.27	103.27	.00	.00	.00	1.03	-1.00	.02
280-159178-a-14	3/2/2022	2:52 PM	21.64	-1.00	6.98	.00	61.84	61.84	.00	.00	.00	.62	-1.00	.02
280-159178-a-18	3/2/2022	2:57 PM	21.28	-1.00	7.00	.00	66.67	66.67	.00	.00	.00	.67	-1.00	.02
280-159180-a-3	3/2/2022	3:02 PM	21.14	-1.00	6.62	.00	69.28	69.28	.00	.00	.00	.69	-1.00	.02
280-159180-a-10	3/2/2022	3:07 PM	21.18	-1.00	6.27	.00	36.67	36.67	.00	.00	.00	.37	-1.00	.02
280-159176-b-1	3/2/2022	3:20 PM	21.30	-1.00	8.41	15.67	1,075.48	1,044.15	31.33	.00	.16	10.75	-1.00	.02
CCV	3/2/2022	3:28 PM	21.50	-1.00	10.66	104.05	196.02	.00	183.93	12.09	1.04	1.96	-1.00	.02
CCB	3/2/2022	3:33 PM	21.70	-1.00	7.91	.00	1.00	1.00	.00	.00	.00	.03	.04	.02
280-159176-d-2	3/2/2022	3:46 PM	21.67	-1.00	8.35	9.22	969.56	951.13	18.44	.00	.09	9.70	-1.00	.02
280-159175-f-1	3/2/2022	4:01 PM	21.74	-1.00	8.52	32.10	1,345.21	1,281.02	64.20	.00	.32	13.45	-1.00	.02
280-159175-f-2	3/2/2022	4:17 PM	21.93	-1.00	8.22	.00	1,328.22	1,328.22	.00	.00	.00	13.28	-1.00	.02
280-159175-f-3	3/2/2022	4:31 PM	22.11	-1.00	8.40	15.31	1,175.23	1,144.61	30.62	.00	.15	11.75	-1.00	.02
280-159175-f-4	3/2/2022	4:42 PM	22.31	-1.00	8.38	9.35	670.90	652.20	18.70	.00	.09	6.71	-1.00	.02
280-159175-f-5	3/2/2022	4:52 PM	21.95	-1.00	8.45	14.75	608.62	579.12	29.50	.00	.15	6.09	-1.00	.02
280-159175-f-6	3/2/2022	5:00 PM	21.73	-1.00	8.54	13.58	368.50	341.35	27.16	.00	.14	3.69	-1.00	.02
280-159208-e-1	3/2/2022	5:06 PM	21.70	-1.00	6.36	.00	135.90	135.90	.00	.00	.00	1.36	-1.00	.02
280-159210-e-1	3/2/2022	5:11 PM	21.63	-1.00	6.62	.00	74.21	74.21	.00	.00	.00	.74	-1.00	.02

PC-TitratION PLUS by Man-Tech Associates, Inc.

GENERAL RESULTS REPORT.SRW

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Run Number 1384 **Order Number** 20220302-2

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)
280-159190-f-1	3/2/2022	5:16 PM	21.61	-1.00	6.89	.00	97.80	97.80	.00	.00	.00	.98	-1.00	.02
CCV	3/2/2022	5:23 PM	21.44	-1.00	10.61	101.78	197.37	.00	191.17	6.20	1.02	1.97	-1.00	.02
CCB	3/2/2022	5:29 PM	21.71	-1.00	7.91	.00	.98	.98	.00	.00	.00	.03	.04	.02
LCS	3/2/2022	5:36 PM	21.63	-1.00	10.60	101.06	196.71	.00	191.29	5.42	1.01	1.97	-1.00	.02
MB	3/2/2022	5:42 PM	21.89	-1.00	7.82	.00	.97	.97	.00	.00	.00	.03	.04	.02
280-159190-f-2	3/2/2022	5:47 PM	22.03	-1.00	6.70	.00	45.33	45.33	.00	.00	.00	.45	-1.00	.02
DU 280-159190-f-2	3/2/2022	5:52 PM	22.26	-1.00	6.75	.00	45.76	45.76	.00	.00	.00	.46	-1.00	.02
280-159190-f-3	3/2/2022	5:59 PM	22.37	-1.00	7.48	.00	326.61	326.61	.00	.00	.00	3.27	-1.00	.02
280-159190-f-4	3/2/2022	6:08 PM	22.13	-1.00	6.97	.00	497.62	497.62	.00	.00	.00	4.98	-1.00	.02
280-159190-f-5	3/2/2022	6:16 PM	22.03	-1.00	7.03	.00	398.66	398.66	.00	.00	.00	3.99	-1.00	.02
280-159190-f-6	3/2/2022	6:23 PM	21.90	-1.00	7.62	.00	236.67	236.67	.00	.00	.00	2.37	-1.00	.02
280-159190-f-7	3/2/2022	6:31 PM	21.80	-1.00	7.33	.00	440.39	440.39	.00	.00	.00	4.40	-1.00	.02
280-159190-f-8	3/2/2022	6:37 PM	21.89	-1.00	7.26	.00	165.43	165.43	.00	.00	.00	1.65	-1.00	.02
280-159190-f-9	3/2/2022	6:43 PM	21.87	-1.00	7.78	.00	130.60	130.60	.00	.00	.00	1.31	-1.00	.02
280-159190-f-10	3/2/2022	6:51 PM	21.98	-1.00	7.71	.00	391.27	391.27	.00	.00	.00	3.91	-1.00	.02
CCV	3/2/2022	6:59 PM	21.99	-1.00	10.55	99.61	198.57	.00	197.91	.65	1.00	1.99	-1.00	.02
CCB	3/2/2022	7:04 PM	22.11	-1.00	7.50	.00	.97	.97	.00	.00	.00	.03	.04	.02
280-159190-f-11	3/2/2022	7:11 PM	22.25	-1.00	7.48	.00	241.96	241.96	.00	.00	.00	2.42	-1.00	.02
280-159190-f-12	3/2/2022	7:18 PM	22.63	-1.00	7.30	.00	181.66	181.66	.00	.00	.00	1.82	-1.00	.02
280-159190-f-13	3/2/2022	7:27 PM	22.54	-1.00	7.12	.00	536.72	536.72	.00	.00	.00	5.37	-1.00	.02
280-159190-f-14	3/2/2022	7:35 PM	22.52	-1.00	7.13	.00	372.68	372.68	.00	.00	.00	3.73	-1.00	.02
280-159190-f-15	3/2/2022	7:43 PM	22.51	-1.00	7.11	.00	414.67	414.67	.00	.00	.00	4.15	-1.00	.02
280-159190-f-16	3/2/2022	7:50 PM	22.52	-1.00	7.83	.00	273.73	273.73	.00	.00	.00	2.74	-1.00	.02
CCV	3/2/2022	7:57 PM	22.39	-1.00	10.52	98.30	199.68	3.08	196.60	.00	.98	2.00	-1.00	.02
CCB	3/2/2022	8:03 PM	22.54	-1.00	7.57	.00	1.12	1.12	.00	.00	.00	.03	.04	.02

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Shipping and Receiving Documents

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): KD BE	

Bill to: Brice Engineering

Remarks: standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+ MNX (8330A)	TKN (351.2), NH_3 (350 1), NO_2, NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)	
2-27-22	1040		X	NW071-S	AQ	9	ABCDEF	X	X	X	X	X	X	6°C
2-27-22	1150		X	NW060-S	↓	9	↓	X	X	X	X	X	X	↓
2-27-22	1305		X	NW061-S	↓	9	↓	X	X	X	X	X	X	↓

280-159190 Chain of Custody

Page 1578 of 1587

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	2-28-22	1600	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	3/1/22	920	Airbill Number: 535539785640	(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

0821/2022

0.4, 10.6, 43, 11, 28 IR3 CF -0.2

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

2020608

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): KD BE BN	

Bill to: Brice Engineering

Remarks: standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Special Instructions
2-26-22	1430		X	EW7-PM24A-8-25	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
2-26-22	1555		X	EW7-PM21A-8-25	↓	9	↓	X	X	X	X	X	X		↓
2-27-22	0940		X	NW070-8	AQ	9	↓	X	X	X	X	X	X		↓

Signatures	Date	Time
Relinquished by:	2-28-22	1600
Received by:	3/01/22	920
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number: 535539785651

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

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

2020607

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 KD	

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
								Analytical Parameters							Bill to: Brice Engineering
2-28-22	1110		X	CA210-8	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
↓	1155		X	CA212-8	AQ	9	↓	X	X	X	X	X	X		↓
↓	1245		X	CA213-8	AQ	9	↓	X	X	X	X	X	X		↓
															standard TAT

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	2-28-22	1600	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	3/01/22	920	Airbill Number: 8165 7648 0523	**(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

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

2020612

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 KD	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
2-27-22	1650		X	GW092-S	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
2-27-22	1555		X	GW091-S	↓	9	↓	X	X	X	X	X	X		↓
2-28-22	1010		X	CA211-S	↓	9	↓	X	X	X	X	X	X		↓

Analytical Parameters

Bill to: Brice Engineering

standard TAT

Signatures	Date	Time
Relinquished by:	2-28-22	1600
Received by:	3/01/22	920
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number: 8165 7648 0534

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

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2020611

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): KD BE BN	

Bill to: Brice Engineering

Remarks: standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2, NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)	
2-26-22	0925		X	EW7-PM28A-8-25	AQ	9	ABCDEF	X	X	X	X	X	X	6°C
2-26-22	1105		X	EW7-PM29A-8-25	↓	9	↓	X	X	X	X	X	X	↓
2-26-22	1300		X	EW7-PM27B-8-35	↓	9	↓	X	X	X	X	X	X	↓

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	2-28-22	1600	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	3/1/22	920	Airbill Number: 5355 3978 5662	(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

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

2020606

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): KD BE	

Bill to: Brice Engineering

Remarks: standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2, NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		
2-27-22	1415		X	NW062-8		9	ABCDEF	X	X	X	X	X	X		6°C
2-27-22	1415		X	NW062-8-MS/MSD		18	↓	X	X	X	X	X	X		↓

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	2-28-22	1600	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	3/01/22	920	Airbill Number: 816576480545	(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	TAL/Brice Project #: 28017805
Received for Laboratory by:				

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

2020609

Page 1583 of 1587
03/21/2022



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Part # 159469-434 MTW EXP 07/22

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ENGINEERING (WATER TREATMENT

SHIP DATE: 19OCT21
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ARVADA CO 800024517

(303) 736-0100

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SAMPLE RECEIVING

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ARVADA CO 80002

(800) 651-4802

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Form ID 0667

280-159190 Waybill


eurofins
Environment Testing
TestAmerica
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GARY CARSON
GRAND ISLAND, NE 68803
UNITED STATES US
EUROFINS TESTAMERICA DENVER
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ARVADA CO 800024517
(303) 736-0100
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Do Not Lift Using This Tag
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Environment Testing
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SHIP DATE: 28FEB22
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Login Sample Receipt Checklist

Client: Brice Environmental Services, Corp

Job Number: 280-159190-1

Login Number: 159190
List Number: 1
Creator: Lee, Jerry

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.	False	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	