ANALYTICAL REPORT

Job Number: 280-155138-1

Job Description: Cornhusker (CHAAP)

For:
Brice Environmental Services, Corp
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Attention: Corey Schwabenlander



Approved for release.
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The Lab Certification ID# is 4025.

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

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

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
U	Undetected at the Limit of Detection.

HPLC/IC

Qualifier	Qualifier Description
B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.
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.
H	Sample was prepped or analyzed beyond the specified holding time
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: 280-155138-1

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 11/4/2021 11:10 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 2.1º C, 3.8º C, 4.0º C and 5.6º C.

DISSOLVED GASES (GC)

Samples NW021-7 (280-155138-1), NW020-7 (280-155138-2), NW022-7 (280-155138-3), G0082-7 (280-155138-4), G0087-7 (280-155138-5), NW071-7 (280-155138-6), CA213-7 (280-155138-7), G0081-7 (280-155138-8), NW070-7 (280-155138-9) and PZ019-7 (280-155138-10) were analyzed for Dissolved Gases (GC) in accordance with RSK_175. The samples were analyzed on 11/10/2021, 11/11/2021 and 11/12/2021.

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

NITROAROMATICS AND NITRAMINES (HPLC)

Samples NW021-7 (280-155138-1), NW020-7 (280-155138-2), NW022-7 (280-155138-3), G0082-7 (280-155138-4), G0087-7 (280-155138-5), NW071-7 (280-155138-6), CA213-7 (280-155138-7), G0081-7 (280-155138-8), NW070-7 (280-155138-9) and PZ019-7 (280-155138-10) were analyzed for Nitroaromatics and Nitramines (HPLC) in accordance with 8330A. The samples were prepared on 11/08/2021 and analyzed on 11/10/2021 and 11/11/2021.

The %RPD between the primary and confirmation column exceeded 40% for 2-Amino-4,6-dinitrotoluene, 4-Amino-2,6-dinitrotoluene and 2,4-Dinitrotoluene for the following samples: NW020-7 (280-155138-2), G0082-7 (280-155138-4), G0087-7 (280-155138-5) and G0081-7 (280-155138-8) in preparation batch 280-556591 and analytical batch 280-556781 .The results from both columns has been reported and qualified in accordance with the laboratory's QAS.

The method blank(MB) associated with preparation batch 280-556591 and analytical batch 280-556958 contained analyte 2-Amino-4,6-dinitrotoluene and 4-Amino-2,6-dinitrotoluene greater than one-half the reporting limit (RL). The analyte was ND in the MB in the primary instrument. The analyte is reported from both instrument. The associated samples are impacted: G0082-7 (280-155138-4), G0087-7 (280-155138-5) and G0081-7 (280-155138-8).

In preparation batch 280-556591, the following samples required filtration to reduce matrix interferences: NW022-7 (280-155138-3) and NW071-7 (280-155138-6).

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

ALKALINITY

Samples NW021-7 (280-155138-1), NW020-7 (280-155138-2), NW022-7 (280-155138-3), G0082-7 (280-155138-4), G0087-7 (280-155138-5), NW071-7 (280-155138-6), CA213-7 (280-155138-7), G0081-7 (280-155138-8), NW070-7 (280-155138-9) and PZ019-7 (280-155138-10) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 11/17/2021.

Reanalysis of the following samples were performed outside of the analytical holding time due to quality control criteria failure in the initial batch: NW071-7 (280-155138-6), CA213-7 (280-155138-7), G0081-7 (280-155138-8) and NW070-7 (280-155138-9).

Total Alkalinity as $CaCO_3$ was detected in method blank MB 280-557846/84 at a level that was below one half the LOQ.

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

AMMONIA

Samples NW021-7 (280-155138-1), NW020-7 (280-155138-2), NW022-7 (280-155138-3), G0082-7 (280-155138-4), G0087-7 (280-155138-5), NW071-7 (280-155138-6), CA213-7 (280-155138-7), G0081-7 (280-155138-8), NW070-7 (280-155138-9) and PZ019-7 (280-155138-10) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 11/21/2021 and 11/22/2021.

Samples NW022-7 (280-155138-3)[2X] and G0081-7 (280-155138-8)[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.

TOTAL KJELDAHL NITROGEN

Samples NW021-7 (280-155138-1), NW020-7 (280-155138-2), NW022-7 (280-155138-3), G0082-7 (280-155138-4), G0087-7 (280-155138-5), NW071-7 (280-155138-6), CA213-7 (280-155138-7), G0081-7 (280-155138-8), NW070-7 (280-155138-9) and PZ019-7 (280-155138-10) were analyzed for total kjeldahl nitrogen in accordance with EPA Method 351.2. The samples were prepared on 11/16/2021 and analyzed on 11/17/2021.

Nitrogen, Total Kjeldahl failed the recovery criteria low for the MS of sample PZ019-7MS (280-155138-10) in batch 280-557899.

Nitrogen, Total Kjeldahl failed the recovery criteria low for the MSD of sample PZ019-7MSD (280-155138-10) in batch 280-557899.

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

NITRATE-NITRITE AS NITROGEN

Samples NW021-7 (280-155138-1), NW020-7 (280-155138-2), NW022-7 (280-155138-3), G0082-7 (280-155138-4), G0087-7 (280-155138-5), NW071-7 (280-155138-6), CA213-7 (280-155138-7), G0081-7 (280-155138-8), NW070-7 (280-155138-9) and PZ019-7 (280-155138-10) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 11/18/2021.

Samples NW020-7 (280-155138-2)[10X], G0087-7 (280-155138-5)[2X], NW071-7 (280-155138-6)[10X], NW070-7 (280-155138-9)[10X] and PZ019-7 (280-155138-10)[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 NW021-7 (280-155138-1), NW020-7 (280-155138-2), NW022-7 (280-155138-3), G0082-7 (280-155138-4), G0087-7 (280-155138-5), NW071-7 (280-155138-6), CA213-7 (280-155138-7), G0081-7 (280-155138-8), NW070-7 (280-155138-9) and PZ019-7 (280-155138-10) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were prepared and analyzed on 11/09/2021.

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

ANIONS (28 DAYS)

Samples NW021-7 (280-155138-1), NW020-7 (280-155138-2), NW022-7 (280-155138-3), G0082-7 (280-155138-4), G0087-7 (280-155138-5), NW071-7 (280-155138-6), CA213-7 (280-155138-7), G0081-7 (280-155138-8), NW070-7 (280-155138-9) and PZ019-7 (280-155138-10) were analyzed for anions (28 days) in accordance with 9056A (28 Days). The samples were analyzed on 11/20/2021 and 11/23/2021.

Sample NW022-7 (280-155138-3)[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 NW021-7 (280-155138-1), NW020-7 (280-155138-2), NW022-7 (280-155138-3), G0082-7 (280-155138-4), G0087-7 (280-155138-5), NW071-7 (280-155138-6), CA213-7 (280-155138-7), G0081-7 (280-155138-8), NW070-7 (280-155138-9) and PZ019-7 (280-155138-10) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 11/05/2021 and 11/06/2021.

The following samples had a pH >2 measured at the bench, it was reduced to <2 using concentrated sulfuric acid after filtration prior to analysis. NW021-7 (280-155138-1), NW020-7 (280-155138-2), NW022-7 (280-155138-3), G0082-7 (280-155138-4), G0087-7 (280-155138-5), NW071-7 (280-155138-6), CA213-7 (280-155138-7), G0081-7 (280-155138-8), NW070-7 (280-155138-9), PZ019-7 (280-155138-10), (280-155138-D-1-B MS) and (280-155138-D-1-C MSD)

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: 280-155138-1

Client Sample ID: NW021-7 — Lab Sample ID: 280-155138-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.28		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
2-Amino-4,6-dinitrotoluene	0.75		0.12	0.10	0.053	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.76		0.16	0.13	0.060	ug/L	1		8330A	Total/NA
RDX	0.22	M	0.22	0.21	0.054	ug/L	1		8330A	Total/NA
Ammonia	1.4		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	1.6		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.063	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	200		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	380		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: NW020-7 — Lab Sample ID: 280-155138-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	1.2		0.11	0.10	0.046	ug/L	1		8330A	Total/NA
2,4-Dinitrotoluene	0.028	J J1 M	0.10	0.081	0.028	ug/L	1		8330A	Total/NA
2,4-Dinitrotoluene	0.042	J J1	0.10	0.081	0.028	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	1.4	M	0.11	0.10	0.052	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	1.6		0.15	0.12	0.059	ug/L	1		8330A	Total/NA
HMX	0.61	M	0.21	0.20	0.089	ug/L	1		8330A	Total/NA
RDX	0.44	M	0.21	0.20	0.052	ug/L	1		8330A	Total/NA
Nitrate Nitrite as N	33		1.0	0.50	0.19	mg/L	10		353.2	Total/NA
Sulfate	190		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	360		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	6.1		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: NW022-7 — Lab Sample ID: 280-155138-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.32		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	1.1		0.20	0.10	0.044	mg/L	2		350.1	Total/NA
Nitrogen, Total Kjeldahl	1.4		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.21		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	250	D	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	3.1		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0082-7 — Lab Sample ID: 280-155138-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.72		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
2-Amino-4,6-dinitrotoluene	0.14	J1	0.11	0.10	0.051	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	0.24	J1 B M	0.11	0.10	0.051	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.21		0.15	0.12	0.058	ug/L	1		8330A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0082-7 (Continued) — Lab Sample ID: 280-155138-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
HMX	0.24	M	0.21	0.20	0.087	ug/L	1		8330A	Total/NA
RDX	0.49	M	0.21	0.20	0.051	ug/L	1		8330A	Total/NA
Nitrate Nitrite as N	4.4		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	140		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	290		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.1		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0087-7 — Lab Sample ID: 280-155138-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2-Amino-4,6-dinitrotoluene	0.21	J1	0.11	0.10	0.051	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	0.32	J1 B	0.11	0.10	0.051	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.58		0.15	0.12	0.058	ug/L	1		8330A	Total/NA
HMX	0.71	M	0.21	0.20	0.089	ug/L	1		8330A	Total/NA
RDX	0.22	M	0.21	0.20	0.052	ug/L	1		8330A	Total/NA
Nitrate Nitrite as N	7.6		0.20	0.10	0.038	mg/L	2		353.2	Total/NA
Sulfate	130		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	320		10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	2.9		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: NW071-7 — Lab Sample ID: 280-155138-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate Nitrite as N	34		1.0	0.50	0.19	mg/L	10		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	110	H	10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.0		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: CA213-7 — Lab Sample ID: 280-155138-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
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	70		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	140	H	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

Client Sample ID: G0081-7 — Lab Sample ID: 280-155138-8

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	1.1		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	0.46	M	0.21	0.20	0.082	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	0.093	J J1	0.11	0.098	0.050	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	0.40	J1 B	0.11	0.098	0.050	ug/L	1		8330A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0081-7 (Continued)
Lab Sample ID: 280-155138-8

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
4-Amino-2,6-dinitrotoluene	0.25	J1	0.15	0.12	0.057	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	1.2	J1 B M	0.15	0.12	0.057	ug/L	1		8330A	Total/NA
Ammonia	0.44		0.20	0.10	0.044	mg/L	2		350.1	Total/NA
Nitrogen, Total Kjeldahl	1.1		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.14		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	150		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	370	H	10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	5.7		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: NW070-7
Lab Sample ID: 280-155138-9

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate Nitrite as N	31		1.0	0.50	0.19	mg/L	10		353.2	Total/NA
Sulfate	98		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	190	H	10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	8.2		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: PZ019-7
Lab Sample ID: 280-155138-10

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate Nitrite as N	38		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	71		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	110		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

This Detection Summary does not include radiochemical test results.

Client Sample ID: NW021-7
Lab Sample ID: 280-155138-1

Date Collected: 11/03/21 10:55
Matrix: Water
Date Received: 11/04/21 11:10

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.28**		0.0050	0.0013	0.00063	mg/L		11/11/21 21:23	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.088	ug/L		11/10/21 03:12	1
1,3-Dinitrobenzene	0.10	U	0.12	0.10	0.039	ug/L		11/10/21 03:12	1
2,4,6-Trinitrotoluene	0.10	U	0.12	0.10	0.047	ug/L		11/10/21 03:12	1
2,4-Dinitrotoluene	0.084	U	0.10	0.084	0.029	ug/L		11/10/21 03:12	1
2,6-Dinitrotoluene	0.084	U	0.10	0.084	0.042	ug/L		11/10/21 03:12	1
2-Amino-4,6-dinitrotoluene	**0.75**		0.12	0.10	0.053	ug/L		11/10/21 03:12	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.090	ug/L		11/10/21 03:12	1
3-Nitrotoluene	0.42	U	0.42	0.42	0.20	ug/L		11/10/21 03:12	1
4-Amino-2,6-dinitrotoluene	**0.76**		0.16	0.13	0.060	ug/L		11/10/21 03:12	1
4-Nitrotoluene	0.42	U	0.43	0.42	0.10	ug/L		11/10/21 03:12	1
HMX	0.21	U M	0.22	0.21	0.092	ug/L		11/10/21 03:12	1
MNX	0.42	U	2.1	0.42	0.16	ug/L		11/10/21 03:12	1
Nitrobenzene	0.21	U	0.22	0.21	0.095	ug/L		11/10/21 03:12	1
RDX	**0.22**	**M**	0.22	0.21	0.054	ug/L		11/10/21 03:12	1
Tetryl	0.10	U M	0.12	0.10	0.033	ug/L		11/10/21 03:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*98*	*M*	*83 - 119*	*11/08/21 14:30*	*11/10/21 03:12*	*1*
1,2-Dinitrobenzene	*94*		*83 - 119*	*11/08/21 14:30*	*11/11/21 02:06*	*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		11/21/21 13:55	1
Nitrogen, Total Kjeldahl	**1.6**		1.0	1.0	0.69	mg/L		11/17/21 19:40	1
Nitrate Nitrite as N	**0.063**	**J**	0.10	0.050	0.019	mg/L		11/18/21 16:45	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/09/21 12:10	1
Sulfate	**200**		5.0	2.5	1.0	mg/L		11/20/21 15:49	1
Total Alkalinity as CaCO3	**380**		10	6.4	3.1	mg/L		11/17/21 05:03	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		11/05/21 23:15	1

Client Sample ID: NW020-7
Lab Sample ID: 280-155138-2

Date Collected: 11/03/21 09:35
Matrix: Water
Date Received: 11/04/21 11:10

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		11/11/21 21:36	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.086	ug/L		11/10/21 03:35	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038	ug/L		11/10/21 03:35	1
2,4,6-Trinitrotoluene	**1.2**		0.11	0.10	0.046	ug/L		11/10/21 03:35	1
2,4-Dinitrotoluene	**0.028**	**J J1 M**	0.10	0.081	0.028	ug/L		11/10/21 03:35	1

Client Sample ID: NW020-7

Date Collected: 11/03/21 09:35
Date Received: 11/04/21 11:10

Lab Sample ID: 280-155138-2

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4-Dinitrotoluene	**0.042**	**J J1**	0.10	0.081	0.028	ug/L		11/11/21 02:40	1
2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.041	ug/L		11/10/21 03:35	1
2-Amino-4,6-dinitrotoluene	**1.4**	**M**	0.11	0.10	0.052	ug/L		11/10/21 03:35	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.087	ug/L		11/10/21 03:35	1
3-Nitrotoluene	0.41	U	0.41	0.41	0.20	ug/L		11/10/21 03:35	1
4-Amino-2,6-dinitrotoluene	**1.6**		0.15	0.12	0.059	ug/L		11/10/21 03:35	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		11/10/21 03:35	1
HMX	**0.61**	**M**	0.21	0.20	0.089	ug/L		11/10/21 03:35	1
MNX	0.41	U	2.0	0.41	0.16	ug/L		11/10/21 03:35	1
Nitrobenzene	0.20	U	0.21	0.20	0.093	ug/L		11/10/21 03:35	1
RDX	**0.44**	**M**	0.21	0.20	0.052	ug/L		11/10/21 03:35	1
Tetryl	0.10	U M	0.11	0.10	0.032	ug/L		11/10/21 03:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*91*	*M*	*83 - 119*	*11/08/21 14:30*	*11/10/21 03:35*	*1*
1,2-Dinitrobenzene	*93*	*M*	*83 - 119*	*11/08/21 14:30*	*11/11/21 02:40*	*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		11/21/21 13:57	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/17/21 19:40	1
Nitrate Nitrite as N	**33**		1.0	0.50	0.19	mg/L		11/18/21 16:47	10
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/09/21 12:10	1
Sulfate	**190**		5.0	2.5	1.0	mg/L		11/20/21 16:31	1
Total Alkalinity as CaCO3	**360**		10	6.4	3.1	mg/L		11/17/21 05:53	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**6.1**		1.0	0.80	0.35	mg/L		11/06/21 00:01	1

Client Sample ID: NW022-7

Date Collected: 11/03/21 12:00
Date Received: 11/04/21 11:10

Lab Sample ID: 280-155138-3

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.32**		0.0050	0.0013	0.00063	mg/L		11/11/21 21:49	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084	ug/L		11/10/21 03:58	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		11/10/21 03:58	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		11/10/21 03:58	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		11/10/21 03:58	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		11/10/21 03:58	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		11/10/21 03:58	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.085	ug/L		11/10/21 03:58	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.19	ug/L		11/10/21 03:58	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		11/10/21 03:58	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		11/10/21 03:58	1
HMX	0.20	U M	0.21	0.20	0.088	ug/L		11/10/21 03:58	1

Client Sample ID: NW022-7

Date Collected: 11/03/21 12:00
Date Received: 11/04/21 11:10

Lab Sample ID: 280-155138-3

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
MNX	0.40	U	2.0	0.40	0.15	ug/L		11/10/21 03:58	1
Nitrobenzene	0.20	U M	0.21	0.20	0.091	ug/L		11/10/21 03:58	1
RDX	0.20	U	0.21	0.20	0.051	ug/L		11/10/21 03:58	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		11/10/21 03:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*93*	*M*	*83 - 119*	*11/08/21 14:30*	*11/10/21 03:58*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**1.1**		0.20	0.10	0.044	mg/L		11/22/21 11:22	2
Nitrogen, Total Kjeldahl	**1.4**		1.0	1.0	0.69	mg/L		11/17/21 19:39	1
Nitrate Nitrite as N	**0.21**		0.10	0.050	0.019	mg/L		11/18/21 16:49	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		11/09/21 12:10	1
Sulfate	**250**	**D**	25	13	5.2	mg/L		11/23/21 15:29	5
Total Alkalinity as CaCO3	**440**		10	6.4	3.1	mg/L		11/17/21 05:19	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.1**		1.0	0.80	0.35	mg/L		11/06/21 00:18	1

Client Sample ID: G0082-7

Date Collected: 11/03/21 10:05
Date Received: 11/04/21 11:10

Lab Sample ID: 280-155138-4

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.72**		0.0050	0.0013	0.00063	mg/L		11/11/21 22:02	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.084	ug/L		11/10/21 04:21	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		11/10/21 04:21	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		11/10/21 04:21	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		11/10/21 04:21	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		11/10/21 04:21	1
2-Amino-4,6-dinitrotoluene	**0.14**	**J1**	0.11	0.10	0.051	ug/L		11/10/21 04:21	1
2-Amino-4,6-dinitrotoluene	**0.24**	**J1 B M**	0.11	0.10	0.051	ug/L		11/11/21 03:15	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.085	ug/L		11/10/21 04:21	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.19	ug/L		11/10/21 04:21	1
4-Amino-2,6-dinitrotoluene	**0.21**		0.15	0.12	0.058	ug/L		11/10/21 04:21	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		11/10/21 04:21	1
HMX	**0.24**	**M**	0.21	0.20	0.087	ug/L		11/10/21 04:21	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		11/10/21 04:21	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		11/10/21 04:21	1
RDX	**0.49**	**M**	0.21	0.20	0.051	ug/L		11/10/21 04:21	1
Tetryl	0.10	U M	0.11	0.10	0.032	ug/L		11/10/21 04:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*	*M*	*83 - 119*	*11/08/21 14:30*	*11/10/21 04:21*	*1*
1,2-Dinitrobenzene	*94*		*83 - 119*	*11/08/21 14:30*	*11/11/21 03:15*	*1*

Client Sample ID: G0082-7
Lab Sample ID: 280-155138-4
Date Collected: 11/03/21 10:05
Matrix: Water
Date Received: 11/04/21 11:10

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		11/21/21 11:38	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/17/21 19:39	1
Nitrate Nitrite as N	**4.4**		0.10	0.050	0.019	mg/L		11/18/21 16:51	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/09/21 12:10	1
Sulfate	**140**		5.0	2.5	1.0	mg/L		11/20/21 16:59	1
Total Alkalinity as CaCO3	**290**		10	6.4	3.1	mg/L		11/17/21 05:27	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.1**		1.0	0.80	0.35	mg/L		11/06/21 00:35	1

Client Sample ID: G0087-7
Lab Sample ID: 280-155138-5
Date Collected: 11/03/21 11:30
Matrix: Water
Date Received: 11/04/21 11:10

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		11/11/21 22:15	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.085	ug/L		11/10/21 04:44	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		11/10/21 04:44	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046	ug/L		11/10/21 04:44	1
2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028	ug/L		11/10/21 04:44	1
2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.041	ug/L		11/10/21 04:44	1
2-Amino-4,6-dinitrotoluene	**0.21**	**J1**	0.11	0.10	0.051	ug/L		11/10/21 04:44	1
2-Amino-4,6-dinitrotoluene	**0.32**	**J1 B**	0.11	0.10	0.051	ug/L		11/11/21 03:50	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.087	ug/L		11/10/21 04:44	1
3-Nitrotoluene	0.41	U	0.41	0.41	0.20	ug/L		11/10/21 04:44	1
4-Amino-2,6-dinitrotoluene	**0.58**		0.15	0.12	0.058	ug/L		11/10/21 04:44	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		11/10/21 04:44	1
HMX	**0.71**	**M**	0.21	0.20	0.089	ug/L		11/10/21 04:44	1
MNX	0.41	U	2.0	0.41	0.16	ug/L		11/10/21 04:44	1
Nitrobenzene	0.20	U	0.21	0.20	0.092	ug/L		11/10/21 04:44	1
RDX	**0.22**	**M**	0.21	0.20	0.052	ug/L		11/10/21 04:44	1
Tetryl	0.10	U M	0.11	0.10	0.032	ug/L		11/10/21 04:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*94*	*M*	*83 - 119*	*11/08/21 14:30*	*11/10/21 04:44*	*1*
1,2-Dinitrobenzene	*94*		*83 - 119*	*11/08/21 14:30*	*11/11/21 03:50*	*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		11/21/21 14:01	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/17/21 19:38	1
Nitrate Nitrite as N	**7.6**		0.20	0.10	0.038	mg/L		11/18/21 16:53	2
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/09/21 12:10	1
Sulfate	**130**		5.0	2.5	1.0	mg/L		11/20/21 17:13	1
Total Alkalinity as CaCO3	**320**		10	6.4	3.1	mg/L		11/17/21 05:11	1

Client Sample ID: G0087-7
Lab Sample ID: 280-155138-5
Date Collected: 11/03/21 11:30
Matrix: Water
Date Received: 11/04/21 11:10

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		11/06/21 00:54	1

Client Sample ID: NW071-7
Lab Sample ID: 280-155138-6
Date Collected: 11/02/21 15:55
Matrix: Water
Date Received: 11/04/21 11:10

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		11/10/21 12:56	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.085	ug/L		11/10/21 05:07	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.037	ug/L		11/10/21 05:07	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		11/10/21 05:07	1
2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028	ug/L		11/10/21 05:07	1
2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.040	ug/L		11/10/21 05:07	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		11/10/21 05:07	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		11/10/21 05:07	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		11/10/21 05:07	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		11/10/21 05:07	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		11/10/21 05:07	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		11/10/21 05:07	1
MNX	0.40	U M	2.0	0.40	0.16	ug/L		11/10/21 05:07	1
Nitrobenzene	0.20	U	0.21	0.20	0.092	ug/L		11/10/21 05:07	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		11/10/21 05:07	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		11/11/21 04:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*	*M*	*83 - 119*	*11/08/21 14:30*	*11/10/21 05:07*	*1*
1,2-Dinitrobenzene	*93*		*83 - 119*	*11/08/21 14:30*	*11/11/21 04:25*	*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		11/21/21 13:59	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/17/21 19:38	1
Nitrate Nitrite as N	**34**		1.0	0.50	0.19	mg/L		11/18/21 16:55	10
Sulfide	**1.6**	**J**	4.0	1.9	0.79	mg/L		11/09/21 14:38	1
Sulfate	**65**		5.0	2.5	1.0	mg/L		11/20/21 17:27	1
Total Alkalinity as CaCO3	**110**	**H**	10	6.4	3.1	mg/L		11/17/21 04:55	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.0**		1.0	0.80	0.35	mg/L		11/06/21 01:15	1

Client Sample ID: CA213-7
Lab Sample ID: 280-155138-7

Date Collected: 11/02/21 13:20
Matrix: Water
Date Received: 11/04/21 11:10

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		11/12/21 16:06	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.084	ug/L		11/10/21 05:30	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		11/10/21 05:30	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		11/10/21 05:30	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		11/10/21 05:30	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		11/10/21 05:30	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		11/10/21 05:30	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.085	ug/L		11/10/21 05:30	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.19	ug/L		11/10/21 05:30	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		11/10/21 05:30	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		11/10/21 05:30	1
HMX	0.20	U M	0.21	0.20	0.088	ug/L		11/10/21 05:30	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		11/10/21 05:30	1
Nitrobenzene	0.20	U M	0.21	0.20	0.091	ug/L		11/10/21 05:30	1
RDX	0.20	U	0.21	0.20	0.051	ug/L		11/10/21 05:30	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		11/10/21 05:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*97*	*M*	*83 - 119*	*11/08/21 14:30*	*11/10/21 05:30*	*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		11/21/21 11:54	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/17/21 19:37	1
Nitrate Nitrite as N	**2.1**		0.10	0.050	0.019	mg/L		11/18/21 16:57	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		11/09/21 14:38	1
Sulfate	**70**		5.0	2.5	1.0	mg/L		11/20/21 18:37	1
Total Alkalinity as CaCO3	**140**	**H**	10	6.4	3.1	mg/L		11/17/21 04:35	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		11/06/21 01:32	1

Client Sample ID: G0081-7
Lab Sample ID: 280-155138-8

Date Collected: 11/02/21 15:10
Matrix: Water
Date Received: 11/04/21 11:10

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**1.1**		0.0050	0.0013	0.00063	mg/L		11/12/21 16:19	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**0.46**	**M**	0.21	0.20	0.082	ug/L		11/10/21 06:39	1
1,3-Dinitrobenzene	0.098	U	0.11	0.098	0.036	ug/L		11/10/21 06:39	1
2,4,6-Trinitrotoluene	0.098	U	0.11	0.098	0.044	ug/L		11/10/21 06:39	1
2,4-Dinitrotoluene	0.078	U	0.098	0.078	0.027	ug/L		11/10/21 06:39	1
2,6-Dinitrotoluene	0.078	U	0.098	0.078	0.039	ug/L		11/10/21 06:39	1

Client Sample ID: G0081-7
Lab Sample ID: 280-155138-8

Date Collected: 11/02/21 15:10
Matrix: Water
Date Received: 11/04/21 11:10

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Amino-4,6-dinitrotoluene	**0.093**	**J J1**	0.11	0.098	0.050	ug/L		11/10/21 06:39	1
2-Amino-4,6-dinitrotoluene	**0.40**	**J1 B**	0.11	0.098	0.050	ug/L		11/11/21 05:00	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.084	ug/L		11/10/21 06:39	1
3-Nitrotoluene	0.39	U	0.39	0.39	0.19	ug/L		11/10/21 06:39	1
4-Amino-2,6-dinitrotoluene	**0.25**	**J1**	0.15	0.12	0.057	ug/L		11/10/21 06:39	1
4-Amino-2,6-dinitrotoluene	**1.2**	**J1 B M**	0.15	0.12	0.057	ug/L		11/11/21 05:00	1
4-Nitrotoluene	0.39	U	0.40	0.39	0.098	ug/L		11/10/21 06:39	1
HMX	0.20	U	0.21	0.20	0.086	ug/L		11/10/21 06:39	1
MNX	0.39	U	2.0	0.39	0.15	ug/L		11/10/21 06:39	1
Nitrobenzene	0.20	U	0.21	0.20	0.089	ug/L		11/10/21 06:39	1
RDX	0.20	U	0.21	0.20	0.051	ug/L		11/10/21 06:39	1
Tetryl	0.098	U M	0.11	0.098	0.031	ug/L		11/10/21 06:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*	*M*	*83 - 119*	*11/08/21 14:30*	*11/10/21 06:39*	*1*
1,2-Dinitrobenzene	*95*	*M*	*83 - 119*	*11/08/21 14:30*	*11/11/21 05:00*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.44**		0.20	0.10	0.044	mg/L		11/22/21 11:30	2
Nitrogen, Total Kjeldahl	**1.1**		1.0	1.0	0.69	mg/L		11/17/21 19:36	1
Nitrate Nitrite as N	**0.14**		0.10	0.050	0.019	mg/L		11/18/21 17:11	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		11/09/21 12:10	1
Sulfate	**150**		5.0	2.5	1.0	mg/L		11/20/21 19:34	1
Total Alkalinity as CaCO3	**370**	**H**	10	6.4	3.1	mg/L		11/17/21 04:49	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**5.7**		1.0	0.80	0.35	mg/L		11/06/21 02:19	1

Client Sample ID: NW070-7
Lab Sample ID: 280-155138-9

Date Collected: 11/02/21 14:45
Matrix: Water
Date Received: 11/04/21 11:10

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		11/12/21 16:32	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.083	ug/L		11/10/21 07:02	1
1,3-Dinitrobenzene	0.099	U	0.11	0.099	0.037	ug/L		11/10/21 07:02	1
2,4,6-Trinitrotoluene	0.099	U	0.11	0.099	0.045	ug/L		11/10/21 07:02	1
2,4-Dinitrotoluene	0.079	U	0.099	0.079	0.027	ug/L		11/10/21 07:02	1
2,6-Dinitrotoluene	0.079	U	0.099	0.079	0.040	ug/L		11/10/21 07:02	1
2-Amino-4,6-dinitrotoluene	0.099	U	0.11	0.099	0.050	ug/L		11/10/21 07:02	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.085	ug/L		11/10/21 07:02	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.19	ug/L		11/10/21 07:02	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.057	ug/L		11/10/21 07:02	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.099	ug/L		11/10/21 07:02	1
HMX	0.20	U	0.21	0.20	0.087	ug/L		11/10/21 07:02	1

Client Sample ID: NW070-7

Date Collected: 11/02/21 14:45
Date Received: 11/04/21 11:10

Lab Sample ID: 280-155138-9

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
MNX	0.40	U	2.0	0.40	0.15	ug/L		11/10/21 07:02	1
Nitrobenzene	0.20	U	0.21	0.20	0.090	ug/L		11/10/21 07:02	1
RDX	0.20	U	0.21	0.20	0.051	ug/L		11/10/21 07:02	1
Tetryl	0.099	U	0.11	0.099	0.032	ug/L		11/10/21 07:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*89*	*M*	*83 - 119*	*11/08/21 14:30*	*11/10/21 07:02*	*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		11/21/21 11:36	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/17/21 19:35	1
Nitrate Nitrite as N	**31**		1.0	0.50	0.19	mg/L		11/18/21 17:13	10
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/09/21 14:38	1
Sulfate	**98**		5.0	2.5	1.0	mg/L		11/20/21 19:20	1
Total Alkalinity as CaCO3	**190**	**H**	10	6.4	3.1	mg/L		11/17/21 04:41	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**8.2**		1.0	0.80	0.35	mg/L		11/06/21 02:33	1

Client Sample ID: PZ019-7

Date Collected: 11/03/21 12:55
Date Received: 11/04/21 11:10

Lab Sample ID: 280-155138-10

Matrix: Water

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		11/12/21 16:45	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.085	ug/L		11/10/21 07:25	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		11/10/21 07:25	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		11/10/21 07:25	1
2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028	ug/L		11/10/21 07:25	1
2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.040	ug/L		11/10/21 07:25	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		11/10/21 07:25	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		11/10/21 07:25	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		11/10/21 07:25	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		11/10/21 07:25	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		11/10/21 07:25	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		11/10/21 07:25	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		11/10/21 07:25	1
Nitrobenzene	0.20	U	0.21	0.20	0.092	ug/L		11/10/21 07:25	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		11/10/21 07:25	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		11/10/21 07:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*	*M*	*83 - 119*	*11/08/21 14:30*	*11/10/21 07:25*	*1*

Client Sample ID: PZ019-7
Date Collected: 11/03/21 12:55
Date Received: 11/04/21 11:10

Lab Sample ID: 280-155138-10
Matrix: Water

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		11/22/21 11:24	1
Nitrogen, Total Kjeldahl	1.0	U J1	1.0	1.0	0.69	mg/L		11/17/21 19:35	1
Nitrate Nitrite as N	**38**		1.0	0.50	0.19	mg/L		11/18/21 16:39	10
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		11/09/21 12:10	1
Sulfate	**71**		5.0	2.5	1.0	mg/L		11/20/21 17:41	1
Total Alkalinity as CaCO3	**110**		10	6.4	3.1	mg/L		11/17/21 05:45	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		11/06/21 02:50	1

Default Detection Limits

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

Job ID: 280-155138-1

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: 280-155138-1

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)						
280-155138-1	NW021-7	98 M						
280-155138-2	NW020-7	91 M						
280-155138-3	NW022-7	93 M						
280-155138-4	G0082-7	95 M						
280-155138-5	G0087-7	94 M						
280-155138-6	NW071-7	95 M						
280-155138-7	CA213-7	97 M						
280-155138-8	G0081-7	95 M						
280-155138-9	NW070-7	89 M						
280-155138-10	PZ019-7	95 M						
280-155138-10MS	PZ019-7	96 M						
280-155138-10MS	PZ019-7	96 M						
280-155138-10MSD	PZ019-7	93 M						
280-155138-10MSD	PZ019-7	96 M						
LCS 280-556591/2-A	Lab Control Sample	95						
LCS 280-556591/3-A	Lab Control Sample	99						
MB 280-556591/1-A	Method Blank	98						

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)						
280-155138-1	NW021-7	94						
280-155138-2	NW020-7	93 M						
280-155138-4	G0082-7	94						
280-155138-5	G0087-7	94						
280-155138-6	NW071-7	93						
280-155138-8	G0081-7	95 M						

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 280-556939/4
Matrix: Water
Analysis Batch: 556939

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		11/10/21 12:30	1

Lab Sample ID: LCS 280-556939/2
Matrix: Water
Analysis Batch: 556939

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	0.0669		mg/L		102	73 - 125

Lab Sample ID: LCSD 280-556939/3
Matrix: Water
Analysis Batch: 556939

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	0.0661		mg/L		101	73 - 125	1	20

Lab Sample ID: MB 280-557116/4
Matrix: Water
Analysis Batch: 557116

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		11/11/21 16:49	1

Lab Sample ID: LCS 280-557116/2
Matrix: Water
Analysis Batch: 557116

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	0.0669		mg/L		102	73 - 125

Lab Sample ID: LCSD 280-557116/3
Matrix: Water
Analysis Batch: 557116

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	0.0670		mg/L		102	73 - 125	0	20

Lab Sample ID: MB 280-557326/4
Matrix: Water
Analysis Batch: 557326

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		11/12/21 14:48	1

Lab Sample ID: LCS 280-557326/2
Matrix: Water
Analysis Batch: 557326

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	0.0663		mg/L		101	73 - 125

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: LCSD 280-557326/3
Matrix: Water
Analysis Batch: 557326

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	0.0666		mg/L		101	73 - 125	1	20

Lab Sample ID: 280-155138-10MS
Matrix: Water
Analysis Batch: 557326

Client Sample ID: PZ019-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methane	0.0013	U	0.0657	0.0657		mg/L		100	73 - 125		

Lab Sample ID: 280-155138-10MSD
Matrix: Water
Analysis Batch: 557326

Client Sample ID: PZ019-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methane	0.0013	U	0.0657	0.0666		mg/L		101	73 - 125	1	20

Lab Sample ID: 280-155138-10 DU
Matrix: Water
Analysis Batch: 557326

Client Sample ID: PZ019-7
Prep Type: Total/NA

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

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Lab Sample ID: MB 280-556591/1-A
Matrix: Water
Analysis Batch: 556781

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 556591

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		11/10/21 02:04	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		11/10/21 02:04	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045	ug/L		11/10/21 02:04	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.027	ug/L		11/10/21 02:04	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		11/10/21 02:04	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		11/10/21 02:04	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		11/10/21 02:04	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		11/10/21 02:04	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		11/10/21 02:04	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		11/10/21 02:04	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		11/10/21 02:04	1
MNX	0.40	U	2.0	0.40	0.15	ug/L		11/10/21 02:04	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		11/10/21 02:04	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		11/10/21 02:04	1
Tetryl	0.10	U	0.11	0.10	0.032	ug/L		11/10/21 02:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*98*		*83 - 119*	*11/08/21 14:30*	*11/10/21 02:04*	*1*

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

Lab Sample ID: LCS 280-556591/2-A
Matrix: Water
Analysis Batch: 556781

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 556591

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	2.00	2.13		ug/L		107	73 - 125
1,3-Dinitrobenzene	2.00	2.06		ug/L		103	78 - 120
2,4,6-Trinitrotoluene	2.00	2.10		ug/L		105	71 - 123
2,4-Dinitrotoluene	2.00	2.01		ug/L		101	78 - 120
2,6-Dinitrotoluene	2.00	1.99		ug/L		99	77 - 127
2-Amino-4,6-dinitrotoluene	2.00	1.92		ug/L		96	79 - 120
2-Nitrotoluene	2.00	1.56		ug/L		78	70 - 127
3-Nitrotoluene	2.00	1.55	M	ug/L		78	73 - 125
4-Amino-2,6-dinitrotoluene	2.00	1.87		ug/L		93	76 - 125
4-Nitrotoluene	2.00	1.59		ug/L		79	71 - 127
HMX	2.00	2.09		ug/L		105	65 - 135
Nitrobenzene	2.00	1.78		ug/L		89	65 - 134
RDX	2.00	1.99		ug/L		100	68 - 130
Tetryl	2.00	2.03		ug/L		101	64 - 128

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

Lab Sample ID: LCS 280-556591/3-A
Matrix: Water
Analysis Batch: 556781

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 556591

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
MNX	2.33	2.31	M	ug/L		99	57 - 132

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

Lab Sample ID: 280-155138-10MS
Matrix: Water
Analysis Batch: 556781

Client Sample ID: PZ019-7
Prep Type: Total/NA
Prep Batch: 556591

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trinitrobenzene	0.20	U	2.01	2.10	M	ug/L		104	73 - 125
1,3-Dinitrobenzene	0.10	U	2.01	2.05	M	ug/L		102	78 - 120
2,4,6-Trinitrotoluene	0.10	U	2.01	2.09		ug/L		104	71 - 123
2,4-Dinitrotoluene	0.081	U	2.01	2.01		ug/L		100	78 - 120
2,6-Dinitrotoluene	0.081	U	2.01	2.05		ug/L		102	77 - 127
2-Amino-4,6-dinitrotoluene	0.10	U	2.01	1.94		ug/L		96	79 - 120
2-Nitrotoluene	0.20	U	2.01	1.74		ug/L		87	70 - 127
3-Nitrotoluene	0.40	U	2.01	1.71	M	ug/L		85	73 - 125
4-Amino-2,6-dinitrotoluene	0.12	U	2.01	1.89		ug/L		94	76 - 125
4-Nitrotoluene	0.40	U	2.01	1.73		ug/L		86	71 - 127
HMX	0.20	U	2.01	1.96	M	ug/L		97	65 - 135
Nitrobenzene	0.20	U	2.01	1.92	M	ug/L		95	65 - 134
RDX	0.20	U	2.01	1.89	M	ug/L		94	68 - 130
Tetryl	0.10	U	2.01	2.17		ug/L		108	64 - 128

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

Lab Sample ID: 280-155138-10MS
Matrix: Water
Analysis Batch: 556781

Client Sample ID: PZ019-7
Prep Type: Total/NA
Prep Batch: 556591

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dinitrobenzene	*96*	*M*	*83 - 119*

Lab Sample ID: 280-155138-10MS
Matrix: Water
Analysis Batch: 556781

Client Sample ID: PZ019-7
Prep Type: Total/NA
Prep Batch: 556591

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
MNX	0.40	U M	2.46	2.45	M	ug/L		99	57 - 132		

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dinitrobenzene	*96*	*M*	*83 - 119*

Lab Sample ID: 280-155138-10MSD
Matrix: Water
Analysis Batch: 556781

Client Sample ID: PZ019-7
Prep Type: Total/NA
Prep Batch: 556591

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	0.20	U	2.03	2.11	M	ug/L		104	73 - 125	1	30
1,3-Dinitrobenzene	0.10	U	2.03	2.12		ug/L		105	78 - 120	3	30
2,4,6-Trinitrotoluene	0.10	U	2.03	2.12		ug/L		105	71 - 123	2	30
2,4-Dinitrotoluene	0.081	U	2.03	2.01		ug/L		99	78 - 120	0	30
2,6-Dinitrotoluene	0.081	U	2.03	2.05		ug/L		101	77 - 127	0	30
2-Amino-4,6-dinitrotoluene	0.10	U	2.03	1.94		ug/L		95	79 - 120	0	30
2-Nitrotoluene	0.20	U	2.03	1.67		ug/L		82	70 - 127	4	30
3-Nitrotoluene	0.40	U	2.03	1.66	M	ug/L		82	73 - 125	3	30
4-Amino-2,6-dinitrotoluene	0.12	U	2.03	1.89		ug/L		93	76 - 125	0	30
4-Nitrotoluene	0.40	U	2.03	1.68		ug/L		83	71 - 127	3	30
HMX	0.20	U	2.03	2.03	M	ug/L		100	65 - 135	3	30
Nitrobenzene	0.20	U	2.03	1.94		ug/L		95	65 - 134	1	30
RDX	0.20	U	2.03	1.96	M	ug/L		97	68 - 130	4	30
Tetryl	0.10	U	2.03	2.18		ug/L		107	64 - 128	0	30

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

Lab Sample ID: 280-155138-10MSD
Matrix: Water
Analysis Batch: 556781

Client Sample ID: PZ019-7
Prep Type: Total/NA
Prep Batch: 556591

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
MNX	0.40	U M	2.33	2.33	M	ug/L		100	57 - 132	5	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dinitrobenzene	*96*	*M*	*83 - 119*

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 280-558260/20
Matrix: Water
Analysis Batch: 558260

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/21/21 11:02	1

Lab Sample ID: LCS 280-558260/18
Matrix: Water
Analysis Batch: 558260

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	2.45		mg/L		98	90 - 110		

Lab Sample ID: LCSD 280-558260/19
Matrix: Water
Analysis Batch: 558260

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia			2.50	2.45		mg/L		98	90 - 110	0	10

Lab Sample ID: MB 280-558270/20
Matrix: Water
Analysis Batch: 558270

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/21/21 13:47	1

Lab Sample ID: LCS 280-558270/18
Matrix: Water
Analysis Batch: 558270

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia			2.50	2.55		mg/L		102	90 - 110		

Lab Sample ID: LCSD 280-558270/19
Matrix: Water
Analysis Batch: 558270

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia			2.50	2.53		mg/L		101	90 - 110	1	10

Lab Sample ID: MB 280-558390/20
Matrix: Water
Analysis Batch: 558390

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	0.050	U	0.10	0.050	0.022	mg/L		11/22/21 10:46	1

Lab Sample ID: LCS 280-558390/18
Matrix: Water
Analysis Batch: 558390

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	2.51		mg/L		100	90 - 110		

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: LCSD 280-558390/19
Matrix: Water
Analysis Batch: 558390

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia			2.50	2.51		mg/L		100	90 - 110	0	10

Lab Sample ID: 280-155138-10MS
Matrix: Water
Analysis Batch: 558390

Client Sample ID: PZ019-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia	0.050	U	1.00	0.985		mg/L		98	90 - 110		

Lab Sample ID: 280-155138-10MSD
Matrix: Water
Analysis Batch: 558390

Client Sample ID: PZ019-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia	0.050	U	1.00	1.01		mg/L		101	90 - 110	3	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-557729/2-A
Matrix: Water
Analysis Batch: 557899

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 557729

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		11/17/21 19:34	1

Lab Sample ID: LCS 280-557729/1-A
Matrix: Water
Analysis Batch: 557899

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 557729

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrogen, Total Kjeldahl			6.00	5.92		mg/L		99	90 - 110		

Lab Sample ID: 280-155138-10MS
Matrix: Water
Analysis Batch: 557899

Client Sample ID: PZ019-7
Prep Type: Total/NA
Prep Batch: 557729

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: 280-155138-10MSD
Matrix: Water
Analysis Batch: 557899

Client Sample ID: PZ019-7
Prep Type: Total/NA
Prep Batch: 557729

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

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-558049/22
Matrix: Water
Analysis Batch: 558049

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		11/18/21 16:37	1

Lab Sample ID: LCS 280-558049/21
Matrix: Water
Analysis Batch: 558049

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	5.18		mg/L		104	90 - 110		

Lab Sample ID: 280-155138-10MS
Matrix: Water
Analysis Batch: 558049

Client Sample ID: PZ019-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate Nitrite as N	38		40.0	76.8		mg/L		97	90 - 110		

Lab Sample ID: 280-155138-10MSD
Matrix: Water
Analysis Batch: 558049

Client Sample ID: PZ019-7
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	38		40.0	78.2		mg/L		100	90 - 110	2	10

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

Lab Sample ID: MB 280-556749/2-A
Matrix: Water
Analysis Batch: 556751

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 556749

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		11/09/21 12:10	1

Lab Sample ID: LCS 280-556749/1-A
Matrix: Water
Analysis Batch: 556751

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 556749

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide			20.2	16.4		mg/L		81	44 - 110		

Lab Sample ID: 280-155138-10MS
Matrix: Water
Analysis Batch: 556751

Client Sample ID: PZ019-7
Prep Type: Total/NA
Prep Batch: 556749

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide	0.80	J	20.2	15.6		mg/L		73	44 - 110		

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

Lab Sample ID: 280-155138-10MSD — **Client Sample ID: PZ019-7**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 556751 — **Prep Batch: 556749**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	0.80	J	20.2	15.6		mg/L		73	44 - 110	0	20

Lab Sample ID: MB 280-556787/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 556789 — **Prep Batch: 556787**

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		11/09/21 14:38	1

Lab Sample ID: LCS 280-556787/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 556789 — **Prep Batch: 556787**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	20.2	16.0		mg/L		79	44 - 110

Lab Sample ID: 280-155138-9 MS — **Client Sample ID: NW070-7**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 556789 — **Prep Batch: 556787**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	1.9	U	20.2	13.6		mg/L		67	44 - 110

Lab Sample ID: 280-155138-9 MSD — **Client Sample ID: NW070-7**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 556789 — **Prep Batch: 556787**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	1.9	U	20.2	13.6		mg/L		67	44 - 110	0	20

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 280-558202/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 558202

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		11/20/21 12:29	1

Lab Sample ID: LCS 280-558202/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 558202

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

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

Lab Sample ID: LCSD 280-558202/5
Matrix: Water
Analysis Batch: 558202

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	M	mg/L		100	87 - 112	0	10

Lab Sample ID: MRL 280-558202/3
Matrix: Water
Analysis Batch: 558202

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	5.15		mg/L		103	50 - 150		

Lab Sample ID: 280-155138-10MS
Matrix: Water
Analysis Batch: 558202

Client Sample ID: PZ019-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	71		50.0	124		mg/L		105	87 - 112		

Lab Sample ID: 280-155138-10MSD
Matrix: Water
Analysis Batch: 558202

Client Sample ID: PZ019-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	71		50.0	125		mg/L		107	87 - 112	1	10

Lab Sample ID: 280-155138-10 DU
Matrix: Water
Analysis Batch: 558202

Client Sample ID: PZ019-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate	71			71.2		mg/L				0	10

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

Lab Sample ID: MB 280-556374/2-A
Matrix: Water
Analysis Batch: 556580

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		11/05/21 23:00	1

Lab Sample ID: LCS 280-556374/1-A
Matrix: Water
Analysis Batch: 556580

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	22.7		mg/L		91	88 - 112		

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

Lab Sample ID: 280-155138-1 MS
Matrix: Water
Analysis Batch: 556580

Client Sample ID: NW021-7
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	26.0		mg/L		92	88 - 112

Lab Sample ID: 280-155138-1 MSD
Matrix: Water
Analysis Batch: 556580

Client Sample ID: NW021-7
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	26.1		mg/L		93	88 - 112	1	15

Lab Sample ID: MB 280-557282/2-A
Matrix: Water
Analysis Batch: 557476

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		11/13/21 12:32	1

Lab Sample ID: LCS 280-557282/1-A
Matrix: Water
Analysis Batch: 557476

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	25.4		mg/L		101	88 - 112

Lab Sample ID: 280-155138-10MS
Matrix: Water
Analysis Batch: 557476

Client Sample ID: PZ019-7
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dissolved Organic Carbon - Quad	2.00		25.0	22.7		mg/L		83	88 - 112

Lab Sample ID: 280-155138-10MSD
Matrix: Water
Analysis Batch: 557476

Client Sample ID: PZ019-7
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	2.00		25.0	22.5		mg/L		82	88 - 112	1	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-557846/84
Matrix: Water
Analysis Batch: 557846

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	4.59	J	10	6.4	3.1	mg/L		11/17/21 04:14	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 280-557846/83
Matrix: Water
Analysis Batch: 557846

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	216		mg/L		108	89 - 109

GC VOA

Analysis Batch: 556939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-6	NW071-7	Total/NA	Water	RSK-175	
MB 280-556939/4	Method Blank	Total/NA	Water	RSK-175	
LCS 280-556939/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-556939/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 557116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-1	NW021-7	Total/NA	Water	RSK-175	
280-155138-2	NW020-7	Total/NA	Water	RSK-175	
280-155138-3	NW022-7	Total/NA	Water	RSK-175	
280-155138-4	G0082-7	Total/NA	Water	RSK-175	
280-155138-5	G0087-7	Total/NA	Water	RSK-175	
MB 280-557116/4	Method Blank	Total/NA	Water	RSK-175	
LCS 280-557116/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-557116/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 557326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-7	CA213-7	Total/NA	Water	RSK-175	
280-155138-8	G0081-7	Total/NA	Water	RSK-175	
280-155138-9	NW070-7	Total/NA	Water	RSK-175	
280-155138-10	PZ019-7	Total/NA	Water	RSK-175	
MB 280-557326/4	Method Blank	Total/NA	Water	RSK-175	
LCS 280-557326/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-557326/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	
280-155138-10MS	PZ019-7	Total/NA	Water	RSK-175	
280-155138-10MSD	PZ019-7	Total/NA	Water	RSK-175	
280-155138-10 DU	PZ019-7	Total/NA	Water	RSK-175	

HPLC/IC

Prep Batch: 556591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-1	NW021-7	Total/NA	Water	3535	
280-155138-2	NW020-7	Total/NA	Water	3535	
280-155138-3	NW022-7	Total/NA	Water	3535	
280-155138-4	G0082-7	Total/NA	Water	3535	
280-155138-5	G0087-7	Total/NA	Water	3535	
280-155138-6	NW071-7	Total/NA	Water	3535	
280-155138-7	CA213-7	Total/NA	Water	3535	
280-155138-8	G0081-7	Total/NA	Water	3535	
280-155138-9	NW070-7	Total/NA	Water	3535	
280-155138-10	PZ019-7	Total/NA	Water	3535	
MB 280-556591/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-556591/2-A	Lab Control Sample	Total/NA	Water	3535	
LCS 280-556591/3-A	Lab Control Sample	Total/NA	Water	3535	
280-155138-10MS	PZ019-7	Total/NA	Water	3535	
280-155138-10MS	PZ019-7	Total/NA	Water	3535	
280-155138-10MSD	PZ019-7	Total/NA	Water	3535	
280-155138-10MSD	PZ019-7	Total/NA	Water	3535	

HPLC/IC

Analysis Batch: 556781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-1	NW021-7	Total/NA	Water	8330A	556591
280-155138-2	NW020-7	Total/NA	Water	8330A	556591
280-155138-3	NW022-7	Total/NA	Water	8330A	556591
280-155138-4	G0082-7	Total/NA	Water	8330A	556591
280-155138-5	G0087-7	Total/NA	Water	8330A	556591
280-155138-6	NW071-7	Total/NA	Water	8330A	556591
280-155138-7	CA213-7	Total/NA	Water	8330A	556591
280-155138-8	G0081-7	Total/NA	Water	8330A	556591
280-155138-9	NW070-7	Total/NA	Water	8330A	556591
280-155138-10	PZ019-7	Total/NA	Water	8330A	556591
MB 280-556591/1-A	Method Blank	Total/NA	Water	8330A	556591
LCS 280-556591/2-A	Lab Control Sample	Total/NA	Water	8330A	556591
LCS 280-556591/3-A	Lab Control Sample	Total/NA	Water	8330A	556591
280-155138-10MS	PZ019-7	Total/NA	Water	8330A	556591
280-155138-10MS	PZ019-7	Total/NA	Water	8330A	556591
280-155138-10MSD	PZ019-7	Total/NA	Water	8330A	556591
280-155138-10MSD	PZ019-7	Total/NA	Water	8330A	556591

Analysis Batch: 556958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-1	NW021-7	Total/NA	Water	8330A	556591
280-155138-2	NW020-7	Total/NA	Water	8330A	556591
280-155138-4	G0082-7	Total/NA	Water	8330A	556591
280-155138-5	G0087-7	Total/NA	Water	8330A	556591
280-155138-6	NW071-7	Total/NA	Water	8330A	556591
280-155138-8	G0081-7	Total/NA	Water	8330A	556591

General Chemistry

Filtration Batch: 556374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-1	NW021-7	Dissolved	Water	FILTRATION	
280-155138-2	NW020-7	Dissolved	Water	FILTRATION	
280-155138-3	NW022-7	Dissolved	Water	FILTRATION	
280-155138-4	G0082-7	Dissolved	Water	FILTRATION	
280-155138-5	G0087-7	Dissolved	Water	FILTRATION	
280-155138-6	NW071-7	Dissolved	Water	FILTRATION	
280-155138-7	CA213-7	Dissolved	Water	FILTRATION	
280-155138-8	G0081-7	Dissolved	Water	FILTRATION	
280-155138-9	NW070-7	Dissolved	Water	FILTRATION	
280-155138-10	PZ019-7	Dissolved	Water	FILTRATION	
MB 280-556374/2-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-556374/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
280-155138-1 MS	NW021-7	Dissolved	Water	FILTRATION	
280-155138-1 MSD	NW021-7	Dissolved	Water	FILTRATION	

Analysis Batch: 556580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-1	NW021-7	Dissolved	Water	9060A	556374
280-155138-2	NW020-7	Dissolved	Water	9060A	556374
280-155138-3	NW022-7	Dissolved	Water	9060A	556374

General Chemistry (Continued)

Analysis Batch: 556580 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-4	G0082-7	Dissolved	Water	9060A	556374
280-155138-5	G0087-7	Dissolved	Water	9060A	556374
280-155138-6	NW071-7	Dissolved	Water	9060A	556374
280-155138-7	CA213-7	Dissolved	Water	9060A	556374
280-155138-8	G0081-7	Dissolved	Water	9060A	556374
280-155138-9	NW070-7	Dissolved	Water	9060A	556374
280-155138-10	PZ019-7	Dissolved	Water	9060A	556374
MB 280-556374/2-A	Method Blank	Dissolved	Water	9060A	556374
LCS 280-556374/1-A	Lab Control Sample	Dissolved	Water	9060A	556374
280-155138-1 MS	NW021-7	Dissolved	Water	9060A	556374
280-155138-1 MSD	NW021-7	Dissolved	Water	9060A	556374

Prep Batch: 556749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-1	NW021-7	Total/NA	Water	9030B	
280-155138-2	NW020-7	Total/NA	Water	9030B	
280-155138-3	NW022-7	Total/NA	Water	9030B	
280-155138-4	G0082-7	Total/NA	Water	9030B	
280-155138-5	G0087-7	Total/NA	Water	9030B	
280-155138-8	G0081-7	Total/NA	Water	9030B	
280-155138-10	PZ019-7	Total/NA	Water	9030B	
MB 280-556749/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-556749/1-A	Lab Control Sample	Total/NA	Water	9030B	
280-155138-10MS	PZ019-7	Total/NA	Water	9030B	
280-155138-10MSD	PZ019-7	Total/NA	Water	9030B	

Analysis Batch: 556751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-1	NW021-7	Total/NA	Water	9034	556749
280-155138-2	NW020-7	Total/NA	Water	9034	556749
280-155138-3	NW022-7	Total/NA	Water	9034	556749
280-155138-4	G0082-7	Total/NA	Water	9034	556749
280-155138-5	G0087-7	Total/NA	Water	9034	556749
280-155138-8	G0081-7	Total/NA	Water	9034	556749
280-155138-10	PZ019-7	Total/NA	Water	9034	556749
MB 280-556749/2-A	Method Blank	Total/NA	Water	9034	556749
LCS 280-556749/1-A	Lab Control Sample	Total/NA	Water	9034	556749
280-155138-10MS	PZ019-7	Total/NA	Water	9034	556749
280-155138-10MSD	PZ019-7	Total/NA	Water	9034	556749

Prep Batch: 556787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-6	NW071-7	Total/NA	Water	9030B	
280-155138-7	CA213-7	Total/NA	Water	9030B	
280-155138-9	NW070-7	Total/NA	Water	9030B	
MB 280-556787/2-A	Method Blank	Total/NA	Water	9030B	
LCS 280-556787/1-A	Lab Control Sample	Total/NA	Water	9030B	
280-155138-9 MS	NW070-7	Total/NA	Water	9030B	
280-155138-9 MSD	NW070-7	Total/NA	Water	9030B	

General Chemistry

Analysis Batch: 556789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-6	NW071-7	Total/NA	Water	9034	556787
280-155138-7	CA213-7	Total/NA	Water	9034	556787
280-155138-9	NW070-7	Total/NA	Water	9034	556787
MB 280-556787/2-A	Method Blank	Total/NA	Water	9034	556787
LCS 280-556787/1-A	Lab Control Sample	Total/NA	Water	9034	556787
280-155138-9 MS	NW070-7	Total/NA	Water	9034	556787
280-155138-9 MSD	NW070-7	Total/NA	Water	9034	556787

Filtration Batch: 557282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-557282/2-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-557282/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
280-155138-10MS	PZ019-7	Dissolved	Water	FILTRATION	
280-155138-10MSD	PZ019-7	Dissolved	Water	FILTRATION	

Analysis Batch: 557476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-557282/2-A	Method Blank	Dissolved	Water	9060A	557282
LCS 280-557282/1-A	Lab Control Sample	Dissolved	Water	9060A	557282
280-155138-10MS	PZ019-7	Dissolved	Water	9060A	557282
280-155138-10MSD	PZ019-7	Dissolved	Water	9060A	557282

Prep Batch: 557729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-1	NW021-7	Total/NA	Water	351.2	
280-155138-2	NW020-7	Total/NA	Water	351.2	
280-155138-3	NW022-7	Total/NA	Water	351.2	
280-155138-4	G0082-7	Total/NA	Water	351.2	
280-155138-5	G0087-7	Total/NA	Water	351.2	
280-155138-6	NW071-7	Total/NA	Water	351.2	
280-155138-7	CA213-7	Total/NA	Water	351.2	
280-155138-8	G0081-7	Total/NA	Water	351.2	
280-155138-9	NW070-7	Total/NA	Water	351.2	
280-155138-10	PZ019-7	Total/NA	Water	351.2	
MB 280-557729/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-557729/1-A	Lab Control Sample	Total/NA	Water	351.2	
280-155138-10MS	PZ019-7	Total/NA	Water	351.2	
280-155138-10MSD	PZ019-7	Total/NA	Water	351.2	

Analysis Batch: 557846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-1	NW021-7	Total/NA	Water	SM 2320B	
280-155138-2	NW020-7	Total/NA	Water	SM 2320B	
280-155138-3	NW022-7	Total/NA	Water	SM 2320B	
280-155138-4	G0082-7	Total/NA	Water	SM 2320B	
280-155138-5	G0087-7	Total/NA	Water	SM 2320B	
280-155138-6	NW071-7	Total/NA	Water	SM 2320B	
280-155138-7	CA213-7	Total/NA	Water	SM 2320B	
280-155138-8	G0081-7	Total/NA	Water	SM 2320B	
280-155138-9	NW070-7	Total/NA	Water	SM 2320B	
280-155138-10	PZ019-7	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 557846 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-557846/84	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-557846/83	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 557899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-1	NW021-7	Total/NA	Water	351.2	557729
280-155138-2	NW020-7	Total/NA	Water	351.2	557729
280-155138-3	NW022-7	Total/NA	Water	351.2	557729
280-155138-4	G0082-7	Total/NA	Water	351.2	557729
280-155138-5	G0087-7	Total/NA	Water	351.2	557729
280-155138-6	NW071-7	Total/NA	Water	351.2	557729
280-155138-7	CA213-7	Total/NA	Water	351.2	557729
280-155138-8	G0081-7	Total/NA	Water	351.2	557729
280-155138-9	NW070-7	Total/NA	Water	351.2	557729
280-155138-10	PZ019-7	Total/NA	Water	351.2	557729
MB 280-557729/2-A	Method Blank	Total/NA	Water	351.2	557729
LCS 280-557729/1-A	Lab Control Sample	Total/NA	Water	351.2	557729
280-155138-10MS	PZ019-7	Total/NA	Water	351.2	557729
280-155138-10MSD	PZ019-7	Total/NA	Water	351.2	557729

Analysis Batch: 558049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-1	NW021-7	Total/NA	Water	353.2	
280-155138-2	NW020-7	Total/NA	Water	353.2	
280-155138-3	NW022-7	Total/NA	Water	353.2	
280-155138-4	G0082-7	Total/NA	Water	353.2	
280-155138-5	G0087-7	Total/NA	Water	353.2	
280-155138-6	NW071-7	Total/NA	Water	353.2	
280-155138-7	CA213-7	Total/NA	Water	353.2	
280-155138-8	G0081-7	Total/NA	Water	353.2	
280-155138-9	NW070-7	Total/NA	Water	353.2	
280-155138-10	PZ019-7	Total/NA	Water	353.2	
MB 280-558049/22	Method Blank	Total/NA	Water	353.2	
LCS 280-558049/21	Lab Control Sample	Total/NA	Water	353.2	
280-155138-10MS	PZ019-7	Total/NA	Water	353.2	
280-155138-10MSD	PZ019-7	Total/NA	Water	353.2	

Analysis Batch: 558202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-1	NW021-7	Total/NA	Water	9056A	
280-155138-2	NW020-7	Total/NA	Water	9056A	
280-155138-4	G0082-7	Total/NA	Water	9056A	
280-155138-5	G0087-7	Total/NA	Water	9056A	
280-155138-6	NW071-7	Total/NA	Water	9056A	
280-155138-7	CA213-7	Total/NA	Water	9056A	
280-155138-8	G0081-7	Total/NA	Water	9056A	
280-155138-9	NW070-7	Total/NA	Water	9056A	
280-155138-10	PZ019-7	Total/NA	Water	9056A	
MB 280-558202/6	Method Blank	Total/NA	Water	9056A	
LCS 280-558202/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-558202/5	Lab Control Sample Dup	Total/NA	Water	9056A	

General Chemistry (Continued)

Analysis Batch: 558202 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 280-558202/3	Lab Control Sample	Total/NA	Water	9056A	
280-155138-10MS	PZ019-7	Total/NA	Water	9056A	
280-155138-10MSD	PZ019-7	Total/NA	Water	9056A	
280-155138-10 DU	PZ019-7	Total/NA	Water	9056A	

Analysis Batch: 558260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-4	G0082-7	Total/NA	Water	350.1	
280-155138-7	CA213-7	Total/NA	Water	350.1	
280-155138-9	NW070-7	Total/NA	Water	350.1	
MB 280-558260/20	Method Blank	Total/NA	Water	350.1	
LCS 280-558260/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-558260/19	Lab Control Sample Dup	Total/NA	Water	350.1	

Analysis Batch: 558270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-1	NW021-7	Total/NA	Water	350.1	
280-155138-2	NW020-7	Total/NA	Water	350.1	
280-155138-5	G0087-7	Total/NA	Water	350.1	
280-155138-6	NW071-7	Total/NA	Water	350.1	
MB 280-558270/20	Method Blank	Total/NA	Water	350.1	
LCS 280-558270/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-558270/19	Lab Control Sample Dup	Total/NA	Water	350.1	

Analysis Batch: 558390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-3	NW022-7	Total/NA	Water	350.1	
280-155138-8	G0081-7	Total/NA	Water	350.1	
280-155138-10	PZ019-7	Total/NA	Water	350.1	
MB 280-558390/20	Method Blank	Total/NA	Water	350.1	
LCS 280-558390/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-558390/19	Lab Control Sample Dup	Total/NA	Water	350.1	
280-155138-10MS	PZ019-7	Total/NA	Water	350.1	
280-155138-10MSD	PZ019-7	Total/NA	Water	350.1	

Analysis Batch: 558471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155138-3	NW022-7	Total/NA	Water	9056A	

Client Sample ID: NW021-7
Lab Sample ID: 280-155138-1

Date Collected: 11/03/21 10:55
Matrix: Water
Date Received: 11/04/21 11:10

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	557116	11/11/21 21:23	CAS	TAL DEN
Total/NA	Prep	3535			476.9 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556781	11/10/21 03:12	JZ	TAL DEN
Total/NA	Prep	3535			476.9 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556958	11/11/21 02:06	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558270	11/21/21 13:55	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557729	11/16/21 18:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:40	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	558049	11/18/21 16:45	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556749	11/09/21 12:07	JJM	TAL DEN
Total/NA	Analysis	9034		1			556751	11/09/21 12:10	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558202	11/20/21 15:49	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556374	11/05/21 13:51	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556580	11/05/21 23:15	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557846	11/17/21 05:03	ECC	TAL DEN

Client Sample ID: NW020-7
Lab Sample ID: 280-155138-2

Date Collected: 11/03/21 09:35
Matrix: Water
Date Received: 11/04/21 11:10

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	557116	11/11/21 21:36	CAS	TAL DEN
Total/NA	Prep	3535			491.5 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556781	11/10/21 03:35	JZ	TAL DEN
Total/NA	Prep	3535			491.5 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556958	11/11/21 02:40	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558270	11/21/21 13:57	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557729	11/16/21 18:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:40	SVC	TAL DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	558049	11/18/21 16:47	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556749	11/09/21 12:07	JJM	TAL DEN
Total/NA	Analysis	9034		1			556751	11/09/21 12:10	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558202	11/20/21 16:31	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556374	11/05/21 13:51	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556580	11/06/21 00:01	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557846	11/17/21 05:53	ECC	TAL DEN

Client Sample ID: NW022-7
Lab Sample ID: 280-155138-3

Date Collected: 11/03/21 12:00
Matrix: Water
Date Received: 11/04/21 11:10

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	557116	11/11/21 21:49	CAS	TAL DEN

Client Sample ID: NW022-7
Lab Sample ID: 280-155138-3

Date Collected: 11/03/21 12:00
Matrix: Water
Date Received: 11/04/21 11:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			500.1 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556781	11/10/21 03:58	JZ	TAL DEN
Total/NA	Analysis	350.1		2	10 mL	10 mL	558390	11/22/21 11:22	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557729	11/16/21 18:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:39	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	558049	11/18/21 16:49	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556749	11/09/21 12:07	JJM	TAL DEN
Total/NA	Analysis	9034		1			556751	11/09/21 12:10	JJM	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	558471	11/23/21 15:29	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556374	11/05/21 13:51	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556580	11/06/21 00:18	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557846	11/17/21 05:19	ECC	TAL DEN

Client Sample ID: G0082-7
Lab Sample ID: 280-155138-4

Date Collected: 11/03/21 10:05
Matrix: Water
Date Received: 11/04/21 11:10

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	557116	11/11/21 22:02	CAS	TAL DEN
Total/NA	Prep	3535			501.6 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556781	11/10/21 04:21	JZ	TAL DEN
Total/NA	Prep	3535			501.6 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556958	11/11/21 03:15	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558260	11/21/21 11:38	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557729	11/16/21 18:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:39	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	558049	11/18/21 16:51	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556749	11/09/21 12:07	JJM	TAL DEN
Total/NA	Analysis	9034		1			556751	11/09/21 12:10	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558202	11/20/21 16:59	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556374	11/05/21 13:51	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556580	11/06/21 00:35	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557846	11/17/21 05:27	ECC	TAL DEN

Client Sample ID: G0087-7
Lab Sample ID: 280-155138-5

Date Collected: 11/03/21 11:30
Matrix: Water
Date Received: 11/04/21 11:10

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	557116	11/11/21 22:15	CAS	TAL DEN
Total/NA	Prep	3535			493.2 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556781	11/10/21 04:44	JZ	TAL DEN
Total/NA	Prep	3535			493.2 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556958	11/11/21 03:50	JZ	TAL DEN

Client Sample ID: G0087-7
Lab Sample ID: 280-155138-5

Date Collected: 11/03/21 11:30
Matrix: Water
Date Received: 11/04/21 11:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	10 mL	10 mL	558270	11/21/21 14:01	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557729	11/16/21 18:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:38	SVC	TAL DEN
Total/NA	Analysis	353.2		2	100 mL	100 mL	558049	11/18/21 16:53	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556749	11/09/21 12:07	JJM	TAL DEN
Total/NA	Analysis	9034		1			556751	11/09/21 12:10	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558202	11/20/21 17:13	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556374	11/05/21 13:51	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556580	11/06/21 00:54	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557846	11/17/21 05:11	ECC	TAL DEN

Client Sample ID: NW071-7
Lab Sample ID: 280-155138-6

Date Collected: 11/02/21 15:55
Matrix: Water
Date Received: 11/04/21 11:10

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	556939	11/10/21 12:56	CAS	TAL DEN
Total/NA	Prep	3535			495.2 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556781	11/10/21 05:07	JZ	TAL DEN
Total/NA	Prep	3535			495.2 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556958	11/11/21 04:25	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558270	11/21/21 13:59	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557729	11/16/21 18:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:38	SVC	TAL DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	558049	11/18/21 16:55	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556787	11/09/21 14:32	JJM	TAL DEN
Total/NA	Analysis	9034		1			556789	11/09/21 14:38	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558202	11/20/21 17:27	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556374	11/05/21 13:51	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556580	11/06/21 01:15	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557846	11/17/21 04:55	ECC	TAL DEN

Client Sample ID: CA213-7
Lab Sample ID: 280-155138-7

Date Collected: 11/02/21 13:20
Matrix: Water
Date Received: 11/04/21 11:10

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	557326	11/12/21 16:06	CAS	TAL DEN
Total/NA	Prep	3535			500.4 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556781	11/10/21 05:30	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558260	11/21/21 11:54	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557729	11/16/21 18:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:37	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	558049	11/18/21 16:57	SVC	TAL DEN

Client Sample ID: CA213-7
Lab Sample ID: 280-155138-7

Date Collected: 11/02/21 13:20
Matrix: Water
Date Received: 11/04/21 11:10

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	556787	11/09/21 14:32	JJM	TAL DEN
Total/NA	Analysis	9034		1			556789	11/09/21 14:38	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558202	11/20/21 18:37	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556374	11/05/21 13:51	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556580	11/06/21 01:32	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557846	11/17/21 04:35	ECC	TAL DEN

Client Sample ID: G0081-7
Lab Sample ID: 280-155138-8

Date Collected: 11/02/21 15:10
Matrix: Water
Date Received: 11/04/21 11:10

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	557326	11/12/21 16:19	CAS	TAL DEN
Total/NA	Prep	3535			509.7 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556781	11/10/21 06:39	JZ	TAL DEN
Total/NA	Prep	3535			509.7 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556958	11/11/21 05:00	JZ	TAL DEN
Total/NA	Analysis	350.1		2	10 mL	10 mL	558390	11/22/21 11:30	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557729	11/16/21 18:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:36	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	558049	11/18/21 17:11	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556749	11/09/21 12:07	JJM	TAL DEN
Total/NA	Analysis	9034		1			556751	11/09/21 12:10	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558202	11/20/21 19:34	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556374	11/05/21 13:51	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556580	11/06/21 02:19	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557846	11/17/21 04:49	ECC	TAL DEN

Client Sample ID: NW070-7
Lab Sample ID: 280-155138-9

Date Collected: 11/02/21 14:45
Matrix: Water
Date Received: 11/04/21 11:10

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	557326	11/12/21 16:32	CAS	TAL DEN
Total/NA	Prep	3535			504 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556781	11/10/21 07:02	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558260	11/21/21 11:36	JJM	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557729	11/16/21 18:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:35	SVC	TAL DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	558049	11/18/21 17:13	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556787	11/09/21 14:32	JJM	TAL DEN
Total/NA	Analysis	9034		1			556789	11/09/21 14:38	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558202	11/20/21 19:20	CJ	TAL DEN

Lab Chronicle

Client: Brice Environmental Services, Corp
Job ID: 280-155138-1
Project/Site: Cornhusker (CHAAP)

Client Sample ID: NW070-7
Lab Sample ID: 280-155138-9
Date Collected: 11/02/21 14:45
Matrix: Water
Date Received: 11/04/21 11:10

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	556374	11/05/21 13:51	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556580	11/06/21 02:33	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557846	11/17/21 04:41	ECC	TAL DEN

Client Sample ID: PZ019-7
Lab Sample ID: 280-155138-10
Date Collected: 11/03/21 12:55
Matrix: Water
Date Received: 11/04/21 11:10

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	557326	11/12/21 16:45	CAS	TAL DEN
Total/NA	Prep	3535			496.8 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556781	11/10/21 07:25	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558390	11/22/21 11:24	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557729	11/16/21 18:04	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:35	SVC	TAL DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	558049	11/18/21 16:39	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556749	11/09/21 12:07	JJM	TAL DEN
Total/NA	Analysis	9034		1			556751	11/09/21 12:10	JJM	TAL DEN
Total/NA	Analysis	9056A		1	10 mL	10 mL	558202	11/20/21 17:41	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	556374	11/05/21 13:51	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	556580	11/06/21 02:50	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557846	11/17/21 05:45	ECC	TAL DEN

Laboratory References:

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

Accreditation/Certification Summary

Client: Brice Environmental Services, Corp
Job ID: 280-155138-1
Project/Site: Cornhusker (CHAAP)

Laboratory: Eurofins TestAmerica, Denver

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	11-30-21

Method Summary

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

Job ID: 280-155138-1

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 TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

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

Job ID: 280-155138-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-155138-1	NW021-7	Water	11/03/21 10:55	11/04/21 11:10
280-155138-2	NW020-7	Water	11/03/21 09:35	11/04/21 11:10
280-155138-3	NW022-7	Water	11/03/21 12:00	11/04/21 11:10
280-155138-4	G0082-7	Water	11/03/21 10:05	11/04/21 11:10
280-155138-5	G0087-7	Water	11/03/21 11:30	11/04/21 11:10
280-155138-6	NW071-7	Water	11/02/21 15:55	11/04/21 11:10
280-155138-7	CA213-7	Water	11/02/21 13:20	11/04/21 11:10
280-155138-8	G0081-7	Water	11/02/21 15:10	11/04/21 11:10
280-155138-9	NW070-7	Water	11/02/21 14:45	11/04/21 11:10
280-155138-10	PZ019-7	Water	11/03/21 12:55	11/04/21 11:10

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 550959

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 556939

Lab Sample ID: CCVRT 280-556939/1 Client Sample ID:

Date Analyzed: 11/10/21 11:51 Lab File ID: 001F0101.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.11	Peak assignment corrected	sciannac	11/12/21 10:26

Lab Sample ID: CCVRT 280-556939/1 Client Sample ID:

Date Analyzed: 11/10/21 11:51 Lab File ID: 001F0101.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	11/12/21 10:26

Lab Sample ID: CCV 280-556939/16 Client Sample ID:

Date Analyzed: 11/10/21 15:06 Lab File ID: 016F1601.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.59	Shouldering	meierg	11/15/21 15:32

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 557116

Lab Sample ID: CCV 280-557116/30 Client Sample ID:

Date Analyzed: 11/11/21 22:28 Lab File ID: 030F3001.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.59	Shouldering	meierg	11/15/21 16:36

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 527768

Lab Sample ID: IC 280-527768/29 Client Sample ID:

Date Analyzed: 03/02/21 23:49 Lab File ID: 03020029.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.52	Baseline	zhangji	03/03/21 13:18
DNX	6.83	Baseline	zhangji	03/03/21 13:18
MNX	7.24	Baseline	zhangji	03/03/21 13:18

Lab Sample ID: IC 280-527768/30 Client Sample ID:

Date Analyzed: 03/03/21 00:12 Lab File ID: 03020030.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.52	Baseline	zhangji	03/03/21 13:19
DNX	6.84	Baseline	zhangji	03/03/21 13:19
MNX	7.24	Baseline	zhangji	03/03/21 13:19

Lab Sample ID: IC 280-527768/31 Client Sample ID:

Date Analyzed: 03/03/21 00:35 Lab File ID: 03020031.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.52	Baseline	zhangji	03/03/21 13:19
DNX	6.83	Baseline	zhangji	03/03/21 13:19
MNX	7.24	Baseline	zhangji	03/03/21 13:19

Lab Sample ID: IC 280-527768/32 Client Sample ID:

Date Analyzed: 03/03/21 00:58 Lab File ID: 03020032.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.52	Baseline	zhangji	03/03/21 13:19
DNX	6.83	Baseline	zhangji	03/03/21 13:19

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 527768

Lab Sample ID: IC 280-527768/33 Client Sample ID:

Date Analyzed: 03/03/21 01:21 Lab File ID: 03020033.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.52	Baseline	zhangji	03/03/21 13:20
DNX	6.83	Baseline	zhangji	03/03/21 13:20

Lab Sample ID: IC 280-527768/34 Client Sample ID:

Date Analyzed: 03/03/21 01:44 Lab File ID: 03020034.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.52	Baseline	zhangji	03/03/21 13:20
DNX	6.83	Baseline	zhangji	03/03/21 13:20

Lab Sample ID: IC 280-527768/35 Client Sample ID:

Date Analyzed: 03/03/21 02:07 Lab File ID: 03020035.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.52	Baseline	zhangji	03/03/21 13:20
DNX	6.83	Baseline	zhangji	03/03/21 13:20

Lab Sample ID: IC 280-527768/36 Client Sample ID:

Date Analyzed: 03/03/21 02:30 Lab File ID: 03020036.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.52	Baseline	zhangji	03/03/21 13:20
DNX	6.83	Baseline	zhangji	03/03/21 13:20

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 527768

Lab Sample ID: ICV 280-527768/37 Client Sample ID:

Date Analyzed: 03/03/21 02:53 Lab File ID: 03020037.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.52	Baseline	zhangji	03/03/21 13:21
DNX	6.83	Baseline	zhangji	03/03/21 13:21
MNX	7.24	Baseline	zhangji	03/03/21 13:21

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 534622

Lab Sample ID: IC 280-534622/11 Client Sample ID:

Date Analyzed: 05/01/21 18:01 Lab File ID: 011-0501.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline	zhangji	05/04/21 13:15

Lab Sample ID: IC 280-534622/12 Client Sample ID:

Date Analyzed: 05/01/21 18:23 Lab File ID: 012-0601.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline	zhangji	05/04/21 13:15

Lab Sample ID: IC 280-534622/13 Client Sample ID:

Date Analyzed: 05/01/21 18:46 Lab File ID: 013-0701.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline	zhangji	05/04/21 13:16

Lab Sample ID: IC 280-534622/14 Client Sample ID:

Date Analyzed: 05/01/21 19:09 Lab File ID: 014-0801.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline	zhangji	05/04/21 13:16

Lab Sample ID: IC 280-534622/15 Client Sample ID:

Date Analyzed: 05/01/21 19:32 Lab File ID: 015-0901.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline	zhangji	05/04/21 13:16

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 534622

Lab Sample ID: IC 280-534622/16 Client Sample ID:

Date Analyzed: 05/01/21 19:55 Lab File ID: 016-1001.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline	zhangji	05/04/21 13:16

Lab Sample ID: IC 280-534622/17 Client Sample ID:

Date Analyzed: 05/01/21 20:18 Lab File ID: 017-1101.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline	zhangji	05/04/21 13:16

Lab Sample ID: IC 280-534622/18 Client Sample ID:

Date Analyzed: 05/01/21 20:41 Lab File ID: 018-1201.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline	zhangji	05/04/21 13:16
RDX	7.61	Baseline	zhangji	05/04/21 13:18
Tetryl	9.98	Baseline	zhangji	05/04/21 13:23
PETN	14.68	Baseline	zhangji	05/04/21 13:18

Lab Sample ID: IC 280-534622/19 Client Sample ID:

Date Analyzed: 05/01/21 21:04 Lab File ID: 019-1301.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline	zhangji	05/04/21 13:17
Tetryl	9.98	Baseline	zhangji	05/04/21 13:23
Nitroglycerin	10.44	Baseline	zhangji	05/04/21 13:18
PETN	14.68	Baseline	zhangji	05/04/21 13:17

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 534622

Lab Sample ID: ICV 280-534622/20 Client Sample ID:

Date Analyzed: 05/01/21 21:27 Lab File ID: 020-1401.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline	zhangji	05/04/21 13:24

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 556781

Lab Sample ID: CCV 280-556781/36 Client Sample ID:

Date Analyzed: 11/10/21 01:41 Lab File ID: 11090036.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	11/10/21 12:42
DNX	6.80	Baseline	zhangji	11/10/21 12:42

Lab Sample ID: LCS 280-556591/2-A Client Sample ID:

Date Analyzed: 11/10/21 02:27 Lab File ID: 11090038.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3-Nitrotoluene	13.66	Baseline	zhangji	11/10/21 12:43

Lab Sample ID: LCS 280-556591/3-A Client Sample ID:

Date Analyzed: 11/10/21 02:50 Lab File ID: 11090039.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.23	Baseline	zhangji	11/10/21 12:43

Lab Sample ID: 280-155138-1 Client Sample ID: NW021-7

Date Analyzed: 11/10/21 03:12 Lab File ID: 11090040.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.60	Baseline	zhangji	11/10/21 12:44
1,2-Dinitrobenzene	8.57	Baseline	zhangji	11/10/21 12:44
HMX		Invalid Compound ID	zhangji	11/10/21 12:43
MNX		Baseline	zhangji	11/10/21 12:44
Tetryl		Invalid Compound ID	zhangji	11/10/21 12:43

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 556781

Lab Sample ID: 280-155138-2 Client Sample ID: NW020-7

Date Analyzed: 11/10/21 03:35 Lab File ID: 11090041.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	11/10/21 12:44
RDX	7.60	Baseline	zhangji	11/10/21 12:44
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/10/21 12:44
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	11/10/21 12:44
Tetryl		Invalid Compound ID	zhangji	11/10/21 12:44
2-Amino-4,6-dinitrotoluene	11.44	Baseline	zhangji	11/10/21 12:44
2,4-Dinitrotoluene	11.78	Baseline	zhangji	11/10/21 12:44

Lab Sample ID: 280-155138-3 Client Sample ID: NW022-7

Date Analyzed: 11/10/21 03:58 Lab File ID: 11090042.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.57	Baseline	zhangji	11/10/21 12:45
HMX		Invalid Compound ID	zhangji	11/10/21 12:45
Nitrobenzene		Invalid Compound ID	zhangji	11/10/21 12:45

Lab Sample ID: 280-155138-4 Client Sample ID: G0082-7

Date Analyzed: 11/10/21 04:21 Lab File ID: 11090043.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	11/10/21 12:45
RDX	7.60	Baseline	zhangji	11/10/21 12:45
1,2-Dinitrobenzene	8.57	Baseline	zhangji	11/10/21 12:46
Tetryl		Invalid Compound ID	zhangji	11/10/21 12:46

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 556781

Lab Sample ID: 280-155138-5 Client Sample ID: G0087-7

Date Analyzed: 11/10/21 04:44 Lab File ID: 11090044.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	11/10/21 12:46
RDX	7.59	Baseline	zhangji	11/10/21 12:46
1,2-Dinitrobenzene	8.57	Baseline	zhangji	11/10/21 12:46
Tetryl		Invalid Compound ID	zhangji	11/10/21 12:46

Lab Sample ID: 280-155138-6 Client Sample ID: NW071-7

Date Analyzed: 11/10/21 05:07 Lab File ID: 11090045.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.57	Baseline	zhangji	11/10/21 12:46
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	11/10/21 12:46
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	11/10/21 12:46
MNX		Invalid Compound ID	zhangji	11/10/21 12:46
Tetryl	10.09	Baseline	zhangji	11/10/21 12:47

Lab Sample ID: 280-155138-7 Client Sample ID: CA213-7

Date Analyzed: 11/10/21 05:30 Lab File ID: 11090046.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.57	Baseline	zhangji	11/10/21 12:47
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	11/10/21 12:47
HMX		Invalid Compound ID	zhangji	11/10/21 12:47
Nitrobenzene		Invalid Compound ID	zhangji	11/10/21 12:47

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 556781

Lab Sample ID: CCV 280-556781/48 Client Sample ID:

Date Analyzed: 11/10/21 06:16 Lab File ID: 11090048.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	11/10/21 12:47
DNX	6.80	Baseline	zhangji	11/10/21 12:47

Lab Sample ID: 280-155138-8 Client Sample ID: G0081-7

Date Analyzed: 11/10/21 06:39 Lab File ID: 11090049.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.57	Baseline	zhangji	11/10/21 12:49
1,3,5-Trinitrobenzene	8.69	Baseline	zhangji	11/10/21 12:49
Tetryl		Invalid Compound ID	zhangji	11/10/21 12:49

Lab Sample ID: 280-155138-9 Client Sample ID: NW070-7

Date Analyzed: 11/10/21 07:02 Lab File ID: 11090050.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.56	Baseline	zhangji	11/10/21 12:49
1,3,5-Trinitrobenzene		Invalid Compound ID	zhangji	11/10/21 12:49

Lab Sample ID: 280-155138-10 Client Sample ID: PZ019-7

Date Analyzed: 11/10/21 07:25 Lab File ID: 11090051.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dinitrobenzene	8.56	Baseline	zhangji	11/10/21 12:49
MNX		Invalid Compound ID	zhangji	11/10/21 12:49

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 556781

Lab Sample ID: 280-155138-10 MS Client Sample ID: PZ019-7 MS

Date Analyzed: 11/10/21 07:48 Lab File ID: 11090052.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.59	Baseline	zhangji	11/10/21 12:50
RDX	7.60	Baseline	zhangji	11/10/21 12:50
1,2-Dinitrobenzene	8.56	Baseline	zhangji	11/10/21 12:50
1,3,5-Trinitrobenzene	8.68	Baseline	zhangji	11/10/21 12:50
1,3-Dinitrobenzene	9.32	Baseline	zhangji	11/10/21 12:50
Nitrobenzene	9.71	Baseline	zhangji	11/10/21 12:50
3-Nitrotoluene	13.63	Baseline	zhangji	11/10/21 12:50

Lab Sample ID: 280-155138-10 MSD Client Sample ID: PZ019-7 MSD

Date Analyzed: 11/10/21 08:11 Lab File ID: 11090053.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	11/10/21 12:51
RDX	7.60	Baseline	zhangji	11/10/21 12:51
1,2-Dinitrobenzene	8.57	Baseline	zhangji	11/10/21 12:51
1,3,5-Trinitrobenzene	8.69	Baseline	zhangji	11/10/21 12:52
3-Nitrotoluene	13.64	Baseline	zhangji	11/10/21 12:52

Lab Sample ID: 280-155138-10 MS Client Sample ID: PZ019-7 MS

Date Analyzed: 11/10/21 08:34 Lab File ID: 11090054.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.21	Baseline	zhangji	11/10/21 12:52
1,2-Dinitrobenzene	8.57	Baseline	zhangji	11/10/21 12:52

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 556781

Lab Sample ID: 280-155138-10 MSD Client Sample ID: PZ019-7 MSD

Date Analyzed: 11/10/21 08:57 Lab File ID: 11090055.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.22	Baseline	zhangji	11/10/21 12:53
1,2-Dinitrobenzene	8.57	Baseline	zhangji	11/10/21 12:53

Lab Sample ID: CCV 280-556781/59 Client Sample ID:

Date Analyzed: 11/10/21 10:28 Lab File ID: 11090059.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.60	Baseline	zhangji	11/10/21 12:55

Lab Sample ID: CCV 280-556781/60 Client Sample ID:

Date Analyzed: 11/10/21 10:51 Lab File ID: 11090060.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
TNX	6.48	Baseline	zhangji	11/10/21 12:55
DNX	6.80	Baseline	zhangji	11/10/21 12:55

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 534620

Lab Sample ID: IC 280-534620/10 Client Sample ID:

Date Analyzed: 05/01/21 18:54 Lab File ID: 010-0501.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.16	Baseline Smoothing	zhangji	05/04/21 13:40

Lab Sample ID: IC 280-534620/11 Client Sample ID:

Date Analyzed: 05/01/21 19:29 Lab File ID: 011-0601.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.14	Baseline Smoothing	zhangji	05/04/21 13:40

Lab Sample ID: IC 280-534620/12 Client Sample ID:

Date Analyzed: 05/01/21 20:04 Lab File ID: 012-0701.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.18	Baseline Smoothing	zhangji	05/04/21 13:40

Lab Sample ID: IC 280-534620/13 Client Sample ID:

Date Analyzed: 05/01/21 20:39 Lab File ID: 013-0801.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.15	Baseline Smoothing	zhangji	05/04/21 13:40

Lab Sample ID: IC 280-534620/14 Client Sample ID:

Date Analyzed: 05/01/21 21:15 Lab File ID: 014-0901.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.19	Baseline Smoothing	zhangji	05/04/21 13:40

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 534620

Lab Sample ID: IC 280-534620/15 Client Sample ID:

Date Analyzed: 05/01/21 21:50 Lab File ID: 015-1001.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.17	Baseline Smoothing	zhangji	05/04/21 13:40

Lab Sample ID: IC 280-534620/16 Client Sample ID:

Date Analyzed: 05/01/21 22:25 Lab File ID: 016-1101.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.15	Baseline Smoothing	zhangji	05/04/21 13:40

Lab Sample ID: IC 280-534620/17 Client Sample ID:

Date Analyzed: 05/01/21 23:00 Lab File ID: 017-1201.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.18	Baseline Smoothing	zhangji	05/04/21 13:41

Lab Sample ID: IC 280-534620/18 Client Sample ID:

Date Analyzed: 05/01/21 23:35 Lab File ID: 018-1301.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.15	Baseline Smoothing	zhangji	05/04/21 13:41

Lab Sample ID: ICV 280-534620/19 Client Sample ID:

Date Analyzed: 05/02/21 00:10 Lab File ID: 019-1401.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PETN	26.19	Baseline Smoothing	zhangji	05/04/21 13:43

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 556958

Lab Sample ID: 280-155138-1 Client Sample ID: NW021-7

Date Analyzed: 11/11/21 02:06 Lab File ID: 11100025.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.65	Baseline Smoothing	zhangji	11/11/21 19:02
RDX	8.80	Baseline Smoothing	zhangji	11/11/21 19:02
MNX		Invalid Compound ID	zhangji	11/11/21 19:01
2-Amino-4,6-dinitrotoluene	18.25	Baseline Smoothing	zhangji	11/11/21 19:02

Lab Sample ID: 280-155138-2 Client Sample ID: NW020-7

Date Analyzed: 11/11/21 02:40 Lab File ID: 11100026.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.64	Baseline Smoothing	zhangji	11/11/21 19:02
RDX	8.78	Baseline Smoothing	zhangji	11/11/21 19:02
4-Nitrotoluene		Invalid Compound ID	zhangji	11/11/21 19:02
1,2-Dinitrobenzene	12.93	Baseline Smoothing	zhangji	11/11/21 19:02
2-Amino-4,6-dinitrotoluene	18.22	Baseline Smoothing	zhangji	11/11/21 19:02

Lab Sample ID: 280-155138-4 Client Sample ID: G0082-7

Date Analyzed: 11/11/21 03:15 Lab File ID: 11100027.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.64	Baseline Smoothing	zhangji	11/11/21 19:03
RDX	8.80	Baseline Smoothing	zhangji	11/11/21 19:03
2-Amino-4,6-dinitrotoluene	18.26	Baseline Smoothing	zhangji	11/11/21 19:03

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 556958

Lab Sample ID: 280-155138-5 Client Sample ID: G0087-7

Date Analyzed: 11/11/21 03:50 Lab File ID: 11100028.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline Smoothing	zhangji	11/11/21 19:03
RDX	8.78	Baseline Smoothing	zhangji	11/11/21 19:03

Lab Sample ID: 280-155138-8 Client Sample ID: G0081-7

Date Analyzed: 11/11/21 05:00 Lab File ID: 11100030.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
HMX	6.63	Baseline Smoothing	zhangji	11/11/21 19:04
RDX	8.77	Baseline Smoothing	zhangji	11/11/21 19:04
Nitrobenzene		Invalid Compound ID	zhangji	11/11/21 19:04
1,2-Dinitrobenzene	12.94	Baseline Smoothing	zhangji	11/11/21 19:04
2-Nitrotoluene	16.65	Baseline Smoothing	zhangji	11/11/21 19:04
4-Amino-2,6-dinitrotoluene	17.27	Baseline Smoothing	zhangji	11/11/21 19:04

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 557415

Lab Sample ID: STD1 280-557415/2 IC Client Sample ID:

Date Analyzed: 11/14/21 16:43 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.77	Unspecified	jindaratc	11/14/21 17:21
Chloride	3.81	Unspecified	jindaratc	11/14/21 17:21
Bromide	5.52	Baseline Smoothing	jindaratc	11/14/21 17:21
Sulfate	8.80	Baseline Smoothing	gonzalezsp	11/15/21 14:59

Lab Sample ID: STD2 280-557415/3 IC Client Sample ID:

Date Analyzed: 11/14/21 16:57 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.77	Peak not integrated	jindaratc	11/14/21 17:20
Chloride	3.81	Peak not integrated	jindaratc	11/14/21 17:20
Sulfate	8.79	Peak not integrated	jindaratc	11/14/21 17:21

Lab Sample ID: STD3 280-557415/4 IC Client Sample ID:

Date Analyzed: 11/14/21 17:11 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.77	Peak not integrated	jindaratc	11/14/21 17:32
Chloride	3.81	Peak not integrated	jindaratc	11/14/21 17:32
Sulfate	8.79	Baseline Smoothing	jindaratc	11/14/21 17:57

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 557415

Lab Sample ID: STD4 280-557415/5 IC Client Sample ID:

Date Analyzed: 11/14/21 17:25 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.77	Peak not integrated	jindaratc	11/14/21 17:43
Chloride	3.83	Peak not integrated	jindaratc	11/14/21 17:43
Sulfate	8.76	Peak not integrated	jindaratc	11/14/21 17:43

Lab Sample ID: STD5 280-557415/6 IC Client Sample ID:

Date Analyzed: 11/14/21 17:39 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.77	Peak not integrated	jindaratc	11/14/21 17:56
Chloride	3.85	Baseline Smoothing	gonzalezsp	11/15/21 07:53
Sulfate	8.73	Baseline Smoothing	gonzalezsp	11/15/21 07:53

Lab Sample ID: STD6 280-557415/7 IC Client Sample ID:

Date Analyzed: 11/14/21 17:53 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.77	Peak not integrated	gonzalezsp	11/15/21 07:54
Chloride	3.88	Baseline Smoothing	gonzalezsp	11/15/21 07:54
Sulfate	8.69	Baseline Smoothing	gonzalezsp	11/15/21 07:54

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 557415

Lab Sample ID: ICB 280-557415/8 Client Sample ID:

Date Analyzed: 11/14/21 18:07 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.80	Baseline Smoothing	gonzalezsp	11/15/21 15:09

Lab Sample ID: ICV 280-557415/9 Client Sample ID:

Date Analyzed: 11/14/21 18:21 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.77	Peak not integrated	gonzalezsp	11/15/21 07:55
Chloride	3.84	Baseline Smoothing	gonzalezsp	11/15/21 07:55
Sulfate	8.74	Baseline Smoothing	gonzalezsp	11/15/21 07:56

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 558202

Lab Sample ID: CCV 280-558202/1 Client Sample ID:

Date Analyzed: 11/20/21 11:19 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.76	Peak not integrated	foleyj	11/20/21 12:37
Chloride	3.82	Baseline Smoothing	jindaratc	11/22/21 11:21
Bromide	5.42	Baseline Smoothing	jindaratc	11/22/21 11:21
Sulfate	8.61	Baseline Smoothing	jindaratc	11/22/21 11:22

Lab Sample ID: LCS 280-558202/4 Client Sample ID:

Date Analyzed: 11/20/21 12:01 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.62	Baseline Smoothing	jindaratc	11/22/21 11:23

Lab Sample ID: LCSD 280-558202/5 Client Sample ID:

Date Analyzed: 11/20/21 12:15 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	8.63	Baseline Smoothing	jindaratc	11/22/21 11:23

Lab Sample ID: CCV 280-558202/17 Client Sample ID:

Date Analyzed: 11/20/21 16:03 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.76	Peak not integrated	jindaratc	11/22/21 11:27
Chloride	3.82	Peak not integrated	jindaratc	11/22/21 11:27
Sulfate	8.63	Baseline Smoothing	jindaratc	11/22/21 11:28

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Batch Number: 558202

Lab Sample ID: CCV 280-558202/29 Client Sample ID:

Date Analyzed: 11/20/21 18:51 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.76	Peak not integrated	jindaratc	11/22/21 11:30
Chloride	3.82	Peak not integrated	jindaratc	11/22/21 11:30
Sulfate	8.68	Peak not integrated	jindaratc	11/22/21 11:30

Lab Sample ID: CCV 280-558202/36 Client Sample ID:

Date Analyzed: 11/20/21 20:30 Lab File ID: Info 2_DENPC179_Anions_20 GC Column: Metrosepp A S ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.77	Peak not integrated	jindaratc	11/22/21 11:32
Chloride	3.82	Peak not integrated	jindaratc	11/22/21 11:32
Sulfate	8.69	Peak not integrated	jindaratc	11/22/21 11:32

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Batch Number: 557417

Lab Sample ID: STD 280-557417/2 IC Client Sample ID:

Date Analyzed: 11/14/21 17:29 Lab File ID: 0004.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.52	Baseline Smoothing	jindaratc	11/14/21 17:52
Sulfate	10.06	Baseline Smoothing	gonzalezsp	11/15/21 07:43

Lab Sample ID: STD 280-557417/3 IC Client Sample ID:

Date Analyzed: 11/14/21 17:45 Lab File ID: 0005.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.51	Baseline Smoothing	gonzalezsp	11/14/21 20:06

Lab Sample ID: STD 280-557417/4 IC Client Sample ID:

Date Analyzed: 11/14/21 18:02 Lab File ID: 0006.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.51	Baseline Smoothing	gonzalezsp	11/14/21 20:06

Lab Sample ID: STD 280-557417/5 IC Client Sample ID:

Date Analyzed: 11/14/21 18:18 Lab File ID: 0007.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.51	Baseline Smoothing	gonzalezsp	11/14/21 20:06
Sulfate	10.12	Baseline Smoothing	gonzalezsp	11/15/21 07:44

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Batch Number: 557417

Lab Sample ID: STD 280-557417/6 IC Client Sample ID:

Date Analyzed: 11/14/21 18:35 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	gonzalezsp	11/15/21 07:45

Lab Sample ID: STD 280-557417/7 IC Client Sample ID:

Date Analyzed: 11/14/21 18:51 Lab File ID: 0009.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	10.23	Baseline Smoothing	gonzalezsp	11/15/21 07:45

Lab Sample ID: ICV 280-557417/8 Client Sample ID:

Date Analyzed: 11/14/21 19:07 Lab File ID: 0010.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Fluoride	2.51	Baseline Smoothing	gonzalezsp	11/14/21 20:07
Sulfate	10.13	Baseline Smoothing	gonzalezsp	11/15/21 07:46

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
350.1 cal_00509	11/28/21	11/21/21	Di Water, Lot na	100 mL	NH3 CAL STD_00033	10 mL	Ammonia	100 mg/L
.NH3 CAL STD_00033	02/28/22		Ricca, Lot 4008G09		(Purchased Reagent)		Ammonia	1000 mg/L
350.1 ICV_00494	11/28/21	11/21/21	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_00008	05/31/21	01/08/21	Acetonitrile, Lot 257727	5 mL	MNX,TNX,DNX_00051	1 mL	DNX	20.02 ug/mL
							MNX	23.34 ug/mL
							TNX	20.02 ug/mL
.MNX,TNX,DNX_00051	05/31/21		Agilent, Lot 0006535619		(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330 DMT_00009	12/02/21	06/02/21	Acetonitrile, Lot ACN_237	5 mL	MNX,TNX,DNX_00059	1 mL	MNX	23.34 ug/mL
.MNX,TNX,DNX_00059	04/30/22		Agilent, Lot 0006599273		(Purchased Reagent)		MNX	116.7 ug/mL
8330 LCS_00108	09/02/21	03/31/21	Acetonitrile, Lot Acetonitrile_00050	100 mL	8330LCSMix1_00121	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_00023	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_00121	08/31/25		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_00023	11/30/25		Restek, Lot A0165983		(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_00110	09/10/22	09/10/21	Acetonitrile, Lot Acetonitrile_00056	100 mL	8330_NG_Stk_00105	1 mL	Nitroglycerin	100 ug/mL
					8330_NG_Stk_00106	1 mL	Nitroglycerin	100 ug/mL

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					8330_PETN_Stk_00106	1 mL	PETN	100 ug/mL
					8330_PETN_Stk_00108	1 mL	PETN	100 ug/mL
					8330LCSMix1_00124	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_00024	1 mL	2,6-Dinitrotoluene	10 ug/mL
							2-Amino-4,6-dinitrotoluene	10 ug/mL
							2-Nitrotoluene	10 ug/mL
							3-Nitrotoluene	10 ug/mL
							4-Amino-2,6-dinitrotoluene	10 ug/mL
							4-Nitrotoluene	10 ug/mL
							Tetryl	10 ug/mL
					PicricARestek_00098	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG_Stk_00105	09/10/22		Restek, Lot A0172805		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_NG_Stk_00106	09/10/22		Restek, Lot A0172805		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00106	09/10/22		Restek, Lot A0168448		(Purchased Reagent)		PETN	5000 ug/mL
.8330_PETN_Stk_00108	09/10/22		Restek, Lot A0168448		(Purchased Reagent)		PETN	5000 ug/mL
.8330LCSMix1_00124	09/10/22		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_00024	09/10/22		Restek, Lot A0165983		(Purchased Reagent)		2,6-Dinitrotoluene	1000 ug/mL
							2-Amino-4,6-dinitrotoluene	1000 ug/mL
							2-Nitrotoluene	1000 ug/mL
							3-Nitrotoluene	1000 ug/mL
							4-Amino-2,6-dinitrotoluene	1000 ug/mL
							4-Nitrotoluene	1000 ug/mL
							Tetryl	1000 ug/mL
.PicricARestek_00098	09/10/22		Restek, Lot A0164473		(Purchased Reagent)		2,4,6-Trinitrophenol	1000 ug/mL
8330_OP_DMT_00009	05/31/21	08/14/20	Acetonitrile, Lot Acetonitrile_00045	25 mL	MNX,TNX,DNX_00048	1 mL	MNX	11.67 ug/mL
					MNX,TNX,DNX_00049	0.5 mL	MNX	11.67 ug/mL
					MNX,TNX,DNX_00050	1 mL	MNX	11.67 ug/mL
.MNX,TNX,DNX_00048	05/31/21		Agilent, Lot 0006535619		(Purchased Reagent)		MNX	116.7 ug/mL
.MNX,TNX,DNX_00049	05/31/21		Agilent, Lot 0006535619		(Purchased Reagent)		MNX	116.7 ug/mL
.MNX,TNX,DNX_00050	05/31/21		Agilent, Lot 0006535619		(Purchased Reagent)		MNX	116.7 ug/mL
8330_OP_DMT_00010	05/31/21	03/03/21	Acetonitrile, Lot Acetonitrile_00051	20 mL	MNX,TNX,DNX_00052	1 mL	MNX	11.67 ug/mL
					MNX,TNX,DNX_00053	1 mL	MNX	11.67 ug/mL
.MNX,TNX,DNX_00052	05/31/21		Agilent, Lot 0006535619		(Purchased Reagent)		MNX	116.7 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MNX,TNX,DNX_00053	05/31/21		Agilent, Lot 0006535619		(Purchased Reagent)		MNX	116.7 ug/mL
8330_OP_DMT_00011	04/30/22	06/01/21	Acetonitrile, Lot Acetonitrile_00054	10 mL	MNX,TNX,DNX_00054	1 mL	DNX	10.01 ug/mL
							MNX	11.67 ug/mL
							TNX	10.01 ug/mL
.MNX,TNX,DNX_00054	04/30/22		Agilent, Lot 0006594482		(Purchased Reagent)		DNX	100.1 ug/mL
							MNX	116.7 ug/mL
							TNX	100.1 ug/mL
8330IntermStk_00067	05/22/21	11/18/20	Acetonitrile, Lot 130057	10 mL	8330_NG_Stk_00094	200 uL	Nitroglycerin	100 ug/mL
					8330_PETN_Stk_00087	200 uL	PETN	100 ug/mL
					8330ICALStock_00030	1 mL	1,3,5-Trinitrobenzene	10.02 ug/mL
							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_00064	1 mL	2,4,6-Trinitrophenol	10 ug/mL
.8330_NG_Stk_00094	06/30/23		Restek, Lot A0161480		(Purchased Reagent)		Nitroglycerin	5000 ug/mL
.8330_PETN_Stk_00087	11/30/22		Restek, Lot A0154763		(Purchased Reagent)		PETN	5000 ug/mL
.8330ICALStock_00030	03/03/22	01/09/20	Acetonitrile, Lot 130057	10 mL	8330 Stock_TS_00015	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_00164	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00015	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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrotoluene	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_00164	07/01/26	AccuStandard, Lot 216071012			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330PAStkPS_00064	05/22/21	AccuStandard, Lot 214121302-02			(Purchased Reagent)		2,4,6-Trinitrophenol	100 ug/mL
8330IntermStk_00069	03/31/22	10/22/21	Acetonitrile, Lot ACN_237	10 mL	8330ICALStock_00031	1 mL	1,3,5-Trinitrobenzene	10.02 ug/mL
							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
.8330ICALStock_00031	03/31/22	04/30/21	Acetonitrile, Lot ACN_237	10 mL	8330 Stock_TS_00018	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_00168	1 mL	1,2-Dinitrobenzene	100 ug/mL
..8330 Stock_TS_00018	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

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrotoluene	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_00168	04/30/22	AccuStandard, Lot 219051500			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00124	09/29/21	03/29/21	Acetonitrile, Lot Acetonitrile_00050	400 mL	8330SurrStkSS_00185	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00188	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00192	1 mL	1,2-Dinitrobenzene	10 ug/mL
					8330SurrStkSS_00193	1 mL	1,2-Dinitrobenzene	10 ug/mL
.8330SurrStkSS_00185	05/31/25	Restek, Lot A0160559			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00188	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00192	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
.8330SurrStkSS_00193	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
8330Surrogate_00126	03/09/22	09/09/21	Acetonitrile, Lot Acetonitrile_00056	500 mL	8330SurrStkSS_00187	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00195	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00197	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00200	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
					8330SurrStkSS_00202	1 mL	1,2-Dinitrobenzene	10 ug/mL
							1,2-Dinitrobenzene (Surr)	10 ug/mL
.8330SurrStkSS_00187	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00195	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00197	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00200	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
.8330SurrStkSS_00202	09/30/25	Restek, Lot A0164261			(Purchased Reagent)		1,2-Dinitrobenzene	1000 ug/mL
							1,2-Dinitrobenzene (Surr)	1000 ug/mL
Alk daily lcs_01006	11/19/21	11/12/21	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_00393	11/17/21	11/10/21	Di Water, Lot na	100 mL	IC CL cal_00064	25 mL	Chloride	250 mg/L
					IC sulfatecal_00062	25 mL	Sulfate	250 mg/L
.IC CL cal_00064	02/28/22	SPEX CertiPrep, Lot 5-67CL-2Y			(Purchased Reagent)		Chloride	1000 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.IC sulfatecal_00062	12/30/21	SPEX CertiPrep, Lot 5-48SO4-2x			(Purchased Reagent)		Sulfate	1000 mg/L
IC CAL cl/so4_00394	11/23/21	11/16/21	Di Water, Lot na	100 mL	IC sulfatecal_00062	25 mL	Sulfate	250 mg/L
.IC sulfatecal_00062	12/30/21	SPEX CertiPrep, Lot 5-48SO4-2x			(Purchased Reagent)		Sulfate	1000 mg/L
IC Cal low_00607	11/17/21	11/10/21	Di Water, Lot NA	100 mL	IC BR ICV_00021	5 mL	Bromide	50 mg/L
					IC FL cal_00016	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_00016	01/31/22	Ricca, Lot 2007C85			(Purchased Reagent)		Fluoride	1000 mg/L
IC LCS_01845	11/23/21	11/16/21	Di Water, Lot 27	200 mL	IC sulfatecal_00063	20 mL	Sulfate	100 mg/L as N
.IC sulfatecal_00063	02/28/22	SPEX CertiPrep, Lot 5-48SO4-2x			(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_00731	11/23/21	11/16/21	Di Water, Lot NA	10 mL	IC SPK 6 ANIO_00025	5 mL	Sulfate	5000.51 mg/L
.IC SPK 6 ANIO_00025	10/12/22	10/12/21	Di Water, Lot NA	1000 mL	IC MS/MSD S04_00006	18.1408 g	Sulfate	10001 mg/L
..IC MS/MSD S04_00006	09/29/23	FISHER, Lot 147276			(Purchased Reagent)		Sulfate	0.5513 g/g
NXN CAL INT_00601	11/22/21	11/15/21	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_00577	11/22/21	11/15/21	Di Water, Lot NA	100 mL	NOXT ICV STD_00024	10 mL	Nitrate Nitrite as N	100 mg/L
.NOXT ICV STD_00024	02/10/22	ERA, Lot 190220m			(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 ICV INT_02023	01/10/22	10/10/21	Di Water, Lot N/A	500 mL	50% NaOH_00022	2 mL	Sodium Hydroxide	2000 mg/L
					SFD ICV STK_00008	3.7753 g	Sulfide	1008.01 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_00826	12/14/21	11/14/21	Di Water, Lot 1	100 mL	TKN 100PPM_00139	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN 100PPM_00139	12/14/21	11/14/21	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_00112	12/14/21	11/14/21	DI water, Lot 1	100 mL	TKN ICV 100_00101	25 mL	Nitrogen, Total Kjeldahl	25 mg/L
.TKN ICV 100_00101	12/14/21	11/14/21	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_00047	01/31/22	Ricca, Lot 1102654			(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_00052	06/30/23	Agilent, Lot 0006606278			(Purchased Reagent)		Dissolved Organic Carbon - Quad	1001 ppm
							DOC Result 1	1001 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							DOC Result 2	1001 ppm
							DOC Result 3	1001 ppm
							DOC Result 4	1001 ppm

Reagent

50% NaOH_00022

RICCA CHEMICAL COMPANY®

448 West Fork Dr
Arlington, TX 76012
http://www.riccachemical.com
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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_00108

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X5\20210401-100246.b\04010006.D

Lims ID: Phenyl-Hexyl:H20-014671 Inj. Date: 01-Apr-2021 16:25:43

Worklist ID: 280-0100246-006 Instrument: CHHPLC_X5

Method: 8330_X5_Luna

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_	Limits 2 3535
6 HMX	0.5000	0.4313	86.3	65-135	
5 2,4,6-Trinitrophenol	0.5000	0.4984	99.7	73-124	80-120
8 RDX	0.5000	0.4421	88.4	68-130	
9 Nitrobenzene	0.5000	0.4453	89.1	65-134	
12 1,3-Dinitrobenzene	0.5000	0.4523	90.5	78-120	
13 Nitroglycerin	5.00	4.36	87.2	74-127	
14 o-Nitrotoluene	0.5000	0.4357	87.1	70-127	
15 p-Nitrotoluene	0.5000	0.4531	90.6	71-127	
16 4AMD	0.5000	0.4354	87.1	76-125	
17 m-Nitrotoluene	0.5000	0.4468	89.4	73-125	
18 2-Amino-4,6-dinitrotolu	0.5000	0.4371	87.4	79-120	
19 1,3,5-Trinitrobenzene	0.5000	0.4516	90.3	73-125	
20 2,6-Dinitrotoluene	0.5000	0.4547	90.9	77-127	
21 2,4-Dinitrotoluene	0.5000	0.4375	87.5	78-120	
22 Tetryl	0.5000	0.4501	90.0	64-128	
23 2,4,6-Trinitrotoluene	0.5000	0.4624	92.5	71-123	
24 PETN	5.00	4.48	89.6	73-127	

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

280-146741-A-1-A 280-146741-A-2-A

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

280-146623-B-5-A 160-41555-D-1-A 160-41555-D-3-A

160-41555-C-5-A

Reagent

8330 LCS_00110

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20210911-104610.b\09110006.D

Lims ID: 8330 LCS 110 Inj. Date: 11-Sep-2021 13:02:26

Worklist ID: 280-0104610-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_
3 HMX	0.5000	0.4719	94.4	80-120
7 RDX	0.5000	0.4840	96.8	80-124
8 2,4,6-Trinitrophenol	0.5000	0.5056	101.1	38-154
10 1,3,5-Trinitrobenzene	0.5000	0.5057	101.1	80-120
11 1,3-Dinitrobenzene	0.5000	0.5048	101.0	80-120
12 Nitrobenzene	0.5000	0.5000	100.0	76-122
14 Tetryl	0.5000	0.4937	98.7	80-120
15 Nitroglycerin	5.00	5.08	101.6	75-120
16 2,4,6-Trinitrotoluene	0.5000	0.5028	100.6	80-120
17 4AMD	0.5000	0.4802	96.0	80-120
18 2-Amino-4,6-dinitrotolu	0.5000	0.4763	95.3	78-120
19 2,6-Dinitrotoluene	0.5000	0.5084	101.7	80-120
20 2,4-Dinitrotoluene	0.5000	0.4893	97.9	80-120
21 o-Nitrotoluene	0.5000	0.4885	97.7	80-124
22 p-Nitrotoluene	0.5000	0.4844	96.9	80-120
23 m-Nitrotoluene	0.5000	0.4840	96.8	80-122
24 PETN	5.00	4.97	99.5	80-120

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

410-53698-B-2-C 410-53698-B-4-C 410-53698-B-6-K

410-53723-B-2-C 410-53723-B-4-C

Reagent

8330 Stock_TS_00015

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 Stock_TS_00018

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
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1,3,5-trinitrobenzene	000099-35-4	RM06608	1002 ± 5 µg/mL
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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_00094

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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0161450

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

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Nitroglycerin	5,020.0 µg/mL	+/- 46.6833 µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 200507JLM)		+/- 277.3466 µg/mL	Unstressed
	Purity 99%		+/- 322.6949 µg/mL	Stressed

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

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

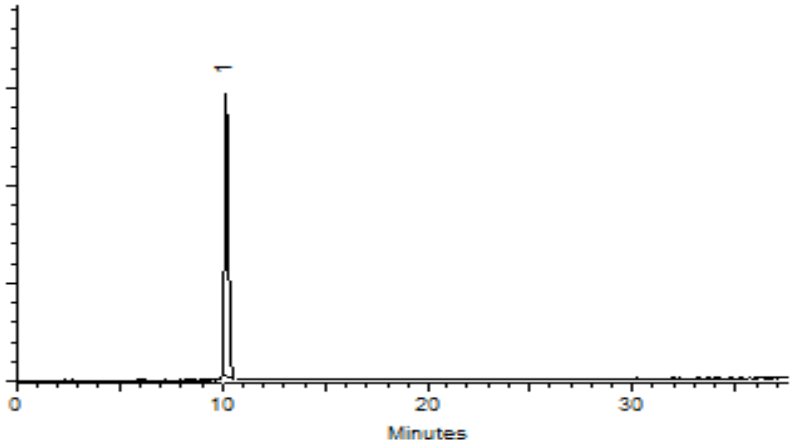
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Matt Fragassi - Mix Technician

Date Mixed: 03-Jun-2020 **Balance:** 1128342314

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 04-Jun-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

8330_NG_Stk_00105

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www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Composition

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0172805

Description : Custom Nitroglycerin Standard

Custom Nitroglycerin 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	Nitroglycerin	5,000.0 µg/mL	+/- 46.4973	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 200507JLM)		+/- 276.2417	µg/mL	Unstressed
	Purity 99%		+/- 321.4093	µg/mL	Stressed

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

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

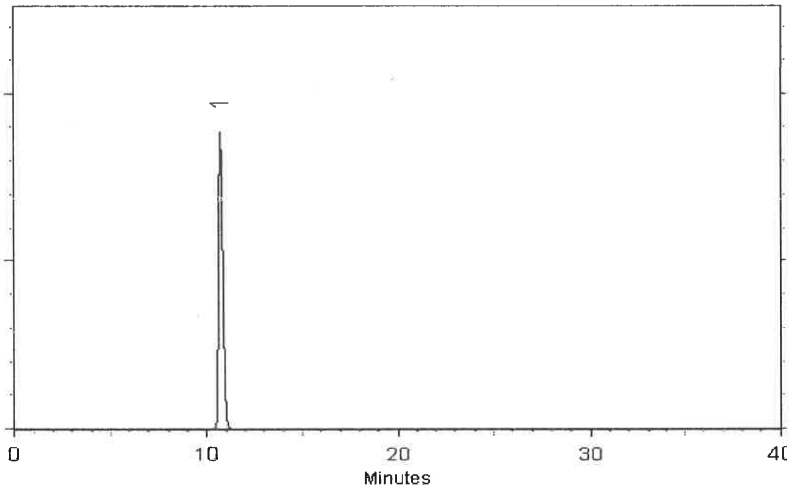
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Cathleen Soltis - Mix Technician

Date Mixed: 26-May-2021 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Jun-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_NG_Stk_00106

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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 568871 **Lot No.:** A0172805

Description : Custom Nitroglycerin Standard

Custom Nitroglycerin 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	Nitroglycerin	5,000.0 µg/mL	+/- 46.4973	µg/mL	Gravimetric
	CAS # 55-63-0 (Lot 200507JLM)		+/- 276.2417	µg/mL	Unstressed
	Purity 99%		+/- 321.4093	µg/mL	Stressed

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

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

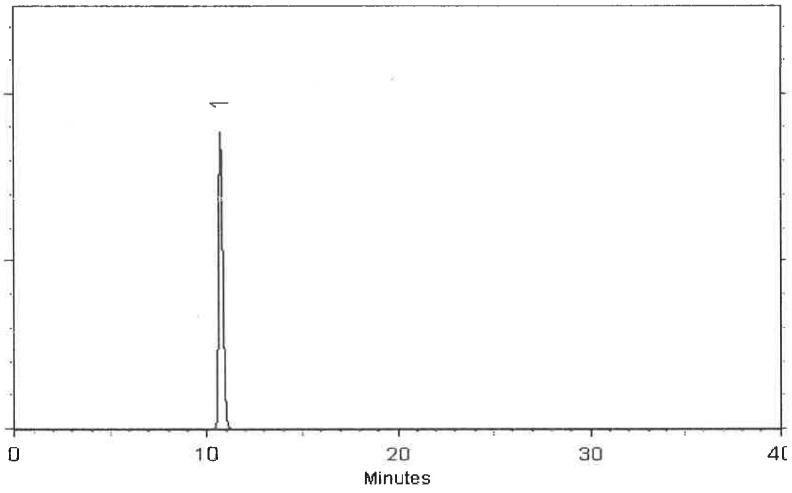
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Cathleen Soltis - Mix Technician

Date Mixed: 26-May-2021 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 01-Jun-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_OP_DMT_00009

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20200818-94226.b\08180006.D

Lims ID: C18column:B16162 Inj. Date: 18-Aug-2020 16:53:53

Worklist ID: 280-0094226-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535
2 TNX	0.2503	0.2275	90.9	50-150		
5 DNX	0.2503	0.2475	98.9	66-119	50-150	
6 MNX	0.2918	0.2601	89.2	57-132	68-123	

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

280-139502-A-1-A 280-139502-A-2-A 280-139502-A-3-A
280-139502-A-4-A 280-139485-A-1-A 280-139485-A-2-A
280-139485-A-3-A 280-139485-A-4-A 280-139485-A-5-A
280-139362-A-1-A 280-139362-A-2-A 280-139362-A-3-A
280-139434-A-12-A 280-139434-A-14-A 280-139434-A-16-A
280-139434-A-18-A 280-139434-A-20-A 280-139434-A-22-A
280-139434-A-28-A 280-139434-A-35-A 280-139434-A-41-A
280-139466-A-6-A 280-139466-A-13-A 280-139472-A-4-A
280-139472-A-15-A 280-139435-A-1-A 280-139467-A-9-A
280-139469-A-6-A 280-139469-A-17-A 280-139470-A-4-A
280-139470-A-14-A

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

600-209588-G-1-A 280-139486-A-1-A 280-139486-A-2-A
280-139514-A-1-A 280-139514-A-2-A 280-139514-A-3-A
280-139514-A-4-A

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

280-139522-A-1-A 280-139524-A-1-A

Reagent

8330_OP_DMT_00011

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20210602-102004.b\06020006.D

Lims ID: C18column:B16162 Inj. Date: 02-Jun-2021 16:51:12

Worklist ID: 280-0102004-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535
2 TNX	0.5005	0.5222	104.3	50-150
5 DNX	0.5005	0.5023	100.4	66-119
6 MNX	0.5835	0.5910	101.3	57-132

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

280-149049-A-5-A	280-149049-A-11-A	280-149049-A-12-A
280-149013-A-16-A	280-149013-A-17-A	280-149013-A-18-A
280-149013-B-19-A	280-149013-B-21-A	280-149013-A-22-A
280-149013-A-23-A	280-149013-B-24-A	280-149013-B-25-A
280-149013-B-26-A	280-149013-B-27-A	280-149013-A-28-A
280-149013-A-29-A	280-149013-A-30-A	280-149013-B-31-A
280-149013-B-32-A	280-149013-B-33-A	280-149013-A-34-A
280-149013-B-35-A	280-149013-B-36-A	

Reagent

8330_PETN_Stk_00087

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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.:** A0154763

Description : Custom PETN Standard

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

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

Expiration Date : November 30, 2022 **Storage:** 10°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	PETN	5,024.0 µg/mL	+/- 46.7205 µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 277.5676 µg/mL	Unstressed
	Purity 99%		+/- 322.9521 µg/mL	Stressed

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

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

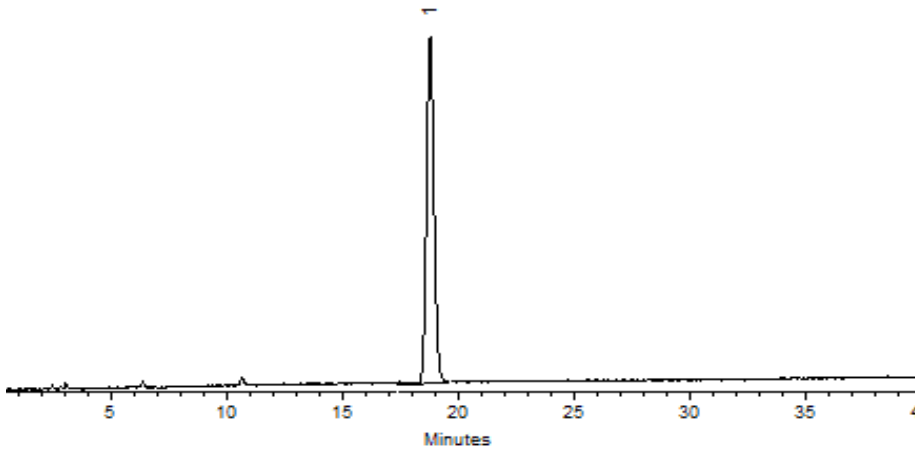
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210 nm



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

Clara Windle - Operations Technician I

Date Mixed: 05-Nov-2019 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 08-Nov-2019

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

Reagent

8330_PETN_Stk_00106

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CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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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. : 568872 **Lot No.:** A0168448

Description : Custom PETN Standard

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

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

Expiration Date : January 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	5,008.0 µg/mL	+/- 46.5717	µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 276.6836	µg/mL	Unstressed
	Purity 99%		+/- 321.9236	µg/mL	Stressed

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

Rec 21/9/21 3 vials
AL

Reagent

8330_PETN_Stk_00108

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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.:** A0168448

Description : Custom PETN Standard

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

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

Expiration Date : January 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	5,008.0 µg/mL	+/- 46.5717	µg/mL	Gravimetric
	CAS # 78-11-5 (Lot 051108JLM)		+/- 276.6836	µg/mL	Unstressed
	Purity 99%		+/- 321.9236	µg/mL	Stressed

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

Rec 2/9/21 3 vials
AL

Reagent

8330LCSMix1_00121

4 vials Rec. 10/6/20
8330 Cali mix 1

RESTEK CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0163590

Description : 8330 Calibration Mix #1

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	HMX **CAS #** 2691-41-0 **Purity** 98%	(Lot 191003JLM)	1,002.5 µg/mL	+/- 5.9548 µg/mL +/- 54.9222 µg/mL +/- 64.0446 µg/mL		Gravimetric Unstressed Stressed
2	RDX **CAS #** 121-82-4 **Purity** 99%	(Lot 080228JLM)	1,005.0 µg/mL	+/- 5.9694 µg/mL +/- 55.0569 µg/mL +/- 64.2018 µg/mL		Gravimetric Unstressed Stressed
3	1,3,5-Trinitrobenzene **CAS #** 99-35-4 **Purity** 99%	(Lot A6TDK)	1,005.0 µg/mL	+/- 5.9694 µg/mL +/- 55.0569 µg/mL +/- 64.2018 µg/mL		Gravimetric Unstressed Stressed
4	1,3-Dinitrobenzene **CAS #** 99-65-0 **Purity** 99%	(Lot BCBN4329V)	1,007.0 µg/mL	+/- 5.9813 µg/mL +/- 55.1665 µg/mL +/- 64.3295 µg/mL		Gravimetric Unstressed Stressed
5	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot SHBJ3622)	1,000.0 µg/mL	+/- 5.9397 µg/mL +/- 54.7830 µg/mL +/- 63.8824 µg/mL		Gravimetric Unstressed Stressed
6	2,4,6-Trinitrotoluene **CAS #** 118-96-7 **Purity** 99%	(Lot 5737200)	1,006.0 µg/mL	+/- 5.9753 µg/mL +/- 55.1117 µg/mL +/- 64.2657 µg/mL		Gravimetric Unstressed Stressed
7	2,4-Dinitrotoluene **CAS #** 121-14-2 **Purity** 99%	(Lot MKAA0690V)	1,009.0 µg/mL	+/- 5.9932 µg/mL +/- 55.2761 µg/mL +/- 64.4573 µg/mL		Gravimetric Unstressed Stressed

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

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

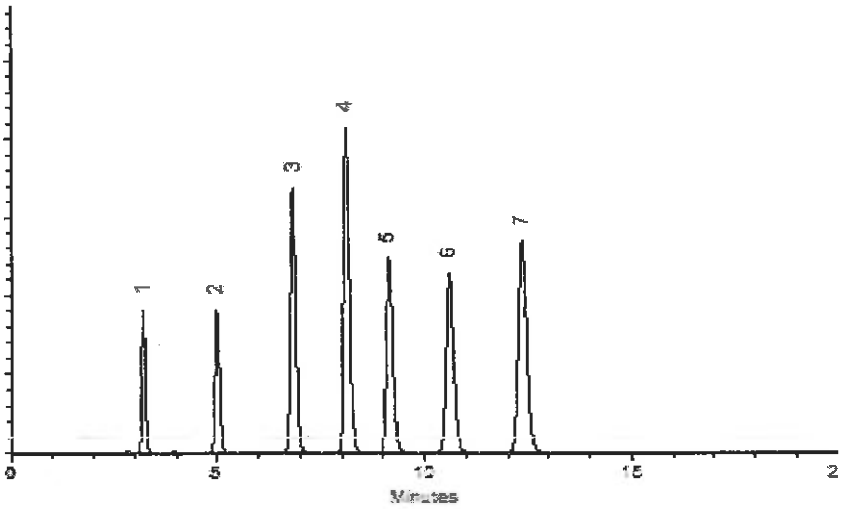
Flow Rate:
1.0 ml/min.

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.

Dalton Stover - Operations Technician I

Date Mixed: 17-Aug-2020 **Balance:** 1128353505

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 19-Aug-2020

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

Reagent

8330LCSMix1_00124

4 vials Rec. 10/6/20
8330 Cali mix 1

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31450 **Lot No.:** A0163590

Description : 8330 Calibration Mix #1

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	HMX		1,002.5 µg/mL	+/- 5.9548	µg/mL	Gravimetric
	CAS # 2691-41-0	(Lot 191003JLM)		+/- 54.9222	µg/mL	Unstressed
	Purity 98%			+/- 64.0446	µg/mL	Stressed
2	RDX		1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 121-82-4	(Lot 080228JLM)		+/- 55.0569	µg/mL	Unstressed
	Purity 99%			+/- 64.2018	µg/mL	Stressed
3	1,3,5-Trinitrobenzene		1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 99-35-4	(Lot A6TDK)		+/- 55.0569	µg/mL	Unstressed
	Purity 99%			+/- 64.2018	µg/mL	Stressed
4	1,3-Dinitrobenzene		1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBN4329V)		+/- 55.1665	µg/mL	Unstressed
	Purity 99%			+/- 64.3295	µg/mL	Stressed
5	Nitrobenzene		1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot SHBJ3622)		+/- 54.7830	µg/mL	Unstressed
	Purity 99%			+/- 63.8824	µg/mL	Stressed
6	2,4,6-Trinitrotoluene		1,006.0 µg/mL	+/- 5.9753	µg/mL	Gravimetric
	CAS # 118-96-7	(Lot 5737200)		+/- 55.1117	µg/mL	Unstressed
	Purity 99%			+/- 64.2657	µg/mL	Stressed
7	2,4-Dinitrotoluene		1,009.0 µg/mL	+/- 5.9932	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)		+/- 55.2761	µg/mL	Unstressed
	Purity 99%			+/- 64.4573	µg/mL	Stressed

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

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

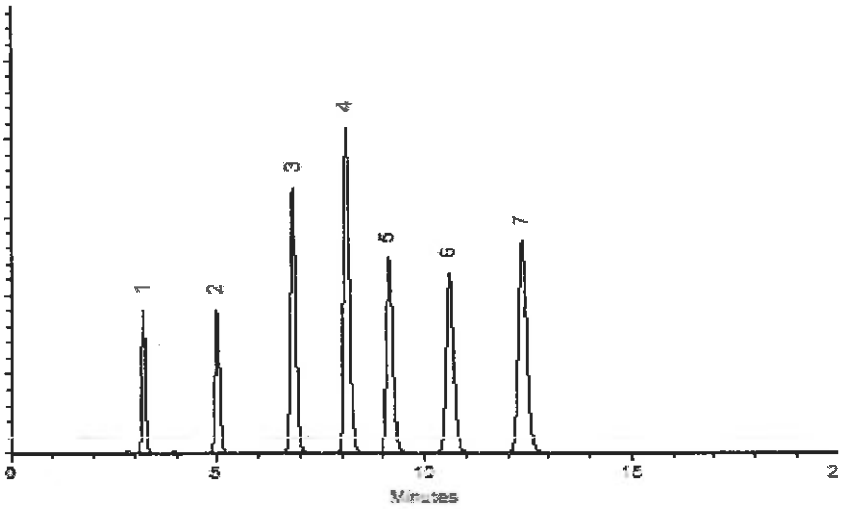
Flow Rate:
1.0 ml/min.

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.

Dalton Stover - Operations Technician I

Date Mixed: 17-Aug-2020 **Balance:** 1128353505

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 19-Aug-2020

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

Reagent

8330LCSmix2_00023

Rec 1/22/21 at 2 vials

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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. : 31451 **Lot No.:** A0165983

Description : 8330 Calibration Mix #2

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

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

Expiration Date : November 30, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Tetryl **CAS #** 479-45-8 **Purity** 99%	(Lot 091120JLM)	1,000.6 µg/mL	+/- 5.9433 +/- 54.8159 +/- 63.9207	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	4-Amino-2,6-dinitrotoluene **CAS #** 19406-51-0 **Purity** 99%	(Lot ER070908-01)	1,000.8 µg/mL	+/- 5.9444 +/- 54.8268 +/- 63.9335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	2-Amino-4,6-dinitrotoluene **CAS #** 35572-78-2 **Purity** 99%	(Lot 29550-55)	1,001.0 µg/mL	+/- 5.9456 +/- 54.8378 +/- 63.9463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	2,6-Dinitrotoluene **CAS #** 606-20-2 **Purity** 99%	(Lot BCBB8606)	1,001.0 µg/mL	+/- 5.9456 +/- 54.8378 +/- 63.9463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	2-Nitrotoluene **CAS #** 88-72-2 **Purity** 99%	(Lot BCBZ7826)	1,000.6 µg/mL	+/- 5.9433 +/- 54.8159 +/- 63.9207	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	4-Nitrotoluene **CAS #** 99-99-0 **Purity** 99%	(Lot FAU01)	1,001.2 µg/mL	+/- 5.9468 +/- 54.8487 +/- 63.9590	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	3-Nitrotoluene **CAS #** 99-08-1 **Purity** 99%	(Lot 07329LG)	1,000.4 µg/mL	+/- 5.9421 +/- 54.8049 +/- 63.9079	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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_00024

Rec 1/22/21 at 2 vials

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31451 **Lot No.:** A0165983

Description : 8330 Calibration Mix #2

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

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

Expiration Date : November 30, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Tetryl **CAS #** 479-45-8 **Purity** 99%	(Lot 091120JLM)	1,000.6 µg/mL	+/- 5.9433 +/- 54.8159 +/- 63.9207	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	4-Amino-2,6-dinitrotoluene **CAS #** 19406-51-0 **Purity** 99%	(Lot ER070908-01)	1,000.8 µg/mL	+/- 5.9444 +/- 54.8268 +/- 63.9335	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	2-Amino-4,6-dinitrotoluene **CAS #** 35572-78-2 **Purity** 99%	(Lot 29550-55)	1,001.0 µg/mL	+/- 5.9456 +/- 54.8378 +/- 63.9463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	2,6-Dinitrotoluene **CAS #** 606-20-2 **Purity** 99%	(Lot BCBB8606)	1,001.0 µg/mL	+/- 5.9456 +/- 54.8378 +/- 63.9463	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	2-Nitrotoluene **CAS #** 88-72-2 **Purity** 99%	(Lot BCBZ7826)	1,000.6 µg/mL	+/- 5.9433 +/- 54.8159 +/- 63.9207	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	4-Nitrotoluene **CAS #** 99-99-0 **Purity** 99%	(Lot FAU01)	1,001.2 µg/mL	+/- 5.9468 +/- 54.8487 +/- 63.9590	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	3-Nitrotoluene **CAS #** 99-08-1 **Purity** 99%	(Lot 07329LG)	1,000.4 µg/mL	+/- 5.9421 +/- 54.8049 +/- 63.9079	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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_00064

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-ADD-3
Description: Picric acid
Lot: 218031154-01
Solvent: Acetonitrile (50%)
Methanol (50%)
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Apr 22, 2019
Expiration: May 22, 2021
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

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

8330Surrogate_00124

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20210330-100173.b\03300006.D

Lims ID: C18column:B16162 Inj. Date: 30-Mar-2021 16:29:09

Worklist ID: 280-0100173-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3535	Limits 2 3535	Limits 3 3535	Limits 4 3535
$ 9 1,2-Dinitrobenzene	0.5000	0.4768	95.4	63-127	83-119		

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

860-270-C-1-A

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

280-146579-B-1-A

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

280-146648-A-7-A 280-146741-A-1-A 280-146741-A-2-A

280-146741-A-3-A 280-146741-G-8-A

Samples for Limit Group: 4, Lims Prep Method: 3535

280-146625-B-1-A 280-146625-B-2-A 280-146623-A-1-A

280-146623-B-2-A 280-146623-A-3-A 280-146623-A-4-A

280-146623-B-5-A 280-146623-A-6-A 280-146623-B-7-A

Reagent

8330Surrogate_00126

Preliminary Report

Eurofins TestAmerica, Denver

LCS, Lab Control Sample Report

Sample Path: \\chromfs\Denver\ChromData\CHHPLC_X\20210909-104566.b\09090006.D

Lims ID: Surr126 Inj. Date: 09-Sep-2021 17:47:23

Worklist ID: 280-0104566-006 Instrument: CHHPLC_X3

Method: 8330_X3

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 0B_Sonc_	Limits 2 3535
$ 9 1,2-Dinitrobenzene	0.5000	0.5068	101.4	63-127	83-119

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

280-152693-A-1-A 280-152693-A-2-A 280-152693-A-3-A

280-152693-B-4-A 400-207943-E-1-A

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

280-152643-B-1-A 280-152643-B-2-A 280-152643-B-3-A

280-152643-B-4-A 280-152643-A-5-A 280-152538-B-1-A

280-152538-B-6-A

Reagent

8330SurrStkSS_00185

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0160559

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, 2025 **Storage:** 10°C or colder

CERTIFIED VALUES

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

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

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

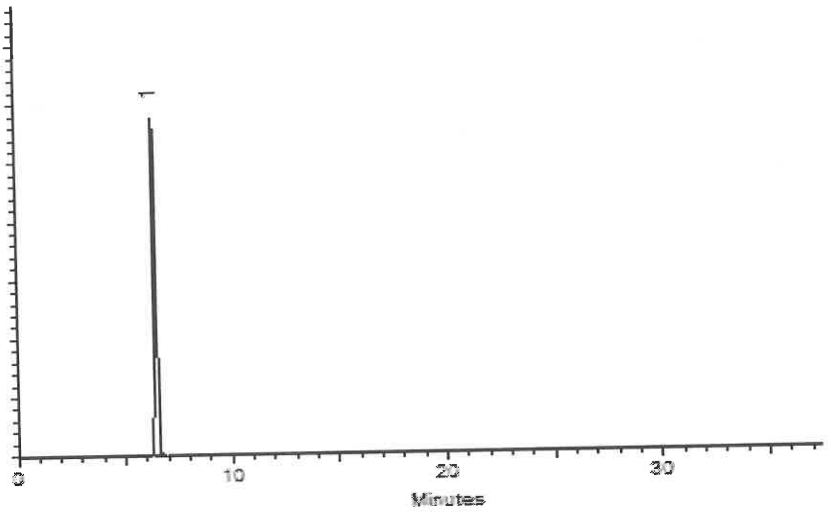
Flow Rate:
1.0 ml/min.

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.

Tom Suckar - Mix Technician

Date Mixed: 05-May-2020 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 08-May-2020

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

Reagent

8330SurrStkSS_00187

Rec 1/22/21 @ 2 vials

RESTEK

CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0164261

Description : 8330 Surrogate Mix

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

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

Expiration Date : September 30, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene **CAS #** 528-29-0 **Purity** 99%	(Lot MKCH6067)	1,007.0 µg/mL	+/- 5.9813 +/- 56.4747 +/- 57.7956	µg/mL µg/mL µg/mL	Gravimetric Unstressed 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_00188

Rec 1/22/21 @ 2 vials

RESTEK

CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0164261

Description : 8330 Surrogate Mix

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

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

Expiration Date : September 30, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene **CAS #** 528-29-0 **Purity** 99% (Lot MKCH6067)	1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
			+/- 56.4747	µg/mL	Unstressed
			+/- 57.7956	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_00192

Rec 1/22/21 @ 2 vials

RESTEK

CERTIFIED REFERENCE MATERIAL

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Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0164261

Description : 8330 Surrogate Mix

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

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

Expiration Date : September 30, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene **CAS #** 528-29-0 **Purity** 99%	(Lot MKCH6067)	1,007.0 µg/mL	+/- 5.9813 +/- 56.4747 +/- 57.7956	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

- 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_00193

Rec 1/22/21 @ 2 vials

RESTEK

CERTIFIED REFERENCE MATERIAL

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Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0164261

Description : 8330 Surrogate Mix

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

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

Expiration Date : September 30, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene **CAS #** 528-29-0 **Purity** 99% (Lot MKCH6067)	1,007.0 µg/mL	+/- 5.9813 µg/mL +/- 56.4747 µg/mL +/- 57.7956 µg/mL		Gravimetric Unstressed 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_00195

Rec 1/22/21 @ 2 vials

RESTEK

CERTIFIED REFERENCE MATERIAL

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

www.restek.com

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0164261

Description : 8330 Surrogate Mix

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

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

Expiration Date : September 30, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene **CAS #** 528-29-0 **Purity** 99%	(Lot MKCH6067)	1,007.0 µg/mL	+/- 5.9813 +/- 56.4747 +/- 57.7956	µg/mL µg/mL µg/mL	Gravimetric Unstressed 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_00197

Rec 1/22/21 @ 2 vials

RESTEK

CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis

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Reference Material Producer
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.:** A0164261

Description : 8330 Surrogate Mix

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

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

Expiration Date : September 30, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene **CAS #** 528-29-0 **Purity** 99% (Lot MKCH6067)	1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
			+/- 56.4747	µg/mL	Unstressed
			+/- 57.7956	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_00200

Rec 1/22/21 @ 2 vials

RESTEK

CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0164261

Description : 8330 Surrogate Mix

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

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

Expiration Date : September 30, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene **CAS #** 528-29-0 **Purity** 99% (Lot MKCH6067)	1,007.0 µg/mL	+/- 5.9813	µg/mL	Gravimetric
			+/- 56.4747	µg/mL	Unstressed
			+/- 57.7956	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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- 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

8330SurrStkSS_00202

Rec 1/22/21 @ 2 vials

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Certificate of Analysis

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 31453 **Lot No.:** A0164261

Description : 8330 Surrogate Mix

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

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

Expiration Date : September 30, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dinitrobenzene **CAS #** 528-29-0 **Purity** 99% (Lot MKCH6067)	1,007.0 µg/mL	+/- 5.9813 µg/mL +/- 56.4747 µg/mL +/- 57.7956 µg/mL		Gravimetric Unstressed Stressed

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
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0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

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

Manufacturing Notes:

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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_00164

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-SS
Description: 1,2-Dinitrobenzene
Lot: 216071012
Solvent: Methanol
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*



Danger 2

Date Certified: Jul 1, 2016
Expiration: Jul 1, 2026
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: Yes

Included on ISO Guide 34 Scope of Accreditation: Yes

Component	CAS #	Purity % (GC/FID)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
1,2-Dinitrobenzene	528-29-0	100.0	100.1	1001

Sample

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.

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

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent 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.

See reverse side for additional information

Certified By: _____
Larry Decker, Organic QC Manager

Page 1 of 1

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

8330SurrStock_00168

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New Haven, CT 06513
USA

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

CERTIFICATE OF ANALYSIS

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



Signal Word: Danger

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

Certified Reference Material

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

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

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

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

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

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

Reagent

Alk stk std_00022

spex certiprep

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Reference Materials Producer
Cert# 2495.01

SPEXertificate®
Certificate of Reference Material

ilac-MRA ACCREDITED
Chemical Testing
Cert# 2495.02

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

Description: Custom Standard

Matrix: H_2O

This Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for conductance meters and conductivity cells used in water purity measurements. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

The CRM is prepared gravimetrically using high purity sodium carbonate (Na_2CO_3) Lot# H04155 and ASTM Type I water, using Class A laboratory ware to give precise concentration.

Certified Value:

Analyte:	Na_2CO_3
Alkalinity:	50,000 µg/mL as $CaCO_3$
Uncertainty:	±500 µg/mL
Traceable to:	Standard made from NIST SRM # 351a

Balances are calibrated regularly with weight sets traceable to NIST#s 32856, 32867. This CRM is guaranteed stable to ±1% of the certified concentration inclusive of uncertainty of measurements and other components such as homogeneity, long and short-term stability for a period of one year from the date of certification. This guarantee is valid only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: OCT - - 2021

Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

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Report of Certification

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

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

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

Instructions for Use:
Primary usage of this CRM is in neat form or diluted serially with matrix of a purity at or greater than the purity of the original matrix solution. If dilution is required, the diluent must be compatible with all certified analytes and contain stabilizers appropriate for the period of intended use. The CRM can also be used as a spike or with a spike, again with appropriate compatibility considerations. All solutions should be thoroughly mixed, by shaking, prior to use and never pipetted directly from the bottle. Do not return excess solution to the bottle. All surfaces that come in contact with the solution must be thoroughly cleaned and leached prior to use. Dilutions should be performed only with Class A volumetric glassware. See SDS for health and safety information.

Method of Preparation:
Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

Homogeneity:
The homogeneity of the CRM has been confirmed by procedures consistent with ISO/IEC 17025, ISO 17034, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

Statistical Estimator and Confidence Limits:
The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X = certified value, U = expanded uncertainty, x = property value
- $U = ku_c$ where k = 2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual element standard uncertainty components u_i and $u_c = \sqrt{\Sigma u_i^2}$

Certification Report:
All certified values reported were derived from the Certification Report, Spex CertiPrep's traceability documentation, identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact Sales Support at CRMSales@spex.com.

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

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203 Norcross Avenue • Metuchen, NJ 08840
www.spexcertiprep.com • Email: CRMSales@spex.com
Phone: 1.800.LAB.SPEX • 1.732.549.7144 Fax: 732.603.9647

Reagent

IC BR ICV_00021

RICCA CHEMICAL COMPANY®

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

Certificate of Analysis

Bromide Standard, 1000 ppm Br^-

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

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

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

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

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

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

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

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

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

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

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

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

Reagent

IC CL cal_00064

Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

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: FEB - - 2021 Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

© 2020 SPEX CertiPrep, LLC

Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001 (certified by DQS), ISO 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 and labels
- ISO Guide 35: Reference Materials – General and principals for certification
- 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 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@spexcsp.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 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@spexcsp.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.

SPEX CertiPrep
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203 Norcross Ave, Metuchen, NJ 08840
www.spexcertiprep.com • E-mail: crmsales@spexcsp.com
Phone: 1-800-LAB-SPEX • Fax: 732-603-9647

Reagent

IC FL cal_00016

RICCA CHEMICAL COMPANY®

1841 Broad Street
Pocomoke City, MD 21851
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Fluoride Standard, 1000 ppm F

Lot Number: 2007C85 **Product Number:** 3173

Manufacture Date: JUL 17, 2020
Expiration Date: JAN 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.
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	1000 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
3173-4	120 mL natural poly	18 months

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

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

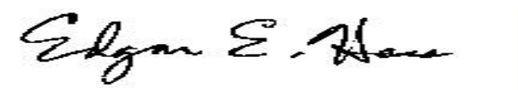
Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2008 standard by SAI Global Certificate Number CERT - 0064970

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 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

IC sulfatecal_00062

Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: AS-SO49-2X **Lot No.** 5-48SO4-2X

Description: 1000 µg/mL Sulfate

Matrix: H_2O

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

Certified Value: 1000 µg/mL ±5 µg/mL

Certified Value is Traceable to: 3181*

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

The CRM is prepared gravimetrically using high purity Potassium Sulfate, Lot# MAN1018SO4. 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: 997 µg/mL

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

Instrumental Analysis by Ion Chromatography: 1002 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
Br^-	<0.006	NO_2^-	<0.004
Cl^-	<0.01	NO_3^-	<0.006
F^-	<0.008	$PO4^{-3}$	<0.01

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: DEC -- 2020 Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

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Reagent

IC sulfatecal_00063

Reference Materials Producer
Cert #2495.01

SPEXertificate®

Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: AS-SO49-2X **Lot No.** 5-48SO4-2X

Description: 1000 µg/mL Sulfate

Matrix: H_2O

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

Certified Value: 1000 µg/mL ±5 µg/mL

Certified Value is Traceable to: 3181*

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

The CRM is prepared gravimetrically using high purity Potassium Sulfate, Lot# MAN1018SO4. 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: 997 µg/mL

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

Instrumental Analysis by Ion Chromatography: 1002 µg/mL

Uncertified Properties

Trace Ionic Impurities in the Actual Solution via IC Analysis:

Element	µg/mL	Element	µg/mL
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Cl^-	<0.01	NO_3^-	<0.006
F^-	<0.008	$PO4^{-3}$	<0.01

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: FEB - - 2021 Certifying Officer: 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 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 and labels
- ISO Guide 35: Reference Materials -- General and principals for certification
- 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 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@spexcsp.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 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@spexcsp.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.

Reagent

MNX,TNX,DNX_00048

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984

Lot Issue Date: 27-Apr-2020

Lot Number: 0006535619

Expiration Date: 31-May-2021

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-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.0 ± 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.

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.

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

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

Reagent

MNX,TNX,DNX_00049

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984

Lot Issue Date: 27-Apr-2020

Lot Number: 0006535619

Expiration Date: 31-May-2021

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-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.0 ± 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.

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.

Reagent

MNX,TNX,DNX_00050

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984

Lot Issue Date: 27-Apr-2020

Lot Number: 0006535619

Expiration Date: 31-May-2021

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-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.0 ± 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.

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.

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

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

Reagent

MNX,TNX,DNX_00051

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984

Lot Issue Date: 27-Apr-2020

Lot Number: 0006535619

Expiration Date: 31-May-2021

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-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.0 ± 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.

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.

Reagent

MNX,TNX,DNX_00052

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984

Lot Issue Date: 27-Apr-2020

Lot Number: 0006535619

Expiration Date: 31-May-2021

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-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.0 ± 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.

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.

Reagent

MNX,TNX,DNX_00053

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984

Lot Issue Date: 27-Apr-2020

Lot Number: 0006535619

Expiration Date: 31-May-2021

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-nitro-3,5-dinitroso-1,3,5-triazacyclohexane (DNX)	N/A	RM12428	100.4 ± 0.5 µg/mL
1,3,5-trinitroso-1,3,5-triazacyclohexane (TNX)	N/A	RM12426	100.3 ± 0.5 µg/mL
1-nitroso-3,5-dinitro-1,3,5-triazacyclohexane (MNX)	N/A	RM12428	117.0 ± 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.

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.

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

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ANAB ACCREDITED TESTING LABORATORY

ISO 17025 Cert No. AT-1937

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Reagent

MNX,TNX,DNX_00054

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

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

Reagent

MNX,TNX,DNX_00059

Agilent

Certificate of Analysis

Product Name: Custom Standard

Product Number: CUS-23984

Lot Number: 0006599273

Lot Issue Date: 02-Apr-2021

Expiration Date: 30-Apr-2022

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

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

Matrix: acetonitrile

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

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

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

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

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

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

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

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

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

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

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

Certificate of Analysis

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

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

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

Sample lot approver:

Monica Bourgeois
QMS Representative

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

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

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

Reagent

NH3 CAL STD_00033

RICCA CHEMICAL COMPANY®

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

Certificate of Analysis

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

Lot Number: 4008G09 **Product Number:** 5455

Manufacture Date: AUG 17, 2020

Expiration Date: FEB 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
Ammonium Chloride	12125-02-9	High Purity

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

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

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
5455-16	500 mL natural poly	18 months
5455-4	120 mL natural poly	18 months

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



Chris Collins (08/17/2020)

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

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.

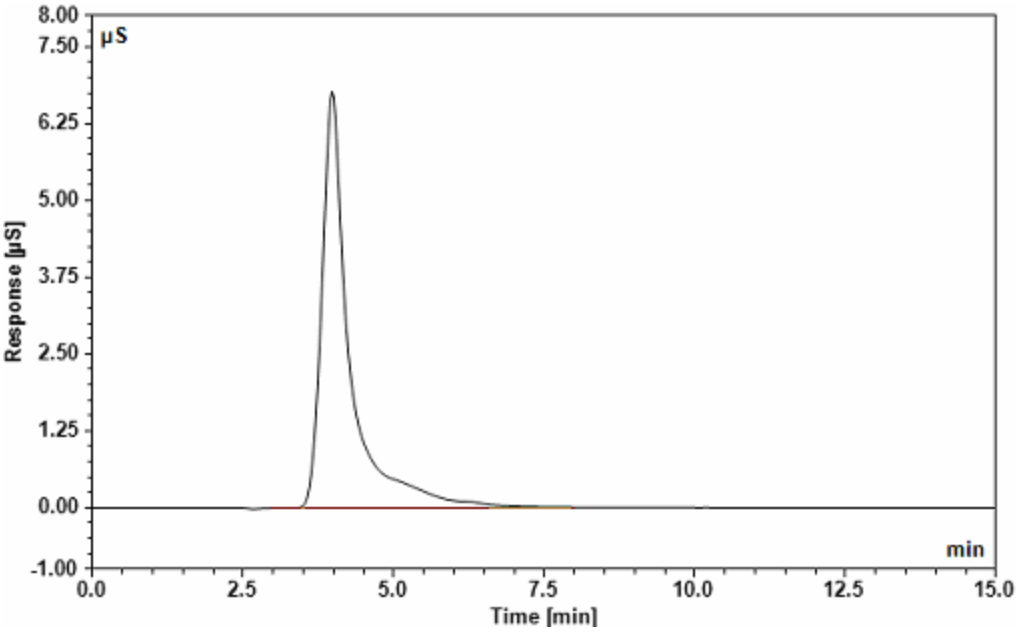
4.2 Balance Calibration

- 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

NOXT ICV STD_00024

ERA

A Waters Company

Certificate of Analysis

PRODUCT:	1000 mg/L Nitrate as N (NO_3-N)
CATALOG NUMBER:	052 -125 mL; 991 - 500 mL
LOT NUMBER:	190220m
ISSUE DATE:	February 19, 2020
REVISION DATE:	Original
STARTING MATERIAL:	Potassium Nitrate (KNO_3)
CERTIFIED CONCENTRATION[1]:	1000 mg/L
UNCERTAINTY[2]:	0.6%
MATRIX:	18 megohm deionized water
DENSITY:	0.9988 ± 0.0020 g/mL at 19.4°C and 753 mm Hg
TRACEABILITY[3]:	101%
NIST/SRM:	3185 Nitrate
VERIFICATION METHOD:	Ion Chromatography
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 2/10/2022**. 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

PicricARestek_00098

RESTEK®
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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.:** A0164473

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 : September 30, 2025 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Picric Acid **CAS #** 88-89-1 **Purity** 97% (Lot 06130CU)	1,006.9 µg/mL	+/- 5.9804 +/- 55.1588 +/- 64.3206	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

Rec 2/10/21 2 vials

AL

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

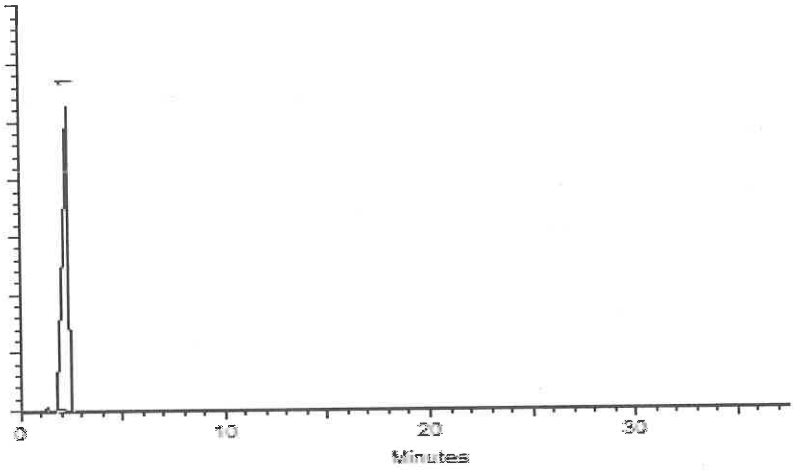
Flow Rate:
1.0 ml/min.

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

Mobile Phase B:

Mobile Phase Composition:
100%A

Det. Type:
Wavelength: 210nm & 254nm



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

Kylie Struble - Operations Technician I

Date Mixed: 16-Sep-2020 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 24-Sep-2020

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

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

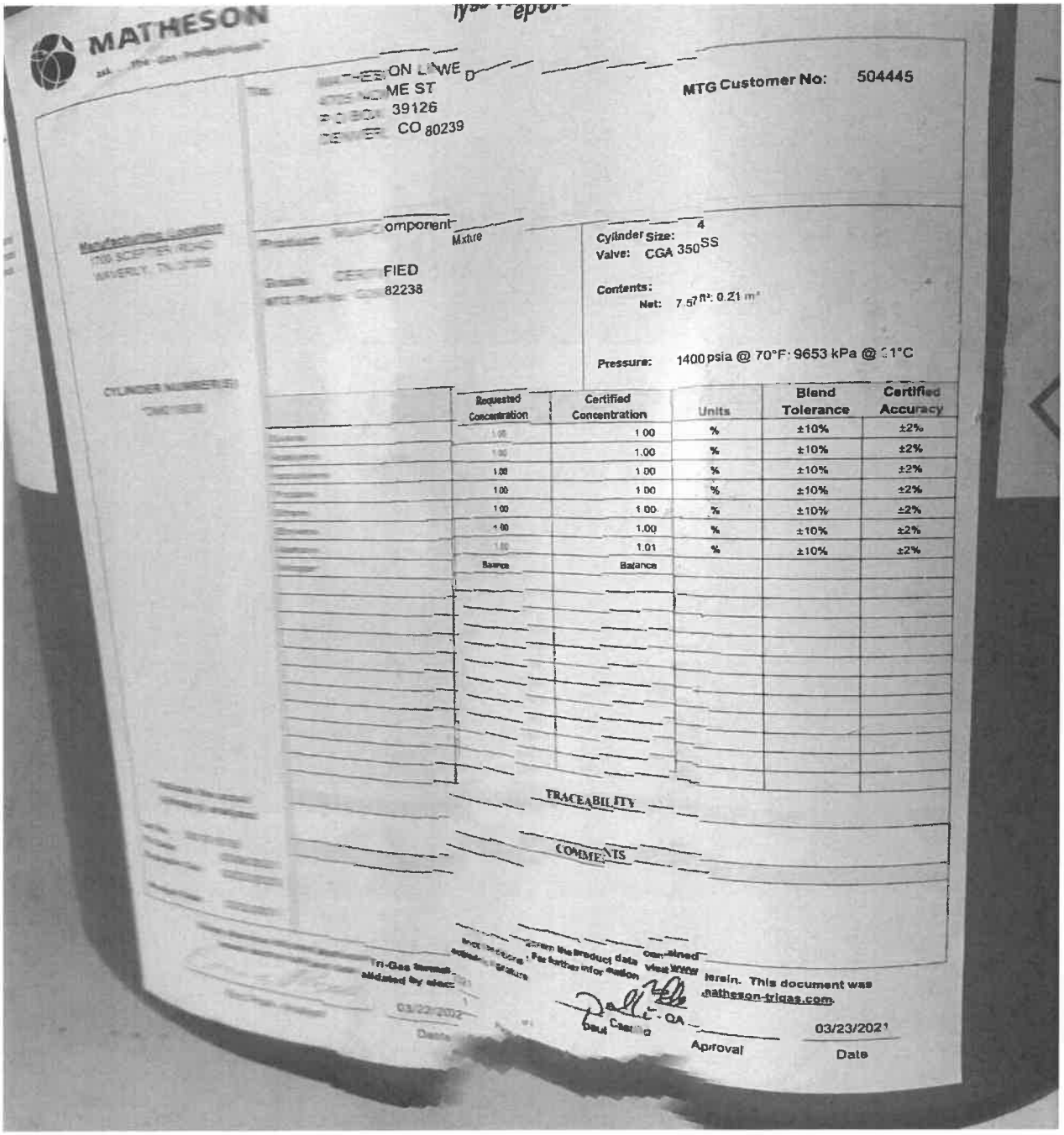
Unless otherwise indicated, Matheson Tri-Gas terms and conditions govern the product data contained herein. This document was issued electronically and data validated by electronic signature. For further information visit www.matheson-trigas.com.

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

03/22/2021
Date

Paul Castillo - QA
Approval

03/23/2021
Date

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

MTG Part No: [illegible]

Net: [illegible]

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

CYLINDER NUMBER(S)

*DM019038

	Requested Concentration	Certified Concentration	Units	Blend Tolerance	Certified Accuracy
Butane	1.00	1.00	%	±10%	±2%
Acetylene	1.00	1.00	%	±10%	±2%
Isobutylene	1.00	1.00	%	±10%	±2%
Propane	1.00	1.00	%	±10%	±2%
Ethane	1.00	1.00	%	±10%	±2%
Ethylene	1.00	1.00	%	±10%	±2%
Methane	1.00	1.01	%	±10%	±2%
Nitrogen	Balance	Balance			

TRACEABILITY

COMMENTS

*** indicates the actual cylinder(s) analyzed.**

Lot No: 9301615705
Fill Date: 03/08/2021
Expiration Date: 03/22/2023

Analysis Date: 03/22/2021

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

Eric Popa - Analyst — 03/22/2021 (Date)

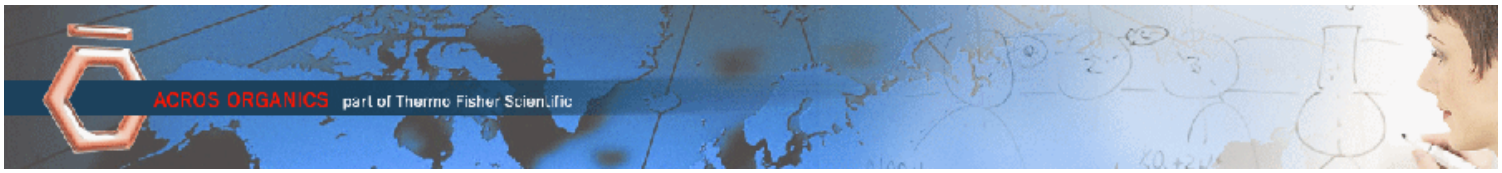
Paul Castillo - QA Approval — 03/23/2021 (Date)

Page 1 of 1

[redacted]

Reagent

SFD ICV STK_00008



Version	1
Molecular weight	240.18
Molecular formula	Na2 S . 9 H2 O
CAS No	1313-84-4
Linear formula	Na2S.9H2O
Flash point (°C)	

Certificate of Analysis

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Acros Organics expressly disclaims all warranties,expressed or implied, including the implied

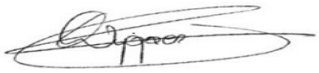
warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to human or animals. It is the responsiblity of the purchaser, formulator or those performing further manufacturing to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	38706	**Quality Test / Release Date**	22 April 2021
Lot Number	A0412804	**Suggested Retest Date**	April 2024
Description	Sodium sulfide nonahydrate,98+%,extra pure		
Country of Origin	INDIA		
Declaration of Origin	synthetic		

Origin Comment	

Result Name	Specifications	Test Value
Appearance (Color)	Colorless to light yellow	Light yellow
Appearance (Form)	Adhering crystals and/or chunks	Adhering crystals
Titration Iodimetric	32.0 to 38.0 % (Na2S)	32.3 % (Na2S)
Total nitrogen (as N)	=<0.005 %	=<0.005 %
Sulfite (as SO2)	=<2000 ppm	=<1000 ppm
Thiosulphate (S2O3)	=<5000 ppm	=<1000 ppm





C. Wygaerts, QA Manager Issued: 27 April 2021

Acros Organics
ENA23, zone 1, nr 1350, Janssen Pharmaceuticalaan 3a, B-2440 Geel, Belgium
Tel +32 14/57.52.11 - Fax +32 14/59.34.34 Internet: http://www.acros.com
1 Reagent Lane, Fair Lawn, NJ 07410,USA Fax 201-796-1329

Reagent

TKN CAL STD_00019

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7212 ACC Blvd. | Raleigh, NC 27617 | 800.234.7837

Certificate of Analysis

TKN Calibration Standard - 1000 mg/L

Catalog Number: IS-009, IS-009-500
Lot Number: 200817
Manufacture Date: 08/17/20
Certified Date: 08/17/20

Expiration: 08/31/2024
Matrix: Water
Hazards: Irritant
(See MSDS)

Bulk Number	Analyte	CAS #	Purity	Certified Concentration (mg/L TKN)
W-1477-30	TKN from Glycine	56-40-6	99.8%	1000 ± 4.60

Packaging, Storage, Instructions For Use

Store at room temperature (15-30°C). After opening, this solution should be stored tightly capped at 2-8°C.

This certified reference material (CRM) is packaged in low density polyethylene. Allow to equilibrate to room temperature before use. Small aliquots should be poured out of the bottle rather than directly pipetted out of bottle in order to prevent contamination or premature degradation. A 1 mL sample size is recommended. Smaller sample volumes may negatively affect estimated uncertainty.

Traceability Information

Analyte Source Materials: The highest purity analyte source materials are used in the manufacture of this CRM. The actual purity is referenced above. Analyte source material purity and associated uncertainty has been analytically verified against appropriate NIST SRMs, if available.

Method: Certified concentration confirmed by HPLC analysis against an independent reference standard with n=3.

Balance: All analytical balances are calibrated on a semiannual basis by an ISO 17025 accredited calibration laboratory and are traceable to NIST. Traceable Calibration Certificate available upon request.

All balances are checked daily by an in-house standard operating procedure. The weights used for this daily verification are calibrated annually by an ISO 17025 accredited calibration laboratory and are certified traceable to NIST. Certificate of Calibration and Traceability available upon request.

Thermometer: All thermometers are NIST traceable through thermometers that are calibrated annually by an ISO 17025 accredited calibration laboratory.

Glassware: All glassware used in the manufacture of our CRMs is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an 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_00047

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: 1102654 **Product Number:** 1847

Manufacture Date: FEB 02, 2021
Expiration Date: JAN 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
Phosphoric Acid	7664-38-2	ACS
Potassium Acid Phthalate	877-24-7	ACS Acidimetric

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

Specification	Reference
Organic Carbon Stock Solution	APHA (5310 B)
Potassium Hydrogen Phthalate, Stock Solution	EPA (SW-846) (9060)
Potassium Hydrogen Phthalate, Stock Solution, 1000 mg Carbon/liter	EPA (415.1)
Organic Carbon Solution, Standard (1 mL = 1 mg C)	ASTM (D 2579)

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

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1847-16	500 mL amber glass	12 months
1847-32	1 L amber glass	12 months
1847-4	120 mL amber glass	12 months
1847-8	250 mL amber glass	12 months

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

Israel Alamudun (02/02/2021)
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

TOC LCS Std_00052

Agilent

Certificate of Analysis

Product Name: Total Organic Carbon (TOC) Standard

Product Number: IQC-106

Lot Number: 0006606278

Lot Issue Date: 07-May-2021

Expiration Date: 30-Jun-2023

Description:
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.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
potassium hydrogen phthalate (KHP) (as TOC)	000877-24-7	RM17581	1001 ± 5 mg/L

Matrix: water (low TOC, < 50 ppb)

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.

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 TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026
Page: 1 of 1
www.agilent.com/quality/
CSD-QA-040.1

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

RSK_175_DOD5

Dissolved Gases (GC)

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 002F0201.D

Lab ID: LCS 280-556939/2 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0657	0.0669	102	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 002F0201.D

Lab ID: LCS 280-557116/2 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0657	0.0669	102	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 002F0201.D

Lab ID: LCS 280-557326/2 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0657	0.0663	101	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

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

Lab ID: LCSD 280-556939/3 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0657	0.0661	101	1	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

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

Lab ID: LCSD 280-557116/3 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0657	0.0670	102	0	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

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

Lab ID: LCSD 280-557326/3 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0657	0.0666	101	1	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 015F1501.D

Lab ID: 280-155138-10 MS Client ID: PZ019-7 MS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC	QC LIMITS REC	#
Methane	0.0657	0.0013 U	0.0657	100	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 016F1601.D

Lab ID: 280-155138-10 MSD Client ID: PZ019-7 MSD

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENTRATION (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	0.0657	0.0666	101	1	20	73-125	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: MB 280-556939/4

Matrix: Water Date Extracted:

Lab File ID:(1) 004F0401.D Lab File ID:(2) 004F0401.D

Date Analyzed:(1) 11/10/2021 12:30 Date Analyzed:(2) 11/10/2021 12:30

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 280-556939/2	11/10/2021 12:04	11/10/2021 12:04
	LCSD 280-556939/3	11/10/2021 12:17	11/10/2021 12:17
NW071-7	280-155138-6	11/10/2021 12:56	11/10/2021 12:56

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: MB 280-557116/4

Matrix: Water Date Extracted:

Lab File ID:(1) 004F0401.D Lab File ID:(2) 004F0401.D

Date Analyzed:(1) 11/11/2021 16:49 Date Analyzed:(2) 11/11/2021 16:49

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 280-557116/2	11/11/2021 16:23	11/11/2021 16:23
	LCSD 280-557116/3	11/11/2021 16:36	11/11/2021 16:36
NW021-7	280-155138-1	11/11/2021 21:23	11/11/2021 21:23
NW020-7	280-155138-2	11/11/2021 21:36	11/11/2021 21:36
NW022-7	280-155138-3	11/11/2021 21:49	11/11/2021 21:49
G0082-7	280-155138-4	11/11/2021 22:02	11/11/2021 22:02
G0087-7	280-155138-5	11/11/2021 22:15	11/11/2021 22:15

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: MB 280-557326/4

Matrix: Water Date Extracted:

Lab File ID:(1) 004F0401.D Lab File ID:(2) 004F0401.D

Date Analyzed:(1) 11/12/2021 14:48 Date Analyzed:(2) 11/12/2021 14:48

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 280-557326/2	11/12/2021 14:22	11/12/2021 14:22
	LCSD 280-557326/3	11/12/2021 14:35	11/12/2021 14:35
CA213-7	280-155138-7	11/12/2021 16:06	11/12/2021 16:06
G0081-7	280-155138-8	11/12/2021 16:19	11/12/2021 16:19
NW070-7	280-155138-9	11/12/2021 16:32	11/12/2021 16:32
PZ019-7	280-155138-10	11/12/2021 16:45	11/12/2021 16:45
PZ019-7 DU	280-155138-10 DU	11/12/2021 16:58	11/12/2021 16:58
PZ019-7 MS	280-155138-10 MS	11/12/2021 17:12	11/12/2021 17:12
PZ019-7 MSD	280-155138-10 MSD	11/12/2021 17:25	11/12/2021 17:25

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: NW021-7 Lab Sample ID: 280-155138-1

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

Date Analyzed (1): 11/11/2021 21:23 Date Analyzed (2): 11/11/2021 21:23

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	1.65	1.73	0.28		6.8
	2		1.29	1.26	1.34	0.30		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: NW022-7 Lab Sample ID: 280-155138-3

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

Date Analyzed (1): 11/11/2021 21:49 Date Analyzed (2): 11/11/2021 21:49

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.65	1.73	0.32		6.9
	2		1.29	1.26	1.34	0.35		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: G0082-7 Lab Sample ID: 280-155138-4

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

Date Analyzed (1): 11/11/2021 22:02 Date Analyzed (2): 11/11/2021 22:02

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	1.65	1.73	0.72		6.4
	2		1.29	1.26	1.34	0.77		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: G0081-7 Lab Sample ID: 280-155138-8

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

Date Analyzed (1): 11/12/2021 16:19 Date Analyzed (2): 11/12/2021 16:19

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	1.64	1.72	1.1		6.2
	2		1.29	1.26	1.34	1.1		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: PZ019-7 MS Lab Sample ID: 280-155138-10 MS

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

Date Analyzed (1): 11/12/2021 17:12 Date Analyzed (2): 11/12/2021 17:12

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		1.67	1.64	1.72	0.0657		0.4
	2		1.29	1.26	1.34	0.0654		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: PZ019-7 MSD Lab Sample ID: 280-155138-10 MSD

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

Date Analyzed (1): 11/12/2021 17:25 Date Analyzed (2): 11/12/2021 17:25

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		1.67	1.64	1.72	0.0666		0.4
	2		1.29	1.26	1.34	0.0663		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-556939/2

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

Date Analyzed (1): 11/10/2021 12:04 Date Analyzed (2): 11/10/2021 12:04

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		1.68	1.65	1.73	0.0669		1.9
	2		1.30	1.26	1.34	0.0657		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-556939/3

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

Date Analyzed (1): 11/10/2021 12:17 Date Analyzed (2): 11/10/2021 12:17

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		1.68	1.65	1.73	0.0661		1.7
	2		1.29	1.26	1.34	0.0649		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-557116/2

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

Date Analyzed (1): 11/11/2021 16:23 Date Analyzed (2): 11/11/2021 16:23

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		1.69	1.65	1.73	0.0669		1.8
	2		1.30	1.26	1.34	0.0658		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-557116/3

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

Date Analyzed (1): 11/11/2021 16:36 Date Analyzed (2): 11/11/2021 16:36

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.68	1.65	1.73	0.0670		1.6
	2		1.30	1.26	1.34	0.0660		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-557326/2

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

Date Analyzed (1): 11/12/2021 14:22 Date Analyzed (2): 11/12/2021 14:22

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		1.68	1.64	1.72	0.0663		2.1
	2		1.29	1.26	1.34	0.0649		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-557326/3

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

Date Analyzed (1): 11/12/2021 14:35 Date Analyzed (2): 11/12/2021 14:35

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		1.68	1.64	1.72	0.0666		2.1
	2		1.29	1.26	1.34	0.0652		

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: NW021-7 Lab Sample ID: 280-155138-1

Matrix: Water Lab File ID: 025F2501.D

Analysis Method: RSK-175 Date Collected: 11/03/2021 10:55

Sample wt/vol: 20(mL) Date Analyzed: 11/11/2021 21:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 557116 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.28		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\025F2501.D
Lims ID: 280-155138-I-1
Client ID: NW021-7
Sample Type: Client
Inject. Date: 11-Nov-2021 21:23:27 ALS Bottle#: 25 Worklist Smp#: 25
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155138-I-1
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:29:11 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1649

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	1.286	1.301	-0.015	10717220	302.9	
2	1.666	1.687	-0.021	10277635	282.9	
					RPD = 6.80	
3 Ethane						
1		1.556			ND	
2		3.026				
4 Ethylene						
1		1.846			ND	
2		2.611				
5 Propane						7
1		2.644			ND	
2		4.927				
6 Acetylene						
1		4.097			ND	
2		2.754				
7 Butane						
1		4.472			ND	
2		6.426				
8 isobutylene						
1		5.339			ND	
2		6.267				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

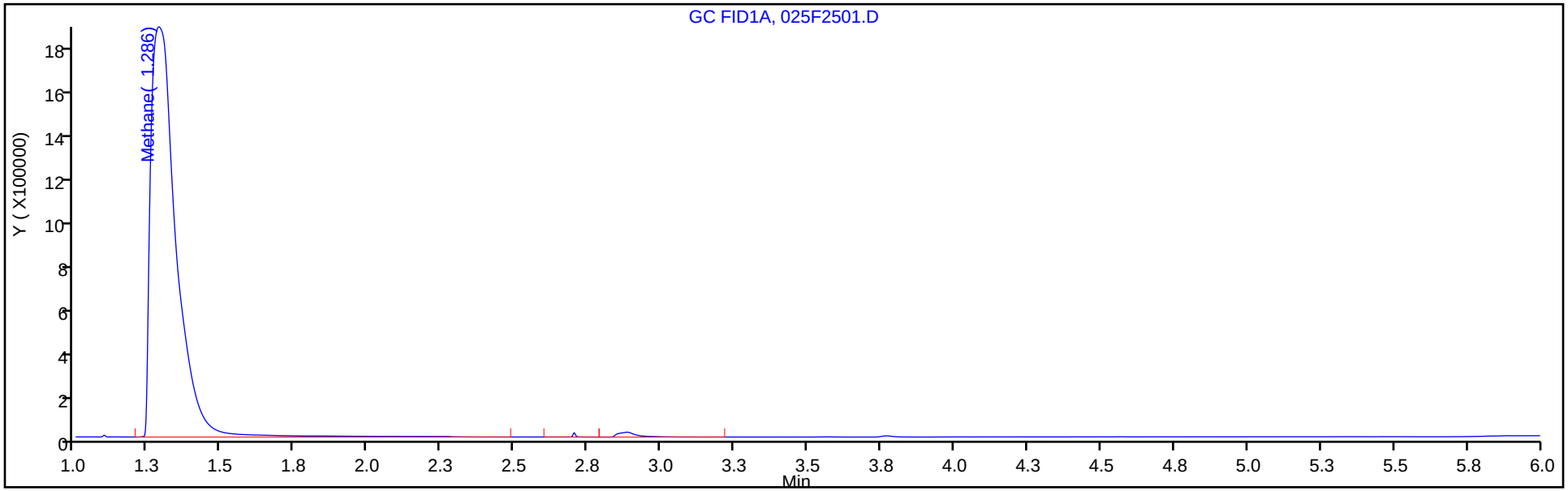
Report Date: 15-Nov-2021 16:29:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

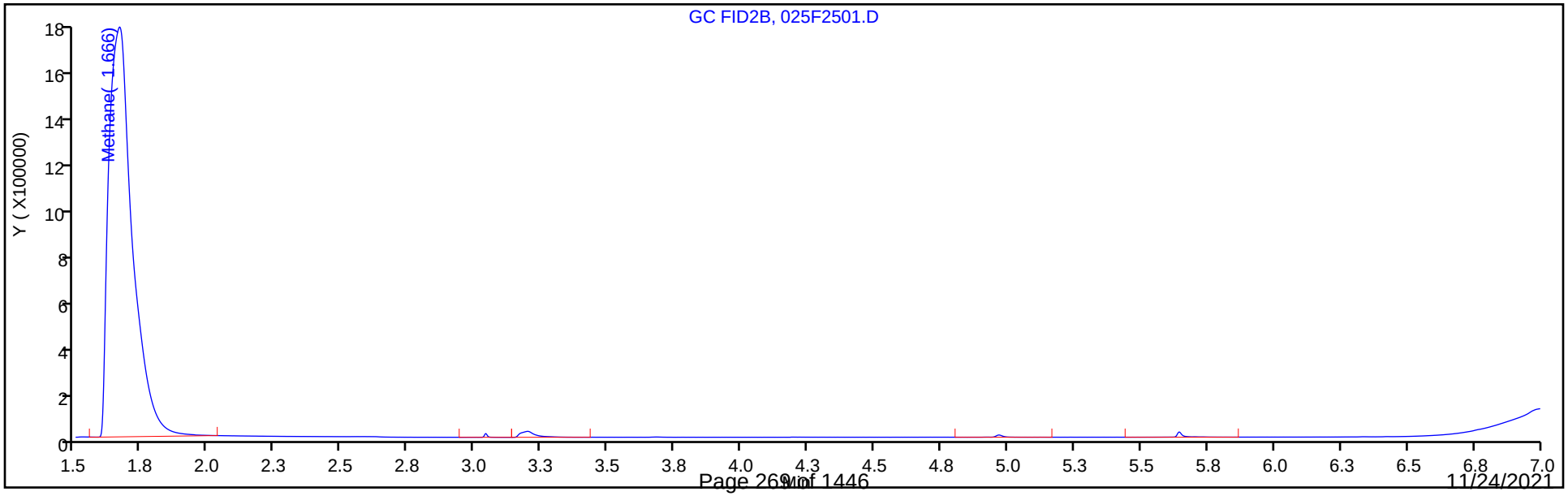
Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\025F2501.D

Injection Date:	11-Nov-2021 21:23:27	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155138-I-1	Lab Sample ID:	280-155138-1	Worklist Smp#:	25
Client ID:	NW021-7				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: NW020-7 Lab Sample ID: 280-155138-2

Matrix: Water Lab File ID: 026F2601.D

Analysis Method: RSK-175 Date Collected: 11/03/2021 09:35

Sample wt/vol: 20(mL) Date Analyzed: 11/11/2021 21:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 557116 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 TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\026F2601.D
Lims ID: 280-155138-I-2
Client ID: NW020-7
Sample Type: Client
Inject. Date: 11-Nov-2021 21:36:31 ALS Bottle#: 26 Worklist Smp#: 26
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155138-I-2
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:29:11 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1649

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		1.301			ND	
2		1.687				
3 Ethane						
1		1.556			ND	
2		3.026				
4 Ethylene						
1		1.846			ND	
2		2.611				
5 Propane						
1		2.644			ND	
2		4.927				
6 Acetylene						
1		4.097			ND	
2		2.754				
7 Butane						
1		4.472			ND	
2		6.426				
8 isobutylene						
1		5.339			ND	
2		6.267				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

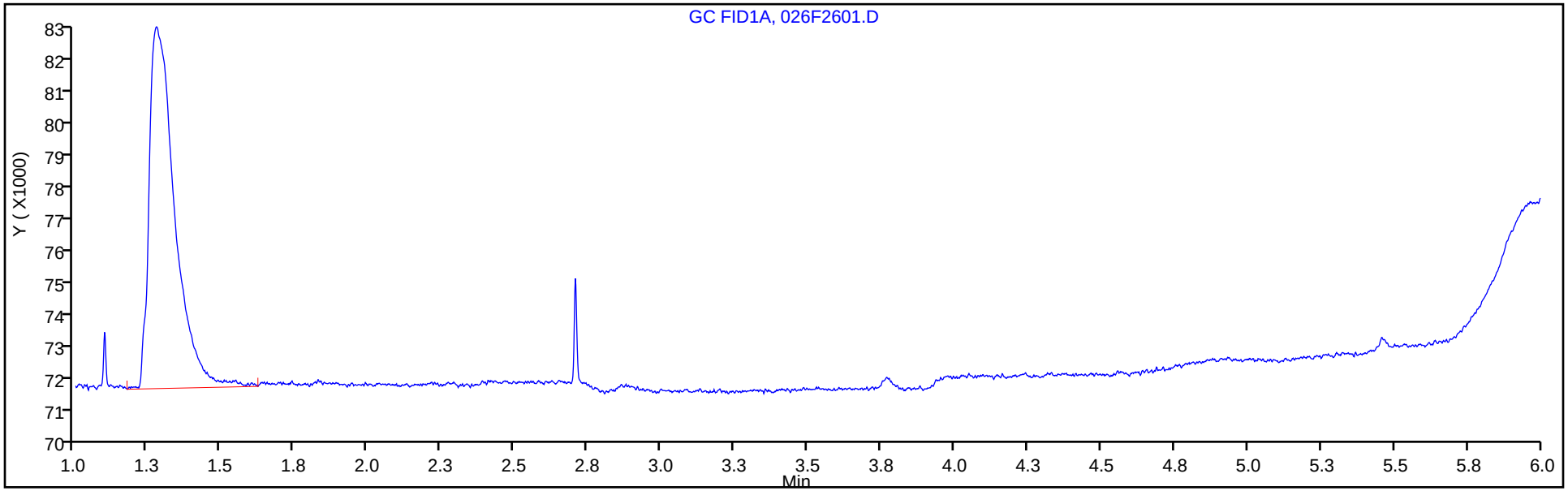
Report Date: 15-Nov-2021 16:29:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

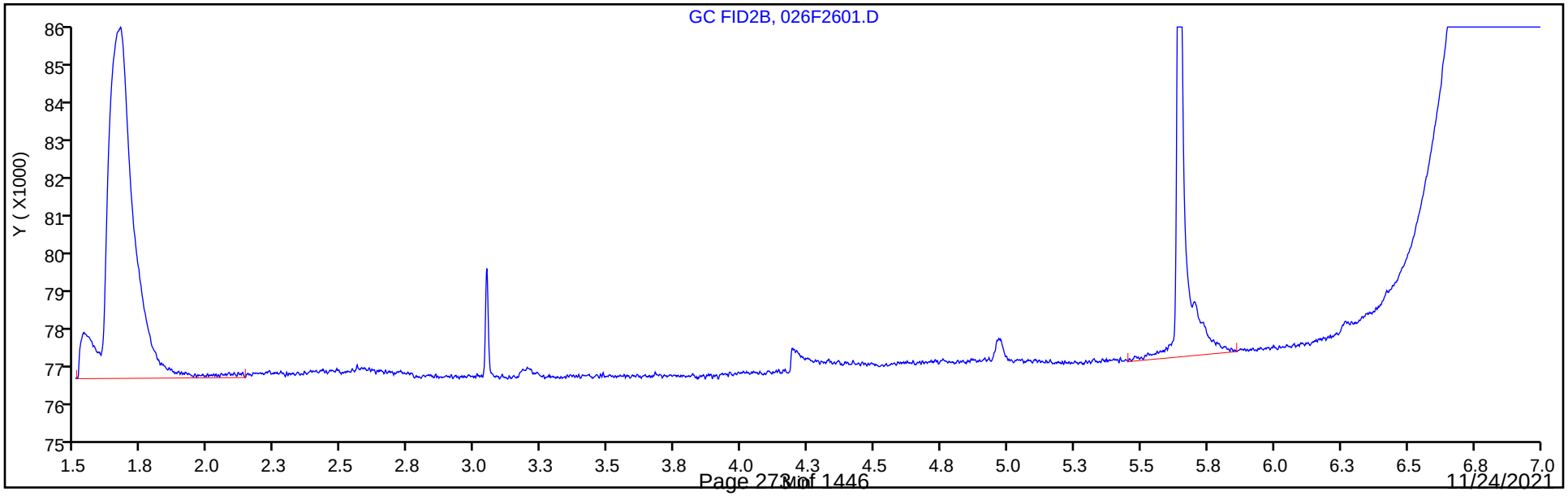
Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\026F2601.D

Injection Date:	11-Nov-2021 21:36:31	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155138-I-2	Lab Sample ID:	280-155138-2	Worklist Smp#:	26
Client ID:	NW020-7				
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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: NW022-7 Lab Sample ID: 280-155138-3

Matrix: Water Lab File ID: 027F2701.D

Analysis Method: RSK-175 Date Collected: 11/03/2021 12:00

Sample wt/vol: 20(mL) Date Analyzed: 11/11/2021 21:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 557116 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.32		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\027F2701.D
Lims ID: 280-155138-I-3
Client ID: NW022-7
Sample Type: Client
Inject. Date: 11-Nov-2021 21:49:34 ALS Bottle#: 27 Worklist Smp#: 27
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155138-I-3
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:29:11 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1649

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	1.285	1.301	-0.016	12239331	346.1	
2	1.667	1.687	-0.020	11726513	323.1	
					RPD = 6.89	
3 Ethane						
1		1.556			ND	
2		3.026				
4 Ethylene						
1		1.846			ND	
2		2.611				
5 Propane						
1		2.644			ND	
2		4.927				
6 Acetylene						
1		4.097			ND	
2		2.754				
7 Butane						
1		4.472			ND	
2		6.426				
8 isobutylene						
1		5.339			ND	
2		6.267				

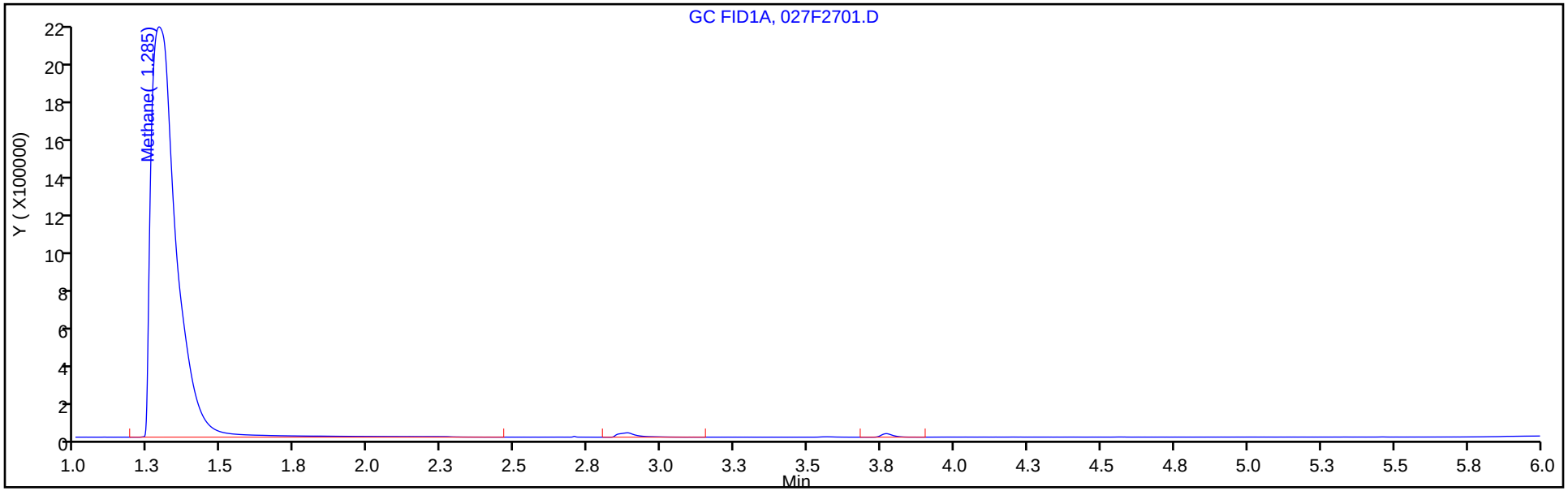
Report Date: 15-Nov-2021 16:29:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

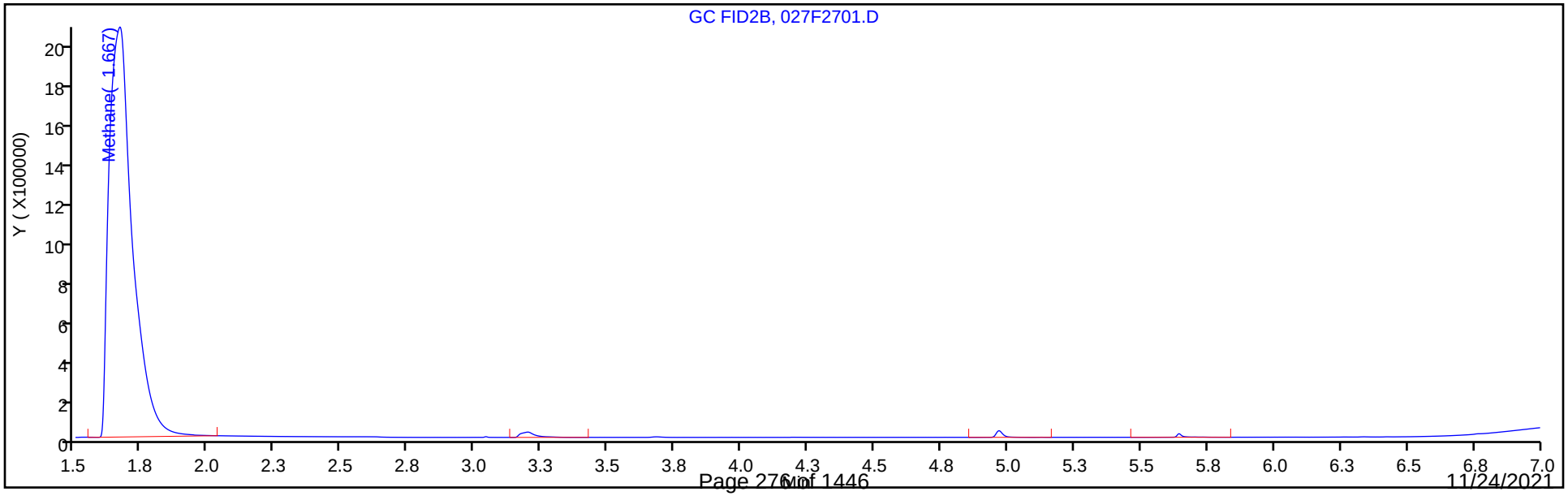
Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\027F2701.D

Injection Date:	11-Nov-2021 21:49:34	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155138-I-3	Lab Sample ID:	280-155138-3	Worklist Smp#:	27
Client ID:	NW022-7				
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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: G0082-7 Lab Sample ID: 280-155138-4

Matrix: Water Lab File ID: 028F2801.D

Analysis Method: RSK-175 Date Collected: 11/03/2021 10:05

Sample wt/vol: 20(mL) Date Analyzed: 11/11/2021 22:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 557116 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.72		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\028F2801.D
Lims ID: 280-155138-I-4
Client ID: G0082-7
Sample Type: Client
Inject. Date: 11-Nov-2021 22:02:33 ALS Bottle#: 28 Worklist Smp#: 28
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155138-I-4
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:29:11 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1649

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	1.287	1.301	-0.014	27207926	771.7	
2	1.667	1.687	-0.020	26205160	724.1	
					RPD = 6.37	
3 Ethane						
1		1.556			ND	
2		3.026				
4 Ethylene						
1		1.846			ND	
2		2.611				
5 Propane						
1		2.644			ND	
2		4.927				
6 Acetylene						
1		4.097			ND	
2		2.754				
7 Butane						
1		4.472			ND	
2		6.426				
8 isobutylene						
1		5.339			ND	
2		6.267				

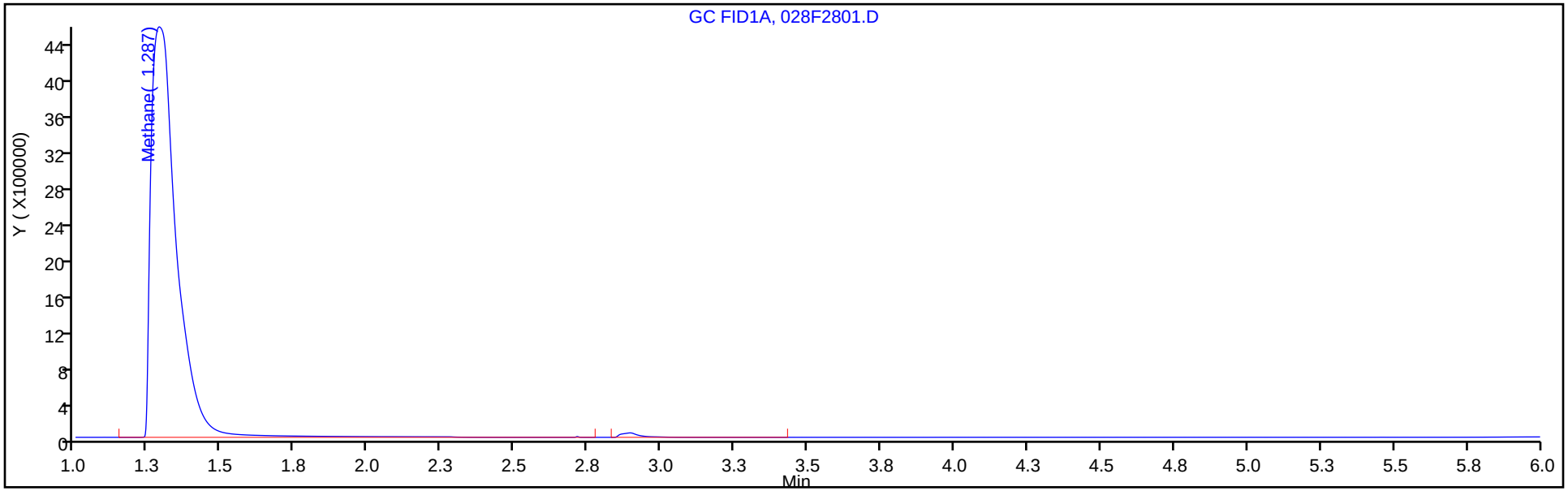
Report Date: 15-Nov-2021 16:29:16 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

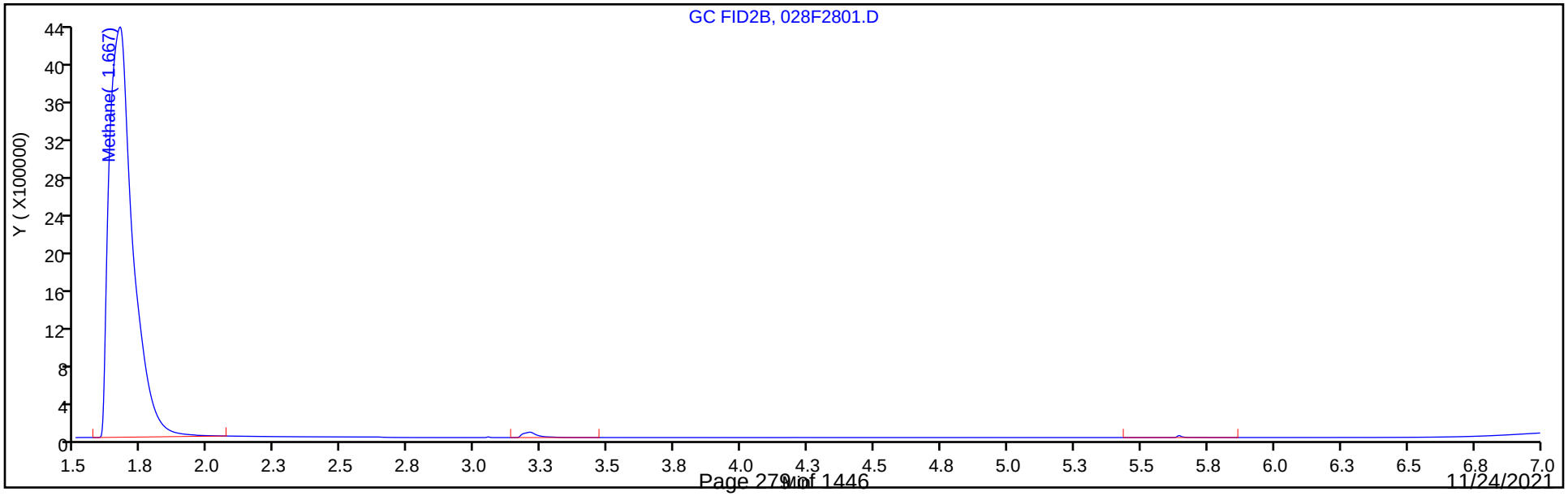
Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\028F2801.D

Injection Date:	11-Nov-2021 22:02:33	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155138-I-4	Lab Sample ID:	280-155138-4	Worklist Smp#:	28
Client ID:	G0082-7				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: G0087-7 Lab Sample ID: 280-155138-5

Matrix: Water Lab File ID: 029F2901.D

Analysis Method: RSK-175 Date Collected: 11/03/2021 11:30

Sample wt/vol: 20(mL) Date Analyzed: 11/11/2021 22:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 557116 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 TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\029F2901.D				
Lims ID:	280-155138-H-5				
Client ID:	G0087-7				
Sample Type:	Client				
Inject. Date:	11-Nov-2021 22:15:30	ALS Bottle#:	29	Worklist Smp#:	29
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-155138-H-5				
Operator ID:	sciannac	Instrument ID:	VGC_J		
Method:	\\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\RSK_J.m				
Limit Group:	GCV - RSK 175				
Method Label:	DV-GC-0025: Dissolved Gases in Water by RSK-175				
Last Update:	15-Nov-2021 16:29:11	Calib Date:	24-Sep-2021 15:12:55		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D				
Column 1 :	Rt-Alumina BOND/KCl (0.53 mm)		Det: GC FID1A		
Column 2 :	HP-PLOT/Q (0.53 mm)		Det: GC FID2B		
Process Host:	CTX1649				

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		1.301			ND	
2		1.687				
3 Ethane						
1		1.556			ND	
2		3.026				
4 Ethylene						
1		1.846			ND	
2		2.611				
5 Propane						
1		2.644			ND	
2		4.927				
6 Acetylene						
1		4.097			ND	
2		2.754				
7 Butane						
1		4.472			ND	
2		6.426				
8 isobutylene						
1		5.339			ND	
2		6.267				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

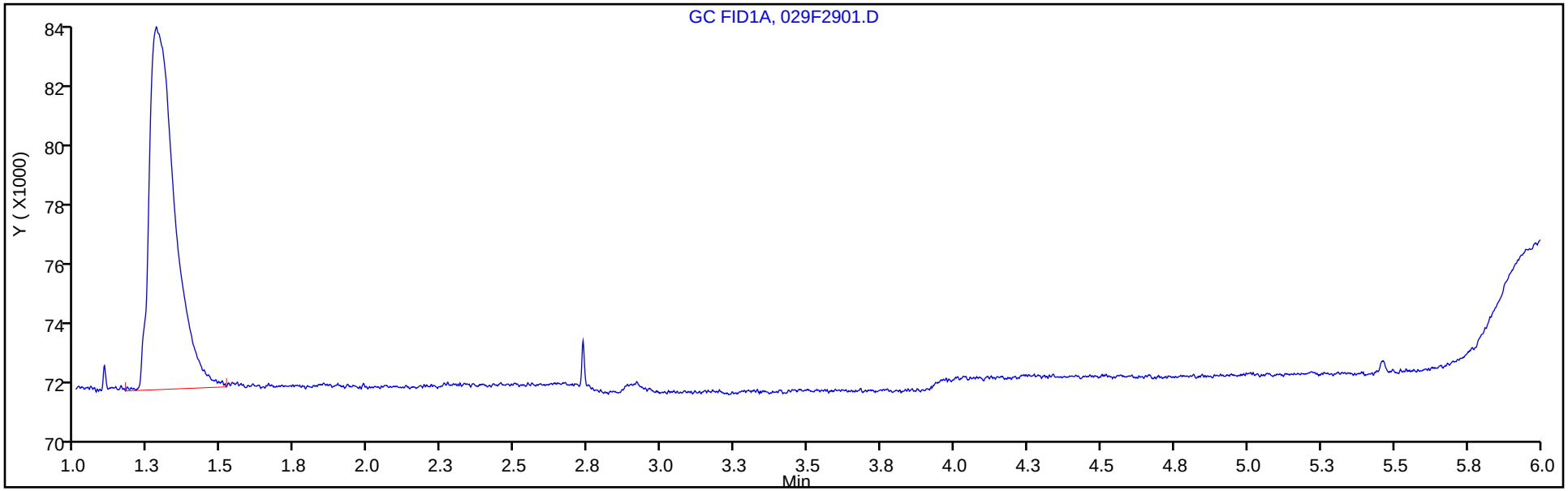
Report Date: 15-Nov-2021 16:29:16 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

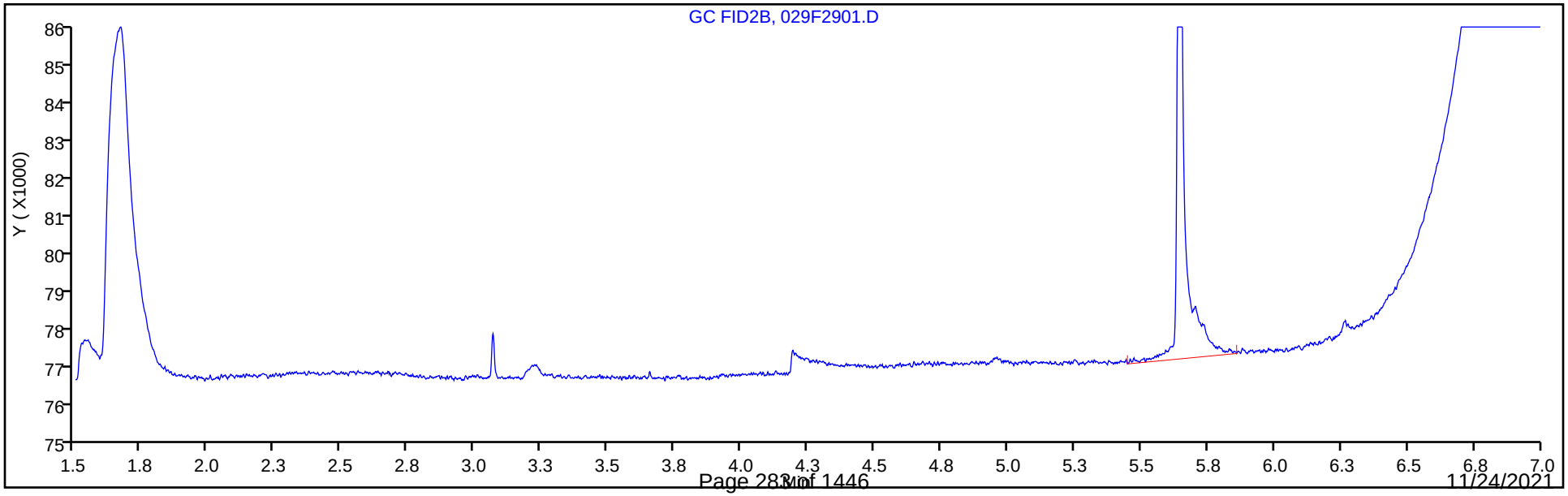
Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\029F2901.D

Injection Date:	11-Nov-2021 22:15:30	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155138-H-5	Lab Sample ID:	280-155138-5	Worklist Smp#:	29
Client ID:	G0087-7				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	29
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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: NW071-7 Lab Sample ID: 280-155138-6

Matrix: Water Lab File ID: 006F0601.D

Analysis Method: RSK-175 Date Collected: 11/02/2021 15:55

Sample wt/vol: 20(mL) Date Analyzed: 11/10/2021 12:56

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.: 556939 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 TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\006F0601.D
Lims ID: 280-155138-G-6
Client ID: NW071-7
Sample Type: Client
Inject. Date: 10-Nov-2021 12:56:34 ALS Bottle#: 6 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155138-G-6
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 15:35:57 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 15:28:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						7
1		1.299			ND	
2		1.686				
3 Ethane						
1		1.553			ND	
2		3.024				
4 Ethylene						
1		1.844			ND	
2		2.608				
5 Propane						
1		2.648			ND	
2		4.928				
6 Acetylene						
1		4.113			ND	
2		2.751				
7 Butane						
1		4.481			ND	
2		6.428				
8 isobutylene						
1		5.348			ND	
2		6.269				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

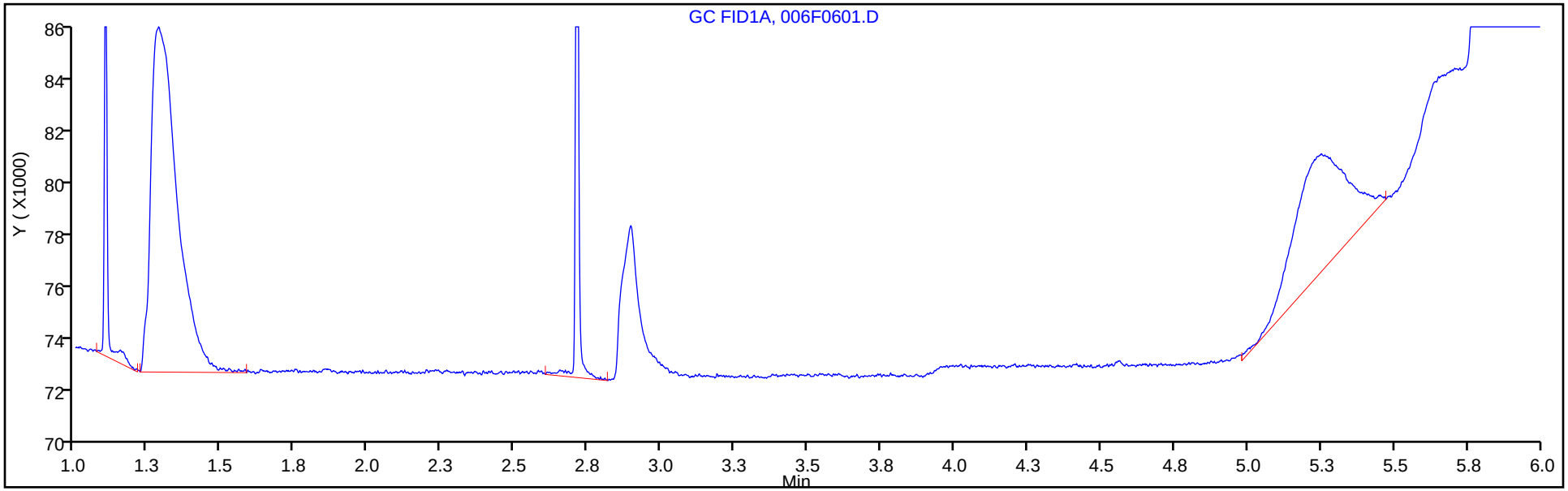
Report Date: 15-Nov-2021 15:36:00 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

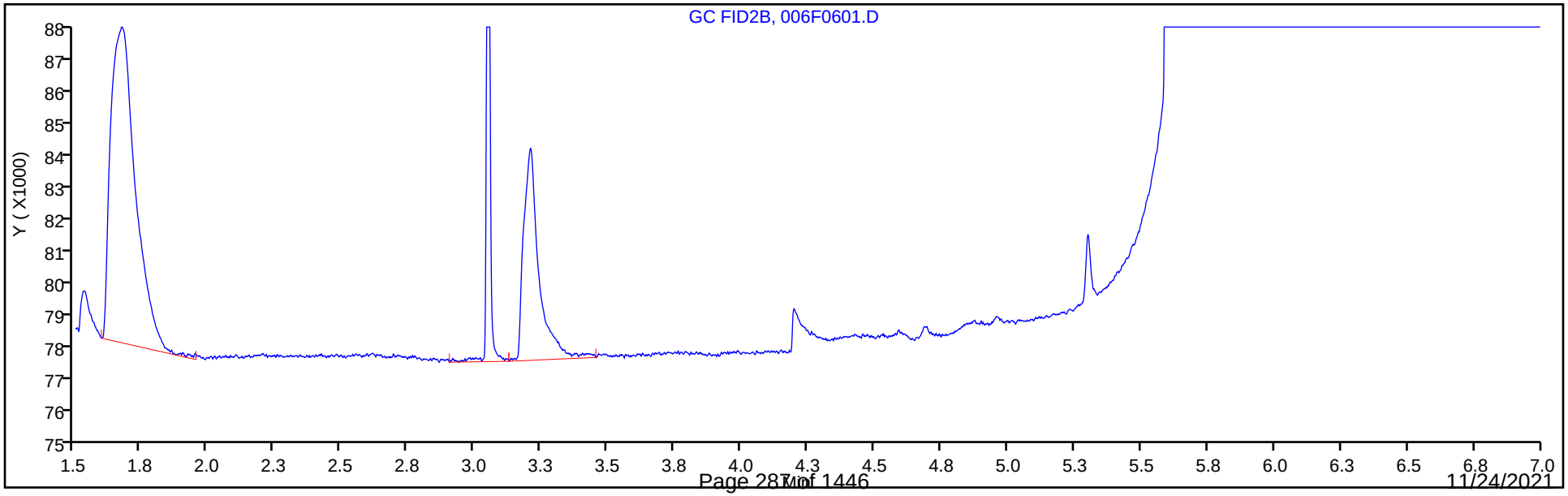
Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\006F0601.D

Injection Date:	10-Nov-2021 12:56:34	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155138-G-6	Lab Sample ID:	280-155138-6	Worklist Smp#:	6
Client ID:	NW071-7				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: CA213-7 Lab Sample ID: 280-155138-7

Matrix: Water Lab File ID: 010F1001.D

Analysis Method: RSK-175 Date Collected: 11/02/2021 13:20

Sample wt/vol: 20(mL) Date Analyzed: 11/12/2021 16:06

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.: 557326 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 TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\010F1001.D
Lims ID: 280-155138-I-7
Client ID: CA213-7
Sample Type: Client
Inject. Date: 12-Nov-2021 16:06:24 ALS Bottle#: 10 Worklist Smp#: 10
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155138-I-7
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:55:31 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 16:54:03

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		1.298			ND	
2		1.683				
3 Ethane						
1		1.553			ND	
2		3.021				
4 Ethylene						
1		1.846			ND	
2		2.605				
5 Propane						
1		2.653			ND	
2		4.928				
6 Acetylene						
1		4.123			ND	
2		2.748				
7 Butane						
1		4.491			ND	
2		6.426				
8 isobutylene						
1		5.359			ND	
2		6.268				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

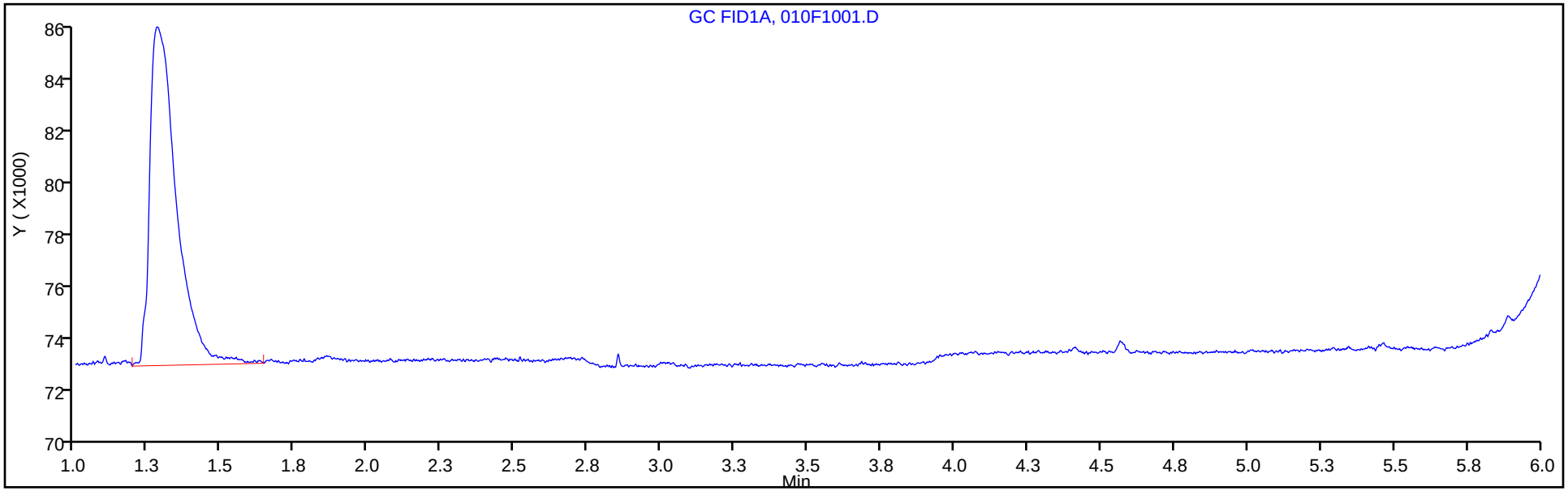
Report Date: 15-Nov-2021 16:56:55 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

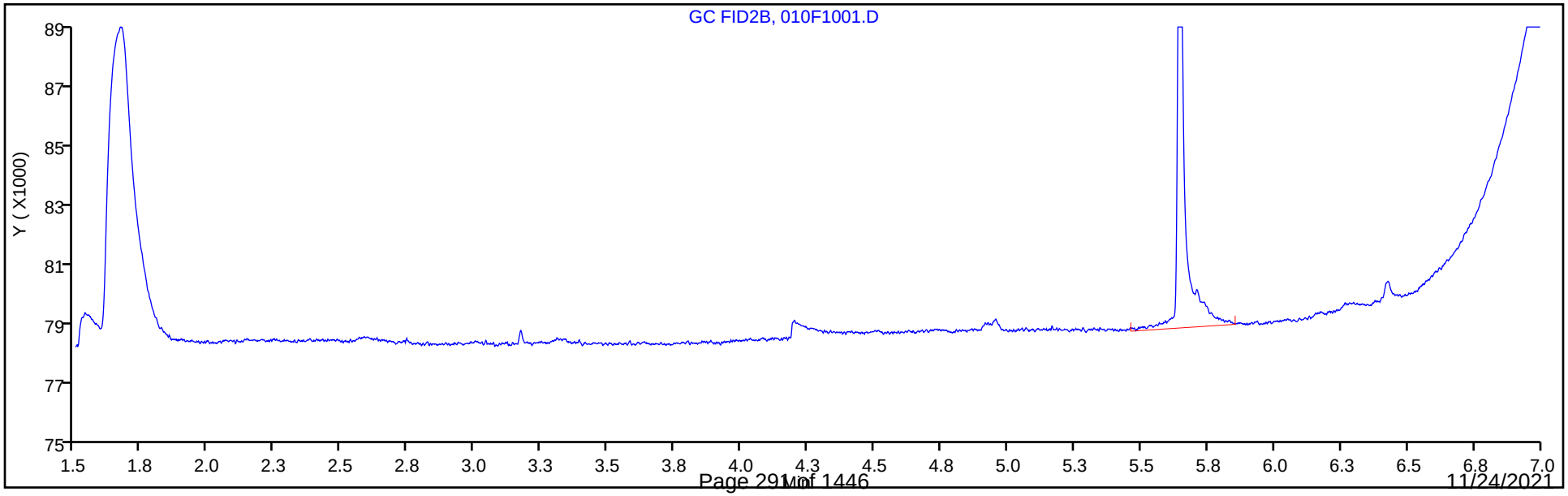
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\010F1001.D

Injection Date:	12-Nov-2021 16:06:24	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155138-I-7	Lab Sample ID:	280-155138-7	Worklist Smp#:	10
Client ID:	CA213-7				
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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: G0081-7 Lab Sample ID: 280-155138-8

Matrix: Water Lab File ID: 011F1101.D

Analysis Method: RSK-175 Date Collected: 11/02/2021 15:10

Sample wt/vol: 20(mL) Date Analyzed: 11/12/2021 16:19

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.: 557326 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	1.1		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\011F1101.D
Lims ID: 280-155138-H-8
Client ID: G0081-7
Sample Type: Client
Inject. Date: 12-Nov-2021 16:19:36 ALS Bottle#: 11 Worklist Smp#: 11
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155138-H-8
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:55:31 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 16:54:09

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	1.289	1.298	-0.009	40286940	1143.6	
2	1.671	1.683	-0.012	38851421	1074.4	
					RPD = 6.24	
3 Ethane						
1		1.553			ND	
2		3.021				
4 Ethylene						
1		1.846			ND	
2		2.605				
5 Propane						
1		2.653			ND	
2		4.928				
6 Acetylene						
1		4.123			ND	
2		2.748				
7 Butane						
1		4.491			ND	
2		6.426				
8 isobutylene						
1		5.359			ND	
2		6.268				

QC Flag Legend

Processing Flags

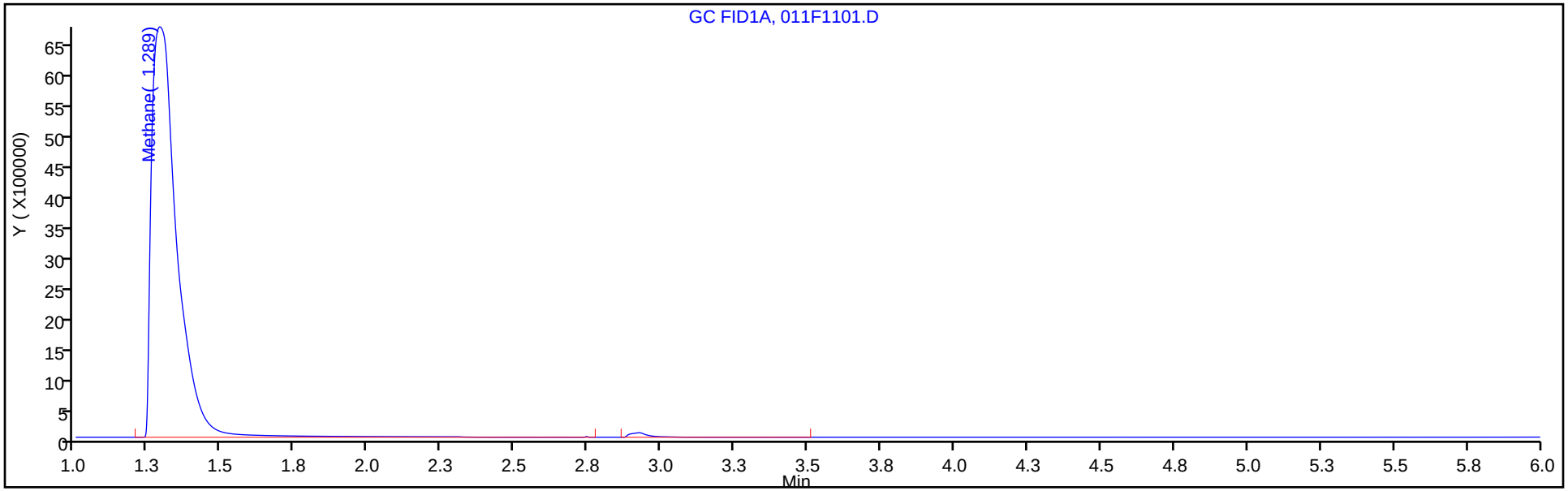
Report Date: 15-Nov-2021 16:56:55 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

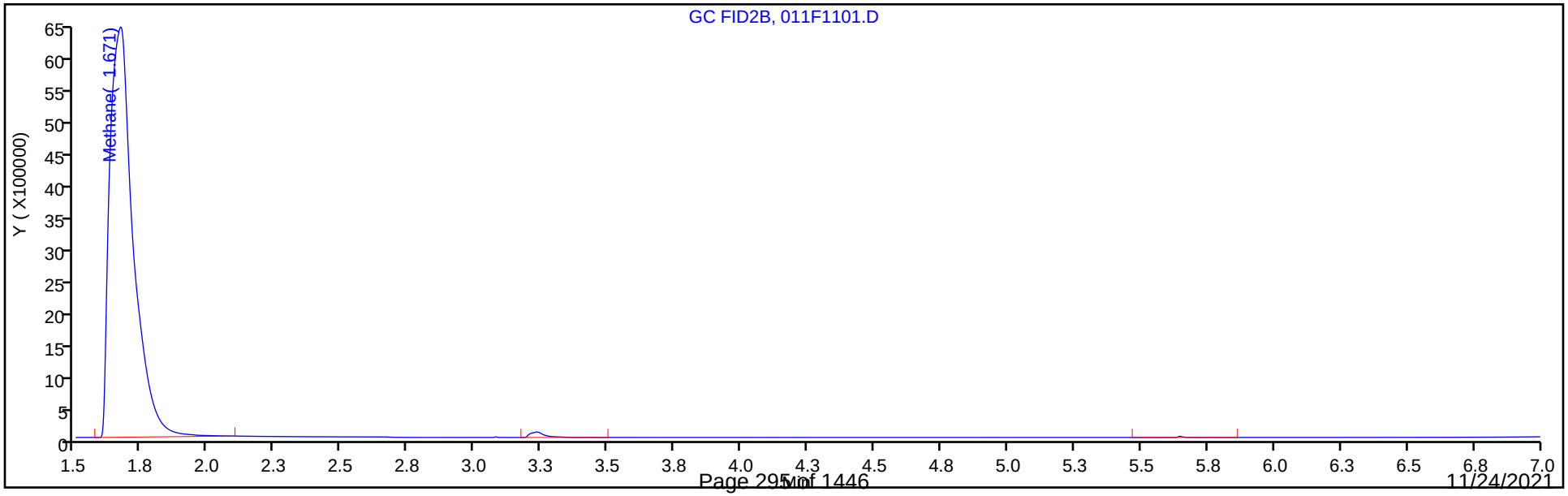
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\011F1101.D

Injection Date:	12-Nov-2021 16:19:36	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155138-H-8	Lab Sample ID:	280-155138-8	Worklist Smp#:	11
Client ID:	G0081-7				
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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: NW070-7 Lab Sample ID: 280-155138-9

Matrix: Water Lab File ID: 012F1201.D

Analysis Method: RSK-175 Date Collected: 11/02/2021 14:45

Sample wt/vol: 20(mL) Date Analyzed: 11/12/2021 16:32

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.: 557326 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 TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\012F1201.D
Lims ID: 280-155138-H-9
Client ID: NW070-7
Sample Type: Client
Inject. Date: 12-Nov-2021 16:32:48 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155138-H-9
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:55:31 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 16:54:16

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		1.298			ND	
2		1.683				
3 Ethane						
1		1.553			ND	
2		3.021				
4 Ethylene						
1		1.846			ND	
2		2.605				
5 Propane						
1		2.653			ND	
2		4.928				
6 Acetylene						
1		4.123			ND	
2		2.748				
7 Butane						
1		4.491			ND	
2		6.426				
8 isobutylene						
1		5.359			ND	
2		6.268				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

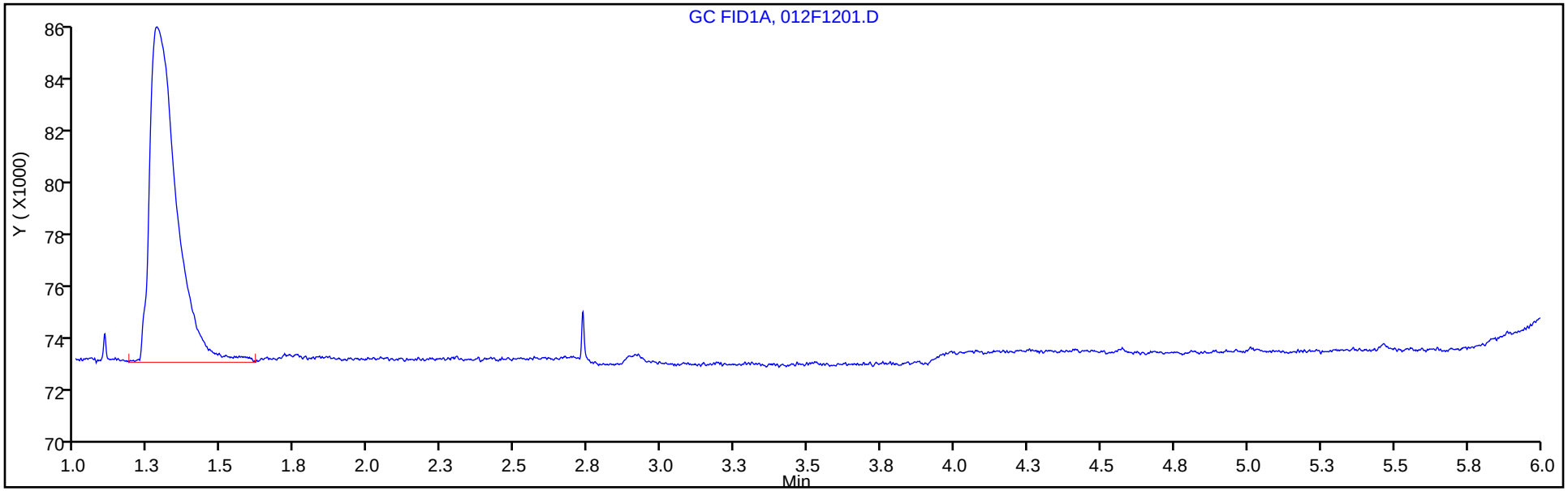
Report Date: 15-Nov-2021 16:56:56 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

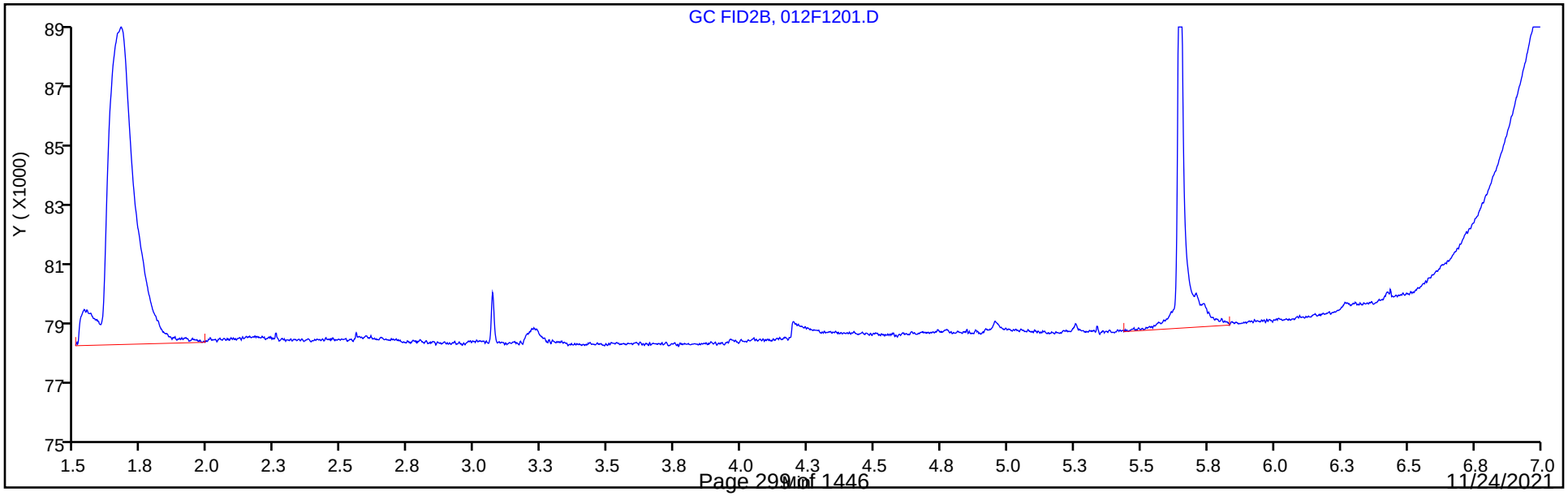
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\012F1201.D

Injection Date:	12-Nov-2021 16:32:48	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155138-H-9	Lab Sample ID:	280-155138-9	Worklist Smp#:	12
Client ID:	NW070-7				
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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: PZ019-7 Lab Sample ID: 280-155138-10

Matrix: Water Lab File ID: 013F1301.D

Analysis Method: RSK-175 Date Collected: 11/03/2021 12:55

Sample wt/vol: 20(mL) Date Analyzed: 11/12/2021 16:45

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.: 557326 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 TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\013F1301.D
Lims ID: 280-155138-I-10
Client ID: PZ019-7
Sample Type: Client
Inject. Date: 12-Nov-2021 16:45:58 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155138-I-10
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:55:31 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 16:54:22

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		1.298			ND	
2		1.683				
3 Ethane						
1		1.553			ND	
2		3.021				
4 Ethylene						
1		1.846			ND	
2		2.605				
5 Propane						
1		2.653			ND	
2		4.928				
6 Acetylene						
1		4.123			ND	
2		2.748				
7 Butane						
1		4.491			ND	
2		6.426				
8 isobutylene						
1		5.359			ND	
2		6.268				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

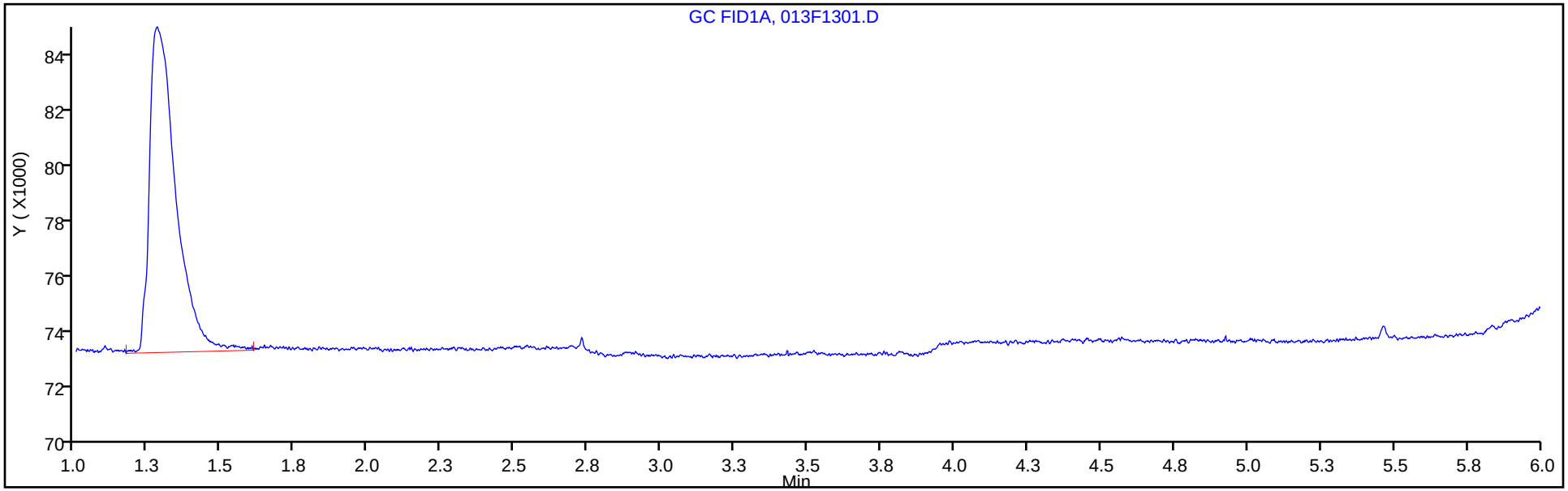
Report Date: 15-Nov-2021 16:56:56 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

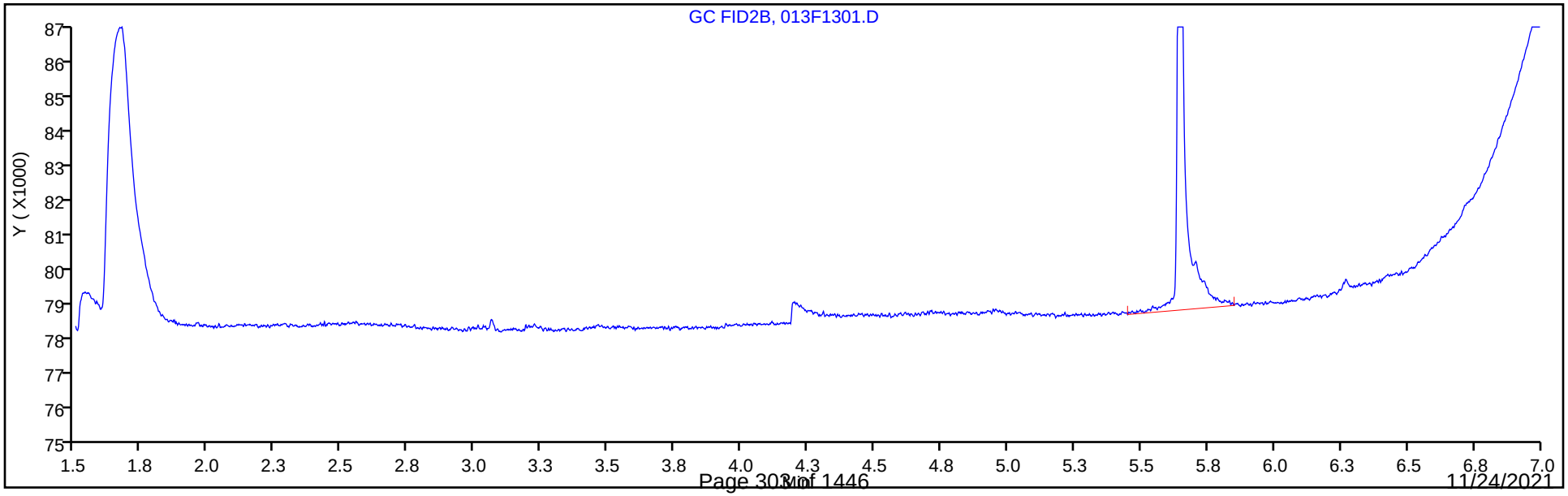
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\013F1301.D

Injection Date:	12-Nov-2021 16:45:58	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155138-I-10	Lab Sample ID:	280-155138-10	Worklist Smp#:	13
Client ID:	PZ019-7				
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 VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1 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 TestAmerica, Denver Job No.: 280-155138-1 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 TestAmerica, Denver Job No.: 280-155138-1 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

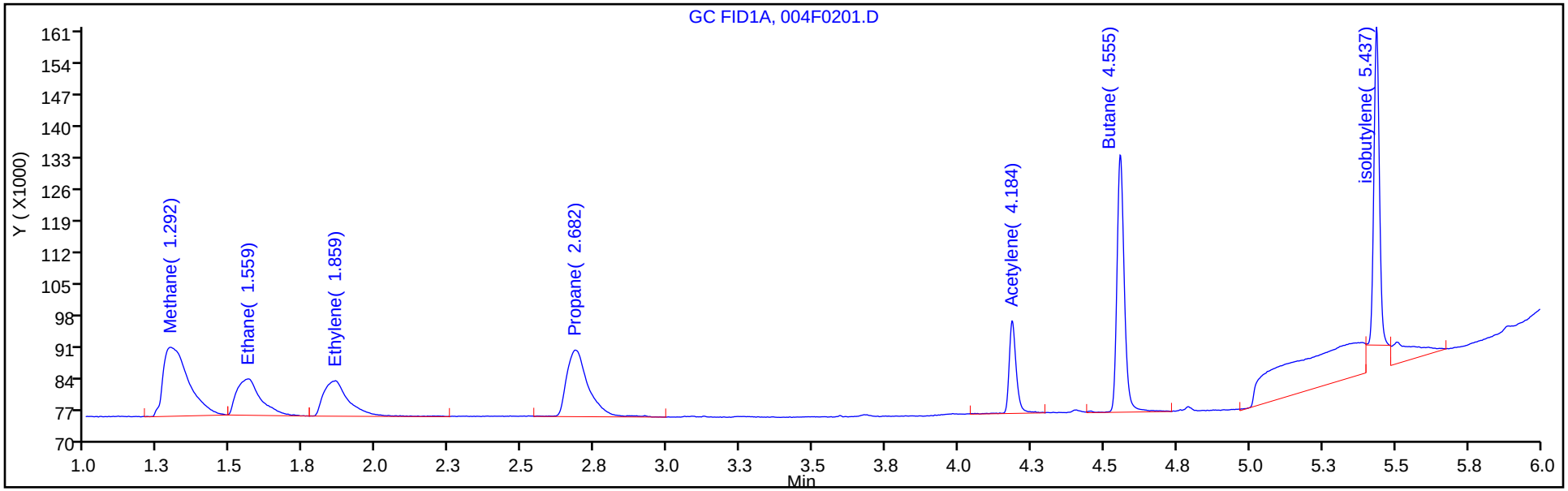
Report Date: 29-Sep-2021 10:55:12 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

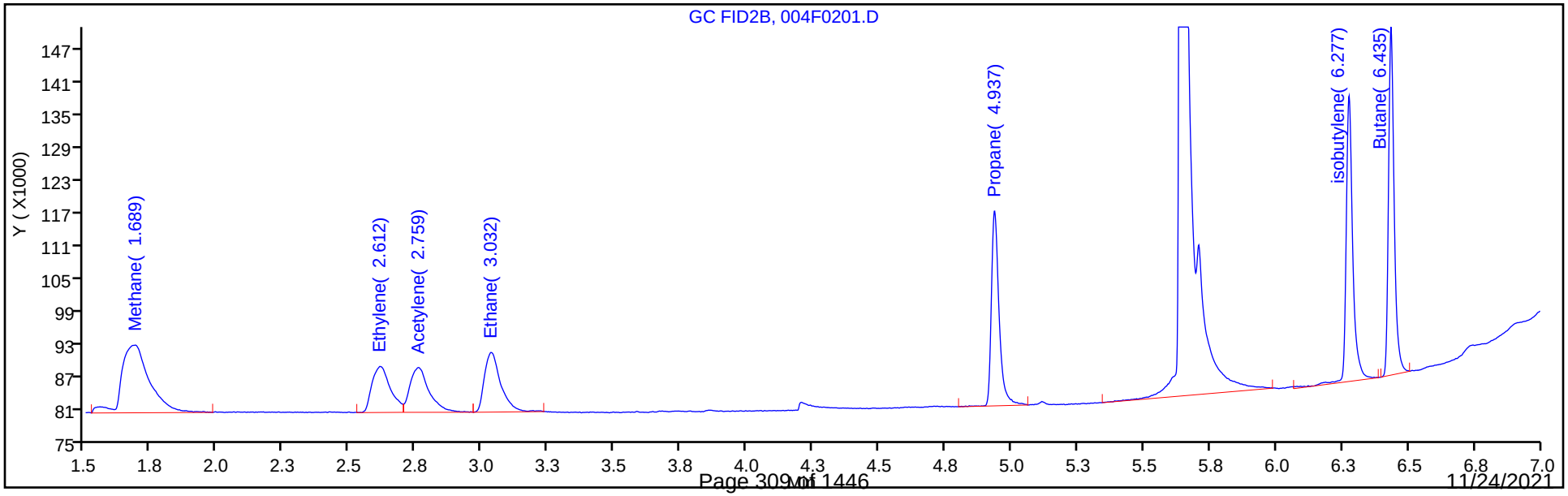
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D

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

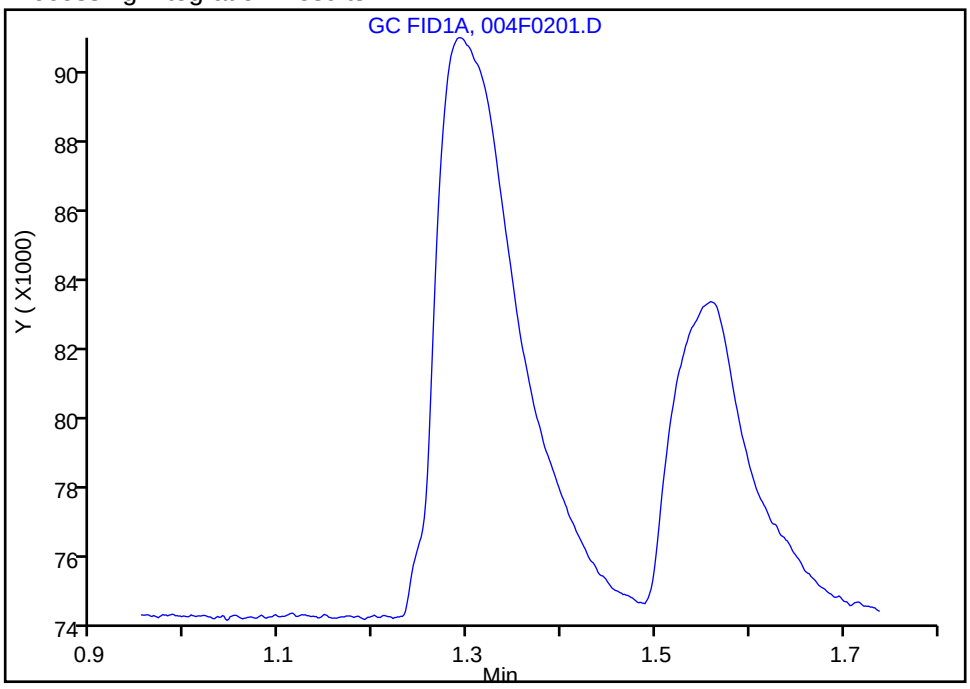
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D				
Injection Date:	24-Sep-2021 13:28:57	Instrument ID:	VGC_J		
Lims ID:	ic				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	4	Worklist Smp#:	2
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

2 Methane, CAS: 74-82-8

Signal: 1

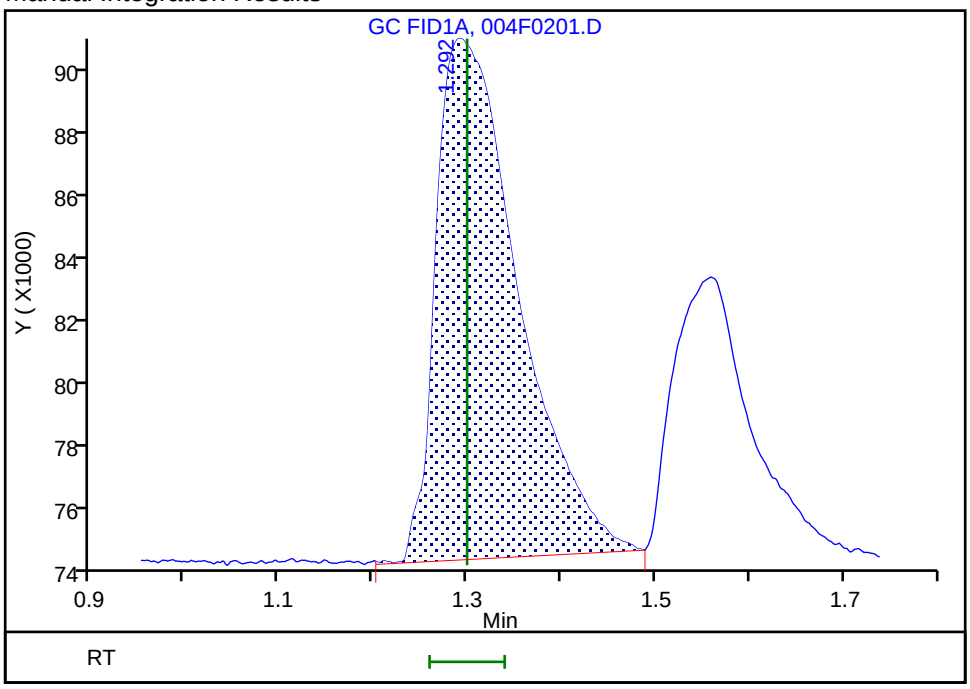
Not Detected
Expected RT: 1.30

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

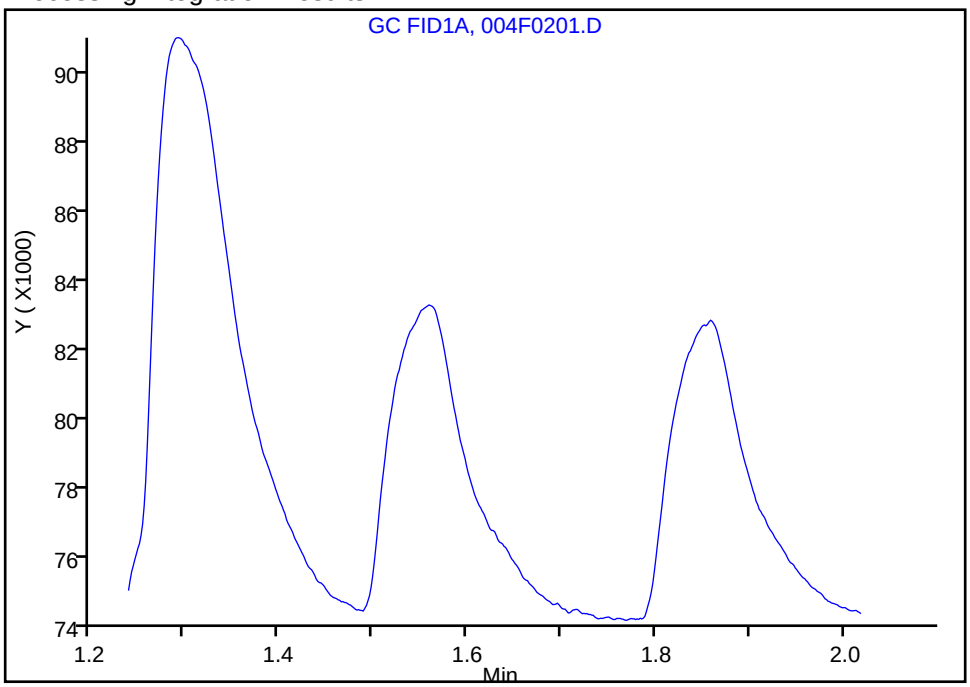
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D				
Injection Date:	24-Sep-2021 13:28:57	Instrument ID:	VGC_J		
Lims ID:	ic				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	4	Worklist Smp#:	2
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

3 Ethane, CAS: 74-84-0

Signal: 1

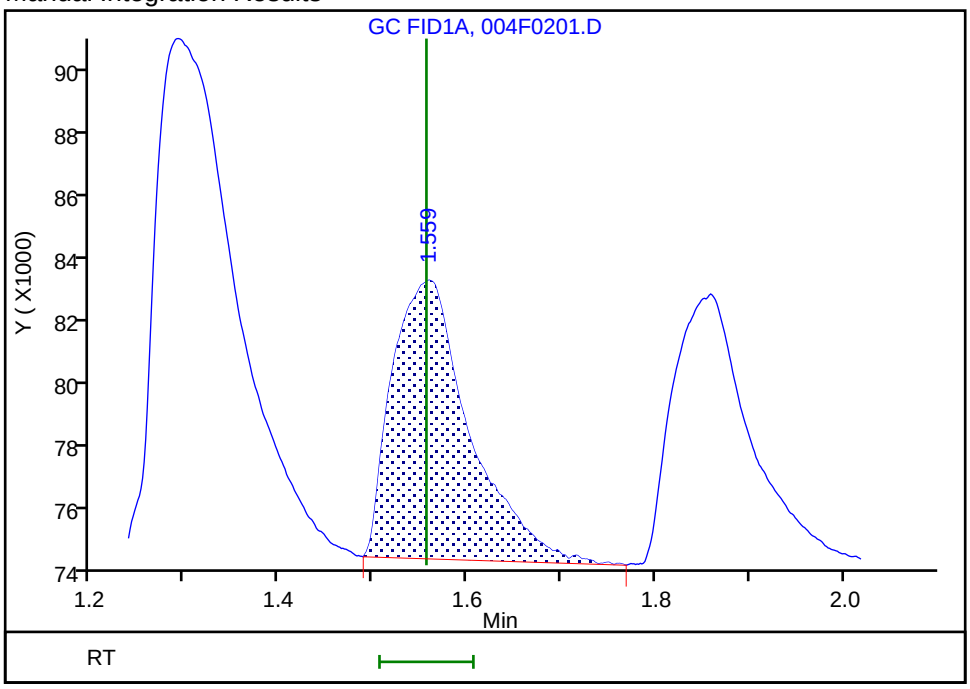
Not Detected
Expected RT: 1.56

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

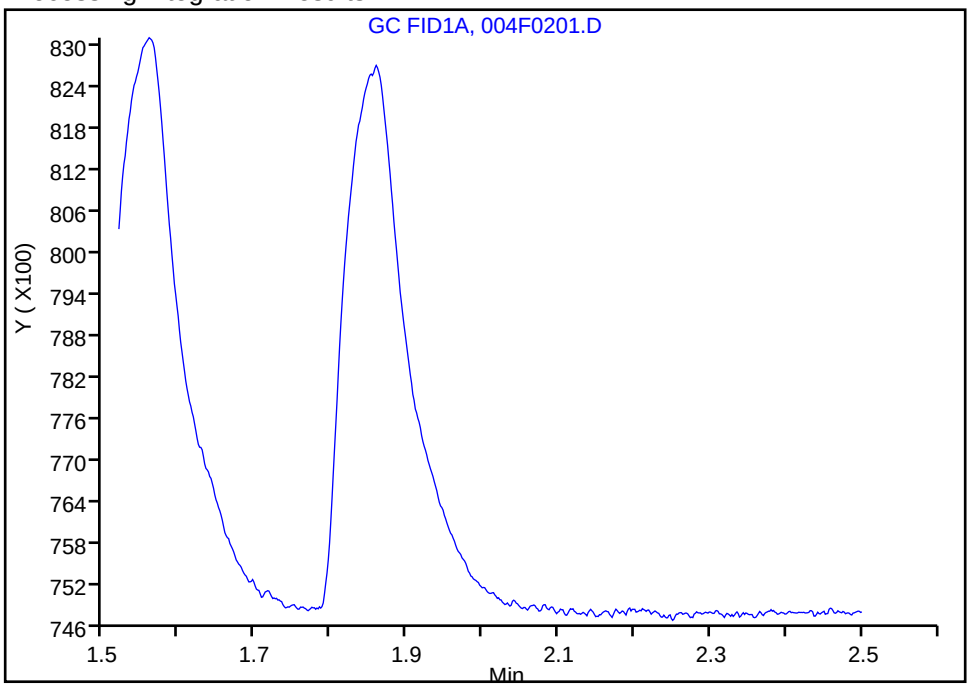
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

4 Ethylene, CAS: 74-85-1

Signal: 1

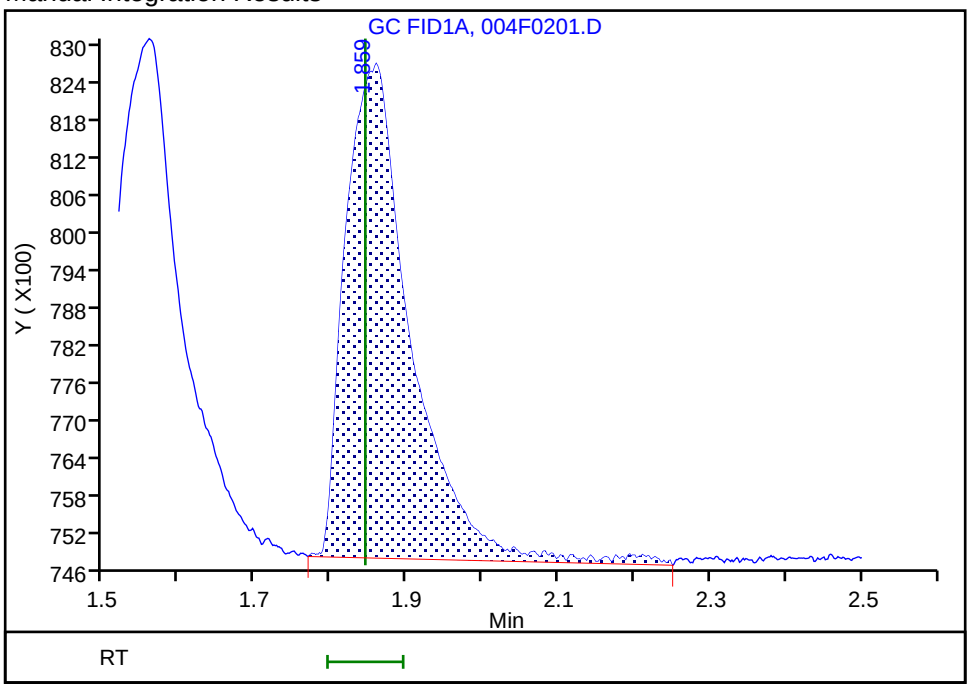
Not Detected
Expected RT: 1.84

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

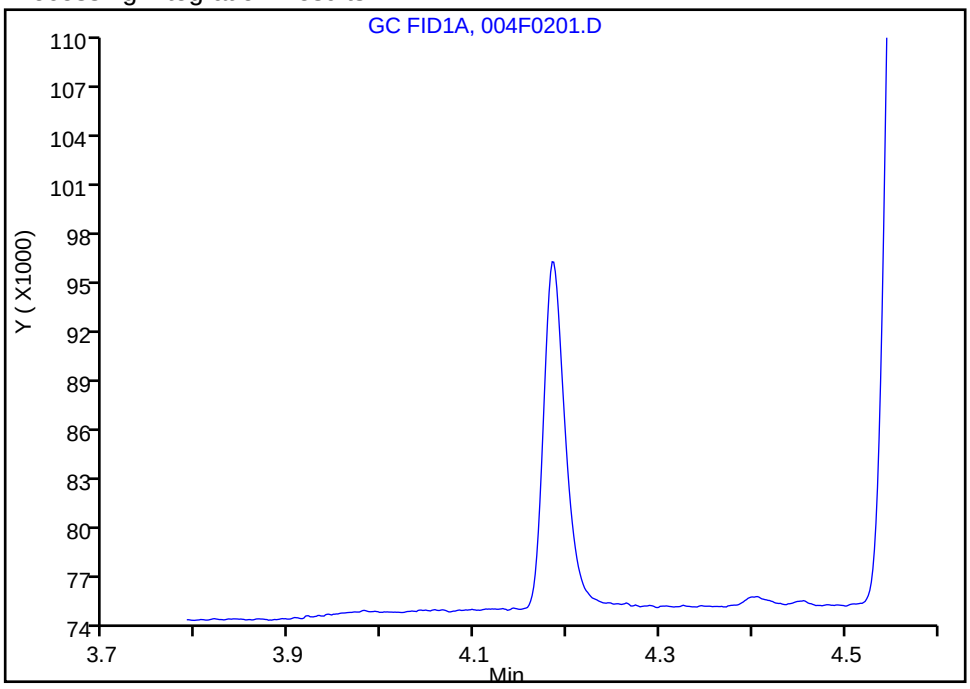
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

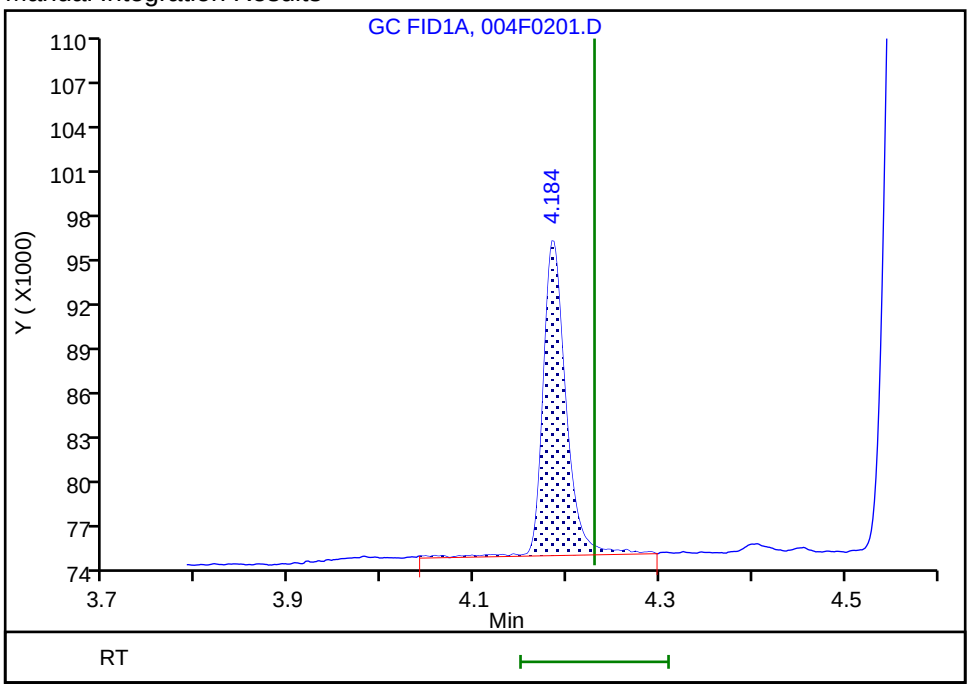
Not Detected
Expected RT: 4.23

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

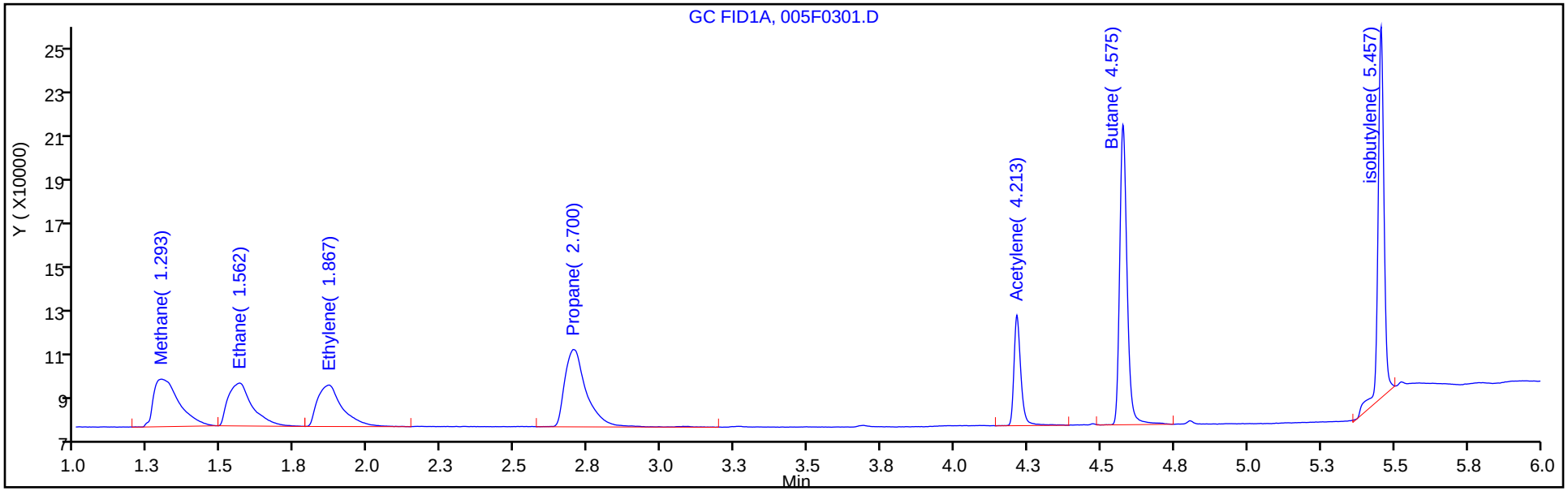
Report Date: 29-Sep-2021 10:55:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

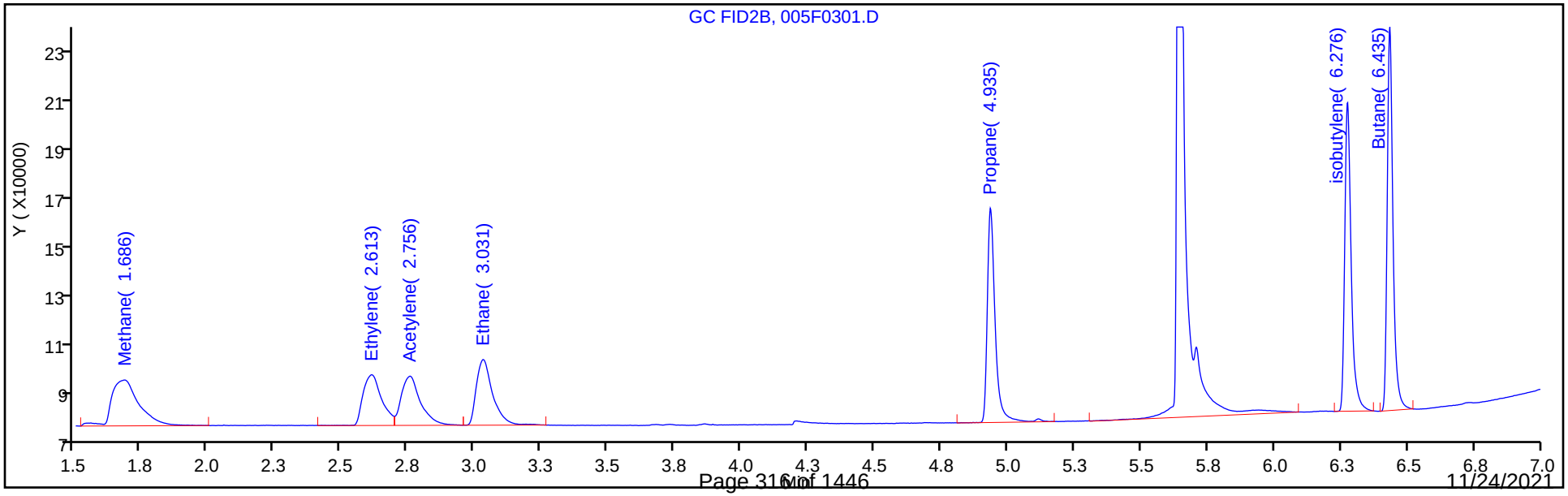
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\005F0301.D

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

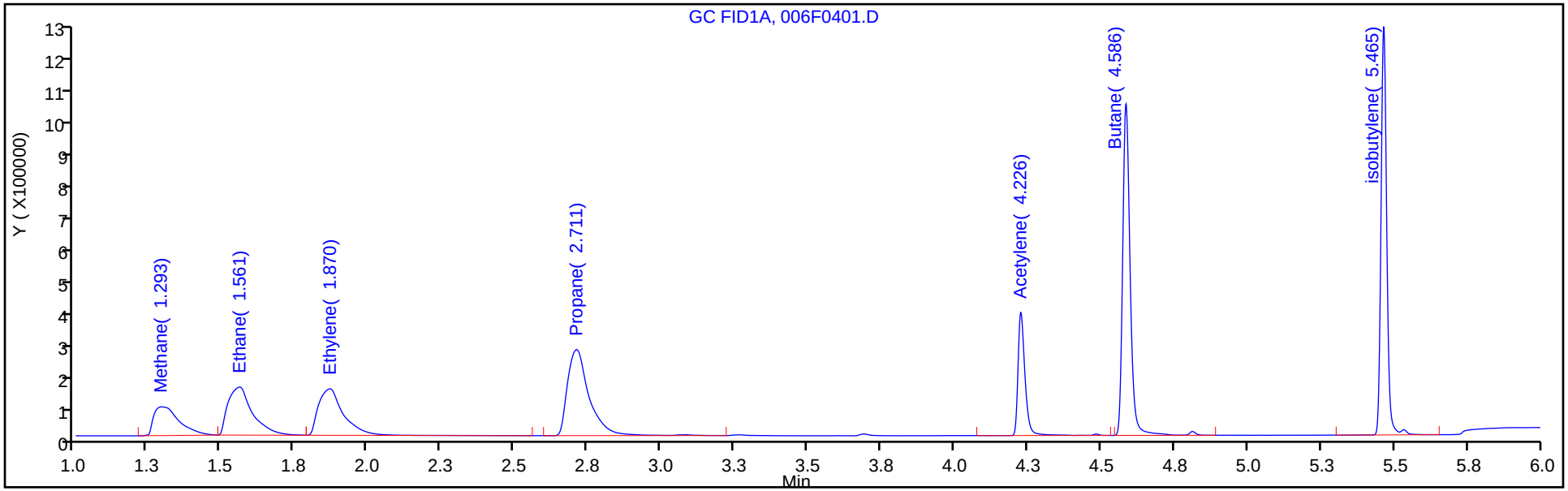
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

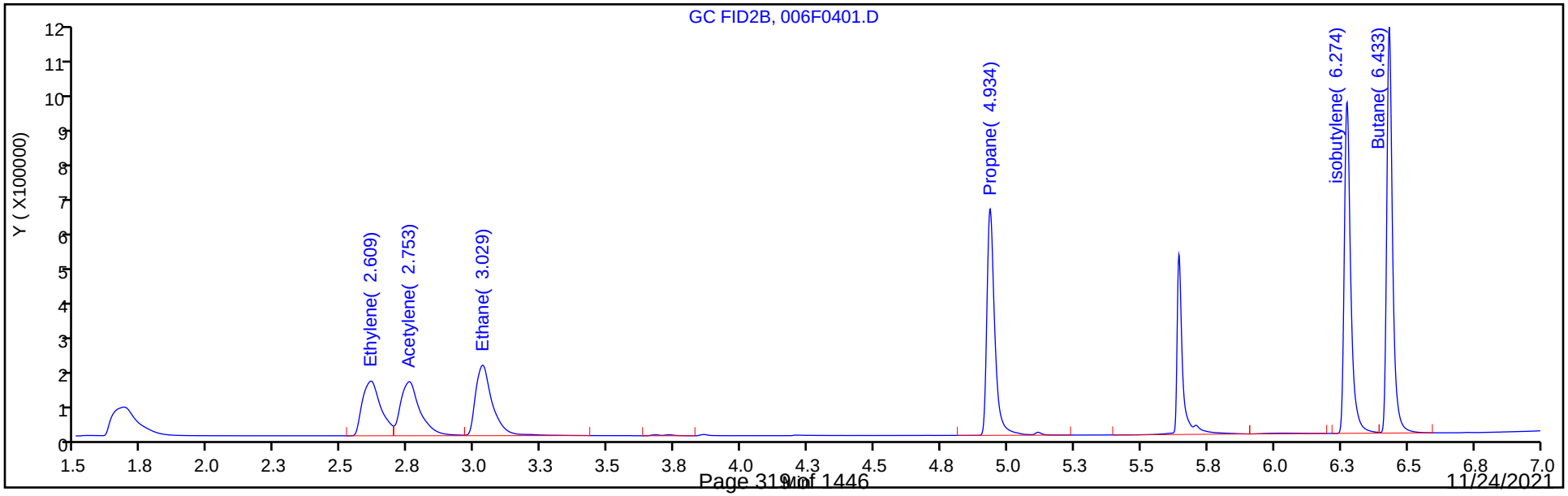
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D

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

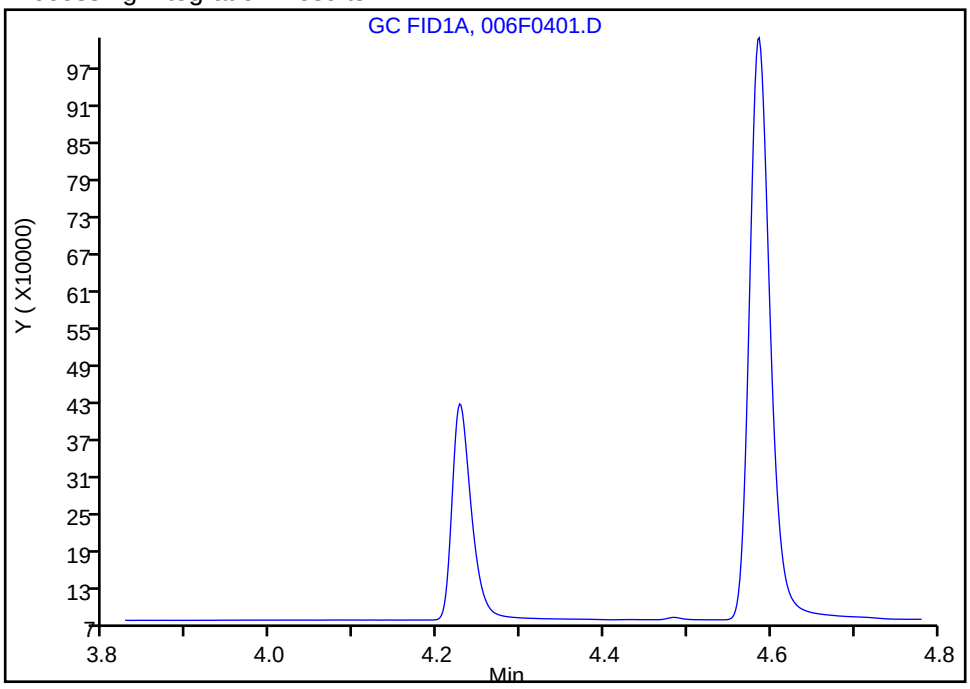
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D
Injection Date: 24-Sep-2021 13:54:46 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 6 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

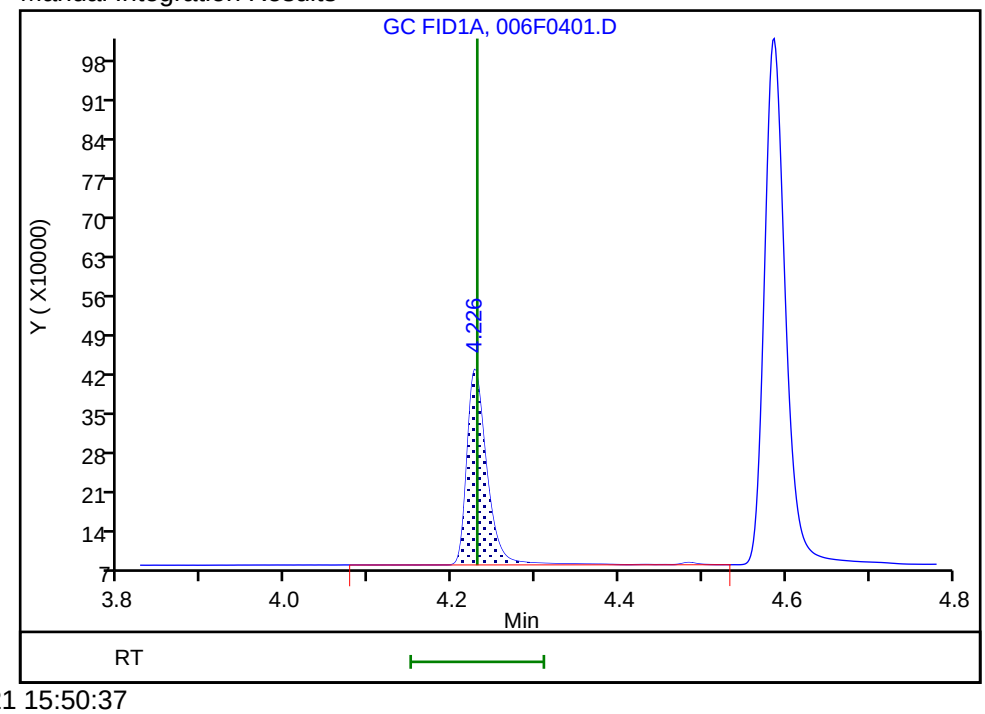
Not Detected
Expected RT: 4.23

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

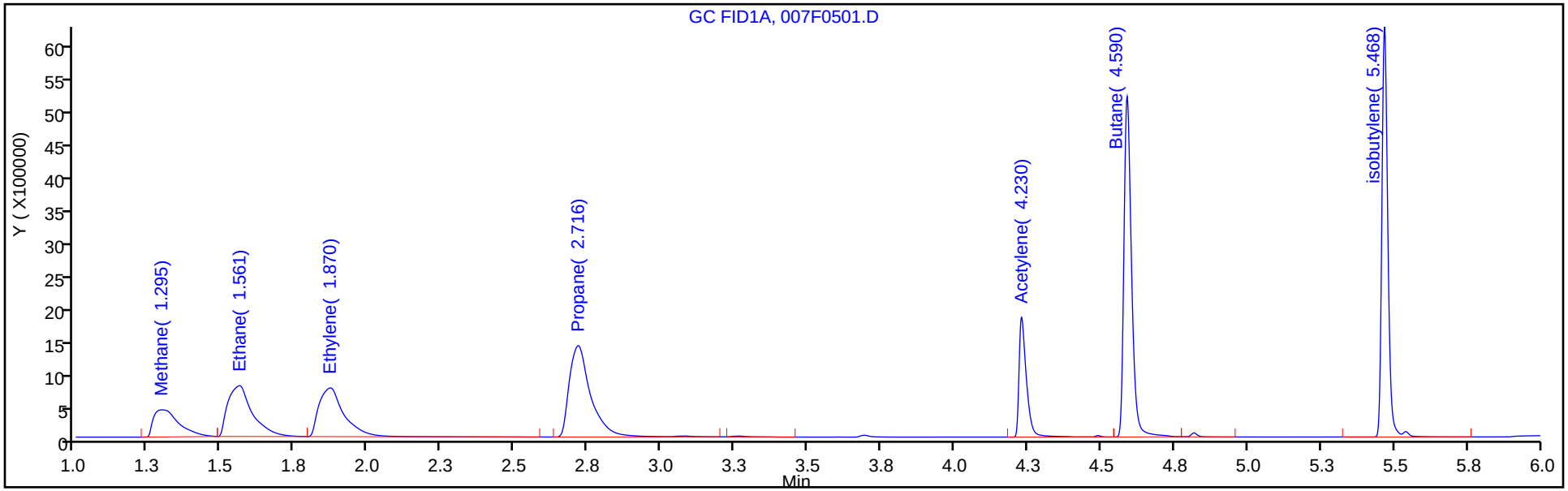
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

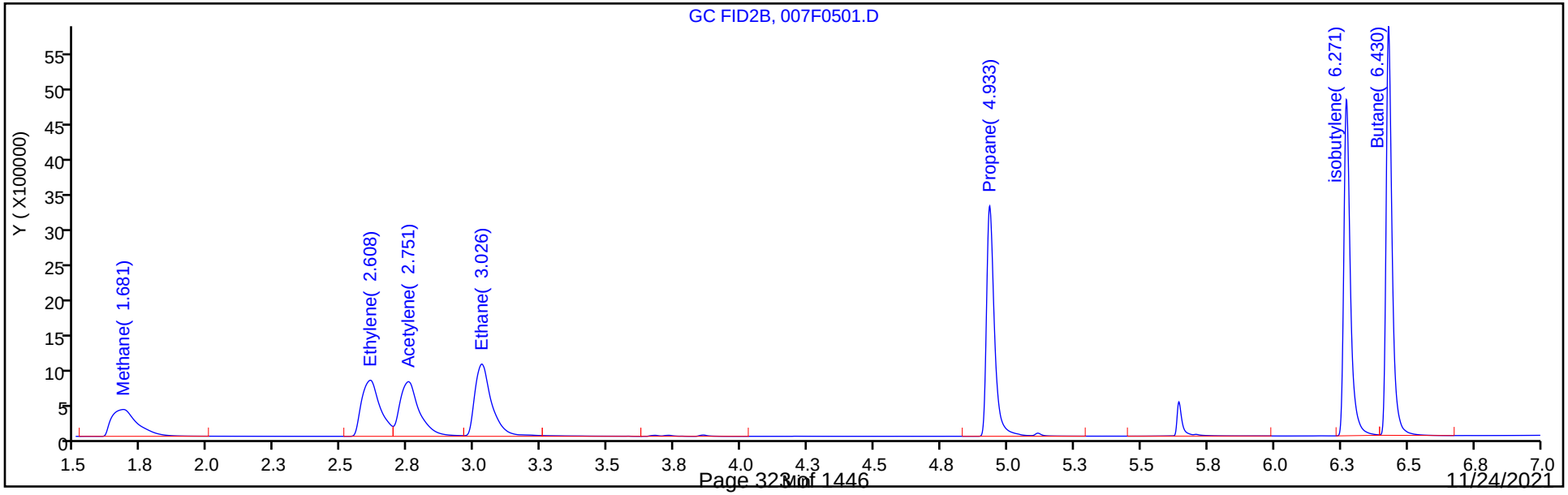
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D

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

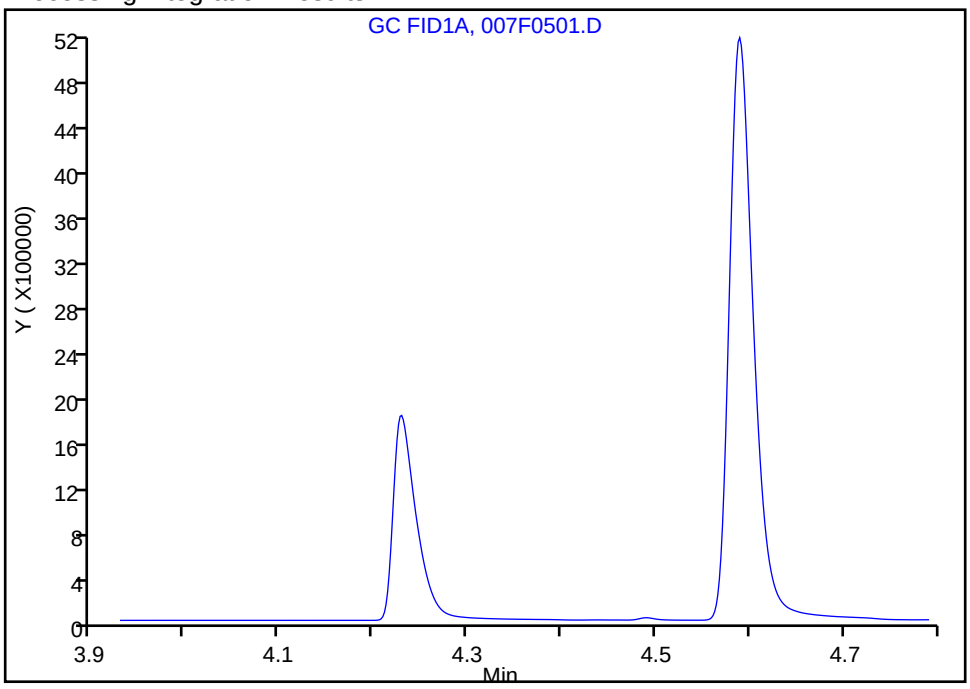
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

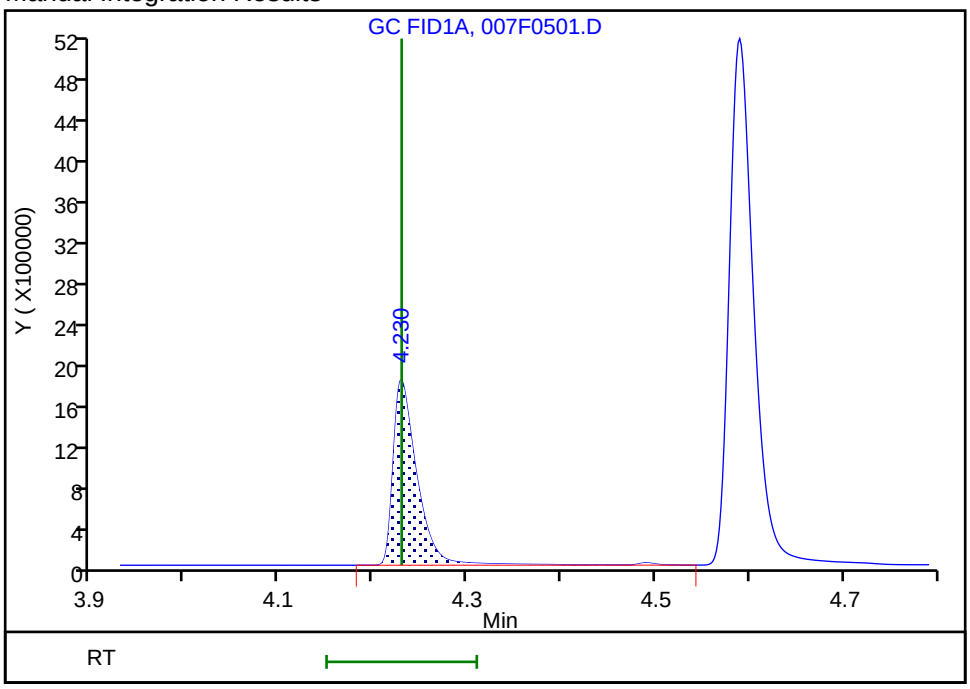
Not Detected
Expected RT: 4.23

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

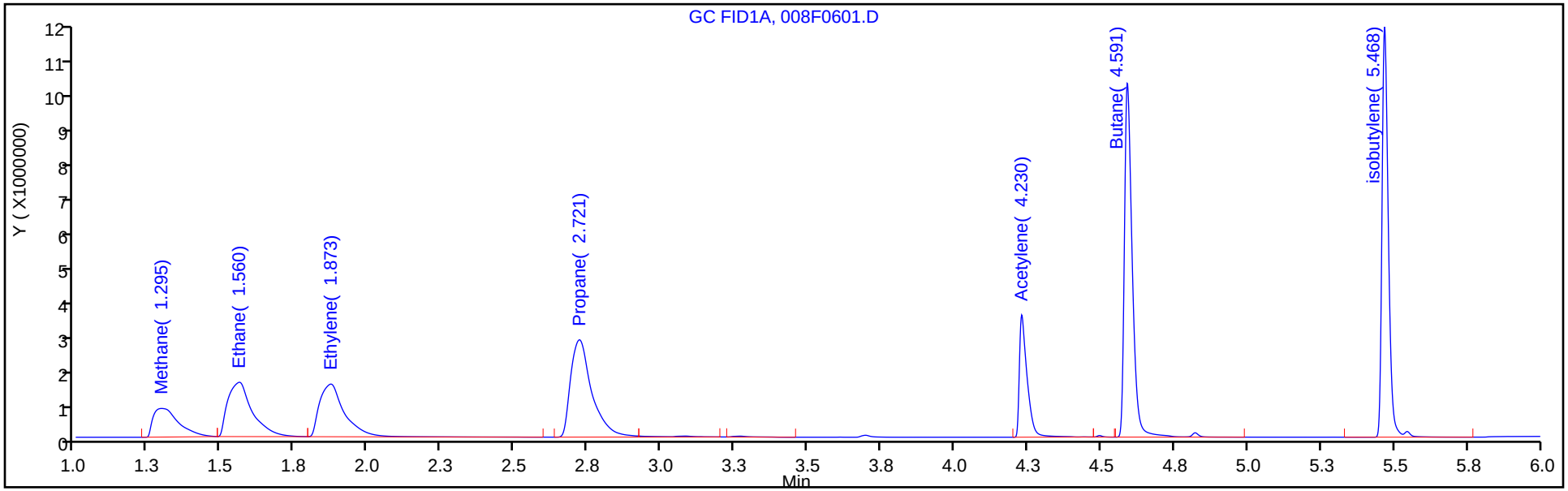
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

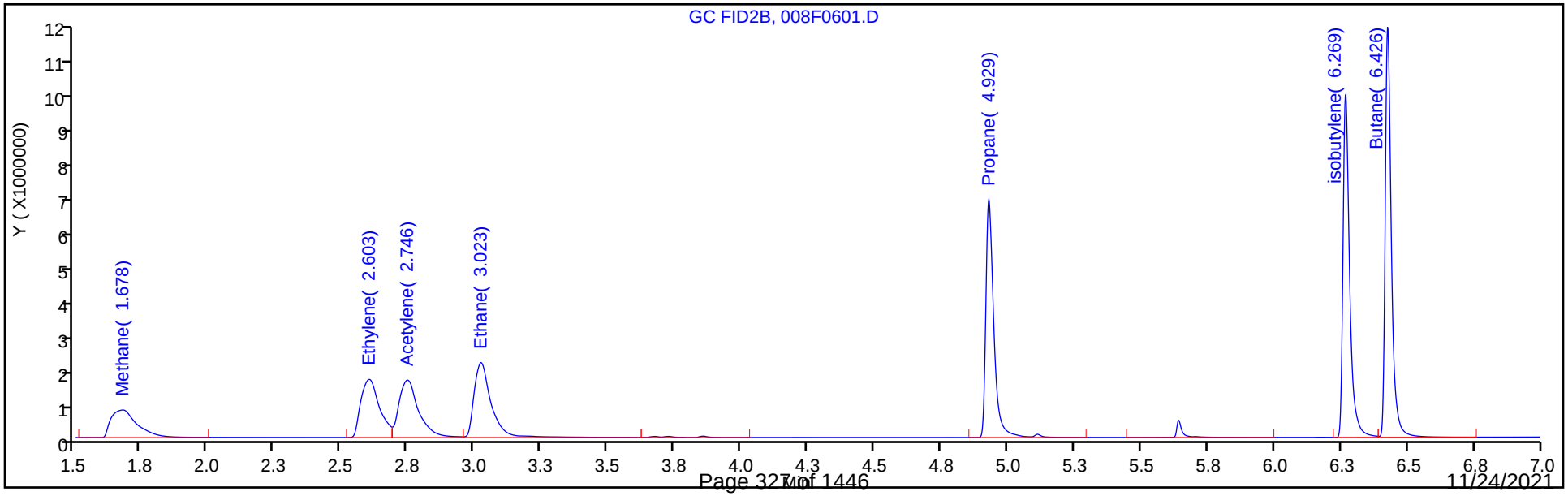
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D

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

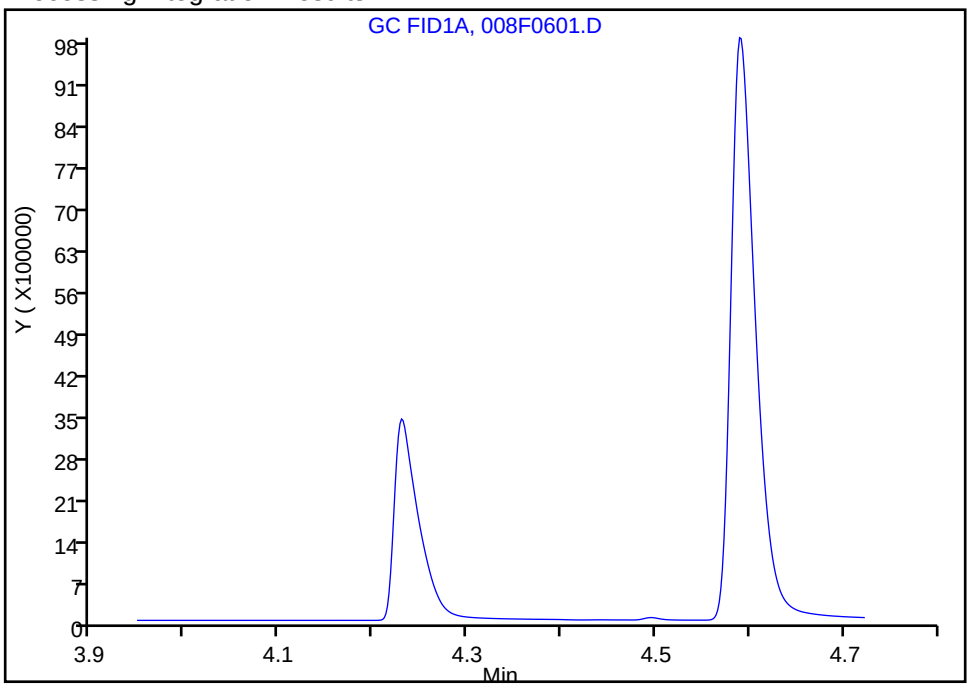
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Injection Date: 24-Sep-2021 14:20:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

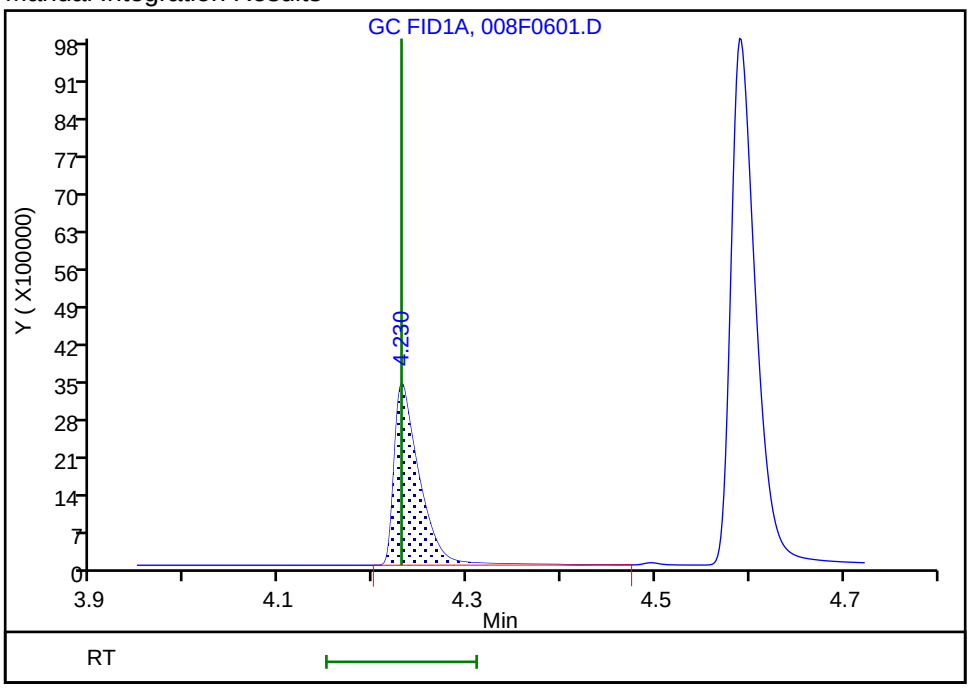
Not Detected
Expected RT: 4.23

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

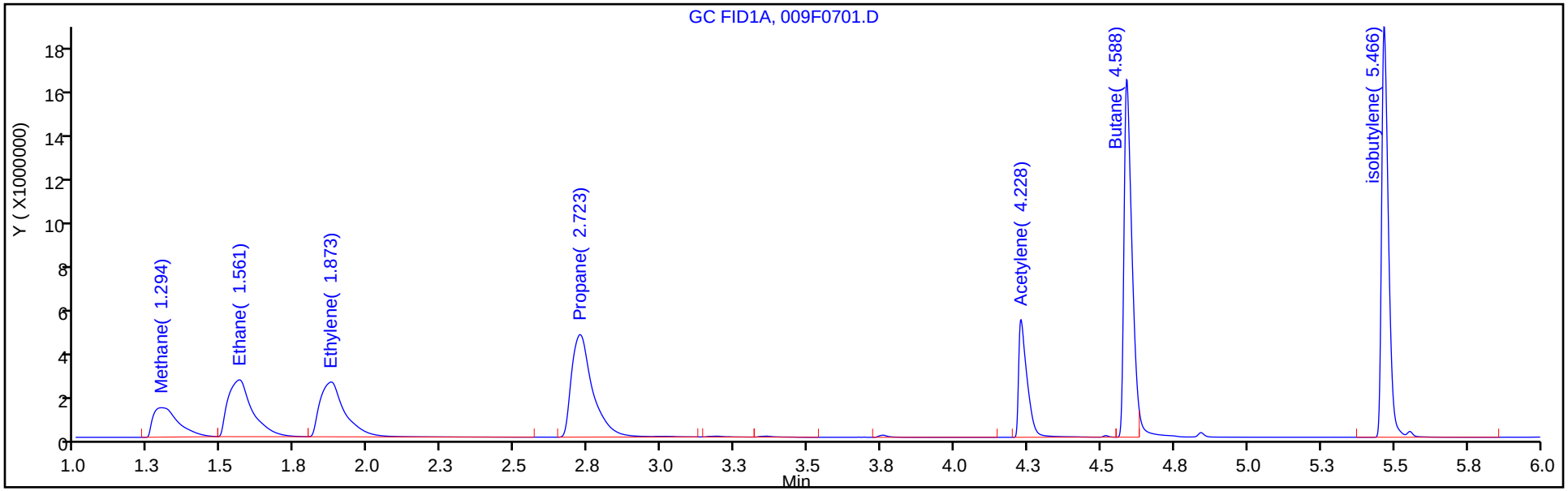
Report Date: 29-Sep-2021 10:55:16 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

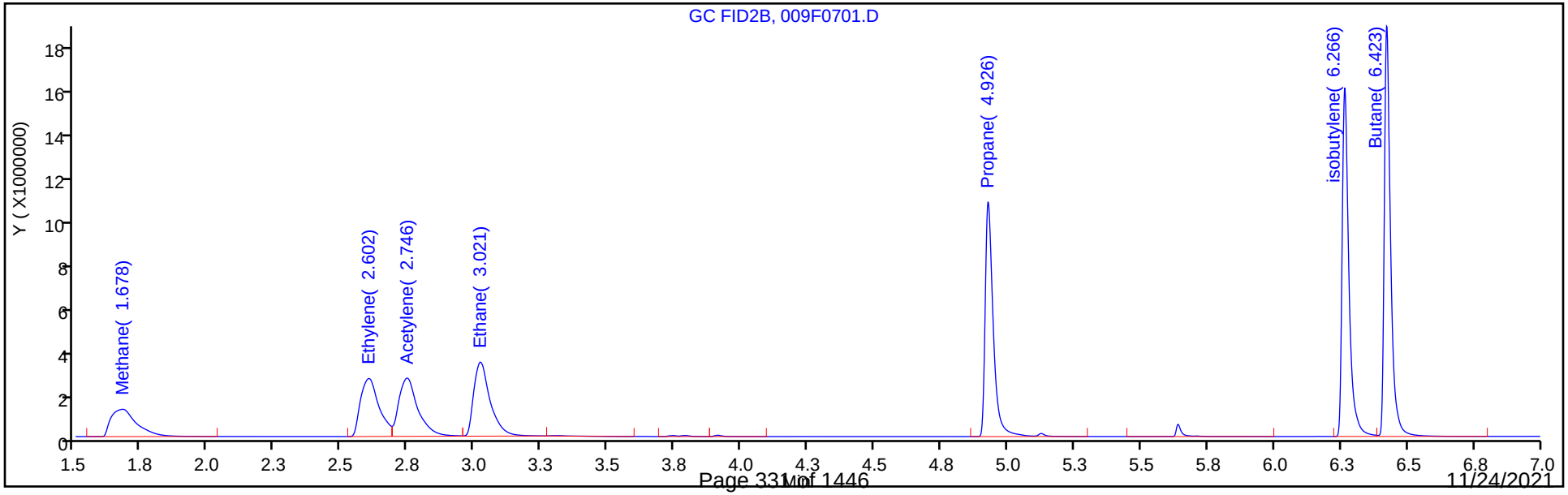
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D

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

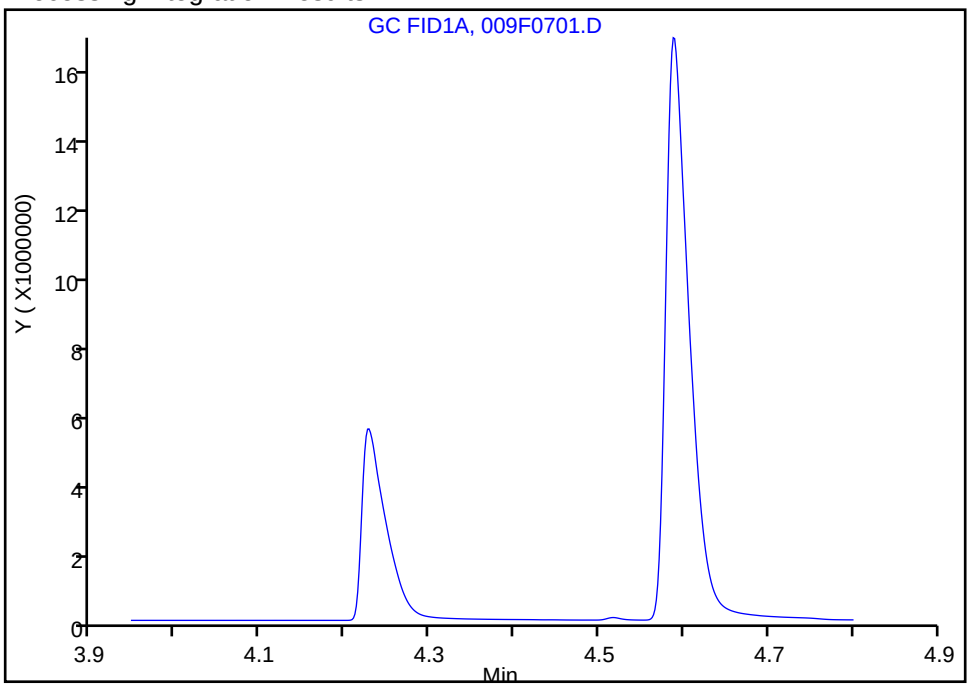
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D
Injection Date: 24-Sep-2021 14:33:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 9 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

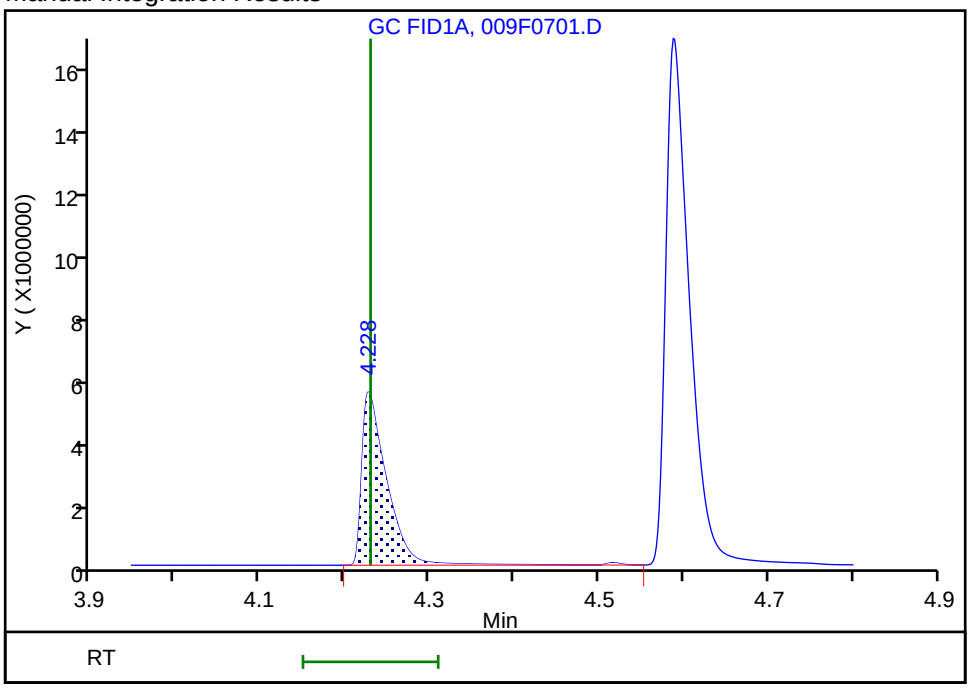
Not Detected
Expected RT: 4.23

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

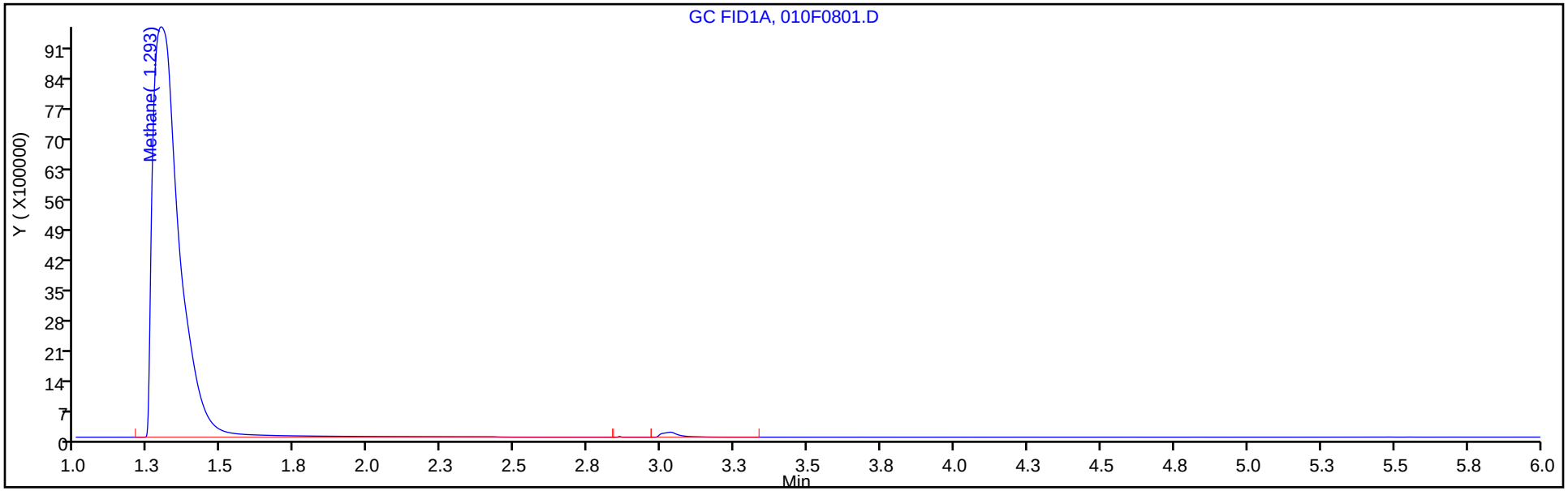
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

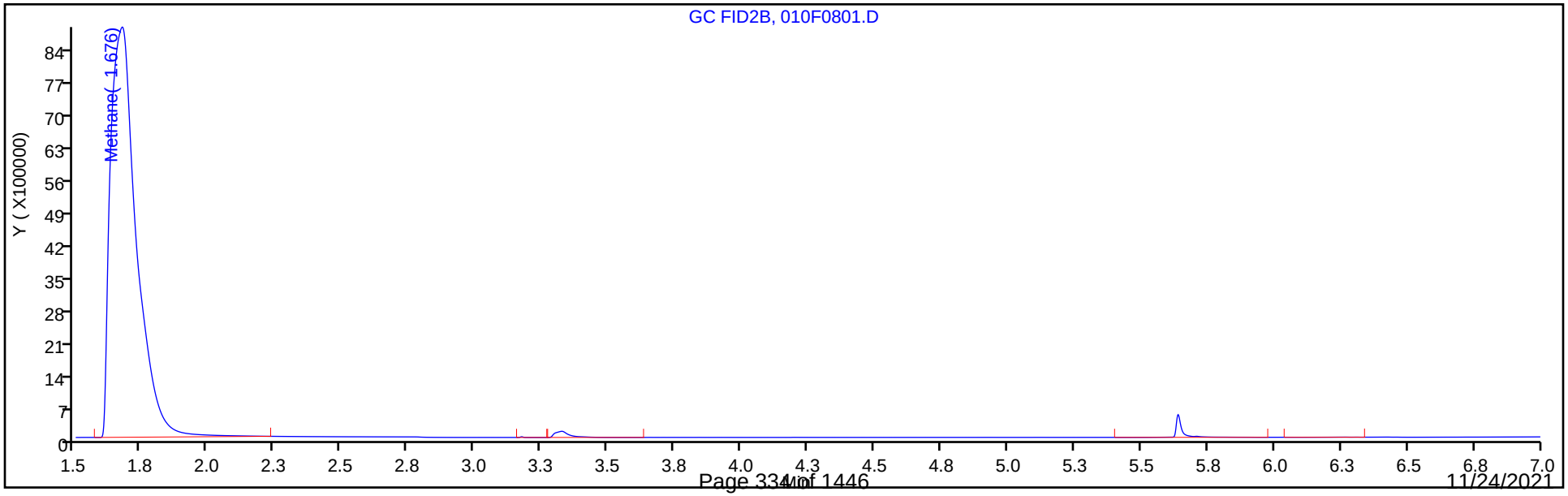
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\010F0801.D

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

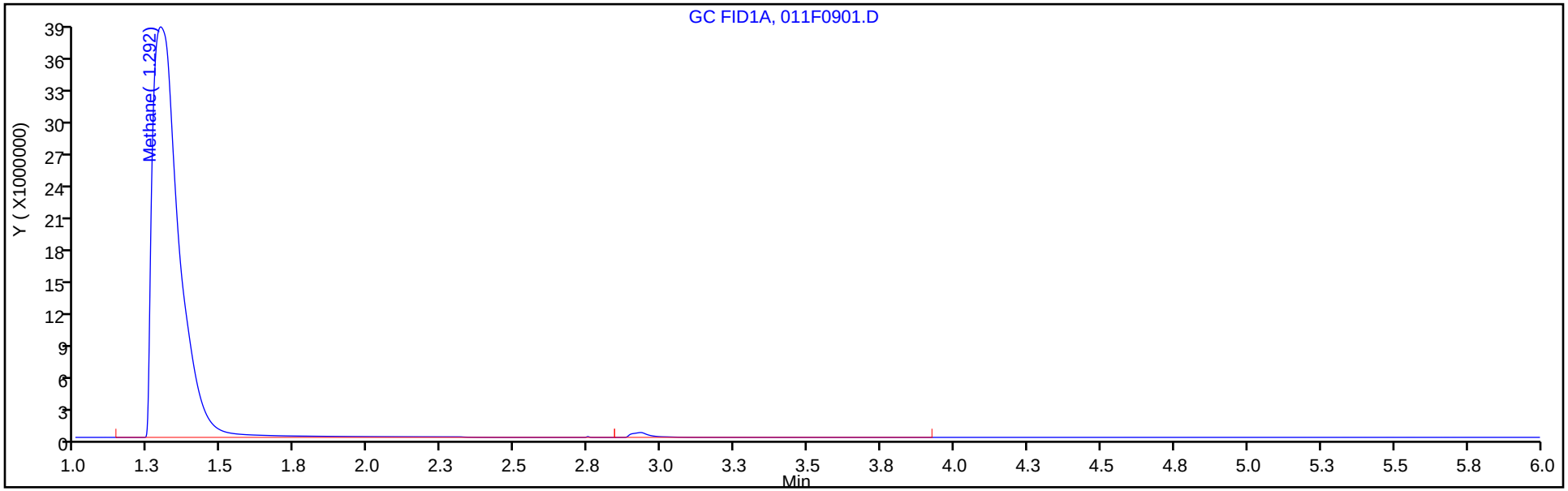
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

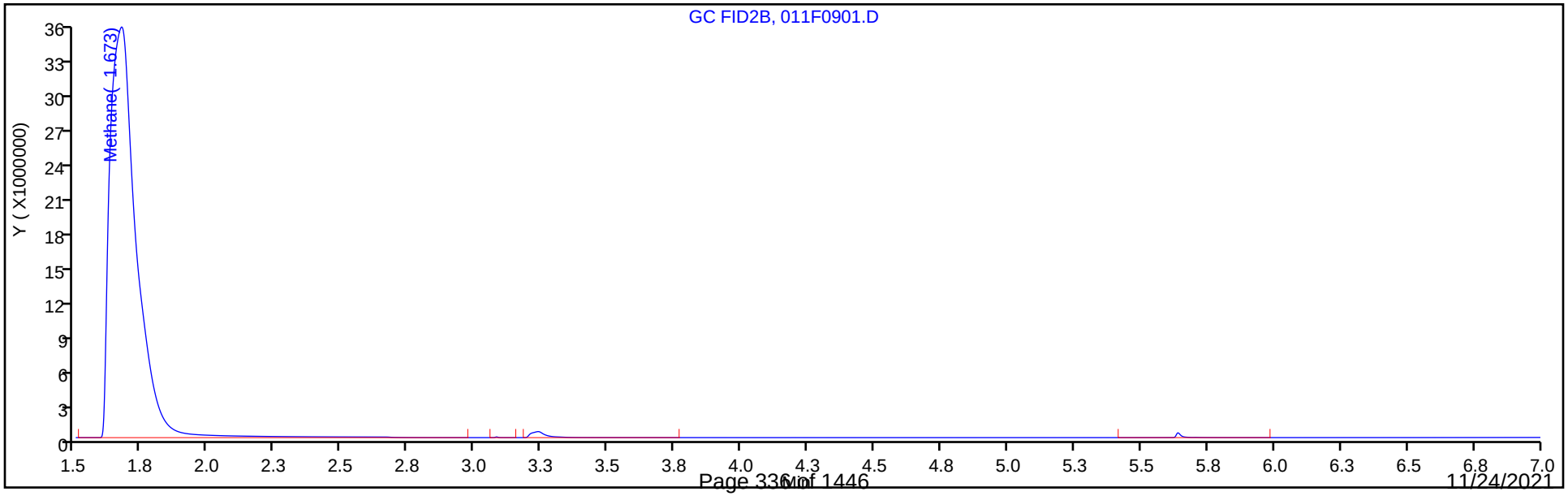
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\011F0901.D

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

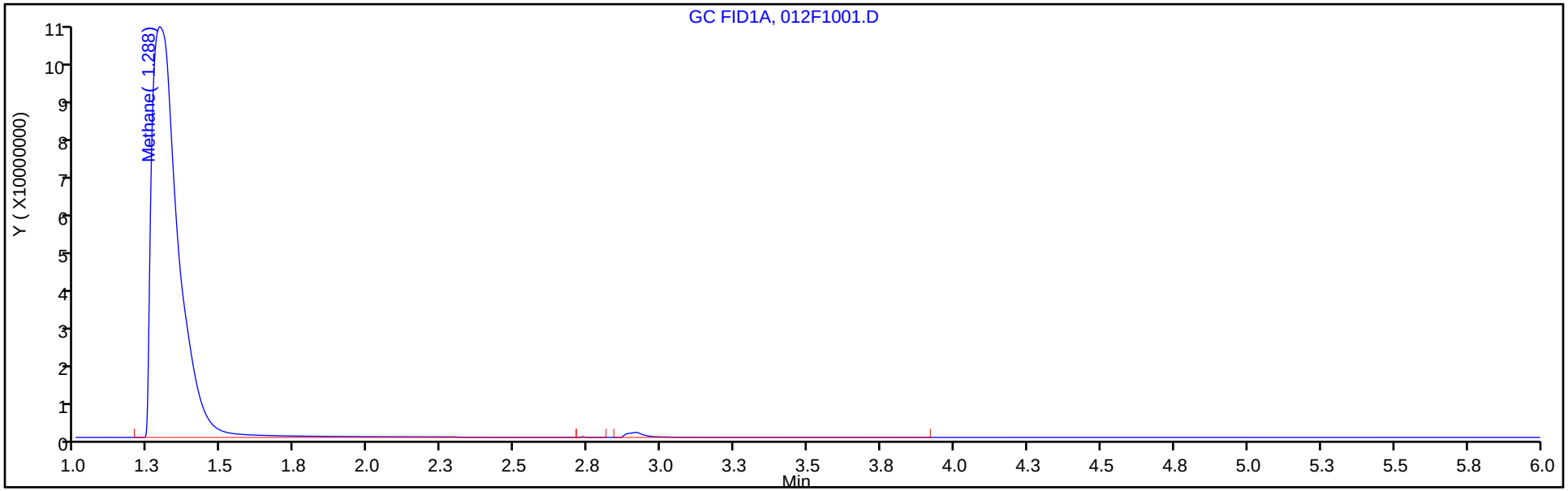
Report Date: 29-Sep-2021 10:55:18 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

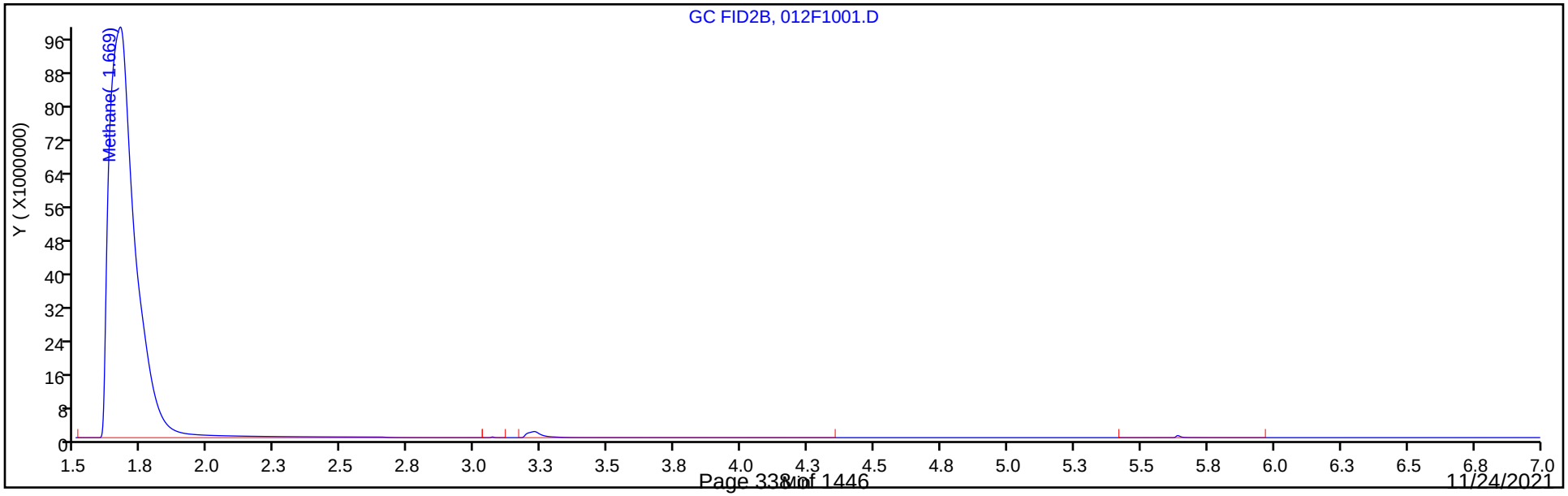
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

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

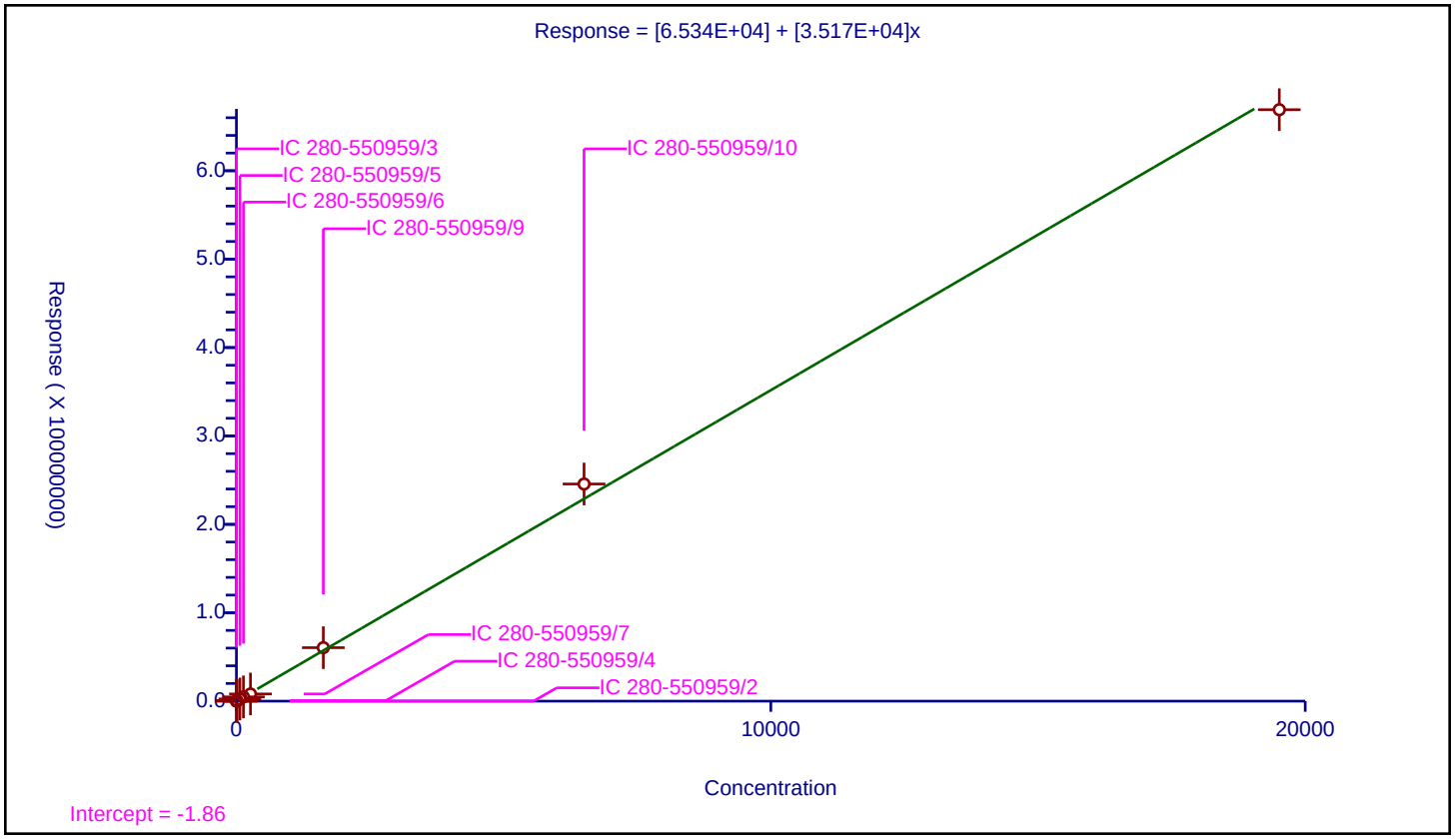
Curve Coefficients

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

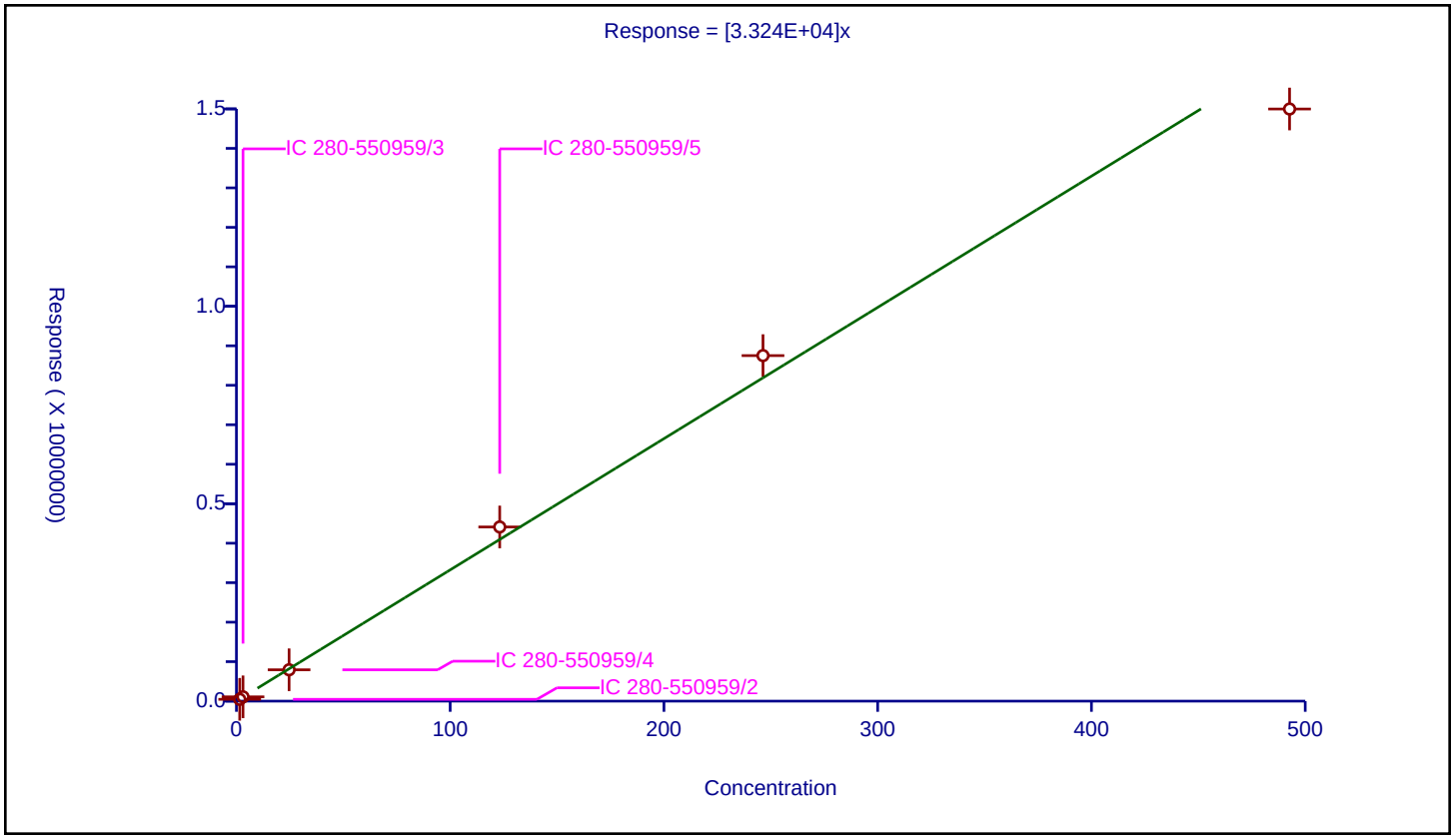
Curve Coefficients

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

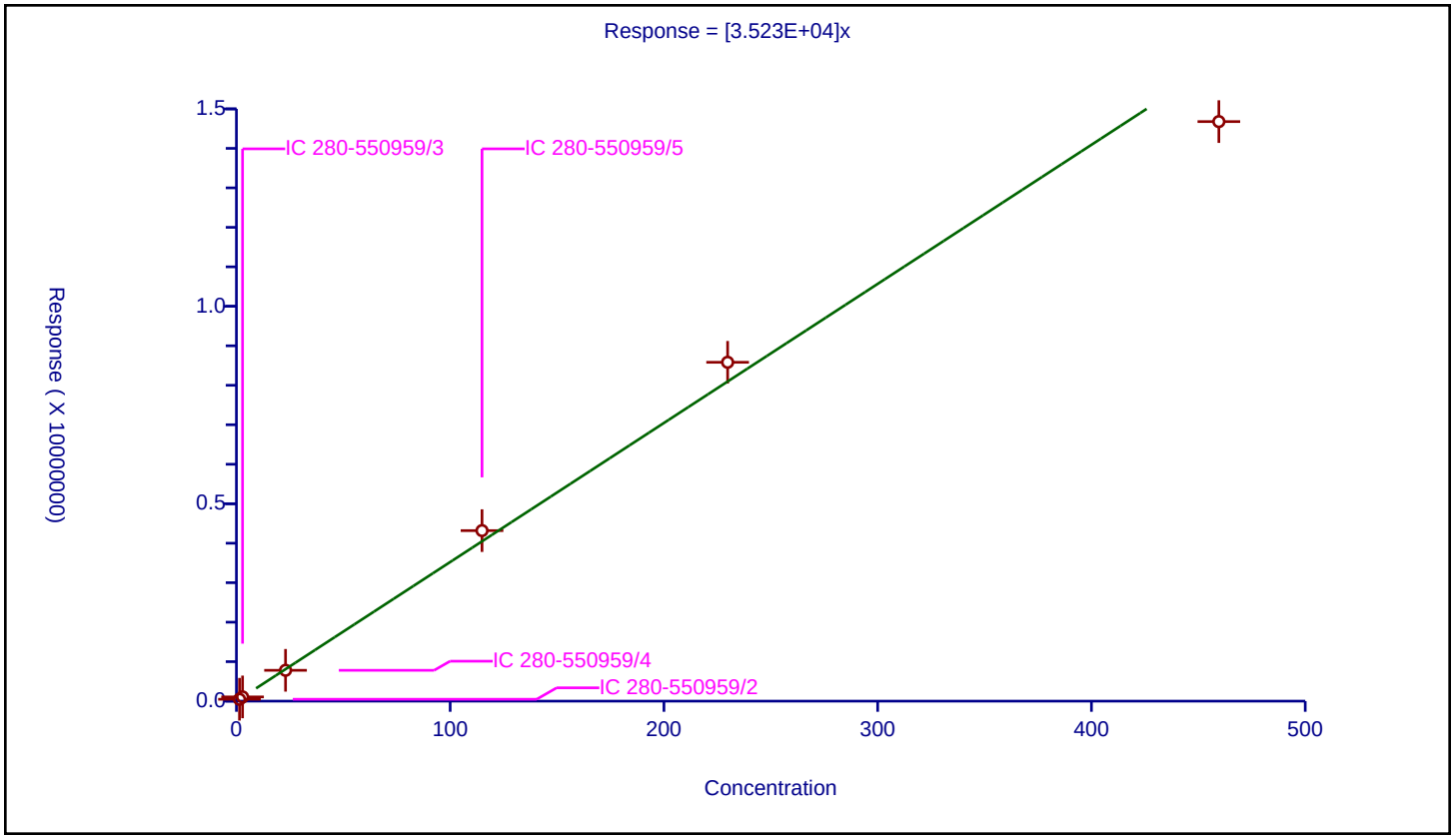
Curve Coefficients

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

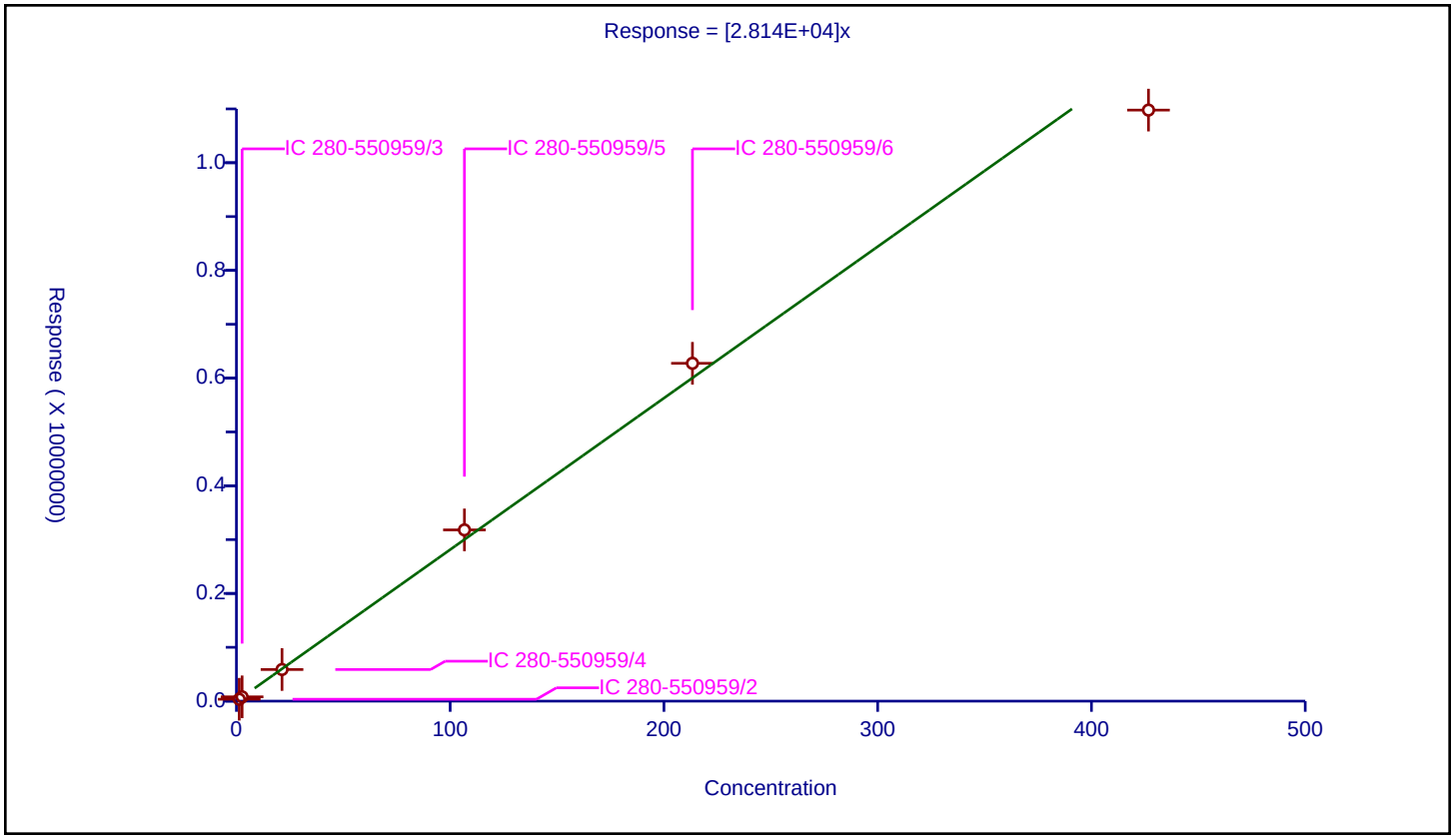
Curve Coefficients

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 TestAmerica, Denver Job No.: 280-155138-1 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 TestAmerica, Denver Job No.: 280-155138-1 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 TestAmerica, Denver Job No.: 280-155138-1 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

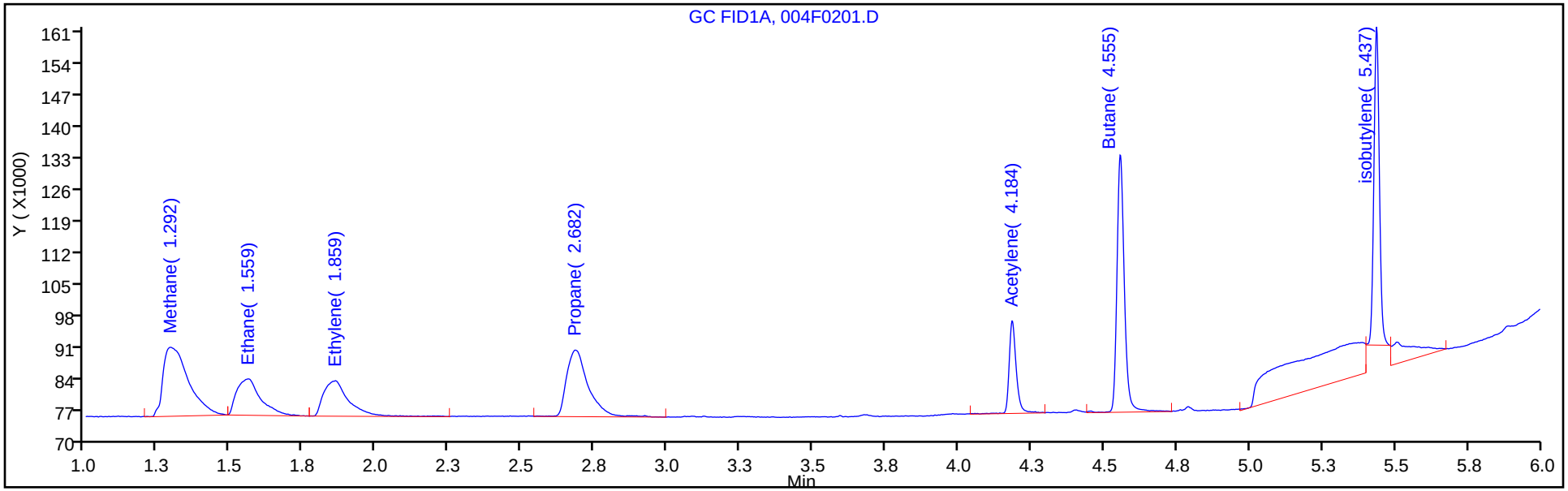
Report Date: 29-Sep-2021 10:55:12 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

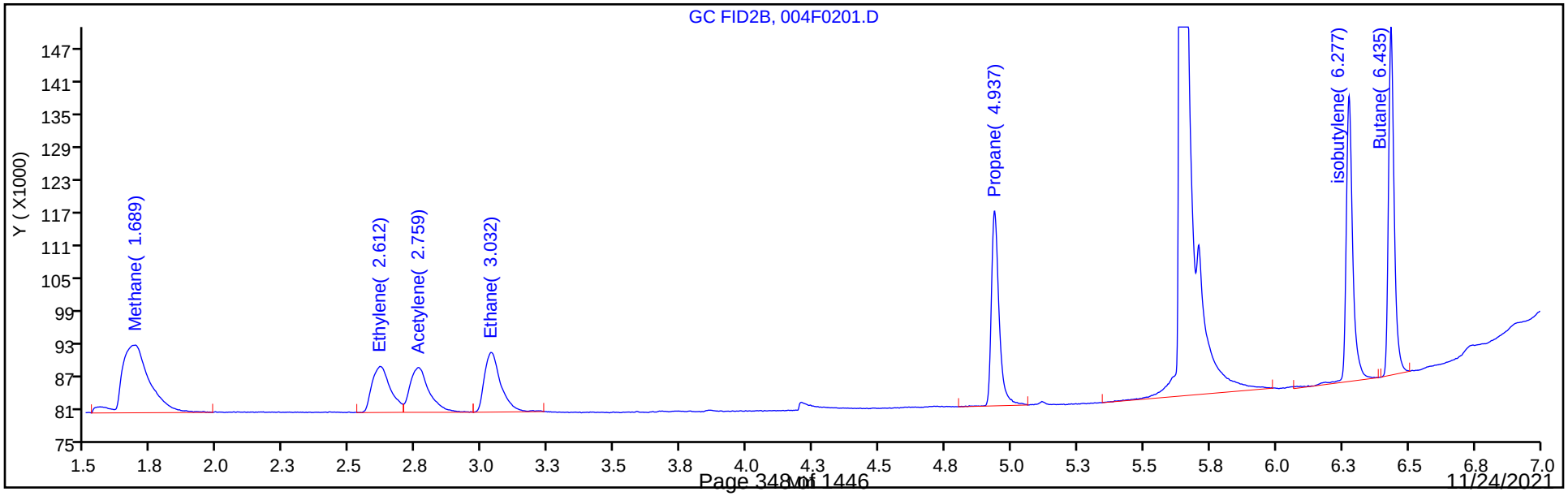
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D

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

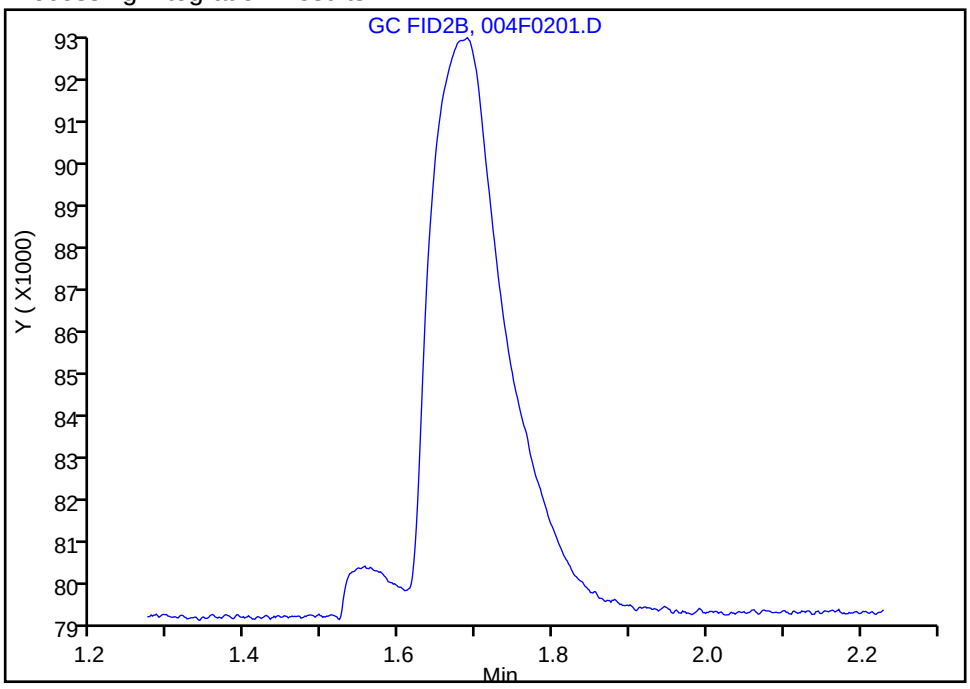
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

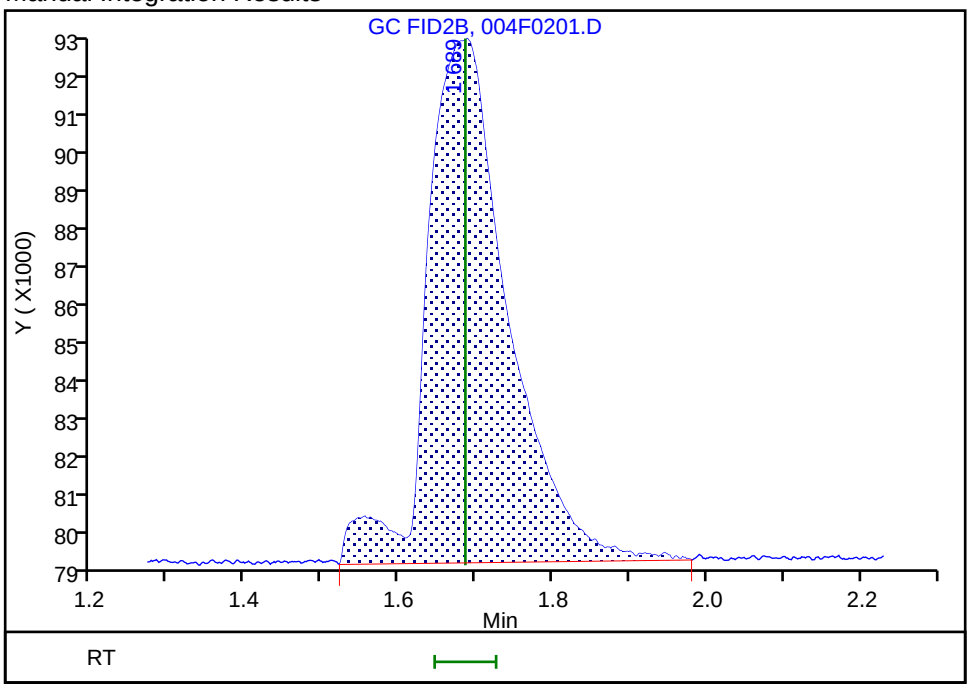
Not Detected
Expected RT: 1.69

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

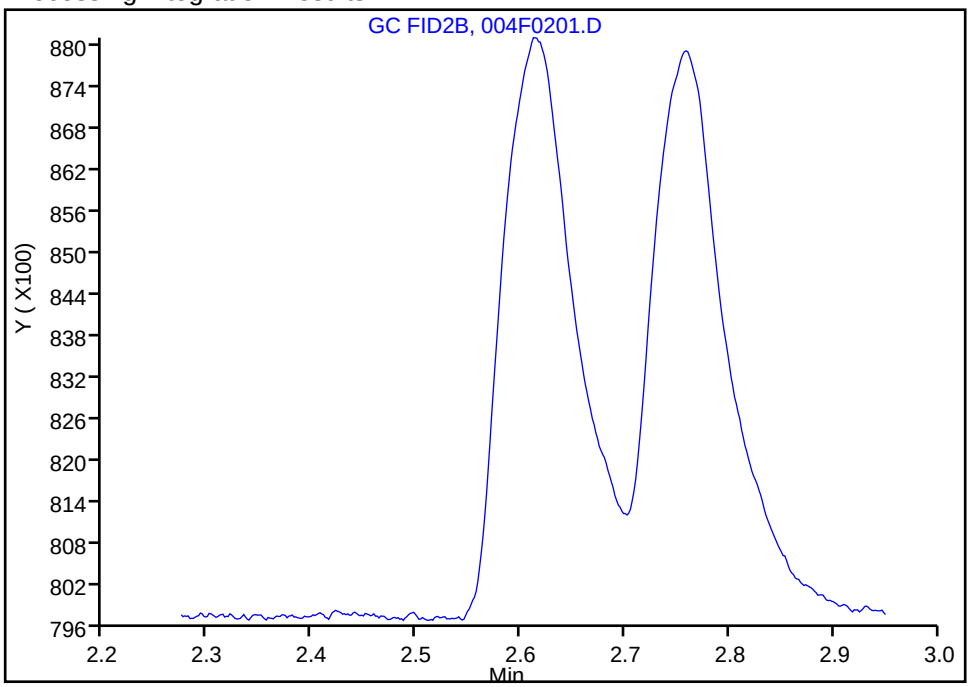
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

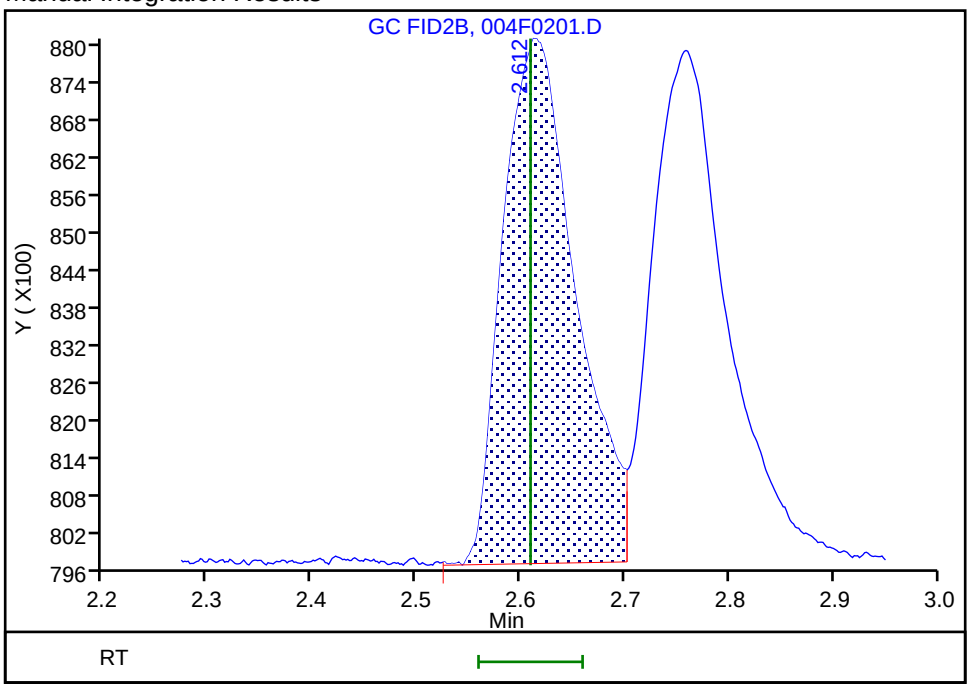
Not Detected
Expected RT: 2.61

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

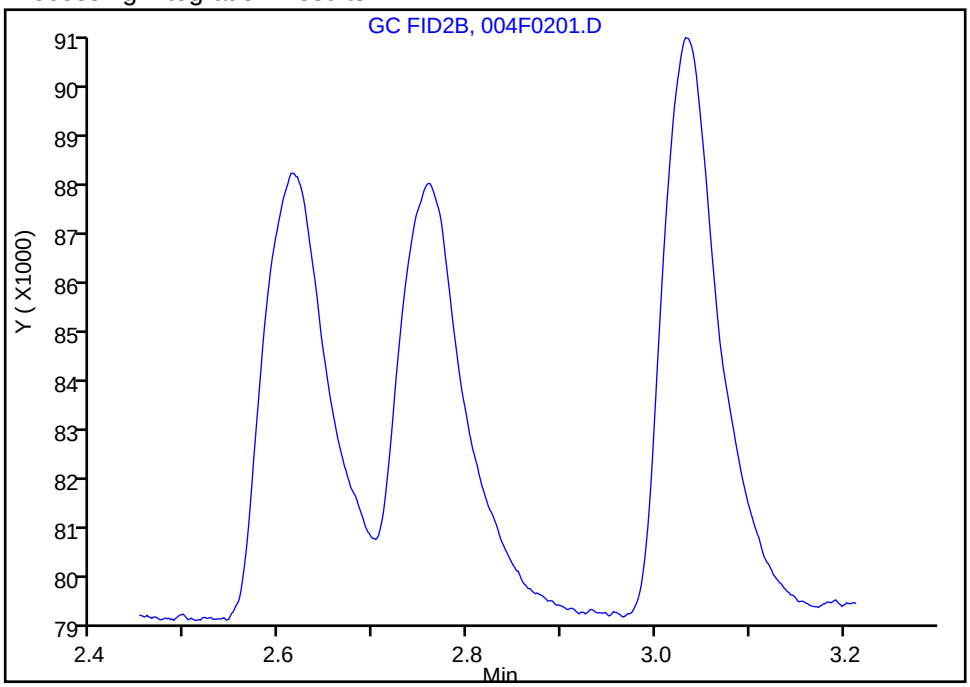
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

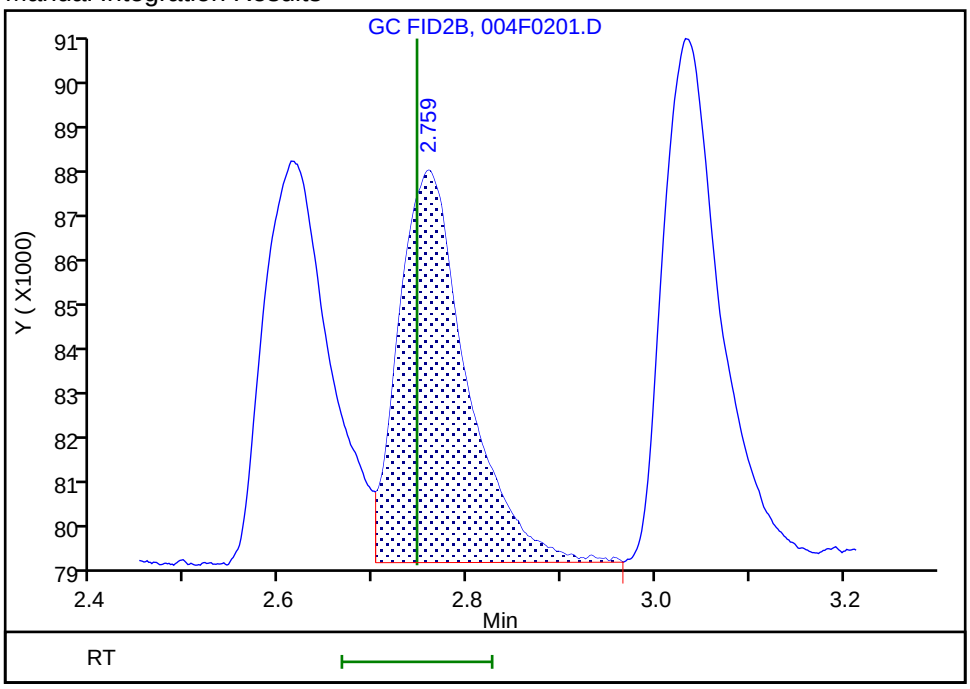
Not Detected
Expected RT: 2.75

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

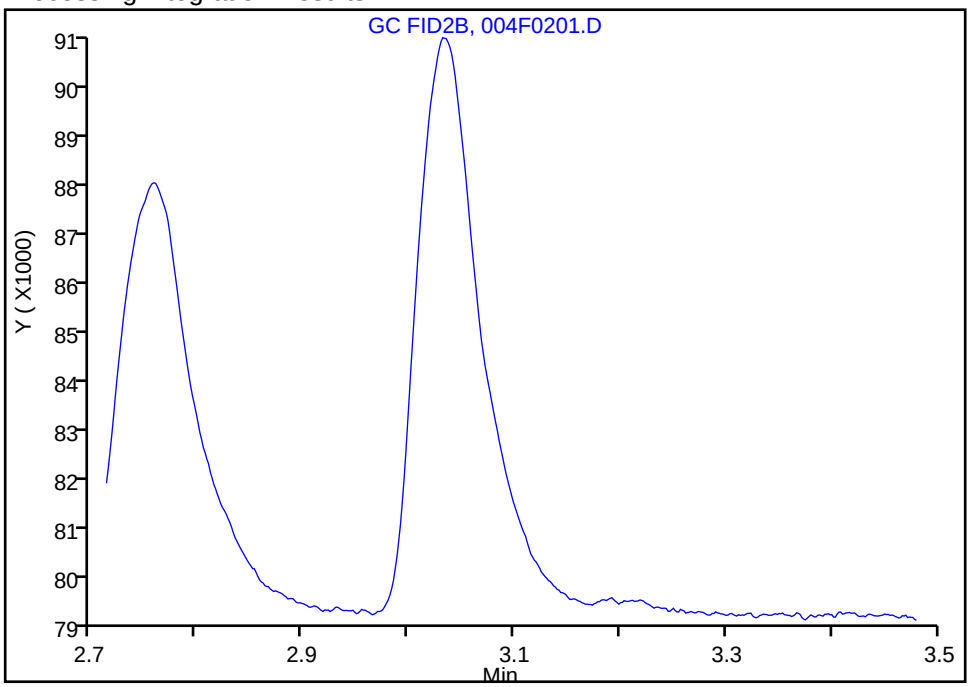
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

3 Ethane, CAS: 74-84-0

Signal: 2

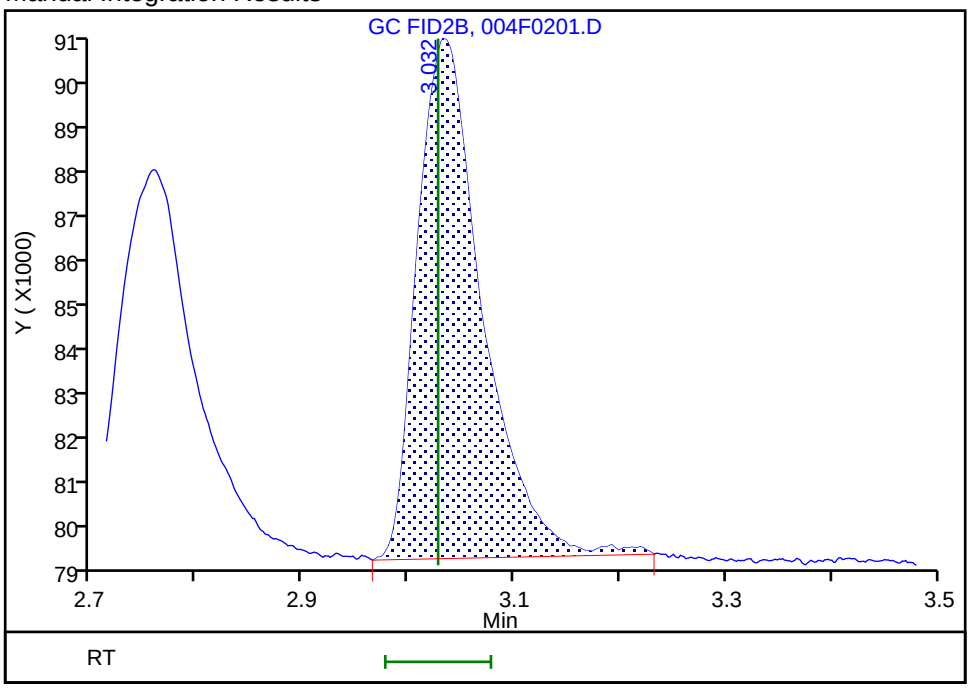
Not Detected
Expected RT: 3.03

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

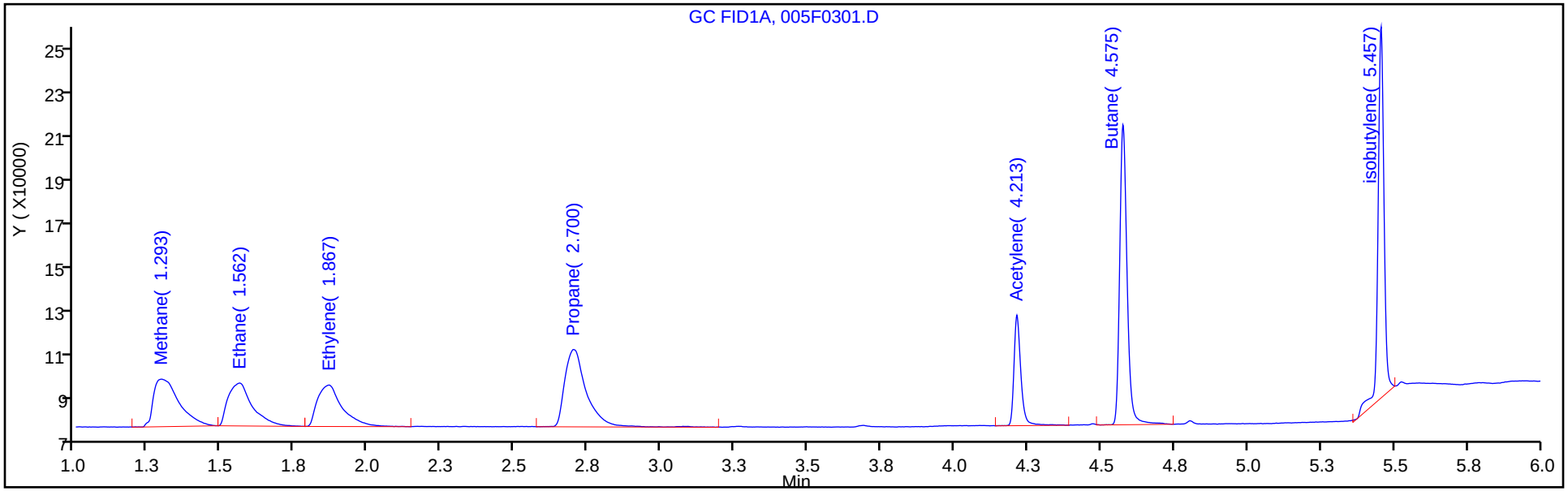
Report Date: 29-Sep-2021 10:55:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

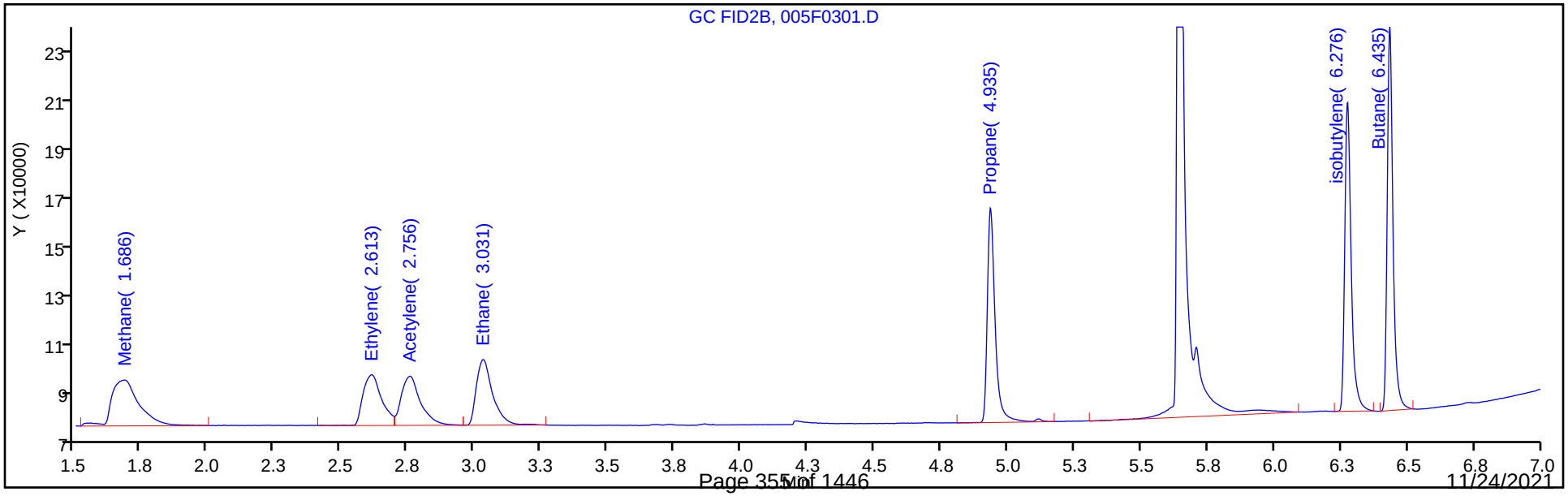
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\005F0301.D

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

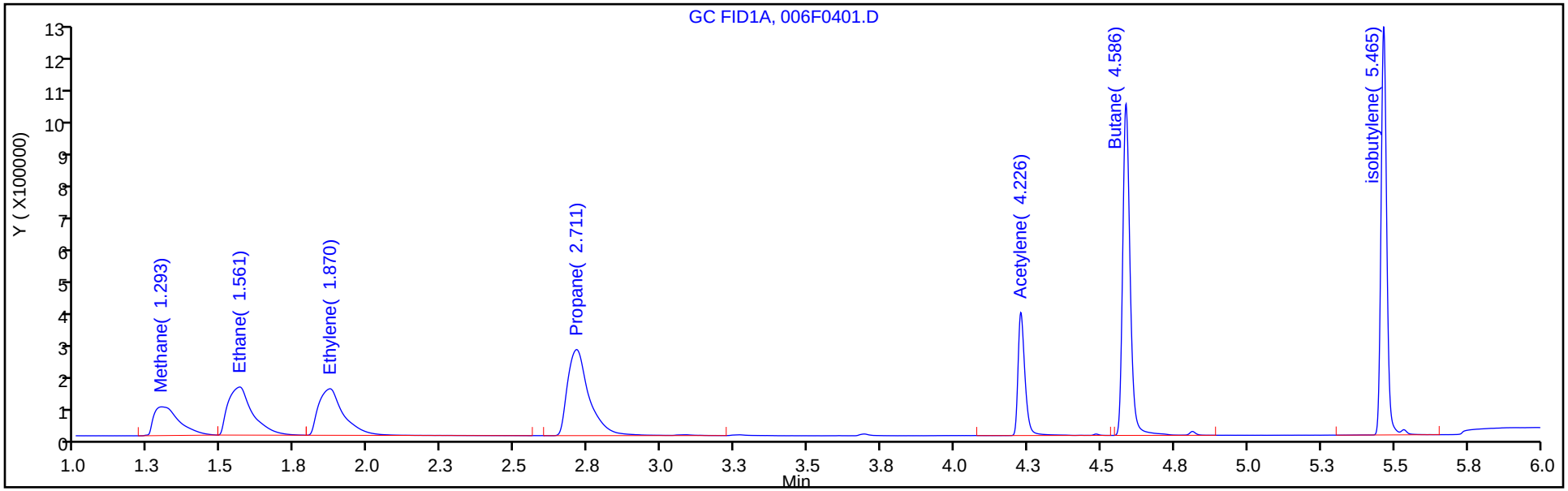
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

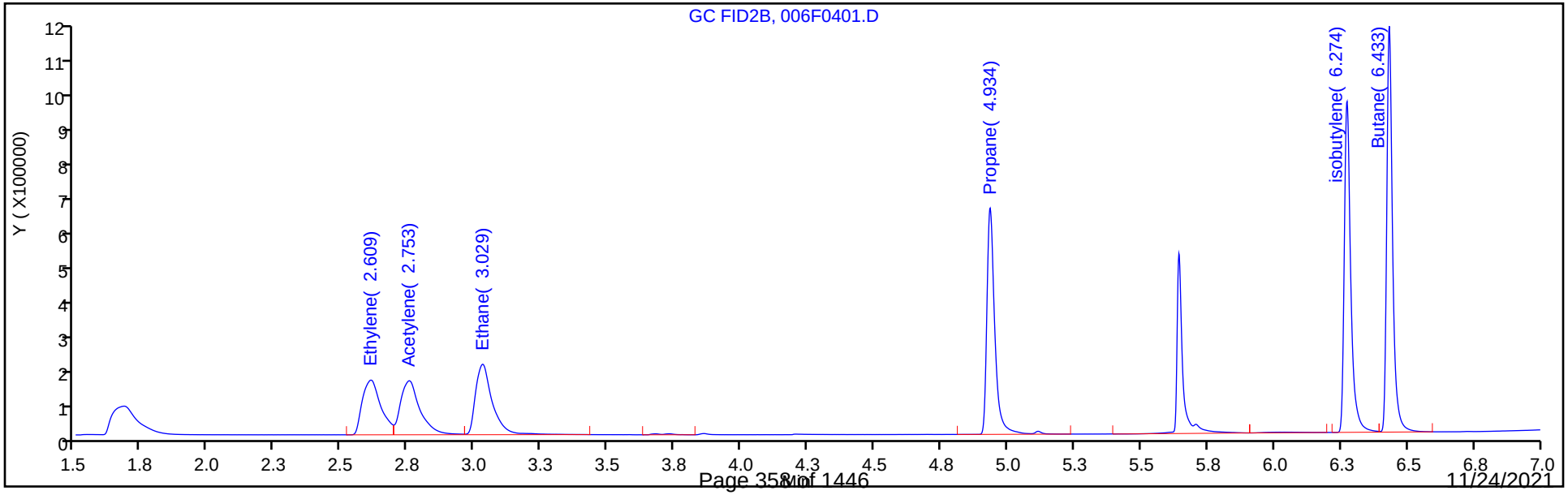
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D

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

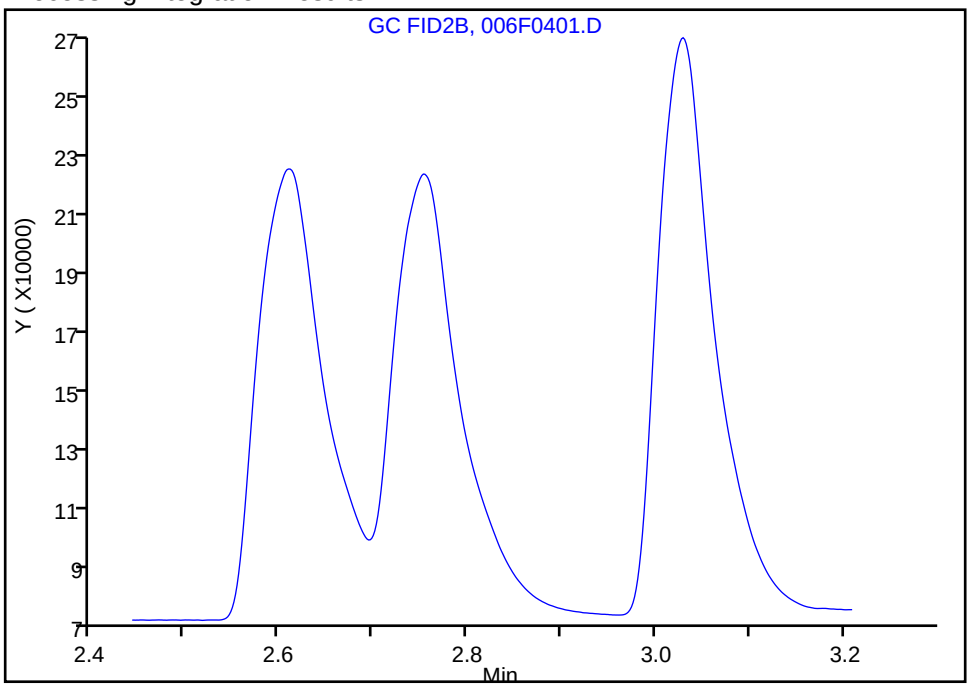
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D
Injection Date: 24-Sep-2021 13:54:46 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 6 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

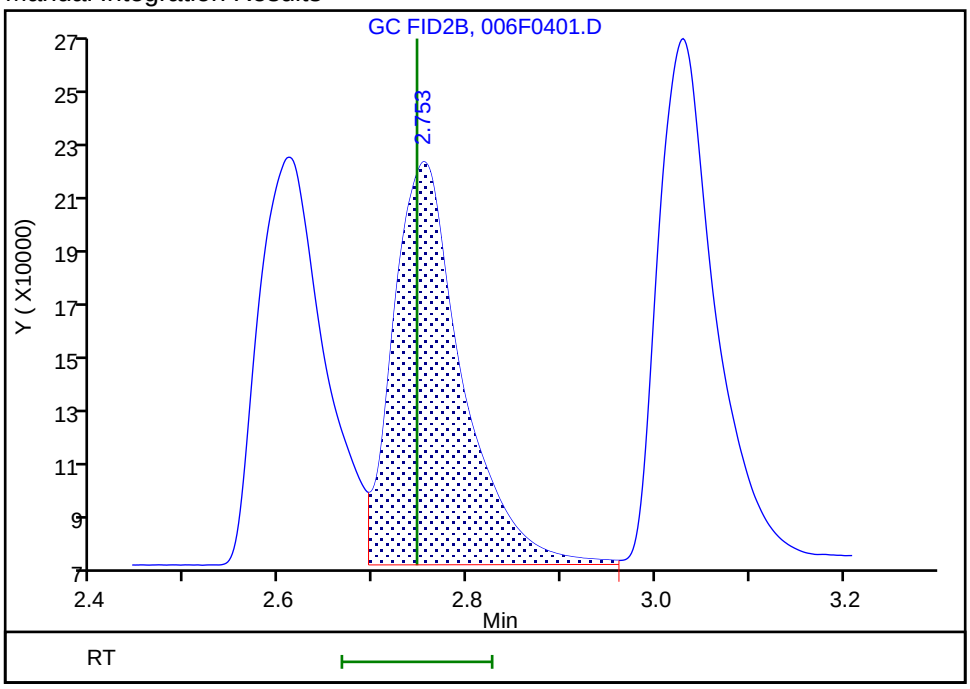
Not Detected
Expected RT: 2.75

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

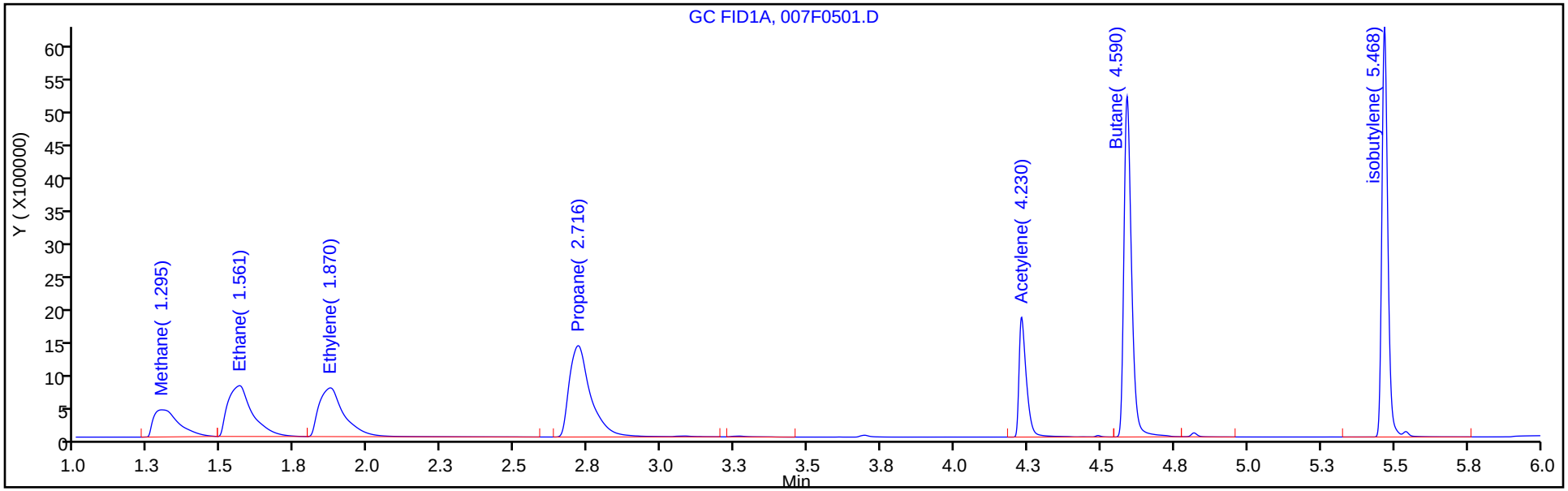
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

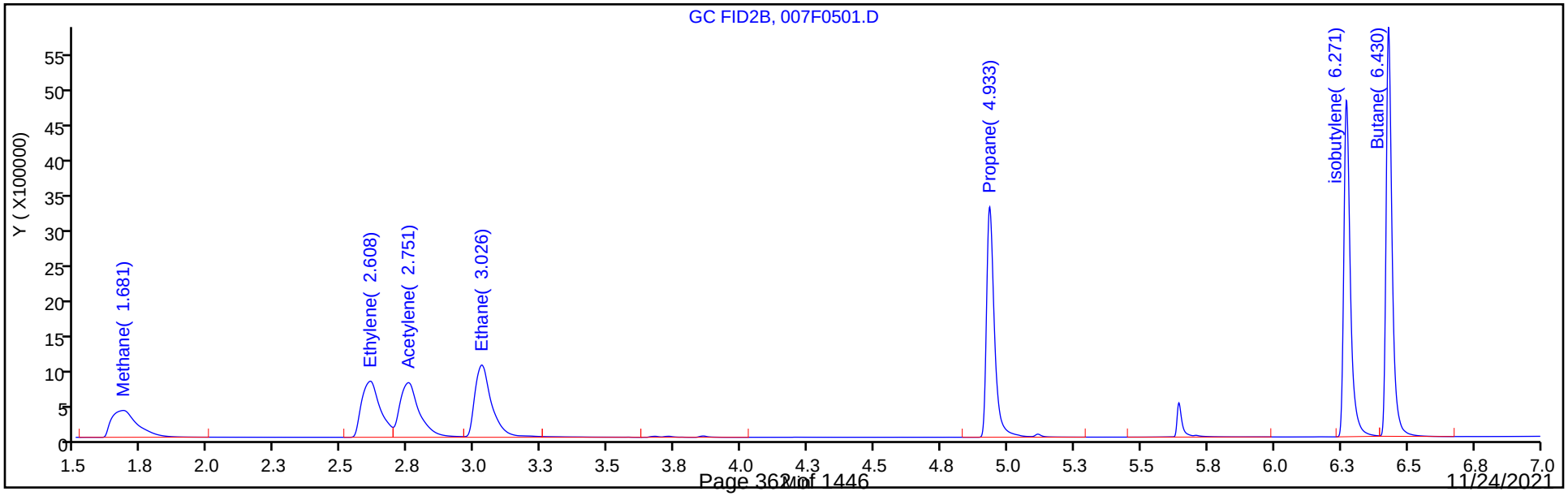
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D

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

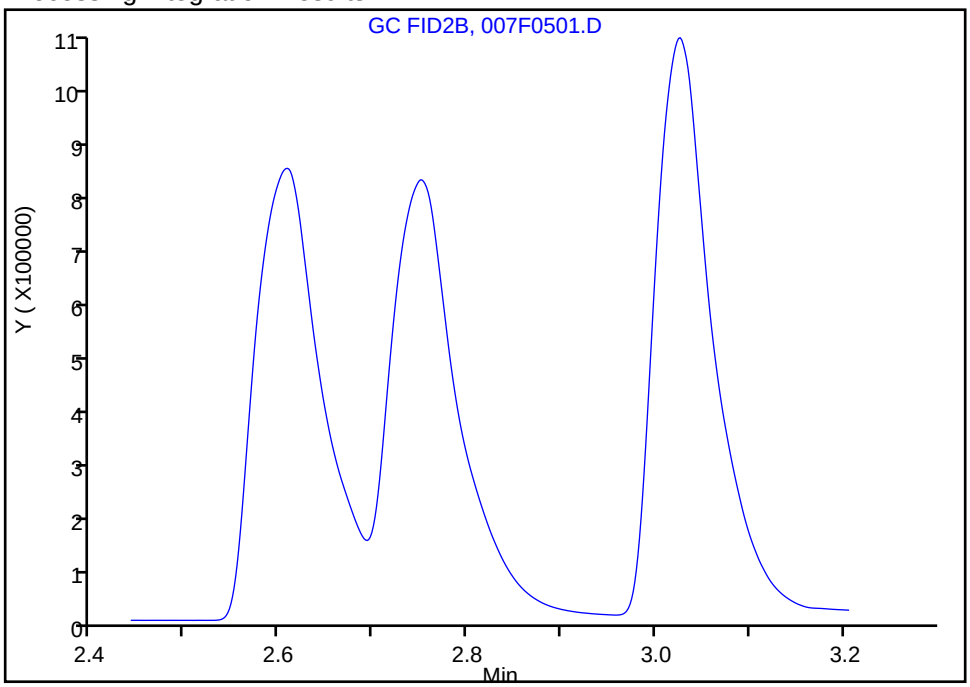
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

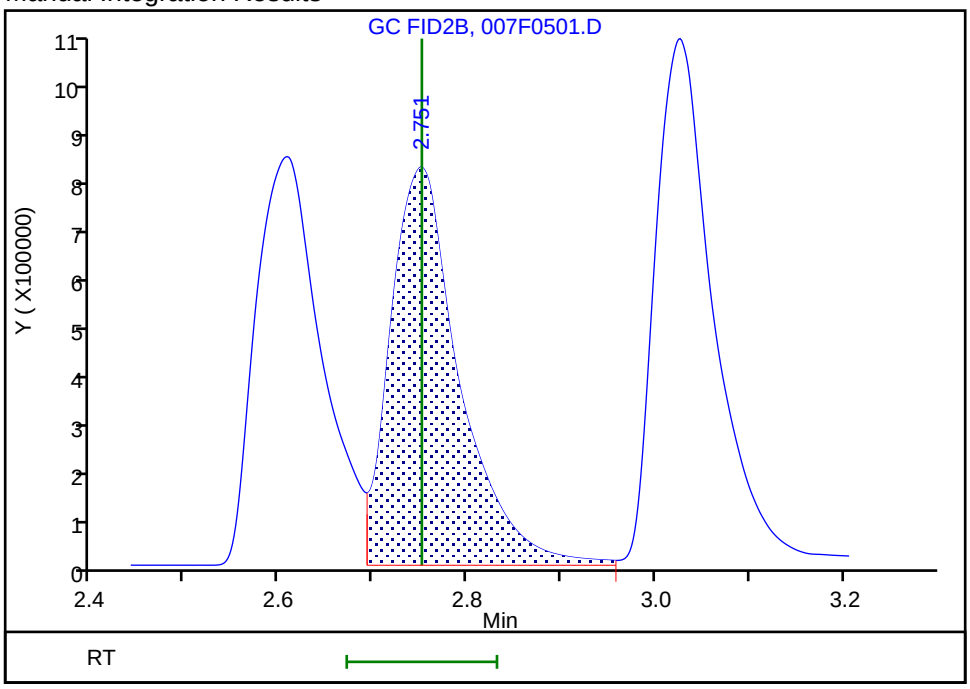
Not Detected
Expected RT: 2.75

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

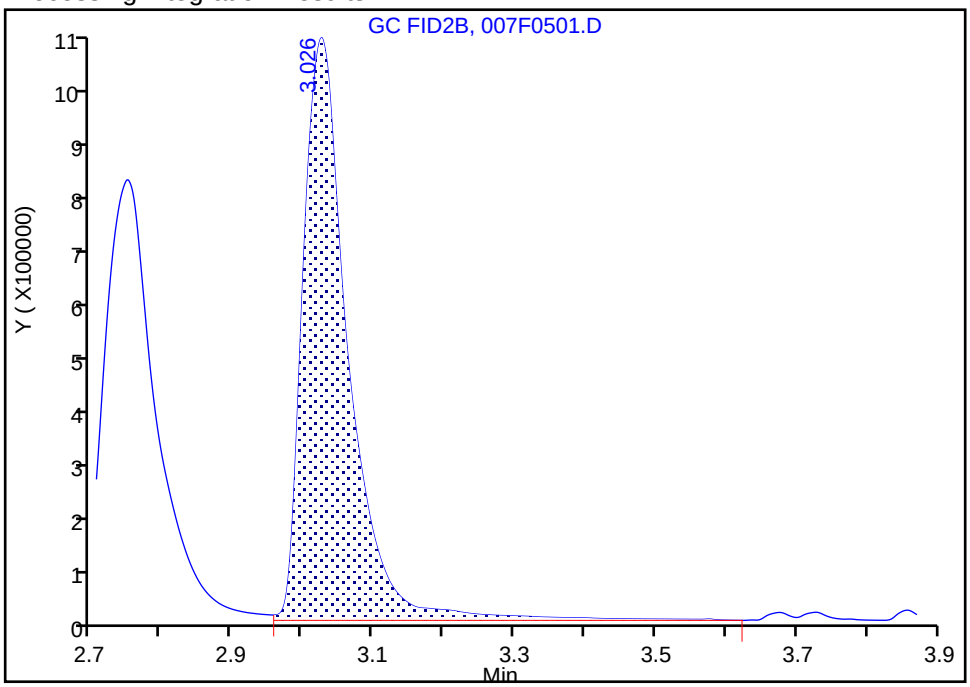
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

3 Ethane, CAS: 74-84-0

Signal: 2

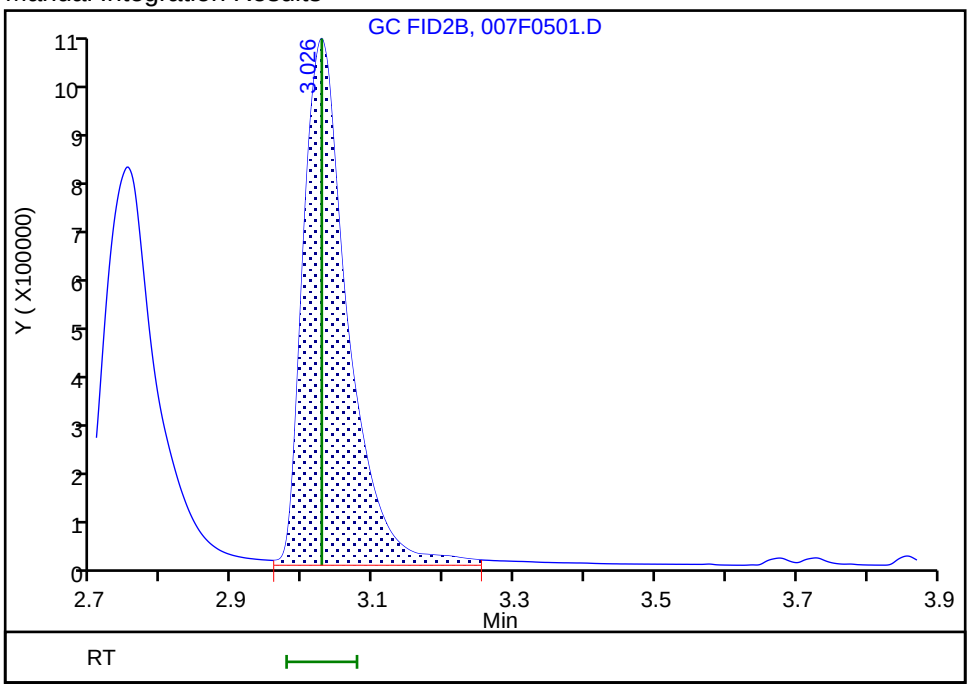
Processing Integration Results

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

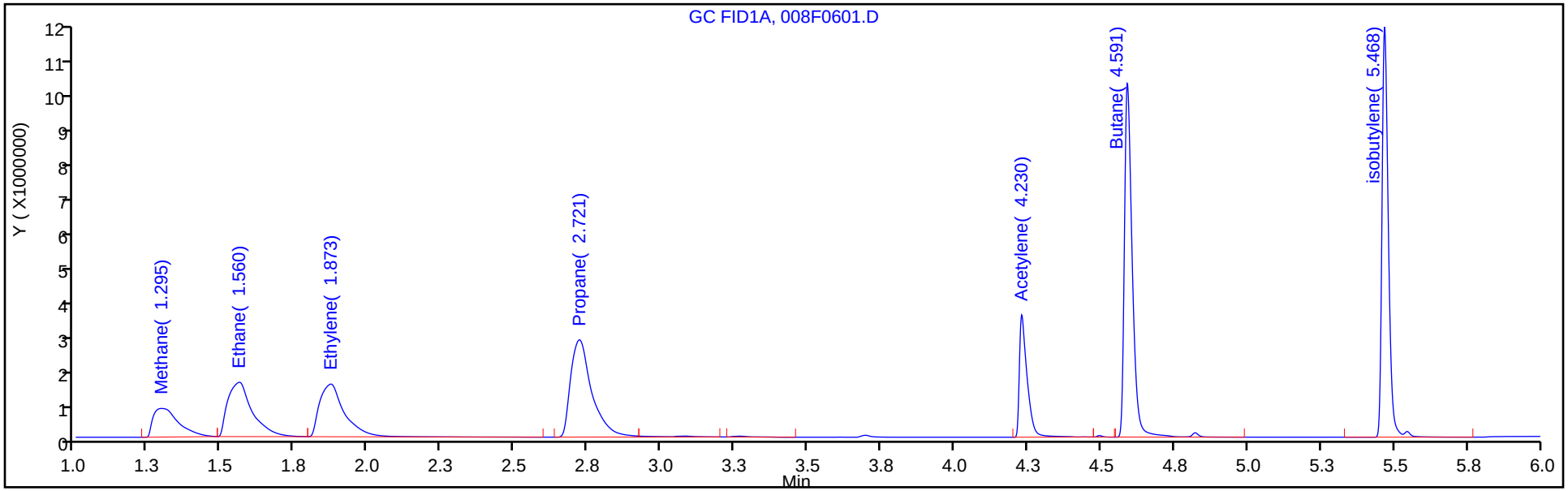
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

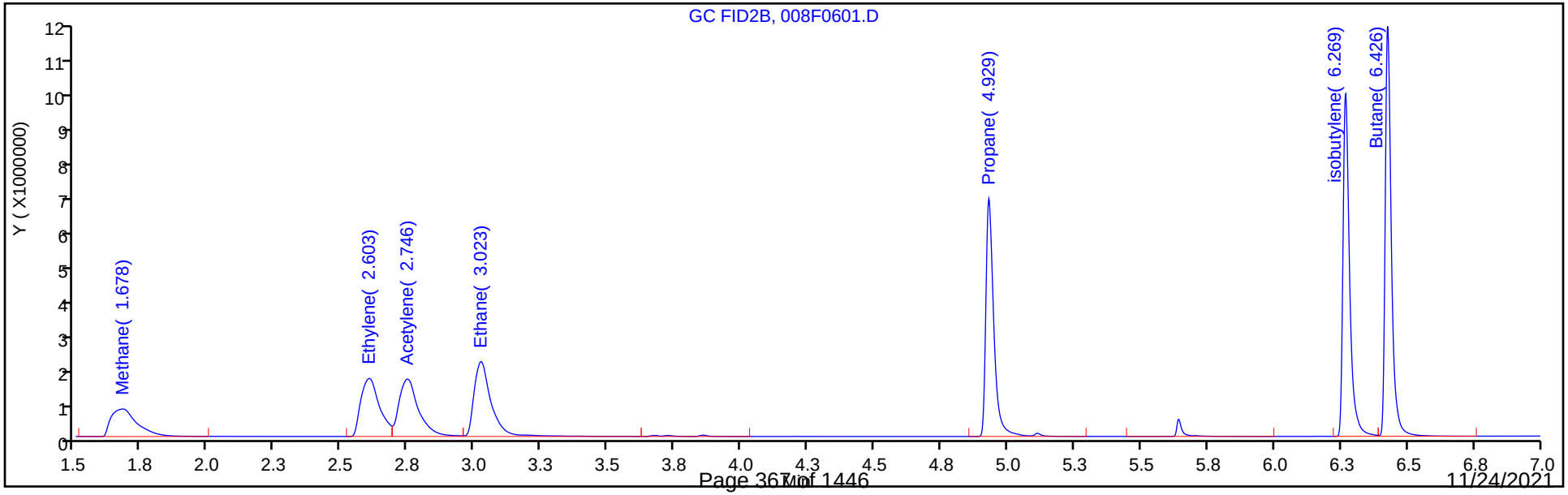
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D

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

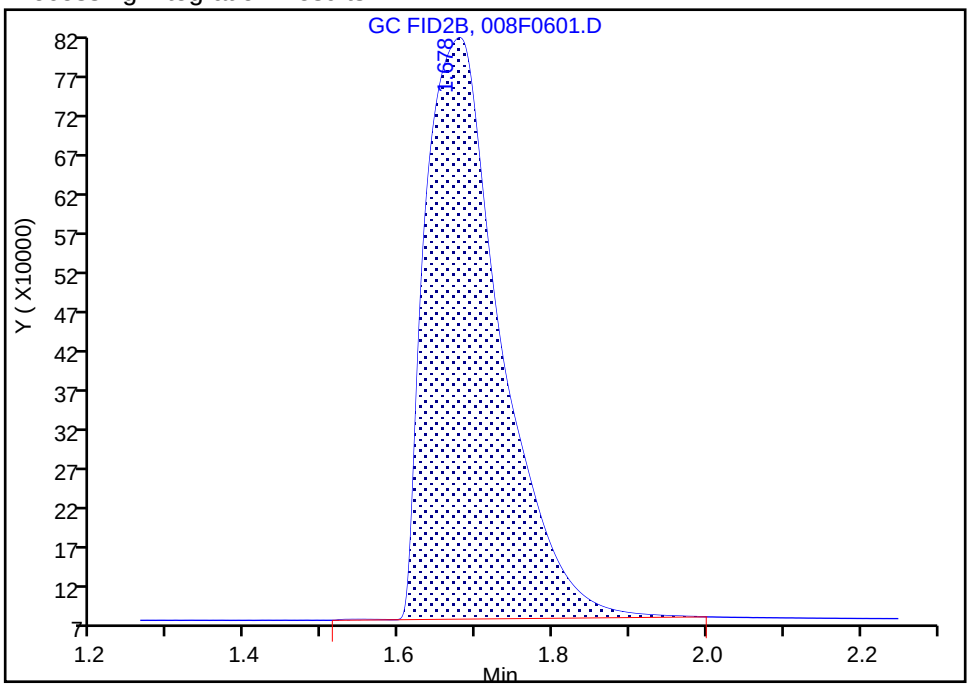
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Injection Date: 24-Sep-2021 14:20:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

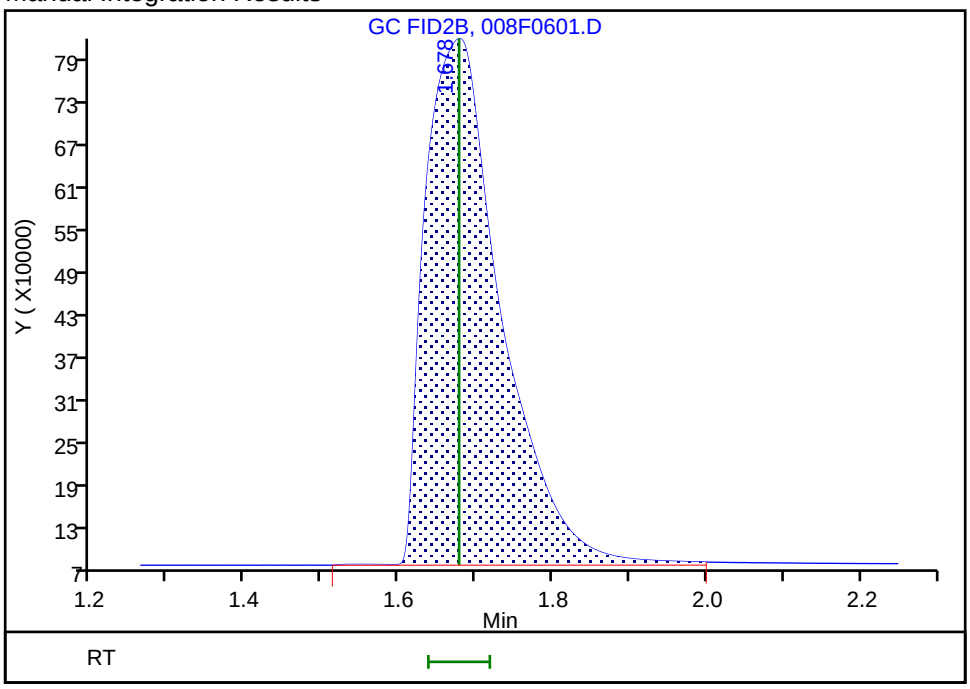
Processing Integration Results

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

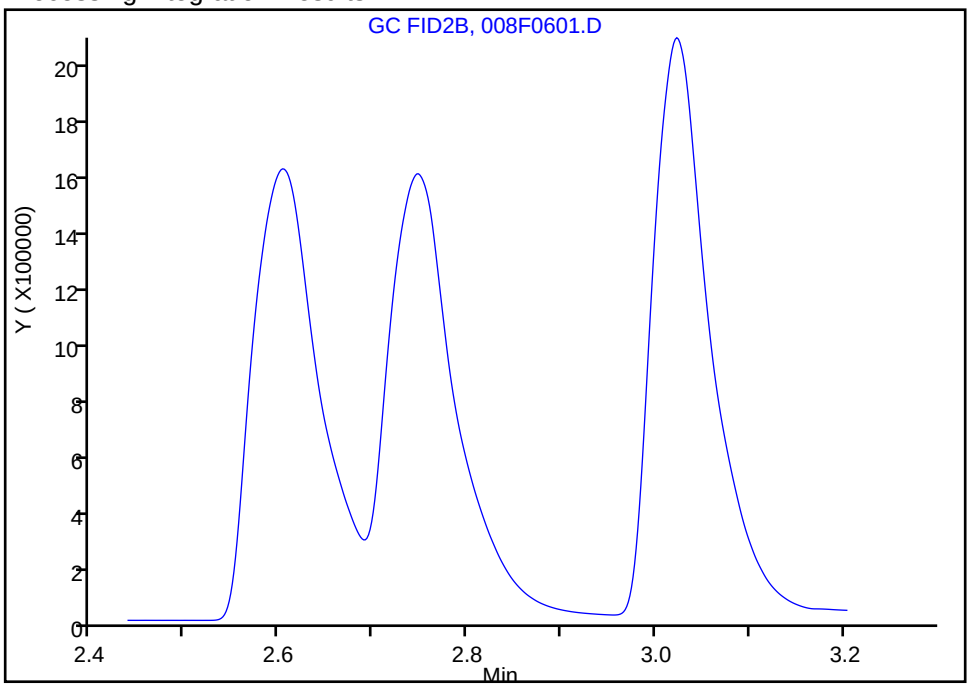
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Injection Date: 24-Sep-2021 14:20:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

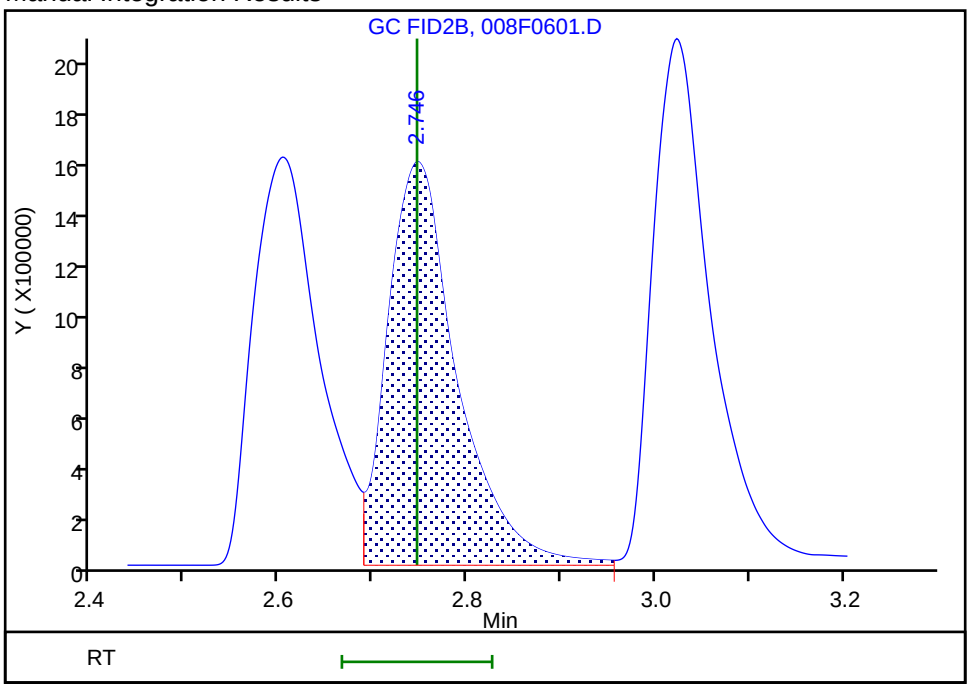
Not Detected
Expected RT: 2.75

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

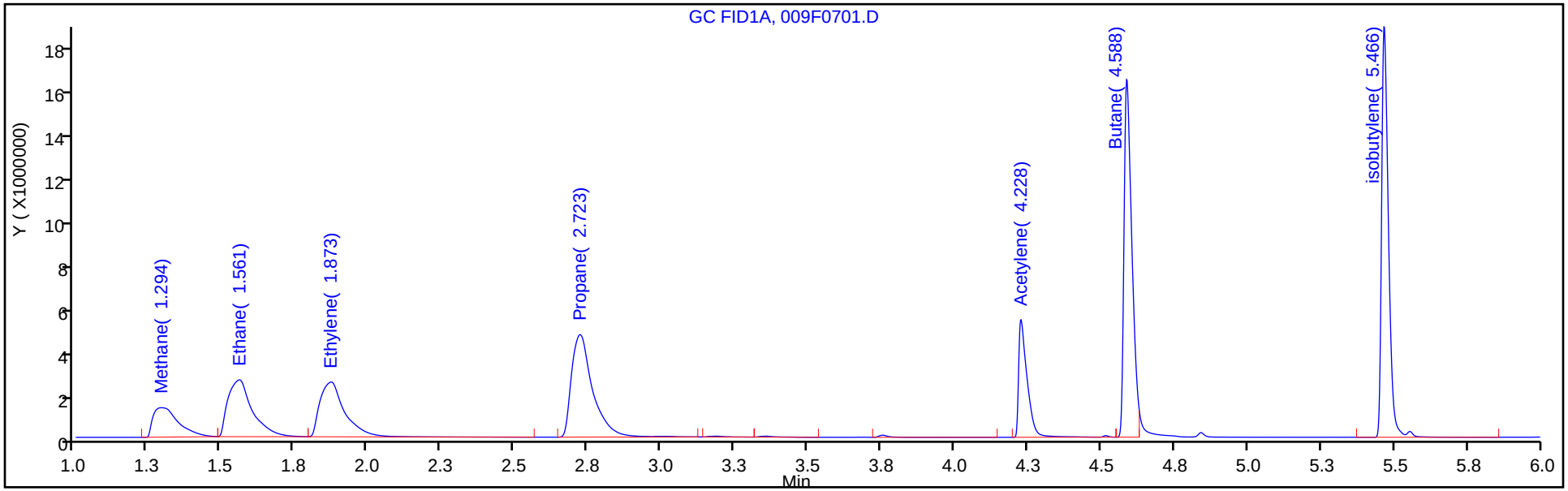
Report Date: 29-Sep-2021 10:55:16 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

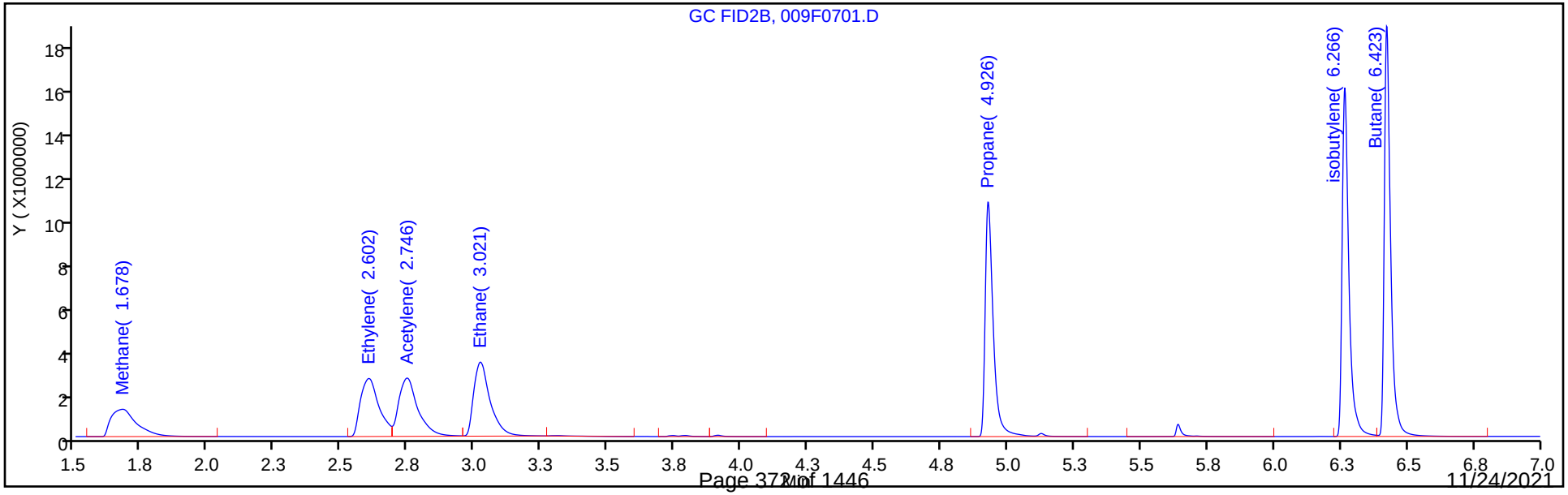
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D

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

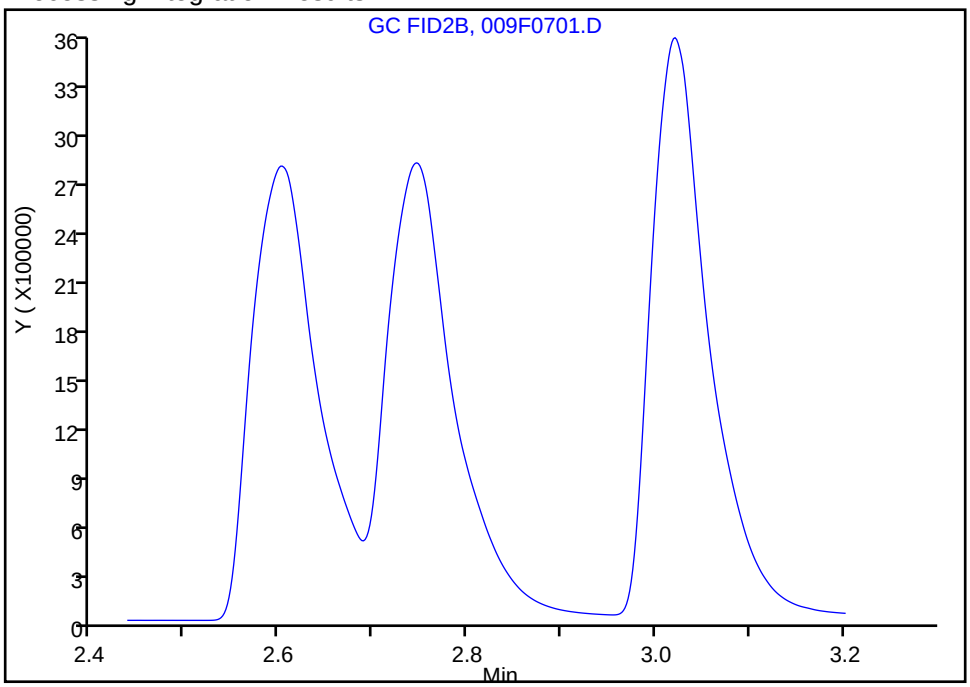
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D
Injection Date: 24-Sep-2021 14:33:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 9 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

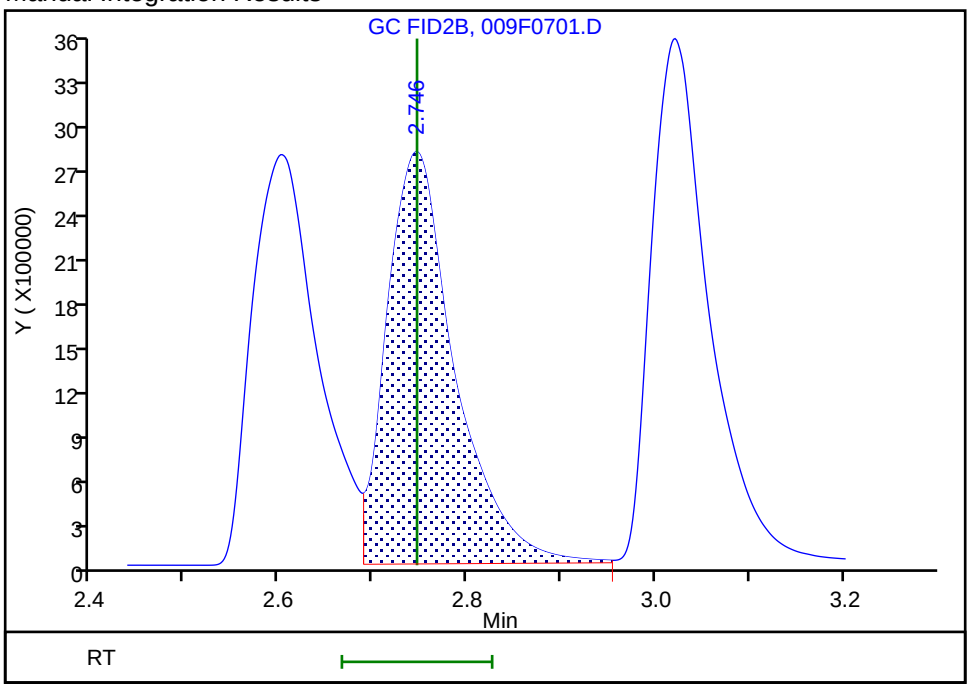
Not Detected
Expected RT: 2.75

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

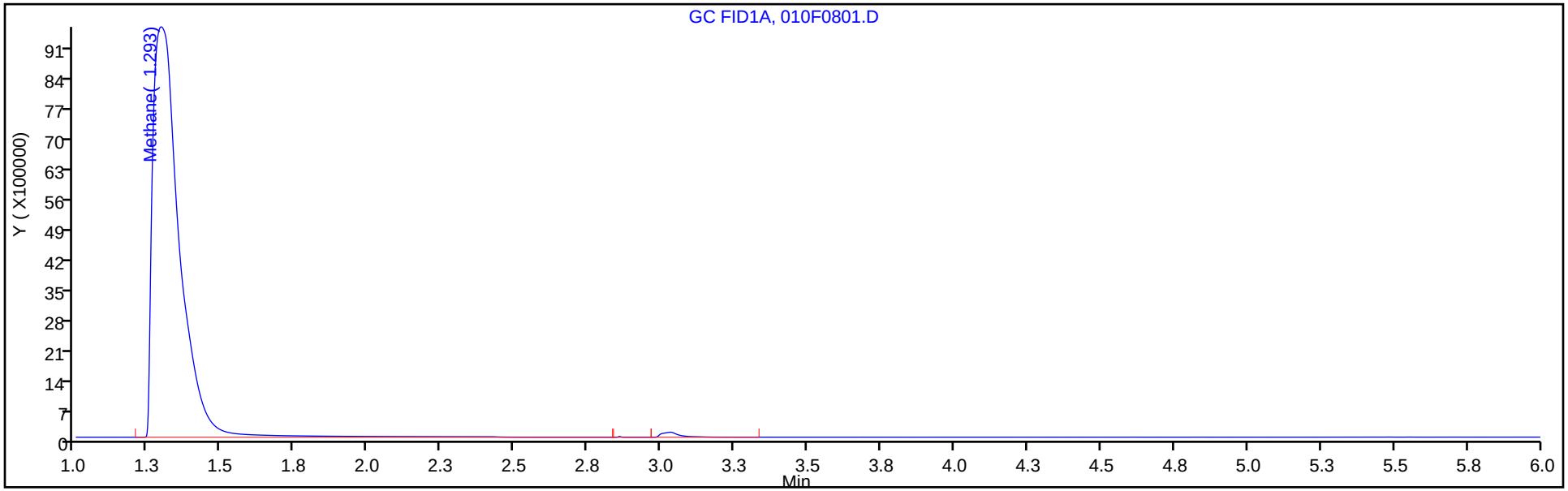
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

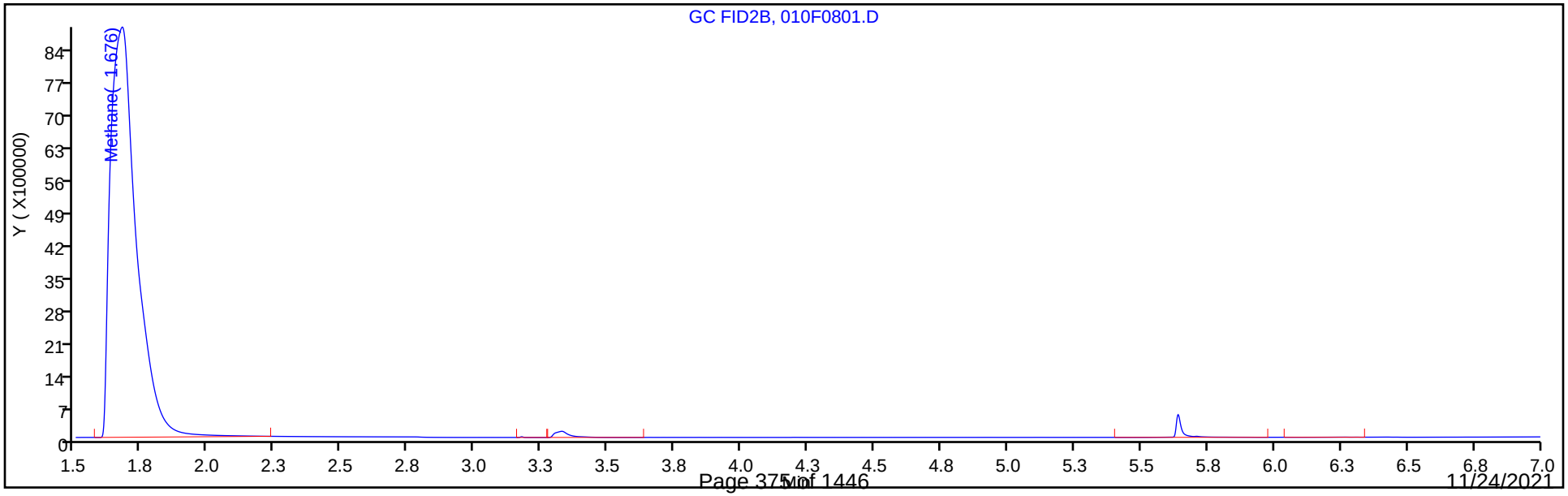
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\010F0801.D

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

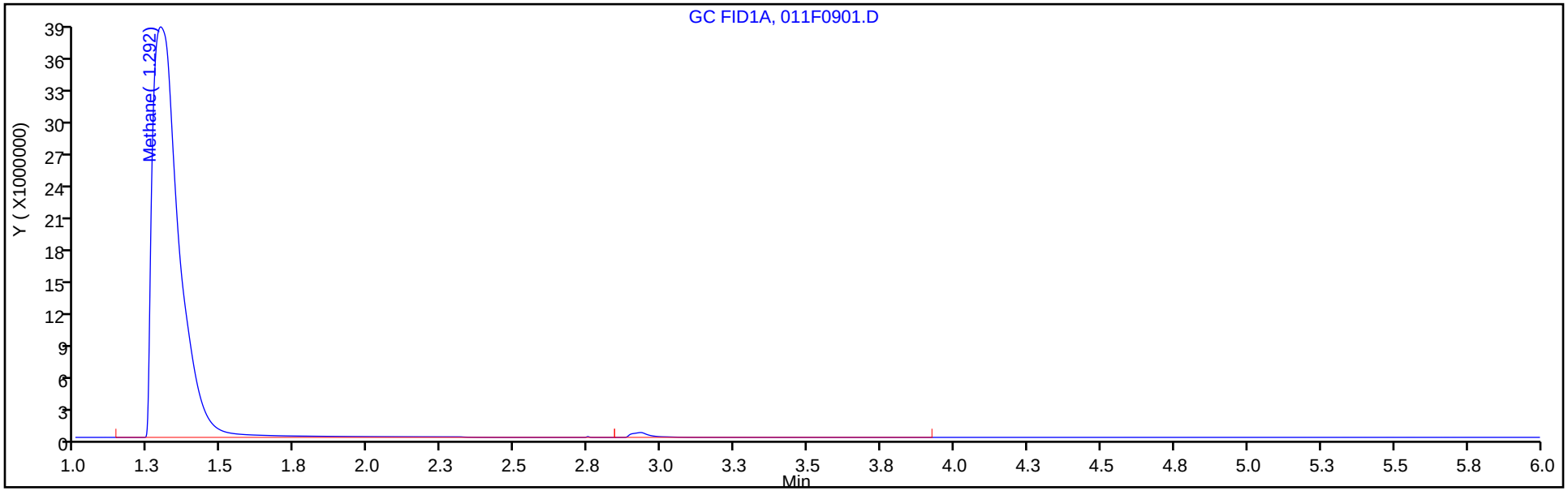
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

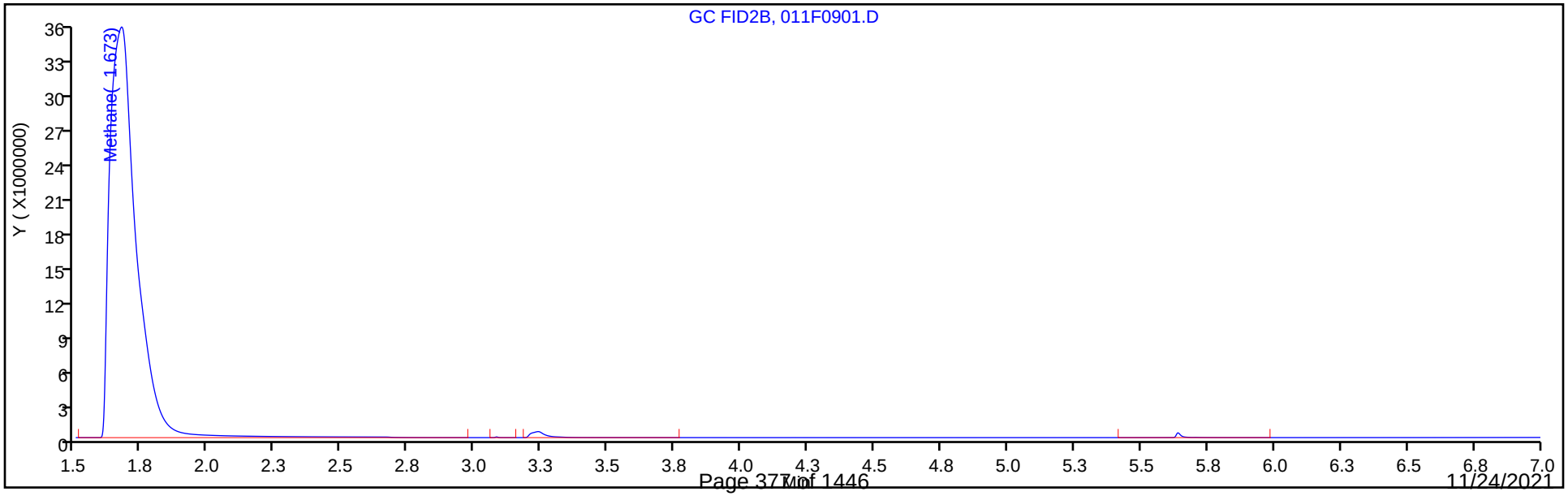
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\011F0901.D

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

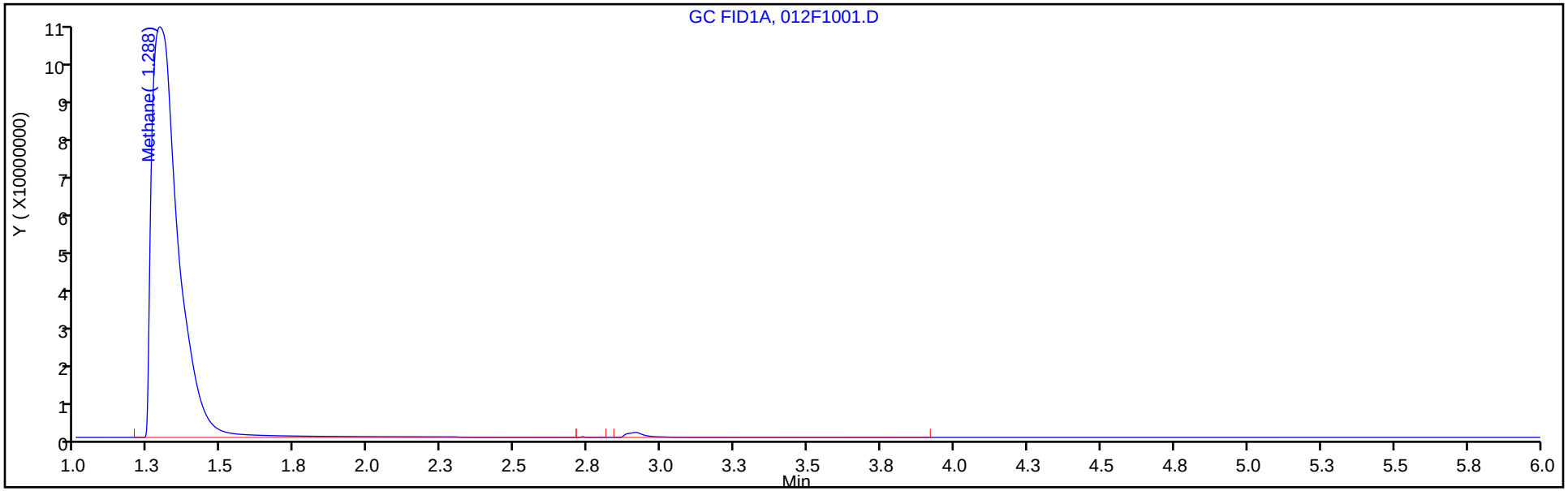
Report Date: 29-Sep-2021 10:55:18 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

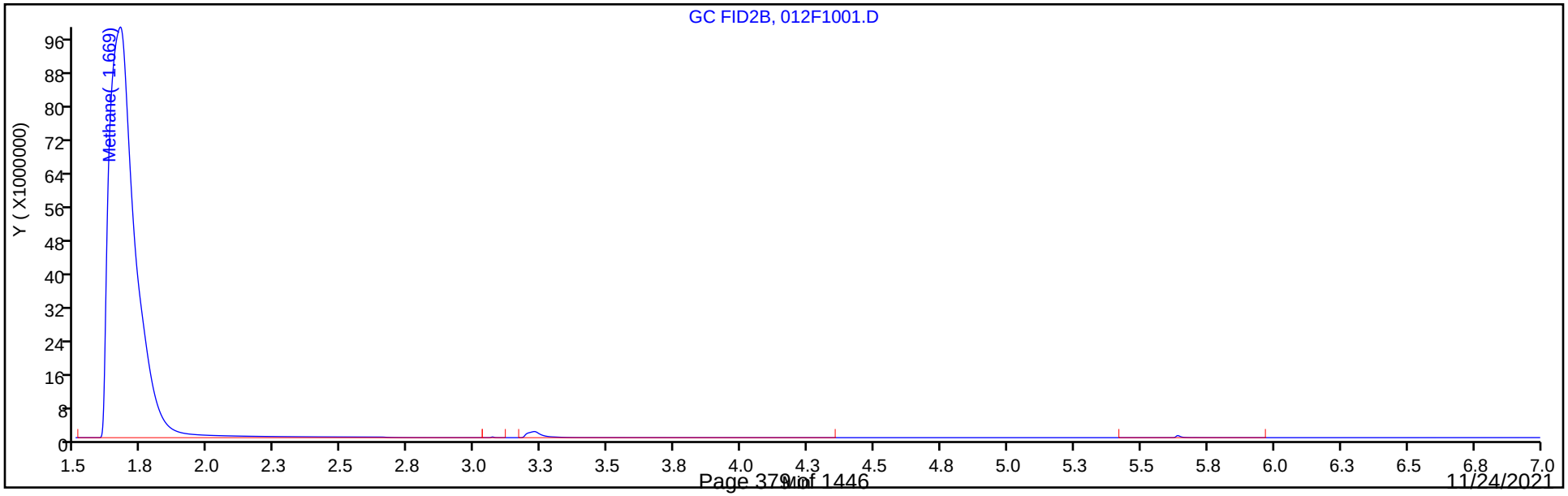
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

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

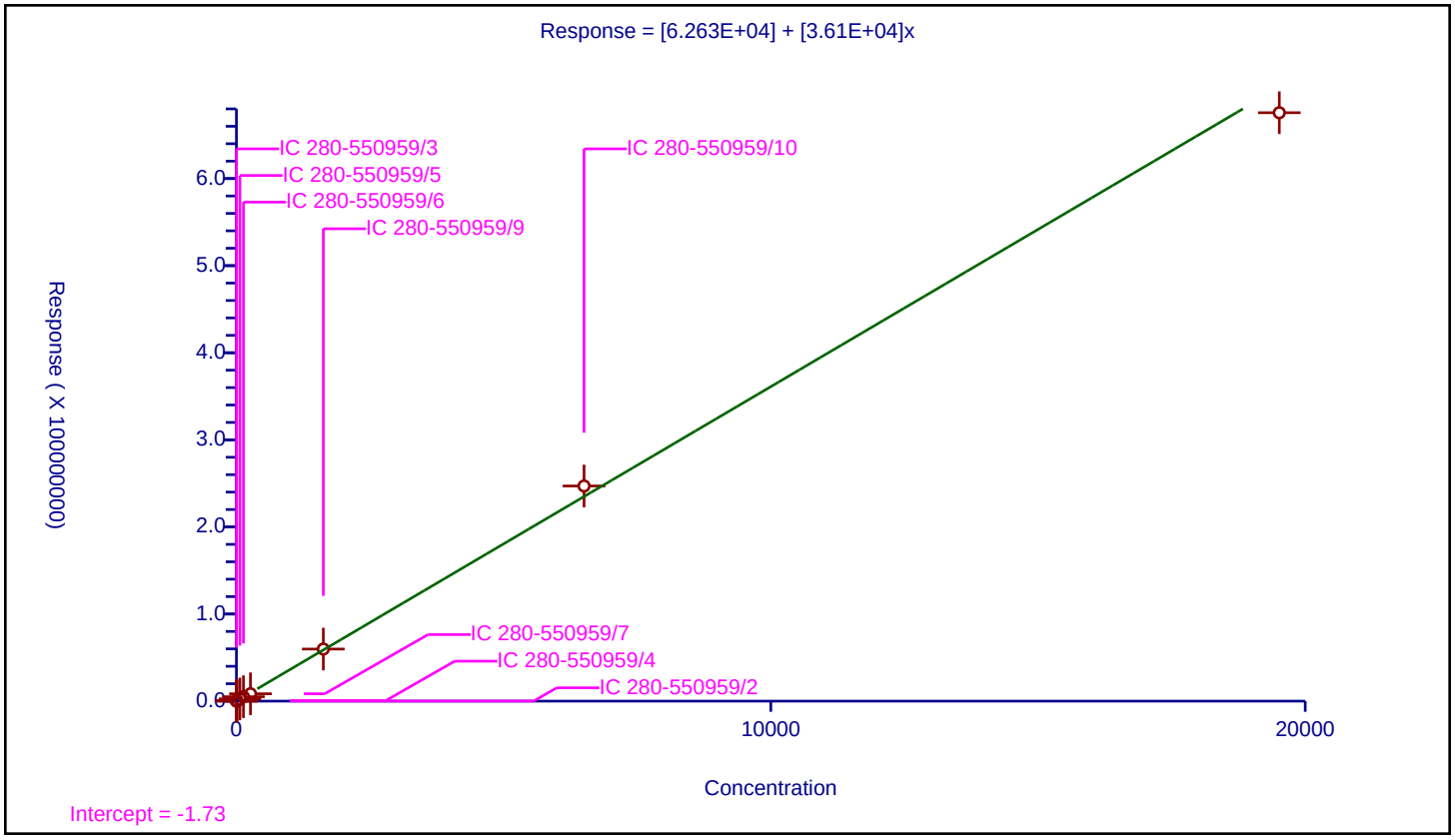
Curve Coefficients

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

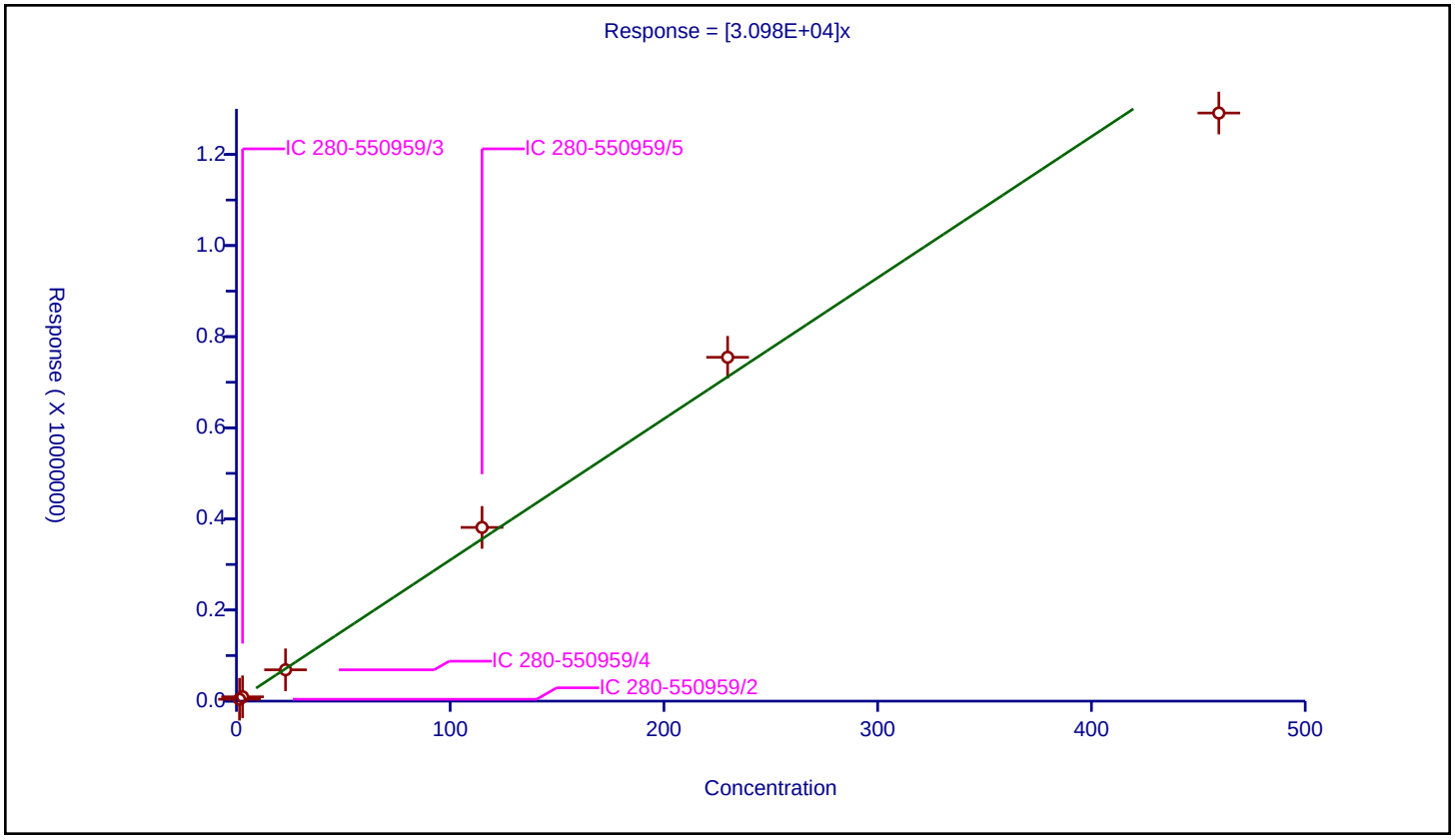
Curve Coefficients

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

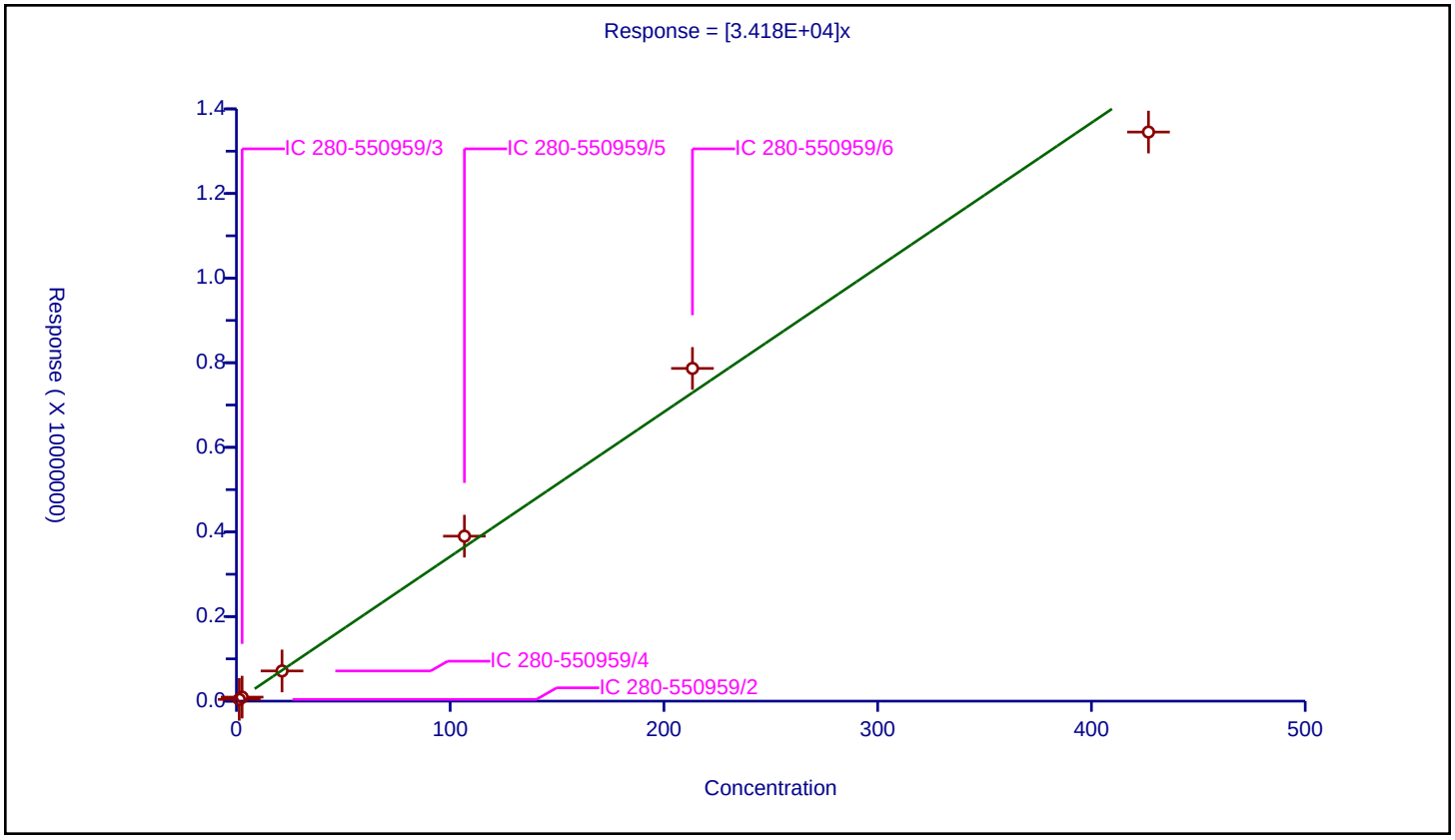
Curve Coefficients

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

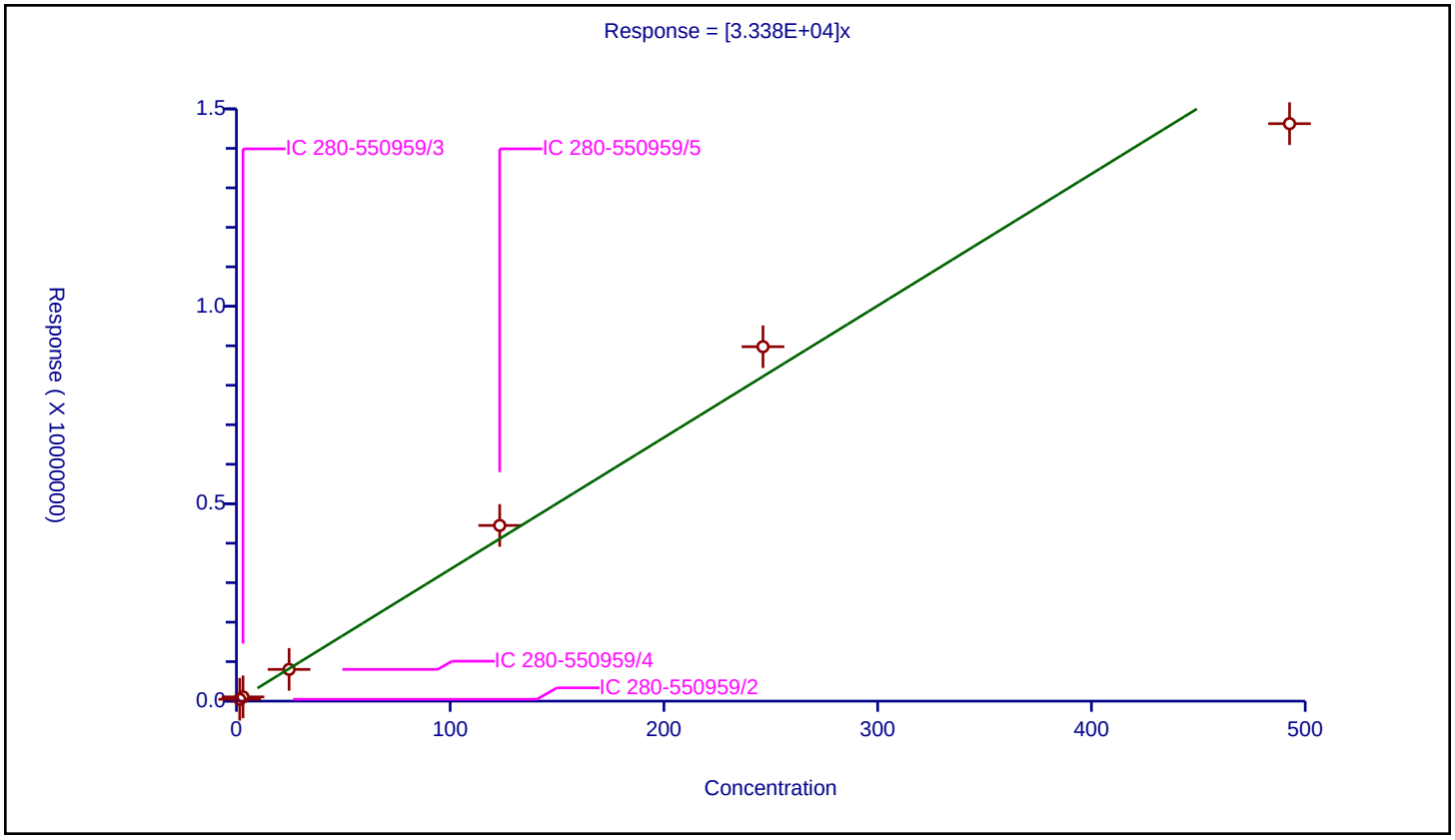
Curve Coefficients

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 TestAmerica, Denver Job No.: 280-155138-1

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 TestAmerica, Denver Job No.: 280-155138-1

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

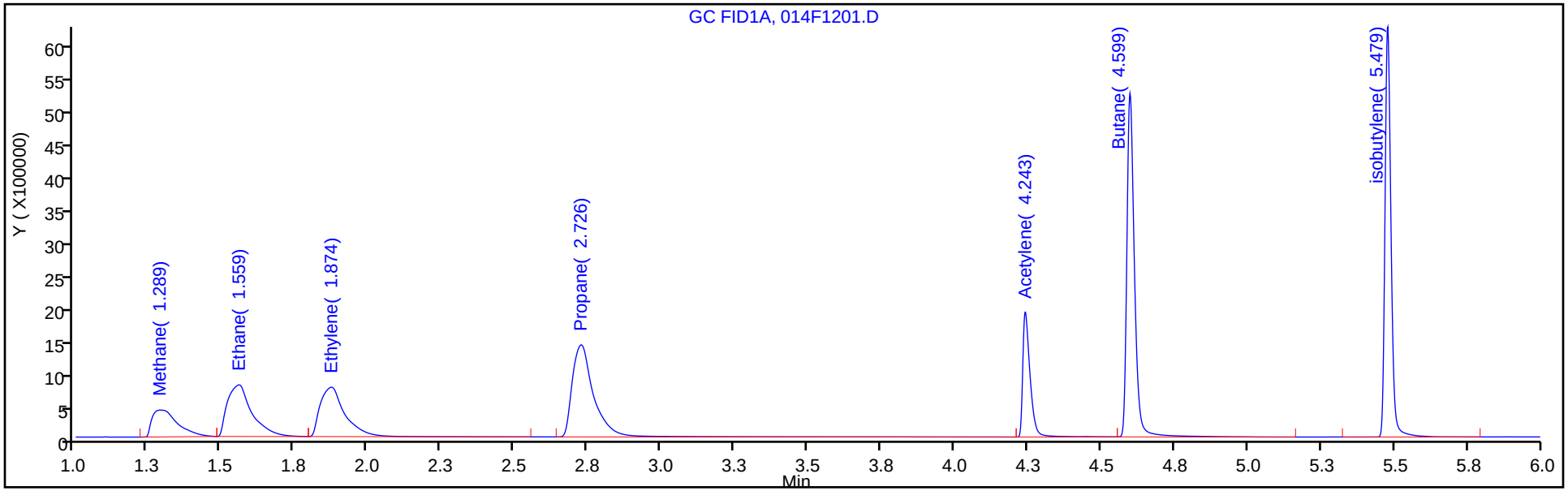
Report Date: 29-Sep-2021 10:58:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

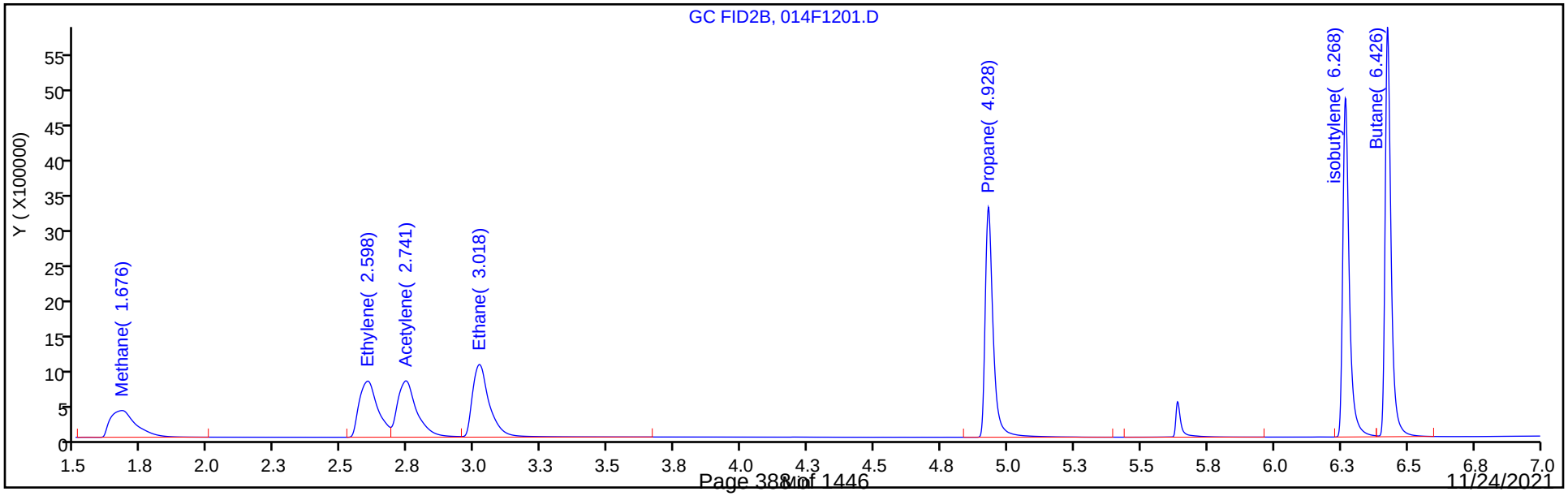
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\014F1201.D

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 TestAmerica, Denver Job No.: 280-155138-1

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 TestAmerica, Denver Job No.: 280-155138-1

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

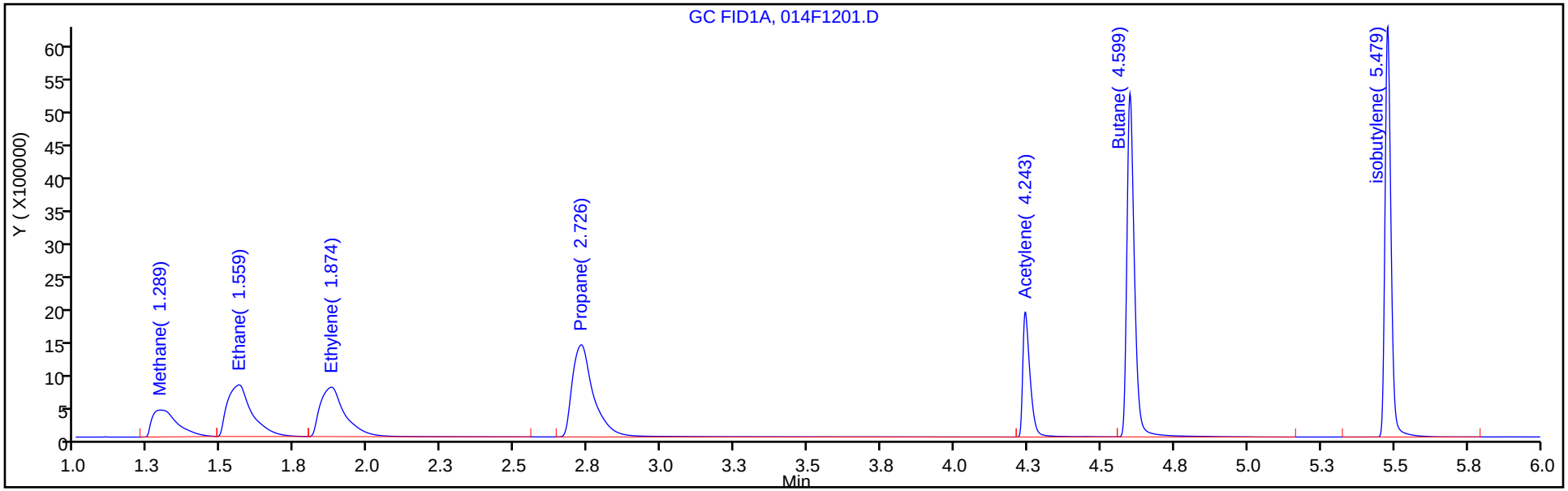
Report Date: 29-Sep-2021 10:58:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

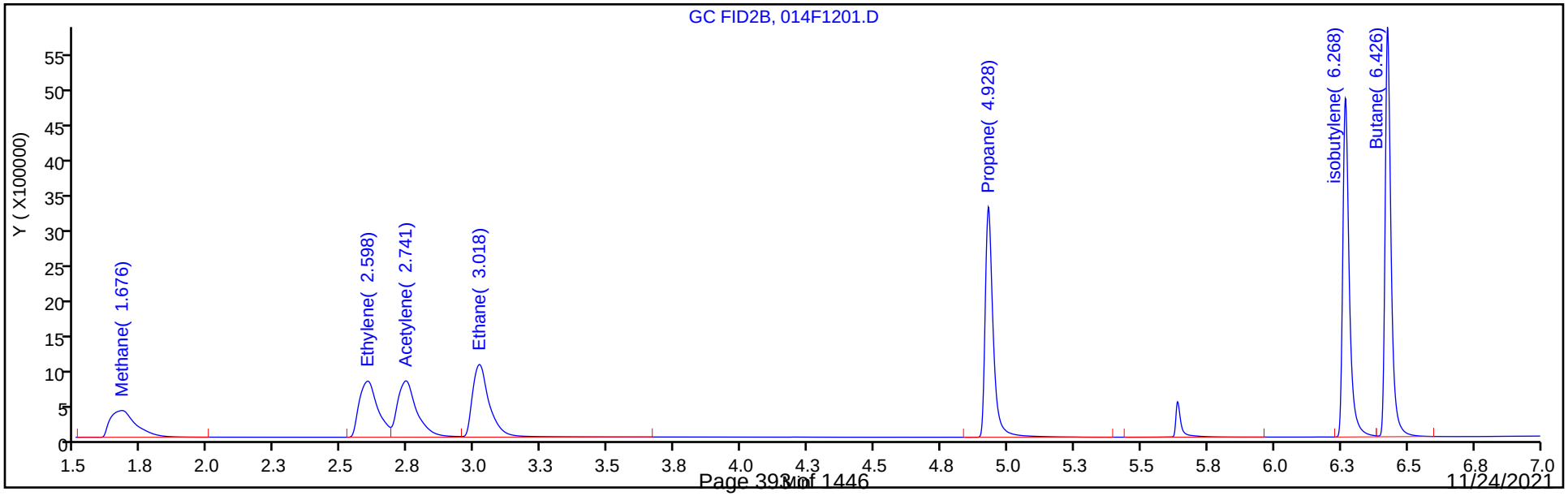
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\014F1201.D

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCVRT 280-556939/1 Calibration Date: 11/10/2021 11:51

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: 001F0101.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		34908		63.4	65.7	-3.6	20.0
Ethane	Ave	33241	31735		118	123	-4.5	20.0
Ethylene	Ave	35226	33892		111	115	-3.8	20.0
Acetylene	Ave	28139	27091		103	107	-3.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCVRT 280-556939/1 Calibration Date: 11/10/2021 11:51

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: 001F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.30	1.26	1.34
Ethane	1.55	1.50	1.60
Ethylene	1.84	1.79	1.89
Acetylene	4.11	4.03	4.19

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\001F0101.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 10-Nov-2021 11:51:48 ALS Bottle#: 1 Worklist Smp#: 1
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\20211110-106374.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 15:35:57 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: CTX1649

First Level Reviewer: sciannac Date: 12-Nov-2021 10:27:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.299	1.299	0.000	2293546	65.7	63.4	
2	1.686	1.686	0.000	2397445	65.7	64.7	
						RPD = 2.06	
3 Ethane							
1	1.553	1.553	0.000	3908794	123.2	117.6	
2	3.024	3.024	0.000	4016738	123.2	120.3	
						RPD = 2.30	
4 Ethylene							
1	1.844	1.844	0.000	3894182	114.9	110.5	
2	2.608	2.608	0.000	3433066	114.9	110.8	
						RPD = 0.24	
5 Propane							
1	2.648	2.648	0.000	5818169	180.6	161.6	
2	4.928	4.928	0.000	5604099	180.6	160.1	
						RPD = 0.93	
6 Acetylene							a
1	4.113	4.113	0.000	2889761	106.7	102.7	a
2	2.751	2.751	0.000	3614832	106.7	105.8	a
						RPD = 2.94	
7 Butane							
1	4.481	4.481	0.000	6643558	238.1	182.4	
2	6.428	6.428	0.000	6314970	238.1	179.7	
						RPD = 1.49	
8 isobutylene							
1	5.348	5.348	0.000	6380602	229.8	176.6	
2	6.269	6.269	0.000	5835330	229.8	175.7	
						RPD = 0.50	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

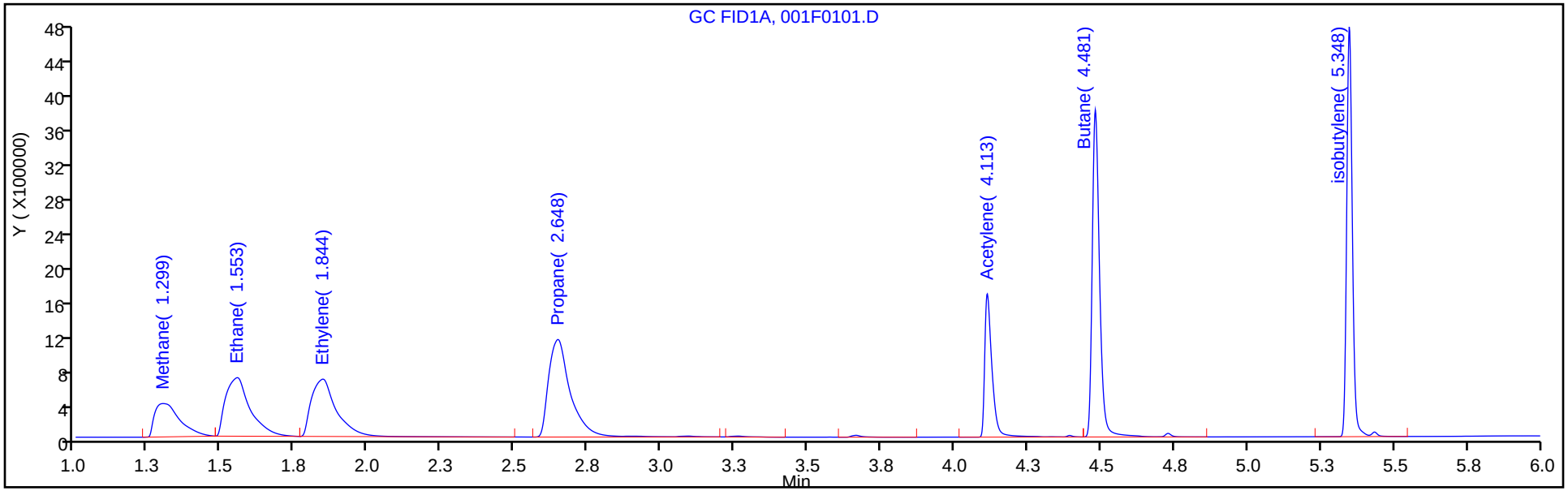
Report Date: 15-Nov-2021 15:35:57 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

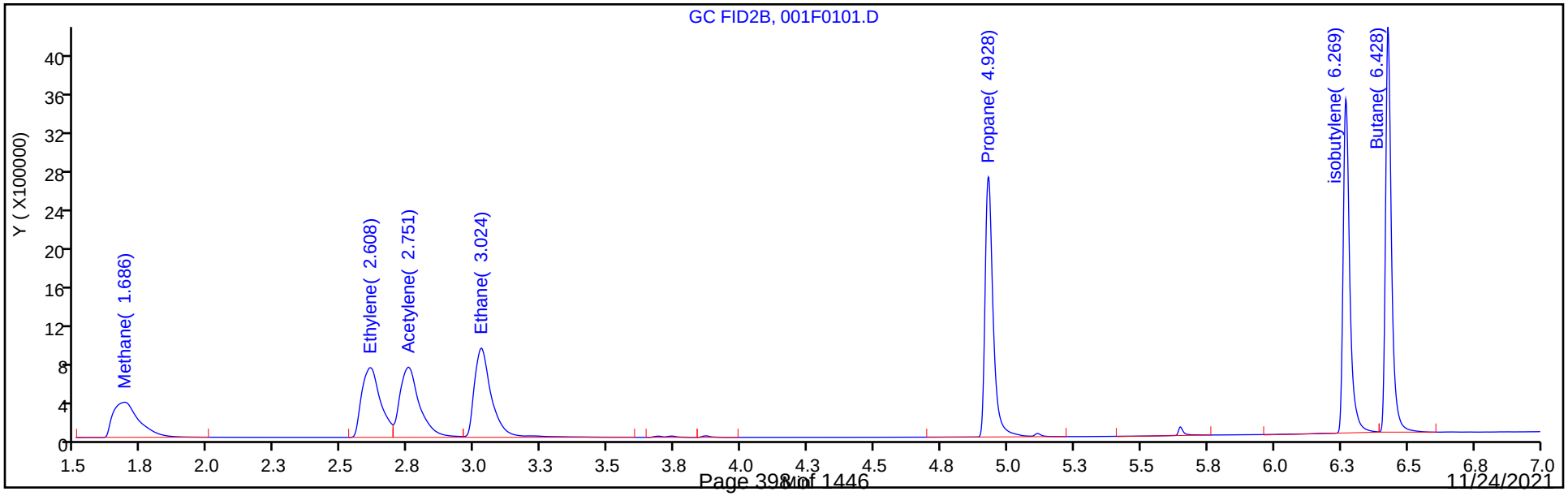
Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\001F0101.D

Injection Date:	10-Nov-2021 11:51:48	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	1
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

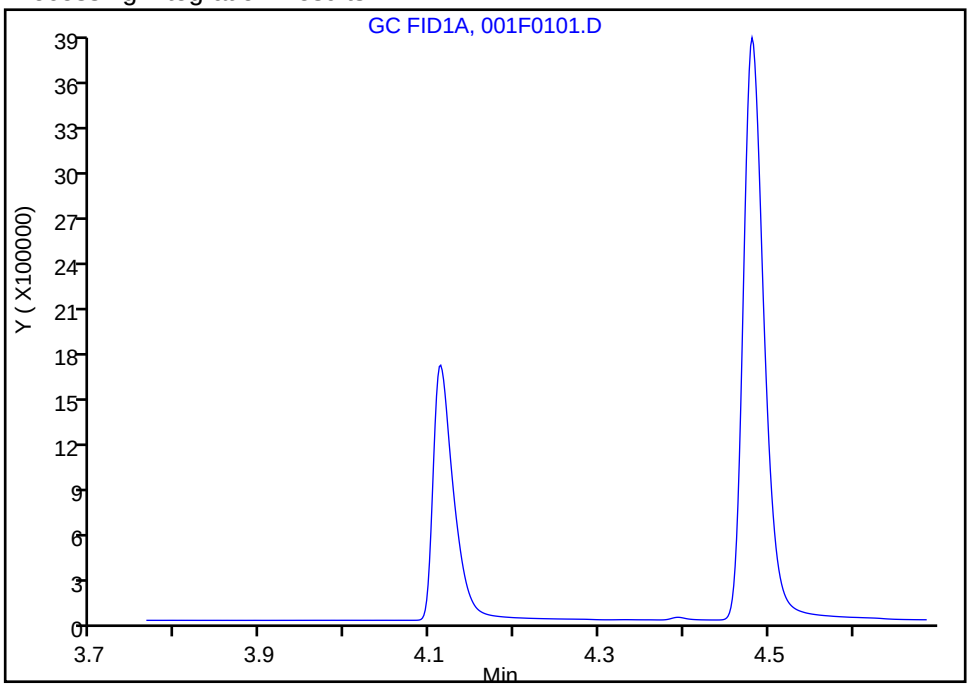
Data File:	\\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\001F0101.D				
Injection Date:	10-Nov-2021 11:51:48	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	1	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

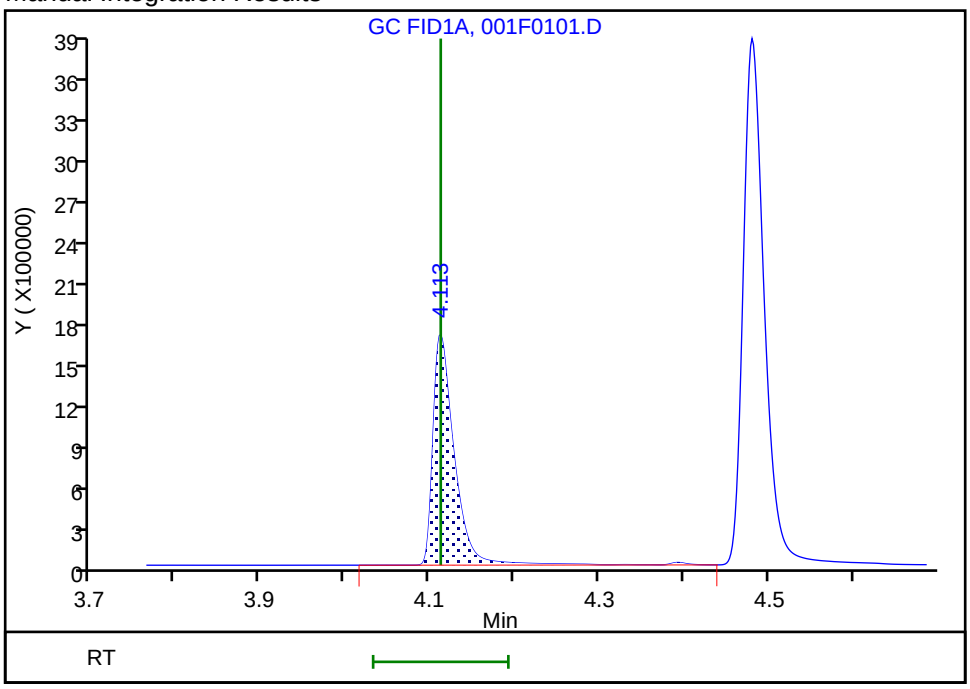
Not Detected
Expected RT: 4.11

Processing Integration Results



Manual Integration Results

RT: 4.11
Area: 2889761
Amount: 102.6959
Amount Units: ug/l



Reviewer: sciannac, 12-Nov-2021 10:26:18
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCVRT 280-556939/1 Calibration Date: 11/10/2021 11:51

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: 001F0101.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		36489		64.7	65.7	-1.6	20.0
Ethylene	Ave	30980	29879		111	115	-3.6	20.0
Acetylene	Ave	34179	33888		106	107	-0.9	20.0
Ethane	Ave	33383	32611		120	123	-2.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCVRT 280-556939/1 Calibration Date: 11/10/2021 11:51

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: 001F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.69	1.65	1.73
Ethylene	2.61	2.56	2.66
Acetylene	2.75	2.67	2.83
Ethane	3.02	2.97	3.07

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\001F0101.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 10-Nov-2021 11:51:48 ALS Bottle#: 1 Worklist Smp#: 1
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\20211110-106374.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 15:35:57 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: CTX1649

First Level Reviewer: sciannac Date: 12-Nov-2021 10:27:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.299	1.299	0.000	2293546	65.7	63.4	
2	1.686	1.686	0.000	2397445	65.7	64.7	
						RPD = 2.06	
3 Ethane							
1	1.553	1.553	0.000	3908794	123.2	117.6	
2	3.024	3.024	0.000	4016738	123.2	120.3	
						RPD = 2.30	
4 Ethylene							
1	1.844	1.844	0.000	3894182	114.9	110.5	
2	2.608	2.608	0.000	3433066	114.9	110.8	
						RPD = 0.24	
5 Propane							
1	2.648	2.648	0.000	5818169	180.6	161.6	
2	4.928	4.928	0.000	5604099	180.6	160.1	
						RPD = 0.93	
6 Acetylene							a
1	4.113	4.113	0.000	2889761	106.7	102.7	a
2	2.751	2.751	0.000	3614832	106.7	105.8	a
						RPD = 2.94	
7 Butane							
1	4.481	4.481	0.000	6643558	238.1	182.4	
2	6.428	6.428	0.000	6314970	238.1	179.7	
						RPD = 1.49	
8 isobutylene							
1	5.348	5.348	0.000	6380602	229.8	176.6	
2	6.269	6.269	0.000	5835330	229.8	175.7	
						RPD = 0.50	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

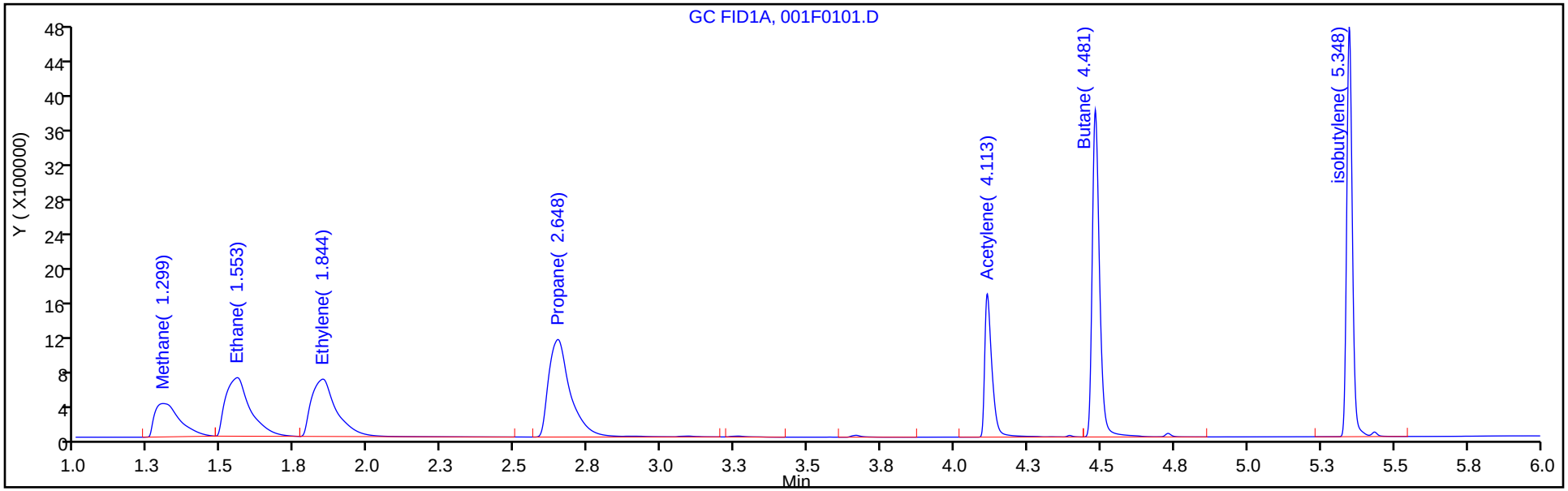
Report Date: 15-Nov-2021 15:35:57 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

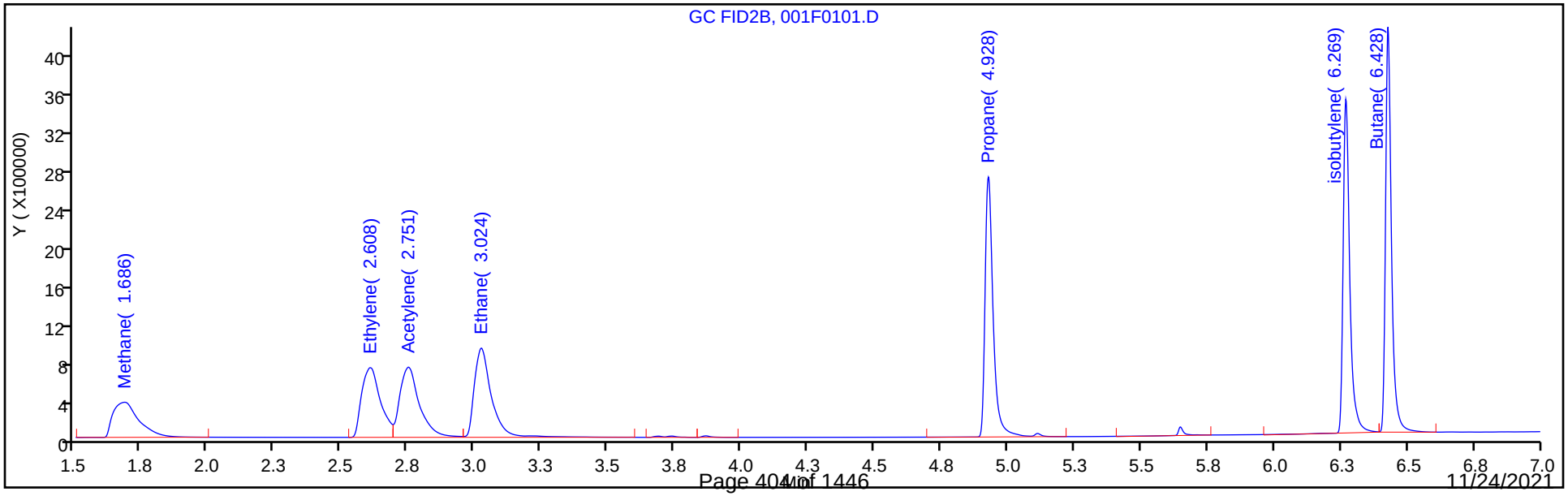
Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\001F0101.D

Injection Date:	10-Nov-2021 11:51:48	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	1
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

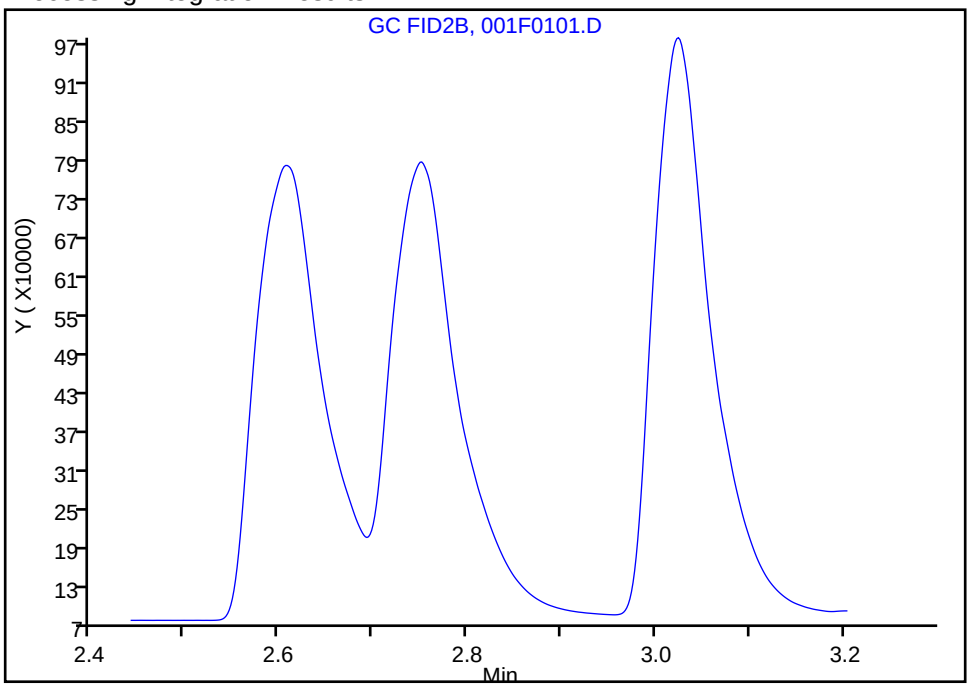
Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\001F0101.D
Injection Date: 10-Nov-2021 11:51:48 Instrument ID: VGC_J
Lims ID: ccvrt
Client ID:
Operator ID: sciannac ALS Bottle#: 1 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

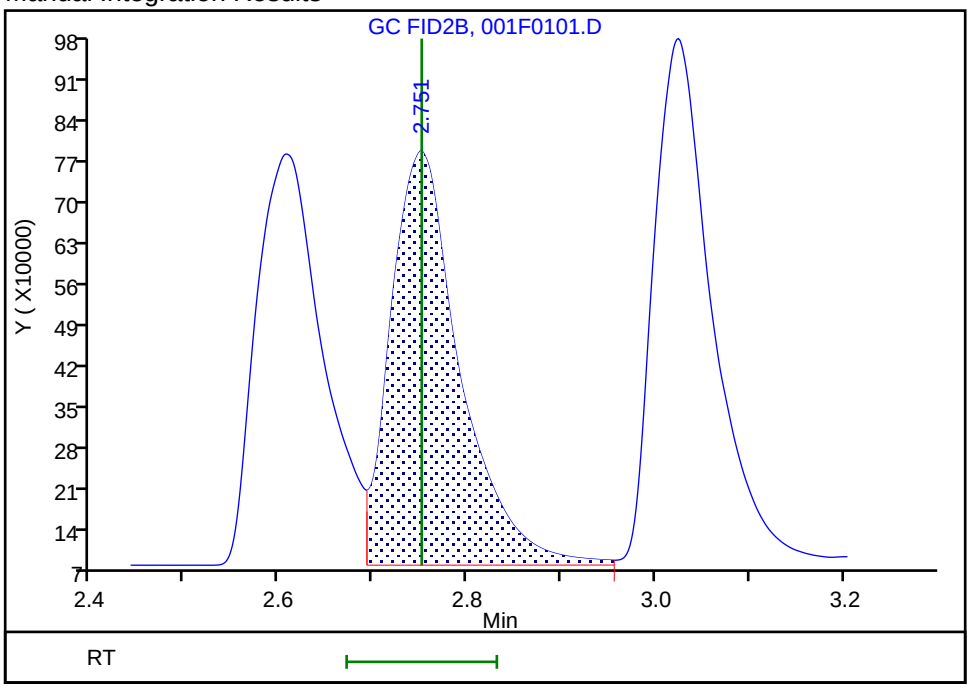
Not Detected
Expected RT: 2.75

Processing Integration Results



Manual Integration Results

RT: 2.75
Area: 3614832
Amount: 105.7624
Amount Units: ug/l



Reviewer: sciannac, 12-Nov-2021 10:26:25
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556939/16 Calibration Date: 11/10/2021 15:06

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: 016F1601.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		36000		65.4	65.7	-0.5	20.0
Ethane	Ave	33241	34296		127	123	3.2	20.0
Ethylene	Ave	35226	36142		118	115	2.6	20.0
Acetylene	Ave	28139			3.70	107		

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556939/16 Calibration Date: 11/10/2021 15:06

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: 016F1601.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.29	1.26	1.34
Ethane	1.55	1.50	1.60
Ethylene	1.86	1.79	1.89
Acetylene			

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\016F1601.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 10-Nov-2021 15:06:43 ALS Bottle#: 16 Worklist Smp#: 16
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\20211110-106374.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 15:36:04 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 15:33:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.288	1.299	-0.011	2365329	65.7	65.4	
2	1.670	1.686	-0.016	2461644	65.7	66.4	
						RPD = 1.60	
3 Ethane							
1	1.550	1.553	-0.003	4224202	123.2	127.1	
2	3.002	3.024	-0.022	4062713	123.2	121.7	
						RPD = 4.32	
4 Ethylene							M
1	1.862	1.844	0.018	4152681	114.9	117.9	
2	2.587	2.608	-0.021	3713951	114.9	119.9	M
						RPD = 1.68	
5 Propane							M
1	2.680	2.648	0.032	6621088	180.6	183.9	
2	4.909	4.928	-0.019	4362642	180.6	124.6	M
						RPD = 38.42	
6 Acetylene							
1		4.113			ND	ND	
2		2.751					
7 Butane							
1		4.481			ND	ND	
2		6.428					
8 isobutylene							
1		5.348			ND	ND	
2		6.269					

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

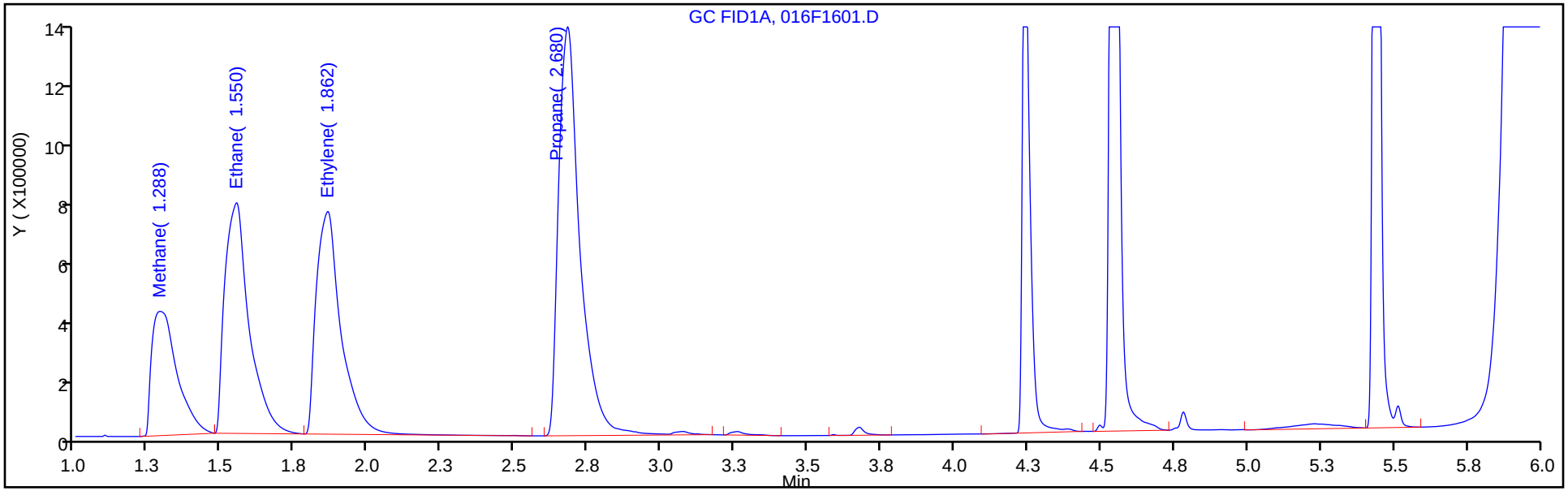
Report Date: 15-Nov-2021 15:36:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

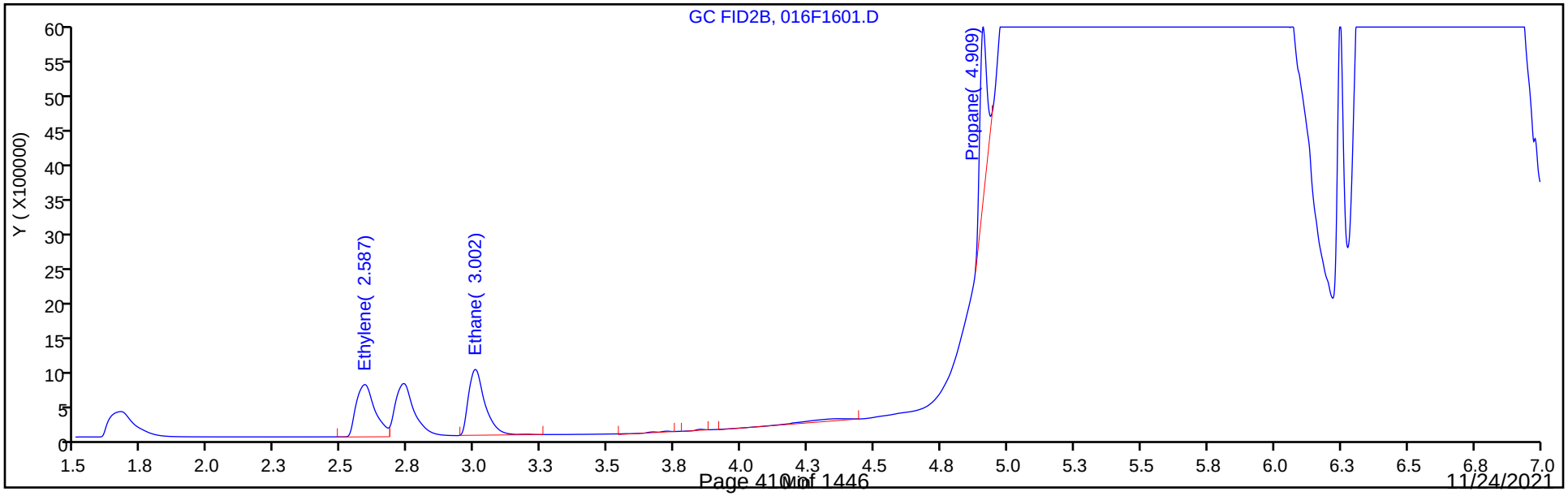
Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\016F1601.D

Injection Date:	10-Nov-2021 15:06:43	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	16
Client ID:					
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 VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556939/16 Calibration Date: 11/10/2021 15:06

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: 016F1601.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		37466		66.4	65.7	1.1	20.0
Ethylene	Ave	30980	32323		120	115	4.3	20.0
Ethane	Ave	33383	32985		122	123	-1.2	20.0
Acetylene	Ave	34179			3.70	107		

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556939/16 Calibration Date: 11/10/2021 15:06

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: 016F1601.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.65	1.73
Ethylene	2.59	2.56	2.66
Ethane	3.00	2.97	3.07
Acetylene			

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\016F1601.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 10-Nov-2021 15:06:43 ALS Bottle#: 16 Worklist Smp#: 16
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\20211110-106374.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 15:36:04 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 15:33:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.288	1.299	-0.011	2365329	65.7	65.4	
2	1.670	1.686	-0.016	2461644	65.7	66.4	
						RPD = 1.60	
3 Ethane							
1	1.550	1.553	-0.003	4224202	123.2	127.1	
2	3.002	3.024	-0.022	4062713	123.2	121.7	
						RPD = 4.32	
4 Ethylene							M
1	1.862	1.844	0.018	4152681	114.9	117.9	
2	2.587	2.608	-0.021	3713951	114.9	119.9	M
						RPD = 1.68	
5 Propane							M
1	2.680	2.648	0.032	6621088	180.6	183.9	
2	4.909	4.928	-0.019	4362642	180.6	124.6	M
						RPD = 38.42	
6 Acetylene							
1		4.113			ND	ND	
2		2.751					
7 Butane							
1		4.481			ND	ND	
2		6.428					
8 isobutylene							
1		5.348			ND	ND	
2		6.269					

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

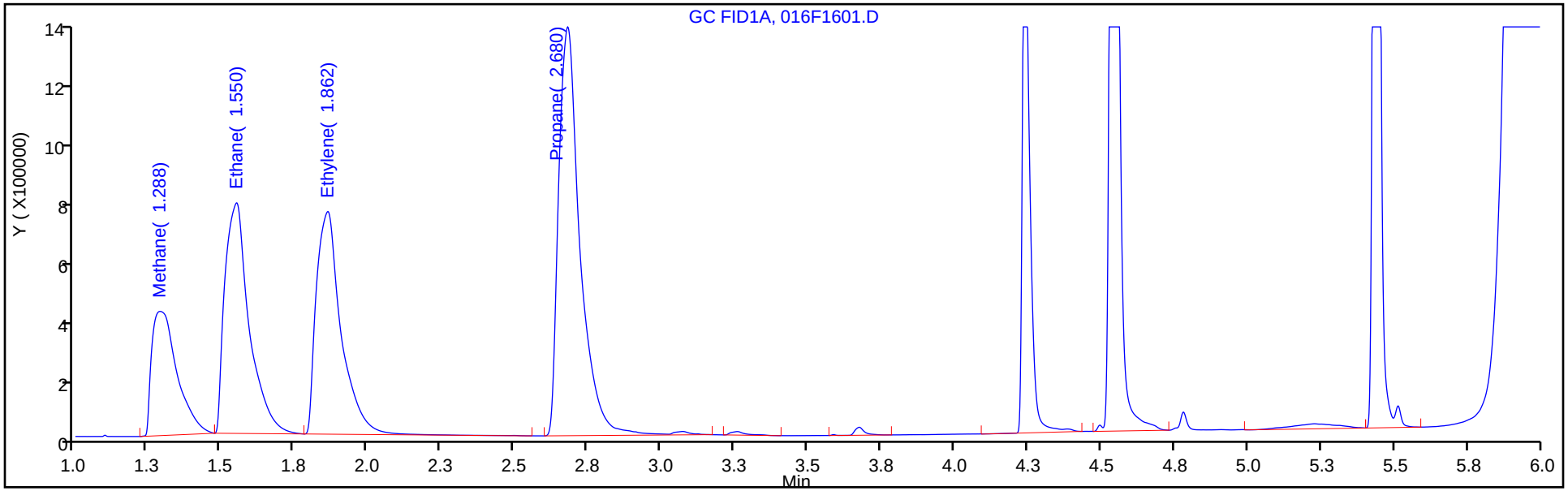
Report Date: 15-Nov-2021 15:36:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

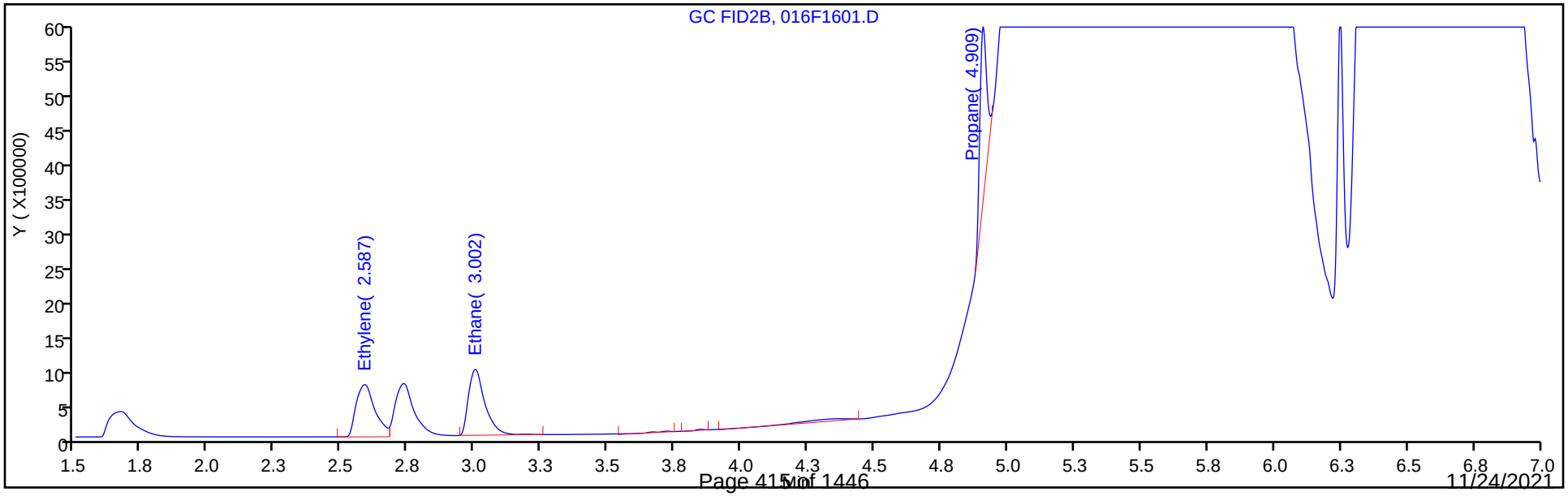
Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\016F1601.D

Injection Date:	10-Nov-2021 15:06:43	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	16
Client ID:					
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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

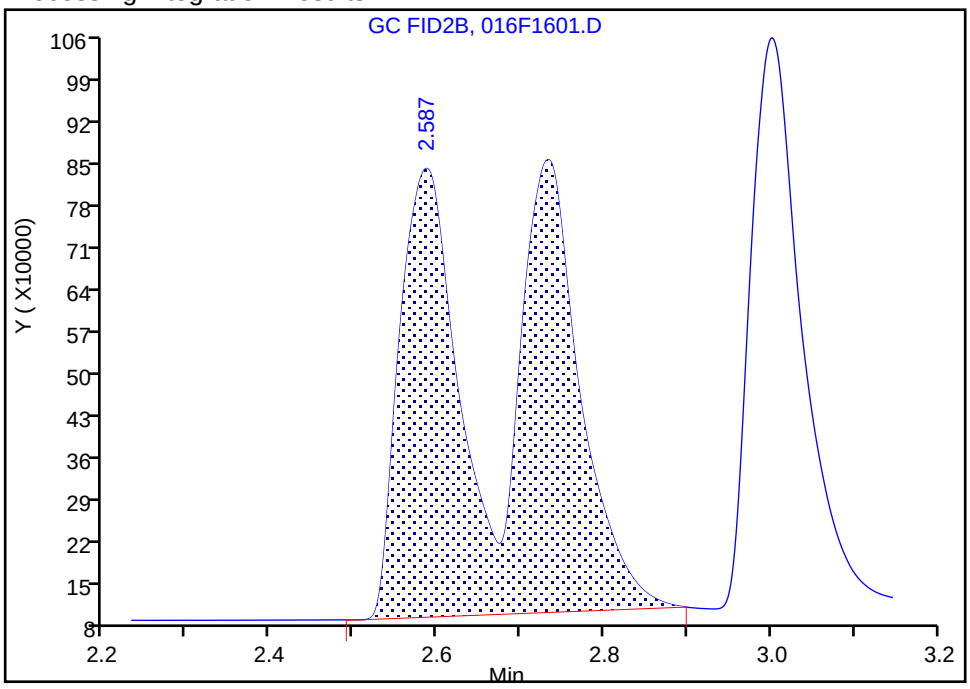
Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\016F1601.D
Injection Date: 10-Nov-2021 15:06:43 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

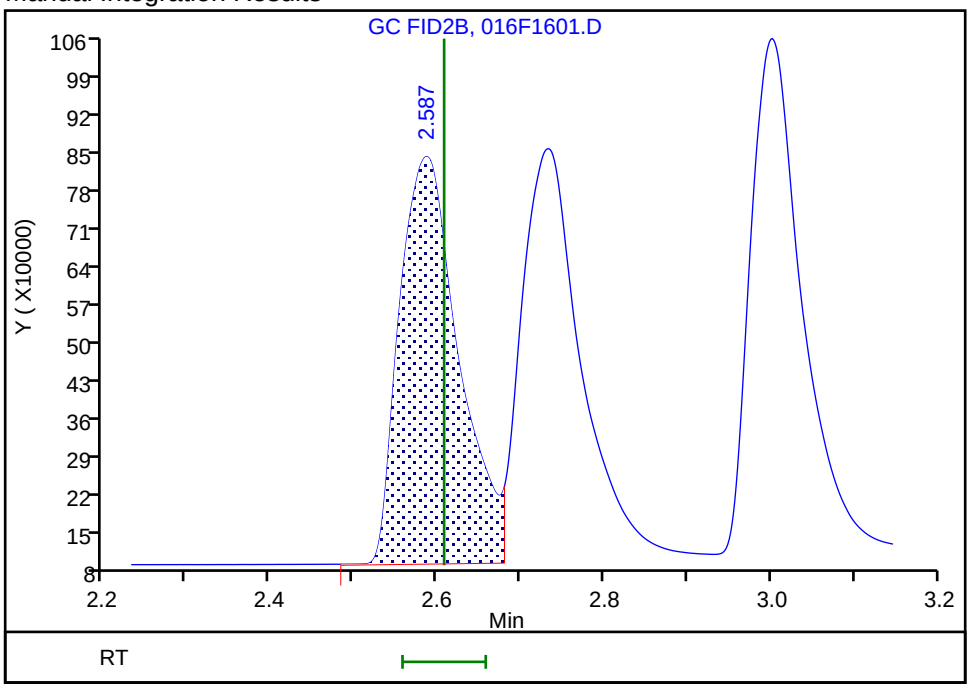
Processing Integration Results

RT: 2.59
Area: 7315166
Amount: 236.1234
Amount Units: ug/l



Manual Integration Results

RT: 2.59
Area: 3713951
Amount: 119.8812
Amount Units: ug/l



Reviewer: meierg, 15-Nov-2021 15:32:06
Audit Action: Manually Integrated Audit Reason: Shouldering

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556939/30 Calibration Date: 11/10/2021 18:09

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: 030F3001.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		36669		66.6	65.7	1.4	20.0
Ethane	Ave	33241	35064		130	123	5.5	20.0
Ethylene	Ave	35226	36793		120	115	4.4	20.0
Acetylene	Ave	28139			3.70	107		

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556939/30 Calibration Date: 11/10/2021 18:09

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: 030F3001.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.29	1.26	1.34
Ethane	1.55	1.50	1.60
Ethylene	1.87	1.79	1.89
Acetylene			

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\030F3001.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 10-Nov-2021 18:09:18 ALS Bottle#: 30 Worklist Smp#: 30
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\20211110-106374.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 15:36:09 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: CTX1649

First Level Reviewer: sciannac Date: 12-Nov-2021 16:00:29

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	2409293	65.7	66.6	
2	1.674	1.686	-0.012	2497335	65.7	67.4	
						RPD = 1.18	
3 Ethane							
1	1.554	1.553	0.001	4318826	123.2	129.9	
2	3.012	3.024	-0.012	4352831	123.2	130.4	
						RPD = 0.36	
4 Ethylene							
1	1.865	1.844	0.021	4227465	114.9	120.0	
2	2.594	2.608	-0.014	3719392	114.9	120.1	
						RPD = 0.04	
5 Propane							
1	2.699	2.648	0.051	6902958	180.6	191.7	
2	4.922	4.928	-0.006	6584025	180.6	188.1	
						RPD = 1.92	
6 Acetylene							
1		4.113			ND	ND	
2		2.751					
7 Butane							
1		4.481			ND	ND	
2		6.428					
8 isobutylene							
1		5.348			ND	ND	
2		6.269					

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

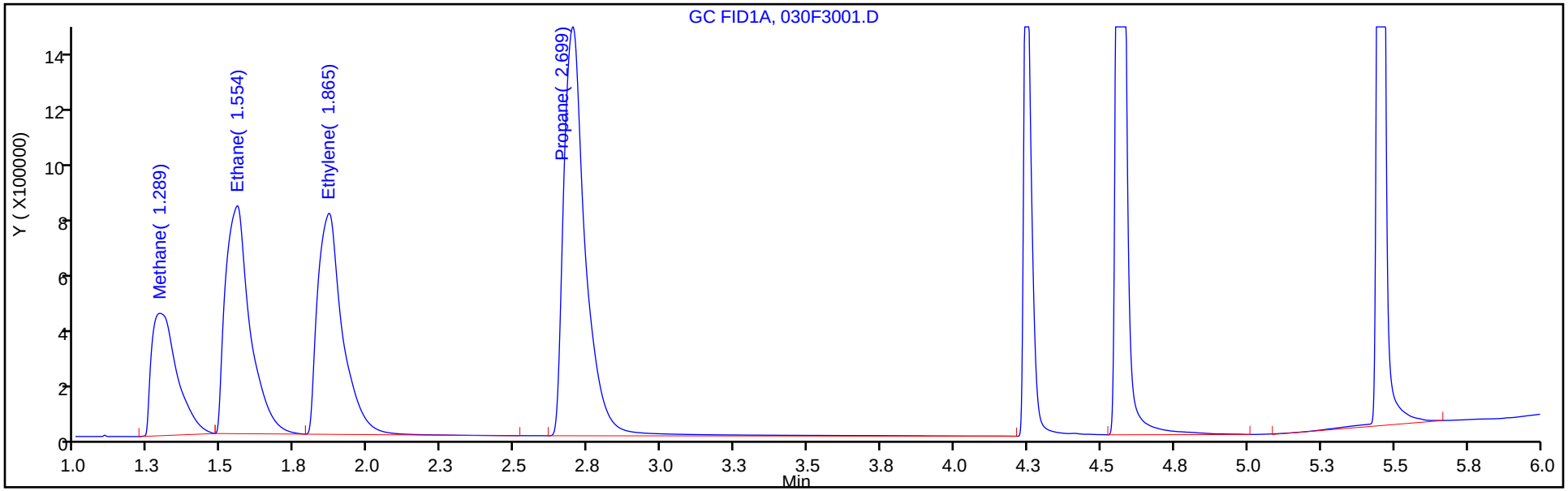
Report Date: 15-Nov-2021 15:36:09 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

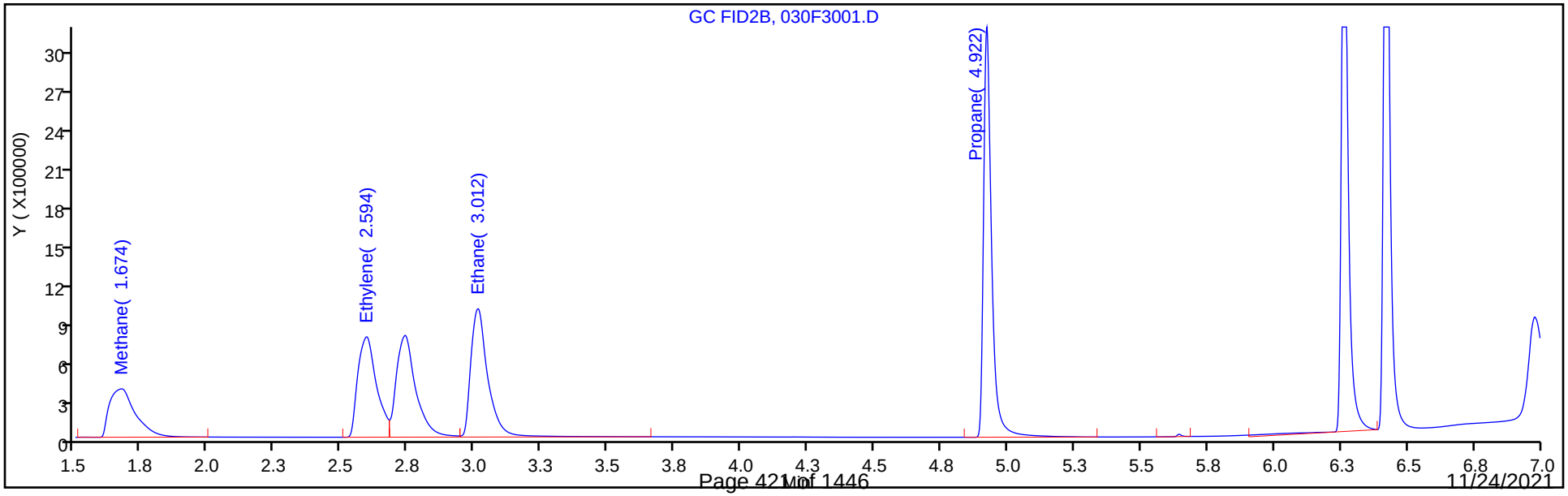
Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\030F3001.D

Injection Date:	10-Nov-2021 18:09:18	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	30
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556939/30 Calibration Date: 11/10/2021 18:09

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: 030F3001.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		38009		67.4	65.7	2.6	20.0
Ethylene	Ave	30980	32371		120	115	4.5	20.0
Ethane	Ave	33383	35340		130	123	5.9	20.0
Acetylene	Ave	34179			3.70	107		

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556939/30 Calibration Date: 11/10/2021 18:09

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: 030F3001.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.65	1.73
Ethylene	2.59	2.56	2.66
Ethane	3.01	2.97	3.07
Acetylene			

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\030F3001.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 10-Nov-2021 18:09:18 ALS Bottle#: 30 Worklist Smp#: 30
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\20211110-106374.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 15:36:09 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: CTX1649

First Level Reviewer: sciannac Date: 12-Nov-2021 16:00:29

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	2409293	65.7	66.6	
2	1.674	1.686	-0.012	2497335	65.7	67.4	
						RPD = 1.18	
3 Ethane							
1	1.554	1.553	0.001	4318826	123.2	129.9	
2	3.012	3.024	-0.012	4352831	123.2	130.4	
						RPD = 0.36	
4 Ethylene							
1	1.865	1.844	0.021	4227465	114.9	120.0	
2	2.594	2.608	-0.014	3719392	114.9	120.1	
						RPD = 0.04	
5 Propane							
1	2.699	2.648	0.051	6902958	180.6	191.7	
2	4.922	4.928	-0.006	6584025	180.6	188.1	
						RPD = 1.92	
6 Acetylene							
1		4.113			ND	ND	
2		2.751					
7 Butane							
1		4.481			ND	ND	
2		6.428					
8 isobutylene							
1		5.348			ND	ND	
2		6.269					

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

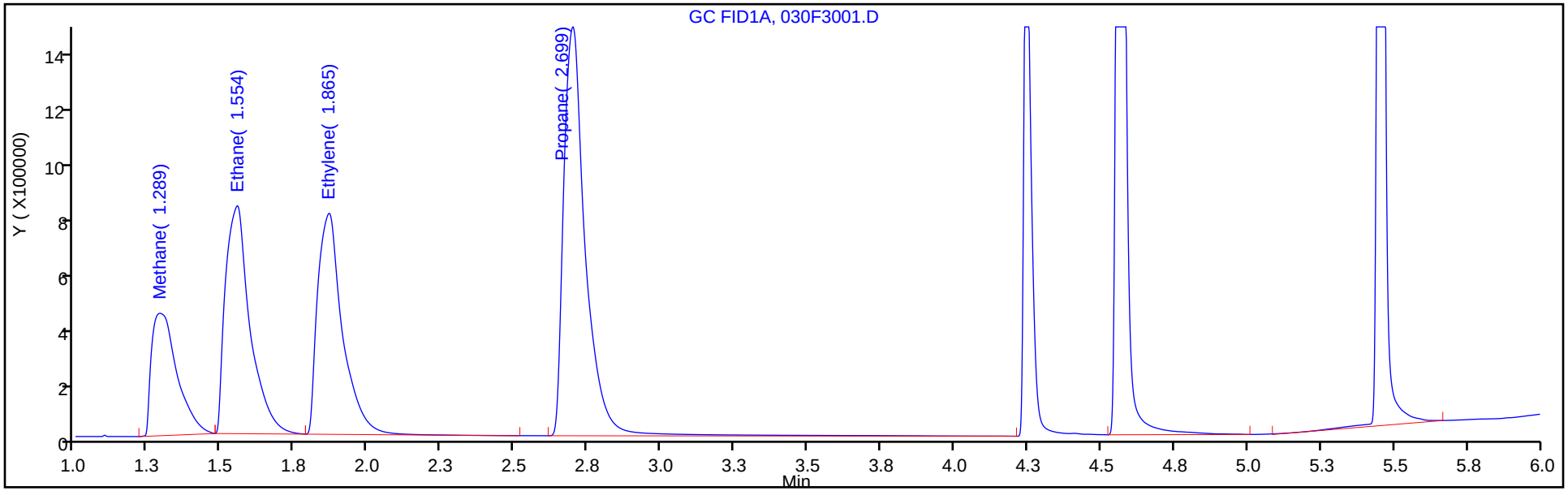
Report Date: 15-Nov-2021 15:36:10 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

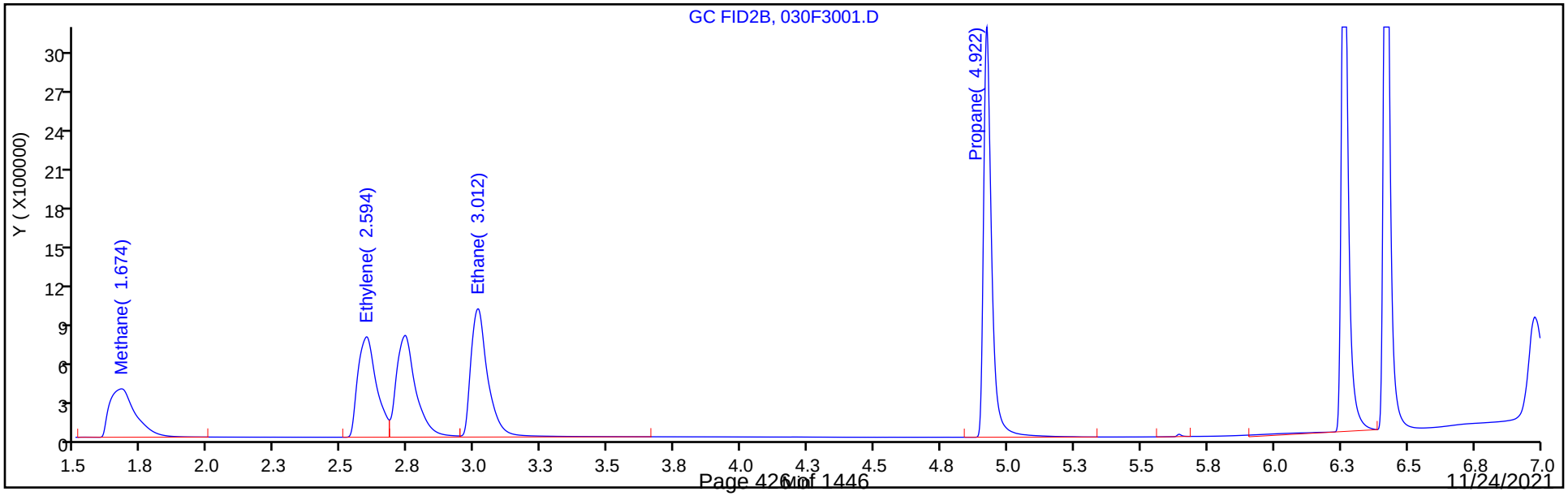
Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\030F3001.D

Injection Date:	10-Nov-2021 18:09:18	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	30
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCVRT 280-557116/1 Calibration Date: 11/11/2021 16:10

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: 001F0101.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		36053		65.5	65.7	-0.3	20.0
Ethane	Ave	33241	34184		127	123	2.8	20.0
Ethylene	Ave	35226	36140		118	115	2.6	20.0
Acetylene	Ave	28139	28976		110	107	3.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCVRT 280-557116/1 Calibration Date: 11/11/2021 16:10

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: 001F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.30	1.26	1.34
Ethane	1.56	1.51	1.61
Ethylene	1.85	1.80	1.90
Acetylene	4.10	4.02	4.18

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\001F0101.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 11-Nov-2021 16:10:00 ALS Bottle#: 1 Worklist Smp#: 1
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\20211111-106416.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:29:05 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: CTX1649

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.301	1.301	0.000	2368813	65.7	65.5	
2	1.687	1.687	0.000	2477119	65.7	66.9	
						RPD = 2.09	
3 Ethane							
1	1.556	1.556	0.000	4210419	123.2	126.7	
2	3.026	3.026	0.000	4305906	123.2	129.0	
						RPD = 1.82	
4 Ethylene							
1	1.846	1.846	0.000	4152512	114.9	117.9	
2	2.611	2.611	0.000	3661771	114.9	118.2	
						RPD = 0.27	
5 Propane							
1	2.644	2.644	0.000	6620704	180.6	183.9	
2	4.927	4.927	0.000	6371116	180.6	182.0	
						RPD = 1.03	
6 Acetylene							
1	4.097	4.097	0.000	3090845	106.7	109.8	
2	2.754	2.754	0.000	3859909	106.7	112.9	
						RPD = 2.77	
7 Butane							
1	4.472	4.472	0.000	8593582	238.1	235.9	
2	6.426	6.426	0.000	8100539	238.1	230.5	
						RPD = 2.32	
8 isobutylene							
1	5.339	5.339	0.000	8154871	229.8	225.7	
2	6.267	6.267	0.000	7537405	229.8	227.0	
						RPD = 0.56	

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

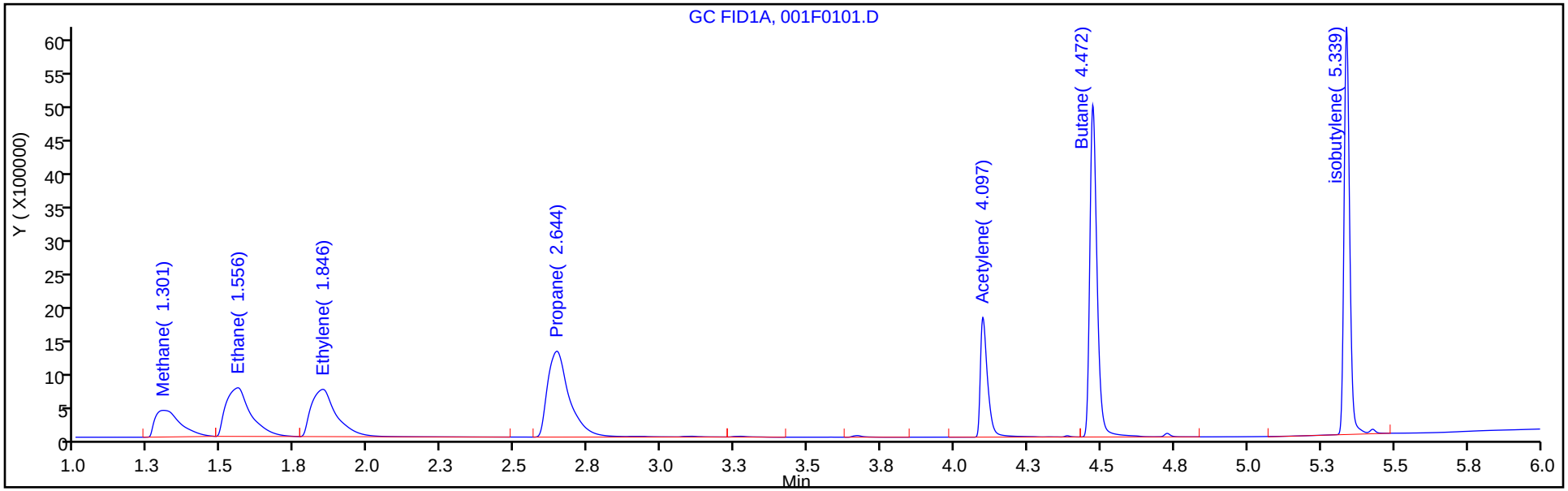
Report Date: 15-Nov-2021 16:29:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

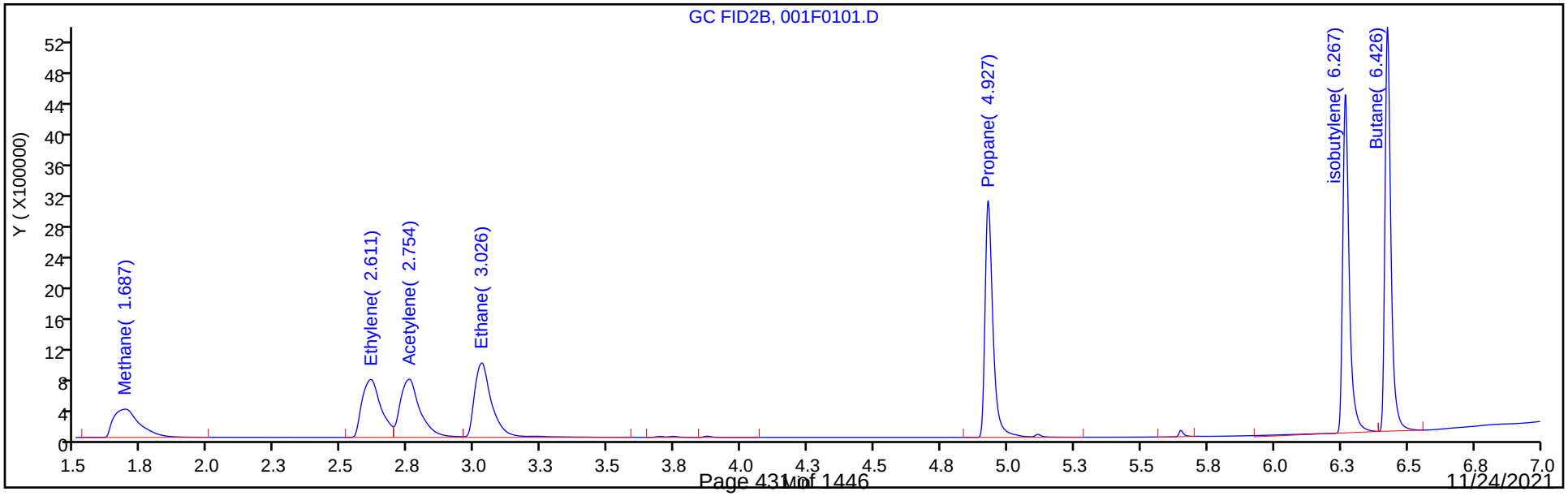
Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\001F0101.D

Injection Date:	11-Nov-2021 16:10:00	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	1
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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCVRT 280-557116/1 Calibration Date: 11/11/2021 16:10

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: 001F0101.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		37702		66.9	65.7	1.8	20.0
Ethylene	Ave	30980	31869		118	115	2.9	20.0
Acetylene	Ave	34179	36186		113	107	5.9	20.0
Ethane	Ave	33383	34959		129	123	4.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCVRT 280-557116/1 Calibration Date: 11/11/2021 16:10

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: 001F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.69	1.65	1.73
Ethylene	2.61	2.56	2.66
Acetylene	2.75	2.67	2.83
Ethane	3.03	2.98	3.08

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\001F0101.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 11-Nov-2021 16:10:00 ALS Bottle#: 1 Worklist Smp#: 1
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\20211111-106416.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:29:05 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: CTX1649

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.301	1.301	0.000	2368813	65.7	65.5	
2	1.687	1.687	0.000	2477119	65.7	66.9	
						RPD = 2.09	
3 Ethane							
1	1.556	1.556	0.000	4210419	123.2	126.7	
2	3.026	3.026	0.000	4305906	123.2	129.0	
						RPD = 1.82	
4 Ethylene							
1	1.846	1.846	0.000	4152512	114.9	117.9	
2	2.611	2.611	0.000	3661771	114.9	118.2	
						RPD = 0.27	
5 Propane							
1	2.644	2.644	0.000	6620704	180.6	183.9	
2	4.927	4.927	0.000	6371116	180.6	182.0	
						RPD = 1.03	
6 Acetylene							
1	4.097	4.097	0.000	3090845	106.7	109.8	
2	2.754	2.754	0.000	3859909	106.7	112.9	
						RPD = 2.77	
7 Butane							
1	4.472	4.472	0.000	8593582	238.1	235.9	
2	6.426	6.426	0.000	8100539	238.1	230.5	
						RPD = 2.32	
8 isobutylene							
1	5.339	5.339	0.000	8154871	229.8	225.7	
2	6.267	6.267	0.000	7537405	229.8	227.0	
						RPD = 0.56	

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

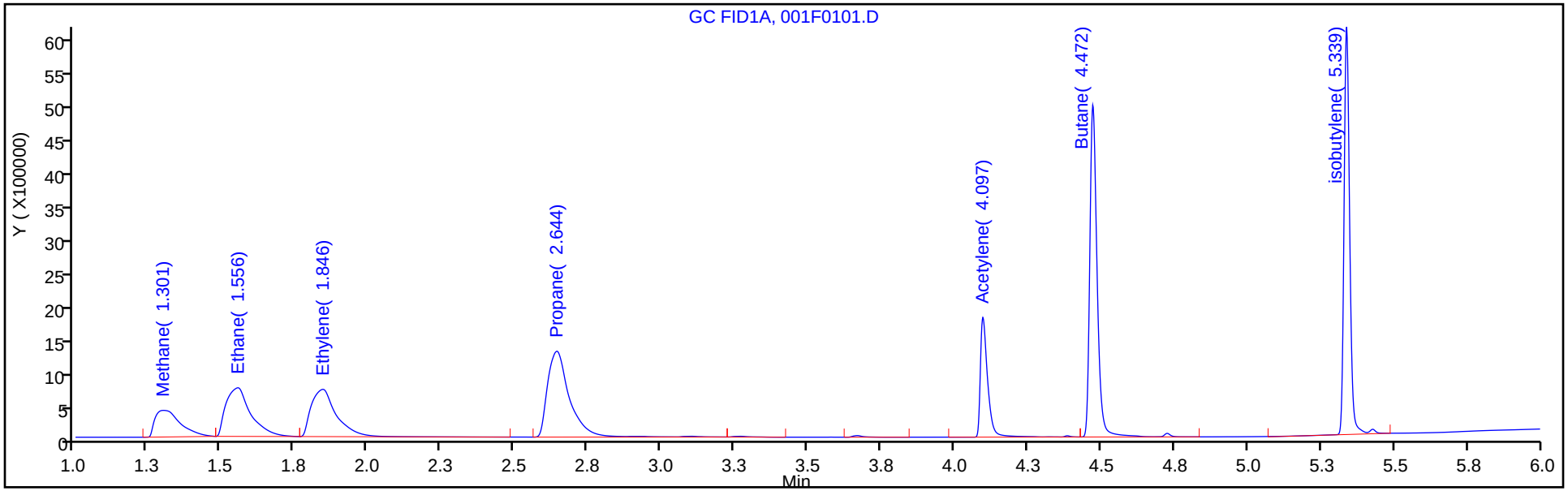
Report Date: 15-Nov-2021 16:29:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

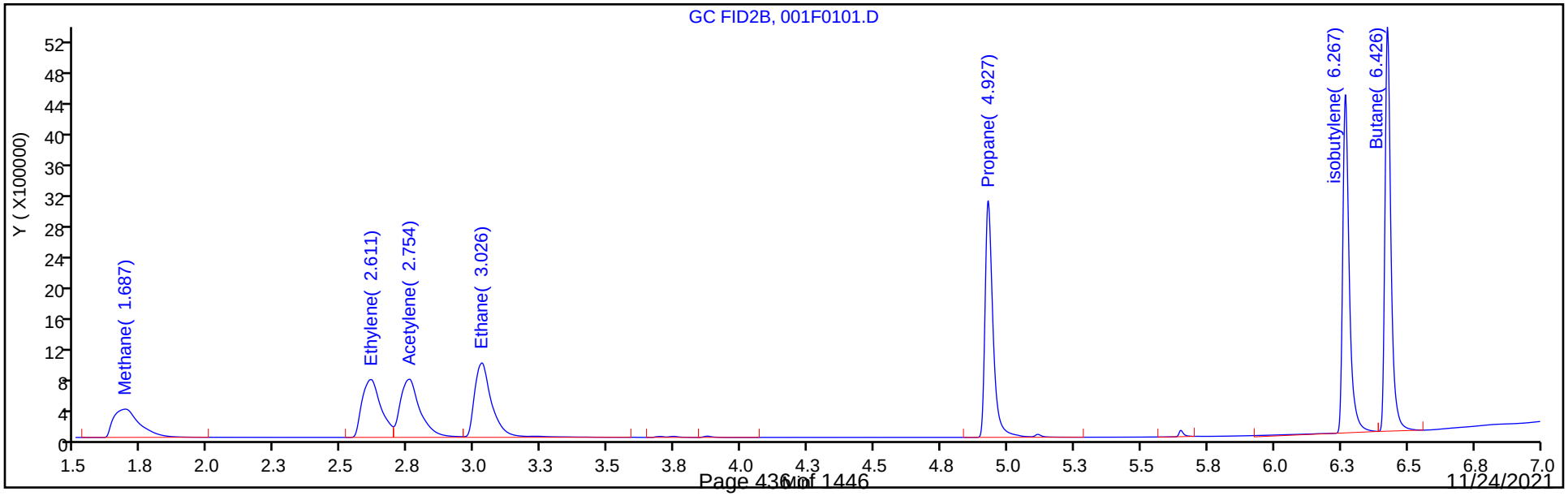
Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\001F0101.D

Injection Date:	11-Nov-2021 16:10:00	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	1
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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-557116/17 Calibration Date: 11/11/2021 19:39

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 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		37173		67.6	65.7	2.9	20.0
Ethane	Ave	33241	35572		132	123	7.0	20.0
Ethylene	Ave	35226	37375		122	115	6.1	20.0
Acetylene	Ave	28139			3.70	107		

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-557116/17 Calibration Date: 11/11/2021 19:39

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 017F1701.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.28	1.26	1.34
Ethane	1.55	1.51	1.61
Ethylene	1.86	1.80	1.90
Acetylene			

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\017F1701.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 11-Nov-2021 19:39:12 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155057-I-11
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:29:11 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 16:27:07

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.284	1.301	-0.017	2442387	65.7	67.6	
2	1.667	1.687	-0.020	2531168	65.7	68.4	
						RPD = 1.16	
3 Ethane							
1	1.547	1.556	-0.009	4381421	123.2	131.8	
2	3.009	3.026	-0.017	4486316	123.2	134.4	
						RPD = 1.94	
4 Ethylene							
1	1.859	1.846	0.013	4294422	114.9	121.9	
2	2.589	2.611	-0.022	3765922	114.9	121.6	
						RPD = 0.29	
5 Propane							
1	2.690	2.644	0.046	6889266	180.6	191.3	
2	4.922	4.927	-0.005	6662669	180.6	190.3	
						RPD = 0.53	
6 Acetylene							
1		4.097			ND	ND	
2		2.754					
7 Butane							
1		4.472			ND	ND	
2		6.426					
8 isobutylene							
1		5.339			ND	ND	
2		6.267					

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

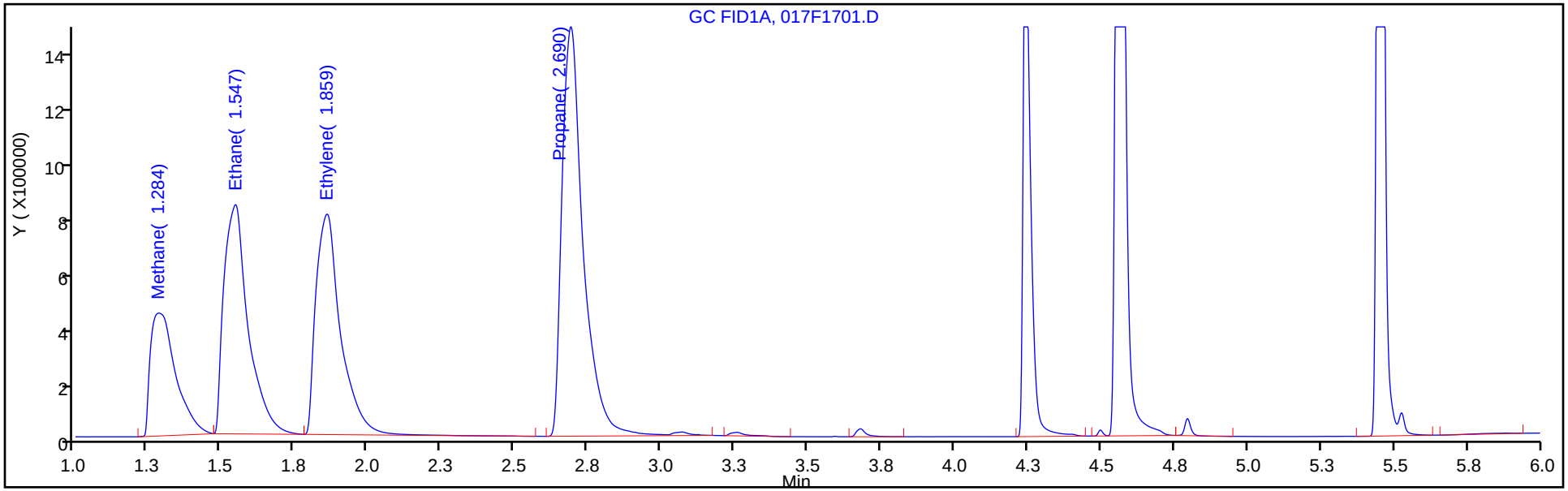
Report Date: 15-Nov-2021 16:29:11 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

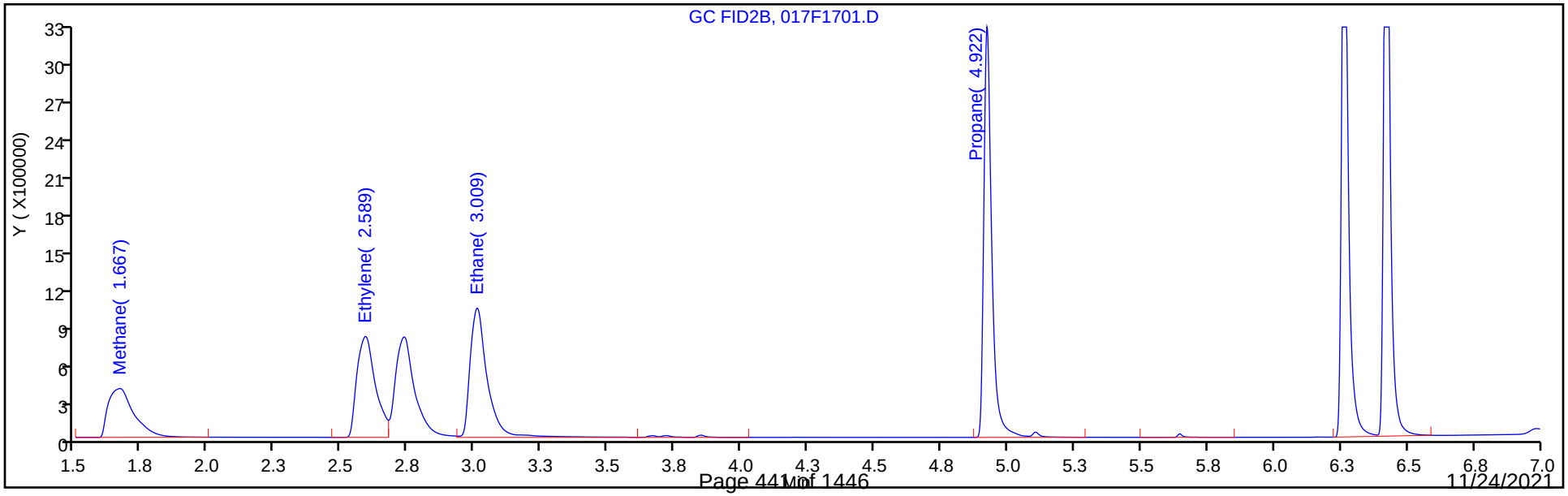
Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\017F1701.D

Injection Date:	11-Nov-2021 19:39:12	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



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-557116/17 Calibration Date: 11/11/2021 19:39

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 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		38524		68.4	65.7	4.1	20.0
Ethylene	Ave	30980	32776		122	115	5.8	20.0
Ethane	Ave	33383	36424		134	123	9.1	20.0
Acetylene	Ave	34179			3.70	107		

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-557116/17 Calibration Date: 11/11/2021 19:39

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 017F1701.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.65	1.73
Ethylene	2.59	2.56	2.66
Ethane	3.01	2.98	3.08
Acetylene			

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\017F1701.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 11-Nov-2021 19:39:12 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155057-I-11
Operator ID: sciannac Instrument ID: VGC_J
Sublist: chrom-RSK_J*sub5

Method: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:29:11 Calib Date: 24-Sep-2021 15:12:55
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

Column 1 : Rt-Alumina BOND/KCl (0.53 mm) Det: GC FID1A
Column 2 : HP-PLOT/Q (0.53 mm) Det: GC FID2B
Process Host: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 16:27:07

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.284	1.301	-0.017	2442387	65.7	67.6	
2	1.667	1.687	-0.020	2531168	65.7	68.4	
						RPD = 1.16	
3 Ethane							
1	1.547	1.556	-0.009	4381421	123.2	131.8	
2	3.009	3.026	-0.017	4486316	123.2	134.4	
						RPD = 1.94	
4 Ethylene							
1	1.859	1.846	0.013	4294422	114.9	121.9	
2	2.589	2.611	-0.022	3765922	114.9	121.6	
						RPD = 0.29	
5 Propane							
1	2.690	2.644	0.046	6889266	180.6	191.3	
2	4.922	4.927	-0.005	6662669	180.6	190.3	
						RPD = 0.53	
6 Acetylene							
1		4.097			ND	ND	
2		2.754					
7 Butane							
1		4.472			ND	ND	
2		6.426					
8 isobutylene							
1		5.339			ND	ND	
2		6.267					

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

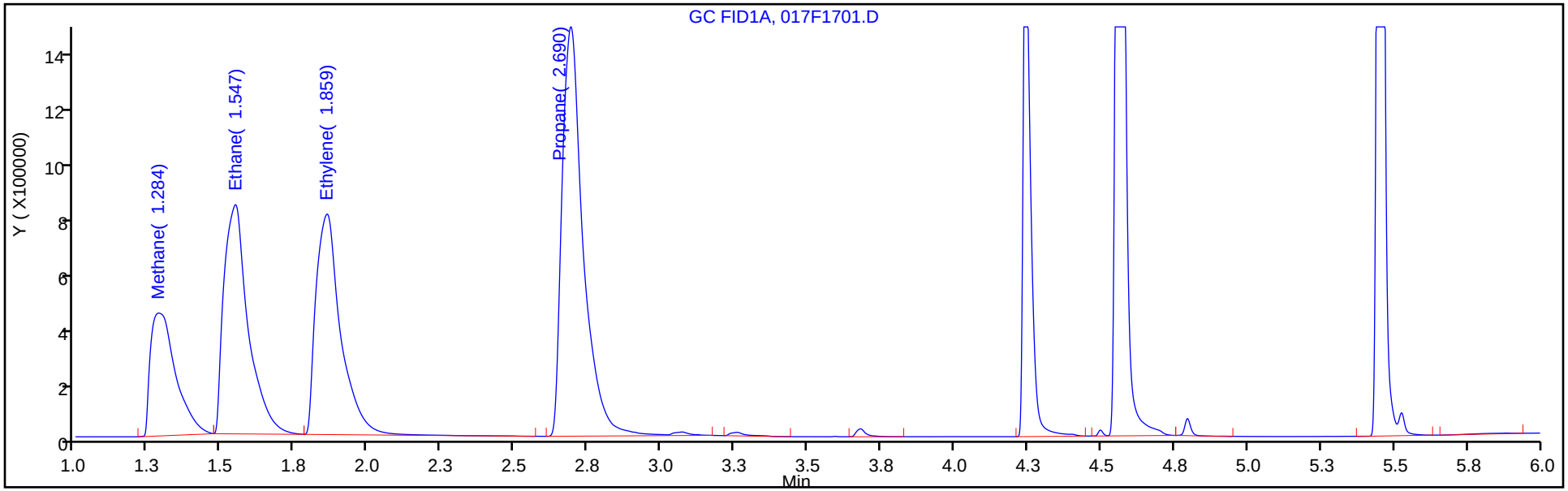
Report Date: 15-Nov-2021 16:29:11 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

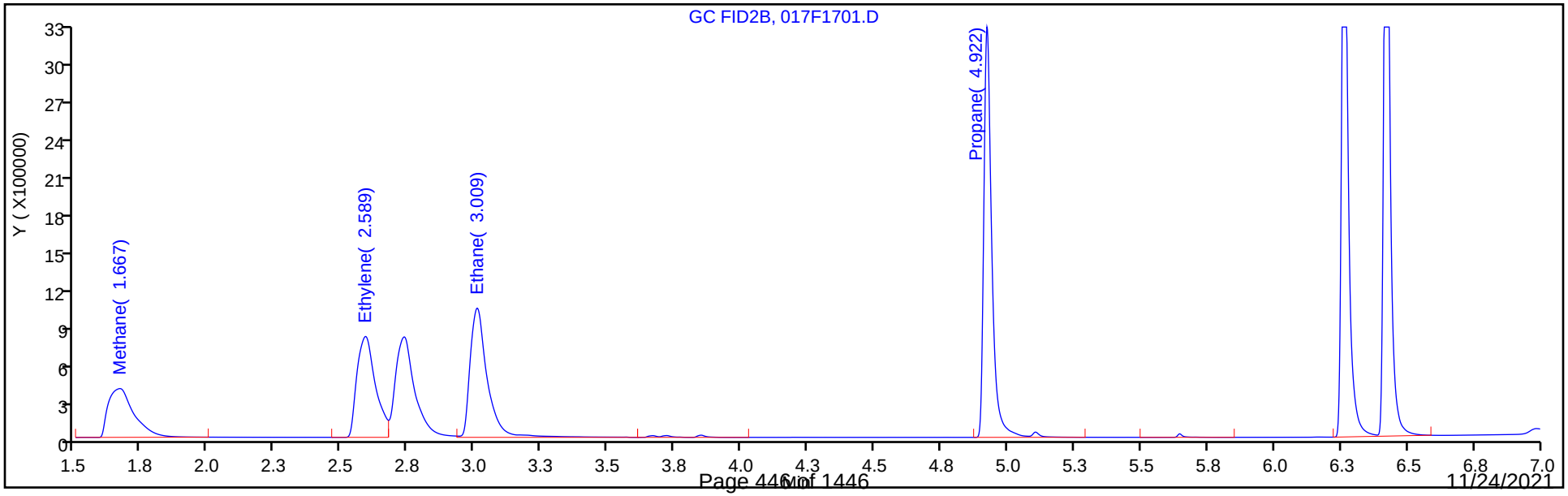
Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\017F1701.D

Injection Date:	11-Nov-2021 19:39:12	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



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-557116/30 Calibration Date: 11/11/2021 22:28

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: 030F3001.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		36556		66.4	65.7	1.1	20.0
Ethane	Ave	33241	34743		129	123	4.5	20.0
Ethylene	Ave	35226	36475		119	115	3.5	20.0
Acetylene	Ave	28139			3.70	107		

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-557116/30 Calibration Date: 11/11/2021 22:28

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: 030F3001.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.29	1.26	1.34
Ethane	1.55	1.51	1.61
Ethylene	1.86	1.80	1.90
Acetylene			

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\030F3001.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 11-Nov-2021 22:28:29 ALS Bottle#: 30 Worklist Smp#: 30
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\20211111-106416.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:36:50 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 16:36:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.285	1.301	-0.016	2401813	65.7	66.4	
2	1.670	1.687	-0.017	2494335	65.7	67.4	
						RPD = 1.38	
3 Ethane							
1	1.548	1.556	-0.008	4279349	123.2	128.7	
2	3.008	3.026	-0.018	4325789	123.2	129.6	
						RPD = 0.66	
4 Ethylene							M
1	1.863	1.846	0.017	4190970	114.9	119.0	
2	2.590	2.611	-0.021	3695015	114.9	119.3	M
						RPD = 0.25	
5 Propane							
1	2.695	2.644	0.051	6801962	180.6	188.9	
2	4.921	4.927	-0.006	6493103	180.6	185.5	
						RPD = 1.83	
6 Acetylene							
1		4.097			ND	ND	
2		2.754					
7 Butane							
1		4.472			ND	ND	
2		6.426					
8 isobutylene							
1		5.339			ND	ND	
2		6.267					

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

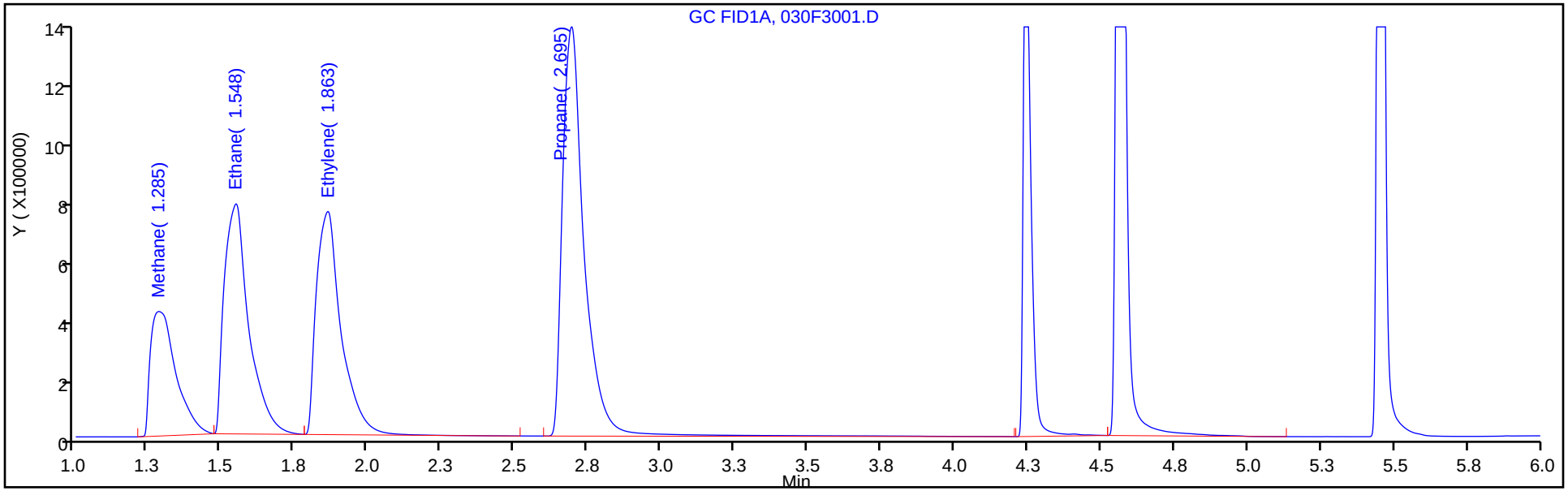
Report Date: 15-Nov-2021 16:36:50 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

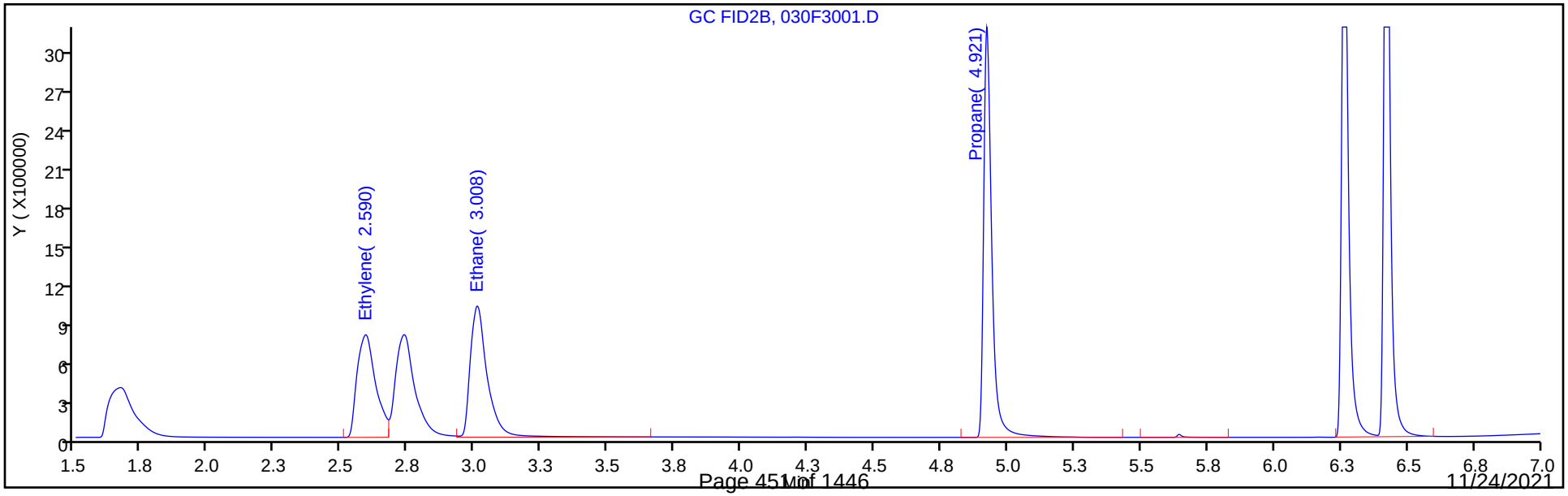
Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\030F3001.D

Injection Date:	11-Nov-2021 22:28:29	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	30
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-557116/30 Calibration Date: 11/11/2021 22:28

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: 030F3001.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		37964		67.4	65.7	2.5	20.0
Ethylene	Ave	30980	32159		119	115	3.8	20.0
Ethane	Ave	33383	35120		130	123	5.2	20.0
Acetylene	Ave	34179			3.70	107		

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-557116/30 Calibration Date: 11/11/2021 22:28

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: 030F3001.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.65	1.73
Ethylene	2.59	2.56	2.66
Ethane	3.01	2.98	3.08
Acetylene			

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\030F3001.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 11-Nov-2021 22:28:29 ALS Bottle#: 30 Worklist Smp#: 30
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\20211111-106416.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:36:50 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 16:36:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.285	1.301	-0.016	2401813	65.7	66.4	
2	1.670	1.687	-0.017	2494335	65.7	67.4	
						RPD = 1.38	
3 Ethane							
1	1.548	1.556	-0.008	4279349	123.2	128.7	
2	3.008	3.026	-0.018	4325789	123.2	129.6	
						RPD = 0.66	
4 Ethylene							M
1	1.863	1.846	0.017	4190970	114.9	119.0	
2	2.590	2.611	-0.021	3695015	114.9	119.3	M
						RPD = 0.25	
5 Propane							
1	2.695	2.644	0.051	6801962	180.6	188.9	
2	4.921	4.927	-0.006	6493103	180.6	185.5	
						RPD = 1.83	
6 Acetylene							
1		4.097			ND	ND	
2		2.754					
7 Butane							
1		4.472			ND	ND	
2		6.426					
8 isobutylene							
1		5.339			ND	ND	
2		6.267					

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

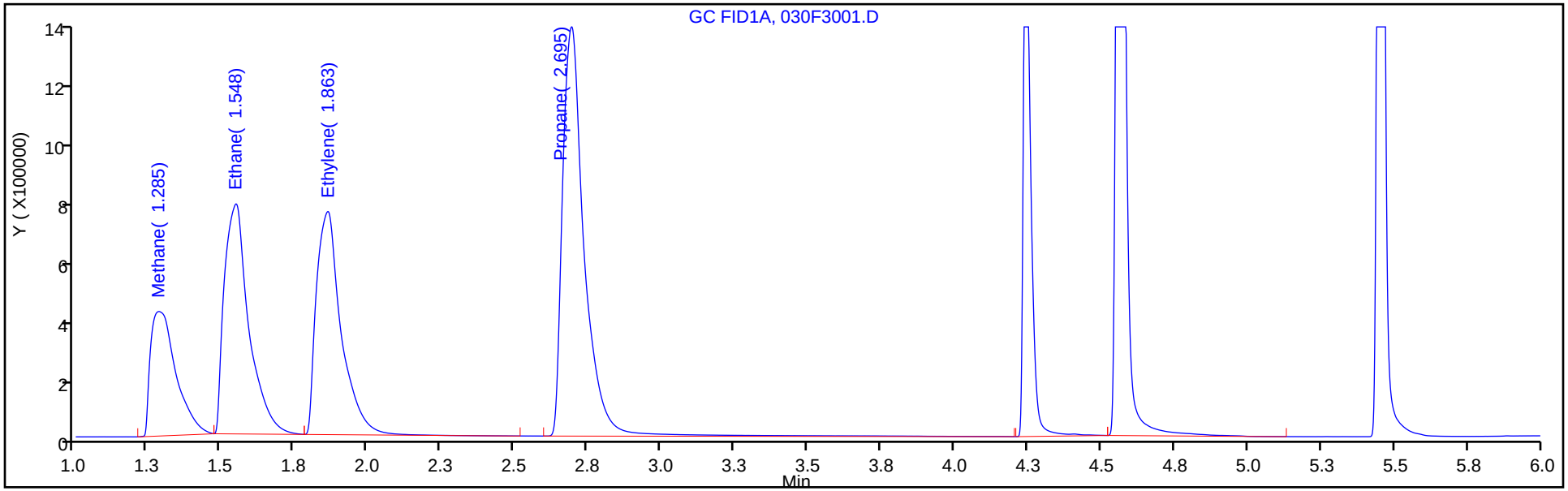
Report Date: 15-Nov-2021 16:36:50 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

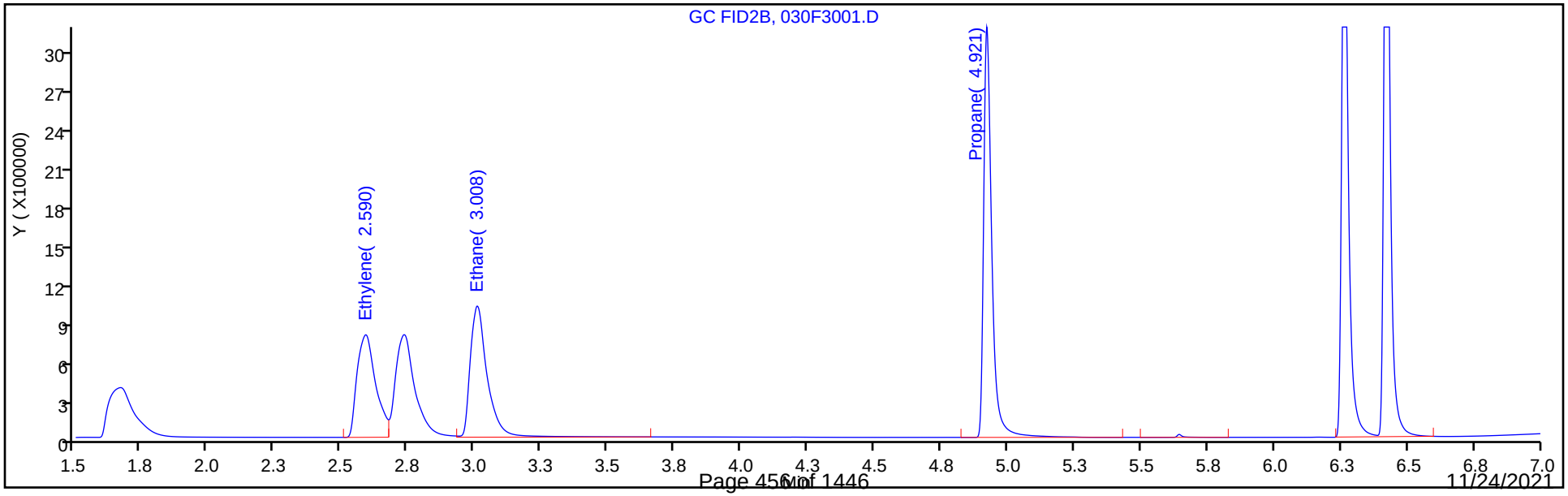
Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\030F3001.D

Injection Date:	11-Nov-2021 22:28:29	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	30
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
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

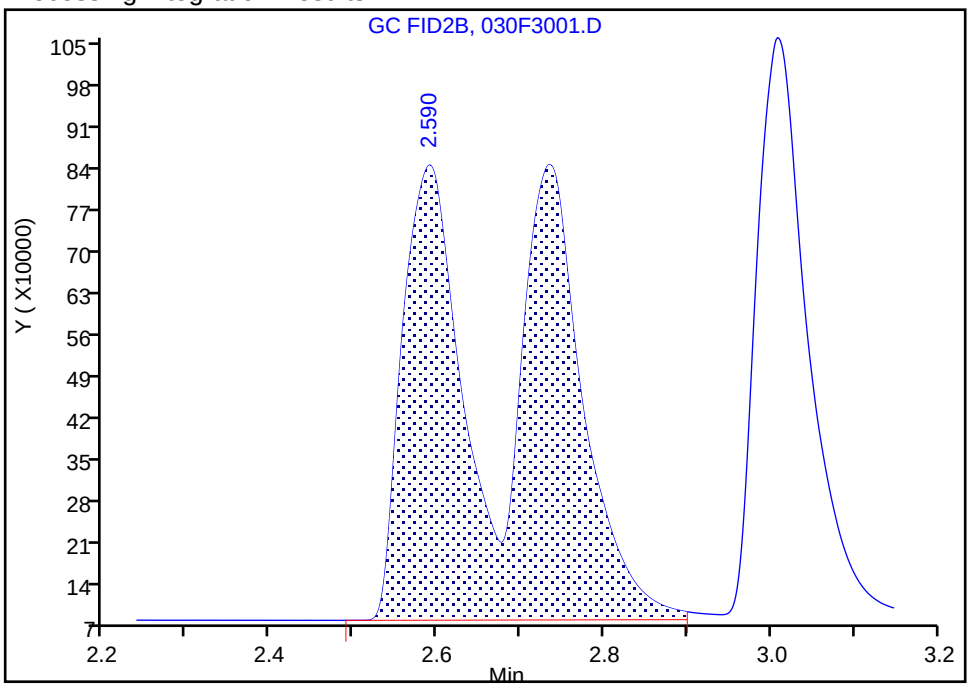
Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\030F3001.D
Injection Date: 11-Nov-2021 22:28:29 Instrument ID: VGC_J
Lims ID: ccv
Client ID:
Operator ID: sciannac ALS Bottle#: 30 Worklist Smp#: 30
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

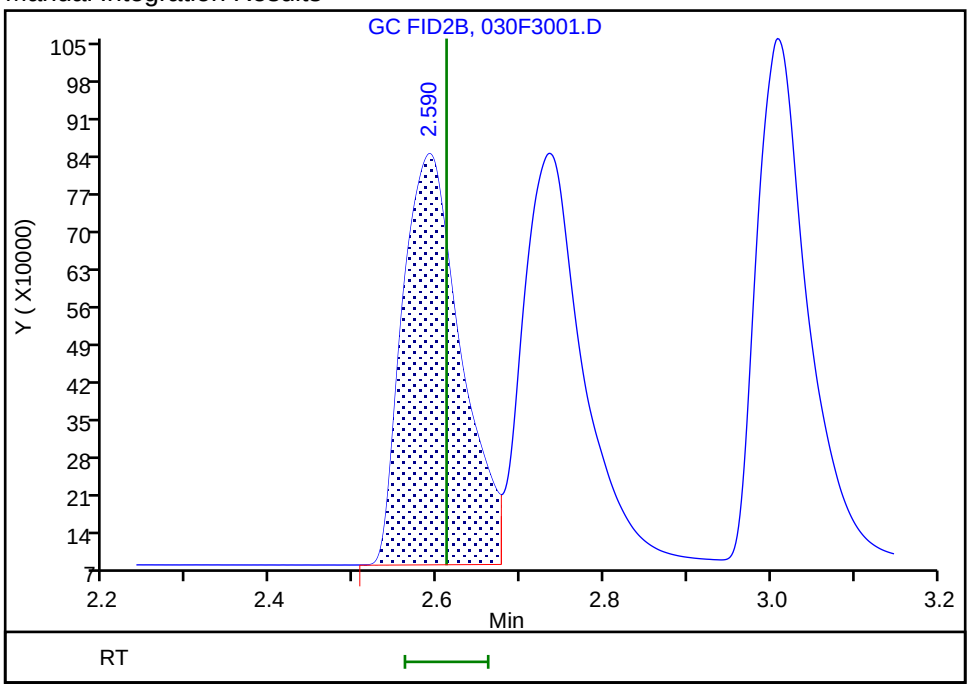
Processing Integration Results

RT: 2.59
Area: 7539112
Amount: 243.3521
Amount Units: ug/l



Manual Integration Results

RT: 2.59
Area: 3695015
Amount: 119.2700
Amount Units: ug/l



Reviewer: meierg, 15-Nov-2021 16:36:33
Audit Action: Manually Integrated Audit Reason: Shouldering

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCVRT 280-557326/1 Calibration Date: 11/12/2021 14:09

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: 001F0101.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		35682		64.8	65.7	-1.4	20.0
Ethane	Ave	33241	33102		123	123	-0.4	20.0
Ethylene	Ave	35226	35272		115	115	0.1	20.0
Acetylene	Ave	28139	28018		106	107	-0.4	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCVRT 280-557326/1 Calibration Date: 11/12/2021 14:09

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: 001F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.30	1.26	1.34
Ethane	1.55	1.50	1.60
Ethylene	1.85	1.80	1.90
Acetylene	4.12	4.04	4.20

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\001F0101.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 12-Nov-2021 14:09:25 ALS Bottle#: 1 Worklist Smp#: 1
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\20211112-106454.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:57:04 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: CTX1649

First Level Reviewer: ornelasg Date: 15-Nov-2021 13:06:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.298	1.298	0.000	2344444	65.7	64.8	
2	1.683	1.683	0.000	2457769	65.7	66.3	
						RPD = 2.35	
3 Ethane							
1	1.553	1.553	0.000	4077227	123.2	122.7	
2	3.021	3.021	0.000	4194979	123.2	125.7	
						RPD = 2.42	
4 Ethylene							
1	1.846	1.846	0.000	4052793	114.9	115.1	
2	2.605	2.605	0.000	3579420	114.9	115.5	
						RPD = 0.42	
5 Propane							
1	2.653	2.653	0.000	6202539	180.6	172.2	
2	4.928	4.928	0.000	6007014	180.6	171.6	
						RPD = 0.39	
6 Acetylene							
1	4.123	4.123	0.000	2988686	106.7	106.2	
2	2.748	2.748	0.000	3751855	106.7	109.8	
						RPD = 3.30	
7 Butane							
1	4.491	4.491	0.000	7454013	238.1	204.7	
2	6.426	6.426	0.000	7144431	238.1	203.3	
						RPD = 0.66	
8 isobutylene							
1	5.359	5.359	0.000	7210075	229.8	199.6	
2	6.268	6.268	0.000	6579695	229.8	198.2	
						RPD = 0.71	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

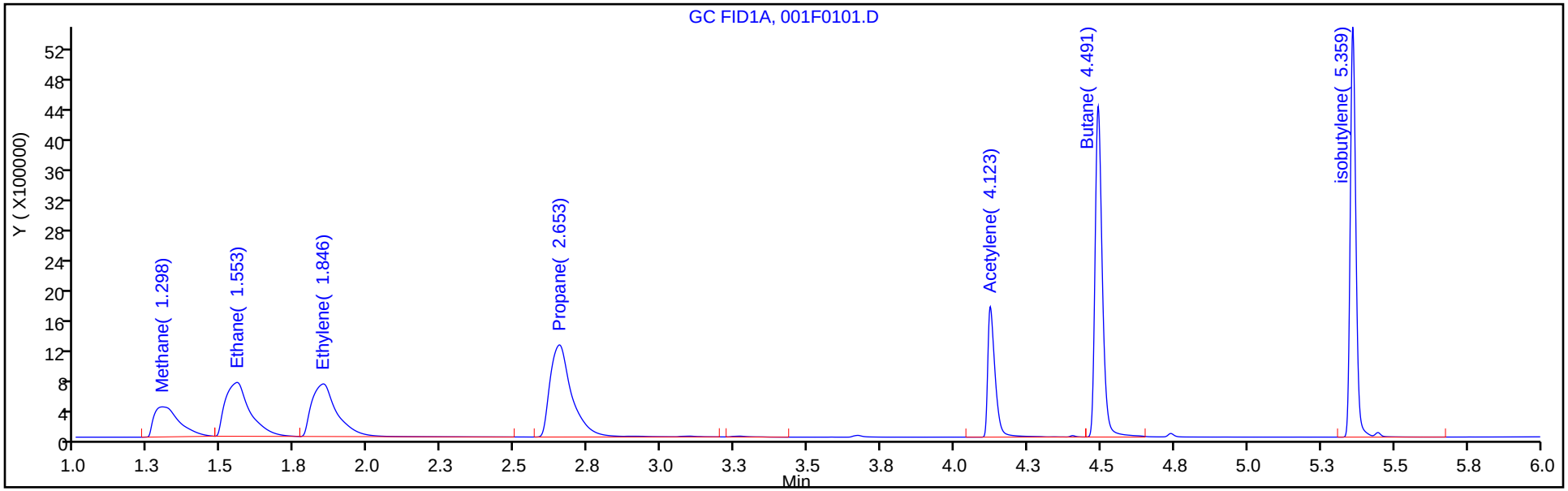
Report Date: 15-Nov-2021 16:57:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

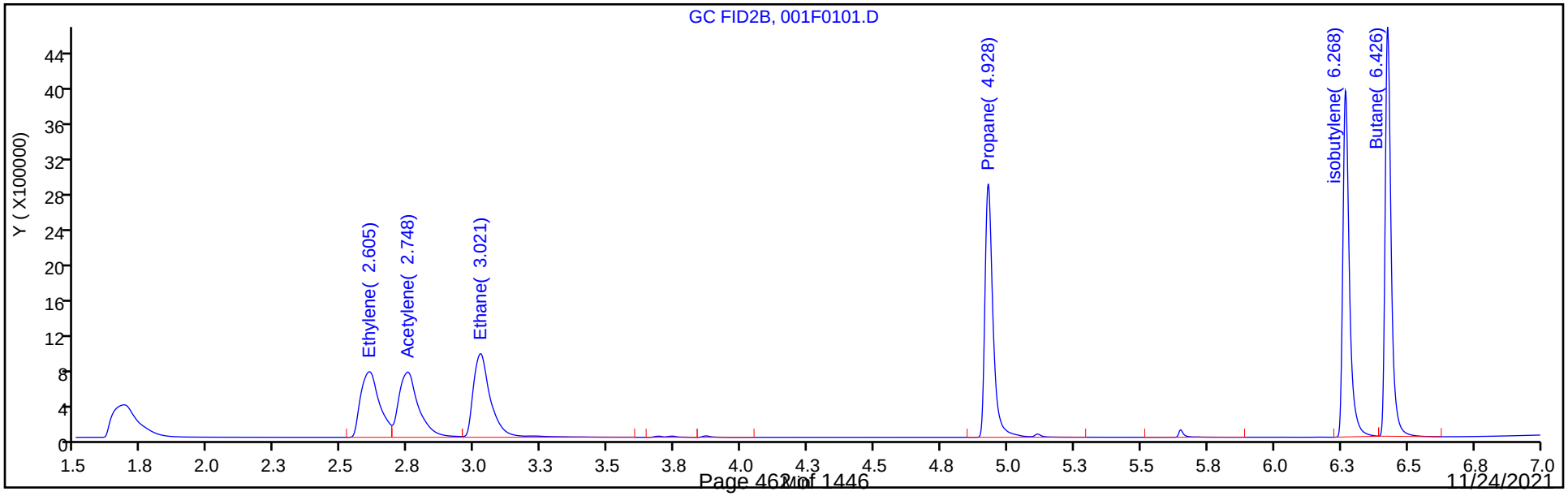
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\001F0101.D

Injection Date:	12-Nov-2021 14:09:25	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	1
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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCVRT 280-557326/1 Calibration Date: 11/12/2021 14:09

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: 001F0101.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		37407		66.3	65.7	1.0	20.0
Ethylene	Ave	30980	31152		116	115	0.6	20.0
Acetylene	Ave	34179	35173		110	107	2.9	20.0
Ethane	Ave	33383	34058		126	123	2.0	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCVRT 280-557326/1 Calibration Date: 11/12/2021 14:09

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: 001F0101.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.68	1.64	1.72
Ethylene	2.61	2.56	2.66
Acetylene	2.75	2.67	2.83
Ethane	3.02	2.97	3.07

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\001F0101.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 12-Nov-2021 14:09:25 ALS Bottle#: 1 Worklist Smp#: 1
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\20211112-106454.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:57:04 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: CTX1649

First Level Reviewer: ornelasg Date: 15-Nov-2021 13:06:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.298	1.298	0.000	2344444	65.7	64.8	
2	1.683	1.683	0.000	2457769	65.7	66.3	
						RPD = 2.35	
3 Ethane							
1	1.553	1.553	0.000	4077227	123.2	122.7	
2	3.021	3.021	0.000	4194979	123.2	125.7	
						RPD = 2.42	
4 Ethylene							
1	1.846	1.846	0.000	4052793	114.9	115.1	
2	2.605	2.605	0.000	3579420	114.9	115.5	
						RPD = 0.42	
5 Propane							
1	2.653	2.653	0.000	6202539	180.6	172.2	
2	4.928	4.928	0.000	6007014	180.6	171.6	
						RPD = 0.39	
6 Acetylene							
1	4.123	4.123	0.000	2988686	106.7	106.2	
2	2.748	2.748	0.000	3751855	106.7	109.8	
						RPD = 3.30	
7 Butane							
1	4.491	4.491	0.000	7454013	238.1	204.7	
2	6.426	6.426	0.000	7144431	238.1	203.3	
						RPD = 0.66	
8 isobutylene							
1	5.359	5.359	0.000	7210075	229.8	199.6	
2	6.268	6.268	0.000	6579695	229.8	198.2	
						RPD = 0.71	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

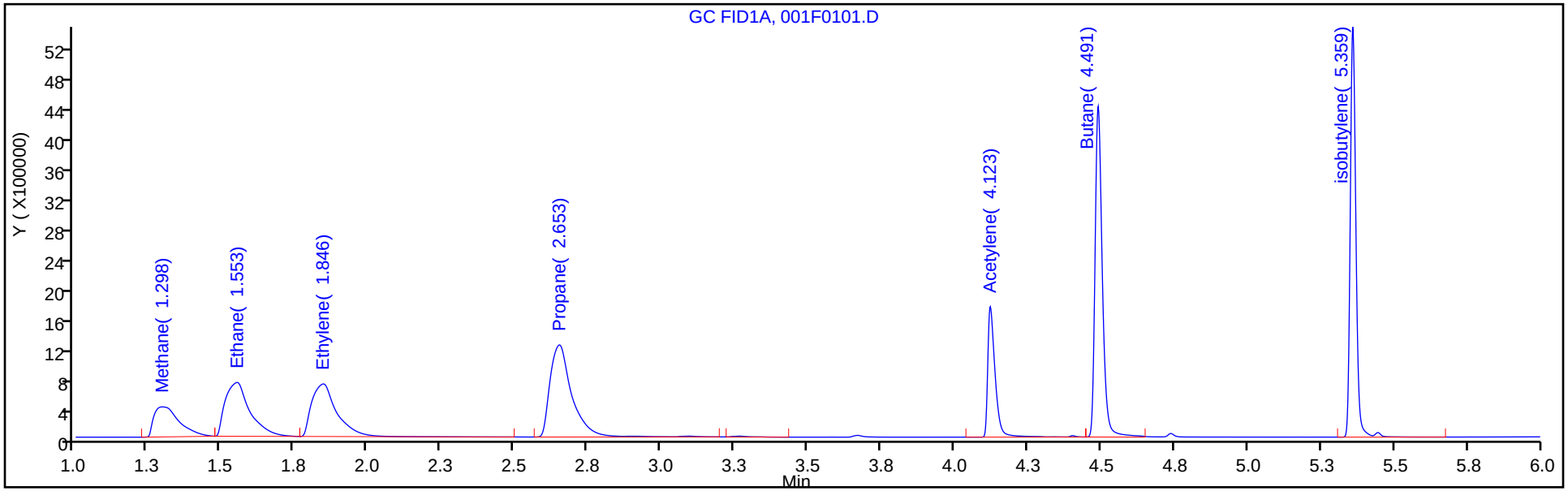
Report Date: 15-Nov-2021 16:57:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

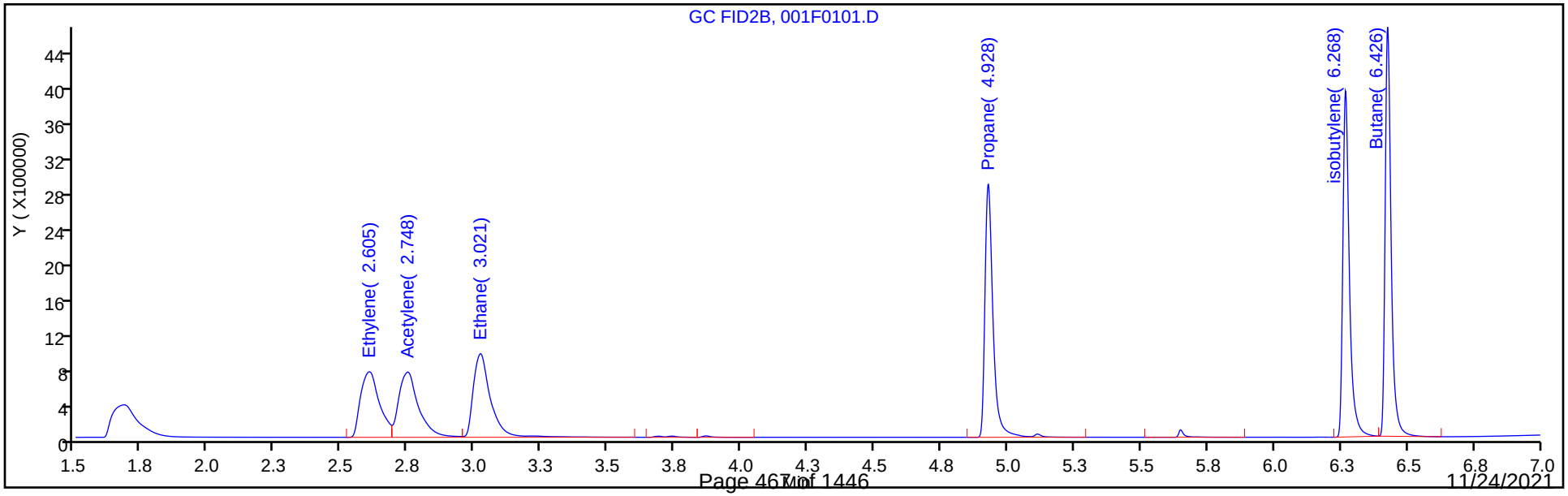
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\001F0101.D

Injection Date:	12-Nov-2021 14:09:25	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccvrt			Worklist Smp#:	1
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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-557326/20 Calibration Date: 11/12/2021 18:17

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: 020F2001.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		35605		64.7	65.7	-1.6	20.0
Ethane	Ave	33241	34039		126	123	2.4	20.0
Ethylene	Ave	35226	35817		117	115	1.7	20.0
Acetylene	Ave	28139	28349		107	107	0.7	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-557326/20 Calibration Date: 11/12/2021 18:17

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: 020F2001.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.29	1.26	1.34
Ethane	1.55	1.50	1.60
Ethylene	1.87	1.80	1.90
Acetylene	4.25	4.04	4.20

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\020F2001.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 12-Nov-2021 18:17:43 ALS Bottle#: 20 Worklist Smp#: 20
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\20211112-106454.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:56:58 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: CTX1649

First Level Reviewer: ornelasg Date: 15-Nov-2021 13:04:48

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.289	1.298	-0.009	2339375	65.7	64.7	
2	1.672	1.683	-0.011	2434280	65.7	65.7	
						RPD = 1.59	
3 Ethane							
1	1.552	1.553	-0.001	4192612	123.2	126.1	
2	3.014	3.021	-0.007	4208725	123.2	126.1	
						RPD = 0.04	
4 Ethylene							
1	1.869	1.846	0.023	4115359	114.9	116.8	
2	2.596	2.605	-0.009	3622543	114.9	116.9	
						RPD = 0.09	
5 Propane							
1	2.702	2.653	0.049	6596393	180.6	183.2	
2	4.926	4.928	-0.002	6404140	180.6	182.9	
						RPD = 0.14	
6 Acetylene							
1	4.251	4.123	0.128	3024038	106.7	107.5	
2	2.741	2.748	-0.007	3818395	106.7	111.7	
						RPD = 3.88	
7 Butane							Ma
1	4.569	4.491	0.078	8847447	238.1	242.9	
2	6.424	6.426	-0.002	8444910	238.1	240.3	M
						RPD = 1.07	
8 isobutylene							Ma
1	5.457	5.359	0.098	8293294	229.8	229.6	
2	6.266	6.268	-0.002	7626041	229.8	229.7	M
						RPD = 0.05	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

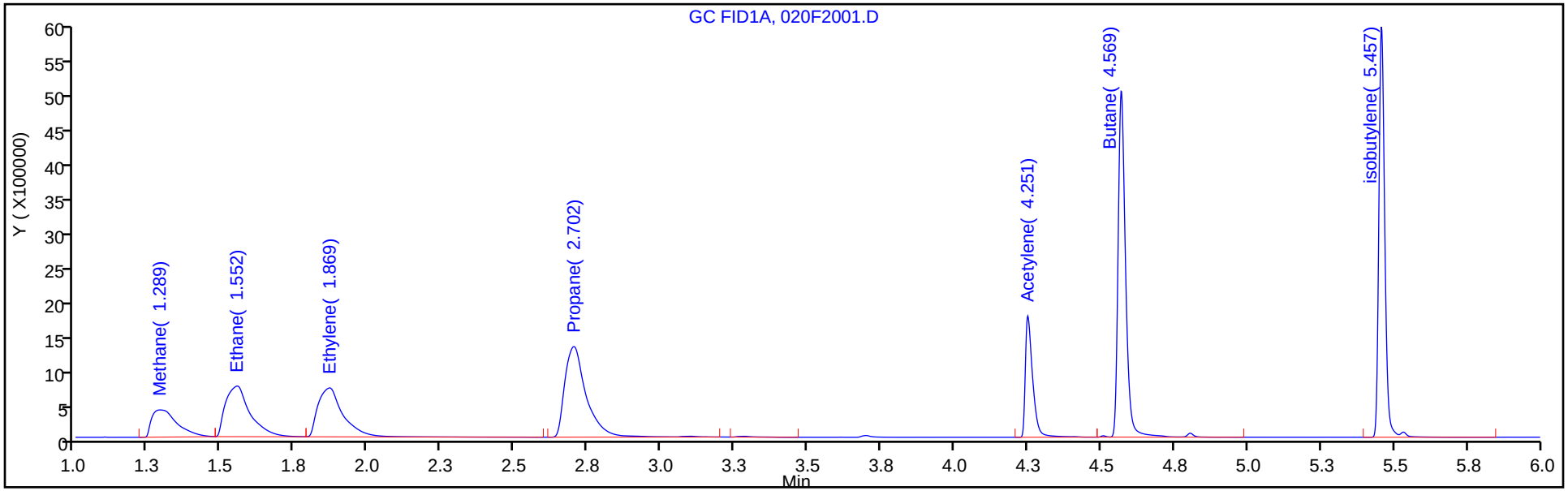
Report Date: 15-Nov-2021 16:56:58 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

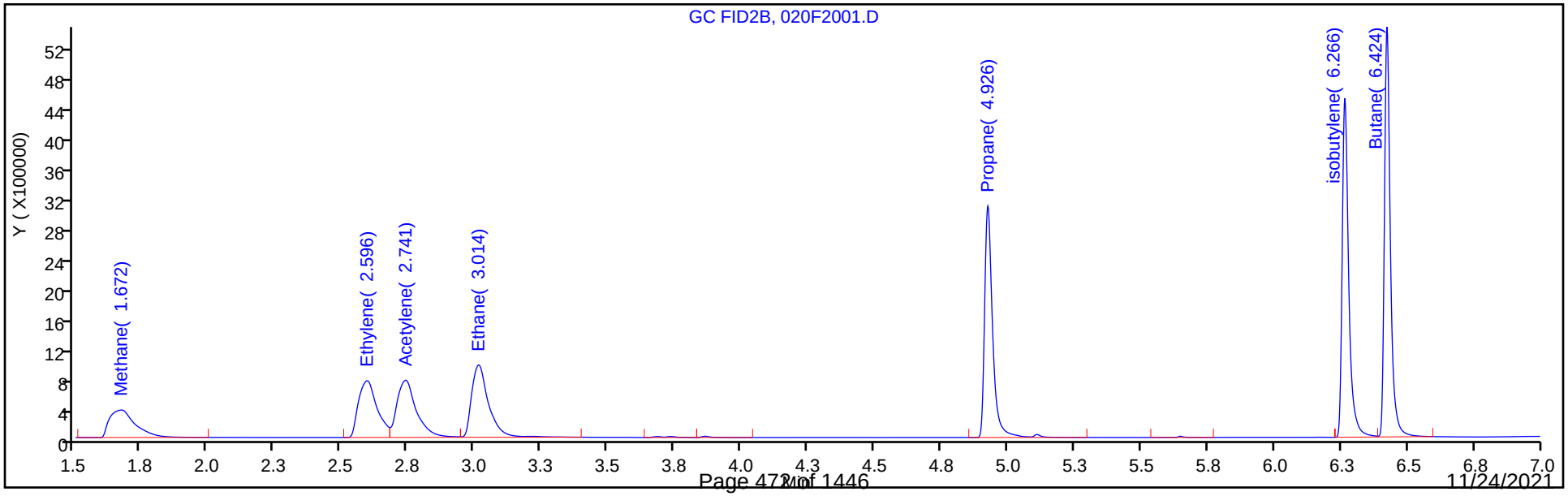
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\020F2001.D

Injection Date:	12-Nov-2021 18:17:43	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	20
Client ID:					
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 VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-557326/20 Calibration Date: 11/12/2021 18:17

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: 020F2001.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		37050		65.7	65.7	-0.0	20.0
Ethylene	Ave	30980	31528		117	115	1.8	20.0
Acetylene	Ave	34179	35796		112	107	4.7	20.0
Ethane	Ave	33383	34170		126	123	2.4	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-557326/20 Calibration Date: 11/12/2021 18:17

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: 020F2001.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.64	1.72
Ethylene	2.60	2.56	2.66
Acetylene	2.74	2.67	2.83
Ethane	3.01	2.97	3.07

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\020F2001.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 12-Nov-2021 18:17:43 ALS Bottle#: 20 Worklist Smp#: 20
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\20211112-106454.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:56:58 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: CTX1649

First Level Reviewer: ornelasg Date: 15-Nov-2021 13:04:48

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.289	1.298	-0.009	2339375	65.7	64.7	
2	1.672	1.683	-0.011	2434280	65.7	65.7	
						RPD = 1.59	
3 Ethane							
1	1.552	1.553	-0.001	4192612	123.2	126.1	
2	3.014	3.021	-0.007	4208725	123.2	126.1	
						RPD = 0.04	
4 Ethylene							
1	1.869	1.846	0.023	4115359	114.9	116.8	
2	2.596	2.605	-0.009	3622543	114.9	116.9	
						RPD = 0.09	
5 Propane							
1	2.702	2.653	0.049	6596393	180.6	183.2	
2	4.926	4.928	-0.002	6404140	180.6	182.9	
						RPD = 0.14	
6 Acetylene							
1	4.251	4.123	0.128	3024038	106.7	107.5	
2	2.741	2.748	-0.007	3818395	106.7	111.7	
						RPD = 3.88	
7 Butane							Ma
1	4.569	4.491	0.078	8847447	238.1	242.9	
2	6.424	6.426	-0.002	8444910	238.1	240.3	M
						RPD = 1.07	
8 isobutylene							Ma
1	5.457	5.359	0.098	8293294	229.8	229.6	
2	6.266	6.268	-0.002	7626041	229.8	229.7	M
						RPD = 0.05	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

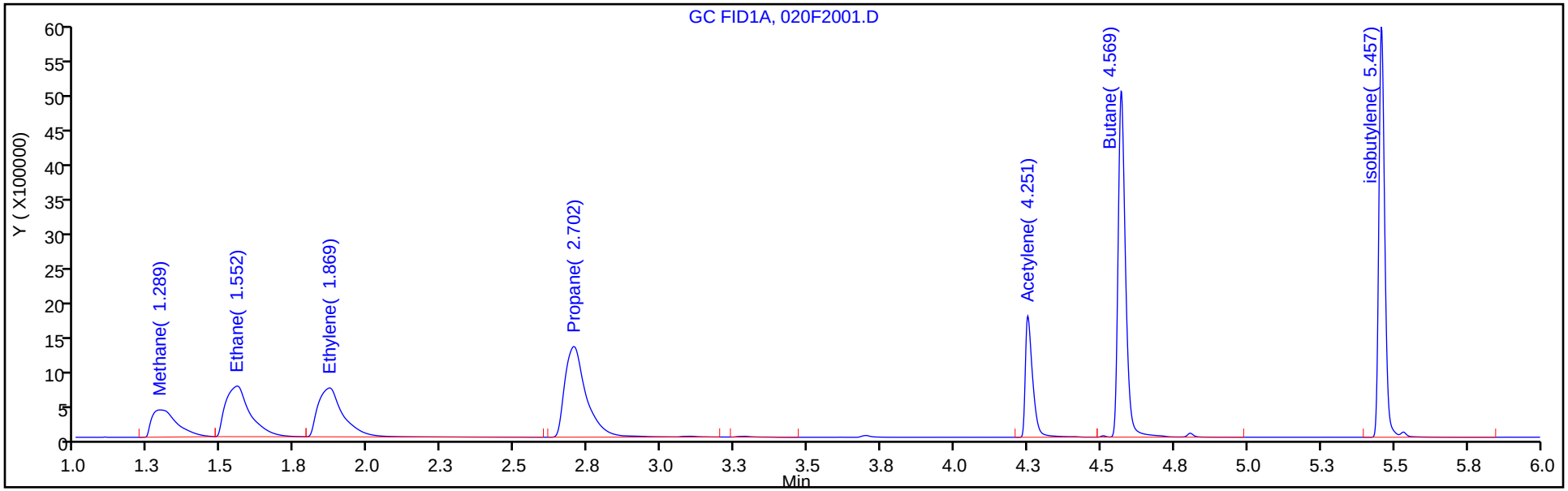
Report Date: 15-Nov-2021 16:56:59 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

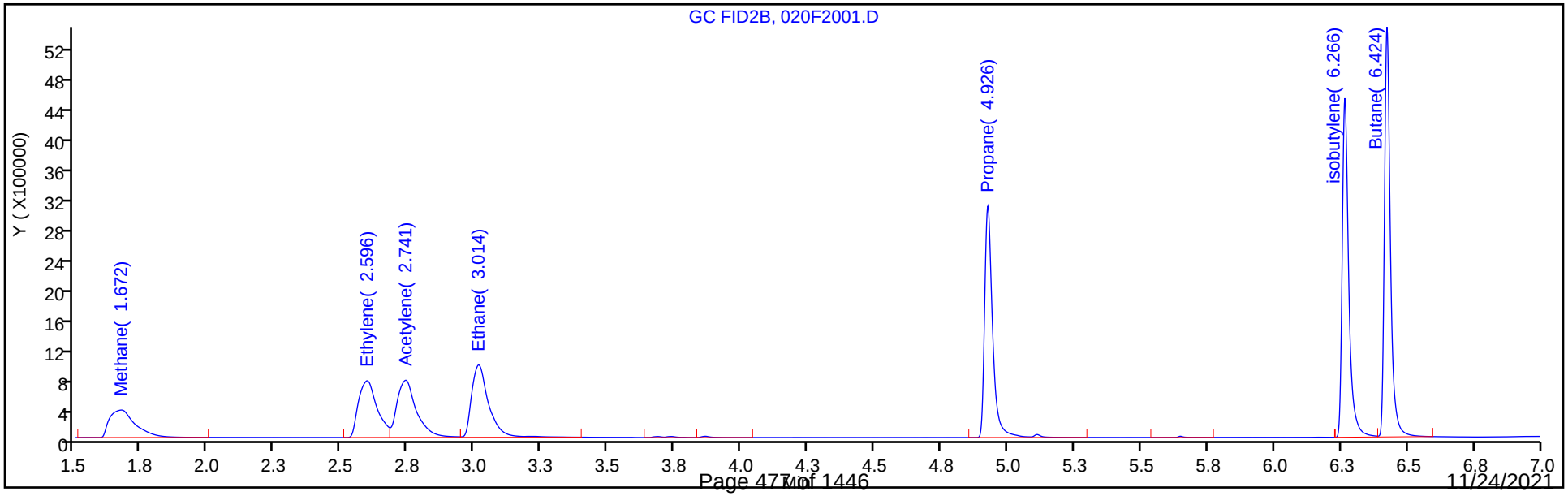
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\020F2001.D

Injection Date:	12-Nov-2021 18:17:43	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	20
Client ID:					
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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-556939/4

Matrix: Water Lab File ID: 004F0401.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 11/10/2021 12:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 556939 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 TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\004F0401.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 10-Nov-2021 12:30:43 ALS Bottle#: 4 Worklist Smp#: 4
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\20211110-106374.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 15:35:57 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: CTX1649

First Level Reviewer: sciannac Date: 12-Nov-2021 10:32:03

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		1.299				ND	
2		1.686					
3 Ethane							
1		1.553				ND	
2		3.024					
4 Ethylene							
1		1.844				ND	
2		2.608					
5 Propane							
1		2.648				ND	
2		4.928					
6 Acetylene							
1		4.113				ND	
2		2.751					
7 Butane							
1		4.481				ND	
2		6.428					
8 isobutylene							
1		5.348				ND	
2		6.269					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

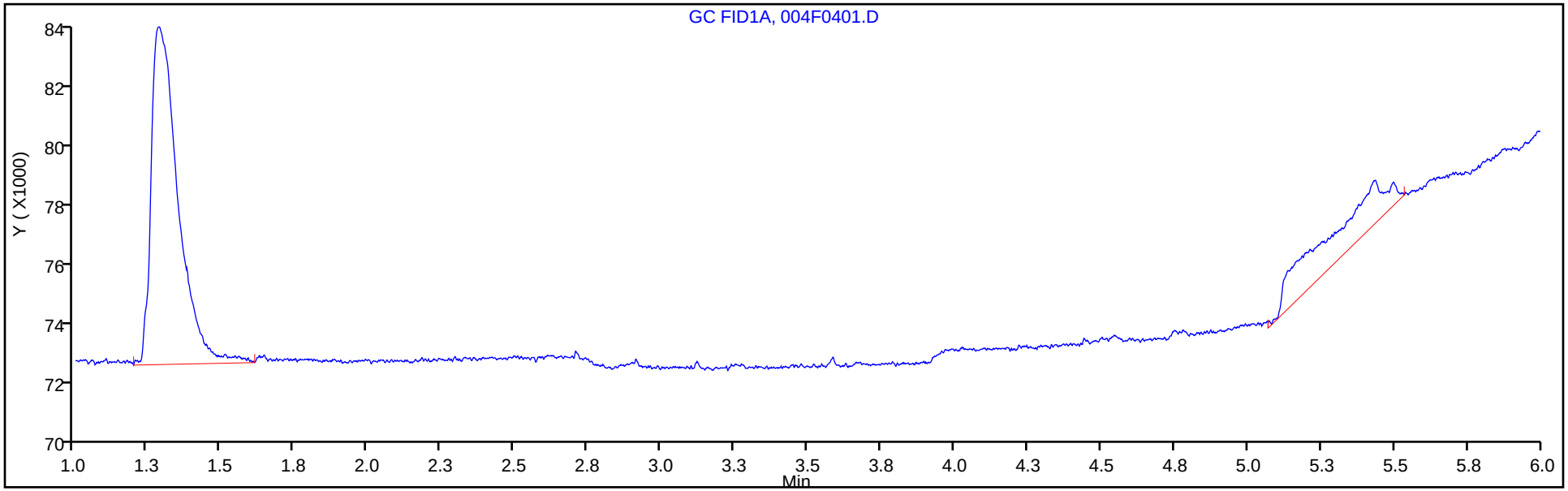
Report Date: 15-Nov-2021 15:35:59 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

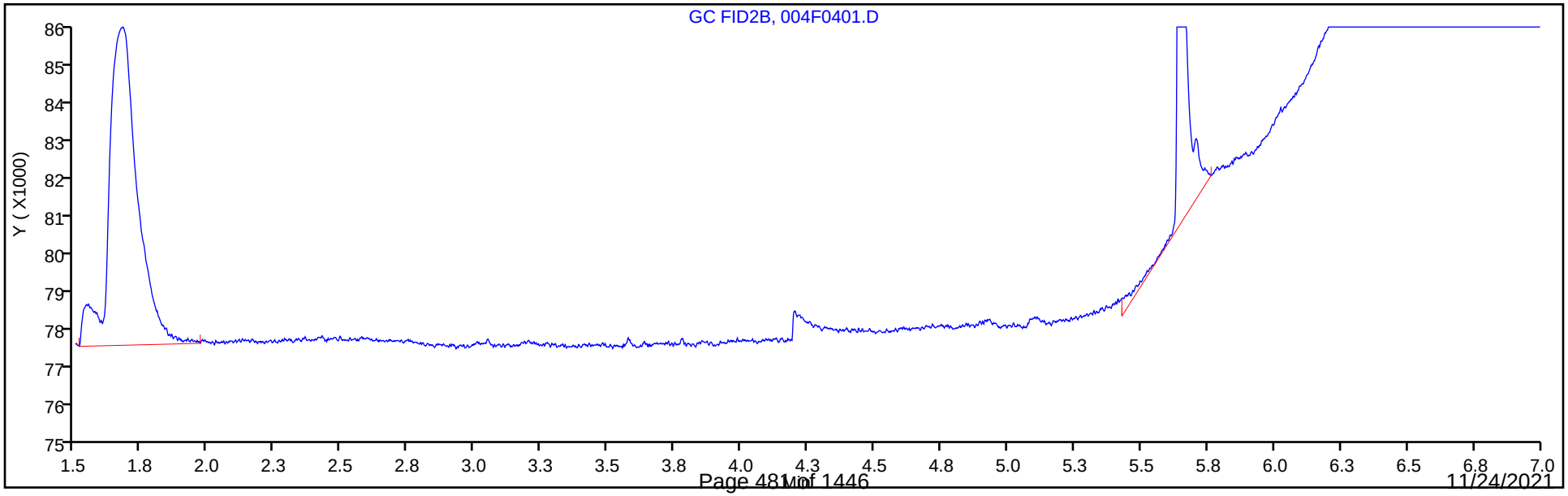
Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\004F0401.D

Injection Date:	10-Nov-2021 12:30:43	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	mb			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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-557116/4

Matrix: Water Lab File ID: 004F0401.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 11/11/2021 16:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 557116 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 TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\004F0401.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 11-Nov-2021 16:49:08 ALS Bottle#: 4 Worklist Smp#: 4
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\20211111-106416.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:29:05 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: CTX1649

First Level Reviewer: sciannac Date: 11-Nov-2021 18:08:45

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		1.301				ND	
2		1.687					
3 Ethane							
1		1.556				ND	
2		3.026					
4 Ethylene							
1		1.846				ND	
2		2.611					
5 Propane							
1		2.644				ND	
2		4.927					
6 Acetylene							
1		4.097				ND	
2		2.754					
7 Butane							
1		4.472				ND	
2		6.426					
8 isobutylene							
1		5.339				ND	
2		6.267					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

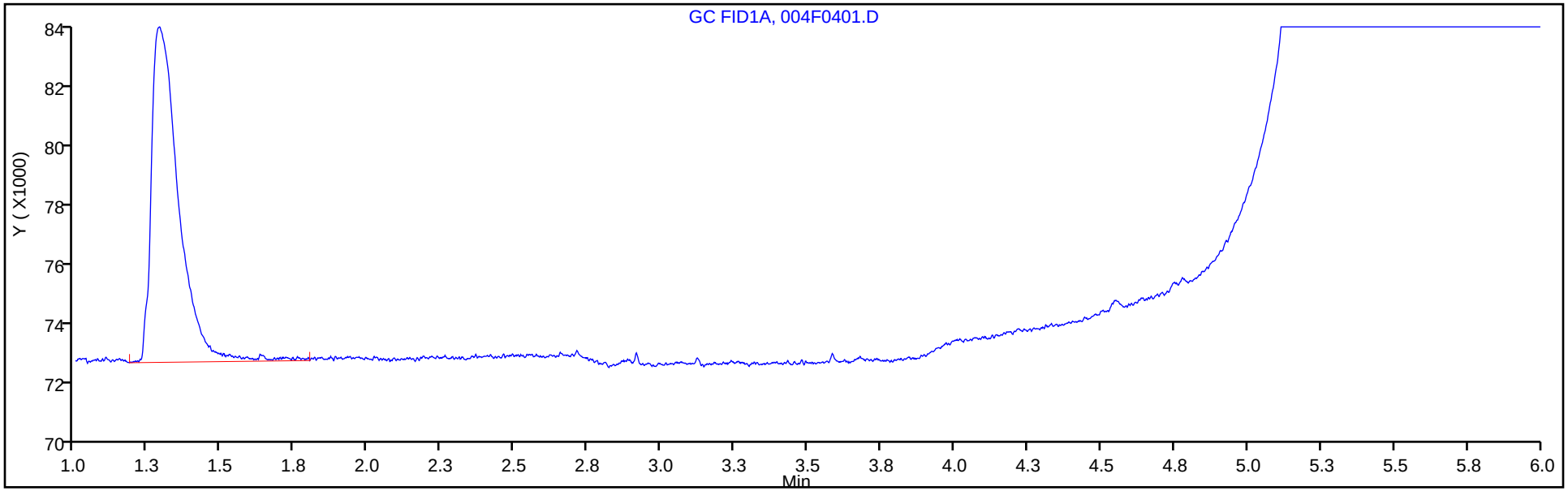
Report Date: 15-Nov-2021 16:29:06 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

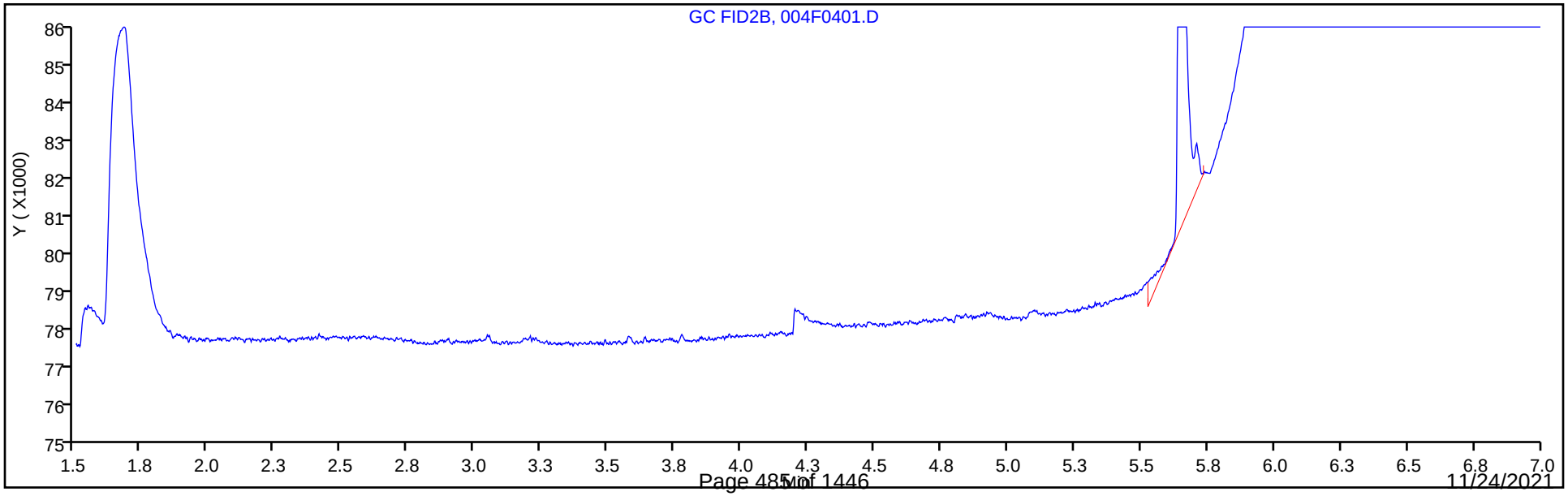
Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\004F0401.D

Injection Date:	11-Nov-2021 16:49:08	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	mb			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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-557326/4

Matrix: Water Lab File ID: 004F0401.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 11/12/2021 14:48

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.: 557326 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 TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\004F0401.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 12-Nov-2021 14:48:37 ALS Bottle#: 4 Worklist Smp#: 4
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\20211112-106454.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:57:04 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: CTX1649

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		1.298				ND	
2		1.683					
3 Ethane							
1		1.553				ND	
2		3.021					
4 Ethylene							
1		1.846				ND	
2		2.605					
5 Propane							
1		2.653				ND	
2		4.928					
6 Acetylene							
1		4.123				ND	
2		2.748					
7 Butane							
1		4.491				ND	
2		6.426					
8 isobutylene							
1		5.359				ND	
2		6.268					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

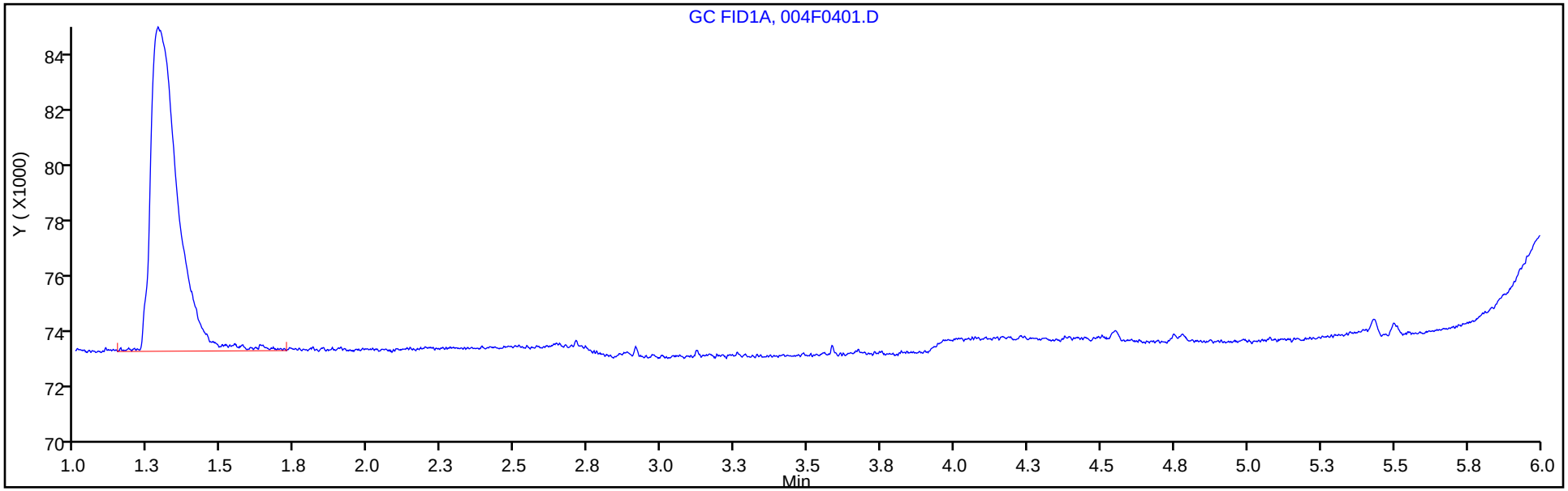
Report Date: 15-Nov-2021 16:57:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

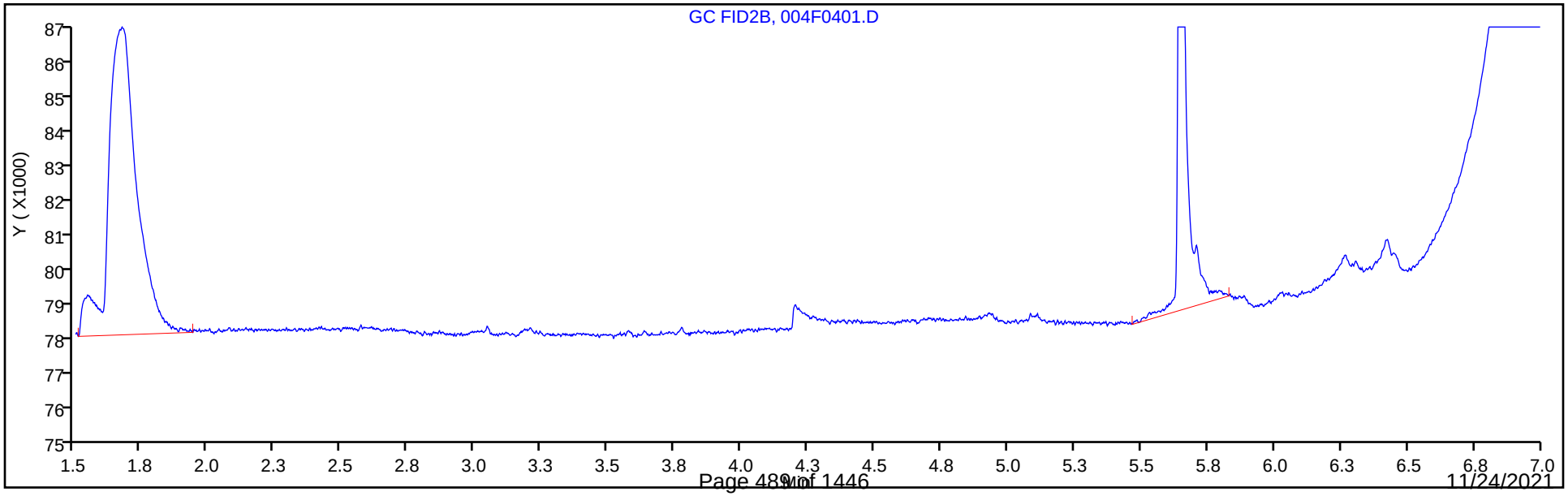
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\004F0401.D

Injection Date:	12-Nov-2021 14:48:37	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	mb			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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-556939/2

Matrix: Water Lab File ID: 002F0201.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 11/10/2021 12:04

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.: 556939 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0669		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\002F0201.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 10-Nov-2021 12:04:53 ALS Bottle#: 2 Worklist Smp#: 2
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\20211110-106374.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 15:35:57 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: CTX1649

First Level Reviewer: sciannac Date: 12-Nov-2021 10:30:21

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.298	1.299	-0.001	2374521	65.7	65.7	
2	1.684	1.686	-0.002	2478989	65.7	66.9	
						RPD = 1.92	
3 Ethane							
1	1.553	1.553	0.000	4243377	123.2	127.7	
2	3.029	3.024	0.005	4375081	123.2	131.1	
						RPD = 2.63	
4 Ethylene							
1	1.846	1.844	0.002	4173569	114.9	118.5	
2	2.613	2.608	0.005	3683442	114.9	118.9	
						RPD = 0.35	
5 Propane							
1	2.648	2.648	0.000	6710052	180.6	186.3	
2	4.931	4.928	0.003	6472439	180.6	184.9	
						RPD = 0.79	
6 Acetylene							a
1	4.149	4.113	0.036	3048261	106.7	108.3	a
2	2.756	2.751	0.005	3850044	106.7	112.6	a
						RPD = 3.91	
7 Butane							
1	4.499	4.481	0.018	8892743	238.1	244.2	
2	6.428	6.428	0.000	8506168	238.1	242.1	
						RPD = 0.86	
8 isobutylene							
1	5.389	5.348	0.041	8341242	229.8	230.9	
2	6.271	6.269	0.002	7623792	229.8	229.6	
						RPD = 0.56	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

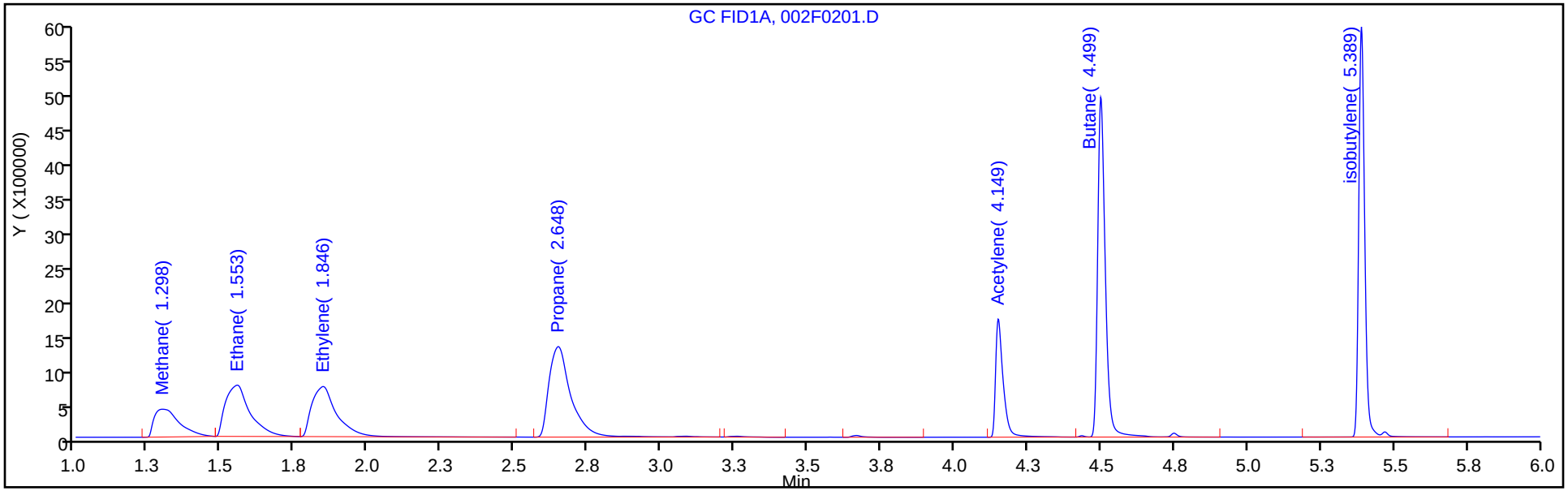
Report Date: 15-Nov-2021 15:35:58 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

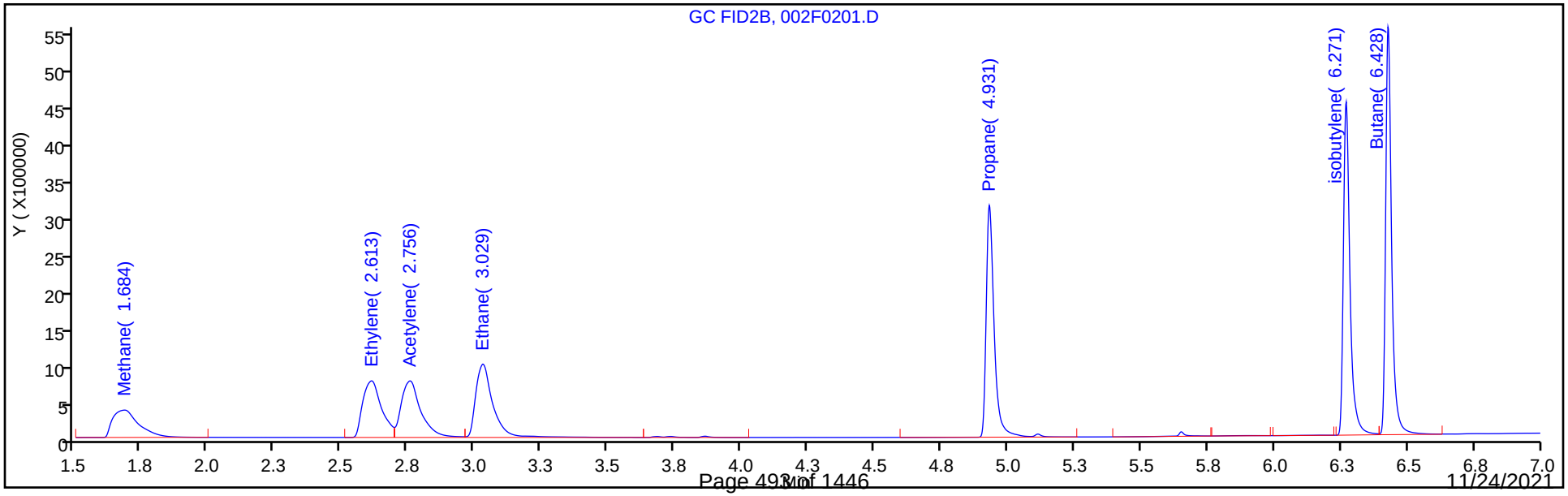
Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\002F0201.D

Injection Date:	10-Nov-2021 12:04:53	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcs			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 I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-557116/2

Matrix: Water Lab File ID: 002F0201.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 11/11/2021 16:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 557116 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0669		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\002F0201.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 11-Nov-2021 16:23:00 ALS Bottle#: 2 Worklist Smp#: 2
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\20211111-106416.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:29:05 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: CTX1649

First Level Reviewer: sciannac Date: 11-Nov-2021 18:08:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.297	1.301	-0.004	2377996	65.7	65.8	
2	1.687	1.687	0.000	2479086	65.7	66.9	
						RPD = 1.77	
3 Ethane							
1	1.554	1.556	-0.002	4270311	123.2	128.5	
2	3.031	3.026	0.005	4364759	123.2	130.7	
						RPD = 1.76	
4 Ethylene							
1	1.847	1.846	0.001	4219059	114.9	119.8	
2	2.614	2.611	0.003	3720326	114.9	120.1	
						RPD = 0.26	
5 Propane							
1	2.647	2.644	0.003	6769867	180.6	188.0	
2	4.929	4.927	0.002	6524402	180.6	186.4	
						RPD = 0.88	
6 Acetylene							
1	4.149	4.097	0.052	3137920	106.7	111.5	
2	2.759	2.754	0.005	3950112	106.7	115.6	
						RPD = 3.57	
7 Butane							
1		4.472			ND	ND	
2		6.426					
8 isobutylene							
1	5.389	5.339	0.050	8559621	229.8	236.9	
2	6.269	6.267	0.002	7841807	229.8	236.2	
						RPD = 0.32	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

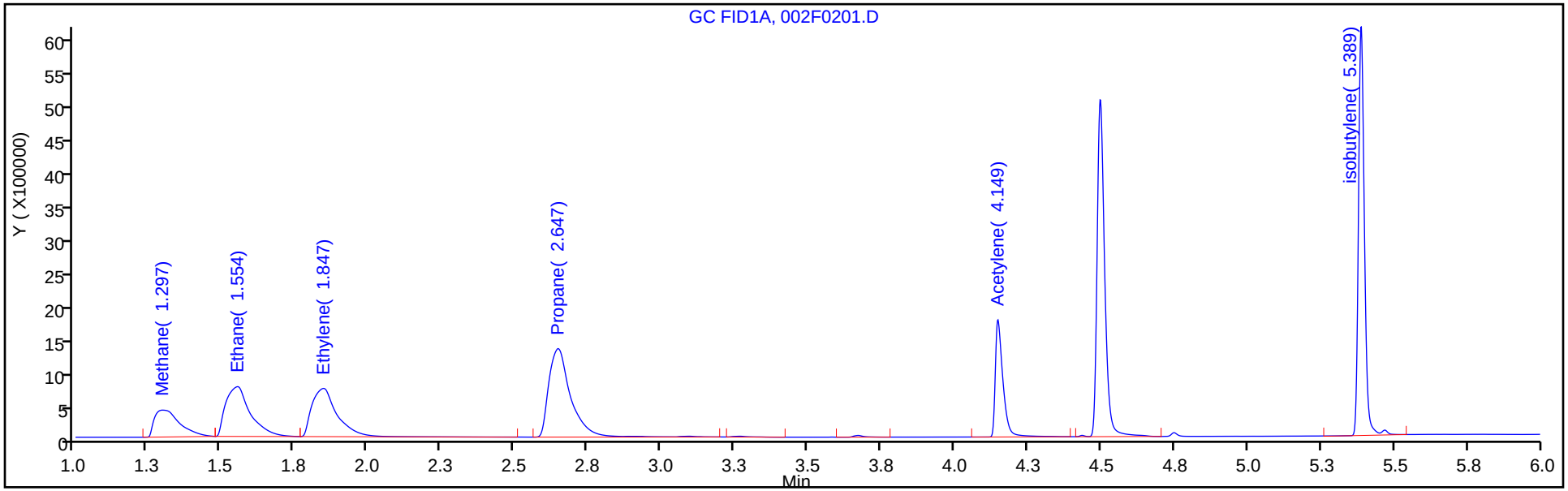
Report Date: 15-Nov-2021 16:29:06 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

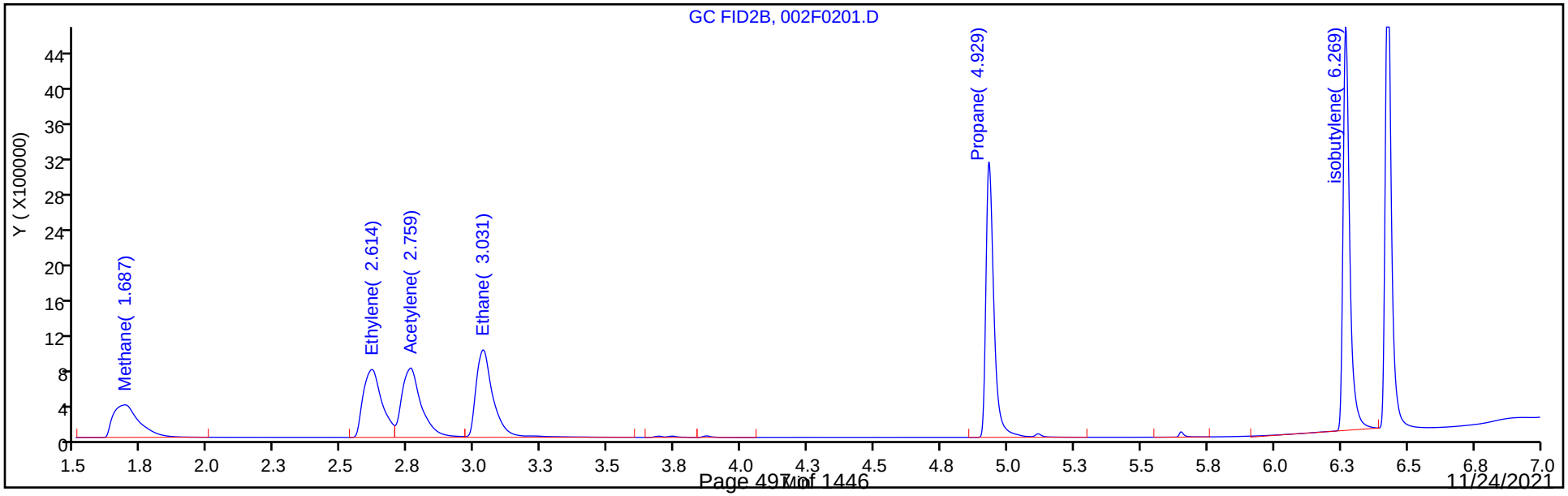
Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\002F0201.D

Injection Date:	11-Nov-2021 16:23:00	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcs			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 I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-557326/2

Matrix: Water Lab File ID: 002F0201.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 11/12/2021 14:22

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.: 557326 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0663		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\002F0201.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 12-Nov-2021 14:22:30 ALS Bottle#: 2 Worklist Smp#: 2
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\20211112-106454.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:57:04 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: CTX1649

First Level Reviewer: ornelasg Date: 14-Nov-2021 22:15:05

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.294	1.298	-0.004	2347944	65.7	64.9	
2	1.681	1.683	-0.002	2455078	65.7	66.3	
						RPD = 2.08	
3 Ethane							
1	1.549	1.553	-0.004	4232773	123.2	127.3	
2	3.026	3.021	0.005	4352043	123.2	130.4	
						RPD = 2.35	
4 Ethylene							
1	1.846	1.846	0.000	4171110	114.9	118.4	
2	2.606	2.605	0.001	3690963	114.9	119.1	
						RPD = 0.61	
5 Propane							
1	2.651	2.653	-0.002	6721733	180.6	186.7	
2	4.929	4.928	0.001	6505420	180.6	185.8	
						RPD = 0.46	
6 Acetylene							
1	4.159	4.123	0.036	3083915	106.7	109.6	
2	2.751	2.748	0.003	3896140	106.7	114.0	
						RPD = 3.93	
7 Butane							
1	4.506	4.491	0.015	9072590	238.1	249.1	
2	6.428	6.426	0.002	8583487	238.1	244.3	
						RPD = 1.96	
8 isobutylene							
1	5.398	5.359	0.039	8541568	229.8	236.4	
2	6.269	6.268	0.001	7797314	229.8	234.8	
						RPD = 0.68	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

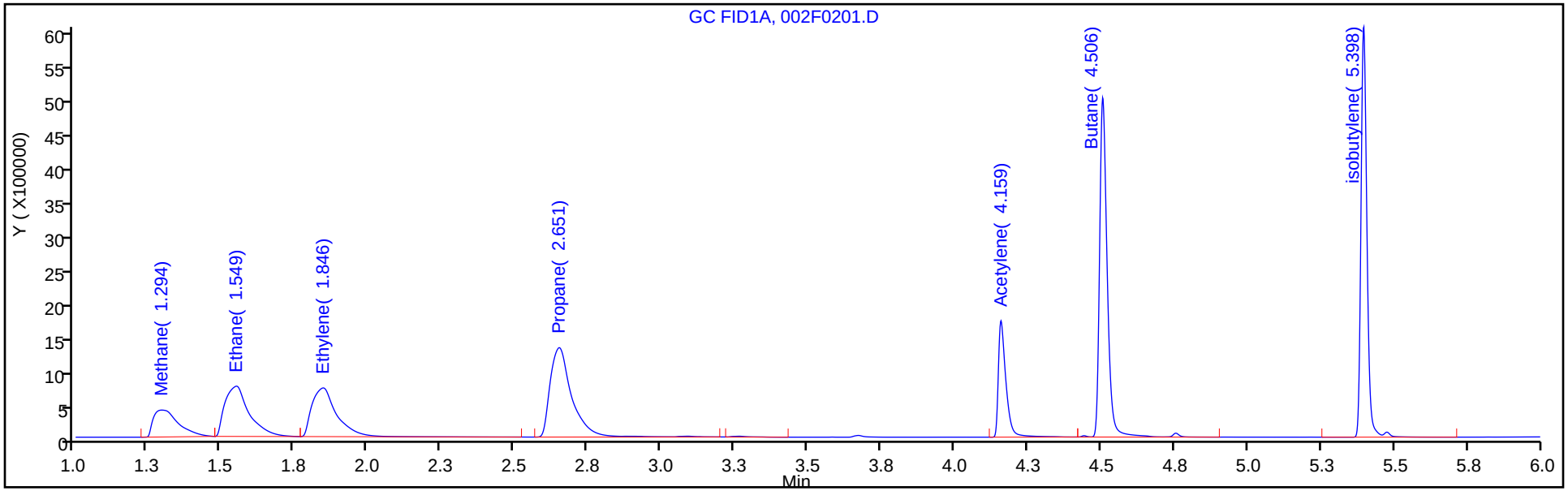
Report Date: 15-Nov-2021 16:57:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

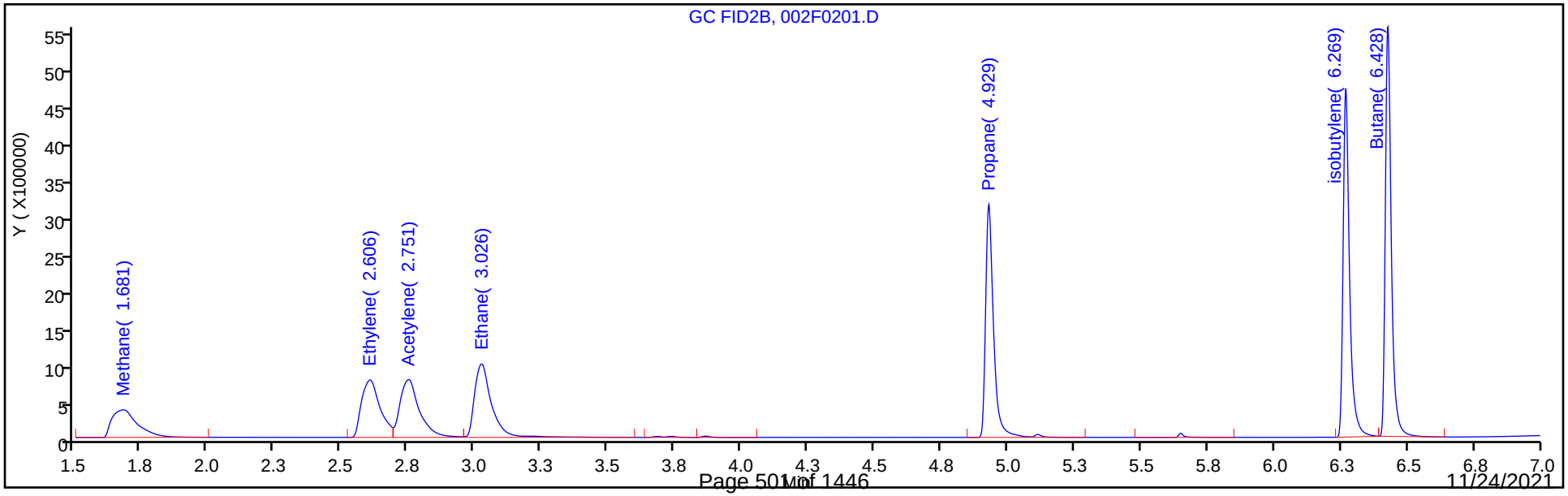
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\002F0201.D

Injection Date:	12-Nov-2021 14:22:30	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcs			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 I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-556939/3

Matrix: Water Lab File ID: 003F0301.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 11/10/2021 12:17

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.: 556939 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0661		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\003F0301.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 10-Nov-2021 12:17:48 ALS Bottle#: 3 Worklist Smp#: 3
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\20211110-106374.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 15:35:57 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: CTX1649

First Level Reviewer: sciannac Date: 12-Nov-2021 10:31:58

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.294	1.299	-0.005	2349240	65.7	64.9	
2	1.683	1.686	-0.003	2447627	65.7	66.1	
						RPD = 1.72	
3 Ethane							
1	1.553	1.553	0.000	4129640	123.2	124.2	
2	3.028	3.024	0.004	4234747	123.2	126.9	
						RPD = 2.09	
4 Ethylene							
1	1.849	1.844	0.005	4083002	114.9	115.9	
2	2.609	2.608	0.001	3594561	114.9	116.0	
						RPD = 0.10	
5 Propane							
1	2.659	2.648	0.011	6380562	180.6	177.2	
2	4.929	4.928	0.001	6148584	180.6	175.6	
						RPD = 0.89	
6 Acetylene							a
1	4.189	4.113	0.076	2974775	106.7	105.7	a
2	2.753	2.751	0.002	3760025	106.7	110.0	a
						RPD = 3.98	
7 Butane							Ma
1	4.524	4.481	0.043	7980895	238.1	219.1	a
2	6.428	6.428	0.000	7695233	238.1	219.0	M
						RPD = 0.06	
8 isobutylene							Ma
1	5.413	5.348	0.065	7642472	229.8	211.6	
2	6.269	6.269	0.000	7007176	229.8	211.0	M
						RPD = 0.24	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

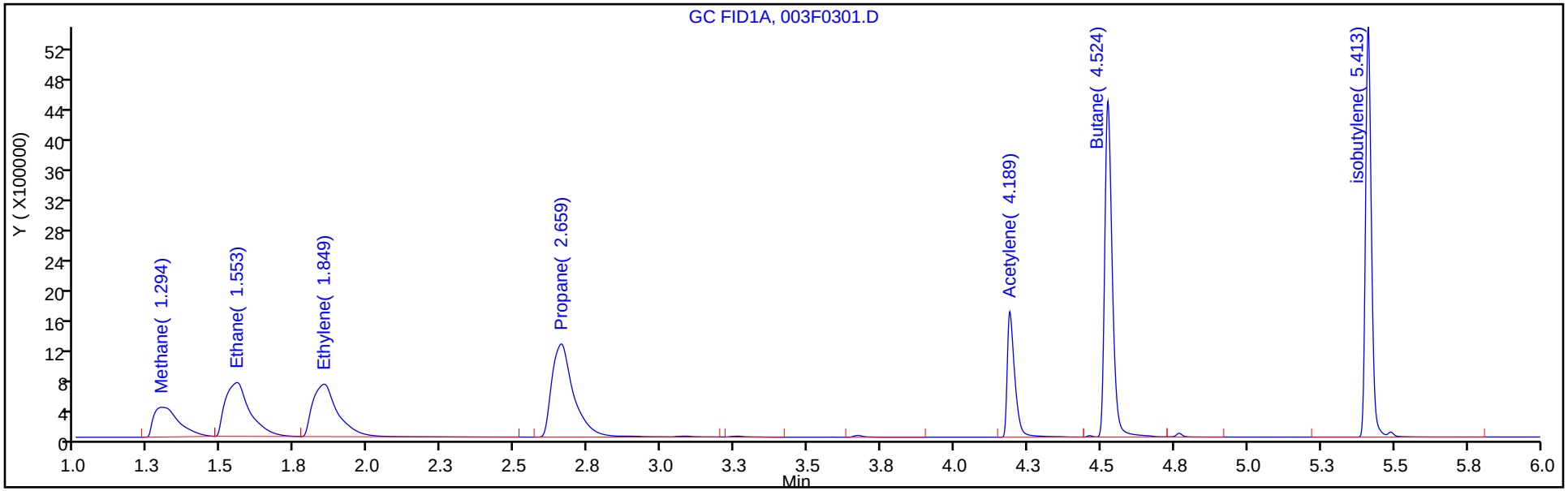
Report Date: 15-Nov-2021 15:35:58 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

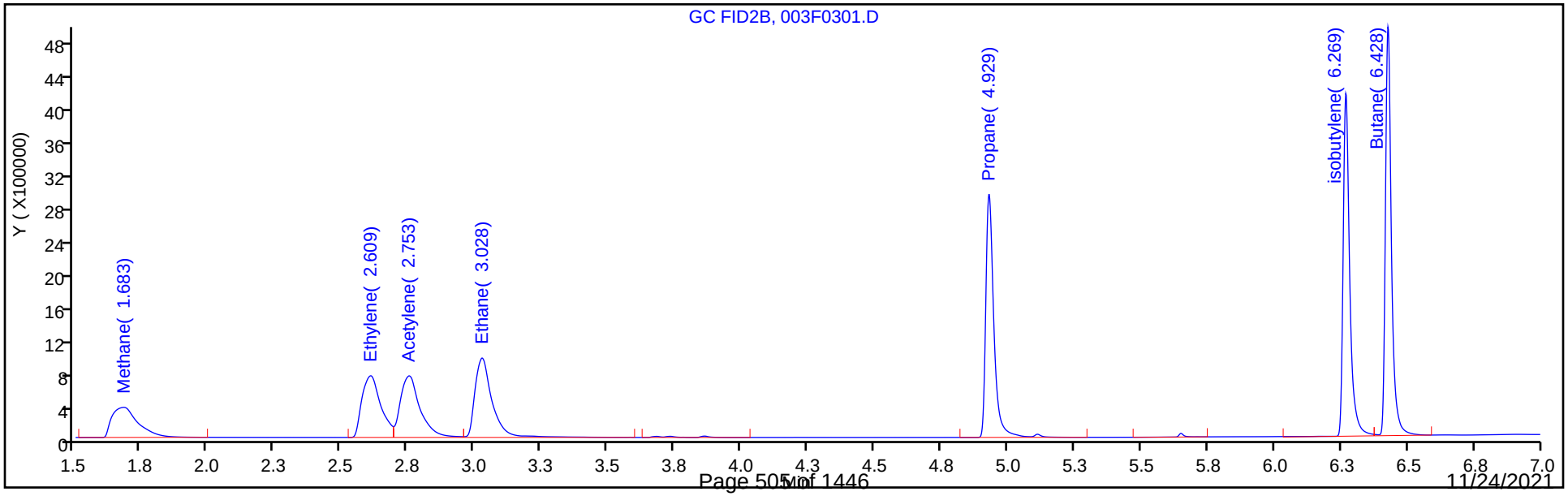
Data File: \\chromfs\Denver\ChromData\VGC_J\20211110-106374.b\003F0301.D

Injection Date:	10-Nov-2021 12:17:48	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcsd			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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-557116/3

Matrix: Water Lab File ID: 003F0301.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 11/11/2021 16:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 557116 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0670		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\003F0301.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 11-Nov-2021 16:36:05 ALS Bottle#: 3 Worklist Smp#: 3
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\20211111-106416.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:29:05 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: CTX1649

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.296	1.301	-0.005	2385415	65.7	66.0	
2	1.683	1.687	-0.004	2482201	65.7	67.0	
						RPD = 1.58	
3 Ethane							
1	1.552	1.556	-0.004	4282974	123.2	128.8	
2	3.026	3.026	0.000	4406375	123.2	132.0	
						RPD = 2.42	
4 Ethylene							
1	1.849	1.846	0.003	4217761	114.9	119.7	
2	2.609	2.611	-0.002	3718593	114.9	120.0	
						RPD = 0.25	
5 Propane							
1	2.657	2.644	0.013	6786161	180.6	188.4	
2	4.929	4.927	0.002	6550050	180.6	187.1	
						RPD = 0.73	
6 Acetylene							
1		4.097			ND	ND	
2		2.754					
7 Butane							
1	4.521	4.472	0.049	9037942	238.1	248.2	
2	6.426	6.426	0.000	8551396	238.1	243.4	
						RPD = 1.95	
8 isobutylene							
1	5.411	5.339	0.072	8801084	229.8	243.6	
2	6.269	6.267	0.002	7941340	229.8	239.2	
						RPD = 1.84	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

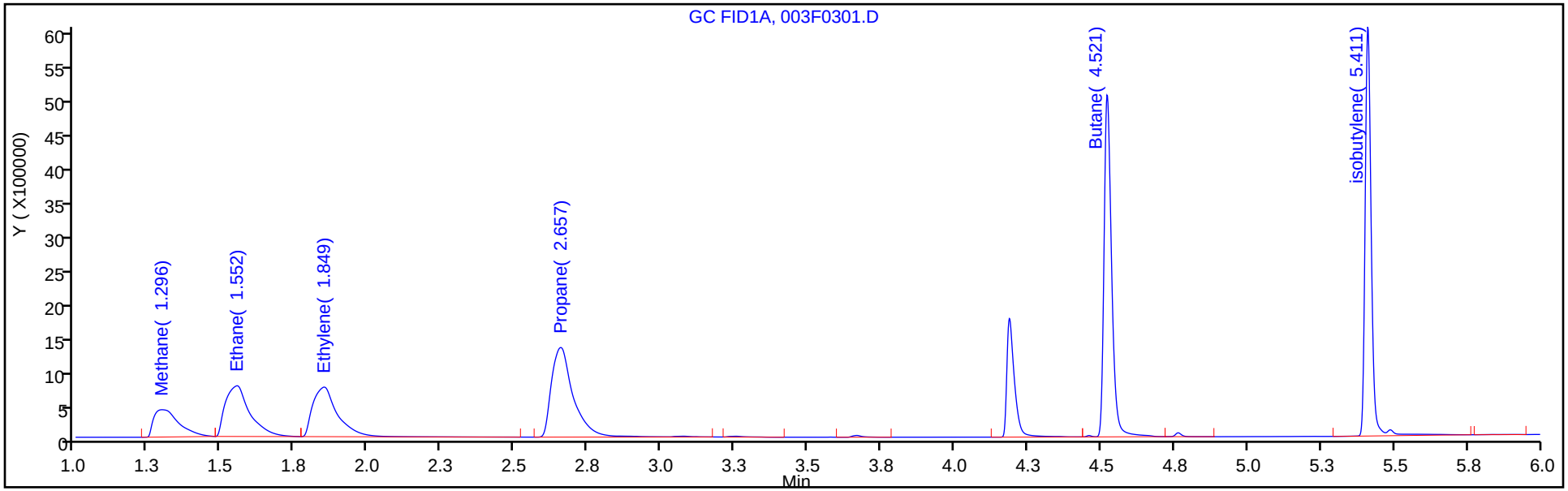
Report Date: 15-Nov-2021 16:29:06 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

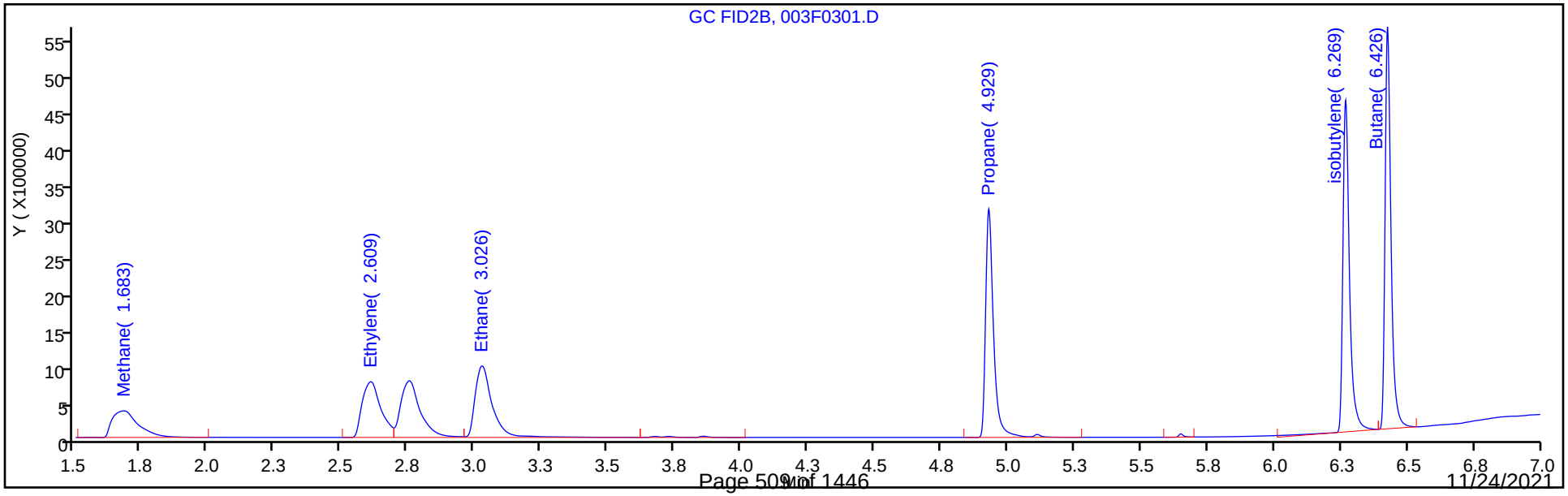
Data File: \\chromfs\Denver\ChromData\VGC_J\20211111-106416.b\003F0301.D

Injection Date:	11-Nov-2021 16:36:05	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcsd			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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-557326/3

Matrix: Water Lab File ID: 003F0301.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 11/12/2021 14:35

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.: 557326 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0666		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\003F0301.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 12-Nov-2021 14:35:41 ALS Bottle#: 3 Worklist Smp#: 3
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\20211112-106454.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:57:04 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: CTX1649

First Level Reviewer: ornelasg Date: 14-Nov-2021 22:14:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.293	1.298	-0.005	2358375	65.7	65.2	
2	1.680	1.683	-0.003	2467233	65.7	66.6	
						RPD = 2.13	
3 Ethane							
1	1.549	1.553	-0.004	4247040	123.2	127.8	
2	3.023	3.021	0.002	4382537	123.2	131.3	
						RPD = 2.72	
4 Ethylene							
1	1.849	1.846	0.003	4176093	114.9	118.6	
2	2.604	2.605	-0.001	3703842	114.9	119.6	
						RPD = 0.84	
5 Propane							
1	2.659	2.653	0.006	6747349	180.6	187.4	
2	4.929	4.928	0.001	6533816	180.6	186.6	
						RPD = 0.40	
6 Acetylene							
1	4.191	4.123	0.068	3070384	106.7	109.1	
2	2.749	2.748	0.001	3880871	106.7	113.5	
						RPD = 3.98	
7 Butane							a
1	4.524	4.491	0.033	9013691	238.1	247.5	a
2	0.000	6.426	-6.426	0	238.1	0	
						RPD = 200.00	
8 isobutylene							a
1	5.414	5.359	0.055	8565290	229.8	237.1	
2	6.268	6.268	0.000	16577301	229.8	499.3	a
						RPD = 71.21	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

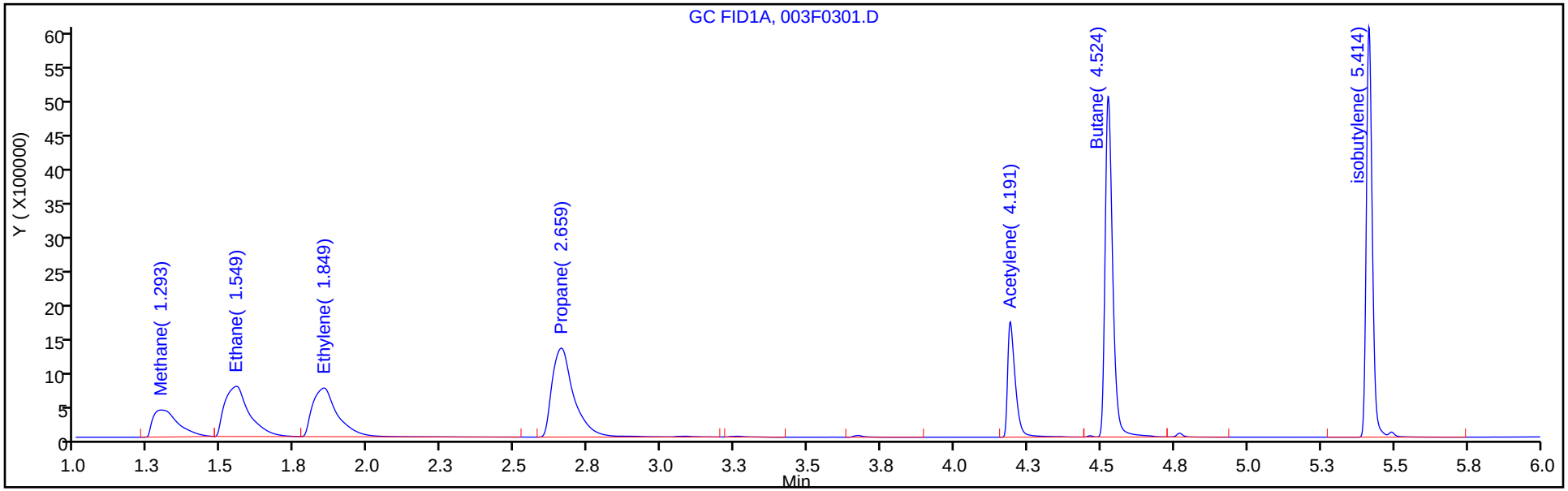
Report Date: 15-Nov-2021 16:57:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

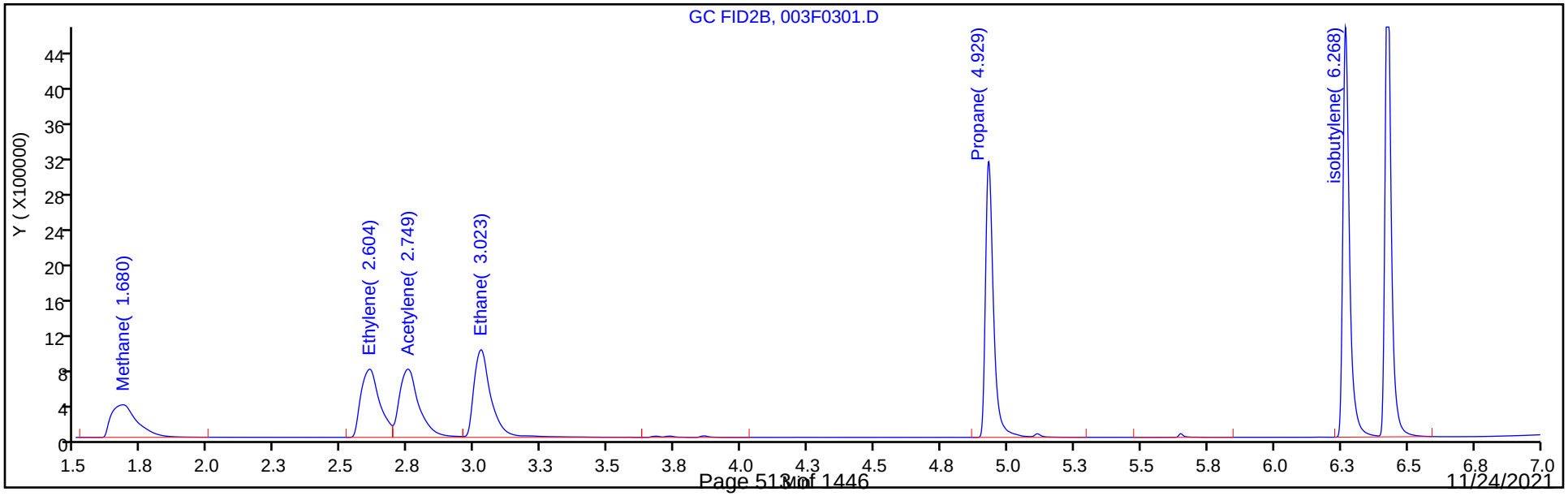
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\003F0301.D

Injection Date:	12-Nov-2021 14:35:41	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	lcsd			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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: PZ019-7 MS Lab Sample ID: 280-155138-10 MS

Matrix: Water Lab File ID: 015F1501.D

Analysis Method: RSK-175 Date Collected: 11/03/2021 12:55

Sample wt/vol: 20(mL) Date Analyzed: 11/12/2021 17:12

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.: 557326 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0657		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\015F1501.D
Lims ID: 280-155138-G-10 MS
Client ID: PZ019-7
Sample Type: MS
Inject. Date: 12-Nov-2021 17:12:08 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155138-G-10M
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:55:31 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 16:54:31

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	1.287	1.298	-0.011	2366956	65.7	65.4	
2	1.671	1.683	-0.012	2434202	65.7	65.7	
						RPD = 0.38	
3 Ethane							
1	1.550	1.553	-0.003	4214016	123.2	126.8	
2	3.012	3.021	-0.009	4283779	123.2	128.3	
						RPD = 1.22	
4 Ethylene							
1	1.862	1.846	0.016	4153509	114.9	117.9	
2	2.594	2.605	-0.011	3618768	114.9	116.8	
						RPD = 0.94	
5 Propane							
1	2.687	2.653	0.034	6540112	180.6	181.6	
2	4.924	4.928	-0.004	6290489	180.6	179.7	
						RPD = 1.08	
6 Acetylene							
1		4.123			ND	ND	
2		2.748					
7 Butane							
1	4.567	4.491	0.076	8459131	238.1	232.3	
2	6.424	6.426	-0.002	8131010	238.1	231.4	
						RPD = 0.37	
8 isobutylene							
1		5.359			ND	ND	
2		6.268					

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

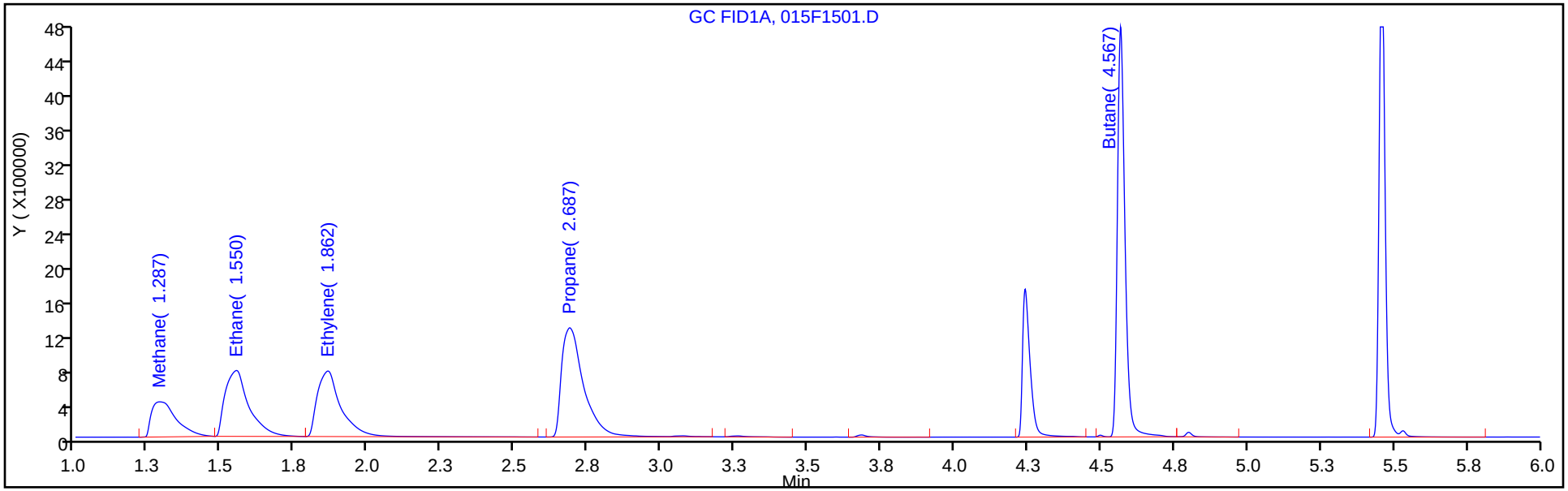
Report Date: 15-Nov-2021 16:56:57 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

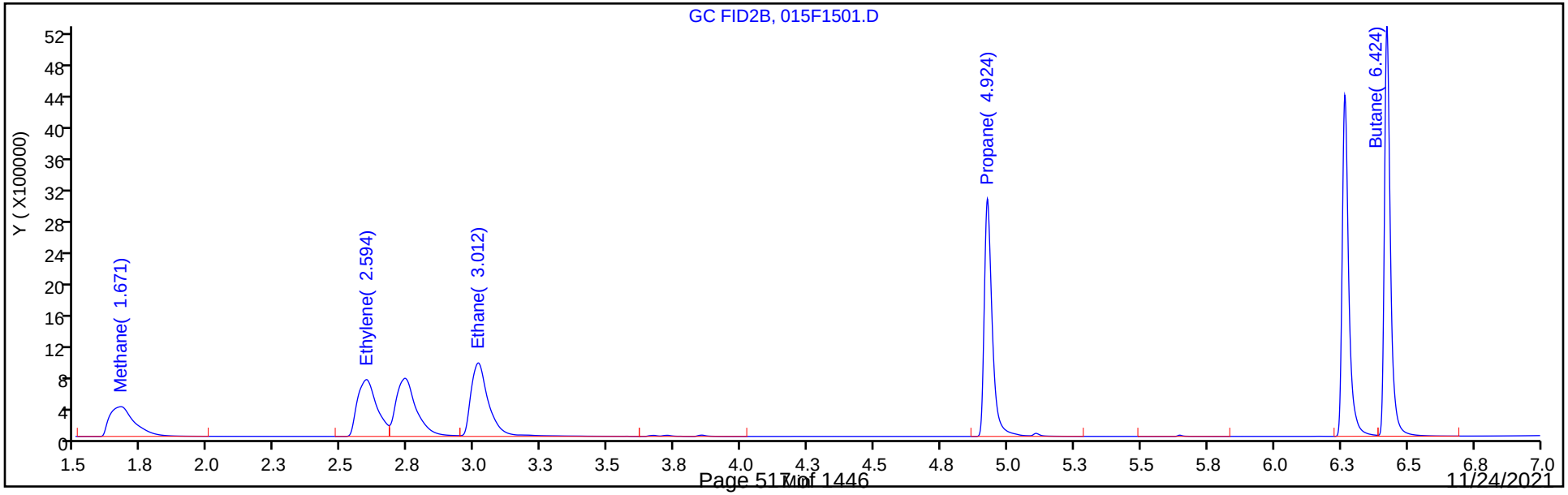
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\015F1501.D

Injection Date:	12-Nov-2021 17:12:08	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155138-G-10 MS			Worklist Smp#:	15
Client ID:	PZ019-7				
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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: PZ019-7 MSD Lab Sample ID: 280-155138-10 MSD

Matrix: Water Lab File ID: 016F1601.D

Analysis Method: RSK-175 Date Collected: 11/03/2021 12:55

Sample wt/vol: 20(mL) Date Analyzed: 11/12/2021 17:25

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.: 557326 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0666		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\016F1601.D
Lims ID: 280-155138-I-10 MSD
Client ID: PZ019-7
Sample Type: MSD
Inject. Date: 12-Nov-2021 17:25:17 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155138-I-10M
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 17:05:24 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 16:54:35

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	1.286	1.298	-0.012	2398857	65.7	66.3	
2	1.672	1.683	-0.011	2467512	65.7	66.6	
						RPD = 0.40	
3 Ethane							
1	1.550	1.553	-0.003	4303046	123.2	129.4	
2	3.013	3.021	-0.008	4379581	123.2	131.2	
						RPD = 1.34	
4 Ethylene							M
1	1.861	1.846	0.015	4229866	114.9	120.1	
2	2.593	2.605	-0.012	3692867	114.9	119.2	M
						RPD = 0.73	
5 Propane							
1	2.688	2.653	0.035	6749259	180.6	187.4	
2	4.925	4.928	-0.003	6494725	180.6	185.5	
						RPD = 1.03	
6 Acetylene							
1		4.123			ND	ND	
2		2.748					
7 Butane							
1	4.566	4.491	0.075	8939310	238.1	245.4	
2	6.423	6.426	-0.003	8497683	238.1	241.8	
						RPD = 1.48	
8 isobutylene							
1		5.359			ND	ND	
2		6.268					

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

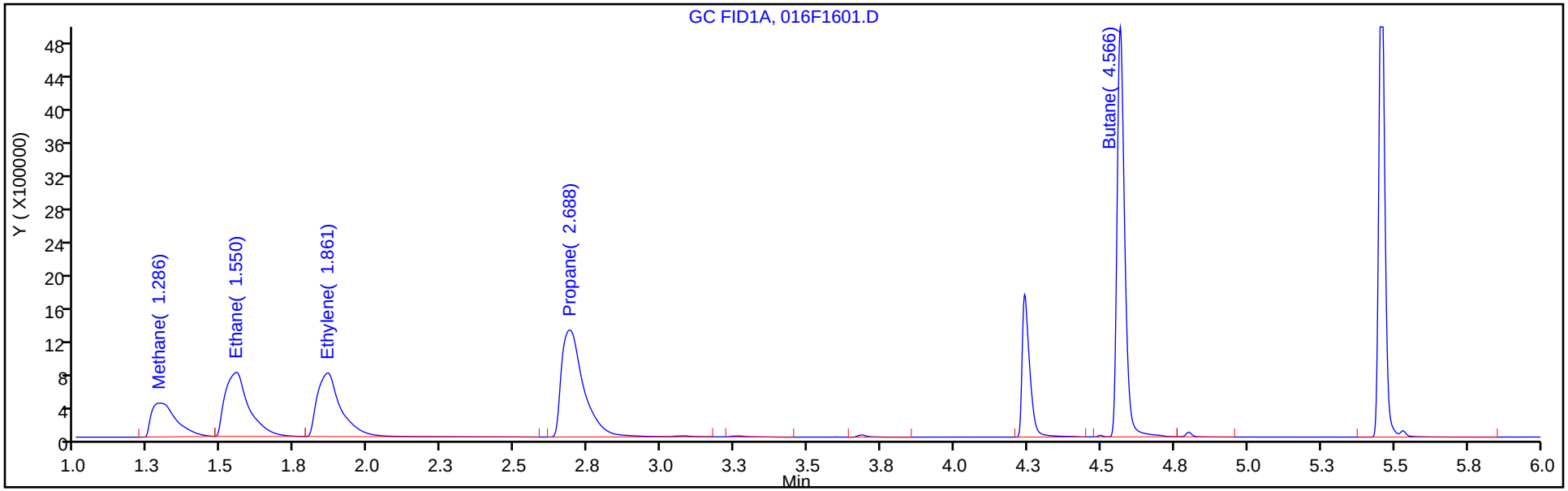
Report Date: 15-Nov-2021 17:05:24 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

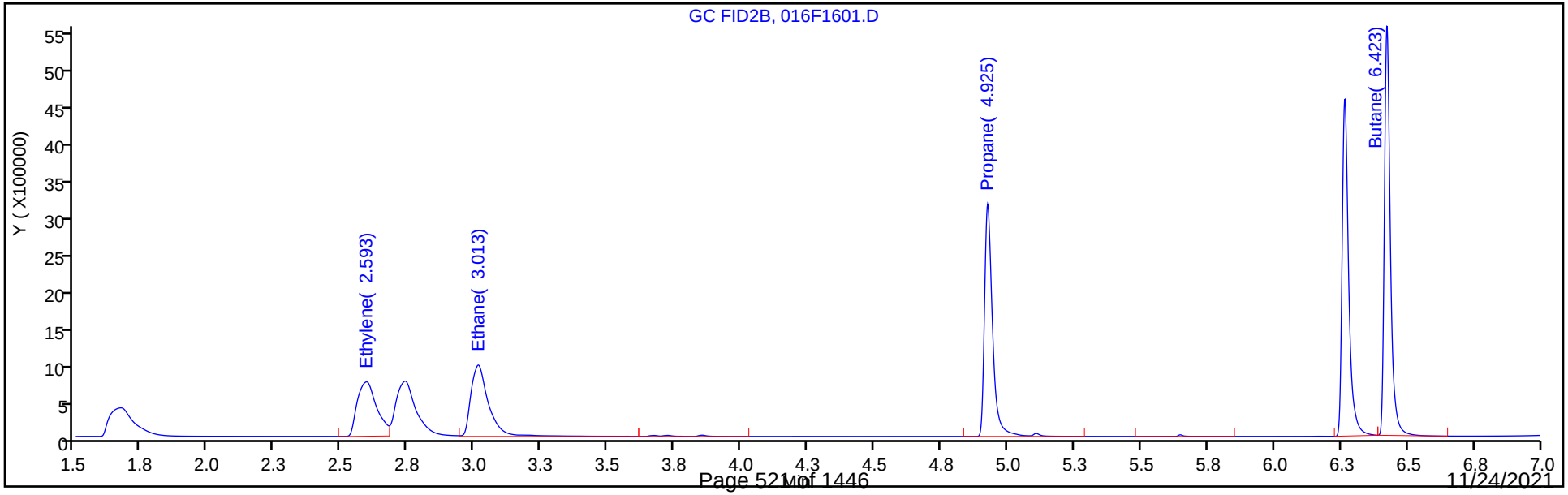
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\016F1601.D

Injection Date:	12-Nov-2021 17:25:17	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155138-I-10 MSD			Worklist Smp#:	16
Client ID:	PZ019-7				
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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: PZ019-7 DU Lab Sample ID: 280-155138-10 DU

Matrix: Water Lab File ID: 014F1401.D

Analysis Method: RSK-175 Date Collected: 11/03/2021 12:55

Sample wt/vol: 20(mL) Date Analyzed: 11/12/2021 16:58

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.: 557326 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 TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\014F1401.D
Lims ID: 280-155138-G-10 DU
Client ID:
Sample Type: DU
Inject. Date: 12-Nov-2021 16:58:57 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155138-G-10
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 15-Nov-2021 16:55:31 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: CTX1649

First Level Reviewer: meierg Date: 15-Nov-2021 16:54:25

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		1.298				ND	
2		1.683					
3 Ethane							
1		1.553				ND	
2		3.021					
4 Ethylene							
1		1.846				ND	
2		2.605					
5 Propane							
1		2.653				ND	
2		4.928					
6 Acetylene							
1		4.123				ND	
2		2.748					
7 Butane							
1		4.491				ND	
2		6.426					
8 isobutylene							
1		5.359				ND	
2		6.268					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

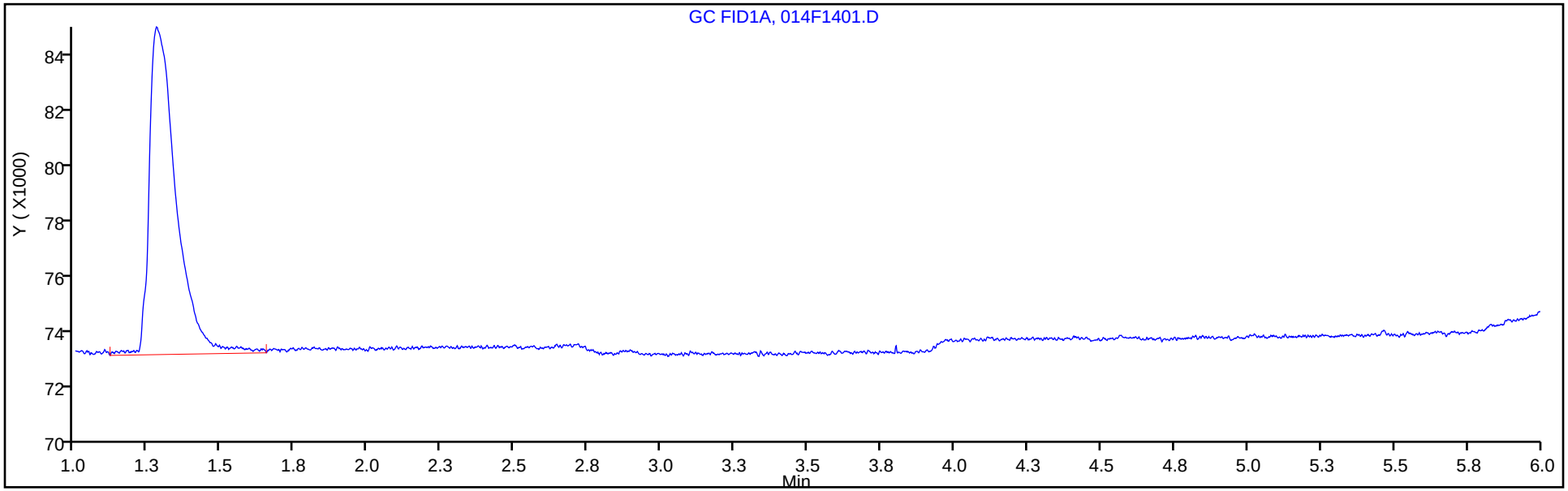
Report Date: 15-Nov-2021 16:56:56 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

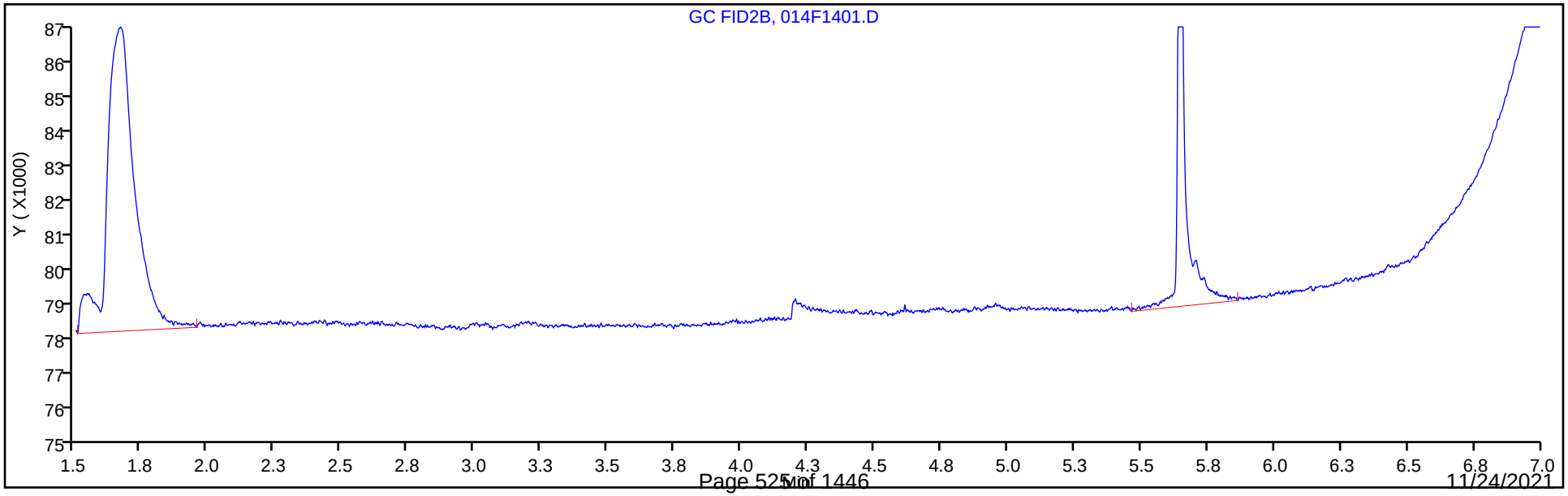
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\014F1401.D

Injection Date:	12-Nov-2021 16:58:57	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155138-G-10 DU			Worklist Smp#:	14
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



GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: VGC_J Start Date: 11/10/2021 11:51

Analysis Batch Number: 556939 End Date: 11/10/2021 18:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-556939/1		11/10/2021 11:51	1	001F0101.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-556939/1		11/10/2021 11:51	1	001F0101.D	HP-Plot Q 0.53(mm)
LCS 280-556939/2		11/10/2021 12:04	1	002F0201.D	Rt-Alumina KCl 0.53(mm)
LCS 280-556939/2		11/10/2021 12:04	1	002F0201.D	HP-Plot Q 0.53(mm)
LCSD 280-556939/3		11/10/2021 12:17	1	003F0301.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-556939/3		11/10/2021 12:17	1	003F0301.D	HP-Plot Q 0.53(mm)
MB 280-556939/4		11/10/2021 12:30	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
MB 280-556939/4		11/10/2021 12:30	1	004F0401.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 12:43	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 12:43	1		HP-Plot Q 0.53(mm)
280-155138-6	NW071-7	11/10/2021 12:56	1	006F0601.D	Rt-Alumina KCl 0.53(mm)
280-155138-6	NW071-7	11/10/2021 12:56	1	006F0601.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 13:09	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 13:09	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 13:22	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 13:22	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 13:35	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 13:35	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 13:48	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 13:48	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 14:01	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 14:01	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 14:14	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 14:14	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 14:27	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 14:27	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 14:40	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 14:40	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 14:53	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 14:53	1		HP-Plot Q 0.53(mm)
CCV 280-556939/16		11/10/2021 15:06	1	016F1601.D	Rt-Alumina KCl 0.53(mm)
CCV 280-556939/16		11/10/2021 15:06	1	016F1601.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 15:19	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 15:19	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 15:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 15:32	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 15:45	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 15:45	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 15:58	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 15:58	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 16:11	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 16:11	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 16:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 16:25	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 16:38	1		Rt-Alumina KCl 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: VGC_J Start Date: 11/10/2021 11:51

Analysis Batch Number: 556939 End Date: 11/10/2021 18:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		11/10/2021 16:38	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 16:51	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 16:51	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 17:04	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 17:04	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 17:17	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 17:17	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 17:30	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 17:30	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 17:43	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 17:43	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/10/2021 17:56	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/10/2021 17:56	1		HP-Plot Q 0.53(mm)
CCV 280-556939/30		11/10/2021 18:09	1	030F3001.D	Rt-Alumina KCl 0.53(mm)
CCV 280-556939/30		11/10/2021 18:09	1	030F3001.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: VGC_J Start Date: 11/11/2021 16:10

Analysis Batch Number: 557116 End Date: 11/11/2021 22:28

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-557116/1		11/11/2021 16:10	1	001F0101.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-557116/1		11/11/2021 16:10	1	001F0101.D	HP-Plot Q 0.53(mm)
LCS 280-557116/2		11/11/2021 16:23	1	002F0201.D	Rt-Alumina KCl 0.53(mm)
LCS 280-557116/2		11/11/2021 16:23	1	002F0201.D	HP-Plot Q 0.53(mm)
LCSD 280-557116/3		11/11/2021 16:36	1	003F0301.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-557116/3		11/11/2021 16:36	1	003F0301.D	HP-Plot Q 0.53(mm)
MB 280-557116/4		11/11/2021 16:49	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
MB 280-557116/4		11/11/2021 16:49	1	004F0401.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/11/2021 17:02	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/11/2021 17:02	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/11/2021 17:15	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/11/2021 17:15	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/11/2021 17:28	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/11/2021 17:28	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/11/2021 17:41	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/11/2021 17:41	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/11/2021 17:54	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/11/2021 17:54	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/11/2021 18:07	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/11/2021 18:07	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/11/2021 18:20	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/11/2021 18:20	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/11/2021 18:33	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/11/2021 18:33	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/11/2021 18:47	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/11/2021 18:47	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/11/2021 19:00	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/11/2021 19:00	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/11/2021 19:13	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/11/2021 19:13	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/11/2021 19:26	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/11/2021 19:26	1		HP-Plot Q 0.53(mm)
CCV 280-557116/17		11/11/2021 19:39	1	017F1701.D	Rt-Alumina KCl 0.53(mm)
CCV 280-557116/17		11/11/2021 19:39	1	017F1701.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/11/2021 19:52	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/11/2021 19:52	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/11/2021 20:05	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/11/2021 20:05	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/11/2021 20:18	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/11/2021 20:18	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/11/2021 20:31	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/11/2021 20:31	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/11/2021 20:44	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/11/2021 20:44	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/11/2021 20:57	1		Rt-Alumina KCl 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: VGC_J Start Date: 11/11/2021 16:10

Analysis Batch Number: 557116 End Date: 11/11/2021 22:28

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		11/11/2021 20:57	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/11/2021 21:10	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/11/2021 21:10	1		HP-Plot Q 0.53(mm)
280-155138-1	NW021-7	11/11/2021 21:23	1	025F2501.D	Rt-Alumina KCl 0.53(mm)
280-155138-1	NW021-7	11/11/2021 21:23	1	025F2501.D	HP-Plot Q 0.53(mm)
280-155138-2	NW020-7	11/11/2021 21:36	1	026F2601.D	Rt-Alumina KCl 0.53(mm)
280-155138-2	NW020-7	11/11/2021 21:36	1	026F2601.D	HP-Plot Q 0.53(mm)
280-155138-3	NW022-7	11/11/2021 21:49	1	027F2701.D	Rt-Alumina KCl 0.53(mm)
280-155138-3	NW022-7	11/11/2021 21:49	1	027F2701.D	HP-Plot Q 0.53(mm)
280-155138-4	G0082-7	11/11/2021 22:02	1	028F2801.D	Rt-Alumina KCl 0.53(mm)
280-155138-4	G0082-7	11/11/2021 22:02	1	028F2801.D	HP-Plot Q 0.53(mm)
280-155138-5	G0087-7	11/11/2021 22:15	1	029F2901.D	Rt-Alumina KCl 0.53(mm)
280-155138-5	G0087-7	11/11/2021 22:15	1	029F2901.D	HP-Plot Q 0.53(mm)
CCV 280-557116/30		11/11/2021 22:28	1	030F3001.D	Rt-Alumina KCl 0.53(mm)
CCV 280-557116/30		11/11/2021 22:28	1	030F3001.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: VGC_J Start Date: 11/12/2021 14:09

Analysis Batch Number: 557326 End Date: 11/12/2021 20:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-557326/1		11/12/2021 14:09	1	001F0101.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-557326/1		11/12/2021 14:09	1	001F0101.D	HP-Plot Q 0.53(mm)
LCS 280-557326/2		11/12/2021 14:22	1	002F0201.D	Rt-Alumina KCl 0.53(mm)
LCS 280-557326/2		11/12/2021 14:22	1	002F0201.D	HP-Plot Q 0.53(mm)
LCSD 280-557326/3		11/12/2021 14:35	1	003F0301.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-557326/3		11/12/2021 14:35	1	003F0301.D	HP-Plot Q 0.53(mm)
MB 280-557326/4		11/12/2021 14:48	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
MB 280-557326/4		11/12/2021 14:48	1	004F0401.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 15:27	2		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 15:27	2		HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 15:40	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 15:40	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 15:53	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 15:53	1		HP-Plot Q 0.53(mm)
280-155138-7	CA213-7	11/12/2021 16:06	1	010F1001.D	Rt-Alumina KCl 0.53(mm)
280-155138-7	CA213-7	11/12/2021 16:06	1	010F1001.D	HP-Plot Q 0.53(mm)
280-155138-8	G0081-7	11/12/2021 16:19	1	011F1101.D	Rt-Alumina KCl 0.53(mm)
280-155138-8	G0081-7	11/12/2021 16:19	1	011F1101.D	HP-Plot Q 0.53(mm)
280-155138-9	NW070-7	11/12/2021 16:32	1	012F1201.D	Rt-Alumina KCl 0.53(mm)
280-155138-9	NW070-7	11/12/2021 16:32	1	012F1201.D	HP-Plot Q 0.53(mm)
280-155138-10	PZ019-7	11/12/2021 16:45	1	013F1301.D	Rt-Alumina KCl 0.53(mm)
280-155138-10	PZ019-7	11/12/2021 16:45	1	013F1301.D	HP-Plot Q 0.53(mm)
280-155138-10 DU	PZ019-7 DU	11/12/2021 16:58	1	014F1401.D	Rt-Alumina KCl 0.53(mm)
280-155138-10 DU	PZ019-7 DU	11/12/2021 16:58	1	014F1401.D	HP-Plot Q 0.53(mm)
280-155138-10 MS	PZ019-7 MS	11/12/2021 17:12	1	015F1501.D	Rt-Alumina KCl 0.53(mm)
280-155138-10 MS	PZ019-7 MS	11/12/2021 17:12	1	015F1501.D	HP-Plot Q 0.53(mm)
280-155138-10 MSD	PZ019-7 MSD	11/12/2021 17:25	1	016F1601.D	Rt-Alumina KCl 0.53(mm)
280-155138-10 MSD	PZ019-7 MSD	11/12/2021 17:25	1	016F1601.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 17:38	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 17:38	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 17:51	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 17:51	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 18:04	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 18:04	1		HP-Plot Q 0.53(mm)
CCV 280-557326/20		11/12/2021 18:17	1	020F2001.D	Rt-Alumina KCl 0.53(mm)
CCV 280-557326/20		11/12/2021 18:17	1	020F2001.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 18:30	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 18:30	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 18:43	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 18:43	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 18:56	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 18:56	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 19:09	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 19:09	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 19:22	1		Rt-Alumina KCl 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: VGC_J Start Date: 11/12/2021 14:09

Analysis Batch Number: 557326 End Date: 11/12/2021 20:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		11/12/2021 19:22	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 19:35	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 19:35	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 19:48	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 19:48	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 20:01	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 20:01	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 20:14	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 20:14	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 20:27	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 20:27	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 20:40	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 20:40	1		HP-Plot Q 0.53(mm)
CCV 280-557326/32		11/12/2021 20:53	1		Rt-Alumina KCl 0.53(mm)
CCV 280-557326/32		11/12/2021 20:53	1		HP-Plot Q 0.53(mm)

GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 556939 Batch Start Date: 11/10/21 11:51 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 280-556939/1		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCS 280-556939/2		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCSD 280-556939/3		RSK-175		20 mL	20 mL	5 SU	200 uL		
MB 280-556939/4		RSK-175		20 mL	20 mL	5 SU			
280-155138-G-6	NW071-7	RSK-175	T	20 mL	20 mL	<2 SU			
CCV 280-556939/16		RSK-175		20 mL	20 mL	5 SU	200 uL		
CCV 280-556939/30		RSK-175		20 mL	20 mL	5 SU	200 uL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 557116 Batch Start Date: 11/11/21 16:10 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 280-557116/1		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCS 280-557116/2		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCSD 280-557116/3		RSK-175		20 mL	20 mL	5 SU	200 uL		
MB 280-557116/4		RSK-175		20 mL	20 mL	5 SU			
CCV 280-557116/17		RSK-175		20 mL	20 mL	5 SU	200 uL		
280-155138-I-1	NW021-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155138-I-2	NW020-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155138-I-3	NW022-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155138-I-4	G0082-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155138-H-5	G0087-7	RSK-175	T	20 mL	20 mL	<2 SU			
CCV 280-557116/30		RSK-175		20 mL	20 mL	5 SU	200 uL		

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 557326 Batch Start Date: 11/12/21 14:09 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 280-557326/1		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCS 280-557326/2		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCSD 280-557326/3		RSK-175		20 mL	20 mL	5 SU	200 uL		
MB 280-557326/4		RSK-175		20 mL	20 mL	5 SU			
280-155138-I-7	CA213-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155138-H-8	G0081-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155138-H-9	NW070-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155138-I-10	PZ019-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155138-G-10 DU	PZ019-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155138-G-10 MS	PZ019-7	RSK-175	T	20 mL	20 mL	<2 SU	200 uL		
280-155138-I-10 MSD	PZ019-7	RSK-175	T	20 mL	20 mL	<2 SU	200 uL		
CCV 280-557326/20		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 TestAmerica, Denver Job No.: 280-155138-1

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 #
NW021-7	280-155138-1	98 M	
NW021-7	280-155138-1		94
NW020-7	280-155138-2	91 M	
NW020-7	280-155138-2		93 M
NW022-7	280-155138-3	93 M	
G0082-7	280-155138-4	95 M	
G0082-7	280-155138-4		94
G0087-7	280-155138-5	94 M	
G0087-7	280-155138-5		94
NW071-7	280-155138-6	95 M	
NW071-7	280-155138-6		93
CA213-7	280-155138-7	97 M	
G0081-7	280-155138-8	95 M	
G0081-7	280-155138-8		95 M
NW070-7	280-155138-9	89 M	
PZ019-7	280-155138-10	95 M	
	MB 280-556591/1-A	98	
	LCS 280-556591/2-A	95	
	LCS 280-556591/3-A	99	
PZ019-7 MS	280-155138-10 MS	96 M	
PZ019-7 MS	280-155138-10 MS	96 M	
PZ019-7 MSD	280-155138-10 MSD	93 M	
PZ019-7 MSD	280-155138-10 MSD	96 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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 11090038.D

Lab ID: LCS 280-556591/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.00	2.13	107	73-125	
1,3-Dinitrobenzene	2.00	2.06	103	78-120	
2,4,6-Trinitrotoluene	2.00	2.10	105	71-123	
2,4-Dinitrotoluene	2.00	2.01	101	78-120	
2,6-Dinitrotoluene	2.00	1.99	99	77-127	
2-Amino-4,6-dinitrotoluene	2.00	1.92	96	79-120	
2-Nitrotoluene	2.00	1.56	78	70-127	
3-Nitrotoluene	2.00	1.55	78	73-125	M
4-Amino-2,6-dinitrotoluene	2.00	1.87	93	76-125	
4-Nitrotoluene	2.00	1.59	79	71-127	
HMX	2.00	2.09	105	65-135	
Nitrobenzene	2.00	1.78	89	65-134	
RDX	2.00	1.99	100	68-130	
Tetryl	2.00	2.03	101	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 11090039.D

Lab ID: LCS 280-556591/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
MNX	2.33	2.31	99	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 11090052.D

Lab ID: 280-155138-10 MS Client ID: PZ019-7 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.01	0.20 U	2.10	104	73-125	M
1,3-Dinitrobenzene	2.01	0.10 U	2.05	102	78-120	M
2,4,6-Trinitrotoluene	2.01	0.10 U	2.09	104	71-123	
2,4-Dinitrotoluene	2.01	0.081 U	2.01	100	78-120	
2,6-Dinitrotoluene	2.01	0.081 U	2.05	102	77-127	
2-Amino-4,6-dinitrotoluene	2.01	0.10 U	1.94	96	79-120	
2-Nitrotoluene	2.01	0.20 U	1.74	87	70-127	
3-Nitrotoluene	2.01	0.40 U	1.71	85	73-125	M
4-Amino-2,6-dinitrotoluene	2.01	0.12 U	1.89	94	76-125	
4-Nitrotoluene	2.01	0.40 U	1.73	86	71-127	
HMX	2.01	0.20 U	1.96	97	65-135	M
Nitrobenzene	2.01	0.20 U	1.92	95	65-134	M
RDX	2.01	0.20 U	1.89	94	68-130	M
Tetryl	2.01	0.10 U	2.17	108	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 11090054.D

Lab ID: 280-155138-10 MS Client ID: PZ019-7 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
MNX	2.46	0.40 U	2.45	99	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 11090053.D

Lab ID: 280-155138-10 MSD Client ID: PZ019-7 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,3,5-Trinitrobenzene	2.03	2.11	104	1	30	73-125	M
1,3-Dinitrobenzene	2.03	2.12	105	3	30	78-120	
2,4,6-Trinitrotoluene	2.03	2.12	105	2	30	71-123	
2,4-Dinitrotoluene	2.03	2.01	99	0	30	78-120	
2,6-Dinitrotoluene	2.03	2.05	101	0	30	77-127	
2-Amino-4,6-dinitrotoluene	2.03	1.94	95	0	30	79-120	
2-Nitrotoluene	2.03	1.67	82	4	30	70-127	
3-Nitrotoluene	2.03	1.66	82	3	30	73-125	M
4-Amino-2,6-dinitrotoluene	2.03	1.89	93	0	30	76-125	
4-Nitrotoluene	2.03	1.68	83	3	30	71-127	
HMX	2.03	2.03	100	3	30	65-135	M
Nitrobenzene	2.03	1.94	95	1	30	65-134	
RDX	2.03	1.96	97	4	30	68-130	M
Tetryl	2.03	2.18	107	0	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 11090055.D

Lab ID: 280-155138-10 MSD Client ID: PZ019-7 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
MNX	2.33	2.33	100	5	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: MB 280-556591/1-A

Matrix: Water Date Extracted: 11/08/2021 14:30

Lab File ID:(1) 11090037.D Lab File ID:(2)

Date Analyzed:(1) 11/10/2021 02:04 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 280-556591/2-A	11/10/2021 02:27	
	LCS 280-556591/3-A	11/10/2021 02:50	
NW021-7	280-155138-1	11/10/2021 03:12	11/11/2021 02:06
NW020-7	280-155138-2	11/10/2021 03:35	11/11/2021 02:40
NW022-7	280-155138-3	11/10/2021 03:58	
G0082-7	280-155138-4	11/10/2021 04:21	11/11/2021 03:15
G0087-7	280-155138-5	11/10/2021 04:44	11/11/2021 03:50
NW071-7	280-155138-6	11/10/2021 05:07	11/11/2021 04:25
CA213-7	280-155138-7	11/10/2021 05:30	
G0081-7	280-155138-8	11/10/2021 06:39	11/11/2021 05:00
NW070-7	280-155138-9	11/10/2021 07:02	
PZ019-7	280-155138-10	11/10/2021 07:25	
PZ019-7 MS	280-155138-10 MS	11/10/2021 07:48	
PZ019-7 MSD	280-155138-10 MSD	11/10/2021 08:11	
PZ019-7 MS	280-155138-10 MS	11/10/2021 08:34	
PZ019-7 MSD	280-155138-10 MSD	11/10/2021 08:57	

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: NW021-7 Lab Sample ID: 280-155138-1

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

Date Analyzed (1): 11/10/2021 03:12 Date Analyzed (2): 11/11/2021 02:06

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	7.45	7.75	0.22		31.7
	2		8.80	8.65	8.95	0.16		
4-Amino-2,6-dinitrotoluene	1		11.17	11.09	11.29	0.76		8.3
	2		17.35	17.19	17.49	0.82		
2-Amino-4,6-dinitrotoluene	1		11.43	11.34	11.54	0.75		18.2
	2		18.25	18.09	18.39	0.90		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: NW020-7 Lab Sample ID: 280-155138-2

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

Date Analyzed (1): 11/10/2021 03:35 Date Analyzed (2): 11/11/2021 02:40

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.59	6.44	6.74	0.61		7.5
	2		6.64	6.50	6.80	0.57		
RDX	1		7.60	7.45	7.75	0.44		28.4
	2		8.78	8.65	8.95	0.58		
2,4,6-Trinitrotoluene	1		10.98	10.87	11.07	1.2		1.0
	2		25.04	24.91	25.21	1.2		
4-Amino-2,6-dinitrotoluene	1		11.18	11.09	11.29	1.6		5.4
	2		17.32	17.19	17.49	1.7		
2-Amino-4,6-dinitrotoluene	1		11.44	11.34	11.54	1.4		11.1
	2		18.22	18.09	18.39	1.5		
2,4-Dinitrotoluene	1		11.78	11.67	11.87	0.028		40.1
	2		20.47	20.33	20.63	0.042		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: G0082-7 Lab Sample ID: 280-155138-4

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

Date Analyzed (1): 11/10/2021 04:21 Date Analyzed (2): 11/11/2021 03:15

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.59	6.44	6.74	0.24		7.6
	2		6.64	6.50	6.80	0.26		
RDX	1		7.60	7.45	7.75	0.49		2.9
	2		8.80	8.65	8.95	0.51		
4-Amino-2,6-dinitrotoluene	1		11.17	11.09	11.29	0.21		28.9
	2		17.34	17.19	17.49	0.29		
2-Amino-4,6-dinitrotoluene	1		11.43	11.34	11.54	0.14		56.5
	2		18.26	18.09	18.39	0.24		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: G0087-7 Lab Sample ID: 280-155138-5

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

Date Analyzed (1): 11/10/2021 04:44 Date Analyzed (2): 11/11/2021 03:50

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
HMX	1		6.59	6.44	6.74	0.71		20.7
	2		6.63	6.50	6.80	0.58		
RDX	1		7.59	7.45	7.75	0.22		9.7
	2		8.78	8.65	8.95	0.20		
4-Amino-2,6-dinitrotoluene	1		11.17	11.09	11.29	0.58		11.8
	2		17.31	17.19	17.49	0.65		
2-Amino-4,6-dinitrotoluene	1		11.43	11.34	11.54	0.21		41.9
	2		18.22	18.09	18.39	0.32		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: G0081-7 Lab Sample ID: 280-155138-8

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

Date Analyzed (1): 11/10/2021 06:39 Date Analyzed (2): 11/11/2021 05:00

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
1,3,5-Trinitrobenzene	1		8.69	8.54	8.84	0.46		4.4
	2		18.75	18.63	18.93	0.44		
4-Amino-2,6-dinitrotoluene	1		11.17	11.09	11.29	0.25		128.4
	2		17.27	17.19	17.49	1.2		
2-Amino-4,6-dinitrotoluene	1		11.42	11.34	11.54	0.093		123.7
	2		18.25	18.09	18.39	0.40		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: NW021-7 Lab Sample ID: 280-155138-1

Matrix: Water Lab File ID: 11090040.D

Analysis Method: 8330A Date Collected: 11/03/2021 10:55

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 476.9(mL) Date Analyzed: 11/10/2021 03:12

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

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

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

Analysis Batch No.: 556781 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	0.10	U	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	0.10	0.084	0.042
35572-78-2	2-Amino-4,6-dinitrotoluene	0.75		0.12	0.10	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	0.76		0.16	0.13	0.060
99-99-0	4-Nitrotoluene	0.42	U	0.43	0.42	0.10
2691-41-0	HMX	0.21	U M	0.22	0.21	0.092
5755-27-1	MNX	0.42	U	2.1	0.42	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.095
121-82-4	RDX	0.22	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 TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090040.D
Lims ID: 280-155138-A-1-A
Client ID: NW021-7
Sample Type: Client
Inject. Date: 10-Nov-2021 03:12:59 ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155138-A-1-A
Misc. Info.: 280-0106333-040
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Nov-2021 12:59:02 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1646

First Level Reviewer: zhangji Date: 10-Nov-2021 12:44:16

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.592			ND	U
7 MNX	1		7.223			ND	M
8 RDX	1	7.601	7.598	0.003	2245	0.0211	M
$ 10 1,2-Dinitrobenzene	1	8.568	8.572	-0.004	25071	0.1955	M
11 1,3,5-Trinitrobenzene	1		8.685			ND	
12 1,3-Dinitrobenzene	1		9.331			ND	
13 Nitrobenzene	1		9.725			ND	
15 Tetryl	1		10.065			ND	U
17 2,4,6-Trinitrotoluene	1		10.971			ND	
18 4-Amino-2,6-dinitrotoluene	1	11.174	11.185	-0.011	11019	0.0721	
19 2-Amino-4,6-dinitrotoluene	1	11.427	11.438	-0.011	14853	0.0718	
20 2,6-Dinitrotoluene	1		11.605			ND	
21 2,4-Dinitrotoluene	1		11.771			ND	
22 o-Nitrotoluene	1		12.645			ND	
23 p-Nitrotoluene	1		13.078			ND	7
24 m-Nitrotoluene	1		13.658			ND	

QC Flag Legend

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

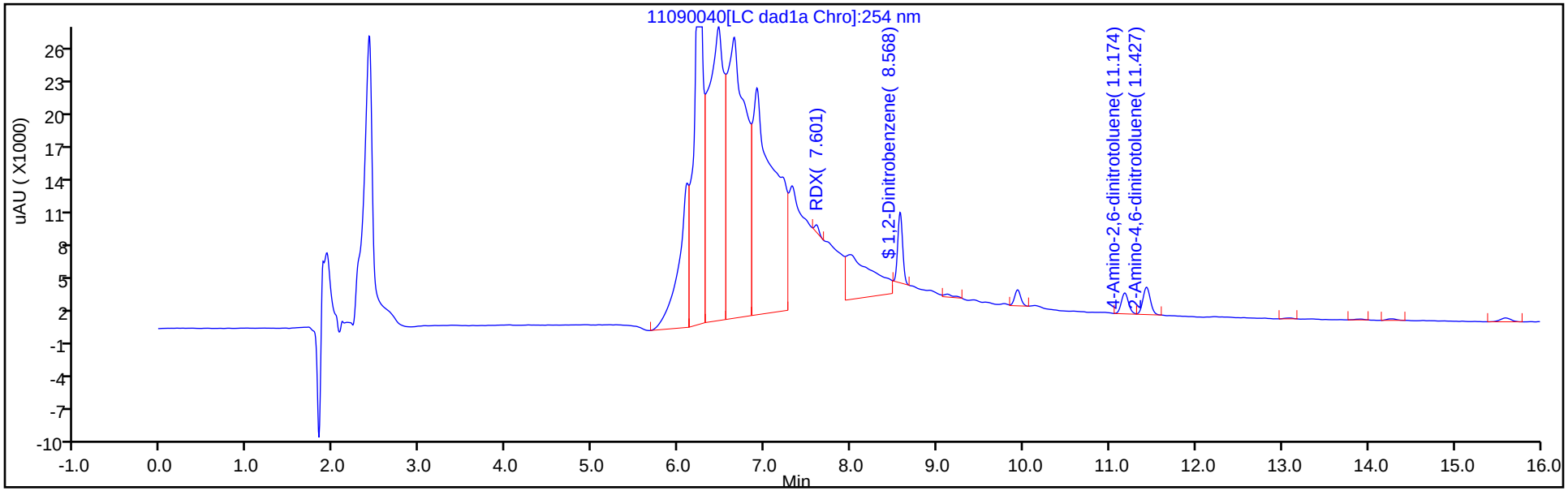
Report Date: 10-Nov-2021 12:59:06 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

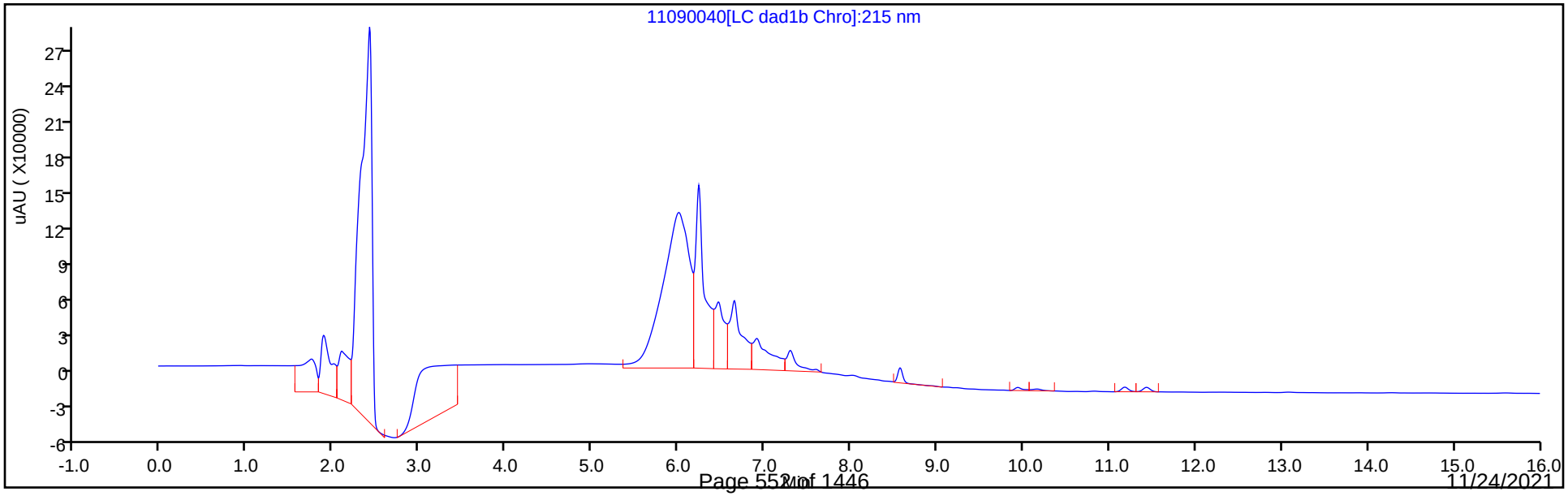
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090040.d

Injection Date:	10-Nov-2021 03:12:59	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155138-A-1-A	Lab Sample ID:	280-155138-1	Worklist Smp#:	40
Client ID:	NW021-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090040.D				
Lims ID:	280-155138-A-1-A				
Client ID:	NW021-7				
Sample Type:	Client				
Inject. Date:	10-Nov-2021 03:12:59	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-A-1-A				
Misc. Info.:	280-0106333-040				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:59:02	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:44:16		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1955	97.77

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

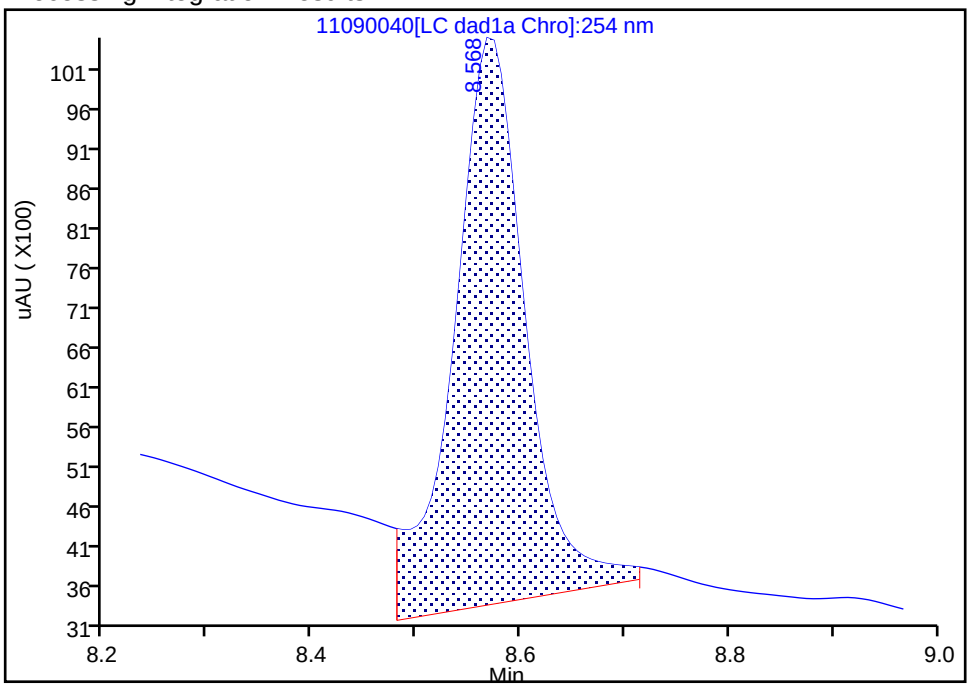
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090040.d				
Injection Date:	10-Nov-2021 03:12:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-1-A	Lab Sample ID:	280-155138-1		
Client ID:	NW021-7				
Operator ID:	JZ	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

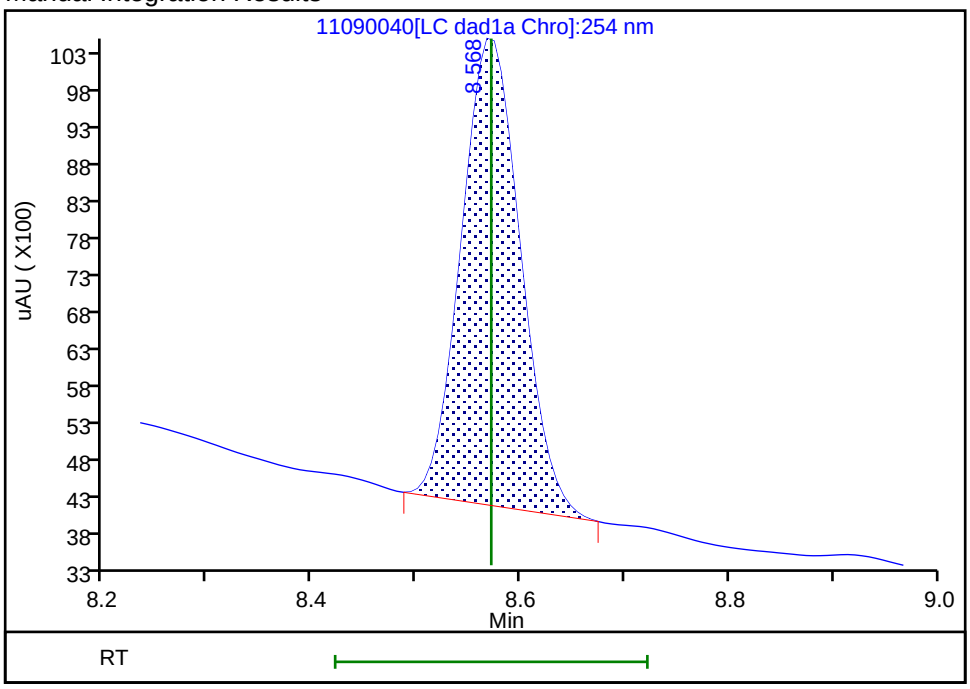
Processing Integration Results

RT: 8.57
Area: 34058
Amount: 0.265627
Amount Units: ug/mL



Manual Integration Results

RT: 8.57
Area: 25071
Amount: 0.195535
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:44:11

Audit Action: Manually Integrated Audit Reason: Baseline

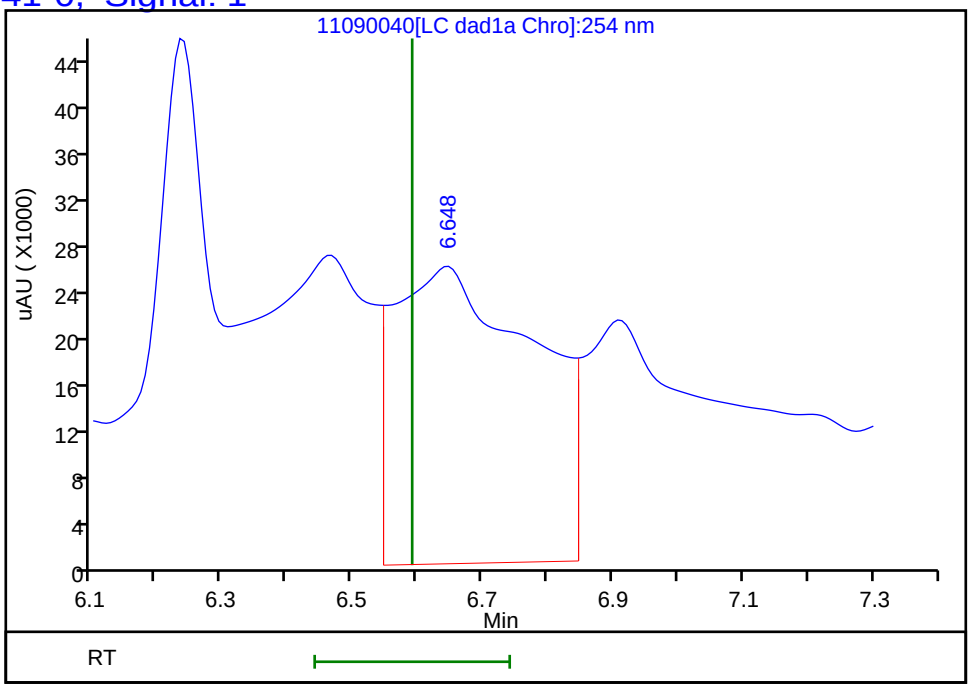
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090040.d				
Injection Date:	10-Nov-2021 03:12:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-1-A	Lab Sample ID:	280-155138-1		
Client ID:	NW021-7				
Operator ID:	JZ	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 6.65
Response: 378583
Amount: 4.484442



Reviewer: zhangji, 10-Nov-2021 12:44:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

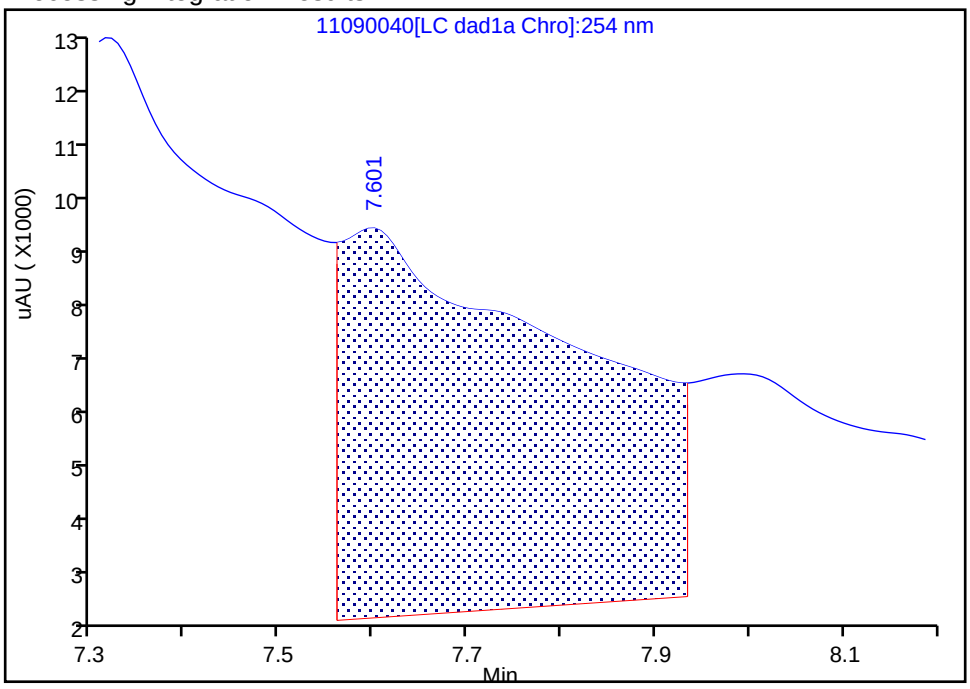
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090040.d				
Injection Date:	10-Nov-2021 03:12:59	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-1-A	Lab Sample ID:	280-155138-1		
Client ID:	NW021-7				
Operator ID:	JZ	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

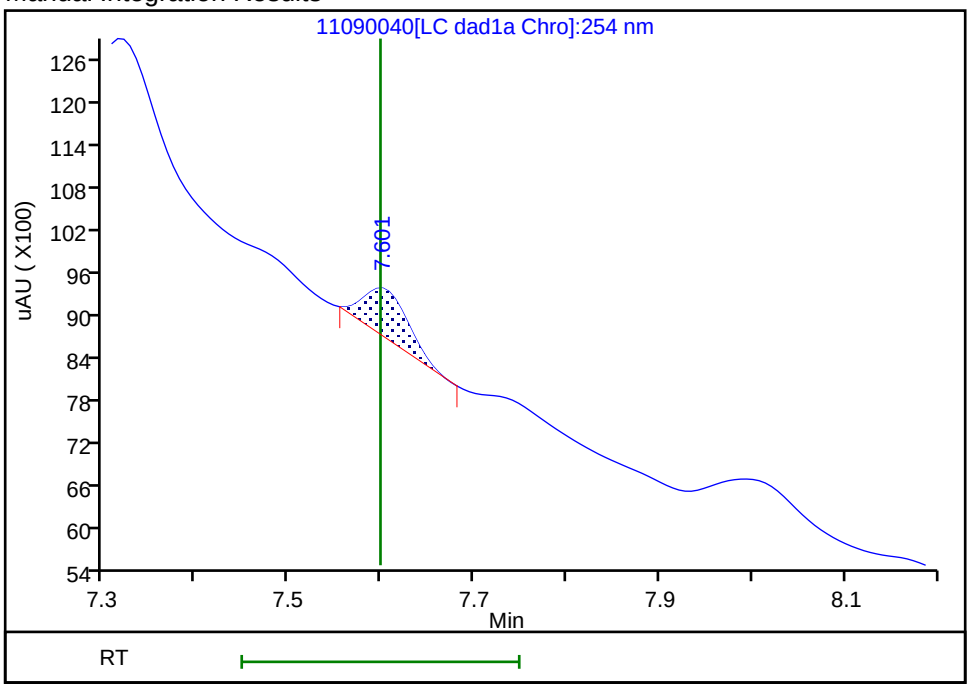
Processing Integration Results

RT: 7.60
Area: 120804
Amount: 1.136856
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 2245
Amount: 0.021127
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:44:07
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

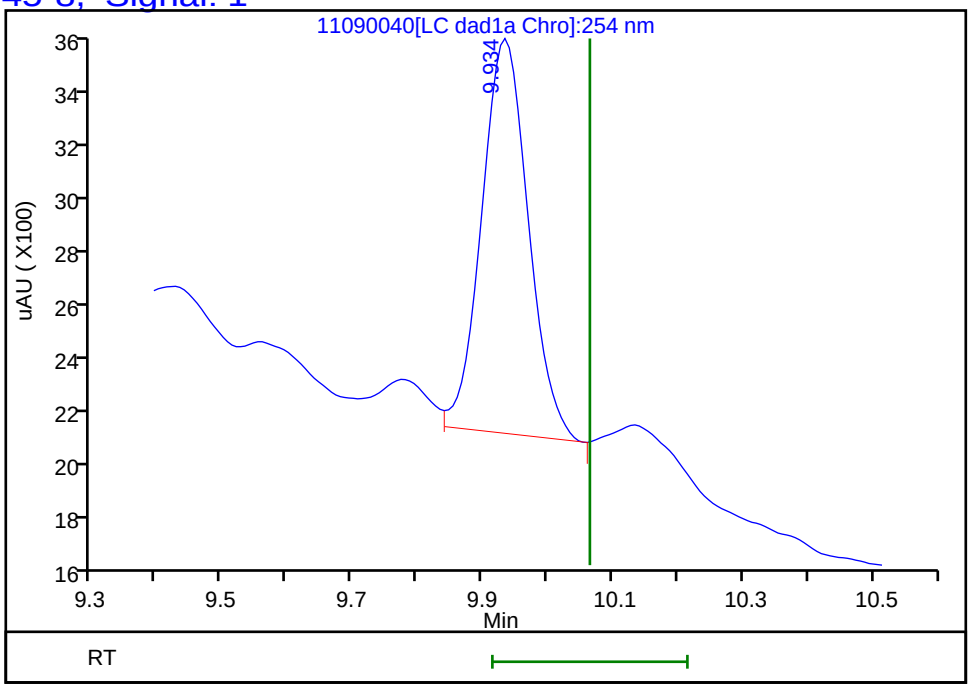
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090040.d
Injection Date: 10-Nov-2021 03:12:59 Instrument ID: CHHPLC_X3
Lims ID: 280-155138-A-1-A Lab Sample ID: 280-155138-1
Client ID: NW021-7
Operator ID: JZ ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 9.93
Response: 7177
Amount: 0.041625



Reviewer: zhangji, 10-Nov-2021 12:44:16
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: NW021-7 Lab Sample ID: 280-155138-1

Matrix: Water Lab File ID: 11100025.D

Analysis Method: 8330A Date Collected: 11/03/2021 10:55

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 476.9(mL) Date Analyzed: 11/11/2021 02:06

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.: 556958 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	94		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100025.D
Lims ID: 280-155138-A-1-A
Client ID: NW021-7
Sample Type: Client
Inject. Date: 11-Nov-2021 02:06:00 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155138-A-1-A
Misc. Info.: 280-0106378-025
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 11-Nov-2021 19:12:33 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1674

First Level Reviewer: zhangji Date: 11-Nov-2021 19:02:27

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.654	6.650	0.004	5116	0.0260	M
	6 MNX	1		7.367			ND	U
	8 RDX	1	8.801	8.803	-0.002	3136	0.0154	M
	9 Nitrobenzene	1		11.856			ND	
$	10 1,2-Dinitrobenzene	1	12.954	12.949	0.005	49862	0.1877	
	12 1,3-Dinitrobenzene	1		15.376			ND	
	14 o-Nitrotoluene	1		16.603			ND	7
	16 p-Nitrotoluene	1		16.889			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.354	17.343	0.011	23262	0.0784	
	18 m-Nitrotoluene	1		17.856			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.254	18.236	0.018	34824	0.0861	M
	20 1,3,5-Trinitrobenzene	1		18.776			ND	
	21 2,6-Dinitrotoluene	1		20.009			ND	
	22 2,4-Dinitrotoluene	1		20.476			ND	
	23 Tetryl	1		24.070			ND	
	24 2,4,6-Trinitrotoluene	1		25.063			ND	

QC Flag Legend

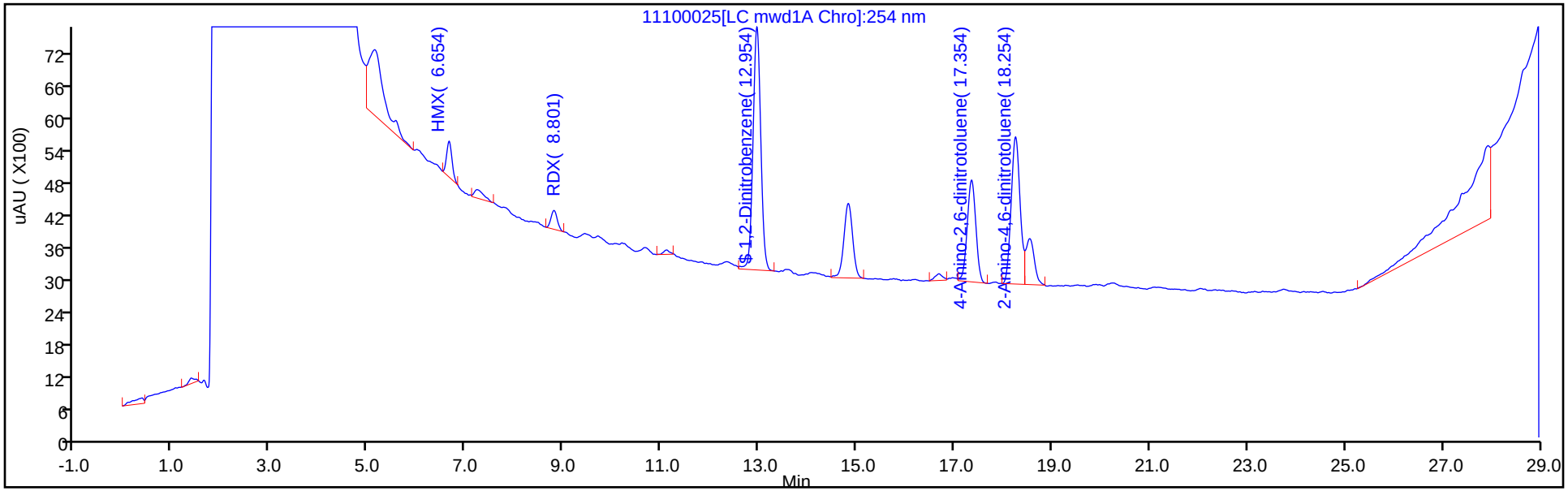
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 11-Nov-2021 19:12:35 Chrom Revision: 2.3 22-Sep-2021 15:38:46

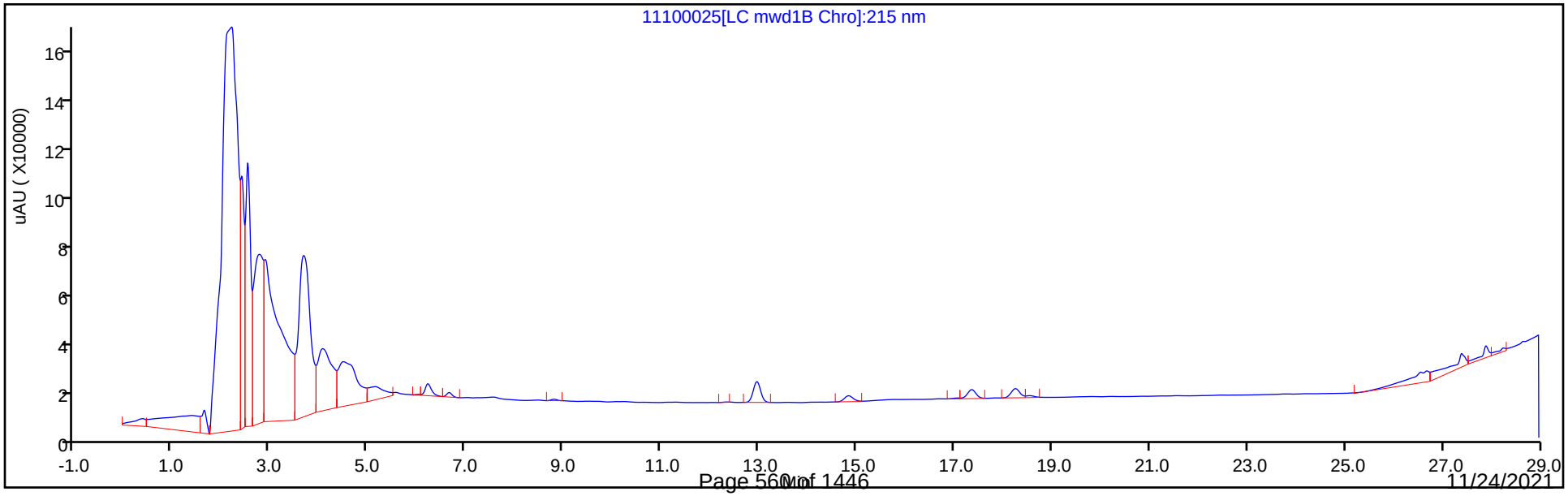
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100025.D				
Injection Date:	11-Nov-2021 02:06:00	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155138-A-1-A	Lab Sample ID:	280-155138-1	Worklist Smp#:	25
Client ID:	NW021-7				
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 TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100025.D				
Lims ID:	280-155138-A-1-A				
Client ID:	NW021-7				
Sample Type:	Client				
Inject. Date:	11-Nov-2021 02:06:00	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-A-1-A				
Misc. Info.:	280-0106378-025				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	11-Nov-2021 19:12:33	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1674				
First Level Reviewer: zhangji		Date:	11-Nov-2021 19:02:27		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1877	93.85

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

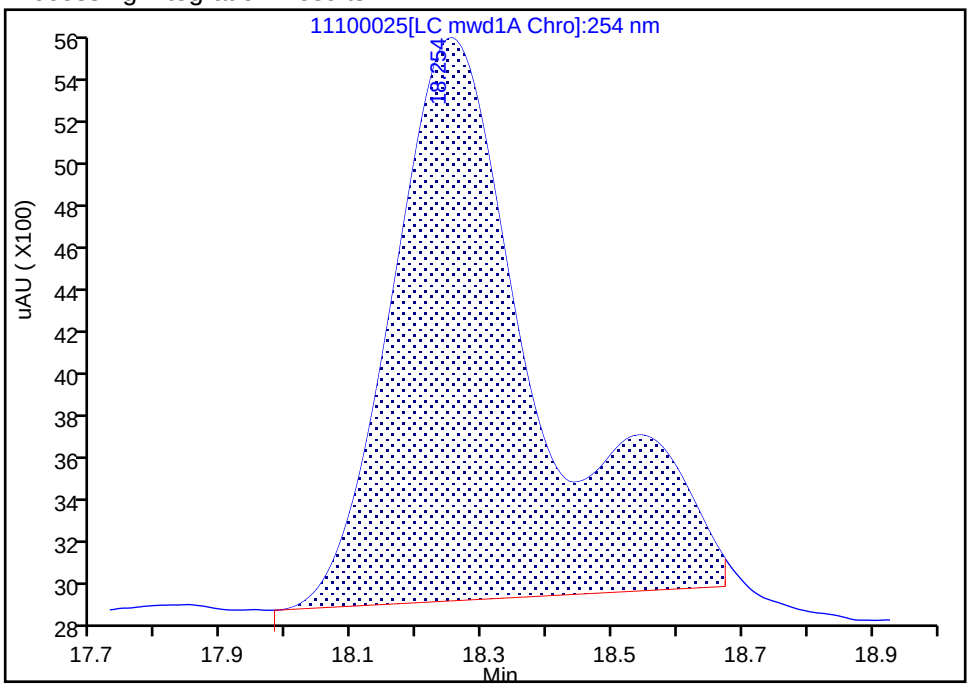
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100025.D				
Injection Date:	11-Nov-2021 02:06:00	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155138-A-1-A	Lab Sample ID:	280-155138-1		
Client ID:	NW021-7				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

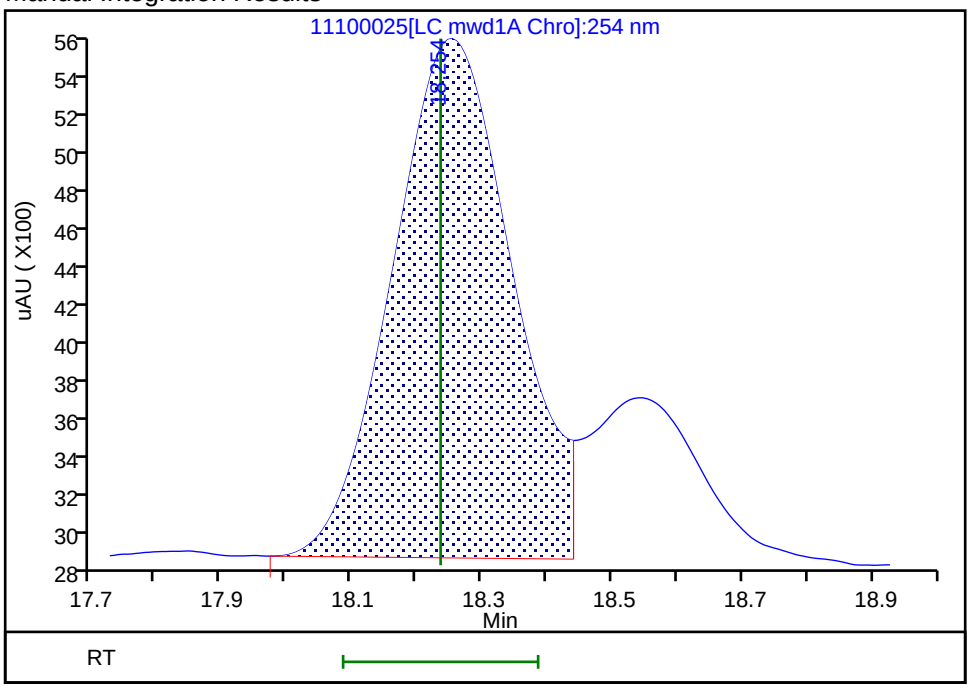
Processing Integration Results

RT: 18.25
Area: 41330
Amount: 0.102799
Amount Units: ug/ml



Manual Integration Results

RT: 18.25
Area: 34824
Amount: 0.086110
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:02:13

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

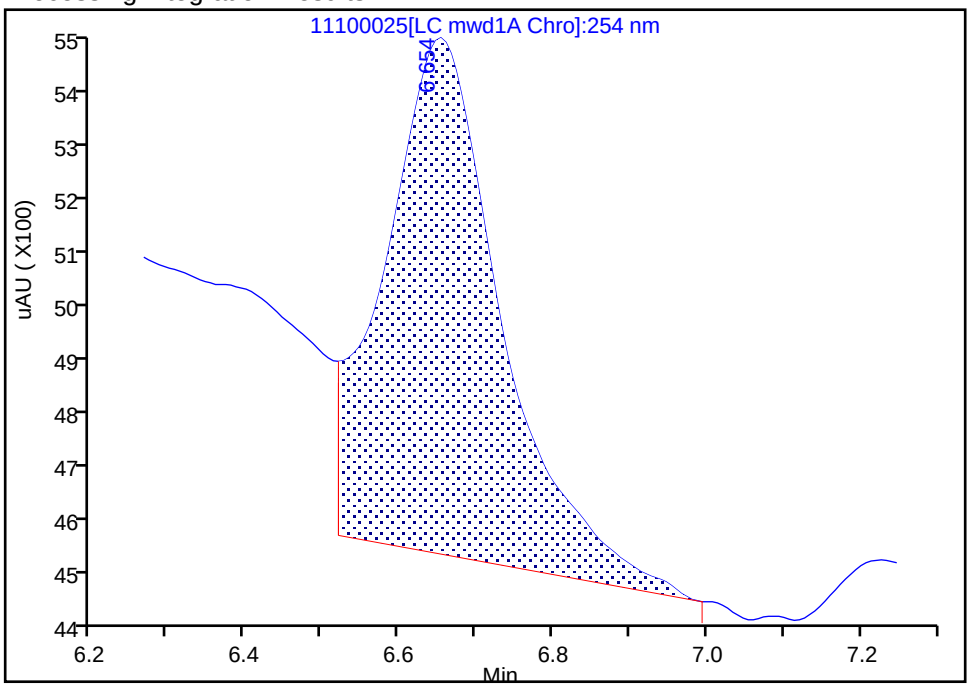
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100025.D				
Injection Date:	11-Nov-2021 02:06:00	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155138-A-1-A	Lab Sample ID:	280-155138-1		
Client ID:	NW021-7				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

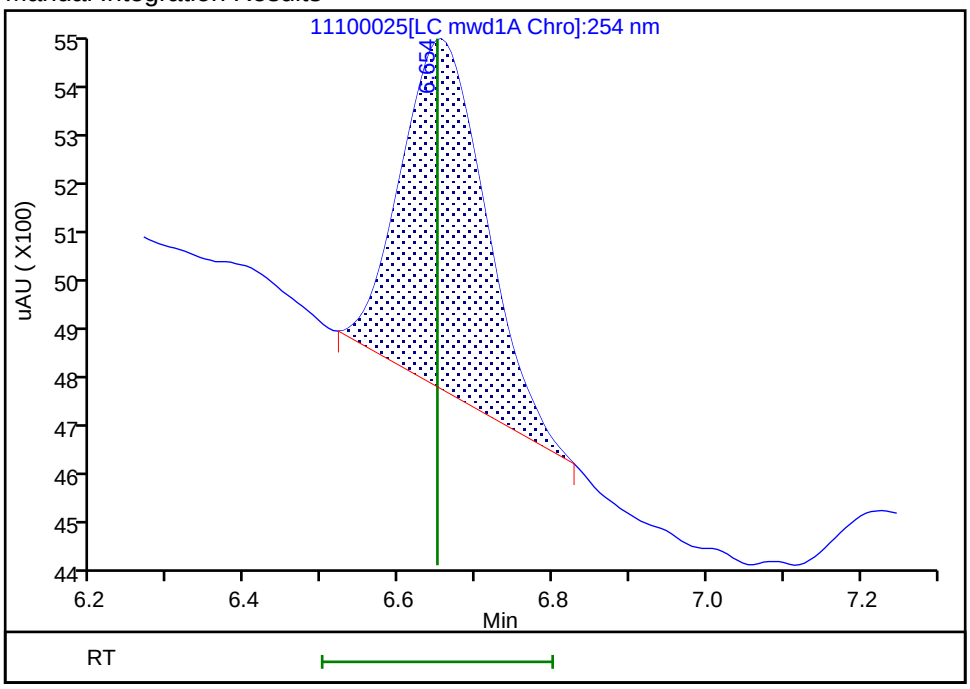
Processing Integration Results

RT: 6.65
Area: 9417
Amount: 0.053134
Amount Units: ug/ml



Manual Integration Results

RT: 6.65
Area: 5116
Amount: 0.026046
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:02:25

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

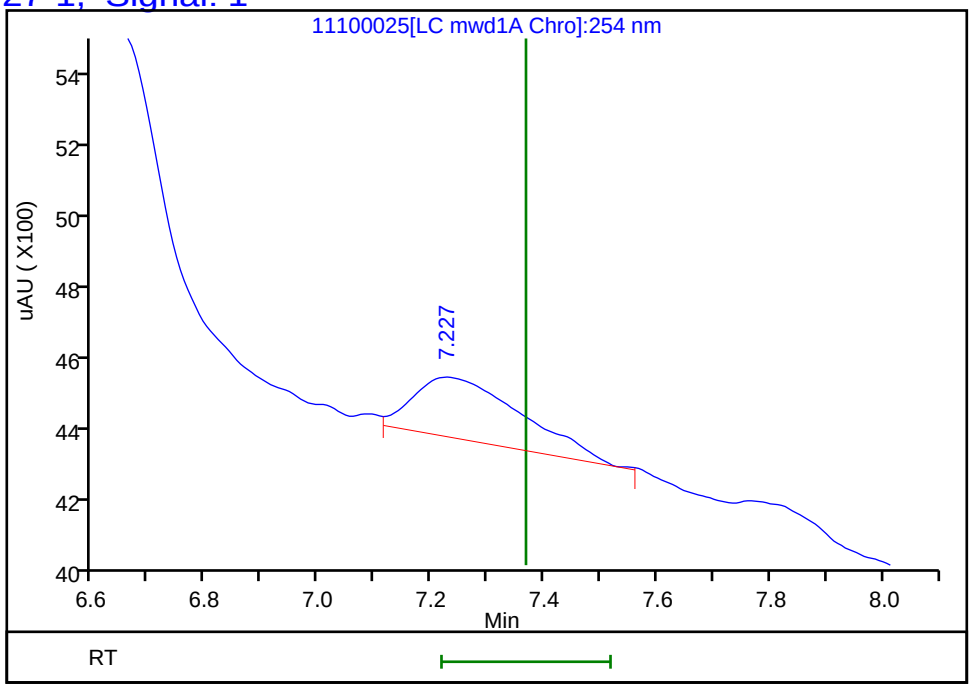
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100025.D				
Injection Date:	11-Nov-2021 02:06:00	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155138-A-1-A	Lab Sample ID:	280-155138-1		
Client ID:	NW021-7				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.23
Response: 2173
Amount: 0.008205



Reviewer: zhangji, 11-Nov-2021 19:02:27
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

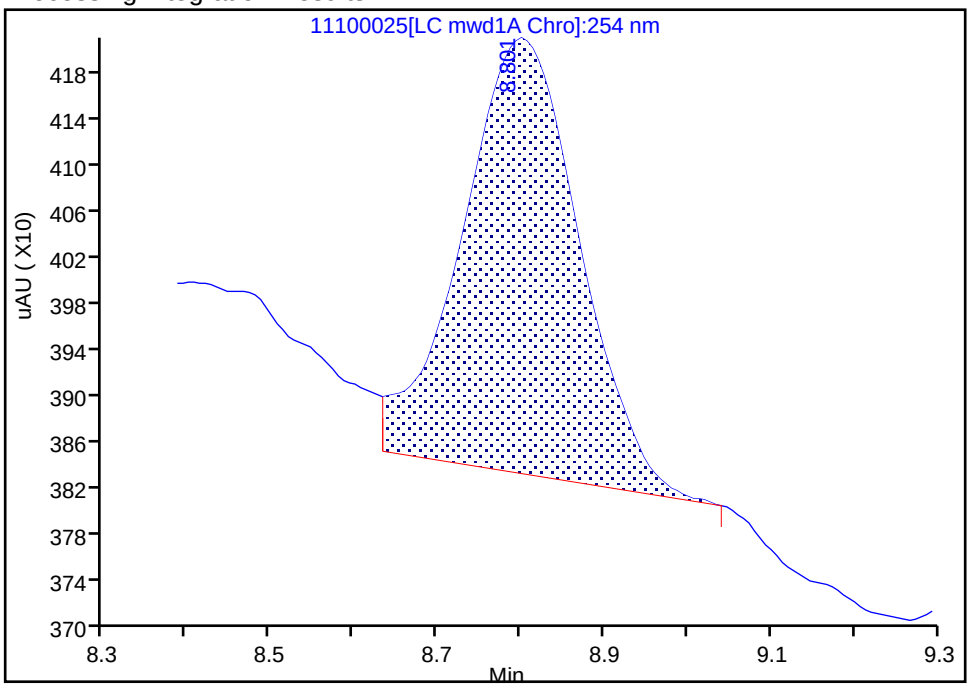
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100025.D				
Injection Date:	11-Nov-2021 02:06:00	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155138-A-1-A	Lab Sample ID:	280-155138-1		
Client ID:	NW021-7				
Operator ID:	JZ	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

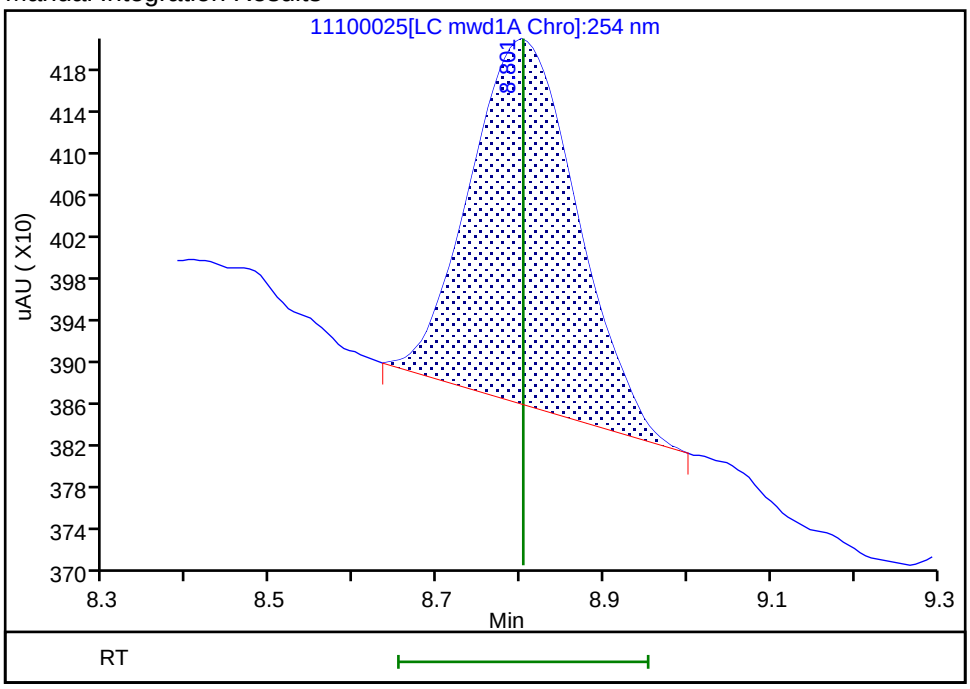
Processing Integration Results

RT: 8.80
Area: 3695
Amount: 0.018089
Amount Units: ug/ml



Manual Integration Results

RT: 8.80
Area: 3136
Amount: 0.015352
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:02:22

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: NW020-7 Lab Sample ID: 280-155138-2

Matrix: Water Lab File ID: 11090041.D

Analysis Method: 8330A Date Collected: 11/03/2021 09:35

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 491.5(mL) Date Analyzed: 11/10/2021 03:35

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.: 556781 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.086
99-65-0	1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	1.2		0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	0.028	J J1 M	0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	1.4	M	0.11	0.10	0.052
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.087
99-08-1	3-Nitrotoluene	0.41	U	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.6		0.15	0.12	0.059
99-99-0	4-Nitrotoluene	0.41	U	0.42	0.41	0.10
2691-41-0	HMX	0.61	M	0.21	0.20	0.089
5755-27-1	MNX	0.41	U	2.0	0.41	0.16
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.093
121-82-4	RDX	0.44	M	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	91	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090041.D
Lims ID: 280-155138-A-2-A
Client ID: NW020-7
Sample Type: Client
Inject. Date: 10-Nov-2021 03:35:58 ALS Bottle#: 41 Worklist Smp#: 41
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155138-A-2-A
Misc. Info.: 280-0106333-041
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Nov-2021 12:59:02 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1646

First Level Reviewer: zhangji Date: 10-Nov-2021 12:44:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.590	6.592	-0.002	5058	0.0599	M
7 MNX	1		7.223			ND	
8 RDX	1	7.603	7.598	0.005	4569	0.0430	M
$ 10 1,2-Dinitrobenzene	1	8.576	8.572	0.004	23278	0.1816	M
11 1,3,5-Trinitrobenzene	1		8.685			ND	
12 1,3-Dinitrobenzene	1		9.331			ND	U
13 Nitrobenzene	1		9.725			ND	
15 Tetryl	1		10.065			ND	U
17 2,4,6-Trinitrotoluene	1	10.976	10.971	0.005	24414	0.1185	
18 4-Amino-2,6-dinitrotoluene	1	11.183	11.185	-0.002	24504	0.1604	
19 2-Amino-4,6-dinitrotoluene	1	11.436	11.438	-0.002	27784	0.1343	M
20 2,6-Dinitrotoluene	1		11.605			ND	
21 2,4-Dinitrotoluene	1	11.776	11.771	0.005	787	0.002742	7M
22 o-Nitrotoluene	1		12.645			ND	
23 p-Nitrotoluene	1		13.078			ND	7
24 m-Nitrotoluene	1		13.658			ND	

QC Flag Legend

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

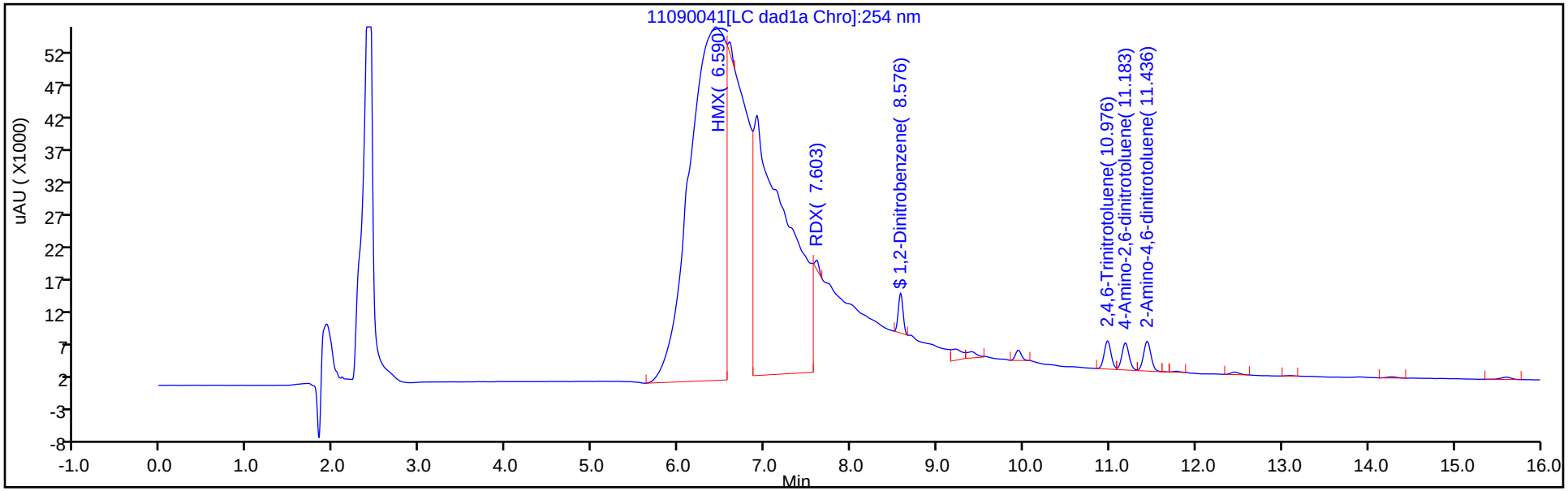
Report Date: 10-Nov-2021 12:59:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

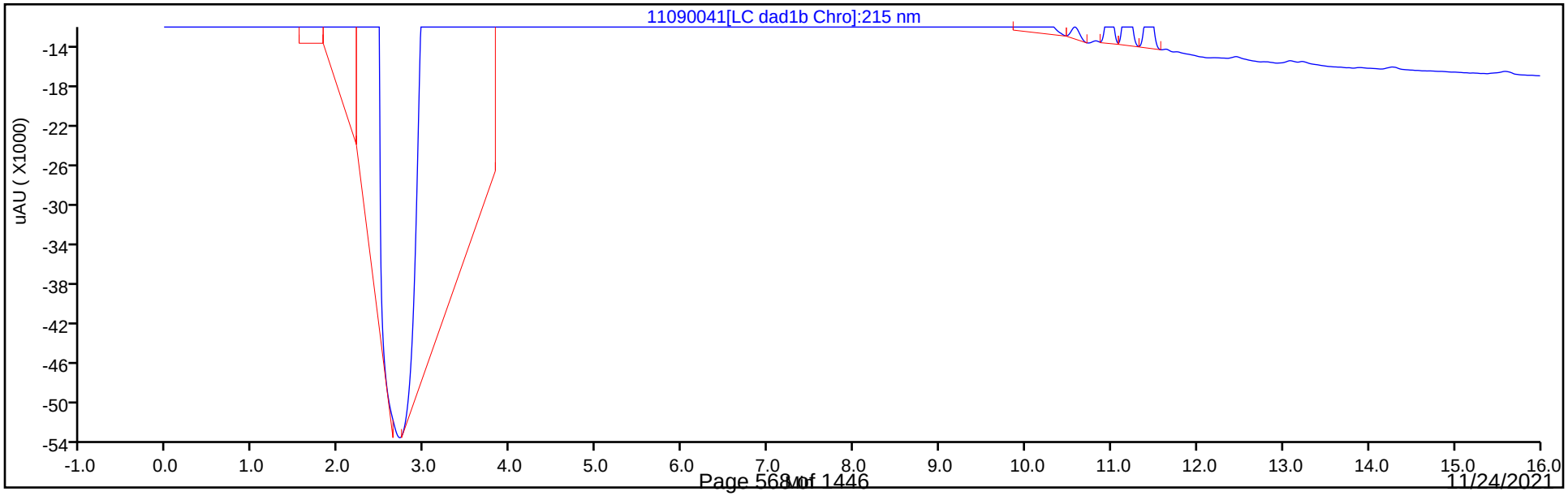
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090041.d

Injection Date:	10-Nov-2021 03:35:58	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155138-A-2-A	Lab Sample ID:	280-155138-2	Worklist Smp#:	41
Client ID:	NW020-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090041.D				
Lims ID:	280-155138-A-2-A				
Client ID:	NW020-7				
Sample Type:	Client				
Inject. Date:	10-Nov-2021 03:35:58	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-A-2-A				
Misc. Info.:	280-0106333-041				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:59:02	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:44:59		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1816	90.78

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

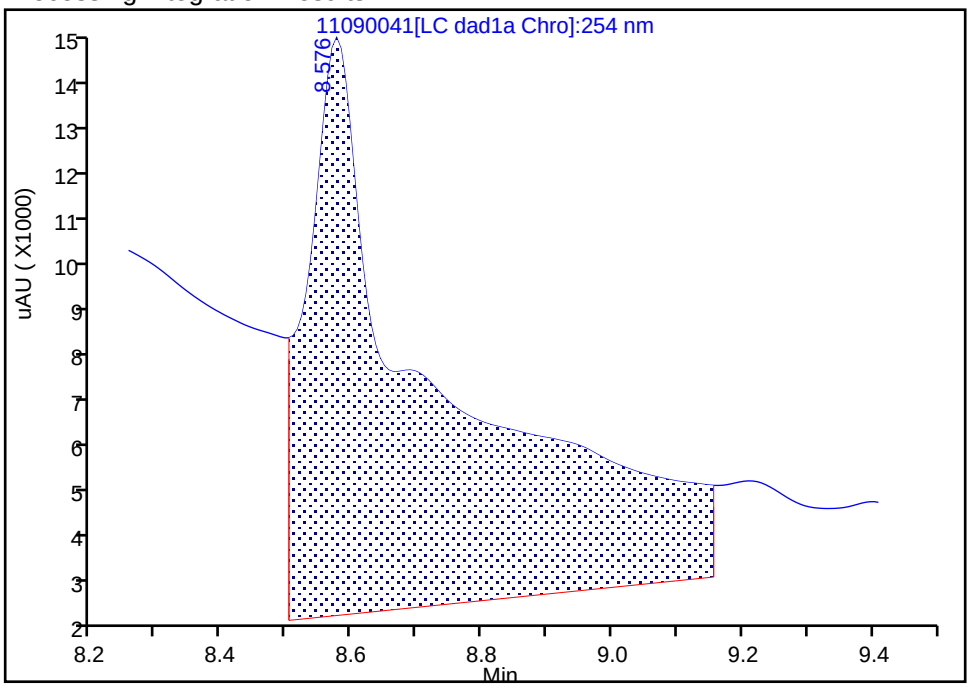
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090041.d				
Injection Date:	10-Nov-2021 03:35:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-2-A	Lab Sample ID:	280-155138-2		
Client ID:	NW020-7				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

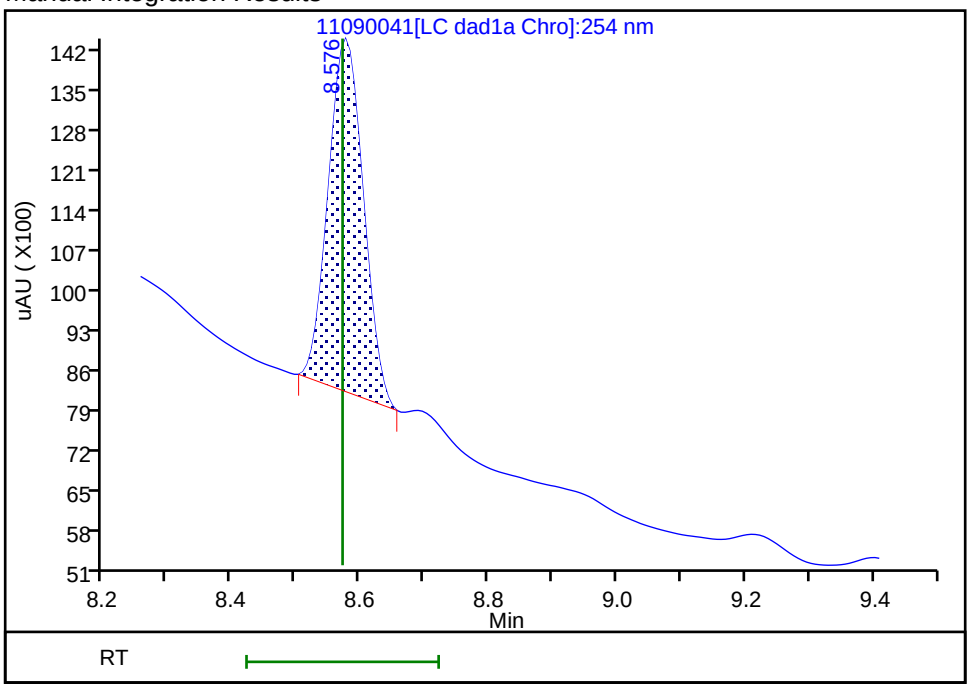
Processing Integration Results

RT: 8.58
Area: 161714
Amount: 1.261250
Amount Units: ug/mL



Manual Integration Results

RT: 8.58
Area: 23278
Amount: 0.181551
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:44:37

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

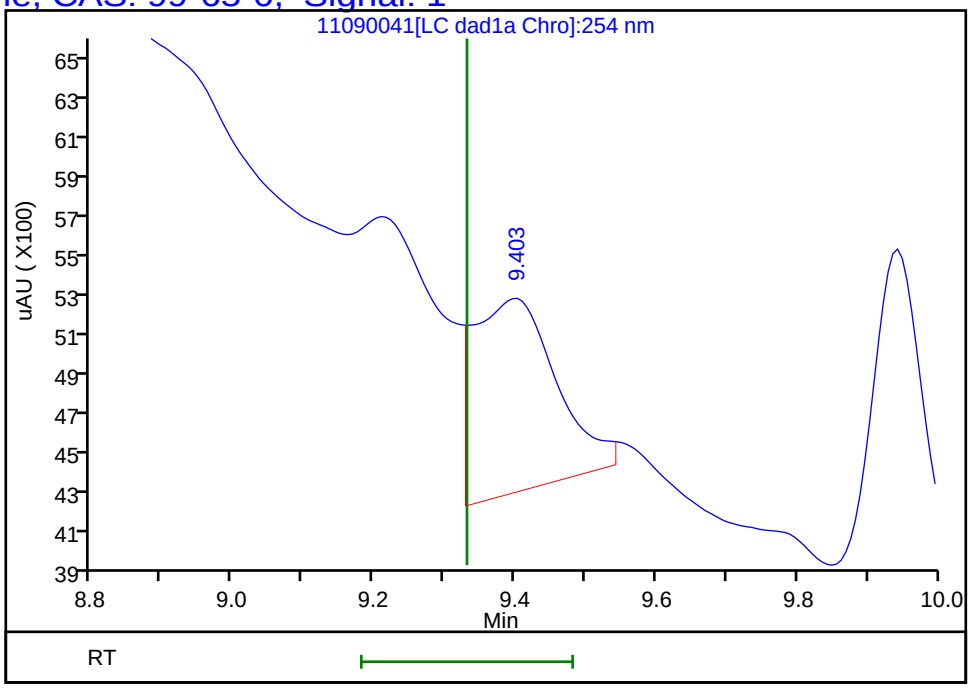
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090041.d

Injection Date:	10-Nov-2021 03:35:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-2-A	Lab Sample ID:	280-155138-2		
Client ID:	NW020-7				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 9.40
Response: 7787
Amount: 0.026278



Reviewer: zhangji, 10-Nov-2021 12:44:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

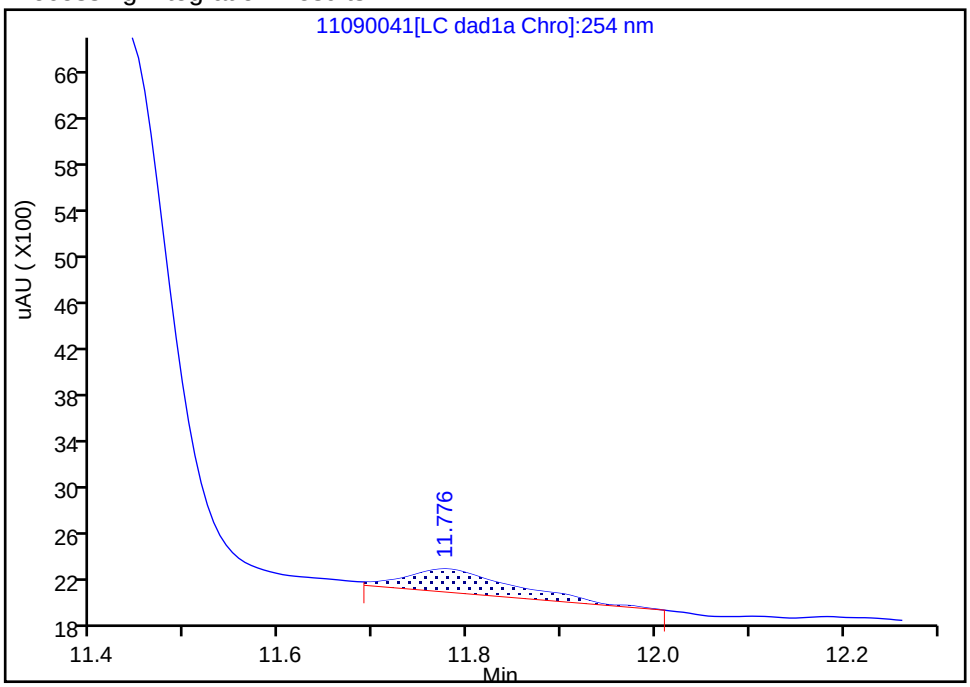
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090041.d				
Injection Date:	10-Nov-2021 03:35:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-2-A	Lab Sample ID:	280-155138-2		
Client ID:	NW020-7				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

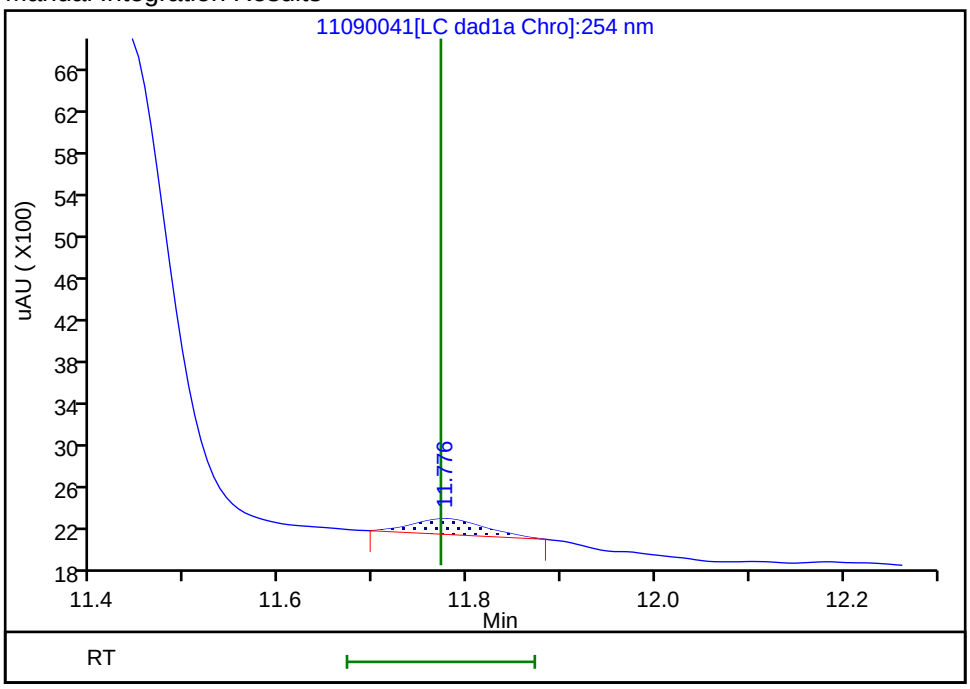
Processing Integration Results

RT: 11.78
Area: 1604
Amount: 0.005589
Amount Units: ug/mL



Manual Integration Results

RT: 11.78
Area: 787
Amount: 0.002742
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:44:52

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

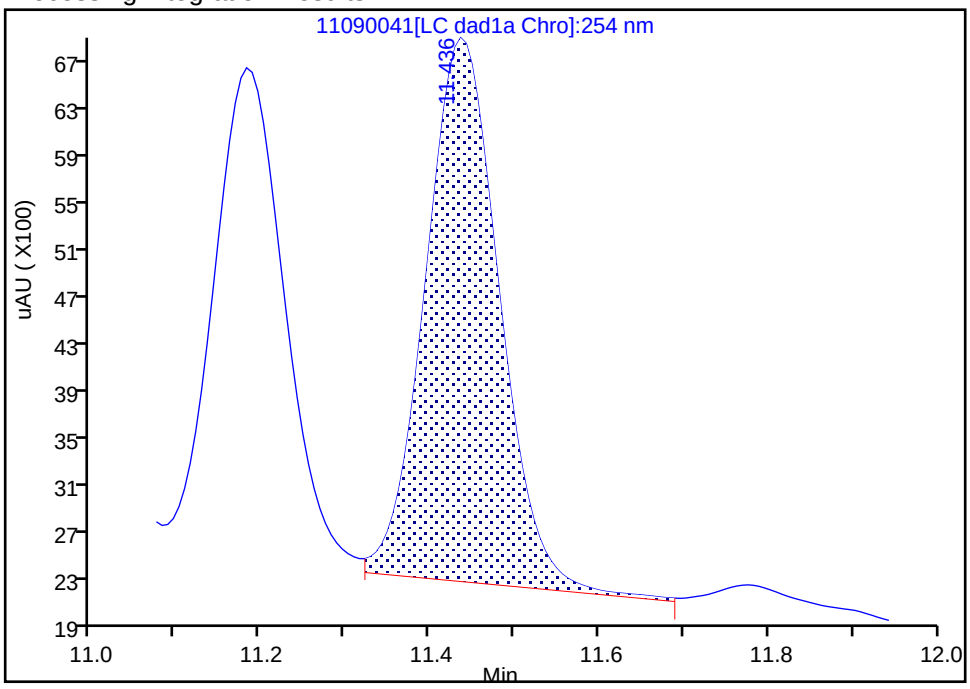
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090041.d				
Injection Date:	10-Nov-2021 03:35:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-2-A	Lab Sample ID:	280-155138-2		
Client ID:	NW020-7				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

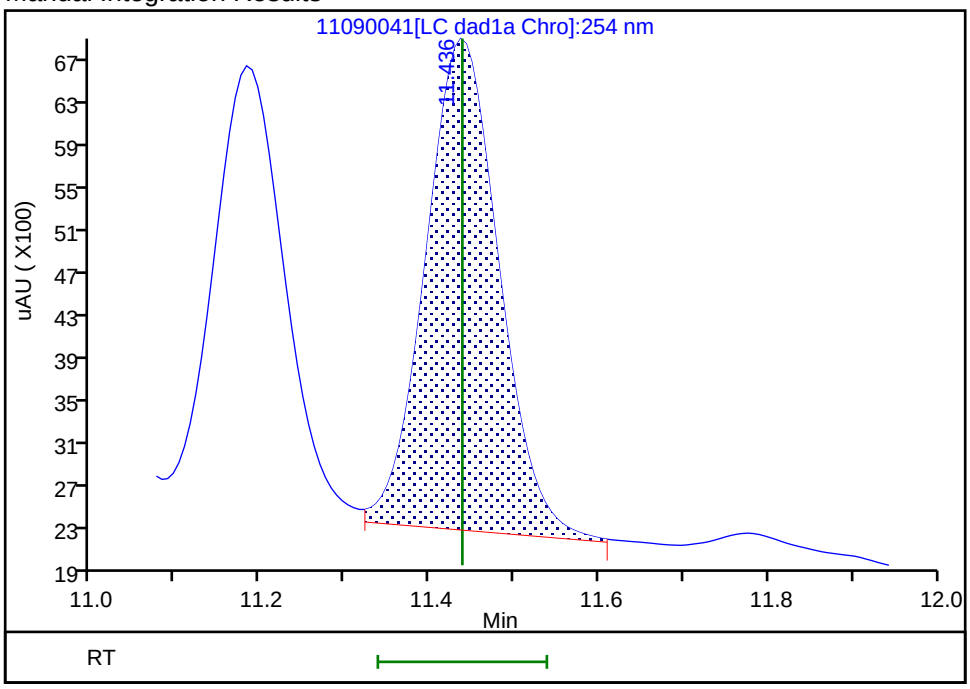
Processing Integration Results

RT: 11.44
Area: 27941
Amount: 0.135029
Amount Units: ug/mL



Manual Integration Results

RT: 11.44
Area: 27784
Amount: 0.134270
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:44:58

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

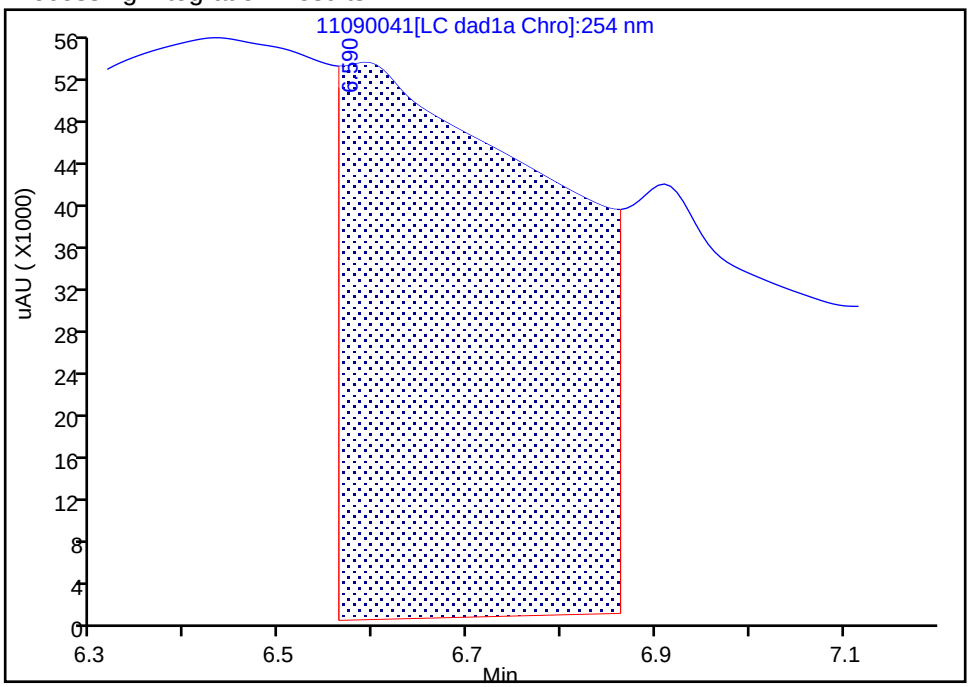
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090041.d				
Injection Date:	10-Nov-2021 03:35:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-2-A	Lab Sample ID:	280-155138-2		
Client ID:	NW020-7				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

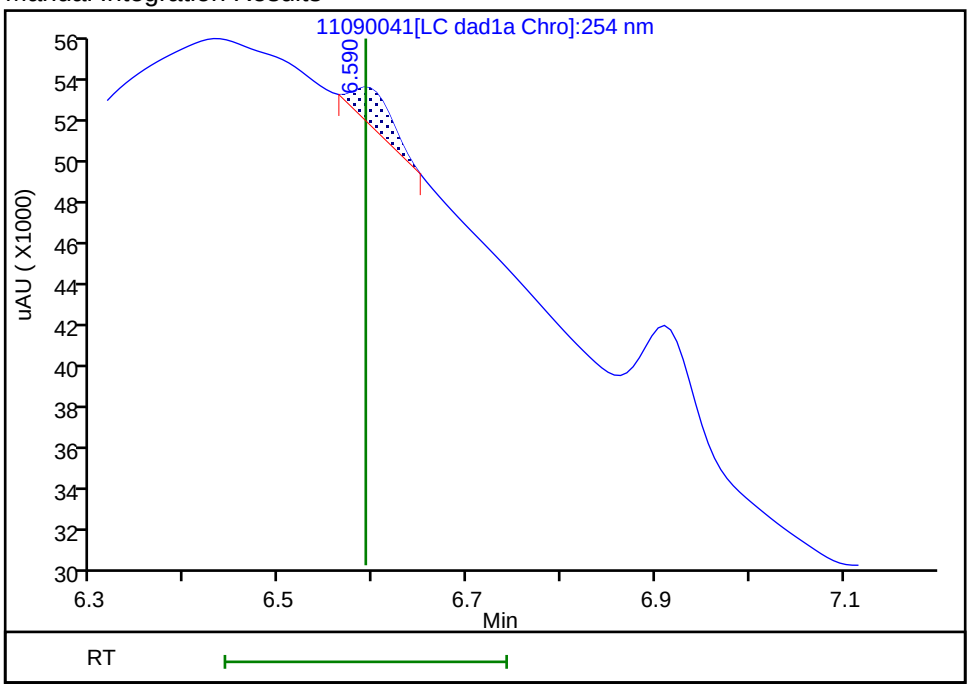
Processing Integration Results

RT: 6.59
Area: 809523
Amount: 9.589069
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 5058
Amount: 0.059914
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:44:27
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

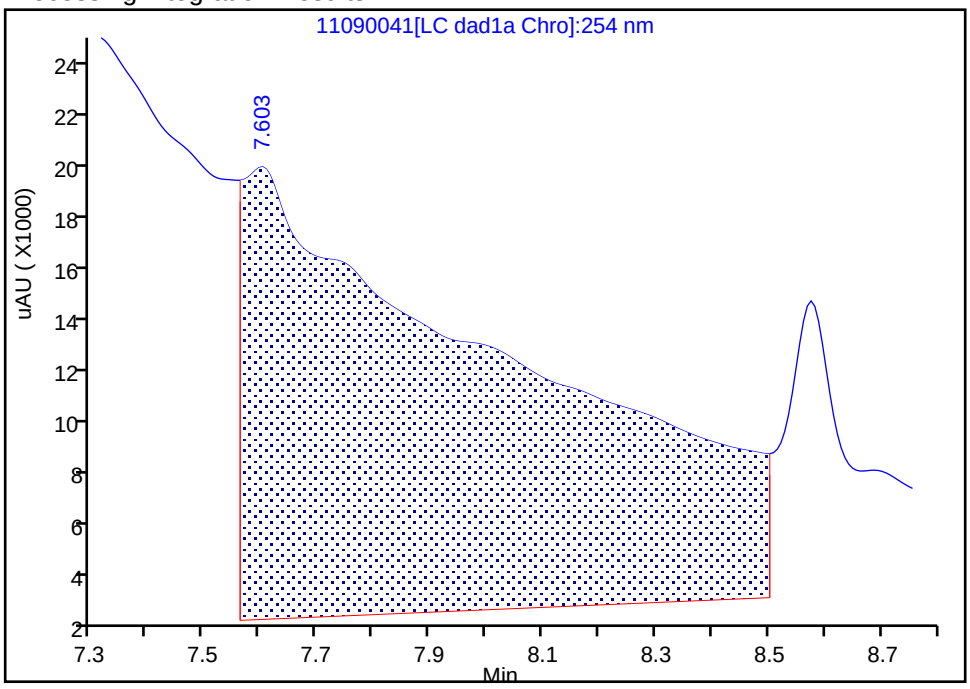
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090041.d				
Injection Date:	10-Nov-2021 03:35:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-2-A	Lab Sample ID:	280-155138-2		
Client ID:	NW020-7				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

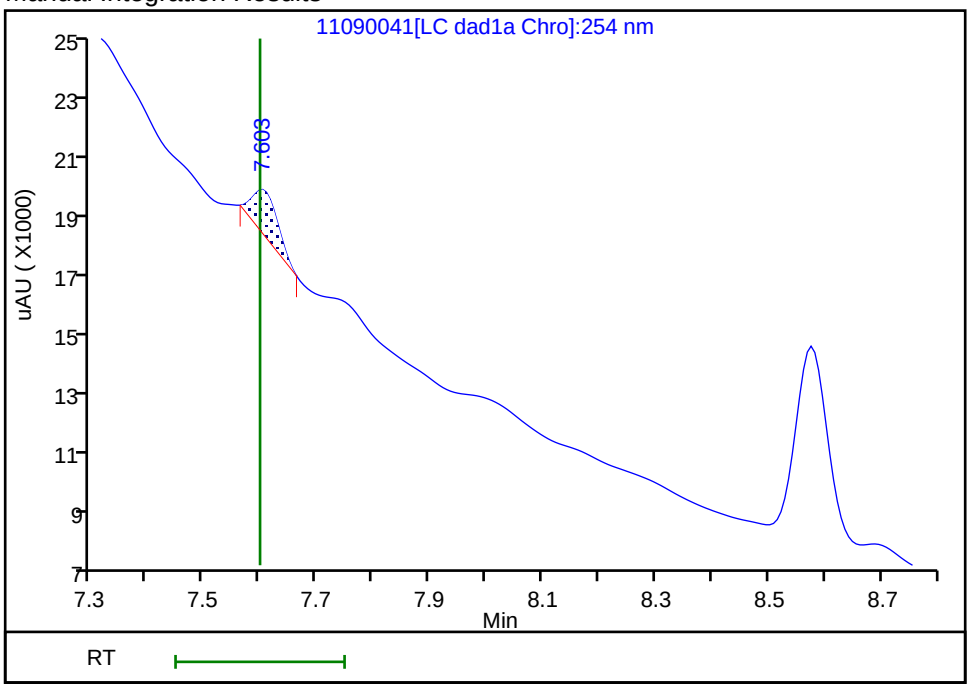
Processing Integration Results

RT: 7.60
Area: 567577
Amount: 5.341325
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 4569
Amount: 0.042998
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:44:32
Audit Action: Manually Integrated Audit Reason: Baseline

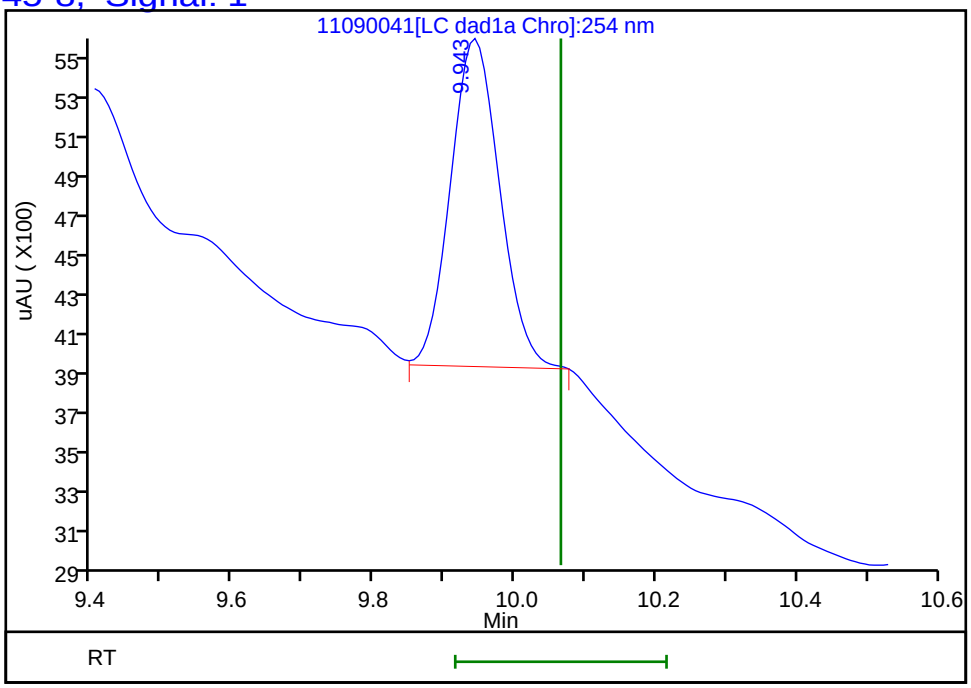
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090041.d				
Injection Date:	10-Nov-2021 03:35:58	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-2-A	Lab Sample ID:	280-155138-2		
Client ID:	NW020-7				
Operator ID:	JZ	ALS Bottle#:	41	Worklist Smp#:	41
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 9.94
Response: 7743
Amount: 0.044908



Reviewer: zhangji, 10-Nov-2021 12:44:59
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: NW020-7 Lab Sample ID: 280-155138-2

Matrix: Water Lab File ID: 11100026.D

Analysis Method: 8330A Date Collected: 11/03/2021 09:35

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 491.5(mL) Date Analyzed: 11/11/2021 02:40

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.: 556958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
121-14-2	*2,4-Dinitrotoluene*	*0.042*	*J J1*	*0.10*	0.081	*0.028*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	93	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100026.D
Lims ID: 280-155138-A-2-A
Client ID: NW020-7
Sample Type: Client
Inject. Date: 11-Nov-2021 02:40:57 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155138-A-2-A
Misc. Info.: 280-0106378-026
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 11-Nov-2021 19:12:33 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1674

First Level Reviewer: zhangji Date: 11-Nov-2021 19:03:03

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.637	6.650	-0.013	9804	0.0556	M
	6 MNX	1		7.367			ND	
	8 RDX	1	8.784	8.803	-0.019	11689	0.0572	M
	9 Nitrobenzene	1		11.856			ND	
$	10 1,2-Dinitrobenzene	1	12.931	12.949	-0.018	49249	0.1854	M
	12 1,3-Dinitrobenzene	1		15.376			ND	
	14 o-Nitrotoluene	1		16.603			ND	
	16 p-Nitrotoluene	1		16.889			ND	U
	17 4-Amino-2,6-dinitrotoluene	1	17.324	17.343	-0.019	50221	0.1693	
	18 m-Nitrotoluene	1		17.856			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.217	18.236	-0.019	59743	0.1500	M
	20 1,3,5-Trinitrobenzene	1		18.776			ND	
	21 2,6-Dinitrotoluene	1		20.009			ND	
	22 2,4-Dinitrotoluene	1	20.471	20.476	-0.005	2330	0.004119	
	23 Tetryl	1		24.070			ND	
	24 2,4,6-Trinitrotoluene	1	25.044	25.063	-0.019	45160	0.1173	

QC Flag Legend

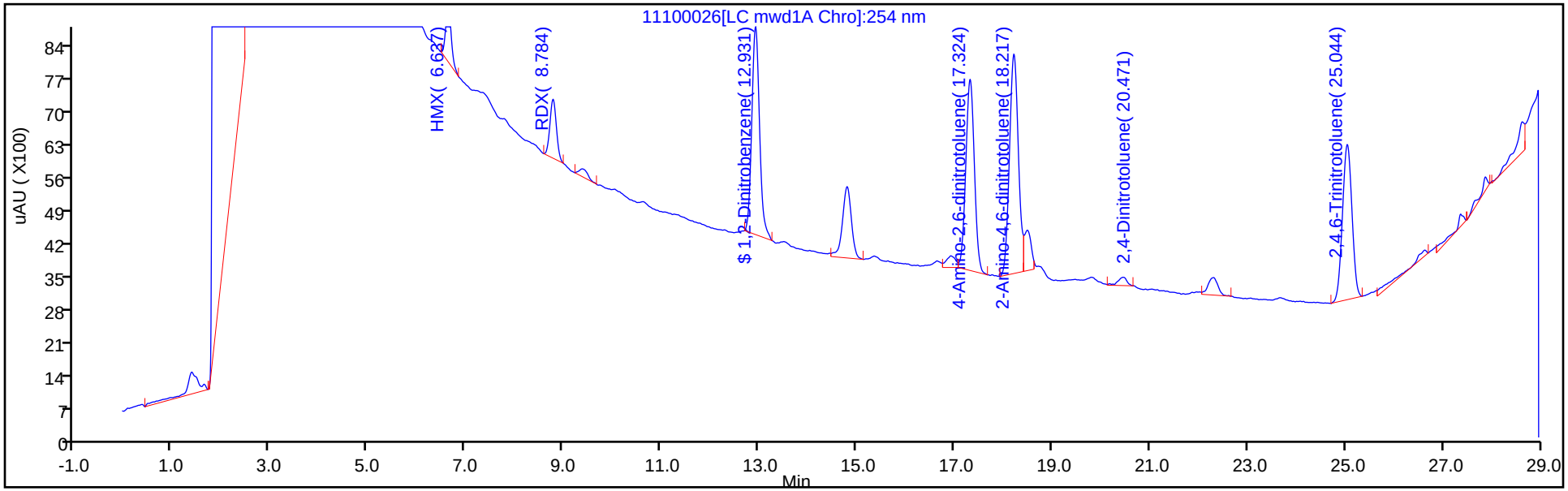
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 11-Nov-2021 19:12:35 Chrom Revision: 2.3 22-Sep-2021 15:38:46

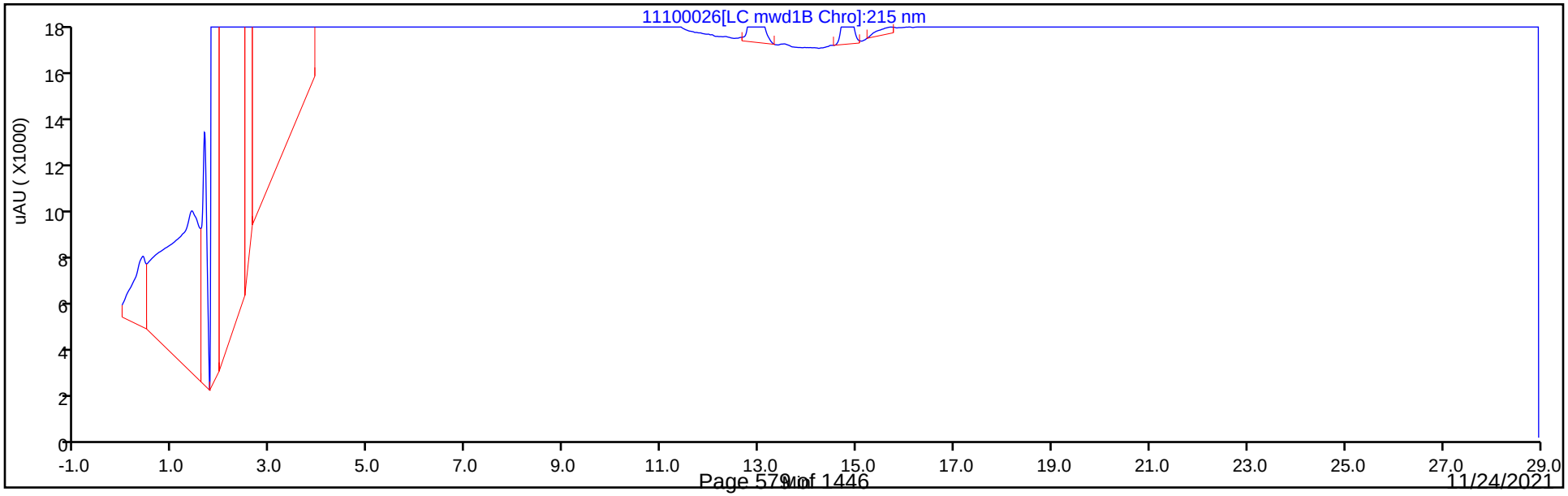
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100026.D				
Injection Date:	11-Nov-2021 02:40:57	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155138-A-2-A	Lab Sample ID:	280-155138-2	Worklist Smp#:	26
Client ID:	NW020-7				
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 TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100026.D				
Lims ID:	280-155138-A-2-A				
Client ID:	NW020-7				
Sample Type:	Client				
Inject. Date:	11-Nov-2021 02:40:57	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-A-2-A				
Misc. Info.:	280-0106378-026				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	11-Nov-2021 19:12:33	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1674				
First Level Reviewer: zhangji		Date:	11-Nov-2021 19:03:03		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1854	92.69

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

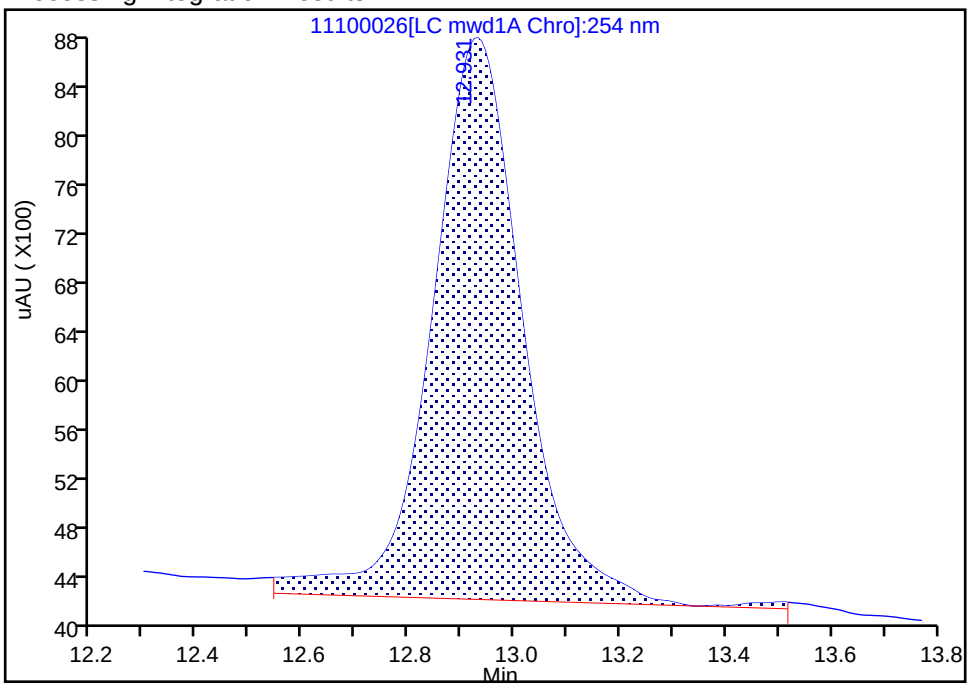
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100026.D				
Injection Date:	11-Nov-2021 02:40:57	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155138-A-2-A	Lab Sample ID:	280-155138-2		
Client ID:	NW020-7				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

Signal: 1

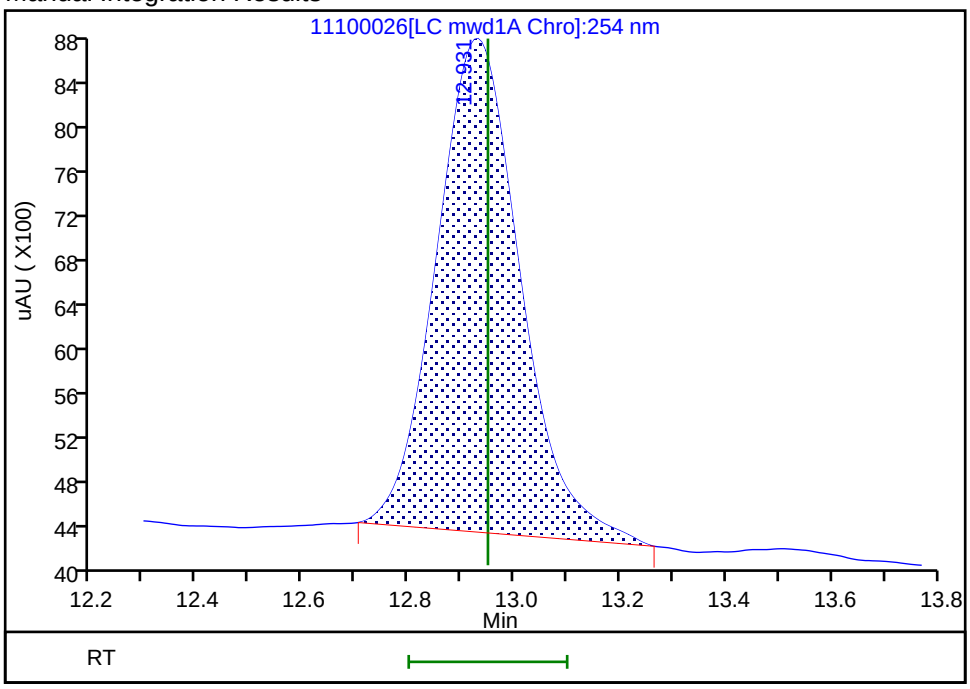
Processing Integration Results

RT: 12.93
Area: 54960
Amount: 0.206882
Amount Units: ug/ml



Manual Integration Results

RT: 12.93
Area: 49249
Amount: 0.185384
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:02:45

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

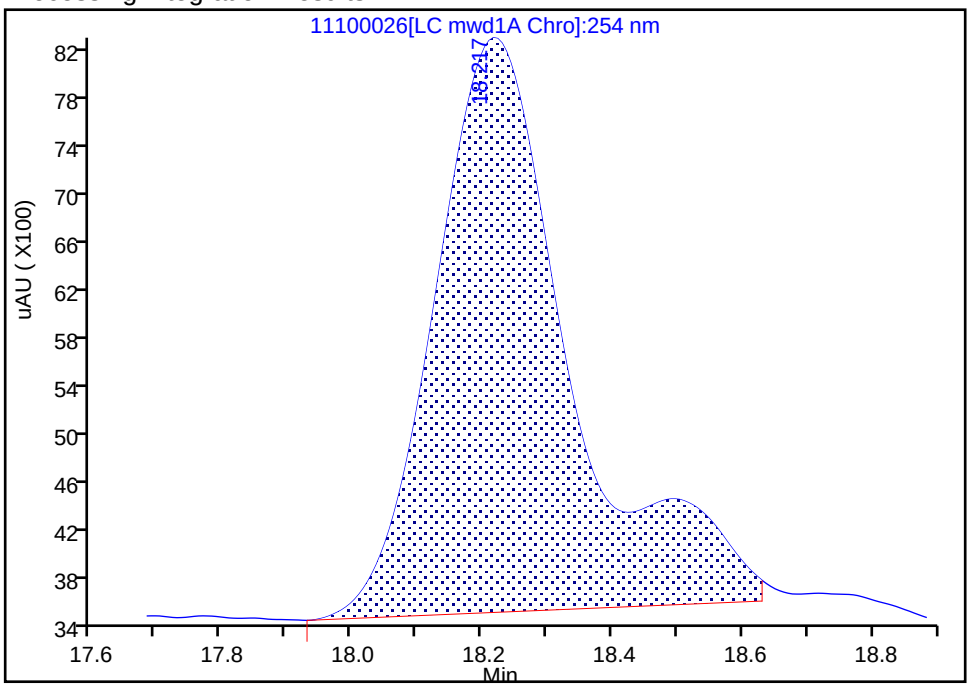
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100026.D				
Injection Date:	11-Nov-2021 02:40:57	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155138-A-2-A	Lab Sample ID:	280-155138-2		
Client ID:	NW020-7				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

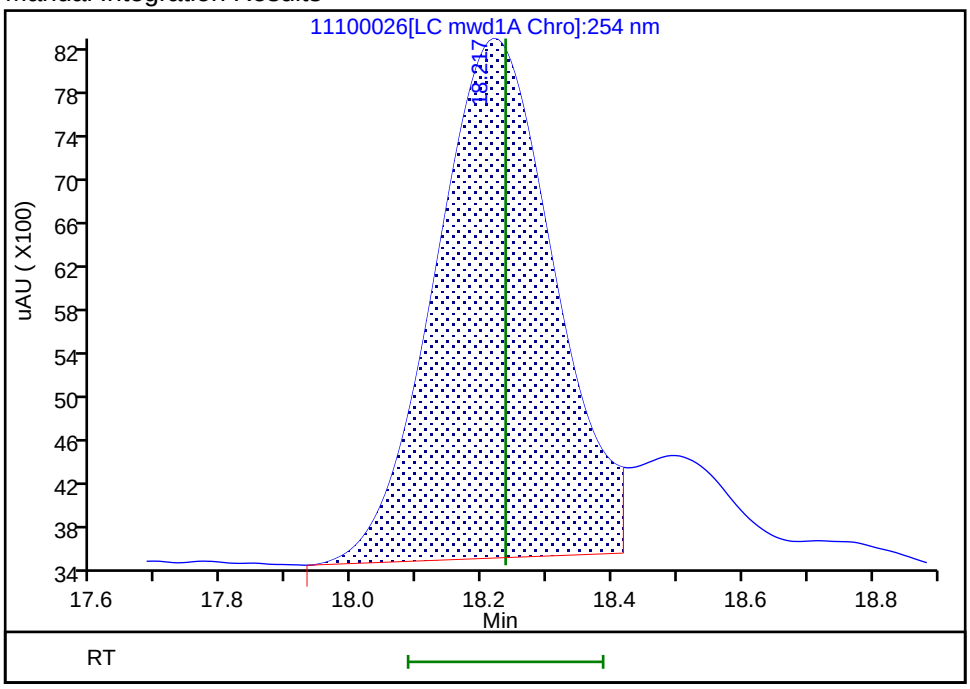
Processing Integration Results

RT: 18.22
Area: 68180
Amount: 0.171671
Amount Units: ug/ml



Manual Integration Results

RT: 18.22
Area: 59743
Amount: 0.150030
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:02:57

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

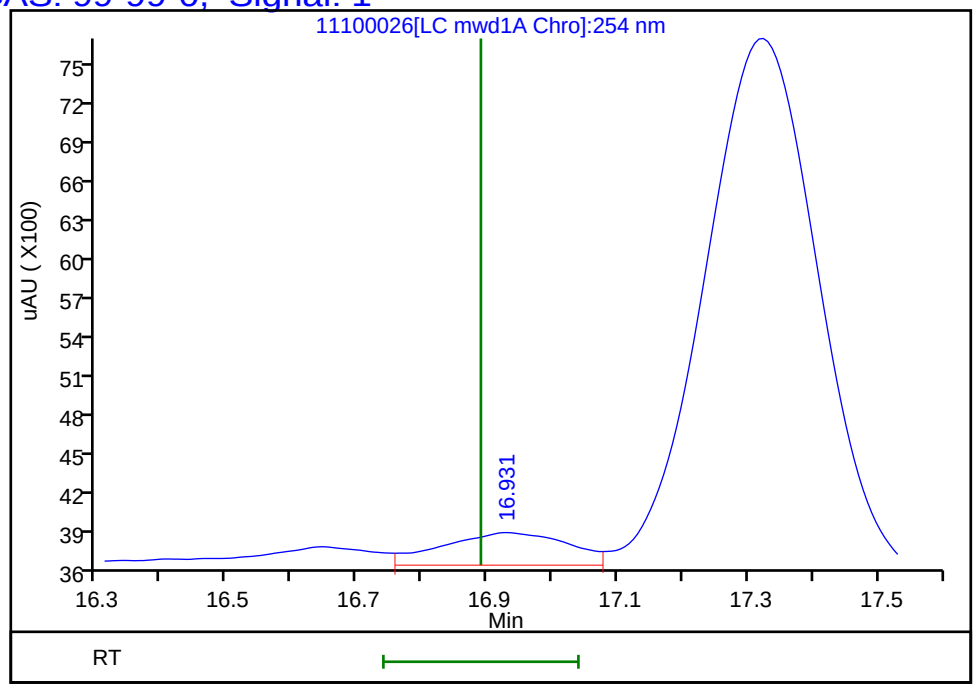
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100026.D				
Injection Date:	11-Nov-2021 02:40:57	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155138-A-2-A	Lab Sample ID:	280-155138-2		
Client ID:	NW020-7				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

RT: 16.93
Response: 3327
Amount: 0.015319



Reviewer: zhangji, 11-Nov-2021 19:03:03
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

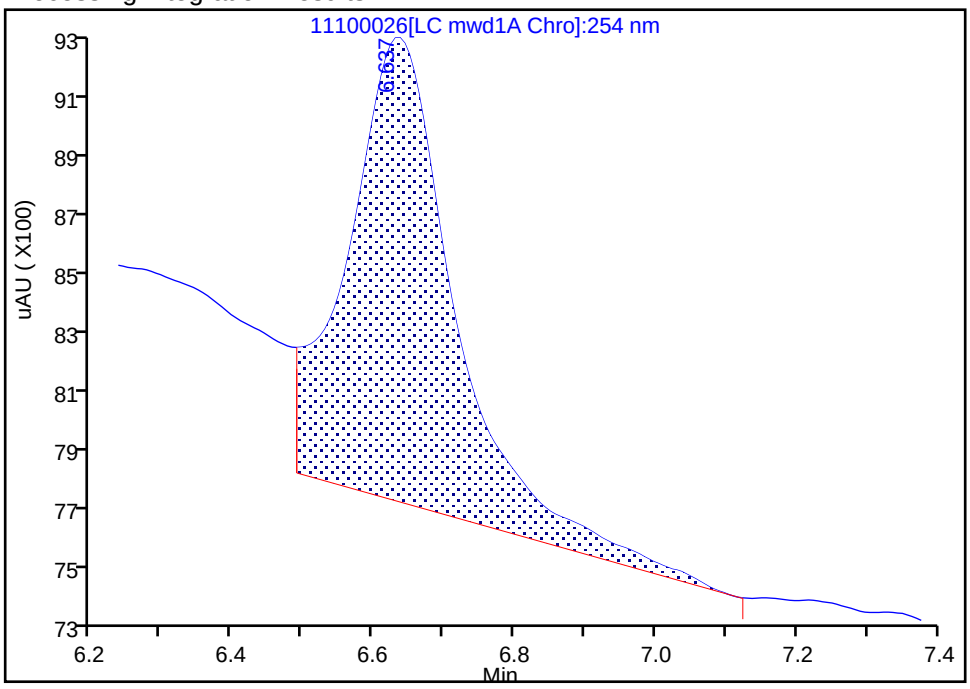
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100026.D				
Injection Date:	11-Nov-2021 02:40:57	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155138-A-2-A	Lab Sample ID:	280-155138-2		
Client ID:	NW020-7				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

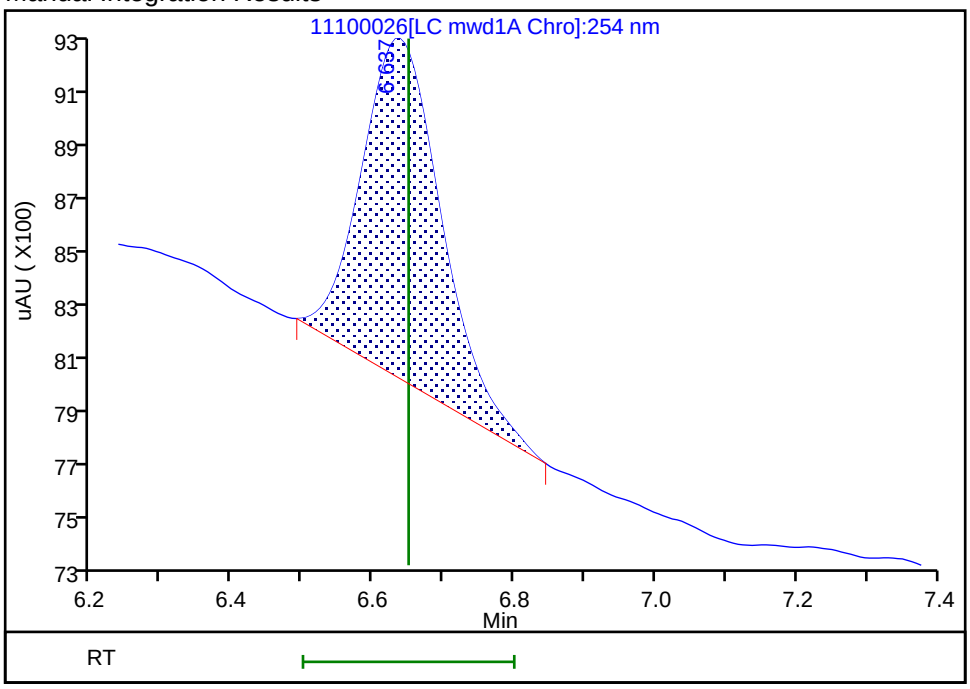
Processing Integration Results

RT: 6.64
Area: 16220
Amount: 0.095982
Amount Units: ug/ml



Manual Integration Results

RT: 6.64
Area: 9804
Amount: 0.055572
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:02:33

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

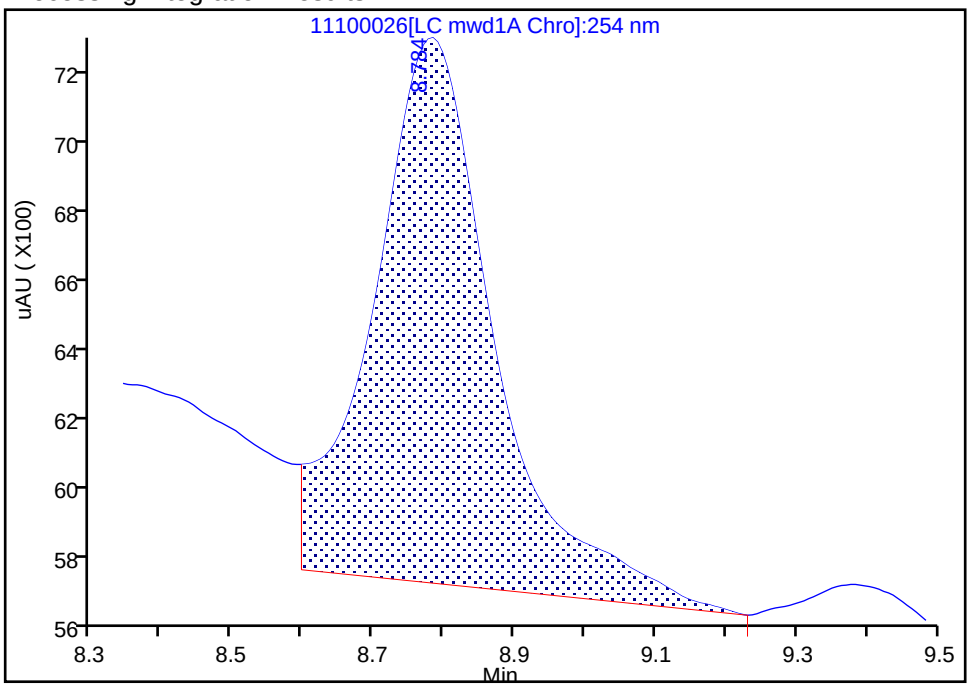
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100026.D				
Injection Date:	11-Nov-2021 02:40:57	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155138-A-2-A	Lab Sample ID:	280-155138-2		
Client ID:	NW020-7				
Operator ID:	JZ	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

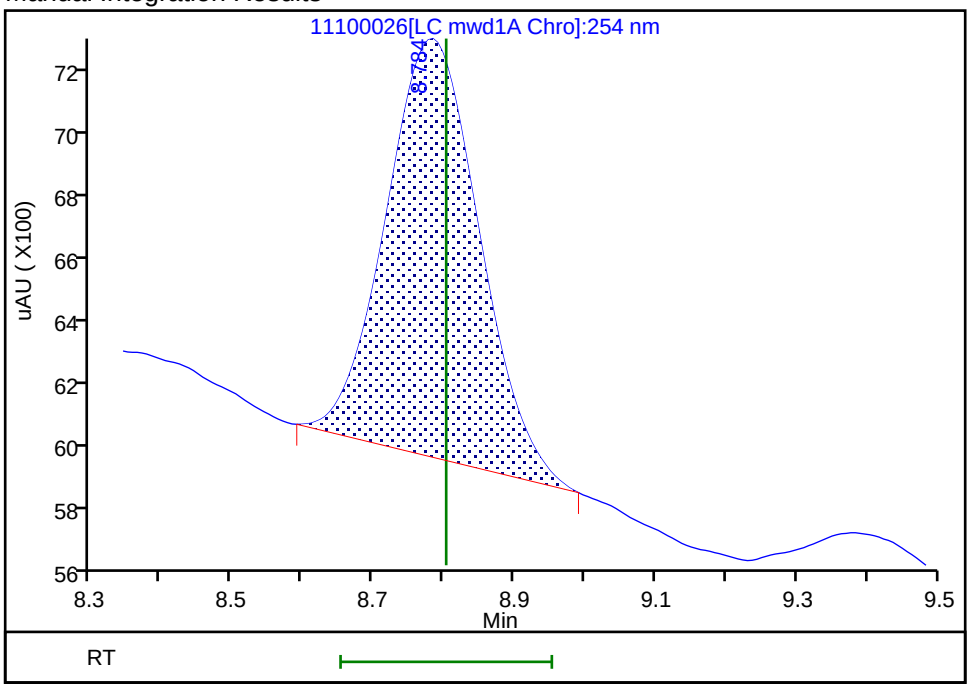
Processing Integration Results

RT: 8.78
Area: 17853
Amount: 0.087399
Amount Units: ug/ml



Manual Integration Results

RT: 8.78
Area: 11689
Amount: 0.057223
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:02:37

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: NW022-7 Lab Sample ID: 280-155138-3

Matrix: Water Lab File ID: 11090042.D

Analysis Method: 8330A Date Collected: 11/03/2021 12:00

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 500.1(mL) Date Analyzed: 11/10/2021 03:58

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.: 556781 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	0.085
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.19
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 M	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 M	0.21	0.20	0.091
121-82-4	RDX	0.20	U	0.21	0.20	0.051
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	93	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090042.D
Lims ID: 280-155138-B-3-A
Client ID: NW022-7
Sample Type: Client
Inject. Date: 10-Nov-2021 03:58:52 ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155138-B-3-A
Misc. Info.: 280-0106333-042
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Nov-2021 12:59:02 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1646

First Level Reviewer: zhangji Date: 10-Nov-2021 12:45:14

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.592			ND	U
7 MNX	1		7.223			ND	
8 RDX	1		7.598			ND	
$ 10 1,2-Dinitrobenzene	1	8.572	8.572	0.000	23963	0.1869	M
11 1,3,5-Trinitrobenzene	1		8.685			ND	
12 1,3-Dinitrobenzene	1		9.331			ND	
13 Nitrobenzene	1		9.725			ND	U
15 Tetryl	1		10.065			ND	
17 2,4,6-Trinitrotoluene	1		10.971			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.185			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.438			ND	
20 2,6-Dinitrotoluene	1		11.605			ND	
21 2,4-Dinitrotoluene	1		11.771			ND	
22 o-Nitrotoluene	1		12.645			ND	
23 p-Nitrotoluene	1		13.078			ND	
24 m-Nitrotoluene	1		13.658			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

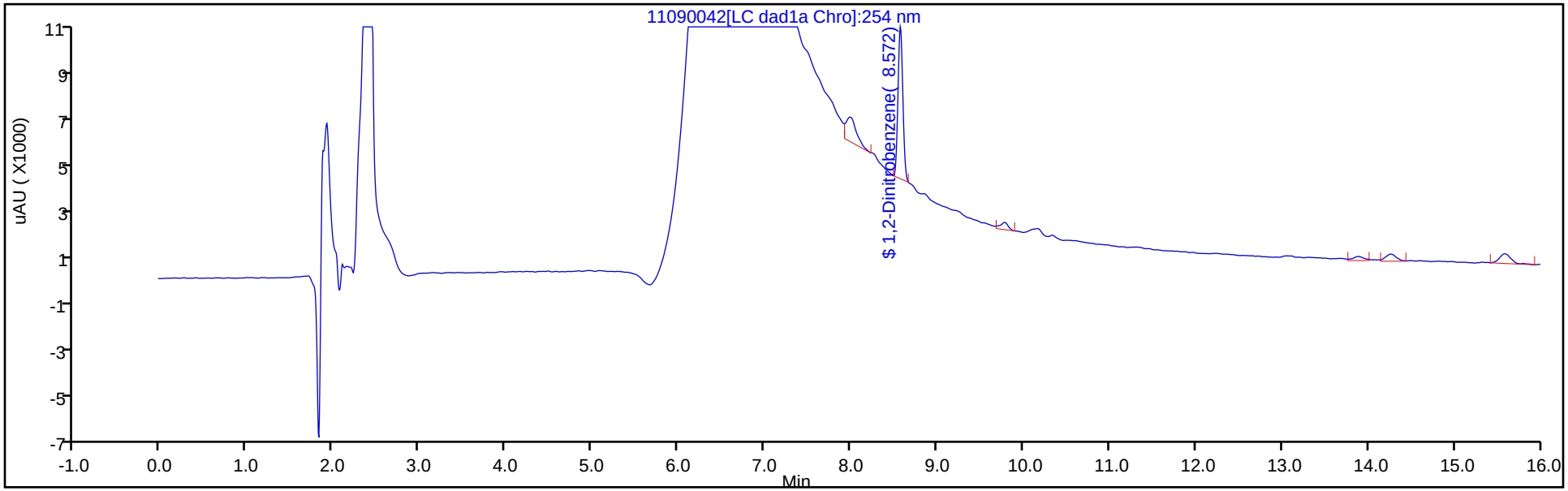
Report Date: 10-Nov-2021 12:59:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

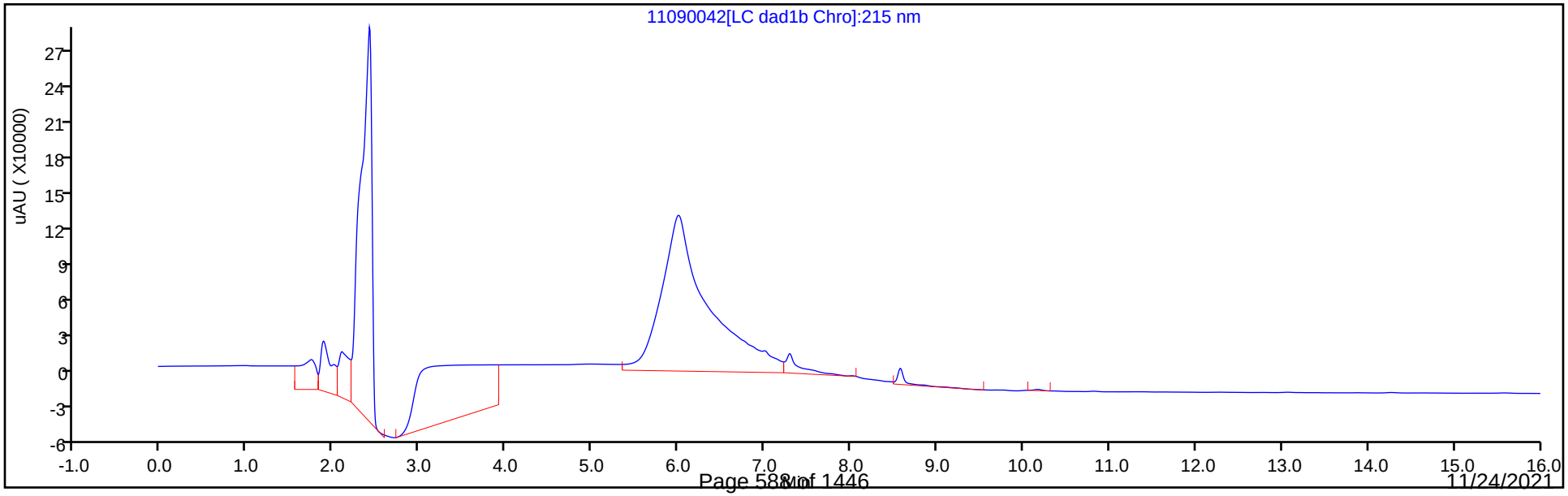
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090042.d

Injection Date:	10-Nov-2021 03:58:52	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155138-B-3-A	Lab Sample ID:	280-155138-3	Worklist Smp#:	42
Client ID:	NW022-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090042.D				
Lims ID:	280-155138-B-3-A				
Client ID:	NW022-7				
Sample Type:	Client				
Inject. Date:	10-Nov-2021 03:58:52	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-B-3-A				
Misc. Info.:	280-0106333-042				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:59:02	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:45:14		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1869	93.45

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

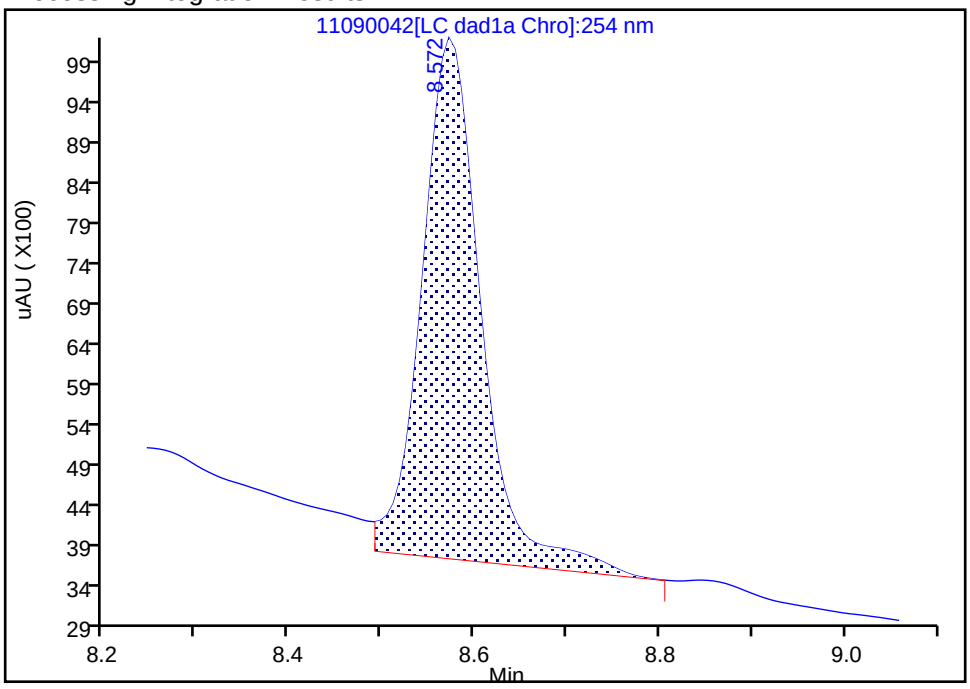
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090042.d				
Injection Date:	10-Nov-2021 03:58:52	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-B-3-A	Lab Sample ID:	280-155138-3		
Client ID:	NW022-7				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

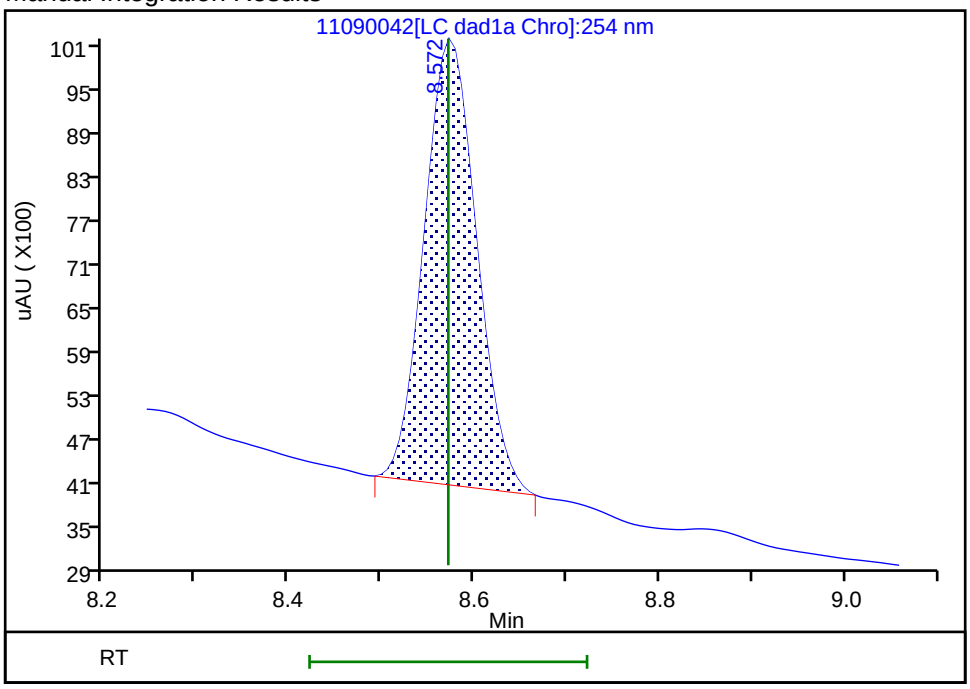
Processing Integration Results

RT: 8.57
Area: 28732
Amount: 0.224088
Amount Units: ug/mL



Manual Integration Results

RT: 8.57
Area: 23963
Amount: 0.186894
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:45:13

Audit Action: Manually Integrated Audit Reason: Baseline

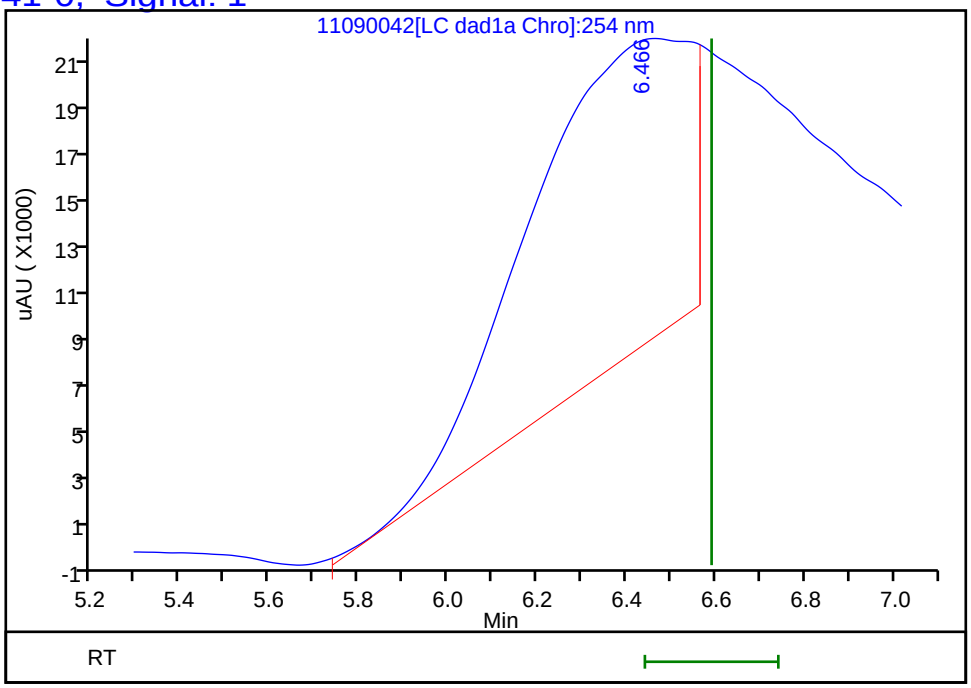
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090042.d				
Injection Date:	10-Nov-2021 03:58:52	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-B-3-A	Lab Sample ID:	280-155138-3		
Client ID:	NW022-7				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 6.47
Response: 324704
Amount: 3.846227



Reviewer: zhangji, 10-Nov-2021 12:45:14
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

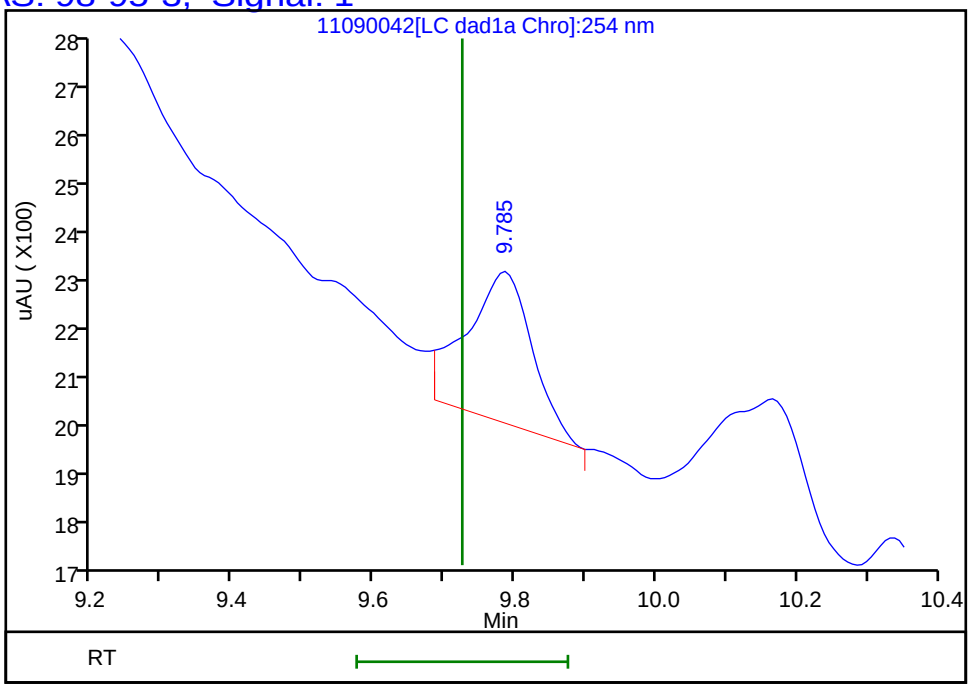
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090042.d				
Injection Date:	10-Nov-2021 03:58:52	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-B-3-A	Lab Sample ID:	280-155138-3		
Client ID:	NW022-7				
Operator ID:	JZ	ALS Bottle#:	42	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 9.79
Response: 1885
Amount: 0.009653



Reviewer: zhangji, 10-Nov-2021 12:45:14
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: G0082-7 Lab Sample ID: 280-155138-4

Matrix: Water Lab File ID: 11090043.D

Analysis Method: 8330A Date Collected: 11/03/2021 10:05

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 501.6(mL) Date Analyzed: 11/10/2021 04:21

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.: 556781 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	0.14	J1	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.085
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.21		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	0.41	0.40	0.10
2691-41-0	HMX	0.24	M	0.21	0.20	0.087
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	0.49	M	0.21	0.20	0.051
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090043.D
Lims ID: 280-155138-B-4-A
Client ID: G0082-7
Sample Type: Client
Inject. Date: 10-Nov-2021 04:21:45 ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155138-B-4-A
Misc. Info.: 280-0106333-043
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Nov-2021 12:59:02 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1646

First Level Reviewer: zhangji Date: 10-Nov-2021 12:46:10

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.586	6.592	-0.006	2072	0.0245	M
7 MNX	1		7.223			ND	
8 RDX	1	7.599	7.598	0.001	5246	0.0494	M
$ 10 1,2-Dinitrobenzene	1	8.566	8.572	-0.006	24372	0.1901	M
11 1,3,5-Trinitrobenzene	1		8.685			ND	
12 1,3-Dinitrobenzene	1		9.331			ND	
13 Nitrobenzene	1		9.725			ND	
15 Tetryl	1		10.065			ND	U
17 2,4,6-Trinitrotoluene	1		10.971			ND	
18 4-Amino-2,6-dinitrotoluene	1	11.172	11.185	-0.013	3290	0.0215	
19 2-Amino-4,6-dinitrotoluene	1	11.426	11.438	-0.012	2822	0.0136	
20 2,6-Dinitrotoluene	1		11.605			ND	
21 2,4-Dinitrotoluene	1		11.771			ND	
22 o-Nitrotoluene	1		12.645			ND	
23 p-Nitrotoluene	1		13.078			ND	
24 m-Nitrotoluene	1		13.658			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

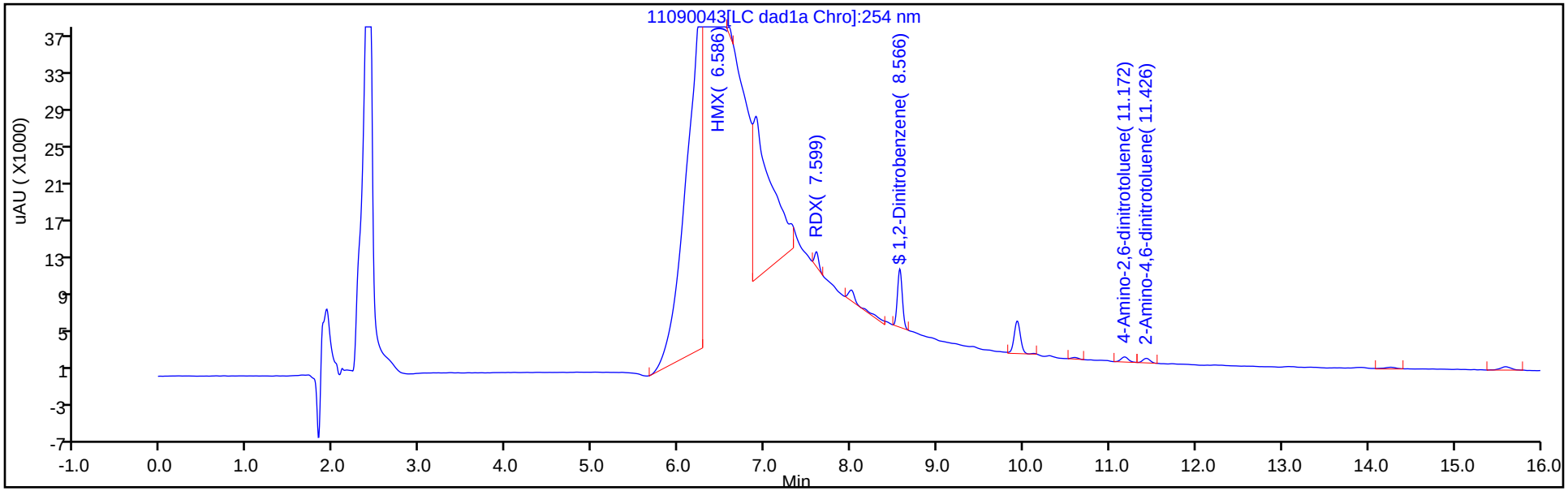
Report Date: 10-Nov-2021 12:59:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

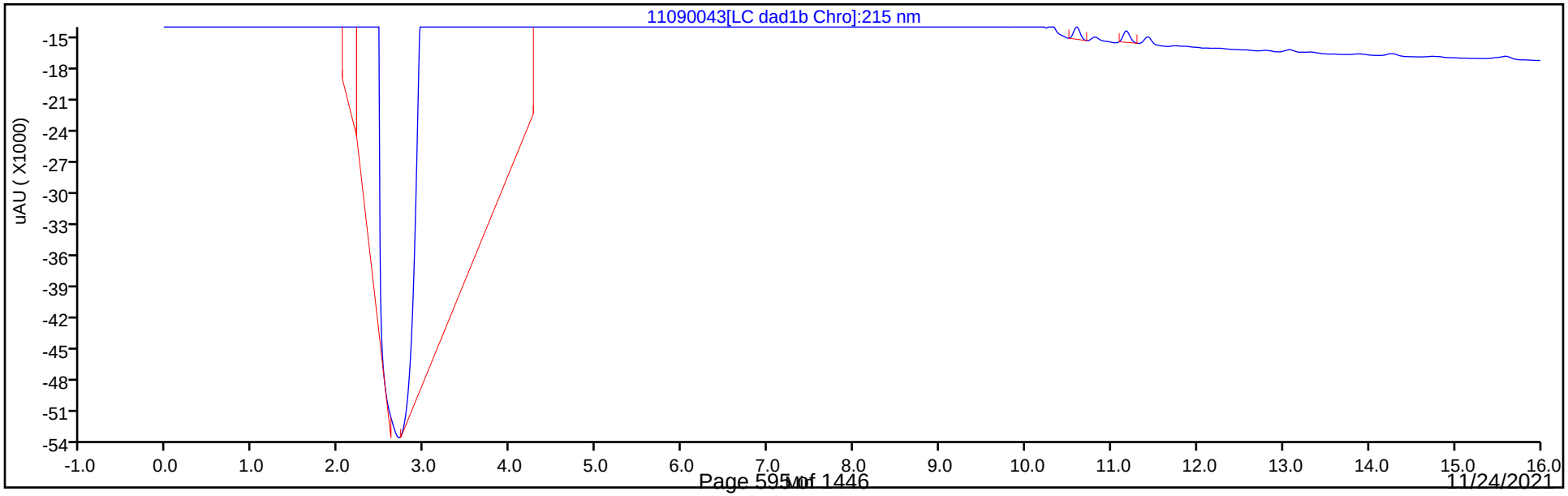
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090043.d

Injection Date:	10-Nov-2021 04:21:45	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155138-B-4-A	Lab Sample ID:	280-155138-4	Worklist Smp#:	43
Client ID:	G0082-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090043.D				
Lims ID:	280-155138-B-4-A				
Client ID:	G0082-7				
Sample Type:	Client				
Inject. Date:	10-Nov-2021 04:21:45	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-B-4-A				
Misc. Info.:	280-0106333-043				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:59:02	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:46:10		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1901	95.04

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

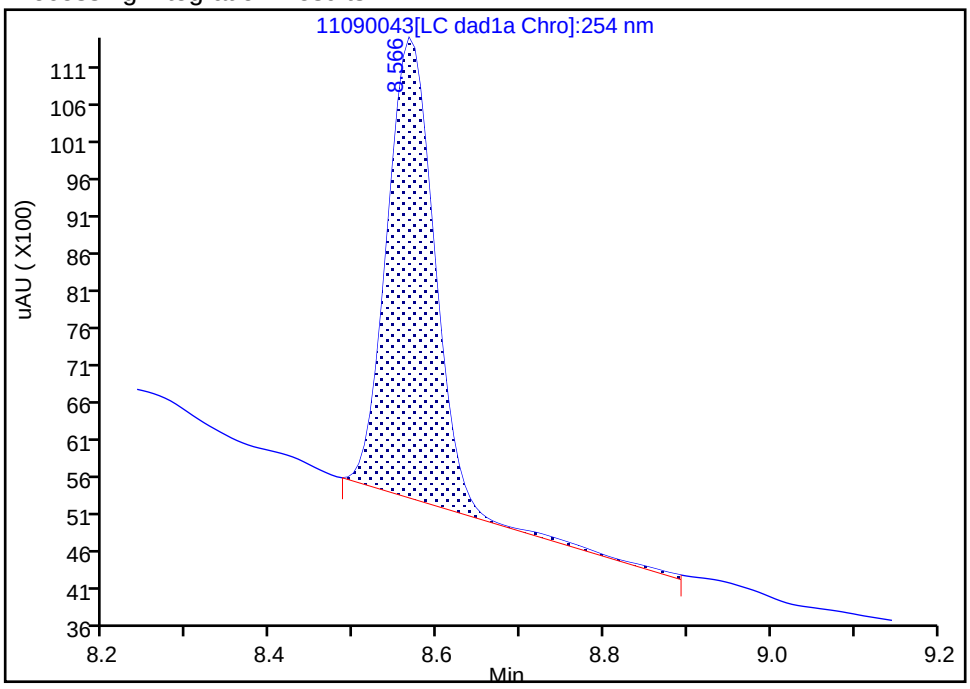
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090043.d				
Injection Date:	10-Nov-2021 04:21:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-B-4-A	Lab Sample ID:	280-155138-4		
Client ID:	G0082-7				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

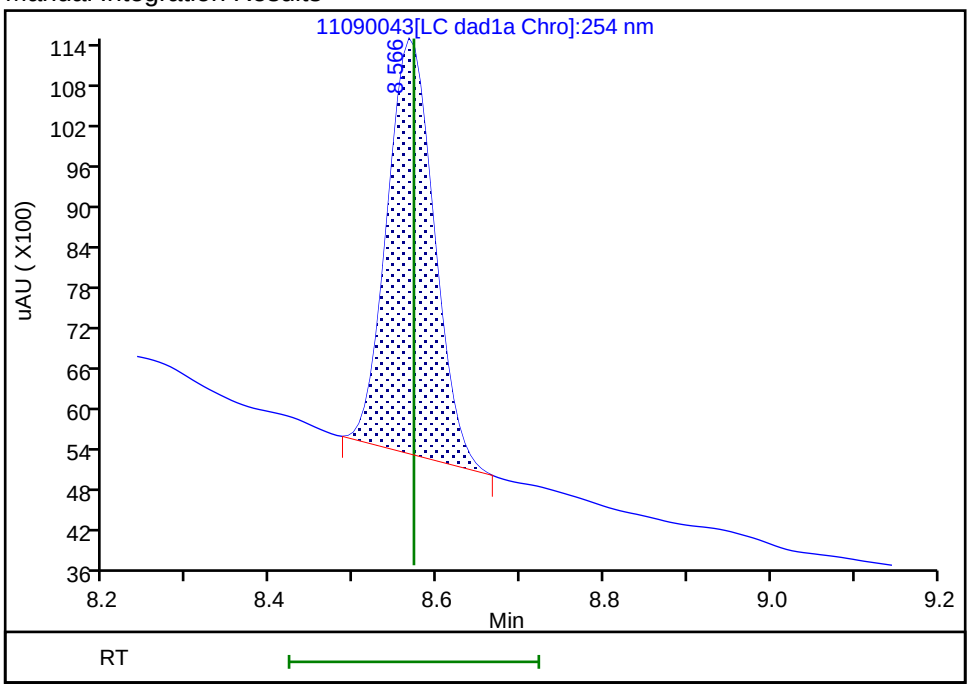
Processing Integration Results

RT: 8.57
Area: 24980
Amount: 0.194826
Amount Units: ug/mL



Manual Integration Results

RT: 8.57
Area: 24372
Amount: 0.190084
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:46:01

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

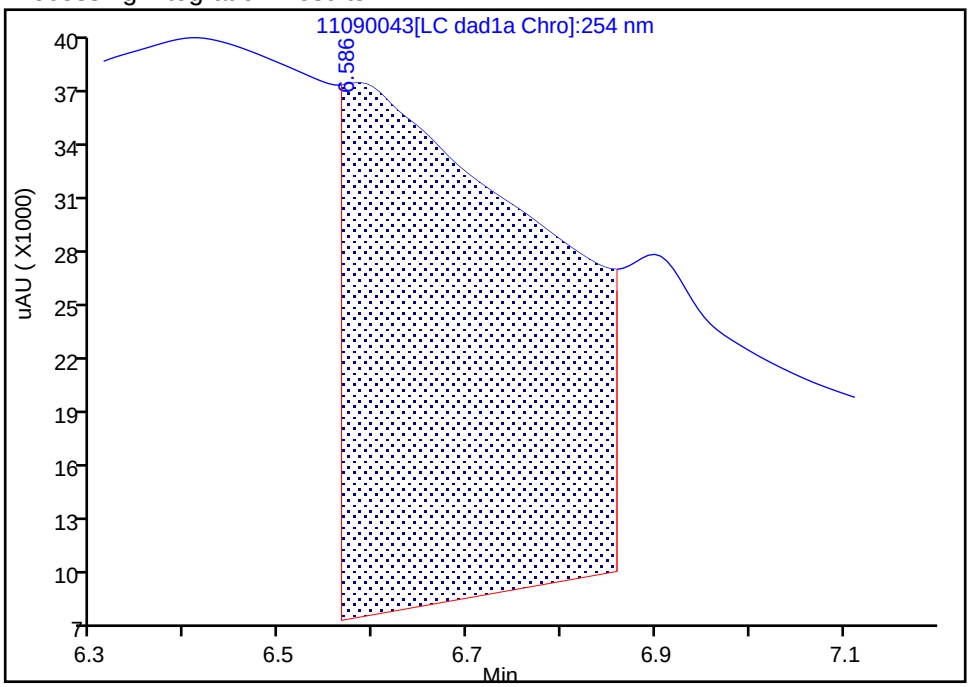
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090043.d				
Injection Date:	10-Nov-2021 04:21:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-B-4-A	Lab Sample ID:	280-155138-4		
Client ID:	G0082-7				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

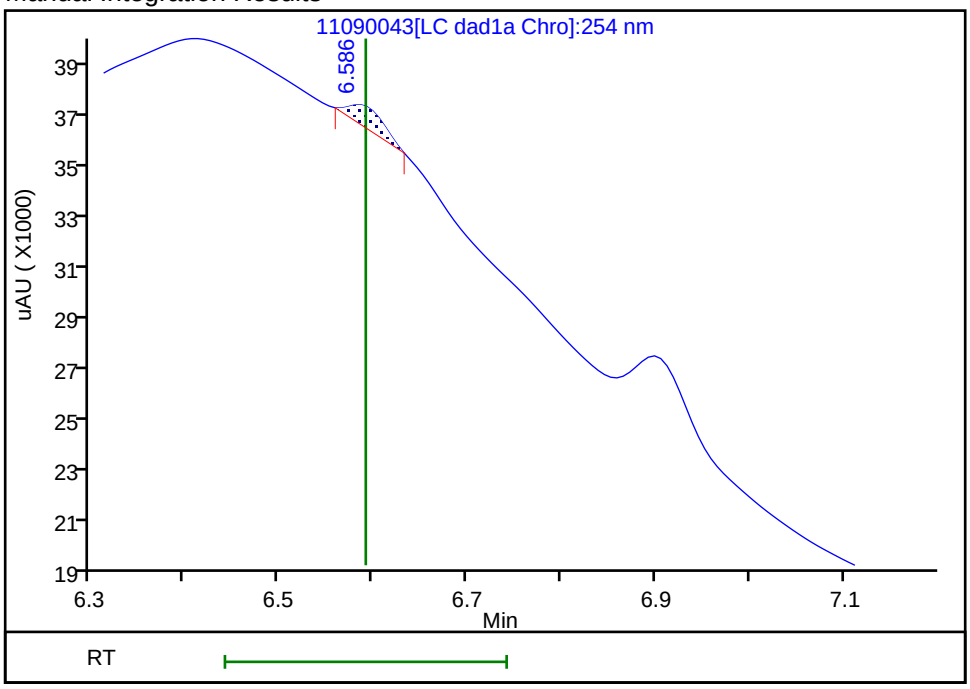
Processing Integration Results

RT: 6.59
Area: 411003
Amount: 4.868467
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 2072
Amount: 0.024544
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:45:51
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

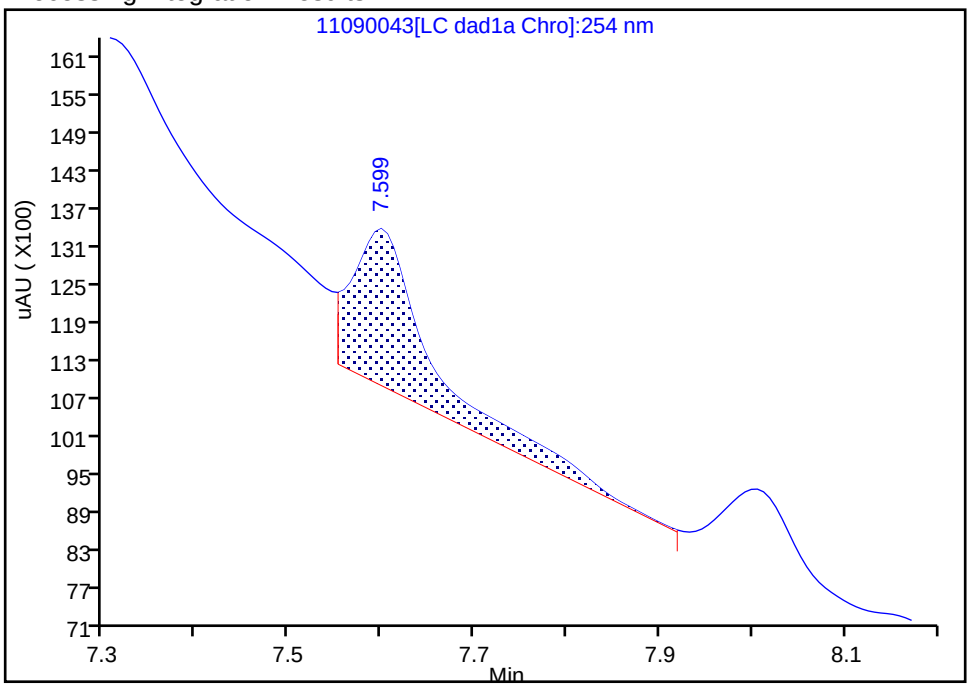
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090043.d				
Injection Date:	10-Nov-2021 04:21:45	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-B-4-A	Lab Sample ID:	280-155138-4		
Client ID:	G0082-7				
Operator ID:	JZ	ALS Bottle#:	43	Worklist Smp#:	43
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

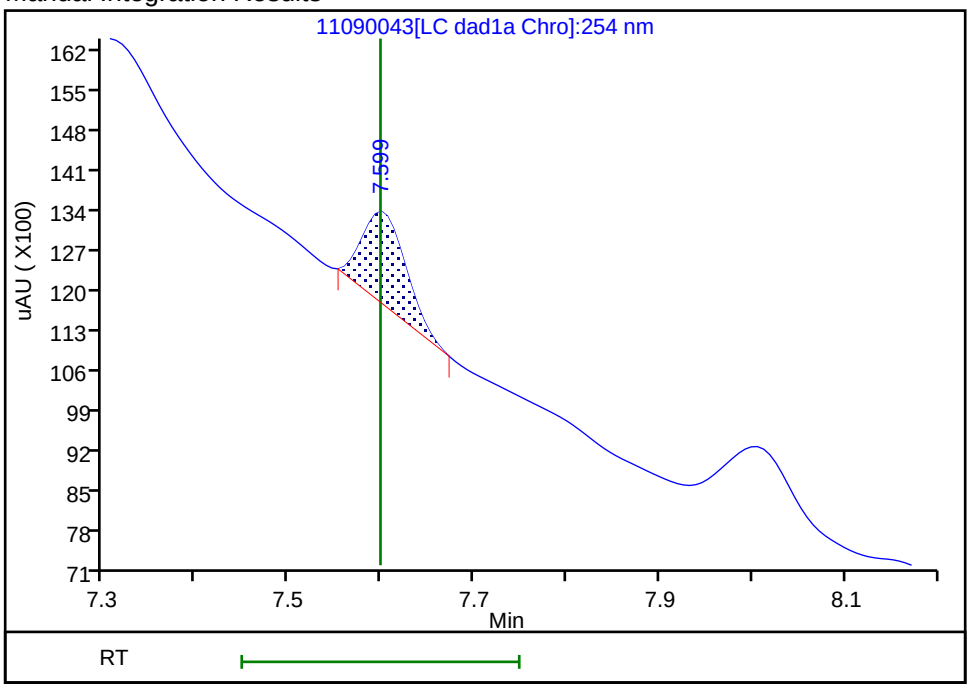
RT: 7.60
Area: 14125
Amount: 0.132927
Amount Units: ug/mL

Processing Integration Results



RT: 7.60
Area: 5246
Amount: 0.049369
Amount Units: ug/mL

Manual Integration Results



Reviewer: zhangji, 10-Nov-2021 12:45:56
Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

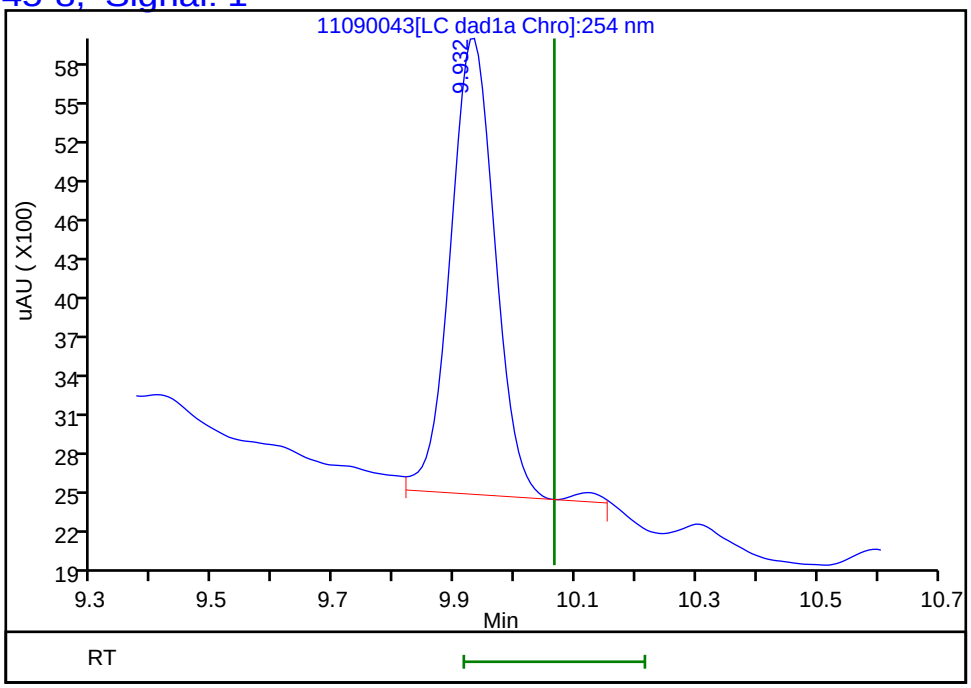
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090043.d
Injection Date: 10-Nov-2021 04:21:45 Instrument ID: CHHPLC_X3
Lims ID: 280-155138-B-4-A Lab Sample ID: 280-155138-4
Client ID: G0082-7
Operator ID: JZ ALS Bottle#: 43 Worklist Smp#: 43
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 9.93
Response: 18026
Amount: 0.104547



Reviewer: zhangji, 10-Nov-2021 12:46:10
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: G0082-7 Lab Sample ID: 280-155138-4

Matrix: Water Lab File ID: 11100027.D

Analysis Method: 8330A Date Collected: 11/03/2021 10:05

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 501.6(mL) Date Analyzed: 11/11/2021 03:15

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.: 556958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.24*	*J1 B M*	*0.11*	0.10	*0.051*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	94		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100027.D
Lims ID: 280-155138-B-4-A
Client ID: G0082-7
Sample Type: Client
Inject. Date: 11-Nov-2021 03:15:55 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155138-B-4-A
Misc. Info.: 280-0106378-027
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 11-Nov-2021 19:12:33 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1674

First Level Reviewer: zhangji Date: 11-Nov-2021 19:03:27

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.644	6.650	-0.006	5186	0.0265	M
	6 MNX	1		7.367			ND	
	8 RDX	1	8.797	8.803	-0.006	10384	0.0508	M
	9 Nitrobenzene	1		11.856			ND	
$	10 1,2-Dinitrobenzene	1	12.950	12.949	0.001	50077	0.1885	
	12 1,3-Dinitrobenzene	1		15.376			ND	
	14 o-Nitrotoluene	1		16.603			ND	7
	16 p-Nitrotoluene	1		16.889			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.337	17.343	-0.006	8549	0.0288	
	18 m-Nitrotoluene	1		17.856			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.264	18.236	0.028	10762	0.0244	M
	20 1,3,5-Trinitrobenzene	1		18.776			ND	
	21 2,6-Dinitrotoluene	1		20.009			ND	
	22 2,4-Dinitrotoluene	1		20.476			ND	
	23 Tetryl	1		24.070			ND	
	24 2,4,6-Trinitrotoluene	1		25.063			ND	

QC Flag Legend

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

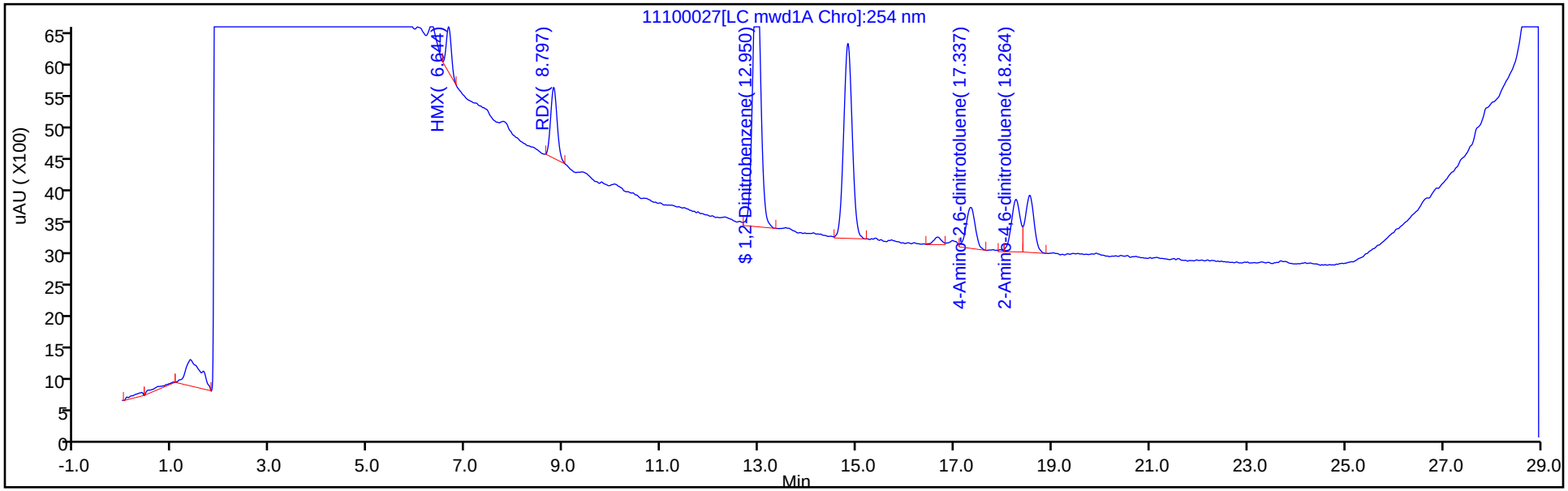
Report Date: 11-Nov-2021 19:12:36 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

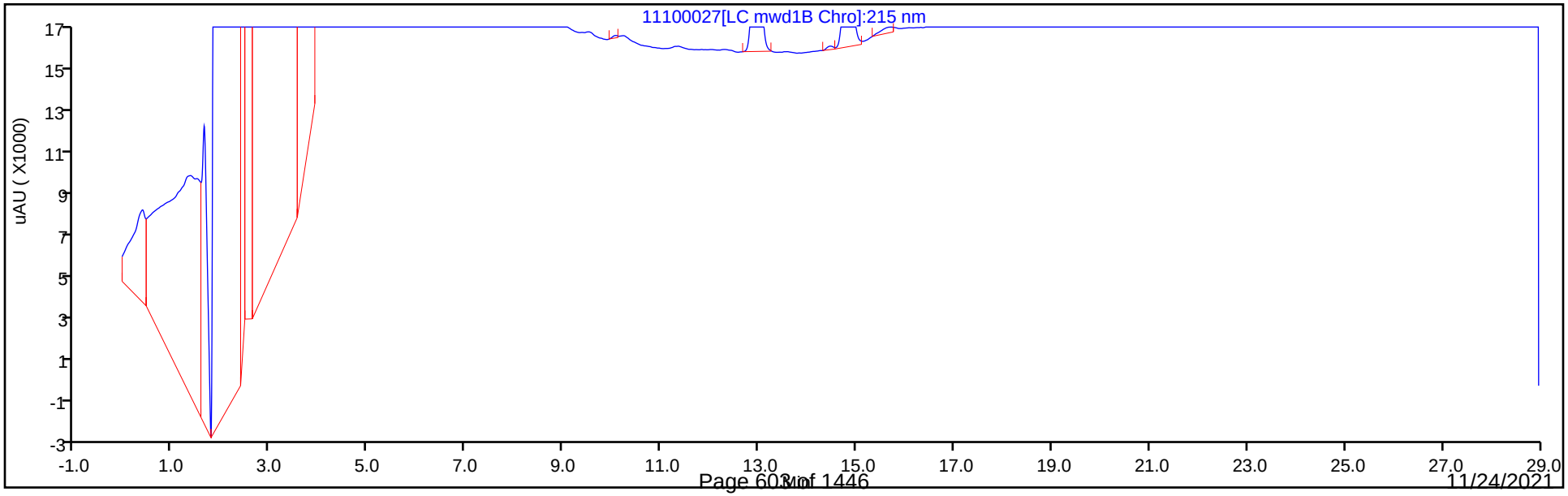
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100027.D

Injection Date:	11-Nov-2021 03:15:55	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155138-B-4-A	Lab Sample ID:	280-155138-4	Worklist Smp#:	27
Client ID:	G0082-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100027.D				
Lims ID:	280-155138-B-4-A				
Client ID:	G0082-7				
Sample Type:	Client				
Inject. Date:	11-Nov-2021 03:15:55	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-B-4-A				
Misc. Info.:	280-0106378-027				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	11-Nov-2021 19:12:33	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1674				
First Level Reviewer: zhangji		Date:	11-Nov-2021 19:03:27		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1885	94.25

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

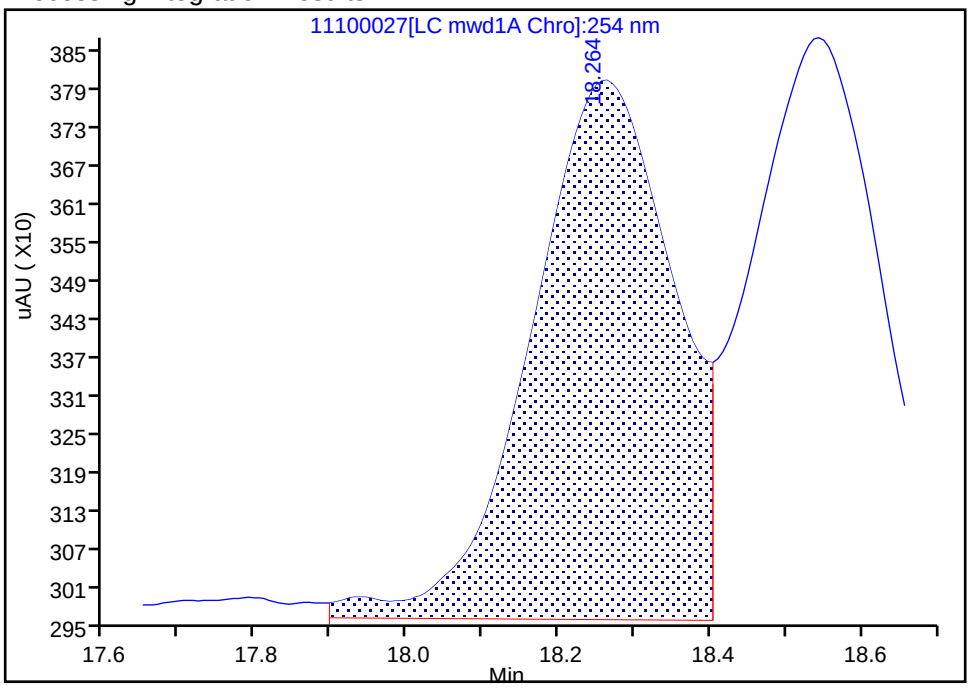
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100027.D				
Injection Date:	11-Nov-2021 03:15:55	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155138-B-4-A	Lab Sample ID:	280-155138-4		
Client ID:	G0082-7				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

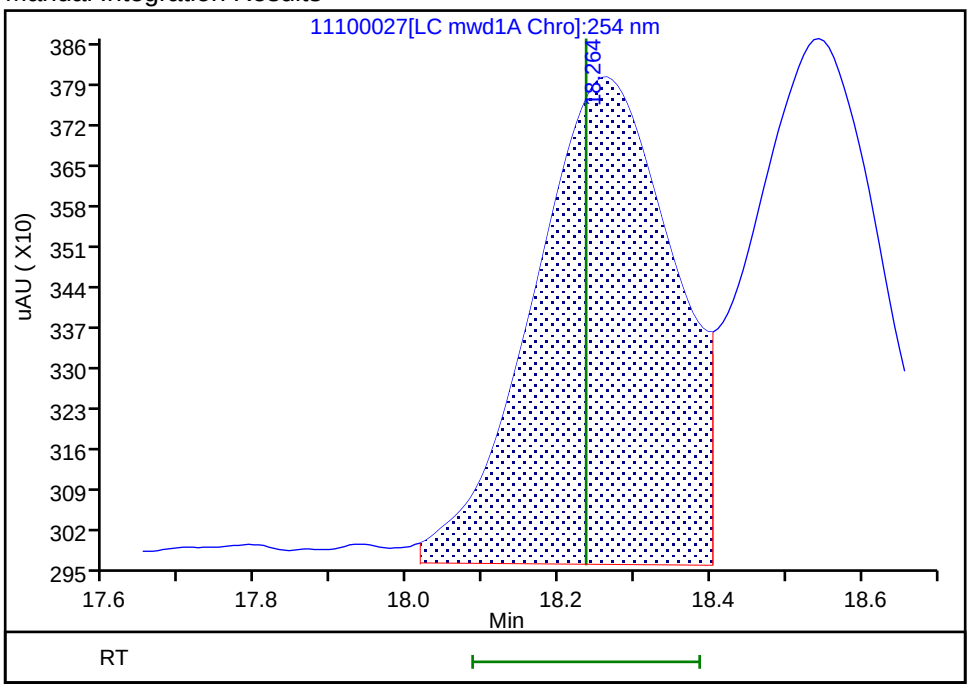
Processing Integration Results

RT: 18.26
Area: 10981
Amount: 0.024951
Amount Units: ug/ml



Manual Integration Results

RT: 18.26
Area: 10762
Amount: 0.024389
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:03:26

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

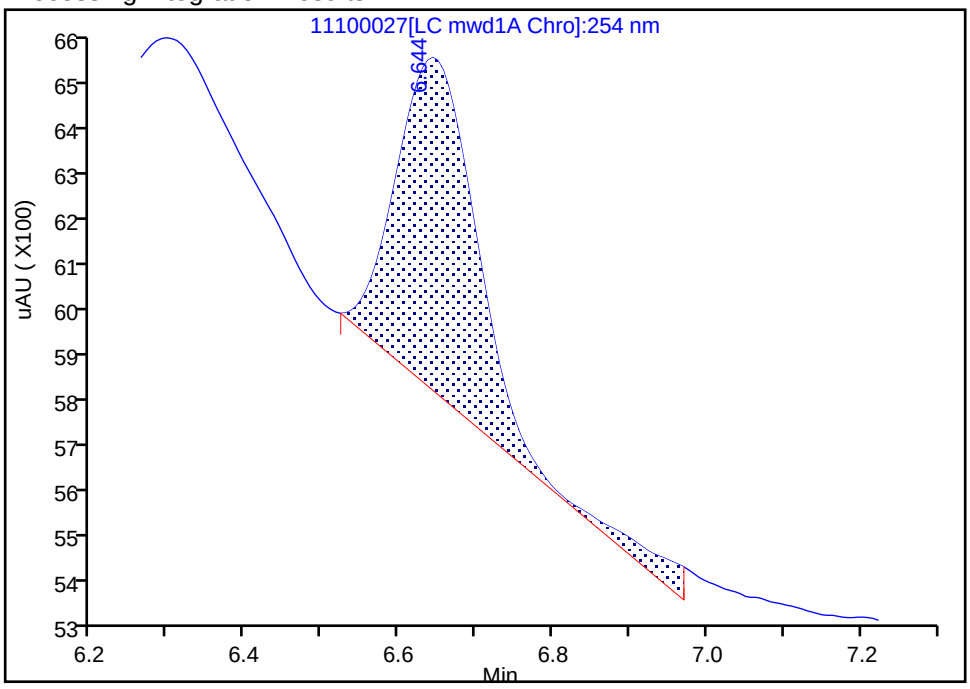
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100027.D				
Injection Date:	11-Nov-2021 03:15:55	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155138-B-4-A	Lab Sample ID:	280-155138-4		
Client ID:	G0082-7				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

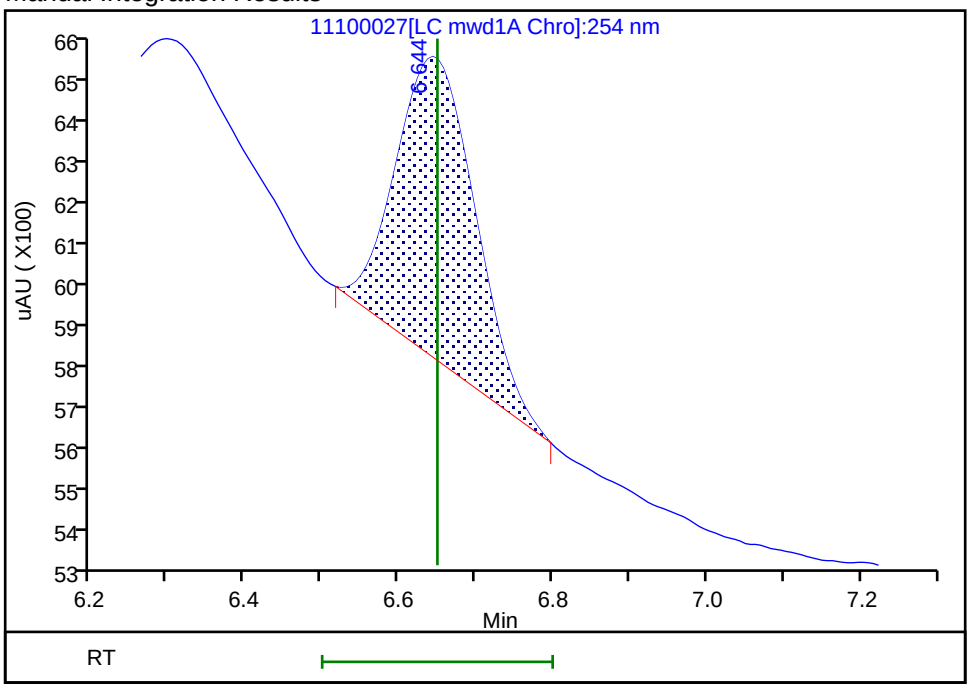
Processing Integration Results

RT: 6.64
Area: 5526
Amount: 0.028628
Amount Units: ug/ml



Manual Integration Results

RT: 6.64
Area: 5186
Amount: 0.026486
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:03:12

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

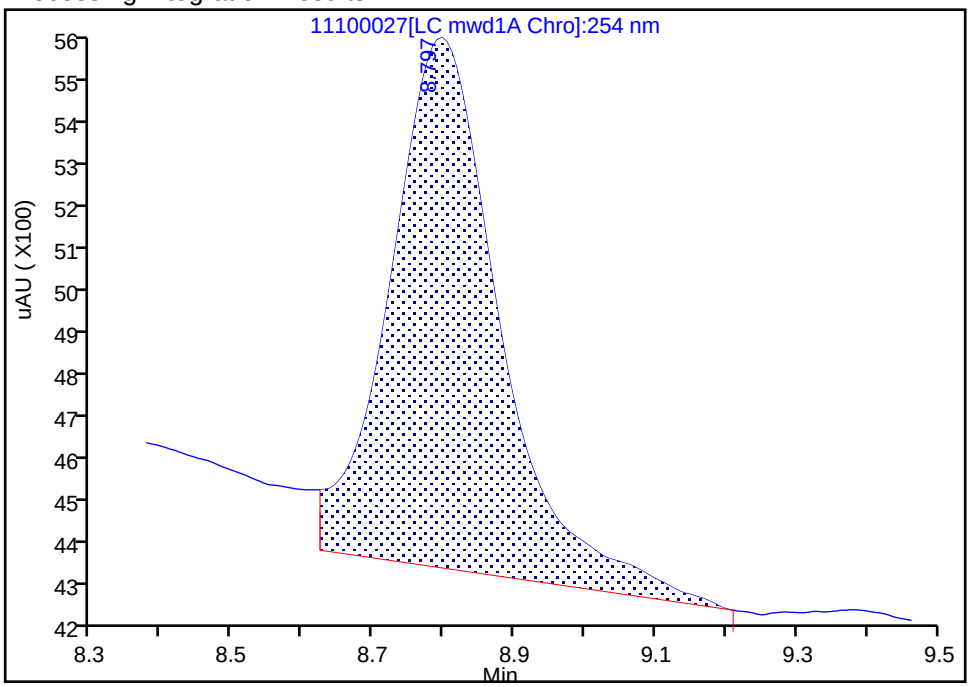
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100027.D				
Injection Date:	11-Nov-2021 03:15:55	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155138-B-4-A	Lab Sample ID:	280-155138-4		
Client ID:	G0082-7				
Operator ID:	JZ	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

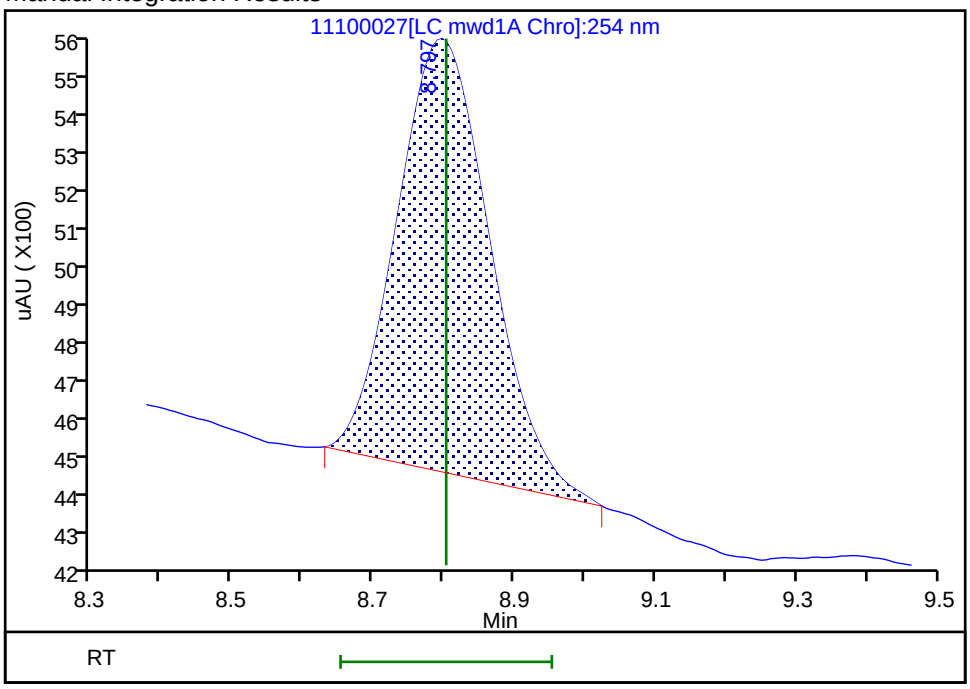
Processing Integration Results

RT: 8.80
Area: 13608
Amount: 0.066618
Amount Units: ug/ml



Manual Integration Results

RT: 8.80
Area: 10384
Amount: 0.050835
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:03:18

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: G0087-7 Lab Sample ID: 280-155138-5

Matrix: Water Lab File ID: 11090044.D

Analysis Method: 8330A Date Collected: 11/03/2021 11:30

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 493.2(mL) Date Analyzed: 11/10/2021 04:44

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.: 556781 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	0.21	J1	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.087
99-08-1	3-Nitrotoluene	0.41	U	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.58		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.41	U	0.42	0.41	0.10
2691-41-0	HMX	0.71	M	0.21	0.20	0.089
5755-27-1	MNX	0.41	U	2.0	0.41	0.16
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.092
121-82-4	RDX	0.22	M	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	94	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090044.D
Lims ID: 280-155138-A-5-A
Client ID: G0087-7
Sample Type: Client
Inject. Date: 10-Nov-2021 04:44:39 ALS Bottle#: 44 Worklist Smp#: 44
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155138-A-5-A
Misc. Info.: 280-0106333-044
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Nov-2021 12:59:02 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1646

First Level Reviewer: zhangji Date: 10-Nov-2021 12:46:34

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.594	6.592	0.002	5943	0.0704	M
7 MNX	1		7.223			ND	
8 RDX	1	7.594	7.598	-0.004	2333	0.0220	M
$ 10 1,2-Dinitrobenzene	1	8.567	8.572	-0.005	24229	0.1890	M
11 1,3,5-Trinitrobenzene	1		8.685			ND	
12 1,3-Dinitrobenzene	1		9.331			ND	
13 Nitrobenzene	1		9.725			ND	
15 Tetryl	1		10.065			ND	U
17 2,4,6-Trinitrotoluene	1		10.971			ND	
18 4-Amino-2,6-dinitrotoluene	1	11.174	11.185	-0.011	8734	0.0572	
19 2-Amino-4,6-dinitrotoluene	1	11.427	11.438	-0.011	4294	0.0208	
20 2,6-Dinitrotoluene	1		11.605			ND	
21 2,4-Dinitrotoluene	1		11.771			ND	
22 o-Nitrotoluene	1		12.645			ND	
23 p-Nitrotoluene	1		13.078			ND	
24 m-Nitrotoluene	1		13.658			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

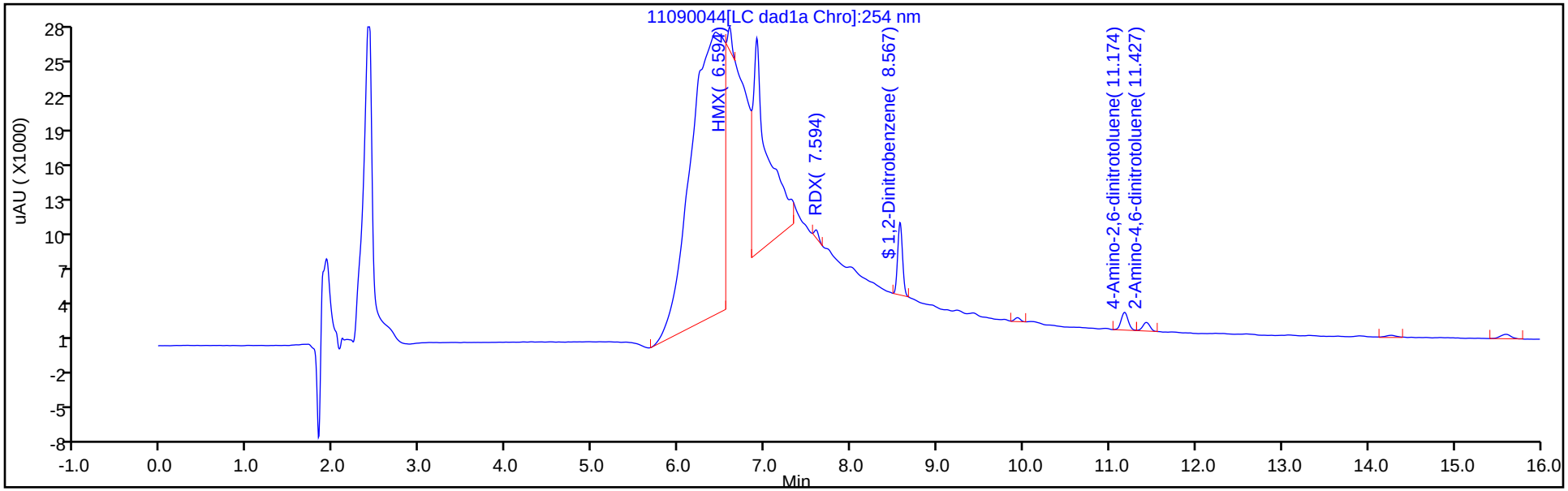
Report Date: 10-Nov-2021 12:59:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

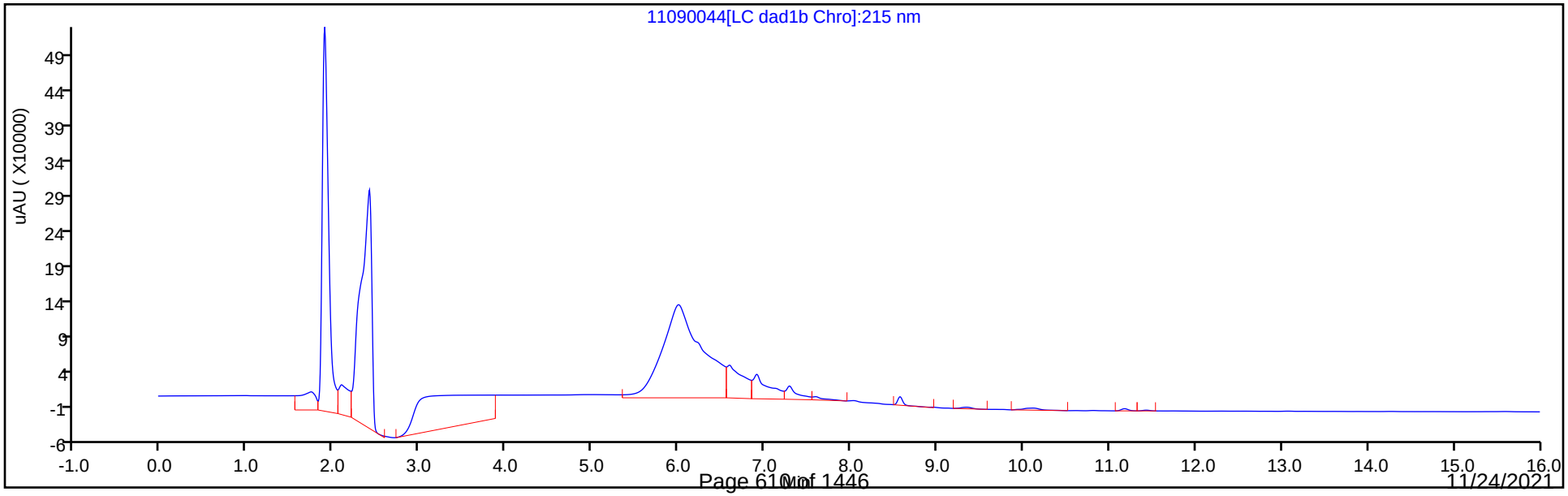
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090044.d

Injection Date:	10-Nov-2021 04:44:39	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155138-A-5-A	Lab Sample ID:	280-155138-5	Worklist Smp#:	44
Client ID:	G0087-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	44
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090044.D				
Lims ID:	280-155138-A-5-A				
Client ID:	G0087-7				
Sample Type:	Client				
Inject. Date:	10-Nov-2021 04:44:39	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-A-5-A				
Misc. Info.:	280-0106333-044				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:59:02	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:46:34		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1890	94.48

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

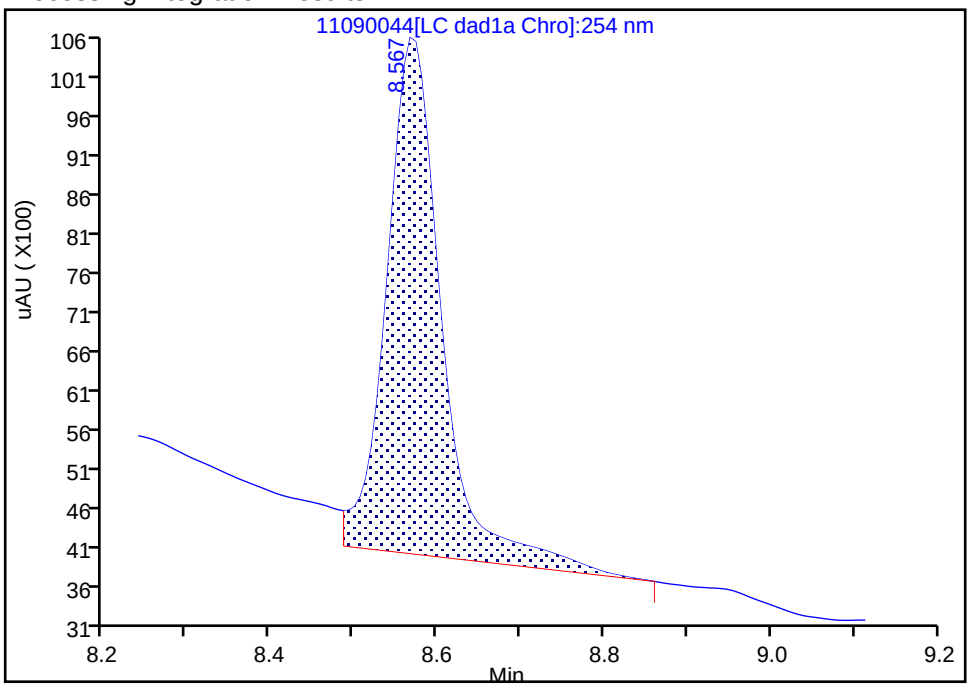
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090044.d				
Injection Date:	10-Nov-2021 04:44:39	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-5-A	Lab Sample ID:	280-155138-5		
Client ID:	G0087-7				
Operator ID:	JZ	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

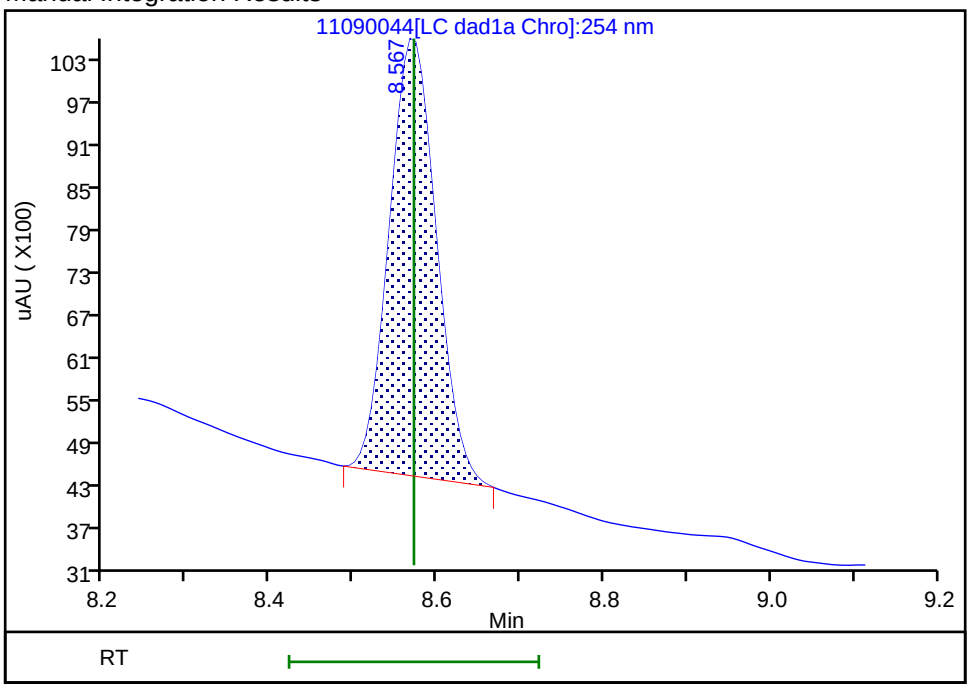
Processing Integration Results

RT: 8.57
Area: 30446
Amount: 0.237456
Amount Units: ug/mL



Manual Integration Results

RT: 8.57
Area: 24229
Amount: 0.188968
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:46:27

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

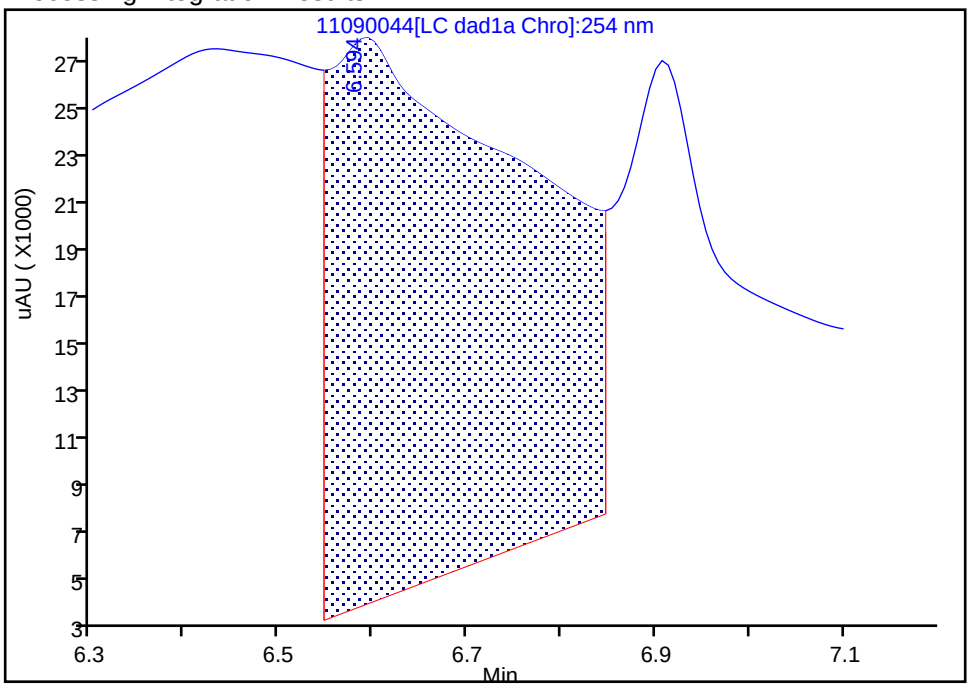
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090044.d				
Injection Date:	10-Nov-2021 04:44:39	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-5-A	Lab Sample ID:	280-155138-5		
Client ID:	G0087-7				
Operator ID:	JZ	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

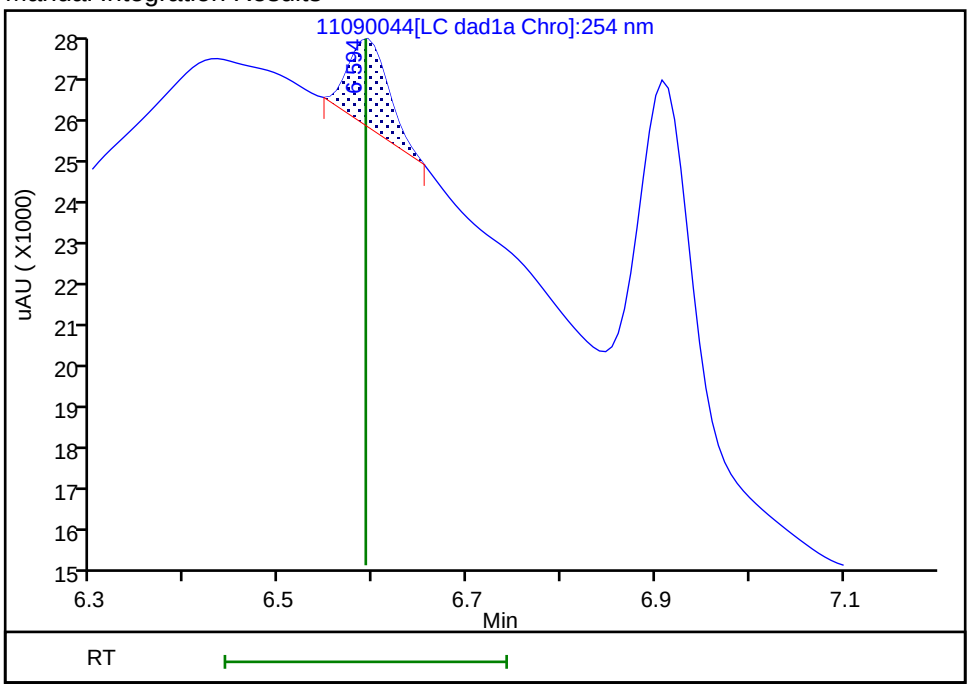
Processing Integration Results

RT: 6.59
Area: 327765
Amount: 3.882485
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 5943
Amount: 0.070397
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:46:18
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

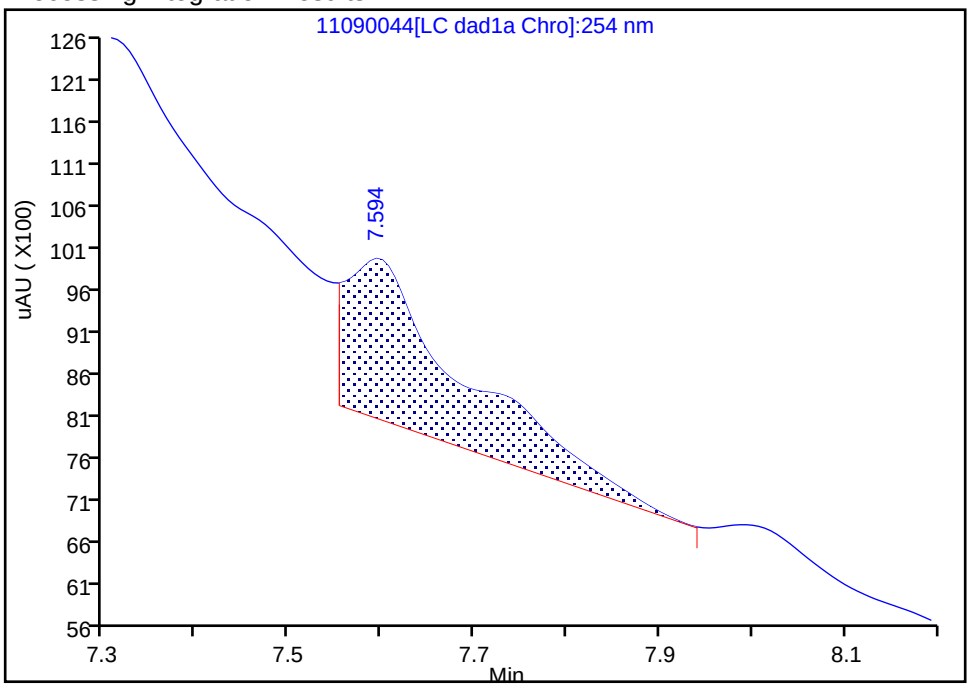
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090044.d				
Injection Date:	10-Nov-2021 04:44:39	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-5-A	Lab Sample ID:	280-155138-5		
Client ID:	G0087-7				
Operator ID:	JZ	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

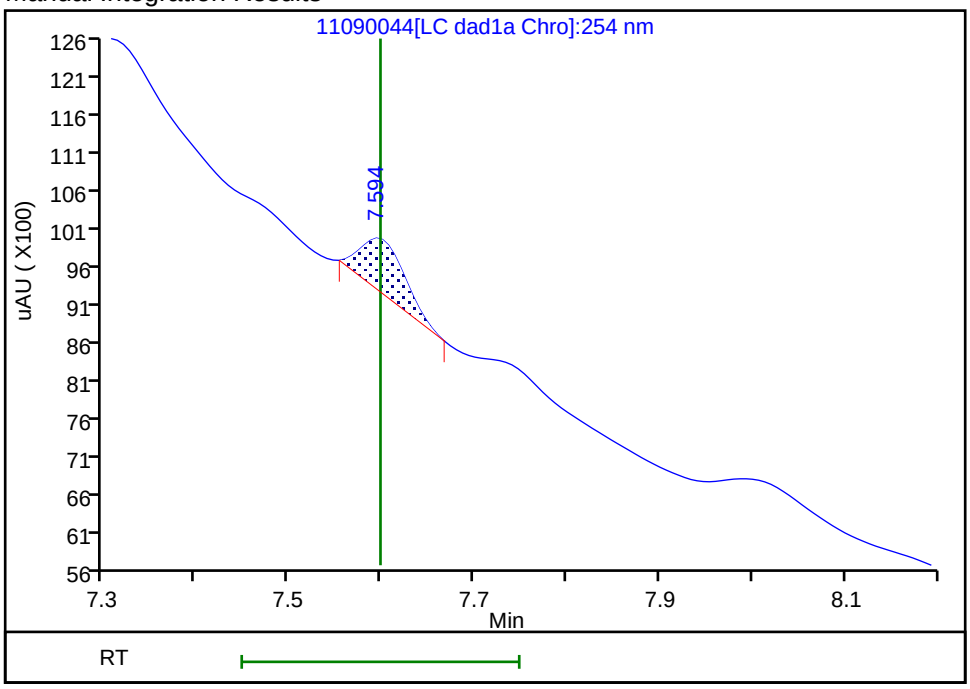
Processing Integration Results

RT: 7.59
Area: 16787
Amount: 0.157978
Amount Units: ug/mL



Manual Integration Results

RT: 7.59
Area: 2333
Amount: 0.021955
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:46:23
Audit Action: Manually Integrated Audit Reason: Baseline

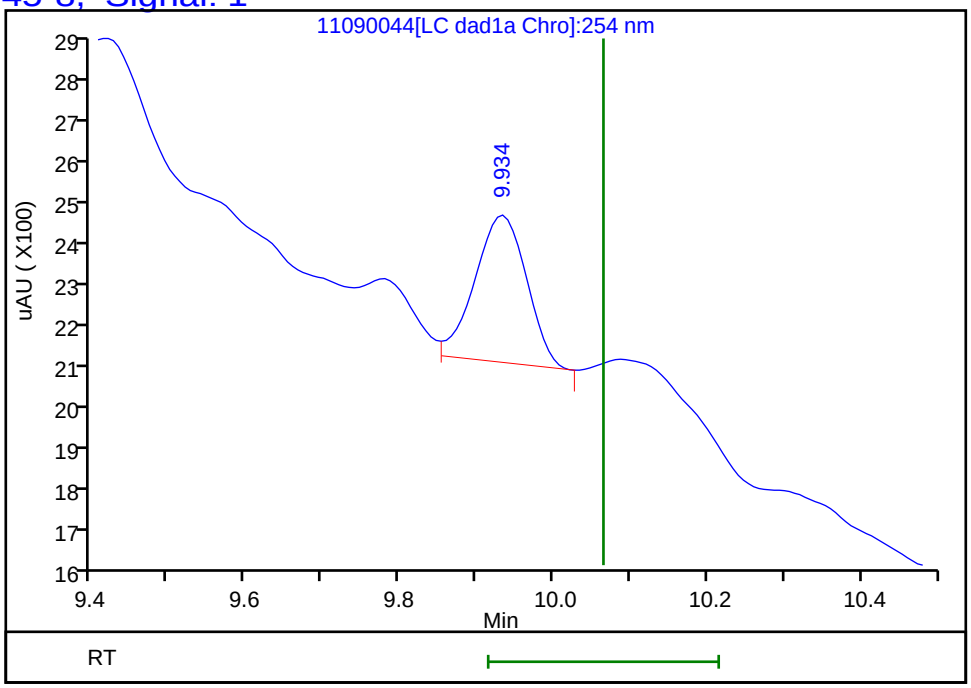
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090044.d				
Injection Date:	10-Nov-2021 04:44:39	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-5-A	Lab Sample ID:	280-155138-5		
Client ID:	G0087-7				
Operator ID:	JZ	ALS Bottle#:	44	Worklist Smp#:	44
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 9.93
Response: 1562
Amount: 0.009059



Reviewer: zhangji, 10-Nov-2021 12:46:34
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: G0087-7 Lab Sample ID: 280-155138-5

Matrix: Water Lab File ID: 11100028.D

Analysis Method: 8330A Date Collected: 11/03/2021 11:30

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 493.2(mL) Date Analyzed: 11/11/2021 03:50

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.: 556958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.32*	*J1 B*	*0.11*	0.10	*0.051*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	94		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100028.D
Lims ID: 280-155138-A-5-A
Client ID: G0087-7
Sample Type: Client
Inject. Date: 11-Nov-2021 03:50:57 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155138-A-5-A
Misc. Info.: 280-0106378-028
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 11-Nov-2021 19:12:33 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1674

First Level Reviewer: zhangji Date: 11-Nov-2021 19:03:45

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.631	6.650	-0.019	10057	0.0572	M
	6 MNX	1		7.367			ND	
	8 RDX	1	8.778	8.803	-0.025	4068	0.0199	M
	9 Nitrobenzene	1		11.856			ND	
$	10 1,2-Dinitrobenzene	1	12.931	12.949	-0.018	49734	0.1872	
	12 1,3-Dinitrobenzene	1		15.376			ND	
	14 o-Nitrotoluene	1		16.603			ND	7
	16 p-Nitrotoluene	1		16.889			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.311	17.343	-0.032	19092	0.0643	
	18 m-Nitrotoluene	1		17.856			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.224	18.236	-0.012	13627	0.0317	
	20 1,3,5-Trinitrobenzene	1		18.776			ND	
	21 2,6-Dinitrotoluene	1		20.009			ND	
	22 2,4-Dinitrotoluene	1		20.476			ND	
	23 Tetryl	1		24.070			ND	
	24 2,4,6-Trinitrotoluene	1		25.063			ND	

QC Flag Legend

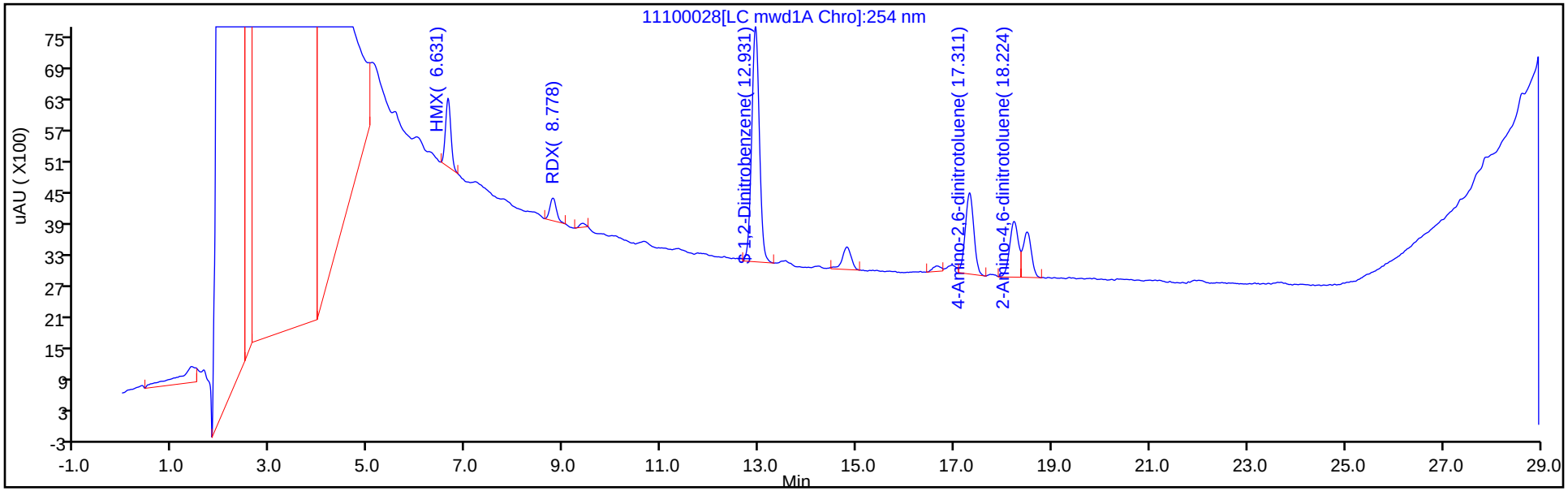
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated

Report Date: 11-Nov-2021 19:12:36 Chrom Revision: 2.3 22-Sep-2021 15:38:46

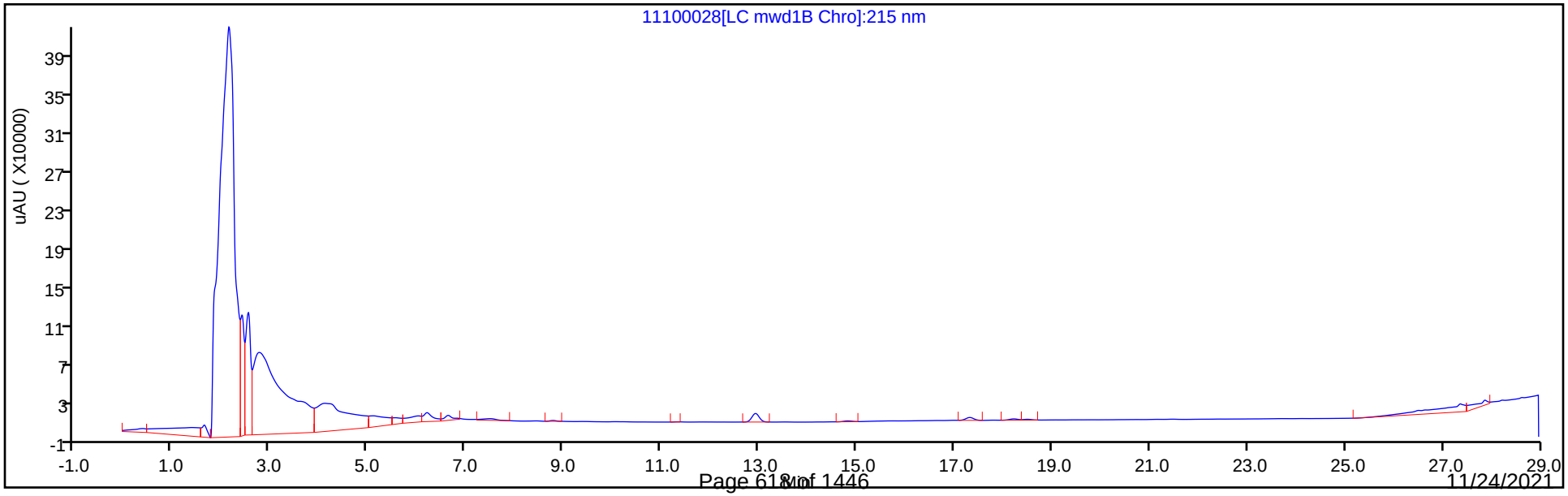
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100028.D				
Injection Date:	11-Nov-2021 03:50:57	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155138-A-5-A	Lab Sample ID:	280-155138-5	Worklist Smp#:	28
Client ID:	G0087-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100028.D				
Lims ID:	280-155138-A-5-A				
Client ID:	G0087-7				
Sample Type:	Client				
Inject. Date:	11-Nov-2021 03:50:57	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-A-5-A				
Misc. Info.:	280-0106378-028				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	11-Nov-2021 19:12:33	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1674				
First Level Reviewer: zhangji		Date:	11-Nov-2021 19:03:45		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1872	93.60

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

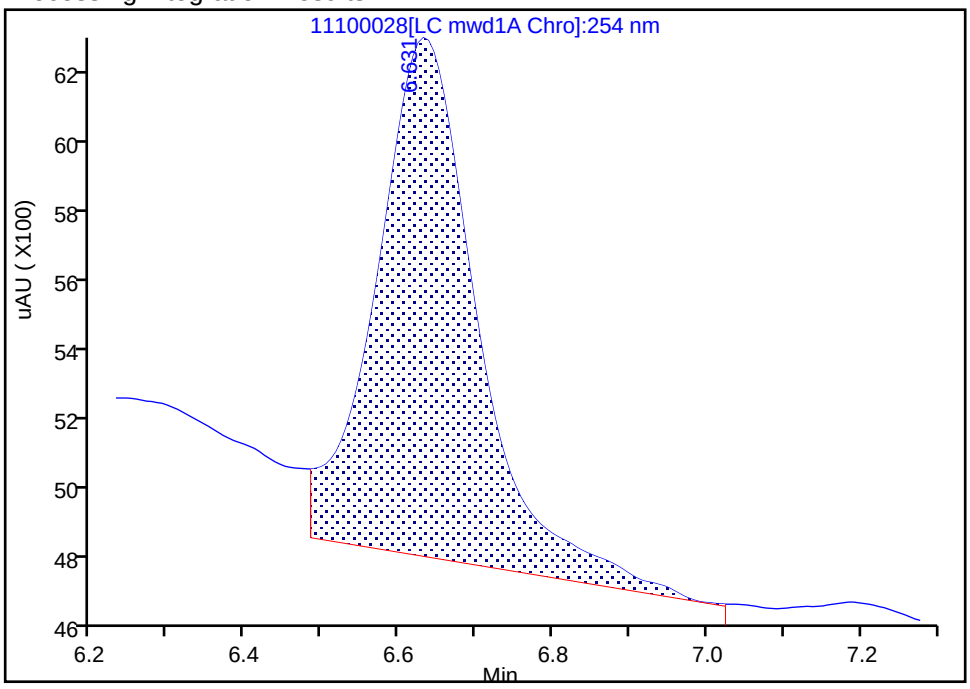
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100028.D				
Injection Date:	11-Nov-2021 03:50:57	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155138-A-5-A	Lab Sample ID:	280-155138-5		
Client ID:	G0087-7				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

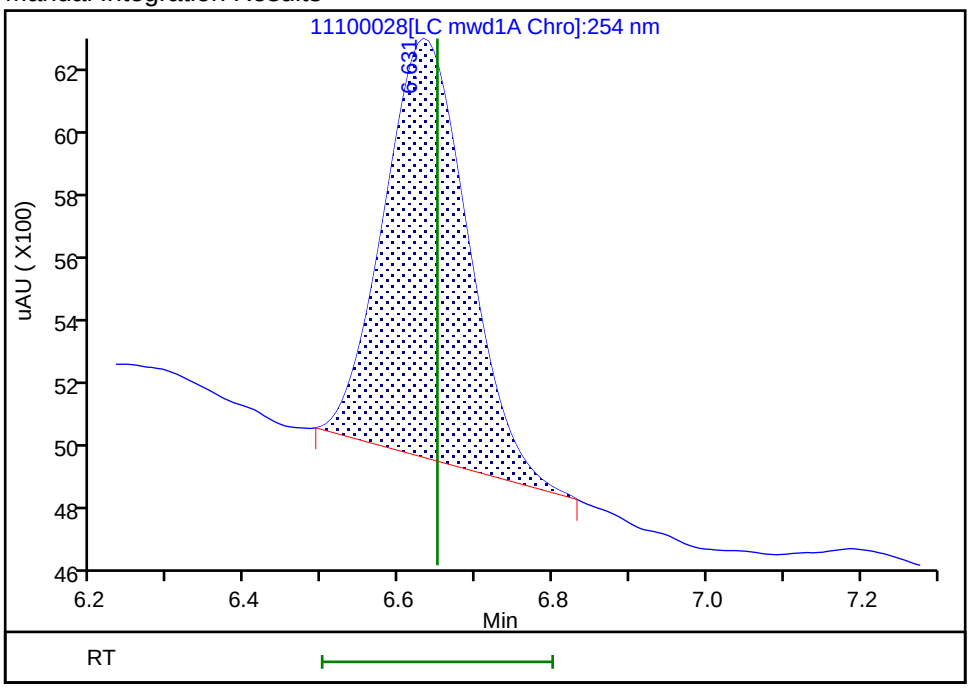
Processing Integration Results

RT: 6.63
Area: 13605
Amount: 0.079512
Amount Units: ug/ml



Manual Integration Results

RT: 6.63
Area: 10057
Amount: 0.057165
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:03:38

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

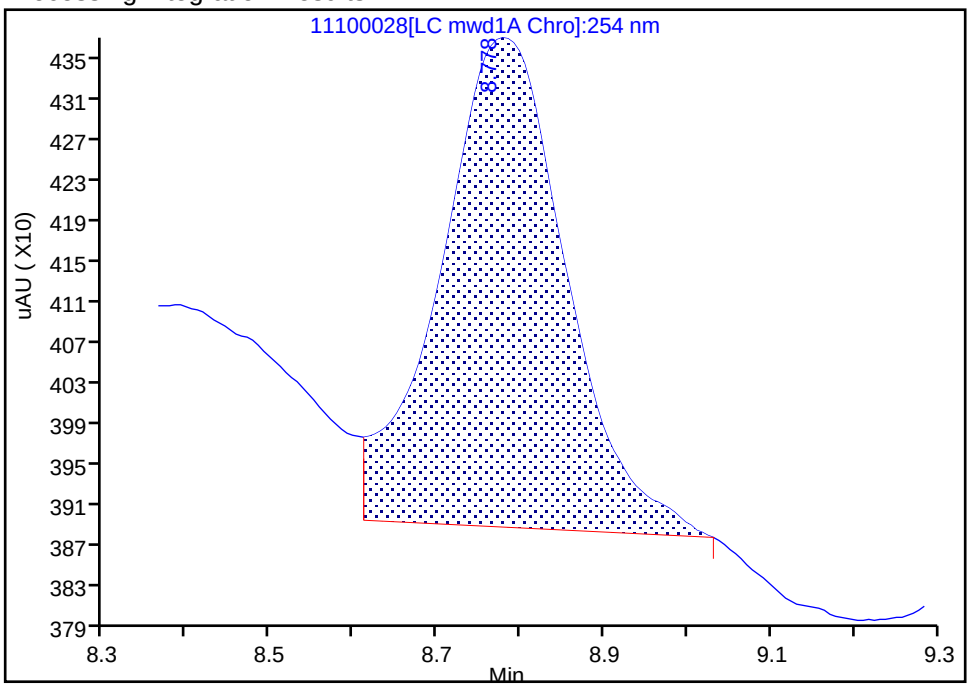
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100028.D				
Injection Date:	11-Nov-2021 03:50:57	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155138-A-5-A	Lab Sample ID:	280-155138-5		
Client ID:	G0087-7				
Operator ID:	JZ	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

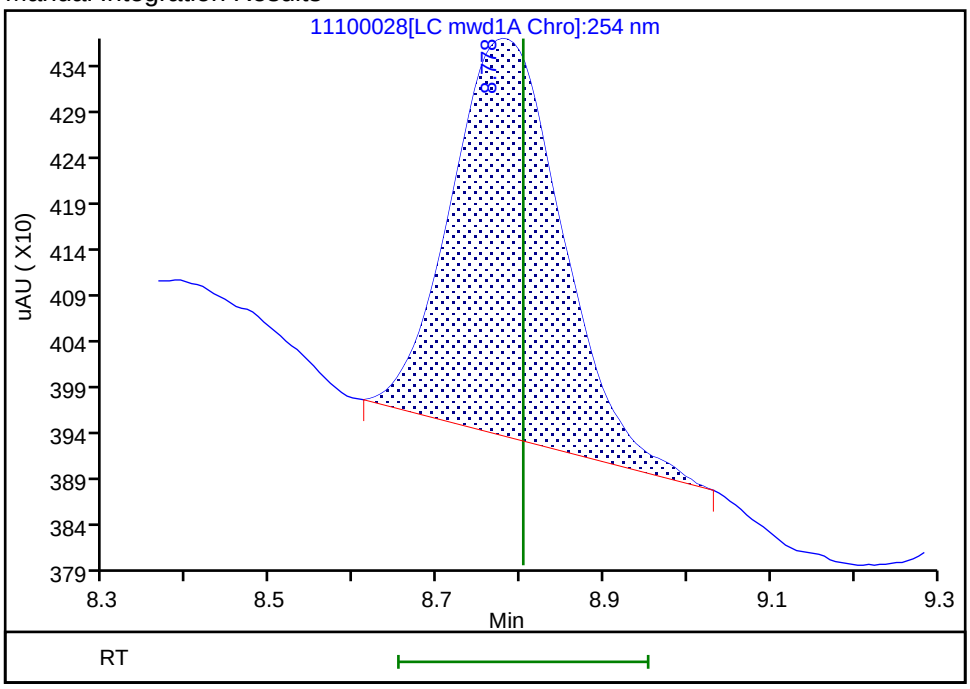
Processing Integration Results

RT: 8.78
Area: 5101
Amount: 0.024972
Amount Units: ug/ml



Manual Integration Results

RT: 8.78
Area: 4068
Amount: 0.019915
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:03:41

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: NW071-7 Lab Sample ID: 280-155138-6

Matrix: Water Lab File ID: 11090045.D

Analysis Method: 8330A Date Collected: 11/02/2021 15:55

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 495.2(mL) Date Analyzed: 11/10/2021 05:07

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.: 556781 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.086
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	0.41	0.40	0.10
2691-41-0	HMX	0.20	U	0.21	0.20	0.088
5755-27-1	MNX	0.40	U M	2.0	0.40	0.16
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.092
121-82-4	RDX	0.20	U	0.21	0.20	0.052

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090045.D
Lims ID: 280-155138-A-6-A
Client ID: NW071-7
Sample Type: Client
Inject. Date: 10-Nov-2021 05:07:32 ALS Bottle#: 45 Worklist Smp#: 45
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155138-A-6-A
Misc. Info.: 280-0106333-045
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Nov-2021 12:59:02 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1646

First Level Reviewer: zhangji Date: 10-Nov-2021 12:47:02

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.592			ND	
7 MNX	1		7.223			ND	U
8 RDX	1		7.598			ND	
$ 10 1,2-Dinitrobenzene	1	8.573	8.572	0.001	24423	0.1905	M
11 1,3,5-Trinitrobenzene	1		8.685			ND	U
12 1,3-Dinitrobenzene	1		9.331			ND	U
13 Nitrobenzene	1		9.725			ND	
15 Tetryl	1	10.086	10.065	0.021	2493	0.0145	M
17 2,4,6-Trinitrotoluene	1		10.971			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.185			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.438			ND	
20 2,6-Dinitrotoluene	1		11.605			ND	
21 2,4-Dinitrotoluene	1		11.771			ND	
22 o-Nitrotoluene	1		12.645			ND	
23 p-Nitrotoluene	1		13.078			ND	
24 m-Nitrotoluene	1		13.658			ND	

QC Flag Legend

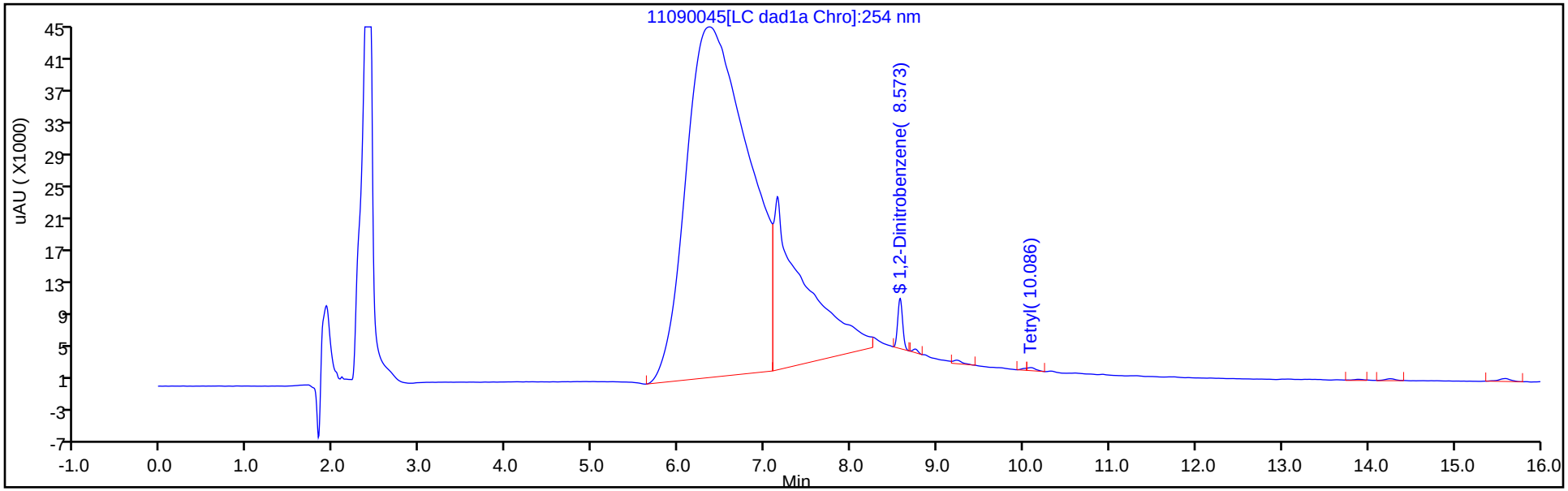
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 10-Nov-2021 12:59:03 Chrom Revision: 2.3 22-Sep-2021 15:38:46

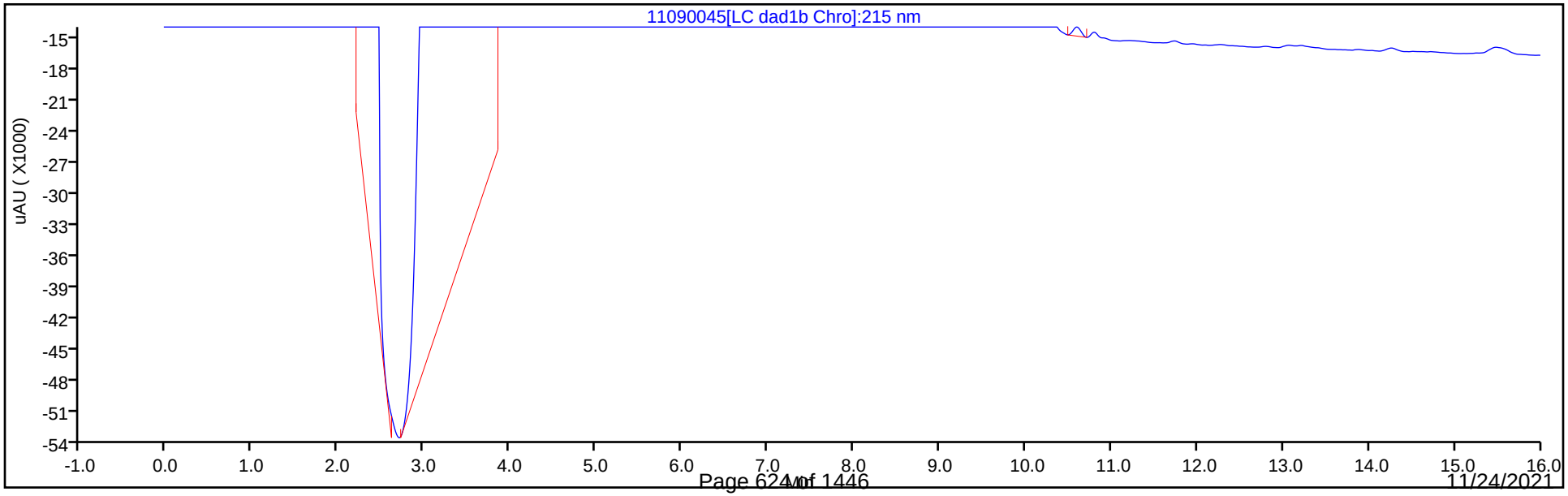
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090045.d				
Injection Date:	10-Nov-2021 05:07:32	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155138-A-6-A	Lab Sample ID:	280-155138-6	Worklist Smp#:	45
Client ID:	NW071-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	45
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090045.D				
Lims ID:	280-155138-A-6-A				
Client ID:	NW071-7				
Sample Type:	Client				
Inject. Date:	10-Nov-2021 05:07:32	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-A-6-A				
Misc. Info.:	280-0106333-045				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:59:02	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:47:02		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1905	95.24

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

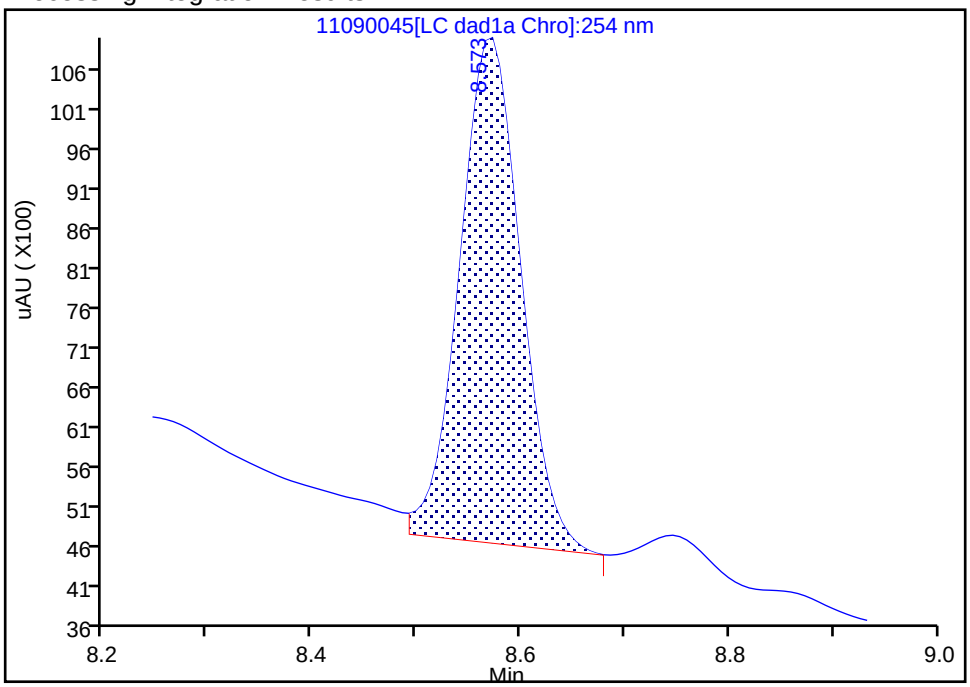
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090045.d				
Injection Date:	10-Nov-2021 05:07:32	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-6-A	Lab Sample ID:	280-155138-6		
Client ID:	NW071-7				
Operator ID:	JZ	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

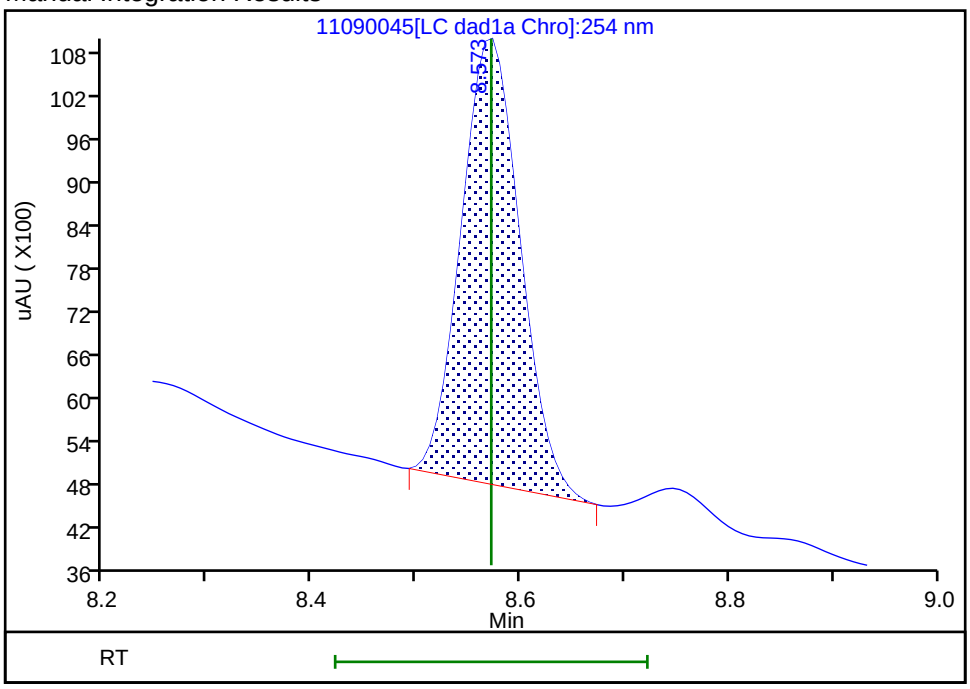
Processing Integration Results

RT: 8.57
Area: 25926
Amount: 0.202204
Amount Units: ug/mL



Manual Integration Results

RT: 8.57
Area: 24423
Amount: 0.190481
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:46:52

Audit Action: Manually Integrated Audit Reason: Baseline

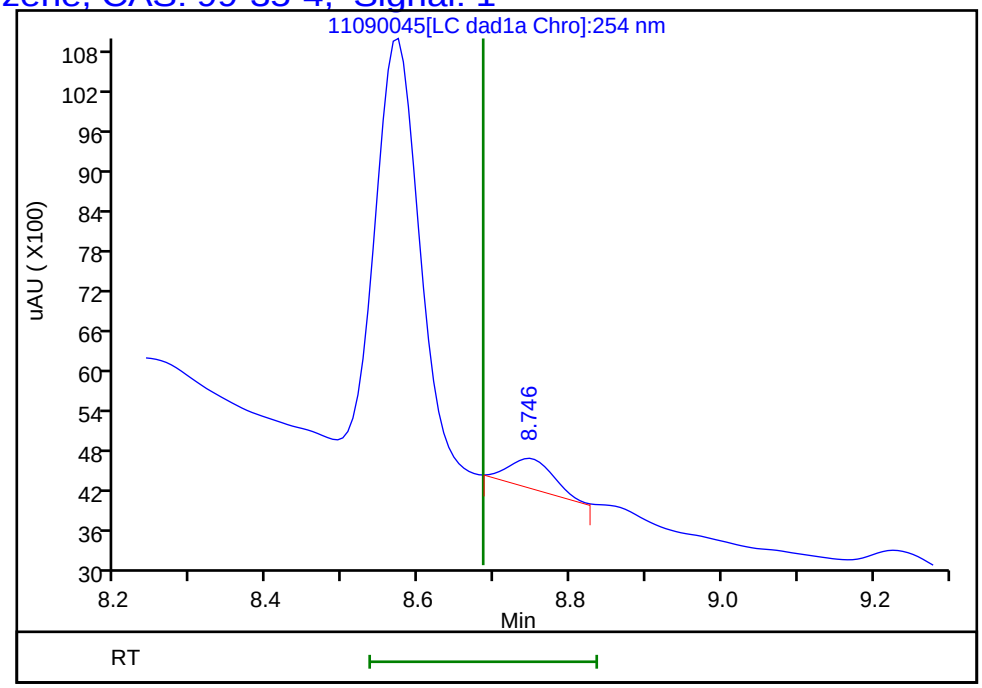
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090045.d				
Injection Date:	10-Nov-2021 05:07:32	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-6-A	Lab Sample ID:	280-155138-6		
Client ID:	NW071-7				
Operator ID:	JZ	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 8.75
Response: 1813
Amount: 0.008229



Reviewer: zhangji, 10-Nov-2021 12:47:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

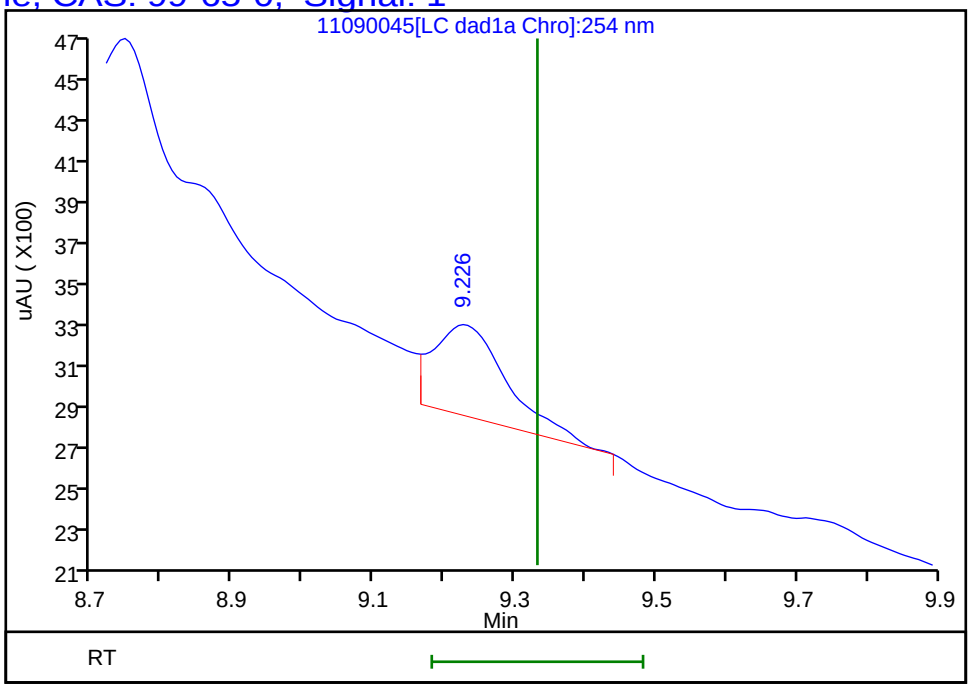
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090045.d				
Injection Date:	10-Nov-2021 05:07:32	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-6-A	Lab Sample ID:	280-155138-6		
Client ID:	NW071-7				
Operator ID:	JZ	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 9.23
Response: 3156
Amount: 0.010650



Reviewer: zhangji, 10-Nov-2021 12:47:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

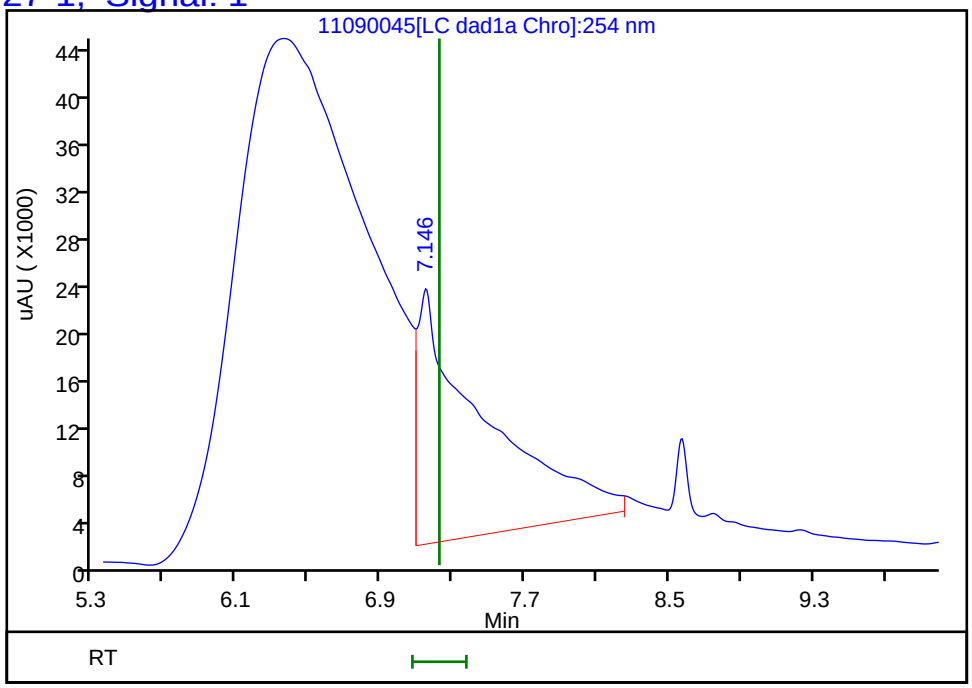
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090045.d				
Injection Date:	10-Nov-2021 05:07:32	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-6-A	Lab Sample ID:	280-155138-6		
Client ID:	NW071-7				
Operator ID:	JZ	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.15
Response: 548404
Amount: 4.207477



Reviewer: zhangji, 10-Nov-2021 12:47:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

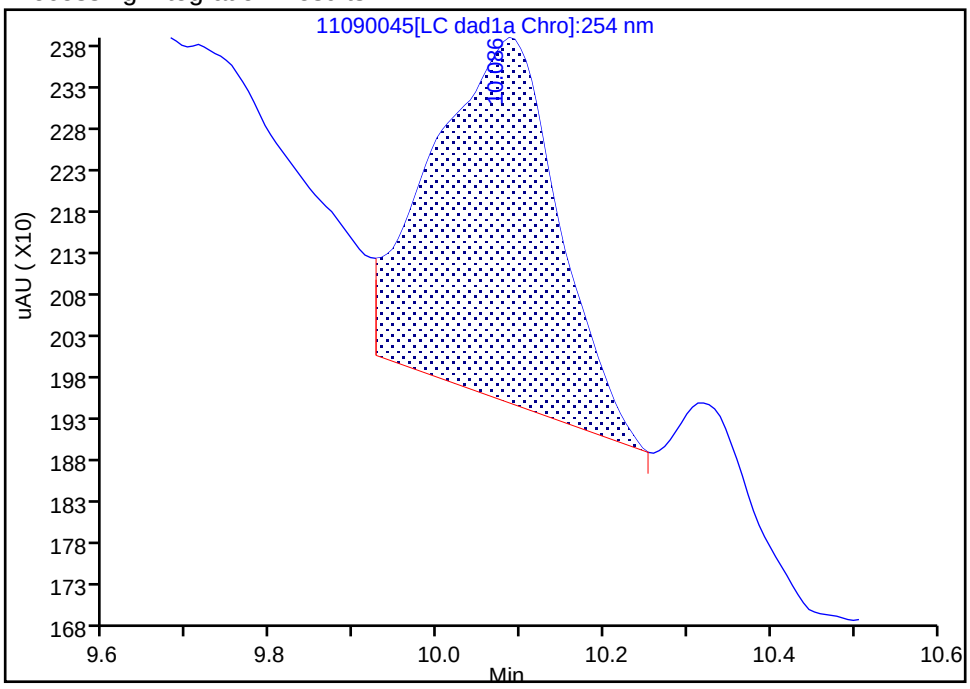
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090045.d				
Injection Date:	10-Nov-2021 05:07:32	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-6-A	Lab Sample ID:	280-155138-6		
Client ID:	NW071-7				
Operator ID:	JZ	ALS Bottle#:	45	Worklist Smp#:	45
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

15 Tetryl, CAS: 479-45-8

Signal: 1

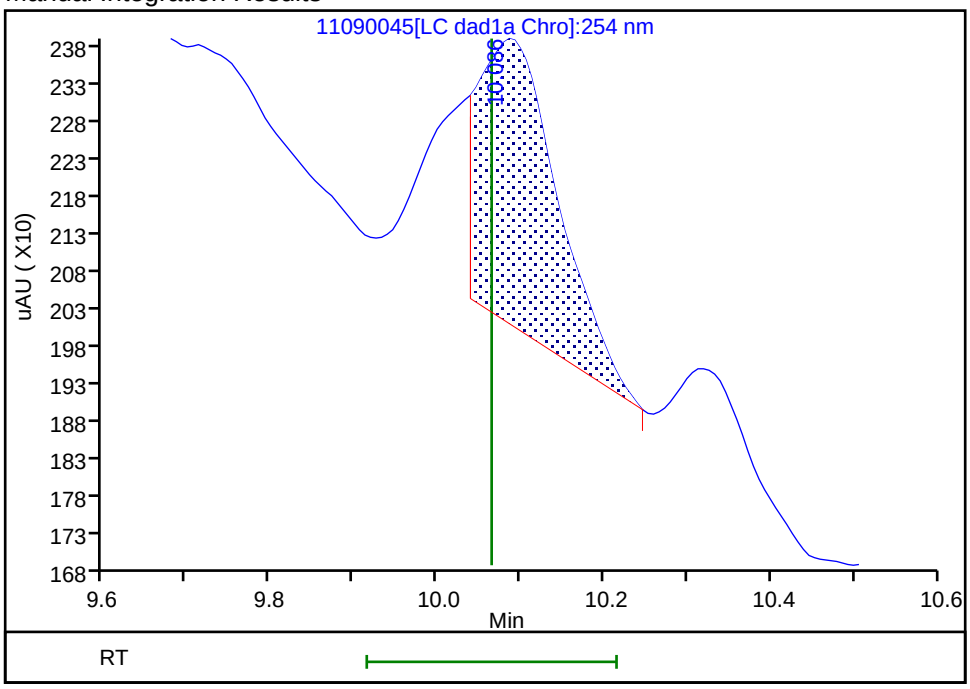
Processing Integration Results

RT: 10.09
Area: 4558
Amount: 0.026435
Amount Units: ug/mL



Manual Integration Results

RT: 10.09
Area: 2493
Amount: 0.014459
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:47:00

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: NW071-7 Lab Sample ID: 280-155138-6

Matrix: Water Lab File ID: 11100029.D

Analysis Method: 8330A Date Collected: 11/02/2021 15:55

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 495.2(mL) Date Analyzed: 11/11/2021 04:25

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.: 556958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
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	93		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100029.D
Lims ID: 280-155138-A-6-A
Client ID: NW071-7
Sample Type: Client
Inject. Date: 11-Nov-2021 04:25:54 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155138-A-6-A
Misc. Info.: 280-0106378-029
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 11-Nov-2021 19:12:33 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1674

First Level Reviewer: zhangji Date: 11-Nov-2021 19:03:54

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1		6.650			ND	
	6 MNX	1		7.367			ND	
	8 RDX	1		8.803			ND	
	9 Nitrobenzene	1		11.856			ND	
$	10 1,2-Dinitrobenzene	1	12.945	12.949	-0.004	49583	0.1866	
	12 1,3-Dinitrobenzene	1		15.376			ND	
	14 o-Nitrotoluene	1		16.603			ND	7
	16 p-Nitrotoluene	1		16.889			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.292	17.343	-0.051	3144	0.0106	
	18 m-Nitrotoluene	1		17.856			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.285	18.236	0.049	3974	0.006977	
	20 1,3,5-Trinitrobenzene	1		18.776			ND	
	21 2,6-Dinitrotoluene	1		20.009			ND	
	22 2,4-Dinitrotoluene	1		20.476			ND	
	23 Tetryl	1		24.070			ND	
	24 2,4,6-Trinitrotoluene	1		25.063			ND	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection

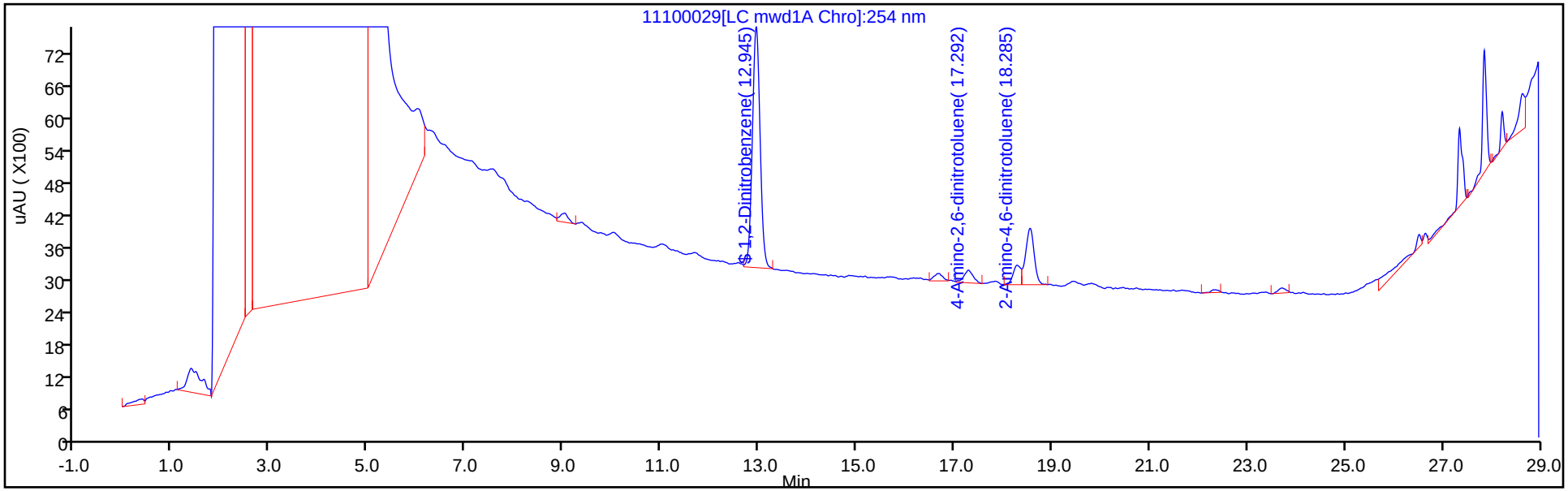
Report Date: 11-Nov-2021 19:12:36 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

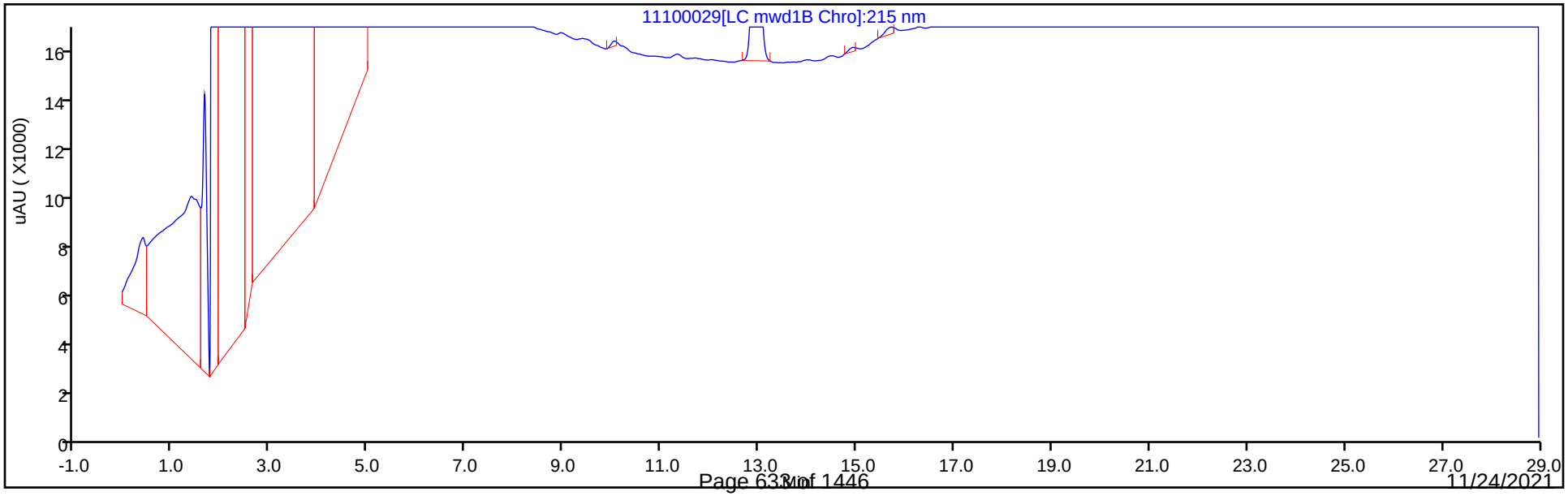
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100029.D

Injection Date:	11-Nov-2021 04:25:54	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155138-A-6-A	Lab Sample ID:	280-155138-6	Worklist Smp#:	29
Client ID:	NW071-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100029.D				
Lims ID:	280-155138-A-6-A				
Client ID:	NW071-7				
Sample Type:	Client				
Inject. Date:	11-Nov-2021 04:25:54	ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-A-6-A				
Misc. Info.:	280-0106378-029				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	11-Nov-2021 19:12:33	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1674				
First Level Reviewer: zhangji		Date:	11-Nov-2021 19:03:54		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1866	93.32

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: CA213-7 Lab Sample ID: 280-155138-7

Matrix: Water Lab File ID: 11090046.D

Analysis Method: 8330A Date Collected: 11/02/2021 13:20

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 500.4(mL) Date Analyzed: 11/10/2021 05:30

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.: 556781 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
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	0.085
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.19
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 M	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 M	0.21	0.20	0.091
121-82-4	RDX	0.20	U	0.21	0.20	0.051
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	97	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090046.D
Lims ID: 280-155138-A-7-A
Client ID: CA213-7
Sample Type: Client
Inject. Date: 10-Nov-2021 05:30:32 ALS Bottle#: 46 Worklist Smp#: 46
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155138-A-7-A
Misc. Info.: 280-0106333-046
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Nov-2021 12:59:02 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1646

First Level Reviewer: zhangji Date: 10-Nov-2021 12:47:17

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.592			ND	U
7 MNX	1		7.223			ND	
8 RDX	1		7.598			ND	
$ 10 1,2-Dinitrobenzene	1	8.571	8.572	-0.001	24771	0.1932	M
11 1,3,5-Trinitrobenzene	1		8.685			ND	U
12 1,3-Dinitrobenzene	1		9.331			ND	
13 Nitrobenzene	1		9.725			ND	U
15 Tetryl	1		10.065			ND	
17 2,4,6-Trinitrotoluene	1		10.971			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.185			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.438			ND	
20 2,6-Dinitrotoluene	1		11.605			ND	
21 2,4-Dinitrotoluene	1		11.771			ND	
22 o-Nitrotoluene	1		12.645			ND	
23 p-Nitrotoluene	1		13.078			ND	7
24 m-Nitrotoluene	1		13.658			ND	

QC Flag Legend

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

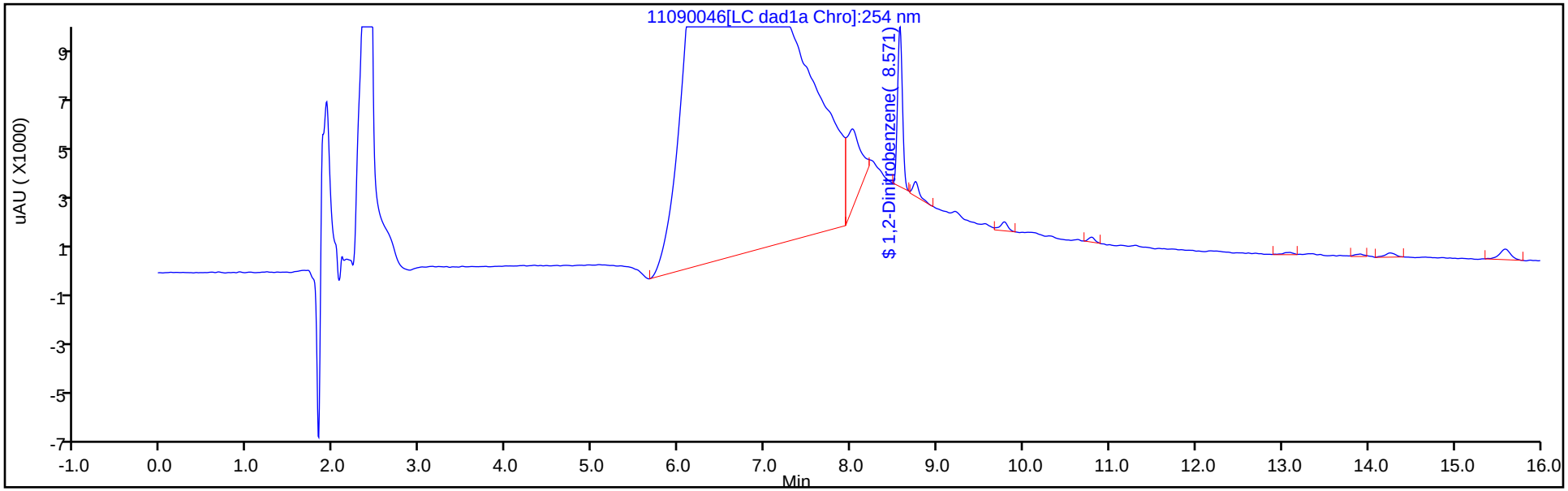
Report Date: 10-Nov-2021 12:59:03 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

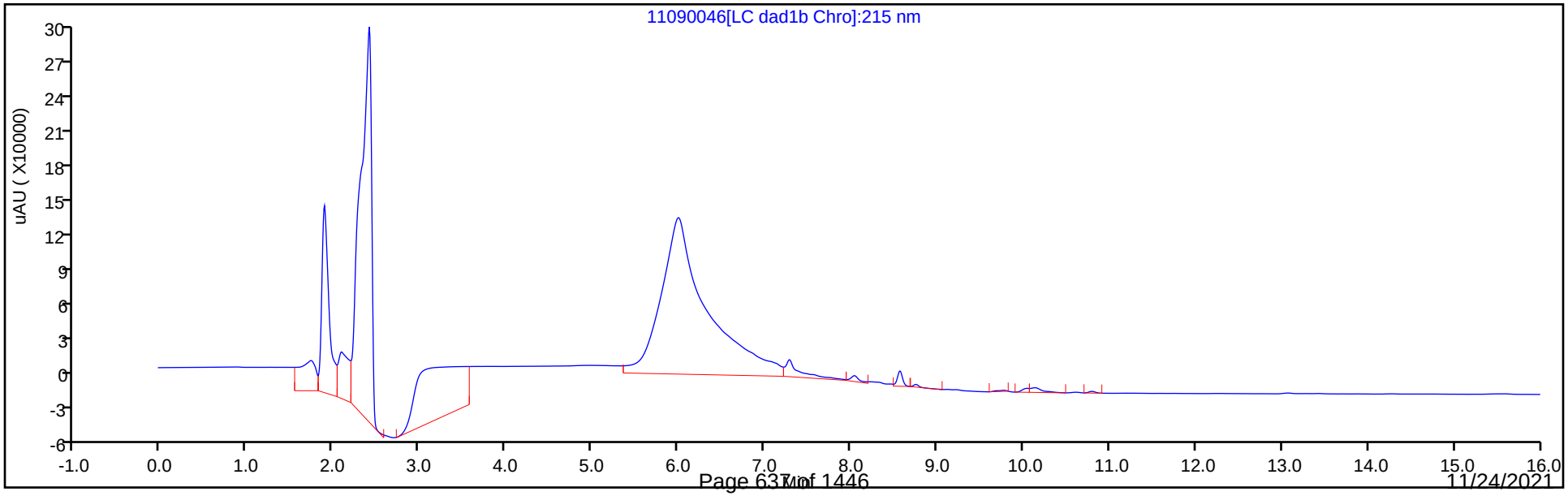
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090046.d

Injection Date:	10-Nov-2021 05:30:32	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155138-A-7-A	Lab Sample ID:	280-155138-7	Worklist Smp#:	46
Client ID:	CA213-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	46
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090046.D				
Lims ID:	280-155138-A-7-A				
Client ID:	CA213-7				
Sample Type:	Client				
Inject. Date:	10-Nov-2021 05:30:32	ALS Bottle#:	46	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-A-7-A				
Misc. Info.:	280-0106333-046				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:59:02	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:47:17		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1932	96.60

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

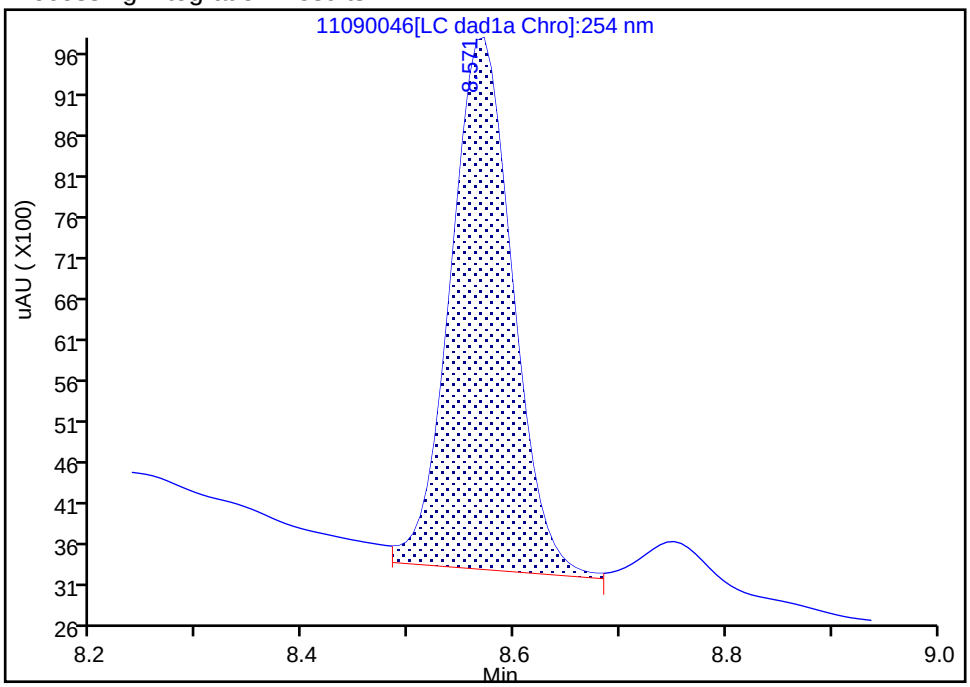
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090046.d				
Injection Date:	10-Nov-2021 05:30:32	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-7-A	Lab Sample ID:	280-155138-7		
Client ID:	CA213-7				
Operator ID:	JZ	ALS Bottle#:	46	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

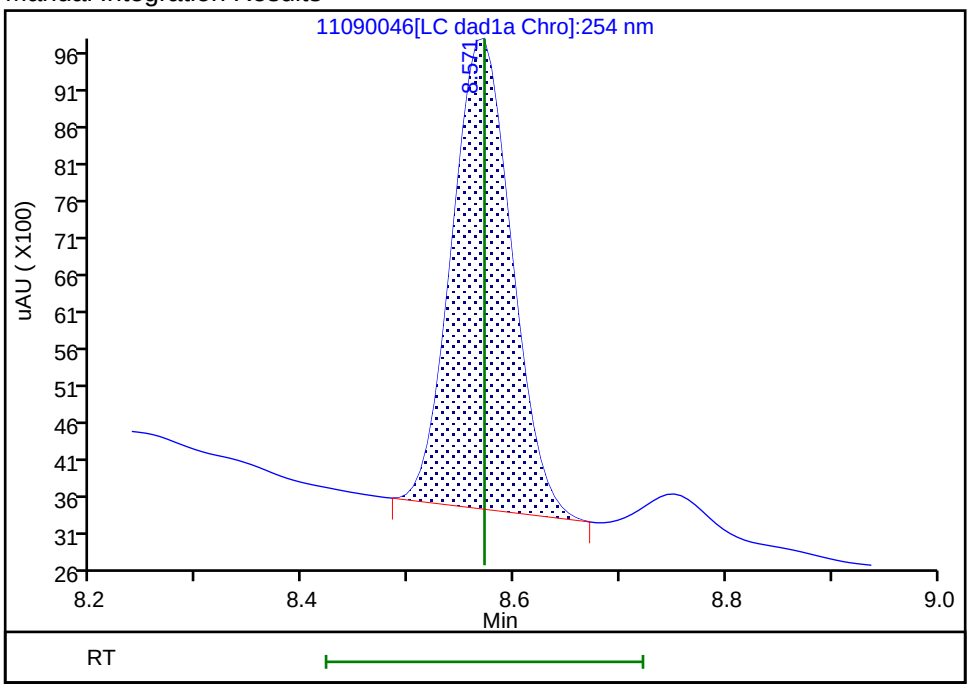
Processing Integration Results

RT: 8.57
Area: 26275
Amount: 0.204926
Amount Units: ug/mL



Manual Integration Results

RT: 8.57
Area: 24771
Amount: 0.193196
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:47:15

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

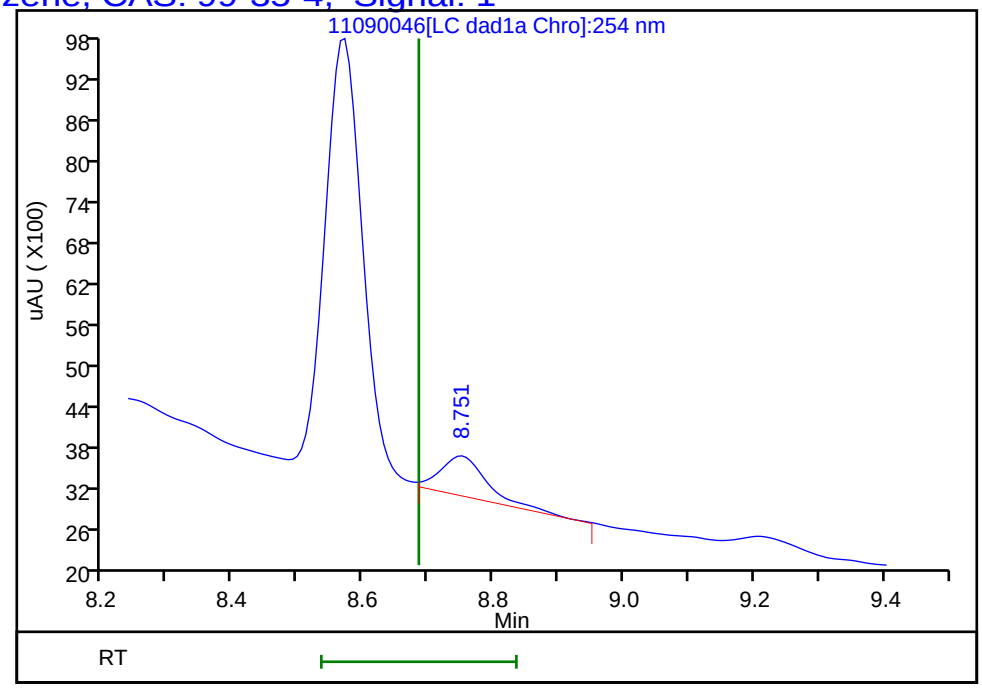
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090046.d
Injection Date: 10-Nov-2021 05:30:32 Instrument ID: CHHPLC_X3
Lims ID: 280-155138-A-7-A Lab Sample ID: 280-155138-7
Client ID: CA213-7
Operator ID: JZ ALS Bottle#: 46 Worklist Smp#: 46
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 8.75
Response: 2943
Amount: 0.013358



Reviewer: zhangji, 10-Nov-2021 12:47:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

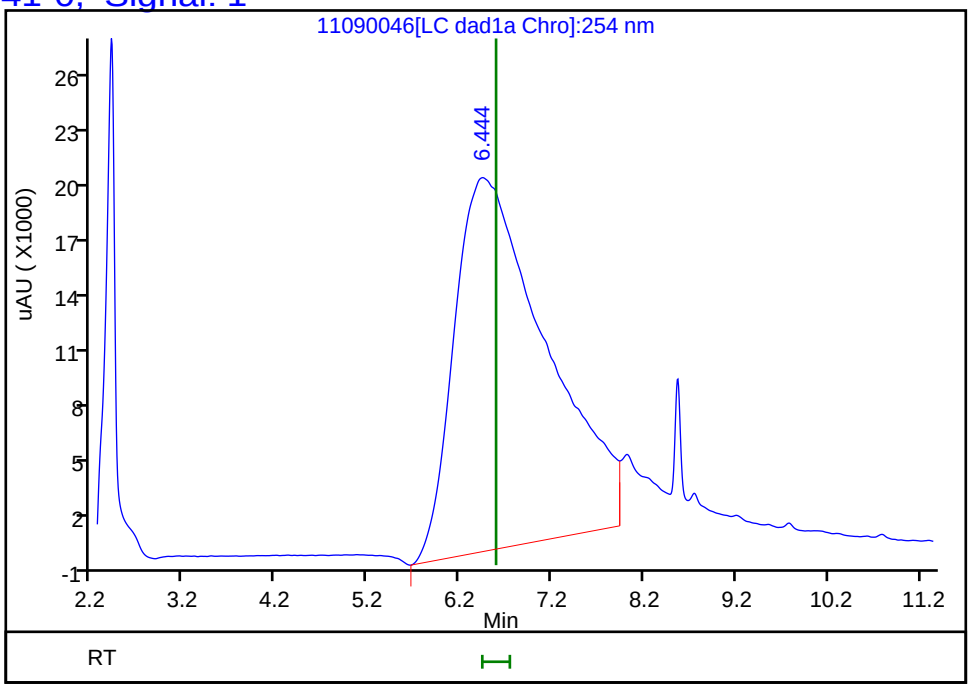
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090046.d

Injection Date:	10-Nov-2021 05:30:32	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-7-A	Lab Sample ID:	280-155138-7		
Client ID:	CA213-7				
Operator ID:	JZ	ALS Bottle#:	46	Worklist Smp#:	46
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 6.44
Response: 1380583
Amount: 16.353465



Reviewer: zhangji, 10-Nov-2021 12:47:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

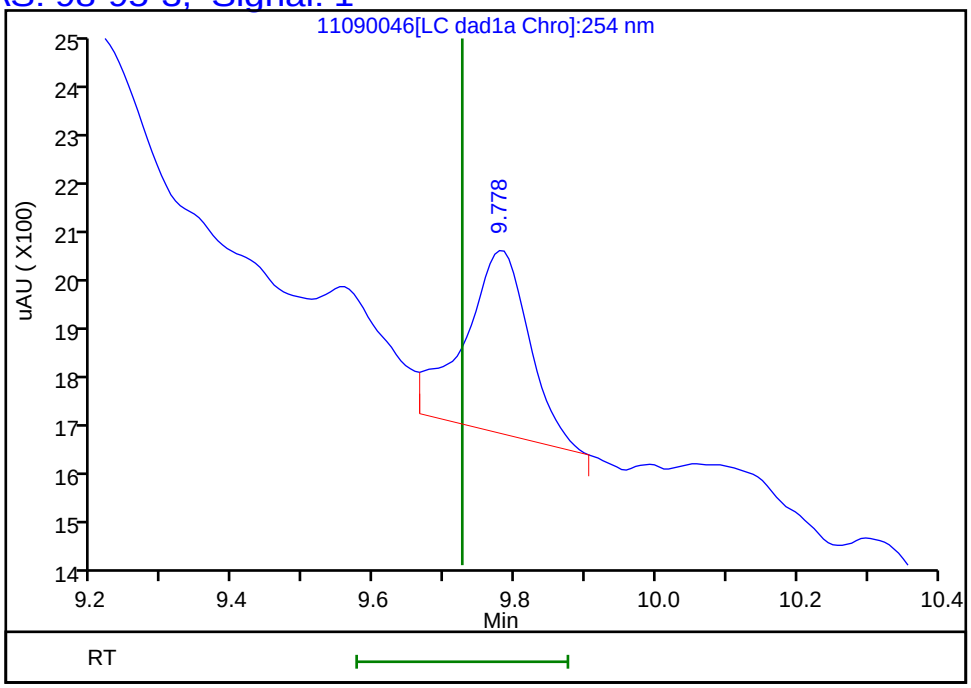
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090046.d
Injection Date: 10-Nov-2021 05:30:32 Instrument ID: CHHPLC_X3
Lims ID: 280-155138-A-7-A Lab Sample ID: 280-155138-7
Client ID: CA213-7
Operator ID: JZ ALS Bottle#: 46 Worklist Smp#: 46
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

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

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

RT: 9.78
Response: 2236
Amount: 0.011450



Reviewer: zhangji, 10-Nov-2021 12:47:17
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: G0081-7 Lab Sample ID: 280-155138-8

Matrix: Water Lab File ID: 11090049.D

Analysis Method: 8330A Date Collected: 11/02/2021 15:10

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 509.7(mL) Date Analyzed: 11/10/2021 06:39

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.: 556781 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.46	M	0.21	0.20	0.082
99-65-0	1,3-Dinitrobenzene	0.098	U	0.11	0.098	0.036
118-96-7	2,4,6-Trinitrotoluene	0.098	U	0.11	0.098	0.044
121-14-2	2,4-Dinitrotoluene	0.078	U	0.098	0.078	0.027
606-20-2	2,6-Dinitrotoluene	0.078	U	0.098	0.078	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.093	J J1	0.11	0.098	0.050
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.084
99-08-1	3-Nitrotoluene	0.39	U	0.39	0.39	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.25	J1	0.15	0.12	0.057
99-99-0	4-Nitrotoluene	0.39	U	0.40	0.39	0.098
2691-41-0	HMX	0.20	U	0.21	0.20	0.086
5755-27-1	MNX	0.39	U	2.0	0.39	0.15
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.089
121-82-4	RDX	0.20	U	0.21	0.20	0.051
479-45-8	Tetryl	0.098	U M	0.11	0.098	0.031

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090049.D
Lims ID: 280-155138-A-8-A
Client ID: G0081-7
Sample Type: Client
Inject. Date: 10-Nov-2021 06:39:25 ALS Bottle#: 49 Worklist Smp#: 49
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155138-A-8-A
Misc. Info.: 280-0106333-049
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Nov-2021 12:58:55 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1646

First Level Reviewer: zhangji Date: 10-Nov-2021 12:49:28

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.592			ND	
7 MNX	1		7.223			ND	
8 RDX	1		7.598			ND	
$ 10 1,2-Dinitrobenzene	1	8.565	8.572	-0.007	24347	0.1899	M
11 1,3,5-Trinitrobenzene	1	8.685	8.685	0.000	10235	0.0465	M
12 1,3-Dinitrobenzene	1		9.331			ND	
13 Nitrobenzene	1		9.725			ND	
15 Tetryl	1		10.065			ND	U
17 2,4,6-Trinitrotoluene	1		10.971			ND	
18 4-Amino-2,6-dinitrotoluene	1	11.165	11.185	-0.020	3922	0.0257	
19 2-Amino-4,6-dinitrotoluene	1	11.418	11.438	-0.020	1965	0.009496	
20 2,6-Dinitrotoluene	1		11.605			ND	
21 2,4-Dinitrotoluene	1		11.771			ND	
22 o-Nitrotoluene	1		12.645			ND	
23 p-Nitrotoluene	1		13.078			ND	7
24 m-Nitrotoluene	1		13.658			ND	

QC Flag Legend

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

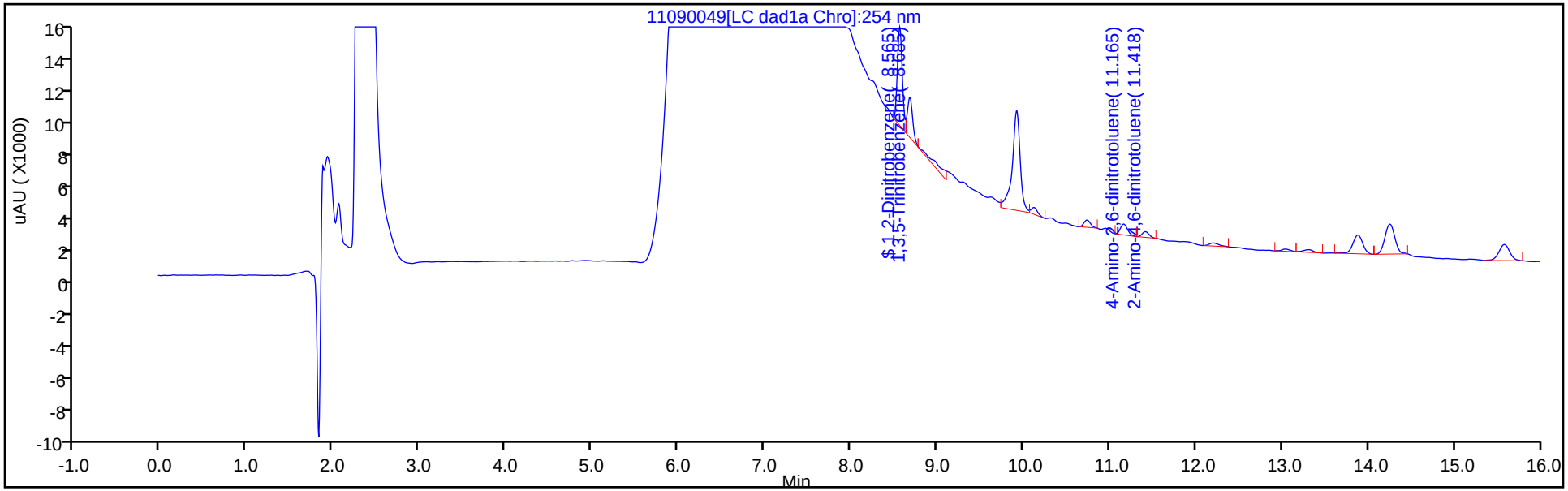
Report Date: 10-Nov-2021 12:59:01 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

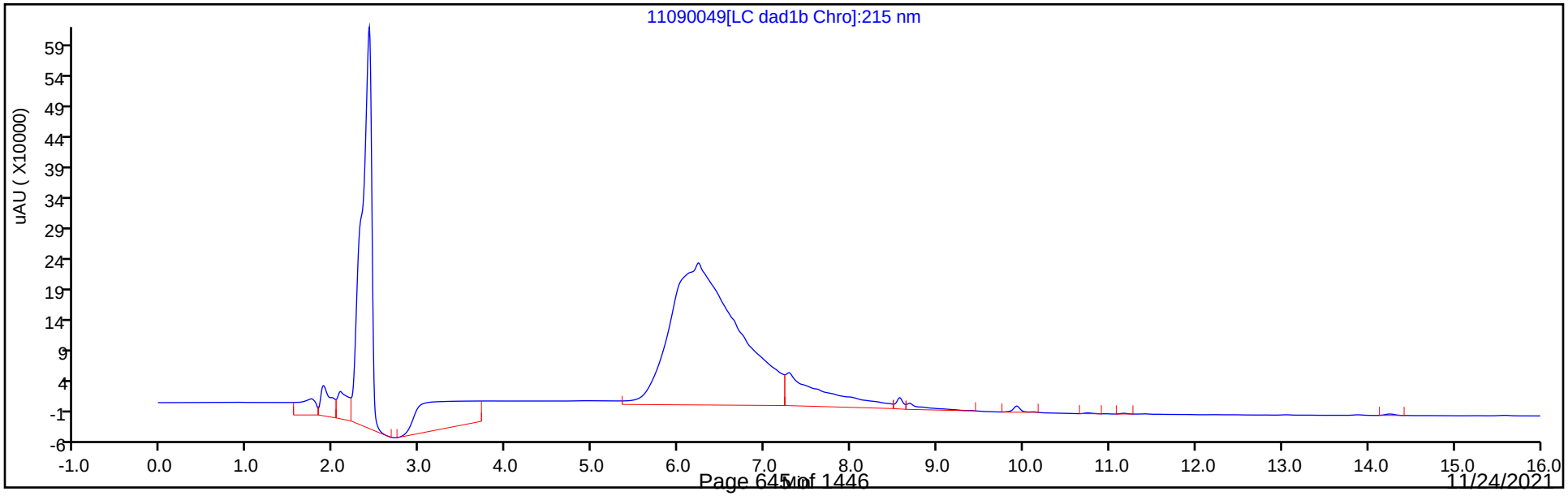
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090049.d

Injection Date:	10-Nov-2021 06:39:25	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155138-A-8-A	Lab Sample ID:	280-155138-8	Worklist Smp#:	49
Client ID:	G0081-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	49
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090049.D				
Lims ID:	280-155138-A-8-A				
Client ID:	G0081-7				
Sample Type:	Client				
Inject. Date:	10-Nov-2021 06:39:25	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-A-8-A				
Misc. Info.:	280-0106333-049				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:58:55	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:49:28		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1899	94.94

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

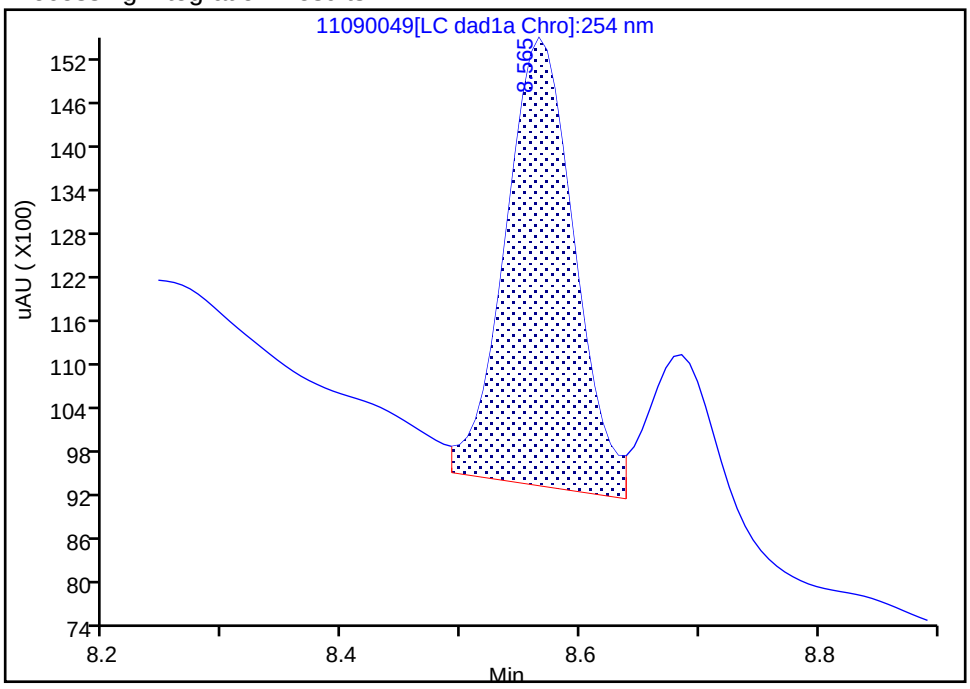
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090049.d				
Injection Date:	10-Nov-2021 06:39:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-8-A	Lab Sample ID:	280-155138-8		
Client ID:	G0081-7				
Operator ID:	JZ	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

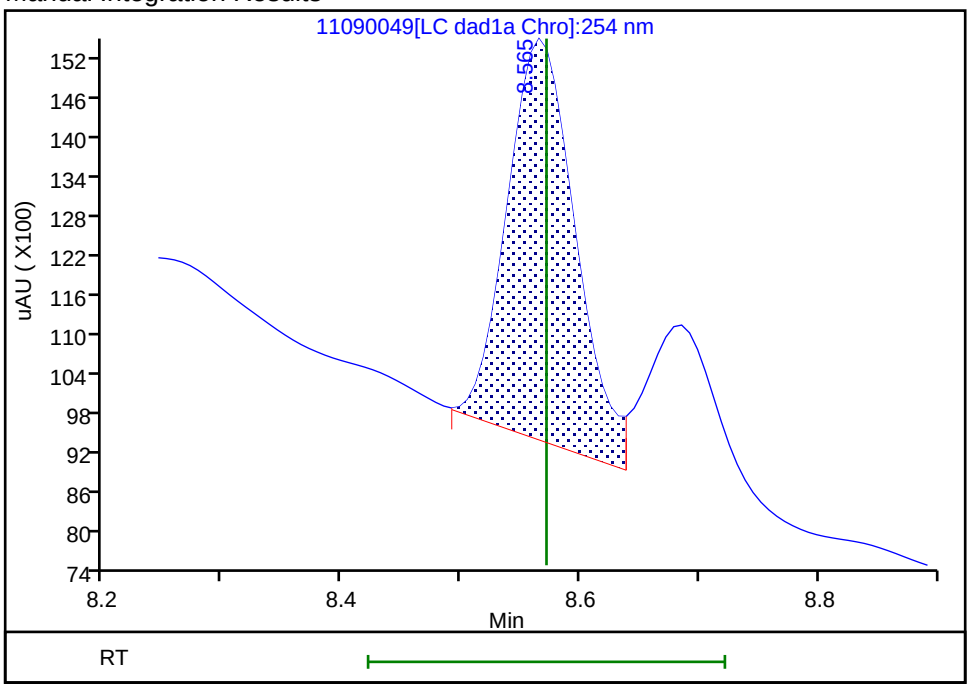
Processing Integration Results

RT: 8.57
Area: 24831
Amount: 0.193664
Amount Units: ug/mL



Manual Integration Results

RT: 8.57
Area: 24347
Amount: 0.189889
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:49:16

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

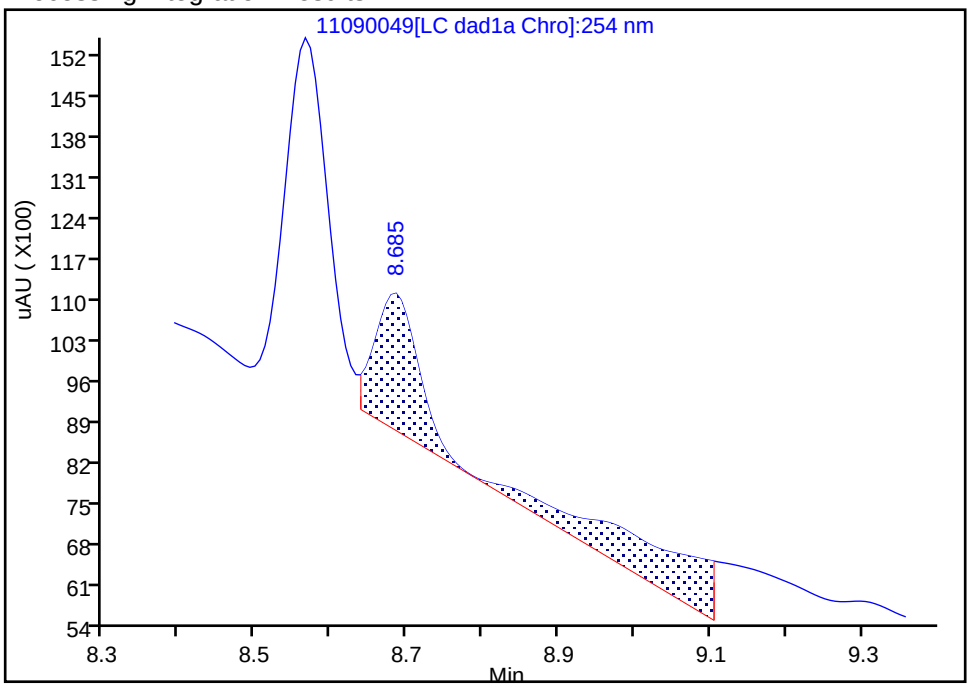
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090049.d				
Injection Date:	10-Nov-2021 06:39:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-8-A	Lab Sample ID:	280-155138-8		
Client ID:	G0081-7				
Operator ID:	JZ	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

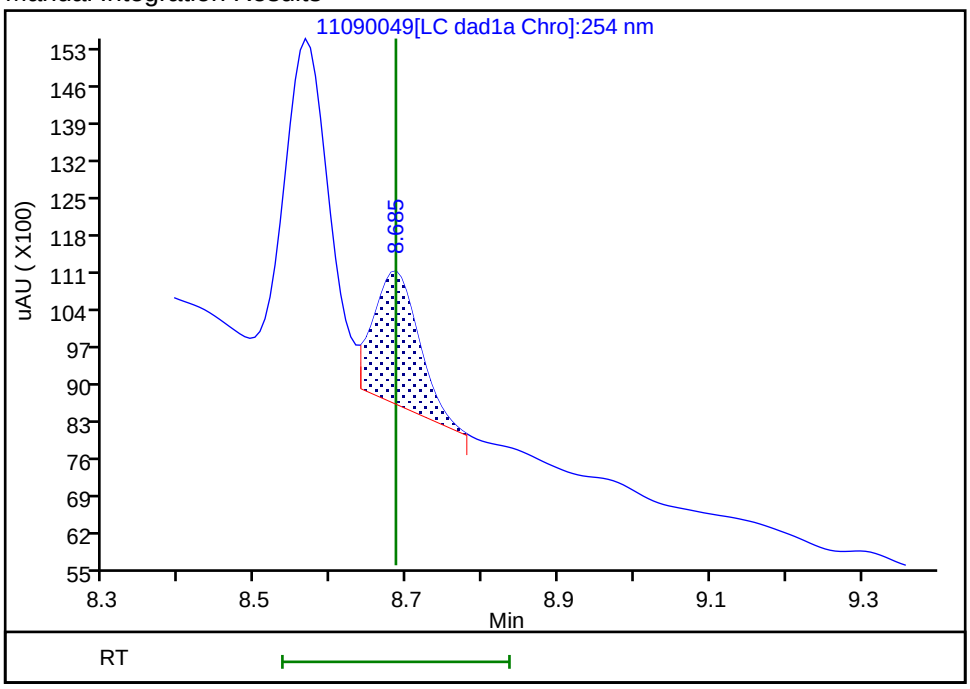
Processing Integration Results

RT: 8.69
Area: 18220
Amount: 0.082699
Amount Units: ug/mL



Manual Integration Results

RT: 8.69
Area: 10235
Amount: 0.046456
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:49:19

Audit Action: Split an Integrated Peak Audit Reason: Baseline

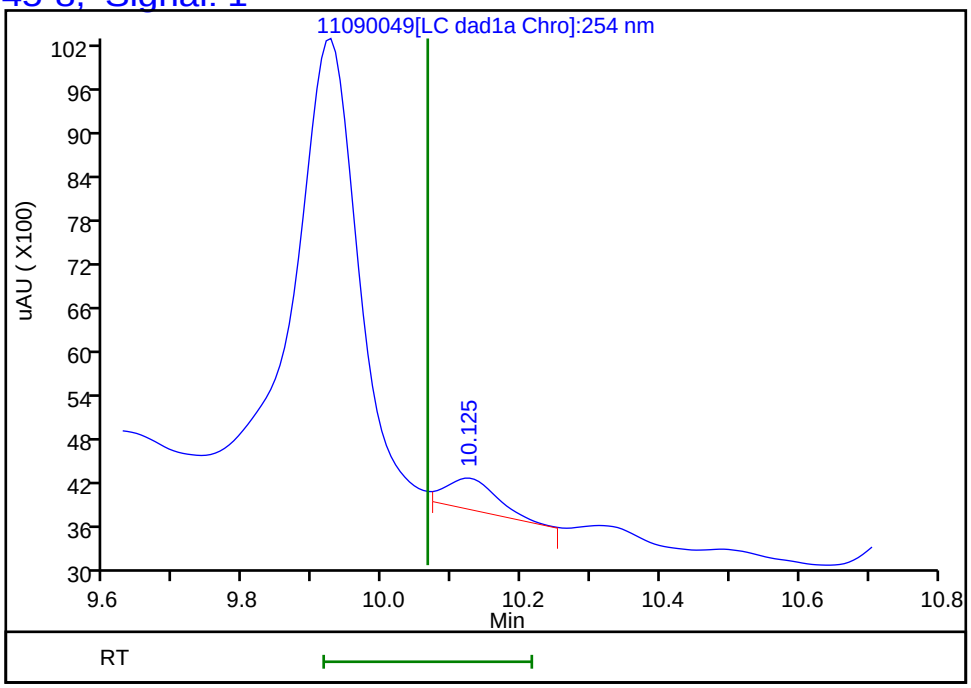
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090049.d				
Injection Date:	10-Nov-2021 06:39:25	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-8-A	Lab Sample ID:	280-155138-8		
Client ID:	G0081-7				
Operator ID:	JZ	ALS Bottle#:	49	Worklist Smp#:	49
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 10.13
Response: 2163
Amount: 0.012545



Reviewer: zhangji, 10-Nov-2021 12:49:28
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: G0081-7 Lab Sample ID: 280-155138-8

Matrix: Water Lab File ID: 11100030.D

Analysis Method: 8330A Date Collected: 11/02/2021 15:10

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 509.7(mL) Date Analyzed: 11/11/2021 05:00

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.: 556958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
35572-78-2	*2-Amino-4,6-dinitrotoluene*	*0.40*	*J1 B*	*0.11*	0.098	*0.050*
19406-51-0	*4-Amino-2,6-dinitrotoluene*	*1.2*	*J1 B M*	*0.15*	0.12	*0.057*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100030.D
Lims ID: 280-155138-A-8-A
Client ID: G0081-7
Sample Type: Client
Inject. Date: 11-Nov-2021 05:00:54 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155138-A-8-A
Misc. Info.: 280-0106378-030
Operator ID: JZ Instrument ID: CHHPLC_X5

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 11-Nov-2021 19:12:33 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1674

First Level Reviewer: zhangji Date: 11-Nov-2021 19:04:40

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.627	6.650	-0.023	2847	0.0118	M
	6 MNX	1		7.367			ND	
	8 RDX	1	8.774	8.803	-0.029	2281	0.0112	M
	9 Nitrobenzene	1		11.856			ND	U
$	10 1,2-Dinitrobenzene	1	12.940	12.949	-0.009	50692	0.1908	M
	12 1,3-Dinitrobenzene	1		15.376			ND	
	14 o-Nitrotoluene	1	16.654	16.603	0.051	17336	0.0696	M
	16 p-Nitrotoluene	1		16.889			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.274	17.343	-0.069	34949	0.1178	M
	18 m-Nitrotoluene	1		17.856			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.247	18.236	0.011	16966	0.0403	
	20 1,3,5-Trinitrobenzene	1	18.754	18.776	-0.022	21087	0.0444	
	21 2,6-Dinitrotoluene	1		20.009			ND	
	22 2,4-Dinitrotoluene	1		20.476			ND	
	23 Tetryl	1		24.070			ND	
	24 2,4,6-Trinitrotoluene	1		25.063			ND	7

QC Flag Legend

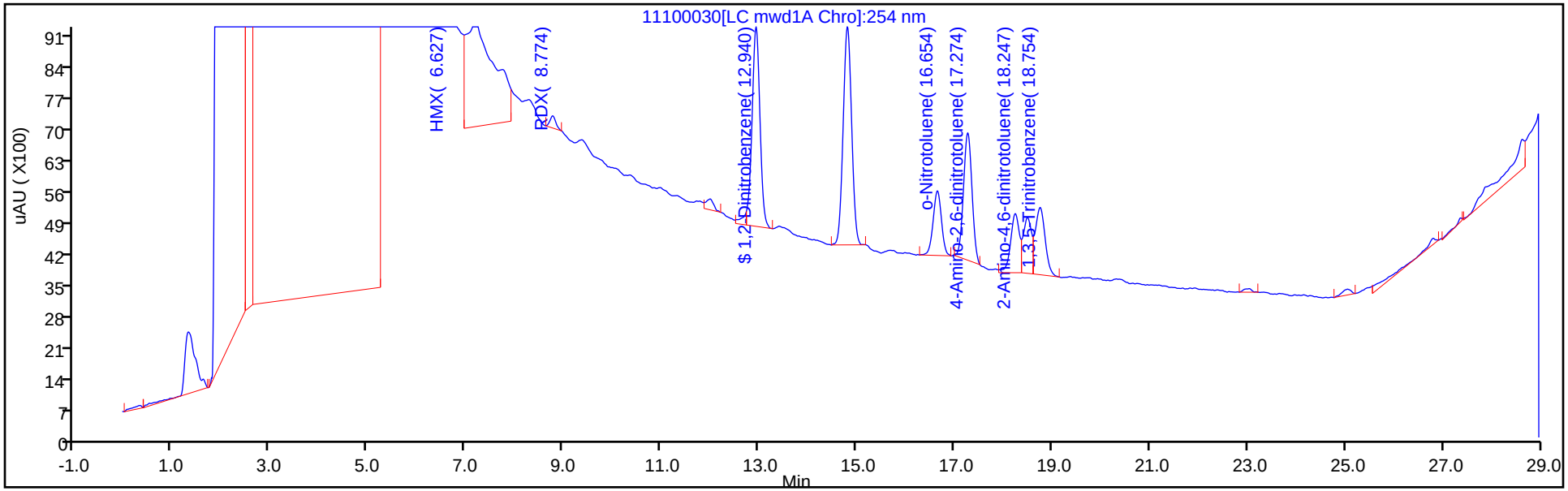
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 11-Nov-2021 19:12:37 Chrom Revision: 2.3 22-Sep-2021 15:38:46

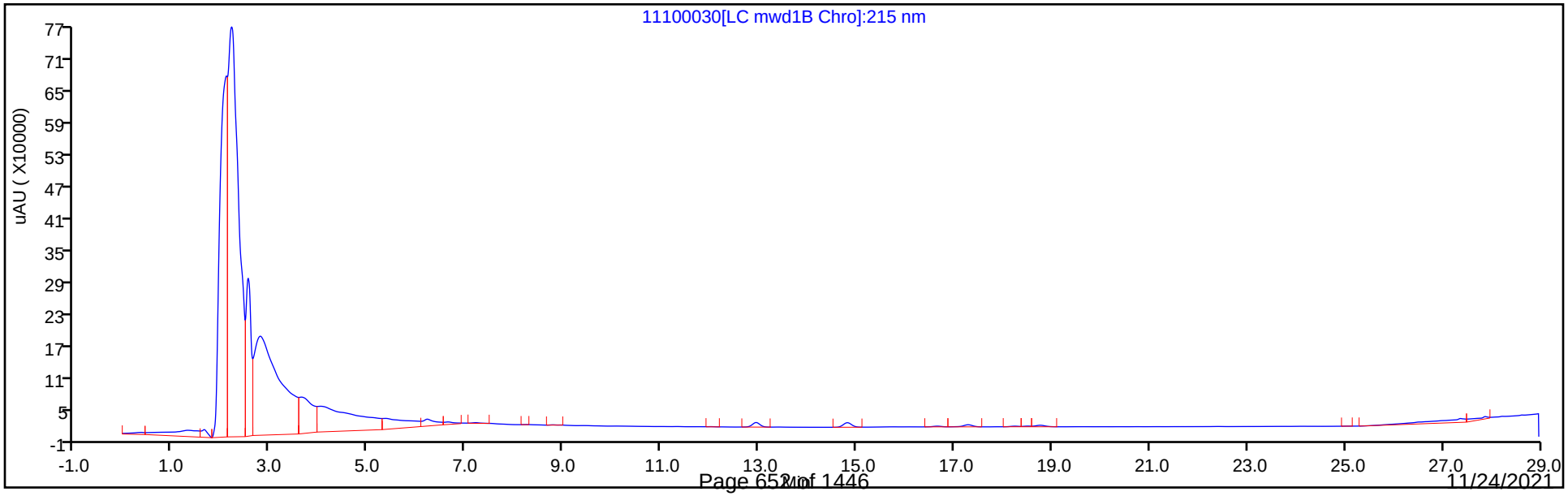
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100030.D				
Injection Date:	11-Nov-2021 05:00:54	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155138-A-8-A	Lab Sample ID:	280-155138-8	Worklist Smp#:	30
Client ID:	G0081-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
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 TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100030.D				
Lims ID:	280-155138-A-8-A				
Client ID:	G0081-7				
Sample Type:	Client				
Inject. Date:	11-Nov-2021 05:00:54	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-A-8-A				
Misc. Info.:	280-0106378-030				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	11-Nov-2021 19:12:33	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1674				
First Level Reviewer: zhangji		Date:	11-Nov-2021 19:04:40		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1908	95.41

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

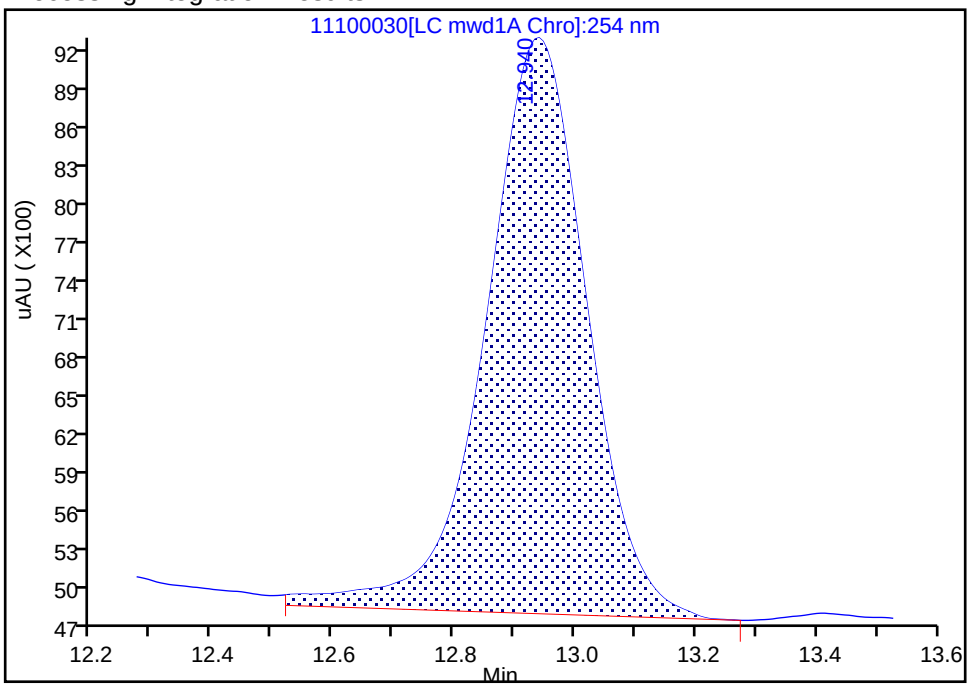
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100030.D				
Injection Date:	11-Nov-2021 05:00:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155138-A-8-A	Lab Sample ID:	280-155138-8		
Client ID:	G0081-7				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. 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

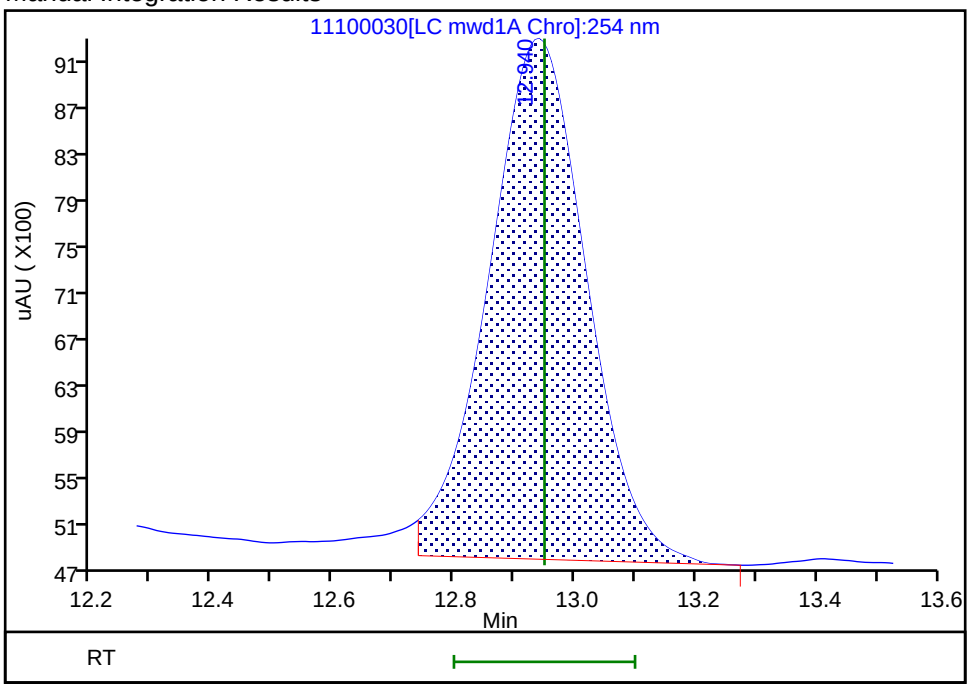
Processing Integration Results

RT: 12.94
Area: 52598
Amount: 0.197990
Amount Units: ug/ml



Manual Integration Results

RT: 12.94
Area: 50692
Amount: 0.190816
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:04:17

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

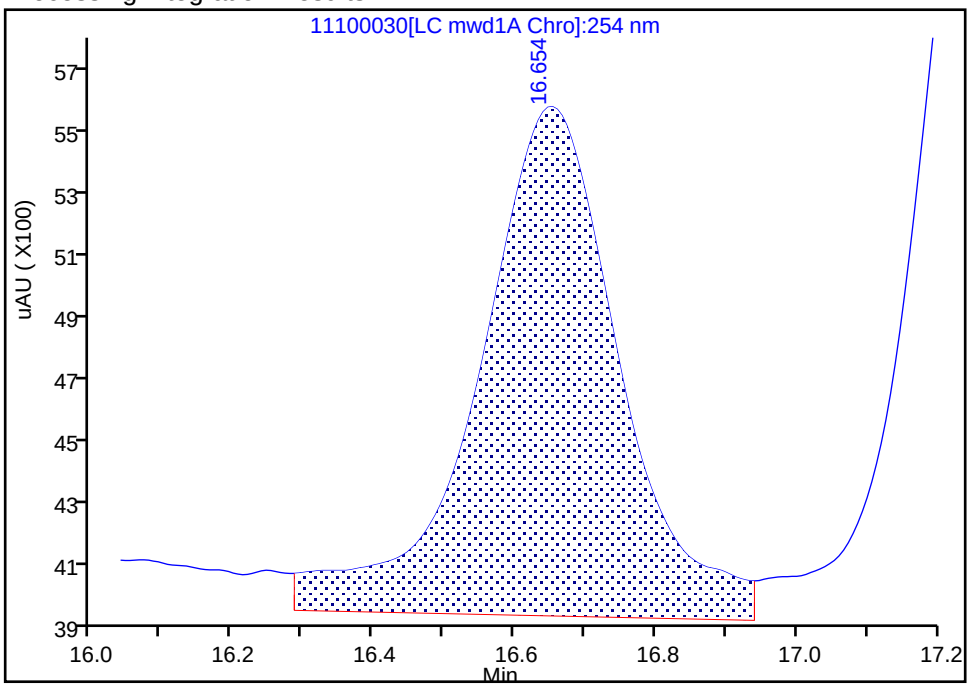
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100030.D				
Injection Date:	11-Nov-2021 05:00:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155138-A-8-A	Lab Sample ID:	280-155138-8		
Client ID:	G0081-7				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. 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

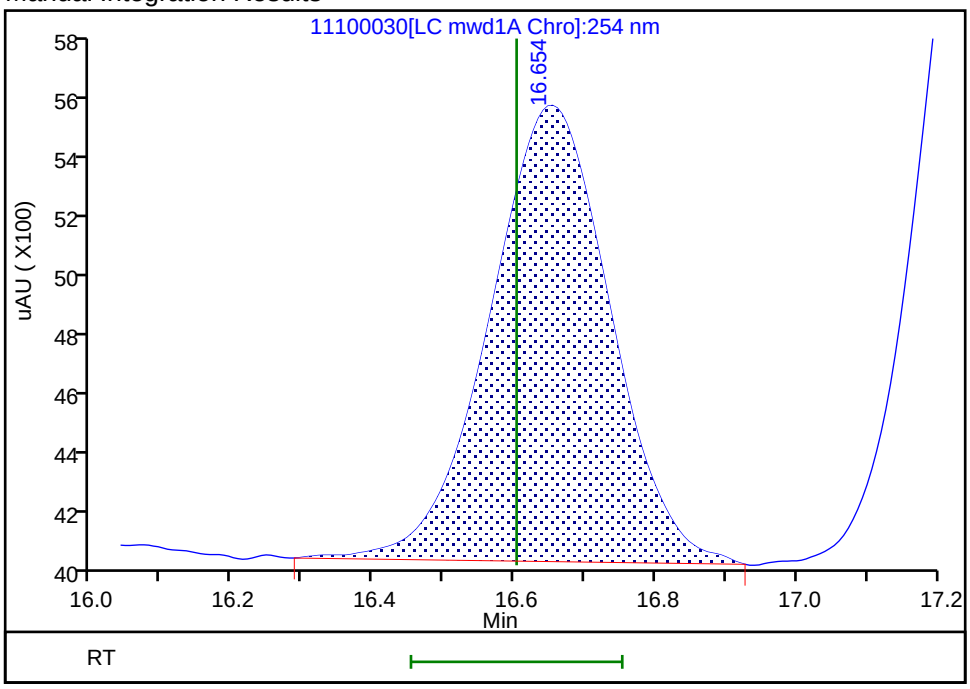
Processing Integration Results

RT: 16.65
Area: 22011
Amount: 0.088409
Amount Units: ug/ml



Manual Integration Results

RT: 16.65
Area: 17336
Amount: 0.069632
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:04:28

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

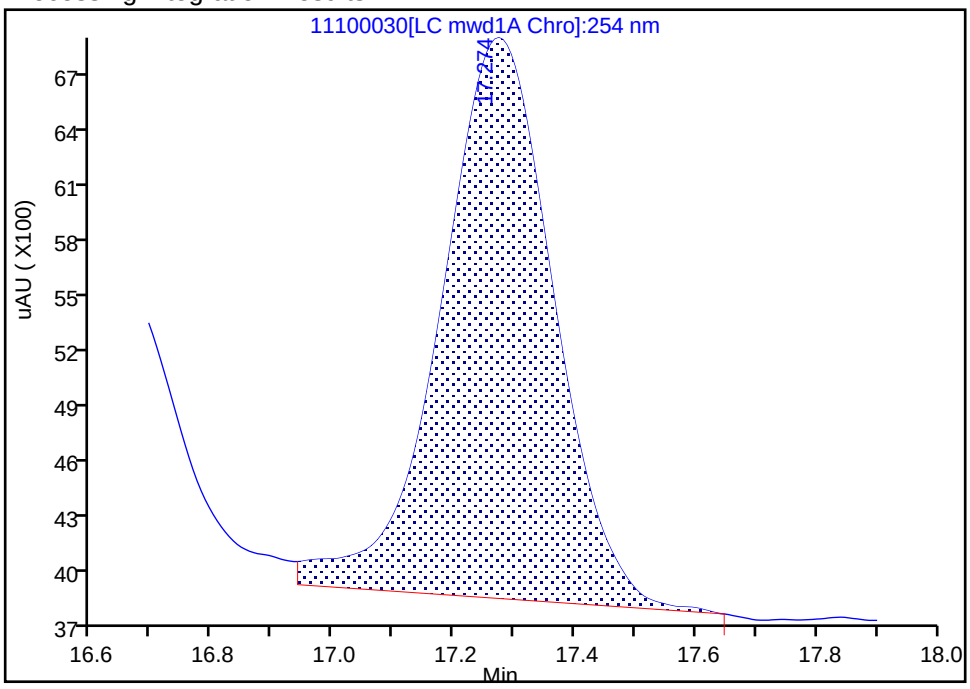
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100030.D				
Injection Date:	11-Nov-2021 05:00:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155138-A-8-A	Lab Sample ID:	280-155138-8		
Client ID:	G0081-7				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. 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

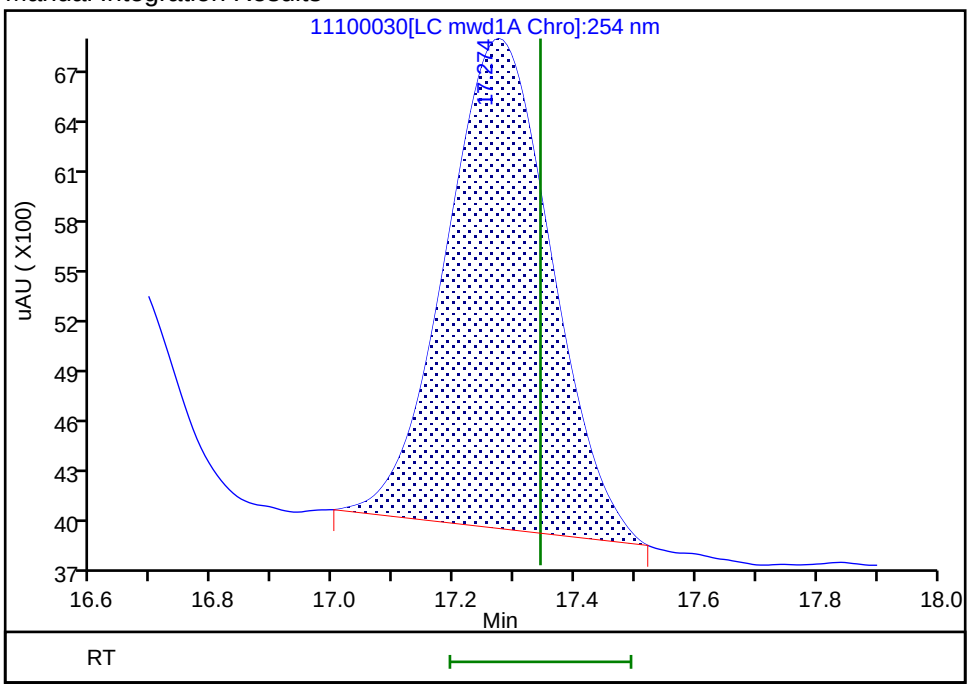
Processing Integration Results

RT: 17.27
Area: 38787
Amount: 0.130726
Amount Units: ug/ml



Manual Integration Results

RT: 17.27
Area: 34949
Amount: 0.117790
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:04:35

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

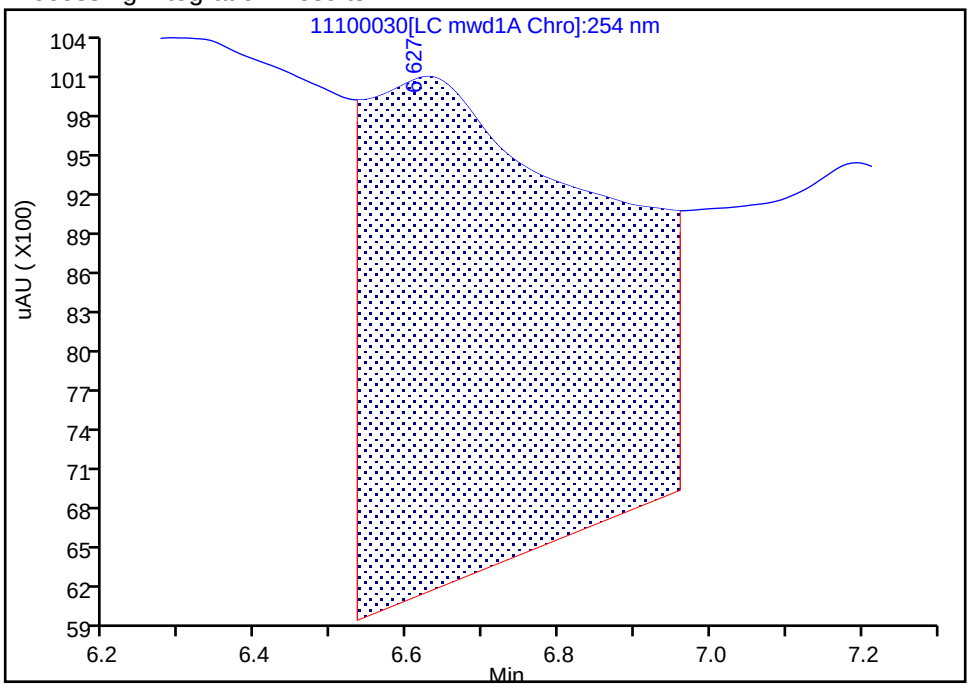
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100030.D				
Injection Date:	11-Nov-2021 05:00:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155138-A-8-A	Lab Sample ID:	280-155138-8		
Client ID:	G0081-7				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. 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

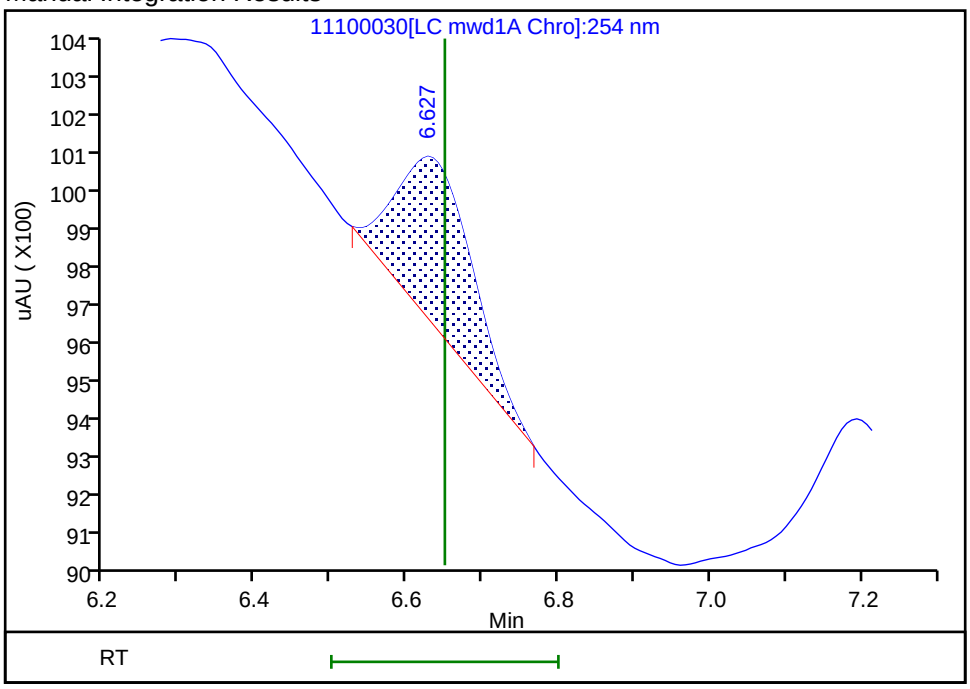
Processing Integration Results

RT: 6.63
Area: 78318
Amount: 0.487092
Amount Units: ug/ml



Manual Integration Results

RT: 6.63
Area: 2847
Amount: 0.011755
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:04:04

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

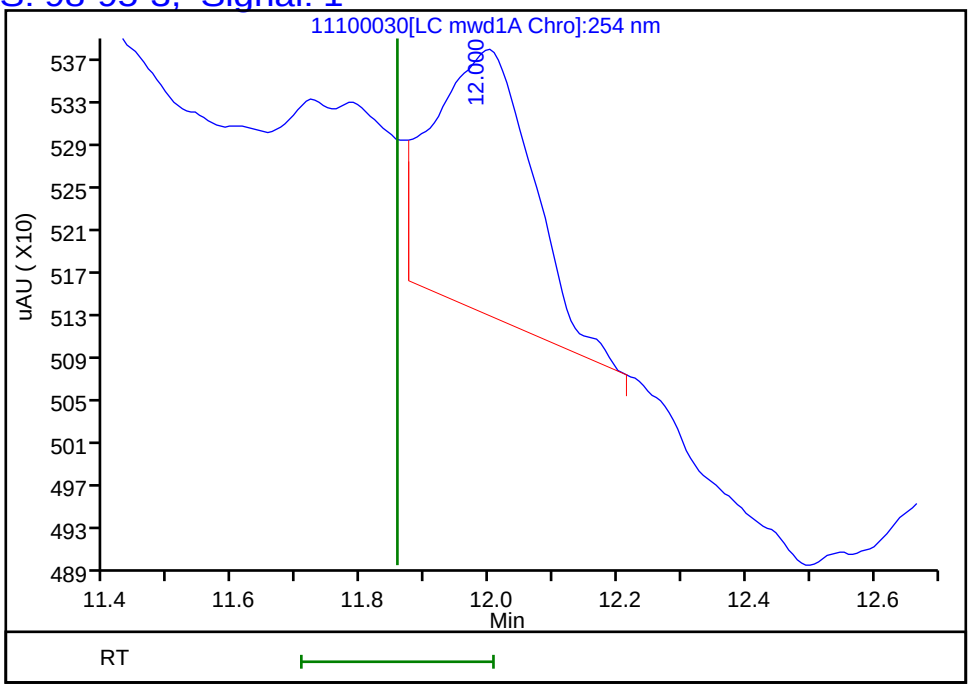
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100030.D				
Injection Date:	11-Nov-2021 05:00:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155138-A-8-A	Lab Sample ID:	280-155138-8		
Client ID:	G0081-7				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

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

RT: 12.00
Response: 2633
Amount: 0.007028



Reviewer: zhangji, 11-Nov-2021 19:04:40
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

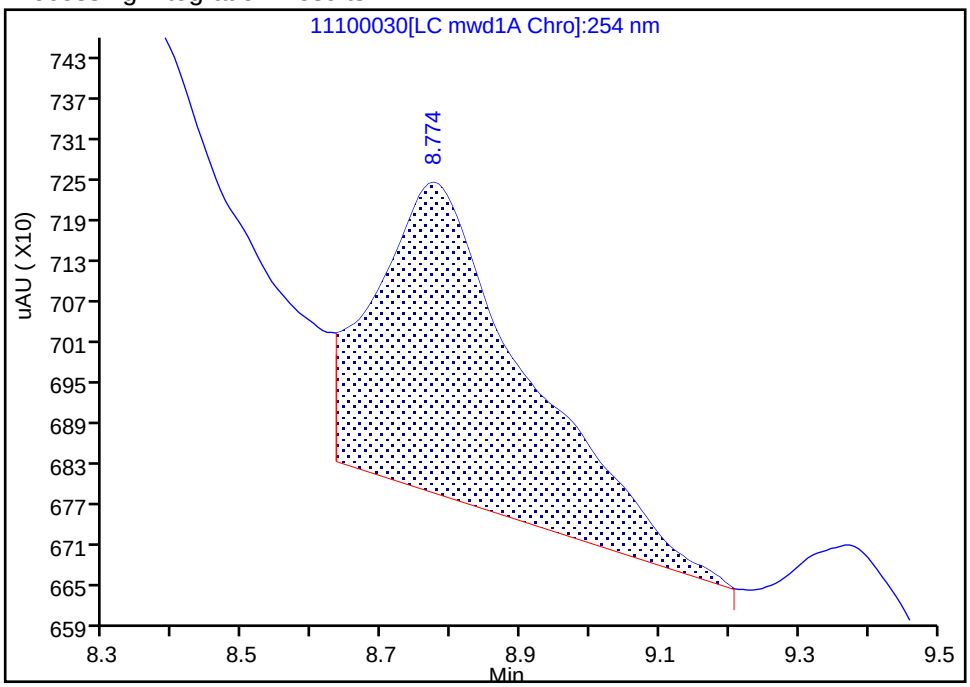
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100030.D				
Injection Date:	11-Nov-2021 05:00:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155138-A-8-A	Lab Sample ID:	280-155138-8		
Client ID:	G0081-7				
Operator ID:	JZ	ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

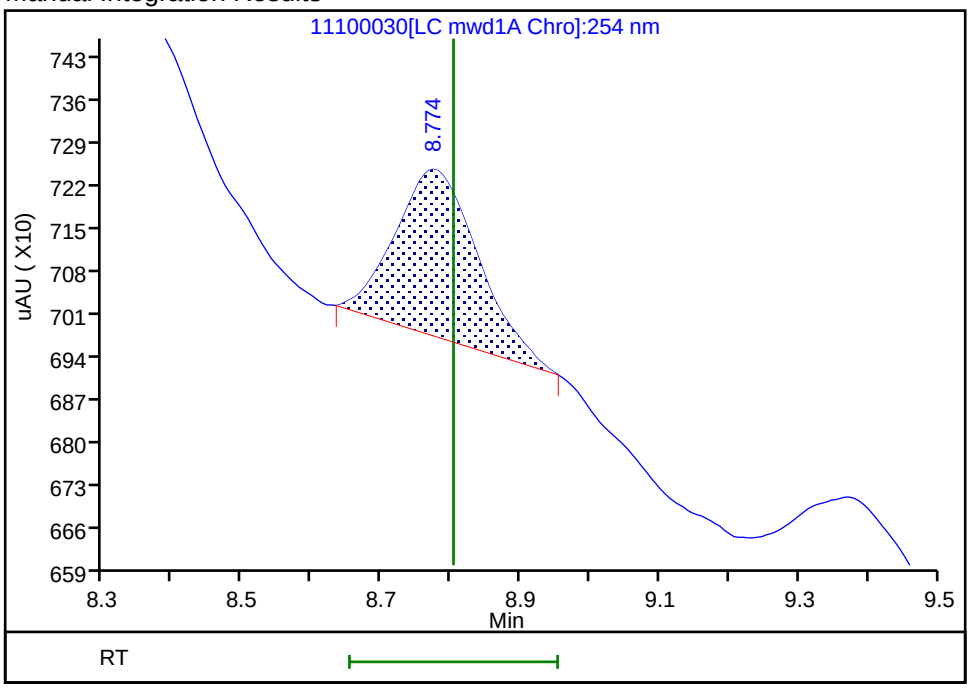
Processing Integration Results

RT: 8.77
Area: 7032
Amount: 0.034425
Amount Units: ug/ml



Manual Integration Results

RT: 8.77
Area: 2281
Amount: 0.011167
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:04:08
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: NW070-7 Lab Sample ID: 280-155138-9

Matrix: Water Lab File ID: 11090050.D

Analysis Method: 8330A Date Collected: 11/02/2021 14:45

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 504(mL) Date Analyzed: 11/10/2021 07:02

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.: 556781 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U M	0.21	0.20	0.083
99-65-0	1,3-Dinitrobenzene	0.099	U	0.11	0.099	0.037
118-96-7	2,4,6-Trinitrotoluene	0.099	U	0.11	0.099	0.045
121-14-2	2,4-Dinitrotoluene	0.079	U	0.099	0.079	0.027
606-20-2	2,6-Dinitrotoluene	0.079	U	0.099	0.079	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.099	U	0.11	0.099	0.050
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.085
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.057
99-99-0	4-Nitrotoluene	0.40	U	0.41	0.40	0.099
2691-41-0	HMX	0.20	U	0.21	0.20	0.087
5755-27-1	MNX	0.40	U	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.090
121-82-4	RDX	0.20	U	0.21	0.20	0.051
479-45-8	Tetryl	0.099	U	0.11	0.099	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	89	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090050.D				
Lims ID:	280-155138-B-9-A				
Client ID:	NW070-7				
Sample Type:	Client				
Inject. Date:	10-Nov-2021 07:02:20	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-B-9-A				
Misc. Info.:	280-0106333-050				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:58:55	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:49:44		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1		6.592			ND	
7 MNX	1		7.223			ND	
8 RDX	1		7.598			ND	
$ 10 1,2-Dinitrobenzene	1	8.562	8.572	-0.010	22950	0.1790	M
11 1,3,5-Trinitrobenzene	1		8.685			ND	U
12 1,3-Dinitrobenzene	1		9.331			ND	
13 Nitrobenzene	1		9.725			ND	
15 Tetryl	1		10.065			ND	
17 2,4,6-Trinitrotoluene	1		10.971			ND	
18 4-Amino-2,6-dinitrotoluene	1		11.185			ND	
19 2-Amino-4,6-dinitrotoluene	1		11.438			ND	
20 2,6-Dinitrotoluene	1		11.605			ND	
21 2,4-Dinitrotoluene	1		11.771			ND	
22 o-Nitrotoluene	1		12.645			ND	
23 p-Nitrotoluene	1		13.078			ND	
24 m-Nitrotoluene	1		13.658			ND	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

U - Marked Undetected

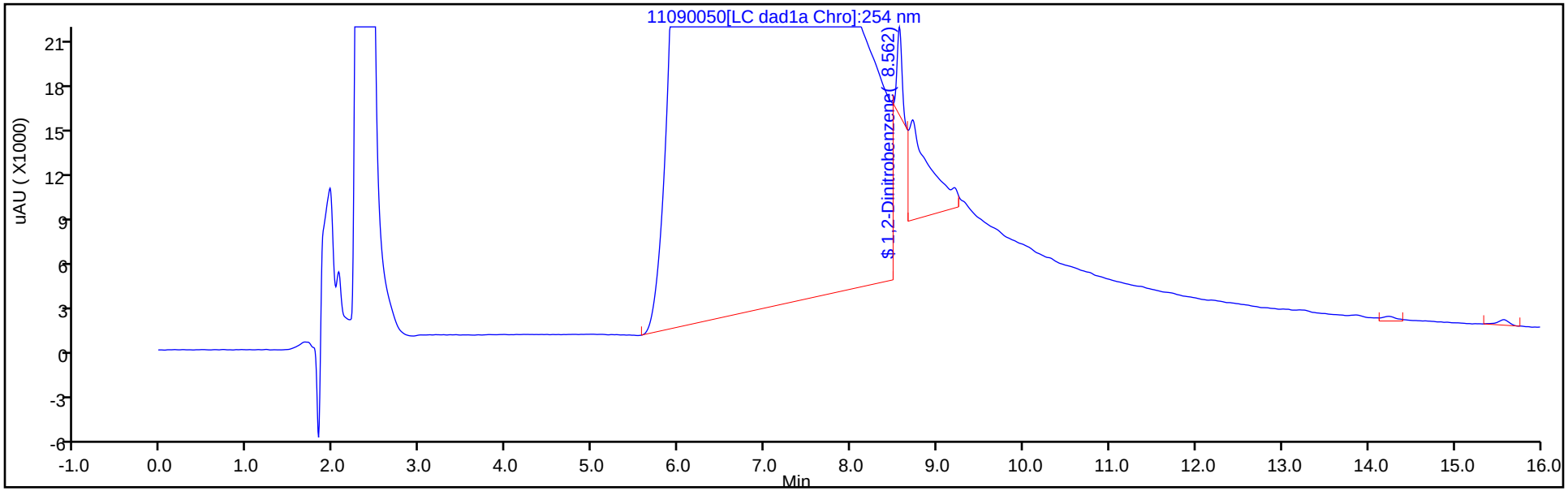
Report Date: 10-Nov-2021 12:59:00 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

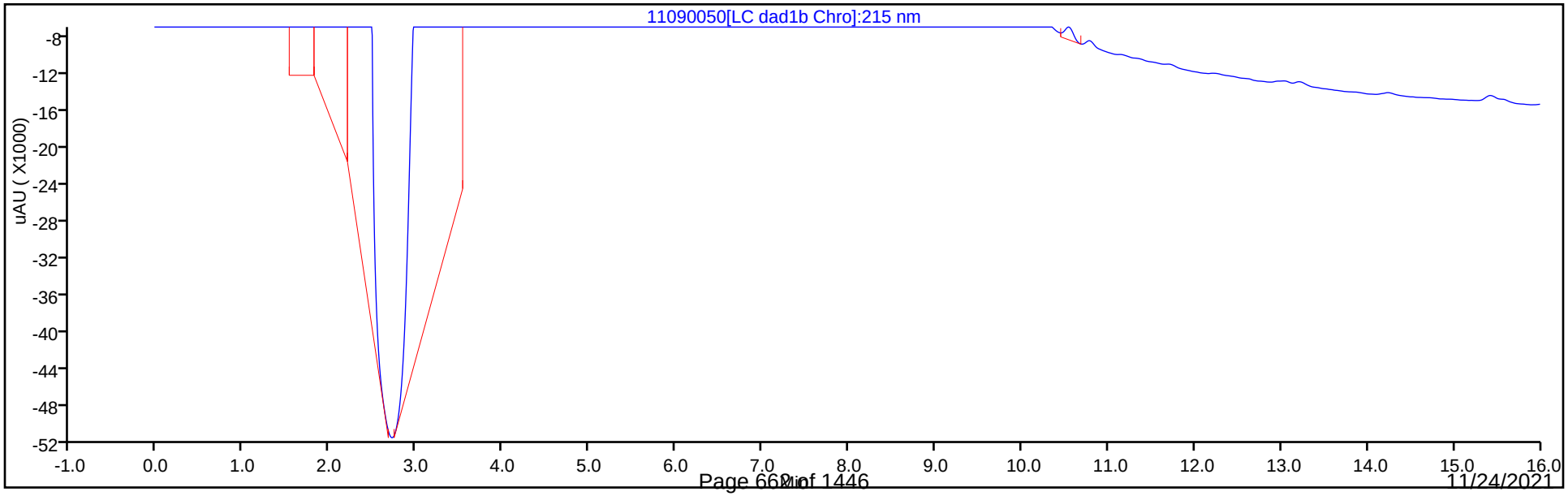
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090050.d

Injection Date:	10-Nov-2021 07:02:20	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155138-B-9-A	Lab Sample ID:	280-155138-9	Worklist Smp#:	50
Client ID:	NW070-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	50
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090050.D				
Lims ID:	280-155138-B-9-A				
Client ID:	NW070-7				
Sample Type:	Client				
Inject. Date:	10-Nov-2021 07:02:20	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-B-9-A				
Misc. Info.:	280-0106333-050				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:58:55	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:49:44		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1790	89.50

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

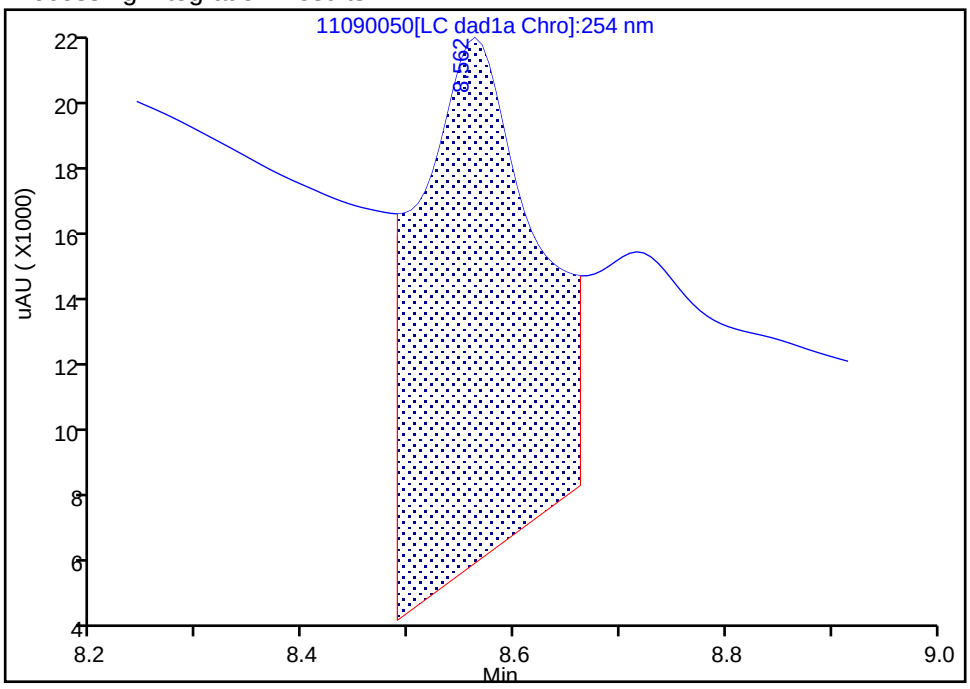
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090050.d				
Injection Date:	10-Nov-2021 07:02:20	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-B-9-A	Lab Sample ID:	280-155138-9		
Client ID:	NW070-7				
Operator ID:	JZ	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

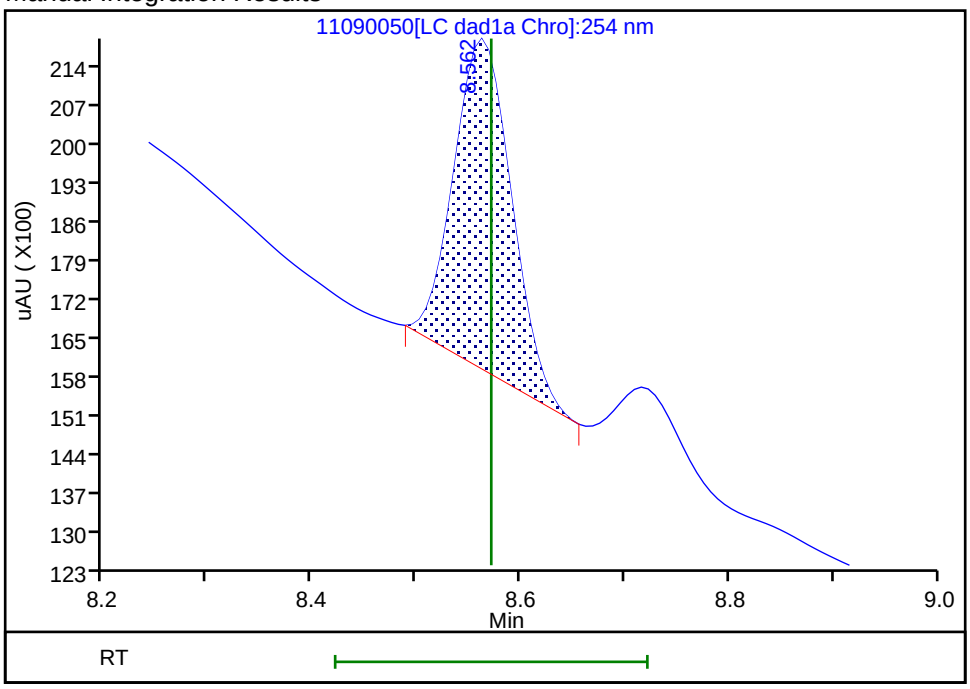
Processing Integration Results

RT: 8.56
Area: 116691
Amount: 0.910104
Amount Units: ug/mL



Manual Integration Results

RT: 8.56
Area: 22950
Amount: 0.178993
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:49:43

Audit Action: Manually Integrated Audit Reason: Baseline

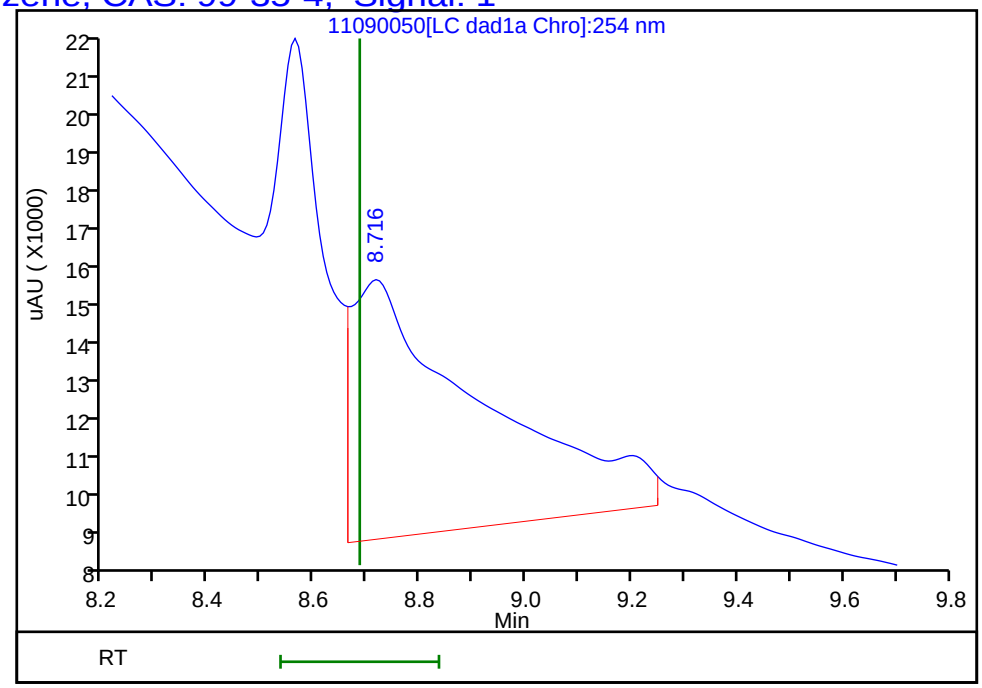
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090050.d				
Injection Date:	10-Nov-2021 07:02:20	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-B-9-A	Lab Sample ID:	280-155138-9		
Client ID:	NW070-7				
Operator ID:	JZ	ALS Bottle#:	50	Worklist Smp#:	50
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

RT: 8.72
Response: 114014
Amount: 0.517499



Reviewer: zhangji, 10-Nov-2021 12:49:44
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: PZ019-7 Lab Sample ID: 280-155138-10

Matrix: Water Lab File ID: 11090051.D

Analysis Method: 8330A Date Collected: 11/03/2021 12:55

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 496.8(mL) Date Analyzed: 11/10/2021 07:25

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.: 556781 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.20	U	0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.086
99-08-1	3-Nitrotoluene	0.40	U	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058
99-99-0	4-Nitrotoluene	0.40	U	0.41	0.40	0.10
2691-41-0	HMX	0.20	U	0.21	0.20	0.088
5755-27-1	MNX	0.40	U M	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.092
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	95	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090051.D
Lims ID: 280-155138-A-10-A
Client ID: PZ019-7
Sample Type: Client
Inject. Date: 10-Nov-2021 07:25:17 ALS Bottle#: 51 Worklist Smp#: 51
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155138-A-10-
Misc. Info.: 280-0106333-051
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Nov-2021 12:58:55 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1646

First Level Reviewer: zhangji Date: 10-Nov-2021 12:50:00

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
	1 Triamine Trinitrobenzene	1		2.449			ND	
	2 2,6-diamino-4-nitrotoluene	1		6.471			ND	U
	3 TNX	1		6.476			ND	U
	4 HMX	1		6.592			ND	
	5 2,4-diamino-6-nitrotoluene	1		6.651			ND	
	6 DNX	1		6.796			ND	
	7 MNX	1		7.223			ND	U
	8 RDX	1		7.598			ND	
	9 2,4,6-Trinitrophenol	1		7.985			ND	
$	10 1,2-Dinitrobenzene	1	8.559	8.572	-0.013	24336	0.1898	M
	11 1,3,5-Trinitrobenzene	1		8.685			ND	
	12 1,3-Dinitrobenzene	1		9.331			ND	
	13 Nitrobenzene	1		9.725			ND	
	14 3,5-Dinitroaniline	1		9.937			ND	
	15 Tetryl	1		10.065			ND	7
	16 Nitroglycerin	2		10.518			ND	
	17 2,4,6-Trinitrotoluene	1		10.971			ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.185			ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.438			ND	
	20 2,6-Dinitrotoluene	1		11.605			ND	
	21 2,4-Dinitrotoluene	1		11.771			ND	
	22 o-Nitrotoluene	1		12.645			ND	
	23 p-Nitrotoluene	1		13.078			ND	
	24 m-Nitrotoluene	1		13.658			ND	
	25 PETN	2		14.758			ND	
	26 Ammonium Picrate	1		0.000			ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

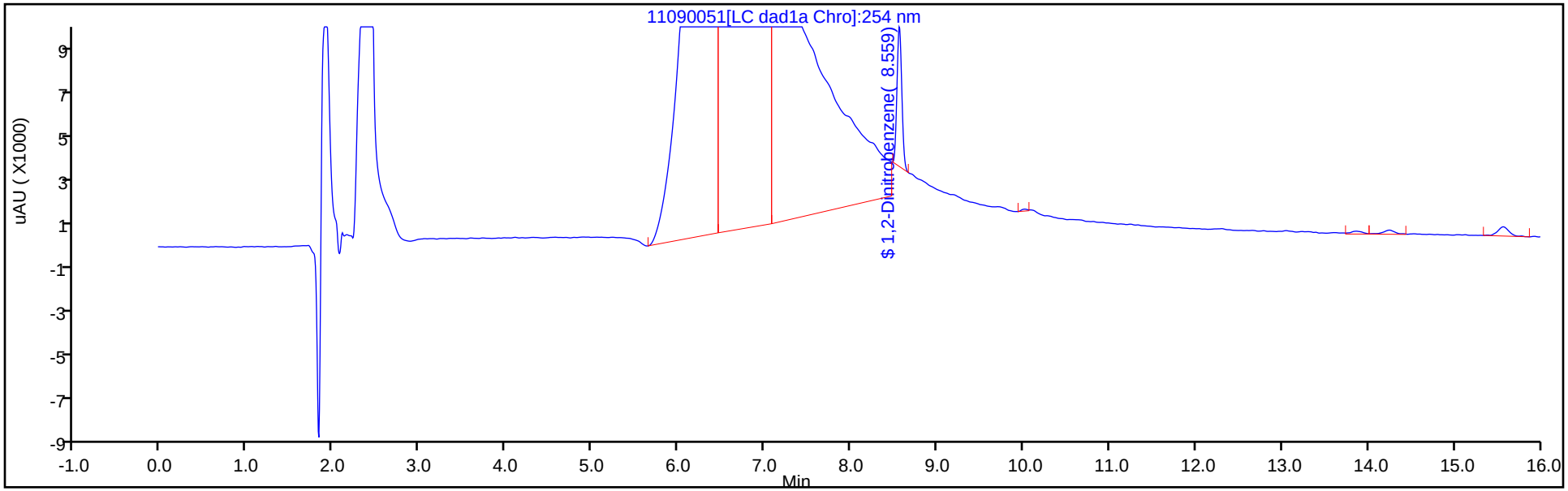
Report Date: 10-Nov-2021 12:59:00 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

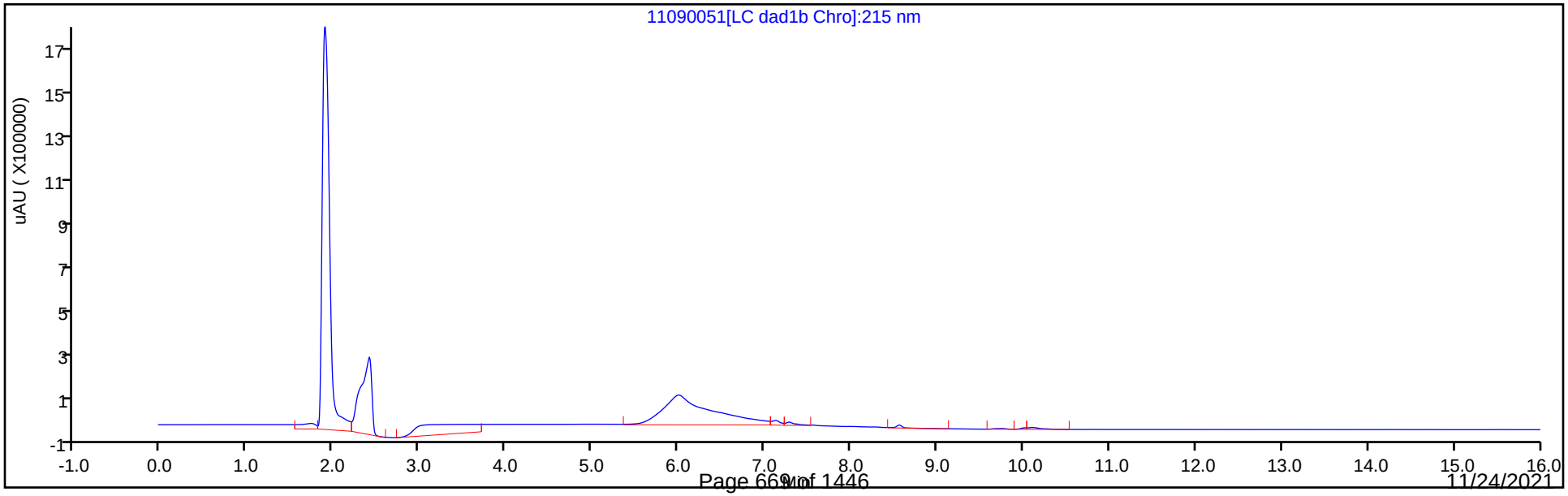
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090051.d

Injection Date:	10-Nov-2021 07:25:17	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155138-A-10-A	Lab Sample ID:	280-155138-10	Worklist Smp#:	51
Client ID:	PZ019-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	51
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090051.D				
Lims ID:	280-155138-A-10-A				
Client ID:	PZ019-7				
Sample Type:	Client				
Inject. Date:	10-Nov-2021 07:25:17	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-A-10-				
Misc. Info.:	280-0106333-051				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:58:55	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:50:00		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1898	94.90

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

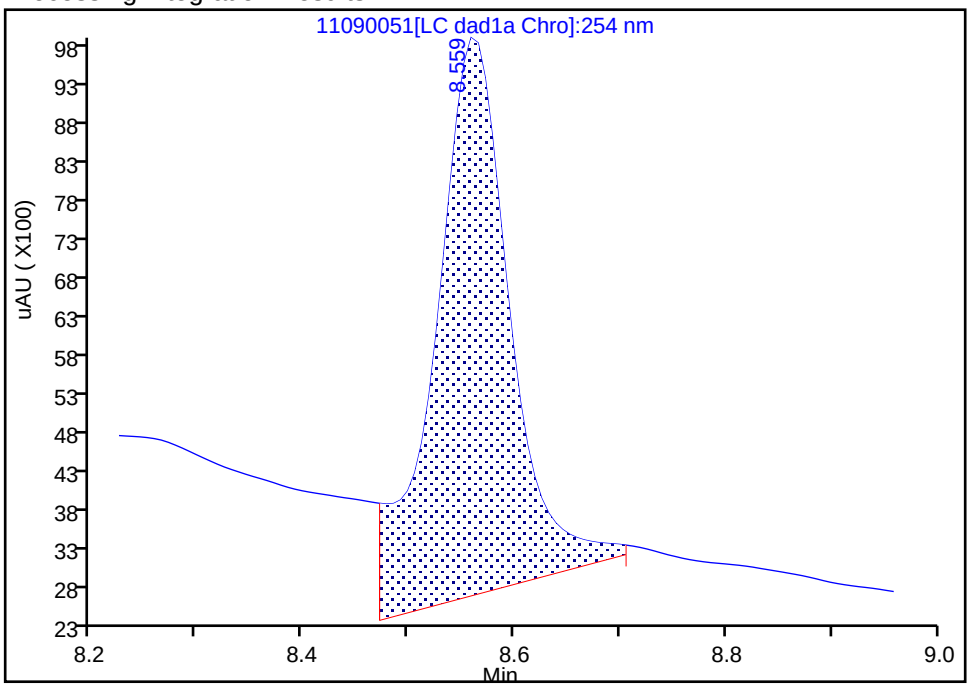
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090051.d				
Injection Date:	10-Nov-2021 07:25:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-10-A	Lab Sample ID:	280-155138-10		
Client ID:	PZ019-7				
Operator ID:	JZ	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

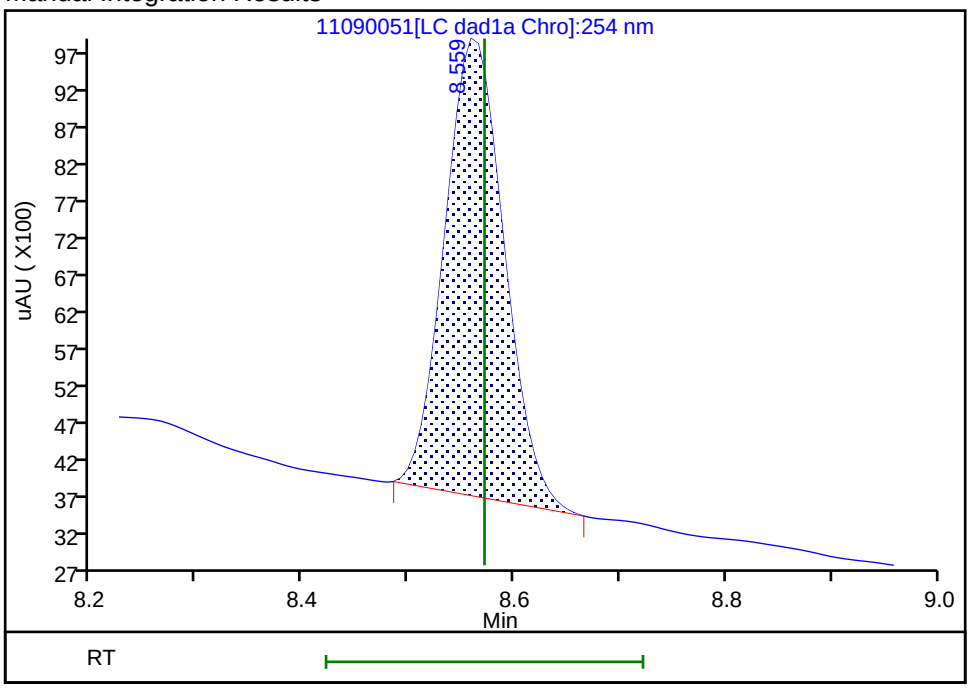
Processing Integration Results

RT: 8.56
Area: 35741
Amount: 0.278754
Amount Units: ug/mL



Manual Integration Results

RT: 8.56
Area: 24336
Amount: 0.189803
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:49:59

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

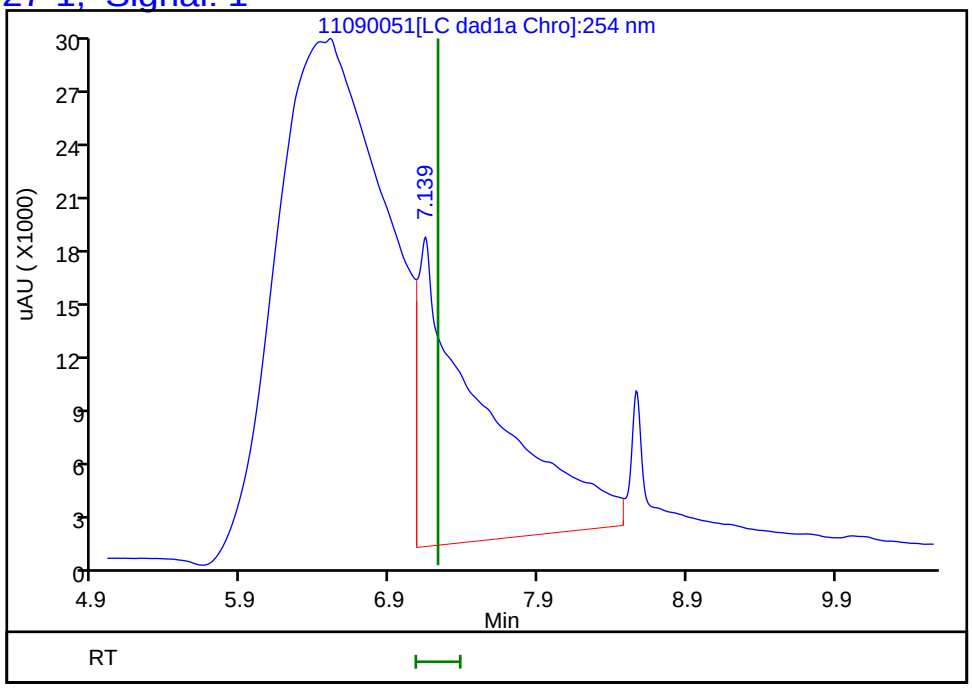
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090051.d

Injection Date:	10-Nov-2021 07:25:17	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-10-A	Lab Sample ID:	280-155138-10		
Client ID:	PZ019-7				
Operator ID:	JZ	ALS Bottle#:	51	Worklist Smp#:	51
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.14
Response: 526444
Amount: 4.038995



Reviewer: zhangji, 10-Nov-2021 12:50:00
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 TestAmerica, Denver Job No.: 280-155138-1 Analy Batch No.: 527768

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2021 23:49 Calibration End Date: 03/03/2021 02:30 Calibration ID: 51473

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-527768/36	03020036.D
Level 2	IC 280-527768/35	03020035.D
Level 3	IC 280-527768/34	03020034.D
Level 4	IC 280-527768/33	03020033.D
Level 5	IC 280-527768/32	03020032.D
Level 6	IC 280-527768/31	03020031.D
Level 7	IC 280-527768/30	03020030.D
Level 8	IC 280-527768/29	03020029.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	6.521	6.522	6.522	6.518	6.521	6.519	6.523	6.520			6.418 - 6.618	6.521
DNX	6.827	6.829	6.828	6.832	6.828	6.833	6.836	6.833			6.732 - 6.932	6.831
MNX	7.234	7.235	7.235	7.232	7.234	7.239	7.236	7.240			7.082 - 7.382	7.236

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1 Analy Batch No.: 527768

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2021 23:49 Calibration End Date: 03/03/2021 02:30 Calibration ID: 51473

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-527768/36	03020036.D
Level 2	IC 280-527768/35	03020035.D
Level 3	IC 280-527768/34	03020034.D
Level 4	IC 280-527768/33	03020033.D
Level 5	IC 280-527768/32	03020032.D
Level 6	IC 280-527768/31	03020031.D
Level 7	IC 280-527768/30	03020030.D
Level 8	IC 280-527768/29	03020029.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	183017 187800	186374 188250	185594 187339	176735 191339	Ave		185806.003				2.3		20.0			
DNX	149051 143511	142278 143240	139351 141711	133874 143939	Ave		142119.338				3.0		20.0			
MNX	132048 132243	129991 131443	130891 130291	124682 131132	Ave		130340.337				1.9		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 TestAmerica, Denver Job No.: 280-155138-1 Analy Batch No.: 527768

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/02/2021 23:49 Calibration End Date: 03/03/2021 02:30 Calibration ID: 51473

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-527768/36	03020036.D
Level 2	IC 280-527768/35	03020035.D
Level 3	IC 280-527768/34	03020034.D
Level 4	IC 280-527768/33	03020033.D
Level 5	IC 280-527768/32	03020032.D
Level 6	IC 280-527768/31	03020031.D
Level 7	IC 280-527768/30	03020030.D
Level 8	IC 280-527768/29	03020029.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	3664 131907	9328 187526	18578 478826	44228	75195	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	2984 100368	7121 141853	13949 360207	33502	57462	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	3082 107376	7585 152050	15275 382579	36376	61731	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\20210302-99486.b\03020029.D
Lims ID: IC DMT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 02-Mar-2021 23:49:27 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 8
Misc. Info.: 280-0099486-029
Operator ID: Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2021 13:32:24 Calib Date: 03-Mar-2021 02:30:22
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1629

First Level Reviewer: zhangji Date: 03-Mar-2021 13:18:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.520	6.518	0.002	478826	2.50	2.58	M
5 DNX	1	6.833	6.832	0.001	360207	2.50	2.53	M
6 MNX	1	7.240	7.232	0.008	382579	2.92	2.94	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 125.00 Units: uL

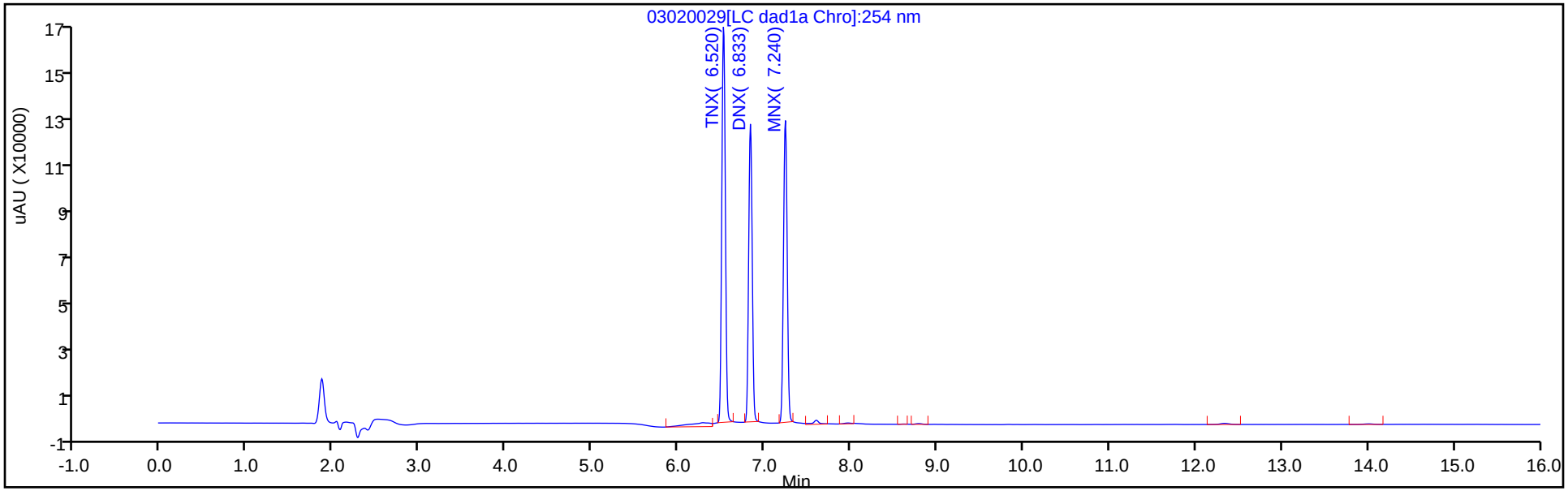
Report Date: 03-Mar-2021 13:32:24 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

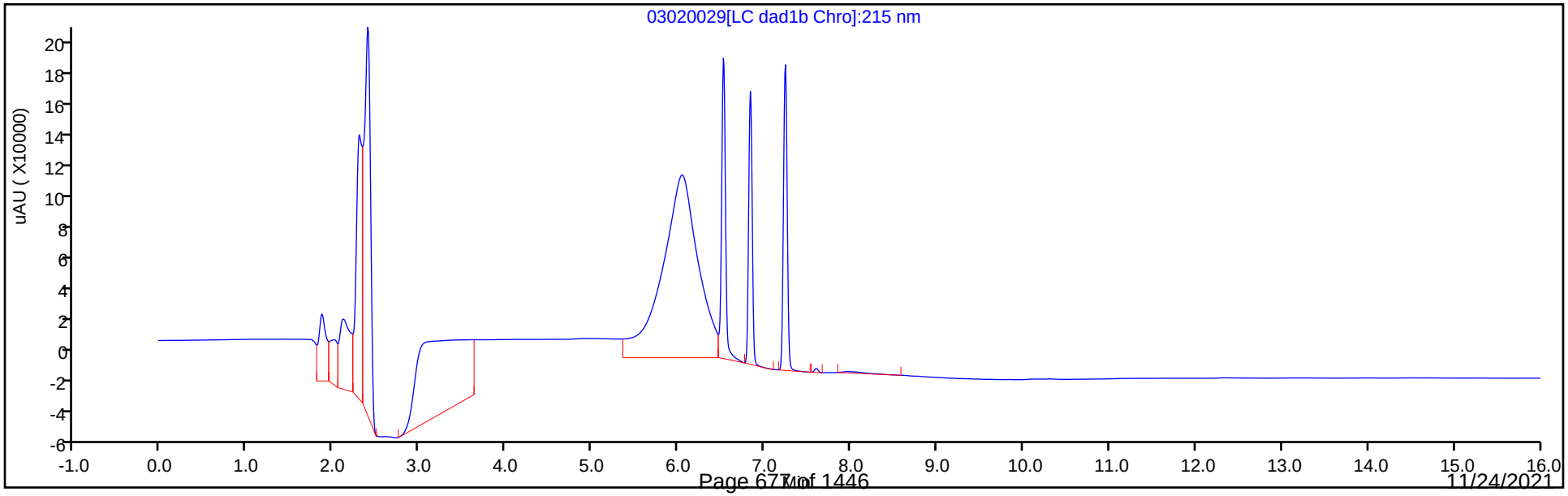
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020029.d

Injection Date:	02-Mar-2021 23:49:27	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 8			Worklist Smp#:	29
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

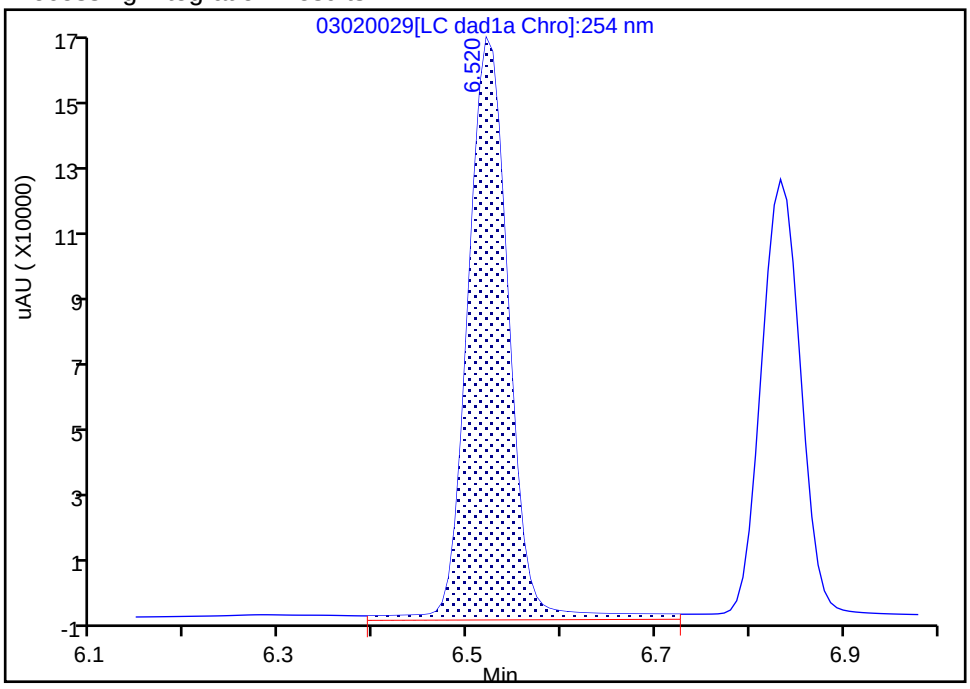
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020029.d		
Injection Date:	02-Mar-2021 23:49:27	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 8		
Client ID:			
Operator ID:		ALS Bottle#:	29 Worklist Smp#: 29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

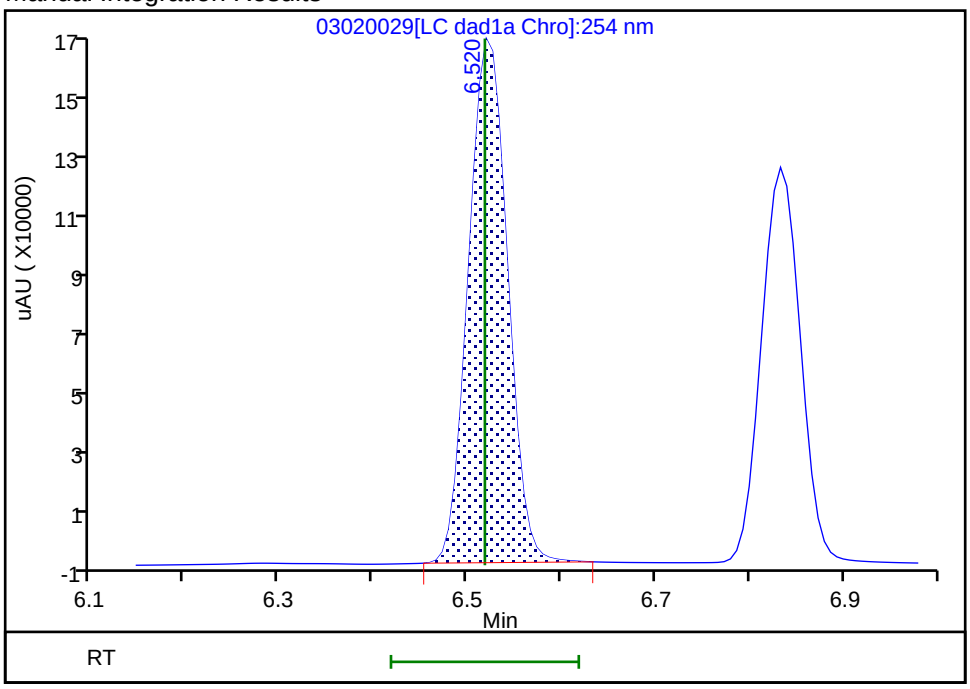
Processing Integration Results

RT: 6.52
Area: 511017
Amount: 2.370738
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 478826
Amount: 2.577021
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:18:46
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

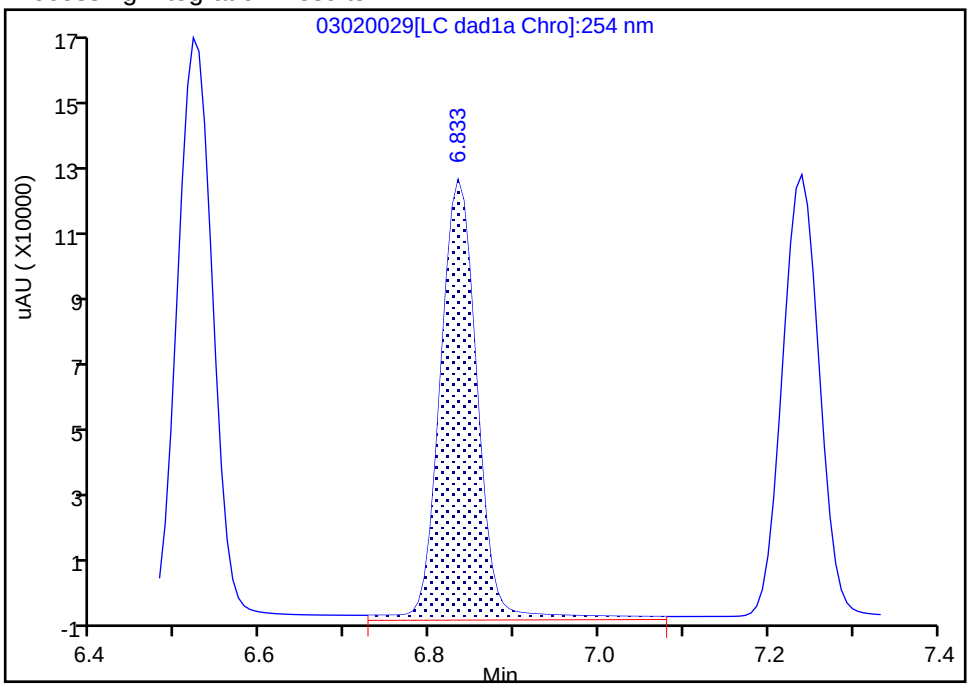
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020029.d		
Injection Date:	02-Mar-2021 23:49:27	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 8		
Client ID:			
Operator ID:		ALS Bottle#:	29 Worklist Smp#: 29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

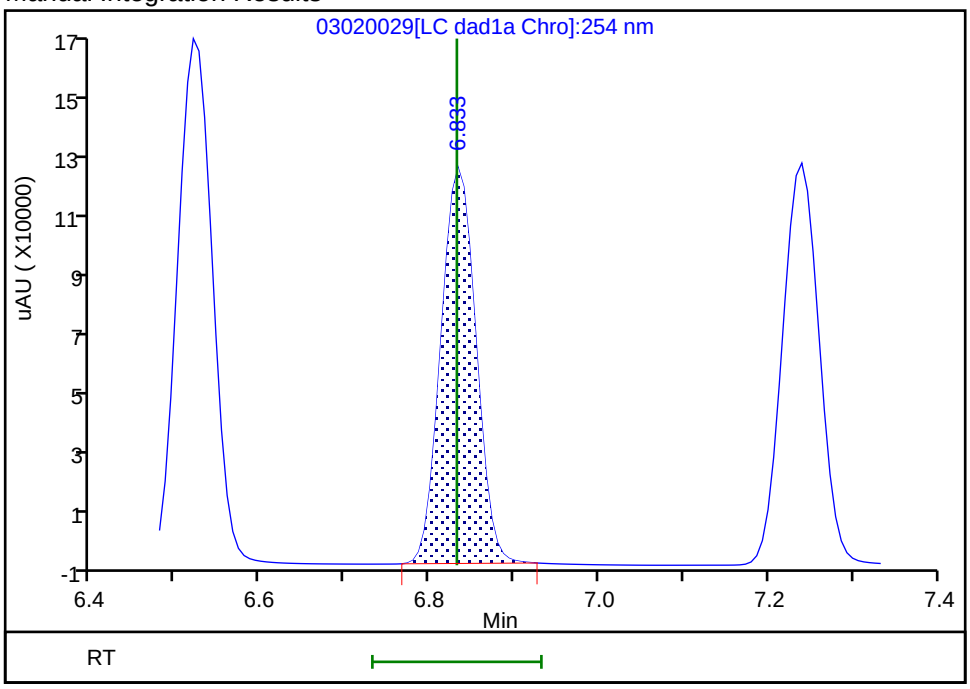
Processing Integration Results

RT: 6.83
Area: 389383
Amount: 2.402937
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 360207
Amount: 2.534539
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:18:53
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

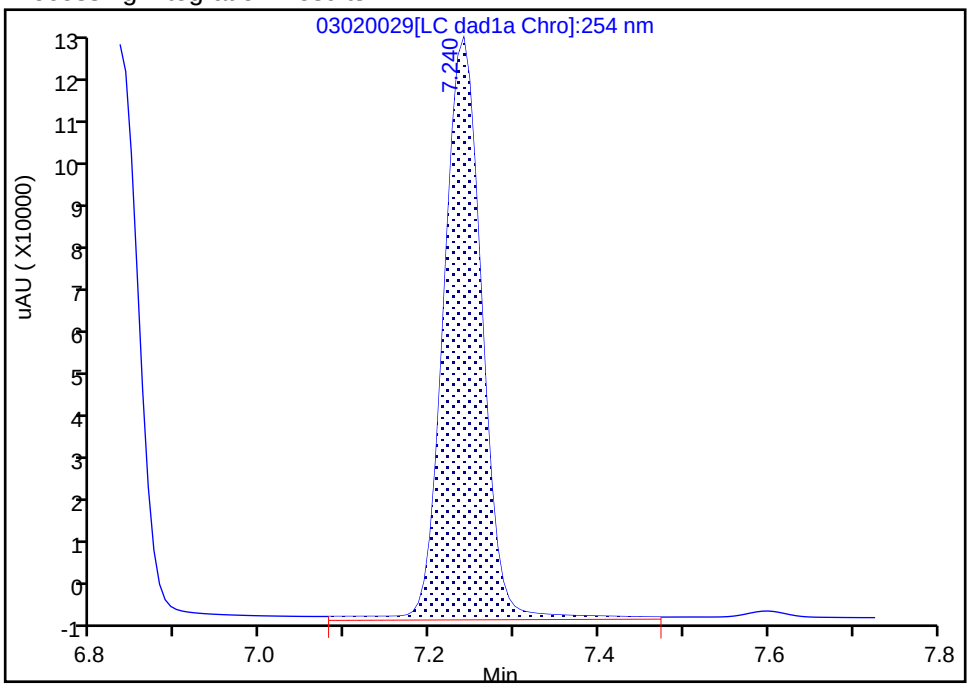
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020029.d		
Injection Date:	02-Mar-2021 23:49:27	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 8		
Client ID:			
Operator ID:		ALS Bottle#:	29 Worklist Smp#: 29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1

Signal: 1

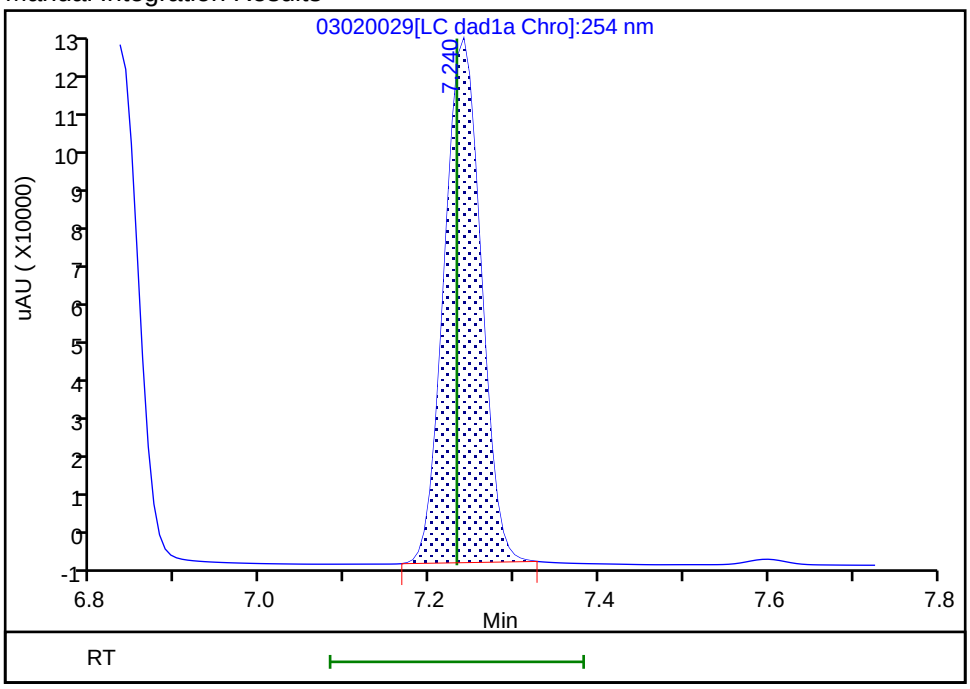
Processing Integration Results

RT: 7.24
Area: 404536
Amount: 3.036153
Amount Units: ug/mL



Manual Integration Results

RT: 7.24
Area: 382579
Amount: 2.935231
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:18:57
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020030.D
Lims ID: IC DMT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 03-Mar-2021 00:12:24 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 7
Misc. Info.: 280-0099486-030
Operator ID: Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2021 13:32:25 Calib Date: 03-Mar-2021 02:30:22
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1629

First Level Reviewer: zhangji Date: 03-Mar-2021 13:19:14

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.523	6.518	0.005	187526	1.00	1.01	M
5 DNX	1	6.836	6.832	0.004	141853	1.00	1.00	M
6 MNX	1	7.236	7.232	0.004	152050	1.17	1.17	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 50.00 Units: uL

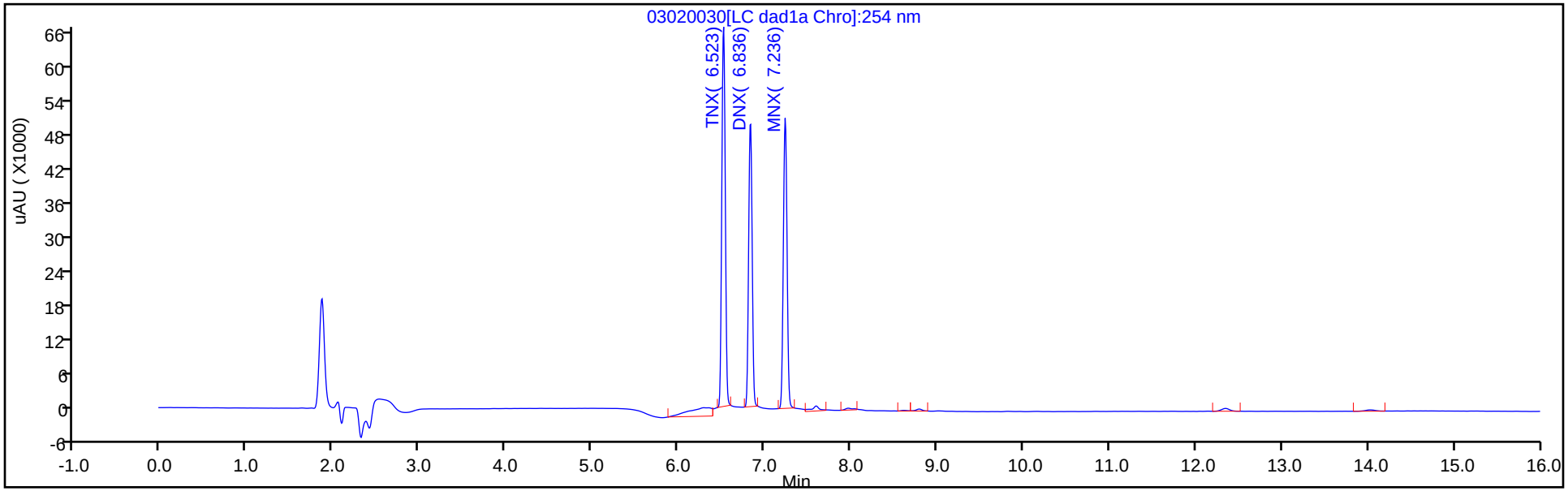
Report Date: 03-Mar-2021 13:32:25 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

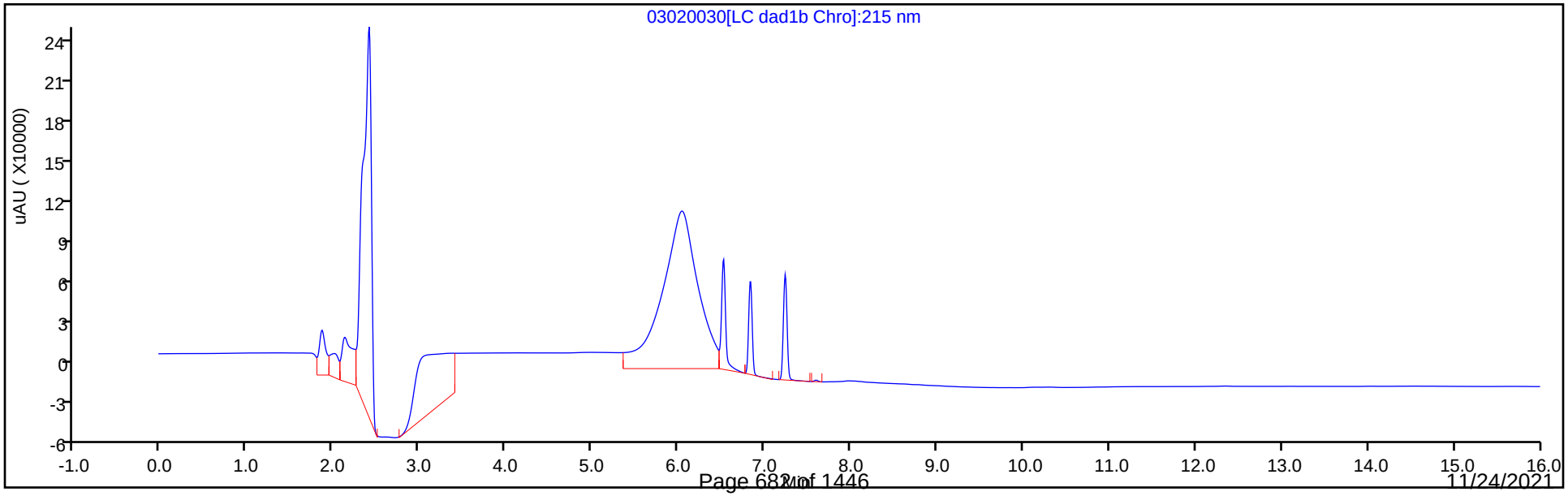
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020030.d

Injection Date:	03-Mar-2021 00:12:24	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 7			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

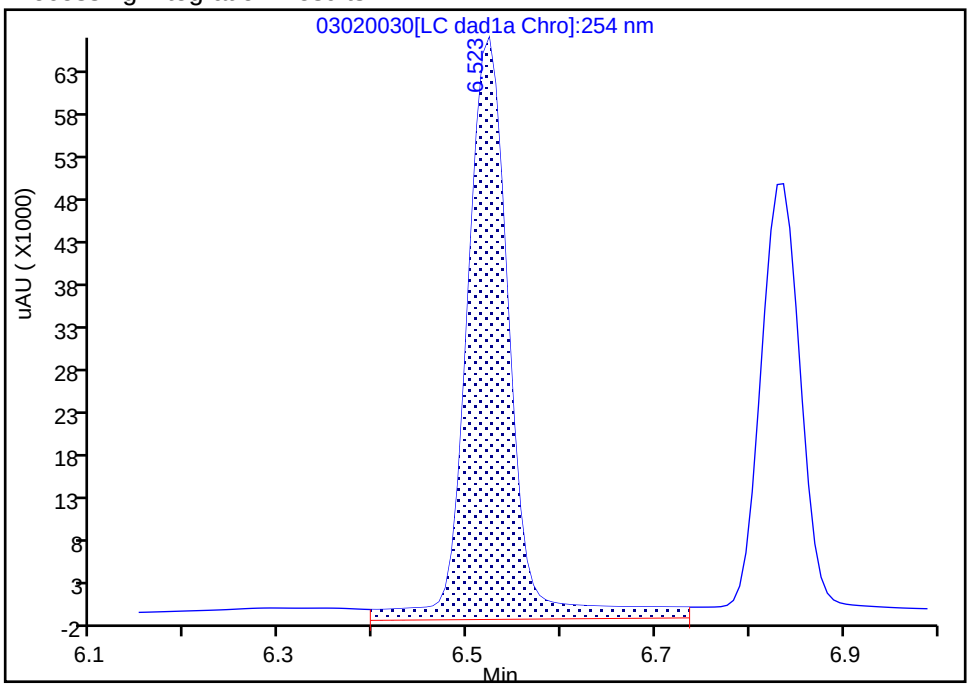
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020030.d				
Injection Date:	03-Mar-2021 00:12:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:		ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

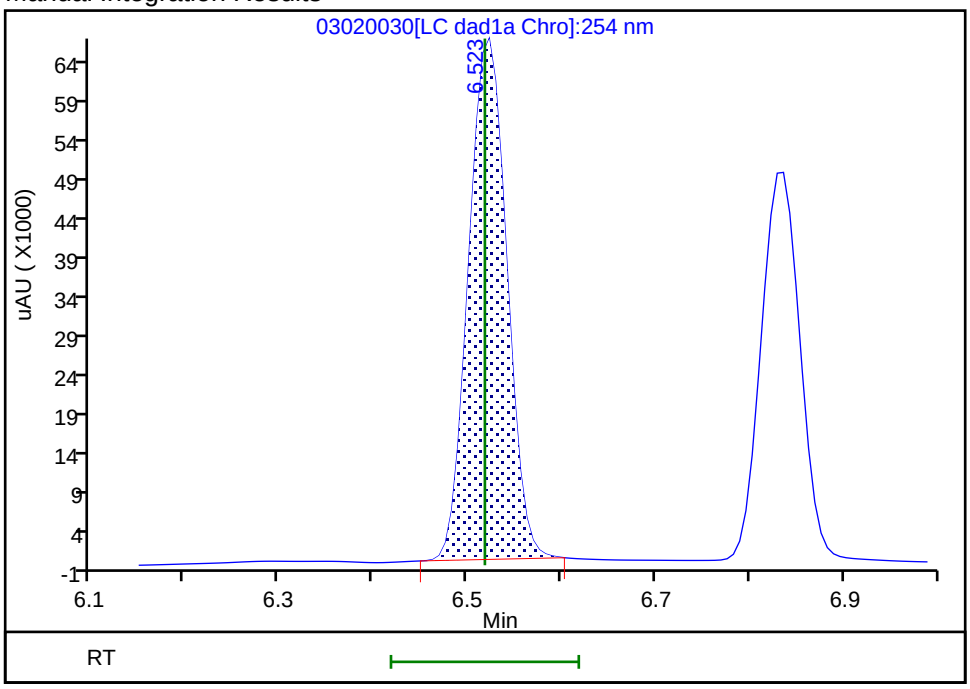
Processing Integration Results

RT: 6.52
Area: 217440
Amount: 0.997461
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 187526
Amount: 1.009257
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:13
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

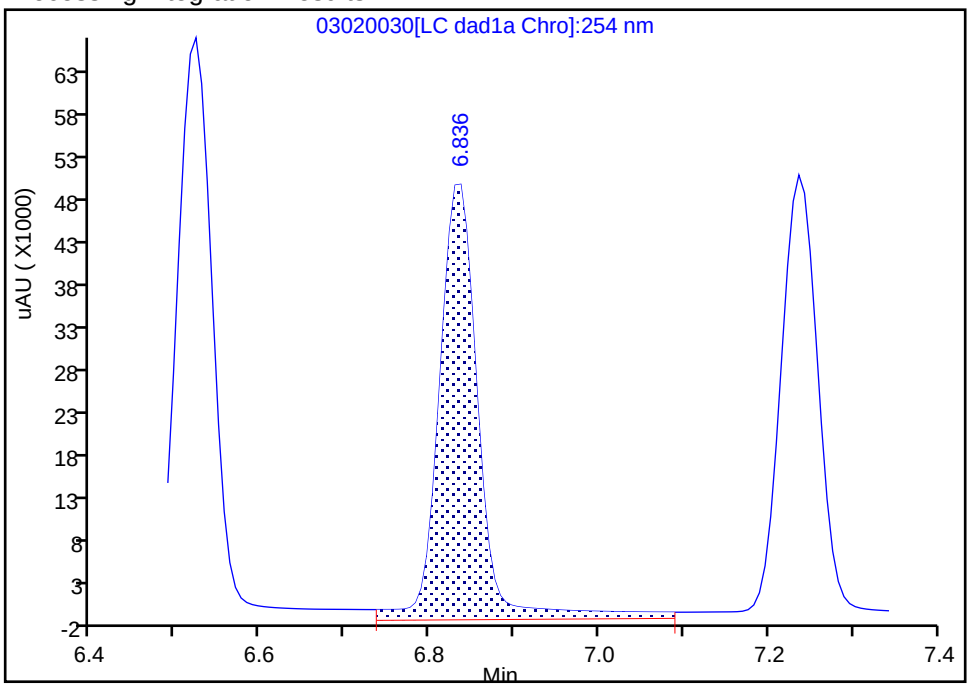
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020030.d				
Injection Date:	03-Mar-2021 00:12:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:		ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

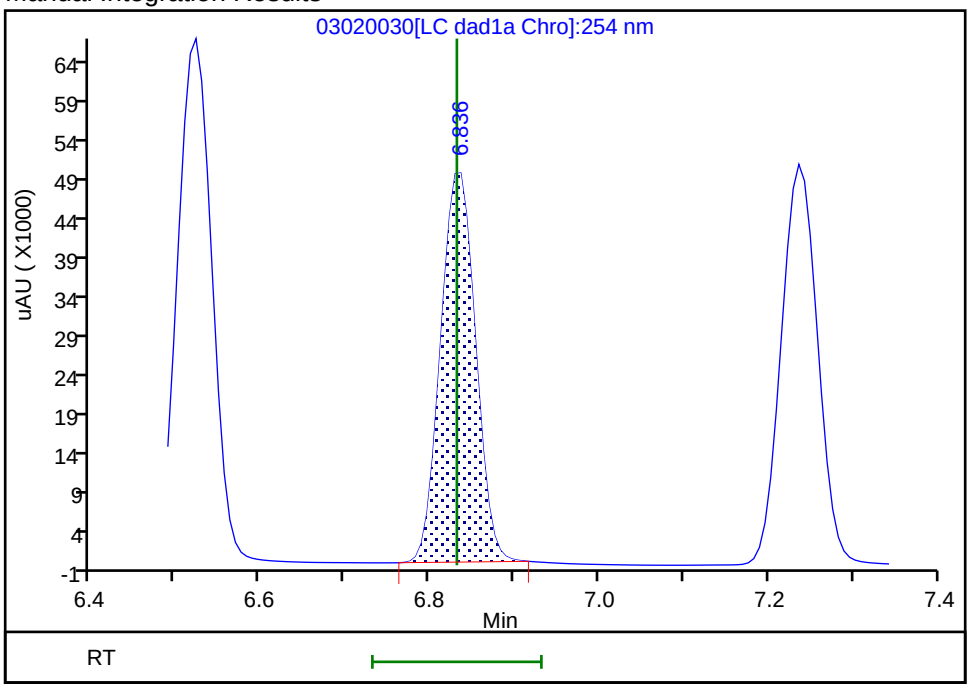
Processing Integration Results

RT: 6.84
Area: 165195
Amount: 1.028693
Amount Units: ug/mL



Manual Integration Results

RT: 6.84
Area: 141853
Amount: 0.998126
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:09
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

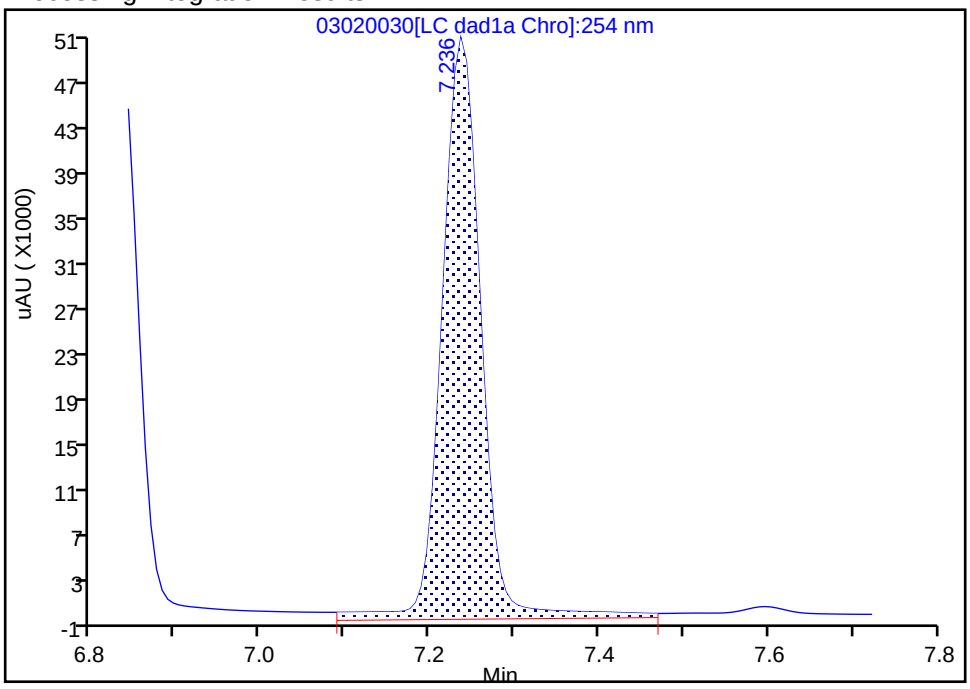
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020030.d				
Injection Date:	03-Mar-2021 00:12:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:		ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

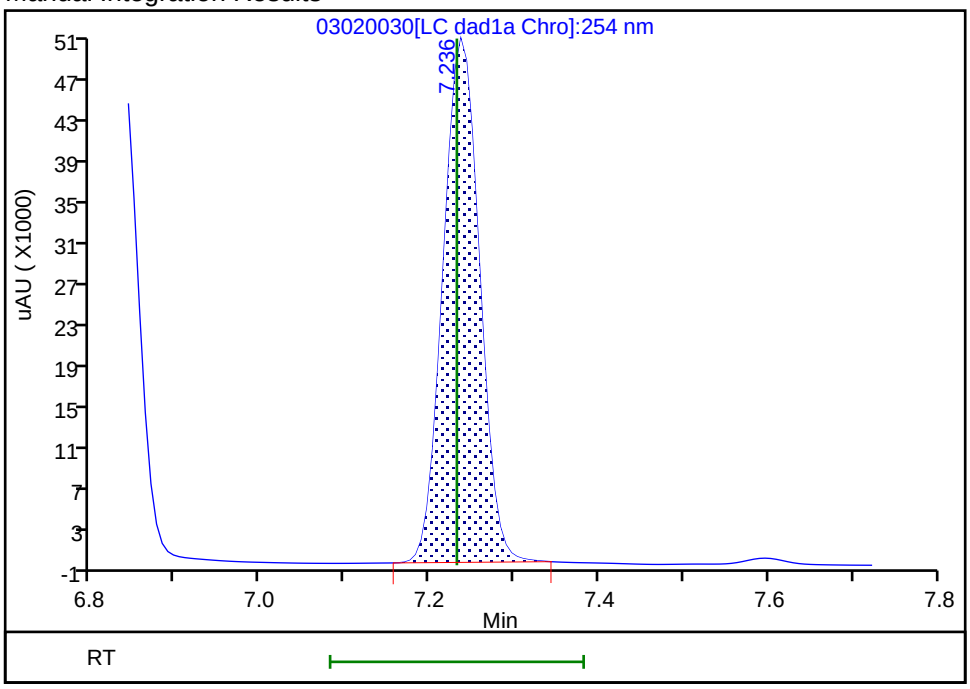
Processing Integration Results

RT: 7.24
Area: 166888
Amount: 1.261447
Amount Units: ug/mL



Manual Integration Results

RT: 7.24
Area: 152050
Amount: 1.166561
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:05
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020031.D				
Lims ID:	IC DMT 6				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	03-Mar-2021 00:35:25	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 6				
Misc. Info.:	280-0099486-031				
Operator ID:		Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2021 13:32:26	Calib Date:	03-Mar-2021 02:30:22		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1629				
First Level Reviewer: zhangji		Date:	03-Mar-2021 13:19:33		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.519	6.518	0.001	131907	0.7007	0.7099	M
5 DNX	1	6.833	6.832	0.001	100368	0.7007	0.7062	M
6 MNX	1	7.239	7.232	0.007	107376	0.8169	0.8238	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 35.00 Units: uL

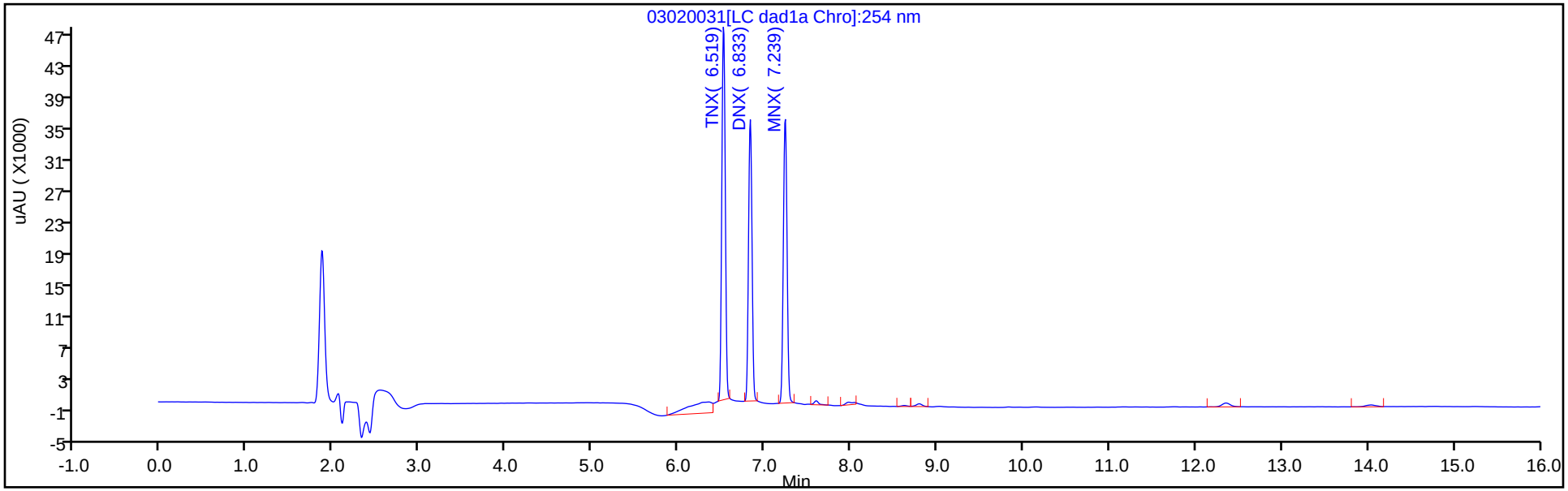
Report Date: 03-Mar-2021 13:32:26 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

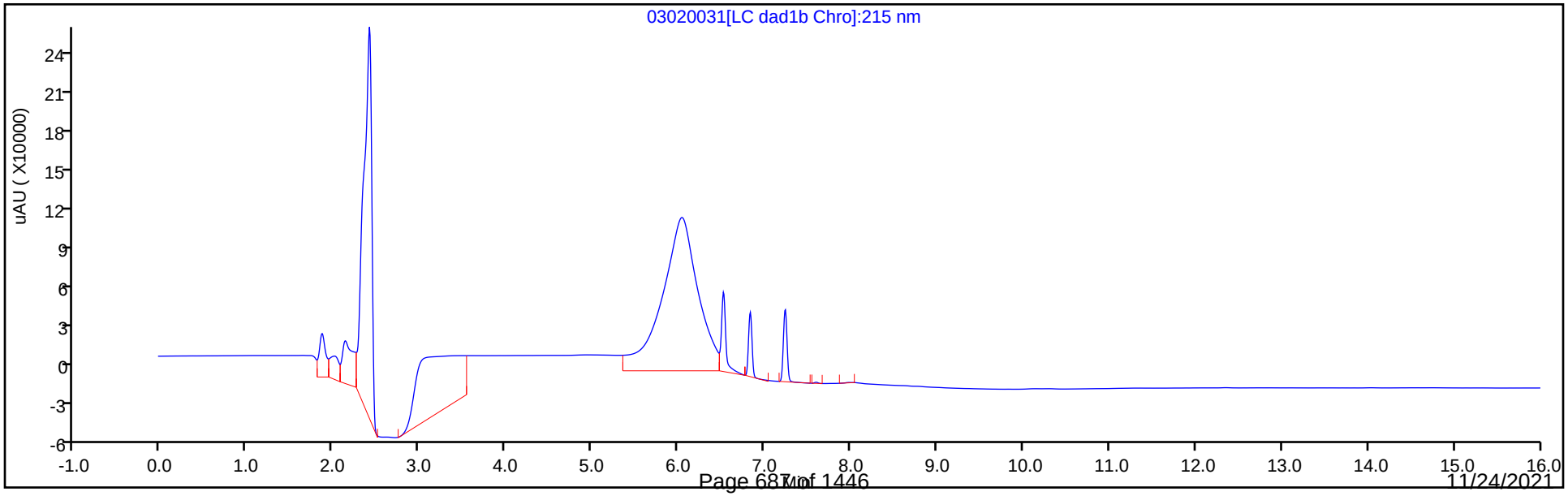
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020031.d

Injection Date:	03-Mar-2021 00:35:25	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 6			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

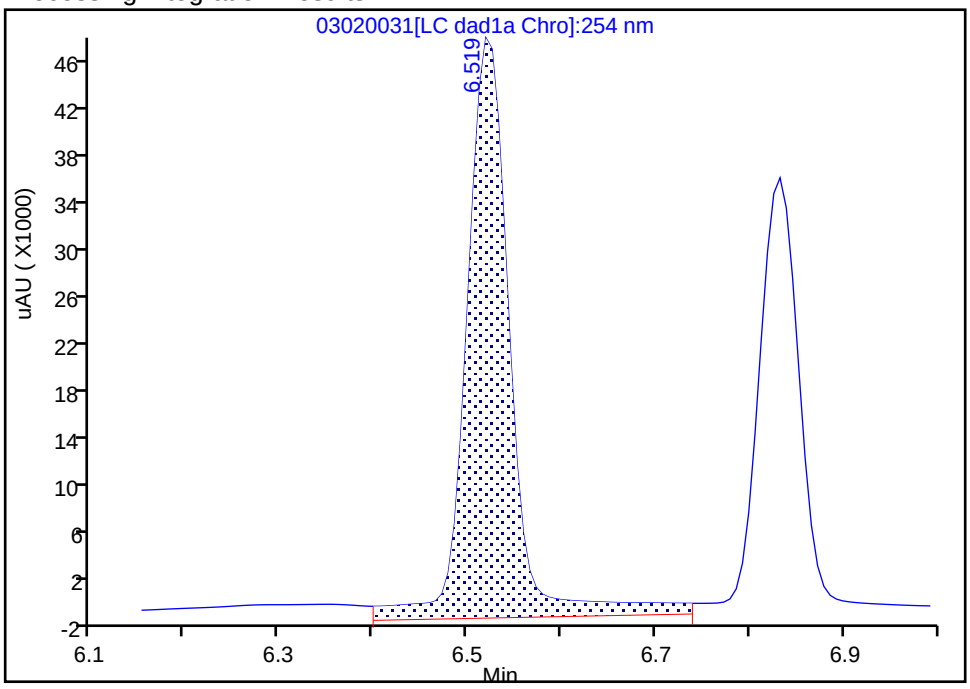
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020031.d				
Injection Date:	03-Mar-2021 00:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:		ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

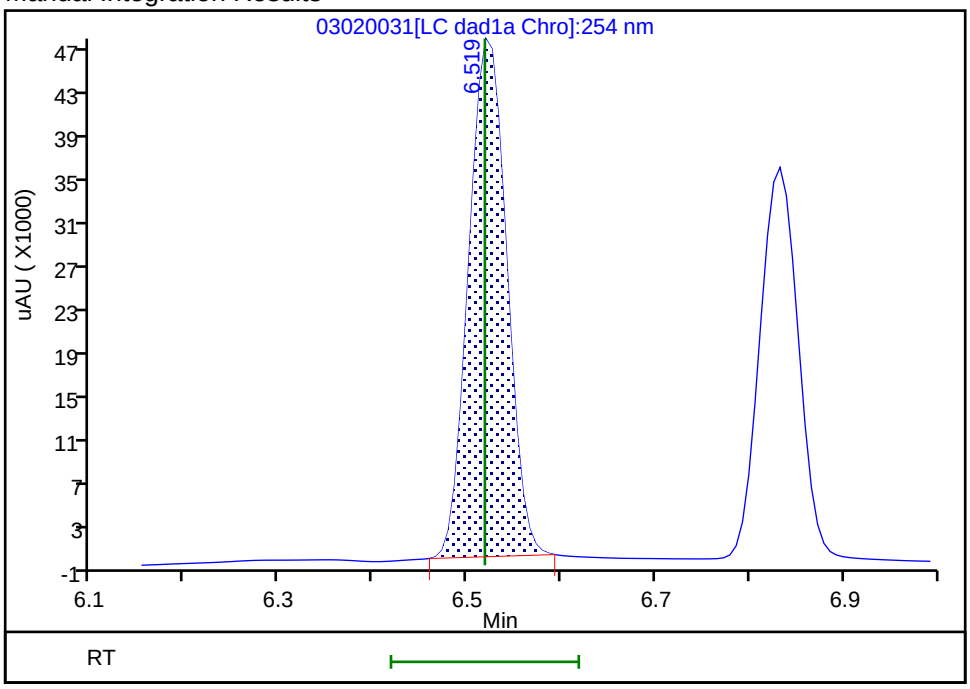
Processing Integration Results

RT: 6.52
Area: 157523
Amount: 0.765441
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 131907
Amount: 0.709918
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:21

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

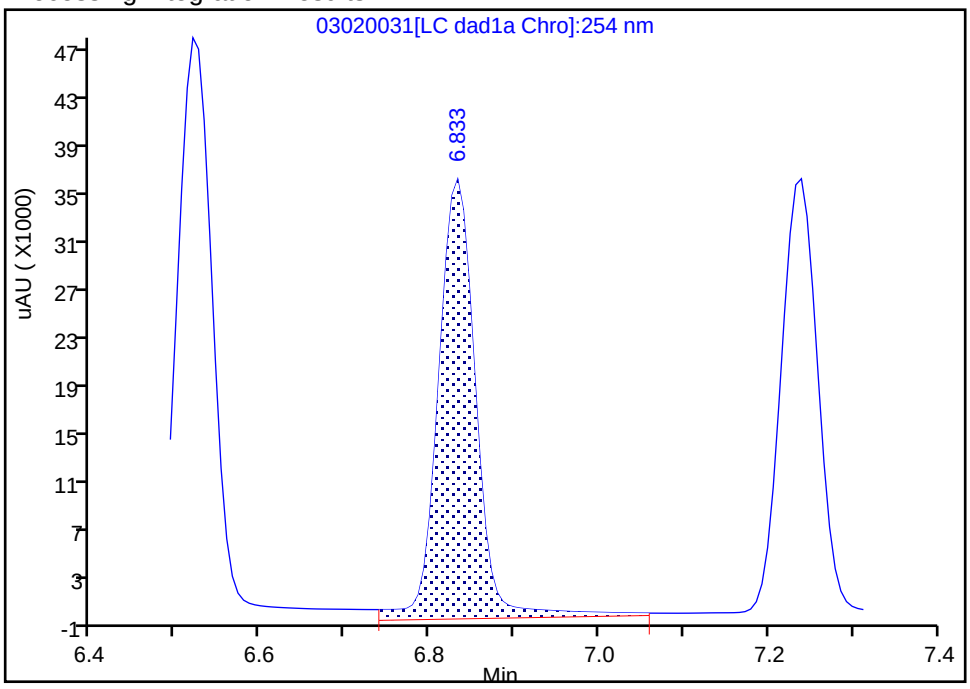
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020031.d				
Injection Date:	03-Mar-2021 00:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:		ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

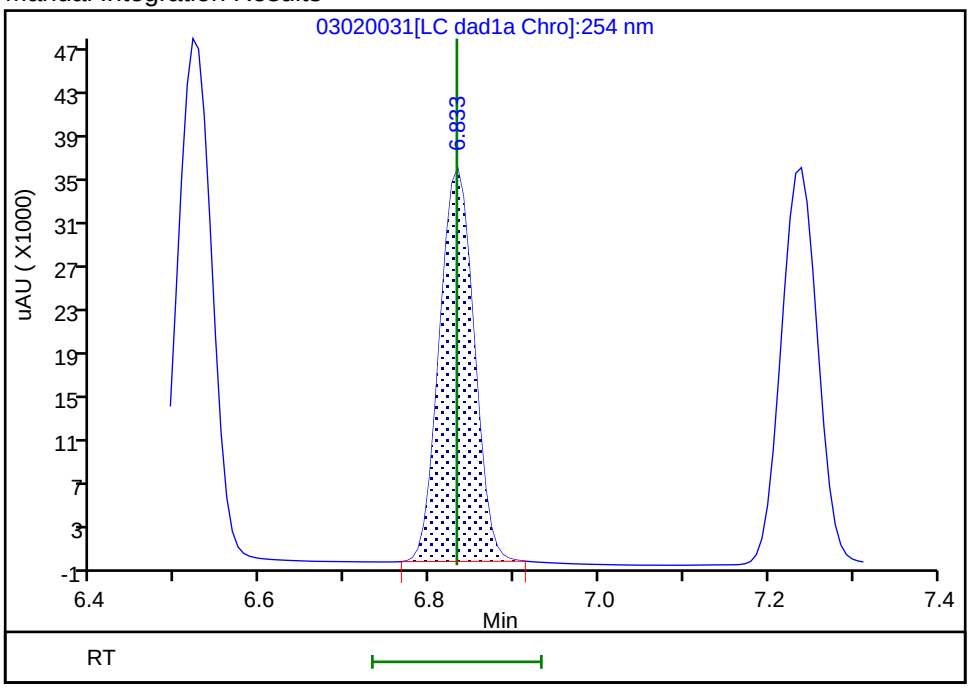
Processing Integration Results

RT: 6.83
Area: 112441
Amount: 0.713130
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 100368
Amount: 0.706223
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:27

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

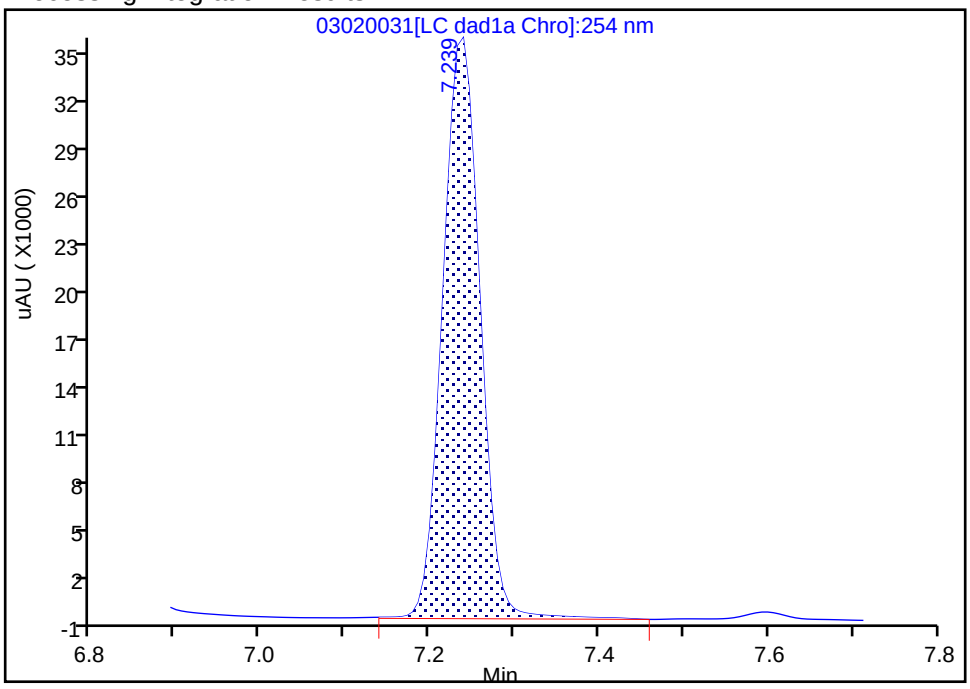
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020031.d				
Injection Date:	03-Mar-2021 00:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:		ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

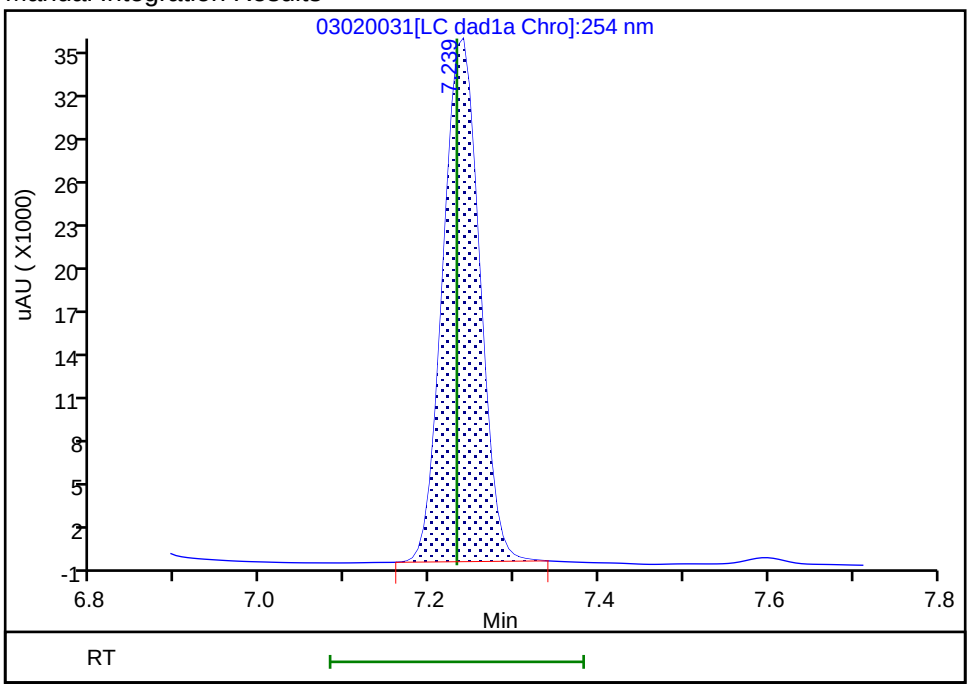
Processing Integration Results

RT: 7.24
Area: 109789
Amount: 0.839946
Amount Units: ug/mL



Manual Integration Results

RT: 7.24
Area: 107376
Amount: 0.823813
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:32

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020032.D
Lims ID: IC DMT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 03-Mar-2021 00:58:19 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 5
Misc. Info.: 280-0099486-032
Operator ID: Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2021 13:32:27 Calib Date: 03-Mar-2021 02:30:22
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1629

First Level Reviewer: zhangji Date: 03-Mar-2021 13:19:53

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.521	6.518	0.003	75195	0.4004	0.4047	M
5 DNX	1	6.828	6.832	-0.004	57462	0.4004	0.4043	M
6 MNX	1	7.234	7.232	0.002	61731	0.4668	0.4736	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 20.00 Units: uL

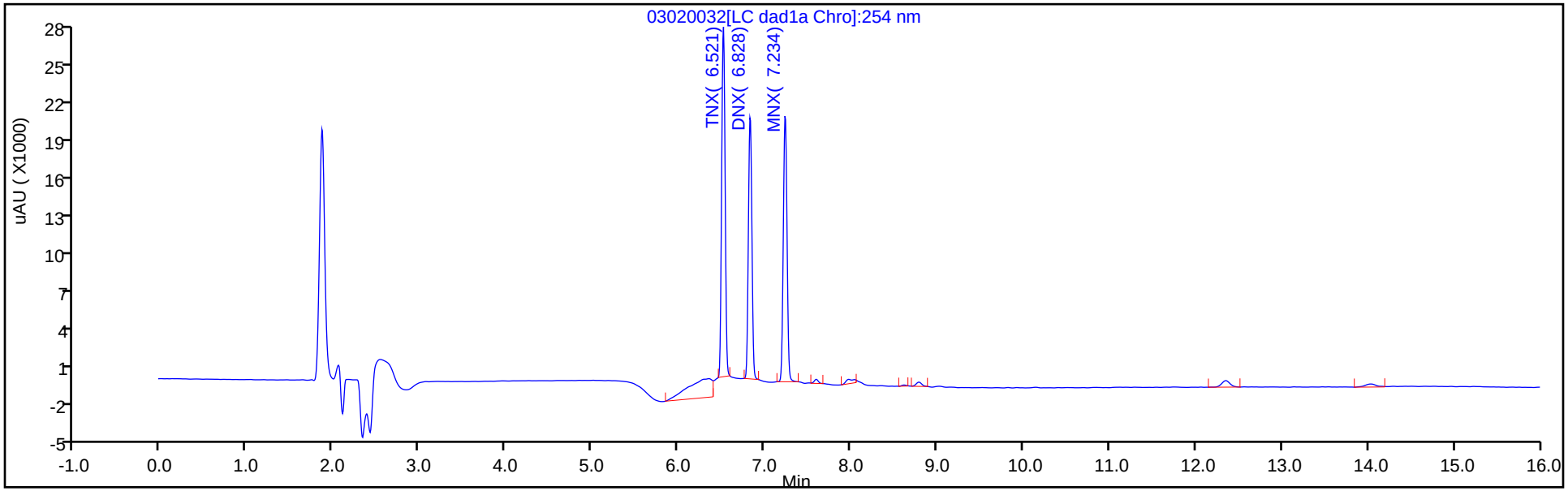
Report Date: 03-Mar-2021 13:32:27 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

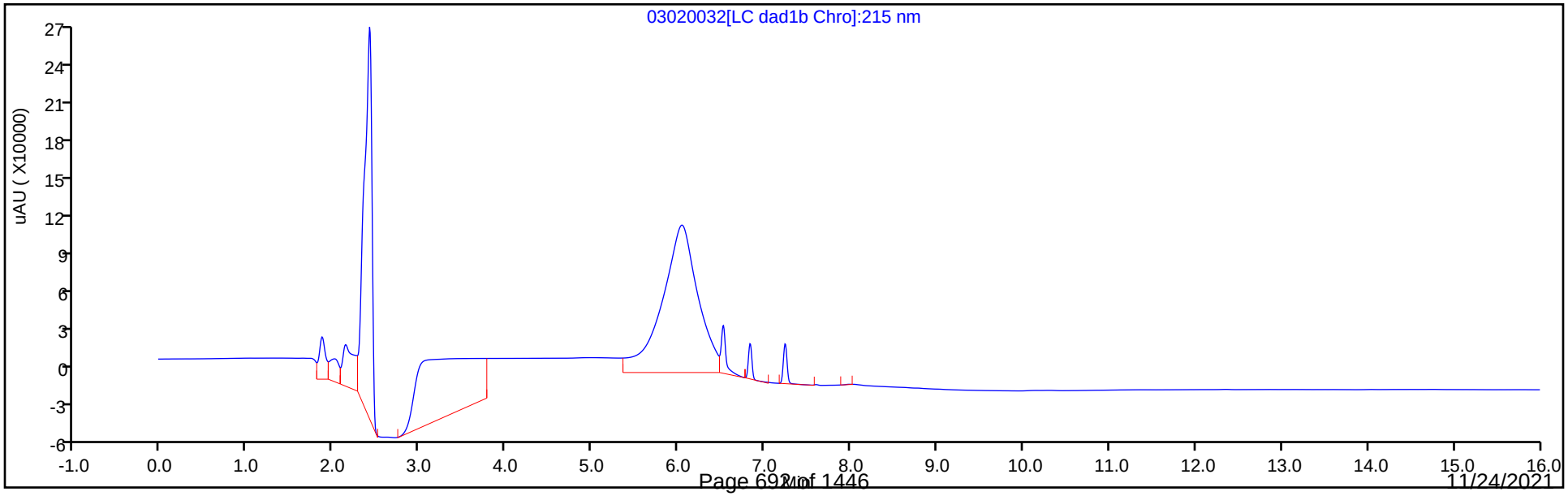
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020032.d

Injection Date:	03-Mar-2021 00:58:19	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 5			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

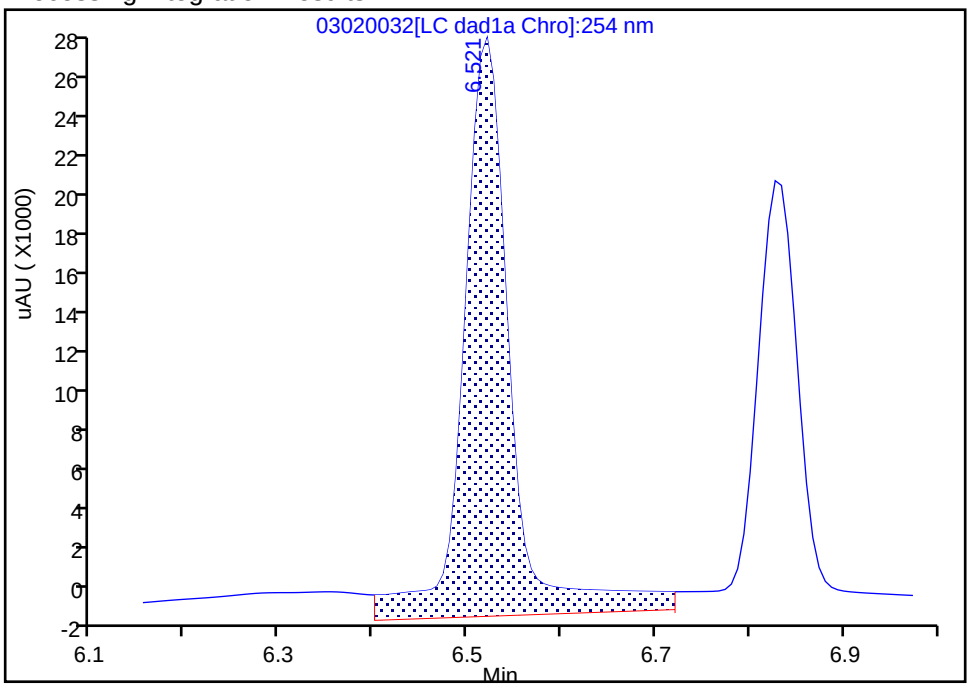
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020032.d				
Injection Date:	03-Mar-2021 00:58:19	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:		ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

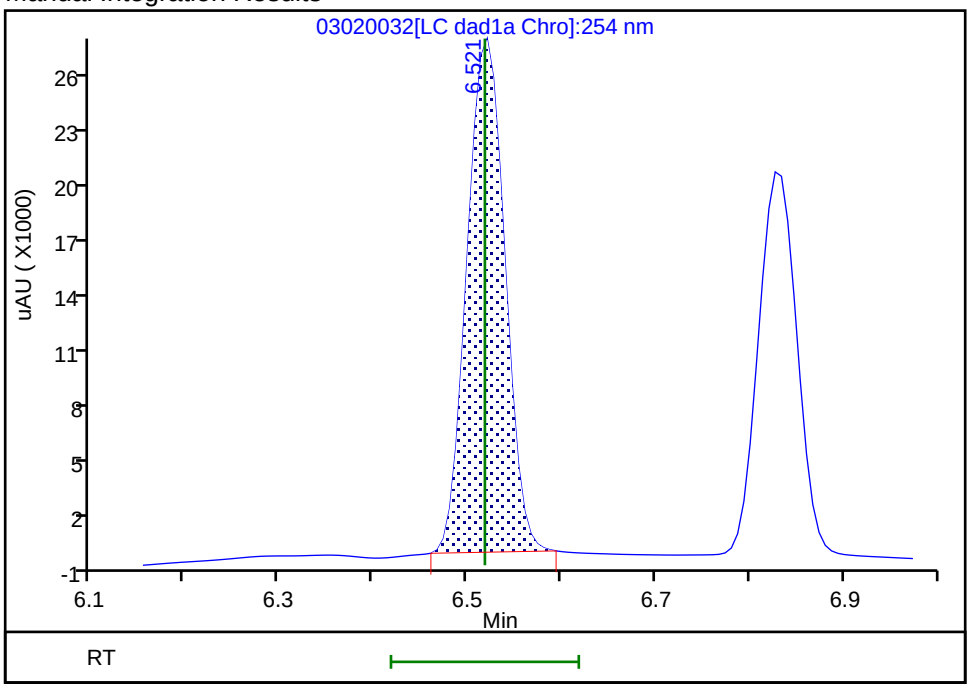
Processing Integration Results

RT: 6.52
Area: 98522
Amount: 0.473037
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 75195
Amount: 0.404696
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:45
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

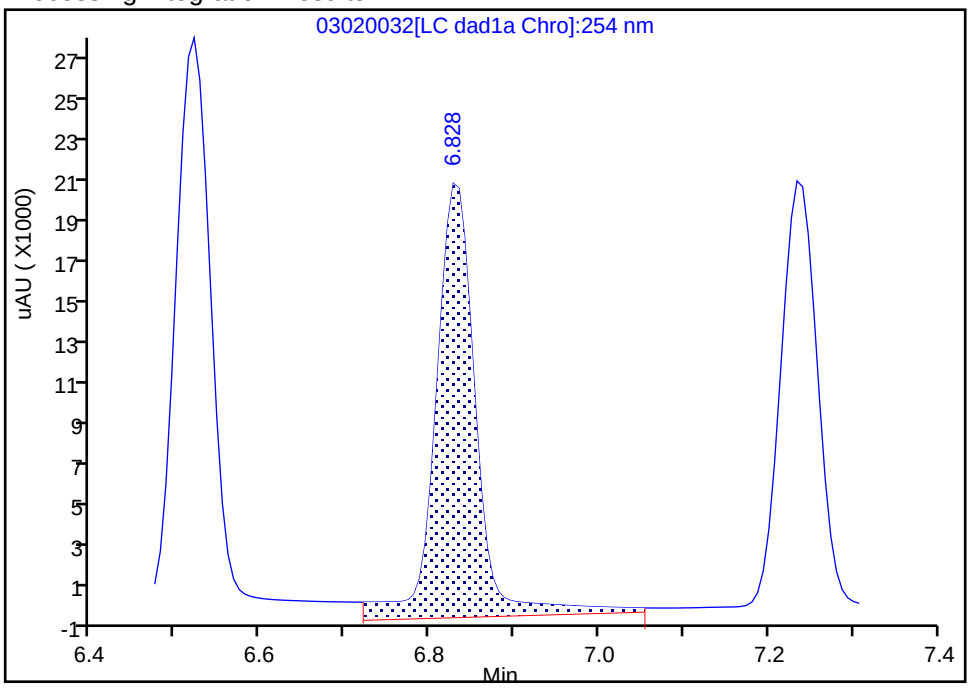
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020032.d		
Injection Date:	03-Mar-2021 00:58:19	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 5		
Client ID:			
Operator ID:		ALS Bottle#:	32 Worklist Smp#: 32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

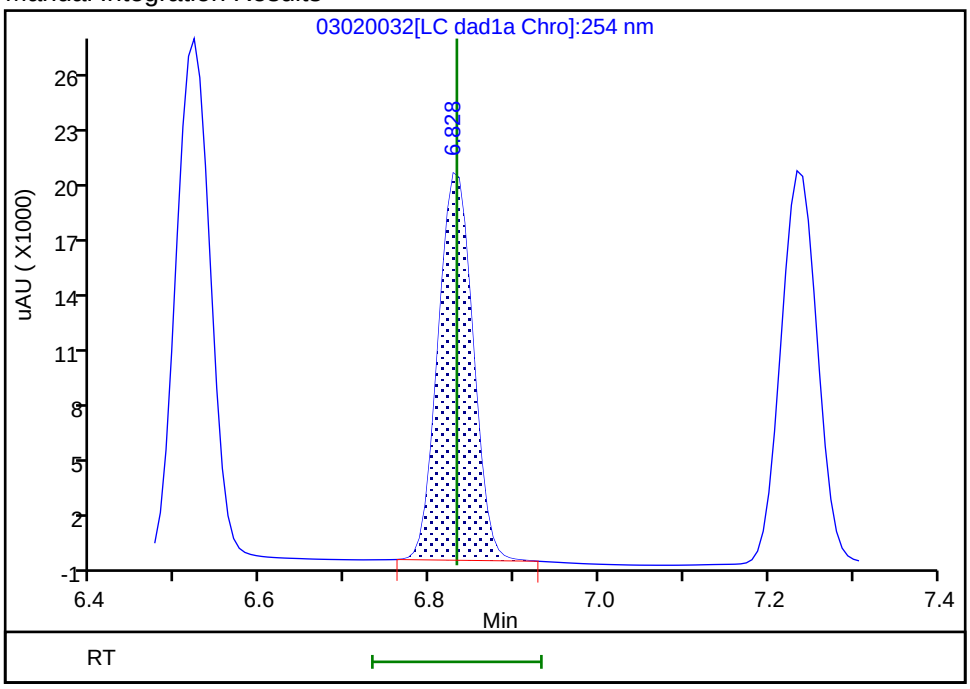
Processing Integration Results

RT: 6.83
Area: 69186
Amount: 0.444873
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 57462
Amount: 0.404322
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:19:42
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020033.D
Lims ID: IC DMT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 03-Mar-2021 01:21:15 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 4
Misc. Info.: 280-0099486-033
Operator ID: Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2021 13:32:28 Calib Date: 03-Mar-2021 02:30:22
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1629

First Level Reviewer: zhangji Date: 03-Mar-2021 13:20:09

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.518	6.518	0.000	44228	0.2503	0.2380	M
5 DNX	1	6.832	6.832	0.000	33502	0.2503	0.2357	M
6 MNX	1	7.232	7.232	0.000	36376	0.2918	0.2791	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 12.50 Units: uL

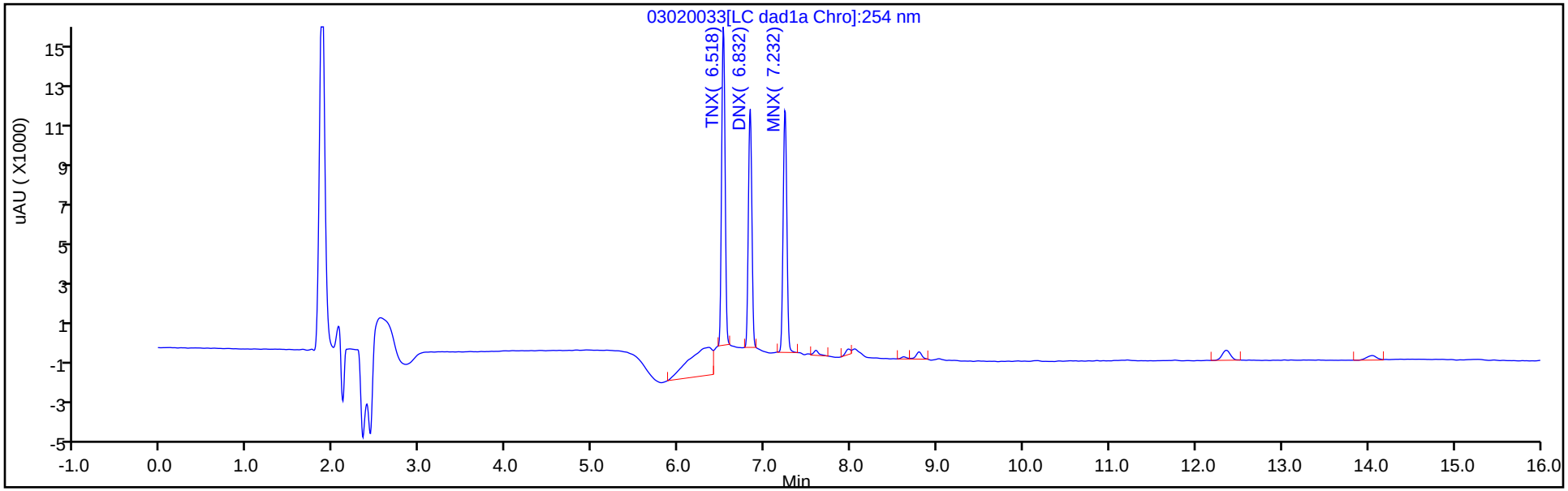
Report Date: 03-Mar-2021 13:32:28 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

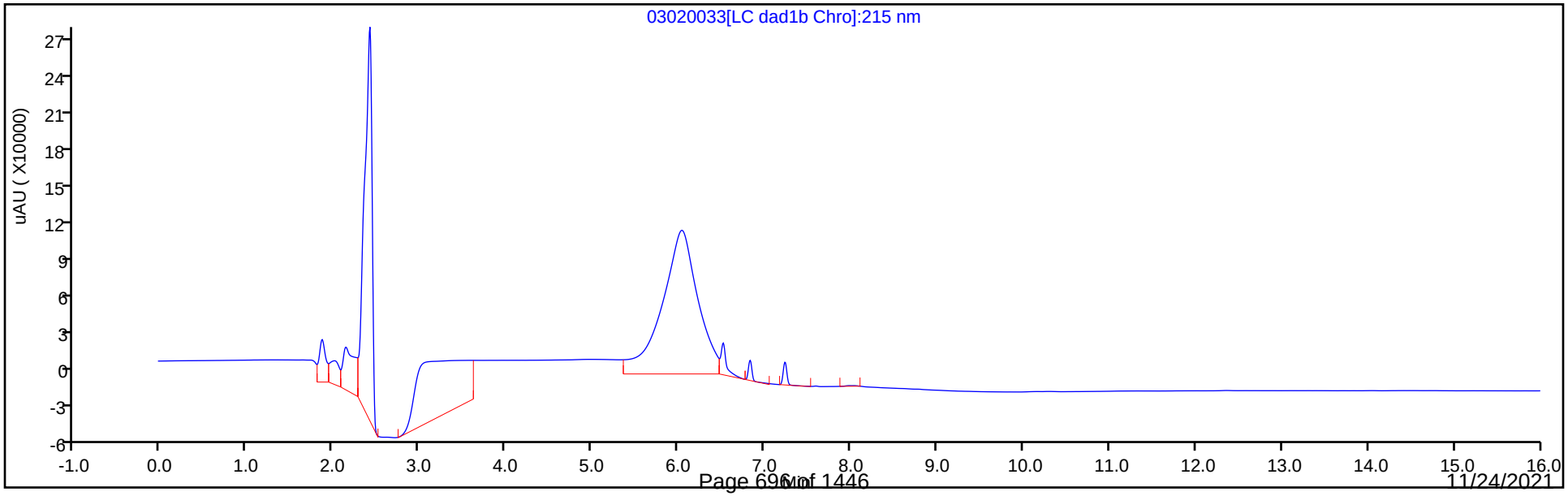
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020033.d

Injection Date:	03-Mar-2021 01:21:15	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 4			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

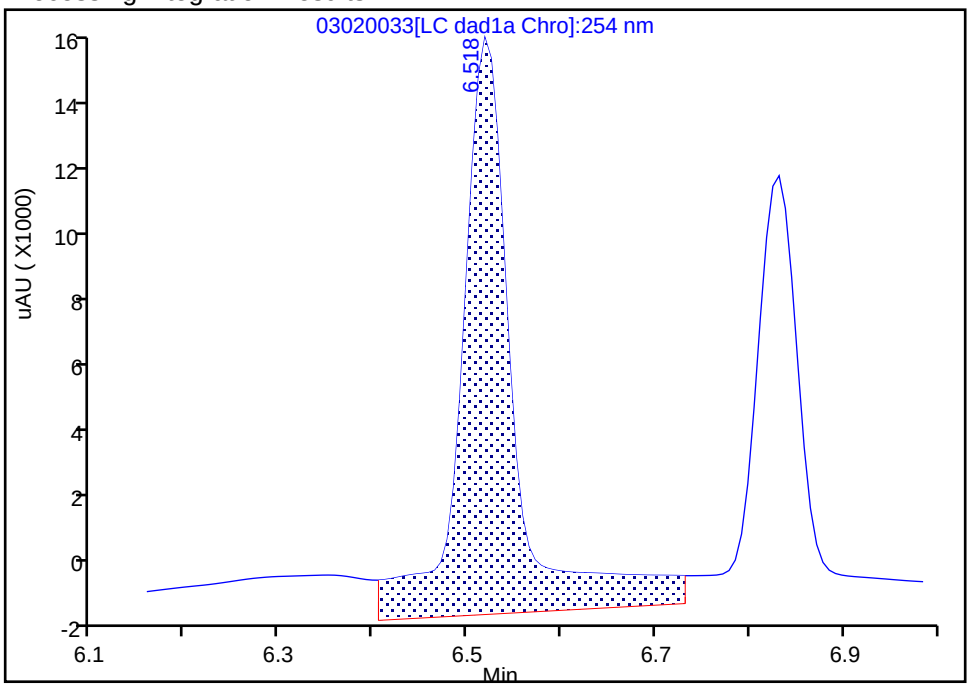
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020033.d				
Injection Date:	03-Mar-2021 01:21:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:		ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

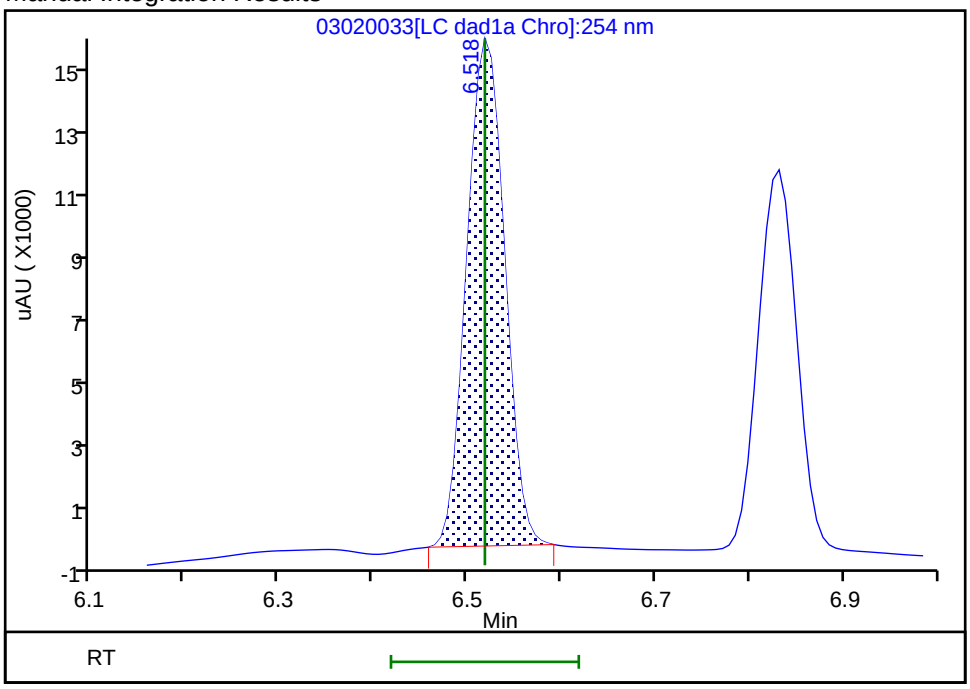
Processing Integration Results

RT: 6.52
Area: 66731
Amount: 0.312730
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 44228
Amount: 0.238033
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:00
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

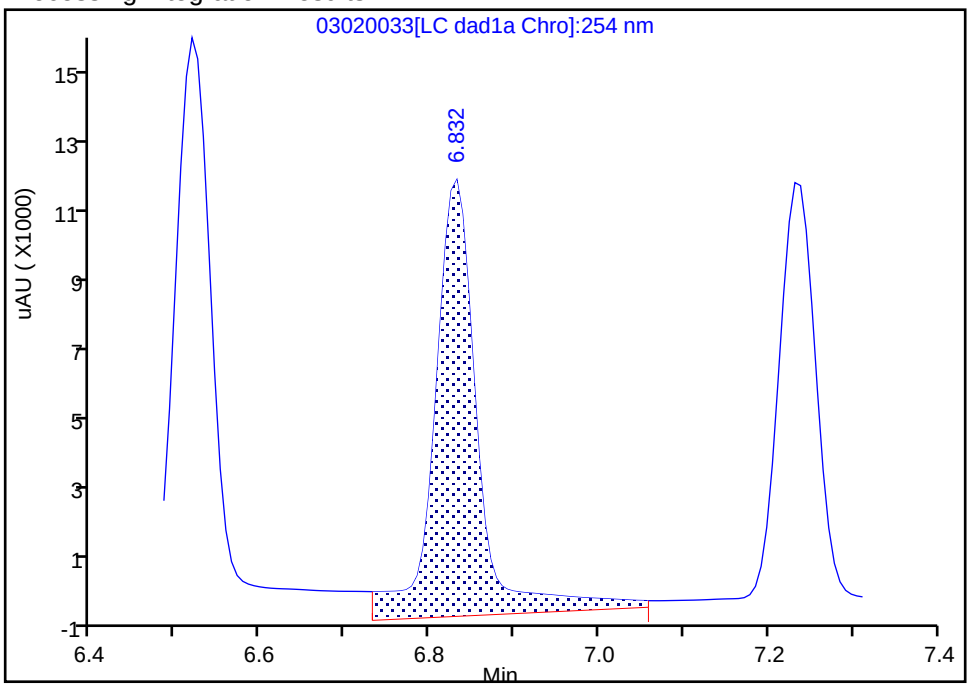
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020033.d				
Injection Date:	03-Mar-2021 01:21:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:		ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

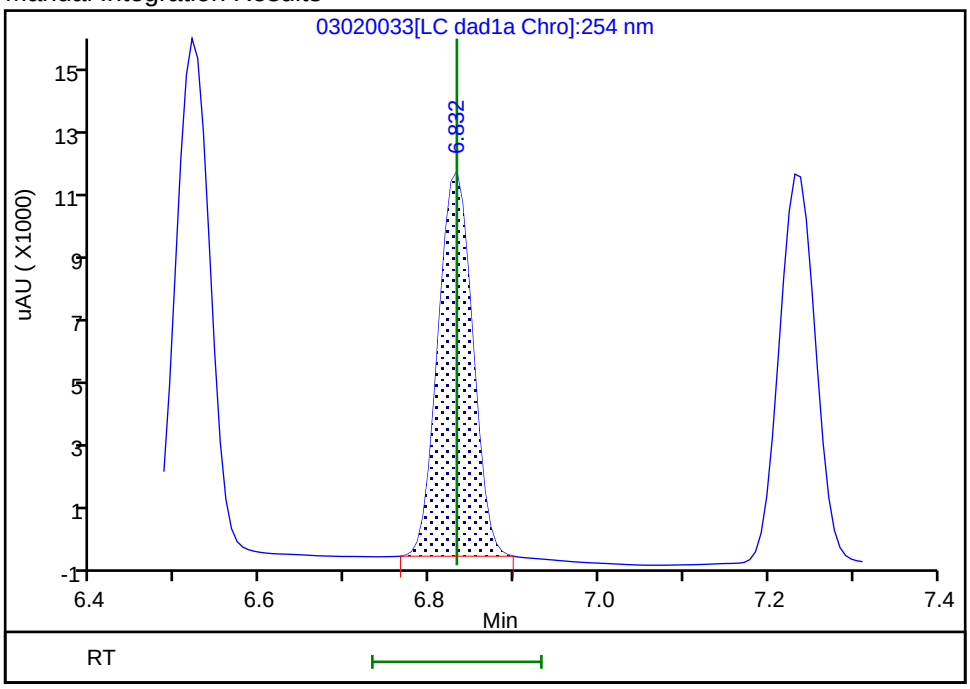
Processing Integration Results

RT: 6.83
Area: 44700
Amount: 0.294353
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 33502
Amount: 0.235731
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:06
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020034.D
Lims ID: IC DMT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 03-Mar-2021 01:44:28 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 3
Misc. Info.: 280-0099486-034
Operator ID: Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2021 13:32:29 Calib Date: 03-Mar-2021 02:30:22
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1629

First Level Reviewer: zhangji Date: 03-Mar-2021 13:20:27

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.522	6.518	0.004	18578	0.1001	0.1000	M
5 DNX	1	6.828	6.832	-0.004	13949	0.1001	0.0981	M
6 MNX	1	7.235	7.232	0.003	15275	0.1167	0.1172	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 5.00 Units: uL

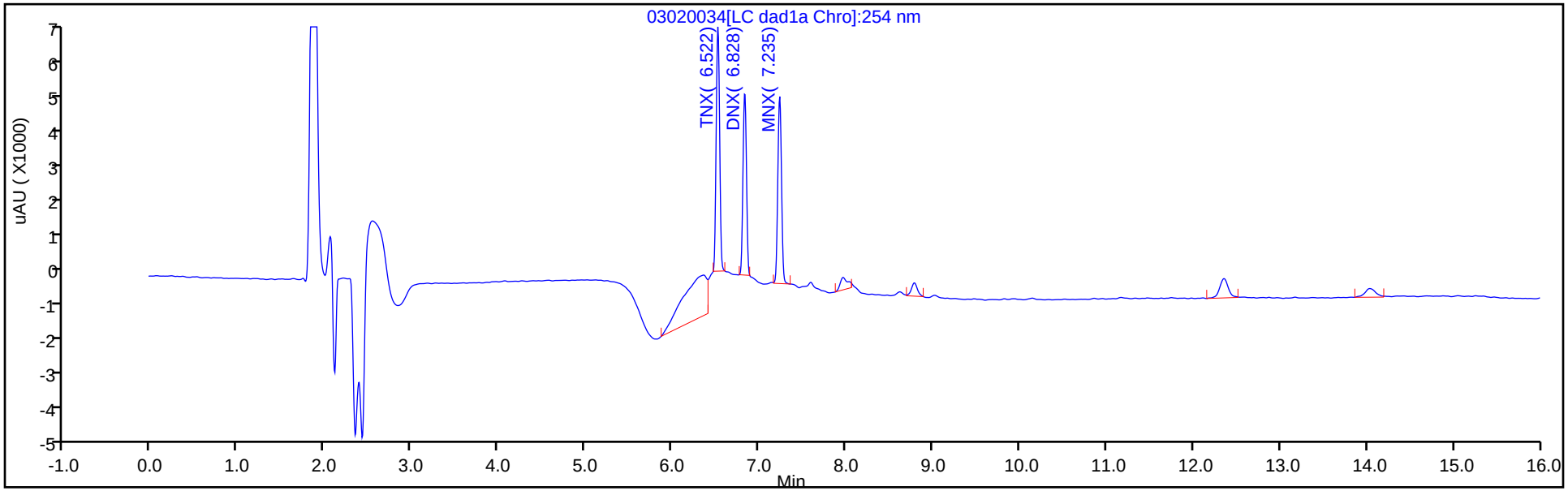
Report Date: 03-Mar-2021 13:32:29 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

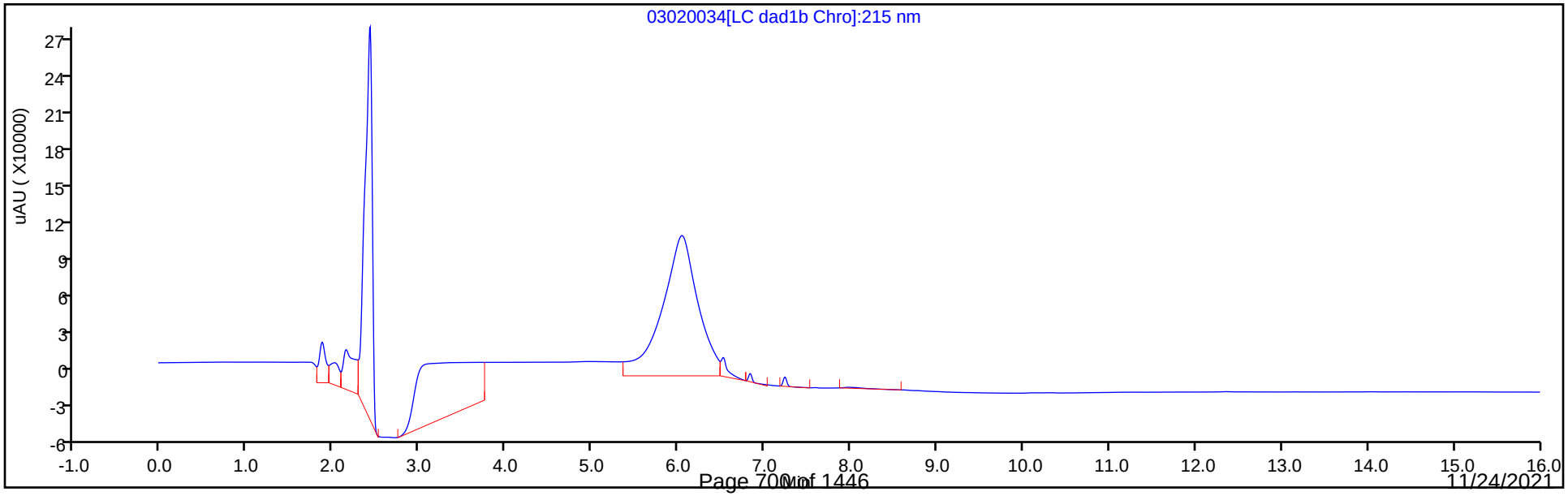
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020034.d

Injection Date:	03-Mar-2021 01:44:28	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 3			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

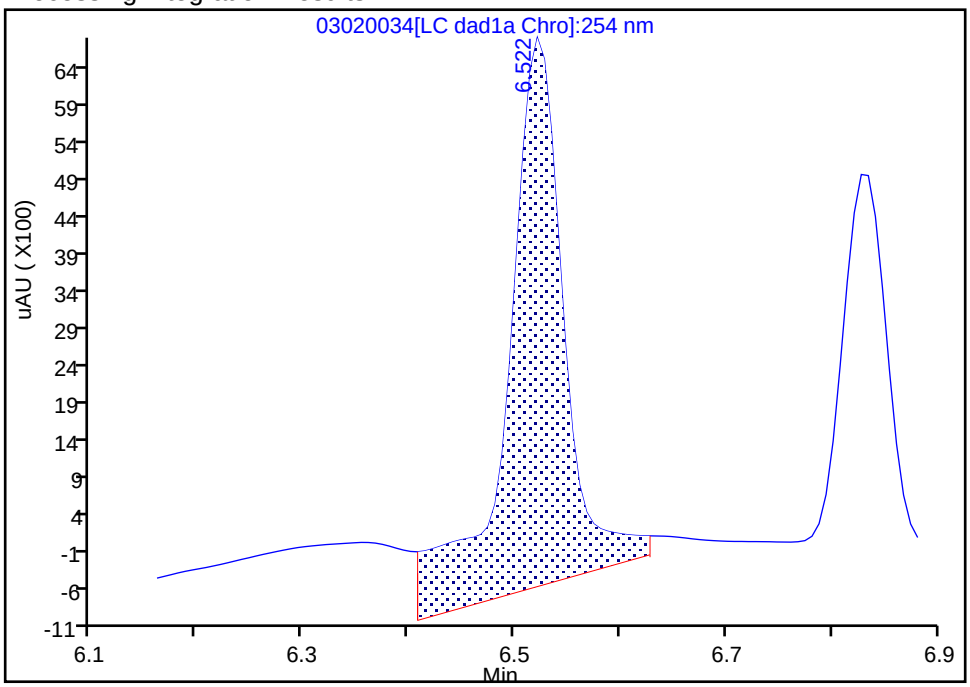
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020034.d				
Injection Date:	03-Mar-2021 01:44:28	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:		ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

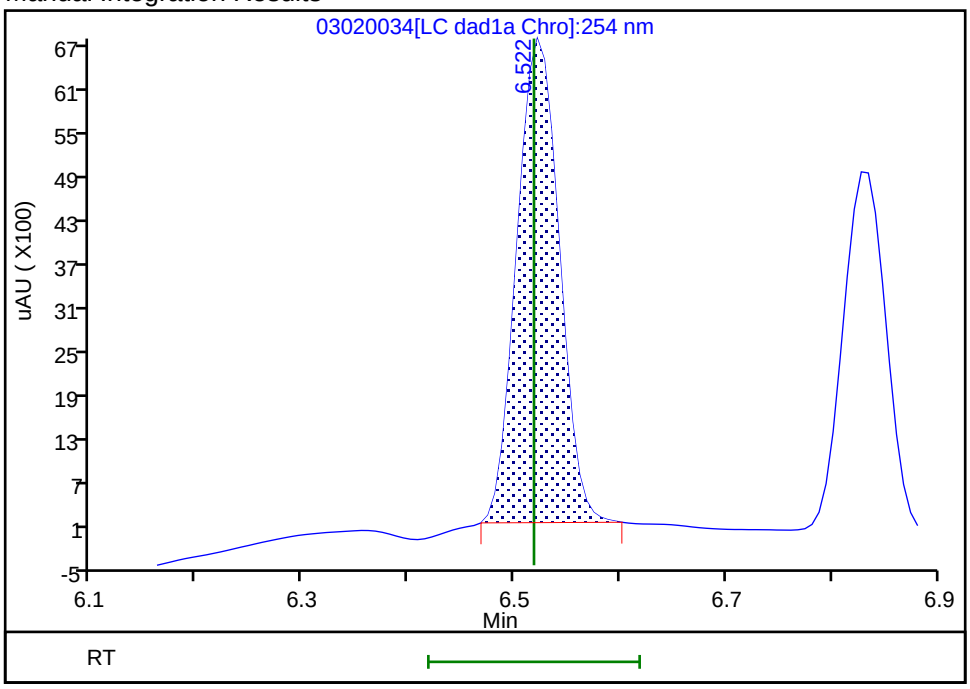
Processing Integration Results

RT: 6.52
Area: 27541
Amount: 0.106458
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 18578
Amount: 0.099986
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:18
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

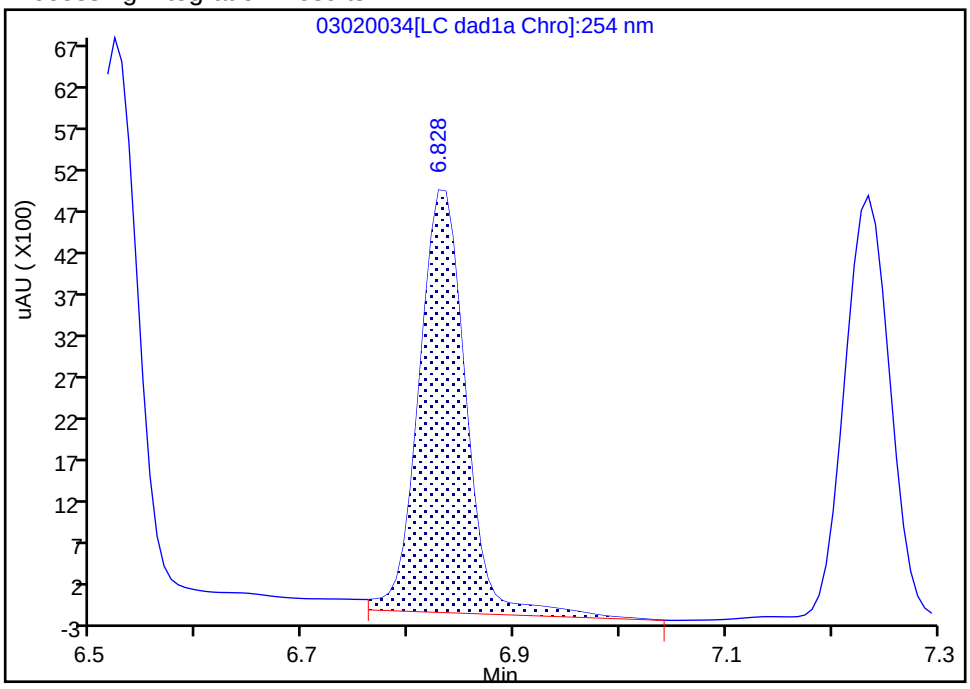
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020034.d		
Injection Date:	03-Mar-2021 01:44:28	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 3		
Client ID:			
Operator ID:		ALS Bottle#:	34 Worklist Smp#: 34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

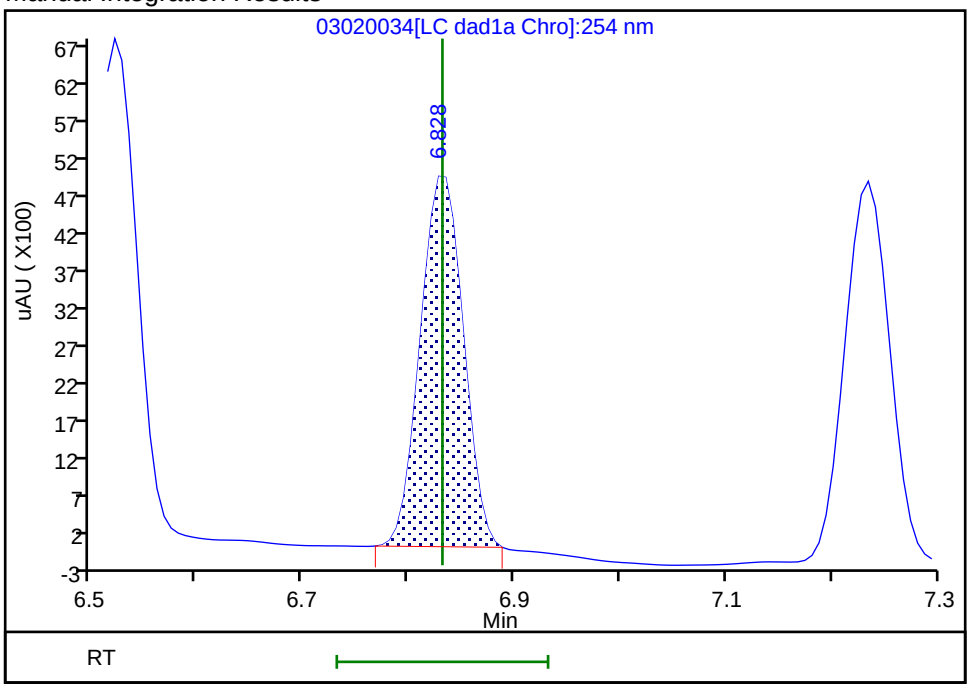
Processing Integration Results

RT: 6.83
Area: 15711
Amount: 0.107414
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 13949
Amount: 0.098150
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:22
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020035.D				
Lims ID:	IC DMT 2				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	03-Mar-2021 02:07:25	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 2				
Misc. Info.:	280-0099486-035				
Operator ID:		Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2021 13:32:30	Calib Date:	03-Mar-2021 02:30:22		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1629				
First Level Reviewer: zhangji		Date:	03-Mar-2021 13:20:44		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.522	6.518	0.004	9328	0.0501	0.0502	M
5 DNX	1	6.829	6.832	-0.003	7121	0.0501	0.0501	M
6 MNX	1	7.235	7.232	0.003	7585	0.0584	0.0582	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 2.50 Units: uL

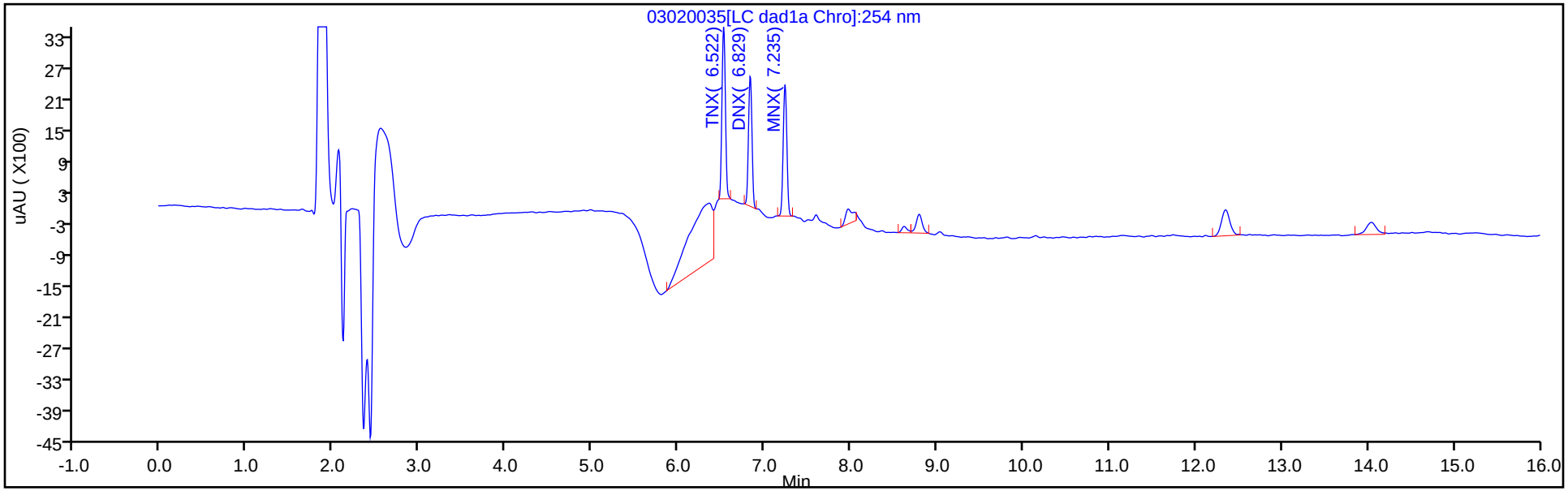
Report Date: 03-Mar-2021 13:32:30 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

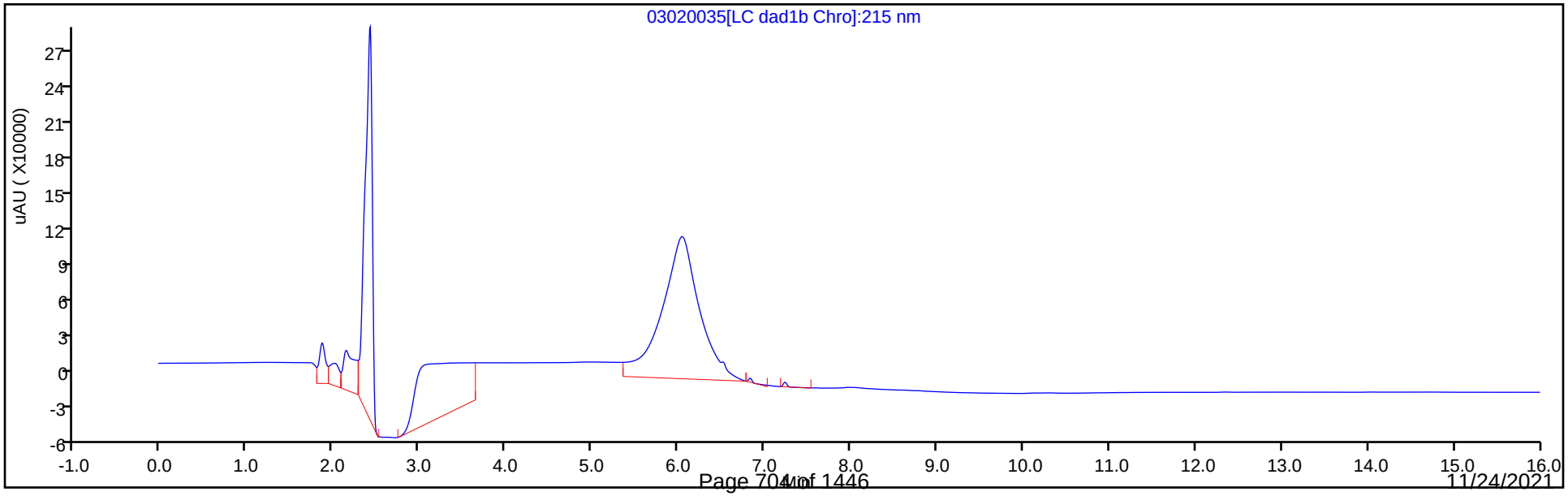
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020035.d

Injection Date:	03-Mar-2021 02:07:25	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 2			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

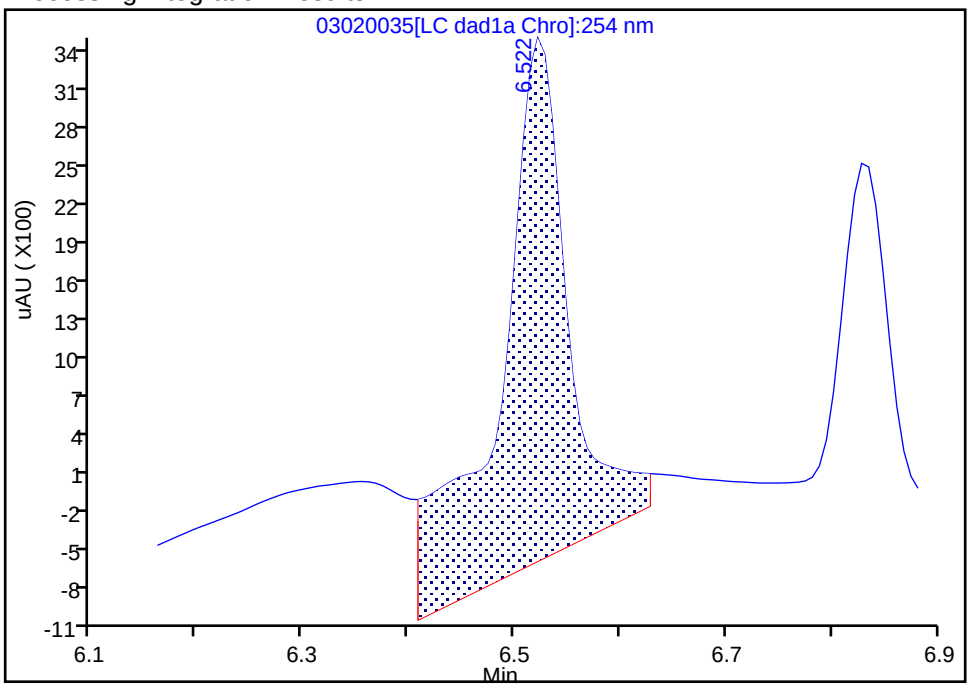
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020035.d		
Injection Date:	03-Mar-2021 02:07:25	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 2		
Client ID:			
Operator ID:		ALS Bottle#:	35 Worklist Smp#: 35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

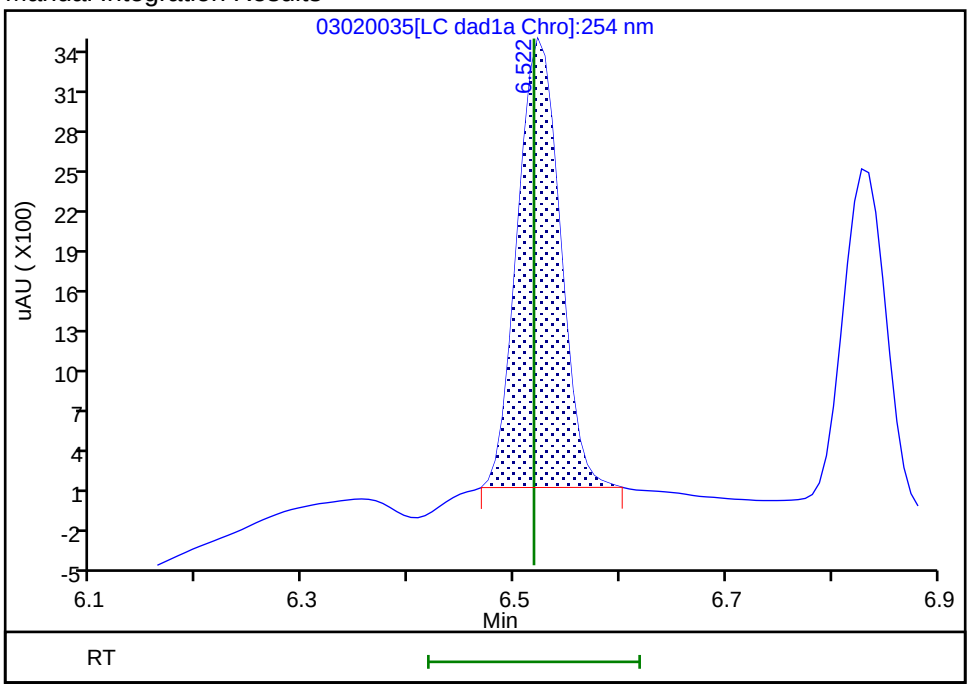
Processing Integration Results

RT: 6.52
Area: 18356
Amount: 0.060447
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 9328
Amount: 0.050203
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:37

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

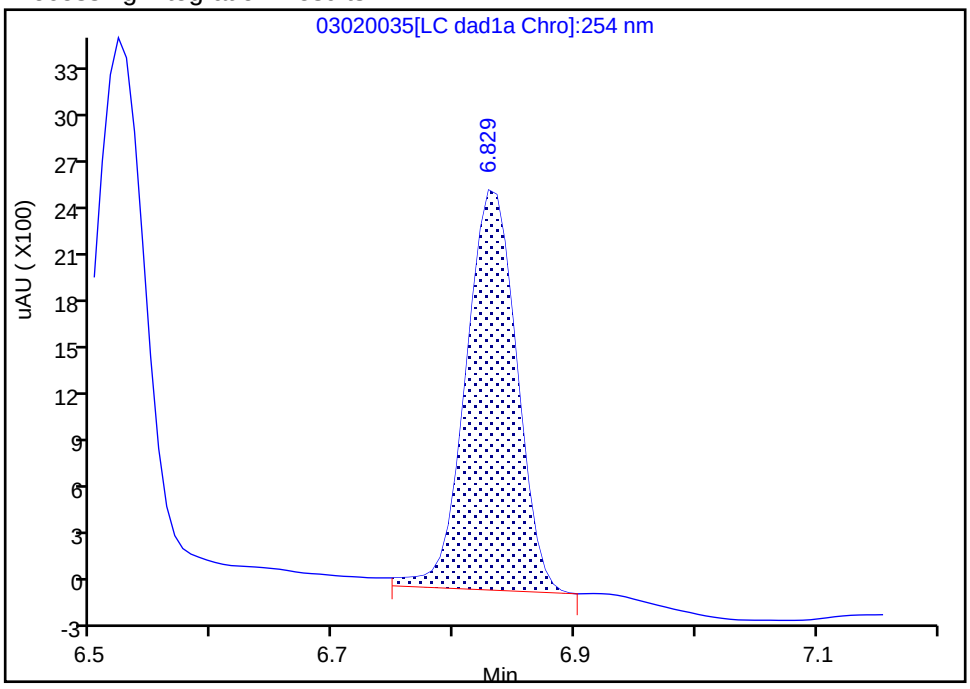
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020035.d				
Injection Date:	03-Mar-2021 02:07:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:		ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

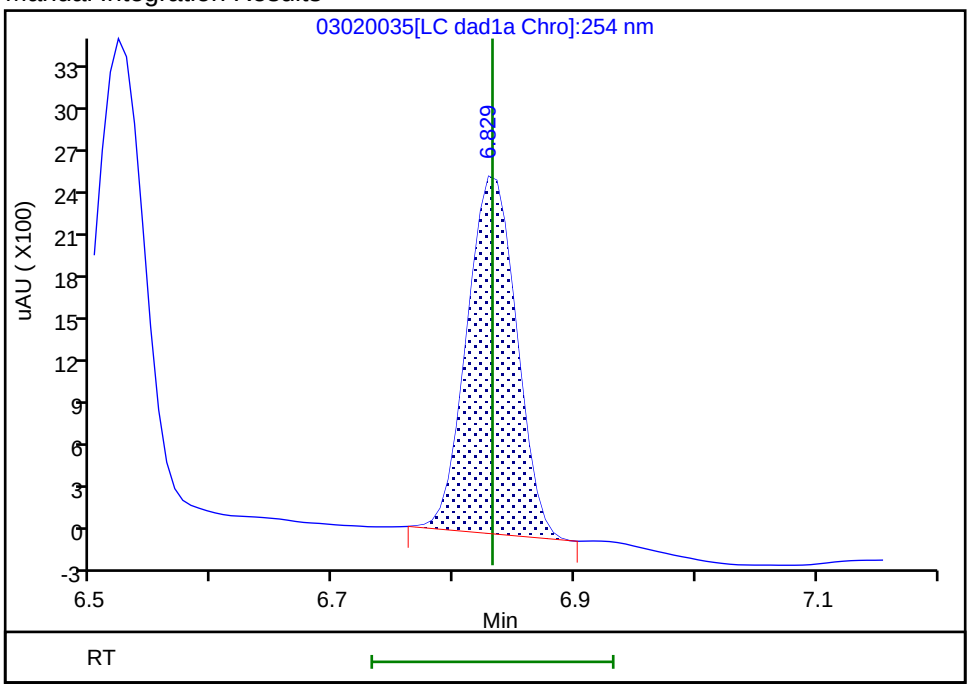
Processing Integration Results

RT: 6.83
Area: 7405
Amount: 0.051400
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 7121
Amount: 0.050106
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:41

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D
Lims ID: IC DMT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 03-Mar-2021 02:30:22 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 1
Misc. Info.: 280-0099486-036
Operator ID: Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 03-Mar-2021 13:32:31 Calib Date: 03-Mar-2021 02:30:22
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1629

First Level Reviewer: zhangji Date: 03-Mar-2021 13:21:03

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.521	6.518	0.003	3664	0.0200	0.0197	M
5 DNX	1	6.827	6.832	-0.005	2984	0.0200	0.0210	M
6 MNX	1	7.234	7.232	0.002	3082	0.0233	0.0236	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00008 Amount Added: 1.00 Units: uL

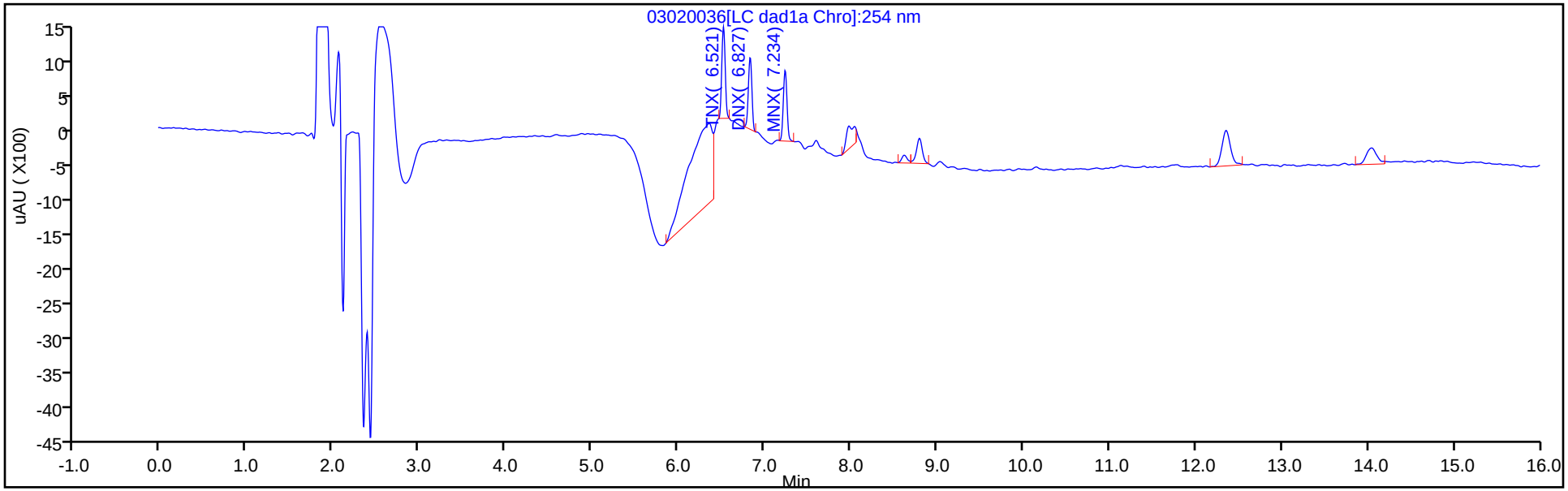
Report Date: 03-Mar-2021 13:32:31 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

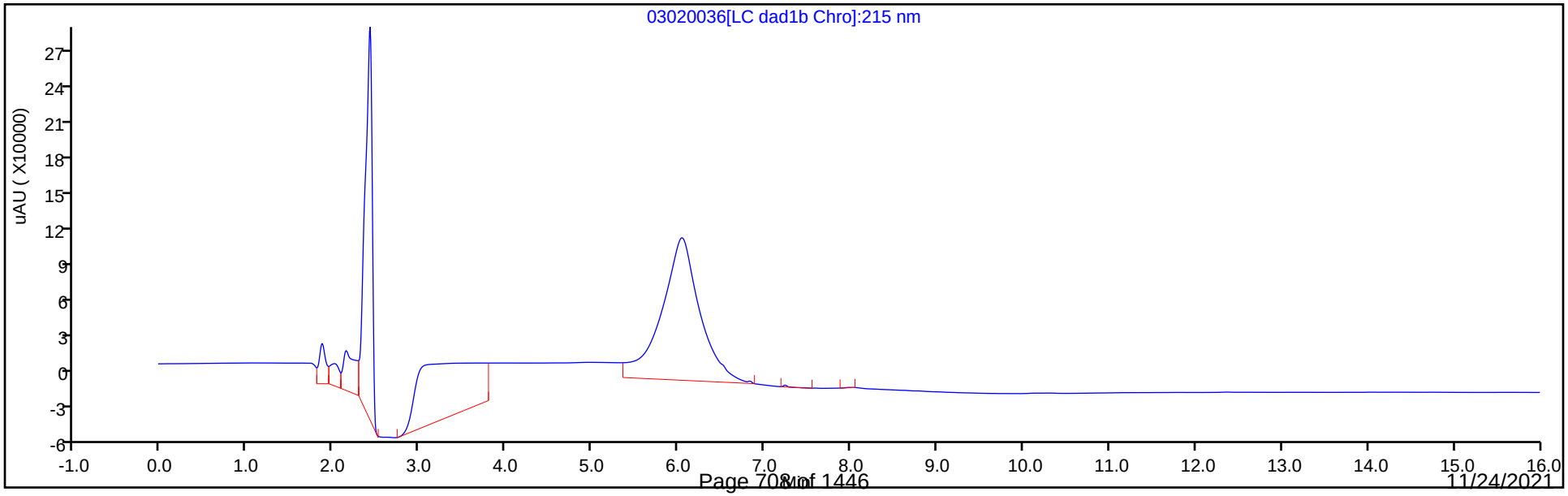
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020036.d

Injection Date:	03-Mar-2021 02:30:22	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	IC DMT 1			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

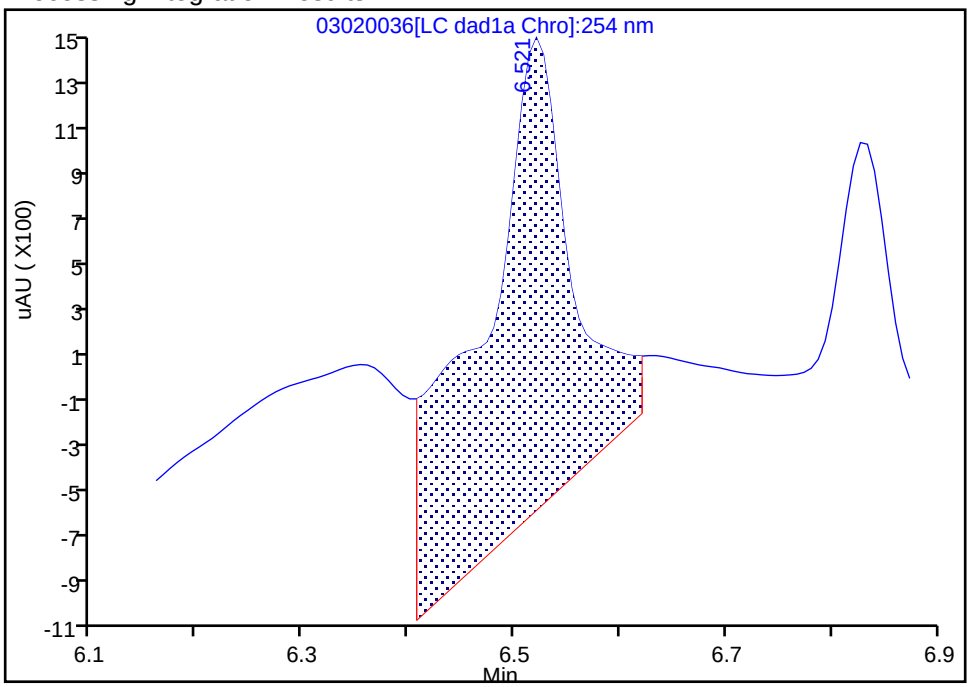
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020036.d		
Injection Date:	03-Mar-2021 02:30:22	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 1		
Client ID:			
Operator ID:		ALS Bottle#:	36 Worklist Smp#: 36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

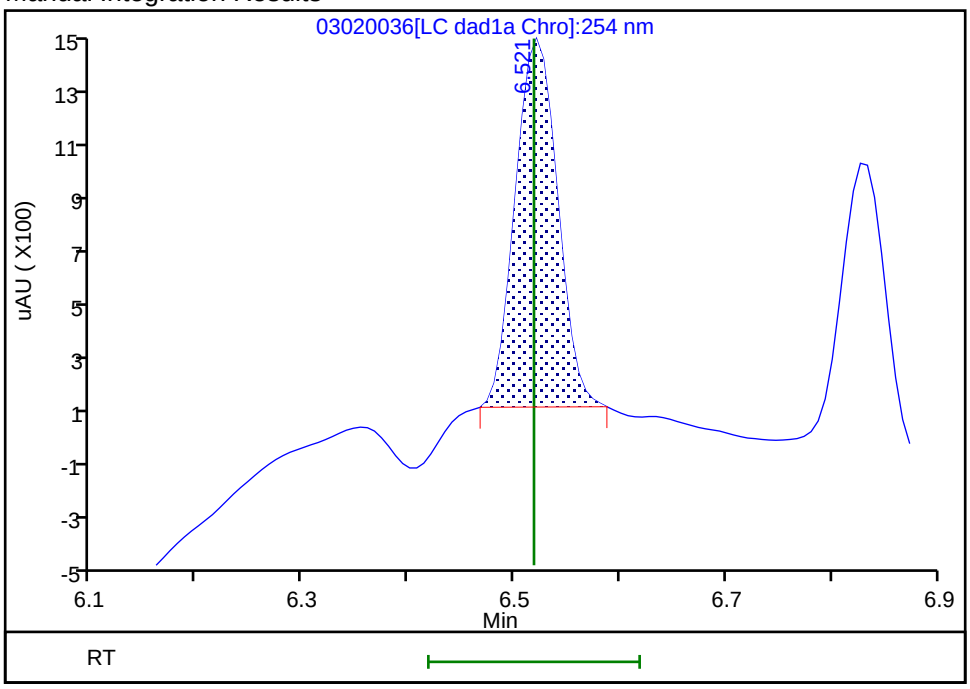
Processing Integration Results

RT: 6.52
Area: 12511
Amount: 0.051903
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 3664
Amount: 0.019719
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:52
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

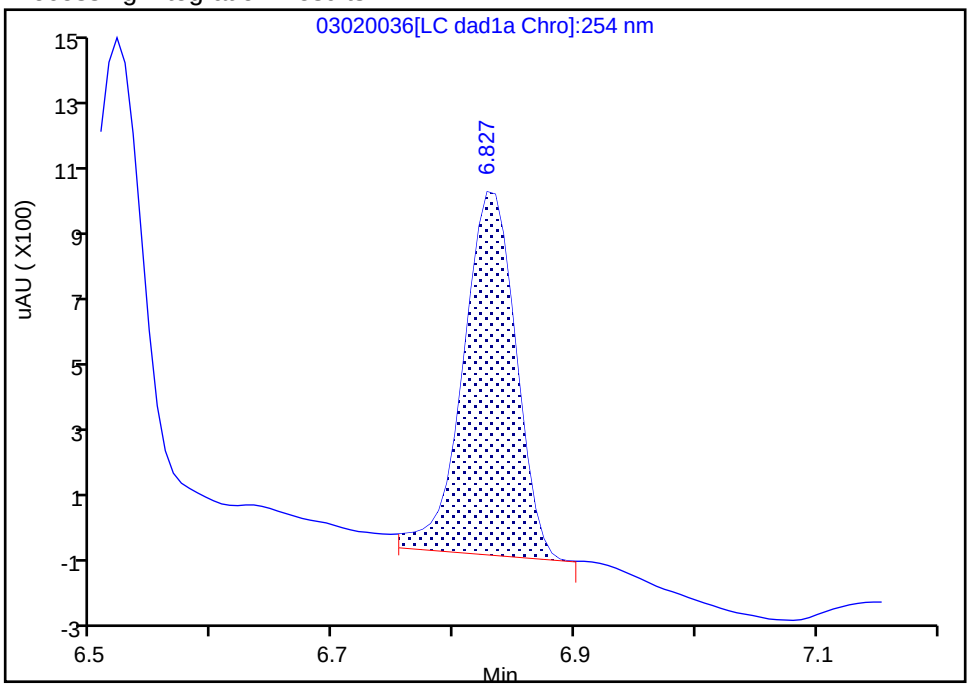
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020036.d				
Injection Date:	03-Mar-2021 02:30:22	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:		ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

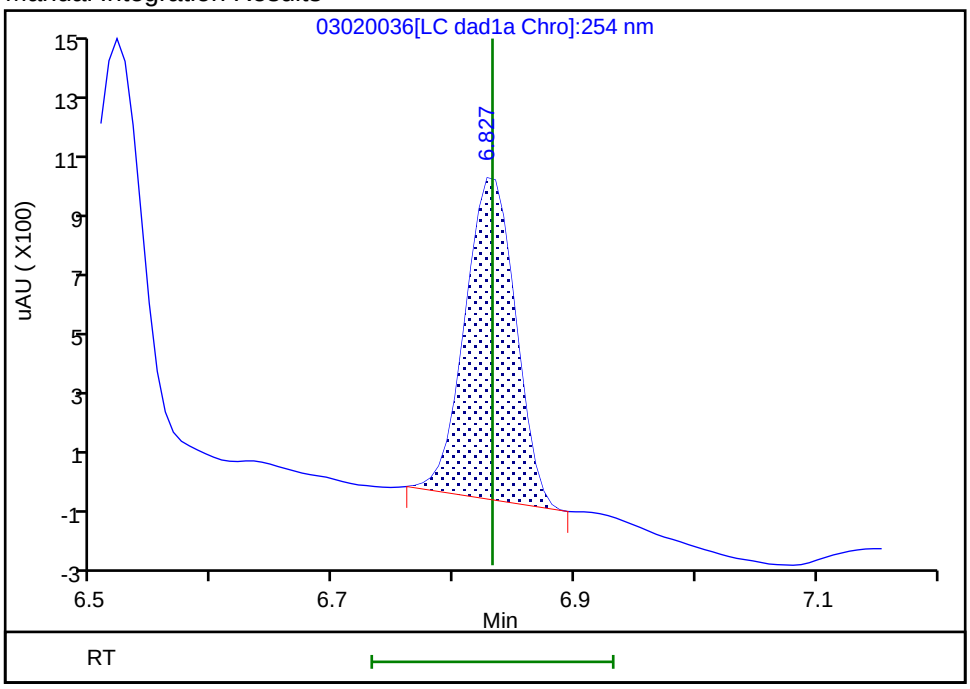
Processing Integration Results

RT: 6.83
Area: 3182
Amount: 0.022197
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 2984
Amount: 0.020996
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:20:57

Audit Action: Manually Integrated Audit Reason: Baseline

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

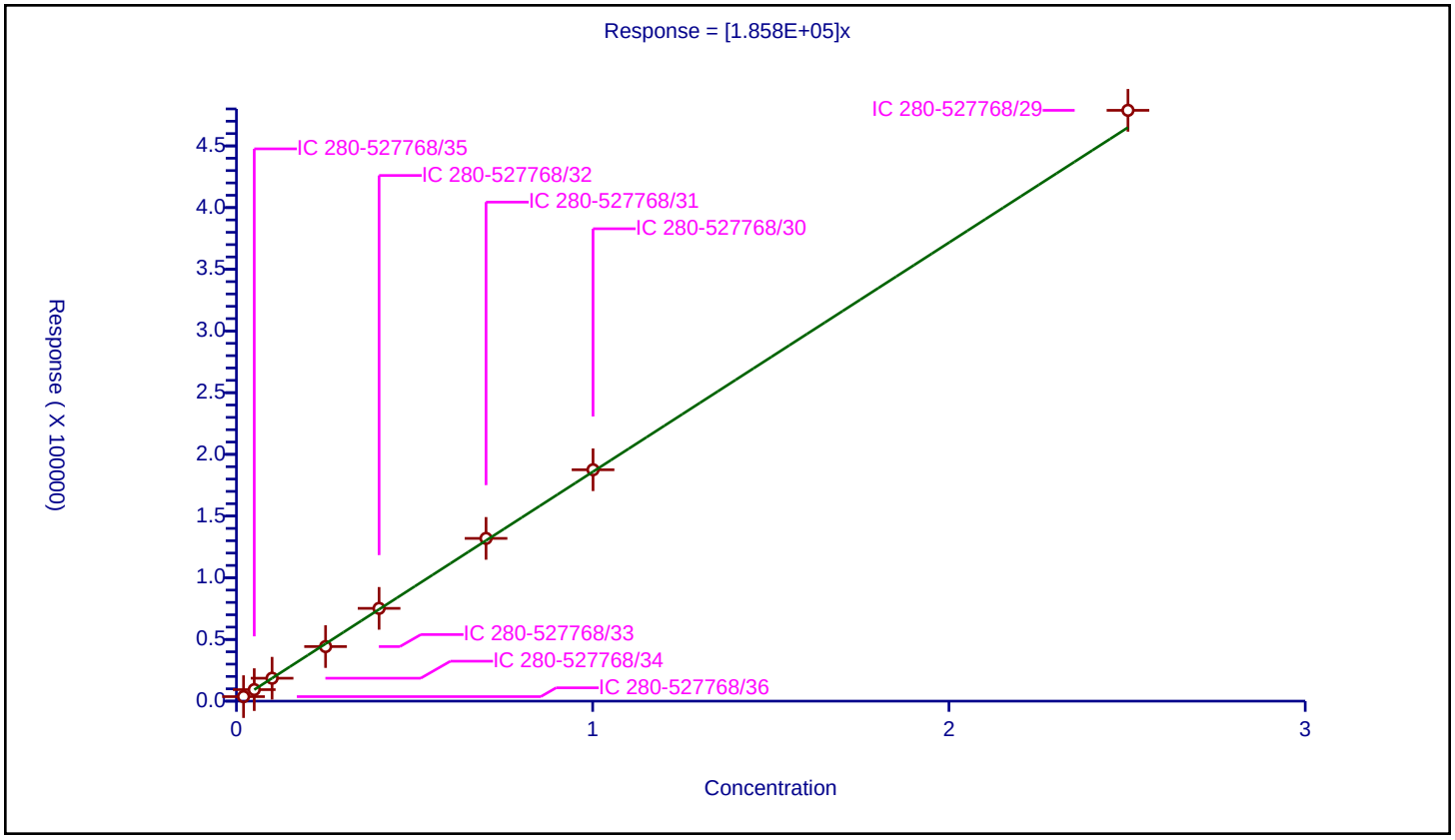
Curve Coefficients

Intercept:	0
Slope:	1.858E+05

Error Coefficients

Standard Error:	5380
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 280-527768/36	0.02002	3664.0			183016.983017	Y
2	IC 280-527768/35	0.05005	9328.0			186373.626374	Y
3	IC 280-527768/34	0.1001	18578.0			185594.405594	Y
4	IC 280-527768/33	0.25025	44228.0			176735.264735	Y
5	IC 280-527768/32	0.4004	75195.0			187799.7003	Y
6	IC 280-527768/31	0.7007	131907.0			188250.321107	Y
7	IC 280-527768/30	1.001	187526.0			187338.661339	Y
8	IC 280-527768/29	2.5025	478826.0			191339.060939	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

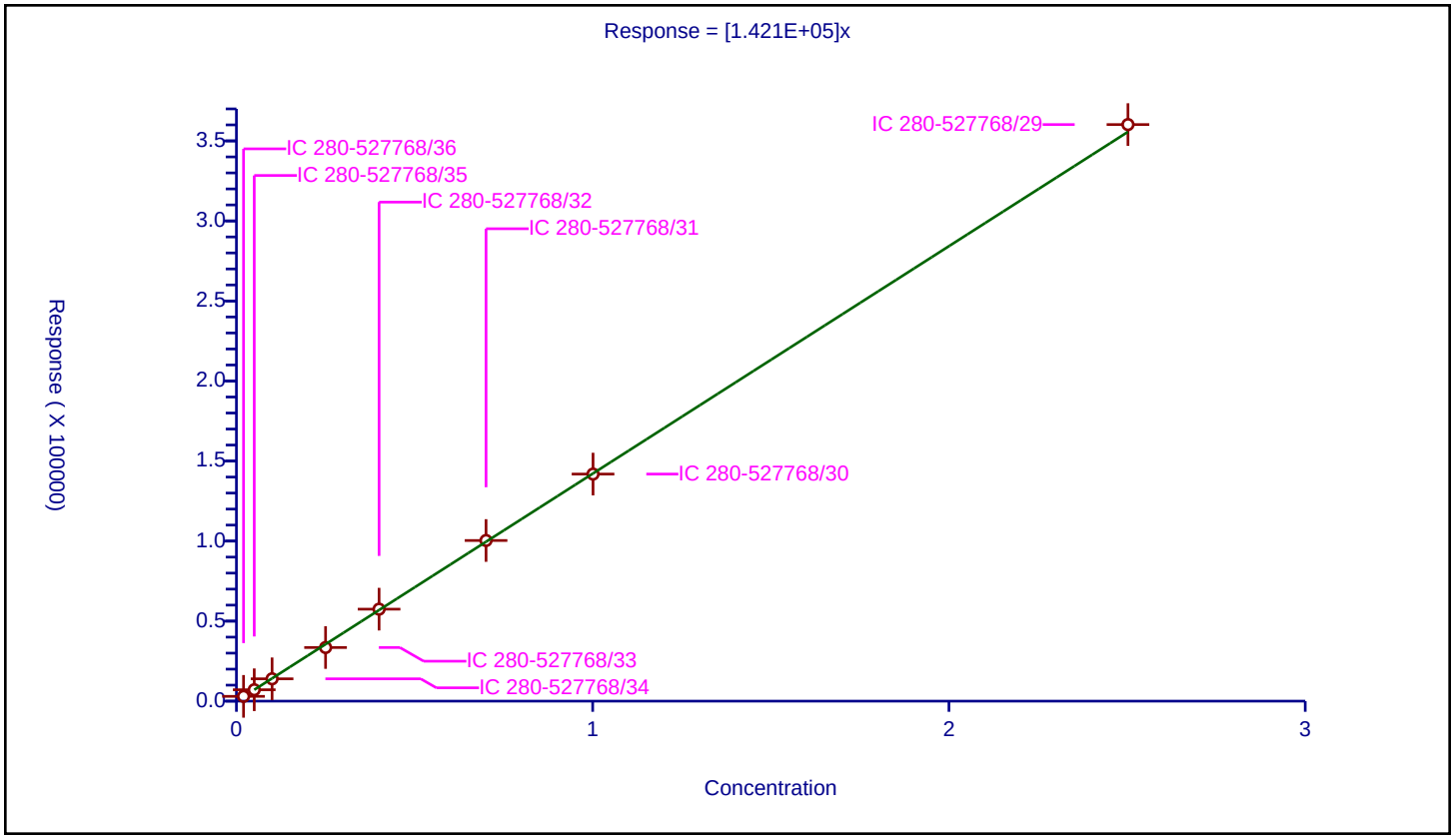
Curve Coefficients

Intercept:	0
Slope:	1.421E+05

Error Coefficients

Standard Error:	1930
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 280-527768/36	0.02002	2984.0			149050.949051	Y
2	IC 280-527768/35	0.05005	7121.0			142277.722278	Y
3	IC 280-527768/34	0.1001	13949.0			139350.649351	Y
4	IC 280-527768/33	0.25025	33502.0			133874.125874	Y
5	IC 280-527768/32	0.4004	57462.0			143511.488511	Y
6	IC 280-527768/31	0.7007	100368.0			143239.617525	Y
7	IC 280-527768/30	1.001	141853.0			141711.288711	Y
8	IC 280-527768/29	2.5025	360207.0			143938.861139	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

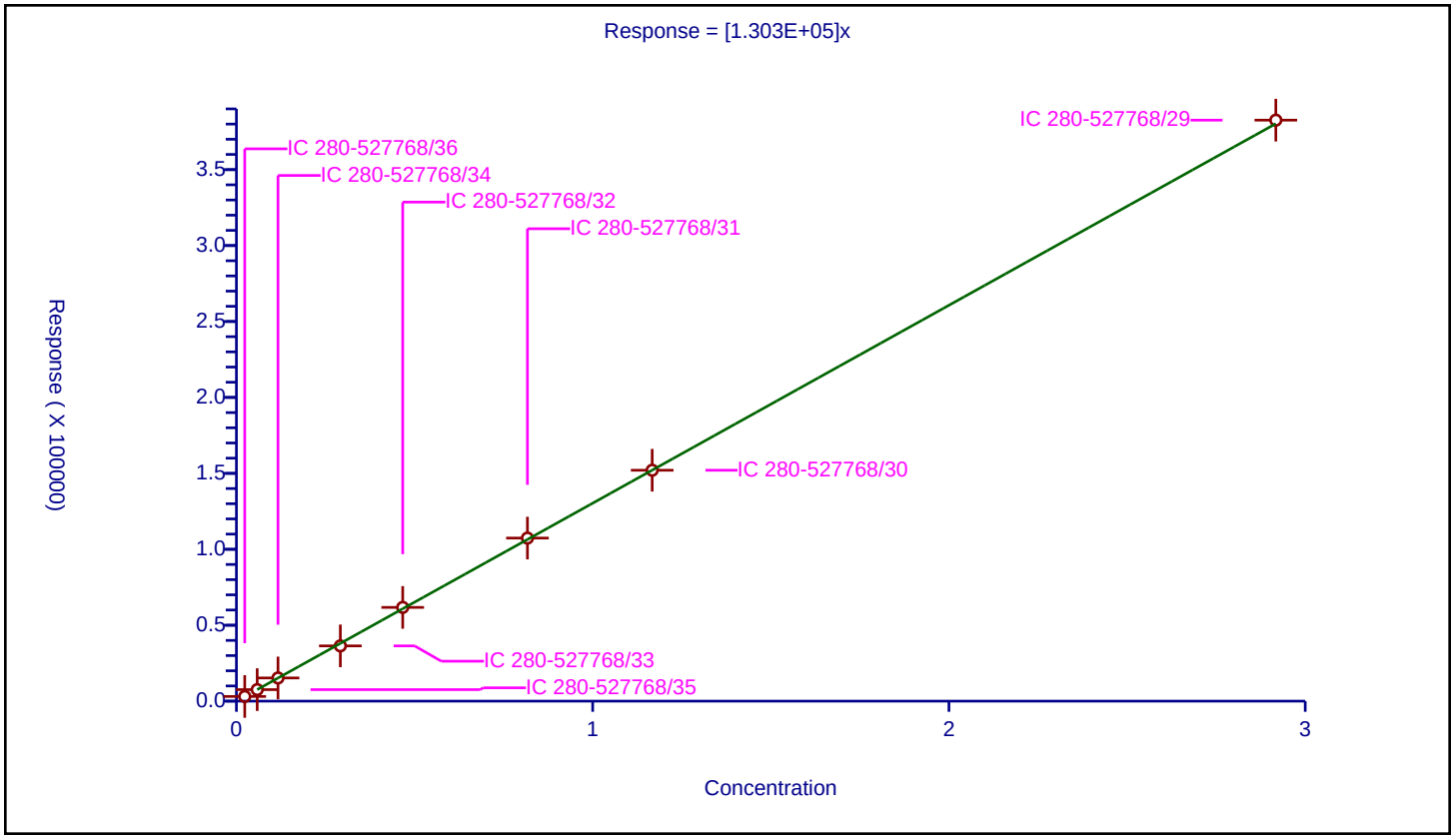
Curve Coefficients

Intercept:	0
Slope:	1.303E+05

Error Coefficients

Standard Error:	1180
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 280-527768/36	0.02334	3082.0			132047.98629	Y
2	IC 280-527768/35	0.05835	7585.0			129991.43102	Y
3	IC 280-527768/34	0.1167	15275.0			130891.17395	Y
4	IC 280-527768/33	0.29175	36376.0			124682.090831	Y
5	IC 280-527768/32	0.4668	61731.0			132242.930591	Y
6	IC 280-527768/31	0.8169	107376.0			131443.261109	Y
7	IC 280-527768/30	1.167	152050.0			130291.34533	Y
8	IC 280-527768/29	2.9175	382579.0			131132.476435	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1 Analy Batch No.: 534622

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:01 Calibration End Date: 05/01/2021 21:04 Calibration ID: 53145

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534622/19	019-1301.D
Level 2	IC 280-534622/18	018-1201.D
Level 3	IC 280-534622/17	017-1101.D
Level 4	IC 280-534622/16	016-1001.D
Level 5	IC 280-534622/15	015-0901.D
Level 6	IC 280-534622/14	014-0801.D
Level 7	IC 280-534622/13	013-0701.D
Level 8	IC 280-534622/12	012-0601.D
Level 9	IC 280-534622/11	011-0501.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	6.629	6.626	6.628	6.631	6.631	6.627	6.631	6.626	6.626		6.481 - 6.781	6.628
RDX	+++++	7.606	7.602	7.598	7.597	7.601	7.604	7.593	7.592		7.448 - 7.748	7.599
Picric acid	+++++	7.966	7.968	7.958	7.951	7.947	7.937	7.920	7.879		7.808 - 8.108	7.941
1,3,5-Trinitrobenzene	8.649	8.653	8.655	8.651	8.651	8.654	8.651	8.646	8.646		8.501 - 8.801	8.651
1,3-Dinitrobenzene	9.275	9.280	9.282	9.278	9.271	9.281	9.277	9.273	9.265		9.128 - 9.428	9.276
Nitrobenzene	9.662	9.666	9.662	9.664	9.657	9.667	9.664	9.659	9.652		9.514 - 9.814	9.661
Tetryl	9.975	9.980	9.982	9.978	9.977	9.981	9.977	9.973	9.972		9.828 - 10.128	9.977
Nitroglycerin	10.435	10.440	10.442	10.438	10.437	10.441	10.437	10.433	10.425		10.288 - 10.588	10.436
2,4,6-Trinitrotoluene	10.902	10.906	10.908	10.904	10.904	10.907	10.904	10.899	10.899		10.804 - 11.004	10.904
4-Amino-2,6-dinitrotoluene	11.109	11.106	11.115	11.111	11.104	11.114	11.104	11.099	11.099		11.011 - 11.211	11.107
2-Amino-4,6-dinitrotoluene	11.369	11.366	11.375	11.371	11.364	11.374	11.364	11.359	11.352		11.271 - 11.471	11.366
2,6-Dinitrotoluene	11.529	11.533	11.535	11.531	11.531	11.541	11.531	11.526	11.519		11.431 - 11.631	11.531
2,4-Dinitrotoluene	11.702	11.706	11.708	11.704	11.704	11.714	11.704	11.699	11.692		11.604 - 11.804	11.704
2-Nitrotoluene	12.575	12.573	12.575	12.578	12.571	12.581	12.571	12.566	12.565		12.428 - 12.728	12.573
4-Nitrotoluene	13.015	13.006	13.015	13.011	13.011	13.021	13.011	13.006	12.999		12.861 - 13.161	13.011
3-Nitrotoluene	13.602	13.600	13.602	13.604	13.597	13.607	13.597	13.593	13.592		13.454 - 13.754	13.599
PETN	14.682	14.680	14.688	14.684	14.684	14.694	14.684	14.679	14.679		14.534 - 14.834	14.684
1,2-Dinitrobenzene	8.522	8.526	8.522	8.525	8.517	8.527	8.524	8.520	8.512		8.375 - 8.675	8.522

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1 Analy Batch No.: 534622

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:01 Calibration End Date: 05/01/2021 21:04 Calibration ID: 53145

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534622/19	019-1301.D
Level 2	IC 280-534622/18	018-1201.D
Level 3	IC 280-534622/17	017-1101.D
Level 4	IC 280-534622/16	016-1001.D
Level 5	IC 280-534622/15	015-0901.D
Level 6	IC 280-534622/14	014-0801.D
Level 7	IC 280-534622/13	013-0701.D
Level 8	IC 280-534622/12	012-0601.D
Level 9	IC 280-534622/11	011-0501.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	90600 81044 83266	84000 83153	84840 83381	85610 83899	Ave		84421.4365				3.1		20.0			
RDX	+++++ 100772 100392	110350 101975	121080 101457	112450 101616	Ave		106261.468				7.1		20.0			
Picric acid	+++++ 78100 78816	92000 79550	91500 79403	83170 79230	Ave		82721.1071				7.0		20.0			
1,3,5-Trinitrobenzene	247605 211904 216811	201497 217647	226766 220329	220699 219598	Ave		220317.354				5.6		20.0			
1,3-Dinitrobenzene	304591 284922 294659	300349 293466	297944 294726	300389 295917	Ave		296329.299				1.9		20.0			
Nitrobenzene	198705 187737 194447	197809 193367	197052 194434	199980 194044	Ave		195285.948				1.9		20.0			
Tetryl	170858 167980 172330	166218 172575	177046 172692	178842 173240	Ave		172419.998				2.3		20.0			
Nitroglycerin	107780 65334 64661	80810 65580	73966 62107	71053 65275	Lin2	4204.13026	64107.7508							0.9980		0.9900

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 TestAmerica, Denver Job No.: 280-155138-1 Analy Batch No.: 534622

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:01 Calibration End Date: 05/01/2021 21:04 Calibration ID: 53145

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	211952 197876 204255	206972 203262	209442 203674	212012 204895	Ave		206037.868				2.2		20.0			
4-Amino-2,6-dinitrotoluene	159441 143209 145339	176424 145884	157203 145937	154895 146581	Ave		152767.994				7.0		20.0			
2-Amino-4,6-dinitrotoluene	211753 195992 200761	220767 202107	214920 201639	211185 203212	Ave		206926.219				3.9		20.0			
2,6-Dinitrotoluene	139841 139335 142809	146763 140697	146614 143092	144990 143569	Ave		143078.761				1.9		20.0			
2,4-Dinitrotoluene	293227 274622 284165	296066 283989	291773 282943	292450 283876	Ave		287012.272				2.4		20.0			
2-Nitrotoluene	134600 121368 124876	136850 124703	132320 124706	131380 124724	Ave		128391.846				4.2		20.0			
4-Nitrotoluene	117465 104032 107464	131387 107423	114251 107231	110609 107352	Ave		111912.732				7.5		20.0			
3-Nitrotoluene	157343 133626 137530	155894 136853	143596 136770	141648 136955	Ave		142246.281				6.1		20.0			
PETN	79010 71928 73997	74720 74156	74586 74227	75747 74637	Ave		74778.5667				2.5		20.0			
1,2-Dinitrobenzene	119500 126156 131759	119950 130943	130080 131307	132180 132080	Ave		128217.205				4.0		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 TestAmerica, Denver Job No.: 280-155138-1 Analy Batch No.: 534622

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:01 Calibration End Date: 05/01/2021 21:04 Calibration ID: 53145

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534622/19	019-1301.D
Level 2	IC 280-534622/18	018-1201.D
Level 3	IC 280-534622/17	017-1101.D
Level 4	IC 280-534622/16	016-1001.D
Level 5	IC 280-534622/15	015-0901.D
Level 6	IC 280-534622/14	014-0801.D
Level 7	IC 280-534622/13	013-0701.D
Level 8	IC 280-534622/12	012-0601.D
Level 9	IC 280-534622/11	011-0501.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	906	1680	4242	8561	20261	0.0100	0.0200	0.0500	0.100	0.250
		33261	58367	83899	208165		0.400	0.700	1.00	2.50	
RDX	Ave	+++++	2207	6054	11245	25193	+++++	0.0200	0.0500	0.100	0.250
		40790	71020	101616	250979		0.400	0.700	1.00	2.50	
Picric acid	Ave	+++++	1840	4575	8317	19525	+++++	0.0200	0.0500	0.100	0.250
		31820	55582	79230	197040		0.400	0.700	1.00	2.50	
1,3,5-Trinitrobenzene	Ave	2481	4038	11361	22114	53082	0.0100	0.0200	0.0501	0.100	0.251
		87233	154539	220037	543111		0.401	0.701	1.00	2.51	
1,3-Dinitrobenzene	Ave	3052	6019	14927	30099	71373	0.0100	0.0200	0.0501	0.100	0.251
		117621	206721	296509	738121		0.401	0.701	1.00	2.51	
Nitrobenzene	Ave	1995	3972	9892	20078	47122	0.0100	0.0201	0.0502	0.100	0.251
		77656	136648	194820	488061		0.402	0.703	1.00	2.51	
Tetryl	Ave	1712	3331	8870	17920	42079	0.0100	0.0200	0.0501	0.100	0.251
		69168	121126	173586	431686		0.401	0.701	1.00	2.51	
Nitroglycerin	Lin2	10778	16162	36983	71053	163334	0.100	0.200	0.500	1.00	2.50
		262320	434747	652752	1616536		4.00	7.00	10.0	25.0	
2,4,6-Trinitrotoluene	Ave	2128	4156	10514	21286	49667	0.0100	0.0201	0.0502	0.100	0.251
		81630	143142	205715	512679		0.402	0.703	1.00	2.51	
4-Amino-2,6-dinitrotoluene	Ave	1596	3532	7868	15505	35838	0.0100	0.0200	0.0501	0.100	0.250
		58412	102258	146728	363710		0.400	0.701	1.00	2.50	
2-Amino-4,6-dinitrotoluene	Ave	2126	4433	10789	21203	49194	0.0100	0.0201	0.0502	0.100	0.251
		81166	141712	204025	503909		0.402	0.703	1.00	2.51	
2,6-Dinitrotoluene	Ave	1404	2947	7360	14557	34973	0.0100	0.0201	0.0502	0.100	0.251
		56504	100565	144143	358451		0.402	0.703	1.00	2.51	
2,4-Dinitrotoluene	Ave	2944	5945	14647	29362	68930	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 TestAmerica, Denver Job No.: 280-155138-1 Analy Batch No.: 534622

SDG No.:

Instrument ID: CHHPLC_X3 GC Column: UltraCarb5u ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:01 Calibration End Date: 05/01/2021 21:04 Calibration ID: 53145

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
		114050	198852	285012	713254		0.402	0.703	1.00	2.51	
2-Nitrotoluene	Ave	1346	2737	6616	13138	30342	0.0100	0.0200	0.0500	0.100	0.250
		49881	87294	124724	312191		0.400	0.700	1.00	2.50	
4-Nitrotoluene	Ave	1177	2633	5724	11083	26060	0.0100	0.0200	0.0501	0.100	0.251
		43055	75212	107567	269197		0.401	0.701	1.00	2.51	
3-Nitrotoluene	Ave	1575	3121	7187	14179	33440	0.0100	0.0200	0.0501	0.100	0.250
		54796	95835	137092	344169		0.400	0.701	1.00	2.50	
PETN	Ave	7901	14944	37293	75747	179819	0.100	0.200	0.500	1.00	2.50
		296622	519589	746366	1849935		4.00	7.00	10.0	25.0	
1,2-Dinitrobenzene	Ave	1195	2399	6504	13218	31539	0.0100	0.0200	0.0500	0.100	0.250
		52377	91915	132080	329398		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\20210501-101094.b\011-0501.D
Lims ID: IC INT 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 01-May-2021 18:01:04 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 9
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:06 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:15:51

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.626	6.631	-0.005	208165	2.50	2.47	M
7 RDX	1	7.592	7.598	-0.006	250979	2.50	2.36	
8 2,4,6-Trinitrophenol	1	7.879	7.958	-0.079	197040	2.50	2.38	
$ 9 1,2-Dinitrobenzene	1	8.512	8.525	-0.013	329398	2.50	2.57	
10 1,3,5-Trinitrobenzene	1	8.646	8.651	-0.005	543111	2.51	2.47	
11 1,3-Dinitrobenzene	1	9.265	9.278	-0.013	738121	2.51	2.49	
12 Nitrobenzene	1	9.652	9.664	-0.012	488061	2.51	2.50	
14 Tetryl	1	9.972	9.978	-0.006	431686	2.51	2.50	
15 Nitroglycerin	2	10.425	10.438	-0.013	1616536	25.0	25.2	
16 2,4,6-Trinitrotoluene	1	10.899	10.904	-0.005	512679	2.51	2.49	
17 4-Amino-2,6-dinitrotoluene	1	11.099	11.111	-0.012	363710	2.50	2.38	
18 2-Amino-4,6-dinitrotoluene	1	11.352	11.371	-0.019	503909	2.51	2.44	
19 2,6-Dinitrotoluene	1	11.519	11.531	-0.012	358451	2.51	2.51	
20 2,4-Dinitrotoluene	1	11.692	11.704	-0.012	713254	2.51	2.49	
21 o-Nitrotoluene	1	12.565	12.578	-0.013	312191	2.50	2.43	
22 p-Nitrotoluene	1	12.999	13.011	-0.012	269197	2.51	2.41	
23 m-Nitrotoluene	1	13.592	13.604	-0.012	344169	2.50	2.42	
24 PETN	2	14.679	14.684	-0.005	1849935	25.0	24.7	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 250.00 Units: uL

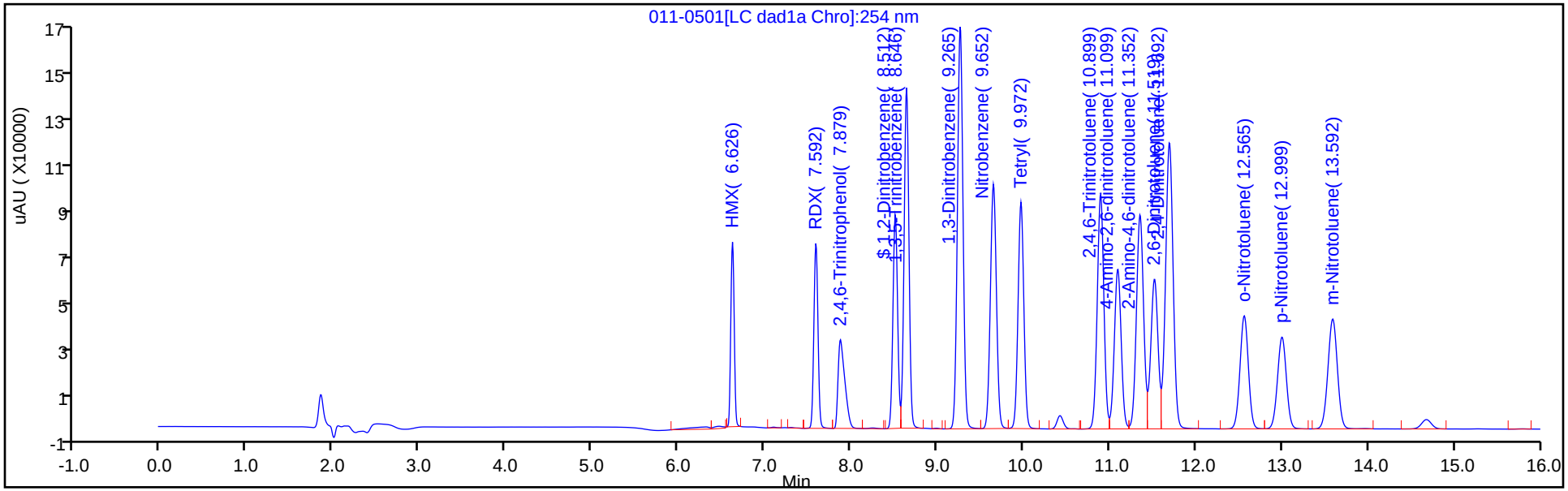
Report Date: 04-May-2021 13:25:06 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

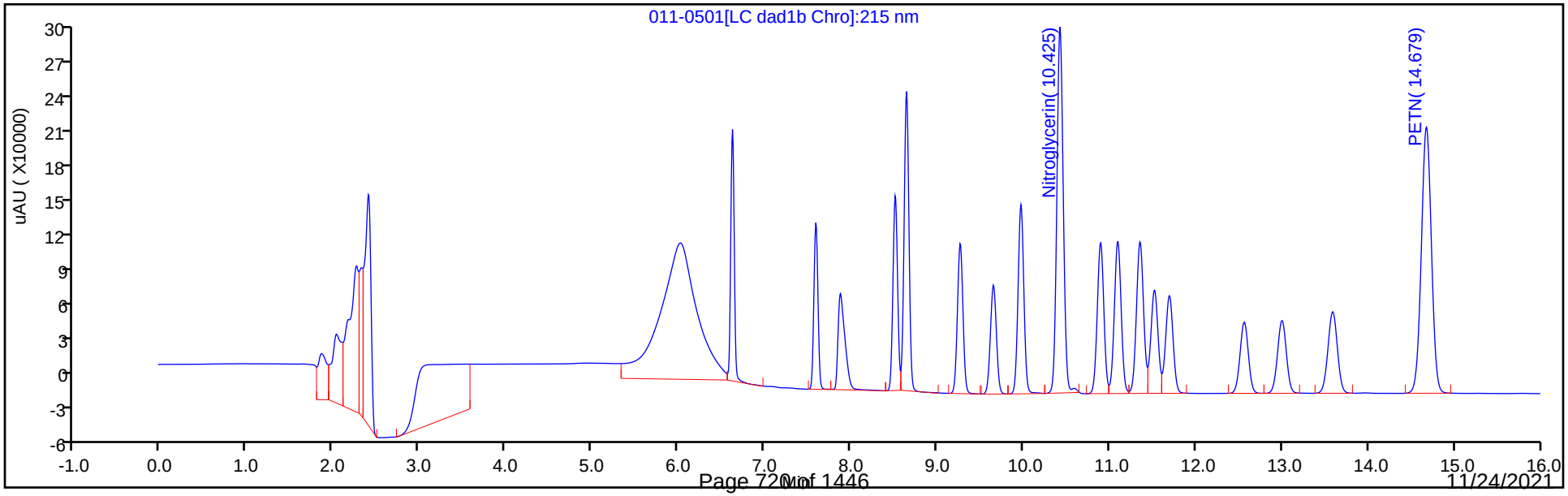
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\011-0501.d

Injection Date:	01-May-2021 18:01:04	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

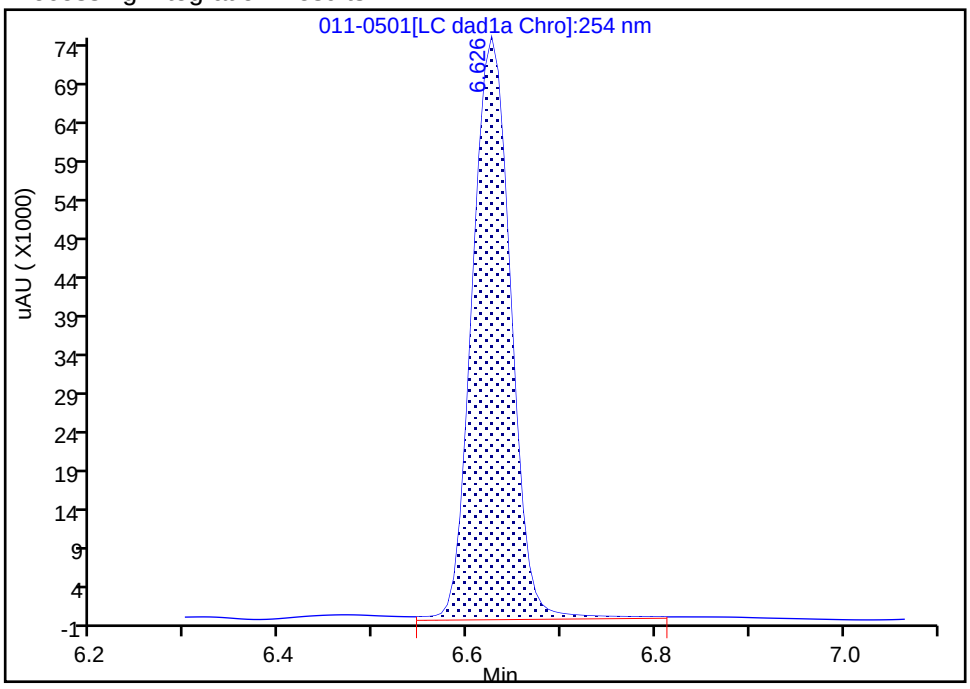
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\011-0501.d				
Injection Date:	01-May-2021 18:01:04	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

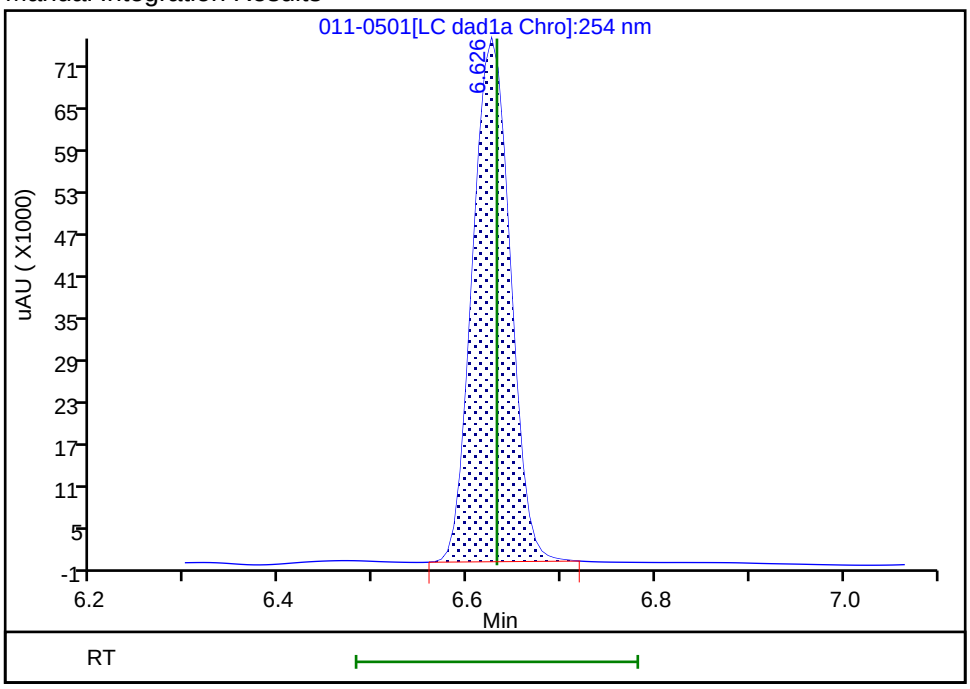
Processing Integration Results

RT: 6.63
Area: 214677
Amount: 2.481723
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 208165
Amount: 2.465784
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:15:42
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\012-0601.D
Lims ID: IC INT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 01-May-2021 18:23:59 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 8
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:07 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:04

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.626	6.631	-0.005	83899	1.00	0.99	M
7 RDX	1	7.593	7.598	-0.005	101616	1.00	0.9563	
8 2,4,6-Trinitrophenol	1	7.920	7.958	-0.038	79230	1.00	0.9578	
$ 9 1,2-Dinitrobenzene	1	8.520	8.525	-0.005	132080	1.00	1.03	
10 1,3,5-Trinitrobenzene	1	8.646	8.651	-0.005	220037	1.00	1.00	
11 1,3-Dinitrobenzene	1	9.273	9.278	-0.005	296509	1.00	1.00	
12 Nitrobenzene	1	9.659	9.664	-0.005	194820	1.00	1.00	
14 Tetryl	1	9.973	9.978	-0.005	173586	1.00	1.01	
15 Nitroglycerin	2	10.433	10.438	-0.005	652752	10.0	10.1	
16 2,4,6-Trinitrotoluene	1	10.899	10.904	-0.005	205715	1.00	1.00	
17 4-Amino-2,6-dinitrotoluene	1	11.099	11.111	-0.012	146728	1.00	0.9605	
18 2-Amino-4,6-dinitrotoluene	1	11.359	11.371	-0.012	204025	1.00	0.9860	
19 2,6-Dinitrotoluene	1	11.526	11.531	-0.005	144143	1.00	1.01	
20 2,4-Dinitrotoluene	1	11.699	11.704	-0.005	285012	1.00	0.99	
21 o-Nitrotoluene	1	12.566	12.578	-0.012	124724	1.00	0.9714	
22 p-Nitrotoluene	1	13.006	13.011	-0.005	107567	1.00	0.9612	
23 m-Nitrotoluene	1	13.593	13.604	-0.011	137092	1.00	0.9638	
24 PETN	2	14.679	14.684	-0.005	746366	10.0	9.98	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 100.00 Units: uL

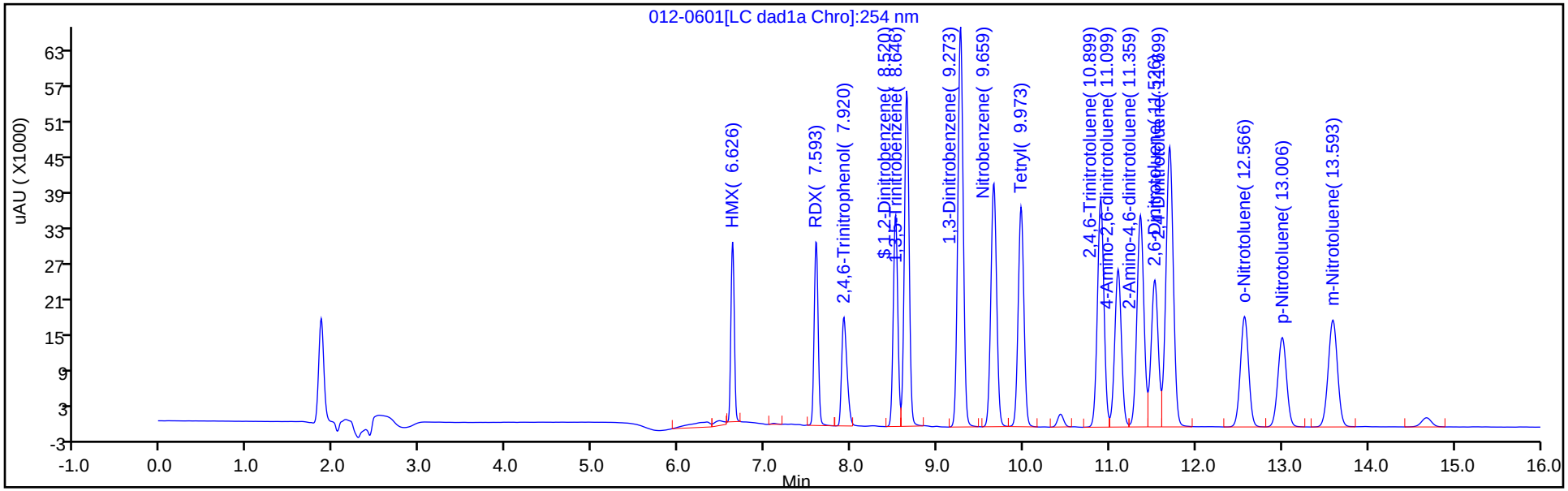
Report Date: 04-May-2021 13:25:07 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

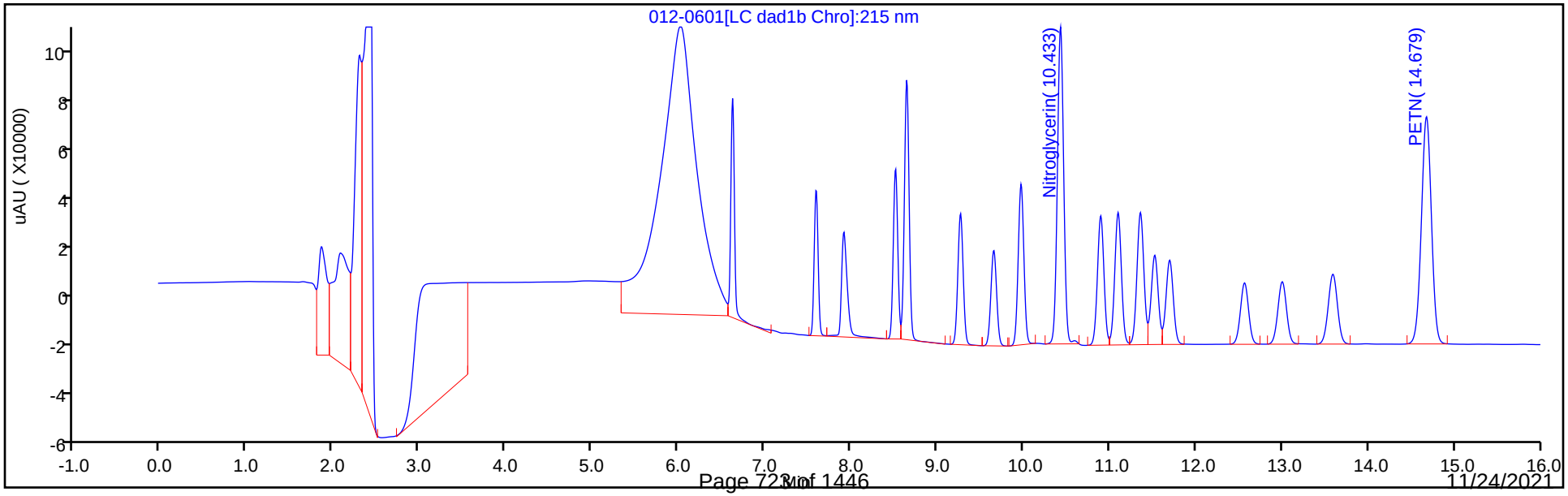
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\012-0601.d

Injection Date:	01-May-2021 18:23:59	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

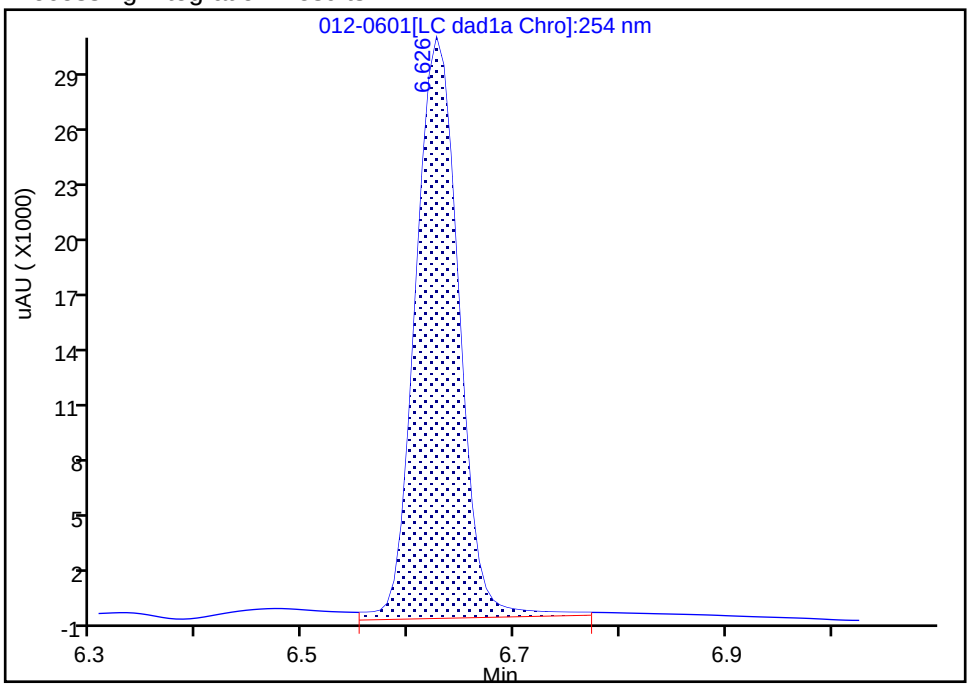
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\012-0601.d				
Injection Date:	01-May-2021 18:23:59	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

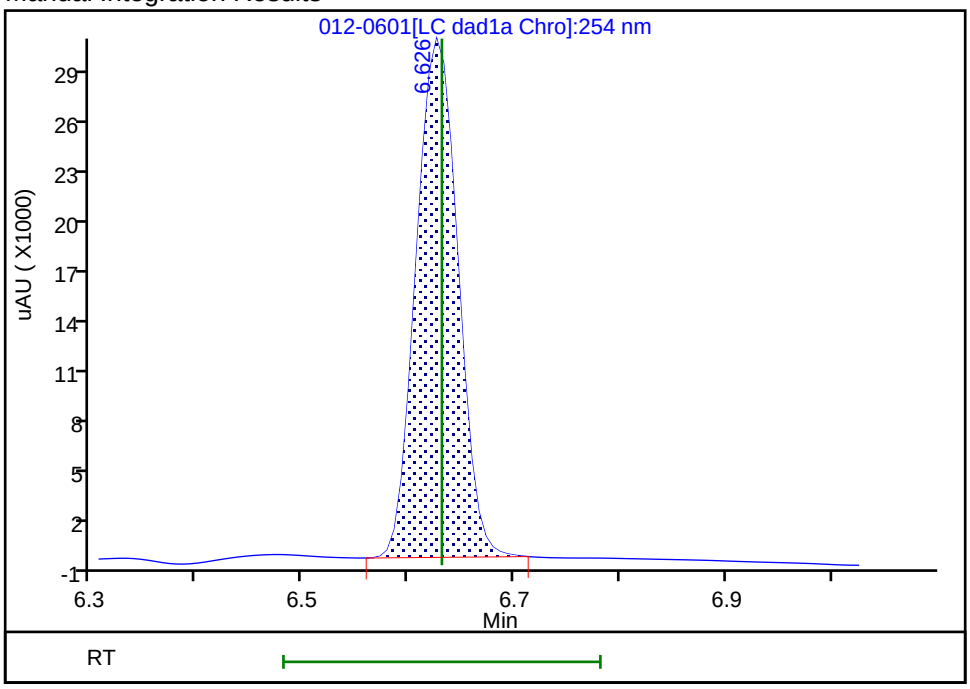
Processing Integration Results

RT: 6.63
Area: 88052
Amount: 1.025258
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 83899
Amount: 0.993812
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:15:59

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\013-0701.D
Lims ID: IC INT 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-May-2021 18:46:55 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 7
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:07 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:11

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.631	6.631	0.000	58367	0.7000	0.6914	M
7 RDX	1	7.604	7.598	0.006	71020	0.7000	0.6684	
8 2,4,6-Trinitrophenol	1	7.937	7.958	-0.021	55582	0.7000	0.6719	
$ 9 1,2-Dinitrobenzene	1	8.524	8.525	-0.001	91915	0.7000	0.7169	
10 1,3,5-Trinitrobenzene	1	8.651	8.651	0.000	154539	0.7014	0.7014	
11 1,3-Dinitrobenzene	1	9.277	9.278	-0.001	206721	0.7014	0.6976	
12 Nitrobenzene	1	9.664	9.664	0.000	136648	0.7028	0.6997	
14 Tetryl	1	9.977	9.978	-0.001	121126	0.7014	0.7025	
15 Nitroglycerin	2	10.437	10.438	-0.001	434747	7.00	6.72	
16 2,4,6-Trinitrotoluene	1	10.904	10.904	0.000	143142	0.7028	0.6947	
17 4-Amino-2,6-dinitrotoluene	1	11.104	11.111	-0.007	102258	0.7007	0.6694	
18 2-Amino-4,6-dinitrotoluene	1	11.364	11.371	-0.007	141712	0.7028	0.6848	
19 2,6-Dinitrotoluene	1	11.531	11.531	0.000	100565	0.7028	0.7029	
20 2,4-Dinitrotoluene	1	11.704	11.704	0.000	198852	0.7028	0.6928	
21 o-Nitrotoluene	1	12.571	12.578	-0.007	87294	0.7000	0.6799	
22 p-Nitrotoluene	1	13.011	13.011	0.000	75212	0.7014	0.6721	
23 m-Nitrotoluene	1	13.597	13.604	-0.007	95835	0.7007	0.6737	
24 PETN	2	14.684	14.684	0.000	519589	7.00	6.95	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 70.00 Units: uL

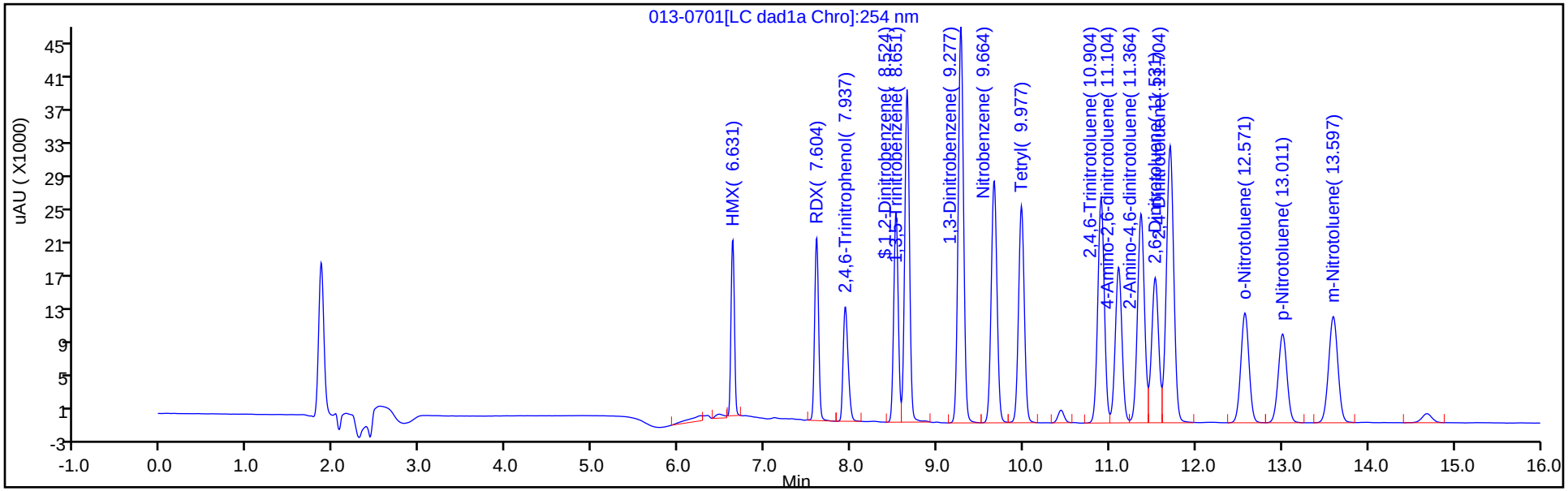
Report Date: 04-May-2021 13:25:07 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

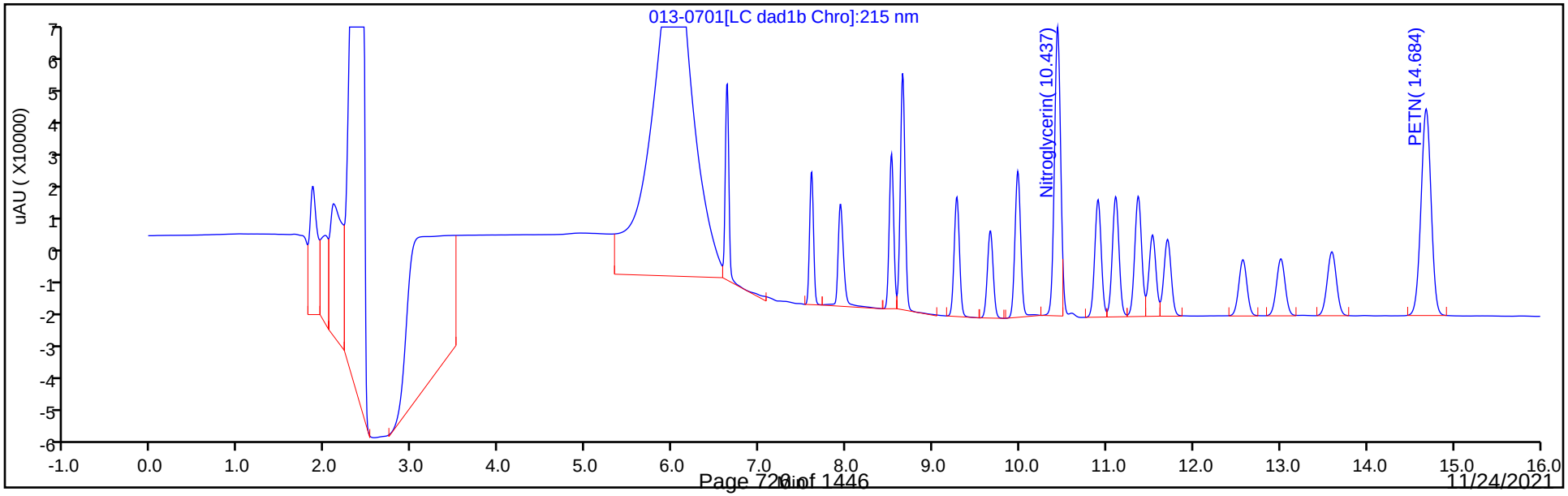
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\013-0701.d

Injection Date:	01-May-2021 18:46:55	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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

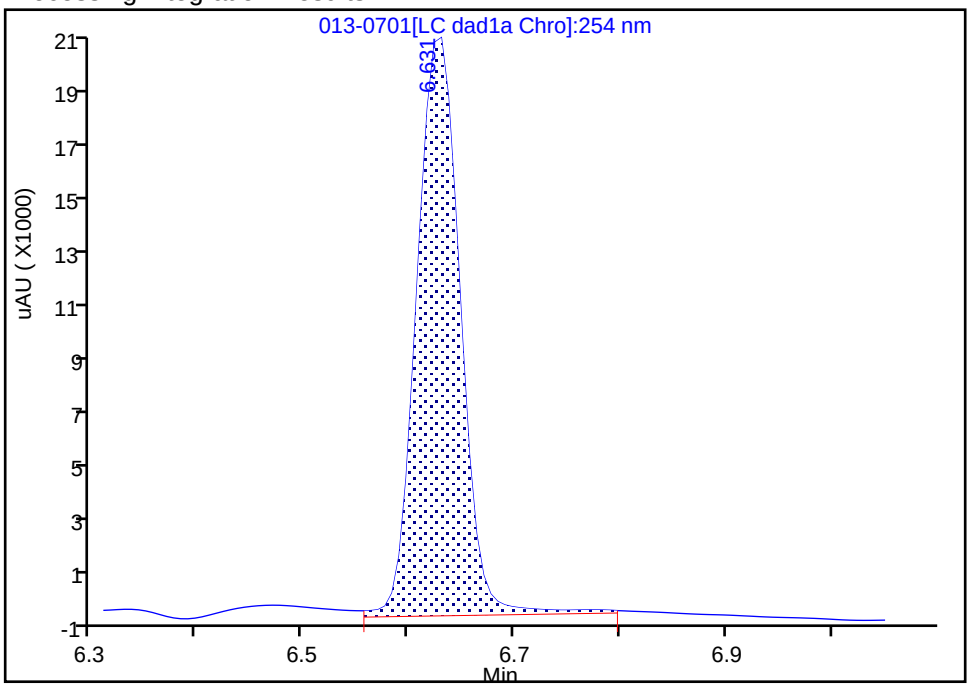
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\013-0701.d				
Injection Date:	01-May-2021 18:46:55	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

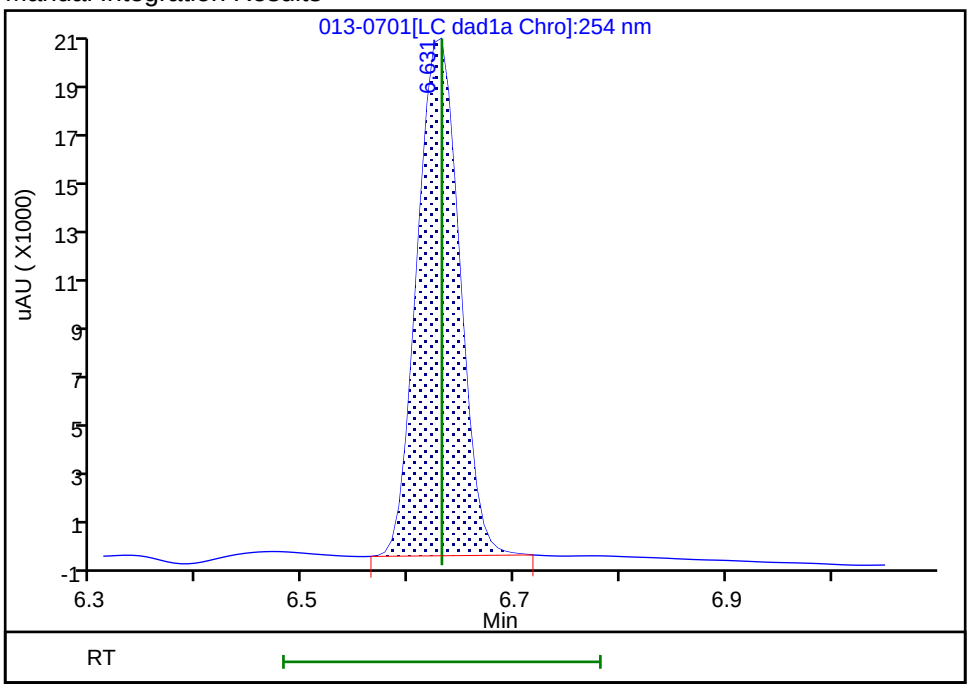
Processing Integration Results

RT: 6.63
Area: 61109
Amount: 0.713851
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 58367
Amount: 0.691377
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:16:10
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\014-0801.D
Lims ID: IC INT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-May-2021 19:09:54 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 6
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:08 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:20

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.627	6.631	-0.004	33261	0.4000	0.3940	M
7 RDX	1	7.601	7.598	0.003	40790	0.4000	0.3839	
8 2,4,6-Trinitrophenol	1	7.947	7.958	-0.011	31820	0.4000	0.3847	
$ 9 1,2-Dinitrobenzene	1	8.527	8.525	0.002	52377	0.4000	0.4085	
10 1,3,5-Trinitrobenzene	1	8.654	8.651	0.003	87233	0.4008	0.3959	
11 1,3-Dinitrobenzene	1	9.281	9.278	0.003	117621	0.4008	0.3969	
12 Nitrobenzene	1	9.667	9.664	0.003	77656	0.4016	0.3977	
14 Tetryl	1	9.981	9.978	0.003	69168	0.4008	0.4012	
15 Nitroglycerin	2	10.441	10.438	0.003	262320	4.00	4.03	
16 2,4,6-Trinitrotoluene	1	10.907	10.904	0.003	81630	0.4016	0.3962	
17 4-Amino-2,6-dinitrotoluene	1	11.114	11.111	0.003	58412	0.4004	0.3824	
18 2-Amino-4,6-dinitrotoluene	1	11.374	11.371	0.003	81166	0.4016	0.3922	
19 2,6-Dinitrotoluene	1	11.541	11.531	0.010	56504	0.4016	0.3949	
20 2,4-Dinitrotoluene	1	11.714	11.704	0.010	114050	0.4016	0.3974	
21 o-Nitrotoluene	1	12.581	12.578	0.003	49881	0.4000	0.3885	
22 p-Nitrotoluene	1	13.021	13.011	0.010	43055	0.4008	0.3847	
23 m-Nitrotoluene	1	13.607	13.604	0.003	54796	0.4004	0.3852	
24 PETN	2	14.694	14.684	0.010	296622	4.00	3.97	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 40.00 Units: uL

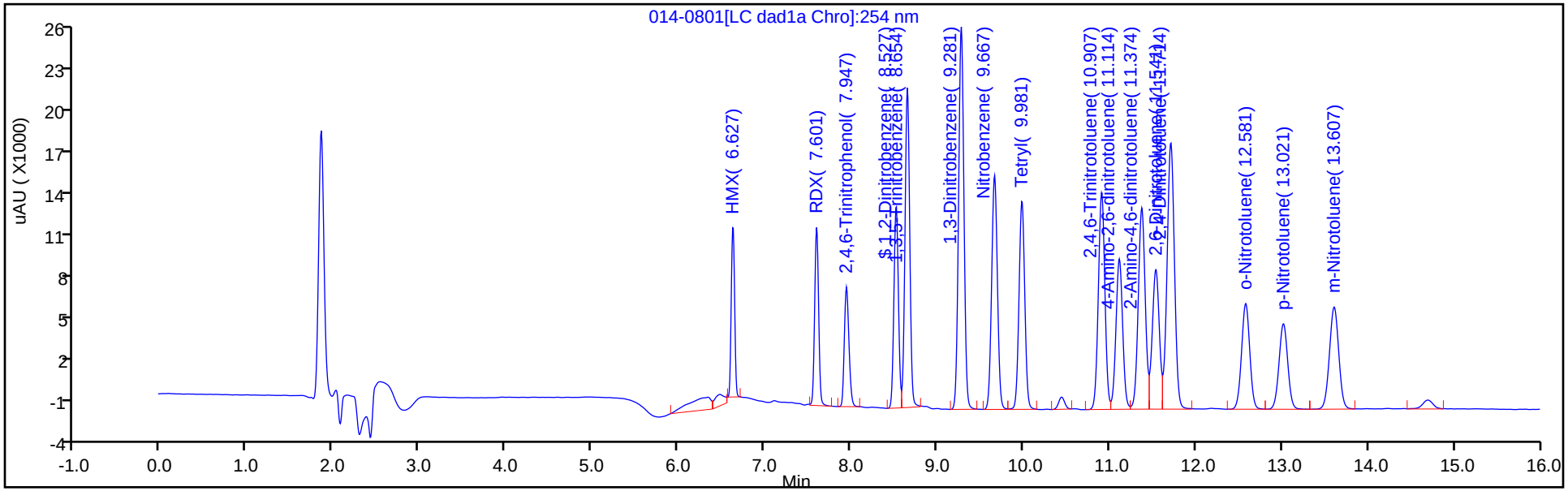
Report Date: 04-May-2021 13:25:08 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

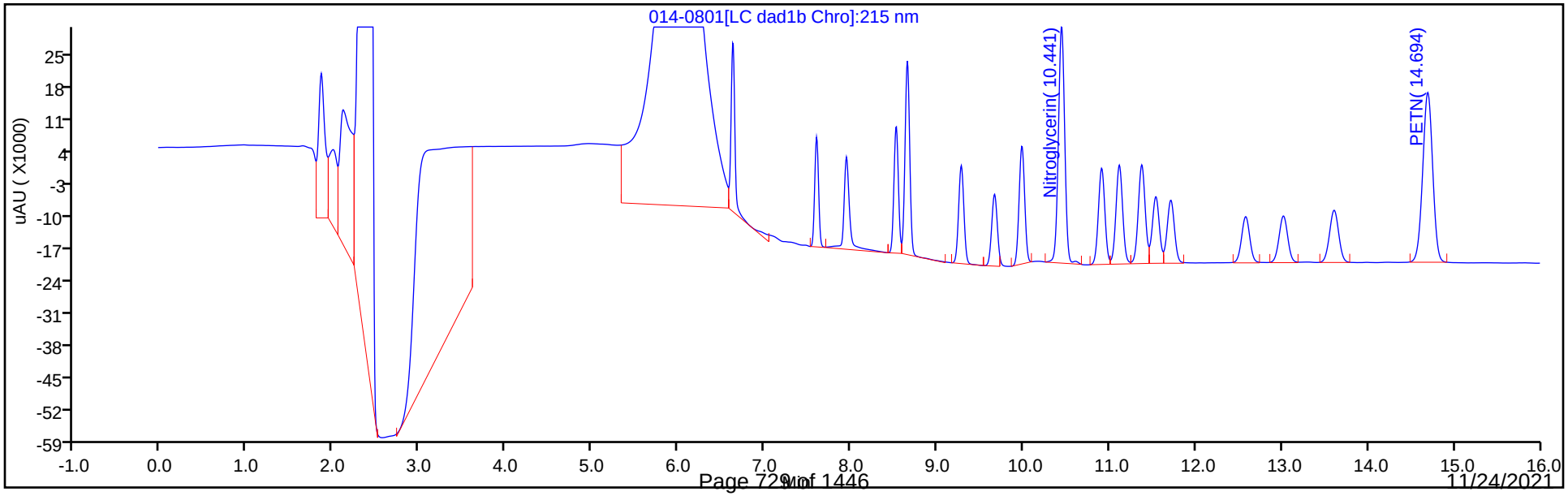
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\014-0801.d

Injection Date:	01-May-2021 19:09:54	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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

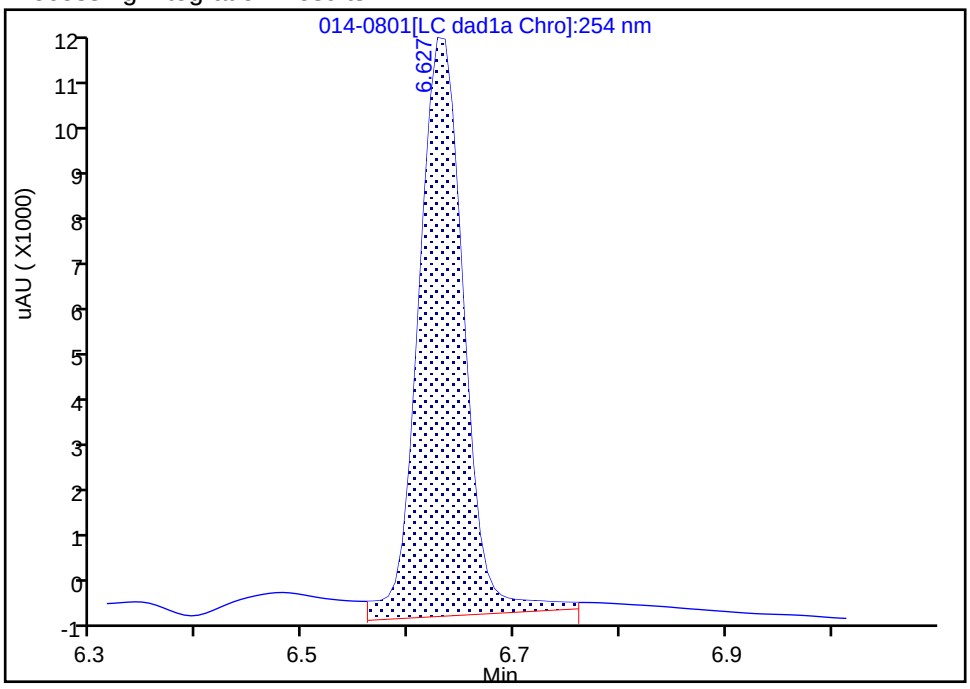
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\014-0801.d				
Injection Date:	01-May-2021 19:09:54	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

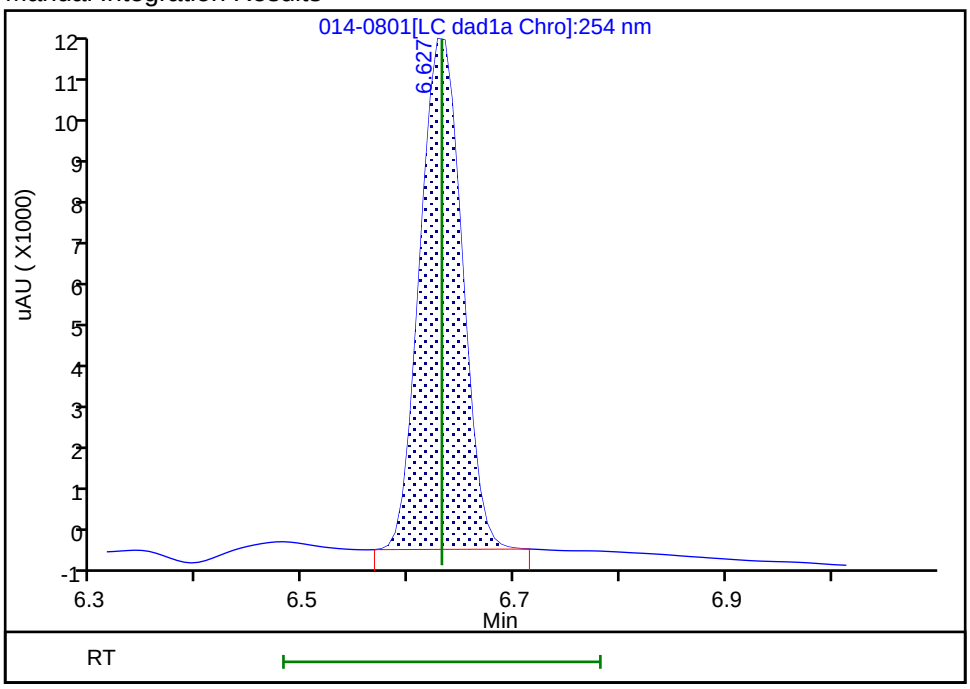
Processing Integration Results

RT: 6.63
Area: 36722
Amount: 0.425419
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 33261
Amount: 0.393988
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:16:17

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\015-0901.D
Lims ID: IC INT 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-May-2021 19:32:52 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 5
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:08 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:29

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.631	6.631	0.000	20261	0.2500	0.2400	M
7 RDX	1	7.597	7.598	-0.001	25193	0.2500	0.2371	
8 2,4,6-Trinitrophenol	1	7.951	7.958	-0.007	19525	0.2500	0.2360	
$ 9 1,2-Dinitrobenzene	1	8.517	8.525	-0.008	31539	0.2500	0.2460	
10 1,3,5-Trinitrobenzene	1	8.651	8.651	0.000	53082	0.2505	0.2409	
11 1,3-Dinitrobenzene	1	9.271	9.278	-0.007	71373	0.2505	0.2409	
12 Nitrobenzene	1	9.657	9.664	-0.007	47122	0.2510	0.2413	
14 Tetryl	1	9.977	9.978	-0.001	42079	0.2505	0.2440	
15 Nitroglycerin	2	10.437	10.438	-0.001	163334	2.50	2.48	
16 2,4,6-Trinitrotoluene	1	10.904	10.904	0.000	49667	0.2510	0.2411	
17 4-Amino-2,6-dinitrotoluene	1	11.104	11.111	-0.007	35838	0.2503	0.2346	
18 2-Amino-4,6-dinitrotoluene	1	11.364	11.371	-0.007	49194	0.2510	0.2377	
19 2,6-Dinitrotoluene	1	11.531	11.531	0.000	34973	0.2510	0.2444	
20 2,4-Dinitrotoluene	1	11.704	11.704	0.000	68930	0.2510	0.2402	
21 o-Nitrotoluene	1	12.571	12.578	-0.007	30342	0.2500	0.2363	
22 p-Nitrotoluene	1	13.011	13.011	0.000	26060	0.2505	0.2329	
23 m-Nitrotoluene	1	13.597	13.604	-0.007	33440	0.2503	0.2351	
24 PETN	2	14.684	14.684	0.000	179819	2.50	2.40	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 25.00 Units: uL

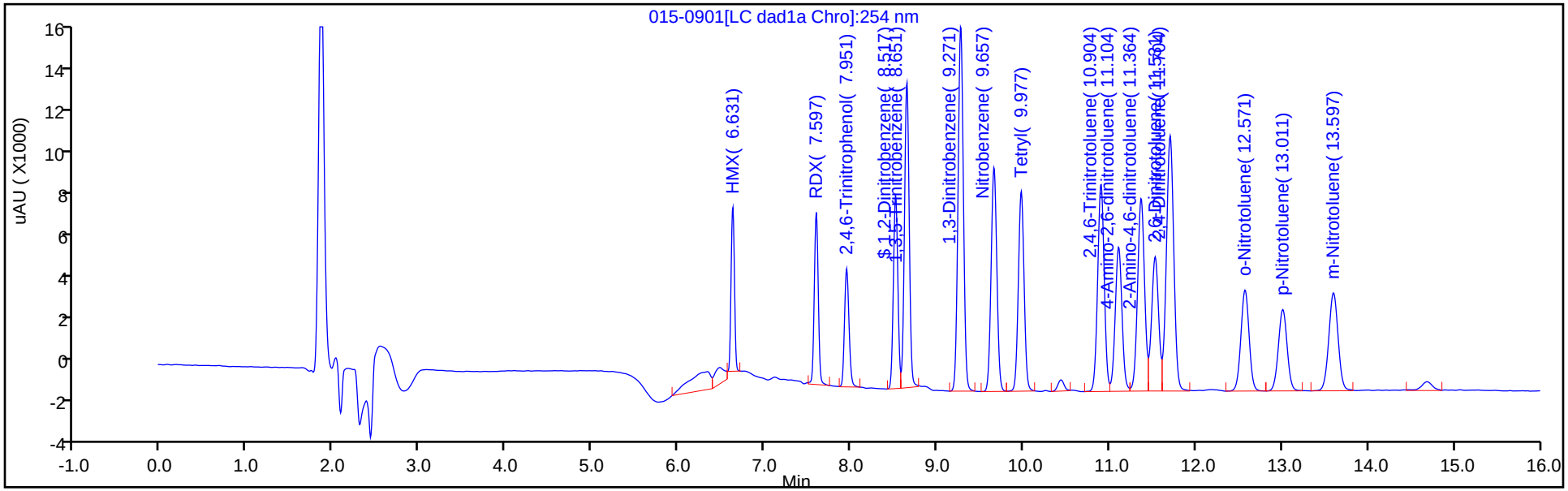
Report Date: 04-May-2021 13:25:08 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

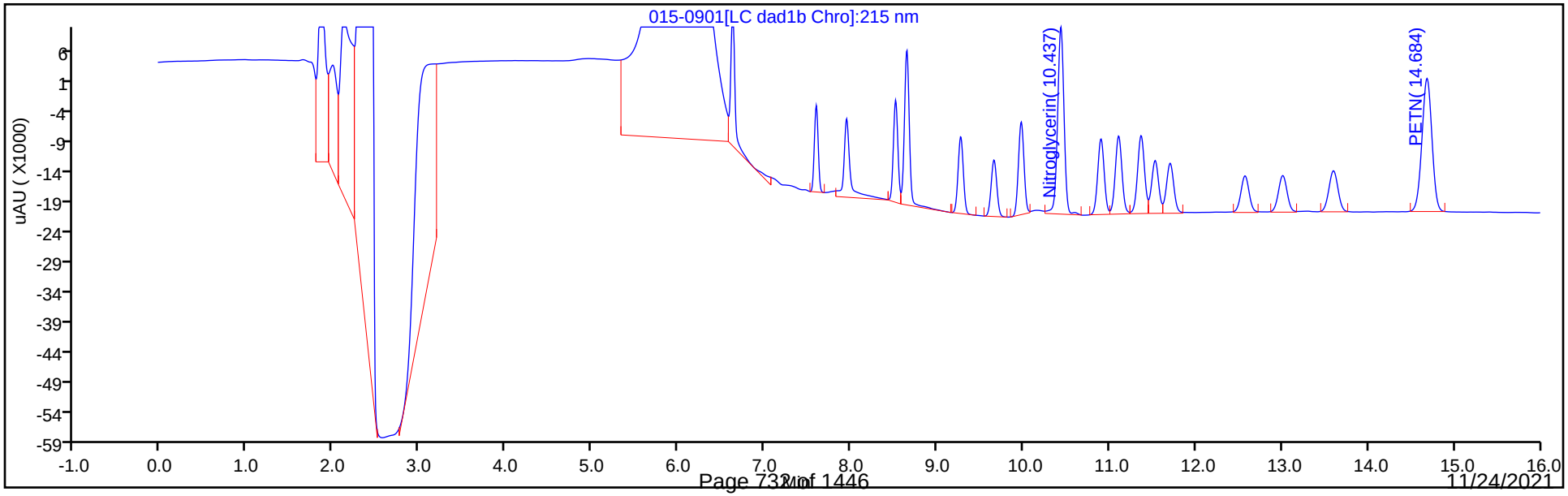
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\015-0901.d

Injection Date:	01-May-2021 19:32:52	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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

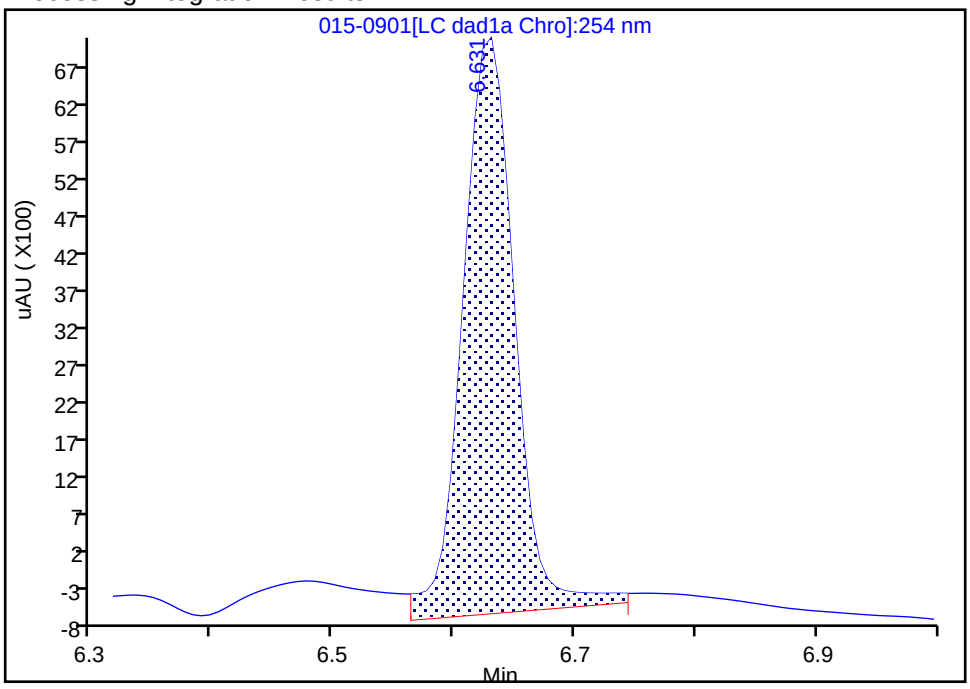
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\015-0901.d				
Injection Date:	01-May-2021 19:32:52	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

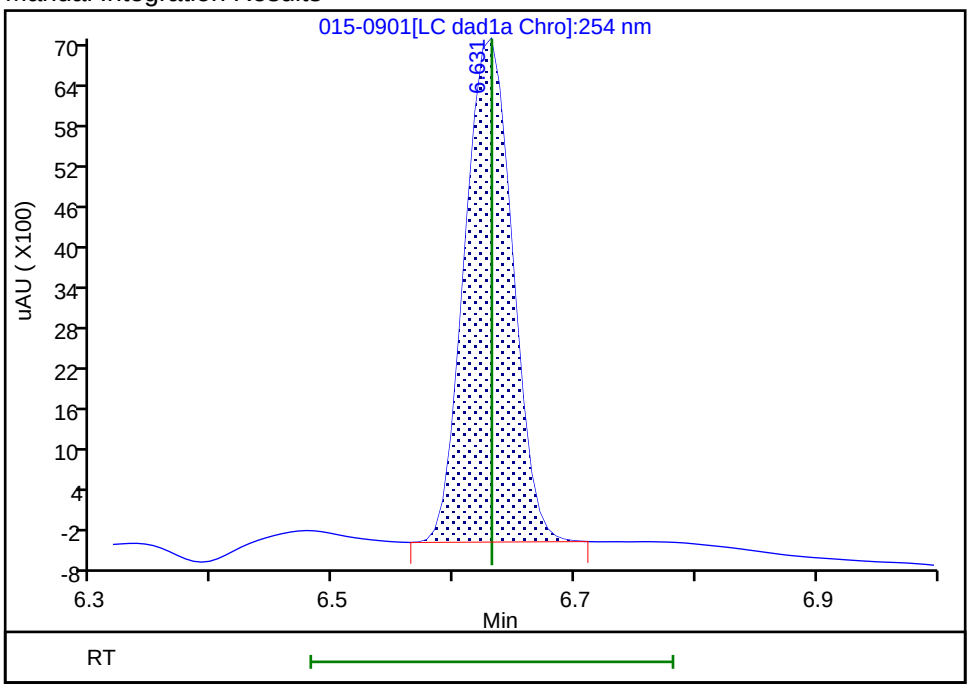
Processing Integration Results

RT: 6.63
Area: 22828
Amount: 0.260662
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 20261
Amount: 0.239998
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:16:27

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\016-1001.D
Lims ID: IC INT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-May-2021 19:55:49 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 4
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:09 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:38

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.631	6.631	0.000	8561	0.1000	0.1014	M
	7 RDX	1	7.598	7.598	0.000	11245	0.1000	0.1058	
	8 2,4,6-Trinitrophenol	1	7.958	7.958	0.000	8317	0.1000	0.1005	
$	9 1,2-Dinitrobenzene	1	8.525	8.525	0.000	13218	0.1000	0.1031	
	10 1,3,5-Trinitrobenzene	1	8.651	8.651	0.000	22114	0.1002	0.1004	
	11 1,3-Dinitrobenzene	1	9.278	9.278	0.000	30099	0.1002	0.1016	
	12 Nitrobenzene	1	9.664	9.664	0.000	20078	0.1004	0.1028	
	14 Tetryl	1	9.978	9.978	0.000	17920	0.1002	0.1039	
	15 Nitroglycerin	2	10.438	10.438	0.000	71053	1.00	1.04	
	16 2,4,6-Trinitrotoluene	1	10.904	10.904	0.000	21286	0.1004	0.1033	
	17 4-Amino-2,6-dinitrotoluene	1	11.111	11.111	0.000	15505	0.1001	0.1015	
	18 2-Amino-4,6-dinitrotoluene	1	11.371	11.371	0.000	21203	0.1004	0.1025	
	19 2,6-Dinitrotoluene	1	11.531	11.531	0.000	14557	0.1004	0.1017	
	20 2,4-Dinitrotoluene	1	11.704	11.704	0.000	29362	0.1004	0.1023	
	21 o-Nitrotoluene	1	12.578	12.578	0.000	13138	0.1000	0.1023	
	22 p-Nitrotoluene	1	13.011	13.011	0.000	11083	0.1002	0.0990	
	23 m-Nitrotoluene	1	13.604	13.604	0.000	14179	0.1001	0.0997	
	24 PETN	2	14.684	14.684	0.000	75747	1.00	1.01	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 10.00 Units: uL

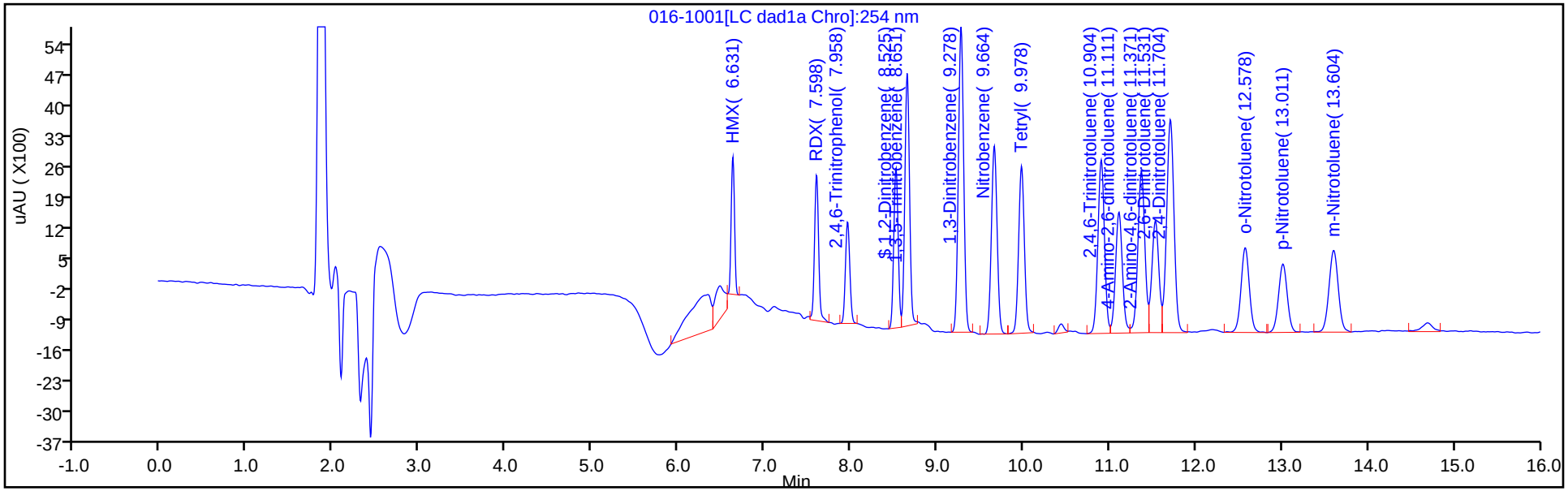
Report Date: 04-May-2021 13:25:09 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

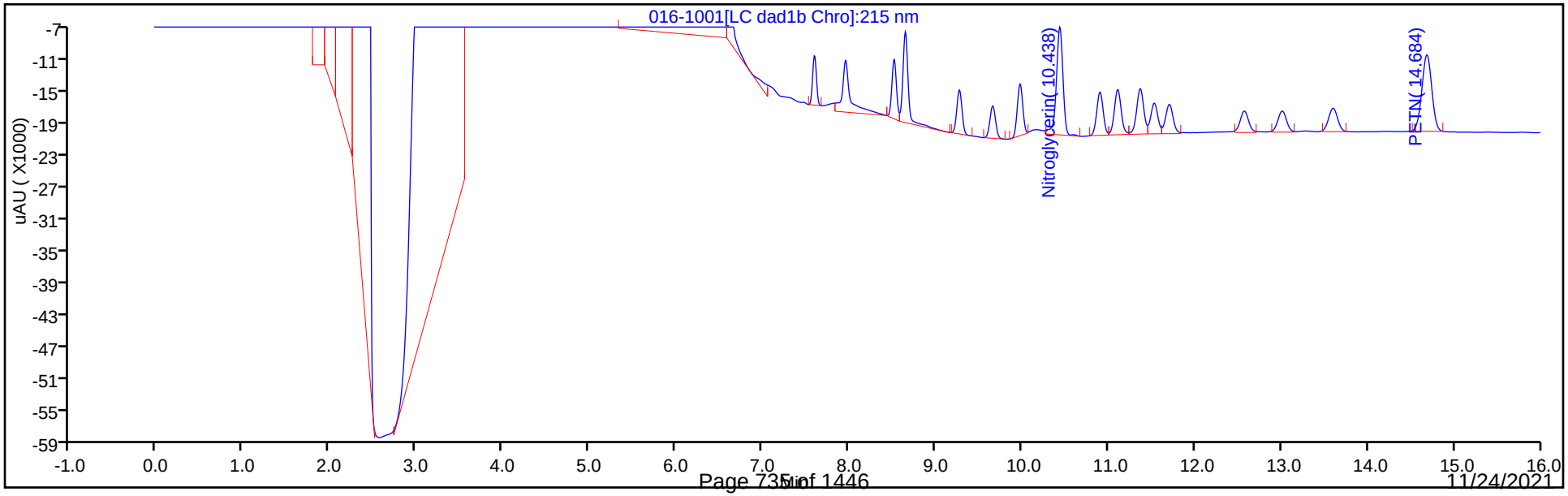
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\016-1001.d

Injection Date:	01-May-2021 19:55:49	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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

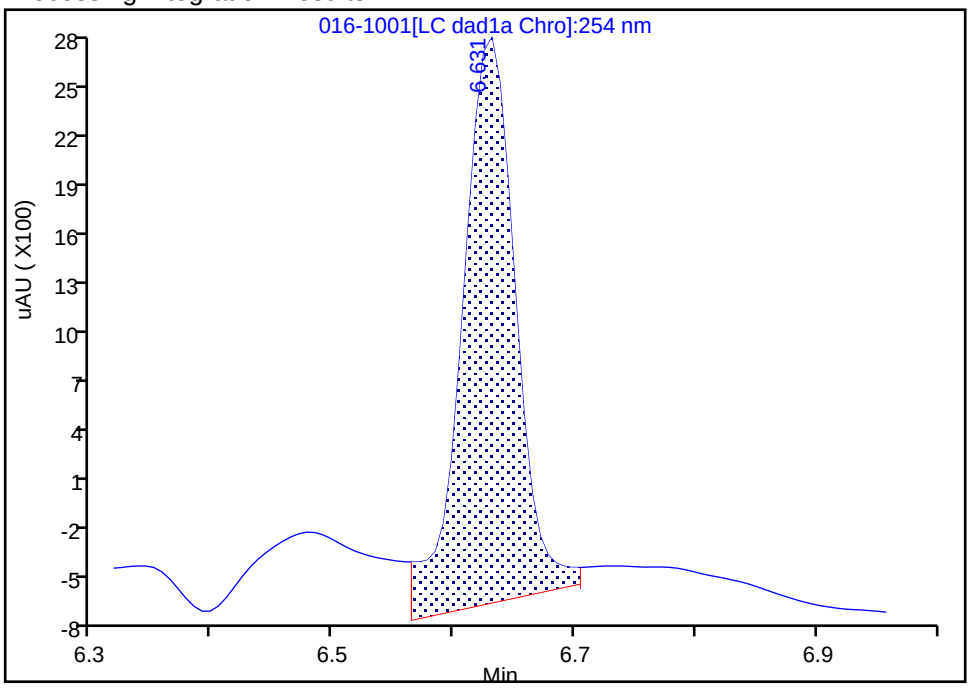
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\016-1001.d				
Injection Date:	01-May-2021 19:55:49	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

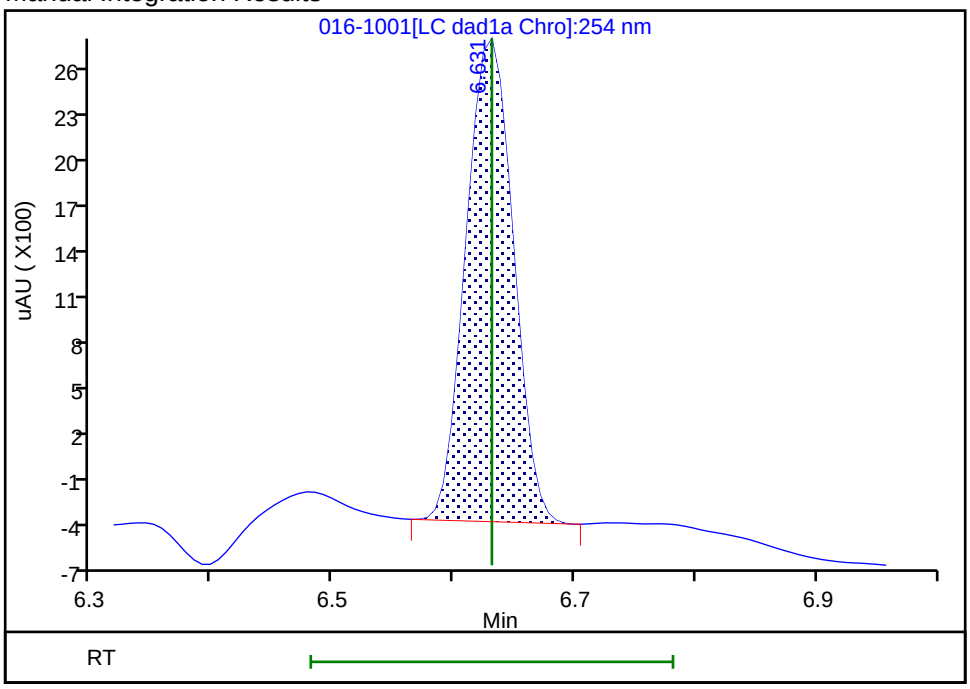
Processing Integration Results

RT: 6.63
Area: 10439
Amount: 0.111561
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 8561
Amount: 0.101408
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:16:35
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\017-1101.D
Lims ID: IC INT 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-May-2021 20:18:45 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 3
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:10 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:16:51

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.628	6.631	-0.003	4242	0.0500	0.0502	M
7 RDX	1	7.602	7.598	0.004	6054	0.0500	0.0570	
8 2,4,6-Trinitrophenol	1	7.968	7.958	0.010	4575	0.0500	0.0553	
$ 9 1,2-Dinitrobenzene	1	8.522	8.525	-0.003	6504	0.0500	0.0507	
10 1,3,5-Trinitrobenzene	1	8.655	8.651	0.004	11361	0.0501	0.0516	
11 1,3-Dinitrobenzene	1	9.282	9.278	0.004	14927	0.0501	0.0504	
12 Nitrobenzene	1	9.662	9.664	-0.002	9892	0.0502	0.0507	
14 Tetryl	1	9.982	9.978	0.004	8870	0.0501	0.0514	
15 Nitroglycerin	2	10.442	10.438	0.004	36983	0.5000	0.5113	
16 2,4,6-Trinitrotoluene	1	10.908	10.904	0.004	10514	0.0502	0.0510	
17 4-Amino-2,6-dinitrotoluene	1	11.115	11.111	0.004	7868	0.0501	0.0515	
18 2-Amino-4,6-dinitrotoluene	1	11.375	11.371	0.004	10789	0.0502	0.0521	
19 2,6-Dinitrotoluene	1	11.535	11.531	0.004	7360	0.0502	0.0514	
20 2,4-Dinitrotoluene	1	11.708	11.704	0.004	14647	0.0502	0.0510	
21 o-Nitrotoluene	1	12.575	12.578	-0.003	6616	0.0500	0.0515	
22 p-Nitrotoluene	1	13.015	13.011	0.004	5724	0.0501	0.0511	
23 m-Nitrotoluene	1	13.602	13.604	-0.002	7187	0.0501	0.0505	
24 PETN	2	14.688	14.684	0.004	37293	0.5000	0.4987	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 5.00 Units: uL

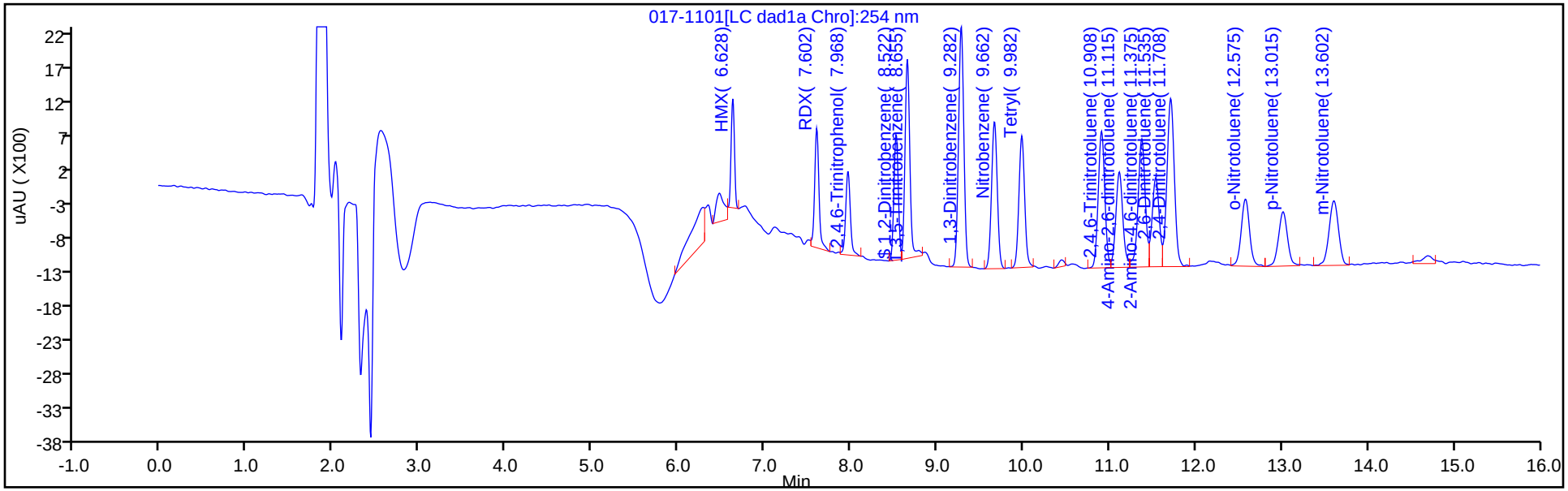
Report Date: 04-May-2021 13:25:10 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

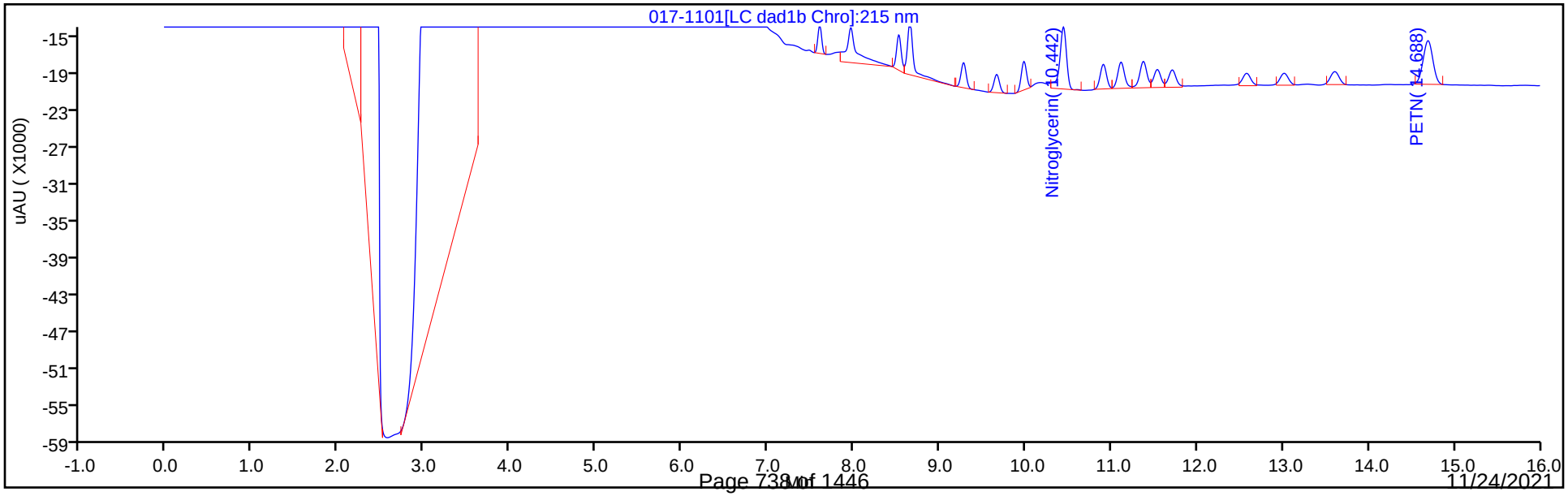
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\017-1101.d

Injection Date:	01-May-2021 20:18:45	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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

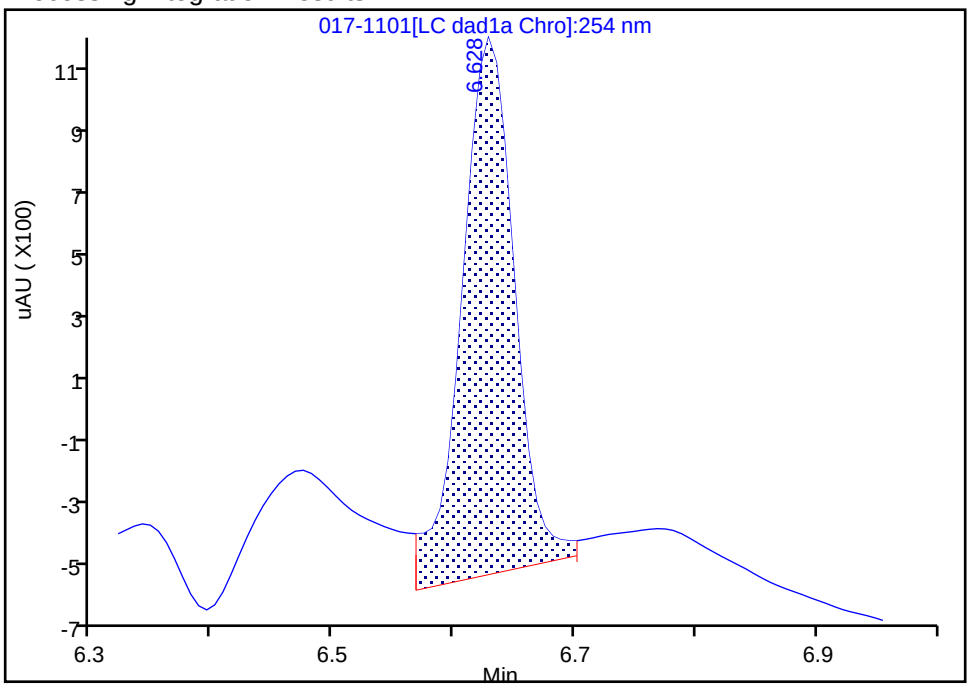
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\017-1101.d				
Injection Date:	01-May-2021 20:18:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

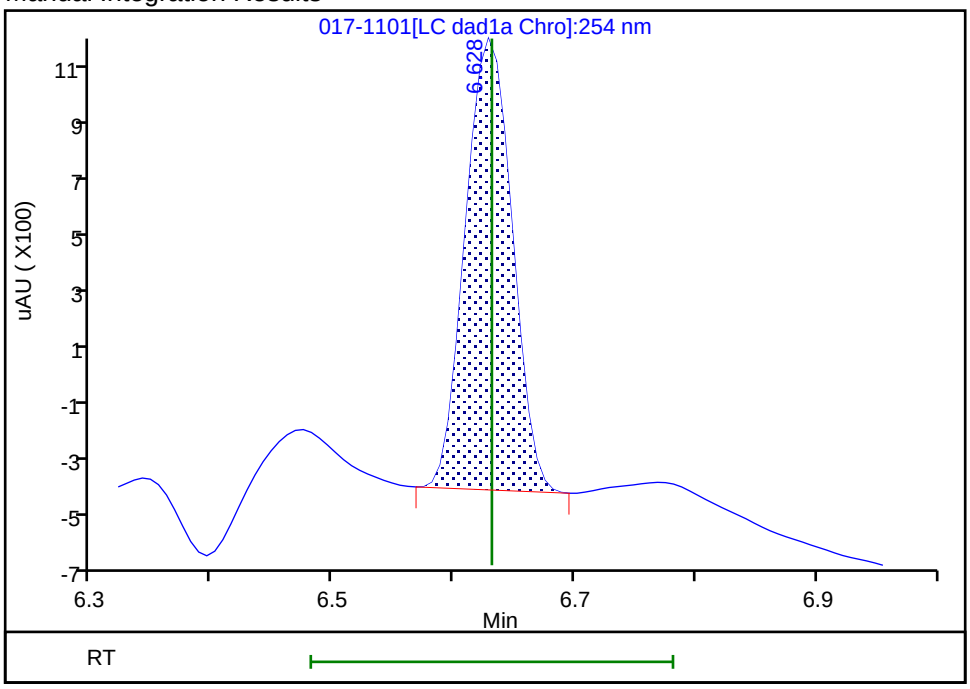
Processing Integration Results

RT: 6.63
Area: 5138
Amount: 0.048188
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 4242
Amount: 0.050248
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:16:49

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\018-1201.D
Lims ID: IC INT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-May-2021 20:41:41 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 2
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:10 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:17:07

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	3 HMX	1	6.626	6.631	-0.005	1680	0.0200	0.0199	M
	7 RDX	1	7.606	7.598	0.008	2207	0.0200	0.0208	M
	8 2,4,6-Trinitrophenol	1	7.966	7.958	0.008	1840	0.0200	0.0222	
$	9 1,2-Dinitrobenzene	1	8.526	8.525	0.001	2399	0.0200	0.0187	
	10 1,3,5-Trinitrobenzene	1	8.653	8.651	0.002	4038	0.0200	0.0183	
	11 1,3-Dinitrobenzene	1	9.280	9.278	0.002	6019	0.0200	0.0203	
	12 Nitrobenzene	1	9.666	9.664	0.002	3972	0.0201	0.0203	
	14 Tetryl	1	9.980	9.978	0.002	3331	0.0200	0.0193	M
	15 Nitroglycerin	2	10.440	10.438	0.002	16162	0.2000	0.1865	
	16 2,4,6-Trinitrotoluene	1	10.906	10.904	0.002	4156	0.0201	0.0202	
	17 4-Amino-2,6-dinitrotoluene	1	11.106	11.111	-0.005	3532	0.0200	0.0231	
	18 2-Amino-4,6-dinitrotoluene	1	11.366	11.371	-0.005	4433	0.0201	0.0214	
	19 2,6-Dinitrotoluene	1	11.533	11.531	0.002	2947	0.0201	0.0206	
	20 2,4-Dinitrotoluene	1	11.706	11.704	0.002	5945	0.0201	0.0207	
	21 o-Nitrotoluene	1	12.573	12.578	-0.005	2737	0.0200	0.0213	
	22 p-Nitrotoluene	1	13.006	13.011	-0.005	2633	0.0200	0.0235	
	23 m-Nitrotoluene	1	13.600	13.604	-0.004	3121	0.0200	0.0219	
	24 PETN	2	14.680	14.684	-0.004	14944	0.2000	0.1998	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067 Amount Added: 2.00 Units: uL

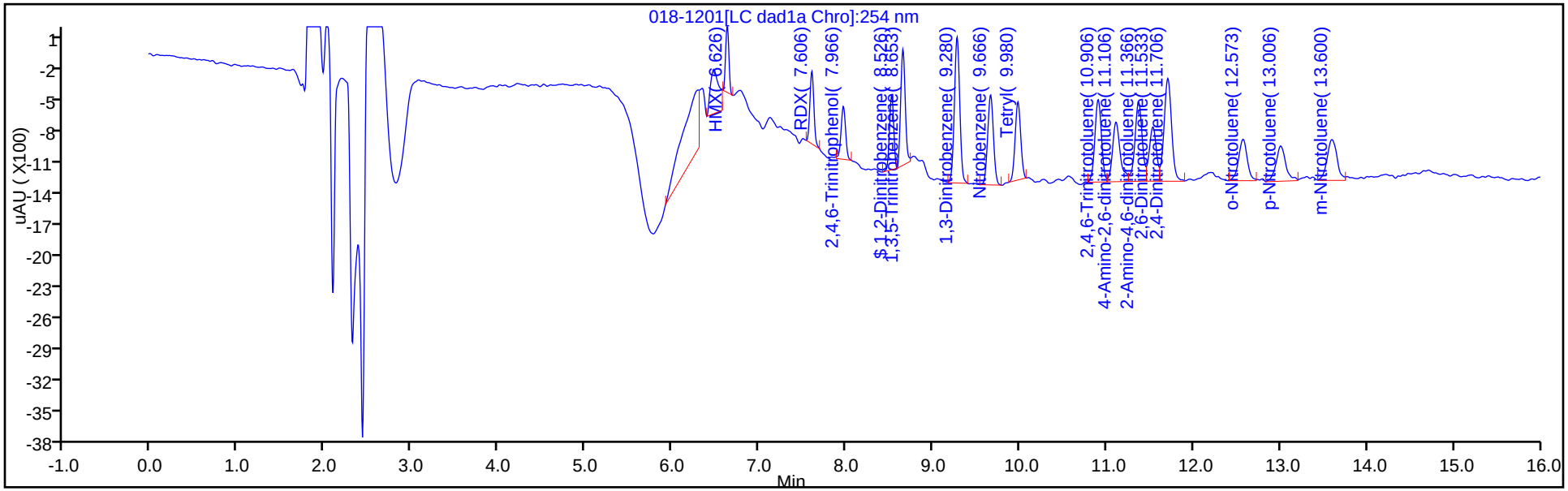
Report Date: 04-May-2021 13:25:11 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

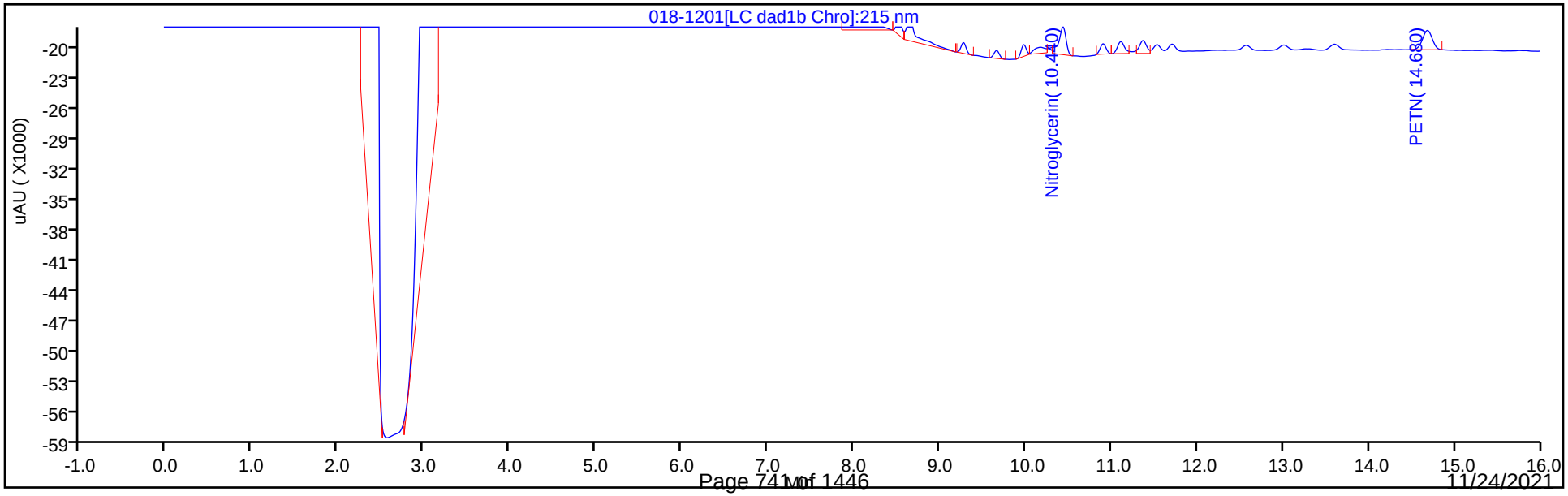
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d

Injection Date:	01-May-2021 20:41:41	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

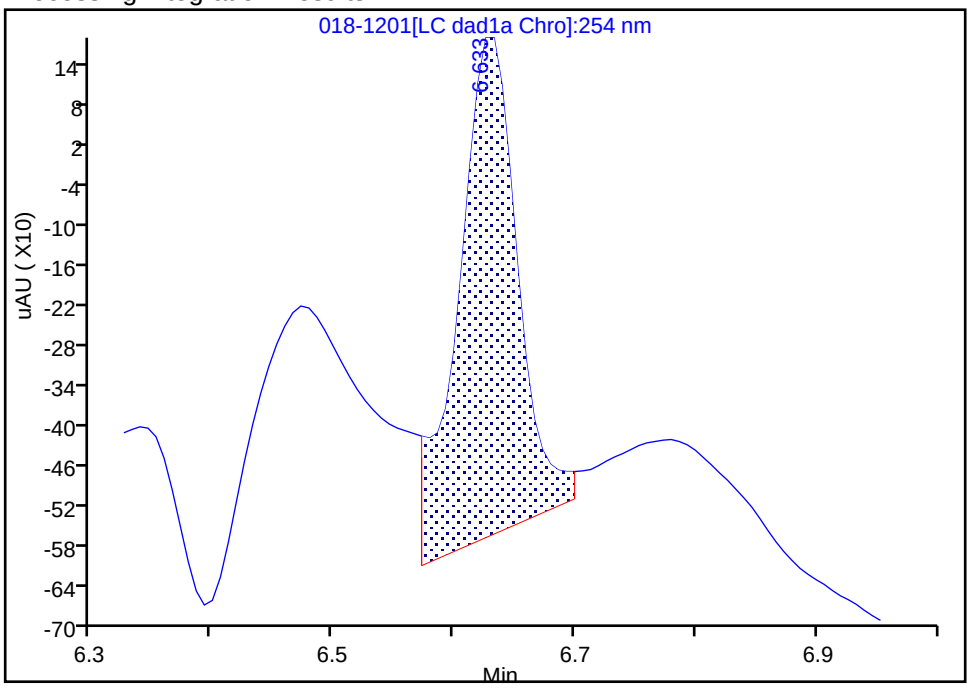
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d				
Injection Date:	01-May-2021 20:41:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

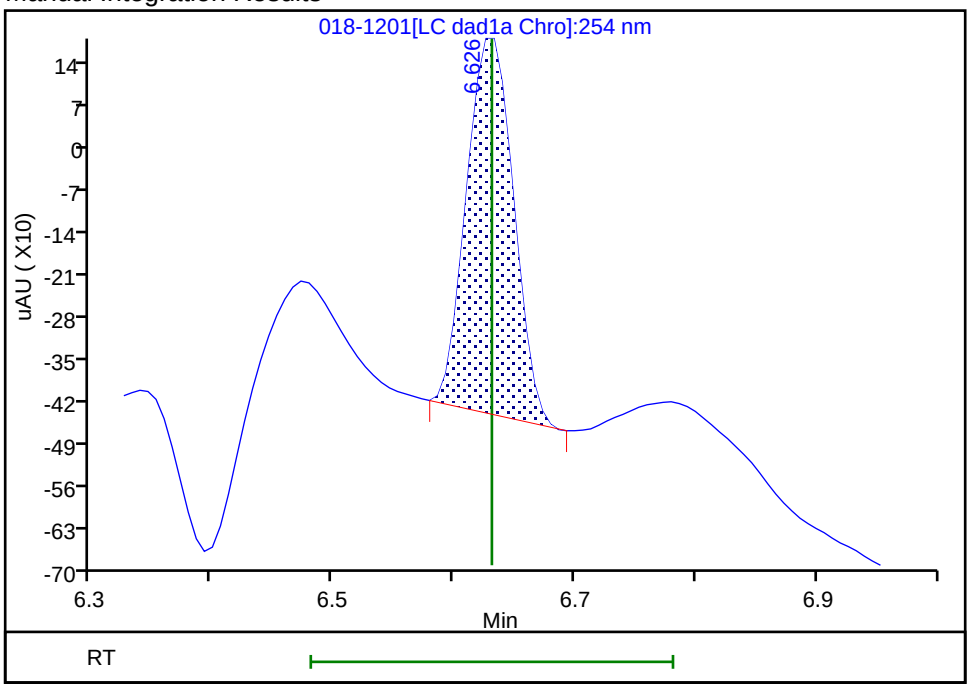
Processing Integration Results

RT: 6.63
Area: 2563
Amount: 0.017888
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 1680
Amount: 0.019900
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:16:58

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

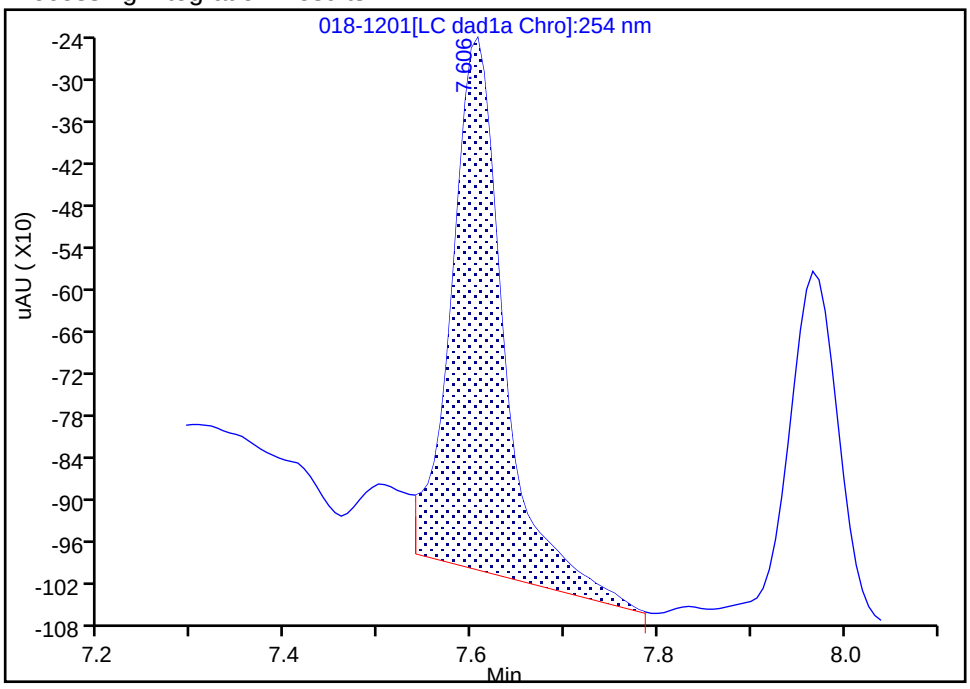
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d				
Injection Date:	01-May-2021 20:41:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

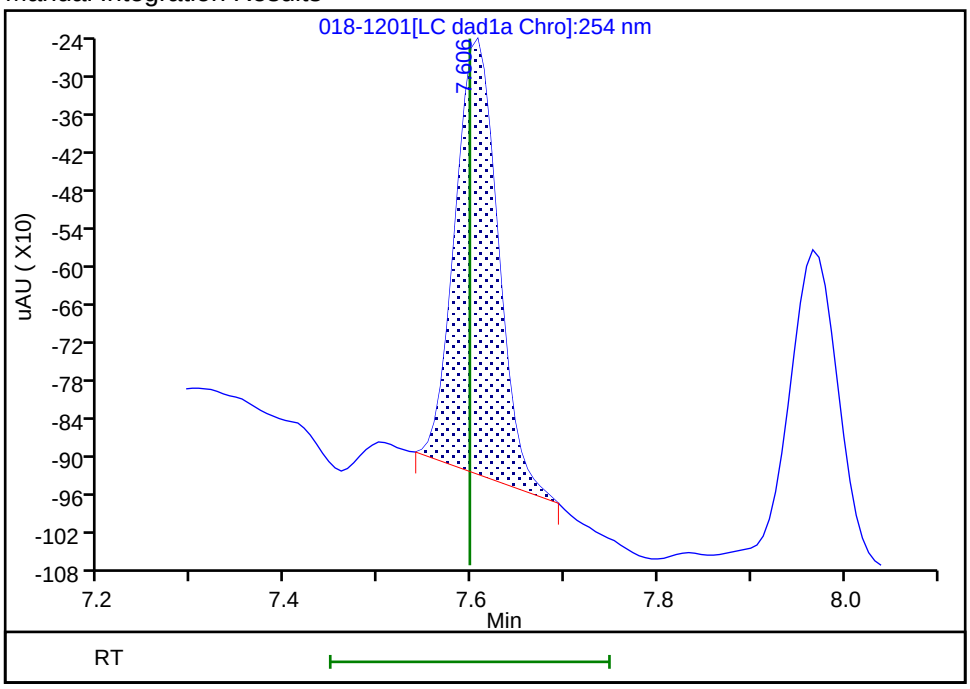
Processing Integration Results

RT: 7.61
Area: 2982
Amount: 0.020729
Amount Units: ug/mL



Manual Integration Results

RT: 7.61
Area: 2207
Amount: 0.020770
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:18:38

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

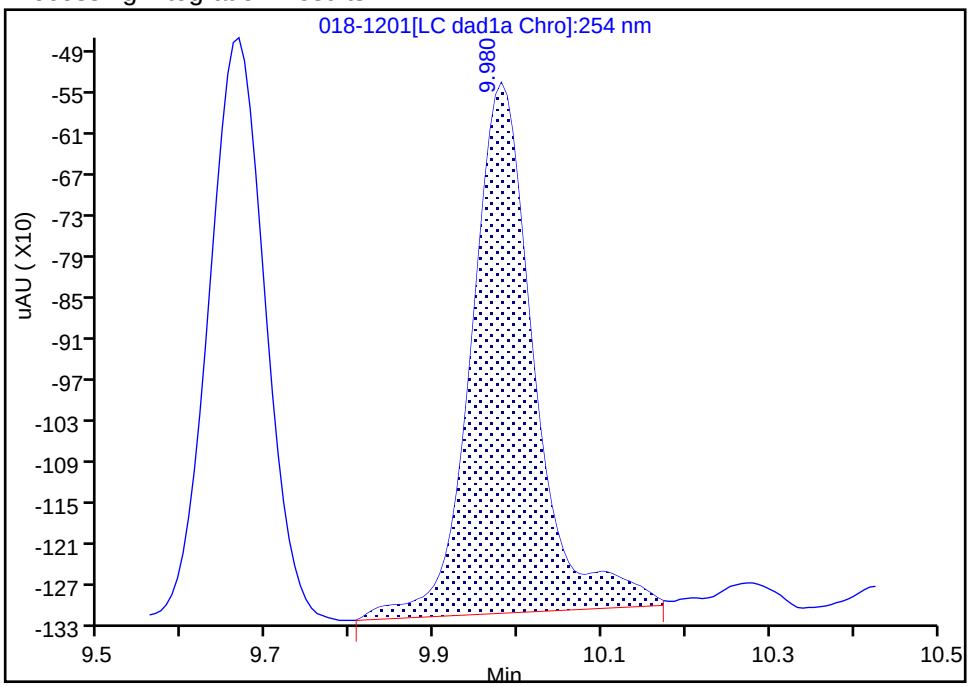
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d				
Injection Date:	01-May-2021 20:41:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8

Signal: 1

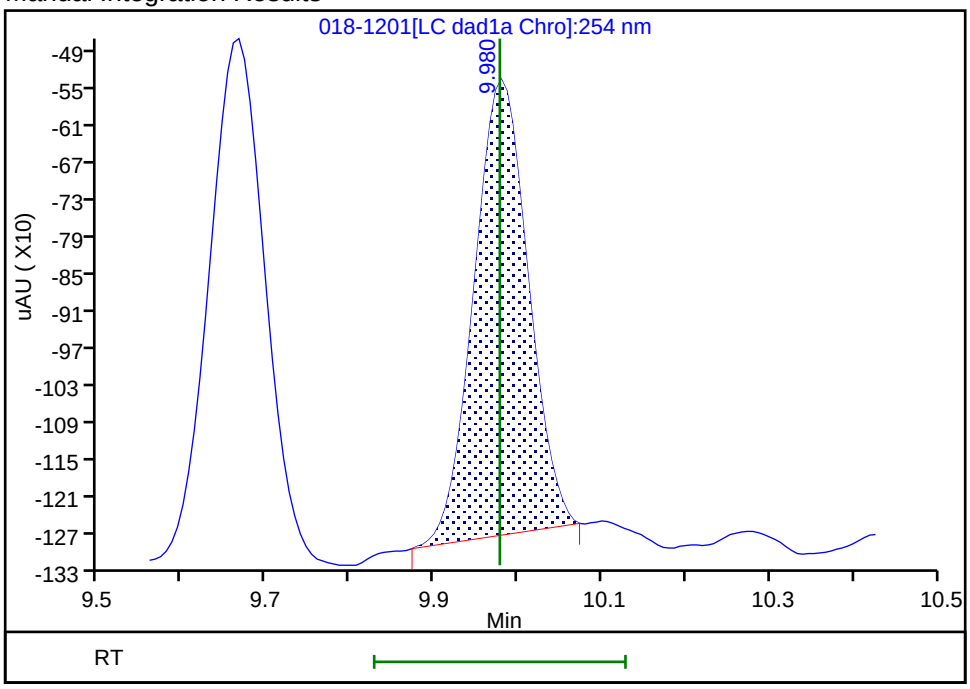
Processing Integration Results

RT: 9.98
Area: 4075
Amount: 0.022280
Amount Units: ug/mL



Manual Integration Results

RT: 9.98
Area: 3331
Amount: 0.019319
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:23:27

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

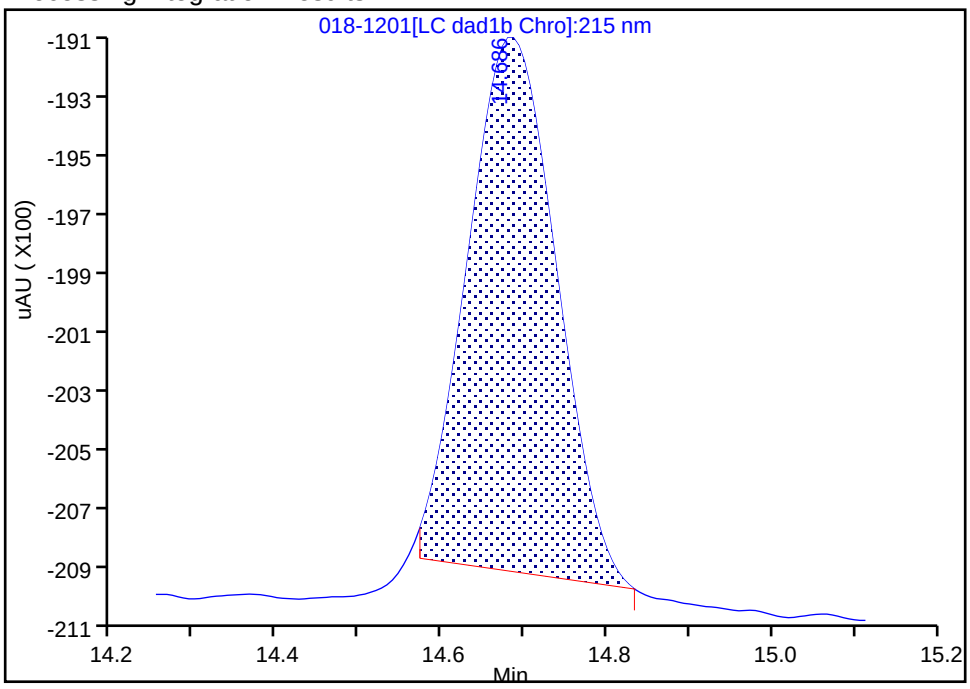
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d
Injection Date: 01-May-2021 20:41:41 Instrument ID: CHHPLC_X3
Lims ID: IC INT 2
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

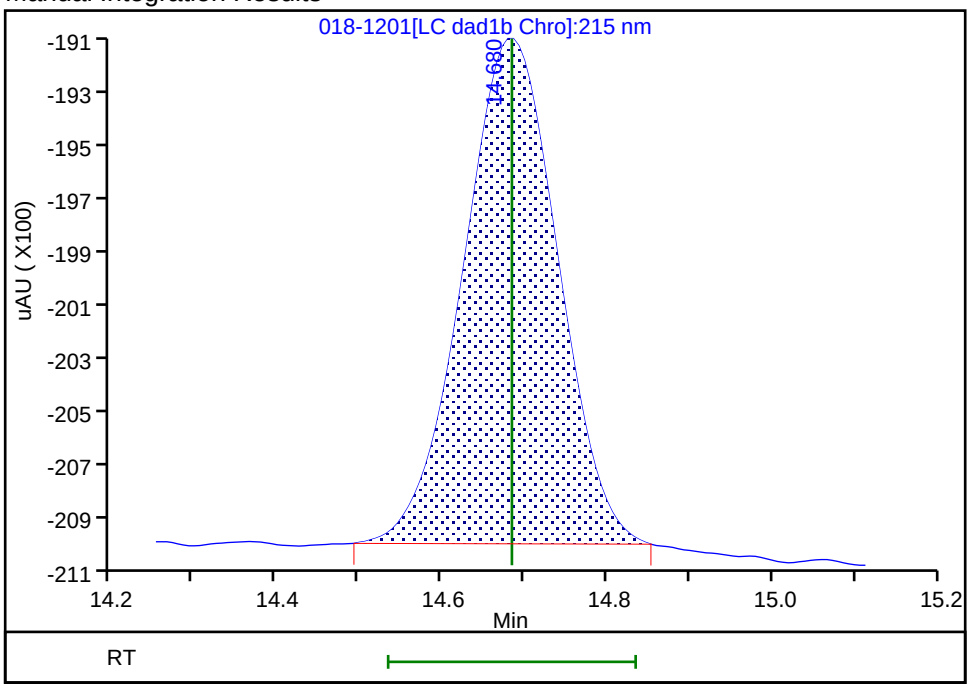
Processing Integration Results

RT: 14.69
Area: 13412
Amount: 0.181421
Amount Units: ug/mL



Manual Integration Results

RT: 14.68
Area: 14944
Amount: 0.199843
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:18:31
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D
Lims ID: IC INT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-May-2021 21:04:39 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT 1
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:25:11 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:18:18

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.629	6.631	-0.002	906	0.0100	0.0107	M
7 RDX	1	7.602	7.598	0.004	1876	0.0100	0.0177	
8 2,4,6-Trinitrophenol	1	7.962	7.958	0.004	1003	0.0100	0.0121	
$ 9 1,2-Dinitrobenzene	1	8.522	8.525	-0.003	1195	0.0100	0.009320	
10 1,3,5-Trinitrobenzene	1	8.649	8.651	-0.002	2481	0.0100	0.0113	
11 1,3-Dinitrobenzene	1	9.275	9.278	-0.003	3052	0.0100	0.0103	
12 Nitrobenzene	1	9.662	9.664	-0.002	1995	0.0100	0.0102	
14 Tetryl	1	9.975	9.978	-0.003	1712	0.0100	0.0099	M
15 Nitroglycerin	2	10.435	10.438	-0.003	10778	0.1000	0.1025	M
16 2,4,6-Trinitrotoluene	1	10.902	10.904	-0.002	2128	0.0100	0.0103	
17 4-Amino-2,6-dinitrotoluene	1	11.109	11.111	-0.002	1596	0.0100	0.0104	
18 2-Amino-4,6-dinitrotoluene	1	11.369	11.371	-0.002	2126	0.0100	0.0103	
19 2,6-Dinitrotoluene	1	11.529	11.531	-0.002	1404	0.0100	0.009813	
20 2,4-Dinitrotoluene	1	11.702	11.704	-0.002	2944	0.0100	0.0103	
21 o-Nitrotoluene	1	12.575	12.578	-0.003	1346	0.0100	0.0105	
22 p-Nitrotoluene	1	13.015	13.011	0.004	1177	0.0100	0.0105	
23 m-Nitrotoluene	1	13.602	13.604	-0.002	1575	0.0100	0.0111	
24 PETN	2	14.682	14.684	-0.002	7901	0.1000	0.1057	Ma

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

8330IntermStk_00067 Amount Added: 1.00 Units: uL

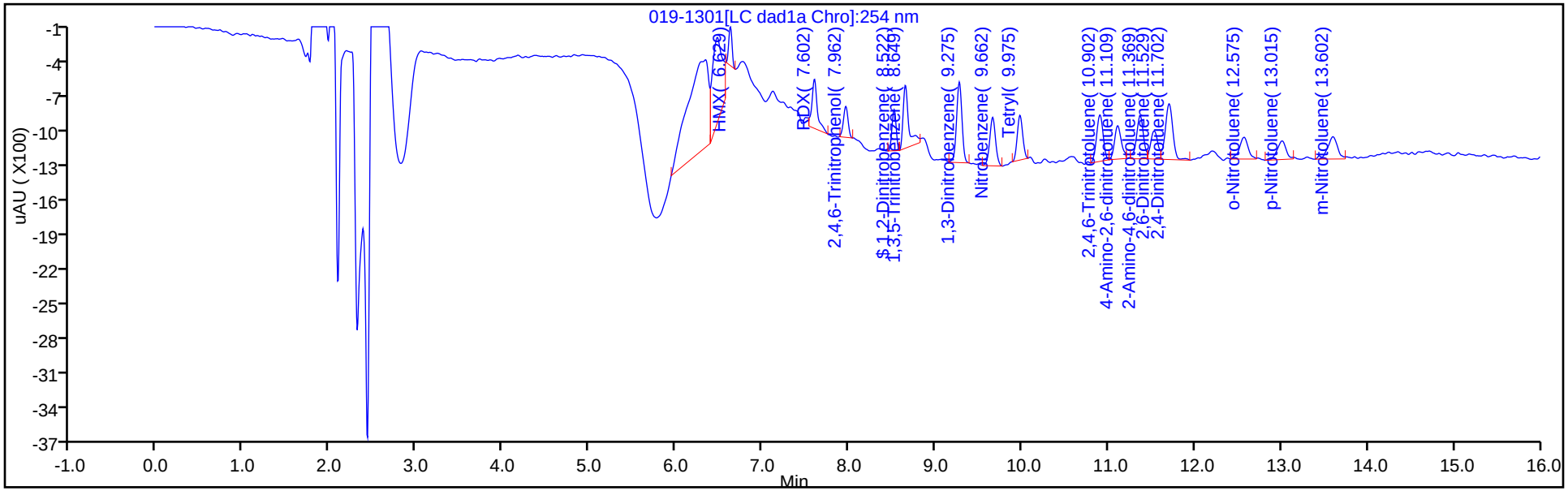
Report Date: 04-May-2021 13:25:11 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

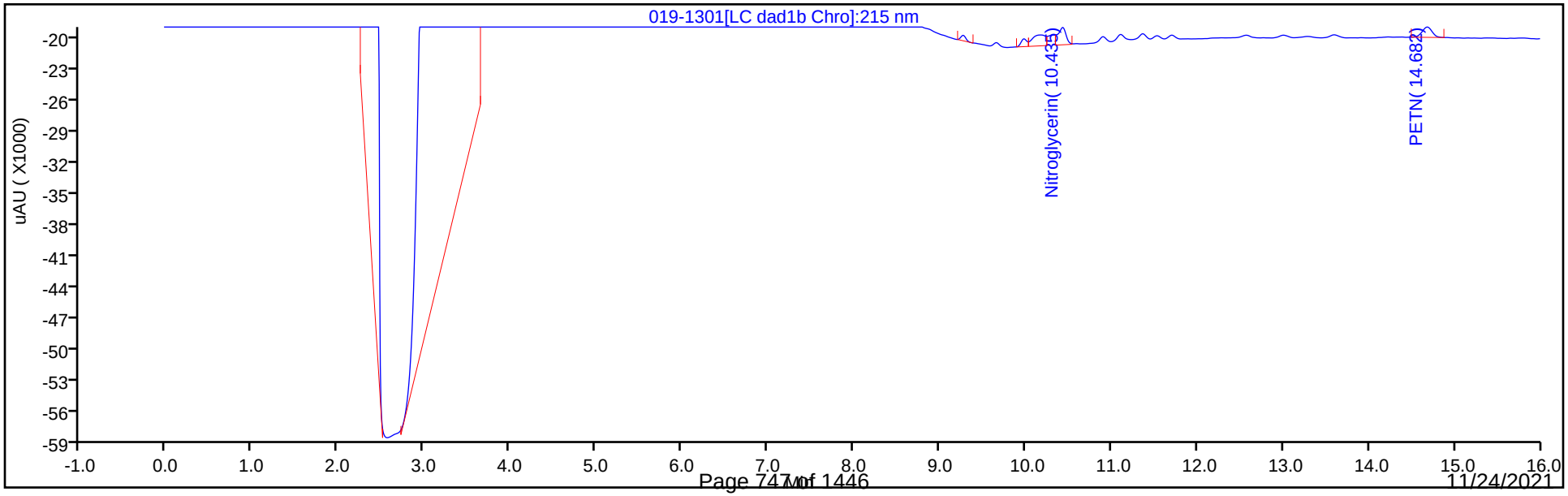
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d

Injection Date:	01-May-2021 21:04:39	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

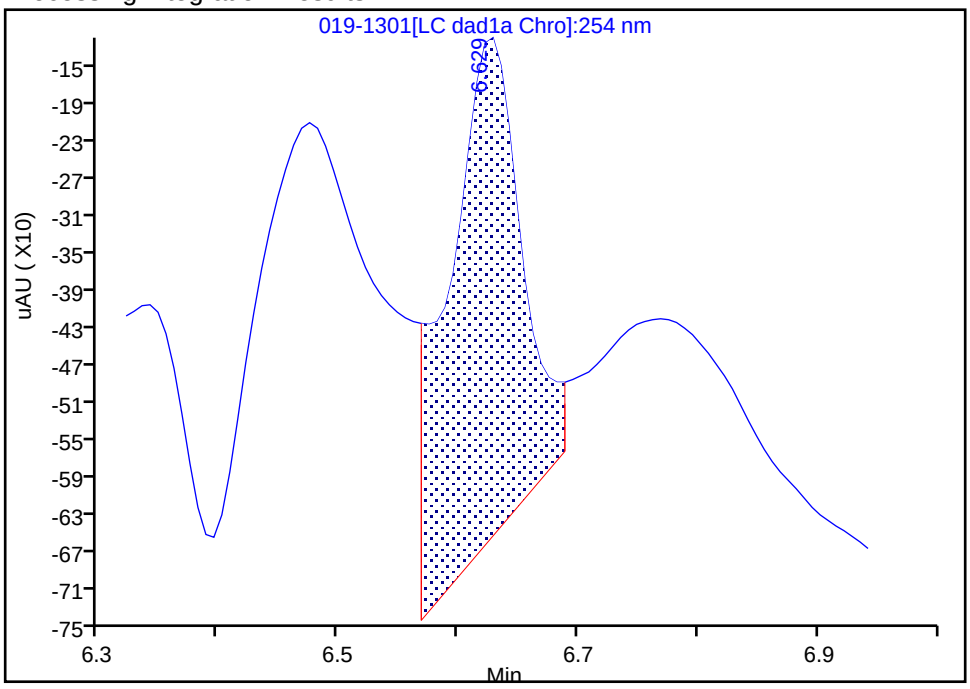
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d				
Injection Date:	01-May-2021 21:04:39	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

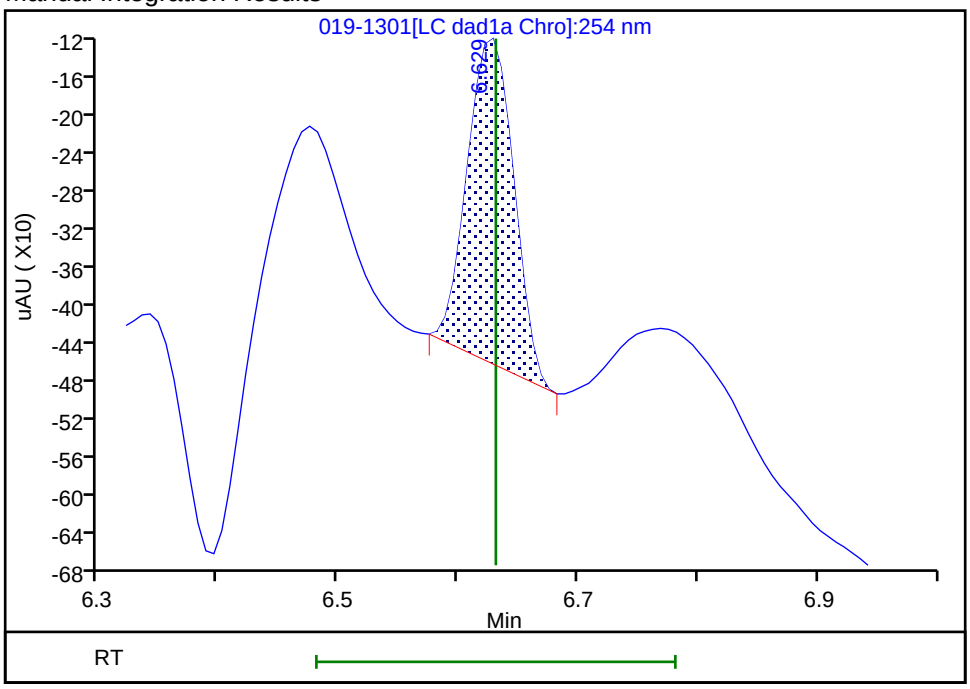
Processing Integration Results

RT: 6.63
Area: 2314
Amount: 0.023125
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 906
Amount: 0.010732
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:17:14
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

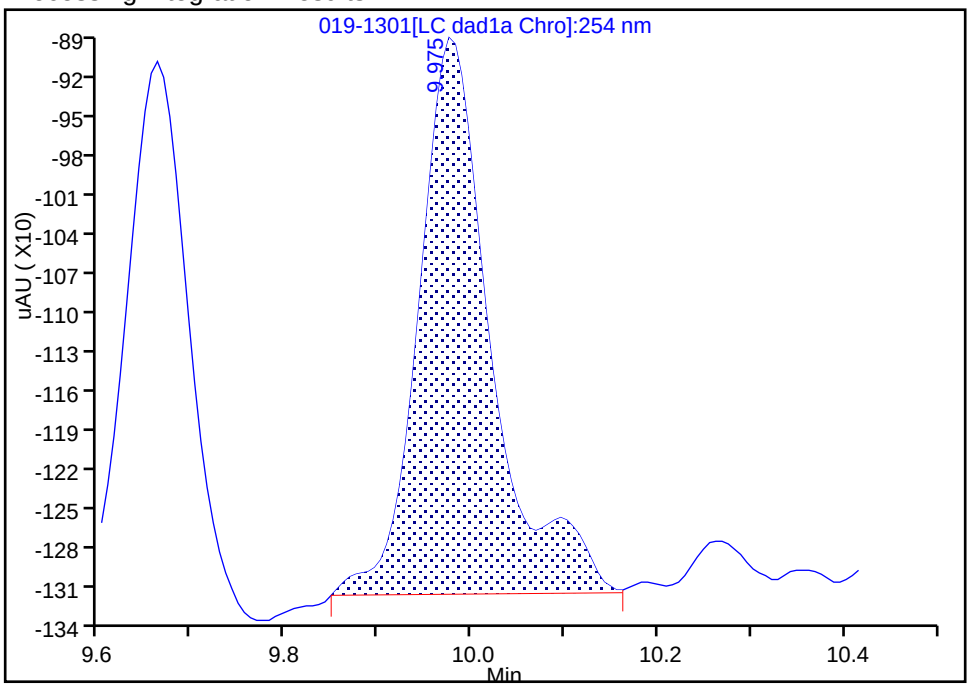
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d				
Injection Date:	01-May-2021 21:04:39	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8

Signal: 1

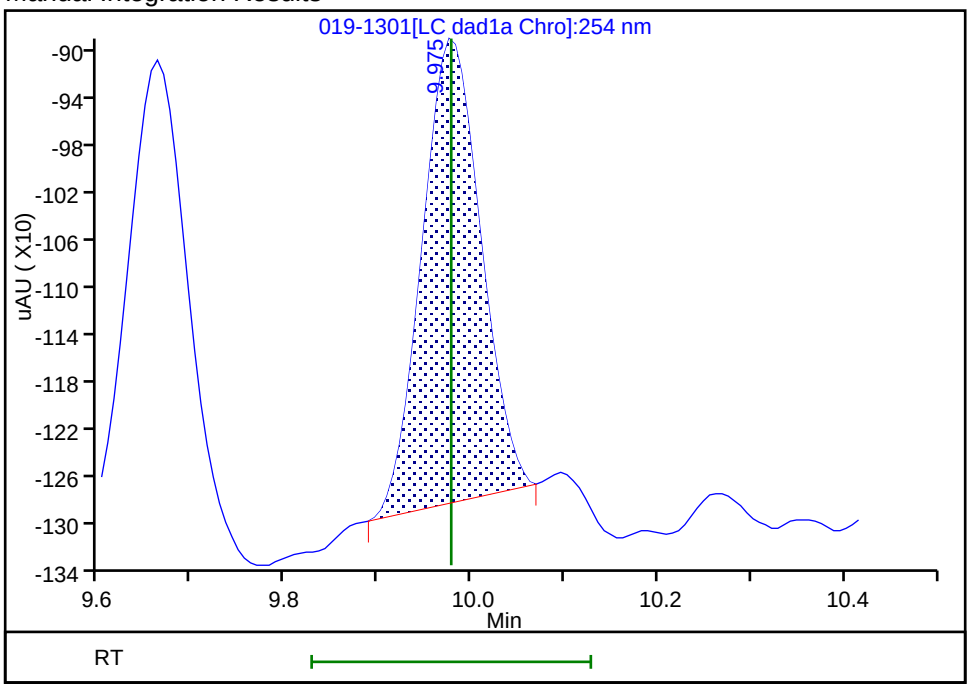
Processing Integration Results

RT: 9.98
Area: 2285
Amount: 0.012782
Amount Units: ug/mL



Manual Integration Results

RT: 9.98
Area: 1712
Amount: 0.009929
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:23:41

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

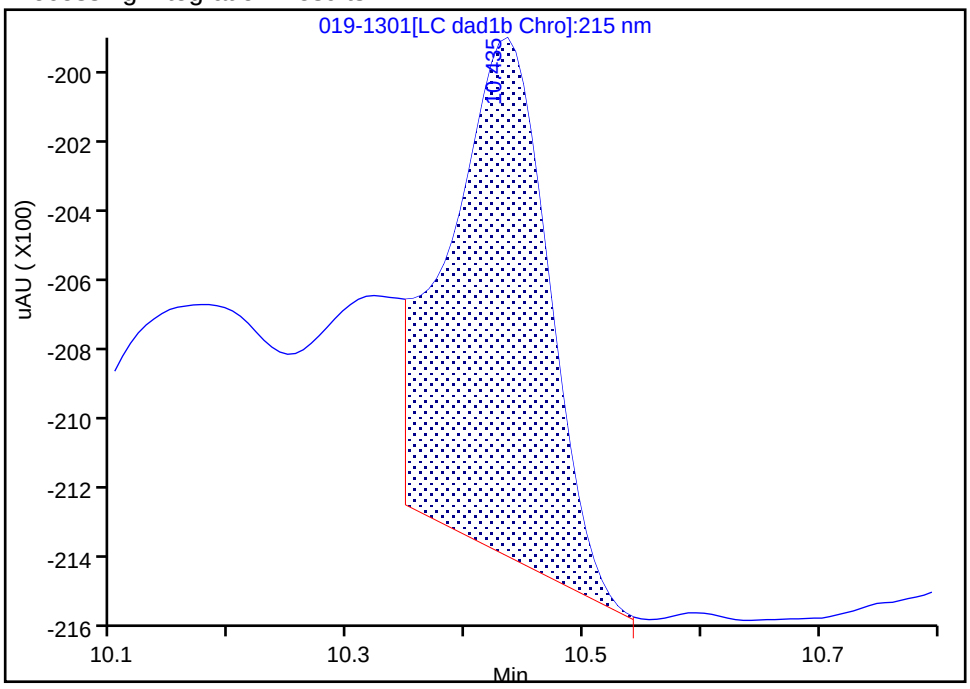
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d
Injection Date: 01-May-2021 21:04:39 Instrument ID: CHHPLC_X3
Lims ID: IC INT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

15 Nitroglycerin, CAS: 55-63-0

Signal: 1

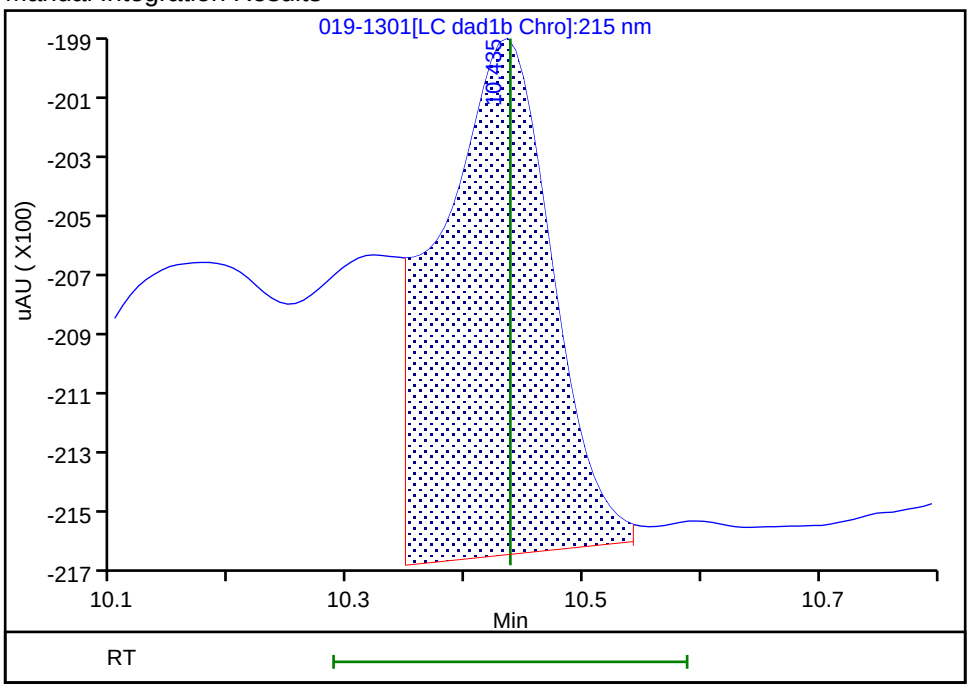
Processing Integration Results

RT: 10.44
Area: 8028
Amount: 0.114856
Amount Units: ug/mL



Manual Integration Results

RT: 10.44
Area: 10778
Amount: 0.102544
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:18:01
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

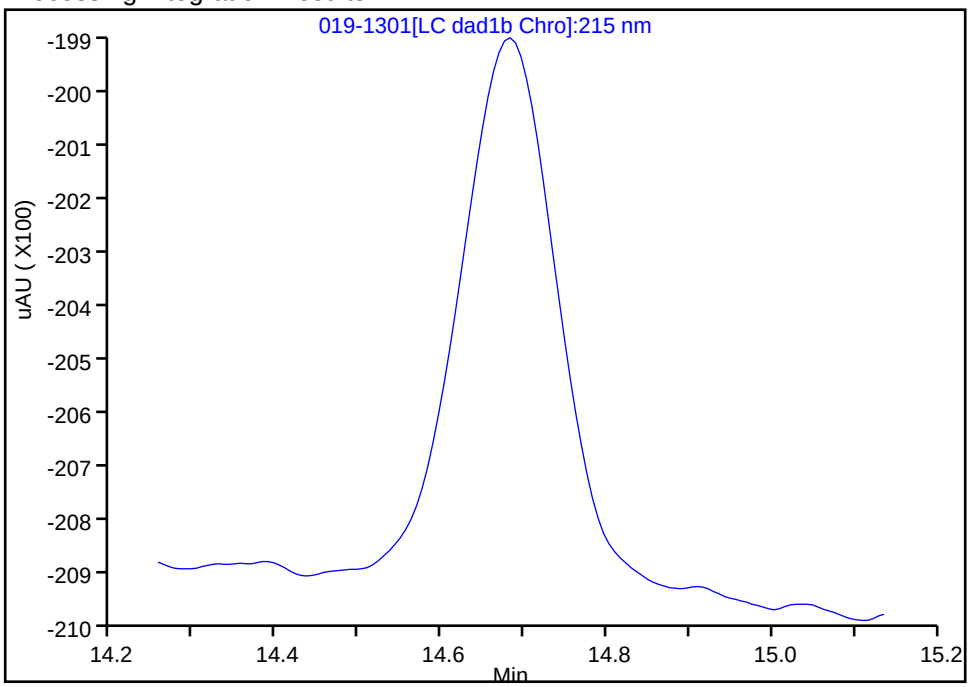
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d		
Injection Date:	01-May-2021 21:04:39	Instrument ID:	CHHPLC_X3
Lims ID:	IC INT 1		
Client ID:			
Operator ID:	JZ	ALS Bottle#:	19 Worklist Smp#: 19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:		Detector	LC DAD1C, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

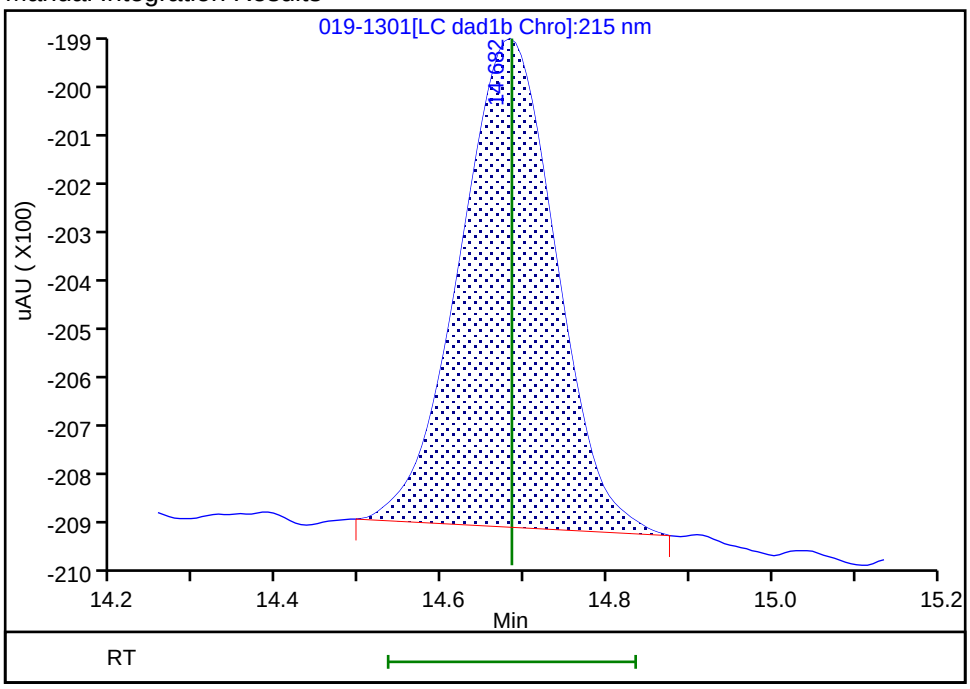
Not Detected
Expected RT: 14.68

Processing Integration Results



Manual Integration Results

RT: 14.68
Area: 7901
Amount: 0.105659
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:17:51
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline

Calibration / HMX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

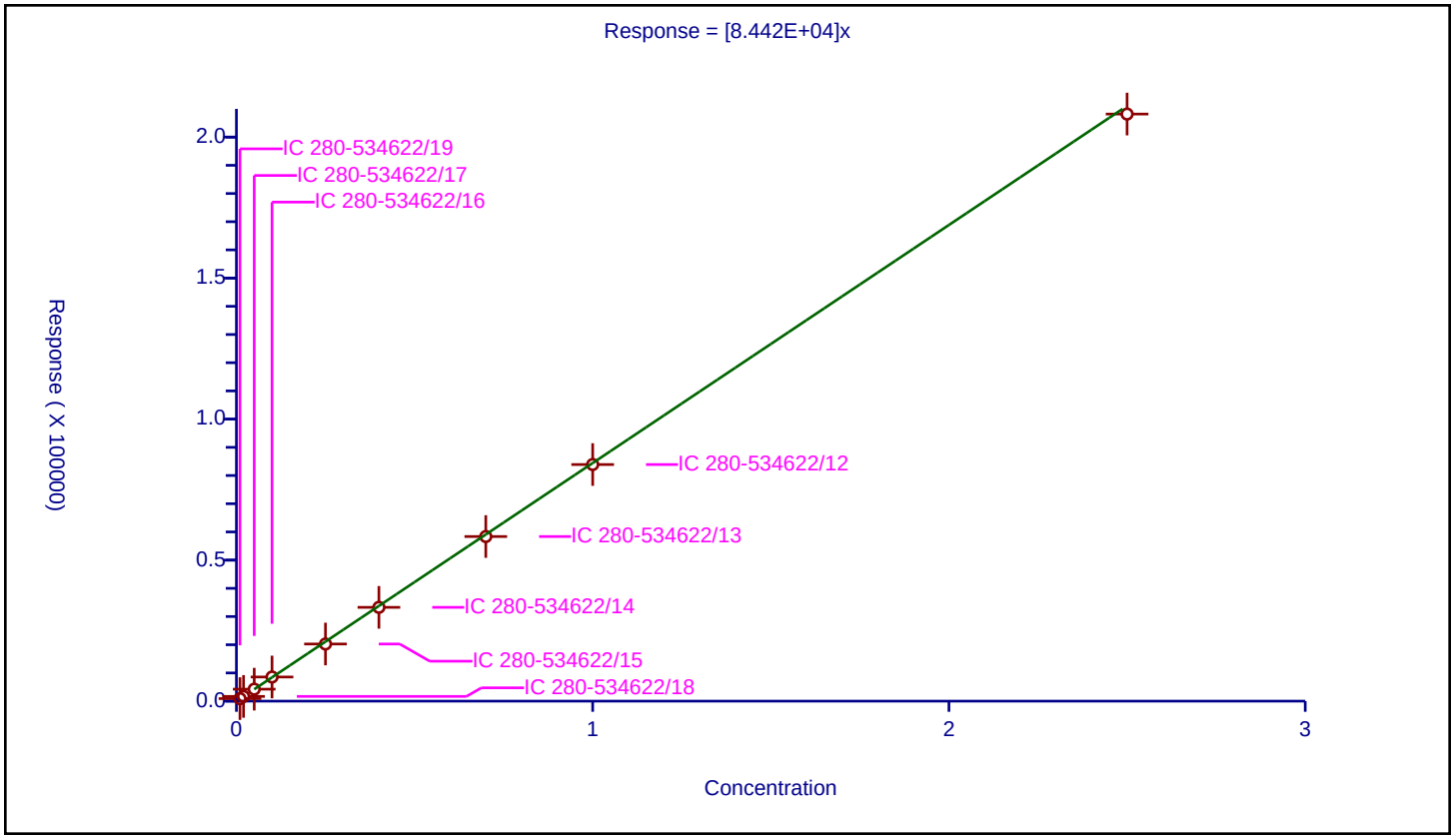
Curve Coefficients

Intercept:	0
Slope:	8.442E+04

Error Coefficients

Standard Error:	1130
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 280-534622/19	0.01	906.0			90600.0	Y
2	IC 280-534622/18	0.02	1680.0			84000.0	Y
3	IC 280-534622/17	0.05	4242.0			84840.0	Y
4	IC 280-534622/16	0.1	8561.0			85610.0	Y
5	IC 280-534622/15	0.25	20261.0			81044.0	Y
6	IC 280-534622/14	0.4	33261.0			83152.5	Y
7	IC 280-534622/13	0.7	58367.0			83381.428571	Y
8	IC 280-534622/12	1.0	83899.0			83899.0	Y
9	IC 280-534622/11	2.5	208165.0			83266.0	Y



Calibration / RDX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

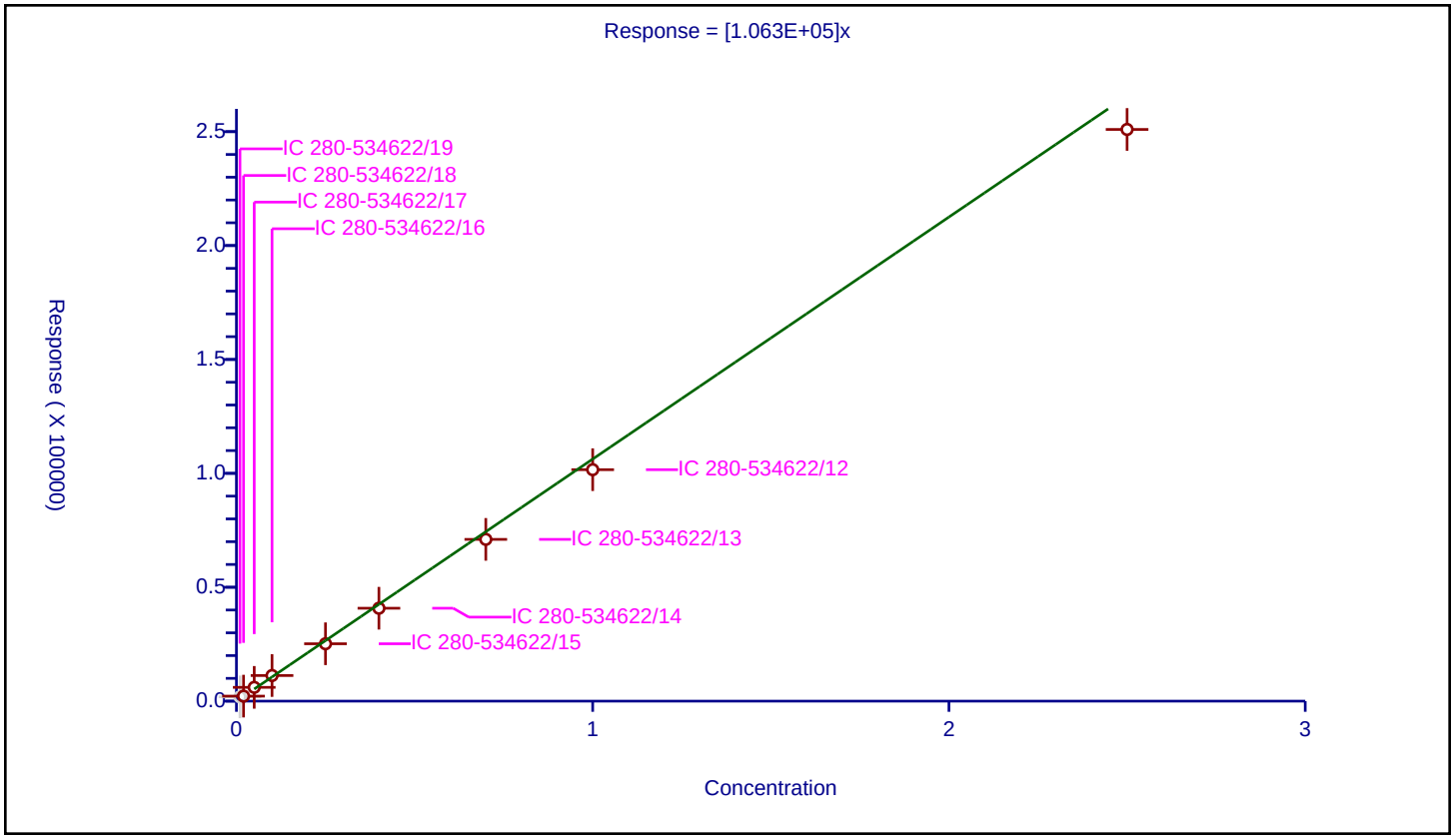
Curve Coefficients

Intercept:	0
Slope:	1.063E+05

Error Coefficients

Standard Error:	6020
Relative Standard Error:	7.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01	1876.0			187600.0	N
2	IC 280-534622/18	0.02	2207.0			110350.0	Y
3	IC 280-534622/17	0.05	6054.0			121080.0	Y
4	IC 280-534622/16	0.1	11245.0			112450.0	Y
5	IC 280-534622/15	0.25	25193.0			100772.0	Y
6	IC 280-534622/14	0.4	40790.0			101975.0	Y
7	IC 280-534622/13	0.7	71020.0			101457.142857	Y
8	IC 280-534622/12	1.0	101616.0			101616.0	Y
9	IC 280-534622/11	2.5	250979.0			100391.6	Y



Calibration / 2,4,6-Trinitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

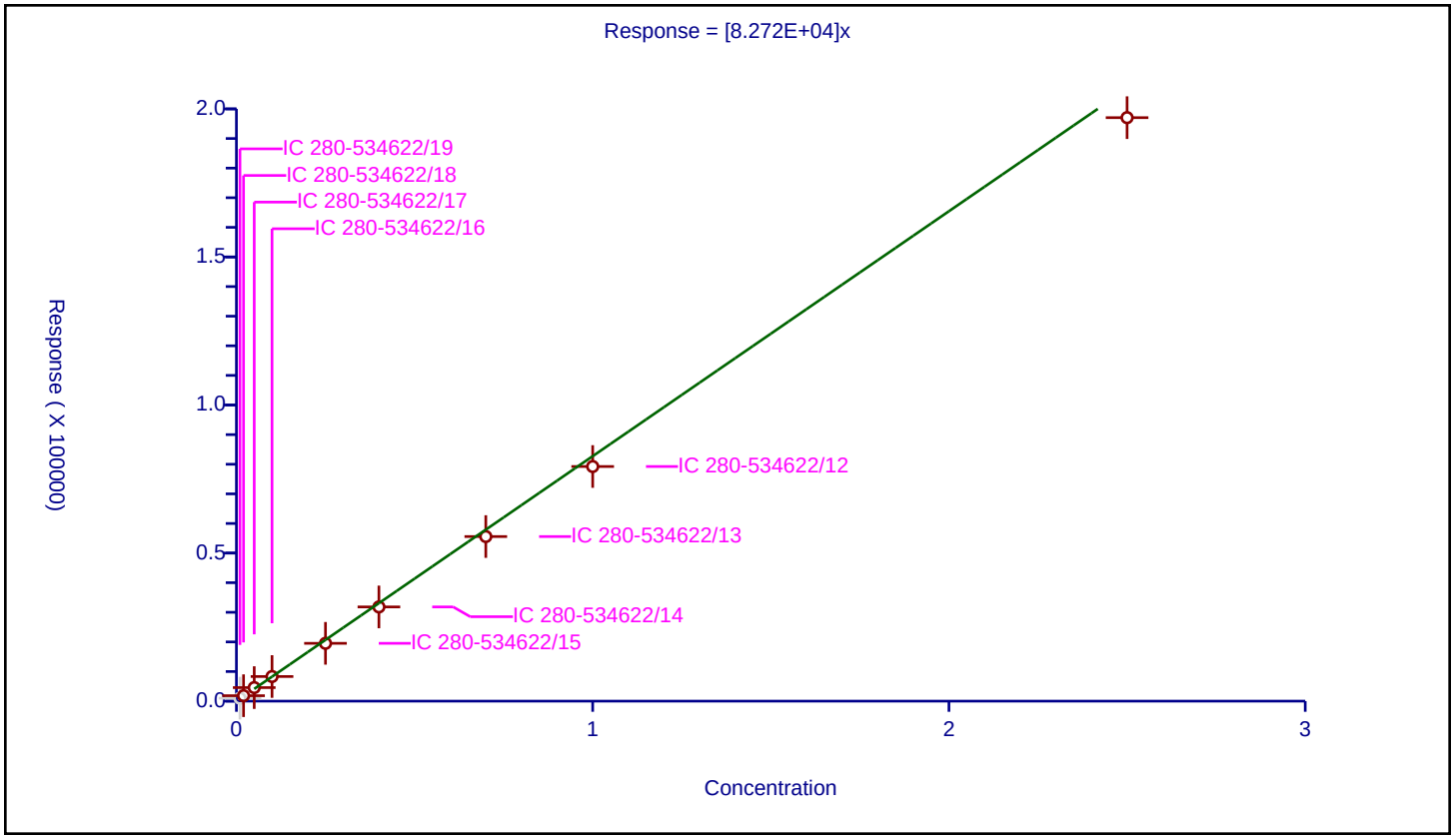
Curve Coefficients

Intercept:	0
Slope:	8.272E+04

Error Coefficients

Standard Error:	4070
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01	1003.0			100300.0	N
2	IC 280-534622/18	0.02	1840.0			92000.0	Y
3	IC 280-534622/17	0.05	4575.0			91500.0	Y
4	IC 280-534622/16	0.1	8317.0			83170.0	Y
5	IC 280-534622/15	0.25	19525.0			78100.0	Y
6	IC 280-534622/14	0.4	31820.0			79550.0	Y
7	IC 280-534622/13	0.7	55582.0			79402.857143	Y
8	IC 280-534622/12	1.0	79230.0			79230.0	Y
9	IC 280-534622/11	2.5	197040.0			78816.0	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

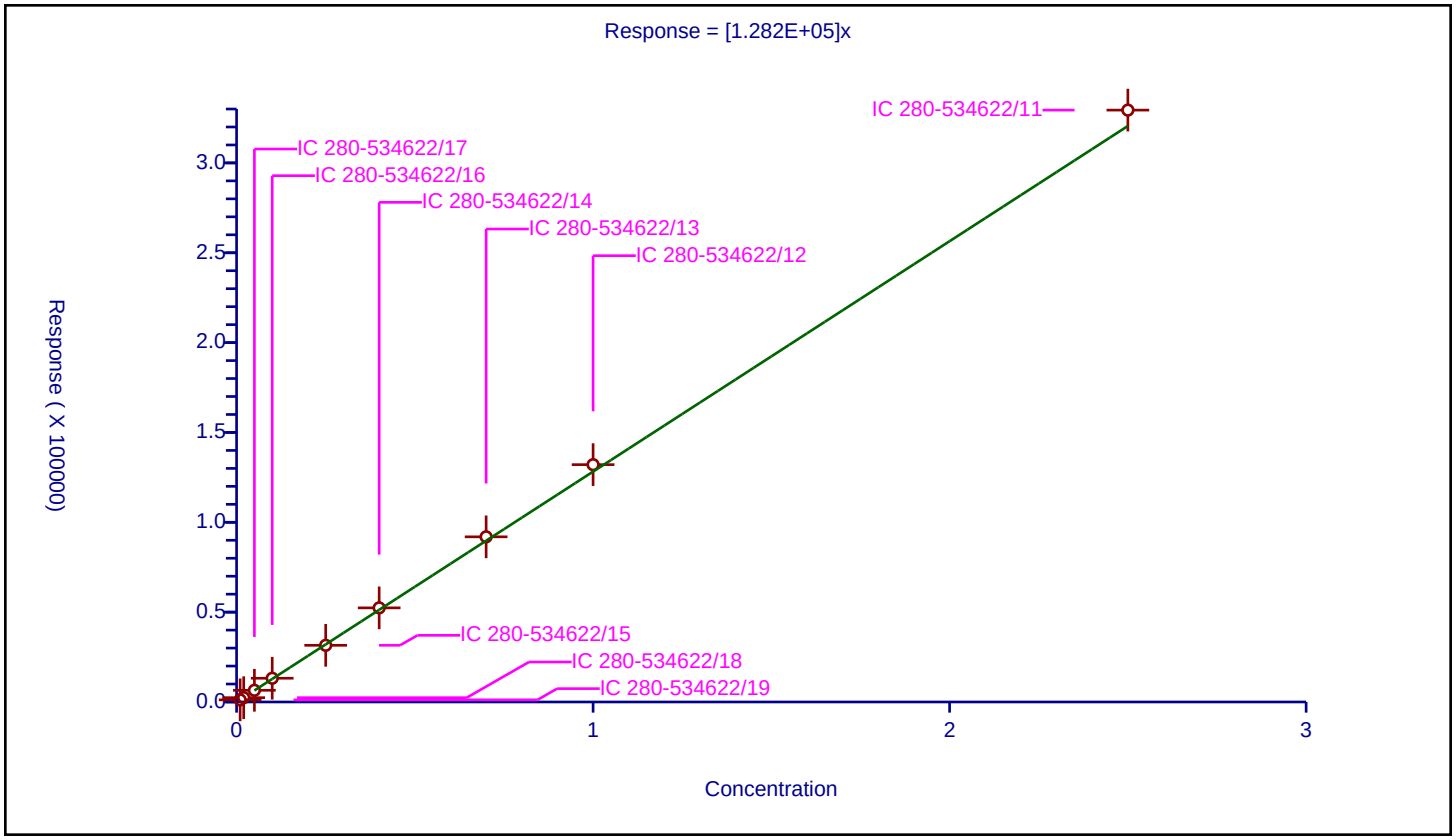
Curve Coefficients

Intercept:	0
Slope:	1.282E+05

Error Coefficients

Standard Error:	3530
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 280-534622/19	0.01	1195.0			119500.0	Y
2	IC 280-534622/18	0.02	2399.0			119950.0	Y
3	IC 280-534622/17	0.05	6504.0			130080.0	Y
4	IC 280-534622/16	0.1	13218.0			132180.0	Y
5	IC 280-534622/15	0.25	31539.0			126156.0	Y
6	IC 280-534622/14	0.4	52377.0			130942.5	Y
7	IC 280-534622/13	0.7	91915.0			131307.142857	Y
8	IC 280-534622/12	1.0	132080.0			132080.0	Y
9	IC 280-534622/11	2.5	329398.0			131759.2	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

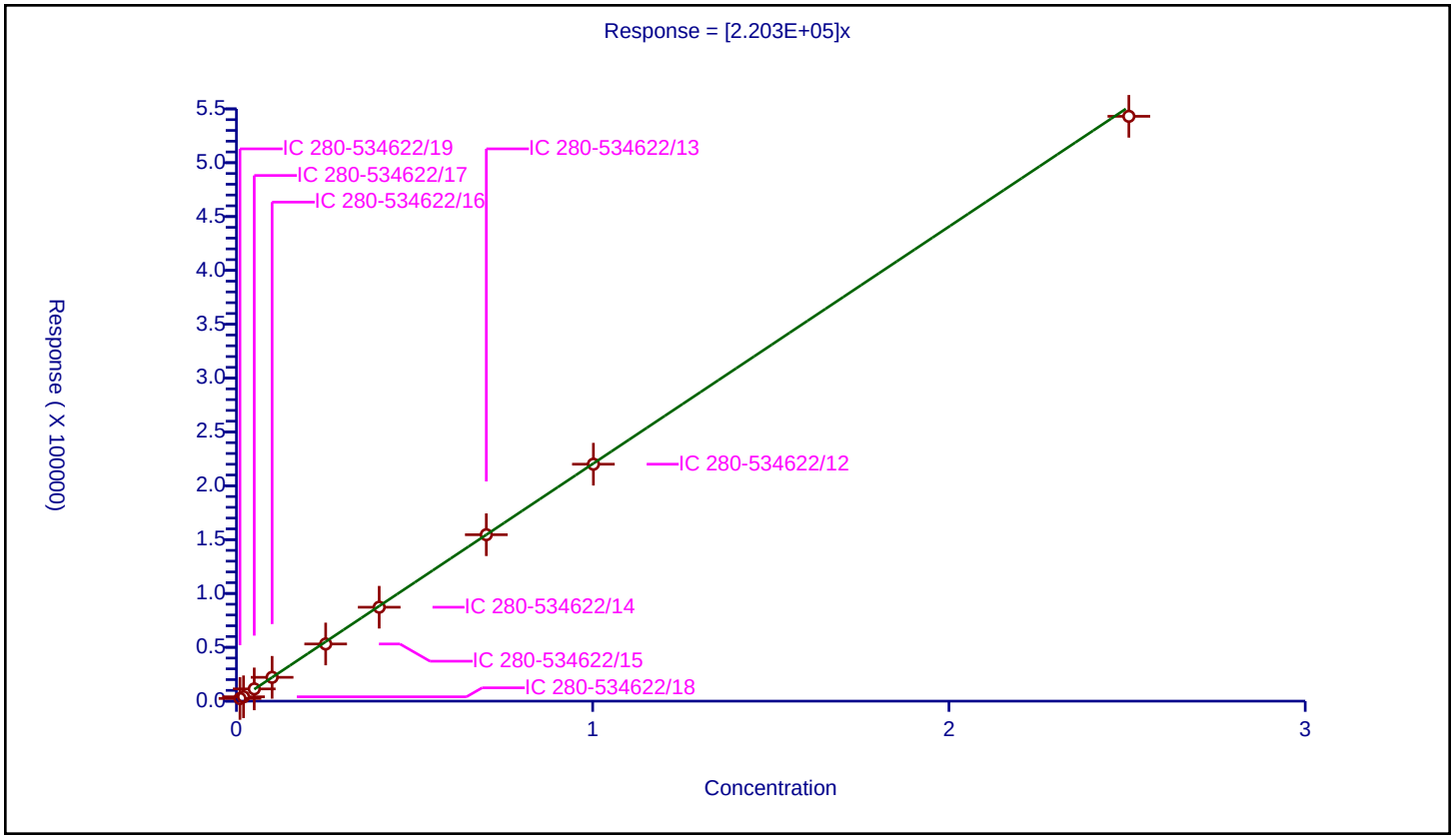
Curve Coefficients

Intercept:	0
Slope:	2.203E+05

Error Coefficients

Standard Error:	3230
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01002	2481.0			247604.790419	Y
2	IC 280-534622/18	0.02004	4038.0			201497.005988	Y
3	IC 280-534622/17	0.0501	11361.0			226766.467066	Y
4	IC 280-534622/16	0.1002	22114.0			220698.602794	Y
5	IC 280-534622/15	0.2505	53082.0			211904.191617	Y
6	IC 280-534622/14	0.4008	87233.0			217647.205589	Y
7	IC 280-534622/13	0.7014	154539.0			220329.341317	Y
8	IC 280-534622/12	1.002	220037.0			219597.804391	Y
9	IC 280-534622/11	2.505	543111.0			216810.778443	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

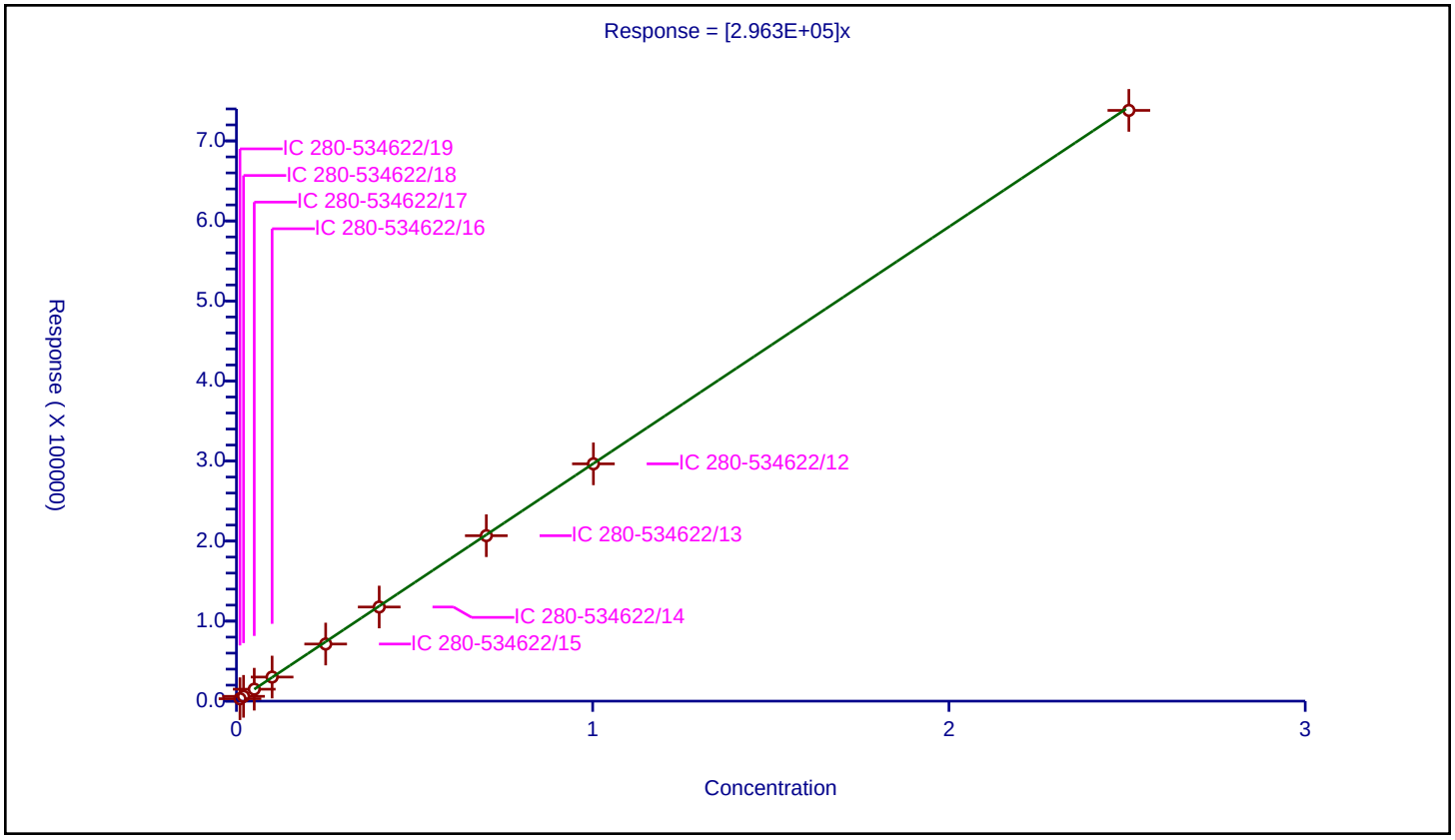
Curve Coefficients

Intercept:	0
Slope:	2.963E+05

Error Coefficients

Standard Error:	1890
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 280-534622/19	0.01002	3052.0			304590.818363	Y
2	IC 280-534622/18	0.02004	6019.0			300349.301397	Y
3	IC 280-534622/17	0.0501	14927.0			297944.111776	Y
4	IC 280-534622/16	0.1002	30099.0			300389.221557	Y
5	IC 280-534622/15	0.2505	71373.0			284922.155689	Y
6	IC 280-534622/14	0.4008	117621.0			293465.568862	Y
7	IC 280-534622/13	0.7014	206721.0			294726.261762	Y
8	IC 280-534622/12	1.002	296509.0			295917.165669	Y
9	IC 280-534622/11	2.505	738121.0			294659.081836	Y



Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

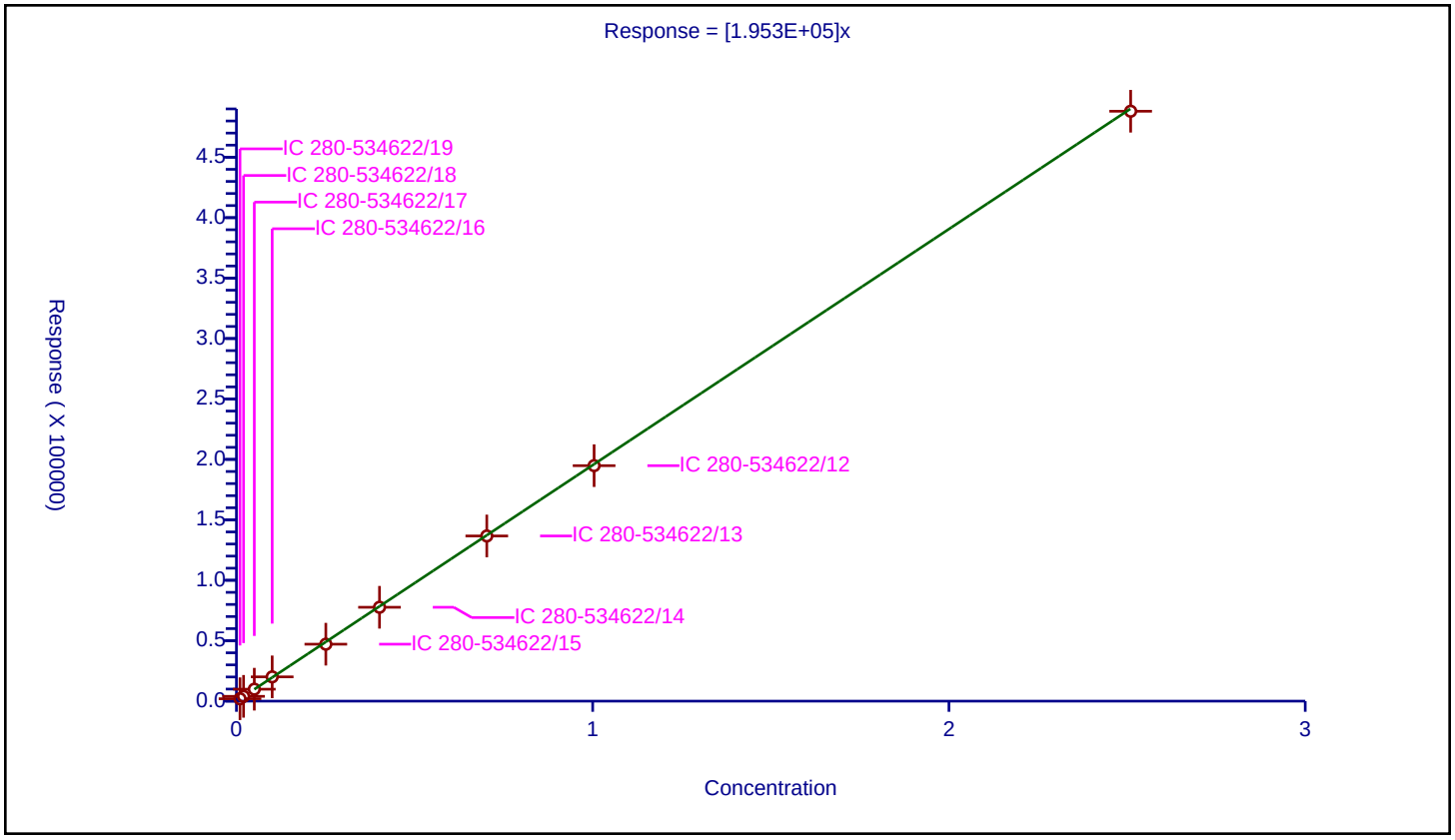
Curve Coefficients

Intercept:	0
Slope:	1.953E+05

Error Coefficients

Standard Error:	1160
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 280-534622/19	0.01004	1995.0			198705.179283	Y
2	IC 280-534622/18	0.02008	3972.0			197808.76494	Y
3	IC 280-534622/17	0.0502	9892.0			197051.792829	Y
4	IC 280-534622/16	0.1004	20078.0			199980.079681	Y
5	IC 280-534622/15	0.251	47122.0			187737.051793	Y
6	IC 280-534622/14	0.4016	77656.0			193366.533865	Y
7	IC 280-534622/13	0.7028	136648.0			194433.693796	Y
8	IC 280-534622/12	1.004	194820.0			194043.824701	Y
9	IC 280-534622/11	2.51	488061.0			194446.613546	Y



Calibration / Tetryl

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

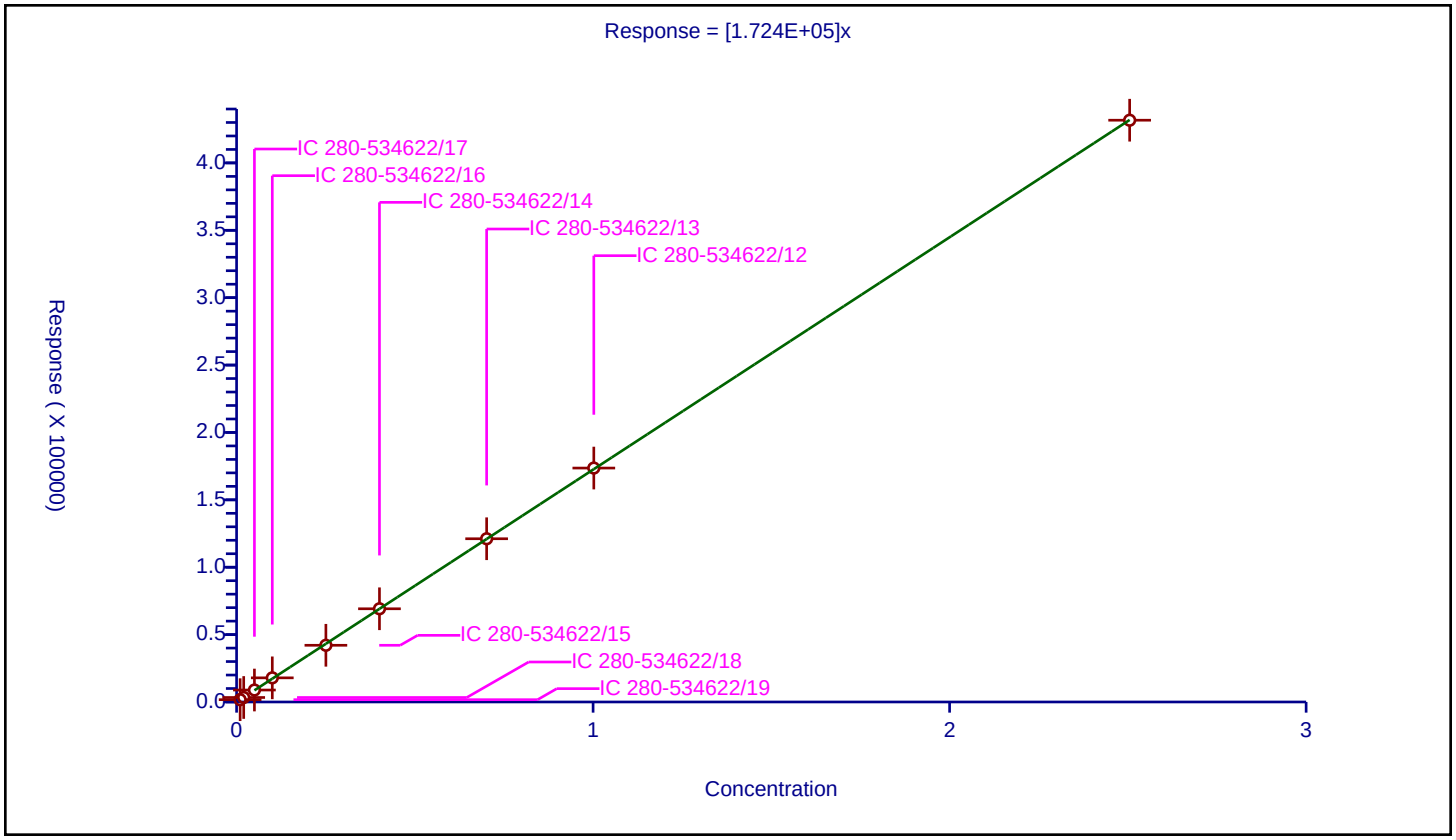
Curve Coefficients

Intercept:	0
Slope:	1.724E+05

Error Coefficients

Standard Error:	557
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 280-534622/19	0.01002	1712.0			170858.283433	Y
2	IC 280-534622/18	0.02004	3331.0			166217.56487	Y
3	IC 280-534622/17	0.0501	8870.0			177045.908184	Y
4	IC 280-534622/16	0.1002	17920.0			178842.315369	Y
5	IC 280-534622/15	0.2505	42079.0			167980.03992	Y
6	IC 280-534622/14	0.4008	69168.0			172574.850299	Y
7	IC 280-534622/13	0.7014	121126.0			172691.759338	Y
8	IC 280-534622/12	1.002	173586.0			173239.520958	Y
9	IC 280-534622/11	2.505	431686.0			172329.740519	Y



Calibration / Nitroglycerin

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

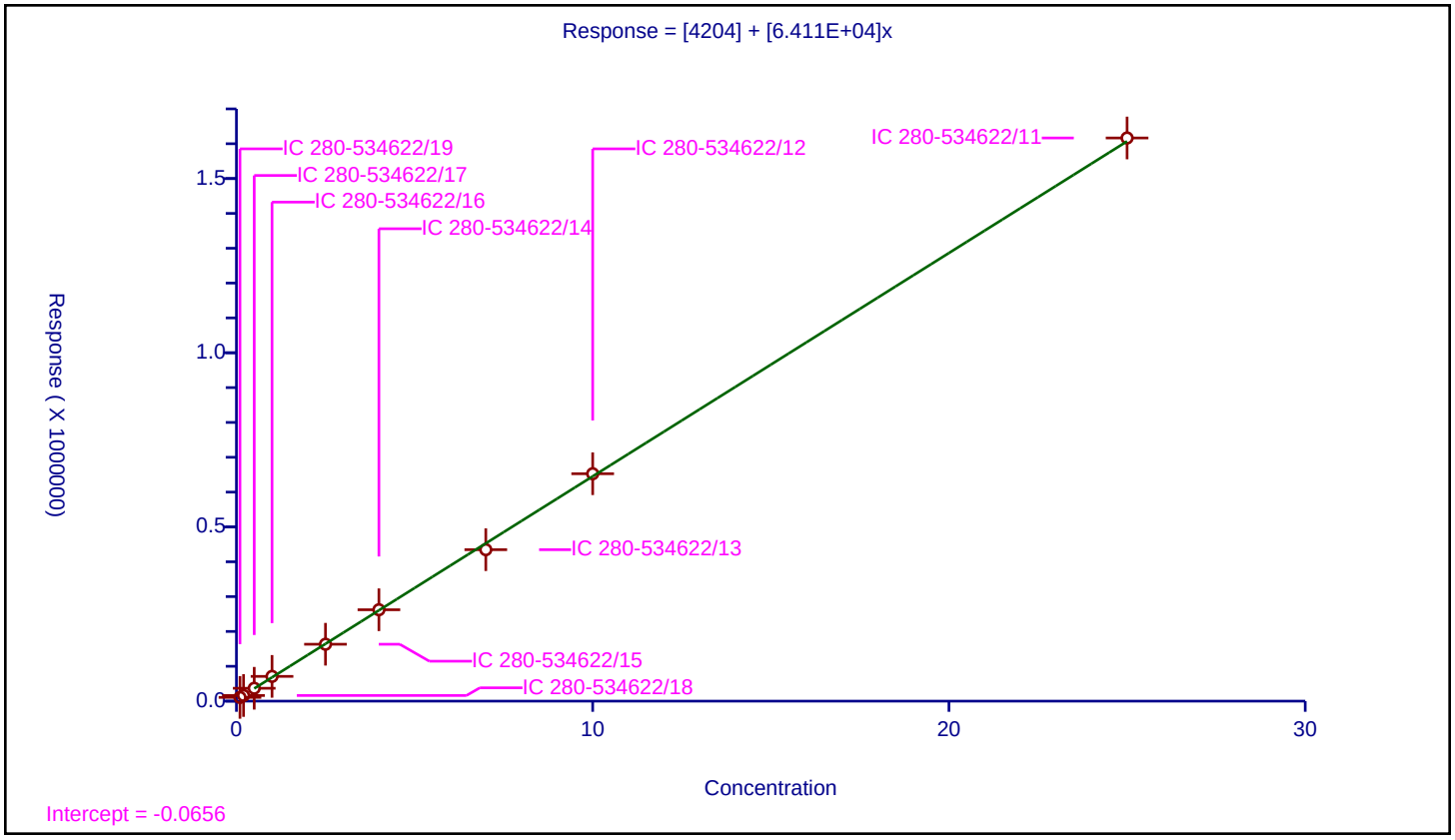
Curve Coefficients

Intercept:	4204
Slope:	6.411E+04

Error Coefficients

Standard Error:	8390
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 280-534622/19	0.1	10778.0			107780.0	Y
2	IC 280-534622/18	0.2	16162.0			80810.0	Y
3	IC 280-534622/17	0.5	36983.0			73966.0	Y
4	IC 280-534622/16	1.0	71053.0			71053.0	Y
5	IC 280-534622/15	2.5	163334.0			65333.6	Y
6	IC 280-534622/14	4.0	262320.0			65580.0	Y
7	IC 280-534622/13	7.0	434747.0			62106.714286	Y
8	IC 280-534622/12	10.0	652752.0			65275.2	Y
9	IC 280-534622/11	25.0	1616536.0			64661.44	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

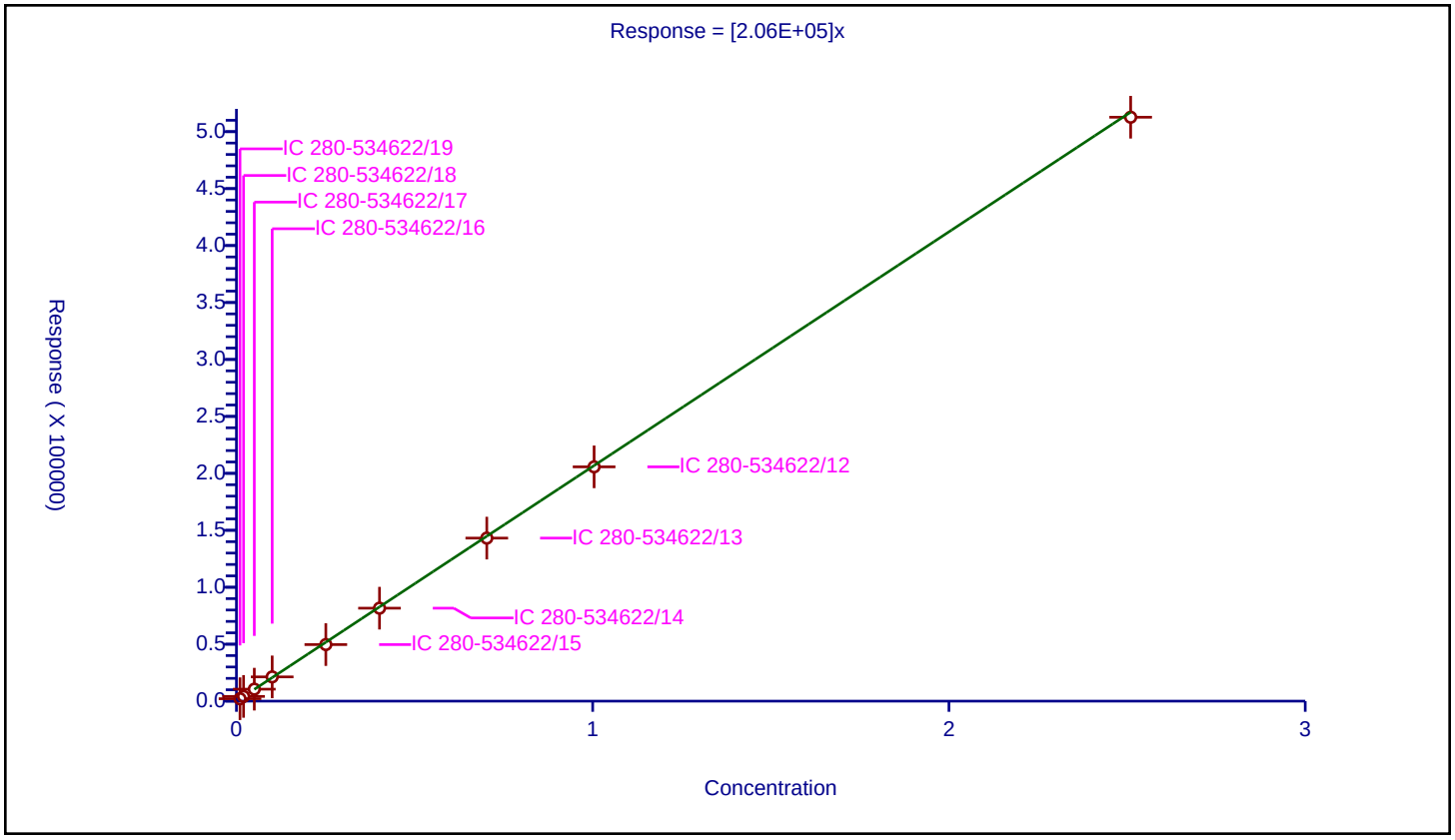
Curve Coefficients

Intercept:	0
Slope:	2.06E+05

Error Coefficients

Standard Error:	1930
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01004	2128.0			211952.191235	Y
2	IC 280-534622/18	0.02008	4156.0			206972.111554	Y
3	IC 280-534622/17	0.0502	10514.0			209442.231076	Y
4	IC 280-534622/16	0.1004	21286.0			212011.952191	Y
5	IC 280-534622/15	0.251	49667.0			197876.494024	Y
6	IC 280-534622/14	0.4016	81630.0			203261.952191	Y
7	IC 280-534622/13	0.7028	143142.0			203673.875925	Y
8	IC 280-534622/12	1.004	205715.0			204895.418327	Y
9	IC 280-534622/11	2.51	512679.0			204254.581673	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

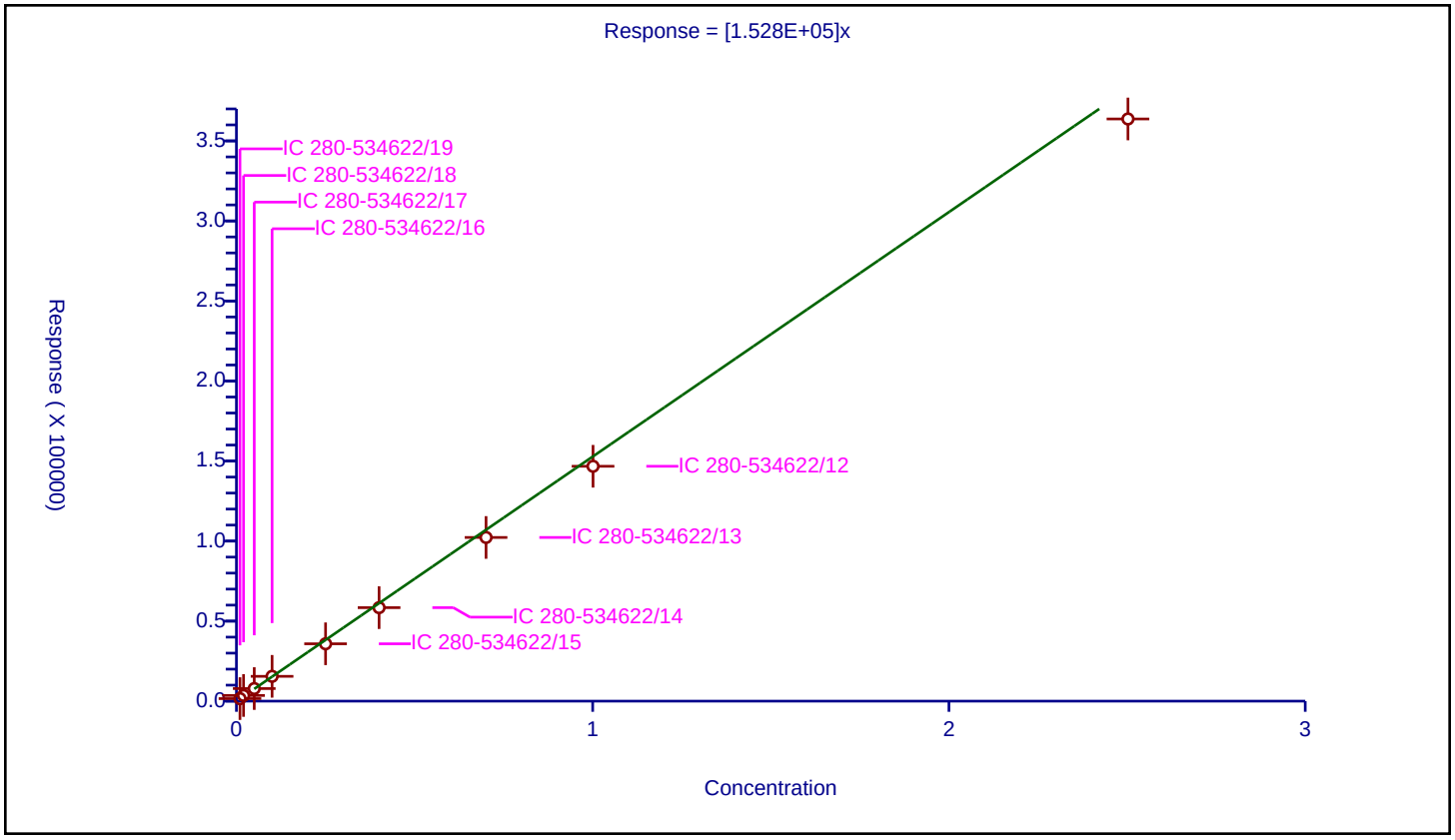
Curve Coefficients

Intercept:	0
Slope:	1.528E+05

Error Coefficients

Standard Error:	7250
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01001	1596.0			159440.559441	Y
2	IC 280-534622/18	0.02002	3532.0			176423.576424	Y
3	IC 280-534622/17	0.05005	7868.0			157202.797203	Y
4	IC 280-534622/16	0.1001	15505.0			154895.104895	Y
5	IC 280-534622/15	0.25025	35838.0			143208.791209	Y
6	IC 280-534622/14	0.4004	58412.0			145884.115884	Y
7	IC 280-534622/13	0.7007	102258.0			145936.920223	Y
8	IC 280-534622/12	1.001	146728.0			146581.418581	Y
9	IC 280-534622/11	2.5025	363710.0			145338.661339	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

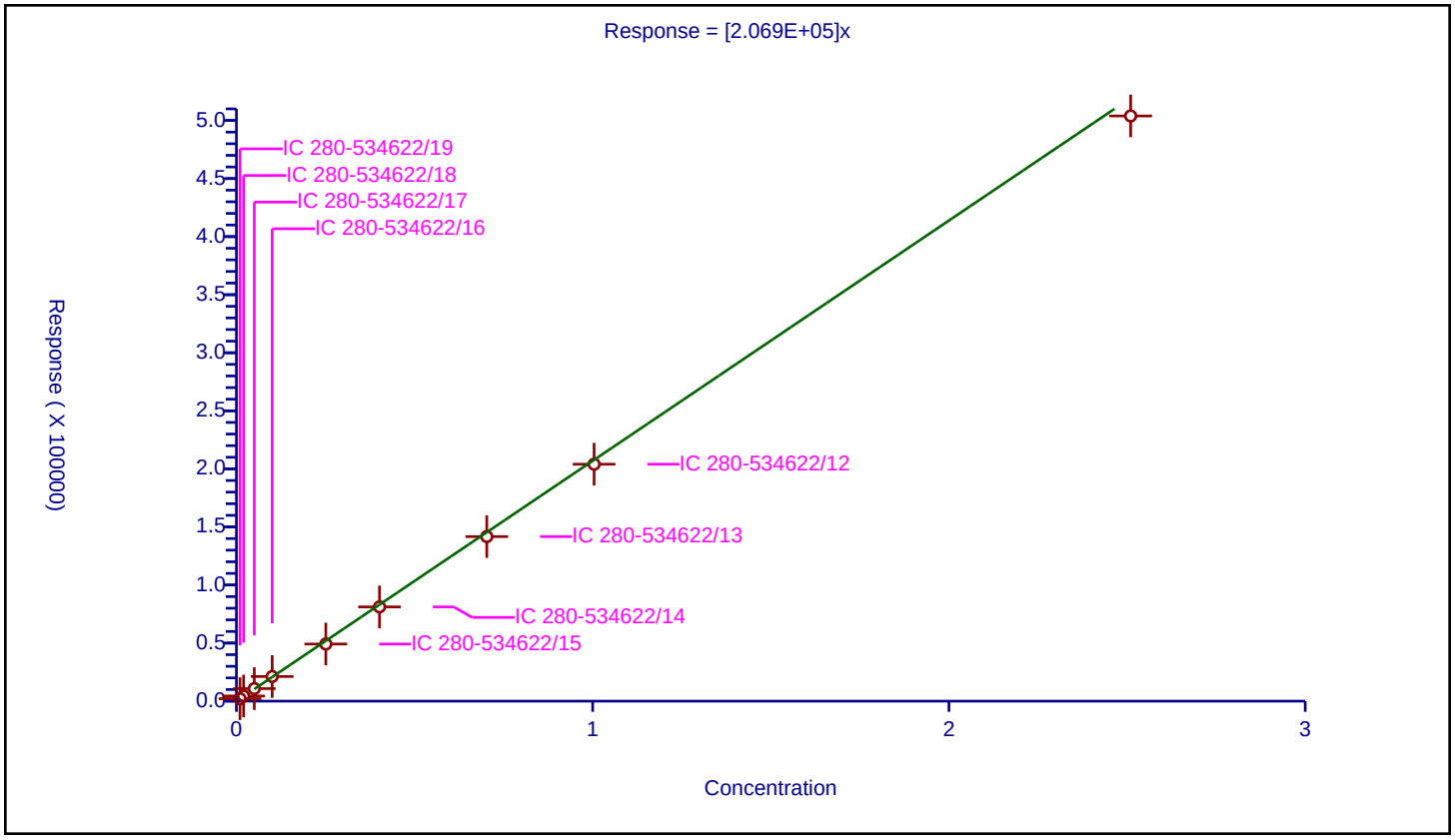
Curve Coefficients

Intercept:	0
Slope:	2.069E+05

Error Coefficients

Standard Error:	5900
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01004	2126.0			211752.988048	Y
2	IC 280-534622/18	0.02008	4433.0			220766.932271	Y
3	IC 280-534622/17	0.0502	10789.0			214920.318725	Y
4	IC 280-534622/16	0.1004	21203.0			211185.258964	Y
5	IC 280-534622/15	0.251	49194.0			195992.031873	Y
6	IC 280-534622/14	0.4016	81166.0			202106.573705	Y
7	IC 280-534622/13	0.7028	141712.0			201639.157655	Y
8	IC 280-534622/12	1.004	204025.0			203212.151394	Y
9	IC 280-534622/11	2.51	503909.0			200760.557769	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

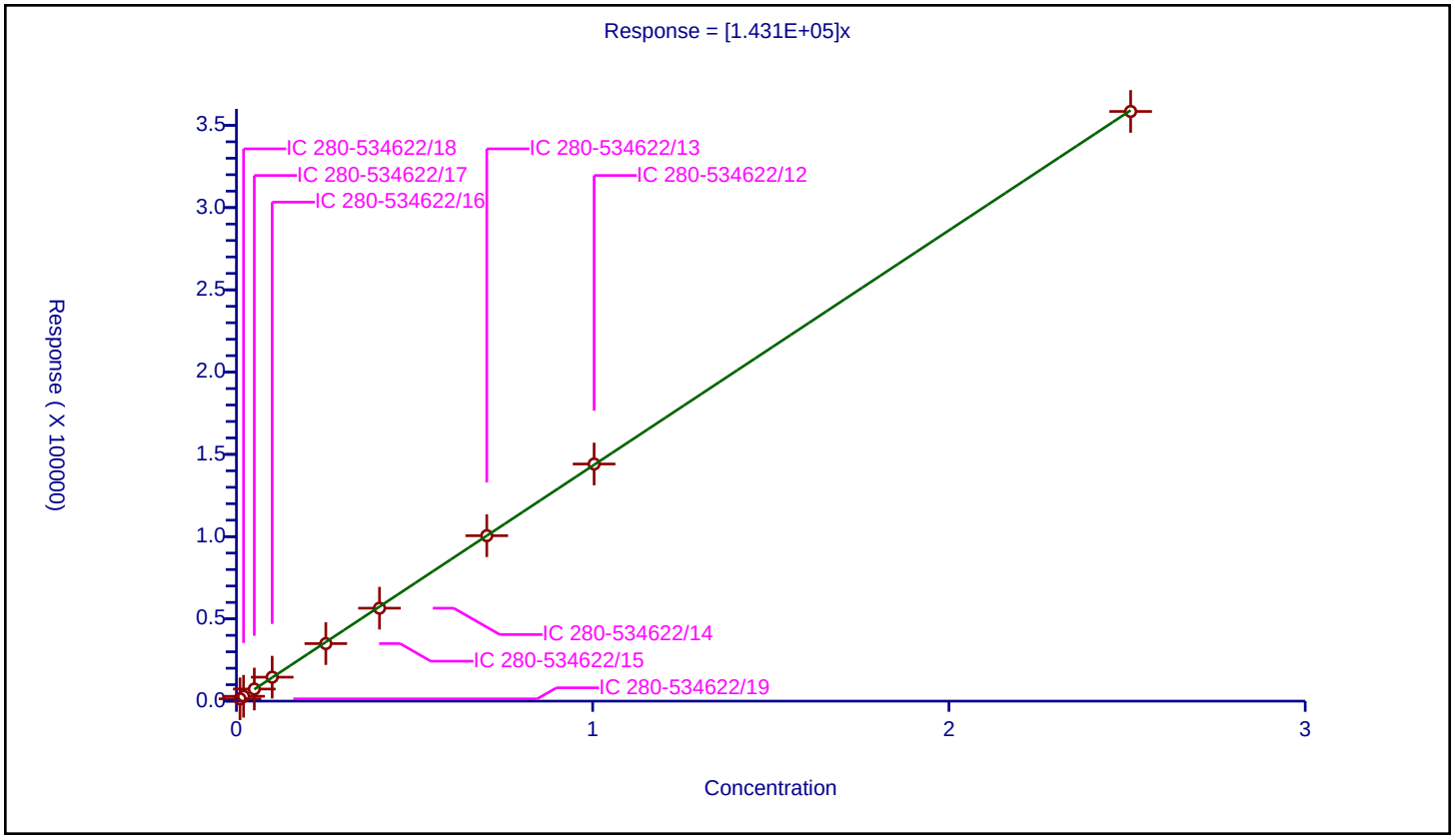
Curve Coefficients

Intercept:	0
Slope:	1.431E+05

Error Coefficients

Standard Error:	567
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 280-534622/19	0.01004	1404.0			139840.63745	Y
2	IC 280-534622/18	0.02008	2947.0			146762.948207	Y
3	IC 280-534622/17	0.0502	7360.0			146613.545817	Y
4	IC 280-534622/16	0.1004	14557.0			144990.039841	Y
5	IC 280-534622/15	0.251	34973.0			139334.661355	Y
6	IC 280-534622/14	0.4016	56504.0			140697.211155	Y
7	IC 280-534622/13	0.7028	100565.0			143091.918042	Y
8	IC 280-534622/12	1.004	144143.0			143568.7251	Y
9	IC 280-534622/11	2.51	358451.0			142809.163347	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

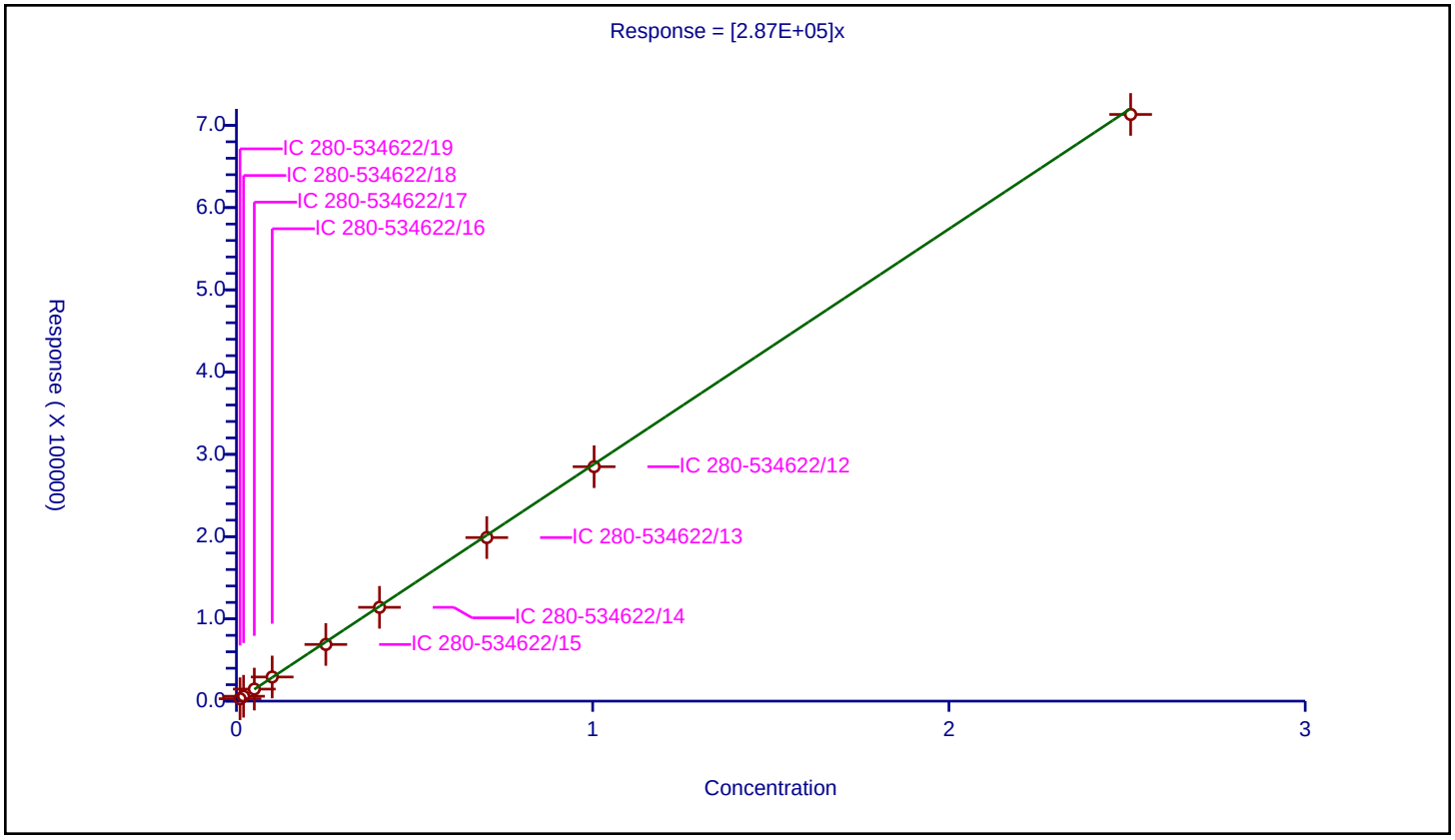
Curve Coefficients

Intercept:	0
Slope:	2.87E+05

Error Coefficients

Standard Error:	3180
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01004	2944.0			293227.091633	Y
2	IC 280-534622/18	0.02008	5945.0			296065.737052	Y
3	IC 280-534622/17	0.0502	14647.0			291772.908367	Y
4	IC 280-534622/16	0.1004	29362.0			292450.199203	Y
5	IC 280-534622/15	0.251	68930.0			274621.513944	Y
6	IC 280-534622/14	0.4016	114050.0			283989.043825	Y
7	IC 280-534622/13	0.7028	198852.0			282942.515652	Y
8	IC 280-534622/12	1.004	285012.0			283876.494024	Y
9	IC 280-534622/11	2.51	713254.0			284164.940239	Y



Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

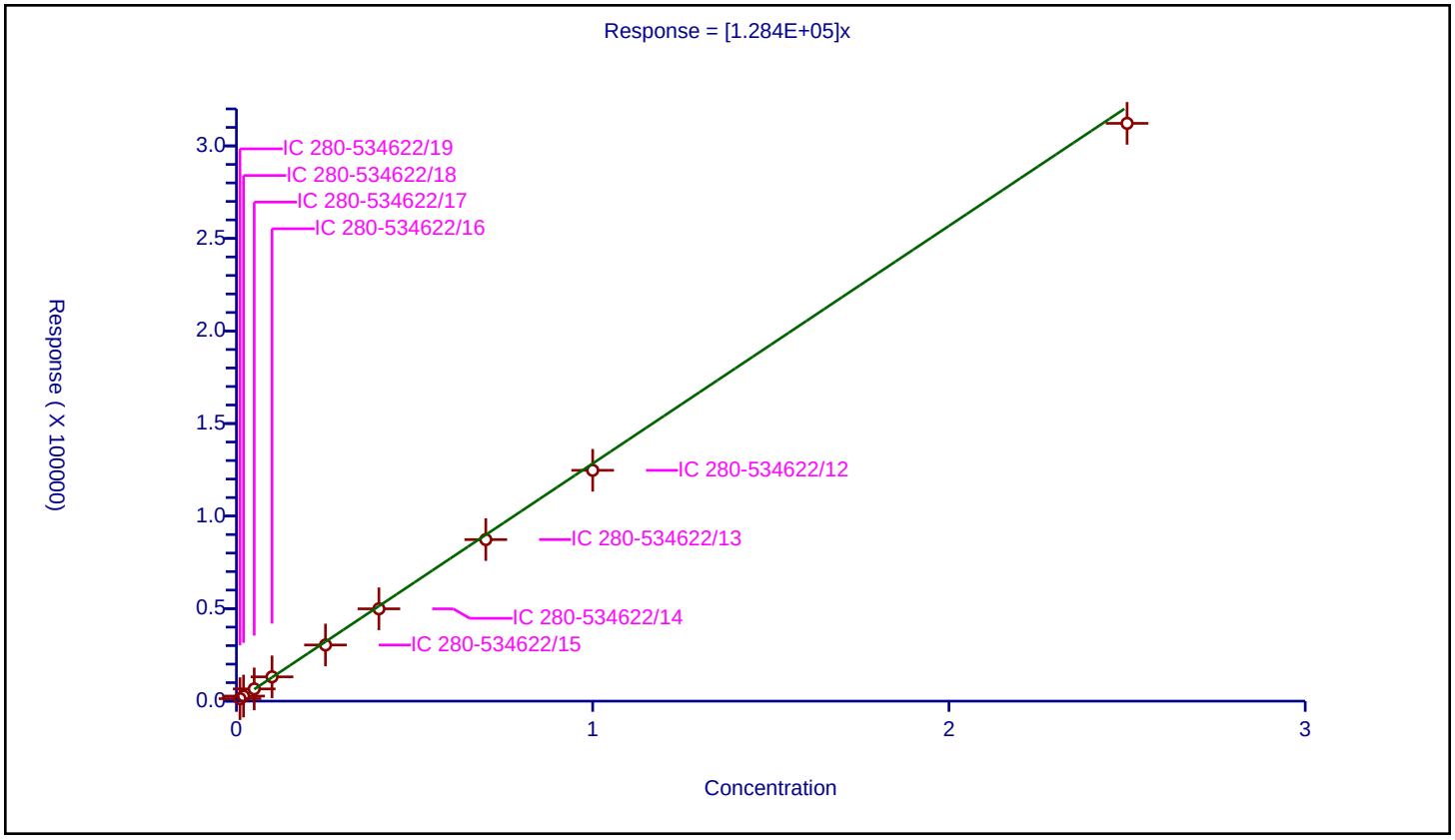
Curve Coefficients

Intercept:	0
Slope:	1.284E+05

Error Coefficients

Standard Error:	3580
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 280-534622/19	0.01	1346.0			134600.0	Y
2	IC 280-534622/18	0.02	2737.0			136850.0	Y
3	IC 280-534622/17	0.05	6616.0			132320.0	Y
4	IC 280-534622/16	0.1	13138.0			131380.0	Y
5	IC 280-534622/15	0.25	30342.0			121368.0	Y
6	IC 280-534622/14	0.4	49881.0			124702.5	Y
7	IC 280-534622/13	0.7	87294.0			124705.714286	Y
8	IC 280-534622/12	1.0	124724.0			124724.0	Y
9	IC 280-534622/11	2.5	312191.0			124876.4	Y



Calibration / p-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

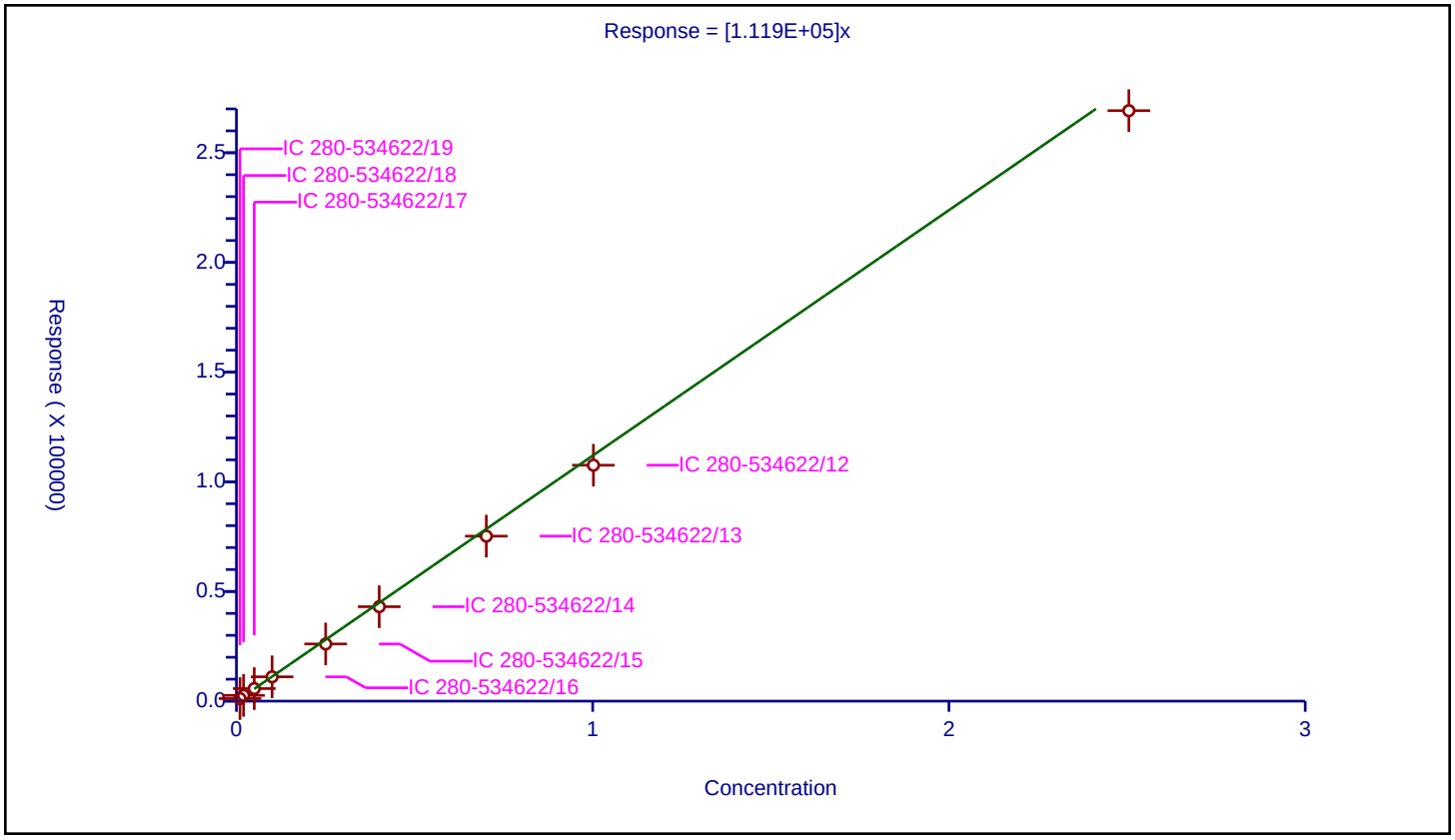
Curve Coefficients

Intercept:	0
Slope:	1.119E+05

Error Coefficients

Standard Error:	4520
Relative Standard Error:	7.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01002	1177.0			117465.06986	Y
2	IC 280-534622/18	0.02004	2633.0			131387.225549	Y
3	IC 280-534622/17	0.0501	5724.0			114251.497006	Y
4	IC 280-534622/16	0.1002	11083.0			110608.782435	Y
5	IC 280-534622/15	0.2505	26060.0			104031.936128	Y
6	IC 280-534622/14	0.4008	43055.0			107422.654691	Y
7	IC 280-534622/13	0.7014	75212.0			107231.251782	Y
8	IC 280-534622/12	1.002	107567.0			107352.295409	Y
9	IC 280-534622/11	2.505	269197.0			107463.872255	Y



Calibration / m-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

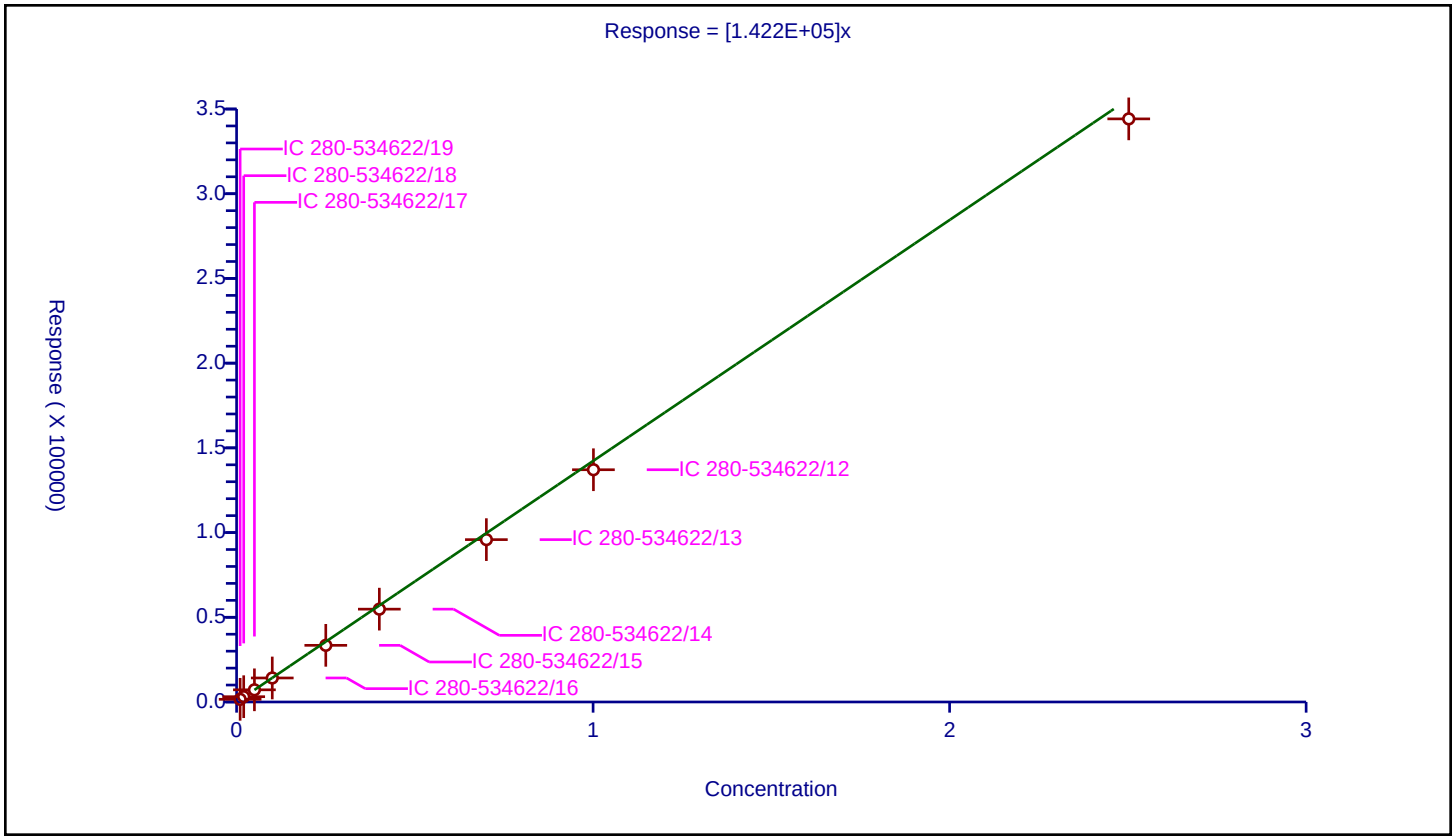
Curve Coefficients

Intercept:	0
Slope:	1.422E+05

Error Coefficients

Standard Error:	4890
Relative Standard Error:	6.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534622/19	0.01001	1575.0			157342.657343	Y
2	IC 280-534622/18	0.02002	3121.0			155894.105894	Y
3	IC 280-534622/17	0.05005	7187.0			143596.403596	Y
4	IC 280-534622/16	0.1001	14179.0			141648.351648	Y
5	IC 280-534622/15	0.25025	33440.0			133626.373626	Y
6	IC 280-534622/14	0.4004	54796.0			136853.146853	Y
7	IC 280-534622/13	0.7007	95835.0			136770.372485	Y
8	IC 280-534622/12	1.001	137092.0			136955.044955	Y
9	IC 280-534622/11	2.5025	344169.0			137530.06993	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

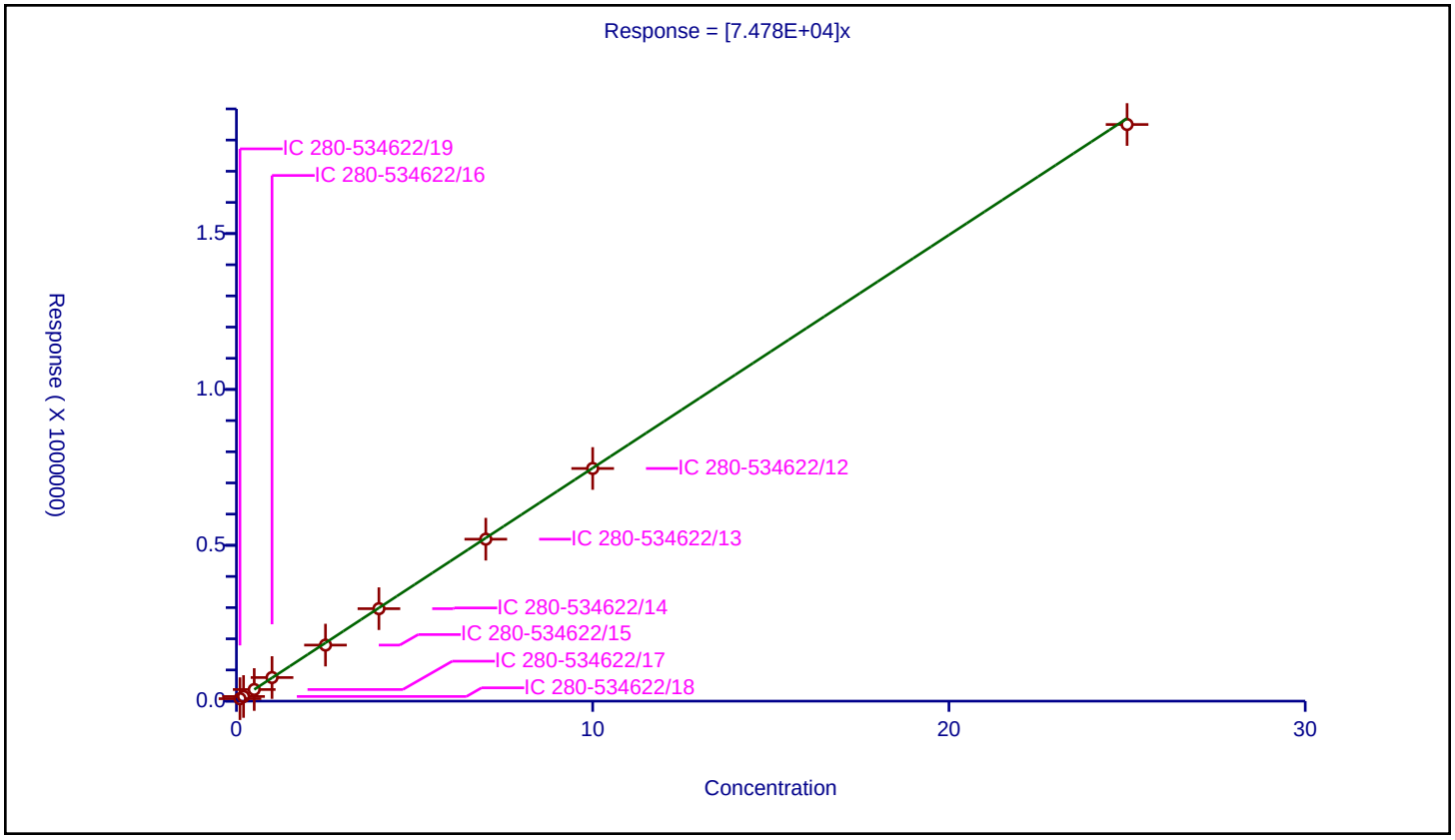
Curve Coefficients

Intercept:	0
Slope:	7.478E+04

Error Coefficients

Standard Error:	7550
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 280-534622/19	0.1	7901.0			79010.0	Y
2	IC 280-534622/18	0.2	14944.0			74720.0	Y
3	IC 280-534622/17	0.5	37293.0			74586.0	Y
4	IC 280-534622/16	1.0	75747.0			75747.0	Y
5	IC 280-534622/15	2.5	179819.0			71927.6	Y
6	IC 280-534622/14	4.0	296622.0			74155.5	Y
7	IC 280-534622/13	7.0	519589.0			74227.0	Y
8	IC 280-534622/12	10.0	746366.0			74636.6	Y
9	IC 280-534622/11	25.0	1849935.0			73997.4	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1 Analy Batch No.: 534620

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:54 Calibration End Date: 05/01/2021 23:35 Calibration ID: 53146

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534620/18	018-1301.D
Level 2	IC 280-534620/17	017-1201.D
Level 3	IC 280-534620/16	016-1101.D
Level 4	IC 280-534620/15	015-1001.D
Level 5	IC 280-534620/14	014-0901.D
Level 6	IC 280-534620/13	013-0801.D
Level 7	IC 280-534620/12	012-0701.D
Level 8	IC 280-534620/11	011-0601.D
Level 9	IC 280-534620/10	010-0501.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	6.724	6.720	6.734	6.718	6.713	6.705	6.698	6.691	6.635		6.563 - 6.863	6.704
Picric acid	8.004	7.980	7.987	7.958	7.933	7.911	7.878	7.845	7.801		7.783 - 8.083	7.922
RDX	+++++	8.926	8.934	8.912	8.906	8.898	8.891	8.878	8.801		8.756 - 9.056	8.893
Nitrobenzene	+++++	11.973	11.994	11.971	11.973	11.951	11.951	11.924	11.854		11.823 - 12.123	11.949
1,3-Dinitrobenzene	15.524	15.533	15.547	15.518	15.519	15.491	15.504	15.471	15.421		15.369 - 15.669	15.503
Nitroglycerin	+++++	15.940	15.961	15.931	15.939	15.905	15.924	15.891	15.861		15.789 - 16.089	15.919
2-Nitrotoluene	16.751	16.740	16.781	16.751	16.759	16.725	16.744	16.704	16.668		16.609 - 16.909	16.736
4-Nitrotoluene	17.031	17.060	17.074	17.038	17.046	17.011	17.031	16.991	16.928		16.896 - 17.196	17.023
4-Amino-2,6-dinitrotoluene	17.511	17.520	17.541	17.511	17.526	17.485	17.504	17.458	17.421		17.376 - 17.676	17.497
3-Nitrotoluene	17.978	18.033	18.047	18.011	18.026	17.985	18.011	17.964	17.928		17.876 - 18.176	17.998
2-Amino-4,6-dinitrotoluene	18.418	18.426	18.441	18.418	18.426	18.385	18.411	18.364	18.321		18.276 - 18.576	18.401
1,3,5-Trinitrobenzene	18.904	18.946	18.954	18.931	18.939	18.905	18.924	18.884	18.861		18.789 - 19.089	18.916
2,6-Dinitrotoluene	20.191	20.200	20.201	20.185	20.199	20.158	20.184	20.138	20.114		20.049 - 20.349	20.174
2,4-Dinitrotoluene	20.644	20.666	20.674	20.652	20.666	20.625	20.651	20.605	20.581		20.516 - 20.816	20.640
Tetryl	24.271	24.306	24.287	24.298	24.313	24.258	24.304	24.245	24.248		24.163 - 24.463	24.281
2,4,6-Trinitrotoluene	25.258	25.280	25.254	25.265	25.280	25.231	25.271	25.218	25.221		25.130 - 25.430	25.253
PETN	26.151	26.180	26.154	26.172	26.186	26.145	26.184	26.138	26.155		26.036 - 26.336	26.163
1,2-Dinitrobenzene	+++++	13.093	13.114	13.091	13.093	13.065	13.071	13.044	12.988		12.943 - 13.243	13.070

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1 Analy Batch No.: 534620

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:54 Calibration End Date: 05/01/2021 23:35 Calibration ID: 53146

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534620/18	018-1301.D
Level 2	IC 280-534620/17	017-1201.D
Level 3	IC 280-534620/16	016-1101.D
Level 4	IC 280-534620/15	015-1001.D
Level 5	IC 280-534620/14	014-0901.D
Level 6	IC 280-534620/13	013-0801.D
Level 7	IC 280-534620/12	012-0701.D
Level 8	IC 280-534620/11	011-0601.D
Level 9	IC 280-534620/10	010-0501.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	254300 158320 162626	214300 160223	175820 158743	168500 161798	Lin2	980.653662	158773.733							0.9990		0.9900
Picric acid	178900 152888 141385	163500 155475	171560 152839	163400 155884	Ave		159536.708				7.0		20.0			
RDX	+++++ 194424 195542	226650 195463	221320 195131	206610 199019	Ave		204269.866				6.3		20.0			
Nitrobenzene	+++++ 361594 374427	392829 363362	384582 365280	379333 375807	Ave		374651.498				2.9		20.0			
1,3-Dinitrobenzene	707086 560267 567860	619311 564242	581677 563124	586467 575968	Lin2	1373.03976	562951.690							1.0000		0.9900
Nitroglycerin	+++++ 124192 125256	141495 124522	130832 124706	130447 127389	Ave		128604.807				4.5		20.0			
2-Nitrotoluene	302200 232764 241861	257550 236045	247460 236947	245280 240595	Ave		248966.927				8.5		20.0			
4-Nitrotoluene	260279 204571 203894	240669 205292	214770 204907	211786 208512	Ave		217186.809				9.1		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
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1 Analy Batch No.: 534620

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:54 Calibration End Date: 05/01/2021 23:35 Calibration ID: 53146

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	395005 273762 275790	313487 274451	295744 274119	287902 280086	Ave		296705.057				13.2		20.0			
3-Nitrotoluene	351349 259473 262003	296104 260060	278581 260578	271848 265537	Ave		278392.538				10.7		20.0			
2-Amino-4,6-dinitrotoluene	512749 386737 391743	453884 388349	420538 388045	407410 395660	Lin2	1254.00604	389849.211							1.0000		0.9900
1,3,5-Trinitrobenzene	710180 416543 413420	525948 413743	469182 414112	445050 423023	Lin2	2883.27310	409600.291							0.9990		0.9900
2,6-Dinitrotoluene	354084 263195 266888	300100 265070	280498 266340	276106 272867	Lin2	857.028820	264837.016							1.0000		0.9900
2,4-Dinitrotoluene	659263 534514 542026	609014 537398	565657 537324	556155 550069	Ave		565713.342				7.4		20.0			
Tetryl	523453 323337 324746	378393 322206	350758 323640	340798 328709	Lin2	1889.68945	317664.730							0.9970		0.9900
2,4,6-Trinitrotoluene	544721 373793 382269	425697 377761	386454 378660	385857 387552	Lin2	1580.45681	371636.737							0.9980		0.9900
PETN	156590 132124 133721	137180 132892	138340 134943	136676 137199	Ave		137740.388				5.4		20.0			
1,2-Dinitrobenzene	+++++ 252324 253320	314000 253120	276720 251686	266780 257324	Ave		265659.214				8.1		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 TestAmerica, Denver Job No.: 280-155138-1 Analy Batch No.: 534620

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:54 Calibration End Date: 05/01/2021 23:35 Calibration ID: 53146

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534620/18	018-1301.D
Level 2	IC 280-534620/17	017-1201.D
Level 3	IC 280-534620/16	016-1101.D
Level 4	IC 280-534620/15	015-1001.D
Level 5	IC 280-534620/14	014-0901.D
Level 6	IC 280-534620/13	013-0801.D
Level 7	IC 280-534620/12	012-0701.D
Level 8	IC 280-534620/11	011-0601.D
Level 9	IC 280-534620/10	010-0501.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	Lin2	2543 64089	4286 111120	8791 161798	16850 406565	39580	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	1789 62190	3270 106987	8578 155884	16340 353462	38222	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	+++++ 78185	4533 136592	11066 199019	20661 488855	48606	+++++ 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Nitrobenzene	Ave	+++++ 145926	7888 256719	19306 377310	38085 939811	90760	+++++ 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
1,3-Dinitrobenzene	Lin2	7085 226148	12411 394975	29142 577120	58764 1422490	140347	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
Nitroglycerin	Ave	+++++ 498088	28299 872941	65416 1273886	130447 3131400	310480	+++++ 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2-Nitrotoluene	Ave	3022 94418	5151 165863	12373 240595	24528 604653	58191	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
4-Nitrotoluene	Ave	2608 82281	4823 143722	10760 208929	21221 510755	51245	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
4-Amino-2,6-dinitrotoluene	Ave	3954 109890	6276 192075	14802 280366	28819 690165	68509	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
3-Nitrotoluene	Ave	3517 104128	5928 182587	13943 265803	27212 655662	64933	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Lin2	5148 155961	9114 272718	21111 397243	40904 983275	97071	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
1,3,5-Trinitrobenzene	Lin2	7116 165828	10540 290458	23506 423869	44594 1035616	104344	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
2,6-Dinitrotoluene	Lin2	3555	6026	14081	27721	66062	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 TestAmerica, Denver Job No.: 280-155138-1 Analy Batch No.: 534620

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/01/2021 18:54 Calibration End Date: 05/01/2021 23:35 Calibration ID: 53146

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
		106452	187184	273958	669889		0.402	0.703	1.00	2.51	
2,4-Dinitrotoluene	Ave	6619	12229	28396	55838	134163	0.0100	0.0201	0.0502	0.100	0.251
		215819	377631	552269	1360486		0.402	0.703	1.00	2.51	
Tetryl	Lin2	5245	7583	17573	34148	80996	0.0100	0.0200	0.0501	0.100	0.251
		129140	227001	329366	813489		0.401	0.701	1.00	2.51	
2,4,6-Trinitrotoluene	Lin2	5469	8548	19400	38740	93822	0.0100	0.0201	0.0502	0.100	0.251
		151709	266122	389102	959496		0.402	0.703	1.00	2.51	
PETN	Ave	15659	27436	69170	136676	330309	0.100	0.200	0.500	1.00	2.50
		531566	944599	1371986	3343027		4.00	7.00	10.0	25.0	
1,2-Dinitrobenzene	Ave	+++++	6280	13836	26678	63081	+++++	0.0200	0.0500	0.100	0.250
		101248	176180	257324	633300		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_X5\20210501-101093.b\010-0501.D
Lims ID: IC INT/ADD 9
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 01-May-2021 18:54:50 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 9
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:11 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:10

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	4.061	4.126	-0.065	1092989	2.50	2.67	
2 2,4-diamino-6-nitrotoluene	1	4.635	4.653	-0.018	538473	2.50	2.25	
6 HMX	1	6.635	6.713	-0.078	406565	2.50	2.55	
5 2,4,6-Trinitrophenol	1	7.801	7.933	-0.132	353462	2.50	2.22	
8 RDX	1	8.801	8.906	-0.105	488855	2.50	2.39	
9 Nitrobenzene	1	11.854	11.973	-0.119	939811	2.51	2.51	
$ 10 1,2-Dinitrobenzene	1	12.988	13.093	-0.105	633300	2.50	2.38	
11 3,5-Dinitroaniline	1	14.868	14.979	-0.111	1143420	2.50	2.54	
12 1,3-Dinitrobenzene	1	15.421	15.519	-0.098	1422490	2.51	2.52	
13 Nitroglycerin	2	15.861	15.939	-0.078	3131400	25.0	24.3	
14 o-Nitrotoluene	1	16.668	16.759	-0.091	604653	2.50	2.43	
15 p-Nitrotoluene	1	16.928	17.046	-0.118	510755	2.51	2.35	
16 4-Amino-2,6-dinitrotoluene	1	17.421	17.526	-0.105	690165	2.50	2.33	
17 m-Nitrotoluene	1	17.928	18.026	-0.098	655662	2.50	2.36	
18 2-Amino-4,6-dinitrotoluene	1	18.321	18.426	-0.105	983275	2.51	2.52	
19 1,3,5-Trinitrobenzene	1	18.861	18.939	-0.078	1035616	2.51	2.52	
20 2,6-Dinitrotoluene	1	20.114	20.199	-0.085	669889	2.51	2.53	
21 2,4-Dinitrotoluene	1	20.581	20.666	-0.085	1360486	2.51	2.40	
22 Tetryl	1	24.248	24.313	-0.065	813489	2.51	2.55	
23 2,4,6-Trinitrotoluene	1	25.221	25.280	-0.059	959496	2.51	2.58	
24 PETN	2	26.155	26.186	-0.031	3343027	25.0	24.3	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added: 250.00	Units: uL
8330_ADDs_00027	Amount Added: 125.00	Units: uL

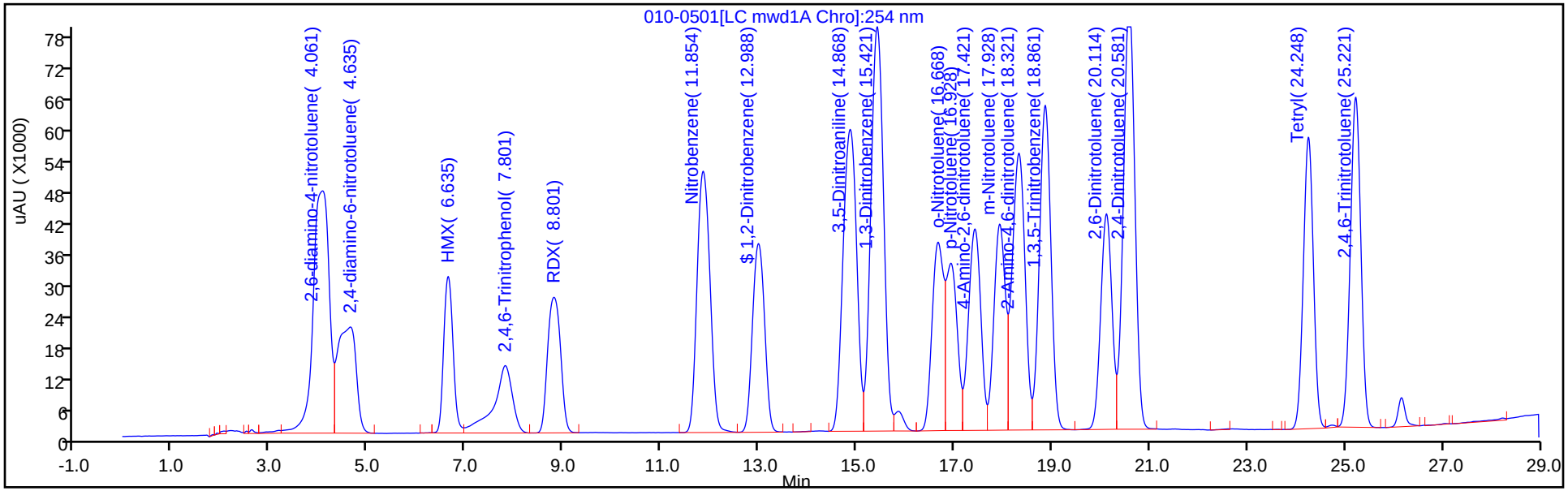
Report Date: 04-May-2021 13:43:11 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

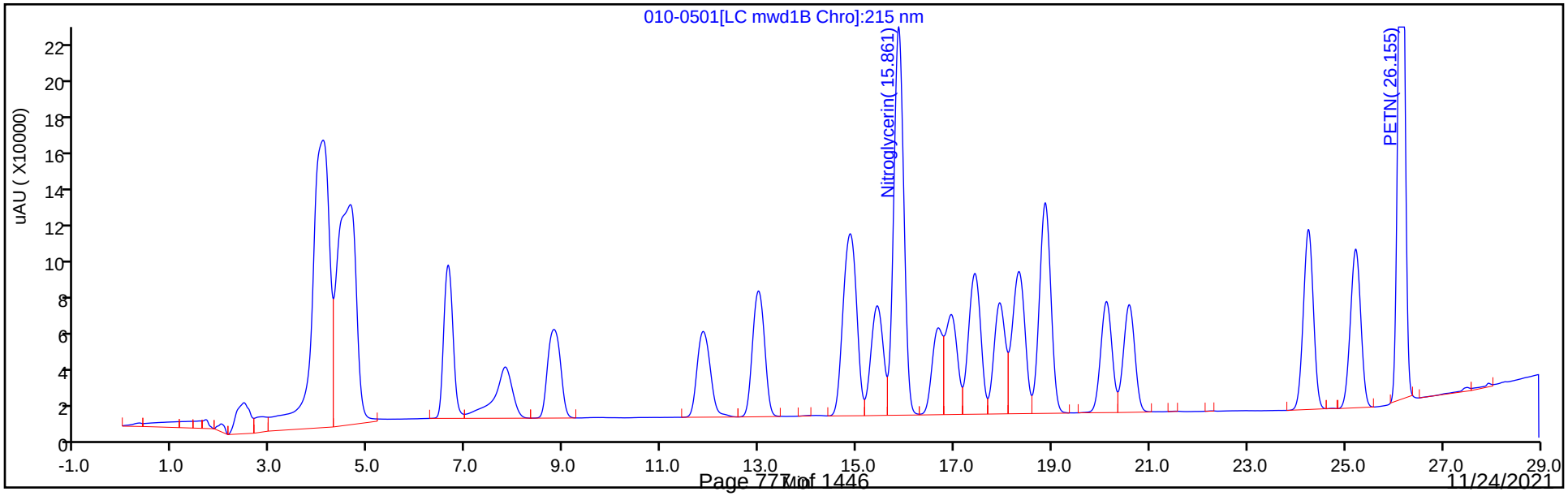
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\010-0501.D

Injection Date:	01-May-2021 18:54:50	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 TestAmerica, Denver

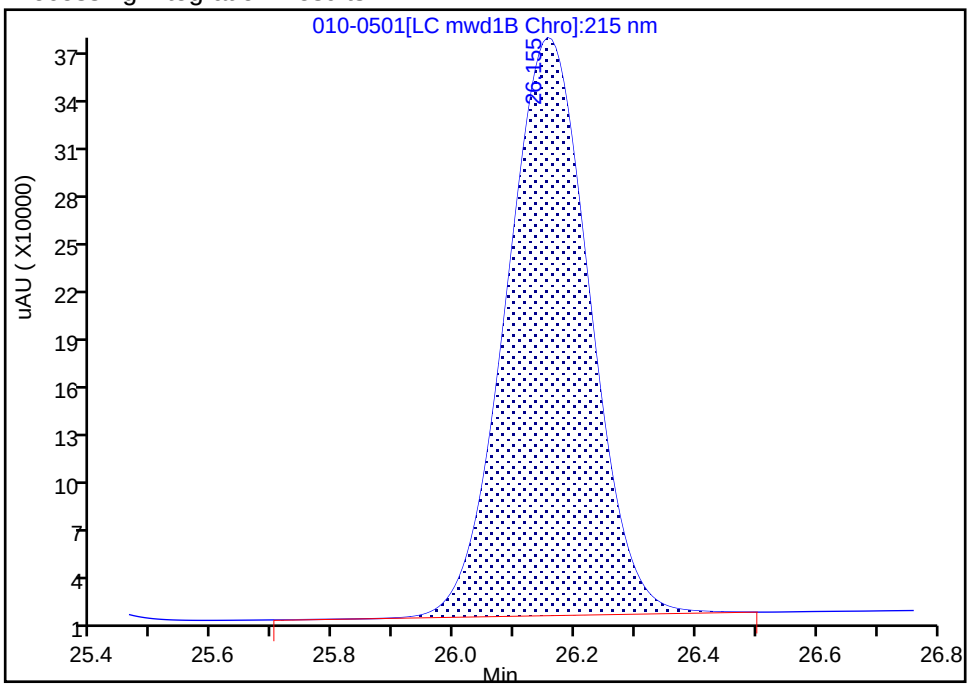
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\010-0501.D
Injection Date: 01-May-2021 18:54:50 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 9
Client ID:
Operator ID: JZ ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

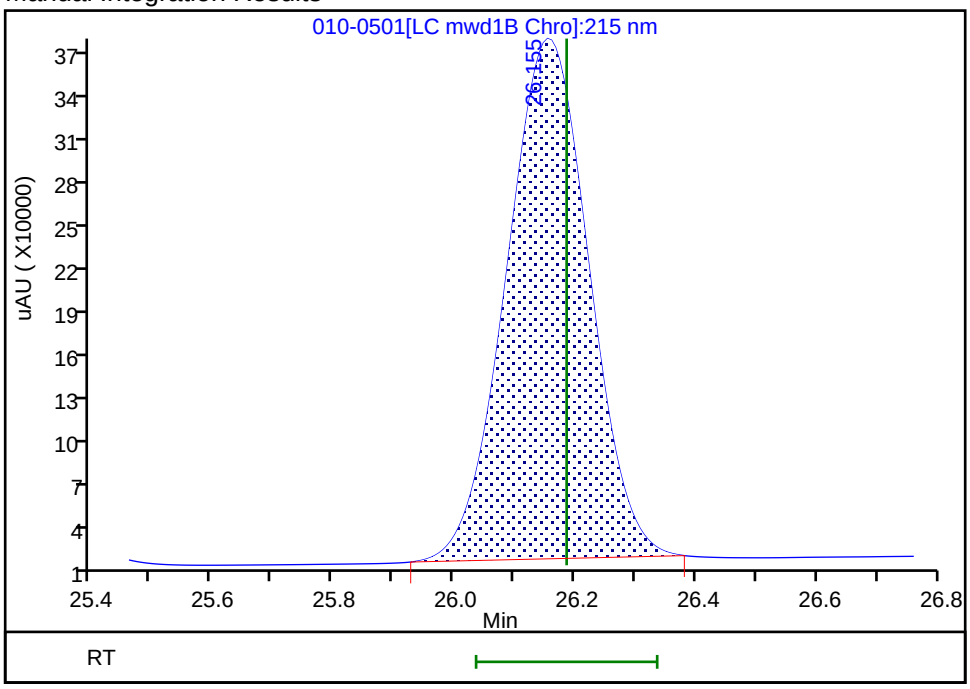
Processing Integration Results

RT: 26.15
Area: 3390696
Amount: 25.717777
Amount Units: ug/ml



Manual Integration Results

RT: 26.15
Area: 3343027
Amount: 24.270492
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:09
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\011-0601.D
Lims ID: IC INT/ADD 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 01-May-2021 19:29:53 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 8
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:11 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:18

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	4.085	4.126	-0.041	410324	1.00	1.00	
2 2,4-diamino-6-nitrotoluene	1	4.598	4.653	-0.055	250474	1.00	1.04	
6 HMX	1	6.691	6.713	-0.022	161798	1.00	1.01	
5 2,4,6-Trinitrophenol	1	7.845	7.933	-0.088	155884	1.00	0.9771	
8 RDX	1	8.878	8.906	-0.028	199019	1.00	0.9743	
9 Nitrobenzene	1	11.924	11.973	-0.049	377310	1.00	1.01	
$ 10 1,2-Dinitrobenzene	1	13.044	13.093	-0.049	257324	1.00	0.9686	
11 3,5-Dinitroaniline	1	14.918	14.979	-0.061	457283	1.00	1.01	
12 1,3-Dinitrobenzene	1	15.471	15.519	-0.048	577120	1.00	1.02	
13 Nitroglycerin	2	15.891	15.939	-0.048	1273886	10.0	9.91	
14 o-Nitrotoluene	1	16.704	16.759	-0.055	240595	1.00	0.9664	
15 p-Nitrotoluene	1	16.991	17.046	-0.055	208929	1.00	0.9620	
16 4-Amino-2,6-dinitrotoluene	1	17.458	17.526	-0.068	280366	1.00	0.9449	
17 m-Nitrotoluene	1	17.964	18.026	-0.062	265803	1.00	0.9548	
18 2-Amino-4,6-dinitrotoluene	1	18.364	18.426	-0.062	397243	1.00	1.02	
19 1,3,5-Trinitrobenzene	1	18.884	18.939	-0.055	423869	1.00	1.03	
20 2,6-Dinitrotoluene	1	20.138	20.199	-0.061	273958	1.00	1.03	
21 2,4-Dinitrotoluene	1	20.605	20.666	-0.062	552269	1.00	0.9762	
22 Tetryl	1	24.245	24.313	-0.068	329366	1.00	1.03	
23 2,4,6-Trinitrotoluene	1	25.218	25.280	-0.062	389102	1.00	1.04	
24 PETN	2	26.138	26.186	-0.048	1371986	10.0	9.96	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added: 100.00	Units: uL
8330_ADDs_00027	Amount Added: 50.00	Units: uL

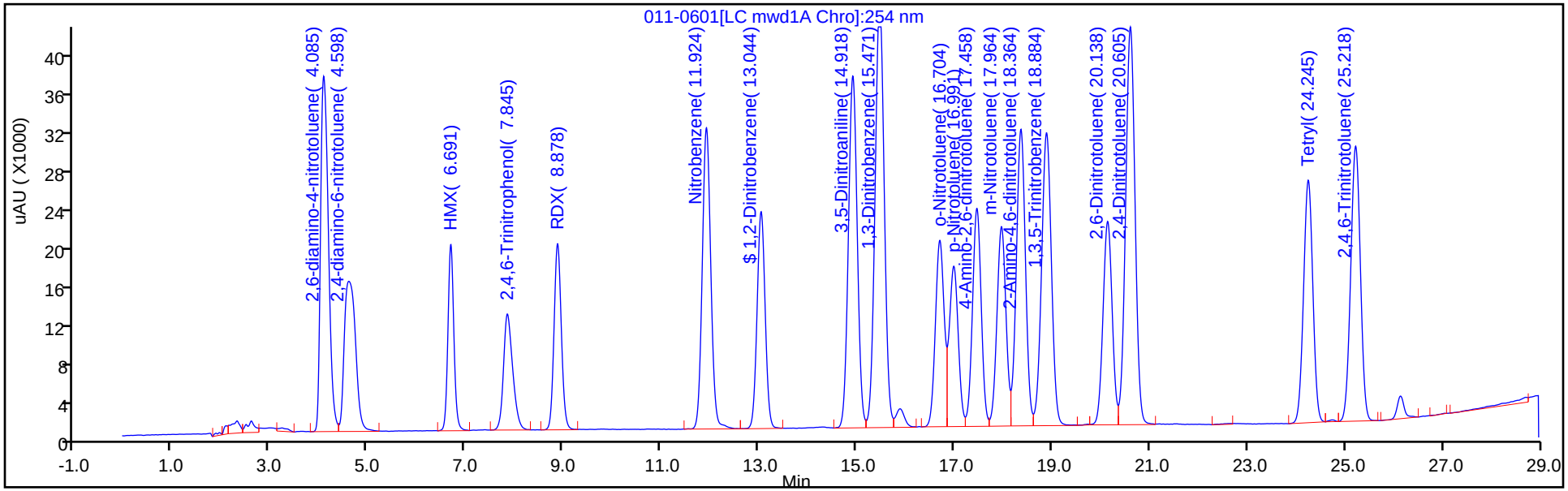
Report Date: 04-May-2021 13:43:12 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

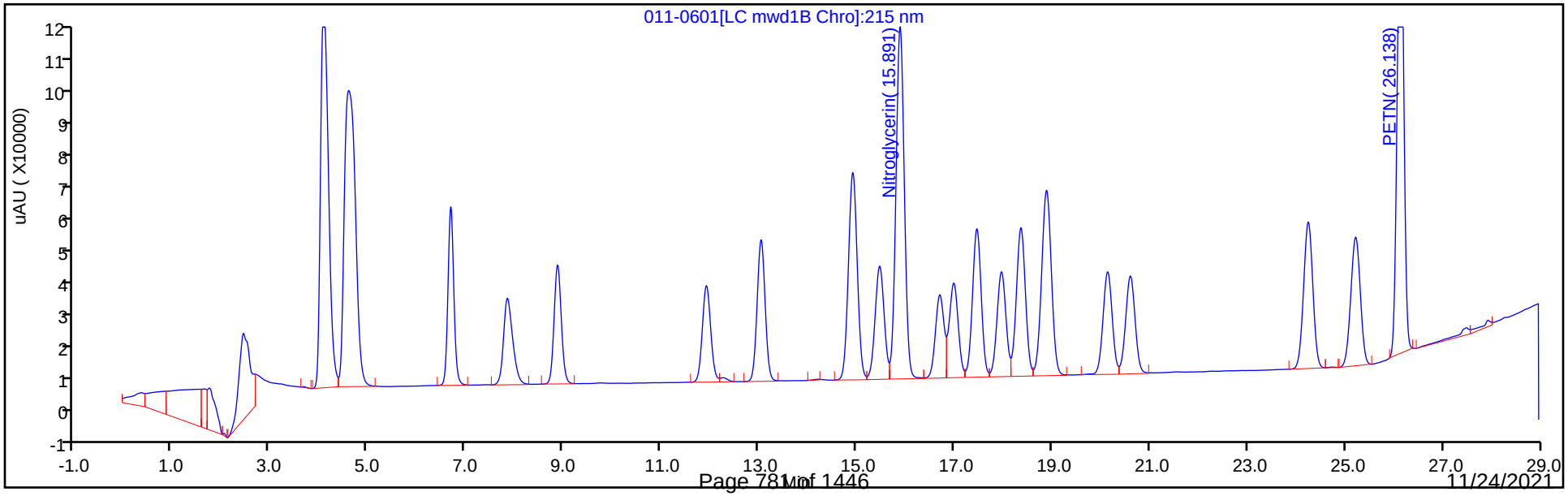
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\011-0601.D

Injection Date:	01-May-2021 19:29:53	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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

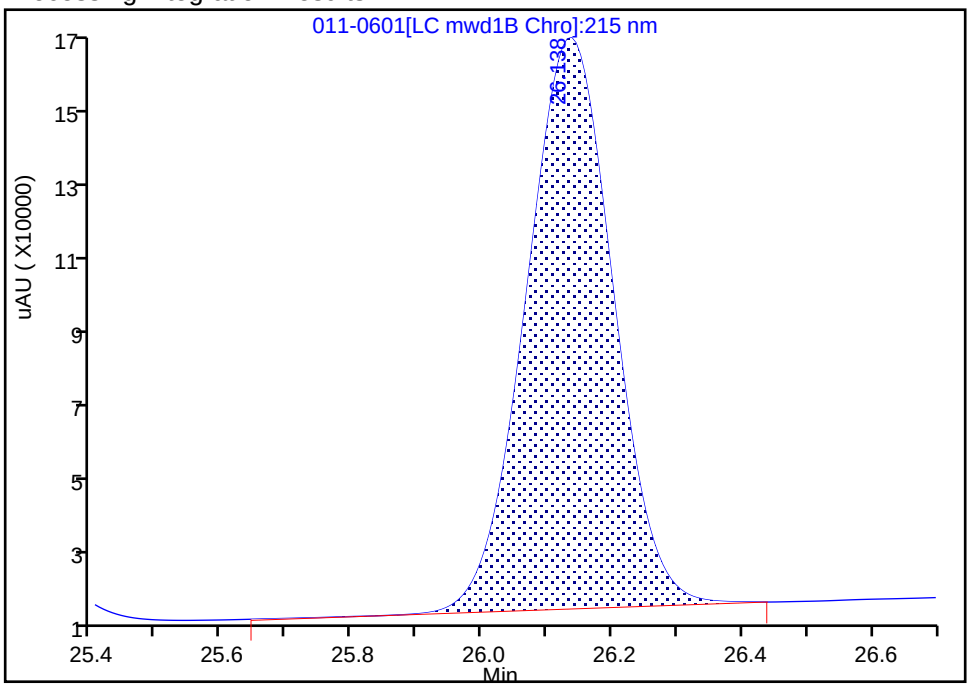
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\011-0601.D				
Injection Date:	01-May-2021 19:29:53	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC mwd1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

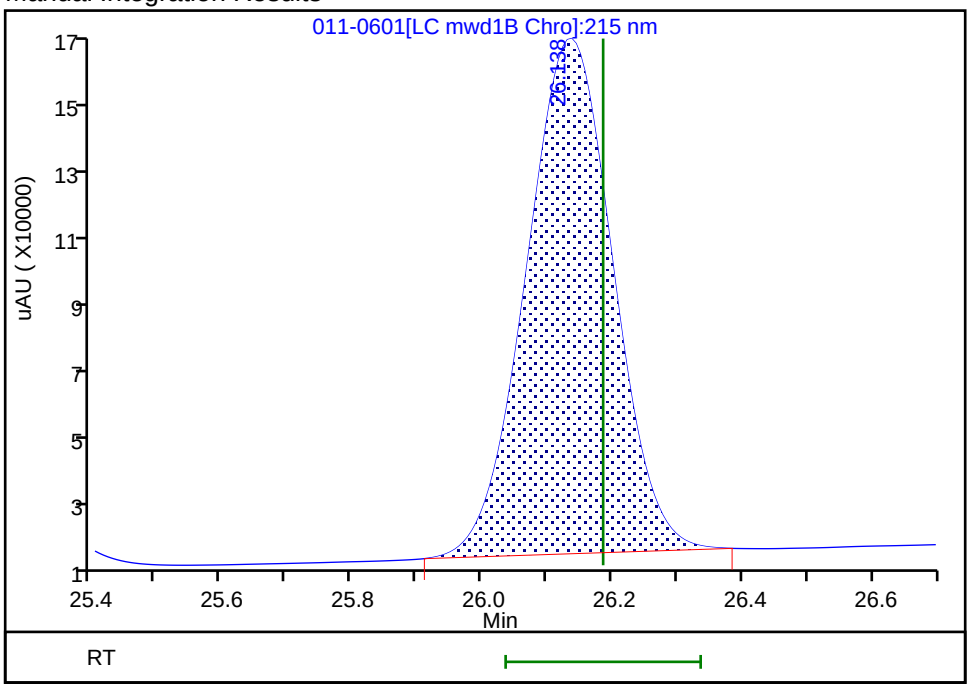
Processing Integration Results

RT: 26.14
Area: 1384511
Amount: 10.424343
Amount Units: ug/ml



Manual Integration Results

RT: 26.14
Area: 1371986
Amount: 9.960666
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:17

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\012-0701.D
Lims ID: IC INT/ADD 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-May-2021 20:04:53 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 7
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:12 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:25

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	4.104	4.126	-0.022	286797	0.7000	0.6941	
2 2,4-diamino-6-nitrotoluene	1	4.618	4.653	-0.035	172168	0.7000	0.7152	
6 HMX	1	6.698	6.713	-0.015	111120	0.7000	0.6937	
5 2,4,6-Trinitrophenol	1	7.878	7.933	-0.055	106987	0.7000	0.6706	
8 RDX	1	8.891	8.906	-0.015	136592	0.7000	0.6687	
9 Nitrobenzene	1	11.951	11.973	-0.022	256719	0.7028	0.6852	
$ 10 1,2-Dinitrobenzene	1	13.071	13.093	-0.022	176180	0.7000	0.6632	
11 3,5-Dinitroaniline	1	14.957	14.979	-0.022	318505	0.7000	0.7055	
12 1,3-Dinitrobenzene	1	15.504	15.519	-0.015	394975	0.7014	0.6992	
13 Nitroglycerin	2	15.924	15.939	-0.015	872941	7.00	6.79	
14 o-Nitrotoluene	1	16.744	16.759	-0.015	165863	0.7000	0.6662	
15 p-Nitrotoluene	1	17.031	17.046	-0.015	143722	0.7014	0.6617	
16 4-Amino-2,6-dinitrotoluene	1	17.504	17.526	-0.022	192075	0.7007	0.6474	
17 m-Nitrotoluene	1	18.011	18.026	-0.015	182587	0.7007	0.6559	
18 2-Amino-4,6-dinitrotoluene	1	18.411	18.426	-0.015	272718	0.7028	0.6963	
19 1,3,5-Trinitrobenzene	1	18.924	18.939	-0.015	290458	0.7014	0.7021	
20 2,6-Dinitrotoluene	1	20.184	20.199	-0.015	187184	0.7028	0.7036	
21 2,4-Dinitrotoluene	1	20.651	20.666	-0.015	377631	0.7028	0.6675	
22 Tetryl	1	24.304	24.313	-0.009	227001	0.7014	0.7086	
23 2,4,6-Trinitrotoluene	1	25.271	25.280	-0.009	266122	0.7028	0.7118	
24 PETN	2	26.184	26.186	-0.002	944599	7.00	6.86	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	70.00	Units: uL
8330_ADDs_00027	Amount Added:	35.00	Units: uL

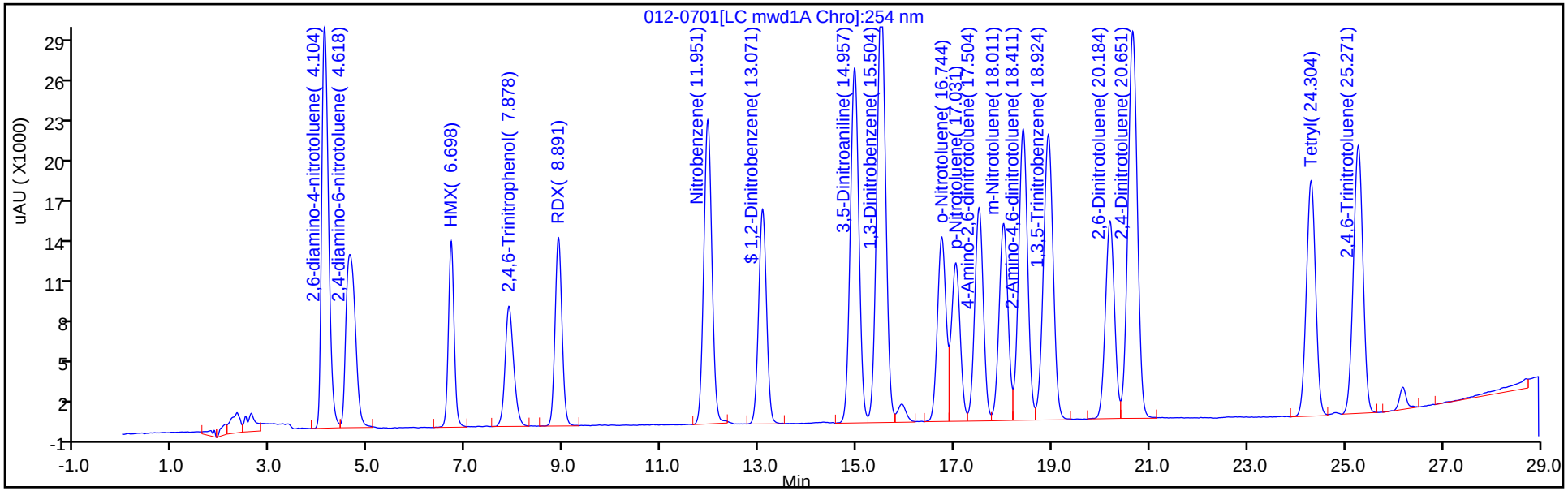
Report Date: 04-May-2021 13:43:12 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

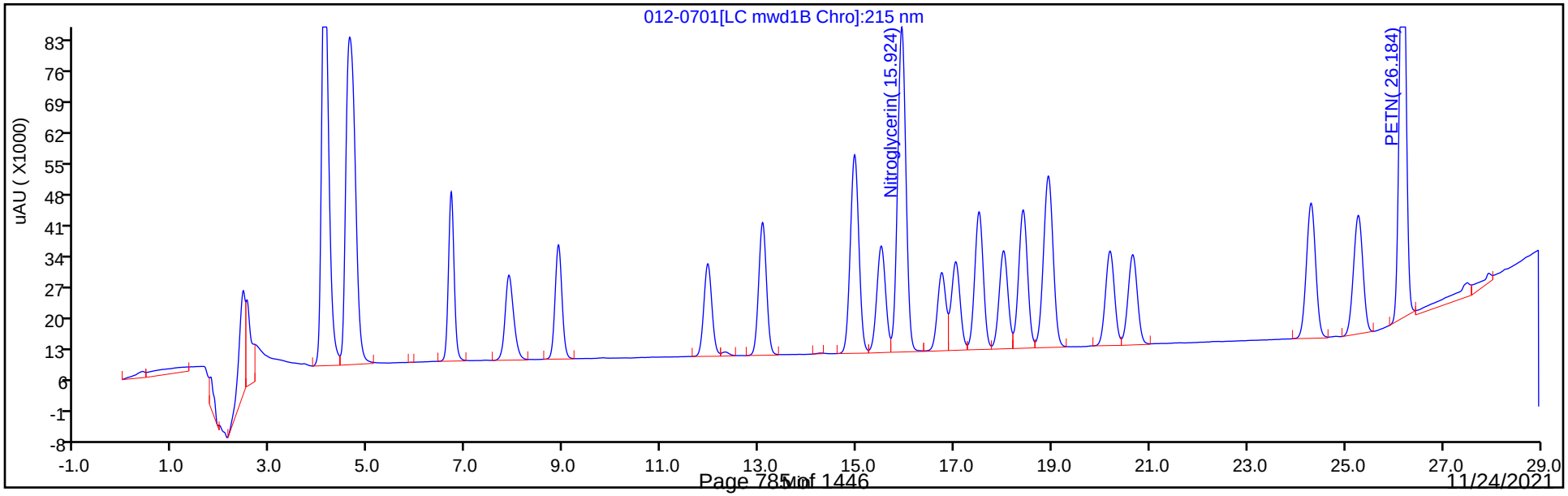
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\012-0701.D

Injection Date:	01-May-2021 20:04:53	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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

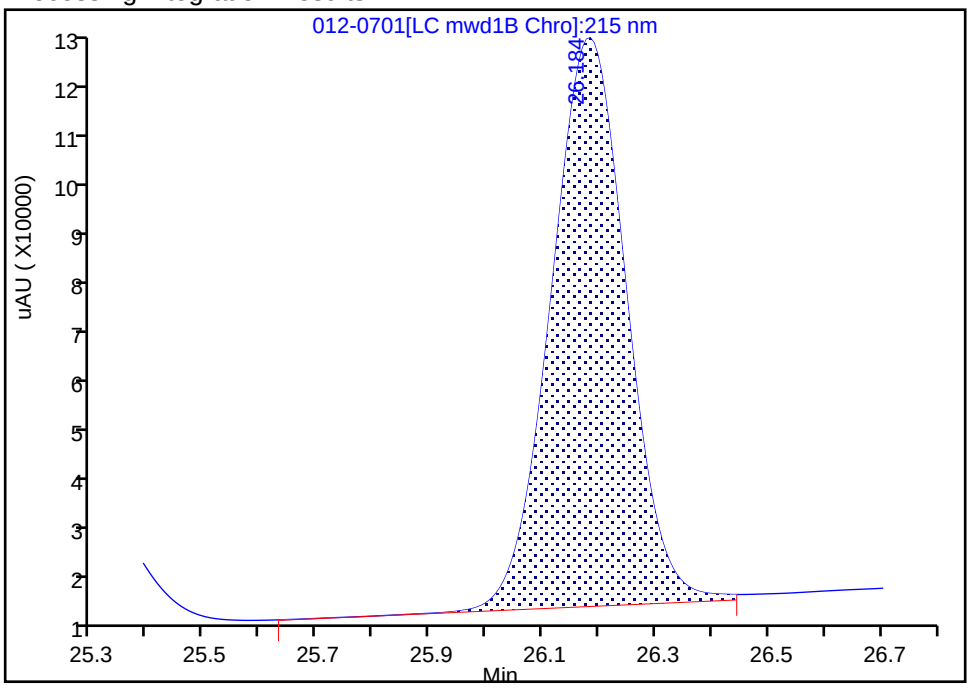
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\012-0701.D				
Injection Date:	01-May-2021 20:04:53	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC mwd1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

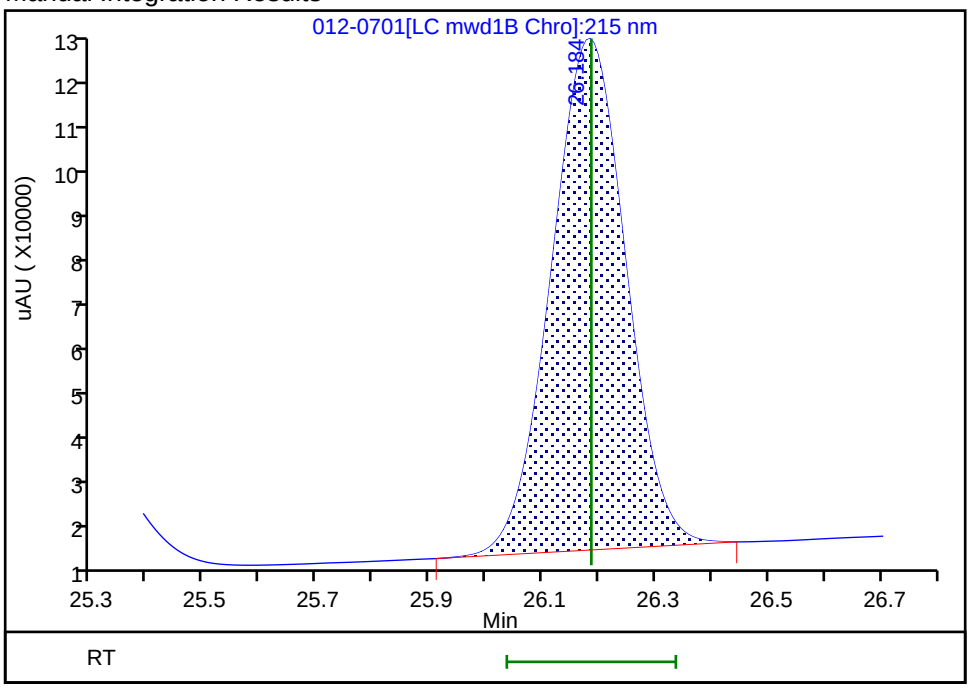
Processing Integration Results

RT: 26.18
Area: 962158
Amount: 7.202862
Amount Units: ug/ml



Manual Integration Results

RT: 26.18
Area: 944599
Amount: 6.857822
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:24

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\013-0801.D
Lims ID: IC INT/ADD 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-May-2021 20:39:55 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 6
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:13 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:33

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.111	4.126	-0.015	166673	0.4000	0.3994	
2 2,4-diamino-6-nitrotoluene	1	4.631	4.653	-0.022	98867	0.4000	0.4084	
6 HMX	1	6.705	6.713	-0.008	64089	0.4000	0.3975	
5 2,4,6-Trinitrophenol	1	7.911	7.933	-0.022	62190	0.4000	0.3898	
8 RDX	1	8.898	8.906	-0.008	78185	0.4000	0.3828	
9 Nitrobenzene	1	11.951	11.973	-0.022	145926	0.4016	0.3895	
$ 10 1,2-Dinitrobenzene	1	13.065	13.093	-0.028	101248	0.4000	0.3811	
11 3,5-Dinitroaniline	1	14.951	14.979	-0.028	183549	0.4000	0.4057	
12 1,3-Dinitrobenzene	1	15.491	15.519	-0.028	226148	0.4008	0.3993	
13 Nitroglycerin	2	15.905	15.939	-0.034	498088	4.00	3.87	
14 o-Nitrotoluene	1	16.725	16.759	-0.034	94418	0.4000	0.3792	
15 p-Nitrotoluene	1	17.011	17.046	-0.035	82281	0.4008	0.3788	
16 4-Amino-2,6-dinitrotoluene	1	17.485	17.526	-0.041	109890	0.4004	0.3704	
17 m-Nitrotoluene	1	17.985	18.026	-0.041	104128	0.4004	0.3740	
18 2-Amino-4,6-dinitrotoluene	1	18.385	18.426	-0.041	155961	0.4016	0.3968	
19 1,3,5-Trinitrobenzene	1	18.905	18.939	-0.034	165828	0.4008	0.3978	
20 2,6-Dinitrotoluene	1	20.158	20.199	-0.041	106452	0.4016	0.3987	
21 2,4-Dinitrotoluene	1	20.625	20.666	-0.041	215819	0.4016	0.3815	
22 Tetryl	1	24.258	24.313	-0.055	129140	0.4008	0.4006	
23 2,4,6-Trinitrotoluene	1	25.231	25.280	-0.049	151709	0.4016	0.4040	
24 PETN	2	26.145	26.186	-0.041	531566	4.00	3.86	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	40.00	Units: uL
8330_ADDs_00027	Amount Added:	20.00	Units: uL

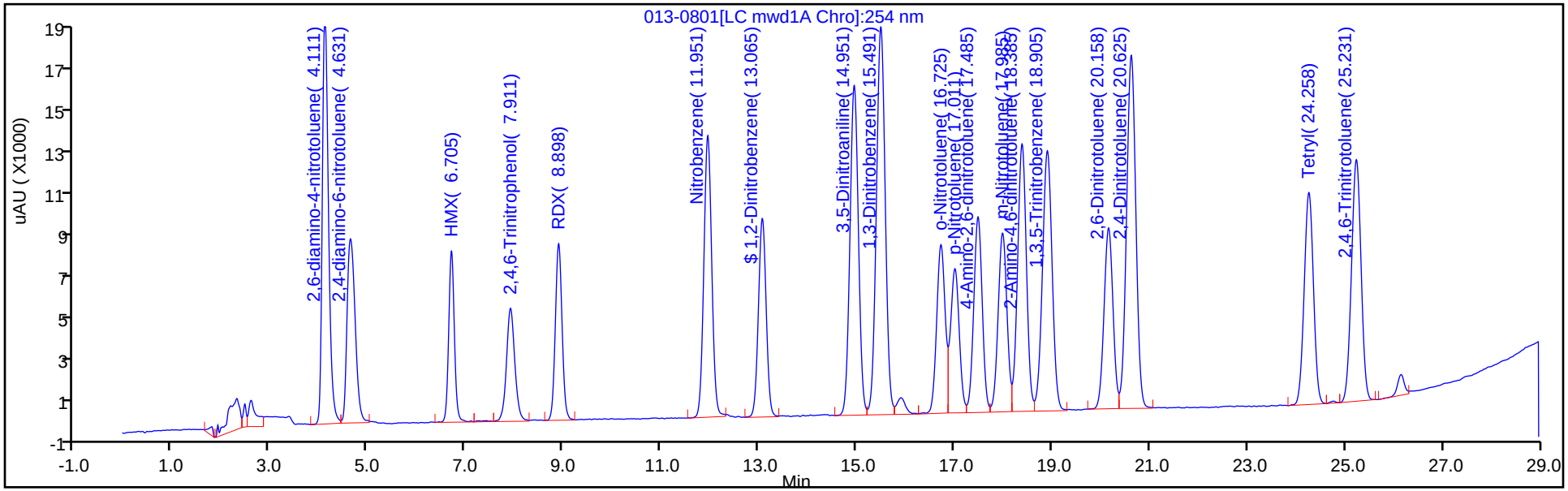
Report Date: 04-May-2021 13:43:13 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

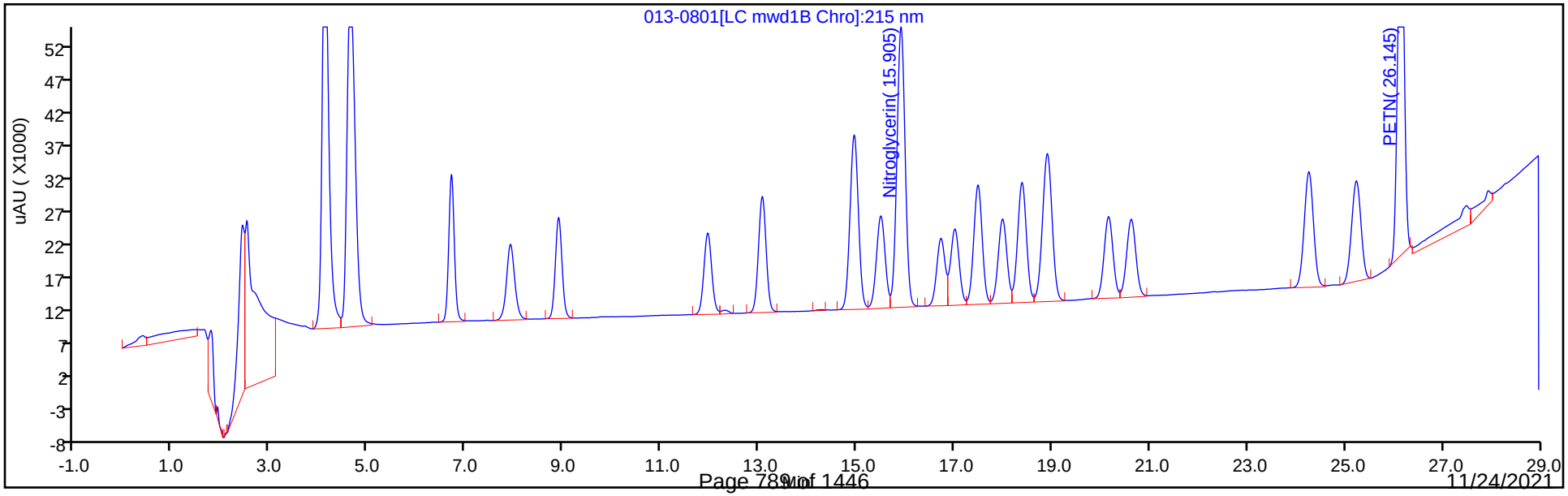
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\013-0801.D

Injection Date:	01-May-2021 20:39:55	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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

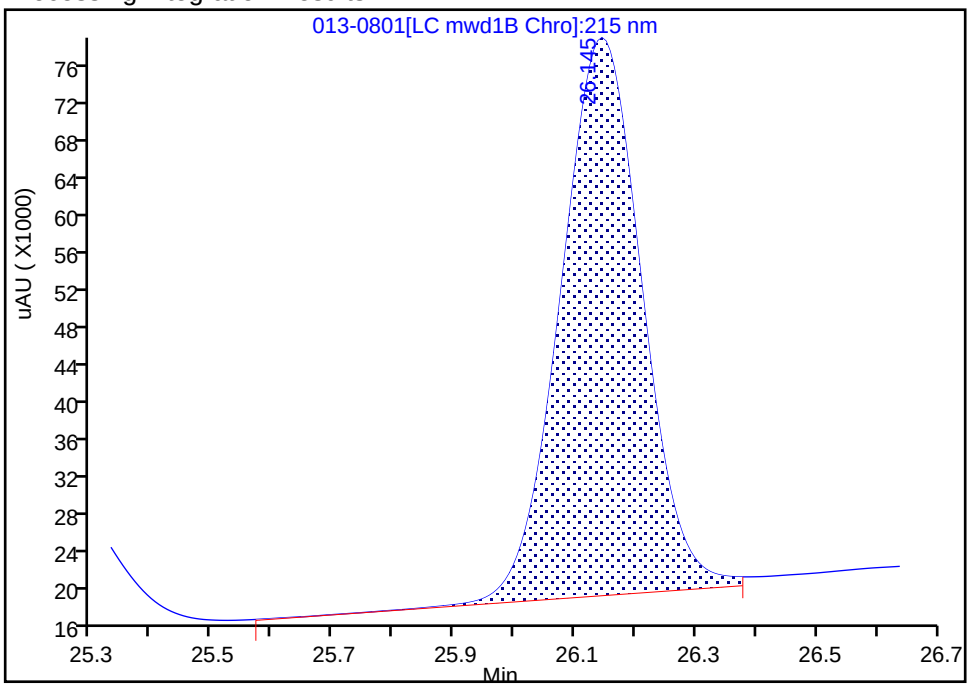
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\013-0801.D
Injection Date: 01-May-2021 20:39:55 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 6
Client ID:
Operator ID: JZ ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

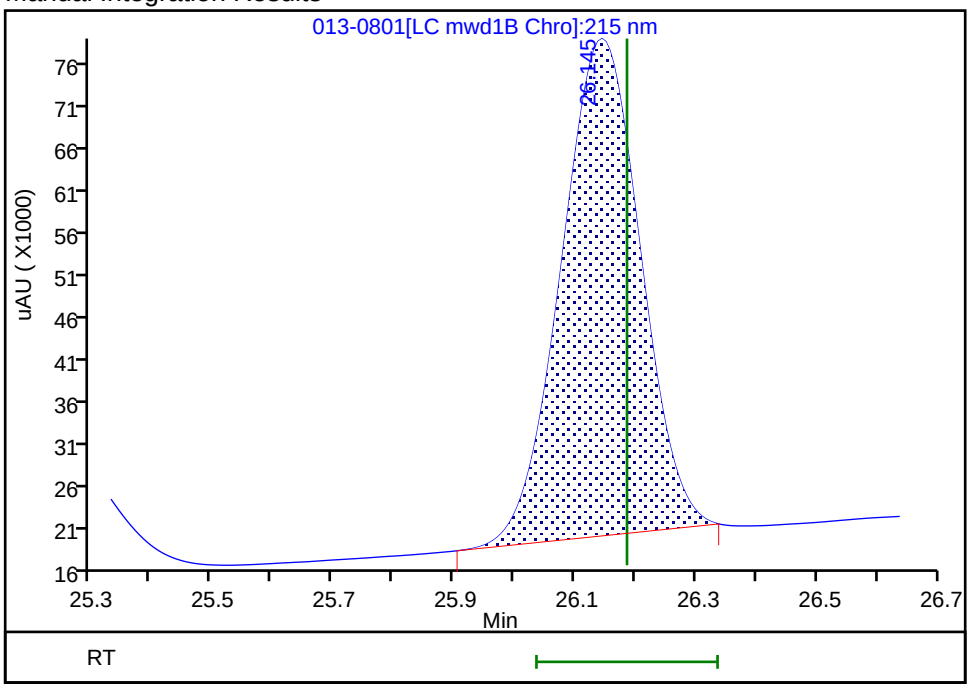
Processing Integration Results

RT: 26.14
Area: 555116
Amount: 4.095081
Amount Units: ug/ml



Manual Integration Results

RT: 26.14
Area: 531566
Amount: 3.859188
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:32
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\014-0901.D
Lims ID: IC INT/ADD 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-May-2021 21:15:02 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 5
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:13 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:35:48

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	4.126	4.126	0.000	101396	0.2500	0.2392	
2 2,4-diamino-6-nitrotoluene	1	4.653	4.653	0.000	59623	0.2500	0.2442	
6 HMX	1	6.713	6.713	0.000	39580	0.2500	0.2431	
5 2,4,6-Trinitrophenol	1	7.933	7.933	0.000	38222	0.2500	0.2396	
8 RDX	1	8.906	8.906	0.000	48606	0.2500	0.2379	
9 Nitrobenzene	1	11.973	11.973	0.000	90760	0.2510	0.2423	
$ 10 1,2-Dinitrobenzene	1	13.093	13.093	0.000	63081	0.2500	0.2375	
11 3,5-Dinitroaniline	1	14.979	14.979	0.000	110385	0.2500	0.2431	
12 1,3-Dinitrobenzene	1	15.519	15.519	0.000	140347	0.2505	0.2469	
13 Nitroglycerin	2	15.939	15.939	0.000	310480	2.50	2.41	
14 o-Nitrotoluene	1	16.759	16.759	0.000	58191	0.2500	0.2337	
15 p-Nitrotoluene	1	17.046	17.046	0.000	51245	0.2505	0.2359	
16 4-Amino-2,6-dinitrotoluene	1	17.526	17.526	0.000	68509	0.2503	0.2309	
17 m-Nitrotoluene	1	18.026	18.026	0.000	64933	0.2503	0.2332	
18 2-Amino-4,6-dinitrotoluene	1	18.426	18.426	0.000	97071	0.2510	0.2458	
19 1,3,5-Trinitrobenzene	1	18.939	18.939	0.000	104344	0.2505	0.2477	
20 2,6-Dinitrotoluene	1	20.199	20.199	0.000	66062	0.2510	0.2462	
21 2,4-Dinitrotoluene	1	20.666	20.666	0.000	134163	0.2510	0.2372	
22 Tetryl	1	24.313	24.313	0.000	80996	0.2505	0.2490	
23 2,4,6-Trinitrotoluene	1	25.280	25.280	0.000	93822	0.2510	0.2482	
24 PETN	2	26.186	26.186	0.000	330309	2.50	2.40	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	25.00	Units: uL
8330_ADDs_00027	Amount Added:	12.50	Units: uL

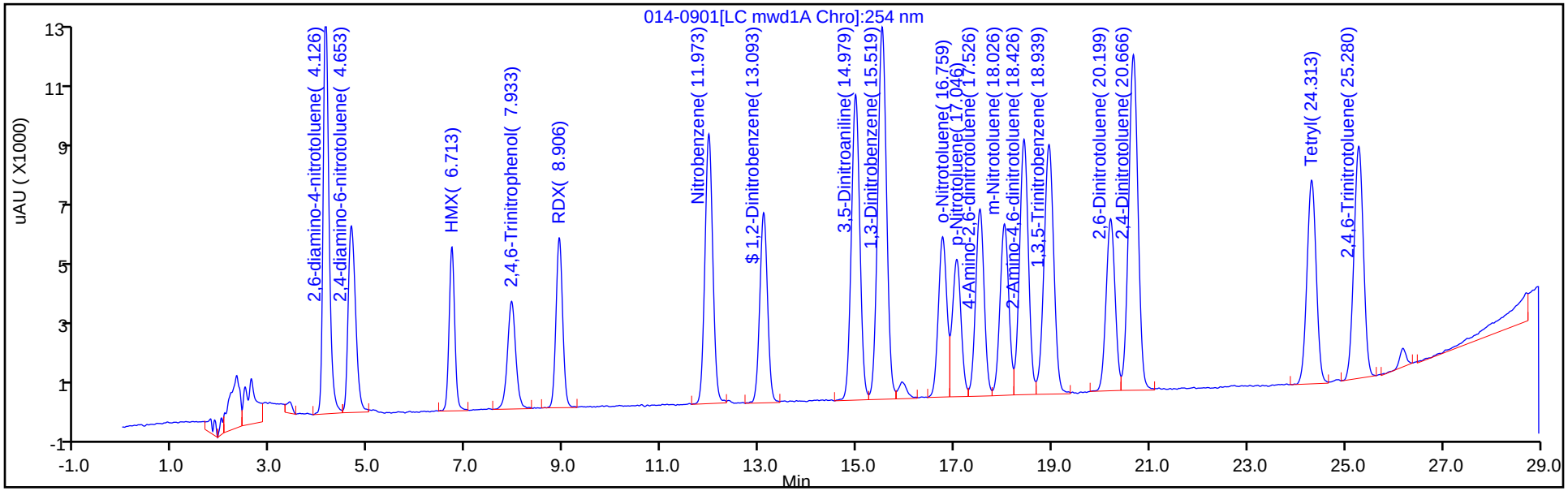
Report Date: 04-May-2021 13:43:13 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

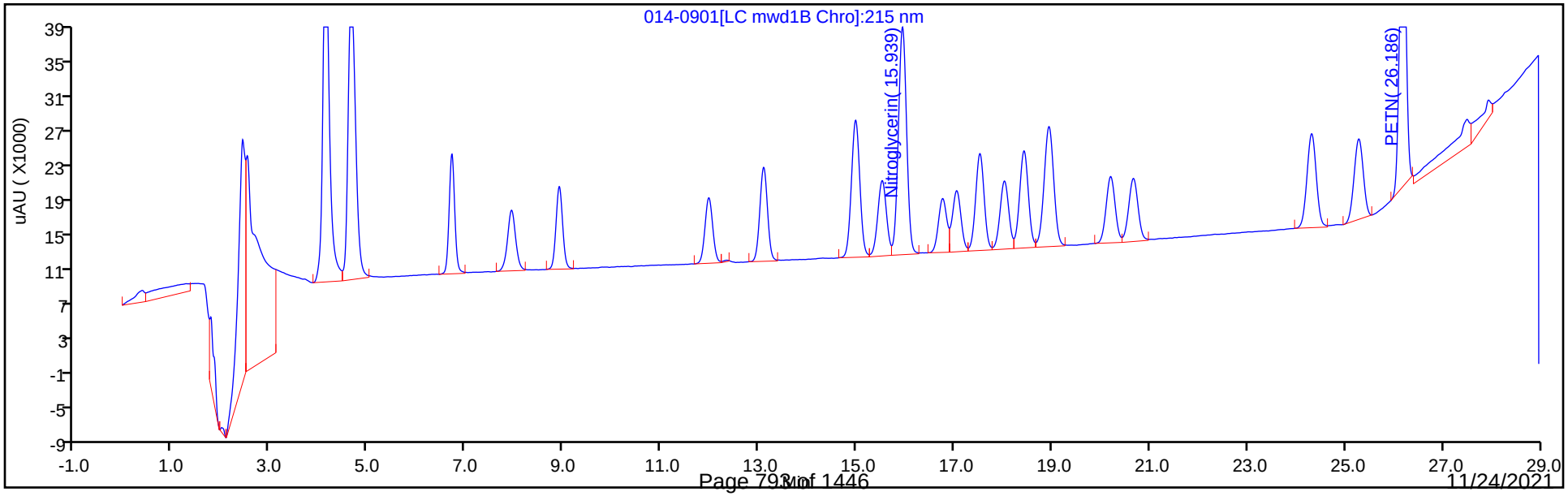
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\014-0901.D

Injection Date:	01-May-2021 21:15:02	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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

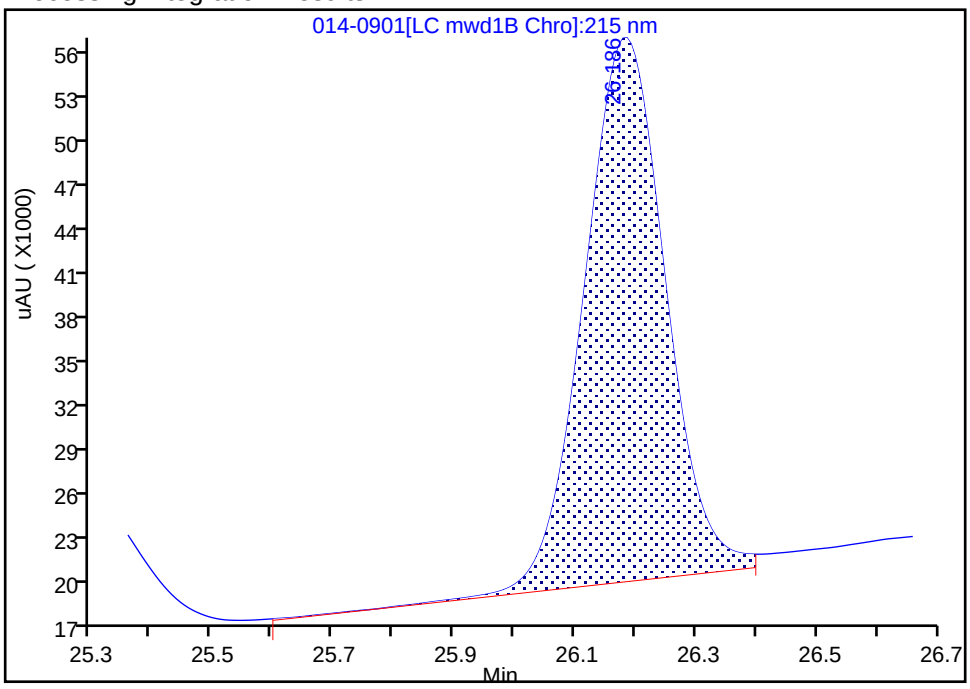
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\014-0901.D
Injection Date: 01-May-2021 21:15:02 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 5
Client ID:
Operator ID: JZ ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

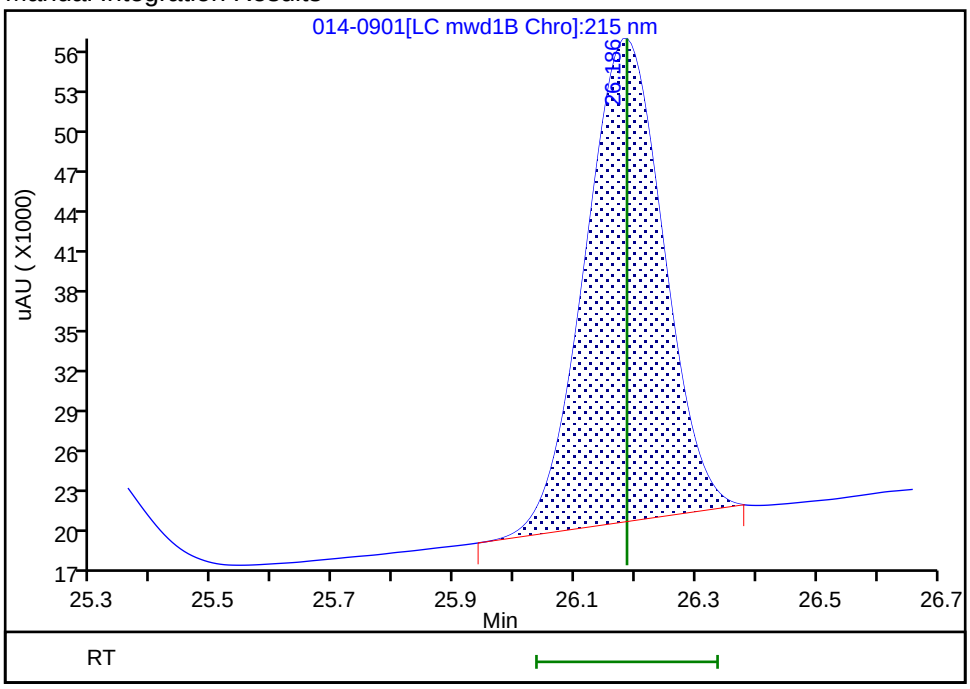
Processing Integration Results

RT: 26.19
Area: 348444
Amount: 2.522976
Amount Units: ug/ml



Manual Integration Results

RT: 26.19
Area: 330309
Amount: 2.398055
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:41
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\015-1001.D
Lims ID: IC INT/ADD 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 01-May-2021 21:50:04 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 4
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:14 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:40:52

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	4.132	4.126	0.006	44112	0.1000	0.0987	
2 2,4-diamino-6-nitrotoluene	1	4.658	4.653	0.005	25556	0.1000	0.1016	
6 HMX	1	6.718	6.713	0.005	16850	0.1000	0.0999	
5 2,4,6-Trinitrophenol	1	7.958	7.933	0.025	16340	0.1000	0.1024	
8 RDX	1	8.912	8.906	0.006	20661	0.1000	0.1011	
9 Nitrobenzene	1	11.971	11.973	-0.002	38085	0.1004	0.1017	
$ 10 1,2-Dinitrobenzene	1	13.091	13.093	-0.002	26678	0.1000	0.1004	
11 3,5-Dinitroaniline	1	14.971	14.979	-0.008	46817	0.1000	0.1019	
12 1,3-Dinitrobenzene	1	15.518	15.519	-0.001	58764	0.1002	0.1019	
13 Nitroglycerin	2	15.931	15.939	-0.008	130447	1.00	1.01	
14 o-Nitrotoluene	1	16.751	16.759	-0.008	24528	0.1000	0.0985	
15 p-Nitrotoluene	1	17.038	17.046	-0.008	21221	0.1002	0.0977	
16 4-Amino-2,6-dinitrotoluene	1	17.511	17.526	-0.015	28819	0.1001	0.0971	
17 m-Nitrotoluene	1	18.011	18.026	-0.015	27212	0.1001	0.0977	
18 2-Amino-4,6-dinitrotoluene	1	18.418	18.426	-0.008	40904	0.1004	0.1017	
19 1,3,5-Trinitrobenzene	1	18.931	18.939	-0.008	44594	0.1002	0.1018	
20 2,6-Dinitrotoluene	1	20.185	20.199	-0.014	27721	0.1004	0.1014	
21 2,4-Dinitrotoluene	1	20.652	20.666	-0.015	55838	0.1004	0.0987	
22 Tetryl	1	24.298	24.313	-0.015	34148	0.1002	0.1015	
23 2,4,6-Trinitrotoluene	1	25.265	25.280	-0.015	38740	0.1004	0.1000	
24 PETN	2	26.172	26.186	-0.014	136676	1.00	0.99	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	10.00	Units: uL
8330_ADDs_00027	Amount Added:	5.00	Units: uL

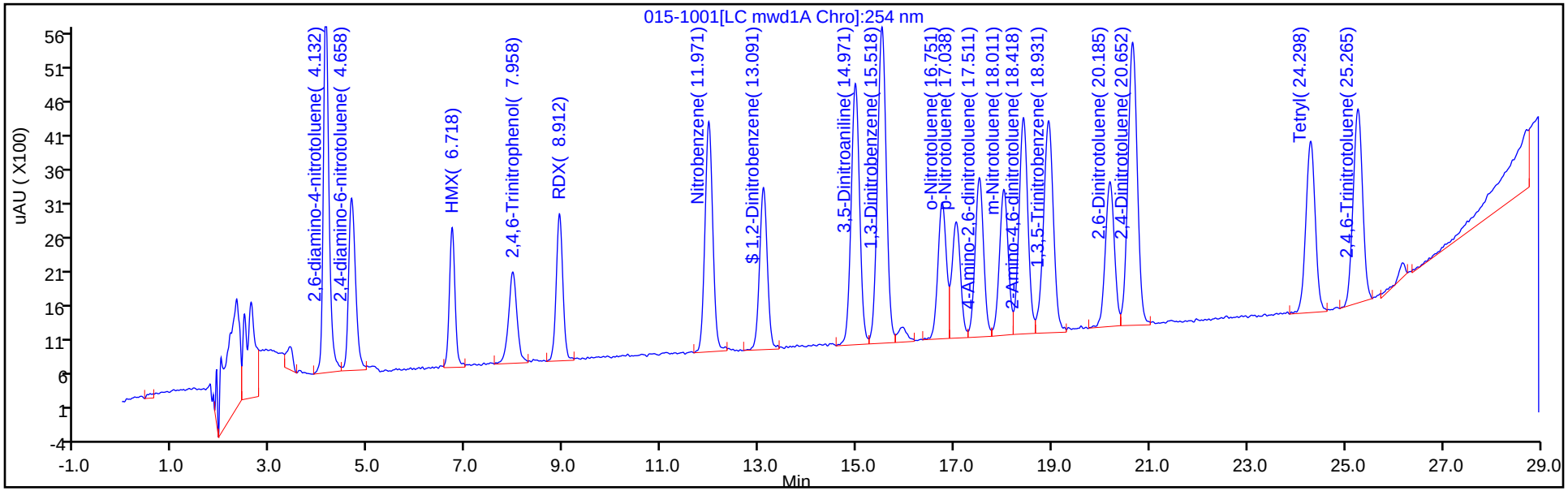
Report Date: 04-May-2021 13:43:14 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

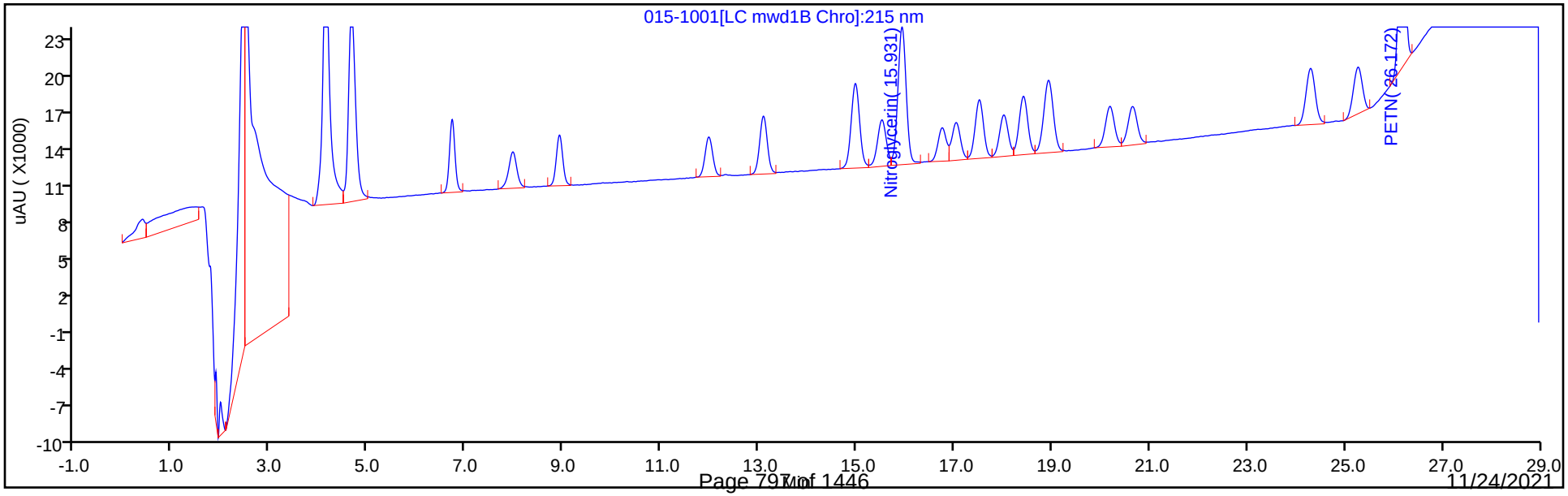
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\015-1001.D

Injection Date:	01-May-2021 21:50:04	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 TestAmerica, Denver

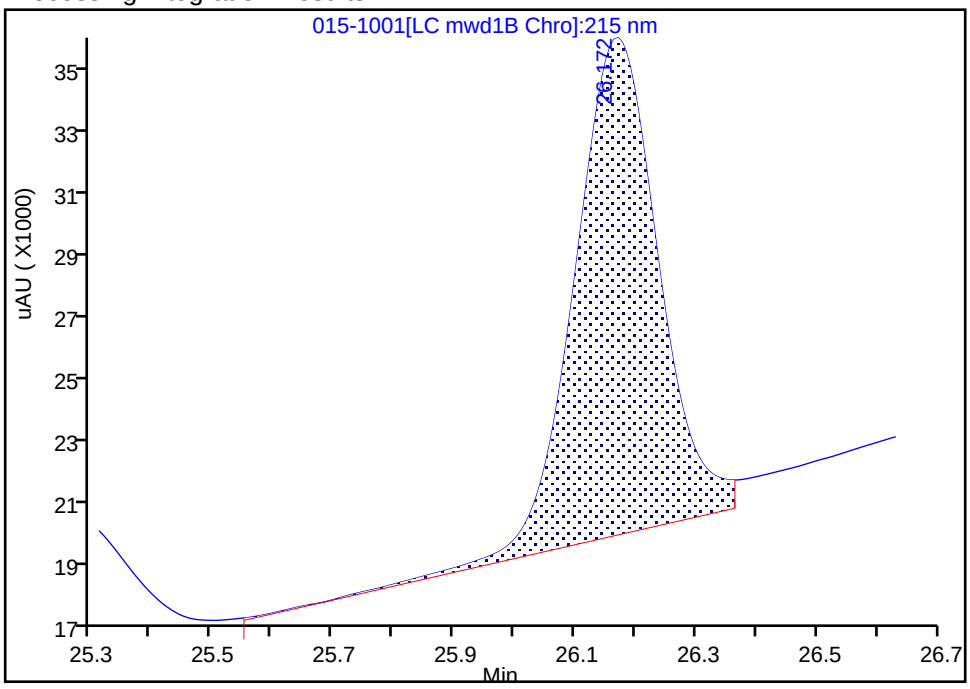
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\015-1001.D				
Injection Date:	01-May-2021 21:50:04	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC mwd1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

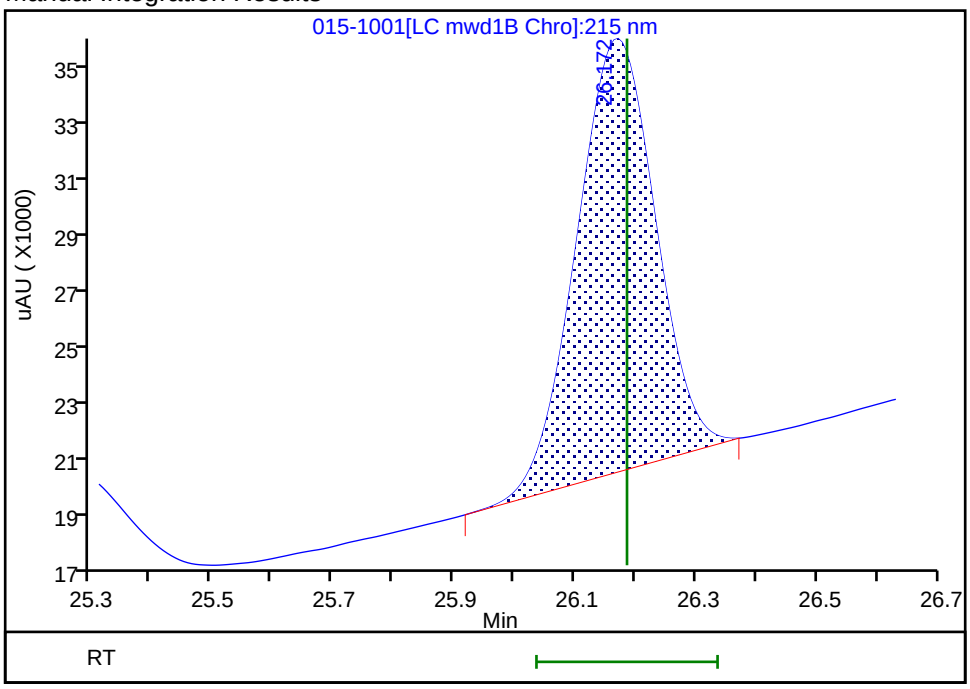
Processing Integration Results

RT: 26.17
Area: 151513
Amount: 1.005886
Amount Units: ug/ml



Manual Integration Results

RT: 26.17
Area: 136676
Amount: 0.992273
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:50
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\016-1101.D
Lims ID: IC INT/ADD 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-May-2021 22:25:05 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 3
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:14 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:41:01

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 2,6-diamino-4-nitrotoluene	1	4.134	4.126	0.008	24575	0.0500	0.0507	
2 2,4-diamino-6-nitrotoluene	1	4.667	4.653	0.014	13602	0.0500	0.0516	
6 HMX	1	6.734	6.713	0.021	8791	0.0500	0.0492	
5 2,4,6-Trinitrophenol	1	7.987	7.933	0.054	8578	0.0500	0.0538	
8 RDX	1	8.934	8.906	0.028	11066	0.0500	0.0542	
9 Nitrobenzene	1	11.994	11.973	0.021	19306	0.0502	0.0515	
$ 10 1,2-Dinitrobenzene	1	13.114	13.093	0.021	13836	0.0500	0.0521	
11 3,5-Dinitroaniline	1	15.007	14.979	0.028	23131	0.0500	0.0493	
12 1,3-Dinitrobenzene	1	15.547	15.519	0.028	29142	0.0501	0.0493	
13 Nitroglycerin	2	15.961	15.939	0.022	65416	0.5000	0.5087	
14 o-Nitrotoluene	1	16.781	16.759	0.022	12373	0.0500	0.0497	
15 p-Nitrotoluene	1	17.074	17.046	0.028	10760	0.0501	0.0495	
16 4-Amino-2,6-dinitrotoluene	1	17.541	17.526	0.015	14802	0.0501	0.0499	
17 m-Nitrotoluene	1	18.047	18.026	0.021	13943	0.0501	0.0501	
18 2-Amino-4,6-dinitrotoluene	1	18.441	18.426	0.015	21111	0.0502	0.0509	
19 1,3,5-Trinitrobenzene	1	18.954	18.939	0.015	23506	0.0501	0.0503	
20 2,6-Dinitrotoluene	1	20.201	20.199	0.002	14081	0.0502	0.0499	
21 2,4-Dinitrotoluene	1	20.674	20.666	0.008	28396	0.0502	0.0502	
22 Tetryl	1	24.287	24.313	-0.026	17573	0.0501	0.0494	
23 2,4,6-Trinitrotoluene	1	25.254	25.280	-0.026	19400	0.0502	0.0479	
24 PETN	2	26.154	26.186	-0.032	69170	0.5000	0.5022	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	5.00	Units: uL
8330_ADDs_00027	Amount Added:	2.50	Units: uL

Report Date: 04-May-2021 13:43:14 Chrom Revision: 2.3 08-Apr-2021 17:17:48

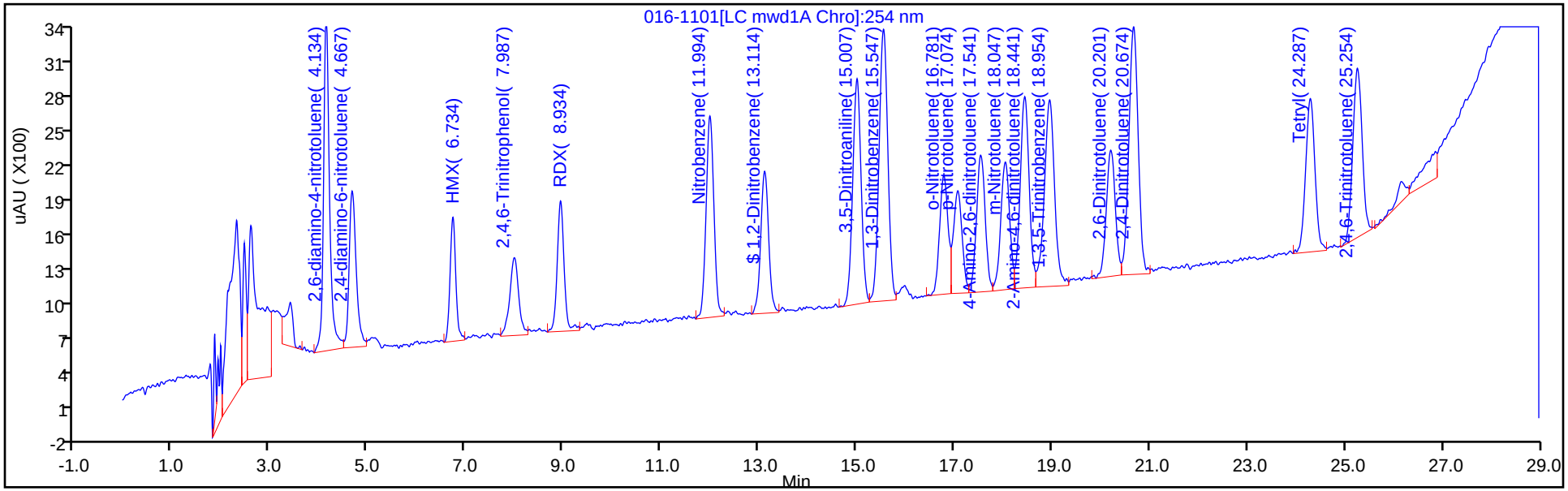
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\016-1101.D

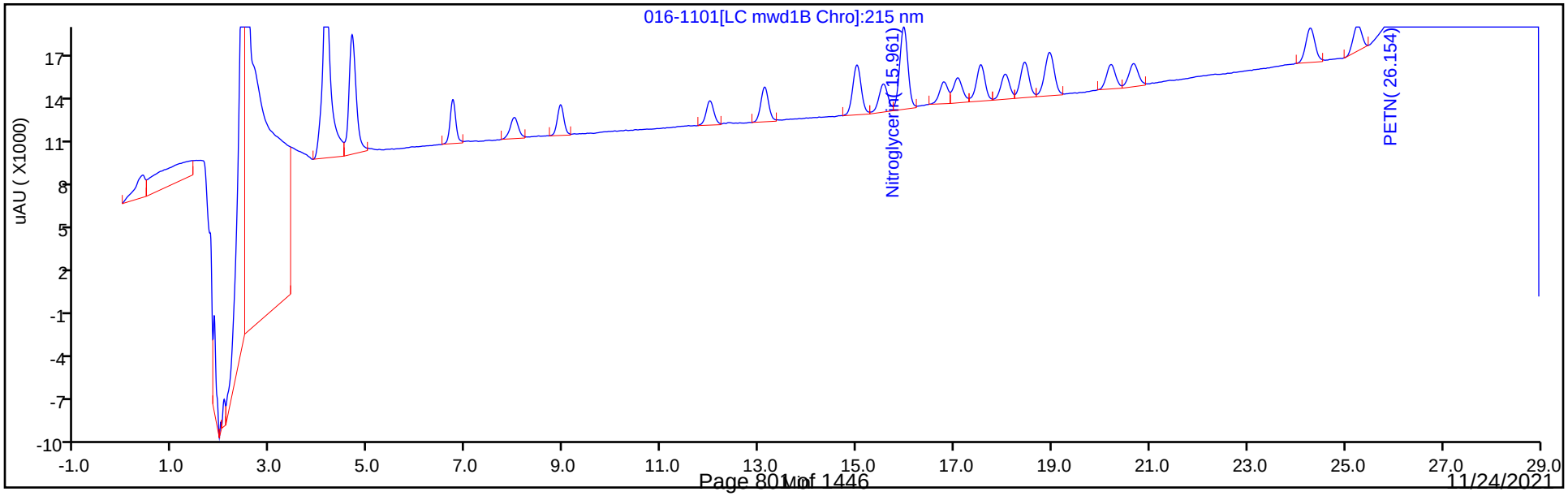
Injection Date:	01-May-2021 22:25:05	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	IC INT/ADD 3			Worklist Smp#:	16
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

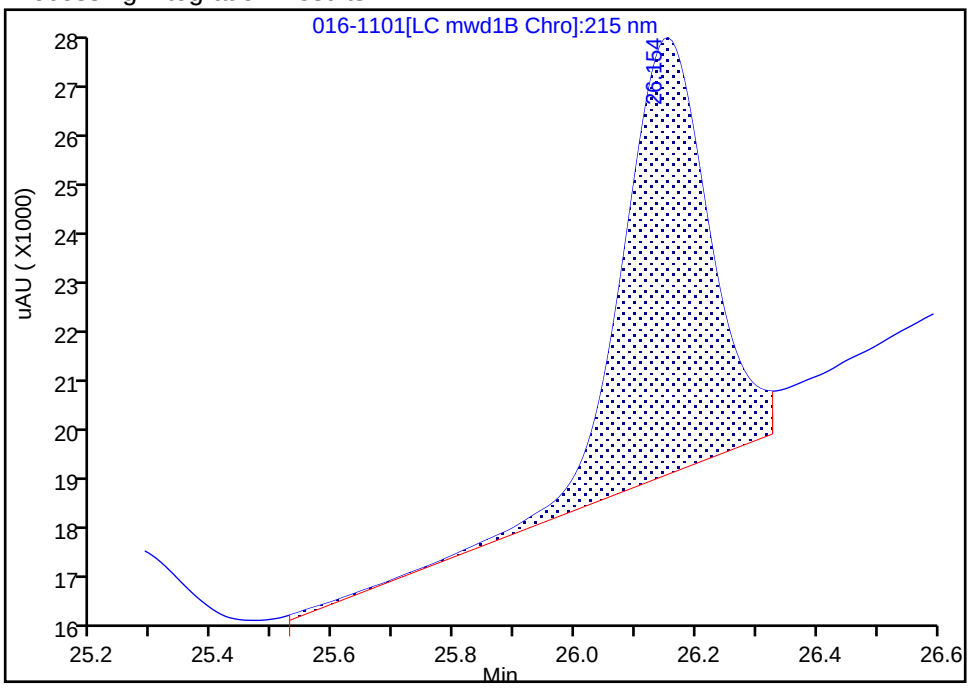
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\016-1101.D
Injection Date: 01-May-2021 22:25:05 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 3
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

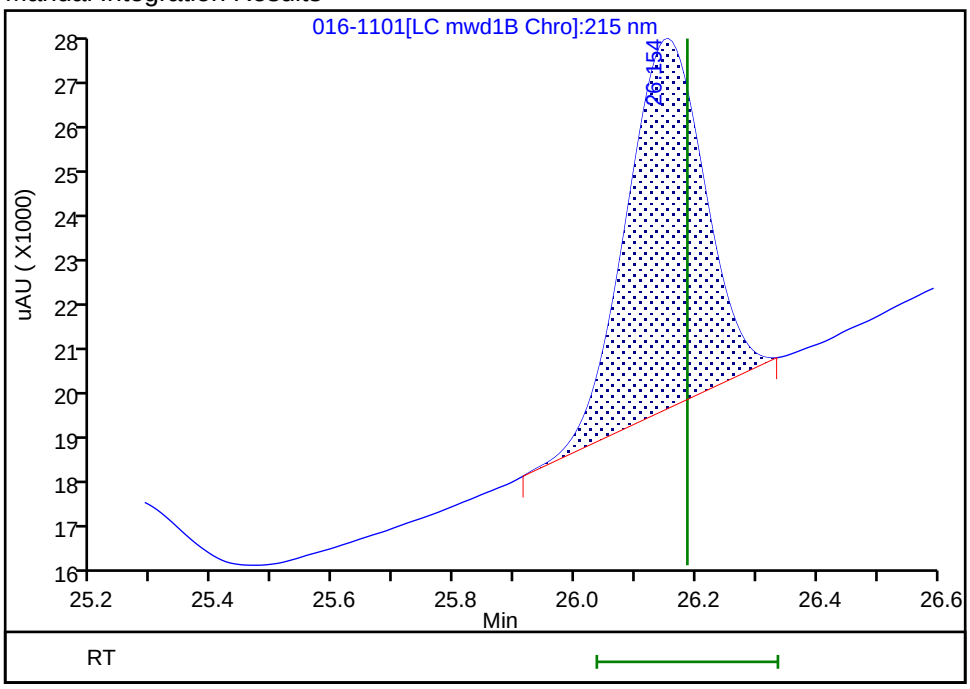
Processing Integration Results

RT: 26.15
Area: 81816
Amount: 0.467715
Amount Units: ug/ml



Manual Integration Results

RT: 26.15
Area: 69170
Amount: 0.502177
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:40:59
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\017-1201.D
Lims ID: IC INT/ADD 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-May-2021 23:00:06 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 2
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:15 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:41:10

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	4.133	4.126	0.007	11811	0.0200	0.0194	
2 2,4-diamino-6-nitrotoluene	1	4.673	4.653	0.020	6051	0.0200	0.0200	
6 HMX	1	6.720	6.713	0.007	4286	0.0200	0.0208	
5 2,4,6-Trinitrophenol	1	7.980	7.933	0.047	3270	0.0200	0.0205	
8 RDX	1	8.926	8.906	0.020	4533	0.0200	0.0222	
9 Nitrobenzene	1	11.973	11.973	0.000	7888	0.0201	0.0211	
$ 10 1,2-Dinitrobenzene	1	13.093	13.093	0.000	6280	0.0200	0.0236	
11 3,5-Dinitroaniline	1	14.980	14.979	0.001	9417	0.0200	0.0188	
12 1,3-Dinitrobenzene	1	15.533	15.519	0.014	12411	0.0200	0.0196	
13 Nitroglycerin	2	15.940	15.939	0.001	28299	0.2000	0.2200	
14 o-Nitrotoluene	1	16.740	16.759	-0.019	5151	0.0200	0.0207	
15 p-Nitrotoluene	1	17.060	17.046	0.014	4823	0.0200	0.0222	
16 4-Amino-2,6-dinitrotoluene	1	17.520	17.526	-0.006	6276	0.0200	0.0212	
17 m-Nitrotoluene	1	18.033	18.026	0.007	5928	0.0200	0.0213	
18 2-Amino-4,6-dinitrotoluene	1	18.426	18.426	0.000	9114	0.0201	0.0202	
19 1,3,5-Trinitrobenzene	1	18.946	18.939	0.007	10540	0.0200	0.0187	
20 2,6-Dinitrotoluene	1	20.200	20.199	0.001	6026	0.0201	0.0195	
21 2,4-Dinitrotoluene	1	20.666	20.666	0.000	12229	0.0201	0.0216	
22 Tetryl	1	24.306	24.313	-0.007	7583	0.0200	0.0179	
23 2,4,6-Trinitrotoluene	1	25.280	25.280	0.000	8548	0.0201	0.0187	
24 PETN	2	26.180	26.186	-0.006	27436	0.2000	0.1992	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	2.00	Units: uL
8330_ADDs_00027	Amount Added:	1.00	Units: uL

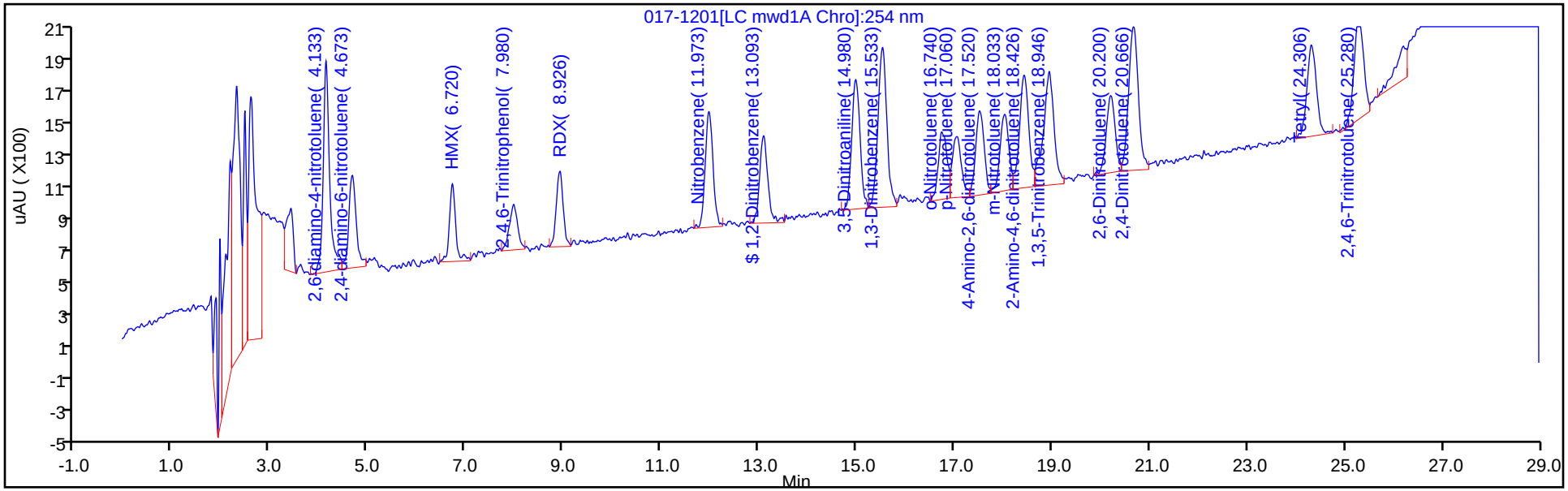
Report Date: 04-May-2021 13:43:15 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

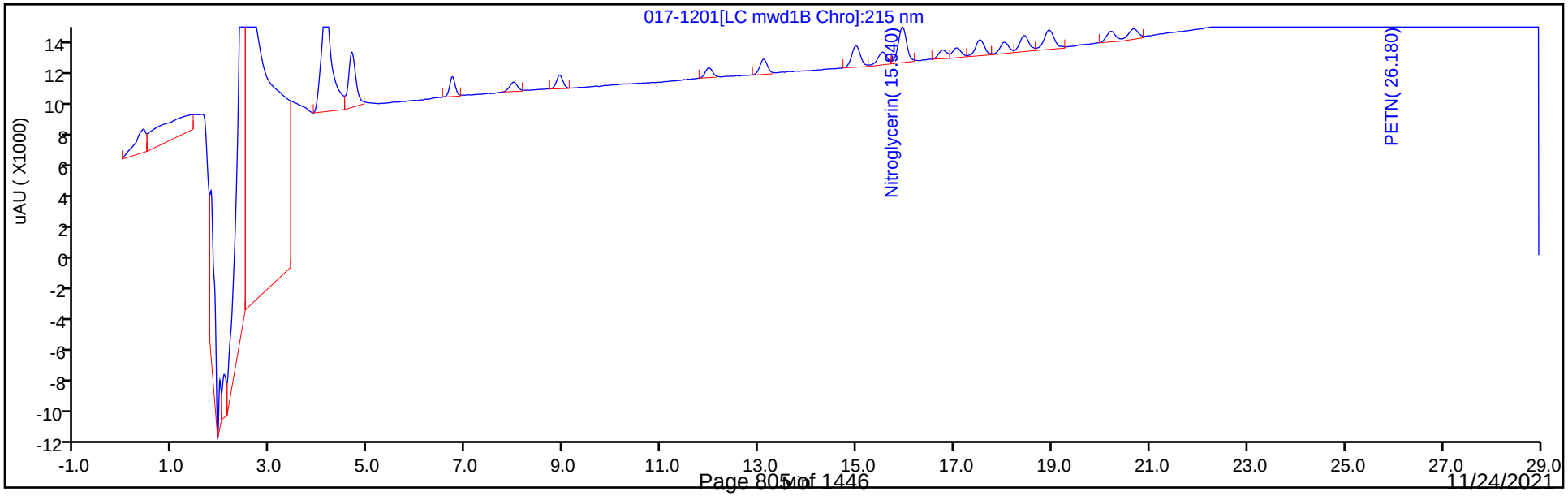
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\017-1201.D

Injection Date:	01-May-2021 23:00:06	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 TestAmerica, Denver

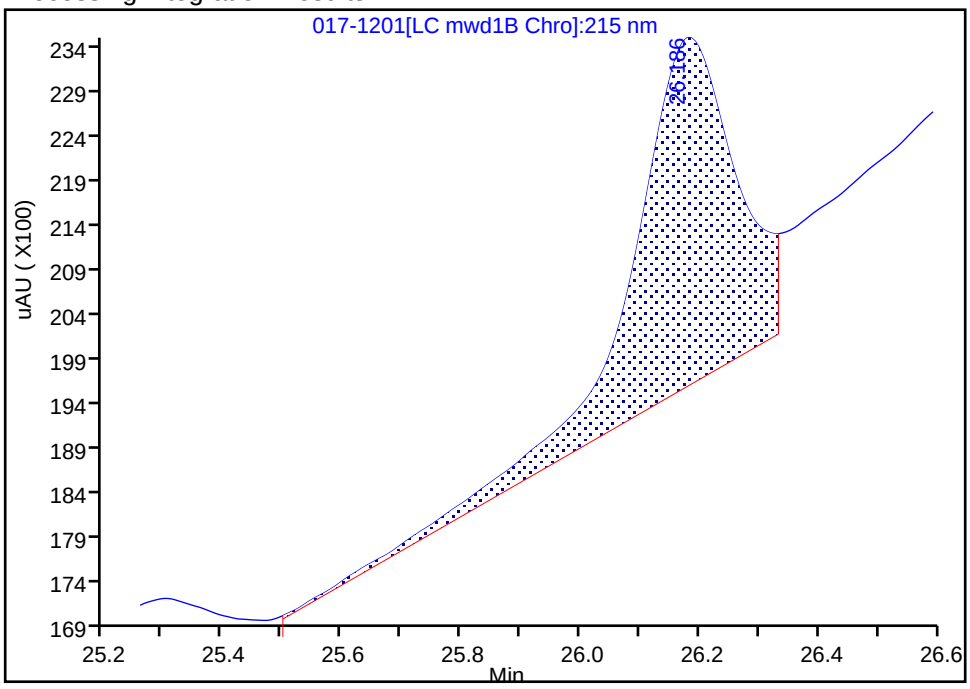
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\017-1201.D
Injection Date: 01-May-2021 23:00:06 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 2
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

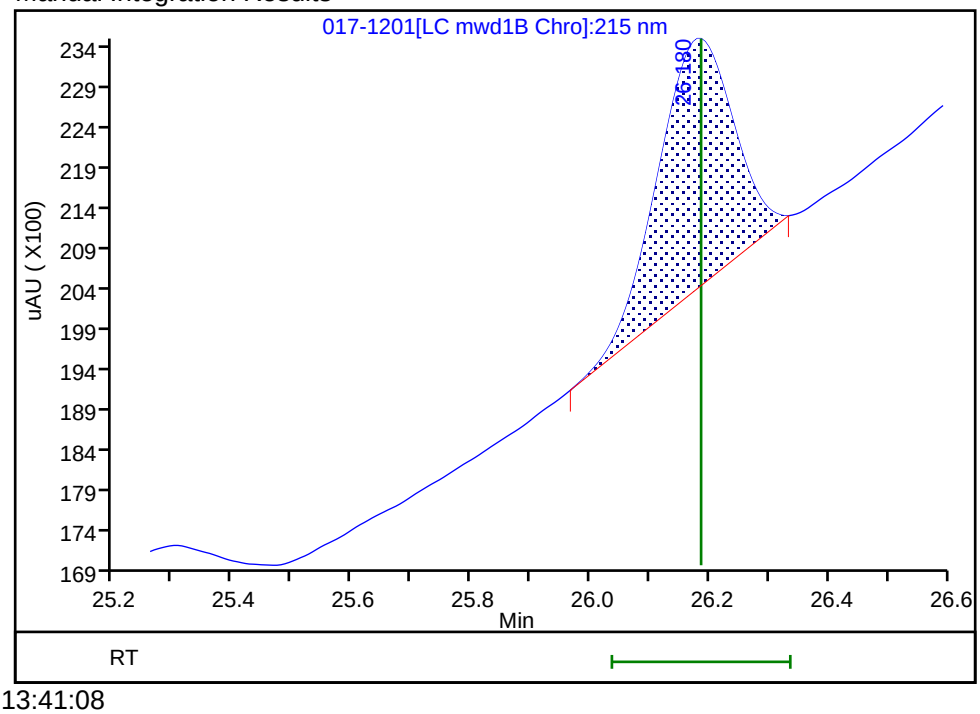
Processing Integration Results

RT: 26.19
Area: 47400
Amount: 0.217570
Amount Units: ug/ml



Manual Integration Results

RT: 26.18
Area: 27436
Amount: 0.199186
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:41:08
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\018-1301.D
Lims ID: IC INT/ADD 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-May-2021 23:35:08 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC INT/ADD 1
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:15 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:42:55

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	4.144	4.126	0.018	8029	0.0100	0.0101	
2 2,4-diamino-6-nitrotoluene	1	4.684	4.653	0.031	3655	0.0100	0.0099	
6 HMX	1	6.724	6.713	0.011	2543	0.0100	0.009840	
5 2,4,6-Trinitrophenol	1	8.004	7.933	0.071	1789	0.0100	0.0112	
8 RDX	1	8.918	8.906	0.012	2988	0.0100	0.0146	
9 Nitrobenzene	1	11.978	11.973	0.005	4507	0.0100	0.0120	
$ 10 1,2-Dinitrobenzene	1	13.104	13.093	0.011	4082	0.0100	0.0154	
11 3,5-Dinitroaniline	1	14.978	14.979	-0.001	5594	0.0100	0.0103	
12 1,3-Dinitrobenzene	1	15.524	15.519	0.005	7085	0.0100	0.0101	
13 Nitroglycerin	2	15.924	15.939	-0.015	16401	0.1000	0.1275	
14 o-Nitrotoluene	1	16.751	16.759	-0.008	3022	0.0100	0.0121	
15 p-Nitrotoluene	1	17.031	17.046	-0.015	2608	0.0100	0.0120	
16 4-Amino-2,6-dinitrotoluene	1	17.511	17.526	-0.015	3954	0.0100	0.0133	
17 m-Nitrotoluene	1	17.978	18.026	-0.048	3517	0.0100	0.0126	
18 2-Amino-4,6-dinitrotoluene	1	18.418	18.426	-0.008	5148	0.0100	0.0100	
19 1,3,5-Trinitrobenzene	1	18.904	18.939	-0.035	7116	0.0100	0.0103	
20 2,6-Dinitrotoluene	1	20.191	20.199	-0.008	3555	0.0100	0.0102	
21 2,4-Dinitrotoluene	1	20.644	20.666	-0.022	6619	0.0100	0.0117	
22 Tetryl	1	24.271	24.313	-0.042	5245	0.0100	0.0106	
23 2,4,6-Trinitrotoluene	1	25.258	25.280	-0.022	5469	0.0100	0.0105	
24 PETN	2	26.151	26.186	-0.035	15659	0.1000	0.1137	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00067	Amount Added:	1.00	Units: uL
8330_ADDs_00027	Amount Added:	0.50	Units: uL

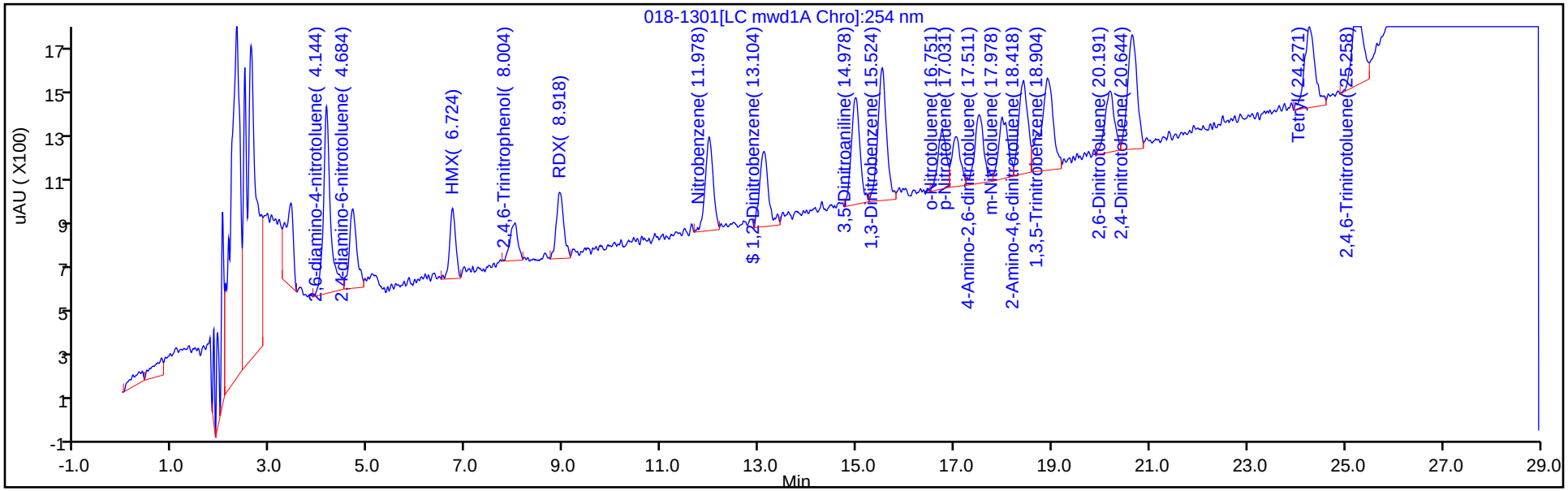
Report Date: 04-May-2021 13:43:16 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

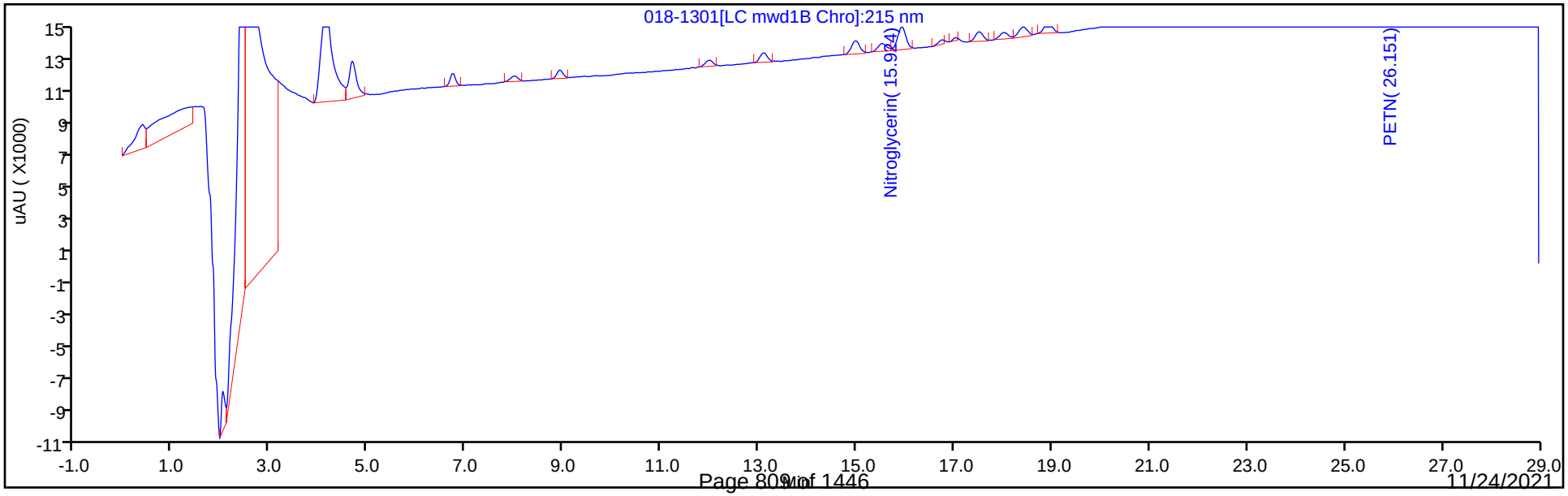
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\018-1301.D

Injection Date:	01-May-2021 23:35:08	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 TestAmerica, Denver

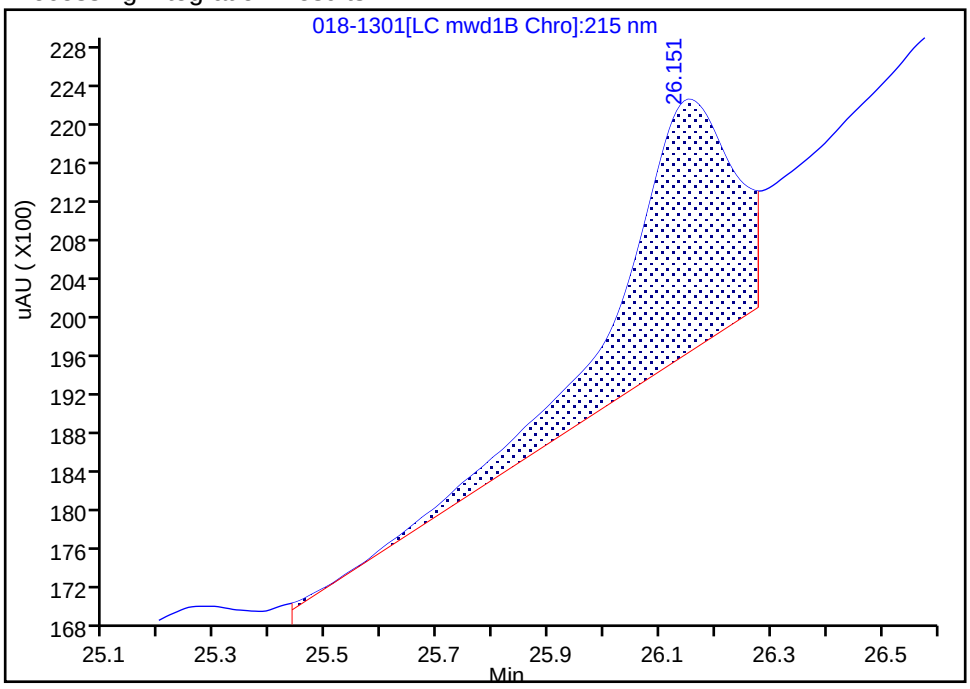
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\018-1301.D
Injection Date: 01-May-2021 23:35:08 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 1
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

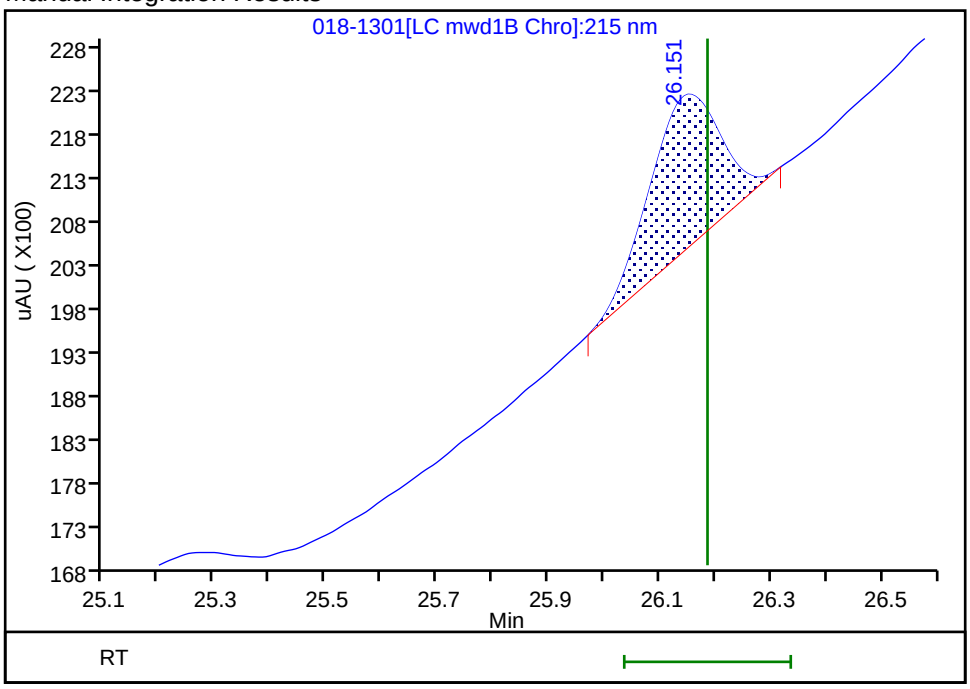
Processing Integration Results

RT: 26.15
Area: 35908
Amount: 0.224090
Amount Units: ug/ml



Manual Integration Results

RT: 26.15
Area: 15659
Amount: 0.113685
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:41:16
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Calibration / HMX

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

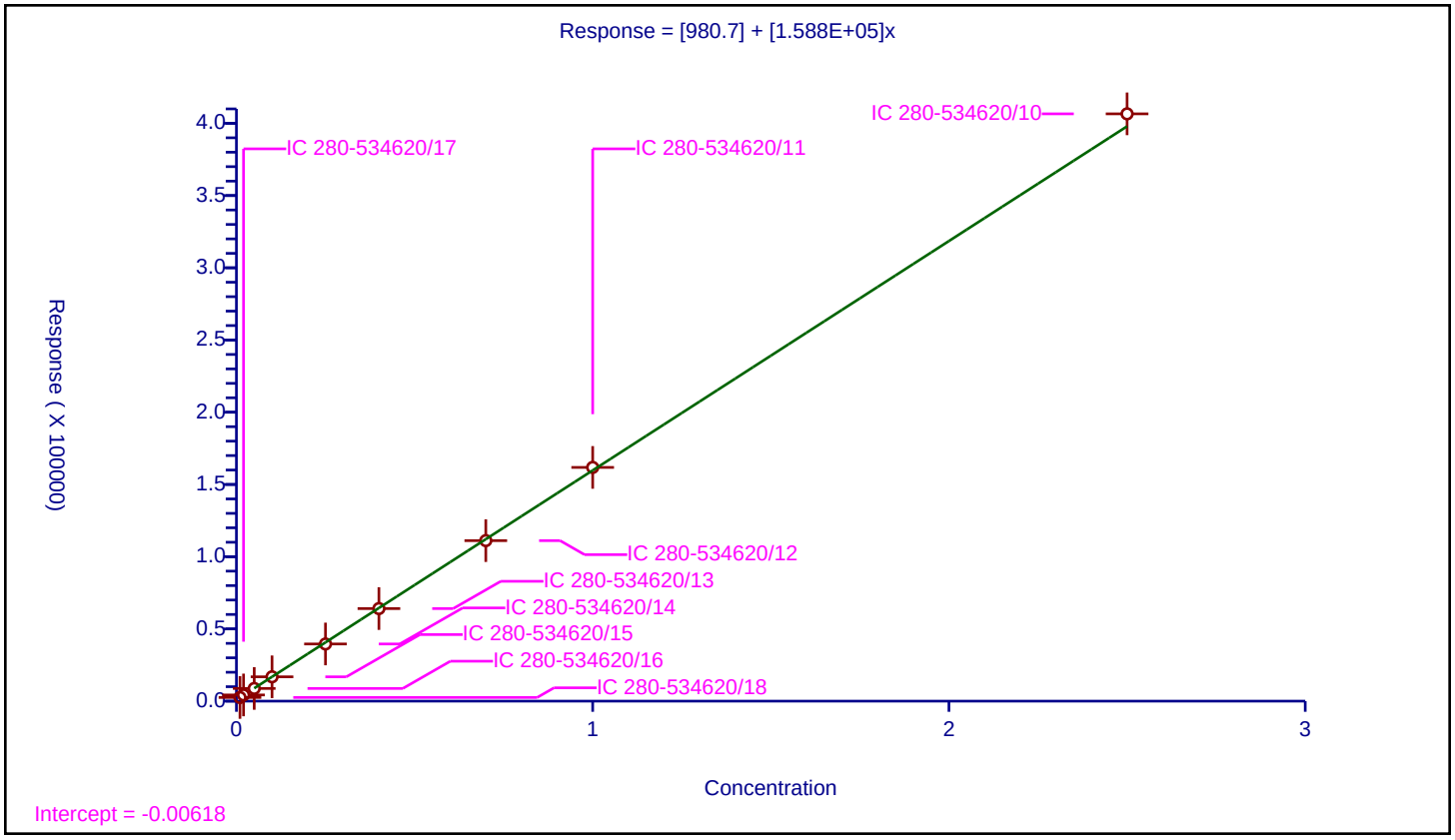
Curve Coefficients

Intercept:	980.7
Slope:	1.588E+05

Error Coefficients

Standard Error:	3410
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 280-534620/18	0.01	2543.0			254300.0	Y
2	IC 280-534620/17	0.02	4286.0			214300.0	Y
3	IC 280-534620/16	0.05	8791.0			175820.0	Y
4	IC 280-534620/15	0.1	16850.0			168500.0	Y
5	IC 280-534620/14	0.25	39580.0			158320.0	Y
6	IC 280-534620/13	0.4	64089.0			160222.5	Y
7	IC 280-534620/12	0.7	111120.0			158742.857143	Y
8	IC 280-534620/11	1.0	161798.0			161798.0	Y
9	IC 280-534620/10	2.5	406565.0			162626.0	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

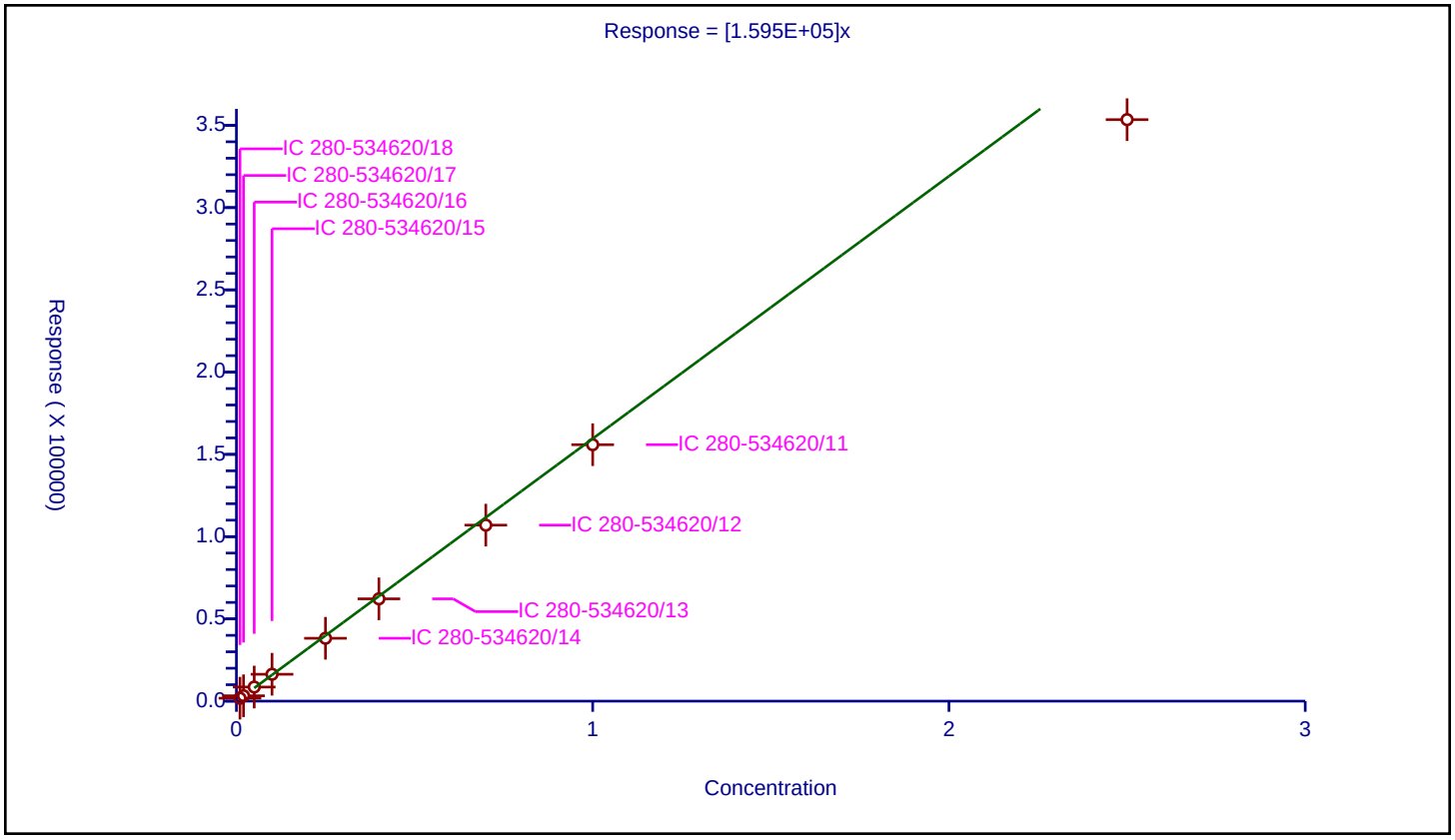
Curve Coefficients

Intercept:	0
Slope:	1.595E+05

Error Coefficients

Standard Error:	16200
Relative Standard Error:	7.0
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	1789.0			178900.0	Y
2	IC 280-534620/17	0.02	3270.0			163500.0	Y
3	IC 280-534620/16	0.05	8578.0			171560.0	Y
4	IC 280-534620/15	0.1	16340.0			163400.0	Y
5	IC 280-534620/14	0.25	38222.0			152888.0	Y
6	IC 280-534620/13	0.4	62190.0			155475.0	Y
7	IC 280-534620/12	0.7	106987.0			152838.571429	Y
8	IC 280-534620/11	1.0	155884.0			155884.0	Y
9	IC 280-534620/10	2.5	353462.0			141384.8	Y



Calibration / RDX

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

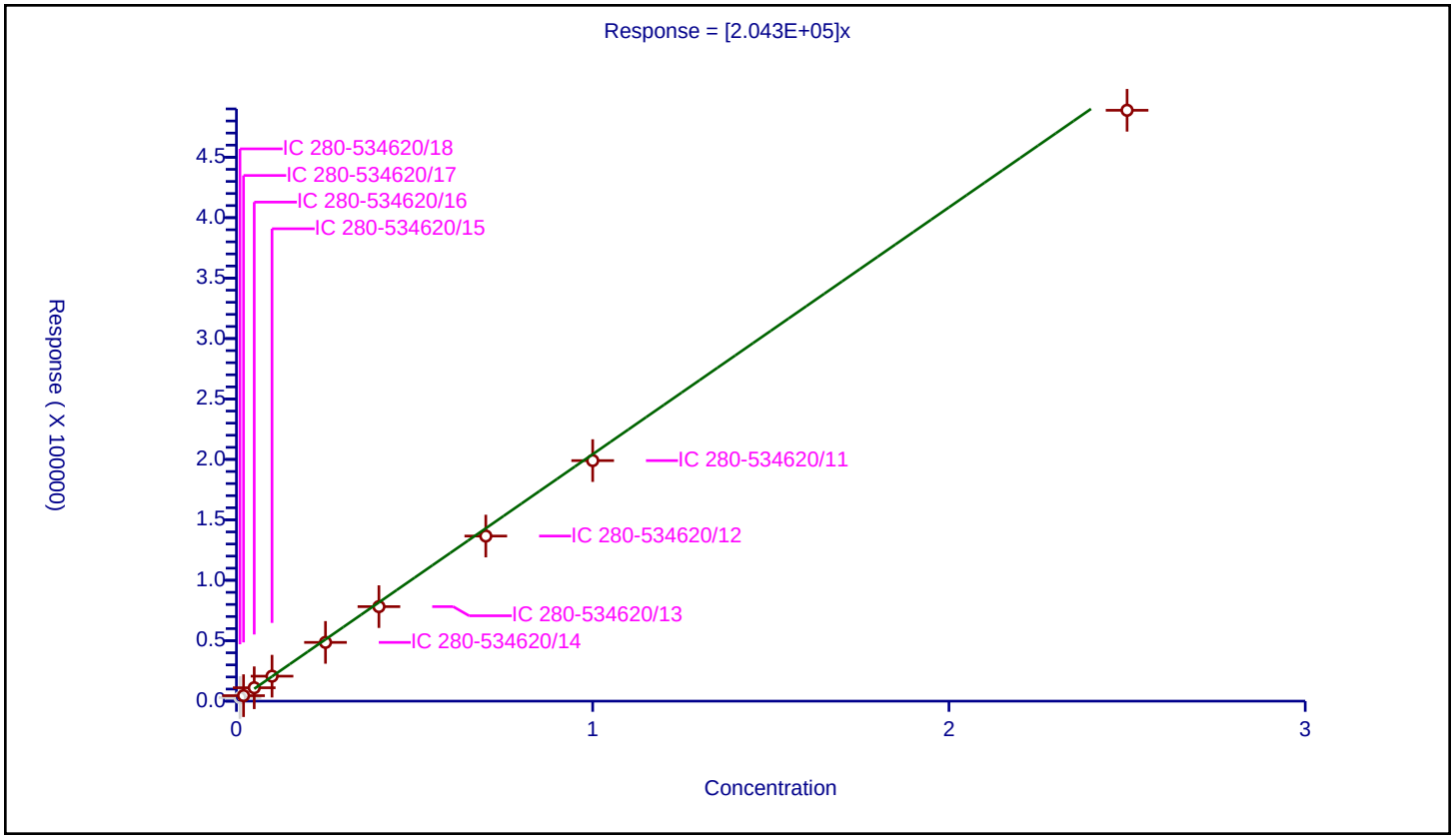
Curve Coefficients

Intercept:	0
Slope:	2.043E+05

Error Coefficients

Standard Error:	8980
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	2988.0			298800.0	N
2	IC 280-534620/17	0.02	4533.0			226650.0	Y
3	IC 280-534620/16	0.05	11066.0			221320.0	Y
4	IC 280-534620/15	0.1	20661.0			206610.0	Y
5	IC 280-534620/14	0.25	48606.0			194424.0	Y
6	IC 280-534620/13	0.4	78185.0			195462.5	Y
7	IC 280-534620/12	0.7	136592.0			195131.428571	Y
8	IC 280-534620/11	1.0	199019.0			199019.0	Y
9	IC 280-534620/10	2.5	488855.0			195542.0	Y



Calibration / Nitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

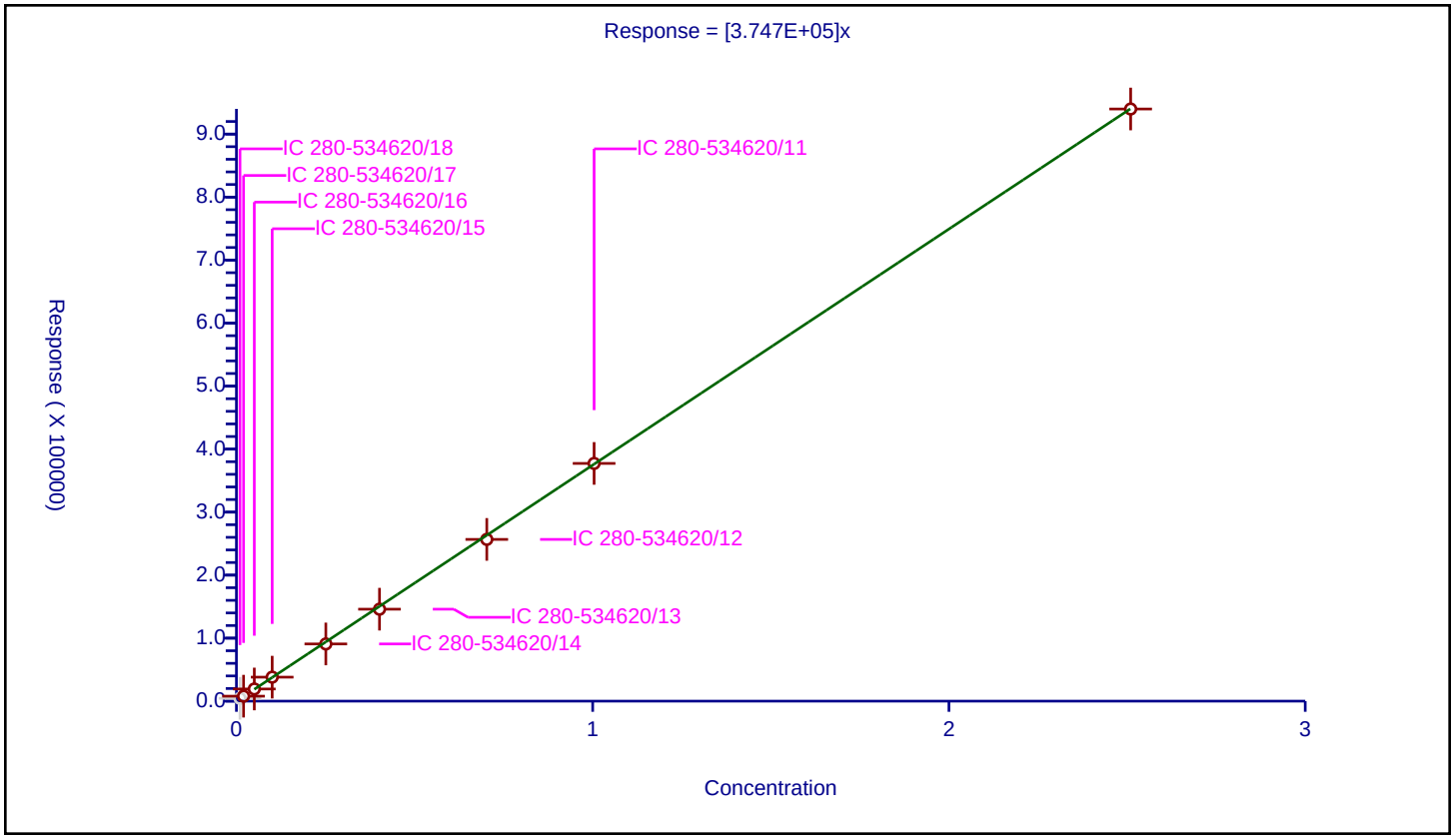
Curve Coefficients

Intercept:	0
Slope:	3.747E+05

Error Coefficients

Standard Error:	3320
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 280-534620/18	0.01004	4507.0			448904.38247	N
2	IC 280-534620/17	0.02008	7888.0			392828.685259	Y
3	IC 280-534620/16	0.0502	19306.0			384581.673307	Y
4	IC 280-534620/15	0.1004	38085.0			379332.669323	Y
5	IC 280-534620/14	0.251	90760.0			361593.625498	Y
6	IC 280-534620/13	0.4016	145926.0			363361.553785	Y
7	IC 280-534620/12	0.7028	256719.0			365280.307342	Y
8	IC 280-534620/11	1.004	377310.0			375806.772908	Y
9	IC 280-534620/10	2.51	939811.0			374426.693227	Y



Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

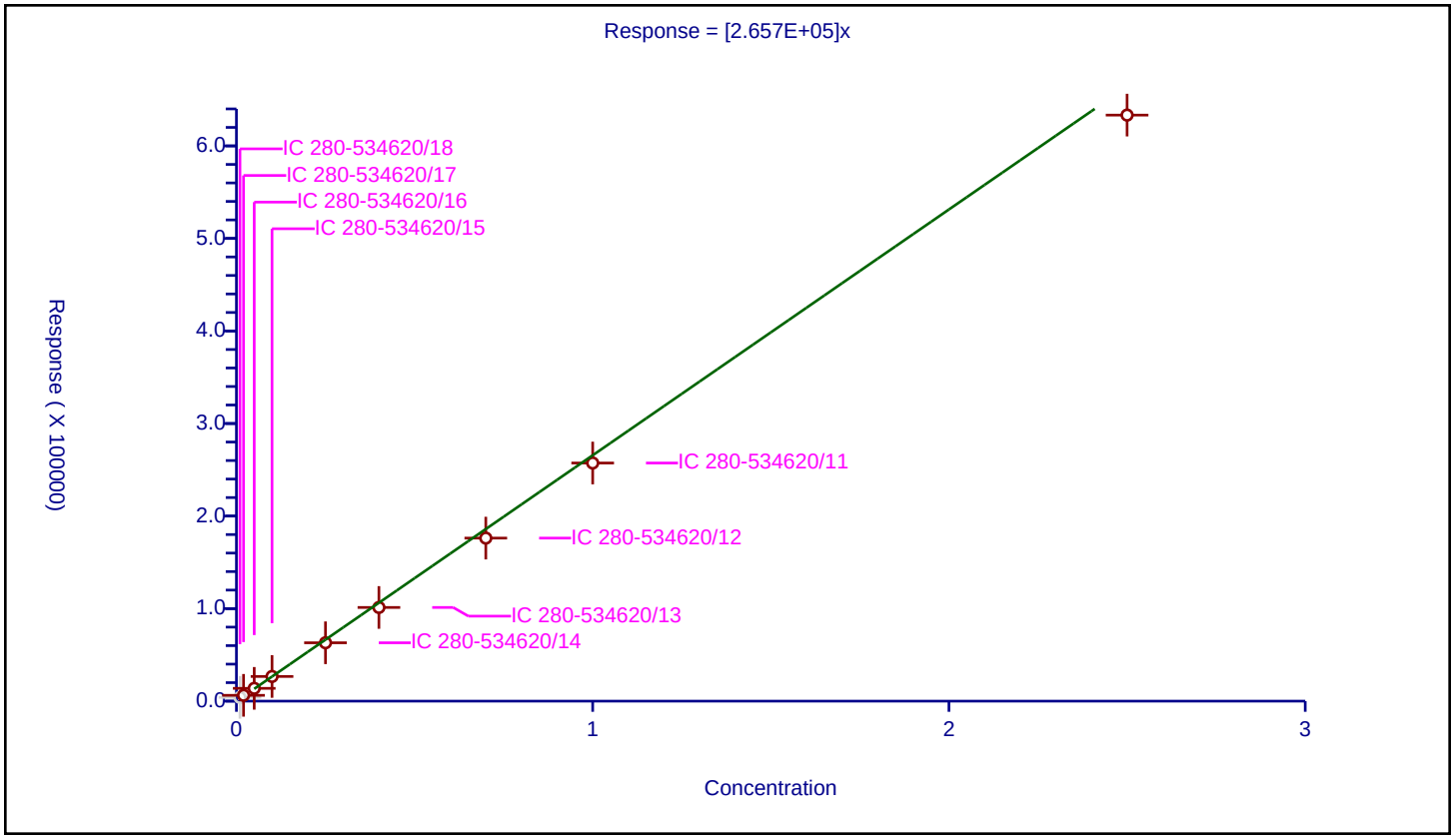
Curve Coefficients

Intercept:	0
Slope:	2.657E+05

Error Coefficients

Standard Error:	12800
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	4082.0			408200.0	N
2	IC 280-534620/17	0.02	6280.0			314000.0	Y
3	IC 280-534620/16	0.05	13836.0			276720.0	Y
4	IC 280-534620/15	0.1	26678.0			266780.0	Y
5	IC 280-534620/14	0.25	63081.0			252324.0	Y
6	IC 280-534620/13	0.4	101248.0			253120.0	Y
7	IC 280-534620/12	0.7	176180.0			251685.714286	Y
8	IC 280-534620/11	1.0	257324.0			257324.0	Y
9	IC 280-534620/10	2.5	633300.0			253320.0	Y



Calibration / 1,3-Dinitrobenzene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

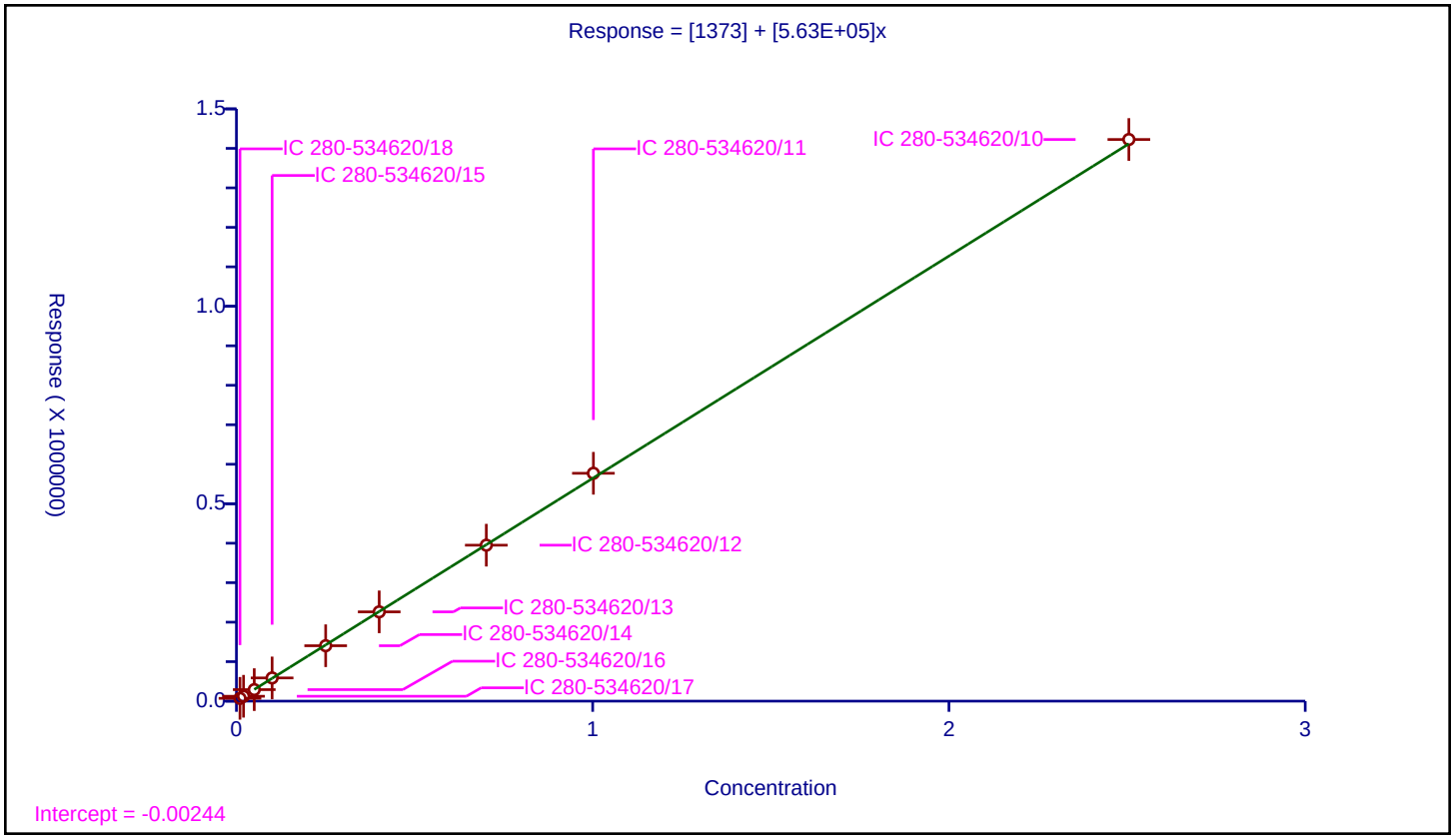
Curve Coefficients

Intercept:	1373
Slope:	5.63E+05

Error Coefficients

Standard Error:	6130
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 280-534620/18	0.01002	7085.0			707085.828343	Y
2	IC 280-534620/17	0.02004	12411.0			619311.377246	Y
3	IC 280-534620/16	0.0501	29142.0			581676.646707	Y
4	IC 280-534620/15	0.1002	58764.0			586467.065868	Y
5	IC 280-534620/14	0.2505	140347.0			560267.46507	Y
6	IC 280-534620/13	0.4008	226148.0			564241.516966	Y
7	IC 280-534620/12	0.7014	394975.0			563123.752495	Y
8	IC 280-534620/11	1.002	577120.0			575968.063872	Y
9	IC 280-534620/10	2.505	1422490.0			567860.279441	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

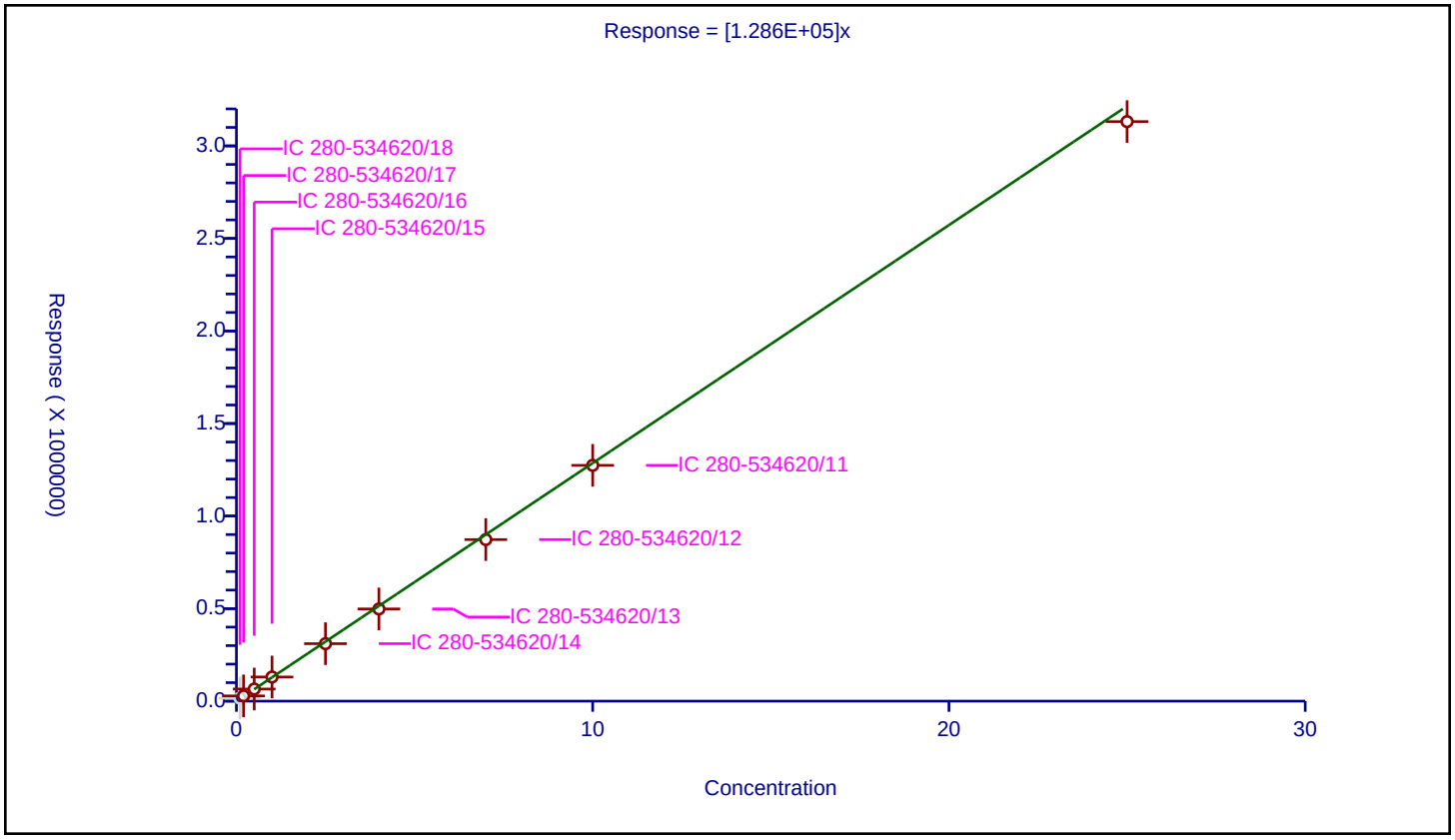
Curve Coefficients

Intercept:	0
Slope:	1.286E+05

Error Coefficients

Standard Error:	34400
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.1	16401.0			164010.0	N
2	IC 280-534620/17	0.2	28299.0			141495.0	Y
3	IC 280-534620/16	0.5	65416.0			130832.0	Y
4	IC 280-534620/15	1.0	130447.0			130447.0	Y
5	IC 280-534620/14	2.5	310480.0			124192.0	Y
6	IC 280-534620/13	4.0	498088.0			124522.0	Y
7	IC 280-534620/12	7.0	872941.0			124705.857143	Y
8	IC 280-534620/11	10.0	1273886.0			127388.6	Y
9	IC 280-534620/10	25.0	3131400.0			125256.0	Y



Calibration / o-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

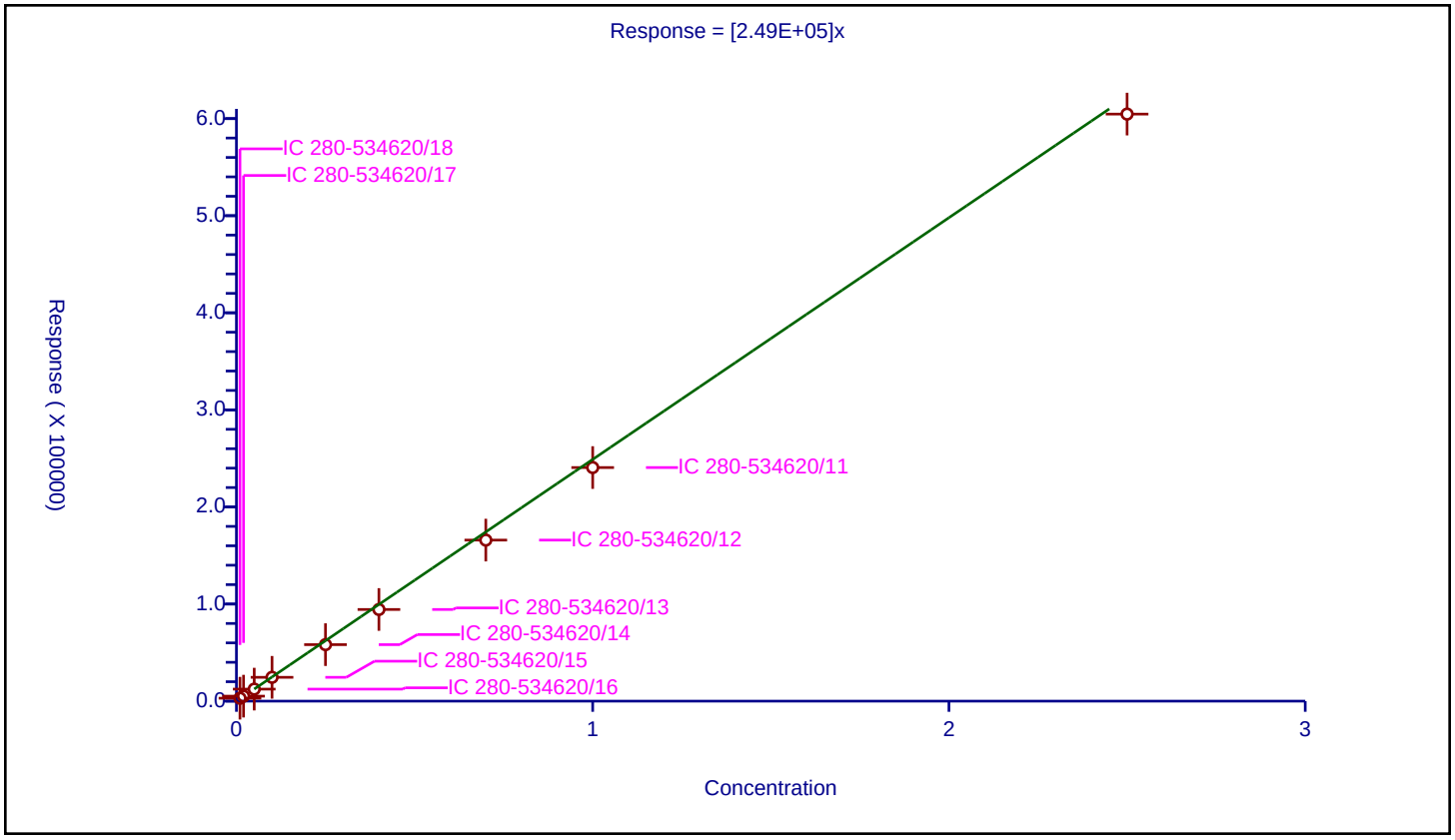
Curve Coefficients

Intercept:	0
Slope:	2.49E+05

Error Coefficients

Standard Error:	7910
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01	3022.0			302200.0	Y
2	IC 280-534620/17	0.02	5151.0			257550.0	Y
3	IC 280-534620/16	0.05	12373.0			247460.0	Y
4	IC 280-534620/15	0.1	24528.0			245280.0	Y
5	IC 280-534620/14	0.25	58191.0			232764.0	Y
6	IC 280-534620/13	0.4	94418.0			236045.0	Y
7	IC 280-534620/12	0.7	165863.0			236947.142857	Y
8	IC 280-534620/11	1.0	240595.0			240595.0	Y
9	IC 280-534620/10	2.5	604653.0			241861.2	Y



Calibration / p-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

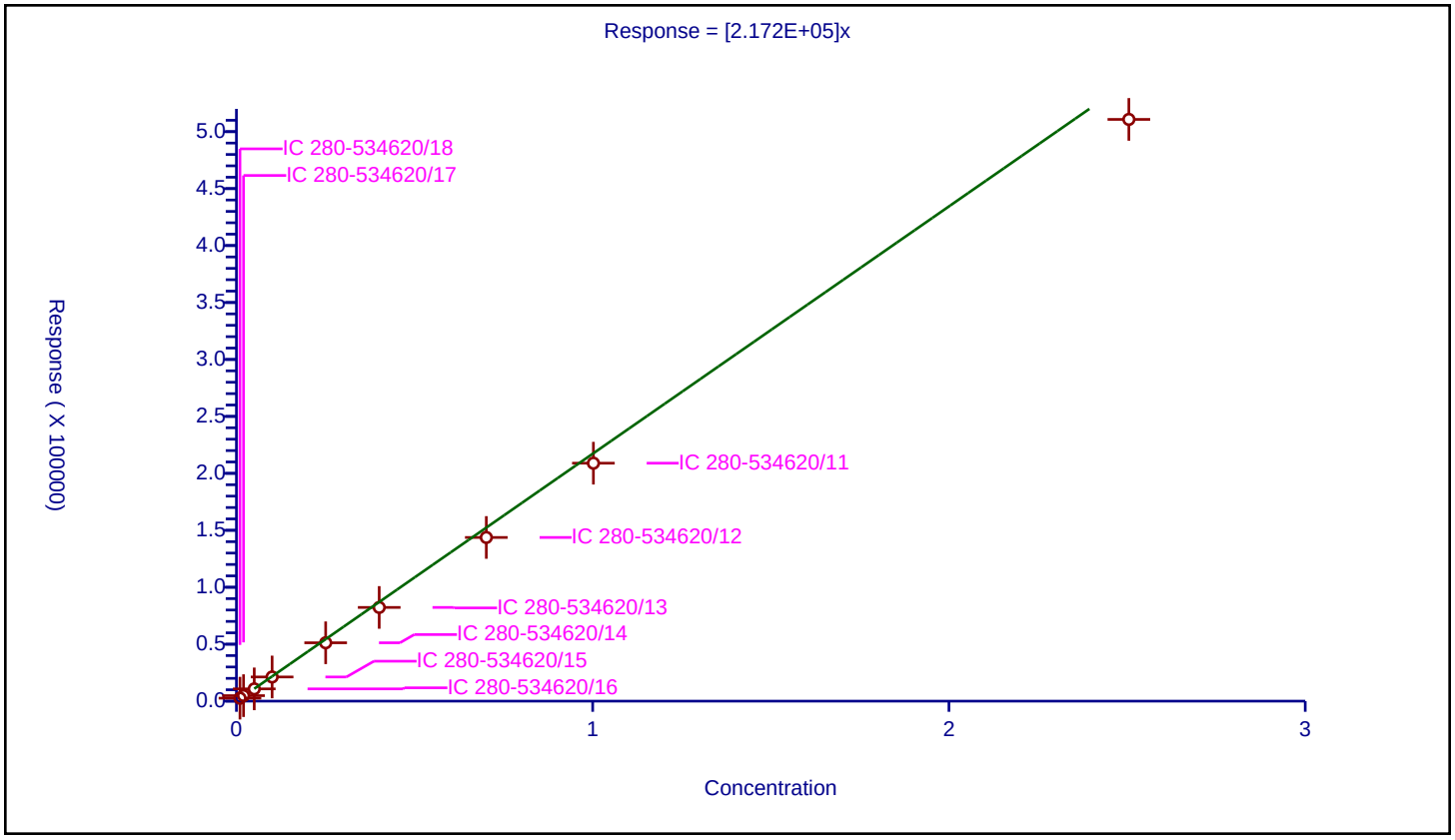
Curve Coefficients

Intercept:	0
Slope:	2.172E+05

Error Coefficients

Standard Error:	12700
Relative Standard Error:	9.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01002	2608.0			260279.441118	Y
2	IC 280-534620/17	0.02004	4823.0			240668.662675	Y
3	IC 280-534620/16	0.0501	10760.0			214770.459082	Y
4	IC 280-534620/15	0.1002	21221.0			211786.427146	Y
5	IC 280-534620/14	0.2505	51245.0			204570.858283	Y
6	IC 280-534620/13	0.4008	82281.0			205291.916168	Y
7	IC 280-534620/12	0.7014	143722.0			204907.328201	Y
8	IC 280-534620/11	1.002	208929.0			208511.976048	Y
9	IC 280-534620/10	2.505	510755.0			203894.211577	Y



Calibration / 4-Amino-2,6-dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

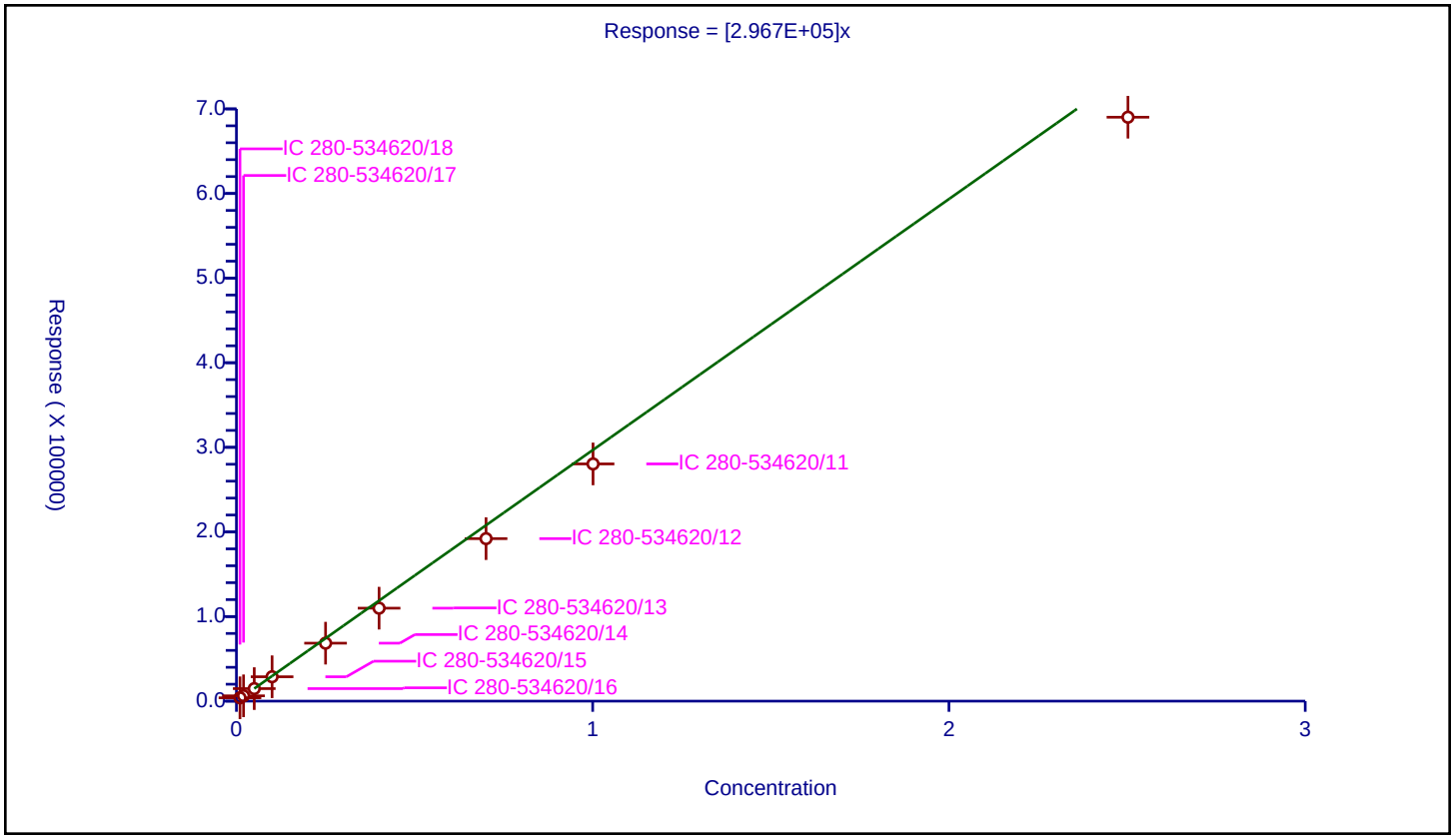
Curve Coefficients

Intercept:	0
Slope:	2.967E+05

Error Coefficients

Standard Error:	20600
Relative Standard Error:	13.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01001	3954.0			395004.995005	Y
2	IC 280-534620/17	0.02002	6276.0			313486.513487	Y
3	IC 280-534620/16	0.05005	14802.0			295744.255744	Y
4	IC 280-534620/15	0.1001	28819.0			287902.097902	Y
5	IC 280-534620/14	0.25025	68509.0			273762.237762	Y
6	IC 280-534620/13	0.4004	109890.0			274450.549451	Y
7	IC 280-534620/12	0.7007	192075.0			274118.738404	Y
8	IC 280-534620/11	1.001	280366.0			280085.914086	Y
9	IC 280-534620/10	2.5025	690165.0			275790.20979	Y



Calibration / m-Nitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

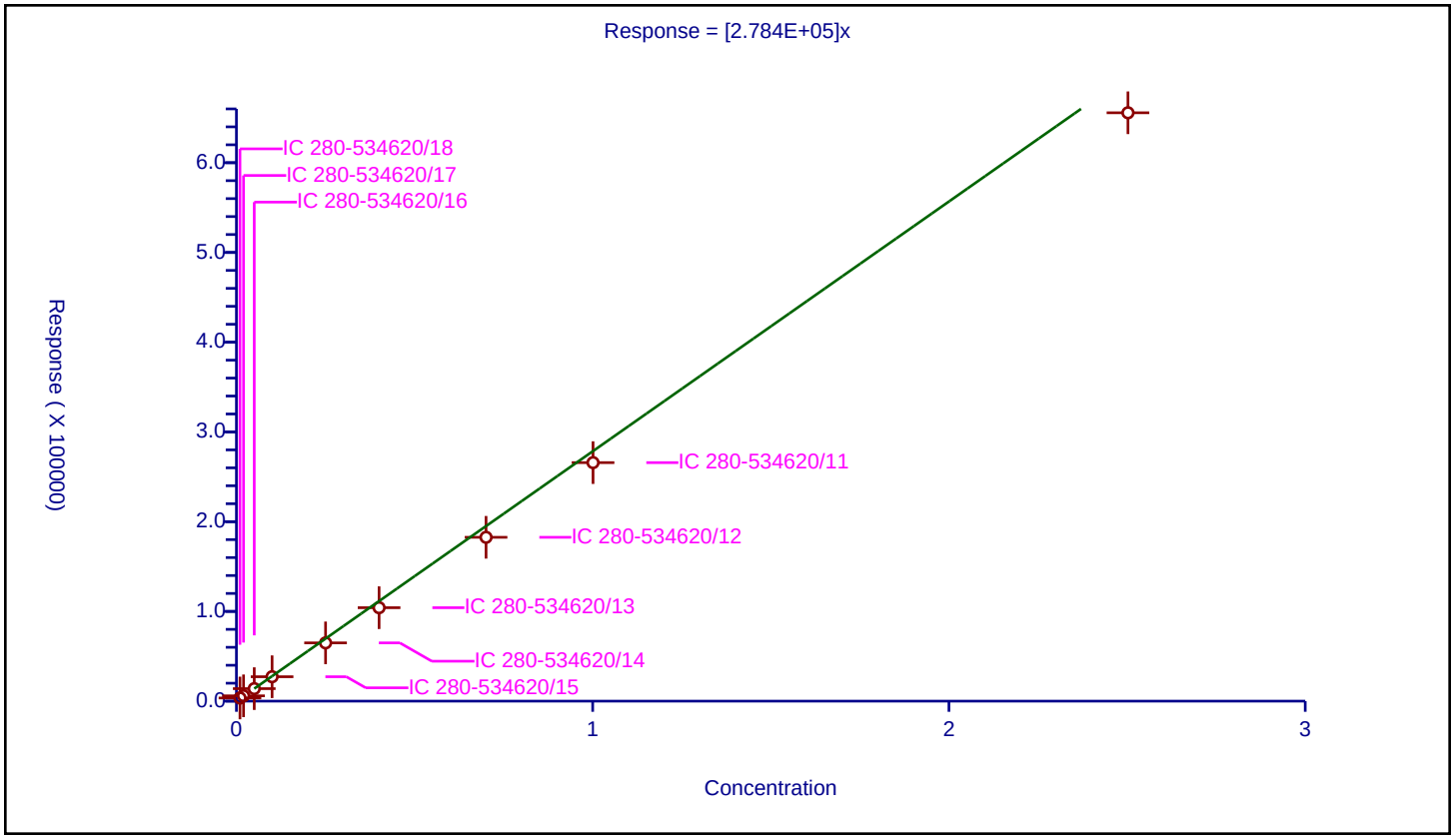
Curve Coefficients

Intercept:	0
Slope:	2.784E+05

Error Coefficients

Standard Error:	16100
Relative Standard Error:	10.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01001	3517.0			351348.651349	Y
2	IC 280-534620/17	0.02002	5928.0			296103.896104	Y
3	IC 280-534620/16	0.05005	13943.0			278581.418581	Y
4	IC 280-534620/15	0.1001	27212.0			271848.151848	Y
5	IC 280-534620/14	0.25025	64933.0			259472.527473	Y
6	IC 280-534620/13	0.4004	104128.0			260059.94006	Y
7	IC 280-534620/12	0.7007	182587.0			260577.993435	Y
8	IC 280-534620/11	1.001	265803.0			265537.462537	Y
9	IC 280-534620/10	2.5025	655662.0			262002.797203	Y



Calibration / 2-Amino-4,6-dinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

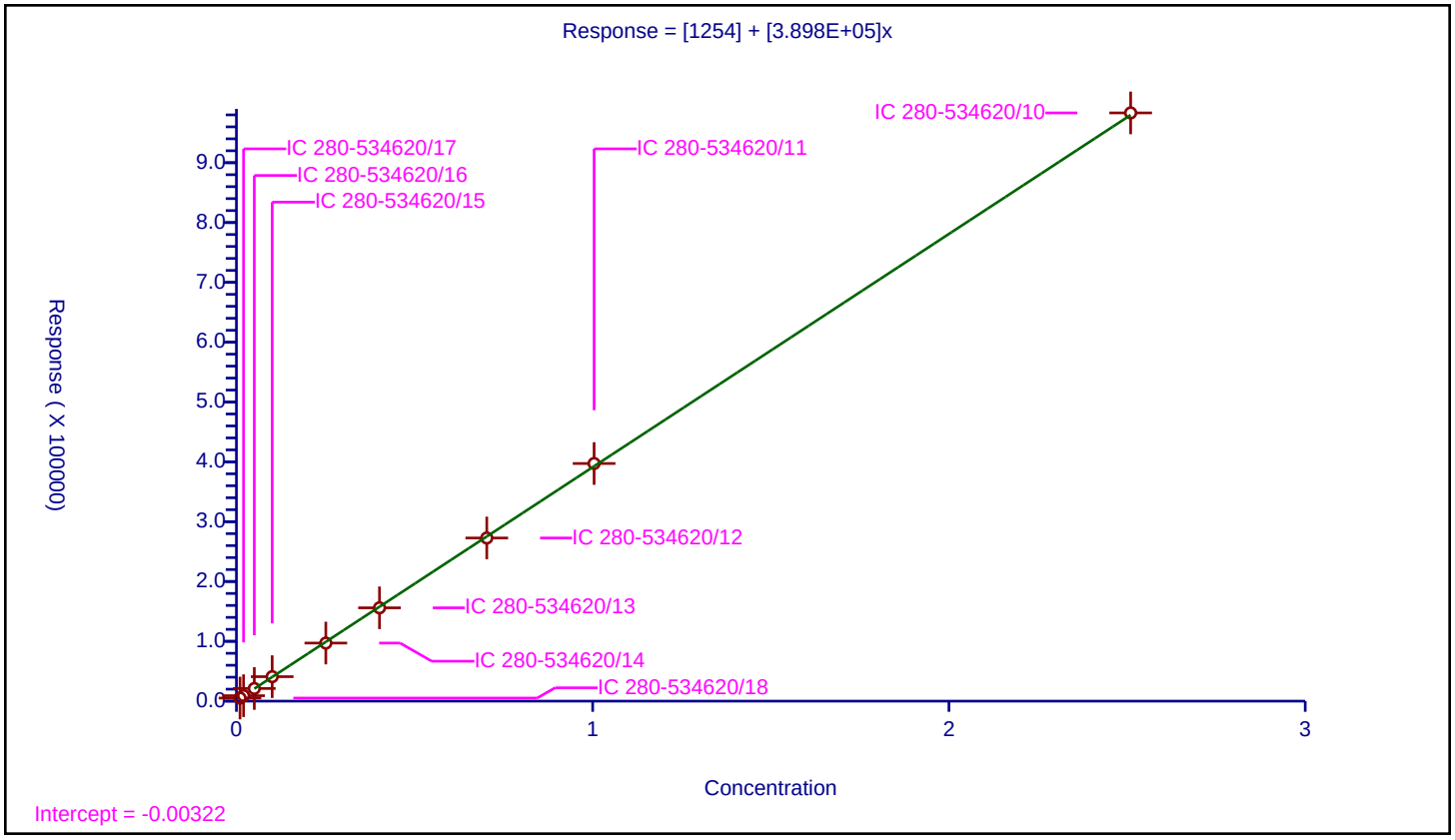
Curve Coefficients

Intercept:	1254
Slope:	3.898E+05

Error Coefficients

Standard Error:	2610
Relative Standard Error:	1.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	5148.0			512749.003984	Y
2	IC 280-534620/17	0.02008	9114.0			453884.462151	Y
3	IC 280-534620/16	0.0502	21111.0			420537.848606	Y
4	IC 280-534620/15	0.1004	40904.0			407410.358566	Y
5	IC 280-534620/14	0.251	97071.0			386737.051793	Y
6	IC 280-534620/13	0.4016	155961.0			388349.103586	Y
7	IC 280-534620/12	0.7028	272718.0			388044.963005	Y
8	IC 280-534620/11	1.004	397243.0			395660.358566	Y
9	IC 280-534620/10	2.51	983275.0			391743.027888	Y



Calibration / 1,3,5-Trinitrobenzene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

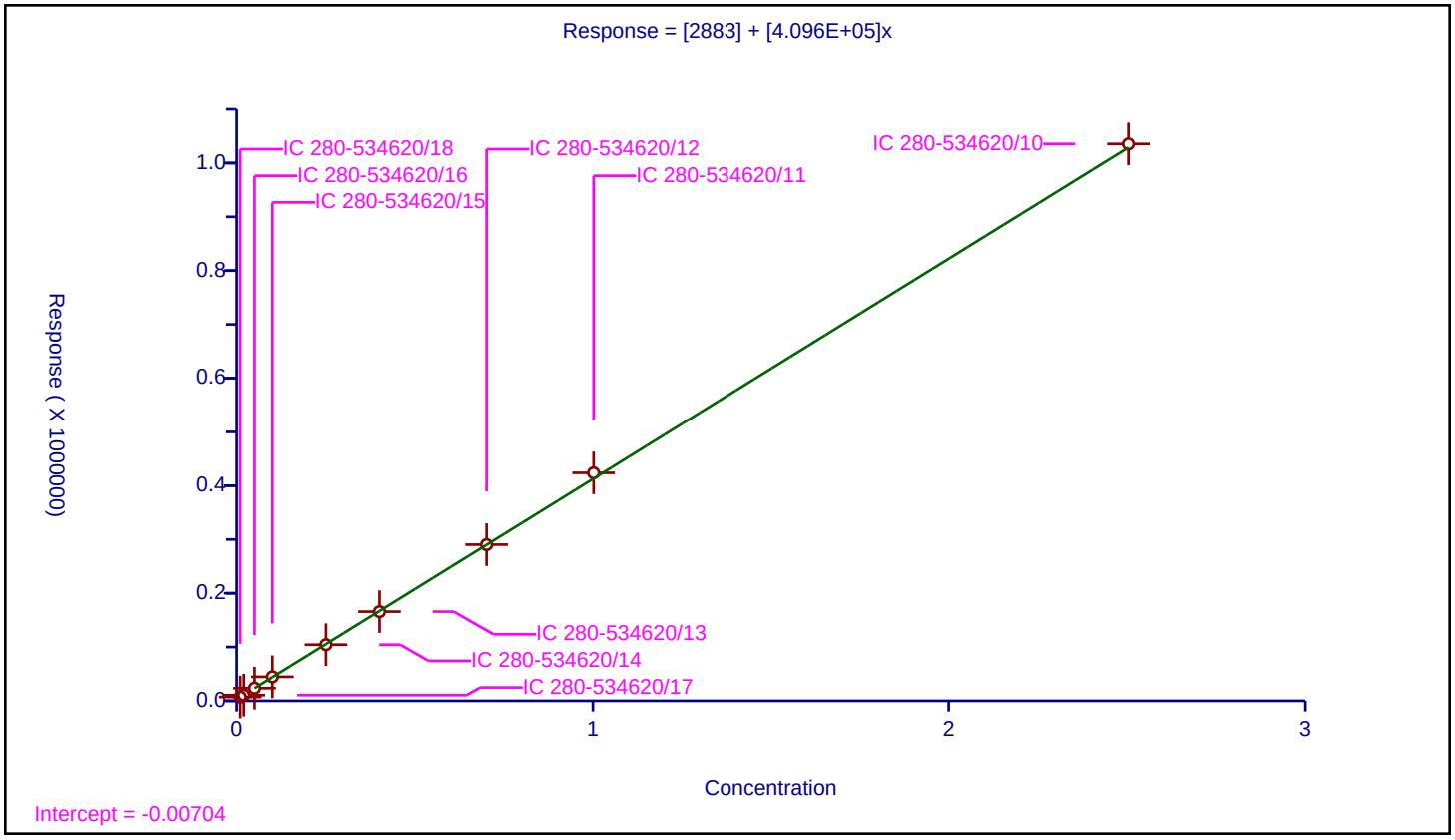
Curve Coefficients

Intercept:	2883
Slope:	4.096E+05

Error Coefficients

Standard Error:	4780
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 280-534620/18	0.01002	7116.0			710179.640719	Y
2	IC 280-534620/17	0.02004	10540.0			525948.103792	Y
3	IC 280-534620/16	0.0501	23506.0			469181.636727	Y
4	IC 280-534620/15	0.1002	44594.0			445049.9002	Y
5	IC 280-534620/14	0.2505	104344.0			416542.914172	Y
6	IC 280-534620/13	0.4008	165828.0			413742.51497	Y
7	IC 280-534620/12	0.7014	290458.0			414111.776447	Y
8	IC 280-534620/11	1.002	423869.0			423022.954092	Y
9	IC 280-534620/10	2.505	1035616.0			413419.560878	Y



Calibration / 2,6-Dinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

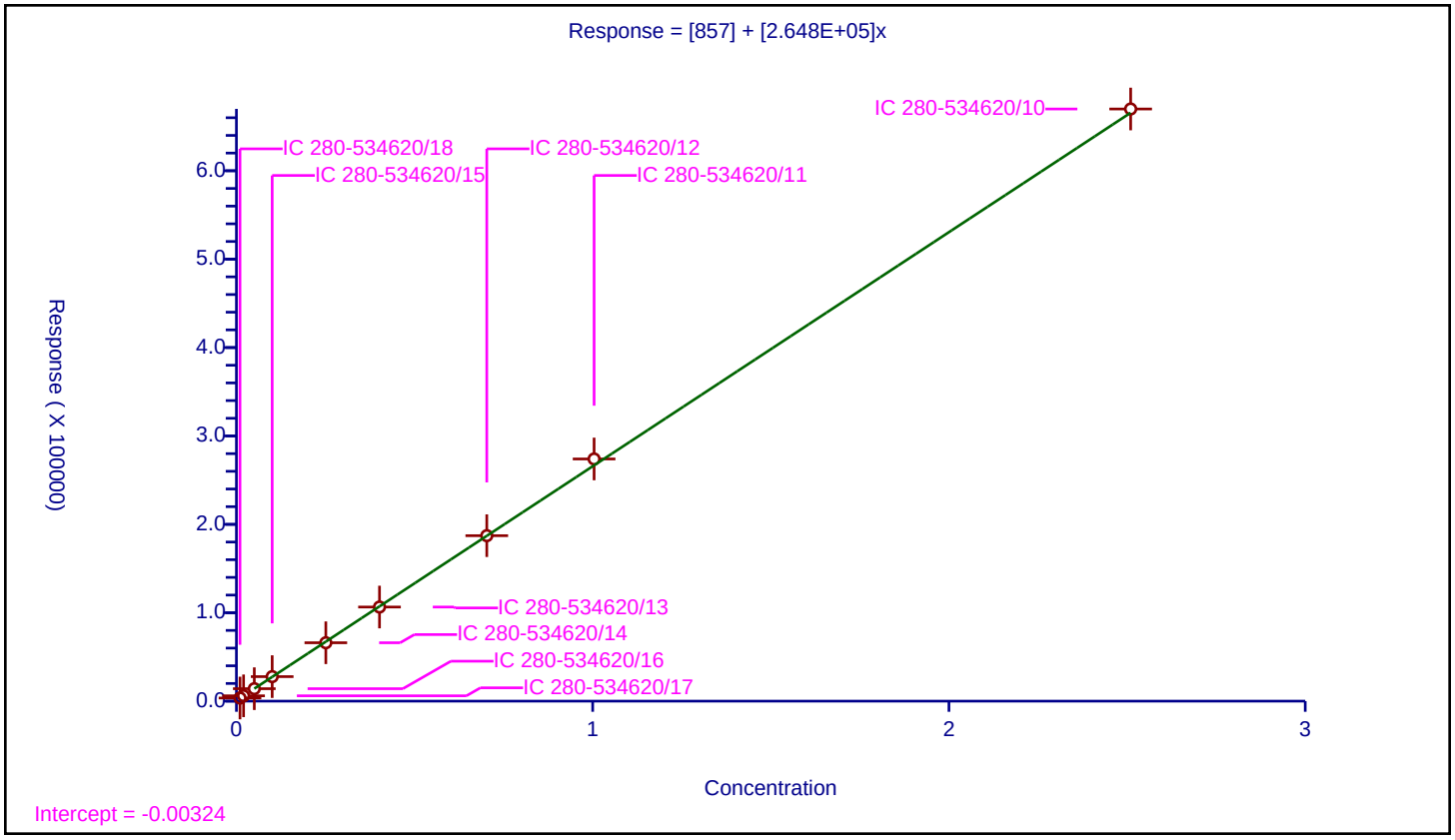
Curve Coefficients

Intercept:	857
Slope:	2.648E+05

Error Coefficients

Standard Error:	3220
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 280-534620/18	0.01004	3555.0			354083.665339	Y
2	IC 280-534620/17	0.02008	6026.0			300099.601594	Y
3	IC 280-534620/16	0.0502	14081.0			280498.007968	Y
4	IC 280-534620/15	0.1004	27721.0			276105.577689	Y
5	IC 280-534620/14	0.251	66062.0			263195.219124	Y
6	IC 280-534620/13	0.4016	106452.0			265069.721116	Y
7	IC 280-534620/12	0.7028	187184.0			266340.352874	Y
8	IC 280-534620/11	1.004	273958.0			272866.533865	Y
9	IC 280-534620/10	2.51	669889.0			266888.047809	Y



Calibration / 2,4-Dinitrotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

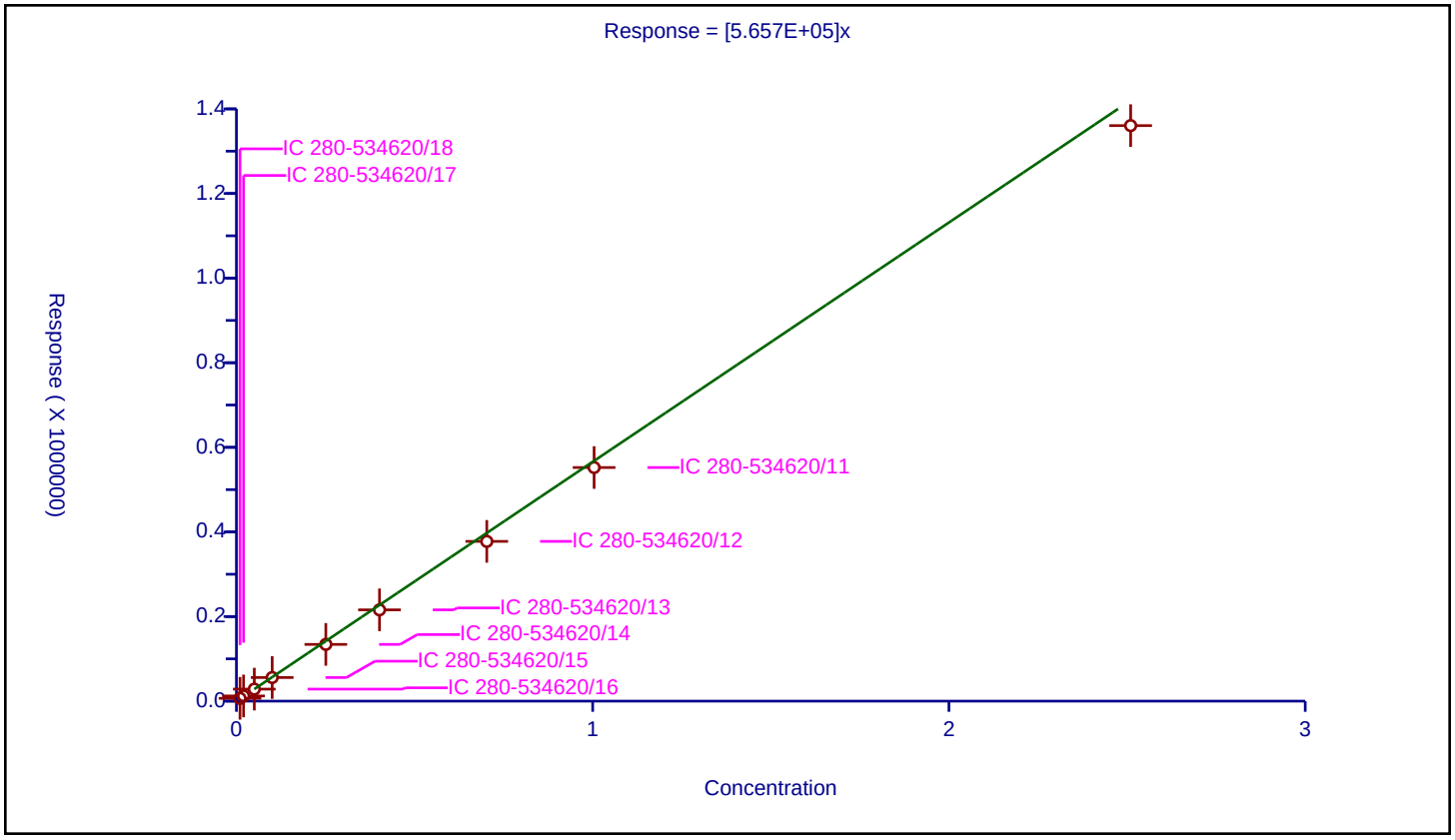
Curve Coefficients

Intercept:	0
Slope:	5.657E+05

Error Coefficients

Standard Error:	23400
Relative Standard Error:	7.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	6619.0			659262.948207	Y
2	IC 280-534620/17	0.02008	12229.0			609013.944223	Y
3	IC 280-534620/16	0.0502	28396.0			565657.370518	Y
4	IC 280-534620/15	0.1004	55838.0			556155.378486	Y
5	IC 280-534620/14	0.251	134163.0			534513.944223	Y
6	IC 280-534620/13	0.4016	215819.0			537397.908367	Y
7	IC 280-534620/12	0.7028	377631.0			537323.562891	Y
8	IC 280-534620/11	1.004	552269.0			550068.7251	Y
9	IC 280-534620/10	2.51	1360486.0			542026.294821	Y



Calibration / Tetryl

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

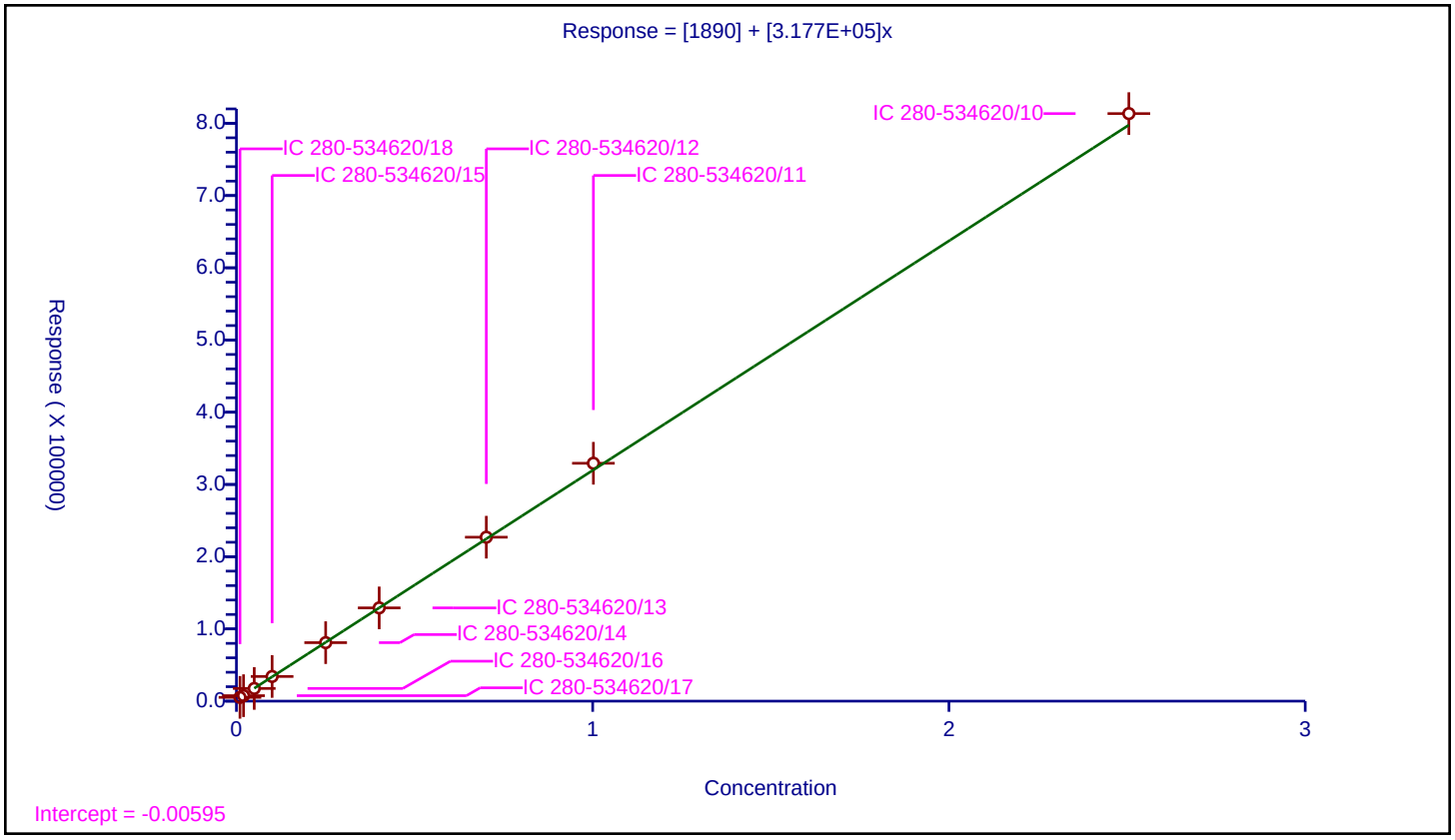
Curve Coefficients

Intercept:	1890
Slope:	3.177E+05

Error Coefficients

Standard Error:	6990
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 280-534620/18	0.01002	5245.0			523453.093812	Y
2	IC 280-534620/17	0.02004	7583.0			378393.213573	Y
3	IC 280-534620/16	0.0501	17573.0			350758.483034	Y
4	IC 280-534620/15	0.1002	34148.0			340798.403194	Y
5	IC 280-534620/14	0.2505	80996.0			323337.325349	Y
6	IC 280-534620/13	0.4008	129140.0			322205.588822	Y
7	IC 280-534620/12	0.7014	227001.0			323639.863131	Y
8	IC 280-534620/11	1.002	329366.0			328708.582834	Y
9	IC 280-534620/10	2.505	813489.0			324746.107784	Y



Calibration / 2,4,6-Trinitrotoluene

Curve Type:	Linear
Weighting:	Conc_Sq
Origin:	None
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

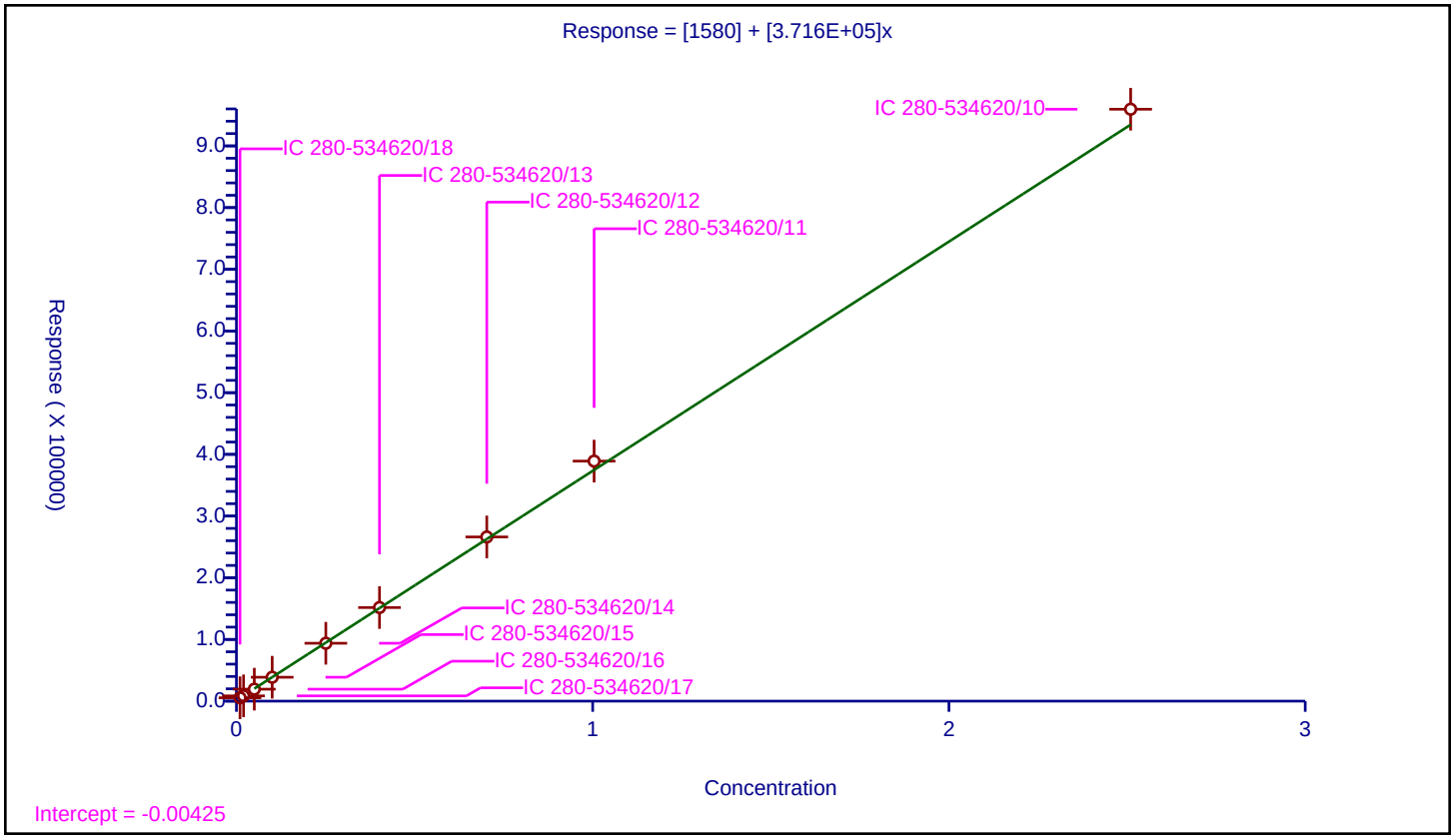
Curve Coefficients

Intercept:	1580
Slope:	3.716E+05

Error Coefficients

Standard Error:	11000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.01004	5469.0			544721.115538	Y
2	IC 280-534620/17	0.02008	8548.0			425697.211155	Y
3	IC 280-534620/16	0.0502	19400.0			386454.183267	Y
4	IC 280-534620/15	0.1004	38740.0			385856.573705	Y
5	IC 280-534620/14	0.251	93822.0			373792.828685	Y
6	IC 280-534620/13	0.4016	151709.0			377761.454183	Y
7	IC 280-534620/12	0.7028	266122.0			378659.647126	Y
8	IC 280-534620/11	1.004	389102.0			387551.792829	Y
9	IC 280-534620/10	2.51	959496.0			382269.322709	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

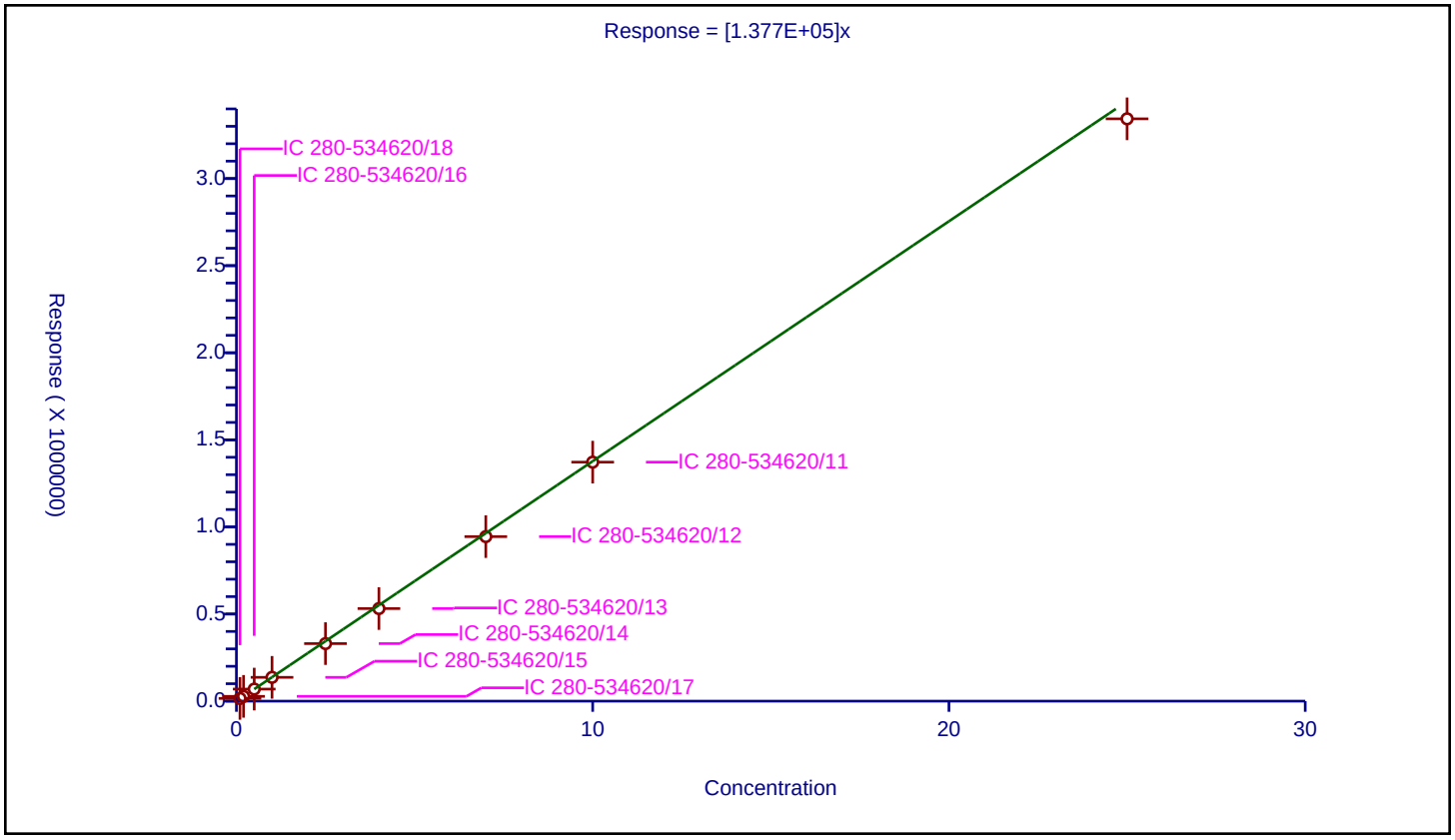
Curve Coefficients

Intercept:	0
Slope:	1.377E+05

Error Coefficients

Standard Error:	37200
Relative Standard Error:	5.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/18	0.1	15659.0			156590.0	Y
2	IC 280-534620/17	0.2	27436.0			137180.0	Y
3	IC 280-534620/16	0.5	69170.0			138340.0	Y
4	IC 280-534620/15	1.0	136676.0			136676.0	Y
5	IC 280-534620/14	2.5	330309.0			132123.6	Y
6	IC 280-534620/13	4.0	531566.0			132891.5	Y
7	IC 280-534620/12	7.0	944599.0			134942.714286	Y
8	IC 280-534620/11	10.0	1371986.0			137198.6	Y
9	IC 280-534620/10	25.0	3343027.0			133721.08	Y



FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1 Analy Batch No.: 534620

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/02/2021 00:45 Calibration End Date: 05/02/2021 04:51 Calibration ID: 53147

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534620/27	027-2201.D
Level 2	IC 280-534620/26	026-2101.D
Level 3	IC 280-534620/25	025-2001.D
Level 4	IC 280-534620/24	024-1901.D
Level 5	IC 280-534620/23	023-1801.D
Level 6	IC 280-534620/22	022-1701.D
Level 7	IC 280-534620/21	021-1601.D
Level 8	IC 280-534620/20	020-1501.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	LVL 8			RT WINDOW	AVG RT
TNX	5.064	5.071	5.067	5.077	5.075	5.069	5.070	5.050			4.925 - 5.225	5.068
DNX	5.897	5.898	5.894	5.904	5.902	5.896	5.904	5.876			5.752 - 6.052	5.896
MNX	7.444	7.444	7.447	7.451	7.455	7.449	7.450	7.430			7.305 - 7.605	7.446

FORM VI
HPLC/IC BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1 Analy Batch No.: 534620

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/02/2021 00:45 Calibration End Date: 05/02/2021 04:51 Calibration ID: 53147

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534620/27	027-2201.D
Level 2	IC 280-534620/26	026-2101.D
Level 3	IC 280-534620/25	025-2001.D
Level 4	IC 280-534620/24	024-1901.D
Level 5	IC 280-534620/23	023-1801.D
Level 6	IC 280-534620/22	022-1701.D
Level 7	IC 280-534620/21	021-1601.D
Level 8	IC 280-534620/20	020-1501.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	410889 372502	384156 369461	382597 368210	348975 372358	Ave		376143.531				4.7		20.0			
DNX	297353 284253	292168 282676	288032 280817	268675 284356	Ave		284791.268				3.0		20.0			
MNX	288260 261292	277069 259317	266692 258167	246968 260974	Ave		264842.562				4.8		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
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1 Analy Batch No.: 534620

SDG No.:

Instrument ID: CHHPLC_X5 GC Column: Luna-phenyl ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/02/2021 00:45 Calibration End Date: 05/02/2021 04:51 Calibration ID: 53147

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 280-534620/27	027-2201.D
Level 2	IC 280-534620/26	026-2101.D
Level 3	IC 280-534620/25	025-2001.D
Level 4	IC 280-534620/24	024-1901.D
Level 5	IC 280-534620/23	023-1801.D
Level 6	IC 280-534620/22	022-1701.D
Level 7	IC 280-534620/21	021-1601.D
Level 8	IC 280-534620/20	020-1501.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	8226 258881	19227 368578	38298 931826	87331	149150	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
DNX	Ave	5953 198071	14623 281098	28832 711601	67236	113815	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250	0.400
MNX	Ave	6728 211836	16167 301281	31123 761392	72053	121971	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_X5\20210501-101093.b\020-1501.D
Lims ID: IC DMT 8
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 02-May-2021 00:45:25 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 8
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub2

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:16 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.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	5.050	5.075	-0.025	931826	2.50	2.48	
4 DNX	1	5.876	5.902	-0.026	711601	2.50	2.50	
7 MNX	1	7.430	7.455	-0.025	761392	2.92	2.87	

Reagents:

8330 DMT_00008 Amount Added: 125.00 Units: uL

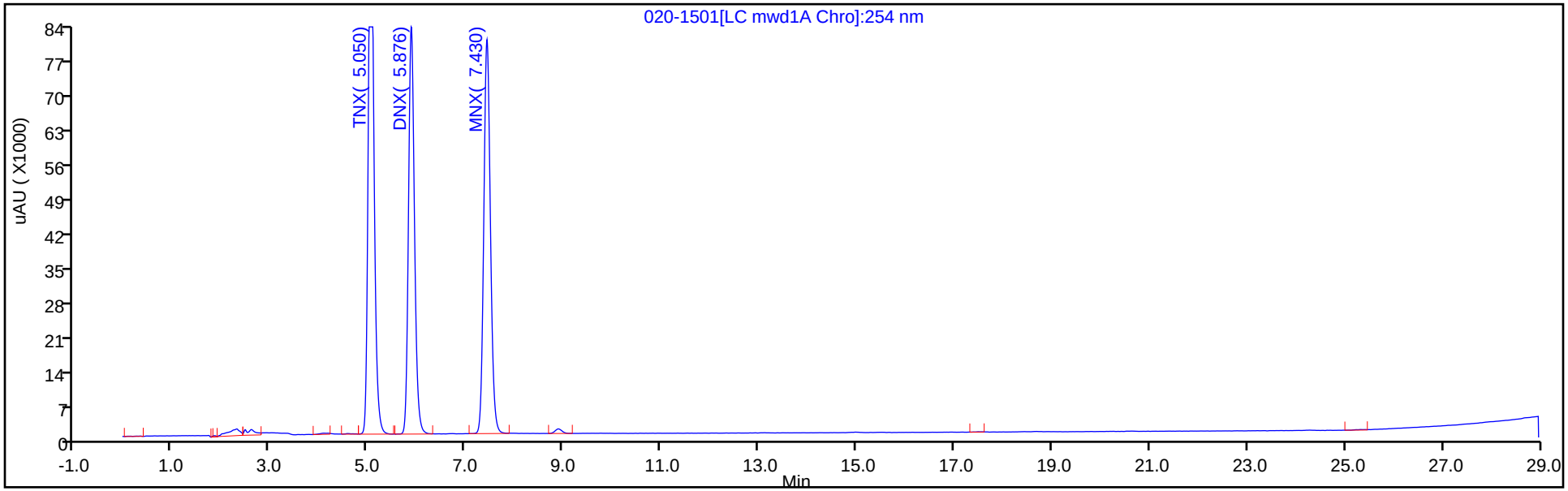
Report Date: 04-May-2021 13:43:16 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

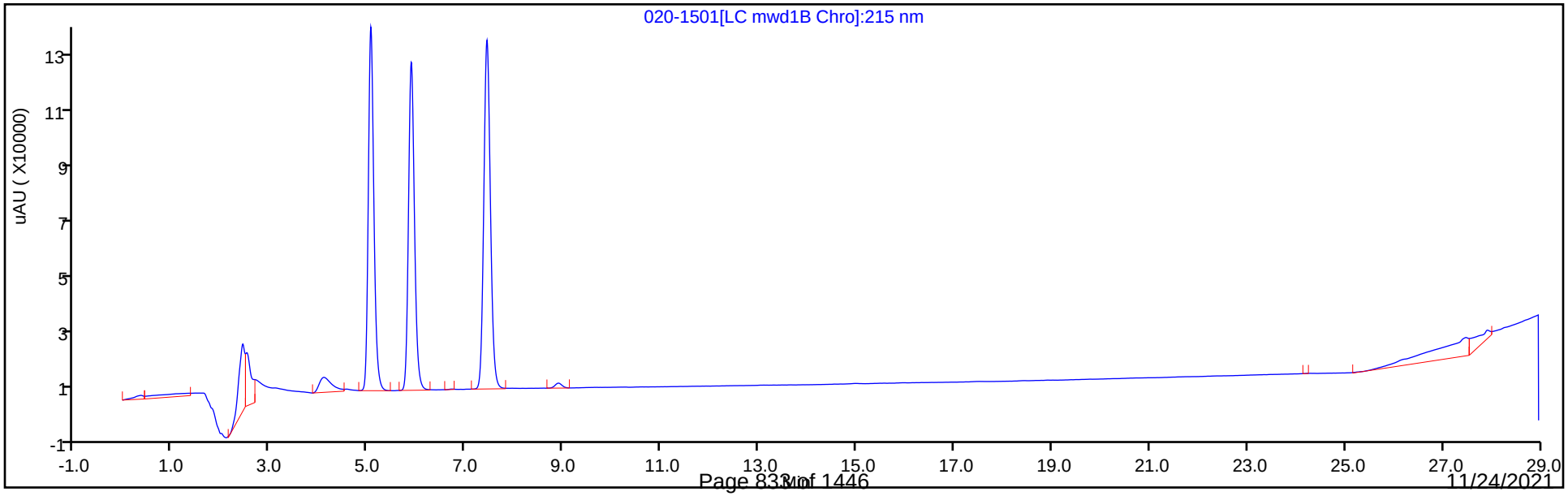
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\020-1501.D

Injection Date:	02-May-2021 00:45:25	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 TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\021-1601.D				
Lims ID:	IC DMT 7				
Client ID:					
Sample Type:	IC	Calib Level:	7		
Inject. Date:	02-May-2021 01:20:33	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 7				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	04-May-2021 13:43:17	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.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	5.070	5.075	-0.005	368578	1.00	0.9799	
4 DNX	1	5.904	5.902	0.002	281098	1.00	0.9870	
7 MNX	1	7.450	7.455	-0.005	301281	1.17	1.14	

Reagents:

8330 DMT_00008 Amount Added: 50.00 Units: uL

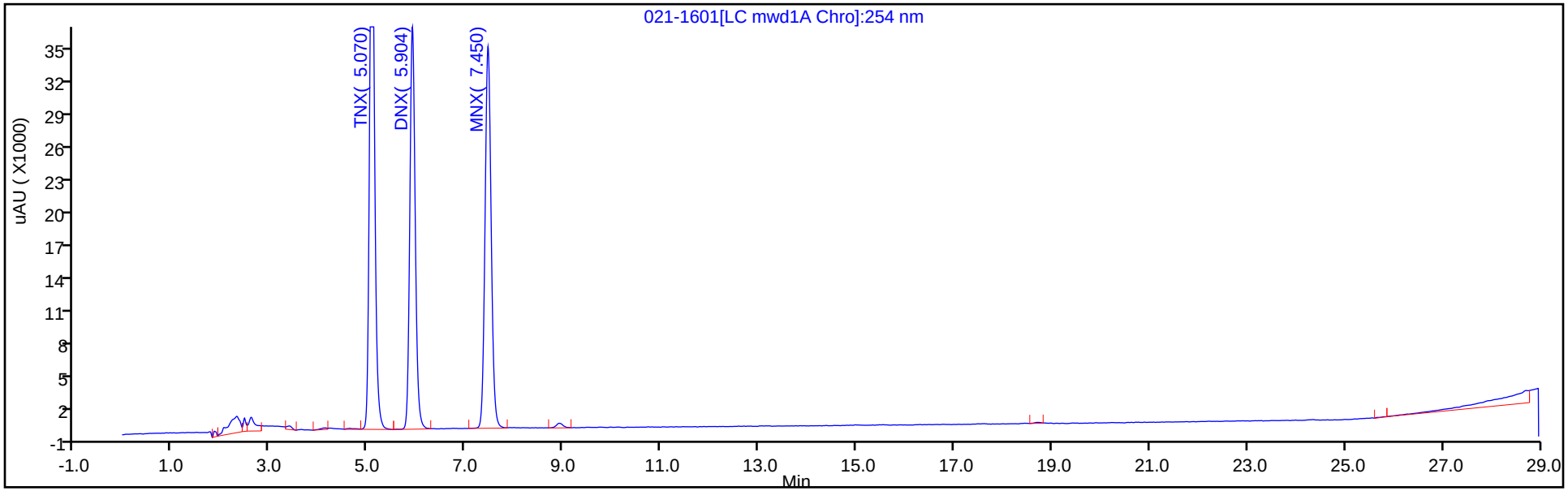
Report Date: 04-May-2021 13:43:17 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

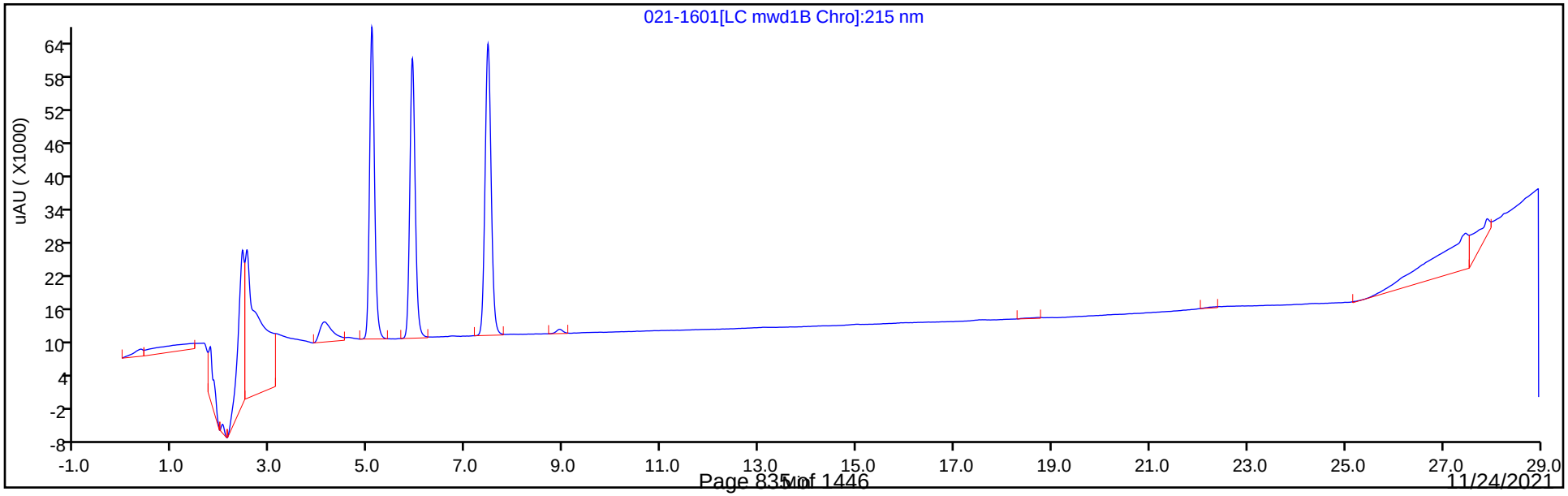
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\021-1601.D

Injection Date:	02-May-2021 01:20:33	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 TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\022-1701.D
Lims ID: IC DMT 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 02-May-2021 01:55:44 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 6
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub2

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:17 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.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	5.069	5.075	-0.006	258881	0.7007	0.6883	
4 DNX	1	5.896	5.902	-0.006	198071	0.7007	0.6955	
7 MNX	1	7.449	7.455	-0.006	211836	0.8169	0.7999	

Reagents:

8330 DMT_00008 Amount Added: 35.00 Units: uL

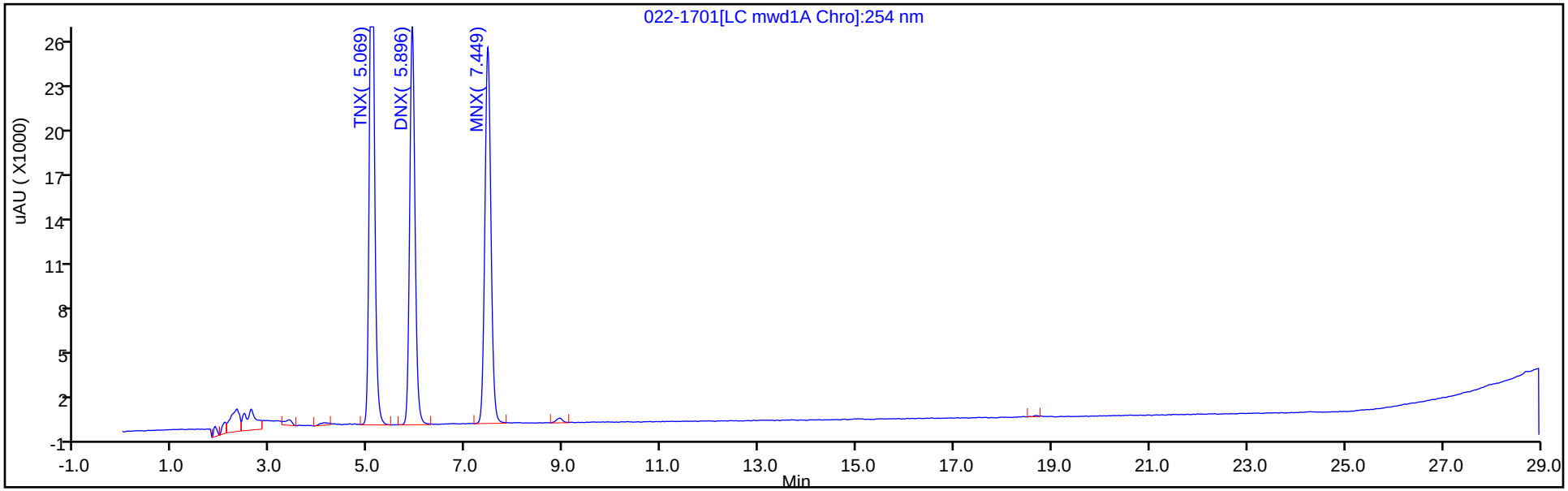
Report Date: 04-May-2021 13:43:17 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

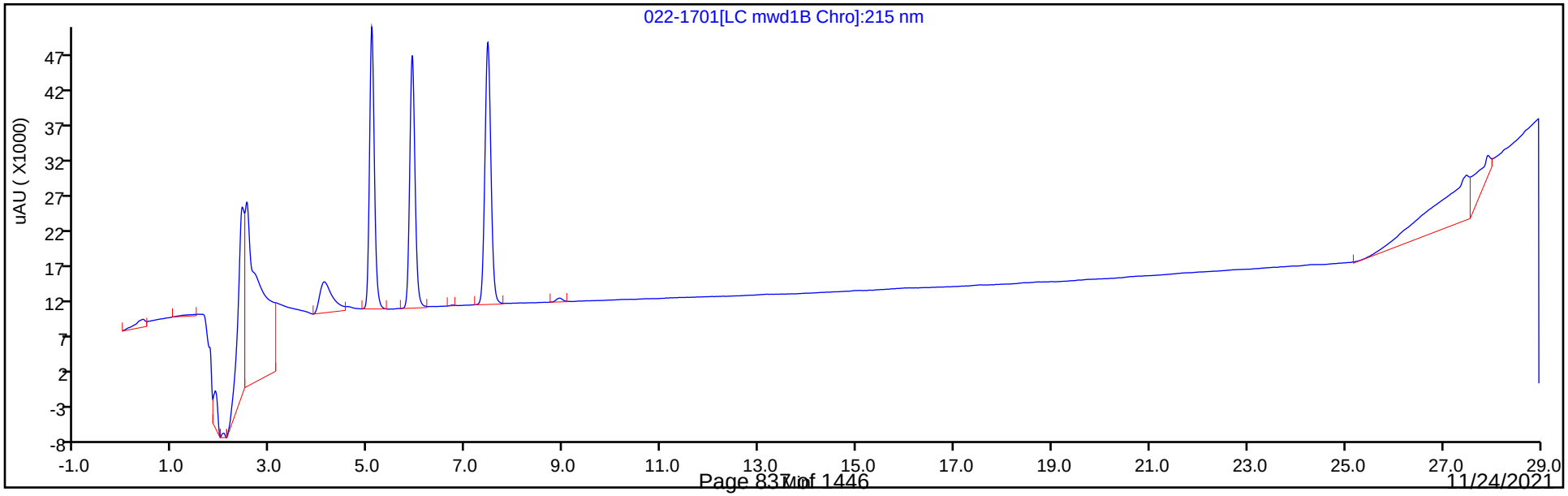
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\022-1701.D

Injection Date:	02-May-2021 01:55:44	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 TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\023-1801.D				
Lims ID:	IC DMT 5				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	02-May-2021 02:30:46	ALS Bottle#:	23	Worklist Smp#:	23
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 5				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	04-May-2021 13:43:18	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.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	5.075	5.075	0.000	149150	0.4004	0.3965	
4 DNX	1	5.902	5.902	0.000	113815	0.4004	0.3996	
7 MNX	1	7.455	7.455	0.000	121971	0.4668	0.4605	

Reagents:

8330 DMT_00008 Amount Added: 20.00 Units: uL

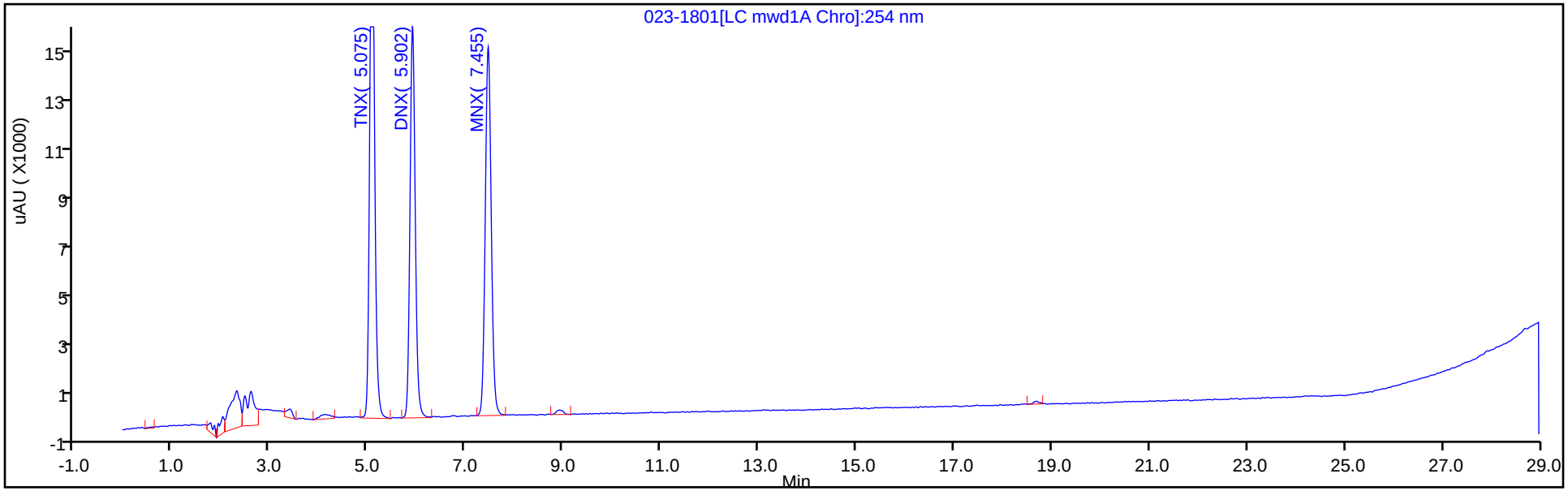
Report Date: 04-May-2021 13:43:18 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

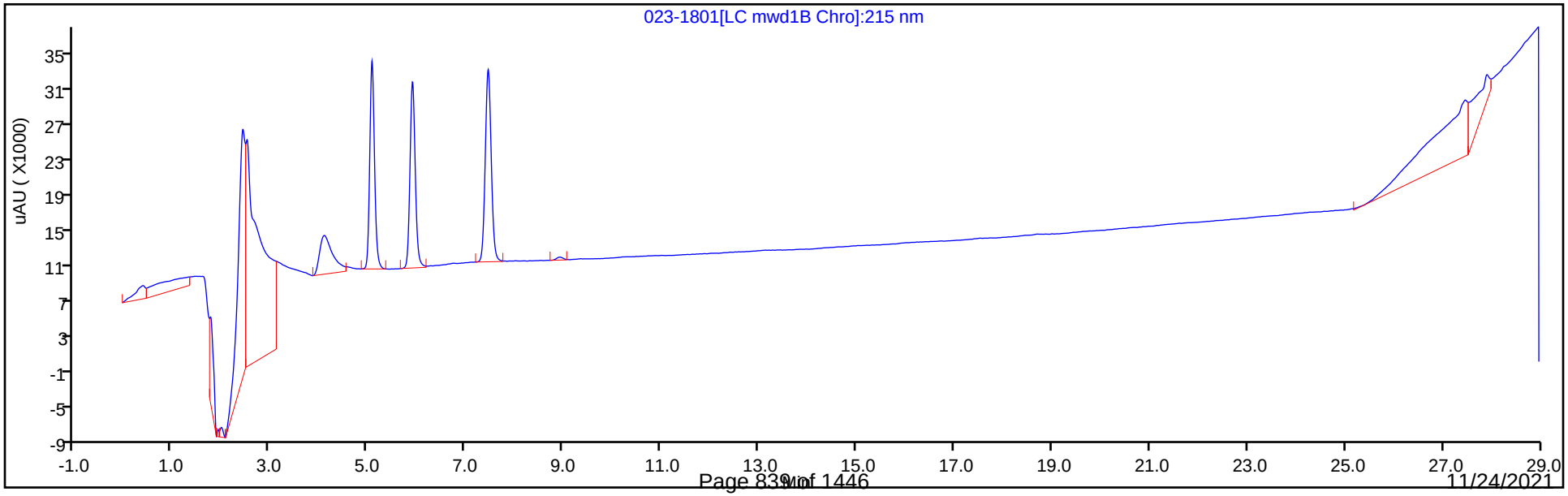
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\023-1801.D

Injection Date:	02-May-2021 02:30:46	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 TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\024-1901.D
Lims ID: IC DMT 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 02-May-2021 03:05:50 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 4
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub2

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:18 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.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	5.077	5.075	0.002	87331	0.2503	0.2322	
4 DNX	1	5.904	5.902	0.002	67236	0.2503	0.2361	
7 MNX	1	7.451	7.455	-0.004	72053	0.2918	0.2721	

Reagents:

8330 DMT_00008 Amount Added: 12.50 Units: uL

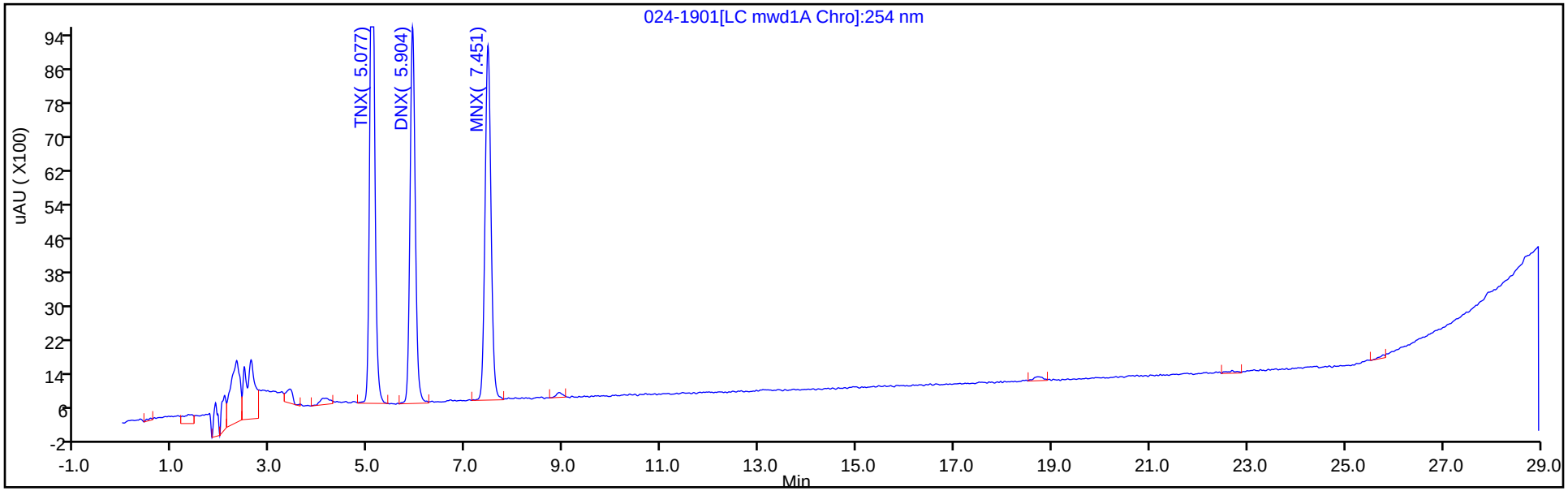
Report Date: 04-May-2021 13:43:18 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

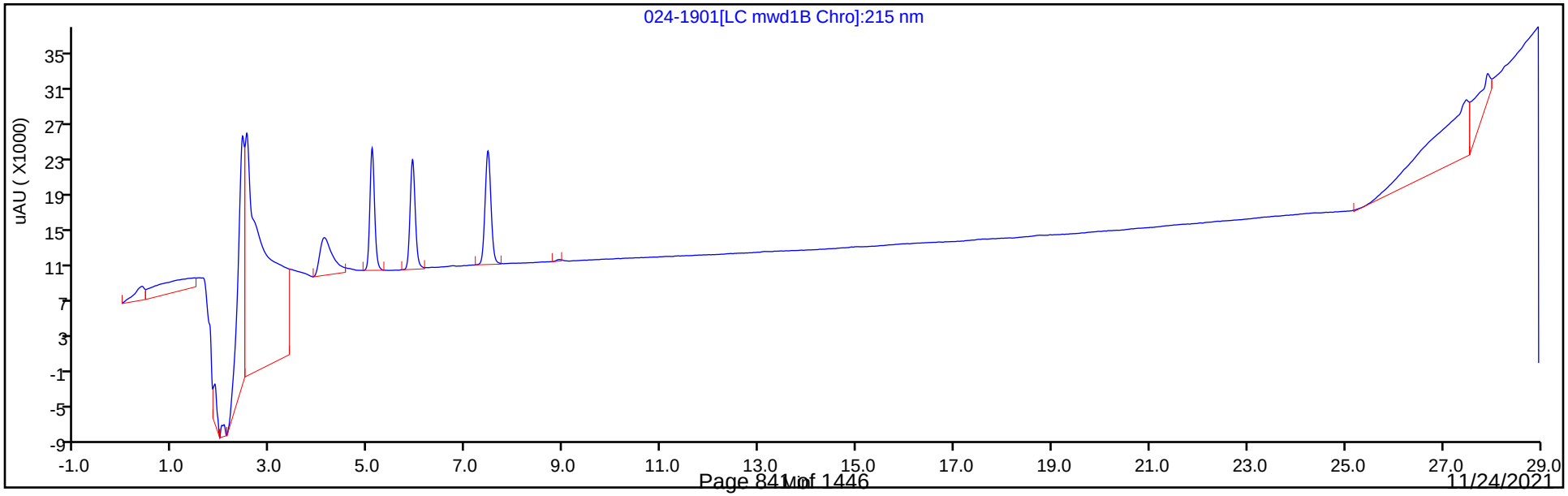
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\024-1901.D

Injection Date:	02-May-2021 03:05:50	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 TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\025-2001.D				
Lims ID:	IC DMT 3				
Client ID:					
Sample Type:	IC	Calib Level:	3		
Inject. Date:	02-May-2021 03:41:00	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	IC DMT 3				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	04-May-2021 13:43:19	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.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	5.067	5.075	-0.008	38298	0.1001	0.1018	
4 DNX	1	5.894	5.902	-0.008	28832	0.1001	0.1012	
7 MNX	1	7.447	7.455	-0.008	31123	0.1167	0.1175	

Reagents:

8330 DMT_00008 Amount Added: 5.00 Units: uL

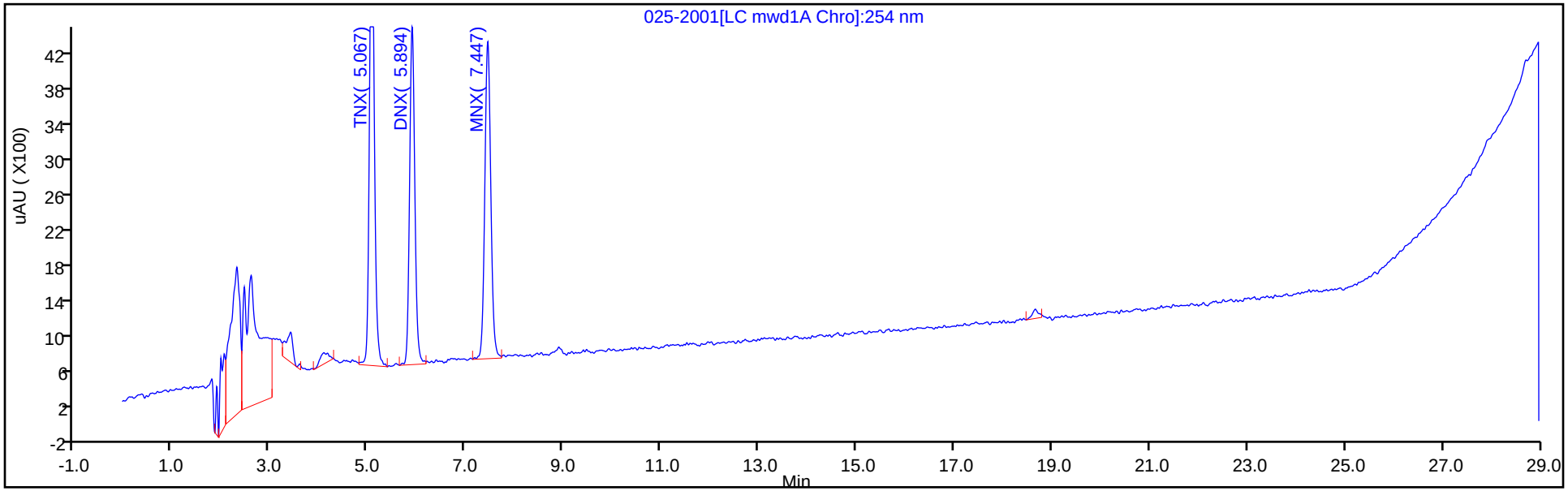
Report Date: 04-May-2021 13:43:19 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

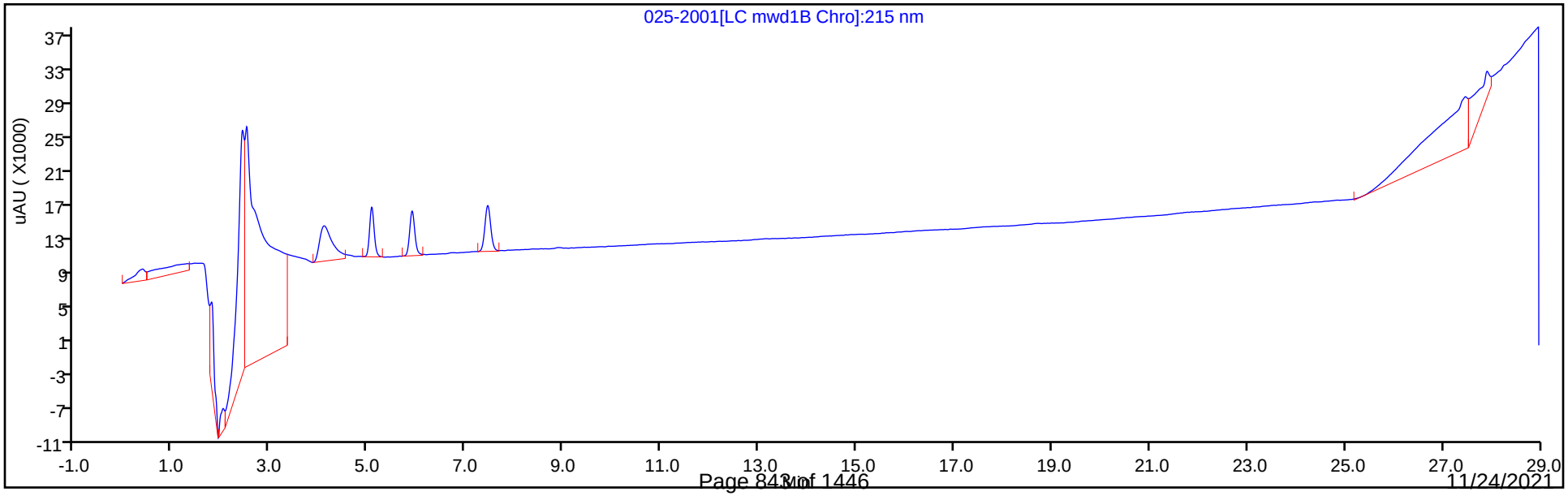
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\025-2001.D

Injection Date:	02-May-2021 03:41:00	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 TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\026-2101.D
Lims ID: IC DMT 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 02-May-2021 04:16:02 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 2
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub2

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:19 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.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	5.071	5.075	-0.004	19227	0.0501	0.0511	
4 DNX	1	5.898	5.902	-0.004	14623	0.0501	0.0513	
7 MNX	1	7.444	7.455	-0.011	16167	0.0584	0.0610	

Reagents:

8330 DMT_00008 Amount Added: 2.50 Units: uL

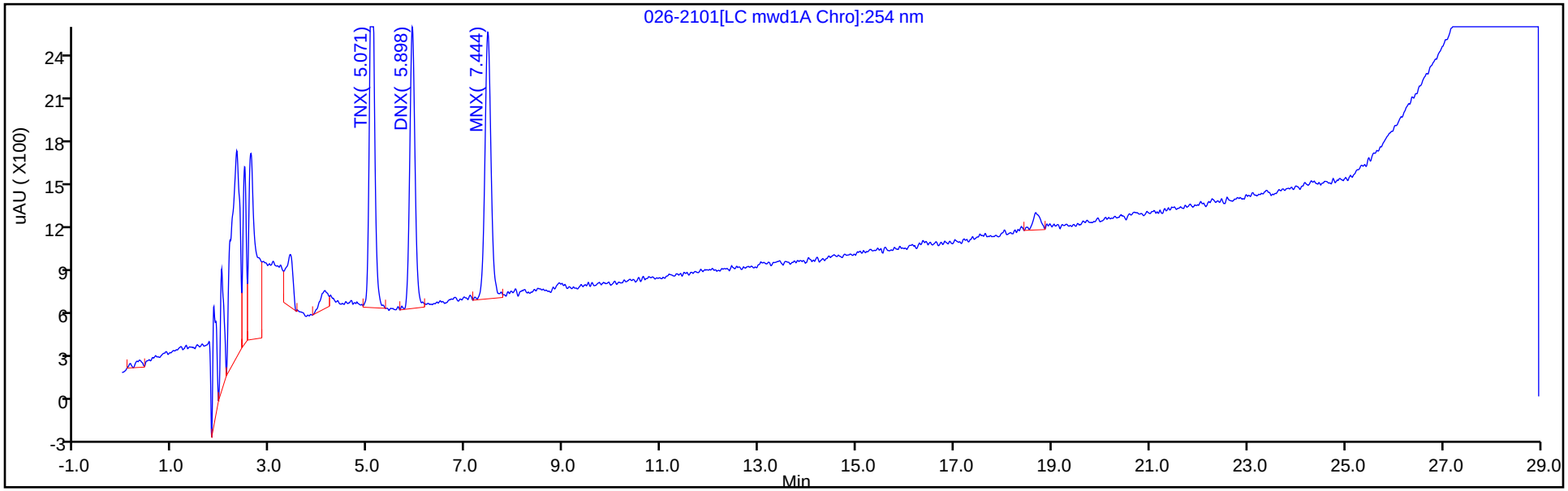
Report Date: 04-May-2021 13:43:19 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

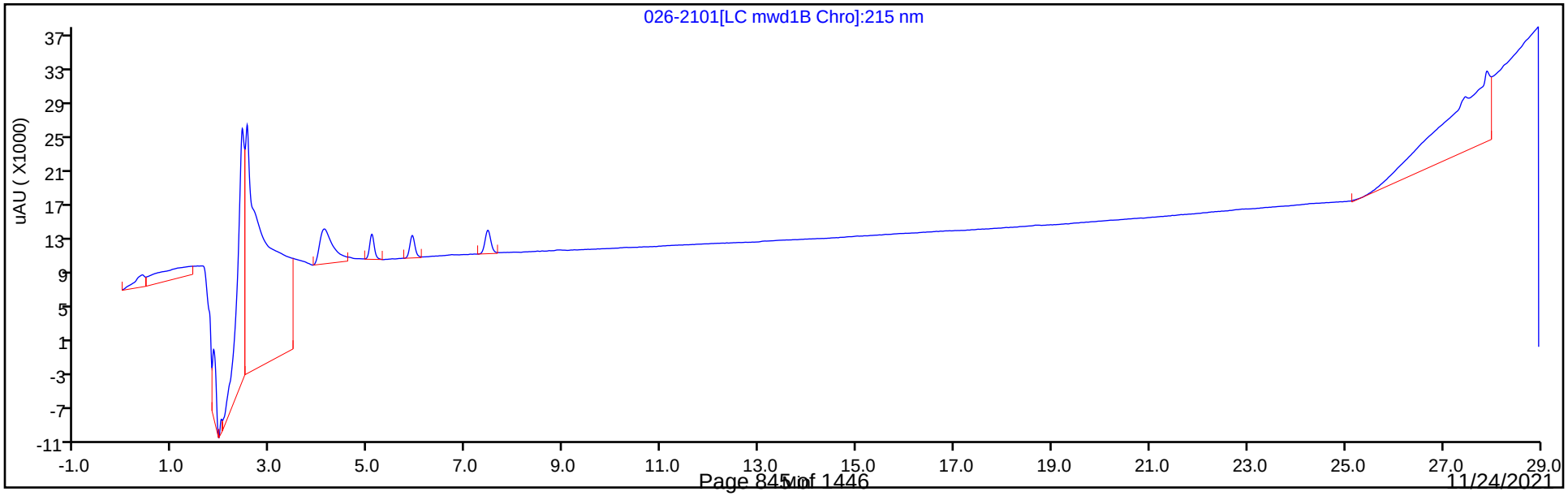
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\026-2101.D

Injection Date:	02-May-2021 04:16:02	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 TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D
Lims ID: IC DMT 1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 02-May-2021 04:51:05 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: IC DMT 1
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub2

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:43:20 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.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	5.064	5.075	-0.011	8226	0.0200	0.0219	
4 DNX	1	5.897	5.902	-0.005	5953	0.0200	0.0209	
7 MNX	1	7.444	7.455	-0.011	6728	0.0233	0.0254	

Reagents:

8330 DMT_00008 Amount Added: 1.00 Units: uL

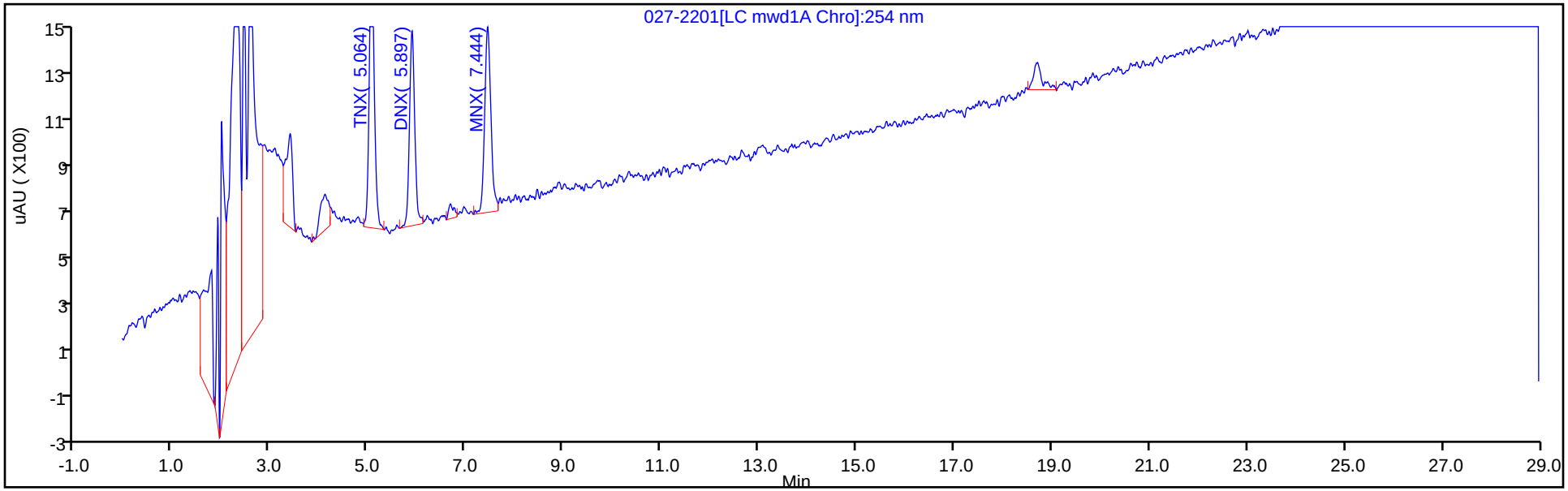
Report Date: 04-May-2021 13:43:20 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

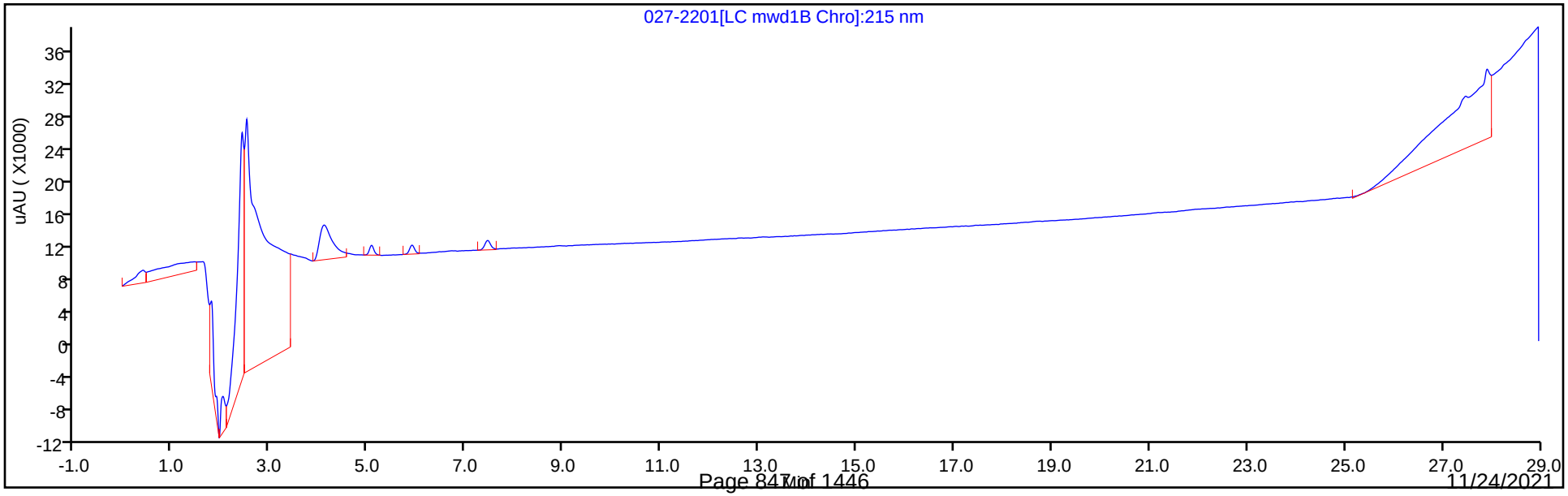
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Injection Date:	02-May-2021 04:51:05	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

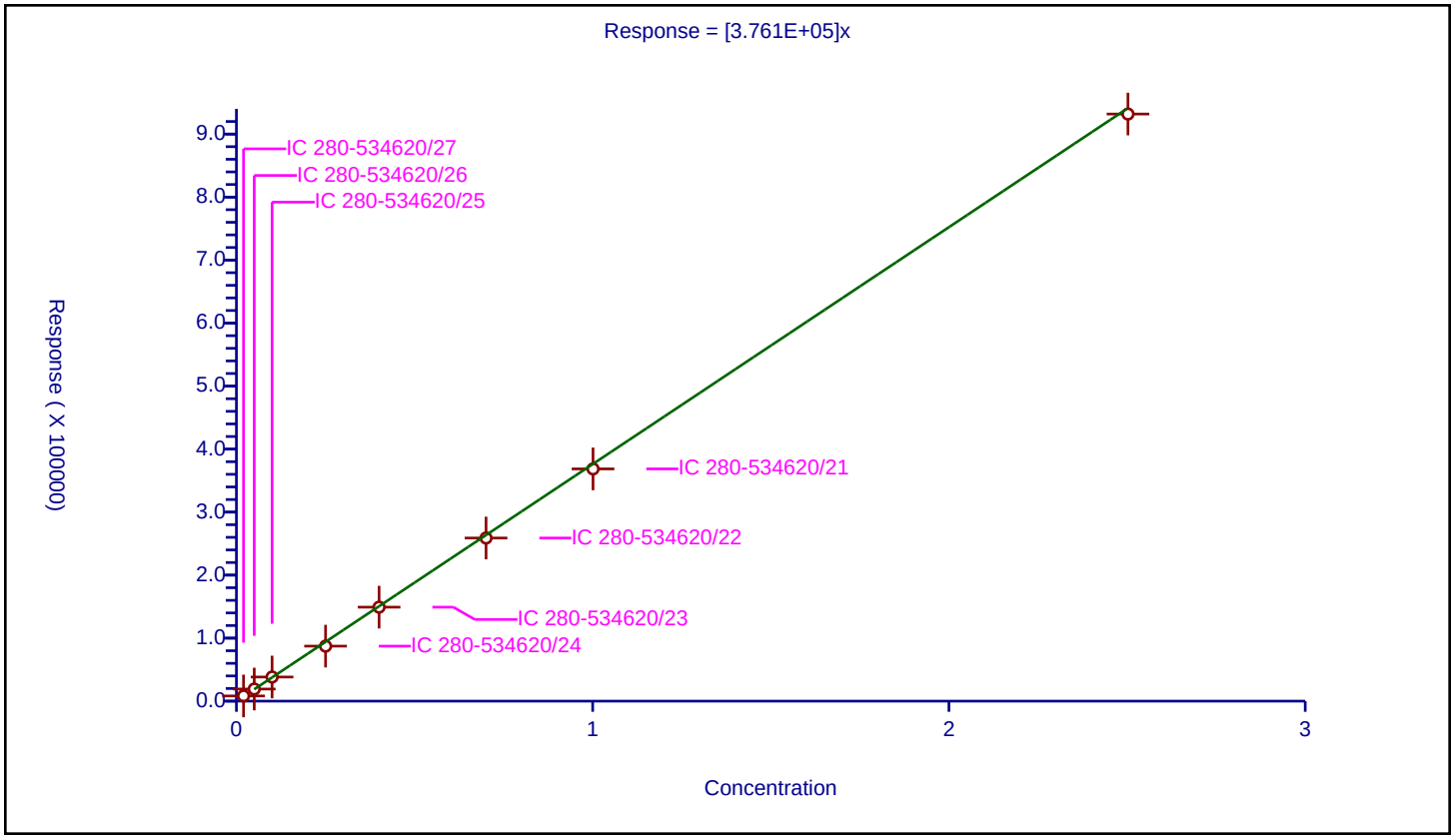
Curve Coefficients

Intercept:	0
Slope:	3.761E+05

Error Coefficients

Standard Error:	5660
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 280-534620/27	0.02002	8226.0			410889.110889	Y
2	IC 280-534620/26	0.05005	19227.0			384155.844156	Y
3	IC 280-534620/25	0.1001	38298.0			382597.402597	Y
4	IC 280-534620/24	0.25025	87331.0			348975.024975	Y
5	IC 280-534620/23	0.4004	149150.0			372502.497502	Y
6	IC 280-534620/22	0.7007	258881.0			369460.539461	Y
7	IC 280-534620/21	1.001	368578.0			368209.79021	Y
8	IC 280-534620/20	2.5025	931826.0			372358.041958	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

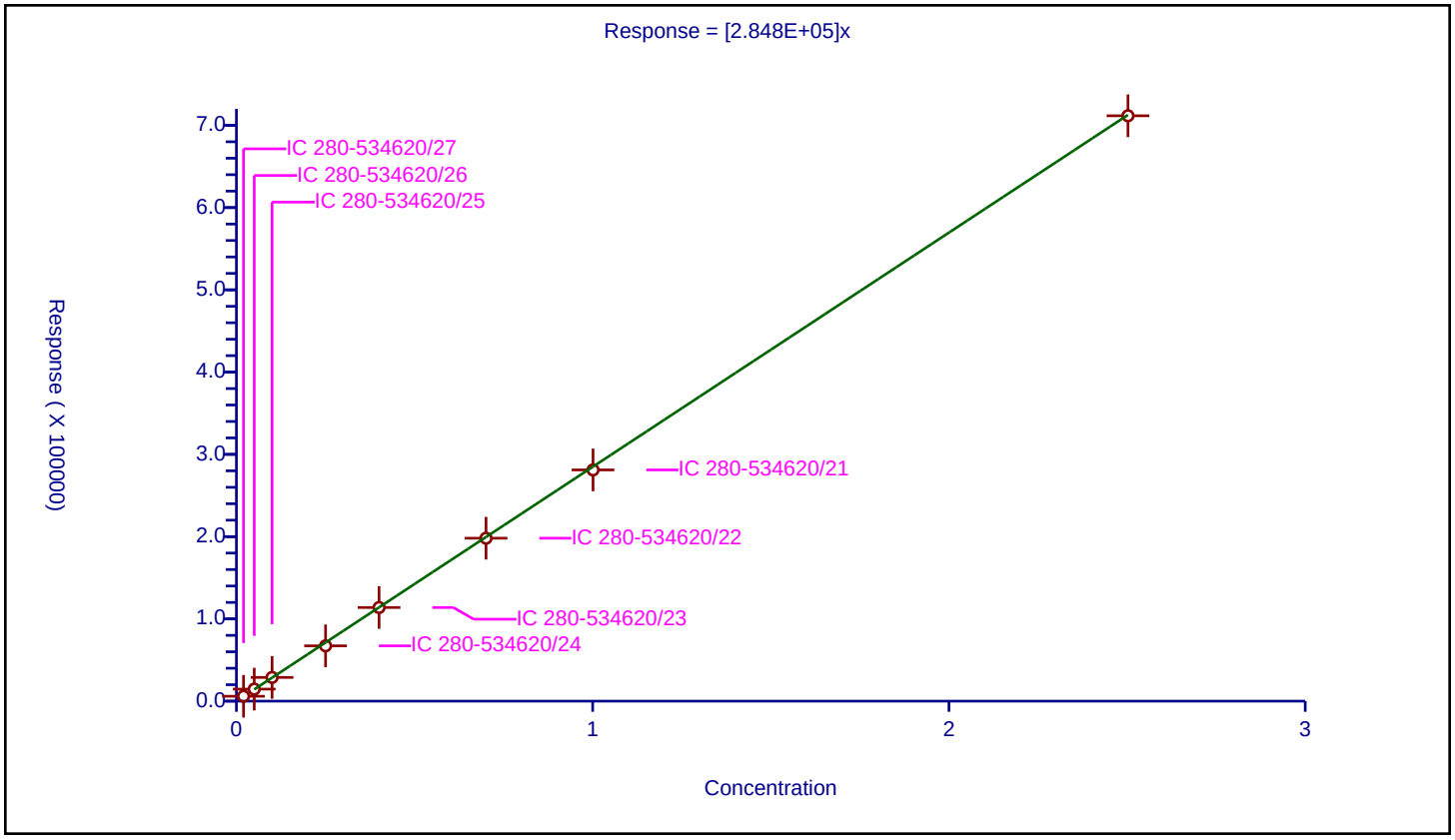
Curve Coefficients

Intercept:	0
Slope:	2.848E+05

Error Coefficients

Standard Error:	2260
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 280-534620/27	0.02002	5953.0			297352.647353	Y
2	IC 280-534620/26	0.05005	14623.0			292167.832168	Y
3	IC 280-534620/25	0.1001	28832.0			288031.968032	Y
4	IC 280-534620/24	0.25025	67236.0			268675.324675	Y
5	IC 280-534620/23	0.4004	113815.0			284253.246753	Y
6	IC 280-534620/22	0.7007	198071.0			282675.895533	Y
7	IC 280-534620/21	1.001	281098.0			280817.182817	Y
8	IC 280-534620/20	2.5025	711601.0			284356.043956	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

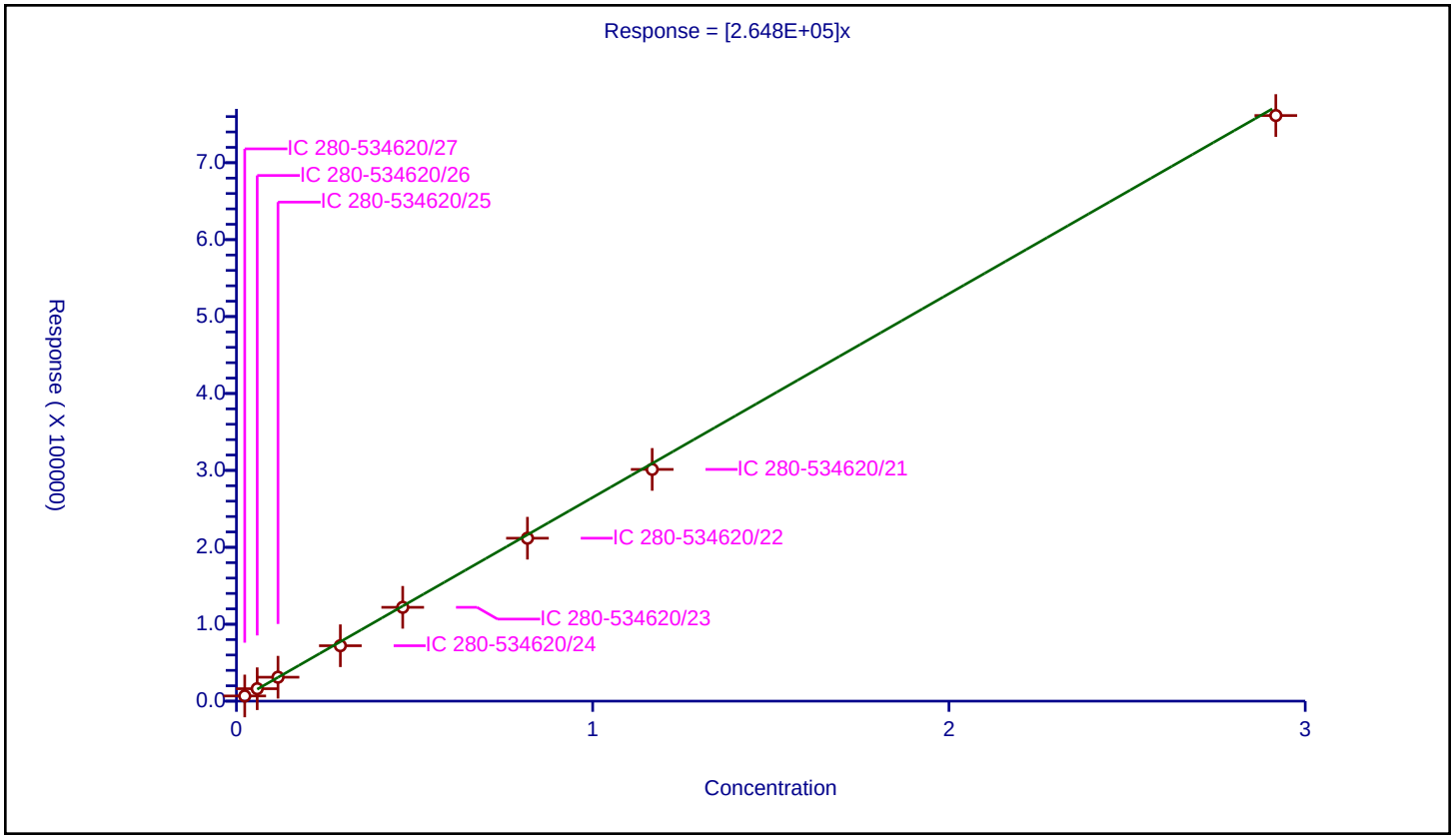
Curve Coefficients

Intercept:	0
Slope:	2.648E+05

Error Coefficients

Standard Error:	5850
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 280-534620/27	0.02334	6728.0			288260.497001	Y
2	IC 280-534620/26	0.05835	16167.0			277069.40874	Y
3	IC 280-534620/25	0.1167	31123.0			266692.373608	Y
4	IC 280-534620/24	0.29175	72053.0			246968.294773	Y
5	IC 280-534620/23	0.4668	121971.0			261291.773779	Y
6	IC 280-534620/22	0.8169	211836.0			259316.929857	Y
7	IC 280-534620/21	1.167	301281.0			258167.095116	Y
8	IC 280-534620/20	2.9175	761392.0			260974.12168	Y



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: ICV 280-527768/37 Calibration Date: 03/03/2021 02:53

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 03020037.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	197668		532	501	6.4	15.0
DNX	Ave	142119	151812		535	501	6.8	15.0
MNX	Ave	130340	138202		619	584	6.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: ICV 280-527768/37 Calibration Date: 03/03/2021 02:53

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 03020037.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.52	6.42	6.62
DNX	6.83	6.73	6.93
MNX	7.24	7.08	7.38

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020037.D				
Lims ID:	ICV DMT				
Client ID:					
Sample Type:	ICV				
Inject. Date:	03-Mar-2021 02:53:28	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	ICV DMT				
Misc. Info.:	280-0099486-037				
Operator ID:		Instrument ID:	CHHPLC_X3		
Sublist:					
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	03-Mar-2021 13:36:22	Calib Date:	03-Mar-2021 02:30:22		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20210302-99486.b\03020036.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1629				
First Level Reviewer: zhangji		Date:	03-Mar-2021 13:21:26		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
2 TNX	1	6.523	6.518	0.005	98933	0.5005	0.5325	M
5 DNX	1	6.830	6.832	-0.002	75982	0.5005	0.5346	M
6 MNX	1	7.237	7.232	0.005	80641	0.5835	0.6187	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330_OP_DMT_00009 Amount Added: 50.00 Units: uL

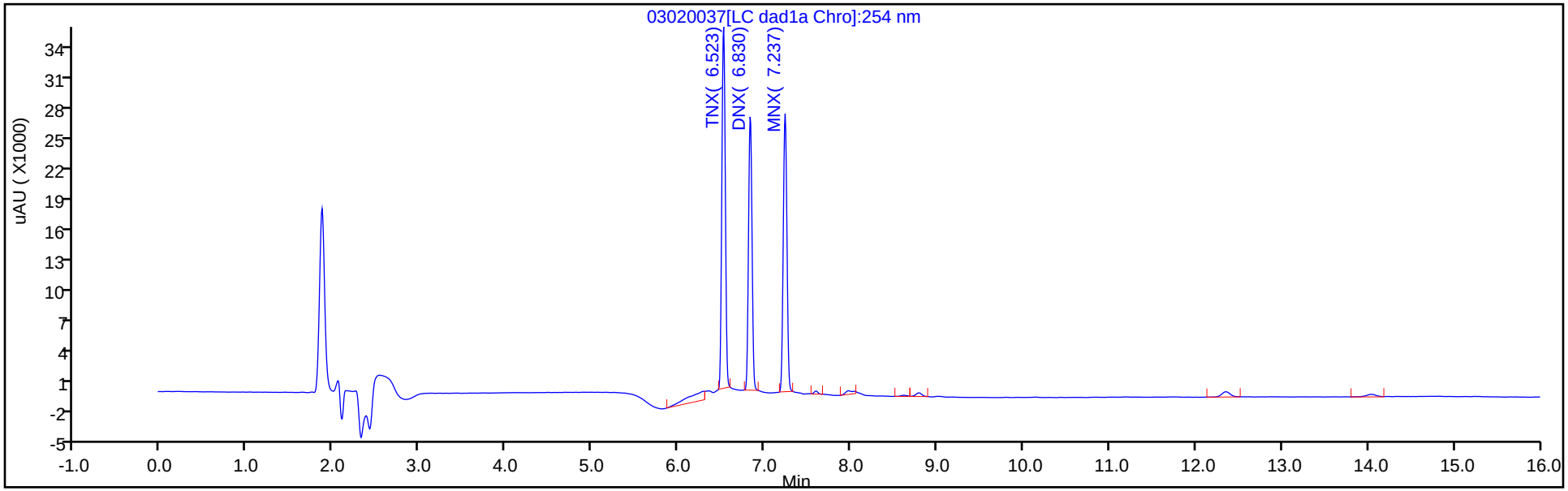
Report Date: 03-Mar-2021 13:36:35 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

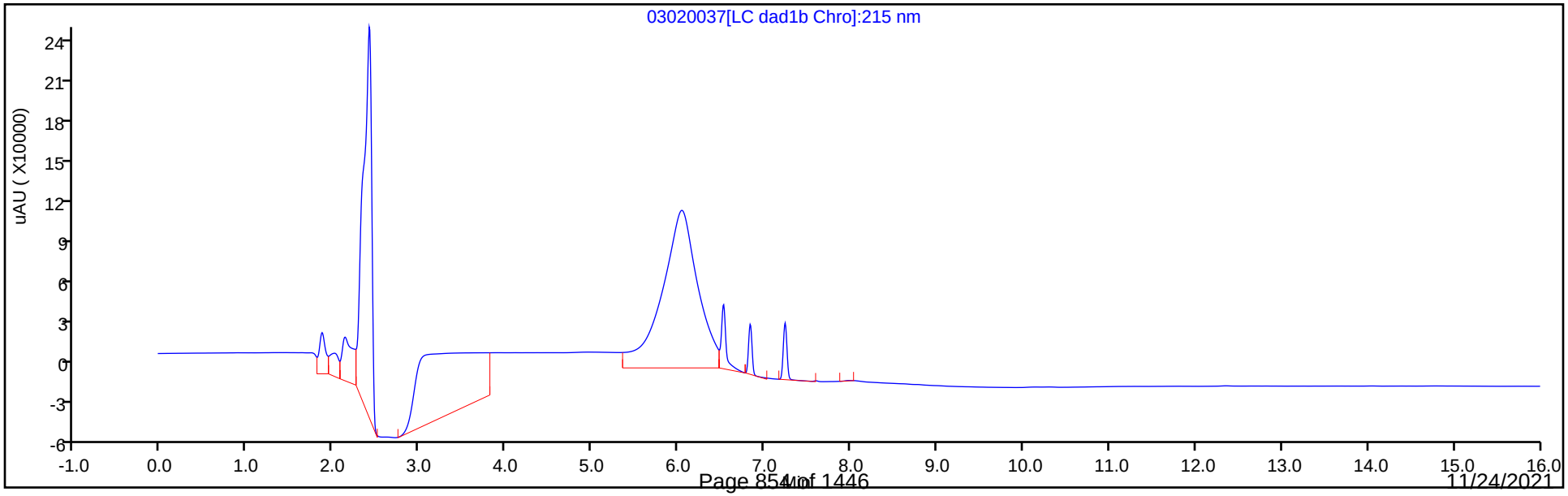
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020037.d

Injection Date:	03-Mar-2021 02:53:28	Instrument ID:	CHHPLC_X3	Operator ID:	
Lims ID:	ICV DMT			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

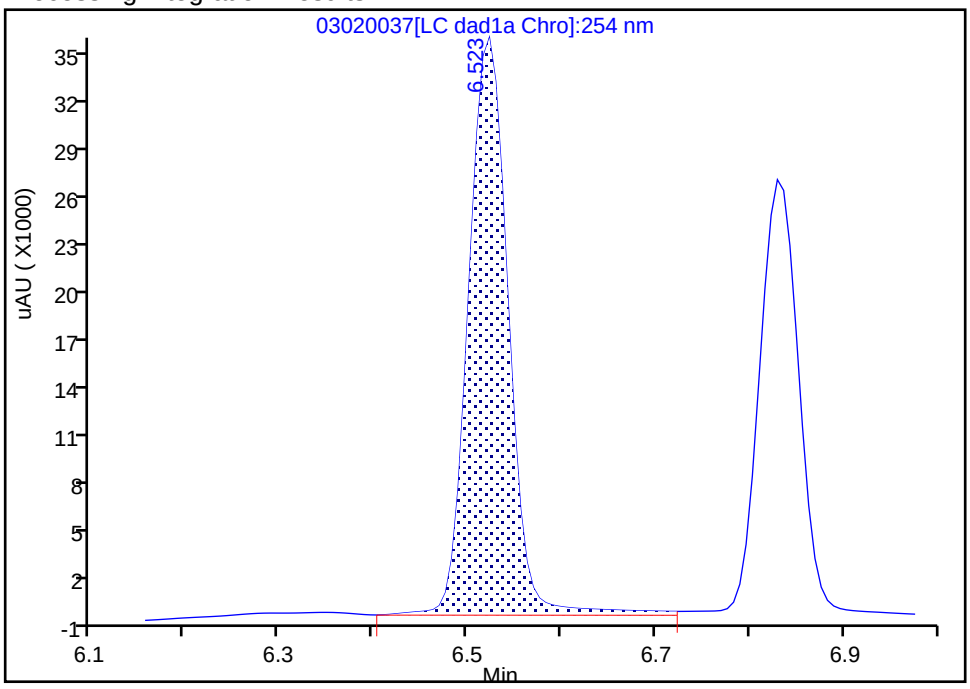
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020037.d				
Injection Date:	03-Mar-2021 02:53:28	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:		ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

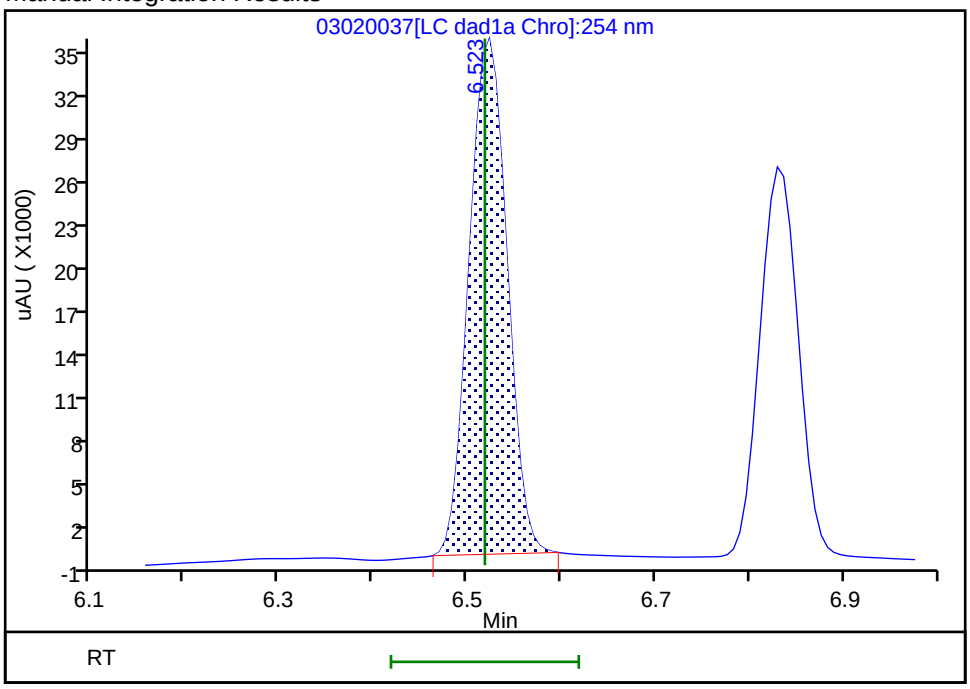
Processing Integration Results

RT: 6.52
Area: 105520
Amount: 0.567904
Amount Units: ug/mL



Manual Integration Results

RT: 6.52
Area: 98933
Amount: 0.532453
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:21:12

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

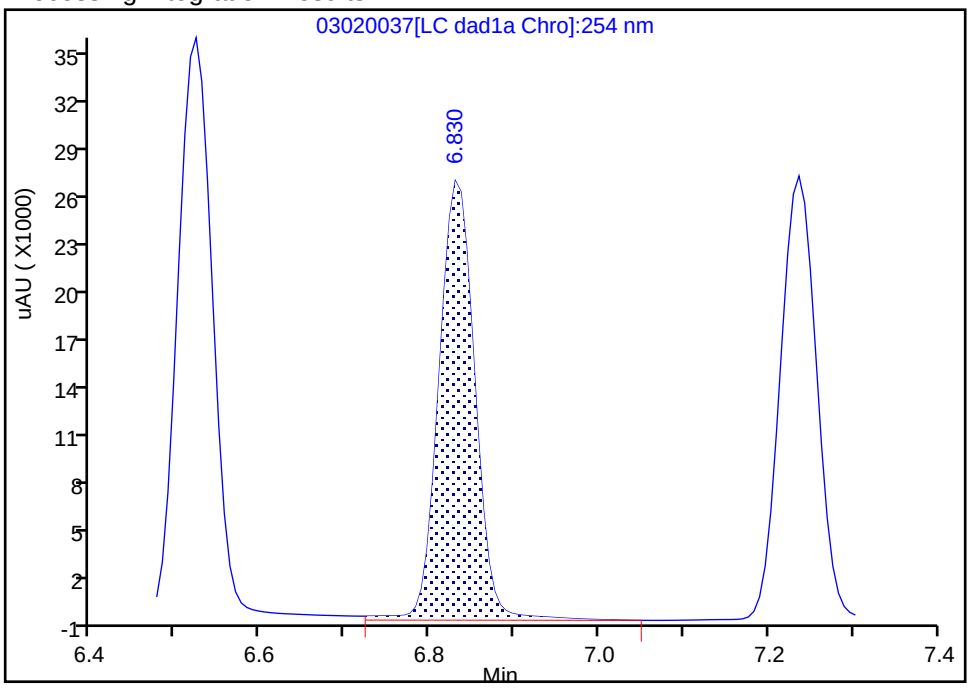
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020037.d				
Injection Date:	03-Mar-2021 02:53:28	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:		ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

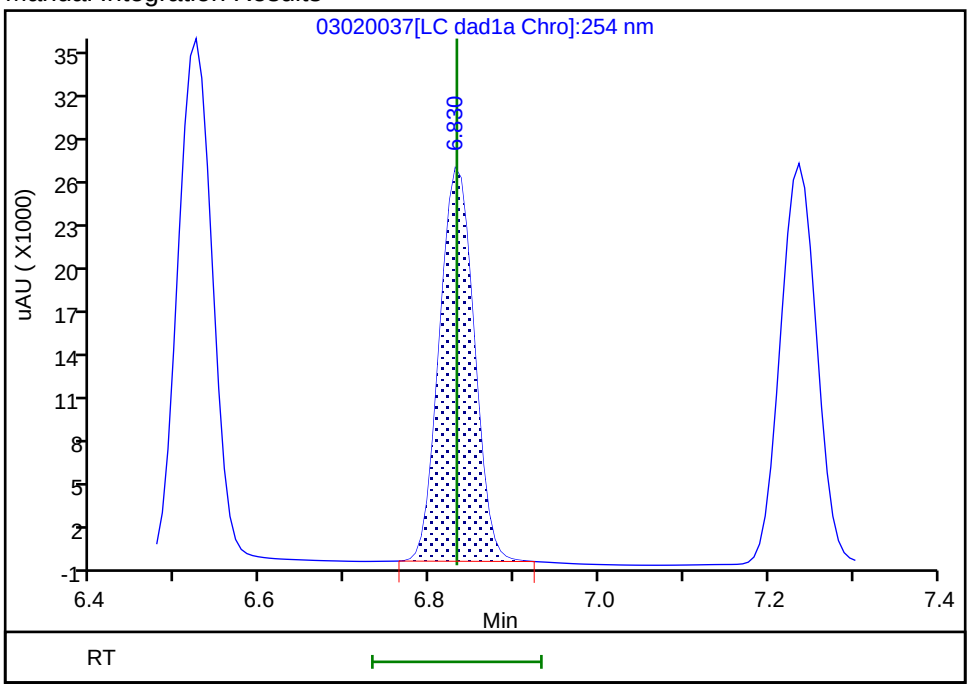
Processing Integration Results

RT: 6.83
Area: 79674
Amount: 0.560613
Amount Units: ug/mL



Manual Integration Results

RT: 6.83
Area: 75982
Amount: 0.534635
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:21:15
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

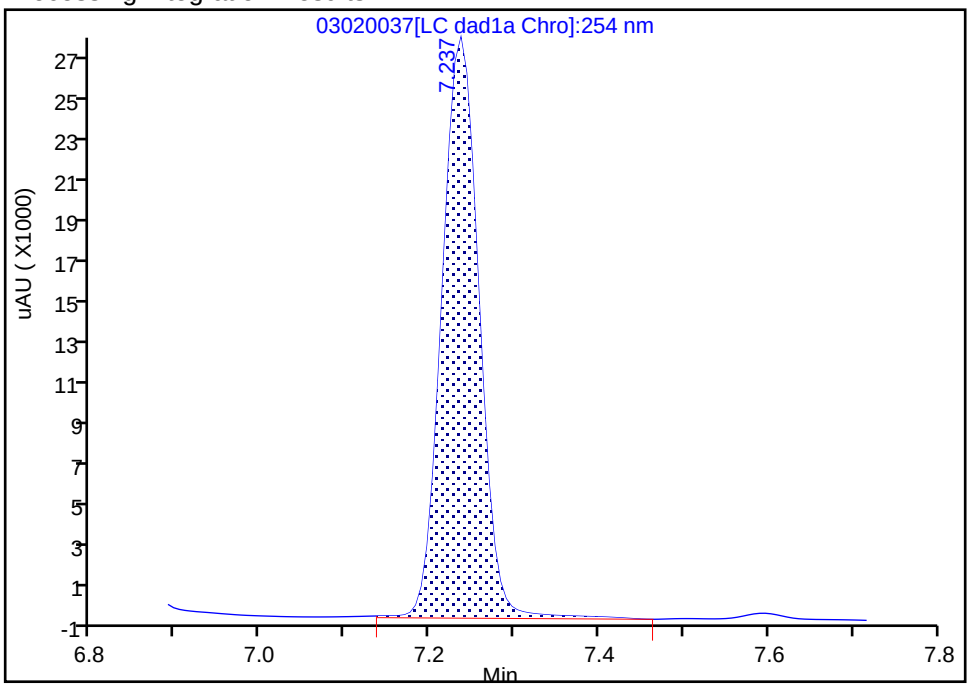
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020037.d		
Injection Date:	03-Mar-2021 02:53:28	Instrument ID:	CHHPLC_X3
Lims ID:	ICV DMT		
Client ID:			
Operator ID:		ALS Bottle#:	37 Worklist Smp#: 37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

6 MNX, CAS: 5755-27-1

Signal: 1

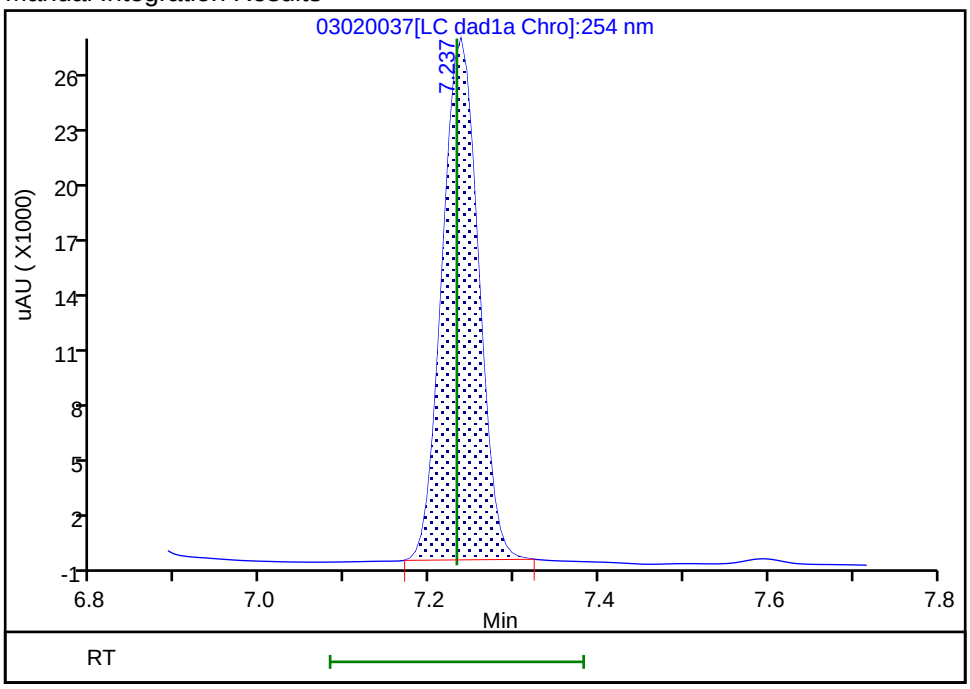
Processing Integration Results

RT: 7.24
Area: 83346
Amount: 0.639449
Amount Units: ug/mL



Manual Integration Results

RT: 7.24
Area: 80641
Amount: 0.618696
Amount Units: ug/mL



Reviewer: zhangji, 03-Mar-2021 13:21:25
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: ICV 280-534622/20 Calibration Date: 05/01/2021 21:27

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 020-1401.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	82460		488	500	-2.3	15.0
RDX	Ave	106261	102780		484	500	-3.3	15.0
Picric acid	Ave	82721	86056		520	500	4.0	15.0
1,3,5-Trinitrobenzene	Ave	220317	224390		509	500	1.8	15.0
1,3-Dinitrobenzene	Ave	296329	300634		507	500	1.5	15.0
Nitrobenzene	Ave	195286	196150		502	500	0.4	15.0
Tetryl	Ave	172420	171402		497	500	-0.6	15.0
Nitroglycerin	Lin2		67022		5160	5000	3.2	15.0
2,4,6-Trinitrotoluene	Ave	206038	210436		511	500	2.1	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	147828		484	500	-3.2	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	203056		491	500	-1.9	15.0
2,6-Dinitrotoluene	Ave	143079	144928		506	500	1.3	15.0
2,4-Dinitrotoluene	Ave	287012	279908		488	500	-2.5	15.0
2-Nitrotoluene	Ave	128392	125290		488	500	-2.4	15.0
4-Nitrotoluene	Ave	111913	108216		483	500	-3.3	15.0
3-Nitrotoluene	Ave	142246	137810		484	500	-3.1	15.0
PETN	Ave	74779	76182		5090	5000	1.9	15.0
1,2-Dinitrobenzene	Ave	128217	134842		526	500	5.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: ICV 280-534622/20 Calibration Date: 05/01/2021 21:27

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 020-1401.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.63	6.48	6.78
RDX	7.59	7.45	7.75
Picric acid	7.93	7.81	8.11
1,3,5-Trinitrobenzene	8.65	8.50	8.80
1,3-Dinitrobenzene	9.27	9.13	9.43
Nitrobenzene	9.66	9.51	9.81
Tetryl	9.97	9.83	10.13
Nitroglycerin	10.43	10.29	10.59
2,4,6-Trinitrotoluene	10.90	10.80	11.00
4-Amino-2,6-dinitrotoluene	11.10	11.01	11.21
2-Amino-4,6-dinitrotoluene	11.36	11.27	11.47
2,6-Dinitrotoluene	11.53	11.43	11.63
2,4-Dinitrotoluene	11.70	11.60	11.80
2-Nitrotoluene	12.57	12.43	12.73
4-Nitrotoluene	13.01	12.86	13.16
3-Nitrotoluene	13.59	13.45	13.75
PETN	14.68	14.53	14.83
1,2-Dinitrobenzene	8.52	8.38	8.68

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\020-1401.D
Lims ID: ICV INT
Client ID:
Sample Type: ICV
Inject. Date: 01-May-2021 21:27:37 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:29:14 Calib Date: 01-May-2021 21:04:39
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20210501-101094.b\019-1301.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:29:14

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 HMX	1	6.627	6.631	-0.004	41230	0.5000	0.4884	M
7 RDX	1	7.593	7.598	-0.005	51390	0.5000	0.4836	
8 2,4,6-Trinitrophenol	1	7.933	7.958	-0.025	43028	0.5000	0.5202	
$ 9 1,2-Dinitrobenzene	1	8.520	8.525	-0.005	67421	0.5000	0.5258	
10 1,3,5-Trinitrobenzene	1	8.647	8.651	-0.004	112195	0.5000	0.5092	
11 1,3-Dinitrobenzene	1	9.273	9.278	-0.005	150317	0.5000	0.5073	
12 Nitrobenzene	1	9.660	9.664	-0.004	98075	0.5000	0.5022	
14 Tetryl	1	9.973	9.978	-0.005	85701	0.5000	0.4970	
15 Nitroglycerin	2	10.433	10.438	-0.005	335112	5.00	5.16	
16 2,4,6-Trinitrotoluene	1	10.900	10.904	-0.004	105218	0.5000	0.5107	
17 4-Amino-2,6-dinitrotoluene	1	11.100	11.111	-0.011	73914	0.5000	0.4838	
18 2-Amino-4,6-dinitrotoluene	1	11.360	11.371	-0.011	101528	0.5000	0.4906	
19 2,6-Dinitrotoluene	1	11.526	11.531	-0.005	72464	0.5000	0.5065	
20 2,4-Dinitrotoluene	1	11.700	11.704	-0.004	139954	0.5000	0.4876	
21 o-Nitrotoluene	1	12.566	12.578	-0.012	62645	0.5000	0.4879	
22 p-Nitrotoluene	1	13.006	13.011	-0.005	54108	0.5000	0.4835	
23 m-Nitrotoluene	1	13.593	13.604	-0.011	68905	0.5000	0.4844	
24 PETN	2	14.680	14.684	-0.004	380912	5.00	5.09	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 LCS_00108 Amount Added: 50.00 Units: uL
8330Surrogate_00124 Amount Added: 50.00 Units: uL

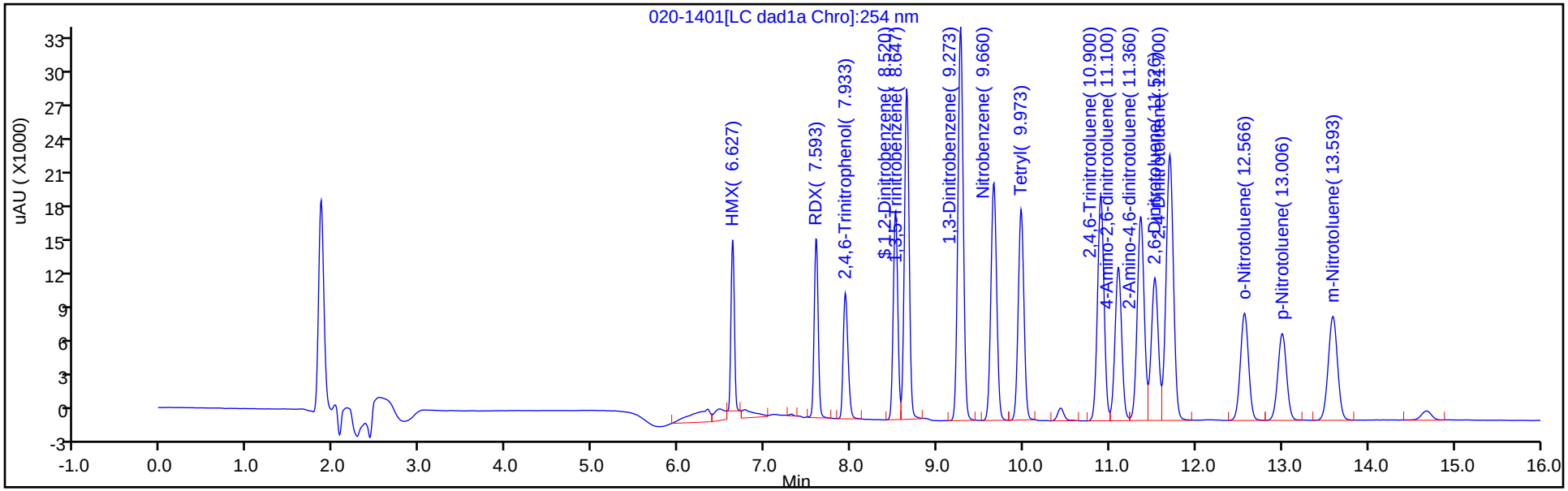
Report Date: 04-May-2021 13:29:19 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

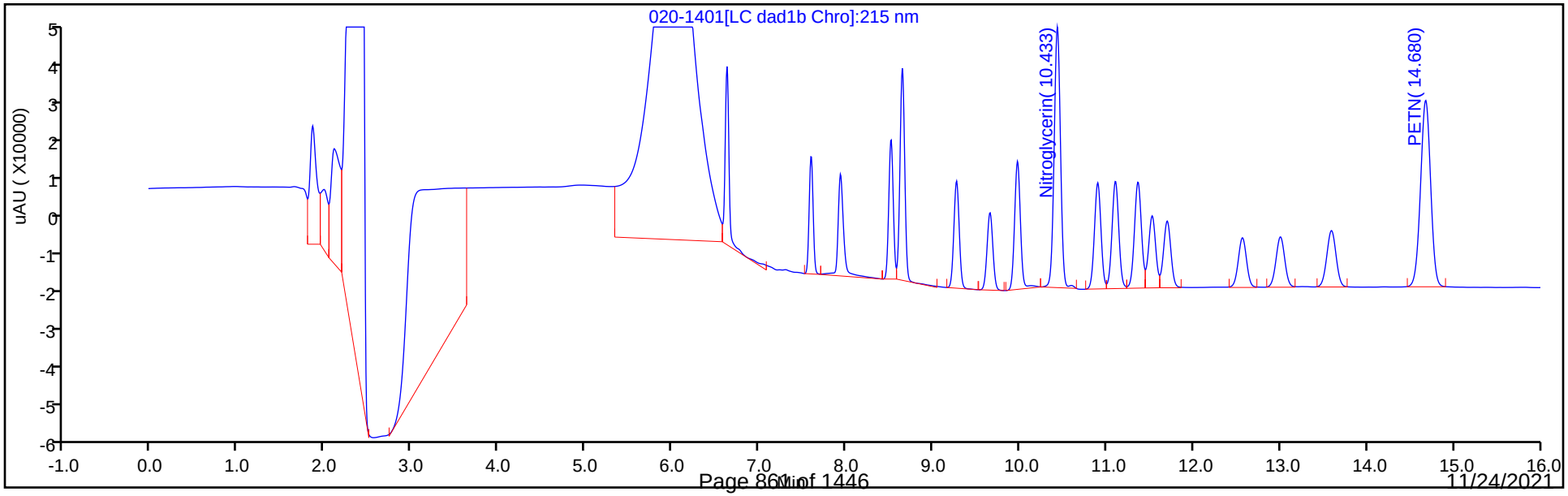
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\020-1401.d

Injection Date:	01-May-2021 21:27:37	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

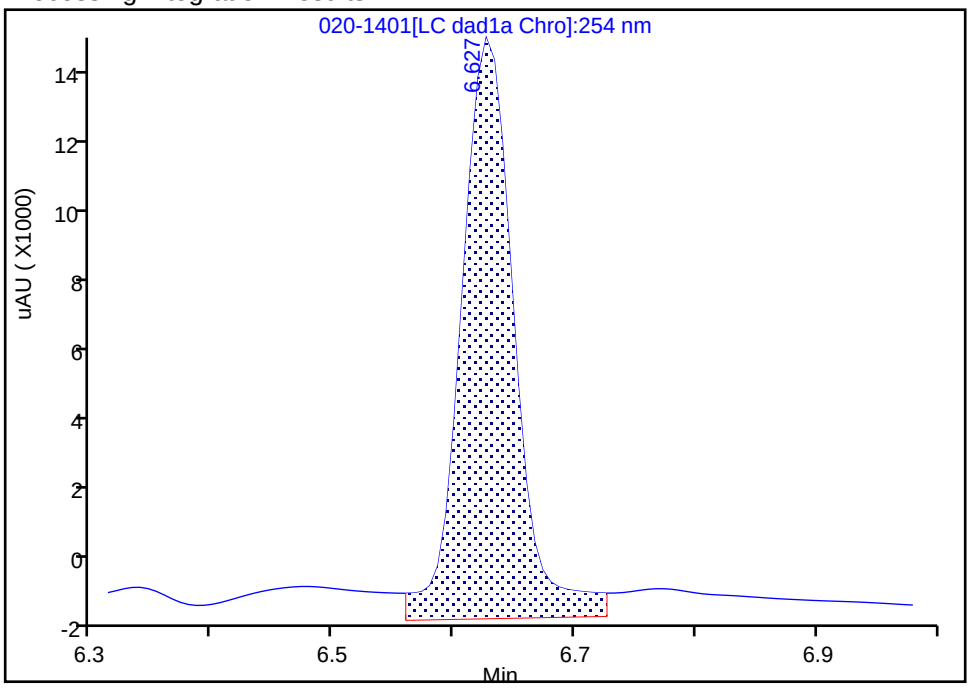
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\020-1401.d				
Injection Date:	01-May-2021 21:27:37	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

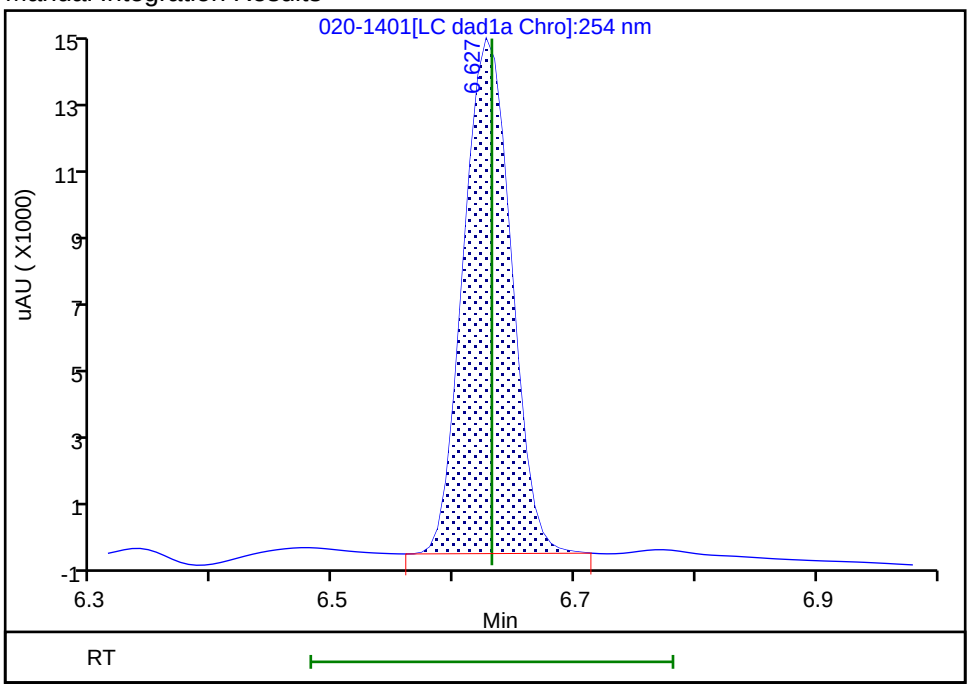
Processing Integration Results

RT: 6.63
Area: 48145
Amount: 0.570294
Amount Units: ug/mL



Manual Integration Results

RT: 6.63
Area: 41230
Amount: 0.488383
Amount Units: ug/mL



Reviewer: zhangji, 04-May-2021 13:24:55

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556781/35 Calibration Date: 11/10/2021 01:18

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 11090035.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	87176		258	250	3.3	15.0
RDX	Ave	106261	102964		242	250	-3.1	15.0
Picric acid	Ave	82721	80296		243	250	-2.9	15.0
1,3,5-Trinitrobenzene	Ave	220317	225940		257	251	2.6	15.0
1,3-Dinitrobenzene	Ave	296329	301002		254	251	1.6	15.0
Nitrobenzene	Ave	195286	190833		245	251	-2.3	15.0
Tetryl	Ave	172420	152555		222	251	-11.5	15.0
Nitroglycerin	Lin2		64900		2470	2500	-1.4	15.0
2,4,6-Trinitrotoluene	Ave	206038	204821		250	251	-0.6	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	151520		248	250	-0.8	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	204749		248	251	-1.1	15.0
2,6-Dinitrotoluene	Ave	143079	146239		257	251	2.2	15.0
2,4-Dinitrotoluene	Ave	287012	299924		262	251	4.5	15.0
2-Nitrotoluene	Ave	128392	123920		241	250	-3.5	15.0
4-Nitrotoluene	Ave	111913	107154		240	251	-4.3	15.0
3-Nitrotoluene	Ave	142246	137642		242	250	-3.2	15.0
PETN	Ave	74779	69126		2310	2500	-7.6	15.0
1,2-Dinitrobenzene	Ave	128217	132176		258	250	3.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556781/35 Calibration Date: 11/10/2021 01:18

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 11090035.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.44	6.74
RDX	7.60	7.45	7.75
Picric acid	7.99	7.84	8.14
1,3,5-Trinitrobenzene	8.69	8.54	8.84
1,3-Dinitrobenzene	9.32	9.18	9.48
Nitrobenzene	9.72	9.58	9.88
Tetryl	10.06	9.92	10.22
Nitroglycerin	10.52	10.37	10.67
2,4,6-Trinitrotoluene	10.97	10.87	11.07
4-Amino-2,6-dinitrotoluene	11.18	11.09	11.29
2-Amino-4,6-dinitrotoluene	11.43	11.34	11.54
2,6-Dinitrotoluene	11.60	11.51	11.71
2,4-Dinitrotoluene	11.76	11.67	11.87
2-Nitrotoluene	12.64	12.50	12.80
4-Nitrotoluene	13.07	12.93	13.23
3-Nitrotoluene	13.65	13.51	13.81
PETN	14.75	14.61	14.91
1,2-Dinitrobenzene	8.57	8.42	8.72

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090035.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 10-Nov-2021 01:18:19 ALS Bottle#: 7 Worklist Smp#: 35
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0106333-035
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Nov-2021 12:59:09 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1646

First Level Reviewer: zhangji Date: 10-Nov-2021 12:42:42

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.596	6.592	0.004	21794	0.2500	0.2582	
8 RDX	1	7.603	7.598	0.005	25741	0.2500	0.2422	
9 2,4,6-Trinitrophenol	1	7.989	7.985	0.004	20074	0.2500	0.2427	
$ 10 1,2-Dinitrobenzene	1	8.569	8.572	-0.003	33044	0.2500	0.2577	
11 1,3,5-Trinitrobenzene	1	8.689	8.685	0.004	56598	0.2505	0.2569	
12 1,3-Dinitrobenzene	1	9.322	9.331	-0.009	75401	0.2505	0.2545	
13 Nitrobenzene	1	9.716	9.725	-0.009	47899	0.2510	0.2453	
15 Tetryl	1	10.056	10.065	-0.009	38215	0.2505	0.2216	
16 Nitroglycerin	2	10.516	10.518	-0.002	162249	2.50	2.47	
17 2,4,6-Trinitrotoluene	1	10.969	10.971	-0.002	51410	0.2510	0.2495	
18 4-Amino-2,6-dinitrotoluene	1	11.176	11.185	-0.009	37918	0.2503	0.2482	
19 2-Amino-4,6-dinitrotoluene	1	11.429	11.438	-0.009	51392	0.2510	0.2484	
20 2,6-Dinitrotoluene	1	11.596	11.605	-0.009	36706	0.2510	0.2565	
21 2,4-Dinitrotoluene	1	11.762	11.771	-0.009	75281	0.2510	0.2623	
22 o-Nitrotoluene	1	12.636	12.645	-0.009	30980	0.2500	0.2413	
23 p-Nitrotoluene	1	13.069	13.078	-0.009	26842	0.2505	0.2398	
24 m-Nitrotoluene	1	13.649	13.658	-0.009	34445	0.2503	0.2422	
25 PETN	2	14.749	14.758	-0.009	172815	2.50	2.31	

QC Flag Legend
Processing Flags

Reagents:
8330IntermStk_00069 Amount Added: 25.00 Units: uL

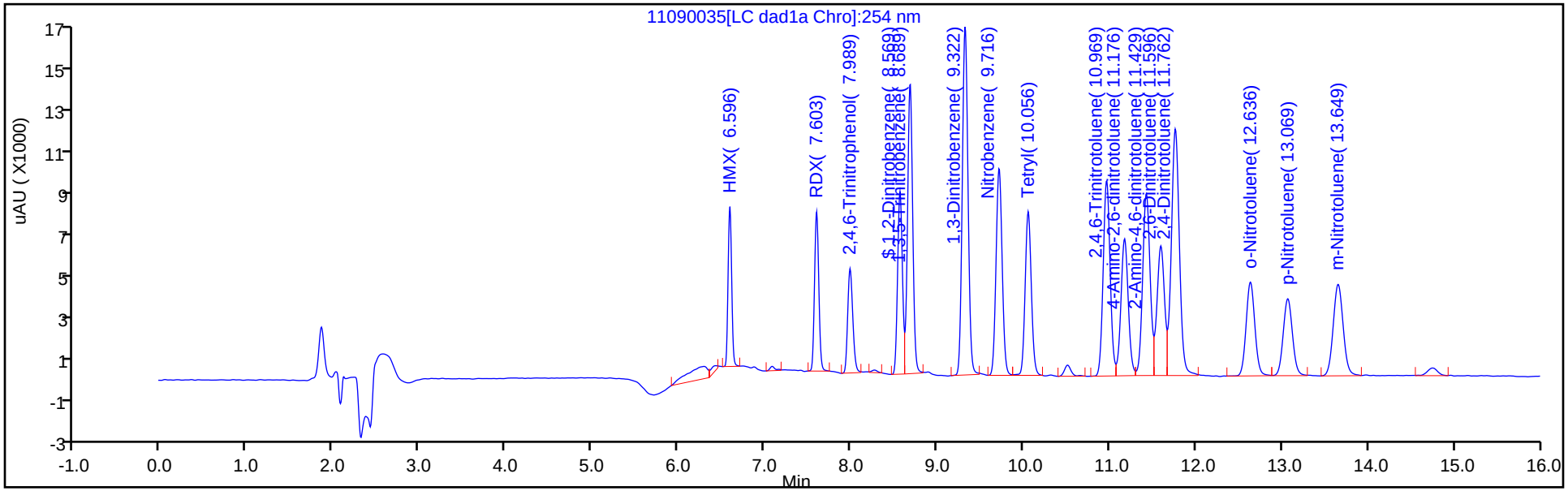
Report Date: 10-Nov-2021 12:59:09 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

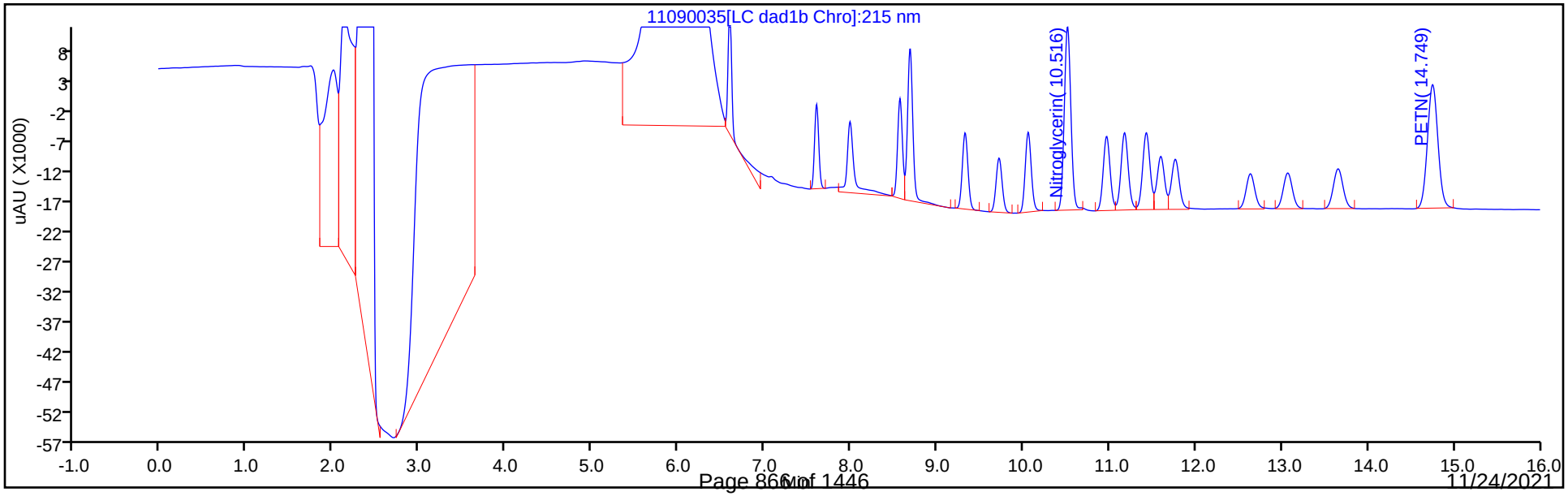
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090035.d

Injection Date:	10-Nov-2021 01:18:19	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	35
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556781/36 Calibration Date: 11/10/2021 01:41

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 11090036.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	188012		253	250	1.2	15.0
DNX	Ave	142119	144048		254	250	1.4	15.0
MNX	Ave	130340	133697		299	292	2.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556781/36 Calibration Date: 11/10/2021 01:41

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 11090036.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\20211109-106333.b\11090036.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 10-Nov-2021 01:41:18 ALS Bottle#: 9 Worklist Smp#: 36
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0106333-036
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub17

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Nov-2021 12:59:08 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1646

First Level Reviewer: zhangji Date: 10-Nov-2021 12:42:59

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.476	6.476	0.000	47050	0.2503	0.2532	M
6 DNX	1	6.796	6.796	0.000	36048	0.2503	0.2536	M
7 MNX	1	7.223	7.223	0.000	39006	0.2918	0.2993	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

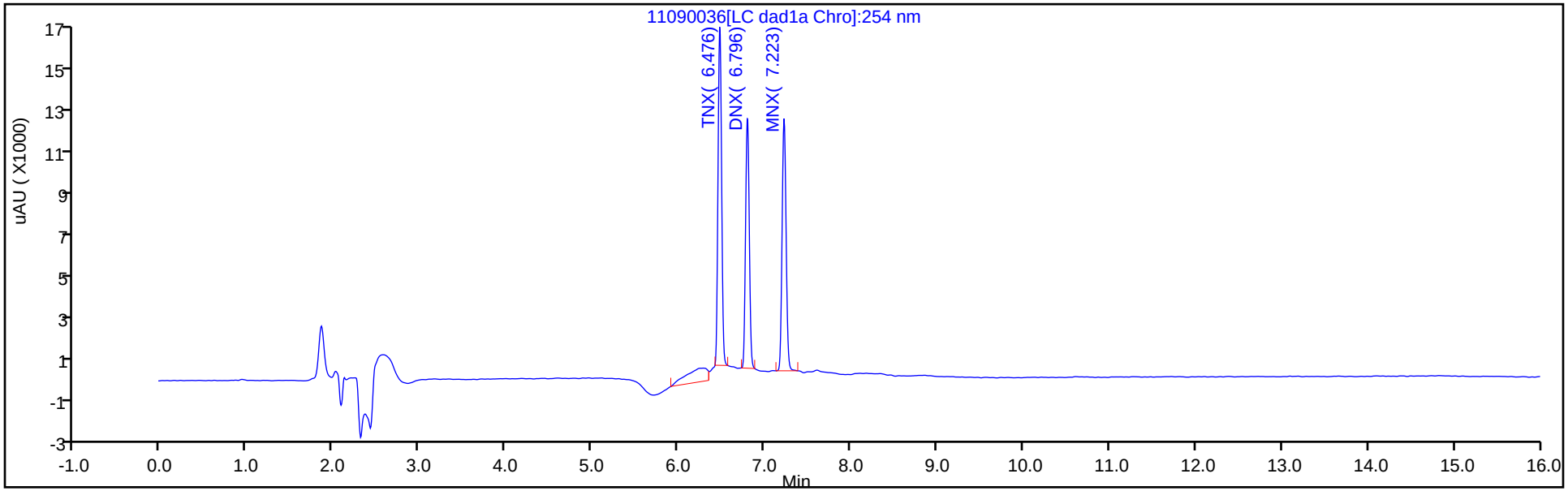
Report Date: 10-Nov-2021 12:59:08 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

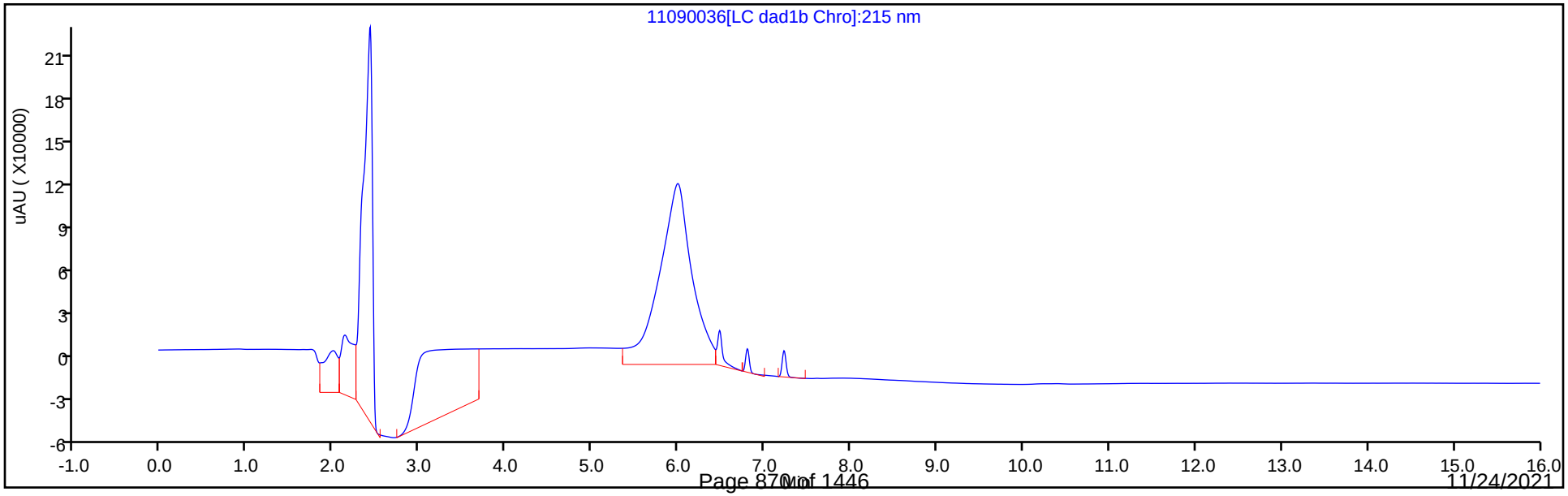
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090036.d

Injection Date:	10-Nov-2021 01:41:18	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	36
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 TestAmerica, Denver

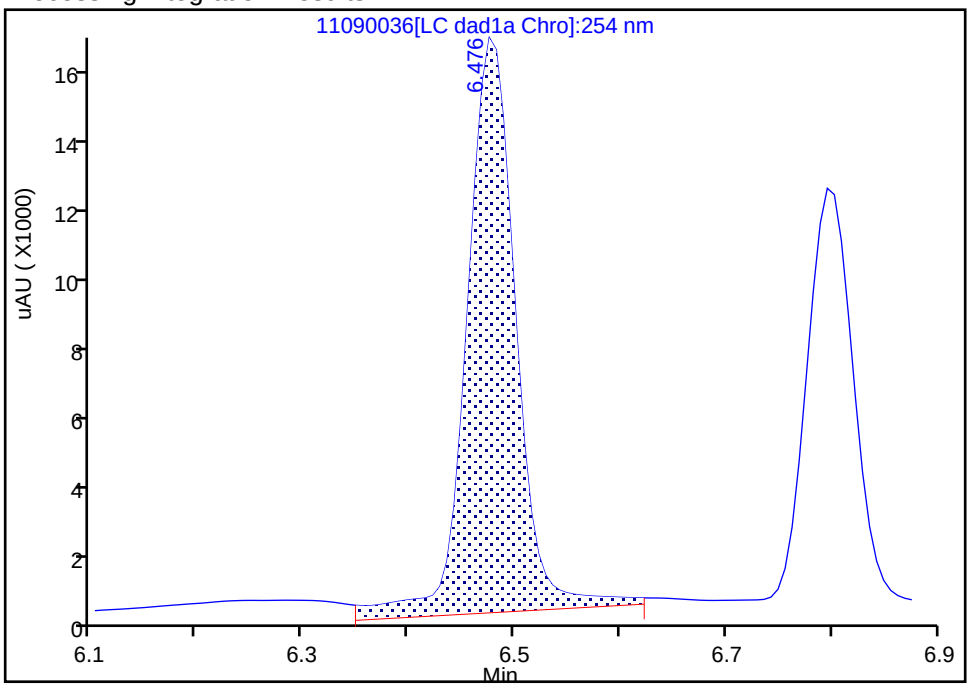
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090036.d				
Injection Date:	10-Nov-2021 01:41:18	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

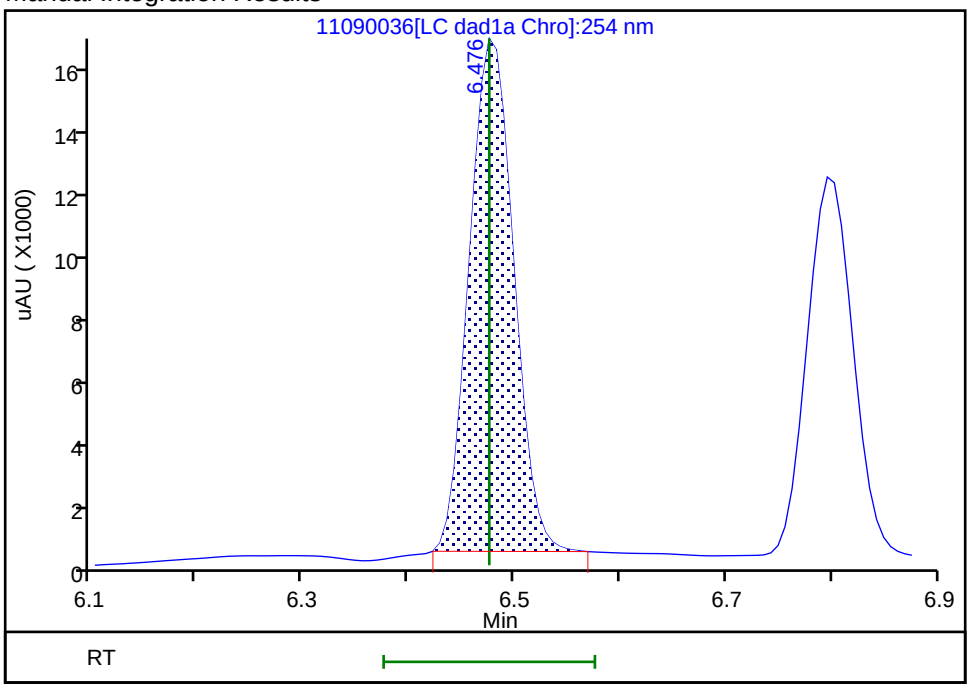
Processing Integration Results

RT: 6.48
Area: 54001
Amount: 0.290631
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 47050
Amount: 0.253221
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:42:54
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver

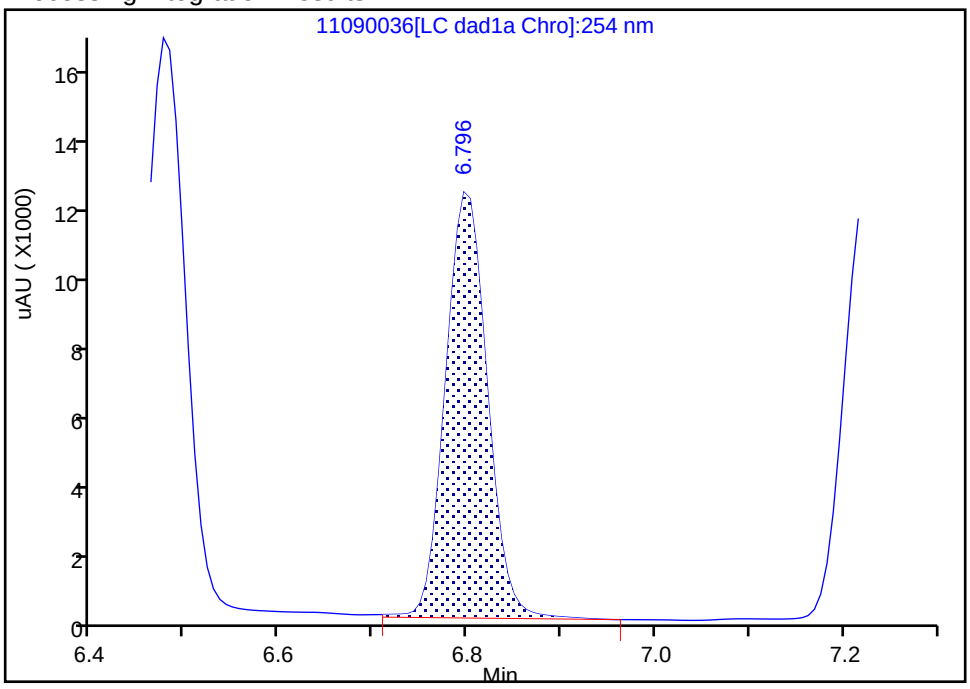
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090036.d				
Injection Date:	10-Nov-2021 01:41:18	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

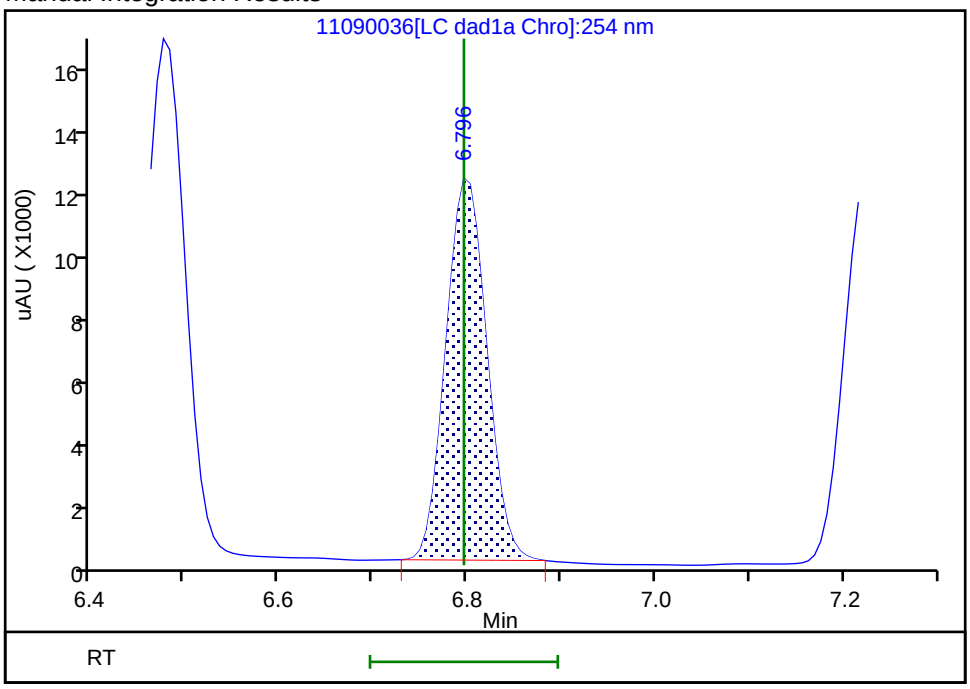
Processing Integration Results

RT: 6.80
Area: 37183
Amount: 0.261632
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 36048
Amount: 0.253646
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:42:58
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556781/47 Calibration Date: 11/10/2021 05:53

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 11090047.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	87512		259	250	3.7	15.0
RDX	Ave	106261	107504		253	250	1.2	15.0
Picric acid	Ave	82721	78912		238	250	-4.6	15.0
1,3,5-Trinitrobenzene	Ave	220317	225449		256	251	2.3	15.0
1,3-Dinitrobenzene	Ave	296329	303058		256	251	2.3	15.0
Nitrobenzene	Ave	195286	187199		241	251	-4.1	15.0
Tetryl	Ave	172420	152770		222	251	-11.4	15.0
Nitroglycerin	Lin2		66254		2520	2500	0.7	15.0
2,4,6-Trinitrotoluene	Ave	206038	205534		250	251	-0.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	152432		250	250	-0.2	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	206709		251	251	-0.1	15.0
2,6-Dinitrotoluene	Ave	143079	146960		258	251	2.7	15.0
2,4-Dinitrotoluene	Ave	287012	301116		263	251	4.9	15.0
2-Nitrotoluene	Ave	128392	121444		236	250	-5.4	15.0
4-Nitrotoluene	Ave	111913	107273		240	251	-4.1	15.0
3-Nitrotoluene	Ave	142246	134869		237	250	-5.2	15.0
PETN	Ave	74779	69283		2320	2500	-7.3	15.0
1,2-Dinitrobenzene	Ave	128217	132852		259	250	3.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556781/47 Calibration Date: 11/10/2021 05:53

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 11090047.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.44	6.74
RDX	7.60	7.45	7.75
Picric acid	7.99	7.84	8.14
1,3,5-Trinitrobenzene	8.68	8.54	8.84
1,3-Dinitrobenzene	9.32	9.18	9.48
Nitrobenzene	9.72	9.58	9.88
Tetryl	10.06	9.92	10.22
Nitroglycerin	10.51	10.37	10.67
2,4,6-Trinitrotoluene	10.96	10.87	11.07
4-Amino-2,6-dinitrotoluene	11.18	11.09	11.29
2-Amino-4,6-dinitrotoluene	11.43	11.34	11.54
2,6-Dinitrotoluene	11.60	11.51	11.71
2,4-Dinitrotoluene	11.76	11.67	11.87
2-Nitrotoluene	12.63	12.50	12.80
4-Nitrotoluene	13.06	12.93	13.23
3-Nitrotoluene	13.65	13.51	13.81
PETN	14.74	14.61	14.91
1,2-Dinitrobenzene	8.57	8.42	8.72

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090047.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 10-Nov-2021 05:53:26 ALS Bottle#: 7 Worklist Smp#: 47
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0106333-047
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Nov-2021 12:59:02 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1646

First Level Reviewer: zhangji Date: 10-Nov-2021 12:47:23

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.597	6.592	0.005	21878	0.2500	0.2592	
8 RDX	1	7.603	7.598	0.005	26876	0.2500	0.2529	
9 2,4,6-Trinitrophenol	1	7.990	7.985	0.005	19728	0.2500	0.2385	
$ 10 1,2-Dinitrobenzene	1	8.570	8.572	-0.002	33213	0.2500	0.2590	
11 1,3,5-Trinitrobenzene	1	8.683	8.685	-0.002	56475	0.2505	0.2563	
12 1,3-Dinitrobenzene	1	9.323	9.331	-0.008	75916	0.2505	0.2562	
13 Nitrobenzene	1	9.716	9.725	-0.009	46987	0.2510	0.2406	
15 Tetryl	1	10.056	10.065	-0.009	38269	0.2505	0.2220	
16 Nitroglycerin	2	10.510	10.518	-0.008	165636	2.50	2.52	
17 2,4,6-Trinitrotoluene	1	10.963	10.971	-0.008	51589	0.2510	0.2504	
18 4-Amino-2,6-dinitrotoluene	1	11.176	11.185	-0.009	38146	0.2503	0.2497	
19 2-Amino-4,6-dinitrotoluene	1	11.430	11.438	-0.008	51884	0.2510	0.2507	
20 2,6-Dinitrotoluene	1	11.596	11.605	-0.009	36887	0.2510	0.2578	
21 2,4-Dinitrotoluene	1	11.763	11.771	-0.008	75580	0.2510	0.2633	
22 o-Nitrotoluene	1	12.630	12.645	-0.015	30361	0.2500	0.2365	
23 p-Nitrotoluene	1	13.063	13.078	-0.015	26872	0.2505	0.2401	
24 m-Nitrotoluene	1	13.650	13.658	-0.008	33751	0.2503	0.2373	
25 PETN	2	14.743	14.758	-0.015	173207	2.50	2.32	

QC Flag Legend
Processing Flags

Reagents:
8330IntermStk_00069 Amount Added: 25.00 Units: uL

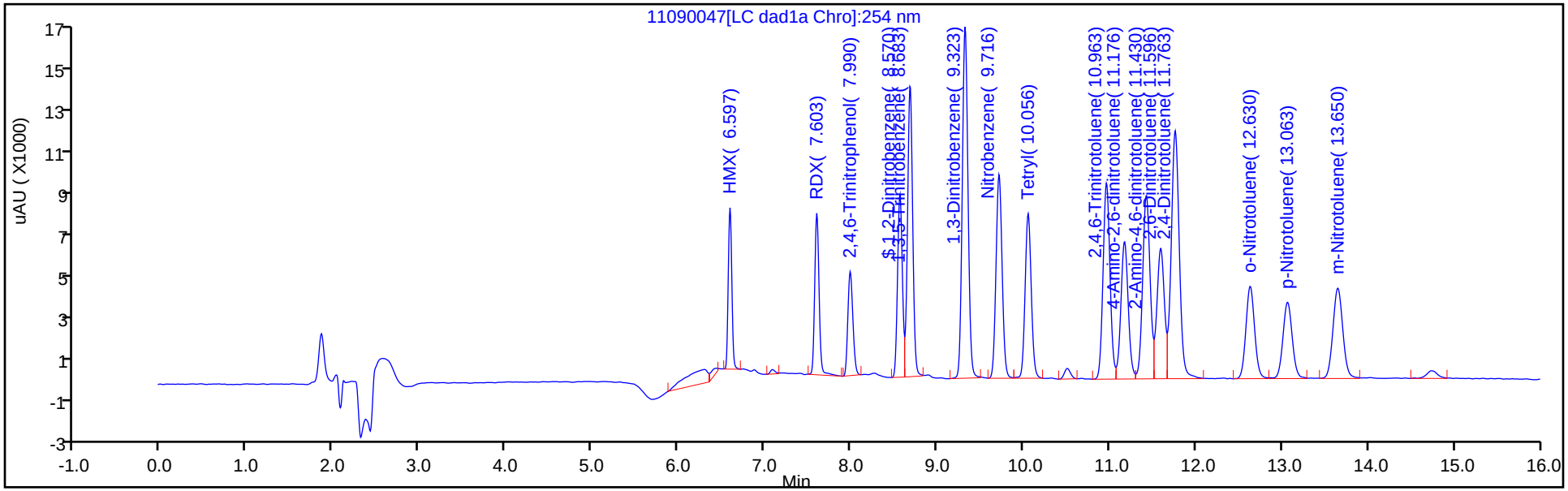
Report Date: 10-Nov-2021 12:59:02 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

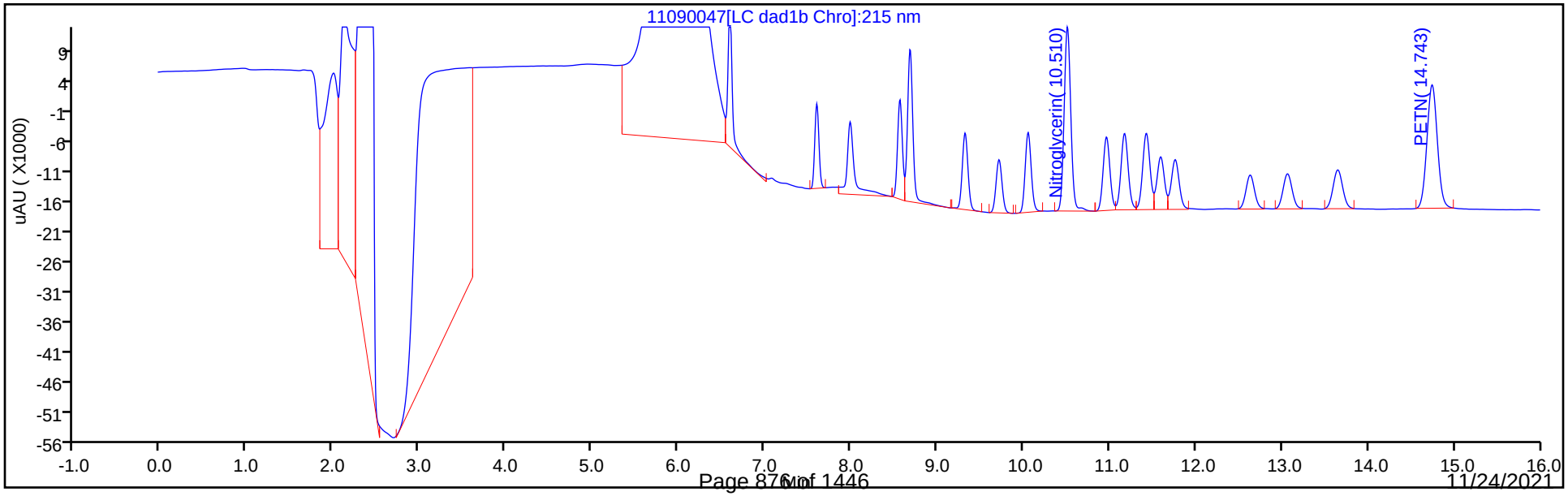
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090047.d

Injection Date:	10-Nov-2021 05:53:26	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	47
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556781/48 Calibration Date: 11/10/2021 06:16

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 11090048.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	188044		253	250	1.2	15.0
DNX	Ave	142119	142474		251	250	0.2	15.0
MNX	Ave	130340	133213		298	292	2.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556781/48 Calibration Date: 11/10/2021 06:16

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 11090048.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\20211109-106333.b\11090048.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	10-Nov-2021 06:16:27	ALS Bottle#:	9	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0106333-048				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:59:01	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:47:38		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.476	6.476	0.000	47058	0.2503	0.2533	M
6 DNX	1	6.796	6.796	0.000	35654	0.2503	0.2509	M
7 MNX	1	7.216	7.223	-0.007	38865	0.2918	0.2982	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

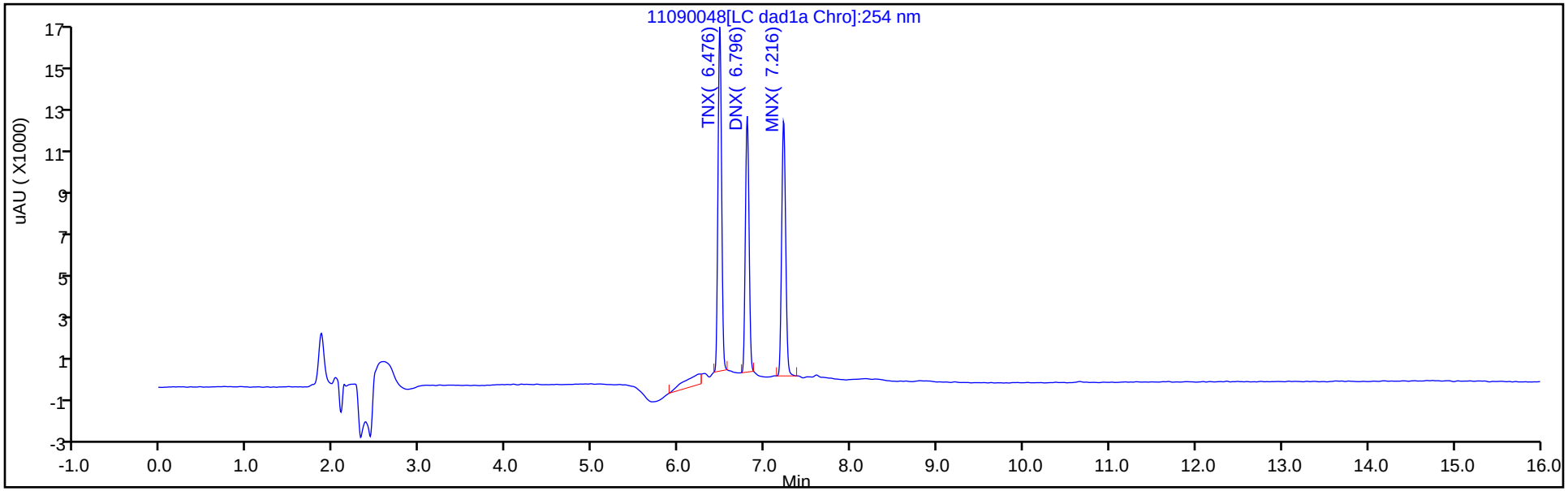
Report Date: 10-Nov-2021 12:59:02 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

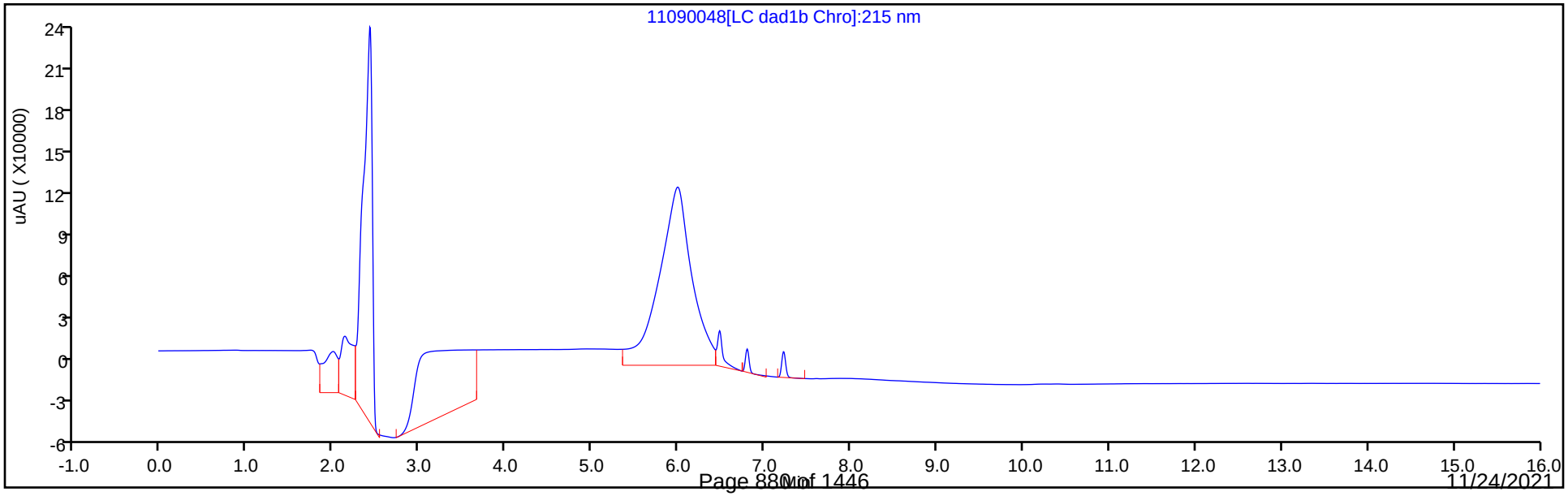
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090048.d

Injection Date:	10-Nov-2021 06:16:27	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	48
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 TestAmerica, Denver

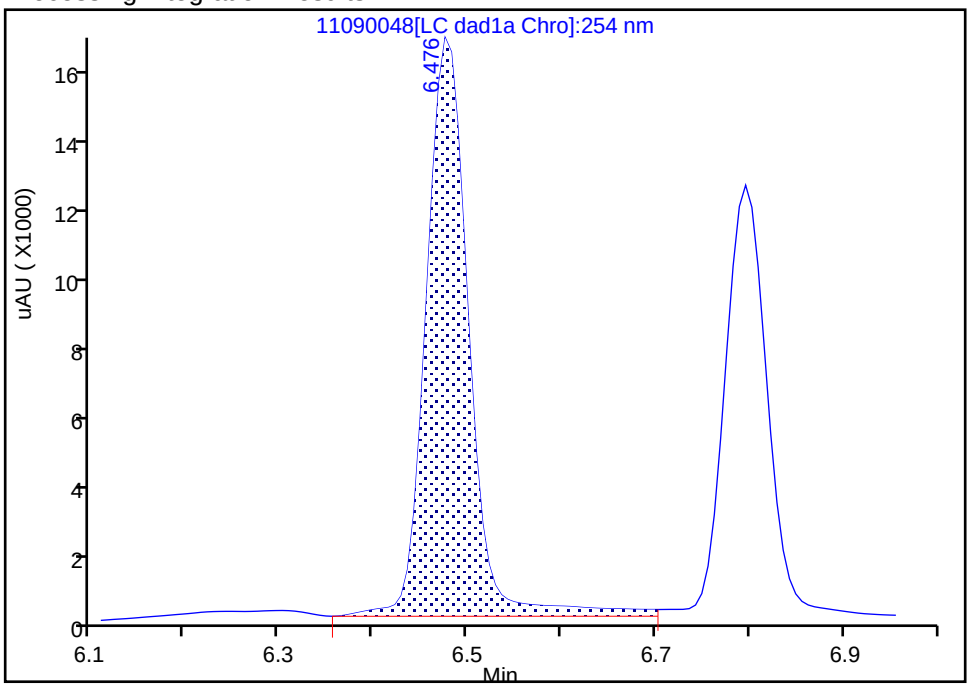
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090048.d				
Injection Date:	10-Nov-2021 06:16:27	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

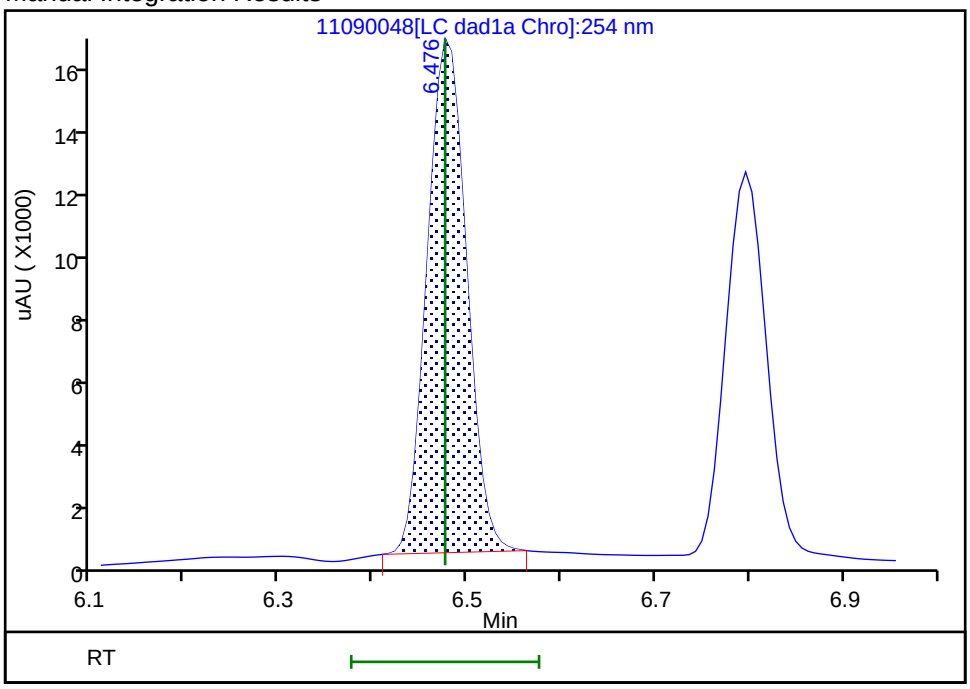
Processing Integration Results

RT: 6.48
Area: 52046
Amount: 0.280109
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 47058
Amount: 0.253264
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:47:32
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver

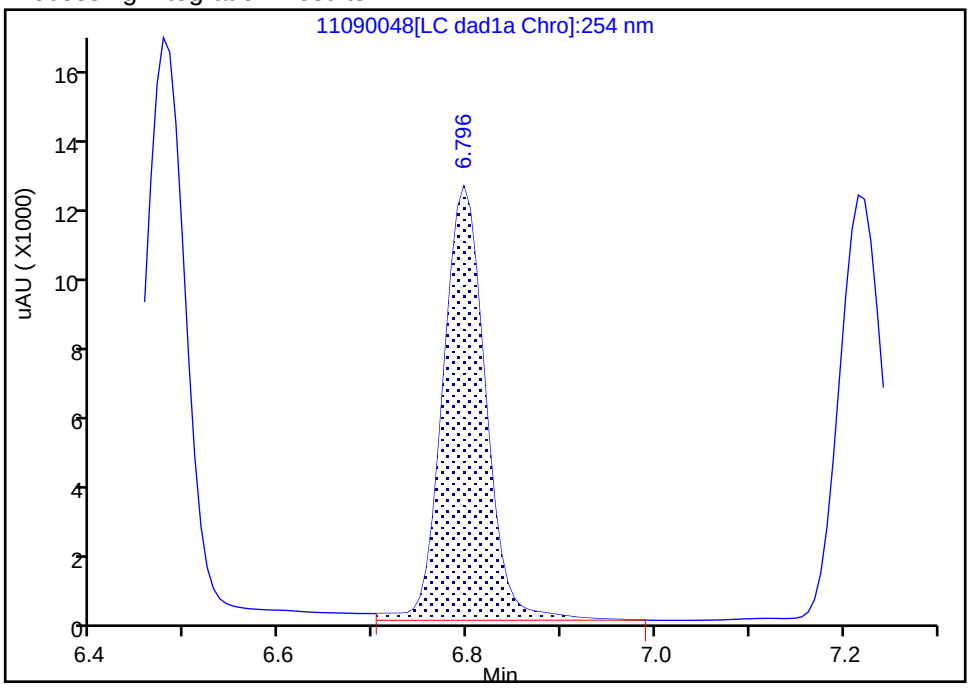
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090048.d				
Injection Date:	10-Nov-2021 06:16:27	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

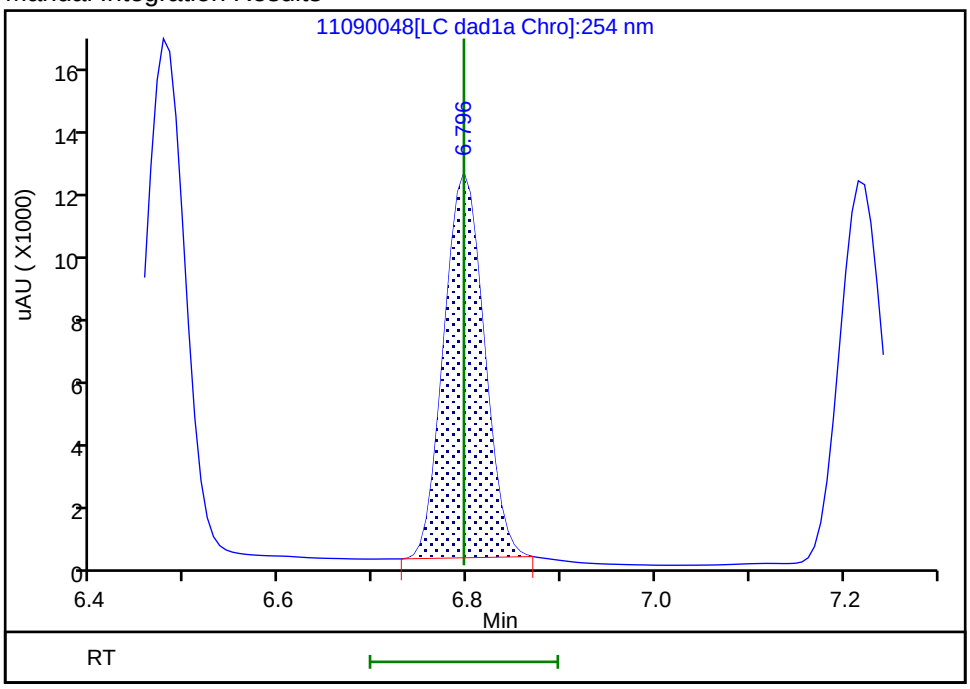
Processing Integration Results

RT: 6.80
Area: 38516
Amount: 0.271012
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 35654
Amount: 0.250874
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:47:36
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556781/59 Calibration Date: 11/10/2021 10:28

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 11090059.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	86636		257	250	2.6	15.0
RDX	Ave	106261	103652		244	250	-2.5	15.0
Picric acid	Ave	82721	79540		240	250	-3.8	15.0
1,3,5-Trinitrobenzene	Ave	220317	226068		257	251	2.6	15.0
1,3-Dinitrobenzene	Ave	296329	304084		257	251	2.6	15.0
Nitrobenzene	Ave	195286	184649		237	251	-5.4	15.0
Tetryl	Ave	172420	152611		222	251	-11.5	15.0
Nitroglycerin	Lin2		65143		2470	2500	-1.0	15.0
2,4,6-Trinitrotoluene	Ave	206038	204984		250	251	-0.5	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	153151		251	250	0.3	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	206570		251	251	-0.2	15.0
2,6-Dinitrotoluene	Ave	143079	145653		256	251	1.8	15.0
2,4-Dinitrotoluene	Ave	287012	302108		264	251	5.3	15.0
2-Nitrotoluene	Ave	128392	118384		231	250	-7.8	15.0
4-Nitrotoluene	Ave	111913	104315		233	251	-6.8	15.0
3-Nitrotoluene	Ave	142246	132751		234	250	-6.7	15.0
PETN	Ave	74779	69724		2330	2500	-6.8	15.0
1,2-Dinitrobenzene	Ave	128217	134336		262	250	4.8	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556781/59 Calibration Date: 11/10/2021 10:28

Instrument ID: CHHPLC_X3 Calib Start Date: 05/01/2021 18:01

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 05/01/2021 21:04

Lab File ID: 11090059.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.60	6.44	6.74
RDX	7.60	7.45	7.75
Picric acid	7.98	7.84	8.14
1,3,5-Trinitrobenzene	8.68	8.54	8.84
1,3-Dinitrobenzene	9.32	9.18	9.48
Nitrobenzene	9.72	9.58	9.88
Tetryl	10.05	9.92	10.22
Nitroglycerin	10.50	10.37	10.67
2,4,6-Trinitrotoluene	10.96	10.87	11.07
4-Amino-2,6-dinitrotoluene	11.16	11.09	11.29
2-Amino-4,6-dinitrotoluene	11.41	11.34	11.54
2,6-Dinitrotoluene	11.58	11.51	11.71
2,4-Dinitrotoluene	11.75	11.67	11.87
2-Nitrotoluene	12.62	12.50	12.80
4-Nitrotoluene	13.06	12.93	13.23
3-Nitrotoluene	13.64	13.51	13.81
PETN	14.73	14.61	14.91
1,2-Dinitrobenzene	8.57	8.42	8.72

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090059.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 10-Nov-2021 10:28:42 ALS Bottle#: 7 Worklist Smp#: 59
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0106333-059
Operator ID: JZ Instrument ID: CHHPLC_X3
Sublist: chrom-8330_X3*sub9

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Nov-2021 12:58:55 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1646

First Level Reviewer: zhangji Date: 10-Nov-2021 12:55:30

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	6.592	0.003	21659	0.2500	0.2566	M
8 RDX	1	7.602	7.598	0.004	25913	0.2500	0.2439	
9 2,4,6-Trinitrophenol	1	7.982	7.985	-0.003	19885	0.2500	0.2404	
$ 10 1,2-Dinitrobenzene	1	8.568	8.572	-0.004	33584	0.2500	0.2619	
11 1,3,5-Trinitrobenzene	1	8.682	8.685	-0.003	56630	0.2505	0.2570	
12 1,3-Dinitrobenzene	1	9.322	9.331	-0.009	76173	0.2505	0.2571	
13 Nitrobenzene	1	9.715	9.725	-0.010	46347	0.2510	0.2373	
15 Tetryl	1	10.048	10.065	-0.017	38229	0.2505	0.2217	
16 Nitroglycerin	2	10.502	10.518	-0.016	162858	2.50	2.47	
17 2,4,6-Trinitrotoluene	1	10.955	10.971	-0.016	51451	0.2510	0.2497	
18 4-Amino-2,6-dinitrotoluene	1	11.162	11.185	-0.023	38326	0.2503	0.2509	
19 2-Amino-4,6-dinitrotoluene	1	11.408	11.438	-0.030	51849	0.2510	0.2506	
20 2,6-Dinitrotoluene	1	11.582	11.605	-0.023	36559	0.2510	0.2555	
21 2,4-Dinitrotoluene	1	11.748	11.771	-0.023	75829	0.2510	0.2642	
22 o-Nitrotoluene	1	12.622	12.645	-0.023	29596	0.2500	0.2305	
23 p-Nitrotoluene	1	13.055	13.078	-0.023	26131	0.2505	0.2335	
24 m-Nitrotoluene	1	13.635	13.658	-0.023	33221	0.2503	0.2335	
25 PETN	2	14.728	14.758	-0.030	174311	2.50	2.33	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330IntermStk_00069 Amount Added: 25.00 Units: uL

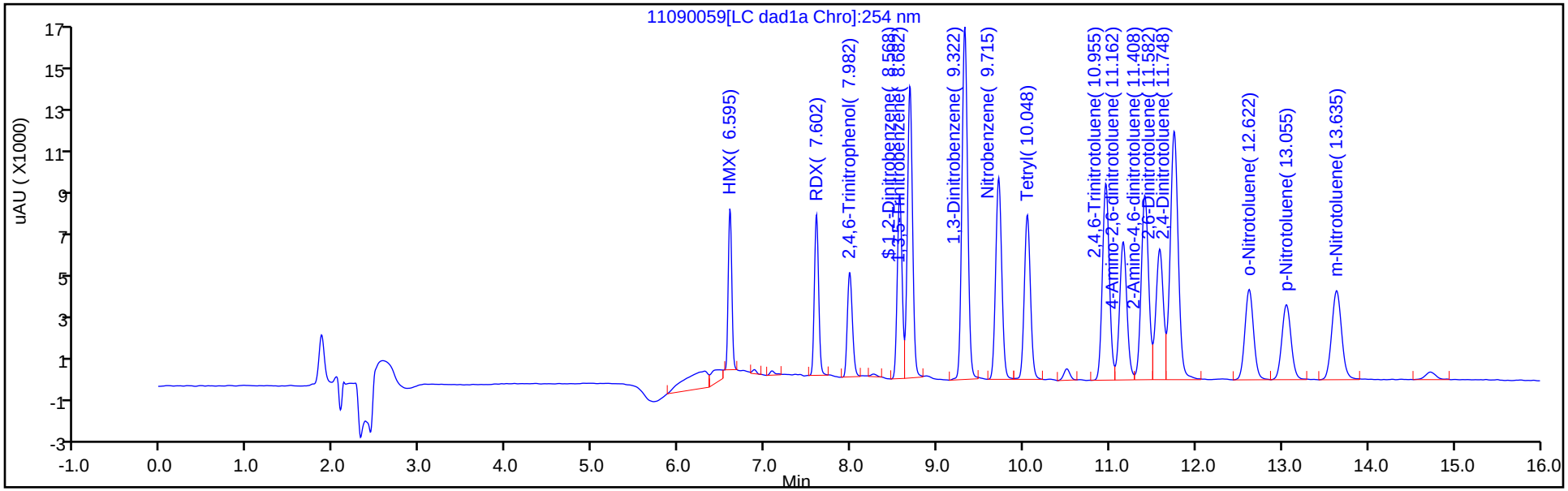
Report Date: 10-Nov-2021 12:58:55 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

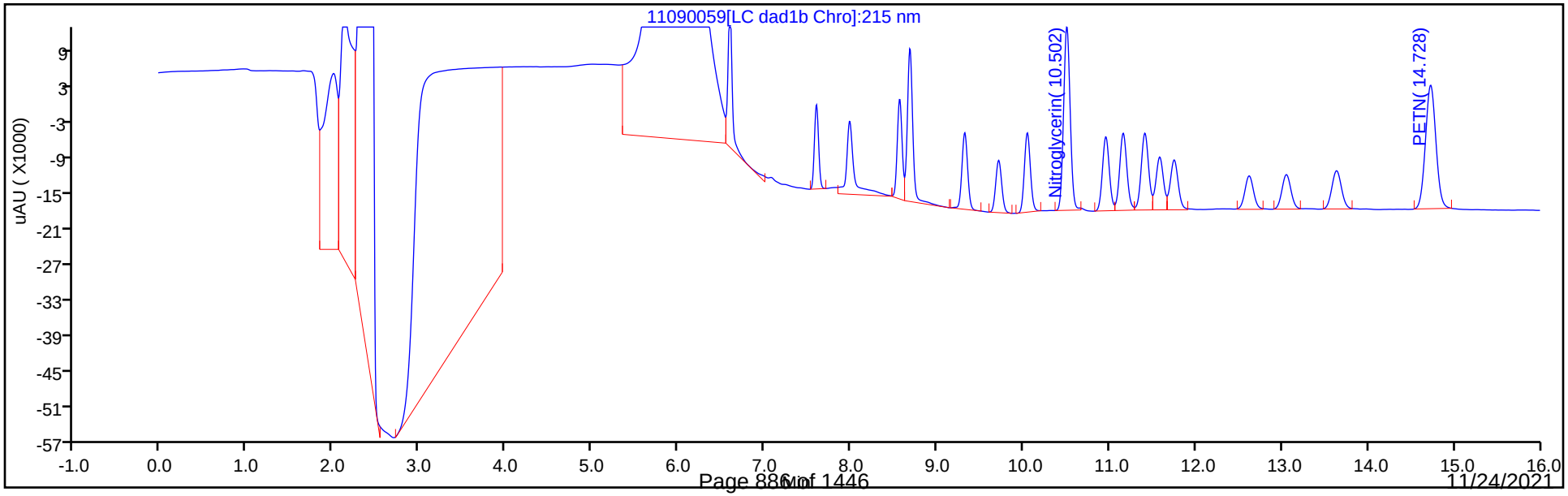
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090059.d

Injection Date:	10-Nov-2021 10:28:42	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	59
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 TestAmerica, Denver

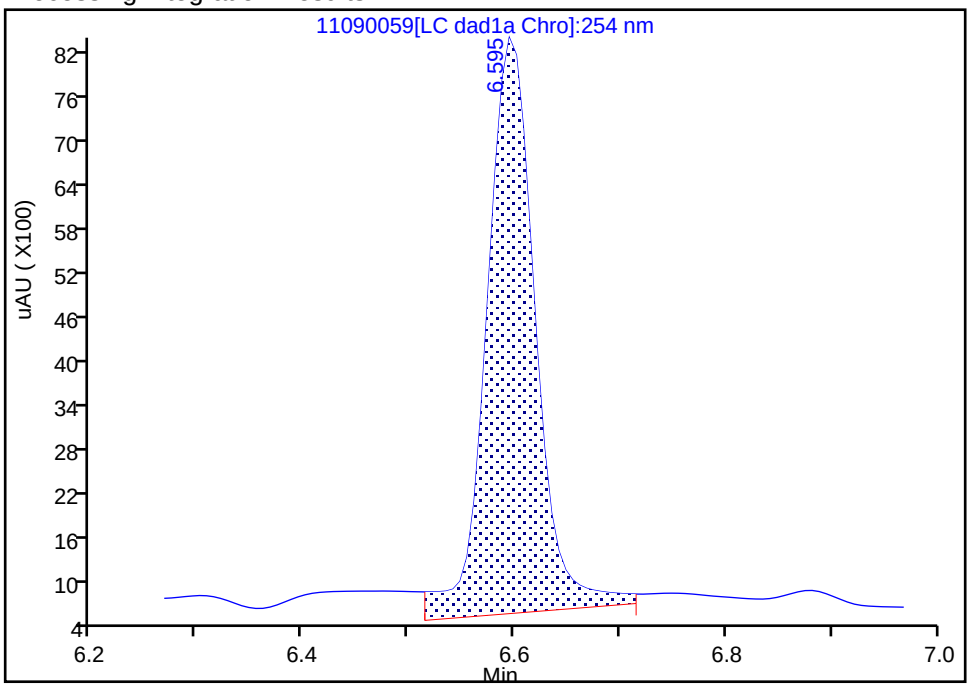
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090059.d				
Injection Date:	10-Nov-2021 10:28:42	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

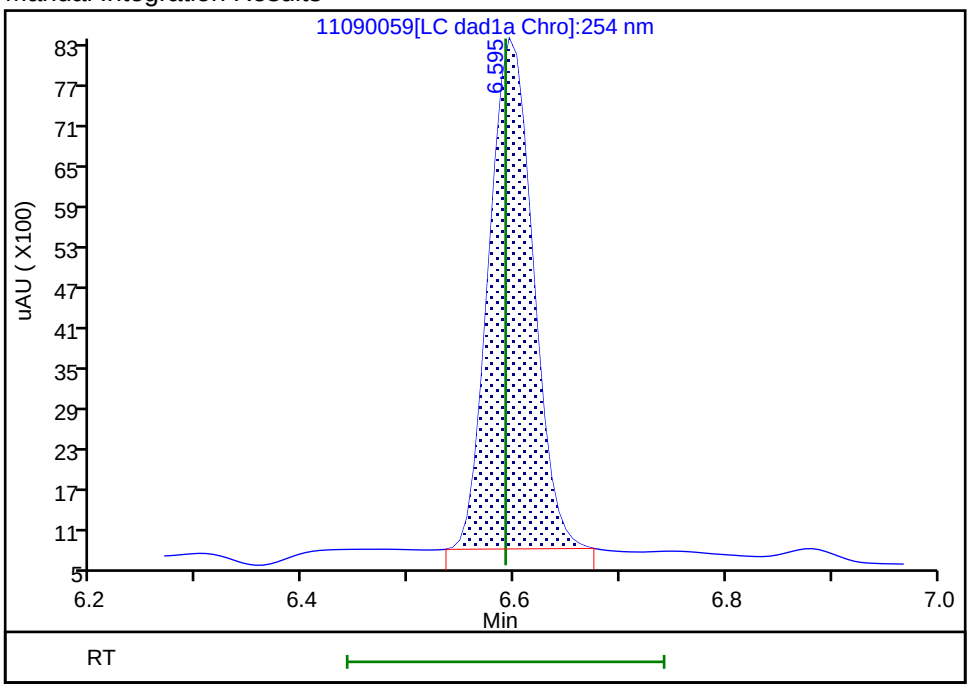
Processing Integration Results

RT: 6.60
Area: 25031
Amount: 0.296501
Amount Units: ug/mL



Manual Integration Results

RT: 6.60
Area: 21659
Amount: 0.256558
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:55:29
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556781/60 Calibration Date: 11/10/2021 10:51

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 11090060.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	185223		249	250	-0.3	15.0
DNX	Ave	142119	141115		248	250	-0.7	15.0
MNX	Ave	130340	133025		298	292	2.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556781/60 Calibration Date: 11/10/2021 10:51

Instrument ID: CHHPLC_X3 Calib Start Date: 03/02/2021 23:49

GC Column: UltraCarb5uODS ID: 4.60(mm) Calib End Date: 03/03/2021 02:30

Lab File ID: 11090060.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.38	6.58
DNX	6.80	6.70	6.90
MNX	7.23	7.07	7.37

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090060.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	10-Nov-2021 10:51:41	ALS Bottle#:	9	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0106333-060				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Sublist:	chrom-8330_X3*sub17				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:58:54	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:55:50		

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	6.476	0.003	46352	0.2503	0.2495	M
6 DNX	1	6.799	6.796	0.003	35314	0.2503	0.2485	M
7 MNX	1	7.226	7.223	0.003	38810	0.2918	0.2978	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

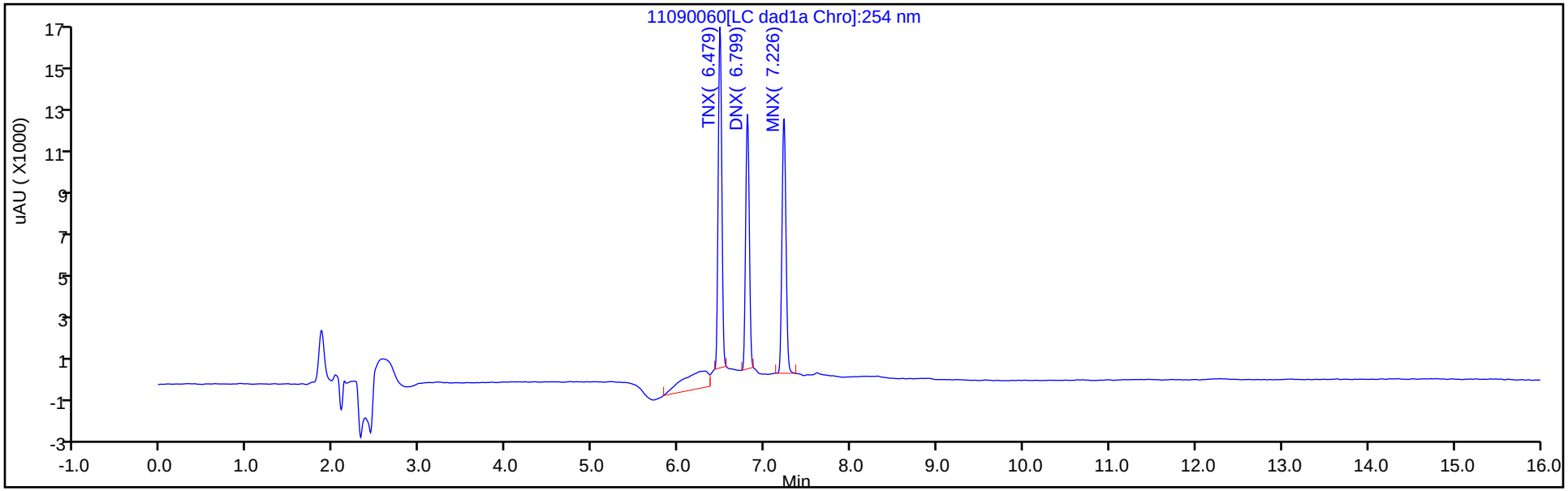
Report Date: 10-Nov-2021 12:58:55 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

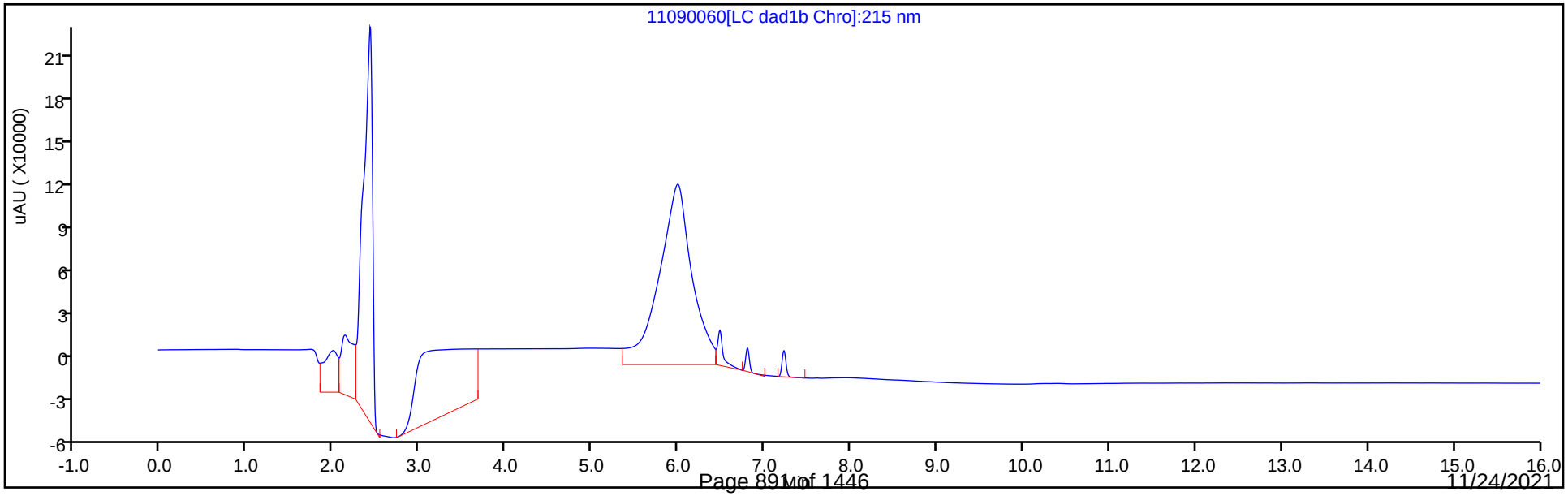
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090060.d

Injection Date:	10-Nov-2021 10:51:41	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	60
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 TestAmerica, Denver

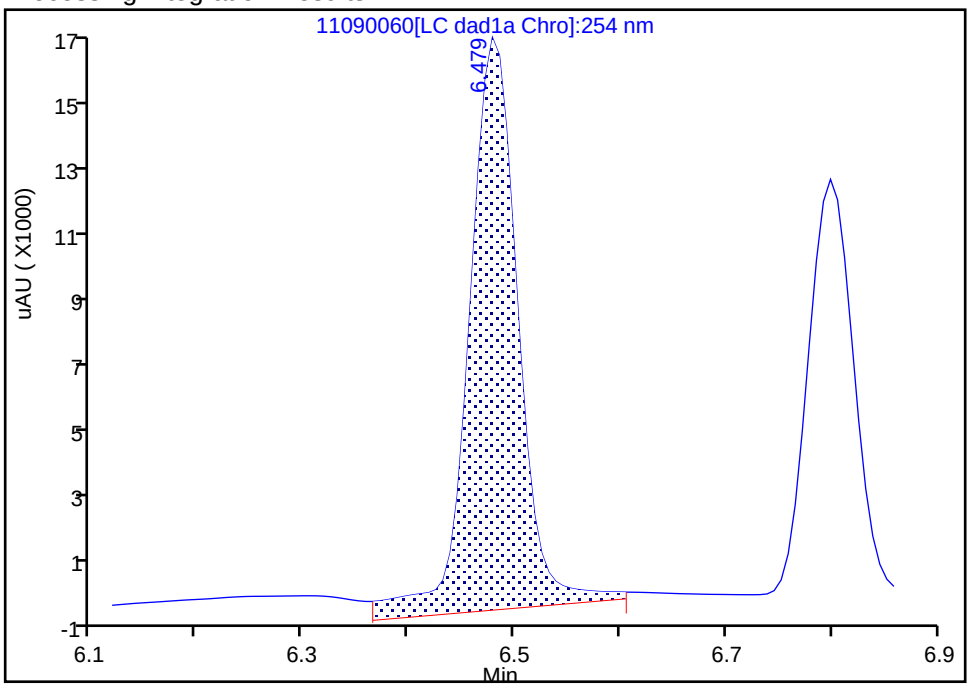
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090060.d				
Injection Date:	10-Nov-2021 10:51:41	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

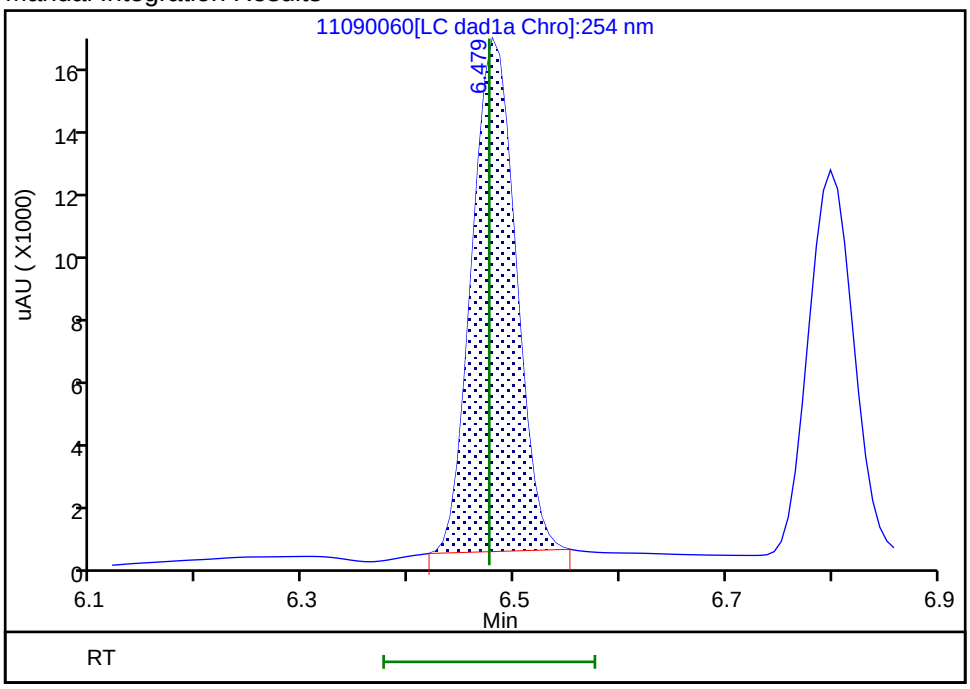
Processing Integration Results

RT: 6.48
Area: 53700
Amount: 0.289011
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 46352
Amount: 0.249464
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:55:41
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver

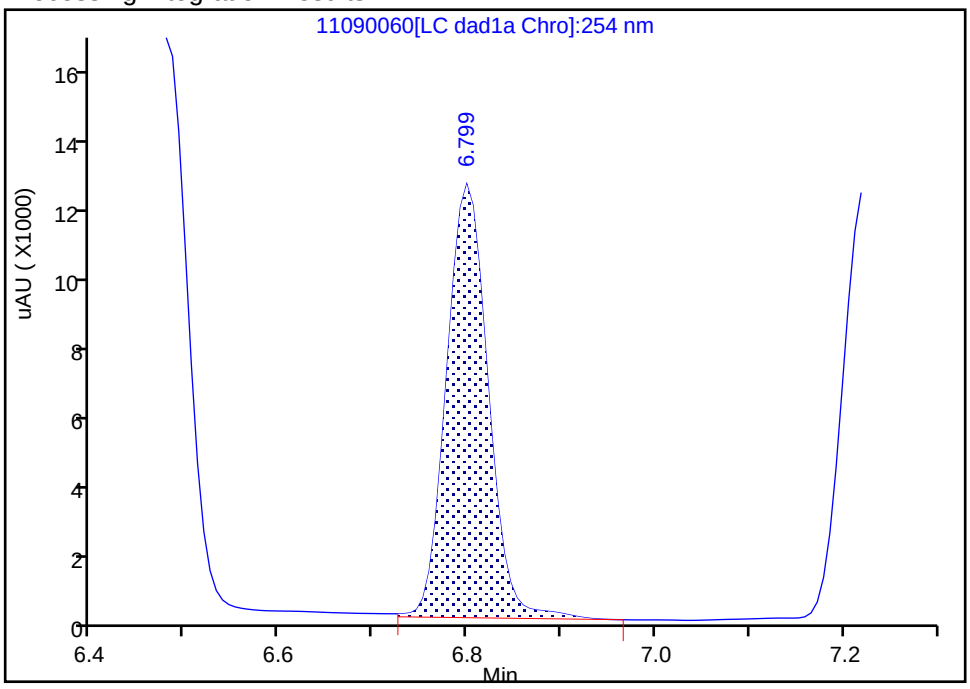
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090060.d				
Injection Date:	10-Nov-2021 10:51:41	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

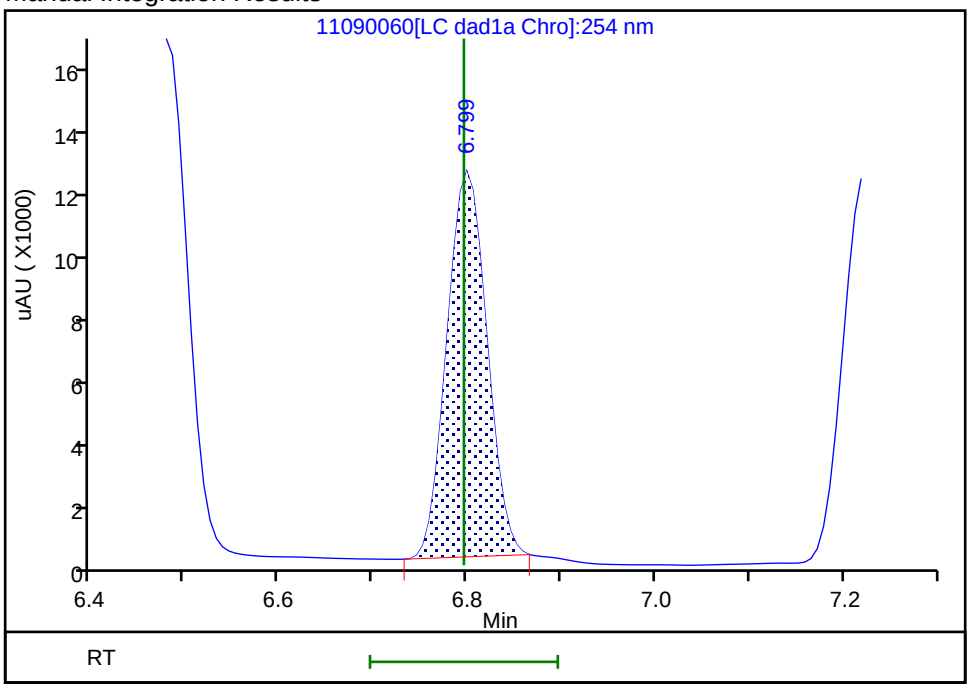
Processing Integration Results

RT: 6.80
Area: 37439
Amount: 0.263434
Amount Units: ug/mL



Manual Integration Results

RT: 6.80
Area: 35314
Amount: 0.248481
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:55:45
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: ICV 280-534620/19 Calibration Date: 05/02/2021 00:10

Instrument ID: CHHPLC_X5 Calib Start Date: 05/01/2021 18:54

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/01/2021 23:35

Lab File ID: 019-1401.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		153834		478	500	-4.3	15.0
Picric acid	Ave	159537	164682		516	500	3.2	15.0
RDX	Ave	204270	192088		470	500	-6.0	15.0
Nitrobenzene	Ave	374651	372074		497	500	-0.7	15.0
1,3-Dinitrobenzene	Lin2		568356		502	500	0.5	15.0
Nitroglycerin	Ave	128605	126748		4930	5000	-1.4	15.0
2-Nitrotoluene	Ave	248967	234824		472	500	-5.7	15.0
4-Nitrotoluene	Ave	217187	205250		473	500	-5.5	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	274856		463	500	-7.4	15.0
3-Nitrotoluene	Ave	278393	258506		464	500	-7.1	15.0
2-Amino-4,6-dinitrotoluene	Lin2		385846		492	500	-1.7	15.0
1,3,5-Trinitrobenzene	Lin2		419618		505	500	1.0	15.0
2,6-Dinitrotoluene	Lin2		264314		496	500	-0.8	15.0
2,4-Dinitrotoluene	Ave	565713	524186		463	500	-7.3	15.0
Tetryl	Lin2		317712		494	500	-1.2	15.0
2,4,6-Trinitrotoluene	Lin2		384566		513	500	2.6	15.0
PETN	Ave	137740	135365		4910	5000	-1.7	15.0
1,2-Dinitrobenzene	Ave	265659	258782		487	500	-2.6	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: ICV 280-534620/19 Calibration Date: 05/02/2021 00:10

Instrument ID: CHHPLC_X5 Calib Start Date: 05/01/2021 18:54

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/01/2021 23:35

Lab File ID: 019-1401.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.69	6.56	6.86
Picric acid	7.83	7.78	8.08
RDX	8.87	8.76	9.06
Nitrobenzene	11.93	11.82	12.12
1,3-Dinitrobenzene	15.49	15.37	15.67
Nitroglycerin	15.92	15.79	16.09
2-Nitrotoluene	16.73	16.61	16.91
4-Nitrotoluene	17.01	16.90	17.20
4-Amino-2,6-dinitrotoluene	17.49	17.38	17.68
3-Nitrotoluene	17.99	17.88	18.18
2-Amino-4,6-dinitrotoluene	18.40	18.28	18.58
1,3,5-Trinitrobenzene	18.92	18.79	19.09
2,6-Dinitrotoluene	20.18	20.05	20.35
2,4-Dinitrotoluene	20.65	20.52	20.82
Tetryl	24.31	24.16	24.46
2,4,6-Trinitrotoluene	25.28	25.13	25.43
PETN	26.19	26.04	26.34
1,2-Dinitrobenzene	13.06	12.94	13.24

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\019-1401.D
Lims ID: ICV INT/ADD
Client ID:
Sample Type: ICV
Inject. Date: 02-May-2021 00:10:18 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: ICV INT/ADD
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist:

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 04-May-2021 13:45:38 Calib Date: 01-May-2021 23:35:08
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\018-1301.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1618

First Level Reviewer: zhangji Date: 04-May-2021 13:33:02

	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	4.060	4.126	-0.066	216822	0.5000	0.5224	
2	2,4-diamino-6-nitrotoluene	1	4.647	4.653	-0.006	135044	0.5000	0.5598	
6	HMX	1	6.694	6.713	-0.019	76917	0.5000	0.4783	
5	2,4,6-Trinitrophenol	1	7.827	7.933	-0.106	82341	0.5000	0.5161	
8	RDX	1	8.874	8.906	-0.032	96044	0.5000	0.4702	
9	Nitrobenzene	1	11.934	11.973	-0.039	186037	0.5000	0.4966	
$ 10	1,2-Dinitrobenzene	1	13.060	13.093	-0.033	129391	0.5000	0.4871	
11	3,5-Dinitroaniline	1	14.947	14.979	-0.032	215841	0.5000	0.4774	
12	1,3-Dinitrobenzene	1	15.494	15.519	-0.025	284178	0.5000	0.5024	
13	Nitroglycerin	2	15.920	15.939	-0.019	633738	5.00	4.93	
14	o-Nitrotoluene	1	16.727	16.759	-0.032	117412	0.5000	0.4716	
15	p-Nitrotoluene	1	17.014	17.046	-0.032	102625	0.5000	0.4725	
16	4-Amino-2,6-dinitrotoluene	1	17.494	17.526	-0.032	137428	0.5000	0.4632	
17	m-Nitrotoluene	1	17.994	18.026	-0.032	129253	0.5000	0.4643	
18	2-Amino-4,6-dinitrotoluene	1	18.400	18.426	-0.026	192923	0.5000	0.4916	
19	1,3,5-Trinitrobenzene	1	18.920	18.939	-0.019	209809	0.5000	0.5052	
20	2,6-Dinitrotoluene	1	20.180	20.199	-0.019	132157	0.5000	0.4958	
21	2,4-Dinitrotoluene	1	20.647	20.666	-0.019	262093	0.5000	0.4633	
22	Tetryl	1	24.314	24.313	0.001	158856	0.5000	0.4941	
23	2,4,6-Trinitrotoluene	1	25.280	25.280	0.000	192283	0.5000	0.5131	
24	PETN	2	26.187	26.186	0.001	676826	5.00	4.91	M

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

3,5-DNA LCS_00038	Amount Added:	50.00	Units: uL
8330 LCS_00108	Amount Added:	50.00	Units: uL
8330Surrogate_00124	Amount Added:	50.00	Units: uL
8330DiaminLCS_00039	Amount Added:	50.00	Units: uL

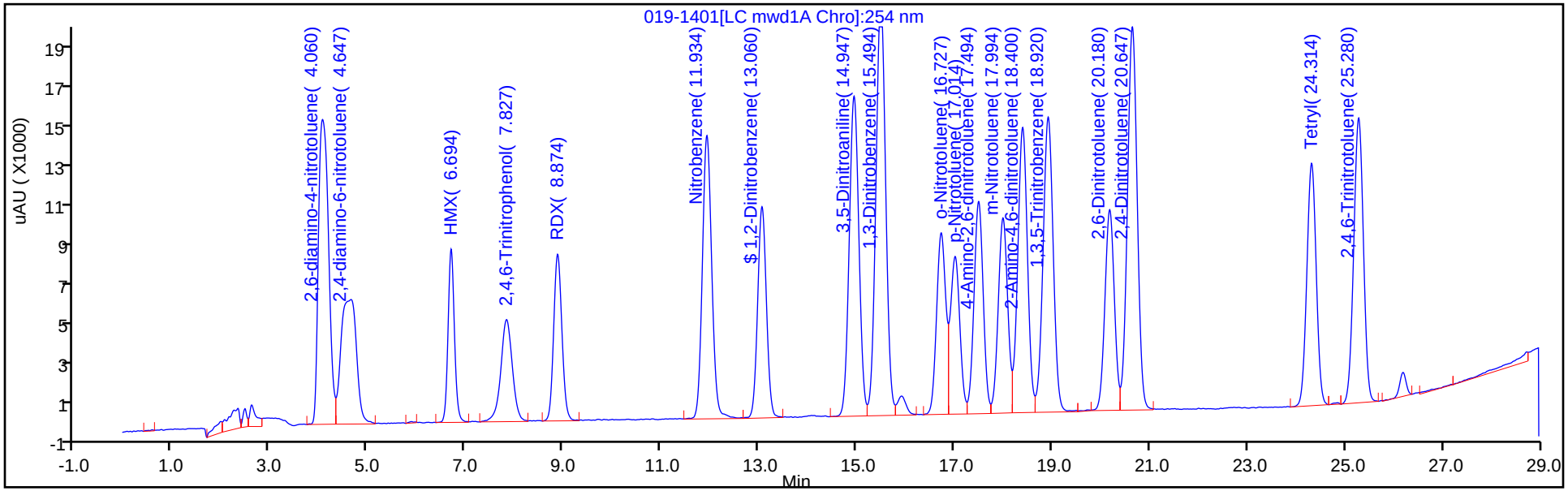
Report Date: 04-May-2021 13:45:44 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

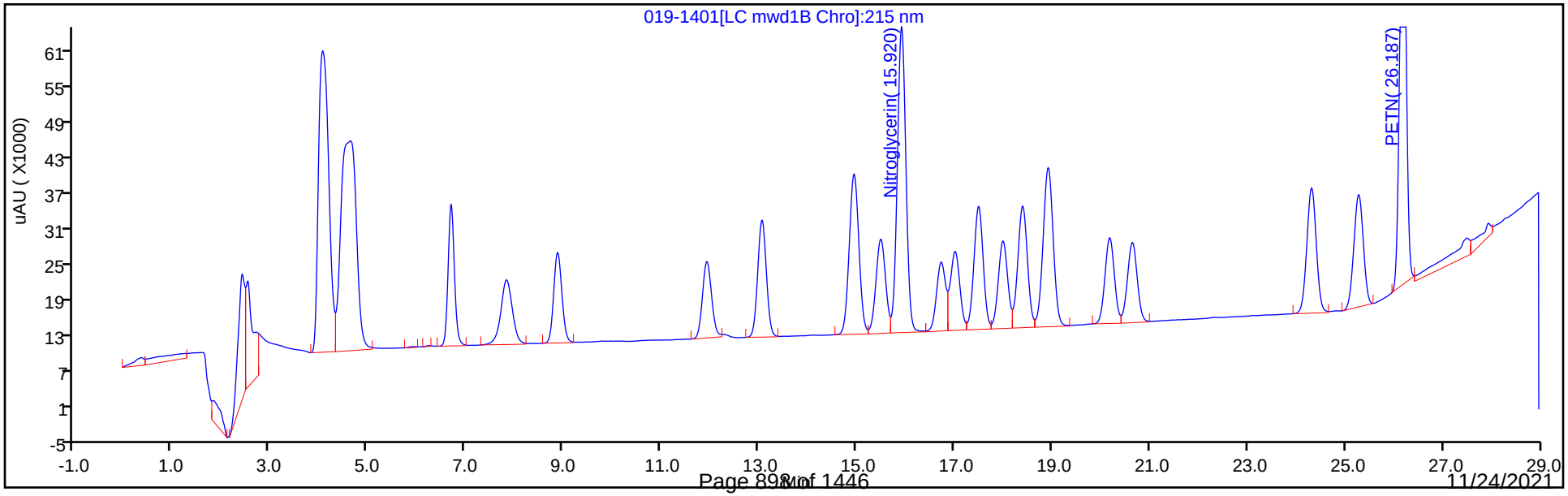
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\019-1401.D

Injection Date:	02-May-2021 00:10:18	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	ICV INT/ADD			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



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

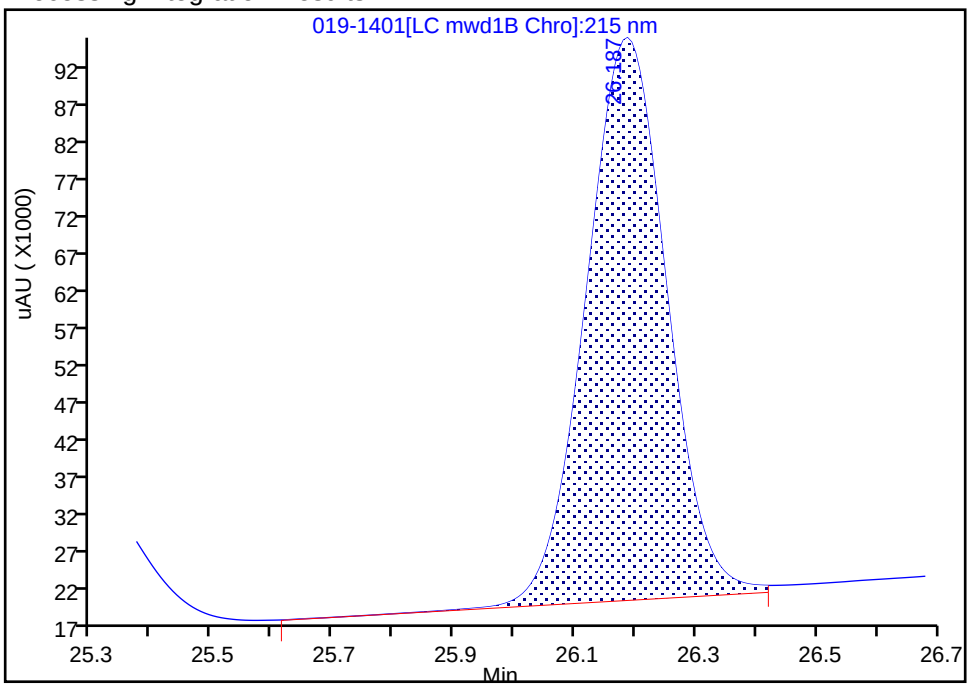
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\019-1401.D
Injection Date: 02-May-2021 00:10:18 Instrument ID: CHHPLC_X5
Lims ID: ICV INT/ADD
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

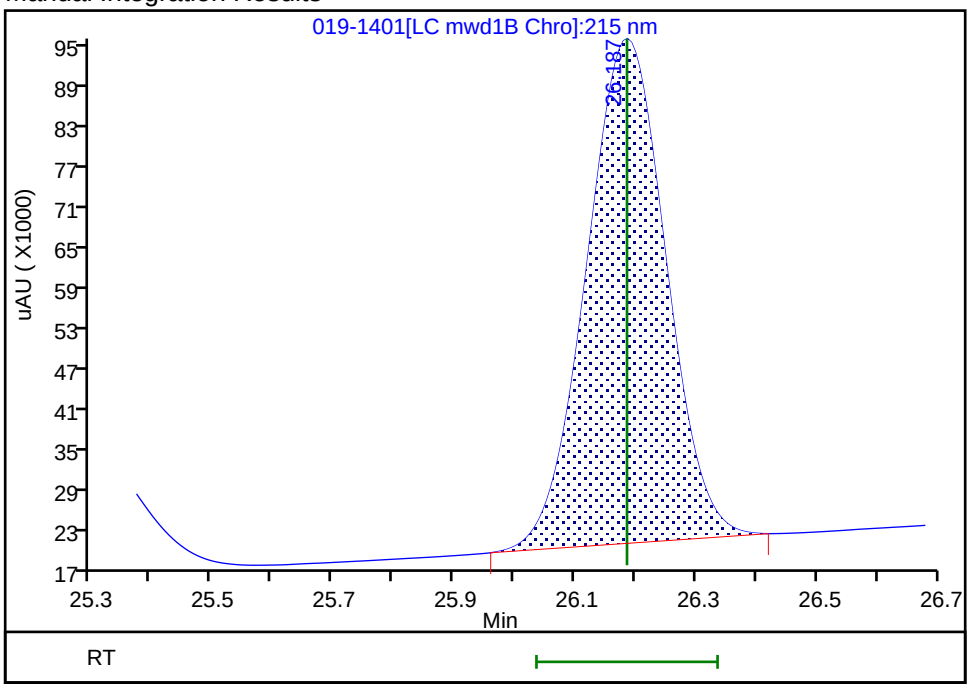
Processing Integration Results

RT: 26.19
Area: 693830
Amount: 5.037230
Amount Units: ug/ml



Manual Integration Results

RT: 26.19
Area: 676826
Amount: 4.913780
Amount Units: ug/ml



Reviewer: zhangji, 04-May-2021 13:43:01
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: ICV 280-534620/28 Calibration Date: 05/02/2021 05:26

Instrument ID: CHHPLC_X5 Calib Start Date: 05/02/2021 00:45

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/02/2021 04:51

Lab File ID: 028-2301.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	376144	376410		501	501	0.0	15.0
DNX	Ave	284791	287804		506	501	1.1	15.0
MNX	Ave	264843	265575		585	584	0.3	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: ICV 280-534620/28 Calibration Date: 05/02/2021 05:26

Instrument ID: CHHPLC_X5 Calib Start Date: 05/02/2021 00:45

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/02/2021 04:51

Lab File ID: 028-2301.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.07	4.93	5.23
DNX	5.89	5.75	6.05
MNX	7.44	7.31	7.61

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\028-2301.D				
Lims ID:	ICV DMT				
Client ID:					
Sample Type:	ICV				
Inject. Date:	02-May-2021 05:26:08	ALS Bottle#:	28	Worklist Smp#:	28
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	ICV DMT				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:					
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	04-May-2021 13:45:38	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1618				
First Level Reviewer: zhangji		Date:	04-May-2021 13:36:47		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.067	5.075	-0.008	188393	0.5005	0.5009	
4 DNX	1	5.894	5.902	-0.008	144046	0.5005	0.5058	
7 MNX	1	7.441	7.455	-0.014	154963	0.5835	0.5851	

Reagents:

8330_OP_DMT_00010 Amount Added: 50.00 Units: uL

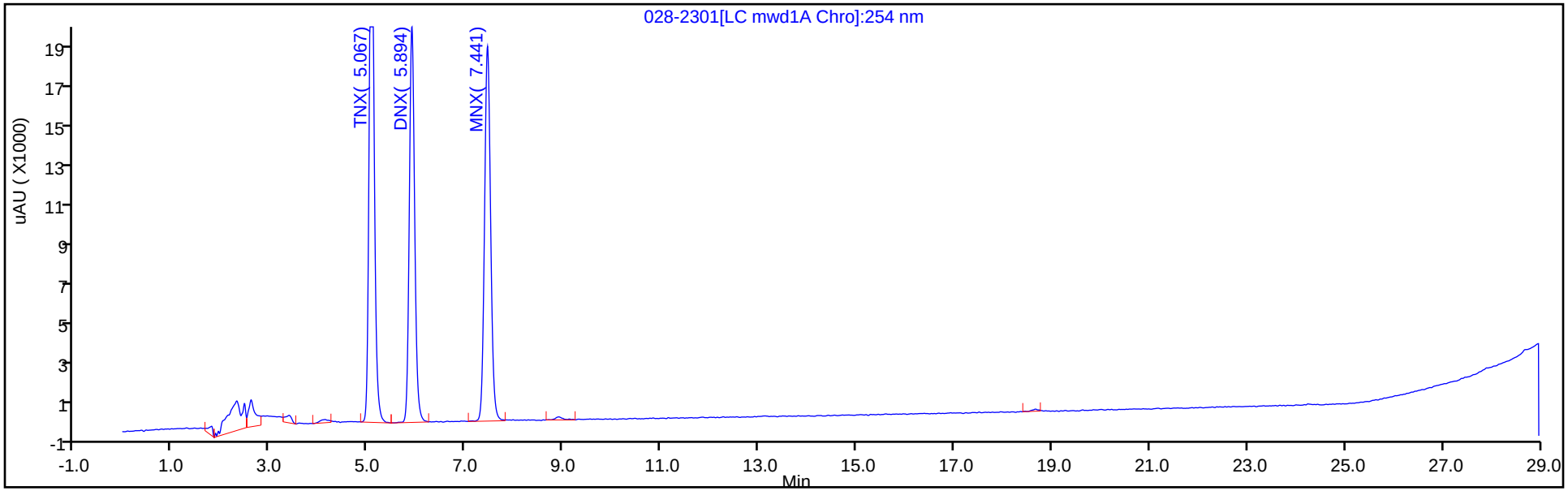
Report Date: 04-May-2021 13:45:44 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

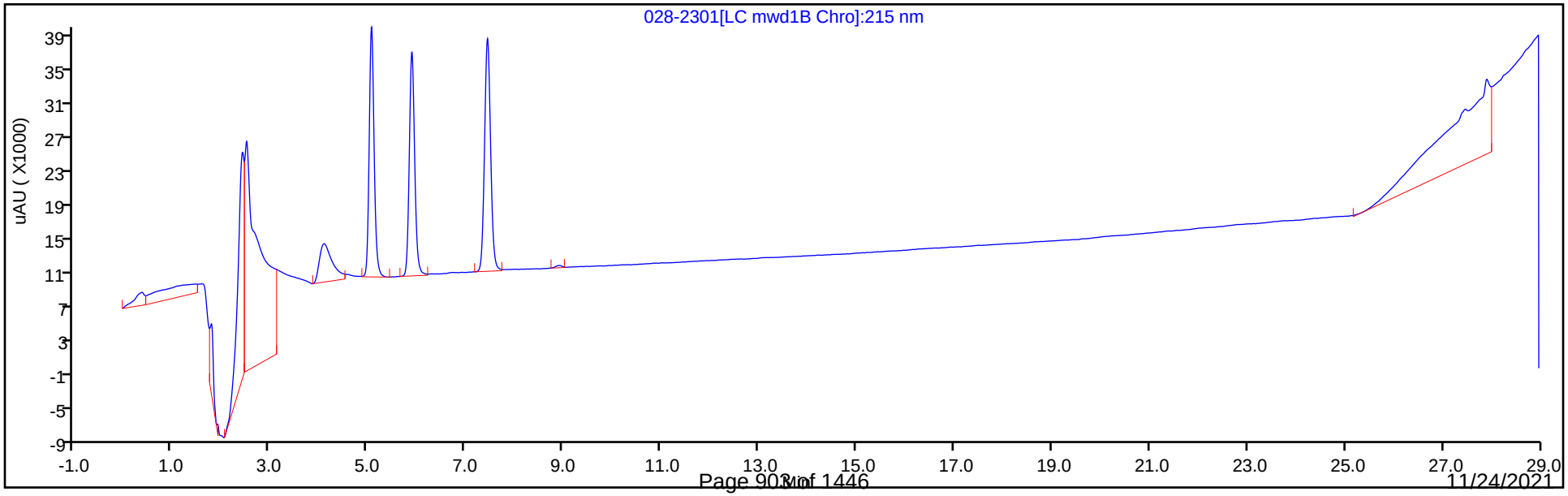
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\028-2301.D

Injection Date:	02-May-2021 05:26:08	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556958/20 Calibration Date: 11/10/2021 23:11

Instrument ID: CHHPLC_X5 Calib Start Date: 05/01/2021 18:54

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/01/2021 23:35

Lab File ID: 11100020.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		169092		260	250	4.0	15.0
Picric acid	Ave	159537	160392		251	250	0.5	15.0
RDX	Ave	204270	205292		251	250	0.5	15.0
Nitrobenzene	Ave	374651	378916		254	251	1.1	15.0
1,3-Dinitrobenzene	Lin2		608387		268	251	7.1	15.0
Nitroglycerin	Ave	128605	135306		2630	2500	5.2	15.0
2-Nitrotoluene	Ave	248967	242740		244	250	-2.5	15.0
4-Nitrotoluene	Ave	217187	216643		250	251	-0.3	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	290533		245	250	-2.1	15.0
3-Nitrotoluene	Ave	278393	272795		245	250	-2.0	15.0
2-Amino-4,6-dinitrotoluene	Lin2		412653		262	251	4.6	15.0
1,3,5-Trinitrobenzene	Lin2		453297		270	251	7.9	15.0
2,6-Dinitrotoluene	Lin2		280175		262	251	4.5	15.0
2,4-Dinitrotoluene	Ave	565713	567127		252	251	0.2	15.0
Tetryl	Lin2		298778		230	251	-8.3	15.0
2,4,6-Trinitrotoluene	Lin2		386538		257	251	2.3	15.0
PETN	Ave	137740	132017		2400	2500	-4.2	15.0
1,2-Dinitrobenzene	Ave	265659	268044		252	250	0.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556958/20 Calibration Date: 11/10/2021 23:11

Instrument ID: CHHPLC_X5 Calib Start Date: 05/01/2021 18:54

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/01/2021 23:35

Lab File ID: 11100020.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.65	6.50	6.80
Picric acid	7.87	7.72	8.02
RDX	8.80	8.65	8.95
Nitrobenzene	11.86	11.71	12.01
1,3-Dinitrobenzene	15.38	15.23	15.53
Nitroglycerin	15.73	15.58	15.88
2-Nitrotoluene	16.60	16.45	16.75
4-Nitrotoluene	16.89	16.74	17.04
4-Amino-2,6-dinitrotoluene	17.34	17.19	17.49
3-Nitrotoluene	17.86	17.71	18.01
2-Amino-4,6-dinitrotoluene	18.24	18.09	18.39
1,3,5-Trinitrobenzene	18.78	18.63	18.93
2,6-Dinitrotoluene	20.01	19.86	20.16
2,4-Dinitrotoluene	20.48	20.33	20.63
Tetryl	24.07	23.92	24.22
2,4,6-Trinitrotoluene	25.06	24.91	25.21
PETN	25.96	25.81	26.11
1,2-Dinitrobenzene	12.95	12.80	13.10

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100020.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 10-Nov-2021 23:11:05 ALS Bottle#: 7 Worklist Smp#: 20
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0106378-020
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 11-Nov-2021 19:12:32 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1674

First Level Reviewer: zhangji Date: 11-Nov-2021 12:24:14

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	4.116	4.116	0.000	102181	0.2500	0.2411	
2 2,4-diamino-6-nitrotoluene	1	4.630	4.630	0.000	61282	0.2500	0.2511	
5 HMX	1	6.650	6.650	0.000	42273	0.2500	0.2601	
7 2,4,6-Trinitrophenol	1	7.870	7.870	0.000	40098	0.2500	0.2513	
8 RDX	1	8.803	8.803	0.000	51323	0.2500	0.2513	
9 Nitrobenzene	1	11.856	11.856	0.000	95108	0.2510	0.2539	
$ 10 1,2-Dinitrobenzene	1	12.949	12.949	0.000	67011	0.2500	0.2522	
11 3,5-Dinitroaniline	1	14.823	14.823	0.000	110309	0.2500	0.2430	
12 1,3-Dinitrobenzene	1	15.376	15.376	0.000	152401	0.2505	0.2683	
13 Nitroglycerin	2	15.729	15.729	0.000	338265	2.50	2.63	
14 o-Nitrotoluene	1	16.603	16.603	0.000	60685	0.2500	0.2437	
16 p-Nitrotoluene	1	16.889	16.889	0.000	54269	0.2505	0.2499	
17 4-Amino-2,6-dinitrotoluene	1	17.343	17.343	0.000	72706	0.2503	0.2450	
18 m-Nitrotoluene	1	17.856	17.856	0.000	68267	0.2503	0.2452	
19 2-Amino-4,6-dinitrotoluene	1	18.236	18.236	0.000	103576	0.2510	0.2625	
20 1,3,5-Trinitrobenzene	1	18.776	18.776	0.000	113551	0.2505	0.2702	
21 2,6-Dinitrotoluene	1	20.009	20.009	0.000	70324	0.2510	0.2623	
22 2,4-Dinitrotoluene	1	20.476	20.476	0.000	142349	0.2510	0.2516	
23 Tetryl	1	24.070	24.070	0.000	74844	0.2505	0.2297	
24 2,4,6-Trinitrotoluene	1	25.063	25.063	0.000	97021	0.2510	0.2568	
25 PETN	2	25.963	25.963	0.000	330042	2.50	2.40	

Reagents:

8330IntermStk_00069 Amount Added: 25.00 Units: uL
8330_ADDs_00029 Amount Added: 12.50 Units: uL

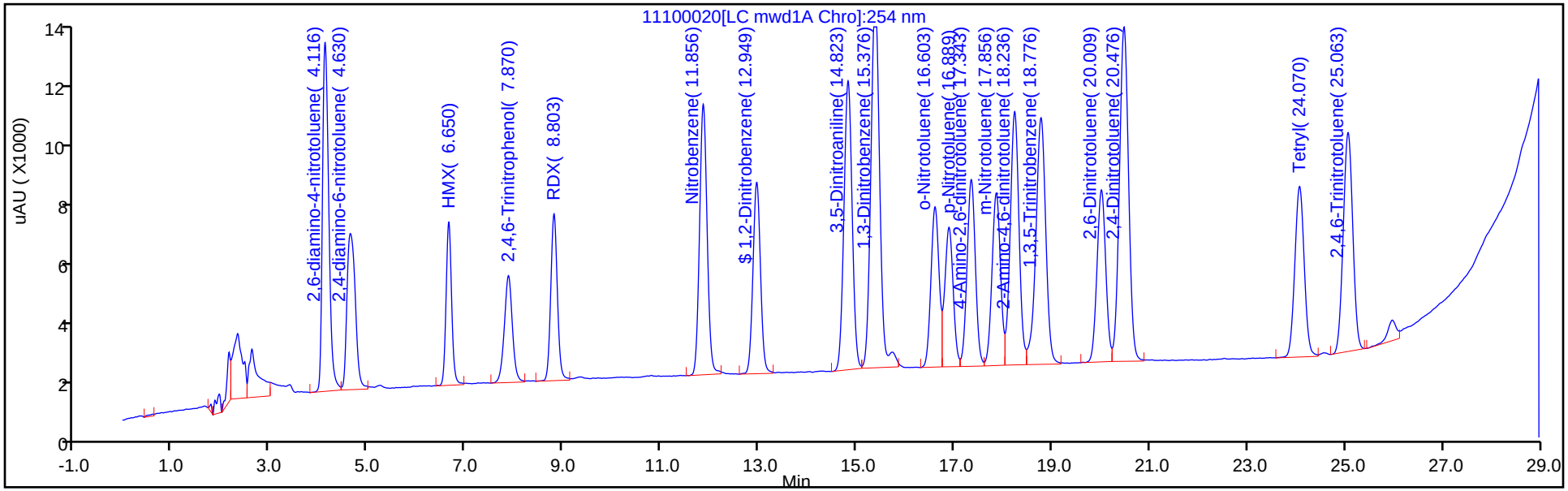
Report Date: 11-Nov-2021 19:12:33 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

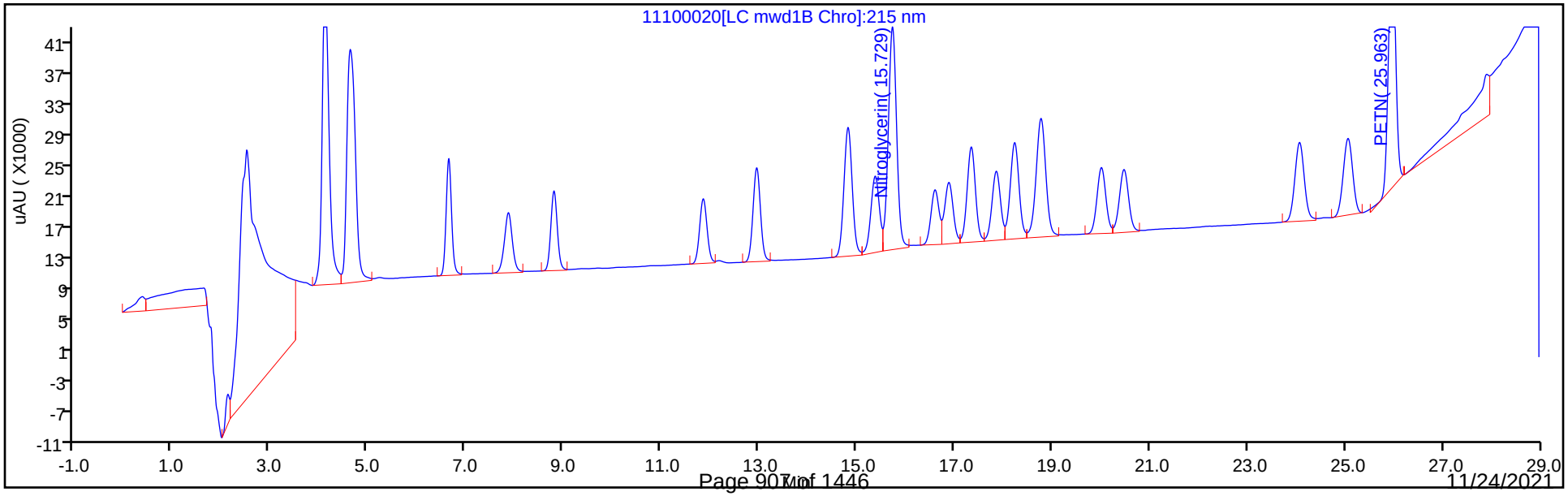
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100020.D

Injection Date:	10-Nov-2021 23:11:05	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	20
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556958/21 Calibration Date: 11/10/2021 23:46

Instrument ID: CHHPLC_X5 Calib Start Date: 05/02/2021 00:45

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/02/2021 04:51

Lab File ID: 11100021.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	376144	363872		242	250	-3.3	15.0
DNX	Ave	284791	283664		249	250	-0.4	15.0
MNX	Ave	264843	259469		286	292	-2.0	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556958/21 Calibration Date: 11/10/2021 23:46

Instrument ID: CHHPLC_X5 Calib Start Date: 05/02/2021 00:45

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/02/2021 04:51

Lab File ID: 11100021.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.04	4.89	5.19
DNX	5.85	5.70	6.00
MNX	7.37	7.22	7.52

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100021.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	10-Nov-2021 23:46:03	ALS Bottle#:	8	Worklist Smp#:	21
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0106378-021				
Operator ID:	JZ	Instrument ID:	CHHPLC_X5		
Sublist:	chrom-8330_X5_Luna*sub2				
Method:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\8330_X5_Luna.m				
Limit Group:	GCSV - 8330				
Last Update:	11-Nov-2021 19:12:33	Calib Date:	02-May-2021 04:51:05		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D				
Column 1 :	Luna-Phenyl hexyl (4.60 mm)		Det: LC mwd1A, 254 nm		
Process Host:	CTX1674				
First Level Reviewer: zhangji		Date:	11-Nov-2021 12:24:19		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.041	5.041	0.000	91059	0.2503	0.2421	
4 DNX	1	5.847	5.847	0.000	70987	0.2503	0.2493	
6 MNX	1	7.367	7.367	0.000	75700	0.2918	0.2858	

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

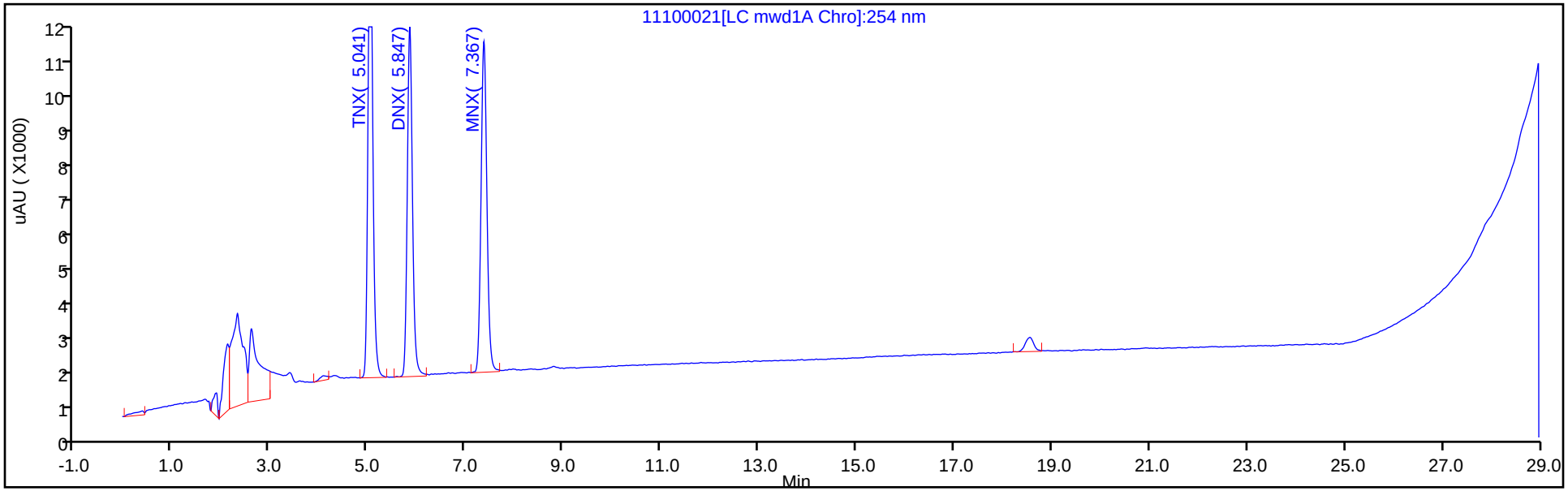
Report Date: 11-Nov-2021 19:12:33 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

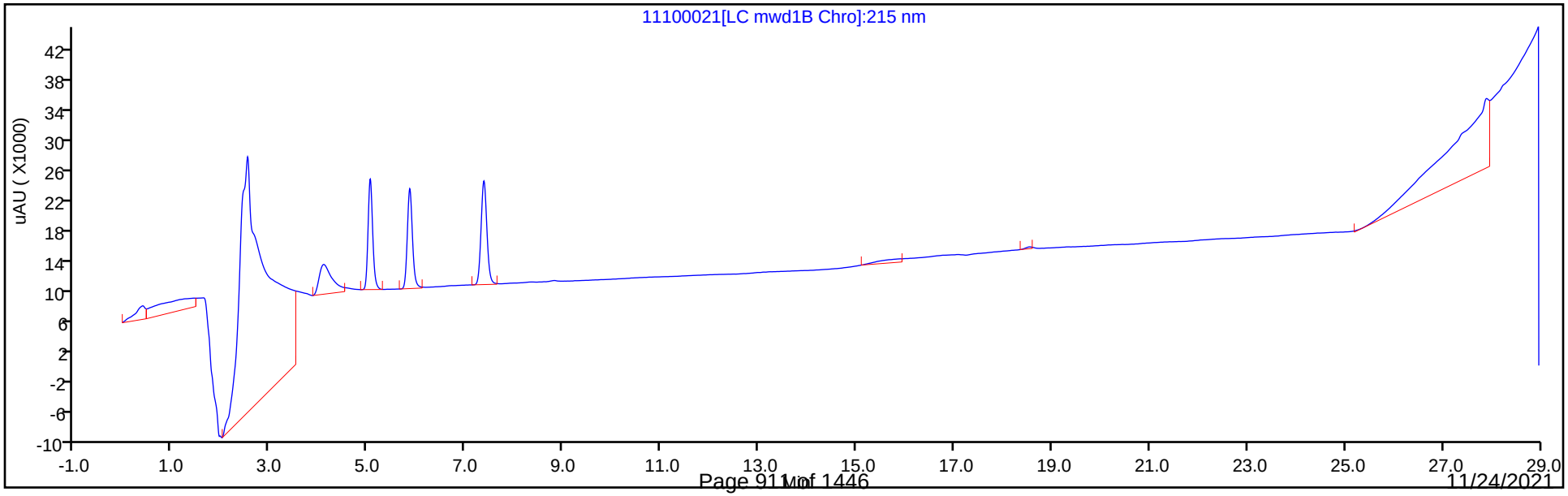
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100021.D

Injection Date:	10-Nov-2021 23:46:03	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	21
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556958/32 Calibration Date: 11/11/2021 06:10

Instrument ID: CHHPLC_X5 Calib Start Date: 05/01/2021 18:54

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/01/2021 23:35

Lab File ID: 11100032.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		168404		259	250	3.6	15.0
Picric acid	Ave	159537	160408		251	250	0.5	15.0
RDX	Ave	204270	205216		251	250	0.5	15.0
Nitrobenzene	Ave	374651	370697		248	251	-1.1	15.0
1,3-Dinitrobenzene	Lin2		609840		269	251	7.4	15.0
Nitroglycerin	Ave	128605	135556		2640	2500	5.4	15.0
2-Nitrotoluene	Ave	248967	237768		239	250	-4.5	15.0
4-Nitrotoluene	Ave	217187	212391		245	251	-2.2	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	290813		245	250	-2.0	15.0
3-Nitrotoluene	Ave	278393	268044		241	250	-3.7	15.0
2-Amino-4,6-dinitrotoluene	Lin2		413056		263	251	4.7	15.0
1,3,5-Trinitrobenzene	Lin2		452990		270	251	7.8	15.0
2,6-Dinitrotoluene	Lin2		279637		262	251	4.3	15.0
2,4-Dinitrotoluene	Ave	565713	567645		252	251	0.3	15.0
Tetryl	Lin2		297529		229	251	-8.7	15.0
2,4,6-Trinitrotoluene	Lin2		391382		260	251	3.6	15.0
PETN	Ave	137740	133923		2430	2500	-2.8	15.0
1,2-Dinitrobenzene	Ave	265659	267952		252	250	0.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556958/32 Calibration Date: 11/11/2021 06:10

Instrument ID: CHHPLC_X5 Calib Start Date: 05/01/2021 18:54

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/01/2021 23:35

Lab File ID: 11100032.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.66	6.50	6.80
Picric acid	7.87	7.72	8.02
RDX	8.81	8.65	8.95
Nitrobenzene	11.88	11.71	12.01
1,3-Dinitrobenzene	15.41	15.23	15.53
Nitroglycerin	15.77	15.58	15.88
2-Nitrotoluene	16.64	16.45	16.75
4-Nitrotoluene	16.93	16.74	17.04
4-Amino-2,6-dinitrotoluene	17.39	17.19	17.49
3-Nitrotoluene	17.89	17.71	18.01
2-Amino-4,6-dinitrotoluene	18.27	18.09	18.39
1,3,5-Trinitrobenzene	18.80	18.63	18.93
2,6-Dinitrotoluene	20.05	19.86	20.16
2,4-Dinitrotoluene	20.51	20.33	20.63
Tetryl	24.13	23.92	24.22
2,4,6-Trinitrotoluene	25.11	24.91	25.21
PETN	26.01	25.81	26.11
1,2-Dinitrobenzene	12.98	12.80	13.10

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100032.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 11-Nov-2021 06:10:56 ALS Bottle#: 7 Worklist Smp#: 32
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0106378-032
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub1

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 11-Nov-2021 19:12:38 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1674

First Level Reviewer: zhangji Date: 11-Nov-2021 19:05:12

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
	1 2,6-diamino-4-nitrotoluene	1	4.113	4.116	-0.003	102223	0.2500	0.2412	
	2 2,4-diamino-6-nitrotoluene	1	4.633	4.630	0.003	60505	0.2500	0.2479	
	5 HMX	1	6.660	6.650	0.010	42101	0.2500	0.2590	
	7 2,4,6-Trinitrophenol	1	7.866	7.870	-0.004	40102	0.2500	0.2514	
	8 RDX	1	8.813	8.803	0.010	51304	0.2500	0.2512	
	9 Nitrobenzene	1	11.879	11.856	0.023	93045	0.2510	0.2484	
$	10 1,2-Dinitrobenzene	1	12.979	12.949	0.030	66988	0.2500	0.2522	
	11 3,5-Dinitroaniline	1	14.853	14.823	0.030	110537	0.2500	0.2435	
	12 1,3-Dinitrobenzene	1	15.406	15.376	0.030	152765	0.2505	0.2689	
	13 Nitroglycerin	2	15.766	15.729	0.037	338891	2.50	2.64	
	14 o-Nitrotoluene	1	16.639	16.603	0.036	59442	0.2500	0.2388	
	16 p-Nitrotoluene	1	16.926	16.889	0.037	53204	0.2505	0.2450	
	17 4-Amino-2,6-dinitrotoluene	1	17.386	17.343	0.043	72776	0.2503	0.2453	
	18 m-Nitrotoluene	1	17.893	17.856	0.037	67078	0.2503	0.2409	
	19 2-Amino-4,6-dinitrotoluene	1	18.273	18.236	0.037	103677	0.2510	0.2627	
	20 1,3,5-Trinitrobenzene	1	18.799	18.776	0.023	113474	0.2505	0.2700	
	21 2,6-Dinitrotoluene	1	20.046	20.009	0.037	70189	0.2510	0.2618	
	22 2,4-Dinitrotoluene	1	20.513	20.476	0.037	142479	0.2510	0.2519	
	23 Tetryl	1	24.126	24.070	0.056	74531	0.2505	0.2287	
	24 2,4,6-Trinitrotoluene	1	25.113	25.063	0.050	98237	0.2510	0.2601	
	25 PETN	2	26.006	25.963	0.043	334807	2.50	2.43	

QC Flag Legend
Processing Flags

Reagents:

8330IntermStk_00069	Amount Added:	25.00	Units: uL
8330_ADDs_00029	Amount Added:	12.50	Units: uL

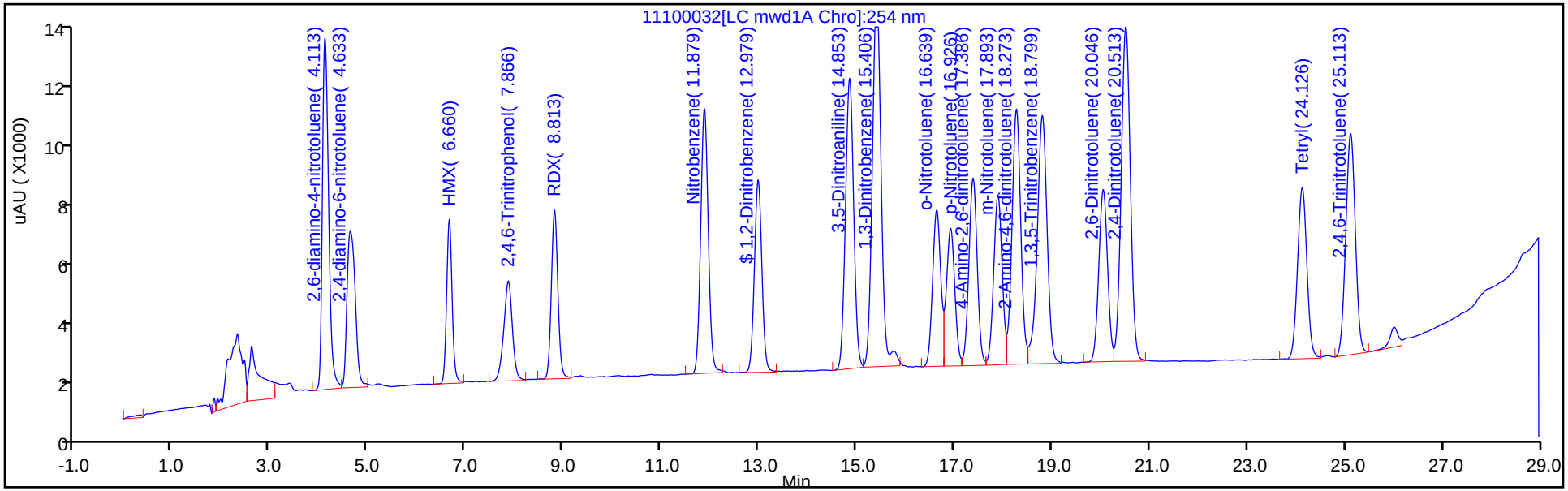
Report Date: 11-Nov-2021 19:12:38 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

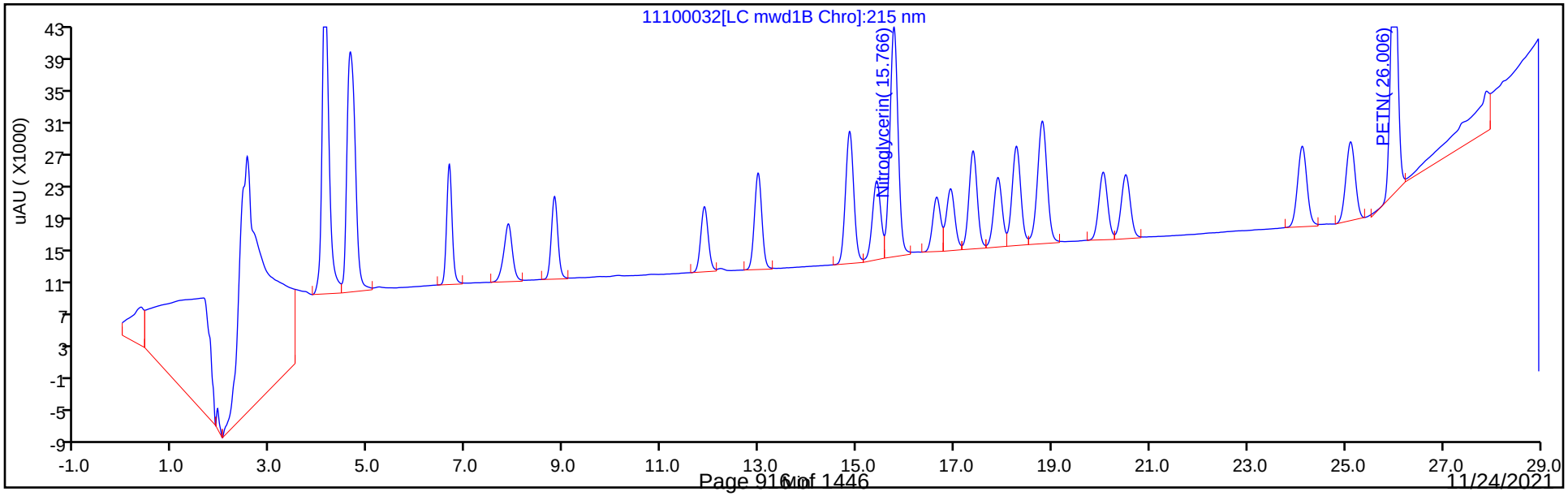
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100032.D

Injection Date:	11-Nov-2021 06:10:56	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	32
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556958/33 Calibration Date: 11/11/2021 06:45

Instrument ID: CHHPLC_X5 Calib Start Date: 05/02/2021 00:45

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/02/2021 04:51

Lab File ID: 11100033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	376144	362845		241	250	-3.5	15.0
DNX	Ave	284791	282885		249	250	-0.7	15.0
MNX	Ave	264843	259757		286	292	-1.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Lab Sample ID: CCV 280-556958/33 Calibration Date: 11/11/2021 06:45

Instrument ID: CHHPLC_X5 Calib Start Date: 05/02/2021 00:45

GC Column: Luna-phenylhex ID: 4.60(mm) Calib End Date: 05/02/2021 04:51

Lab File ID: 11100033.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.03	4.89	5.19
DNX	5.84	5.70	6.00
MNX	7.36	7.22	7.52

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100033.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 11-Nov-2021 06:45:55 ALS Bottle#: 8 Worklist Smp#: 33
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0106378-033
Operator ID: JZ Instrument ID: CHHPLC_X5
Sublist: chrom-8330_X5_Luna*sub2

Method: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\8330_X5_Luna.m
Limit Group: GCSV - 8330
Last Update: 11-Nov-2021 19:12:38 Calib Date: 02-May-2021 04:51:05
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

Column 1 : Luna-Phenyl hexyl (4.60 mm) Det: LC mwd1A, 254 nm
Process Host: CTX1674

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
3 TNX	1	5.029	5.041	-0.012	90802	0.2503	0.2414	
4 DNX	1	5.842	5.847	-0.005	70792	0.2503	0.2486	
6 MNX	1	7.355	7.367	-0.012	75784	0.2918	0.2861	

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

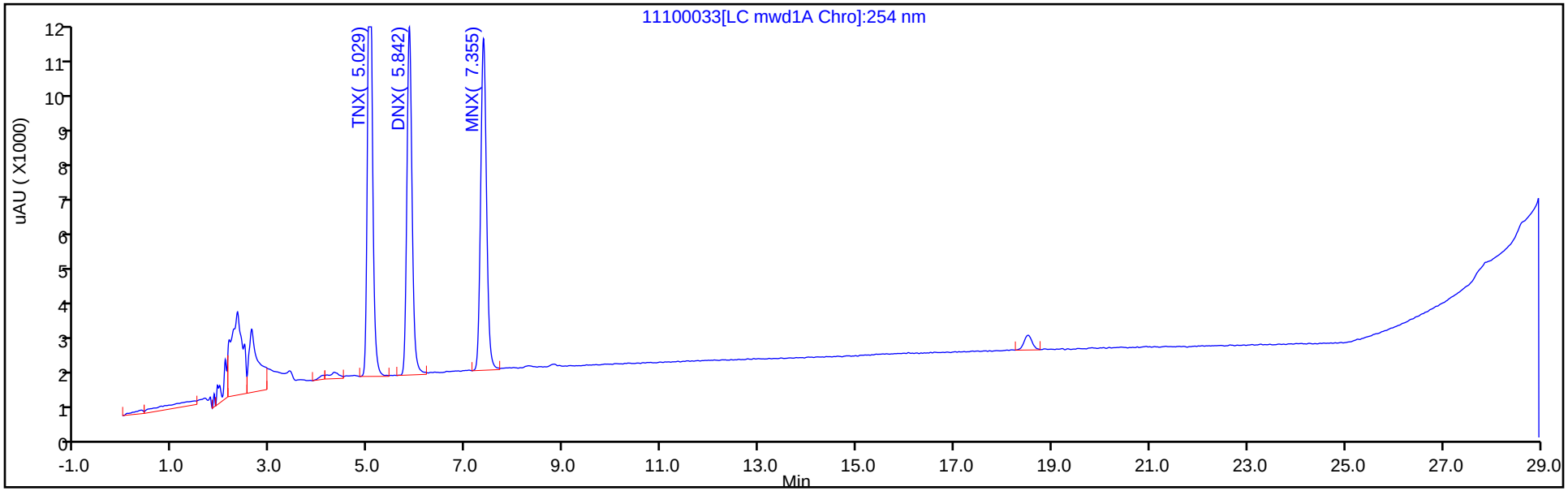
Report Date: 11-Nov-2021 19:12:38 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

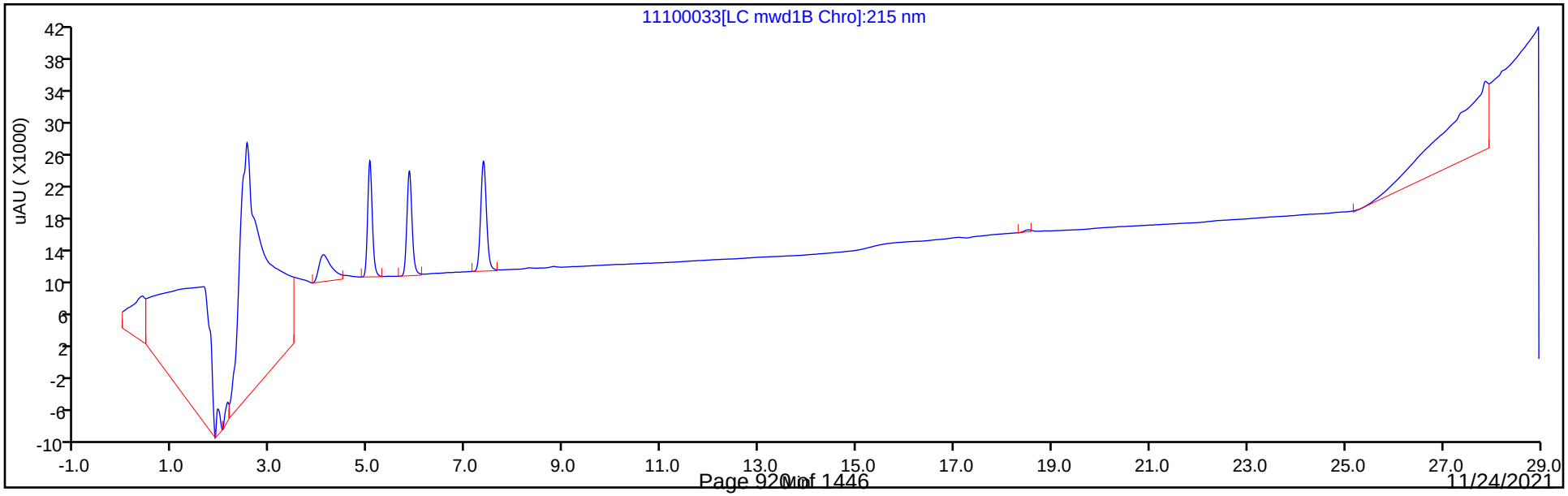
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100033.D

Injection Date:	11-Nov-2021 06:45:55	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	33
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-556591/1-A

Matrix: Water Lab File ID: 11090037.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 500(mL) Date Analyzed: 11/10/2021 02:04

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.: 556781 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	98		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090037.D
Lims ID: MB 280-556591/1-A
Client ID:
Sample Type: MB
Inject. Date: 10-Nov-2021 02:04:13 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-556591/1-
Misc. Info.: 280-0106333-037
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Nov-2021 12:59:02 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1646

First Level Reviewer: zhangji Date: 10-Nov-2021 12:43:03

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
	1 Triamine Trinitrobenzene	1		2.449				ND	
	2 2,6-diamino-4-nitrotoluene	1		6.471				ND	7
	3 TNX	1		6.476				ND	
	4 HMX	1		6.592				ND	
	5 2,4-diamino-6-nitrotoluene	1		6.651				ND	
	6 DNX	1		6.796				ND	
	7 MNX	1		7.223				ND	
	8 RDX	1		7.598				ND	
	9 2,4,6-Trinitrophenol	1		7.985				ND	
$	10 1,2-Dinitrobenzene	1	8.566	8.572	-0.006	25243	0.2000	0.1969	
	11 1,3,5-Trinitrobenzene	1		8.685				ND	
	12 1,3-Dinitrobenzene	1		9.331				ND	
	13 Nitrobenzene	1		9.725				ND	
	14 3,5-Dinitroaniline	1		9.937				ND	
	15 Tetryl	1		10.065				ND	
	16 Nitroglycerin	2		10.518				ND	
	17 2,4,6-Trinitrotoluene	1		10.971				ND	
	18 4-Amino-2,6-dinitrotoluene	1		11.185				ND	
	19 2-Amino-4,6-dinitrotoluene	1		11.438				ND	
	20 2,6-Dinitrotoluene	1		11.605				ND	
	21 2,4-Dinitrotoluene	1		11.771				ND	
	22 o-Nitrotoluene	1		12.645				ND	
	23 p-Nitrotoluene	1		13.078				ND	
	24 m-Nitrotoluene	1		13.658				ND	
	25 PETN	2		14.758				ND	
	26 Ammonium Picrate	1		0.000				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

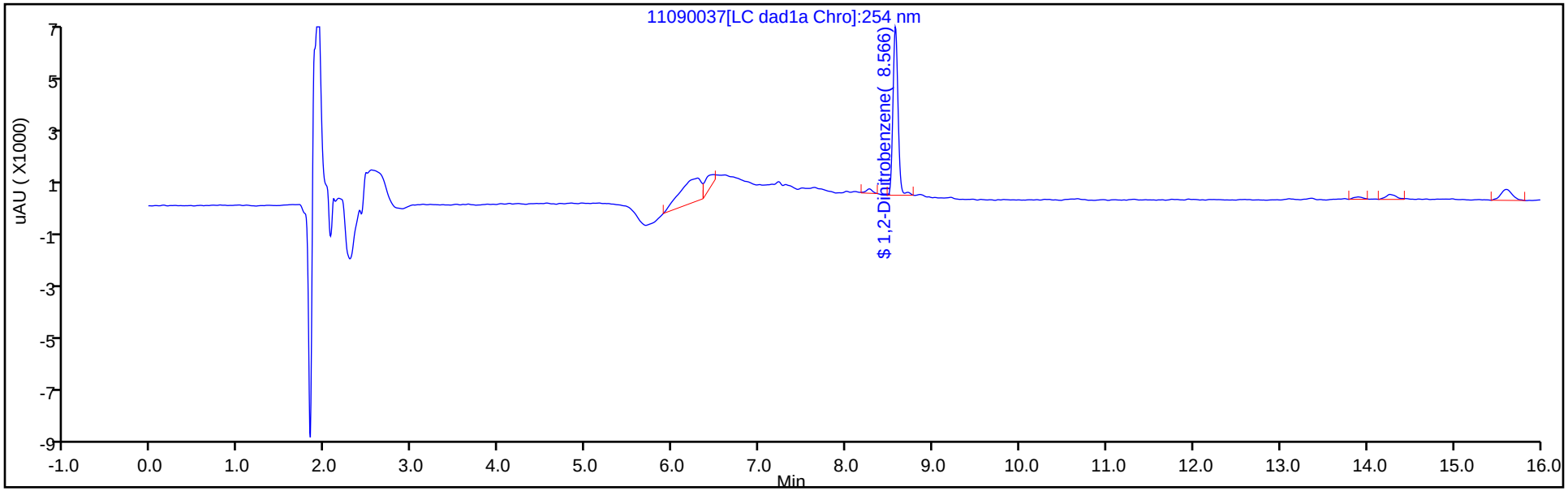
Report Date: 10-Nov-2021 12:59:08 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

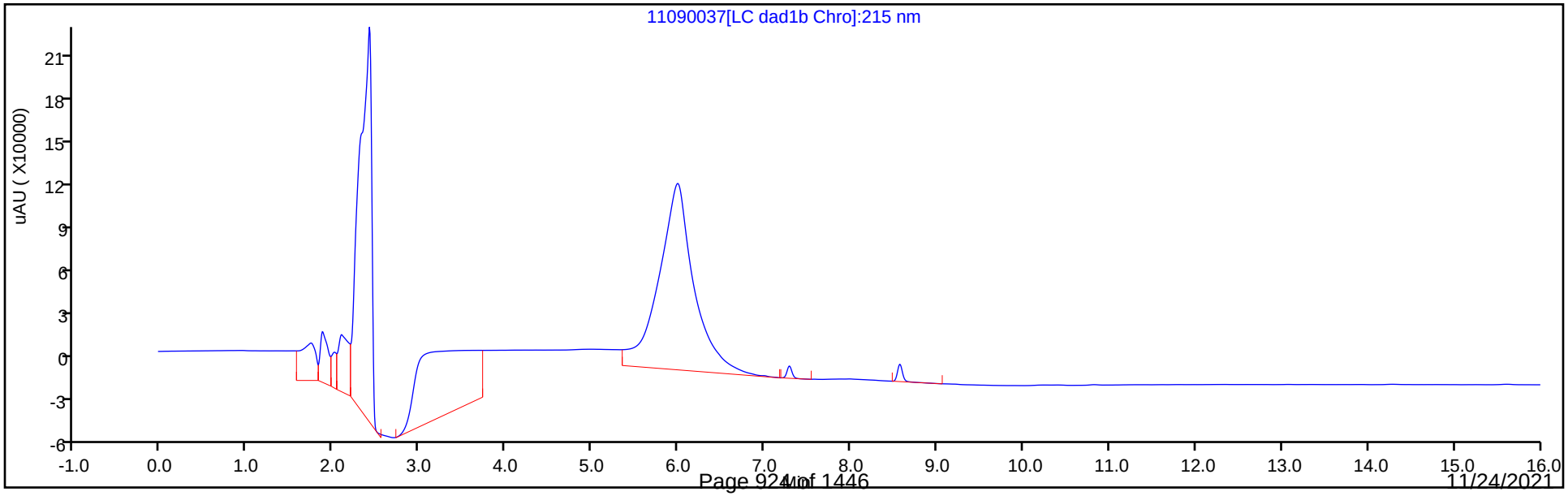
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090037.d

Injection Date:	10-Nov-2021 02:04:13	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	MB 280-556591/1-A			Worklist Smp#:	37
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090037.D				
Lims ID:	MB 280-556591/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	10-Nov-2021 02:04:13	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-556591/1-				
Misc. Info.:	280-0106333-037				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:59:02	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:43:03		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1969	98.44

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-556591/2-A

Matrix: Water Lab File ID: 11090038.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 500(mL) Date Analyzed: 11/10/2021 02:27

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.: 556781 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.13		0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	2.06		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	2.10		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	2.01		0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	1.99		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.92		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.56		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.55	M	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.87		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.59		0.41	0.40	0.10
2691-41-0	HMX	2.09		0.21	0.20	0.088
98-95-3	Nitrobenzene	1.78		0.21	0.20	0.091
121-82-4	RDX	1.99		0.21	0.20	0.052
479-45-8	Tetryl	2.03		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090038.D
Lims ID: LCS 280-556591/2-A
Client ID:
Sample Type: LCS
Inject. Date: 10-Nov-2021 02:27:05 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-556591/2
Misc. Info.: 280-0106333-038
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Nov-2021 12:59:02 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1646

First Level Reviewer: zhangji Date: 10-Nov-2021 12:43:12

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.595	6.592	0.003	17662	0.2000	0.2092	
8 RDX	1	7.602	7.598	0.004	21178	0.2000	0.1993	
9 2,4,6-Trinitrophenol	1	7.982	7.985	-0.003	17658	0.2000	0.2135	
$ 10 1,2-Dinitrobenzene	1	8.575	8.572	0.003	24327	0.2000	0.1897	
11 1,3,5-Trinitrobenzene	1	8.688	8.685	0.003	46958	0.2000	0.2131	
12 1,3-Dinitrobenzene	1	9.328	9.331	-0.003	61132	0.2000	0.2063	
13 Nitrobenzene	1	9.721	9.725	-0.004	34736	0.2000	0.1779	
15 Tetryl	1	10.061	10.065	-0.004	34948	0.2000	0.2027	
16 Nitroglycerin	2	10.521	10.518	0.003	135481	2.00	2.05	
17 2,4,6-Trinitrotoluene	1	10.975	10.971	0.004	43222	0.2000	0.2098	
18 4-Amino-2,6-dinitrotoluene	1	11.181	11.185	-0.004	28540	0.2000	0.1868	
19 2-Amino-4,6-dinitrotoluene	1	11.428	11.438	-0.010	39828	0.2000	0.1925	
20 2,6-Dinitrotoluene	1	11.601	11.605	-0.004	28432	0.2000	0.1987	
21 2,4-Dinitrotoluene	1	11.768	11.771	-0.003	57814	0.2000	0.2014	
22 o-Nitrotoluene	1	12.641	12.645	-0.004	19986	0.2000	0.1557	
23 p-Nitrotoluene	1	13.075	13.078	-0.003	17739	0.2000	0.1585	
24 m-Nitrotoluene	1	13.661	13.658	0.003	22084	0.2000	0.1553	M
25 PETN	2	14.755	14.758	-0.003	155444	2.00	2.08	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

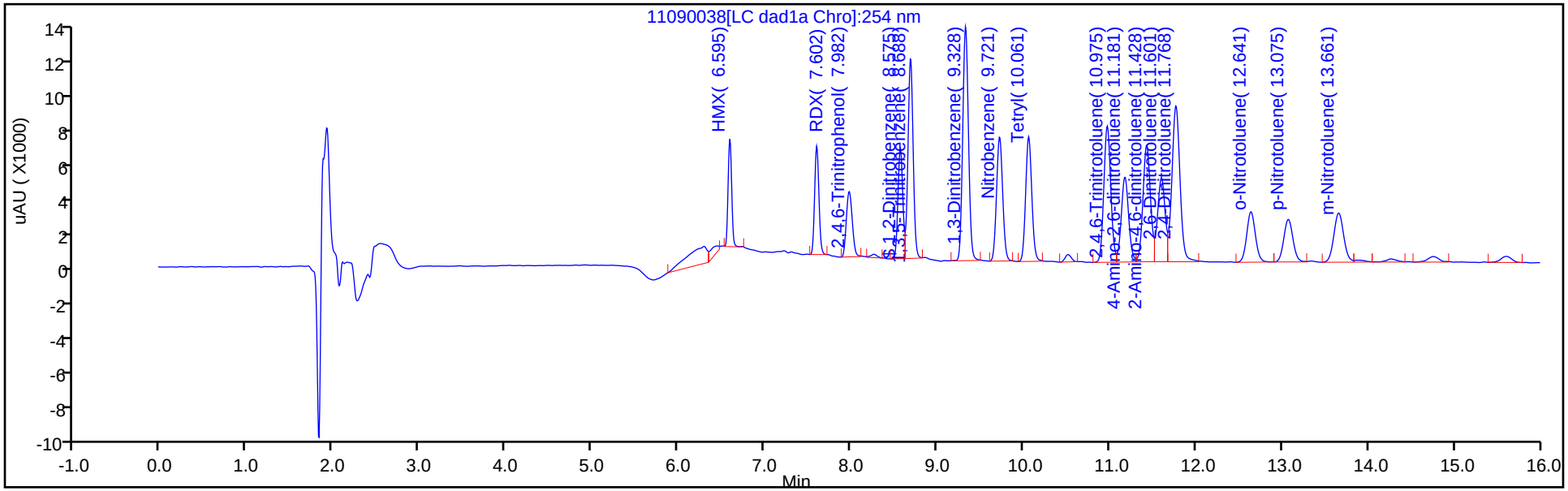
Report Date: 10-Nov-2021 12:59:07 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

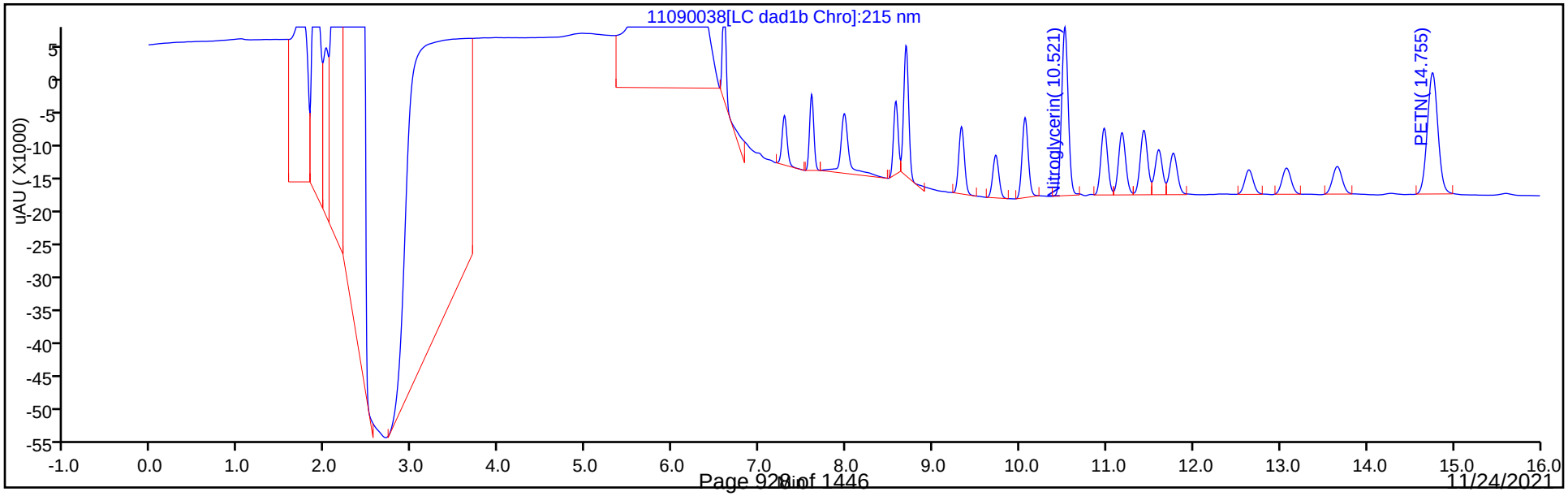
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090038.d

Injection Date:	10-Nov-2021 02:27:05	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-556591/2-A			Worklist Smp#:	38
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090038.D				
Lims ID:	LCS 280-556591/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	10-Nov-2021 02:27:05	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-556591/2				
Misc. Info.:	280-0106333-038				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:59:02	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:43:12		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1897	94.87

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

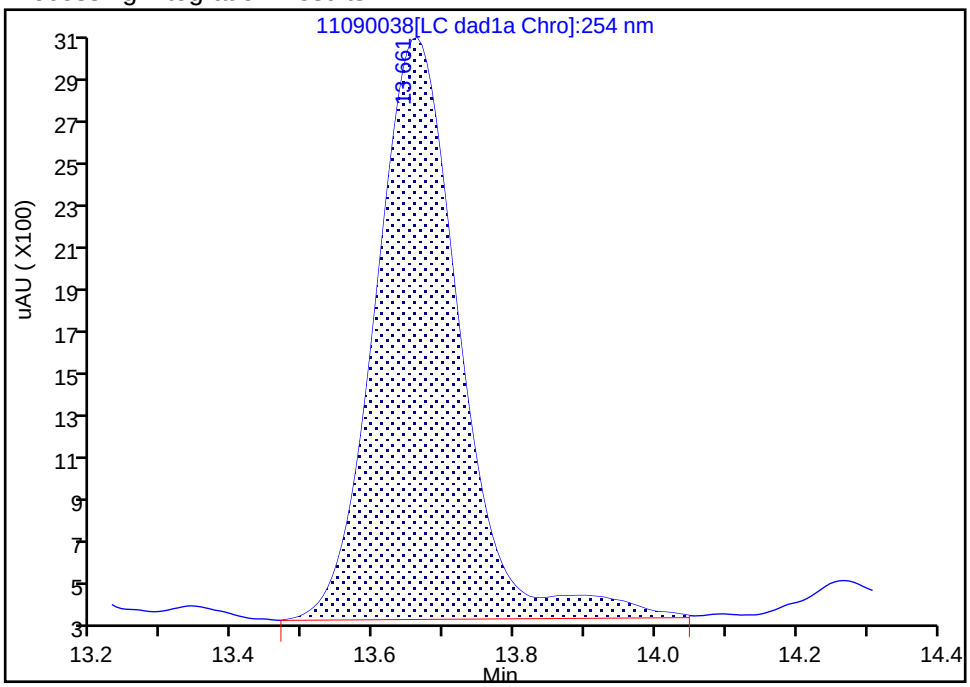
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090038.d				
Injection Date:	10-Nov-2021 02:27:05	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-556591/2-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

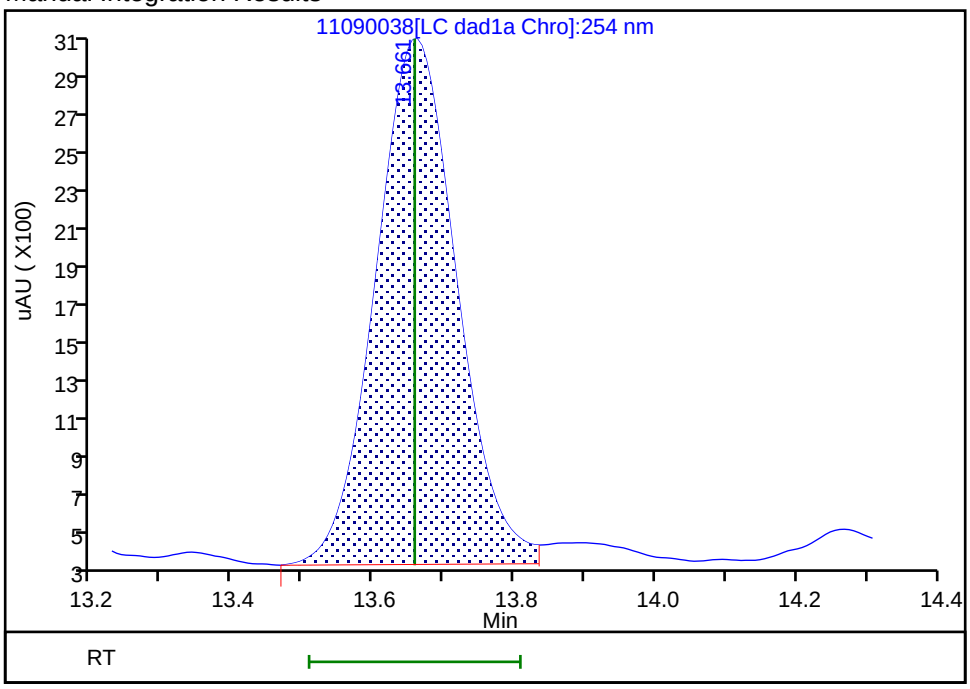
Processing Integration Results

RT: 13.66
Area: 23022
Amount: 0.161846
Amount Units: ug/mL



Manual Integration Results

RT: 13.66
Area: 22084
Amount: 0.155252
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:43:11

Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-556591/3-A

Matrix: Water Lab File ID: 11090039.D

Analysis Method: 8330A Date Collected:

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 500(mL) Date Analyzed: 11/10/2021 02:50

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.: 556781 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.31	M	2.0	0.40	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	99		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090039.D				
Lims ID:	LCS 280-556591/3-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	10-Nov-2021 02:50:02	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-556591/3				
Misc. Info.:	280-0106333-039				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:59:02	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:43:45		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.479	6.476	0.003	36546	0.2002	0.1967	M
6 DNX	1	6.799	6.796	0.003	28172	0.2002	0.1982	M
7 MNX	1	7.226	7.223	0.003	30050	0.2334	0.2306	M
$ 10 1,2-Dinitrobenzene	1	8.573	8.572	0.001	25428	0.2000	0.1983	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

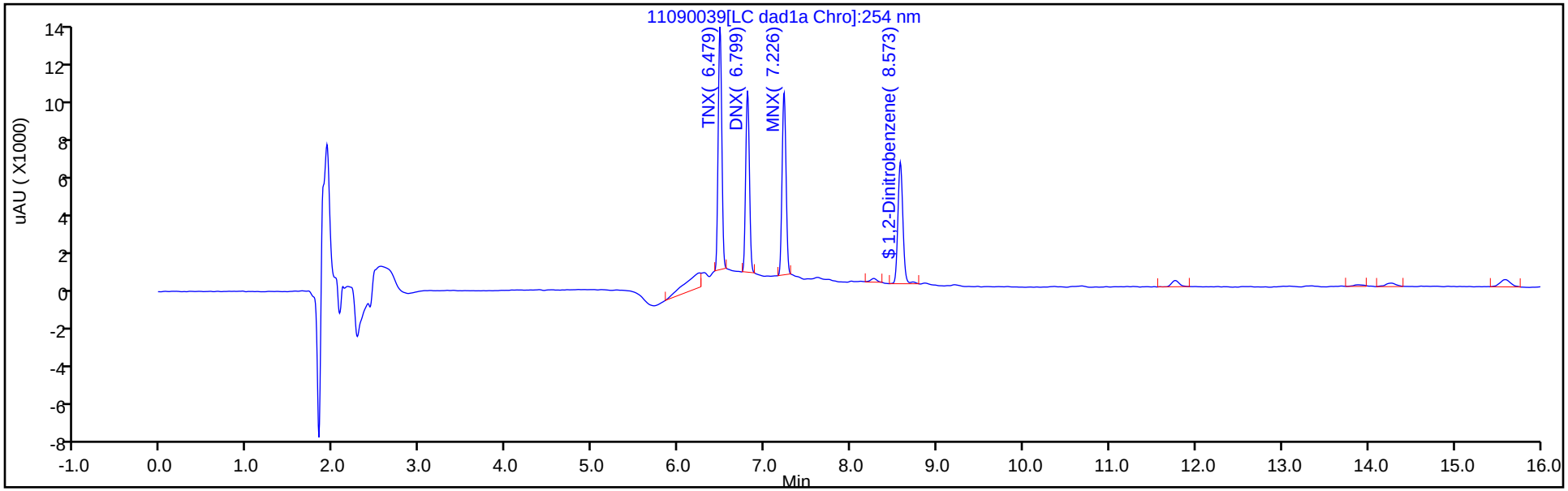
Report Date: 10-Nov-2021 12:59:07 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

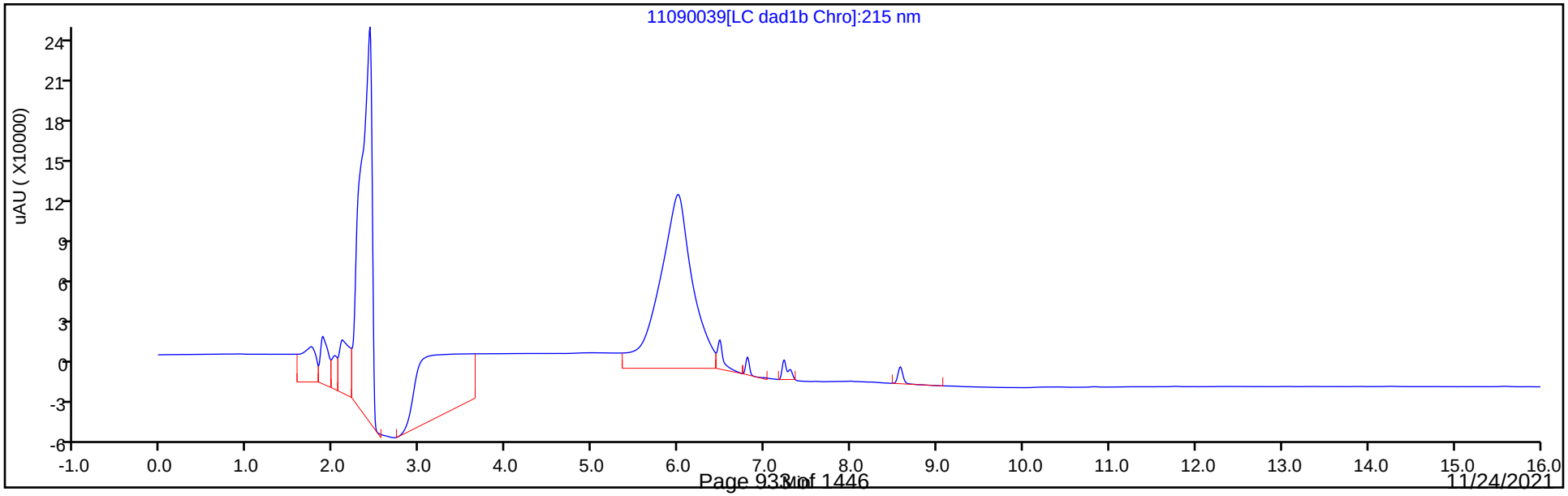
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090039.d

Injection Date:	10-Nov-2021 02:50:02	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	LCS 280-556591/3-A			Worklist Smp#:	39
Client ID:					
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090039.D				
Lims ID:	LCS 280-556591/3-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	10-Nov-2021 02:50:02	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-556591/3				
Misc. Info.:	280-0106333-039				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:59:02	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:43:45		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1983	99.16

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

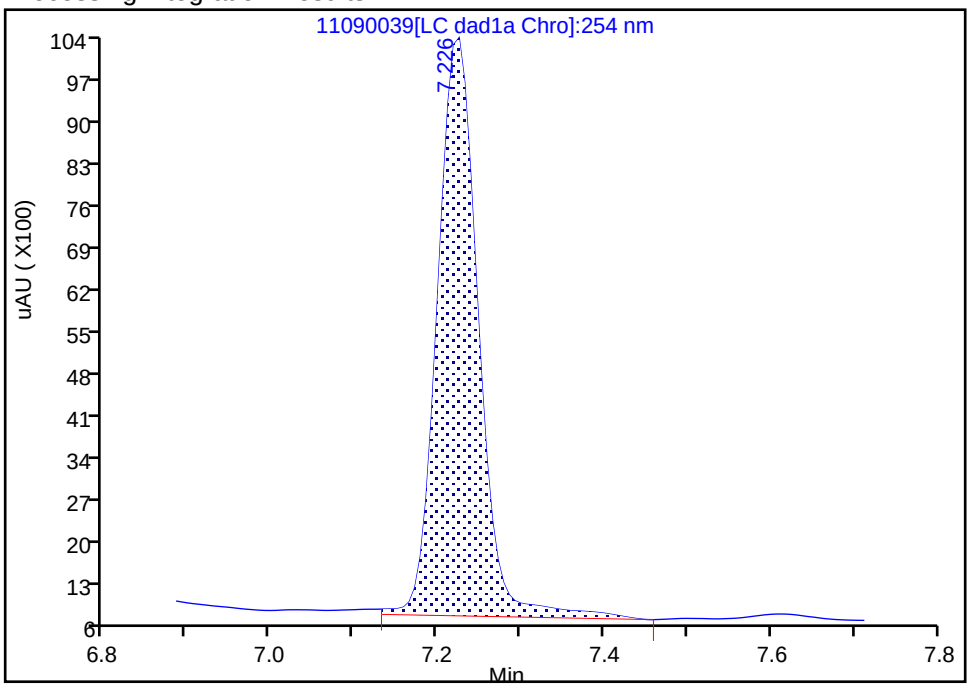
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090039.d				
Injection Date:	10-Nov-2021 02:50:02	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-556591/3-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

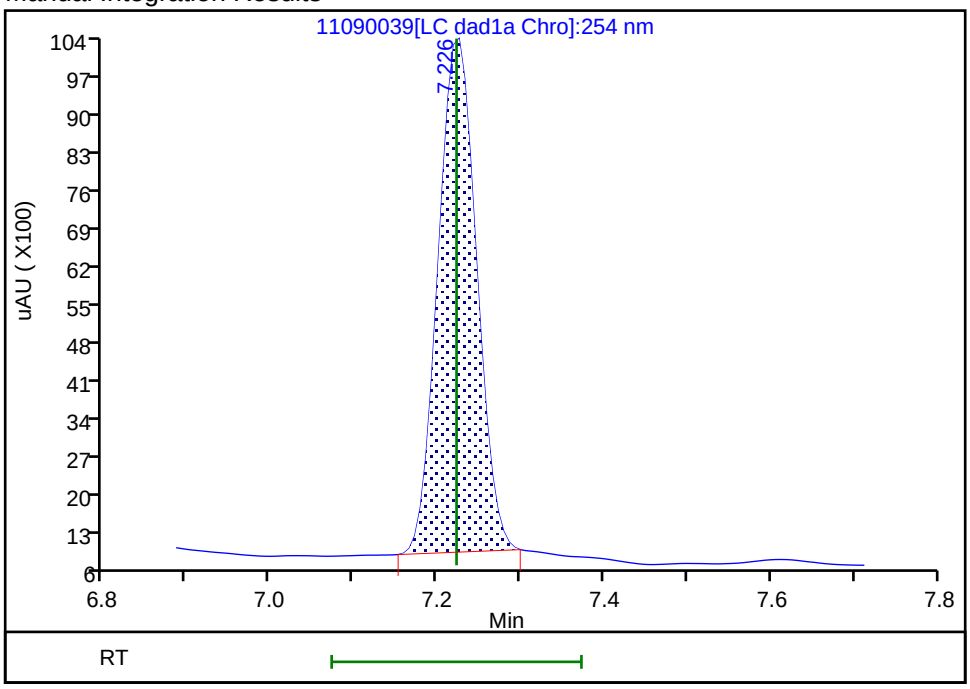
Processing Integration Results

RT: 7.23
Area: 32645
Amount: 0.250460
Amount Units: ug/mL



Manual Integration Results

RT: 7.23
Area: 30050
Amount: 0.230550
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:43:44

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: PZ019-7 MS Lab Sample ID: 280-155138-10 MS

Matrix: Water Lab File ID: 11090052.D

Analysis Method: 8330A Date Collected: 11/03/2021 12:55

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 497.4(mL) Date Analyzed: 11/10/2021 07:48

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.: 556781 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.10	M	0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	2.05	M	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	2.09		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	2.01		0.10	0.080	0.028
606-20-2	2,6-Dinitrotoluene	2.05		0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.94		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.74		0.21	0.20	0.086
99-08-1	3-Nitrotoluene	1.71	M	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.89		0.15	0.12	0.058
99-99-0	4-Nitrotoluene	1.73		0.41	0.40	0.10
2691-41-0	HMX	1.96	M	0.21	0.20	0.088
98-95-3	Nitrobenzene	1.92	M	0.21	0.20	0.091
121-82-4	RDX	1.89	M	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	96	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090052.D
Lims ID: 280-155138-B-10-A MS
Client ID: PZ019-7
Sample Type: MS
Inject. Date: 10-Nov-2021 07:48:15 ALS Bottle#: 52 Worklist Smp#: 52
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155138-B-10-
Misc. Info.: 280-0106333-052
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Nov-2021 12:58:55 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1646

First Level Reviewer: zhangji Date: 10-Nov-2021 12:50:56

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.590	6.592	-0.002	16447	0.2000	0.1948	M
8 RDX	1	7.597	7.598	-0.001	19978	0.2000	0.1880	M
9 2,4,6-Trinitrophenol	1	7.957	7.985	-0.028	16897	0.2000	0.2043	M
$ 10 1,2-Dinitrobenzene	1	8.563	8.572	-0.009	24666	0.2000	0.1924	M
11 1,3,5-Trinitrobenzene	1	8.683	8.685	-0.002	45980	0.2000	0.2087	M
12 1,3-Dinitrobenzene	1	9.316	9.331	-0.015	60397	0.2000	0.2038	M
13 Nitrobenzene	1	9.710	9.725	-0.015	37211	0.2000	0.1905	M
15 Tetryl	1	10.043	10.065	-0.022	37265	0.2000	0.2161	
16 Nitroglycerin	2	10.503	10.518	-0.015	129779	2.00	1.96	
17 2,4,6-Trinitrotoluene	1	10.956	10.971	-0.015	42857	0.2000	0.2080	
18 4-Amino-2,6-dinitrotoluene	1	11.156	11.185	-0.029	28773	0.2000	0.1883	
19 2-Amino-4,6-dinitrotoluene	1	11.410	11.438	-0.028	39885	0.2000	0.1927	
20 2,6-Dinitrotoluene	1	11.583	11.605	-0.022	29229	0.2000	0.2043	
21 2,4-Dinitrotoluene	1	11.750	11.771	-0.021	57326	0.2000	0.1997	
22 o-Nitrotoluene	1	12.616	12.645	-0.029	22220	0.2000	0.1731	
23 p-Nitrotoluene	1	13.050	13.078	-0.028	19301	0.2000	0.1725	
24 m-Nitrotoluene	1	13.630	13.658	-0.028	24191	0.2000	0.1701	M
25 PETN	2	14.723	14.758	-0.035	153728	2.00	2.06	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

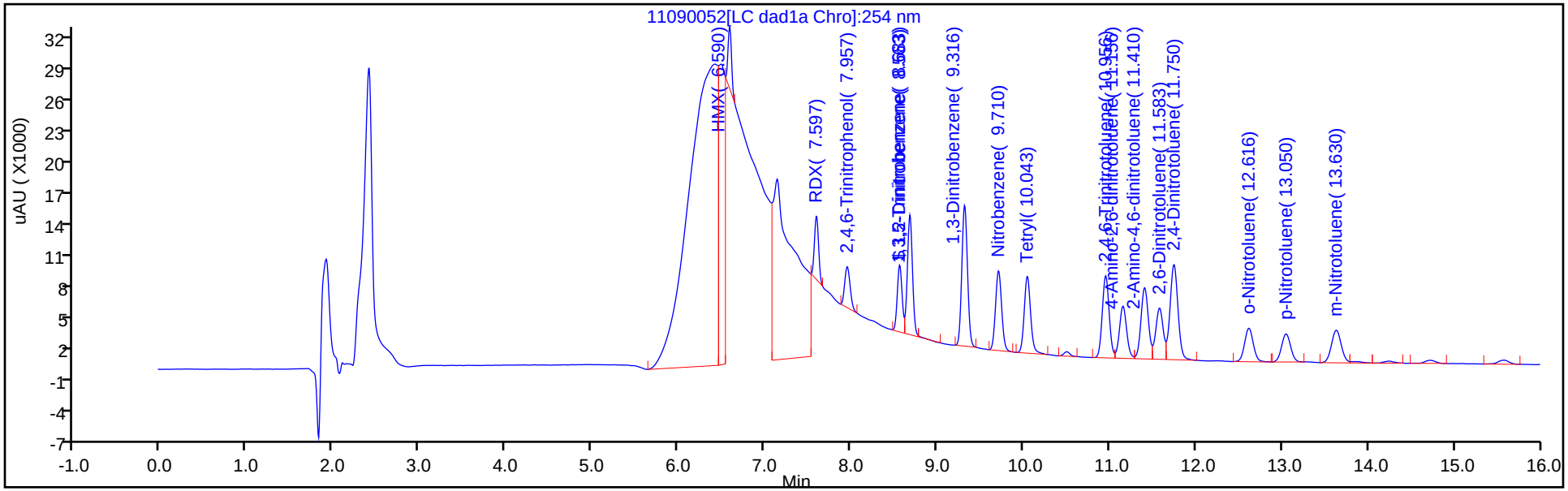
Report Date: 10-Nov-2021 12:58:59 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

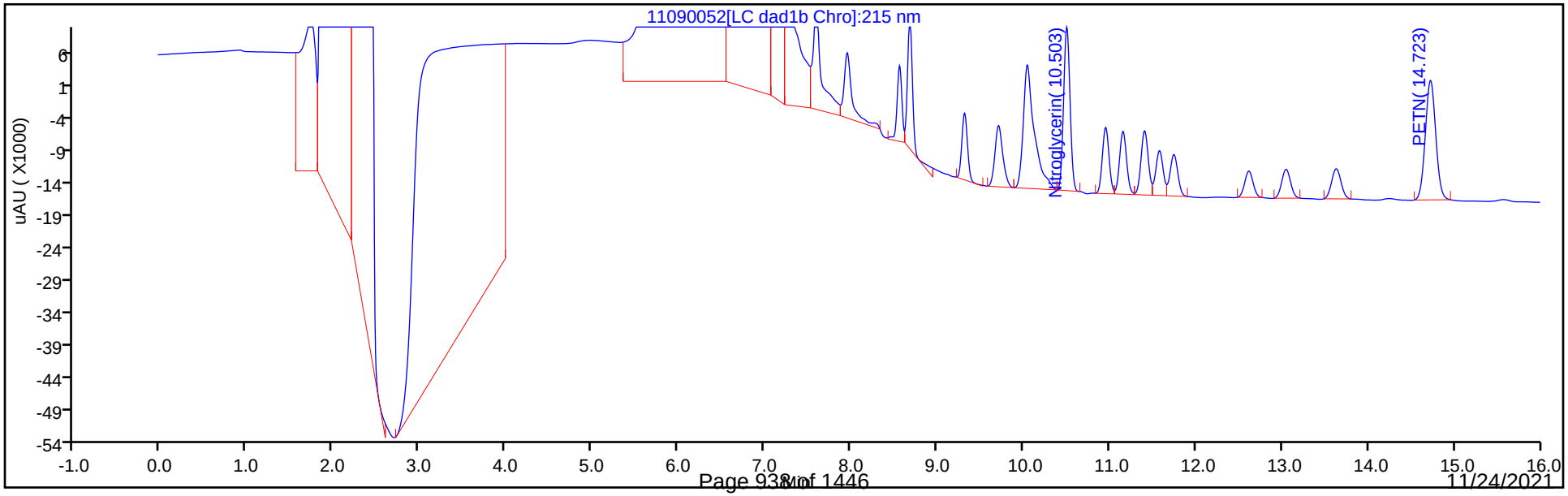
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090052.d

Injection Date:	10-Nov-2021 07:48:15	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155138-B-10-A MS			Worklist Smp#:	52
Client ID:	PZ019-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	52
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090052.D				
Lims ID:	280-155138-B-10-A MS				
Client ID:	PZ019-7				
Sample Type:	MS				
Inject. Date:	10-Nov-2021 07:48:15	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-B-10-				
Misc. Info.:	280-0106333-052				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:58:55	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:50:56		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1924	96.19

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

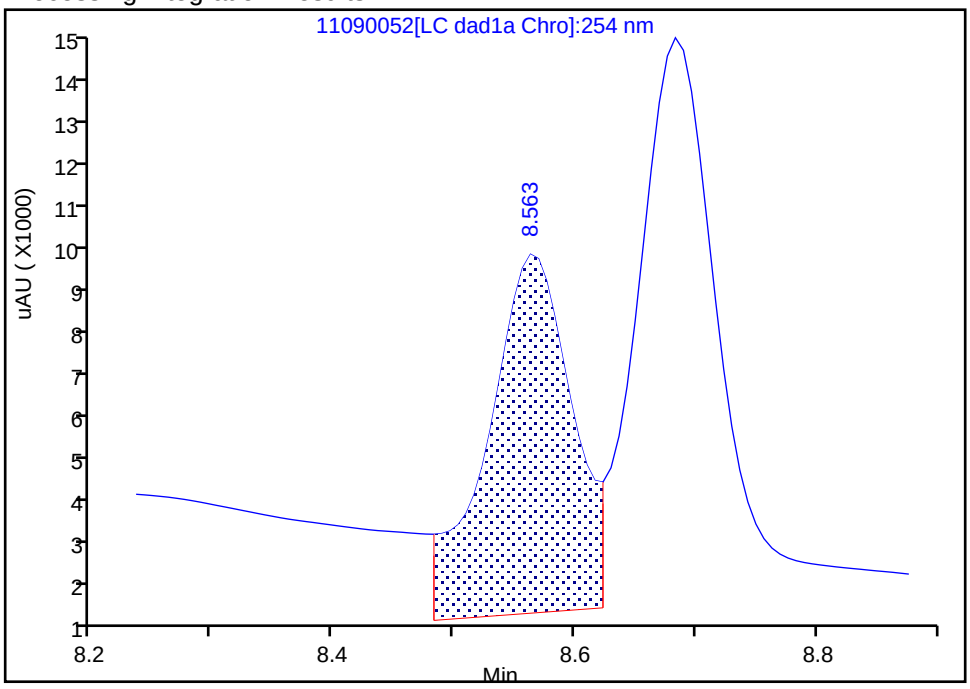
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090052.d				
Injection Date:	10-Nov-2021 07:48:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-B-10-A MS				
Client ID:	PZ019-7				
Operator ID:	JZ	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

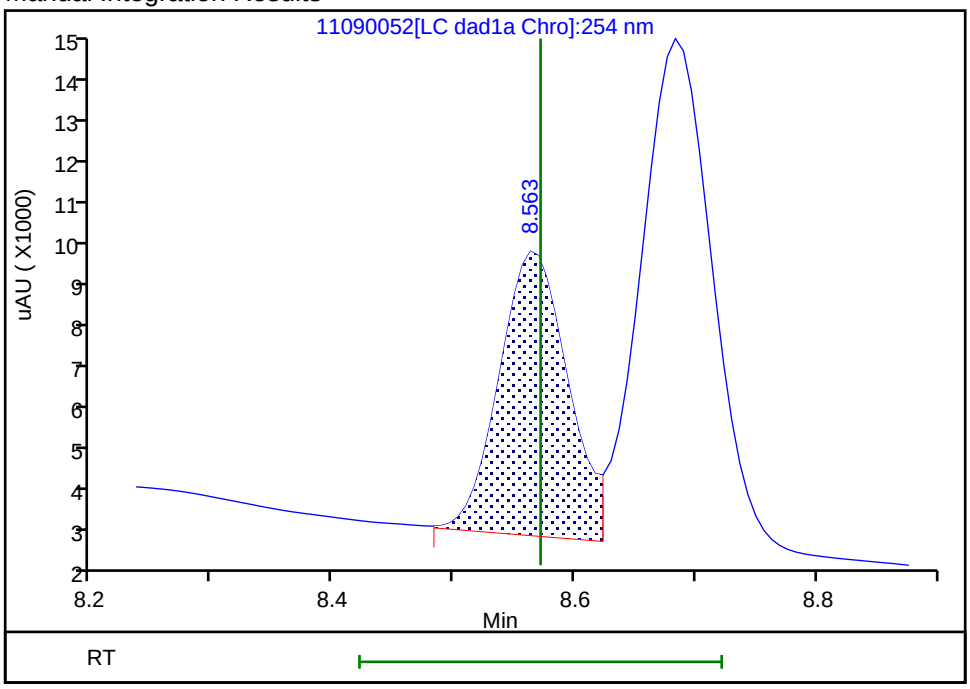
Processing Integration Results

RT: 8.56
Area: 37564
Amount: 0.292972
Amount Units: ug/mL



Manual Integration Results

RT: 8.56
Area: 24666
Amount: 0.192377
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:50:26
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

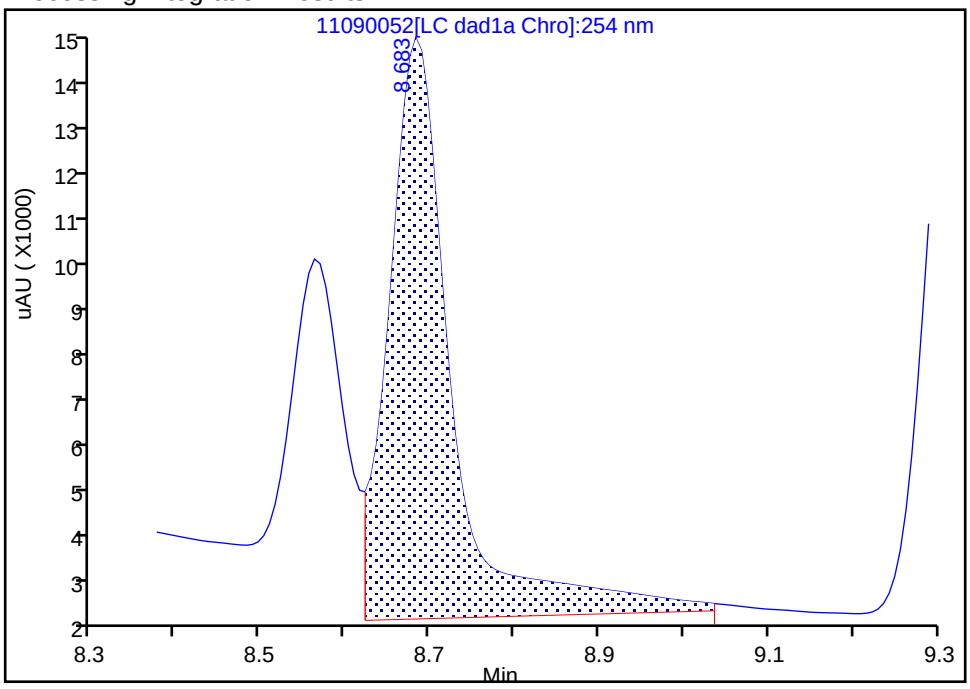
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090052.d				
Injection Date:	10-Nov-2021 07:48:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-B-10-A MS				
Client ID:	PZ019-7				
Operator ID:	JZ	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

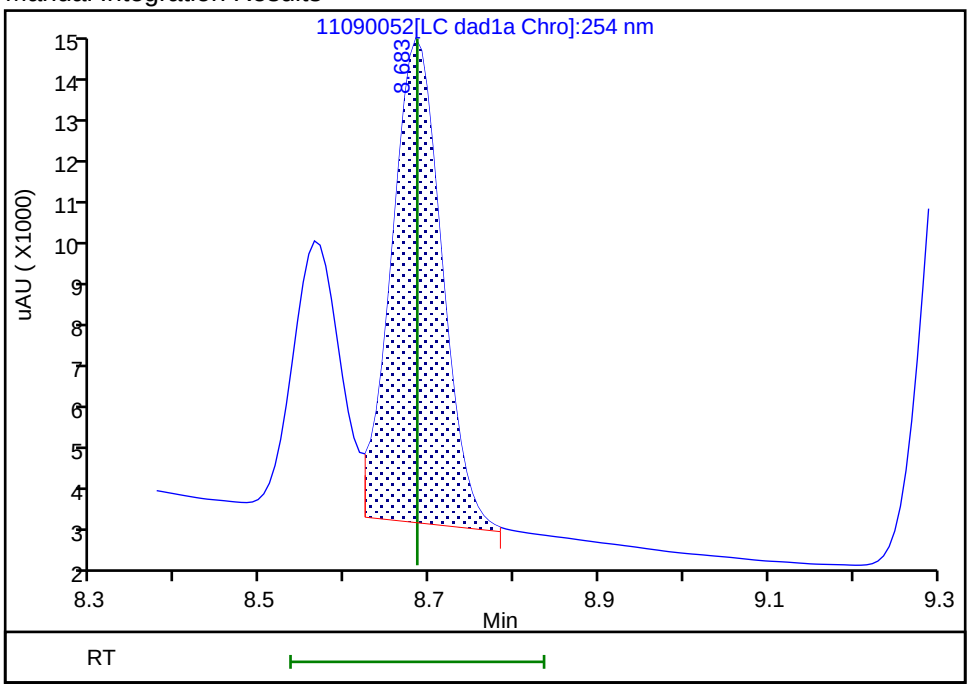
Processing Integration Results

RT: 8.68
Area: 63741
Amount: 0.289314
Amount Units: ug/mL



Manual Integration Results

RT: 8.68
Area: 45980
Amount: 0.208699
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:50:29
Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

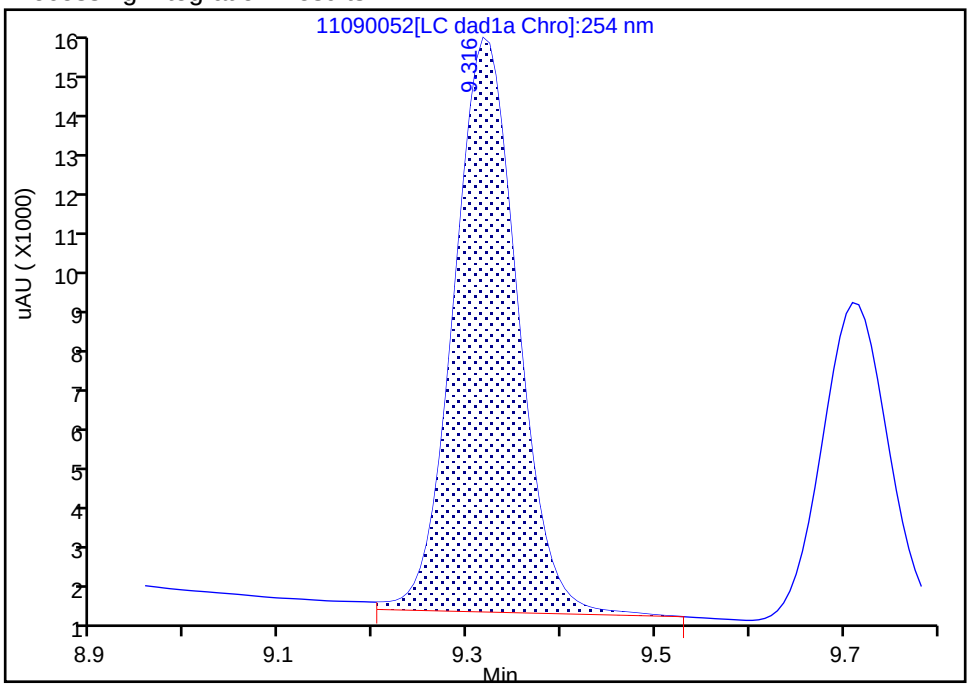
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090052.d				
Injection Date:	10-Nov-2021 07:48:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-B-10-A MS				
Client ID:	PZ019-7				
Operator ID:	JZ	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

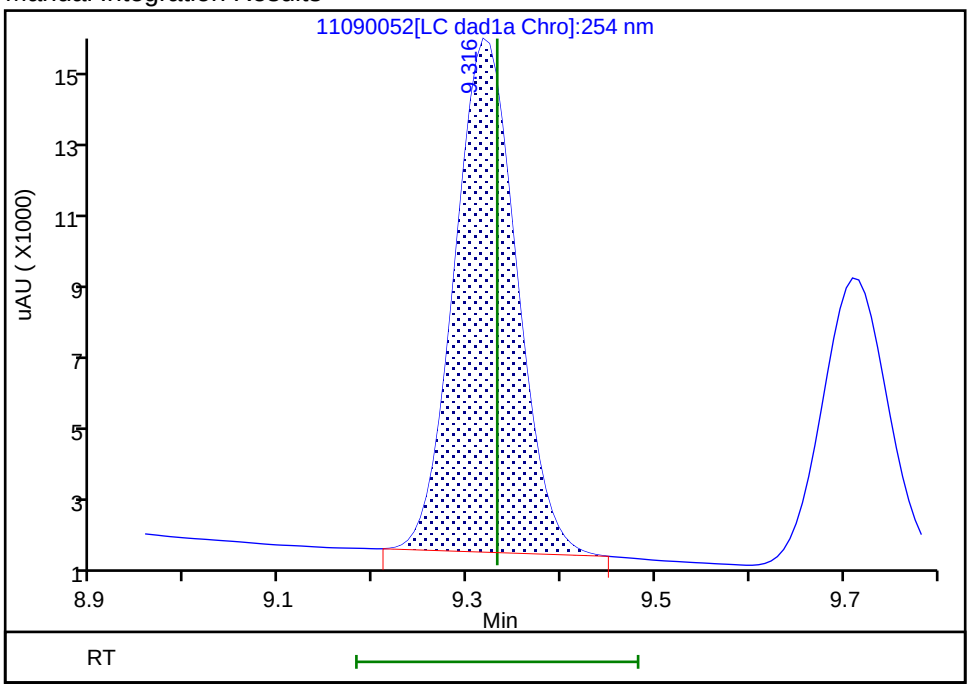
Processing Integration Results

RT: 9.32
Area: 62662
Amount: 0.211461
Amount Units: ug/mL



Manual Integration Results

RT: 9.32
Area: 60397
Amount: 0.203817
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:50:36

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

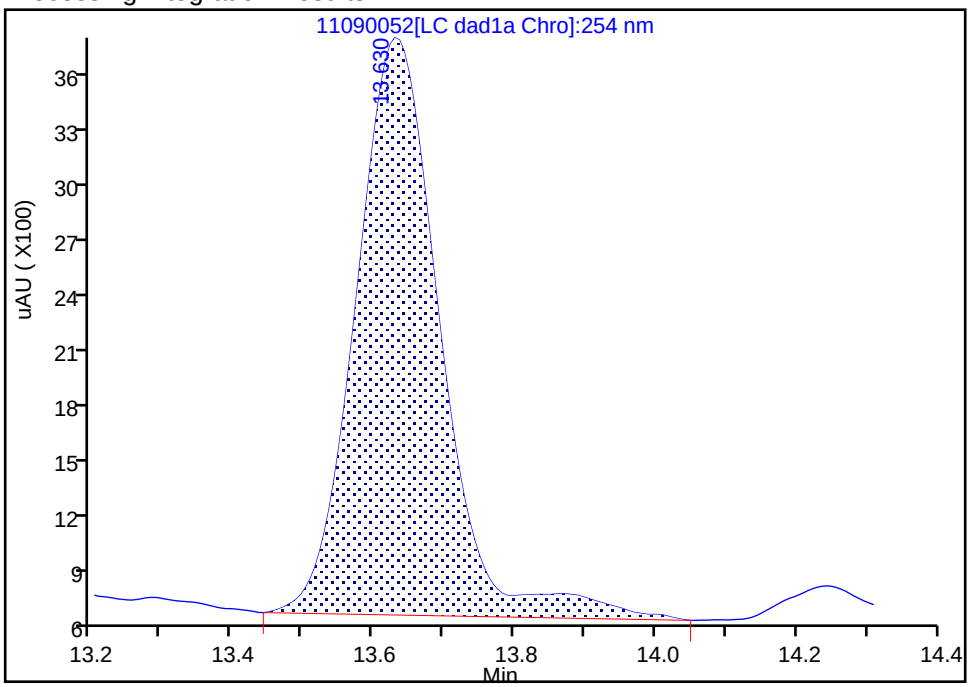
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090052.d				
Injection Date:	10-Nov-2021 07:48:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-B-10-A MS				
Client ID:	PZ019-7				
Operator ID:	JZ	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

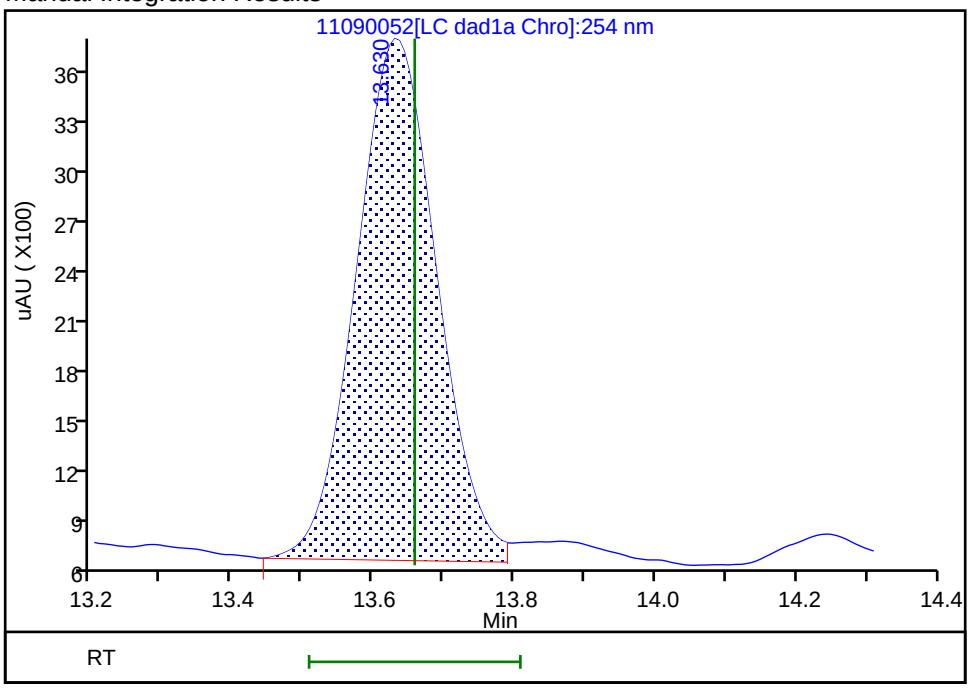
Processing Integration Results

RT: 13.63
Area: 25397
Amount: 0.178542
Amount Units: ug/mL



Manual Integration Results

RT: 13.63
Area: 24191
Amount: 0.170064
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:50:55

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

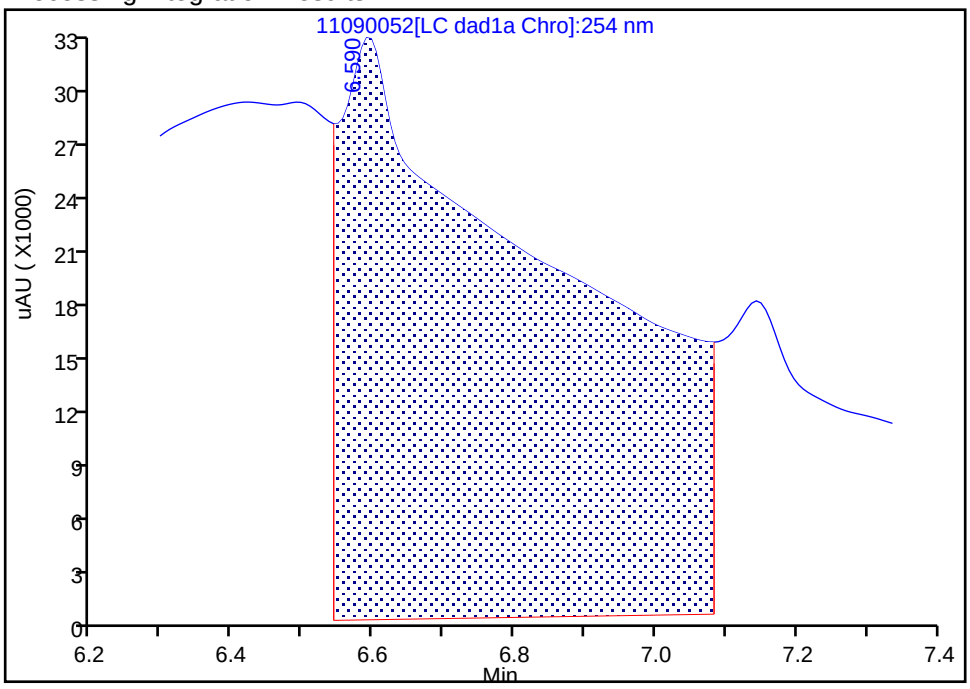
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090052.d				
Injection Date:	10-Nov-2021 07:48:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-B-10-A MS				
Client ID:	PZ019-7				
Operator ID:	JZ	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

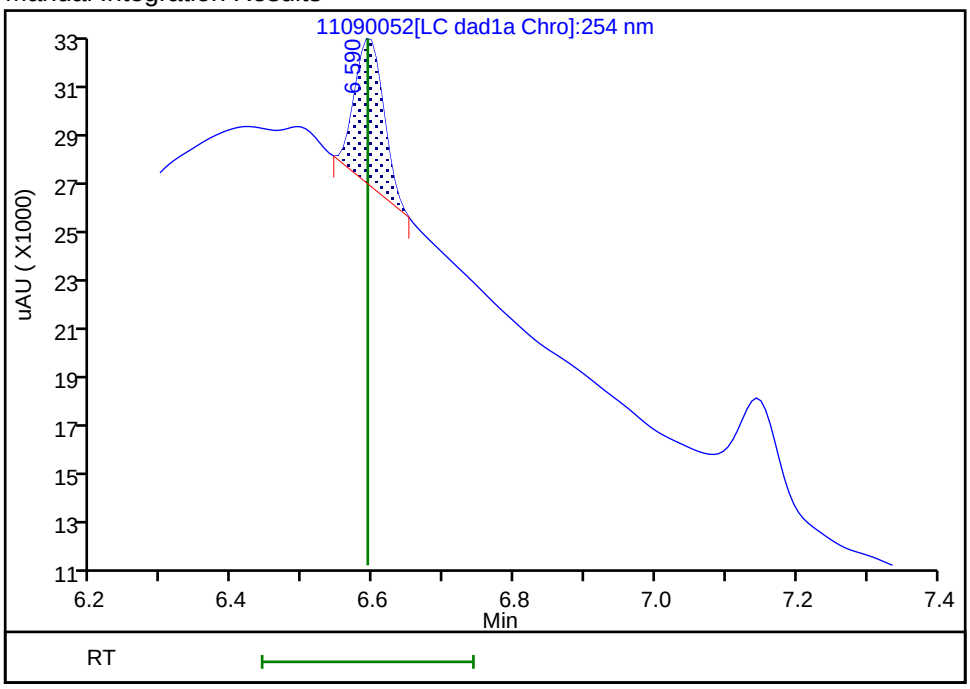
Processing Integration Results

RT: 6.59
Area: 670575
Amount: 7.943184
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 16447
Amount: 0.194820
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:50:09
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

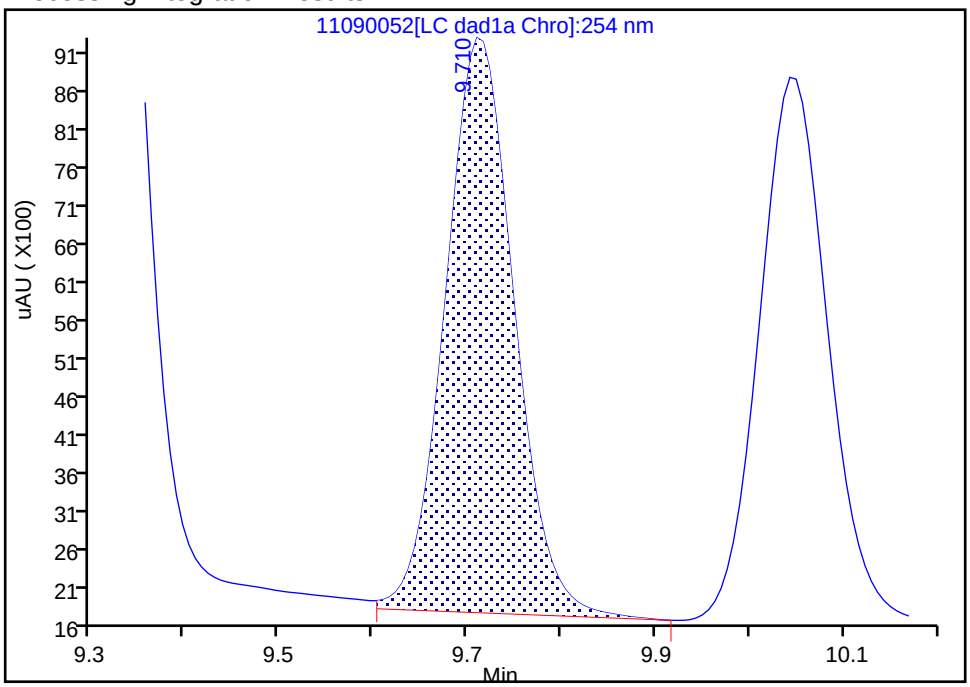
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090052.d				
Injection Date:	10-Nov-2021 07:48:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-B-10-A MS				
Client ID:	PZ019-7				
Operator ID:	JZ	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

13 Nitrobenzene, CAS: 98-95-3

Signal: 1

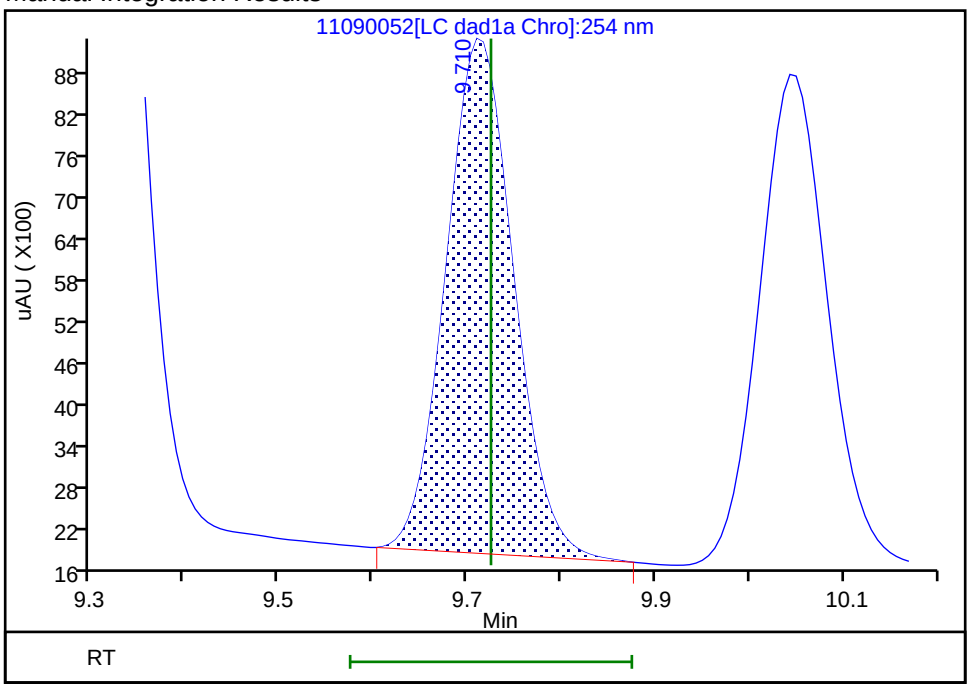
Processing Integration Results

RT: 9.71
Area: 38280
Amount: 0.196020
Amount Units: ug/mL



Manual Integration Results

RT: 9.71
Area: 37211
Amount: 0.190546
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:50:41

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

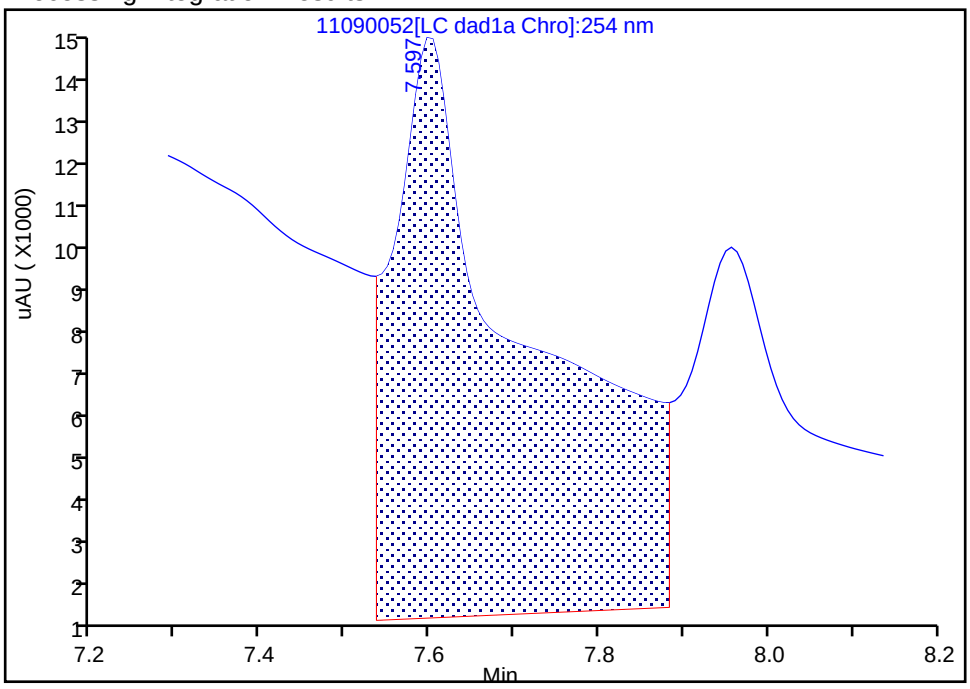
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090052.d				
Injection Date:	10-Nov-2021 07:48:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-B-10-A MS				
Client ID:	PZ019-7				
Operator ID:	JZ	ALS Bottle#:	52	Worklist Smp#:	52
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

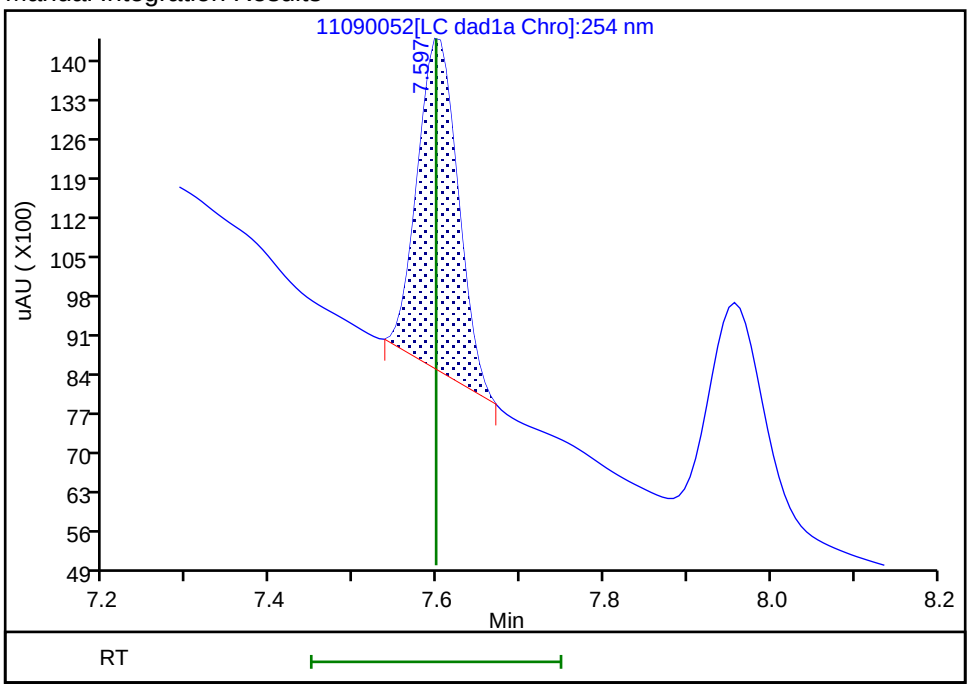
Processing Integration Results

RT: 7.60
Area: 146649
Amount: 1.380077
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 19978
Amount: 0.188008
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:50:13
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: PZ019-7 MS Lab Sample ID: 280-155138-10 MS

Matrix: Water Lab File ID: 11090054.D

Analysis Method: 8330A Date Collected: 11/03/2021 12:55

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 474.2(mL) Date Analyzed: 11/10/2021 08:34

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.: 556781 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.45	M	2.1	0.42	0.16

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

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090054.D				
Lims ID:	280-155138-A-10-C MS				
Client ID:	PZ019-7				
Sample Type:	MS				
Inject. Date:	10-Nov-2021 08:34:04	ALS Bottle#:	54	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-A-10-				
Misc. Info.:	280-0106333-054				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:58:55	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:52:39		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.474	6.476	-0.002	38146	0.2002	0.2053	M
6 DNX	1	6.794	6.796	-0.002	27199	0.2002	0.1914	M
7 MNX	1	7.214	7.223	-0.009	30242	0.2334	0.2320	M
$ 10 1,2-Dinitrobenzene	1	8.568	8.572	-0.004	24625	0.2000	0.1921	M

QC Flag Legend

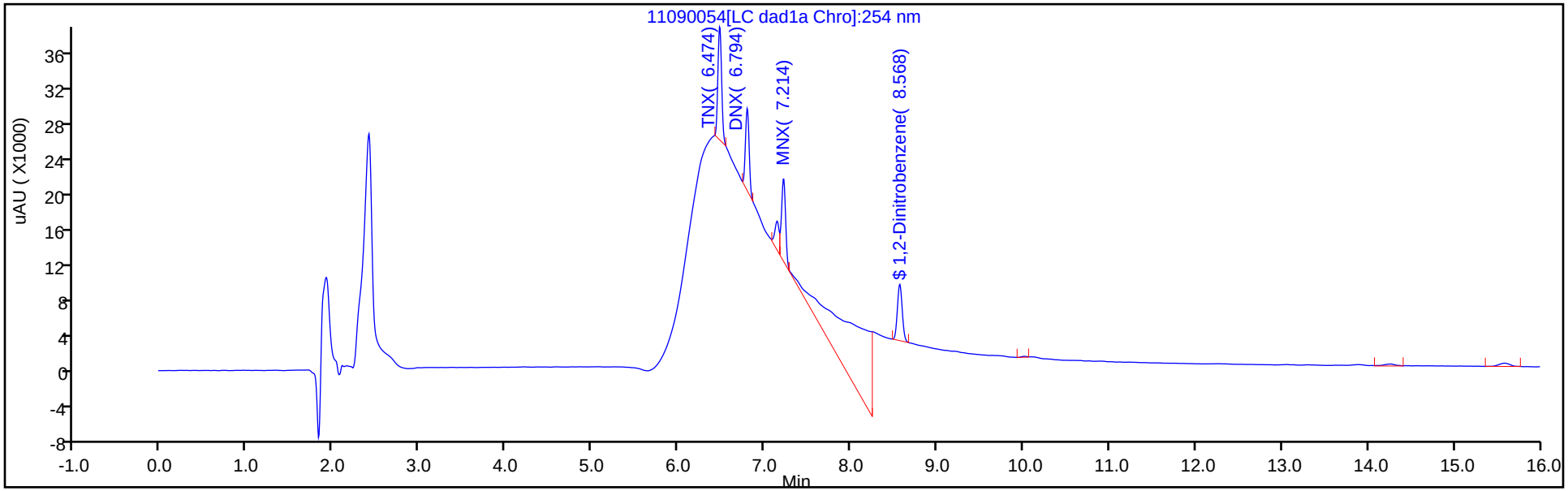
Processing Flags
Review Flags
M - Manually Integrated

Report Date: 10-Nov-2021 12:58:58 Chrom Revision: 2.3 22-Sep-2021 15:38:46

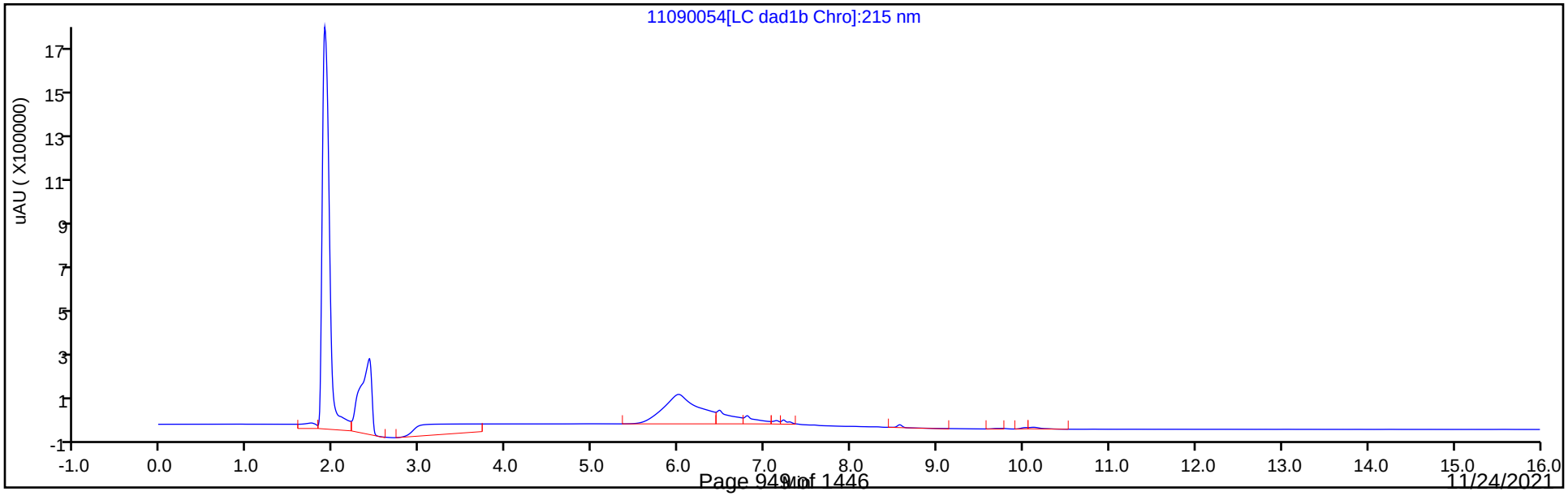
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090054.d				
Injection Date:	10-Nov-2021 08:34:04	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155138-A-10-C MS			Worklist Smp#:	54
Client ID:	PZ019-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	54
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090054.D				
Lims ID:	280-155138-A-10-C MS				
Client ID:	PZ019-7				
Sample Type:	MS				
Inject. Date:	10-Nov-2021 08:34:04	ALS Bottle#:	54	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-A-10-				
Misc. Info.:	280-0106333-054				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:58:55	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:52:39		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1921	96.03

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

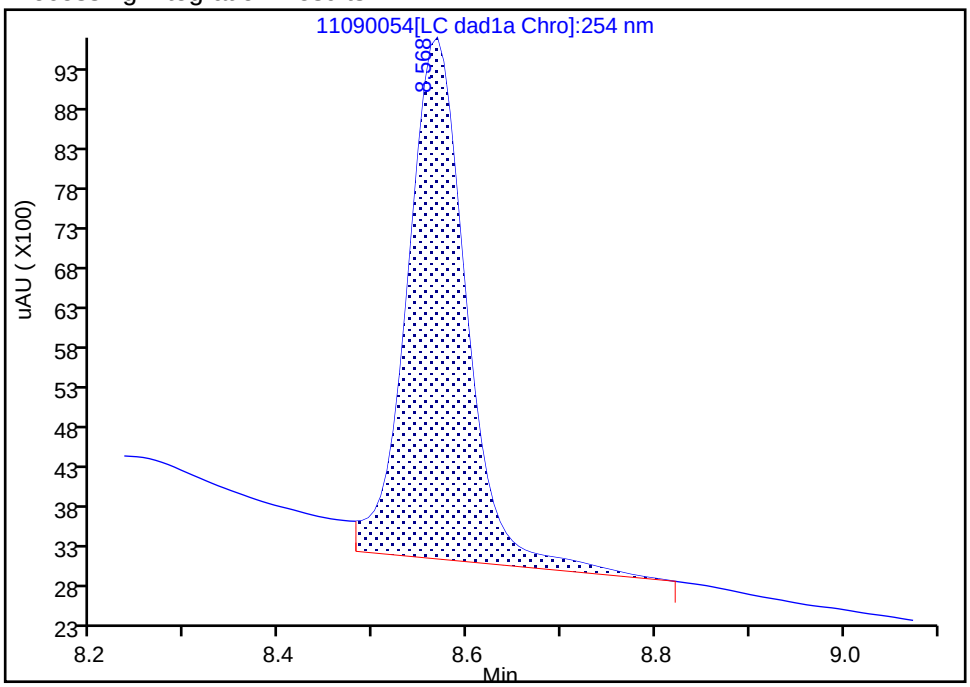
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090054.d				
Injection Date:	10-Nov-2021 08:34:04	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-10-C MS				
Client ID:	PZ019-7				
Operator ID:	JZ	ALS Bottle#:	54	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

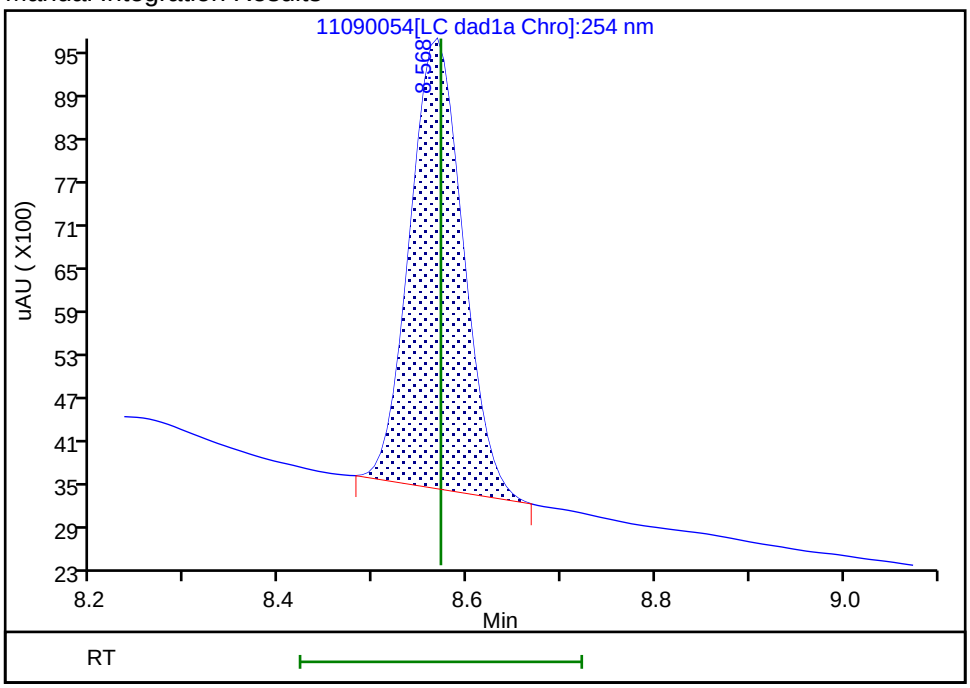
Processing Integration Results

RT: 8.57
Area: 28619
Amount: 0.223207
Amount Units: ug/mL



Manual Integration Results

RT: 8.57
Area: 24625
Amount: 0.192057
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:52:38

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

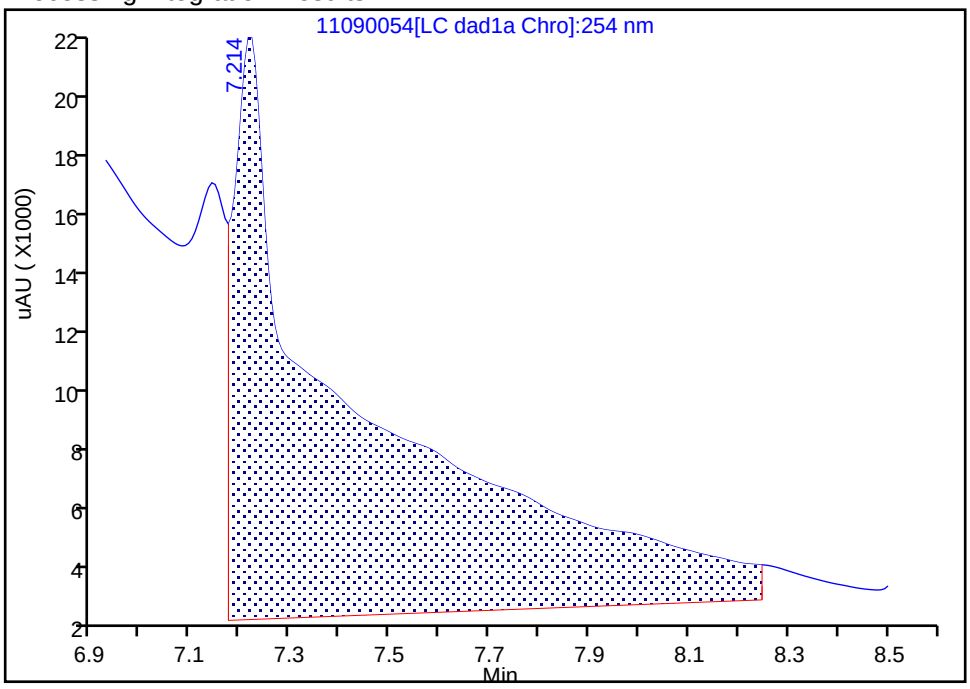
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090054.d				
Injection Date:	10-Nov-2021 08:34:04	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-10-C MS				
Client ID:	PZ019-7				
Operator ID:	JZ	ALS Bottle#:	54	Worklist Smp#:	54
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

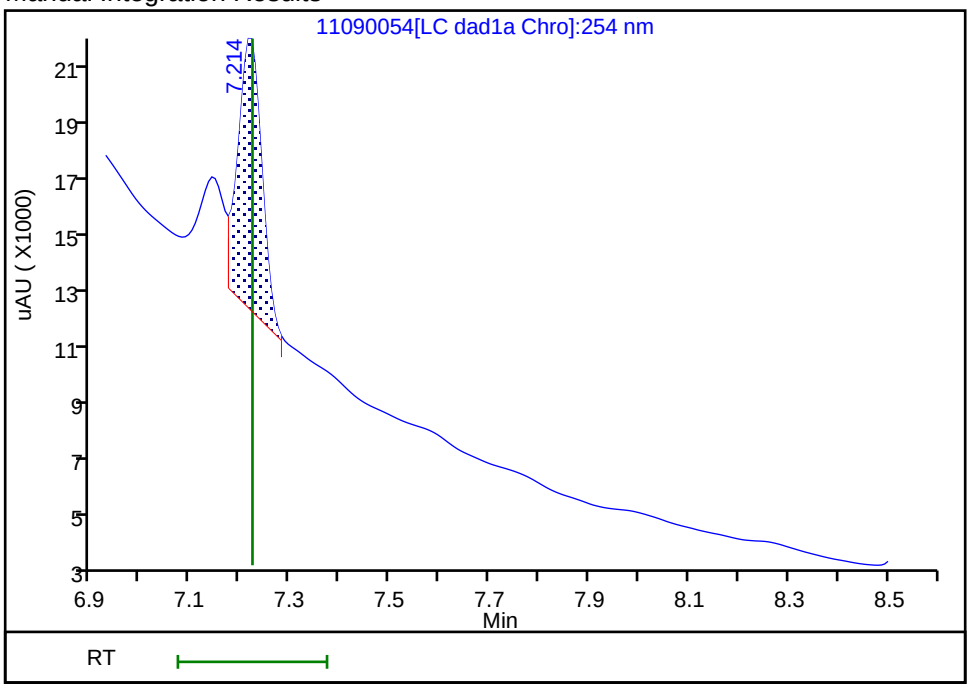
Processing Integration Results

RT: 7.21
Area: 322986
Amount: 2.478020
Amount Units: ug/mL



Manual Integration Results

RT: 7.21
Area: 30242
Amount: 0.232023
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:52:33
Audit Action: Split an Integrated Peak Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: PZ019-7 MSD Lab Sample ID: 280-155138-10 MSD

Matrix: Water Lab File ID: 11090053.D

Analysis Method: 8330A Date Collected: 11/03/2021 12:55

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 492.8(mL) Date Analyzed: 11/10/2021 08:11

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.: 556781 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	2.11	M	0.21	0.20	0.085
99-65-0	1,3-Dinitrobenzene	2.12		0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	2.12		0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	2.01		0.10	0.081	0.028
606-20-2	2,6-Dinitrotoluene	2.05		0.10	0.081	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	1.94		0.11	0.10	0.051
88-72-2	2-Nitrotoluene	1.67		0.21	0.20	0.087
99-08-1	3-Nitrotoluene	1.66	M	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	1.89		0.15	0.12	0.059
99-99-0	4-Nitrotoluene	1.68		0.42	0.41	0.10
2691-41-0	HMX	2.03	M	0.21	0.20	0.089
98-95-3	Nitrobenzene	1.94		0.21	0.20	0.092
121-82-4	RDX	1.96	M	0.21	0.20	0.052
479-45-8	Tetryl	2.18		0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	93	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090053.D
Lims ID: 280-155138-A-10-B MSD
Client ID: PZ019-7
Sample Type: MSD
Inject. Date: 10-Nov-2021 08:11:07 ALS Bottle#: 53 Worklist Smp#: 53
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155138-A-10-
Misc. Info.: 280-0106333-053
Operator ID: JZ Instrument ID: CHHPLC_X3

Method: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m
Limit Group: GCSV - 8330
Last Update: 10-Nov-2021 12:58:55 Calib Date: 27-Oct-2021 04:27:09
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D

Column 1 : UltraCarb5uODS (20) (4.60 mm) Det: LC DAD1B, 254 nm
Process Host: CTX1646

First Level Reviewer: zhangji Date: 10-Nov-2021 12:52:12

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
4 HMX	1	6.595	6.592	0.003	16866	0.2000	0.1998	M
8 RDX	1	7.602	7.598	0.004	20560	0.2000	0.1935	M
9 2,4,6-Trinitrophenol	1	7.962	7.985	-0.023	17058	0.2000	0.2062	M
$ 10 1,2-Dinitrobenzene	1	8.568	8.572	-0.004	23955	0.2000	0.1868	M
11 1,3,5-Trinitrobenzene	1	8.688	8.685	0.003	45806	0.2000	0.2079	M
12 1,3-Dinitrobenzene	1	9.321	9.331	-0.010	61965	0.2000	0.2091	
13 Nitrobenzene	1	9.715	9.725	-0.010	37289	0.2000	0.1909	
15 Tetryl	1	10.048	10.065	-0.017	37028	0.2000	0.2148	
16 Nitroglycerin	2	10.508	10.518	-0.010	130529	2.00	1.97	
17 2,4,6-Trinitrotoluene	1	10.961	10.971	-0.010	43129	0.2000	0.2093	
18 4-Amino-2,6-dinitrotoluene	1	11.161	11.185	-0.024	28389	0.2000	0.1858	
19 2-Amino-4,6-dinitrotoluene	1	11.415	11.438	-0.023	39510	0.2000	0.1909	
20 2,6-Dinitrotoluene	1	11.588	11.605	-0.017	28865	0.2000	0.2017	
21 2,4-Dinitrotoluene	1	11.755	11.771	-0.016	56883	0.2000	0.1982	
22 o-Nitrotoluene	1	12.621	12.645	-0.024	21165	0.2000	0.1648	
23 p-Nitrotoluene	1	13.055	13.078	-0.023	18544	0.2000	0.1657	
24 m-Nitrotoluene	1	13.635	13.658	-0.023	23282	0.2000	0.1637	M
25 PETN	2	14.735	14.758	-0.023	154746	2.00	2.07	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

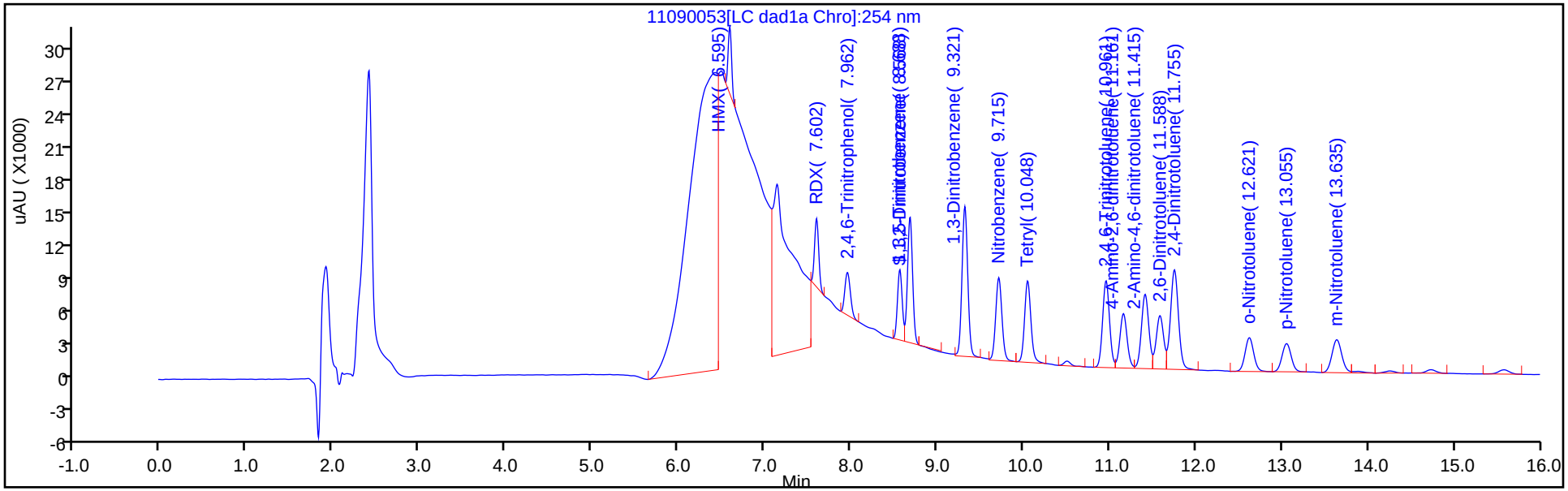
Report Date: 10-Nov-2021 12:58:58 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

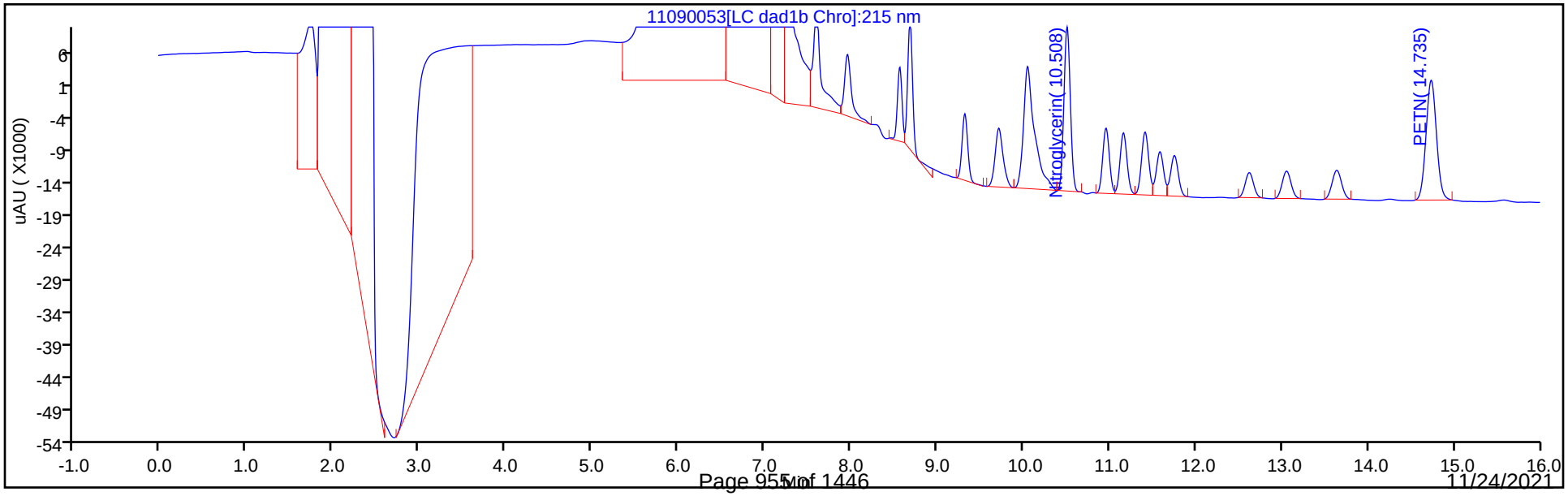
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090053.d

Injection Date:	10-Nov-2021 08:11:07	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155138-A-10-B MSD			Worklist Smp#:	53
Client ID:	PZ019-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	53
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090053.D				
Lims ID:	280-155138-A-10-B MSD				
Client ID:	PZ019-7				
Sample Type:	MSD				
Inject. Date:	10-Nov-2021 08:11:07	ALS Bottle#:	53	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-A-10-				
Misc. Info.:	280-0106333-053				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:58:55	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:52:12		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1868	93.42

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

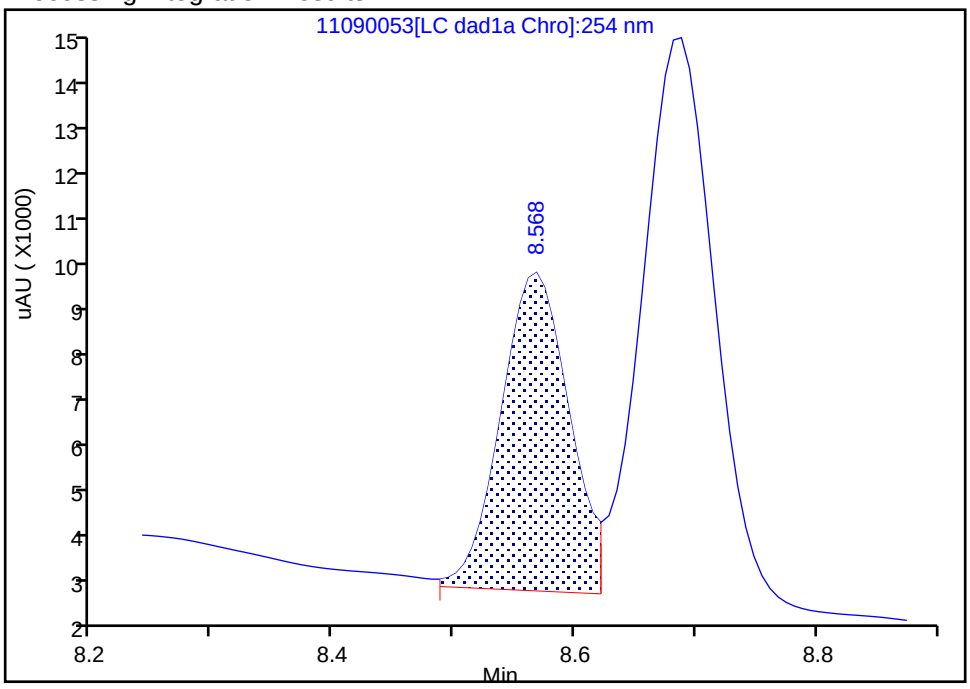
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090053.d				
Injection Date:	10-Nov-2021 08:11:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-10-B MSD				
Client ID:	PZ019-7				
Operator ID:	JZ	ALS Bottle#:	53	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

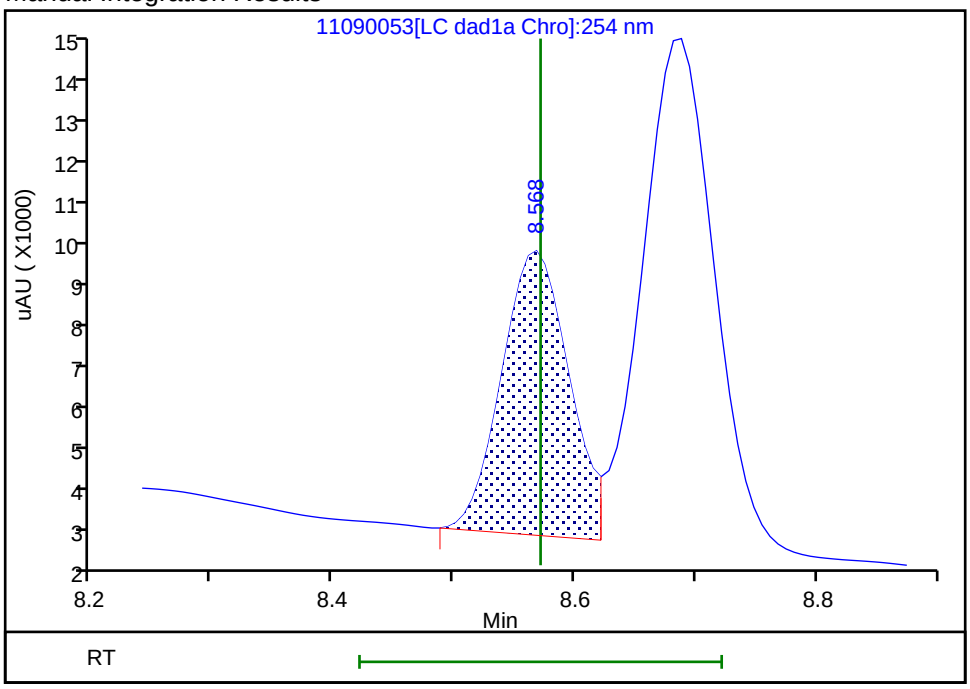
Processing Integration Results

RT: 8.57
Area: 24631
Amount: 0.192104
Amount Units: ug/mL



Manual Integration Results

RT: 8.57
Area: 23955
Amount: 0.186831
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:51:58
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

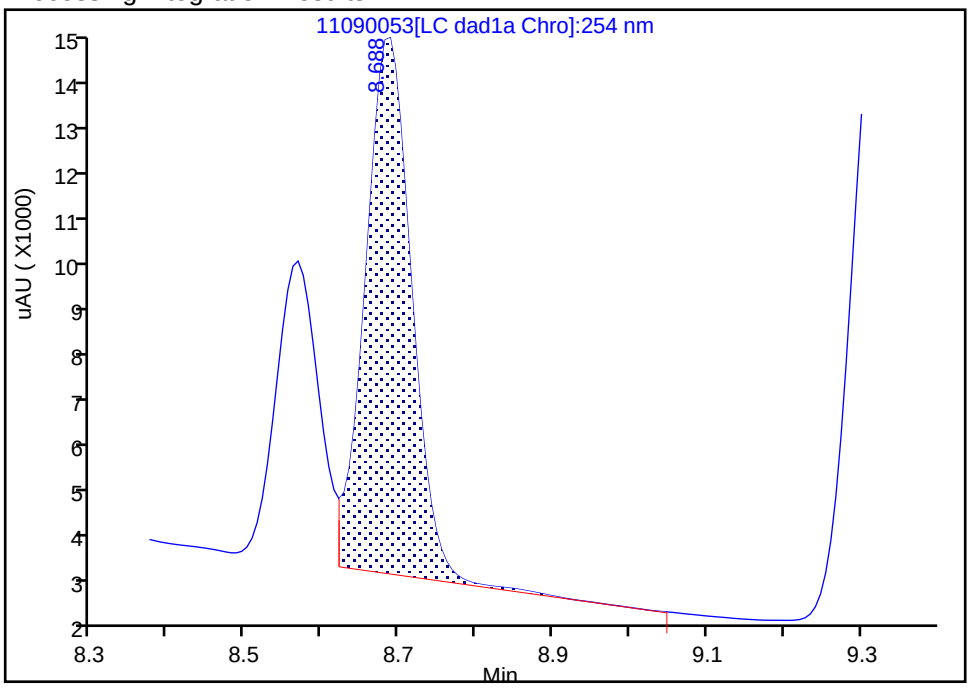
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090053.d				
Injection Date:	10-Nov-2021 08:11:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-10-B MSD				
Client ID:	PZ019-7				
Operator ID:	JZ	ALS Bottle#:	53	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

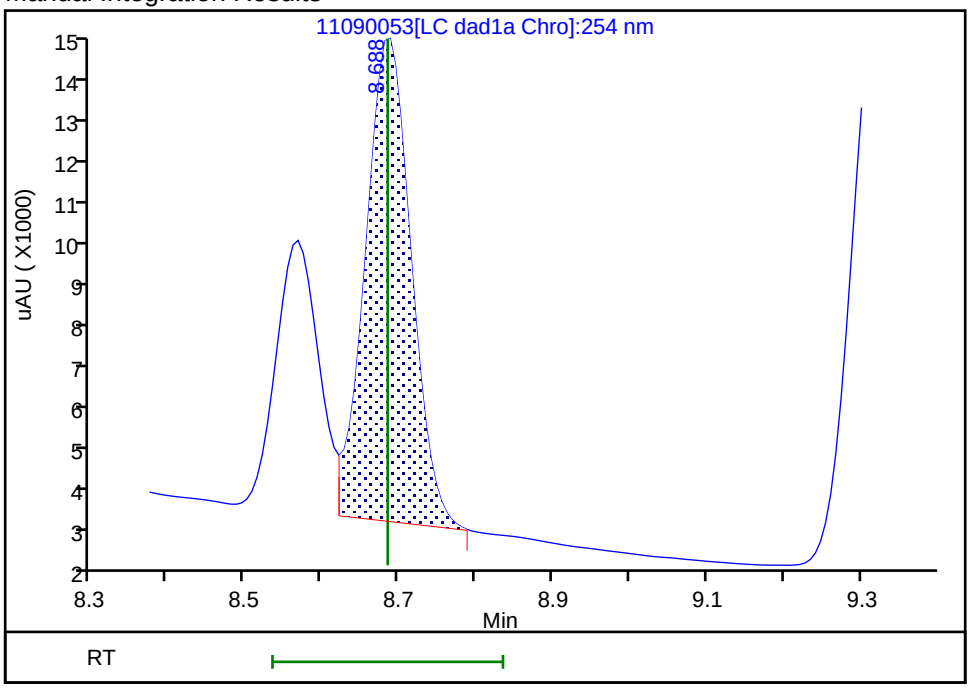
Processing Integration Results

RT: 8.69
Area: 46614
Amount: 0.211577
Amount Units: ug/mL



Manual Integration Results

RT: 8.69
Area: 45806
Amount: 0.207909
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:52:00

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

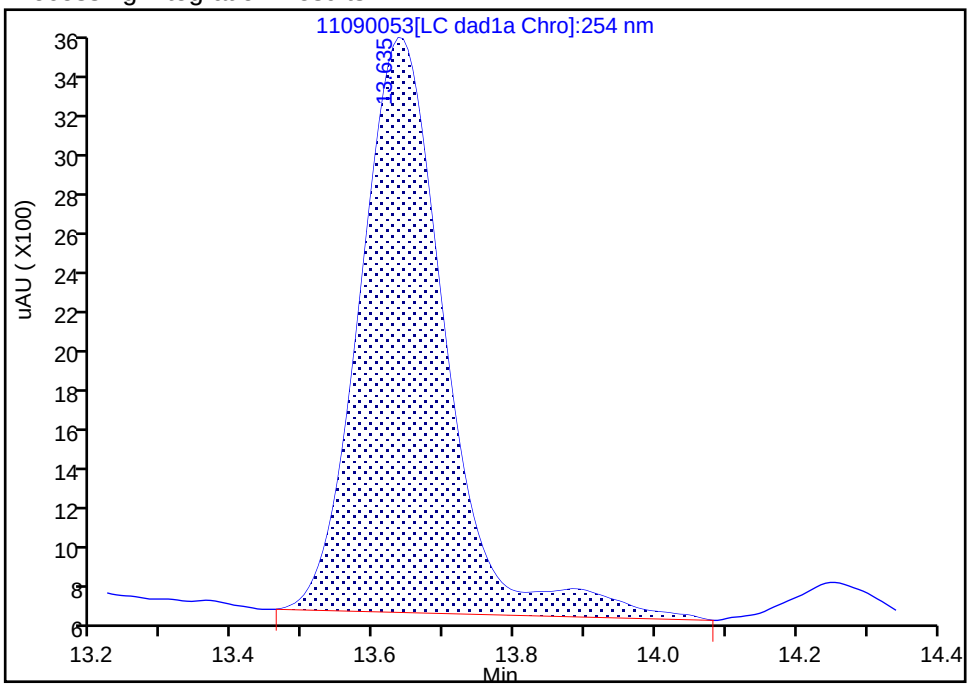
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090053.d				
Injection Date:	10-Nov-2021 08:11:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-10-B MSD				
Client ID:	PZ019-7				
Operator ID:	JZ	ALS Bottle#:	53	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

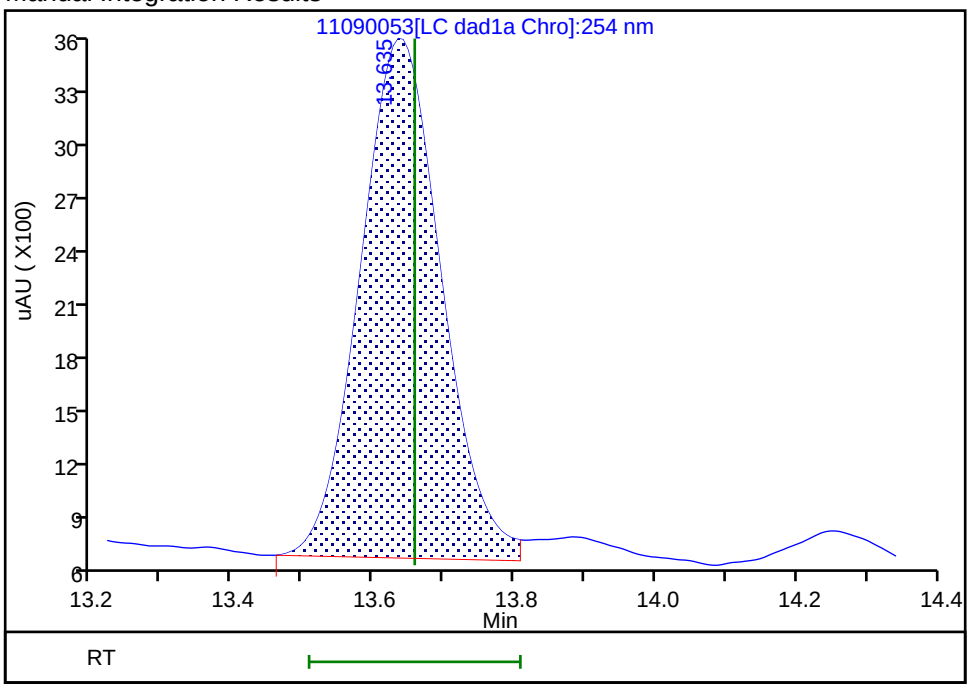
Processing Integration Results

RT: 13.63
Area: 24594
Amount: 0.172897
Amount Units: ug/mL



Manual Integration Results

RT: 13.63
Area: 23282
Amount: 0.163674
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:52:11

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

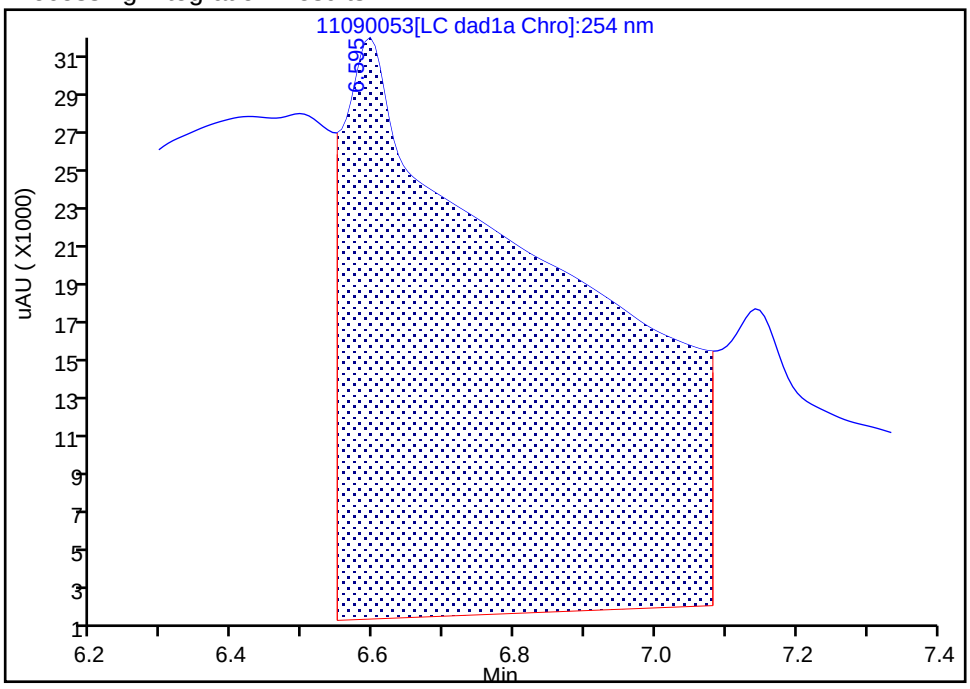
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090053.d				
Injection Date:	10-Nov-2021 08:11:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-10-B MSD				
Client ID:	PZ019-7				
Operator ID:	JZ	ALS Bottle#:	53	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

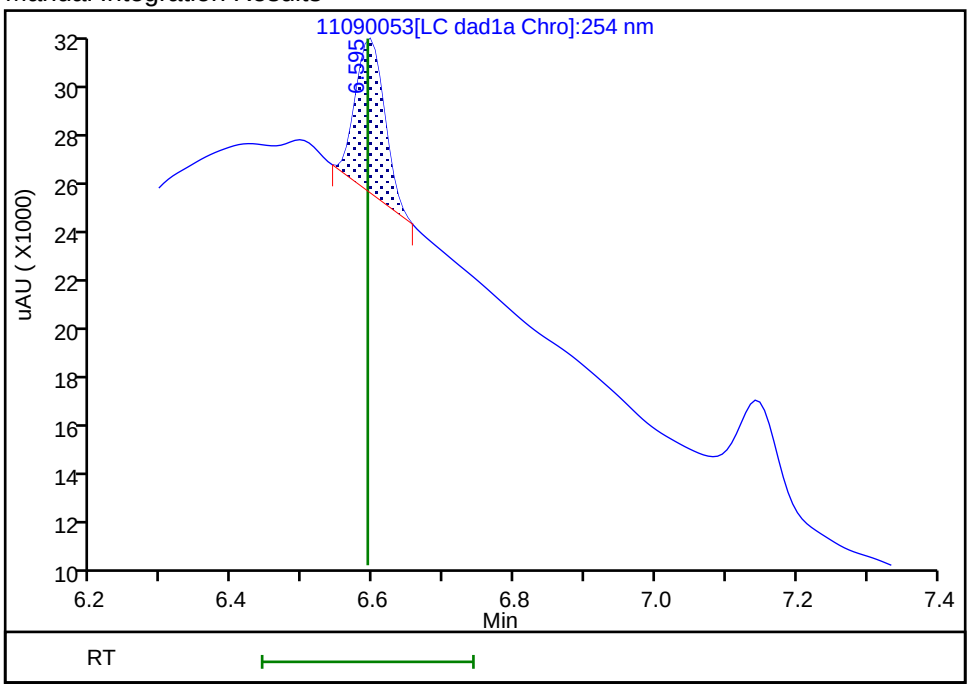
Processing Integration Results

RT: 6.59
Area: 615876
Amount: 7.295256
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 16866
Amount: 0.199783
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:51:41
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

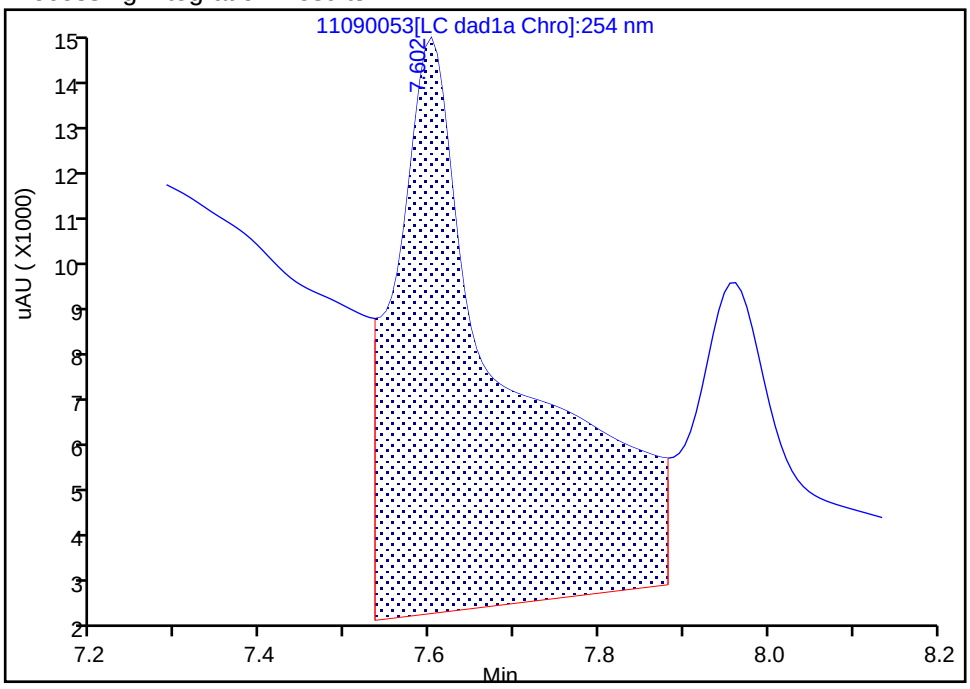
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090053.d				
Injection Date:	10-Nov-2021 08:11:07	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-A-10-B MSD				
Client ID:	PZ019-7				
Operator ID:	JZ	ALS Bottle#:	53	Worklist Smp#:	53
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

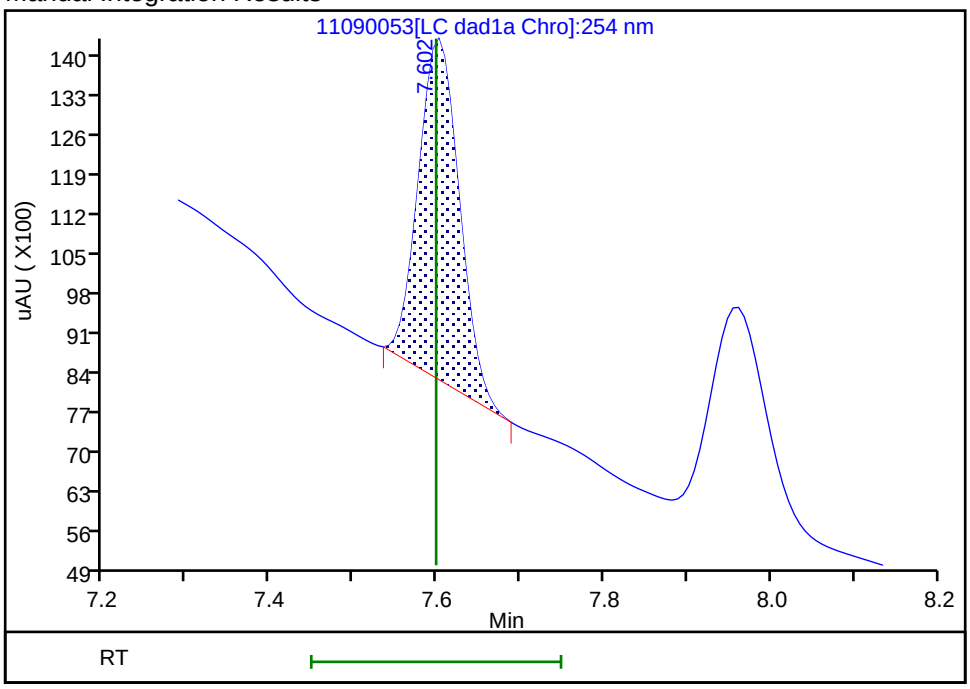
Processing Integration Results

RT: 7.60
Area: 105662
Amount: 0.994359
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 20560
Amount: 0.193485
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:51:48
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Client Sample ID: PZ019-7 MSD Lab Sample ID: 280-155138-10 MSD

Matrix: Water Lab File ID: 11090055.D

Analysis Method: 8330A Date Collected: 11/03/2021 12:55

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 500.5(mL) Date Analyzed: 11/10/2021 08:57

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.: 556781 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
5755-27-1	MNX	2.33	M	2.0	0.40	0.15

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

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090055.D				
Lims ID:	280-155138-B-10-B MSD				
Client ID:	PZ019-7				
Sample Type:	MSD				
Inject. Date:	10-Nov-2021 08:57:00	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-B-10-				
Misc. Info.:	280-0106333-055				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:58:55	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				
First Level Reviewer: zhangji		Date:	10-Nov-2021 12:53:09		

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/mL	OnCol Amt ug/mL	Flags
3 TNX	1	6.477	6.476	0.001	39240	0.2002	0.2112	M
6 DNX	1	6.797	6.796	0.001	27242	0.2002	0.1917	M
7 MNX	1	7.217	7.223	-0.006	30431	0.2334	0.2335	M
$ 10 1,2-Dinitrobenzene	1	8.570	8.572	-0.002	24667	0.2000	0.1924	M

QC Flag Legend

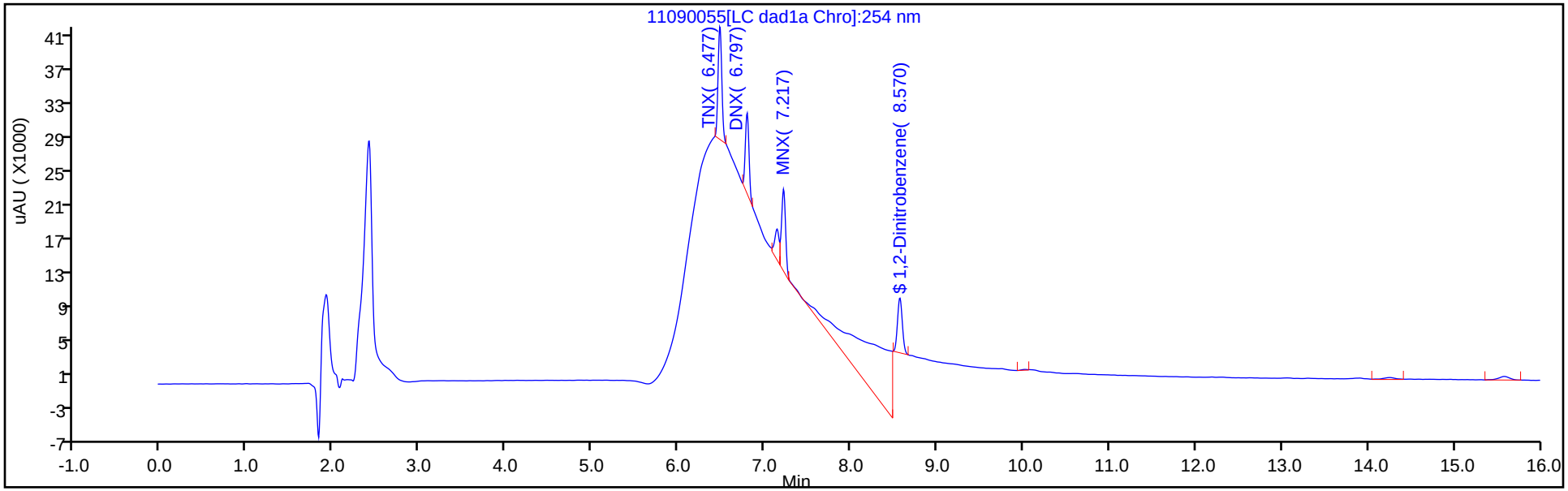
Processing Flags
Review Flags
M - Manually Integrated

Report Date: 10-Nov-2021 12:58:57 Chrom Revision: 2.3 22-Sep-2021 15:38:46

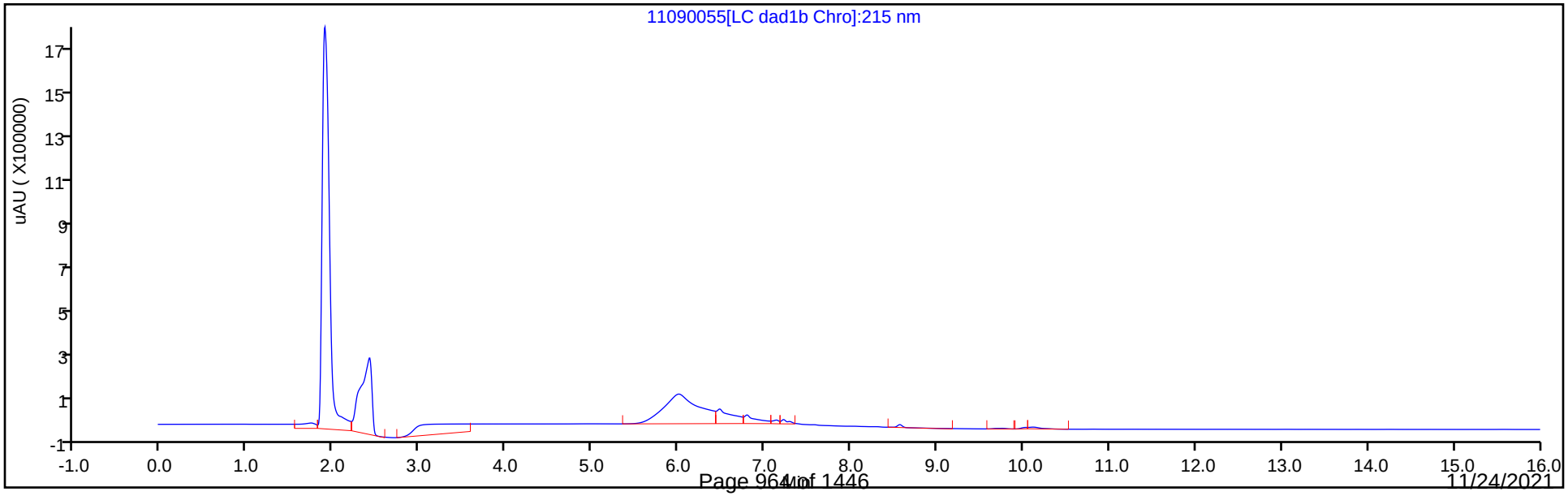
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090055.d				
Injection Date:	10-Nov-2021 08:57:00	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155138-B-10-B MSD			Worklist Smp#:	55
Client ID:	PZ019-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	55
Method:	8330_X3	Limit Group:	GCSV - 8330		

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



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090055.D				
Lims ID:	280-155138-B-10-B MSD				
Client ID:	PZ019-7				
Sample Type:	MSD				
Inject. Date:	10-Nov-2021 08:57:00	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155138-B-10-				
Misc. Info.:	280-0106333-055				
Operator ID:	JZ	Instrument ID:	CHHPLC_X3		
Method:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\8330_X3.m				
Limit Group:	GCSV - 8330				
Last Update:	10-Nov-2021 12:58:55	Calib Date:	27-Oct-2021 04:27:09		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211027-105955.b\1026T007.D				
Column 1 :	UltraCarb5uODS (20) (4.60 mm)		Det: LC DAD1B, 254 nm		
Process Host:	CTX1646				

First Level Reviewer: zhangji Date: 10-Nov-2021 12:53:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1924	96.19

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

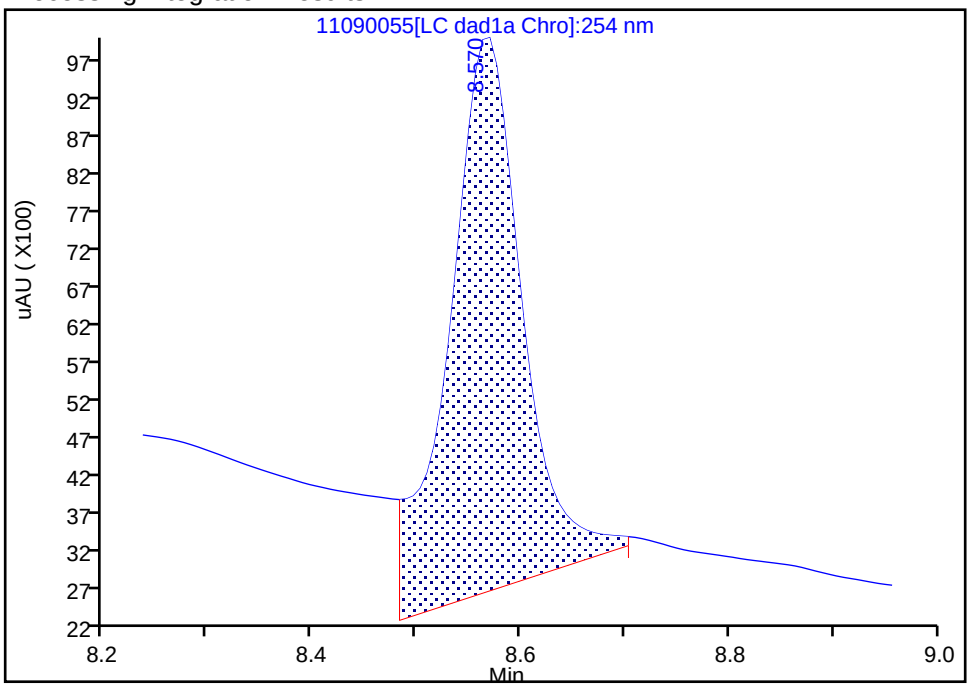
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090055.d				
Injection Date:	10-Nov-2021 08:57:00	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-B-10-B MSD				
Client ID:	PZ019-7				
Operator ID:	JZ	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

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

Signal: 1

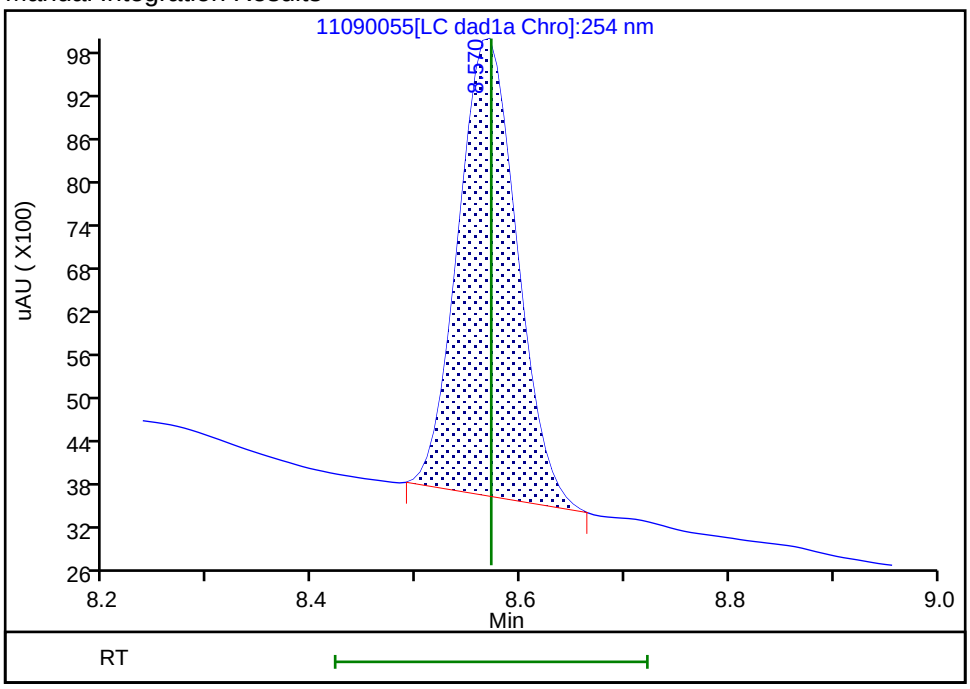
Processing Integration Results

RT: 8.57
Area: 36036
Amount: 0.281054
Amount Units: ug/mL



Manual Integration Results

RT: 8.57
Area: 24667
Amount: 0.192384
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:53:07

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

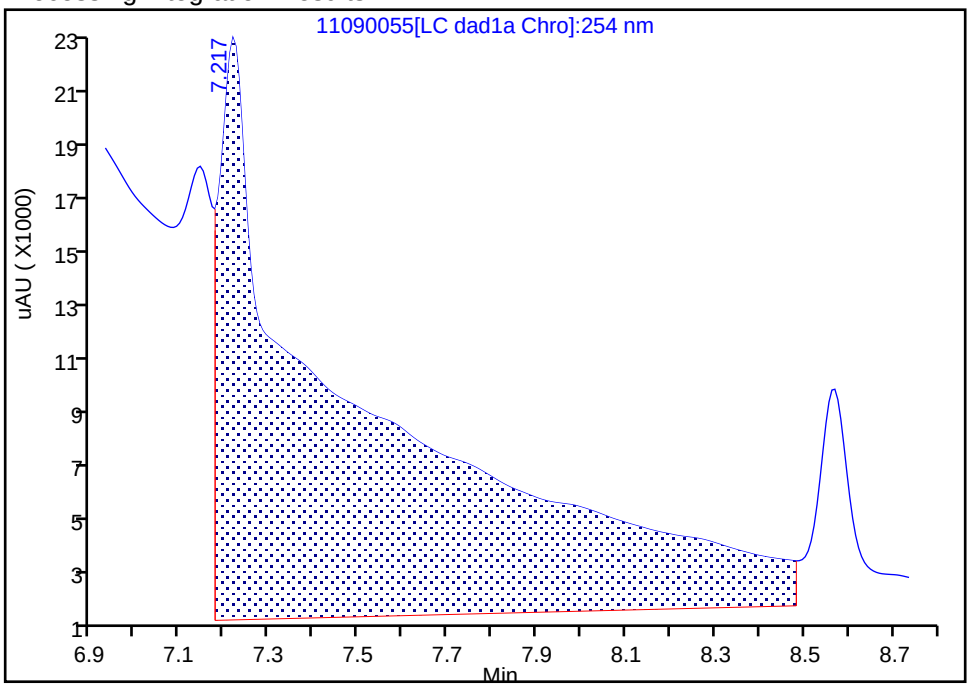
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090055.d				
Injection Date:	10-Nov-2021 08:57:00	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155138-B-10-B MSD				
Client ID:	PZ019-7				
Operator ID:	JZ	ALS Bottle#:	55	Worklist Smp#:	55
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

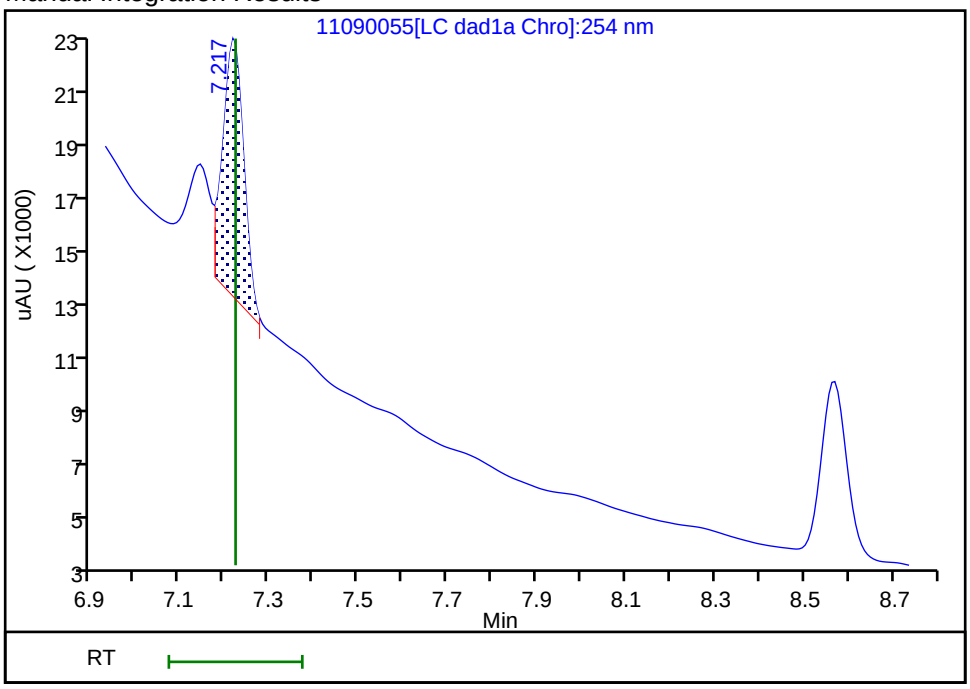
Processing Integration Results

RT: 7.22
Area: 448920
Amount: 3.444214
Amount Units: ug/mL



Manual Integration Results

RT: 7.22
Area: 30431
Amount: 0.233473
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:53:03
Audit Action: Split an Integrated Peak Audit Reason: Baseline

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 03/02/2021 16:33

Analysis Batch Number: 527768 End Date: 03/03/2021 02:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-527768/11		03/02/2021 16:33	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/12		03/02/2021 16:56	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/13		03/02/2021 17:19	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/14		03/02/2021 17:42	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/15		03/02/2021 18:05	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/16		03/02/2021 18:28	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/17		03/02/2021 18:51	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/18		03/02/2021 19:13	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/58		03/02/2021 19:36	1		UltraCarb5uODS 4.6(mm)
ICV 280-527768/19		03/02/2021 19:59	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/20		03/02/2021 20:22	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/21		03/02/2021 20:45	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/22		03/02/2021 21:08	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/23		03/02/2021 21:31	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/24		03/02/2021 21:54	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/25		03/02/2021 22:17	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/26		03/02/2021 22:40	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/27		03/02/2021 23:03	1		UltraCarb5uODS 4.6(mm)
ICV 280-527768/28		03/02/2021 23:26	1		UltraCarb5uODS 4.6(mm)
IC 280-527768/29		03/02/2021 23:49	1	03020029.D	UltraCarb5uODS 4.6(mm)
IC 280-527768/30		03/03/2021 00:12	1	03020030.D	UltraCarb5uODS 4.6(mm)
IC 280-527768/31		03/03/2021 00:35	1	03020031.D	UltraCarb5uODS 4.6(mm)
IC 280-527768/32		03/03/2021 00:58	1	03020032.D	UltraCarb5uODS 4.6(mm)
IC 280-527768/33		03/03/2021 01:21	1	03020033.D	UltraCarb5uODS 4.6(mm)
IC 280-527768/34		03/03/2021 01:44	1	03020034.D	UltraCarb5uODS 4.6(mm)
IC 280-527768/35		03/03/2021 02:07	1	03020035.D	UltraCarb5uODS 4.6(mm)
IC 280-527768/36		03/03/2021 02:30	1	03020036.D	UltraCarb5uODS 4.6(mm)
ICV 280-527768/37		03/03/2021 02:53	1	03020037.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 05/01/2021 18:54

Analysis Batch Number: 534620 End Date: 05/02/2021 05:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-534620/10		05/01/2021 18:54	1	010-0501.D	Luna-phenylhex 4.6(mm)
IC 280-534620/11		05/01/2021 19:29	1	011-0601.D	Luna-phenylhex 4.6(mm)
IC 280-534620/12		05/01/2021 20:04	1	012-0701.D	Luna-phenylhex 4.6(mm)
IC 280-534620/13		05/01/2021 20:39	1	013-0801.D	Luna-phenylhex 4.6(mm)
IC 280-534620/14		05/01/2021 21:15	1	014-0901.D	Luna-phenylhex 4.6(mm)
IC 280-534620/15		05/01/2021 21:50	1	015-1001.D	Luna-phenylhex 4.6(mm)
IC 280-534620/16		05/01/2021 22:25	1	016-1101.D	Luna-phenylhex 4.6(mm)
IC 280-534620/17		05/01/2021 23:00	1	017-1201.D	Luna-phenylhex 4.6(mm)
IC 280-534620/18		05/01/2021 23:35	1	018-1301.D	Luna-phenylhex 4.6(mm)
ICV 280-534620/19		05/02/2021 00:10	1	019-1401.D	Luna-phenylhex 4.6(mm)
IC 280-534620/20		05/02/2021 00:45	1	020-1501.D	Luna-phenylhex 4.6(mm)
IC 280-534620/21		05/02/2021 01:20	1	021-1601.D	Luna-phenylhex 4.6(mm)
IC 280-534620/22		05/02/2021 01:55	1	022-1701.D	Luna-phenylhex 4.6(mm)
IC 280-534620/23		05/02/2021 02:30	1	023-1801.D	Luna-phenylhex 4.6(mm)
IC 280-534620/24		05/02/2021 03:05	1	024-1901.D	Luna-phenylhex 4.6(mm)
IC 280-534620/25		05/02/2021 03:41	1	025-2001.D	Luna-phenylhex 4.6(mm)
IC 280-534620/26		05/02/2021 04:16	1	026-2101.D	Luna-phenylhex 4.6(mm)
IC 280-534620/27		05/02/2021 04:51	1	027-2201.D	Luna-phenylhex 4.6(mm)
ICV 280-534620/28		05/02/2021 05:26	1	028-2301.D	Luna-phenylhex 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 05/01/2021 18:01

Analysis Batch Number: 534622 End Date: 05/01/2021 21:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
IC 280-534622/11		05/01/2021 18:01	1	011-0501.D	UltraCarb5uODS 4.6(mm)
IC 280-534622/12		05/01/2021 18:23	1	012-0601.D	UltraCarb5uODS 4.6(mm)
IC 280-534622/13		05/01/2021 18:46	1	013-0701.D	UltraCarb5uODS 4.6(mm)
IC 280-534622/14		05/01/2021 19:09	1	014-0801.D	UltraCarb5uODS 4.6(mm)
IC 280-534622/15		05/01/2021 19:32	1	015-0901.D	UltraCarb5uODS 4.6(mm)
IC 280-534622/16		05/01/2021 19:55	1	016-1001.D	UltraCarb5uODS 4.6(mm)
IC 280-534622/17		05/01/2021 20:18	1	017-1101.D	UltraCarb5uODS 4.6(mm)
IC 280-534622/18		05/01/2021 20:41	1	018-1201.D	UltraCarb5uODS 4.6(mm)
IC 280-534622/19		05/01/2021 21:04	1	019-1301.D	UltraCarb5uODS 4.6(mm)
ICV 280-534622/20		05/01/2021 21:27	1	020-1401.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X3 Start Date: 11/10/2021 01:18

Analysis Batch Number: 556781 End Date: 11/10/2021 13:55

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-556781/35		11/10/2021 01:18	1	11090035.D	UltraCarb5uODS 4.6(mm)
CCV 280-556781/36		11/10/2021 01:41	1	11090036.D	UltraCarb5uODS 4.6(mm)
MB 280-556591/1-A		11/10/2021 02:04	1	11090037.D	UltraCarb5uODS 4.6(mm)
LCS 280-556591/2-A		11/10/2021 02:27	1	11090038.D	UltraCarb5uODS 4.6(mm)
LCS 280-556591/3-A		11/10/2021 02:50	1	11090039.D	UltraCarb5uODS 4.6(mm)
280-155138-1	NW021-7	11/10/2021 03:12	1	11090040.D	UltraCarb5uODS 4.6(mm)
280-155138-2	NW020-7	11/10/2021 03:35	1	11090041.D	UltraCarb5uODS 4.6(mm)
280-155138-3	NW022-7	11/10/2021 03:58	1	11090042.D	UltraCarb5uODS 4.6(mm)
280-155138-4	G0082-7	11/10/2021 04:21	1	11090043.D	UltraCarb5uODS 4.6(mm)
280-155138-5	G0087-7	11/10/2021 04:44	1	11090044.D	UltraCarb5uODS 4.6(mm)
280-155138-6	NW071-7	11/10/2021 05:07	1	11090045.D	UltraCarb5uODS 4.6(mm)
280-155138-7	CA213-7	11/10/2021 05:30	1	11090046.D	UltraCarb5uODS 4.6(mm)
CCV 280-556781/47		11/10/2021 05:53	1	11090047.D	UltraCarb5uODS 4.6(mm)
CCV 280-556781/48		11/10/2021 06:16	1	11090048.D	UltraCarb5uODS 4.6(mm)
280-155138-8	G0081-7	11/10/2021 06:39	1	11090049.D	UltraCarb5uODS 4.6(mm)
280-155138-9	NW070-7	11/10/2021 07:02	1	11090050.D	UltraCarb5uODS 4.6(mm)
280-155138-10	PZ019-7	11/10/2021 07:25	1	11090051.D	UltraCarb5uODS 4.6(mm)
280-155138-10 MS	PZ019-7 MS	11/10/2021 07:48	1	11090052.D	UltraCarb5uODS 4.6(mm)
280-155138-10 MSD	PZ019-7 MSD	11/10/2021 08:11	1	11090053.D	UltraCarb5uODS 4.6(mm)
280-155138-10 MS	PZ019-7 MS	11/10/2021 08:34	1	11090054.D	UltraCarb5uODS 4.6(mm)
280-155138-10 MSD	PZ019-7 MSD	11/10/2021 08:57	1	11090055.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 09:19	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 09:42	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 10:05	1		UltraCarb5uODS 4.6(mm)
CCV 280-556781/59		11/10/2021 10:28	1	11090059.D	UltraCarb5uODS 4.6(mm)
CCV 280-556781/60		11/10/2021 10:51	1	11090060.D	UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 11:14	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 11:37	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 12:00	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 12:23	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 12:46	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 13:09	1		UltraCarb5uODS 4.6(mm)
CCV 280-556781/67		11/10/2021 13:32	1		UltraCarb5uODS 4.6(mm)
CCV 280-556781/68		11/10/2021 13:55	1		UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: CHHPLC_X5 Start Date: 11/10/2021 23:11

Analysis Batch Number: 556958 End Date: 11/11/2021 12:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-556958/20		11/10/2021 23:11	1	11100020.D	Luna-phenylhex 4.6(mm)
CCV 280-556958/21		11/10/2021 23:46	1	11100021.D	Luna-phenylhex 4.6(mm)
ZZZZZ		11/11/2021 00:21	1		Luna-phenylhex 4.6(mm)
ZZZZZ		11/11/2021 00:55	1		Luna-phenylhex 4.6(mm)
ZZZZZ		11/11/2021 01:31	1		Luna-phenylhex 4.6(mm)
280-155138-1	NW021-7	11/11/2021 02:06	1	11100025.D	Luna-phenylhex 4.6(mm)
280-155138-2	NW020-7	11/11/2021 02:40	1	11100026.D	Luna-phenylhex 4.6(mm)
280-155138-4	G0082-7	11/11/2021 03:15	1	11100027.D	Luna-phenylhex 4.6(mm)
280-155138-5	G0087-7	11/11/2021 03:50	1	11100028.D	Luna-phenylhex 4.6(mm)
280-155138-6	NW071-7	11/11/2021 04:25	1	11100029.D	Luna-phenylhex 4.6(mm)
280-155138-8	G0081-7	11/11/2021 05:00	1	11100030.D	Luna-phenylhex 4.6(mm)
ZZZZZ		11/11/2021 05:35	1		Luna-phenylhex 4.6(mm)
CCV 280-556958/32		11/11/2021 06:10	1	11100032.D	Luna-phenylhex 4.6(mm)
CCV 280-556958/33		11/11/2021 06:45	1	11100033.D	Luna-phenylhex 4.6(mm)
ZZZZZ		11/11/2021 07:20	1		Luna-phenylhex 4.6(mm)
ZZZZZ		11/11/2021 07:55	1		Luna-phenylhex 4.6(mm)
ZZZZZ		11/11/2021 08:30	1		Luna-phenylhex 4.6(mm)
ZZZZZ		11/11/2021 09:06	1		Luna-phenylhex 4.6(mm)
ZZZZZ		11/11/2021 09:41	1		Luna-phenylhex 4.6(mm)
ZZZZZ		11/11/2021 10:15	1		Luna-phenylhex 4.6(mm)
ZZZZZ		11/11/2021 10:50	1		Luna-phenylhex 4.6(mm)
CCV 280-556958/41		11/11/2021 11:25	1		Luna-phenylhex 4.6(mm)
CCV 280-556958/42		11/11/2021 12:00	1		Luna-phenylhex 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 556591 Batch Start Date: 11/08/21 14:30 Batch Analyst: Hayburn, Christopher D

Batch Method: 3535 Batch End Date: 11/08/21 17:48

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	8330 LCS 00110	8330_OP_DMT 00011
MB 280-556591/1		3535, 8330A				500 mL	5 mL		
LCS 280-556591/2		3535, 8330A				500 mL	5 mL	0.1 mL	
LCS 280-556591/3		3535, 8330A				500 mL	5 mL		0.1 mL
280-155138-A-1	NW021-7	3535, 8330A	T	764.8 g	287.9 g	476.9 mL	5 mL		
280-155138-A-2	NW020-7	3535, 8330A	T	778.9 g	287.4 g	491.5 mL	5 mL		
280-155138-B-3	NW022-7	3535, 8330A	T	787.4 g	287.3 g	500.1 mL	5 mL		
280-155138-B-4	G0082-7	3535, 8330A	T	788.9 g	287.3 g	501.6 mL	5 mL		
280-155138-A-5	G0087-7	3535, 8330A	T	781.6 g	288.4 g	493.2 mL	5 mL		
280-155138-A-6	NW071-7	3535, 8330A	T	779.7 g	284.5 g	495.2 mL	5 mL		
280-155138-A-7	CA213-7	3535, 8330A	T	790.6 g	290.2 g	500.4 mL	5 mL		
280-155138-A-8	G0081-7	3535, 8330A	T	799.1 g	289.4 g	509.7 mL	5 mL		
280-155138-B-9	NW070-7	3535, 8330A	T	791.9 g	287.9 g	504 mL	5 mL		
280-155138-A-10	PZ019-7	3535, 8330A	T	783.7 g	286.9 g	496.8 mL	5 mL		
280-155138-B-10 MS	PZ019-7	3535, 8330A	T	784.8 g	287.4 g	497.4 mL	5 mL	0.1 mL	
280-155138-A-10 MSD	PZ019-7	3535, 8330A	T	778.9 g	286.1 g	492.8 mL	5 mL	0.1 mL	
280-155138-A-10 MS	PZ019-7	3535, 8330A	T	762.0 g	287.8 g	474.2 mL	5 mL		0.1 mL
280-155138-B-10 MSD	PZ019-7	3535, 8330A	T	787.5 g	287.0 g	500.5 mL	5 mL		0.1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00126	AnalysisComment				
MB 280-556591/1		3535, 8330A		0.1 mL					
LCS 280-556591/2		3535, 8330A		0.1 mL	8330				
LCS 280-556591/3		3535, 8330A		0.1 mL	DMT				
280-155138-A-1	NW021-7	3535, 8330A	T	0.1 mL					
280-155138-A-2	NW020-7	3535, 8330A	T	0.1 mL					
280-155138-B-3	NW022-7	3535, 8330A	T	0.1 mL					
280-155138-B-4	G0082-7	3535, 8330A	T	0.1 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 556591 Batch Start Date: 11/08/21 14:30 Batch Analyst: Hayburn, Christopher D

Batch Method: 3535 Batch End Date: 11/08/21 17:48

Lab Sample ID	Client Sample ID	Method Chain	Basis	8330Surrogate 00126	AnalysisComment				
280-155138-A-5	G0087-7	3535, 8330A	T	0.1 mL					
280-155138-A-6	NW071-7	3535, 8330A	T	0.1 mL					
280-155138-A-7	CA213-7	3535, 8330A	T	0.1 mL					
280-155138-A-8	G0081-7	3535, 8330A	T	0.1 mL					
280-155138-B-9	NW070-7	3535, 8330A	T	0.1 mL					
280-155138-A-10	PZ019-7	3535, 8330A	T	0.1 mL					
280-155138-B-10 MS	PZ019-7	3535, 8330A	T	0.1 mL	8330				
280-155138-A-10 MSD	PZ019-7	3535, 8330A	T	0.1 mL	8330				
280-155138-A-10 MS	PZ019-7	3535, 8330A	T	0.1 mL	DMT				
280-155138-B-10 MSD	PZ019-7	3535, 8330A	T	0.1 mL	DMT				

Batch Notes	
First Start time	11/08/2021 14:59
First End time	11/08/2021 17:25
SPE Cartridge Type	Porapak RDX
SPE Cartridge Lot ID	005230155A
Balance ID	24350888
Pipette/Syringe/Dispenser ID	JiJi, Soot, DOD
Solvent Name	Acetonitrile
Solvent Lot #	Acetonitrile_00055
Rinse Solvent Name	0.1%AAinACN
Rinse Solvent Lot	0.1%AAinACN_00168
Acid Name	Ca2Cl
Acid ID	Ca2Cl_Sol_00078
Analyst ID - Spike Analyst	DL
Analyst ID - Spike Witness Analyst	Reviewer: ARC
Batch Comment	DV-OP-0017; Mantel: A/B

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 556591 Batch Start Date: 11/08/21 14:30 Batch Analyst: Hayburn, Christopher D

Batch Method: 3535 Batch End Date: 11/08/21 17:48

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 TestAmerica, Denver Job Number: 280-155138-1

SDG No.:

Project: Cornhusker (CHAAP)

Client Sample ID	Lab Sample ID
NW021-7	280-155138-1
NW020-7	280-155138-2
NW022-7	280-155138-3
G0082-7	280-155138-4
G0087-7	280-155138-5
NW071-7	280-155138-6
CA213-7	280-155138-7
G0081-7	280-155138-8
NW070-7	280-155138-9
PZ019-7	280-155138-10

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NW021-7 Lab Sample ID: 280-155138-1

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG ID.:

Matrix: Water Date Sampled: 11/03/2021 10:55

Reporting Basis: WET Date Received: 11/04/2021 11:10

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	1.6	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.063	0.10	0.050	0.019	mg/L	J		1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	200	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	380	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: NW021-7 Lab Sample ID: 280-155138-1

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG ID.:

Matrix: Water Date Sampled: 11/03/2021 10:55

Reporting Basis: WET Date Received: 11/04/2021 11:10

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: NW020-7 Lab Sample ID: 280-155138-2

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG ID.:

Matrix: Water Date Sampled: 11/03/2021 09:35

Reporting Basis: WET Date Received: 11/04/2021 11:10

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	33	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	190	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	360	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: NW020-7 Lab Sample ID: 280-155138-2

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG ID.:

Matrix: Water Date Sampled: 11/03/2021 09:35

Reporting Basis: WET Date Received: 11/04/2021 11:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	6.1	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NW022-7 Lab Sample ID: 280-155138-3

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG ID.:

Matrix: Water Date Sampled: 11/03/2021 12:00

Reporting Basis: WET Date Received: 11/04/2021 11:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	1.1	0.20	0.10	0.044	mg/L			2	350.1
Nitrogen, Total Kjeldahl	1.4	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.21	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	250	25	13	5.2	mg/L		D	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: NW022-7 Lab Sample ID: 280-155138-3

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG ID.:

Matrix: Water Date Sampled: 11/03/2021 12:00

Reporting Basis: WET Date Received: 11/04/2021 11:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.1	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0082-7 | Lab Sample ID: 280-155138-4

Lab Name: Eurofins TestAmerica, Denver | Job No.: 280-155138-1

SDG ID.:

Matrix: Water | Date Sampled: 11/03/2021 10:05

Reporting Basis: WET | Date Received: 11/04/2021 11:10

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	4.4	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	140	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	290	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0082-7 Lab Sample ID: 280-155138-4

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG ID.:

Matrix: Water Date Sampled: 11/03/2021 10:05

Reporting Basis: WET Date Received: 11/04/2021 11:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.1	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0087-7 Lab Sample ID: 280-155138-5

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG ID.:

Matrix: Water Date Sampled: 11/03/2021 11:30

Reporting Basis: WET Date Received: 11/04/2021 11:10

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	7.6	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	130	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	320	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0087-7 Lab Sample ID: 280-155138-5

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG ID.:

Matrix: Water Date Sampled: 11/03/2021 11:30

Reporting Basis: WET Date Received: 11/04/2021 11:10

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: NW071-7 Lab Sample ID: 280-155138-6

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG ID.:

Matrix: Water Date Sampled: 11/02/2021 15:55

Reporting Basis: WET Date Received: 11/04/2021 11:10

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	34	1.0	0.50	0.19	mg/L			10	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	110	10	6.4	3.1	mg/L		H	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: NW071-7 Lab Sample ID: 280-155138-6

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG ID.:

Matrix: Water Date Sampled: 11/02/2021 15:55

Reporting Basis: WET Date Received: 11/04/2021 11:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.0	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: CA213-7 | Lab Sample ID: 280-155138-7

Lab Name: Eurofins TestAmerica, Denver | Job No.: 280-155138-1

SDG ID.:

Matrix: Water | Date Sampled: 11/02/2021 13:20

Reporting Basis: WET | Date Received: 11/04/2021 11:10

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	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	70	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	140	10	6.4	3.1	mg/L		H	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: CA213-7 Lab Sample ID: 280-155138-7

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG ID.:

Matrix: Water Date Sampled: 11/02/2021 13:20

Reporting Basis: WET Date Received: 11/04/2021 11:10

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: G0081-7 | Lab Sample ID: 280-155138-8

Lab Name: Eurofins TestAmerica, Denver | Job No.: 280-155138-1

SDG ID.:

Matrix: Water | Date Sampled: 11/02/2021 15:10

Reporting Basis: WET | Date Received: 11/04/2021 11:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.44	0.20	0.10	0.044	mg/L			2	350.1
Nitrogen, Total Kjeldahl	1.1	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.14	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	150	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	370	10	6.4	3.1	mg/L		H	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0081-7 Lab Sample ID: 280-155138-8

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG ID.:

Matrix: Water Date Sampled: 11/02/2021 15:10

Reporting Basis: WET Date Received: 11/04/2021 11:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	5.7	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: NW070-7 Lab Sample ID: 280-155138-9

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG ID.:

Matrix: Water Date Sampled: 11/02/2021 14:45

Reporting Basis: WET Date Received: 11/04/2021 11:10

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	31	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	98	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	190	10	6.4	3.1	mg/L		H	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: NW070-7 Lab Sample ID: 280-155138-9

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG ID.:

Matrix: Water Date Sampled: 11/02/2021 14:45

Reporting Basis: WET Date Received: 11/04/2021 11:10

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	8.2	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ019-7 Lab Sample ID: 280-155138-10

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG ID.:

Matrix: Water Date Sampled: 11/03/2021 12:55

Reporting Basis: WET Date Received: 11/04/2021 11:10

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	38	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	71	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	110	10	6.4	3.1	mg/L			1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ019-7 Lab Sample ID: 280-155138-10

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG ID.:

Matrix: Water Date Sampled: 11/03/2021 12:55

Reporting Basis: WET Date Received: 11/04/2021 11:10

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

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Analyst: JJM Batch Start Date: 11/21/2021

Reporting Units: mg/L Analytical Batch No.: 558260

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	10:50	Ammonia	0.511	0.501	102	90-110		350.1 ICV_00494
15	ICV	10:52	Ammonia	2.47	2.51	99	90-110		350.1 ICV_00494
16	ICB	10:54	Ammonia	0.050				U	
33	CCVL	11:28	Ammonia	0.487	0.500	97	90-110		350.1 cal_00509
34	CCV	11:30	Ammonia	2.47	2.50	99	90-110		350.1 cal_00509
35	CCB	11:32	Ammonia	0.050				U	
49	CCVL	12:00	Ammonia	0.517	0.500	103	90-110		350.1 cal_00509
50	CCV	12:02	Ammonia	2.63	2.50	105	90-110		350.1 cal_00509
51	CCB	12:04	Ammonia	0.0233				J	

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Analyst: JJM Batch Start Date: 11/21/2021

Reporting Units: mg/L Analytical Batch No.: 558270

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	13:35	Ammonia	0.530	0.501	106	90-110		350.1 ICV_00494
15	ICV	13:37	Ammonia	2.53	2.51	101	90-110		350.1 ICV_00494
16	ICB	13:39	Ammonia	0.050				U	
33	CCVL	14:13	Ammonia	0.480	0.500	96	90-110		350.1 cal_00509
34	CCV	14:15	Ammonia	2.42	2.50	97	90-110		350.1 cal_00509
35	CCB	14:17	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Analyst: RKD Batch Start Date: 11/22/2021

Reporting Units: mg/L Analytical Batch No.: 558390

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	10:34	Ammonia	0.507	0.501	101	90-110		350.1 ICV_00494
15	ICV	10:36	Ammonia	2.46	2.51	98	90-110		350.1 ICV_00494
16	ICB	10:38	Ammonia	0.0284				J	
33	CCVL	11:12	Ammonia	0.500	0.500	100	90-110		350.1 cal_00509
34	CCV	11:14	Ammonia	2.50	2.50	100	90-110		350.1 cal_00509
35	CCB	11:16	Ammonia	0.0268				J	
49	CCVL	11:44	Ammonia	0.500	0.500	100	90-110		350.1 cal_00509
50	CCV	11:46	Ammonia	2.51	2.50	101	90-110		350.1 cal_00509
51	CCB	11:48	Ammonia	0.0339				J	

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Analyst: SVC Batch Start Date: 11/17/2021

Reporting Units: mg/L Analytical Batch No.: 557899

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
7	ICV	19:34	Nitrogen, Total Kjeldahl	5.09	5.00	102	90-110		TKN ICV 25_00112
8	ICB	19:34	Nitrogen, Total Kjeldahl	1.0				U	
21	CCV	19:39	Nitrogen, Total Kjeldahl	5.04	5.00	101	90-110		TKN 25ppm_00826
22	CCB	19:39	Nitrogen, Total Kjeldahl	1.0				U	
32	CCV	19:45	Nitrogen, Total Kjeldahl	5.08	5.00	102	90-110		TKN 25ppm_00826
33	CCB	19:45	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Analyst: SVC Batch Start Date: 11/18/2021

Reporting Units: mg/L Analytical Batch No.: 558049

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
17	ICV	16:27	Nitrate Nitrite as N	4.88	5.00	98	90-110		NXN ICV INT_00577
18	ICVL	16:29	Nitrate Nitrite as N	1.86	2.00	93	90-110		NXN ICV INT_00577
19	ICB	16:31	Nitrate Nitrite as N	0.0231				J	
35	CCV	17:03	Nitrate Nitrite as N	5.30	5.00	106	90-110		NXN CAL INT_00601
36	CCVL	17:05	Nitrate Nitrite as N	1.02	1.00	102	90-110		NXN CAL INT_00601
37	CCB	17:07	Nitrate Nitrite as N	0.0192				J	
51	CCV	17:35	Nitrate Nitrite as N	5.23	5.00	105	90-110		NXN CAL INT_00601
52	CCVL	17:37	Nitrate Nitrite as N	1.02	1.00	102	90-110		NXN CAL INT_00601
53	CCB	17:39	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Analyst: SPG Batch Start Date: 11/14/2021

Reporting Units: mg/L Analytical Batch No.: 557415

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICB	18:07	Sulfate	2.5				U	
9	ICV	18:21	Sulfate	84.0	80.0	105	90-110		IC SO4 ICV_00022

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Analyst: CJ Batch Start Date: 11/14/2021

Reporting Units: mg/L Analytical Batch No.: 557417

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
8	ICV	19:07	Sulfate	80.7	80.0	101	90-110		IC SO4 ICV_00022
9	ICB	19:24	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Analyst: CJ Batch Start Date: 11/20/2021

Reporting Units: mg/L Analytical Batch No.: 558202

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	11:19	Sulfate	100	100	100	90-110		IC LCS_01845
2	CCB	11:33	Sulfate	2.5				U	
17	CCV	16:03	Sulfate	101	100	101	90-110		IC LCS_01845
18	CCB	16:17	Sulfate	2.5				U	
29	CCV	18:51	Sulfate	101	100	101	90-110		IC LCS_01845
30	CCB	19:05	Sulfate	2.5				U	
36	CCV	20:30	Sulfate	101	100	101	90-110		IC LCS_01845
37	CCB	20:44	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Analyst: RAF Batch Start Date: 11/05/2021

Reporting Units: mg/L Analytical Batch No.: 556580

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	15:41	Dissolved Organic Carbon - Quad	18.6	20.0	93	90-110		TOC ICV Std_00047
2	ICB	15:56	Dissolved Organic Carbon - Quad	0.80				U	
15	CCV	19:24	Dissolved Organic Carbon - Quad	23.1	25.0	92	90-110		TOC LCS Std_00052
16	CCB	19:41	Dissolved Organic Carbon - Quad	0.80				U	
27	CCV	22:29	Dissolved Organic Carbon - Quad	23.4	25.0	94	90-110		TOC LCS Std_00052
28	CCB	22:46	Dissolved Organic Carbon - Quad	0.80				U	
39	CCV	01:47	Dissolved Organic Carbon - Quad	23.0	25.0	92	90-110		TOC LCS Std_00052
40	CCB	02:04	Dissolved Organic Carbon - Quad	0.80				U	
51	CCV	04:51	Dissolved Organic Carbon - Quad	23.3	25.0	93	90-110		TOC LCS Std_00052
52	CCB	05:08	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Analyst: RAF Batch Start Date: 11/12/2021

Reporting Units: mg/L Analytical Batch No.: 557476

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	18:16	Dissolved Organic Carbon - Quad	19.9	20.0	99	90-110		TOC ICV Std_00047
2	ICB	18:31	Dissolved Organic Carbon - Quad	0.80				U	
63	CCV	10:32	Dissolved Organic Carbon - Quad	25.3	25.0	101	90-110		TOC LCS Std_00052
64	CCB	10:46	Dissolved Organic Carbon - Quad	0.80				U	
75	CCV	13:47	Dissolved Organic Carbon - Quad	25.3	25.0	101	90-110		TOC LCS Std_00052
76	CCB	14:02	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Analyst: ECC Batch Start Date: 11/17/2021

Reporting Units: mg/L Analytical Batch No.: 557846

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
95	CCV	05:34	Total Alkalinity as CaCO3	220	200	110	90-110		Alk daily lcs 01006
96	CCB	05:40	Total Alkalinity as CaCO3	3.86				J	
107	CCV	07:19	Total Alkalinity as CaCO3	220	200	110	90-110		Alk daily lcs 01006
108	CCB	07:25	Total Alkalinity as CaCO3	3.97				J	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
Batch ID: 558260	Date: 11/21/2021 11:02						
350.1	MB 280-558260/20	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 558270	Date: 11/21/2021 13:47						
350.1	MB 280-558270/20	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 558390	Date: 11/22/2021 10:46						
350.1	MB 280-558390/20	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 557899	Date: 11/17/2021 19:34	Prep Batch: 557729	Date: 11/16/2021 18:04				
351.2	MB 280-557729/2-A	Nitrogen, Total Kjeldahl	1.0	U	mg/L	1.0	1
Batch ID: 558049	Date: 11/18/2021 16:37						
353.2	MB 280-558049/22	Nitrate Nitrite as N	0.050	U	mg/L	0.10	1
Batch ID: 556751	Date: 11/09/2021 12:10	Prep Batch: 556749	Date: 11/09/2021 12:07				
9034	MB 280-556749/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 556789	Date: 11/09/2021 14:38	Prep Batch: 556787	Date: 11/09/2021 14:32				
9034	MB 280-556787/2-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 558202	Date: 11/20/2021 12:29						
9056A	MB 280-558202/6	Sulfate	2.5	U	mg/L	5.0	1
Batch ID: 556580	Date: 11/05/2021 23:00						
9060A	MB 280-556374/2-A	Dissolved Organic Carbon - Quad	0.80	U	mg/L	1.0	1
Batch ID: 557476	Date: 11/13/2021 12:32						
9060A	MB 280-557282/2-A	Dissolved Organic Carbon - Quad	0.80	U	mg/L	1.0	1
Batch ID: 557846	Date: 11/17/2021 04:14						
SM 2320B	MB 280-557846/84	Total Alkalinity as CaCO3	4.59	J	mg/L	10	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 558390 Date: 11/22/2021 11:26											
350.1	280-155138-10	Ammonia	0.050	U	mg/L						
350.1	280-155138-10 MS	Ammonia	0.985		mg/L	1.00	98	90-110			
Batch ID: 557899 Date: 11/17/2021 19:35			Prep Batch: 557729			Date: 11/16/2021 18:04					
351.2	280-155138-10	Nitrogen, Total Kjeldahl	1.0	U	mg/L						J1
351.2	280-155138-10 MS	Nitrogen, Total Kjeldahl	1.0	U	mg/L	3.00	0	90-110			J1
Batch ID: 558049 Date: 11/18/2021 16:41											
353.2	280-155138-10	Nitrate Nitrite as N	38		mg/L						
353.2	280-155138-10 MS	Nitrate Nitrite as N	76.8		mg/L	40.0	97	90-110			
Batch ID: 556751 Date: 11/09/2021 12:10			Prep Batch: 556749			Date: 11/09/2021 12:07					
9034	280-155138-10	Sulfide	0.80	J	mg/L						
9034	280-155138-10 MS	Sulfide	15.6		mg/L	20.2	73	44-110			
Batch ID: 556789 Date: 11/09/2021 14:38			Prep Batch: 556787			Date: 11/09/2021 14:32					
9034	280-155138-9	Sulfide	1.9	U	mg/L						
9034	280-155138-9 MS	Sulfide	13.6		mg/L	20.2	67	44-110			
Batch ID: 558202 Date: 11/20/2021 18:09											
9056A	280-155138-10	Sulfate	71		mg/L						
9056A	280-155138-10 MS	Sulfate	124		mg/L	50.0	105	87-112			
Batch ID: 556580 Date: 11/05/2021 23:30											
9060A	280-155138-1	Dissolved Organic Carbon - Quad	2.9		mg/L						
9060A	280-155138-1 MS	Dissolved Organic Carbon - Quad	26.0		mg/L	25.0	92	88-112			
Batch ID: 557476 Date: 11/13/2021 13:01											
9060A	280-155138-10	Dissolved Organic Carbon - Quad	2.00		mg/L						
9060A	280-155138-10 MS	Dissolved Organic Carbon - Quad	22.7		mg/L	25.0	83	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 558390 Date: 11/22/2021 11:28											
350.1	280-155138-10 MSD	Ammonia	1.01		mg/L	1.00	101	90-110	3	10	
Batch ID: 557899 Date: 11/17/2021 19:35			Prep Batch: 557729			Date: 11/16/2021 18:04					
351.2	280-155138-10 MSD	Nitrogen, Total Kjeldahl	1.0	U	mg/L	3.00	0	90-110	NC	25	J1
Batch ID: 558049 Date: 11/18/2021 16:43											
353.2	280-155138-10 MSD	Nitrate Nitrite as N	78.2		mg/L	40.0	100	90-110	2	10	
Batch ID: 556751 Date: 11/09/2021 12:10			Prep Batch: 556749			Date: 11/09/2021 12:07					
9034	280-155138-10 MSD	Sulfide	15.6		mg/L	20.2	73	44-110	0	20	
Batch ID: 556789 Date: 11/09/2021 14:38			Prep Batch: 556787			Date: 11/09/2021 14:32					
9034	280-155138-9 MSD	Sulfide	13.6		mg/L	20.2	67	44-110	0	20	
Batch ID: 558202 Date: 11/20/2021 18:23											
9056A	280-155138-10 MSD	Sulfate	125		mg/L	50.0	107	87-112	1	10	
Batch ID: 556580 Date: 11/05/2021 23:45											
9060A	280-155138-1 MSD	Dissolved Organic Carbon - Quad	26.1		mg/L	25.0	93	88-112	1	15	
Batch ID: 557476 Date: 11/13/2021 13:16											
9060A	280-155138-10 MSD	Dissolved Organic Carbon - Quad	22.5		mg/L	25.0	82	88-112	1	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 558202 Date: 11/20/2021 17:55								
9056A	PZ019-7	280-155138-10	Sulfate	71	mg/L			
9056A	PZ019-7	280-155138-10 DU	Sulfate	71.2	mg/L	0	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 558260	Date: 11/21/2021 10:58										
						LCS Source: 350.1 cal_00509					
350.1	LCS 280-558260/18	Ammonia	2.45		mg/L	2.50	98	90-110	0	10	
Batch ID: 558270	Date: 11/21/2021 13:43										
						LCS Source: 350.1 cal_00509					
350.1	LCS 280-558270/18	Ammonia	2.55		mg/L	2.50	102	90-110	1	10	
Batch ID: 558390	Date: 11/22/2021 10:42										
						LCS Source: 350.1 cal_00509					
350.1	LCS 280-558390/18	Ammonia	2.51		mg/L	2.50	100	90-110	0	10	
Batch ID: 557899	Date: 11/17/2021 19:34	Prep Batch: 557729	Date: 11/16/2021 18:04								
						LCS Source: TKN 25ppm_00826					
351.2	LCS 280-557729/1-A	Nitrogen, Total Kjeldahl	5.92		mg/L	6.00	99	90-110			
Batch ID: 558049	Date: 11/18/2021 16:35										
						LCS Source: NXN CAL INT_00601					
353.2	LCS 280-558049/21	Nitrate Nitrite as N	5.18		mg/L	5.00	104	90-110			
Batch ID: 556751	Date: 11/09/2021 12:10	Prep Batch: 556749	Date: 11/09/2021 12:07								
						LCS Source: SFD ICV INT_02023					
9034	LCS 280-556749/1-A	Sulfide	16.4		mg/L	20.2	81	44-110			
Batch ID: 556789	Date: 11/09/2021 14:38	Prep Batch: 556787	Date: 11/09/2021 14:32								
						LCS Source: SFD ICV INT_02023					
9034	LCS 280-556787/1-A	Sulfide	16.0		mg/L	20.2	79	44-110			
Batch ID: 558202	Date: 11/20/2021 12:01										
						LCS Source: IC LCS_01845					
9056A	LCS 280-558202/4	Sulfate	100		mg/L	100	100	87-112	0	10	M
Batch ID: 556580	Date: 11/05/2021 22:14										
						LCS Source: TOC LCS Std_00052					
9060A	LCS 280-556374/1-A	Dissolved Organic Carbon - Quad	22.7		mg/L	25.0	91	88-112			
Batch ID: 557476	Date: 11/13/2021 12:17										
						LCS Source: TOC LCS Std_00052					
9060A	LCS 280-557282/1-A	Dissolved Organic Carbon - Quad	25.4		mg/L	25.0	101	88-112			
Batch ID: 557846	Date: 11/17/2021 04:09										
						LCS Source: Alk daily lcs_01006					
SM 2320B	LCS 280-557846/83	Total Alkalinity as CaCO3	216		mg/L	200	108	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 558260	Date: 11/21/2021 11:00										
						LCSD Source: 350.1 cal_00509					
350.1	LCSD 280-558260/19	Ammonia	2.45		mg/L	2.50	98	90-110	0	10	
Batch ID: 558270	Date: 11/21/2021 13:45										
						LCSD Source: 350.1 cal_00509					
350.1	LCSD 280-558270/19	Ammonia	2.53		mg/L	2.50	101	90-110	1	10	
Batch ID: 558390	Date: 11/22/2021 10:44										
						LCSD Source: 350.1 cal_00509					
350.1	LCSD 280-558390/19	Ammonia	2.51		mg/L	2.50	100	90-110	0	10	
Batch ID: 558202	Date: 11/20/2021 12:15										
						LCSD Source: IC LCS_01845					
9056A	LCSD 280-558202/5	Sulfate	100		mg/L	100	100	87-112	0	10	M

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 558202	Date: 11/20/2021 11:47										
						LCS Source: IC CAL cl/so4_00394					
9056A	MRL 280-558202/3	Sulfate	5.15		mg/L	5.00	103	50-150			

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 TestAmerica, Denver Job Number: 280-155138-1

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 TestAmerica, Denver Job Number: 280-155138-1

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 TestAmerica, Denver Job Number: 280-155138-1

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 TestAmerica, Denver Job Number: 280-155138-1

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 TestAmerica, Denver Job Number: 280-155138-1

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 TestAmerica, Denver Job Number: 280-155138-1

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 TestAmerica, Denver Job Number: 280-155138-1

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 TestAmerica, Denver Job Number: 280-155138-1

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 TestAmerica, Denver Job Number: 280-155138-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom10

Method: 9056A DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Sulfate		5	1.03

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-155138-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom10

Method: 9056A XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfate		5	1.03

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-155138-1

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 TestAmerica, Denver Job Number: 280-155138-1

SDG Number:

Matrix: Water Instrument ID: WC_IonChrom11

Method: 9056A XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfate		5	1.03

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-155138-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI4

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 TestAmerica, Denver Job Number: 280-155138-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI4

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 TestAmerica, Denver Job Number: 280-155138-1

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 TestAmerica, Denver Job Number: 280-155138-1

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Prep Method: 351.2

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-557729/1-A	11/16/2021 18:04	557729		25	25
MB 280-557729/2-A	11/16/2021 18:04	557729		25	25
280-155138-10	11/16/2021 18:04	557729		25	25
280-155138-10 MS	11/16/2021 18:04	557729		25	25
280-155138-10 MSD	11/16/2021 18:04	557729		25	25
280-155138-9	11/16/2021 18:04	557729		25	25
280-155138-8	11/16/2021 18:04	557729		25	25
280-155138-7	11/16/2021 18:04	557729		25	25
280-155138-6	11/16/2021 18:04	557729		25	25
280-155138-5	11/16/2021 18:04	557729		25	25
280-155138-4	11/16/2021 18:04	557729		25	25
280-155138-3	11/16/2021 18:04	557729		25	25
280-155138-2	11/16/2021 18:04	557729		25	25
280-155138-1	11/16/2021 18:04	557729		25	25

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-556749/1-A	11/09/2021 12:07	556749		50	50
MB 280-556749/2-A	11/09/2021 12:07	556749		50	50
280-155138-10	11/09/2021 12:07	556749		50	50
280-155138-10 MS	11/09/2021 12:07	556749		50	50
280-155138-10 MSD	11/09/2021 12:07	556749		50	50
280-155138-1	11/09/2021 12:07	556749		50	50
280-155138-2	11/09/2021 12:07	556749		50	50
280-155138-3	11/09/2021 12:07	556749		50	50
280-155138-4	11/09/2021 12:07	556749		50	50
280-155138-5	11/09/2021 12:07	556749		50	50
280-155138-8	11/09/2021 12:07	556749		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-556787/1-A	11/09/2021 14:32	556787		50	50
MB 280-556787/2-A	11/09/2021 14:32	556787		50	50
280-155138-9	11/09/2021 14:32	556787		50	50
280-155138-9 MS	11/09/2021 14:32	556787		50	50
280-155138-9 MSD	11/09/2021 14:32	556787		50	50
280-155138-6	11/09/2021 14:32	556787		50	50
280-155138-7	11/09/2021 14:32	556787		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 11/21/2021 10:23 End Date: 11/21/2021 12:14

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			10:23																									
ZZZZZZ			10:25																									
ZZZZZZ			10:27																									
IC 280-558260/4			10:29	X																								
IC 280-558260/5			10:31	X																								
IC 280-558260/6			10:34	X																								
IC 280-558260/7			10:36	X																								
IC 280-558260/8			10:38	X																								
IC 280-558260/9			10:40	X																								
IC 280-558260/10			10:42	X																								
IC 280-558260/11			10:44	X																								
ZZZZZZ			10:46																									
ZZZZZZ			10:48																									
ICVL 280-558260/14	1		10:50	X																								
ICV 280-558260/15	1		10:52	X																								
ICB 280-558260/16	1		10:54	X																								
ZZZZZZ			10:56																									
LCS 280-558260/18	1	T	10:58	X																								
LCSD 280-558260/19	1	T	11:00	X																								
MB 280-558260/20	1	T	11:02	X																								
ZZZZZZ			11:04																									
ZZZZZZ			11:06																									
ZZZZZZ			11:08																									
ZZZZZZ			11:10																									
ZZZZZZ			11:12																									
ZZZZZZ			11:14																									
ZZZZZZ			11:16																									
ZZZZZZ			11:18																									
ZZZZZZ			11:20																									
ZZZZZZ			11:22																									
ZZZZZZ			11:24																									
ZZZZZZ			11:26																									
CCVL 280-558260/33	1		11:28	X																								
CCV 280-558260/34	1		11:30	X																								
CCB 280-558260/35	1		11:32	X																								
ZZZZZZ			11:34																									
280-155138-9	1	T	11:36	X																								
280-155138-4	1	T	11:38	X																								
ZZZZZZ			11:40																									
ZZZZZZ			11:42																									
ZZZZZZ			11:44																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 11/21/2021 10:23 End Date: 11/21/2021 12:14

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			11:46																									
ZZZZZZ			11:48																									
ZZZZZZ			11:50																									
ZZZZZZ			11:52																									
280-155138-7	1	T	11:54	X																								
ZZZZZZ			11:56																									
ZZZZZZ			11:58																									
CCVL 280-558260/49	1		12:00	X																								
CCV 280-558260/50	1		12:02	X																								
CCB 280-558260/51	1		12:04	X																								
ZZZZZZ			12:06																									
ZZZZZZ			12:08																									
ZZZZZZ			12:10																									
ZZZZZZ			12:12																									
ZZZZZZ			12:14																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 11/21/2021 13:09 End Date: 11/21/2021 15:58

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			13:09																									
ZZZZZZ			13:11																									
ZZZZZZ			13:13																									
IC 280-558270/4			13:15	X																								
IC 280-558270/5			13:17	X																								
IC 280-558270/6			13:19	X																								
IC 280-558270/7			13:21	X																								
IC 280-558270/8			13:23	X																								
IC 280-558270/9			13:25	X																								
IC 280-558270/10			13:27	X																								
IC 280-558270/11			13:29	X																								
ZZZZZZ			13:31																									
ZZZZZZ			13:33																									
ICVL 280-558270/14	1		13:35	X																								
ICV 280-558270/15	1		13:37	X																								
ICB 280-558270/16	1		13:39	X																								
ZZZZZZ			13:41																									
LCS 280-558270/18	1	T	13:43	X																								
LCSD 280-558270/19	1	T	13:45	X																								
MB 280-558270/20	1	T	13:47	X																								
ZZZZZZ			13:49																									
ZZZZZZ			13:51																									
ZZZZZZ			13:53																									
280-155138-1	1	T	13:55	X																								
280-155138-2	1	T	13:57	X																								
280-155138-6	1	T	13:59	X																								
280-155138-5	1	T	14:01	X																								
ZZZZZZ			14:03																									
ZZZZZZ			14:05																									
ZZZZZZ			14:07																									
ZZZZZZ			14:09																									
ZZZZZZ			14:11																									
CCVL 280-558270/33	1		14:13	X																								
CCV 280-558270/34	1		14:15	X																								
CCB 280-558270/35	1		14:17	X																								
ZZZZZZ			14:19																									
ZZZZZZ			14:21																									
ZZZZZZ			14:23																									
ZZZZZZ			14:25																									
ZZZZZZ			14:27																									
ZZZZZZ			14:29																									

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 11/21/2021 13:09 End Date: 11/21/2021 15:58

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			14:31																									
ZZZZZZ			14:33																									
ZZZZZZ			14:35																									
ZZZZZZ			14:37																									
ZZZZZZ			14:39																									
ZZZZZZ			14:41																									
ZZZZZZ			14:43																									
CCVL 280-558270/49			14:45																									
CCV 280-558270/50			14:47																									
CCB 280-558270/51			14:49																									
ZZZZZZ			14:51																									
ZZZZZZ			14:53																									
ZZZZZZ			14:55																									
ZZZZZZ			14:57																									
ZZZZZZ			14:59																									
ZZZZZZ			15:01																									
ZZZZZZ			15:03																									
ZZZZZZ			15:05																									
ZZZZZZ			15:07																									
ZZZZZZ			15:09																									
ZZZZZZ			15:11																									
ZZZZZZ			15:13																									
ZZZZZZ			15:15																									
ZZZZZZ			15:17																									
ZZZZZZ			15:19																									
ZZZZZZ			15:21																									
ZZZZZZ			15:23																									
ZZZZZZ			15:25																									
ZZZZZZ			15:27																									
ZZZZZZ			15:29																									
ZZZZZZ			15:38																									
ZZZZZZ			15:40																									
ZZZZZZ			15:42																									
ZZZZZZ			15:44																									
ZZZZZZ			15:51																									
ZZZZZZ			15:54																									
ZZZZZZ			15:56																									
ZZZZZZ			15:58																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 11/22/2021 10:08 End Date: 11/22/2021 14:45

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			10:08																									
ZZZZZZ			10:10																									
ZZZZZZ			10:12																									
IC 280-558390/4			10:14	X																								
IC 280-558390/5			10:16	X																								
IC 280-558390/6			10:18	X																								
IC 280-558390/7			10:20	X																								
IC 280-558390/8			10:22	X																								
IC 280-558390/9			10:24	X																								
IC 280-558390/10			10:26	X																								
IC 280-558390/11			10:28	X																								
ZZZZZZ			10:30																									
ZZZZZZ			10:32																									
ICVL 280-558390/14	1		10:34	X																								
ICV 280-558390/15	1		10:36	X																								
ICB 280-558390/16	1		10:38	X																								
ZZZZZZ			10:40																									
LCS 280-558390/18	1	T	10:42	X																								
LCSD 280-558390/19	1	T	10:44	X																								
MB 280-558390/20	1	T	10:46	X																								
ZZZZZZ			10:48																									
ZZZZZZ			10:50																									
ZZZZZZ			10:52																									
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																									
CCVL 280-558390/33	1		11:12	X																								
CCV 280-558390/34	1		11:14	X																								
CCB 280-558390/35	1		11:16	X																								
ZZZZZZ			11:18																									
ZZZZZZ			11:20																									
280-155138-3	2	T	11:22	X																								
280-155138-10	1	T	11:24	X																								
280-155138-10 MS	1	T	11:26	X																								
280-155138-10 MSD	1	T	11:28	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 11/22/2021 10:08 End Date: 11/22/2021 14:45

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
280-155138-8	2	T	11:30	X																								
ZZZZZZ			11:32																									
ZZZZZZ			11:34																									
ZZZZZZ			11:36																									
ZZZZZZ			11:38																									
ZZZZZZ			11:40																									
ZZZZZZ			11:42																									
CCVL 280-558390/49	1		11:44	X																								
CCV 280-558390/50	1		11:46	X																								
CCB 280-558390/51	1		11:48	X																								
ZZZZZZ			11:50																									
ZZZZZZ			11:52																									
ZZZZZZ			11:54																									
ZZZZZZ			11:56																									
ZZZZZZ			11:58																									
ZZZZZZ			12:00																									
ZZZZZZ			12:02																									
ZZZZZZ			12:04																									
ZZZZZZ			12:06																									
ZZZZZZ			12:08																									
ZZZZZZ			12:10																									
ZZZZZZ			12:12																									
ZZZZZZ			12:14																									
ZZZZZZ			12:16																									
ZZZZZZ			12:18																									
ZZZZZZ			12:20																									
ZZZZZZ			12:22																									
CCVL 280-558390/69			12:24																									
CCV 280-558390/70			12:26																									
CCB 280-558390/71			12:28																									
ZZZZZZ			12:30																									
ZZZZZZ			12:32																									
ZZZZZZ			12:34																									
ZZZZZZ			12:36																									
ZZZZZZ			12:38																									
ZZZZZZ			12:40																									
ZZZZZZ			12:42																									
ZZZZZZ			12:53																									
ZZZZZZ			12:55																									
ZZZZZZ			12:57																									
ZZZZZZ			12:59																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 11/22/2021 10:08 End Date: 11/22/2021 14:45

Lab Sample Id	D/F	Type	Time	Analytes																									
				NH3																									
ZZZZZZ			13:01																										
ZZZZZZ			13:03																										
CCVL 280-558390/85			13:05																										
CCV 280-558390/86			13:07																										
CCB 280-558390/87			13:09																										
ZZZZZZ			13:11																										
ZZZZZZ			13:13																										
ZZZZZZ			13:15																										
ZZZZZZ			13:17																										
ZZZZZZ			13:19																										
ZZZZZZ			13:21																										
ZZZZZZ			13:23																										
ZZZZZZ			13:25																										
ZZZZZZ			13:27																										
ZZZZZZ			13:29																										
ZZZZZZ			13:31																										
ZZZZZZ			13:33																										
ZZZZZZ			13:35																										
ZZZZZZ			13:37																										
ZZZZZZ			13:39																										
ZZZZZZ			13:41																										
ZZZZZZ			13:43																										
ZZZZZZ			13:45																										
ZZZZZZ			13:47																										
ZZZZZZ			13:54																										
ZZZZZZ			13:56																										
ZZZZZZ			13:58																										
ZZZZZZ			14:00																										
ZZZZZZ			14:39																										
ZZZZZZ			14:41																										
ZZZZZZ			14:43																										
ZZZZZZ			14:45																										

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_GAL1 Analysis Method: 351.2

Start Date: 11/15/2021 17:04 End Date: 11/17/2021 20:51

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
IC 280-557418/1-A			17:04	X																								
IC 280-557418/2-A			17:04	X																								
IC 280-557418/3-A			17:05	X																								
IC 280-557418/4-A			17:05	X																								
IC 280-557418/5-A			17:05	X																								
IC 280-557418/6-A			17:05	X																								
ICV 280-557418/7-A	1		19:34	X																								
ICB 280-557418/8-A	1		19:34	X																								
LCS 280-557729/1-A	1	T	19:34	X																								
MB 280-557729/2-A	1	T	19:34	X																								
280-155138-10	1	T	19:35	X																								
280-155138-10 MS	1	T	19:35	X																								
280-155138-10 MSD	1	T	19:35	X																								
280-155138-9	1	T	19:35	X																								
280-155138-8	1	T	19:36	X																								
280-155138-7	1	T	19:37	X																								
280-155138-6	1	T	19:38	X																								
280-155138-5	1	T	19:38	X																								
280-155138-4	1	T	19:39	X																								
280-155138-3	1	T	19:39	X																								
CCV 280-557418/9-A	1		19:39	X																								
CCB 280-557418/10-A	1		19:39	X																								
280-155138-2	1	T	19:40	X																								
280-155138-1	1	T	19:40	X																								
ZZZZZZ			19:42																									
ZZZZZZ			19:42																									
ZZZZZZ			19:42																									
ZZZZZZ			19:42																									
ZZZZZZ			19:43																									
ZZZZZZ			19:43																									
ZZZZZZ			19:43																									
CCV 280-557418/9-A	1		19:45	X																								
CCB 280-557418/10-A	1		19:45	X																								
ZZZZZZ			19:46																									
ZZZZZZ			19:46																									
ZZZZZZ			19:47																									
ZZZZZZ			19:47																									
ZZZZZZ			19:47																									
ZZZZZZ			19:47																									
ZZZZZZ			19:48																									
ZZZZZZ			19:48																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_GAL1 Analysis Method: 351.2

Start Date: 11/15/2021 17:04 End Date: 11/17/2021 20:51

Lab Sample Id	D/F	Type	Time	Analytes																								
				TKN																								
ZZZZZZ			19:49																									
ZZZZZZ			19:49																									
CCV 280-557418/9-A			19:51																									
CCB 280-557418/10-A			19:51																									
ZZZZZZ			19:51																									
ZZZZZZ			19:51																									
ZZZZZZ			19:52																									
ZZZZZZ			19:52																									
ZZZZZZ			19:52																									
ZZZZZZ			19:52																									
ZZZZZZ			19:54																									
ZZZZZZ			19:54																									
ZZZZZZ			19:55																									
ZZZZZZ			19:55																									
ZZZZZZ			20:46																									
CCV 280-557418/9-A			20:46																									
CCB 280-557418/10-A			20:46																									
ZZZZZZ			20:46																									
ZZZZZZ			20:47																									
ZZZZZZ			20:47																									
ZZZZZZ			20:47																									
ZZZZZZ			20:48																									
ZZZZZZ			20:49																									
ZZZZZZ			20:49																									
CCV 280-557418/9-A			20:50																									
CCV 280-557418/9-A			20:50																									
CCB 280-557418/10-A			20:51																									
CCB 280-557418/10-A			20:51																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 11/18/2021 15:55 End Date: 11/18/2021 19:18

Lab Sample Id	D/F	Type	Time	Analytes																								
				NNO32																								
ZZZZZZ			15:55																									
ZZZZZZ			15:57																									
ZZZZZZ			15:59																									
ZZZZZZ			16:01																									
IC 280-558049/5			16:03	X																								
IC 280-558049/6			16:05	X																								
IC 280-558049/7			16:07	X																								
IC 280-558049/8			16:09	X																								
IC 280-558049/9			16:11	X																								
IC 280-558049/10			16:13	X																								
IC 280-558049/11			16:15	X																								
IC 280-558049/12			16:17	X																								
IC 280-558049/13			16:19	X																								
ZZZZZZ			16:21																									
ZZZZZZ			16:23																									
ZZZZZZ			16:25																									
ICV 280-558049/17	1		16:27	X																								
ICVL 280-558049/18	1		16:29	X																								
ICB 280-558049/19	1		16:31	X																								
ZZZZZZ			16:33																									
LCS 280-558049/21	1	T	16:35	X																								
MB 280-558049/22	1	T	16:37	X																								
280-155138-10	10	T	16:39	X																								
280-155138-10 MS	10	T	16:41	X																								
280-155138-10 MSD	10	T	16:43	X																								
280-155138-1	1	T	16:45	X																								
280-155138-2	10	T	16:47	X																								
280-155138-3	1	T	16:49	X																								
280-155138-4	1	T	16:51	X																								
280-155138-5	2	T	16:53	X																								
280-155138-6	10	T	16:55	X																								
280-155138-7	1	T	16:57	X																								
RINSE 280-558049/33			16:59																									
ZZZZZZ			17:01																									
CCV 280-558049/35	1		17:03	X																								
CCVL 280-558049/36	1		17:05	X																								
CCB 280-558049/37	1		17:07	X																								
ZZZZZZ			17:09																									
280-155138-8	1	T	17:11	X																								

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 11/18/2021 15:55 End Date: 11/18/2021 19:18

Lab Sample Id	D/F	Type	Time	Analytes																								
				NNO32																								
280-155138-9	10	T	17:13	X																								
ZZZZZZ			17:15																									
ZZZZZZ			17:17																									
ZZZZZZ			17:19																									
ZZZZZZ			17:21																									
ZZZZZZ			17:23																									
ZZZZZZ			17:25																									
ZZZZZZ			17:27																									
ZZZZZZ			17:29																									
RINSE 280-558049/49			17:31																									
ZZZZZZ			17:33																									
CCV 280-558049/51	1		17:35	X																								
CCVL 280-558049/52	1		17:37	X																								
CCB 280-558049/53	1		17:39	X																								
ZZZZZZ			17:41																									
ZZZZZZ			17:43																									
ZZZZZZ			17:45																									
ZZZZZZ			17:47																									
ZZZZZZ			17:49																									
ZZZZZZ			17:51																									
ZZZZZZ			17:53																									
ZZZZZZ			17:55																									
ZZZZZZ			17:57																									
ZZZZZZ			17:59																									
ZZZZZZ			18:01																									
RINSE 280-558049/65			18:03																									
ZZZZZZ			18:05																									
CCV 280-558049/67			18:07																									
CCVL 280-558049/68			18:09																									
CCB 280-558049/69			18:11																									
ZZZZZZ			18:13																									
ZZZZZZ			18:15																									
ZZZZZZ			18:17																									
ZZZZZZ			18:19																									
ZZZZZZ			18:21																									
ZZZZZZ			18:23																									
ZZZZZZ			18:25																									
ZZZZZZ			18:27																									
ZZZZZZ			18:29																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_Alp 2 Analysis Method: 353.2

Start Date: 11/18/2021 15:55 End Date: 11/18/2021 19:18

Lab Sample Id	D/F	Type	Time	Analytes
				NNO32
ZZZZZZ			18:31	
ZZZZZZ			18:33	
RINSE 280-558049/81			18:35	
ZZZZZZ			18:37	
CCV 280-558049/83			18:39	
CCVL 280-558049/84			18:41	
CCB 280-558049/85			18:43	
ZZZZZZ			18:45	
ZZZZZZ			18:48	
ZZZZZZ			18:50	
ZZZZZZ			18:52	
ZZZZZZ			18:54	
ZZZZZZ			18:56	
ZZZZZZ			18:58	
ZZZZZZ			19:00	
ZZZZZZ			19:02	
ZZZZZZ			19:04	
ZZZZZZ			19:06	
RINSE 280-558049/97			19:08	
ZZZZZZ			19:10	
CCV 280-558049/99			19:12	
CCVL 280-558049/100			19:14	
CCB 280-558049/101			19:16	
ZZZZZZ			19:18	

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 11/09/2021 12:10 End Date: 11/09/2021 12:10

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-556749/1-A	1	T	12:10	X																								
MB 280-556749/2-A	1	T	12:10	X																								
280-155138-10	1	T	12:10	X																								
280-155138-10 MS	1	T	12:10	X																								
280-155138-10 MSD	1	T	12:10	X																								
ZZZZZZ			12:10																									
ZZZZZZ			12:10																									
ZZZZZZ			12:10																									
ZZZZZZ			12:10																									
280-155138-1	1	T	12:10	X																								
280-155138-2	1	T	12:10	X																								
280-155138-3	1	T	12:10	X																								
280-155138-4	1	T	12:10	X																								
280-155138-5	1	T	12:10	X																								
280-155138-8	1	T	12:10	X																								
ZZZZZZ			12:10																									
ZZZZZZ			12:10																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 11/09/2021 14:38 End Date: 11/09/2021 14:38

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
LCS 280-556787/1-A	1	T	14:38	X																								
MB 280-556787/2-A	1	T	14:38	X																								
280-155138-9	1	T	14:38	X																								
280-155138-9 MS	1	T	14:38	X																								
280-155138-9 MSD	1	T	14:38	X																								
280-155138-6	1	T	14:38	X																								
280-155138-7	1	T	14:38	X																								
ZZZZZZ			14:38																									
ZZZZZZ			14:38																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 11/14/2021 16:43 End Date: 11/16/2021 02:32

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
STD1 280-557415/2 IC	1		16:43	X																								
STD2 280-557415/3 IC	1		16:57	X																								
STD3 280-557415/4 IC	1		17:11	X																								
STD4 280-557415/5 IC	1		17:25	X																								
STD5 280-557415/6 IC	1		17:39	X																								
STD6 280-557415/7 IC	1		17:53	X																								
ICB 280-557415/8	1		18:07	X																								
ICV 280-557415/9	1		18:21	X																								
ZZZZZZ			18:35																									
ZZZZZZ			18:49																									
ZZZZZZ			19:03																									
ZZZZZZ			19:17																									
ZZZZZZ			10:10																									
ZZZZZZ			10:24																									
ZZZZZZ			10:38																									
ZZZZZZ			10:52																									
ZZZZZZ			11:06																									
ZZZZZZ			11:20																									
ZZZZZZ			11:34																									
ZZZZZZ			11:48																									
ZZZZZZ			12:02																									
ZZZZZZ			12:16																									
CCV 280-557415/24			12:30																									
CCB 280-557415/25			12:44																									
ZZZZZZ			12:58																									
CCV 280-557415/28			13:12																									
CCB 280-557415/29			13:26																									
ZZZZZZ			13:40																									
ZZZZZZ			13:54																									
ZZZZZZ			14:08																									
ZZZZZZ			14:22																									
ZZZZZZ			14:36																									
ZZZZZZ			14:50																									
ZZZZZZ			15:04																									
ZZZZZZ			15:18																									
ZZZZZZ			15:33																									
ZZZZZZ			15:47																									
CCV 280-557415/41			16:01																									
CCB 280-557415/42			16:15																									
ZZZZZZ			16:29																									
ZZZZZZ			16:43																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 11/14/2021 16:43 End Date: 11/16/2021 02:32

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			16:57																									
ZZZZZZ			17:11																									
ZZZZZZ			17:25																									
ZZZZZZ			17:39																									
ZZZZZZ			17:53																									
ZZZZZZ			18:07																									
ZZZZZZ			18:21																									
ZZZZZZ			18:35																									
CCV 280-557415/87			18:49																									
CCB 280-557415/88			19:03																									
ZZZZZZ			19:17																									
ZZZZZZ			19:31																									
ZZZZZZ			19:45																									
ZZZZZZ			19:59																									
CCV 280-557415/59			20:13																									
CCB 280-557415/60			20:27																									
ZZZZZZ			20:41																									
ZZZZZZ			20:55																									
ZZZZZZ			21:09																									
ZZZZZZ			21:23																									
ZZZZZZ			21:37																									
ZZZZZZ			21:51																									
ZZZZZZ			22:05																									
ZZZZZZ			22:19																									
ZZZZZZ			22:33																									
ZZZZZZ			22:47																									
ZZZZZZ			23:01																									
ZZZZZZ			23:15																									
ZZZZZZ			23:29																									
CCV 280-557415/74			23:43																									
CCB 280-557415/75			23:57																									
ZZZZZZ			00:12																									
ZZZZZZ			00:26																									
ZZZZZZ			00:40																									
ZZZZZZ			00:54																									
ZZZZZZ			01:08																									
ZZZZZZ			01:22																									
ZZZZZZ			01:36																									
ZZZZZZ			01:50																									
ZZZZZZ			02:04																									
CCV 280-557415/85			02:18																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 11/14/2021 16:43 End Date: 11/16/2021 02:32

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCB 280-557415/86			02:32																									

Prep Types:
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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 11/20/2021 11:19 End Date: 11/21/2021 06:33

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCV 280-558202/1	1		11:19	X																								
CCB 280-558202/2	1		11:33	X																								
MRL 280-558202/3	1	T	11:47	X																								
LCS 280-558202/4	1	T	12:01	X																								
LCSD 280-558202/5	1	T	12:15	X																								
MB 280-558202/6	1	T	12:29	X																								
ZZZZZZ			13:41																									
ZZZZZZ			13:57																									
ZZZZZZ			14:11																									
ZZZZZZ			14:25																									
ZZZZZZ			14:39																									
ZZZZZZ			14:53																									
ZZZZZZ			15:07																									
ZZZZZZ			15:21																									
ZZZZZZ			15:35																									
280-155138-1	1	T	15:49	X																								
CCV 280-558202/17	1		16:03	X																								
CCB 280-558202/18	1		16:17	X																								
280-155138-2	1	T	16:31	X																								
ZZZZZZ			16:45																									
280-155138-4	1	T	16:59	X																								
280-155138-5	1	T	17:13	X																								
280-155138-6	1	T	17:27	X																								
280-155138-10	1	T	17:41	X																								
280-155138-10 DU	1	T	17:55	X																								
280-155138-10 MS	1	T	18:09	X																								
280-155138-10 MSD	1	T	18:23	X																								
280-155138-7	1	T	18:37	X																								
CCV 280-558202/29	1		18:51	X																								
CCB 280-558202/30	1		19:05	X																								
280-155138-9	1	T	19:20	X																								
280-155138-8	1	T	19:34	X																								
ZZZZZZ			19:48																									
ZZZZZZ			20:02																									
ZZZZZZ			20:16																									
CCV 280-558202/36	1		20:30	X																								
CCB 280-558202/37	1		20:44	X																								
ZZZZZZ			20:58																									
ZZZZZZ			21:12																									
ZZZZZZ			21:26																									
ZZZZZZ			21:40																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_IonChrom10 Analysis Method: 9056A

Start Date: 11/20/2021 11:19 End Date: 11/21/2021 06:33

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			21:54																									
ZZZZZZ			22:08																									
ZZZZZZ			22:22																									
ZZZZZZ			22:36																									
ZZZZZZ			22:50																									
ZZZZZZ			23:04																									
CCV 280-558202/48			23:18																									
CCB 280-558202/49			23:32																									
ZZZZZZ			23:46																									
ZZZZZZ			00:00																									
ZZZZZZ			00:14																									
ZZZZZZ			00:28																									
ZZZZZZ			00:42																									
ZZZZZZ			00:56																									
ZZZZZZ			01:10																									
ZZZZZZ			01:24																									
ZZZZZZ			01:38																									
ZZZZZZ			01:52																									
CCV 280-558202/60			02:06																									
CCB 280-558202/61			02:20																									
ZZZZZZ			02:34																									
ZZZZZZ			02:48																									
ZZZZZZ			03:02																									
ZZZZZZ			03:16																									
ZZZZZZ			03:30																									
ZZZZZZ			03:44																									
ZZZZZZ			03:58																									
ZZZZZZ			04:13																									
ZZZZZZ			04:27																									
ZZZZZZ			04:41																									
CCV 280-558202/72			04:55																									
CCB 280-558202/73			05:09																									
ZZZZZZ			05:23																									
ZZZZZZ			05:37																									
ZZZZZZ			05:51																									
ZZZZZZ			06:05																									
CCV 280-558202/78			06:19																									
CCB 280-558202/79			06:33																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Method: 9056A

Start Date: 11/14/2021 17:29 End Date: 11/16/2021 04:21

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
STD 280-557417/2 IC	1		17:29	X																								
STD 280-557417/3 IC	1		17:45	X																								
STD 280-557417/4 IC	1		18:02	X																								
STD 280-557417/5 IC	1		18:18	X																								
STD 280-557417/6 IC	1		18:35	X																								
STD 280-557417/7 IC	1		18:51	X																								
ICV 280-557417/8	1		19:07	X																								
ICB 280-557417/9	1		19:24	X																								
ZZZZZZ			19:40																									
ZZZZZZ			19:57																									
ZZZZZZ			20:13																									
ZZZZZZ			20:29																									
ZZZZZZ			09:40																									
ZZZZZZ			09:56																									
ZZZZZZ			10:12																									
ZZZZZZ			10:29																									
ZZZZZZ			10:45																									
ZZZZZZ			11:02																									
ZZZZZZ			11:18																									
ZZZZZZ			11:34																									
ZZZZZZ			11:51																									
ZZZZZZ			12:07																									
CCV 280-557417/24			12:24																									
CCB 280-557417/25			12:40																									
ZZZZZZ			12:56																									
ZZZZZZ			13:13																									
ZZZZZZ			13:29																									
ZZZZZZ			13:46																									
ZZZZZZ			14:02																									
ZZZZZZ			14:19																									
ZZZZZZ			14:35																									
ZZZZZZ			14:51																									
ZZZZZZ			15:08																									
ZZZZZZ			15:24																									
ZZZZZZ			15:41																									
CCV 280-557417/37			15:57																									
CCB 280-557417/38			16:13																									
ZZZZZZ			16:30																									
ZZZZZZ			16:46																									
ZZZZZZ			17:03																									
ZZZZZZ			17:19																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Method: 9056A

Start Date: 11/14/2021 17:29 End Date: 11/16/2021 04:21

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
ZZZZZZ			17:36																									
ZZZZZZ			17:52																									
ZZZZZZ			18:08																									
CCV 280-557417/46			18:25																									
CCB 280-557417/47			18:41																									
ZZZZZZ			19:36																									
ZZZZZZ			19:52																									
ZZZZZZ			20:08																									
ZZZZZZ			20:25																									
ZZZZZZ			20:41																									
ZZZZZZ			20:58																									
ZZZZZZ			21:14																									
ZZZZZZ			21:31																									
ZZZZZZ			21:47																									
ZZZZZZ			22:03																									
CCV 280-557417/58			22:20																									
CCB 280-557417/59			22:36																									
ZZZZZZ			22:53																									
ZZZZZZ			23:09																									
ZZZZZZ			23:25																									
ZZZZZZ			23:42																									
ZZZZZZ			23:58																									
ZZZZZZ			00:15																									
ZZZZZZ			00:31																									
ZZZZZZ			00:48																									
ZZZZZZ			01:04																									
ZZZZZZ			01:20																									
CCV 280-557417/70			01:37																									
CCB 280-557417/71			01:53																									
ZZZZZZ			02:10																									
ZZZZZZ			02:26																									
ZZZZZZ			02:42																									
ZZZZZZ			02:59																									
ZZZZZZ			03:15																									
ZZZZZZ			03:32																									
ZZZZZZ			03:48																									
CCV 280-557417/79			04:05																									
CCB 280-557417/80			04:21																									

Prep Types:
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Method: 9056A

Start Date: 11/23/2021 10:27 End Date: 11/24/2021 00:56

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCV 280-558471/1			10:27																									
CCB 280-558471/2			10:43																									
ZZZZZZ			10:59																									
ZZZZZZ			11:16																									
ZZZZZZ			11:32																									
ZZZZZZ			11:48																									
ZZZZZZ			12:29																									
ZZZZZZ			12:45																									
ZZZZZZ			13:02																									
ZZZZZZ			13:18																									
ZZZZZZ			13:34																									
ZZZZZZ			13:51																									
ZZZZZZ			14:07																									
CCV 280-558471/15			14:24																									
CCB 280-558471/16			14:40																									
ZZZZZZ			14:57																									
ZZZZZZ			15:13																									
280-155138-3	5	T	15:29	X																								
ZZZZZZ			15:46																									
ZZZZZZ			16:02																									
ZZZZZZ			16:19																									
ZZZZZZ			16:35																									
ZZZZZZ			16:51																									
ZZZZZZ			17:08																									
ZZZZZZ			17:24																									
CCV 280-558471/27			17:41																									
CCB 280-558471/28			17:57																									
ZZZZZZ			18:14																									
ZZZZZZ			18:39																									
ZZZZZZ			18:54																									
ZZZZZZ			19:11																									
ZZZZZZ			19:27																									
ZZZZZZ			19:44																									
ZZZZZZ			20:00																									
ZZZZZZ			20:16																									
ZZZZZZ			20:33																									
ZZZZZZ			20:49																									
CCV 280-558471/39			21:06																									
CCB 280-558471/40			21:22																									
ZZZZZZ			21:39																									
ZZZZZZ			21:55																									

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Method: 9056A

Start Date: 11/23/2021 10:27 End Date: 11/24/2021 00:56

Lab Sample Id	D/F	Type	Time	Analytes																									
				SO4																									
ZZZZZZ			22:11																										
ZZZZZZ			22:28																										
ZZZZZZ			22:44																										
ZZZZZZ			23:01																										
ZZZZZZ			23:17																										
ZZZZZZ			23:33																										
ZZZZZZ			23:50																										
ZZZZZZ			00:06																										
ZZZZZZ			00:23																										
CCV 280-558471/52			00:39																										
CCB 280-558471/53			00:56																										

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 11/12/2021 18:16 End Date: 11/13/2021 18:38

Lab Sample Id	D/F	Type	Time	Analytes																									
				DOCQ																									
ICV 280-557476/1	1		18:16	X																									
ICB 280-557476/2	1		18:31	X																									
ZZZZZZ			18:47																										
ZZZZZZ			19:02																										
ZZZZZZ			19:17																										
ZZZZZZ			19:33																										
ZZZZZZ			19:48																										
ZZZZZZ			20:03																										
ZZZZZZ			20:17																										
ZZZZZZ			20:32																										
ZZZZZZ			20:47																										
ZZZZZZ			21:01																										
ZZZZZZ			21:16																										
ZZZZZZ			21:31																										
CCV 280-557476/15			21:45																										
CCB 280-557476/16			22:00																										
ZZZZZZ			22:15																										
ZZZZZZ			22:29																										
ZZZZZZ			22:44																										
ZZZZZZ			22:59																										
ZZZZZZ			23:14																										
ZZZZZZ			23:28																										
ZZZZZZ			23:45																										
ZZZZZZ			00:02																										
ZZZZZZ			00:16																										
ZZZZZZ			00:31																										
CCV 280-557476/27			00:46																										
CCB 280-557476/28			01:00																										
ZZZZZZ			01:15																										
ZZZZZZ			01:30																										
ZZZZZZ			01:44																										
ZZZZZZ			02:01																										
ZZZZZZ			02:16																										
ZZZZZZ			02:31																										
ZZZZZZ			02:45																										
ZZZZZZ			03:00																										
ZZZZZZ			03:15																										
ZZZZZZ			03:29																										
CCV 280-557476/39			03:44																										
CCB 280-557476/40			03:59																										

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 11/12/2021 18:16 End Date: 11/13/2021 18:38

Lab Sample Id	D/F	Type	Time	Analytes																									
				DOCQ																									
ZZZZZZ			04:13																										
ZZZZZZ			04:30																										
ZZZZZZ			04:45																										
ZZZZZZ			05:00																										
ZZZZZZ			05:15																										
ZZZZZZ			05:29																										
ZZZZZZ			05:44																										
ZZZZZZ			05:59																										
ZZZZZZ			06:15																										
ZZZZZZ			06:32																										
CCV 280-557476/51			06:47																										
CCB 280-557476/52			07:01																										
ZZZZZZ			07:24																										
ZZZZZZ			07:57																										
ZZZZZZ			08:14																										
ZZZZZZ			08:36																										
ZZZZZZ			08:53																										
ZZZZZZ			09:12																										
ZZZZZZ			09:29																										
ZZZZZZ			09:45																										
ZZZZZZ			10:02																										
ZZZZZZ			10:17																										
CCV 280-557476/63	1		10:32	X																									
CCB 280-557476/64	1		10:46	X																									
ZZZZZZ			11:10																										
ZZZZZZ			11:33																										
ZZZZZZ			11:48																										
ZZZZZZ			12:02																										
LCS 280-557282/1-A	1	D	12:17	X																									
MB 280-557282/2-A	1	D	12:32	X																									
ZZZZZZ			12:46																										
280-155138-10MS	1		13:01	X																									
280-155138-10MSD	1		13:16	X																									
ZZZZZZ			13:33																										
CCV 280-557476/75	1		13:47	X																									
CCB 280-557476/76	1		14:02	X																									
ZZZZZZ			14:19																										
ZZZZZZ			14:42																										
ZZZZZZ			15:08																										
ZZZZZZ			15:22																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_SHI3 Analysis Method: 9060A

Start Date: 11/12/2021 18:16 End Date: 11/13/2021 18:38

Lab Sample Id	D/F	Type	Time	Analytes																									
				DOCQ																									
ZZZZZZ			15:39																										
ZZZZZZ			15:56																										
ZZZZZZ			16:11																										
ZZZZZZ			16:25																										
ZZZZZZ			16:40																										
ZZZZZZ			16:55																										
CCV 280-557476/87			17:10																										
CCB 280-557476/88			17:24																										
ZZZZZZ			17:39																										
ZZZZZZ			17:54																										
ZZZZZZ			18:09																										
CCV 280-557476/92			18:24																										
CCB 280-557476/93			18:38																										

Prep Types:
D = Dissolved

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_SHI4 Analysis Method: 9060A

Start Date: 11/05/2021 15:41 End Date: 11/06/2021 11:24

Lab Sample Id	D/F	Type	Time	Analytes																									
				DOCQ																									
ICV 280-556580/1	1		15:41	X																									
ICB 280-556580/2	1		15:56	X																									
ZZZZZZ			16:12																										
ZZZZZZ			16:28																										
ZZZZZZ			16:45																										
ZZZZZZ			17:00																										
ZZZZZZ			17:17																										
ZZZZZZ			17:32																										
ZZZZZZ			17:49																										
ZZZZZZ			18:08																										
ZZZZZZ			18:25																										
ZZZZZZ			18:40																										
ZZZZZZ			18:55																										
ZZZZZZ			19:09																										
CCV 280-556580/15	1		19:24	X																									
CCB 280-556580/16	1		19:41	X																									
ZZZZZZ			19:56																										
ZZZZZZ			20:13																										
ZZZZZZ			20:30																										
ZZZZZZ			20:45																										
ZZZZZZ			20:59																										
ZZZZZZ			21:14																										
ZZZZZZ			21:29																										
ZZZZZZ			21:44																										
ZZZZZZ			21:59																										
LCS 280-556374/1-A	1	D	22:14	X																									
CCV 280-556580/27	1		22:29	X																									
CCB 280-556580/28	1		22:46	X																									
MB 280-556374/2-A	1	D	23:00	X																									
280-155138-1	1	D	23:15	X																									
280-155138-1 MS	1	D	23:30	X																									
280-155138-1 MSD	1	D	23:45	X																									
280-155138-2	1	D	00:01	X																									
280-155138-3	1	D	00:18	X																									
280-155138-4	1	D	00:35	X																									
280-155138-5	1	D	00:54	X																									
280-155138-6	1	D	01:15	X																									
280-155138-7	1	D	01:32	X																									
CCV 280-556580/39	1		01:47	X																									
CCB 280-556580/40	1		02:04	X																									

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_SHI4 Analysis Method: 9060A

Start Date: 11/05/2021 15:41 End Date: 11/06/2021 11:24

Lab Sample Id	D/F	Type	Time	Analytes																									
				DOCQ																									
280-155138-8	1	D	02:19	X																									
280-155138-9	1	D	02:33	X																									
280-155138-10	1	D	02:50	X																									
ZZZZZZ			03:05																										
ZZZZZZ			03:22																										
ZZZZZZ			03:37																										
ZZZZZZ			03:52																										
ZZZZZZ			04:07																										
ZZZZZZ			04:22																										
ZZZZZZ			04:36																										
CCV 280-556580/51	1		04:51	X																									
CCB 280-556580/52	1		05:08	X																									
ZZZZZZ			05:23																										
ZZZZZZ			05:40																										
ZZZZZZ			05:55																										
ZZZZZZ			06:10																										
ZZZZZZ			06:25																										
ZZZZZZ			06:40																										
ZZZZZZ			06:54																										
ZZZZZZ			07:09																										
ZZZZZZ			07:26																										
ZZZZZZ			07:41																										
CCV 280-556580/63			07:56																										
CCB 280-556580/64			08:13																										
ZZZZZZ			08:28																										
ZZZZZZ			08:45																										
ZZZZZZ			09:02																										
ZZZZZZ			09:19																										
ZZZZZZ			09:34																										
ZZZZZZ			09:48																										
ZZZZZZ			10:05																										
ZZZZZZ			10:20																										
ZZZZZZ			10:39																										
ZZZZZZ			10:54																										
CCV 280-556580/75			11:09																										
CCB 280-556580/76			11:24																										

Prep Types:
D = Dissolved

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 11/16/2021 17:36 End Date: 11/17/2021 13:51

Lab Sample Id	D/F	Type	Time	Analytes
				Alk
RINSE 280-557846/1			17:36	
ZZZZZZ			17:43	
ZZZZZZ			17:46	
ZZZZZZ			17:53	
ZZZZZZ			18:00	
ZZZZZZ			18:06	
ZZZZZZ			18:11	
ZZZZZZ			18:17	
ZZZZZZ			18:23	
ZZZZZZ			18:28	
ZZZZZZ			18:33	
ZZZZZZ			18:38	
ZZZZZZ			18:44	
ZZZZZZ			18:49	
ZZZZZZ			18:54	
ZZZZZZ			19:03	
CCV 280-557846/17			19:09	
CCB 280-557846/18			19:15	
ZZZZZZ			19:23	
ZZZZZZ			19:30	
ZZZZZZ			19:37	
ZZZZZZ			19:45	
ZZZZZZ			19:56	
ZZZZZZ			20:12	
ZZZZZZ			20:21	
ZZZZZZ			20:26	
ZZZZZZ			20:37	
ZZZZZZ			20:46	
CCV 280-557846/29			20:53	
CCB 280-557846/30			20:59	
ZZZZZZ			21:05	
ZZZZZZ			21:11	
ZZZZZZ			21:21	
ZZZZZZ			21:30	
ZZZZZZ			21:41	
ZZZZZZ			21:51	
ZZZZZZ			21:58	
ZZZZZZ			22:07	
ZZZZZZ			22:16	
ZZZZZZ			22:24	
ZZZZZZ			22:32	

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 11/16/2021 17:36 End Date: 11/17/2021 13:51

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			22:42																									
CCV 280-557846/43			22:49																									
CCB 280-557846/44			22:55																									
ZZZZZZ			23:04																									
ZZZZZZ			23:16																									
ZZZZZZ			23:26																									
ZZZZZZ			23:34																									
ZZZZZZ			23:43																									
ZZZZZZ			23:54																									
ZZZZZZ			00:06																									
ZZZZZZ			00:14																									
ZZZZZZ			00:23																									
ZZZZZZ			00:34																									
CCV 280-557846/55			00:40																									
CCB 280-557846/56			00:46																									
ZZZZZZ			00:53																									
ZZZZZZ			00:59																									
ZZZZZZ			01:05																									
ZZZZZZ			01:12																									
ZZZZZZ			01:20																									
ZZZZZZ			01:26																									
ZZZZZZ			01:31																									
ZZZZZZ			01:39																									
ZZZZZZ			01:42																									
ZZZZZZ			01:47																									
ZZZZZZ			01:53																									
ZZZZZZ			01:58																									
CCV 280-557846/69			02:06																									
CCB 280-557846/70			02:11																									
ZZZZZZ			02:17																									
ZZZZZZ			02:30																									
ZZZZZZ			02:42																									
ZZZZZZ			02:55																									
ZZZZZZ			03:11																									
ZZZZZZ			03:19																									
ZZZZZZ			03:27																									
ZZZZZZ			03:35																									
ZZZZZZ			03:42																									
ZZZZZZ			03:49																									
CCV 280-557846/81			03:57																									
CCB 280-557846/82			04:03																									

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13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 11/16/2021 17:36 End Date: 11/17/2021 13:51

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
LCS 280-557846/83	1	T	04:09	X																								
MB 280-557846/84	1	T	04:14	X																								
ZZZZZZ			04:22																									
ZZZZZZ			04:29																									
280-155138-7	1	T	04:35	X																								
280-155138-9	1	T	04:41	X																								
280-155138-8	1	T	04:49	X																								
280-155138-6	1	T	04:55	X																								
280-155138-1	1	T	05:03	X																								
280-155138-5	1	T	05:11	X																								
280-155138-3	1	T	05:19	X																								
280-155138-4	1	T	05:27	X																								
CCV 280-557846/95	1		05:34	X																								
CCB 280-557846/96	1		05:40	X																								
280-155138-10	1	T	05:45	X																								
280-155138-2	1	T	05:53	X																								
ZZZZZZ			06:07																									
ZZZZZZ			06:22																									
ZZZZZZ			06:30																									
ZZZZZZ			06:38																									
ZZZZZZ			06:46																									
ZZZZZZ			06:54																									
ZZZZZZ			07:01																									
ZZZZZZ			07:12																									
CCV 280-557846/107	1		07:19	X																								
CCB 280-557846/108	1		07:25	X																								
ZZZZZZ			07:32																									
ZZZZZZ			07:38																									
ZZZZZZ			07:46																									
ZZZZZZ			07:54																									
ZZZZZZ			08:00																									
ZZZZZZ			08:10																									
ZZZZZZ			08:17																									
ZZZZZZ			08:24																									
ZZZZZZ			08:33																									
ZZZZZZ			08:40																									
ZZZZZZ			08:49																									
ZZZZZZ			08:57																									
CCV 280-557846/121			09:04																									
CCB 280-557846/122			09:10																									
ZZZZZZ			09:16																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 11/16/2021 17:36 End Date: 11/17/2021 13:51

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			09:24																									
ZZZZZZ			09:33																									
ZZZZZZ			09:40																									
ZZZZZZ			09:48																									
ZZZZZZ			09:57																									
ZZZZZZ			10:06																									
ZZZZZZ			10:16																									
ZZZZZZ			10:23																									
ZZZZZZ			10:29																									
CCV 280-557846/133			10:37																									
CCB 280-557846/134			10:42																									
ZZZZZZ			10:50																									
ZZZZZZ			10:55																									
ZZZZZZ			11:01																									
ZZZZZZ			11:07																									
ZZZZZZ			11:13																									
ZZZZZZ			11:19																									
ZZZZZZ			11:24																									
ZZZZZZ			11:29																									
ZZZZZZ			11:34																									
ZZZZZZ			11:39																									
ZZZZZZ			11:45																									
ZZZZZZ			11:50																									
CCV 280-557846/147			11:57																									
CCB 280-557846/148			12:03																									
ZZZZZZ			12:08																									
ZZZZZZ			12:14																									
ZZZZZZ			12:19																									
ZZZZZZ			12:25																									
ZZZZZZ			12:30																									
ZZZZZZ			12:36																									
ZZZZZZ			12:42																									
ZZZZZZ			12:48																									
ZZZZZZ			12:53																									
ZZZZZZ			12:58																									
CCV 280-557846/159			13:05																									
CCB 280-557846/160			13:11																									
ZZZZZZ			13:17																									
ZZZZZZ			13:23																									
ZZZZZZ			13:28																									
ZZZZZZ			13:34																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 11/16/2021 17:36 End Date: 11/17/2021 13:51

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
ZZZZZZ			13:39																									
CCV 280-557846/166			13:45																									
CCB 280-557846/167			13:51																									

Prep Types:
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 558260 Batch Start Date: 11/21/21 10:23 Batch Analyst: Mitchell, Jacob J

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00509	350.1 ICV 00494
ICVL 280-558260/14		350.1			100 mL	100 mL			0.5 mL
ICV 280-558260/15		350.1			100 mL	100 mL			2.5 mL
ICB 280-558260/16		350.1			10 mL	10 mL			
LCS 280-558260/18		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-558260/19		350.1			100 mL	100 mL		2.5 mL	
MB 280-558260/20		350.1			10 mL	10 mL			
CCVL 280-558260/33		350.1			100 mL	100 mL		0.5 mL	
CCV 280-558260/34		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558260/35		350.1			10 mL	10 mL			
280-155138-C-9	NW070-7	350.1	T	no	10 mL	10 mL	<2 SU		
280-155138-C-4	G0082-7	350.1	T	no	10 mL	10 mL	<2 SU		
280-155138-C-7	CA213-7	350.1	T	no	10 mL	10 mL	<2 SU		
CCVL 280-558260/49		350.1			100 mL	100 mL		0.5 mL	
CCV 280-558260/50		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558260/51		350.1			10 mL	10 mL			

Batch Notes	
Sodium Nitroprusside ID	350.1 color_00268
Hypochlorite ID	350.1 bleach_01524
Carrier Identification	350.1 complex_00584
Sodium Salicylate ID	Sodium Sal_00021
Pipette/Syringe/Dispenser ID	SAH5000, 1000 INTERCESSOR, BWH 200
Batch Comment	JM

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 558260 Batch Start Date: 11/21/21 10:23 Batch Analyst: Mitchell, Jacob J

Batch Method: 350.1 Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 558270 Batch Start Date: 11/21/21 13:09 Batch Analyst: Mitchell, Jacob J

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00509	350.1 ICV 00494
ICVL 280-558270/14		350.1			100 mL	100 mL			0.5 mL
ICV 280-558270/15		350.1			100 mL	100 mL			2.5 mL
ICB 280-558270/16		350.1			10 mL	10 mL			
LCS 280-558270/18		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-558270/19		350.1			100 mL	100 mL		2.5 mL	
MB 280-558270/20		350.1			10 mL	10 mL			
280-155138-C-1	NW021-7	350.1	T	no	10 mL	10 mL	<2 SU		
280-155138-C-2	NW020-7	350.1	T	no	10 mL	10 mL	<2 SU		
280-155138-C-6	NW071-7	350.1	T	no	10 mL	10 mL	<2 SU		
280-155138-C-5	G0087-7	350.1	T	no	10 mL	10 mL	<2 SU		
CCVL 280-558270/33		350.1			100 mL	100 mL		0.5 mL	
CCV 280-558270/34		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558270/35		350.1			10 mL	10 mL			

Batch Notes	
Sodium Nitroprusside ID	350.1 color_00268
Hypochlorite ID	350.1 bleach_01524
Carrier Identification	350.1 complex_00584
Sodium Salicylate ID	Sodium Sal_00021
Pipette/Syringe/Dispenser ID	SAH5000, 1000 INTERCESSOR, BWH 200
Batch Comment	JM

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 558390 Batch Start Date: 11/22/21 10:08 Batch Analyst: Dhungel, Rohit K

Batch Method: 350.1 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	ClResPres	InitialAmount	FinalAmount	Initial pH	350.1 cal 00509	350.1 ICV 00494
ICVL 280-558390/14		350.1			100 mL	100 mL			0.5 mL
ICV 280-558390/15		350.1			100 mL	100 mL			2.5 mL
ICB 280-558390/16		350.1			10 mL	10 mL			
LCS 280-558390/18		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-558390/19		350.1			100 mL	100 mL		2.5 mL	
MB 280-558390/20		350.1			10 mL	10 mL			
CCVL 280-558390/33		350.1			100 mL	100 mL		0.5 mL	
CCV 280-558390/34		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558390/35		350.1			10 mL	10 mL			
280-155138-C-3	NW022-7	350.1	T	No	10 mL	10 mL	<2 SU		
280-155138-C-10	PZ019-7	350.1	T	No	10 mL	10 mL	<2 SU		
280-155138-C-10 MS	PZ019-7	350.1	T	No	10 mL	10 mL	<2 SU	0.1 mL	
280-155138-C-10 MSD	PZ019-7	350.1	T	No	10 mL	10 mL	<2 SU	0.1 mL	
280-155138-C-8	G0081-7	350.1	T	No	10 mL	10 mL	<2 SU		
CCVL 280-558390/49		350.1			100 mL	100 mL		0.5 mL	
CCV 280-558390/50		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558390/51		350.1			10 mL	10 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 558390 Batch Start Date: 11/22/21 10:08 Batch Analyst: Dhungel, Rohit K

Batch Method: 350.1 Batch End Date:

Batch Notes	
Sodium Nitroprusside ID	350.1 color_00268
Hypochlorite ID	350.1 bleach_01525
Carrier Identification	350.1 complex_00584
Sodium Salicylate ID	sodium sal_00033
Pipette/Syringe/Dispenser ID	SAH 5000, 1000 INTERCESSOR, BWH 200
Batch Comment	RKD

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 557418 Batch Start Date: 11/14/21 16:04 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	TKN 25ppm 00826	TKN ICV 25 00112		
ICV 280-557418/7		351.2, 351.2		25 mL	25 mL		5 mL		
ICB 280-557418/8		351.2, 351.2		25 mL	25 mL				
CCV 280-557418/9		351.2, 351.2		25 mL	25 mL	5 mL			
CCB 280-557418/10		351.2, 351.2		25 mL	25 mL				

Batch Notes	
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00143
Oven, Bath or Block Temperature 1	160 Degrees C
Block Digestion Temperature Start Date	11/14/2021 16:45
Oven, Bath or Block Temperature 2	380 Degrees C
Bl;ock Digestion Temperature End Date	11/14/2021 23:00
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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 557729 Batch Start Date: 11/16/21 18:04 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 00826		
LCS 280-557729/1		351.2, 351.2			25 mL	25 mL	6 mL		
MB 280-557729/2		351.2, 351.2			25 mL	25 mL			
280-155138-C-10	PZ019-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155138-C-10 MS	PZ019-7	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-155138-C-10 MSD	PZ019-7	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-155138-C-9	NW070-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155138-C-8	G0081-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155138-C-7	CA213-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155138-C-6	NW071-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155138-C-5	G0087-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155138-C-4	G0082-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155138-C-3	NW022-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155138-C-2	NW020-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155138-C-1	NW021-7	351.2, 351.2	T	<2	25 mL	25 mL			

Batch Notes	
Block Digestor ID	TKN Hotblock
Digestion Solution ID	TKN digestion_00143
Oven, Bath or Block Temperature 1	160 Degrees C
Block Digestion Temperature Start Date	11/16/2021 18:25
Oven, Bath or Block Temperature 2	380 Degrees C
Bl;ock Digestion Temperature End Date	11/16/2021 23:45
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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 557899 Batch Start Date: 11/15/21 17:04 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount					
ICV 280-557418/7-A		351.2		2 mL					
ICB 280-557418/8-A		351.2		2 mL					
LCS 280-557729/1-A		351.2		2 mL					
MB 280-557729/2-A		351.2		2 mL					
280-155138-C-10-A	PZ019-7	351.2	T	2 mL					
280-155138-C-10-B MS	PZ019-7	351.2	T	2 mL					
280-155138-C-10-C MSD	PZ019-7	351.2	T	2 mL					
280-155138-C-9-A	NW070-7	351.2	T	2 mL					
280-155138-C-8-A	G0081-7	351.2	T	2 mL					
280-155138-C-7-A	CA213-7	351.2	T	2 mL					
280-155138-C-6-A	NW071-7	351.2	T	2 mL					
280-155138-C-5-A	G0087-7	351.2	T	2 mL					
280-155138-C-4-A	G0082-7	351.2	T	2 mL					
280-155138-C-3-A	NW022-7	351.2	T	2 mL					
CCV 280-557418/9-A		351.2		2 mL					
CCB 280-557418/10-A		351.2		2 mL					
280-155138-C-2-A	NW020-7	351.2	T	2 mL					
280-155138-C-1-A	NW021-7	351.2	T	2 mL					
CCV 280-557418/9-A		351.2		2 mL					
CCB 280-557418/10-A		351.2		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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 557899 Batch Start Date: 11/15/21 17:04 Batch Analyst: Cherry, Scott V

Batch Method: 351.2 Batch End Date:

Batch Notes	
Hypochlorite ID	TKN hypo_00675
Buffer Reagent ID	TKN buffer_00132
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
Sodium Nitroprusside ID	sodium nitro_00107

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 558049 Batch Start Date: 11/18/21 15:55 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 00601	NXN ICV INT 00577		
ICV 280-558049/17		353.2		100 mL	100 mL		5 mL		
ICVL 280-558049/18		353.2		100 mL	100 mL		2 mL		
ICB 280-558049/19		353.2		100 mL	100 mL				
LCS 280-558049/21		353.2		100 mL	100 mL	5 mL			
MB 280-558049/22		353.2		100 mL	100 mL				
280-155138-C-10	PZ019-7	353.2	T	100 mL	100 mL				
280-155138-C-10 MS	PZ019-7	353.2	T	5 mL	5 mL	0.2 mL			
280-155138-C-10 MSD	PZ019-7	353.2	T	5 mL	5 mL	0.2 mL			
280-155138-C-1	NW021-7	353.2	T	100 mL	100 mL				
280-155138-C-2	NW020-7	353.2	T	100 mL	100 mL				
280-155138-C-3	NW022-7	353.2	T	100 mL	100 mL				
280-155138-C-4	G0082-7	353.2	T	100 mL	100 mL				
280-155138-C-5	G0087-7	353.2	T	100 mL	100 mL				
280-155138-C-6	NW071-7	353.2	T	100 mL	100 mL				
280-155138-C-7	CA213-7	353.2	T	100 mL	100 mL				
CCV 280-558049/35		353.2		100 mL	100 mL	5 mL			
CCVL 280-558049/36		353.2		100 mL	100 mL	1 mL			
CCB 280-558049/37		353.2		100 mL	100 mL				
280-155138-C-8	G0081-7	353.2	T	100 mL	100 mL				
280-155138-C-9	NW070-7	353.2	T	100 mL	100 mL				
CCV 280-558049/51		353.2		100 mL	100 mL	5 mL			
CCVL 280-558049/52		353.2		100 mL	100 mL	1 mL			
CCB 280-558049/53		353.2		100 mL	100 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 558049 Batch Start Date: 11/18/21 15:55 Batch Analyst: Cherry, Scott V

Batch Method: 353.2 Batch End Date:

Batch Notes	
pH Indicator ID	hc902937
Buffer Reagent ID	NOXT Buffer_00222
Color Reagent ID	NOXT CR_00121
Pipette/Syringe/Dispenser ID	5000ad, 1000ad
Cadmium Column Lot ID	q19133-0419
Copper Sulfate ID	CuSO4 NOXT_0014
Hydrochloric Acid ID	0.5N HCl_0084

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 556749 Batch Start Date: 11/09/21 12:15 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 11/09/21 13:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-556749/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
MB 280-556749/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-155138-E-10	PZ019-7	9030B, 9034	T	50 mL	50 mL	3	>9 SU	<2 SU	5 mL
280-155138-E-10 MS	PZ019-7	9030B, 9034	T	50 mL	50 mL	4	>9 SU	<2 SU	5 mL
280-155138-E-10 MSD	PZ019-7	9030B, 9034	T	50 mL	50 mL	5	>9 SU	<2 SU	5 mL
280-155138-E-1	NW021-7	9030B, 9034	T	50 mL	50 mL	10	>9 SU	<2 SU	5 mL
280-155138-E-2	NW020-7	9030B, 9034	T	50 mL	50 mL	11	>9 SU	<2 SU	5 mL
280-155138-E-3	NW022-7	9030B, 9034	T	50 mL	50 mL	12	>9 SU	<2 SU	5 mL
280-155138-E-4	G0082-7	9030B, 9034	T	50 mL	50 mL	13	>9 SU	<2 SU	5 mL
280-155138-E-5	G0087-7	9030B, 9034	T	50 mL	50 mL	14	>9 SU	<2 SU	5 mL
280-155138-E-8	G0081-7	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 02023					
LCS 280-556749/1		9030B, 9034		1 mL					
MB 280-556749/2		9030B, 9034							
280-155138-E-10	PZ019-7	9030B, 9034	T						
280-155138-E-10 MS	PZ019-7	9030B, 9034	T	1 mL					
280-155138-E-10 MSD	PZ019-7	9030B, 9034	T	1 mL					
280-155138-E-1	NW021-7	9030B, 9034	T						
280-155138-E-2	NW020-7	9030B, 9034	T						
280-155138-E-3	NW022-7	9030B, 9034	T						
280-155138-E-4	G0082-7	9030B, 9034	T						
280-155138-E-5	G0087-7	9030B, 9034	T						
280-155138-E-8	G0081-7	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 556749 Batch Start Date: 11/09/21 12:15 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 11/09/21 13:45

Batch Notes	
Formaldehyde ID	form_00120
Zinc Acetate Buffer ID	znac_00120
Pipette/Syringe/Dispenser ID	5Hz4, ARM 1000
Sulfuric Acid Reagent ID Number	SulfuricAcid_00260
pH Indicator ID	HC157843
Distillation Start Time	11/09/2021 12:15
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	11/09/2021 13:45
Lead Acetate Paper Lot #	3
Batch Comment	JM

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 556751 Batch Start Date: 11/09/21 12:10 Batch Analyst: Mitchell, Jacob J

Batch Method: 9034 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-556749/1-A		9034		0 mL	2.95 mL	5 mL	2.95 mL	50 mL	
MB 280-556749/2-A		9034		2.95 mL	3.9 mL	1 mL	0.95 mL	50 mL	
280-155138-E-10-A	PZ019-7	9034	T	3.9 mL	4.8 mL	1 mL	0.9 mL	50 mL	
280-155138-E-10-B MS	PZ019-7	9034	T	4.8 mL	7.85 mL	5 mL	3.05 mL	50 mL	
280-155138-E-10-C MSD	PZ019-7	9034	T	7.85 mL	10.9 mL	5 mL	3.05 mL	50 mL	
280-155138-E-1-A	NW021-7	9034	T	14.7 mL	15.7 mL	1 mL	1 mL	50 mL	
280-155138-E-2-A	NW020-7	9034	T	15.7 mL	16.7 mL	1 mL	1 mL	50 mL	
280-155138-E-3-A	NW022-7	9034	T	16.7 mL	17.6 mL	1 mL	0.900000000000002 mL	50 mL	
280-155138-E-4-A	G0082-7	9034	T	17.6 mL	18.6 mL	1 mL	1 mL	50 mL	
280-155138-E-5-A	G0087-7	9034	T	18.6 mL	19.6 mL	1 mL	1 mL	50 mL	
280-155138-E-8-A	G0081-7	9034	T	19.6 mL	20.5 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	Iod_00271
Hydrochloric Acid ID	HCl Sol_00195
Sodium Thiosulfate ID	Na Thio_00174
Starch Reagent ID	Starch Ind_00066
Pipette/Syringe/Dispenser ID	5Hz4, ARM 1000
Batch Comment	JM

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 556787 Batch Start Date: 11/09/21 14:35 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 11/09/21 16:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
LCS 280-556787/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
MB 280-556787/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-155138-E-9	NW070-7	9030B, 9034	T	50 mL	50 mL	3	>9 SU	<2 SU	5 mL
280-155138-E-9 MS	NW070-7	9030B, 9034	T	50 mL	50 mL	4	>9 SU	<2 SU	5 mL
280-155138-E-9 MSD	NW070-7	9030B, 9034	T	50 mL	50 mL	5	>9 SU	<2 SU	5 mL
280-155138-E-6	NW071-7	9030B, 9034	T	50 mL	50 mL	6	>9 SU	<2 SU	5 mL
280-155138-E-7	CA213-7	9030B, 9034	T	50 mL	50 mL	7	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 02023					
LCS 280-556787/1		9030B, 9034		1 mL					
MB 280-556787/2		9030B, 9034							
280-155138-E-9	NW070-7	9030B, 9034	T						
280-155138-E-9 MS	NW070-7	9030B, 9034	T	1 mL					
280-155138-E-9 MSD	NW070-7	9030B, 9034	T	1 mL					
280-155138-E-6	NW071-7	9030B, 9034	T						
280-155138-E-7	CA213-7	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 556787 Batch Start Date: 11/09/21 14:35 Batch Analyst: Mitchell, Jacob J

Batch Method: 9030B Batch End Date: 11/09/21 16:05

Batch Notes	
Formaldehyde ID	form_00120
Zinc Acetate Buffer ID	znac_00120
Pipette/Syringe/Dispenser ID	5Hz4, ARM 1000
Sulfuric Acid Reagent ID Number	SulfuricAcid_00260
pH Indicator ID	HC157843
Distillation Start Time	11/09/2021 14:35
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	11/09/2021 16:05
Lead Acetate Paper Lot #	3
Batch Comment	JM

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 556789 Batch Start Date: 11/09/21 16:05 Batch Analyst: Mitchell, Jacob J

Batch Method: 9034 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
LCS 280-556787/1-A		9034		0 mL	3.0 mL	5 mL	3 mL	50 mL	
MB 280-556787/2-A		9034		3.0 mL	4.0 mL	1 mL	1 mL	50 mL	
280-155138-E-9-A	NW070-7	9034	T	4.0 mL	5.0 mL	1 mL	1 mL	50 mL	
280-155138-E-9-B MS	NW070-7	9034	T	5.0 mL	8.3 mL	5 mL	3.3 mL	50 mL	
280-155138-E-9-C MSD	NW070-7	9034	T	8.3 mL	11.6 mL	5 mL	3.3 mL	50 mL	
280-155138-E-6-A	NW071-7	9034	T	11.8 mL	12.6 mL	1 mL	0.799999999999999 mL	50 mL	
280-155138-E-7-A	CA213-7	9034	T	12.7 mL	13.6 mL	1 mL	0.9 mL	50 mL	

Batch Notes	
Normality of First Titrant	0.025 N
Normality of Iodine Solution	0.025 N
Iodine ID	Iod_00271
Hydrochloric Acid ID	HCl Sol_00195
Sodium Thiosulfate ID	Na Thio_00174
Starch Reagent ID	Starch Ind_00066
Pipette/Syringe/Dispenser ID	5Hz4, ARM 1000
Batch Comment	JM

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 557415 Batch Start Date: 11/14/21 16:43 Batch Analyst: Gonzalez, Sofie P

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 00393	IC Cal low 00607	IC ICV 5 00341
STD1 280-557415/2 IC		9056A		10 mL	10 mL		0.04 mL	0.04 mL	
STD2 280-557415/3 IC		9056A		10 mL	10 mL		0.1 mL	0.1 mL	
STD3 280-557415/4 IC		9056A		10 mL	10 mL		0.2 mL	0.2 mL	
STD4 280-557415/5 IC		9056A		10 mL	10 mL		2.4 mL	0.8 mL	
STD5 280-557415/6 IC		9056A		10 mL	10 mL		4.8 mL	1.6 mL	
STD6 280-557415/7 IC		9056A		10 mL	10 mL		8 mL	2 mL	
ICB 280-557415/8		9056A		10 mL	10 mL				
ICV 280-557415/9		9056A		10 mL	10 mL	0.8 mL			0.8 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00022					
STD1 280-557415/2 IC		9056A							
STD2 280-557415/3 IC		9056A							
STD3 280-557415/4 IC		9056A							
STD4 280-557415/5 IC		9056A							
STD5 280-557415/6 IC		9056A							
STD6 280-557415/7 IC		9056A							
ICB 280-557415/8		9056A							
ICV 280-557415/9		9056A		0.8 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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 557415 Batch Start Date: 11/14/21 16:43 Batch Analyst: Gonzalez, Sofie P

Batch Method: 9056A Batch End Date:

Batch Notes	
Filter ID	SLGB033NB
Pipette/Syringe/Dispenser ID	5000CK IC100 CJ200 BMF1000
Sufficient Volume for Batch QC	yes
Eluent 1 ID	IC10 eluent_00002
Batch Comment	CJ and SG

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 557417 Batch Start Date: 11/14/21 17:29 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 00393	IC Cal low 00607	IC ICV 5 00341
STD 280-557417/2 IC		9056A		5 mL	5 mL		0.02 mL	0.02 mL	
STD 280-557417/3 IC		9056A		5 mL	5 mL		0.05 mL	0.05 mL	
STD 280-557417/4 IC		9056A		5 mL	5 mL		0.1 mL	0.1 mL	
STD 280-557417/5 IC		9056A		5 mL	5 mL		1.2 mL	0.4 mL	
STD 280-557417/6 IC		9056A		5 mL	5 mL		2.4 mL	0.8 mL	
STD 280-557417/7 IC		9056A		5 mL	5 mL		4 mL	1 mL	
ICV 280-557417/8		9056A		5 mL	5 mL	0.4 mL			0.4 mL
ICB 280-557417/9		9056A		5 mL	5 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	IC SO4 ICV 00022					
STD 280-557417/2 IC		9056A							
STD 280-557417/3 IC		9056A							
STD 280-557417/4 IC		9056A							
STD 280-557417/5 IC		9056A							
STD 280-557417/6 IC		9056A							
STD 280-557417/7 IC		9056A							
ICV 280-557417/8		9056A		0.4 mL					
ICB 280-557417/9		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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 557417 Batch Start Date: 11/14/21 17:29 Batch Analyst: Jindarat, Chanida

Batch Method: 9056A Batch End Date:

Batch Notes	
Filter ID	SLGP033NB
Pipette/Syringe/Dispenser ID	5000CK, BMF1000, 200CJ, ic100
Sufficient Volume for Batch QC	Yes
Eluent 1 ID	AS14 Eluent_00022

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 558202 Batch Start Date: 11/20/21 11:19 Batch Analyst: Jindarat, Chanida

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00394	IC Cal low 00608	IC LCS 01845	ICMS/MSD WEEK 00731
CCV 280-558202/1		9056A		10 mL	10 mL			10 mL	
CCB 280-558202/2		9056A		10 mL	10 mL				
MRL 280-558202/3		9056A		10 mL	10 mL	0.2 mL	0.1 mL		
LCS 280-558202/4		9056A		10 mL	10 mL			10 mL	
LCSD 280-558202/5		9056A		5 mL	5 mL			10 mL	
MB 280-558202/6		9056A		10 mL	10 mL				
280-155138-F-1	NW021-7	9056A	T	10 mL	10 mL				
CCV 280-558202/17		9056A		10 mL	10 mL			10 mL	
CCB 280-558202/18		9056A		10 mL	10 mL				
280-155138-F-2	NW020-7	9056A	T	10 mL	10 mL				
280-155138-F-3	NW022-7	9056A	T	10 mL	10 mL				
280-155138-F-4	G0082-7	9056A	T	10 mL	10 mL				
280-155138-F-5	G0087-7	9056A	T	10 mL	10 mL				
280-155138-F-6	NW071-7	9056A	T	10 mL	10 mL				
280-155138-F-10	PZ019-7	9056A	T	10 mL	10 mL				
280-155138-F-10 DU	PZ019-7	9056A	T	10 mL	10 mL				
280-155138-F-10 MS	PZ019-7	9056A	T	10 mL	10 mL				0.1 mL
280-155138-F-10 MSD	PZ019-7	9056A	T	10 mL	10 mL				0.1 mL
280-155138-F-7	CA213-7	9056A	T	10 mL	10 mL				
CCV 280-558202/29		9056A		10 mL	10 mL			10 mL	
CCB 280-558202/30		9056A		10 mL	10 mL				
280-155138-F-9	NW070-7	9056A	T	10 mL	10 mL				
280-155138-F-8	G0081-7	9056A	T	10 mL	10 mL				
CCV 280-558202/36		9056A		10 mL	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 558202 Batch Start Date: 11/20/21 11:19 Batch Analyst: Jindarat, Chanida

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00394	IC Cal low 00608	IC LCS 01845	ICMS/MSD WEEK 00731
CCB 280-558202/37		9056A		10 mL	10 mL				

Batch Notes	
Filter ID	SLGP033NB
Pipette/Syringe/Dispenser ID	5000CK, BMF1000, 200CJ, ic100
Sufficient Volume for Batch QC	Yes
Eluent 1 ID	IC10 Eluent_00002

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 558327 Batch Start Date: 11/22/21 09:54 Batch Analyst: Jindarat, Chanida

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC CAL cl/so4 00394	IC Cal low 00608	IC LCS 01845	ICMS/MSD WEEK 00731
MRL 280-558327/3		9056A		10 mL	10 mL	0.2 mL	0.1 mL		
LCS 280-558327/4		9056A		10 mL	10 mL			10 mL	
LCSD 280-558327/5		9056A		5 mL	5 mL			10 mL	
MB 280-558327/6		9056A		10 mL	10 mL				
280-155138-F-3	NW022-7	9056A	T	10 mL	10 mL				
280-155138-F-3 DU	NW022-7	9056A	T	10 mL	10 mL				
280-155138-F-3 MS	NW022-7	9056A	T	10 mL	10 mL				0.1 mL
280-155138-F-3 MSD	NW022-7	9056A	T	10 mL	10 mL				0.1 mL

Batch Notes	
Filter ID	SLGP033NB
Pipette/Syringe/Dispenser ID	5000CK, BMF1000, 200CJ, ic100
Sufficient Volume for Batch QC	Yes
Eluent 1 ID	IC10 Eluent_00002

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 558471 Batch Start Date: 11/23/21 10:27 Batch Analyst: Jindarat, Chanida

Batch Method: 9056A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
280-155138-F-3	NW022-7	9056A	T	5 mL	5 mL				

Batch Notes	
Filter ID	SLGP033NB
Pipette/Syringe/Dispenser ID	5000CK, BMF1000, 200CJ, ic100
Sufficient Volume for Batch QC	Yes
Eluent 1 ID	AS14 Eluent_00022
Batch Comment	Run by JF, review by 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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 556578 Batch Start Date: 11/05/21 15:41 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC LCS Std 00052	AnalysisComment
LCS 280-556374/1-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 280-556374/2-A		9060A		20 mL	20 mL	<2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155138-D-1-A	NW021-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155138-D-1-B MS	NW021-7	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.
280-155138-D-1-C MSD	NW021-7	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.
280-155138-D-2-A	NW020-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155138-D-3-A	NW022-7	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 556578 Batch Start Date: 11/05/21 15:41 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC LCS Std 00052	AnalysisComment
280-155138-D-4-A	G0082-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155138-D-5-A	G0087-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155138-D-6-A	NW071-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155138-D-7-A	CA213-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155138-D-8-A	G0081-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155138-D-9-A	NW070-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155138-D-10-A	PZ019-7	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 556578 Batch Start Date: 11/05/21 15:41 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Batch Notes	
Acid ID	H2SO4_00210, 0.2% H2SO4_00407
Combustion Catylyst ID	19003D-03
Pipette/Syringe/Dispenser ID	BWH 5000
pH Paper ID	HC157843

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 556580 Batch Start Date: 11/05/21 15:41 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC ICV Std 00047	TOC LCS Std 00052
ICV 280-556580/1		9060A		50 mL	50 mL	<2 SU	<2 SU	1 mL	
ICB 280-556580/2		9060A		20 mL	20 mL	<2 SU	<2 SU		
CCV 280-556580/15		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-556580/16		9060A		20 mL	20 mL	<2 SU	<2 SU		
LCS 280-556374/1-A		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCV 280-556580/27		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-556580/28		9060A		20 mL	20 mL	<2 SU	<2 SU		
MB 280-556374/2-A		9060A		20 mL	20 mL	<2 SU	<2 SU		
280-155138-D-1-A	NW021-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155138-D-1-B MS	NW021-7	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL
280-155138-D-1-C MSD	NW021-7	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL
280-155138-D-2-A	NW020-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155138-D-3-A	NW022-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155138-D-4-A	G0082-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155138-D-5-A	G0087-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155138-D-6-A	NW071-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155138-D-7-A	CA213-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
CCV 280-556580/39		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-556580/40		9060A		20 mL	20 mL	<2 SU	<2 SU		
280-155138-D-8-A	G0081-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155138-D-9-A	NW070-7	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.

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 556580 Batch Start Date: 11/05/21 15:41 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC ICV Std 00047	TOC LCS Std 00052
280-155138-D-10-A	PZ019-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
CCV 280-556580/51		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-556580/52		9060A		20 mL	20 mL	<2 SU	<2 SU		

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
ICV 280-556580/1		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
ICB 280-556580/2		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-556580/15		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-556580/16		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
LCS 280-556374/1-A		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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 556580 Batch Start Date: 11/05/21 15:41 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
CCV 280-556580/27		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-556580/28		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
MB 280-556374/2-A		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155138-D-1-A	NW021-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155138-D-1-B MS	NW021-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155138-D-1-C MSD	NW021-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155138-D-2-A	NW020-7	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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 556580 Batch Start Date: 11/05/21 15:41 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-155138-D-3-A	NW022-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155138-D-4-A	G0082-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155138-D-5-A	G0087-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155138-D-6-A	NW071-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155138-D-7-A	CA213-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-556580/39		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-556580/40		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 556580 Batch Start Date: 11/05/21 15:41 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
280-155138-D-8-A	G0081-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155138-D-9-A	NW070-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155138-D-10-A	PZ019-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-556580/51		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-556580/52		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					

Batch Notes	
Acid ID	H2SO4_00210, 0.2% H2SO4_00407
Combustion Catylyst ID	19003D-03
Pipette/Syringe/Dispenser ID	BWH 5000, 1082991
Filter ID	16876568
pH Paper ID	HC157843
Batch Comment	DOC

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 556580 Batch Start Date: 11/05/21 15:41 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 557475 Batch Start Date: 11/12/21 18:16 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC LCS Std 00052	AnalysisComment
LCS 280-557282/1-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 280-557282/2-A		9060A		20 mL	20 mL	<2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155138-D-10-C MS	PZ019-7	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.
280-155138-D-10-D MSD	PZ019-7	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	H2SO4_00210, 0.2% H2SO4_00408
Combustion Catylyst ID	19003D-03
Pipette/Syringe/Dispenser ID	BWH 5000
pH Paper ID	HC160347
Batch Comment	RAF training LFL

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 557476 Batch Start Date: 11/12/21 18:16 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	TOC ICV Std 00047	TOC LCS Std 00052
ICV 280-557476/1		9060A		50 mL	50 mL	<2 SU	<2 SU	1 mL	
ICB 280-557476/2		9060A		20 mL	20 mL	<2 SU	<2 SU		
CCV 280-557476/63		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-557476/64		9060A		20 mL	20 mL	<2 SU	<2 SU		
LCS 280-557282/1-A		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
MB 280-557282/2-A		9060A		20 mL	20 mL	<2 SU	<2 SU		
280-155138-D-10 -C MS	PZ019-7	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL
280-155138-D-10 -D MSD	PZ019-7	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL
CCV 280-557476/75		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-557476/76		9060A		20 mL	20 mL	<2 SU	<2 SU		

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
ICV 280-557476/1		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
ICB 280-557476/2		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-557476/63		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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 557476 Batch Start Date: 11/12/21 18:16 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
CCB 280-557476/64		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
LCS 280-557282/1-A		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
MB 280-557282/2-A		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155138-D-10 -C MS	PZ019-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155138-D-10 -D MSD	PZ019-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-557476/75		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-557476/76		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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 557476 Batch Start Date: 11/12/21 18:16 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

Batch Notes	
Acid ID	H2SO4_00210, 0.2% H2SO4_00408
Combustion Catylyst ID	19003D-03
Pipette/Syringe/Dispenser ID	BWH 5000, 1082991
Filter ID	16876568
pH Paper ID	HC160347
Batch Comment	DOC. RAF training LFL

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 TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 557846 Batch Start Date: 11/16/21 17:36 Batch Analyst: Clifford, Emilie CS

Batch Method: SM 2320B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	Alk daily lcs 01006				
LCS 280-557846/83		SM 2320B		InitialAmount is blank	10 mL				
MB 280-557846/84		SM 2320B		InitialAmount is blank					
280-155138-F-7	CA213-7	SM 2320B	T	InitialAmount is blank					
280-155138-F-9	NW070-7	SM 2320B	T	InitialAmount is blank					
280-155138-F-8	G0081-7	SM 2320B	T	InitialAmount is blank					
280-155138-F-6	NW071-7	SM 2320B	T	InitialAmount is blank					
280-155138-F-1	NW021-7	SM 2320B	T	InitialAmount is blank					
280-155138-F-5	G0087-7	SM 2320B	T	InitialAmount is blank					
280-155138-F-3	NW022-7	SM 2320B	T	InitialAmount is blank					
280-155138-F-4	G0082-7	SM 2320B	T	InitialAmount is blank					
CCV 280-557846/95		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-557846/96		SM 2320B		InitialAmount is blank					
280-155138-F-10	PZ019-7	SM 2320B	T	InitialAmount is blank					
280-155138-F-2	NW020-7	SM 2320B	T	InitialAmount is blank					
CCV 280-557846/107		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-557846/108		SM 2320B		InitialAmount is blank					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155138-1

SDG No.:

Batch Number: 557846 Batch Start Date: 11/16/21 17:36 Batch Analyst: Clifford, Emilie CS

Batch Method: SM 2320B Batch End Date:

Batch Notes	
Nominal Amount Used	10 mL
Acid ID	0.02 H2SO4_00281
Normality of First Titrant	0.02 N
Sodium Carbonate ID	Alk Stk Std_00022
pH Buffer 1 ID	pH 2.0 buffer_00093
pH Buffer 2 ID	pH 4.0 buffer_00202
pH Buffer 3 ID	pH 7.0 buffer_00305
pH Buffer 4 ID	pH 10 buffer_00157
pH Buffer 5 ID	pH 12 buffer_00175
pH Buffer 6 ID	pH 7.0 buffer_00302
Probe ID	PCE 80 pH 1200D_8080
Batch Comment	EC

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: 21-Nov-21

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 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
201	280-155369-a-9	U	1	1	1		
202	MS 280-155369-a-9	U	1	1	1		
203	MSD 280-155369-a-9	U	1	1	1		
204	280-155070-f-2	U	1	5	1		
205	Void 280-155015-c-10	U	1	10	1		
206	280-155015-c-9	U	1	1	1		
207	280-155015-c-11	U	1	1	1		
208	280-155015-c-12	U	1	1	1		
209	280-155048-c-2	U	1	1	1		
210	280-155048-c-5	U	1	1	1		
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	280-155138-c-9	U	1	1	1		
212	280-155138-c-4	U	1	1	1		
213	280-155048-c-8	U	1	1	1		
214	280-155048-c-8 ms	U	1	1	1		
215	280-155048-c-8 msd	U	1	1	1		
216	280-155048-c-1	U	1	1	1		
217	280-155048-c-4	U	1	1	1		
218	280-155048-c-3	U	1	1	1		
219	280-155048-c-6	U	1	1	1		
220	280-155138-c-7	U	1	1	1		
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		
107	LCS 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
0	read baseline	RB	1	1	1		

Peak Table:NH3

File name: C:\FLOW_4\112121.RST
Date: 21-Nov-21
Operator: JM

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	106	Sync	1	SYNC	1	1	7735	1085.109009	
2	0	Carry Over	1	CO	1	1	-8	-9.504777	LO
3	0	Blank	1	BLNK	1	1	-19	-11.167446	LO
4	101	Cal 0 ppb	1	C	1	1	97	5.097373	
5	102	Cal 25 ppb	1	C	1	1	251	26.544283	
6	103	Cal 50 ppb	1	C	1	1	388	45.798668	
7	104	Cal 100 ppb	1	C	1	1	738	94.724915	
8	105	Cal 500 ppb	1	C	1	1	3563	491.874084	
9	106	Cal 1000 ppb	1	C	1	1	7265	1017.944397	
10	107	Cal 2500 ppb	1	C	1	1	17413	2491.521240	
11	108	Cal 5000 ppb	1	C	1	1	34006	5001.498535	HI
12	0	Blank	1	BLNK	1	1	2	-8.177981	LO
B	0	Read Baseline	1	RB	1	1	0	-8.455329	BL
14	109	ICVL 500.0 ppb	1	U	1	1	3701	511.396759	
15	110	ICV 2500.0 ppb	1	U	1	1	17295	2474.119141	
16	111	ICB	1	U	1	1	173	15.661288	
B	0	read baseline	1	RB	1	1	0	-8.455329	BL
18	107	LCS 2500.00	1	U	1	1	17101	2445.604980	
19	107	LCSD 2500.00	1	U	1	1	17143	2451.770264	
20	111	MB	1	U	1	1	140	11.058041	
21	201	280-155369-a-9	1	U	1	1	100	5.562490	
22	202	MS 280-155369-a-9	1	U	1	1	7060	988.628052	
23	203	MSD 280-155369-a-9	1	U	1	1	7097	993.865967	
24	204	280-155070-f-2	1	U	5	1	27236	19811.871094	
25	205	Void 280-155015-c-10	1	U	10	1	510	627.920654	
26	206	280-155015-c-9	1	U	1	1	10911	1541.943604	
27	207	280-155015-c-11	1	U	1	1	125	9.052941	
28	208	280-155015-c-12	1	U	1	1	497	61.034966	
29	209	280-155048-c-2	1	U	1	1	47	-1.954761	LO
30	210	280-155048-c-5	1	U	1	1	69	1.216039	
31	0	Blank	1	BLNK	1	1	-6	-9.267093	LO
B	0	Read Baseline	1	RB	1	1	0	-8.455329	BL
33	105	CCVL 500.0 ppb	1	U	1	1	3528	486.922546	
34	107	CCV 2500.0 ppb	1	U	1	1	17258	2468.637939	
35	111	CCB	1	U	1	1	38	-3.085647	LO UM
B	0	read baseline	1	RB	1	1	0	-8.455329	BL
37	211	280-155138-c-9	1	U	1	1	20	-5.728232	LO
38	212	280-155138-c-4	1	U	1	1	8	-7.336373	LO
39	213	280-155048-c-8	1	U	1	1	23	-5.224354	LO
40	214	280-155048-c-8 ms	1	U	1	1	7314	1024.856812	
41	215	280-155048-c-8 msd	1	U	1	1	7364	1032.005371	
42	216	280-155048-c-1	1	U	1	1	42	-2.560865	LO
43	217	280-155048-c-4	1	U	1	1	12834	1820.853394	
44	218	280-155048-c-3	1	U	1	1	27633	4022.796387	
45	219	280-155048-c-6	1	U	1	1	201	19.604500	
46	220	280-155138-c-7	1	U	1	1	40	-2.878658	LO
47	0	Blank	1	BLNK	1	1	-8	-9.543214	LO
B	0	Read Baseline	1	RB	1	1	0	-8.455329	BL
49	105	CCVL 500.0 ppb	1	U	1	1	3742	517.222717	
50	107	CCV 2500.0 ppb	1	U	1	1	18373	2633.388428	
51	111	CCB	1	U	1	1	227	23.320381	
B	0	read baseline	1	RB	1	1	0	-8.455329	BL
53	107	LCS 2500.00	1	U	1	1	18693	2680.700928	
54	107	LCSD 2500.00	1	U	1	1	18850	2704.001709	
55	111	MB	1	U	1	1	206	20.253628	
B	0	read baseline	1	RB	1	1	0	-8.455329	BL
57	0	Void	1		0	0	-1	-8.599980	LO

NH3:Calibration 1: Peak 4-59

File name: C:\FLOW_4\112121.RST
Date: 21-Nov-21
Operator: JM

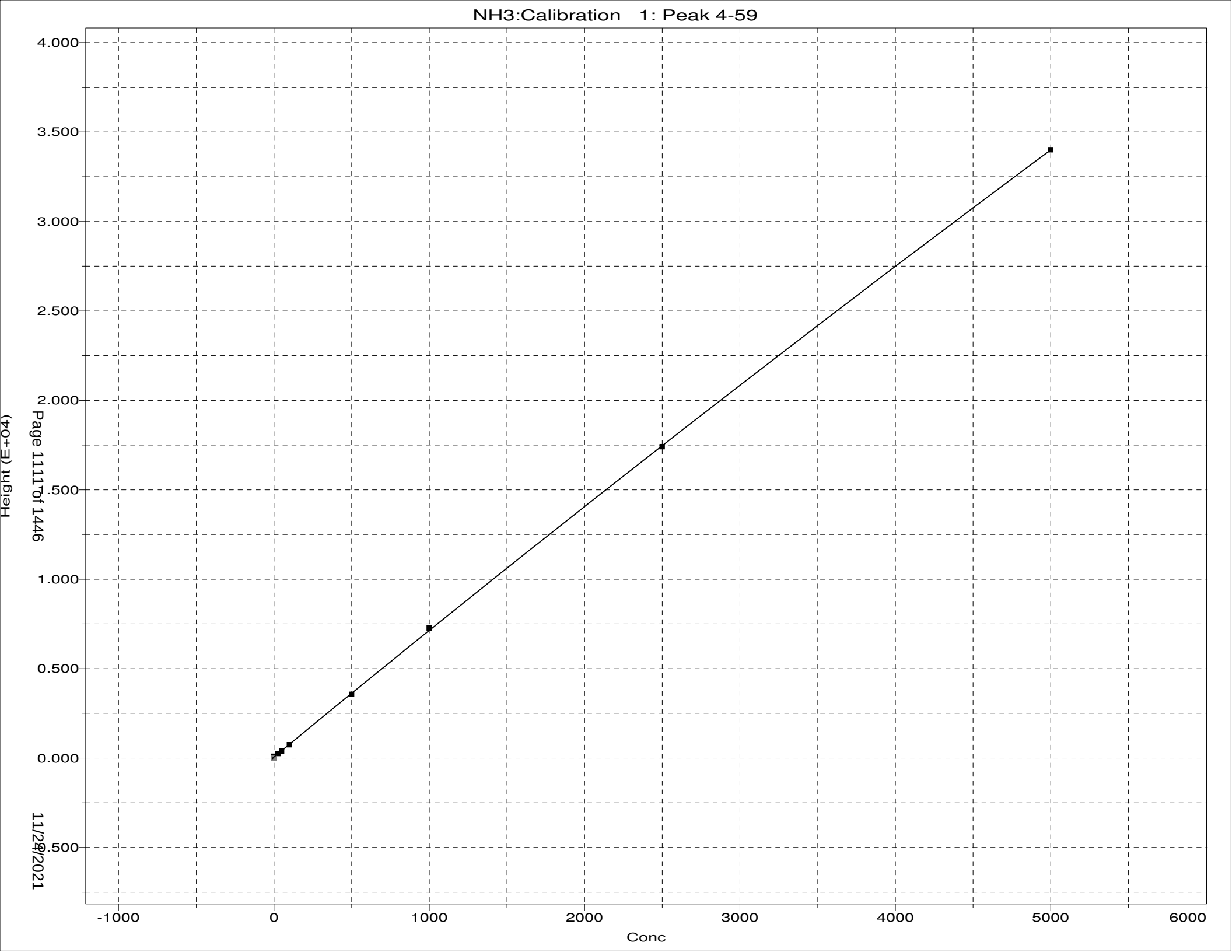
*	Name	Conc	Height
*	Cal 0 ppb	0.000000	97.045105
*	Cal 25 ppb	25.000000	250.554932
*	Cal 50 ppb	50.000000	388.306458
*	Cal 100 ppb	100.000000	738.063171
*	Cal 500 ppb	500.000000	3562.644287
*	Cal 1000 ppb	1000.000000	7265.245605
*	Cal 2500 ppb	2500.000000	17412.826172
*	Cal 5000 ppb	5000.000000	34006.160156

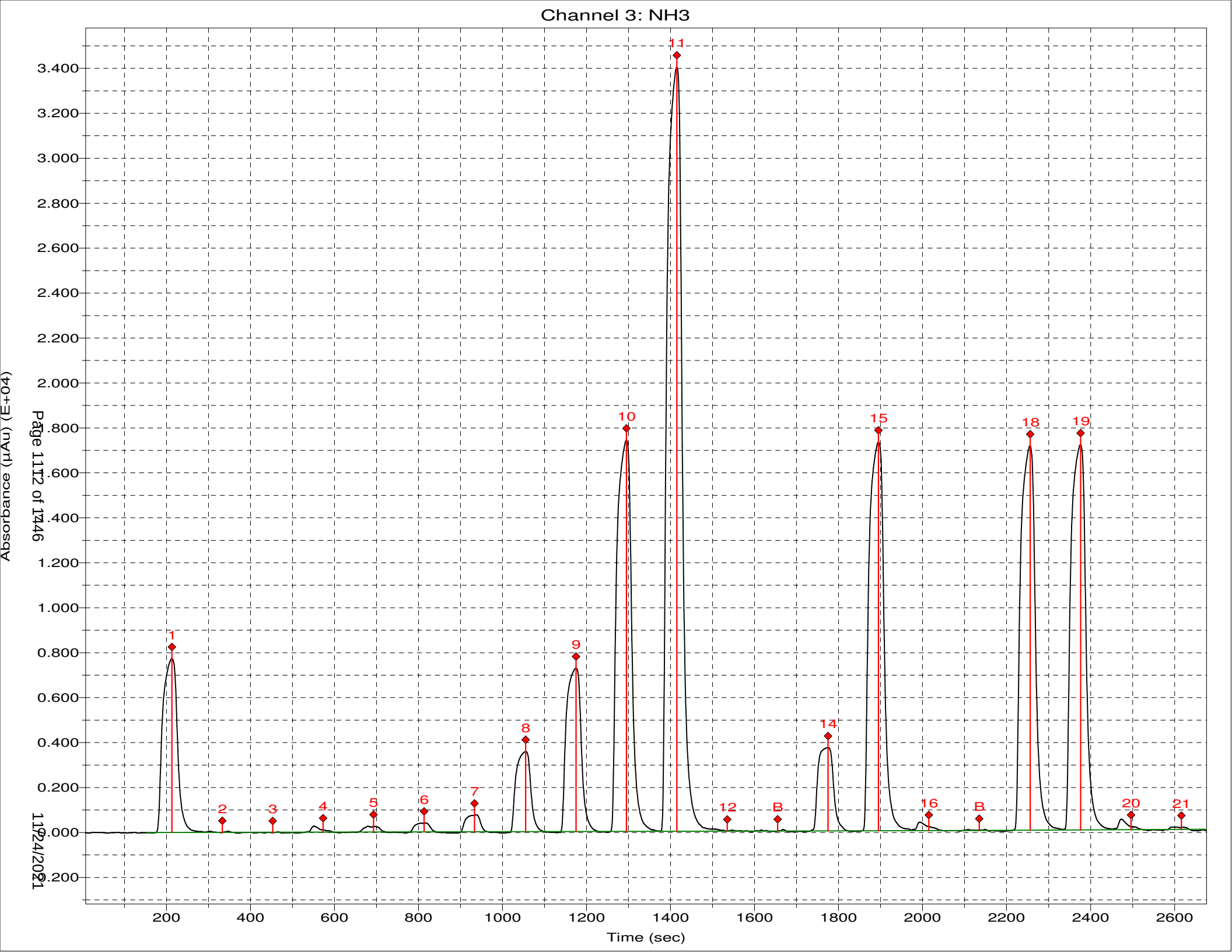
Calib Coef:
x=cyy+by+a
a: (intercept) -8.4553e+00
b: 1.3963e-01
c: 2.2623e-07

Corr Coef: 0.999988

Carryover: 0%

No Drift Peaks


NH3:Calibration 1: Peak 4-59
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
-0.500
Height (E+04)
-1000
0
1000
2000
3000
4000
5000
6000
Conc
Page 1111 of 1446
11/29/2021


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec)
Page 11 of 14
11/24/2021
1
2
3
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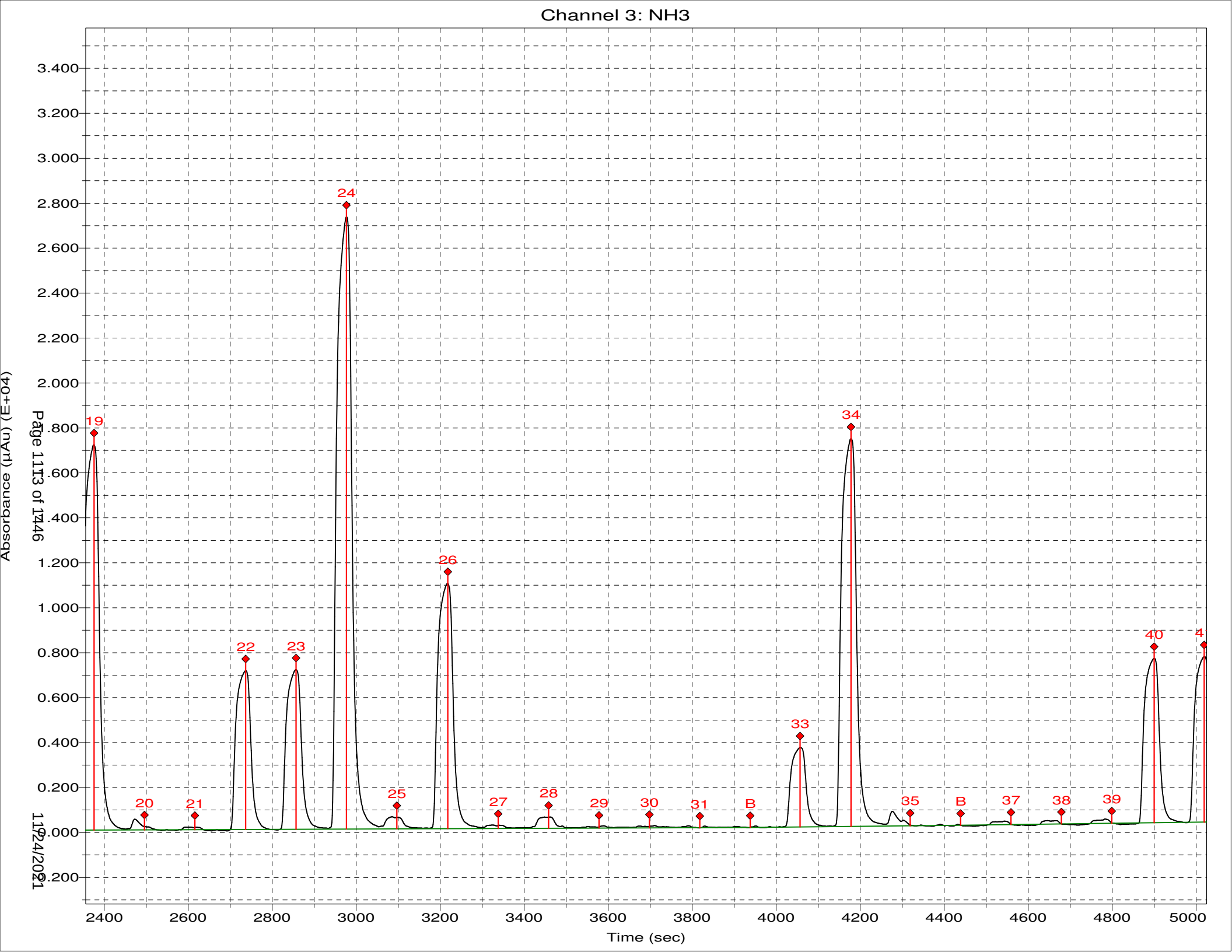
Channel 3: NH3
Absorbance (µAu) (E+04)
3.400
3.200
3.000
2.800
2.600
2.400
2.200
2.000
1.800
1.600
1.400
1.200
1.000
0.800
0.600
0.400
0.200
0.000
-0.200
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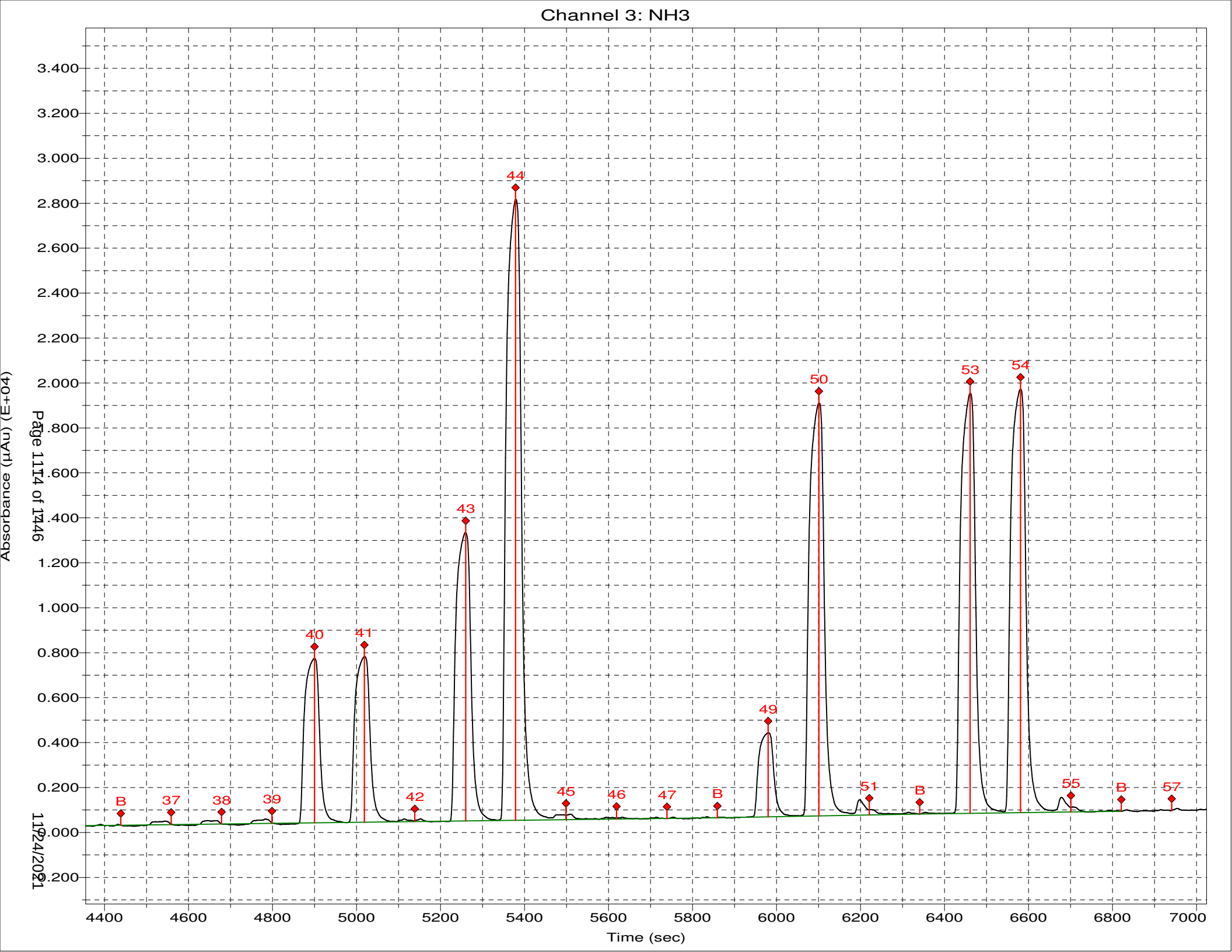
37
38
39
40
4
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
4600
4800
5000
Time (sec)
Page 11 of 17
11/24/2021


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec)
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
4400
4600
4800
5000
5200
5400
5600
5800
6000
6200
6400
6600
6800
7000
B
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B
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50
51
B
53
54
55
B
57

TestAmerica Calibration Spreadsheet, Work Instruction No. CA-Q-WI-13; dated 8/10/2011

Method	350.1
Analyte/Da	NH3

Input Calibration Data

Amount	Response	ISTD Amt	ISTD Resp	Response
0.000	97.045			97.04500
25.000	250.554			250.55400
50.000	388.306			388.30600
100.000	738.063			738.06300
500.000	3562.644			3562.64400
1000.000	7265.246			7265.24600
2500.000	17412.826			17412.82600
5000.000	34006.160			34006.16000
				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!	42.94%	-10.24%	14.54%
	#DIV/0!	#DIV/0!	#DIV/0!	10.76%	-15.53%	-4.91%
	#DIV/0!	#DIV/0!	#DIV/0!	5.26%	-7.51%	-4.37%
	#DIV/0!	#DIV/0!	#DIV/0!	1.62%	-0.32%	-2.57%
	#DIV/0!	#DIV/0!	#DIV/0!	3.62%	3.04%	0.95%
	#DIV/0!	#DIV/0!	#DIV/0!	-0.66%	-0.45%	-0.04%
	#DIV/0!	#DIV/0!	#DIV/0!	-3.00%	-2.54%	3.12%
RSE in X:	#DIV/0!	#DIV/0!	#DIV/0!	18.3%	9.1%	8.2%

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		7.0115E+00		0	0.99921	0.99961
Linear	9.4393E+01	6.9590E+00		-13.56	0.99918	0.99959
Quadratic	4.1812E+01	7.2938E+00	-1.3706E-04	-5.73	0.99915	0.99957
	c	b	a			

Sample Results

	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Instrum.Responses:	250.554	3,562.644			
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:	35.735	508.116	0.000	0.000	0.000
Linear Result:	22.440	498.382	-13.564	-13.564	-13.564
Quad Result (no IS):	28.634	487.173	-5.732	-5.732	-5.732
Quad Result (with IS):					

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 21-Nov-21

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 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
201	280-155369-a-9	U	1	1	1		
202	MS 280-155369-a-9	U	1	1	1		
203	MSD 280-155369-a-9	U	1	1	1		
204	280-155070-f-2	U	1	5	1		
205	Void 280-155015-c-10	U	1	10	1		
206	280-155015-c-9	U	1	1	1		
207	280-155015-c-11	U	1	1	1		
208	280-155015-c-12	U	1	1	1		
209	280-155048-c-2	U	1	1	1		
210	280-155048-c-5	U	1	1	1		
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	280-155138-c-9	U	1	1	1		
212	280-155138-c-4	U	1	1	1		
213	280-155048-c-8	U	1	1	1		
214	280-155048-c-8 ms	U	1	1	1		
215	280-155048-c-8 msd	U	1	1	1		
216	280-155048-c-1	U	1	1	1		
217	280-155048-c-4	U	1	1	1		
218	280-155048-c-3	U	1	1	1		
219	280-155048-c-6	U	1	1	1		
220	280-155138-c-7	U	1	1	1		
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		
107	LCS 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
0	read baseline	RB	1	1	1		

350.1 color_00268

350.1 bleach_01524

350.1 complex_00584

pH

All <2

Cl^-

All non-detect

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 21-Nov-21

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 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
223	280-155078-a-7	U	1	1	1		
224	MS 280-155078-a-7	U	1	1	1		
225	MSD 280-155078-a-7	U	1	1	1		
226	280-155138-c-1	U	1	1	1		
227	280-155138-c-2	U	1	1	1		
228	280-155138-c-6	U	1	1	1		
229	280-155138-c-5	U	1	1	1		
230	Void 280-155130-f-1	U	1	10	1		
231	280-155130-f-2	U	1	1	1		
232	280-155117-b-5	U	1	1	1		
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		
233	280-155117-b-4	U	1	1	1		
234	280-155117-b-6	U	1	1	1		
235	280-155048-c-7	U	1	1	1		
236	280-155048-c-7 ms	U	1	1	1		
237	280-155048-c-7 msd	U	1	1	1		
238	280-155117-b-9	U	1	1	1		
239	280-155150-b-1	U	1	1	1		
240	280-155150-a-3	U	1	1	1		
241	280-155117-b-3	U	1	1	1		
242	280-155117-b-2	U	1	1	1		
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		
107	LCS 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
0	read baseline	RB	1	1	1		
243	Void 280-155117-b-1	U	1	1	1		
244	Void 280-155117-b-8	U	1	1	1		
113	Void 280-155138-c-10	U	1	1	1		
114	Void 280-155138-c-10	U	1	1	1		
115	Void 280-155138-c-10	U	1	1	1		

Cup	Name	Type	R	Dil	Wt	Vial	Comment
116	Void 280-155150-a-2	U		1	1	1	
117	Void 280-155117-b-7	U		1	1	1	
118	Void 320-81484-a-3	U		1	1	1	
221	Void 280-155138-c-8	U		1	1	1	
222	Void 280-155138-c-3	U		1	1	1	
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	Void CCVL 500.0 ppb	U		1	1	1	
107	Void CCV 2500.0 ppb	U		1	1	1	
111	Void CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
105	Void CCVL 500.0 ppb	U		1	1	1	
107	Void CCV 2500.0 ppb	U		1	1	1	
0	Blank	BLNK	1	1	1		
105	Void CCVL 500.0 ppb	U		1	1	1	
107	Void CCV 2500.0 ppb	U		1	1	1	
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		

Peak Table:NH3

File name: C:\FLOW_4\112121A.RST
Date: 21-Nov-21
Operator: JM

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	106	Sync	1	SYNC	1	1	8615	1004.915222	
2	0	Carry Over	1	CO	1	1	11	-8.235144	LO
3	0	Blank	1	BLNK	1	1	3	-9.196054	LO
4	101	Cal 0 ppb	1	C	1	1	126	5.202130	
5	102	Cal 25 ppb	1	C	1	1	261	20.925222	
6	103	Cal 50 ppb	1	C	1	1	487	47.384411	
7	104	Cal 100 ppb	1	C	1	1	951	101.774696	
8	105	Cal 500 ppb	1	C	1	1	4282	493.071808	
9	106	Cal 1000 ppb	1	C	1	1	8658	1010.009827	
10	107	Cal 2500 ppb	1	C	1	1	21077	2495.955811	
11	108	Cal 5000 ppb	1	C	1	1	41510	5000.683105	HI
12	0	Blank	1	BLNK	1	1	-43	-14.594490	LO
B	0	Read Baseline	1	RB	1	1	0	-9.577360	BL
14	109	ICVL 500.0 ppb	1	U	1	1	4592	529.591797	
15	110	ICV 2500.0 ppb	1	U	1	1	21376	2532.060303	
16	111	ICB	1	U	1	1	133	5.998303	
B	0	read baseline	1	RB	1	1	0	-9.577360	BL
18	107	LCS 2500.00	1	U	1	1	21559	2554.146729	
19	107	LCSD 2500.00	1	U	1	1	21342	2527.918213	
20	111	MB	1	U	1	1	186	12.176451	
21	223	280-155078-a-7	1	U	1	1	108	3.020077	
22	224	MS 280-155078-a-7 1	1	U	1	1	8725	1018.001099	
23	225	MSD 280-155078-a-7 1	1	U	1	1	8921	1041.246704	
24	226	280-155138-c-1	1	U	1	1	11611	1360.924683	
25	227	280-155138-c-2	1	U	1	1	83	0.165446	
26	228	280-155138-c-6	1	U	1	1	89	0.811603	
27	229	280-155138-c-5	1	U	1	1	84	0.202149	
28	230	Void 280-155130-f-1 1	1	U	10	1	72210	89040.593750	HI
29	231	280-155130-f-2	1	U	1	1	959	102.753754	FL
30	232	280-155117-b-5	1	U	1	1	78	-0.404926	LO FL
31	0	Blank	1	BLNK	1	1	0	-9.535042	LO
B	0	Read Baseline	1	RB	1	1	0	-9.577360	BL
33	105	CCVL 500.0 ppb	1	U	1	1	4172	480.030121	
34	107	CCV 2500.0 ppb	1	U	1	1	20467	2422.293213	
35	111	CCB	1	U	1	1	152	8.252777	
B	0	read baseline	1	RB	1	1	0	-9.577360	BL
37	233	280-155117-b-4	1	U	1	1	59	-2.675020	LO
38	234	280-155117-b-6	1	U	1	1	733	76.256264	
39	235	280-155048-c-7	1	U	1	1	10007	1170.090942	
40	236	280-155048-c-7 ms 1	1	U	1	1	18123	2140.001221	
41	237	280-155048-c-7 msd 1	1	U	1	1	17736	2093.525146	
42	238	280-155117-b-9	1	U	1	1	96	1.709458	
43	239	280-155150-b-1	1	U	1	1	501	49.072514	
44	240	280-155150-a-3	1	U	1	1	4541	523.581421	
45	241	280-155117-b-3	1	U	1	1	2882	328.307312	
46	242	280-155117-b-2	1	U	1	1	48	-3.927627	LO
47	0	Blank	1	BLNK	1	1	10	-8.379513	LO
B	0	Read Baseline	1	RB	1	1	0	-9.577360	BL
49	105	CCVL 500.0 ppb	1	U	1	1	3947	453.597260	
50	107	CCV 2500.0 ppb	1	U	1	1	19398	2293.474365	
51	111	CCB	1	U	1	1	144	7.229188	
B	0	read baseline	1	RB	1	1	0	-9.577360	BL
53	107	LCS 2500.00	1	U	1	1	19160	2264.803955	
54	107	LCSD 2500.00	1	U	1	1	19137	2261.977539	
55	111	MB	1	U	1	1	157	8.801363	
B	0	read baseline	1	RB	1	1	0	-9.577360	BL
57	243	Void 280-155117-b-1 1	1	U	1	1	673	69.231682	
58	244	Void 280-155117-b-8 1	1	U	1	1	52	-3.471555	LO
59	113	Void 280-155138-c-10 1	1	U	1	1	13	-8.102268	LO
60	114	Void 280-155138-c-10 ms 1	1	U	1	1	7772	905.140076	
61	115	Void 280-155138-c-10 msd 1	1	U	1	1	7744	901.734192	
62	116	Void 280-155150-a-2 1	1	U	1	1	694	71.634300	
63	117	Void 280-155117-b-7 1	1	U	1	1	685	70.584190	
64	118	Void 320-81484-a-3 1	1	U	1	1	823	86.777763	
65	221	Void 280-155138-c-8 1	1	U	1	1	3406	389.908112	
66	222	Void 280-155138-c-3 1	1	U	1	1	8365	975.275024	
67	0	Blank	1	BLNK	1	1	-4	-9.987164	LO
B	0	Read Baseline	1	RB	1	1	0	-9.577360	BL
69	105	Void CCVL 500.0 ppb 1	1	U	1	1	3696	424.086182	
70	107	Void CCV 2500.0 ppb 1	1	U	1	1	18102	2137.487305	

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	111	Void CCB	1	U	1	1	166	9.814084	
B	0	read baseline	1	RB	1	1	0	-9.577360	BL
73	105	Void CCVL 500.0 ppb	1	U	1	1	3777	433.632904	UM
74	107	Void CCV 2500.0 ppb	1	U	1	1	18178	2146.651855	
75	0	Blank	1	BLNK	1	1	0	-9.617776	LO
76	105	Void CCVL 500.0 ppb	1	U	1	1	3776	433.423187	
77	107	Void CCV 2500.0 ppb	1	U	1	1	18552	2191.601318	

NH3:Calibration 1: Peak 4-79

File name: C:\FLOW_4\112121A.RST
Date: 21-Nov-21
Operator: JM

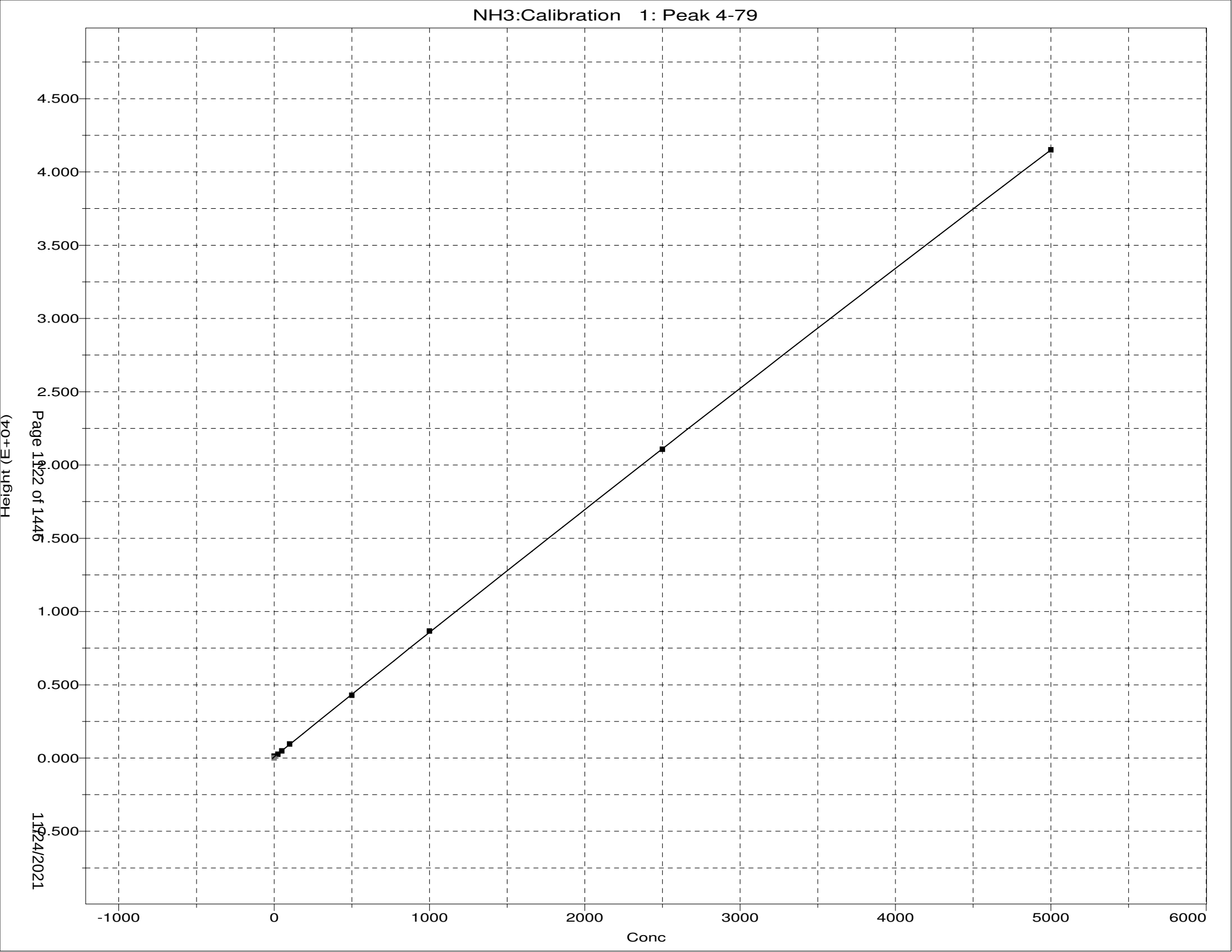
*	Name	Conc	Height
*	Cal 0 ppb	0.000000	126.314377
*	Cal 25 ppb	25.000000	260.666626
*	Cal 50 ppb	50.000000	486.695618
*	Cal 100 ppb	100.000000	951.082886
*	Cal 500 ppb	500.000000	4282.362305
*	Cal 1000 ppb	1000.000000	8657.651367
*	Cal 2500 ppb	2500.000000	21076.890625
*	Cal 5000 ppb	5000.000000	41510.058594

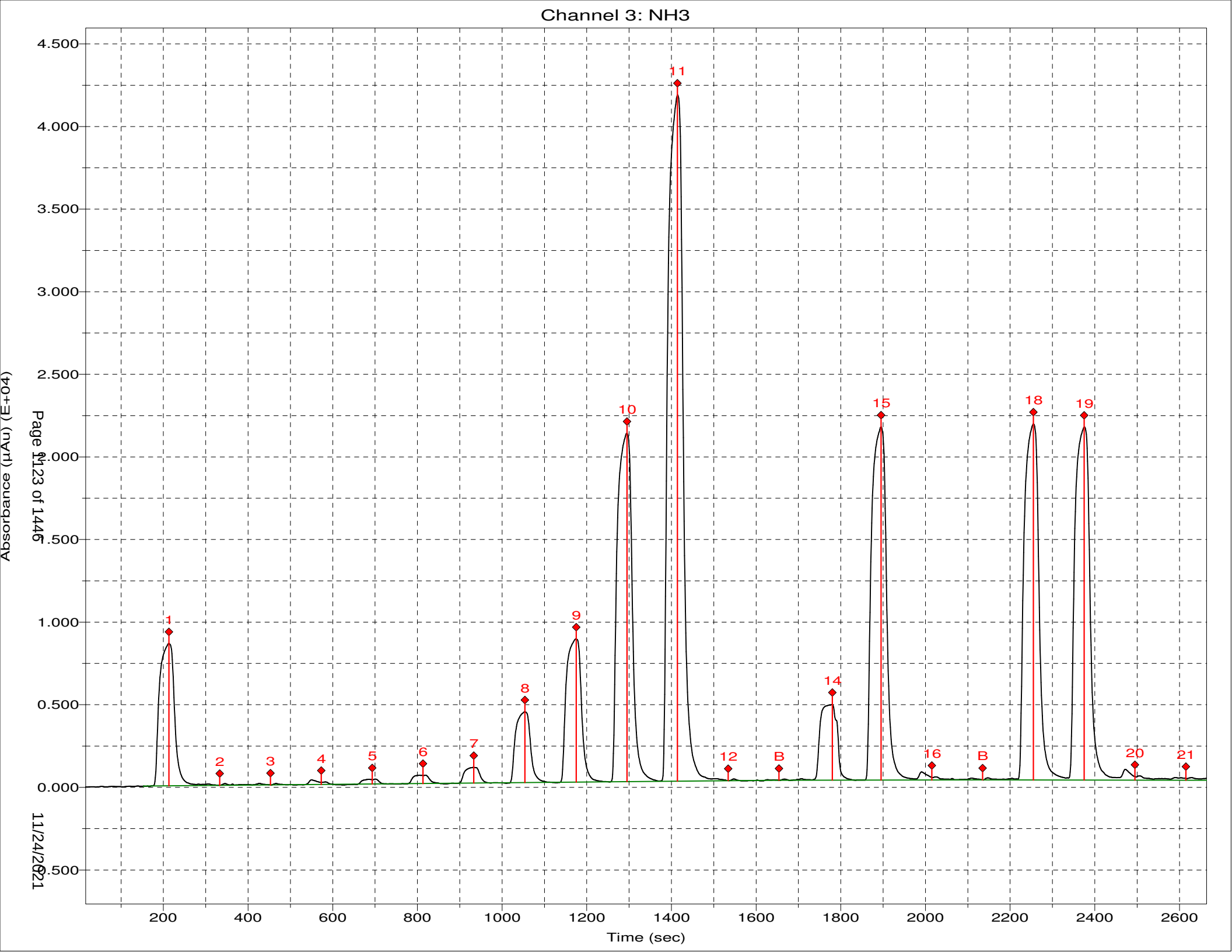
Calib Coef:
x=cyy+by+a
a: (intercept) -9.5774e+00
b: 1.1699e-01
c: 8.9269e-08

Corr Coef: 0.999995

Carryover: 0.133%

No Drift Peaks


NH3:Calibration 1: Peak 4-79
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
-0.500
Height (E+04)
-1000
0
1000
2000
3000
4000
5000
6000
Conc


Channel 3: NH3
Absorbance (µAu) (E+04)
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
-0.500
1
2
3
4
5
6
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8
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10
11
12
B
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B
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21
200
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1400
1600
1800
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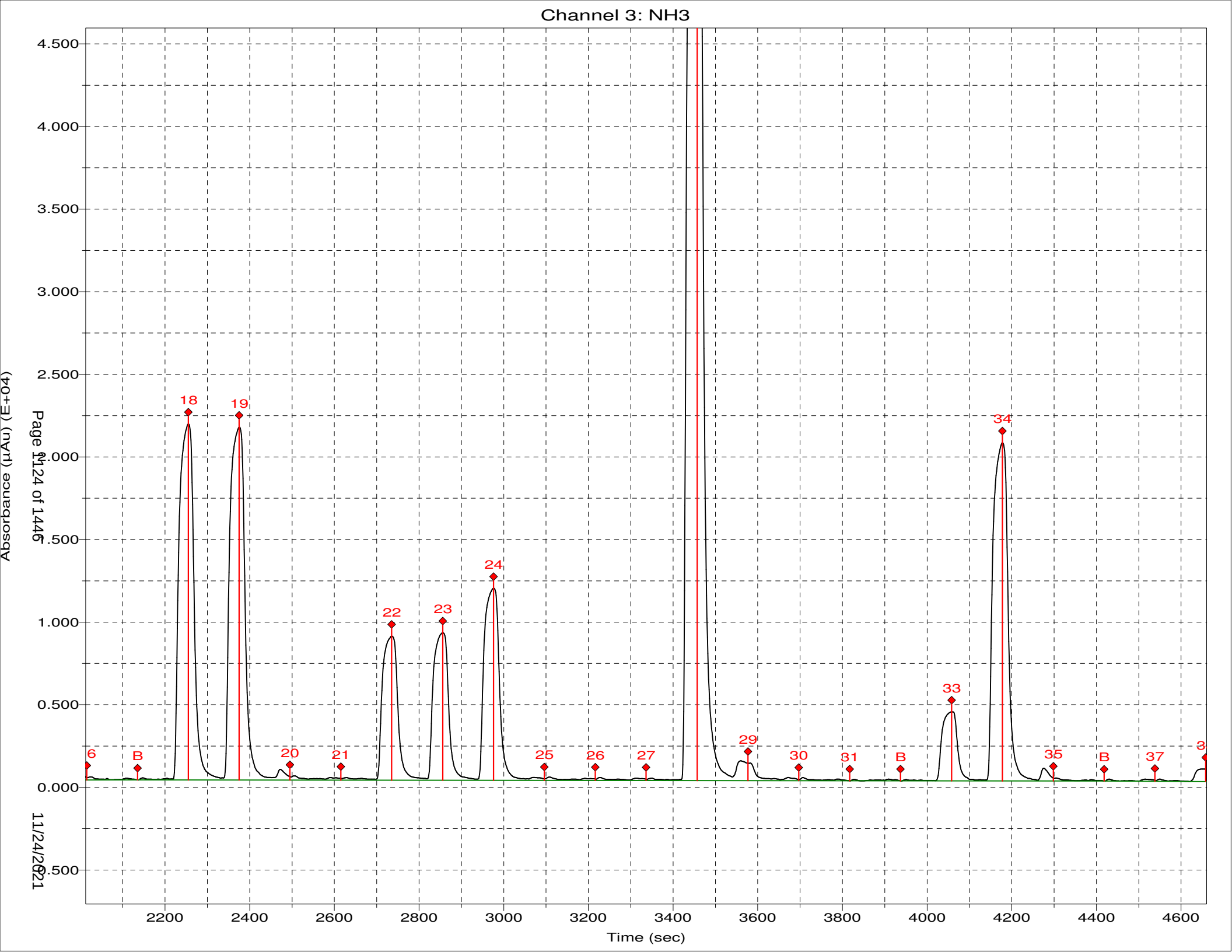
2200
2400
2600
Time (sec)
Page 1123 of 1446
11/24/2021


Channel 3: NH3
Absorbance (µAu) (E+04)
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
-0.500
Page 1124 of 1446
11/24/2021
6
B
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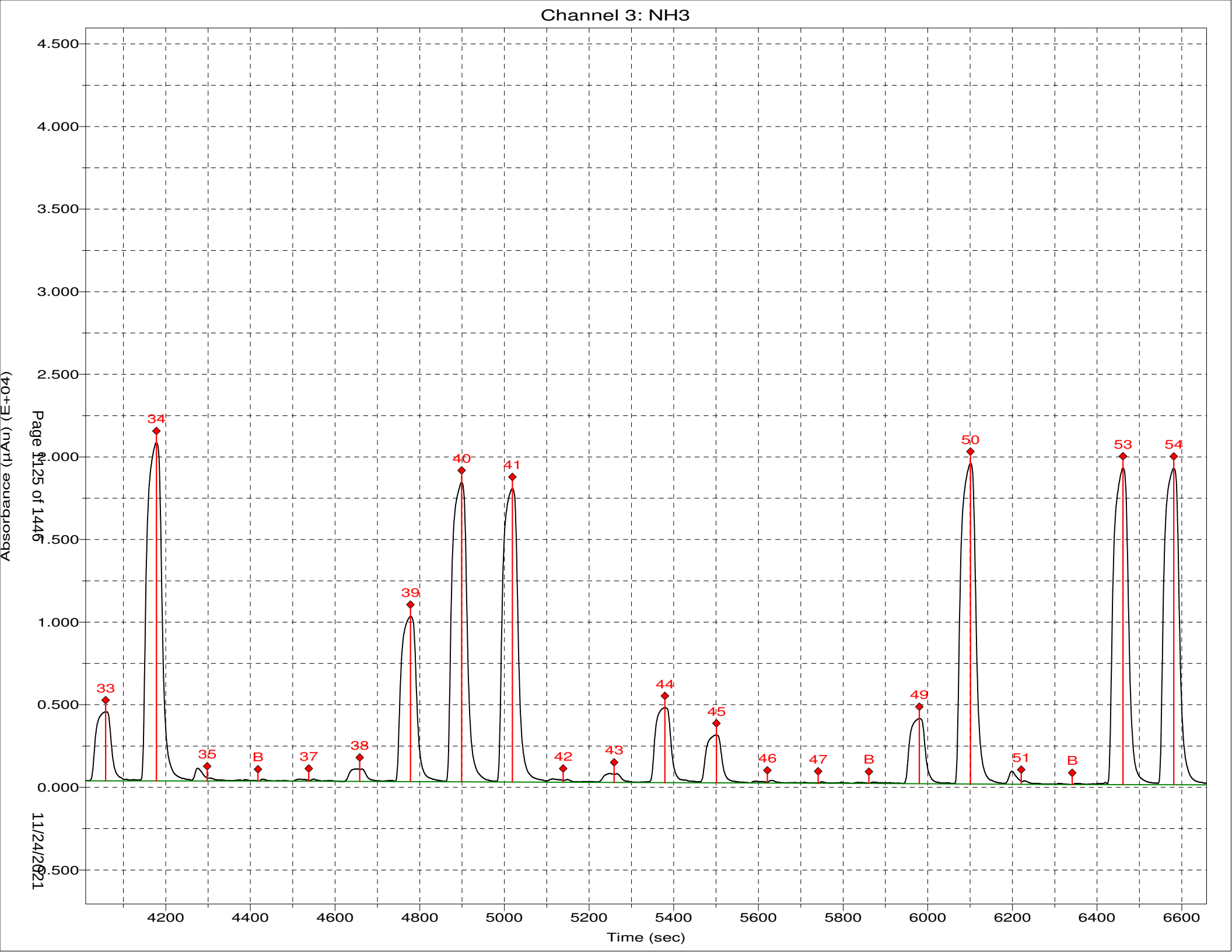
34
35
B
37
2200
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
4600
Time (sec)


Channel 3: NH3
Absorbance (µAu) (E+04)
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
-0.500
Time (sec)
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
6200
6400
6600
33
34
35
B
37
38
39
40
41
42
43
44
45
46
47
B
49
50
51
B
53
54
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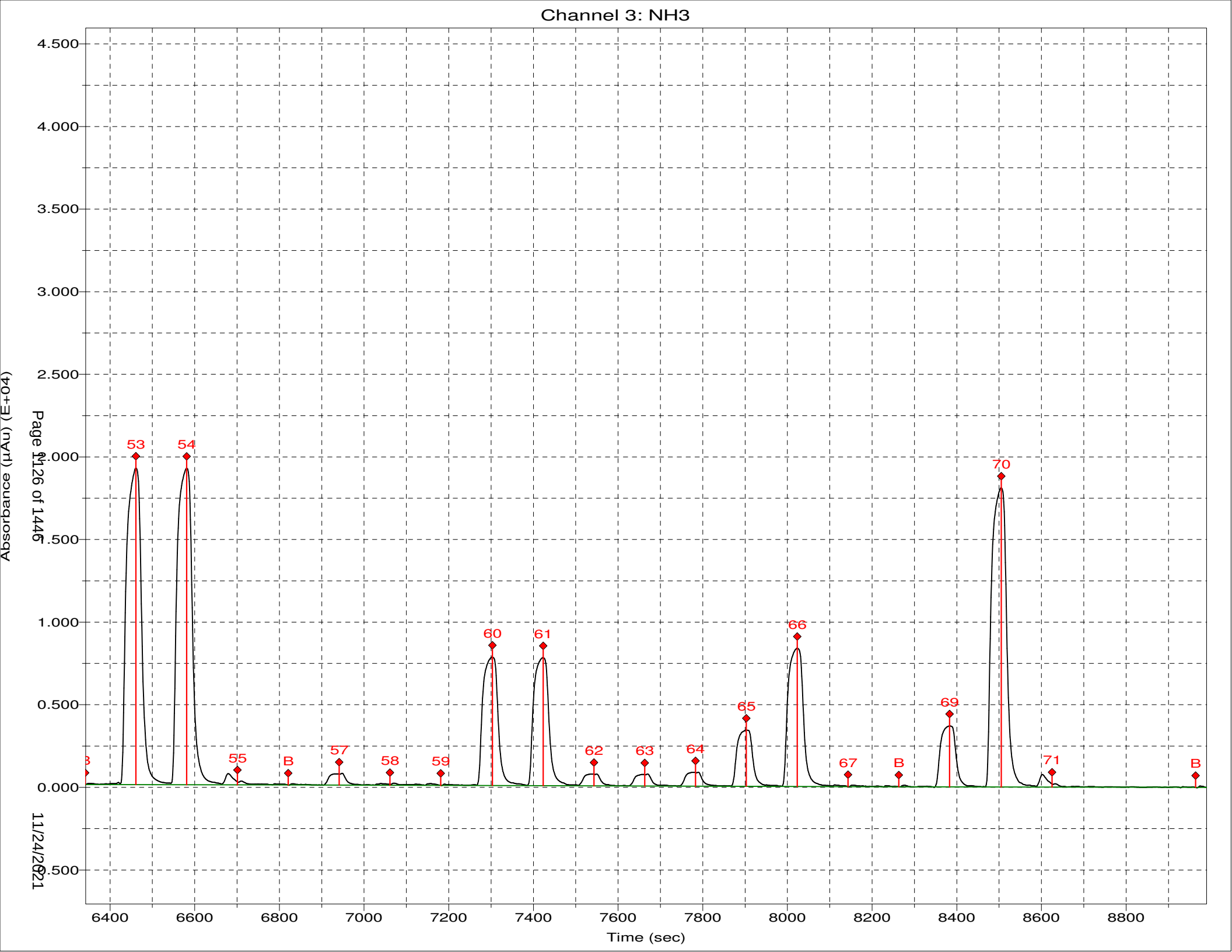
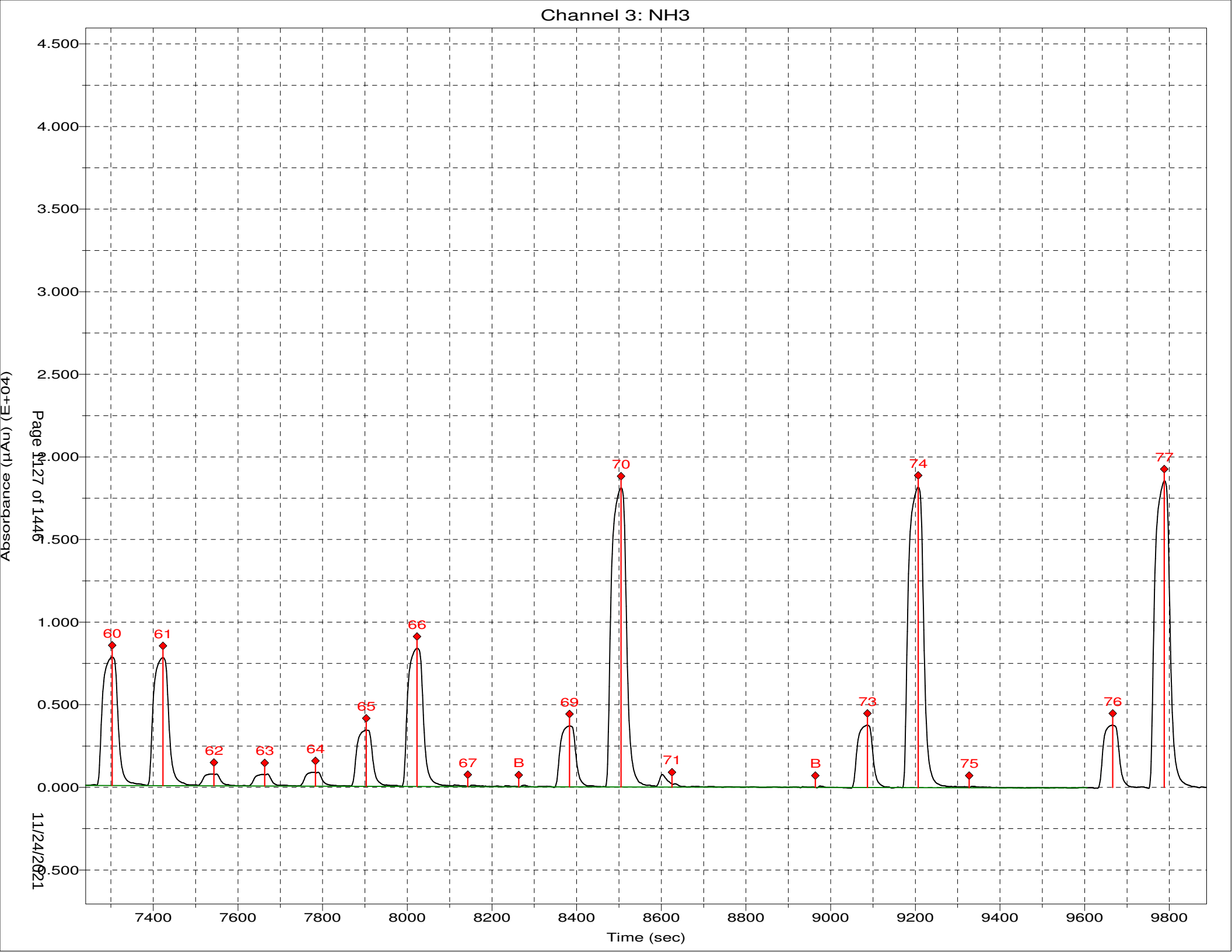

Channel 3: NH3
Absorbance (µAu) (E+04)
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
-0.500
Time (sec)
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
53
54
55
B
57
58
59
60
61
62
63
64
65
66
67
B
69
70
71
B
Page 11 of 1446
11/24/2021


Channel 3: NH3
Absorbance (µAu) (E+04)
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
-0.500
Time (sec)
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
9400
9600
9800
60
61
62
63
64
65
66
67
B
69
70
71
B
73
74
75
76
77
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11/24/2021

TestAmerica Calibration Spreadsheet, Work Instruction No. CA-Q-WI-13; dated 8/10/2011

Method	350.1
Analyte/Da	NH3

Input Calibration Data

Amount	Response	ISTD Amt	ISTD Resp	Response
0.000	126.314			126.31400
25.000	260.666			260.66600
50.000	486.696			486.69600
100.000	951.083			951.08300
500.000	4282.362			4282.36200
1000.000	8657.651			8657.65100
2500.000	21076.890			21076.89000
5000.000	41510.059			41510.05900
				0.00000
				0.00000
			RSE in X:	#DIV/0!

Relative Errors in X

Average	Linear (1/x2)	Linear (1/X)	Linear Forced	Linear	Quadratic
#DIV/0!	#DIV/0!	#DIV/0!	23.14%	-25.82%	-12.14%
#DIV/0!	#DIV/0!	#DIV/0!	14.96%	-9.15%	-3.60%
#DIV/0!	#DIV/0!	#DIV/0!	12.32%	0.65%	2.14%
#DIV/0!	#DIV/0!	#DIV/0!	1.15%	-0.64%	-1.83%
#DIV/0!	#DIV/0!	#DIV/0!	2.25%	1.71%	0.61%
#DIV/0!	#DIV/0!	#DIV/0!	-0.43%	-0.24%	-0.03%
#DIV/0!	#DIV/0!	#DIV/0!	-1.95%	-1.52%	1.30%
#DIV/0!	#DIV/0!	#DIV/0!	12.4%	12.3%	6.5%

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		8.4675E+00		0	0.99966	0.99983
Linear	1.0471E+02	8.4093E+00		-12.45	0.99971	0.99985
Quadratic	7.1321E+01	8.6219E+00	-8.7041E-05	-8.27	0.99982	0.99991
	c	b	a			

Sample Results

	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
Instrum.Responses:	260.666	4,282.362			
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:	30.784	505.744	0.000	0.000	0.000
Linear Result:	18.545	496.791	-12.452	-12.452	-12.452
Quad Result (no IS):	21.966	490.845	-8.271	-8.271	-8.271
Quad Result (with IS):					

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 21-Nov-21

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 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
223	280-155078-a-7	U	1	1	1		
224	MS 280-155078-a-7	U	1	1	1		
225	MSD 280-155078-a-7	U	1	1	1		
226	280-155138-c-1	U	1	1	1		
227	280-155138-c-2	U	1	1	1		
228	280-155138-c-6	U	1	1	1		
229	280-155138-c-5	U	1	1	1		
230	Void 280-155130-f-1	U	1	10	1		
231	280-155130-f-2	U	1	1	1		
232	280-155117-b-5	U	1	1	1		
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		
233	280-155117-b-4	U	1	1	1		
234	280-155117-b-6	U	1	1	1		
235	280-155048-c-7	U	1	1	1		
236	280-155048-c-7 ms	U	1	1	1		
237	280-155048-c-7 msd	U	1	1	1		
238	280-155117-b-9	U	1	1	1		
239	280-155150-b-1	U	1	1	1		
240	280-155150-a-3	U	1	1	1		
241	280-155117-b-3	U	1	1	1		
242	280-155117-b-2	U	1	1	1		
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		
107	LCS 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
0	read baseline	RB	1	1	1		

350.1 color_00268

350.1 bleach_01524

350.1 complex_00584

pH

All <2

Cl⁻

All non-detect

Cup	Name	Type	R	Dil	Wt	Vial	Comment
243	Void 280-155117-b-1 U			1	1	1	
244	Void 280-155117-b-8 U			1	1	1	
113	Void 280-155138-c-10 U			1	1	1	
114	Void 280-155138-c-10 U			1	1	1	
115	Void 280-155138-c-10 U			1	1	1	
116	Void 280-155150-a-2 U			1	1	1	
117	Void 280-155117-b-7 U			1	1	1	
118	Void 320-81484-a-3 U			1	1	1	
221	Void 280-155138-c-8 U			1	1	1	
222	Void 280-155138-c-3 U			1	1	1	
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
105	Void CCVL 500.0 ppb U			1	1	1	
107	Void CCV 2500.0 ppb U			1	1	1	
111	Void CCB	U	1	1	1		
0	read baseline	RB	1	1	1		
105	Void CCVL 500.0 ppb U			1	1	1	
107	Void CCV 2500.0 ppb U			1	1	1	
0	Blank	BLNK	1	1	1		
105	Void CCVL 500.0 ppb U			1	1	1	
107	Void CCV 2500.0 ppb U			1	1	1	
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 22-Nov-21

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 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
201	280-155015-C-12	U	1	1	1		
202	MS 280-155015-c-12	U	1	1	1		
203	MSD 280-155015-c-12	U	1	1	1		
204	280-155048-c-3	U	1	1	1		
205	Void 280-155070-f-3	U	1	100	1		
206	Void 280-155015-c-10	U	1	10	1		
207	280-155117-b-1	U	1	1	1		
208	280-155117-b-7	U	1	1	1		
209	280-155117-b-8	U	1	1	1		
210	Void 280-155130-f-1	U	1	100	1		
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	280-155130-f-2	U	1	1	1		
212	280-155138-c-3	U	1	2	1		
213	280-155138-c-10	U	1	1	1		
214	MS 280-155138-c-10	U	1	1	1		
215	MSD 280-155138-c-10	U	1	1	1		
216	280-155138-c-8	U	1	2	1		
217	320-81484-a-3	U	1	1	1		
218	320-81484-a-8	U	1	2	1		
219	Void 280-154777-r-1	U	1	100	1		
220	280-154779-p-1	U	1	1	1		
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		
107	LCS 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
0	read baseline	RB	1	1	1		
221	280-155081-a-3	U	1	1	1		
222	280-155081-a-7	U	1	1	1		
223	280-155081-a-11	U	1	1	1		
224	280-155081-a-15	U	1	1	1		
225	280-155150-a-2	U	1	1	1		

Cup	Name	Type	R	Dil	Wt	Vial	Comment
226	MS 280-155150-a-2	U		1	1	1	
227	MSD 280-155150-a-2	U		1	1	1	
228	280-155081-a-19	U		1	1	1	
229	Void 280-155225-c-1	U		1	2	1	
230	Void 280-155225-c-2	U		1	2	1	
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	
231	280-155225-c-3	U		1	2	1	
232	Void 280-155225-c-4	U		1	2	1	
233	280-155225-c-5	U		1	1	1	
234	280-155225-c-6	U		1	1	1	
235	280-155225-c-7	U		1	1	1	
236	280-155225-c-8	U		1	1	1	
237	280-155275-b-1	U		1	1	1	
238	MS 280-155275-b-1	U		1	1	1	
239	MSD 280-155275-b-1	U		1	1	1	
240	280-155015-c-10	U		1	2	1	
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	
107	LCS 2500.00	U		1	1	1	
107	LCSD 2500.00	U		1	1	1	
111	MB	U		1	1	1	
0	read baseline	RB		1	1	1	
241	Void 280-155070-f-3	U		1	20	1	
242	Void 280-155130-f-1	U		1	20	1	
243	Void 280-154777-r-1	U		1	20	1	
244	Void 280-155225-c-1	U		1	1	1	
245	Void 280-155225-c-2	U		1	1	1	
246	Void 280-155225-c-4	U		1	1	1	
247	Void 280-155225-c-9	U		1	2	1	
248	Void 280-155275-b-2	U		1	1	1	
0	Void Blank	BLNK		1	1	1	
0	Void Read Baseline	RB		1	1	1	
105	Void CCVL 500.0 ppb	U		1	1	1	
107	VOid CCV 2500.0 ppb	U		1	1	1	
111	VOid CCB	U		1	1	1	
0	Void read baseline	RB		1	1	1	
105	Void CCVL 500.0 ppb	U		1	1	1	
107	VOid CCV 2500.0 ppb	U		1	1	1	
111	VOid CCB	U		1	1	1	
0	VOid read baseline	RB		1	1	1	
105	Void CCVL 500.0 ppb	U		1	1	1	
107	Void CCV 2500.0 ppb	U		1	1	1	
111	Void CCB	U		1	1	1	
0	VOid read baseline	RB		1	1	1	

Peak Table:NH3

File name: C:\FLOW_4\112221.RST
Date: 22-Nov-21
Operator: RKD

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	106	Sync	1	SYNC	1	1	13096	983.204590	
2	0	Carry Over	1	CO	1	1	-39	0.081900	
3	0	Blank	1	BLNK	1	1	-1	2.919065	
4	101	Cal 0 ppb	1	C	1	1	125	12.346548	
5	102	Cal 25 ppb	1	C	1	1	330	27.573448	
6	103	Cal 50 ppb	1	C	1	1	620	49.180344	
7	104	Cal 100 ppb	1	C	1	1	1288	99.022430	
8	105	Cal 500 ppb	1	C	1	1	6550	492.047974	
9	106	Cal 1000 ppb	1	C	1	1	13118	984.834778	
10	107	Cal 2500 ppb	1	C	1	1	33282	2512.545654	
11	108	Cal 5000 ppb	1	C	1	1	65468	4997.446289	
12	0	Blank	1	BLNK	1	1	39	5.927881	
B	0	Read Baseline	1	RB	1	1	0	3.014382	BL
14	109	ICVL 500.0 ppb	1	U	1	1	6755	507.433655	
15	110	ICV 2500.0 ppb	1	U	1	1	32644	2463.885742	
16	111	ICB	1	U	1	1	340	28.375267	
B	0	read baseline	1	RB	1	1	0	3.014382	BL
18	107	LCS 2500.00	1	U	1	1	33250	2510.051270	
19	107	LCSD 2500.00	1	U	1	1	33280	2512.344971	
20	111	MB	1	U	1	1	209	18.547848	
21	201	280-155015-C-12	1	U	1	1	979	75.961288	
22	202	MS 280-155015-c-12	1	U	1	1	13953	1047.651611	
23	203	MSD 280-155015-c-12	1	U	1	1	14455	1085.447876	
24	204	280-155048-c-3	1	U	1	1	51496	3911.741211	
25	205	Void 280-155070-f-3	1	U	100	1	5751	43228.550781	
26	206	Void 280-155015-c-10	1	U	10	1	750	588.661133	
27	207	280-155117-b-1	1	U	1	1	1069	82.697678	
28	208	280-155117-b-7	1	U	1	1	1232	94.786804	
29	209	280-155117-b-8	1	U	1	1	-33	0.566142	
30	210	Void 280-155130-f-1	1	U	100	1	9710	72883.554688	
31	0	Blank	1	BLNK	1	1	-1	2.945170	
B	0	Read Baseline	1	RB	1	1	0	3.014382	BL
33	105	CCVL 500.0 ppb	1	U	1	1	6651	499.646698	
34	107	CCV 2500.0 ppb	1	U	1	1	33099	2498.571777	
35	111	CCB	1	U	1	1	319	26.772406	
B	0	read baseline	1	RB	1	1	0	3.014382	BL
37	211	280-155130-f-2	1	U	1	1	1457	111.632919	
38	212	280-155138-c-3	1	U	2	1	7328	1100.680420	
39	213	280-155138-c-10	1	U	1	1	21	4.587388	
40	214	MS 280-155138-c-10	1	U	1	1	13119	984.894714	
41	215	MSD 280-155138-c-10	1	U	1	1	13460	1010.609924	
42	216	280-155138-c-8	1	U	2	1	2911	440.139740	
43	217	320-81484-a-3	1	U	1	1	1290	99.180946	
44	218	320-81484-a-8	1	U	2	1	1474	225.803711	
45	219	Void 280-154777-r-1	1	U	100	1	4007	30195.281250	
46	220	280-154779-p-1	1	U	1	1	42575	3224.127930	
47	0	Blank	1	BLNK	1	1	14	4.031395	
B	0	Read Baseline	1	RB	1	1	0	3.014382	BL
49	105	CCVL 500.0 ppb	1	U	1	1	6662	500.443817	
50	107	CCV 2500.0 ppb	1	U	1	1	33294	2513.453857	
51	111	CCB	1	U	1	1	414	33.875896	
B	0	read baseline	1	RB	1	1	0	3.014382	BL
53	107	LCS 2500.00	1	U	1	1	33336	2516.681885	
54	107	LCSD 2500.00	1	U	1	1	33533	2531.685059	
55	111	MB	1	U	1	1	319	26.812859	
B	0	read baseline	1	RB	1	1	0	3.014382	BL
57	221	280-155081-a-3	1	U	1	1	10	3.762875	
58	222	280-155081-a-7	1	U	1	1	-71	-2.250809	LO
59	223	280-155081-a-11	1	U	1	1	-98	-4.271098	LO
60	224	280-155081-a-15	1	U	1	1	-3	2.797109	
61	225	280-155150-a-2	1	U	1	1	1242	95.554543	
62	226	MS 280-155150-a-2	1	U	1	1	14632	1098.800049	
63	227	MSD 280-155150-a-2	1	U	1	1	14783	1110.151001	
64	228	280-155081-a-19	1	U	1	1	62	7.649746	
65	229	Void 280-155225-c-1	1	U	2	1	117	23.468254	
66	230	Void 280-155225-c-2	1	U	2	1	56	14.418431	
67	0	Blank	1	BLNK	1	1	58	7.366704	
B	0	Read Baseline	1	RB	1	1	0	3.014382	BL
69	105	CCVL 500.0 ppb	1	U	1	1	6830	513.055908	
70	107	CCV 2500.0 ppb	1	U	1	1	33432	2523.948242	

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
71	111	CCB	1	U	1	1	380	31.332104	
B	0	read baseline	1	RB	1	1	0	3.014382	BL
73	231	280-155225-c-3	1	U	2	1	1345	206.566467	
74	232	Void 280-155225-c-4	1	U	2	1	106	21.746801	
75	233	280-155225-c-5	1	U	1	1	-26	1.051014	
76	234	280-155225-c-6	1	U	1	1	329	27.514601	
77	235	280-155225-c-7	1	U	1	1	6222	467.523926	
78	236	280-155225-c-8	1	U	1	1	8652	649.490479	
79	237	280-155275-b-1	1	U	1	1	591	47.075035	
80	238	MS 280-155275-b-1	1	U	1	1	12826	962.861389	
81	239	MSD 280-155275-b-1	1	U	1	1	13204	991.321228	
82	240	280-155015-c-10	1	U	2	1	3259	492.118805	
83	0	Blank	1	BLNK	1	1	26	4.981570	
B	0	Read Baseline	1	RB	1	1	0	3.014382	BL
85	105	CCVL 500.0 ppb	1	U	1	1	6345	476.718231	
86	107	CCV 2500.0 ppb	1	U	1	1	31169	2351.375977	
87	111	CCB	1	U	1	1	393	32.258194	
B	0	read baseline	1	RB	1	1	0	3.014382	BL
89	107	LCS 2500.00	1	U	1	1	31057	2342.858887	
90	107	LCSD 2500.00	1	U	1	1	30662	2312.760254	
91	111	MB	1	U	1	1	266	22.851402	
B	0	read baseline	1	RB	1	1	0	3.014382	BL
93	241	Void 280-155070-f-3	1	U	20	1	25805	38868.273438	
94	242	Void 280-155130-f-1	1	U	20	1	44579	67564.171875	
95	243	Void 280-154777-r-1	1	U	20	1	18338	27564.394531	
96	244	Void 280-155225-c-1	1	U	1	1	74	8.492549	
97	245	Void 280-155225-c-2	1	U	1	1	44	6.267785	
98	246	Void 280-155225-c-4	1	U	1	1	56	7.215763	
99	247	Void 280-155225-c-9	1	U	2	1	2977	450.006287	
100	248	Void 280-155275-b-2	1	U	1	1	1394	106.885307	
101	0	Void Blank	1	BLNK	1	1	49	6.657682	
B	0	Void Read Baseline	1	RB	1	1	0	3.014382	BL
103	105	Void CCVL 500.0 ppb	1	U	1	1	5934	445.998108	
104	107	VOid CCV 2500.0 ppb	1	U	1	1	29365	2214.025391	
105	111	VOid CCB	1	U	1	1	217	19.169249	
B	0	Void read baseline	1	RB	1	1	0	3.014382	BL
107	105	Void CCVL 500.0 ppb	1	U	1	1	5712	429.374664	
108	107	VOid CCV 2500.0 ppb	1	U	1	1	28770	2168.775635	
109	111	VOid CCB	1	U	1	1	209	18.588259	
B	0	VOid read baseline	1	RB	1	1	0	3.014382	BL
111	105	Void CCVL 500.0 ppb	1	U	1	1	-39	0.138372	
112	107	Void CCV 2500.0 ppb	1	U	1	1	54	7.071733	
113	111	Void CCB	1	U	1	1	78	8.812767	
B	0	VOid read baseline	1	RB	1	1	0	3.014382	BL

NH3:Calibration 1: Peak 4-114

File name: C:\FLOW_4\112221.RST
Date: 22-Nov-21
Operator: RKD

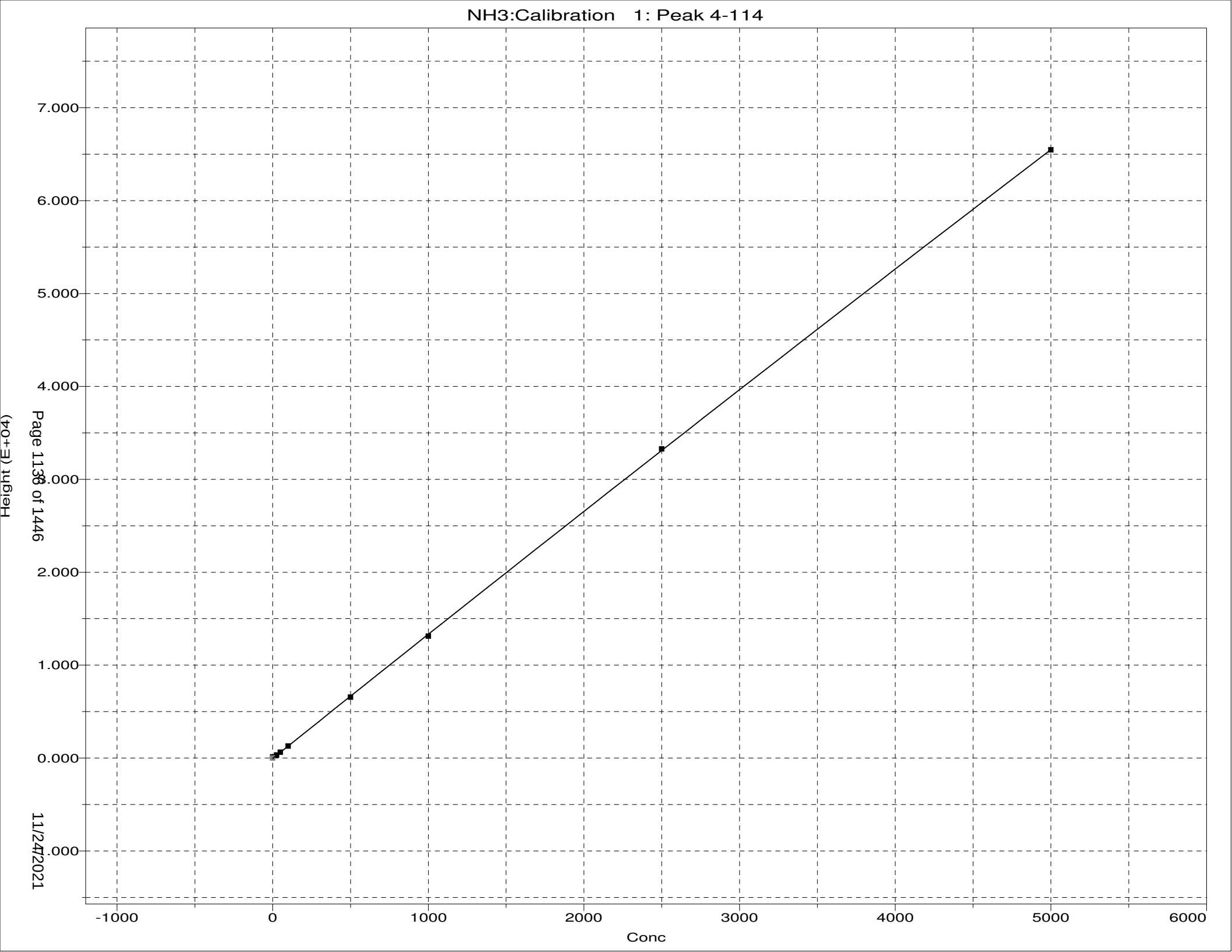
*	Name	Conc	Height
*	Cal 0 ppb	0.000000	125.282837
*	Cal 25 ppb	25.000000	329.676575
*	Cal 50 ppb	50.000000	619.657349
*	Cal 100 ppb	100.000000	1288.338623
*	Cal 500 ppb	500.000000	6549.645508
*	Cal 1000 ppb	1000.000000	13117.789062
*	Cal 2500 ppb	2500.000000	33282.195312
*	Cal 5000 ppb	5000.000000	65468.359375

Calib Coef:
x=cyy+by+a
a: (intercept) 3.0144e+00
b: 7.4485e-02
c: 2.7531e-08

Corr Coef: 0.999986

Carryover: 0%

No Drift Peaks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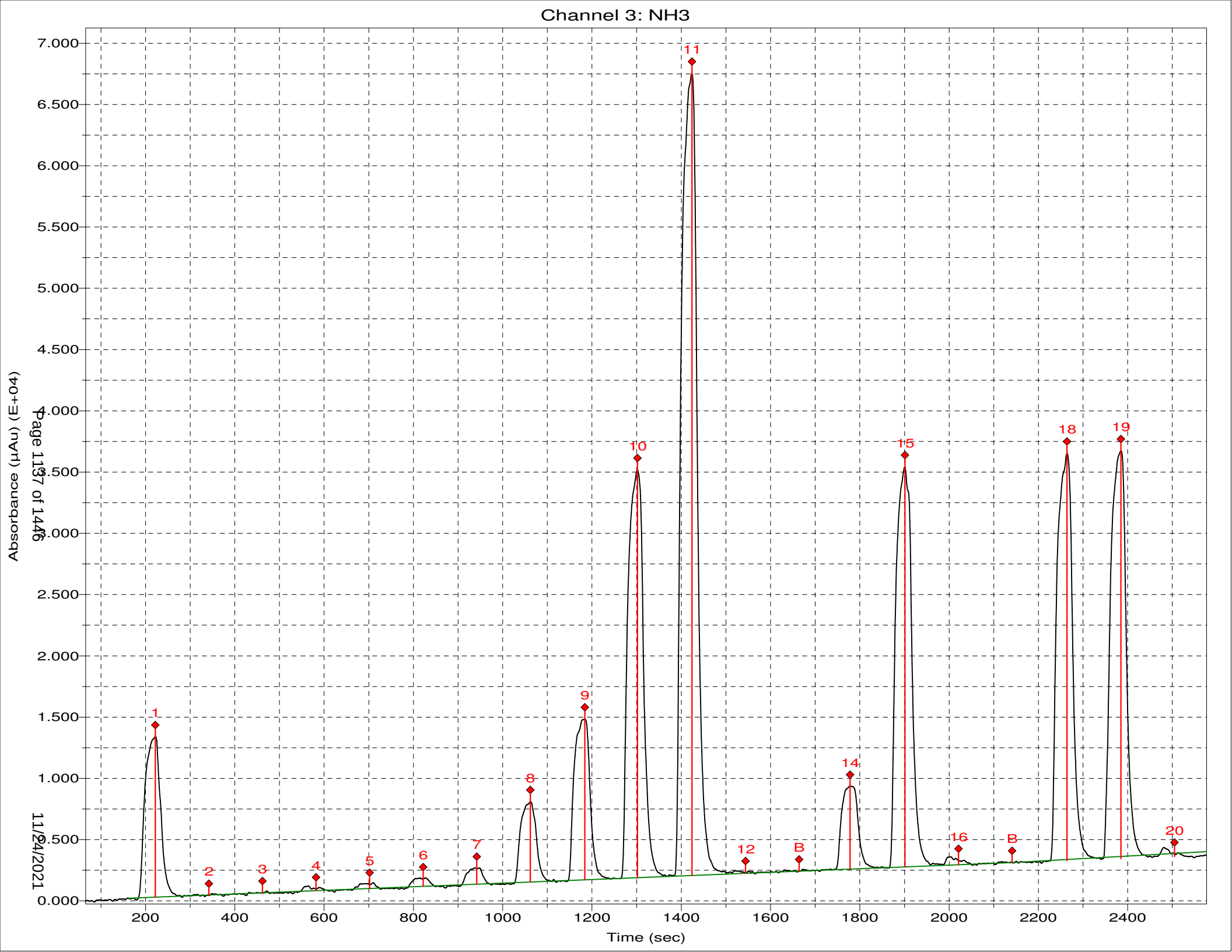
6.000
5.000
4.000
3.000
2.000
1.000
0.000
-1.000
Height (E+04)
-1000
0
1000
2000
3000
4000
5000
6000
Conc
Page 1138 of 1446
11/24/2021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Absorbance (µAu) (E+04)
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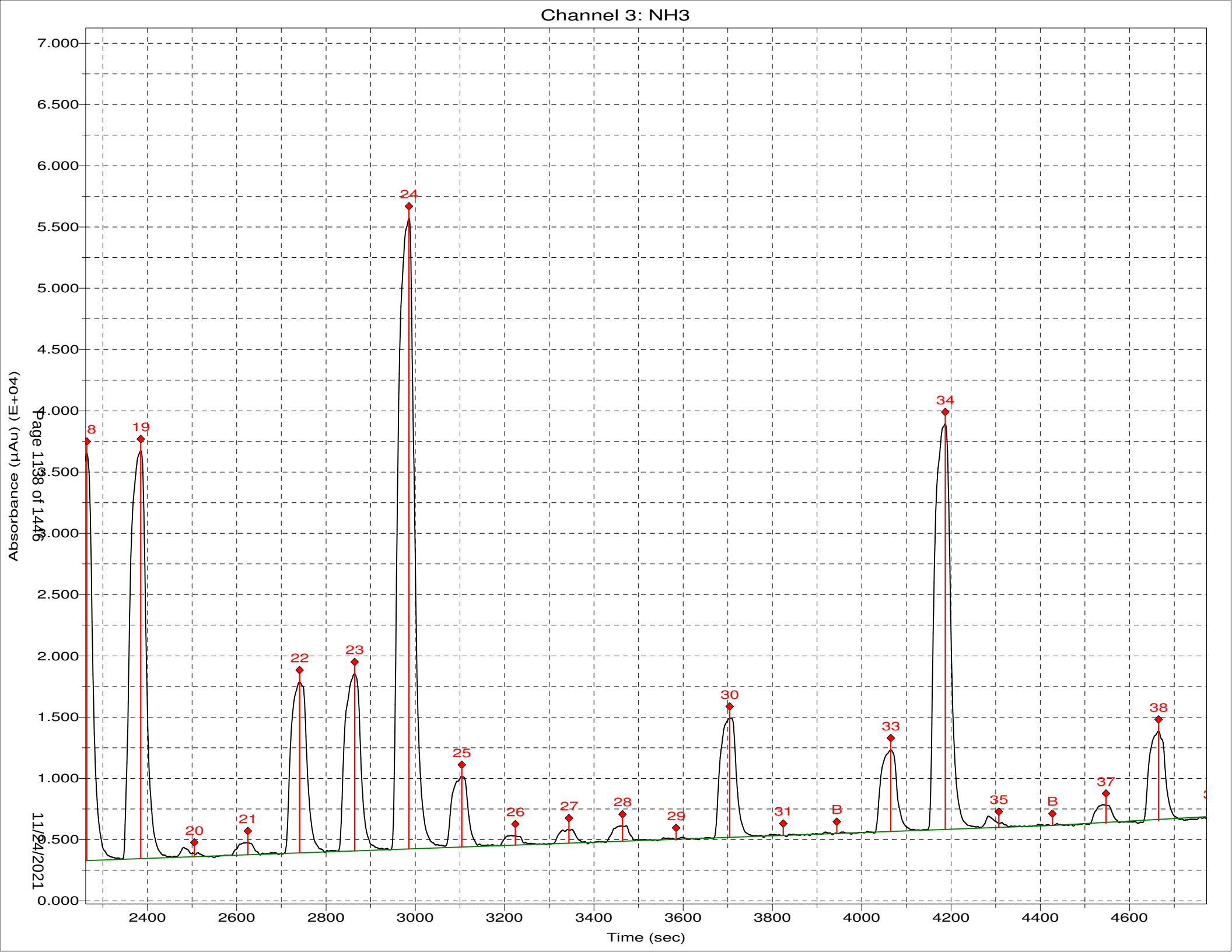
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
Time (sec)
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
1
2
3
4
5
6
7
8
9
10
11
12
B
14
15
16
B
18
19
20
Page 1137 of 1446
11/24/2021


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec)
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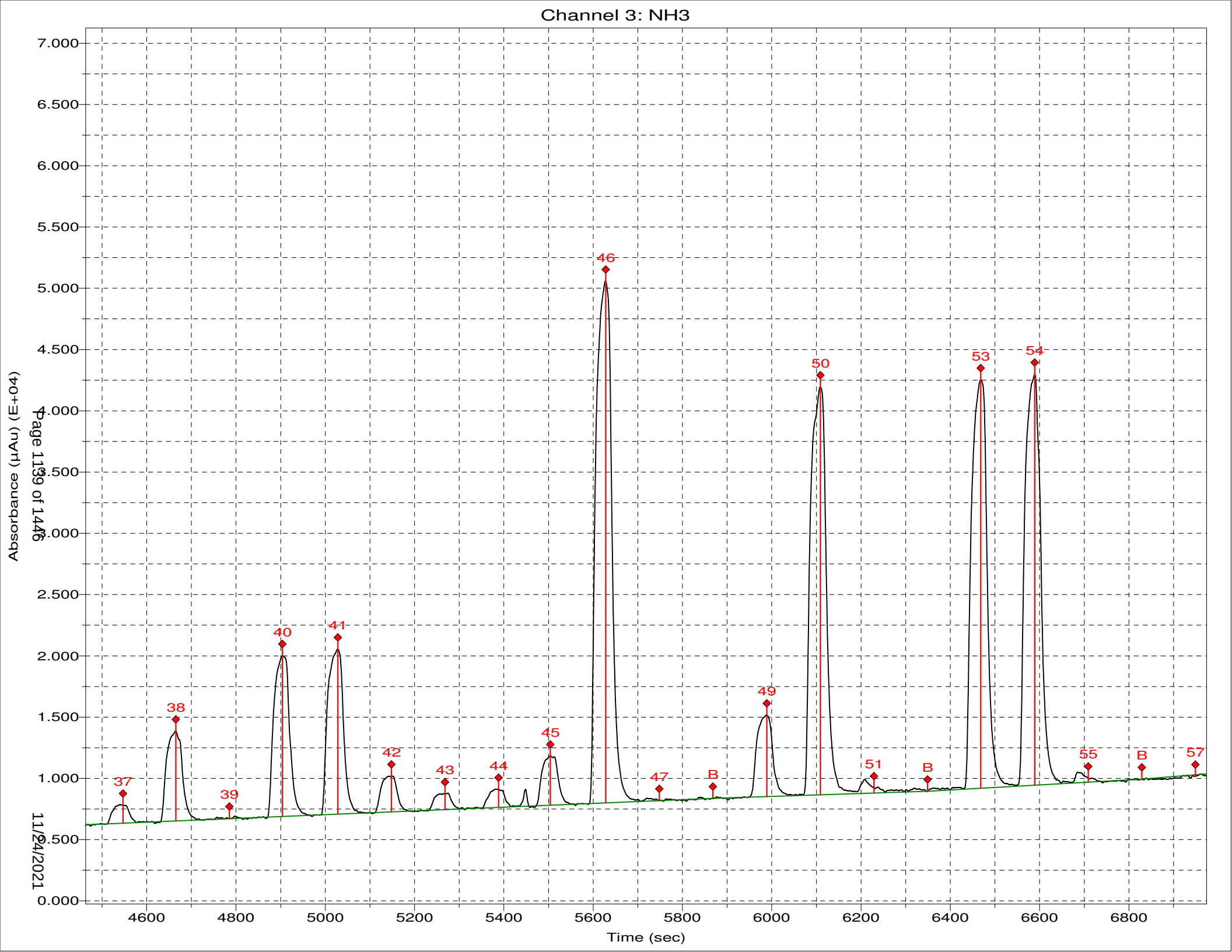
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
4600
8
19
20
21
22
23
24
25
26
27
28
29
30
31
B
33
34
35
B
37
38
Page 1138 of 1446
11/24/2021


Channel 3: NH3
Absorbance (µAu) (E+04)
7.000
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
4600
4800
5000
5200
5400
5600
5800
6000
6200
6400
6600
6800
Time (sec)
37
38
39
40
41
42
43
44
45
46
47
B
49
50
51
B
53
54
55
B
57
Page 1139 of 1446
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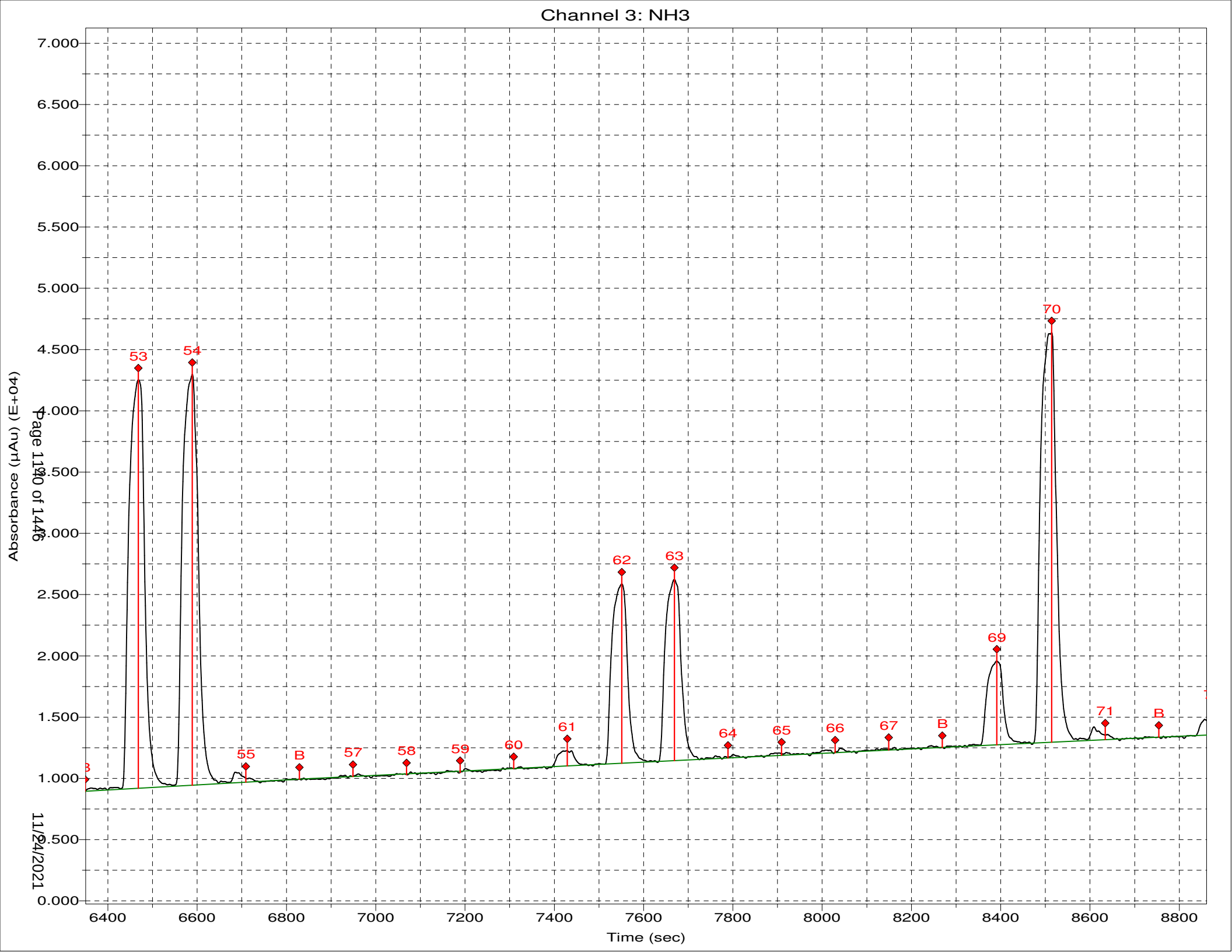
Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec)
7.000
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
53
54
55
B
57
58
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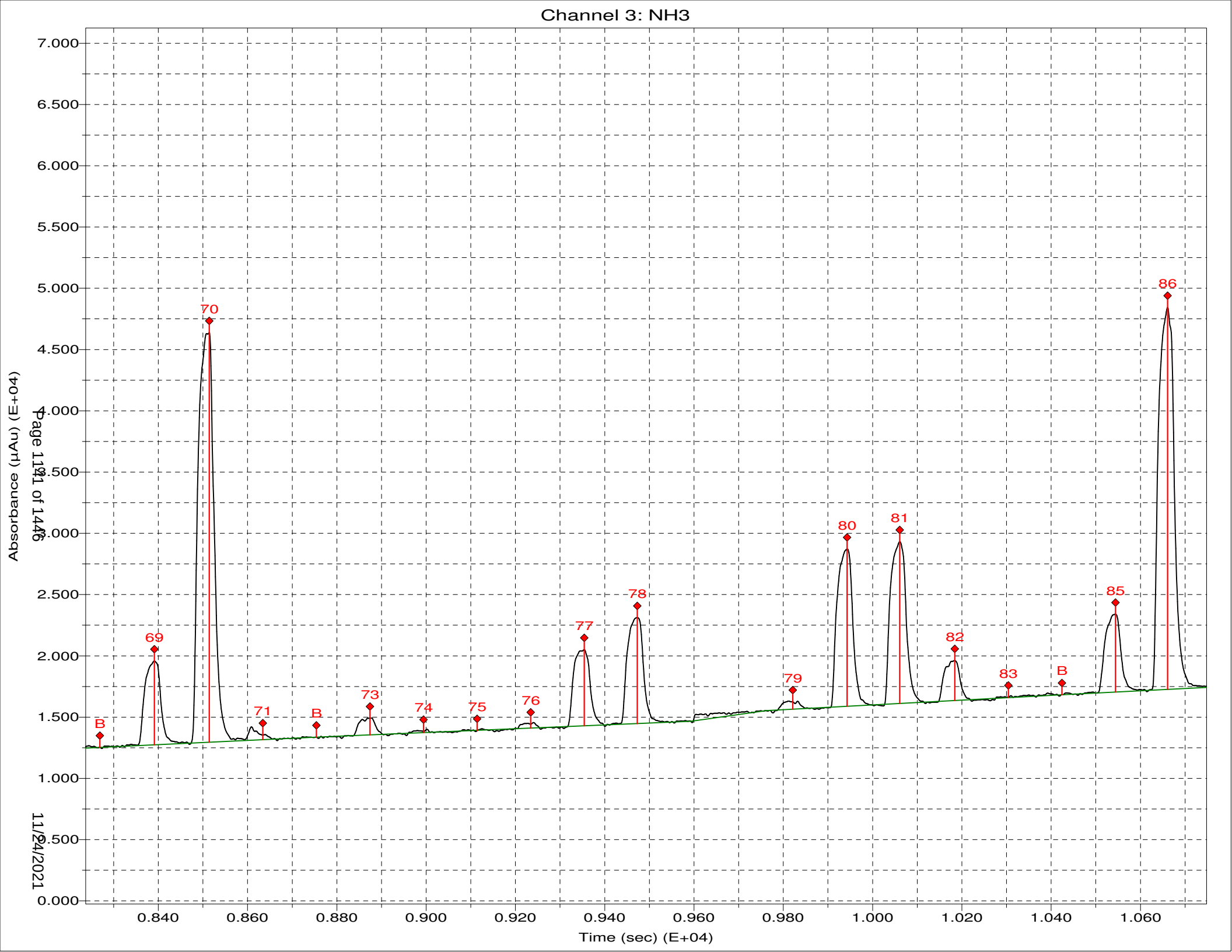
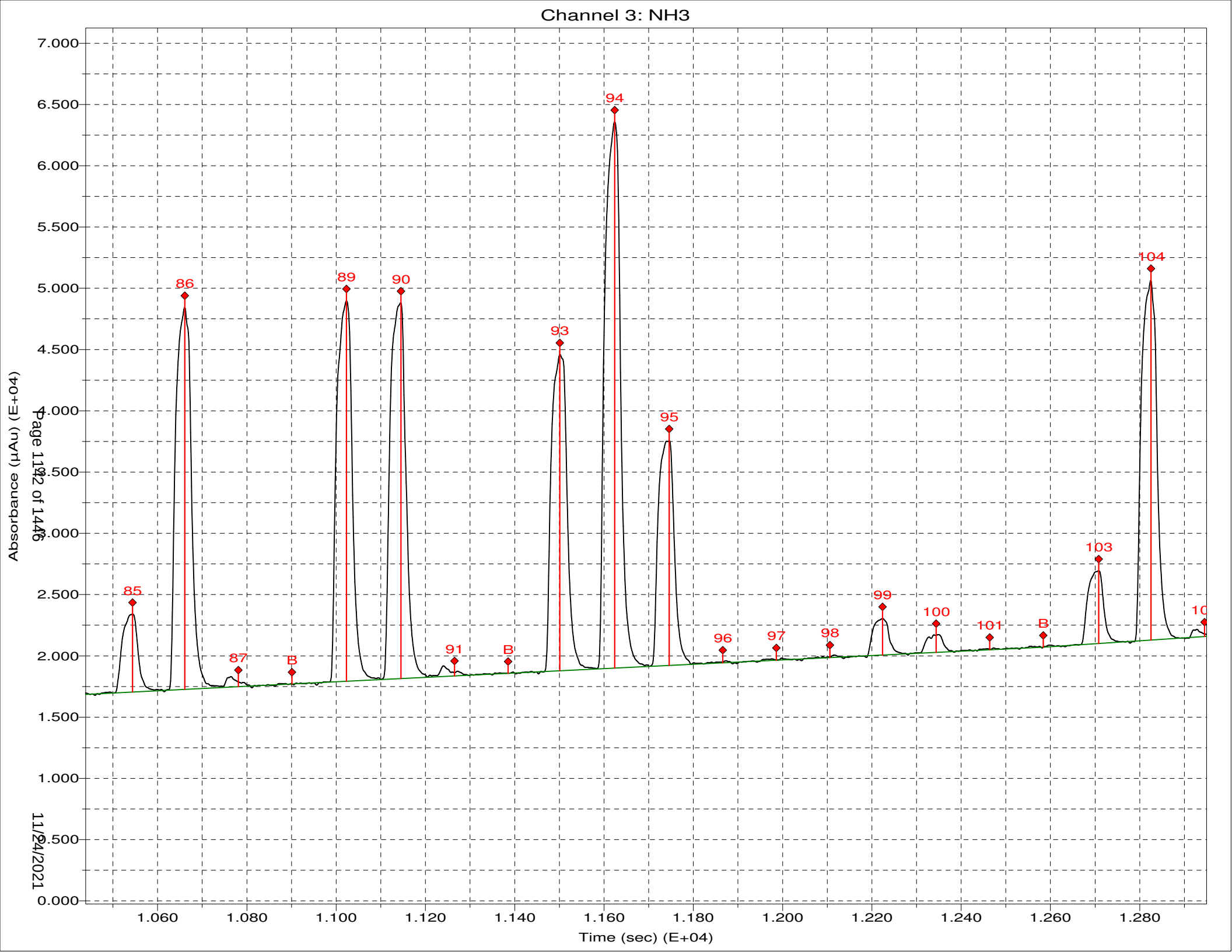
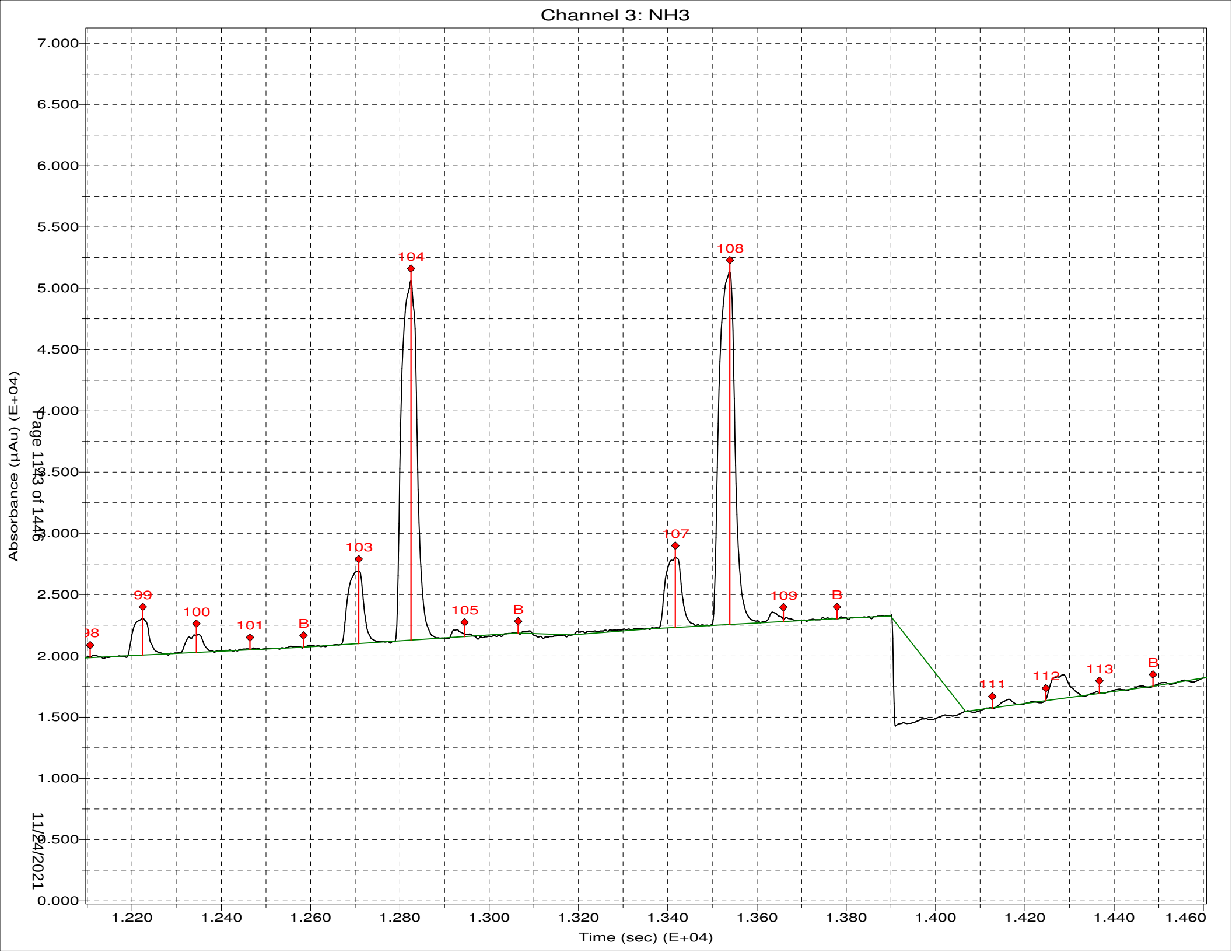
60
61
62
63
64
65
66
67
B
69
70
71
B
Page 110 of 1446
11/24/2021


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec) (E+04)
7.000
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
0.840
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
B
73
74
75
76
77
78
79
80
81
82
83
B
85
86


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec) (E+04)
7.000
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
1.060
1.080
1.100
1.120
1.140
1.160
1.180
1.200
1.220
1.240
1.260
1.280
85
86
87
B
89
90
91
B
93
94
95
96
97
98
99
100
101
B
103
104
Page 1132 of 1446
11/24/2021


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec) (E+04)
Page 1193 of 1446
11/24/2021
7.000
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
1.220
1.240
1.260
1.280
1.300
1.320
1.340
1.360
1.380
1.400
1.420
1.440
1.460
98
99
100
101
B
103
104
105
B
107
108
109
B
111
112
113
B

*** Sample Table from Analysis ***

File name: *** Sample Table from Analysis ***
Date: 22-Nov-21

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 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
201	280-155015-C-12	U	1	1	1		
202	MS 280-155015-c-12	U	1	1	1		
203	MSD 280-155015-c-12	U	1	1	1		
204	280-155048-c-3	U	1	1	1		
205	Void 280-155070-f-3	U	1	100	1		
206	Void 280-155015-c-10	U	1	10	1		
207	280-155117-b-1	U	1	1	1		
208	280-155117-b-7	U	1	1	1		
209	280-155117-b-8	U	1	1	1		
210	Void 280-155130-f-1	U	1	100	1		
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	280-155130-f-2	U	1	1	1		
212	280-155138-c-3	U	1	2	1		
213	280-155138-c-10	U	1	1	1		
214	MS 280-155138-c-10	U	1	1	1		
215	MSD 280-155138-c-10	U	1	1	1		
216	280-155138-c-8	U	1	2	1		
217	320-81484-a-3	U	1	1	1		
218	320-81484-a-8	U	1	2	1		
219	Void 280-154777-r-1	U	1	100	1		
220	280-154779-p-1	U	1	1	1		
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		
107	LCS 2500.00	U	1	1	1		
107	LCSD 2500.00	U	1	1	1		
111	MB	U	1	1	1		
0	read baseline	RB	1	1	1		

350.1 Color - 00268
350.1 Bleach - 01525
350.1 Complex - 00584

PH
<2

Cl
NO

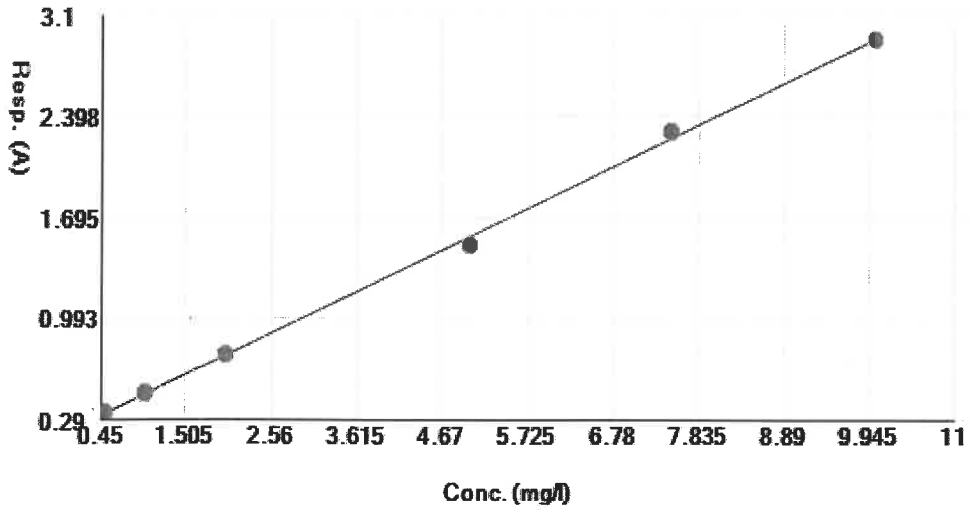
Calibration results

TKN Version number 1.5 WC_GAL1

Date	11/17/2021	**User**	Dealer
Time	8:58:09PM	**Software version: 7.0**	
Analyzer name	WC_GAL1		

Test	TKN	**Coeff. of deter.**	0.998983
Status	Accepted	**Total factor**	3.644
Accepted	11/15/2021 5:07 PM		
Checked	11/15/2021 5:07 PM		
User name	Dealer		
Comment			
Errors			
Factor	3.644		
Bias	0.187		

Cal/Ctrl	Response	Calc. conc.	Given conc.	Lot	Errors
TKN 10.0	0.333	0.52934520	0.50000000	Default	
TKN 10.0	0.468	1.02455200	1.00000000	Default	
TKN 10.0	0.745	2.03061500	2.00000000	Default	
TKN 10.0	1.498	4.77604200	5.00000000	Default	
TKN 7.5	2.287	7.65004500	7.50000000	Default	
TKN 10.0	2.929	9.98939900	10.00000000	Default	



Test results report

WC_GAL1

Test name TKN

Date 11/17/2021 **User** Dealer

Time 8:58:47PM **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	5.0892210	mg/l		0.0	calc	
TKN	icb	1.5	0.1081988	mg/l		0.0	calc	
TKN	LCS 280-557729/1-A	1.5	5.9242120	mg/l		0.0	calc	
TKN	MB 280-557729/2-A	1.5	0.1000341	mg/l		0.0	calc	
TKN	280-155138-C-10-A	1.5	-0.4722454	mg/l		0.0	calc	
TKN	280-155138-C-10-B MS	1.5	-0.3525051	mg/l		0.0	calc	
TKN	280-155138-C-10-C MS	1.5	-0.3567832	mg/l		0.0	calc	
TKN	280-155138-C-9-A	1.5	-0.4782377	mg/l		0.0	calc	
TKN	280-155138-C-8-A	1.5	1.1154250	mg/l		0.0	calc	
TKN	280-155138-C-7-A	1.5	0.2176941	mg/l		0.0	calc	
TKN	280-155138-C-6-A	1.5	-0.4762098	mg/l		0.0	calc	
TKN	280-155138-C-5-A	1.5	-0.1736874	mg/l		0.0	calc	
TKN	280-155138-C-4-A	1.5	-0.1434925	mg/l		0.0	calc	
TKN	280-155138-C-3-A	1.5	1.3538810	mg/l		0.0	calc	
TKN	ccv1	1.5	5.0415520	mg/l		0.0	calc	
TKN	ccb1	1.5	0.1140050	mg/l		0.0	calc	
TKN	280-155138-C-2-A	1.5	-0.4676255	mg/l		0.0	calc	
TKN	280-155138-C-1-A	1.5	1.6367360	mg/l		0.0	calc	
TKN	280-155048-C-7-A	1.5	1.5839390	mg/l		0.0	calc	
TKN	280-155048-C-7-B MS	1.5	4.4388700	mg/l		0.0	calc	
TKN	280-155048-C-7-C MSD	1.5	4.4183430	mg/l		0.0	calc	

Test	Sample/ctrl ID	Test version	Result	Unit	Note	Dil. 1 +	Status	Errors
TKN	280-155048-C-1-A	1.5	-0.4686755	mg/l		0.0	calc	
TKN	280-155048-C-2-A	1.5	-0.4756789	mg/l		0.0	calc	
TKN	280-155048-C-3-A	1.5	2.8191080	mg/l		0.0	calc	
TKN	280-155048-C-4-A	1.5	1.9791010	mg/l		0.0	calc	
TKN	ccv2	1.5	5.0843170	mg/l		0.0	calc	
TKN	ccb2	1.5	0.0715438	mg/l		0.0	calc	
TKN	280-155048-C-5-A	1.5	0.1313861	mg/l		0.0	calc	
TKN	280-155048-C-6-A	1.5	-0.4361079	mg/l		0.0	calc	
TKN	280-155221-I-1-A	1.5	1.0254540	mg/l		0.0	calc	
TKN	280-155221-I-2-A	1.5	0.5735527	mg/l		0.0	calc	
TKN	LCS 280-557730/1-A	1.5	5.7142470	mg/l		0.0	calc	
TKN	MB 280-557730/2-A	1.5	0.0624511	mg/l		0.0	calc	
TKN	280-155048-C-8-A	1.5	0.2259924	mg/l		0.0	calc	
TKN	280-155048-C-8-B MS	1.5	3.4011620	mg/l		0.0	calc	
TKN	280-155048-C-8-C MSD	1.5	3.4080560	mg/l		0.0	calc	
TKN	280-155225-C-1-A	1.5	-0.0461806	mg/l		0.0	calc	
TKN	ccv3	1.5	5.0143890	mg/l		0.0	calc	
TKN	ccb3	1.5	0.0029035	mg/l		0.0	calc	
TKN	280-155225-C-2-A	1.5	-0.4762115	mg/l		0.0	calc	
TKN	280-155225-C-3-A	1.5	0.5290443	mg/l		0.0	calc	
TKN	280-155225-C-4-A	1.5	0.5121606	mg/l		0.0	calc	
TKN	280-155225-C-5-A	1.5	-0.4860420	mg/l		0.0	calc	
TKN	280-155225-C-7-A	1.5	1.9948230	mg/l		0.0	calc	
TKN	280-155225-C-8-A	1.5	2.8235230	mg/l		0.0	calc	
TKN	280-155225-C-9-A	1.5	1.9230160	mg/l		0.0	calc	
TKN	280-155225-C-6-A	1.5	-0.1736972	mg/l		0.0	calc	

Test	Sample/ctrl ID	Test version	Result	Unit	Note	Dil. 1 +	Status	Errors
TKN	280-155225-C-6-B MS	1.5	2.6271640	mg/l		0.0	calc	
TKN	280-155225-C-6-C MSD	1.5	2.6228180	mg/l		0.0	calc	
TKN	280-155436-K-1-B	1.5	12.6162800	mg/l		4.0	calc	
TKN	ccv4	1.5	5.0926820	mg/l		0.0	calc	
TKN	ccb4	1.5	0.0366655	mg/l		0.0	calc	
TKN	280-155015-C-1-B	1.5	1.6314870	mg/l		0.0	calc	
TKN	280-155015-C-2-B	1.5	2.8356290	mg/l		0.0	calc	
TKN	280-155015-C-3-B	1.5	3.6169980	mg/l		0.0	calc	
TKN	280-155015-C-5-B	1.5	1.3155450	mg/l		0.0	calc	
TKN	280-155015-C-5-B	1.5	1.3188080	mg/l		0.0	calc	
TKN	280-155015-C-8-B	1.5	3.0520540	mg/l		0.0	calc	
TKN	280-155015-C-8-B	1.5	3.0642320	mg/l		0.0	calc	
TKN	ccv5	1.5	5.1496120	mg/l		0.0	calc	
TKN	ccv5	1.5	5.0559920	mg/l		0.0	calc	
TKN	ccb5	1.5	0.0994432	mg/l		0.0	calc	
TKN	ccb5	1.5	0.0968346	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	Z:\353.2PR\111821.RST
Sample table path	Z:\353.2PR\111821.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	18-Nov-21
Time acquired	19:26

Date	Time	Cup	Name
18-Nov-21	15:55	109	SYNC
18-Nov-21	15:57	0	Carryover
18-Nov-21	15:59	0	Carryover (Statistics)
18-Nov-21	16:01	0	read baseline
18-Nov-21	16:03	101	Cal 0.00 ppb
18-Nov-21	16:05	102	Cal 50.0 ppb
18-Nov-21	16:07	103	Cal 100 ppb
18-Nov-21	16:09	104	Cal 500 ppb
18-Nov-21	16:11	105	Cal 1000 ppb
18-Nov-21	16:13	106	Cal 2500 ppb
18-Nov-21	16:15	107	Cal 5000 ppb
18-Nov-21	16:17	108	Cal 7500 ppb
18-Nov-21	16:19	109	Cal 10000 ppb
18-Nov-21	16:21	0	Blank
18-Nov-21	16:23	0	Read Baseline
18-Nov-21	16:25	110	5000 PPB NO2
18-Nov-21	16:27	111	ICV 5000 PPB
18-Nov-21	16:29	112	ICV 2000 PPB
18-Nov-21	16:31	0	ICB
18-Nov-21	16:33	0	Read Baseline
18-Nov-21	16:35	107	LCS
18-Nov-21	16:37	0	MB
18-Nov-21	16:39	113	280-155138-C-10
18-Nov-21	16:41	114	ms 280-155138-C-10
18-Nov-21	16:43	115	msd 280-155138-C-10
18-Nov-21	16:45	116	280-155138-C-1
18-Nov-21	16:47	117	280-155138-C-2
18-Nov-21	16:49	118	280-155138-C-3
18-Nov-21	16:51	119	280-155138-C-4
18-Nov-21	16:53	120	280-155138-C-5
18-Nov-21	16:55	121	280-155138-C-6
18-Nov-21	16:57	122	280-155138-C-7
18-Nov-21	16:59	0	Rinse
18-Nov-21	17:01	0	Read Baseline
18-Nov-21	17:03	107	CCV 5000 ppb
18-Nov-21	17:05	105	CCVL 1000 ppb
18-Nov-21	17:07	0	CCB
18-Nov-21	17:09	0	Read Baseline
18-Nov-21	17:11	123	280-155138-C-8
18-Nov-21	17:13	124	280-155138-C-9
18-Nov-21	17:15	125	280-155318-D-8
18-Nov-21	17:17	126	280-155318-D-8 MS
18-Nov-21	17:19	127	280-155318-D-8 MSD
18-Nov-21	17:21	128	280-155318-C-3

Result path Z:\353.2PR\111821.RST
Sample table path Z:\353.2PR\111821.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 18-Nov-21
Time acquired 19:26

Date	Time	Cup	Name
18-Nov-21	17:23	129	280-155318-C-9
18-Nov-21	17:25	130	280-155318-A-11
18-Nov-21	17:27	131	280-155318-D-13
18-Nov-21	17:29	132	280-155436-J-1
18-Nov-21	17:31	0	Rinse
18-Nov-21	17:33	0	Read Baseline
18-Nov-21	17:35	107	CCV 5000 ppb
18-Nov-21	17:37	105	CCVL 1000 ppb
18-Nov-21	17:39	0	CCB
18-Nov-21	17:41	0	Read Baseline
18-Nov-21	17:43	133	280-155275-B-1
18-Nov-21	17:45	134	280-155275-B-2
18-Nov-21	17:47	135	280-155275-B-3
18-Nov-21	17:49	136	280-155275-B-4
18-Nov-21	17:51	107	LCS
18-Nov-21	17:53	0	MB
18-Nov-21	17:55	137	280-155275-B-5
18-Nov-21	17:57	138	ms 280-155275-B-5
18-Nov-21	17:59	139	msd 280-155275-B-5
18-Nov-21	18:01	140	280-155201-A-3
18-Nov-21	18:03	0	Rinse
18-Nov-21	18:05	0	Read Baseline
18-Nov-21	18:07	107	CCV 5000 ppb
18-Nov-21	18:09	105	CCVL 1000 ppb
18-Nov-21	18:11	0	CCB
18-Nov-21	18:13	0	Read Baseline
18-Nov-21	18:15	141	280-155225-C-1
18-Nov-21	18:17	142	280-155225-C-2
18-Nov-21	18:19	143	280-155225-C-3
18-Nov-21	18:21	144	280-155225-C-4
18-Nov-21	18:23	145	280-155225-C-5
18-Nov-21	18:25	146	280-155225-C-6
18-Nov-21	18:27	147	280-155225-C-7
18-Nov-21	18:29	148	280-155225-C-8
18-Nov-21	18:31	149	280-155117-B-1
18-Nov-21	18:33	150	ms 280-155117-B-1
18-Nov-21	18:35	0	Rinse
18-Nov-21	18:37	0	Read Baseline
18-Nov-21	18:39	107	CCV 5000 ppb
18-Nov-21	18:41	105	CCVL 1000 ppb
18-Nov-21	18:43	0	CCB
18-Nov-21	18:45	0	Read Baseline
18-Nov-21	18:48	151	msd 280-155117-B-1
18-Nov-21	18:50	152	280-155225-C-9
18-Nov-21	18:52	153	280-155117-B-2
18-Nov-21	18:54	154	280-155117-B-3
18-Nov-21	18:56	155	280-155117-B-4
18-Nov-21	18:58	156	280-155117-B-5
18-Nov-21	19:00	157	280-155117-B-6
18-Nov-21	19:02	158	280-155117-B-7
18-Nov-21	19:04	159	280-155117-B-8
18-Nov-21	19:06	160	280-155117-B-9
18-Nov-21	19:08	0	Rinse
18-Nov-21	19:10	0	Read Baseline
18-Nov-21	19:12	107	CCV 5000 ppb
18-Nov-21	19:14	105	CCVL 1000 ppb
18-Nov-21	19:16	0	CCB

Result path	Z:\353.2PR\111821.RST
Sample table path	Z:\353.2PR\111821.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	18-Nov-21
Time acquired	19:26

Date	Time	Cup	Name
18-Nov-21	19:18	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 Z:\353.2PR\111821.RST
Sample table path Z:\353.2PR\111821.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 18-Nov-21
Time acquired 19:26

	Nitrate as N					
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]	
SYNC	2264744	10056.479	HI UM			
Carryover	3632	30.267				
Carryover	15	15.164				
(Statistics)				1824	22.715	N
read baseline	0	15.100	BL			
Cal 0.00 ppb	2138	24.028				
Cal 50.0 ppb	12475	67.215	UM			
Cal 100 ppb	26818	127.177				
Cal 500 ppb	113808	491.848				
Cal 1000 ppb	230426	983.421				
Cal 2500 ppb	561047	2393.899				
Cal 5000 ppb	1166481	5041.254				
Cal 7500 ppb	1726090	7562.417				
Cal 10000 ppb	2243897	9958.727				
Blank	478	17.098				
Read Baseline	0	15.100	BL			
5000 PPB NO2	1097976	4737.518				
ICV 5000 PPB	1130827	4883.041				
ICV 2000 PPB	437094	1862.185				
ICB	1920	23.119				
Read Baseline	0	15.100	BL			
LCS	1197746	5180.229				
MB	195	15.913				
280-155138-C-10	888629	38159.457				
ms 280-155138-C-10	1751740	76796.805				
msd 280-155138-C-10	1783005	78228.195				
280-155138-C-1	11415	62.783				
280-155138-C-2	759102	32507.441				
280-155138-C-3	46817	210.862				
280-155138-C-4	1019752	4392.000				
280-155138-C-5	881944	7573.364				
280-155138-C-6	795683	34099.840				
280-155138-C-7	498824	2126.545				
Rinse	-875	11.446				
Read Baseline	0	15.100	BL			
CCV 5000 ppb	1223741	5295.950				
CCVL 1000 ppb	238253	1016.526				
CCB	987	19.223				
Read Baseline	0	15.100	BL			
280-155138-C-8	30501	142.581				
280-155138-C-9	723327	30953.102				
280-155318-D-8	948406	203903.875				
280-155318-D-8 MS	1783506	391255.906				
280-155318-D-8 MSD	1831437	402249.719				
280-155318-C-3	896635	385100.469				

Result path	Z:\353.2PR\111821.RST
Sample table path	Z:\353.2PR\111821.tbl
Method path	C:\FLOW_4\nox.mth
Date acquired	18-Nov-21
Time acquired	19:26

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
280-155318-C-9	1615020	141127.016			
280-155318-A-11	1158608	500629.344			
280-155318-D-13	973576	209434.625			
280-155436-J-1	10216	57.773			
Rinse	-510	12.970			
Read Baseline	0	15.100	BL		
CCV 5000 ppb	1207908	5225.451			
CCVL 1000 ppb	238247	1016.498			
CCB	-657	12.357			
Read Baseline	0	15.100	BL		
280-155275-B-1	72080	316.703			
280-155275-B-2	8024	48.615			
280-155275-B-3	7984	48.447			
280-155275-B-4	11919	64.892			
LCS	1215061	5257.292			
MB	-555	12.780			
280-155275-B-5	5492	38.038			
ms 280-155275-B-5	919509	3951.256			
msd 280-155275-B-5	924332	3972.411			
280-155201-A-3	1188695	5139.973			
Rinse	434	16.914			
Read Baseline	0	15.100	BL		
CCV 5000 ppb	1202472	5201.256			
CCVL 1000 ppb	248087	1058.136			
CCB	2054	23.677			
Read Baseline	0	15.100	BL		
280-155225-C-1	1262952	5470.791			
280-155225-C-2	776988	16642.814			
280-155225-C-3	3522	29.811			
280-155225-C-4	5337	37.389			
280-155225-C-5	936482	40257.203			
280-155225-C-6	775656	6645.537			
280-155225-C-7	21672	105.657			
280-155225-C-8	754068	3228.856			
280-155117-B-1	34293	158.444			
ms 280-155117-B-1	982394	4227.480			
Rinse	454	16.996			
Read Baseline	0	15.100	BL		
CCV 5000 ppb	1214494	5254.770			
CCVL 1000 ppb	247898	1057.337			
CCB	1755	22.428			
Read Baseline	0	15.100	BL		
msd 280-155117-B-1	991260	4266.497			
280-155225-C-9	23231	112.175			
280-155117-B-2	50696	227.104			
280-155117-B-3	26816	127.168			
280-155117-B-4	8787	51.802			
280-155117-B-5	51924	232.246			
280-155117-B-6	3912	31.437			
280-155117-B-7	3910	31.429			
280-155117-B-8	3742	30.729			
280-155117-B-9	18026	90.416			
Rinse	1597	21.767			
Read Baseline	0	15.100	BL		
CCV 5000 ppb	1202414	5200.998			
CCVL 1000 ppb	253609	1081.511			
CCB	-1526	8.729			

Result path Z:\353.2PR\111821.RST
Sample table path Z:\353.2PR\111821.tbl
Method path C:\FLOW_4\nox.mth
Date acquired 18-Nov-21
Time acquired 19:26

	Nitrate as N				
Name	Response	Calc [ppb]	Flags	Mean Response	Mean Calc [ppb]
Read Baseline	0	15.100	BL		

Peak Table:Nitrate as N

File name: Z:\353.2PR\111821.RST
Date: 18-Nov-21
Operator: svc

Peak	Cup	Name	R	Type	Dil	Wt	Height	Calc. (ppb)	Flags
1	109	SYNC	1	SYNC	1	1	2264744	10056.478516	HI UM
2	0	Carryover	1	CO	1	1	3632	30.266972	
3	0	Carryover	2	CO	1	1	15	15.164249	
B	0	read baseline	1	RB	1	1	0	15.099628	BL
5	101	Cal 0.00 ppb	1	C	1	1	2138	24.027578	
6	102	Cal 50.0 ppb	1	C	1	1	12475	67.214615	UM
7	103	Cal 100 ppb	1	C	1	1	26818	127.177422	
8	104	Cal 500 ppb	1	C	1	1	113808	491.848022	
9	105	Cal 1000 ppb	1	C	1	1	230426	983.420654	
10	106	Cal 2500 ppb	1	C	1	1	561047	2393.898926	
11	107	Cal 5000 ppb	1	C	1	1	1166481	5041.254395	
12	108	Cal 7500 ppb	1	C	1	1	1726090	7562.416992	
13	109	Cal 10000 ppb	1	C	1	1	2243897	9958.726562	
14	0	Blank	1	BLNK	1	1	478	17.097887	
B	0	Read Baseline	1	RB	1	1	0	15.099628	BL
16	110	5000 PPB NO2	1	U	1	1	1097976	4737.518066	
17	111	ICV 5000 PPB	1	CCV	1	1	1130827	4883.041016	
18	112	ICV 2000 PPB	1	CCV	1	1	437094	1862.184814	
19	0	ICB	1	U	1	1	1920	23.118628	
B	0	Read Baseline	1	RB	1	1	0	15.099628	BL
21	107	LCS	1	U	1	1	1197746	5180.228516	
22	0	MB	1	U	1	1	195	15.913157	
23	113	280-155138-C-10	1	U	10	1	888629	38159.457031	
24	114	ms 280-155138-C-10	1	U	10	1	1751740	76796.804688	
25	115	msd 280-155138-C-10	1	U	10	1	1783005	78228.195312	
26	116	280-155138-C-1	1	U	1	1	11415	62.783051	
27	117	280-155138-C-2	1	U	10	1	759102	32507.441406	
28	118	280-155138-C-3	1	U	1	1	46817	210.862259	
29	119	280-155138-C-4	1	U	1	1	1019752	4392.000000	
30	120	280-155138-C-5	1	U	2	1	881944	7573.363770	
31	121	280-155138-C-6	1	U	10	1	795683	34099.839844	
32	122	280-155138-C-7	1	U	1	1	498824	2126.545166	
33	0	Rinse	1	U	1	1	-875	11.445508	
B	0	Read Baseline	1	RB	1	1	0	15.099628	BL
35	107	CCV 5000 ppb	1	CCV	1	1	1223741	5295.949707	
36	105	CCVL 1000 ppb	1	CCV	1	1	238253	1016.525696	
37	0	CCB	1	U	1	1	987	19.223167	
B	0	Read Baseline	1	RB	1	1	0	15.099628	BL
39	123	280-155138-C-8	1	U	1	1	30501	142.580719	
40	124	280-155138-C-9	1	U	10	1	723327	30953.101562	
41	125	280-155318-D-8	1	U	50	1	948406	203903.875000	
42	126	280-155318-D-8 MS	1	U	50	1	1783506	391255.906250	
43	127	280-155318-D-8 MSD	1	U	50	1	1831437	402249.718750	
44	128	280-155318-C-3	1	U	100	1	896635	385100.468750	
45	129	280-155318-C-9	1	U	20	1	1615020	141127.015625	
46	130	280-155318-A-11	1	U	100	1	1158608	500629.343750	
47	131	280-155318-D-13	1	U	50	1	973576	209434.625000	
48	132	280-155436-J-1	1	U	1	1	10216	57.773308	
49	0	Rinse	1	U	1	1	-510	12.970267	
B	0	Read Baseline	1	RB	1	1	0	15.099628	BL
51	107	CCV 5000 ppb	1	CCV	1	1	1207908	5225.450684	
52	105	CCVL 1000 ppb	1	CCV	1	1	238247	1016.498291	
53	0	CCB	1	U	1	1	-657	12.357121	
B	0	Read Baseline	1	RB	1	1	0	15.099628	BL
55	133	280-155275-B-1	1	U	1	1	72080	316.703339	
56	134	280-155275-B-2	1	U	1	1	8024	48.615406	
57	135	280-155275-B-3	1	U	1	1	7984	48.446877	
58	136	280-155275-B-4	1	U	1	1	11919	64.891792	
59	107	LCS	1	U	1	1	1215061	5257.291992	
60	0	MB	1	U	1	1	-555	12.780483	
61	137	280-155275-B-5	1	U	1	1	5492	38.038429	
62	138	ms 280-155275-B-5	1	U	1	1	919509	3951.255859	
63	139	msd 280-155275-B-5	1	U	1	1	924332	3972.410889	
64	140	280-155201-A-3	1	U	1	1	1188695	5139.973145	
65	0	Rinse	1	U	1	1	434	16.913576	
B	0	Read Baseline	1	RB	1	1	0	15.099628	BL
67	107	CCV 5000 ppb	1	CCV	1	1	1202472	5201.255859	
68	105	CCVL 1000 ppb	1	CCV	1	1	248087	1058.136475	
69	0	CCB	1	U	1	1	2054	23.676876	
B	0	Read Baseline	1	RB	1	1	0	15.099628	BL

Peak	Cup	Name	R	Type	Dil	Wt		Height	Calc. (ppb)	Flags
71	141	280-155225-C-1	1	U	1	1		1262952	5470.790527	
72	142	280-155225-C-2	1	U	5	1		776988	16642.814453	
73	143	280-155225-C-3	1	U	1	1		3522	29.811090	
74	144	280-155225-C-4	1	U	1	1		5337	37.388878	
75	145	280-155225-C-5	1	U	10	1		936482	40257.203125	
76	146	280-155225-C-6	1	U	2	1		775656	6645.537109	
77	147	280-155225-C-7	1	U	1	1		21672	105.656784	
78	148	280-155225-C-8	1	U	1	1		754068	3228.856201	
79	149	280-155117-B-1	1	U	1	1		34293	158.444046	
80	150	ms 280-155117-B-1	1	U	1	1		982394	4227.479980	
81	0	Rinse	1	U	1	1		454	16.996107	
B	0	Read Baseline	1	RB	1	1		0	15.099628	BL
83	107	CCV 5000 ppb	1	CCV	1	1		1214494	5254.769531	
84	105	CCVL 1000 ppb	1	CCV	1	1		247898	1057.336670	
85	0	CCB	1	U	1	1		1755	22.428314	
B	0	Read Baseline	1	RB	1	1		0	15.099628	BL
87	151	msd 280-155117-B-1	1	U	1	1		991260	4266.496582	
88	152	280-155225-C-9	1	U	1	1		23231	112.174942	
89	153	280-155117-B-2	1	U	1	1		50696	227.103836	
90	154	280-155117-B-3	1	U	1	1		26816	127.168152	
91	155	280-155117-B-4	1	U	1	1		8787	51.801727	
92	156	280-155117-B-5	1	U	1	1		51924	232.246292	
93	157	280-155117-B-6	1	U	1	1		3912	31.436718	
94	158	280-155117-B-7	1	U	1	1		3910	31.428772	
95	159	280-155117-B-8	1	U	1	1		3742	30.728626	
96	160	280-155117-B-9	1	U	1	1		18026	90.415558	
97	0	Rinse	1	U	1	1		1597	21.767136	
B	0	Read Baseline	1	RB	1	1		0	15.099628	BL
99	107	CCV 5000 ppb	1	CCV	1	1		1202414	5200.998047	
100	105	CCVL 1000 ppb	1	CCV	1	1		253609	1081.511475	
101	0	CCB	1	U	1	1		-1526	8.728611	
B	0	Read Baseline	1	RB	1	1		0	15.099628	BL

Nitrate as N:Calibration 1: Peak 5-102

File name: Z:\353.2PR\111821.RST
Date: 18-Nov-21
Operator: svc

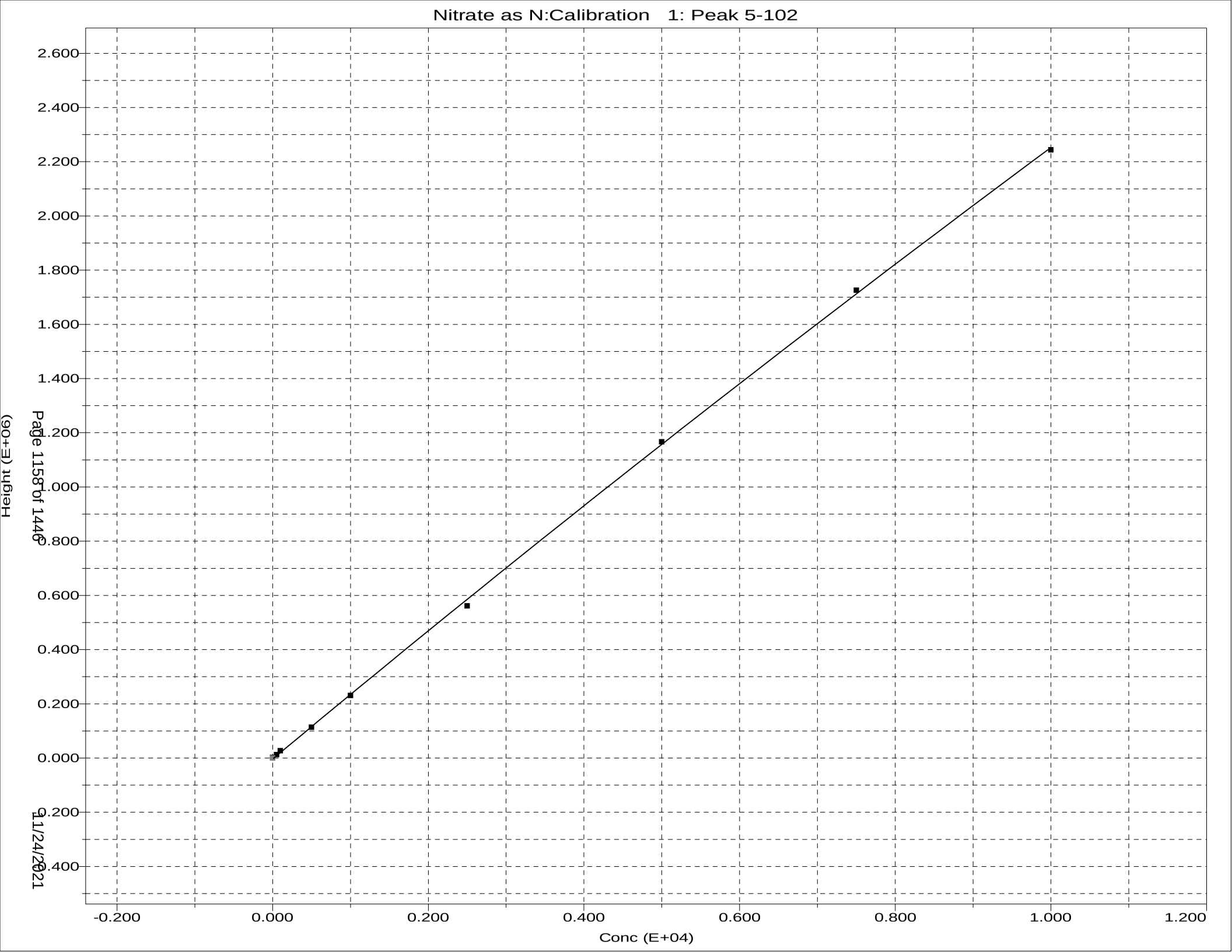
*	Name	Conc	Height
*	Cal 0.00 ppb	0.000000	2137.747559
*	Cal 50.0 ppb	50.000000	12475.126953
*	Cal 100 ppb	100.000000	26818.367188
*	Cal 500 ppb	500.000000	113808.468750
*	Cal 1000 ppb	1000.000000	230425.859375
*	Cal 2500 ppb	2500.000000	561046.875000
*	Cal 5000 ppb	5000.000000	1166481.125000
*	Cal 7500 ppb	7500.000000	1726090.500000
*	Cal 10000 ppb	10000.000000	2243897.000000

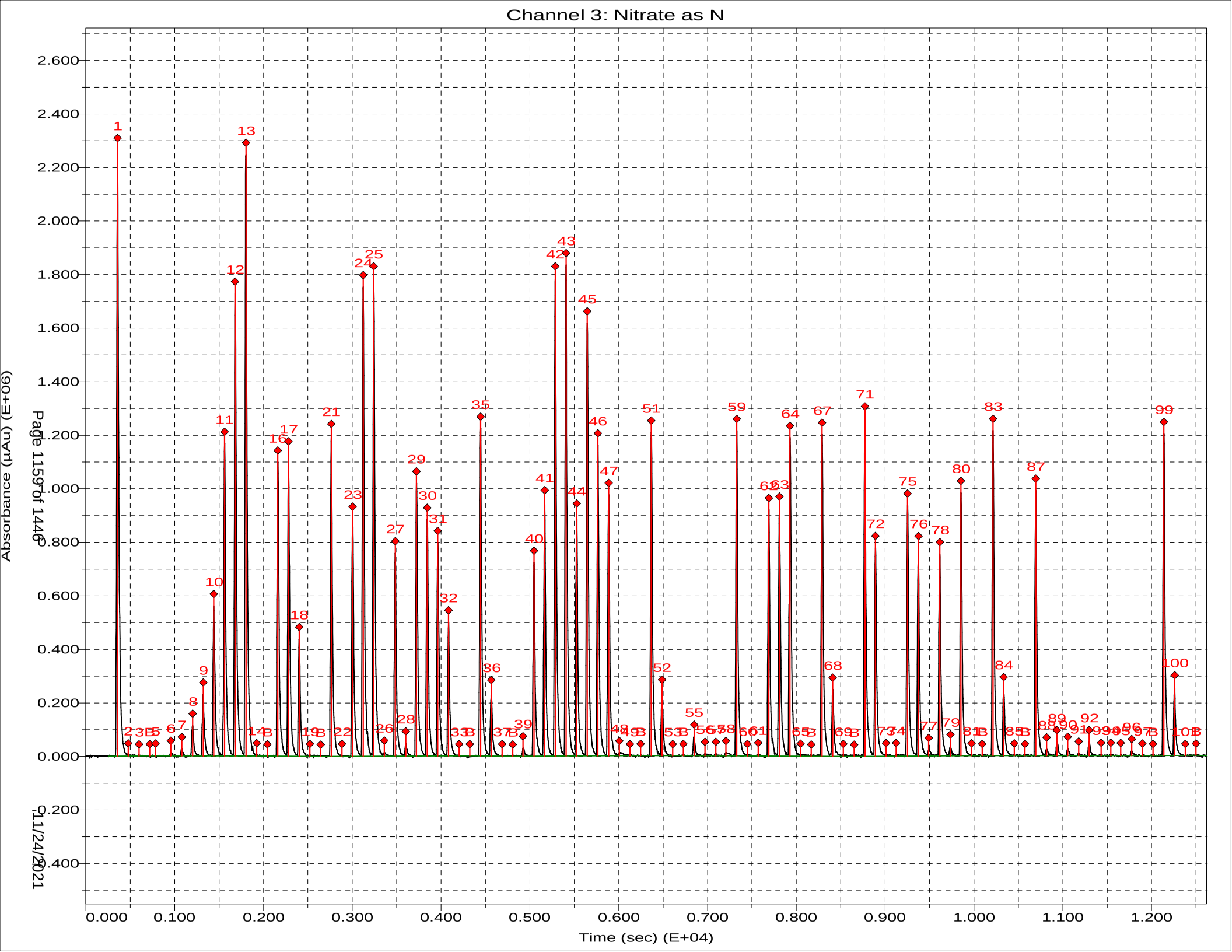
Calib Coef:
x=cyy+by+a
a: (intercept) 1.5100e+01
b: 4.1761e-03
c: 1.1378e-10

Corr Coef: 0.999907

Carryover: 0.16%

No Drift Peaks


Nitrate as N:Calibration 1: Peak 5-102
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
Height (E+06)
-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) (E+04)
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
0.000
0.100
0.200
0.300
0.400
0.500
0.600
0.700
0.800
0.900
1.000
1.100
1.200

Sample Table - 111821.tbl

File name: Z:\353.2PR\111821.tbl
Date: 18-Nov-21

Cup	Name	Type	R	Dil	Wt	Vial	Comment
109	SYNC	SYNC	1	1	1		
0	Carryover	CO	1	1	1		
0	Carryover	CO	1	1	1		
0	read baseline	RB	1	1	1		
101	Cal 0.00 ppb	C	1	1	1		
102	Cal 50.0 ppb	C	1	1	1		
103	Cal 100 ppb	C	1	1	1		
104	Cal 500 ppb	C	1	1	1		
105	Cal 1000 ppb	C	1	1	1		
106	Cal 2500 ppb	C	1	1	1		
107	Cal 5000 ppb	C	1	1	1		
108	Cal 7500 ppb	C	1	1	1		
109	Cal 10000 ppb	C	1	1	1		
0	Blank	BLNK	1	1	1		
0	Read Baseline	RB	1	1	1		
110	5000 PPB NO2	U	1	1	1		
111	ICV 5000 PPB	CCV	1	1	1		
112	ICV 2000 PPB	CCV	1	1	1		
0	ICB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	LCS	U	1	1	1		pH
0	MB	U	1	1	1		
113	280-155138-C-10	U	1	10	1		CL
114	ms 280-155138-C-10	U	1	10	1		CL
115	msd 280-155138-C-10	U	1	10	1		CL
116	280-155138-C-1	U	1	1	1		CL
117	280-155138-C-2	U	1	10	1		CL
118	280-155138-C-3	U	1	1	1		CL
119	280-155138-C-4	U	1	1	1		CL
120	280-155138-C-5	U	1	2	1		CL
121	280-155138-C-6	U	1	10	1		CL
122	280-155138-C-7	U	1	1	1		CL
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	280-155138-C-8	U	1	1	1		CL
124	280-155138-C-9	U	1	10	1		CL
125	280-155318-D-8	U	1	50	1		CL
126	280-155318-D-8	MS U	1	50	1		CL
127	280-155318-D-8	MSD U	1	50	1		CL
128	280-155318-C-3	U	1	100	1		CL
129	280-155318-C-9	U	1	20	1		CL
130	280-155318-A-11	U	1	100	1		CL
131	280-155318-D-13	U	1	50	1		CL
132	280-155436-J-1	U	1	1	1		CL Yellow color
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
133	280-155275-B-1	U	1	1	1		CL
134	280-155275-B-2	U	1	1	1		CL

Cup	Name	Type	R	Dil	Wt	Vial	Comment
135	280-155275-B-3	U	1	1	1		∠2
136	280-155275-B-4	U	1	1	1		∠2
107	LCS	U	1	1	1		
0	MB	U	1	1	1		
137	280-155275-B-5	U	1	1	1		∠2
138	ms 280-155275-B-5	U	1	1	1		∠2
139	msd 280-155275-B-5	U	1	1	1		∠2
140	280-155201-A-3	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	280-155225-C-1	U	1	1	1		∠2
142	280-155225-C-2	U	1	5 ~~1~~	1		∠2
143	280-155225-C-3	U	1	1	1		∠2
144	280-155225-C-4	U	1	1	1		∠2
145	280-155225-C-5	U	1	10 ~~1~~	1		∠2
146	280-155225-C-6	U	1	2 ~~1~~	1		∠2
147	280-155225-C-7	U	1	1	1		∠2
148	280-155225-C-8	U	1	1	1		∠2
149	280-155117-B-1	U	1	1	1		∠2
150	ms 280-155117-B-1	U	1	1	1		∠2
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		
151	msd 280-155117-B-1	U	1	1	1		∠2
152	280-155225-C-9	U	1	1	1		∠2
153	280-155117-B-2	U	1	1	1		∠2
154	280-155117-B-3	U	1	1	1		∠2
155	280-155117-B-4	U	1	1	1		∠2
156	280-155117-B-5	U	1	1	1		∠2
157	280-155117-B-6	U	1	1	1		∠2
158	280-155117-B-7	U	1	1	1		∠2
159	280-155117-B-8	U	1	1	1		∠2
160	280-155117-B-9	U	1	1	1		∠2
0	Rinse	U	1	1	1		
0	Read Baseline	RB	1	1	1		
107	CCV 5000 ppb	CCV	1	1	1		
105	CCVL 1000 ppb	CCV	1	1	1		
0	CCB	U	1	1	1		
0	Read Baseline	RB	1	1	1		

General Chemistry Raw Data Report

Job ID: 280-155138-1

Batch: 556751 | **Analyst Initials: JJM**

Method: 9034 | **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-556749/1-A

Analysis Date: Nov 09, 2021 12:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	16.4	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-556749/2-A

Analysis Date: Nov 09, 2021 12:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.4	mg/L	50 mL	50 mL

Lab Sample ID: 280-155138-E-10-A

Analysis Date: Nov 09, 2021 12:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-155138-E-10-B MS

Analysis Date: Nov 09, 2021 12:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	15.6	mg/L	50 mL	50 mL

Lab Sample ID: 280-155138-E-10-C MSD

Analysis Date: Nov 09, 2021 12:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	15.6	mg/L	50 mL	50 mL

Lab Sample ID: 280-155138-E-1-A

Analysis Date: Nov 09, 2021 12:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155138-E-2-A

Analysis Date: Nov 09, 2021 12:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155138-E-3-A

Analysis Date: Nov 09, 2021 12:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0.799999999999968	mg/L	50 mL	50 mL

Lab Sample ID: 280-155138-E-4-A

Analysis Date: Nov 09, 2021 12:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155138-E-5-A

Analysis Date: Nov 09, 2021 12:10

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155138-E-8-A

Analysis Date: Nov 09, 2021 12:10

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:	11/9/2021	Number:	91
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_0195
TALS ID	Iod_00271	Prep Date:	7/23/2021
Normality:	0.025	Made By:	JM
Solution 2:	sodium thiosulfate	Concentration:	936
TALS ID	Na Thio_00174	Expiration Date:	11/8/2021
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch IND_00066		

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	8.30	20	8.30	936.000
CAL	5	8.30	16.60	20	8.30	936.000

ICV Information	
Source/Ver-Lot#:	INT_0190
Prep Date:	7/23/2021
Made By:	JM
Concentration:	1008
Expiration Date:	11/8/2021

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	7.30	20	7.30	1016.000
ICV	5	7.30	14.80	20	7.50	1000.000

TALS Raw Data Report

Job Number: 280-155048-1
LIMS Batch: 556751
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556749/1-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.4 mg/L	mg/L	81	44 110		
Sulfide as H2S		17.425 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556749/2-A** Inj Date: 11/9/2021 12:10:00PM 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# 3 Lab ID: **280-155138-E-10-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 4 Lab ID: **280-155138-E-10-B MS** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.6 mg/L	mg/L	73	44 110		
Sulfide as H2S		16.575 mg/L	mg/L				

RS# 5 Lab ID: **280-155138-E-10-C MSD** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.6 mg/L	mg/L	73	44 110	0	20
Sulfide as H2S		16.575 mg/L	mg/L				

RS# 6 Lab ID: **280-155048-E-2-A** Inj Date: 11/9/2021 12:10:00PM 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: **280-155048-E-3-A** Inj Date: 11/9/2021 12:10:00PM 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: **280-155048-E-5-A** Inj Date: 11/9/2021 12:10:00PM 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: **280-155048-E-6-A** Inj Date: 11/9/2021 12:10:00PM 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: 280-155084-1
LIMS Batch: 556751
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556749/1-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.4 mg/L	mg/L	81	44 110		
Sulfide as H2S		17.425 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556749/2-A** Inj Date: 11/9/2021 12:10:00PM 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# 3 Lab ID: **280-155138-E-10-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 4 Lab ID: **280-155138-E-10-B MS** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.6 mg/L	mg/L	73	44 110		
Sulfide as H2S		16.575 mg/L	mg/L				

RS# 5 Lab ID: **280-155138-E-10-C MSD** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.6 mg/L	mg/L	73	44 110	0	20
Sulfide as H2S		16.575 mg/L	mg/L				

RS# 16 Lab ID: **280-155084-C-9-A** Inj Date: 11/9/2021 12:10:00PM 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: 280-155138-1
LIMS Batch: 556751
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556749/1-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.4 mg/L	mg/L	81	44 110		
Sulfide as H2S		17.425 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556749/2-A** Inj Date: 11/9/2021 12:10:00PM 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# 3 Lab ID: **280-155138-E-10-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 4 Lab ID: **280-155138-E-10-B MS** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.6 mg/L	mg/L	73	44 110		
Sulfide as H2S		16.575 mg/L	mg/L				

RS# 5 Lab ID: **280-155138-E-10-C MSD** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.6 mg/L	mg/L	73	44 110	0	20
Sulfide as H2S		16.575 mg/L	mg/L				

RS# 10 Lab ID: **280-155138-E-1-A** Inj Date: 11/9/2021 12:10:00PM 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# 11 Lab ID: **280-155138-E-2-A** Inj Date: 11/9/2021 12:10:00PM 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: **280-155138-E-3-A** Inj Date: 11/9/2021 12:10:00PM 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				

RS# 13 Lab ID: **280-155138-E-4-A** Inj Date: 11/9/2021 12:10:00PM 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: **280-155138-E-5-A** Inj Date: 11/9/2021 12:10:00PM 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

RS# 15 Lab ID: **280-155138-E-8-A** Inj Date: 11/9/2021 12:10:00PM 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: 280-155225-1
LIMS Batch: 556751
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556749/1-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16.4 mg/L	mg/L	81	44 110		
Sulfide as H2S		17.425 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556749/2-A** Inj Date: 11/9/2021 12:10:00PM 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# 3 Lab ID: **280-155138-E-10-A** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 4 Lab ID: **280-155138-E-10-B MS** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.6 mg/L	mg/L	73	44 110		
Sulfide as H2S		16.575 mg/L	mg/L				

RS# 5 Lab ID: **280-155138-E-10-C MSD** Inj Date: 11/9/2021 12:10:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.6 mg/L	mg/L	73	44 110	0	20
Sulfide as H2S		16.575 mg/L	mg/L				

RS# 17 Lab ID: **280-155225-E-4-A** Inj Date: 11/9/2021 12:10:00PM 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: 556751	**Method (circle one):**	**QC Type (circle):**
Analyst/1st Reviewer: WB	**2310B 2320B 2340C**	**Standard DoD QAPP Other**
Date: 11/11/21	**4500 S2 F 4500 SO3 B 9030B/9034**	
Matrix (circle): Water Solid	**Automated or Manual (circle one)**	**Instrument ID (circle one if applicable):** **AT2 AT3**

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
A. Sample Storage and Pretreatment				
1. Is sample pH verified and documented prior to analysis? (if required)	Y		✓	
2. For samples requiring pH adjustment is the amount of acid/base used documented?	NA		—	If no, list details:
3. Are samples analyzed within the required hold time?	Y		✓	NCM:
4. Pre-treatment reagents used to remove interferences are documented.	NA		—	
B. Calibration / Instrument				
5. Was the normality of the titrant verified and found acceptable?	Y		✓	Comments:
6. For potentiometric titration, the pH meter is calibrated with 5 buffers bracketing range of samples and QC.	NA		—	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		—	Comments:
8. Calibrations standards (ICV/CCV) are within 90-110% recovery.	NA		—	
C. Sample and Batch QC				
9. Blanks are analyzed at the beginning, end and after every 10 sample analyses in the sequence.	Y		✓	
10. Results of blank analyses (MB, ICB, CCB) are < ½ RL (<RL for alkalinity unless DoD)	Y		✓	□ No analyte > ½ RL in associated samples □ Sample results >10x blank
11. A standard from a second source (SRM, CRM, LCS) is included in the analytical sequence.	Y		✓	
12. The recovery of the 2nd source material falls within 90-110% or manufacturer's limits.	Y		✓	
13. Samples analyses are bracketing by acceptable CCV/CCBs.	NA		—	□ No analyte > RL in associated samples □ Sample results >10x blank □ Sample results qualified
14. MS/MSD analyzed at required frequency and recoveries within limits. (If recoveries out of limits, verify not due to lab error) (Required for 2340C, 4500 S2 F, 9030B/9034)	Y		✓	□ Non-conformance (NCM) added □ Sample results >4X spike conc.
15. Duplicate analyzed at required frequency and RPD within limits. (Required for 2310B, 2320B, 4500 SO3 B)	NA		—	□ Non-conformance (NCM) added □ Sample results ND or <2X RL

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
16. Are all MS/MSD RPDs <50%? Note: Excessive RPDs (>50%) require evaluation, correction or explanation.	Y		✓	□ Non-conformance (NCM) added
D. Raw Data & TALS Data Entry				
17. Raw Data				
a. Unused data is clearly identified with reason	✓		✓	
b. All crossed out data is initialed and dated	✓		✓	
c. Out of control QC is clearly identified	✓		✓	
d. Any data that has a qualifier is commented on with appropriate action taken	✓		✓	
e. The first page of the run includes the filename, instrument, and analyst initials/signature	✓		✓	
f. 100% of manual calculations are verified.	✓		✓	
18. TALS Samples Tab				
a. LIMS Sample IDs / Containers are correct	✓		✓	
b. Method and matrix are correct	✓		✓	
c. Date and time match raw data	✓		✓	
d. Dilutions are correct	✓		✓	
e. Correct suffix designated (where applicable)	✓		✓	
19. TALS Worksheet Tab is complete and correct	✓		✓	
20. TALS Reagent Tab is complete and correct	✓		✓	
21. TALS QC Links Tab is correct	✓		✓	
22. TALS Sample Results Tab				
a. All unused data are marked Rejected or Accepted	✓		✓	
b. All reported analytes are marked Primary or Secondary	✓		✓	
c. Data manually transcribed from benchsheet into TALS verified 100% including significant figures SM 4500 SO3 B).	✓		✓	
d. TALS Batch Information Screen documentation is complete	✓		✓	
e. TALS Status set to appropriate review level	✓		✓	
E. Final Report and NCMs (2nd level review only)				
f. Were all job/project requirements met?			✓	
g. Results for samples and QC correct on final report?			✓	
h. Are all necessary scanned documents in TALS?			✓	
i. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?			✓	

Comments: JM performed 11/09/21

2nd Reviewer: [signature] **Review Date:** 11.11.21

General Chemistry Raw Data Report

Job ID: 280-155138-1

Batch: 556789 **Analyst Initials: JJM**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: LCS 280-556787/1-A **Analysis Date: Nov 09, 2021 14:38**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	16	mg/L	50 mL	50 mL

Lab Sample ID: MB 280-556787/2-A **Analysis Date: Nov 09, 2021 14:38**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155138-E-9-A **Analysis Date: Nov 09, 2021 14:38**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155138-E-9-B MS **Analysis Date: Nov 09, 2021 14:38**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	13.6	mg/L	50 mL	50 mL

Lab Sample ID: 280-155138-E-9-C MSD **Analysis Date: Nov 09, 2021 14:38**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	13.6	mg/L	50 mL	50 mL

Lab Sample ID: 280-155138-E-6-A **Analysis Date: Nov 09, 2021 14:38**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	1.6	mg/L	50 mL	50 mL

Lab Sample ID: 280-155138-E-7-A **Analysis Date: Nov 09, 2021 14:38**

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:	11/9/2021	Number:	91
Titration Solutions		**Calibration Information**	
Solution 1:	Iodine	Source/Ver-Lot#:	INT_0195
TALS ID	Iod_00271	Prep Date:	7/23/2021
Normality:	0.025	Made By:	JM
Solution 2:	sodium thiosulfate	Concentration:	936
TALS ID	Na Thio_00174	Expiration Date:	11/8/2021
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch IND_00066		

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	8.30	20	8.30	936.000
CAL	5	8.30	16.60	20	8.30	936.000

ICV Information	
Source/Ver-Lot#:	INT_0190
Prep Date:	7/23/2021
Made By:	JM
Concentration:	1008
Expiration Date:	11/8/2021

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	7.30	20	7.30	1016.000
ICV	5	7.30	14.80	20	7.50	1000.000

TALS Raw Data Report

Job Number: 280-155048-1
LIMS Batch: 556789
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556787/1-A** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	79	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556787/2-A** Inj Date: 11/9/2021 2:38:00PM 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: **280-155138-E-9-A** Inj Date: 11/9/2021 2:38:00PM 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: **280-155138-E-9-B MS** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		13.6 mg/L	mg/L	67	44 110		
Sulfide as H2S		14.45 mg/L	mg/L				

RS# 5 Lab ID: **280-155138-E-9-C MSD** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		13.6 mg/L	mg/L	67	44 110	0	20
Sulfide as H2S		14.45 mg/L	mg/L				

RS# 8 Lab ID: **280-155048-E-1-A** Inj Date: 11/9/2021 2:38:00PM 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: 280-155138-1
LIMS Batch: 556789
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556787/1-A** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	79	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556787/2-A** Inj Date: 11/9/2021 2:38:00PM 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: **280-155138-E-9-A** Inj Date: 11/9/2021 2:38:00PM 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: **280-155138-E-9-B MS** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		13.6 mg/L	mg/L	67	44 110		
Sulfide as H2S		14.45 mg/L	mg/L				

RS# 5 Lab ID: **280-155138-E-9-C MSD** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		13.6 mg/L	mg/L	67	44 110	0	20
Sulfide as H2S		14.45 mg/L	mg/L				

RS# 6 Lab ID: **280-155138-E-6-A** Inj Date: 11/9/2021 2:38:00PM 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# 7 Lab ID: **280-155138-E-7-A** Inj Date: 11/9/2021 2:38:00PM 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: 280-155224-1
LIMS Batch: 556789
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **LCS 280-556787/1-A** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		16 mg/L	mg/L	79	44 110		
Sulfide as H2S		17 mg/L	mg/L				

RS# 2 Lab ID: **MB 280-556787/2-A** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 3 Lab ID: **280-155138-E-9-A** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	mg/L				
Sulfide as H2S		0 mg/L	mg/L				

RS# 4 Lab ID: **280-155138-E-9-B MS** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		13.6 mg/L	mg/L	67	44 110		
Sulfide as H2S		14.45 mg/L	mg/L				

RS# 5 Lab ID: **280-155138-E-9-C MSD** Inj Date: 11/9/2021 2:38:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		13.6 mg/L	mg/L	67	44 110	0	20
Sulfide as H2S		14.45 mg/L	mg/L				

RS# 9 Lab ID: **280-155224-K-1-A** Inj Date: 11/9/2021 2:38:00PM 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				

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Titration Data Review Checklist

LIMS Batch Number: 556789	**Method (circle one):**	**QC Type (circle):**
Analyst/1st Reviewer: URB	**2310B 2320B 2340C**	**Standard DoD QAPP Other**
Date: 11/11/21	**4500 S2 F 4500 SO3 B 9030B/9034**	
Matrix (circle): Water Solid	**Automated or Manual (circle one)**	**Instrument ID (circle one if applicable):** AT2 AT3

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
A. Sample Storage and Pretreatment				
1. Is sample pH verified and documented prior to analysis? (if required)	Y		✓	
2. For samples requiring pH adjustment is the amount of acid/base used documented?	NA		—	If no, list details:
3. Are samples analyzed within the required hold time?	Y		✓	NCM:
4. Pre-treatment reagents used to remove interferences are documented.	NA		—	
B. Calibration / Instrument				
5. Was the normality of the titrant verified and found acceptable?	Y		✓	Comments:
6. For potentiometric titration, the pH meter is calibrated with 5 buffers bracketing range of samples and QC.	NA		—	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		—	Comments:
8. Calibrations standards (ICV/CCV) are within 90-110% recovery.	NA		—	
C. Sample and Batch QC				
9. Blanks are analyzed at the beginning, end and after every 10 sample analyses in the sequence.	Y		✓	
10. Results of blank analyses (MB, ICB, CCB) are < ½ RL (<RL for alkalinity unless DoD)	Y		✓	☐ No analyte > ½ RL in associated samples ☐ Sample results >10x blank
11. A standard from a second source (SRM, CRM, LCS) is included in the analytical sequence.	Y		✓	
12. The recovery of the 2nd source material falls within 90-110% or manufacturer's limits.	Y		✓	
13. Samples analyses are bracketing by acceptable CCV/CCBs.	NA		—	☐ No analyte > RL in associated samples ☐ Sample results >10x blank ☐ Sample results qualified
14. MS/MSD analyzed at required frequency and recoveries within limits. (If recoveries out of limits, verify not due to lab error) (Required for 2340C, 4500 S2 F, 9030B/9034)	Y		✓	☑ Non-conformance (NCM) added ☐ Sample results >4X spike conc.
15. Duplicate analyzed at required frequency and RPD within limits. (Required for 2310B, 2320B, 4500 SO3 B)	NA		—	☐ Non-conformance (NCM) added ☐ Sample results ND or <2X RL

Review Items	Yes	No	2nd Rev	If No, why is data reportable?
16. Are all MS/MSD RPDs <50%? Note: Excessive RPDs (>50%) require evaluation, correction or explanation.	Y		✓	☐ Non-conformance (NCM) added
D. Raw Data & TALS Data Entry				
17. Raw Data				
a. Unused data is clearly identified with reason	✓		✓	
b. All crossed out data is initialed and dated	✓		✓	
c. Out of control QC is clearly identified	✓		✓	
d. Any data that has a qualifier is commented on with appropriate action taken	✓		✓	
e. The first page of the run includes the filename, instrument, and analyst initials/signature	✓		✓	
f. 100% of manual calculations are verified.	✓		✓	
18. TALS Samples Tab				
a. LIMS Sample IDs / Containers are correct	✓		✓	
b. Method and matrix are correct	✓		✓	
c. Date and time match raw data	✓		✓	
d. Dilutions are correct	✓		✓	
e. Correct suffix designated (where applicable)	✓		✓	
19. TALS Worksheet Tab is complete and correct	✓		✓	
20. TALS Reagent Tab is complete and correct	✓		✓	
21. TALS QC Links Tab is correct	✓		✓	
22. TALS Sample Results Tab			✓	
a. All unused data are marked Rejected or Accepted	✓		✓	
b. All reported analytes are marked Primary or Secondary	✓		✓	
c. Data manually transcribed from benchsheet into TALS verified 100% including significant figures SM 4500 SO3 B).	✓		✓	
d. TALS Batch Information Screen documentation is complete	✓		✓	
e. TALS Status set to appropriate review level	✓		✓	
E. Final Report and NCMs (2nd level review only)				
f. Were all job/project requirements met?			✓	
g. Results for samples and QC correct on final report?			✓	
h. Are all necessary scanned documents in TALS?			✓	
i. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?			✓	

Comments: SM performed 11/09/21

2nd Reviewer: [signature] **Review Date:** 11.11.21

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-165
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 14-Nov-2021 16:43:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106492-002
Misc. Info.: 280-0106492-002
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2021 15:00:09 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1639

First Level Reviewer: jindaratc Date: 14-Nov-2021 17:20:28

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.767	2.767	0.000	6429023	0.2000	0.1493	Ma
2 Chloride	3.813	3.837	-0.024	12878743	1.00	1.01	Ma
3 Nitrite as N	4.462	4.433	0.029	6082884	NC	NC	
4 Bromide	5.523	5.465	0.058	998417	0.2000	0.2256	M
5 Nitrate as N	6.292	6.160	0.132	6150773	NC	NC	
6 Orthophosphate as P	7.737	7.698	0.039	5134364	NC	NC	M
7 Sulfate	8.800	8.743	0.057	9141707	1.00	1.05	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

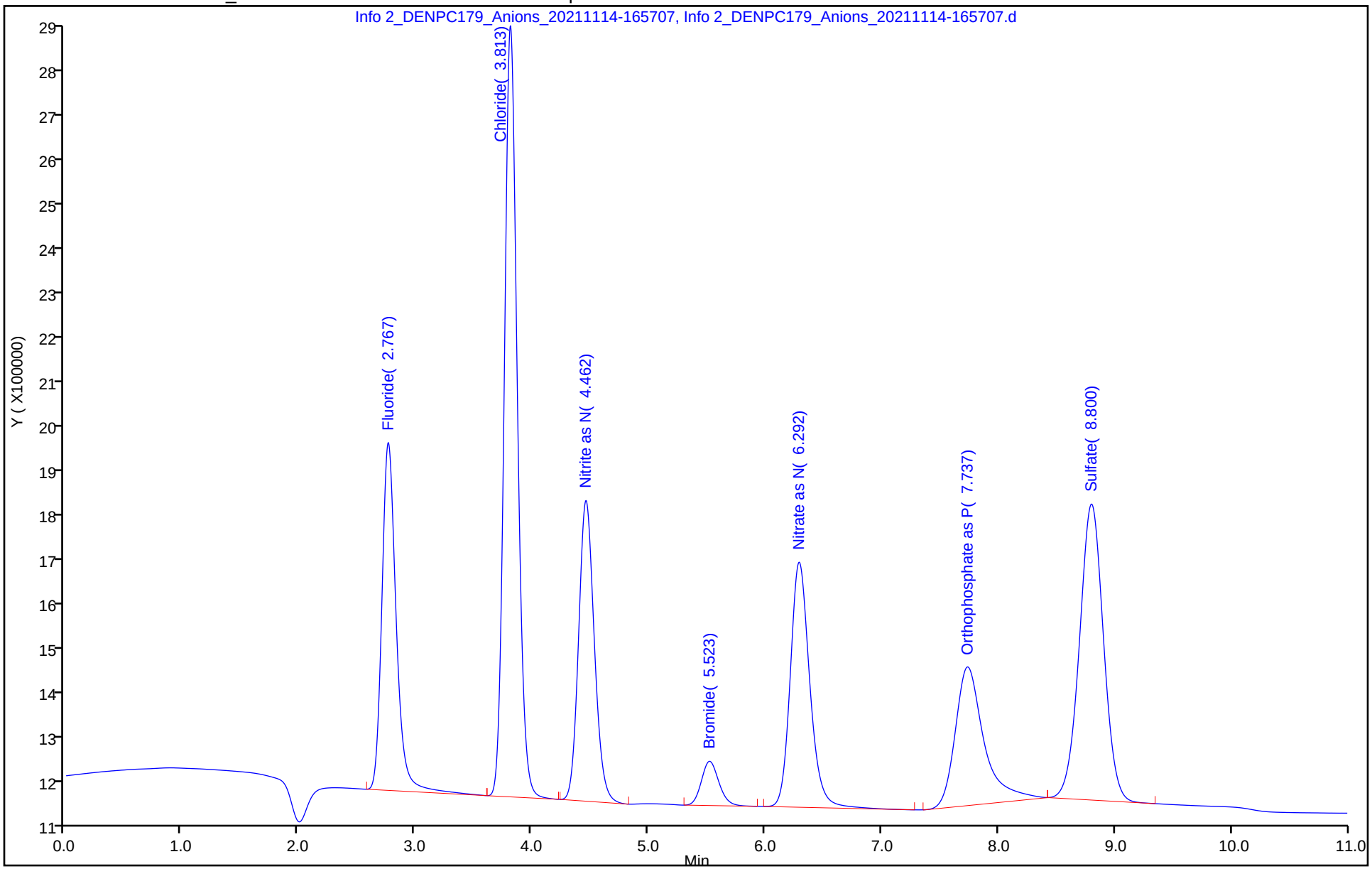
Reagents:

IC Cal low_00607 Amount Added: 0.04 Units: mL
IC CAL cl/so4_00393 Amount Added: 0.04 Units: mL

Report Date: 15-Nov-2021 15:00:10 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-165707.d				
Injection Date:	14-Nov-2021 16:43:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD1			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-165

Injection Date: 14-Nov-2021 16:43:00 Instrument ID: WC_IonChrom10

Lims ID: STD1

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

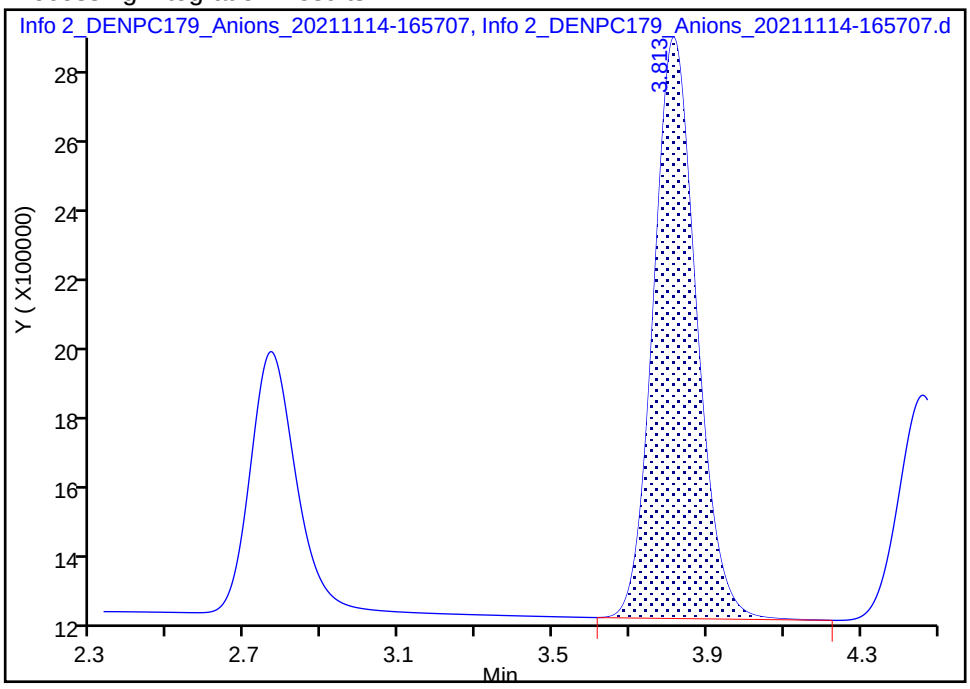
Column: Detector Info 2_091554_1

1 Fluoride, CAS: 16984-48-8

Signal: 1

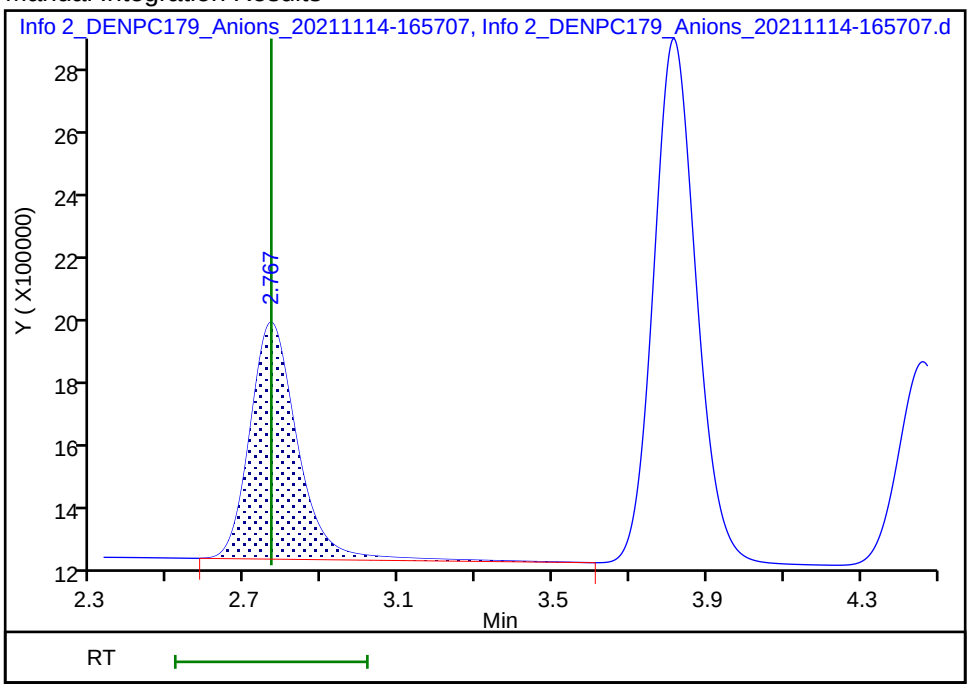
Processing Integration Results

RT: 3.81
Area: 12878743
Amount: 0.200000
Amount Units: ug/ml



Manual Integration Results

RT: 2.77
Area: 6429023
Amount: 0.149279
Amount Units: ug/ml



Reviewer: jindaratc, 14-Nov-2021 17:21:23

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-165

Injection Date: 14-Nov-2021 16:43:00 Instrument ID: WC_IonChrom10

Lims ID: STD1

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

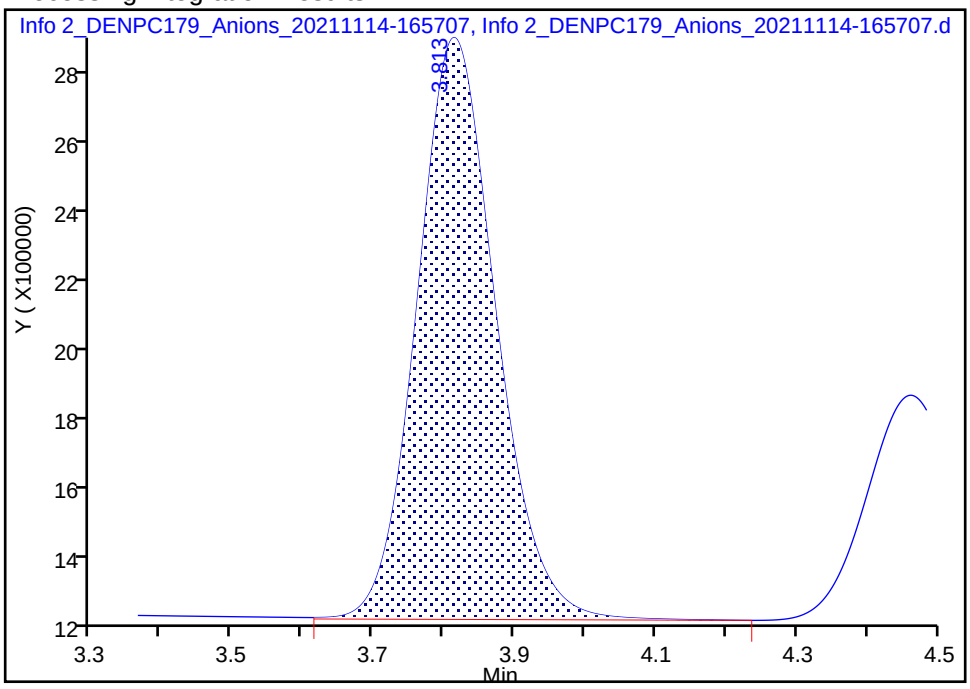
Column: Detector Info 2_091554_1

2 Chloride, CAS: 16887-00-6

Signal: 1

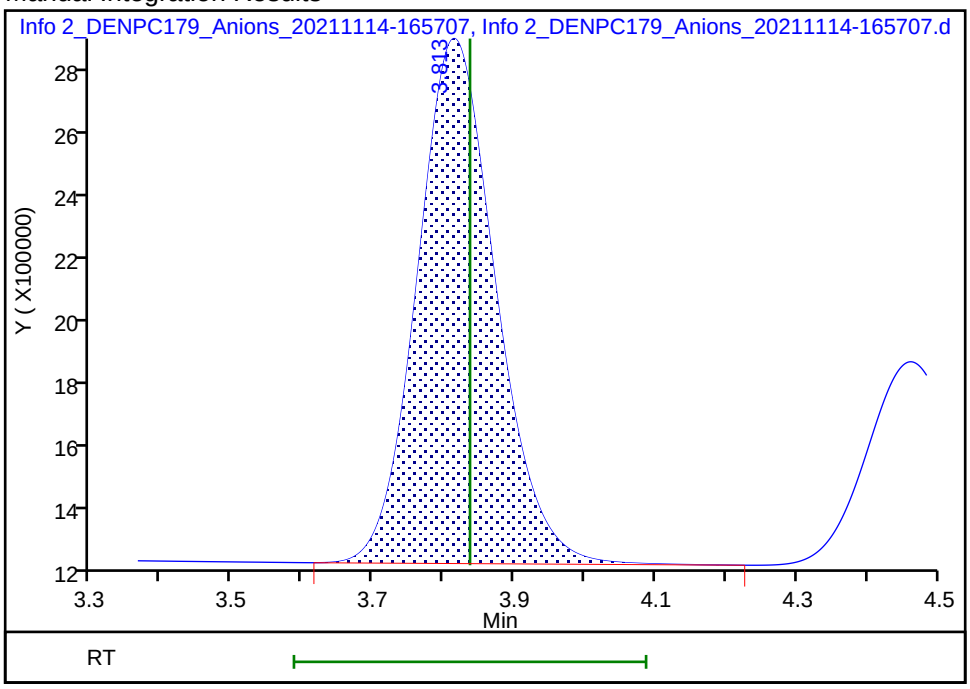
Processing Integration Results

RT: 3.81
Area: 12950930
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 3.81
Area: 12878743
Amount: 1.013598
Amount Units: ug/ml



Reviewer: jindaratc, 14-Nov-2021 17:21:25

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-165

Injection Date: 14-Nov-2021 16:43:00 Instrument ID: WC_IonChrom10

Lims ID: STD1

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

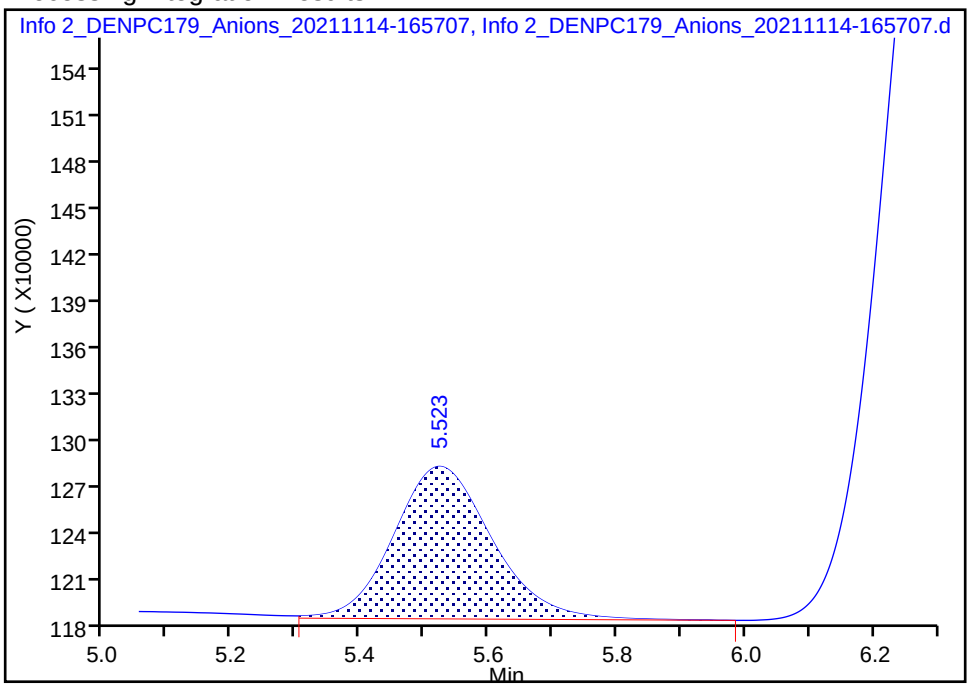
Column: Detector Info 2_091554_1

4 Bromide, CAS: 24959-67-9

Signal: 1

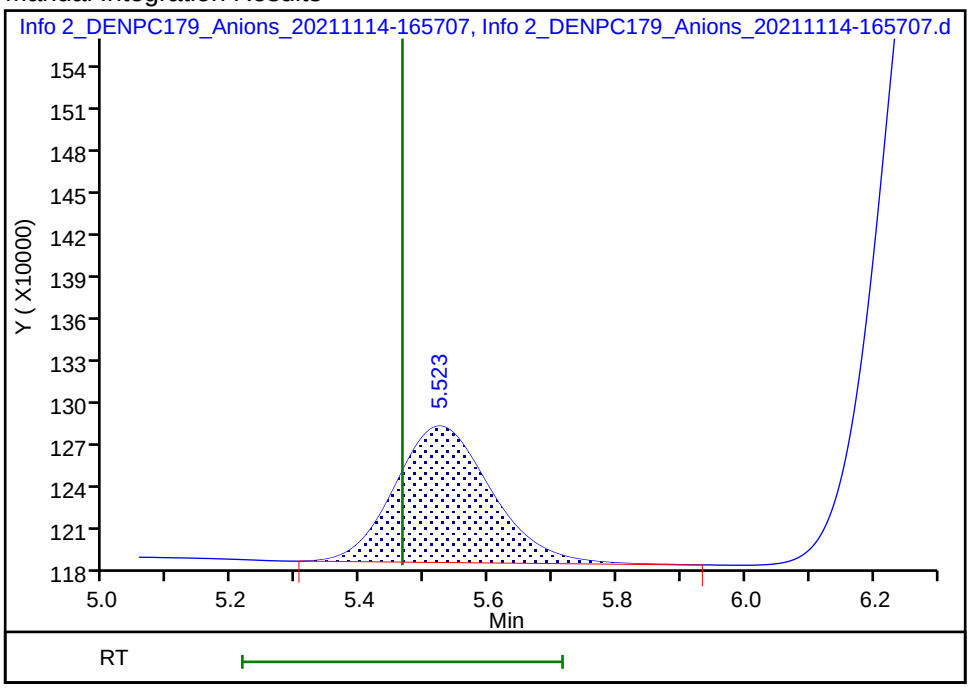
Processing Integration Results

RT: 5.52
Area: 1027737
Amount: 0.200000
Amount Units: ug/ml



Manual Integration Results

RT: 5.52
Area: 998417
Amount: 0.225619
Amount Units: ug/ml



Reviewer: jindaratc, 14-Nov-2021 17:21:32

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-165

Injection Date: 14-Nov-2021 16:43:00 Instrument ID: WC_IonChrom10

Lims ID: STD1

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

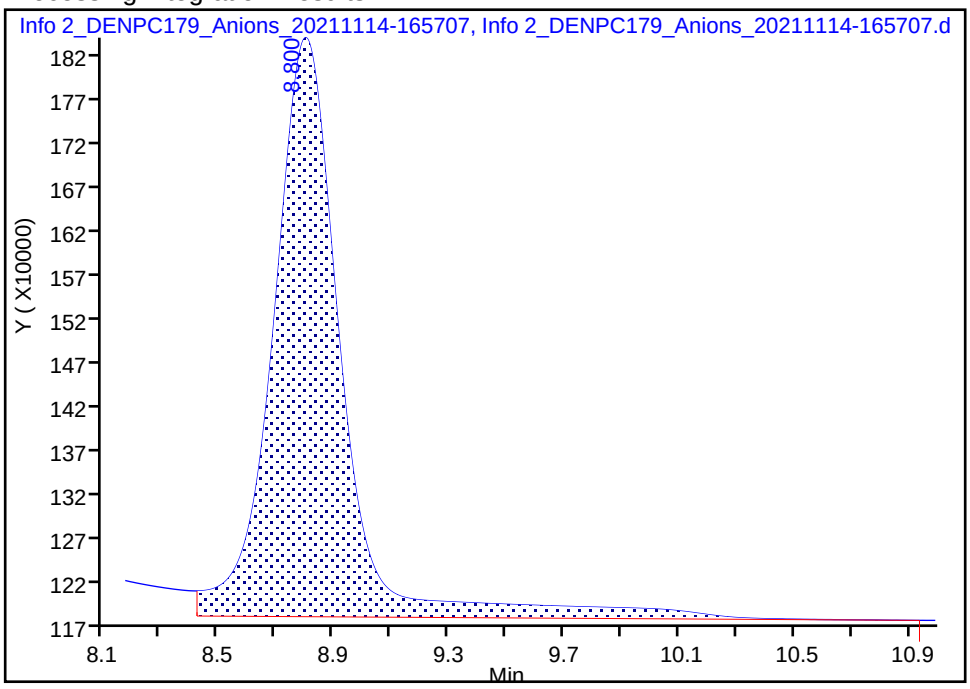
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

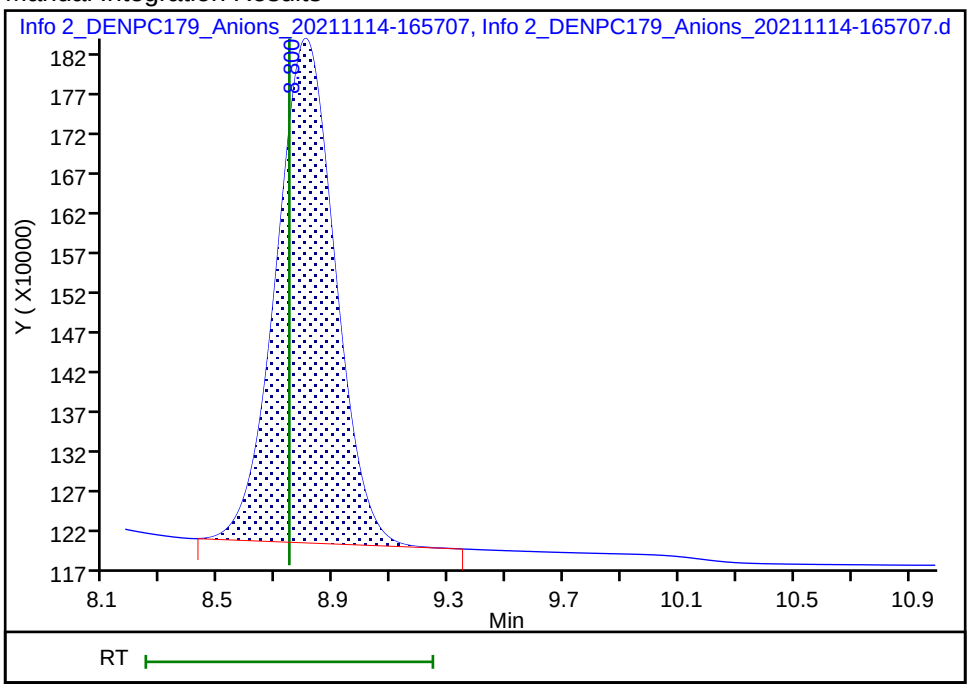
Processing Integration Results

RT: 8.80
Area: 11117203
Amount: 1.000000
Amount Units: ug/ml



Manual Integration Results

RT: 8.80
Area: 9141707
Amount: 1.049773
Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 14:59:28

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-171
Lims ID: STD2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 14-Nov-2021 16:57:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106492-003
Misc. Info.: 280-0106492-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2021 15:00:10 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1639

First Level Reviewer: jindaratc Date: 14-Nov-2021 17:21:16

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.765	2.767	-0.002	18357697	0.5000	0.5423	Ma
2 Chloride	3.813	3.837	-0.024	35397665	2.50	2.50	M
3 Nitrite as N	4.462	4.433	0.029	16872480	NC	NC	M
4 Bromide	5.522	5.465	0.057	2718107	0.5000	0.4869	
5 Nitrate as N	6.278	6.160	0.118	16933607	NC	NC	
6 Orthophosphate as P	7.723	7.698	0.025	10164537	NC	NC	M
7 Sulfate	8.792	8.743	0.049	24918556	2.50	2.46	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

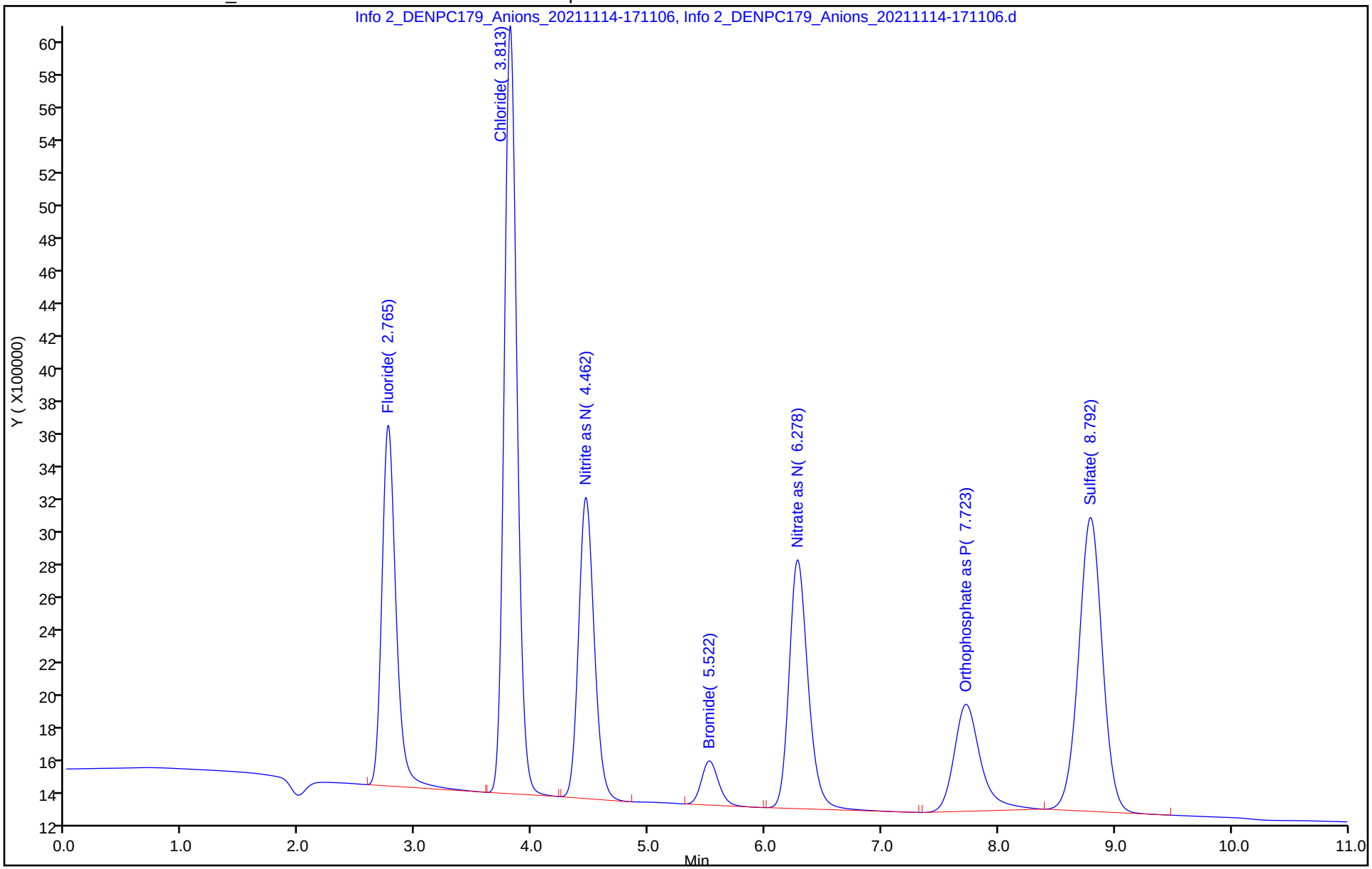
Reagents:

IC Cal low_00607 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00393 Amount Added: 0.10 Units: mL

Report Date: 15-Nov-2021 15:00:11 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-171106.d				
Injection Date:	14-Nov-2021 16:57:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD2			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

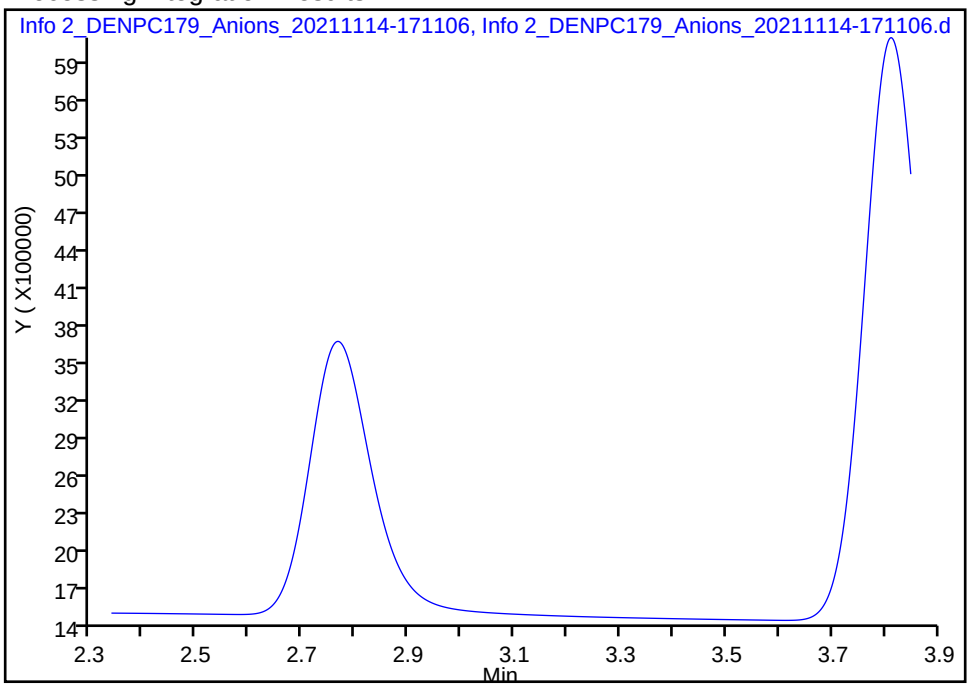
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-171
Injection Date: 14-Nov-2021 16:57:00 Instrument ID: WC_IonChrom10
Lims ID: STD2
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

1 Fluoride, CAS: 16984-48-8

Signal: 1

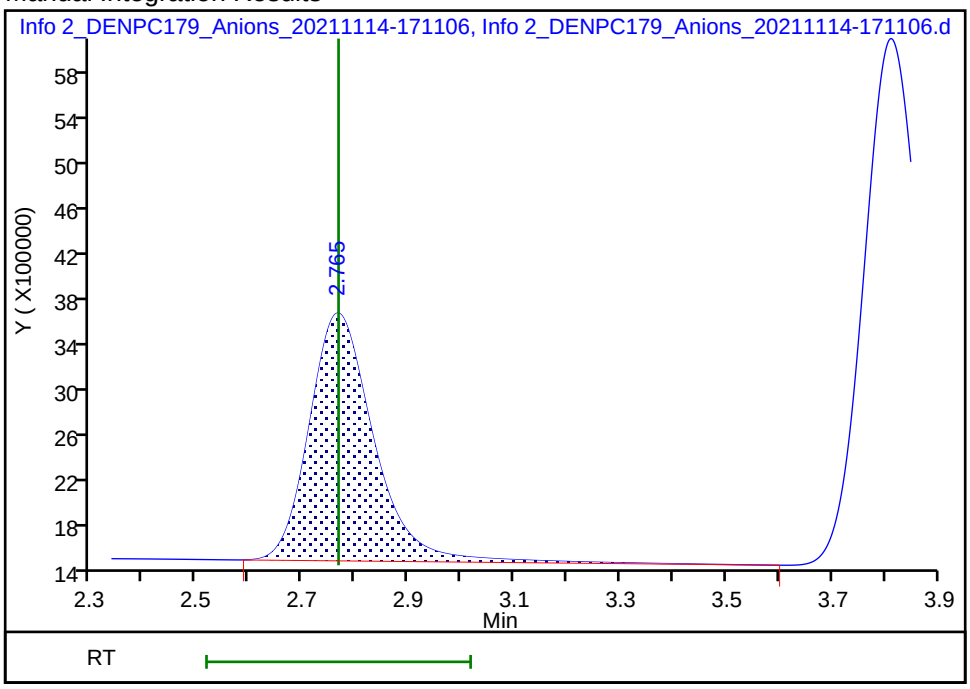
Not Detected
Expected RT: 2.77

Processing Integration Results



Manual Integration Results

RT: 2.77
Area: 18357697
Amount: 0.542348
Amount Units: ug/ml



Reviewer: jindaratc, 14-Nov-2021 17:20:44
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-171

Injection Date: 14-Nov-2021 16:57:00 Instrument ID: WC_IonChrom10

Lims ID: STD2

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

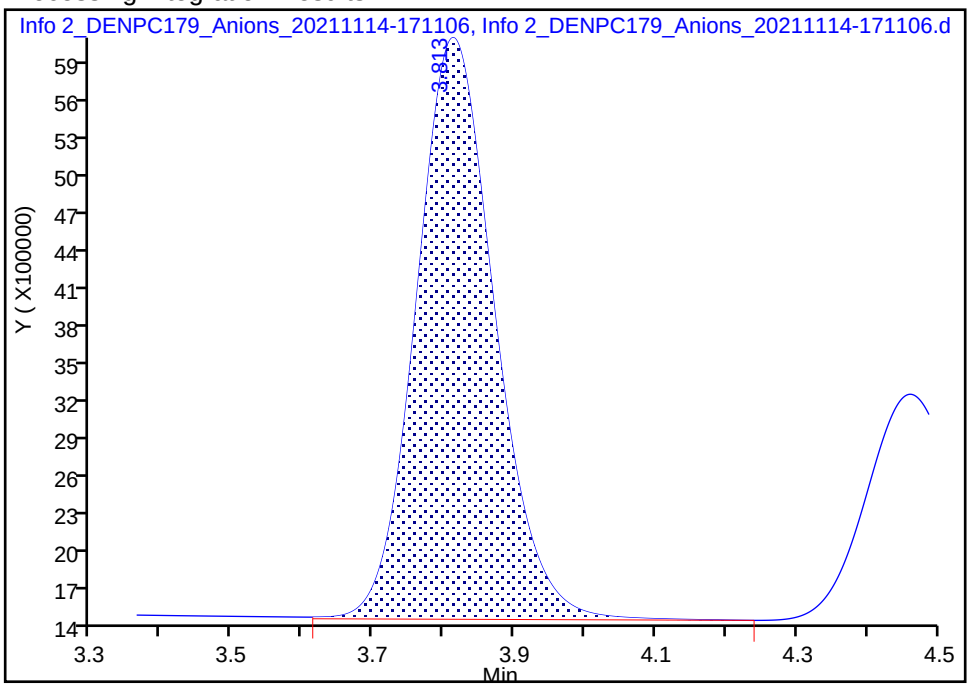
Column: Detector Info 2_091554_1

2 Chloride, CAS: 16887-00-6

Signal: 1

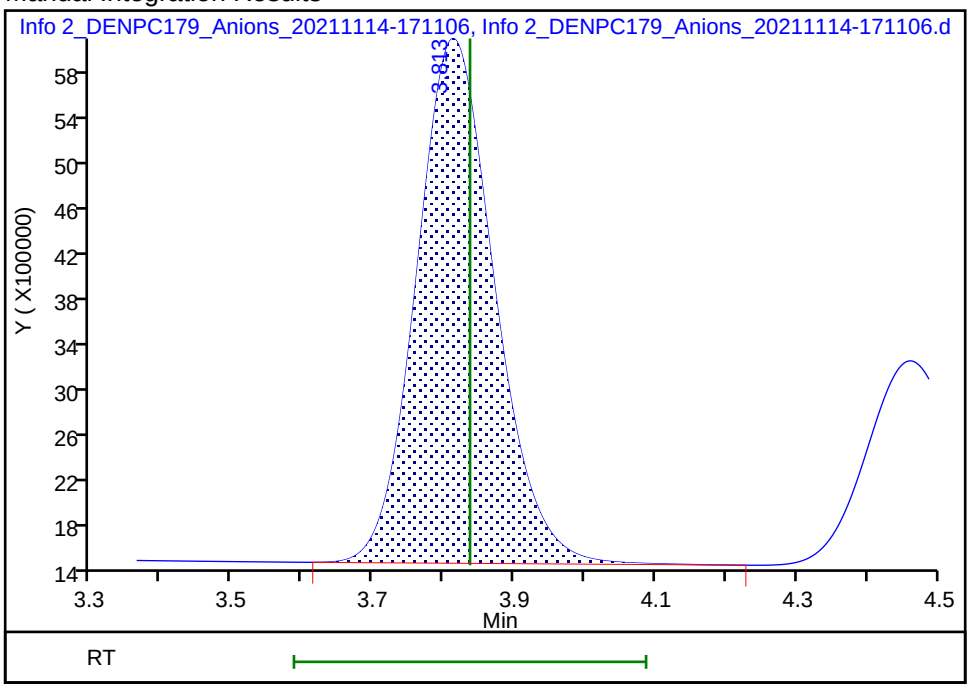
Processing Integration Results

RT: 3.81
Area: 35636388
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 3.81
Area: 35397665
Amount: 2.497876
Amount Units: ug/ml



Reviewer: jindaratc, 14-Nov-2021 17:20:51

Audit Action: Manually Integrated Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

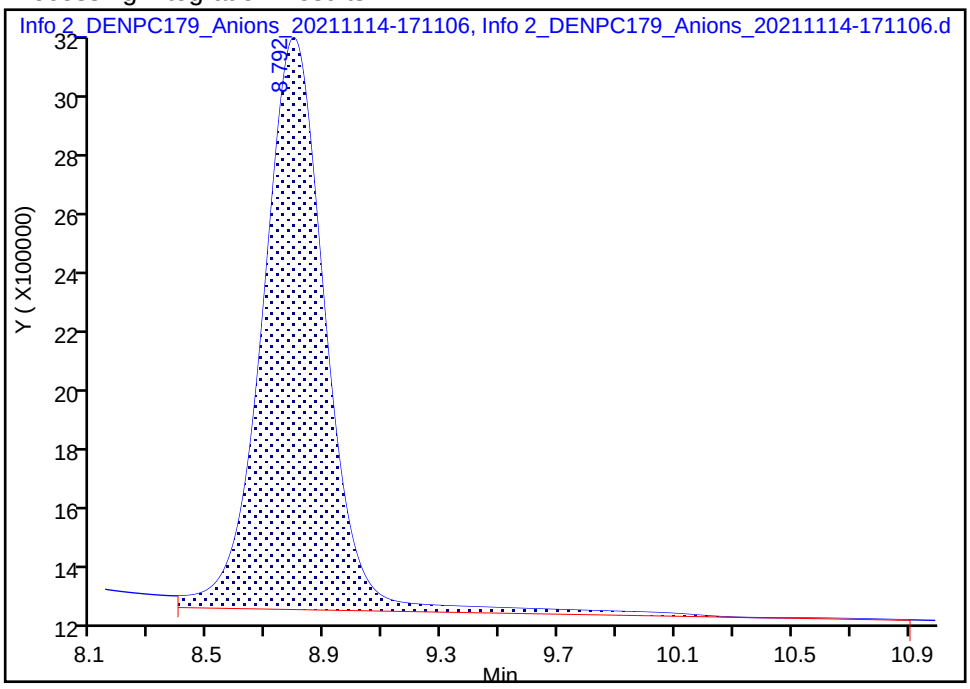
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-171
Injection Date: 14-Nov-2021 16:57:00 Instrument ID: WC_IonChrom10
Lims ID: STD2
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

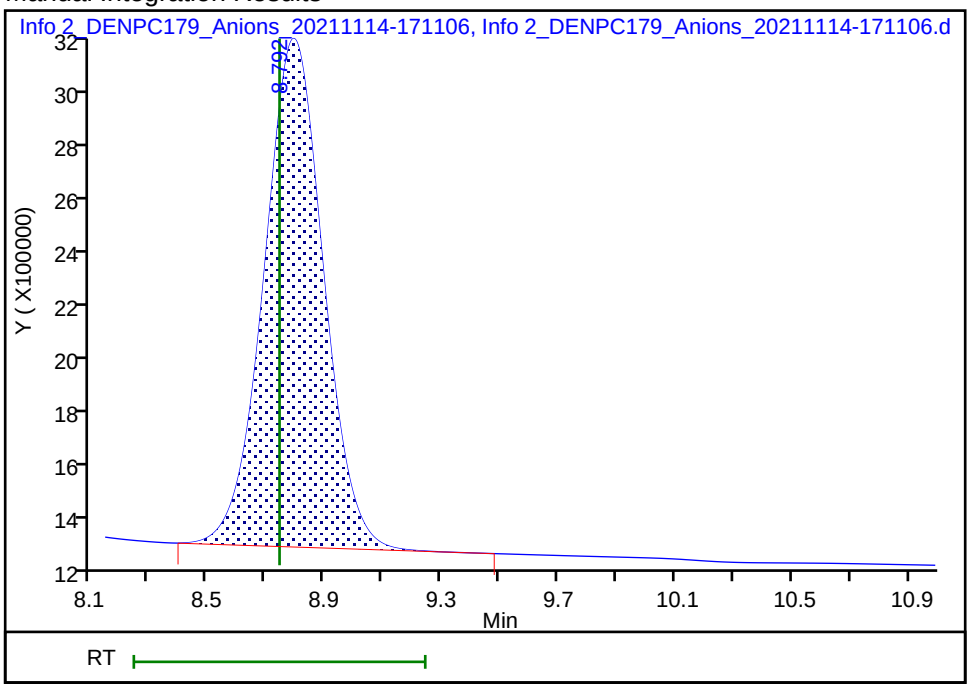
Processing Integration Results

RT: 8.79
Area: 27249100
Amount: 2.500000
Amount Units: ug/ml



Manual Integration Results

RT: 8.79
Area: 24918556
Amount: 2.455798
Amount Units: ug/ml



Reviewer: jindaratc, 14-Nov-2021 17:21:13
Audit Action: Manually Integrated Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-172
Lims ID: STD3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 14-Nov-2021 17:11:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106492-004
Misc. Info.: 280-0106492-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2021 15:00:11 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1639

First Level Reviewer: jindaratc Date: 14-Nov-2021 17:33:02

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.765	2.767	-0.002	36569889	1.00	1.14	Ma
2 Chloride	3.812	3.837	-0.025	72906043	5.00	4.97	M
3 Nitrite as N	4.458	4.433	0.025	35140921	NC	NC	M
4 Bromide	5.515	5.465	0.050	5592493	1.00	0.9237	
5 Nitrate as N	6.260	6.160	0.100	35371015	NC	NC	
6 Orthophosphate as P	7.713	7.698	0.015	17946003	NC	NC	M
7 Sulfate	8.785	8.743	0.042	51712422	5.00	4.84	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

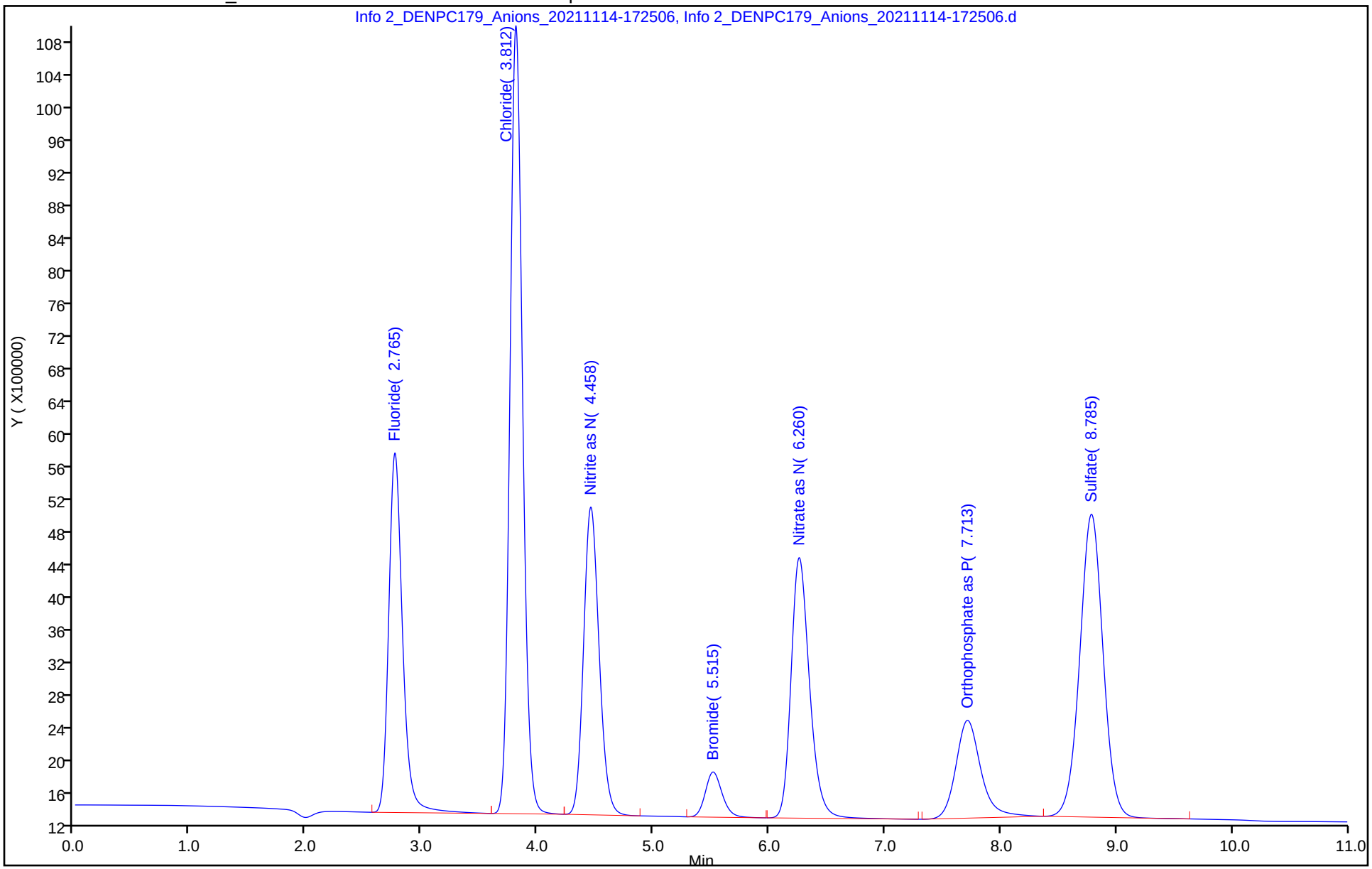
IC Cal low_00607 Amount Added: 0.20 Units: mL
IC CAL cl/so4_00393 Amount Added: 0.20 Units: mL

Report Date: 15-Nov-2021 15:00:11 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-172506.d

Injection Date:	14-Nov-2021 17:11:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD3			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

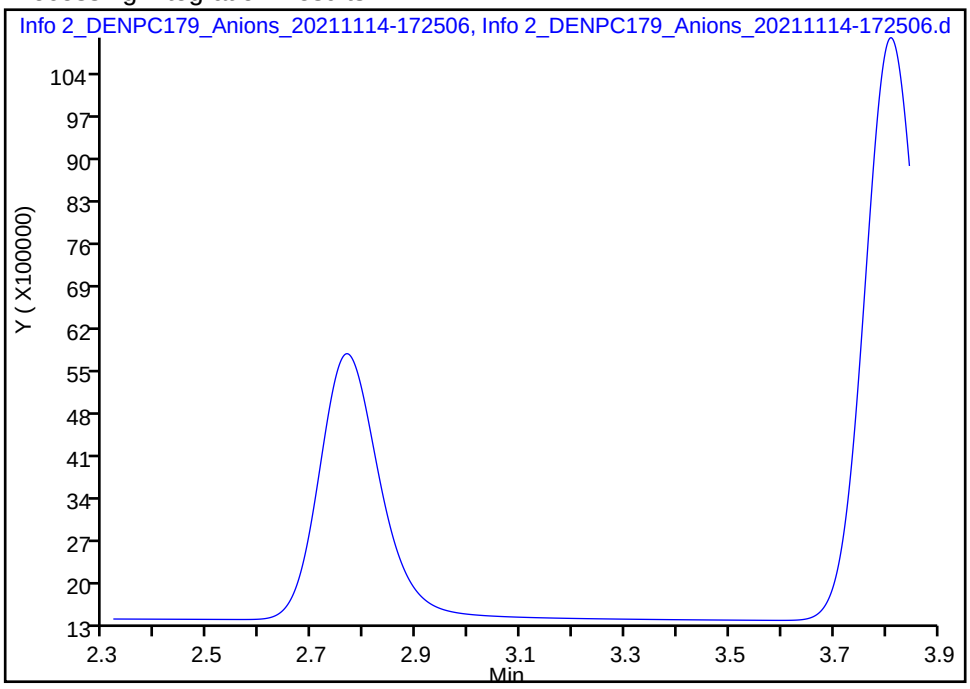
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-172
Injection Date: 14-Nov-2021 17:11:00 Instrument ID: WC_IonChrom10
Lims ID: STD3
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

1 Fluoride, CAS: 16984-48-8

Signal: 1

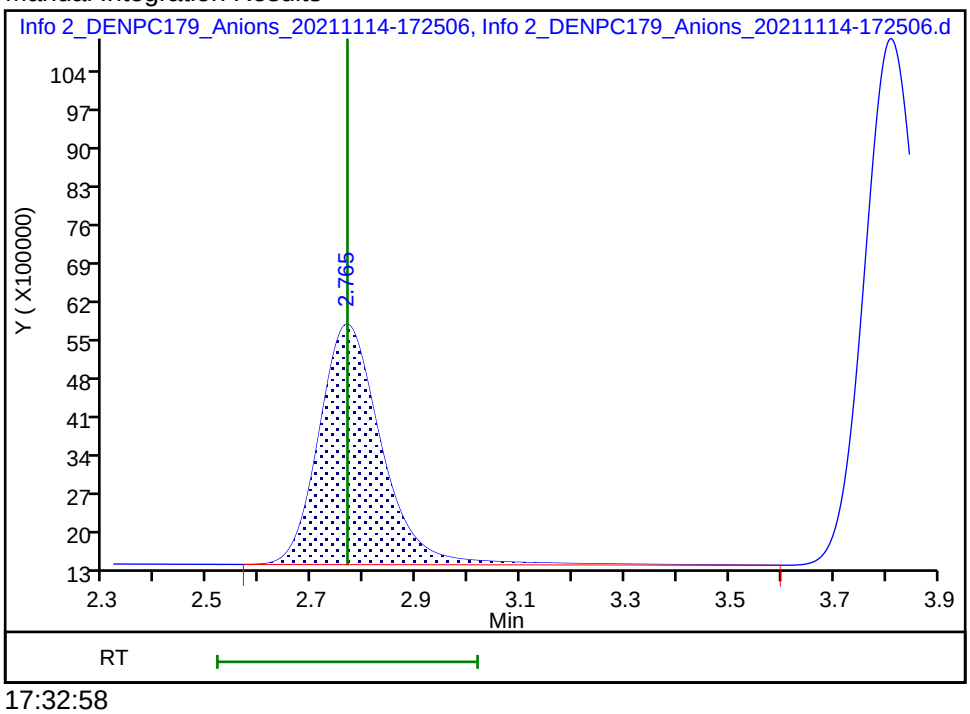
Not Detected
Expected RT: 2.77

Processing Integration Results



Manual Integration Results

RT: 2.77
Area: 36569889
Amount: 1.142469
Amount Units: ug/ml



Reviewer: jindaratc, 14-Nov-2021 17:32:58
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

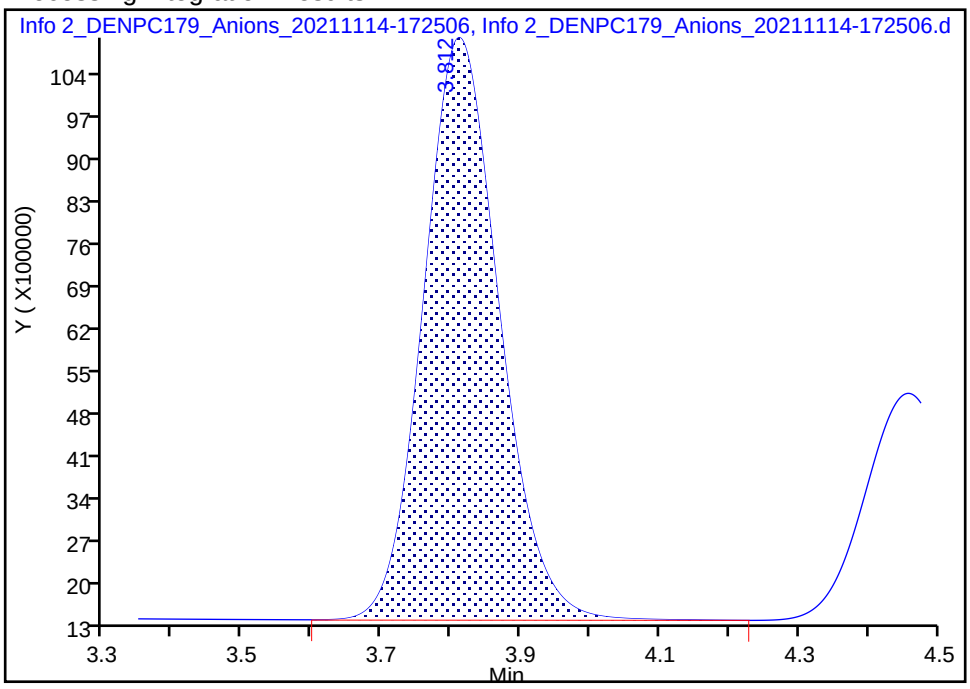
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-172
Injection Date: 14-Nov-2021 17:11:00 Instrument ID: WC_IonChrom10
Lims ID: STD3
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

2 Chloride, CAS: 16887-00-6

Signal: 1

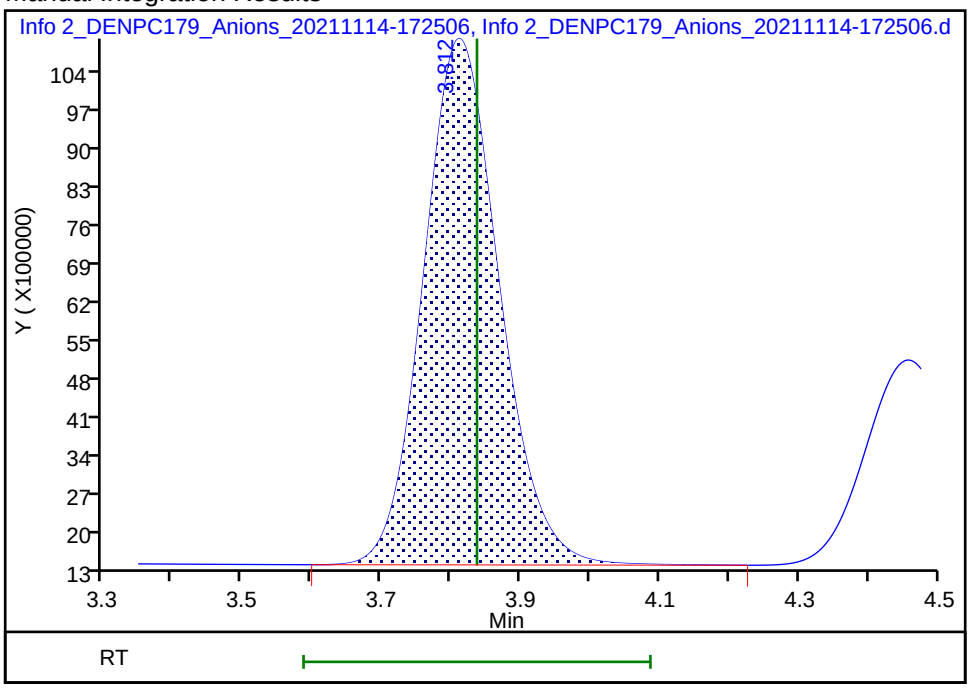
Processing Integration Results

RT: 3.81
Area: 72995169
Amount: 5.000859
Amount Units: ug/ml



Manual Integration Results

RT: 3.81
Area: 72906043
Amount: 4.970147
Amount Units: ug/ml



Reviewer: jindaratc, 14-Nov-2021 17:32:55
Audit Action: Manually Integrated Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

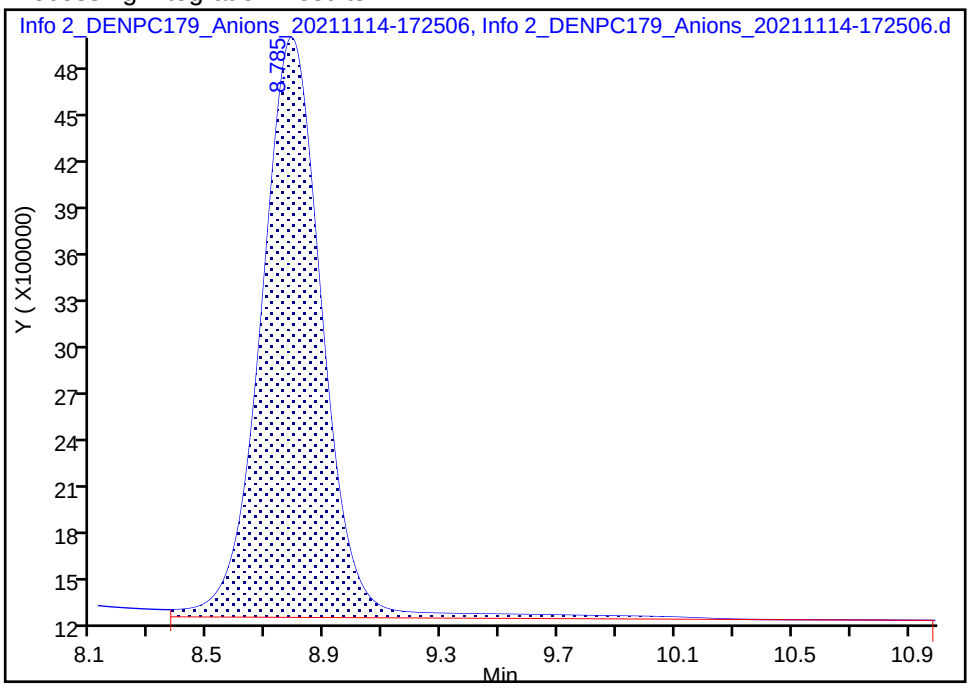
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-172
Injection Date: 14-Nov-2021 17:11:00 Instrument ID: WC_IonChrom10
Lims ID: STD3
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

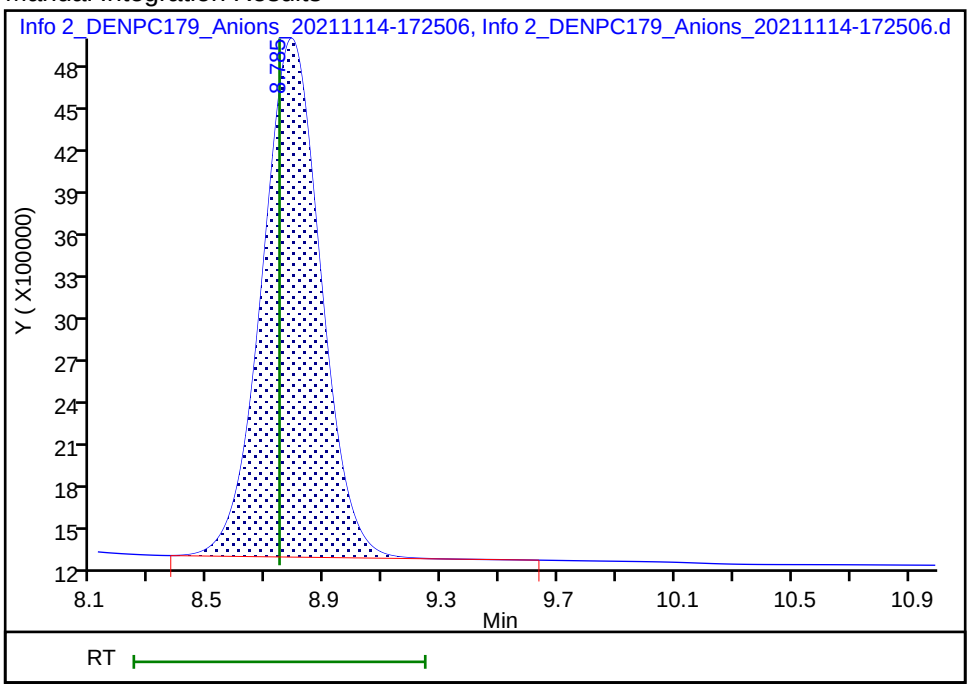
Processing Integration Results

RT: 8.79
Area: 55018657
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 8.79
Area: 51712422
Amount: 4.843653
Amount Units: ug/ml



Reviewer: jindaratc, 14-Nov-2021 17:57:39
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-173
Lims ID: STD4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 14-Nov-2021 17:25:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106492-005
Misc. Info.: 280-0106492-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2021 15:00:12 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1639

First Level Reviewer: jindaratc Date: 14-Nov-2021 17:43:42

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.770	2.770	0.000	131821553	4.00	4.28	Ma
2 Chloride	3.828	3.828	0.000	897570285	60.0	59.3	M
3 Nitrite as N	4.450	4.450	0.000	145985760	NC	NC	M
4 Bromide	5.498	5.498	0.000	24352756	4.00	3.77	
5 Nitrate as N	6.207	6.207	0.000	153138478	NC	NC	
6 Orthophosphate as P	7.698	7.698	0.000	66323295	NC	NC	M
7 Sulfate	8.757	8.757	0.000	666739209	60.0	59.7	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

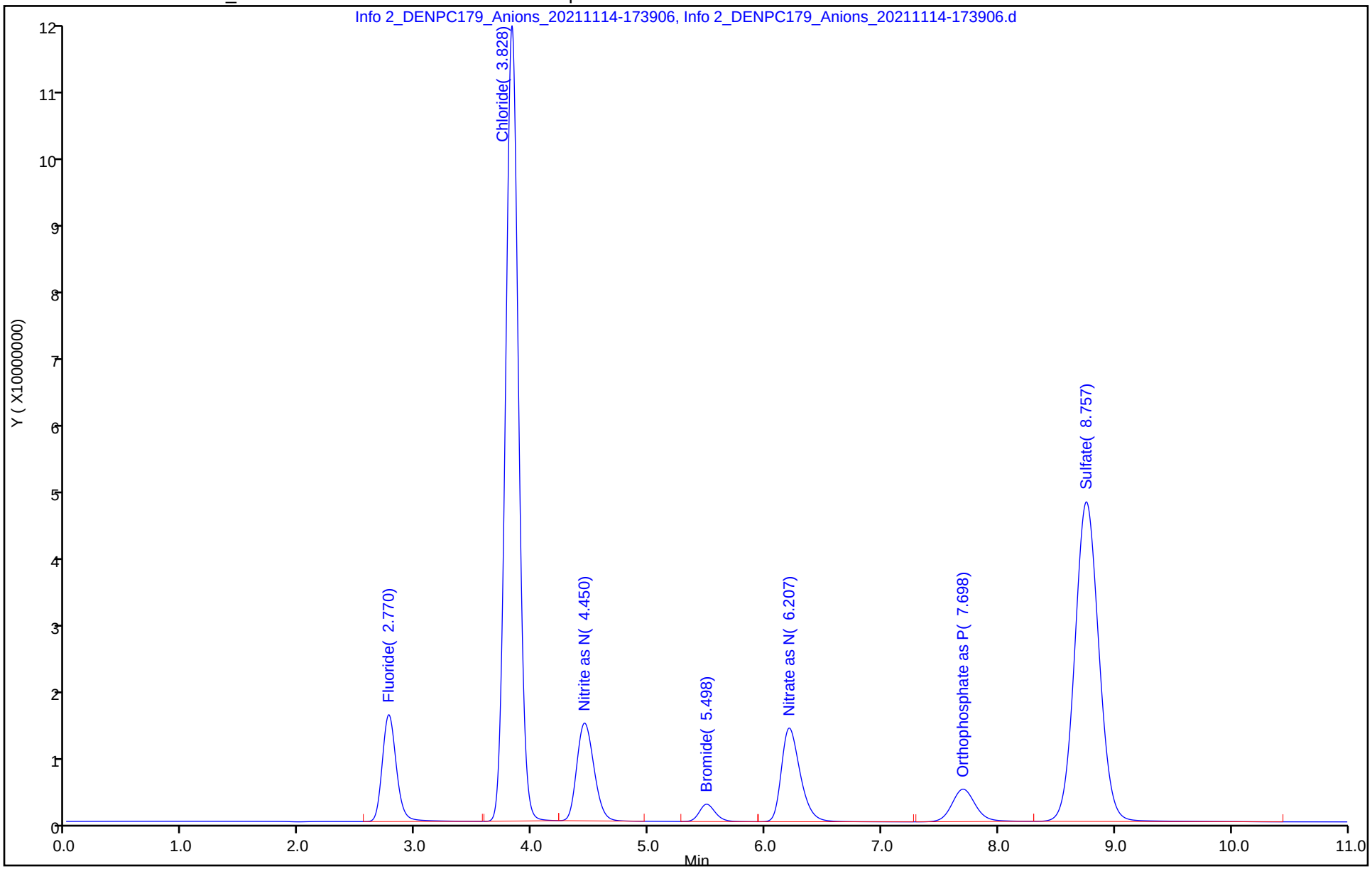
IC Cal low_00607 Amount Added: 0.80 Units: mL
IC CAL cl/so4_00393 Amount Added: 2.40 Units: mL

Report Date: 15-Nov-2021 15:00:12 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-173906.d

Injection Date:	14-Nov-2021 17:25:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD4			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

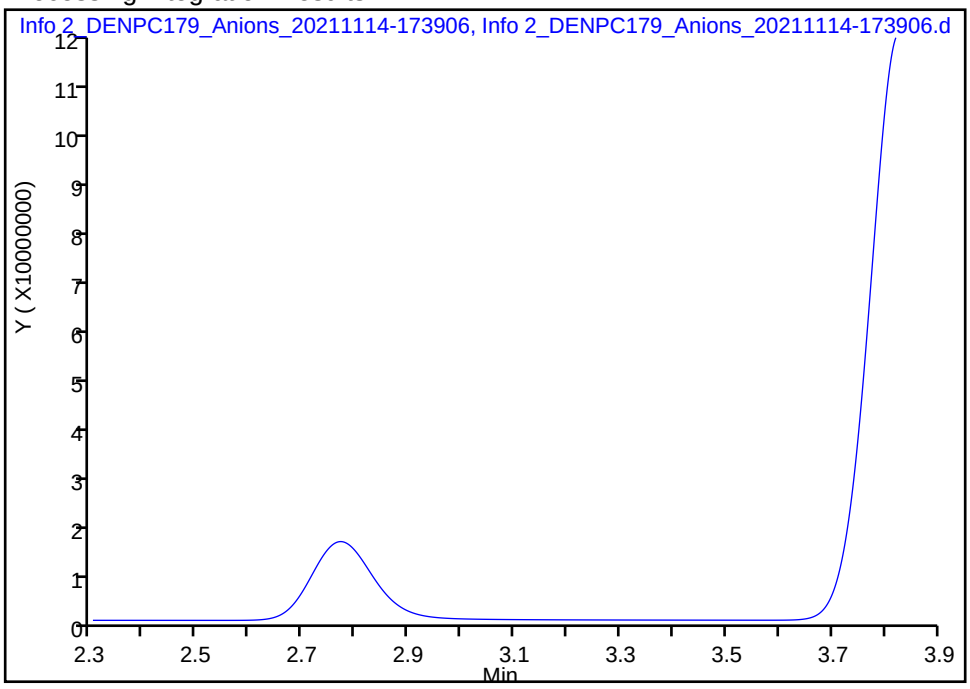
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-173
Injection Date: 14-Nov-2021 17:25:00 Instrument ID: WC_IonChrom10
Lims ID: STD4
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

1 Fluoride, CAS: 16984-48-8

Signal: 1

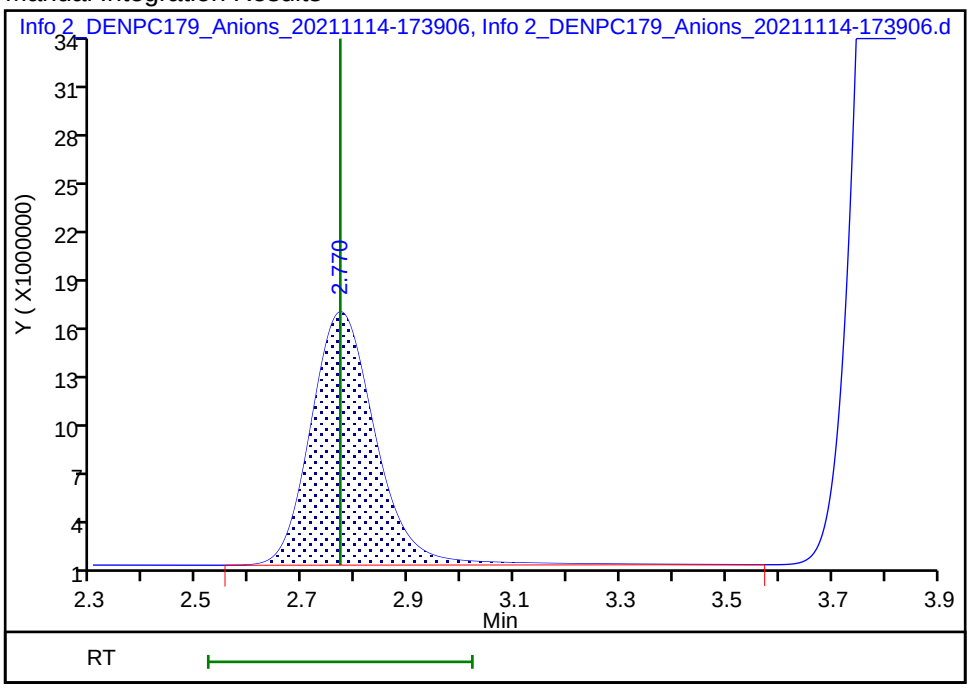
Not Detected
Expected RT: 2.77

Processing Integration Results



Manual Integration Results

RT: 2.77
Area: 131821553
Amount: 4.281163
Amount Units: ug/ml



Reviewer: jindaratc, 14-Nov-2021 17:43:06
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

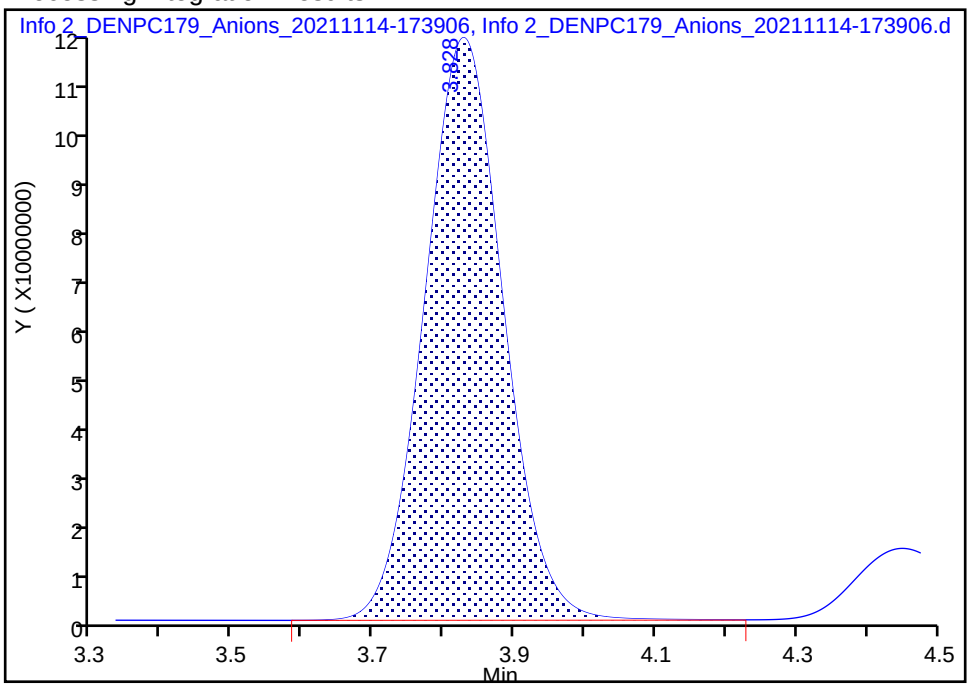
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-173
Injection Date: 14-Nov-2021 17:25:00 Instrument ID: WC_IonChrom10
Lims ID: STD4
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

2 Chloride, CAS: 16887-00-6

Signal: 1

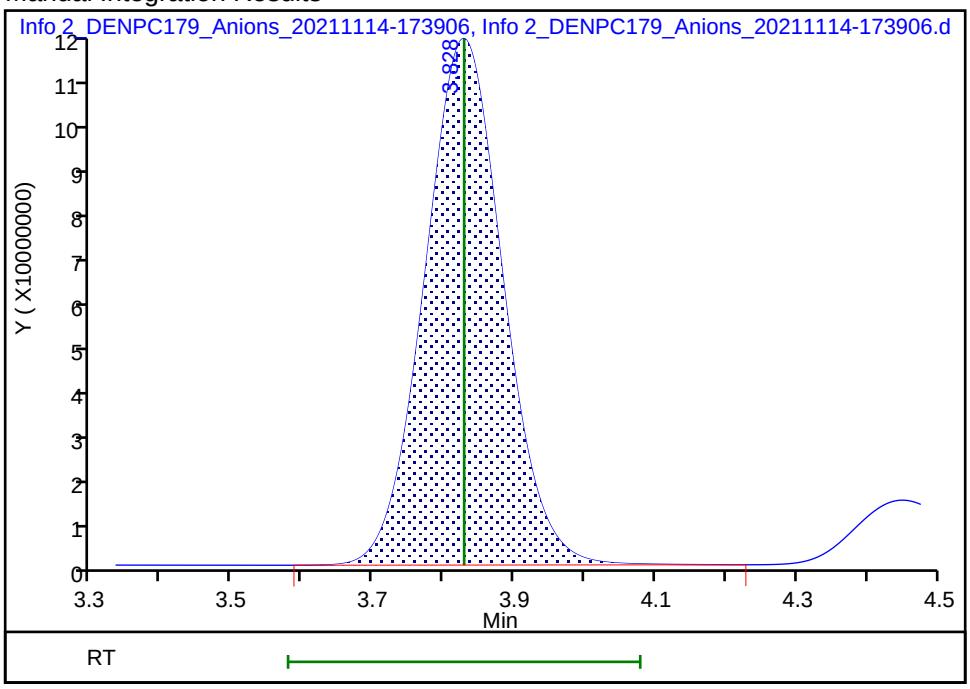
Processing Integration Results

RT: 3.83
Area: 898611985
Amount: 60.000920
Amount Units: ug/ml



Manual Integration Results

RT: 3.83
Area: 897570285
Amount: 59.325823
Amount Units: ug/ml



Reviewer: jindaratc, 14-Nov-2021 17:43:16
Audit Action: Manually Integrated Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-173

Injection Date: 14-Nov-2021 17:25:00 Instrument ID: WC_IonChrom10

Lims ID: STD4

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 5

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

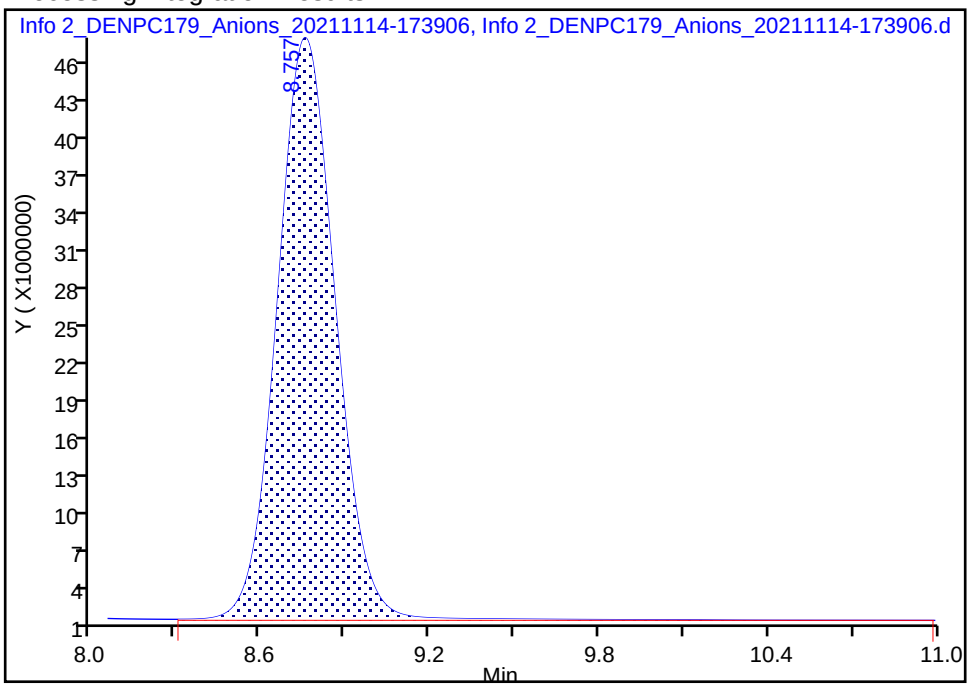
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

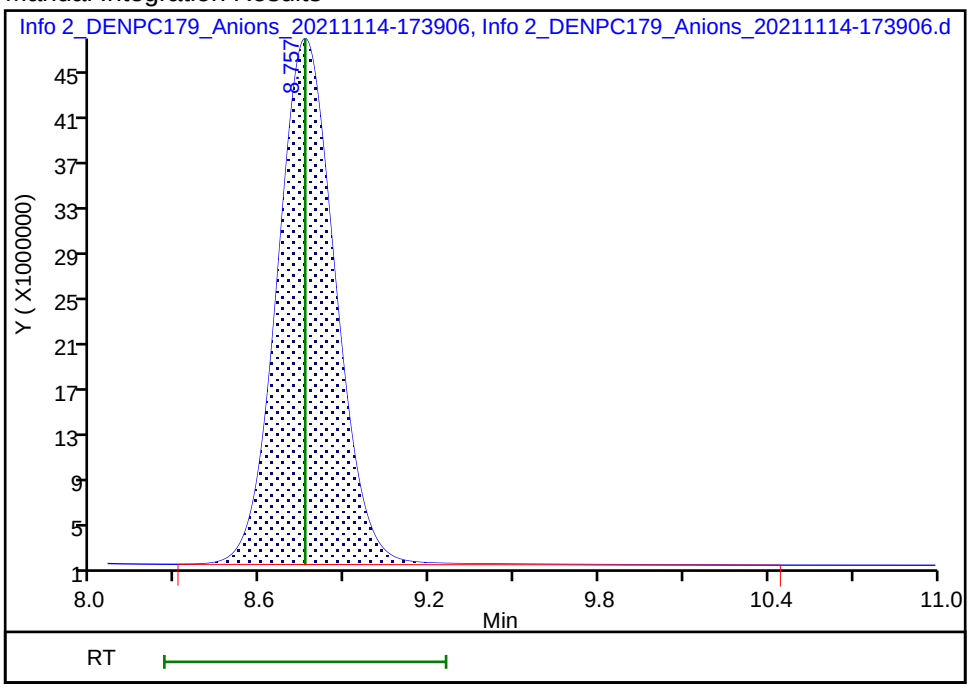
Processing Integration Results

RT: 8.76
Area: 672202819
Amount: 59.975363
Amount Units: ug/ml



Manual Integration Results

RT: 8.76
Area: 666739209
Amount: 59.654523
Amount Units: ug/ml



Reviewer: jindaratc, 14-Nov-2021 17:43:37

Audit Action: Manually Integrated Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-175
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 14-Nov-2021 17:39:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106492-006
Misc. Info.: 280-0106492-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2021 15:00:12 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1639

First Level Reviewer: jindaratc Date: 14-Nov-2021 17:57:01

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.773	2.773	0.000	241856951	8.00	7.91	Ma
2 Chloride	3.850	3.850	0.000	1822628329	120.0	120.3	Ma
3 Nitrite as N	4.440	4.440	0.000	289035241	NC	NC	M
4 Bromide	5.487	5.487	0.000	52627722	8.00	8.07	
5 Nitrate as N	6.175	6.175	0.000	316207513	NC	NC	
6 Orthophosphate as P	7.683	7.683	0.000	133628582	NC	NC	M
7 Sulfate	8.727	8.727	0.000	1352130342	120.0	120.7	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

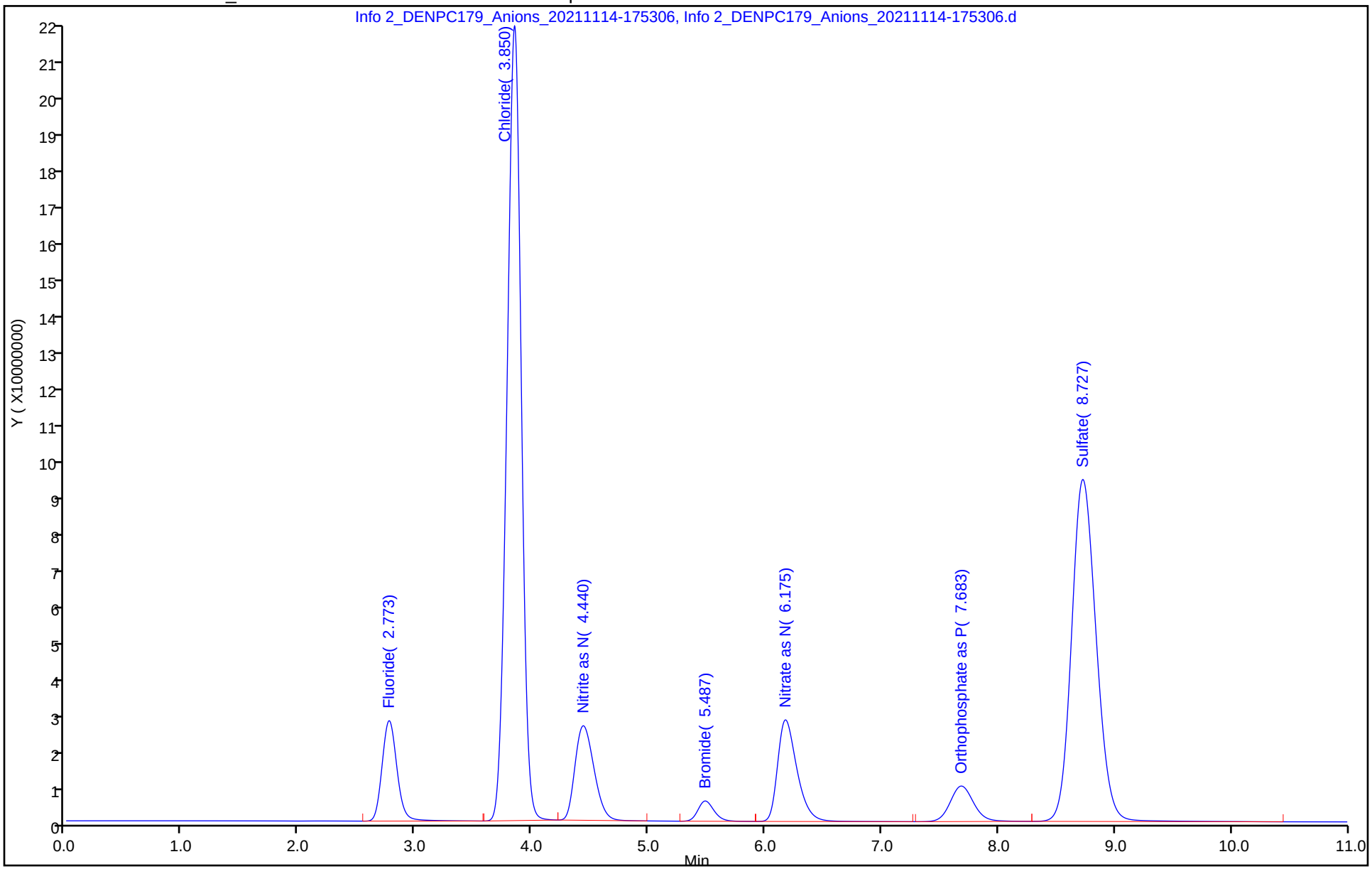
Reagents:

IC Cal low_00607 Amount Added: 1.60 Units: mL
IC CAL cl/so4_00393 Amount Added: 4.80 Units: mL

Report Date: 15-Nov-2021 15:00:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-175306.d				
Injection Date:	14-Nov-2021 17:39:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD5			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

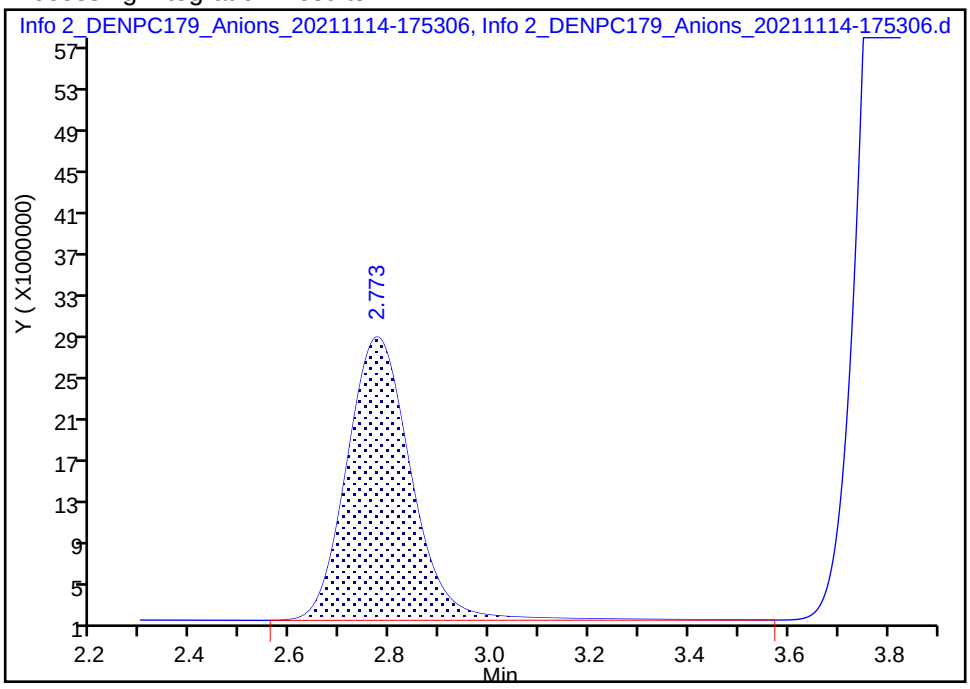
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-175				
Injection Date:	14-Nov-2021 17:39:00	Instrument ID:	WC_IonChrom10		
Lims ID:	STD5				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	6
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		
Column:		Detector	Info 2_091554_1		

1 Fluoride, CAS: 16984-48-8

Signal: 1

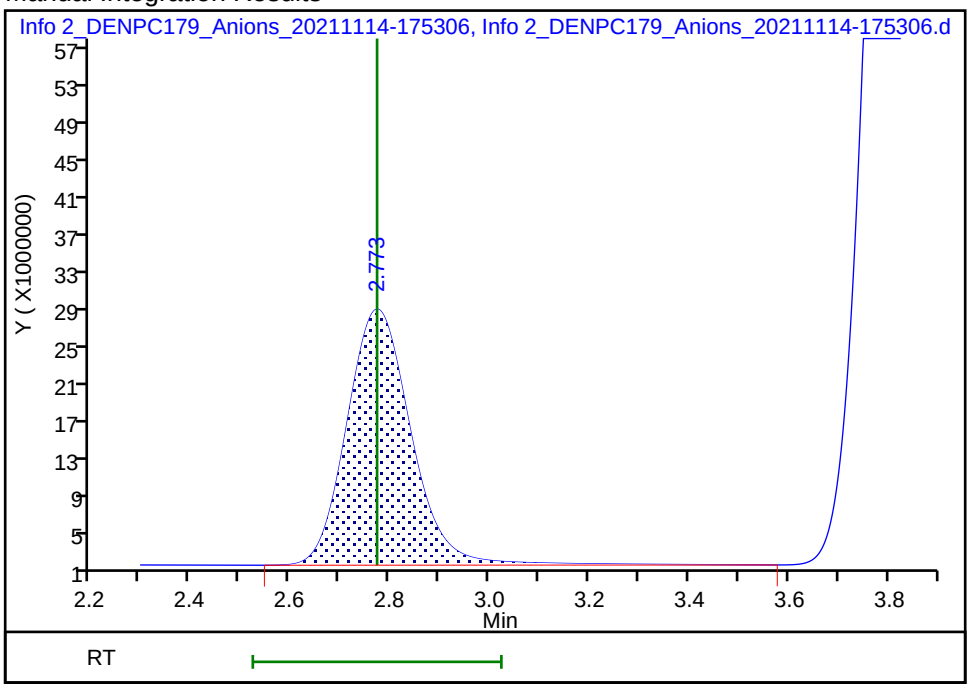
Processing Integration Results

RT: 2.77
Area: 241914194
Amount: 7.702899
Amount Units: ug/ml



Manual Integration Results

RT: 2.77
Area: 241856951
Amount: 7.907004
Amount Units: ug/ml



Reviewer: jindaratc, 14-Nov-2021 17:56:42

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

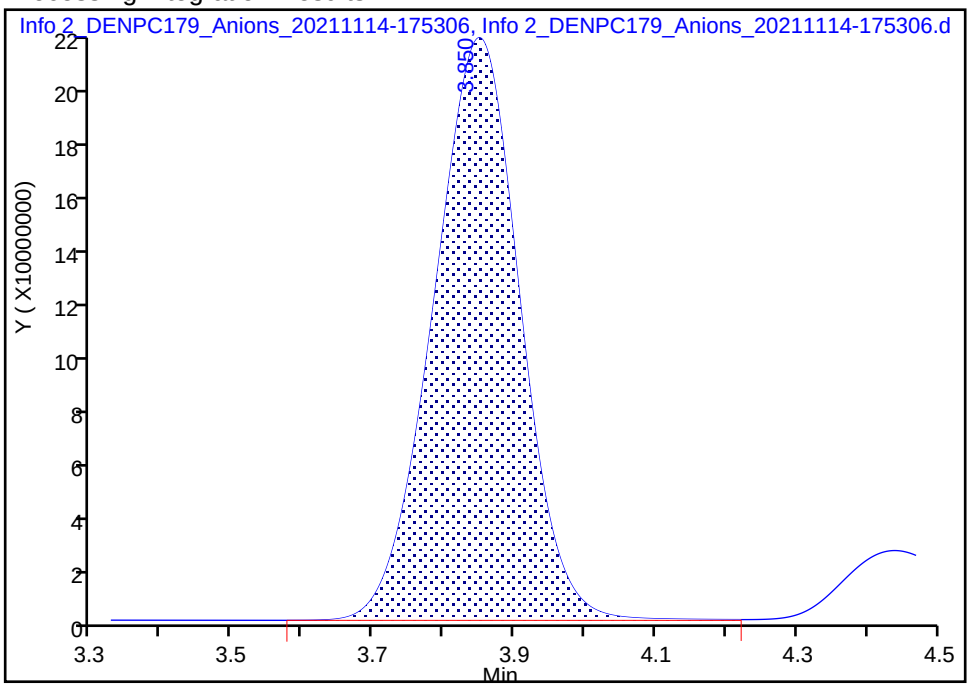
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-175
Injection Date: 14-Nov-2021 17:39:00 Instrument ID: WC_IonChrom10
Lims ID: STD5
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

2 Chloride, CAS: 16887-00-6

Signal: 1

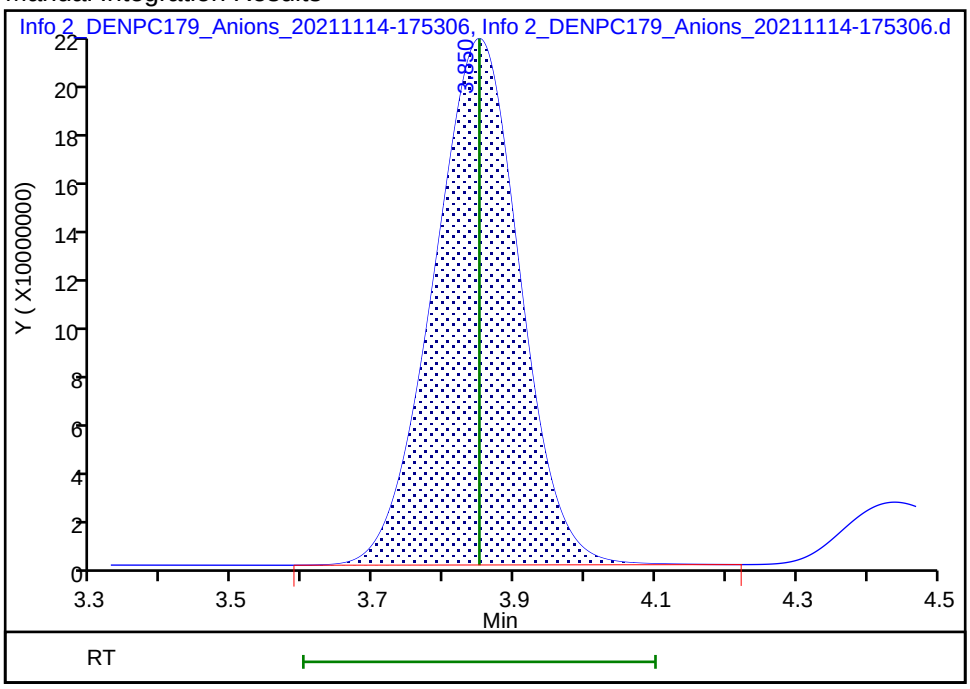
Processing Integration Results

RT: 3.85
Area: 1828199074
Amount: 120.6856
Amount Units: ug/ml



Manual Integration Results

RT: 3.85
Area: 1822628329
Amount: 120.2987
Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 07:53:58
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

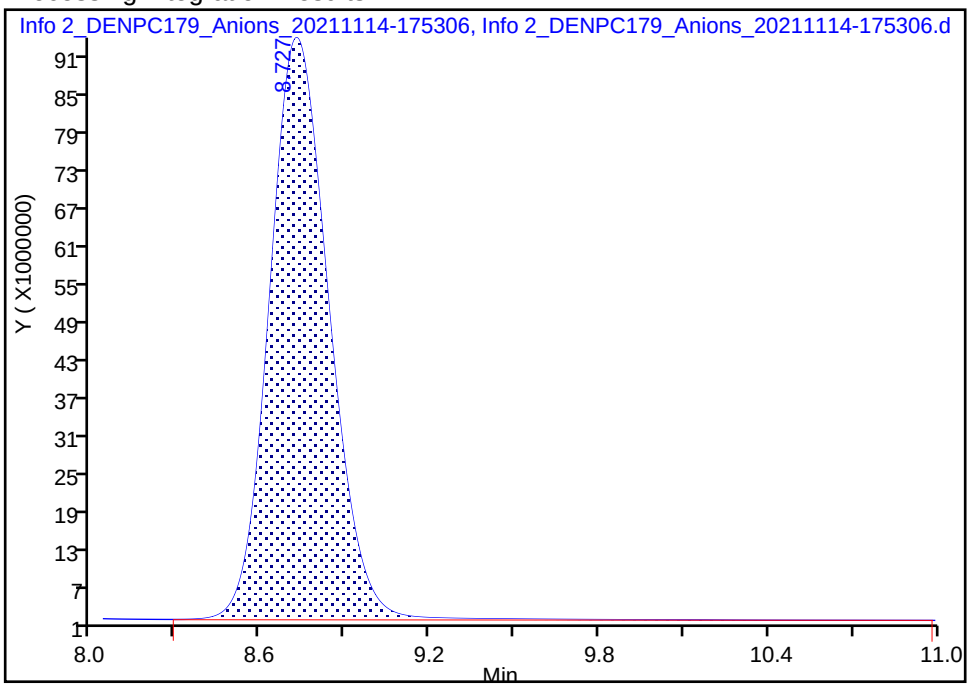
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-175
Injection Date: 14-Nov-2021 17:39:00 Instrument ID: WC_IonChrom10
Lims ID: STD5
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

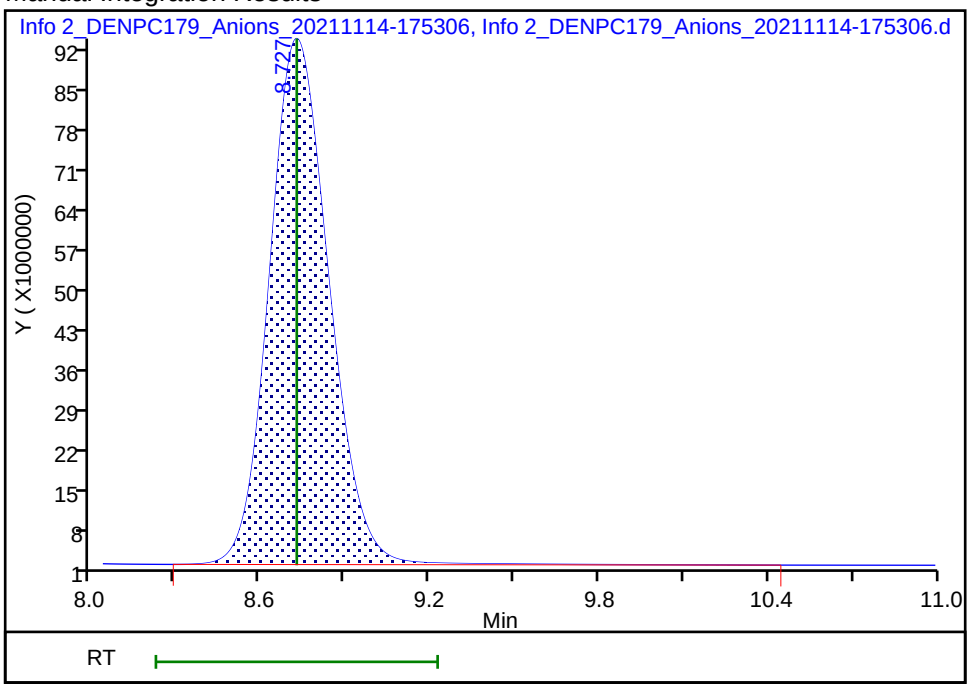
Processing Integration Results

RT: 8.73
Area: 1355132256
Amount: 120.7938
Amount Units: ug/ml



Manual Integration Results

RT: 8.73
Area: 1352130342
Amount: 120.7362
Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 07:53:45
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 14-Nov-2021 17:53:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106492-007
Misc. Info.: 280-0106492-007
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2021 15:00:13 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1639

First Level Reviewer: gonzalezsp Date: 15-Nov-2021 07:55:05

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.772	2.773	-0.001	295594338	10.0	9.68	Ma
2 Chloride	3.878	3.850	0.028	3037802265	200.0	200.4	M
3 Nitrite as N	4.435	4.440	-0.005	358262688	NC	NC	M
4 Bromide	5.482	5.487	-0.005	66758391	10.0	10.2	
5 Nitrate as N	6.163	6.175	-0.012	398758825	NC	NC	
6 Orthophosphate as P	7.672	7.683	-0.011	167342390	NC	NC	M
7 Sulfate	8.693	8.727	-0.034	2238847753	200.0	199.8	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

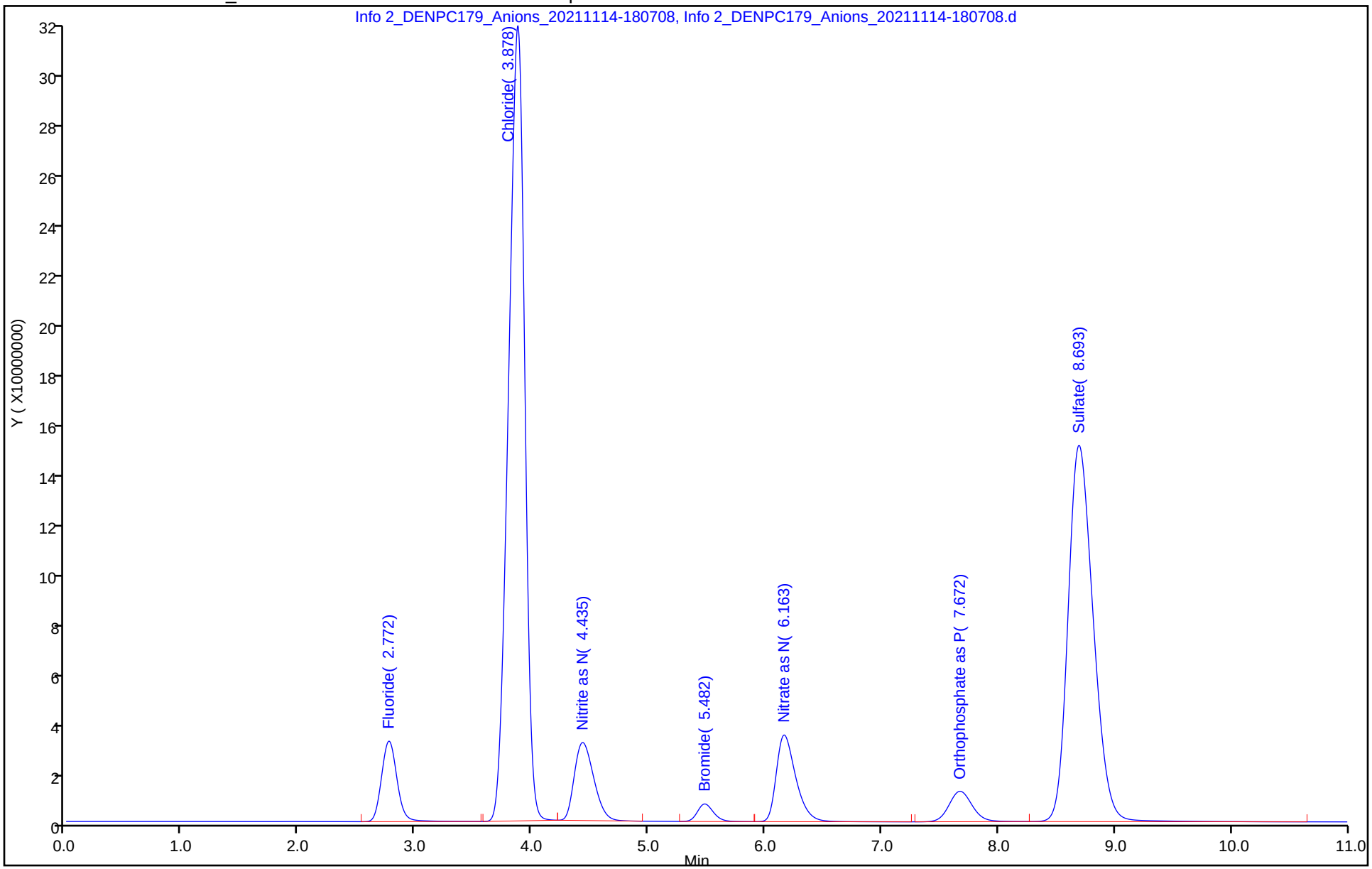
IC Cal low_00607 Amount Added: 2.00 Units: mL
IC CAL cl/so4_00393 Amount Added: 8.00 Units: mL

Report Date: 15-Nov-2021 15:00:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180708.d

Injection Date:	14-Nov-2021 17:53:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	STD6			Worklist Smp#:	7
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Injection Date: 14-Nov-2021 17:53:00 Instrument ID: WC_IonChrom10

Lims ID: STD6

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 7

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

Column: Detector Info 2_091554_1

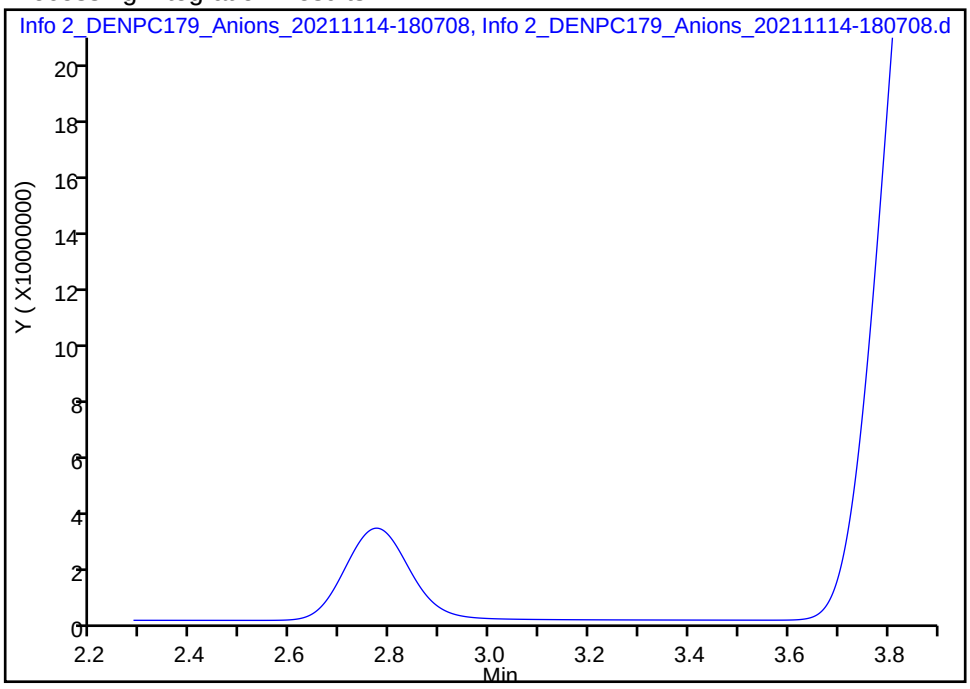
1 Fluoride, CAS: 16984-48-8

Signal: 1

Not Detected

Expected RT: 2.77

Processing Integration Results



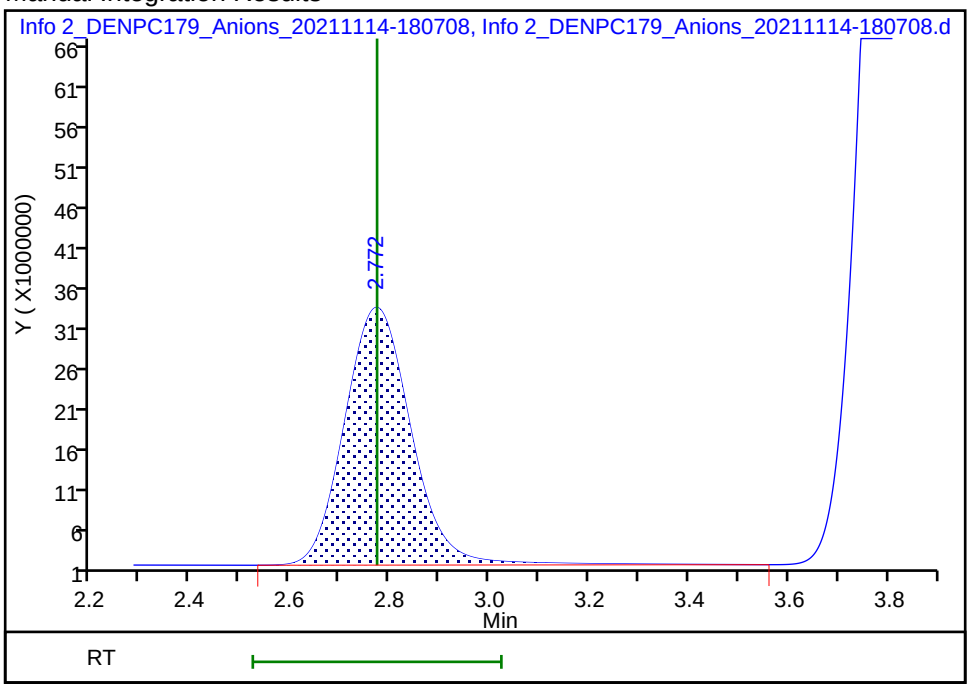
Manual Integration Results

RT: 2.77

Area: 295594338

Amount: 9.677737

Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 07:54:27

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Injection Date: 14-Nov-2021 17:53:00 Instrument ID: WC_IonChrom10

Lims ID: STD6

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 7

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

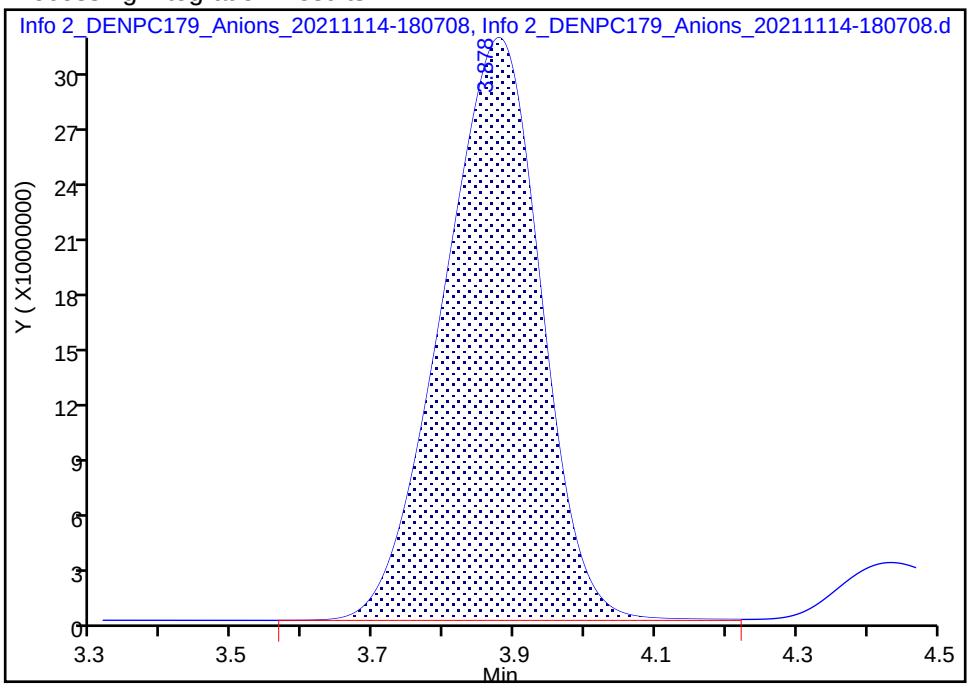
Column: Detector Info 2_091554_1

2 Chloride, CAS: 16887-00-6

Signal: 1

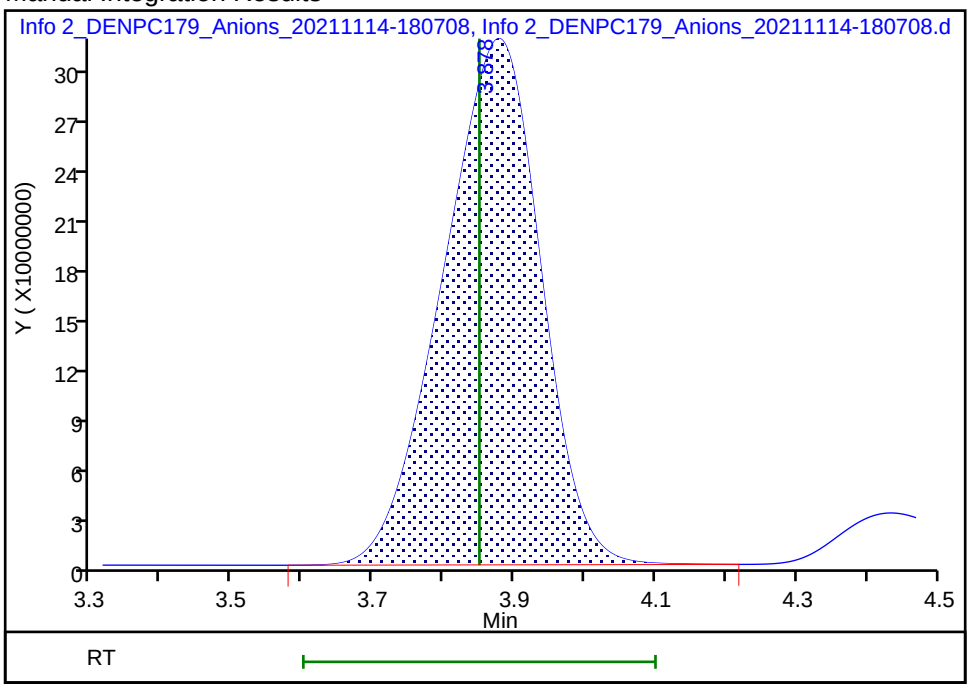
Processing Integration Results

RT: 3.88
Area: 3047604774
Amount: 200.6970
Amount Units: ug/ml



Manual Integration Results

RT: 3.88
Area: 3037802265
Amount: 200.3938
Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 07:54:39

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Injection Date: 14-Nov-2021 17:53:00 Instrument ID: WC_IonChrom10

Lims ID: STD6

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 7

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

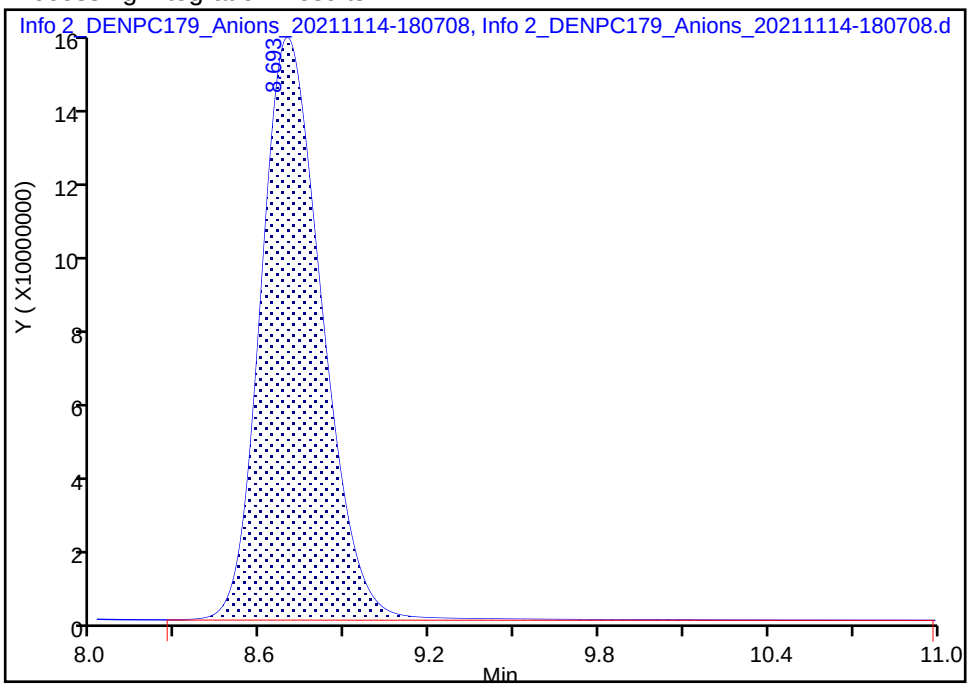
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

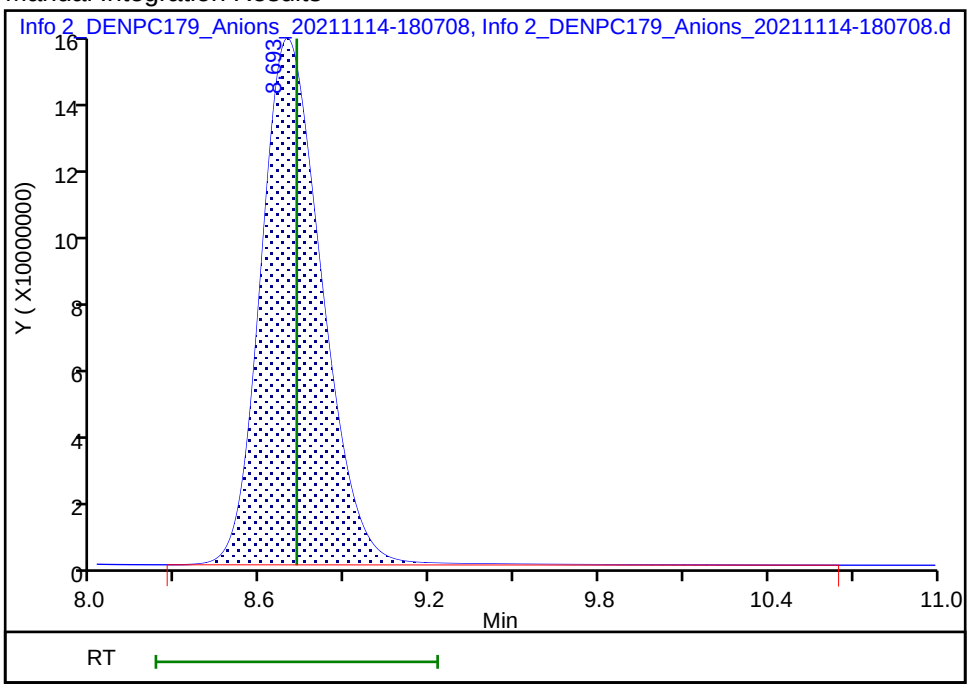
Processing Integration Results

RT: 8.69
Area: 2243317526
Amount: 199.9492
Amount Units: ug/ml



Manual Integration Results

RT: 8.69
Area: 2238847753
Amount: 199.7600
Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 07:54:58

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

IC Instrument Information

WL: 100492 **Inst ID:** IC10 **Analysis Date:** 11/15/21 **Analyst:** SM

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	154500	1	F (Cl) NO2 Br NO3 PO4 SO4	MS/D #3	
☐	154517	2	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	154587	2	F (Cl) NO2 Br NO3 PO4 SO4	MS/D	
☐	154946	2	F (Cl) NO2 Br NO3 PO4 SO4	MS/D	
☐	154952	1	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	155037	2	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	154485	4	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	154487	3	(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
1052	#2	F Cl NO2 Br NO3 PO4 (SO4)	5X	Over range
1057	2	(F) Cl NO2 Br NO3 PO4 SO4	5X	coverage
		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		

IC Instrument Information

WL: 100492 **Inst ID:** ICIO **Analysis Date:** 11/15/21 **Analyst:** SB7

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	154500	1	F (Cl) NO2 Br NO3 PO4 SO4	MS/D #3	
☐	154517	2	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	154587	2	F (Cl) NO2 Br NO3 PO4 SO4	MS/D	
☐	154946	2	F (Cl) NO2 Br NO3 PO4 SO4	MS/D	
☐	154652	1	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	155037	2	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	154405	4	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	154487	3	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	154580	3	(F) (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	154472	4	(F) (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	154690	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	

Reviewed 11/15 SB

Dilutions

Job No.	Samples	Anions	Dilution	Reason
052	#2	F Cl NO2 Br NO3 PO4 (SO4)	5X	Over range
037	2	(F) Cl NO2 Br NO3 PO4 SO4	5X	coverage
580		F Cl NO2 Br NO3 PO4 SO4	10, 100X	Test/coverage.
472		F Cl NO2 Br NO3 PO4 SO4	20X	Hist/Coverage
690		F Cl NO2 Br NO3 PO4 SO4	20X	Test/Coverage.
		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_IonChrom10\20211114-106492.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 15-Nov-2021 14:59:33
No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b
Inj Date : 14-Nov-2021 16:43:00, Sublist: chrom-Anions_IC10*sub2

Detector 1: Info 2_091554_1

	Wet - Anions 28D				Wet - Anions			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride	1898768	3034754		0.997				
2 Chloride	-249919	1517163		1.000				
3 Nitrite as N					-111943	362066C		1.000
4 Bromide	-486344	6580842		0.999				
5 Nitrate as N					-242864	3971021		1.000
6 Orthophosphate as P					1806094	1644314		1.000
7 Sulfate	-263768	112208S		1.000				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 15-Nov-2021 14:59:33
No.Compounds:7
Sublist: chrom-Anions_IC10*sub2
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.933 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-16570
Inj Date: 14-Nov-2021 16:43:00 Worklist: 106492 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17110
Inj Date: 14-Nov-2021 16:57:00 Worklist: 106492 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17250
Inj Date: 14-Nov-2021 17:11:00 Worklist: 106492 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17390
Inj Date: 14-Nov-2021 17:25:00 Worklist: 106492 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17530
Inj Date: 14-Nov-2021 17:39:00 Worklist: 106492 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-18070
Inj Date: 14-Nov-2021 17:53:00 Worklist: 106492 Sample#: 7

Start Cal Date: 14-Nov-2021 16:43:00 End Cal Date: 14-Nov-2021 17:53:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
32145115	36715394	36569889	32955388	30232119	29559434	1898768			0.997
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		30347546		
M6429023	M18357697	M36569889	M131821553	M241856951	M295594338				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				
2 Chloride				Signal: 1					
12878743	14159066	14581209	14959505	15188569	15189011	-2499190			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		15171631		
M12878743	M35397665	M72906043	M897570285	M1822628329	M3037802265				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				
4 Bromide				Signal: 1					
4992085	5436214	5592493	6088189	6578465	6675839	-486344			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		6580842		
M998417	2718107	5592493	24352756	52627722	66758391				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				
7 Sulfate				Signal: 1					
9141707	9967422	10342484	11112320	11267753	11194239	-2637680			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		11220891		
M9141707	M24918556	M51712422	M666739209	M1352130342	M2238847753				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 15-Nov-2021 14:59:33
No.Compounds:7
Sublist: chrom-Anions_IC10*sub2
Limit Group: Wet - Anions

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.933 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-16570
Inj Date: 14-Nov-2021 16:43:00 Worklist: 106492 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17110
Inj Date: 14-Nov-2021 16:57:00 Worklist: 106492 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17250
Inj Date: 14-Nov-2021 17:11:00 Worklist: 106492 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17390
Inj Date: 14-Nov-2021 17:25:00 Worklist: 106492 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17530
Inj Date: 14-Nov-2021 17:39:00 Worklist: 106492 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-18070
Inj Date: 14-Nov-2021 17:53:00 Worklist: 106492 Sample#: 7

Start Cal Date: 14-Nov-2021 16:43:00 End Cal Date: 14-Nov-2021 17:53:00

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					
30414420	33744960	35140921	36496440	36129405	35826269	-1119437			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		36206607		
6082884	M16872480	M35140921	M145985760	M289035241	M358262688				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				
5 Nitrate as N				Signal: 1					
30753865	33867214	35371015	38284620	39525939	39875883	-2428643			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		39710214		
6150773	16933607	35371015	153138478	316207513	398758825				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				
6 Orthophosphate as P				Signal: 1					
25671820	20329074	17946003	16580824	16703573	16734239	1806094			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		16443148		
M5134364	M10164537	M17946003	M66323295	M133628582	M167342390				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-182
Lims ID: icb
Client ID:
Sample Type: ICB
Inject. Date: 14-Nov-2021 18:07:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106492-008
Misc. Info.: 280-0106492-008
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2021 15:21:58 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1639

First Level Reviewer: gonzalezsp Date: 15-Nov-2021 15:09:10

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.773	2.768	0.005	521063		-0.0454	Ma
2 Chloride		3.837				ND	
3 Nitrite as N		4.447				ND	
4 Bromide		5.498				ND	
5 Nitrate as N		6.208				ND	
6 Orthophosphate as P	7.748	7.693	0.055	2482874		NC	M
7 Sulfate	8.797	8.742	0.055	158280		0.2492	M

QC Flag Legend

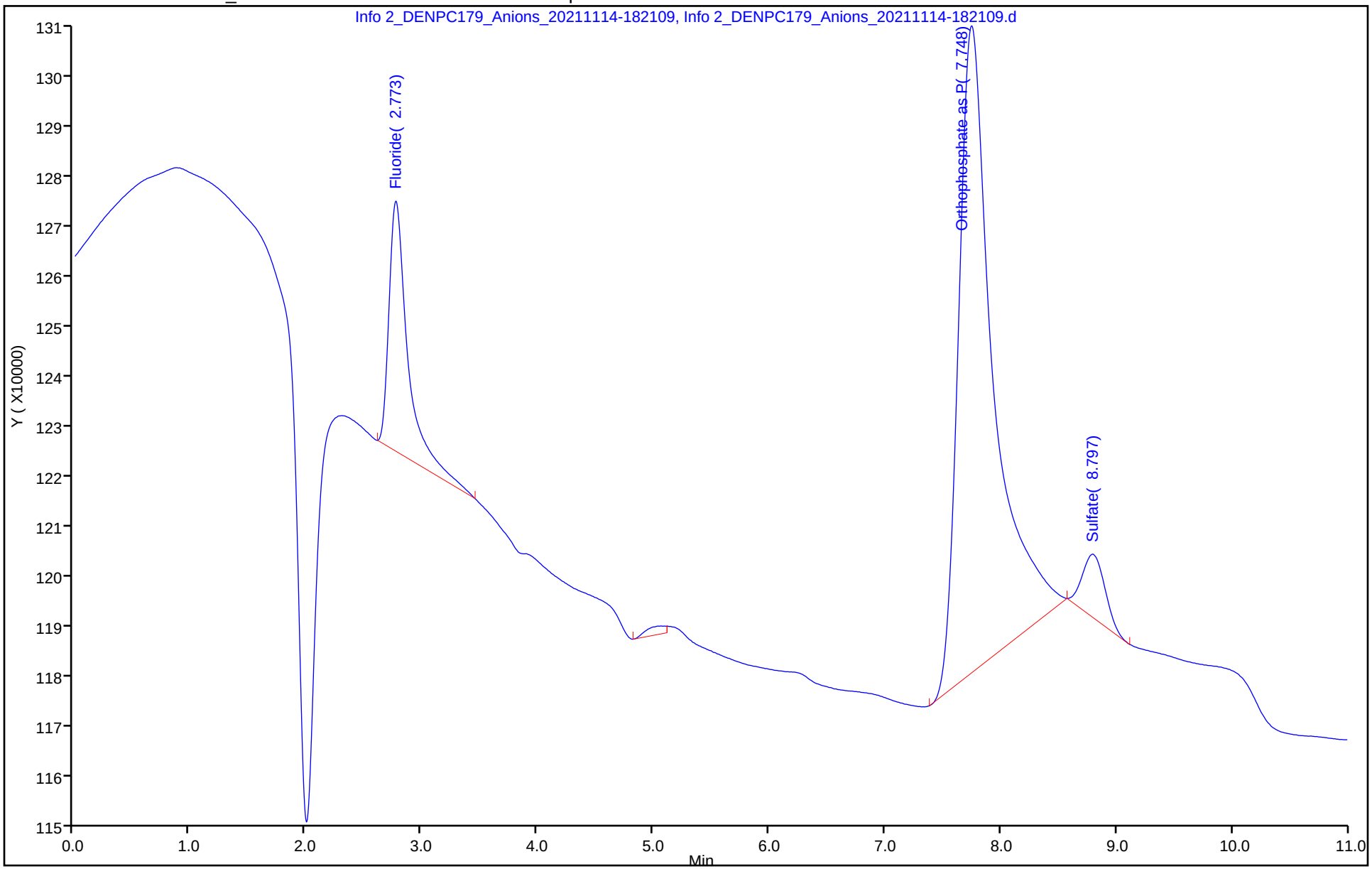
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 15-Nov-2021 15:22:09 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-182109.d

Injection Date:	14-Nov-2021 18:07:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	icb			Worklist Smp#:	8
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

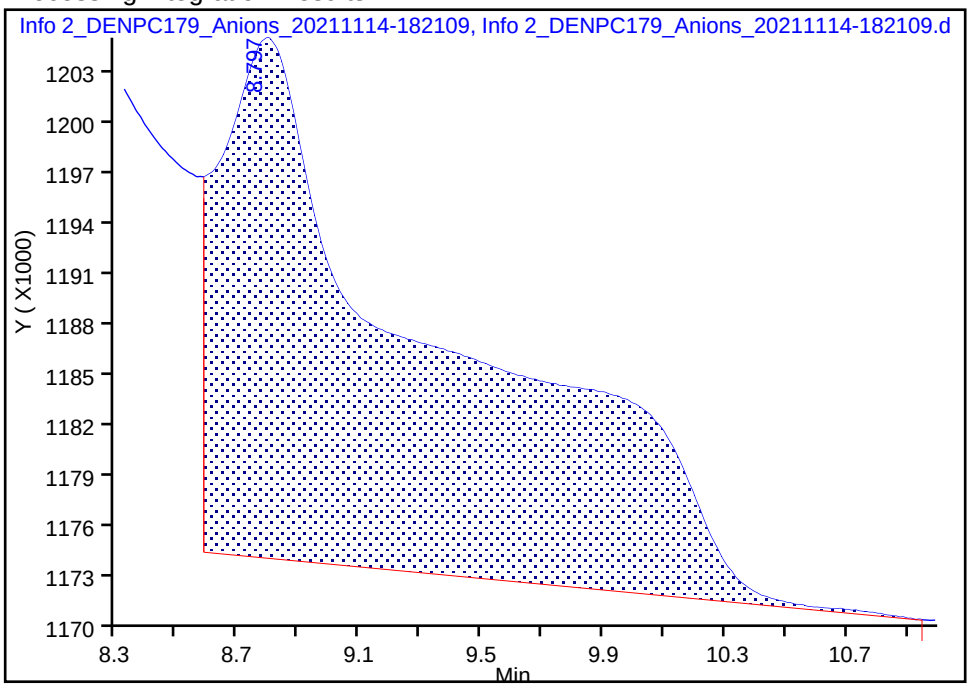
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-182
Injection Date: 14-Nov-2021 18:07:00 Instrument ID: WC_IonChrom10
Lims ID: icb
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

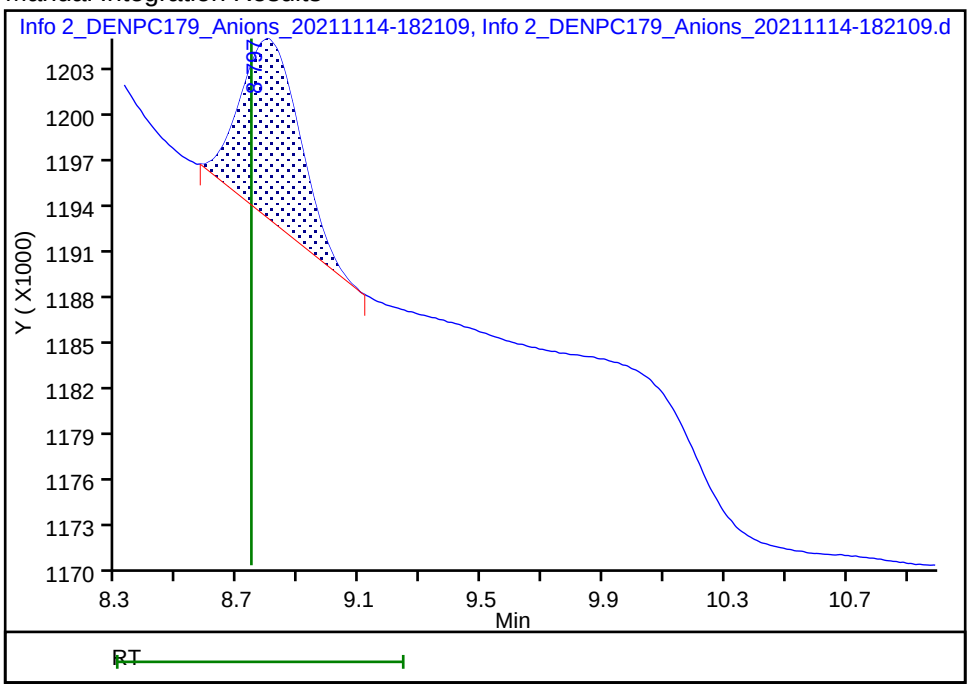
Processing Integration Results

RT: 8.80
Area: 1546406
Amount: 0.372884
Amount Units: ug/ml



Manual Integration Results

RT: 8.80
Area: 158280
Amount: 0.249175
Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 15:09:05
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-183
Lims ID: icv
Client ID:
Sample Type: ICV
Inject. Date: 14-Nov-2021 18:21:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106492-009
Misc. Info.: 280-0106492-009
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 15-Nov-2021 15:22:10 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1639

First Level Reviewer: gonzalezsp Date: 15-Nov-2021 07:56:17

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.768	2.768	0.000	130028484	4.00	4.22	Ma
2 Chloride	3.837	3.837	0.000	1251876792	80.0	82.7	M
3 Nitrite as N	4.447	4.447	0.000	144158207	NC	NC	M
4 Bromide	5.498	5.498	0.000	24890719	4.00	3.86	
5 Nitrate as N	6.208	6.208	0.000	155524483	NC	NC	
6 Orthophosphate as P	7.693	7.693	0.000	65200836	NC	NC	M
7 Sulfate	8.742	8.742	0.000	939382506	80.0	84.0	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

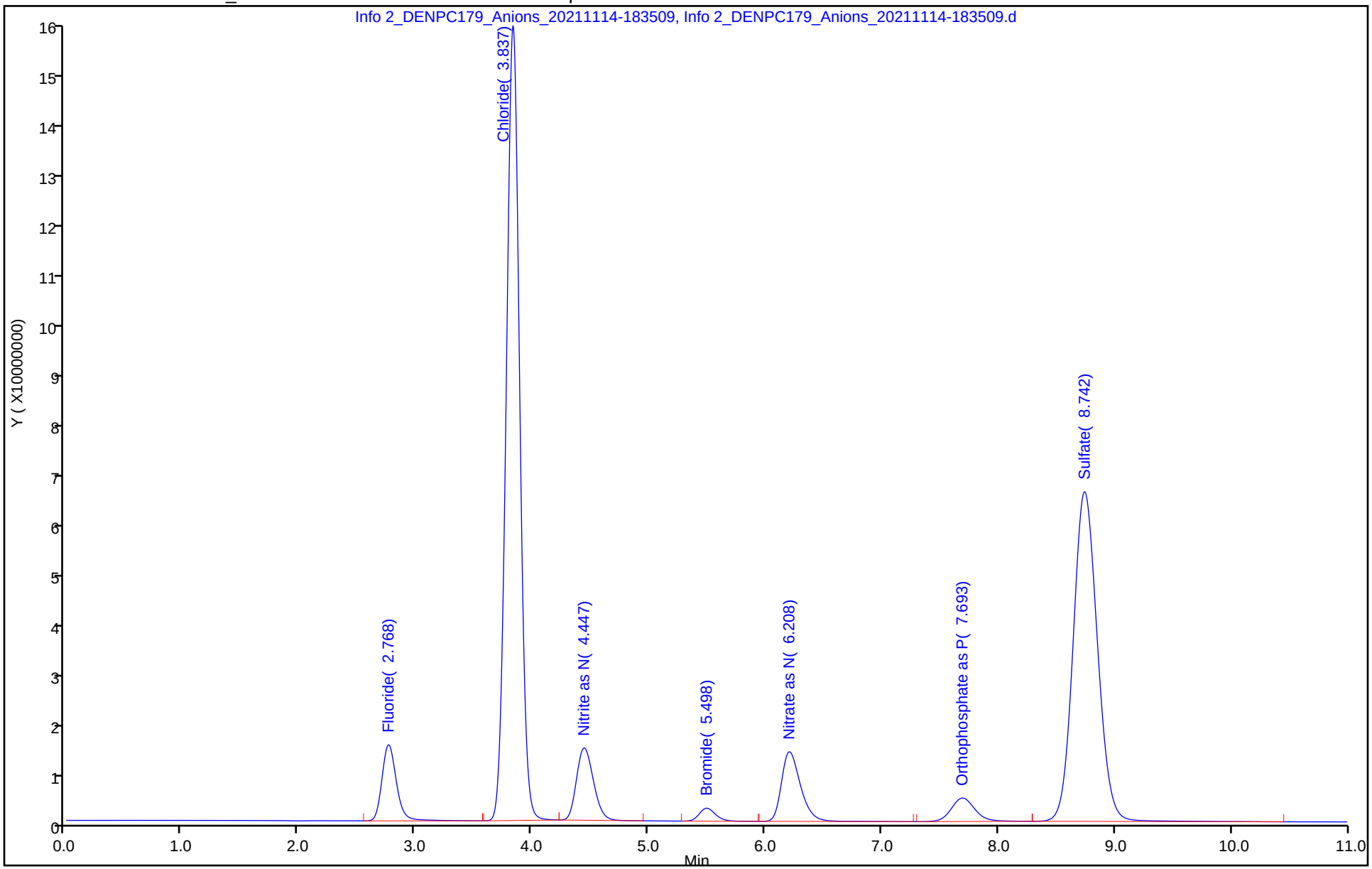
Reagents:

IC SO4 ICV_00022	Amount Added:	0.80	Units: mL
Cl ICV Std_00002	Amount Added:	0.80	Units: mL
IC ICV 5_00341	Amount Added:	0.80	Units: mL

Report Date: 15-Nov-2021 15:22:10 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-183509.d				
Injection Date:	14-Nov-2021 18:21:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	icv			Worklist Smp#:	9
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

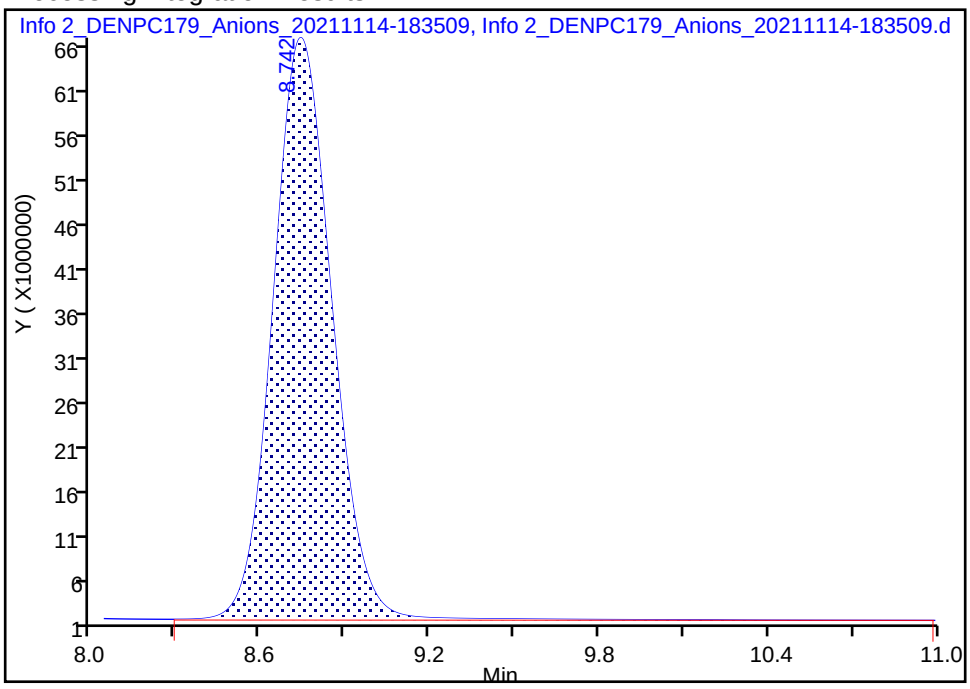
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-183				
Injection Date:	14-Nov-2021 18:21:00	Instrument ID:	WC_IonChrom10		
Lims ID:	icv				
Client ID:					
Operator ID:	wetchemd	ALS Bottle#:	0	Worklist Smp#:	9
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		
Column:		Detector	Info 2_091554_1		

7 Sulfate, CAS: 14808-79-8

Signal: 1

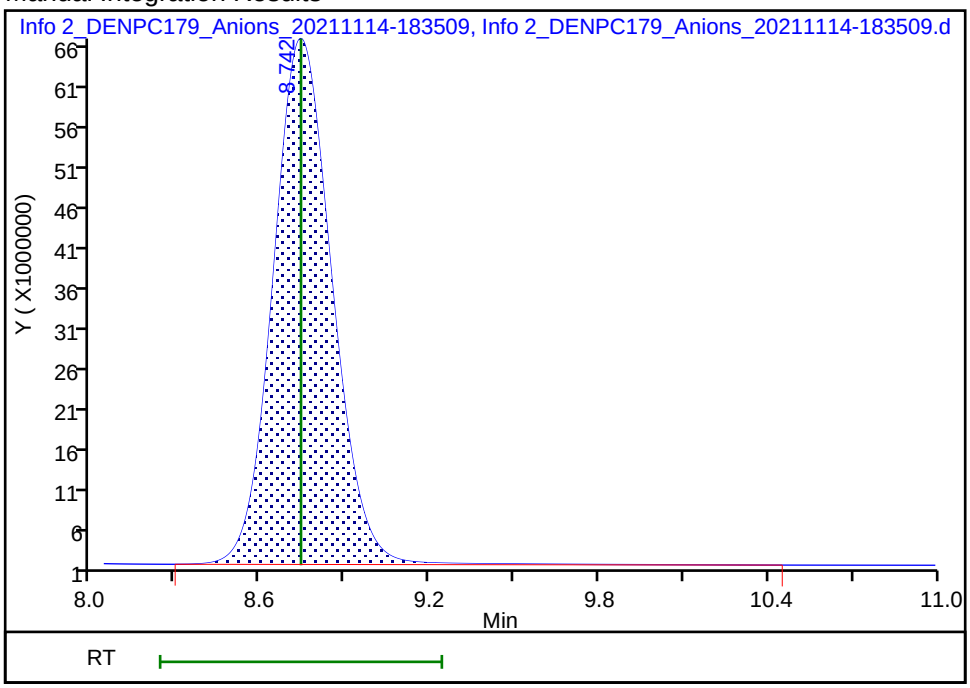
Processing Integration Results

RT: 8.74
Area: 945411149
Amount: 84.489582
Amount Units: ug/ml



Manual Integration Results

RT: 8.74
Area: 939382506
Amount: 83.952353
Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 07:56:02

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

IC Instrument Information

WL: 106682 **Inst ID:** ICIO **Analysis Date:** 11/20/21 **Analyst:** JF

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	155364	1	(F) Cl NO2 Br NO3 PO4 SO4	(MS/D)	
☐	154974	2	(F) (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	155138	10	F Cl NO2 Br NO3 PO4 (SO4)	(MS/D)	
☐	155949	1	(F) (Cl) (NO2) (Br) (NO3) PO4 (SO4)	MS/D	
☐	155104	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	105	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	106	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	107	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	108	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	109	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	110	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	111	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	112	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	113	1	F Cl NO2 Br NO3 PO4 SO4	MS/D	
	114	1			

Dilutions

Job No.	Samples	Anions	Dilution	Reason
974	2	(F) Cl NO2 Br NO3 PO4 (SO4)	1/5	Test
155104 – 155114	11	(F) (Cl) NO2 Br NO3 PO4 (SO4)	1, 10, 20	History
		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_IonChrom10\20211114-106492.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 15-Nov-2021 14:59:33
No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b
Inj Date : 14-Nov-2021 16:43:00, Sublist: chrom-Anions_IC10*sub2

Detector 1: Info 2_091554_1

	Wet - Anions 28D				Wet - Anions			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride	1898768	3034754		0.997				
2 Chloride	-249919	1517163		1.000				
3 Nitrite as N					-111943	362066C		1.000
4 Bromide	-486344	6580842		0.999				
5 Nitrate as N					-242864	3971021		1.000
6 Orthophosphate as P					1806094	1644314		1.000
7 Sulfate	-263768	112208S		1.000				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 15-Nov-2021 14:59:33
No.Compounds:7
Sublist: chrom-Anions_IC10*sub2
Limit Group: Wet - Anions 28D

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.933 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-16570
Inj Date: 14-Nov-2021 16:43:00 Worklist: 106492 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17110
Inj Date: 14-Nov-2021 16:57:00 Worklist: 106492 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17250
Inj Date: 14-Nov-2021 17:11:00 Worklist: 106492 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17390
Inj Date: 14-Nov-2021 17:25:00 Worklist: 106492 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17530
Inj Date: 14-Nov-2021 17:39:00 Worklist: 106492 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-18070
Inj Date: 14-Nov-2021 17:53:00 Worklist: 106492 Sample#: 7

Start Cal Date: 14-Nov-2021 16:43:00 End Cal Date: 14-Nov-2021 17:53:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: raw_COD Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
32145115	36715394	36569889	32955388	30232119	29559434	1898768			0.997
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		30347546		
M6429023	M18357697	M36569889	M131821553	M241856951	M295594338				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				
2 Chloride				Signal: 1					
12878743	14159066	14581209	14959505	15188569	15189011	-2499190			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		15171631		
M12878743	M35397665	M72906043	M897570285	M1822628329	M3037802265				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				
4 Bromide				Signal: 1					
4992085	5436214	5592493	6088189	6578465	6675839	-486344			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		6580842		
M998417	2718107	5592493	24352756	52627722	66758391				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				
7 Sulfate				Signal: 1					
9141707	9967422	10342484	11112320	11267753	11194239	-2637680			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		11220891		
M9141707	M24918556	M51712422	M666739209	M1352130342	M2238847753				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Anions_IC10.m
Instrument: WC_IonChrom10 Lims Location: 280
Lock State: Unlocked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 15-Nov-2021 14:59:33
No.Compounds:7
Sublist: chrom-Anions_IC10*sub2
Limit Group: Wet - Anions

Detectors

Detector: 1, Info 2_091554_1
Data Type: ic Spec Type: none
Supports Extracted Chromatograms: False
Run Time: 0.000-13.933 No. Points: 7196

Calibration File Names

Level: 1 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-16570
Inj Date: 14-Nov-2021 16:43:00 Worklist: 106492 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17110
Inj Date: 14-Nov-2021 16:57:00 Worklist: 106492 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17250
Inj Date: 14-Nov-2021 17:11:00 Worklist: 106492 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17390
Inj Date: 14-Nov-2021 17:25:00 Worklist: 106492 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-17530
Inj Date: 14-Nov-2021 17:39:00 Worklist: 106492 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-18070
Inj Date: 14-Nov-2021 17:53:00 Worklist: 106492 Sample#: 7

Start Cal Date: 14-Nov-2021 16:43:00 End Cal Date: 14-Nov-2021 17:53:00

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						
30414420	33744960	35140921	36496440	36129405	35826269	-1119437			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		36206607		
6082884	M16872480	M35140921	M145985760	M289035241	M358262688				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				
5 Nitrate as N			Signal: 1						
30753865	33867214	35371015	38284620	39525939	39875883	-2428643			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		39710214		
6150773	16933607	35371015	153138478	316207513	398758825				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				
6 Orthophosphate as P			Signal: 1						
25671820	20329074	17946003	16580824	16703573	16734239	1806094			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		16443148		
M5134364	M10164537	M17946003	M66323295	M133628582	M167342390				
106492(2)	106492(3)	106492(4)	106492(5)	106492(6)	106492(7)				

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-113
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 20-Nov-2021 11:19:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-001
Misc. Info.: 280-0106682-001
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:24 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

First Level Reviewer: foleyj Date: 20-Nov-2021 12:37:42

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.758	2.758	0.000	143090010	5.00	4.65	Ma
2 Chloride	3.815	3.815	0.000	1508522069	100.0	99.6	M
3 Nitrite as N	4.400	4.400	0.000	174543478	NC	NC	M
4 Bromide	5.422	5.422	0.000	30829589	5.00	4.76	M
5 Nitrate as N	6.107	6.107	0.000	190351969	NC	NC	
6 Orthophosphate as P	7.592	7.592	0.000	80853205	NC	NC	M
7 Sulfate	8.610	8.610	0.000	1119647481	100.0	100.0	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

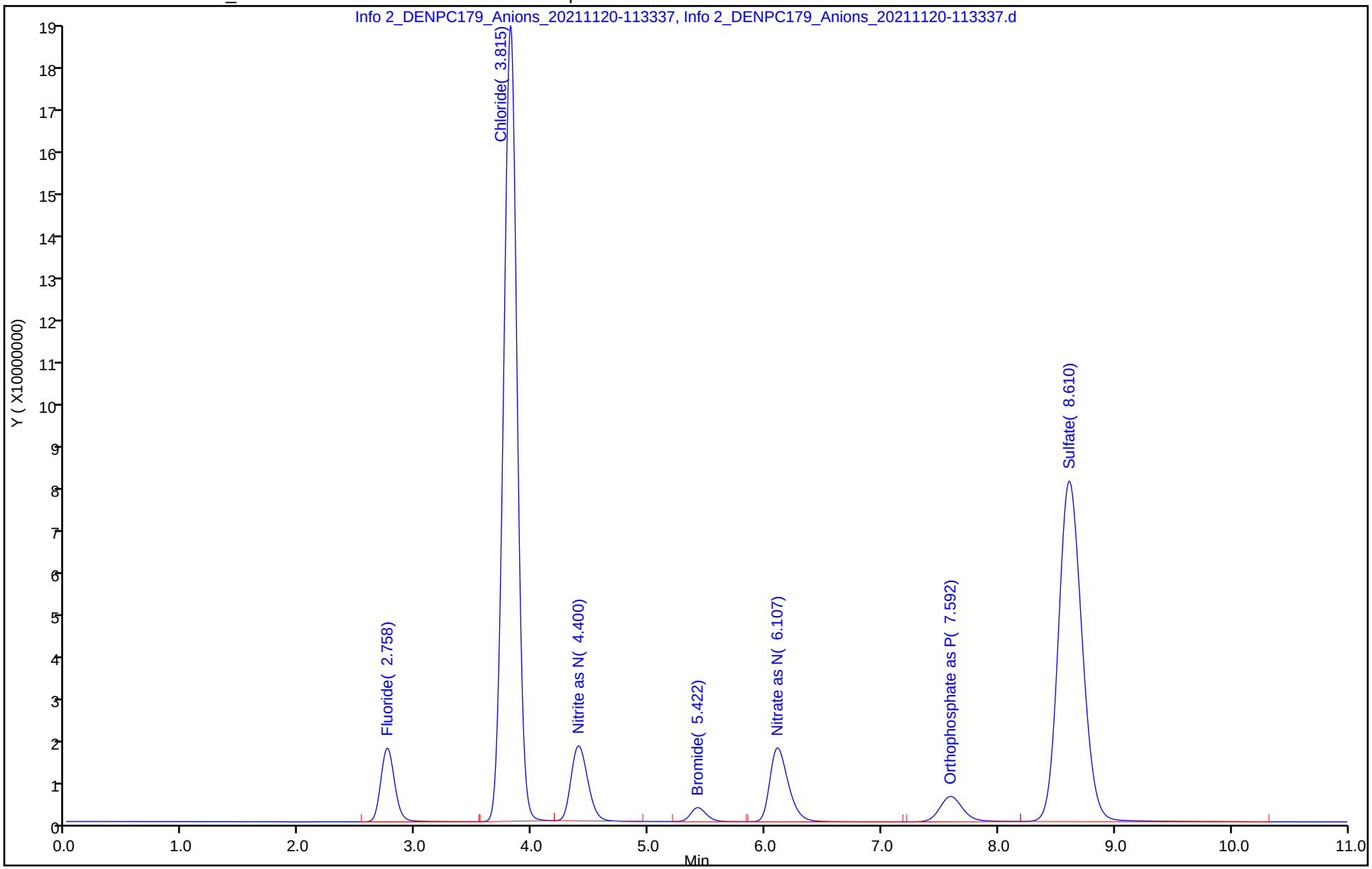
IC LCS_01845 Amount Added: 10.00 Units: mL

Report Date: 22-Nov-2021 11:52:24 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-113337.d

Injection Date:	20-Nov-2021 11:19:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	CCV			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

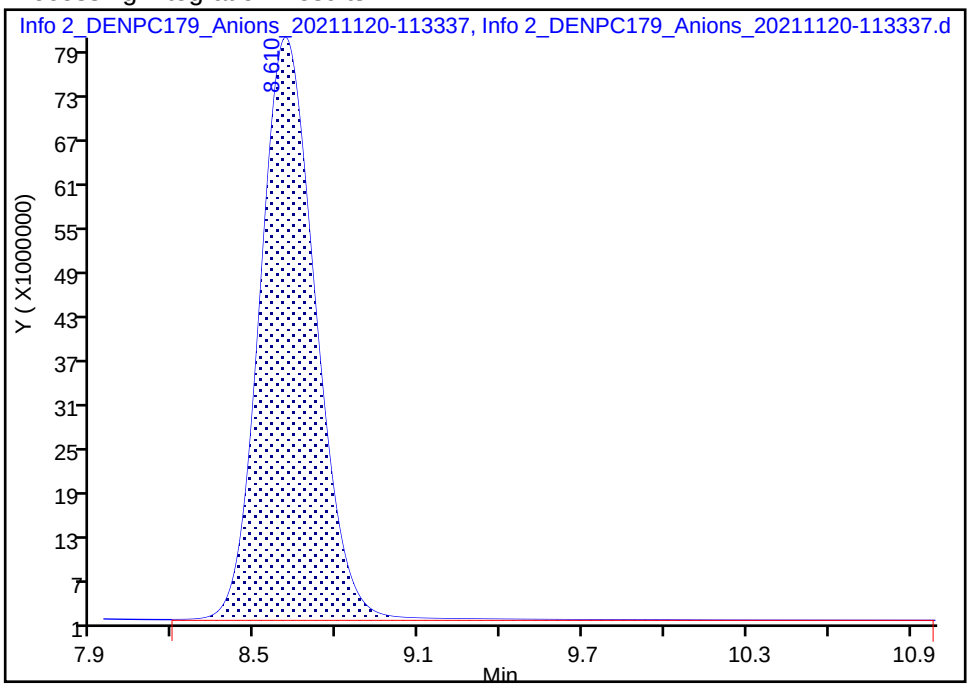
Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-113
Injection Date: 20-Nov-2021 11:19:00 Instrument ID: WC_IonChrom10
Lims ID: CCV
Client ID:
Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: Anions_IC10 Limit Group: Wet - Anions 28D
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

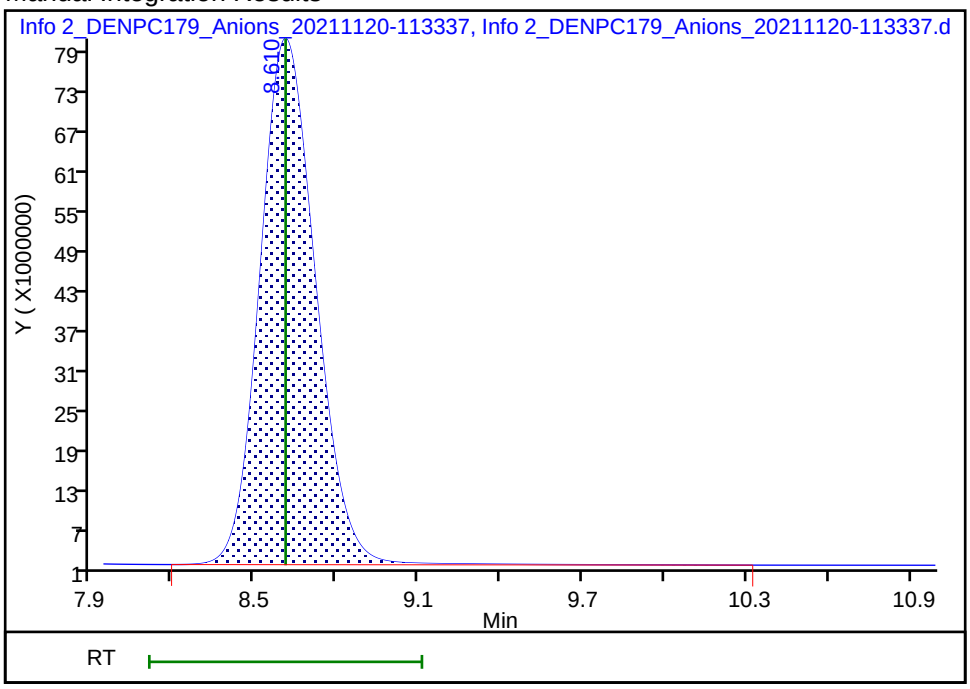
Processing Integration Results

RT: 8.61
Area: 1127339991
Amount: 100.7030
Amount Units: ug/ml



Manual Integration Results

RT: 8.61
Area: 1119647481
Amount: 100.0175
Amount Units: ug/ml



Reviewer: jindaratc, 22-Nov-2021 11:22:08
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-114
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 20-Nov-2021 11:33:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-002
Misc. Info.: 280-0106682-002
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:24 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

First Level Reviewer: jindaratc Date: 22-Nov-2021 11:22:25

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.735	2.758	-0.023	78876		-0.0600	Ma
2 Chloride		3.815				ND	
3 Nitrite as N		4.400				ND	
4 Bromide		5.422				ND	
5 Nitrate as N	6.202	6.107	0.095	59575		NC	M
6 Orthophosphate as P	7.647	7.592	0.055	2178688		NC	
7 Sulfate	8.675	8.610	0.065	1437402		0.3632	

QC Flag Legend

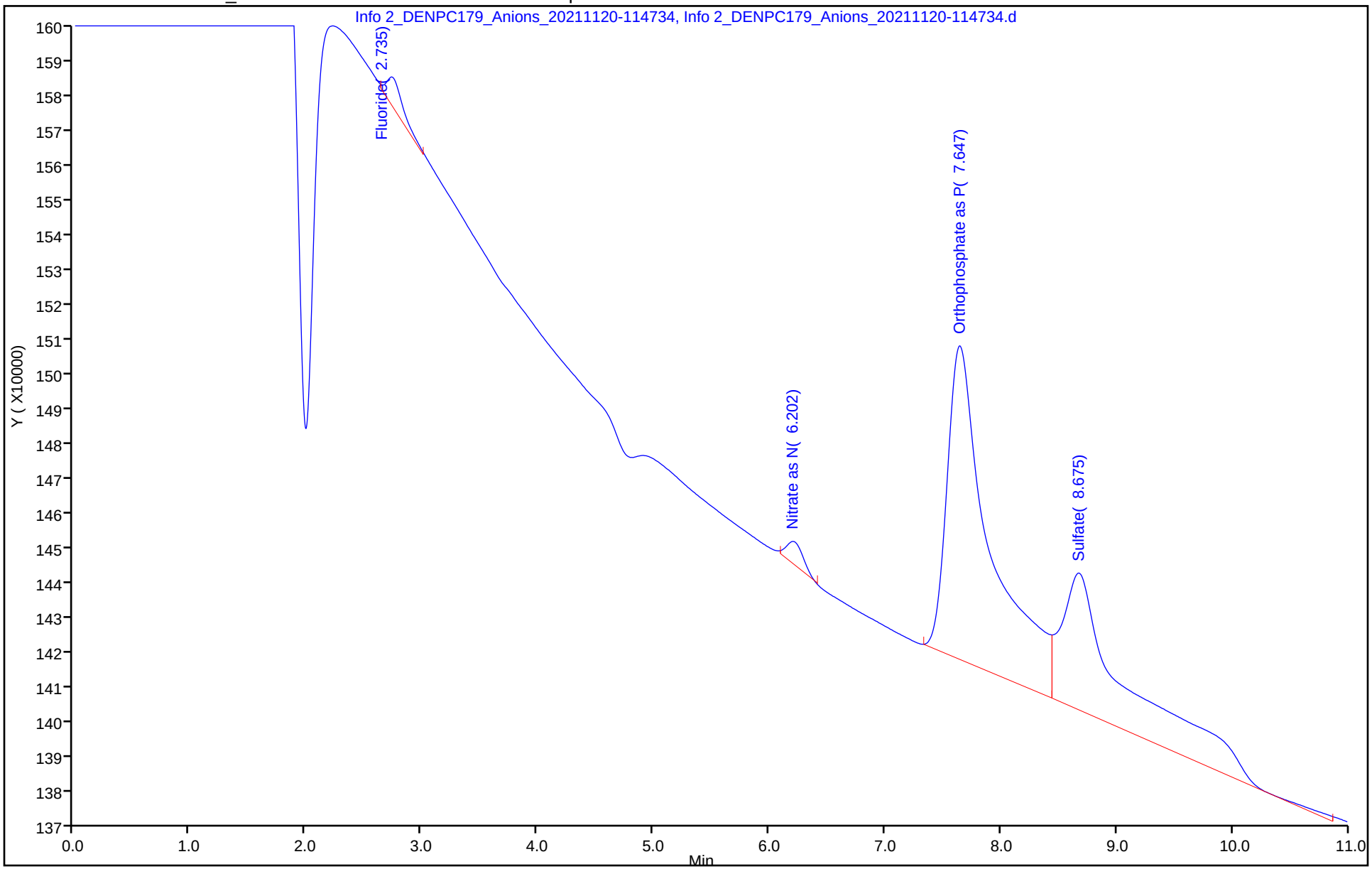
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 22-Nov-2021 11:52:25 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-114734.d

Injection Date:	20-Nov-2021 11:33:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	CCB			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-120
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 20-Nov-2021 11:47:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-003
Misc. Info.: 280-0106682-003
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:24 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

First Level Reviewer: jindaratc Date: 22-Nov-2021 11:22:38

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.755	2.758	-0.003	16856888	0.5000	0.4929	Ma
2 Chloride	3.782	3.815	-0.033	73039823	5.00	4.98	
3 Nitrite as N	4.410	4.400	0.010	17210774	NC	NC	
4 Bromide	5.438	5.422	0.016	3015013	0.5000	0.5321	
5 Nitrate as N	6.168	6.107	0.061	17763589	NC	NC	
6 Orthophosphate as P	7.628	7.592	0.036	11992888	NC	NC	
7 Sulfate	8.670	8.610	0.060	55174983	5.00	5.15	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

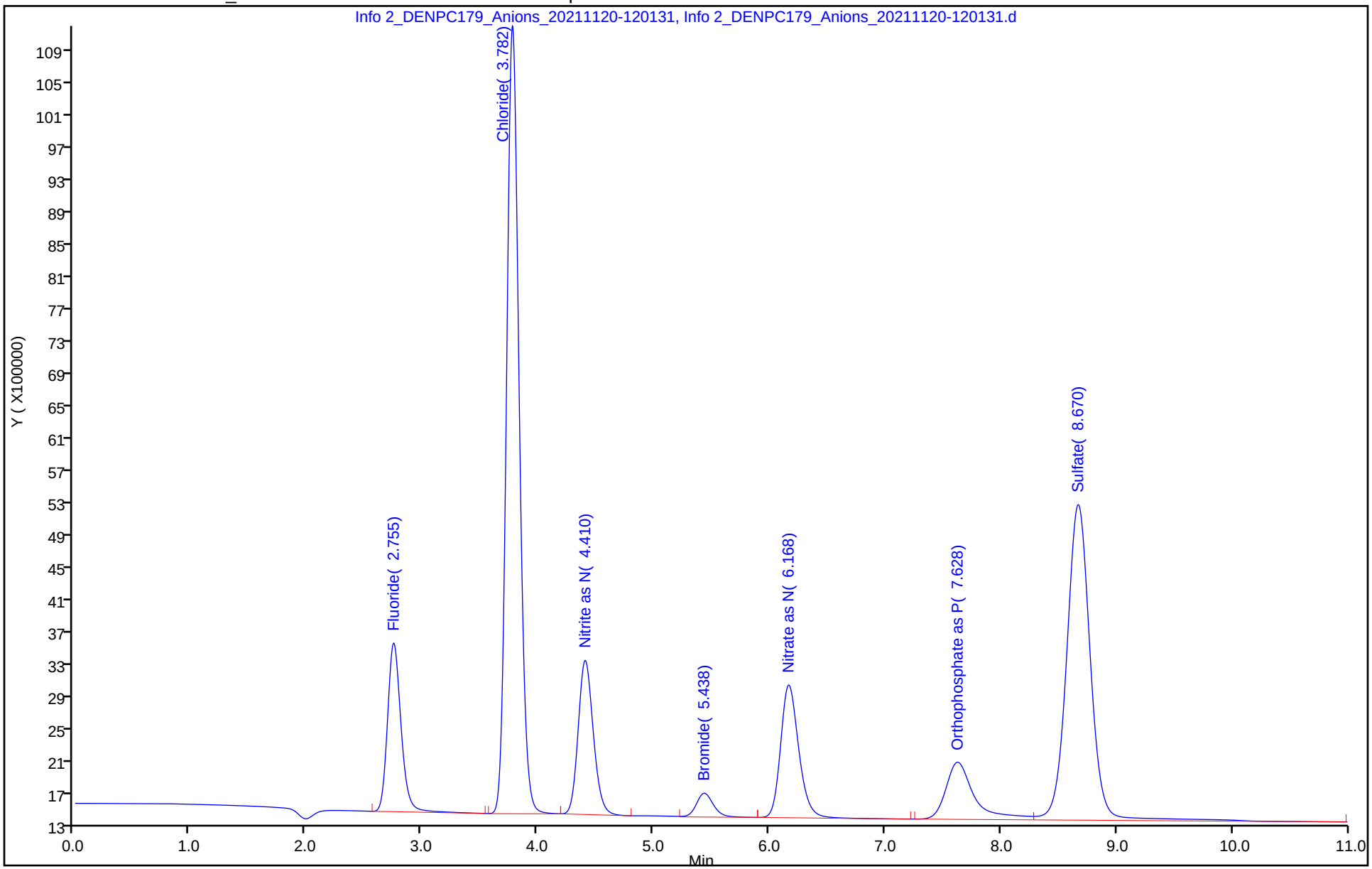
Reagents:

IC Cal low_00608 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00394 Amount Added: 0.20 Units: mL

Report Date: 22-Nov-2021 11:52:26 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-120131.d				
Injection Date:	20-Nov-2021 11:47:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	MRL			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-121
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 20-Nov-2021 12:01:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-004
Misc. Info.: 280-0106682-004
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:24 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

First Level Reviewer: foleyj Date: 20-Nov-2021 12:38:03

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.762	2.758	0.004	151426235	5.00	4.93	Ma
2 Chloride	3.813	3.815	-0.002	1511406122	100.0	99.8	M
3 Nitrite as N	4.392	4.400	-0.008	175105842	NC	NC	M
4 Bromide	5.405	5.422	-0.017	30935740	5.00	4.77	
5 Nitrate as N	6.083	6.107	-0.024	190925199	NC	NC	
6 Orthophosphate as P	7.605	7.592	0.013	81736072	NC	NC	M
7 Sulfate	8.623	8.610	0.013	1122283462	100.0	100.3	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

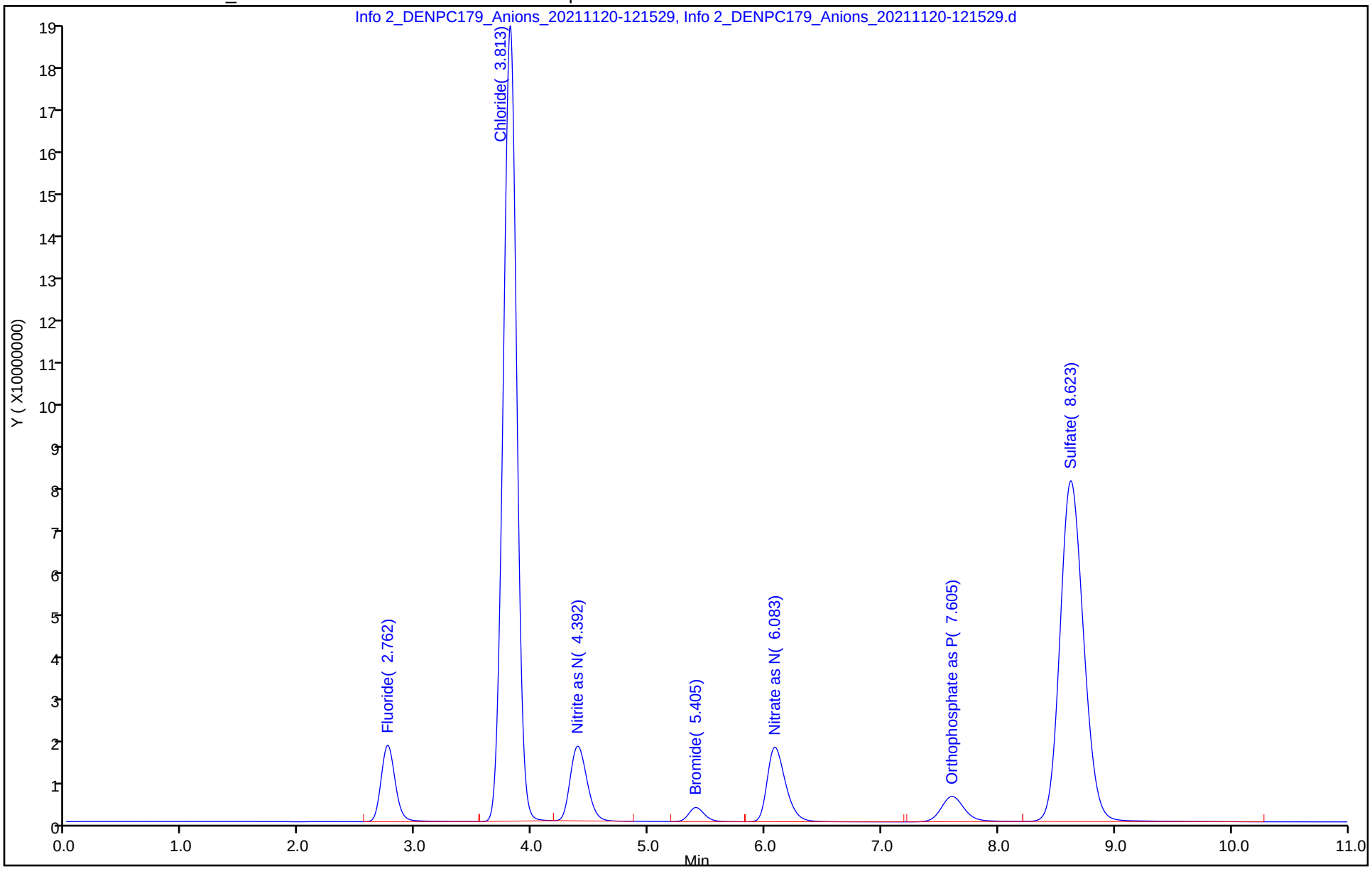
IC LCS_01845 Amount Added: 10.00 Units: mL

Report Date: 22-Nov-2021 11:52:26 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-121529.d

Injection Date:	20-Nov-2021 12:01:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-121

Injection Date: 20-Nov-2021 12:01:00 Instrument ID: WC_IonChrom10

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_IC10 Limit Group: Wet - Anions 28D

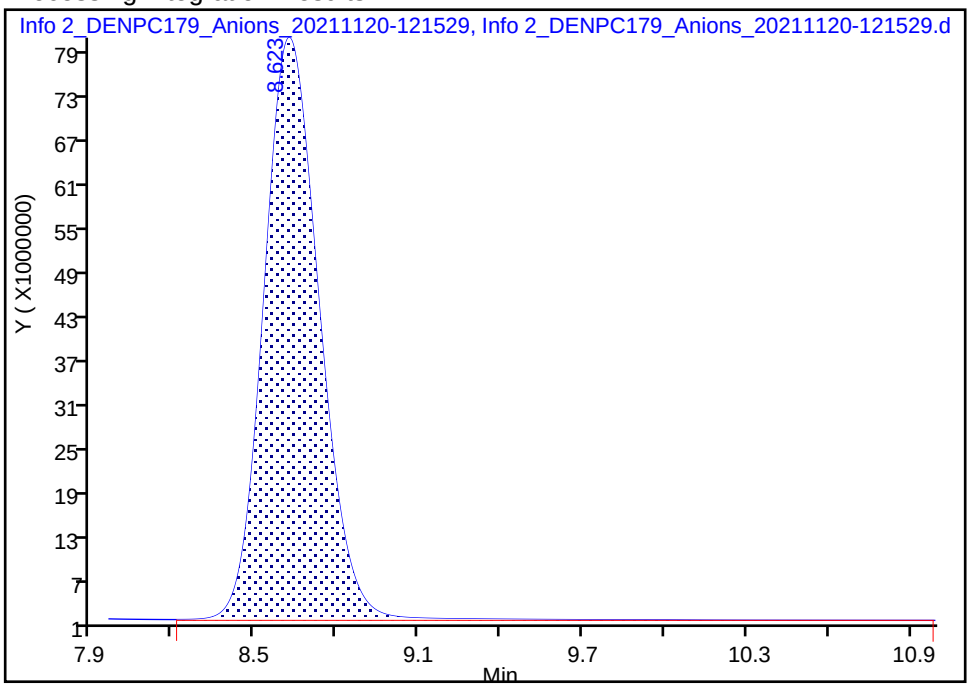
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

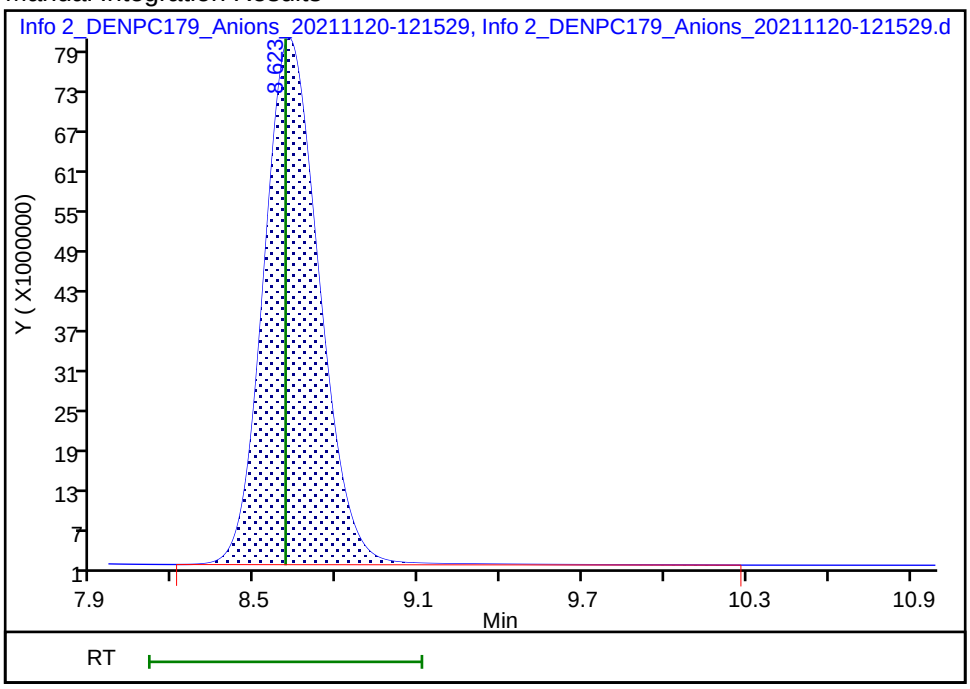
Processing Integration Results

RT: 8.62
Area: 1129865394
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 8.62
Area: 1122283462
Amount: 100.2524
Amount Units: ug/ml



Reviewer: jindaratc, 22-Nov-2021 11:23:20

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-122
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 20-Nov-2021 12:15:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-005
Misc. Info.: 280-0106682-005
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:24 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

First Level Reviewer: foleyj Date: 20-Nov-2021 12:38:23

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.763	2.758	0.005	154049118	5.00	5.01	Ma
2 Chloride	3.815	3.815	0.000	1514377975	100.0	100.0	M
3 Nitrite as N	4.393	4.400	-0.007	175698183	NC	NC	M
4 Bromide	5.407	5.422	-0.015	31588489	5.00	4.87	
5 Nitrate as N	6.083	6.107	-0.024	192375635	NC	NC	
6 Orthophosphate as P	7.608	7.592	0.016	83408545	NC	NC	M
7 Sulfate	8.628	8.610	0.018	1124166454	100.0	100.4	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

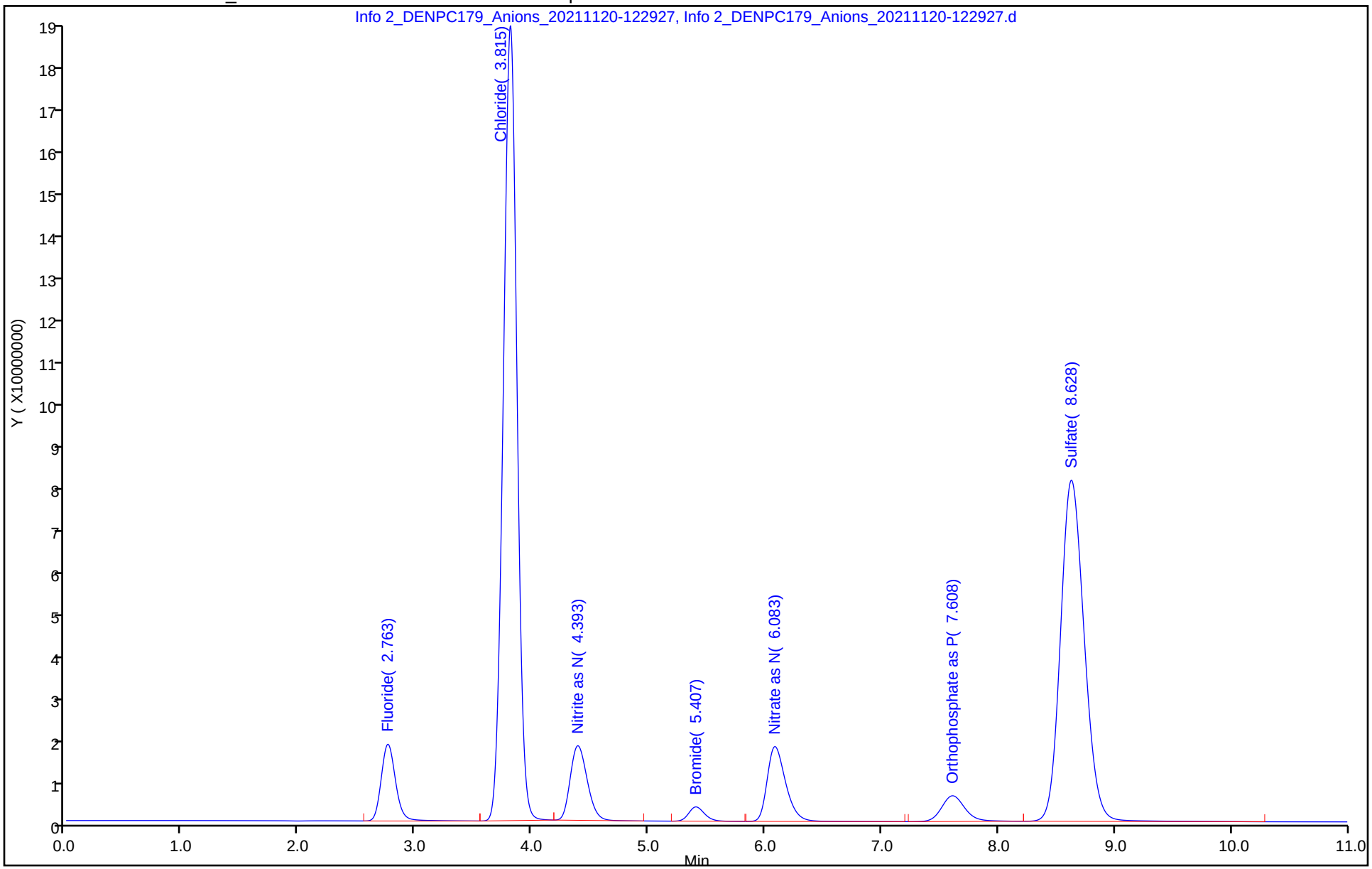
IC LCS_01845 Amount Added: 10.00 Units: mL

Report Date: 22-Nov-2021 11:52:27 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-122927.d

Injection Date:	20-Nov-2021 12:15:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-122

Injection Date: 20-Nov-2021 12:15:00 Instrument ID: WC_IonChrom10

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_IC10 Limit Group: Wet - Anions 28D

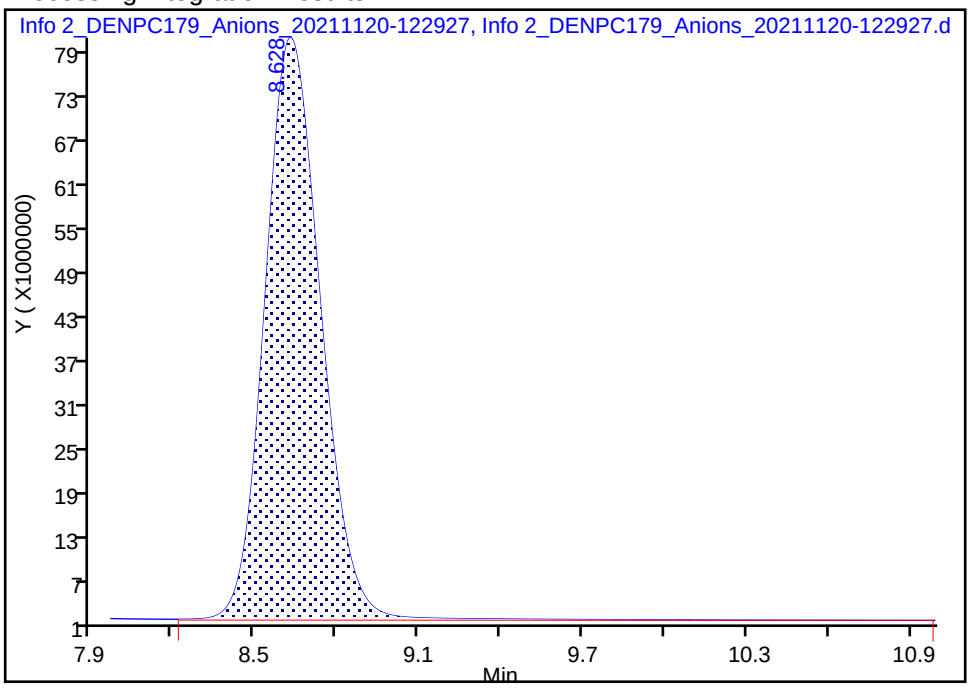
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

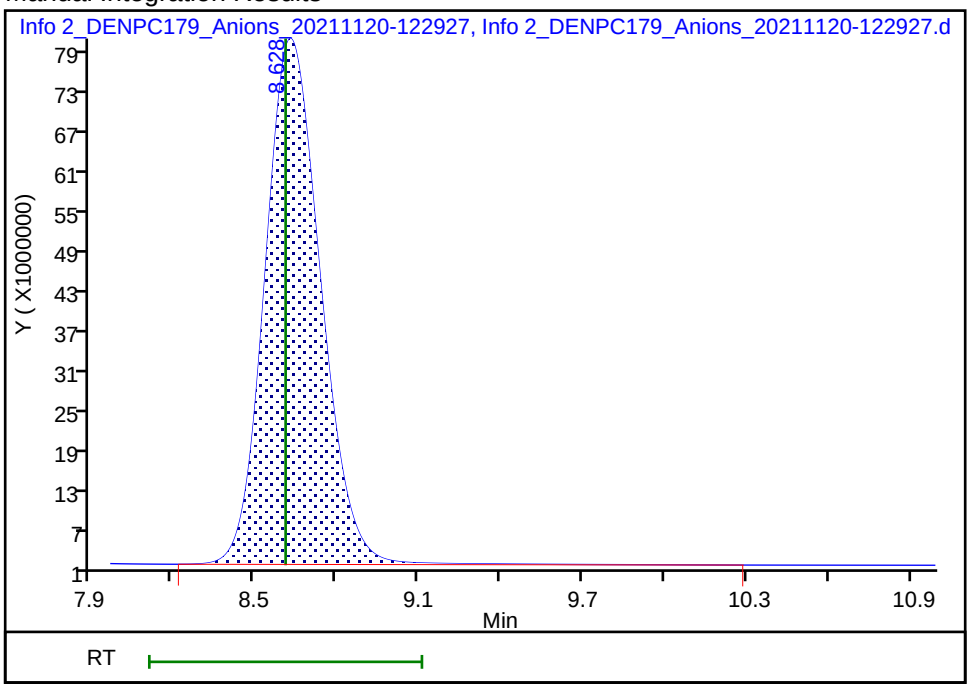
Processing Integration Results

RT: 8.63
Area: 1132224646
Amount: 101.1383
Amount Units: ug/ml



Manual Integration Results

RT: 8.63
Area: 1124166454
Amount: 100.4202
Amount Units: ug/ml



Reviewer: jindaratc, 22-Nov-2021 11:23:49

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-124
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 20-Nov-2021 12:29:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-006
Misc. Info.: 280-0106682-006
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:28 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

First Level Reviewer: jindaratc Date: 22-Nov-2021 11:24:06

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.755	2.755	0.000	108946		-0.0590	Ma
2 Chloride		3.815				ND	
3 Nitrite as N		4.400				ND	
4 Bromide		5.422				ND	
5 Nitrate as N		6.107				ND	
6 Orthophosphate as P	7.662	7.662	0.000	2678132		NC	
7 Sulfate	8.692	8.692	0.000	1654618		0.3825	

QC Flag Legend

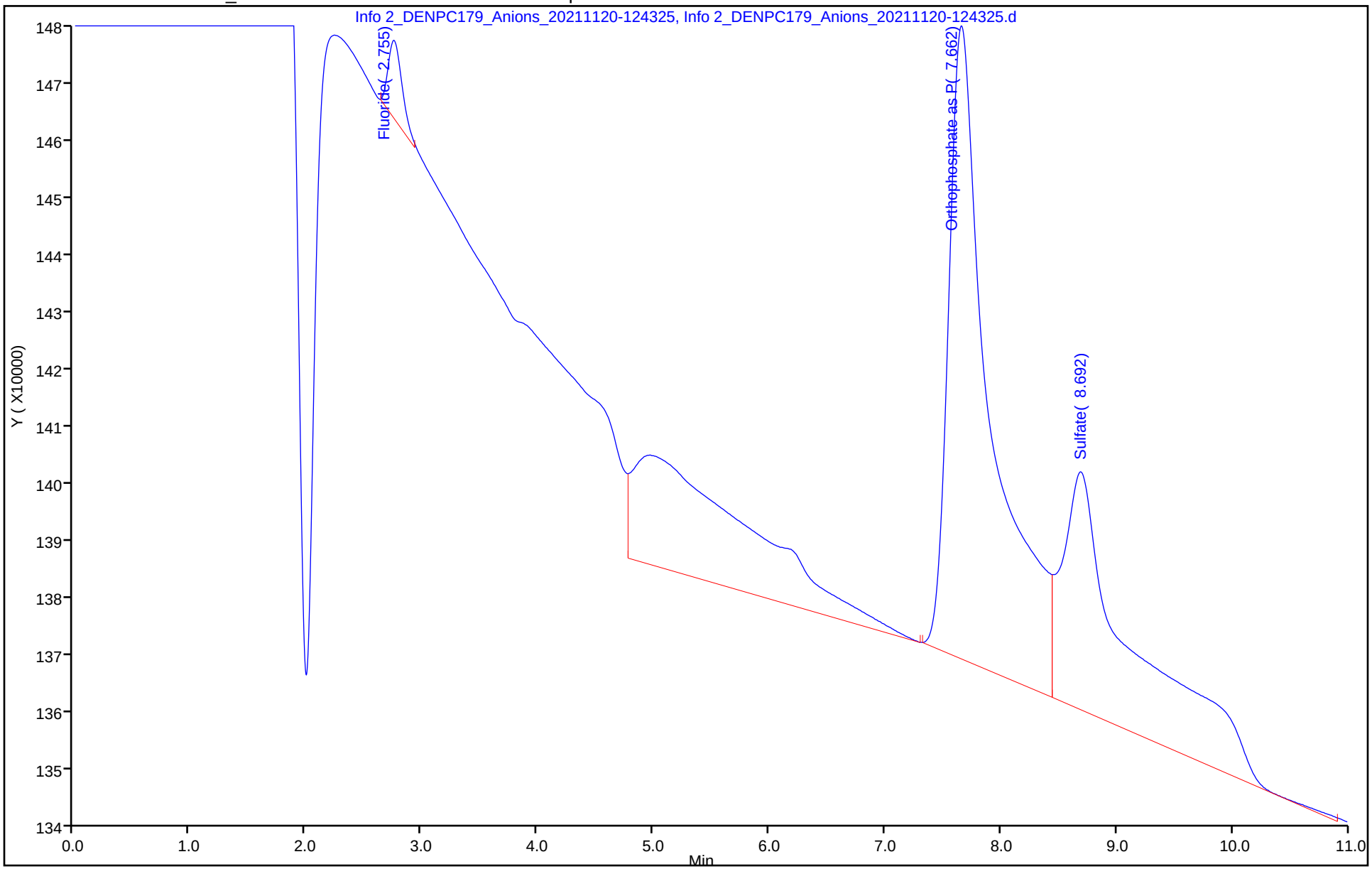
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 22-Nov-2021 11:52:28 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-124325.d

Injection Date:	20-Nov-2021 12:29:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-160
Lims ID: 280-155138-F-1
Client ID: NW021-7
Sample Type: Client
Inject. Date: 20-Nov-2021 15:49:00 ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-016
Misc. Info.: 280-0106682-016
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:28 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

First Level Reviewer: jindaratc Date: 22-Nov-2021 11:27:16

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.753	2.755	-0.002	6408211	0.1486	Ma
2 Chloride	3.853	3.815	0.038	543670817	36.0	
3 Nitrite as N		4.400			ND	
4 Bromide	5.485	5.422	0.063	1229847	0.2608	
5 Nitrate as N	6.240	6.107	0.133	1573580	NC	
6 Orthophosphate as P	7.682	7.662	0.020	2732583	NC	
7 Sulfate	8.597	8.692	-0.095	2209582471	197.2	

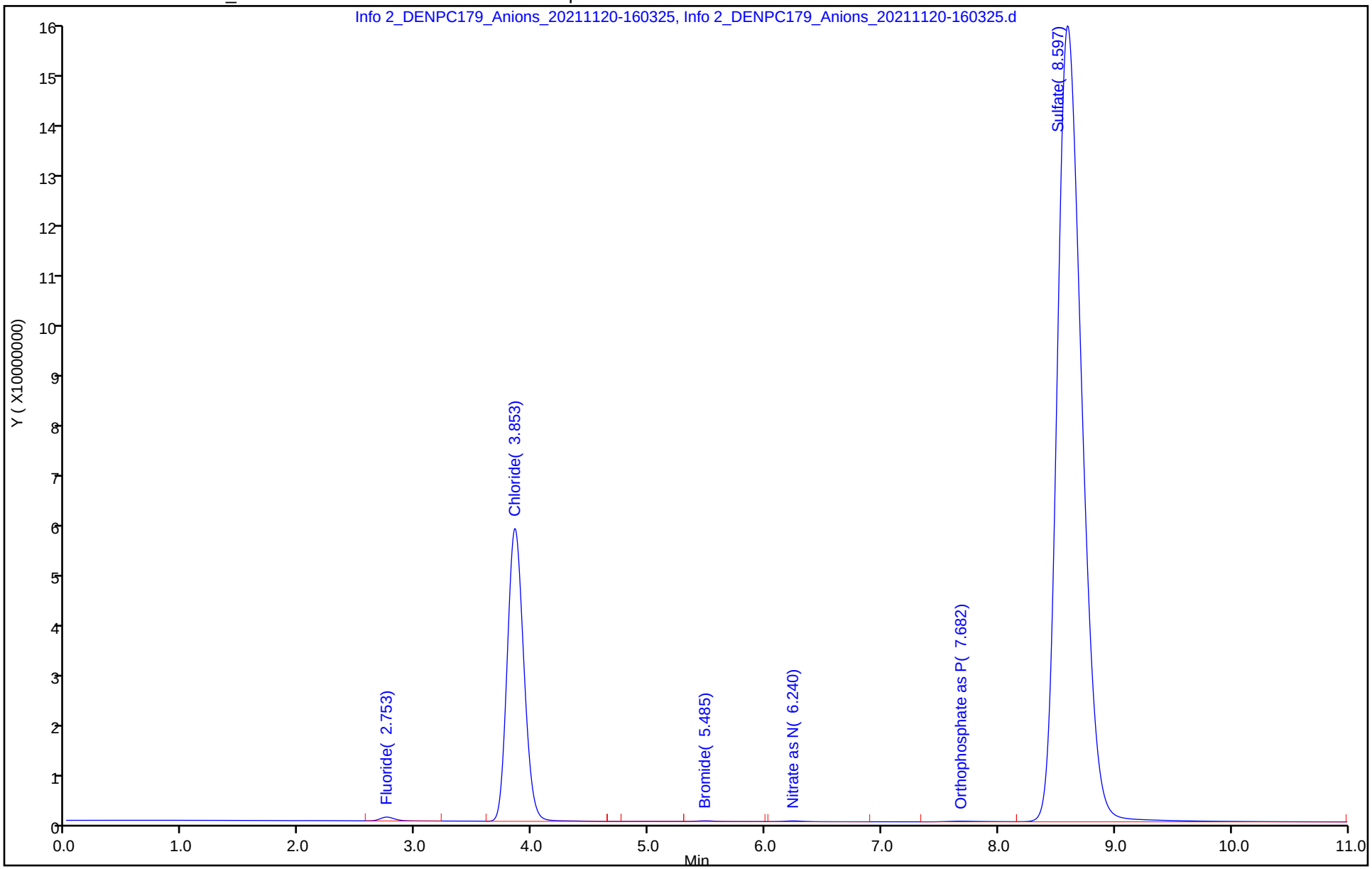
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 22-Nov-2021 11:52:36 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-160325.d				
Injection Date:	20-Nov-2021 15:49:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-155138-F-1	Lab Sample ID:	280-155138-1	Worklist Smp#:	16
Client ID:	NW021-7				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-161
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 20-Nov-2021 16:03:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-017
Misc. Info.: 280-0106682-017
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:36 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

First Level Reviewer: jindaratc Date: 22-Nov-2021 11:28:08

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.760	2.755	0.005	141644044	5.00	4.60	Ma
2 Chloride	3.815	3.815	0.000	1515988901	100.0	100.1	M
3 Nitrite as N	4.393	4.400	-0.007	175371732	NC	NC	Ma
4 Bromide	5.407	5.422	-0.015	31612859	5.00	4.88	
5 Nitrate as N	6.087	6.107	-0.020	192488972	NC	NC	
6 Orthophosphate as P	7.607	7.662	-0.055	83834778	NC	NC	Ma
7 Sulfate	8.630	8.692	-0.062	1125429117	100.0	100.5	Ma

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

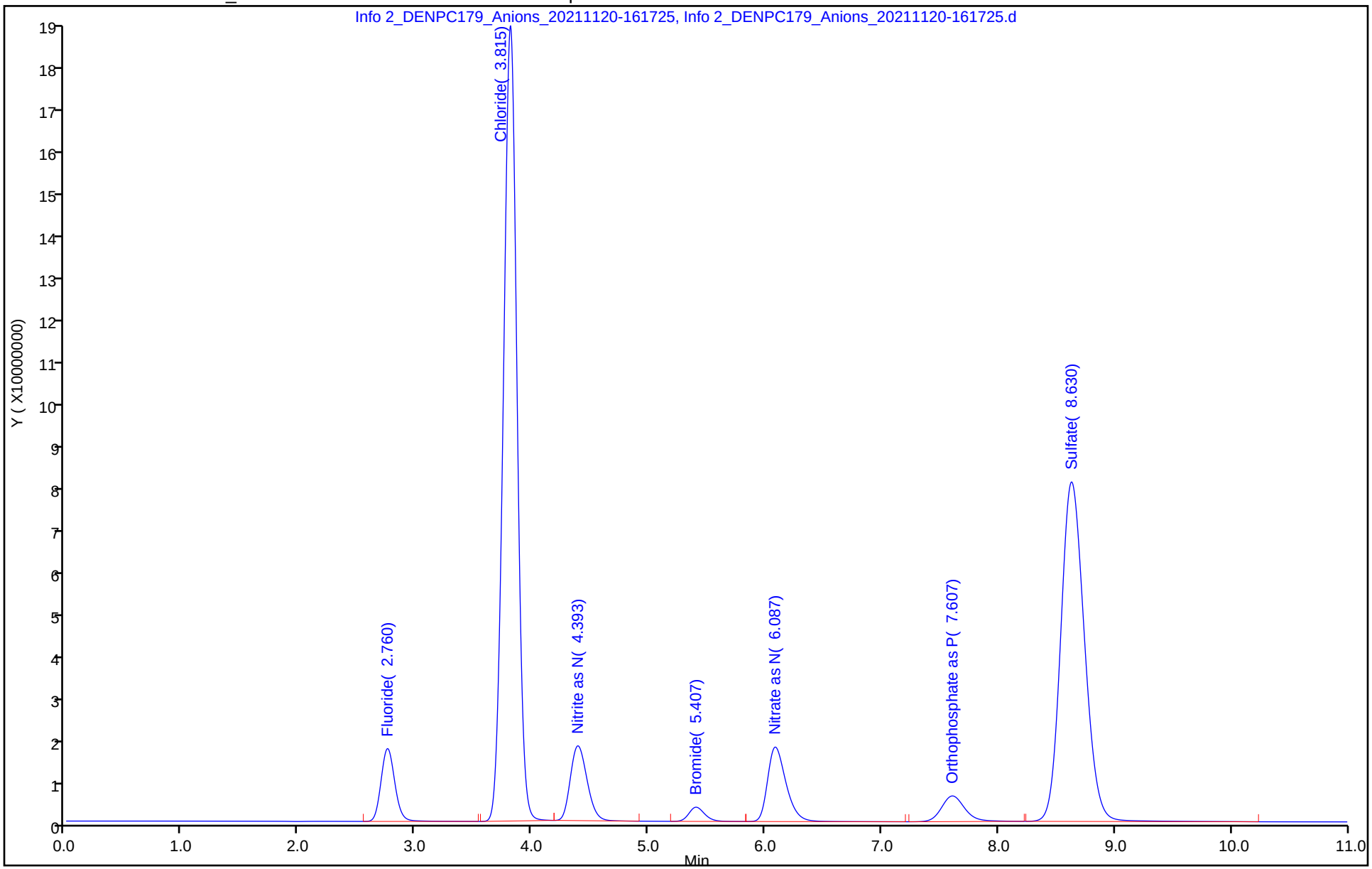
IC LCS_01845 Amount Added: 10.00 Units: mL

Report Date: 22-Nov-2021 11:52:36 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-161725.d

Injection Date:	20-Nov-2021 16:03:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-161

Injection Date: 20-Nov-2021 16:03:00 Instrument ID: WC_IonChrom10

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_IC10 Limit Group: Wet - Anions 28D

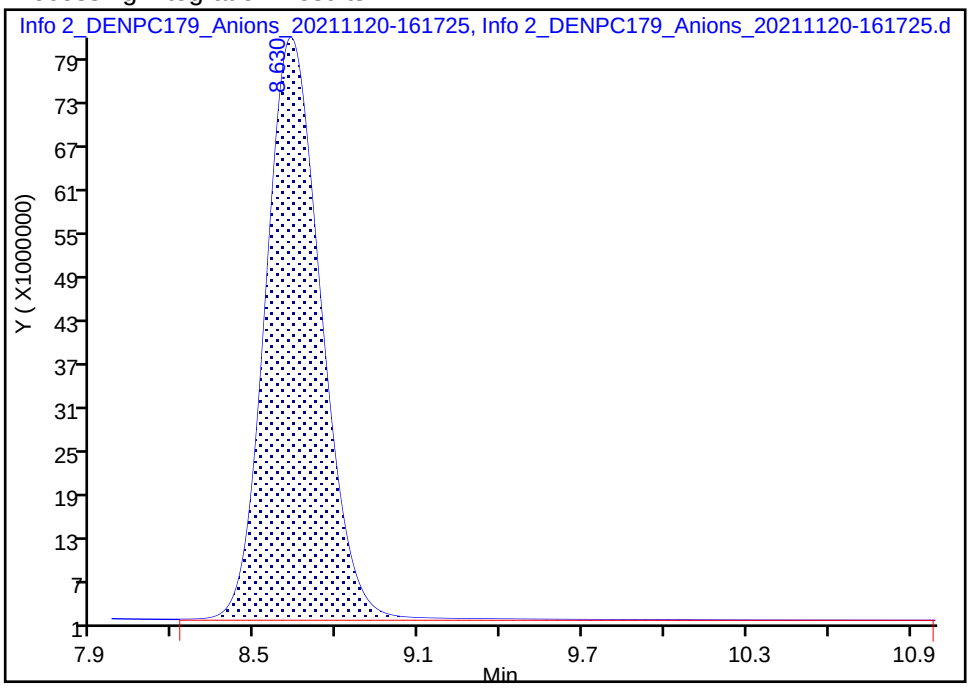
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

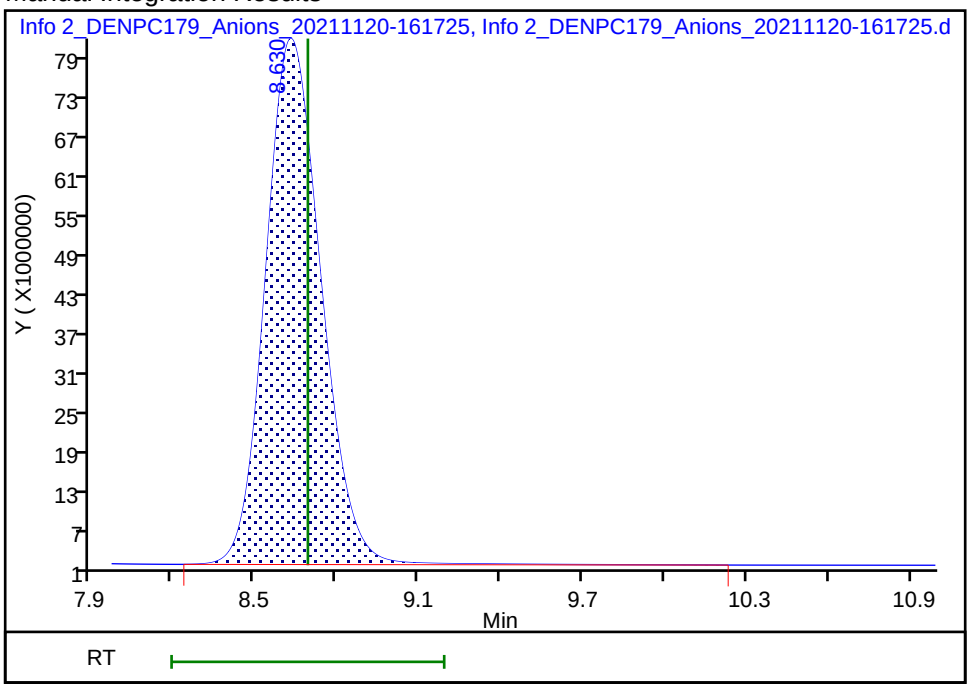
Processing Integration Results

RT: 8.63
Area: 1133389084
Amount: 101.2421
Amount Units: ug/ml



Manual Integration Results

RT: 8.63
Area: 1125429117
Amount: 100.5327
Amount Units: ug/ml



Reviewer: jindaratc, 22-Nov-2021 11:28:04

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-163
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 20-Nov-2021 16:17:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-018
Misc. Info.: 280-0106682-018
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:36 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

First Level Reviewer: jindaratc Date: 22-Nov-2021 11:28:23

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.755	2.755	0.000	74702		-0.0601	Ma
2 Chloride	3.785	3.815	-0.030	127536		0.1731	M
3 Nitrite as N		4.400				ND	
4 Bromide		5.422				ND	
5 Nitrate as N	6.207	6.107	0.100	112753		NC	
6 Orthophosphate as P	7.688	7.662	0.026	2856228		NC	
7 Sulfate	8.720	8.692	0.028	2417173		0.4505	

QC Flag Legend

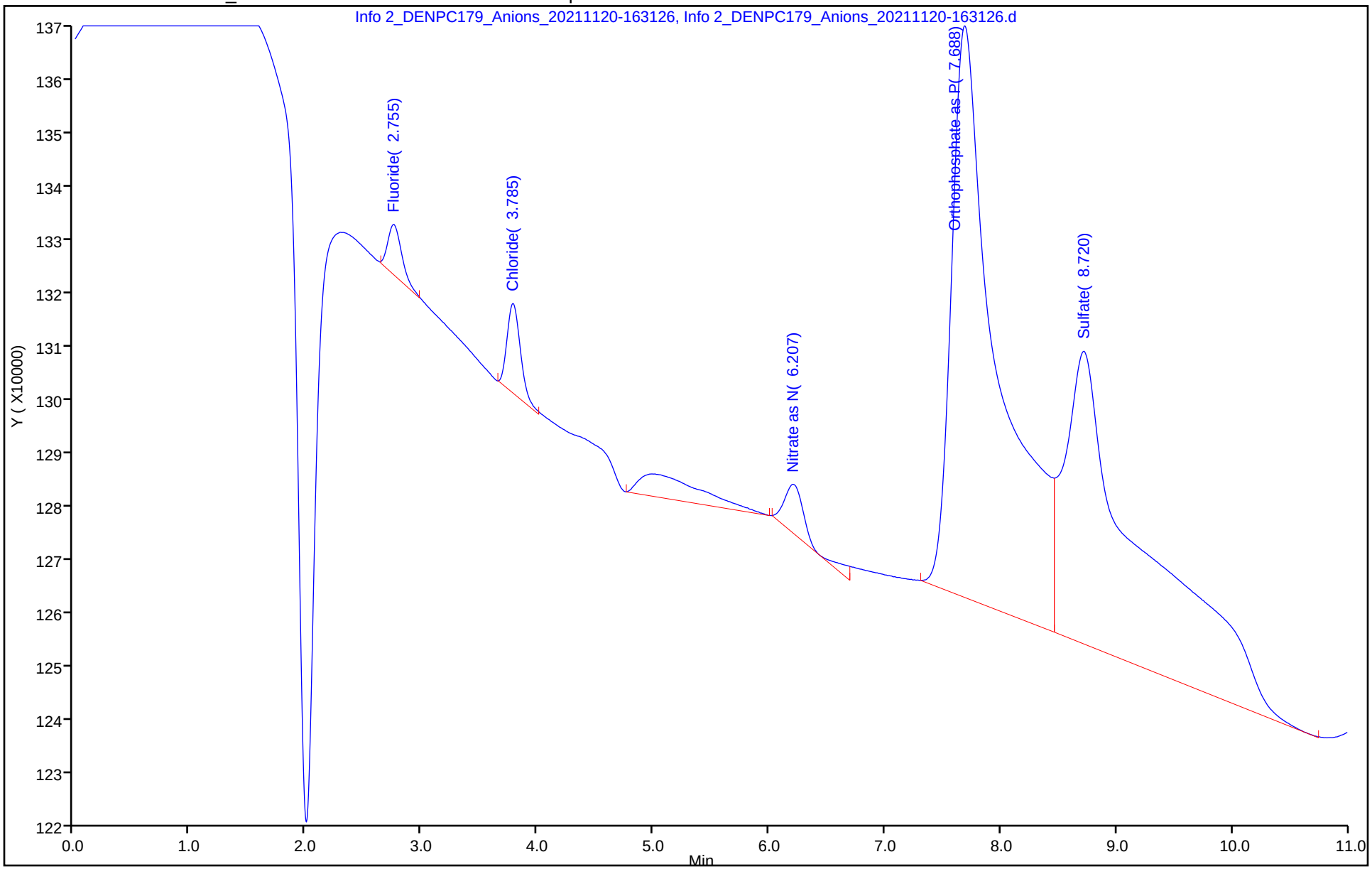
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 22-Nov-2021 11:52:37 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-163126.d

Injection Date:	20-Nov-2021 16:17:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	18
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-164
Lims ID: 280-155138-F-2
Client ID: NW020-7
Sample Type: Client
Inject. Date: 20-Nov-2021 16:31:00 ALS Bottle#: 0 Worklist Smp#: 19
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-019
Misc. Info.: 280-0106682-019
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:36 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

First Level Reviewer: jindaratc Date: 22-Nov-2021 11:28:50

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.753	2.755	-0.002	11110258	0.3035	Ma
2 Chloride	3.842	3.815	0.027	489195922	32.4	M
3 Nitrite as N		4.400			ND	
4 Bromide	5.460	5.422	0.038	4013657	0.6838	
5 Nitrate as N	6.047	6.107	-0.060	1212808445	NC	
6 Orthophosphate as P	7.717	7.662	0.055	15748478	NC	
7 Sulfate	8.642	8.692	-0.050	2174612774	194.0	

QC Flag Legend

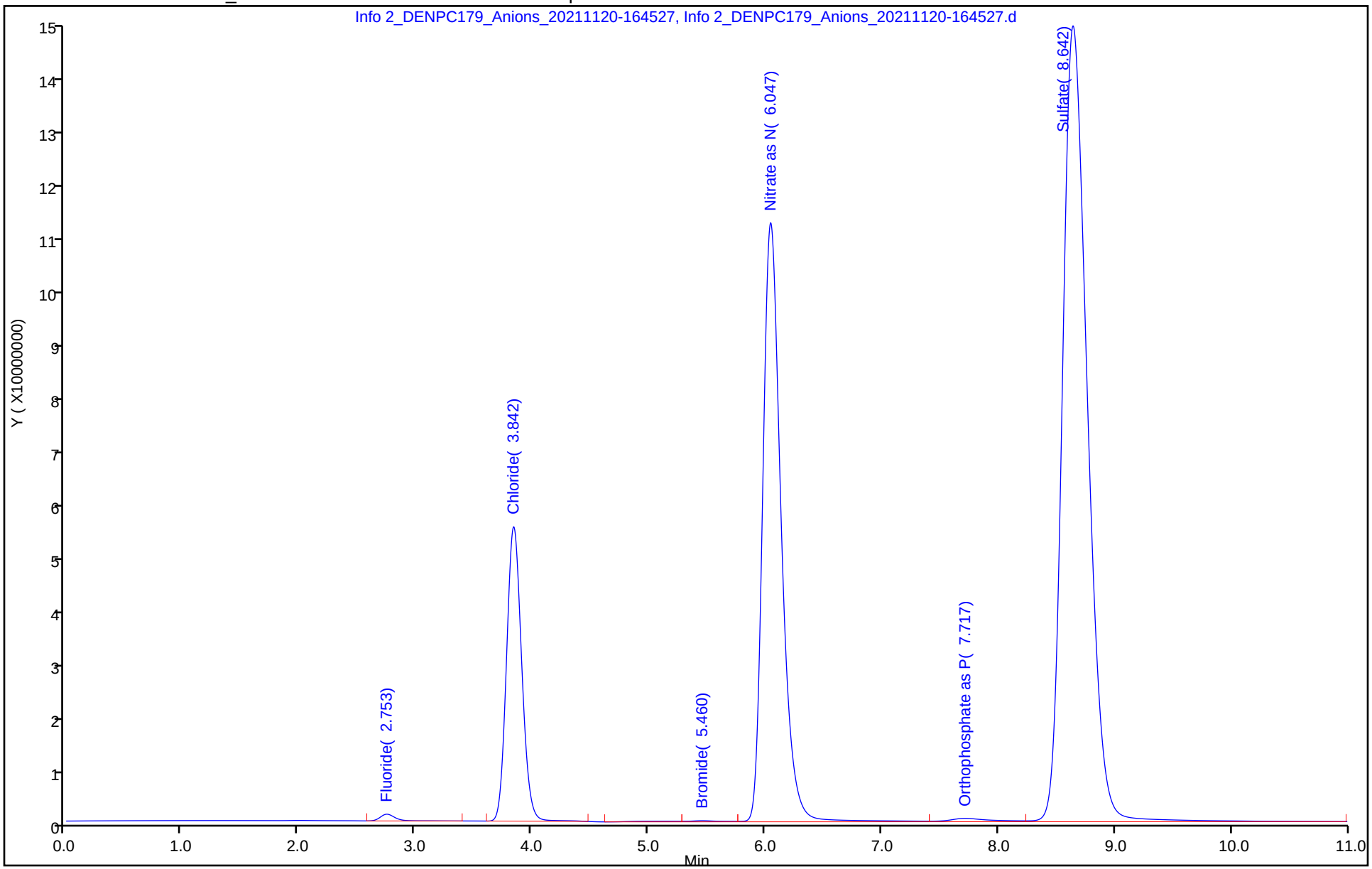
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 22-Nov-2021 11:52:38 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-164527.d

Injection Date:	20-Nov-2021 16:31:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-155138-F-2	Lab Sample ID:	280-155138-2	Worklist Smp#:	19
Client ID:	NW020-7				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-171
Lims ID: 280-155138-F-4
Client ID: G0082-7
Sample Type: Client
Inject. Date: 20-Nov-2021 16:59:00 ALS Bottle#: 0 Worklist Smp#: 21
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-021
Misc. Info.: 280-0106682-021
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:36 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		2.755			ND	
2 Chloride	3.850	3.815	0.035	504890909	33.4	
3 Nitrite as N		4.400			ND	
4 Bromide	5.475	5.422	0.053	4733670	0.7932	
5 Nitrate as N	6.115	6.107	0.008	178593477	NC	
6 Orthophosphate as P	7.732	7.662	0.070	13511058	NC	
7 Sulfate	8.677	8.692	-0.015	1564994508	139.7	

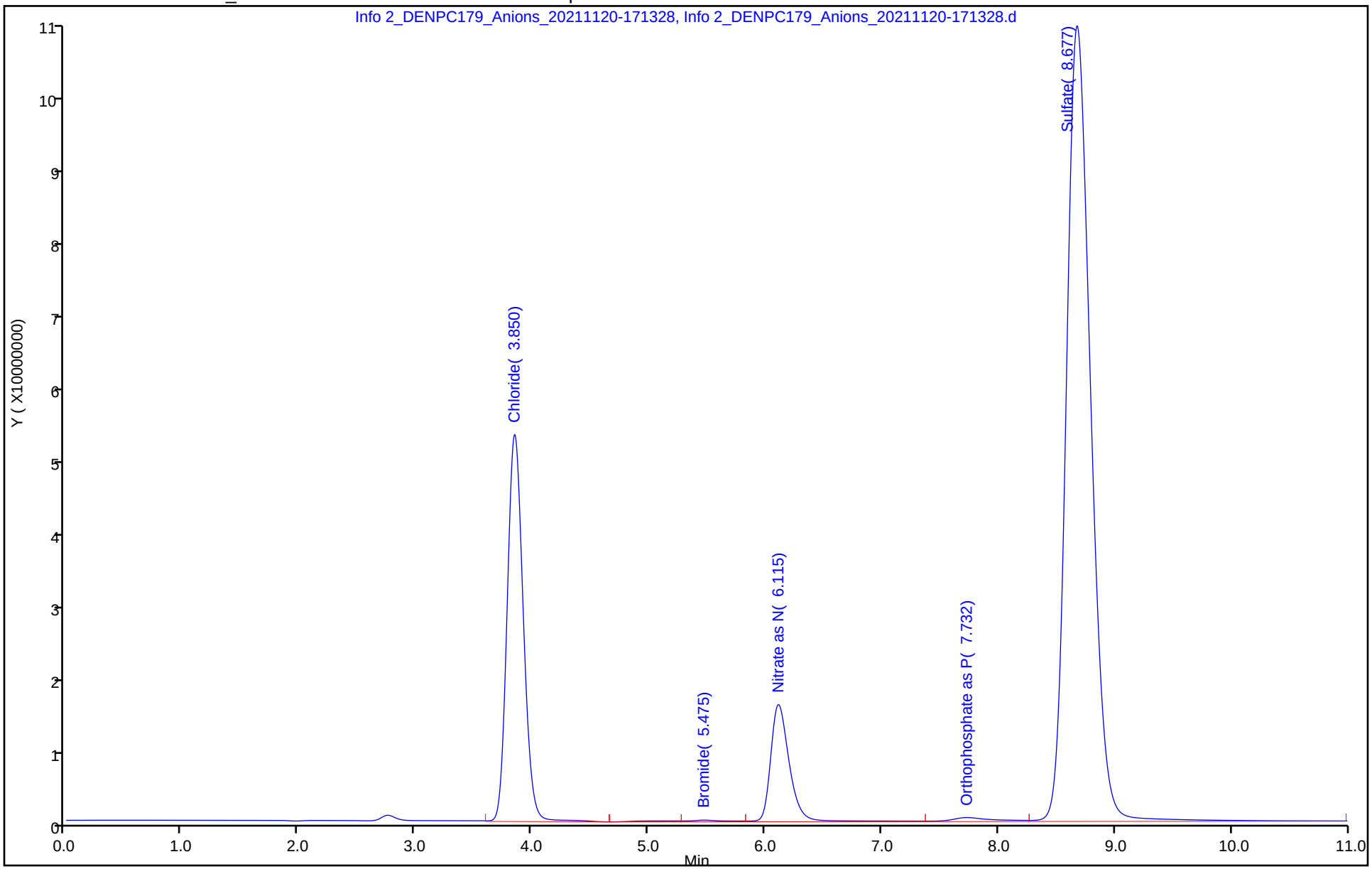
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 22-Nov-2021 11:52:38 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-171328.d				
Injection Date:	20-Nov-2021 16:59:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-155138-F-4	Lab Sample ID:	280-155138-4	Worklist Smp#:	21
Client ID:	G0082-7				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-172
Lims ID: 280-155138-F-5
Client ID: G0087-7
Sample Type: Client
Inject. Date: 20-Nov-2021 17:13:00 ALS Bottle#: 0 Worklist Smp#: 22
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-022
Misc. Info.: 280-0106682-022
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:36 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		2.755			ND	
2 Chloride	3.843	3.815	0.028	425037181	28.2	
3 Nitrite as N		4.400			ND	
4 Bromide	5.465	5.422	0.043	4670366	0.7836	
5 Nitrate as N	6.083	6.107	-0.024	301551314	NC	
6 Orthophosphate as P	7.738	7.662	0.076	11212016	NC	
7 Sulfate	8.680	8.692	-0.012	1414295992	126.3	

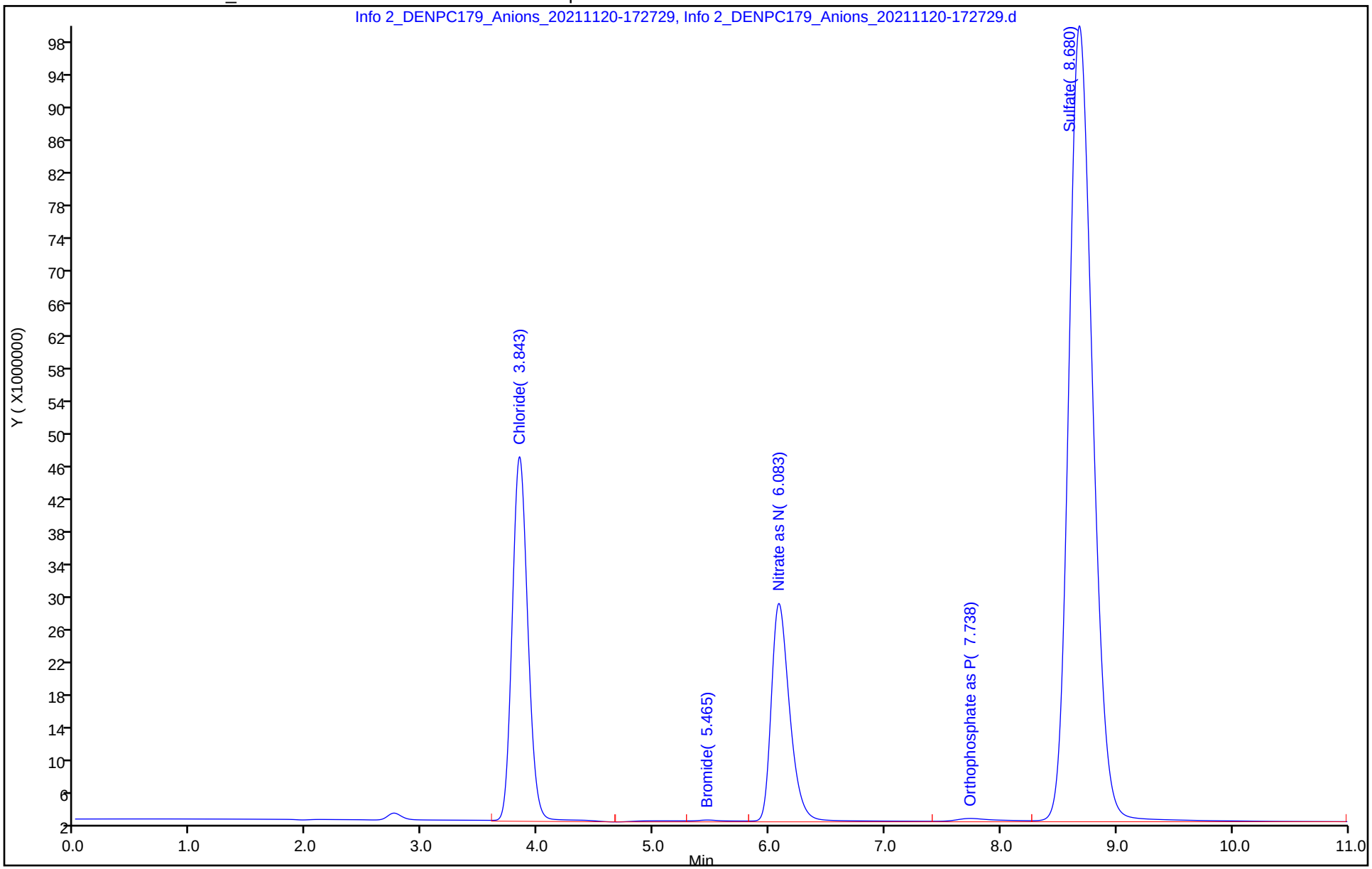
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 22-Nov-2021 11:52:39 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-172729.d				
Injection Date:	20-Nov-2021 17:13:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-155138-F-5	Lab Sample ID:	280-155138-5	Worklist Smp#:	22
Client ID:	G0087-7				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-174
Lims ID: 280-155138-F-6
Client ID: NW071-7
Sample Type: Client
Inject. Date: 20-Nov-2021 17:27:00 ALS Bottle#: 0 Worklist Smp#: 23
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-023
Misc. Info.: 280-0106682-023
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:36 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		2.755			ND	
2 Chloride	3.815	3.815	0.000	664741896	44.0	
3 Nitrite as N		4.400			ND	
4 Bromide	5.443	5.422	0.021	1885403	0.3604	
5 Nitrate as N	6.038	6.107	-0.069	1367059471	NC	
6 Orthophosphate as P	7.727	7.662	0.065	22080520	NC	
7 Sulfate	8.713	8.692	0.021	731874434	65.5	

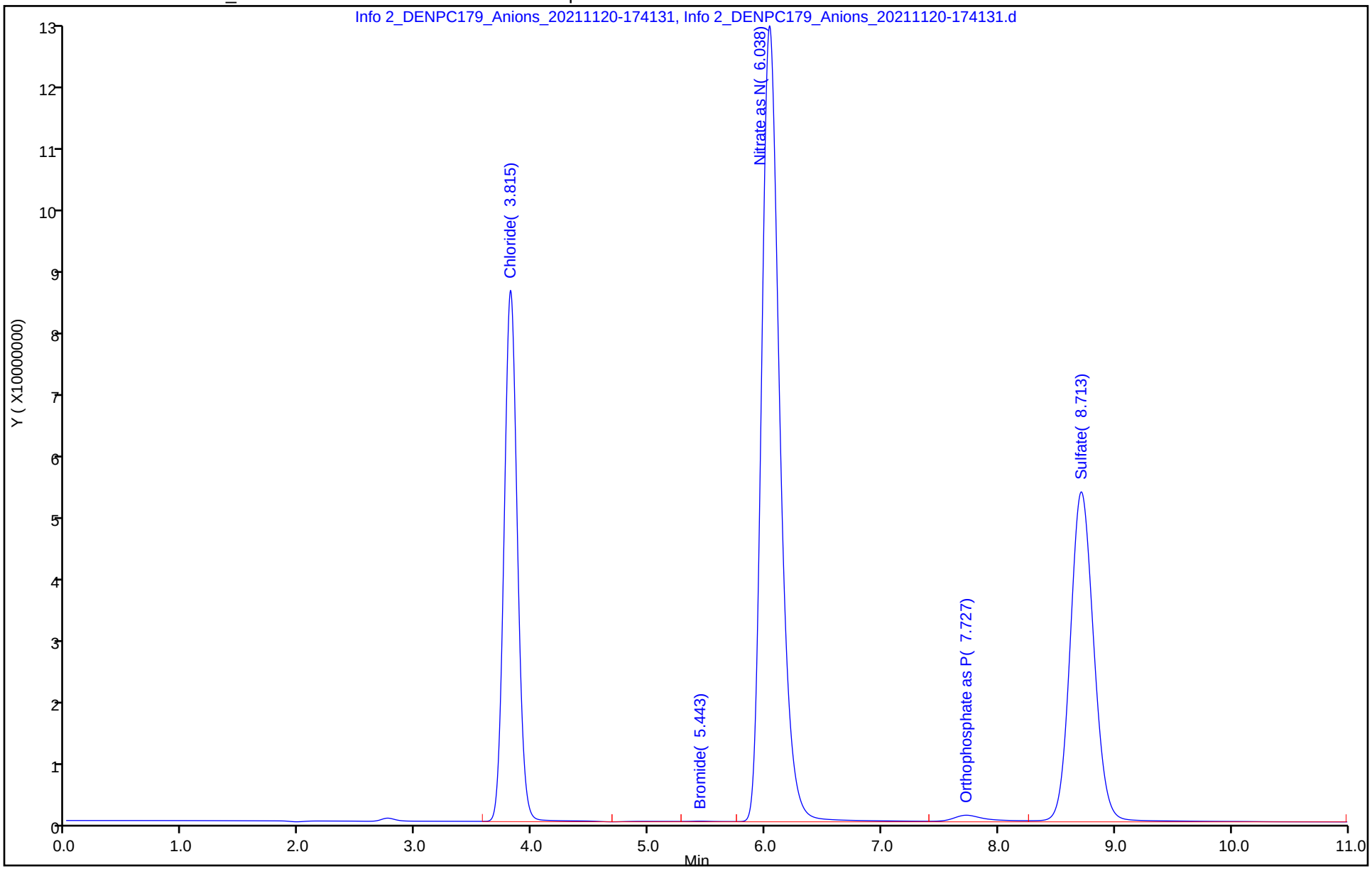
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 22-Nov-2021 11:52:39 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-174131.d				
Injection Date:	20-Nov-2021 17:27:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-155138-F-6	Lab Sample ID:	280-155138-6	Worklist Smp#:	23
Client ID:	NW071-7				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-175
Lims ID: 280-155138-F-10
Client ID: PZ019-7
Sample Type: Client
Inject. Date: 20-Nov-2021 17:41:00 ALS Bottle#: 0 Worklist Smp#: 24
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-024
Misc. Info.: 280-0106682-024
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:36 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		2.755			ND	
2 Chloride	3.808	3.815	-0.007	236902290	15.8	
3 Nitrite as N		4.400			ND	
4 Bromide	5.447	5.422	0.025	2776662	0.4958	
5 Nitrate as N	6.043	6.107	-0.064	1513604740	NC	
6 Orthophosphate as P	7.742	7.662	0.080	10725186	NC	
7 Sulfate	8.713	8.692	0.021	795595326	71.1	

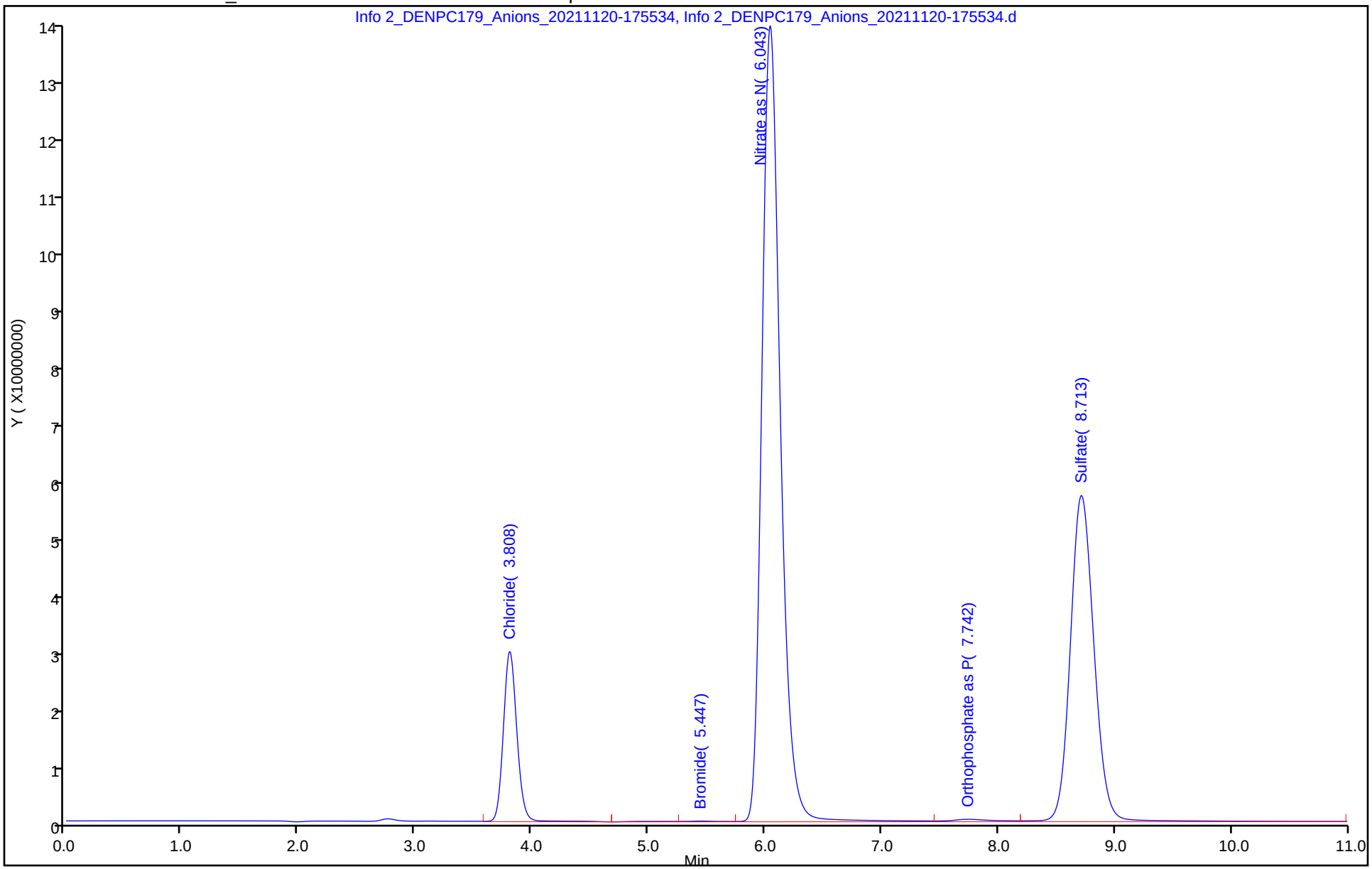
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 22-Nov-2021 11:52:40 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-175534.d				
Injection Date:	20-Nov-2021 17:41:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-155138-F-10	Lab Sample ID:	280-155138-10	Worklist Smp#:	24
Client ID:	PZ019-7				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-180
Lims ID: 280-155138-F-10 DU
Client ID:
Sample Type: DU
Inject. Date: 20-Nov-2021 17:55:00 ALS Bottle#: 0 Worklist Smp#: 25
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-025
Misc. Info.: 280-0106682-025
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:36 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.755				ND	
2 Chloride	3.810	3.815	-0.005	238717769		15.9	
3 Nitrite as N		4.400				ND	
4 Bromide	5.445	5.422	0.023	2505612		0.4546	
5 Nitrate as N	6.045	6.107	-0.062	1517342325		NC	
6 Orthophosphate as P	7.747	7.662	0.085	9679675		NC	
7 Sulfate	8.720	8.692	0.028	795833155		71.2	

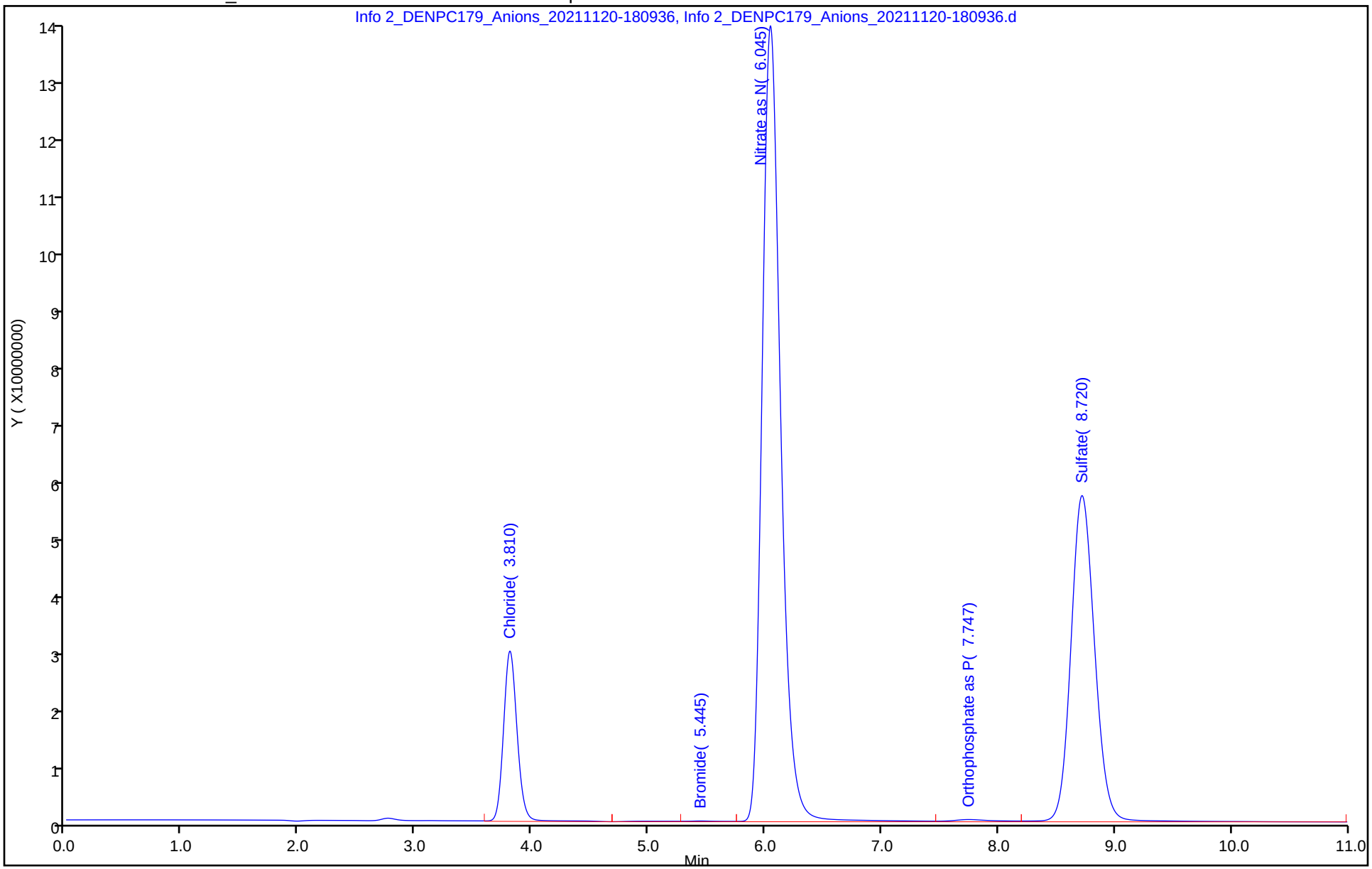
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 22-Nov-2021 11:52:40 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-180936.d				
Injection Date:	20-Nov-2021 17:55:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-155138-F-10 DU			Worklist Smp#:	25
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-182
Lims ID: 280-155138-F-10 MS
Client ID: PZ019-7
Sample Type: MS
Inject. Date: 20-Nov-2021 18:09:00 ALS Bottle#: 0 Worklist Smp#: 26
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-026
Misc. Info.: 280-0106682-026
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:36 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

First Level Reviewer: jindaratc Date: 22-Nov-2021 11:29:46

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.768	2.755	0.013	138385319	5.00	4.50	Ma
2 Chloride	3.818	3.815	0.003	1043786177	50.0	69.0	
3 Nitrite as N	4.478	4.400	0.078	183969154	NC	NC	
4 Bromide	5.412	5.422	-0.010	32417388	5.00	5.00	
5 Nitrate as N	6.047	6.107	-0.060	1690846950	NC	NC	
6 Orthophosphate as P	7.698	7.662	0.036	90933109	NC	NC	
7 Sulfate	8.690	8.692	-0.002	1385545824	50.0	123.7	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

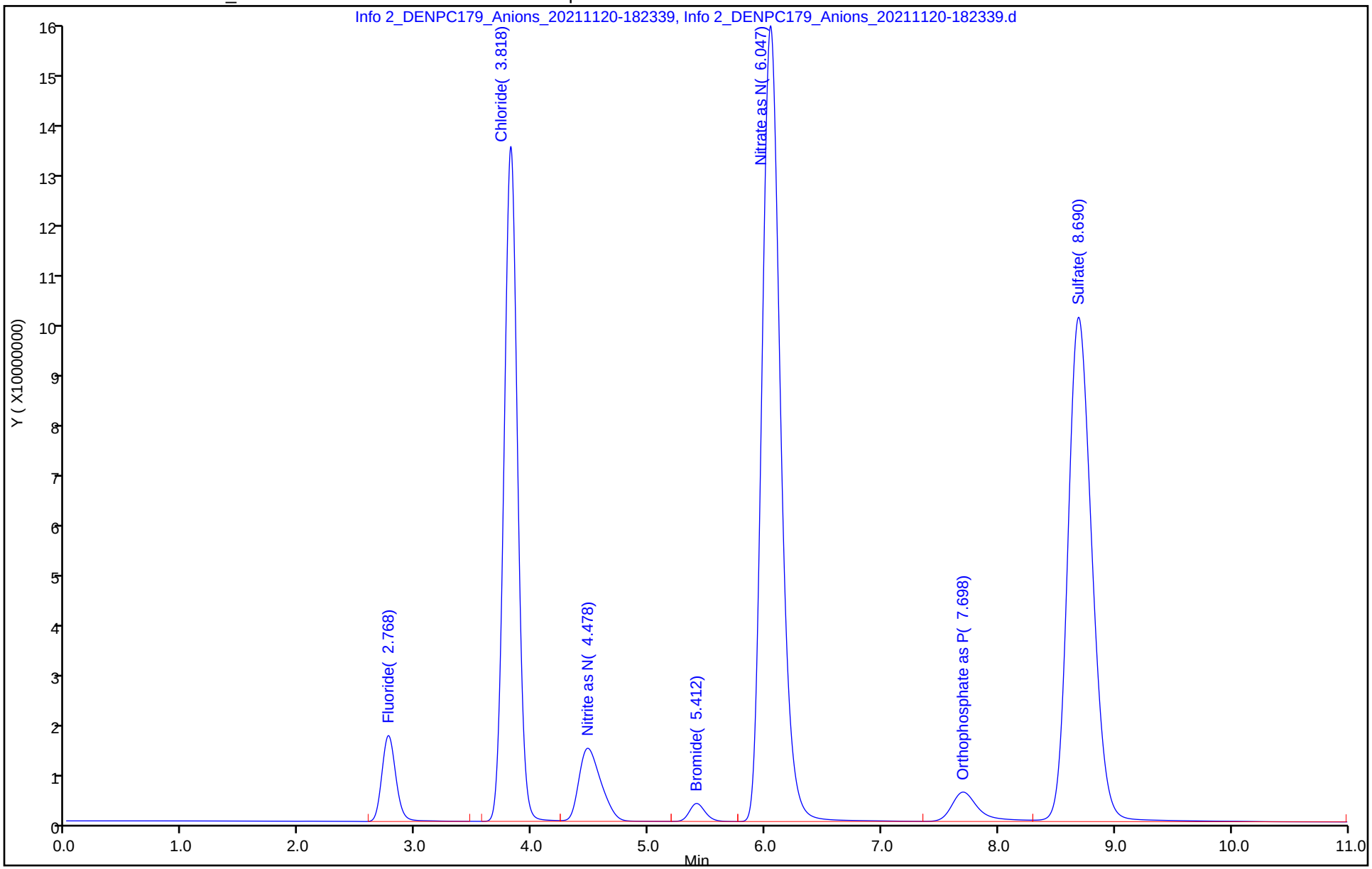
Reagents:

ICMS/MSD WEEK_00731 Amount Added: 0.10 Units: mL

Report Date: 22-Nov-2021 11:52:41 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-182339.d				
Injection Date:	20-Nov-2021 18:09:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-155138-F-10 MS			Worklist Smp#:	26
Client ID:	PZ019-7				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-183
Lims ID: 280-155138-F-10 MSD
Client ID: PZ019-7
Sample Type: MSD
Inject. Date: 20-Nov-2021 18:23:00 ALS Bottle#: 0 Worklist Smp#: 27
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-027
Misc. Info.: 280-0106682-027
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:36 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

First Level Reviewer: jindaratc Date: 22-Nov-2021 11:29:59

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.767	2.755	0.012	140671571	5.00	4.57	Ma
2 Chloride	3.817	3.815	0.002	1060177867	50.0	70.0	
3 Nitrite as N	4.475	4.400	0.075	187693970	NC	NC	
4 Bromide	5.410	5.422	-0.012	32961311	5.00	5.08	
5 Nitrate as N	6.045	6.107	-0.062	1694851519	NC	NC	
6 Orthophosphate as P	7.698	7.662	0.036	93906387	NC	NC	
7 Sulfate	8.688	8.692	-0.004	1398109387	50.0	124.8	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

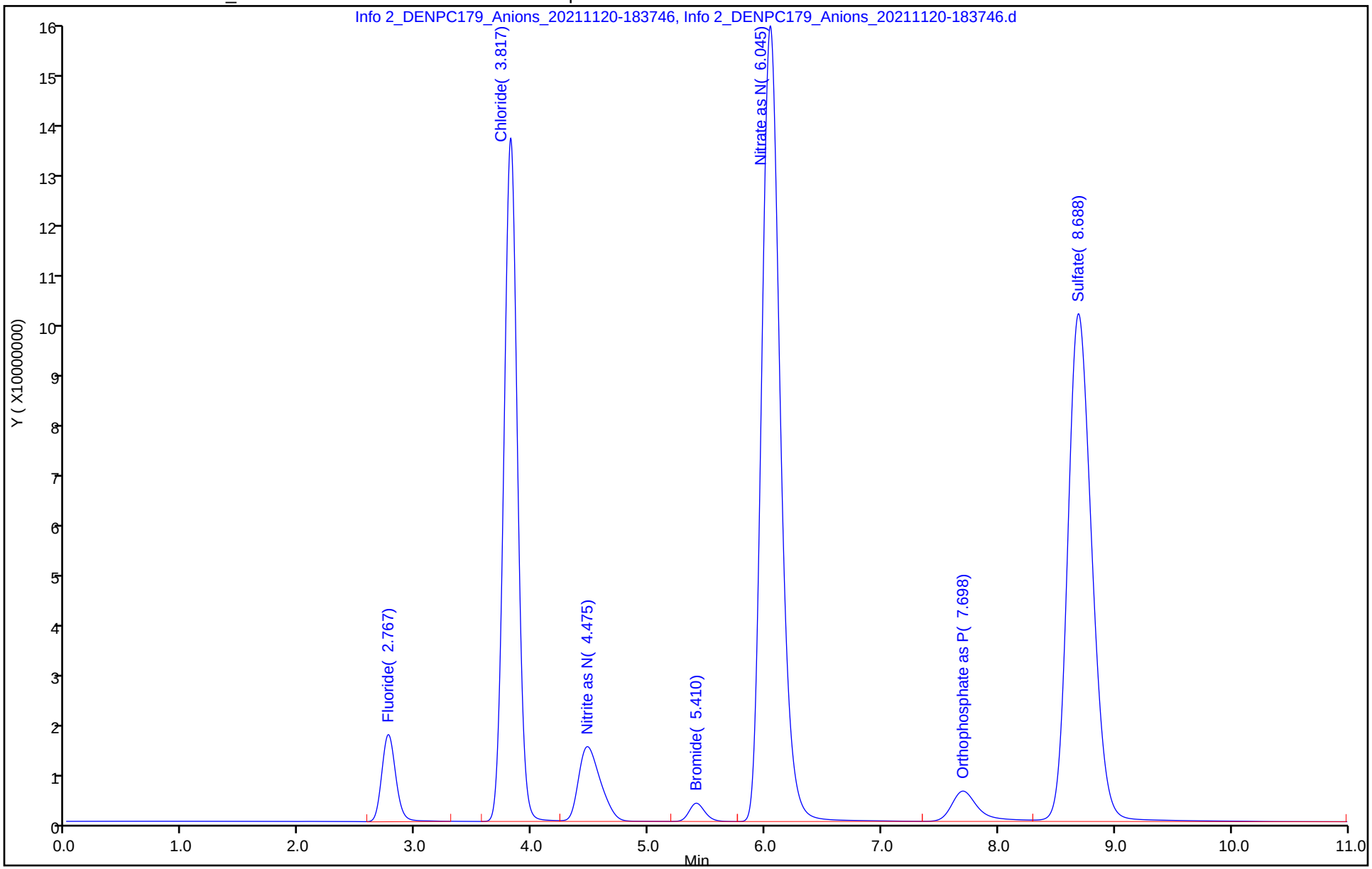
Reagents:

ICMS/MSD WEEK_00731 Amount Added: 0.10 Units: mL

Report Date: 22-Nov-2021 11:52:41 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-183746.d				
Injection Date:	20-Nov-2021 18:23:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-155138-F-10 MSD			Worklist Smp#:	27
Client ID:	PZ019-7				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-185				
Lims ID:	280-155138-F-7				
Client ID:	CA213-7				
Sample Type:	Client				
Inject. Date:	20-Nov-2021 18:37:00	ALS Bottle#:	0	Worklist Smp#:	28
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-0106682-028				
Misc. Info.:	280-0106682-028				
Operator ID:	wetchemd	Instrument ID:	WC_IonChrom10		
Method:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m				
Limit Group:	Wet - Anions 28D				
Last Update:	22-Nov-2021 11:52:36	Calib Date:	14-Nov-2021 17:53:00		
Integrator:	Falcon				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180				
Column 1 :			Det: Info 2_091554_1		
Process Host:	CTX1607				
First Level Reviewer: jindaratc		Date:	22-Nov-2021 11:30:13		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.758	2.755	0.003	6176237	0.1409	Ma
2 Chloride	3.810	3.815	-0.005	495312651	32.8	
3 Nitrite as N	4.522	4.400	0.122	1614464	NC	
4 Bromide	5.448	5.422	0.026	1913819	0.3647	
5 Nitrate as N	6.122	6.107	0.015	77549844	NC	
6 Orthophosphate as P	7.767	7.662	0.105	4618888	NC	
7 Sulfate	8.707	8.692	0.015	786539328	70.3	

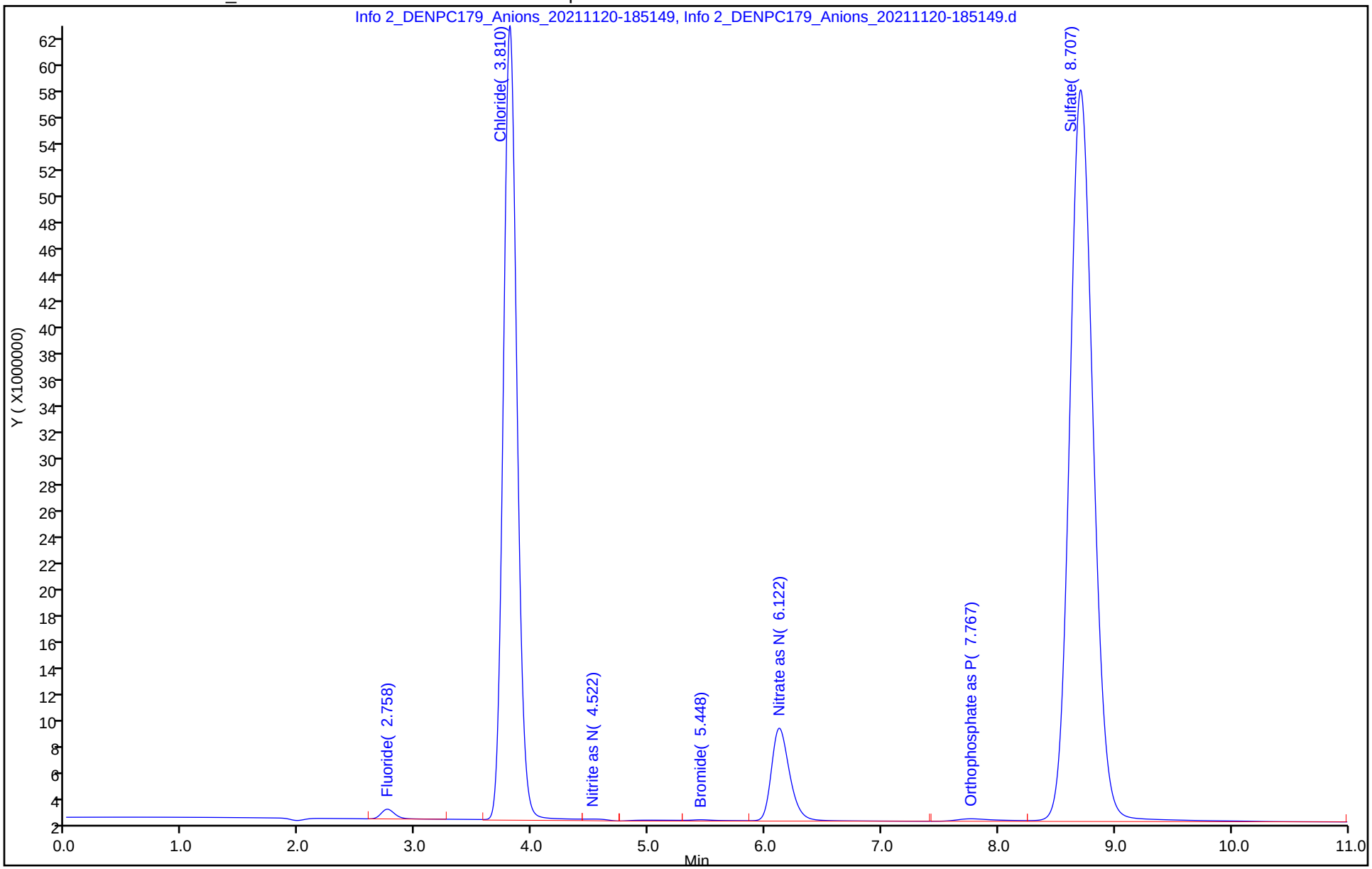
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 22-Nov-2021 11:52:42 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-185149.d				
Injection Date:	20-Nov-2021 18:37:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-155138-F-7	Lab Sample ID:	280-155138-7	Worklist Smp#:	28
Client ID:	CA213-7				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-190
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 20-Nov-2021 18:51:00 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-029
Misc. Info.: 280-0106682-029
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:42 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

First Level Reviewer: jindaratc Date: 22-Nov-2021 11:30:50

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.763	2.755	0.008	141367627	5.00	4.60	Ma
2 Chloride	3.817	3.815	0.002	1521059564	100.0	100.4	M
3 Nitrite as N	4.390	4.400	-0.010	177031874	NC	NC	M
4 Bromide	5.393	5.422	-0.029	33115371	5.00	5.11	
5 Nitrate as N	6.070	6.107	-0.037	195678670	NC	NC	
6 Orthophosphate as P	7.667	7.662	0.005	88879509	NC	NC	M
7 Sulfate	8.682	8.692	-0.010	1131790614	100.0	101.1	Ma

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

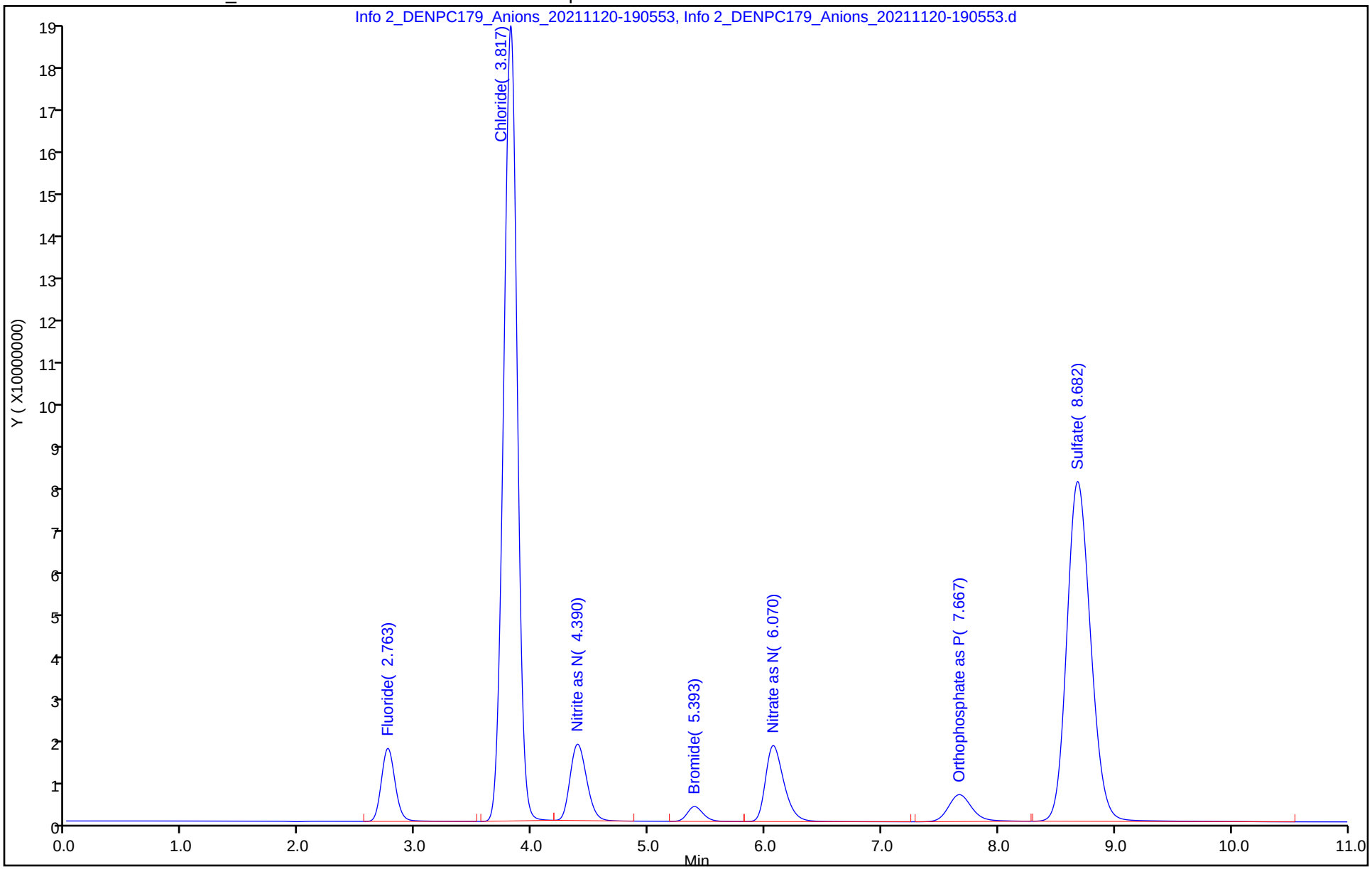
Reagents:

IC LCS_01845 Amount Added: 10.00 Units: mL

Report Date: 22-Nov-2021 11:52:42 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-190553.d				
Injection Date:	20-Nov-2021 18:51:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	29
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-190

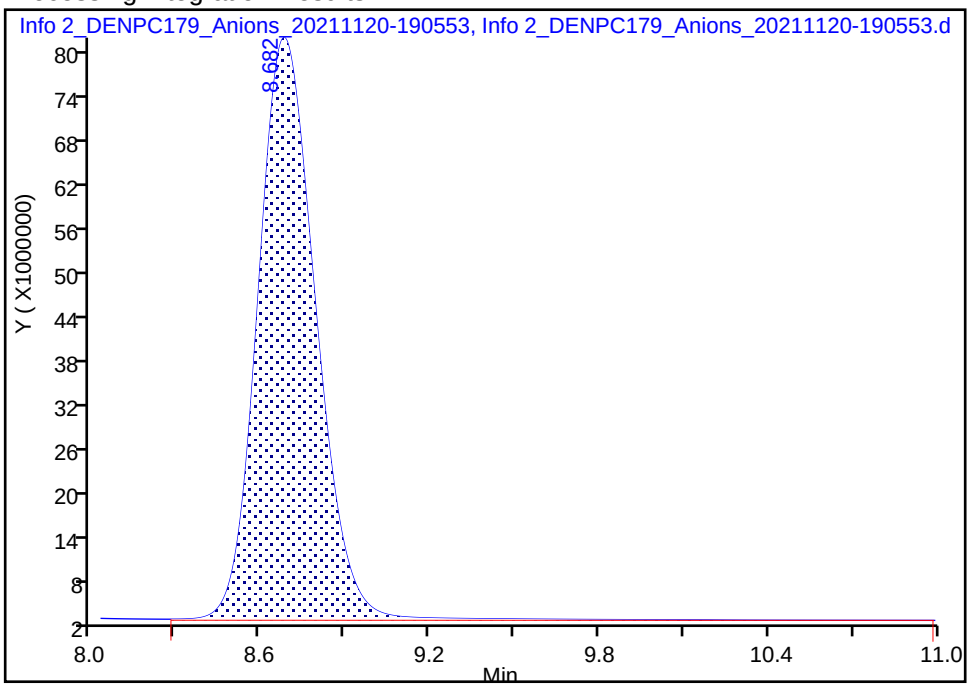
Injection Date:	20-Nov-2021 18:51:00	Instrument ID:	WC_IonChrom10
Lims ID:	ccv		
Client ID:			
Operator ID:	wetchemd	ALS Bottle#:	0 Worklist Smp#: 29
Injection Vol:	5.0 ul	Dil. Factor:	1.0000
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D
Column:		Detector	Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

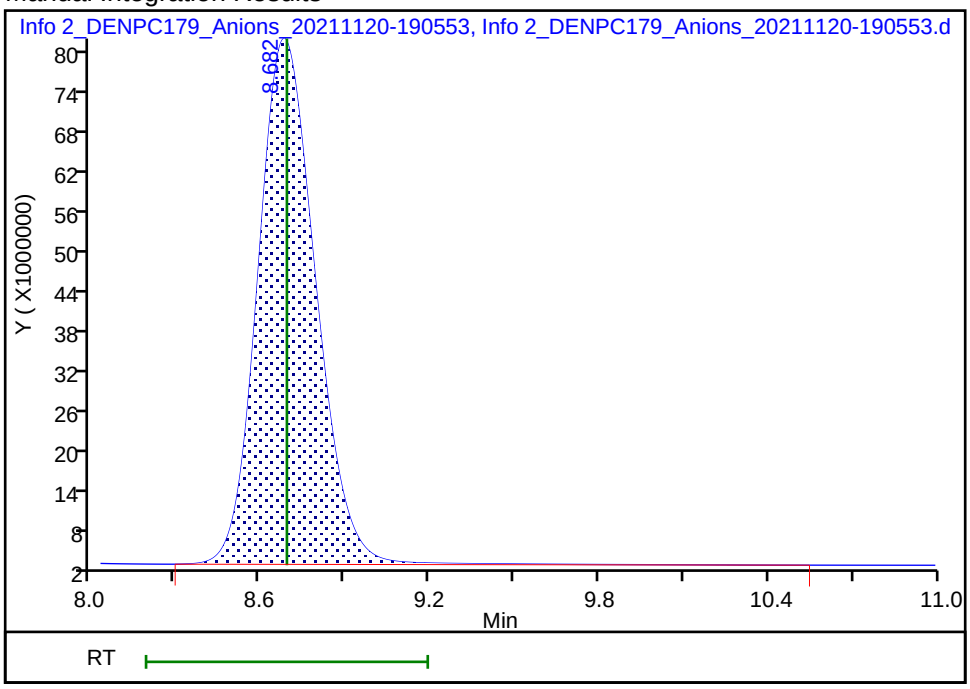
Processing Integration Results

RT: 8.68
Area: 1142139125
Amount: 102.0219
Amount Units: ug/ml



Manual Integration Results

RT: 8.68
Area: 1131790614
Amount: 101.0997
Amount Units: ug/ml



Reviewer: jindaratc, 22-Nov-2021 11:30:48

Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-191
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 20-Nov-2021 19:05:00 ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-030
Misc. Info.: 280-0106682-030
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:42 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.755				ND	
2 Chloride	3.790	3.815	-0.025	934748		0.2263	
3 Nitrite as N	4.412	4.400	0.012	249824		NC	
4 Bromide	5.437	5.422	0.015	517316		0.1525	
5 Nitrate as N	6.200	6.107	0.093	807182		NC	
6 Orthophosphate as P	7.727	7.662	0.065	4130068		NC	
7 Sulfate	8.752	8.692	0.060	3858441		0.5789	

QC Flag Legend

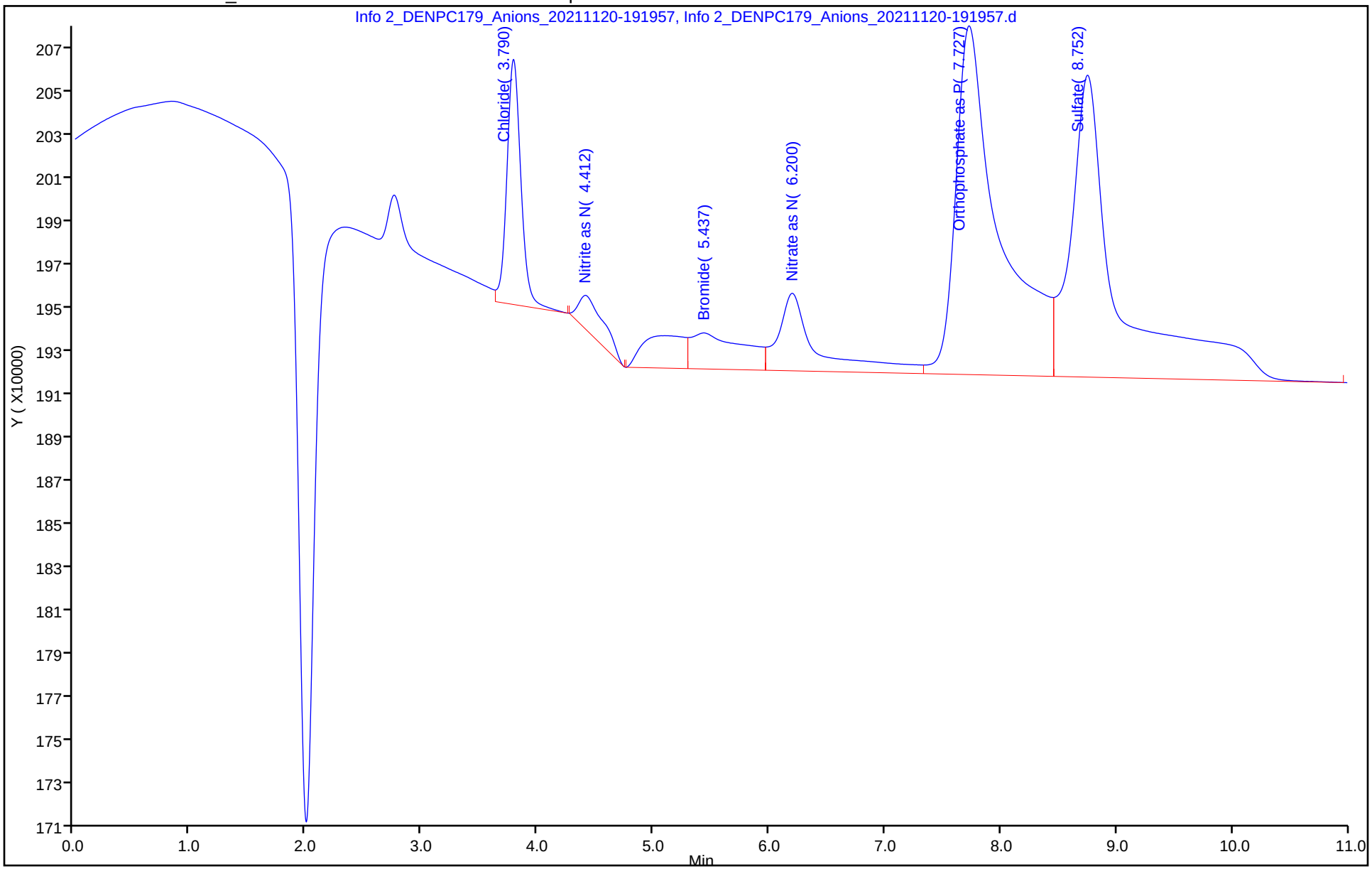
Processing Flags
NC - Not Calibrated

Report Date: 22-Nov-2021 11:52:43 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-191957.d

Injection Date:	20-Nov-2021 19:05:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	30
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-193
Lims ID: 280-155138-F-9
Client ID: NW070-7
Sample Type: Client
Inject. Date: 20-Nov-2021 19:20:00 ALS Bottle#: 0 Worklist Smp#: 31
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-031
Misc. Info.: 280-0106682-031
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:42 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		2.755			ND	
2 Chloride	3.825	3.815	0.010	950978169	62.8	
3 Nitrite as N	4.580	4.400	0.180	38971945	NC	
4 Bromide	5.437	5.422	0.015	607192	0.1662	
5 Nitrate as N	6.028	6.107	-0.079	1143403779	NC	
6 Orthophosphate as P	7.708	7.662	0.046	52916255	NC	
7 Sulfate	8.693	8.692	0.001	1091534692	97.5	

QC Flag Legend

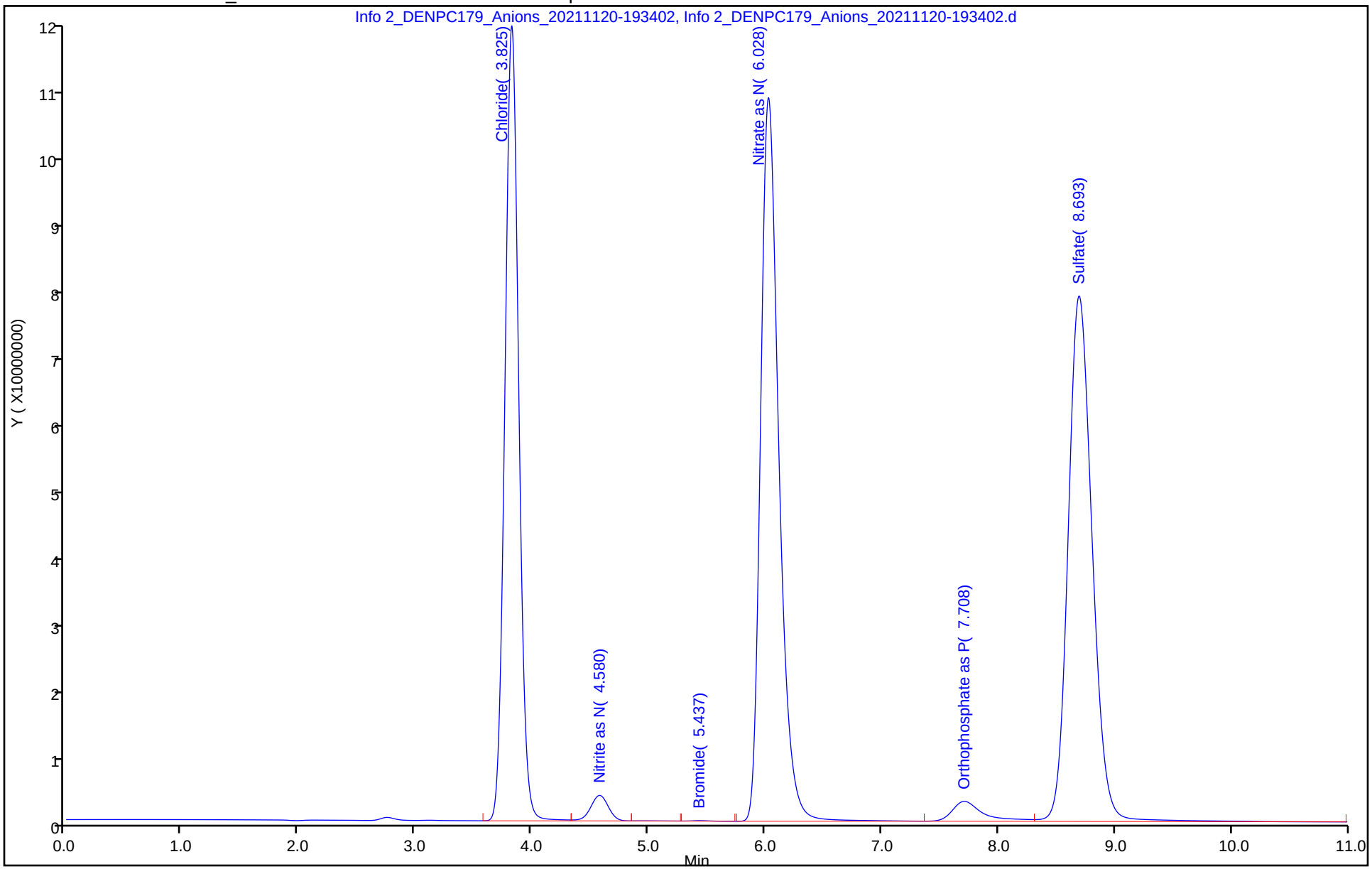
Processing Flags
NC - Not Calibrated

Report Date: 22-Nov-2021 11:52:43 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-193402.d

Injection Date:	20-Nov-2021 19:20:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-155138-F-9	Lab Sample ID:	280-155138-9	Worklist Smp#:	31
Client ID:	NW070-7				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-194
Lims ID: 280-155138-F-8
Client ID: G0081-7
Sample Type: Client
Inject. Date: 20-Nov-2021 19:34:00 ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-032
Misc. Info.: 280-0106682-032
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:42 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		2.755			ND	
2 Chloride	3.868	3.815	0.053	677275806	44.8	
3 Nitrite as N		4.400			ND	
4 Bromide	5.478	5.422	0.056	5651702	0.9327	
5 Nitrate as N	6.210	6.107	0.103	6699166	NC	
6 Orthophosphate as P	7.742	7.662	0.080	17101430	NC	
7 Sulfate	8.678	8.692	-0.014	1699222565	151.7	

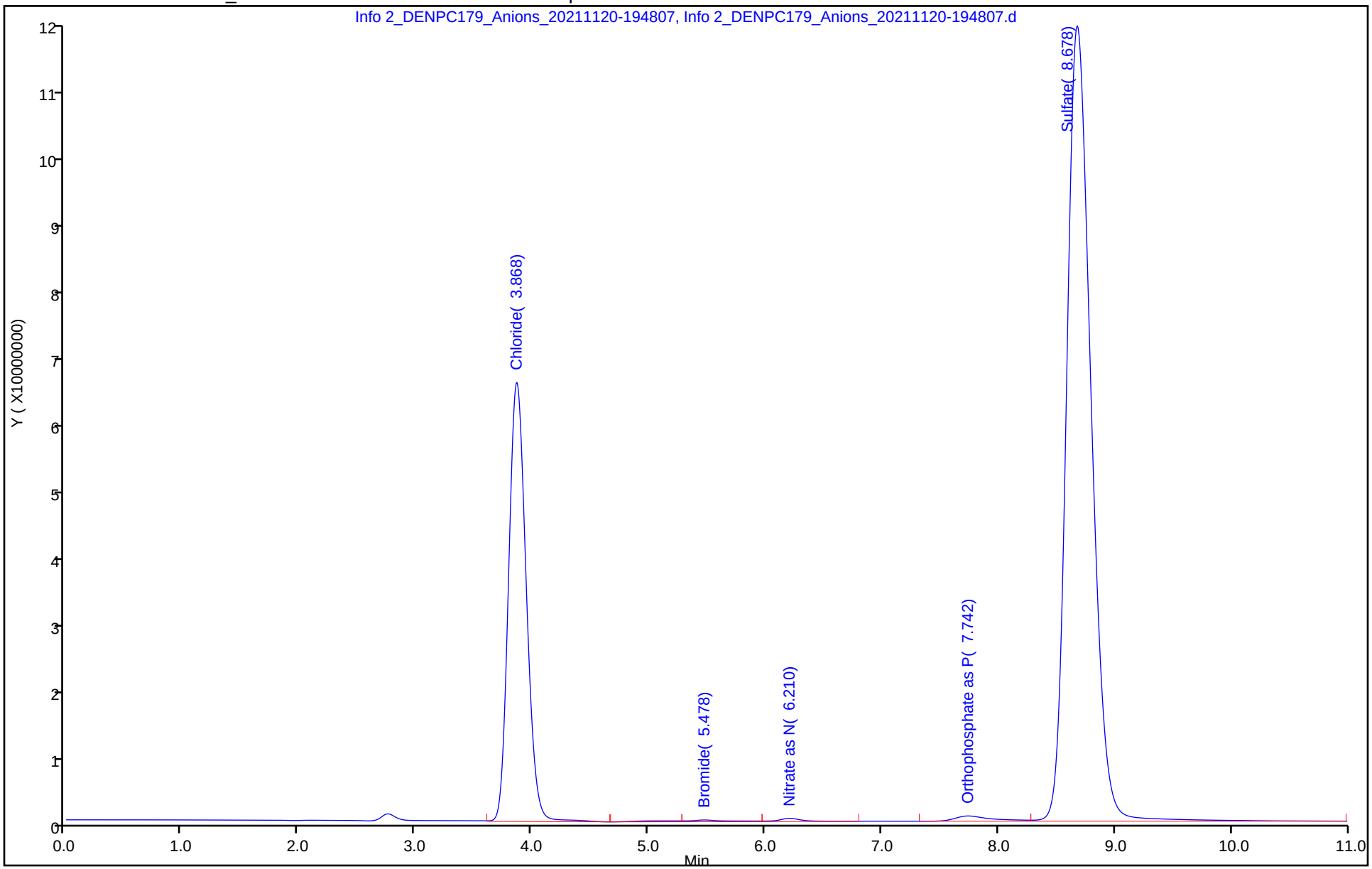
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 22-Nov-2021 11:52:44 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-194807.d				
Injection Date:	20-Nov-2021 19:34:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	280-155138-F-8	Lab Sample ID:	280-155138-8	Worklist Smp#:	32
Client ID:	G0081-7				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-204
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 20-Nov-2021 20:30:00 ALS Bottle#: 0 Worklist Smp#: 36
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-036
Misc. Info.: 280-0106682-036
Operator ID: wetchemd Instrument ID: WC_IonChrom10
Sublist: chrom-Anions_IC10*sub2

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:46 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

First Level Reviewer: jindaratc Date: 22-Nov-2021 11:32:55

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.768	2.755	0.013	153093852	5.00	4.98	Ma
2 Chloride	3.820	3.815	0.005	1523830216	100.0	100.6	M
3 Nitrite as N	4.395	4.400	-0.005	177804353	NC	NC	M
4 Bromide	5.398	5.422	-0.024	32899088	5.00	5.07	
5 Nitrate as N	6.073	6.107	-0.034	195770027	NC	NC	
6 Orthophosphate as P	7.672	7.662	0.010	86274625	NC	NC	M
7 Sulfate	8.687	8.692	-0.005	1134484818	100.0	101.3	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

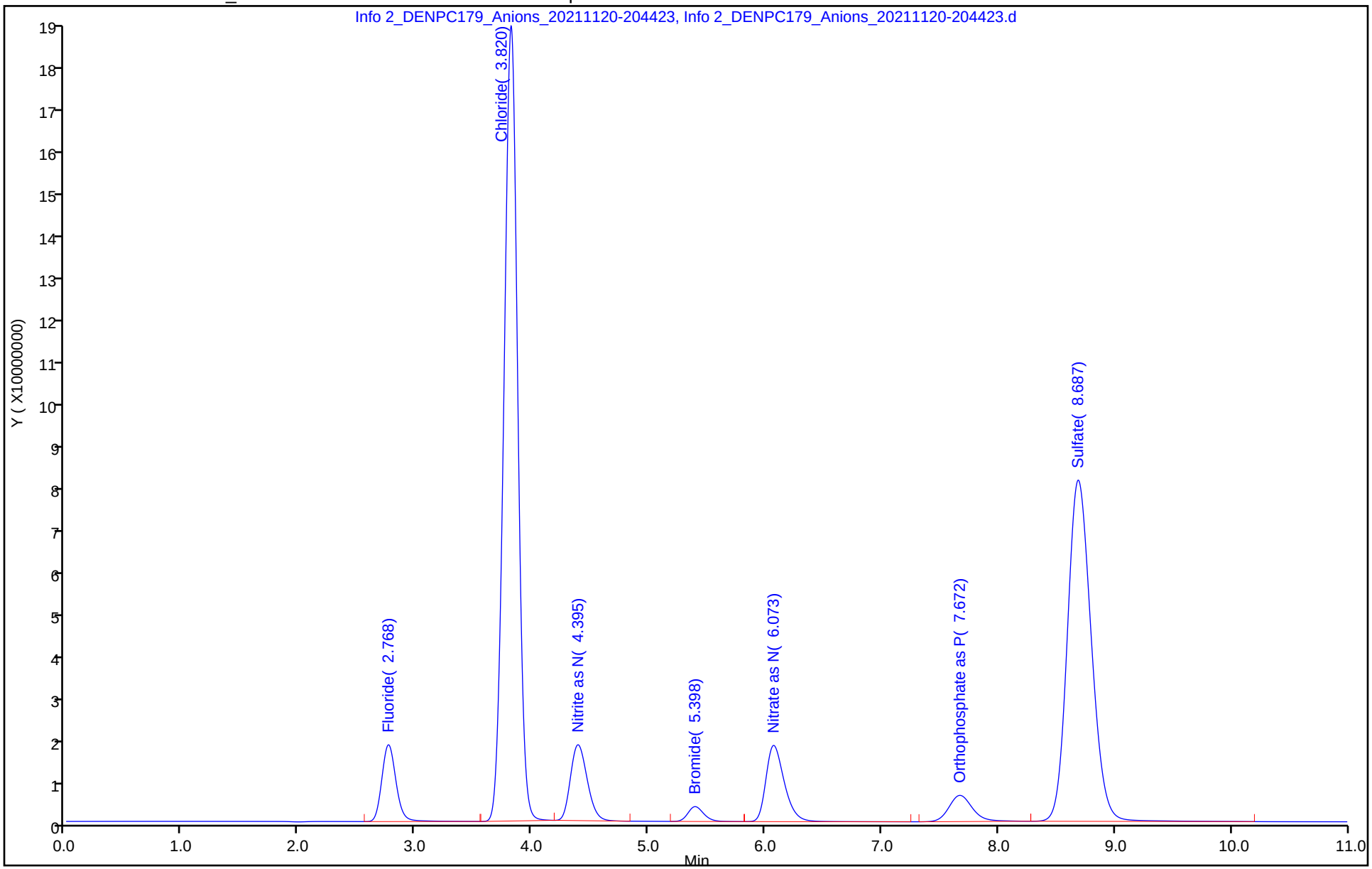
Reagents:

IC LCS_01845 Amount Added: 10.00 Units: mL

Report Date: 22-Nov-2021 11:52:46 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-204423.d				
Injection Date:	20-Nov-2021 20:30:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccv			Worklist Smp#:	36
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-204

Injection Date: 20-Nov-2021 20:30:00 Instrument ID: WC_IonChrom10

Lims ID: ccv

Client ID:

Operator ID: wetchemd ALS Bottle#: 0 Worklist Smp#: 36

Injection Vol: 5.0 ul Dil. Factor: 1.0000

Method: Anions_IC10 Limit Group: Wet - Anions 28D

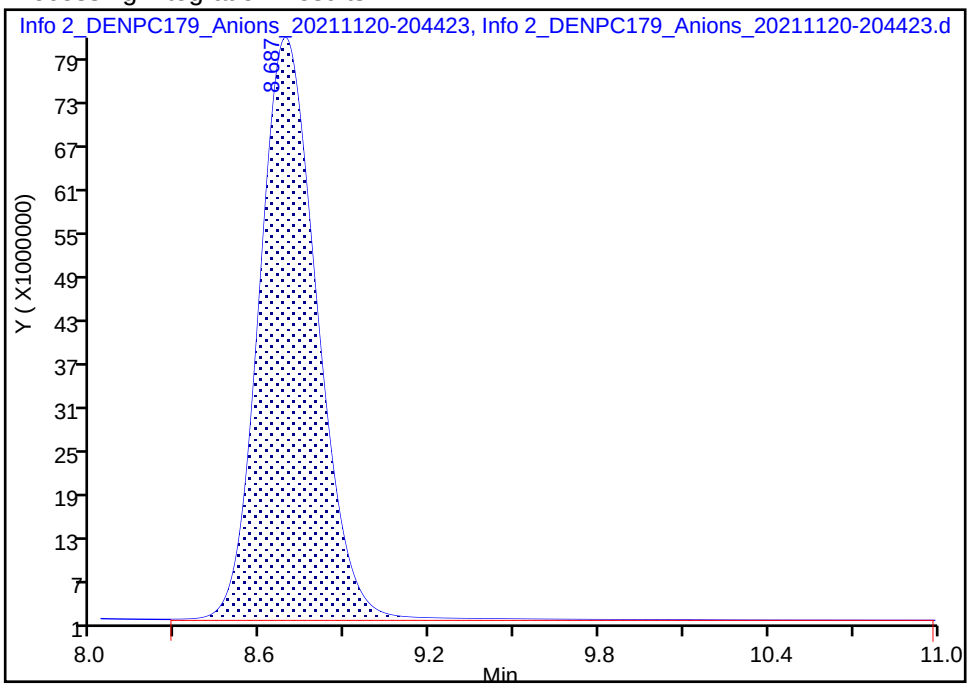
Column: Detector Info 2_091554_1

7 Sulfate, CAS: 14808-79-8

Signal: 1

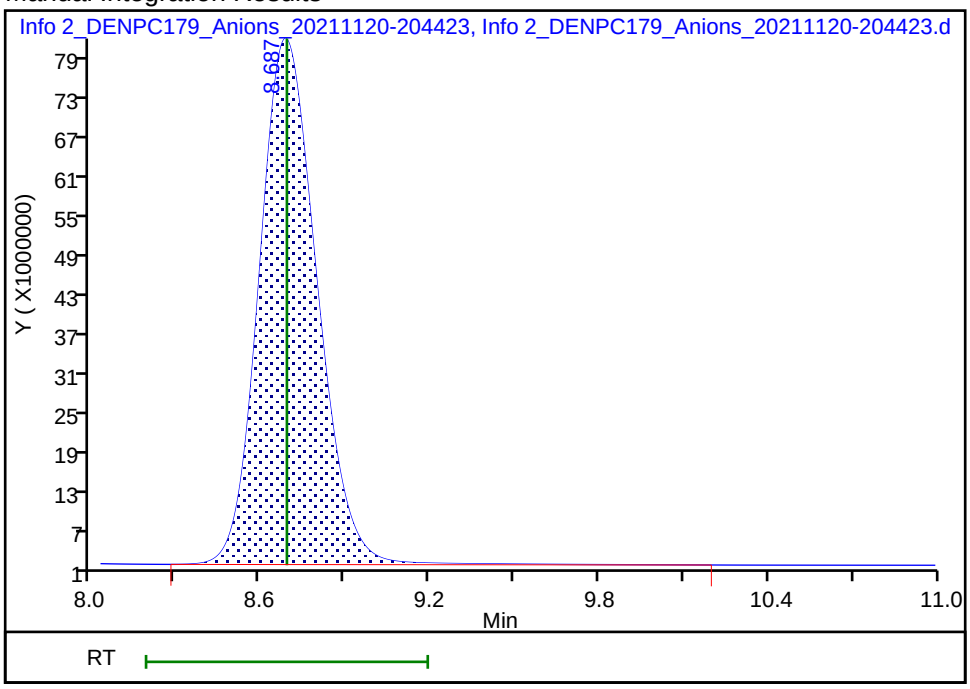
Processing Integration Results

RT: 8.69
Area: 1144282278
Amount: 102.2129
Amount Units: ug/ml



Manual Integration Results

RT: 8.69
Area: 1134484818
Amount: 101.3398
Amount Units: ug/ml



Reviewer: jindaratc, 22-Nov-2021 11:32:53

Audit Action: Manually Integrated Audit Reason: Peak not integrated

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-205
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 20-Nov-2021 20:44:00 ALS Bottle#: 0 Worklist Smp#: 37
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106682-037
Misc. Info.: 280-0106682-037
Operator ID: wetchemd Instrument ID: WC_IonChrom10

Method: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Anions_IC10.m
Limit Group: Wet - Anions 28D
Last Update: 22-Nov-2021 11:52:46 Calib Date: 14-Nov-2021 17:53:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211114-106492.b\Info 2_DENPC179_Anions_20211114-180

Column 1 : Det: Info 2_091554_1
Process Host: CTX1607

First Level Reviewer: jindaratc Date: 22-Nov-2021 11:33:09

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.757	2.755	0.002	123057		-0.0585	Ma
2 Chloride	3.778	3.815	-0.037	82171		0.1701	M
3 Nitrite as N		4.400				ND	
4 Bromide		5.422				ND	
5 Nitrate as N	6.192	6.107	0.085	229621		NC	
6 Orthophosphate as P	7.727	7.662	0.065	3594776		NC	
7 Sulfate	8.750	8.692	0.058	3282655		0.5276	

QC Flag Legend

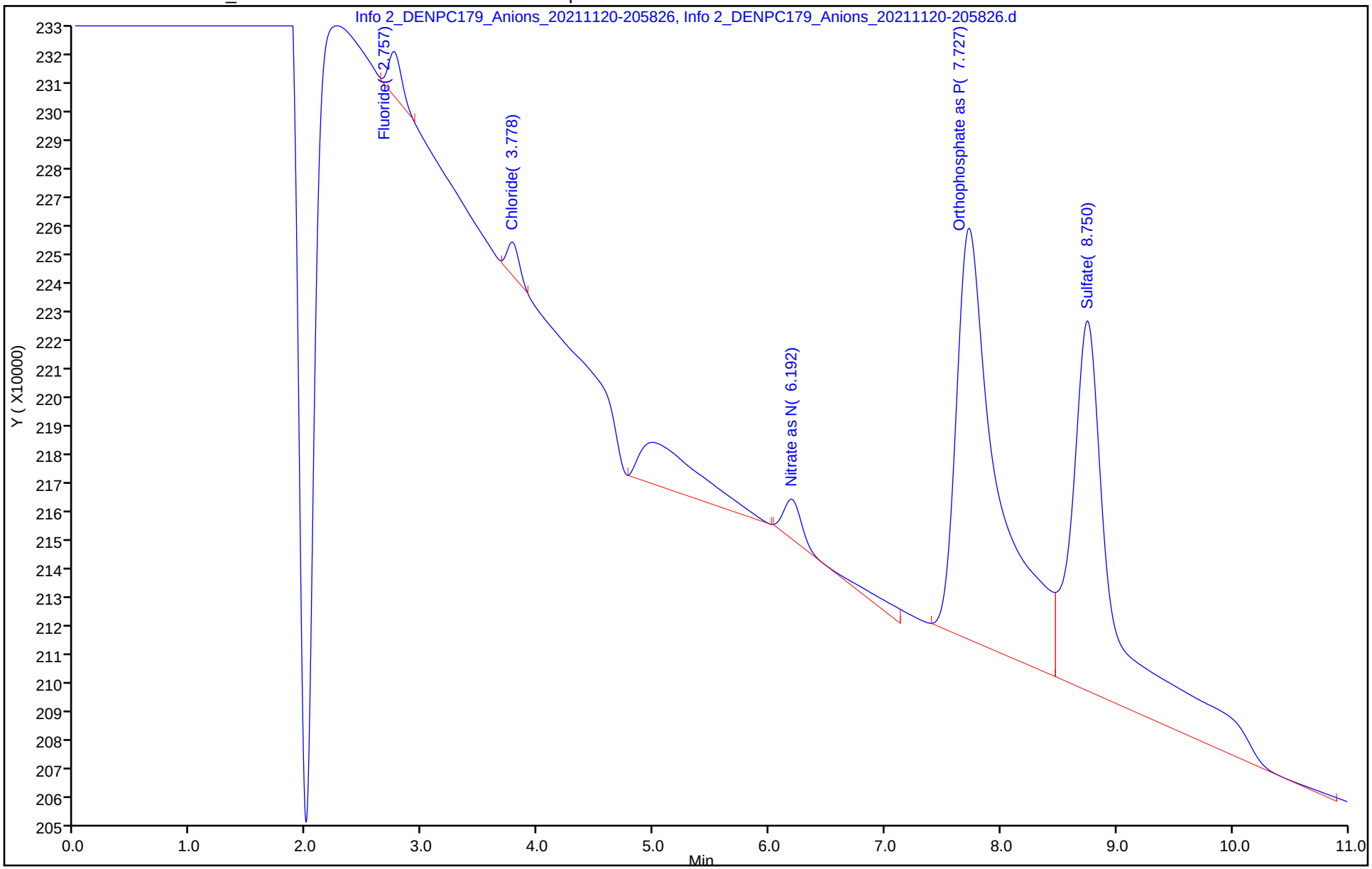
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
a - User Assigned ID

Report Date: 22-Nov-2021 11:52:47 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom10\20211120-106682.b\Info 2_DENPC179_Anions_20211120-205826.d

Injection Date:	20-Nov-2021 20:44:00	Instrument ID:	WC_IonChrom10	Operator ID:	wetchemd
Lims ID:	ccb			Worklist Smp#:	37
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC10	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0004.d
Lims ID: std L1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 14-Nov-2021 17:29:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106493-002
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Nov-2021 13:02:37 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1677

First Level Reviewer: jindaratc Date: 14-Nov-2021 17:52:49

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	3138766	0.2000	0.2172	M
2 Chloride	3.700	3.700	0.000	11646073	1.00	1.31	
3 Nitrite as N	4.525	4.525	0.000	5323545	NC	NC	
4 Bromide	5.484	5.484	0.000	1014966	0.2000	0.2102	
5 Nitrate as N	6.200	6.200	0.000	5998610	NC	NC	
7 Orthophosphate as P	9.209	9.209	0.000	1171008	NC	NC	
6 Sulfate	10.059	10.059	0.000	8264861	1.00	1.30	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

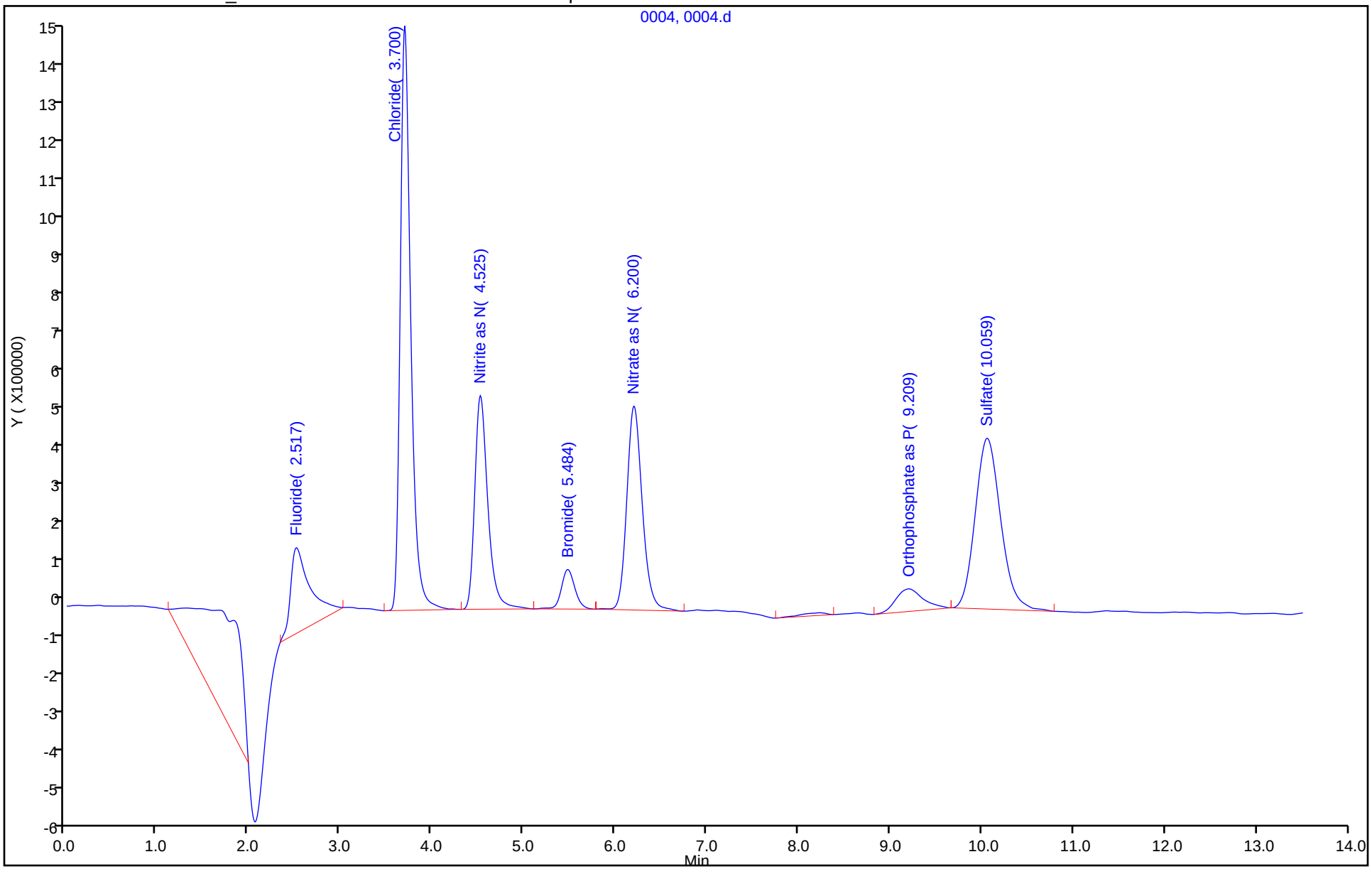
Reagents:

IC Cal low_00607 Amount Added: 0.02 Units: mL
IC CAL cl/so4_00393 Amount Added: 0.02 Units: mL

Report Date: 16-Nov-2021 13:02:37 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0004.d				
Injection Date:	14-Nov-2021 17:29:00	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 TestAmerica, Denver

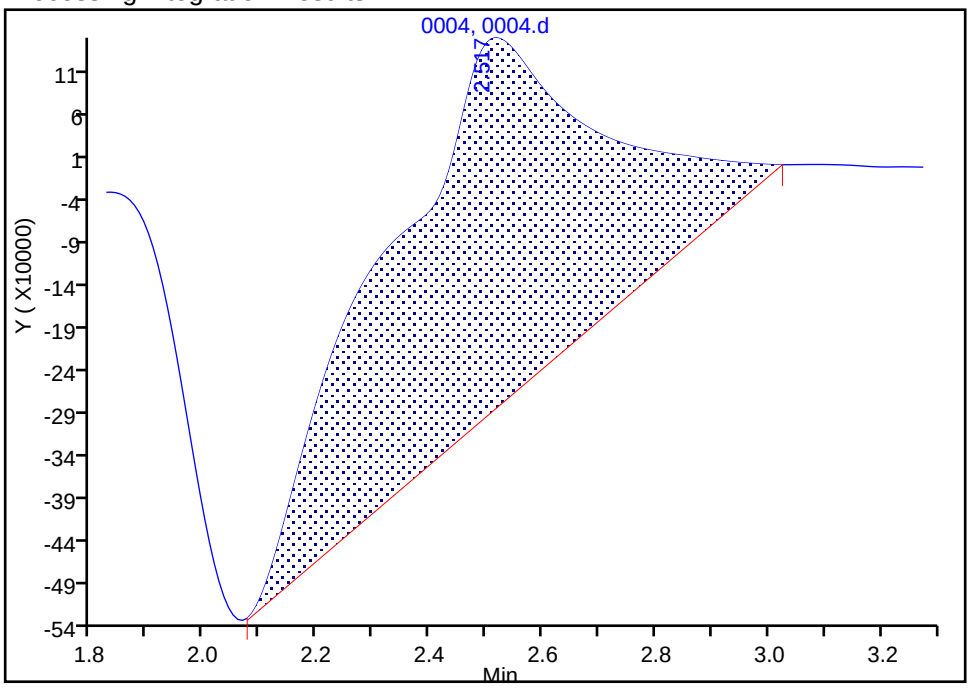
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0004.d
Injection Date: 14-Nov-2021 17:29:00 Instrument ID: WC_IonChrom11
Lims ID: std L1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

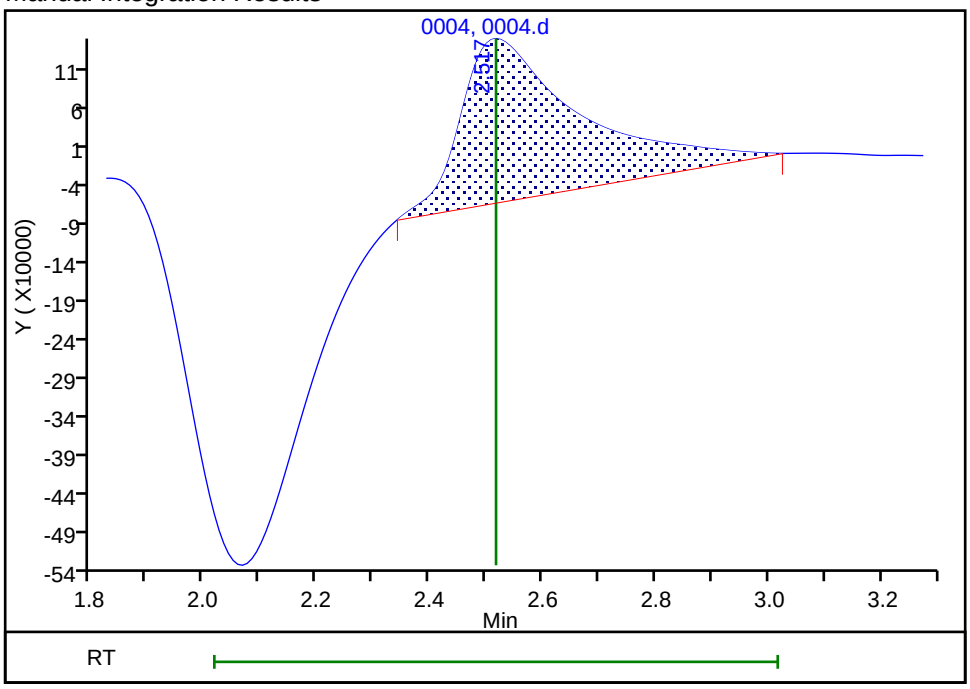
Processing Integration Results

RT: 2.52
Area: 12086115
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 2.52
Area: 3138766
Amount: 0.217247
Amount Units: ug/ml



Reviewer: jindaratc, 14-Nov-2021 17:52:45
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

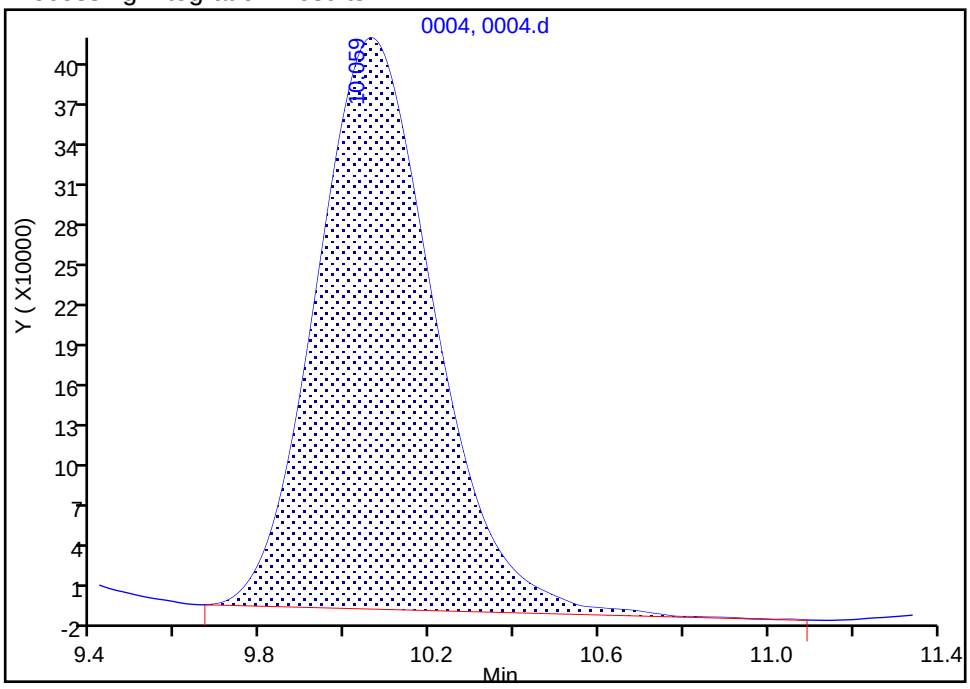
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0004.d
Injection Date: 14-Nov-2021 17:29:00 Instrument ID: WC_IonChrom11
Lims ID: std L1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

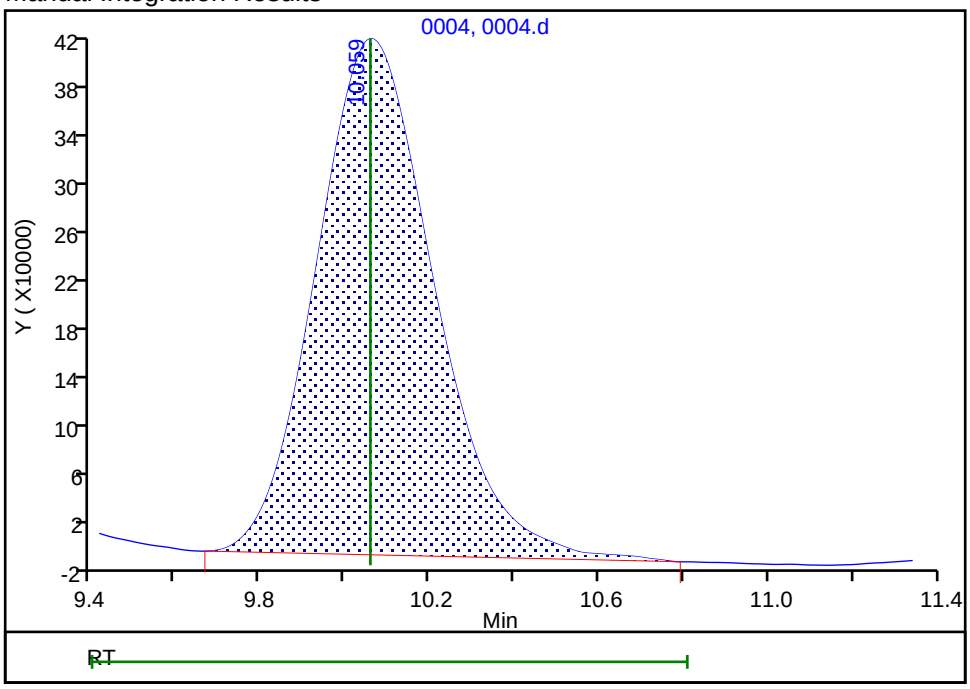
Processing Integration Results

RT: 10.06
Area: 8288886
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.06
Area: 8264861
Amount: 1.303181
Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 07:43:43
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0005.d
Lims ID: std L2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 14-Nov-2021 17:45:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106493-003
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Nov-2021 13:02:38 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1677

First Level Reviewer: gonzalezsp Date: 14-Nov-2021 20:06:13

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	7643242	0.5000	0.4915	M
2 Chloride	3.700	3.700	0.000	29173549	2.50	2.29	
3 Nitrite as N	4.525	4.525	0.000	13071055	NC	NC	
4 Bromide	5.475	5.475	0.000	2588032	0.5000	0.4994	
5 Nitrate as N	6.200	6.200	0.000	14609941	NC	NC	
7 Orthophosphate as P	9.192	9.192	0.000	2786926	NC	NC	
6 Sulfate	10.059	10.059	0.000	20543270	2.50	2.35	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

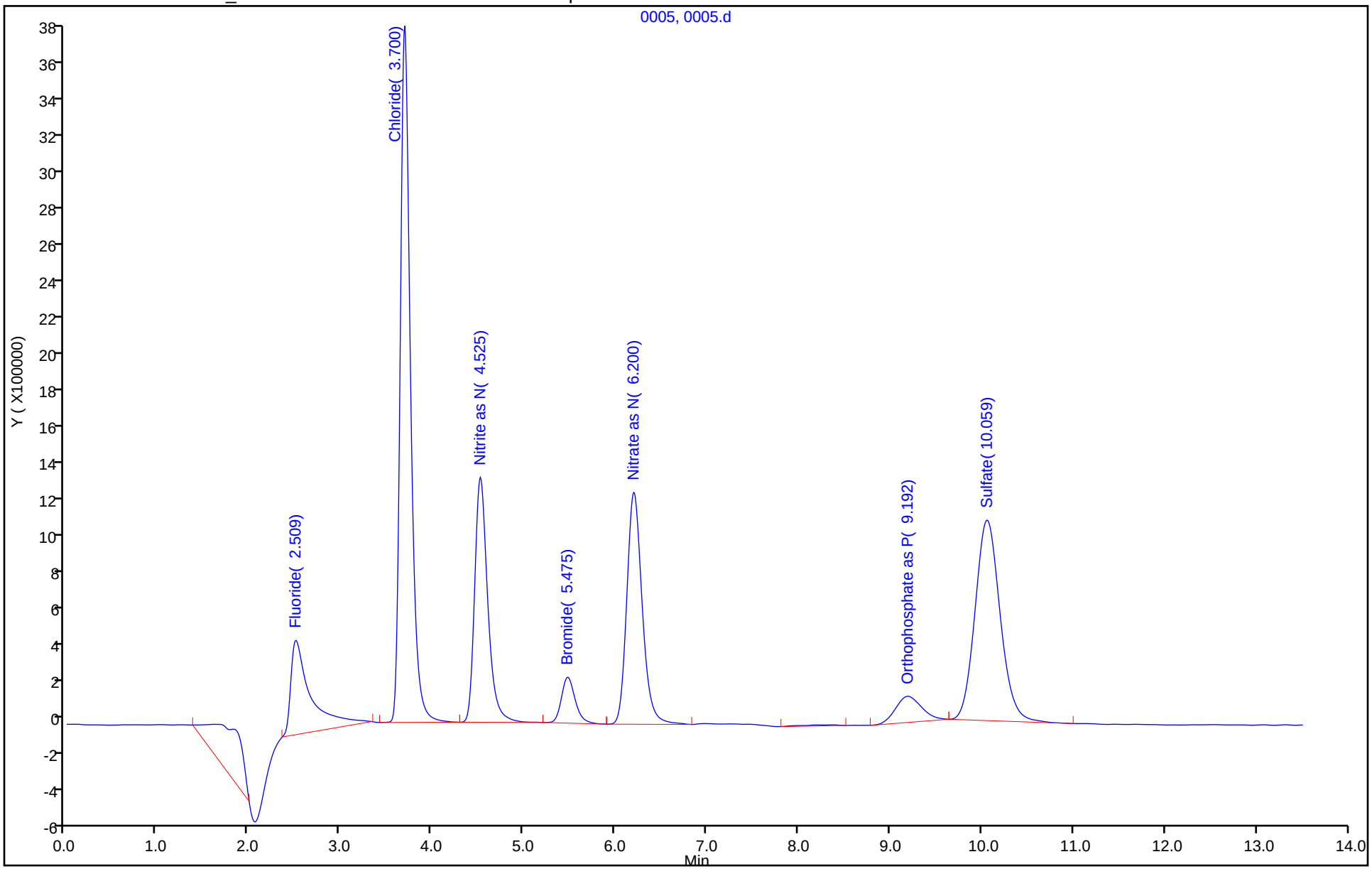
IC Cal low_00607 Amount Added: 0.05 Units: mL
IC CAL cl/so4_00393 Amount Added: 0.05 Units: mL

Report Date: 16-Nov-2021 13:02:38 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0005.d

Injection Date:	14-Nov-2021 17:45:00	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 TestAmerica, Denver

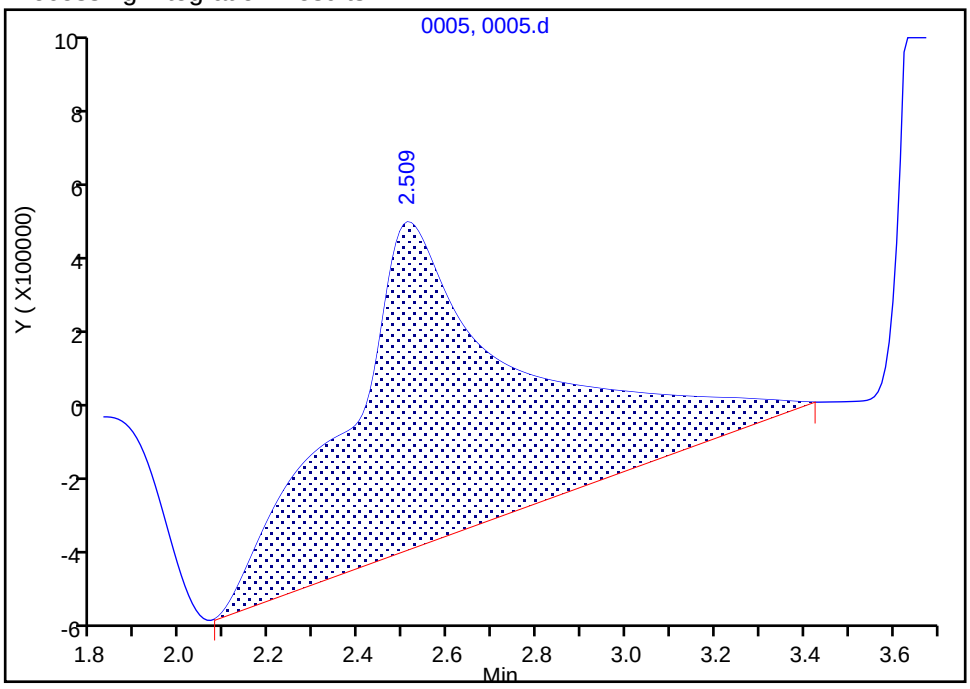
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0005.d				
Injection Date:	14-Nov-2021 17:45:00	Instrument ID:	WC_IonChrom11		
Lims ID:	std L2				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	3
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

1 Fluoride, CAS: 16984-48-8

Signal: 1

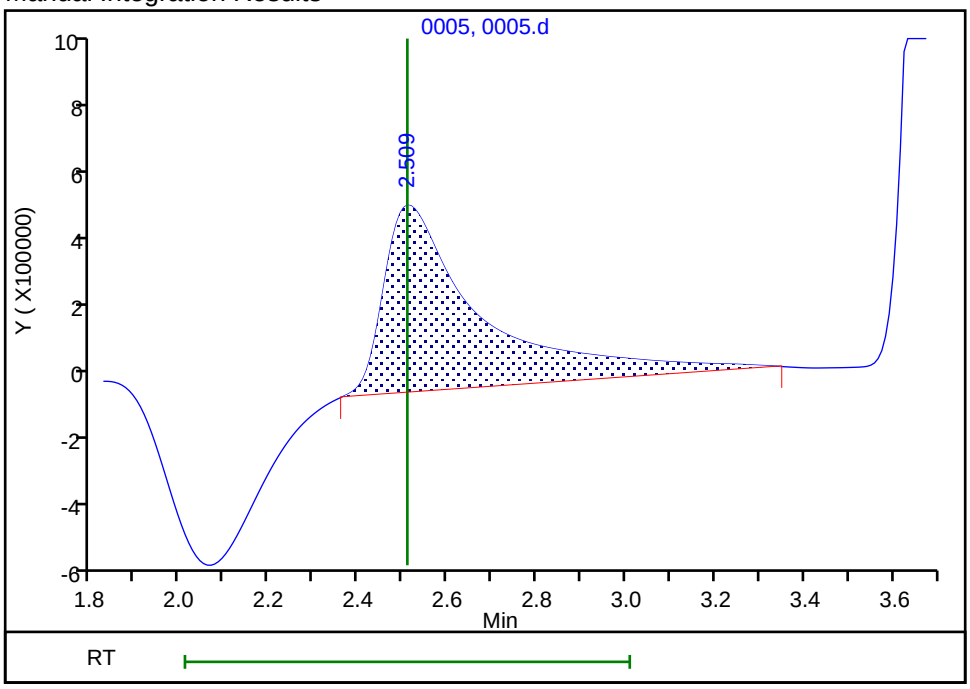
Processing Integration Results

RT: 2.51
Area: 22519207
Amount: 1.070054
Amount Units: ug/ml



Manual Integration Results

RT: 2.51
Area: 7643242
Amount: 0.491494
Amount Units: ug/ml



Reviewer: gonzalezsp, 14-Nov-2021 20:06:07

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0006.d
Lims ID: std L3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 14-Nov-2021 18:02:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106493-004
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Nov-2021 13:02:38 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1677

First Level Reviewer: gonzalezsp Date: 14-Nov-2021 20:06:34

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	15207785	1.00	0.9520	M
2 Chloride	3.700	3.700	0.000	60418917	5.00	4.03	
3 Nitrite as N	4.534	4.534	0.000	26760914	NC	NC	
4 Bromide	5.484	5.484	0.000	5089010	1.00	0.9591	
5 Nitrate as N	6.209	6.209	0.000	29649558	NC	NC	
7 Orthophosphate as P	9.184	9.184	0.000	6407539	NC	NC	
6 Sulfate	10.059	10.059	0.000	41674139	5.00	4.14	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

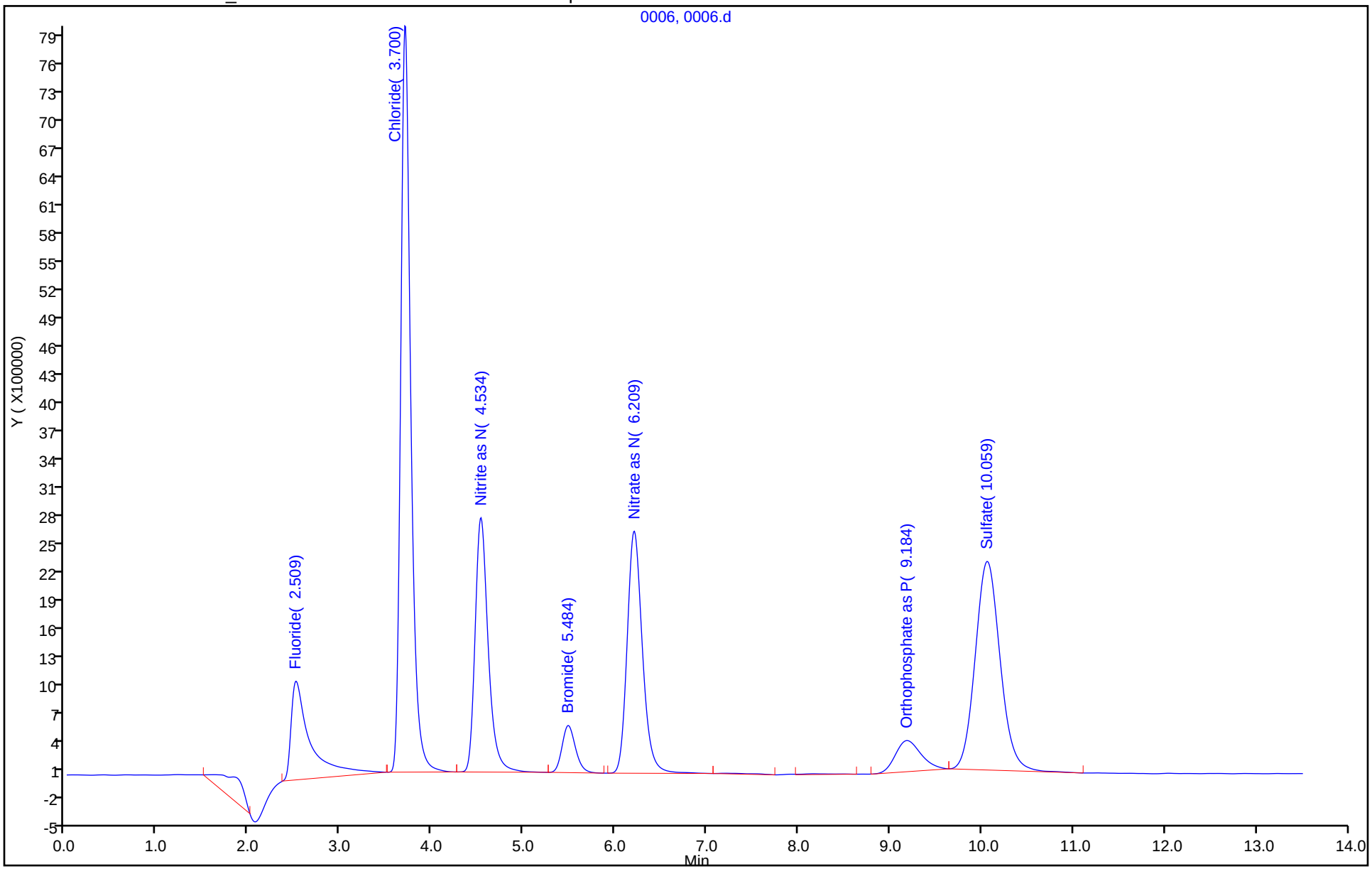
IC Cal low_00607 Amount Added: 0.10 Units: mL
IC CAL cl/so4_00393 Amount Added: 0.10 Units: mL

Report Date: 16-Nov-2021 13:02:39 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0006.d

Injection Date:	14-Nov-2021 18:02:00	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 TestAmerica, Denver

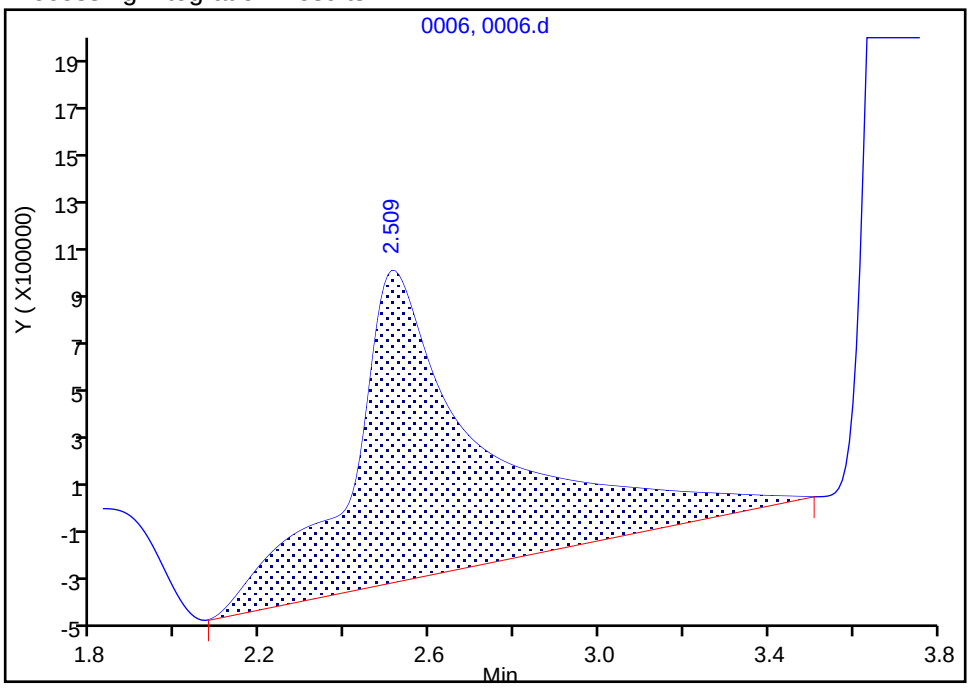
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0006.d
Injection Date: 14-Nov-2021 18:02:00 Instrument ID: WC_IonChrom11
Lims ID: std L3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

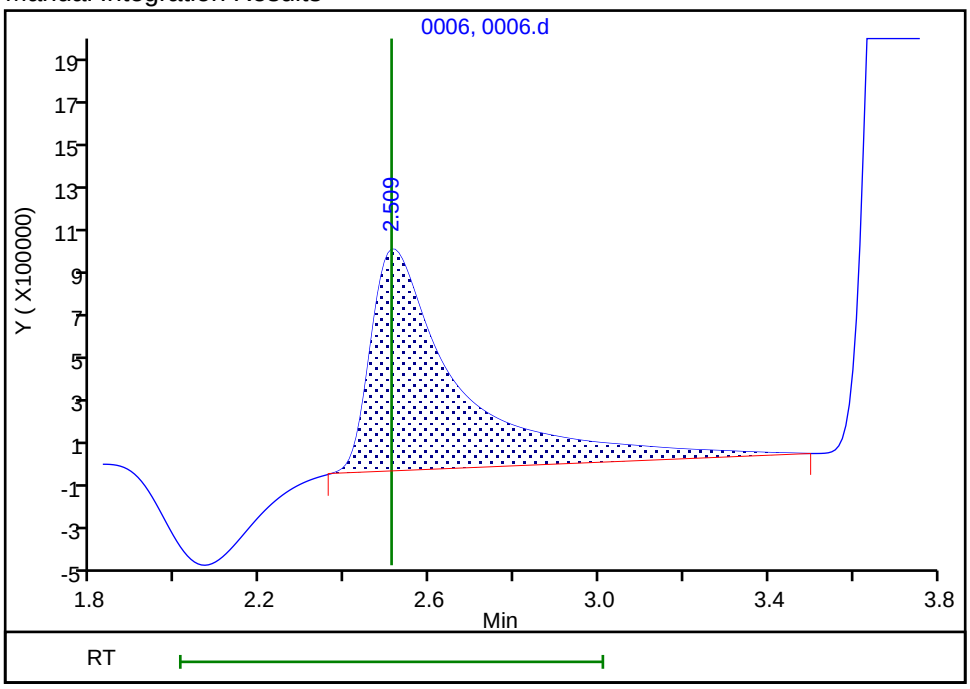
Processing Integration Results

RT: 2.51
Area: 29807017
Amount: 1.705578
Amount Units: ug/ml



Manual Integration Results

RT: 2.51
Area: 15207785
Amount: 0.952047
Amount Units: ug/ml



Reviewer: gonzalezsp, 14-Nov-2021 20:06:27
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d
Lims ID: std L4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 14-Nov-2021 18:18:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106493-005
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Nov-2021 13:02:39 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1677

First Level Reviewer: gonzalezsp Date: 14-Nov-2021 20:06:59

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	62544168	4.00	3.83	M
2 Chloride	3.750	3.750	0.000	1007983829	60.0	56.8	
3 Nitrite as N	4.550	4.550	0.000	118723288	NC	NC	
4 Bromide	5.484	5.484	0.000	21222174	4.00	3.92	
5 Nitrate as N	6.200	6.200	0.000	131879303	NC	NC	M
7 Orthophosphate as P	9.150	9.150	0.000	32904898	NC	NC	
6 Sulfate	10.117	10.117	0.000	628840790	60.0	54.0	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

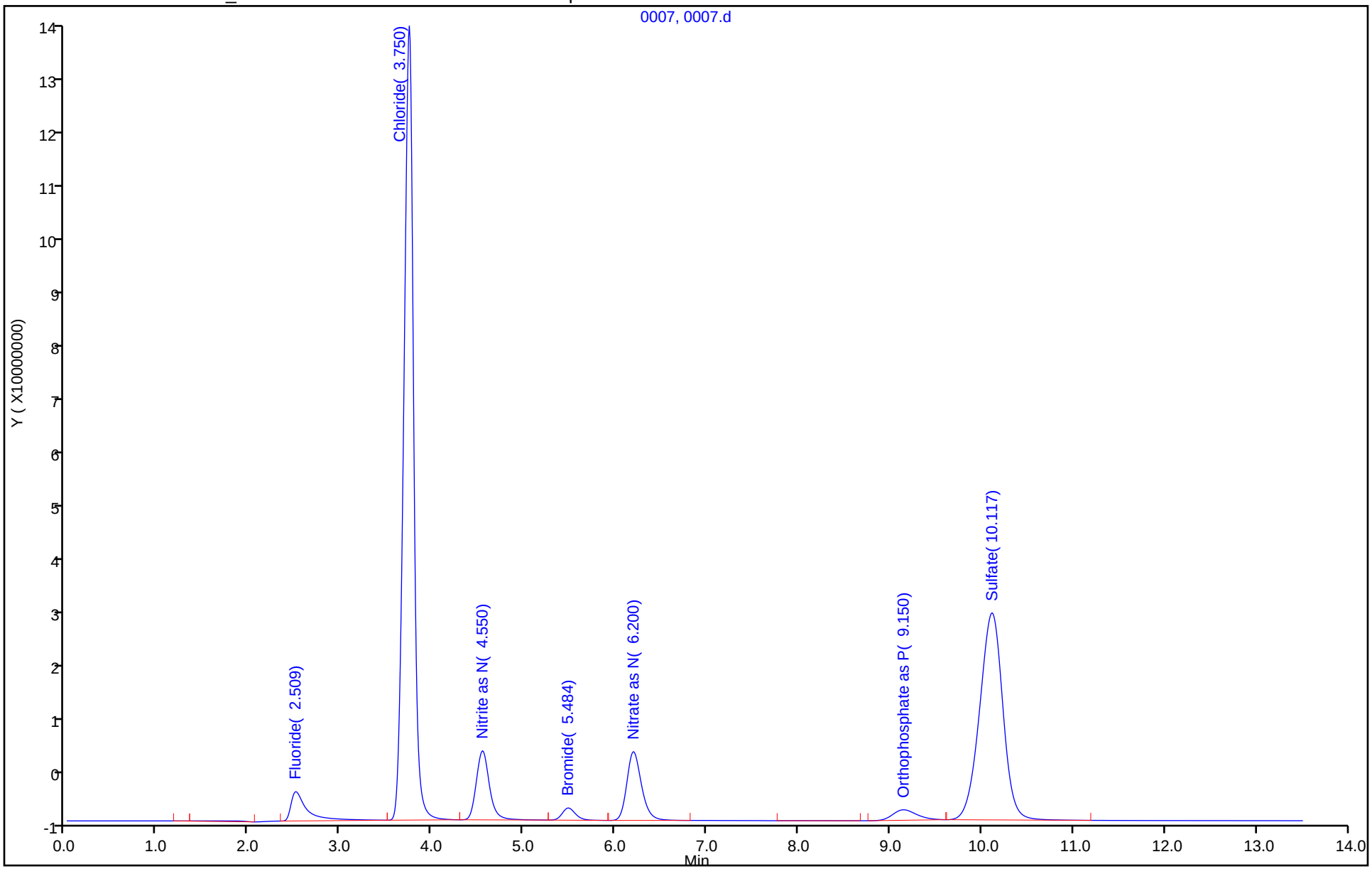
IC Cal low_00607 Amount Added: 0.40 Units: mL
IC CAL cl/so4_00393 Amount Added: 1.20 Units: mL

Report Date: 16-Nov-2021 13:02:39 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d

Injection Date:	14-Nov-2021 18:18:00	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 TestAmerica, Denver

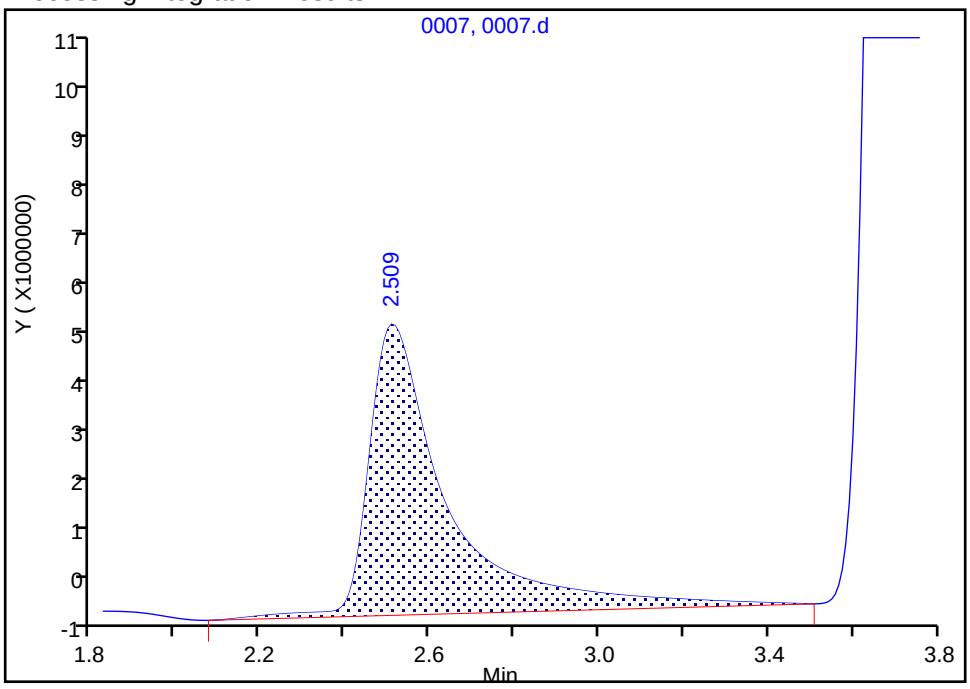
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d				
Injection Date:	14-Nov-2021 18:18:00	Instrument ID:	WC_IonChrom11		
Lims ID:	std L4				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	5
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

1 Fluoride, CAS: 16984-48-8

Signal: 1

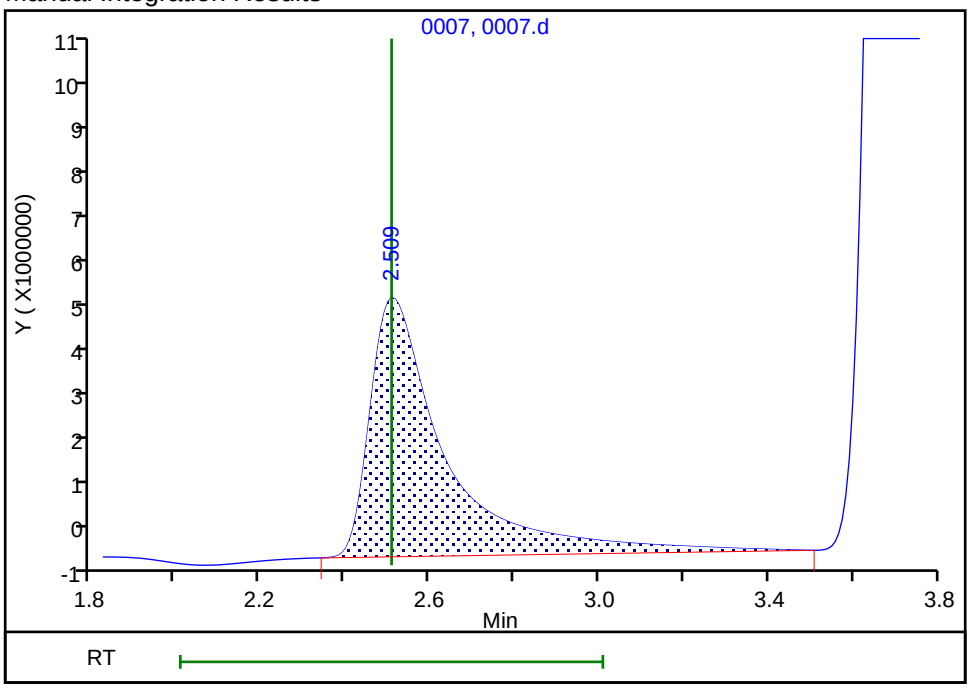
Processing Integration Results

RT: 2.51
Area: 66466563
Amount: 4.032208
Amount Units: ug/ml



Manual Integration Results

RT: 2.51
Area: 62544168
Amount: 3.834033
Amount Units: ug/ml



Reviewer: gonzalezsp, 14-Nov-2021 20:06:52

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

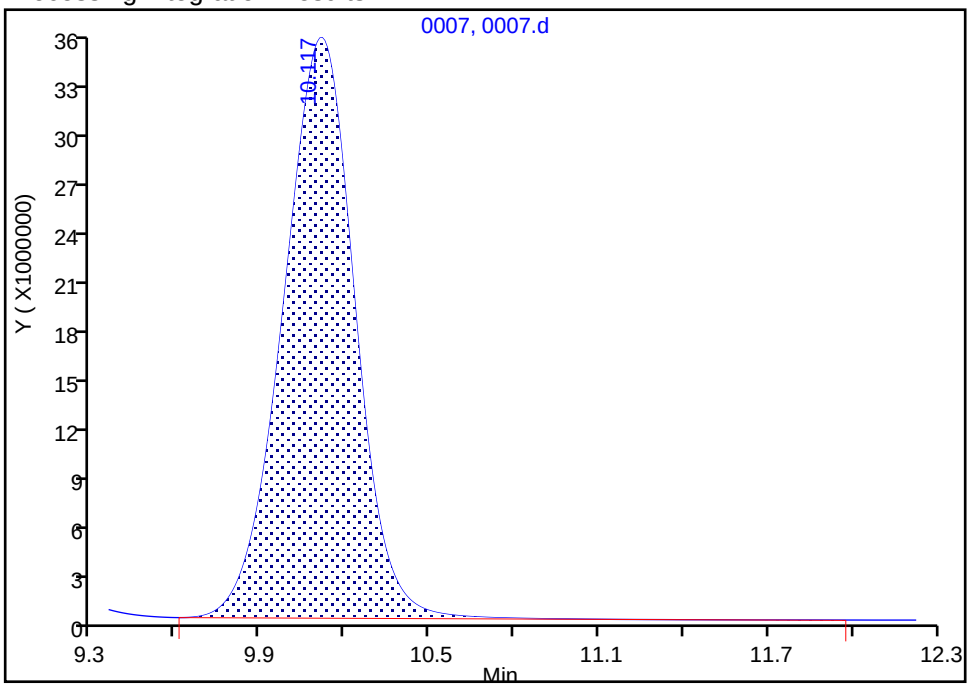
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d
Injection Date: 14-Nov-2021 18:18:00 Instrument ID: WC_IonChrom11
Lims ID: std L4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

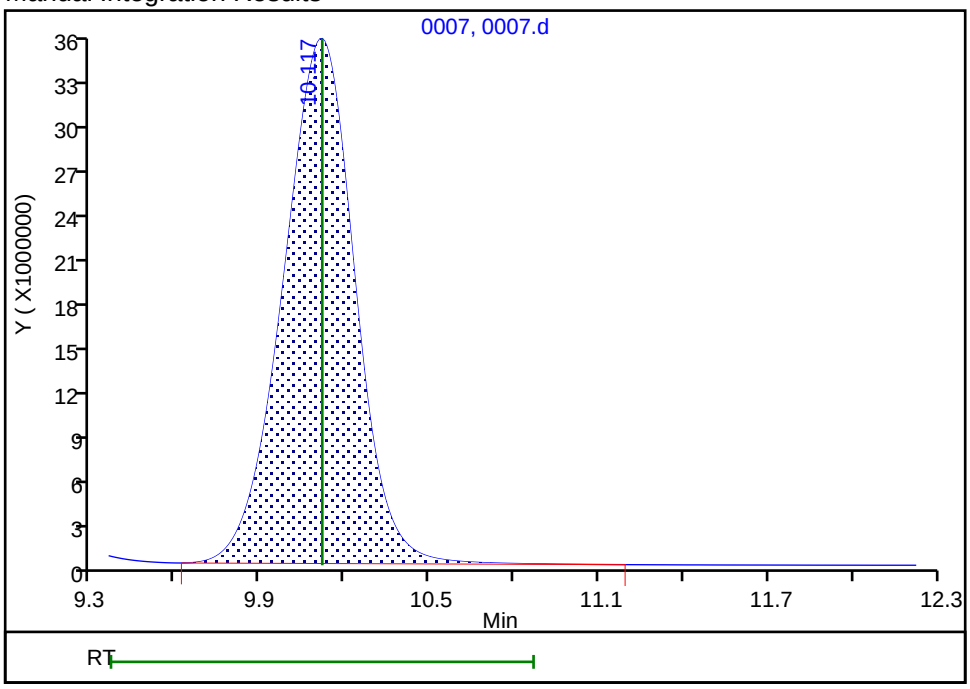
Processing Integration Results

RT: 10.12
Area: 629244124
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.12
Area: 628840790
Amount: 54.023175
Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 07:44:22
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0008.d
Lims ID: std L5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 14-Nov-2021 18:35:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106493-006
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Nov-2021 13:02:40 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1677

First Level Reviewer: gonzalezsp Date: 15-Nov-2021 07:45:24

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	130775611	8.00	7.99	
2 Chloride	3.792	3.792	0.000	2142832479	120.0	120.1	
3 Nitrite as N	4.567	4.567	0.000	247152972	NC	NC	
4 Bromide	5.484	5.484	0.000	43224295	8.00	7.97	
5 Nitrate as N	6.184	6.184	0.000	285371230	NC	NC	M
7 Orthophosphate as P	9.117	9.117	0.000	74986164	NC	NC	
6 Sulfate	10.167	10.167	0.000	1392088630	120.0	118.9	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

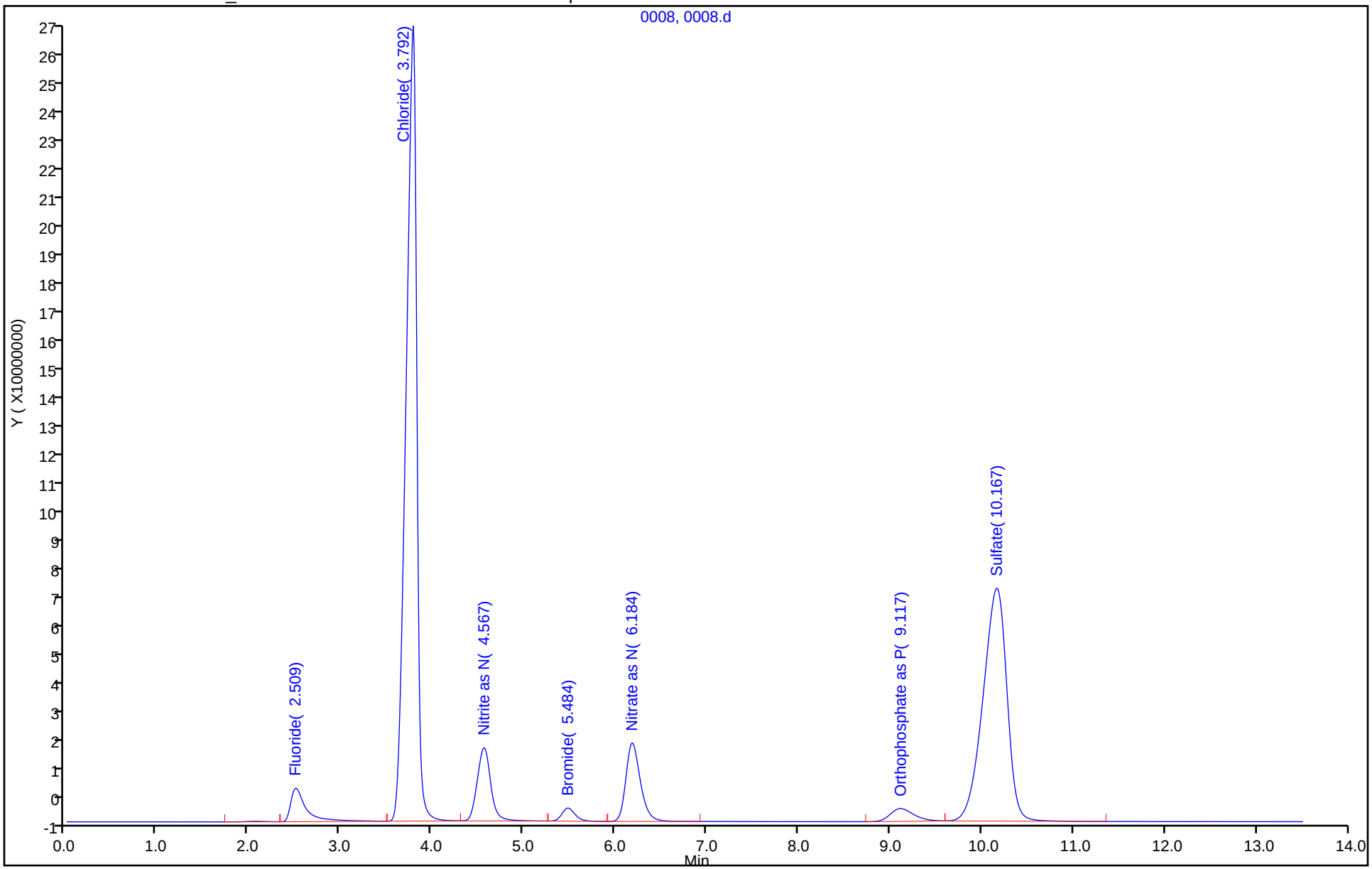
IC Cal low_00607 Amount Added: 0.80 Units: mL
IC CAL cl/so4_00393 Amount Added: 2.40 Units: mL

Report Date: 16-Nov-2021 13:02:40 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0008.d

Injection Date:	14-Nov-2021 18:35:00	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 TestAmerica, Denver

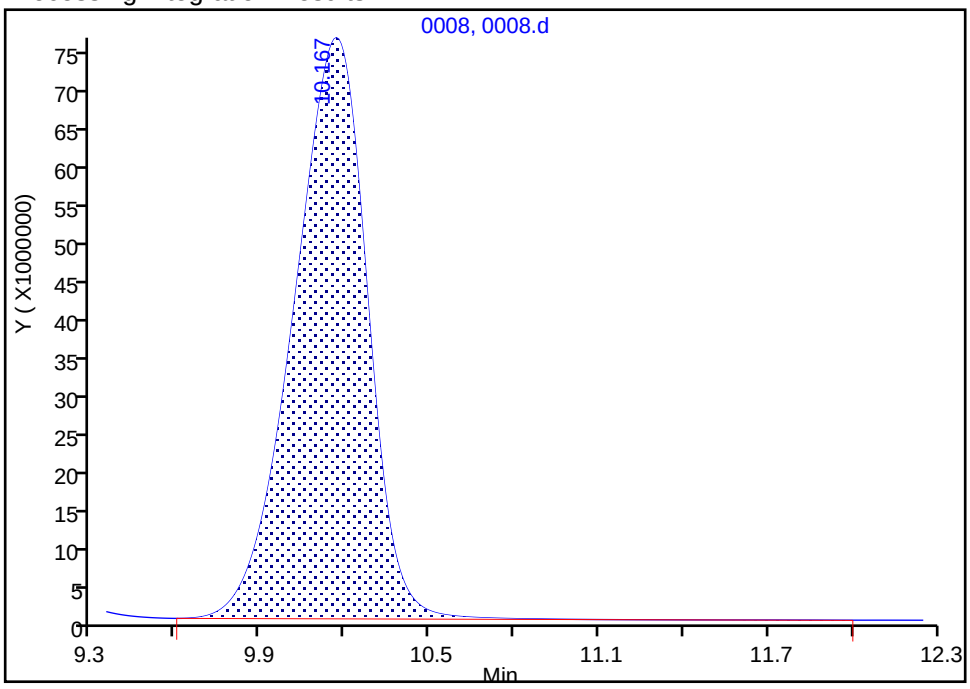
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0008.d
Injection Date: 14-Nov-2021 18:35:00 Instrument ID: WC_IonChrom11
Lims ID: std L5
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

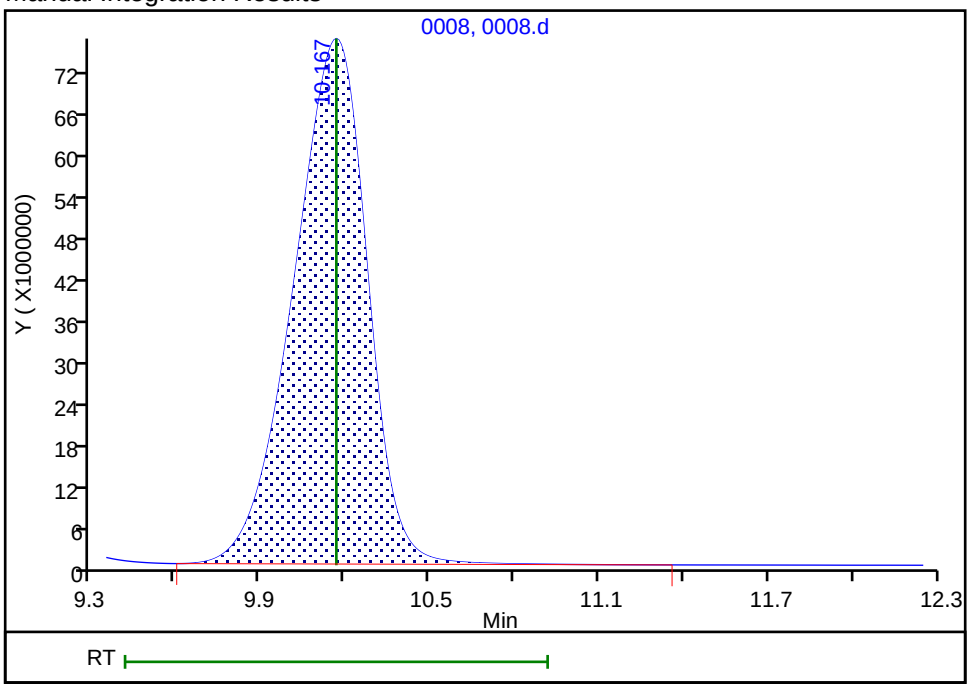
Processing Integration Results

RT: 10.17
Area: 1392640893
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.17
Area: 1392088630
Amount: 118.8636
Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 07:45:06
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d
Lims ID: std L6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 14-Nov-2021 18:51:00 ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106493-007
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Nov-2021 13:02:40 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1677

First Level Reviewer: gonzalezsp Date: 15-Nov-2021 07:45:51

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	167383964	10.0	10.2	
2 Chloride	3.842	3.842	0.000	3647971873	200.0	204.0	
3 Nitrite as N	4.575	4.575	0.000	314678249	NC	NC	
4 Bromide	5.484	5.484	0.000	55029657	10.0	10.1	
5 Nitrate as N	6.184	6.184	0.000	370295669	NC	NC	M
7 Orthophosphate as P	9.100	9.100	0.000	98180029	NC	NC	
6 Sulfate	10.225	10.225	0.000	2439236596	200.0	207.8	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

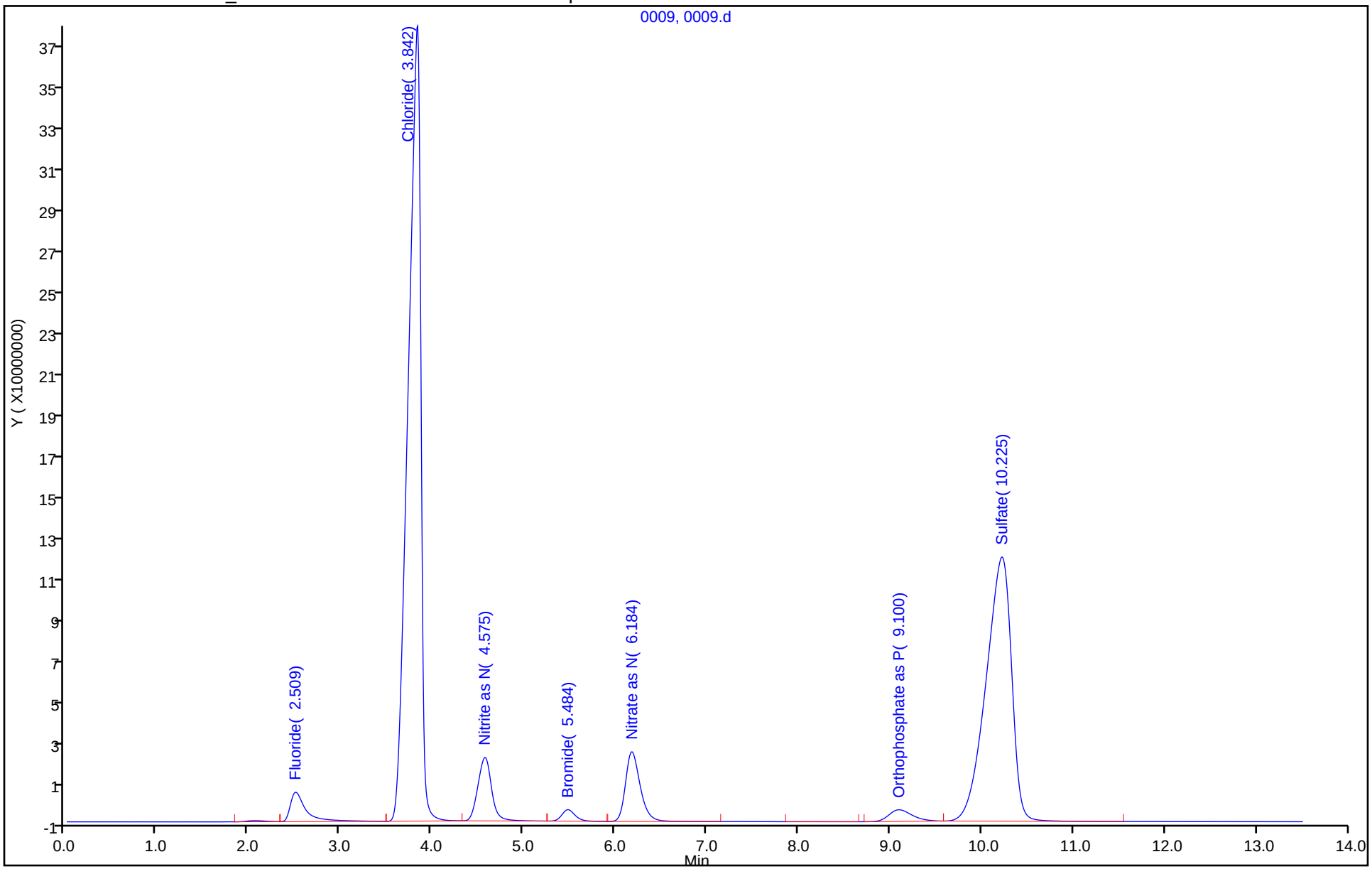
IC Cal low_00607 Amount Added: 1.00 Units: mL
IC CAL cl/so4_00393 Amount Added: 4.00 Units: mL

Report Date: 16-Nov-2021 13:02:40 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Injection Date:	14-Nov-2021 18:51:00	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 TestAmerica, Denver

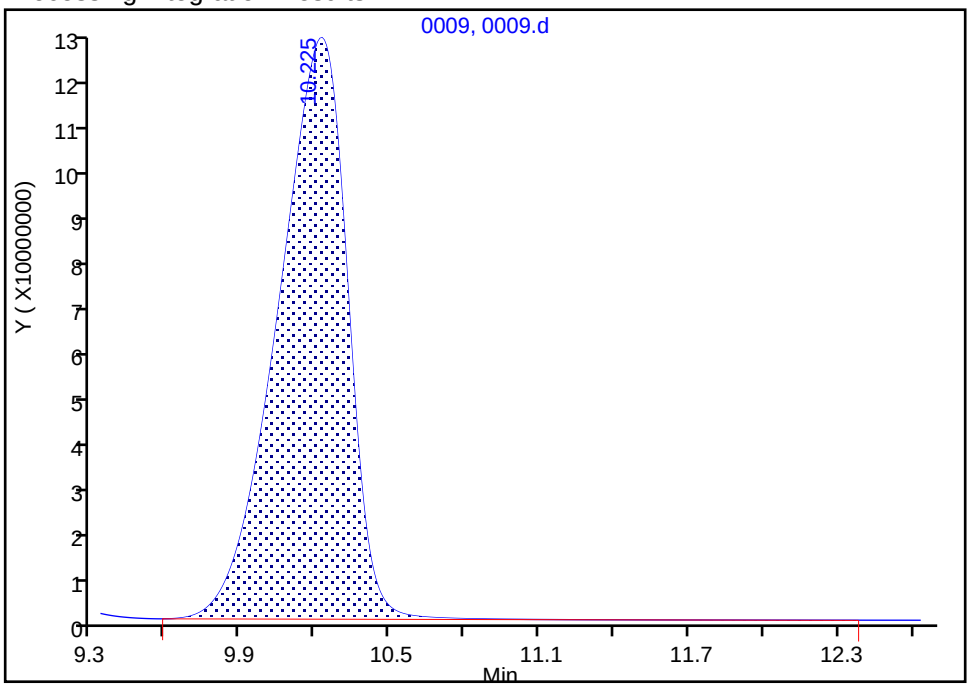
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d
Injection Date: 14-Nov-2021 18:51:00 Instrument ID: WC_IonChrom11
Lims ID: std L6
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 7
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

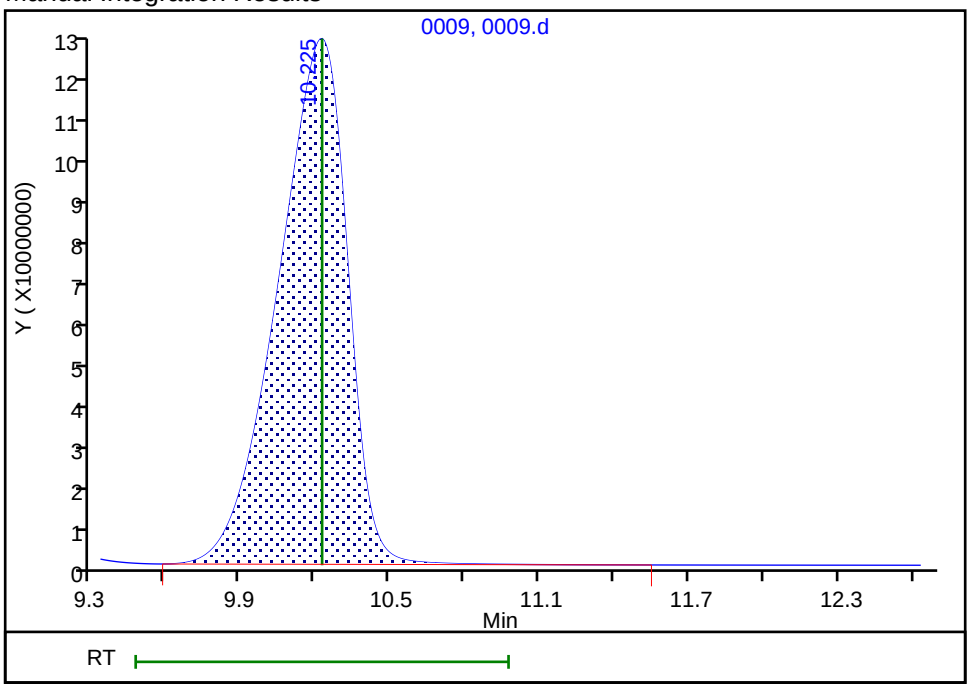
Processing Integration Results

RT: 10.23
Area: 2440190368
Amount: 0
Amount Units: ug/ml



Manual Integration Results

RT: 10.23
Area: 2439236596
Amount: 207.8223
Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 07:45:35
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

IC Instrument Information

WL: 106493 **Inst ID:** IC11 **Analysis Date:** 11/5/21 **Analyst:** SG

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	154833	5	(F) Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	154837	5	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	154839	3	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	155056	2	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	154941	7	(F) Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	
☐			F Cl NO2 Br NO3 PO4 SO4	MS/D	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
833	4	(F) Cl NO2 Br NO3 PO4 (SO4)	5X	coverage
837	5	(F) Cl NO2 Br NO3 PO4 SO4	5X, 10X	dilution
839	3	(F) Cl NO2 Br NO3 PO4 SO4	5X	dilution
056		F Cl NO2 Br NO3 PO4 SO4	5X	coverage.
941		F Cl NO2 Br NO3 PO4 SO4	10, 20, 100X	Test/coverage.
		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\20211114-106493.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	16-Nov-2021 13:20:39

No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b
Inj Date : 14-Nov-2021 17:29:00, Sublist: chrom-Anions_IC11*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-429500	1642491		0.999
2 Chloride					-118831	179442C		1.000
3 Nitrite as N	-174820	3106326		0.999				
4 Bromide					-128835	5440555		1.000
5 Nitrate as N	-252573	3598982		0.998				
7 Orthophosphate as P	-137149	9479558	R1	).994*				
6 Sulfate					-707509	1177116		0.997

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	16-Nov-2021 13:20:39

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\20211114-106493.b\0004.d		
	Inj Date: 14-Nov-2021 17:29:00	Worklist: 106493	Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0005.d		
	Inj Date: 14-Nov-2021 17:45:00	Worklist: 106493	Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0006.d		
	Inj Date: 14-Nov-2021 18:02:00	Worklist: 106493	Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d		
	Inj Date: 14-Nov-2021 18:18:00	Worklist: 106493	Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0008.d		
	Inj Date: 14-Nov-2021 18:35:00	Worklist: 106493	Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d		
	Inj Date: 14-Nov-2021 18:51:00	Worklist: 106493	Sample#: 7

Start Cal Date: 14-Nov-2021 17:13:00 End Cal Date: 14-Nov-2021 18:51:00

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

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	16-Nov-2021 13:20:39
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\20211114-106493.b\0004.d		
	Inj Date: 14-Nov-2021 17:29:00	Worklist: 106493	Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0005.d		
	Inj Date: 14-Nov-2021 17:45:00	Worklist: 106493	Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0006.d		
	Inj Date: 14-Nov-2021 18:02:00	Worklist: 106493	Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d		
	Inj Date: 14-Nov-2021 18:18:00	Worklist: 106493	Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0008.d		
	Inj Date: 14-Nov-2021 18:35:00	Worklist: 106493	Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d		
	Inj Date: 14-Nov-2021 18:51:00	Worklist: 106493	Sample#: 7

Start Cal Date: 14-Nov-2021 17:13:00 End Cal Date: 14-Nov-2021 18:51:00

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

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0010.d
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 14-Nov-2021 19:07:00 ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106493-008
Misc. Info.: 10
Operator ID: Instrument ID: WC_IonChrom11
Sublist:

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Nov-2021 13:20:09 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1677

First Level Reviewer: gonzalezsp Date: 14-Nov-2021 20:08:46

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	60073164	4.00	3.68	M
2 Chloride	3.767	3.767	0.000	1470602591	80.0	82.6	
3 Nitrite as N	4.551	4.551	0.000	115835637	NC	NC	
4 Bromide	5.484	5.484	0.000	20914443	4.00	3.87	
5 Nitrate as N	6.201	6.201	0.000	132289111	NC	NC	M
7 Orthophosphate as P	9.142	9.142	0.000	32093698	NC	NC	
6 Sulfate	10.134	10.134	0.000	942891781	80.0	80.7	M

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

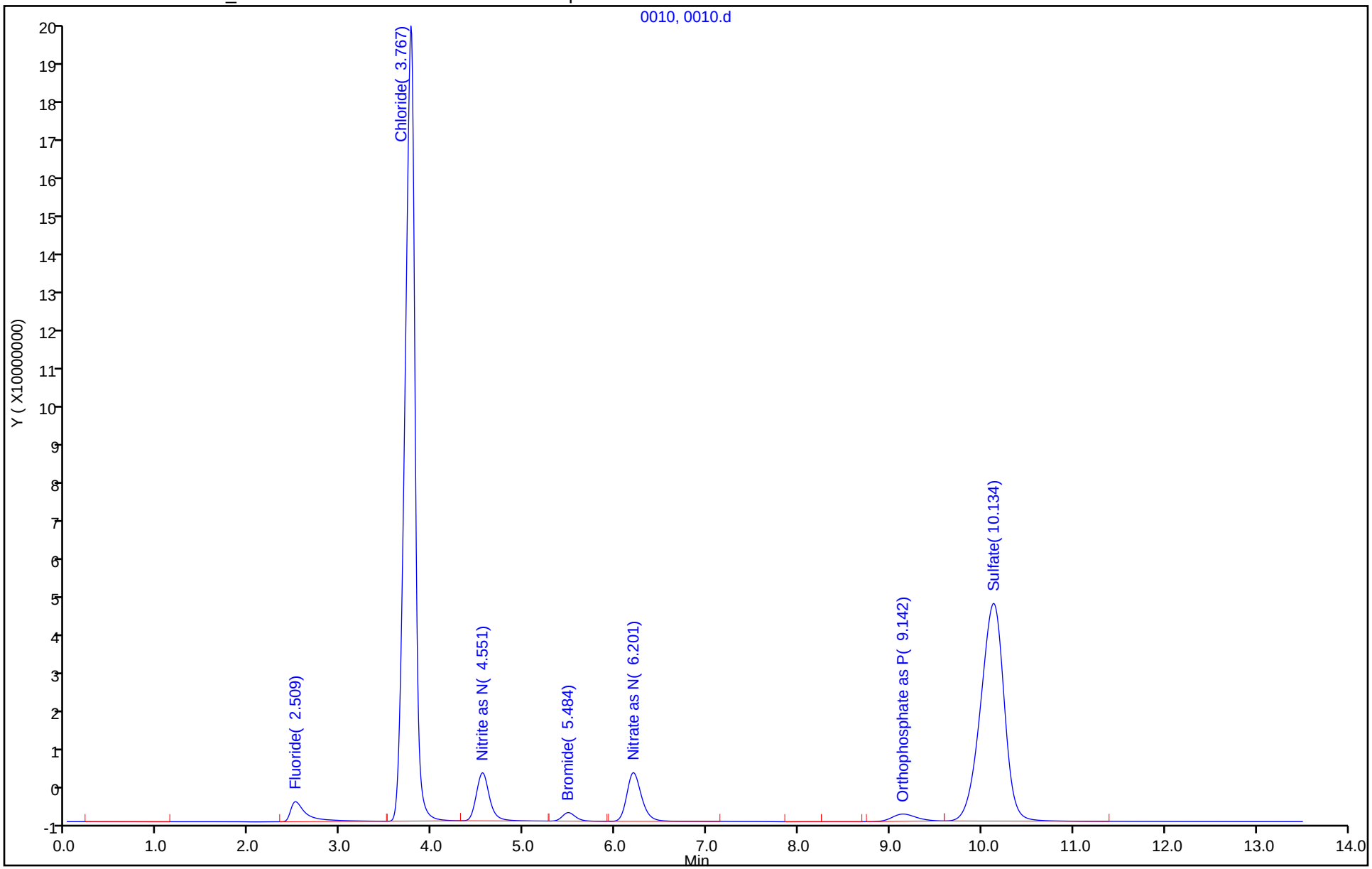
Reagents:

IC SO4 ICV_00022	Amount Added:	0.40	Units: mL
Cl ICV Std_00002	Amount Added:	0.40	Units: mL
IC ICV 5_00341	Amount Added:	0.40	Units: mL

Report Date: 16-Nov-2021 13:20:10 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0010.d				
Injection Date:	14-Nov-2021 19:07:00	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 TestAmerica, Denver

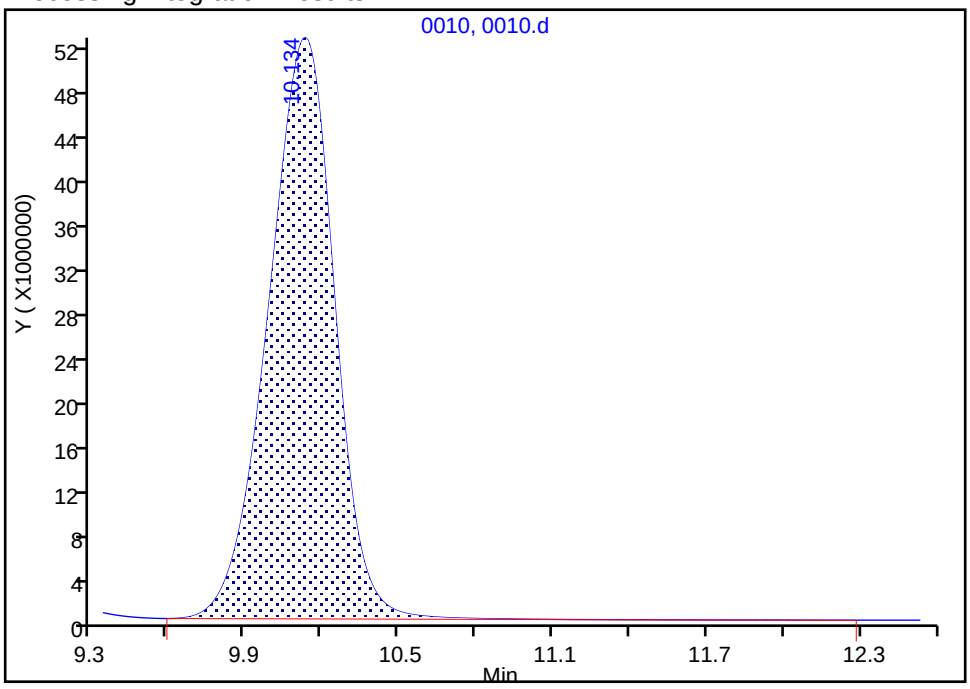
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0010.d
Injection Date: 14-Nov-2021 19:07:00 Instrument ID: WC_IonChrom11
Lims ID: ICV
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

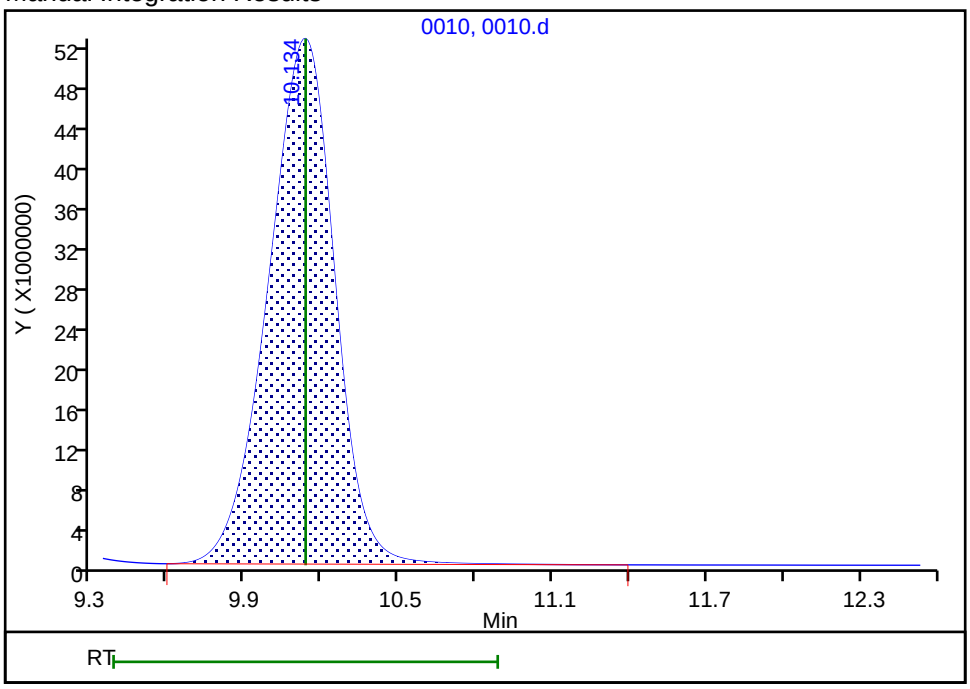
Processing Integration Results

RT: 10.13
Area: 943389256
Amount: 80.745117
Amount Units: ug/ml



Manual Integration Results

RT: 10.13
Area: 942891781
Amount: 80.702854
Amount Units: ug/ml



Reviewer: gonzalezsp, 15-Nov-2021 07:46:09
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0011.d
Lims ID: ICB
Client ID:
Sample Type: ICB
Inject. Date: 14-Nov-2021 19:24:00 ALS Bottle#: 0 Worklist Smp#: 9
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106493-009
Misc. Info.: 11
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 16-Nov-2021 13:20:09 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1677

First Level Reviewer: jindaratc Date: 16-Nov-2021 13:03:37

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.509				ND	U
2 Chloride		3.767				ND	U
3 Nitrite as N		4.551				ND	U
4 Bromide		5.484				ND	U
5 Nitrate as N		6.201				ND	U
7 Orthophosphate as P	8.809	9.142	-0.333	127828		NC	
6 Sulfate	10.375	10.134	0.241	115396		0.6109	

QC Flag Legend

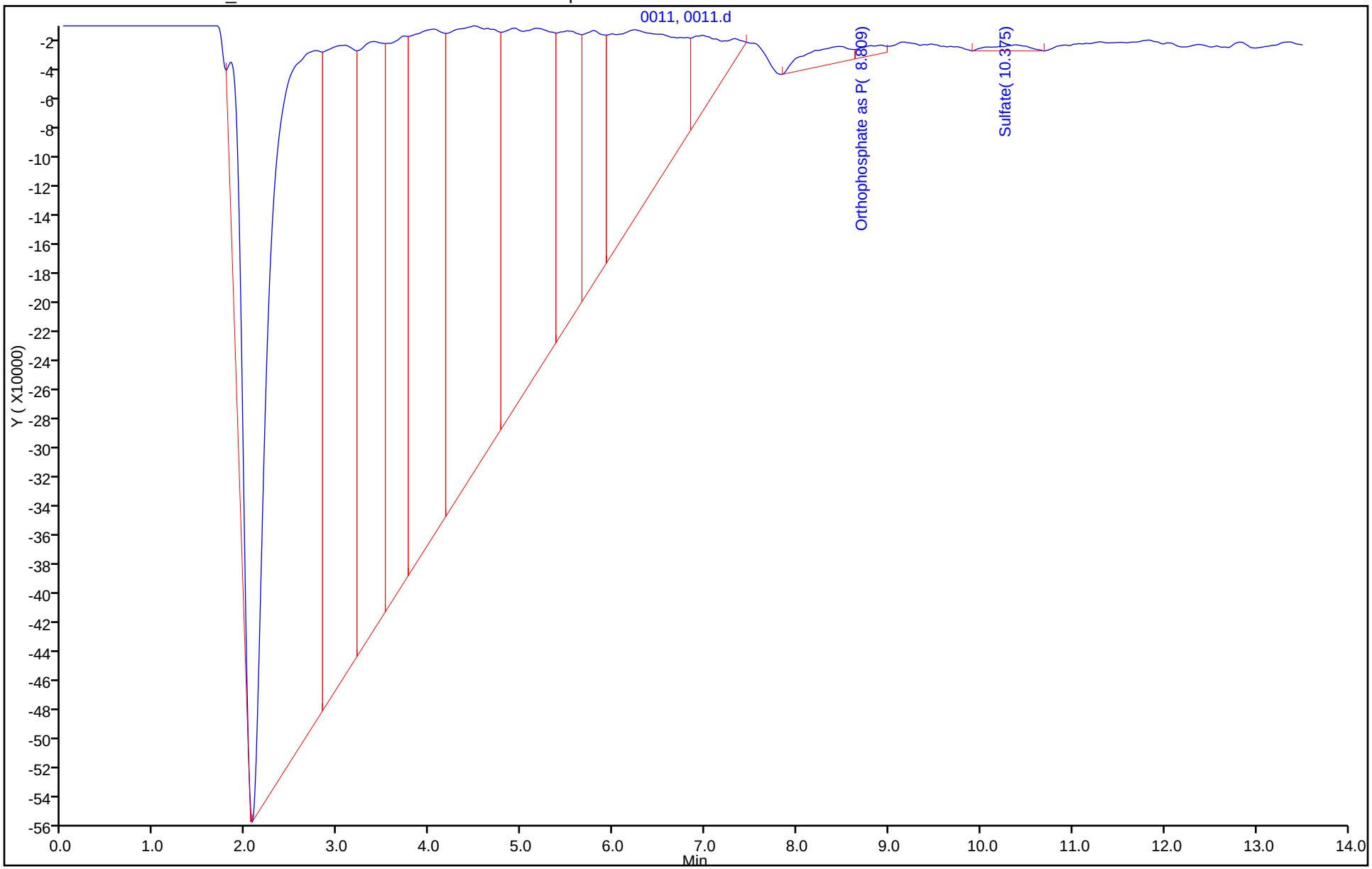
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 16-Nov-2021 13:20:10 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0011.d

Injection Date:	14-Nov-2021 19:24:00	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		



IC Instrument Information

WL: 106740 **Inst ID:** IC11 **Analysis Date:** 11/23/21 **Analyst:** JF

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	154996	1	(F) Cl NO2 Br NO3 PO4 SO4	MS/D	
☐	154973	1	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	155015	1	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	155356	1	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	155025	2	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	155237	1	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	154934	1	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	155081	2	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	155225	3	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	155138	1	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	155117	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	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
973		F Cl NO2 Br NO3 PO4 SO4	5X	dilution
015		F Cl NO2 Br NO3 PO4 SO4	5X	dilution
356		F Cl NO2 Br NO3 PO4 SO4	200X	dilution.
025		F Cl NO2 Br NO3 PO4 SO4	20X	dilution
237		F Cl NO2 Br NO3 PO4 SO4	10,50X	dilution
934		F Cl NO2 Br NO3 PO4 SO4	20X	dilution
081		F Cl NO2 Br NO3 PO4 SO4	5X	dilution
225		F Cl NO2 Br NO3 PO4 SO4	5X	dilution
138		F Cl NO2 Br NO3 PO4 SO4	5X	dilution.
117			20X	dilution.

IC Instrument Information

WL: 106740 **Inst ID:** IC11 **Analysis Date:** 11/23/21 **Analyst:** CT

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	155119	3	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	155490	2	F (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	155295	4	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	154744	1	(F) (Cl) NO2 Br NO3 PO4 (SO4)	MS/D	
☐	154749	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
119		F Cl NO2 Br NO3 PO4 SO4	5,10X	dilution
490		F Cl NO2 Br NO3 PO4 SO4	5,10X	dilution
295		F Cl NO2 Br NO3 PO4 SO4	5,10X	dilution
744		F Cl NO2 Br NO3 PO4 SO4	10X	hist.
749		F Cl NO2 Br NO3 PO4 SO4	20X	hist.
		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\20211114-106493.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	16-Nov-2021 13:20:39

No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b
Inj Date : 14-Nov-2021 17:29:00, Sublist: chrom-Anions_IC11*sub1

Detector 1: 0005

	Wet - Anions				Wet - Anions 28D			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride					-429500	1642491		0.999
2 Chloride					-118831	179442C		1.000
3 Nitrite as N	-174820	3106326		0.999				
4 Bromide					-128835	5440555		1.000
5 Nitrate as N	-252573	3598982		0.998				
7 Orthophosphate as P	-137149	9479558	R1	).994*				
6 Sulfate					-707509	1177116		0.997

ICalib Error Legend
R1, Curve Fit Fail Error Limit Test

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	16-Nov-2021 13:20:39

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\20211114-106493.b\0004.d		
	Inj Date: 14-Nov-2021 17:29:00	Worklist: 106493	Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0005.d		
	Inj Date: 14-Nov-2021 17:45:00	Worklist: 106493	Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0006.d		
	Inj Date: 14-Nov-2021 18:02:00	Worklist: 106493	Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d		
	Inj Date: 14-Nov-2021 18:18:00	Worklist: 106493	Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0008.d		
	Inj Date: 14-Nov-2021 18:35:00	Worklist: 106493	Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d		
	Inj Date: 14-Nov-2021 18:51:00	Worklist: 106493	Sample#: 7

Start Cal Date: 14-Nov-2021 17:13:00 End Cal Date: 14-Nov-2021 18:51:00

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

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\Anions_IC11.m

Instrument:	WC_IonChrom11	Lims Location:	280
Lock State:	Initial Calib Locked	Cpnd Order:	Retention Time
Integrator:	Falcon	Last Modified:	16-Nov-2021 13:20:39

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\20211114-106493.b\0004.d		
	Inj Date: 14-Nov-2021 17:29:00	Worklist: 106493	Sample#: 2
Level: 2	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0005.d		
	Inj Date: 14-Nov-2021 17:45:00	Worklist: 106493	Sample#: 3
Level: 3	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0006.d		
	Inj Date: 14-Nov-2021 18:02:00	Worklist: 106493	Sample#: 4
Level: 4	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d		
	Inj Date: 14-Nov-2021 18:18:00	Worklist: 106493	Sample#: 5
Level: 5	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0008.d		
	Inj Date: 14-Nov-2021 18:35:00	Worklist: 106493	Sample#: 6
Level: 6	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d		
	Inj Date: 14-Nov-2021 18:51:00	Worklist: 106493	Sample#: 7

Start Cal Date: 14-Nov-2021 17:13:00 End Cal Date: 14-Nov-2021 18:51:00

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

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0018.d
Lims ID: 280-155138-F-3
Client ID: NW022-7
Sample Type: Client
Inject. Date: 23-Nov-2021 15:29:00 ALS Bottle#: 0 Worklist Smp#: 19
Injection Vol: 10.0 ul Dil. Factor: 5.0000
Sample Info: 280-0106740-019
Misc. Info.: 9696
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 19:32:44 Calib Date: 14-Nov-2021 18:51:00
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d

Column 1 : Det: 0005
Process Host: CTX1682

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.492	2.476	0.016	3329631	0.2289	
2 Chloride	3.625	3.617	0.008	133807196	8.12	
3 Nitrite as N	4.384	4.409	-0.025	1320194	NC	
4 Bromide	5.309	5.276	0.033	684516	0.1495	
5 Nitrate as N	6.009	5.951	0.058	1536303	NC	
7 Orthophosphate as P	8.742	8.626	0.116	425879	NC	
6 Sulfate	9.617	9.517	0.100	589520179	50.7	

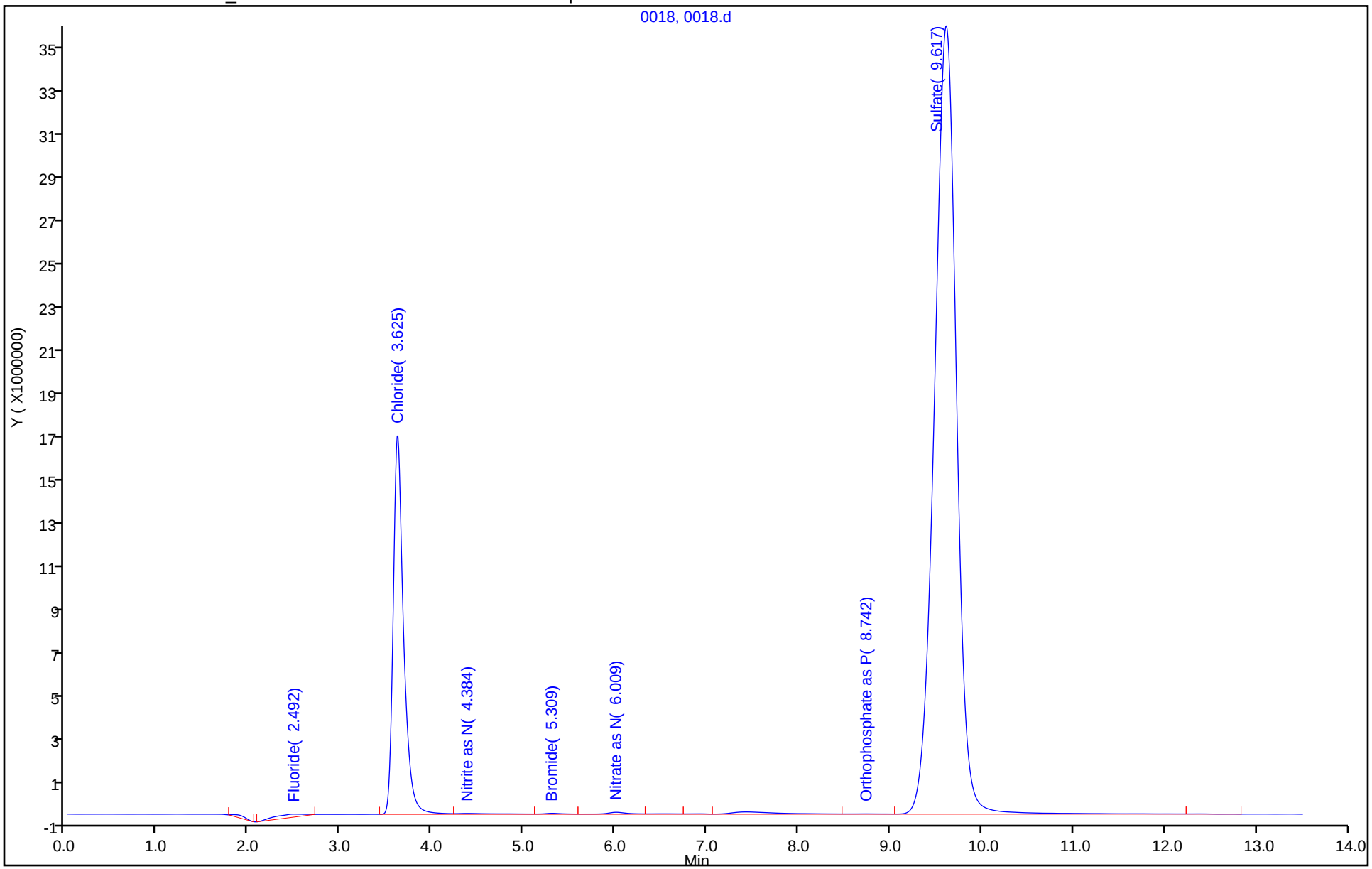
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 23-Nov-2021 19:33:00 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0018.d				
Injection Date:	23-Nov-2021 15:29:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-155138-F-3	Lab Sample ID:	280-155138-3	Worklist Smp#:	19
Client ID:	NW022-7				
Injection Vol:	10.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



	Type	Analysis	Sample Name	S	O	Origin	Manual Dilution	Result	Notes	Status
1	Unknown	NPOC	ICV		0	NPOC.met	1.000	NPOC:19.87mg/L		Completed
2	Unknown	NPOC	ICB		0	NPOC.met	1.000	NPOC:0.1482mg/L		Completed
3	Unknown	NPOC	LCS		0	NPOC.met	1.000	NPOC:24.81mg/L		Completed
4	Unknown	NPOC	MB		0	NPOC.met	1.000	NPOC:0.1577mg/L		Completed
5	Unknown	NPOC	TIC		0	NPOC.met	1.000	NPOC:0.2738mg/L		Completed
6	Unknown	NPOC	680-206680-a-1		0	NPOC.met	1.000	NPOC:1.809mg/L		Completed
7	Unknown	NPOC	680-206680-a-2		0	NPOC.met	1.000	NPOC:1.240mg/L		Completed
8	Unknown	NPOC	680-206680-a-3		0	NPOC.met	1.000	NPOC:0.8461mg/L		Completed
9	Unknown	NPOC	MS 680-206680-a-3		0	NPOC.met	1.000	NPOC:25.54mg/L		Completed
10	Unknown	NPOC	MSD 680-206680-a-3		0	NPOC.met	1.000	NPOC:25.65mg/L		Completed
11	Unknown	NPOC	680-206680-a-4		0	NPOC.met	1.000	NPOC:0.9117mg/L		Completed
12	Unknown	NPOC	680-206680-a-5		0	NPOC.met	1.000	NPOC:1.592mg/L		Completed
13	Unknown	NPOC	680-206680-a-6		0	NPOC.met	1.000	NPOC:1.037mg/L		Completed
14	Unknown	NPOC	680-206680-a-7		0	NPOC.met	1.000	NPOC:1.105mg/L		Completed
15	Unknown	NPOC	CCV		0	NPOC.met	1.000	NPOC:24.98mg/L		Completed
16	Unknown	NPOC	CCB		0	NPOC.met	1.000	NPOC:0.1636mg/L		Completed
17	Unknown	NPOC	680-206680-a-8		0	NPOC.met	1.000	NPOC:3.499mg/L		Completed
18	Unknown	NPOC	680-207141-a-7		0	NPOC.met	1.000	NPOC:1.554mg/L		Completed
19	Unknown	NPOC	320-81289-d-1		0	NPOC.met	1.000	NPOC:7.592mg/L		Completed
20	Unknown	NPOC	MS 320-81289-d-1		0	NPOC.met	1.000	NPOC:32.78mg/L		Completed
21	Unknown	NPOC	MSD 320-81289-d-1		0	NPOC.met	1.000	NPOC:32.82mg/L		Completed
22	Unknown	NPOC	280-155002-c-2		0	NPOC.met	5.000	NPOC:133.6mg/L		Completed
23	Unknown	NPOC	580-106949-u-1		0	NPOC.met	1.000	NPOC:20.91mg/L		Completed
24	Unknown	NPOC	280-155140-b-4		0	NPOC.met	1.000	NPOC:0.6701mg/L		Completed
25	Unknown	NPOC	280-155132-a-7		0	NPOC.met	1.000	NPOC:2.290mg/L		Completed
26	Unknown	NPOC	280-155145-b-5		0	NPOC.met	1.000	NPOC:0.5906mg/L		Completed
27	Unknown	NPOC	CCV		0	NPOC.met	1.000	NPOC:24.91mg/L		Completed
28	Unknown	NPOC	CCB		0	NPOC.met	1.000	NPOC:0.1474mg/L		Completed
29	Unknown	NPOC	280-155145-b-7		0	NPOC.met	1.000	NPOC:0.4468mg/L		Completed
30	Unknown	NPOC	280-155145-b-8		0	NPOC.met	1.000	NPOC:0.4410mg/L		Completed
31	Unknown	NPOC	280-155195-a-1		0	NPOC.met	1.000	NPOC:9.293mg/L		Completed
32	Unknown	NPOC	280-155195-a-2		0	NPOC.met	1.000	NPOC:10.03mg/L		Completed
33	Unknown	NPOC	680-207006-b-18		0	NPOC.met	1.000	NPOC:5.319mg/L		Completed
34	Unknown	NPOC	MS 680-207006-b-18		0	NPOC.met	1.000	NPOC:29.93mg/L		Completed
35	Unknown	NPOC	MSD 680-207006-b-18		0	NPOC.met	1.000	NPOC:30.04mg/L		Completed
36	Unknown	NPOC	LCS		0	NPOC.met	1.000	NPOC:25.03mg/L		Completed
37	Unknown	NPOC	MB		0	NPOC.met	1.000	NPOC:0.1851mg/L		Completed
38	Unknown	NPOC	TIC		0	NPOC.met	1.000	NPOC:0.2824mg/L		Completed
39	Unknown	NPOC	CCV		0	NPOC.met	1.000	NPOC:25.06mg/L		Completed
40	Unknown	NPOC	CCB		0	NPOC.met	1.000	NPOC:0.1647mg/L		Completed
41	Unknown	NPOC	160-43898-a-1		0	NPOC.met	5.000	NPOC:95.69mg/L		Completed
42	Unknown	NPOC	160-43898-a-2		0	NPOC.met	10.00	NPOC:1194mg/L		Completed
43	Unknown	NPOC	160-43898-a-3		0	NPOC.met	10.00	NPOC:229.4mg/L		Completed
44	Unknown	NPOC	MS 160-43898-a-3		0	NPOC.met	10.00	NPOC:479.0mg/L		Completed
45	Unknown	NPOC	MSD 160-43898-a-3		0	NPOC.met	10.00	NPOC:479.5mg/L		Completed
46	Unknown	NPOC	160-43898-a-4		0	NPOC.met	10.00	NPOC:23.67mg/L		Completed
47	Unknown	NPOC	160-43898-a-5		0	NPOC.met	5.000	NPOC:191.2mg/L		Completed
48	Unknown	NPOC	160-43898-a-6		0	NPOC.met	100.0	NPOC:158.6mg/L		Completed
49	Unknown	NPOC	160-43898-a-7		0	NPOC.met	100.0	NPOC:6215mg/L		Completed
50	Unknown	NPOC	160-43898-a-8		0	NPOC.met	100.0	NPOC:7082mg/L		Completed
51	Unknown	NPOC	CCV		0	NPOC.met	1.000	NPOC:25.05mg/L		Completed
52	Unknown	NPOC	CCB		0	NPOC.met	1.000	NPOC:0.1584mg/L		Completed
53	Unknown	NPOC	160-43898-a-9		0	NPOC.met	25.00	NPOC:6593mg/L		Completed

	Date / Time	Vial
1	11/12/2021 6:22:43 PM	1
2	11/12/2021 6:39:25 PM	2
3	11/12/2021 6:54:03 PM	3
4	11/12/2021 7:08:42 PM	4
5	11/12/2021 7:25:24 PM	5
6	11/12/2021 7:40:02 PM	6
7	11/12/2021 7:54:42 PM	7
8	11/12/2021 8:09:22 PM	8
9	11/12/2021 8:24:02 PM	9
10	11/12/2021 8:38:42 PM	10
11	11/12/2021 8:53:22 PM	11
12	11/12/2021 9:08:02 PM	12
13	11/12/2021 9:22:42 PM	13
14	11/12/2021 9:37:22 PM	14
15	11/12/2021 9:52:01 PM	15
16	11/12/2021 10:06:41 PM	16
17	11/12/2021 10:21:21 PM	17
18	11/12/2021 10:36:01 PM	18
19	11/12/2021 10:50:41 PM	19
20	11/12/2021 11:05:39 PM	20
21	11/12/2021 11:20:19 PM	21
22	11/12/2021 11:34:58 PM	22
23	11/12/2021 11:53:44 PM	23
24	11/13/2021 12:08:17 AM	24
25	11/13/2021 12:22:57 AM	25
26	11/13/2021 12:37:37 AM	26
27	11/13/2021 12:52:17 AM	27
28	11/13/2021 1:06:57 AM	28
29	11/13/2021 1:21:37 AM	29
30	11/13/2021 1:36:17 AM	30
31	11/13/2021 1:50:57 AM	31
32	11/13/2021 2:08:00 AM	32
33	11/13/2021 2:22:39 AM	33
34	11/13/2021 2:37:19 AM	34
35	11/13/2021 2:51:59 AM	35
36	11/13/2021 3:06:39 AM	36
37	11/13/2021 3:21:19 AM	37
38	11/13/2021 3:35:59 AM	38
39	11/13/2021 3:50:41 AM	39
40	11/13/2021 4:05:21 AM	40
41	11/13/2021 4:20:01 AM	41
42	11/13/2021 4:36:53 AM	42
43	11/13/2021 4:51:50 AM	43
44	11/13/2021 5:06:30 AM	44
45	11/13/2021 5:21:10 AM	45
46	11/13/2021 5:35:50 AM	46
47	11/13/2021 5:50:33 AM	47
48	11/13/2021 6:05:13 AM	48
49	11/13/2021 6:21:56 AM	49
50	11/13/2021 6:38:38 AM	50
51	11/13/2021 6:53:20 AM	51
52	11/13/2021 7:08:01 AM	52
53	11/13/2021 7:30:30 AM	53

	Type	Analysis	Sample Name	S	O	Origin	Manual Dilution	Result	Notes	Status
54	Unknown	NPOC	160-43898-a-10		0	NPOC.met	10.00	NPOC:2107mg/L		Completed
55	Unknown	NPOC	160-43898-a-11		0	NPOC.met	100.0	NPOC:7585mg/L		Completed
56	Unknown	NPOC	160-43898-a-12		0	NPOC.met	2.000	NPOC:453.5mg/L		Completed
57	Unknown	NPOC	160-43898-a-13		0	NPOC.met	5.000	NPOC:467.7mg/L		Completed
58	Unknown	NPOC	MS 160-43898-a-13		0	NPOC.met	5.000	NPOC:587.9mg/L		Completed
59	Unknown	NPOC	MSD 160-43898-a-13		0	NPOC.met	5.000	NPOC:588.0mg/L		Completed
60	Unknown	NPOC	160-43898-a-14		0	NPOC.met	100.0	NPOC:7564mg/L		Completed
61	Unknown	NPOC	160-43898-a-15		0	NPOC.met	50.00	NPOC:5419mg/L		Completed
62	Unknown	NPOC	160-43898-b-16		0	NPOC.met	5.000	NPOC:203.5mg/L		Completed
63	Unknown	NPOC	CCV		0	NPOC.met	1.000	NPOC:25.26mg/L		Completed
64	Unknown	NPOC	CCB		0	NPOC.met	1.000	NPOC:0.1916mg/L		Completed
65	Unknown	NPOC	160-43898-a-17		0	NPOC.met	10.00	NPOC:7623mg/L		Completed
66	Unknown	NPOC	160-43898-a-18		0	NPOC.met	10.00	NPOC:5672mg/L		Completed
67	Unknown	NPOC	160-43898-a-19		0	NPOC.met	250.0	NPOC:2340mg/L		Completed
68	Unknown	NPOC	160-43898-a-20		0	NPOC.met	250.0	NPOC:1775mg/L		Completed
69	Unknown	NPOC	lcs 280-557282/1-a		0	NPOC.met	1.000	NPOC:25.39mg/L		Completed
70	Unknown	NPOC	mb 280-557282/2-a		0	NPOC.met	1.000	NPOC:0.2356mg/L		Completed
71	Unknown	NPOC	280-155138-d-10-b		0	NPOC.met	1.000	NPOC:2.005mg/L		Completed
72	Unknown	NPOC	280-155138-d-10-c ms		0	NPOC.met	1.000	NPOC:22.66mg/L		Completed
73	Unknown	NPOC	280-155138-d-10-d msd		0	NPOC.met	1.000	NPOC:22.53mg/L		Completed
74	Unknown	NPOC	500-208136-f-1-a		0	NPOC.met	50.00	NPOC:827.4mg/L		Completed
75	Unknown	NPOC	CCV		0	NPOC.met	1.000	NPOC:25.26mg/L		Completed
76	Unknown	NPOC	CCB		0	NPOC.met	1.000	NPOC:0.1917mg/L		Completed
77	Unknown	NPOC	500-208136-e-2-a		0	NPOC.met	1.000	NPOC:102.5mg/L		Completed
78	Unknown	NPOC	500-208018-a-2-a		0	NPOC.met	10.00	NPOC:746.6mg/L		Completed
79	Unknown	NPOC	280-155225-d-1-a		0	NPOC.met	1.000	NPOC:3.935mg/L		Completed
80	Unknown	NPOC	280-155225-d-2-a		0	NPOC.met	1.000	NPOC:4.633mg/L		Completed
81	Unknown	NPOC	280-155225-d-3-a		0	NPOC.met	1.000	NPOC:3.038mg/L		Completed
82	Unknown	NPOC	280-155225-d-4-a		0	NPOC.met	1.000	NPOC:3.107mg/L		Completed
83	Unknown	NPOC	280-155225-d-5-a		0	NPOC.met	1.000	NPOC:3.300mg/L		Completed
84	Unknown	NPOC	280-155225-d-6-a		0	NPOC.met	1.000	NPOC:2.857mg/L		Completed
85	Unknown	NPOC	280-155225-d-7-a		0	NPOC.met	1.000	NPOC:9.104mg/L		Completed
86	Unknown	NPOC	280-155225-d-7-b ms		0	NPOC.met	1.000	NPOC:30.04mg/L		Completed
87	Unknown	NPOC	CCV		0	NPOC.met	1.000	NPOC:25.33mg/L		Completed
88	Unknown	NPOC	CCB		0	NPOC.met	1.000	NPOC:0.1936mg/L		Completed
89	Unknown	NPOC	280-155225-d-7-c msd		0	NPOC.met	1.000	NPOC:29.96mg/L		Completed
90	Unknown	NPOC	280-155225-d-8-a		0	NPOC.met	1.000	NPOC:12.79mg/L		Completed
91	Unknown	NPOC	280-155225-d-9-a		0	NPOC.met	1.000	NPOC:9.316mg/L		Completed
92	Unknown	NPOC	CCV		0	NPOC.met	1.000	NPOC:25.28mg/L		Completed
93	Unknown	NPOC	CCB		0	NPOC.met	1.000	NPOC:0.1879mg/L		Completed

	Date / Time	Vial
54	11/13/2021 8:03:30 AM	54
55	11/13/2021 8:20:21 AM	55
56	11/13/2021 8:42:50 AM	56
57	11/13/2021 9:01:52 AM	57
58	11/13/2021 9:18:33 AM	58
59	11/13/2021 9:35:23 AM	59
60	11/13/2021 9:52:06 AM	60
61	11/13/2021 10:09:04 AM	61
62	11/13/2021 10:23:45 AM	62
63	11/13/2021 10:38:26 AM	63
64	11/13/2021 10:53:07 AM	64
65	11/13/2021 11:16:19 AM	65
66	11/13/2021 11:39:42 AM	66
67	11/13/2021 11:54:23 AM	67
68	11/13/2021 12:09:04 PM	68
69	11/13/2021 12:23:45 PM	69
70	11/13/2021 12:38:26 PM	70
71	11/13/2021 12:53:07 PM	71
72	11/13/2021 1:07:48 PM	72
73	11/13/2021 1:22:32 PM	73
74	11/13/2021 1:39:16 PM	74
75	11/13/2021 1:53:58 PM	75
76	11/13/2021 2:08:40 PM	76
77	11/13/2021 2:25:32 PM	77
78	11/13/2021 2:57:40 PM	78
79	11/13/2021 3:14:18 PM	79
80	11/13/2021 3:29:00 PM	80
81	11/13/2021 3:45:44 PM	81
82	11/13/2021 4:02:28 PM	82
83	11/13/2021 4:17:10 PM	83
84	11/13/2021 4:31:52 PM	84
85	11/13/2021 4:46:33 PM	85
86	11/13/2021 5:01:39 PM	86
87	11/13/2021 5:16:23 PM	87
88	11/13/2021 5:31:06 PM	88
89	11/13/2021 5:46:13 PM	89
90	11/13/2021 6:00:55 PM	90
91	11/13/2021 6:15:38 PM	91
92	11/13/2021 6:30:21 PM	92
93	11/13/2021 6:45:04 PM	93

TOC-V Cal Curve Information
C:¥TOC3201¥CalCurves¥TOC3.2021_10_15_09_58_04.cal

Date of Creation 11:01:10 AM 10/15/2021
User
System TOC-V cpn 3

Cal. Curve

Sample Name: CAL 110716
Sample ID: Untitled
Object ID 0A-103108-04335027-134654717262-0000
Cal. Curve: TOC3.2021_10_15_09_58_04.cal
Status Completed
Comment:

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.2706	50uL	1	*******		10/15/2021 10:05:47
2	0.2090	50uL	1	*******		10/15/2021 10:07:50

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 0.2398
SD Area 0.04356
CV Area 18.16%
Vial 88

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	3.734	50uL	1	*******		10/15/2021 10:16:27
2	3.746	50uL	1	*******		10/15/2021 10:18:30

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 3.740
SD Area 0.00849
CV Area 0.23%
Vial 89

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	17.28	50uL	1	*******		10/15/2021 10:27:07
2	16.95	50uL	1	*******		10/15/2021 10:29:10

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 17.12
SD Area 0.2333
CV Area 1.36%
Vial 90

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	35.81	50uL	1	*******		10/15/2021 10:37:47
2	36.06	50uL	1	*******		10/15/2021 10:39:50

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 35.94
SD Area 0.1768
CV Area 0.49%
Vial 91

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	89.80	50uL	1	*******		10/15/2021 10:48:27
2	89.78	50uL	1	*******		10/15/2021 10:50:30

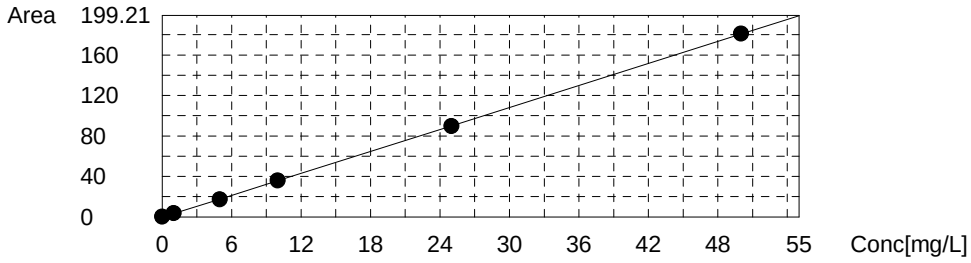
Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 89.79
SD Area 0.01414
CV Area 0.02%
Vial 92

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	182.1	50uL	1	*******		10/15/2021 10:59:07
2	180.1	50uL	1	*******		10/15/2021 11:01:10

Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 181.1
SD Area 1.414
CV Area 0.78%
Vial 93

Slope: 3.621
Intercept -0.2707
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	

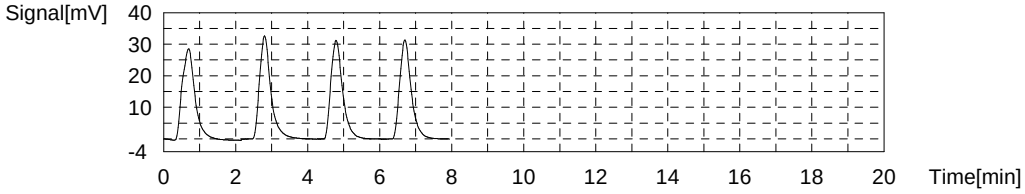
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.87mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	72.41	20.07mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 6:16:29 PM
2	72.22	20.02mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 6:18:37 PM
3	71.56	19.84mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 6:20:40 PM
4	70.51	19.55mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 6:22:43 PM

Mean Area 71.67
Mean Conc. 19.87mg/L



Sample

Sample Name:	ICB
Sample ID:	
Origin:	NPOC.met
Status	Completed
Chk. Result	

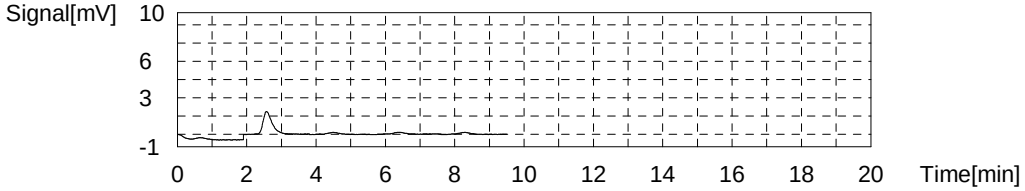
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1482mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2343	0.1394mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 6:31:13 PM
2	3.339	0.9968mg/L	50uL	1	E	TOC3.2021_10_15_09_58_04.cal	11/12/2021 6:33:16 PM
3	0.2862	0.1538mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 6:35:19 PM
4	0.2677	0.1487mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 6:37:22 PM
5	0.2757	0.1509mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 6:39:25 PM

Mean Area 0.2660
Mean Conc. 0.1482mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

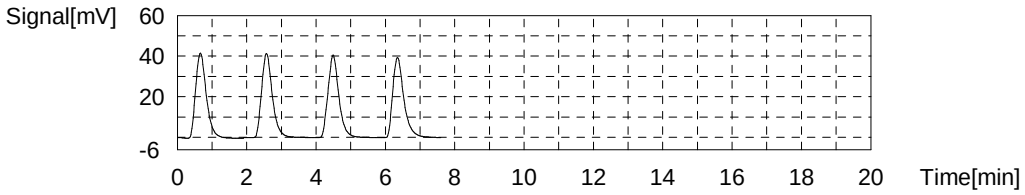
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.81mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	90.94	25.19mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 6:47:54 PM
2	89.41	24.76mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 6:49:57 PM
3	89.34	24.75mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 6:52:00 PM
4	88.66	24.56mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 6:54:03 PM

Mean Area 89.59
Mean Conc. 24.81mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

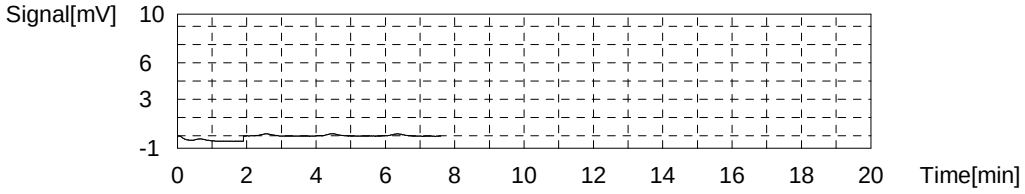
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1577mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2352	0.1397mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 7:02:33 PM
2	0.3087	0.1600mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 7:04:36 PM
3	0.3444	0.1699mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 7:06:39 PM
4	0.3127	0.1611mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 7:08:42 PM

Mean Area 0.3003
Mean Conc. 0.1577mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

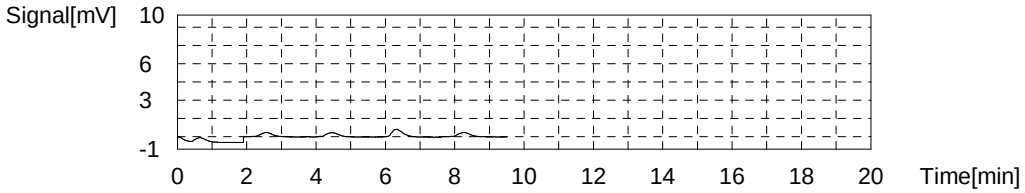
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2738mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6519	0.2548mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 7:17:12 PM
2	0.7578	0.2840mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 7:19:15 PM
3	0.7477	0.2812mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 7:21:18 PM
4	1.282	0.4288mg/L	50uL	1	E	TOC3.2021_10_15_09_58_04.cal	11/12/2021 7:23:21 PM
5	0.7254	0.2751mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 7:25:24 PM

Mean Area 0.7207
Mean Conc. 0.2738mg/L



Sample

Sample Name: 680-206680-a-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

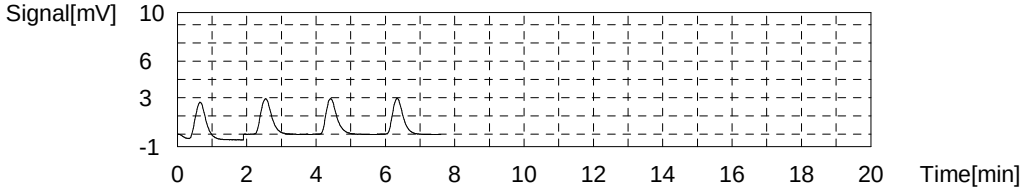
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.809mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.288	1.811mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 7:33:53 PM
2	6.365	1.832mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 7:35:56 PM
3	6.268	1.806mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 7:37:59 PM
4	6.204	1.788mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 7:40:02 PM

Mean Area 6.281
Mean Conc. 1.809mg/L



Sample

Sample Name: 680-206680-a-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

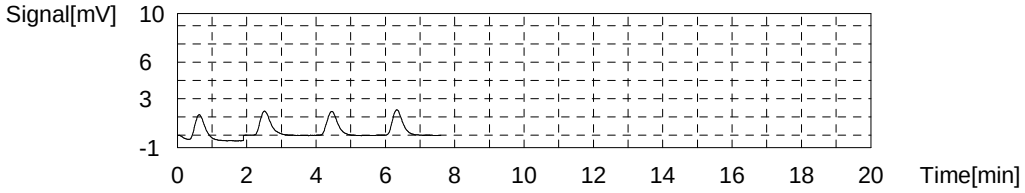
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.240mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.141	1.218mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 7:48:33 PM
2	4.215	1.239mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 7:50:36 PM
3	4.240	1.246mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 7:52:39 PM
4	4.286	1.258mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 7:54:42 PM

Mean Area 4.221
Mean Conc. 1.240mg/L



Sample

Sample Name: 680-206680-a-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

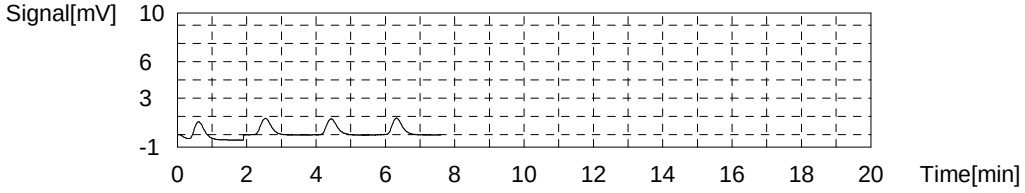
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8461mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.789	0.8449mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 8:03:13 PM
2	2.827	0.8554mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 8:05:16 PM
3	2.821	0.8537mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 8:07:19 PM
4	2.737	0.8305mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 8:09:22 PM

Mean Area 2.793
Mean Conc. 0.8461mg/L



Sample

Sample Name: MS 680-206680-a-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

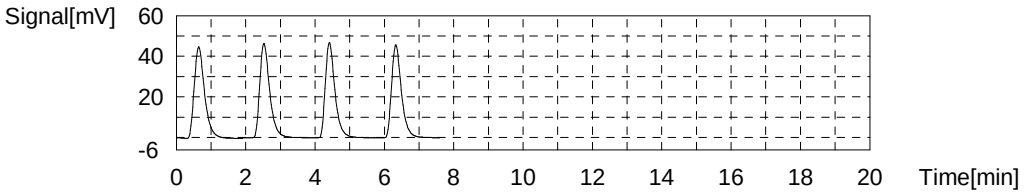
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.54mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	94.06	26.05mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 8:17:53 PM
2	92.84	25.71mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 8:19:56 PM
3	90.85	25.16mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 8:21:59 PM
4	91.07	25.22mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 8:24:02 PM

Mean Area 92.20
Mean Conc. 25.54mg/L



Sample

Sample Name: MSD 680-206680-a-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

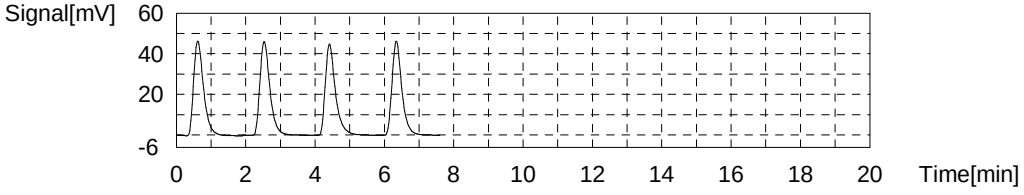
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.65mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	93.76	25.97mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 8:32:33 PM
2	92.77	25.69mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 8:34:36 PM
3	91.92	25.46mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 8:36:39 PM
4	91.97	25.47mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 8:38:42 PM

Mean Area 92.61
Mean Conc. 25.65mg/L



Sample

Sample Name: 680-206680-a-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

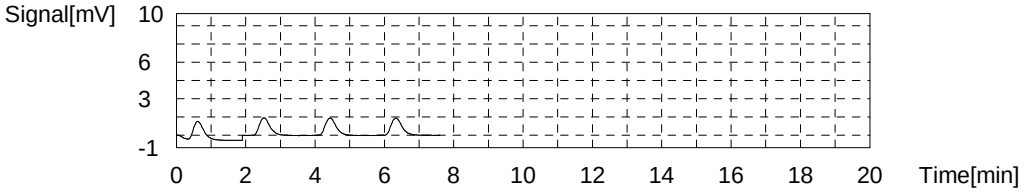
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.9117mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.940	0.8866mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 8:47:13 PM
2	3.074	0.9236mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 8:49:16 PM
3	3.078	0.9247mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 8:51:19 PM
4	3.031	0.9117mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 8:53:22 PM

Mean Area 3.031
Mean Conc. 0.9117mg/L



Sample

Sample Name: 680-206680-a-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

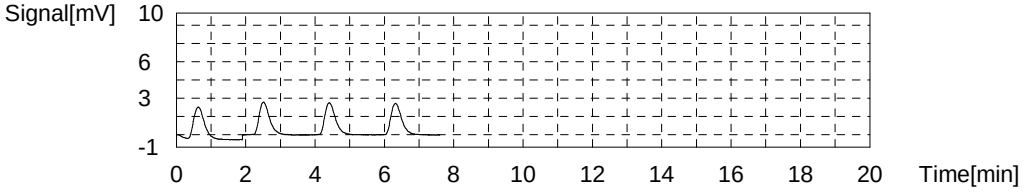
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.592mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.408	1.568mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 9:01:53 PM
2	5.527	1.601mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 9:03:56 PM
3	5.548	1.607mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 9:05:59 PM
4	5.499	1.593mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 9:08:02 PM

Mean Area 5.495
Mean Conc. 1.592mg/L



Sample

Sample Name: 680-206680-a-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

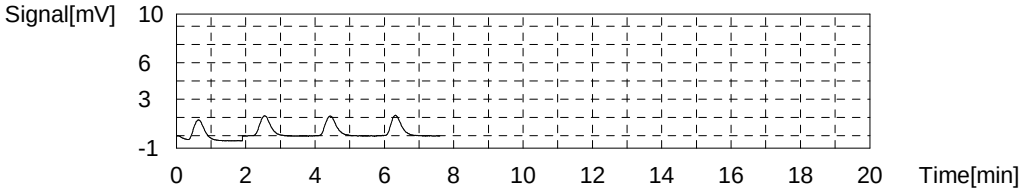
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.037mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.427	1.021mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 9:16:33 PM
2	3.514	1.045mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 9:18:36 PM
3	3.565	1.059mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 9:20:39 PM
4	3.439	1.024mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 9:22:42 PM

Mean Area 3.486
Mean Conc. 1.037mg/L



Sample

Sample Name: 680-206680-a-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

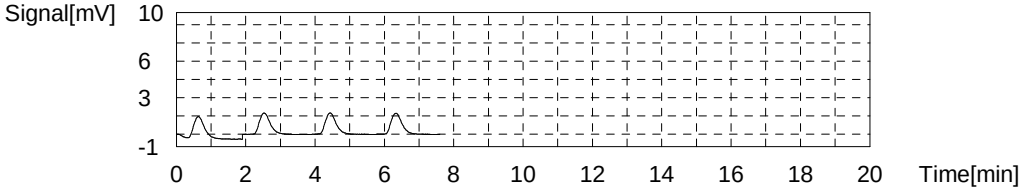
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.105mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.672	1.089mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 9:31:13 PM
2	3.753	1.111mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 9:33:16 PM
3	3.744	1.109mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 9:35:19 PM
4	3.754	1.111mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 9:37:22 PM

Mean Area 3.731
Mean Conc. 1.105mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

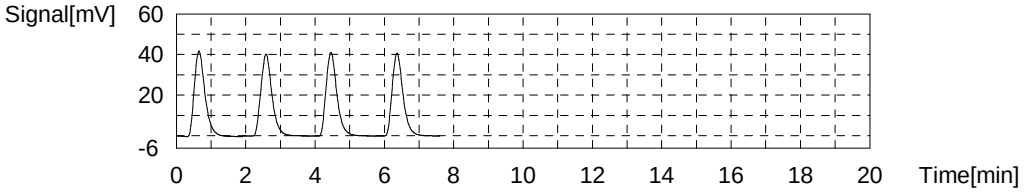
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.98mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.09	25.23mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 9:45:52 PM
2	90.18	24.98mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 9:47:55 PM
3	90.23	24.99mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 9:49:58 PM
4	89.21	24.71mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 9:52:01 PM

Mean Area 90.18
Mean Conc. 24.98mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

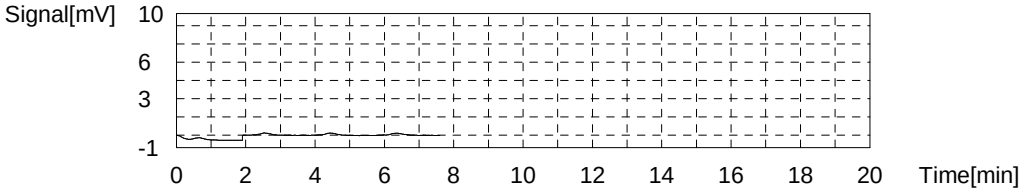
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1636mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2724	0.1500mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 10:00:32 PM
2	0.3346	0.1671mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 10:02:35 PM
3	0.3420	0.1692mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 10:04:38 PM
4	0.3377	0.1680mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 10:06:41 PM

Mean Area 0.3217
Mean Conc. 0.1636mg/L



Sample

Sample Name: 680-206680-a-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

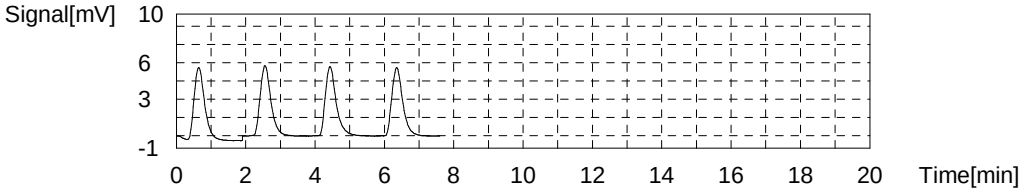
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.499mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.50	3.526mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 10:15:12 PM
2	12.42	3.504mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 10:17:15 PM
3	12.38	3.493mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 10:19:18 PM
4	12.30	3.471mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 10:21:21 PM

Mean Area 12.40
Mean Conc. 3.499mg/L



Sample

Sample Name: 680-207141-a-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

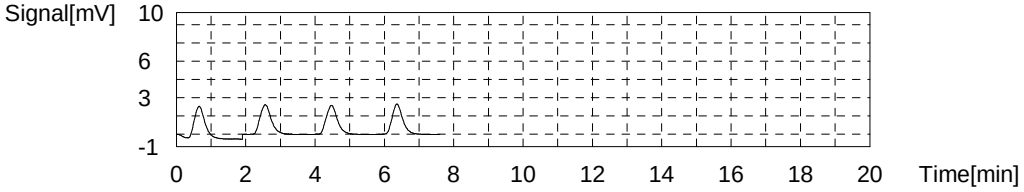
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.554mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.432	1.575mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 10:29:52 PM
2	5.466	1.584mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 10:31:55 PM
3	5.281	1.533mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 10:33:58 PM
4	5.252	1.525mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 10:36:01 PM

Mean Area 5.358
Mean Conc. 1.554mg/L



Sample

Sample Name: 320-81289-d-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

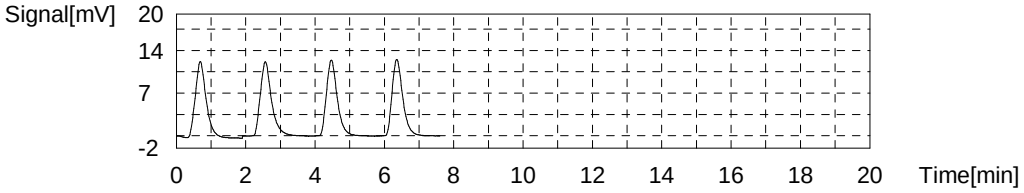
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.592mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	27.23	7.594mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 10:44:32 PM
2	27.45	7.655mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 10:46:35 PM
3	27.15	7.572mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 10:48:38 PM
4	27.06	7.547mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 10:50:41 PM

Mean Area 27.22
Mean Conc. 7.592mg/L



Sample

Sample Name: MS 320-81289-d-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

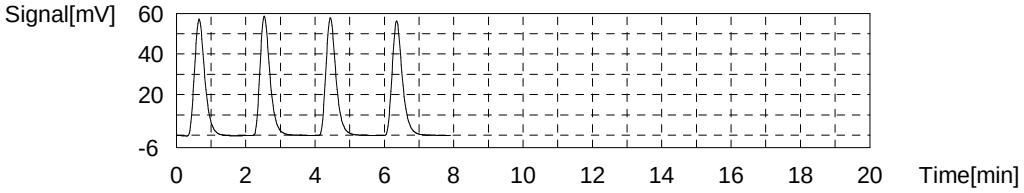
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:32.78mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	119.7	33.13mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 10:59:12 PM
2	118.1	32.69mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 11:01:15 PM
3	118.3	32.74mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 11:03:18 PM
4	117.6	32.55mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 11:05:39 PM

Mean Area 118.4
Mean Conc. 32.78mg/L



Sample

Sample Name: MSD 320-81289-d-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

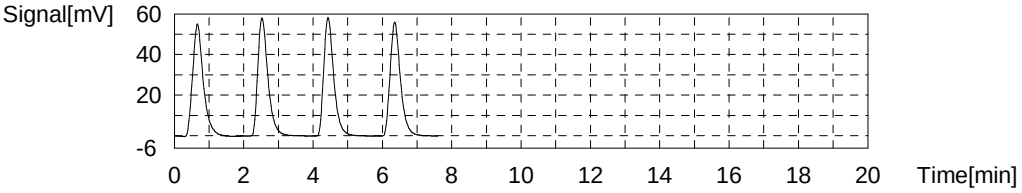
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:32.82mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	120.3	33.29mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 11:14:10 PM
2	118.9	32.91mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 11:16:13 PM
3	117.9	32.63mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 11:18:16 PM
4	117.3	32.47mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 11:20:19 PM

Mean Area 118.6
Mean Conc. 32.82mg/L



Sample

Sample Name: 280-155002-c-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

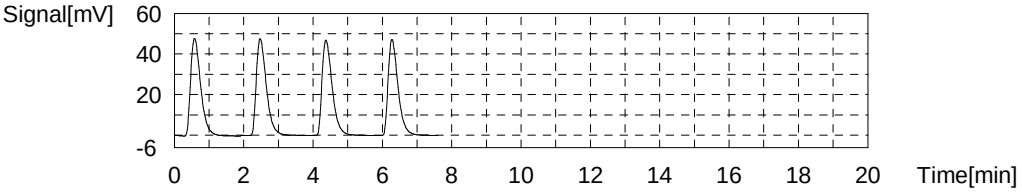
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:133.6mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	98.28	136.1mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 11:28:49 PM
2	96.80	134.0mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 11:30:52 PM
3	96.11	133.1mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 11:32:55 PM
4	94.91	131.4mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 11:34:58 PM

Mean Area 96.53
Mean Conc. 133.6mg/L



Sample

Sample Name: 580-106949-u-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

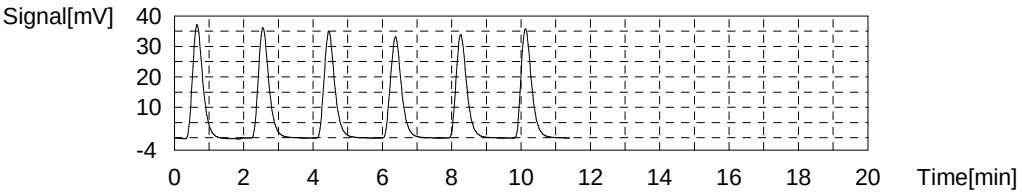
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.91mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	78.14	21.65mg/L	50uL	1	E	TOC3.2021_10_15_09_58_04.cal	11/12/2021 11:43:29 PM
2	76.54	21.21mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 11:45:32 PM
3	75.13	20.82mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 11:47:35 PM
4	73.99	20.51mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 11:49:38 PM
5	72.91	20.21mg/L	50uL	1	E	TOC3.2021_10_15_09_58_04.cal	11/12/2021 11:51:41 PM
6	76.19	21.11mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/12/2021 11:53:44 PM

Mean Area 75.46
Mean Conc. 20.91mg/L



Sample

Sample Name: 280-155140-b-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

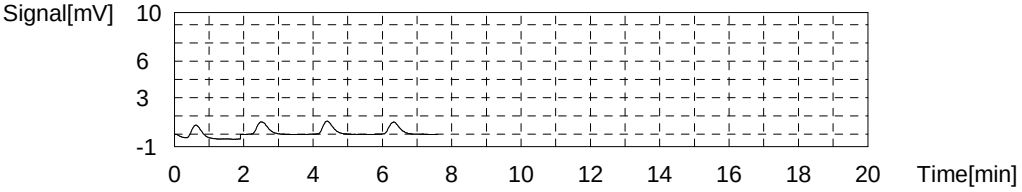
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6701mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.148	0.6679mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:02:08 AM
2	2.207	0.6842mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:04:11 AM
3	2.170	0.6740mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:06:14 AM
4	2.099	0.6544mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:08:17 AM

Mean Area 2.156
Mean Conc. 0.6701mg/L



Sample

Sample Name: 280-155132-a-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

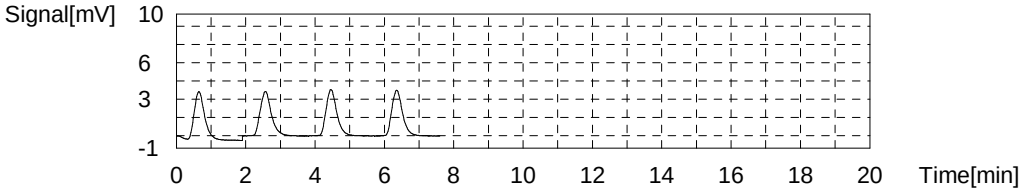
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.290mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.892	2.254mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:16:48 AM
2	8.123	2.318mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:18:51 AM
3	8.086	2.308mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:20:54 AM
4	7.982	2.279mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:22:57 AM

Mean Area 8.021
Mean Conc. 2.290mg/L



Sample

Sample Name: 280-155145-b-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

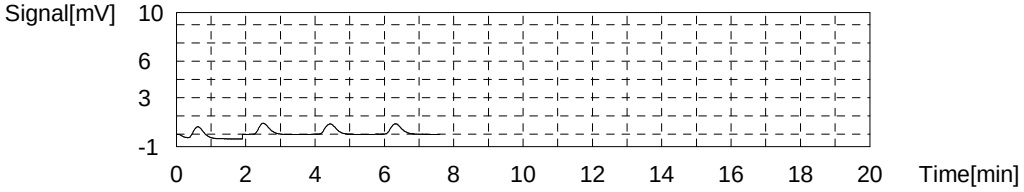
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5906mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.815	0.5759mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:31:28 AM
2	1.885	0.5953mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:33:31 AM
3	1.889	0.5964mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:35:34 AM
4	1.883	0.5947mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:37:37 AM

Mean Area 1.868
Mean Conc. 0.5906mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

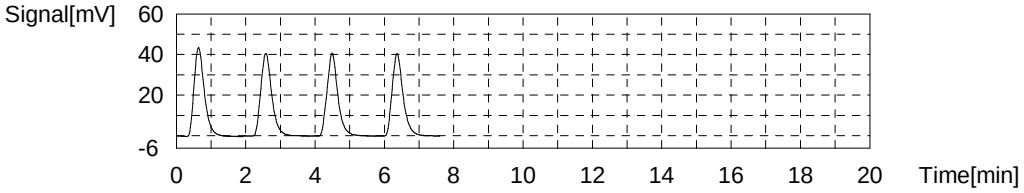
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.91mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.30	25.29mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:46:08 AM
2	89.94	24.91mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:48:11 AM
3	88.96	24.64mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:50:14 AM
4	89.60	24.82mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:52:17 AM

Mean Area 89.95
Mean Conc. 24.91mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

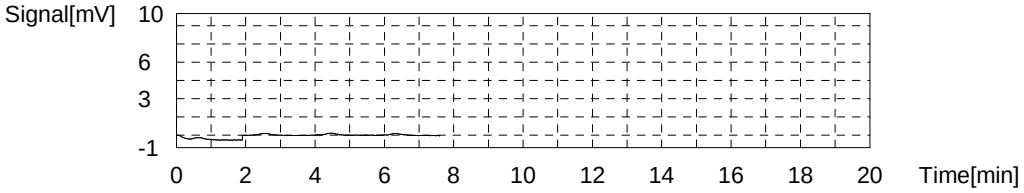
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1474mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2742	0.1505mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:00:48 AM
2	0.2312	0.1386mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:02:51 AM
3	0.2910	0.1551mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:04:54 AM
4	0.2556	0.1453mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:06:57 AM

Mean Area 0.2630
Mean Conc. 0.1474mg/L



Sample

Sample Name: 280-155145-b-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

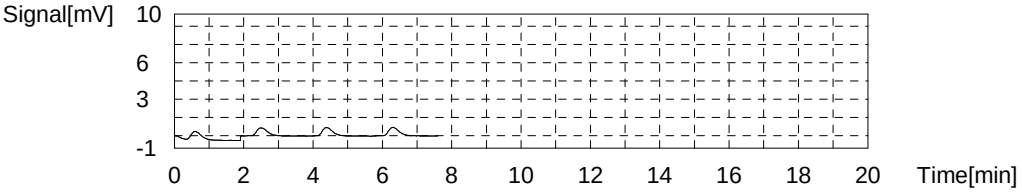
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4468mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.259	0.4224mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:15:28 AM
2	1.387	0.4578mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:17:31 AM
3	1.366	0.4520mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:19:34 AM
4	1.378	0.4553mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:21:37 AM

Mean Area 1.348
Mean Conc. 0.4468mg/L



Sample

Sample Name: 280-155145-b-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

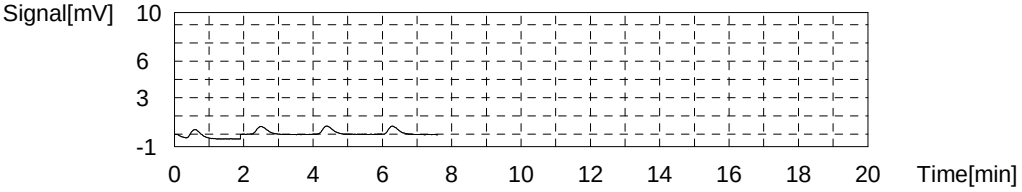
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4410mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.285	0.4296mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:30:08 AM
2	1.344	0.4459mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:32:11 AM
3	1.345	0.4462mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:34:14 AM
4	1.331	0.4423mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:36:17 AM

Mean Area 1.326
Mean Conc. 0.4410mg/L



Sample

Sample Name: 280-155195-a-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

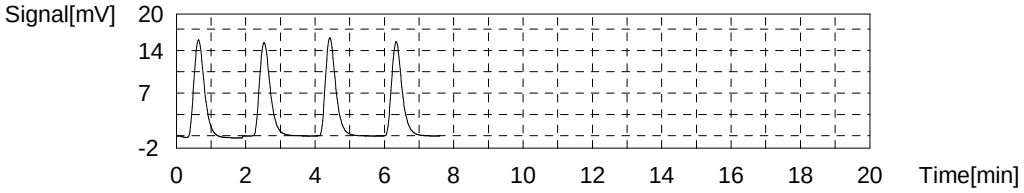
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.293mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.04	9.475mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:44:48 AM
2	33.05	9.201mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:46:51 AM
3	33.45	9.312mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:48:54 AM
4	32.99	9.185mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:50:57 AM

Mean Area 33.38
Mean Conc. 9.293mg/L



Sample

Sample Name: 280-155195-a-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

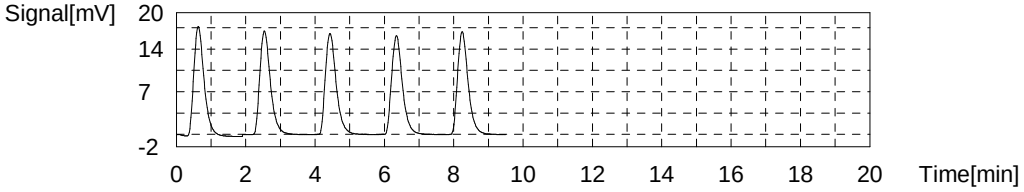
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.03mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	37.44	10.41mg/L	50uL	1	E	TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:59:48 AM
2	36.37	10.12mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:01:51 AM
3	36.24	10.08mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:03:54 AM
4	35.57	9.897mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:05:57 AM
5	36.00	10.02mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:08:00 AM

Mean Area 36.05
Mean Conc. 10.03mg/L



Sample

Sample Name: 680-207006-b-18
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

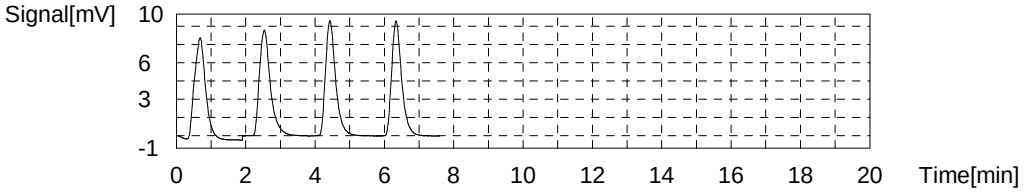
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.319mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.63	5.219mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:16:30 AM
2	19.13	5.357mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:18:33 AM
3	19.19	5.374mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:20:36 AM
4	19.01	5.324mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:22:39 AM

Mean Area 18.99
Mean Conc. 5.319mg/L



Sample

Sample Name: MS 680-207006-b-18
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

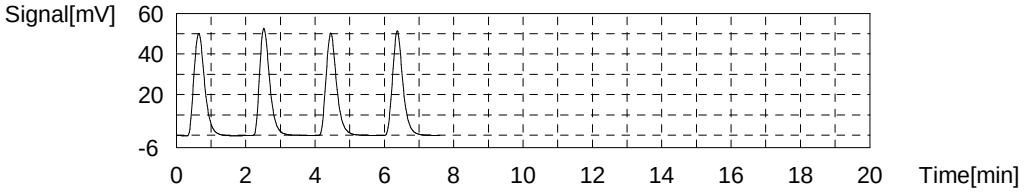
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.93mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	110.0	30.45mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:31:10 AM
2	107.5	29.76mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:33:13 AM
3	107.5	29.76mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:35:16 AM
4	107.5	29.76mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:37:19 AM

Mean Area 108.1
Mean Conc. 29.93mg/L



Sample

Sample Name: MSD 680-207006-b-18
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

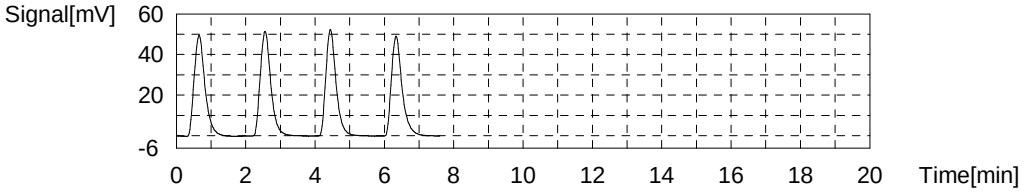
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.04mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	109.8	30.39mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:45:50 AM
2	109.8	30.39mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:47:53 AM
3	107.9	29.87mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:49:56 AM
4	106.6	29.51mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:51:59 AM

Mean Area 108.5
Mean Conc. 30.04mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

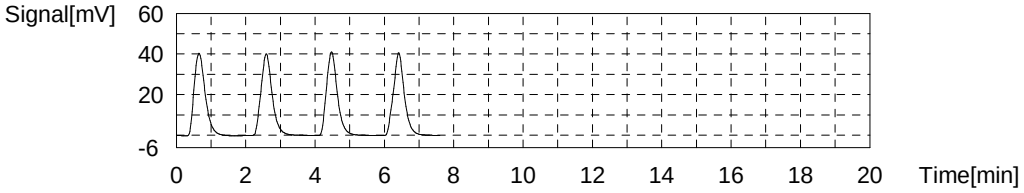
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.03mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.62	25.37mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:00:30 AM
2	90.13	24.96mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:02:33 AM
3	90.21	24.99mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:04:36 AM
4	89.59	24.81mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:06:39 AM

Mean Area 90.39
Mean Conc. 25.03mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

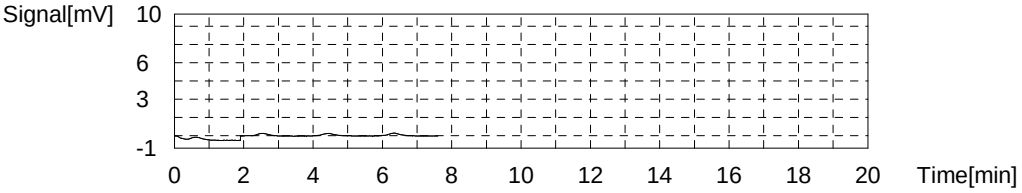
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1851mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3662	0.1759mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:15:10 AM
2	0.4084	0.1875mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:17:13 AM
3	0.4167	0.1898mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:19:16 AM
4	0.4065	0.1870mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:21:19 AM

Mean Area 0.3995
Mean Conc. 0.1851mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

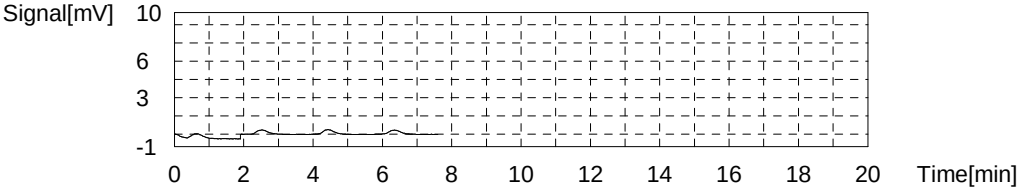
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2824mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7204	0.2737mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:29:50 AM
2	0.7707	0.2876mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:31:53 AM
3	0.7802	0.2902mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:33:56 AM
4	0.7368	0.2782mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:35:59 AM

Mean Area 0.7520
Mean Conc. 0.2824mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

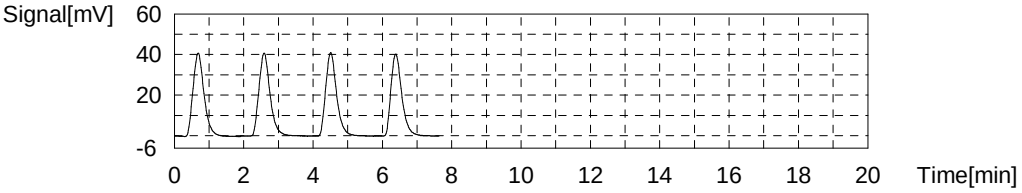
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.06mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.42	25.32mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:44:30 AM
2	91.55	25.36mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:46:35 AM
3	90.41	25.04mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:48:38 AM
4	88.51	24.52mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:50:41 AM

Mean Area 90.47
Mean Conc. 25.06mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

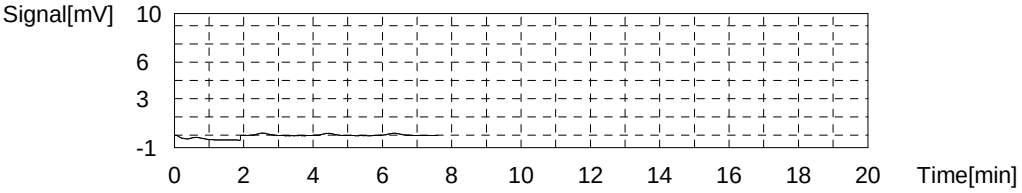
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1647mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2695	0.1492mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:59:12 AM
2	0.3598	0.1741mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:01:15 AM
3	0.3443	0.1698mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:03:18 AM
4	0.3291	0.1656mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:05:21 AM

Mean Area 0.3257
Mean Conc. 0.1647mg/L



Sample

Sample Name: 160-43898-a-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

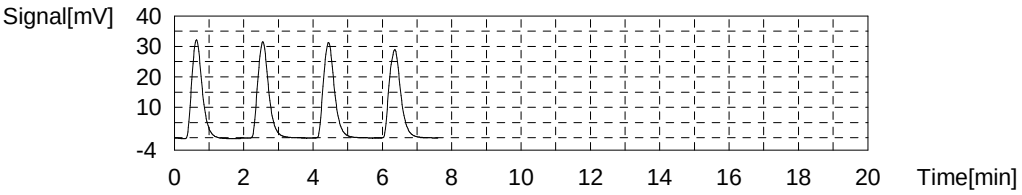
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:95.69mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	68.55	95.02mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:13:52 AM
2	69.43	96.24mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:15:55 AM
3	70.08	97.13mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:17:58 AM
4	68.07	94.36mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:20:01 AM

Mean Area 69.03
Mean Conc. 95.69mg/L



Sample

Sample Name: 160-43898-a-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

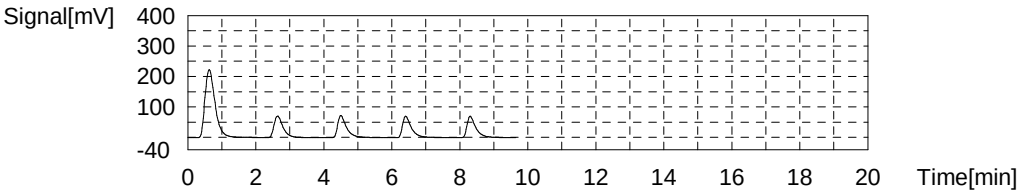
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:1194mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	462.9	1279mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:28:41 AM
2	132.6	1221mg/L	15uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:30:45 AM
3	130.8	1205mg/L	15uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:32:48 AM
4	127.7	1176mg/L	15uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:34:51 AM
5	127.3	1172mg/L	15uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:36:53 AM

Mean Area 129.6
Mean Conc. 1194mg/L



Sample

Sample Name: 160-43898-a-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

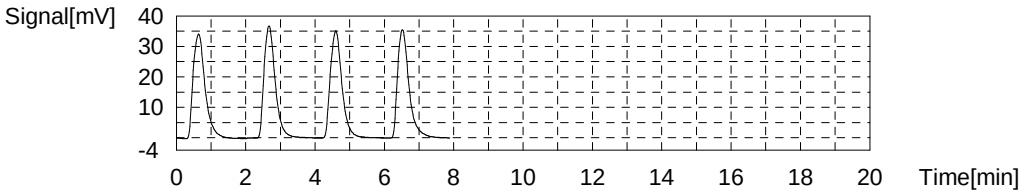
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:229.4mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	83.71	231.9mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:45:32 AM
2	82.76	229.3mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:47:35 AM
3	82.46	228.5mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:49:42 AM
4	82.25	227.9mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:51:50 AM

Mean Area 82.80
Mean Conc. 229.4mg/L



Sample

Sample Name: MS 160-43898-a-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

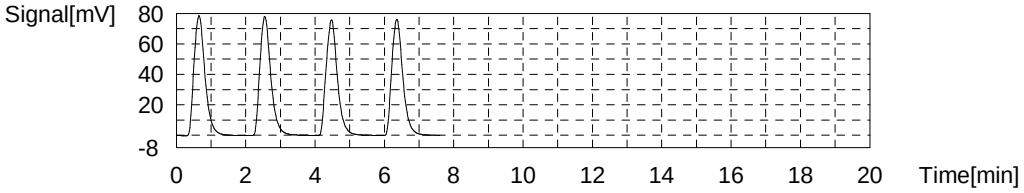
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:479.0mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	176.2	487.3mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:00:21 AM
2	172.6	477.4mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:02:24 AM
3	172.7	477.6mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:04:27 AM
4	171.2	473.5mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:06:30 AM

Mean Area 173.2
Mean Conc. 479.0mg/L



Sample

Sample Name: MSD 160-43898-a-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

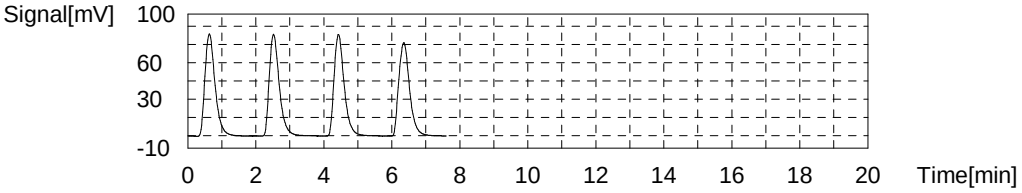
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:479.5mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	176.3	487.6mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:15:01 AM
2	171.9	475.4mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:17:04 AM
3	173.9	481.0mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:19:07 AM
4	171.4	474.1mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:21:10 AM

Mean Area 173.4
Mean Conc. 479.5mg/L



Sample

Sample Name: 160-43898-a-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

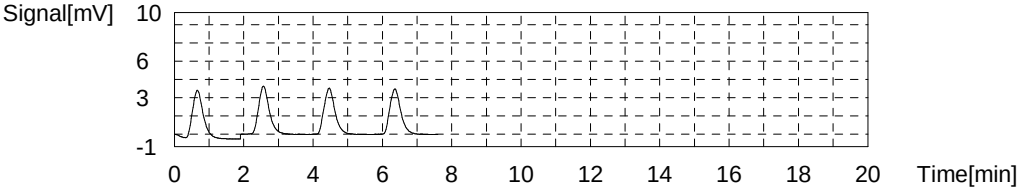
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:23.67mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.328	23.74mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:29:41 AM
2	8.385	23.90mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:31:44 AM
3	8.315	23.71mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:33:47 AM
4	8.183	23.34mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:35:50 AM

Mean Area 8.303
Mean Conc. 23.67mg/L



Sample

Sample Name: 160-43898-a-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

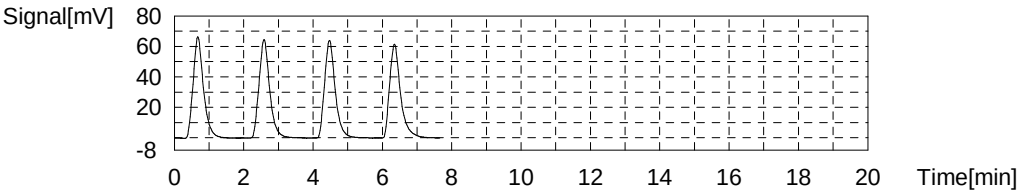
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:191.2mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	140.0	193.7mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:44:21 AM
2	138.6	191.7mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:46:24 AM
3	137.6	190.4mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:48:27 AM
4	136.7	189.1mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:50:33 AM

Mean Area 138.2
Mean Conc. 191.2mg/L



Sample

Sample Name: 160-43898-a-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

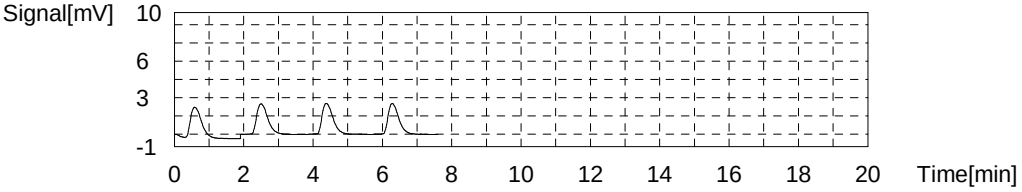
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:158.6mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.473	158.6mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:59:04 AM
2	5.572	161.3mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:01:07 AM
3	5.469	158.5mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:03:10 AM
4	5.370	155.8mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:05:13 AM

Mean Area 5.471
Mean Conc. 158.6mg/L



Sample

Sample Name: 160-43898-a-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

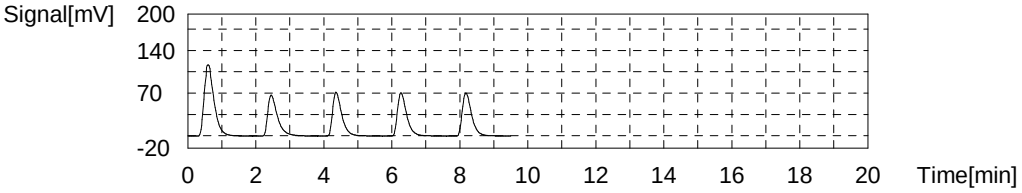
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:6215mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	236.3	6533mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:13:44 AM
2	134.6	6202mg/L	30uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:15:47 AM
3	134.8	6211mg/L	30uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:17:50 AM
4	134.3	6188mg/L	30uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:19:53 AM
5	135.8	6257mg/L	30uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:21:56 AM

Mean Area 134.9
Mean Conc. 6215mg/L



Sample

Sample Name: 160-43898-a-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

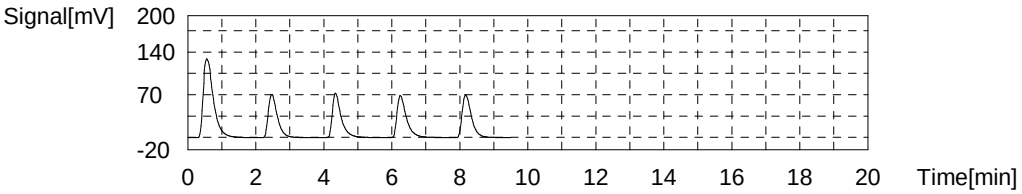
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:7082mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	271.8	7513mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:30:26 AM
2	132.9	7065mg/L	26uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:32:29 AM
3	132.4	7038mg/L	26uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:34:32 AM
4	134.1	7129mg/L	26uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:36:34 AM
5	133.5	7097mg/L	26uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:38:38 AM

Mean Area 133.2
Mean Conc. 7082mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

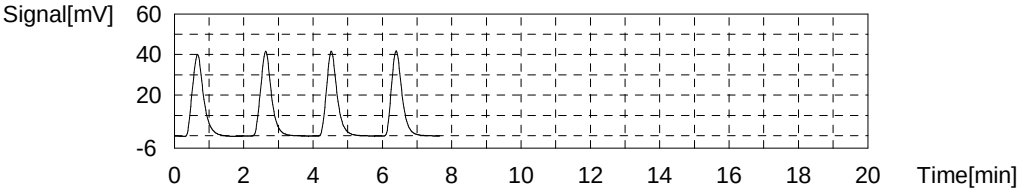
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.05mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	92.01	25.48mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:47:11 AM
2	90.67	25.11mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:49:14 AM
3	89.73	24.85mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:51:17 AM
4	89.41	24.76mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:53:20 AM

Mean Area 90.46
Mean Conc. 25.05mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

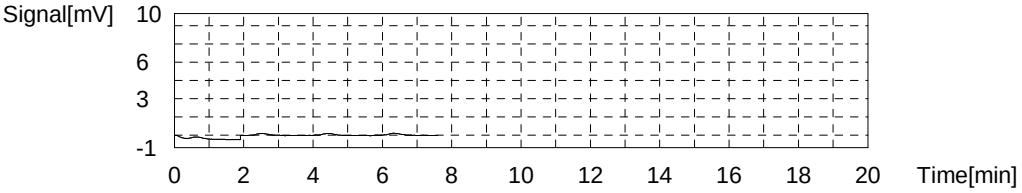
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1584mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2885	0.1544mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 7:01:52 AM
2	0.2858	0.1537mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 7:03:55 AM
3	0.3338	0.1669mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 7:05:58 AM
4	0.3042	0.1587mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 7:08:01 AM

Mean Area 0.3031
Mean Conc. 0.1584mg/L



Sample

Sample Name: 160-43898-a-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

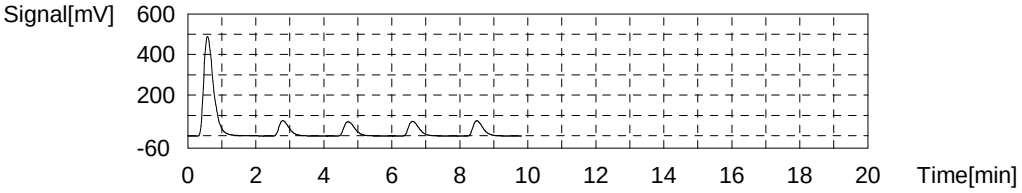
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	25.00	NPOC:6593mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	990.9	6843mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 7:16:51 AM
2	160.3	6651mg/L	50uL	6		TOC3.2021_10_15_09_58_04.cal	11/13/2021 7:24:21 AM
3	159.5	6618mg/L	50uL	6		TOC3.2021_10_15_09_58_04.cal	11/13/2021 7:26:24 AM
4	158.4	6572mg/L	50uL	6		TOC3.2021_10_15_09_58_04.cal	11/13/2021 7:28:27 AM
5	157.4	6531mg/L	50uL	6		TOC3.2021_10_15_09_58_04.cal	11/13/2021 7:30:30 AM

Mean Area 158.9
Mean Conc. 6593mg/L



Sample

Sample Name: 160-43898-a-10
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

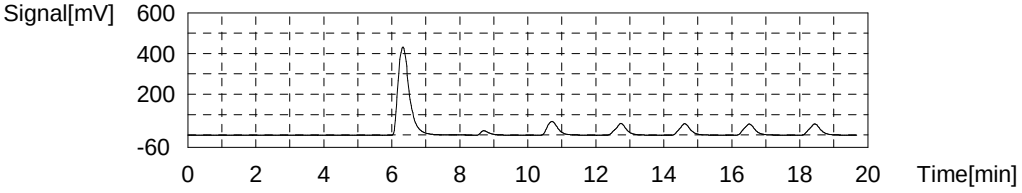
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:2107mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	0.7475mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 7:39:01 AM
2	0.000	0.7475mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 7:41:04 AM
3	0.1856	1.260mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 7:43:07 AM
4	1008	2784mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 7:45:44 AM
5	40.03	667.7mg/L	50uL	6	E	TOC3.2021_10_15_09_58_04.cal	11/13/2021 7:53:10 AM
6	148.7	2468mg/L	50uL	6	E	TOC3.2021_10_15_09_58_04.cal	11/13/2021 7:55:16 AM
7	129.3	2147mg/L	50uL	6		TOC3.2021_10_15_09_58_04.cal	11/13/2021 7:57:19 AM
8	125.9	2090mg/L	50uL	6		TOC3.2021_10_15_09_58_04.cal	11/13/2021 7:59:22 AM
9	125.7	2087mg/L	50uL	6		TOC3.2021_10_15_09_58_04.cal	11/13/2021 8:01:26 AM
10	126.7	2104mg/L	50uL	6		TOC3.2021_10_15_09_58_04.cal	11/13/2021 8:03:30 AM

Mean Area 126.9
Mean Conc. 2107mg/L



Sample

Sample Name: 160-43898-a-11
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

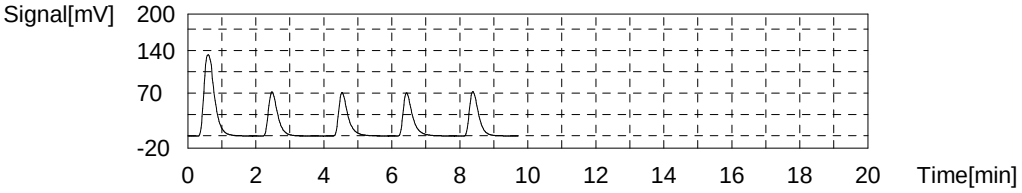
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:7585mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	287.9	7958mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 8:11:56 AM
2	138.6	7662mg/L	25uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 8:14:10 AM
3	136.6	7552mg/L	25uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 8:16:13 AM
4	136.2	7530mg/L	25uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 8:18:18 AM
5	137.4	7596mg/L	25uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 8:20:21 AM

Mean Area 137.2
Mean Conc. 7585mg/L



Sample

Sample Name: 160-43898-a-12
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

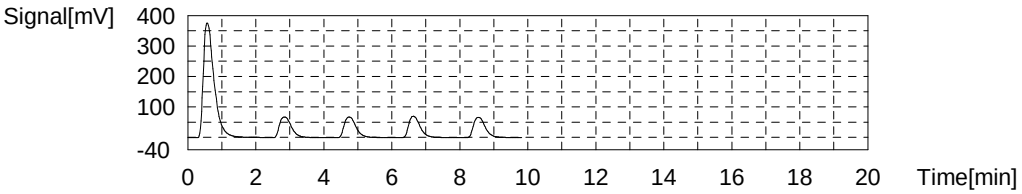
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:453.5mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	833.1	460.3mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 8:29:11 AM
2	167.0	461.9mg/L	50uL	5		TOC3.2021_10_15_09_58_04.cal	11/13/2021 8:36:41 AM
3	164.5	455.0mg/L	50uL	5		TOC3.2021_10_15_09_58_04.cal	11/13/2021 8:38:44 AM
4	163.6	452.5mg/L	50uL	5		TOC3.2021_10_15_09_58_04.cal	11/13/2021 8:40:47 AM
5	160.7	444.5mg/L	50uL	5		TOC3.2021_10_15_09_58_04.cal	11/13/2021 8:42:50 AM

Mean Area 164.0
Mean Conc. 453.5mg/L



Sample

Sample Name: 160-43898-a-13
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

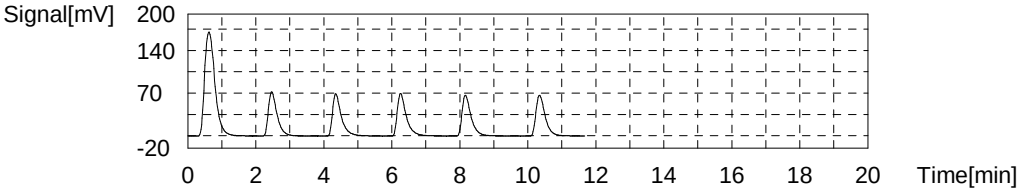
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:467.7mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	362.0	500.2mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 8:51:22 AM
2	131.0	476.4mg/L	19uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 8:53:25 AM
3	125.9	457.8mg/L	19uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 8:55:28 AM
4	130.5	474.5mg/L	19uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 8:57:30 AM
5	124.6	453.1mg/L	19uL	1	E	TOC3.2021_10_15_09_58_04.cal	11/13/2021 8:59:49 AM
6	127.1	462.2mg/L	19uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 9:01:52 AM

Mean Area 128.6
Mean Conc. 467.7mg/L



Sample

Sample Name: MS 160-43898-a-13
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

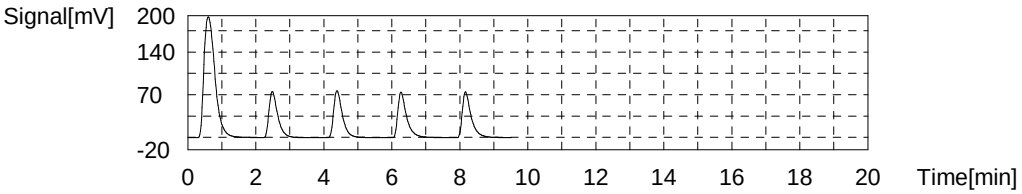
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:587.9mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	449.9	621.5mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 9:10:19 AM
2	136.7	590.2mg/L	16uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 9:12:24 AM
3	137.7	594.5mg/L	16uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 9:14:27 AM
4	134.4	580.3mg/L	16uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 9:16:30 AM
5	135.9	586.7mg/L	16uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 9:18:33 AM

Mean Area 136.2
Mean Conc. 587.9mg/L



Sample

Sample Name: MSD 160-43898-a-13
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

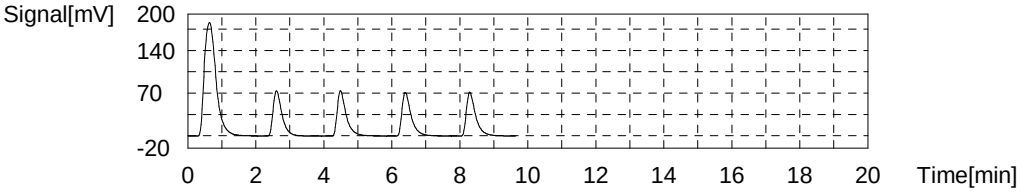
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:588.0mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	450.4	622.2mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 9:27:12 AM
2	136.0	587.2mg/L	16uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 9:29:15 AM
3	137.0	591.5mg/L	16uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 9:31:18 AM
4	135.5	585.0mg/L	16uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 9:33:20 AM
5	136.3	588.5mg/L	16uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 9:35:23 AM

Mean Area 136.2
Mean Conc. 588.0mg/L



Sample

Sample Name: 160-43898-a-14
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

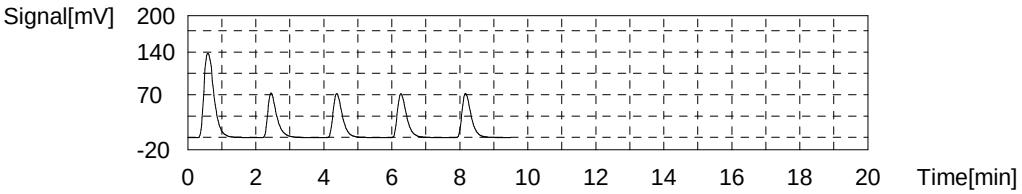
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:7564mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	286.3	7913mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 9:43:55 AM
2	136.6	7552mg/L	25uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 9:45:58 AM
3	137.9	7623mg/L	25uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 9:48:01 AM
4	136.5	7546mg/L	25uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 9:50:04 AM
5	136.3	7535mg/L	25uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 9:52:06 AM

Mean Area 136.8
Mean Conc. 7564mg/L



Sample

Sample Name: 160-43898-a-15
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

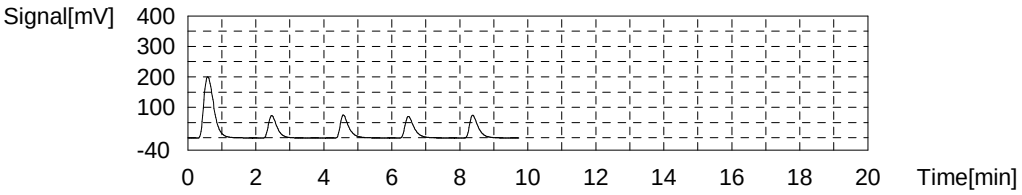
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	50.00	NPOC:5419mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	416.9	5760mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 10:00:38 AM
2	131.7	5352mg/L	17uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 10:02:56 AM
3	134.3	5457mg/L	17uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 10:04:59 AM
4	133.4	5421mg/L	17uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 10:07:01 AM
5	134.0	5445mg/L	17uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 10:09:04 AM

Mean Area 133.3
Mean Conc. 5419mg/L



Sample

Sample Name: 160-43898-b-16
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

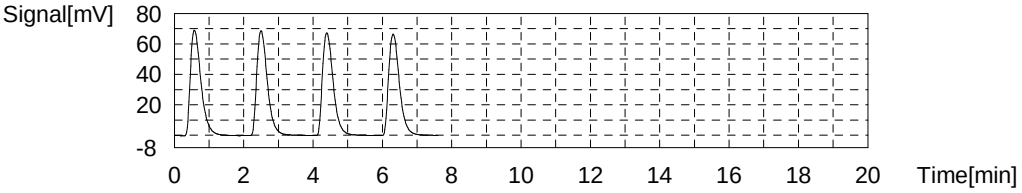
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:203.5mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	149.3	206.5mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 10:17:36 AM
2	147.1	203.5mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 10:19:39 AM
3	146.2	202.2mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 10:21:42 AM
4	145.8	201.7mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 10:23:45 AM

Mean Area 147.1
Mean Conc. 203.5mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

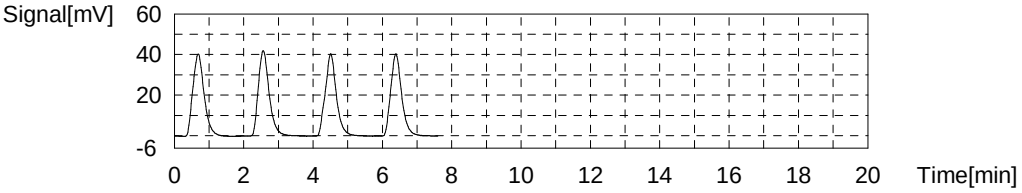
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.26mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	92.63	25.65mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 10:32:17 AM
2	91.99	25.48mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 10:34:20 AM
3	90.70	25.12mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 10:36:23 AM
4	89.49	24.79mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 10:38:26 AM

Mean Area 91.20
Mean Conc. 25.26mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

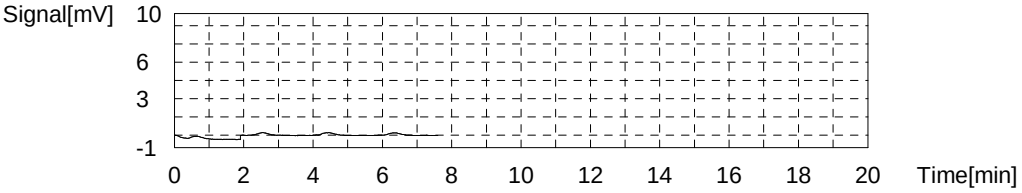
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1916mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3622	0.1748mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 10:46:58 AM
2	0.4440	0.1974mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 10:49:01 AM
3	0.4419	0.1968mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 10:51:04 AM
4	0.4443	0.1974mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 10:53:07 AM

Mean Area 0.4231
Mean Conc. 0.1916mg/L



Sample

Sample Name: 160-43898-a-17
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

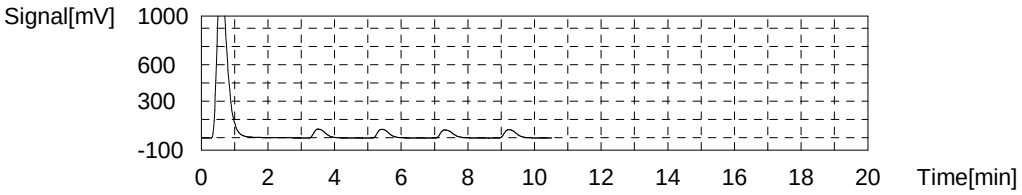
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:7623mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2785	7691mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 11:02:40 AM
2	177.0	7832mg/L	50uL	16		TOC3.2021_10_15_09_58_04.cal	11/13/2021 11:10:10 AM
3	172.0	7611mg/L	50uL	16		TOC3.2021_10_15_09_58_04.cal	11/13/2021 11:12:13 AM
4	170.3	7536mg/L	50uL	16		TOC3.2021_10_15_09_58_04.cal	11/13/2021 11:14:16 AM
5	169.8	7514mg/L	50uL	16		TOC3.2021_10_15_09_58_04.cal	11/13/2021 11:16:19 AM

Mean Area 172.3
Mean Conc. 7623mg/L



Sample

Sample Name: 160-43898-a-18
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

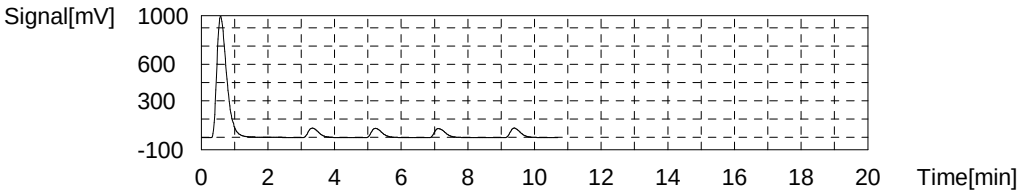
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:5672mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2082	5750mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 11:25:41 AM
2	173.4	5755mg/L	50uL	12		TOC3.2021_10_15_09_58_04.cal	11/13/2021 11:33:11 AM
3	171.0	5675mg/L	50uL	12		TOC3.2021_10_15_09_58_04.cal	11/13/2021 11:35:14 AM
4	170.6	5662mg/L	50uL	12		TOC3.2021_10_15_09_58_04.cal	11/13/2021 11:37:39 AM
5	168.6	5596mg/L	50uL	12		TOC3.2021_10_15_09_58_04.cal	11/13/2021 11:39:42 AM

Mean Area 170.9
Mean Conc. 5672mg/L



Sample

Sample Name: 160-43898-a-19
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

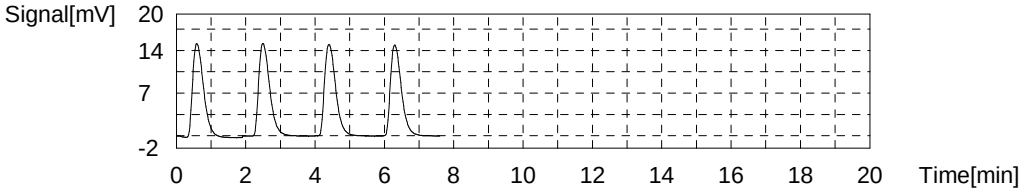
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	250.0	NPOC:2340mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.15	2376mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 11:48:14 AM
2	33.64	2341mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 11:50:17 AM
3	33.75	2349mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 11:52:20 AM
4	32.94	2293mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 11:54:23 AM

Mean Area 33.62
Mean Conc. 2340mg/L



Sample

Sample Name: 160-43898-a-20
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

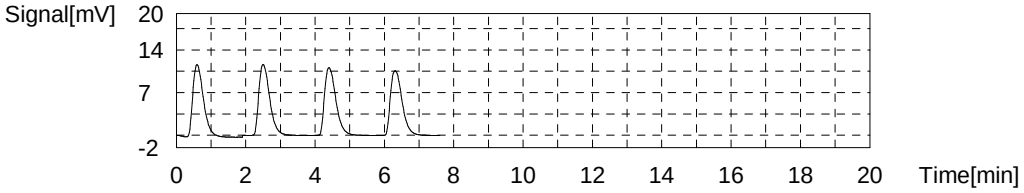
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	250.0	NPOC:1775mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	25.47	1777mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:02:55 PM
2	25.65	1789mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:04:58 PM
3	25.54	1782mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:07:01 PM
4	25.09	1751mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:09:04 PM

Mean Area 25.44
Mean Conc. 1775mg/L



Sample

Sample Name: lcs 280-557282/1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

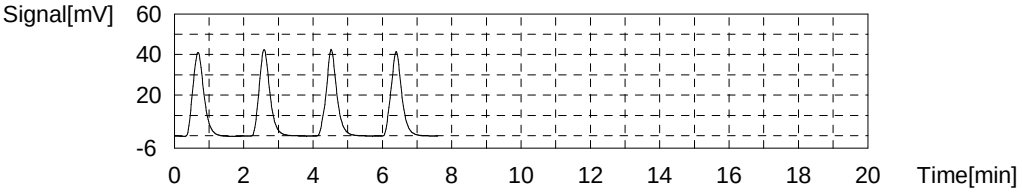
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.39mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	92.63	25.65mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:17:36 PM
2	91.87	25.44mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:19:39 PM
3	91.56	25.36mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:21:42 PM
4	90.63	25.10mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:23:45 PM

Mean Area 91.67
Mean Conc. 25.39mg/L



Sample

Sample Name: mb 280-557282/2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

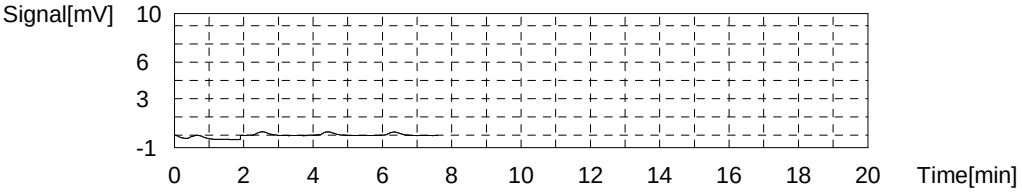
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2356mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5996	0.2403mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:32:17 PM
2	0.6081	0.2427mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:34:20 PM
3	0.5633	0.2303mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:36:23 PM
4	0.5585	0.2290mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:38:26 PM

Mean Area 0.5824
Mean Conc. 0.2356mg/L



Sample

Sample Name: 280-155138-d-10-b
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

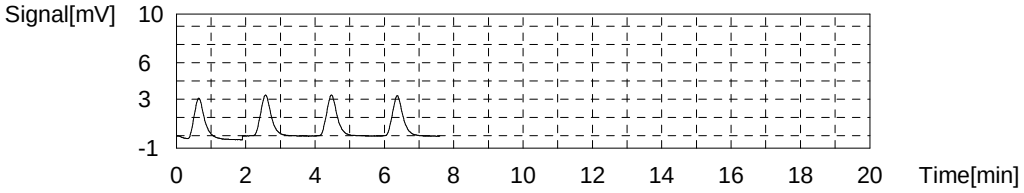
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.005mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.978	2.002mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:46:58 PM
2	7.028	2.015mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:49:01 PM
3	6.992	2.006mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:51:04 PM
4	6.958	1.996mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 12:53:07 PM

Mean Area 6.989
Mean Conc. 2.005mg/L



Sample

Sample Name: 280-155138-d-10-c ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

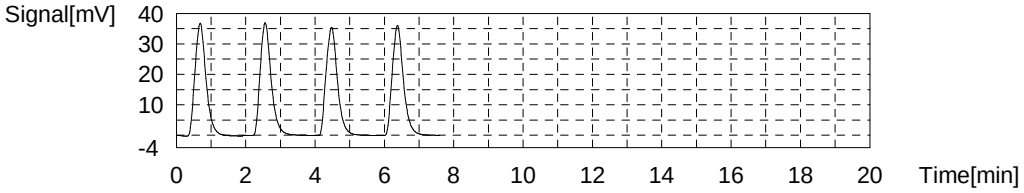
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:22.66mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	82.83	22.95mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:01:39 PM
2	81.59	22.60mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:03:42 PM
3	81.32	22.53mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:05:45 PM
4	81.45	22.57mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:07:48 PM

Mean Area 81.80
Mean Conc. 22.66mg/L



Sample

Sample Name: 280-155138-d-10-d msd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

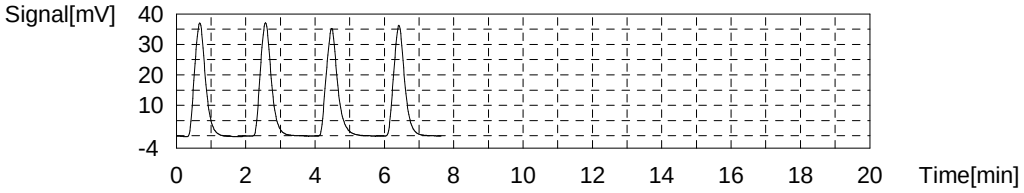
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:22.53mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	82.28	22.80mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:16:21 PM
2	81.80	22.66mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:18:24 PM
3	81.25	22.51mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:20:29 PM
4	79.92	22.14mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:22:32 PM

Mean Area 81.31
Mean Conc. 22.53mg/L



Sample

Sample Name: 500-208136-f-1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

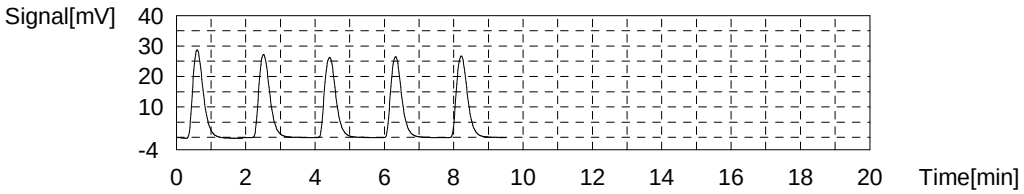
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	50.00	NPOC:827.4mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	61.99	859.6mg/L	50uL	1	E	TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:31:05 PM
2	60.22	835.2mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:33:08 PM
3	60.11	833.7mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:35:11 PM
4	58.78	815.3mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:37:14 PM
5	59.51	825.4mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:39:16 PM

Mean Area 59.66
Mean Conc. 827.4mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

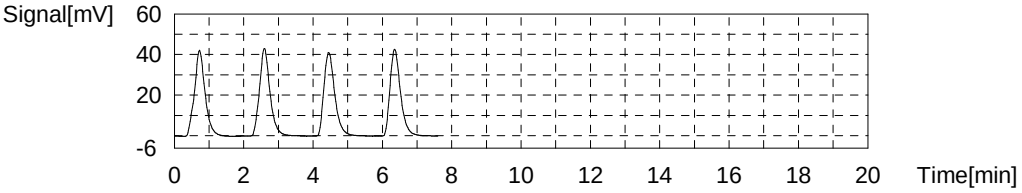
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.26mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	91.76	25.41mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:47:49 PM
2	91.40	25.31mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:49:52 PM
3	90.61	25.10mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:51:55 PM
4	91.00	25.20mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 1:53:58 PM

Mean Area 91.19
Mean Conc. 25.26mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

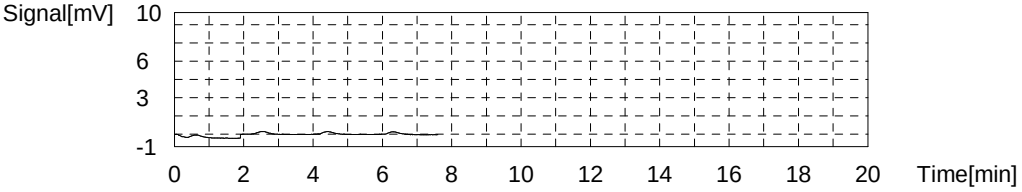
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1917mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3844	0.1809mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:02:31 PM
2	0.4573	0.2010mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:04:34 PM
3	0.4376	0.1956mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:06:37 PM
4	0.4154	0.1895mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:08:40 PM

Mean Area 0.4237
Mean Conc. 0.1917mg/L



Sample

Sample Name: 500-208136-e-2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

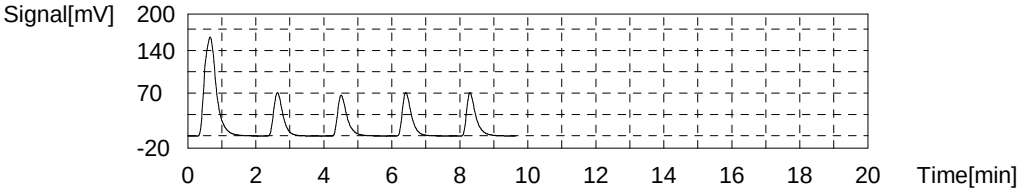
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:102.5mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	395.8	109.4mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:17:21 PM
2	136.0	104.4mg/L	18uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:19:24 PM
3	130.7	100.3mg/L	18uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:21:26 PM
4	133.2	102.2mg/L	18uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:23:29 PM
5	134.0	102.9mg/L	18uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:25:32 PM

Mean Area 133.5
Mean Conc. 102.5mg/L



Sample

Sample Name: 500-208018-a-2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

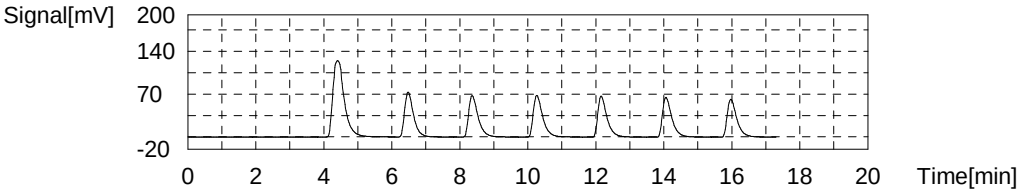
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:746.6mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3644	1.754mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:34:05 PM
2	0.3059	1.592mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:36:08 PM
3	293.4	810.9mg/L	50uL	1	R	TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:38:23 PM
4	135.6	780.8mg/L	24uL	1	E	TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:40:26 PM
5	132.7	764.2mg/L	24uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:42:28 PM
6	133.0	765.9mg/L	24uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:44:31 PM
7	126.7	729.6mg/L	24uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:48:54 PM
8	126.2	726.8mg/L	24uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:53:17 PM
9	123.1	708.9mg/L	24uL	1	E	TOC3.2021_10_15_09_58_04.cal	11/13/2021 2:57:40 PM

Mean Area 129.7
Mean Conc. 746.6mg/L



Sample

Sample Name: 280-155225-d-1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

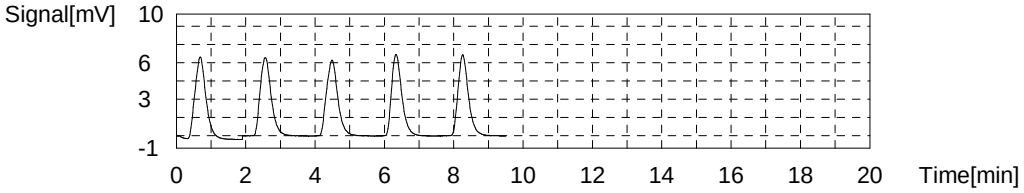
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.935mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.77	4.153mg/L	50uL	1	E	TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:06:07 PM
2	14.14	3.979mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:08:10 PM
3	14.15	3.982mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:10:13 PM
4	13.84	3.897mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:12:16 PM
5	13.79	3.883mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:14:18 PM

Mean Area 13.98
Mean Conc. 3.935mg/L



Sample

Sample Name: 280-155225-d-2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

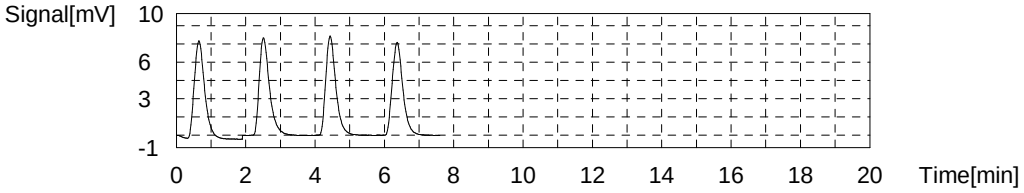
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.633mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.59	4.656mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:22:51 PM
2	16.57	4.650mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:24:54 PM
3	16.50	4.631mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:26:57 PM
4	16.37	4.595mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:29:00 PM

Mean Area 16.51
Mean Conc. 4.633mg/L



Sample

Sample Name: 280-155225-d-3-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

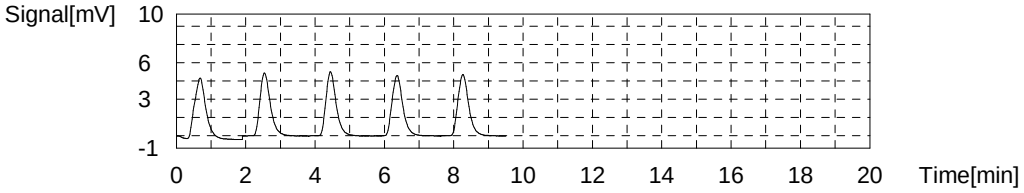
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.038mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.25	3.181mg/L	50uL	1	E	TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:37:33 PM
2	10.75	3.043mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:39:36 PM
3	10.74	3.040mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:41:39 PM
4	10.67	3.021mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:43:41 PM
5	10.76	3.046mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:45:44 PM

Mean Area 10.73
Mean Conc. 3.038mg/L



Sample

Sample Name: 280-155225-d-4-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

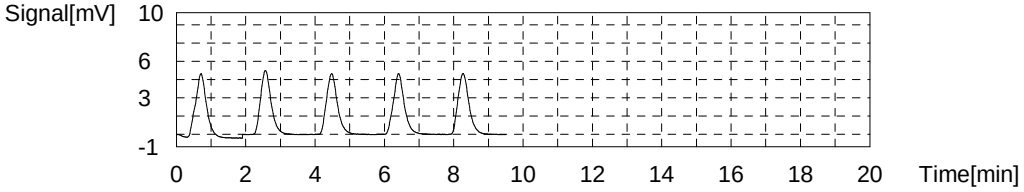
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.107mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.55	3.264mg/L	50uL	1	E	TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:54:17 PM
2	11.13	3.148mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:56:20 PM
3	10.98	3.107mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 3:58:23 PM
4	10.89	3.082mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:00:26 PM
5	10.93	3.093mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:02:28 PM

Mean Area 10.98
Mean Conc. 3.107mg/L



Sample

Sample Name: 280-155225-d-5-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

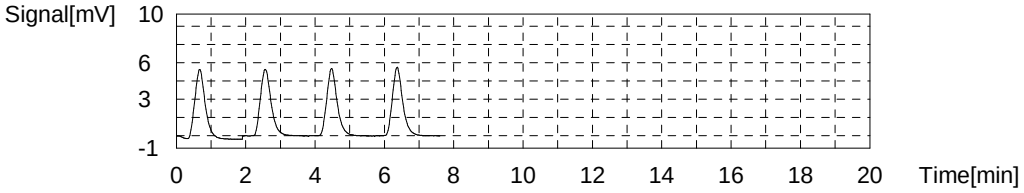
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.300mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.88	3.355mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:11:01 PM
2	11.70	3.306mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:13:04 PM
3	11.52	3.256mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:15:07 PM
4	11.62	3.283mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:17:10 PM

Mean Area 11.68
Mean Conc. 3.300mg/L



Sample

Sample Name: 280-155225-d-6-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

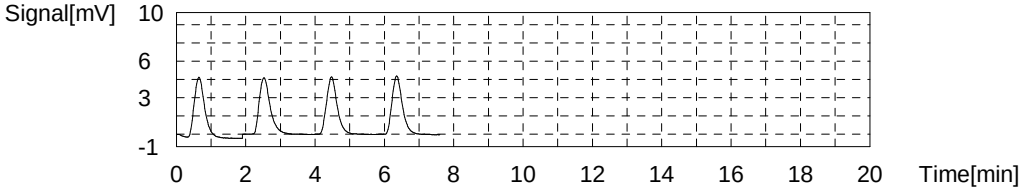
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.857mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.27	2.911mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:25:43 PM
2	10.13	2.872mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:27:46 PM
3	9.962	2.826mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:29:49 PM
4	9.945	2.821mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:31:52 PM

Mean Area 10.08
Mean Conc. 2.857mg/L



Sample

Sample Name: 280-155225-d-7-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

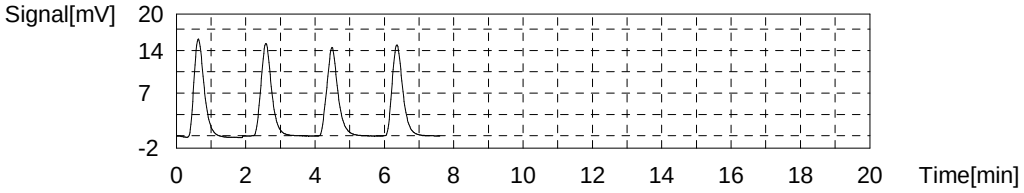
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.104mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.35	9.284mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:40:25 PM
2	32.49	9.047mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:42:28 PM
3	32.67	9.096mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:44:31 PM
4	32.29	8.991mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:46:33 PM

Mean Area 32.70
Mean Conc. 9.104mg/L



Sample

Sample Name: 280-155225-d-7-b ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

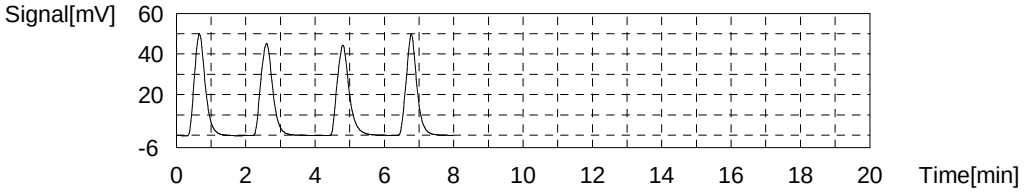
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.04mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	110.2	30.51mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:55:08 PM
2	108.9	30.15mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:57:30 PM
3	107.9	29.87mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 4:59:37 PM
4	107.0	29.62mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:01:39 PM

Mean Area 108.5
Mean Conc. 30.04mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

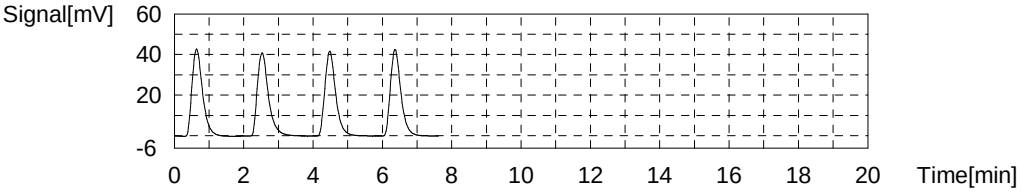
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.33mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	92.46	25.61mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:10:14 PM
2	91.93	25.46mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:12:18 PM
3	90.99	25.20mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:14:21 PM
4	90.40	25.04mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:16:23 PM

Mean Area 91.44
Mean Conc. 25.33mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

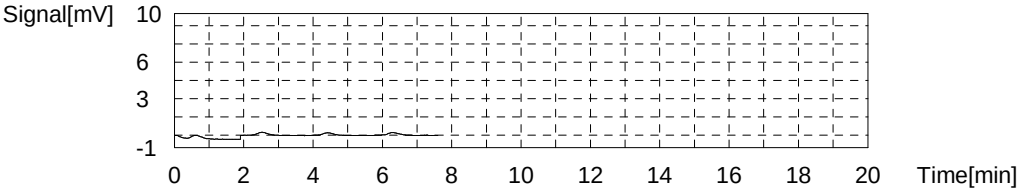
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1936mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4607	0.2020mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:24:58 PM
2	0.4661	0.2035mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:27:01 PM
3	0.3919	0.1830mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:29:04 PM
4	0.4035	0.1862mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:31:06 PM

Mean Area 0.4306
Mean Conc. 0.1936mg/L



Sample

Sample Name: 280-155225-d-7-c msd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

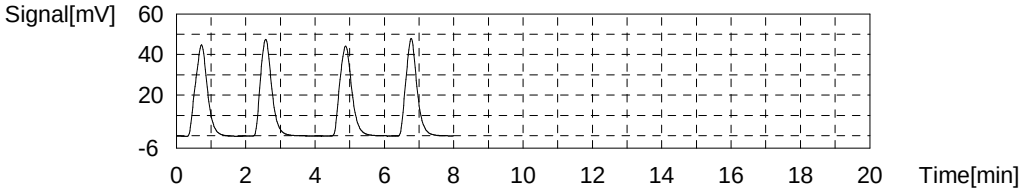
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.96mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	109.4	30.28mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:39:41 PM
2	108.1	29.93mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:42:07 PM
3	107.7	29.81mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:44:10 PM
4	107.7	29.81mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:46:13 PM

Mean Area 108.2
Mean Conc. 29.96mg/L



Sample

Sample Name: 280-155225-d-8-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

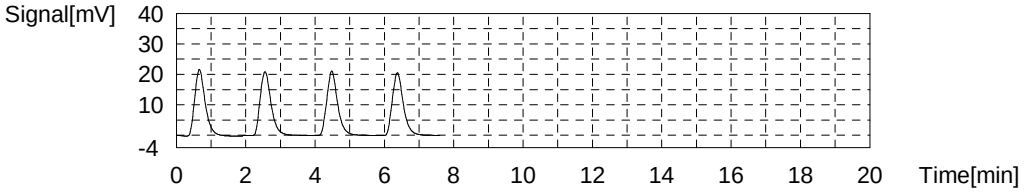
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:12.79mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	46.64	12.95mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:54:47 PM
2	45.95	12.76mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:56:50 PM
3	46.00	12.78mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 5:58:53 PM
4	45.66	12.68mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:00:55 PM

Mean Area 46.06
Mean Conc. 12.79mg/L



Sample

Sample Name: 280-155225-d-9-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

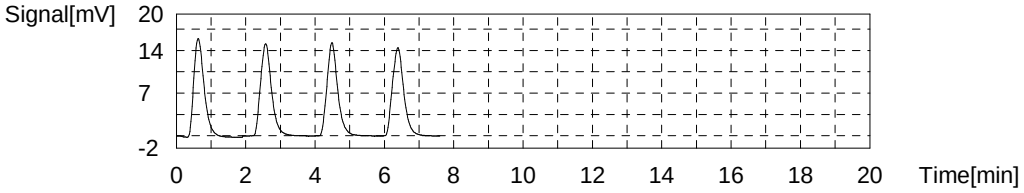
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.316mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.03	9.472mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:09:30 PM
2	33.48	9.320mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:11:33 PM
3	33.07	9.207mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:13:36 PM
4	33.28	9.265mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:15:38 PM

Mean Area 33.47
Mean Conc. 9.316mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

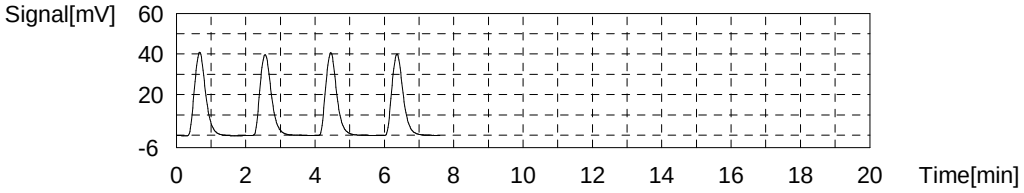
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.28mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	92.54	25.63mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:24:13 PM
2	91.08	25.23mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:26:16 PM
3	90.68	25.12mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:28:18 PM
4	90.85	25.16mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:30:21 PM

Mean Area 91.29
Mean Conc. 25.28mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

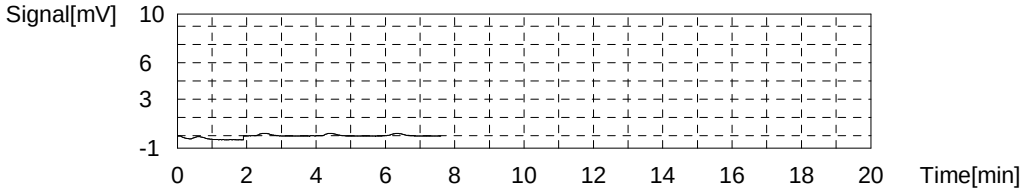
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1879mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3629	0.1750mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:38:56 PM
2	0.4141	0.1891mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:40:59 PM
3	0.4349	0.1948mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:43:02 PM
4	0.4272	0.1927mg/L	50uL	1		TOC3.2021_10_15_09_58_04.cal	11/13/2021 6:45:04 PM

Mean Area	0.4098
Mean Conc.	0.1879mg/L



SHI 3

9060A

	Type	Analysis	Sample Name	S	O	O	M	Result	Notes	S	D	Vial
1*	Unknown	NPOC	ICV		0	N	1	✓		D		1
2*	Unknown	NPOC	ICB		0	N	1	✓		D		2
3*	Unknown	NPOC	LCS		0	N	1	✓		D		3
4*	Unknown	NPOC	MB		0	N	1	✓		D		4
5*	Unknown	NPOC	TIC		0	N	1	✓		D		5
6*	Unknown	NPOC	680-206680-a-1		0	N	1	✓	doc	D		6
7*	Unknown	NPOC	680-206680-a-2		0	N	1	✓	doc	D		7
8*	Unknown	NPOC	680-206680-a-3		0	N	1	✓	doc	D		8
9*	Unknown	NPOC	MS 680-206680-a-3		0	N	1	✓	doc	D		9
10*	Unknown	NPOC	MSD 680-206680-a-3		0	N	1	✓	doc	D		10
11*	Unknown	NPOC	680-206680-a-4		0	N	1	✓	doc	D		11
12*	Unknown	NPOC	680-206680-a-5		0	N	1	✓	doc	D		12
13*	Unknown	NPOC	680-206680-a-6		0	N	1	✓	doc	D		13
14*	Unknown	NPOC	680-206680-a-7		0	N	1	✓	doc	D		14
15*	Unknown	NPOC	CCV		0	N	1	✓		D		15
16*	Unknown	NPOC	CCB		0	N	1	✓		D		16
17*	Unknown	NPOC	680-206680-a-8		0	N	1	✓	doc	D		17
18*	Unknown	NPOC	680-207141-a-7		0	N	1	✓	doc	D		18
19*	Unknown	NPOC	320-81289-d-1		0	N	1	✓		D		19
20*	Unknown	NPOC	MS 320-81289-d-1		0	N	1	✓		D		20
21*	Unknown	NPOC	MSD 320-81289-d-1		0	N	1	✓		D		21
22*	Unknown	NPOC	280-155002-c-2		0	N	1	✓	2 11/12/21 5x DIL-odor	D		22
23*	Unknown	NPOC	580-106949-u-1		0	N	1	✓		D		23
24*	Unknown	NPOC	280-155140-b-4		0	N	1	✓		D		24
25*	Unknown	NPOC	280-155132-a-7		0	N	1	✓		D		25
26*	Unknown	NPOC	280-155145-b-5		0	N	1	✓		D		26
27*	Unknown	NPOC	CCV		0	N	1	✓		D		27
28*	Unknown	NPOC	CCB		0	N	1	✓		D		28
29*	Unknown	NPOC	280-155145-b-7		0	N	1	✓		D		29
30*	Unknown	NPOC	280-155145-b-8		0	N	1	✓		D		30
31*	Unknown	NPOC	280-155195-a-1		0	N	1	✓		D		31
32*	Unknown	NPOC	280-155195-a-2		0	N	1	✓		D		32
33*	Unknown	NPOC	680-207006-b-18		0	N	1	✓		D		33
34*	Unknown	NPOC	MS 680-207006-b-18		0	N	1	✓		D		34
35*	Unknown	NPOC	MSD 680-207006-b-18		0	N	1	✓		D		35
36*	Unknown	NPOC	LCS		0	N	1	✓		D		36
37*	Unknown	NPOC	MB		0	N	1	✓		D		37
38*	Unknown	NPOC	TIC		0	N	1	✓		D		38
39*	Unknown	NPOC	CCV		0	N	1	✓		D		39
40*	Unknown	NPOC	CCB		0	N	1	✓		D		40
41*	Unknown	NPOC	160-43898-a-1		0	N	1	✓	5x DIL - odor	D		41
42*	Unknown	NPOC	160-43898-a-2		0	N	1	✓	10x DIL - odor	D		42
43*	Unknown	NPOC	160-43898-a-3		0	N	1	✓	10x DIL - odor	D		43
44*	Unknown	NPOC	MS 160-43898-a-3		0	N	1	✓	10x DIL - odor	D		44
45*	Unknown	NPOC	MSD 160-43898-a-3		0	N	1	✓	10x DIL - odor	D		45
46*	Unknown	NPOC	160-43898-a-4		0	N	1	✓	10x DIL - odor	D		46
47*	Unknown	NPOC	160-43898-a-5		0	N	1	✓	5x DIL - odor	D		47
48*	Unknown	NPOC	160-43898-a-6		0	N	1	✓	100x DIL - odor	D		48
49*	Unknown	NPOC	160-43898-a-7		0	N	1	✓	100x DIL - odor/color	D		49
50*	Unknown	NPOC	160-43898-a-8		0	N	1	✓	100x DIL - odor/color	D		50
51*	Unknown	NPOC	CCV		0	N	1	✓		D		51

SHI 3

9060A

	Type	Analysis	Sample Name	S	O	O	M	pH Result	Notes	S	D	Vial
52*	Unknown	NPOC	CCB		0	N	1	✓		D		52
53*	Unknown	NPOC	160-43898-a-9		0	N	1	✓	25 x DIL - odor/color	D		53
54*	Unknown	NPOC	160-43898-a-10		0	N	1	✓	10 x DIL - odor/bubbly	D		54
55*	Unknown	NPOC	160-43898-a-11		0	N	1	✓	100x DIL - odor/color	D		55
56*	Unknown	NPOC	160-43898-a-12		0	N	1	✓	2x DIL - odor	D		56
57*	Unknown	NPOC	160-43898-a-13		0	N	1	✓	5x DIL - odor	D		57
58*	Unknown	NPOC	MS 160-43898-a-13		0	N	1	✓	5x - DIL - odor	D		58
59*	Unknown	NPOC	MSD 160-43898-a-13		0	N	1	✓	5x DIL - odor	D		59
60*	Unknown	NPOC	160-43898-a-14		0	N	1	✓	100x DIL - odor/color	D		60
61*	Unknown	NPOC	160-43898-a-15		0	N	1	✓	50x DIL - odor/color	D		61
62*	Unknown	NPOC	160-43898-b-16		0	N	1	>2	5x DIL - color	D		62
63*	Unknown	NPOC	CCV		0	N	1	✓		D		63
64*	Unknown	NPOC	CCB		0	N	1	✓		D		64
65*	Unknown	NPOC	160-43898-a-17		0	N	1	✓	10x DIL - odor/color	D		65
66*	Unknown	NPOC	160-43898-a-18		0	N	1	✓	10x DIL - odor	D		66
67*	Unknown	NPOC	160-43898-a-19		0	N	1	~~✓~~ >2	250x DIL - color/odor	D		67
68*	Unknown	NPOC	160-43898-a-20		0	N	1	>2	250x DIL - color/odor	D		68
69*	Unknown	NPOC	lcs 280-557282/1-a		0	N	1	✓	filtration	D		69
70*	Unknown	NPOC	mb 280-557282/2-a		0	N	1	✓		D		70
71*	Unknown	NPOC	280-155138-d-10-b		0	N	1	>2	DOC	D		71
72*	Unknown	NPOC	280-155138-d-10-c ms		0	N	1	>2	DOC	D		72
73*	Unknown	NPOC	280-155138-d-10-d msd		0	N	1	>2	DOC	D		73
74*	Unknown	NPOC	500-208136-f-1-a		0	N	1	>2	DOC 50x DIL - odor	D		74
75*	Unknown	NPOC	CCV		0	N	1	✓		D		75
76*	Unknown	NPOC	CCB		0	N	1	✓		D		76
77*	Unknown	NPOC	500-208136-e-2-a		0	N	1	>2	DOC	D		77
78*	Unknown	NPOC	500-208018-a-2-a		0	N	1	>2	DOC 10x DIL - odor/bubbly	D		78
79*	Unknown	NPOC	280-155225-d-1-a		0	N	1	>2	DOC	D		79
80*	Unknown	NPOC	280-155225-d-2-a		0	N	1	>2	DOC	D		80
81*	Unknown	NPOC	280-155225-d-3-a		0	N	1	>2	DOC	D		81
82*	Unknown	NPOC	280-155225-d-4-a		0	N	1	>2	DOC	D		82
83*	Unknown	NPOC	280-155225-d-5-a		0	N	1	>2	DOC	D		83
84*	Unknown	NPOC	280-155225-d-6-a		0	N	1	>2	DOC	D		84
85*	Unknown	NPOC	280-155225-d-7-a		0	N	1	>2	DOC	D		85
86*	Unknown	NPOC	280-155225-d-7-b ms		0	N	1	>2	DOC	D		86
87*	Unknown	NPOC	CCV		0	N	1	✓		D		87
88*	Unknown	NPOC	CCB		0	N	1	✓		D		88
89*	Unknown	NPOC	280-155225-d-7-c msd		0	N	1	>2	DOC	D		89
90*	Unknown	NPOC	280-155225-d-8-a		0	N	1	>2	DOC	D		90
91*	Unknown	NPOC	280-155225-d-9-a		0	N	1	>2	DOC	D		91
92*	Unknown	NPOC	CCV		0	N	1	✓		D		92
93*	Unknown	NPOC	CCB		0	N	1	✓		D		93

DOC filtration

BWH 5000

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-557282

Analyst: Fox, Regan A

Batch Open: 11/12/2021 12:38:00PM

Batch End:

11/24/2021

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~280-557282/1 N/A	N/A				N/A	N/A	N/A		
2	MB~280-557282/2 N/A	N/A				N/A	N/A	N/A		
3	280-155138-D-10 N/A	N/A				N/A	N/A	N/A		
4	280-155138-D-10~MS (9060A_Diss)	N/A (280-155138-1)	Water			11/22/21	18_Days	4		
5	280-155138-D-10~MSD (9060A_Diss)	N/A (280-155138-1)	Water			11/22/21	18_Days	4		
6	500-208136-F-1 (9060A_Diss)	N/A (500-208136-1)	Water			11/12/21	2_Day_RUSH	4		
7	500-208136-E-2 (9060A_Diss)	N/A (500-208136-1)	Water			11/12/21	2_Day_RUSH	4		
8	500-208018-A-2 (9060A_Diss)	N/A (500-208018-1)	Water			11/11/21	3_Day_RUSH	4		
9	280-155225-D-1 (9060A_Diss)	N/A (280-155225-1)	Water			11/23/21	18_Days	4		
10	280-155225-D-2 (9060A_Diss)	N/A (280-155225-1)	Water			11/23/21	18_Days	4		
11	280-155225-D-3 (9060A_Diss)	N/A (280-155225-1)	Water			11/23/21	18_Days	4		
12	280-155225-D-4 (9060A_Diss)	N/A (280-155225-1)	Water			11/23/21	18_Days	4		
13	280-155225-D-5 (9060A_Diss)	N/A (280-155225-1)	Water			11/23/21	18_Days	4		
14	280-155225-D-6 (9060A_Diss)	N/A (280-155225-1)	Water			11/23/21	18_Days	4		

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

11/24/2021

Batch Number: 280-557282

Analyst: Fox, Regan A

Batch Open: 11/12/2021 12:38:00PM

Batch End:

15	280-155225-D-7 (9060A_Diss)	N/A (280-155225-1)	Water			11/23/21	18_Days	4	
16	280-155225-D-7~MS (9060A_Diss)	N/A (280-155225-1)	Water			11/23/21	18_Days	4	
17	280-155225-D-7~MSD (9060A_Diss)	N/A (280-155225-1)	Water			11/23/21	18_Days	4	
18	280-155225-D-8 (9060A_Diss)	N/A (280-155225-1)	Water			11/23/21	18_Days	4	
19	280-155225-D-9 (9060A_Diss)	N/A (280-155225-1)	Water			11/23/21	18_Days	4	

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FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-557282

Analyst: Fox, Regan A

Batch Open: 11/12/2021 12:38:00PM

Batch End:

11/24/2021

Batch Notes

Pipette/Syringe/Dispenser ID	1082991
Filter ID	16876568
Nitric Acid ID	N/A
Batch Comment	DOC filtration. RAF training LFL

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-557282

Analyst: Fox, Regan A

Batch Open: 11/12/2021 12:38:00PM

Batch End:

11/24/2021

Comments

280-155138-D-10~M
Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

280-155138-D-10~M
Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

Login Comments for Job 208136: CC sjf

Login Comments for Job 208018: CC sjf

280-155225-D-1
Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

280-155225-D-2
Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

280-155225-D-3
Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

280-155225-D-4
Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

280-155225-D-5
Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

280-155225-D-6
Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

280-155225-D-7
Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

280-155225-D-7~MS
Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

280-155225-D-7~MS
Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

280-155225-D-8
Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

280-155225-D-9
Method Comments: Q5Rev3.1-12212015_Std Var App_60day disposal

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

11/24/2021

Batch Number: 280-557282

Analyst: Fox, Regan A

Batch Open: 11/12/2021 12:38:00PM

Batch End:

Reagent Additions Worksheet

Lab ID	Reagent Code	Amount Added	Final Amount	By	Witness

Other Reagents:

Reagent	Amount/Units	Lot#:

	Type	Analysis	Sample Name	Sa	Origin	Manual Dilution	Result	Notes	C	Status	A
1	Unknow	NPOC	ICV		NPOC.met	1.000	NPOC:18.57mg/L			Completed	
2	Unknow	NPOC	ICB		NPOC.met	1.000	NPOC:0.1161mg/L			Completed	
3	Unknow	NPOC	LCS		NPOC.met	1.000	NPOC:23.03mg/L			Completed	
4	Unknow	NPOC	MB		NPOC.met	1.000	NPOC:0.1152mg/L			Completed	
5	Unknow	NPOC	TIC		NPOC.met	1.000	NPOC:0.1560mg/L			Completed	
6	Unknow	NPOC	680-206906-a-1		NPOC.met	1.000	NPOC:2.138mg/L			Completed	
7	Unknow	NPOC	MS 680-206906-a-1		NPOC.met	1.000	NPOC:25.28mg/L			Completed	
8	Unknow	NPOC	MSD 680-206906-a-1		NPOC.met	1.000	NPOC:25.45mg/L			Completed	
9	Unknow	NPOC	680-206906-a-2		NPOC.met	1.000	NPOC:1.355mg/L			Completed	
10	Unknow	NPOC	680-206906-a-3		NPOC.met	1.000	NPOC:0.6407mg/L			Completed	
11	Unknow	NPOC	680-206906-a-4		NPOC.met	1.000	NPOC:0.7398mg/L			Completed	
12	Unknow	NPOC	680-206906-a-5		NPOC.met	1.000	NPOC:1.119mg/L			Completed	
13	Unknow	NPOC	680-206906-a-6		NPOC.met	1.000	NPOC:1.097mg/L			Completed	
14	Unknow	NPOC	680-206906-a-7		NPOC.met	1.000	NPOC:1.838mg/L			Completed	
15	Unknow	NPOC	CCV		NPOC.met	1.000	NPOC:23.11mg/L			Completed	
16	Unknow	NPOC	CCB		NPOC.met	1.000	NPOC:0.1389mg/L			Completed	
17	Unknow	NPOC	680-206906-a-8		NPOC.met	1.000	NPOC:1.257mg/L			Completed	
18	Unknow	NPOC	680-206906-a-9		NPOC.met	1.000	NPOC:3.596mg/L			Completed	
19	Unknow	NPOC	680-206906-a-10		NPOC.met	1.000	NPOC:4.209mg/L			Completed	
20	Unknow	NPOC	680-206906-a-11		NPOC.met	1.000	NPOC:1.445mg/L			Completed	
21	Unknow	NPOC	680-206906-a-12		NPOC.met	1.000	NPOC:1.477mg/L			Completed	
22	Unknow	NPOC	680-206909-a-1		NPOC.met	1.000	NPOC:1.087mg/L			Completed	
23	Unknow	NPOC	680-206909-a-2		NPOC.met	1.000	NPOC:1.194mg/L			Completed	
24	Unknow	NPOC	MS 680-206909-a-2		NPOC.met	1.000	NPOC:24.19mg/L			Completed	
25	Unknow	NPOC	MSD 680-206909-a-2		NPOC.met	1.000	NPOC:23.85mg/L			Completed	
26	Unknow	NPOC	lcs 280-556374/1-a		NPOC.met	1.000	NPOC:22.73mg/L			Completed	
27	Unknow	NPOC	CCV		NPOC.met	1.000	NPOC:23.41mg/L			Completed	
28	Unknow	NPOC	CCB		NPOC.met	1.000	NPOC:0.1488mg/L			Completed	
29	Unknow	NPOC	mb 280-556374/2-a		NPOC.met	1.000	NPOC:0.2058mg/L			Completed	
30	Unknow	NPOC	280-155138-d-1-a		NPOC.met	1.000	NPOC:2.925mg/L			Completed	
31	Unknow	NPOC	280-155138-d-1-b ms		NPOC.met	1.000	NPOC:25.96mg/L			Completed	
32	Unknow	NPOC	280-155138-d-1-c msd		NPOC.met	1.000	NPOC:26.14mg/L			Completed	
33	Unknow	NPOC	280-155138-d-2-a		NPOC.met	1.000	NPOC:6.094mg/L			Completed	
34	Unknow	NPOC	280-155138-d-3-a		NPOC.met	1.000	NPOC:3.081mg/L			Completed	
35	Unknow	NPOC	280-155138-d-4-a		NPOC.met	1.000	NPOC:3.062mg/L			Completed	
36	Unknow	NPOC	280-155138-d-5-a		NPOC.met	1.000	NPOC:2.948mg/L			Completed	
37	Unknow	NPOC	280-155138-d-6-a		NPOC.met	1.000	NPOC:3.039mg/L			Completed	
38	Unknow	NPOC	280-155138-d-7-a		NPOC.met	1.000	NPOC:2.204mg/L			Completed	
39	Unknow	NPOC	CCV		NPOC.met	1.000	NPOC:22.96mg/L			Completed	
40	Unknow	NPOC	CCB		NPOC.met	1.000	NPOC:0.1392mg/L			Completed	
41	Unknow	NPOC	280-155138-d-8-a		NPOC.met	1.000	NPOC:5.700mg/L			Completed	
42	Unknow	NPOC	280-155138-d-9-a		NPOC.met	1.000	NPOC:8.203mg/L			Completed	
43	Unknow	NPOC	280-155138-d-10-a		NPOC.met	1.000	NPOC:2.041mg/L			Completed	
44	Unknow	NPOC	LCS		NPOC.met	1.000	NPOC:23.24mg/L			Completed	
45	Unknow	NPOC	MB		NPOC.met	1.000	NPOC:0.1648mg/L			Completed	
46	Unknow	NPOC	TIC		NPOC.met	1.000	NPOC:0.1962mg/L			Completed	
47	Unknow	NPOC	160-43832-g-2		NPOC.met	1.000	NPOC:2.150mg/L			Completed	
48	Unknow	NPOC	160-43832-g-4		NPOC.met	1.000	NPOC:2.455mg/L			Completed	
49	Unknow	NPOC	MS 160-43832-g-4		NPOC.met	1.000	NPOC:25.20mg/L			Completed	
50	Unknow	NPOC	MSD 160-43832-g-4		NPOC.met	1.000	NPOC:25.26mg/L			Completed	
51	Unknow	NPOC	CCV		NPOC.met	1.000	NPOC:23.31mg/L			Completed	
52	Unknow	NPOC	CCB		NPOC.met	1.000	NPOC:0.1645mg/L			Completed	
53	Unknow	NPOC	160-43832-f-6		NPOC.met	1.000	NPOC:2.525mg/L			Completed	

	Date / Time	Vial
1	11/5/2021 3:48:11 PM	1
2	11/5/2021 4:03:02 PM	2
3	11/5/2021 4:18:17 PM	3
4	11/5/2021 4:35:14 PM	4
5	11/5/2021 4:52:15 PM	5
6	11/5/2021 5:09:10 PM	6
7	11/5/2021 5:23:59 PM	7
8	11/5/2021 5:38:50 PM	8
9	11/5/2021 5:55:47 PM	9
10	11/5/2021 6:14:47 PM	10
11	11/5/2021 6:31:37 PM	11
12	11/5/2021 6:46:26 PM	12
13	11/5/2021 7:01:17 PM	13
14	11/5/2021 7:16:08 PM	14
15	11/5/2021 7:30:59 PM	15
16	11/5/2021 7:47:56 PM	16
17	11/5/2021 8:02:45 PM	17
18	11/5/2021 8:19:41 PM	18
19	11/5/2021 8:36:35 PM	19
20	11/5/2021 8:51:25 PM	20
21	11/5/2021 9:06:16 PM	21
22	11/5/2021 9:21:07 PM	22
23	11/5/2021 9:35:58 PM	23
24	11/5/2021 9:50:49 PM	24
25	11/5/2021 10:05:40 PM	25
26	11/5/2021 10:20:33 PM	26
27	11/5/2021 10:35:24 PM	27
28	11/5/2021 10:52:20 PM	28
29	11/5/2021 11:07:10 PM	29
30	11/5/2021 11:22:01 PM	30
31	11/5/2021 11:36:54 PM	31
32	11/5/2021 11:53:07 PM	32
33	11/6/2021 12:07:59 AM	33
34	11/6/2021 12:24:56 AM	34
35	11/6/2021 12:43:58 AM	35
36	11/6/2021 1:02:54 AM	36
37	11/6/2021 1:21:50 AM	37
38	11/6/2021 1:38:40 AM	38
39	11/6/2021 1:53:31 AM	39
40	11/6/2021 2:10:28 AM	40
41	11/6/2021 2:25:19 AM	41
42	11/6/2021 2:40:11 AM	42
43	11/6/2021 2:57:08 AM	43
44	11/6/2021 3:11:59 AM	44
45	11/6/2021 3:28:56 AM	45
46	11/6/2021 3:43:47 AM	46
47	11/6/2021 3:58:39 AM	47
48	11/6/2021 4:13:31 AM	48
49	11/6/2021 4:28:23 AM	49
50	11/6/2021 4:43:15 AM	50
51	11/6/2021 4:58:09 AM	51
52	11/6/2021 5:15:06 AM	52
53	11/6/2021 5:29:58 AM	53

	Type	Analysis	Sample Name	Sa	Origin	Manual Dilution	Result	Notes	C	Status	A
54	Unknow	NPOC	160-43832-f-10		NPOC.met	1.000	NPOC:1.948mg/L			Completed	
55	Unknow	NPOC	280-155002-c-2		NPOC.met	2.000	NPOC:121.7mg/L			Completed	
56	Unknow	NPOC	280-155002-c-5		NPOC.met	1.000	NPOC:28.12mg/L			Completed	
57	Unknow	NPOC	280-155002-c-6		NPOC.met	25.00	NPOC:736.1mg/L			Completed	
58	Unknow	NPOC	280-155002-c-7		NPOC.met	2.000	NPOC:59.82mg/L			Completed	
59	Unknow	NPOC	280-155115-a-2		NPOC.met	1.000	NPOC:1.951mg/L			Completed	
60	Unknow	NPOC	280-155125-a-6		NPOC.met	1.000	NPOC:0.7982mg/L			Completed	
61	Unknow	NPOC	280-155125-a-9		NPOC.met	1.000	NPOC:1.516mg/L			Completed	
62	Unknow	NPOC	MS 280-155125-a-9		NPOC.met	1.000	NPOC:23.79mg/L			Completed	
63	Unknow	NPOC	CCV		NPOC.met	1.000	NPOC:22.80mg/L			Completed	
64	Unknow	NPOC	CCB		NPOC.met	1.000	NPOC:0.1772mg/L			Completed	
65	Unknow	NPOC	MSD 280-155125-a-9		NPOC.met	1.000	NPOC:24.11mg/L			Completed	
66	Unknow	NPOC	280-155125-a-13		NPOC.met	1.000	NPOC:161.8mg/L			Completed	
67	Unknow	NPOC	280-155125-a-17		NPOC.met	1.000	NPOC:117.1mg/L			Completed	
68	Unknow	NPOC	280-155125-a-18		NPOC.met	1.000	NPOC:9.398mg/L			Completed	
69	Unknow	NPOC	280-155195-a-6		NPOC.met	1.000	NPOC:3.638mg/L			Completed	
70	Unknow	NPOC	280-155132-a-1		NPOC.met	1.000	NPOC:1.786mg/L			Completed	
71	Unknow	NPOC	280-155132-a-2		NPOC.met	1.000	NPOC:1.742mg/L			Completed	
72	Unknow	NPOC	280-155132-a-3		NPOC.met	1.000	NPOC:1.093mg/L			Completed	
73	Unknow	NPOC	280-155132-a-4		NPOC.met	1.000	NPOC:1.235mg/L			Completed	
74	Unknow	NPOC	280-155132-a-5		NPOC.met	1.000	NPOC:8.592mg/L			Completed	
75	Unknow	NPOC	CCV		NPOC.met	1.000	NPOC:22.63mg/L			Completed	
76	Unknow	NPOC	CCB		NPOC.met	1.000	NPOC:0.1588mg/L			Completed	

	Date / Time	Vial
54	11/6/2021 5:46:55 AM	54
55	11/6/2021 6:01:46 AM	55
56	11/6/2021 6:16:38 AM	56
57	11/6/2021 6:31:30 AM	57
58	11/6/2021 6:46:22 AM	58
59	11/6/2021 7:01:14 AM	59
60	11/6/2021 7:16:07 AM	60
61	11/6/2021 7:33:04 AM	61
62	11/6/2021 7:47:56 AM	62
63	11/6/2021 8:02:49 AM	63
64	11/6/2021 8:19:47 AM	64
65	11/6/2021 8:34:39 AM	65
66	11/6/2021 8:51:36 AM	66
67	11/6/2021 9:08:33 AM	67
68	11/6/2021 9:25:30 AM	68
69	11/6/2021 9:40:22 AM	69
70	11/6/2021 9:55:14 AM	70
71	11/6/2021 10:12:11 AM	71
72	11/6/2021 10:31:14 AM	72
73	11/6/2021 10:46:01 AM	73
74	11/6/2021 11:00:54 AM	74
75	11/6/2021 11:15:47 AM	75
76	11/6/2021 11:30:40 AM	76

TOC-V Cal Curve Information
C:¥TOC3201¥CalCurves¥NPOC.2021_11_04_16_22_17.cal

Date of Creation 5:27:53 PM 11/4/2021
User
System TOC-V CPN

Cal. Curve

Sample Name: CAL
Sample ID:
Object ID 0A-100612-04635090-13465A02794E-0000
Cal. Curve: NPOC.2021_11_04_16_22_17.cal
Status Completed
Comment:

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.2606	50uL	1	*******		11/4/2021 4:29:58 PM
2	0.3120	50uL	1	*******		11/4/2021 4:32:04 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 0.2863
SD Area 0.03635
CV Area 12.69%
Vial 88

Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	3.355	50uL	1	*******	E	11/4/2021 4:40:43 PM
2	3.569	50uL	1	*******		11/4/2021 4:42:49 PM
3	3.535	50uL	1	*******		11/4/2021 4:44:54 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 3.552
SD Area 0.02404
CV Area 0.68%
Vial 89

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	15.54	50uL	1	*******		11/4/2021 4:53:33 PM
2	15.91	50uL	1	*******		11/4/2021 4:55:38 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 15.73
SD Area 0.2616
CV Area 1.66%
Vial 90

Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	31.32	50uL	1	*******		11/4/2021 5:04:17 PM
2	31.66	50uL	1	*******		11/4/2021 5:06:23 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 31.49
SD Area 0.2404
CV Area 0.76%
Vial 91

Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	78.86	50uL	1	*******		11/4/2021 5:15:02 PM
2	80.32	50uL	1	*******		11/4/2021 5:17:08 PM

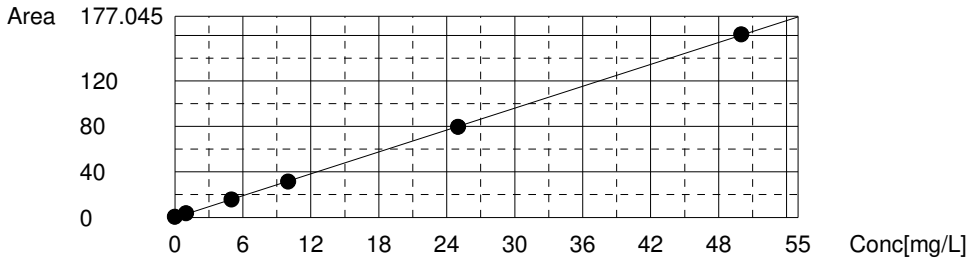
Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 79.59
SD Area 1.032
CV Area 1.30%
Vial 92

Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	160.9	50uL	1	*******		11/4/2021 5:25:47 PM
2	161.0	50uL	1	*******		11/4/2021 5:27:53 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 160.9
SD Area 0.07071
CV Area 0.04%
Vial 93

Slope: 3.213
Intercept -0.1384
r^2 0.9999
r 1.0000
Zero Shift No



Instr.Information

System	TOC-V CPN
Instrument Options	TOC/ASI/
Catalyst	Regular Sensitivity

Sample

Sample Name:	ICV
Sample ID:	
Origin:	NPOC.met
Status	Completed
Chk. Result	

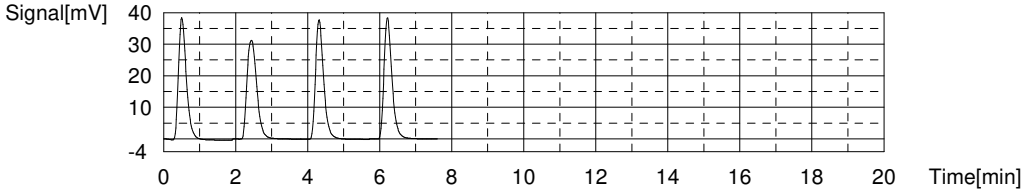
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:18.57mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	59.25	18.48mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:41:54 PM
2	59.67	18.61mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:44:00 PM
3	59.49	18.56mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:46:05 PM
4	59.71	18.62mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:48:11 PM

Mean Area 59.53
Mean Conc. 18.57mg/L



Sample

Sample Name:	ICB
Sample ID:	
Origin:	NPOC.met
Status	Completed
Chk. Result	

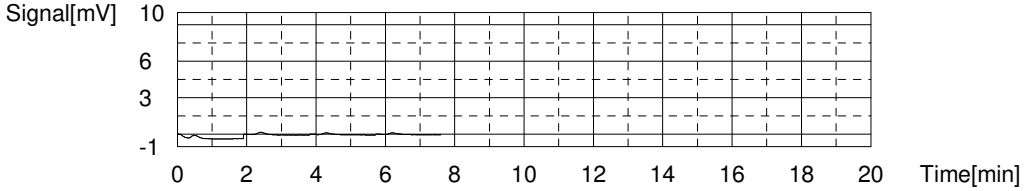
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1161mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2633	0.1250mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:56:45 PM
2	0.2558	0.1227mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 3:58:51 PM
3	0.2149	0.1100mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:00:57 PM
4	0.2042	0.1066mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:03:02 PM

Mean Area 0.2346
Mean Conc. 0.1161mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

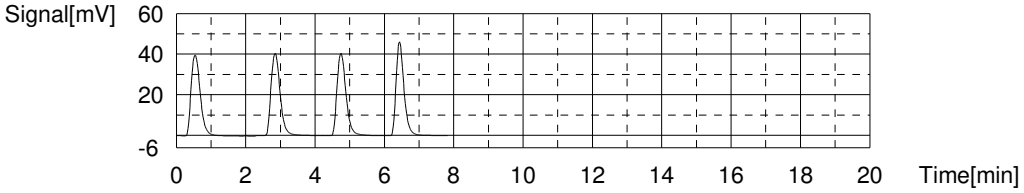
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.03mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	73.45	22.90mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:12:00 PM
2	74.78	23.31mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:14:06 PM
3	73.62	22.95mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:16:11 PM
4	73.60	22.95mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:18:17 PM

Mean Area 73.86
Mean Conc. 23.03mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

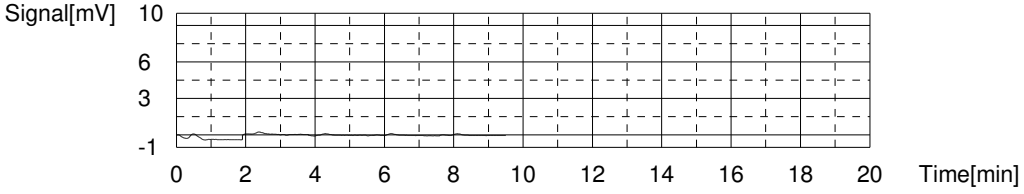
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1152mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4827	0.1933mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:26:51 PM
2	0.2335	0.1157mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:28:57 PM
3	0.2847	0.1317mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:31:02 PM
4	0.1987	0.1049mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:33:08 PM
5	0.2096	0.1083mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:35:14 PM

Mean Area 0.2316
Mean Conc. 0.1152mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

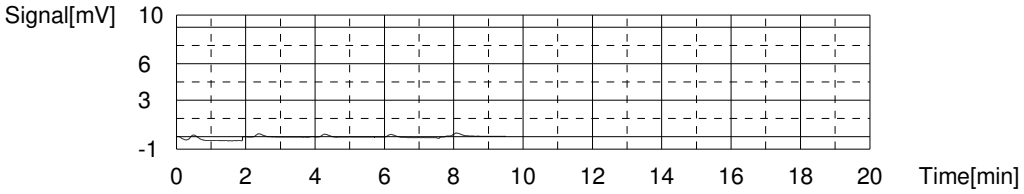
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1560mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5830	0.2245mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:43:46 PM
2	0.3829	0.1622mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:45:52 PM
3	0.3096	0.1394mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:47:58 PM
4	0.3319	0.1464mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:50:09 PM
5	0.4273	0.1761mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 4:52:15 PM

Mean Area 0.3629
Mean Conc. 0.1560mg/L



Sample

Sample Name: 680-206906-a-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

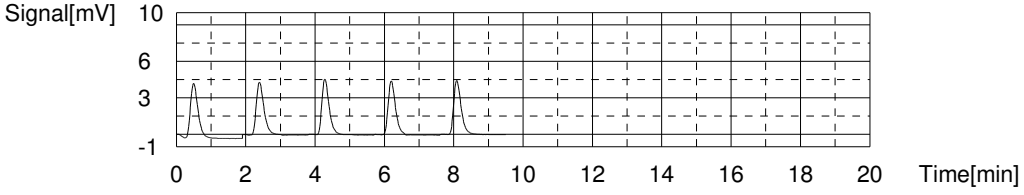
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.138mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.805	2.161mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:00:47 PM
2	6.830	2.169mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:02:53 PM
3	6.631	2.107mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:04:59 PM
4	6.550	2.081mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:07:04 PM
5	6.656	2.114mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:09:10 PM

Mean Area 6.731
Mean Conc. 2.138mg/L



Sample

Sample Name: MS 680-206906-a-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

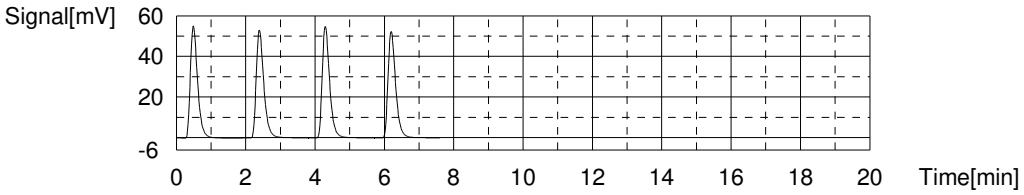
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.28mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	80.95	25.23mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:17:42 PM
2	81.31	25.35mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:19:48 PM
3	81.68	25.46mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:21:54 PM
4	80.45	25.08mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:23:59 PM

Mean Area 81.10
Mean Conc. 25.28mg/L



Sample

Sample Name: MSD 680-206906-a-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

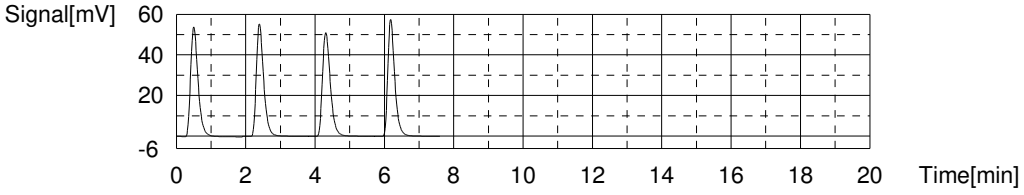
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.45mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	82.20	25.62mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:32:33 PM
2	81.98	25.55mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:34:39 PM
3	81.44	25.39mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:36:44 PM
4	80.93	25.23mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:38:50 PM

Mean Area 81.64
Mean Conc. 25.45mg/L



Sample

Sample Name: 680-206906-a-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

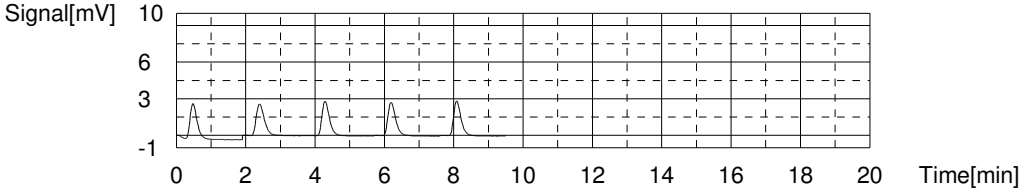
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.355mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.942	1.270mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:47:24 PM
2	4.271	1.372mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:49:30 PM
3	4.210	1.353mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:51:36 PM
4	4.200	1.350mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:53:41 PM
5	4.178	1.343mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 5:55:47 PM

Mean Area 4.215
Mean Conc. 1.355mg/L



Sample

Sample Name: 680-206906-a-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

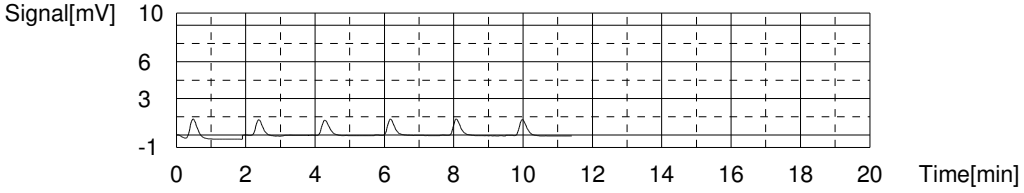
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6407mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.279	0.7523mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:04:19 PM
2	1.656	0.5584mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:06:25 PM
3	1.882	0.6287mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:08:31 PM
4	1.929	0.6434mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:10:36 PM
5	1.962	0.6536mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:12:42 PM
6	1.909	0.6371mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:14:47 PM

Mean Area 1.920
Mean Conc. 0.6407mg/L



Sample

Sample Name: 680-206906-a-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

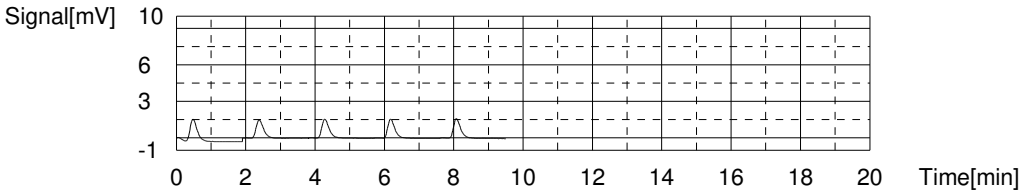
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7398mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.488	0.8173mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:23:14 PM
2	2.177	0.7205mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:25:20 PM
3	2.241	0.7405mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:27:26 PM
4	2.231	0.7373mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:29:31 PM
5	2.306	0.7607mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:31:37 PM

Mean Area 2.239
Mean Conc. 0.7398mg/L



Sample

Sample Name: 680-206906-a-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

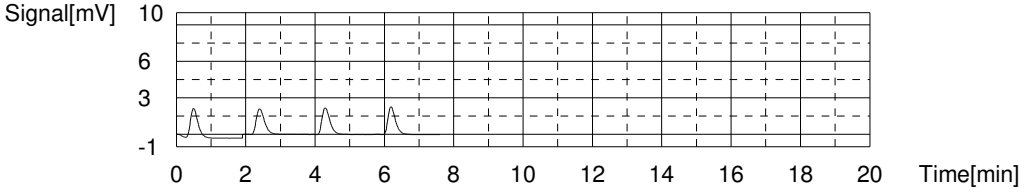
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.119mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.430	1.110mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:40:09 PM
2	3.483	1.127mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:42:15 PM
3	3.481	1.126mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:44:21 PM
4	3.433	1.111mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:46:26 PM

Mean Area 3.457
Mean Conc. 1.119mg/L



Sample

Sample Name: 680-206906-a-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

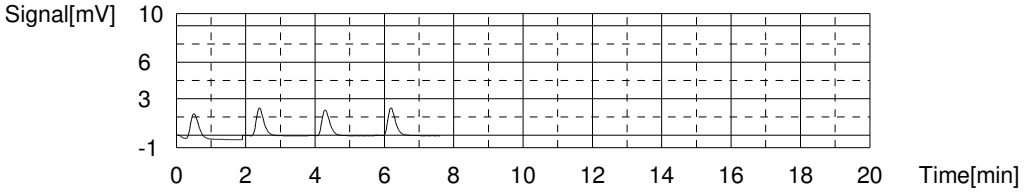
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.097mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.314	1.074mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:55:00 PM
2	3.388	1.097mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:57:06 PM
3	3.343	1.083mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 6:59:12 PM
4	3.502	1.133mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:01:17 PM

Mean Area 3.387
Mean Conc. 1.097mg/L



Sample

Sample Name: 680-206906-a-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

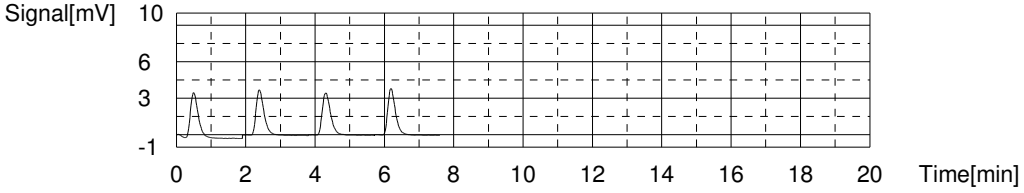
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.838mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.707	1.819mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:09:51 PM
2	5.828	1.857mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:11:57 PM
3	5.716	1.822mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:14:03 PM
4	5.818	1.854mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:16:08 PM

Mean Area 5.767
Mean Conc. 1.838mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

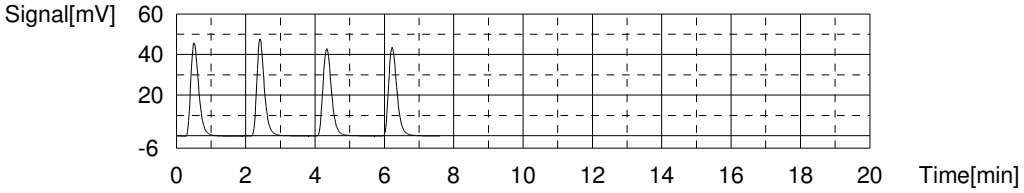
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.11mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.99	23.38mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:24:42 PM
2	73.13	22.80mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:26:48 PM
3	74.22	23.14mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:28:54 PM
4	74.18	23.13mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:30:59 PM

Mean Area 74.13
Mean Conc. 23.11mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

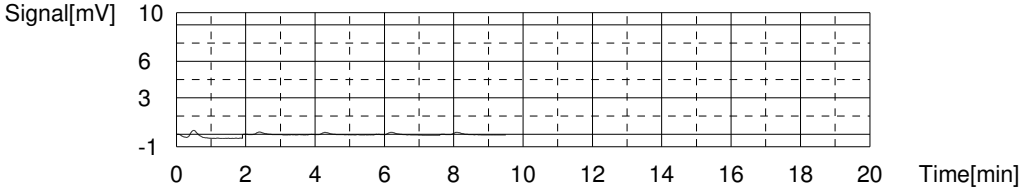
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1389mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8146	0.2966mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:39:33 PM
2	0.3471	0.1511mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:41:39 PM
3	0.2492	0.1206mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:43:45 PM
4	0.2979	0.1358mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:45:50 PM
5	0.3369	0.1479mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:47:56 PM

Mean Area 0.3078
Mean Conc. 0.1389mg/L



Sample

Sample Name: 680-206906-a-8
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

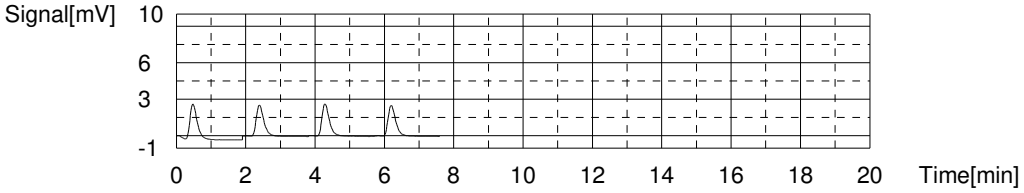
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.257mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.021	1.294mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:56:28 PM
2	3.852	1.242mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 7:58:34 PM
3	3.853	1.242mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:00:39 PM
4	3.875	1.249mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:02:45 PM

Mean Area 3.900
Mean Conc. 1.257mg/L



Sample

Sample Name: 680-206906-a-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

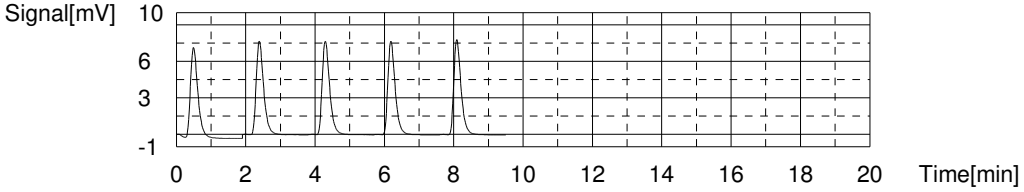
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.596mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.78	3.398mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:11:19 PM
2	11.41	3.594mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:13:24 PM
3	11.50	3.622mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:15:30 PM
4	11.33	3.569mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:17:35 PM
5	11.43	3.600mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:19:41 PM

Mean Area 11.42
Mean Conc. 3.596mg/L



Sample

Sample Name: 680-206906-a-10
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

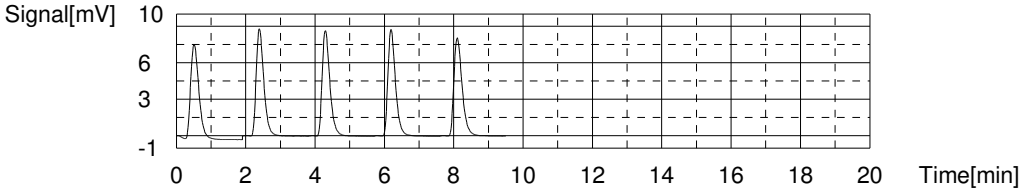
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.209mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.83	4.036mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:28:13 PM
2	13.38	4.207mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:30:19 PM
3	13.39	4.210mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:32:24 PM
4	13.39	4.210mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:34:30 PM
5	13.39	4.210mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:36:35 PM

Mean Area 13.39
Mean Conc. 4.209mg/L



Sample

Sample Name: 680-206906-a-11
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

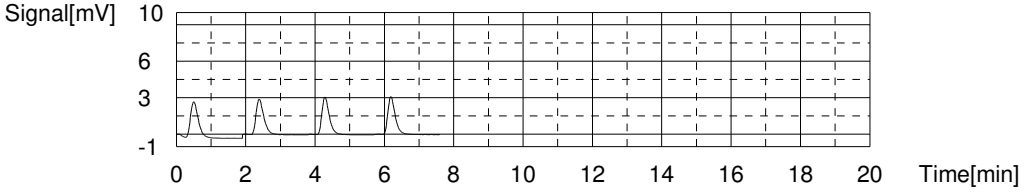
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.445mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.494	1.442mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:45:08 PM
2	4.494	1.442mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:47:14 PM
3	4.499	1.443mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:49:19 PM
4	4.537	1.455mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:51:25 PM

Mean Area 4.506
Mean Conc. 1.445mg/L



Sample

Sample Name: 680-206906-a-12
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

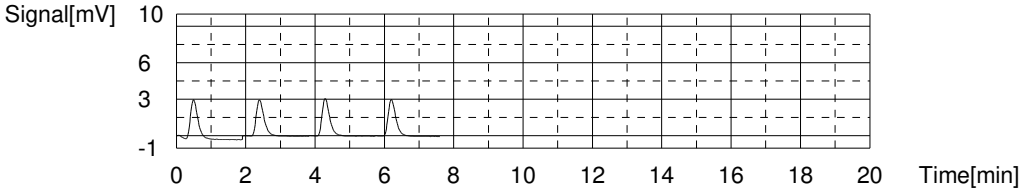
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.477mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.551	1.459mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 8:59:59 PM
2	4.604	1.476mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:02:04 PM
3	4.657	1.492mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:04:10 PM
4	4.614	1.479mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:06:16 PM

Mean Area 4.607
Mean Conc. 1.477mg/L



Sample

Sample Name: 680-206909-a-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

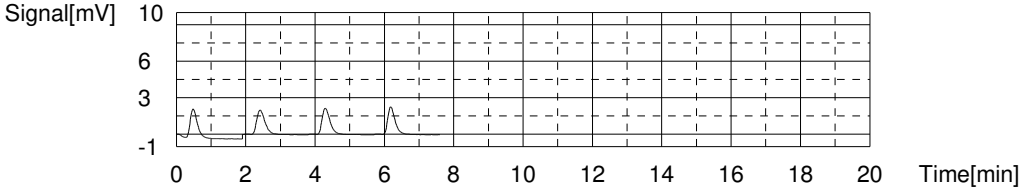
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.087mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.347	1.085mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:14:50 PM
2	3.314	1.074mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:16:56 PM
3	3.431	1.111mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:19:01 PM
4	3.332	1.080mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:21:07 PM

Mean Area 3.356
Mean Conc. 1.087mg/L



Sample

Sample Name: 680-206909-a-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

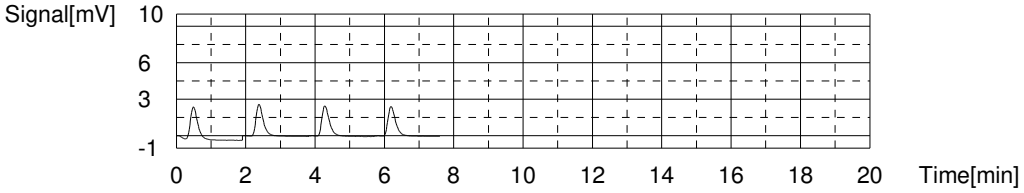
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.194mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.801	1.226mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:29:41 PM
2	3.679	1.188mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:31:47 PM
3	3.659	1.182mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:33:52 PM
4	3.658	1.181mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:35:58 PM

Mean Area 3.699
Mean Conc. 1.194mg/L



Sample

Sample Name: MS 680-206909-a-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

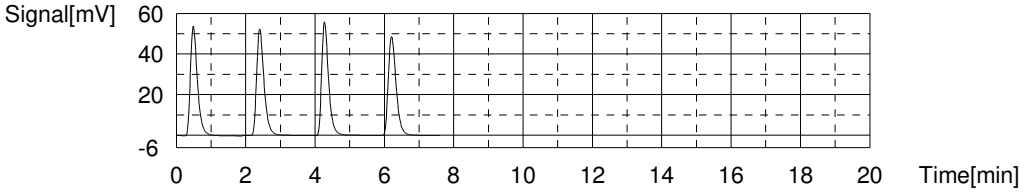
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.19mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	77.13	24.05mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:44:32 PM
2	78.82	24.57mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:46:38 PM
3	77.09	24.03mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:48:43 PM
4	77.37	24.12mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:50:49 PM

Mean Area 77.60
Mean Conc. 24.19mg/L



Sample

Sample Name: MSD 680-206909-a-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

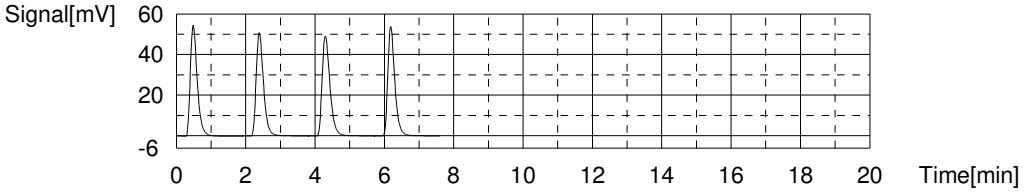
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.85mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	76.86	23.96mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 9:59:23 PM
2	74.95	23.37mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:01:28 PM
3	77.89	24.28mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:03:34 PM
4	76.37	23.81mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:05:40 PM

Mean Area 76.52
Mean Conc. 23.85mg/L



Sample

Sample Name: lcs 280-556374/1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

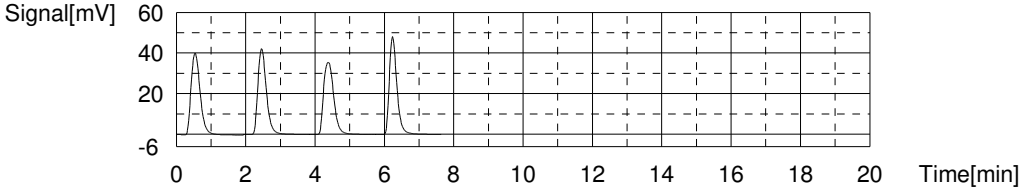
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:22.73mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	73.47	22.91mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:14:16 PM
2	72.06	22.47mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:16:22 PM
3	72.26	22.53mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:18:27 PM
4	73.88	23.03mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:20:33 PM

Mean Area 72.92
Mean Conc. 22.73mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

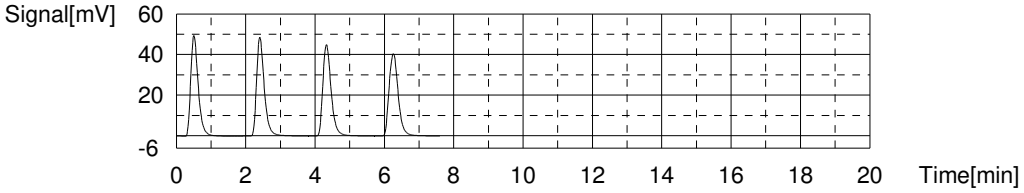
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.41mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.32	23.48mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:29:07 PM
2	75.17	23.44mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:31:13 PM
3	74.99	23.38mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:33:18 PM
4	74.82	23.33mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:35:24 PM

Mean Area 75.08
Mean Conc. 23.41mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

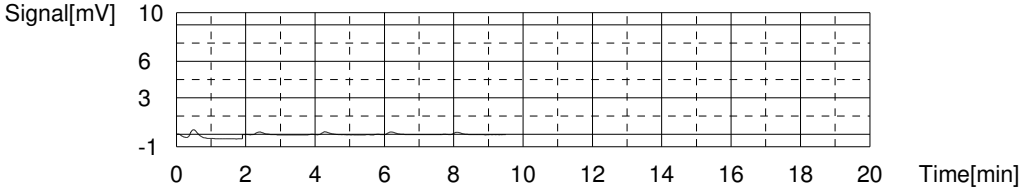
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1488mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9255	0.3311mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:43:58 PM
2	0.3527	0.1528mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:46:04 PM
3	0.3729	0.1591mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:48:09 PM
4	0.3563	0.1540mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:50:15 PM
5	0.2775	0.1294mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 10:52:20 PM

Mean Area 0.3399
Mean Conc. 0.1488mg/L



Sample

Sample Name: mb 280-556374/2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

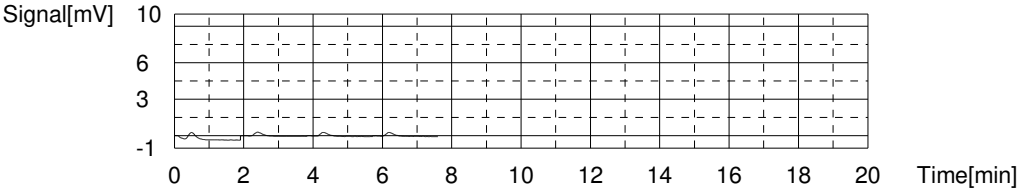
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2058mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6488	0.2450mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:00:53 PM
2	0.4972	0.1978mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:02:59 PM
3	0.4680	0.1887mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:05:04 PM
4	0.4773	0.1916mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:07:10 PM

Mean Area 0.5228
Mean Conc. 0.2058mg/L



Sample

Sample Name: 280-155138-d-1-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

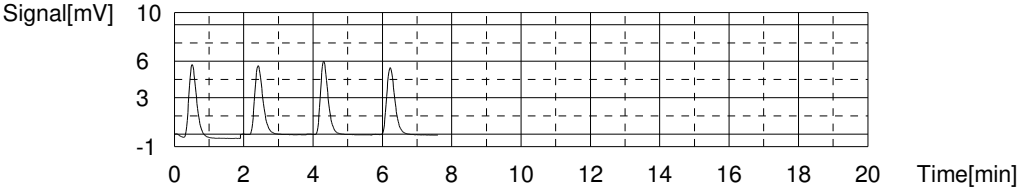
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.925mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.329	2.946mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:15:44 PM
2	9.373	2.960mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:17:49 PM
3	9.193	2.904mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:19:55 PM
4	9.155	2.892mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:22:01 PM

Mean Area 9.263
Mean Conc. 2.925mg/L



Sample

Sample Name: 280-155138-d-1-b ms
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

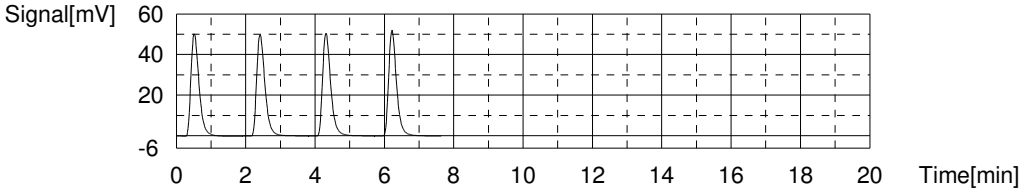
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.96mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	83.43	26.01mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:30:35 PM
2	83.40	26.00mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:32:41 PM
3	83.00	25.87mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:34:46 PM
4	83.24	25.95mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:36:54 PM

Mean Area 83.27
Mean Conc. 25.96mg/L



Sample

Sample Name: 280-155138-d-1-c msd
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

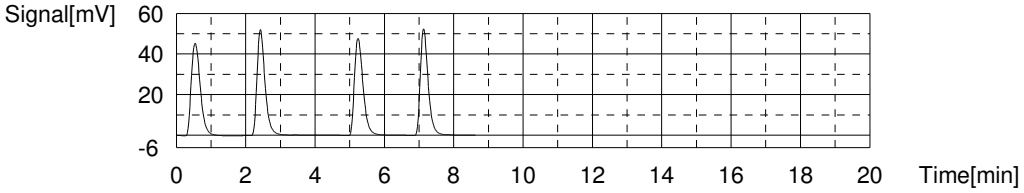
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.14mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	84.00	26.18mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:45:49 PM
2	84.65	26.39mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:48:50 PM
3	83.61	26.06mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:50:55 PM
4	83.15	25.92mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/5/2021 11:53:07 PM

Mean Area 83.85
Mean Conc. 26.14mg/L



Sample

Sample Name: 280-155138-d-2-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

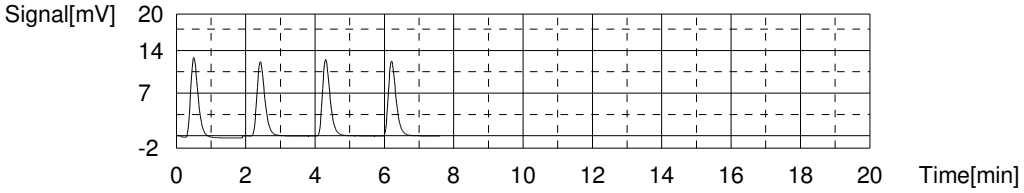
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.094mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.90	6.236mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 12:01:42 AM
2	19.43	6.090mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 12:03:48 AM
3	19.32	6.055mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 12:05:53 AM
4	19.13	5.996mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 12:07:59 AM

Mean Area 19.45
Mean Conc. 6.094mg/L



Sample

Sample Name: 280-155138-d-3-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

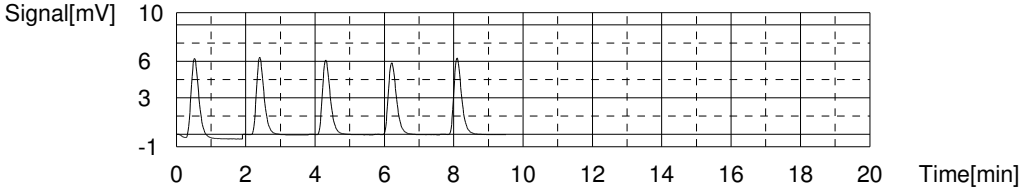
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.081mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.22	3.223mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/6/2021 12:16:34 AM
2	9.822	3.100mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 12:18:40 AM
3	9.710	3.065mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 12:20:45 AM
4	9.748	3.077mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 12:22:51 AM
5	9.767	3.082mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 12:24:56 AM

Mean Area 9.762
Mean Conc. 3.081mg/L



Sample

Sample Name: 280-155138-d-4-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

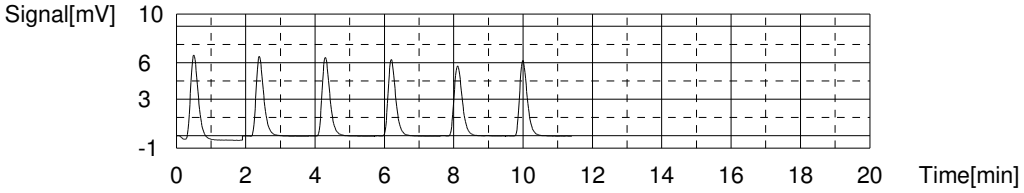
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.062mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.80	3.404mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/6/2021 12:33:30 AM
2	10.06	3.174mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 12:35:36 AM
3	10.13	3.195mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/6/2021 12:37:41 AM
4	9.679	3.055mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 12:39:47 AM
5	9.537	3.011mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 12:41:52 AM
6	9.524	3.007mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 12:43:58 AM

Mean Area 9.700
Mean Conc. 3.062mg/L



Sample

Sample Name: 280-155138-d-5-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

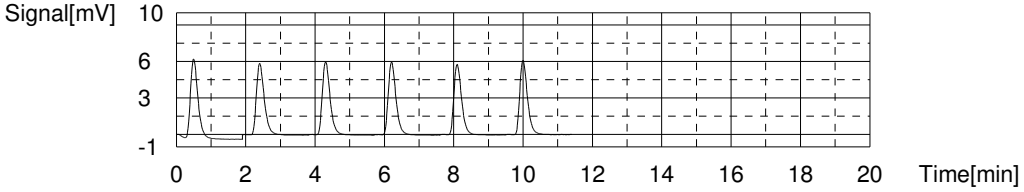
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.948mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	9.684	3.057mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/6/2021 12:52:26 AM
2	9.315	2.942mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 12:54:31 AM
3	9.362	2.956mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 12:56:37 AM
4	9.247	2.921mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 12:58:43 AM
5	8.840	2.794mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/6/2021 1:00:48 AM
6	9.409	2.971mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 1:02:54 AM

Mean Area 9.333
Mean Conc. 2.948mg/L



Sample

Sample Name: 280-155138-d-6-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

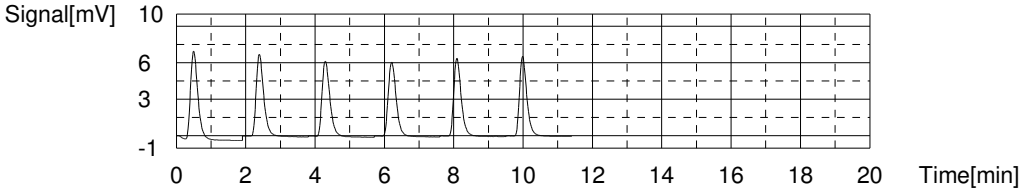
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.039mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.51	3.314mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/6/2021 1:11:22 AM
2	10.15	3.202mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/6/2021 1:13:28 AM
3	9.630	3.040mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 1:15:33 AM
4	9.731	3.071mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 1:17:39 AM
5	9.618	3.036mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 1:19:44 AM
6	9.528	3.008mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 1:21:50 AM

Mean Area 9.627
Mean Conc. 3.039mg/L



Sample

Sample Name: 280-155138-d-7-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

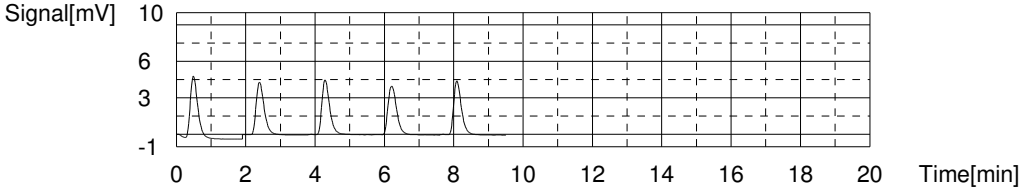
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.204mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.362	2.334mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/6/2021 1:30:18 AM
2	6.949	2.206mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 1:32:23 AM
3	7.021	2.228mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 1:34:29 AM
4	6.952	2.206mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 1:36:35 AM
5	6.854	2.176mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 1:38:40 AM

Mean Area 6.944
Mean Conc. 2.204mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

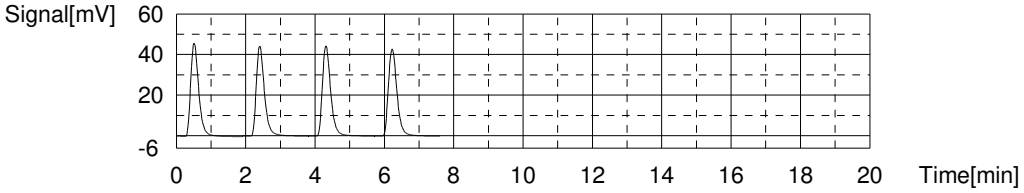
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:22.96mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.80	23.32mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 1:47:14 AM
2	71.93	22.43mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 1:49:19 AM
3	73.70	22.98mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 1:51:25 AM
4	74.12	23.11mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 1:53:31 AM

Mean Area 73.64
Mean Conc. 22.96mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

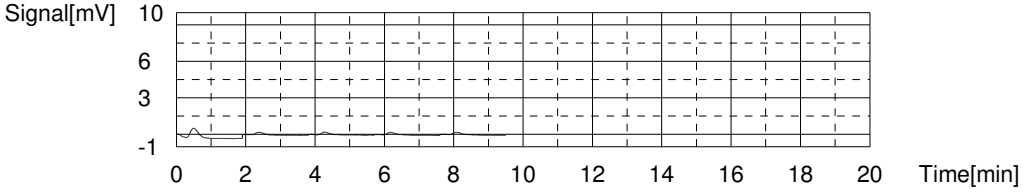
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1392mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.165	0.4056mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/6/2021 2:02:06 AM
2	0.2982	0.1359mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 2:04:12 AM
3	0.3092	0.1393mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 2:06:17 AM
4	0.3195	0.1425mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 2:08:23 AM
5	0.3090	0.1392mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 2:10:28 AM

Mean Area 0.3090
Mean Conc. 0.1392mg/L



Sample

Sample Name: 280-155138-d-8-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

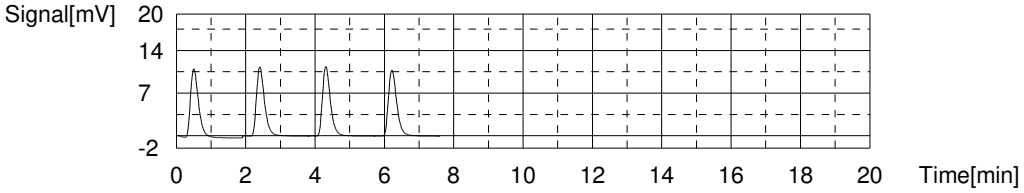
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.700mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	18.24	5.719mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 2:19:02 AM
2	18.28	5.732mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 2:21:07 AM
3	18.10	5.676mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 2:23:13 AM
4	18.09	5.673mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 2:25:19 AM

Mean Area 18.18
Mean Conc. 5.700mg/L



Sample

Sample Name: 280-155138-d-9-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

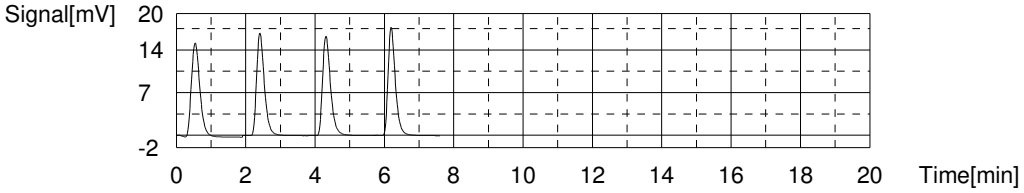
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.203mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	26.13	8.175mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 2:33:54 AM
2	26.33	8.237mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 2:35:59 AM
3	26.23	8.206mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 2:38:05 AM
4	26.19	8.193mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 2:40:11 AM

Mean Area 26.22
Mean Conc. 8.203mg/L



Sample

Sample Name: 280-155138-d-10-a
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

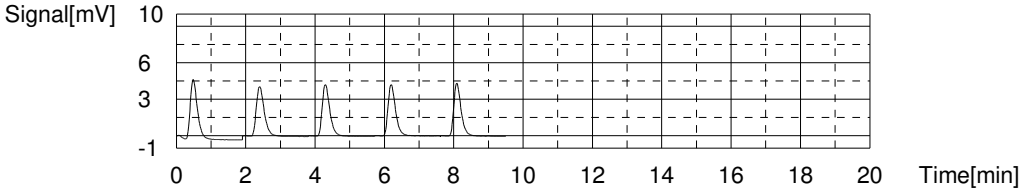
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.041mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.941	2.203mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/6/2021 2:48:46 AM
2	6.452	2.051mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 2:50:51 AM
3	6.414	2.039mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 2:52:57 AM
4	6.404	2.036mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 2:55:03 AM
5	6.408	2.037mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 2:57:08 AM

Mean Area 6.420
Mean Conc. 2.041mg/L



Sample

Sample Name: LCS
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

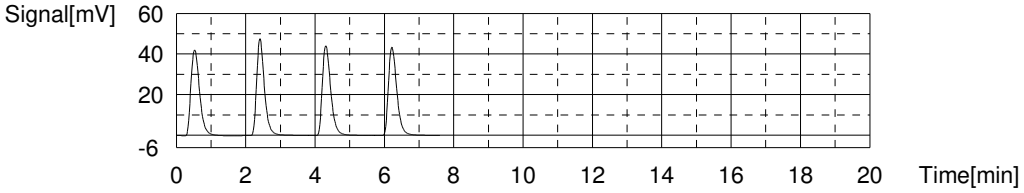
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.24mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.68	23.28mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 3:05:42 AM
2	74.54	23.24mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 3:07:47 AM
3	74.84	23.33mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 3:09:53 AM
4	74.10	23.10mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 3:11:59 AM

Mean Area 74.54
Mean Conc. 23.24mg/L



Sample

Sample Name: MB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

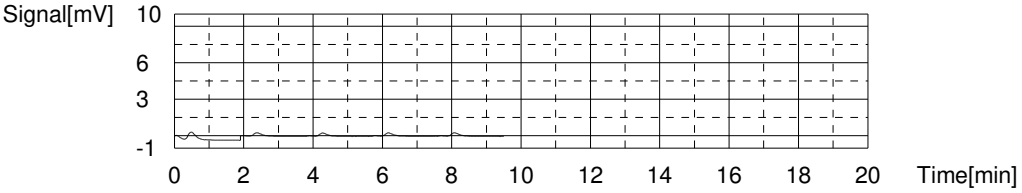
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1648mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8016	0.2925mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/6/2021 3:20:34 AM
2	0.4152	0.1723mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 3:22:39 AM
3	0.3776	0.1606mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 3:24:45 AM
4	0.3679	0.1576mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 3:26:51 AM
5	0.4040	0.1688mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 3:28:56 AM

Mean Area 0.3912
Mean Conc. 0.1648mg/L



Sample

Sample Name: TIC
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

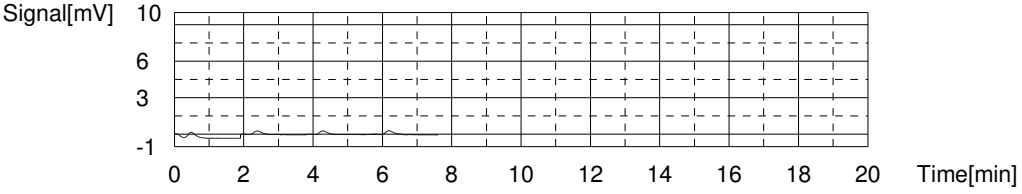
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1962mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5807	0.2238mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 3:37:30 AM
2	0.4659	0.1881mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 3:39:35 AM
3	0.4279	0.1762mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 3:41:41 AM
4	0.4936	0.1967mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 3:43:47 AM

Mean Area 0.4920
Mean Conc. 0.1962mg/L



Sample

Sample Name: 160-43832-g-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

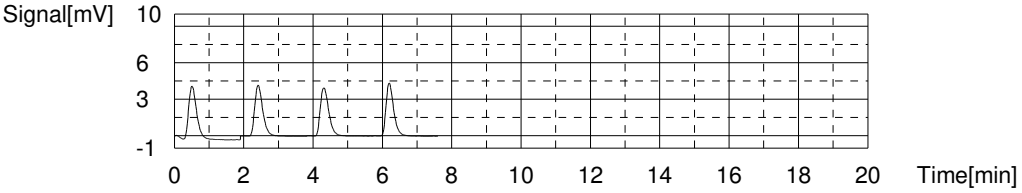
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.150mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.938	2.202mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 3:52:22 AM
2	6.766	2.149mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 3:54:27 AM
3	6.748	2.143mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 3:56:33 AM
4	6.633	2.107mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 3:58:39 AM

Mean Area 6.771
Mean Conc. 2.150mg/L



Sample

Sample Name: 160-43832-g-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

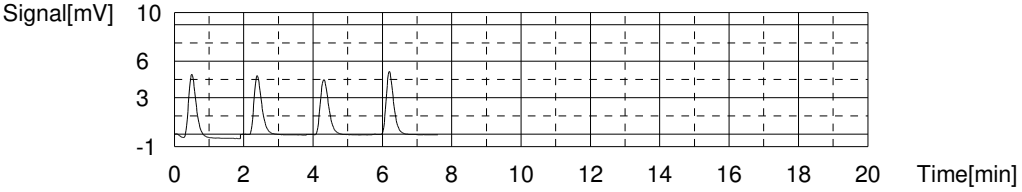
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.455mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.923	2.509mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 4:07:14 AM
2	7.630	2.417mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 4:09:19 AM
3	7.649	2.423mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 4:11:25 AM
4	7.805	2.472mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 4:13:31 AM

Mean Area 7.752
Mean Conc. 2.455mg/L



Sample

Sample Name: MS 160-43832-g-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

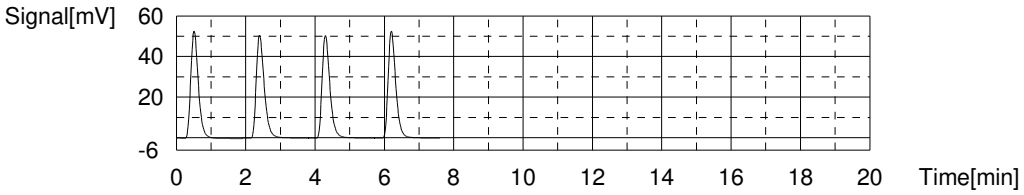
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.20mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.03	25.26mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 4:22:06 AM
2	81.61	25.44mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 4:24:12 AM
3	79.49	24.78mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 4:26:17 AM
4	81.29	25.34mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 4:28:23 AM

Mean Area 80.86
Mean Conc. 25.20mg/L



Sample

Sample Name: MSD 160-43832-g-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

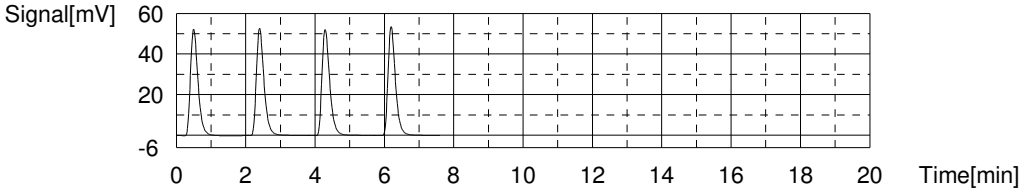
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.26mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	80.88	25.21mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 4:36:58 AM
2	81.36	25.36mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 4:39:03 AM
3	81.35	25.36mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 4:41:09 AM
4	80.58	25.12mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 4:43:15 AM

Mean Area 81.04
Mean Conc. 25.26mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

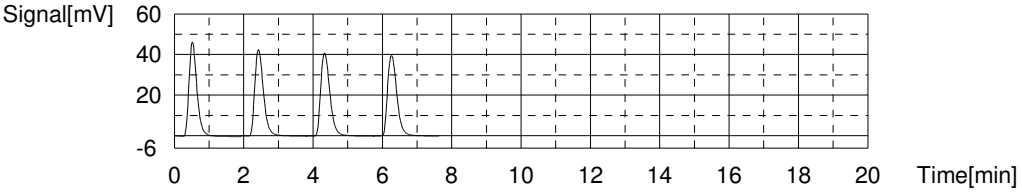
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.31mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	74.26	23.15mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 4:51:50 AM
2	74.67	23.28mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 4:53:55 AM
3	75.70	23.60mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 4:56:03 AM
4	74.41	23.20mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 4:58:09 AM

Mean Area 74.76
Mean Conc. 23.31mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

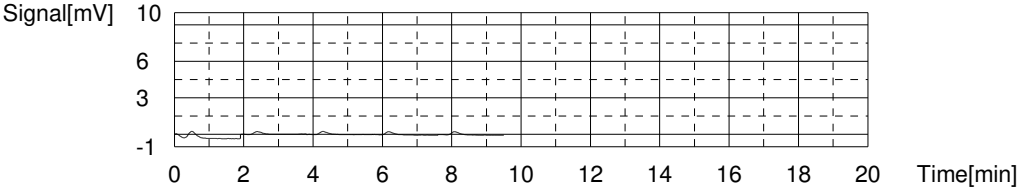
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1645mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8049	0.2936mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/6/2021 5:06:44 AM
2	0.3769	0.1604mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 5:08:49 AM
3	0.3978	0.1669mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 5:10:55 AM
4	0.4032	0.1686mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 5:13:01 AM
5	0.3823	0.1620mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 5:15:06 AM

Mean Area 0.3901
Mean Conc. 0.1645mg/L



Sample

Sample Name: 160-43832-f-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

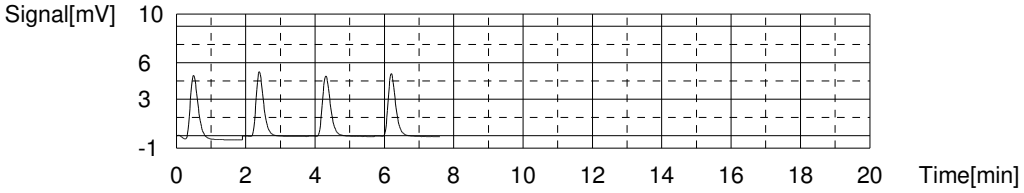
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.525mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.033	2.543mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 5:23:41 AM
2	8.047	2.547mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 5:25:46 AM
3	8.031	2.542mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 5:27:52 AM
4	7.789	2.467mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 5:29:58 AM

Mean Area 7.975
Mean Conc. 2.525mg/L



Sample

Sample Name: 160-43832-f-10
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

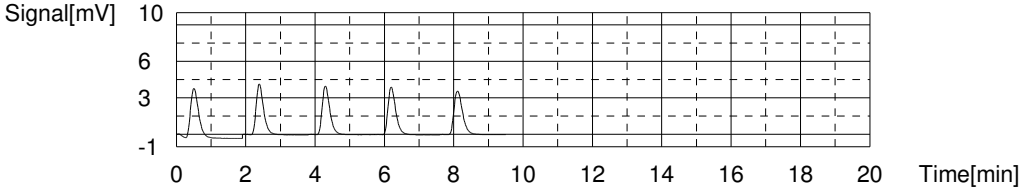
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.948mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.441	2.047mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/6/2021 5:38:33 AM
2	6.191	1.970mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 5:40:38 AM
3	6.051	1.926mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 5:42:44 AM
4	6.110	1.944mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 5:44:50 AM
5	6.137	1.953mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 5:46:55 AM

Mean Area 6.122
Mean Conc. 1.948mg/L



Sample

Sample Name: 280-155002-c-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

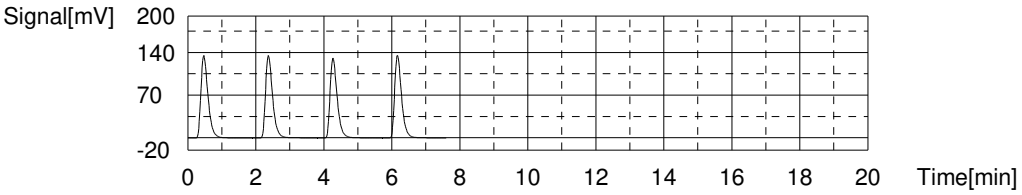
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:121.7mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	198.4	123.6mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 5:55:29 AM
2	197.2	122.8mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 5:57:34 AM
3	192.1	119.6mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 5:59:40 AM
4	194.2	121.0mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 6:01:46 AM

Mean Area 195.5
Mean Conc. 121.7mg/L



Sample

Sample Name: 280-155002-c-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

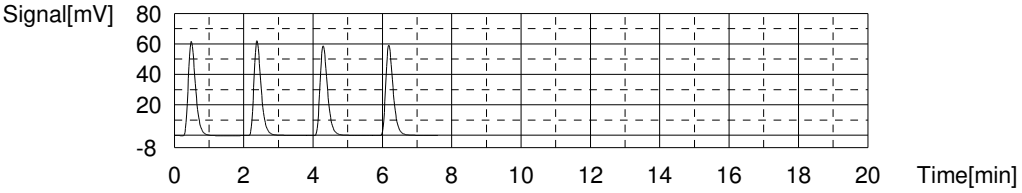
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:28.12mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	92.18	28.73mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 6:10:21 AM
2	90.52	28.21mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 6:12:26 AM
3	89.20	27.80mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 6:14:32 AM
4	88.96	27.73mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 6:16:38 AM

Mean Area 90.22
Mean Conc. 28.12mg/L



Sample

Sample Name: 280-155002-c-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

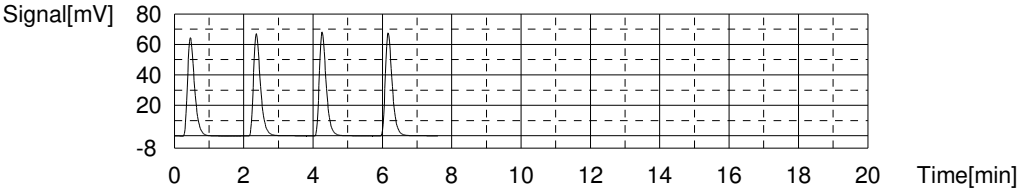
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	25.00	NPOC:736.1mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	92.32	719.3mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 6:25:13 AM
2	95.79	746.3mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 6:27:18 AM
3	94.90	739.4mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 6:29:24 AM
4	94.89	739.3mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 6:31:30 AM

Mean Area 94.47
Mean Conc. 736.1mg/L



Sample

Sample Name: 280-155002-c-7
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

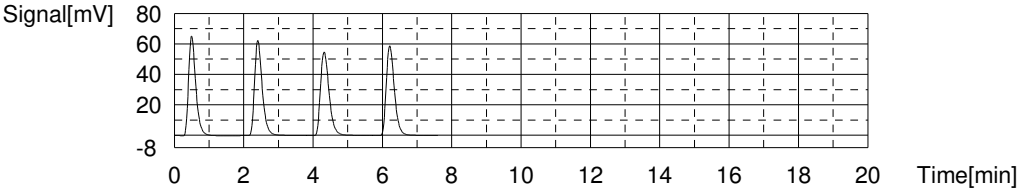
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:59.82mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	95.36	59.44mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 6:40:05 AM
2	96.68	60.26mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 6:42:10 AM
3	95.31	59.41mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 6:44:16 AM
4	96.53	60.16mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 6:46:22 AM

Mean Area 95.97
Mean Conc. 59.82mg/L



Sample

Sample Name: 280-155115-a-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

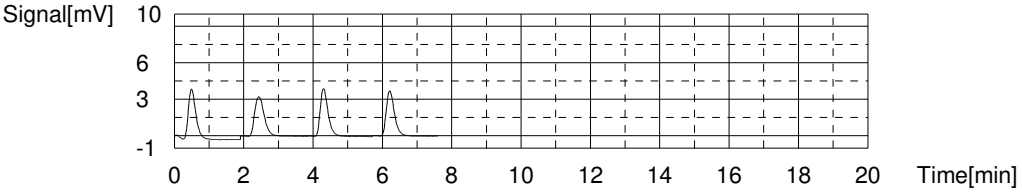
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.951mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.080	1.935mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 6:54:57 AM
2	6.218	1.978mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 6:57:02 AM
3	6.161	1.960mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 6:59:08 AM
4	6.063	1.930mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 7:01:14 AM

Mean Area 6.130
Mean Conc. 1.951mg/L



Sample

Sample Name: 280-155125-a-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

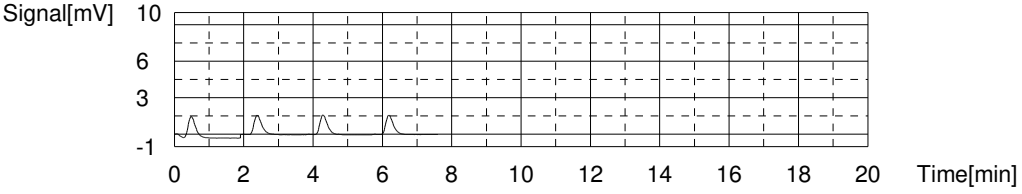
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7982mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.385	0.7853mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 7:09:50 AM
2	2.498	0.8204mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 7:11:55 AM
3	2.404	0.7912mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 7:14:01 AM
4	2.419	0.7959mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 7:16:07 AM

Mean Area 2.427
Mean Conc. 0.7982mg/L



Sample

Sample Name: 280-155125-a-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

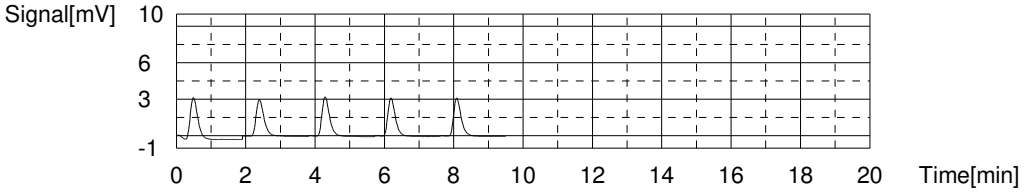
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.516mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.052	1.615mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/6/2021 7:24:42 AM
2	4.695	1.504mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 7:26:47 AM
3	4.850	1.552mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 7:28:53 AM
4	4.716	1.511mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 7:30:59 AM
5	4.670	1.496mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 7:33:04 AM

Mean Area 4.733
Mean Conc. 1.516mg/L



Sample

Sample Name: MS 280-155125-a-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

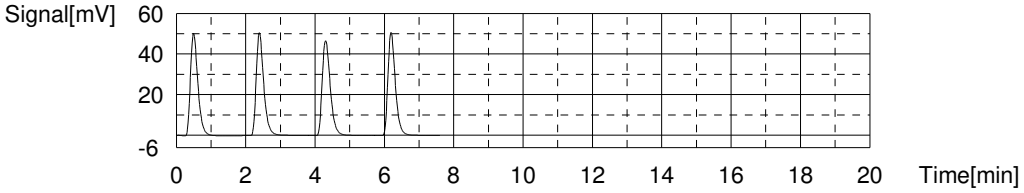
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.79mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	75.79	23.63mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 7:41:39 AM
2	76.93	23.98mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 7:43:44 AM
3	76.46	23.84mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 7:45:50 AM
4	76.04	23.71mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 7:47:56 AM

Mean Area 76.31
Mean Conc. 23.79mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

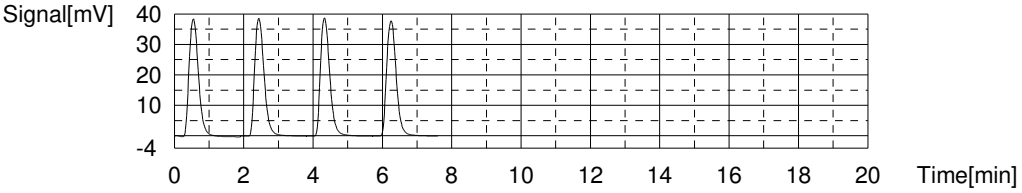
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:22.80mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	73.82	23.02mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 7:56:31 AM
2	73.07	22.78mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 7:58:36 AM
3	72.49	22.60mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 8:00:43 AM
4	73.17	22.81mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 8:02:49 AM

Mean Area 73.14
Mean Conc. 22.80mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

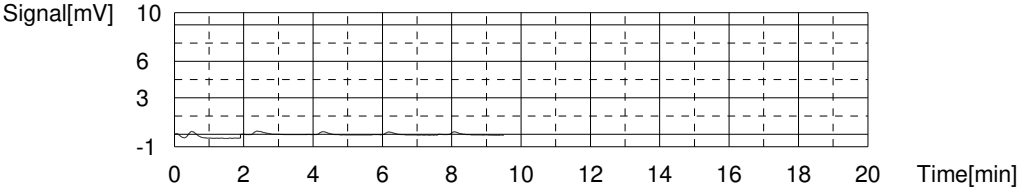
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1772mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8054	0.2937mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/6/2021 8:11:25 AM
2	0.5626	0.2182mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 8:13:30 AM
3	0.4032	0.1686mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 8:15:36 AM
4	0.4020	0.1682mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 8:17:42 AM
5	0.3564	0.1540mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 8:19:47 AM

Mean Area 0.4310
Mean Conc. 0.1772mg/L



Sample

Sample Name: MSD 280-155125-a-9
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

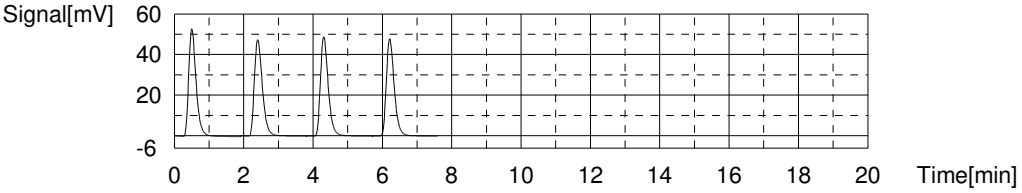
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.11mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	79.07	24.65mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 8:28:22 AM
2	77.29	24.10mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 8:30:27 AM
3	76.48	23.84mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 8:32:33 AM
4	76.52	23.86mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 8:34:39 AM

Mean Area 77.34
Mean Conc. 24.11mg/L



Sample

Sample Name: 280-155125-a-13
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

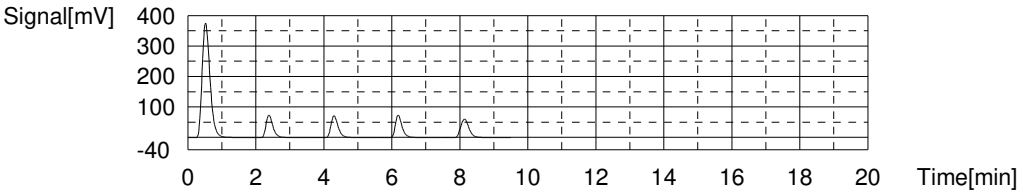
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:161.8mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	612.1	190.5mg/L	50uL	1	R	NPOC.2021_11_04_16_22_17.cal	11/6/2021 8:43:14 AM
2	105.0	163.4mg/L	10uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 8:45:19 AM
3	105.3	163.9mg/L	10uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 8:47:25 AM
4	101.6	158.1mg/L	10uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 8:49:30 AM
5	104.0	161.9mg/L	10uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 8:51:36 AM

Mean Area 104.0
Mean Conc. 161.8mg/L



Sample

Sample Name: 280-155125-a-17
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

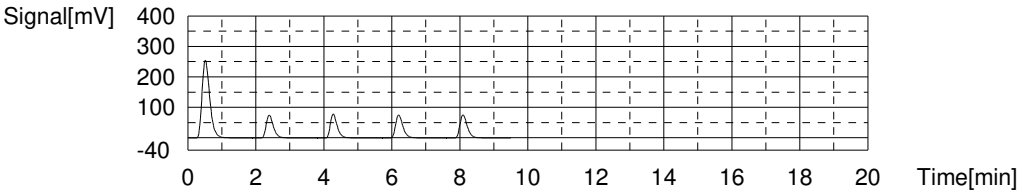
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:117.1mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	409.0	127.3mg/L	50uL	1	R	NPOC.2021_11_04_16_22_17.cal	11/6/2021 9:00:11 AM
2	111.8	116.0mg/L	15uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 9:02:16 AM
3	111.0	115.2mg/L	15uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 9:04:22 AM
4	113.7	118.0mg/L	15uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 9:06:27 AM
5	114.9	119.2mg/L	15uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 9:08:33 AM

Mean Area 112.8
Mean Conc. 117.1mg/L



Sample

Sample Name: 280-155125-a-18
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

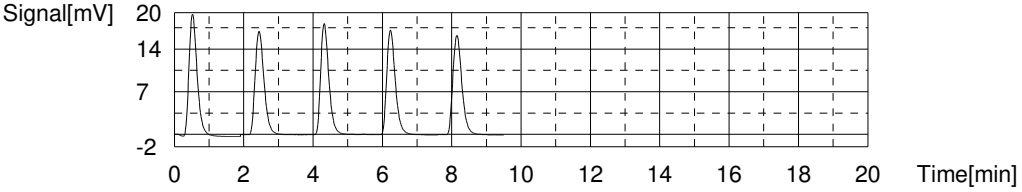
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.398mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.98	10.31mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/6/2021 9:17:08 AM
2	30.54	9.547mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 9:19:14 AM
3	29.91	9.351mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 9:21:19 AM
4	29.91	9.351mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 9:23:25 AM
5	29.88	9.341mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 9:25:30 AM

Mean Area 30.06
Mean Conc. 9.398mg/L



Sample

Sample Name: 280-155195-a-6
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

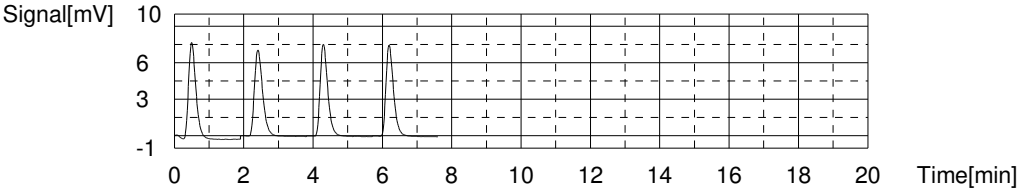
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.638mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.58	3.647mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 9:34:05 AM
2	11.65	3.668mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 9:36:10 AM
3	11.55	3.637mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 9:38:16 AM
4	11.43	3.600mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 9:40:22 AM

Mean Area 11.55
Mean Conc. 3.638mg/L



Sample

Sample Name: 280-155132-a-1
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

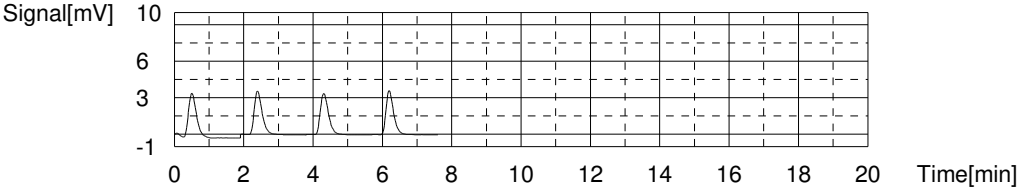
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.786mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.683	1.812mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 9:48:57 AM
2	5.668	1.807mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 9:51:02 AM
3	5.532	1.765mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 9:53:08 AM
4	5.525	1.762mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 9:55:14 AM

Mean Area 5.602
Mean Conc. 1.786mg/L



Sample

Sample Name: 280-155132-a-2
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

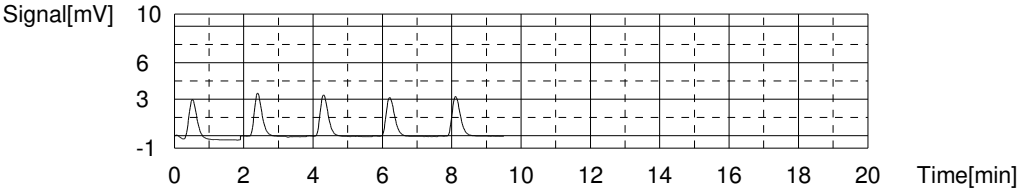
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.742mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.236	1.672mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/6/2021 10:03:49 AM
2	5.482	1.749mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 10:05:54 AM
3	5.464	1.743mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 10:08:00 AM
4	5.431	1.733mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 10:10:06 AM
5	5.459	1.742mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 10:12:11 AM

Mean Area 5.459
Mean Conc. 1.742mg/L



Sample

Sample Name: 280-155132-a-3
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

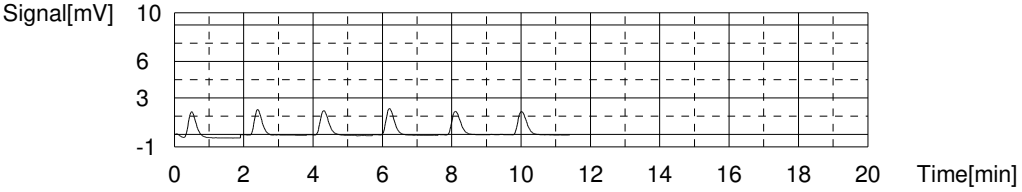
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.093mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.298	1.069mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 10:20:46 AM
2	3.066	0.9972mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/6/2021 10:22:52 AM
3	3.411	1.105mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 10:24:57 AM
4	3.621	1.170mg/L	50uL	1	E	NPOC.2021_11_04_16_22_17.cal	11/6/2021 10:27:03 AM
5	3.392	1.099mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 10:29:08 AM
6	3.394	1.099mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 10:31:14 AM

Mean Area 3.374
Mean Conc. 1.093mg/L



Sample

Sample Name: 280-155132-a-4
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

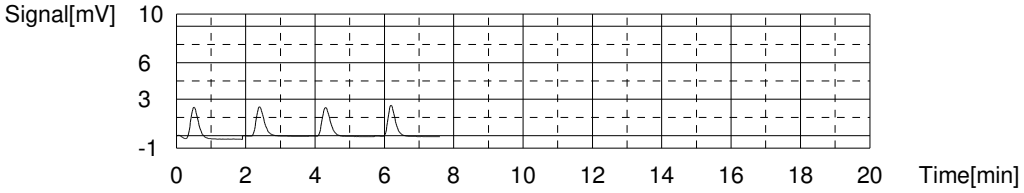
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.235mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.855	1.243mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 10:39:44 AM
2	3.860	1.244mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 10:41:49 AM
3	3.860	1.244mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 10:43:55 AM
4	3.742	1.208mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 10:46:01 AM

Mean Area 3.829
Mean Conc. 1.235mg/L



Sample

Sample Name: 280-155132-a-5
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

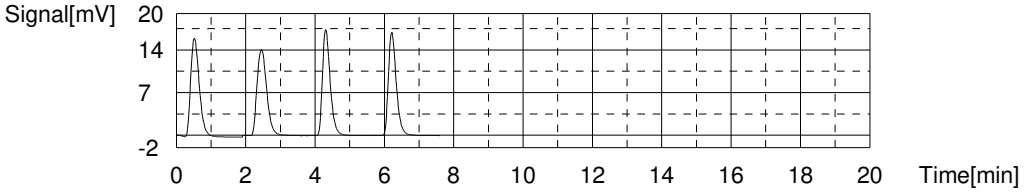
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.592mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	28.01	8.760mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 10:54:37 AM
2	27.66	8.651mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 10:56:42 AM
3	27.08	8.470mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 10:58:48 AM
4	27.14	8.489mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 11:00:54 AM

Mean Area 27.47
Mean Conc. 8.592mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

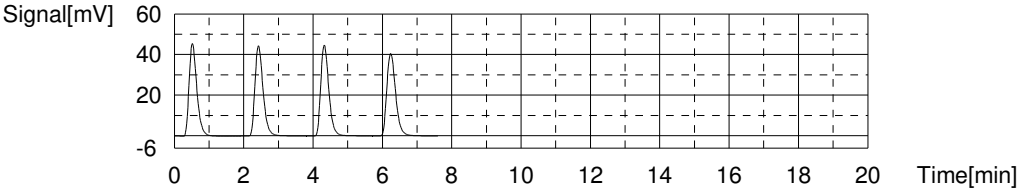
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:22.63mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	72.18	22.50mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 11:09:30 AM
2	72.95	22.74mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 11:11:36 AM
3	72.53	22.61mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 11:13:41 AM
4	72.63	22.64mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 11:15:47 AM

Mean Area 72.57
Mean Conc. 22.63mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: NPOC.met
Status Completed
Chk. Result

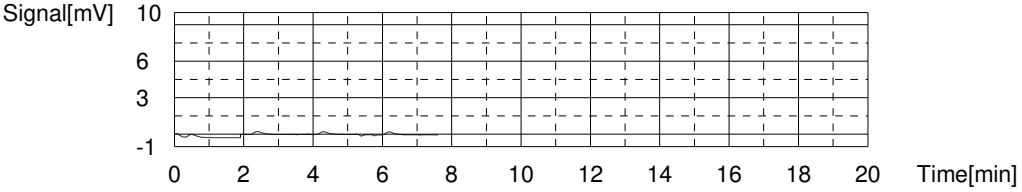
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1588mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3270	0.1448mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 11:24:23 AM
2	0.4182	0.1732mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 11:26:28 AM
3	0.3527	0.1528mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 11:28:34 AM
4	0.3891	0.1642mg/L	50uL	1		NPOC.2021_11_04_16_22_17.cal	11/6/2021 11:30:40 AM

Mean Area 0.3718
Mean Conc. 0.1588mg/L



Sh.4

9060A

	Type	Analysis	Sample Name	Sa	Or	M	pH Result <2	Notes	C	SA	D	Vial
1*	Unknow	NPOC	ICV		N	1	✓			D		1
2*	Unknow	NPOC	ICB		N	1	✓			D		2
3*	Unknow	NPOC	LCS		N	1	✓			D		3
4*	Unknow	NPOC	MB		N	1	✓			D		4
5*	Unknow	NPOC	TIC		N	1	✓			D		5
6*	Unknow	NPOC	680-206906-a-1		N	1	✓	DOC		D		6
7*	Unknow	NPOC	MS 680-206906-a-1		N	1	✓	DOC		D		7
8*	Unknow	NPOC	MSD 680-206906-a-1		N	1	✓	DOC		D		8
9*	Unknow	NPOC	680-206906-a-2		N	1	✓	DOC		D		9
10*	Unknow	NPOC	680-206906-a-3		N	1	✓	DOC		D		10
11*	Unknow	NPOC	680-206906-a-4		N	1	✓	DOC		D		11
12*	Unknow	NPOC	680-206906-a-5		N	1	✓	DOC		D		12
13*	Unknow	NPOC	680-206906-a-6		N	1	✓	DOC		D		13
14*	Unknow	NPOC	680-206906-a-7		N	1	✓	DOC		D		14
15*	Unknow	NPOC	CCV		N	1	✓			D		15
16*	Unknow	NPOC	CCB		N	1	✓			D		16
17*	Unknow	NPOC	680-206906-a-8		N	1	✓	DOC		D		17
18*	Unknow	NPOC	680-206906-a-9		N	1	✓	DOC		D		18
19*	Unknow	NPOC	680-206906-a-10		N	1	✓	DOC		D		19
20*	Unknow	NPOC	680-206906-a-11		N	1	✓	DOC		D		20
21*	Unknow	NPOC	680-206906-a-12		N	1	✓	DOC		D		21
22*	Unknow	NPOC	680-206909-a-1		N	1	✓	DOC		D		22
23*	Unknow	NPOC	680-206909-a-2		N	1	✓	DOC		D		23
24*	Unknow	NPOC	MS 680-206909-a-2		N	1	✓	DOC		D		24
25*	Unknow	NPOC	MSD 680-206909-a-2		N	1	✓	DOC		D		25
26*	Unknow	NPOC	lcs 280-556374/1-a		N	1	✓	filtration		D		26
27*	Unknow	NPOC	CCV		N	1	✓			D		27
28*	Unknow	NPOC	CCB		N	1	✓			D		28
29*	Unknow	NPOC	mb 280-556374/2-a		N	1	✓	filtration		D		29
30*	Unknow	NPOC	280-155138-d-1-a		N	1	>2	DOC		D		30
31*	Unknow	NPOC	280-155138-d-1-b ms		N	1	>2	DOC		D		31
32*	Unknow	NPOC	280-155138-d-1-c msd		N	1	>2	DOC		D		32
33*	Unknow	NPOC	280-155138-d-2-a		N	1	>2	DOC		D		33
34*	Unknow	NPOC	280-155138-d-3-a		N	1	>2	DOC		D		34
35*	Unknow	NPOC	280-155138-d-4-a		N	1	>2	DOC		D		35
36*	Unknow	NPOC	280-155138-d-5-a		N	1	>2	DOC		D		36
37*	Unknow	NPOC	280-155138-d-6-a		N	1	>2	DOC		D		37
38*	Unknow	NPOC	280-155138-d-7-a		N	1	>2	DOC		D		38
39*	Unknow	NPOC	CCV		N	1	✓			D		39
40*	Unknow	NPOC	CCB		N	1	✓			D		40
41*	Unknow	NPOC	280-155138-d-8-a		N	1	>2	DOC filtration		D		41
42*	Unknow	NPOC	280-155138-d-9-a		N	1	>2	DOC		D		42
43*	Unknow	NPOC	280-155138-d-10-a		N	1	>2	DOC		D		43
44*	Unknow	NPOC	LCS		N	1	✓			D		44
45*	Unknow	NPOC	MB		N	1	✓			D		45
46*	Unknow	NPOC	TIC		N	1	✓			D		46
47*	Unknow	NPOC	160-43832-g-2		N	1	✓			D		47
48*	Unknow	NPOC	160-43832-g-4		N	1	✓			D		48
49*	Unknow	NPOC	MS 160-43832-g-4		N	1	✓			D		49
50*	Unknow	NPOC	MSD 160-43832-g-4		N	1	✓			D		50
51*	Unknow	NPOC	CCV		N	1	✓			D		51

Sh: 4

9060A

	Type	Analysis	Sample Name	Sa	Or	M	pH 2 2 Result	Notes	C	SA	D	Vial
52*	Unknow	NPOC	CCB		N	1	✓			D		52
53*	Unknow	NPOC	160-43832-f-6		N	1	✓			D		53
54*	Unknow	NPOC	160-43832-f-10		N	1	✓			D		54
55*	Unknow	NPOC	280-155002-c-2		N	1	✓	2X Dil-reRUN		D		55
56*	Unknow	NPOC	280-155002-c-5		N	1	✓			D		56
57*	Unknow	NPOC	280-155002-c-6		N	1	✓	25X Dil-reRUN		D		57
58*	Unknow	NPOC	280-155002-c-7		N	1	✓	2X Dil-reRUN		D		58
59*	Unknow	NPOC	280-155115-a-2		N	1	✓			D		59
60*	Unknow	NPOC	280-155125-a-6		N	1	✓			D		60
61*	Unknow	NPOC	280-155125-a-9		N	1	✓			D		61
62*	Unknow	NPOC	MS 280-155125-a-9		N	1	✓			D		62
63*	Unknow	NPOC	CCV		N	1	✓			D		63
64*	Unknow	NPOC	CCB		N	1	✓			D		64
65*	Unknow	NPOC	MSD 280-155125-a-9		N	1	✓			D		65
66*	Unknow	NPOC	280-155125-a-13		N	1	✓			D		66
67*	Unknow	NPOC	280-155125-a-17		N	1	✓			D		67
68*	Unknow	NPOC	280-155125-a-18		N	1	✓			D		68
69*	Unknow	NPOC	280-155195-a-6		N	1	✓			D		69
70*	Unknow	NPOC	280-155132-a-1		N	1	✓			D		70
71*	Unknow	NPOC	280-155132-a-2		N	1	✓			D		71
72*	Unknow	NPOC	280-155132-a-3		N	1	✓			D		72
73*	Unknow	NPOC	280-155132-a-4		N	1	✓			D		73
74*	Unknow	NPOC	280-155132-a-5		N	1	✓			D		74
75*	Unknow	NPOC	CCV		N	1	✓			D		75
76*	Unknow	NPOC	CCB		N	1	✓			D		76

BWH 5000

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-556374

Analyst: Fox, Regan A

Batch Open: 11/5/2021 1:50:00PM

Batch End:

11/24/2021

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~280-556374/1 N/A	N/A				N/A	N/A	N/A		
2	MB~280-556374/2 N/A	N/A				N/A	N/A	N/A		
3	280-155138-D-1 (9060A_Diss)	N/A (280-155138-1)	Water			11/22/21	18_Days	4		
4	280-155138-D-1~MS (9060A_Diss)	N/A (280-155138-1)	Water			11/22/21	18_Days	4		
5	280-155138-D-1~MSD (9060A_Diss)	N/A (280-155138-1)	Water			11/22/21	18_Days	4		
6	280-155138-D-2 (9060A_Diss)	N/A (280-155138-1)	Water			11/22/21	18_Days	4		
7	280-155138-D-3 (9060A_Diss)	N/A (280-155138-1)	Water			11/22/21	18_Days	4		
8	280-155138-D-4 (9060A_Diss)	N/A (280-155138-1)	Water			11/22/21	18_Days	4		
9	280-155138-D-5 (9060A_Diss)	N/A (280-155138-1)	Water			11/22/21	18_Days	4		
10	280-155138-D-6 (9060A_Diss)	N/A (280-155138-1)	Water			11/22/21	18_Days	4		
11	280-155138-D-7 (9060A_Diss)	N/A (280-155138-1)	Water			11/22/21	18_Days	4		
12	280-155138-D-8 (9060A_Diss)	N/A (280-155138-1)	Water			11/22/21	18_Days	4		
13	280-155138-D-9 (9060A_Diss)	N/A (280-155138-1)	Water			11/22/21	18_Days	4		
14	280-155138-D-10 (9060A_Diss)	N/A (280-155138-1)	Water			11/22/21	18_Days	4		

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-556374

Analyst: Fox, Regan A

Batch Open: 11/5/2021 1:50:00PM

Batch End:

Batch Notes

Pipette/Syringe/Dispenser ID	1082991
Filter ID	16876568
Nitric Acid ID	N/A
Batch Comment	DOC filtration

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-556374

Analyst: Fox, Regan A

Batch Open: 11/5/2021 1:50:00PM

Batch End:

11/24/2021

Comments

280-155138-D-1	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155138-D-1~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155138-D-1~MS	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155138-D-2	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155138-D-3	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155138-D-4	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155138-D-5	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155138-D-6	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155138-D-7	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155138-D-8	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155138-D-9	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal
280-155138-D-10	Method Comments:	Q5Rev3.1-12212015_Std Var App_60day disposal

FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

Batch Number: 280-556374

Analyst: Fox, Regan A

Batch Open: 11/5/2021 1:50:00PM

Batch End:

Reagent Additions Worksheet

Lab ID	Reagent Code	Amount Added	Final Amount	By	Witness

Other Reagents:

Reagent	Amount/Units	Lot#:

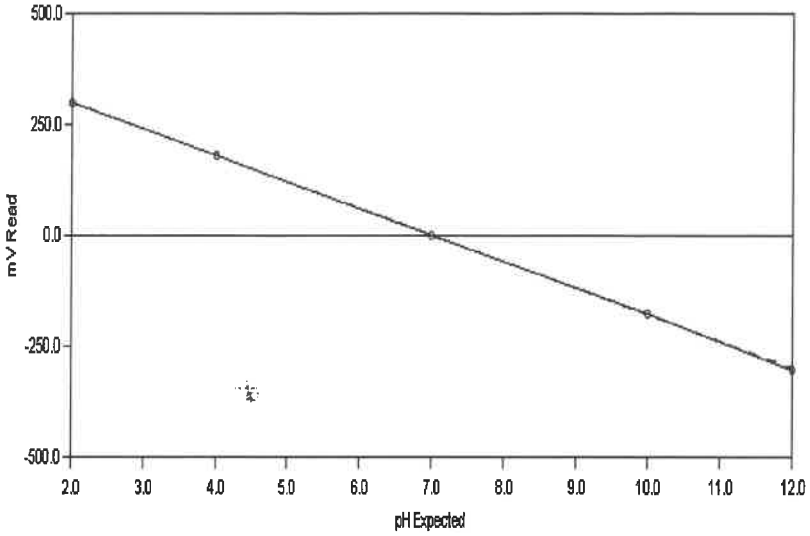
MANTECH

MANTECH INC.

Report Date: 11/16/2021 : 2:19 PM

Calibration Report

Calibration Record # 407



Calibration Settings

Calibration ID	PH	Date	11/16/2021	
Channel	1	Time	1:40 PM	
Probe Type	pH	Temperature	295.28 K	22.13 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit	

Calibration Results

Slope	-60.142	CorrCoeff	1.0000
Intercept	-0.246	Equation:	Y = (-60.142) X + (-0.246)

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-60.142	-65.00	-53.00
Intercept	-0.246	-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	299.31
	4.00	180.78
	7.00	0.12
	10.00	-178.22
	12.00	-303.22

00281
01006

Test America
Water Analysis Report

AT4 Analyst:_____

Run Number 1208 **Order Number** 20211116-2

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	11/16/2021	5:36 PM	21.41	-1.00	5.27	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
INITIAL CHECK	11/16/2021	5:43 PM	21.27	-1.00	10.59	124.37	209.82	.00	170.89	38.92	1.24	2.10	-1.00	.02
BUFFER 7	11/16/2021	5:46 PM	21.02	-1.00	7.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
LCS	11/16/2021	5:53 PM	21.12	-1.00	10.59	113.80	211.65	.00	195.70	15.95	1.14	2.12	-1.00	.02
LCSD	11/16/2021	6:00 PM	21.30	-1.00	10.64	123.94	209.04	.00	170.22	38.83	1.24	2.09	-1.00	.02
MB	11/16/2021	6:06 PM	21.35	-1.00	8.90	2.95	5.37	.00	4.82	.54	.03	.06	.07	.02
280-155609-A-7	11/16/2021	6:11 PM	21.24	-1.00	6.69	.00	73.01	73.01	.00	.00	.00	.73	-1.00	.02
du 280-155609-A-7	11/16/2021	6:17 PM	21.12	-1.00	6.79	.00	74.50	74.50	.00	.00	.00	.75	-1.00	.02
280-155495-A-1	11/16/2021	6:23 PM	21.09	-1.00	7.27	.00	186.33	186.33	.00	.00	.00	1.86	-1.00	.02
280-155081-A-5	11/16/2021	6:28 PM	21.19	-1.00	6.19	.00	42.13	42.13	.00	.00	.00	.42	-1.00	.02
280-155081-A-9	11/16/2021	6:33 PM	21.32	-1.00	6.18	.00	40.29	40.29	.00	.00	.00	.40	-1.00	.02
280-155081-A-1	11/16/2021	6:38 PM	21.21	-1.00	6.23	.00	34.50	34.50	.00	.00	.00	.35	-1.00	.02
280-155081-A-13	11/16/2021	6:44 PM	21.02	-1.00	6.46	.00	84.50	84.50	.00	.00	.00	.84	-1.00	.02
280-155081-A-17	11/16/2021	6:49 PM	20.92	-1.00	6.28	.00	46.63	46.63	.00	.00	.00	.47	-1.00	.02
280-155078-A-5	11/16/2021	6:54 PM	20.91	-1.00	5.66	.00	12.20	12.20	.00	.00	.00	.13	.14	.02
280-155118-C-2	11/16/2021	7:03 PM	20.99	-1.00	7.51	.00	490.85	490.85	.00	.00	.00	4.91	-1.00	.02
CCV	11/16/2021	7:09 PM	21.12	-1.00	10.58	138.07	214.02	.00	151.90	62.12	1.38	2.14	-1.00	.02
CCB	11/16/2021	7:15 PM	21.30	-1.00	8.42	.30	4.04	3.43	.60	.00	.00	.05	.06	.02
280-155118-D-1	11/16/2021	7:23 PM	21.32	-1.00	7.63	.00	383.12	383.12	.00	.00	.00	3.83	-1.00	.02
280-155125-E-6	11/16/2021	7:30 PM	21.44	-1.00	7.54	.00	234.63	234.63	.00	.00	.00	2.35	-1.00	.02
280-155125-E-9	11/16/2021	7:37 PM	21.54	-1.00	7.71	.00	265.75	265.75	.00	.00	.00	2.66	-1.00	.02
280-155125-E-18	11/16/2021	7:45 PM	21.70	-1.00	7.21	.00	370.75	370.75	.00	.00	.00	3.71	-1.00	.02
280-155070-E-3	11/16/2021	7:56 PM	21.76	-1.00	9.06	47.02	799.35	705.31	94.04	.00	.47	7.99	-1.00	.02
280-155070-E-2	11/16/2021	8:12 PM	21.70	-1.00	7.75	.00	1,367.10	1,367.10	.00	.00	.00	13.67	-1.00	.02
280-154848-E-5	11/16/2021	8:21 PM	21.53	-1.00	7.65	.00	453.79	453.79	.00	.00	.00	4.54	-1.00	.02
280-155002-A-6	11/16/2021	8:26 PM	21.09	-1.00	4.66	.00	78.12	78.12	.00	.00	.00	.78	-1.00	.02
280-155204-A-1	11/16/2021	8:37 PM	21.14	-1.00	7.62	.00	708.57	708.57	.00	.00	.00	7.09	-1.00	.02

PC TitratION PLUS by Man-Tech Associates, Inc.

GENERAL RESULTS REPORT.SRW

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Run Number 1208 **Order Number** 20211116-2

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)
280-155015-F-3	11/16/2021	8:46 PM	21.19	-1.00	7.09	.00	512.63	512.63	.00	.00	.00	5.13	-1.00	.02
CCV	11/16/2021	8:53 PM	21.03	-1.00	10.55	120.59	212.59	.00	183.98	28.60	1.21	2.13	-1.00	.02
CCB	11/16/2021	8:59 PM	21.06	-1.00	8.34	.00	4.21	4.21	.00	.00	.00	.05	.06	.02
LCS	11/16/2021	9:05 PM	20.96	-1.00	10.58	119.89	211.58	.00	183.37	28.21	1.20	2.12	-1.00	.02
MB	11/16/2021	9:11 PM	21.09	-1.00	8.47	1.05	4.41	2.31	2.10	.00	.01	.05	.06	.02
280-155015-F-5	11/16/2021	9:21 PM	21.18	-1.00	7.05	.00	563.53	563.53	.00	.00	.00	5.64	-1.00	.02
du 280-155015-F-5	11/16/2021	9:30 PM	21.40	-1.00	7.13	.00	567.37	567.37	.00	.00	.00	5.67	-1.00	.02
280-155015-F-1	11/16/2021	9:41 PM	21.40	-1.00	7.19	.00	725.44	725.44	.00	.00	.00	7.25	-1.00	.02
280-155015-F-8	11/16/2021	9:51 PM	21.19	-1.00	7.16	.00	524.89	524.89	.00	.00	.00	5.25	-1.00	.02
280-155015-F-9	11/16/2021	9:58 PM	21.01	-1.00	7.22	.00	339.78	339.78	.00	.00	.00	3.40	-1.00	.02
280-155015-F-2	11/16/2021	10:07 PM	20.87	-1.00	7.14	.00	455.29	455.29	.00	.00	.00	4.55	-1.00	.02
280-155015-F-6	11/16/2021	10:16 PM	20.76	-1.00	7.11	.00	430.13	430.13	.00	.00	.00	4.30	-1.00	.02
280-155015-F-4	11/16/2021	10:24 PM	20.66	-1.00	7.21	.00	460.98	460.98	.00	.00	.00	4.61	-1.00	.02
280-155015-F-7	11/16/2021	10:32 PM	20.65	-1.00	7.24	.00	396.09	396.09	.00	.00	.00	3.96	-1.00	.02
280-155015-F-10	11/16/2021	10:42 PM	20.87	-1.00	7.25	.00	520.23	520.23	.00	.00	.00	5.20	-1.00	.02
CCV	11/16/2021	10:49 PM	21.40	-1.00	10.50	120.23	214.22	.00	187.98	26.24	1.20	2.14	-1.00	.02
CCB	11/16/2021	10:55 PM	21.67	-1.00	8.28	.00	3.77	3.77	.00	.00	.00	.05	.06	.02
280-155119-G-7	11/16/2021	11:04 PM	21.99	-1.00	7.95	.00	525.93	525.93	.00	.00	.00	5.26	-1.00	.02
280-155119-G-8	11/16/2021	11:16 PM	22.48	-1.00	7.86	.00	881.68	881.68	.00	.00	.00	8.82	-1.00	.02
280-155119-G-9	11/16/2021	11:26 PM	22.51	-1.00	7.66	.00	522.55	522.55	.00	.00	.00	5.23	-1.00	.02
280-155119-G-4	11/16/2021	11:34 PM	22.32	-1.00	7.79	.00	433.72	433.72	.00	.00	.00	4.34	-1.00	.02
280-155119-G-6	11/16/2021	11:43 PM	22.19	-1.00	7.61	.00	483.24	483.24	.00	.00	.00	4.83	-1.00	.02
280-155119-G-5	11/16/2021	11:54 PM	22.10	-1.00	7.89	.00	702.98	702.98	.00	.00	.00	7.03	-1.00	.02
280-155119-G-1	11/17/2021	12:06 AM	22.10	-1.00	7.55	.00	781.24	781.24	.00	.00	.00	7.81	-1.00	.02
280-155119-G-3	11/17/2021	12:14 AM	22.02	-1.00	7.79	.00	409.19	409.19	.00	.00	.00	4.09	-1.00	.02
280-155119-G-2	11/17/2021	12:23 AM	22.00	-1.00	7.76	.00	451.29	451.29	.00	.00	.00	4.51	-1.00	.02
280-155130-M-1	11/17/2021	12:34 AM	21.99	-1.00	7.72	.00	722.03	722.03	.00	.00	.00	7.22	-1.00	.02
CCV	11/17/2021	12:40 AM	21.96	-1.00	10.49	116.35	218.37	.00	204.03	14.34	1.16	2.18	-1.00	.02
CCB	11/17/2021	12:46 AM	22.14	-1.00	8.24	.00	3.79	3.79	.00	.00	.00	.05	.06	.02
LCS	11/17/2021	12:53 AM	22.20	-1.00	10.49	118.38	218.93	.00	201.11	17.82	1.18	2.19	-1.00	.02

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Run Number 1208 **Order Number** 20211116-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL)@ 8.3	(mL)@ 4.5	(mL)@4.2	Conc (N)
MB	11/17/2021	12:59 AM	22.34	-1.00	8.29	.00	4.04	4.04	.00	.00	.00	.05	.06	.02
280-155130-M-2	11/17/2021	1:05 AM	22.13	-1.00	7.32	.00	186.82	186.82	.00	.00	.00	1.87	-1.00	.02
du 280-155130-M-2	11/17/2021	1:12 AM	21.98	-1.00	7.40	.00	186.97	186.97	.00	.00	.00	1.87	-1.00	.02
280-155117-A-5	11/17/2021	1:20 AM	21.86	-1.00	7.03	.00	358.33	358.33	.00	.00	.00	3.58	-1.00	.02
280-155117-A-4	11/17/2021	1:26 AM	21.83	-1.00	6.69	.00	173.26	173.26	.00	.00	.00	1.73	-1.00	.02
280-155117-A-3	11/17/2021	1:31 AM	21.77	-1.00	4.73	.00	.06	.06	.00	.00	.00	.04	.08	.02
280-155117-A-2	11/17/2021	1:39 AM	21.70	-1.00	7.09	.00	310.87	310.87	.00	.00	.00	3.11	-1.00	.02
280-155117-A-1	11/17/2021	1:42 AM	21.64	-1.00	3.78	.00	.00	.00	.00	.00	.00	.00	.00	.02
280-155117-A-9	11/17/2021	1:47 AM	21.71	-1.00	6.28	.00	89.51	89.51	.00	.00	.00	.90	-1.00	.02
280-155117-A-8	11/17/2021	1:53 AM	21.86	-1.00	6.03	.00	1.07	1.07	.00	.00	.00	.03	.04	.02
280-155117-A-7	11/17/2021	1:58 AM	22.02	-1.00	6.26	.00	76.38	76.38	.00	.00	.00	.76	-1.00	.02
CCV	11/17/2021	2:06 AM	22.31	-1.00	10.45	115.87	214.81	.00	197.89	16.93	1.16	2.15	-1.00	.02
CCB	11/17/2021	2:11 AM	22.22	-1.00	8.37	.34	4.11	3.44	.67	.00	.00	.05	.06	.02
280-155117-A-6	11/17/2021	2:17 AM	21.99	-1.00	6.24	.00	78.09	78.09	.00	.00	.00	.78	-1.00	.02
280-155210-F-1	11/17/2021	2:30 AM	21.92	-1.00	8.42	21.45	1,005.41	962.51	42.91	.00	.21	10.05	-1.00	.02
280-155210-F-2	11/17/2021	2:42 AM	21.95	-1.00	8.43	20.43	822.61	781.74	40.87	.00	.20	8.23	-1.00	.02
280-155220-F-2	11/17/2021	2:55 AM	21.92	-1.00	8.56	37.34	950.56	875.87	74.68	.00	.37	9.51	-1.00	.02
280-155220-F-1	11/17/2021	3:11 AM	21.93	-1.00	8.62	54.13	1,396.38	1,288.12	108.26	.00	.54	13.96	-1.00	.02
280-155132-E-1	11/17/2021	3:19 AM	21.98	-1.00	7.62	.00	266.22	266.22	.00	.00	.00	2.66	-1.00	.02
280-155132-E-7	11/17/2021	3:27 AM	21.87	-1.00	7.86	.00	413.38	413.38	.00	.00	.00	4.13	-1.00	.02
280-155132-E-3	11/17/2021	3:35 AM	21.95	-1.00	7.84	.00	364.80	364.80	.00	.00	.00	3.65	-1.00	.02
280-155132-E-2	11/17/2021	3:42 AM	22.03	-1.00	7.98	.00	295.52	295.52	.00	.00	.00	2.96	-1.00	.02
280-155132-E-4	11/17/2021	3:49 AM	22.25	-1.00	8.03	.00	291.44	291.44	.00	.00	.00	2.91	-1.00	.02
CCV	11/17/2021	3:57 AM	22.42	-1.00	10.43	116.01	219.25	.00	206.50	12.76	1.16	2.19	-1.00	.02
CCB	11/17/2021	4:03 AM	22.31	-1.00	8.22	.00	3.79	3.79	.00	.00	.00	.05	.06	.02
LCS	11/17/2021	4:09 AM	22.07	-1.00	10.45	114.49	216.00	.00	203.02	12.97	1.14	2.16	-1.00	.02
MB	11/17/2021	4:14 AM	22.07	-1.00	8.32	.00	4.59	4.59	.00	.00	.00	.05	.06	.02
280-155132-E-5	11/17/2021	4:22 AM	22.02	-1.00	7.80	.00	292.01	292.01	.00	.00	.00	2.92	-1.00	.02
du 280-155132-E-5	11/17/2021	4:29 AM	22.07	-1.00	7.84	.00	292.29	292.29	.00	.00	.00	2.92	-1.00	.02
280-155138-F-7	11/17/2021	4:35 AM	22.10	-1.00	7.52	.00	144.87	144.87	.00	.00	.00	1.45	-1.00	.02

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Run Number 1208 **Order Number** 20211116-2

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)
280-155138-F-9	11/17/2021	4:41 AM	22.16	-1.00	7.58	.00	191.37	191.37	.00	.00	.00	1.91	-1.00	.02
280-155138-F-8	11/17/2021	4:49 AM	22.19	-1.00	7.31	.00	372.16	372.16	.00	.00	.00	3.72	-1.00	.02
280-155138-F-6	11/17/2021	4:55 AM	22.35	-1.00	7.00	.00	111.86	111.86	.00	.00	.00	1.12	-1.00	.02
280-155138-F-1	11/17/2021	5:03 AM	22.52	-1.00	7.71	.00	376.44	376.44	.00	.00	.00	3.76	-1.00	.02
280-155138-F-5	11/17/2021	5:11 AM	22.78	-1.00	7.60	.00	318.52	318.52	.00	.00	.00	3.19	-1.00	.02
280-155138-F-3	11/17/2021	5:19 AM	22.70	-1.00	7.89	.00	444.10	444.10	.00	.00	.00	4.44	-1.00	.02
280-155138-F-4	11/17/2021	5:27 AM	22.49	-1.00	7.25	.00	289.93	289.93	.00	.00	.00	2.90	-1.00	.02
CCV	11/17/2021	5:34 AM	22.40	-1.00	10.41	114.37	219.91	.00	211.08	8.84	1.14	2.20	-1.00	.02
CCB	11/17/2021	5:40 AM	22.37	-1.00	8.21	.00	3.86	3.86	.00	.00	.00	.05	.06	.02
280-155138-F-10	11/17/2021	5:45 AM	22.29	-1.00	6.67	.00	111.32	111.32	.00	.00	.00	1.11	-1.00	.02
280-155138-F-2	11/17/2021	5:53 AM	22.28	-1.00	7.57	.00	363.80	363.80	.00	.00	.00	3.64	-1.00	.02
280-155218-E-1	11/17/2021	6:07 AM	22.32	-1.00	8.60	44.47	1,123.24	1,034.29	88.95	.00	.44	11.23	-1.00	.02
280-155218-E-2	11/17/2021	6:22 AM	22.54	-1.00	8.47	32.87	1,257.62	1,191.89	65.73	.00	.33	12.58	-1.00	.02
280-155208-D-3	11/17/2021	6:30 AM	22.67	-1.00	7.87	.00	294.24	294.24	.00	.00	.00	2.94	-1.00	.02
280-155208-D-1	11/17/2021	6:38 AM	22.69	-1.00	7.92	.00	371.01	371.01	.00	.00	.00	3.71	-1.00	.02
280-155208-D-2	11/17/2021	6:46 AM	22.83	-1.00	8.02	.00	357.16	357.16	.00	.00	.00	3.57	-1.00	.02
280-155208-C-4	11/17/2021	6:54 AM	22.81	-1.00	7.86	.00	327.47	327.47	.00	.00	.00	3.27	-1.00	.02
280-155208-D-5	11/17/2021	7:01 AM	22.72	-1.00	7.80	.00	221.22	221.22	.00	.00	.00	2.21	-1.00	.02
280-155150-d-1	11/17/2021	7:12 AM	22.55	-1.00	8.05	.00	758.93	758.93	.00	.00	.00	7.59	-1.00	.02
CCV	11/17/2021	7:19 AM	22.60	-1.00	10.38	117.93	219.98	.00	204.10	15.88	1.18	2.20	-1.00	.02
CCB	11/17/2021	7:25 AM	22.46	-1.00	8.05	.00	3.97	3.97	.00	.00	.00	.05	.06	.02
LCS	11/17/2021	7:32 AM	22.40	-1.00	10.41	113.01	219.40	.00	212.77	6.63	1.13	2.19	-1.00	.02
MB	11/17/2021	7:38 AM	22.55	-1.00	8.24	.00	3.84	3.84	.00	.00	.00	.05	.06	.02
280-155150-d-2	11/17/2021	7:46 AM	22.48	-1.00	8.12	.00	366.42	366.42	.00	.00	.00	3.66	-1.00	.02
DU 280-155150-d-2	11/17/2021	7:54 AM	22.61	-1.00	8.17	.00	369.05	369.05	.00	.00	.00	3.69	-1.00	.02
280-155150-d-3	11/17/2021	8:00 AM	22.72	-1.00	7.67	.00	172.89	172.89	.00	.00	.00	1.73	-1.00	.02
280-155141-e-6	11/17/2021	8:10 AM	22.84	-1.00	7.93	.00	565.84	565.84	.00	.00	.00	5.66	-1.00	.02
280-155141-e-4	11/17/2021	8:17 AM	23.12	-1.00	7.69	.00	171.55	171.55	.00	.00	.00	1.72	-1.00	.02
280-155141-e-5	11/17/2021	8:24 AM	22.90	-1.00	7.87	.00	320.30	320.30	.00	.00	.00	3.20	-1.00	.02
280-155141-d-3	11/17/2021	8:33 AM	22.81	-1.00	7.79	.00	446.09	446.09	.00	.00	.00	4.46	-1.00	.02

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Run Number 1208 **Order Number** 20211116-2

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)
280-155141-e-1	11/17/2021	8:40 AM	22.75	-1.00	7.52	.00	227.29	227.29	.00	.00	.00	2.27	-1.00	.02
280-155141-f-2	11/17/2021	8:49 AM	22.66	-1.00	7.88	.00	559.52	559.52	.00	.00	.00	5.60	-1.00	.02
280-155225-f-3	11/17/2021	8:57 AM	22.75	-1.00	7.73	.00	349.92	349.92	.00	.00	.00	3.50	-1.00	.02
CCV	11/17/2021	9:04 AM	22.67	-1.00	10.37	110.17	223.80	3.47	220.34	.00	1.10	2.24	-1.00	.02
CCB	11/17/2021	9:10 AM	22.74	-1.00	8.00	.00	3.49	3.49	.00	.00	.00	.05	.06	.02
280-155225-d-1	11/17/2021	9:16 AM	22.66	-1.00	7.24	.00	211.56	211.56	.00	.00	.00	2.12	-1.00	.02
280-155225-d-2	11/17/2021	9:24 AM	22.72	-1.00	7.75	.00	366.50	366.50	.00	.00	.00	3.66	-1.00	.02
280-155225-f-4	11/17/2021	9:33 AM	22.83	-1.00	7.99	.00	416.75	416.75	.00	.00	.00	4.17	-1.00	.02
280-155225-f-5	11/17/2021	9:40 AM	22.90	-1.00	7.69	.00	276.53	276.53	.00	.00	.00	2.77	-1.00	.02
280-155225-f-6	11/17/2021	9:48 AM	22.93	-1.00	7.81	.00	338.78	338.78	.00	.00	.00	3.39	-1.00	.02
280-155225-f-7	11/17/2021	9:57 AM	22.78	-1.00	7.54	.00	598.10	598.10	.00	.00	.00	5.98	-1.00	.02
280-155225-f-8	11/17/2021	10:06 AM	22.67	-1.00	7.17	.00	471.11	471.11	.00	.00	.00	4.71	-1.00	.02
280-155225-f-9	11/17/2021	10:16 AM	22.58	-1.00	7.43	.00	597.14	597.14	.00	.00	.00	5.97	-1.00	.02
280-155289-e-1	11/17/2021	10:23 AM	22.52	-1.00	7.39	.00	147.77	147.77	.00	.00	.00	1.48	-1.00	.02
280-155290-e-1	11/17/2021	10:29 AM	22.51	-1.00	7.07	.00	122.73	122.73	.00	.00	.00	1.23	-1.00	.02
CCV	11/17/2021	10:37 AM	22.48	-1.00	10.33	111.54	222.47	.00	221.85	.62	1.12	2.22	-1.00	.02
CCB	11/17/2021	10:42 AM	22.61	-1.00	8.16	.00	3.65	3.65	.00	.00	.00	.05	.06	.02
LCS	11/17/2021	10:50 AM	22.60	-1.00	10.34	109.74	220.39	.91	219.48	.00	1.10	2.20	-1.00	.02
MB	11/17/2021	10:55 AM	22.70	-1.00	8.15	.00	6.87	6.87	.00	.00	.00	.07	.08	.02
280-155293-e-1	11/17/2021	11:01 AM	22.78	-1.00	7.06	.00	123.81	123.81	.00	.00	.00	1.24	-1.00	.02
DU 280-155293-e-1	11/17/2021	11:07 AM	23.07	-1.00	7.11	.00	123.45	123.45	.00	.00	.00	1.23	-1.00	.02
280-155292-e-1	11/17/2021	11:13 AM	22.92	-1.00	6.44	.00	2.11	2.11	.00	.00	.00	.03	.05	.02
280-155291-e-1	11/17/2021	11:19 AM	22.78	-1.00	6.39	.00	99.30	99.30	.00	.00	.00	.99	-1.00	.02
680-207006-c-9	11/17/2021	11:24 AM	22.75	-1.00	6.40	.00	27.73	27.73	.00	.00	.00	.28	-1.00	.02
680-207006-c-2	11/17/2021	11:29 AM	22.69	-1.00	6.58	.00	60.86	60.86	.00	.00	.00	.61	-1.00	.02
680-207006-c-3	11/17/2021	11:34 AM	22.64	-1.00	6.33	.00	83.37	83.37	.00	.00	.00	.83	-1.00	.02
680-207006-c-10	11/17/2021	11:39 AM	22.55	-1.00	6.41	.00	34.76	34.76	.00	.00	.00	.35	-1.00	.02
680-207006-c-13	11/17/2021	11:45 AM	22.51	-1.00	6.73	.00	138.90	138.90	.00	.00	.00	1.39	-1.00	.02
680-207006-c-1	11/17/2021	11:50 AM	22.57	-1.00	6.49	.00	35.02	35.02	.00	.00	.00	.35	-1.00	.02
CCV	11/17/2021	11:57 AM	22.60	-1.00	10.32	107.84	219.72	4.05	215.67	.00	1.08	2.20	-1.00	.02

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Run Number 1208 **Order Number** 20211116-2

SampleID	RunDate	RunTime	Temp	cond (uS)	pH	palk-ppm	talk-ppm	bcarb-ppm	carb-ppm	hydr-ppm	(mL) @ 8.3	(mL) @ 4.5	(mL) @ 4.2	Conc (N)
CCB	11/17/2021	12:03 PM	22.70	-1.00	8.27	.00	4.13	4.13	.00	.00	.00	.05	.06	.02
680-207006-c-8	11/17/2021	12:08 PM	22.74	-1.00	6.48	.00	43.59	43.59	.00	.00	.00	.44	-1.00	.02
680-207006-c-17	11/17/2021	12:14 PM	22.84	-1.00	7.18	.00	148.07	148.07	.00	.00	.00	1.48	-1.00	.02
680-207006-c-18	11/17/2021	12:19 PM	22.75	-1.00	6.47	.00	37.63	37.63	.00	.00	.00	.38	-1.00	.02
680-207006-c-11	11/17/2021	12:25 PM	22.67	-1.00	6.82	.00	84.33	84.33	.00	.00	.00	.84	-1.00	.02
680-207006-c-12	11/17/2021	12:30 PM	22.61	-1.00	6.34	.00	13.51	13.51	.00	.00	.00	.15	.16	.02
680-207006-c-5	11/17/2021	12:36 PM	22.60	-1.00	6.82	.00	150.43	150.43	.00	.00	.00	1.50	-1.00	.02
680-207006-c-6	11/17/2021	12:42 PM	22.67	-1.00	6.92	.00	192.76	192.76	.00	.00	.00	1.93	-1.00	.02
680-207006-c-16	11/17/2021	12:48 PM	22.67	-1.00	6.68	.00	85.31	85.31	.00	.00	.00	.85	-1.00	.02
680-207006-c-4	11/17/2021	12:53 PM	22.75	-1.00	6.01	.00	1.25	1.25	.00	.00	.00	.03	.04	.02
680-207006-c-14	11/17/2021	12:58 PM	22.77	-1.00	6.34	.00	28.35	28.35	.00	.00	.00	.28	-1.00	.02
CCV	11/17/2021	1:05 PM	22.81	-1.00	10.29	108.95	223.32	5.41	217.91	.00	1.09	2.23	-1.00	.02
CCV	11/17/2021	1:11 PM	22.93	-1.00	8.25	.00	4.07	4.07	.00	.00	.00	.05	.06	.02
LCS	11/17/2021	1:17 PM	23.14	-1.00	10.28	106.32	223.81	11.17	212.64	.00	1.06	2.24	-1.00	.02
MB	11/17/2021	1:23 PM	23.17	-1.00	8.24	.00	3.86	3.86	.00	.00	.00	.05	.06	.02
680-207006-c-15	11/17/2021	1:28 PM	23.11	-1.00	6.52	.00	57.32	57.32	.00	.00	.00	.57	-1.00	.02
DU 680-207006-c-15	11/17/2021	1:34 PM	23.12	-1.00	6.57	.00	56.41	56.41	.00	.00	.00	.56	-1.00	.02
680-207006-c-7	11/17/2021	1:39 PM	23.09	-1.00	6.78	.00	111.47	111.47	.00	.00	.00	1.11	-1.00	.02
CCV	11/17/2021	1:45 PM	22.98	-1.00	10.29	106.13	222.75	10.49	212.26	.00	1.06	2.23	-1.00	.02
CCB	11/17/2021	1:51 PM	22.99	-1.00	8.15	.00	5.89	5.89	.00	.00	.00	.06	.07	.02

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Shipping and Receiving Documents

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): BE AP	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2-NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
11-3-21	1055		X	NW021-7	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
11-3-21	0935		X	NW020-7	AQ	9	ABCDEF	X	X	X	X	X	X		
11-3-21	1200		X	NW022-7	AQ	9	ABCDEF	X	X	X	X	X	X		

Bill to: Brice Engineering

standard TAT

Page 1438 of 1446



Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	11-3-21	1700	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	11/04/2021	1110	Airbill Number: 535539785559	(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

11/24/2021

2.8 IRRIGATION

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2020585

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): BE AP KD GC	

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)		Bill to: Brice Engineering Remarks standard TAT
11-3-21	1005		X	GW082-7	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
11-3-21	1130		X	GW087-7	AQ	9	ABCDEF	X	X	X	X	X	X		↓
11-2-21	1555		X	MW071-7	AQ	9	ABCDEF	X	X	X	X	X	X		↓

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	11-3-21	1700	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	11/04/2021	1110	Airbill Number: 535539785548	(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:				

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2020584

AECOM
12120 Shamrock Plaza Suite 300, Omaha, NE 68154 (402) 334-8181 Fax (402) 334-1984

CHAIN OF CUSTODY RECORD

Project Name: CHAAP 2019	AECOM Project Number: 60565355
Project Location: Grand Island, Nebraska	AECOM Project Manager: Dean Converse
Sampler(s): BE AP KD GC	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2, NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks: standard TAT
11-2-21	1320		X	CA213-7	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
11-2-21	1510		X	GW081-7	AQ	9	ABCDEF	X	X	X	X	X	X		↓
11-2-21	1445		X	NW070-7	AQ	9	ABCDEF	X	X	X	X	X	X		

Bill to: Brice Engineering

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	11-3-21	1700	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	11/4/2021	1110	Airbill Number: 535539785537	(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

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1.1 IR11 CF110

2020583

11/24/2021

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 GC	

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
11-3-21	1255		X	PZ019-7	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
11-3-21	1255		X	PZ019-7 MS/MSD	AQ	18	ABCDEF	X	X	X	X	X	X		↓

Bill to: Brice Engineering

standard TAT

Signatures	Date	Time
Relinquished by:	11-3-21	1700
Received by:	11/04/21	1110
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number: 535539785560

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

3.0 IR11CR41.0

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2020586

eurofins | Environment Testing TestAmerica



280-155138 Waybill

ORIGIN ID:PHDA (308) 379-7542
GARY CARSON
BRICE ENGINEERING (WATER TREATMENT
7502 WEST 13TH STREET

GRAND ISLAND, NE 68803
UNITED STATES US

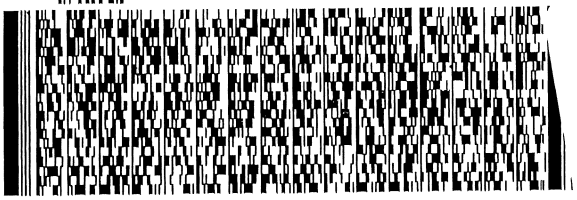
SHIP DATE: 19OCT21
ACTWGT: 10.00 LB MAN
CAD: 0562071/CAFE3507

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-113339

RMA:



FedEx
TRK# 0221 5355 3978 5548

THU - 04 N
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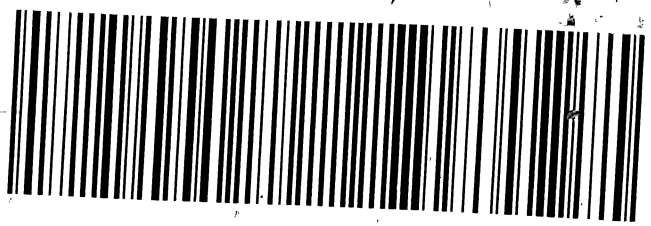

5046225 11/03 56DJ2/9A7E/FE4A

CLEAR

53553978 5283
10/21/2021 01:27:06



eurofins

Environment Testing
TestAmerica

Part # 159470 434 FDT2 EXP 07/22

ORIGIN ID:PHDA (308) 379-7542
GARY CARSON
BRICE ENGINEERING (WATER TREATMENT
7502 WEST 13TH STREET

GRAND ISLAND, NE 68803
UNITED STATES US

SHIP DATE: 19OCT21
ACTWGT: 1 LB MAN
CAD: 05 FE3507

TO

EUROFINS TESTAMERIC
4955 YARROW STREE

ARVADA CO 800024
(303) 736-0100
REF: S280-113339
RMA:

RT 650 4 11:30 E 5560 11.04

FZ

570C3/14BA/6F4D

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Express

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THU - 04 NOV 11:30A
PRIORITY OVERNIGHT

XA LAAA

80002
CO-US DEN

Part # 156207-435 RRDB2 EXP 04/22

#5046225 11/03 56DJ2/9A7E/FE4A



eurofins | Environment Testing TestAmerica

ORIGIN ID:PHDA (308) 379
GARY CARSON
BRICE ENGINEERING (WATER
7502 WEST 13TH STREET

GRAND ISLAND, NE 68803
UNITED STATES US

DATE: 19OCT21
WT: 10.00 LB MAN
0562071/CAFE3507

TO

EUROFINS TEST. NVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-113339

RMA:

FedEx Express

FedEx
TRK# 0221 5355 3978 5537

THU - 04 NOV 11:30A
PRIORITY OVERNIGHT

XA LAAA

80002
CO-US DEN

#5046225 11/03 5GDJ2/9A7E/FE4A

eurofins | Environment Testing TestAmerica

Part # 159470-434 RIT2 EXP 07/22

RT 650 4 11:30 E 5559 11.04

ORIGIN ID:PHDA (3C FZ
GARY CARSON
BRICE ENGINEERING
7502 WEST 13TH STRE
GRAND ISLAND, NE 68803
UNITED STATES US

T21
B MAN
AFE3507

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-113339

RMA:

FedEx Express

FedEx
TRK# 0221 5355 3978 5559

THU - 04 NOV 11:30A
PRIORITY OVERNIGHT

XA LAAA

80002 2
CO-US DEN

#5046225 11/03 56DJ2/9A7E/FE4A

Part # 156297-435 RRDB2 EXP 04/22

Login Sample Receipt Checklist

Client: Brice Environmental Services, Corp

Job Number: 280-155138-1

Login Number: 155138
List Number: 1
Creator: Kirar, Dylan A

List Source: Eurofins TestAmerica, Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	