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ANALYTICAL REPORT

Job Number: 280-155225-1

Job Description: Cornhusker (CHAAP)

For:
Brice Environmental Services, Corp
3800 Centerpoint Drive, Suite 520
Anchorage, AK 99503

Attention: Corey Schwabenlander



Approved for release.
Patrick J McEntee
Client Service Manager
11/26/2021 9:42 PM

Patrick J McEntee, Client Service Manager
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0107
Patrick.McEntee@Eurofinset.com
11/26/2021

cc: Dean Converse
Jared DeSadier
Mr. Anthony Farinacci

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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
D	The reported value is from a dilution.
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.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

General Chemistry

Qualifier	Qualifier Description
B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.
D	The reported value is from a dilution.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

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)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

CASE NARRATIVE

Client: Brice Environmental Services, Corp

Project: Cornhusker (CHAAP)

Report Number: 280-155225-1

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 11/5/2021 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.8º C, 2.8º C and 4.5º C.

DISSOLVED GASES (GC)

Samples G0024-7 (280-155225-1), G0077-7 (280-155225-2), G0078-7 (280-155225-3), G0092-7 (280-155225-4), G0091-7 (280-155225-5), G0086-7 (280-155225-6), PZ017R-7 (280-155225-7), PZ018-7 (280-155225-8) and PZ021-7 (280-155225-9) were analyzed for Dissolved Gases (GC) in accordance with RSK_175. The samples were analyzed on 11/12/2021 and 11/16/2021.

Samples PZ017R-7 (280-155225-7)[4X] and PZ021-7 (280-155225-9)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

NITROAROMATICS AND NITRAMINES (HPLC)

Samples G0024-7 (280-155225-1), G0077-7 (280-155225-2), G0078-7 (280-155225-3), G0092-7 (280-155225-4), G0091-7 (280-155225-5), G0086-7 (280-155225-6), PZ017R-7 (280-155225-7), PZ018-7 (280-155225-8) and PZ021-7 (280-155225-9) 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.

Surrogate recovery for the following sample in preparation batch 280-556591 and analytical batch 280-556781 was outside the lower control limits: G0086-7 (280-155225-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. Surrogate recovered within control limit in the confirmation instrument.

The %RPD between the primary and confirmation column exceeded 40% for 2,4,6-Trinitrotoluene, 4-Amino-2,6-dinitrotoluene, p-Nitrotoluene, HMX and RDX for the following samples: G0077-7 (280-155225-2), G0091-7 (280-155225-5), G0086-7 (280-155225-6), PZ017R-7 (280-155225-7) and PZ021-7 (280-155225-9) 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 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: G0091-7 (280-155225-5), PZ017R-7 (280-155225-7) and PZ021-7 (280-155225-9).

In preparation batch 280-556591, the following samples required filtration to reduce matrix interferences: PZ017R-7 (280-155225-7), PZ018-7 (280-155225-8) and PZ021-7 (280-155225-9).

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

ALKALINITY

Samples G0024-7 (280-155225-1), G0077-7 (280-155225-2), G0078-7 (280-155225-3), G0092-7 (280-155225-4), G0091-7 (280-155225-5), G0086-7 (280-155225-6), PZ017R-7 (280-155225-7), PZ018-7 (280-155225-8) and PZ021-7 (280-155225-9) were analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 11/17/2021 and 11/18/2021.

Total Alkalinity as CaCO3 was detected in method blank MB 280-557846/110 at a level that was below one half the LOQ.

Total Alkalinity as CaCO3 failed the recovery criteria high for LCS 280-557846/109 at 110% (limits 89-109%). The holding times had expired; therefore the reanalysis was not performed. Impacated samples: G0092-7 (280-155225-4), G0091-7 (280-155225-5), G0086-7 (280-155225-6), and PZ018-7 (280-155225-8).

The continuing calibration verification (CCV) associated with batch 280-557846 recovered above the upper control limit for total alkalinity. The associated samples are impacted: G0024-7 (280-155225-1), G0077-7 (280-155225-2), G0092-7 (280-155225-4) and G0091-7 (280-155225-5).

Total Alkalinity as CaCO3 was detected in method blank MB 280-558096/31 at a level was above one half the LOQ but below the LOQ. Associated sample results are greater than 10x the MB.

Total Alkalinity as CaCO3 was detected in method blank MB 280-558096/5 at a level was above one half the LOQ but below the LOQ. Associated sample results are greater than 10x the MB.

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

AMMONIA

Samples G0024-7 (280-155225-1), G0077-7 (280-155225-2), G0078-7 (280-155225-3), G0092-7 (280-155225-4), G0091-7 (280-155225-5), G0086-7 (280-155225-6), PZ017R-7 (280-155225-7), PZ018-7 (280-155225-8) and PZ021-7 (280-155225-9) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 11/22/2021.

Ammonia was detected in method blank MB 280-558390/55 at a level that was below one half the LOQ.

Sample G0078-7 (280-155225-3)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

TOTAL KJELDAHL NITROGEN

Samples G0024-7 (280-155225-1), G0077-7 (280-155225-2), G0078-7 (280-155225-3), G0092-7 (280-155225-4), G0091-7 (280-155225-5), G0086-7 (280-155225-6), PZ017R-7 (280-155225-7), PZ018-7 (280-155225-8) and PZ021-7 (280-155225-9) 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 G0086-7MS (280-155225-6) in batch 280-557899.

Nitrogen, Total Kjeldahl failed the recovery criteria low for the MSD of sample G0086-7MSD (280-155225-6) 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 G0024-7 (280-155225-1), G0077-7 (280-155225-2), G0078-7 (280-155225-3), G0092-7 (280-155225-4), G0091-7 (280-155225-5), G0086-7 (280-155225-6), PZ017R-7 (280-155225-7), PZ018-7 (280-155225-8) and PZ021-7 (280-155225-9) were analyzed for nitrate-nitrite as nitrogen in accordance with EPA Method 353.2. The samples were analyzed on 11/18/2021.

Samples G0077-7 (280-155225-2)[5X], G0091-7 (280-155225-5)[10X] and G0086-7 (280-155225-6)[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.

SULFIDE

Samples G0024-7 (280-155225-1), G0077-7 (280-155225-2), G0078-7 (280-155225-3), G0092-7 (280-155225-4), G0091-7 (280-155225-5), G0086-7 (280-155225-6), PZ017R-7 (280-155225-7), PZ018-7 (280-155225-8) and PZ021-7 (280-155225-9) were analyzed for sulfide in accordance with EPA SW-846 Method 9034. The samples were prepared and analyzed on 11/09/2021 and 11/10/2021.

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

ANIONS (28 DAYS)

Samples G0024-7 (280-155225-1), G0077-7 (280-155225-2), G0078-7 (280-155225-3), G0092-7 (280-155225-4), G0091-7 (280-155225-5), G0086-7 (280-155225-6), PZ017R-7 (280-155225-7), PZ018-7 (280-155225-8) and PZ021-7 (280-155225-9) were analyzed for anions (28 days) in accordance with 9056A (28 Days). The samples were analyzed on 11/22/2021 and 11/23/2021.

Samples G0078-7 (280-155225-3)[5X], G0092-7 (280-155225-4)[5X] and G0091-7 (280-155225-5)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

DISSOLVED ORGANIC CARBON

Samples G0024-7 (280-155225-1), G0077-7 (280-155225-2), G0078-7 (280-155225-3), G0092-7 (280-155225-4), G0091-7

(280-155225-5), G0086-7 (280-155225-6), PZ017R-7 (280-155225-7), PZ018-7 (280-155225-8) and PZ021-7 (280-155225-9) were analyzed for dissolved organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 11/13/2021.

Dissolved Organic Carbon - Quad failed the recovery criteria low for the MS of sample PZ017R-7MS (280-155225-7) in batch 280-557476.

Dissolved Organic Carbon - Quad failed the recovery criteria low for the MSD of sample PZ017R-7MSD (280-155225-7) in batch 280-557476.

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. G0024-7 (280-155225-1), G0077-7 (280-155225-2), G0078-7 (280-155225-3), G0092-7 (280-155225-4), G0091-7 (280-155225-5), G0086-7 (280-155225-6), PZ017R-7 (280-155225-7), PZ018-7 (280-155225-8), PZ021-7 (280-155225-9), (280-155225-D-7-B MS) and (280-155225-D-7-C MSD)

No additional 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: 280-155225-1

Client Sample ID: G0024-7 — Lab Sample ID: 280-155225-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2,4,6-Trinitrotoluene	0.46	M	0.11	0.10	0.046	ug/L	1		8330A	Total/NA
2,4-Dinitrotoluene	0.12	M	0.10	0.082	0.028	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	1.2	M	0.11	0.10	0.052	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.96	M	0.15	0.12	0.059	ug/L	1		8330A	Total/NA
Nitrate Nitrite as N	5.5		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfide	3.6	J	4.0	1.9	0.79	mg/L	1		9034	Total/NA
Sulfate	61		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	210	B	10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.9		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0077-7 — Lab Sample ID: 280-155225-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.96		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	4.4	M	0.21	0.20	0.084	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	4.5		0.11	0.10	0.045	ug/L	1		8330A	Total/NA
2,4-Dinitrotoluene	0.11	M	0.10	0.080	0.027	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	3.4		0.11	0.10	0.050	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	4.2		0.15	0.12	0.057	ug/L	1		8330A	Total/NA
4-Nitrotoluene	0.33	J J1	0.41	0.40	0.10	ug/L	1		8330A	Total/NA
4-Nitrotoluene	1.1	J1	0.41	0.40	0.10	ug/L	1		8330A	Total/NA
HMX	0.61	M	0.21	0.20	0.087	ug/L	1		8330A	Total/NA
RDX	1.7	M	0.21	0.20	0.051	ug/L	1		8330A	Total/NA
Nitrate Nitrite as N	17		0.50	0.25	0.095	mg/L	5		353.2	Total/NA
Sulfate	130		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	360	B	10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	4.6		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0078-7 — Lab Sample ID: 280-155225-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.21		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Ammonia	0.21		0.20	0.10	0.044	mg/L	2		350.1	Total/NA
Nitrate Nitrite as N	0.030	J	0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	250	D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	340	B	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: G0092-7 — Lab Sample ID: 280-155225-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.070		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
Nitrate Nitrite as N	0.037	J	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	360	D	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	420	Q	10	6.4	3.1	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0092-7 (Continued) — Lab Sample ID: 280-155225-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Dissolved Organic Carbon - Quad	3.1		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0091-7 — Lab Sample ID: 280-155225-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
2-Amino-4,6-dinitrotoluene	0.17		0.11	0.099	0.050	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.17	J1	0.15	0.12	0.057	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.26	J1 B	0.15	0.12	0.057	ug/L	1		8330A	Total/NA
HMX	0.34	J1 M	0.21	0.20	0.086	ug/L	1		8330A	Total/NA
HMX	0.23	J1 M	0.21	0.20	0.086	ug/L	1		8330A	Total/NA
RDX	0.32	M	0.21	0.20	0.051	ug/L	1		8330A	Total/NA
Nitrate Nitrite as N	40		1.0	0.50	0.19	mg/L	10		353.2	Total/NA
Sulfate	170	D M	25	13	5.2	mg/L	5		9056A	Total/NA
Total Alkalinity as CaCO3	280	Q	10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	3.3		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: G0086-7 — Lab Sample ID: 280-155225-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	0.0092		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	17	Q	0.21	0.20	0.083	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	5.5	Q	0.11	0.099	0.045	ug/L	1		8330A	Total/NA
2,4-Dinitrotoluene	0.073	J Q M	0.099	0.079	0.027	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	1.8	Q	0.11	0.099	0.050	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	1.5	Q	0.15	0.12	0.057	ug/L	1		8330A	Total/NA
HMX	0.56	Q J1 M	0.21	0.20	0.087	ug/L	1		8330A	Total/NA
HMX	0.27	J1 M	0.21	0.20	0.087	ug/L	1		8330A	Total/NA
RDX	0.95	Q J1	0.21	0.20	0.051	ug/L	1		8330A	Total/NA
RDX	0.63	J1	0.21	0.20	0.051	ug/L	1		8330A	Total/NA
Ammonia	0.028	J	0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate Nitrite as N	6.6		0.20	0.10	0.038	mg/L	2		353.2	Total/NA
Sulfate	170		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	340	Q	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: PZ017R-7 — Lab Sample ID: 280-155225-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	21	D	0.020	0.0052	0.0025	mg/L	4		RSK-175	Total/NA
2,4,6-Trinitrotoluene	0.37	J1 M	0.11	0.098	0.044	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	0.20	J1	0.11	0.098	0.044	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.47	J1 M	0.15	0.12	0.057	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	4.1	J1 B	0.15	0.12	0.057	ug/L	1		8330A	Total/NA
Ammonia	0.47		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	2.0		1.0	1.0	0.69	mg/L	1		351.2	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PZ017R-7 (Continued)

Lab Sample ID: 280-155225-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Nitrate Nitrite as N	0.11		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	34		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	580	B	10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	9.1	J1	1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: PZ018-7

Lab Sample ID: 280-155225-8

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	16		0.0050	0.0013	0.00063	mg/L	1		RSK-175	Total/NA
1,3,5-Trinitrobenzene	0.94	M	0.21	0.20	0.084	ug/L	1		8330A	Total/NA
2,4,6-Trinitrotoluene	4.0		0.11	0.10	0.045	ug/L	1		8330A	Total/NA
2-Amino-4,6-dinitrotoluene	2.7		0.11	0.10	0.051	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	4.3		0.15	0.12	0.058	ug/L	1		8330A	Total/NA
Ammonia	0.65		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	2.8		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	3.2		0.10	0.050	0.019	mg/L	1		353.2	Total/NA
Sulfate	36		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	470	Q	10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	13		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

Client Sample ID: PZ021-7

Lab Sample ID: 280-155225-9

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Methane	24	D	0.020	0.0052	0.0025	mg/L	4		RSK-175	Total/NA
2,4,6-Trinitrotoluene	0.30		0.11	0.098	0.044	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	0.47	J1	0.15	0.12	0.057	ug/L	1		8330A	Total/NA
4-Amino-2,6-dinitrotoluene	6.3	J1 B	0.15	0.12	0.057	ug/L	1		8330A	Total/NA
Ammonia	0.45		0.10	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrogen, Total Kjeldahl	1.9		1.0	1.0	0.69	mg/L	1		351.2	Total/NA
Nitrate Nitrite as N	0.11		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	34		5.0	2.5	1.0	mg/L	1		9056A	Total/NA
Total Alkalinity as CaCO3	580	B	10	6.4	3.1	mg/L	1		SM 2320B	Total/NA
Dissolved Organic Carbon - Quad	9.3		1.0	0.80	0.35	mg/L	1		9060A	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: G0024-7
Lab Sample ID: 280-155225-1
Date Collected: 11/04/21 09:25
Matrix: Water
Date Received: 11/05/21 10:30

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 18:56	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	0.21	0.20	0.086	ug/L		11/10/21 09:19	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		11/10/21 09:19	1
2,4,6-Trinitrotoluene	**0.46**	**M**	0.11	0.10	0.046	ug/L		11/10/21 09:19	1
2,4-Dinitrotoluene	**0.12**	**M**	0.10	0.082	0.028	ug/L		11/10/21 09:19	1
2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041	ug/L		11/10/21 09:19	1
2-Amino-4,6-dinitrotoluene	**1.2**	**M**	0.11	0.10	0.052	ug/L		11/10/21 09:19	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.087	ug/L		11/10/21 09:19	1
3-Nitrotoluene	0.41	U	0.41	0.41	0.20	ug/L		11/10/21 09:19	1
4-Amino-2,6-dinitrotoluene	**0.96**	**M**	0.15	0.12	0.059	ug/L		11/10/21 09:19	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		11/11/21 05:35	1
HMX	0.20	U	0.21	0.20	0.090	ug/L		11/10/21 09:19	1
MNX	0.41	U	2.0	0.41	0.16	ug/L		11/10/21 09:19	1
Nitrobenzene	0.20	U	0.21	0.20	0.093	ug/L		11/10/21 09:19	1
RDX	0.20	U	0.21	0.20	0.053	ug/L		11/10/21 09:19	1
Tetryl	0.10	U M	0.11	0.10	0.033	ug/L		11/10/21 09:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*93*	*M*	*83 - 119*	*11/08/21 14:30*	*11/10/21 09:19*	*1*
1,2-Dinitrobenzene	*96*		*83 - 119*	*11/08/21 14:30*	*11/11/21 05:35*	*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		11/22/21 16:18	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/17/21 19:49	1
Nitrate Nitrite as N	**5.5**		0.10	0.050	0.019	mg/L		11/18/21 18:15	1
Sulfide	**3.6**	**J**	4.0	1.9	0.79	mg/L		11/10/21 13:25	1
Sulfate	**61**		5.0	2.5	1.0	mg/L		11/22/21 16:41	1
Total Alkalinity as CaCO3	**210**	**B**	10	6.4	3.1	mg/L		11/18/21 20:03	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.9**		1.0	0.80	0.35	mg/L		11/13/21 15:08	1

Client Sample ID: G0077-7
Lab Sample ID: 280-155225-2
Date Collected: 11/04/21 10:35
Matrix: Water
Date Received: 11/05/21 10:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.96**		0.0050	0.0013	0.00063	mg/L		11/12/21 19:09	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**4.4**	**M**	0.21	0.20	0.084	ug/L		11/10/21 09:42	1
1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.037	ug/L		11/10/21 09:42	1
2,4,6-Trinitrotoluene	**4.5**		0.11	0.10	0.045	ug/L		11/10/21 09:42	1
2,4-Dinitrotoluene	**0.11**	**M**	0.10	0.080	0.027	ug/L		11/10/21 09:42	1

Client Sample ID: G0077-7

Date Collected: 11/04/21 10:35
Date Received: 11/05/21 10:30

Lab Sample ID: 280-155225-2

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		11/10/21 09:42	1
2-Amino-4,6-dinitrotoluene	**3.4**		0.11	0.10	0.050	ug/L		11/10/21 09:42	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.085	ug/L		11/10/21 09:42	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.19	ug/L		11/10/21 09:42	1
4-Amino-2,6-dinitrotoluene	**4.2**		0.15	0.12	0.057	ug/L		11/10/21 09:42	1
4-Nitrotoluene	**0.33**	**J J1**	0.41	0.40	0.10	ug/L		11/10/21 09:42	1
4-Nitrotoluene	**1.1**	**J1**	0.41	0.40	0.10	ug/L		11/11/21 07:20	1
HMX	**0.61**	**M**	0.21	0.20	0.087	ug/L		11/10/21 09:42	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		11/10/21 09:42	1
Nitrobenzene	0.20	U M	0.21	0.20	0.091	ug/L		11/10/21 09:42	1
RDX	**1.7**	**M**	0.21	0.20	0.051	ug/L		11/10/21 09:42	1
Tetryl	0.10	U M	0.11	0.10	0.032	ug/L		11/10/21 09:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*91*	*M*	*83 - 119*	*11/08/21 14:30*	*11/10/21 09:42*	*1*
1,2-Dinitrobenzene	*95*	*M*	*83 - 119*	*11/08/21 14:30*	*11/11/21 07:20*	*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		11/22/21 16:20	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/17/21 19:51	1
Nitrate Nitrite as N	**17**		0.50	0.25	0.095	mg/L		11/18/21 18:17	5
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/10/21 13:25	1
Sulfate	**130**		5.0	2.5	1.0	mg/L		11/22/21 16:57	1
Total Alkalinity as CaCO3	**360**	**B**	10	6.4	3.1	mg/L		11/18/21 20:17	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**4.6**		1.0	0.80	0.35	mg/L		11/13/21 15:22	1

Client Sample ID: G0078-7

Date Collected: 11/04/21 11:45
Date Received: 11/05/21 10:30

Lab Sample ID: 280-155225-3

Matrix: Water

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.21**		0.0050	0.0013	0.00063	mg/L		11/12/21 19:22	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.21	U	0.22	0.21	0.087	ug/L		11/10/21 10:05	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038	ug/L		11/10/21 10:05	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046	ug/L		11/10/21 10:05	1
2,4-Dinitrotoluene	0.082	U	0.10	0.082	0.028	ug/L		11/10/21 10:05	1
2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041	ug/L		11/10/21 10:05	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052	ug/L		11/10/21 10:05	1
2-Nitrotoluene	0.21	U	0.22	0.21	0.088	ug/L		11/10/21 10:05	1
3-Nitrotoluene	0.41	U	0.41	0.41	0.20	ug/L		11/10/21 10:05	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.059	ug/L		11/10/21 10:05	1
4-Nitrotoluene	0.41	U	0.42	0.41	0.10	ug/L		11/11/21 07:55	1
HMX	0.21	U M	0.22	0.21	0.090	ug/L		11/10/21 10:05	1

Client Sample ID: G0078-7
Lab Sample ID: 280-155225-3
Date Collected: 11/04/21 11:45
Matrix: Water
Date Received: 11/05/21 10:30

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
MNX	0.41	U	2.1	0.41	0.16	ug/L		11/10/21 10:05	1
Nitrobenzene	0.21	U	0.22	0.21	0.094	ug/L		11/10/21 10:05	1
RDX	0.21	U	0.22	0.21	0.053	ug/L		11/11/21 07:55	1
Tetryl	0.10	U	0.11	0.10	0.033	ug/L		11/10/21 10:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*95*	*M*	*83 - 119*	*11/08/21 14:30*	*11/10/21 10:05*	*1*
1,2-Dinitrobenzene	*95*		*83 - 119*	*11/08/21 14:30*	*11/11/21 07:55*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.21**		0.20	0.10	0.044	mg/L		11/22/21 12:32	2
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/17/21 19:51	1
Nitrate Nitrite as N	**0.030**	**J**	0.10	0.050	0.019	mg/L		11/18/21 18:19	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/10/21 13:25	1
Sulfate	**250**	**D**	25	13	5.2	mg/L		11/23/21 15:46	5
Total Alkalinity as CaCO3	**340**	**B**	10	6.4	3.1	mg/L		11/18/21 19:31	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		11/13/21 15:39	1

Client Sample ID: G0092-7
Lab Sample ID: 280-155225-4
Date Collected: 11/03/21 14:55
Matrix: Water
Date Received: 11/05/21 10:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.070**		0.0050	0.0013	0.00063	mg/L		11/12/21 19:35	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 11:14	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		11/10/21 11:14	1
2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046	ug/L		11/10/21 11:14	1
2,4-Dinitrotoluene	0.081	U	0.10	0.081	0.028	ug/L		11/10/21 11:14	1
2,6-Dinitrotoluene	0.081	U	0.10	0.081	0.041	ug/L		11/10/21 11:14	1
2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.051	ug/L		11/10/21 11:14	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.087	ug/L		11/10/21 11:14	1
3-Nitrotoluene	0.40	U	0.40	0.40	0.20	ug/L		11/10/21 11:14	1
4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.058	ug/L		11/10/21 11:14	1
4-Nitrotoluene	0.40	U	0.42	0.40	0.10	ug/L		11/10/21 11:14	1
HMX	0.20	U M	0.21	0.20	0.089	ug/L		11/10/21 11:14	1
MNX	0.40	U	2.0	0.40	0.16	ug/L		11/10/21 11:14	1
Nitrobenzene	0.20	U M	0.21	0.20	0.092	ug/L		11/10/21 11:14	1
RDX	0.20	U	0.21	0.20	0.052	ug/L		11/10/21 11:14	1
Tetryl	0.10	U M	0.11	0.10	0.032	ug/L		11/10/21 11:14	1

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

Client Sample ID: G0092-7
Lab Sample ID: 280-155225-4

Date Collected: 11/03/21 14:55
Matrix: Water
Date Received: 11/05/21 10:30

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 16:22	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/17/21 19:52	1
Nitrate Nitrite as N	**0.037**	**J**	0.10	0.050	0.019	mg/L		11/18/21 18:21	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		11/09/21 12:10	1
Sulfate	**360**	**D**	25	13	5.2	mg/L		11/23/21 16:02	5
Total Alkalinity as CaCO3	**420**	**Q**	10	6.4	3.1	mg/L		11/17/21 09:33	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		11/13/21 15:56	1

Client Sample ID: G0091-7
Lab Sample ID: 280-155225-5

Date Collected: 11/03/21 13:40
Matrix: Water
Date Received: 11/05/21 10:30

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 19:48	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	0.083	ug/L		11/10/21 11:37	1
1,3-Dinitrobenzene	0.099	U	0.11	0.099	0.036	ug/L		11/10/21 11:37	1
2,4,6-Trinitrotoluene	0.099	U	0.11	0.099	0.044	ug/L		11/11/21 08:30	1
2,4-Dinitrotoluene	0.079	U	0.099	0.079	0.027	ug/L		11/10/21 11:37	1
2,6-Dinitrotoluene	0.079	U	0.099	0.079	0.040	ug/L		11/10/21 11:37	1
2-Amino-4,6-dinitrotoluene	**0.17**		0.11	0.099	0.050	ug/L		11/10/21 11:37	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.084	ug/L		11/10/21 11:37	1
3-Nitrotoluene	0.39	U	0.39	0.39	0.19	ug/L		11/10/21 11:37	1
4-Amino-2,6-dinitrotoluene	**0.17**	**J1**	0.15	0.12	0.057	ug/L		11/10/21 11:37	1
4-Amino-2,6-dinitrotoluene	**0.26**	**J1 B**	0.15	0.12	0.057	ug/L		11/11/21 08:30	1
4-Nitrotoluene	0.39	U	0.40	0.39	0.099	ug/L		11/10/21 11:37	1
HMX	**0.34**	**J1 M**	0.21	0.20	0.086	ug/L		11/10/21 11:37	1
HMX	**0.23**	**J1 M**	0.21	0.20	0.086	ug/L		11/11/21 08:30	1
MNX	0.39	U M	2.0	0.39	0.15	ug/L		11/10/21 11:37	1
Nitrobenzene	0.20	U	0.21	0.20	0.090	ug/L		11/10/21 11:37	1
RDX	**0.32**	**M**	0.21	0.20	0.051	ug/L		11/10/21 11:37	1
Tetryl	0.099	U	0.11	0.099	0.031	ug/L		11/10/21 11:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*93*	*M*	*83 - 119*	*11/08/21 14:30*	*11/10/21 11:37*	*1*
1,2-Dinitrobenzene	*92*		*83 - 119*	*11/08/21 14:30*	*11/11/21 08:30*	*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		11/22/21 12:36	1
Nitrogen, Total Kjeldahl	1.0	U	1.0	1.0	0.69	mg/L		11/17/21 19:52	1
Nitrate Nitrite as N	**40**		1.0	0.50	0.19	mg/L		11/18/21 18:23	10
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/10/21 13:25	1
Sulfate	**170**	**D M**	25	13	5.2	mg/L		11/23/21 16:19	5
Total Alkalinity as CaCO3	**280**	**Q**	10	6.4	3.1	mg/L		11/17/21 09:40	1

Client Sample ID: G0091-7
Lab Sample ID: 280-155225-5
Date Collected: 11/03/21 13:40
Matrix: Water
Date Received: 11/05/21 10:30

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**3.3**		1.0	0.80	0.35	mg/L		11/13/21 16:11	1

Client Sample ID: G0086-7
Lab Sample ID: 280-155225-6
Date Collected: 11/03/21 15:05
Matrix: Water
Date Received: 11/05/21 10:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**0.0092**		0.0050	0.0013	0.00063	mg/L		11/12/21 20:01	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**17**	**Q**	0.21	0.20	0.083	ug/L		11/10/21 12:00	1
1,3-Dinitrobenzene	0.099	U Q M	0.11	0.099	0.037	ug/L		11/10/21 12:00	1
2,4,6-Trinitrotoluene	**5.5**	**Q**	0.11	0.099	0.045	ug/L		11/10/21 12:00	1
2,4-Dinitrotoluene	**0.073**	**J Q M**	0.099	0.079	0.027	ug/L		11/10/21 12:00	1
2,6-Dinitrotoluene	0.079	U Q	0.099	0.079	0.040	ug/L		11/10/21 12:00	1
2-Amino-4,6-dinitrotoluene	**1.8**	**Q**	0.11	0.099	0.050	ug/L		11/10/21 12:00	1
2-Nitrotoluene	0.20	U Q	0.21	0.20	0.085	ug/L		11/10/21 12:00	1
3-Nitrotoluene	0.40	U Q	0.40	0.40	0.19	ug/L		11/10/21 12:00	1
4-Amino-2,6-dinitrotoluene	**1.5**	**Q**	0.15	0.12	0.057	ug/L		11/10/21 12:00	1
4-Nitrotoluene	0.40	U M	0.41	0.40	0.099	ug/L		11/11/21 09:06	1
HMX	**0.56**	**Q J1 M**	0.21	0.20	0.087	ug/L		11/10/21 12:00	1
HMX	**0.27**	**J1 M**	0.21	0.20	0.087	ug/L		11/11/21 09:06	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		11/10/21 12:00	1
Nitrobenzene	0.20	U Q	0.21	0.20	0.090	ug/L		11/10/21 12:00	1
RDX	**0.95**	**Q J1**	0.21	0.20	0.051	ug/L		11/10/21 12:00	1
RDX	**0.63**	**J1**	0.21	0.20	0.051	ug/L		11/11/21 09:06	1
Tetryl	0.099	U Q M	0.11	0.099	0.032	ug/L		11/10/21 12:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*81*	*Q*	*83 - 119*	*11/08/21 14:30*	*11/10/21 12:00*	*1*
1,2-Dinitrobenzene	*96*	*M*	*83 - 119*	*11/08/21 14:30*	*11/11/21 09:06*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.028**	**J**	0.10	0.050	0.022	mg/L		11/22/21 12:38	1
Nitrogen, Total Kjeldahl	1.0	U J1	1.0	1.0	0.69	mg/L		11/17/21 19:54	1
Nitrate Nitrite as N	**6.6**		0.20	0.10	0.038	mg/L		11/18/21 18:25	2
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/10/21 13:25	1
Sulfate	**170**		5.0	2.5	1.0	mg/L		11/22/21 19:41	1
Total Alkalinity as CaCO3	**340**	**Q**	10	6.4	3.1	mg/L		11/17/21 09:48	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		11/13/21 16:25	1

Client Sample ID: PZ017R-7
Lab Sample ID: 280-155225-7
Date Collected: 11/04/21 09:30
Matrix: Water
Date Received: 11/05/21 10:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**21**	**D**	0.020	0.0052	0.0025	mg/L		11/16/21 20:24	4

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	0.083	ug/L		11/10/21 12:23	1
1,3-Dinitrobenzene	0.098	U	0.11	0.098	0.036	ug/L		11/10/21 12:23	1
2,4,6-Trinitrotoluene	**0.37**	**J1 M**	0.11	0.098	0.044	ug/L		11/10/21 12:23	1
2,4,6-Trinitrotoluene	**0.20**	**J1**	0.11	0.098	0.044	ug/L		11/11/21 09:41	1
2,4-Dinitrotoluene	0.079	U	0.098	0.079	0.027	ug/L		11/10/21 12:23	1
2,6-Dinitrotoluene	0.079	U	0.098	0.079	0.039	ug/L		11/10/21 12:23	1
2-Amino-4,6-dinitrotoluene	0.098	U M	0.11	0.098	0.050	ug/L		11/10/21 12:23	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.084	ug/L		11/10/21 12:23	1
3-Nitrotoluene	0.39	U	0.39	0.39	0.19	ug/L		11/10/21 12:23	1
4-Amino-2,6-dinitrotoluene	**0.47**	**J1 M**	0.15	0.12	0.057	ug/L		11/10/21 12:23	1
4-Amino-2,6-dinitrotoluene	**4.1**	**J1 B**	0.15	0.12	0.057	ug/L		11/11/21 09:41	1
4-Nitrotoluene	0.39	U M	0.40	0.39	0.098	ug/L		11/10/21 12:23	1
HMX	0.20	U	0.21	0.20	0.086	ug/L		11/10/21 12:23	1
MNX	0.39	U M	2.0	0.39	0.15	ug/L		11/10/21 12:23	1
Nitrobenzene	0.20	U M	0.21	0.20	0.089	ug/L		11/10/21 12:23	1
RDX	0.20	U M	0.21	0.20	0.051	ug/L		11/10/21 12:23	1
Tetryl	0.098	U M	0.11	0.098	0.031	ug/L		11/10/21 12:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*105*	*M*	*83 - 119*	*11/08/21 14:30*	*11/10/21 12:23*	*1*
1,2-Dinitrobenzene	*90*	*M*	*83 - 119*	*11/08/21 14:30*	*11/11/21 09:41*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.47**		0.10	0.050	0.022	mg/L		11/22/21 12:40	1
Nitrogen, Total Kjeldahl	**2.0**		1.0	1.0	0.69	mg/L		11/17/21 19:52	1
Nitrate Nitrite as N	**0.11**		0.10	0.050	0.019	mg/L		11/18/21 18:27	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/10/21 13:25	1
Sulfate	**34**		5.0	2.5	1.0	mg/L		11/22/21 19:58	1
Total Alkalinity as CaCO3	**580**	**B**	10	6.4	3.1	mg/L		11/18/21 18:58	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**9.1**	**J1**	1.0	0.80	0.35	mg/L		11/13/21 16:40	1

Client Sample ID: PZ018-7
Lab Sample ID: 280-155225-8
Date Collected: 11/04/21 11:05
Matrix: Water
Date Received: 11/05/21 10:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**16**		0.0050	0.0013	0.00063	mg/L		11/12/21 20:27	1

Method: 8330A - Nitroaromatics and Nitramines (HPLC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	**0.94**	**M**	0.21	0.20	0.084	ug/L		11/10/21 12:46	1
1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037	ug/L		11/11/21 10:15	1

Client Sample ID: PZ018-7
Lab Sample ID: 280-155225-8
Date Collected: 11/04/21 11:05
Matrix: Water
Date Received: 11/05/21 10:30

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2,4,6-Trinitrotoluene	**4.0**		0.11	0.10	0.045	ug/L		11/10/21 12:46	1
2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.028	ug/L		11/10/21 12:46	1
2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040	ug/L		11/10/21 12:46	1
2-Amino-4,6-dinitrotoluene	**2.7**		0.11	0.10	0.051	ug/L		11/10/21 12:46	1
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		11/10/21 12:46	1
3-Nitrotoluene	0.40	U M	0.40	0.40	0.20	ug/L		11/10/21 12:46	1
4-Amino-2,6-dinitrotoluene	**4.3**		0.15	0.12	0.058	ug/L		11/10/21 12:46	1
4-Nitrotoluene	0.40	U	0.41	0.40	0.10	ug/L		11/11/21 10:15	1
HMX	0.20	U	0.21	0.20	0.088	ug/L		11/10/21 12:46	1
MNX	0.40	U M	2.0	0.40	0.15	ug/L		11/10/21 12:46	1
Nitrobenzene	0.20	U	0.21	0.20	0.091	ug/L		11/10/21 12:46	1
RDX	0.20	U M	0.21	0.20	0.052	ug/L		11/10/21 12:46	1
Tetryl	0.10	U M	0.11	0.10	0.032	ug/L		11/10/21 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*118*	*M*	*83 - 119*	*11/08/21 14:30*	*11/10/21 12:46*	*1*
1,2-Dinitrobenzene	*89*	*M*	*83 - 119*	*11/08/21 14:30*	*11/11/21 10:15*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.65**		0.10	0.050	0.022	mg/L		11/22/21 12:42	1
Nitrogen, Total Kjeldahl	**2.8**		1.0	1.0	0.69	mg/L		11/17/21 19:52	1
Nitrate Nitrite as N	**3.2**		0.10	0.050	0.019	mg/L		11/18/21 18:29	1
Sulfide	1.9	U	4.0	1.9	0.79	mg/L		11/10/21 13:25	1
Sulfate	**36**		5.0	2.5	1.0	mg/L		11/22/21 20:14	1
Total Alkalinity as CaCO3	**470**	**Q**	10	6.4	3.1	mg/L		11/17/21 10:06	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**13**		1.0	0.80	0.35	mg/L		11/13/21 17:54	1

Client Sample ID: PZ021-7
Lab Sample ID: 280-155225-9
Date Collected: 11/04/21 08:00
Matrix: Water
Date Received: 11/05/21 10:30

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Methane	**24**	**D**	0.020	0.0052	0.0025	mg/L		11/16/21 20:38	4

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	0.083	ug/L		11/10/21 13:09	1
1,3-Dinitrobenzene	0.098	U	0.11	0.098	0.036	ug/L		11/10/21 13:09	1
2,4,6-Trinitrotoluene	**0.30**		0.11	0.098	0.044	ug/L		11/10/21 13:09	1
2,4-Dinitrotoluene	0.079	U	0.098	0.079	0.027	ug/L		11/10/21 13:09	1
2,6-Dinitrotoluene	0.079	U	0.098	0.079	0.039	ug/L		11/10/21 13:09	1
2-Amino-4,6-dinitrotoluene	0.098	U M	0.11	0.098	0.050	ug/L		11/10/21 13:09	1
2-Nitrotoluene	0.20	U M	0.21	0.20	0.084	ug/L		11/10/21 13:09	1
3-Nitrotoluene	0.39	U	0.39	0.39	0.19	ug/L		11/10/21 13:09	1
4-Amino-2,6-dinitrotoluene	**0.47**	**J1**	0.15	0.12	0.057	ug/L		11/10/21 13:09	1
4-Amino-2,6-dinitrotoluene	**6.3**	**J1 B**	0.15	0.12	0.057	ug/L		11/11/21 10:50	1

Client Sample ID: PZ021-7
Date Collected: 11/04/21 08:00
Date Received: 11/05/21 10:30

Lab Sample ID: 280-155225-9
Matrix: Water

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
4-Nitrotoluene	0.39	U M	0.40	0.39	0.098	ug/L		11/10/21 13:09	1
HMX	0.20	U	0.21	0.20	0.086	ug/L		11/10/21 13:09	1
MNX	0.39	U M	2.0	0.39	0.15	ug/L		11/10/21 13:09	1
Nitrobenzene	0.20	U M	0.21	0.20	0.089	ug/L		11/10/21 13:09	1
RDX	0.20	U M	0.21	0.20	0.051	ug/L		11/10/21 13:09	1
Tetryl	0.098	U M	0.11	0.098	0.031	ug/L		11/10/21 13:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dinitrobenzene	*102*	*M*	*83 - 119*	*11/08/21 14:30*	*11/10/21 13:09*	*1*
1,2-Dinitrobenzene	*89*	*M*	*83 - 119*	*11/08/21 14:30*	*11/11/21 10:50*	*1*

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ammonia	**0.45**		0.10	0.050	0.022	mg/L		11/22/21 16:24	1
Nitrogen, Total Kjeldahl	**1.9**		1.0	1.0	0.69	mg/L		11/17/21 19:54	1
Nitrate Nitrite as N	**0.11**		0.10	0.050	0.019	mg/L		11/18/21 18:50	1
Sulfide	**0.80**	**J**	4.0	1.9	0.79	mg/L		11/10/21 13:25	1
Sulfate	**34**		5.0	2.5	1.0	mg/L		11/22/21 20:30	1
Total Alkalinity as CaCO3	**580**	**B**	10	6.4	3.1	mg/L		11/18/21 19:08	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Dissolved Organic Carbon - Quad	**9.3**		1.0	0.80	0.35	mg/L		11/13/21 18:09	1

Default Detection Limits

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

Job ID: 280-155225-1

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: 280-155225-1

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)
280-155225-1	G0024-7	93 M
280-155225-2	G0077-7	91 M
280-155225-3	G0078-7	95 M
280-155225-4	G0092-7	95 M
280-155225-5	G0091-7	93 M
280-155225-6	G0086-7	81 Q
280-155225-7	PZ017R-7	105 M
280-155225-8	PZ018-7	118 M
280-155225-9	PZ021-7	102 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)
280-155225-1	G0024-7	96
280-155225-2	G0077-7	95 M
280-155225-3	G0078-7	95
280-155225-5	G0091-7	92
280-155225-6	G0086-7	96 M
280-155225-7	PZ017R-7	90 M
280-155225-8	PZ018-7	89 M
280-155225-9	PZ021-7	89 M

Surrogate Legend

12DNB = 1,2-Dinitrobenzene

Method: RSK-175 - Dissolved Gases (GC)

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

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: MB 280-557735/4
Matrix: Water
Analysis Batch: 557735

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		11/16/21 19:32	1

Lab Sample ID: LCS 280-557735/2
Matrix: Water
Analysis Batch: 557735

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	0.0665		mg/L		101	73 - 125

Lab Sample ID: LCSD 280-557735/3
Matrix: Water
Analysis Batch: 557735

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	1	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

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

Lab Sample ID: MB 280-556591/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 556781 — **Prep Batch: 556591**

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
2-Nitrotoluene	0.20	U	0.21	0.20	0.086	ug/L		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*

Lab Sample ID: LCS 280-556591/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 556781 — **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 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 556781 — **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*

Method: 350.1 - Nitrogen, Ammonia

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: MB 280-558390/55
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	0.0268	J	0.10	0.050	0.022	mg/L		11/22/21 11:56	1

Lab Sample ID: LCS 280-558390/53
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	2.52		mg/L		101	90 - 110		

Lab Sample ID: LCSD 280-558390/54
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	2.53		mg/L		101	90 - 110	1	10

Lab Sample ID: MB 280-558417/20
Matrix: Water
Analysis Batch: 558417

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 16:04	1

Lab Sample ID: LCS 280-558417/18
Matrix: Water
Analysis Batch: 558417

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

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

Lab Sample ID: LCSD 280-558417/19
Matrix: Water
Analysis Batch: 558417

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	2.39		mg/L		96	90 - 110	2	10

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 280-557730/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 557899 — **Prep Batch: 557730**

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 19:47	1

Lab Sample ID: LCS 280-557730/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 557899 — **Prep Batch: 557730**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrogen, Total Kjeldahl			6.00	5.71		mg/L		95	90 - 110		

Lab Sample ID: 280-155225-6 MS — **Client Sample ID: G0086-7**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 557899 — **Prep Batch: 557730**

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	2.63	J1	mg/L		88	90 - 110		

Lab Sample ID: 280-155225-6 MSD — **Client Sample ID: G0086-7**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 557899 — **Prep Batch: 557730**

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	2.62	J1	mg/L		87	90 - 110	0	25

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 280-558049/60 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 558049

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 17:53	1

Lab Sample ID: LCS 280-558049/59 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 558049

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate Nitrite as N			5.00	5.26		mg/L		105	90 - 110		

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

Lab Sample ID: MB 280-556749/2-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 556751 — **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

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

Lab Sample ID: LCS 280-556749/1-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 556751 — **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: MB 280-556892/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 556959 — **Prep Batch: 556892**

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		11/10/21 13:25	1

Lab Sample ID: LCS 280-556892/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 556959 — **Prep Batch: 556892**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide			18.6	12.0		mg/L		65	44 - 110		

Lab Sample ID: 280-155225-1 MS — **Client Sample ID: G0024-7**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 556959 — **Prep Batch: 556892**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide	3.6	J	18.6	15.2		mg/L		62	44 - 110		

Lab Sample ID: 280-155225-1 MSD — **Client Sample ID: G0024-7**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 556959 — **Prep Batch: 556892**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	3.6	J	18.6	14.4		mg/L		58	44 - 110	5	20

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 280-558325/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 558325

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	2.5	U M	5.0	2.5	1.0	mg/L		11/22/21 11:10	1

Lab Sample ID: LCS 280-558325/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 558325

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			100	95.1		mg/L		95	87 - 112		

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

Lab Sample ID: LCSD 280-558325/5
Matrix: Water
Analysis Batch: 558325

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	95.1		mg/L		95	87 - 112	0	10

Lab Sample ID: MRL 280-558325/3
Matrix: Water
Analysis Batch: 558325

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	4.11	J	mg/L		82	50 - 150

Lab Sample ID: MB 280-558471/6
Matrix: Water
Analysis Batch: 558471

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Sulfate	2.5	U M	5.0	2.5	1.0	mg/L		11/23/21 11:48	1

Lab Sample ID: LCS 280-558471/4
Matrix: Water
Analysis Batch: 558471

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	100	96.4		mg/L		96	87 - 112

Lab Sample ID: LCSD 280-558471/5
Matrix: Water
Analysis Batch: 558471

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	100	96.6		mg/L		97	87 - 112	0	10

Lab Sample ID: MRL 280-558471/3
Matrix: Water
Analysis Batch: 558471

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	4.08	J	mg/L		82	50 - 150

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

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

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

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: 280-155225-7 MS
Matrix: Water
Analysis Batch: 557476

Client Sample ID: PZ017R-7
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Dissolved Organic Carbon - Quad	9.1	J1	25.0	30.0	J1	mg/L		84	88 - 112		

Lab Sample ID: 280-155225-7 MSD
Matrix: Water
Analysis Batch: 557476

Client Sample ID: PZ017R-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	9.1	J1	25.0	30.0	J1	mg/L		83	88 - 112	0	15

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-557846/110
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	3.84	J Q	10	6.4	3.1	mg/L		11/17/21 07:38	1

Lab Sample ID: LCS 280-557846/109
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	219	Q	mg/L		110	89 - 109		

Lab Sample ID: MB 280-558096/31
Matrix: Water
Analysis Batch: 558096

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	5.22	J	10	6.4	3.1	mg/L		11/18/21 19:56	1

Lab Sample ID: MB 280-558096/5
Matrix: Water
Analysis Batch: 558096

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	5.84	J	10	6.4	3.1	mg/L		11/18/21 16:49	1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 280-558096/30
Matrix: Water
Analysis Batch: 558096

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	212		mg/L		106	89 - 109		

Lab Sample ID: LCS 280-558096/4
Matrix: Water
Analysis Batch: 558096

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	207		mg/L		104	89 - 109		

Lab Sample ID: 280-155225-1 DU
Matrix: Water
Analysis Batch: 558096

Client Sample ID: G0024-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity as CaCO3	210	B		208		mg/L				0.3	10

GC VOA

Analysis Batch: 557326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-1	G0024-7	Total/NA	Water	RSK-175	
280-155225-2	G0077-7	Total/NA	Water	RSK-175	
280-155225-3	G0078-7	Total/NA	Water	RSK-175	
280-155225-4	G0092-7	Total/NA	Water	RSK-175	
280-155225-5	G0091-7	Total/NA	Water	RSK-175	
280-155225-6	G0086-7	Total/NA	Water	RSK-175	
280-155225-8	PZ018-7	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	

Analysis Batch: 557735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-7	PZ017R-7	Total/NA	Water	RSK-175	
280-155225-9	PZ021-7	Total/NA	Water	RSK-175	
MB 280-557735/4	Method Blank	Total/NA	Water	RSK-175	
LCS 280-557735/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 280-557735/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	

HPLC/IC

Prep Batch: 556591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-1	G0024-7	Total/NA	Water	3535	
280-155225-2	G0077-7	Total/NA	Water	3535	
280-155225-3	G0078-7	Total/NA	Water	3535	
280-155225-4	G0092-7	Total/NA	Water	3535	
280-155225-5	G0091-7	Total/NA	Water	3535	
280-155225-6	G0086-7	Total/NA	Water	3535	
280-155225-7	PZ017R-7	Total/NA	Water	3535	
280-155225-8	PZ018-7	Total/NA	Water	3535	
280-155225-9	PZ021-7	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	

Analysis Batch: 556781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-1	G0024-7	Total/NA	Water	8330A	556591
280-155225-2	G0077-7	Total/NA	Water	8330A	556591
280-155225-3	G0078-7	Total/NA	Water	8330A	556591
280-155225-4	G0092-7	Total/NA	Water	8330A	556591
280-155225-5	G0091-7	Total/NA	Water	8330A	556591
280-155225-6	G0086-7	Total/NA	Water	8330A	556591
280-155225-7	PZ017R-7	Total/NA	Water	8330A	556591
280-155225-8	PZ018-7	Total/NA	Water	8330A	556591
280-155225-9	PZ021-7	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

HPLC/IC

Analysis Batch: 556958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-1	G0024-7	Total/NA	Water	8330A	556591
280-155225-2	G0077-7	Total/NA	Water	8330A	556591
280-155225-3	G0078-7	Total/NA	Water	8330A	556591
280-155225-5	G0091-7	Total/NA	Water	8330A	556591
280-155225-6	G0086-7	Total/NA	Water	8330A	556591
280-155225-7	PZ017R-7	Total/NA	Water	8330A	556591
280-155225-8	PZ018-7	Total/NA	Water	8330A	556591
280-155225-9	PZ021-7	Total/NA	Water	8330A	556591

General Chemistry

Prep Batch: 556749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-4	G0092-7	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	

Analysis Batch: 556751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-4	G0092-7	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

Prep Batch: 556892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-1	G0024-7	Total/NA	Water	9030B	
280-155225-2	G0077-7	Total/NA	Water	9030B	
280-155225-3	G0078-7	Total/NA	Water	9030B	
280-155225-5	G0091-7	Total/NA	Water	9030B	
280-155225-6	G0086-7	Total/NA	Water	9030B	
280-155225-7	PZ017R-7	Total/NA	Water	9030B	
280-155225-8	PZ018-7	Total/NA	Water	9030B	
280-155225-9	PZ021-7	Total/NA	Water	9030B	
MB 280-556892/1-A	Method Blank	Total/NA	Water	9030B	
LCS 280-556892/2-A	Lab Control Sample	Total/NA	Water	9030B	
280-155225-1 MS	G0024-7	Total/NA	Water	9030B	
280-155225-1 MSD	G0024-7	Total/NA	Water	9030B	

Analysis Batch: 556959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-1	G0024-7	Total/NA	Water	9034	556892
280-155225-2	G0077-7	Total/NA	Water	9034	556892
280-155225-3	G0078-7	Total/NA	Water	9034	556892
280-155225-5	G0091-7	Total/NA	Water	9034	556892
280-155225-6	G0086-7	Total/NA	Water	9034	556892
280-155225-7	PZ017R-7	Total/NA	Water	9034	556892
280-155225-8	PZ018-7	Total/NA	Water	9034	556892
280-155225-9	PZ021-7	Total/NA	Water	9034	556892
MB 280-556892/1-A	Method Blank	Total/NA	Water	9034	556892
LCS 280-556892/2-A	Lab Control Sample	Total/NA	Water	9034	556892
280-155225-1 MS	G0024-7	Total/NA	Water	9034	556892

General Chemistry (Continued)

Analysis Batch: 556959 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-1 MSD	G0024-7	Total/NA	Water	9034	556892

Filtration Batch: 557282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-1	G0024-7	Dissolved	Water	FILTRATION	
280-155225-2	G0077-7	Dissolved	Water	FILTRATION	
280-155225-3	G0078-7	Dissolved	Water	FILTRATION	
280-155225-4	G0092-7	Dissolved	Water	FILTRATION	
280-155225-5	G0091-7	Dissolved	Water	FILTRATION	
280-155225-6	G0086-7	Dissolved	Water	FILTRATION	
280-155225-7	PZ017R-7	Dissolved	Water	FILTRATION	
280-155225-8	PZ018-7	Dissolved	Water	FILTRATION	
280-155225-9	PZ021-7	Dissolved	Water	FILTRATION	
MB 280-557282/2-A	Method Blank	Dissolved	Water	FILTRATION	
LCS 280-557282/1-A	Lab Control Sample	Dissolved	Water	FILTRATION	
280-155225-7 MS	PZ017R-7	Dissolved	Water	FILTRATION	
280-155225-7 MSD	PZ017R-7	Dissolved	Water	FILTRATION	

Analysis Batch: 557476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-1	G0024-7	Dissolved	Water	9060A	557282
280-155225-2	G0077-7	Dissolved	Water	9060A	557282
280-155225-3	G0078-7	Dissolved	Water	9060A	557282
280-155225-4	G0092-7	Dissolved	Water	9060A	557282
280-155225-5	G0091-7	Dissolved	Water	9060A	557282
280-155225-6	G0086-7	Dissolved	Water	9060A	557282
280-155225-7	PZ017R-7	Dissolved	Water	9060A	557282
280-155225-8	PZ018-7	Dissolved	Water	9060A	557282
280-155225-9	PZ021-7	Dissolved	Water	9060A	557282
MB 280-557282/2-A	Method Blank	Dissolved	Water	9060A	557282
LCS 280-557282/1-A	Lab Control Sample	Dissolved	Water	9060A	557282
280-155225-7 MS	PZ017R-7	Dissolved	Water	9060A	557282
280-155225-7 MSD	PZ017R-7	Dissolved	Water	9060A	557282

Prep Batch: 557730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-1	G0024-7	Total/NA	Water	351.2	
280-155225-2	G0077-7	Total/NA	Water	351.2	
280-155225-3	G0078-7	Total/NA	Water	351.2	
280-155225-4	G0092-7	Total/NA	Water	351.2	
280-155225-5	G0091-7	Total/NA	Water	351.2	
280-155225-6	G0086-7	Total/NA	Water	351.2	
280-155225-7	PZ017R-7	Total/NA	Water	351.2	
280-155225-8	PZ018-7	Total/NA	Water	351.2	
280-155225-9	PZ021-7	Total/NA	Water	351.2	
MB 280-557730/2-A	Method Blank	Total/NA	Water	351.2	
LCS 280-557730/1-A	Lab Control Sample	Total/NA	Water	351.2	
280-155225-6 MS	G0086-7	Total/NA	Water	351.2	
280-155225-6 MSD	G0086-7	Total/NA	Water	351.2	

General Chemistry

Analysis Batch: 557846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-4	G0092-7	Total/NA	Water	SM 2320B	
280-155225-5	G0091-7	Total/NA	Water	SM 2320B	
280-155225-6	G0086-7	Total/NA	Water	SM 2320B	
280-155225-8	PZ018-7	Total/NA	Water	SM 2320B	
MB 280-557846/110	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-557846/109	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 557899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-1	G0024-7	Total/NA	Water	351.2	557730
280-155225-2	G0077-7	Total/NA	Water	351.2	557730
280-155225-3	G0078-7	Total/NA	Water	351.2	557730
280-155225-4	G0092-7	Total/NA	Water	351.2	557730
280-155225-5	G0091-7	Total/NA	Water	351.2	557730
280-155225-6	G0086-7	Total/NA	Water	351.2	557730
280-155225-7	PZ017R-7	Total/NA	Water	351.2	557730
280-155225-8	PZ018-7	Total/NA	Water	351.2	557730
280-155225-9	PZ021-7	Total/NA	Water	351.2	557730
MB 280-557730/2-A	Method Blank	Total/NA	Water	351.2	557730
LCS 280-557730/1-A	Lab Control Sample	Total/NA	Water	351.2	557730
280-155225-6 MS	G0086-7	Total/NA	Water	351.2	557730
280-155225-6 MSD	G0086-7	Total/NA	Water	351.2	557730

Analysis Batch: 558049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-1	G0024-7	Total/NA	Water	353.2	
280-155225-2	G0077-7	Total/NA	Water	353.2	
280-155225-3	G0078-7	Total/NA	Water	353.2	
280-155225-4	G0092-7	Total/NA	Water	353.2	
280-155225-5	G0091-7	Total/NA	Water	353.2	
280-155225-6	G0086-7	Total/NA	Water	353.2	
280-155225-7	PZ017R-7	Total/NA	Water	353.2	
280-155225-8	PZ018-7	Total/NA	Water	353.2	
280-155225-9	PZ021-7	Total/NA	Water	353.2	
MB 280-558049/60	Method Blank	Total/NA	Water	353.2	
LCS 280-558049/59	Lab Control Sample	Total/NA	Water	353.2	

Analysis Batch: 558096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-1	G0024-7	Total/NA	Water	SM 2320B	
280-155225-2	G0077-7	Total/NA	Water	SM 2320B	
280-155225-3	G0078-7	Total/NA	Water	SM 2320B	
280-155225-7	PZ017R-7	Total/NA	Water	SM 2320B	
280-155225-9	PZ021-7	Total/NA	Water	SM 2320B	
MB 280-558096/31	Method Blank	Total/NA	Water	SM 2320B	
MB 280-558096/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 280-558096/30	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 280-558096/4	Lab Control Sample	Total/NA	Water	SM 2320B	
280-155225-1 DU	G0024-7	Total/NA	Water	SM 2320B	

General Chemistry

Analysis Batch: 558325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-1	G0024-7	Total/NA	Water	9056A	
280-155225-2	G0077-7	Total/NA	Water	9056A	
280-155225-6	G0086-7	Total/NA	Water	9056A	
280-155225-7	PZ017R-7	Total/NA	Water	9056A	
280-155225-8	PZ018-7	Total/NA	Water	9056A	
280-155225-9	PZ021-7	Total/NA	Water	9056A	
MB 280-558325/6	Method Blank	Total/NA	Water	9056A	
LCS 280-558325/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-558325/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-558325/3	Lab Control Sample	Total/NA	Water	9056A	

Analysis Batch: 558390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-3	G0078-7	Total/NA	Water	350.1	
280-155225-5	G0091-7	Total/NA	Water	350.1	
280-155225-6	G0086-7	Total/NA	Water	350.1	
280-155225-7	PZ017R-7	Total/NA	Water	350.1	
280-155225-8	PZ018-7	Total/NA	Water	350.1	
MB 280-558390/20	Method Blank	Total/NA	Water	350.1	
MB 280-558390/55	Method Blank	Total/NA	Water	350.1	
LCS 280-558390/53	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-558390/54	Lab Control Sample Dup	Total/NA	Water	350.1	

Analysis Batch: 558417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-1	G0024-7	Total/NA	Water	350.1	
280-155225-2	G0077-7	Total/NA	Water	350.1	
280-155225-4	G0092-7	Total/NA	Water	350.1	
280-155225-9	PZ021-7	Total/NA	Water	350.1	
MB 280-558417/20	Method Blank	Total/NA	Water	350.1	
LCS 280-558417/18	Lab Control Sample	Total/NA	Water	350.1	
LCSD 280-558417/19	Lab Control Sample Dup	Total/NA	Water	350.1	

Analysis Batch: 558471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-155225-3	G0078-7	Total/NA	Water	9056A	
280-155225-4	G0092-7	Total/NA	Water	9056A	
280-155225-5	G0091-7	Total/NA	Water	9056A	
MB 280-558471/6	Method Blank	Total/NA	Water	9056A	
LCS 280-558471/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 280-558471/5	Lab Control Sample Dup	Total/NA	Water	9056A	
MRL 280-558471/3	Lab Control Sample	Total/NA	Water	9056A	

Client Sample ID: G0024-7
Lab Sample ID: 280-155225-1

Date Collected: 11/04/21 09:25
Matrix: Water
Date Received: 11/05/21 10:30

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 18:56	CAS	TAL DEN
Total/NA	Prep	3535			489 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556781	11/10/21 09:19	JZ	TAL DEN
Total/NA	Prep	3535			489 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556958	11/11/21 05:35	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558417	11/22/21 16:18	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557730	11/16/21 18:07	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:49	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	558049	11/18/21 18:15	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556892	11/10/21 09:52	LRB	TAL DEN
Total/NA	Analysis	9034		1			556959	11/10/21 13:25	LRB	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	558325	11/22/21 16:41	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	557282	11/12/21 12:38	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	557476	11/13/21 15:08	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			558096	11/18/21 20:03	ECC	TAL DEN

Client Sample ID: G0077-7
Lab Sample ID: 280-155225-2

Date Collected: 11/04/21 10:35
Matrix: Water
Date Received: 11/05/21 10:30

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 19:09	CAS	TAL DEN
Total/NA	Prep	3535			502 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556781	11/10/21 09:42	JZ	TAL DEN
Total/NA	Prep	3535			502 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556958	11/11/21 07:20	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558417	11/22/21 16:20	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557730	11/16/21 18:07	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:51	SVC	TAL DEN
Total/NA	Analysis	353.2		5	100 mL	100 mL	558049	11/18/21 18:17	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556892	11/10/21 09:52	LRB	TAL DEN
Total/NA	Analysis	9034		1			556959	11/10/21 13:25	LRB	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	558325	11/22/21 16:57	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	557282	11/12/21 12:38	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	557476	11/13/21 15:22	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			558096	11/18/21 20:17	ECC	TAL DEN

Client Sample ID: G0078-7
Lab Sample ID: 280-155225-3

Date Collected: 11/04/21 11:45
Matrix: Water
Date Received: 11/05/21 10:30

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 19:22	CAS	TAL DEN

Client Sample ID: G0078-7
Lab Sample ID: 280-155225-3

Date Collected: 11/04/21 11:45
Matrix: Water
Date Received: 11/05/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			486.1 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556781	11/10/21 10:05	JZ	TAL DEN
Total/NA	Prep	3535			486.1 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556958	11/11/21 07:55	JZ	TAL DEN
Total/NA	Analysis	350.1		2	10 mL	10 mL	558390	11/22/21 12:32	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557730	11/16/21 18:07	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:51	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	558049	11/18/21 18:19	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556892	11/10/21 09:52	LRB	TAL DEN
Total/NA	Analysis	9034		1			556959	11/10/21 13:25	LRB	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	558471	11/23/21 15:46	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	557282	11/12/21 12:38	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	557476	11/13/21 15:39	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			558096	11/18/21 19:31	ECC	TAL DEN

Client Sample ID: G0092-7
Lab Sample ID: 280-155225-4

Date Collected: 11/03/21 14:55
Matrix: Water
Date Received: 11/05/21 10:30

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 19:35	CAS	TAL DEN
Total/NA	Prep	3535			493.9 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556781	11/10/21 11:14	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558417	11/22/21 16:22	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557730	11/16/21 18:07	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:52	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	558049	11/18/21 18:21	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 16:02	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	557282	11/12/21 12:38	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	557476	11/13/21 15:56	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557846	11/17/21 09:33	ECC	TAL DEN

Client Sample ID: G0091-7
Lab Sample ID: 280-155225-5

Date Collected: 11/03/21 13:40
Matrix: Water
Date Received: 11/05/21 10:30

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 19:48	CAS	TAL DEN
Total/NA	Prep	3535			507.5 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556781	11/10/21 11:37	JZ	TAL DEN
Total/NA	Prep	3535			507.5 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556958	11/11/21 08:30	JZ	TAL DEN

Client Sample ID: G0091-7
Lab Sample ID: 280-155225-5

Date Collected: 11/03/21 13:40
Matrix: Water
Date Received: 11/05/21 10:30

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	558390	11/22/21 12:36	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557730	11/16/21 18:07	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:52	SVC	TAL DEN
Total/NA	Analysis	353.2		10	100 mL	100 mL	558049	11/18/21 18:23	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556892	11/10/21 09:52	LRB	TAL DEN
Total/NA	Analysis	9034		1			556959	11/10/21 13:25	LRB	TAL DEN
Total/NA	Analysis	9056A		5	5 mL	5 mL	558471	11/23/21 16:19	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	557282	11/12/21 12:38	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	557476	11/13/21 16:11	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557846	11/17/21 09:40	ECC	TAL DEN

Client Sample ID: G0086-7
Lab Sample ID: 280-155225-6

Date Collected: 11/03/21 15:05
Matrix: Water
Date Received: 11/05/21 10:30

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 20:01	CAS	TAL DEN
Total/NA	Prep	3535			504.3 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556781	11/10/21 12:00	JZ	TAL DEN
Total/NA	Prep	3535			504.3 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556958	11/11/21 09:06	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558390	11/22/21 12:38	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557730	11/16/21 18:07	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:54	SVC	TAL DEN
Total/NA	Analysis	353.2		2	100 mL	100 mL	558049	11/18/21 18:25	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556892	11/10/21 09:52	LRB	TAL DEN
Total/NA	Analysis	9034		1			556959	11/10/21 13:25	LRB	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	558325	11/22/21 19:41	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	557282	11/12/21 12:38	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	557476	11/13/21 16:25	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557846	11/17/21 09:48	ECC	TAL DEN

Client Sample ID: PZ017R-7
Lab Sample ID: 280-155225-7

Date Collected: 11/04/21 09:30
Matrix: Water
Date Received: 11/05/21 10:30

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		4	20 mL	20 mL	557735	11/16/21 20:24	GO	TAL DEN
Total/NA	Prep	3535			509.2 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556781	11/10/21 12:23	JZ	TAL DEN
Total/NA	Prep	3535			509.2 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556958	11/11/21 09:41	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558390	11/22/21 12:40	RKD	TAL DEN

Client Sample ID: PZ017R-7
Lab Sample ID: 280-155225-7

Date Collected: 11/04/21 09:30
Matrix: Water
Date Received: 11/05/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	351.2			25 mL	25 mL	557730	11/16/21 18:07	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:52	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	558049	11/18/21 18:27	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556892	11/10/21 09:52	LRB	TAL DEN
Total/NA	Analysis	9034		1			556959	11/10/21 13:25	LRB	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	558325	11/22/21 19:58	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	557282	11/12/21 12:38	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	557476	11/13/21 16:40	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			558096	11/18/21 18:58	ECC	TAL DEN

Client Sample ID: PZ018-7
Lab Sample ID: 280-155225-8

Date Collected: 11/04/21 11:05
Matrix: Water
Date Received: 11/05/21 10:30

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 20:27	CAS	TAL DEN
Total/NA	Prep	3535			498 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556781	11/10/21 12:46	JZ	TAL DEN
Total/NA	Prep	3535			498 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556958	11/11/21 10:15	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558390	11/22/21 12:42	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557730	11/16/21 18:07	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:52	SVC	TAL DEN
Total/NA	Analysis	353.2		1	100 mL	100 mL	558049	11/18/21 18:29	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556892	11/10/21 09:52	LRB	TAL DEN
Total/NA	Analysis	9034		1			556959	11/10/21 13:25	LRB	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	558325	11/22/21 20:14	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	557282	11/12/21 12:38	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	557476	11/13/21 17:54	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			557846	11/17/21 10:06	ECC	TAL DEN

Client Sample ID: PZ021-7
Lab Sample ID: 280-155225-9

Date Collected: 11/04/21 08:00
Matrix: Water
Date Received: 11/05/21 10:30

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		4	20 mL	20 mL	557735	11/16/21 20:38	GO	TAL DEN
Total/NA	Prep	3535			508.5 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556781	11/10/21 13:09	JZ	TAL DEN
Total/NA	Prep	3535			508.5 mL	5 mL	556591	11/08/21 14:30	CDH	TAL DEN
Total/NA	Analysis	8330A		1			556958	11/11/21 10:50	JZ	TAL DEN
Total/NA	Analysis	350.1		1	10 mL	10 mL	558417	11/22/21 16:24	RKD	TAL DEN
Total/NA	Prep	351.2			25 mL	25 mL	557730	11/16/21 18:07	SVC	TAL DEN
Total/NA	Analysis	351.2		1			557899	11/17/21 19:54	SVC	TAL DEN

Client Sample ID: PZ021-7
Date Collected: 11/04/21 08:00
Date Received: 11/05/21 10:30

Lab Sample ID: 280-155225-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		1	100 mL	100 mL	558049	11/18/21 18:50	SVC	TAL DEN
Total/NA	Prep	9030B			50 mL	50 mL	556892	11/10/21 09:52	LRB	TAL DEN
Total/NA	Analysis	9034		1			556959	11/10/21 13:25	LRB	TAL DEN
Total/NA	Analysis	9056A		1	5 mL	5 mL	558325	11/22/21 20:30	CJ	TAL DEN
Dissolved	Filtration	FILTRATION			1.0 mL	1.0 mL	557282	11/12/21 12:38	RAF	TAL DEN
Dissolved	Analysis	9060A		1	20 mL	20 mL	557476	11/13/21 18:09	RAF	TAL DEN
Total/NA	Analysis	SM 2320B		1			558096	11/18/21 19:08	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: 280-155225-1
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: 280-155225-1

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: 280-155225-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-155225-1	G0024-7	Water	11/04/21 09:25	11/05/21 10:30
280-155225-2	G0077-7	Water	11/04/21 10:35	11/05/21 10:30
280-155225-3	G0078-7	Water	11/04/21 11:45	11/05/21 10:30
280-155225-4	G0092-7	Water	11/03/21 14:55	11/05/21 10:30
280-155225-5	G0091-7	Water	11/03/21 13:40	11/05/21 10:30
280-155225-6	G0086-7	Water	11/03/21 15:05	11/05/21 10:30
280-155225-7	PZ017R-7	Water	11/04/21 09:30	11/05/21 10:30
280-155225-8	PZ018-7	Water	11/04/21 11:05	11/05/21 10:30
280-155225-9	PZ021-7	Water	11/04/21 08:00	11/05/21 10:30

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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.: 280-155225-1

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.: 280-155225-1

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.: 280-155225-1

SDG No.:

Instrument ID: VGC_J Analysis Batch Number: 557735

Lab Sample ID: CCVRT 280-557735/1 Client Sample ID:

Date Analyzed: 11/16/21 18:53 Lab File ID: 002F0201.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.17	Peak assignment corrected	ornelasg	11/16/21 19:44

Lab Sample ID: CCVRT 280-557735/1 Client Sample ID:

Date Analyzed: 11/16/21 18:53 Lab File ID: 002F0201.D GC Column: HP-Plot Q ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethylene	2.62	Peak assignment corrected	ornelasg	11/16/21 19:44
Acetylene	2.76	Split Peak	ornelasg	11/16/21 19:45

Lab Sample ID: CCV 280-557735/16 Client Sample ID:

Date Analyzed: 11/16/21 22:09 Lab File ID: 017F1701.D GC Column: Rt-Alumina KC ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetylene	4.25	Peak assignment corrected	ornelasg	11/17/21 10:48

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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.: 280-155225-1

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.: 280-155225-1

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.: 280-155225-1

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.: 280-155225-1

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.: 280-155225-1

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.: 280-155225-1

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: 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

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 556781

Lab Sample ID: 280-155225-1 Client Sample ID: G0024-7

Date Analyzed: 11/10/21 09:19 Lab File ID: 11090056.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 12:53
Tetryl		Invalid Compound ID	zhangji	11/10/21 12:53
2,4,6-Trinitrotoluene	10.96	Baseline	zhangji	11/10/21 12:53
4-Amino-2,6-dinitrotoluene	11.16	Baseline	zhangji	11/10/21 12:53
2-Amino-4,6-dinitrotoluene	11.41	Baseline	zhangji	11/10/21 12:53
2,4-Dinitrotoluene	11.75	Baseline	zhangji	11/10/21 12:53
4-Nitrotoluene	13.07	Baseline	zhangji	11/10/21 12:53

Lab Sample ID: 280-155225-2 Client Sample ID: G0077-7

Date Analyzed: 11/10/21 09:42 Lab File ID: 11090057.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 12:54
RDX	7.60	Baseline	zhangji	11/10/21 12:54
1,2-Dinitrobenzene	8.58	Baseline	zhangji	11/10/21 12:54
1,3,5-Trinitrobenzene	8.69	Baseline	zhangji	11/10/21 12:54
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	11/10/21 12:54
MNX		Baseline	zhangji	11/10/21 12:54
Nitrobenzene		Invalid Compound ID	zhangji	11/10/21 12:54
Tetryl		Invalid Compound ID	zhangji	11/10/21 12:54
2,4-Dinitrotoluene	11.76	Baseline	zhangji	11/10/21 12:54

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 556781

Lab Sample ID: 280-155225-3 Client Sample ID: G0078-7

Date Analyzed: 11/10/21 10:05 Lab File ID: 11090058.D GC Column: UltraCarb5uOD ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
RDX	7.63	Baseline	zhangji	11/10/21 12:55
1,2-Dinitrobenzene	8.57	Baseline	zhangji	11/10/21 12:55
HMX		Invalid Compound ID	zhangji	11/10/21 12:55

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

Lab Sample ID: 280-155225-4 Client Sample ID: G0092-7

Date Analyzed: 11/10/21 11:14 Lab File ID: 11090061.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 12:56
HMX		Invalid Compound ID	zhangji	11/10/21 12:55
Nitrobenzene		Invalid Compound ID	zhangji	11/10/21 12:55
Tetryl		Invalid Compound ID	zhangji	11/10/21 12:56

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 556781

Lab Sample ID: 280-155225-5 Client Sample ID: G0091-7

Date Analyzed: 11/10/21 11:37 Lab File ID: 11090062.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 12:56
RDX	7.59	Baseline	zhangji	11/10/21 12:57
1,2-Dinitrobenzene	8.57	Baseline	zhangji	11/10/21 12:57
MNX		Invalid Compound ID	zhangji	11/10/21 12:56

Lab Sample ID: 280-155225-6 Client Sample ID: G0086-7

Date Analyzed: 11/10/21 12:00 Lab File ID: 11090063.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 12:57
1,3-Dinitrobenzene		Invalid Compound ID	zhangji	11/10/21 12:57
MNX		Invalid Compound ID	zhangji	11/10/21 12:57
Tetryl		Invalid Compound ID	zhangji	11/10/21 12:57
2,4-Dinitrotoluene	11.76	Baseline	zhangji	11/10/21 12:57

Lab Sample ID: 280-155225-7 Client Sample ID: PZ017R-7

Date Analyzed: 11/10/21 12:23 Lab File ID: 11090064.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 12:58
2-Amino-4,6-dinitrotoluene		Baseline	zhangji	11/10/21 12:58
4-Nitrotoluene		Invalid Compound ID	zhangji	11/10/21 12:58
MNX		Invalid Compound ID	zhangji	11/10/21 12:58
Nitrobenzene		Invalid Compound ID	zhangji	11/10/21 12:58
RDX		Invalid Compound ID	zhangji	11/10/21 12:58
Tetryl		Invalid Compound ID	zhangji	11/10/21 12:58
2,4,6-Trinitrotoluene	10.95	Baseline	zhangji	11/10/21 12:58
4-Amino-2,6-dinitrotoluene	11.16	Baseline	zhangji	11/10/21 12:58

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Instrument ID: CHHPLC_X3 Analysis Batch Number: 556781

Lab Sample ID: 280-155225-8 Client Sample ID: PZ018-7

Date Analyzed: 11/10/21 12:46 Lab File ID: 11090065.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 13:13
1,3,5-Trinitrobenzene	8.67	Baseline	zhangji	11/10/21 13:13
1,3-Dinitrobenzene	9.30	Baseline	zhangji	11/10/21 13:13
3-Nitrotoluene		Invalid Compound ID	zhangji	11/10/21 13:14
MNX		Invalid Compound ID	zhangji	11/10/21 13:13
RDX		Invalid Compound ID	zhangji	11/10/21 13:13
Tetryl		Invalid Compound ID	zhangji	11/10/21 13:14
4-Nitrotoluene	13.07	Baseline	zhangji	11/10/21 13:14

Lab Sample ID: 280-155225-9 Client Sample ID: PZ021-7

Date Analyzed: 11/10/21 13:09 Lab File ID: 11090066.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 14:04
2-Amino-4,6-dinitrotoluene		Invalid Compound ID	zhangji	11/10/21 14:03
2-Nitrotoluene		Invalid Compound ID	zhangji	11/10/21 14:03
4-Nitrotoluene		Invalid Compound ID	zhangji	11/10/21 14:03
MNX		Invalid Compound ID	zhangji	11/10/21 14:03
Nitrobenzene		Invalid Compound ID	zhangji	11/10/21 14:03
RDX		Invalid Compound ID	zhangji	11/10/21 14:03
Tetryl		Invalid Compound ID	zhangji	11/10/21 14:03

Lab Sample ID: CCV 280-556781/68 Client Sample ID:

Date Analyzed: 11/10/21 13:55 Lab File ID: 11090068.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 14:20
DNX	6.79	Baseline	zhangji	11/10/21 14:20

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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.: 280-155225-1

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.: 280-155225-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 556958

Lab Sample ID: 280-155225-1 Client Sample ID: G0024-7

Date Analyzed: 11/11/21 05:35 Lab File ID: 11100031.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene		Invalid Compound ID	zhangji	11/11/21 19:04
2-Amino-4,6-dinitrotoluene	18.24	Baseline Smoothing	zhangji	11/11/21 19:05

Lab Sample ID: 280-155225-2 Client Sample ID: G0077-7

Date Analyzed: 11/11/21 07:20 Lab File ID: 11100034.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 19:05
MNX	7.36	Baseline Smoothing	zhangji	11/11/21 19:05
1,2-Dinitrobenzene	12.94	Baseline Smoothing	zhangji	11/11/21 19:05

Lab Sample ID: 280-155225-3 Client Sample ID: G0078-7

Date Analyzed: 11/11/21 07:55 Lab File ID: 11100035.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
MNX	7.36	Baseline Smoothing	zhangji	11/11/21 19:06
4-Amino-2,6-dinitrotoluene		Invalid Compound ID	zhangji	11/11/21 19:06

Lab Sample ID: 280-155225-5 Client Sample ID: G0091-7

Date Analyzed: 11/11/21 08:30 Lab File ID: 11100036.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 19:06
RDX	8.79	Baseline Smoothing	zhangji	11/11/21 19:06

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 556958

Lab Sample ID: 280-155225-6 Client Sample ID: G0086-7

Date Analyzed: 11/11/21 09:06 Lab File ID: 11100037.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 19:10
2-Nitrotoluene		Invalid Compound ID	zhangji	11/11/21 19:10
4-Nitrotoluene		Invalid Compound ID	zhangji	11/11/21 19:10
1,2-Dinitrobenzene	12.94	Baseline Smoothing	zhangji	11/11/21 19:10

Lab Sample ID: 280-155225-7 Client Sample ID: PZ017R-7

Date Analyzed: 11/11/21 09:41 Lab File ID: 11100038.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Nitrotoluene		Invalid Compound ID	zhangji	11/11/21 19:11
Nitrobenzene		Invalid Compound ID	zhangji	11/11/21 19:11
RDX		Invalid Compound ID	zhangji	11/11/21 19:11
1,2-Dinitrobenzene	12.92	Baseline Smoothing	zhangji	11/11/21 19:11

Lab Sample ID: 280-155225-8 Client Sample ID: PZ018-7

Date Analyzed: 11/11/21 10:15 Lab File ID: 11100039.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 19:11
2-Nitrotoluene		Invalid Compound ID	zhangji	11/11/21 19:11
RDX		Invalid Compound ID	zhangji	11/11/21 19:11
1,2-Dinitrobenzene	12.95	Baseline Smoothing	zhangji	11/11/21 19:11
2-Amino-4,6-dinitrotoluene	18.24	Baseline Smoothing	zhangji	11/11/21 19:11

HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Instrument ID: CHHPLC_X5 Analysis Batch Number: 556958

Lab Sample ID: 280-155225-9 Client Sample ID: PZ021-7

Date Analyzed: 11/11/21 10:50 Lab File ID: 11100040.D GC Column: Luna-phenylhe ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
3-Nitrotoluene		Invalid Compound ID	zhangji	11/11/21 19:12
RDX		Invalid Compound ID	zhangji	11/11/21 19:12
1,2-Dinitrobenzene	12.90	Baseline Smoothing	zhangji	11/11/21 19:12

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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.: 280-155225-1

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

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Batch Number: 558325

Lab Sample ID: CCB 280-558325/2 Client Sample ID:

Date Analyzed: 11/22/21 10:05 Lab File ID: 0002.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate		Unspecified		

Lab Sample ID: MB 280-558325/6 Client Sample ID:

Date Analyzed: 11/22/21 11:10 Lab File ID: 0006.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.73	Baseline Smoothing	jindaratc	11/23/21 12:11

GENERAL CHEMISTRY MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Batch Number: 558471

Lab Sample ID: MB 280-558471/6 Client Sample ID:

Date Analyzed: 11/23/21 11:48 Lab File ID: 0006.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.52	Baseline Smoothing	jindaratc	11/23/21 15:20

Lab Sample ID: 280-155225-5 Client Sample ID: G0091-7

Date Analyzed: 11/23/21 16:19 Lab File ID: 0021.d GC Column: Ion PAC AS 14 ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Sulfate	9.59	Baseline Smoothing	jindaratc	11/23/21 19:31

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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.: 280-155225-1

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.: 280-155225-1

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.: 280-155225-1

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
Alk daily lcs_01007	11/25/21	11/18/21	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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
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
.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
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
SFD ICV INT_02024	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	3.47566 g	Sulfide	928.001 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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

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

Reagent

50% NaOH_00022

RICCA CHEMICAL COMPANY®

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Arlington, TX 76012
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customerservice@riccachemical.com

Certificate of Analysis

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

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

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

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

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

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

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

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

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

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



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

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

Reagent

8330 LCS_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
HMX	002691-41-0	RM06237	1000 ± 5 µg/mL
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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

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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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Fax: (814)353-1309

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.:** 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)

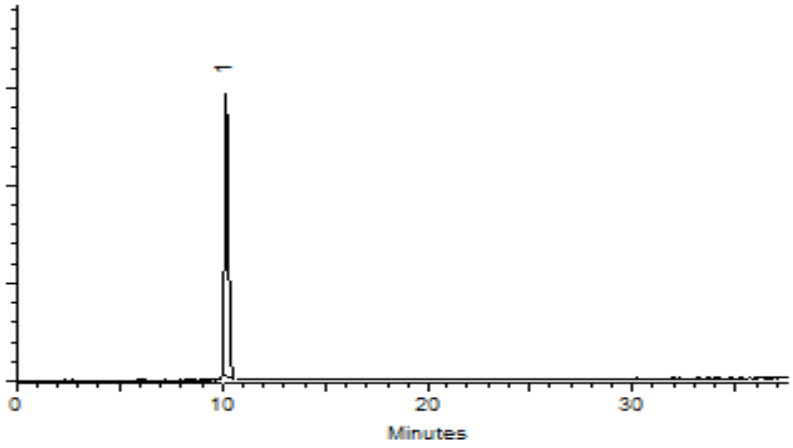
Flow Rate:
1.0 ml/min.

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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Tel: (800)356-1688
Fax: (814)353-1309

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)

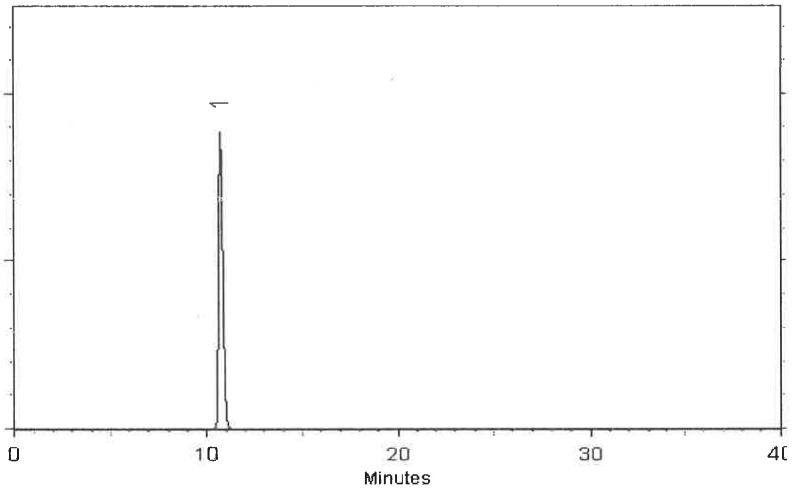
Flow Rate:
1.0 ml/min.

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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Fax: (814)353-1309

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Certificate of Composition

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ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

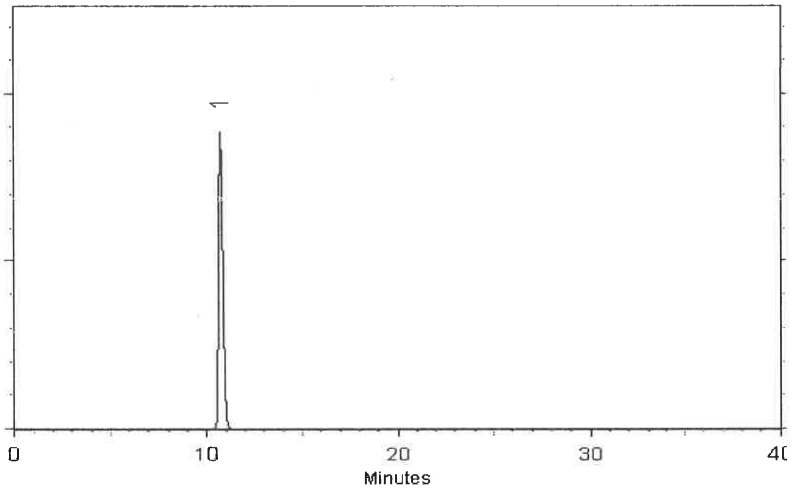
Flow Rate:
1.0 ml/min.

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

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

www.restek.com

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.:** 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)

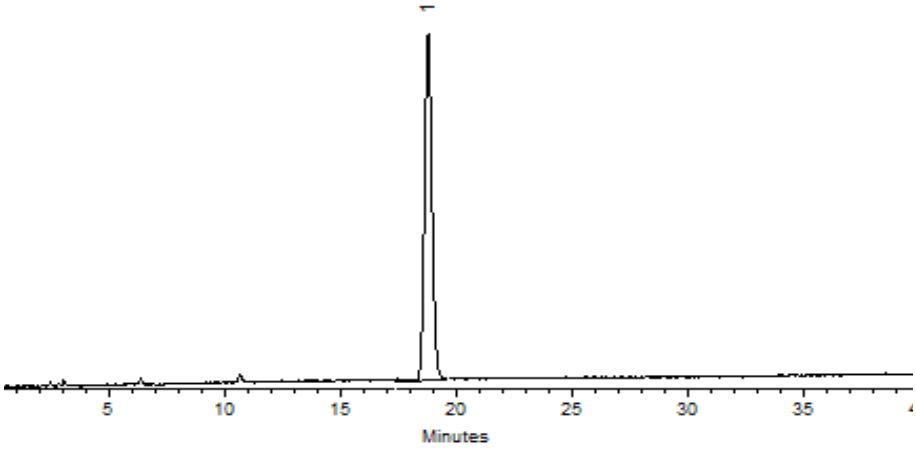
Flow Rate:
1.0 ml/min.

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

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Composition

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Testing Laboratory
Certificate #3222.02

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

Catalog No. : 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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110 Benner Circle
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Tel: (800)356-1688
Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

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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 21/9/21 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 #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. : 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)

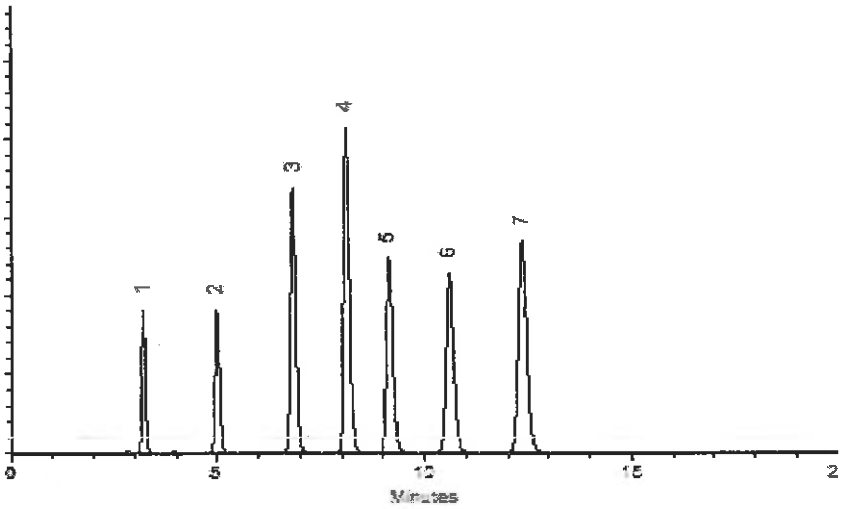
Flow Rate:
1.0 ml/min.

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

8330LCSMix1_00124

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

RESTEK CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis

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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)

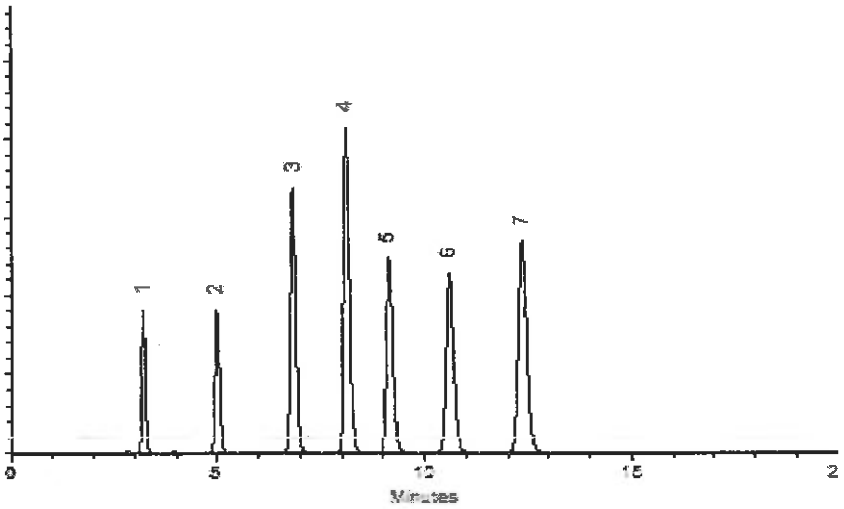
Flow Rate:
1.0 ml/min.

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

8330LCSmix2_00023

Rec 1/22/21 at 2 vials

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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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

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

Page 1 of 1

For use in routine laboratory analysis.

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)

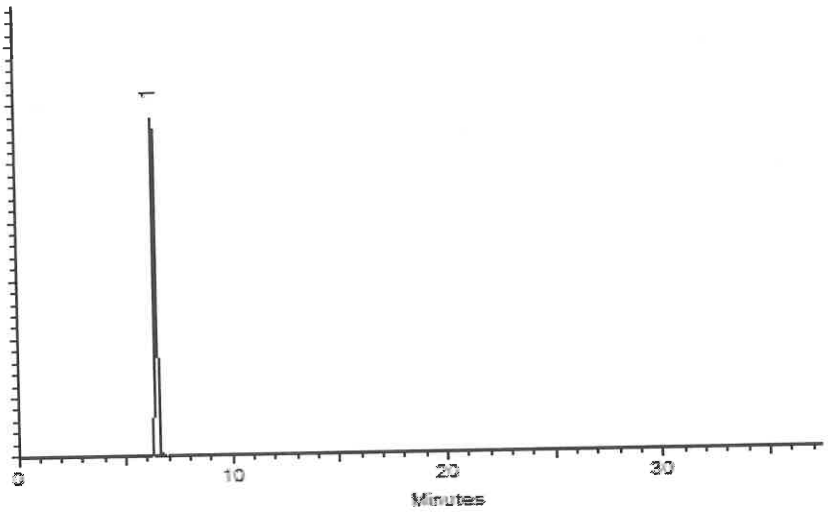
Flow Rate:
1.0 ml/min.

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 #3222.01

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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	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_00188

Rec 1/22/21 w/ 2 vials

RESTEK

CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
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	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.
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- Purity of isomeric compounds is reported as the sum of the isomers.
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Certified Uncertainty Value Notes:

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

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

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

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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_00192

Rec 1/22/21 @ 2 vials

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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Reagent

8330SurrStkSS_00193

Rec 1/22/21 @ 2 vials

RESTEK

CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis

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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:

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- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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

Handling Notes:

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Reagent

8330SurrStkSS_00195

Rec 1/22/21 @ 2 vials

RESTEK

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Certificate #3222.02

Certificate of Analysis

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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.
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- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

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Reagent

8330SurrStkSS_00197

Rec 1/22/21 @ 2 vials

RESTEK

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Certificate of Analysis

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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:

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Manufacturing Notes:

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Reagent

8330SurrStkSS_00200

Rec 1/22/21 @ 2 vials

RESTEK

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Certificate of Analysis

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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:

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Reagent

8330SurrStkSS_00202

Rec 1/22/21 @ 2 vials

RESTEK

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Certificate of Analysis

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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

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Reagent

8330SurrStock_00164

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

Catalog No: M-8330-SS
Description: 1,2-Dinitrobenzene
Lot: 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

125 Market Street
New Haven, CT 06513
USA

AccuStandard®

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

CERTIFICATE OF ANALYSIS

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



Signal Word: Danger

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

Certified Reference Material

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

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

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

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

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

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

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

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

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

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

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

Reagent

Alk stk std_00022

spex certiprep

ACCREDITED
Reference Materials Producer
Cert# 2495.01

SPEXertificate®
Certificate of Reference Material

ilac-MRA ACCREDITED
Chemical Testing
Cert# 2495.02

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

Description: Custom Standard

Matrix: H_2O

This Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for conductance meters and conductivity cells used in water purity measurements. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

The CRM is prepared gravimetrically using high purity sodium carbonate (Na_2CO_3) Lot# H04155 and ASTM Type I water, using Class A laboratory ware to give precise concentration.

Certified Value:

Analyte:	Na_2CO_3
Alkalinity:	50,000 µg/mL as $CaCO_3$
Uncertainty:	±500 µg/mL
Traceable to:	Standard made from NIST SRM # 351a

Balances are calibrated regularly with weight sets traceable to NIST#s 32856, 32867. This CRM is guaranteed stable to ±1% of the certified concentration inclusive of uncertainty of measurements and other components such as homogeneity, long and short-term stability for a period of one year from the date of certification. This guarantee is valid only when the material is kept tightly capped and stored under ambient laboratory conditions.

Date of Certification: OCT - - 2021

Certifying Officer: Katherine Cullinan

Katherine Cullinan, QC Manager

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Report of Certification

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

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

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

Instructions for Use:
Primary usage of this CRM is in neat form or diluted serially with matrix of a purity at or greater than the purity of the original matrix solution. If dilution is required, the diluent must be compatible with all certified analytes and contain stabilizers appropriate for the period of intended use. The CRM can also be used as a spike or with a spike, again with appropriate compatibility considerations. All solutions should be thoroughly mixed, by shaking, prior to use and never pipetted directly from the bottle. Do not return excess solution to the bottle. All surfaces that come in contact with the solution must be thoroughly cleaned and leached prior to use. Dilutions should be performed only with Class A volumetric glassware. See SDS for health and safety information.

Method of Preparation:
Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

Homogeneity:
The homogeneity of the CRM has been confirmed by procedures consistent with ISO/IEC 17025, ISO 17034, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

Statistical Estimator and Confidence Limits:
The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X = certified value, U = expanded uncertainty, x = property value
- $U = ku_c$ where k = 2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual element standard uncertainty components u_i and $u_c = \sqrt{\Sigma u_i^2}$

Certification Report:
All certified values reported were derived from the Certification Report, Spex CertiPrep's traceability documentation, identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact Sales Support at CRMSales@spex.com.

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

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Reagent

IC BR ICV_00021

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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

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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.

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Reagent

IC FL cal_00016

RICCA CHEMICAL COMPANY®

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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 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, 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
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: FEB - - 2021 Certifying Officer: Katherine Cullinan, QC Manager

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Report of Certification

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- ISO 17034: General requirements for the competence of reference material producers
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- 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:

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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.

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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.

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_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.

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

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

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

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

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

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

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

Certificate of Analysis

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

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

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

Sample lot approver:

Monica Bourgeois
QMS Representative

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

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

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

Reagent

NH3 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.

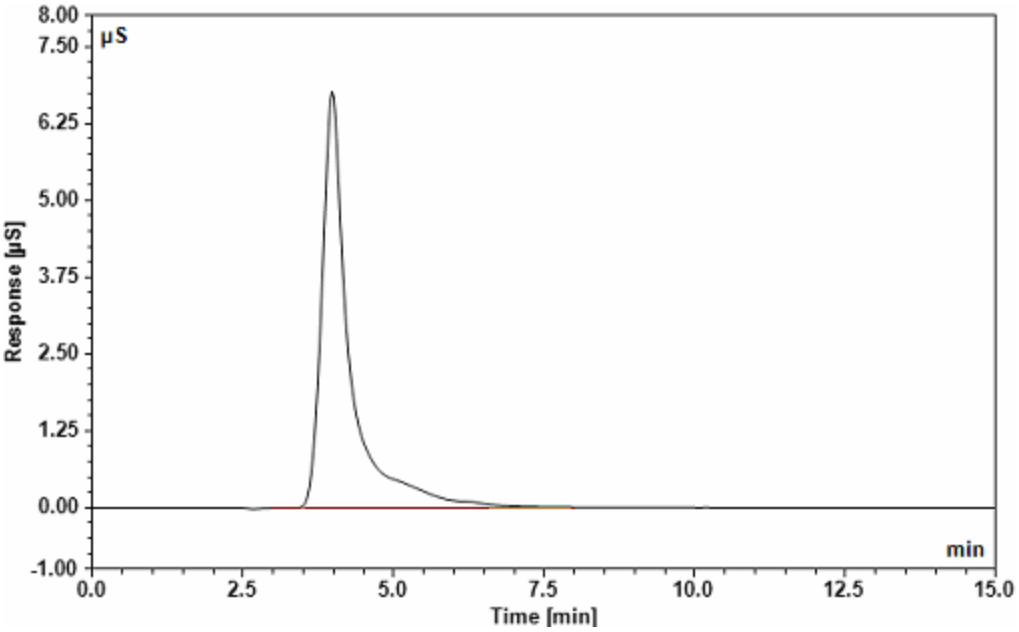
4.2 Balance Calibration

- 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

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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 (Lot 06130CU) **Purity** 97%	1,006.9 µg/mL	+/- 5.9804 µg/mL +/- 55.1588 µg/mL +/- 64.3206 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)

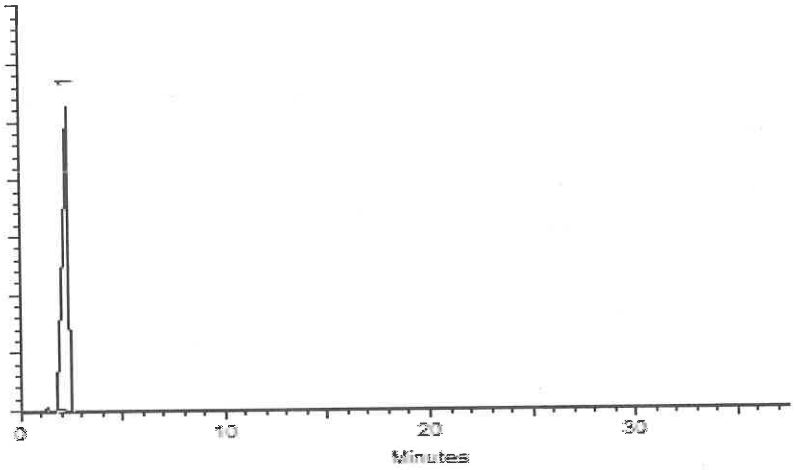
Flow Rate:
1.0 ml/min.

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)
*DL039162

	Requested Concentration	Certified Concentration	Units -	Blend Tolerance	Certified Accuracy
Butane	1.00	1.00	%	±10%	±2%
Acetylene	1.00	1.00	%	±10%	±2%
Isobutylene	1.00	1.01	%	±10%	±2%
Propane	1.00	1.00	%	±10%	±2%
Ethane	1.00	1.01	%	±10%	±2%
Ethylene	1.00	1.00	%	±10%	±2%
Methane	1.00	1.00	%	±10%	±2%
Nitrogen	Balance	Balance			

TRACEABILITY

COMMENTS

* Indicates the actual cylinder(s) analyzed.

Lot No: 9300606746
Fill Date: 02/23/2020
Expiration Date: 03/09/2022
Analysis Date: 03/09/2020

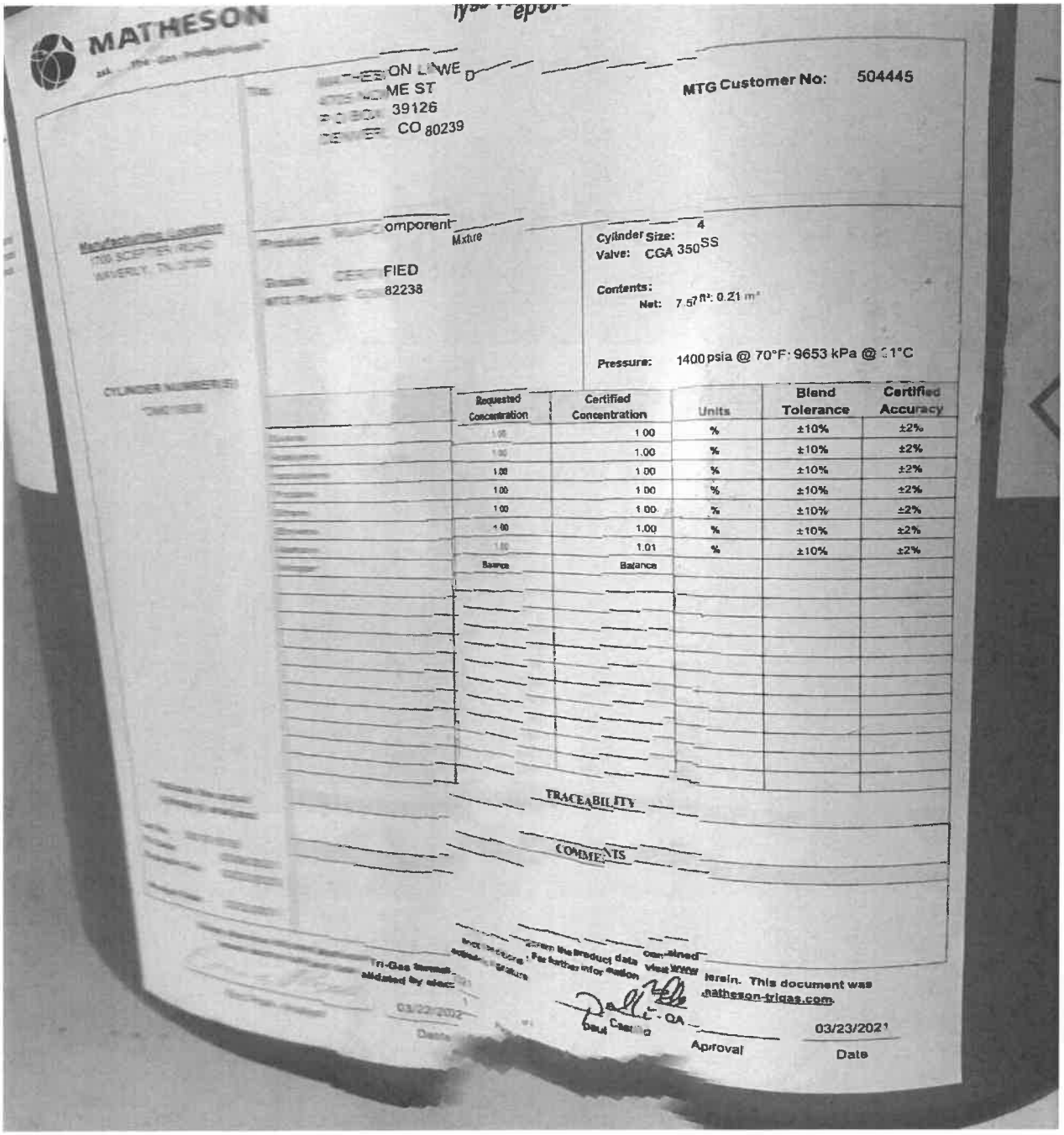
Unless otherwise indicated, Matheson Tri-Gas terms and conditions govern the product data contained herein. This document was issued electronically and data validated by electronic signature. For further information visit www.matheson-trigas.com.

Eric Popa - Analyst — 03/09/2020 Date

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

Reagent

RSK7gasMathes_00034


MATHESON
MTG Customer No: 504445
CO 80239
Component
Mixture
Cylinder Size: 4
Valve: CGA 350 SS
Contents:
Net: 7.57 ft³: 0.21 m³
Pressure: 1400 psia @ 70°F: 9653 kPa @ 21°C
Requested Concentration
Certified Concentration
Units
Blend Tolerance
Certified Accuracy
1.00 % ±10% ±2%
1.00 % ±10% ±2%
1.00 % ±10% ±2%
1.00 % ±10% ±2%
1.00 % ±10% ±2%
1.00 % ±10% ±2%
1.01 % ±10% ±2%
Balance Balance
TRACEABILITY
COMMENTS
03/22/2021
03/23/2021
Date
Approval
Date

MTG Part No: [illegible]

Net: [illegible]

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

CYLINDER NUMBER(S)

*DM019038

	Requested Concentration	Certified Concentration	Units	Blend Tolerance	Certified Accuracy
Butane	1.00	1.00	%	±10%	±2%
Acetylene	1.00	1.00	%	±10%	±2%
Isobutylene	1.00	1.00	%	±10%	±2%
Propane	1.00	1.00	%	±10%	±2%
Ethane	1.00	1.00	%	±10%	±2%
Ethylene	1.00	1.00	%	±10%	±2%
Methane	1.00	1.01	%	±10%	±2%
Nitrogen	Balance	Balance			

TRACEABILITY

COMMENTS

*** indicates the actual cylinder(s) analyzed.**

Lot No: 9301615705
Fill Date: 03/08/2021
Expiration Date: 03/22/2023

Analysis Date: 03/22/2021

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

Eric Popa - Analyst — 03/22/2021 (Date)

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

Page 1 of 1

[redacted]

Reagent

SFD ICV INT_02024

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:	########
Normality:	0.025	Made By:	JM
Solution 2:	sodium thiosulfate	Concentration:	876
TALS ID	Na Thio_00174	Expiration Date:	1/10/2022
Normality:	0.025		
	Starch Indicator		
TALS ID	Starch IND_00066		

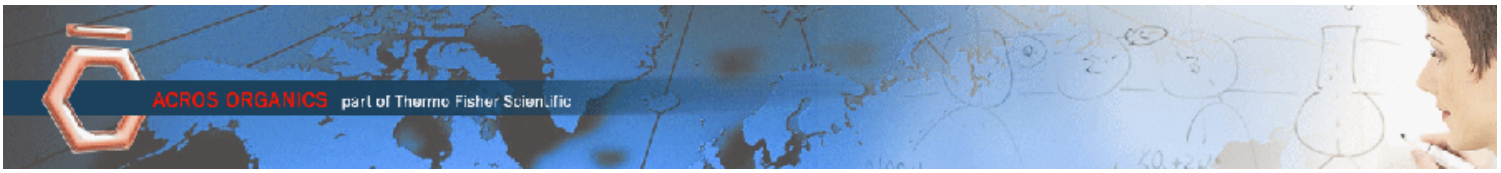
	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
CAL	5	0.00	8.80	20	8.80	896.000
CAL	5	8.80	18.10	20	9.30	856.000

ICV Information	
Source/Ver-Lot#:	INT_0190
Prep Date:	########
Made By:	JM
Concentration:	928
Expiration Date:	1/10/2022

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	8.00	20	8.00	960.000
ICV	5	8.00	16.80	20	8.80	896.000

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

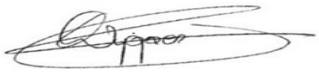
warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to human or animals. It is the responsiblity of the purchaser, formulator or those performing further manufacturing to determine suitability based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

TKN CAL STD_00019

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Certificate of Analysis

TKN Calibration Standard - 1000 mg/L

Catalog Number: IS-009, IS-009-500
Lot Number: 200817
Manufacture Date: 08/17/20
Certified Date: 08/17/20

Expiration: 08/31/2024
Matrix: Water
Hazards: Irritant
(See MSDS)

Bulk Number	Analyte	CAS #	Purity	Certified Concentration (mg/L TKN)
W-1477-30	TKN from Glycine	56-40-6	99.8%	1000 ± 4.60

Packaging, Storage, Instructions For Use

Store at room temperature (15-30°C). After opening, this solution should be stored tightly capped at 2-8°C.

This certified reference material (CRM) is packaged in low density polyethylene. Allow to equilibrate to room temperature before use. Small aliquots should be poured out of the bottle rather than directly pipetted out of bottle in order to prevent contamination or premature degradation. A 1 mL sample size is recommended. Smaller sample volumes may negatively affect estimated uncertainty.

Traceability Information

Analyte Source Materials: The highest purity analyte source materials are used in the manufacture of this CRM. The actual purity is referenced above. Analyte source material purity and associated uncertainty has been analytically verified against appropriate NIST SRMs, if available.

Method: Certified concentration confirmed by HPLC analysis against an independent reference standard with n=3.

Balance: All analytical balances are calibrated on a semiannual basis by an ISO 17025 accredited calibration laboratory and are traceable to NIST. Traceable Calibration Certificate available upon request.

All balances are checked daily by an in-house standard operating procedure. The weights used for this daily verification are calibrated annually by an ISO 17025 accredited calibration laboratory and are certified traceable to NIST. Certificate of Calibration and Traceability available upon request.

Thermometer: All thermometers are NIST traceable through thermometers that are calibrated annually by an ISO 17025 accredited calibration laboratory.

Glassware: All glassware used in the manufacture of our CRMs is Class A. An in-house standard operating procedure is used to verify all glassware prior to it being placed into service. Volumetric pipetors are calibrated every four months by an ISO 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®

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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.: 280-155225-1

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 RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

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

Lab ID: LCS 280-557735/2 Client ID:

COMPOUND	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC	QC LIMITS REC	#
Methane	0.0657	0.0665	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.: 280-155225-1

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 LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

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

Lab ID: LCSD 280-557735/3 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	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.: 280-155225-1

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
G0024-7	280-155225-1	11/12/2021 18:56	11/12/2021 18:56
G0077-7	280-155225-2	11/12/2021 19:09	11/12/2021 19:09
G0078-7	280-155225-3	11/12/2021 19:22	11/12/2021 19:22
G0092-7	280-155225-4	11/12/2021 19:35	11/12/2021 19:35
G0091-7	280-155225-5	11/12/2021 19:48	11/12/2021 19:48
G0086-7	280-155225-6	11/12/2021 20:01	11/12/2021 20:01
PZ018-7	280-155225-8	11/12/2021 20:27	11/12/2021 20:27

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Lab Sample ID: MB 280-557735/4

Matrix: Water Date Extracted:

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

Date Analyzed:(1) 11/16/2021 19:32 Date Analyzed:(2) 11/16/2021 19:32

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 280-557735/2	11/16/2021 19:06	11/16/2021 19:06
	LCSD 280-557735/3	11/16/2021 19:19	11/16/2021 19:19
PZ017R-7	280-155225-7	11/16/2021 20:24	11/16/2021 20:24
PZ021-7	280-155225-9	11/16/2021 20:38	11/16/2021 20:38

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: G0077-7 Lab Sample ID: 280-155225-2

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

Date Analyzed (1): 11/12/2021 19:09 Date Analyzed (2): 11/12/2021 19:09

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	0.96		5.9
	2		1.29	1.26	1.34	1.0		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: G0078-7 Lab Sample ID: 280-155225-3

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

Date Analyzed (1): 11/12/2021 19:22 Date Analyzed (2): 11/12/2021 19:22

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		1.67	1.64	1.72	0.21		5.6
	2		1.29	1.26	1.34	0.22		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: G0092-7 Lab Sample ID: 280-155225-4

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

Date Analyzed (1): 11/12/2021 19:35 Date Analyzed (2): 11/12/2021 19:35

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		1.67	1.64	1.72	0.070		5.6
	2		1.29	1.26	1.34	0.074		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: G0086-7 Lab Sample ID: 280-155225-6

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

Date Analyzed (1): 11/12/2021 20:01 Date Analyzed (2): 11/12/2021 20:01

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.64	1.72	0.0092		6.0
	2		1.28	1.26	1.34	0.0098		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: PZ017R-7 Lab Sample ID: 280-155225-7

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

Date Analyzed (1): 11/16/2021 20:24 Date Analyzed (2): 11/16/2021 20:24

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	21		3.9
	2		1.29	1.26	1.34	22		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: PZ018-7 Lab Sample ID: 280-155225-8

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

Date Analyzed (1): 11/12/2021 20:27 Date Analyzed (2): 11/12/2021 20:27

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.66	1.64	1.72	16		5.2
	2		1.29	1.26	1.34	17		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: PZ021-7 Lab Sample ID: 280-155225-9

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

Date Analyzed (1): 11/16/2021 20:38 Date Analyzed (2): 11/16/2021 20:38

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.67	1.63	1.71	24		4.1
	2		1.29	1.25	1.33	25		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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.: 280-155225-1

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 X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-557735/2

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

Date Analyzed (1): 11/16/2021 19:06 Date Analyzed (2): 11/16/2021 19:06

GC Column (1): HP-Plot Q ID: 0.53(mm) GC Column (2): Rt-Alumina KC ID: 0.53(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Methane	1		1.69	1.65	1.73	0.0665		1.2
	2		1.30	1.26	1.34	0.0657		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-557735/3

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

Date Analyzed (1): 11/16/2021 19:19 Date Analyzed (2): 11/16/2021 19:19

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		1.68	1.65	1.73	0.0670		1.2
	2		1.30	1.26	1.34	0.0662		

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: G0024-7 Lab Sample ID: 280-155225-1

Matrix: Water Lab File ID: 023F2301.D

Analysis Method: RSK-175 Date Collected: 11/04/2021 09:25

Sample wt/vol: 20(mL) Date Analyzed: 11/12/2021 18:56

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.: 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\023F2301.D
Lims ID: 280-155225-G-1
Client ID: G0024-7
Sample Type: Client
Inject. Date: 12-Nov-2021 18:56:48 ALS Bottle#: 23 Worklist Smp#: 23
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155225-G-1
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 16:56:58 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: meierg Date: 15-Nov-2021 16:55:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						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

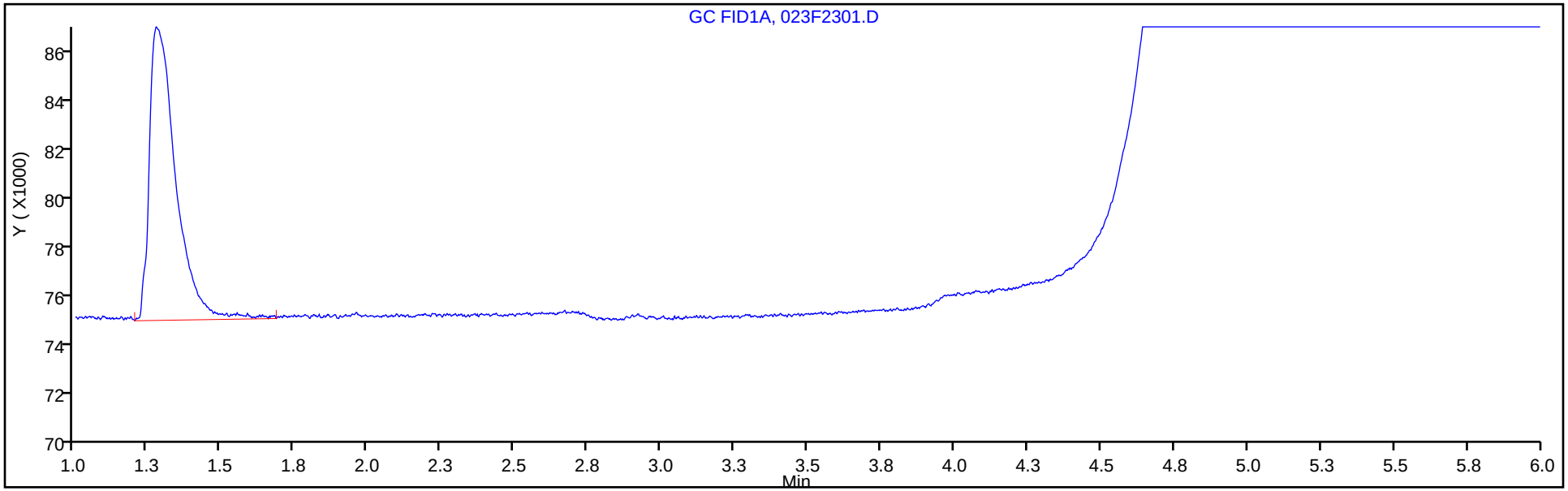
Report Date: 15-Nov-2021 16:57:00 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

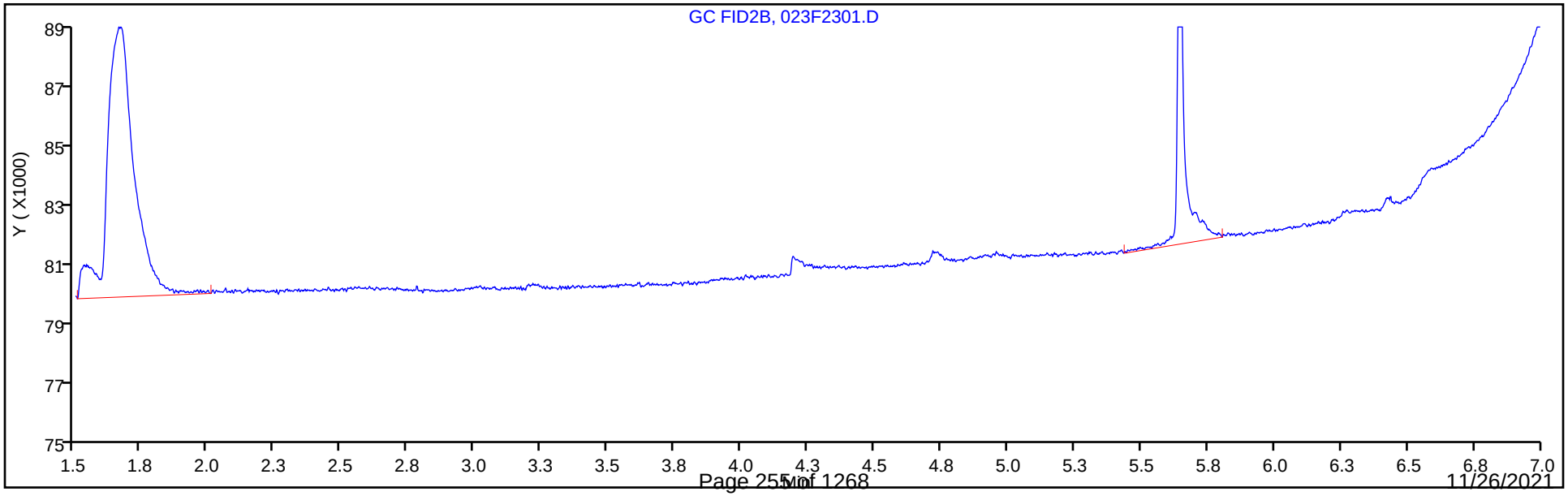
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\023F2301.D

Injection Date:	12-Nov-2021 18:56:48	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155225-G-1	Lab Sample ID:	280-155225-1	Worklist Smp#:	23
Client ID:	G0024-7				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: G0077-7 Lab Sample ID: 280-155225-2

Matrix: Water Lab File ID: 024F2401.D

Analysis Method: RSK-175 Date Collected: 11/04/2021 10:35

Sample wt/vol: 20(mL) Date Analyzed: 11/12/2021 19:09

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	0.96		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\024F2401.D
Lims ID: 280-155225-G-2
Client ID: G0077-7
Sample Type: Client
Inject. Date: 12-Nov-2021 19:09:52 ALS Bottle#: 24 Worklist Smp#: 24
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155225-G-2
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 16:56:58 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: meierg Date: 15-Nov-2021 16:55:46

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.288	1.298	-0.010	35765672	1015.1	
2	1.668	1.683	-0.015	34605856	956.8	
					RPD = 5.91	
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

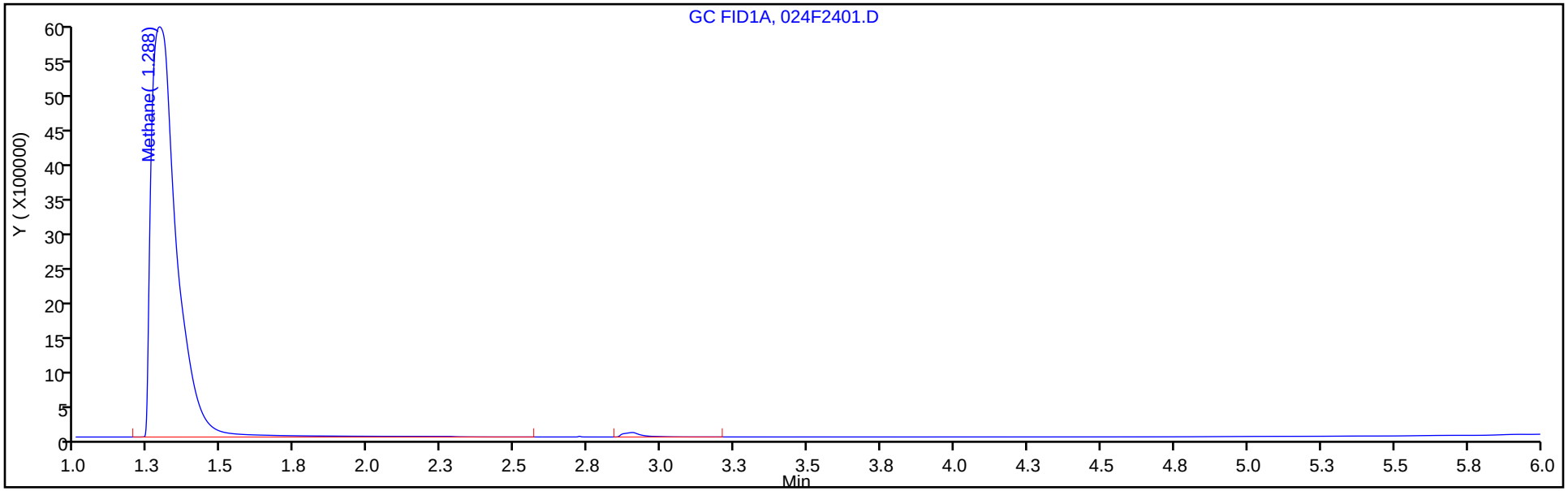
Report Date: 15-Nov-2021 16:57:00 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

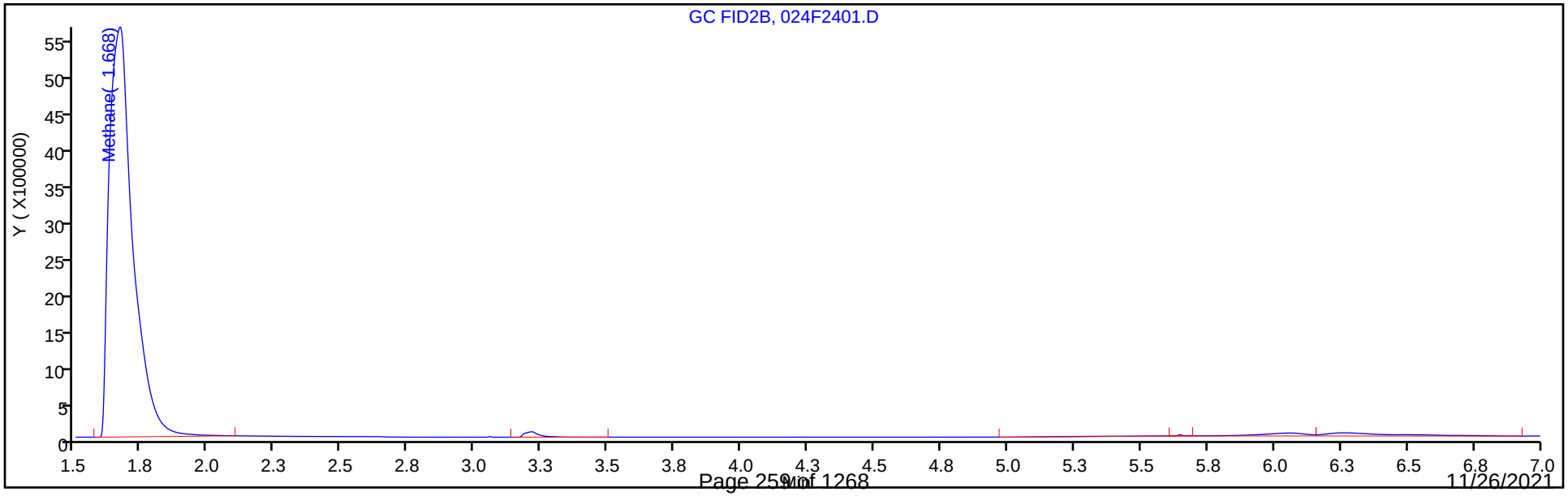
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\024F2401.D

Injection Date:	12-Nov-2021 19:09:52	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155225-G-2	Lab Sample ID:	280-155225-2	Worklist Smp#:	24
Client ID:	G0077-7				
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: G0078-7 Lab Sample ID: 280-155225-3

Matrix: Water Lab File ID: 025F2501.D

Analysis Method: RSK-175 Date Collected: 11/04/2021 11:45

Sample wt/vol: 20(mL) Date Analyzed: 11/12/2021 19:22

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	0.21		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\025F2501.D
Lims ID: 280-155225-H-3
Client ID: G0078-7
Sample Type: Client
Inject. Date: 12-Nov-2021 19:22:49 ALS Bottle#: 25 Worklist Smp#: 25
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155225-H-3
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 16:56:58 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: meierg Date: 15-Nov-2021 16:55:54

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.287	1.298	-0.011	7929583	223.6	
2	1.668	1.683	-0.015	7698986	211.5	
					RPD = 5.55	
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

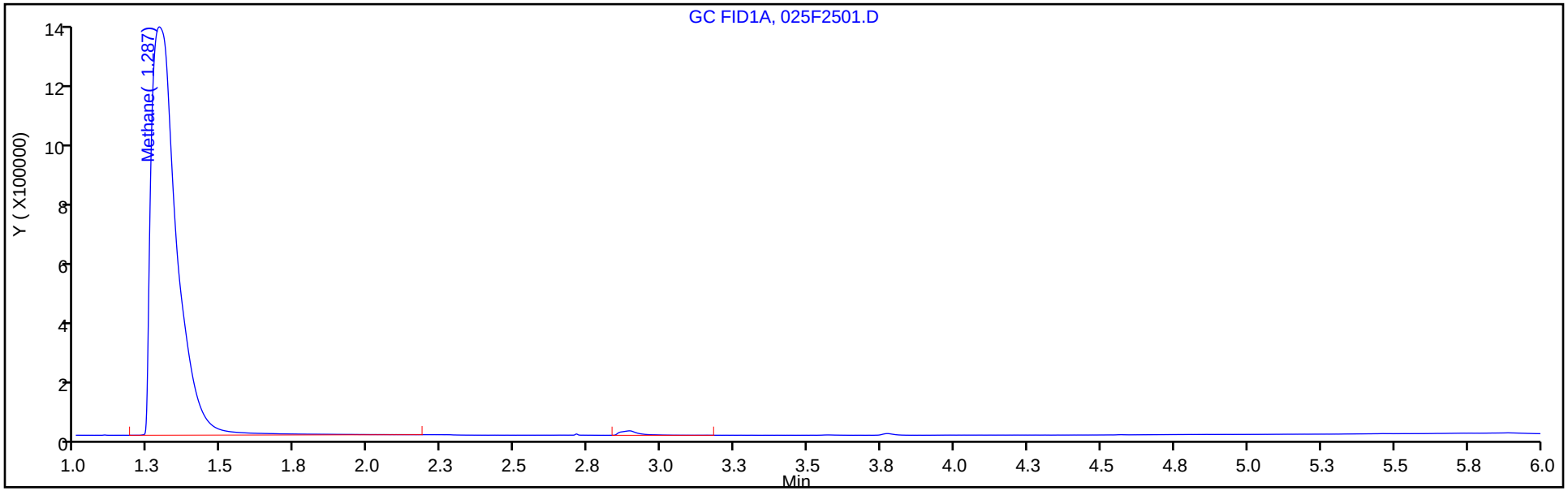
Report Date: 15-Nov-2021 16:57:01 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

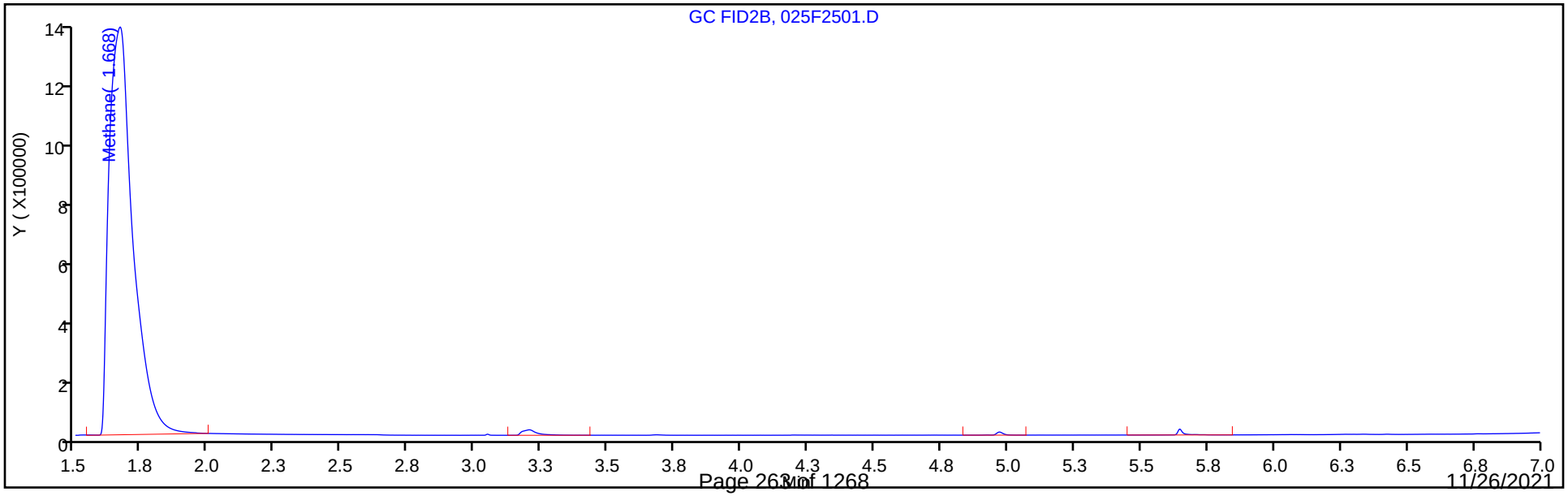
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\025F2501.D

Injection Date:	12-Nov-2021 19:22:49	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155225-H-3	Lab Sample ID:	280-155225-3	Worklist Smp#:	25
Client ID:	G0078-7				
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.: 280-155225-1

SDG No.:

Client Sample ID: G0092-7 Lab Sample ID: 280-155225-4

Matrix: Water Lab File ID: 026F2601.D

Analysis Method: RSK-175 Date Collected: 11/03/2021 14:55

Sample wt/vol: 20(mL) Date Analyzed: 11/12/2021 19:35

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	0.070		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\026F2601.D
Lims ID: 280-155225-G-4
Client ID: G0092-7
Sample Type: Client
Inject. Date: 12-Nov-2021 19:35:45 ALS Bottle#: 26 Worklist Smp#: 26
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155225-G-4
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 16:56:58 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: meierg Date: 15-Nov-2021 16:55:59

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.286	1.298	-0.012	2684345	74.5	
2	1.666	1.683	-0.017	2604076	70.4	
					RPD = 5.62	
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

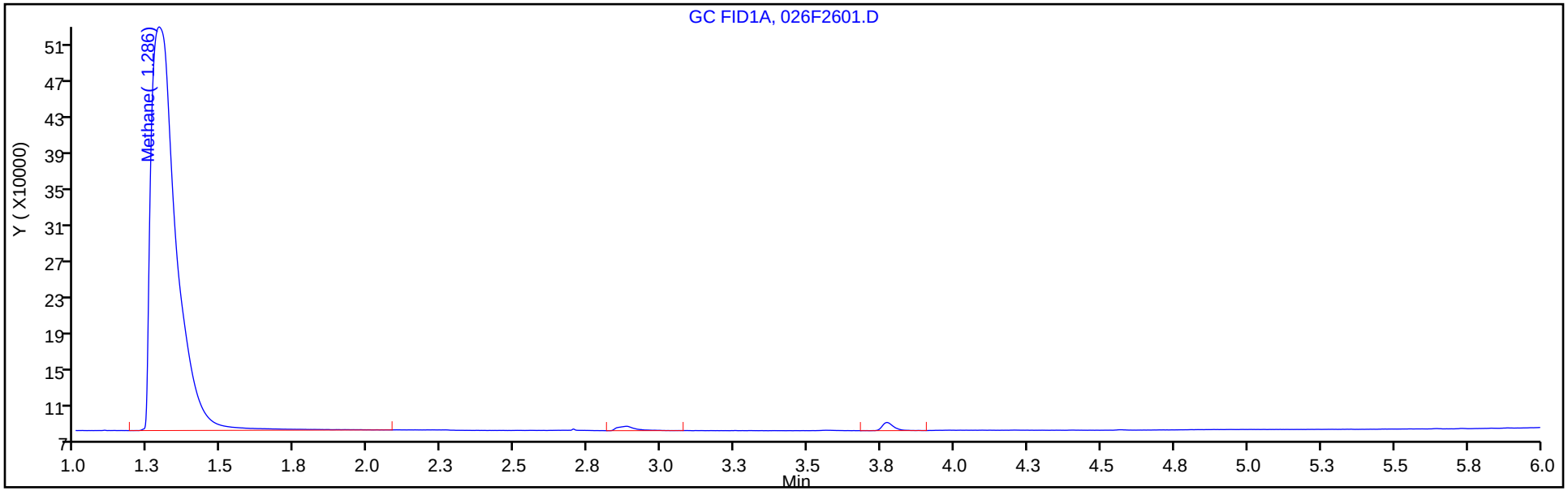
Report Date: 15-Nov-2021 16:57:01 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

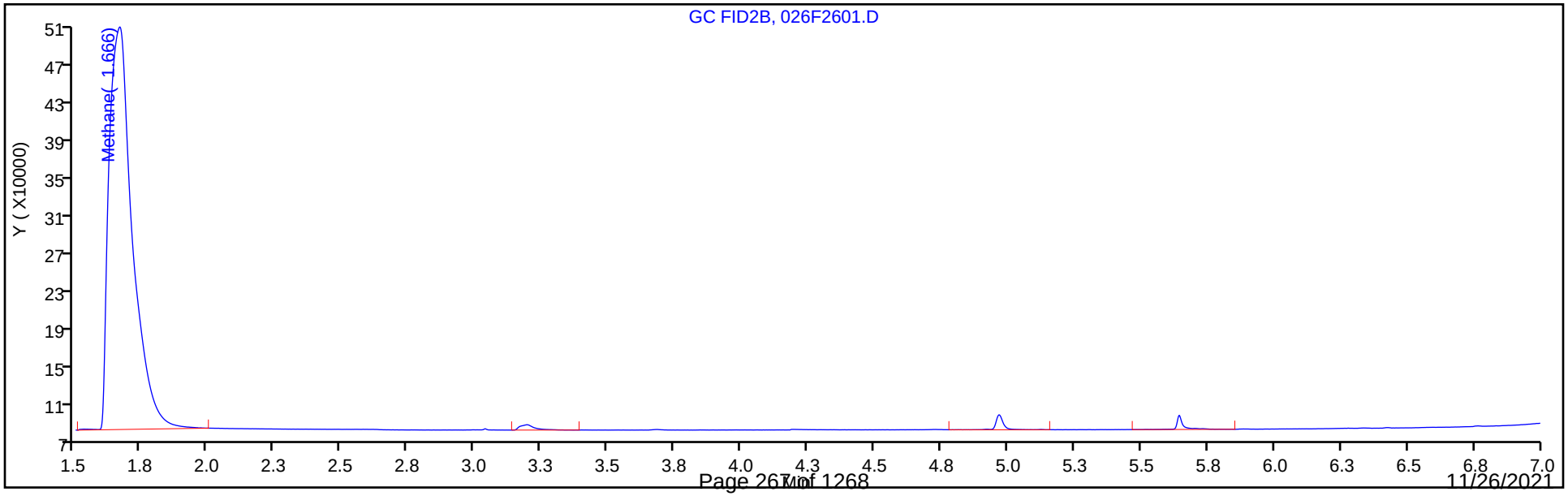
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\026F2601.D

Injection Date:	12-Nov-2021 19:35:45	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155225-G-4	Lab Sample ID:	280-155225-4	Worklist Smp#:	26
Client ID:	G0092-7				
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.: 280-155225-1

SDG No.:

Client Sample ID: G0091-7 Lab Sample ID: 280-155225-5

Matrix: Water Lab File ID: 027F2701.D

Analysis Method: RSK-175 Date Collected: 11/03/2021 13:40

Sample wt/vol: 20(mL) Date Analyzed: 11/12/2021 19:48

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\027F2701.D
Lims ID: 280-155225-H-5
Client ID: G0091-7
Sample Type: Client
Inject. Date: 12-Nov-2021 19:48:44 ALS Bottle#: 27 Worklist Smp#: 27
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155225-H-5
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 16:56:58 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: meierg Date: 15-Nov-2021 16:56:03

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

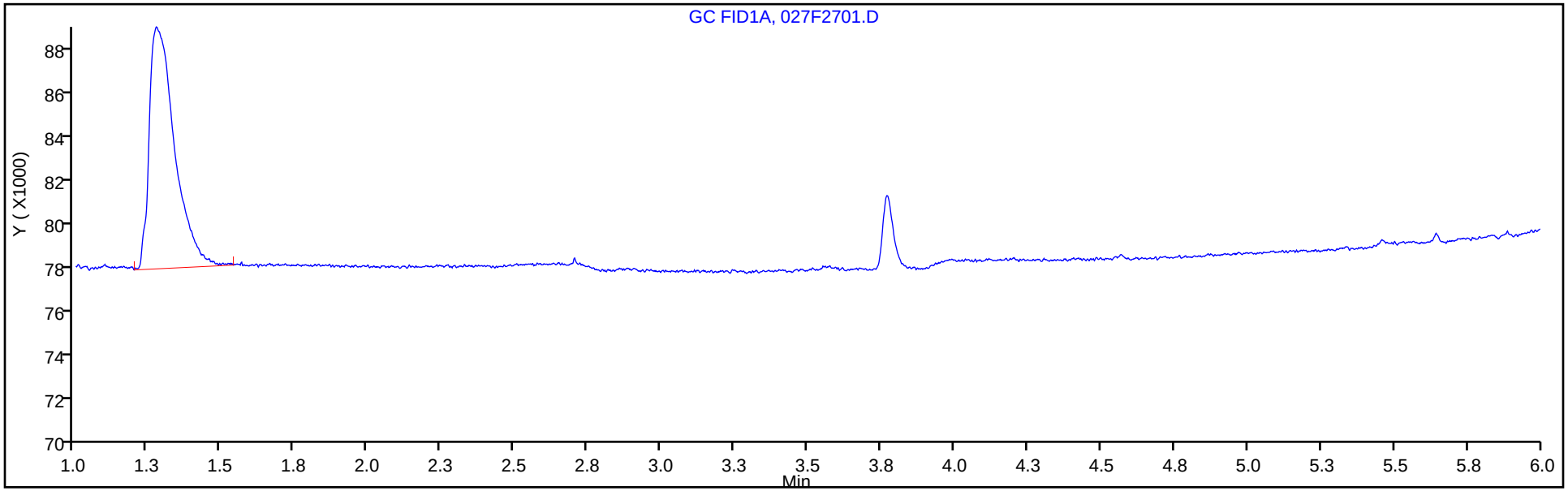
Report Date: 15-Nov-2021 16:57:02 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

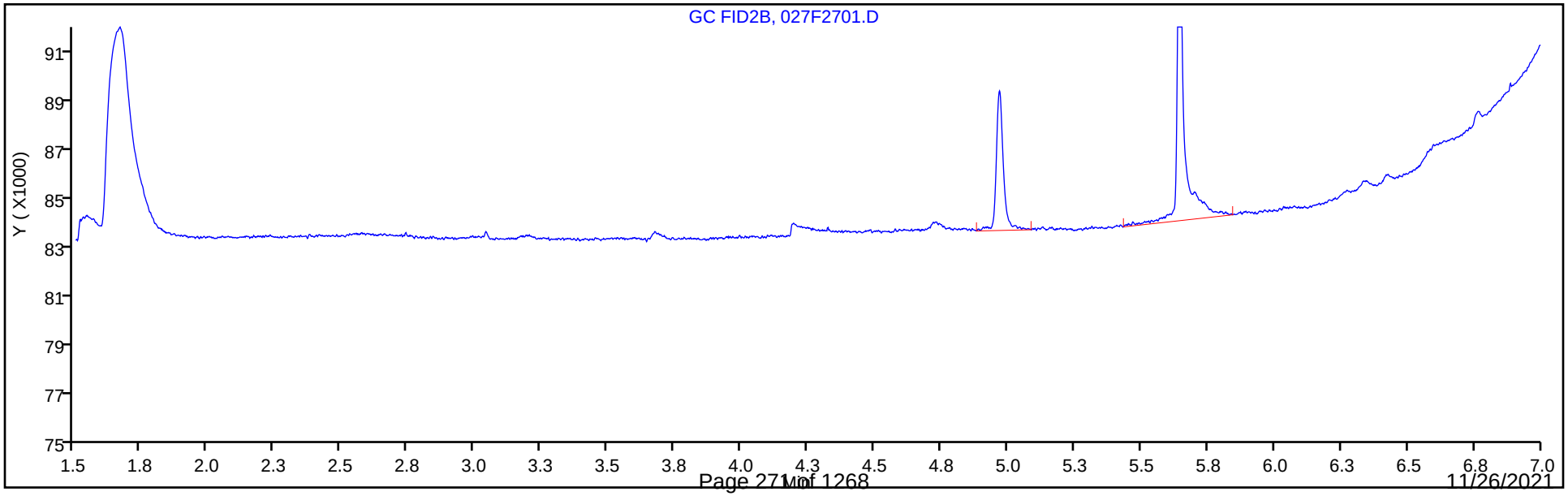
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\027F2701.D

Injection Date:	12-Nov-2021 19:48:44	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155225-H-5	Lab Sample ID:	280-155225-5	Worklist Smp#:	27
Client ID:	G0091-7				
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.: 280-155225-1

SDG No.:

Client Sample ID: G0086-7 Lab Sample ID: 280-155225-6

Matrix: Water Lab File ID: 028F2801.D

Analysis Method: RSK-175 Date Collected: 11/03/2021 15:05

Sample wt/vol: 20(mL) Date Analyzed: 11/12/2021 20:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 557326 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0092		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\028F2801.D
Lims ID: 280-155225-H-6
Client ID: G0086-7
Sample Type: Client
Inject. Date: 12-Nov-2021 20:01:39 ALS Bottle#: 28 Worklist Smp#: 28
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155225-H-6
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 16:56:58 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: meierg Date: 15-Nov-2021 16:56:06

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	1.282	1.298	-0.016	410529	9.81	
2	1.667	1.683	-0.016	396172	9.24	
					RPD = 6.05	
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

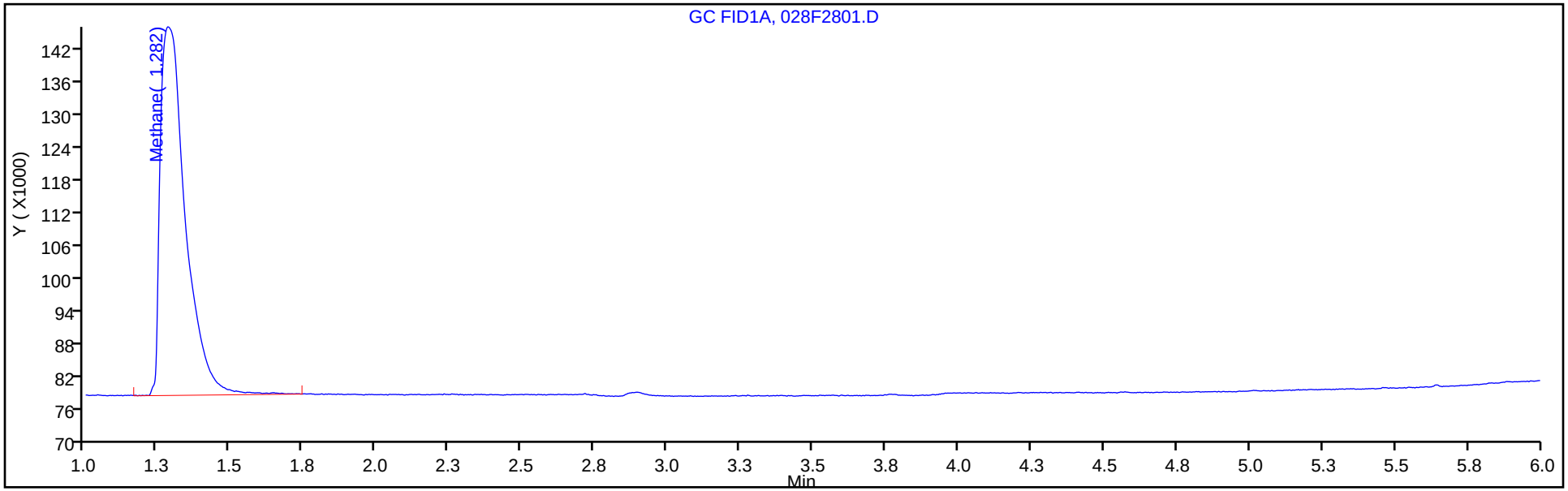
Report Date: 15-Nov-2021 16:57:02 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

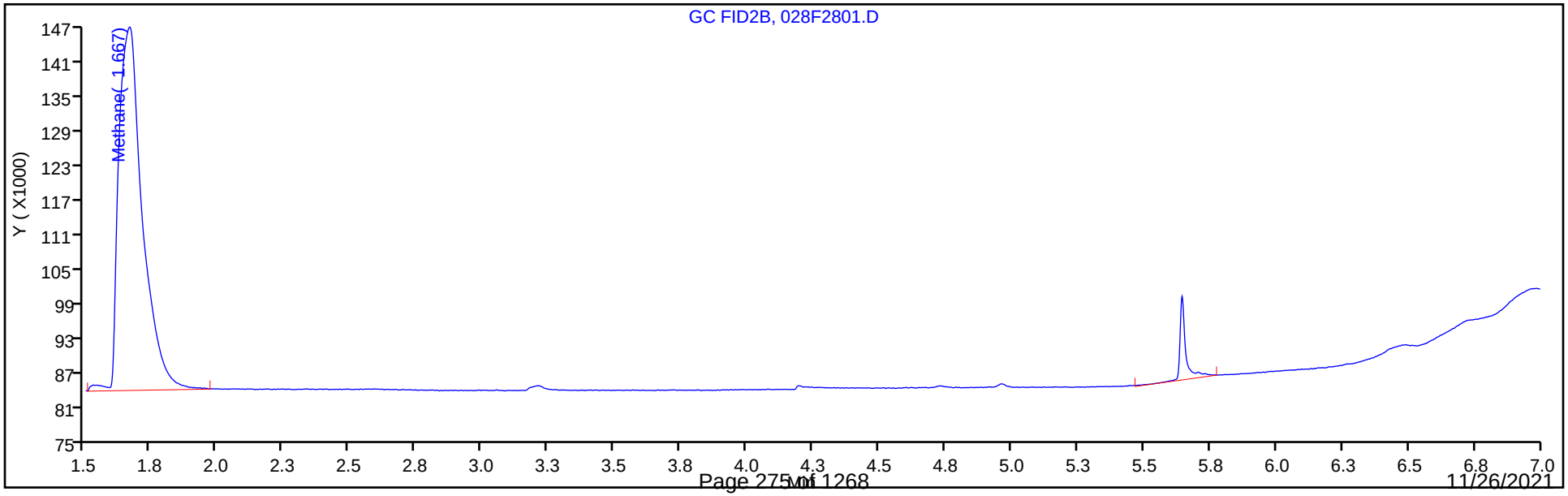
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\028F2801.D

Injection Date:	12-Nov-2021 20:01:39	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155225-H-6	Lab Sample ID:	280-155225-6	Worklist Smp#:	28
Client ID:	G0086-7				
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.: 280-155225-1

SDG No.:

Client Sample ID: PZ017R-7 Lab Sample ID: 280-155225-7

Matrix: Water Lab File ID: 009F0901.D

Analysis Method: RSK-175 Date Collected: 11/04/2021 09:30

Sample wt/vol: 20(mL) Date Analyzed: 11/16/2021 20:24

Soil Aliquot Vol: Dilution Factor: 4

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 557735 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	21	D	0.020	0.0052	0.0025

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\009F0901.D
Lims ID: 280-155225-I-7
Client ID: PZ017R-7
Sample Type: Client
Inject. Date: 16-Nov-2021 20:24:52 ALS Bottle#: 9 Worklist Smp#: 8
Purge Vol: 18.000 mL Dil. Factor: 4.0000
Sample Info: 155225-I-7 4x
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-Nov-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

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	1.292	1.302	-0.010	190130532	5404.1	
2	1.673	1.690	-0.017	187709658	5197.6	
					RPD = 3.90	
3 Ethane						
1		1.560			ND	
2		3.037				
4 Ethylene						
1		1.858			ND	
2		2.620				
5 Propane						
1		2.665			ND	
2		4.934				
6 Acetylene						
1		4.167			ND	
2		2.764				
7 Butane						
1		4.513			ND	
2		6.432				
8 isobutylene						
1		5.403			ND	
2		6.274				

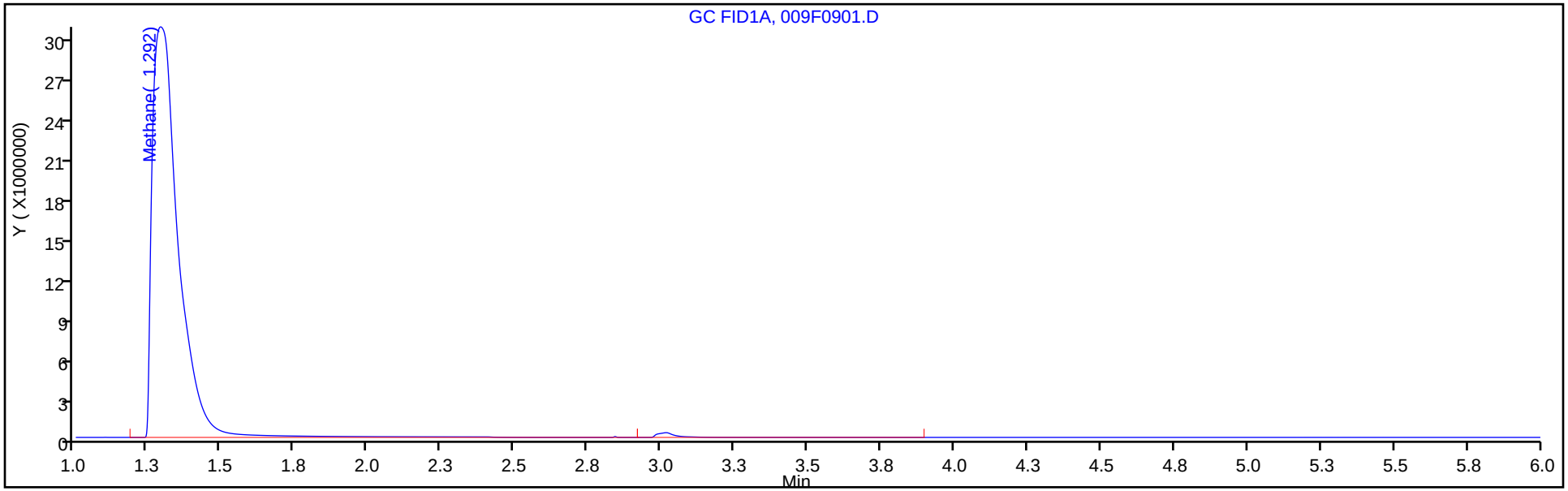
Report Date: 17-Nov-2021 10:55:16 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

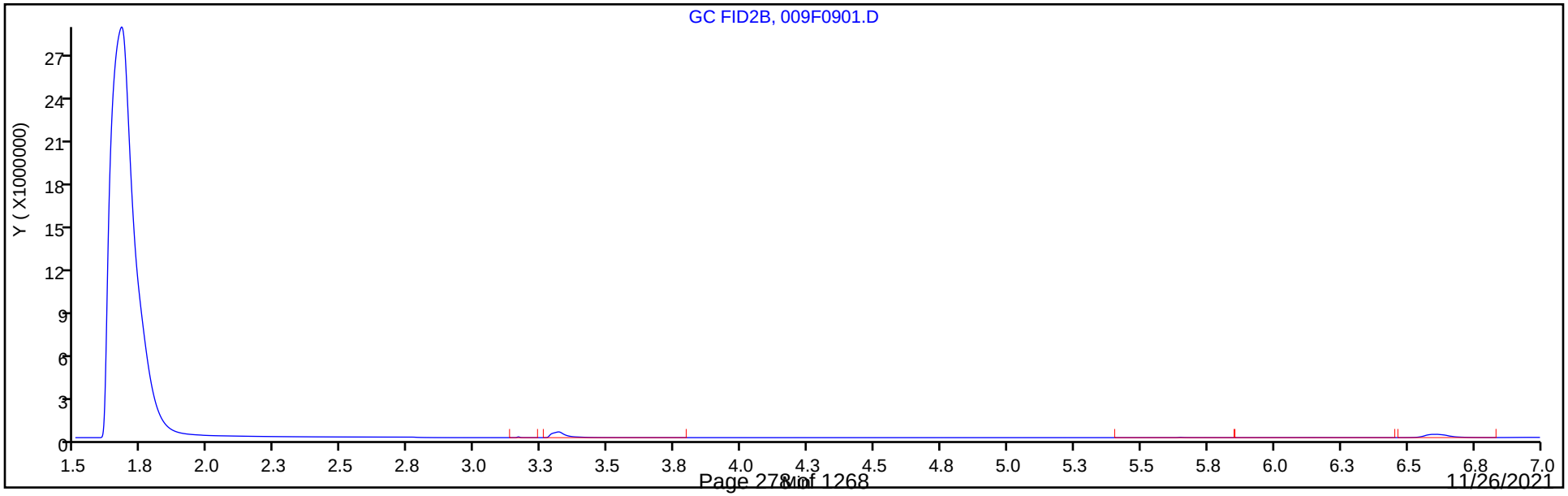
Data File: \\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\009F0901.D

Injection Date:	16-Nov-2021 20:24:52	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155225-I-7	Lab Sample ID:	280-155225-7	Worklist Smp#:	8
Client ID:	PZ017R-7				
Purge Vol:	18.000 mL	Dil. Factor:	4.0000	ALS Bottle#:	9
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: PZ018-7 Lab Sample ID: 280-155225-8

Matrix: Water Lab File ID: 030F3001.D

Analysis Method: RSK-175 Date Collected: 11/04/2021 11:05

Sample wt/vol: 20(mL) Date Analyzed: 11/12/2021 20:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 557326 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	16		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\030F3001.D
Lims ID: 280-155225-G-8
Client ID: PZ018-7
Sample Type: Client
Inject. Date: 12-Nov-2021 20:27:35 ALS Bottle#: 30 Worklist Smp#: 30
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Sample Info: 280-155225-G-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 16:56:58 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: meierg Date: 15-Nov-2021 16:56:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
$ 1 1,1,1-Trifluoroethane						
1		4.362			ND	
2		5.458				
2 Methane						
1	1.286	1.298	-0.012	598665859	17020	
2	1.663	1.683	-0.020	583602188	16163	
					RPD = 5.16	
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

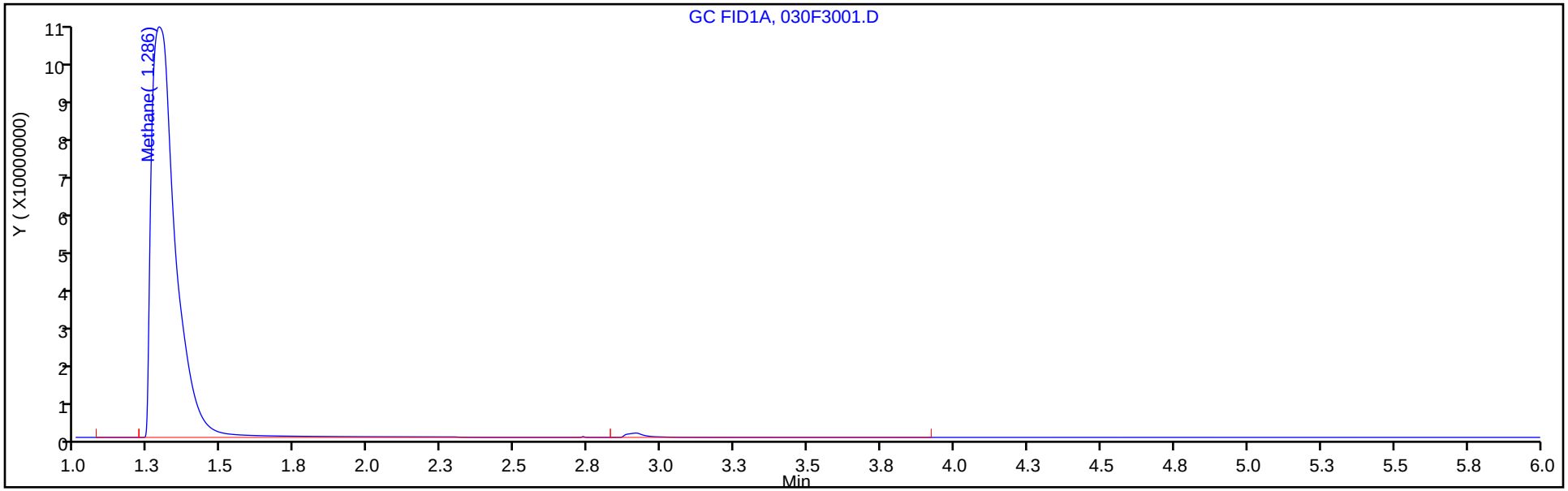
Report Date: 15-Nov-2021 16:57:03 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

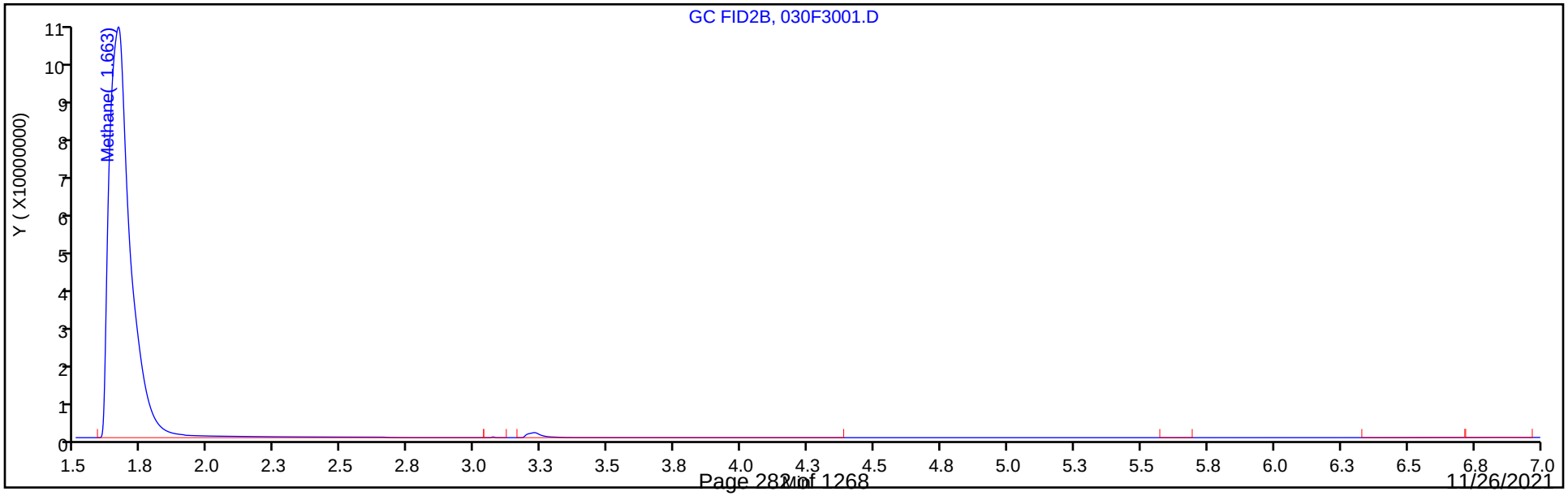
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\030F3001.D

Injection Date:	12-Nov-2021 20:27:35	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155225-G-8	Lab Sample ID:	280-155225-8	Worklist Smp#:	30
Client ID:	PZ018-7				
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 I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: PZ021-7 Lab Sample ID: 280-155225-9

Matrix: Water Lab File ID: 010F1001.D

Analysis Method: RSK-175 Date Collected: 11/04/2021 08:00

Sample wt/vol: 20(mL) Date Analyzed: 11/16/2021 20:38

Soil Aliquot Vol: Dilution Factor: 4

Soil Extract Vol.: GC Column: HP-Plot Q ID: 0.53(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 557735 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	24	D	0.020	0.0052	0.0025

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\010F1001.D
Lims ID: 280-155225-G-9
Client ID: PZ021-7
Sample Type: DU
Inject. Date: 16-Nov-2021 20:38:02 ALS Bottle#: 10 Worklist Smp#: 9
Purge Vol: 18.000 mL Dil. Factor: 4.0000
Sample Info: 155225-G-9 4x
Operator ID: sciannac Instrument ID: VGC_J

Method: \\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-Nov-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

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	1.290	1.290	0.000	221468209		6295.1	
2	1.672	1.672	0.000	218264243		6043.9	
						RPD = 4.07	
3 Ethane							
1		1.560				ND	
2		3.037					
4 Ethylene							
1		1.858				ND	
2		2.620					
5 Propane							
1		2.665				ND	
2		4.934					
6 Acetylene							
1		4.167				ND	
2		2.764					
7 Butane							
1		4.513				ND	
2		6.432					
8 isobutylene							
1		5.403				ND	
2		6.274					

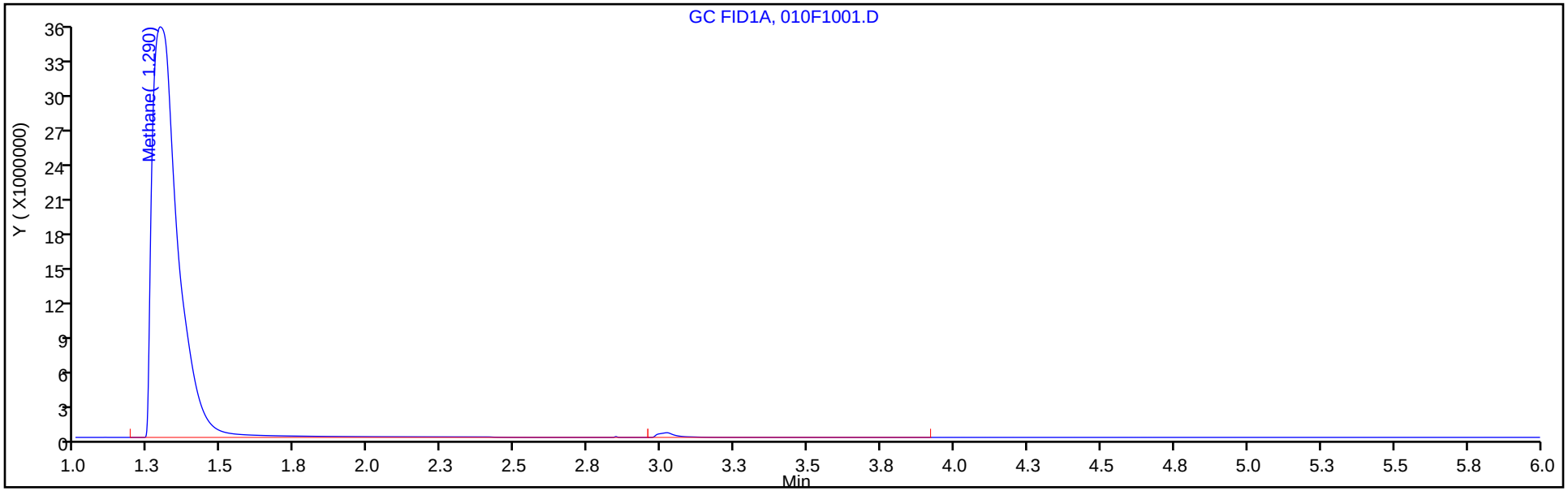
Report Date: 17-Nov-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

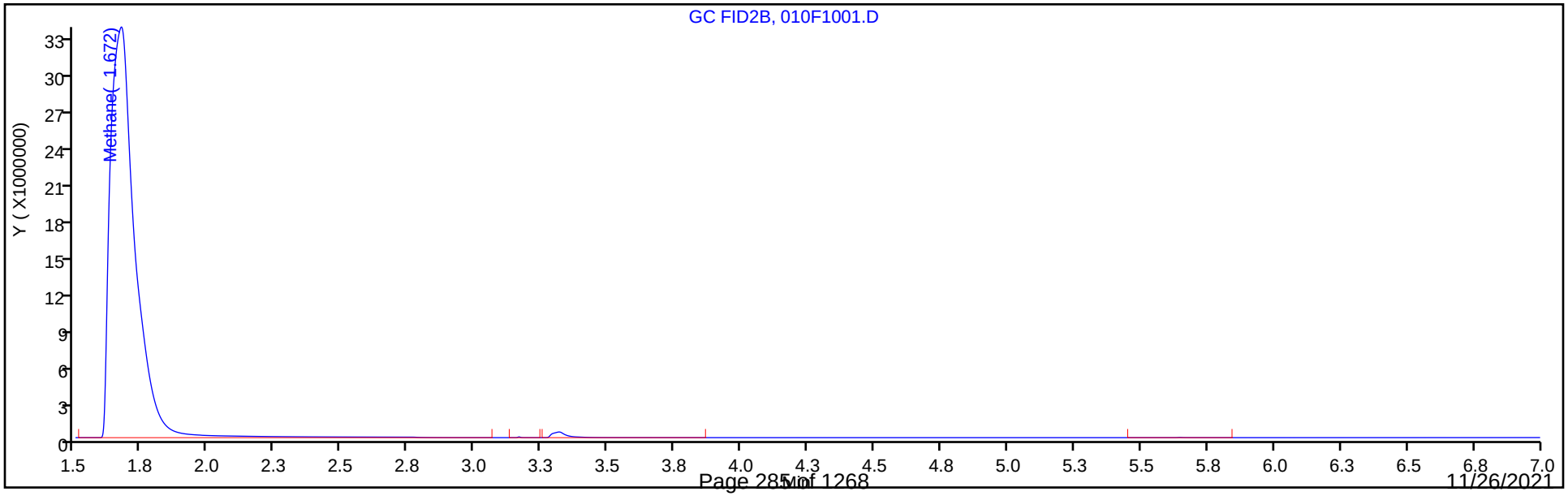
Data File: \\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\010F1001.D

Injection Date:	16-Nov-2021 20:38:02	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	280-155225-G-9			Worklist Smp#:	9
Client ID:	PZ021-7				
Purge Vol:	18.000 mL	Dil. Factor:	4.0000	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 VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1 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.: 280-155225-1 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.: 280-155225-1 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

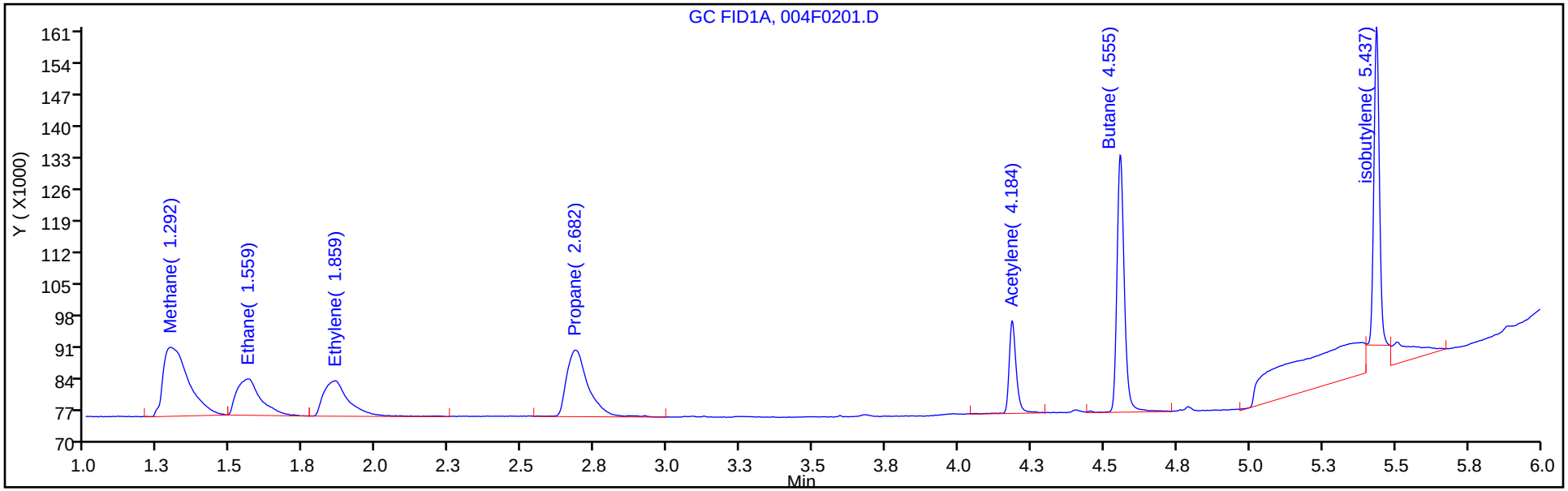
Report Date: 29-Sep-2021 10:55:12 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

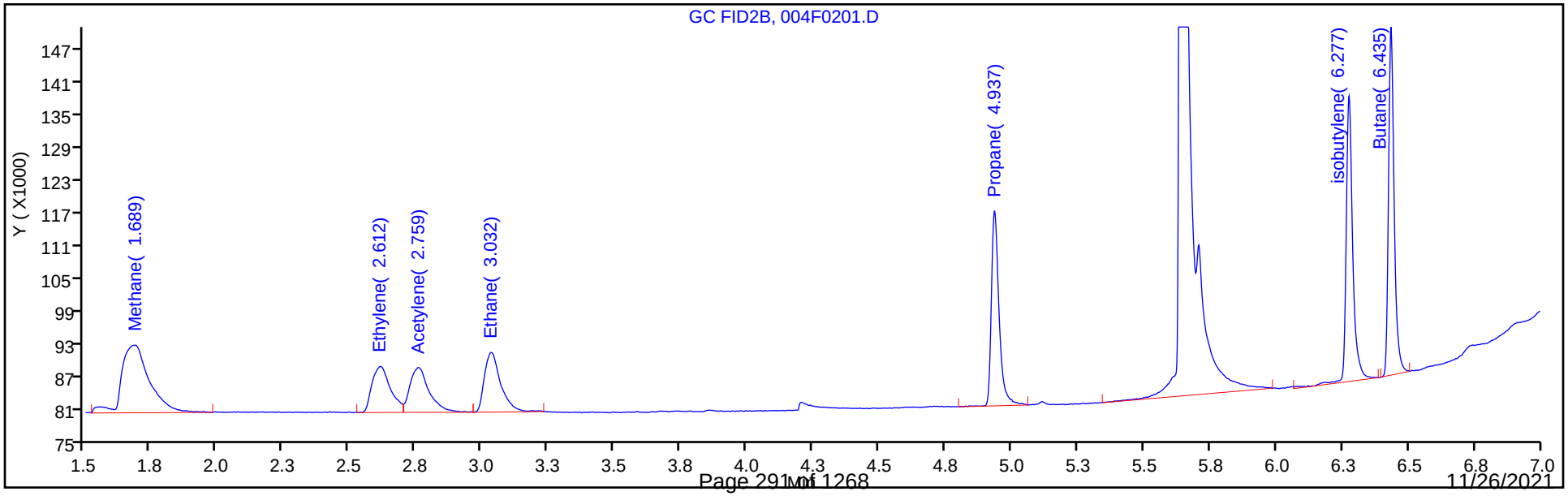
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D

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

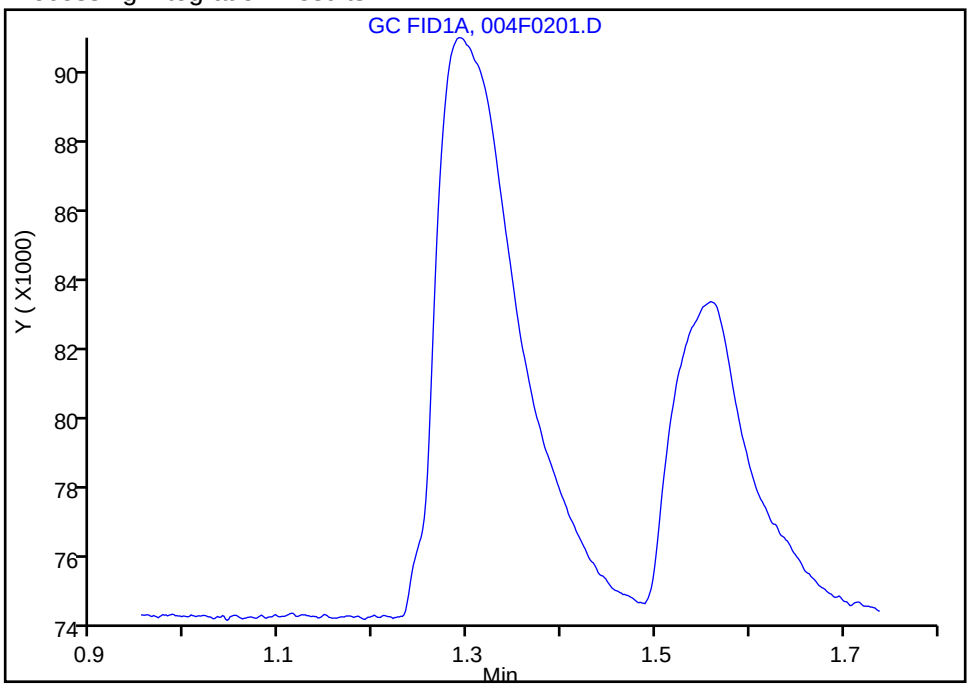
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D				
Injection Date:	24-Sep-2021 13:28:57	Instrument ID:	VGC_J		
Lims ID:	ic				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	4	Worklist Smp#:	2
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

2 Methane, CAS: 74-82-8

Signal: 1

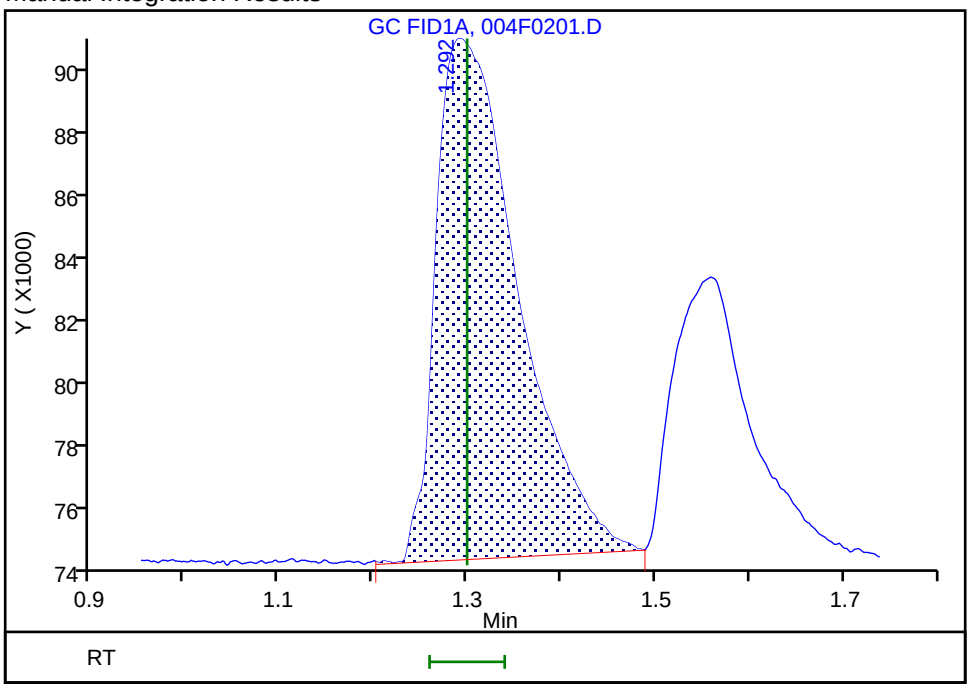
Not Detected
Expected RT: 1.30

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

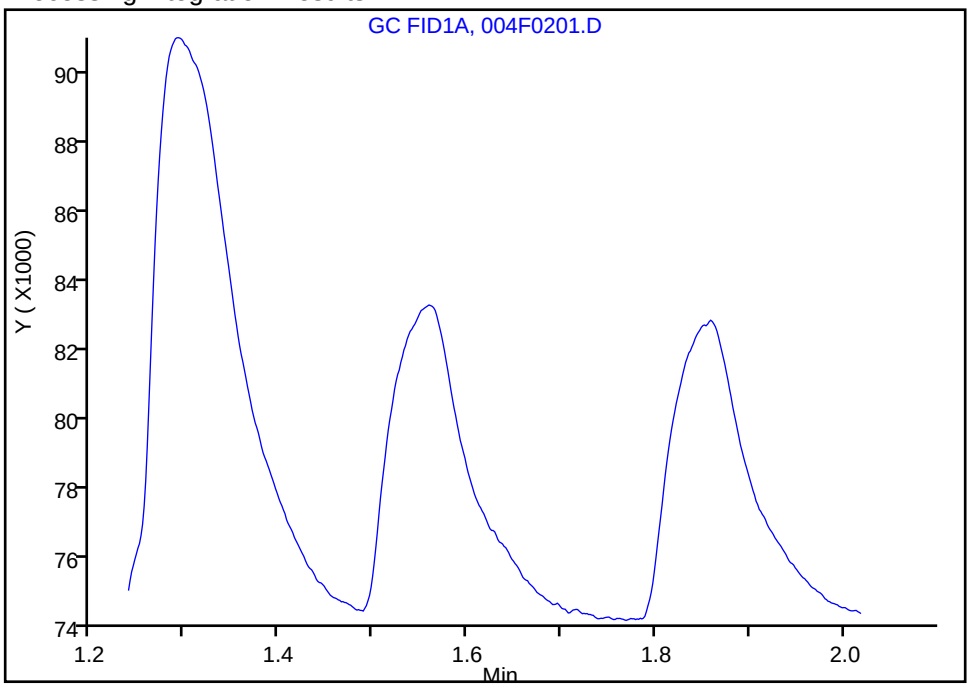
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D				
Injection Date:	24-Sep-2021 13:28:57	Instrument ID:	VGC_J		
Lims ID:	ic				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	4	Worklist Smp#:	2
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

3 Ethane, CAS: 74-84-0

Signal: 1

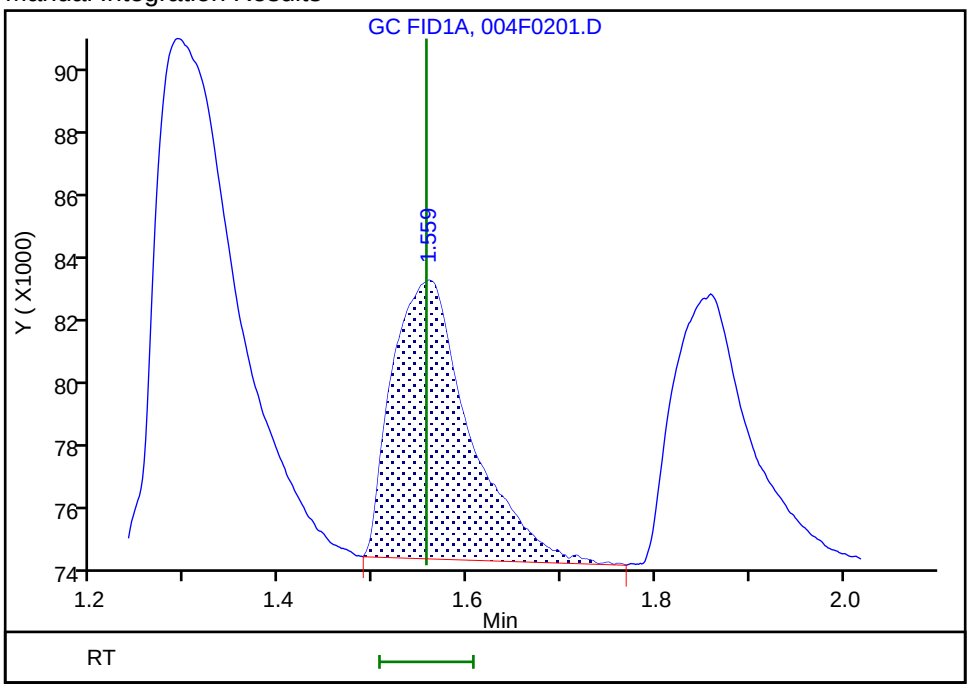
Not Detected
Expected RT: 1.56

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

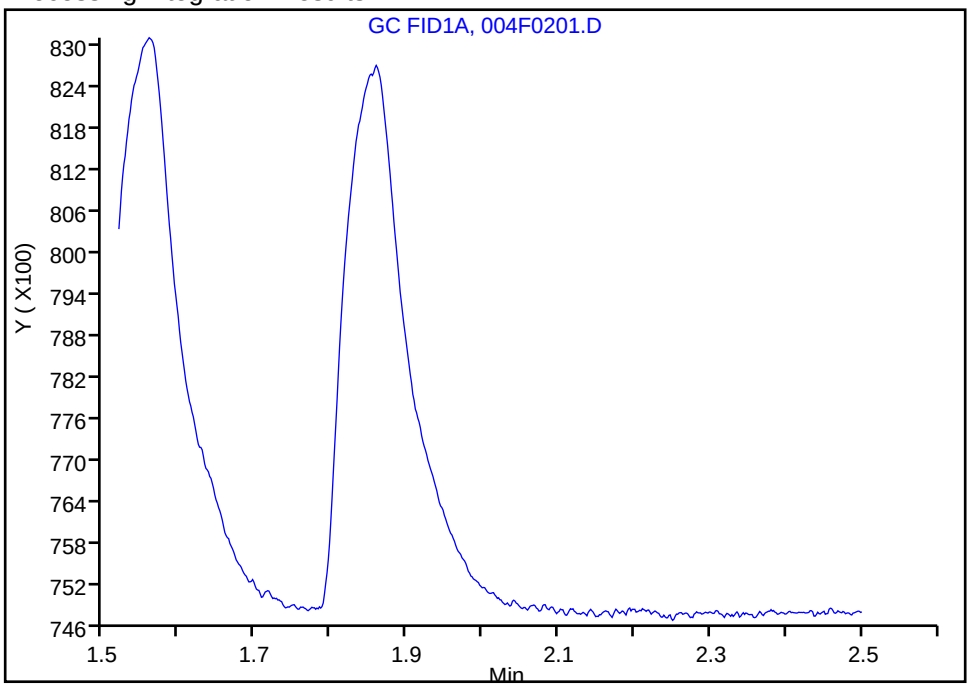
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

4 Ethylene, CAS: 74-85-1

Signal: 1

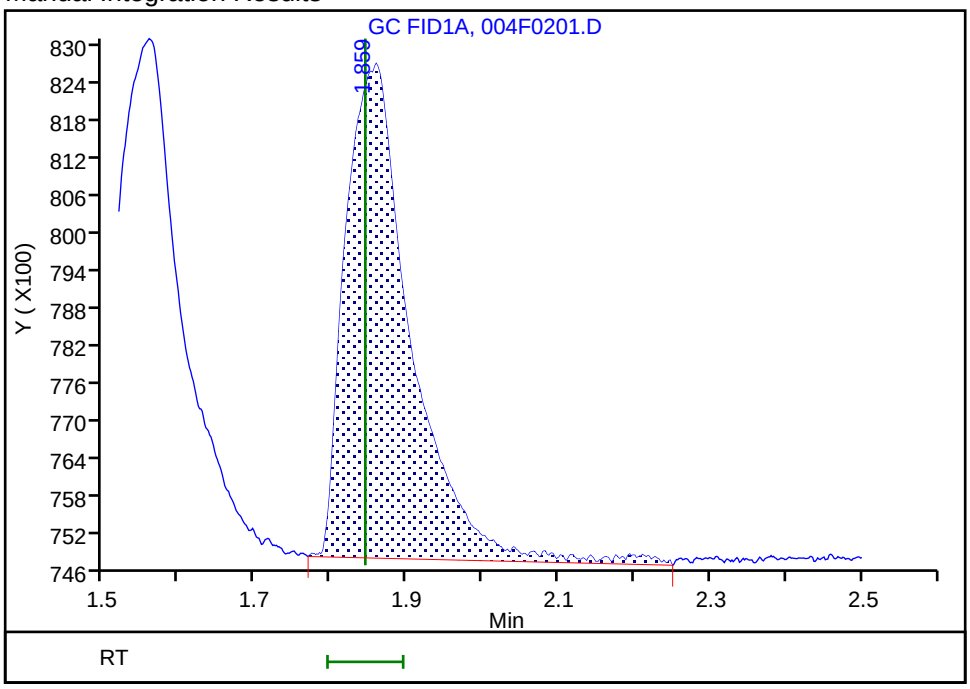
Not Detected
Expected RT: 1.84

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

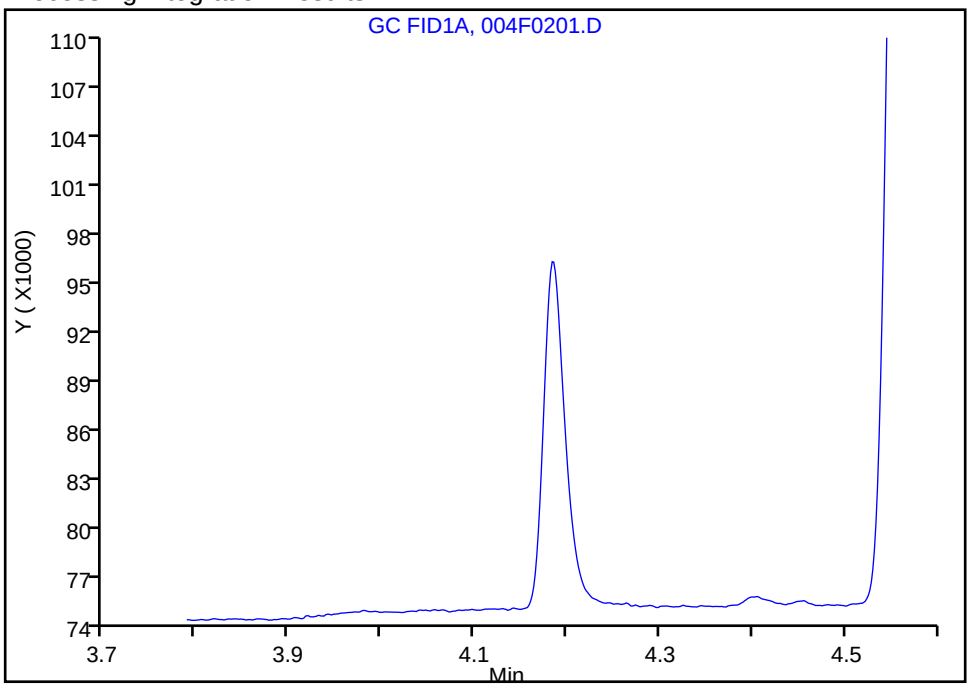
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D				
Injection Date:	24-Sep-2021 13:28:57	Instrument ID:	VGC_J		
Lims ID:	ic				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	4	Worklist Smp#:	2
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

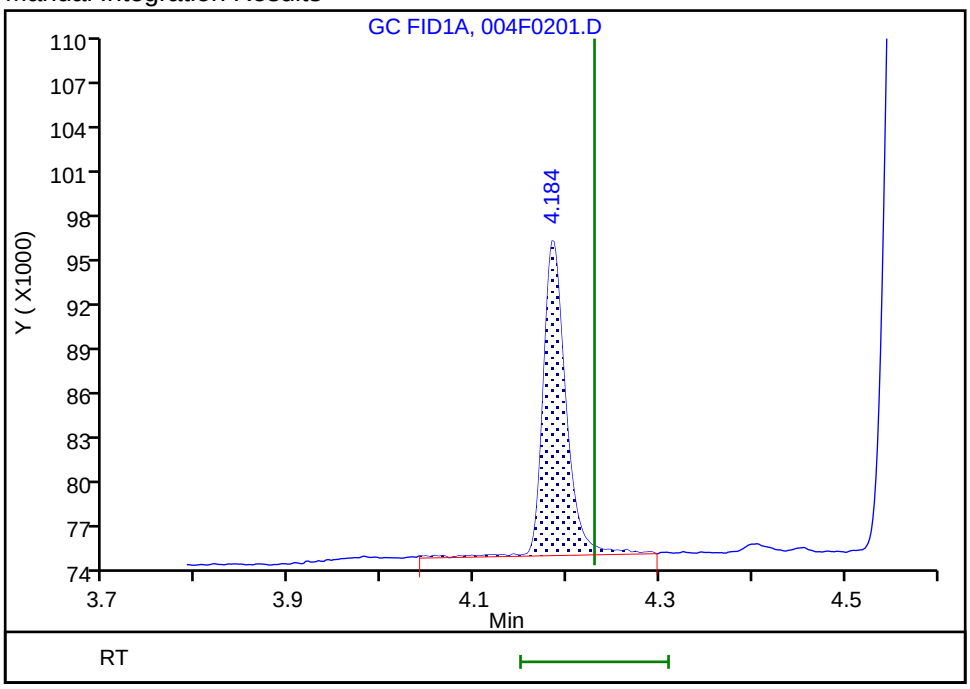
Not Detected
Expected RT: 4.23

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

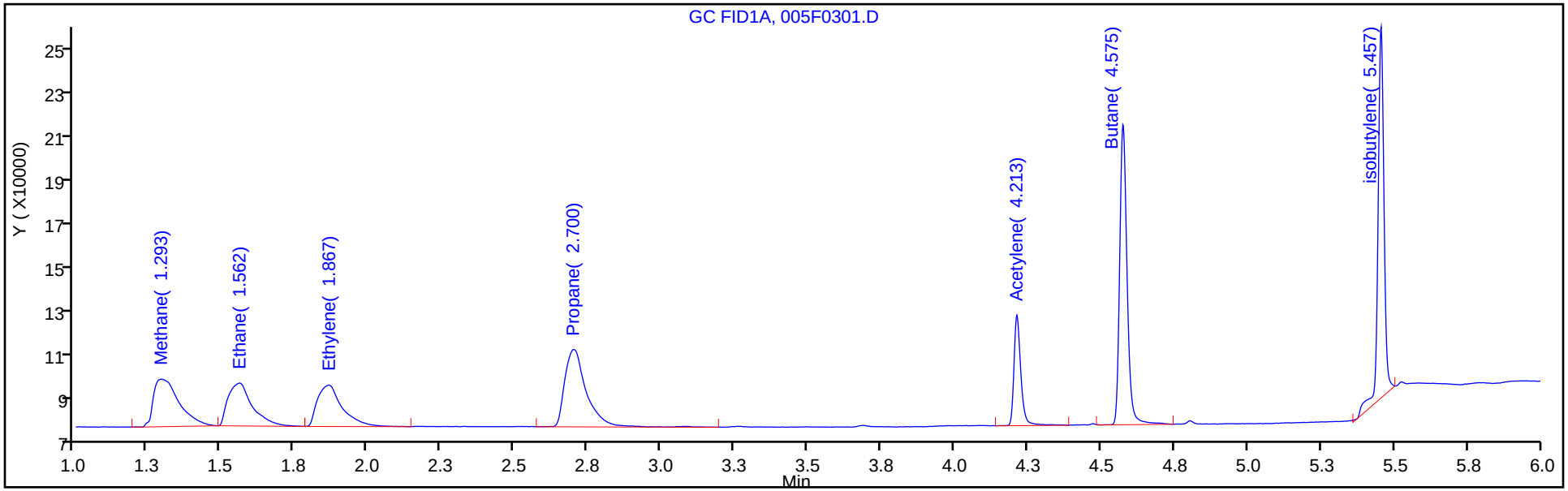
Report Date: 29-Sep-2021 10:55:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

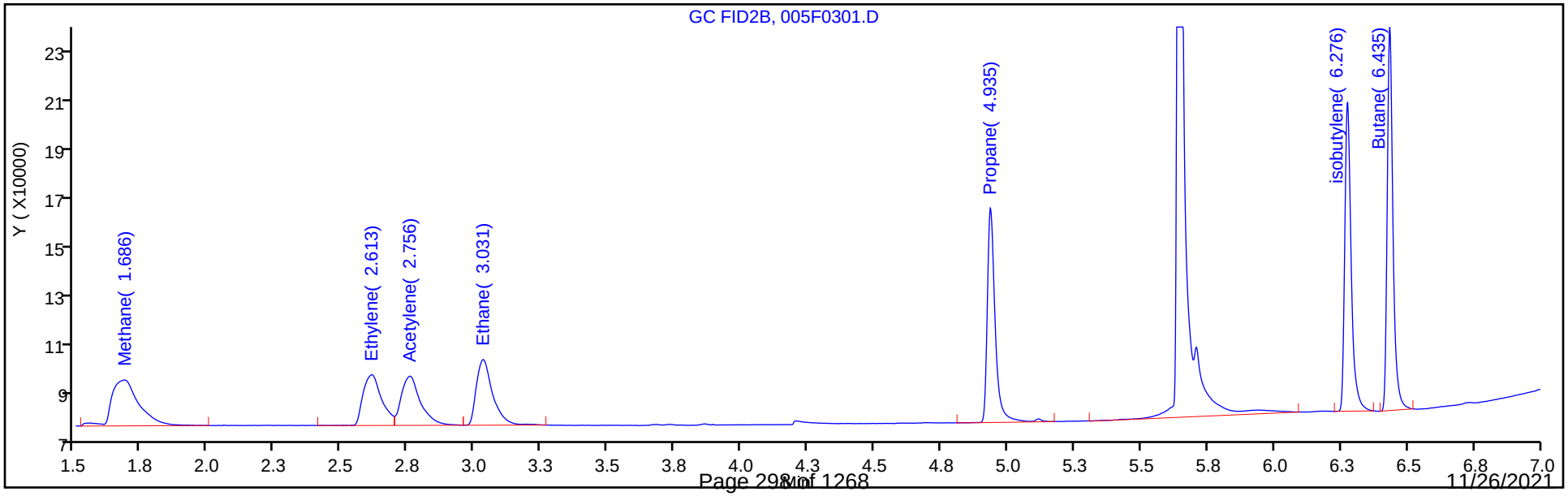
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\005F0301.D

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

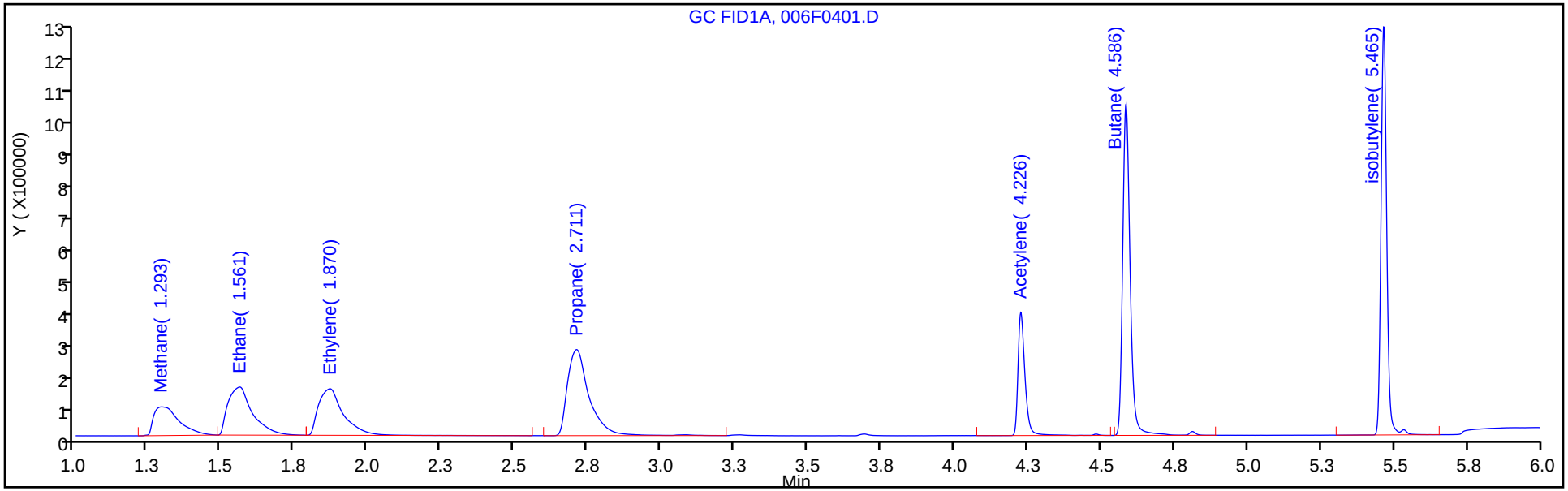
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

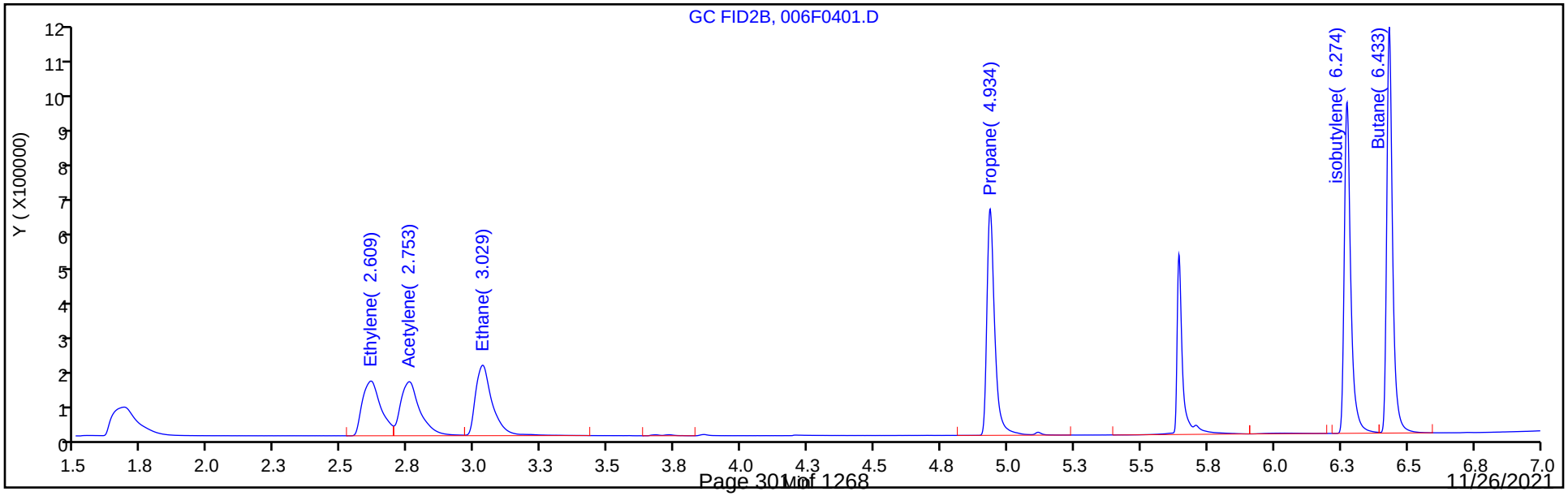
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D

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

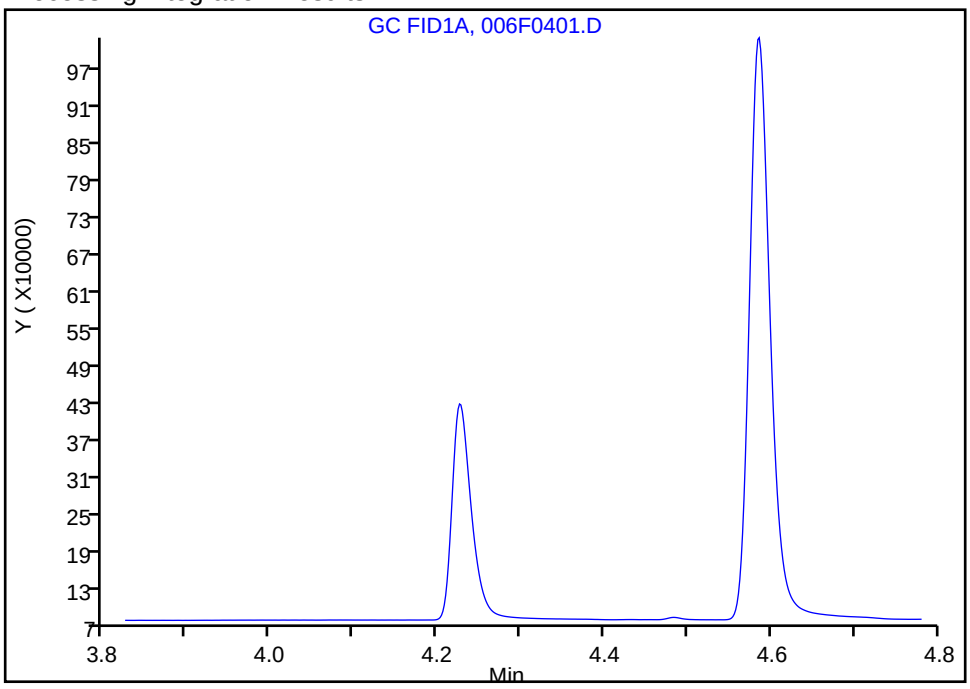
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D
Injection Date: 24-Sep-2021 13:54:46 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 6 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

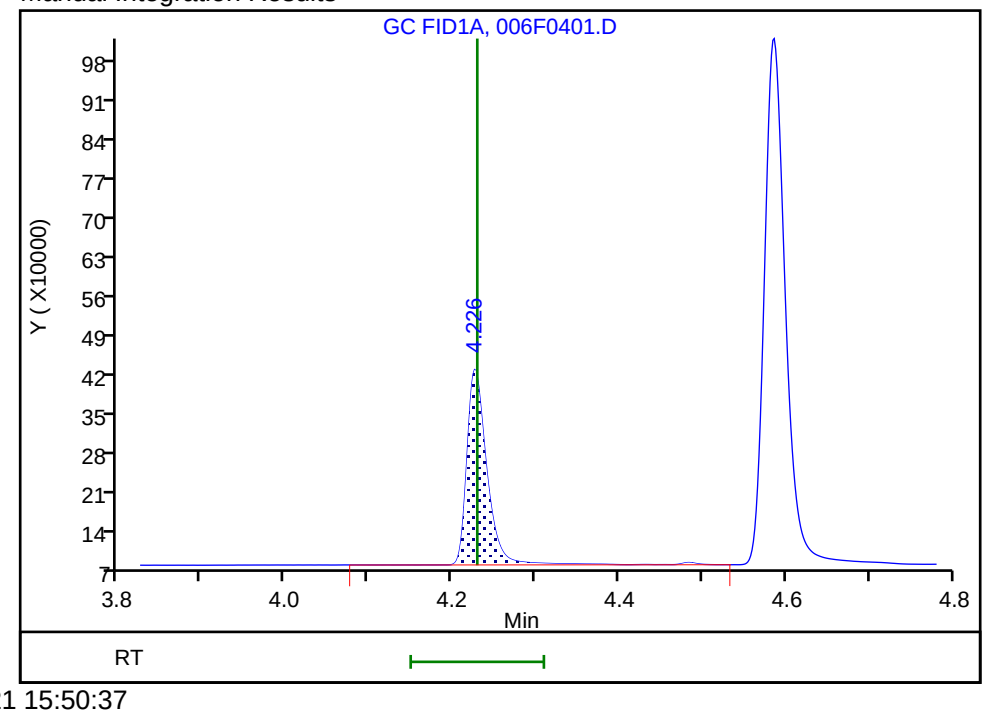
Not Detected
Expected RT: 4.23

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

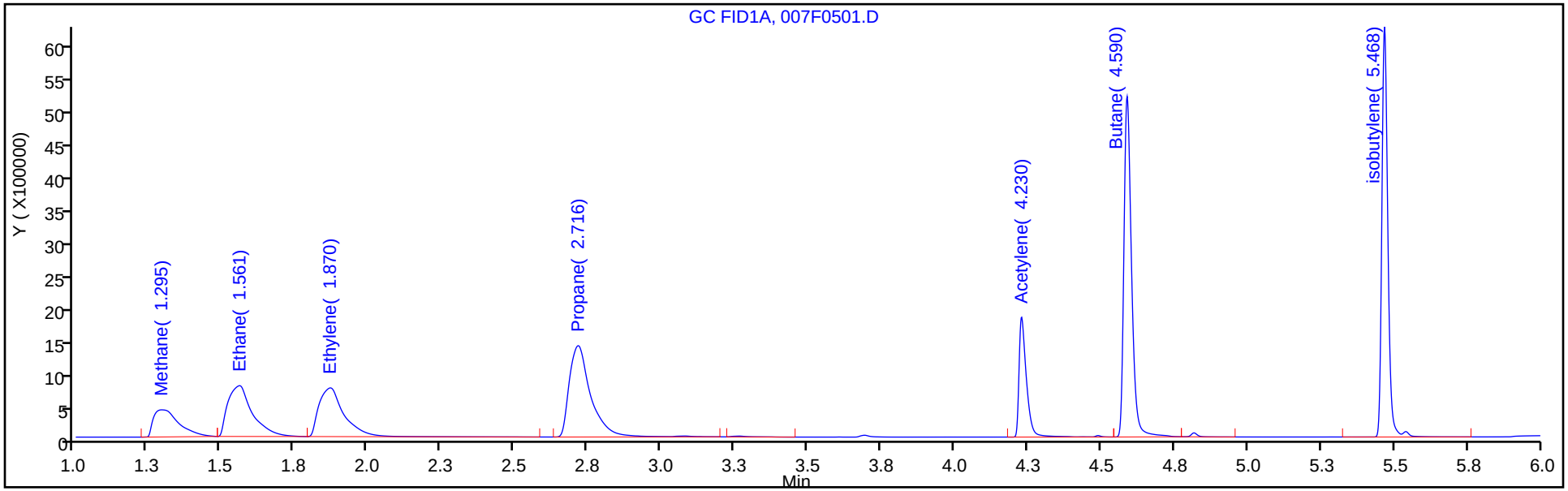
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

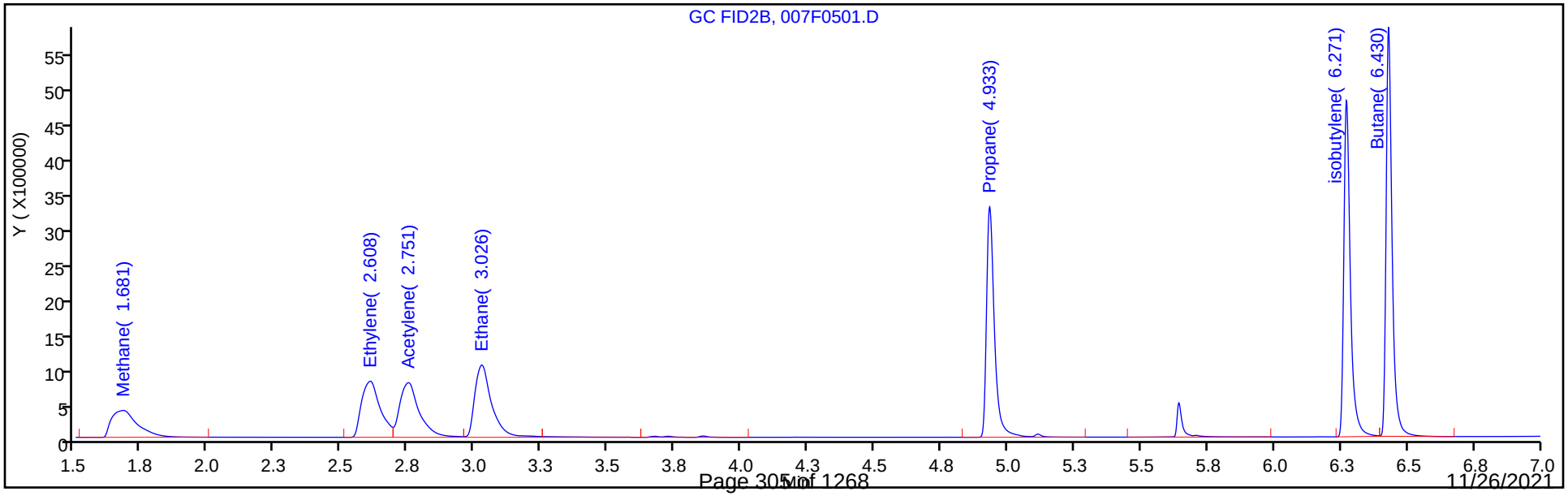
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D

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

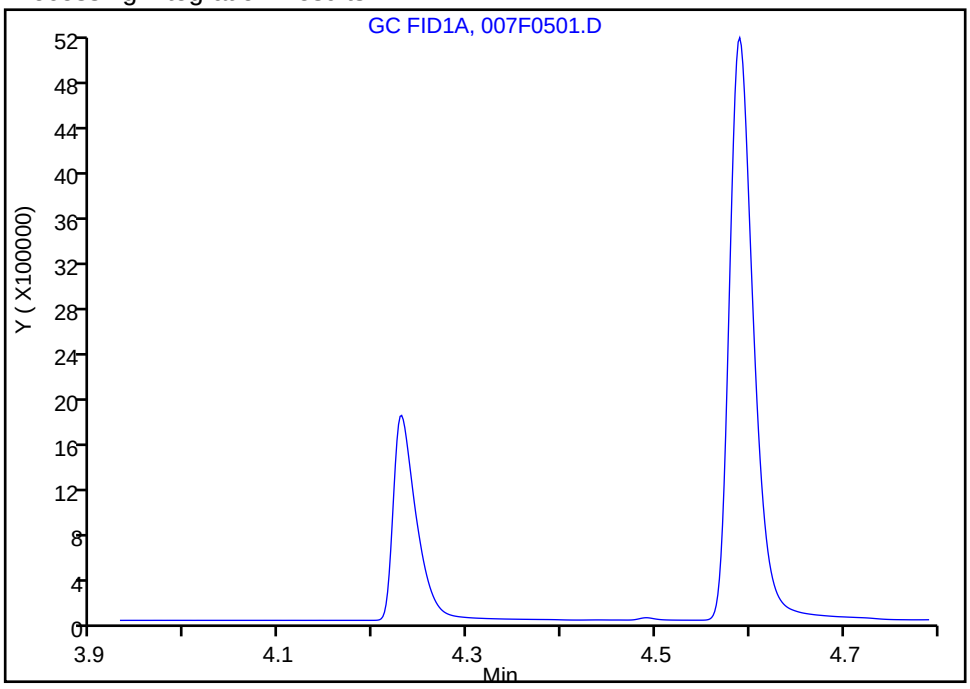
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D				
Injection Date:	24-Sep-2021 14:07:45	Instrument ID:	VGC_J		
Lims ID:	ic				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	7	Worklist Smp#:	5
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

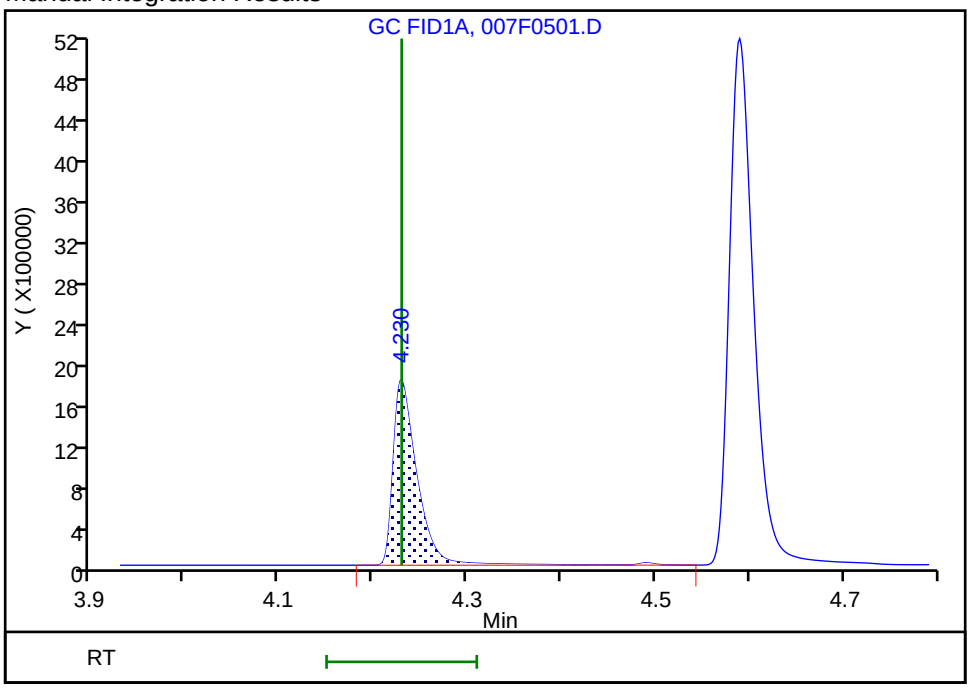
Not Detected
Expected RT: 4.23

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

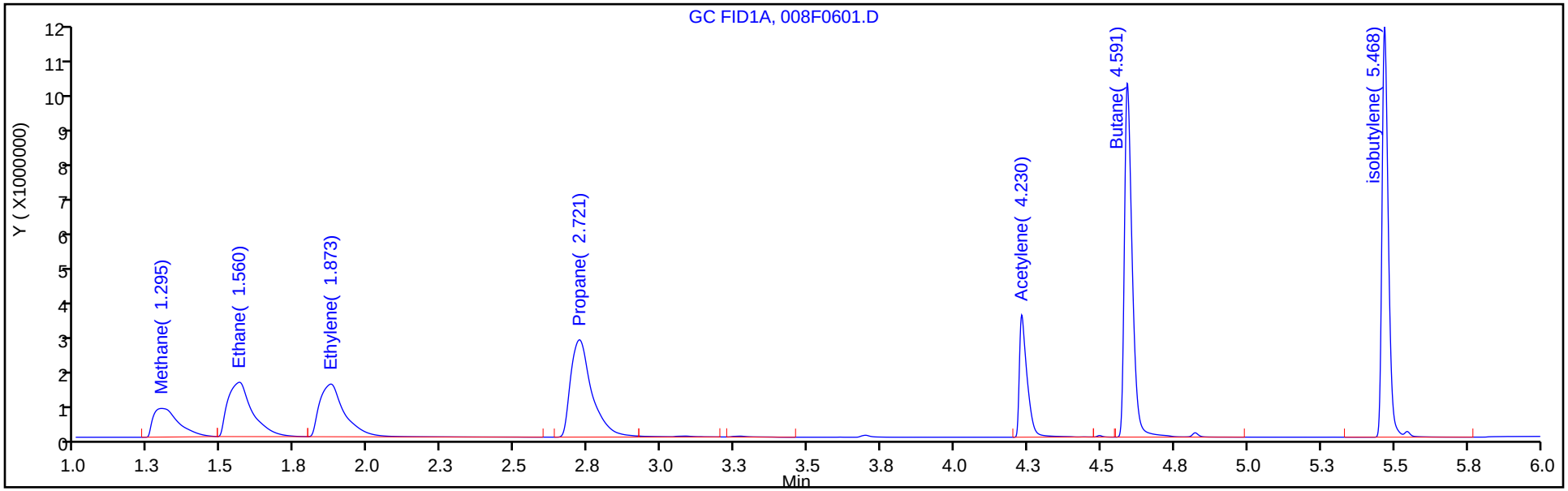
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

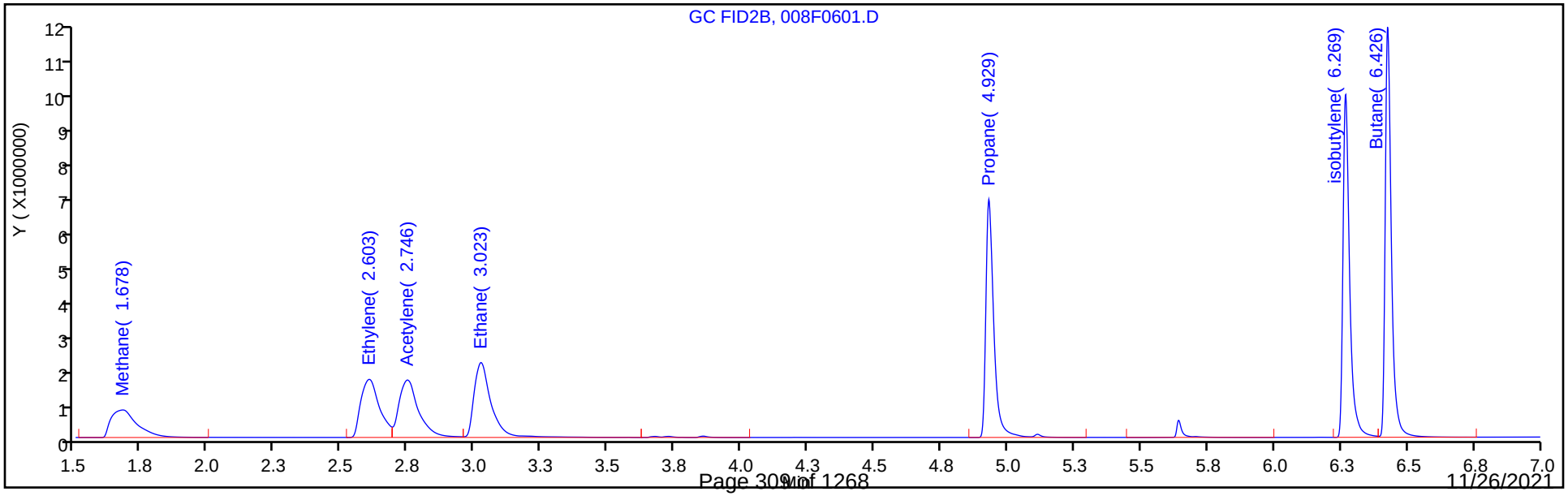
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D

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

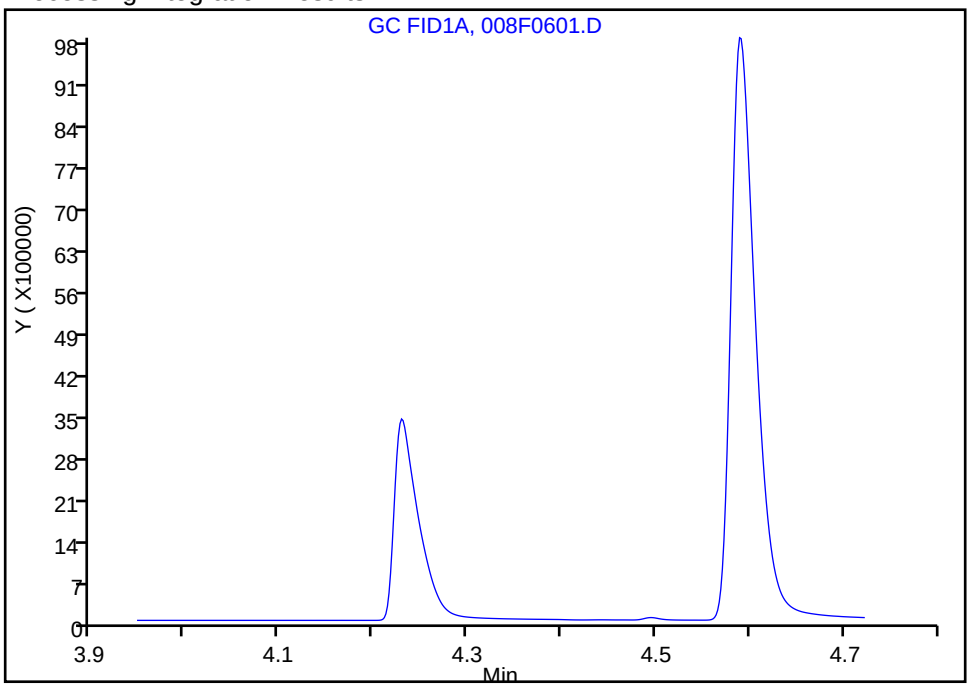
Data File:	\\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D				
Injection Date:	24-Sep-2021 14:20:44	Instrument ID:	VGC_J		
Lims ID:	ic				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	8	Worklist Smp#:	6
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

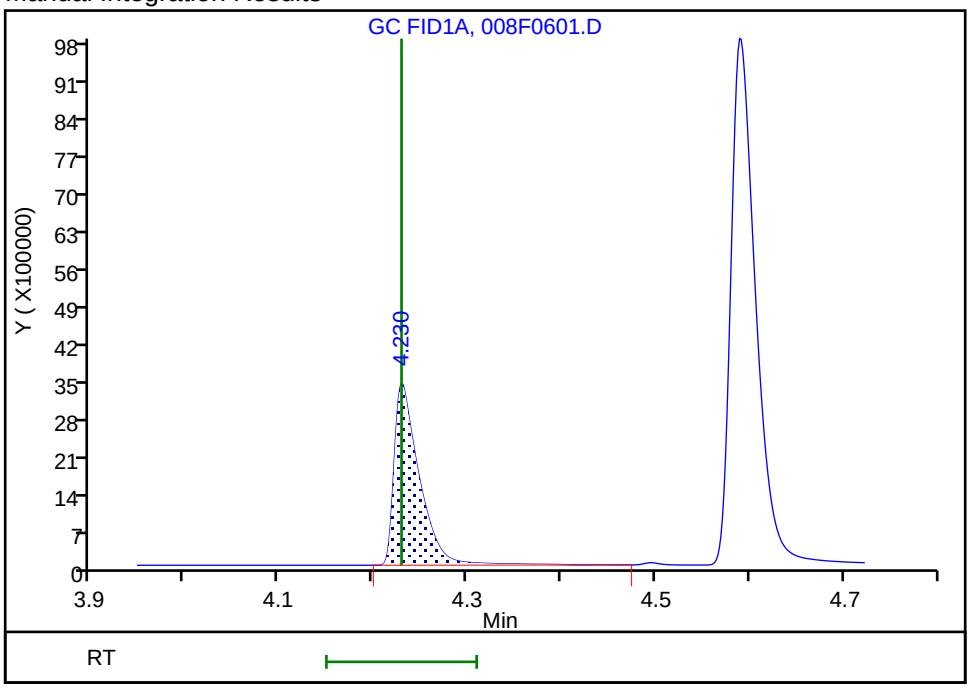
Not Detected
Expected RT: 4.23

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

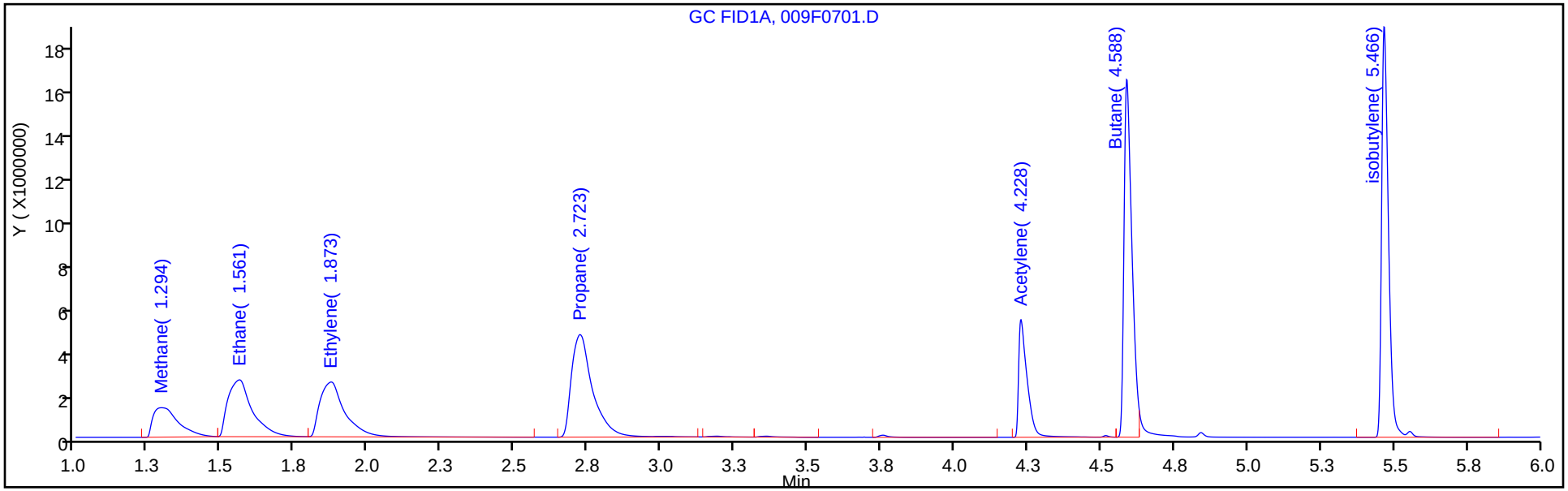
Report Date: 29-Sep-2021 10:55:16 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

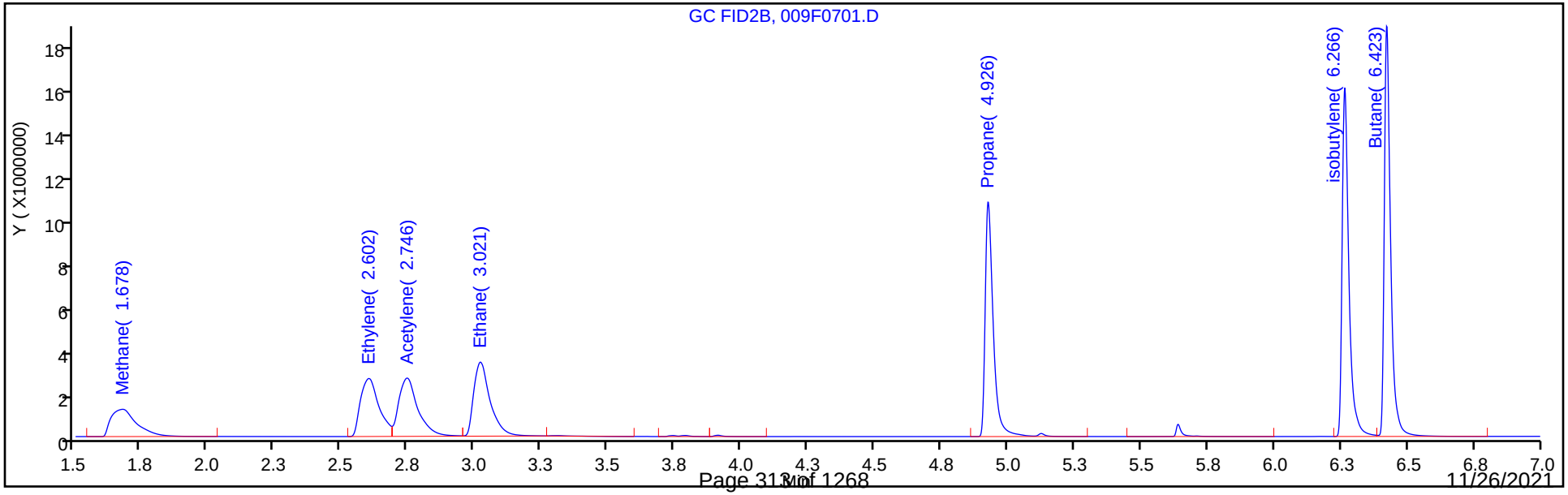
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D

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

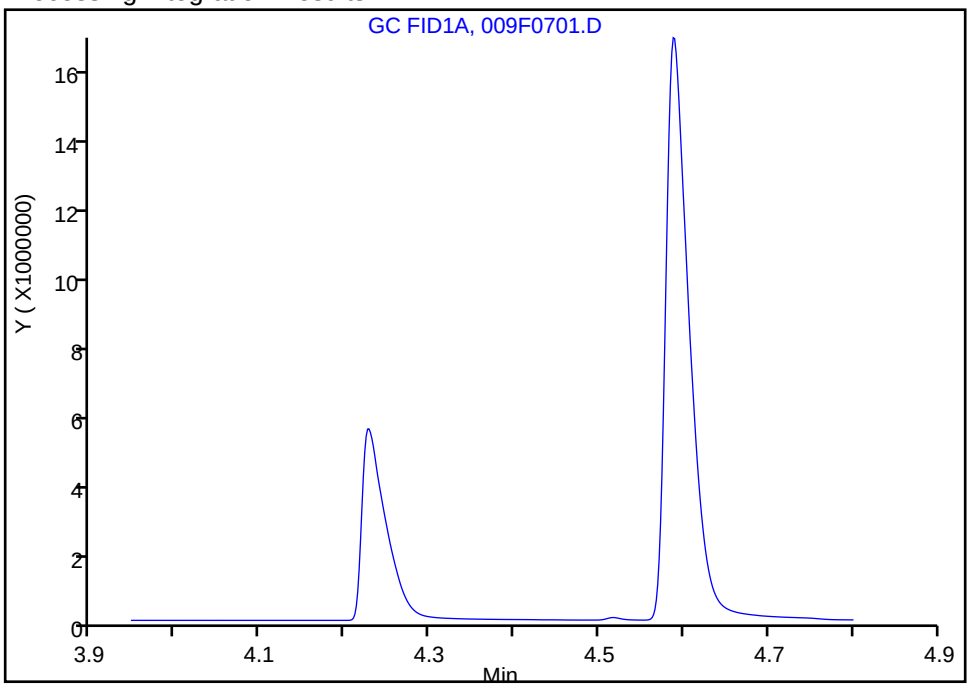
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D
Injection Date: 24-Sep-2021 14:33:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 9 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: Rt-Alumina BOND/KCl (0.53 mm) Detector GC FID1A

6 Acetylene, CAS: 74-86-2

Signal: 1

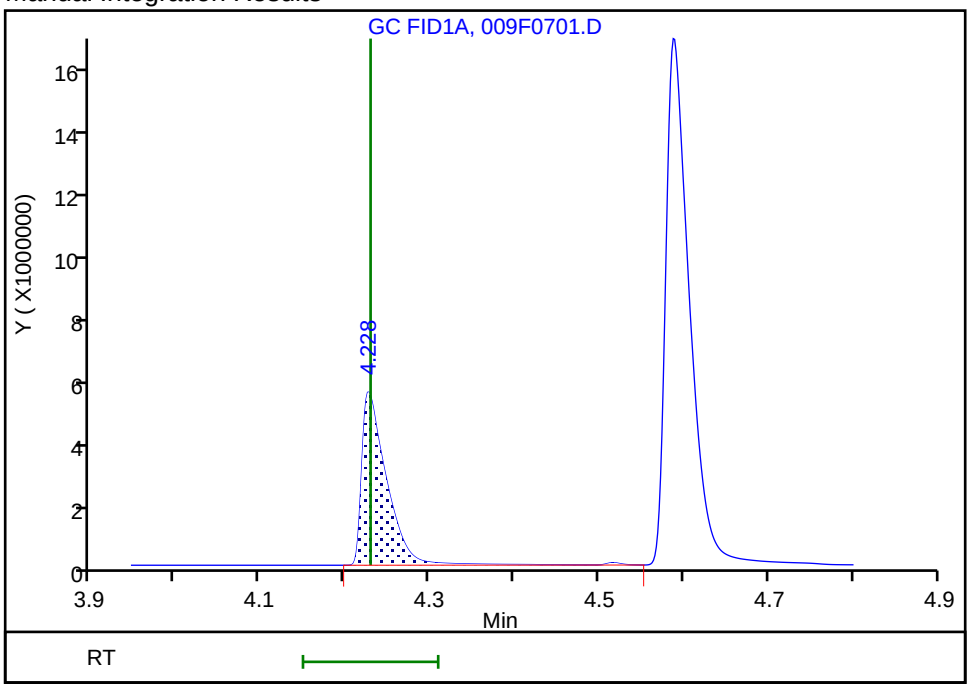
Not Detected
Expected RT: 4.23

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

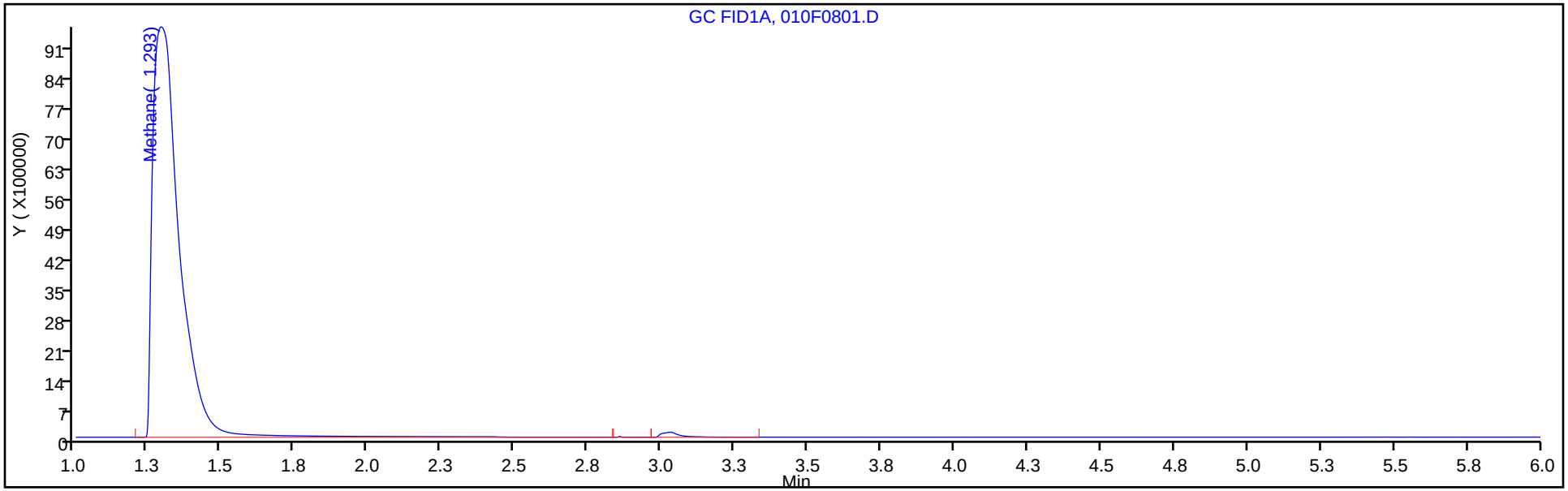
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

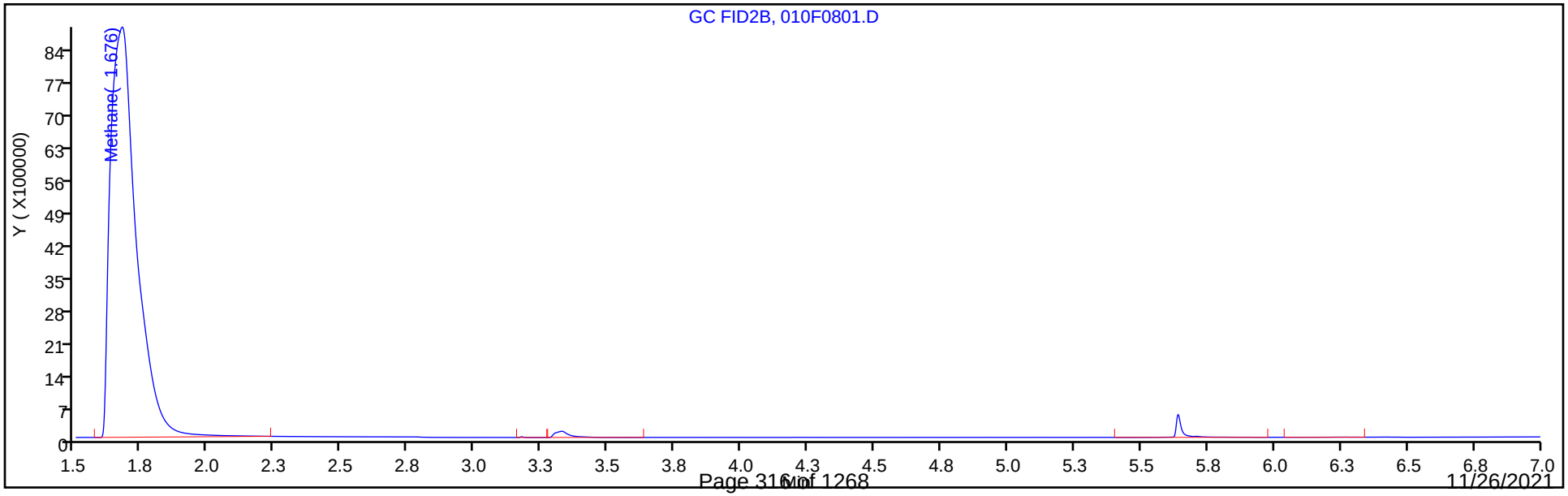
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\010F0801.D

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

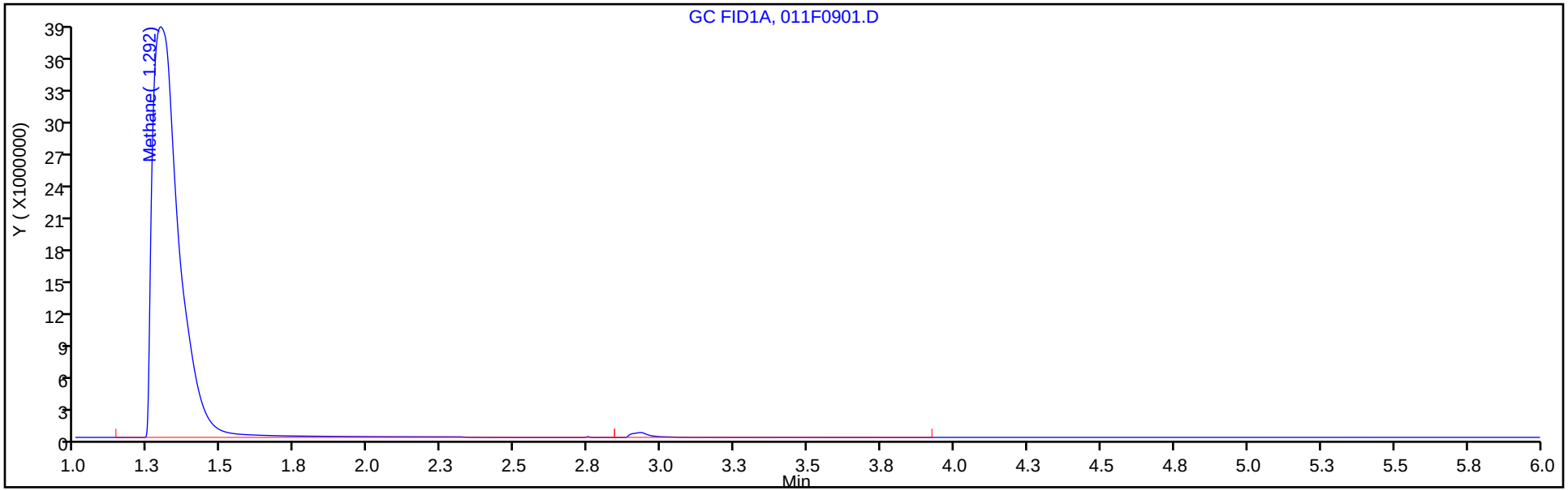
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

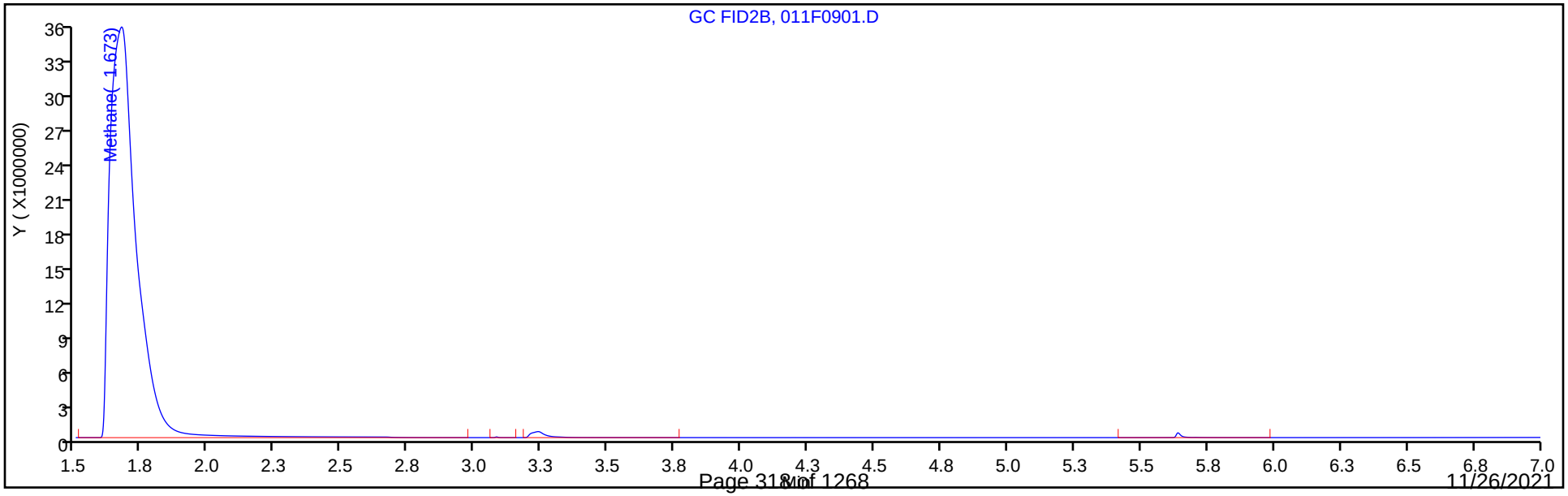
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\011F0901.D

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

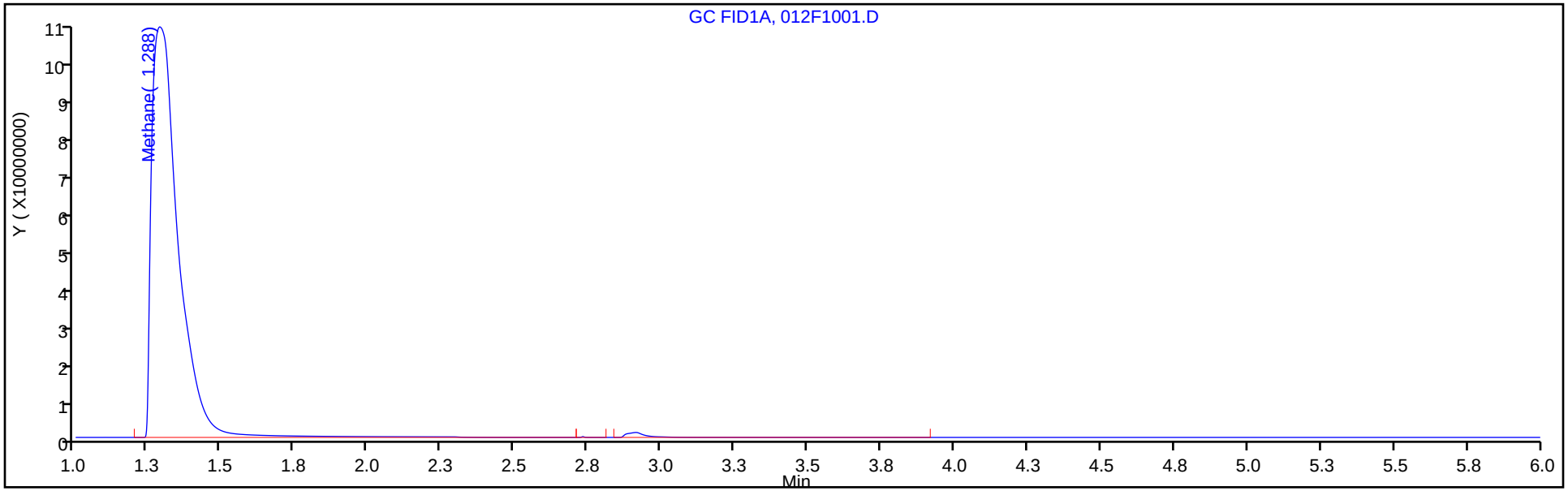
Report Date: 29-Sep-2021 10:55:18 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

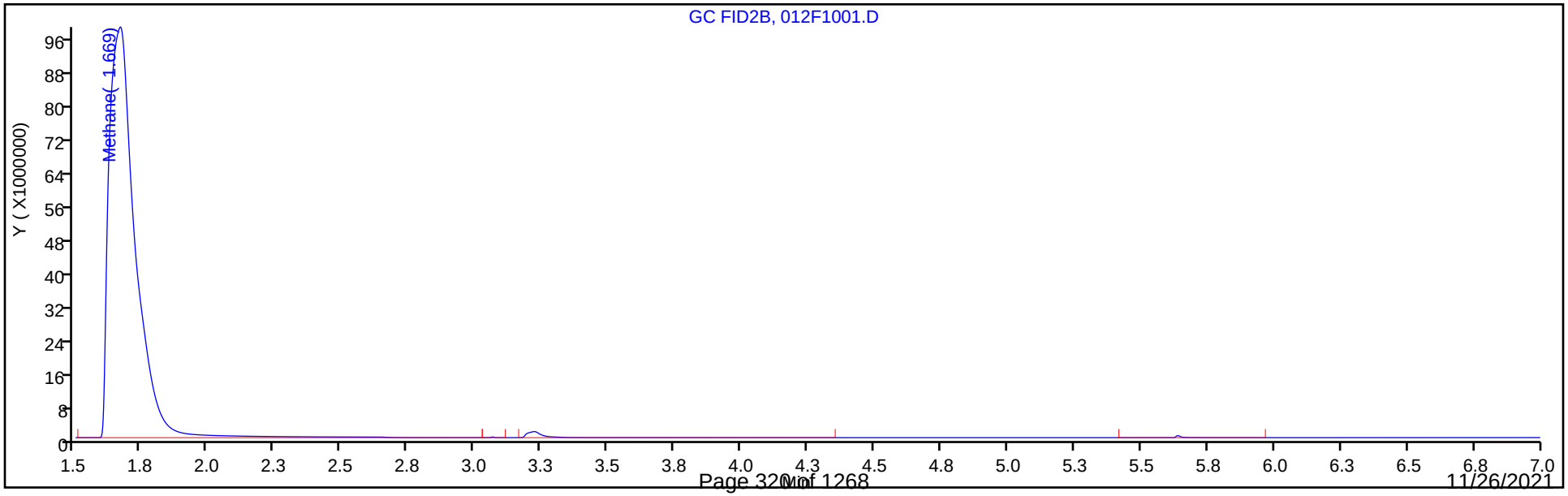
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

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

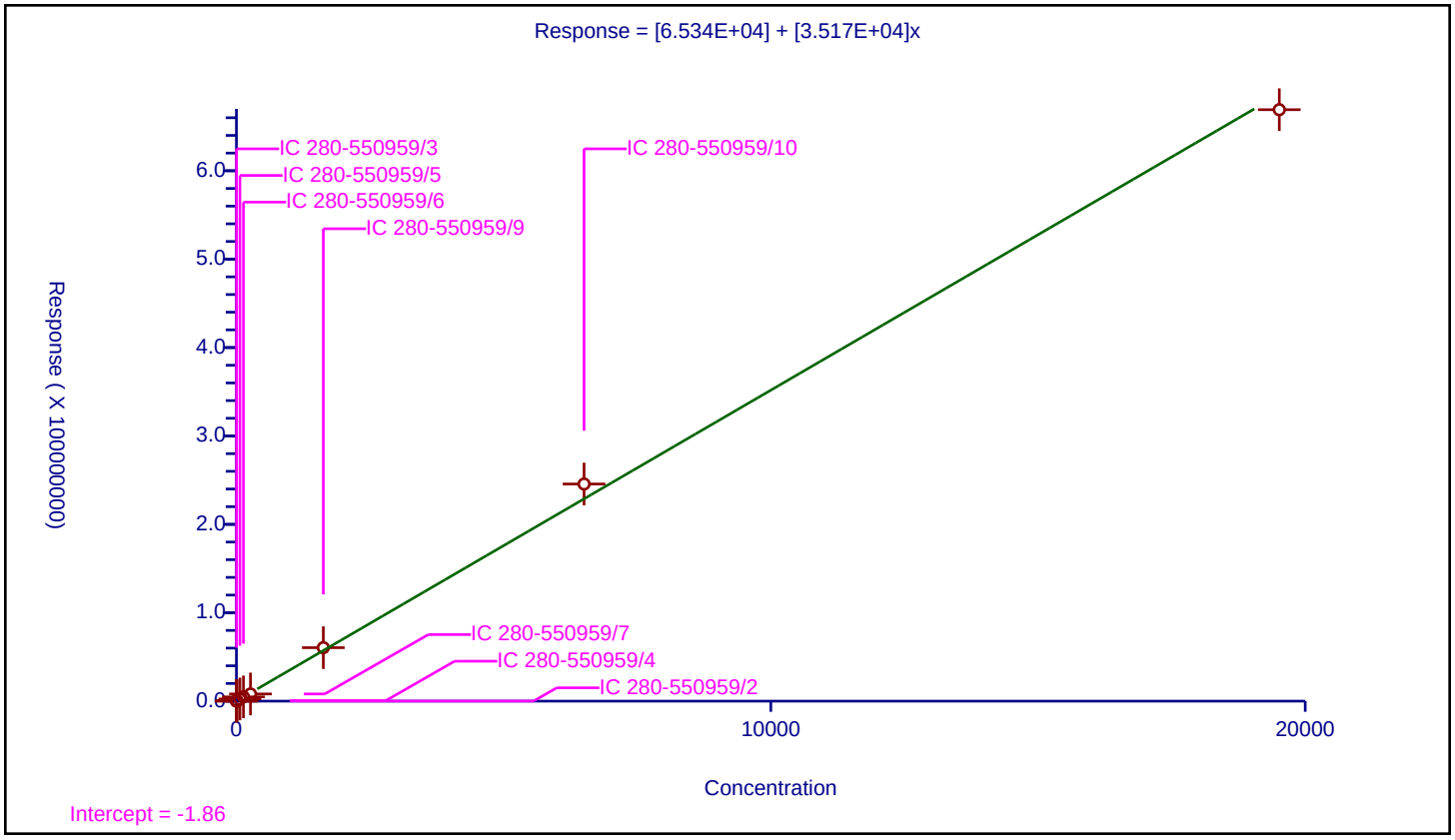
Curve Coefficients

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

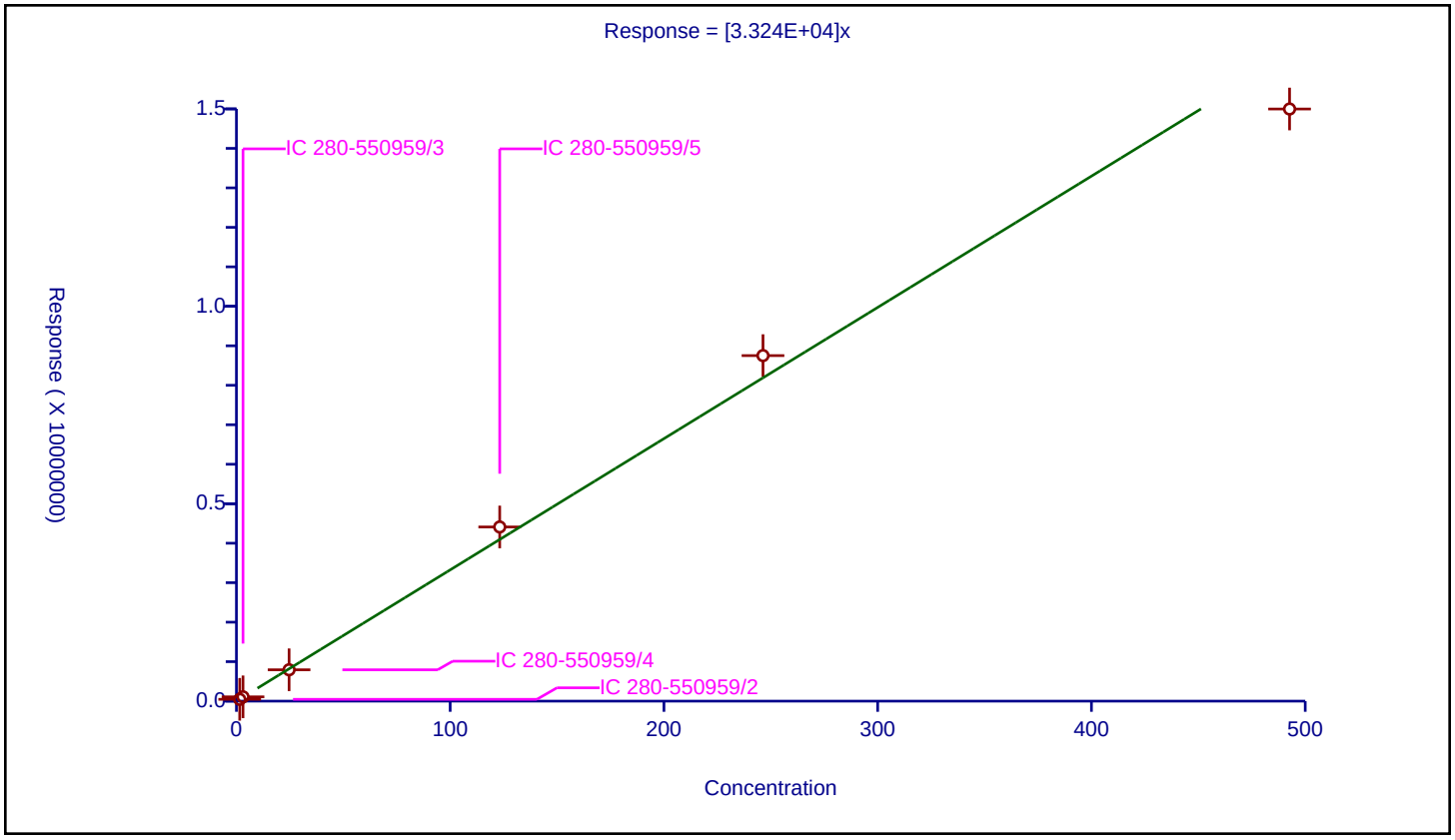
Curve Coefficients

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

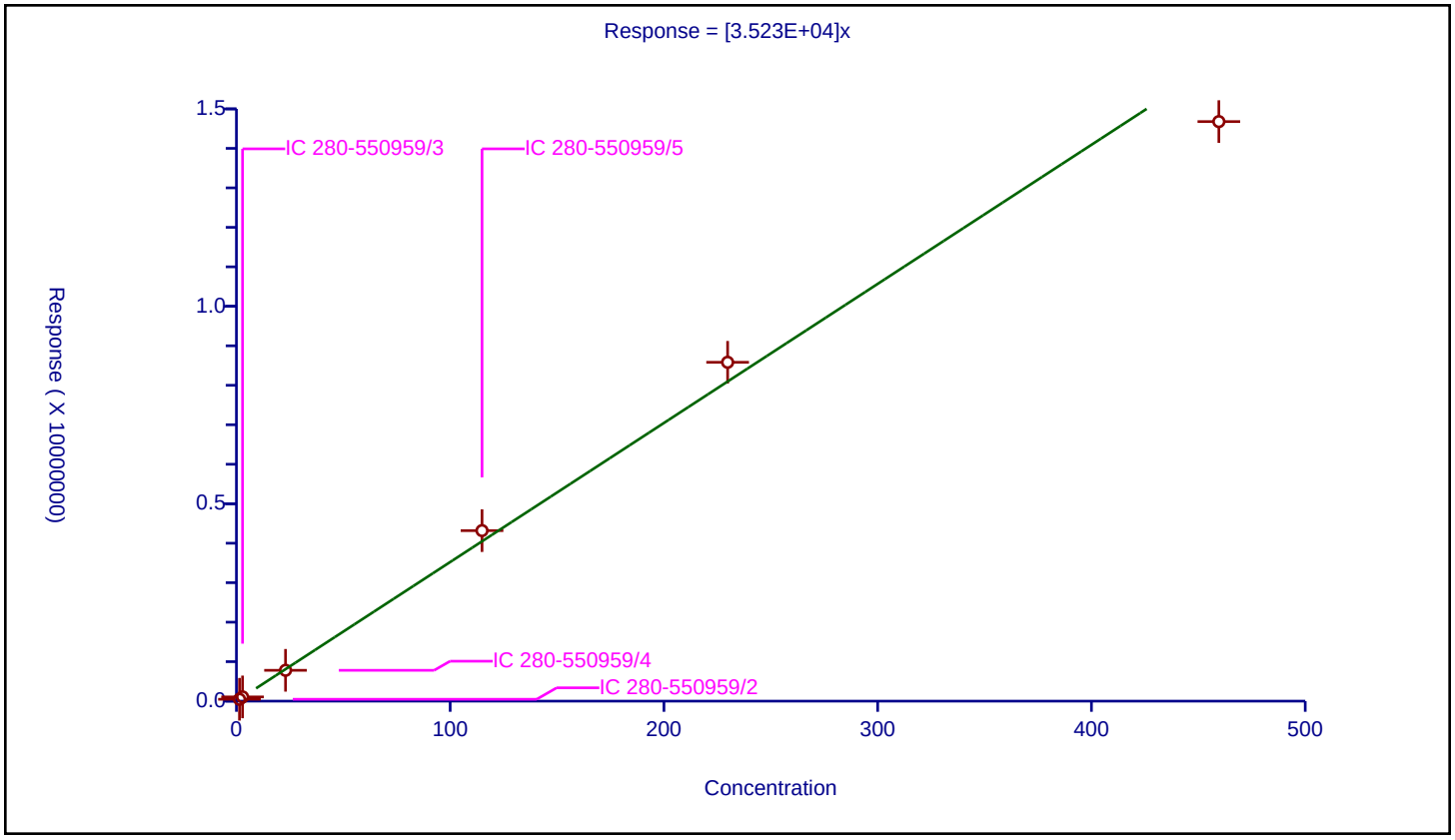
Curve Coefficients

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

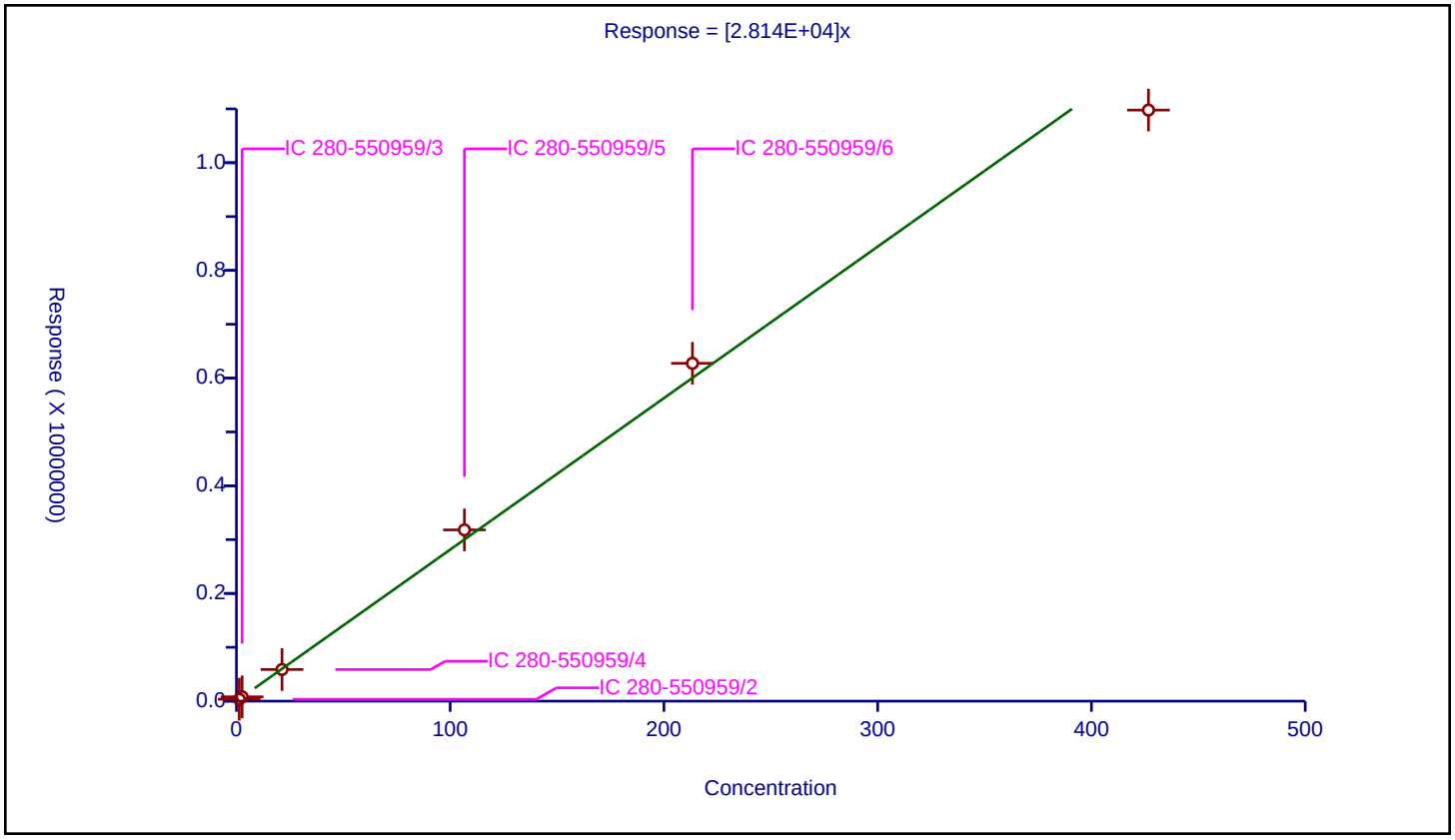
Curve Coefficients

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.: 280-155225-1 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.: 280-155225-1 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.: 280-155225-1 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

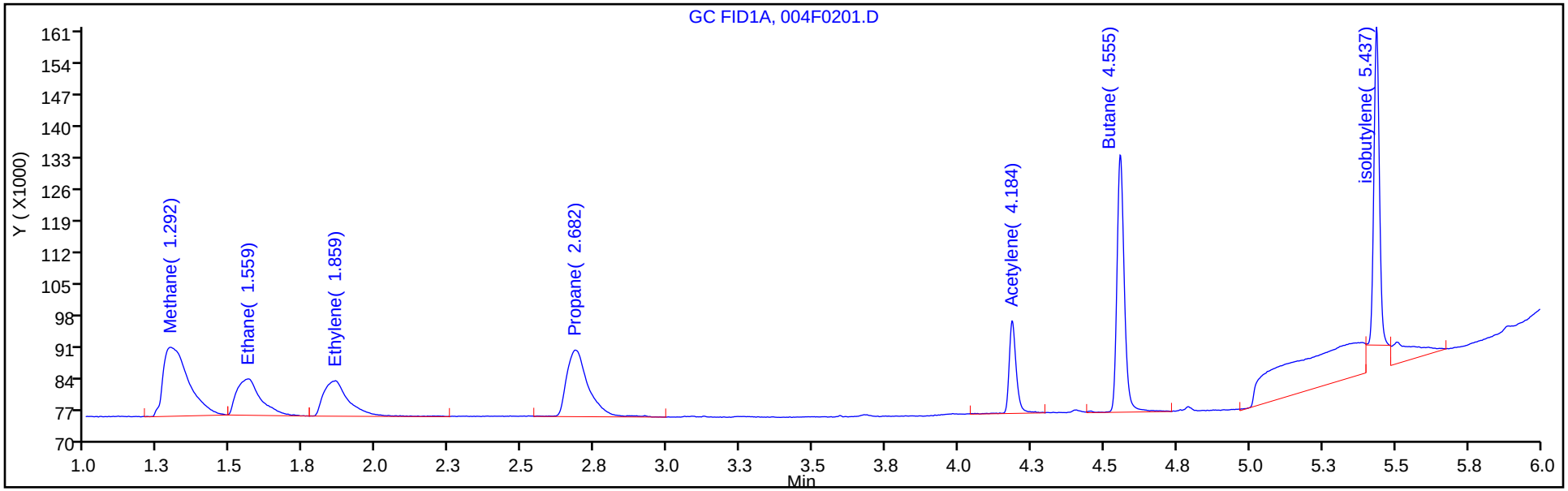
Report Date: 29-Sep-2021 10:55:12 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

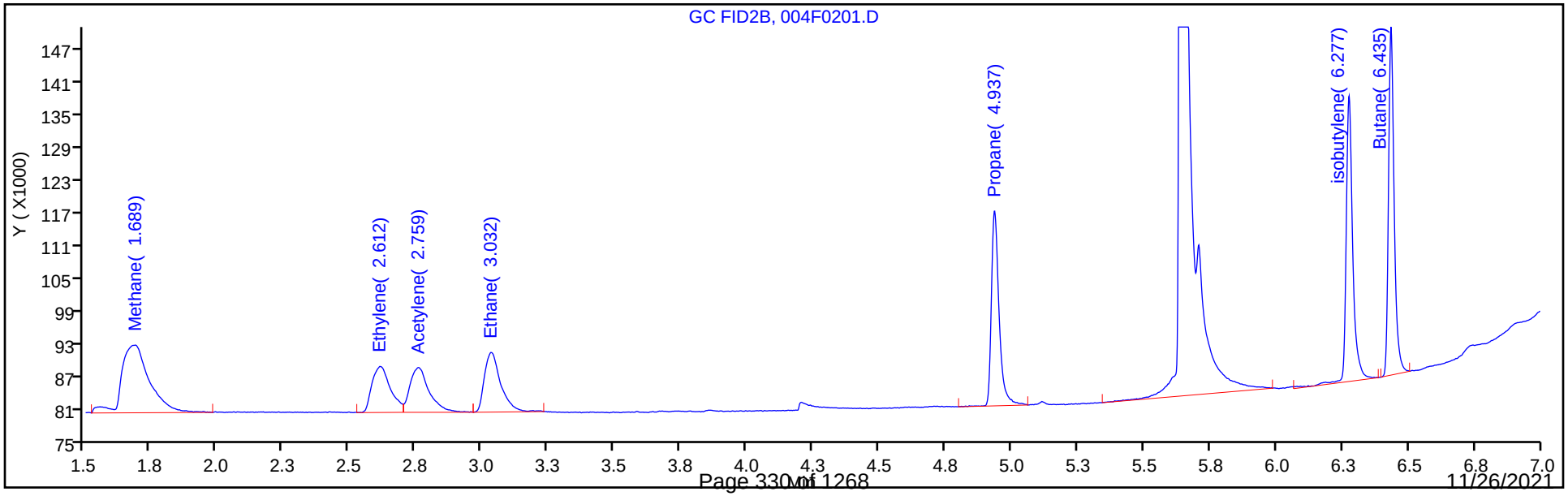
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D

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

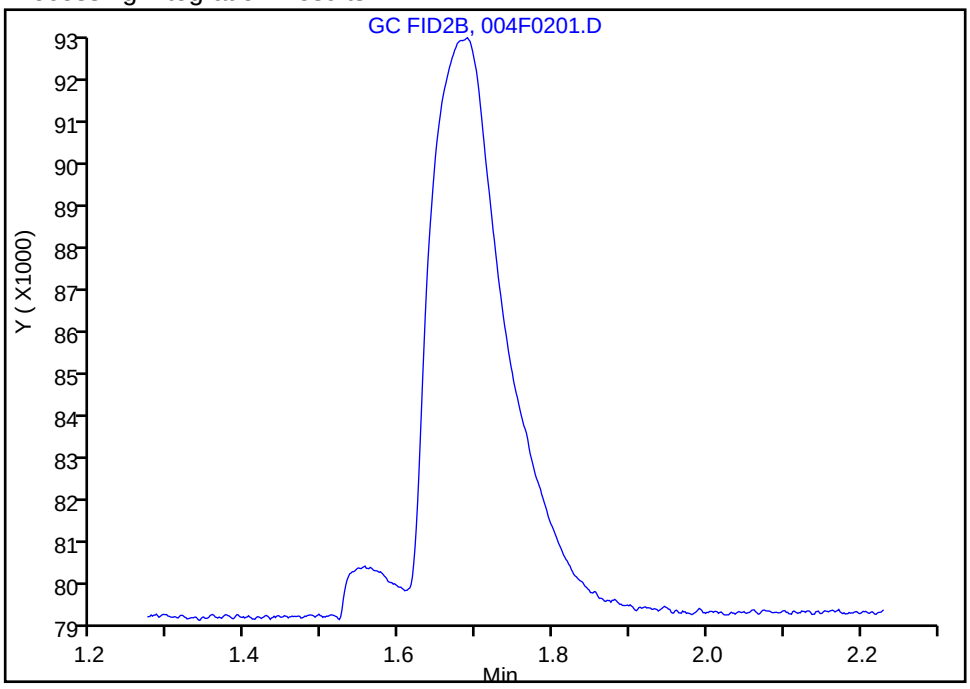
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

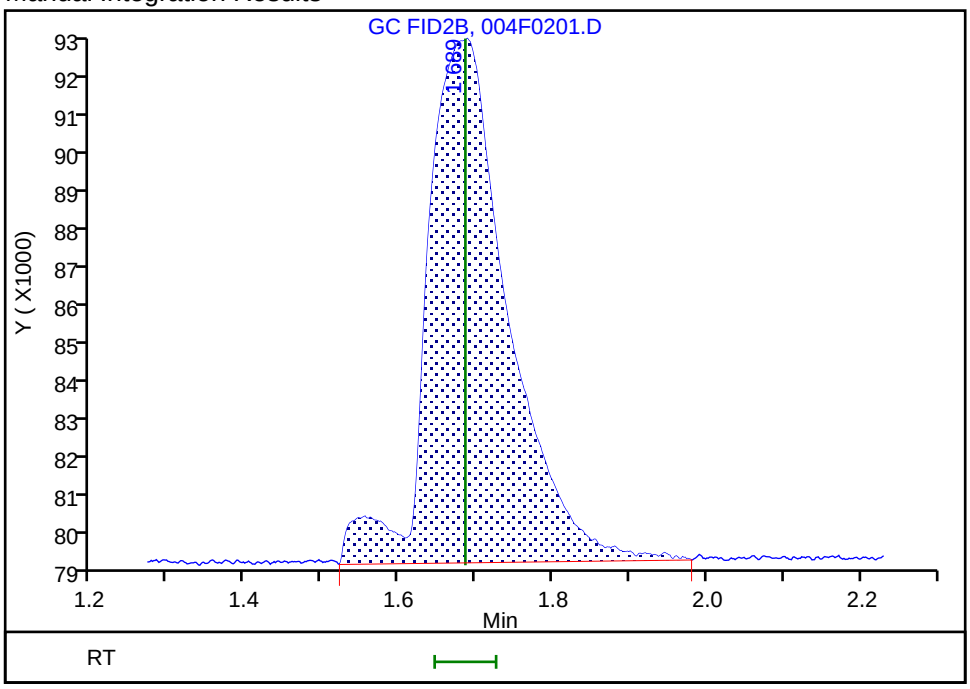
Not Detected
Expected RT: 1.69

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

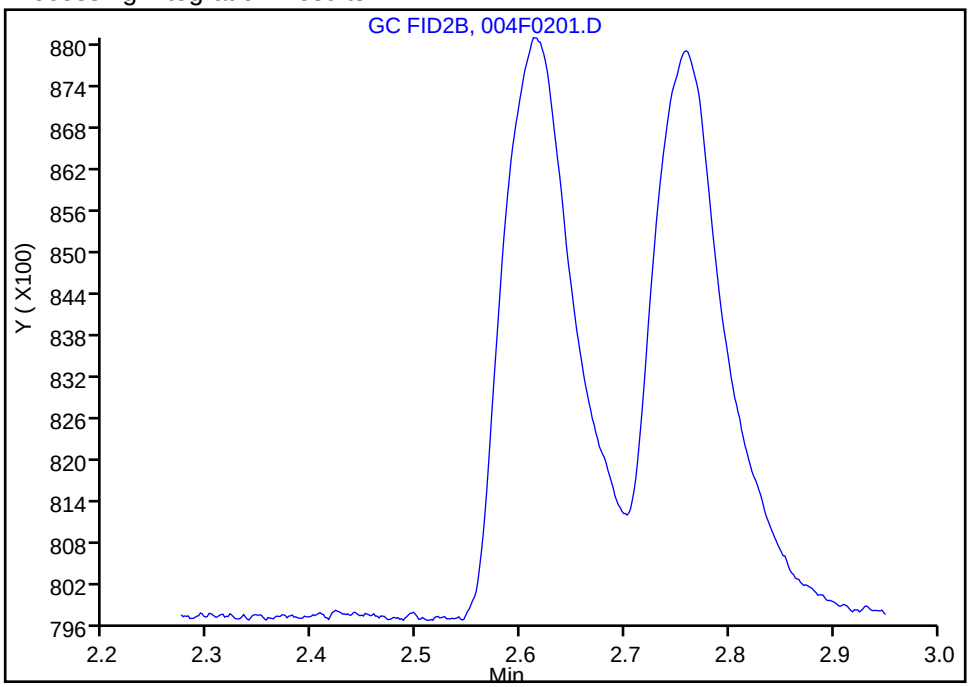
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

4 Ethylene, CAS: 74-85-1

Signal: 2

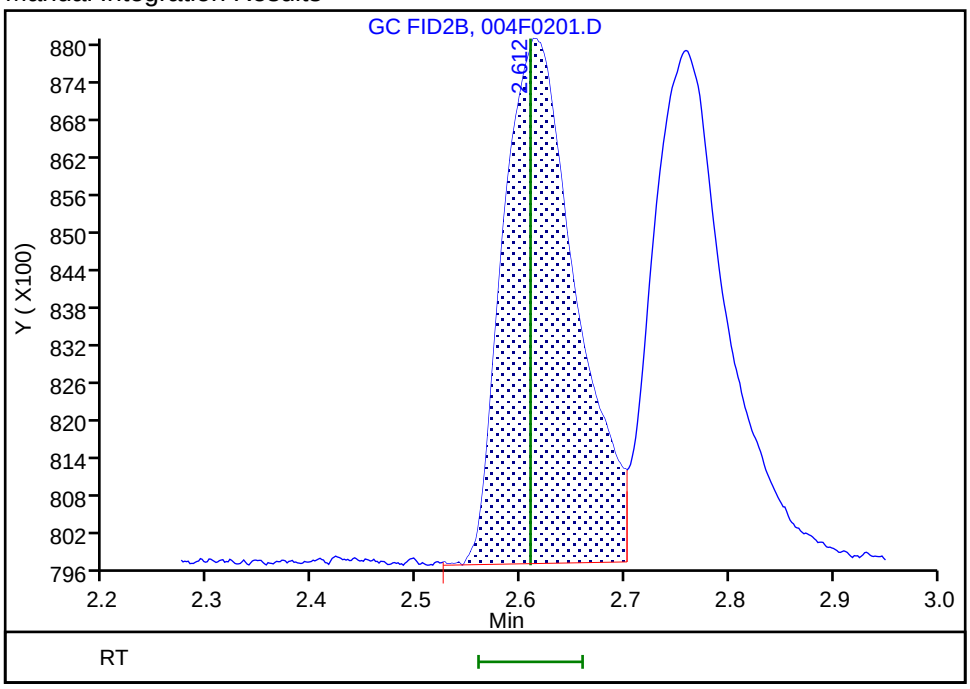
Not Detected
Expected RT: 2.61

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

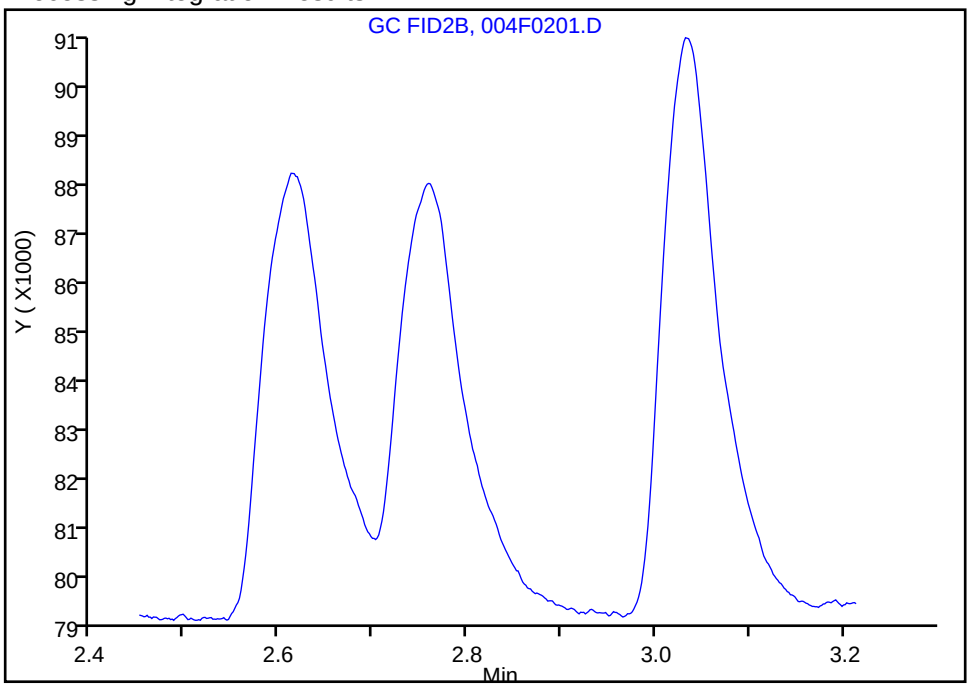
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

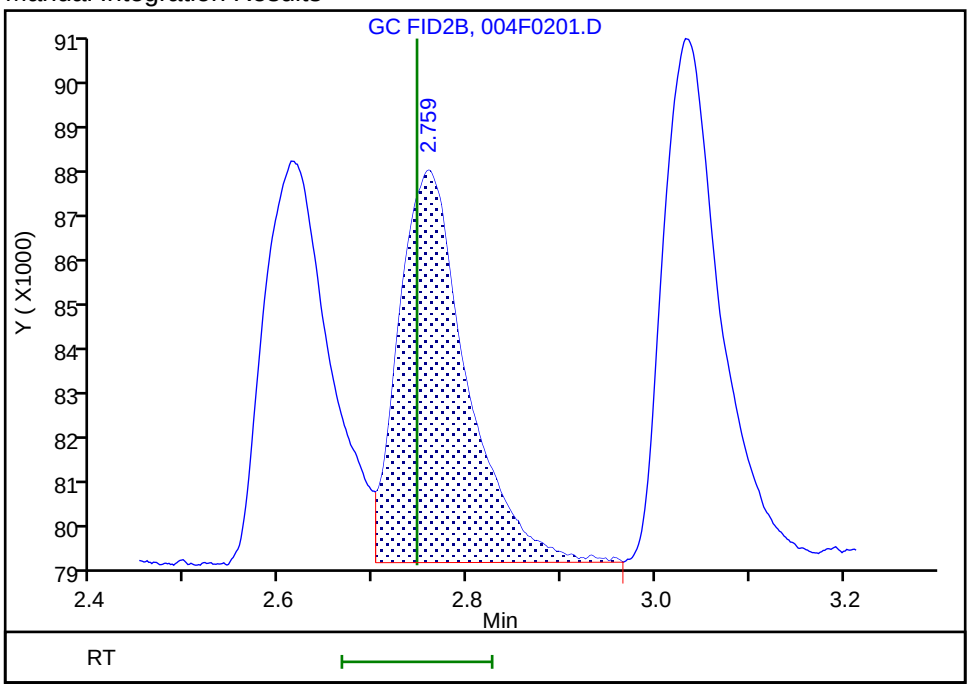
Not Detected
Expected RT: 2.75

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

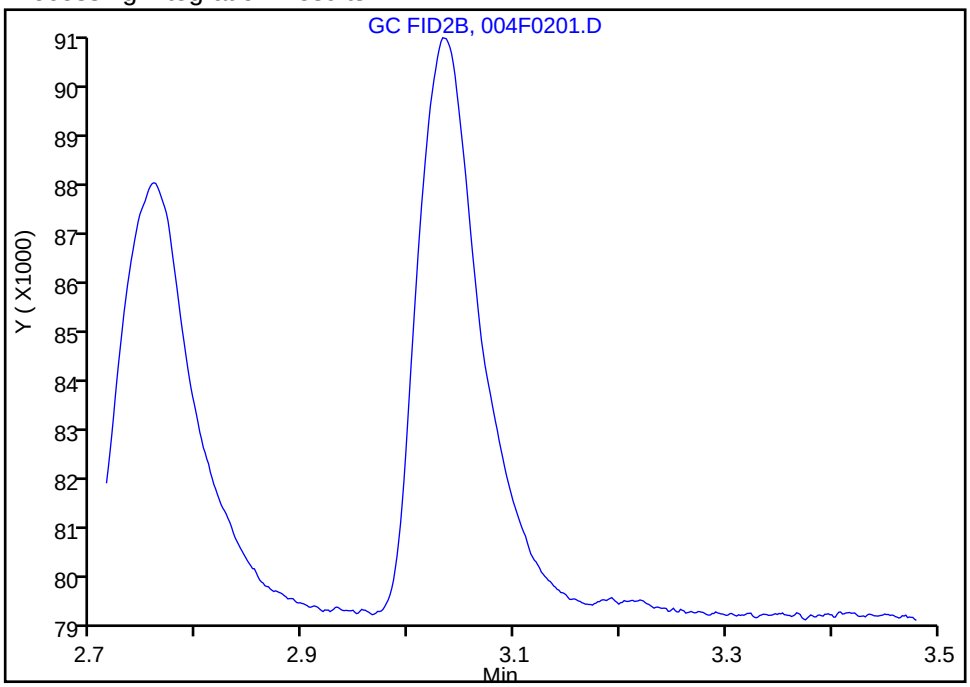
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\004F0201.D
Injection Date: 24-Sep-2021 13:28:57 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 4 Worklist Smp#: 2
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

3 Ethane, CAS: 74-84-0

Signal: 2

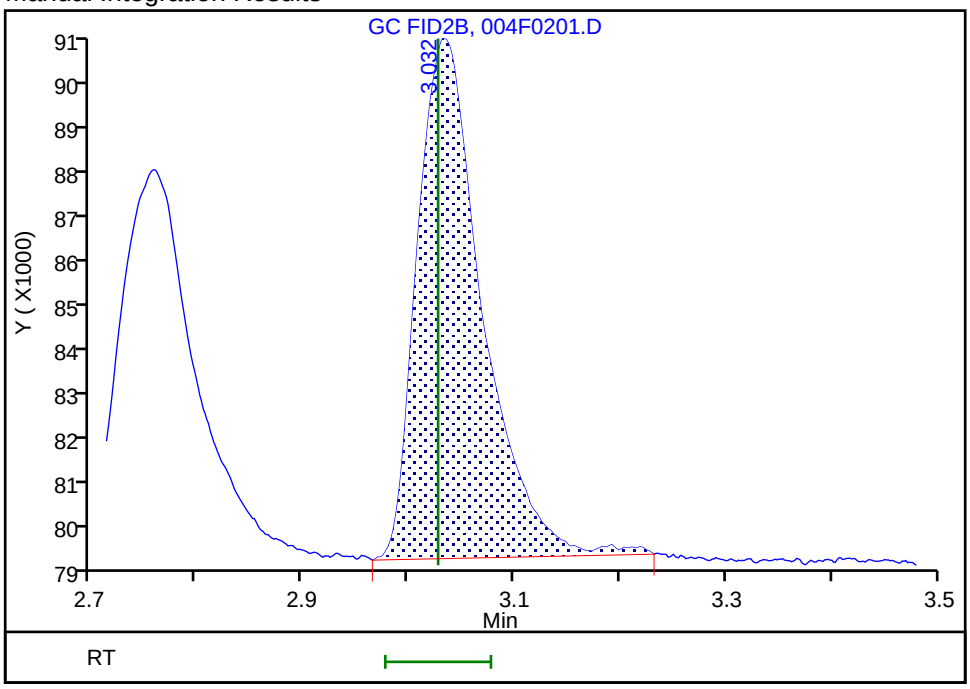
Not Detected
Expected RT: 3.03

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

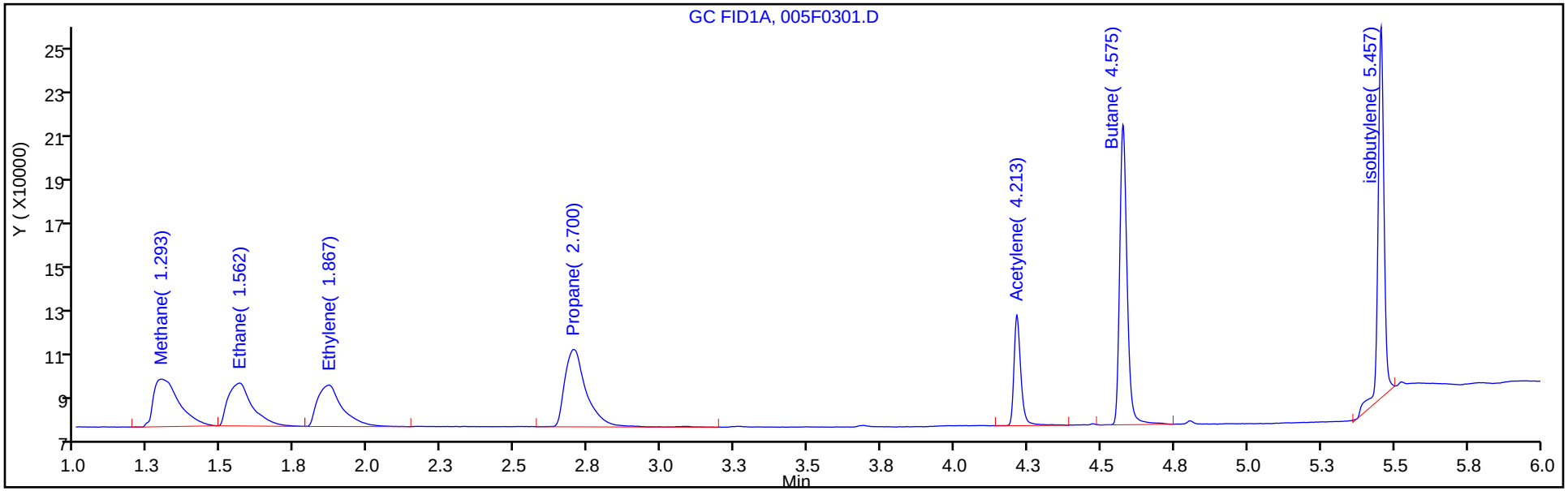
Report Date: 29-Sep-2021 10:55:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

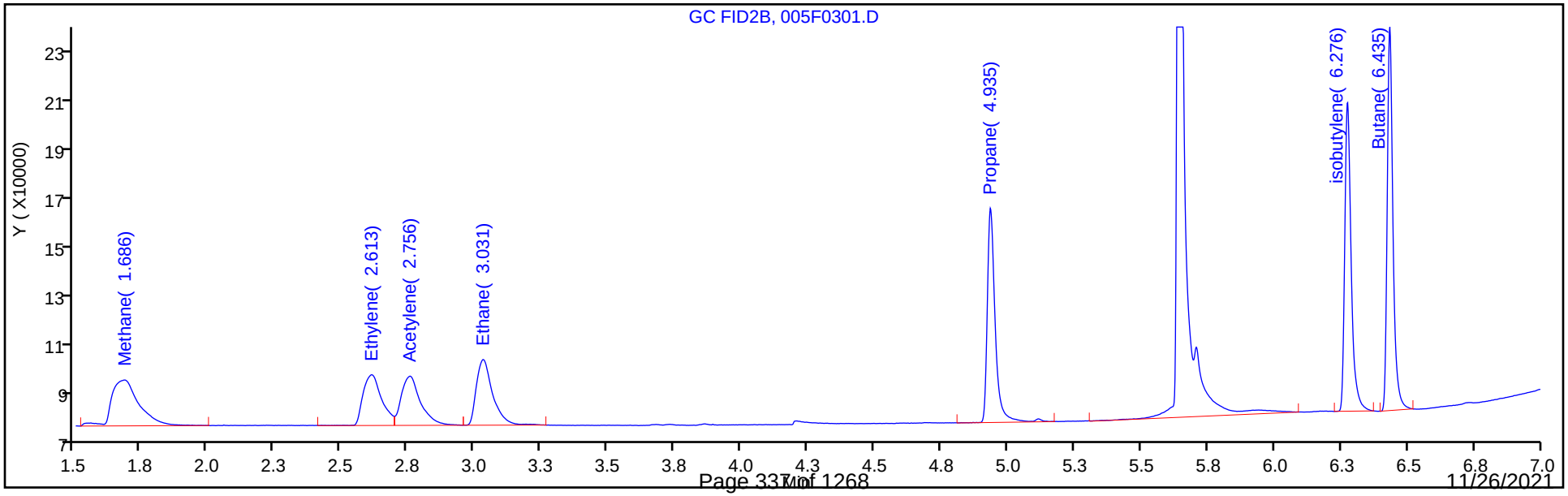
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\005F0301.D

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

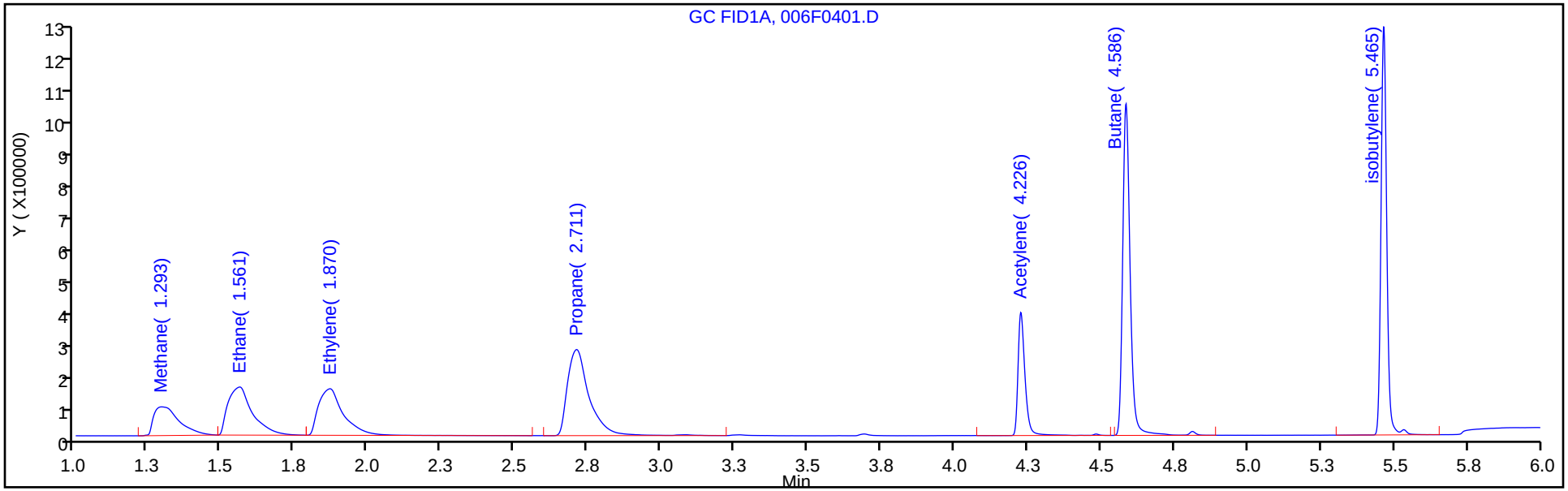
Report Date: 29-Sep-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

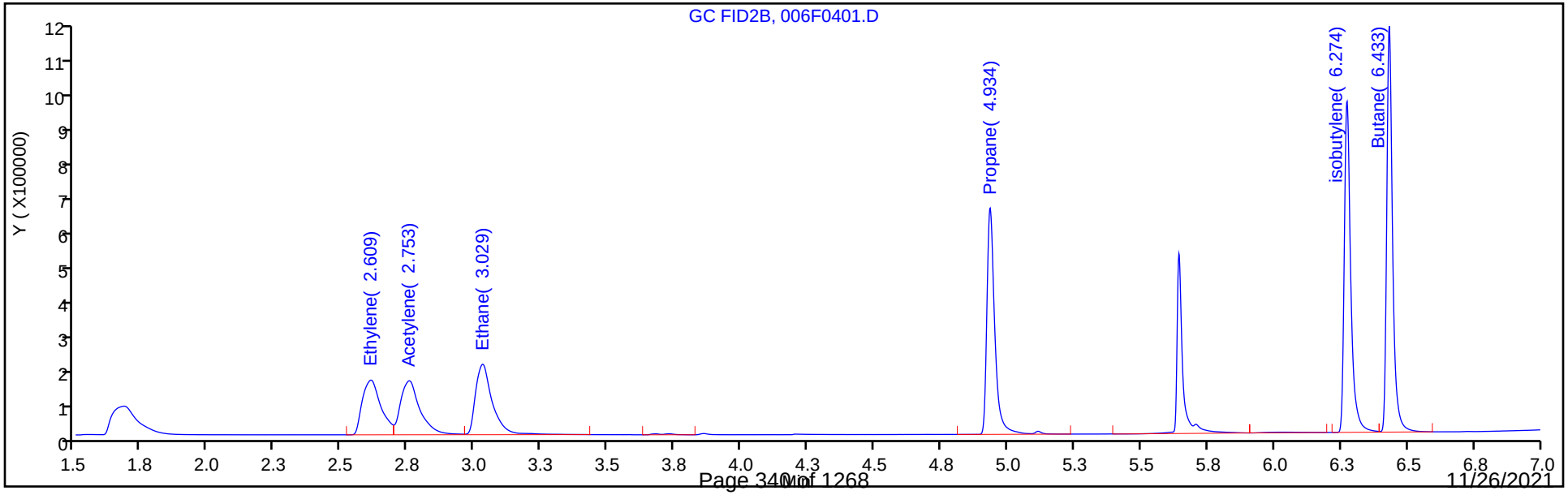
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D

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

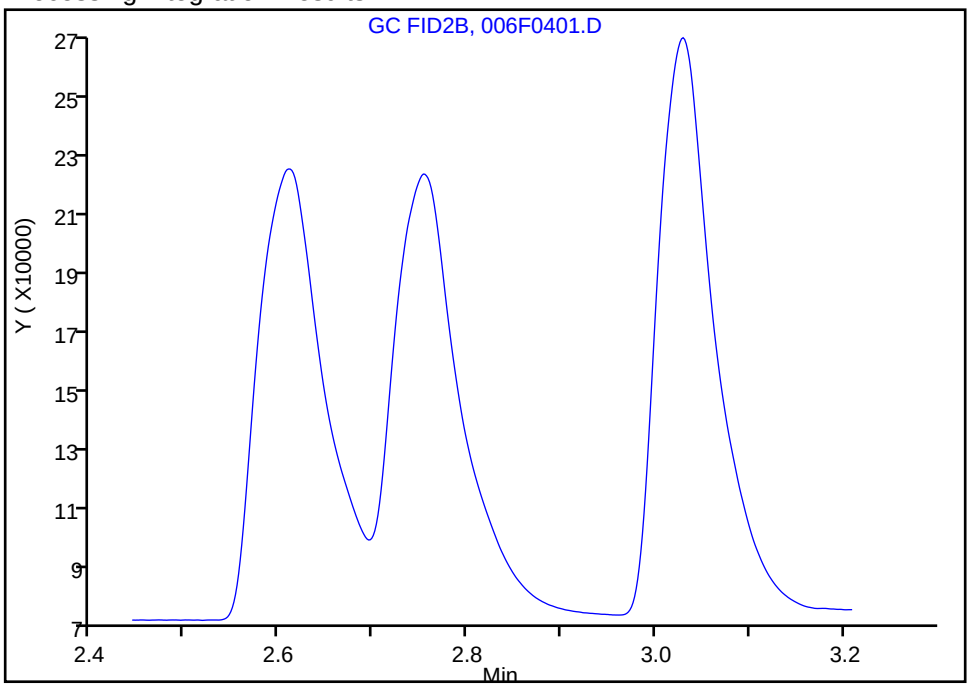
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\006F0401.D
Injection Date: 24-Sep-2021 13:54:46 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 6 Worklist Smp#: 4
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

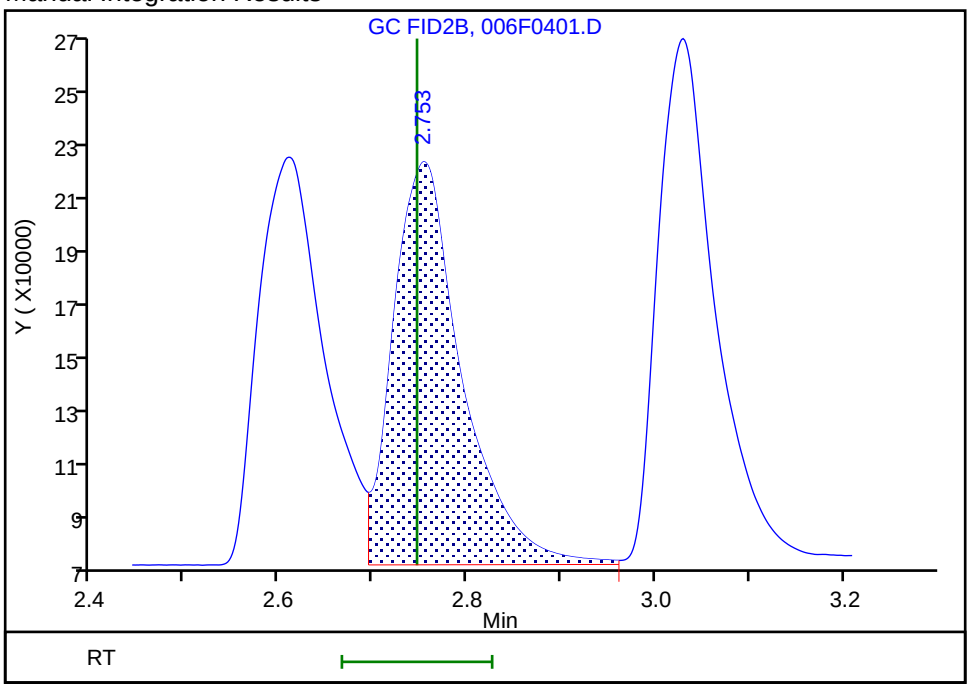
Not Detected
Expected RT: 2.75

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

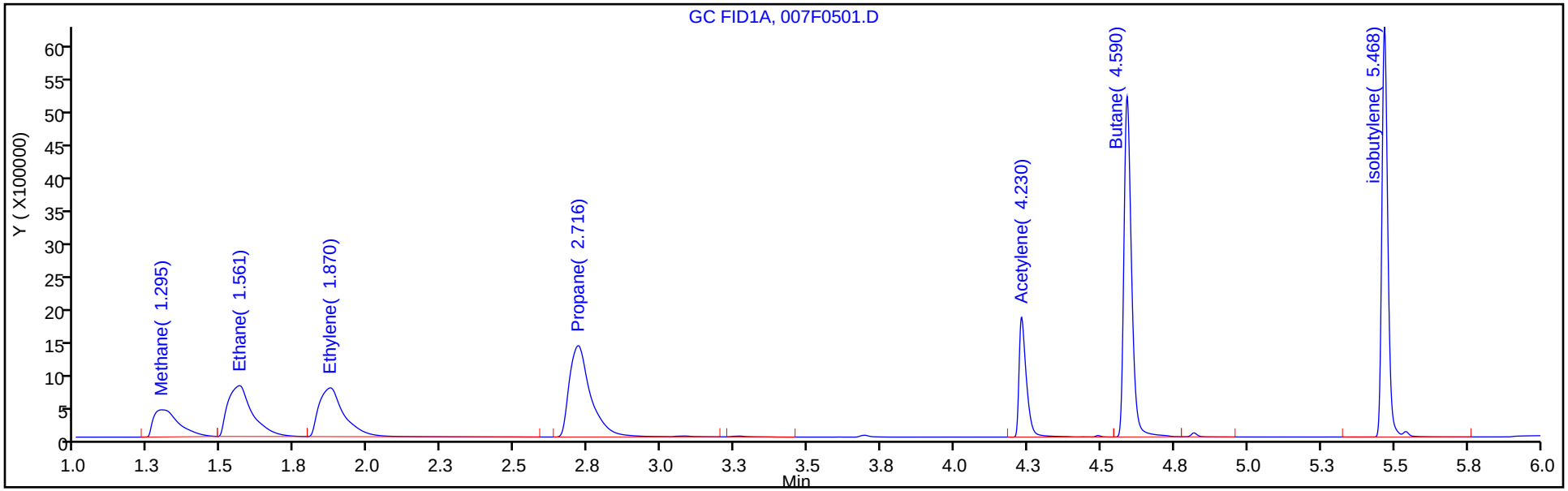
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

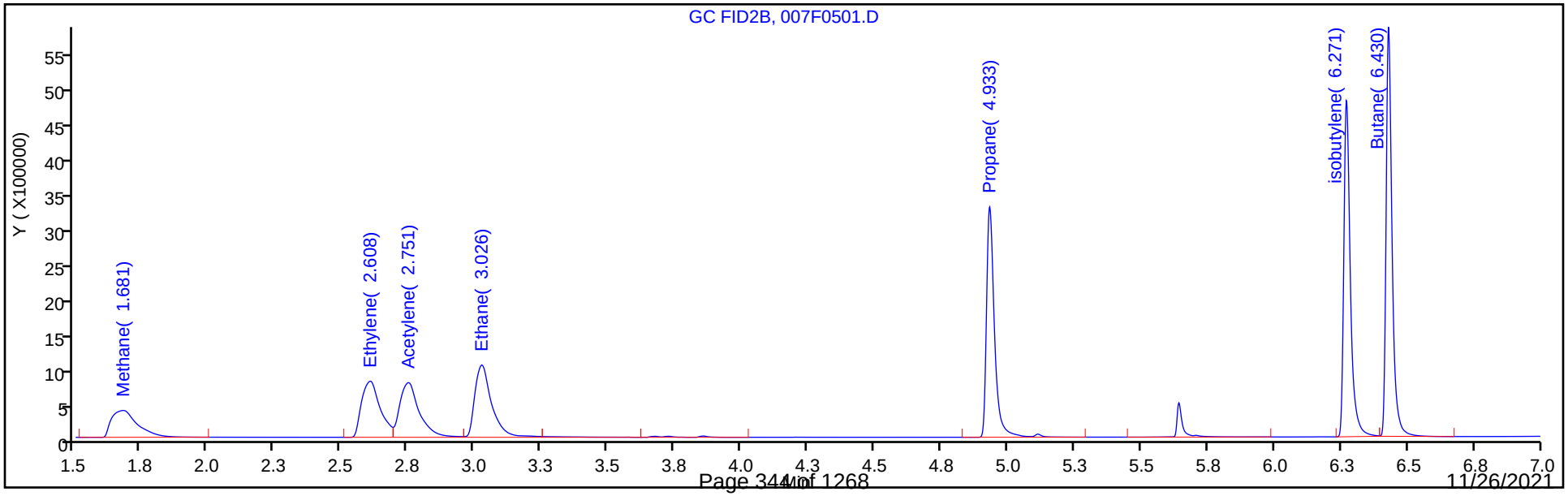
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D

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

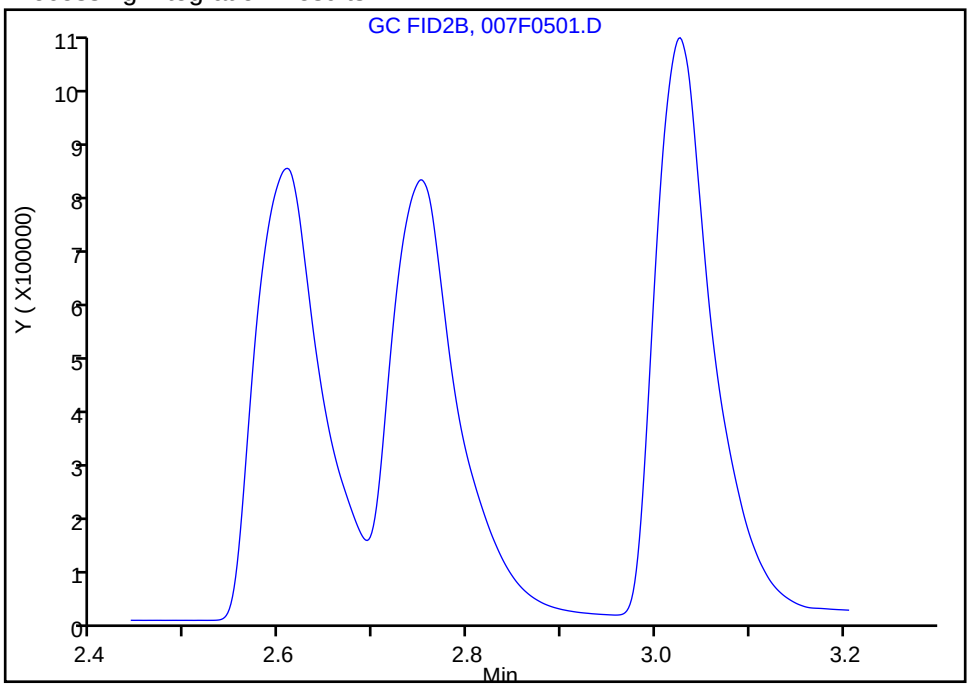
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

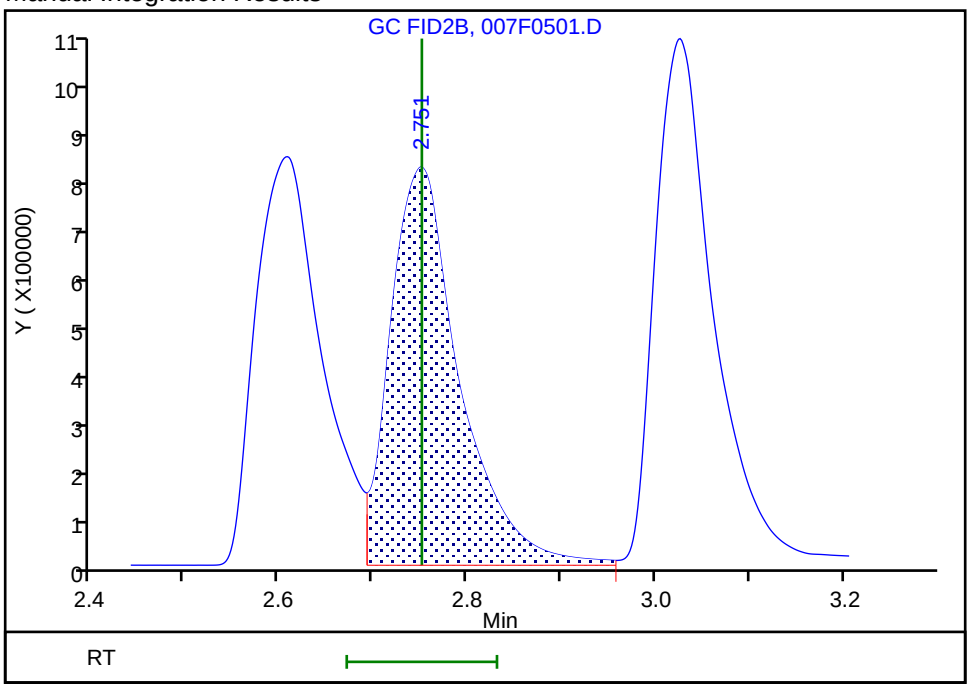
Not Detected
Expected RT: 2.75

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

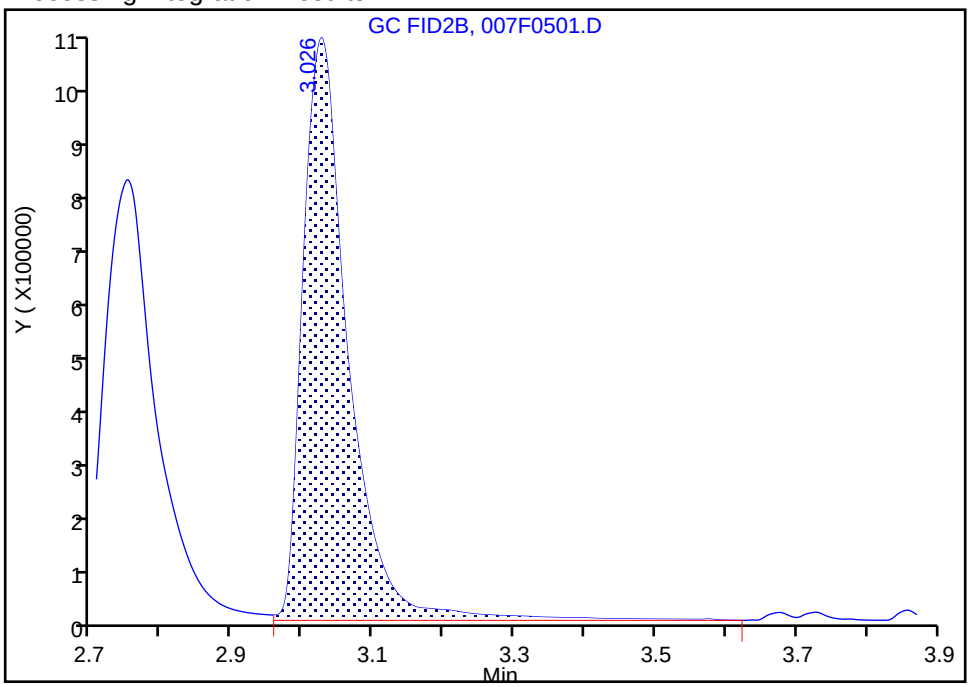
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\007F0501.D
Injection Date: 24-Sep-2021 14:07:45 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 7 Worklist Smp#: 5
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

3 Ethane, CAS: 74-84-0

Signal: 2

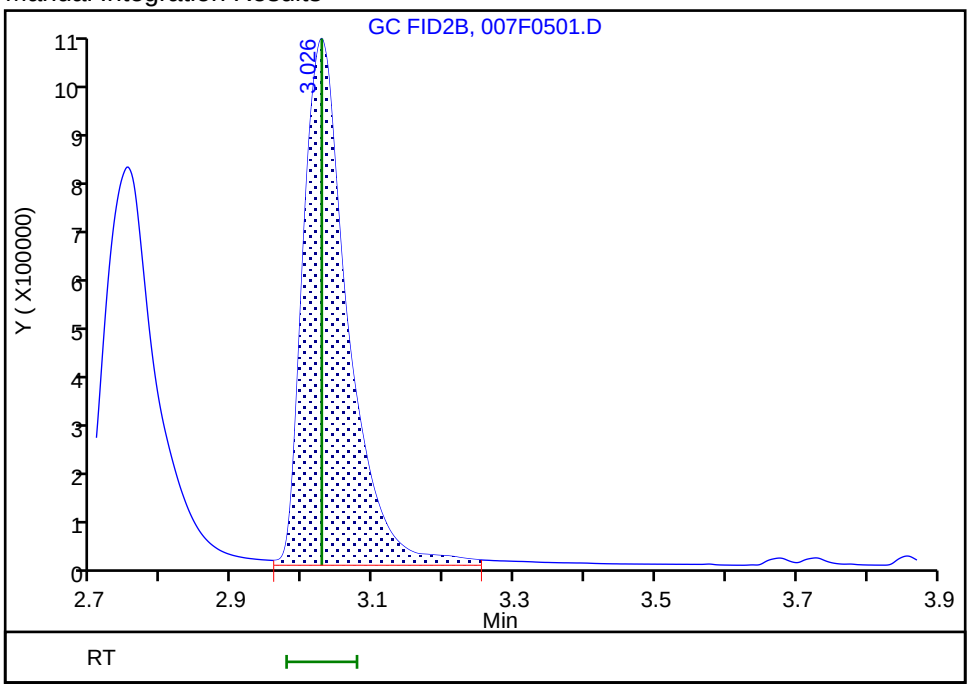
Processing Integration Results

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

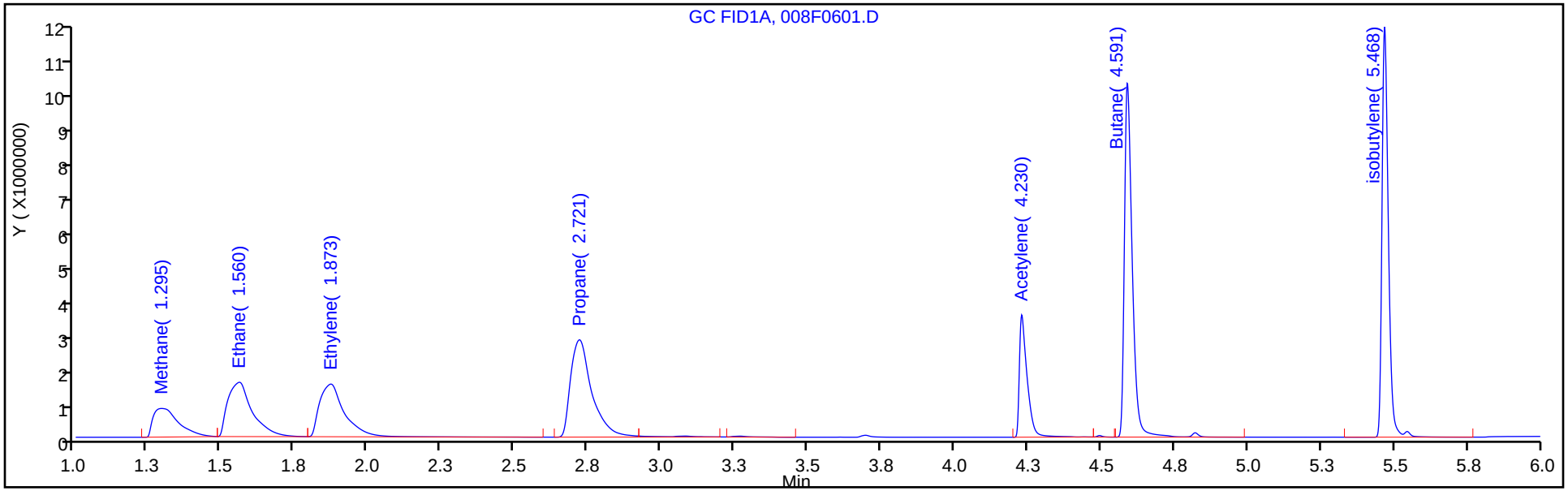
Report Date: 29-Sep-2021 10:55:15 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

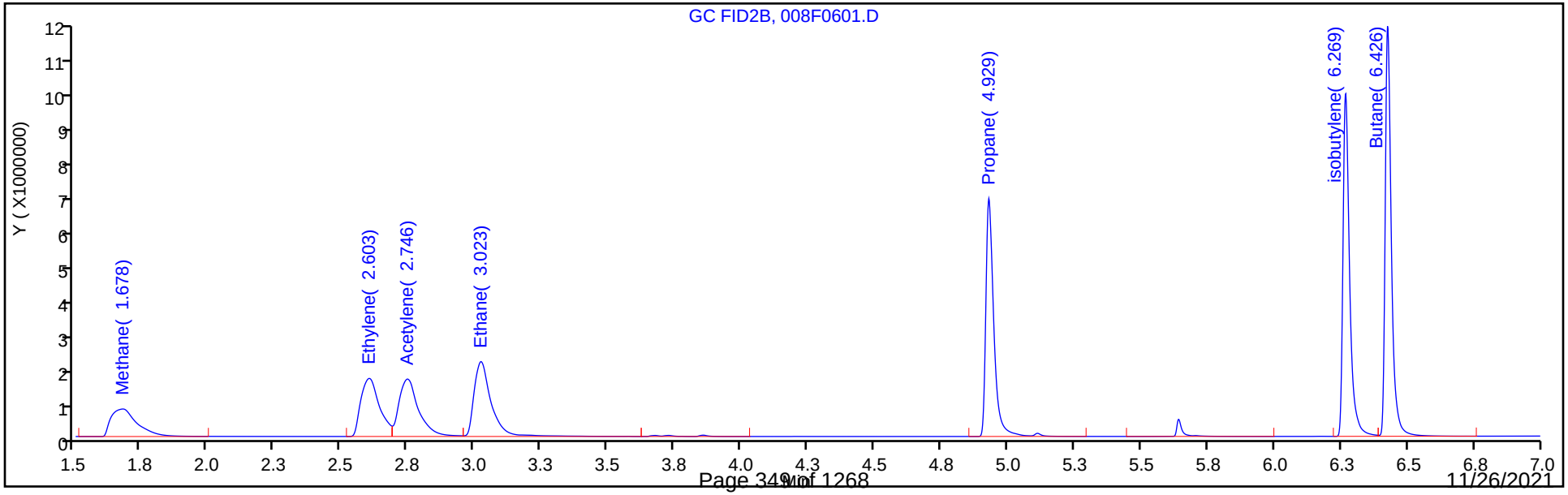
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D

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

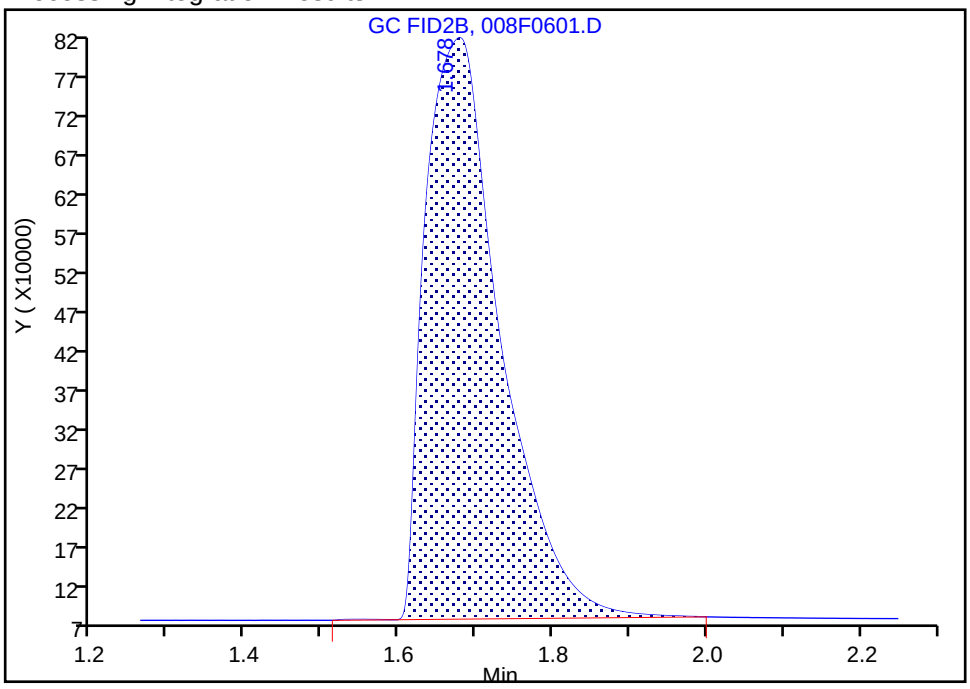
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Injection Date: 24-Sep-2021 14:20:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

2 Methane, CAS: 74-82-8

Signal: 2

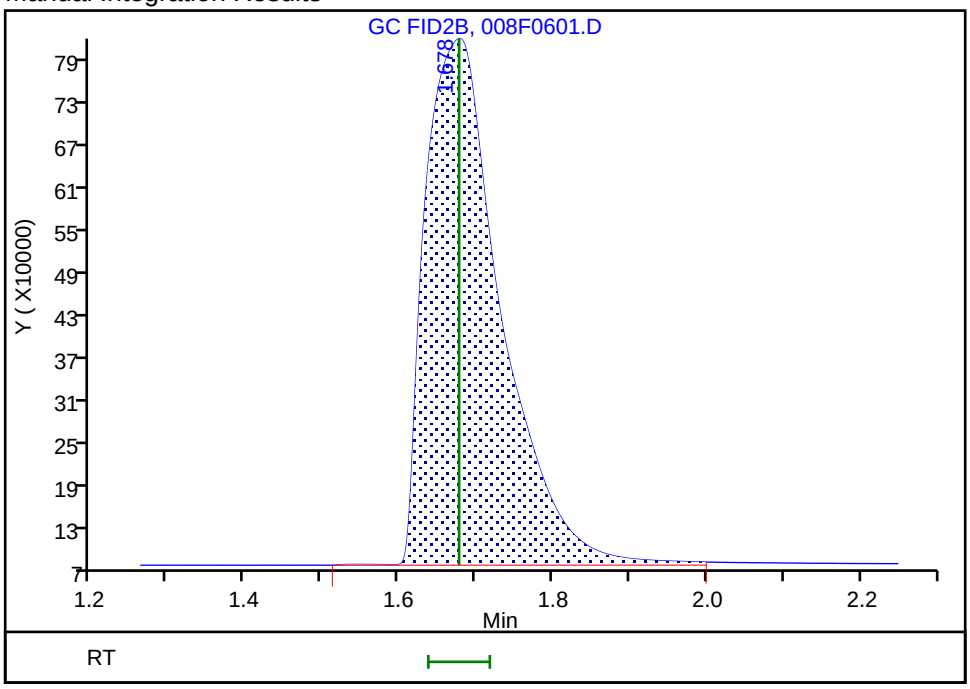
Processing Integration Results

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

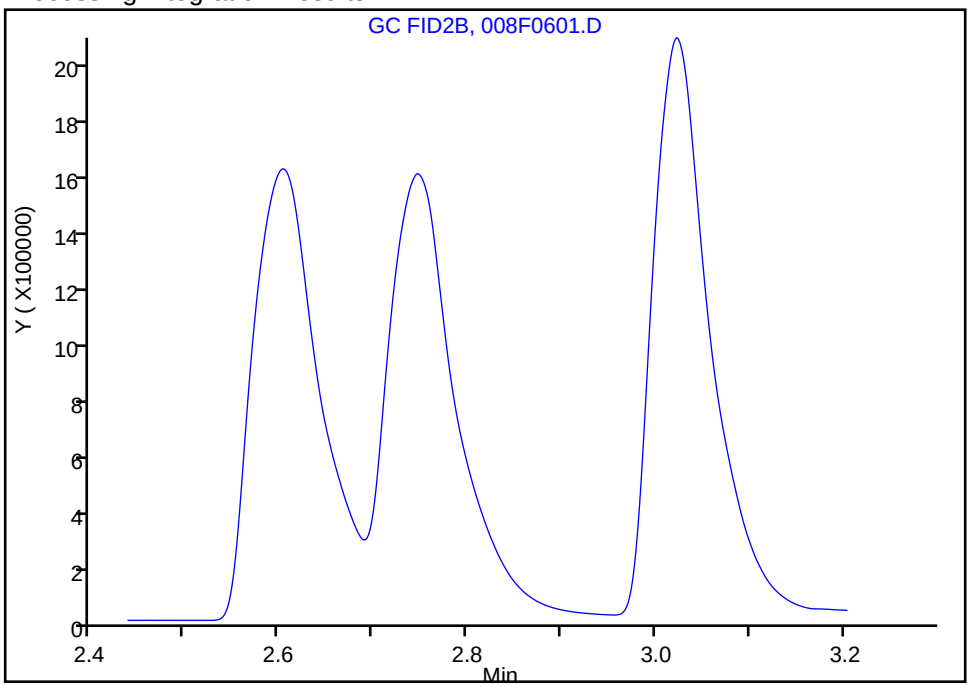
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\008F0601.D
Injection Date: 24-Sep-2021 14:20:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 8 Worklist Smp#: 6
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

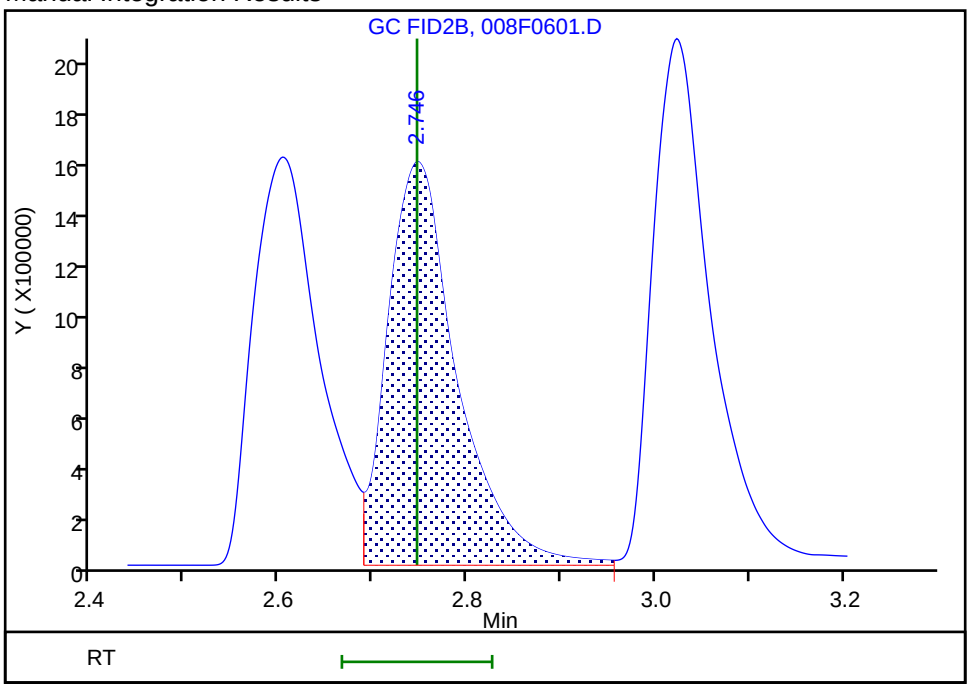
Not Detected
Expected RT: 2.75

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

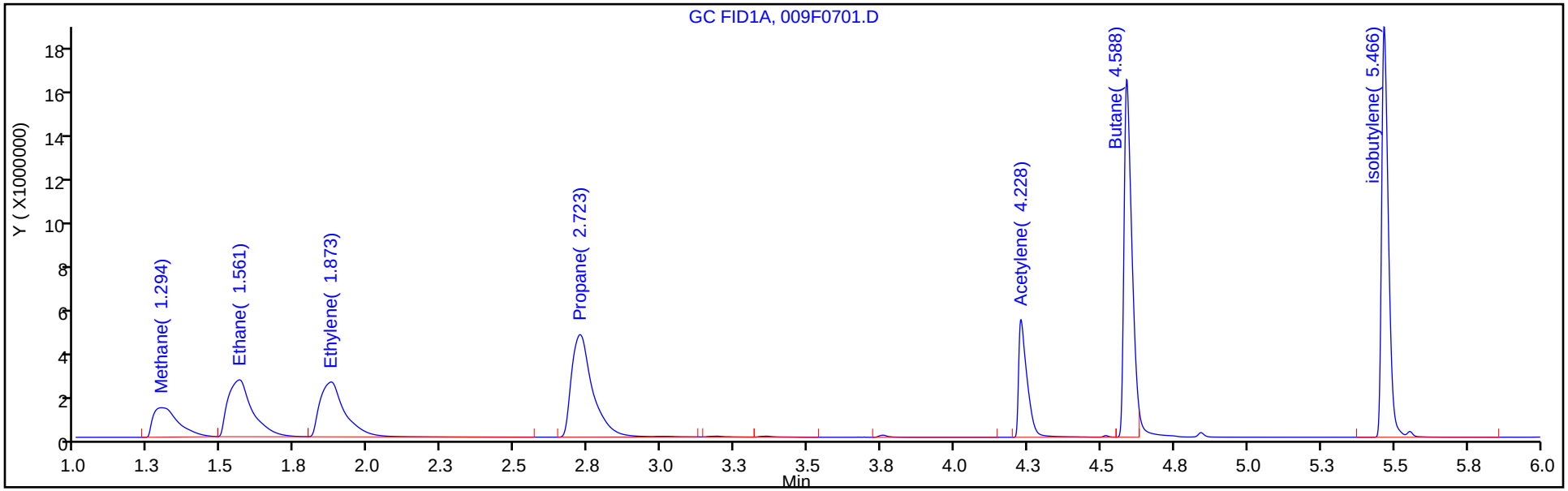
Report Date: 29-Sep-2021 10:55:16 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

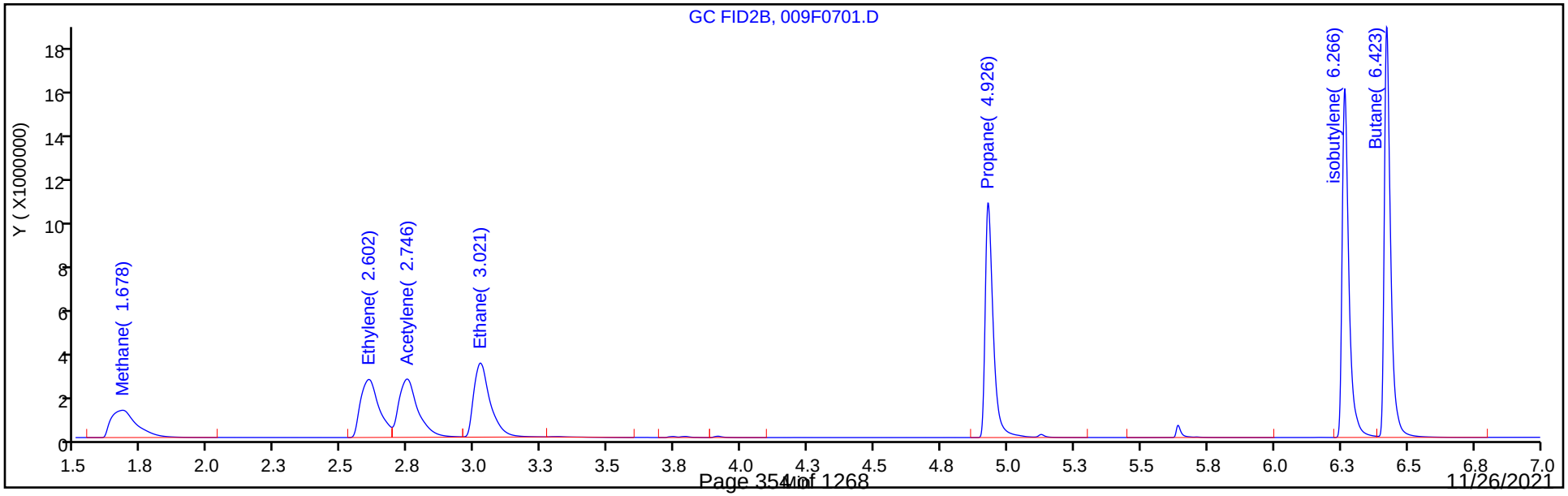
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D

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

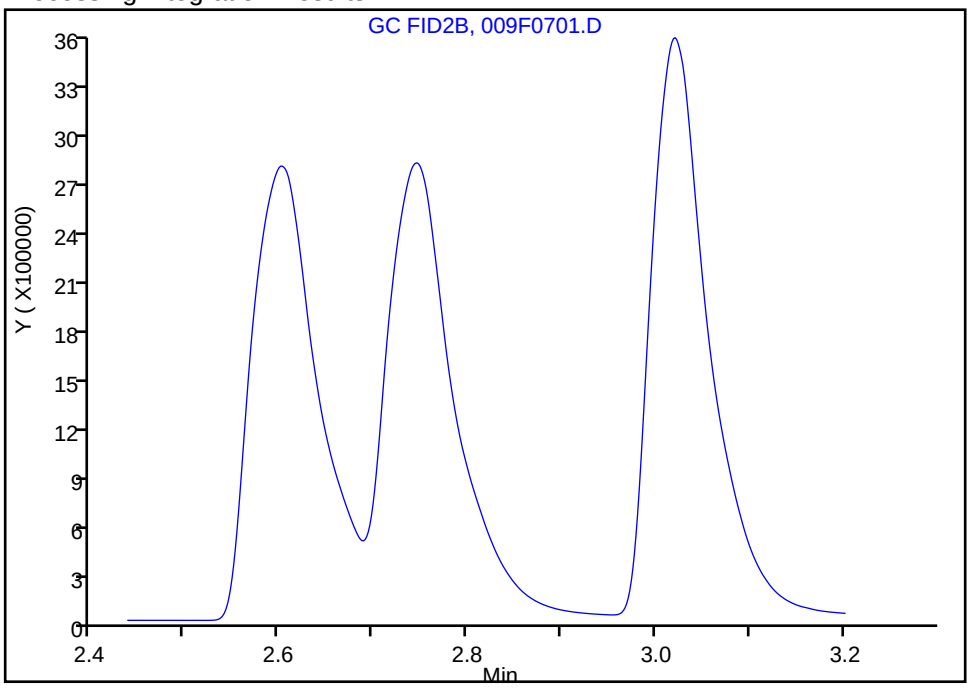
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\009F0701.D
Injection Date: 24-Sep-2021 14:33:44 Instrument ID: VGC_J
Lims ID: ic
Client ID:
Operator ID: sciannac ALS Bottle#: 9 Worklist Smp#: 7
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

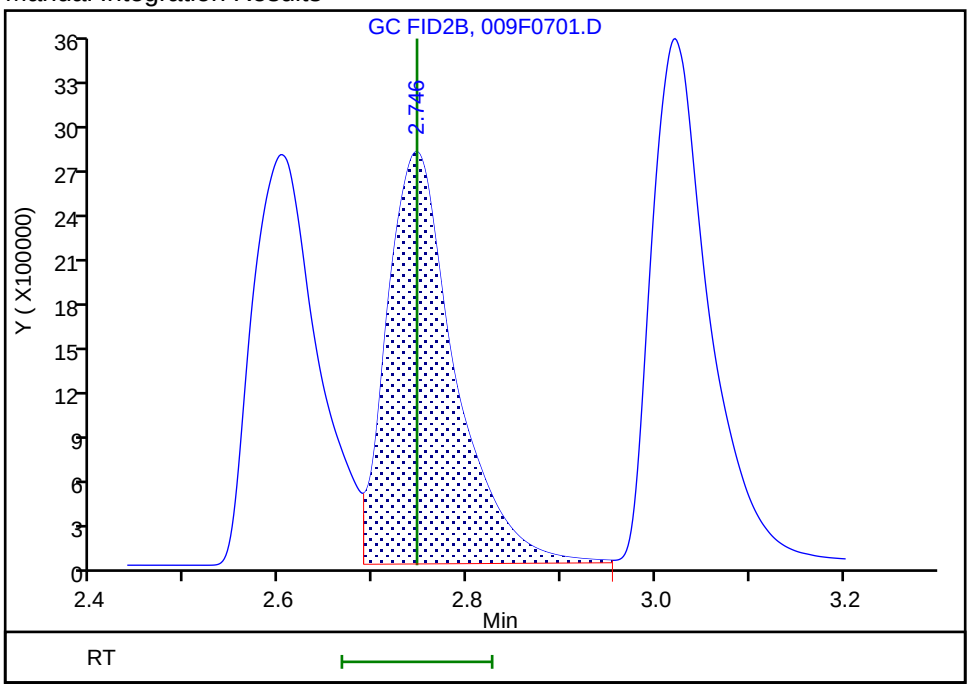
Not Detected
Expected RT: 2.75

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

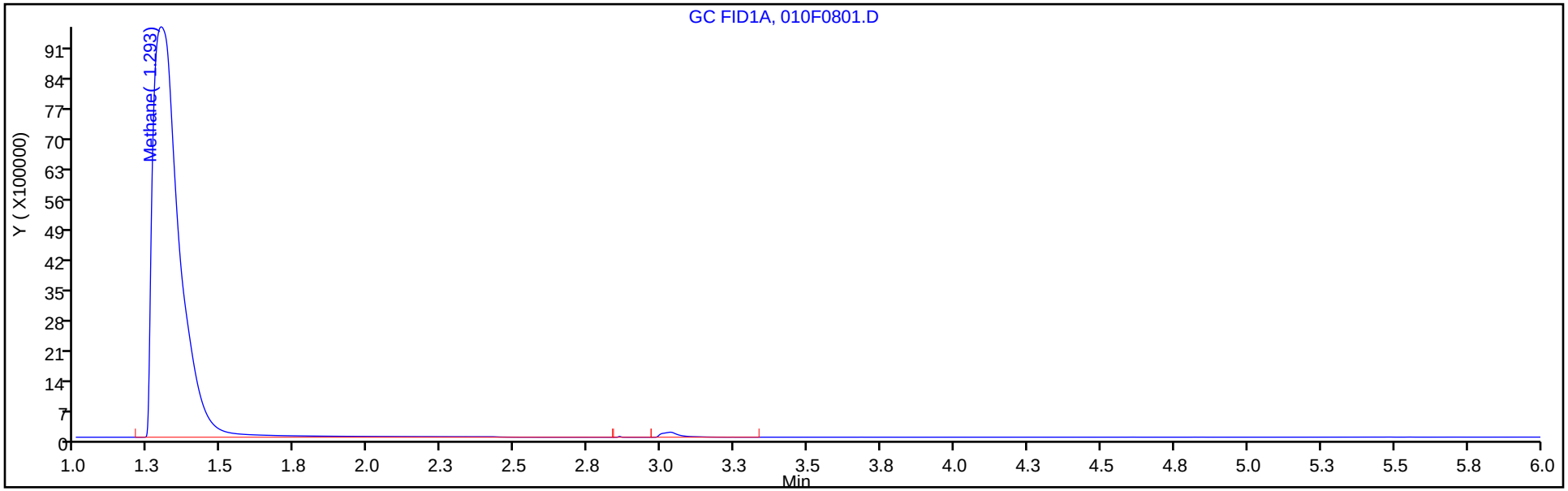
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

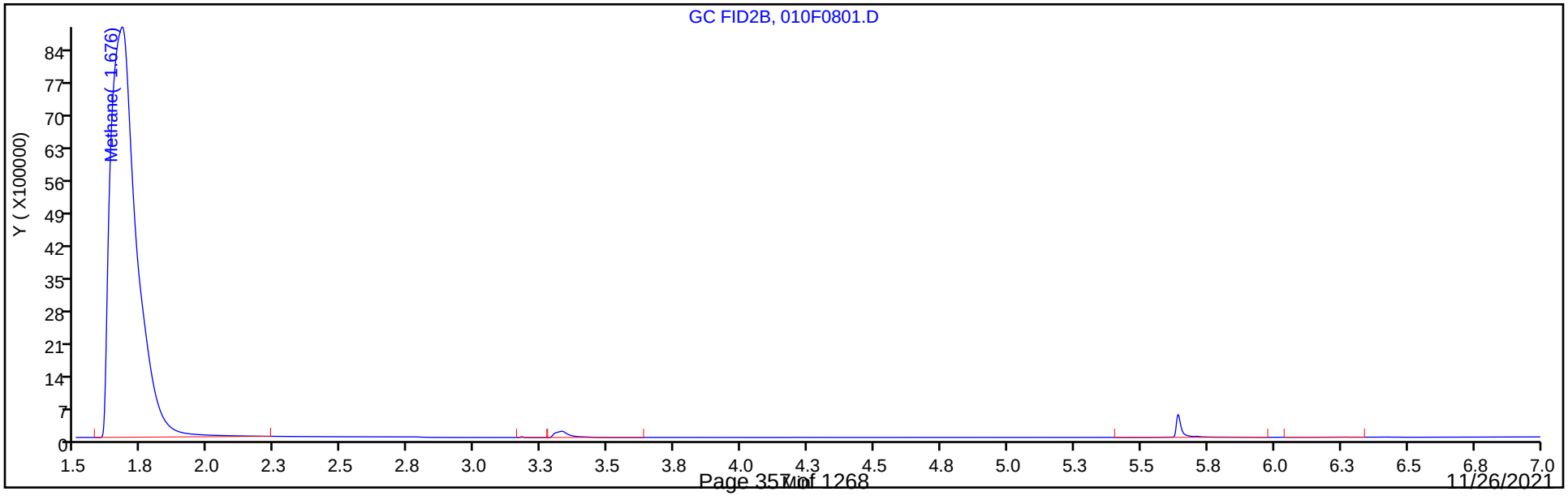
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\010F0801.D

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

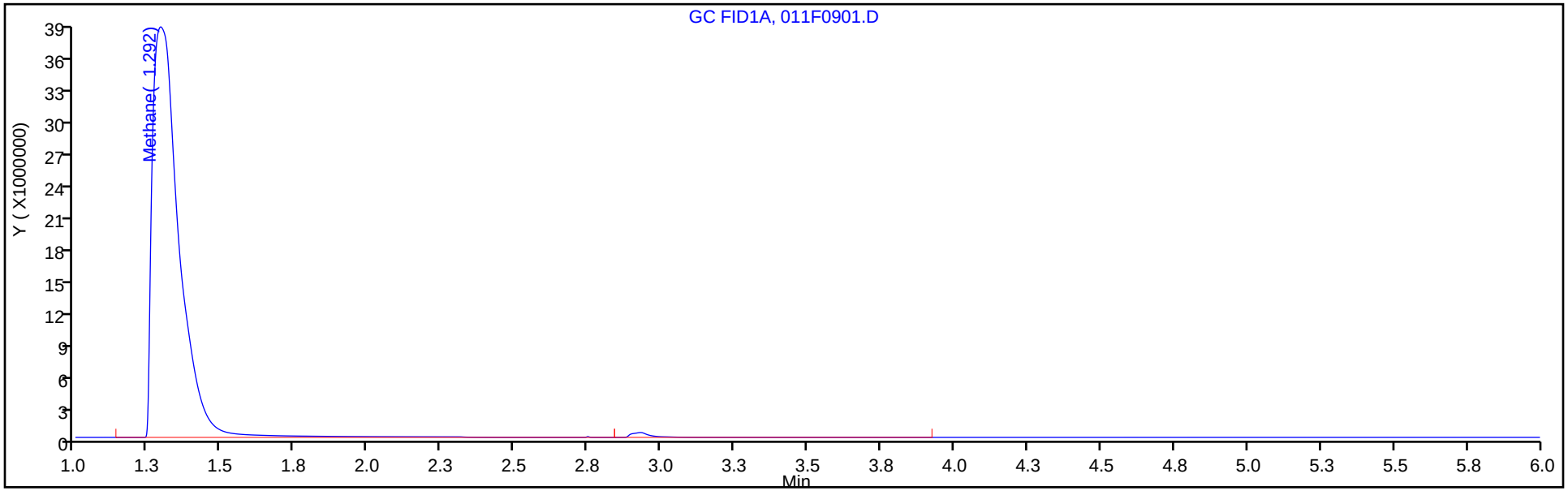
Report Date: 29-Sep-2021 10:55:17 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

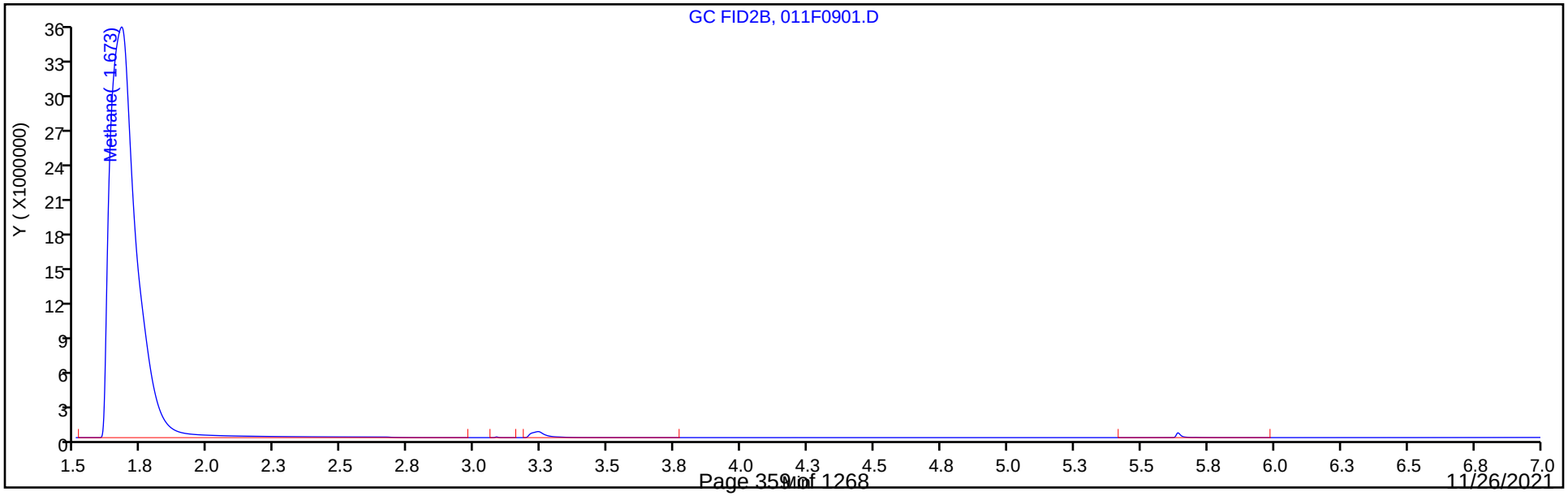
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\011F0901.D

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

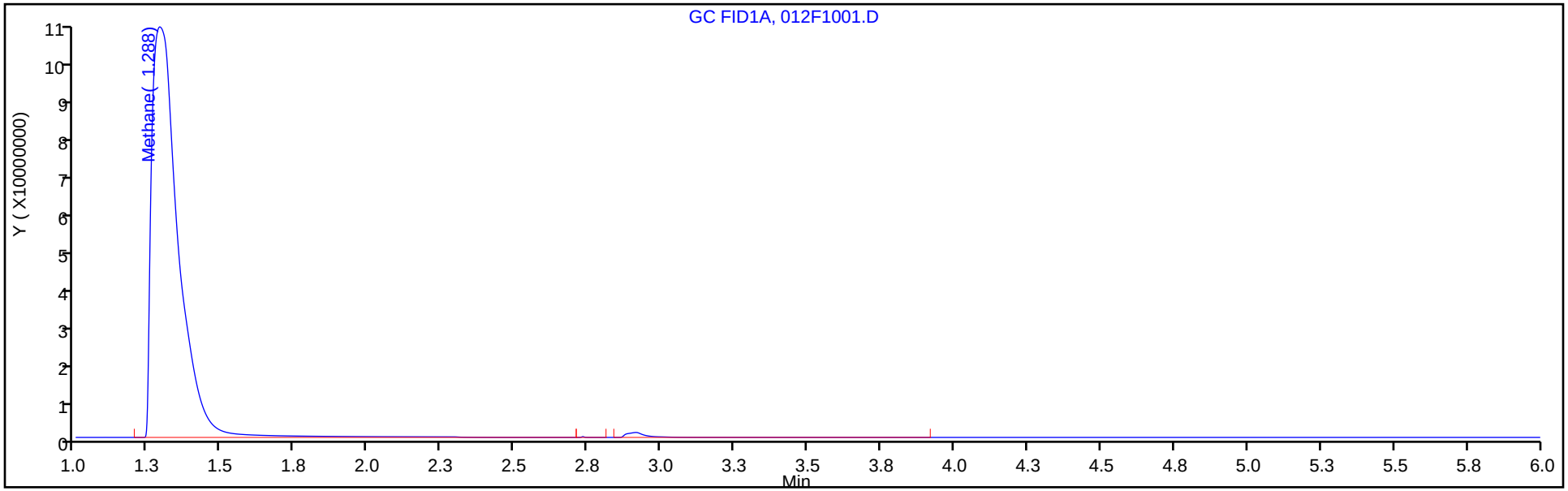
Report Date: 29-Sep-2021 10:55:18 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

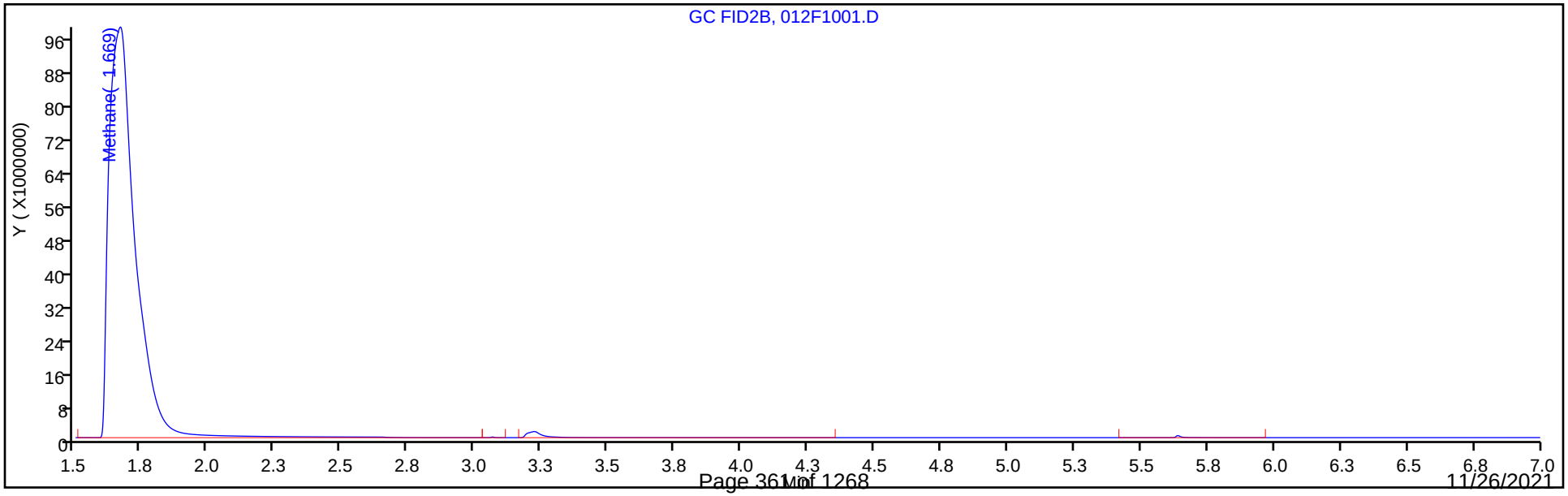
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\012F1001.D

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

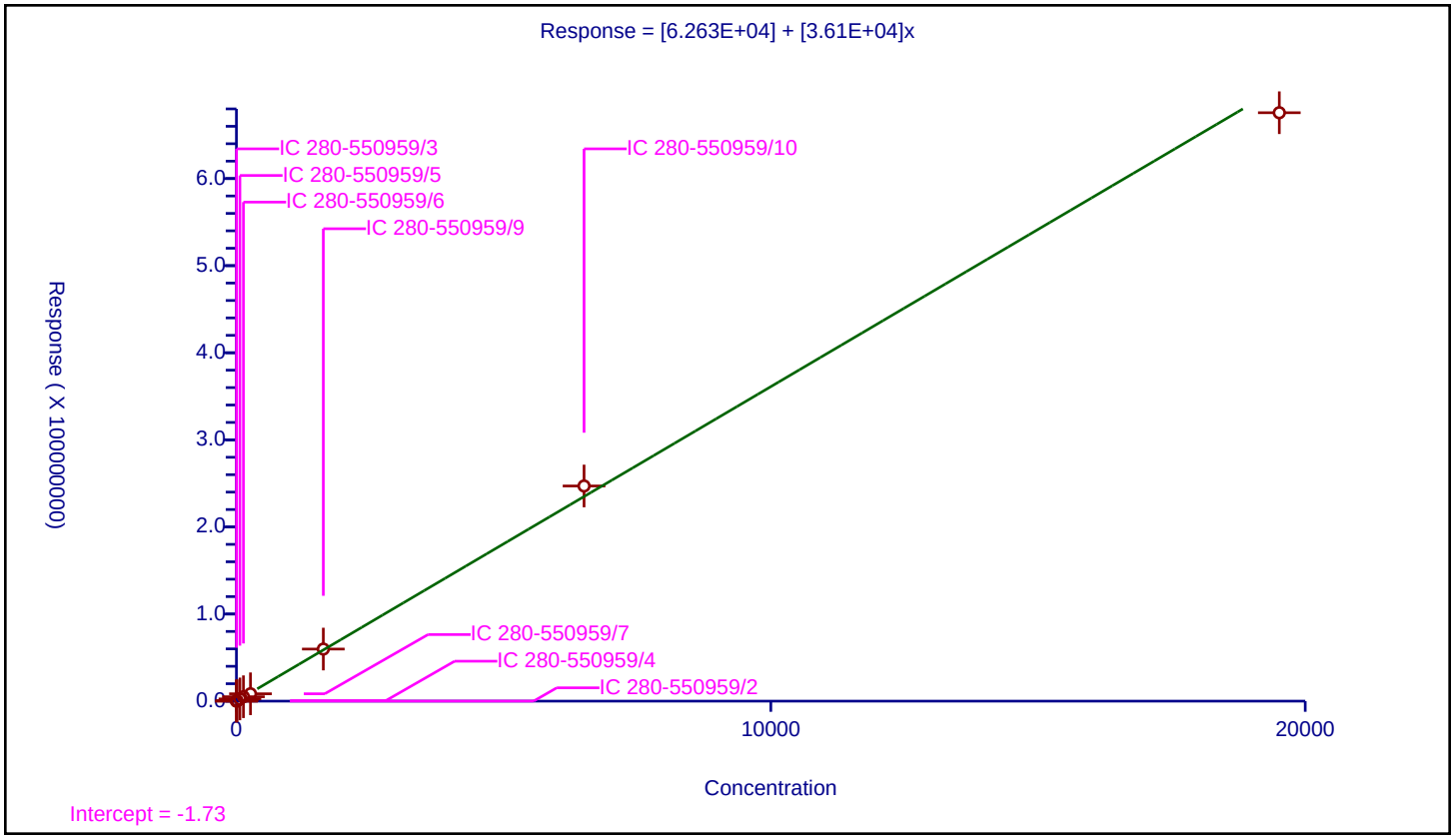
Curve Coefficients

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

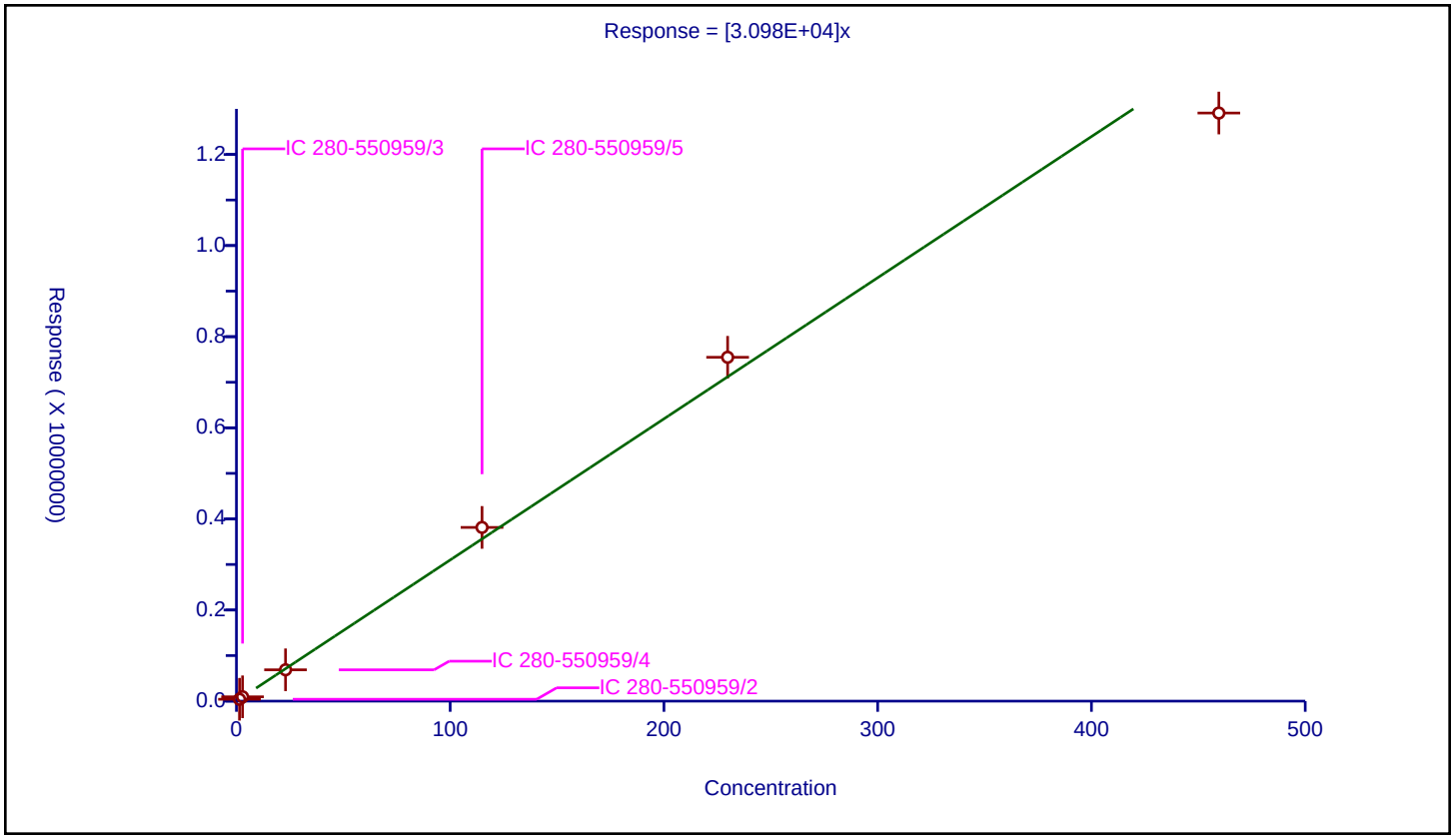
Curve Coefficients

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

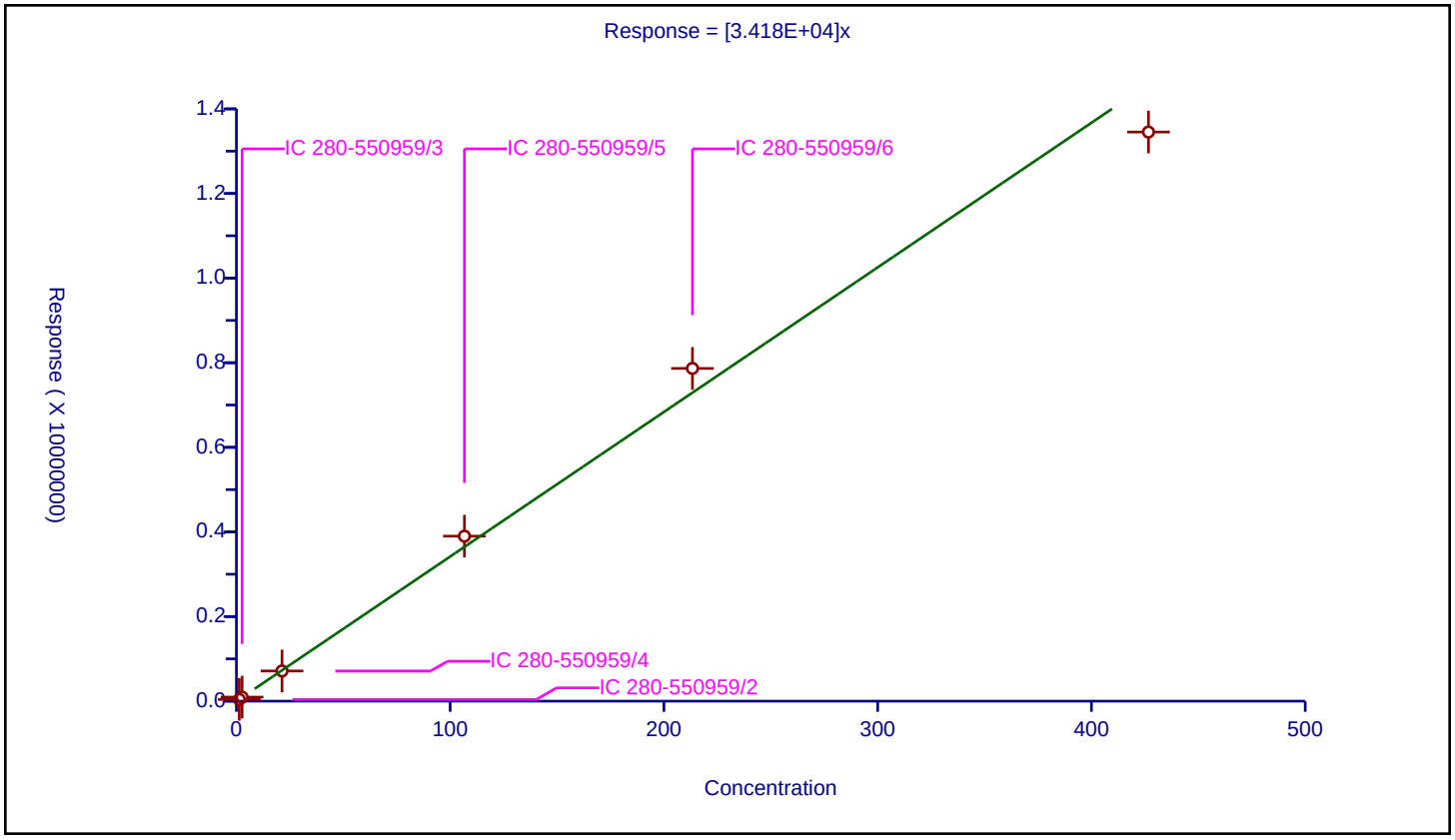
Curve Coefficients

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

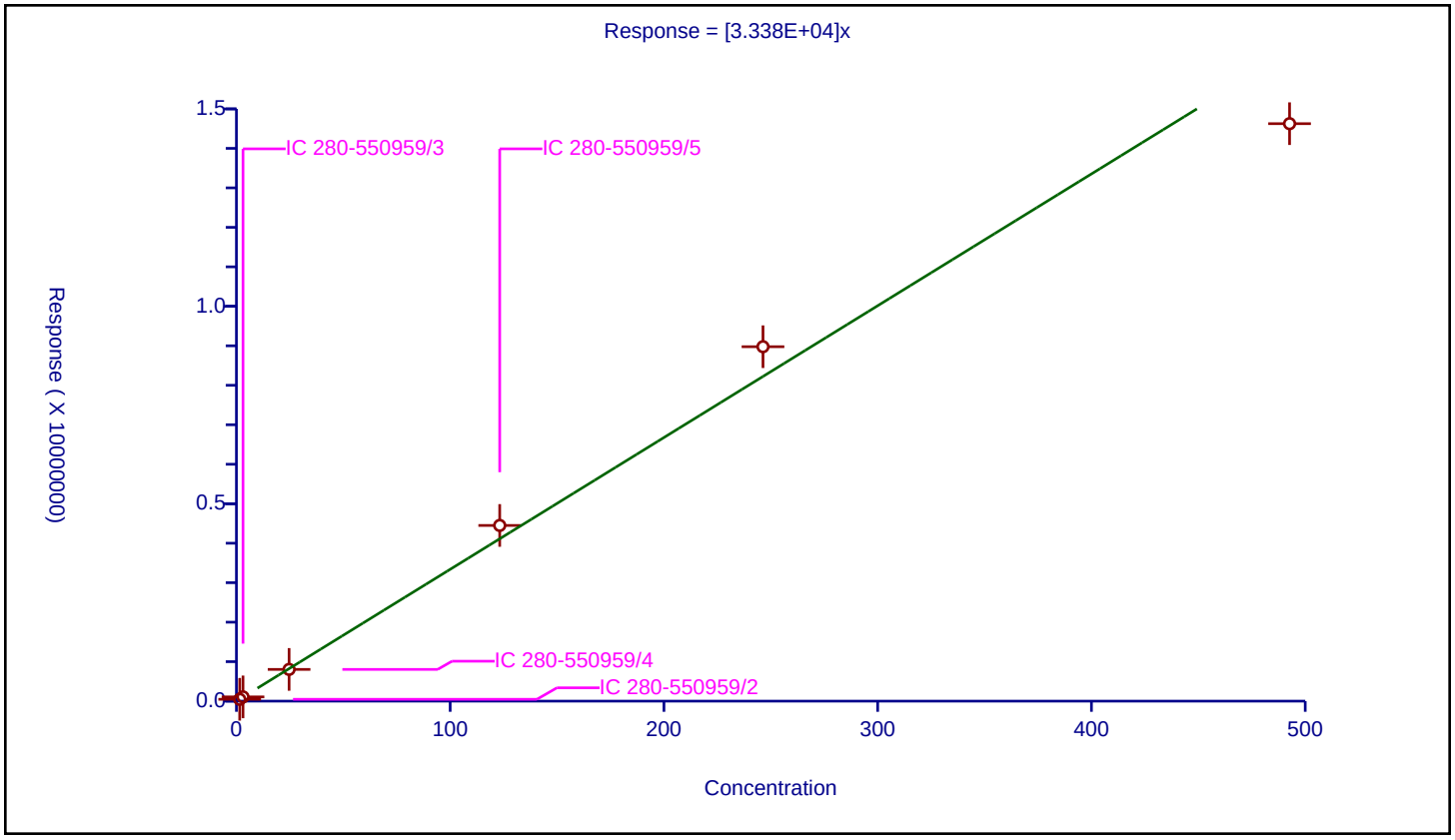
Curve Coefficients

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.: 280-155225-1

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.: 280-155225-1

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

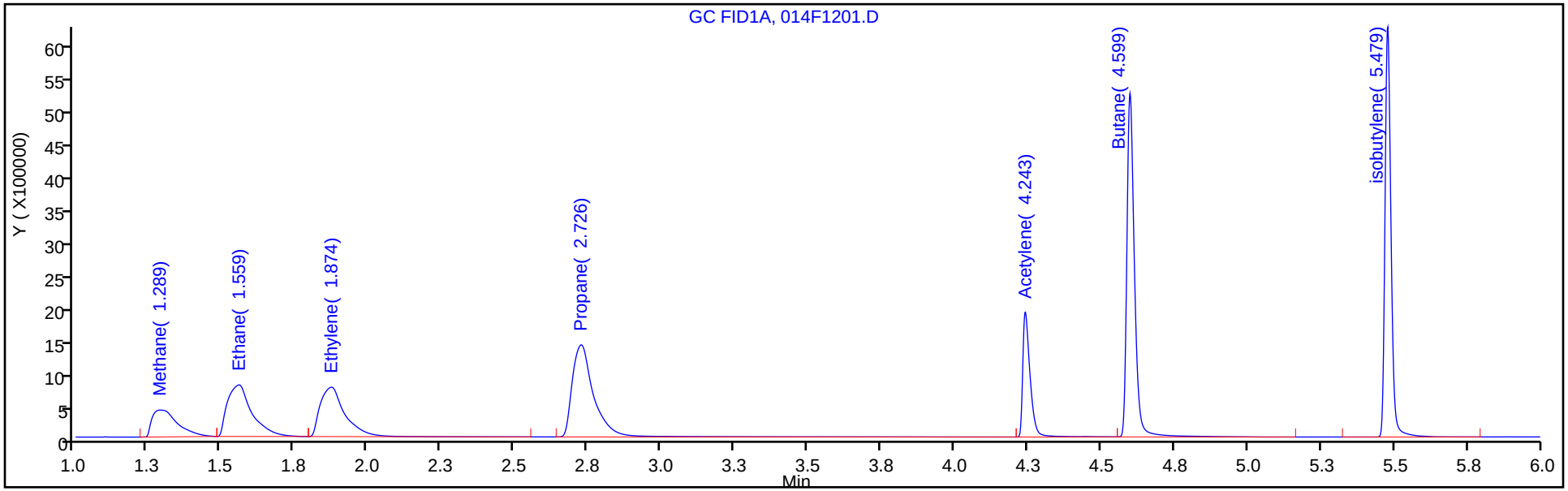
Report Date: 29-Sep-2021 10:58:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

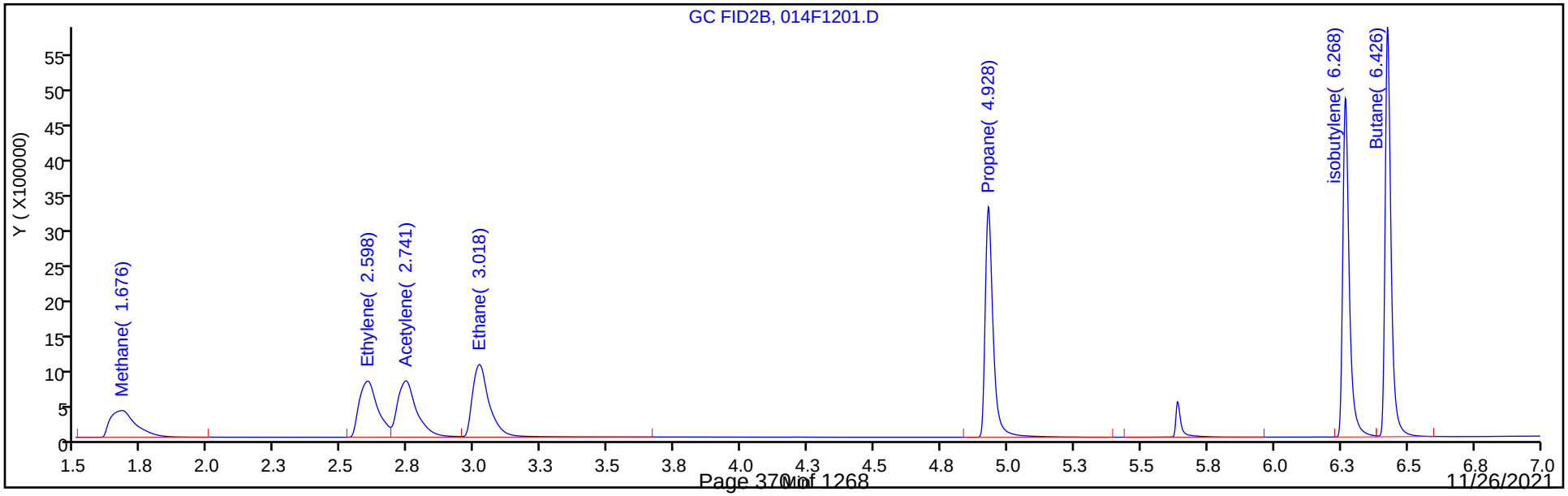
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\014F1201.D

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.: 280-155225-1

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.: 280-155225-1

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

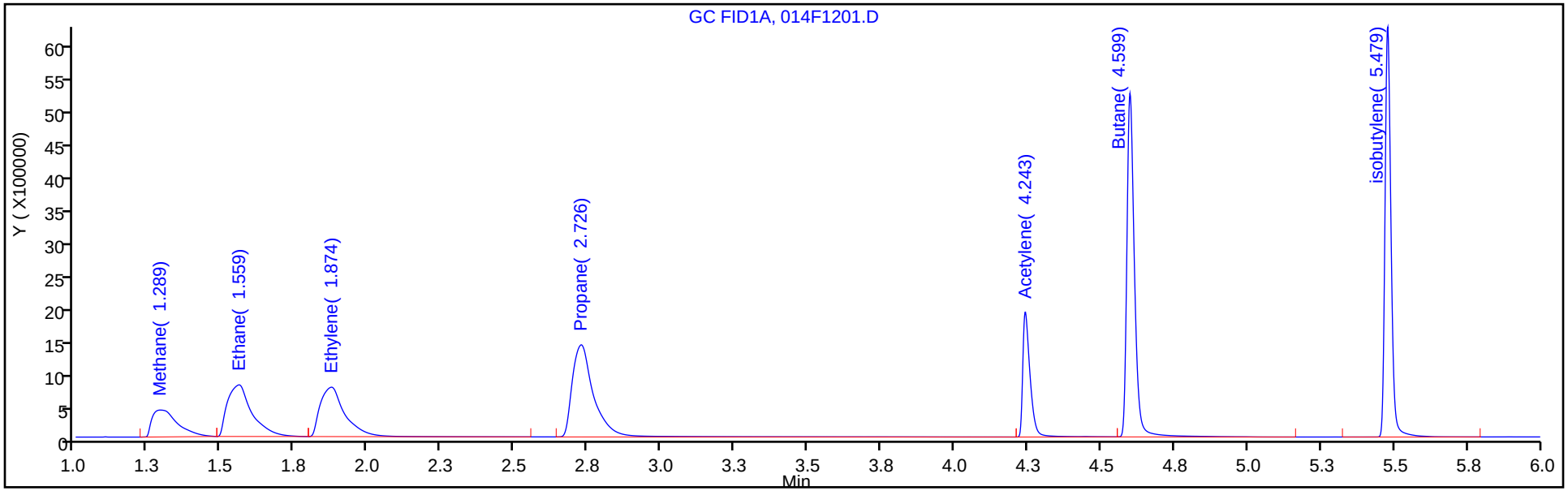
Report Date: 29-Sep-2021 10:58:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

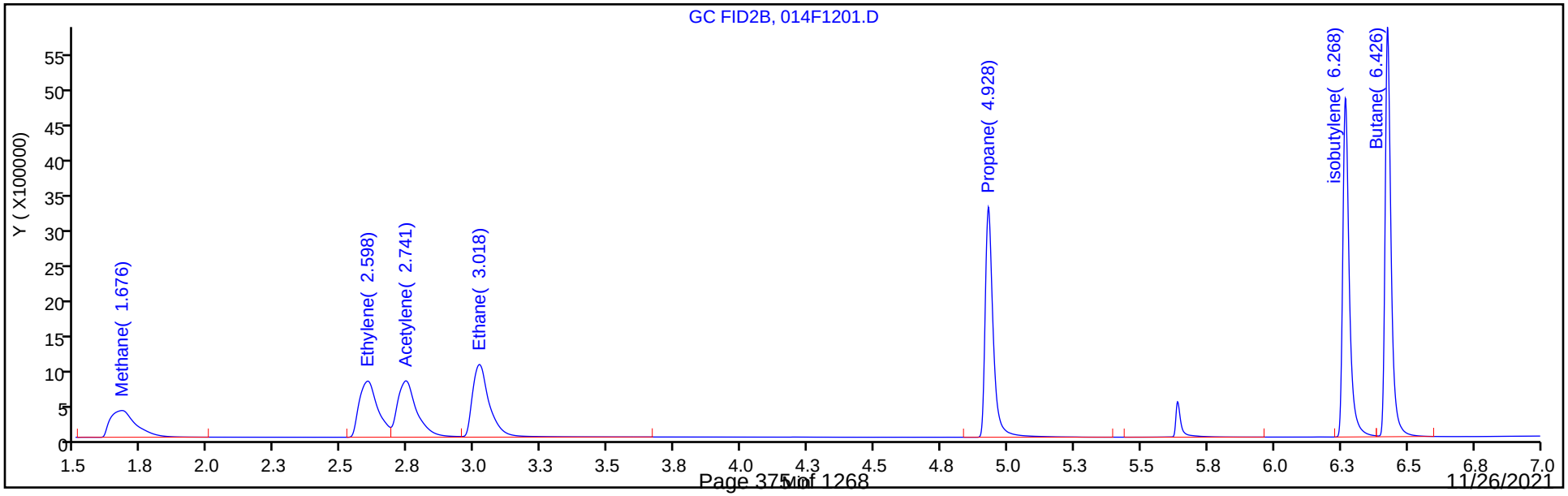
Data File: \\chromfs\Denver\ChromData\VGC_J\20210923-104922.b\014F1201.D

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.: 280-155225-1

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.: 280-155225-1

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

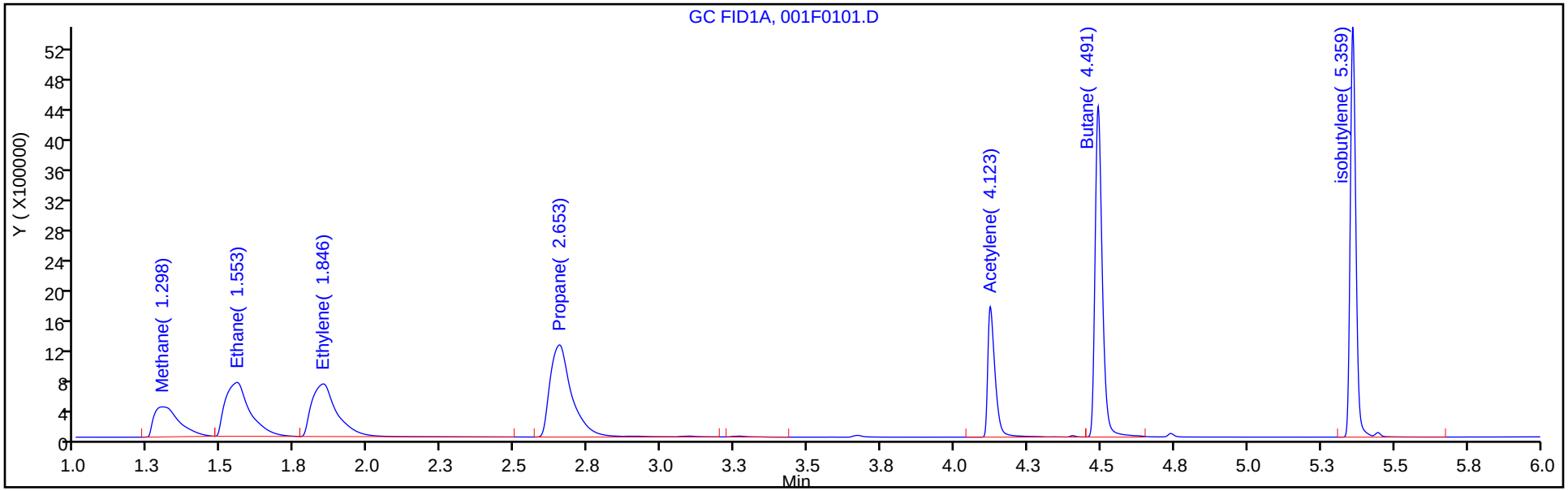
Report Date: 15-Nov-2021 16:57:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

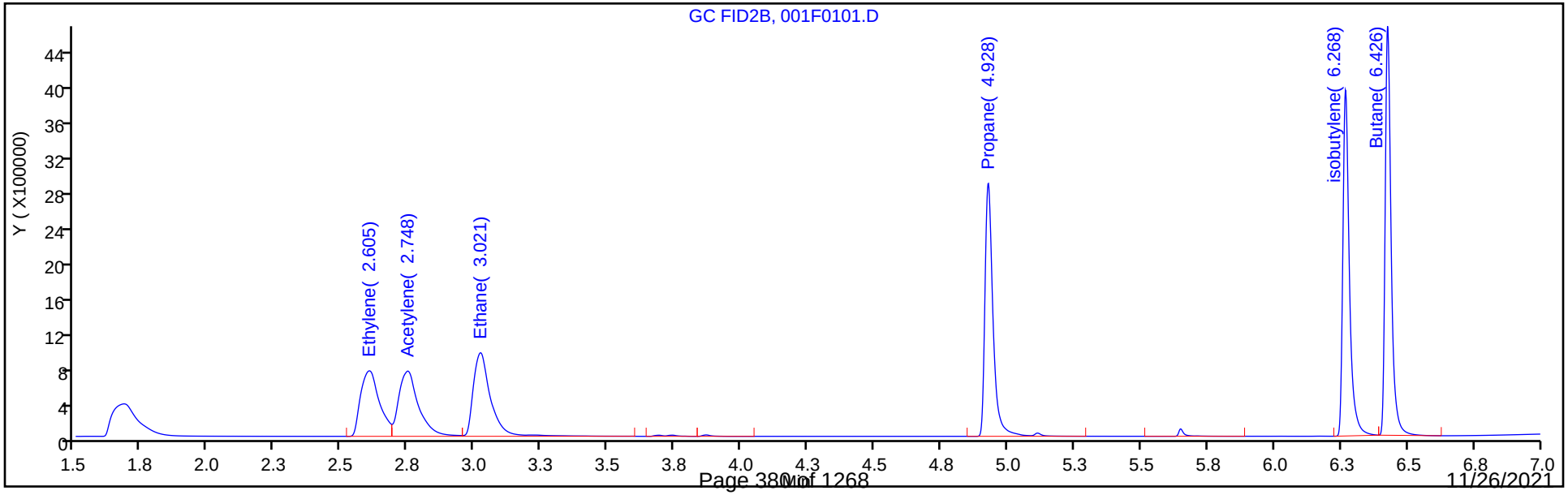
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\001F0101.D

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.: 280-155225-1

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.: 280-155225-1

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

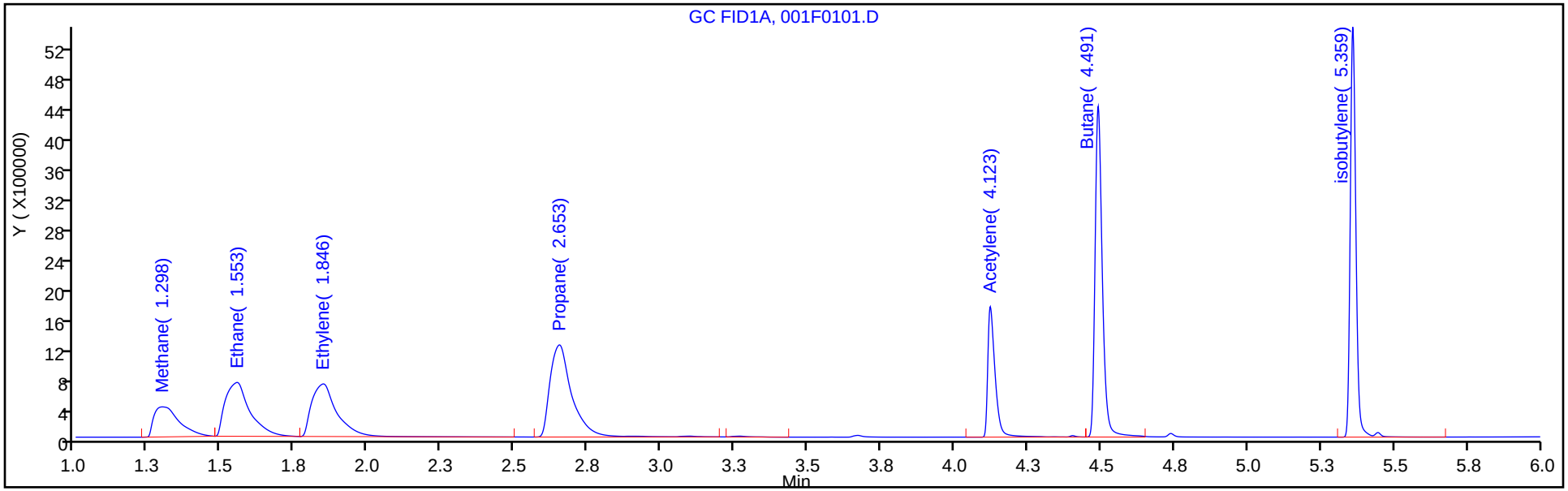
Report Date: 15-Nov-2021 16:57:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

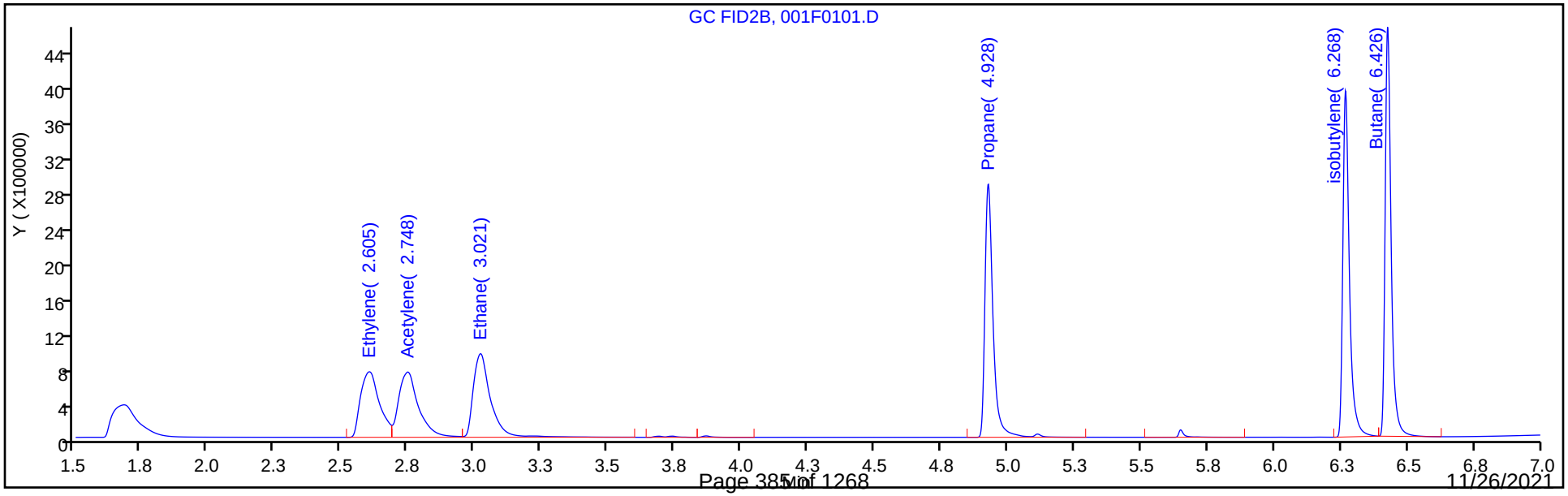
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\001F0101.D

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.: 280-155225-1

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.: 280-155225-1

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

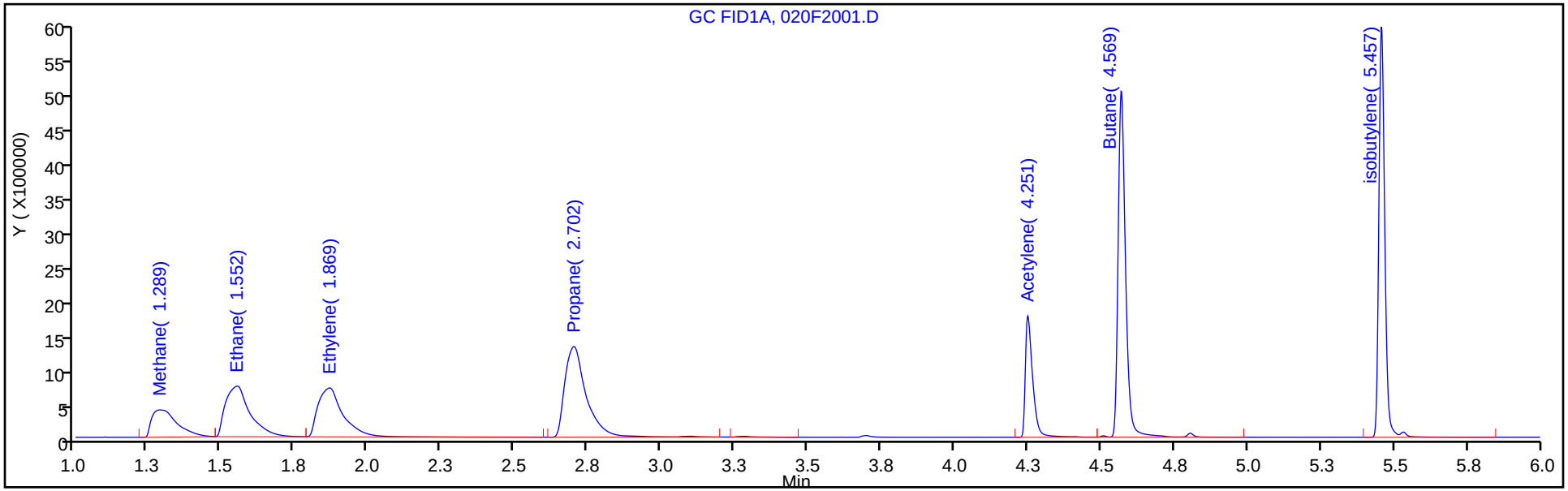
Report Date: 15-Nov-2021 16:56:58 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

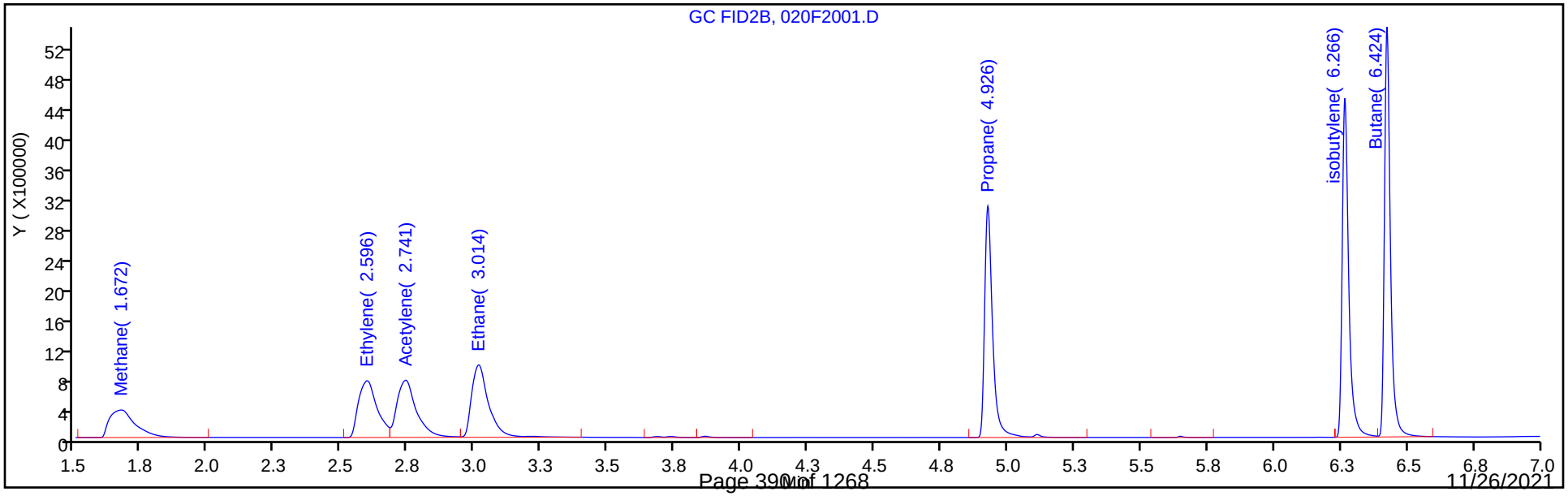
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\020F2001.D

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.: 280-155225-1

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.: 280-155225-1

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

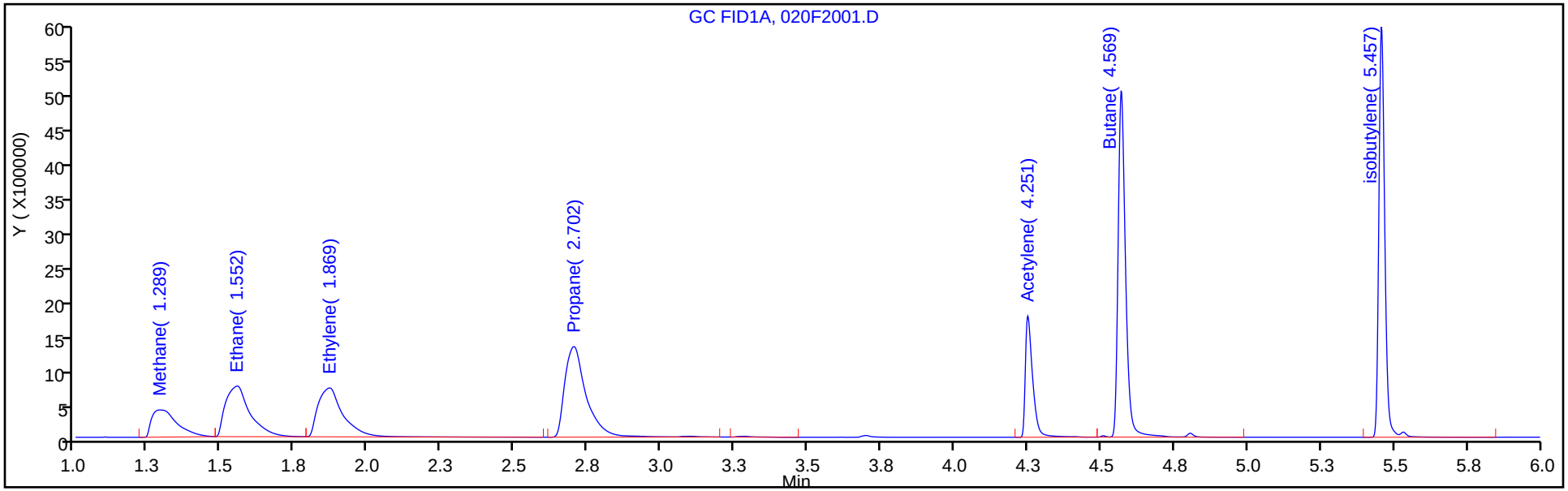
Report Date: 15-Nov-2021 16:56:59 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

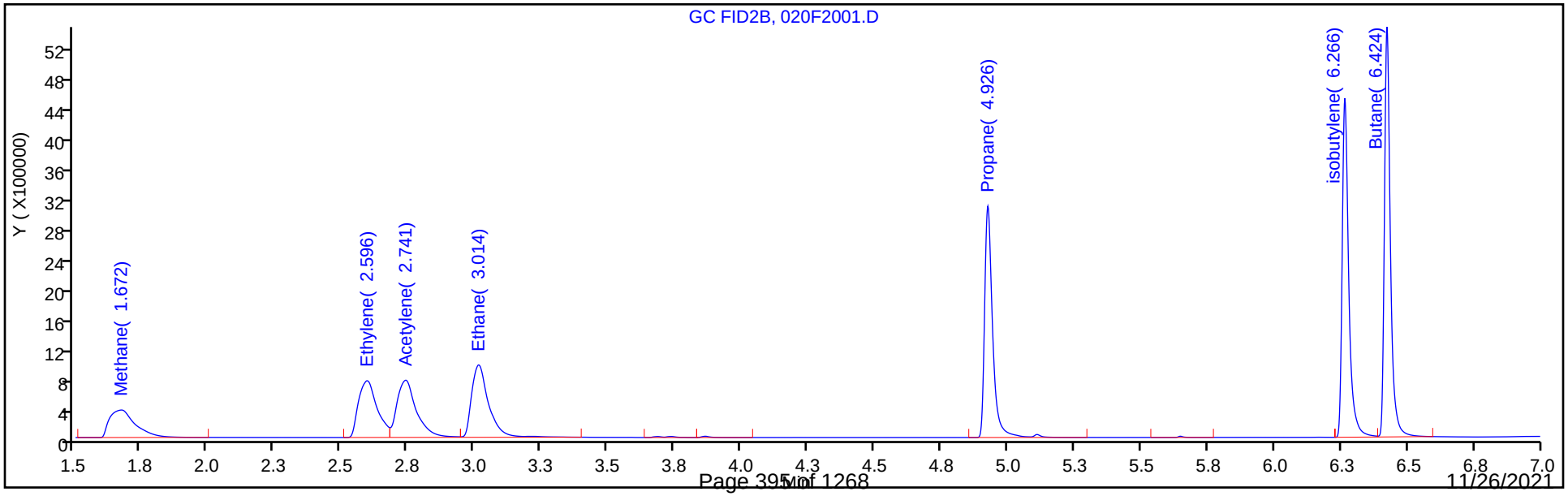
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\020F2001.D

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 VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Lab Sample ID: CCV 280-557326/32 Calibration Date: 11/12/2021 20:53

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 032F3201.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		36475		66.3	65.7	0.9	20.0
Ethane	Ave	33241	34744		129	123	4.5	20.0
Ethylene	Ave	35226	36492		119	115	3.6	20.0
Acetylene	Ave	28139	29522		112	107	4.9	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Lab Sample ID: CCV 280-557326/32 Calibration Date: 11/12/2021 20:53

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 032F3201.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	1.80	1.90
Acetylene	4.24	4.04	4.20

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\032F3201.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 12-Nov-2021 20:53:33 ALS Bottle#: 32 Worklist Smp#: 32
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 16:57:04 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 13:08:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.287	1.298	-0.011	2396487	65.7	66.3	
2	1.671	1.683	-0.012	2482809	65.7	67.0	
						RPD = 1.13	
3 Ethane							
1	1.549	1.553	-0.004	4279473	123.2	128.7	
2	3.009	3.021	-0.012	4321323	123.2	129.4	
						RPD = 0.55	
4 Ethylene							
1	1.862	1.846	0.016	4192874	114.9	119.0	
2	2.591	2.605	-0.014	3703382	114.9	119.5	
						RPD = 0.43	
5 Propane							
1	2.696	2.653	0.043	6868055	180.6	190.7	
2	4.922	4.928	-0.006	6552022	180.6	187.1	
						RPD = 1.90	
6 Acetylene							
1	4.244	4.123	0.121	3149120	106.7	111.9	
2	2.736	2.748	-0.012	3913230	106.7	114.5	
						RPD = 2.28	
7 Butane							
1	4.564	4.491	0.073	9054299	238.1	248.6	
2	6.422	6.426	-0.004	16513010	238.1	469.9	
						RPD = 61.61	
8 isobutylene							
1	5.454	5.359	0.095	8533812	229.8	236.2	
2	5.644	6.268	-0.624	23324	229.8	0.7025	
						RPD = 198.81	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

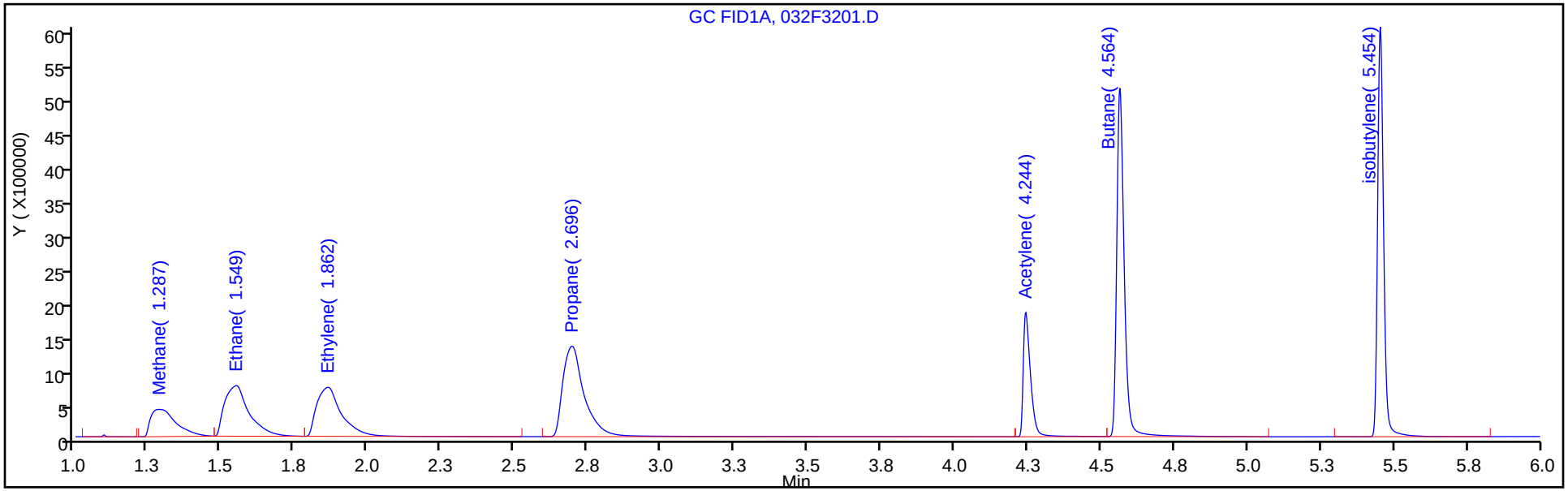
Report Date: 15-Nov-2021 16:57:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

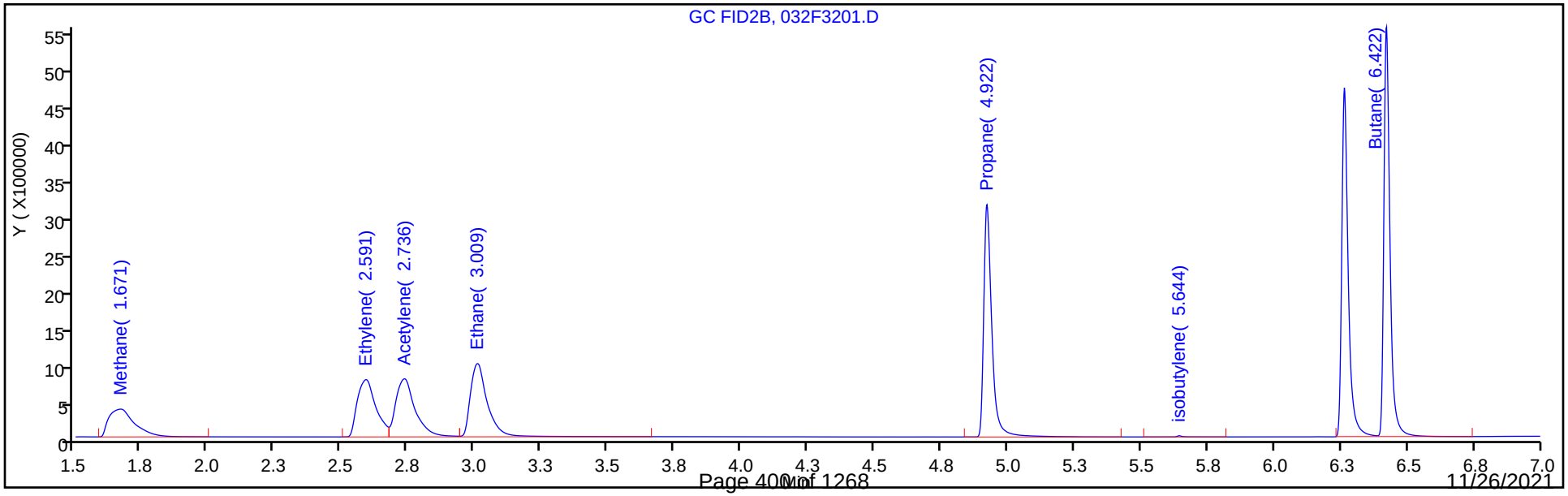
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\032F3201.D

Injection Date:	12-Nov-2021 20:53:33	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	32
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	32
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.: 280-155225-1

SDG No.:

Lab Sample ID: CCV 280-557326/32 Calibration Date: 11/12/2021 20:53

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 032F3201.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		37788		67.0	65.7	2.0	20.0
Ethylene	Ave	30980	32231		120	115	4.0	20.0
Acetylene	Ave	34179	36685		114	107	7.3	20.0
Ethane	Ave	33383	35084		129	123	5.1	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Lab Sample ID: CCV 280-557326/32 Calibration Date: 11/12/2021 20:53

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 032F3201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.64	1.72
Ethylene	2.59	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\032F3201.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 12-Nov-2021 20:53:33 ALS Bottle#: 32 Worklist Smp#: 32
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 16:57:04 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 13:08:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.287	1.298	-0.011	2396487	65.7	66.3	
2	1.671	1.683	-0.012	2482809	65.7	67.0	
						RPD = 1.13	
3 Ethane							
1	1.549	1.553	-0.004	4279473	123.2	128.7	
2	3.009	3.021	-0.012	4321323	123.2	129.4	
						RPD = 0.55	
4 Ethylene							
1	1.862	1.846	0.016	4192874	114.9	119.0	
2	2.591	2.605	-0.014	3703382	114.9	119.5	
						RPD = 0.43	
5 Propane							
1	2.696	2.653	0.043	6868055	180.6	190.7	
2	4.922	4.928	-0.006	6552022	180.6	187.1	
						RPD = 1.90	
6 Acetylene							
1	4.244	4.123	0.121	3149120	106.7	111.9	
2	2.736	2.748	-0.012	3913230	106.7	114.5	
						RPD = 2.28	
7 Butane							
1	4.564	4.491	0.073	9054299	238.1	248.6	
2	6.422	6.426	-0.004	16513010	238.1	469.9	
						RPD = 61.61	
8 isobutylene							
1	5.454	5.359	0.095	8533812	229.8	236.2	
2	5.644	6.268	-0.624	23324	229.8	0.7025	
						RPD = 198.81	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

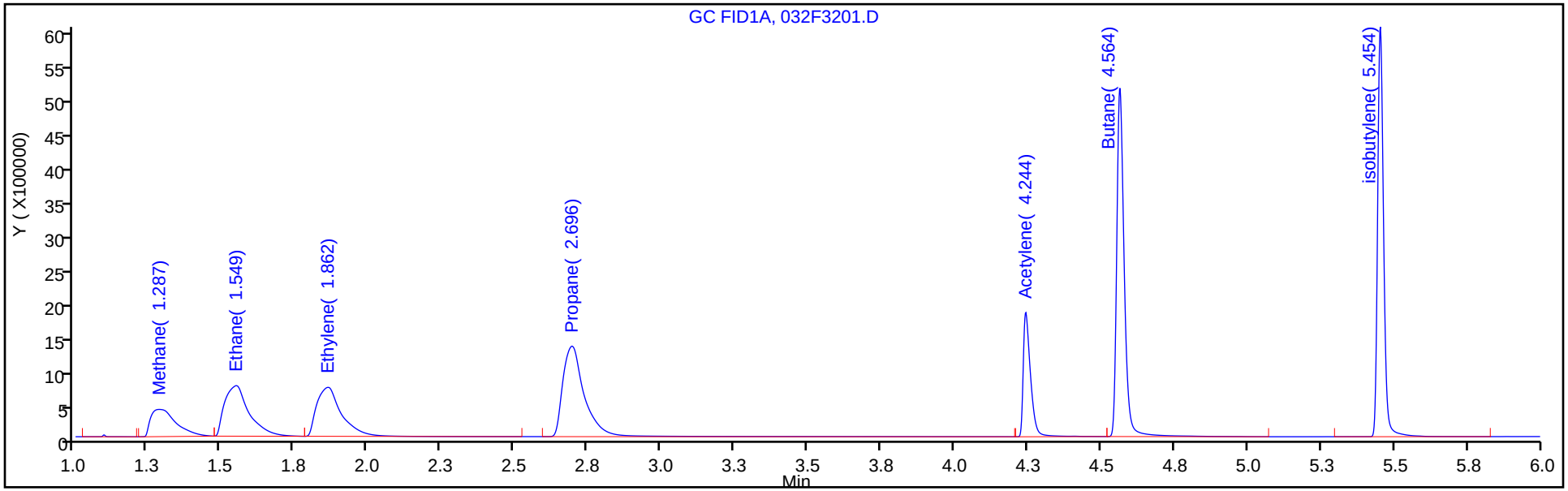
Report Date: 15-Nov-2021 16:57:04 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

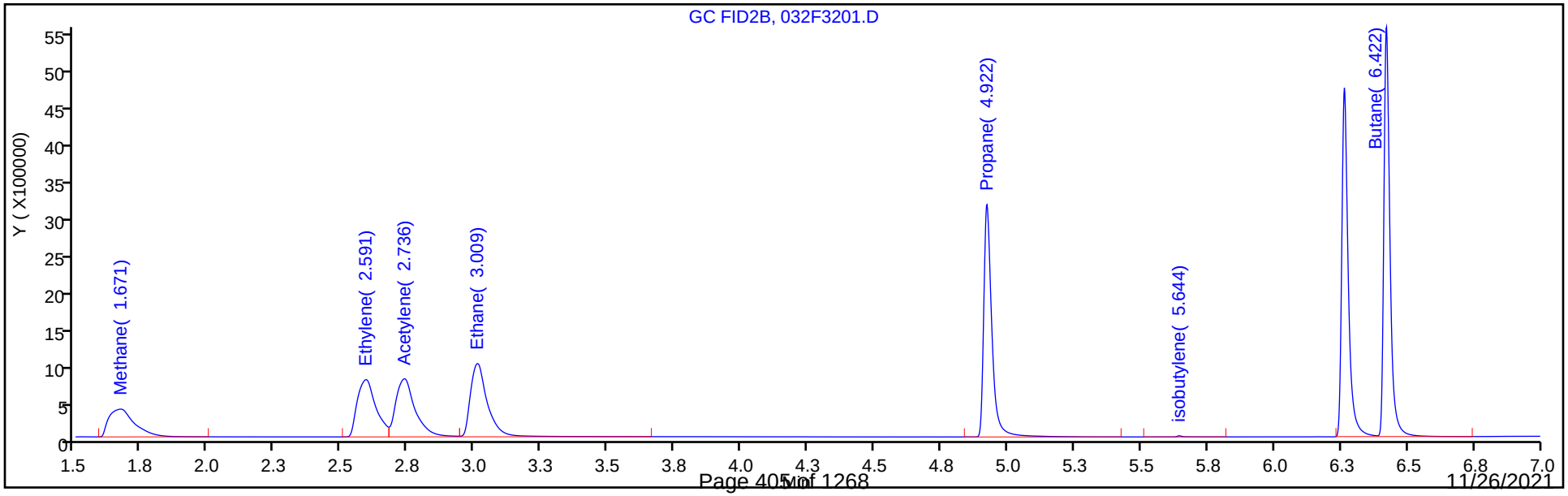
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\032F3201.D

Injection Date:	12-Nov-2021 20:53:33	Instrument ID:	VGC_J	Operator ID:	sciannac
Lims ID:	ccv			Worklist Smp#:	32
Client ID:					
Purge Vol:	18.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	32
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.: 280-155225-1

SDG No.:

Lab Sample ID: CCVRT 280-557735/1 Calibration Date: 11/16/2021 18:53

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		35790		65.0	65.7	-1.1	20.0
Ethane	Ave	33241	33627		125	123	1.2	20.0
Ethylene	Ave	35226	35617		116	115	1.1	20.0
Acetylene	Ave	28139	28378		108	107	0.9	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Lab Sample ID: CCVRT 280-557735/1 Calibration Date: 11/16/2021 18:53

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: Rt-Alumina KCl ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.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	1.86	1.81	1.91
Acetylene	4.17	4.09	4.25

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\002F0201.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 16-Nov-2021 18:53:10 ALS Bottle#: 2 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\20211116-106564.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-Nov-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: ornelasg Date: 16-Nov-2021 19:45:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.302	1.302	0.000	2351482	65.7	65.0	
2	1.690	1.690	0.000	2439975	65.7	65.8	
						RPD = 1.30	
3 Ethane							
1	1.560	1.560	0.000	4141837	123.2	124.6	
2	3.037	3.037	0.000	4250661	123.2	127.3	
						RPD = 2.17	
4 Ethylene							a
1	1.858	1.858	0.000	4092429	114.9	116.2	
2	2.620	2.620	0.000	3594164	114.9	116.0	a
						RPD = 0.14	
5 Propane							
1	2.665	2.665	0.000	6412503	180.6	178.1	
2	4.934	4.934	0.000	6162021	180.6	176.0	
						RPD = 1.17	
6 Acetylene							Ma
1	4.167	4.167	0.000	3027112	106.7	107.6	a
2	2.764	2.764	0.000	3820989	106.7	111.8	M
						RPD = 3.84	
7 Butane							
1	4.513	4.513	0.000	7998980	238.1	219.6	
2	6.432	6.432	0.000	7657748	238.1	217.9	
						RPD = 0.77	
8 isobutylene							
1	5.403	5.403	0.000	7657682	229.8	212.0	
2	6.274	6.274	0.000	6960265	229.8	209.6	
						RPD = 1.11	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

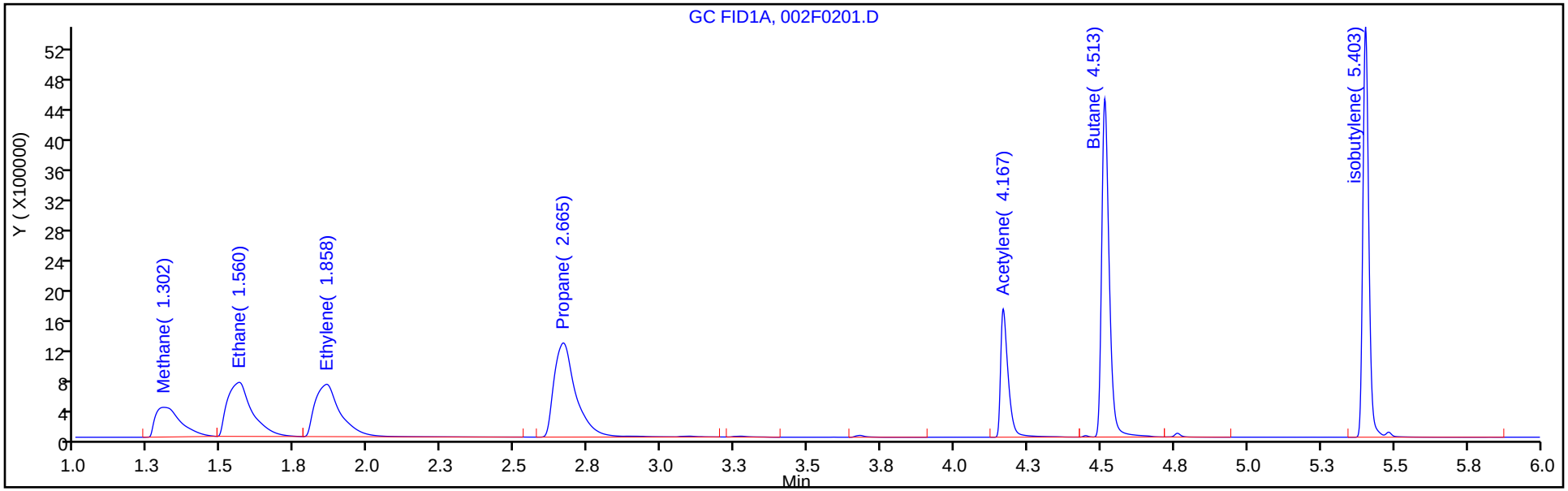
Report Date: 17-Nov-2021 10:55:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

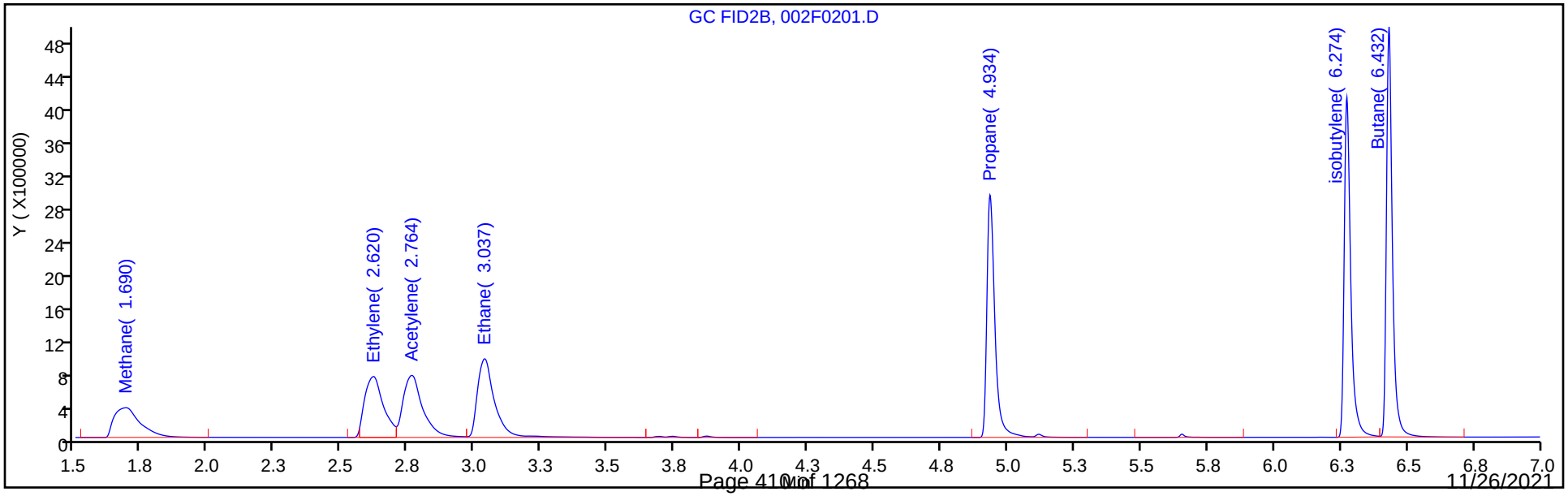
Data File: \\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\002F0201.D

Injection Date:	16-Nov-2021 18:53:10	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#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

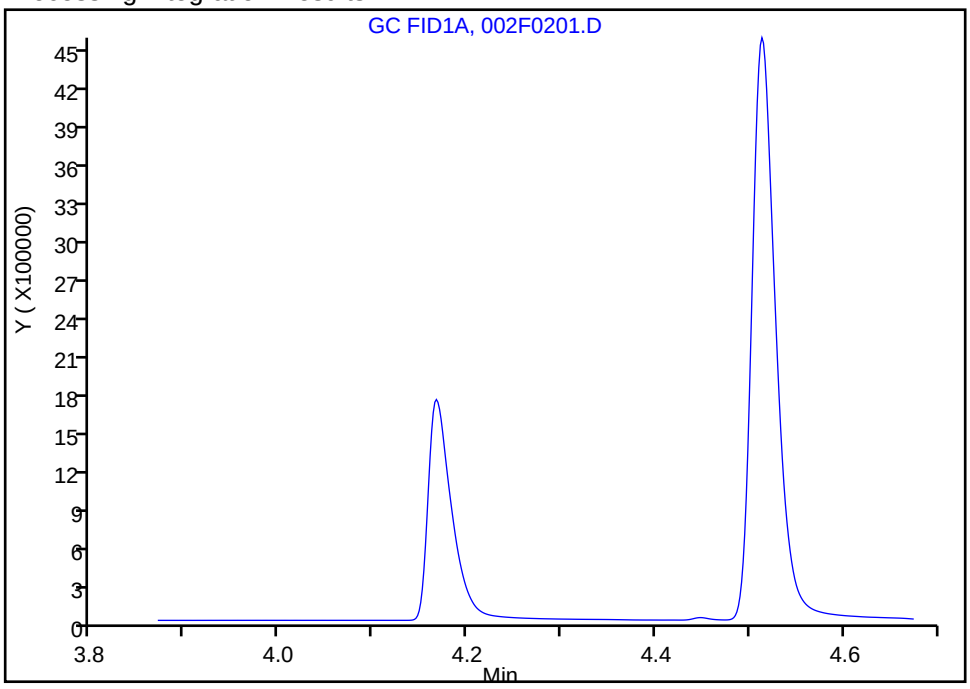
Data File:	\\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\002F0201.D				
Injection Date:	16-Nov-2021 18:53:10	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	2	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

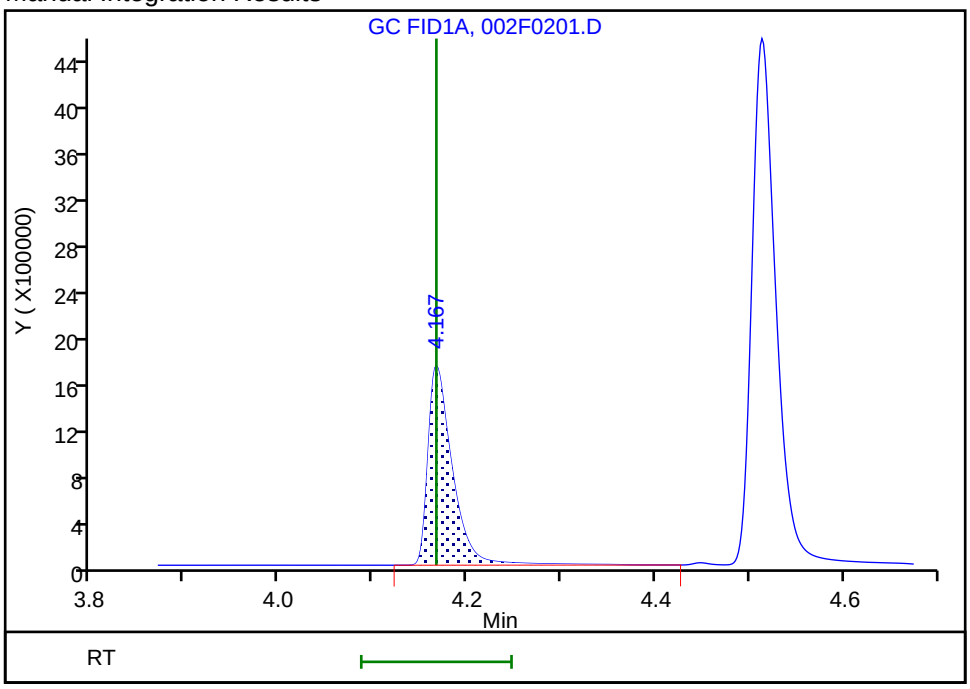
Not Detected
Expected RT: 4.17

Processing Integration Results



Manual Integration Results

RT: 4.17
Area: 3027112
Amount: 107.5770
Amount Units: ug/l



Reviewer: ornelasg, 16-Nov-2021 19:44:17
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Lab Sample ID: CCVRT 280-557735/1 Calibration Date: 11/16/2021 18:53

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Lin2		37136		65.8	65.7	0.2	20.0
Ethylene	Ave	30980	31281		116	115	1.0	20.0
Acetylene	Ave	34179	35821		112	107	4.8	20.0
Ethane	Ave	33383	34511		127	123	3.4	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Lab Sample ID: CCVRT 280-557735/1 Calibration Date: 11/16/2021 18:53

Instrument ID: VGC_J Calib Start Date: 09/24/2021 13:28

GC Column: HP-Plot Q ID: 0.53(mm) Calib End Date: 09/24/2021 15:12

Lab File ID: 002F0201.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.69	1.65	1.73
Ethylene	2.62	2.57	2.67
Acetylene	2.76	2.68	2.84
Ethane	3.04	2.99	3.09

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\002F0201.D
Lims ID: ccvrt
Client ID:
Sample Type: CCVRT
Inject. Date: 16-Nov-2021 18:53:10 ALS Bottle#: 2 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\20211116-106564.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-Nov-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: ornelasg Date: 16-Nov-2021 19:45:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.302	1.302	0.000	2351482	65.7	65.0	
2	1.690	1.690	0.000	2439975	65.7	65.8	
						RPD = 1.30	
3 Ethane							
1	1.560	1.560	0.000	4141837	123.2	124.6	
2	3.037	3.037	0.000	4250661	123.2	127.3	
						RPD = 2.17	
4 Ethylene							a
1	1.858	1.858	0.000	4092429	114.9	116.2	
2	2.620	2.620	0.000	3594164	114.9	116.0	a
						RPD = 0.14	
5 Propane							
1	2.665	2.665	0.000	6412503	180.6	178.1	
2	4.934	4.934	0.000	6162021	180.6	176.0	
						RPD = 1.17	
6 Acetylene							Ma
1	4.167	4.167	0.000	3027112	106.7	107.6	a
2	2.764	2.764	0.000	3820989	106.7	111.8	M
						RPD = 3.84	
7 Butane							
1	4.513	4.513	0.000	7998980	238.1	219.6	
2	6.432	6.432	0.000	7657748	238.1	217.9	
						RPD = 0.77	
8 isobutylene							
1	5.403	5.403	0.000	7657682	229.8	212.0	
2	6.274	6.274	0.000	6960265	229.8	209.6	
						RPD = 1.11	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

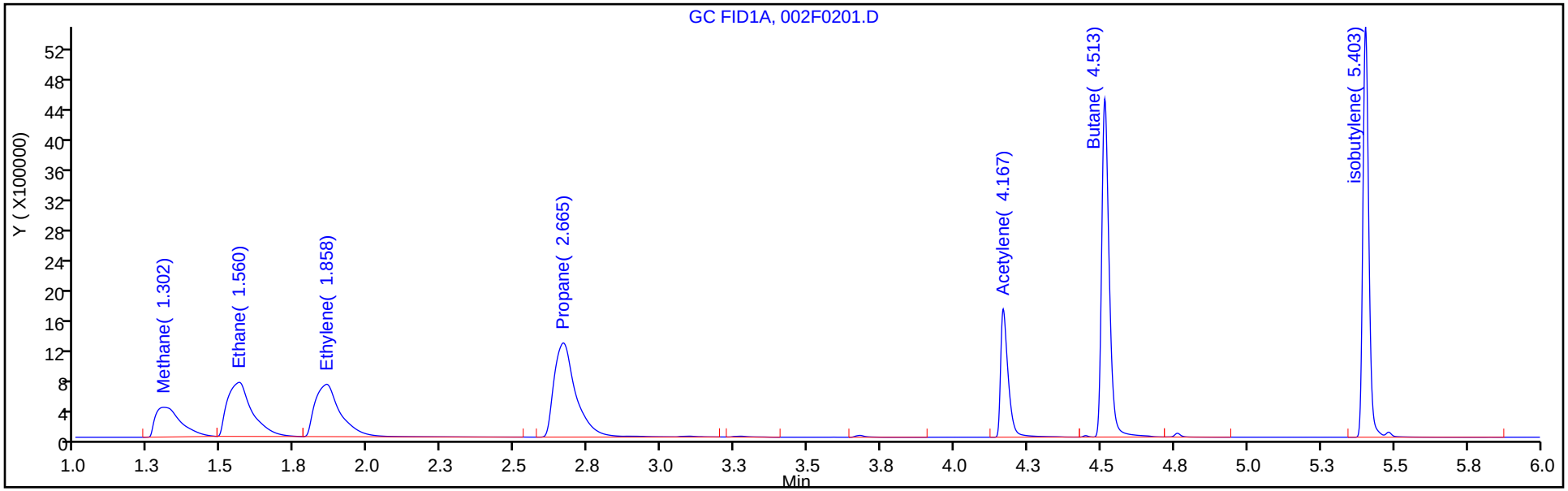
Report Date: 17-Nov-2021 10:55:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

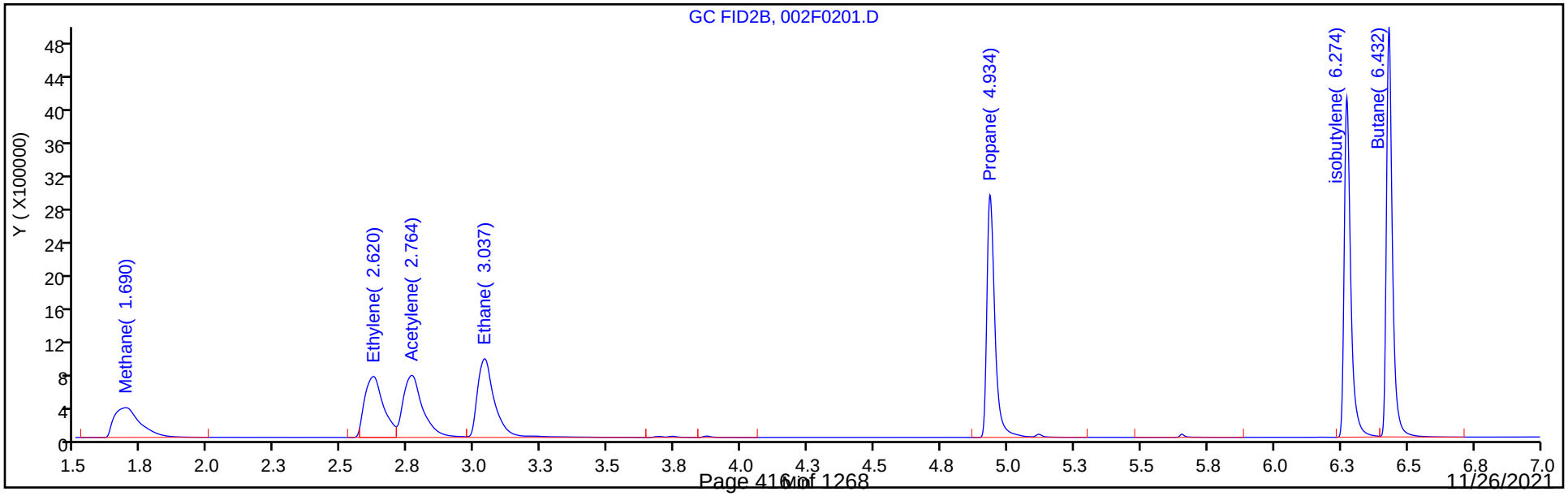
Data File: \\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\002F0201.D

Injection Date:	16-Nov-2021 18:53:10	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#:	2
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

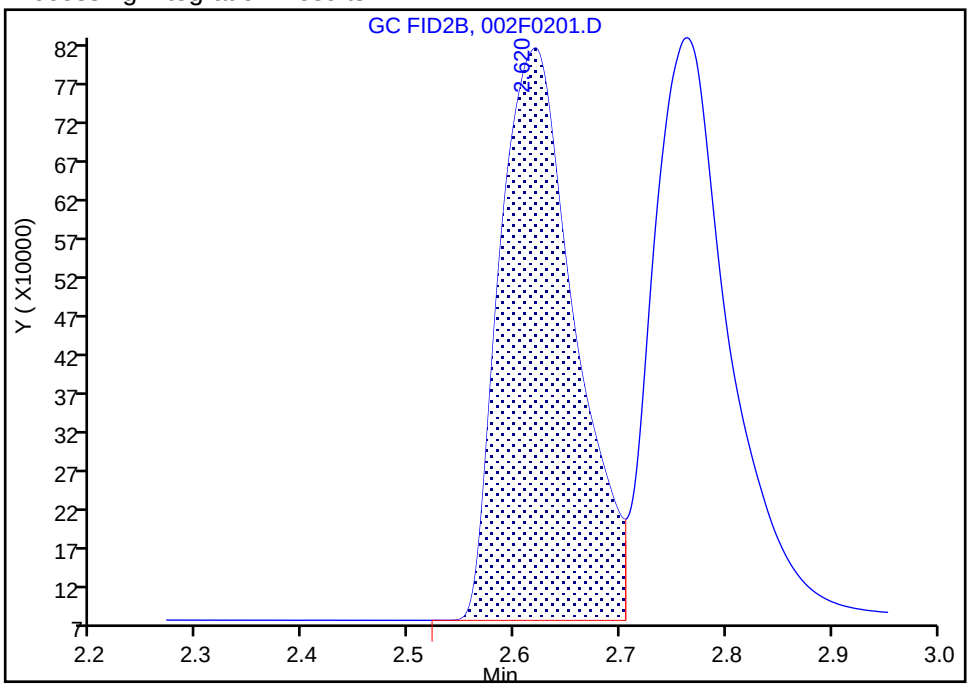
Data File:	\\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\002F0201.D				
Injection Date:	16-Nov-2021 18:53:10	Instrument ID:	VGC_J		
Lims ID:	ccvrt				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	2	Worklist Smp#:	1
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	HP-PLOT/Q (0.53 mm)	Detector	GC FID2B		

4 Ethylene, CAS: 74-85-1

Signal: 2

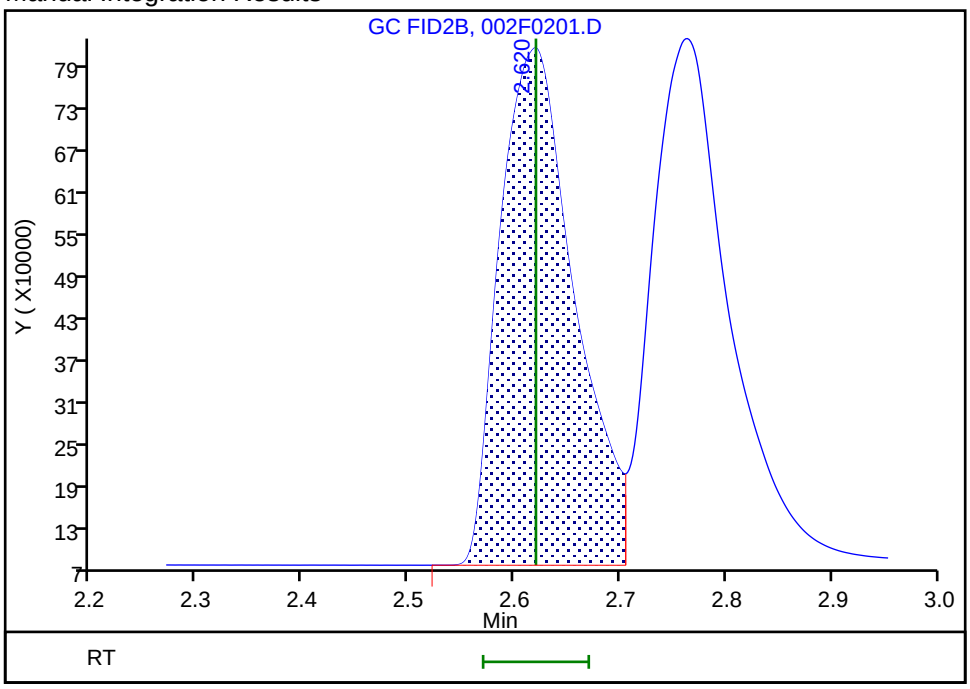
Processing Integration Results

RT: 2.62
Area: 3594164
Amount: 116.0146
Amount Units: ug/l



Manual Integration Results

RT: 2.62
Area: 3594164
Amount: 116.0146
Amount Units: ug/l



Reviewer: ornelasg, 16-Nov-2021 19:44:31
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

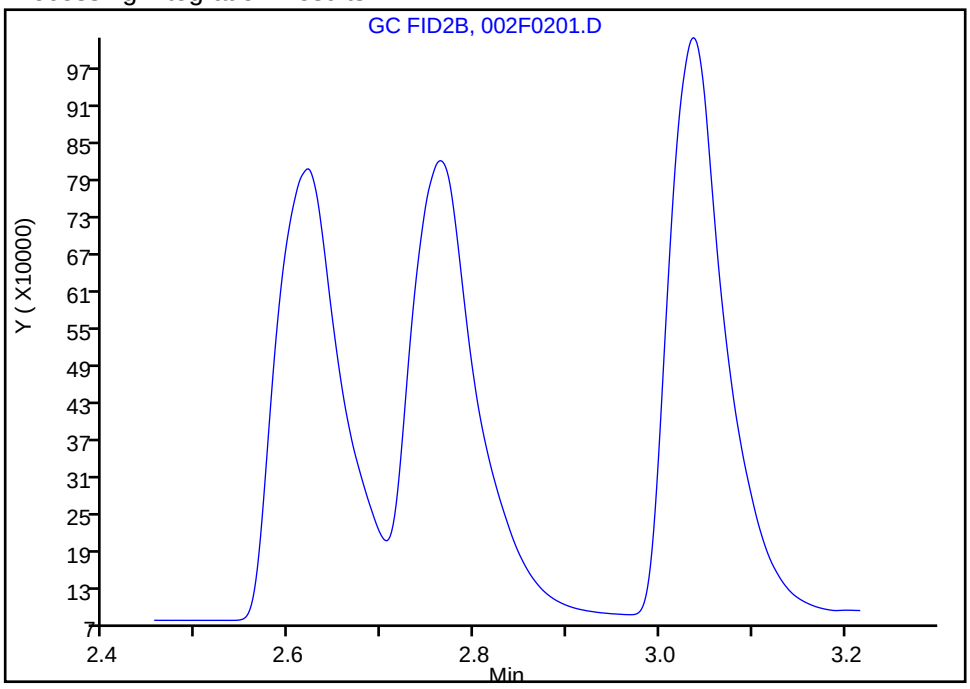
Data File: \\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\002F0201.D
Injection Date: 16-Nov-2021 18:53:10 Instrument ID: VGC_J
Lims ID: ccvrt
Client ID:
Operator ID: sciannac ALS Bottle#: 2 Worklist Smp#: 1
Purge Vol: 18.000 mL Dil. Factor: 1.0000
Method: RSK_J Limit Group: GCV - RSK 175
Column: HP-PLOT/Q (0.53 mm) Detector GC FID2B

6 Acetylene, CAS: 74-86-2

Signal: 2

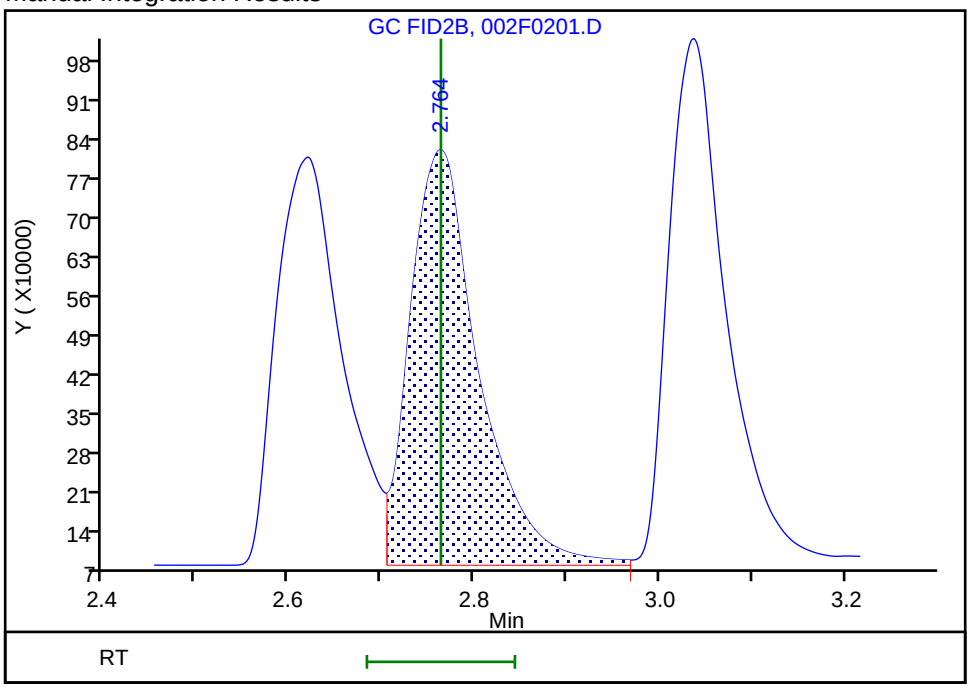
Not Detected
Expected RT: 2.76

Processing Integration Results



Manual Integration Results

RT: 2.76
Area: 3820989
Amount: 111.7941
Amount Units: ug/l



Reviewer: ornelasg, 16-Nov-2021 19:45:36
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Lab Sample ID: CCV 280-557735/16 Calibration Date: 11/16/2021 22:09

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: 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		36288		65.9	65.7	0.3	20.0
Ethane	Ave	33241	34012		126	123	2.3	20.0
Ethylene	Ave	35226	35914		117	115	2.0	20.0
Acetylene	Ave	28139	27766		105	107	-1.3	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Lab Sample ID: CCV 280-557735/16 Calibration Date: 11/16/2021 22:09

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: 017F1701.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.29	1.25	1.33
Ethane	1.55	1.51	1.61
Ethylene	1.87	1.81	1.91
Acetylene	4.25	4.09	4.25

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\017F1701.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 16-Nov-2021 22:09:48 ALS Bottle#: 17 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\20211116-106564.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-Nov-2021 10:55:20 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: ornelasg Date: 17-Nov-2021 10:48:59

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.289	1.290	-0.001	2384229	65.7	65.9	
2	1.674	1.672	0.002	2462730	65.7	66.5	
						RPD = 0.83	
3 Ethane							
1	1.554	1.560	-0.006	4189253	123.2	126.0	
2	3.018	3.037	-0.019	4333240	123.2	129.8	
						RPD = 2.95	
4 Ethylene							
1	1.869	1.858	0.011	4126572	114.9	117.1	
2	2.598	2.620	-0.022	3614049	114.9	116.7	
						RPD = 0.42	
5 Propane							
1	2.706	2.665	0.041	6507335	180.6	180.7	
2	4.928	4.934	-0.006	6242209	180.6	178.3	
						RPD = 1.34	
6 Acetylene							a
1	4.249	4.167	0.082	2961788	106.7	105.3	a
2	0.000	2.764	0.000	0	106.7	0	
						RPD = 200.00	
7 Butane							
1	4.569	4.513	0.056	8179116	238.1	224.6	
2	6.424	6.432	-0.008	7826053	238.1	222.7	
						RPD = 0.83	
8 isobutylene							
1	5.457	5.403	0.054	7785377	229.8	215.5	
2	6.268	6.274	-0.006	7082313	229.8	213.3	
						RPD = 1.03	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

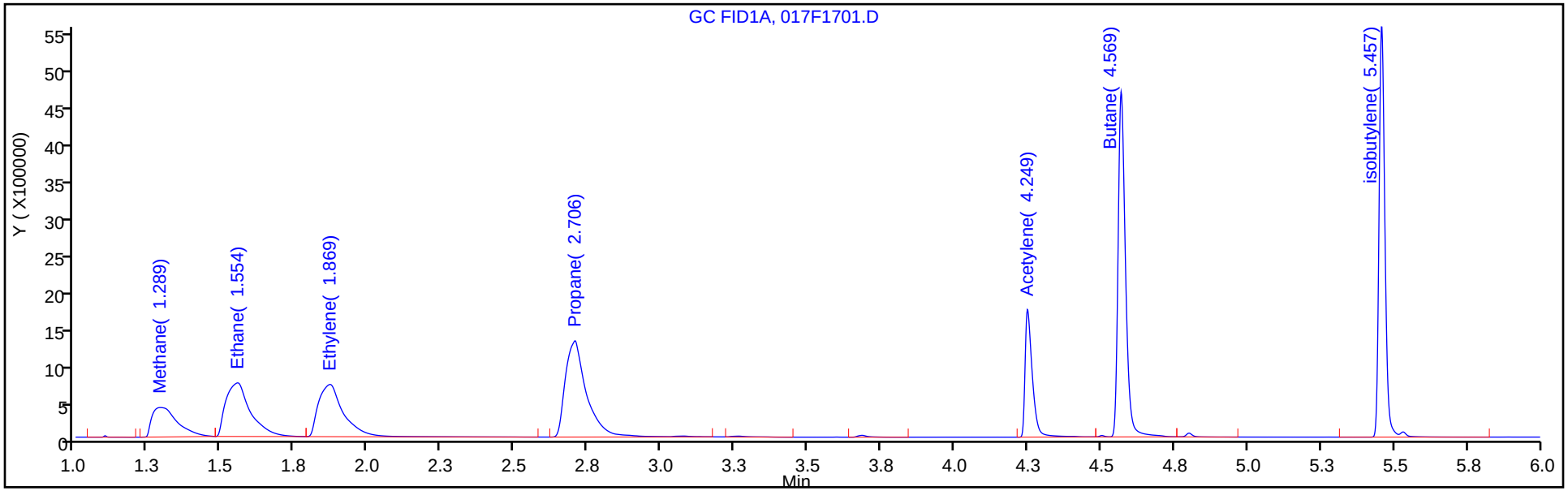
Report Date: 17-Nov-2021 10:55:20 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

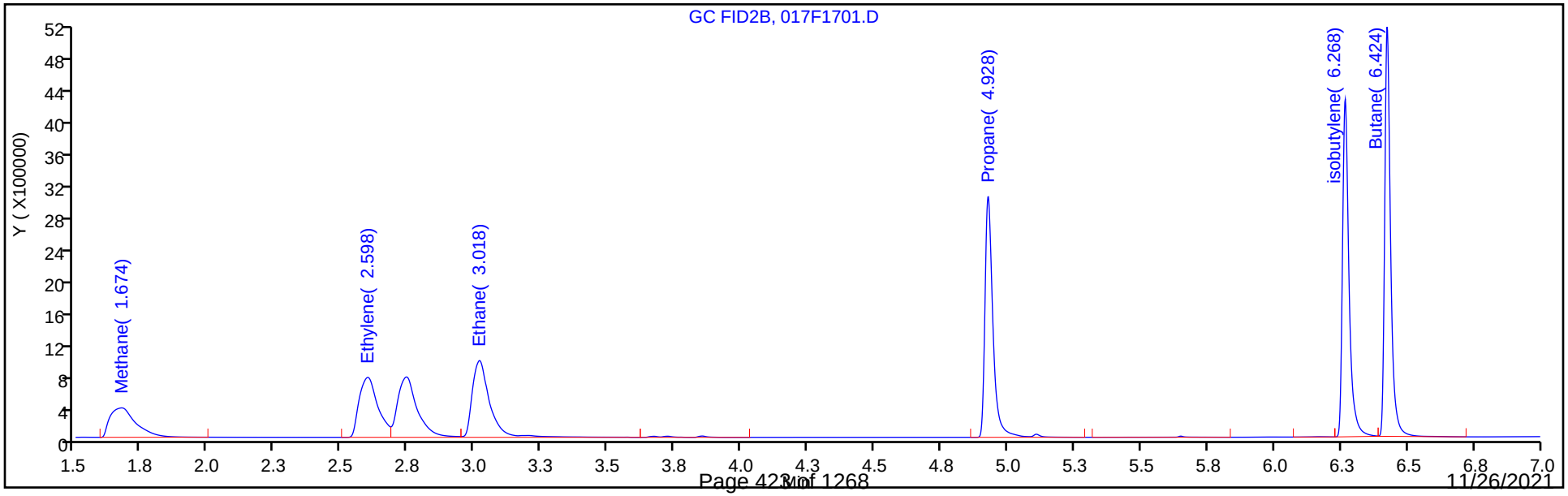
Data File: \\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\017F1701.D

Injection Date:	16-Nov-2021 22:09:48	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#:	17
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

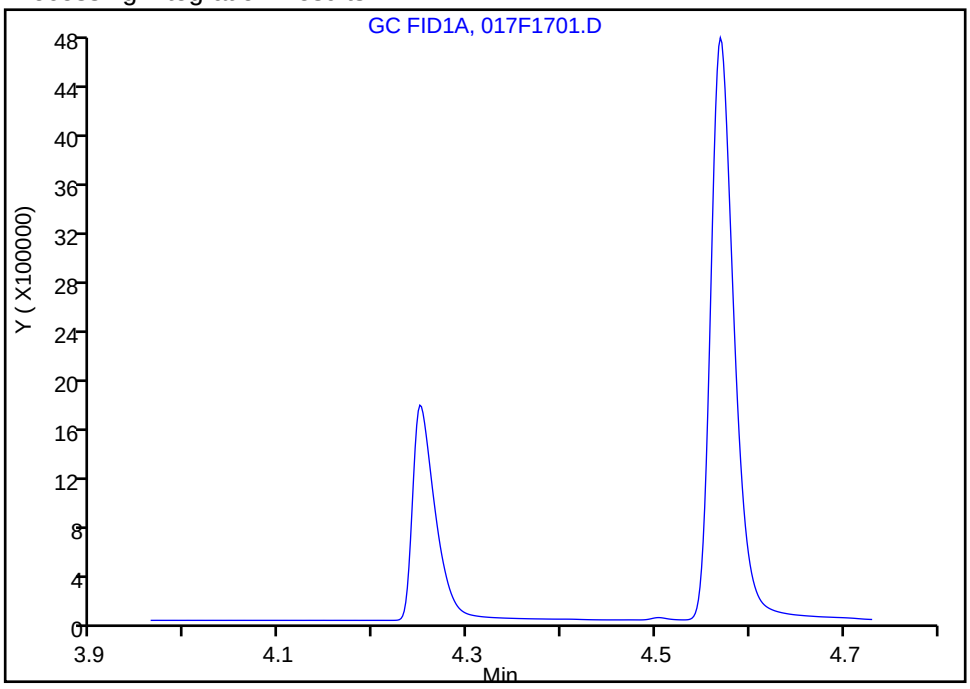
Data File:	\\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\017F1701.D				
Injection Date:	16-Nov-2021 22:09:48	Instrument ID:	VGC_J		
Lims ID:	ccv				
Client ID:					
Operator ID:	sciannac	ALS Bottle#:	17	Worklist Smp#:	16
Purge Vol:	18.000 mL	Dil. Factor:	1.0000		
Method:	RSK_J	Limit Group:	GCV - RSK 175		
Column:	Rt-Alumina BOND/KCl (0.53 mm)	Detector	GC FID1A		

6 Acetylene, CAS: 74-86-2

Signal: 1

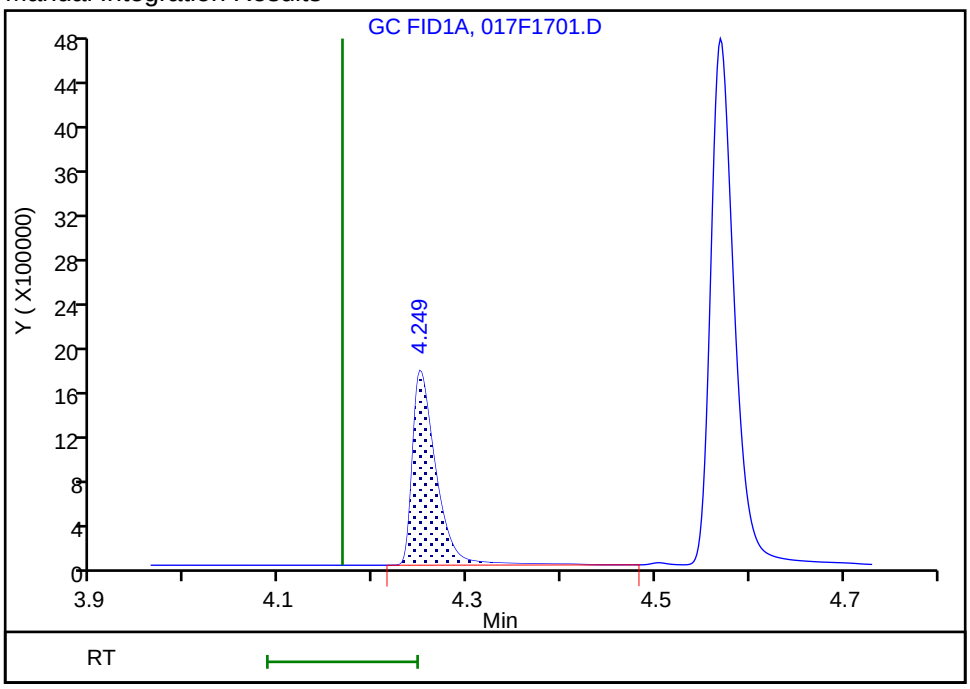
Not Detected
Expected RT: 4.17

Processing Integration Results



Manual Integration Results

RT: 4.25
Area: 2961788
Amount: 105.2556
Amount Units: ug/l



Reviewer: ornelasg, 17-Nov-2021 10:48:43
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Lab Sample ID: CCV 280-557735/16 Calibration Date: 11/16/2021 22:09

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: 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		37483		66.5	65.7	1.2	20.0
Ethylene	Ave	30980	31454		117	115	1.5	20.0
Acetylene	Ave	34179	0.0000		3.70	107	-100.0*	20.0
Ethane	Ave	33383	35181		130	123	5.4	20.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Lab Sample ID: CCV 280-557735/16 Calibration Date: 11/16/2021 22:09

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: 017F1701.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.67	1.63	1.71
Ethylene	2.60	2.57	2.67
Acetylene	2.76	2.68	2.84
Ethane	3.02	2.99	3.09

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\017F1701.D
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 16-Nov-2021 22:09:48 ALS Bottle#: 17 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\20211116-106564.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-Nov-2021 10:55:20 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: ornelasg Date: 17-Nov-2021 10:48:59

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.289	1.290	-0.001	2384229	65.7	65.9	
2	1.674	1.672	0.002	2462730	65.7	66.5	
						RPD = 0.83	
3 Ethane							
1	1.554	1.560	-0.006	4189253	123.2	126.0	
2	3.018	3.037	-0.019	4333240	123.2	129.8	
						RPD = 2.95	
4 Ethylene							
1	1.869	1.858	0.011	4126572	114.9	117.1	
2	2.598	2.620	-0.022	3614049	114.9	116.7	
						RPD = 0.42	
5 Propane							
1	2.706	2.665	0.041	6507335	180.6	180.7	
2	4.928	4.934	-0.006	6242209	180.6	178.3	
						RPD = 1.34	
6 Acetylene							a
1	4.249	4.167	0.082	2961788	106.7	105.3	a
2	0.000	2.764	0.000	0	106.7	0	
						RPD = 200.00	
7 Butane							
1	4.569	4.513	0.056	8179116	238.1	224.6	
2	6.424	6.432	-0.008	7826053	238.1	222.7	
						RPD = 0.83	
8 isobutylene							
1	5.457	5.403	0.054	7785377	229.8	215.5	
2	6.268	6.274	-0.006	7082313	229.8	213.3	
						RPD = 1.03	

QC Flag Legend

Processing Flags

Review Flags

a - User Assigned ID

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

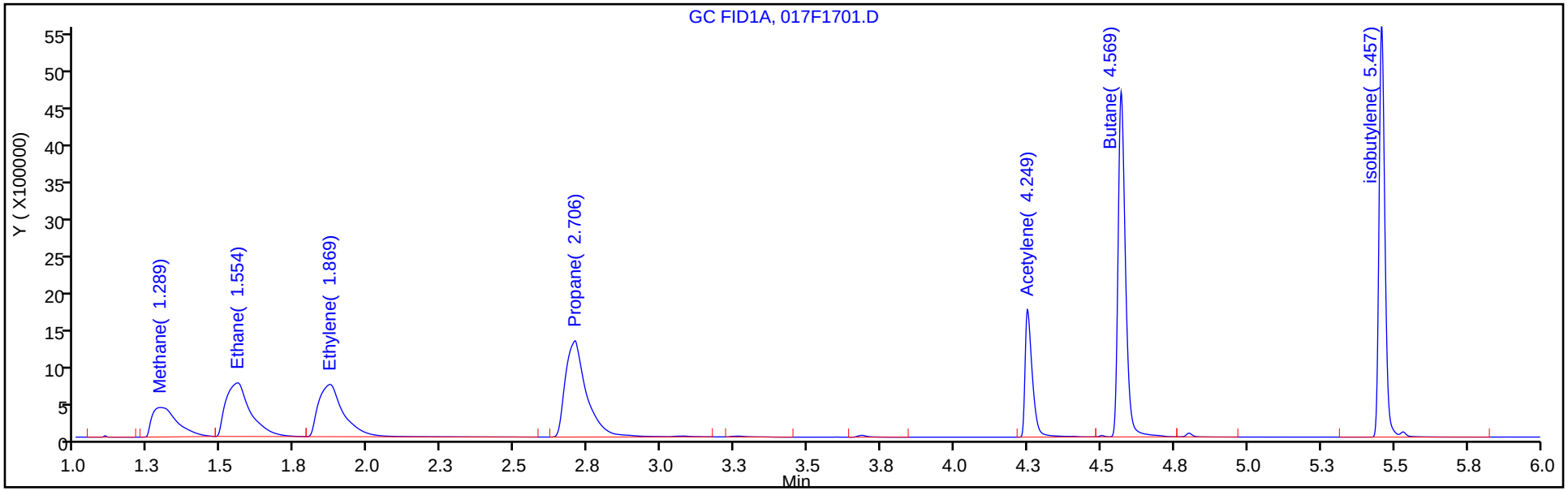
Report Date: 17-Nov-2021 10:55:20 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

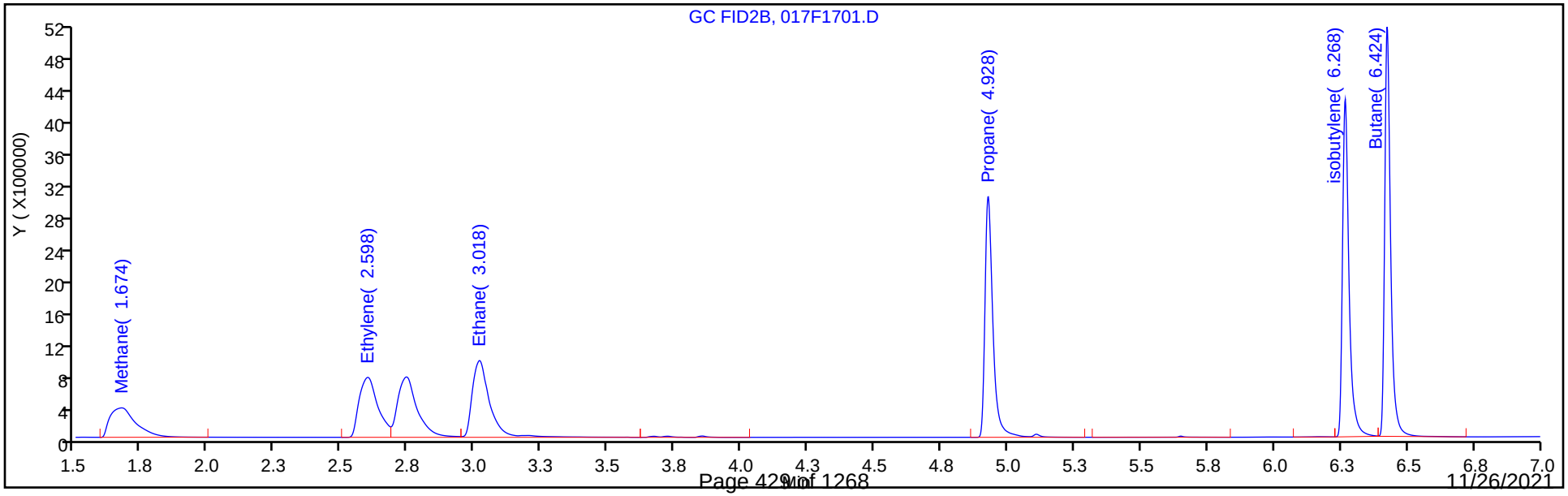
Data File: \\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\017F1701.D

Injection Date:	16-Nov-2021 22:09:48	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#:	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 I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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

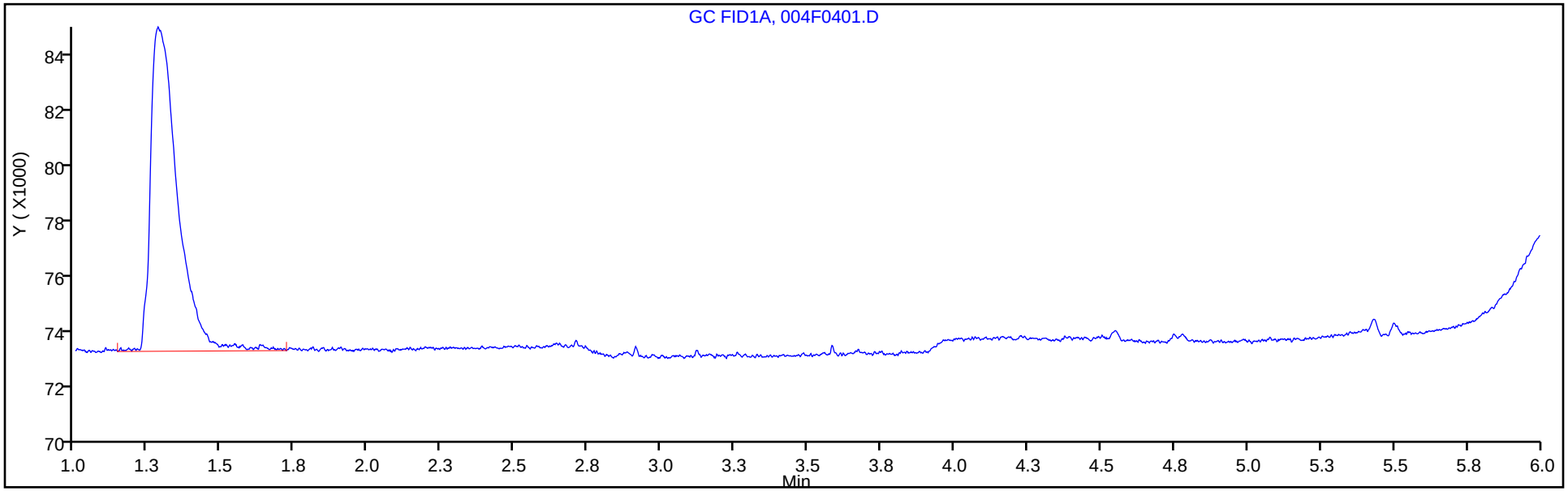
Report Date: 15-Nov-2021 16:57:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

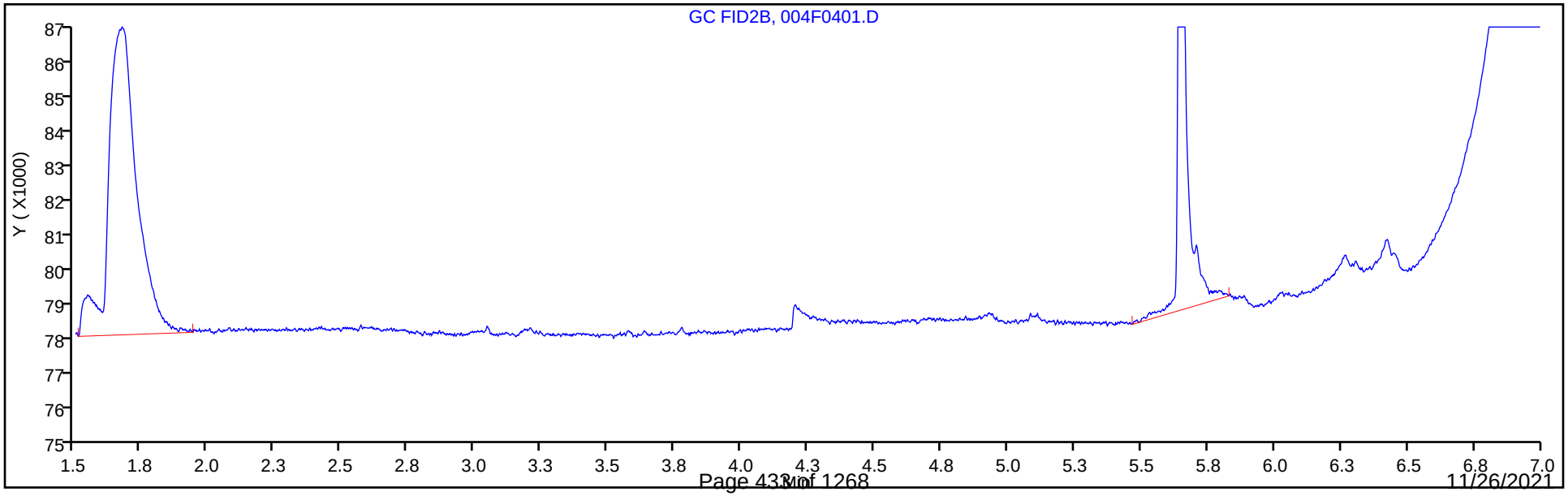
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\004F0401.D

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.: 280-155225-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-557735/4

Matrix: Water Lab File ID: 005F0501.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 11/16/2021 19:32

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.: 557735 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\20211116-106564.b\005F0501.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 16-Nov-2021 19:32:24 ALS Bottle#: 5 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\20211116-106564.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-Nov-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: ornelasg Date: 16-Nov-2021 22:14:43

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		1.302				ND	
2		1.690					
3 Ethane							
1		1.560				ND	
2		3.037					
4 Ethylene							
1		1.858				ND	
2		2.620					
5 Propane							
1		2.665				ND	
2		4.934					
6 Acetylene							
1		4.167				ND	
2		2.764					
7 Butane							
1		4.513				ND	
2		6.432					
8 isobutylene							
1		5.403				ND	
2		6.274					

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

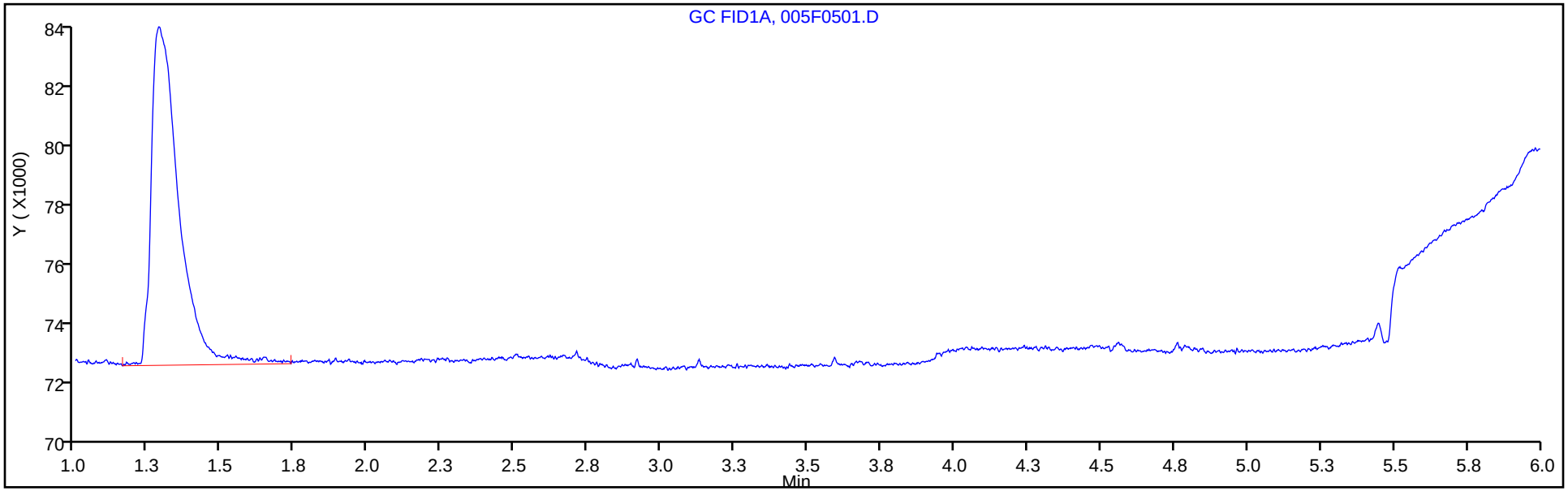
Report Date: 17-Nov-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

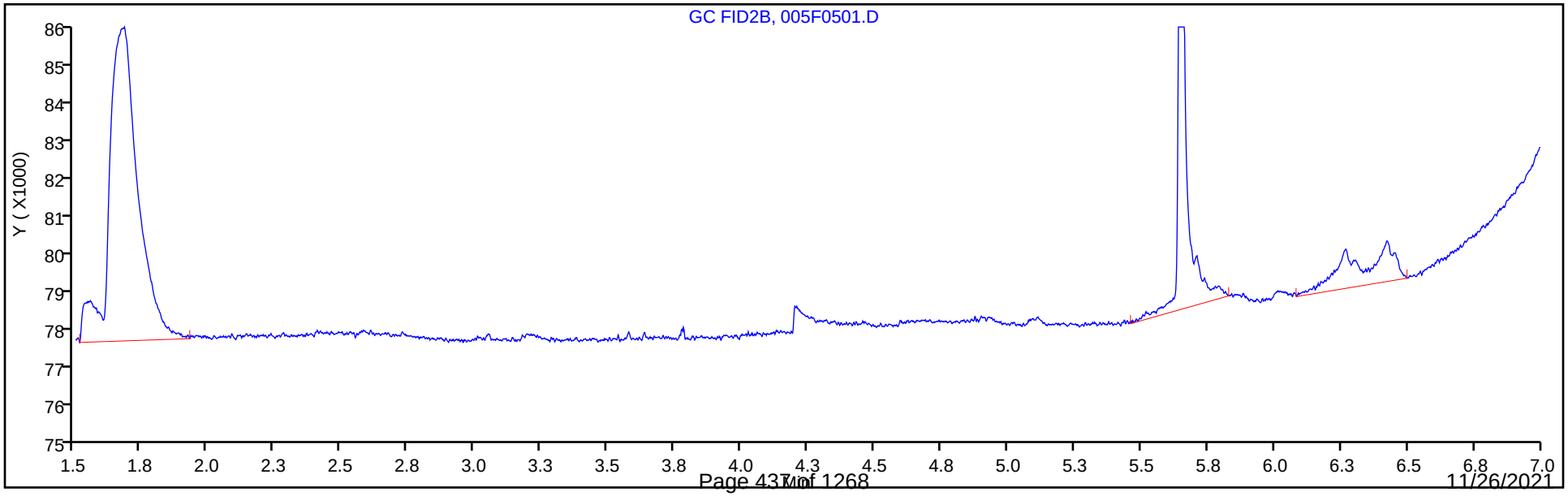
Data File: \\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\005F0501.D

Injection Date:	16-Nov-2021 19:32:24	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#:	5
Method:	RSK_J	Limit Group:	GCV - RSK 175		

Column: Rt-Alumina BOND/KCl (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Column: HP-PLOT/Q (0.53 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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

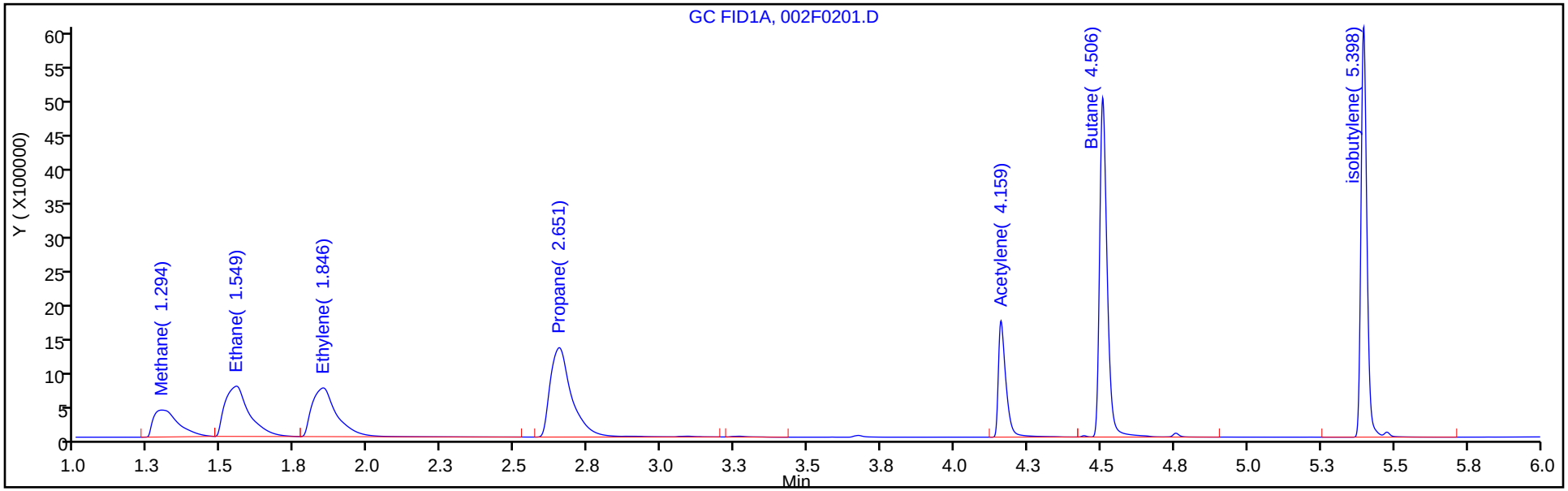
Report Date: 15-Nov-2021 16:57:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

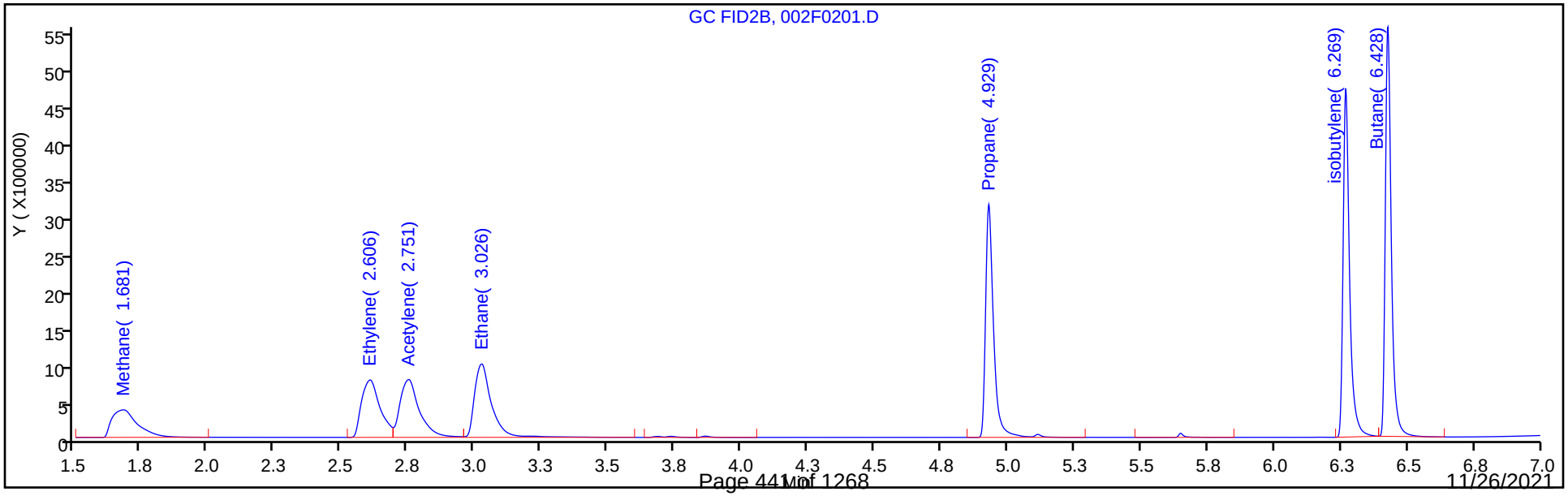
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\002F0201.D

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.: 280-155225-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-557735/2

Matrix: Water Lab File ID: 003F0301.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 11/16/2021 19:06

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.: 557735 Units: mg/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
74-82-8	Methane	0.0665		0.0050	0.0013	0.00063

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\003F0301.D
Lims ID: lcs
Client ID:
Sample Type: LCS
Inject. Date: 16-Nov-2021 19:06:21 ALS Bottle#: 3 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\20211116-106564.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-Nov-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: ornelasg Date: 16-Nov-2021 19:46:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.299	1.302	-0.003	2376725	65.7	65.7	
2	1.687	1.690	-0.003	2463300	65.7	66.5	
						RPD = 1.17	
3 Ethane							
1	1.559	1.560	-0.001	4234448	123.2	127.4	
2	3.034	3.037	-0.003	4340327	123.2	130.0	
						RPD = 2.05	
4 Ethylene							
1	1.859	1.858	0.001	4172486	114.9	118.4	
2	2.616	2.620	-0.004	3661978	114.9	118.2	
						RPD = 0.21	
5 Propane							
1	2.670	2.665	0.005	6644640	180.6	184.5	
2	4.932	4.934	-0.002	6382613	180.6	182.3	
						RPD = 1.21	
6 Acetylene							
1	4.197	4.167	0.030	3080811	106.7	109.5	
2	2.761	2.764	-0.003	3899118	106.7	114.1	
						RPD = 4.11	
7 Butane							
1	4.530	4.513	0.017	8694718	238.1	238.7	
2	6.429	6.432	-0.003	8214777	238.1	233.8	
						RPD = 2.09	
8 isobutylene							
1	5.420	5.403	0.017	8197883	229.8	226.9	
2	6.271	6.274	-0.003	7449111	229.8	224.4	
						RPD = 1.14	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

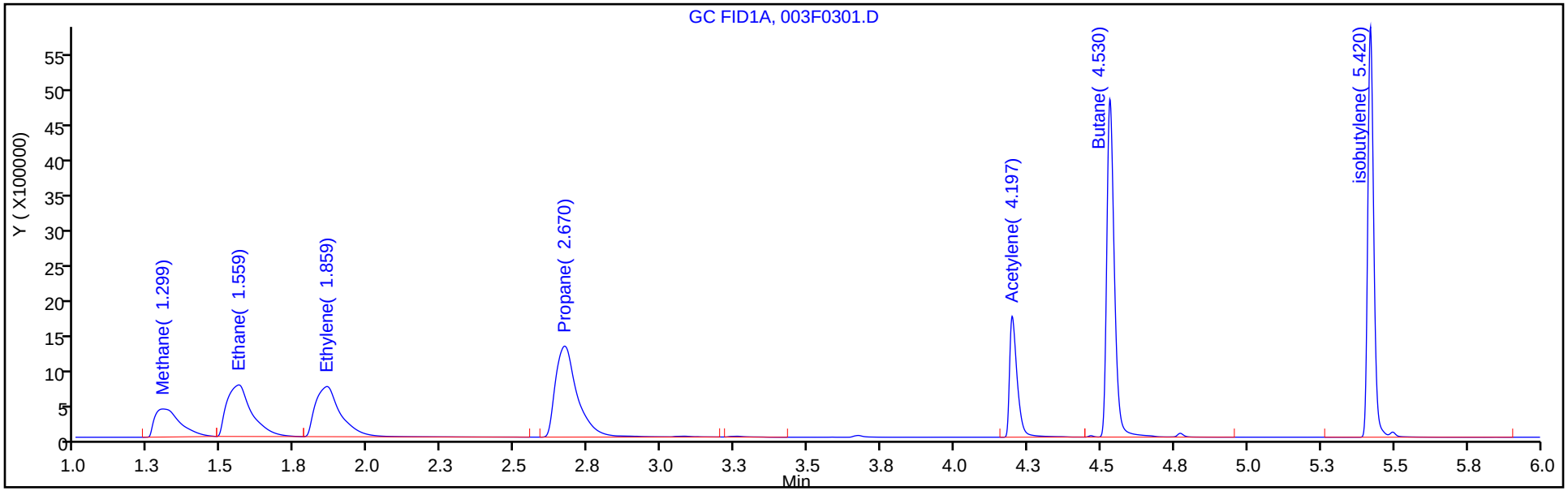
Report Date: 17-Nov-2021 10:55:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

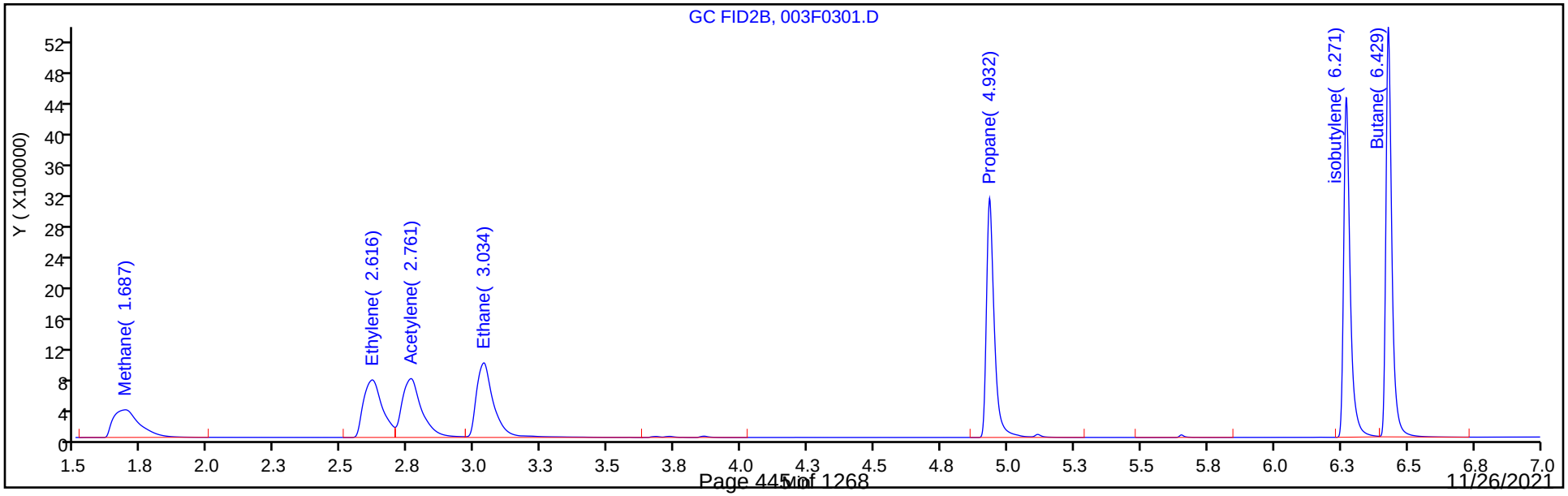
Data File: \\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\003F0301.D

Injection Date:	16-Nov-2021 19:06:21	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#:	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.: 280-155225-1

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

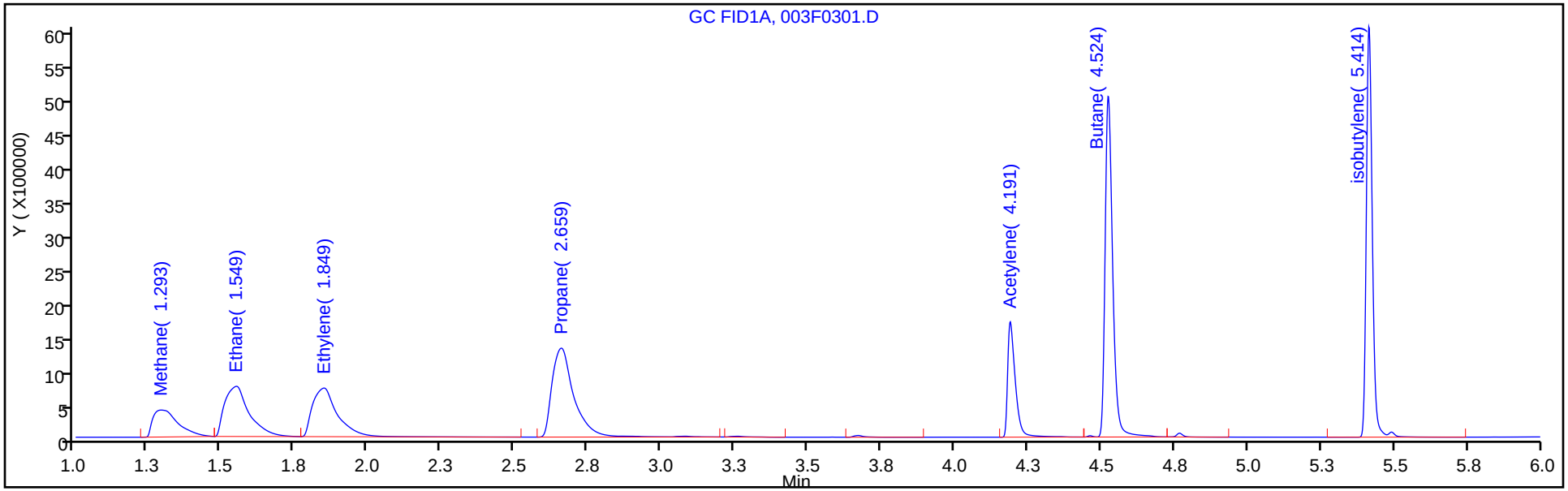
Report Date: 15-Nov-2021 16:57:05 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

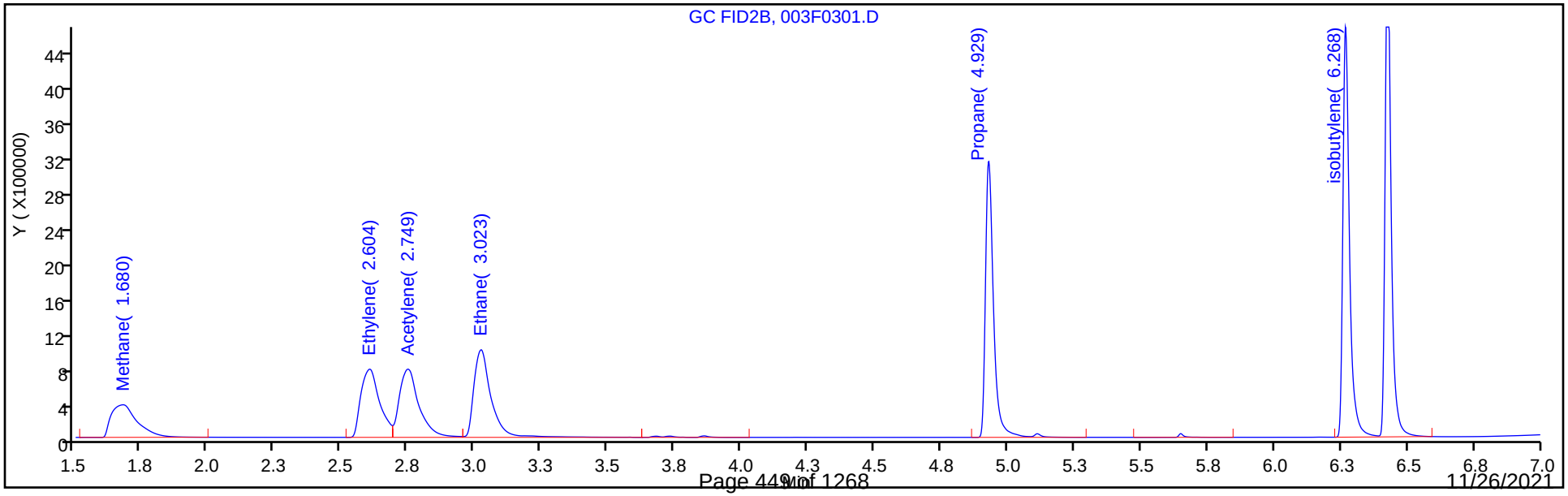
Data File: \\chromfs\Denver\ChromData\VGC_J\20211112-106454.b\003F0301.D

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.: 280-155225-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-557735/3

Matrix: Water Lab File ID: 004F0401.D

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 20(mL) Date Analyzed: 11/16/2021 19:19

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.: 557735 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\20211116-106564.b\004F0401.D
Lims ID: lcsd
Client ID:
Sample Type: LCSD
Inject. Date: 16-Nov-2021 19:19:30 ALS Bottle#: 4 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\20211116-106564.b\RSK_J.m
Limit Group: GCV - RSK 175
Method Label: DV-GC-0025: Dissolved Gases in Water by RSK-175
Last Update: 17-Nov-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: ornelasg Date: 16-Nov-2021 22:14:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Methane							
1	1.296	1.302	-0.006	2394149	65.7	66.2	
2	1.683	1.690	-0.007	2482480	65.7	67.0	
						RPD = 1.22	
3 Ethane							
1	1.556	1.560	-0.004	4296710	123.2	129.3	
2	3.028	3.037	-0.009	4397868	123.2	131.7	
						RPD = 1.90	
4 Ethylene							
1	1.860	1.858	0.002	4226685	114.9	120.0	
2	2.610	2.620	-0.010	3705450	114.9	119.6	
						RPD = 0.32	
5 Propane							
1	2.676	2.665	0.011	6773792	180.6	188.1	
2	4.931	4.934	-0.003	6519888	180.6	186.2	
						RPD = 1.01	
6 Acetylene							
1	4.216	4.167	0.049	3088315	106.7	109.8	
2	2.756	2.764	-0.008	3919752	106.7	114.7	
						RPD = 4.39	
7 Butane							
1	4.543	4.513	0.030	9036992	238.1	248.1	
2	6.428	6.432	-0.004	8543612	238.1	243.1	
						RPD = 2.03	
8 isobutylene							
1	5.431	5.403	0.028	8499185	229.8	235.3	
2	6.271	6.274	-0.003	7724380	229.8	232.6	
						RPD = 1.12	

QC Flag Legend

Processing Flags

Reagents:

RSK7gasMathes_00034 Amount Added: 200.00 Units: uL

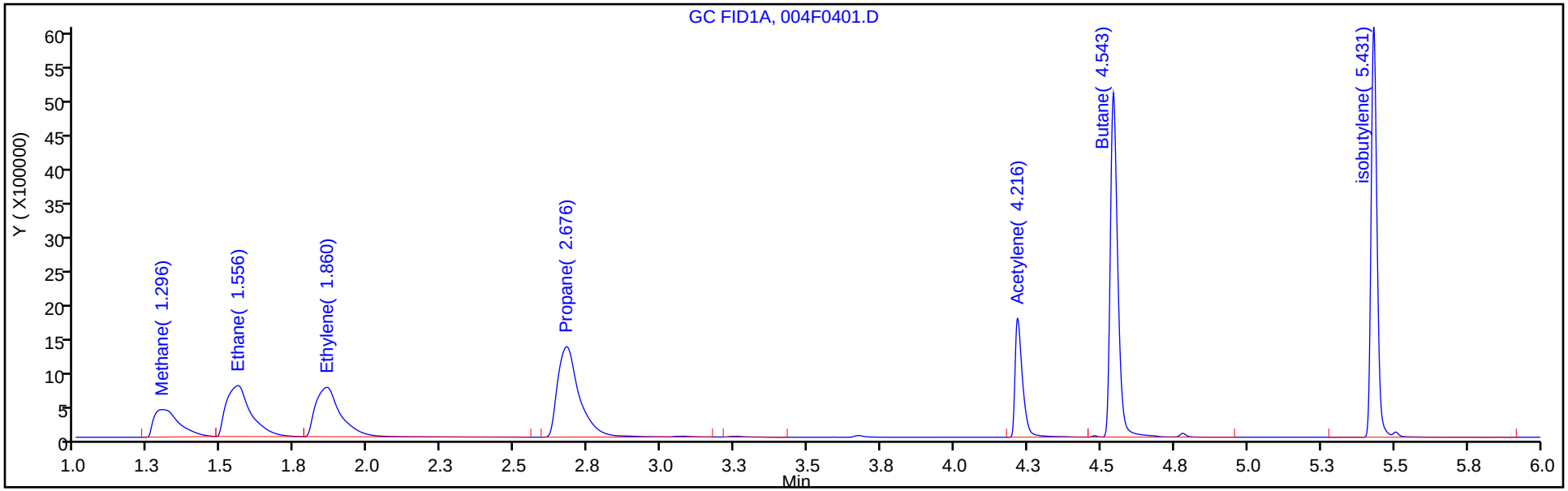
Report Date: 17-Nov-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

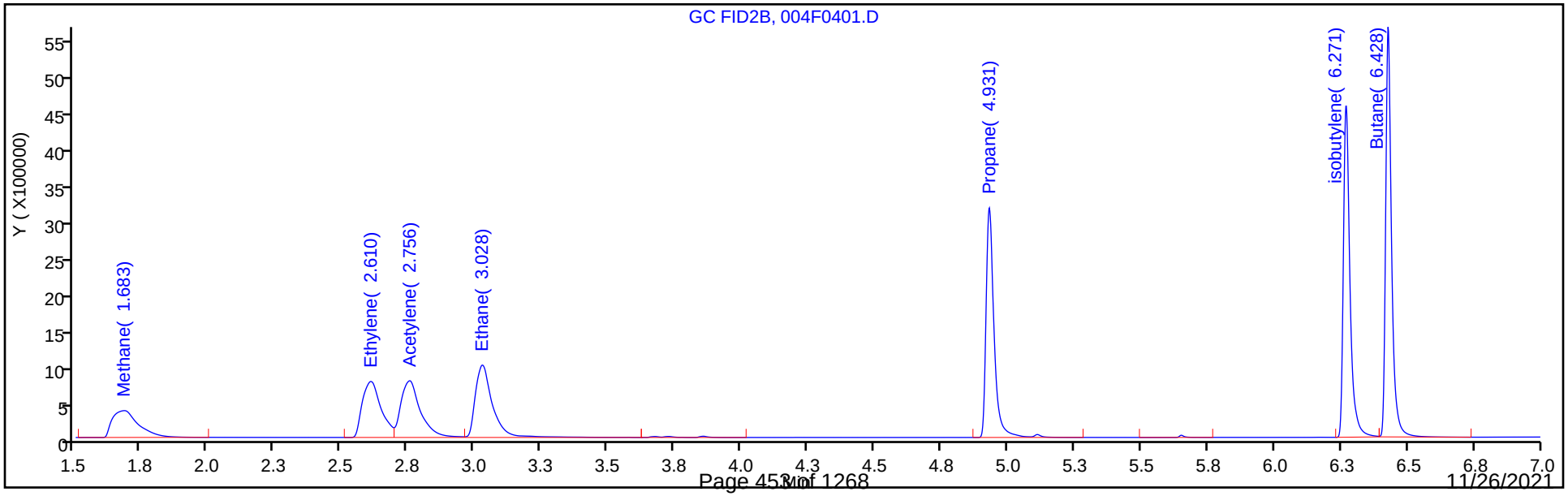
Data File: \\chromfs\Denver\ChromData\VGC_J\20211116-106564.b\004F0401.D

Injection Date:	16-Nov-2021 19:19:30	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#:	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



GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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.: 280-155225-1

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)
ZZZZZ		11/12/2021 16:06	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 16:06	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 16:19	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 16:19	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 16:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 16:32	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 16:45	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 16:45	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 16:58	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 16:58	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 17:12	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 17:12	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/12/2021 17:25	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/12/2021 17:25	1		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)
280-155225-1	G0024-7	11/12/2021 18:56	1	023F2301.D	Rt-Alumina KCl 0.53(mm)
280-155225-1	G0024-7	11/12/2021 18:56	1	023F2301.D	HP-Plot Q 0.53(mm)
280-155225-2	G0077-7	11/12/2021 19:09	1	024F2401.D	Rt-Alumina KCl 0.53(mm)
280-155225-2	G0077-7	11/12/2021 19:09	1	024F2401.D	HP-Plot Q 0.53(mm)
280-155225-3	G0078-7	11/12/2021 19:22	1	025F2501.D	Rt-Alumina KCl 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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
280-155225-3	G0078-7	11/12/2021 19:22	1	025F2501.D	HP-Plot Q 0.53(mm)
280-155225-4	G0092-7	11/12/2021 19:35	1	026F2601.D	Rt-Alumina KCl 0.53(mm)
280-155225-4	G0092-7	11/12/2021 19:35	1	026F2601.D	HP-Plot Q 0.53(mm)
280-155225-5	G0091-7	11/12/2021 19:48	1	027F2701.D	Rt-Alumina KCl 0.53(mm)
280-155225-5	G0091-7	11/12/2021 19:48	1	027F2701.D	HP-Plot Q 0.53(mm)
280-155225-6	G0086-7	11/12/2021 20:01	1	028F2801.D	Rt-Alumina KCl 0.53(mm)
280-155225-6	G0086-7	11/12/2021 20:01	1	028F2801.D	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)
280-155225-8	PZ018-7	11/12/2021 20:27	1	030F3001.D	Rt-Alumina KCl 0.53(mm)
280-155225-8	PZ018-7	11/12/2021 20:27	1	030F3001.D	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	032F3201.D	Rt-Alumina KCl 0.53(mm)
CCV 280-557326/32		11/12/2021 20:53	1	032F3201.D	HP-Plot Q 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Instrument ID: VGC_J Start Date: 11/16/2021 18:53

Analysis Batch Number: 557735 End Date: 11/17/2021 01:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 280-557735/1		11/16/2021 18:53	1	002F0201.D	Rt-Alumina KCl 0.53(mm)
CCVRT 280-557735/1		11/16/2021 18:53	1	002F0201.D	HP-Plot Q 0.53(mm)
LCS 280-557735/2		11/16/2021 19:06	1	003F0301.D	Rt-Alumina KCl 0.53(mm)
LCS 280-557735/2		11/16/2021 19:06	1	003F0301.D	HP-Plot Q 0.53(mm)
LCSD 280-557735/3		11/16/2021 19:19	1	004F0401.D	Rt-Alumina KCl 0.53(mm)
LCSD 280-557735/3		11/16/2021 19:19	1	004F0401.D	HP-Plot Q 0.53(mm)
MB 280-557735/4		11/16/2021 19:32	1	005F0501.D	Rt-Alumina KCl 0.53(mm)
MB 280-557735/4		11/16/2021 19:32	1	005F0501.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/16/2021 19:45	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/16/2021 19:45	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/16/2021 19:58	4		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/16/2021 19:58	4		HP-Plot Q 0.53(mm)
ZZZZZ		11/16/2021 20:11	4		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/16/2021 20:11	4		HP-Plot Q 0.53(mm)
280-155225-7	PZ017R-7	11/16/2021 20:24	4	009F0901.D	Rt-Alumina KCl 0.53(mm)
280-155225-7	PZ017R-7	11/16/2021 20:24	4	009F0901.D	HP-Plot Q 0.53(mm)
280-155225-9	PZ021-7	11/16/2021 20:38	4	010F1001.D	Rt-Alumina KCl 0.53(mm)
280-155225-9	PZ021-7	11/16/2021 20:38	4	010F1001.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/16/2021 20:51	2		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/16/2021 20:51	2		HP-Plot Q 0.53(mm)
ZZZZZ		11/16/2021 21:04	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/16/2021 21:04	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/16/2021 21:17	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/16/2021 21:17	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/16/2021 21:30	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/16/2021 21:30	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/16/2021 21:43	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/16/2021 21:43	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/16/2021 21:56	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/16/2021 21:56	1		HP-Plot Q 0.53(mm)
CCV 280-557735/16		11/16/2021 22:09	1	017F1701.D	Rt-Alumina KCl 0.53(mm)
CCV 280-557735/16		11/16/2021 22:09	1	017F1701.D	HP-Plot Q 0.53(mm)
ZZZZZ		11/16/2021 22:22	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/16/2021 22:22	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/16/2021 22:36	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/16/2021 22:36	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/16/2021 22:48	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/16/2021 22:48	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/16/2021 23:02	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/16/2021 23:02	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/16/2021 23:15	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/16/2021 23:15	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/16/2021 23:27	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/16/2021 23:27	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/16/2021 23:40	1		Rt-Alumina KCl 0.53(mm)

RSK-175

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Instrument ID: VGC_J Start Date: 11/16/2021 18:53

Analysis Batch Number: 557735 End Date: 11/17/2021 01:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		11/16/2021 23:40	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/16/2021 23:53	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/16/2021 23:53	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/17/2021 00:06	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/17/2021 00:06	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/17/2021 00:19	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/17/2021 00:19	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/17/2021 00:32	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/17/2021 00:32	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/17/2021 00:45	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/17/2021 00:45	1		HP-Plot Q 0.53(mm)
ZZZZZ		11/17/2021 00:58	1		Rt-Alumina KCl 0.53(mm)
ZZZZZ		11/17/2021 00:58	1		HP-Plot Q 0.53(mm)
CCV 280-557735/30		11/17/2021 01:12	1		Rt-Alumina KCl 0.53(mm)
CCV 280-557735/30		11/17/2021 01:12	1		HP-Plot Q 0.53(mm)

GC VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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			
CCV 280-557326/20		RSK-175		20 mL	20 mL	5 SU	200 uL		
280-155225-G-1	G0024-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155225-G-2	G0077-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155225-H-3	G0078-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155225-G-4	G0092-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155225-H-5	G0091-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155225-H-6	G0086-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155225-G-8	PZ018-7	RSK-175	T	20 mL	20 mL	<2 SU			
CCV 280-557326/32		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.: 280-155225-1

SDG No.:

Batch Number: 557735 Batch Start Date: 11/16/21 18:53 Batch Analyst: Ornelas, Gabriel

Batch Method: RSK-175 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	RSK7gasMathes 00034		
CCVRT 280-557735/1		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCS 280-557735/2		RSK-175		20 mL	20 mL	5 SU	200 uL		
LCSD 280-557735/3		RSK-175		20 mL	20 mL	5 SU	200 uL		
MB 280-557735/4		RSK-175		20 mL	20 mL	5 SU			
280-155225-I-7	PZ017R-7	RSK-175	T	20 mL	20 mL	<2 SU			
280-155225-G-9	PZ021-7	RSK-175	T	20 mL	20 mL	<2 SU			
CCV 280-557735/16		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.: 280-155225-1

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 #
G0024-7	280-155225-1	93 M	
G0024-7	280-155225-1		96
G0077-7	280-155225-2	91 M	
G0077-7	280-155225-2		95 M
G0078-7	280-155225-3	95 M	
G0078-7	280-155225-3		95
G0092-7	280-155225-4	95 M	
G0091-7	280-155225-5	93 M	
G0091-7	280-155225-5		92
G0086-7	280-155225-6	81 Q	
G0086-7	280-155225-6		96 M
PZ017R-7	280-155225-7	105 M	
PZ017R-7	280-155225-7		90 M
PZ018-7	280-155225-8	118 M	
PZ018-7	280-155225-8		89 M
PZ021-7	280-155225-9	102 M	
PZ021-7	280-155225-9		89 M
	MB 280-556591/1-A	98	
	LCS 280-556591/2-A	95	
	LCS 280-556591/3-A	99	

	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.: 280-155225-1

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.: 280-155225-1

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 IV
HPLC/IC METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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	
G0024-7	280-155225-1	11/10/2021 09:19	11/11/2021 05:35
G0077-7	280-155225-2	11/10/2021 09:42	11/11/2021 07:20
G0078-7	280-155225-3	11/10/2021 10:05	11/11/2021 07:55
G0092-7	280-155225-4	11/10/2021 11:14	
G0091-7	280-155225-5	11/10/2021 11:37	11/11/2021 08:30
G0086-7	280-155225-6	11/10/2021 12:00	11/11/2021 09:06
PZ017R-7	280-155225-7	11/10/2021 12:23	11/11/2021 09:41
PZ018-7	280-155225-8	11/10/2021 12:46	11/11/2021 10:15
PZ021-7	280-155225-9	11/10/2021 13:09	11/11/2021 10:50

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: G0024-7 Lab Sample ID: 280-155225-1

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 11/10/2021 09:19 Date Analyzed (2): 11/11/2021 05:35

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4,6-Trinitrotoluene	1		10.96	10.87	11.07	0.46		10.8
	2		25.08	24.91	25.21	0.42		
4-Amino-2,6-dinitrotoluene	1		11.16	11.09	11.29	0.96		8.0
	2		17.35	17.19	17.49	1.0		
2-Amino-4,6-dinitrotoluene	1		11.41	11.34	11.54	1.2		11.4
	2		18.24	18.09	18.39	1.4		
2,4-Dinitrotoluene	1		11.75	11.67	11.87	0.12		18.8
	2		20.47	20.33	20.63	0.14		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: G0077-7 Lab Sample ID: 280-155225-2

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 11/10/2021 09:42 Date Analyzed (2): 11/11/2021 07:20

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		1.9
	2		6.64	6.50	6.80	0.60		
RDX	1		7.60	7.45	7.75	1.7		35.6
	2		8.78	8.65	8.95	1.2		
1,3,5-Trinitrobenzene	1		8.69	8.54	8.84	4.4		9.0
	2		18.78	18.63	18.93	4.8		
2,4,6-Trinitrotoluene	1		10.97	10.87	11.07	4.5		3.2
	2		25.08	24.91	25.21	4.4		
4-Amino-2,6-dinitrotoluene	1		11.17	11.09	11.29	4.2		4.9
	2		17.35	17.19	17.49	4.4		
2-Amino-4,6-dinitrotoluene	1		11.42	11.34	11.54	3.4		16.2
	2		18.24	18.09	18.39	4.0		
2,4-Dinitrotoluene	1		11.76	11.67	11.87	0.11		25.3
	2		20.47	20.33	20.63	0.14		
4-Nitrotoluene	1		13.09	12.93	13.23	0.33		109.2
	2		16.94	16.74	17.04	1.1		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: G0091-7 Lab Sample ID: 280-155225-5

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 11/10/2021 11:37 Date Analyzed (2): 11/11/2021 08:30

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	0.34		40.7
	2		6.64	6.50	6.80	0.23		
RDX	1		7.59	7.45	7.75	0.32		3.4
	2		8.79	8.65	8.95	0.33		
4-Amino-2,6-dinitrotoluene	1		11.16	11.09	11.29	0.17		40.8
	2		17.33	17.19	17.49	0.26		
2-Amino-4,6-dinitrotoluene	1		11.41	11.34	11.54	0.17		32.1
	2		18.25	18.09	18.39	0.24		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: G0086-7 Lab Sample ID: 280-155225-6

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 11/10/2021 12:00 Date Analyzed (2): 11/11/2021 09:06

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	
HMX	1		6.59	6.44	6.74	0.56		71.2
	2		6.64	6.50	6.80	0.27		
RDX	1		7.60	7.45	7.75	0.95		41.6
	2		8.79	8.65	8.95	0.63		
1,3,5-Trinitrobenzene	1		8.69	8.54	8.84	17		5.5
	2		18.77	18.63	18.93	18		
2,4,6-Trinitrotoluene	1		10.96	10.87	11.07	5.5		1.3
	2		25.04	24.91	25.21	5.4		
4-Amino-2,6-dinitrotoluene	1		11.16	11.09	11.29	1.5		13.0
	2		17.34	17.19	17.49	1.7		
2-Amino-4,6-dinitrotoluene	1		11.41	11.34	11.54	1.8		18.0
	2		18.24	18.09	18.39	2.2		
2,4-Dinitrotoluene	1		11.76	11.67	11.87	0.073		26.4
	2		20.44	20.33	20.63	0.095		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: PZ017R-7 Lab Sample ID: 280-155225-7

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 11/10/2021 12:23 Date Analyzed (2): 11/11/2021 09:41

GC Column (1): UltraCarb5uOD ID: 4.6(mm) GC Column (2): Luna-phenylhe ID: 4.6(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
2,4,6-Trinitrotoluene	1		10.95	10.87	11.07	0.37		57.4
	2		25.04	24.91	25.21	0.20		
4-Amino-2,6-dinitrotoluene	1		11.16	11.09	11.29	0.47		159.2
	2		17.26	17.19	17.49	4.1		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: PZ018-7 Lab Sample ID: 280-155225-8

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 11/10/2021 12:46 Date Analyzed (2): 11/11/2021 10:15

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	
1,3,5-Trinitrobenzene	1		8.67	8.54	8.84	0.94		22.6
	2		18.77	18.63	18.93	0.75		
2,4,6-Trinitrotoluene	1		10.95	10.87	11.07	4.0		7.7
	2		25.07	24.91	25.21	4.4		
4-Amino-2,6-dinitrotoluene	1		11.16	11.09	11.29	4.3		15.0
	2		17.34	17.19	17.49	5.0		
2-Amino-4,6-dinitrotoluene	1		11.41	11.34	11.54	2.7		6.4
	2		18.24	18.09	18.39	2.6		

FORM X
IDENTIFICATION SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: PZ021-7 Lab Sample ID: 280-155225-9

Instrument ID (1): CHHPLC_X3 Instrument ID (2): CHHPLC_X5

Date Analyzed (1): 11/10/2021 13:09 Date Analyzed (2): 11/11/2021 10:50

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	
2,4,6-Trinitrotoluene	1		10.94	10.87	11.07	0.30		29.6
	2		25.00	24.91	25.21	0.22		
4-Amino-2,6-dinitrotoluene	1		11.16	11.09	11.29	0.47		172.0
	2		17.23	17.19	17.49	6.3		

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: G0024-7 Lab Sample ID: 280-155225-1

Matrix: Water Lab File ID: 11090056.D

Analysis Method: 8330A Date Collected: 11/04/2021 09:25

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 489(mL) Date Analyzed: 11/10/2021 09:19

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	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.46	M	0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	0.12	M	0.10	0.082	0.028
606-20-2	2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	1.2	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	0.96	M	0.15	0.12	0.059
2691-41-0	HMX	0.20	U	0.21	0.20	0.090
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	0.20	U	0.21	0.20	0.053
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	93	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090056.D
Lims ID: 280-155225-A-1-A
Client ID: G0024-7
Sample Type: Client
Inject. Date: 10-Nov-2021 09:19:56 ALS Bottle#: 56 Worklist Smp#: 56
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155225-A-1-A
Misc. Info.: 280-0106333-056
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 12:53:50

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	8.563	8.572	-0.009	23846	0.1860	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	10.957	10.971	-0.014	9369	0.0455	M
18 4-Amino-2,6-dinitrotoluene	1	11.157	11.185	-0.028	14384	0.0942	M
19 2-Amino-4,6-dinitrotoluene	1	11.410	11.438	-0.028	25015	0.1209	M
20 2,6-Dinitrotoluene	1		11.605			ND	
21 2,4-Dinitrotoluene	1	11.750	11.771	-0.021	3292	0.0115	M
22 o-Nitrotoluene	1		12.645			ND	
23 p-Nitrotoluene	1	13.070	13.078	-0.008	1289	0.0115	M
24 m-Nitrotoluene	1		13.658			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

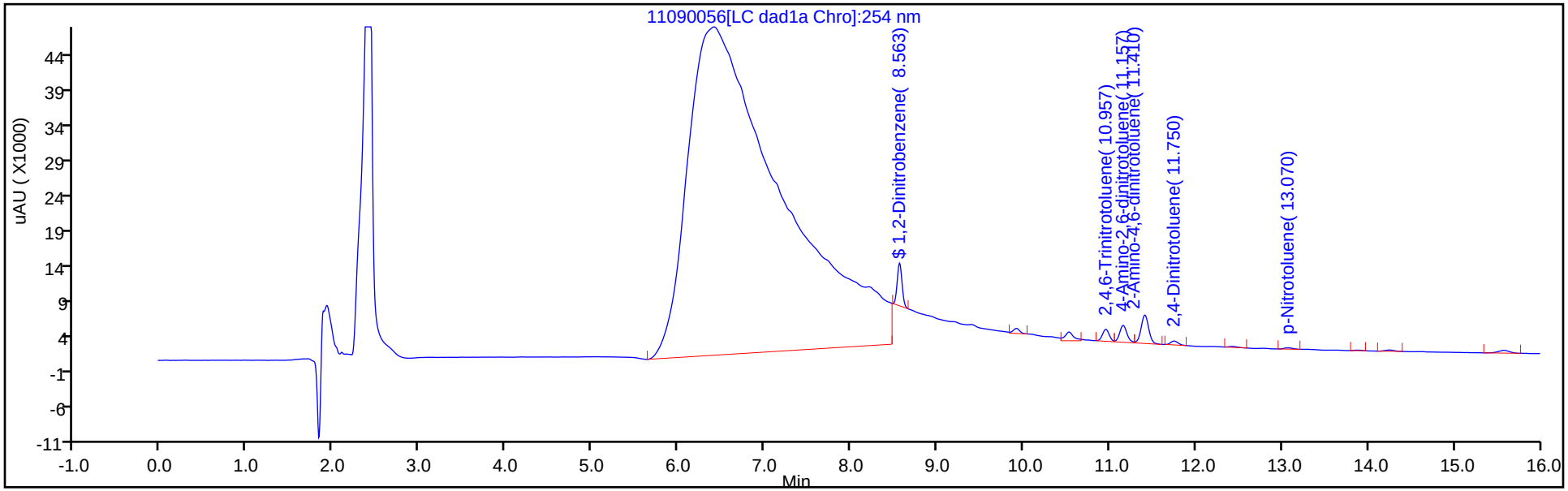
Report Date: 10-Nov-2021 12:58:57 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

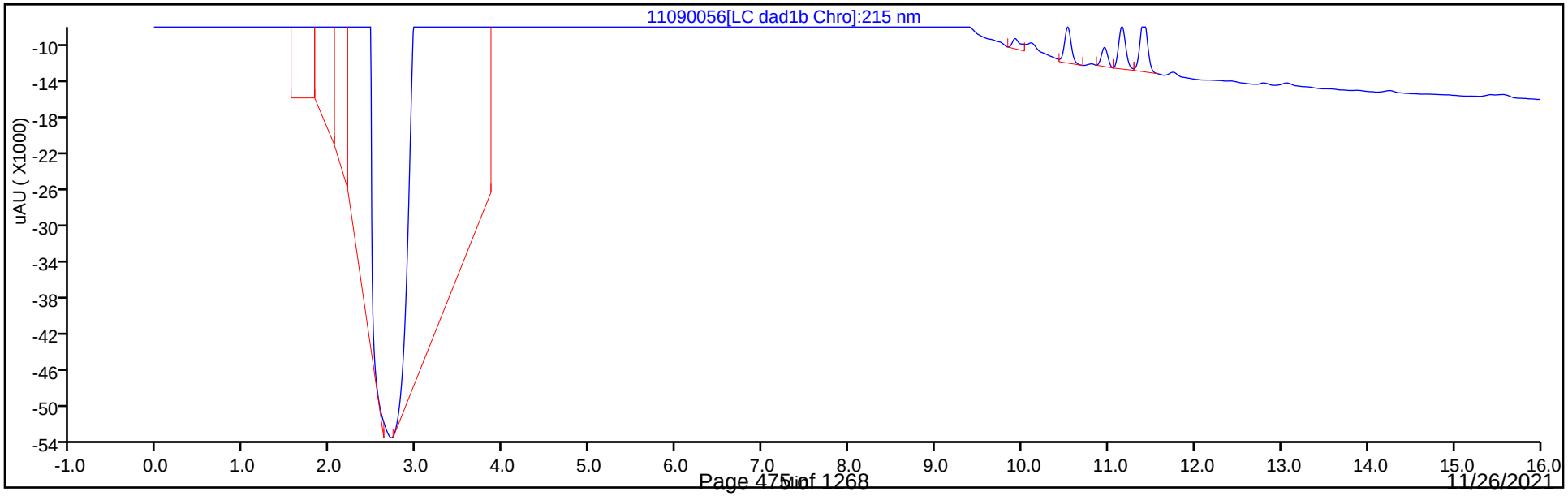
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090056.d

Injection Date:	10-Nov-2021 09:19:56	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155225-A-1-A	Lab Sample ID:	280-155225-1	Worklist Smp#:	56
Client ID:	G0024-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	56
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090056.D				
Lims ID:	280-155225-A-1-A				
Client ID:	G0024-7				
Sample Type:	Client				
Inject. Date:	10-Nov-2021 09:19:56	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155225-A-1-A				
Misc. Info.:	280-0106333-056				
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 12:53:50		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1860	92.99

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

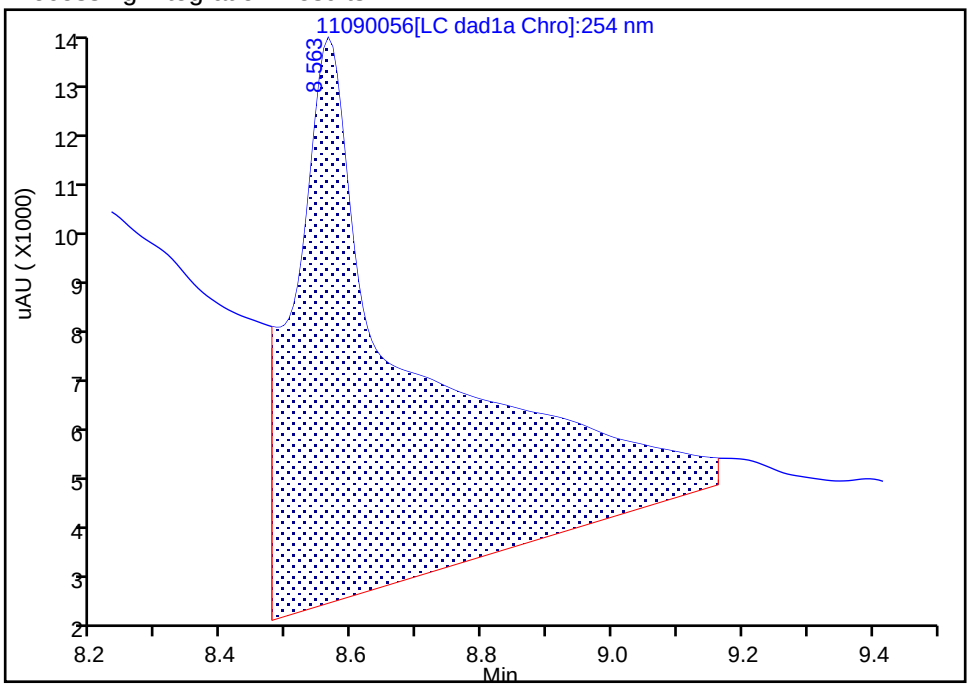
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090056.d				
Injection Date:	10-Nov-2021 09:19:56	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-1-A	Lab Sample ID:	280-155225-1		
Client ID:	G0024-7				
Operator ID:	JZ	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

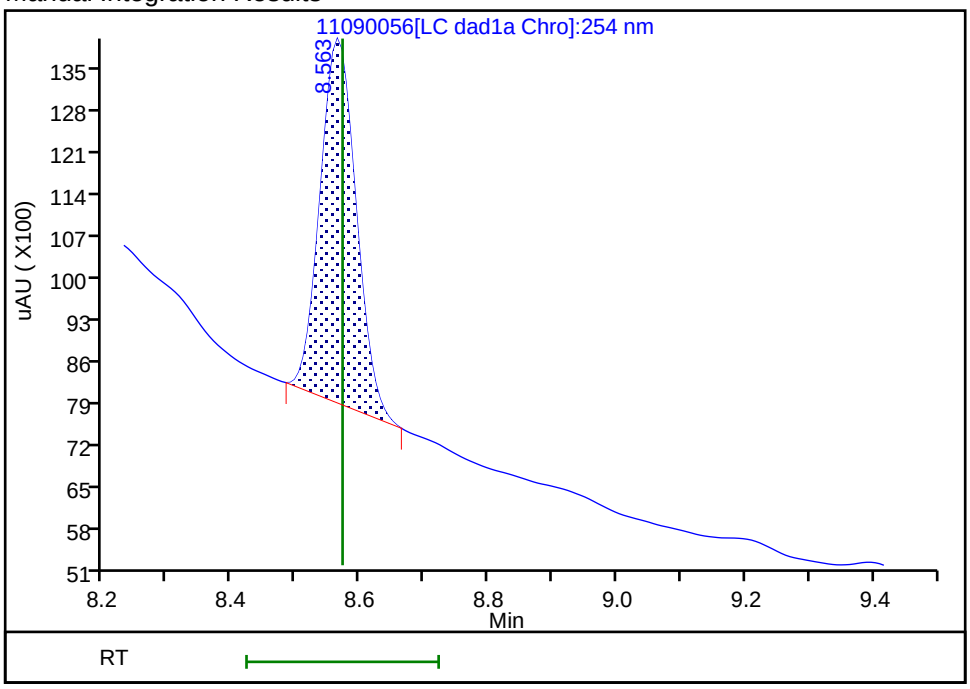
Processing Integration Results

RT: 8.56
Area: 150376
Amount: 1.172822
Amount Units: ug/mL



Manual Integration Results

RT: 8.56
Area: 23846
Amount: 0.185981
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:53:26

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

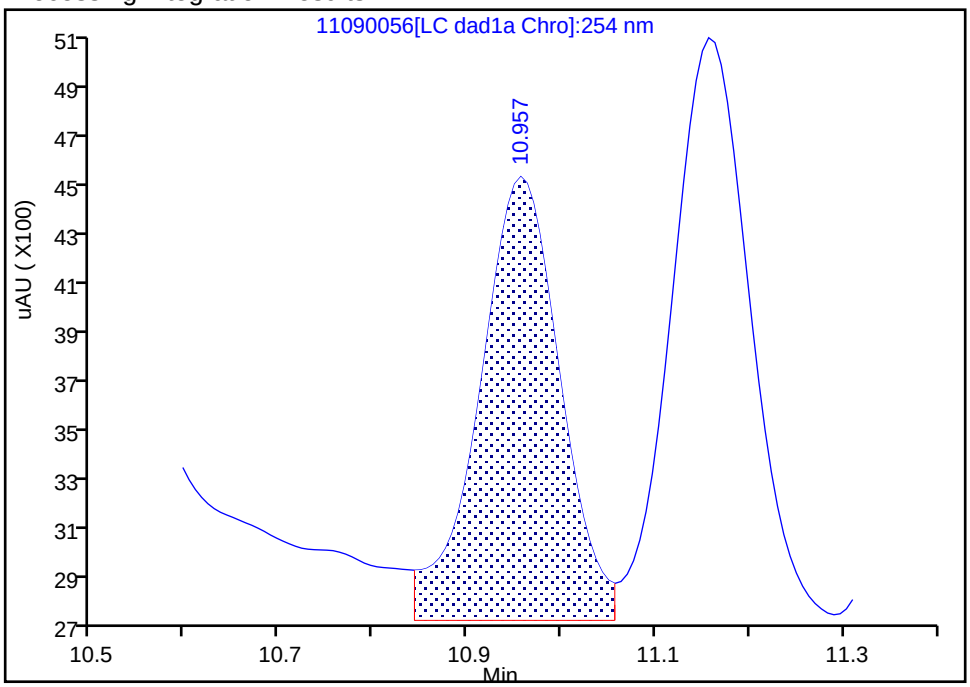
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090056.d				
Injection Date:	10-Nov-2021 09:19:56	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-1-A	Lab Sample ID:	280-155225-1		
Client ID:	G0024-7				
Operator ID:	JZ	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

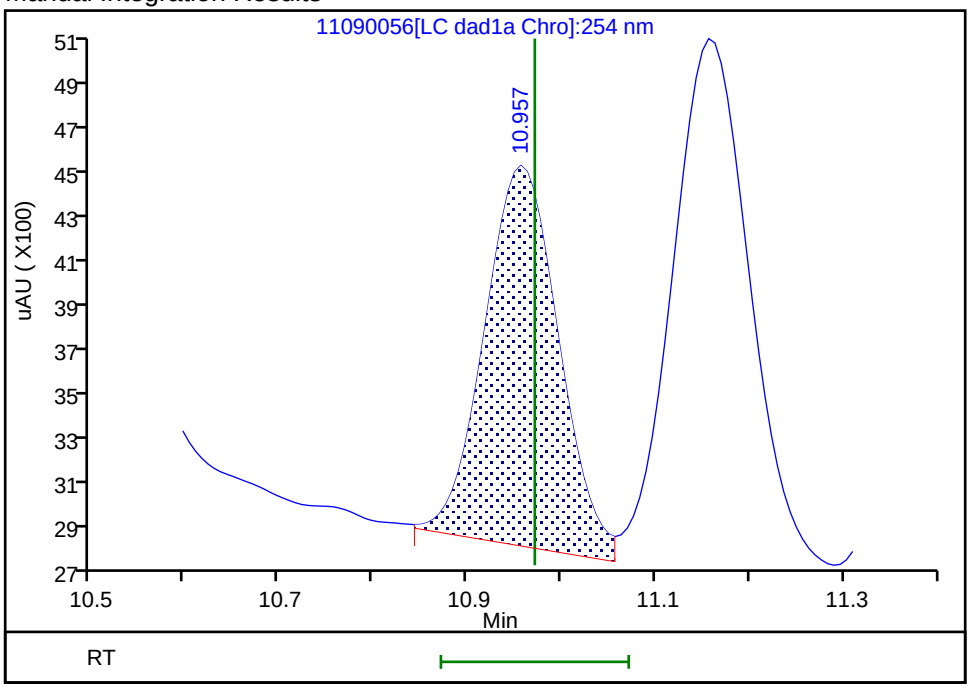
Processing Integration Results

RT: 10.96
Area: 10829
Amount: 0.052558
Amount Units: ug/mL



Manual Integration Results

RT: 10.96
Area: 9369
Amount: 0.045472
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:53:37

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

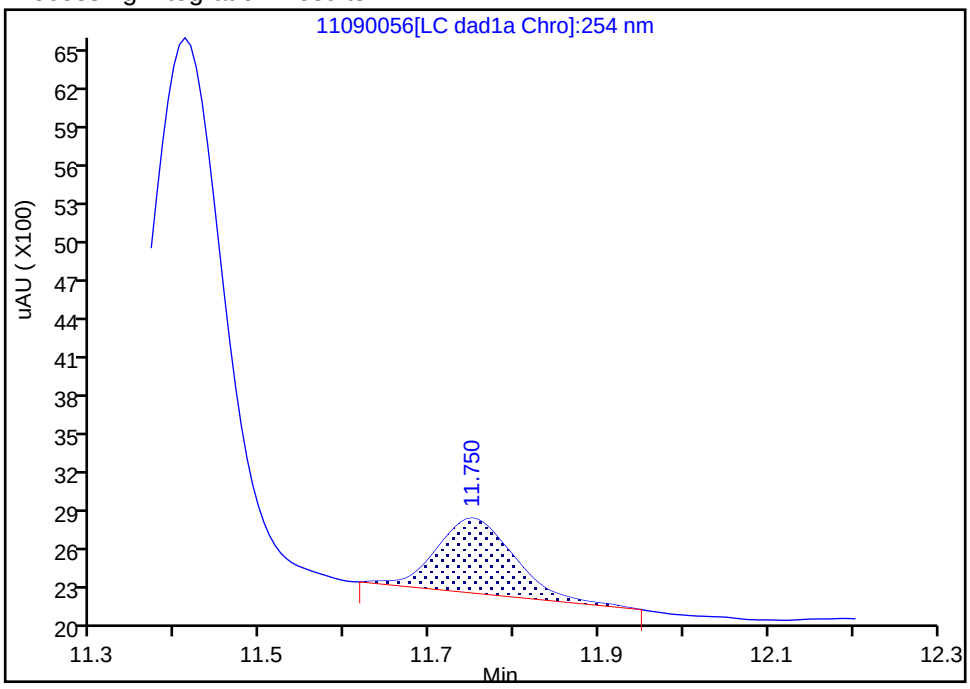
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090056.d				
Injection Date:	10-Nov-2021 09:19:56	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-1-A	Lab Sample ID:	280-155225-1		
Client ID:	G0024-7				
Operator ID:	JZ	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

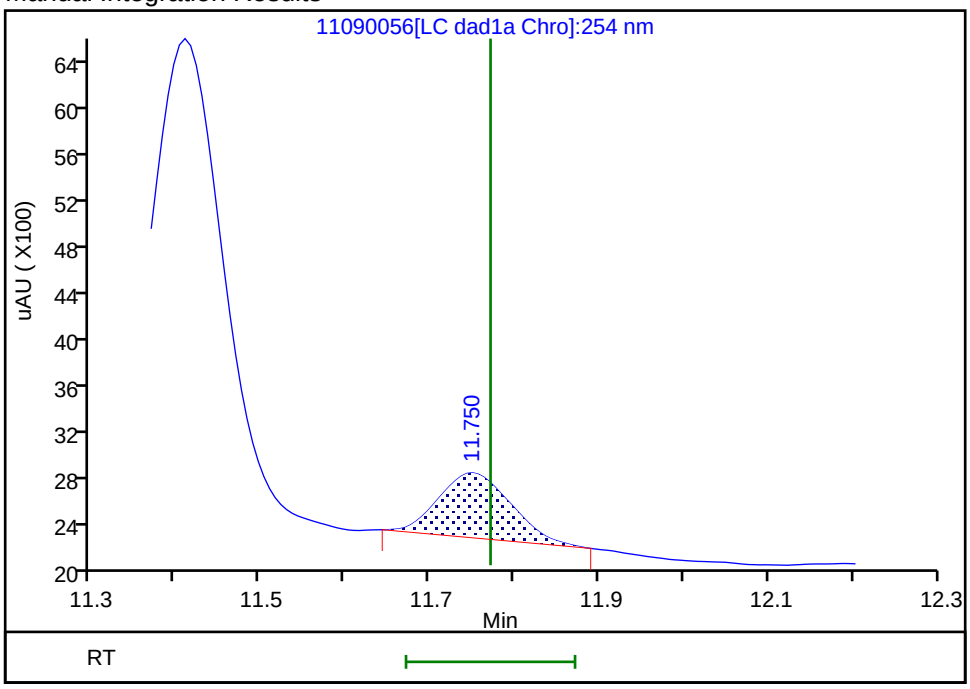
Processing Integration Results

RT: 11.75
Area: 3704
Amount: 0.012905
Amount Units: ug/mL



Manual Integration Results

RT: 11.75
Area: 3292
Amount: 0.011470
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:53:44

Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins TestAmerica, Denver

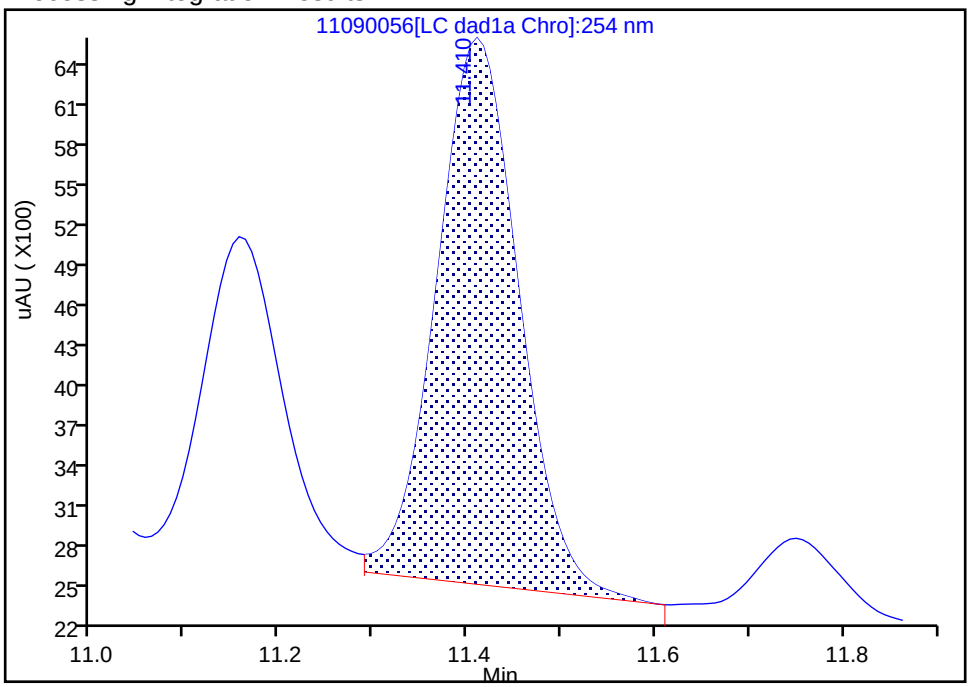
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090056.d				
Injection Date:	10-Nov-2021 09:19:56	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-1-A	Lab Sample ID:	280-155225-1		
Client ID:	G0024-7				
Operator ID:	JZ	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2

Signal: 1

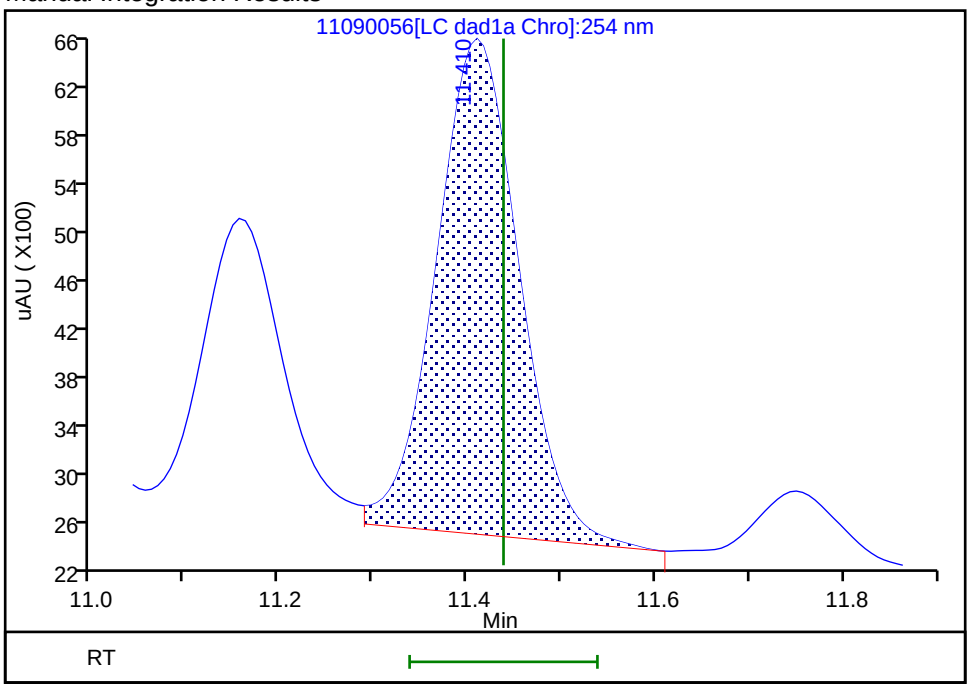
Processing Integration Results

RT: 11.41
Area: 24813
Amount: 0.119912
Amount Units: ug/mL



Manual Integration Results

RT: 11.41
Area: 25015
Amount: 0.120888
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:53:37
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

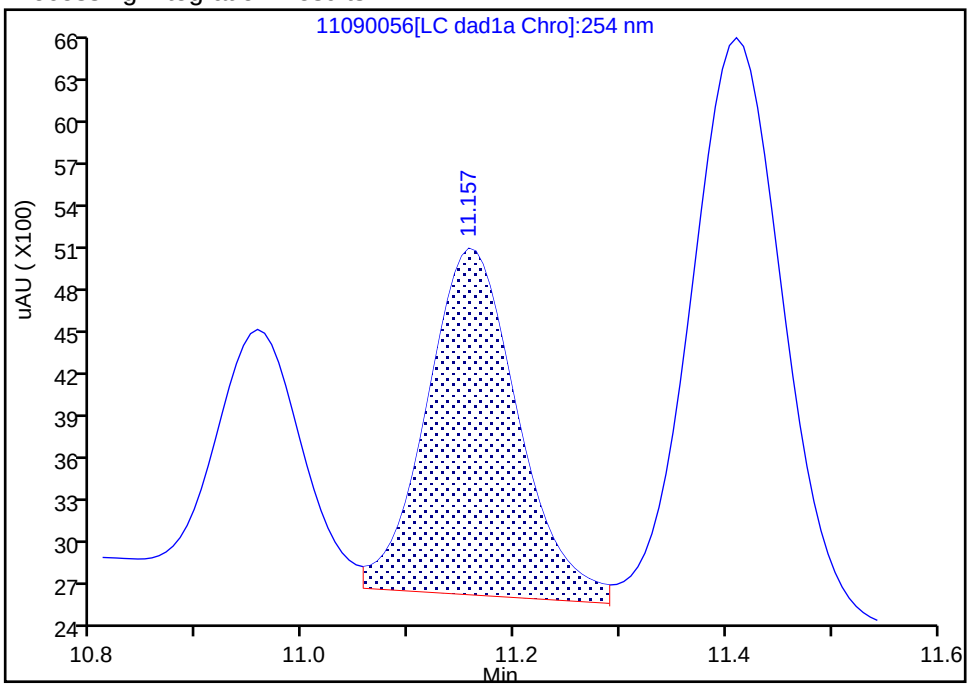
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090056.d				
Injection Date:	10-Nov-2021 09:19:56	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-1-A	Lab Sample ID:	280-155225-1		
Client ID:	G0024-7				
Operator ID:	JZ	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

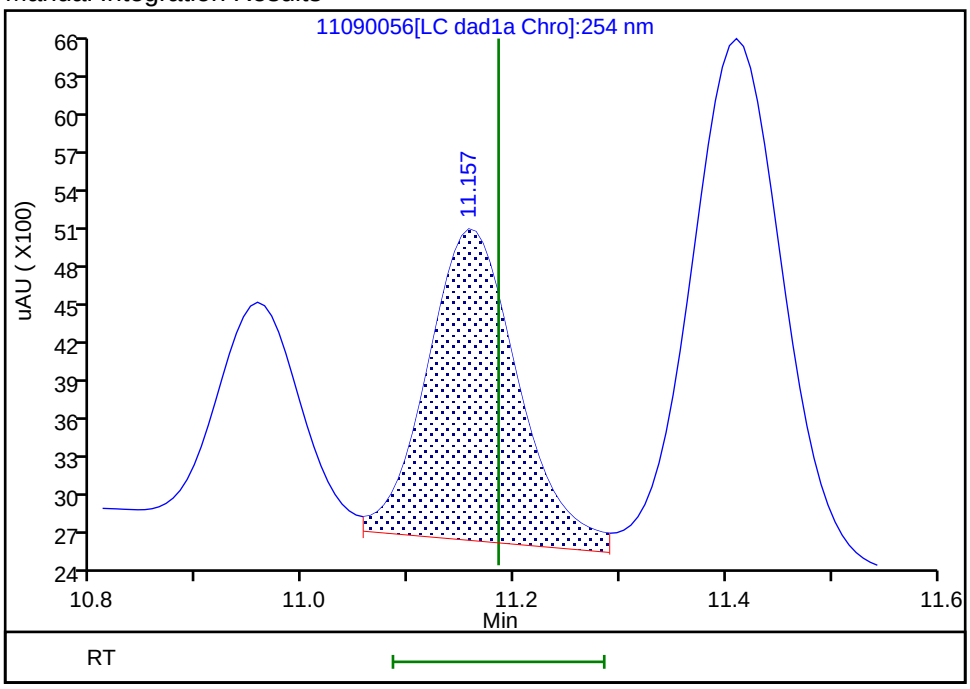
Processing Integration Results

RT: 11.16
Area: 14517
Amount: 0.095026
Amount Units: ug/mL



Manual Integration Results

RT: 11.16
Area: 14384
Amount: 0.094156
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:53:37

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

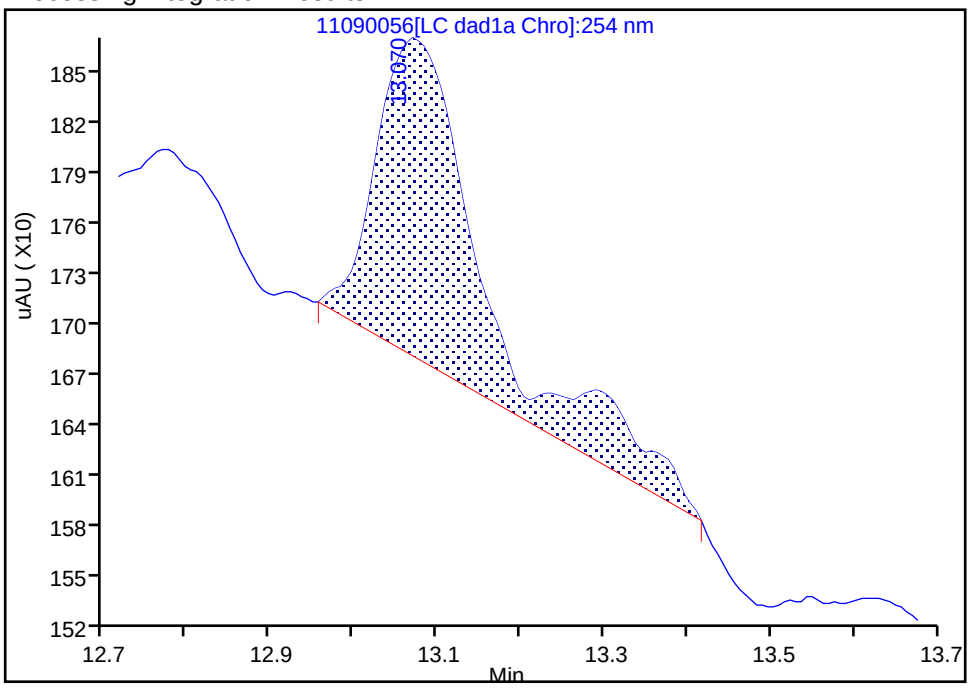
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090056.d				
Injection Date:	10-Nov-2021 09:19:56	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-1-A	Lab Sample ID:	280-155225-1		
Client ID:	G0024-7				
Operator ID:	JZ	ALS Bottle#:	56	Worklist Smp#:	56
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

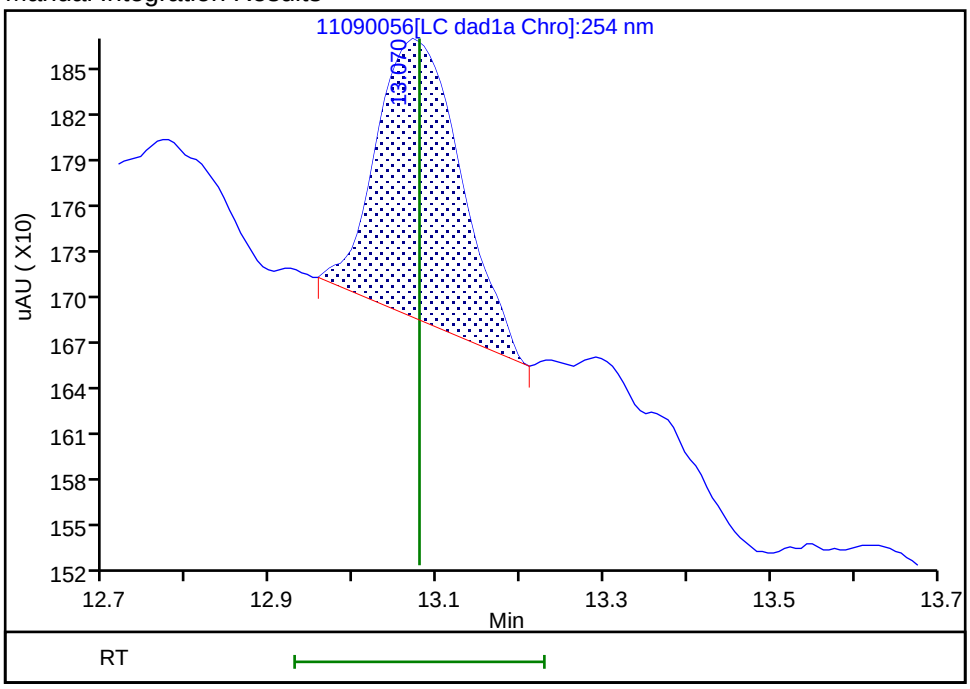
Processing Integration Results

RT: 13.07
Area: 1705
Amount: 0.015235
Amount Units: ug/mL



Manual Integration Results

RT: 13.07
Area: 1289
Amount: 0.011518
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:53:49

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

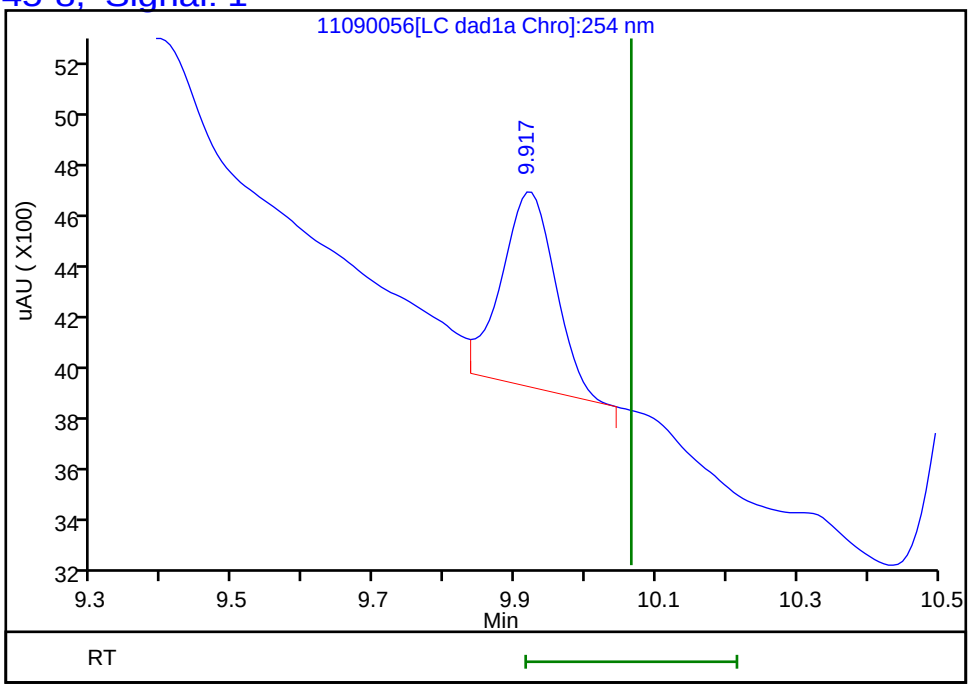
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090056.d
Injection Date: 10-Nov-2021 09:19:56 Instrument ID: CHHPLC_X3
Lims ID: 280-155225-A-1-A Lab Sample ID: 280-155225-1
Client ID: G0024-7
Operator ID: JZ ALS Bottle#: 56 Worklist Smp#: 56
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.92
Response: 3802
Amount: 0.022051



Reviewer: zhangji, 10-Nov-2021 12:53:50
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.: 280-155225-1

SDG No.:

Client Sample ID: G0024-7 Lab Sample ID: 280-155225-1

Matrix: Water Lab File ID: 11100031.D

Analysis Method: 8330A Date Collected: 11/04/2021 09:25

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 489(mL) Date Analyzed: 11/11/2021 05:35

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
99-99-0	4-Nitrotoluene	0.41	U	0.42	0.41	0.10

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	96		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100031.D
Lims ID: 280-155225-A-1-A
Client ID: G0024-7
Sample Type: Client
Inject. Date: 11-Nov-2021 05:35:55 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155225-A-1-A
Misc. Info.: 280-0106378-031
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 19:05:07

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	12.934	12.949	-0.015	50963	0.1918	
12 1,3-Dinitrobenzene	1		15.376			ND	
14 o-Nitrotoluene	1		16.603			ND	U
16 p-Nitrotoluene	1		16.889			ND	
17 4-Amino-2,6-dinitrotoluene	1	17.347	17.343	0.004	30272	0.1020	
18 m-Nitrotoluene	1		17.856			ND	
19 2-Amino-4,6-dinitrotoluene	1	18.241	18.236	0.005	54086	0.1355	M
20 1,3,5-Trinitrobenzene	1		18.776			ND	
21 2,6-Dinitrotoluene	1		20.009			ND	
22 2,4-Dinitrotoluene	1	20.474	20.476	-0.002	7832	0.0138	
23 Tetryl	1		24.070			ND	
24 2,4,6-Trinitrotoluene	1	25.081	25.063	0.018	16741	0.0408	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

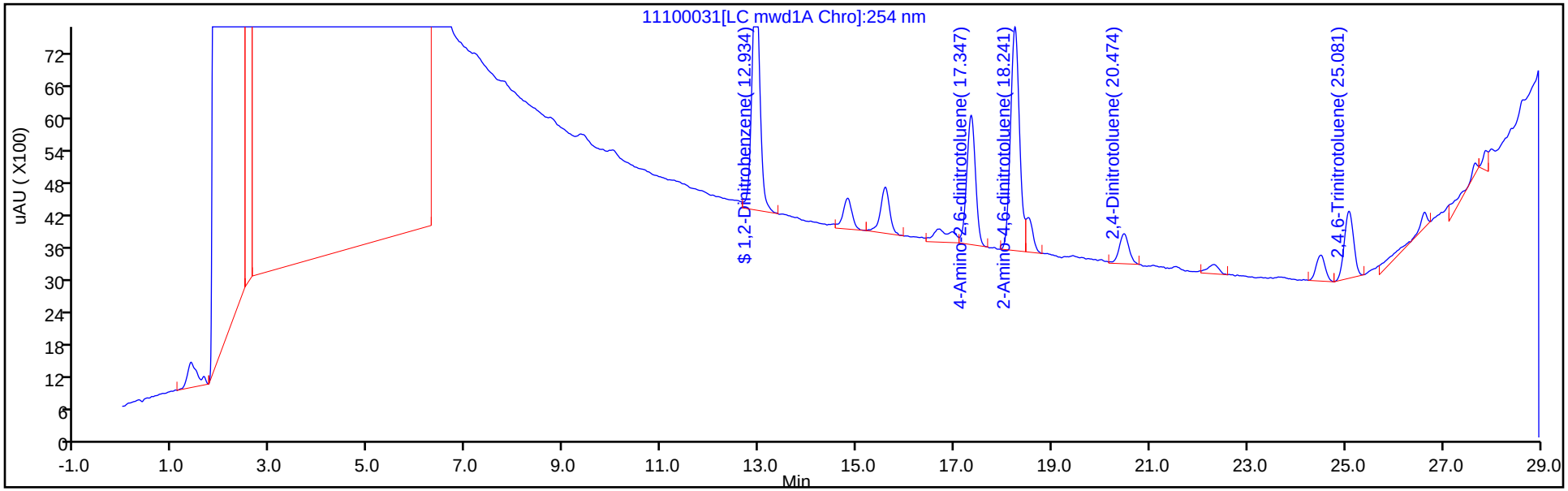
Report Date: 11-Nov-2021 19:12:37 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

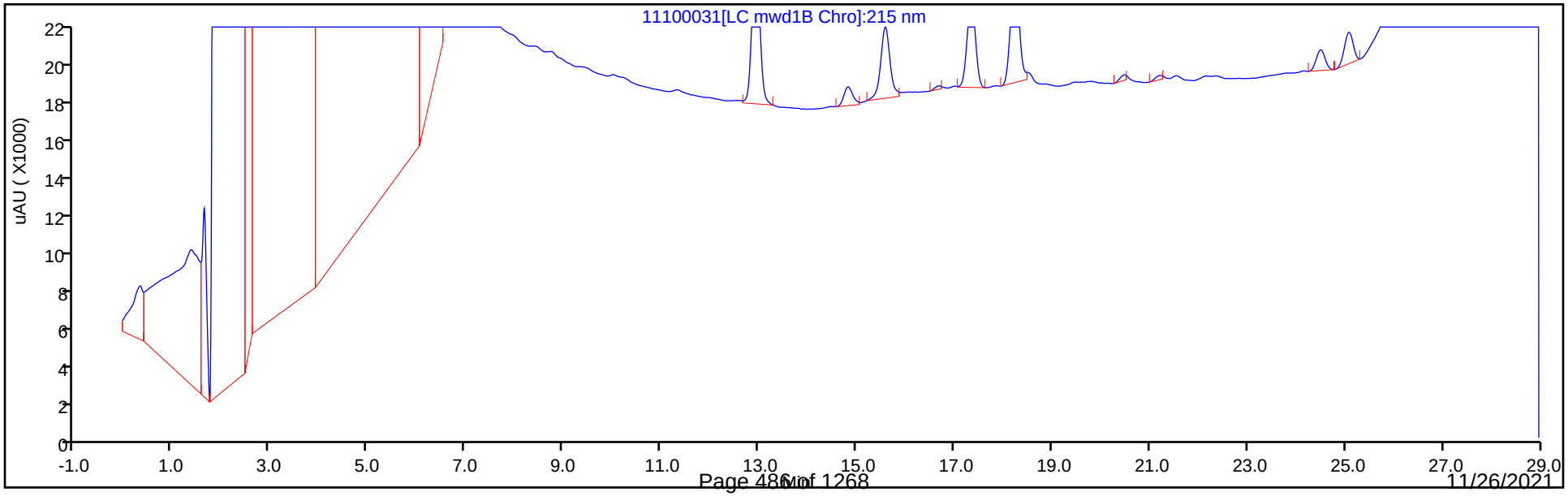
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100031.D

Injection Date:	11-Nov-2021 05:35:55	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155225-A-1-A	Lab Sample ID:	280-155225-1	Worklist Smp#:	31
Client ID:	G0024-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
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\11100031.D				
Lims ID:	280-155225-A-1-A				
Client ID:	G0024-7				
Sample Type:	Client				
Inject. Date:	11-Nov-2021 05:35:55	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155225-A-1-A				
Misc. Info.:	280-0106378-031				
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 19:05:07		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1918	95.92

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

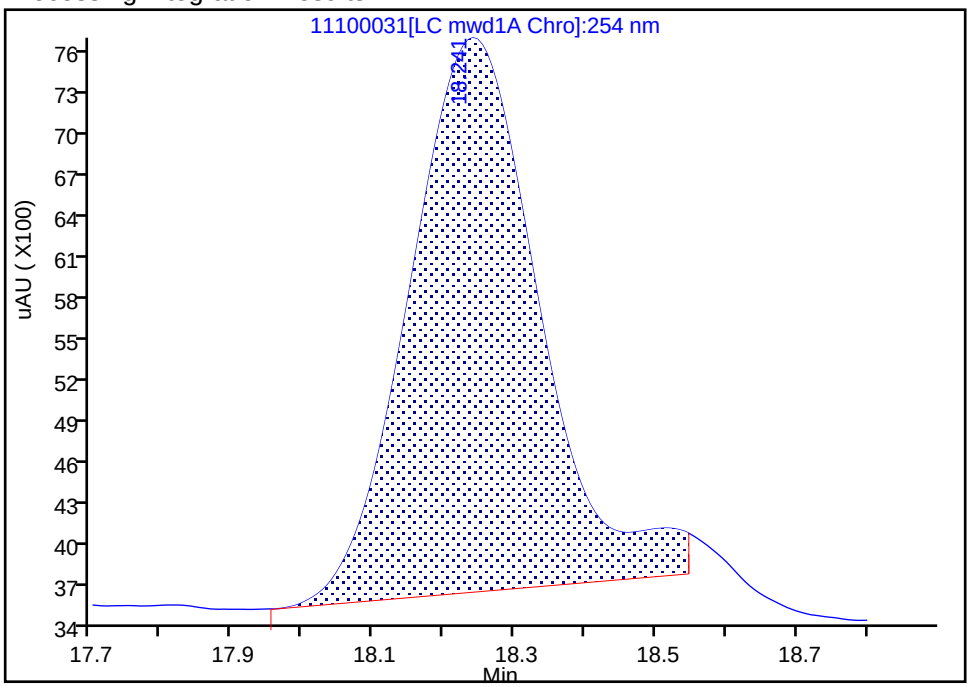
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100031.D				
Injection Date:	11-Nov-2021 05:35:55	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-1-A	Lab Sample ID:	280-155225-1		
Client ID:	G0024-7				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. 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

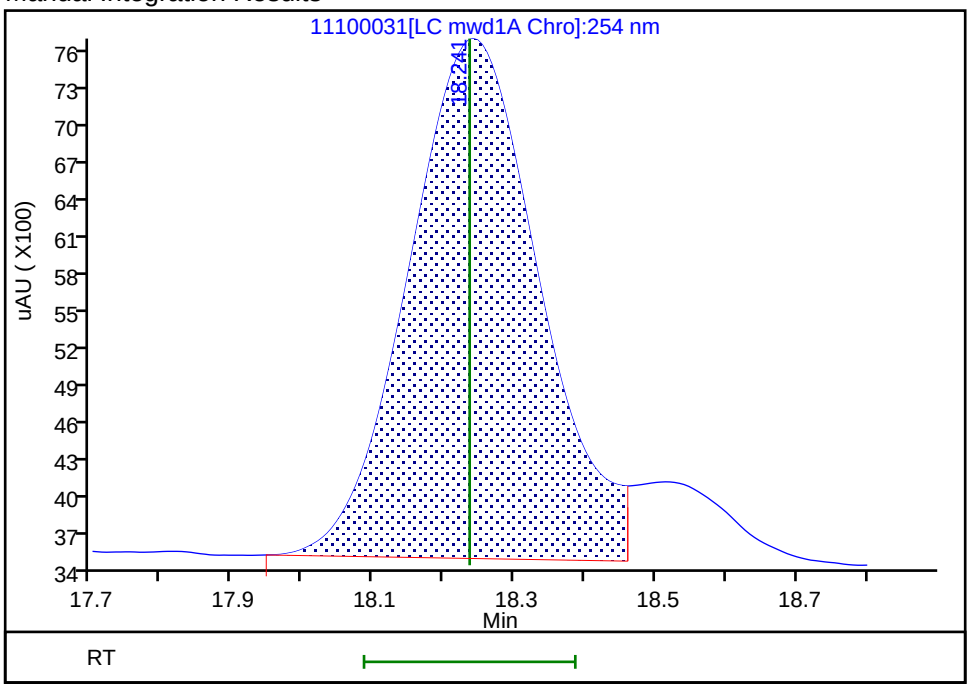
Processing Integration Results

RT: 18.24
Area: 51805
Amount: 0.129668
Amount Units: ug/ml



Manual Integration Results

RT: 18.24
Area: 54086
Amount: 0.135519
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:05:05

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

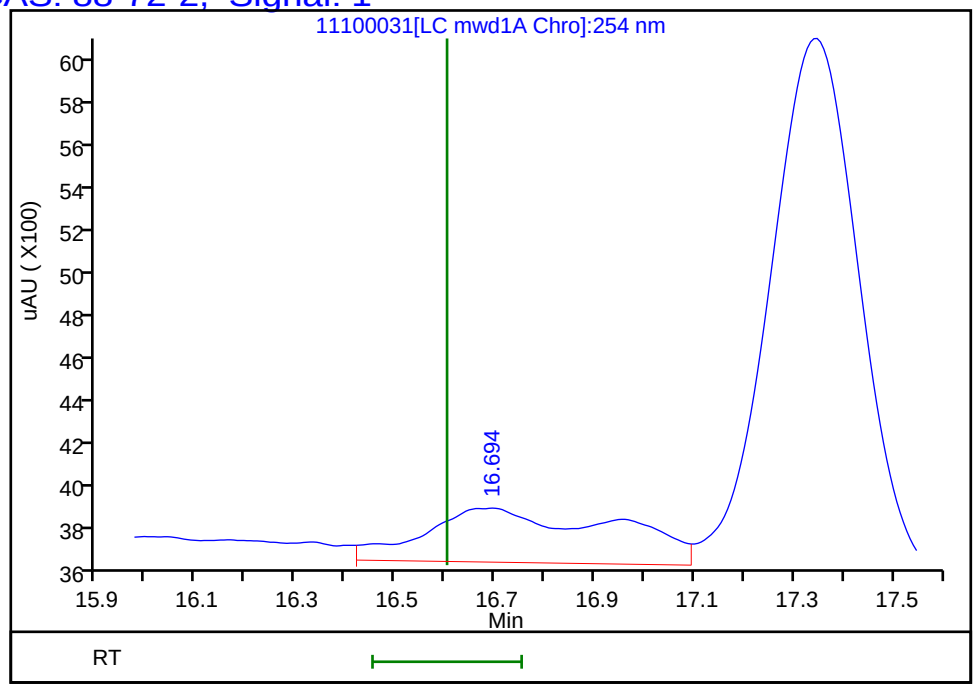
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100031.D				
Injection Date:	11-Nov-2021 05:35:55	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-1-A	Lab Sample ID:	280-155225-1		
Client ID:	G0024-7				
Operator ID:	JZ	ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.69
Response: 6534
Amount: 0.026244



Reviewer: zhangji, 11-Nov-2021 19:05:07
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.: 280-155225-1

SDG No.:

Client Sample ID: G0077-7 Lab Sample ID: 280-155225-2

Matrix: Water Lab File ID: 11090057.D

Analysis Method: 8330A Date Collected: 11/04/2021 10:35

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 502(mL) Date Analyzed: 11/10/2021 09:42

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	4.4	M	0.21	0.20	0.084
99-65-0	1,3-Dinitrobenzene	0.10	U M	0.11	0.10	0.037
118-96-7	2,4,6-Trinitrotoluene	4.5		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	0.11	M	0.10	0.080	0.027
606-20-2	2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	3.4		0.11	0.10	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	4.2		0.15	0.12	0.057
99-99-0	4-Nitrotoluene	0.33	J J1	0.41	0.40	0.10
2691-41-0	HMX	0.61	M	0.21	0.20	0.087
5755-27-1	MNX	0.40	U M	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U M	0.21	0.20	0.091
121-82-4	RDX	1.7	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	91	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090057.D
Lims ID: 280-155225-A-2-A
Client ID: G0077-7
Sample Type: Client
Inject. Date: 10-Nov-2021 09:42:54 ALS Bottle#: 57 Worklist Smp#: 57
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155225-A-2-A
Misc. Info.: 280-0106333-057
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 12:54:56

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.589	6.592	-0.003	5195	0.0615	M
7 MNX	1		7.223			ND	MU
8 RDX	1	7.602	7.598	0.004	18620	0.1752	M
$ 10 1,2-Dinitrobenzene	1	8.576	8.572	0.004	23310	0.1818	M
11 1,3,5-Trinitrobenzene	1	8.689	8.685	0.004	96759	0.4392	M
12 1,3-Dinitrobenzene	1		9.331			ND	U
13 Nitrobenzene	1		9.725			ND	U
15 Tetryl	1		10.065			ND	U
17 2,4,6-Trinitrotoluene	1	10.969	10.971	-0.002	93260	0.4526	
18 4-Amino-2,6-dinitrotoluene	1	11.169	11.185	-0.016	64842	0.4244	
19 2-Amino-4,6-dinitrotoluene	1	11.422	11.438	-0.016	70099	0.3388	
20 2,6-Dinitrotoluene	1		11.605			ND	
21 2,4-Dinitrotoluene	1	11.762	11.771	-0.009	3237	0.0113	M
22 o-Nitrotoluene	1		12.645			ND	
23 p-Nitrotoluene	1	13.089	13.078	0.011	3663	0.0327	
24 m-Nitrotoluene	1		13.658			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

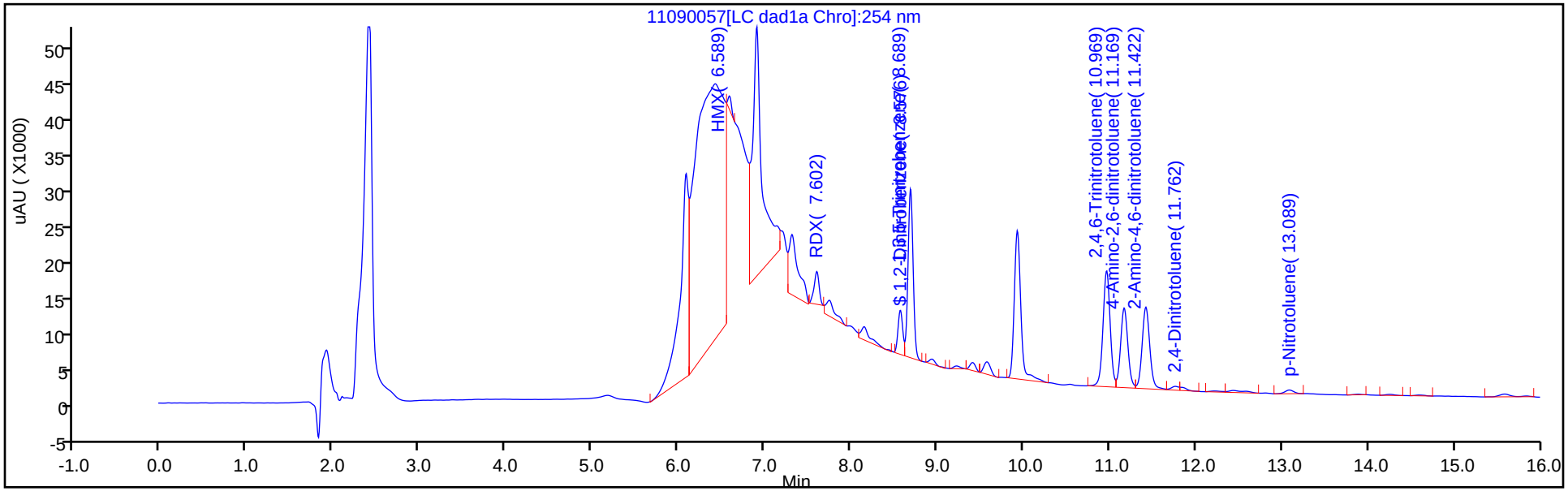
Report Date: 10-Nov-2021 12:58:56 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

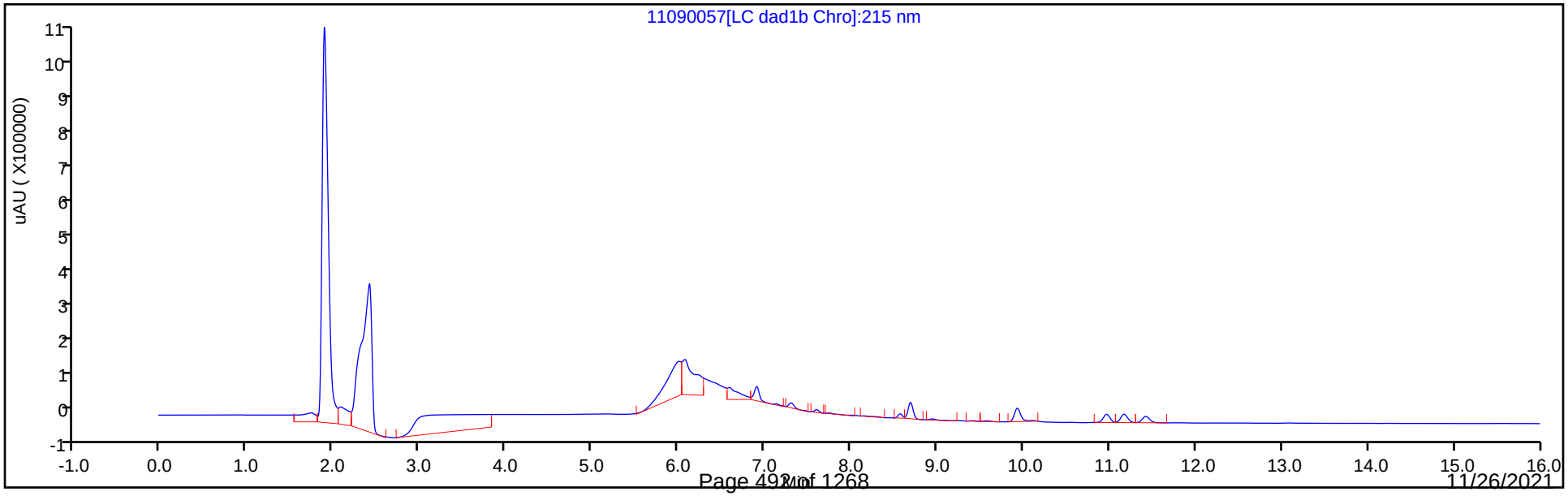
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090057.d

Injection Date:	10-Nov-2021 09:42:54	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155225-A-2-A	Lab Sample ID:	280-155225-2	Worklist Smp#:	57
Client ID:	G0077-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	57
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090057.D				
Lims ID:	280-155225-A-2-A				
Client ID:	G0077-7				
Sample Type:	Client				
Inject. Date:	10-Nov-2021 09:42:54	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155225-A-2-A				
Misc. Info.:	280-0106333-057				
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 12:54:56		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1818	90.90

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

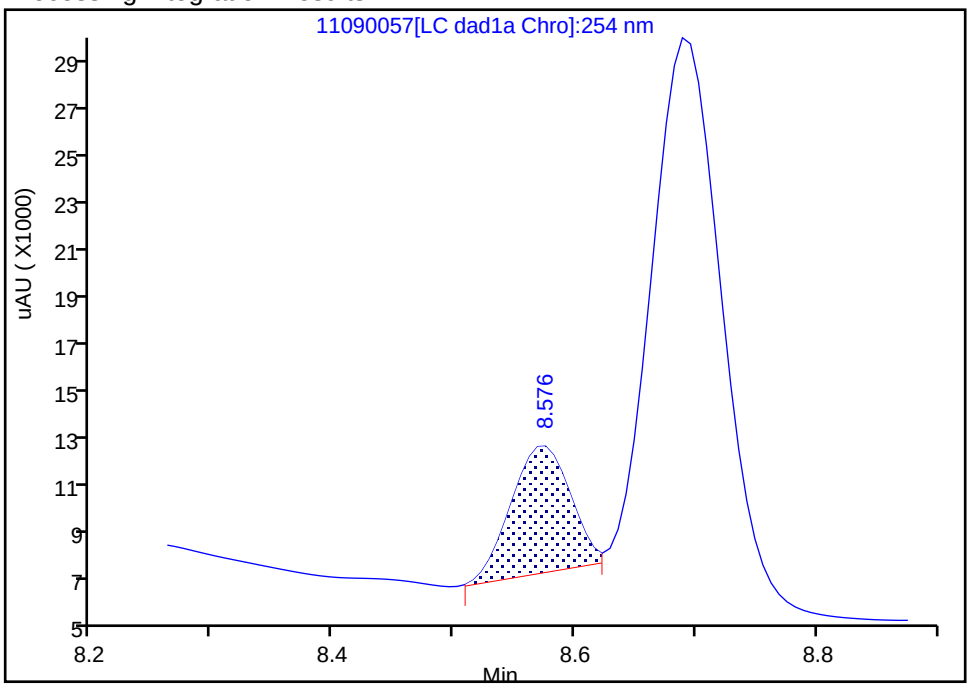
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090057.d				
Injection Date:	10-Nov-2021 09:42:54	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-2-A	Lab Sample ID:	280-155225-2		
Client ID:	G0077-7				
Operator ID:	JZ	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

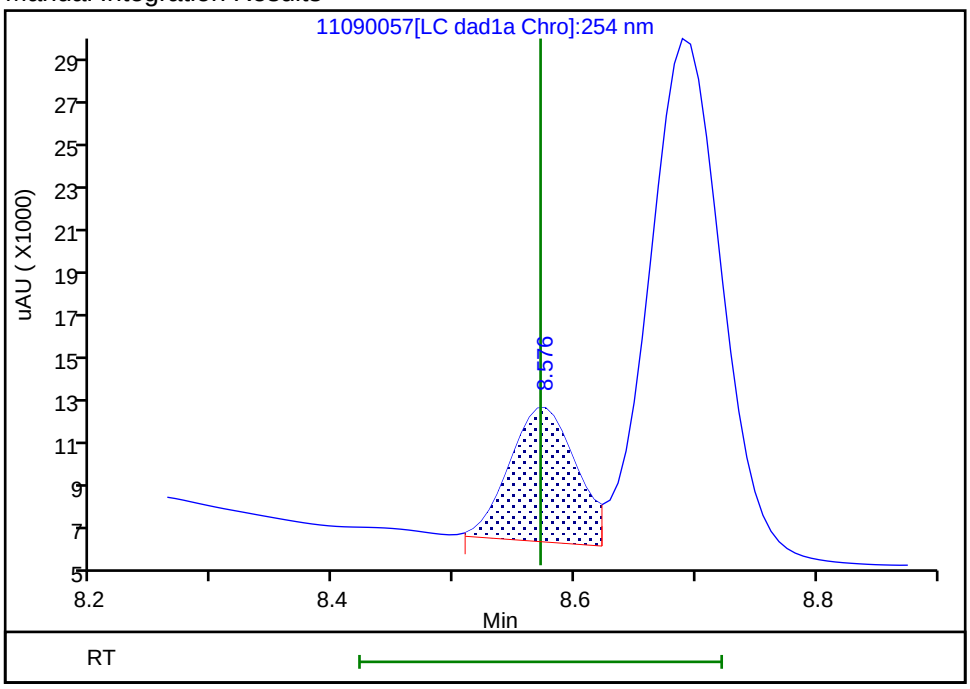
Processing Integration Results

RT: 8.58
Area: 17931
Amount: 0.139849
Amount Units: ug/mL



Manual Integration Results

RT: 8.58
Area: 23310
Amount: 0.181801
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:54:34
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

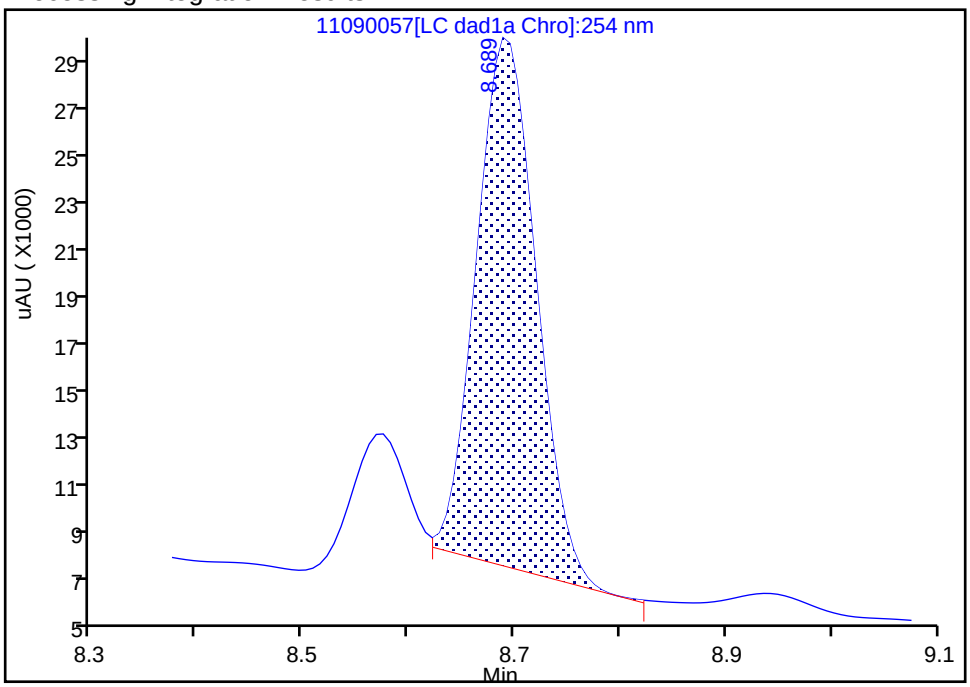
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090057.d				
Injection Date:	10-Nov-2021 09:42:54	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-2-A	Lab Sample ID:	280-155225-2		
Client ID:	G0077-7				
Operator ID:	JZ	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

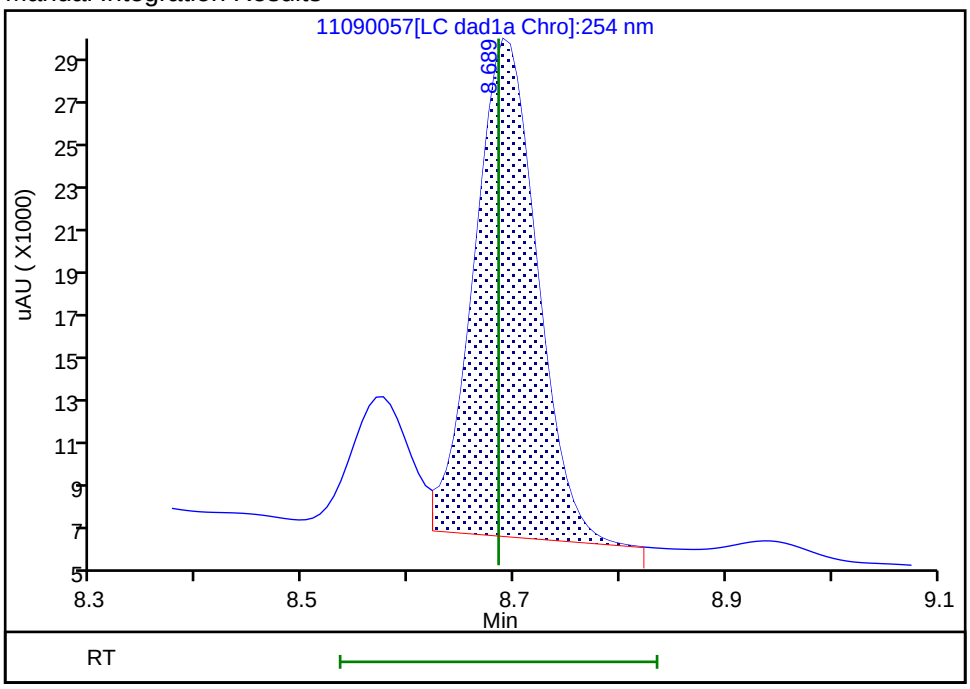
Processing Integration Results

RT: 8.69
Area: 88341
Amount: 0.400972
Amount Units: ug/mL



Manual Integration Results

RT: 8.69
Area: 96759
Amount: 0.439180
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:54:34
Audit Action: Assigned New Baseline Audit Reason: Baseline

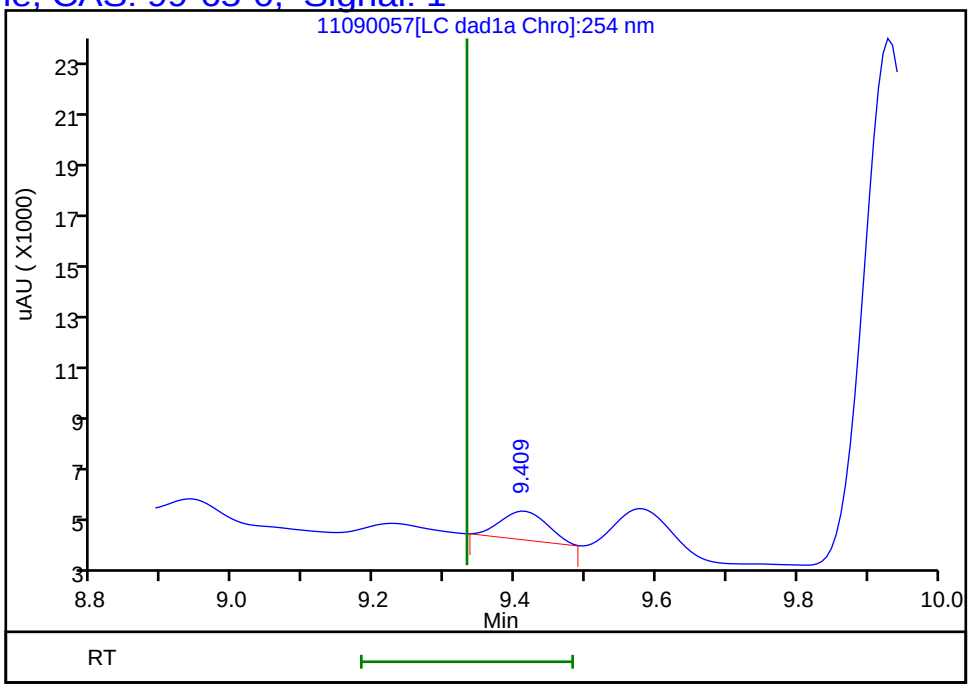
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090057.d				
Injection Date:	10-Nov-2021 09:42:54	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-2-A	Lab Sample ID:	280-155225-2		
Client ID:	G0077-7				
Operator ID:	JZ	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0, Signal: 1

RT: 9.41
Response: 5097
Amount: 0.017200



Reviewer: zhangji, 10-Nov-2021 12:54:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

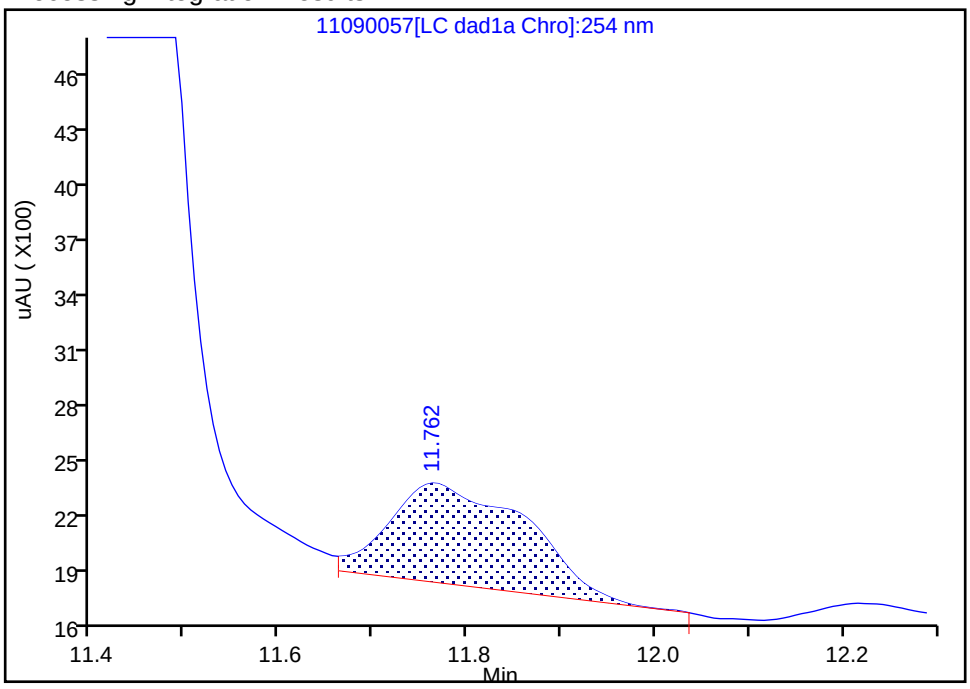
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090057.d				
Injection Date:	10-Nov-2021 09:42:54	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-2-A	Lab Sample ID:	280-155225-2		
Client ID:	G0077-7				
Operator ID:	JZ	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

21 2,4-Dinitrotoluene, CAS: 121-14-2

Signal: 1

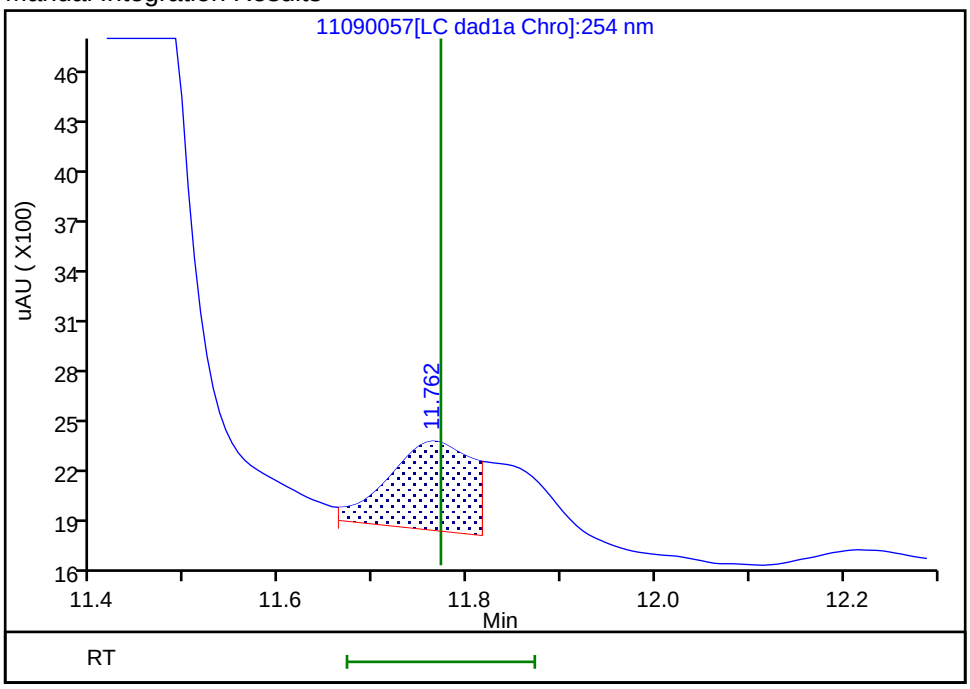
Processing Integration Results

RT: 11.76
Area: 5523
Amount: 0.019243
Amount Units: ug/mL



Manual Integration Results

RT: 11.76
Area: 3237
Amount: 0.011278
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:54:54

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

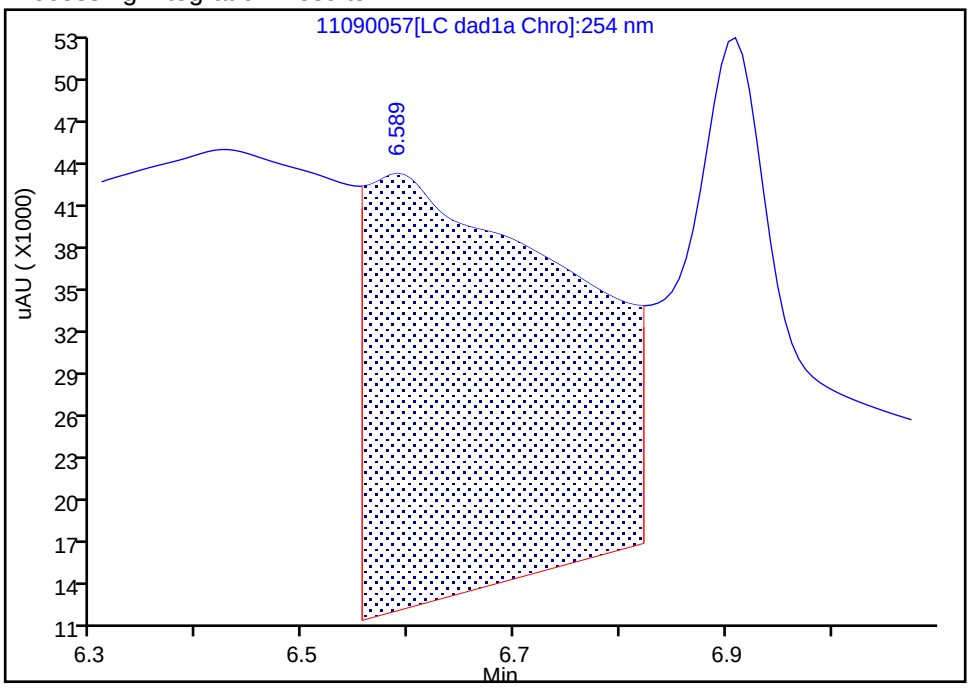
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090057.d				
Injection Date:	10-Nov-2021 09:42:54	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-2-A	Lab Sample ID:	280-155225-2		
Client ID:	G0077-7				
Operator ID:	JZ	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

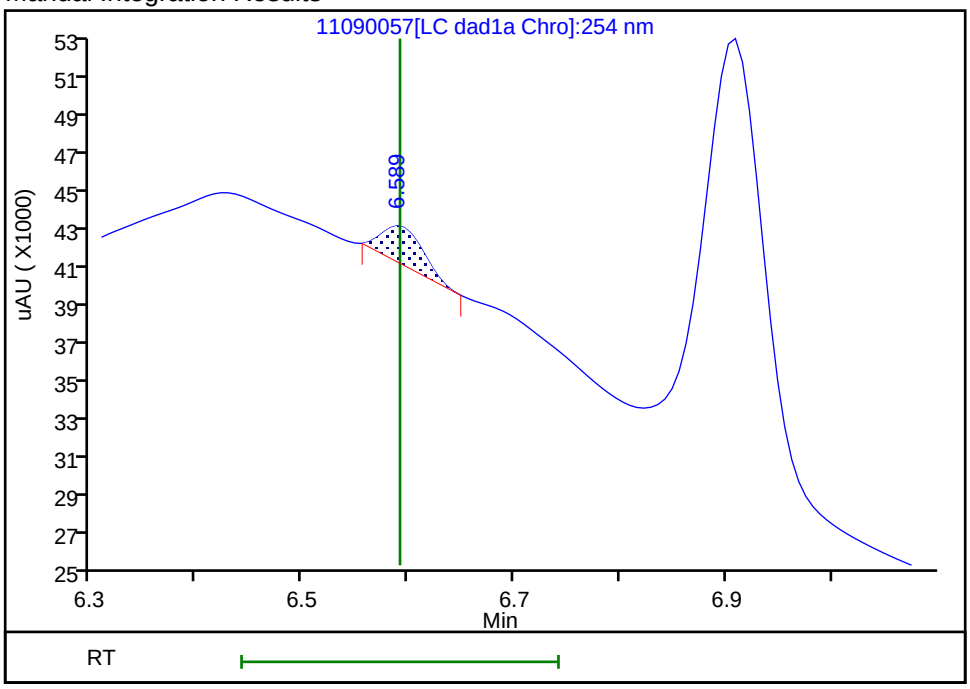
Processing Integration Results

RT: 6.59
Area: 387933
Amount: 4.595195
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 5195
Amount: 0.061537
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:54:08
Audit Action: Manually Integrated Audit Reason: Baseline

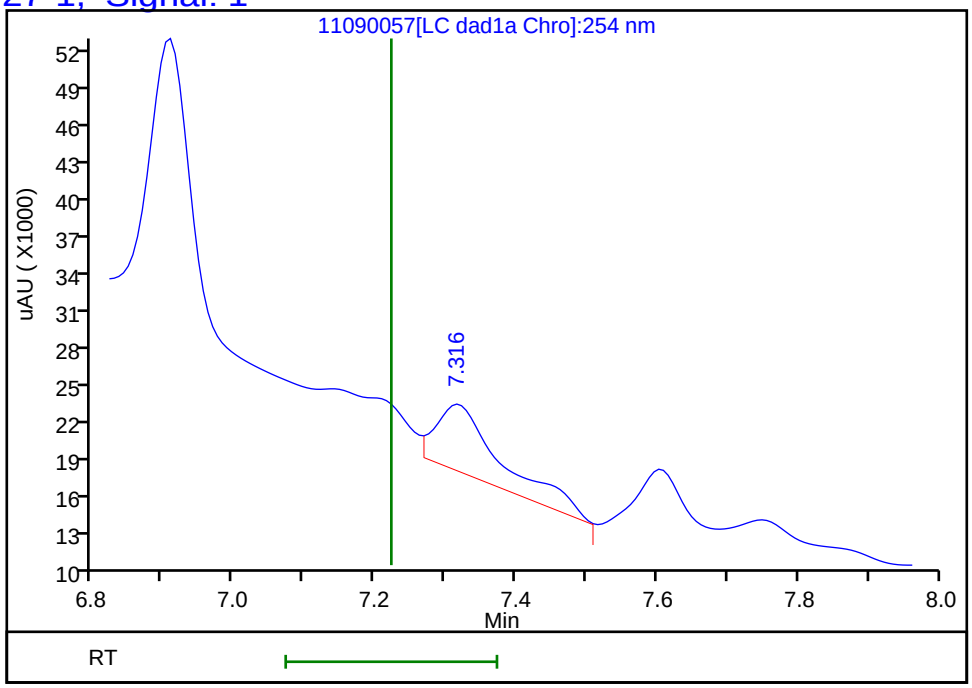
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090057.d				
Injection Date:	10-Nov-2021 09:42:54	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-2-A	Lab Sample ID:	280-155225-2		
Client ID:	G0077-7				
Operator ID:	JZ	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.32
Response: 34377
Amount: 0.263748



Reviewer: zhangji, 10-Nov-2021 12:54:56
Audit Action: Assigned New Baseline Audit Reason: Baseline

User Disabled Compound Report

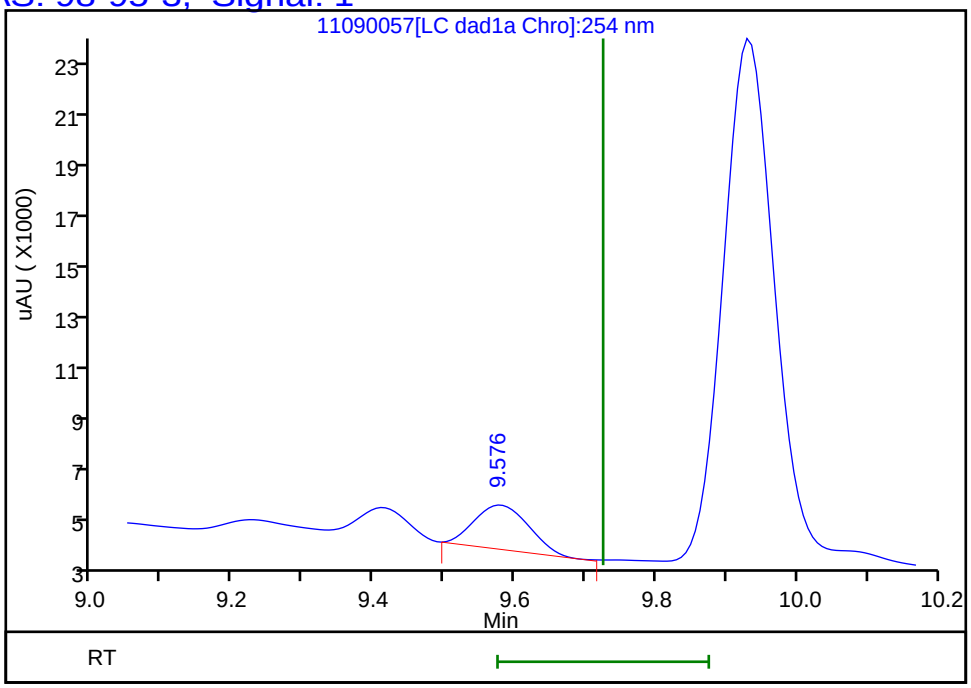
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090057.d

Injection Date:	10-Nov-2021 09:42:54	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-2-A	Lab Sample ID:	280-155225-2		
Client ID:	G0077-7				
Operator ID:	JZ	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.58
Response: 9298
Amount: 0.047612



Reviewer: zhangji, 10-Nov-2021 12:54:56
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

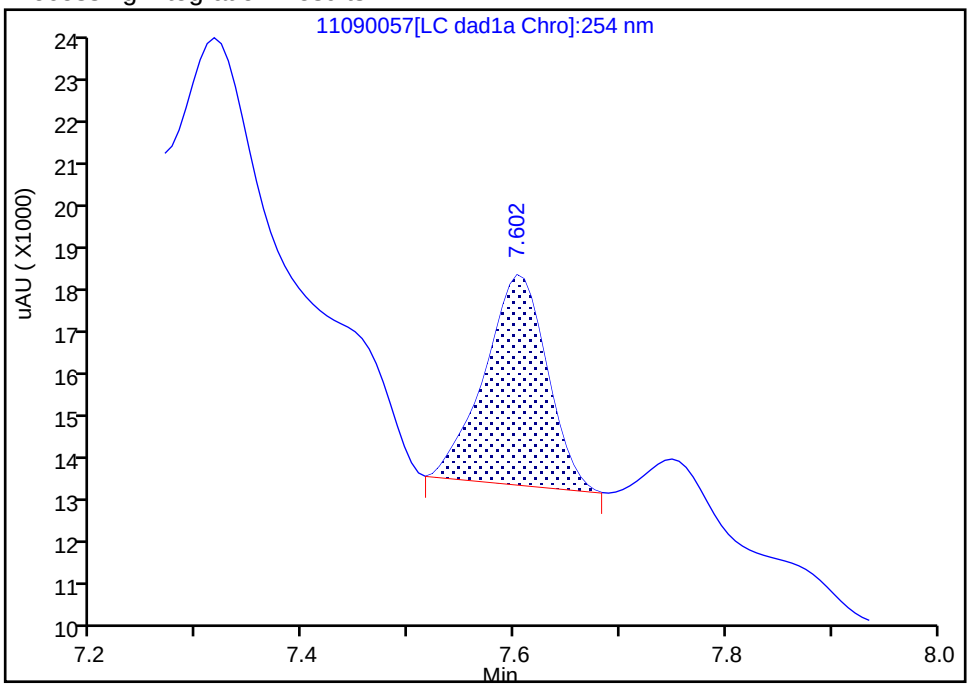
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090057.d				
Injection Date:	10-Nov-2021 09:42:54	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-2-A	Lab Sample ID:	280-155225-2		
Client ID:	G0077-7				
Operator ID:	JZ	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

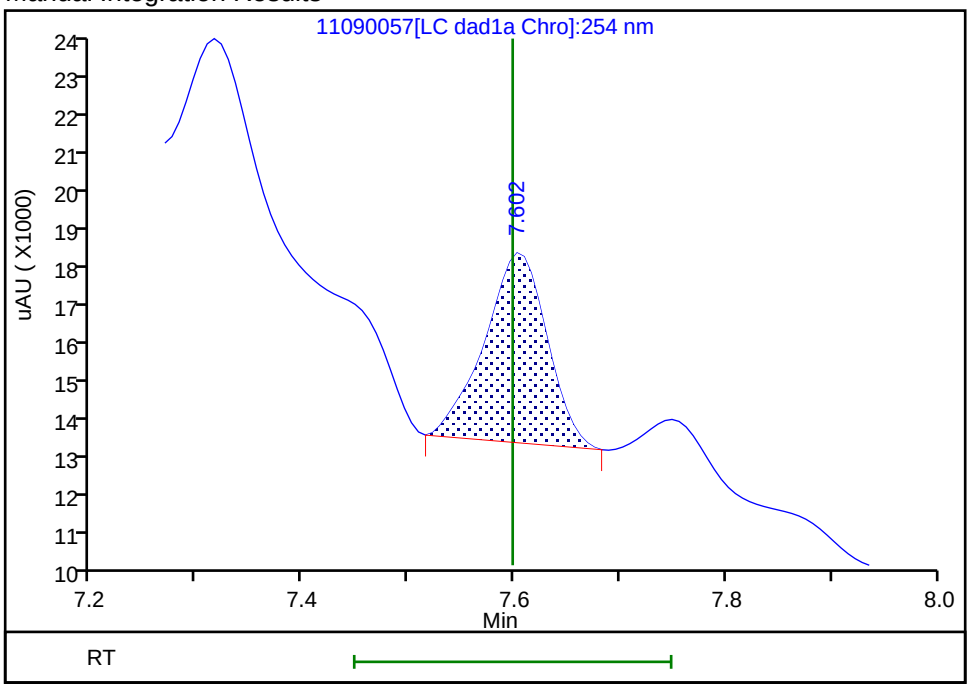
Processing Integration Results

RT: 7.60
Area: 18680
Amount: 0.175793
Amount Units: ug/mL



Manual Integration Results

RT: 7.60
Area: 18620
Amount: 0.175228
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:54:26

Audit Action: Manually Integrated Audit Reason: Baseline

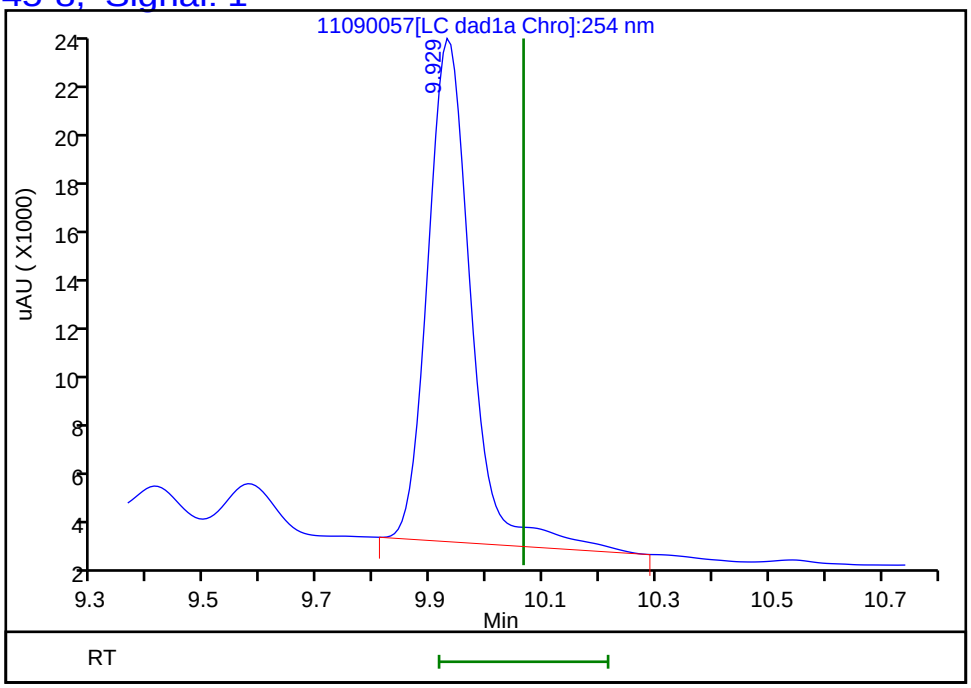
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090057.d				
Injection Date:	10-Nov-2021 09:42:54	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-2-A	Lab Sample ID:	280-155225-2		
Client ID:	G0077-7				
Operator ID:	JZ	ALS Bottle#:	57	Worklist Smp#:	57
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.93
Response: 110021
Amount: 0.638099



Reviewer: zhangji, 10-Nov-2021 12:54:56
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.: 280-155225-1

SDG No.:

Client Sample ID: G0077-7 Lab Sample ID: 280-155225-2

Matrix: Water Lab File ID: 11100034.D

Analysis Method: 8330A Date Collected: 11/04/2021 10:35

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 502(mL) Date Analyzed: 11/11/2021 07:20

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 556958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-99-0	*4-Nitrotoluene*	*1.1*	*J1*	*0.41*	0.40	*0.10*

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\11100034.D
Lims ID: 280-155225-A-2-A
Client ID: G0077-7
Sample Type: Client
Inject. Date: 11-Nov-2021 07:20:54 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155225-A-2-A
Misc. Info.: 280-0106378-034
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 19:12:38 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 19:06:10

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
5 HMX	1	6.643	6.650	-0.007	10566	0.0604	M
6 MNX	1	7.363	7.367	-0.004	11630	0.0439	M
8 RDX	1	8.783	8.803	-0.020	24984	0.1223	
9 Nitrobenzene	1		11.856			ND	
$ 10 1,2-Dinitrobenzene	1	12.936	12.949	-0.013	50699	0.1908	M
12 1,3-Dinitrobenzene	1		15.376			ND	7
14 o-Nitrotoluene	1		16.603			ND	
16 p-Nitrotoluene	1	16.936	16.889	0.047	24224	0.1115	
17 4-Amino-2,6-dinitrotoluene	1	17.350	17.343	0.007	132207	0.4456	
18 m-Nitrotoluene	1		17.856			ND	
19 2-Amino-4,6-dinitrotoluene	1	18.243	18.236	0.007	156677	0.3987	
20 1,3,5-Trinitrobenzene	1	18.776	18.776	0.000	199819	0.4808	
21 2,6-Dinitrotoluene	1		20.009			ND	
22 2,4-Dinitrotoluene	1	20.470	20.476	-0.006	8231	0.0145	
23 Tetryl	1		24.070			ND	
24 2,4,6-Trinitrotoluene	1	25.083	25.063	0.020	164496	0.4384	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated

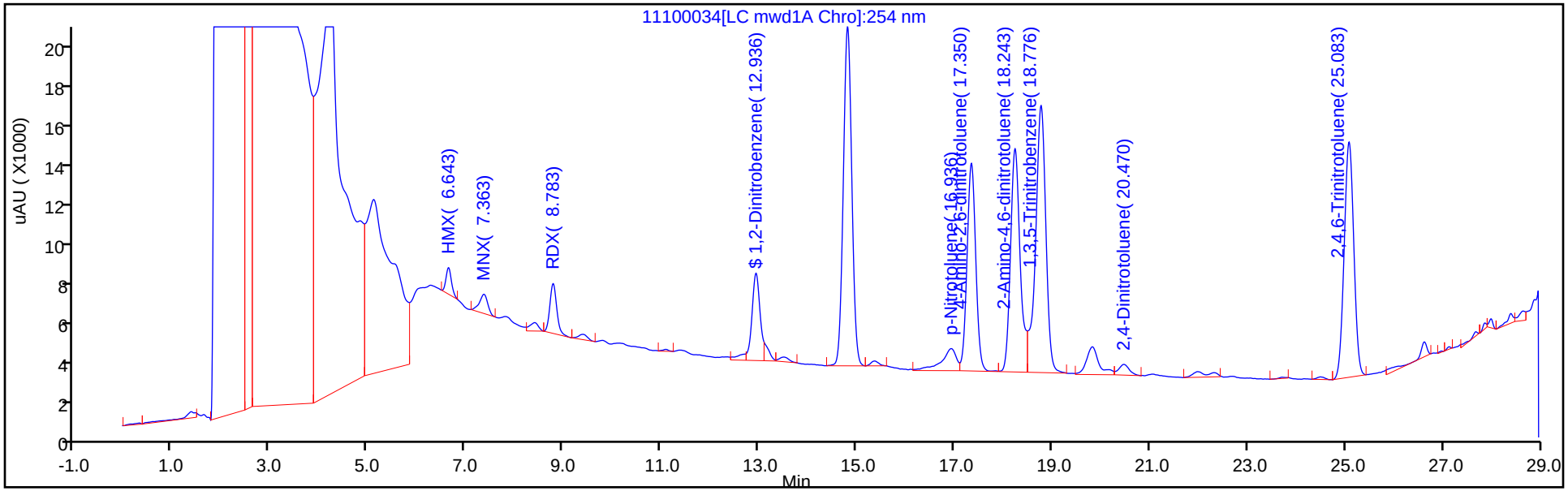
Report Date: 11-Nov-2021 19:12:38 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

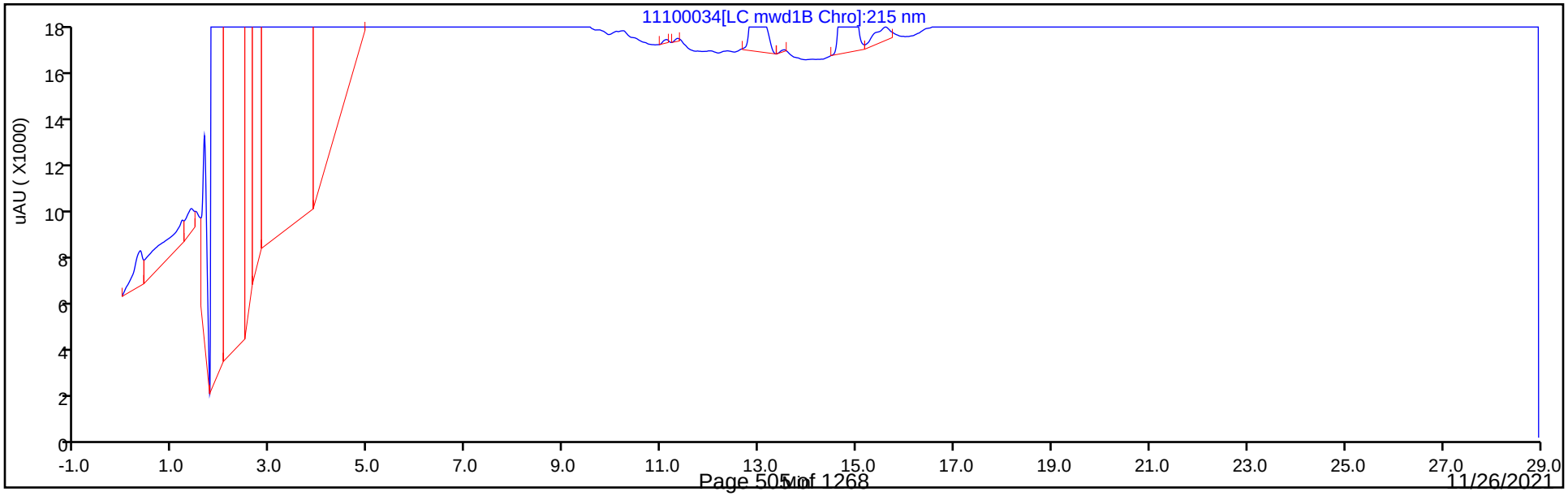
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100034.D

Injection Date:	11-Nov-2021 07:20:54	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155225-A-2-A	Lab Sample ID:	280-155225-2	Worklist Smp#:	34
Client ID:	G0077-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100034.D				
Lims ID:	280-155225-A-2-A				
Client ID:	G0077-7				
Sample Type:	Client				
Inject. Date:	11-Nov-2021 07:20:54	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155225-A-2-A				
Misc. Info.:	280-0106378-034				
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 19:12:38	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 19:06:10		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1908	95.42

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

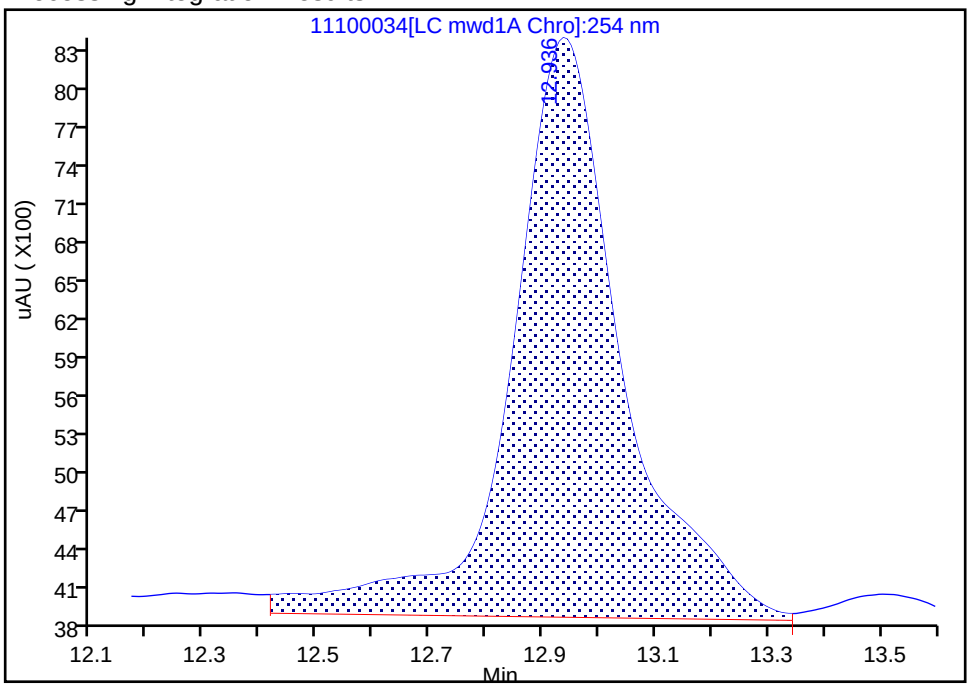
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100034.D				
Injection Date:	11-Nov-2021 07:20:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-2-A	Lab Sample ID:	280-155225-2		
Client ID:	G0077-7				
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

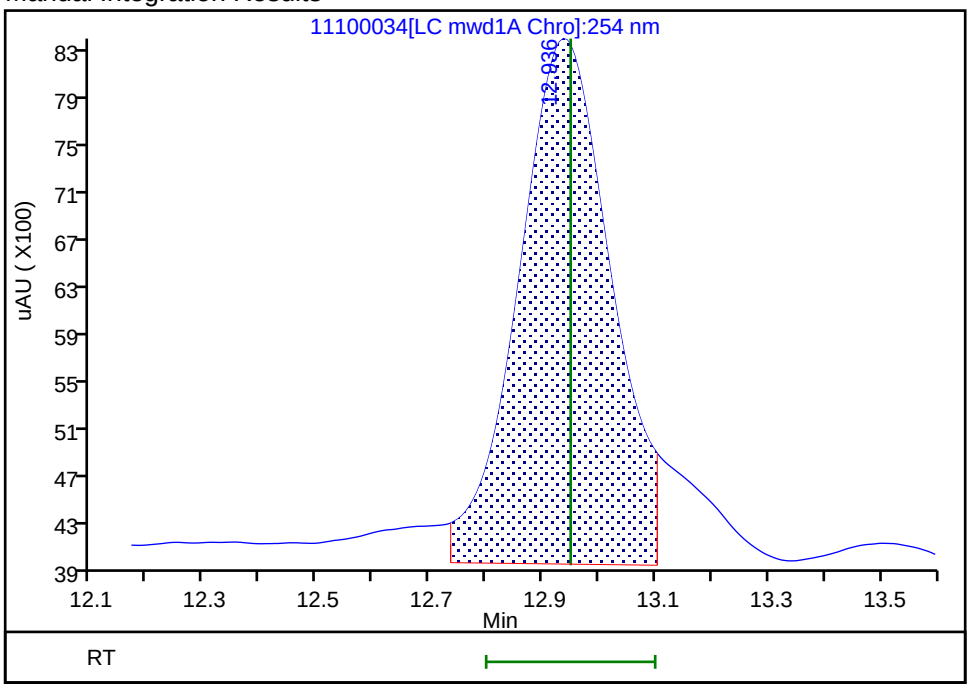
Processing Integration Results

RT: 12.94
Area: 61214
Amount: 0.230423
Amount Units: ug/ml



Manual Integration Results

RT: 12.94
Area: 50699
Amount: 0.190842
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:05:40

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

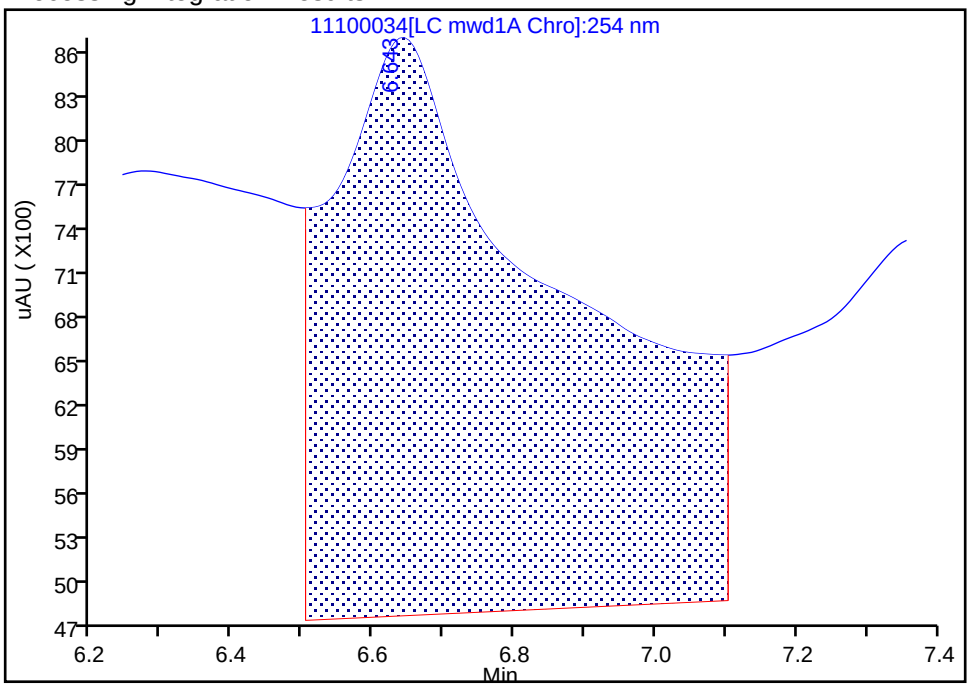
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100034.D				
Injection Date:	11-Nov-2021 07:20:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-2-A	Lab Sample ID:	280-155225-2		
Client ID:	G0077-7				
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

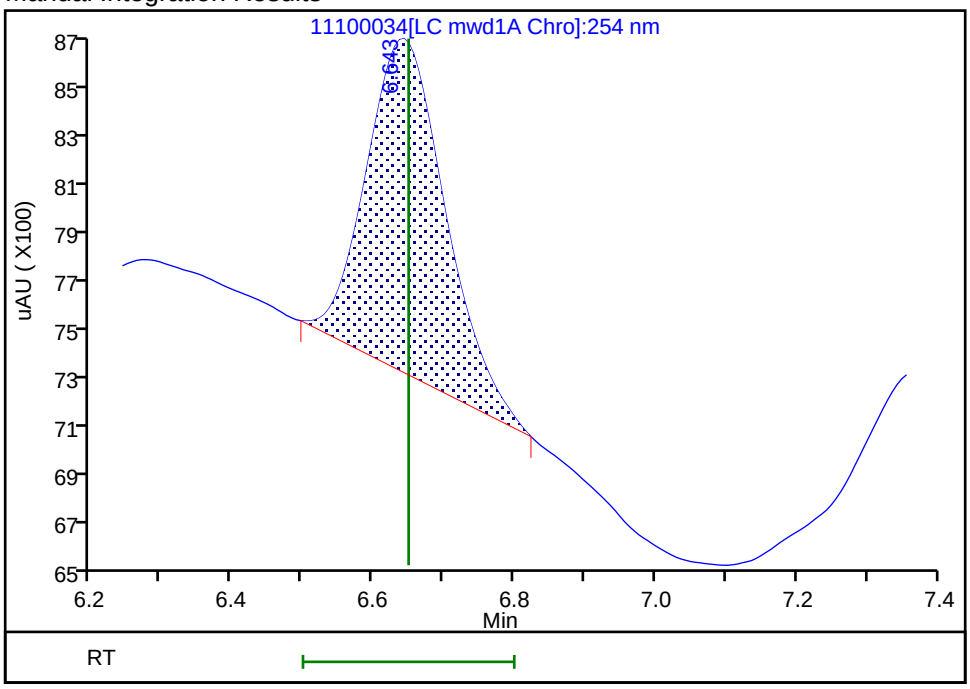
Processing Integration Results

RT: 6.64
Area: 90042
Amount: 0.560932
Amount Units: ug/ml



Manual Integration Results

RT: 6.64
Area: 10566
Amount: 0.060371
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:05:48
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

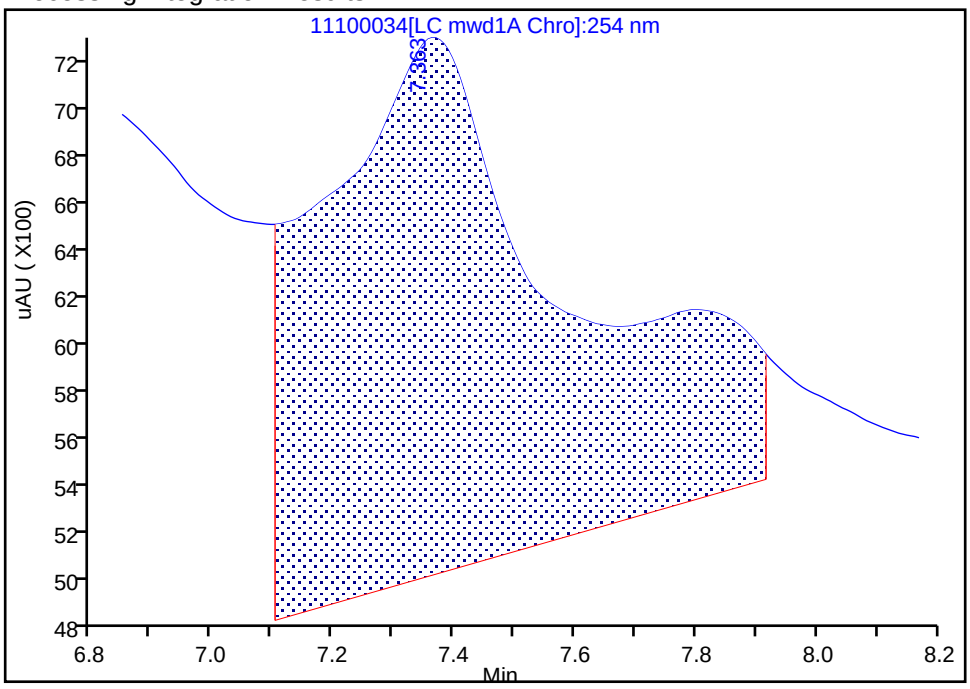
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100034.D				
Injection Date:	11-Nov-2021 07:20:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-2-A	Lab Sample ID:	280-155225-2		
Client ID:	G0077-7				
Operator ID:	JZ	ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

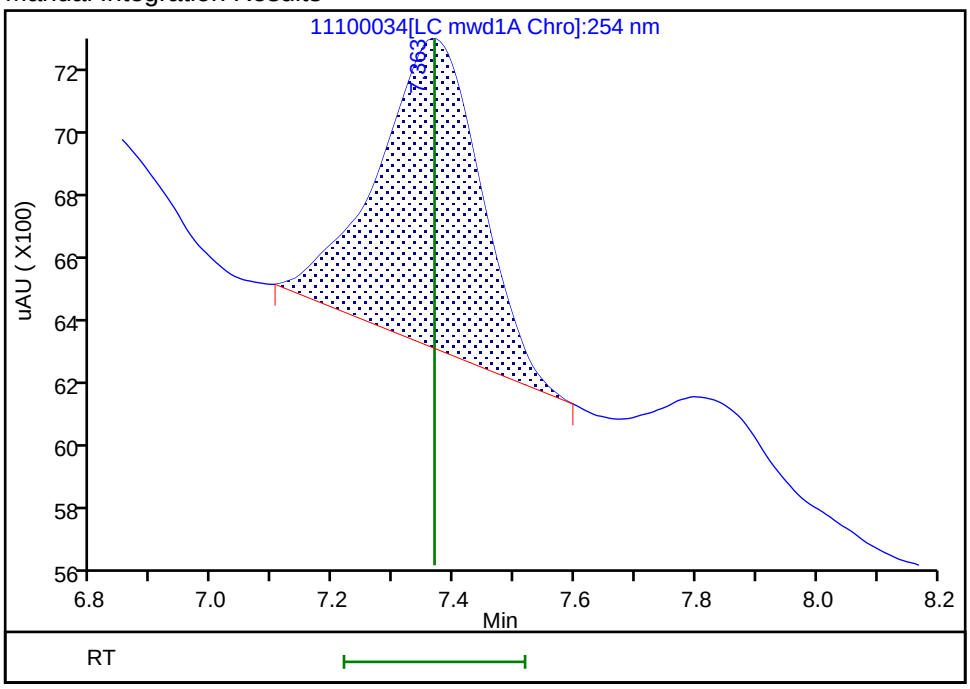
Processing Integration Results

RT: 7.36
Area: 64365
Amount: 0.243031
Amount Units: ug/ml



Manual Integration Results

RT: 7.36
Area: 11630
Amount: 0.043913
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:05:51
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: G0078-7 Lab Sample ID: 280-155225-3

Matrix: Water Lab File ID: 11090058.D

Analysis Method: 8330A Date Collected: 11/04/2021 11:45

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 486.1(mL) Date Analyzed: 11/10/2021 10:05

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	0.087
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.038
118-96-7	2,4,6-Trinitrotoluene	0.10	U	0.11	0.10	0.046
121-14-2	2,4-Dinitrotoluene	0.082	U	0.10	0.082	0.028
606-20-2	2,6-Dinitrotoluene	0.082	U	0.10	0.082	0.041
35572-78-2	2-Amino-4,6-dinitrotoluene	0.10	U	0.11	0.10	0.052
88-72-2	2-Nitrotoluene	0.21	U	0.22	0.21	0.088
99-08-1	3-Nitrotoluene	0.41	U	0.41	0.41	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	0.12	U	0.15	0.12	0.059
2691-41-0	HMX	0.21	U M	0.22	0.21	0.090
5755-27-1	MNX	0.41	U	2.1	0.41	0.16
98-95-3	Nitrobenzene	0.21	U	0.22	0.21	0.094
479-45-8	Tetryl	0.10	U	0.11	0.10	0.033

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090058.D
Lims ID: 280-155225-A-3-A
Client ID: G0078-7
Sample Type: Client
Inject. Date: 10-Nov-2021 10:05:49 ALS Bottle#: 58 Worklist Smp#: 58
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155225-A-3-A
Misc. Info.: 280-0106333-058
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 12:55:21

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	7.628	7.598	0.030	3098	0.0292	M
$ 10 1,2-Dinitrobenzene	1	8.568	8.572	-0.004	24246	0.1891	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	
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	13.042	13.078	-0.036	1109	0.0099	
24 m-Nitrotoluene	1		13.658			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

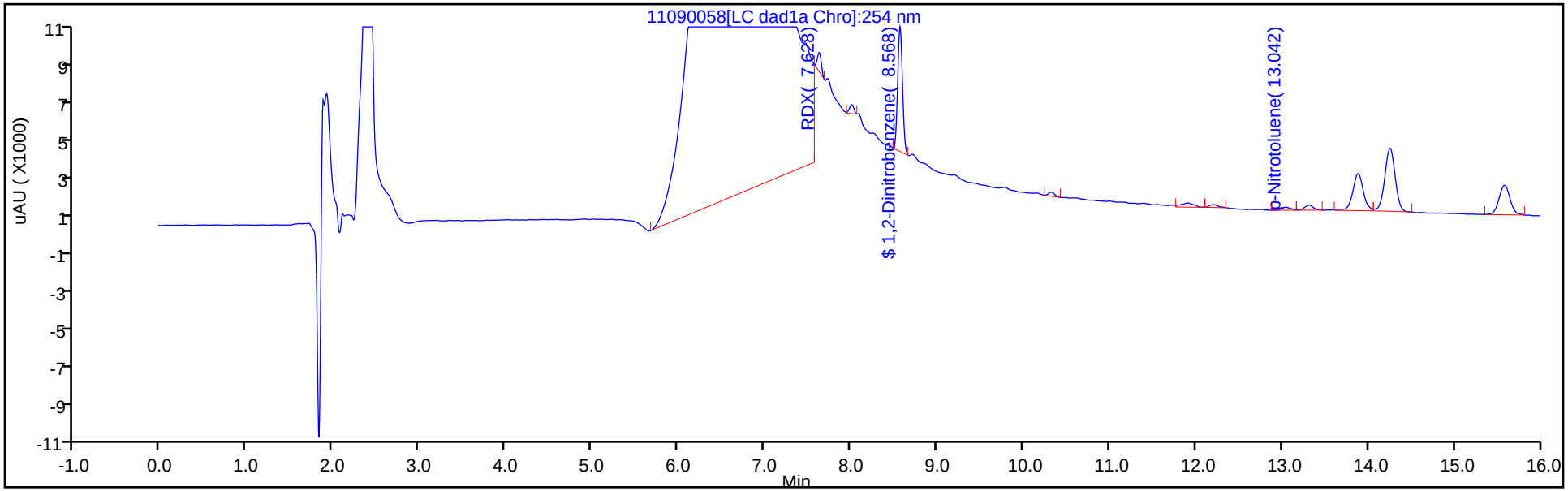
Report Date: 10-Nov-2021 12:58:56 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

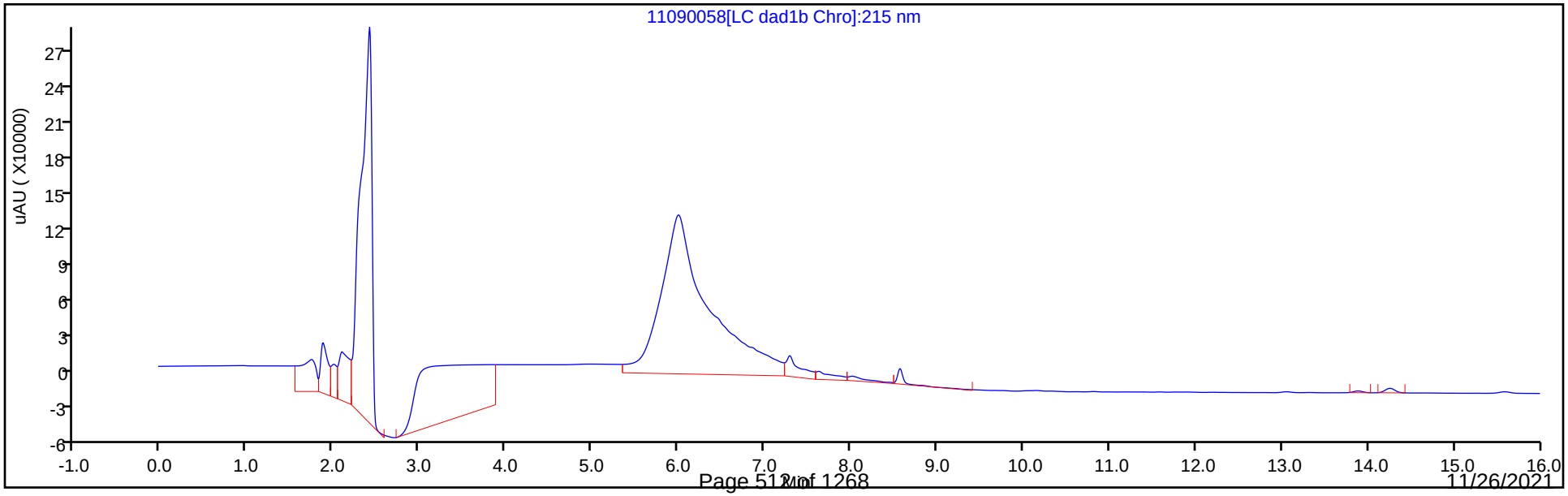
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090058.d

Injection Date:	10-Nov-2021 10:05:49	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155225-A-3-A	Lab Sample ID:	280-155225-3	Worklist Smp#:	58
Client ID:	G0078-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	58
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090058.D				
Lims ID:	280-155225-A-3-A				
Client ID:	G0078-7				
Sample Type:	Client				
Inject. Date:	10-Nov-2021 10:05:49	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155225-A-3-A				
Misc. Info.:	280-0106333-058				
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 12:55:21		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1891	94.55

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

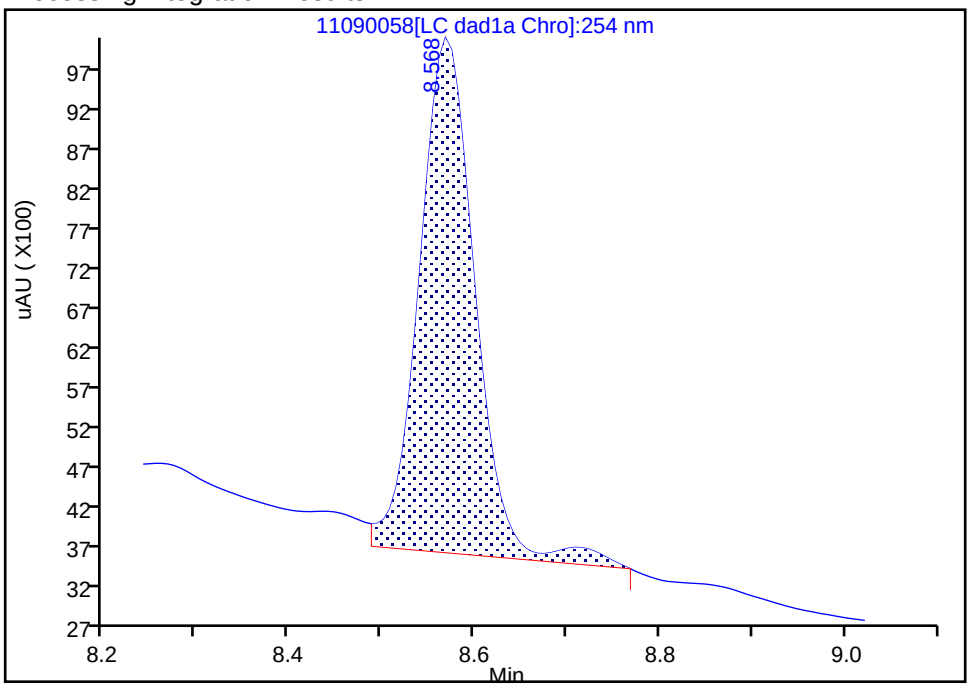
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090058.d				
Injection Date:	10-Nov-2021 10:05:49	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-3-A	Lab Sample ID:	280-155225-3		
Client ID:	G0078-7				
Operator ID:	JZ	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

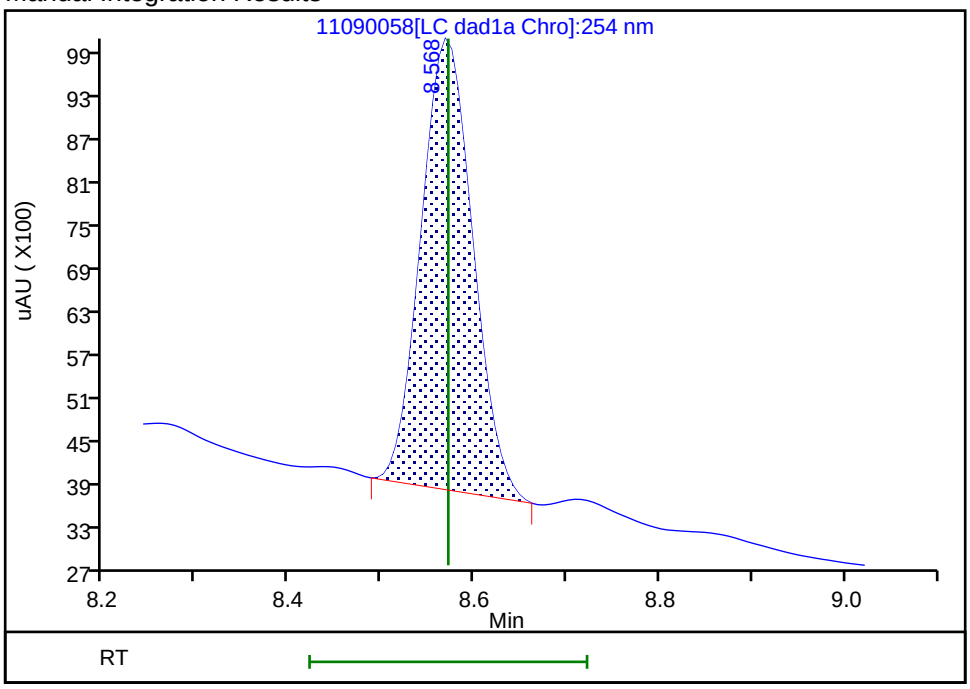
Processing Integration Results

RT: 8.57
Area: 27100
Amount: 0.211360
Amount Units: ug/mL



Manual Integration Results

RT: 8.57
Area: 24246
Amount: 0.189101
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:55:20

Audit Action: Manually Integrated Audit Reason: Baseline

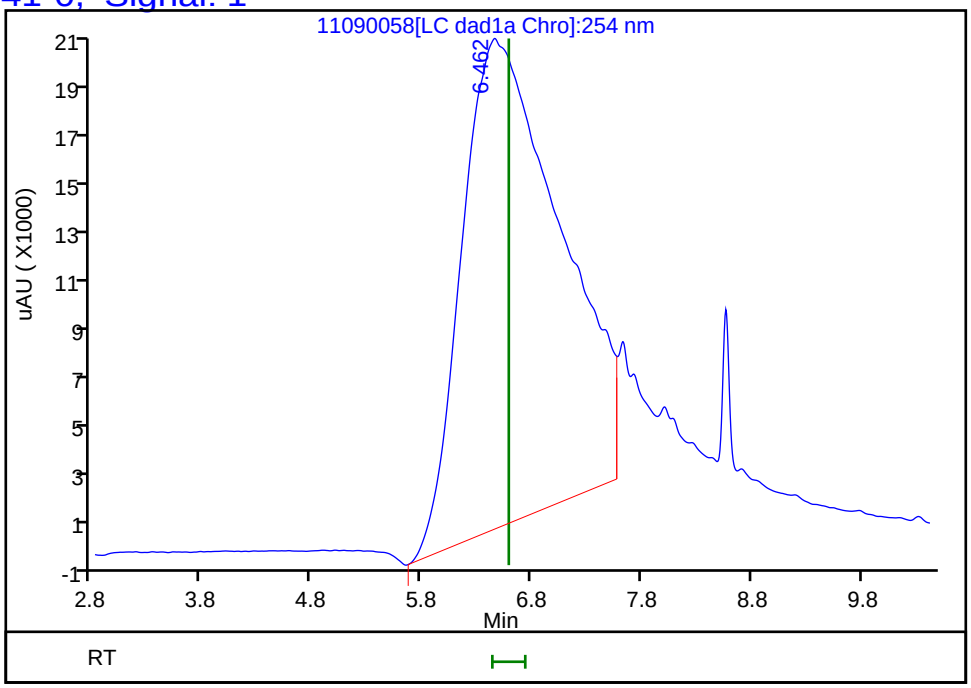
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090058.d				
Injection Date:	10-Nov-2021 10:05:49	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-3-A	Lab Sample ID:	280-155225-3		
Client ID:	G0078-7				
Operator ID:	JZ	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.46
Response: 1213342
Amount: 14.372440



Reviewer: zhangji, 10-Nov-2021 12:55:21
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

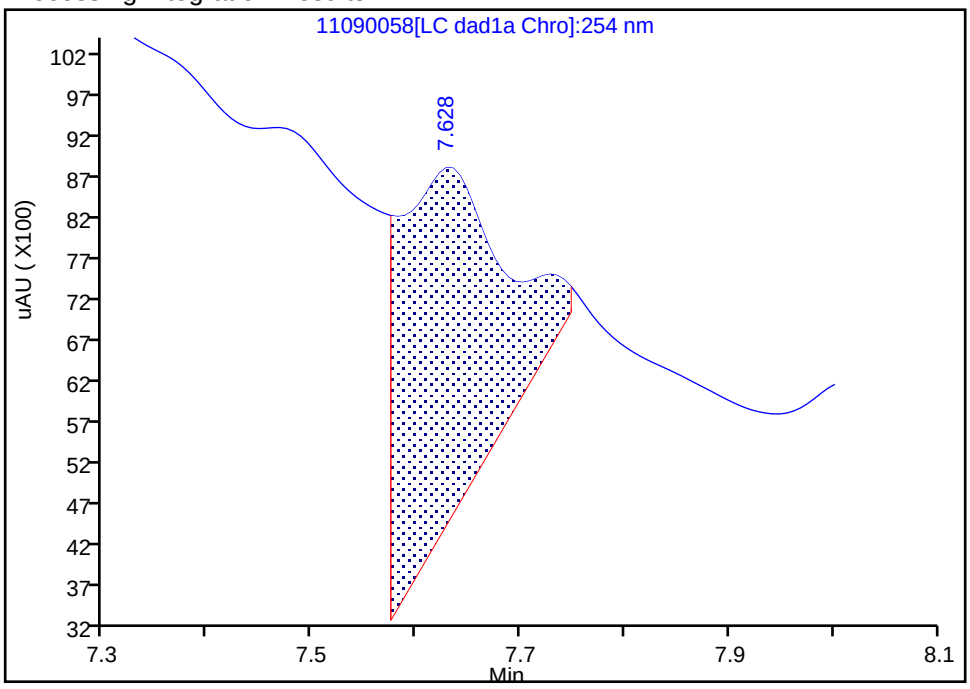
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090058.d				
Injection Date:	10-Nov-2021 10:05:49	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-3-A	Lab Sample ID:	280-155225-3		
Client ID:	G0078-7				
Operator ID:	JZ	ALS Bottle#:	58	Worklist Smp#:	58
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

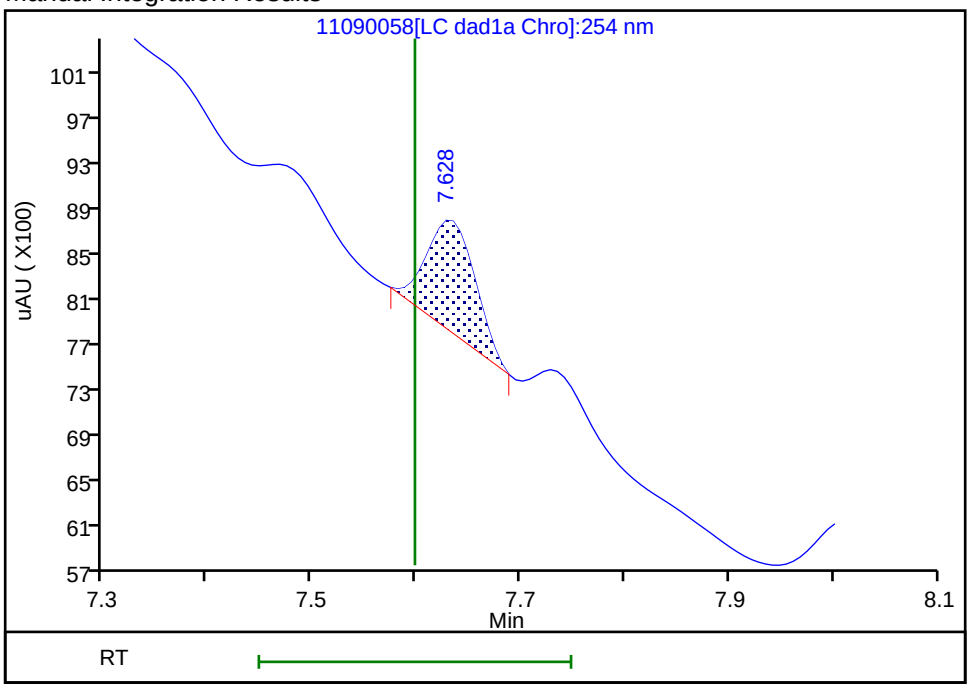
Processing Integration Results

RT: 7.63
Area: 29386
Amount: 0.276544
Amount Units: ug/mL



Manual Integration Results

RT: 7.63
Area: 3098
Amount: 0.029155
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:55:16

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: G0078-7 Lab Sample ID: 280-155225-3

Matrix: Water Lab File ID: 11100035.D

Analysis Method: 8330A Date Collected: 11/04/2021 11:45

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 486.1(mL) Date Analyzed: 11/11/2021 07:55

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 556958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-99-0	4-Nitrotoluene	0.41	U	0.42	0.41	0.10
121-82-4	RDX	0.21	U	0.22	0.21	0.053

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	95		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100035.D
Lims ID: 280-155225-A-3-A
Client ID: G0078-7
Sample Type: Client
Inject. Date: 11-Nov-2021 07:55:54 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155225-A-3-A
Misc. Info.: 280-0106378-035
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 19:12:38 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 19:06:28

	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	7.363	7.367	-0.004	4446	0.0168	M
	8 RDX	1		8.803			ND	
	9 Nitrobenzene	1		11.856			ND	7
$	10 1,2-Dinitrobenzene	1	12.963	12.949	0.014	50251	0.1892	
	12 1,3-Dinitrobenzene	1		15.376			ND	
	14 o-Nitrotoluene	1	16.670	16.603	0.067	31460	0.1264	
	16 p-Nitrotoluene	1		16.889			ND	
	17 4-Amino-2,6-dinitrotoluene	1		17.343			ND	U
	18 m-Nitrotoluene	1		17.856			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.276	18.236	0.040	16149	0.0382	
	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 19:12:39 Chrom Revision: 2.3 22-Sep-2021 15:38:46

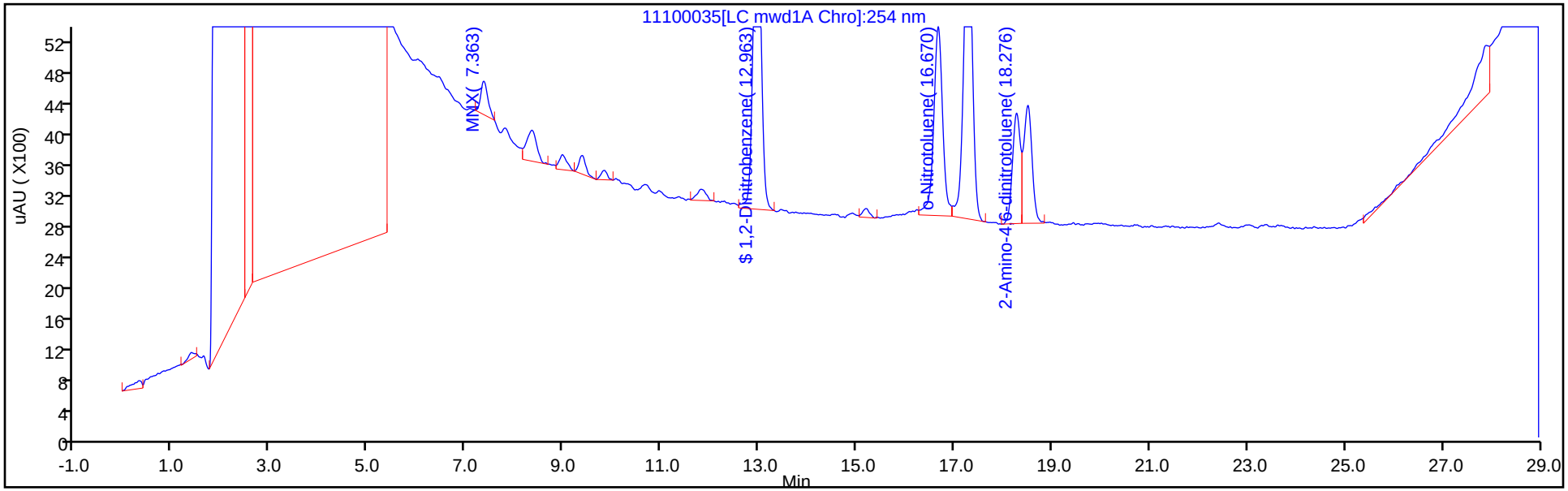
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100035.D

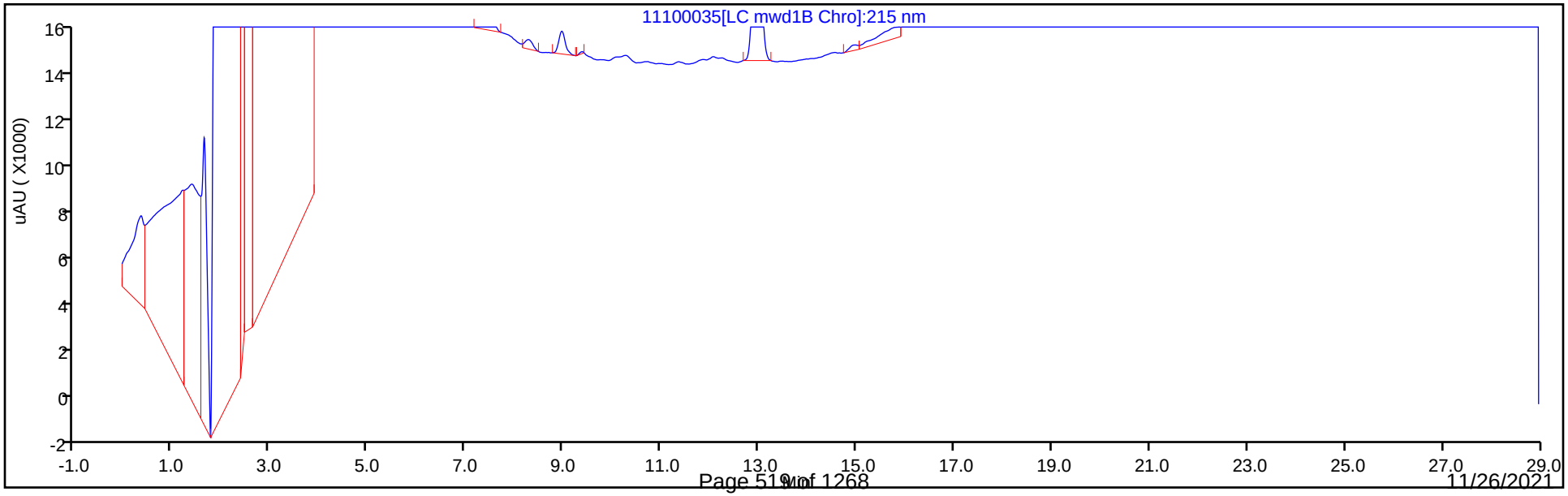
Injection Date:	11-Nov-2021 07:55:54	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155225-A-3-A	Lab Sample ID:	280-155225-3	Worklist Smp#:	35
Client ID:	G0078-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

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\11100035.D				
Lims ID:	280-155225-A-3-A				
Client ID:	G0078-7				
Sample Type:	Client				
Inject. Date:	11-Nov-2021 07:55:54	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155225-A-3-A				
Misc. Info.:	280-0106378-035				
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 19:12:38	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 19:06:28		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1892	94.58

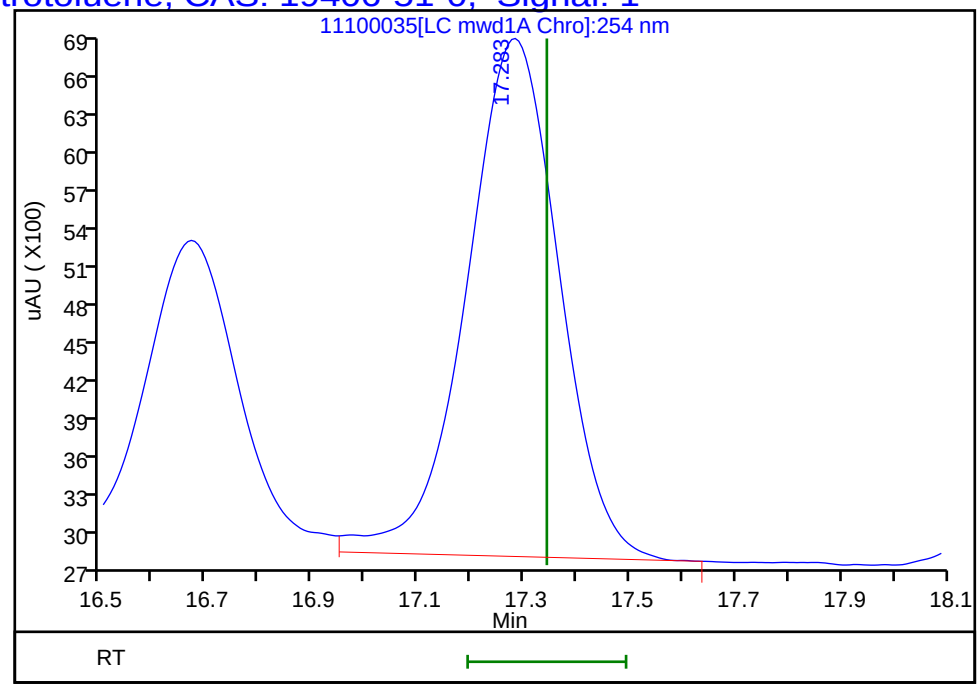
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100035.D				
Injection Date:	11-Nov-2021 07:55:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-3-A	Lab Sample ID:	280-155225-3		
Client ID:	G0078-7				
Operator ID:	JZ	ALS Bottle#:	35	Worklist Smp#:	35
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

RT: 17.28
Response: 49720
Amount: 0.167574



Reviewer: zhangji, 11-Nov-2021 19:06:28
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

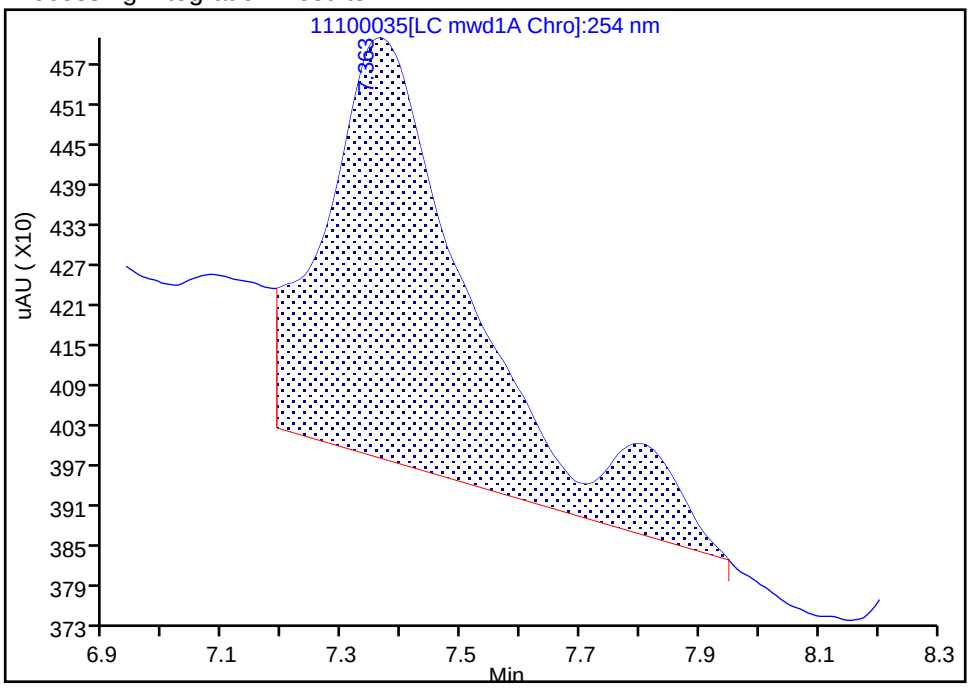
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100035.D				
Injection Date:	11-Nov-2021 07:55:54	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-3-A	Lab Sample ID:	280-155225-3		
Client ID:	G0078-7				
Operator ID:	JZ	ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

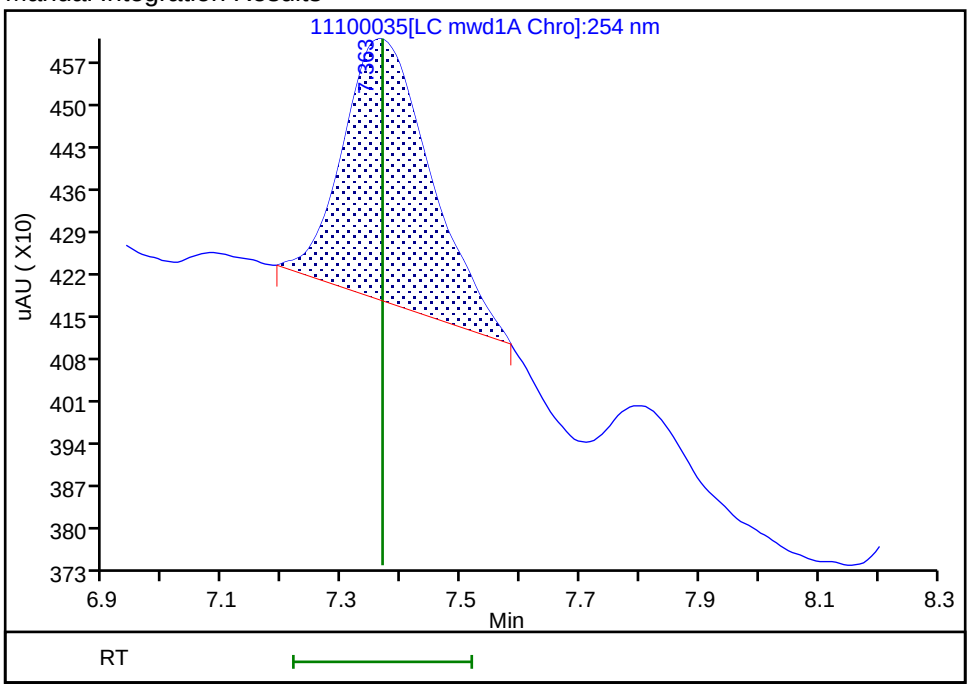
Processing Integration Results

RT: 7.36
Area: 10938
Amount: 0.041300
Amount Units: ug/ml



Manual Integration Results

RT: 7.36
Area: 4446
Amount: 0.016787
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:06:19

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: G0092-7 Lab Sample ID: 280-155225-4

Matrix: Water Lab File ID: 11090061.D

Analysis Method: 8330A Date Collected: 11/03/2021 14:55

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 493.9(mL) Date Analyzed: 11/10/2021 11:14

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 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	0.10	U	0.11	0.10	0.051
88-72-2	2-Nitrotoluene	0.20	U	0.21	0.20	0.087
99-08-1	3-Nitrotoluene	0.40	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	0.42	0.40	0.10
2691-41-0	HMX	0.20	U M	0.21	0.20	0.089
5755-27-1	MNX	0.40	U	2.0	0.40	0.16
98-95-3	Nitrobenzene	0.20	U M	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 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\11090061.D
Lims ID: 280-155225-A-4-A
Client ID: G0092-7
Sample Type: Client
Inject. Date: 10-Nov-2021 11:14:38 ALS Bottle#: 61 Worklist Smp#: 61
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155225-A-4-A
Misc. Info.: 280-0106333-061
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 12:58:47 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 12:56:07

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	8.566	8.572	-0.006	24348	0.1899	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	U
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

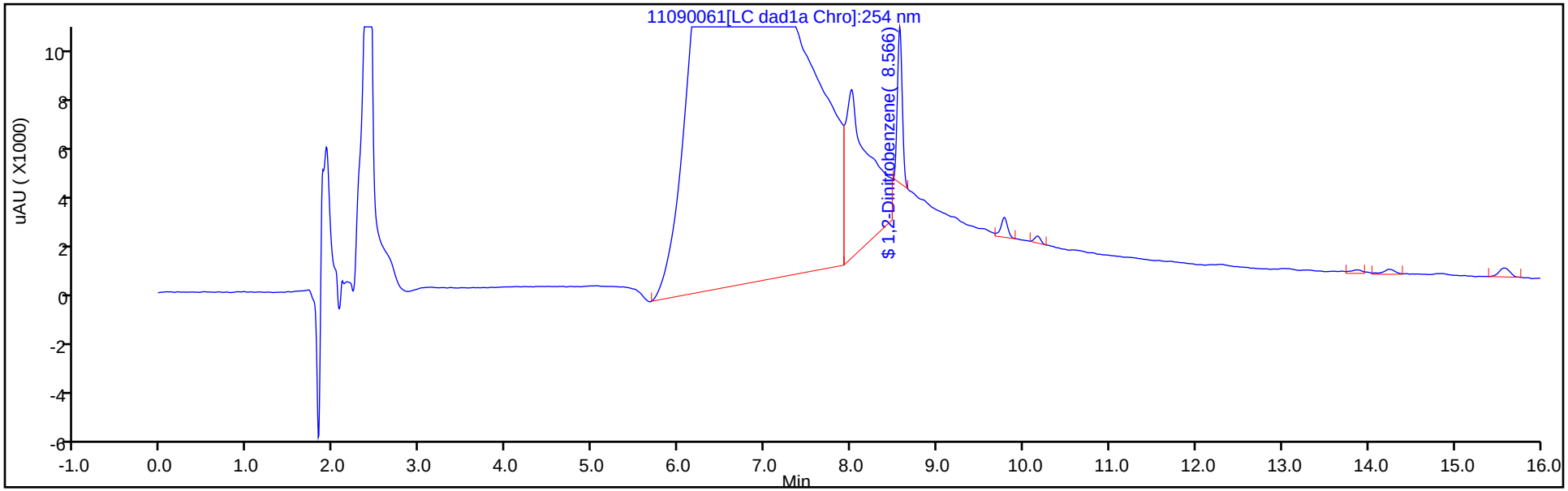
Report Date: 10-Nov-2021 12:58:54 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

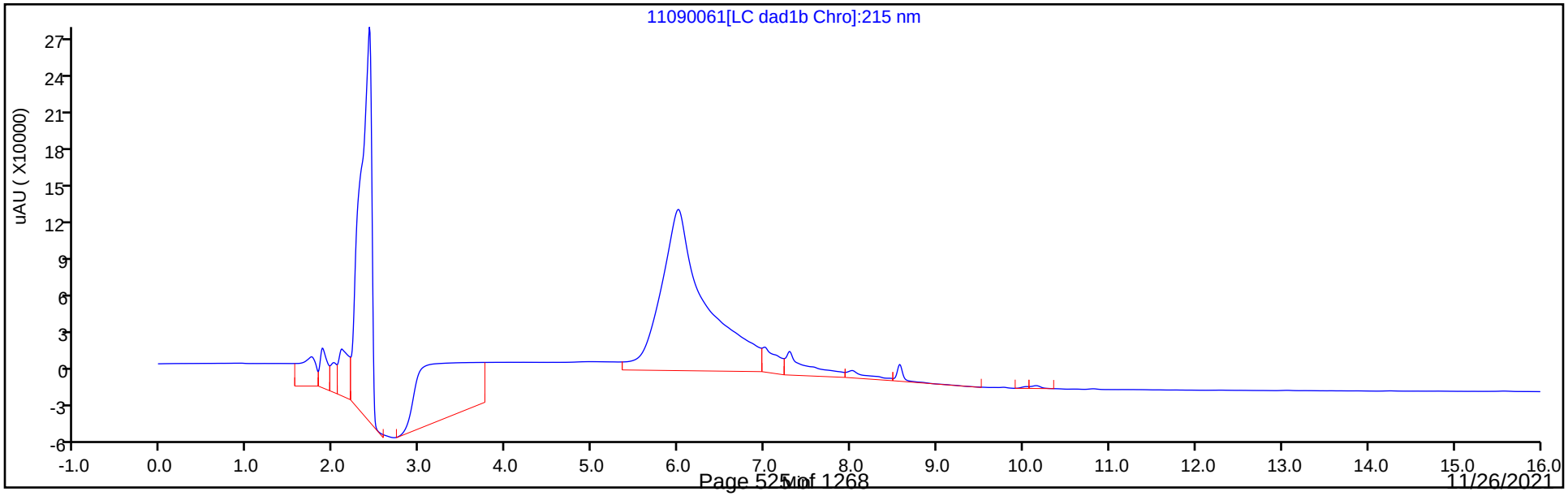
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090061.d

Injection Date:	10-Nov-2021 11:14:38	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155225-A-4-A	Lab Sample ID:	280-155225-4	Worklist Smp#:	61
Client ID:	G0092-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	61
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090061.D				
Lims ID:	280-155225-A-4-A				
Client ID:	G0092-7				
Sample Type:	Client				
Inject. Date:	10-Nov-2021 11:14:38	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155225-A-4-A				
Misc. Info.:	280-0106333-061				
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 12:58:47	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 12:56:07		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1899	94.95

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

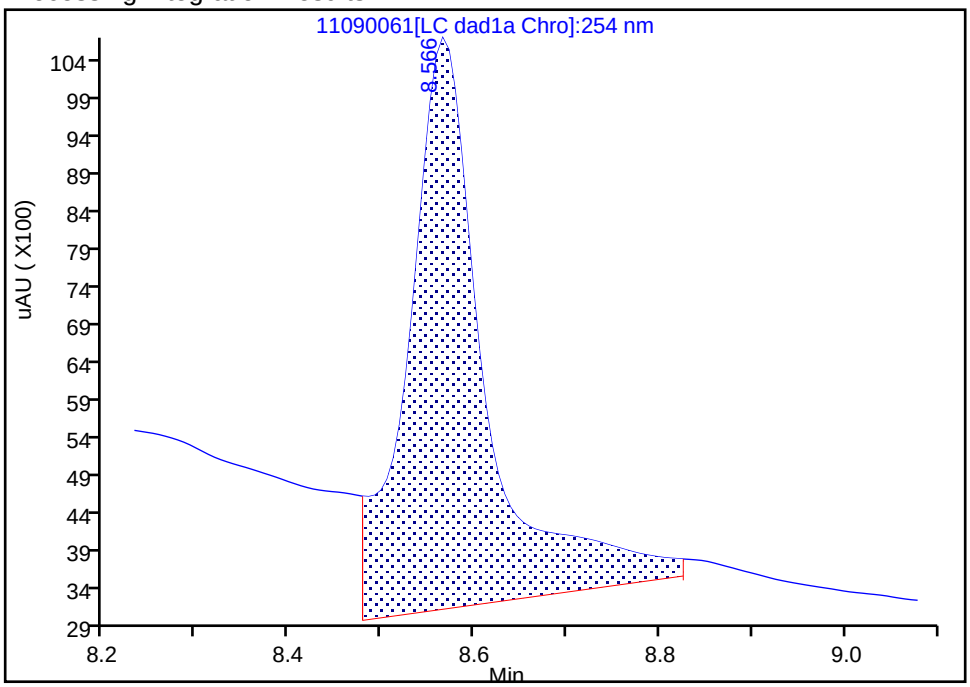
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090061.d				
Injection Date:	10-Nov-2021 11:14:38	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-4-A	Lab Sample ID:	280-155225-4		
Client ID:	G0092-7				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

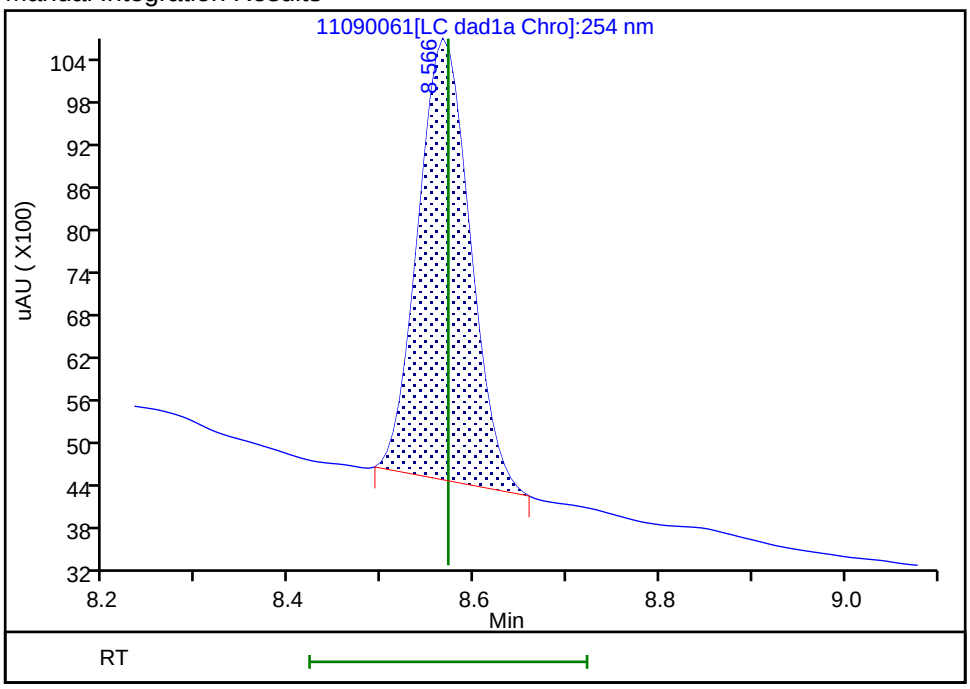
Processing Integration Results

RT: 8.57
Area: 44094
Amount: 0.343901
Amount Units: ug/mL



Manual Integration Results

RT: 8.57
Area: 24348
Amount: 0.189897
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:56:06

Audit Action: Manually Integrated Audit Reason: Baseline

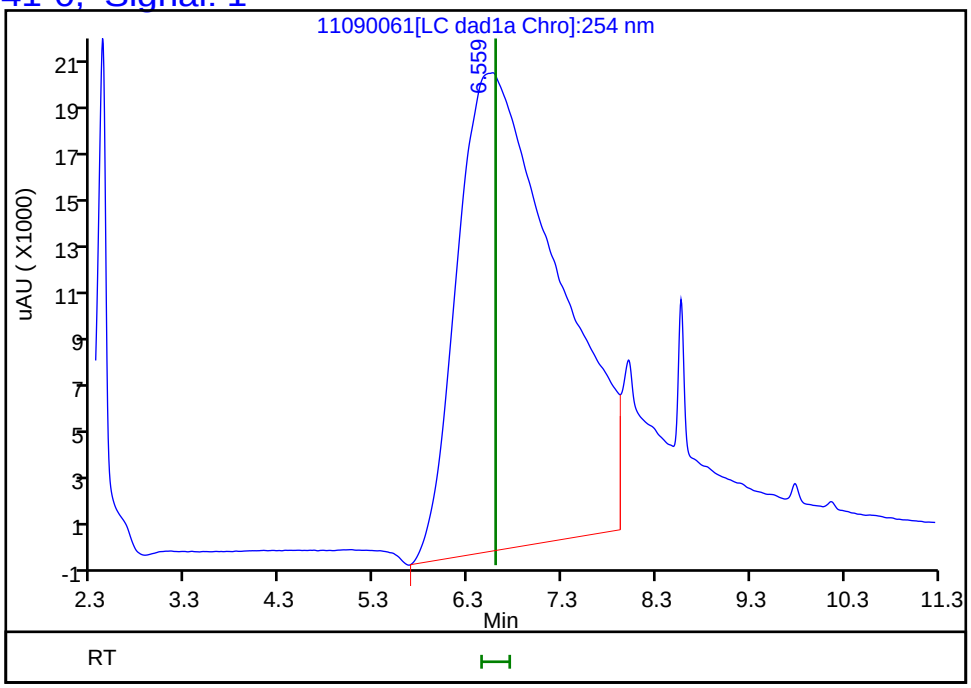
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090061.d				
Injection Date:	10-Nov-2021 11:14:38	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-4-A	Lab Sample ID:	280-155225-4		
Client ID:	G0092-7				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0, Signal: 1

RT: 6.56
Response: 1481973
Amount: 17.554463



Reviewer: zhangji, 10-Nov-2021 12:56:07
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

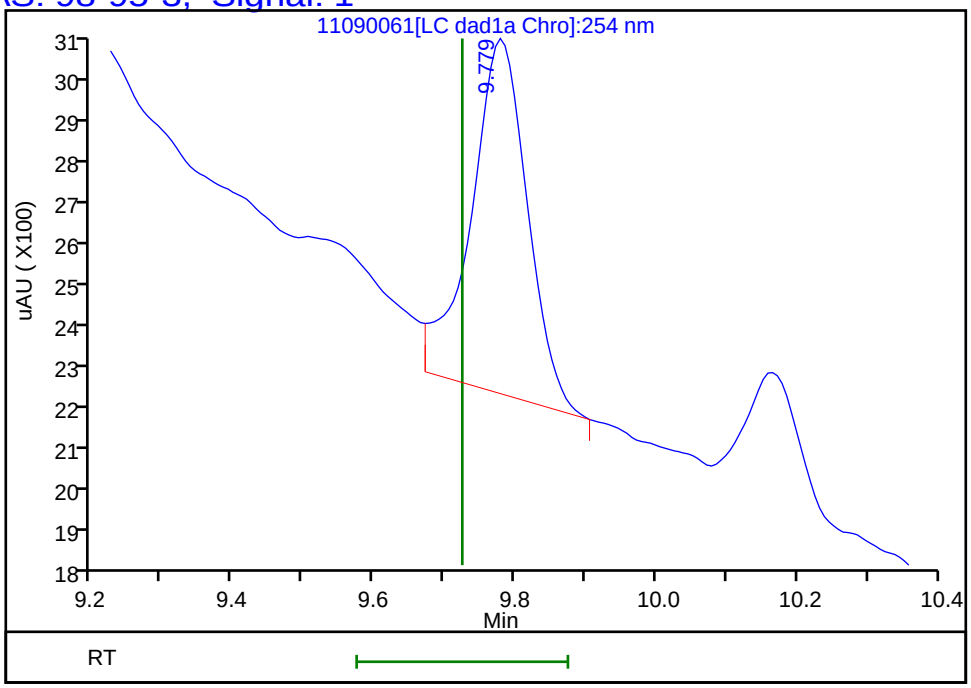
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090061.d				
Injection Date:	10-Nov-2021 11:14:38	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-4-A	Lab Sample ID:	280-155225-4		
Client ID:	G0092-7				
Operator ID:	JZ	ALS Bottle#:	61	Worklist Smp#:	61
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.78
Response: 4408
Amount: 0.022572



Reviewer: zhangji, 10-Nov-2021 12:56:07
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

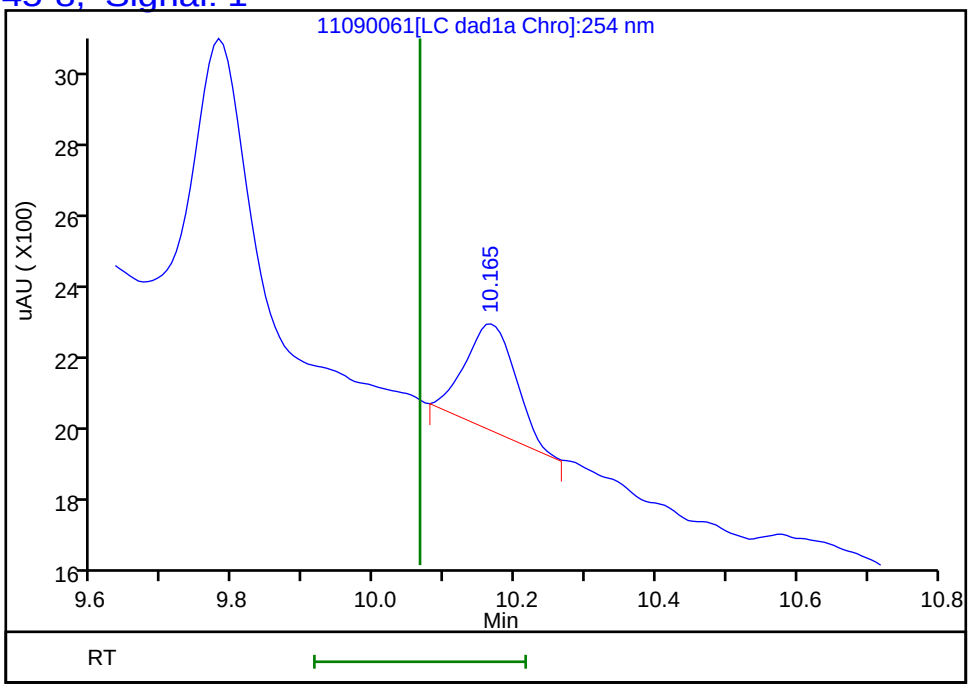
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090061.d
Injection Date: 10-Nov-2021 11:14:38 Instrument ID: CHHPLC_X3
Lims ID: 280-155225-A-4-A Lab Sample ID: 280-155225-4
Client ID: G0092-7
Operator ID: JZ ALS Bottle#: 61 Worklist Smp#: 61
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.17
Response: 1382
Amount: 0.008015



Reviewer: zhangji, 10-Nov-2021 12:56:07
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.: 280-155225-1

SDG No.:

Client Sample ID: G0091-7 Lab Sample ID: 280-155225-5

Matrix: Water Lab File ID: 11090062.D

Analysis Method: 8330A Date Collected: 11/03/2021 13:40

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 507.5(mL) Date Analyzed: 11/10/2021 11:37

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 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	0.083
99-65-0	1,3-Dinitrobenzene	0.099	U	0.11	0.099	0.036
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	0.17		0.11	0.099	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	0.17	J1	0.15	0.12	0.057
99-99-0	4-Nitrotoluene	0.39	U	0.40	0.39	0.099
2691-41-0	HMX	0.34	J1 M	0.21	0.20	0.086
5755-27-1	MNX	0.39	U M	2.0	0.39	0.15
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.090
121-82-4	RDX	0.32	M	0.21	0.20	0.051
479-45-8	Tetryl	0.099	U	0.11	0.099	0.031

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\11090062.D
Lims ID: 280-155225-A-5-A
Client ID: G0091-7
Sample Type: Client
Inject. Date: 10-Nov-2021 11:37:29 ALS Bottle#: 62 Worklist Smp#: 62
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155225-A-5-A
Misc. Info.: 280-0106333-062
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 12:58:47 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 12:57:11

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.587	6.592	-0.005	2913	0.0345	M
7 MNX	1		7.223			ND	U
8 RDX	1	7.587	7.598	-0.011	3453	0.0325	M
$ 10 1,2-Dinitrobenzene	1	8.567	8.572	-0.005	23808	0.1857	M
11 1,3,5-Trinitrobenzene	1		8.685			ND	
12 1,3-Dinitrobenzene	1		9.331			ND	
13 Nitrobenzene	1		9.725			ND	7
15 Tetryl	1		10.065			ND	7
17 2,4,6-Trinitrotoluene	1	10.960	10.971	-0.011	1253	0.006081	
18 4-Amino-2,6-dinitrotoluene	1	11.160	11.185	-0.025	2658	0.0174	
19 2-Amino-4,6-dinitrotoluene	1	11.414	11.438	-0.024	3664	0.0177	
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
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

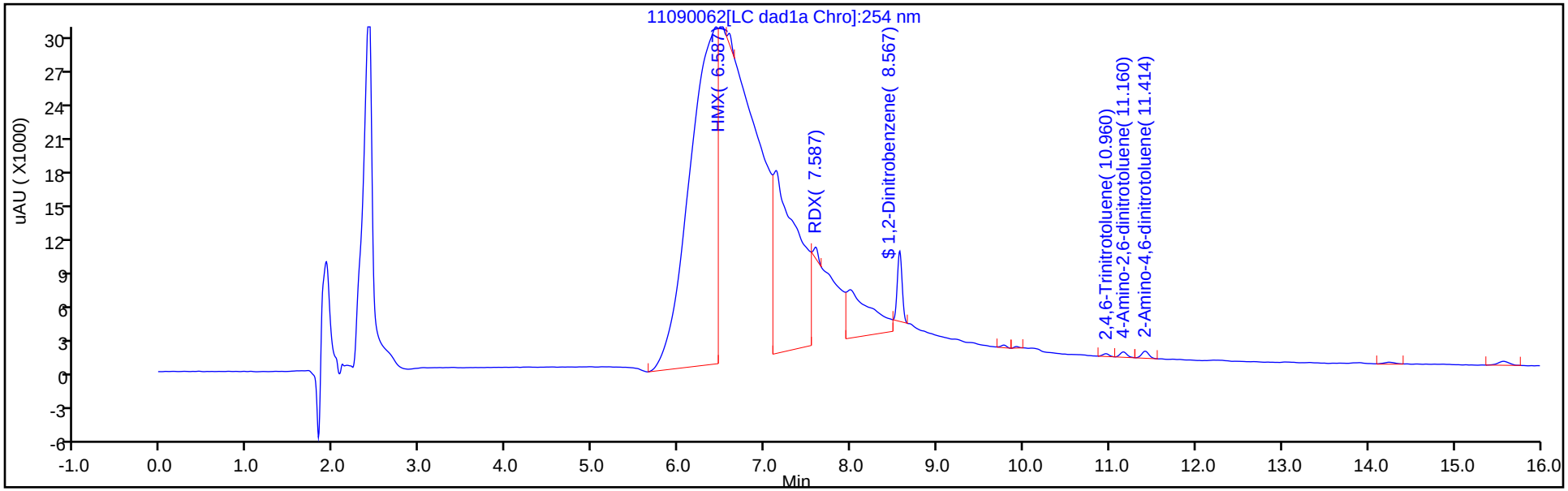
Report Date: 10-Nov-2021 12:58:54 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

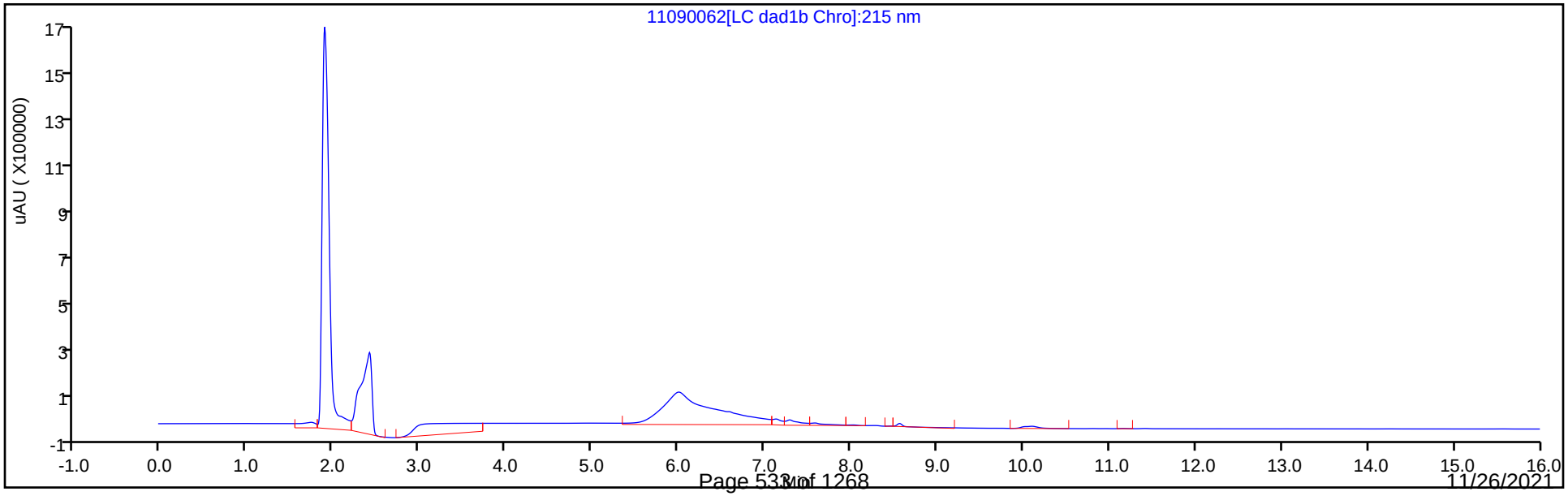
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090062.d

Injection Date:	10-Nov-2021 11:37:29	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155225-A-5-A	Lab Sample ID:	280-155225-5	Worklist Smp#:	62
Client ID:	G0091-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	62
Method:	8330_X3	Limit Group:	GCSV - 8330		

Column: UltraCarb5uODS (20) (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090062.D				
Lims ID:	280-155225-A-5-A				
Client ID:	G0091-7				
Sample Type:	Client				
Inject. Date:	10-Nov-2021 11:37:29	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155225-A-5-A				
Misc. Info.:	280-0106333-062				
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 12:58:47	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 12:57:11		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1857	92.84

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

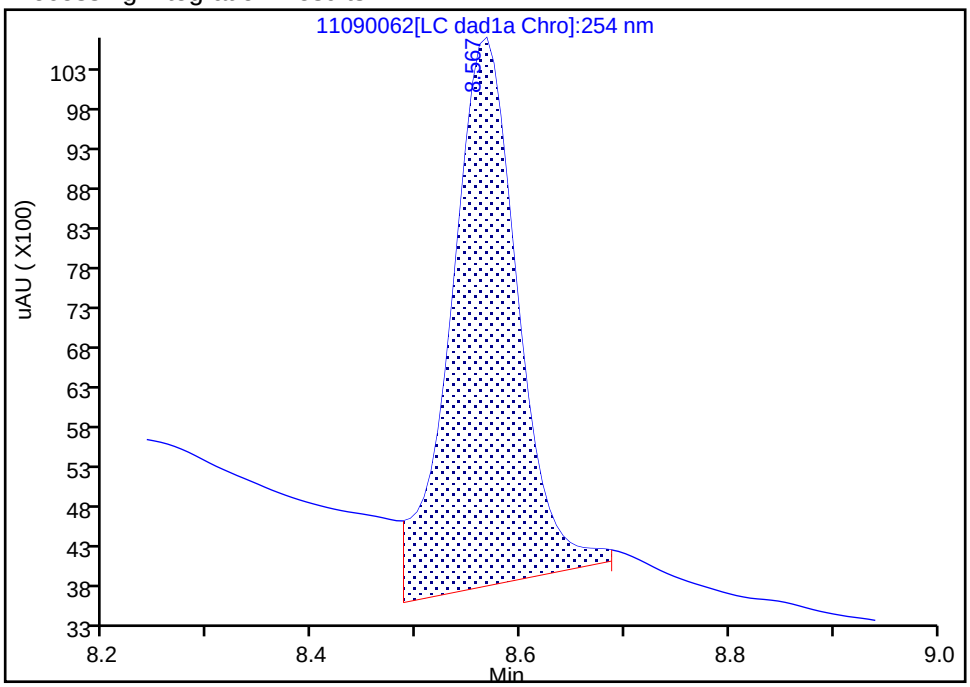
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090062.d				
Injection Date:	10-Nov-2021 11:37:29	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-5-A	Lab Sample ID:	280-155225-5		
Client ID:	G0091-7				
Operator ID:	JZ	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

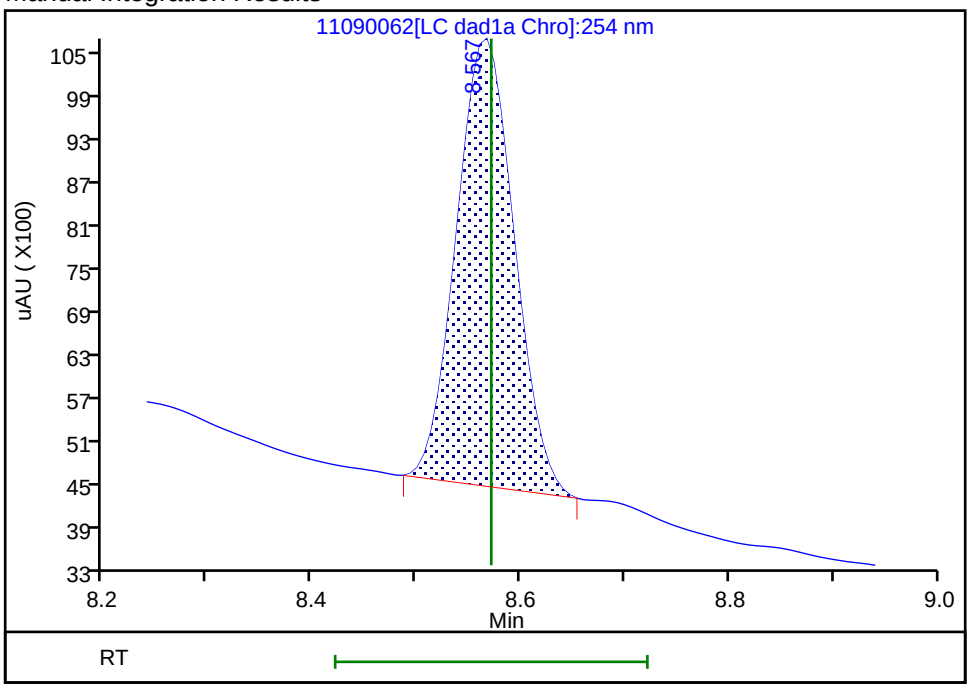
Processing Integration Results

RT: 8.57
Area: 30655
Amount: 0.239086
Amount Units: ug/mL



Manual Integration Results

RT: 8.57
Area: 23808
Amount: 0.185685
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:57:04

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

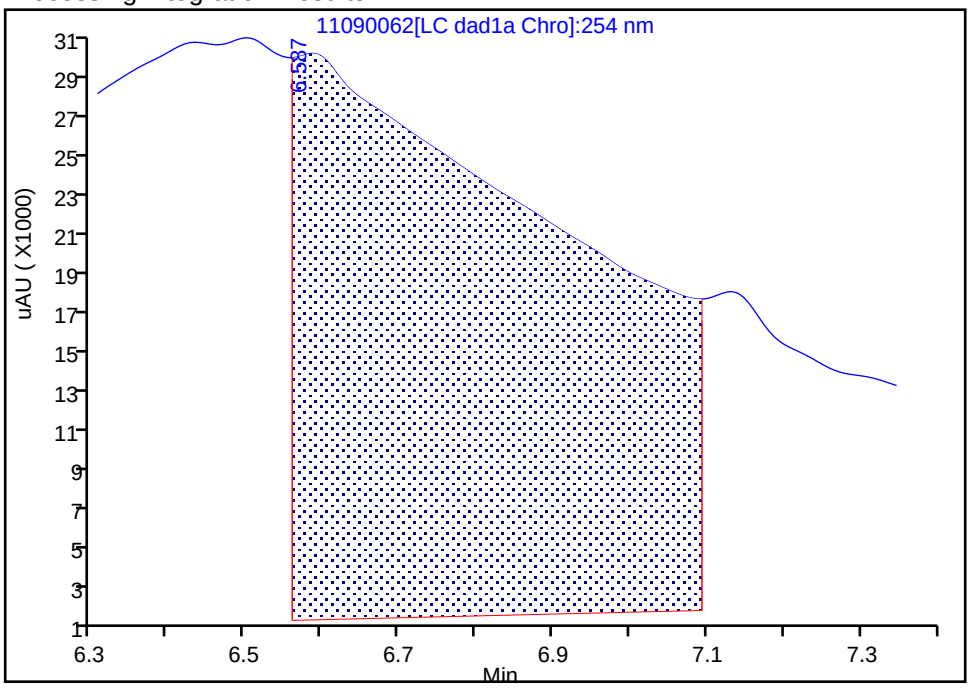
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090062.d				
Injection Date:	10-Nov-2021 11:37:29	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-5-A	Lab Sample ID:	280-155225-5		
Client ID:	G0091-7				
Operator ID:	JZ	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

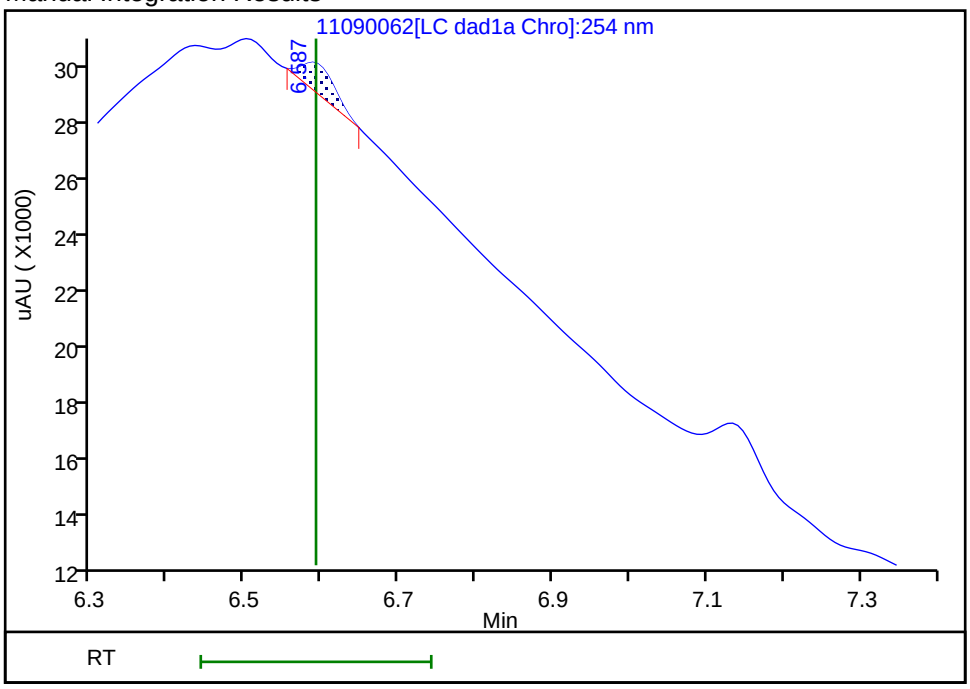
Processing Integration Results

RT: 6.59
Area: 696833
Amount: 8.254219
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 2913
Amount: 0.034505
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:56:53

Audit Action: Manually Integrated Audit Reason: Baseline

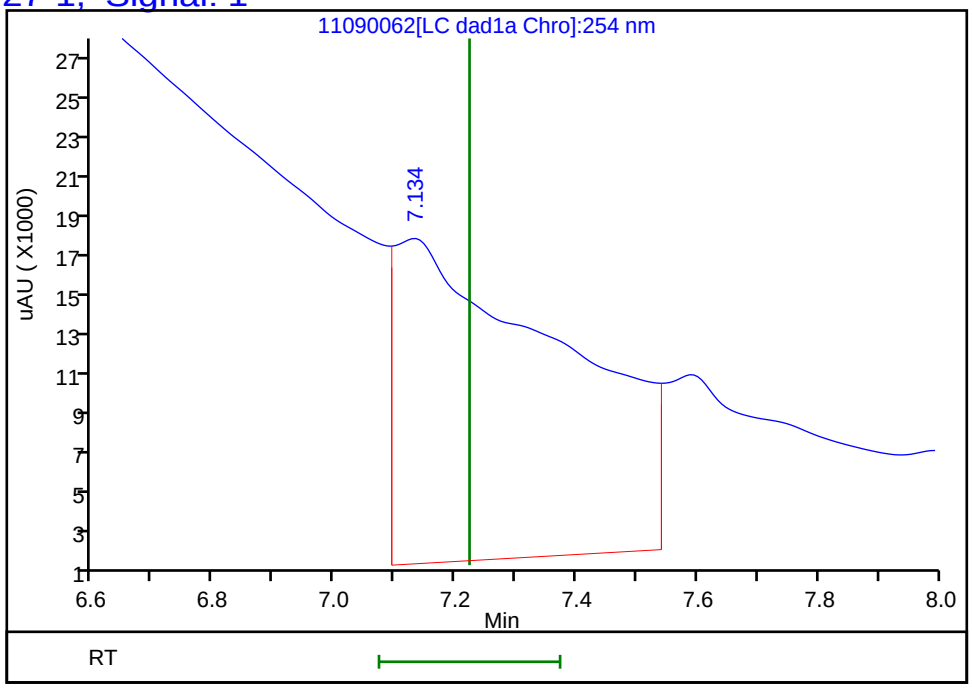
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090062.d				
Injection Date:	10-Nov-2021 11:37:29	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-5-A	Lab Sample ID:	280-155225-5		
Client ID:	G0091-7				
Operator ID:	JZ	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.13
Response: 310569
Amount: 2.382754



Reviewer: zhangji, 10-Nov-2021 12:57:11
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

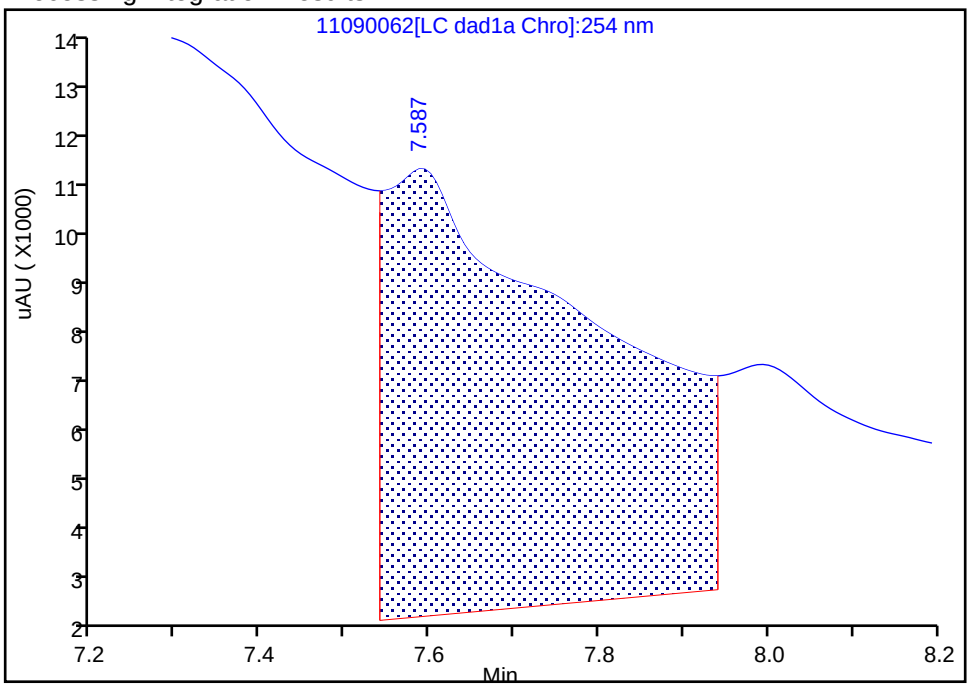
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090062.d				
Injection Date:	10-Nov-2021 11:37:29	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-5-A	Lab Sample ID:	280-155225-5		
Client ID:	G0091-7				
Operator ID:	JZ	ALS Bottle#:	62	Worklist Smp#:	62
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

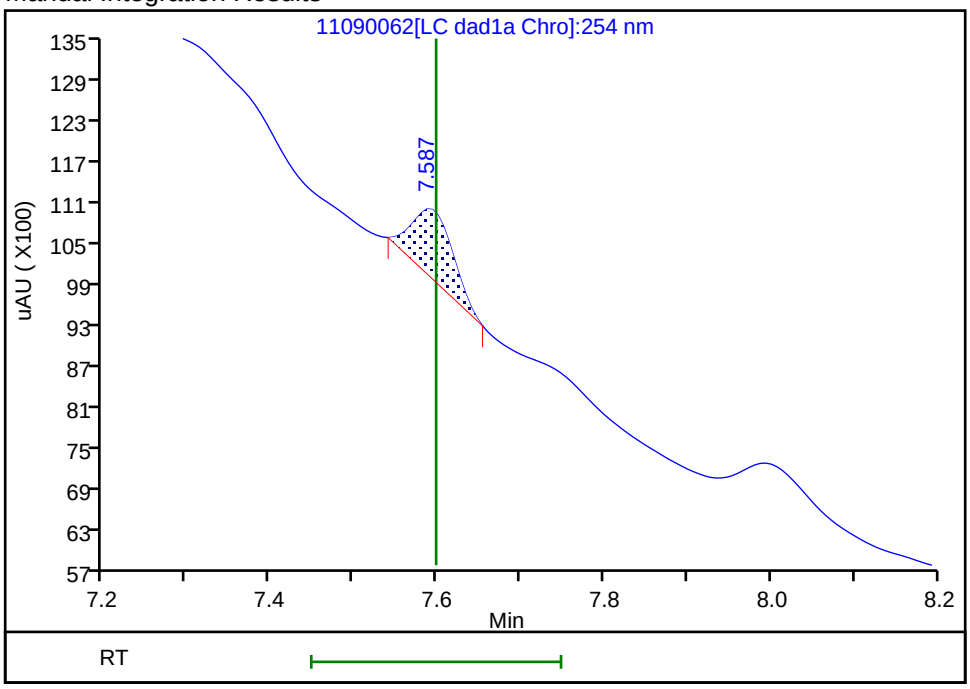
Processing Integration Results

RT: 7.59
Area: 145618
Amount: 1.370374
Amount Units: ug/mL



Manual Integration Results

RT: 7.59
Area: 3453
Amount: 0.032495
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:57:00

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: G0091-7 Lab Sample ID: 280-155225-5

Matrix: Water Lab File ID: 11100036.D

Analysis Method: 8330A Date Collected: 11/03/2021 13:40

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 507.5(mL) Date Analyzed: 11/11/2021 08:30

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 556958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	2,4,6-Trinitrotoluene	0.099	U	0.11	0.099	0.044
19406-51-0	*4-Amino-2,6-dinitrotoluene*	*0.26*	*J1 B*	*0.15*	0.12	*0.057*
2691-41-0	*HMX*	*0.23*	*J1 M*	*0.21*	0.20	*0.086*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	92		83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100036.D
Lims ID: 280-155225-A-5-A
Client ID: G0091-7
Sample Type: Client
Inject. Date: 11-Nov-2021 08:30:59 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155225-A-5-A
Misc. Info.: 280-0106378-036
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 19:12:38 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 19:06:44

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.640	6.650	-0.010	4608	0.0228	M
	6 MNX	1		7.367			ND	
	8 RDX	1	8.787	8.803	-0.016	6865	0.0336	M
	9 Nitrobenzene	1		11.856			ND	
$	10 1,2-Dinitrobenzene	1	12.933	12.949	-0.016	49088	0.1848	
	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	17.326	17.343	-0.017	7811	0.0263	
	18 m-Nitrotoluene	1		17.856			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.253	18.236	0.017	10800	0.0245	
	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	7

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated

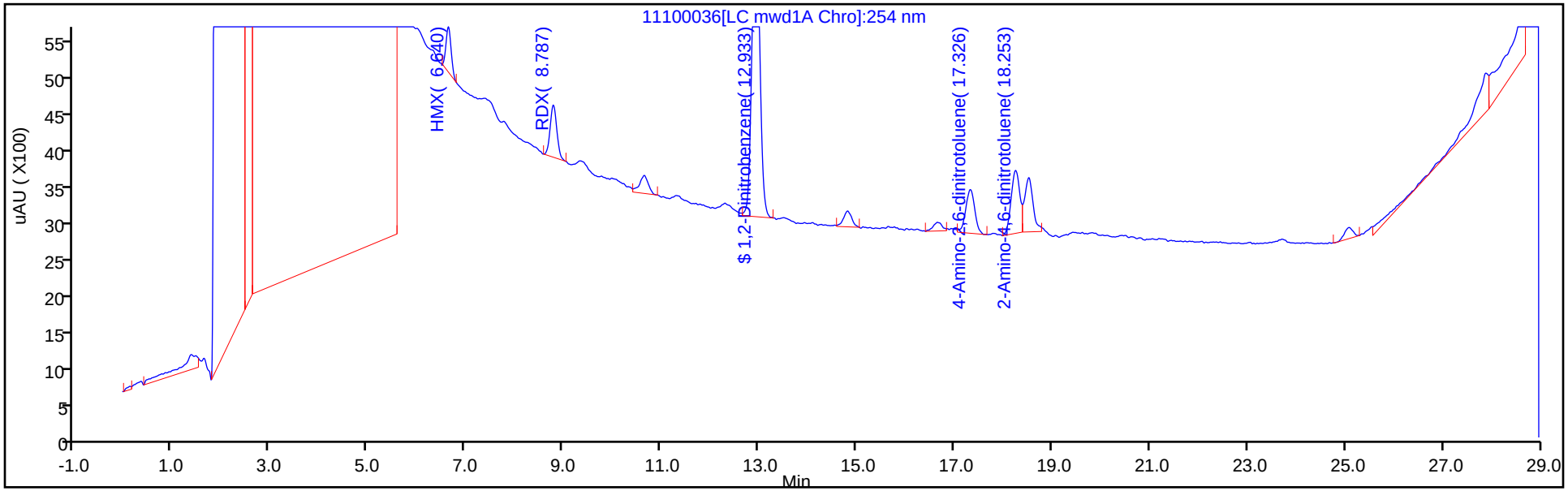
Report Date: 11-Nov-2021 19:12:39 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

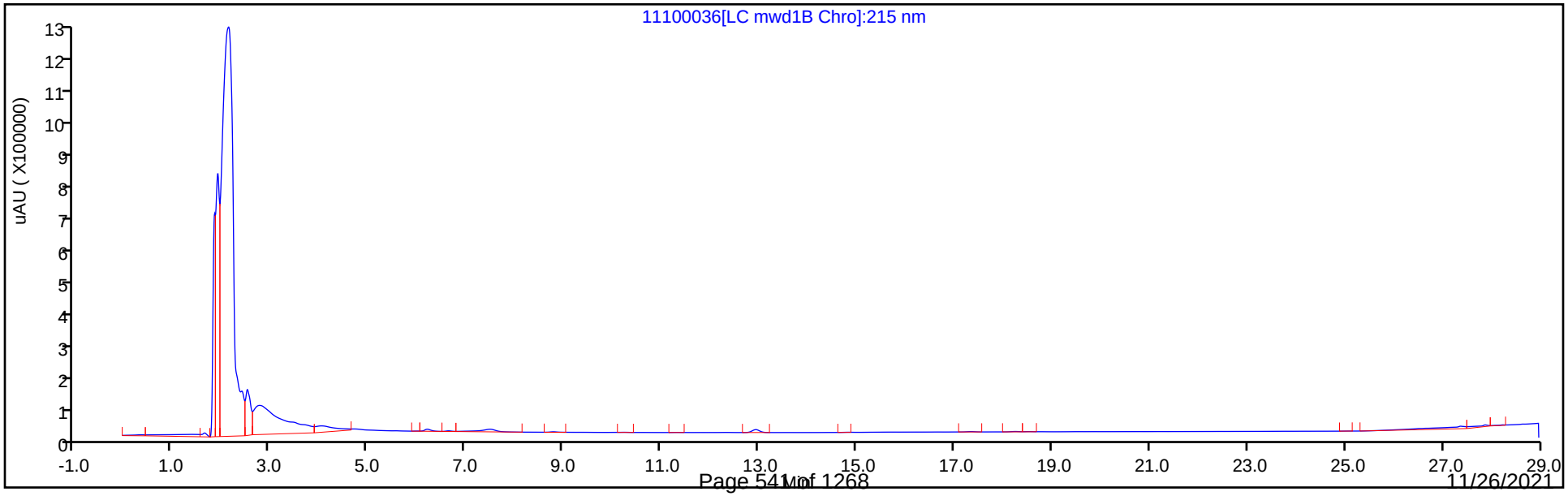
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100036.D

Injection Date:	11-Nov-2021 08:30:59	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155225-A-5-A	Lab Sample ID:	280-155225-5	Worklist Smp#:	36
Client ID:	G0091-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		

Column: Luna-Phenyl hexyl (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins TestAmerica, Denver
Recovery Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100036.D				
Lims ID:	280-155225-A-5-A				
Client ID:	G0091-7				
Sample Type:	Client				
Inject. Date:	11-Nov-2021 08:30:59	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155225-A-5-A				
Misc. Info.:	280-0106378-036				
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 19:12:38	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 19:06:44		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1848	92.39

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

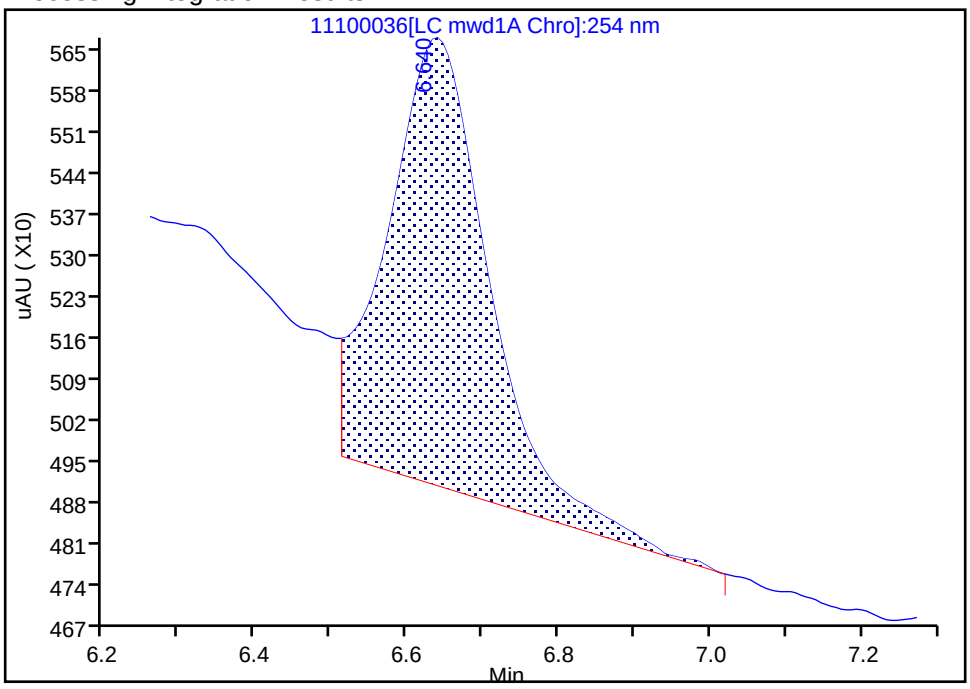
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100036.D				
Injection Date:	11-Nov-2021 08:30:59	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-5-A	Lab Sample ID:	280-155225-5		
Client ID:	G0091-7				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

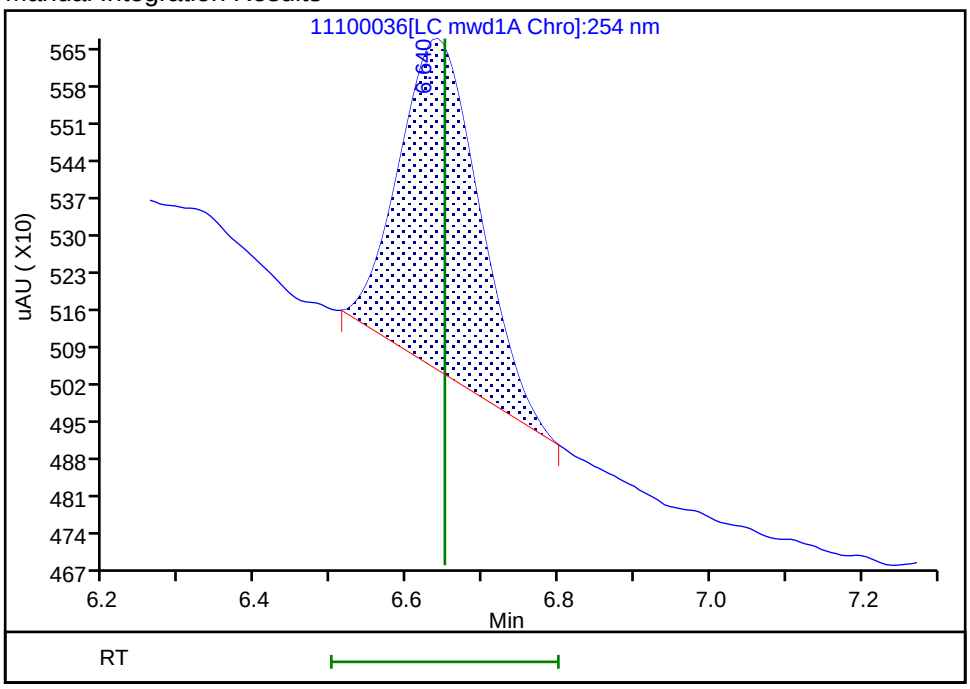
Processing Integration Results

RT: 6.64
Area: 7146
Amount: 0.038831
Amount Units: ug/ml



Manual Integration Results

RT: 6.64
Area: 4608
Amount: 0.022846
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:06:36

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

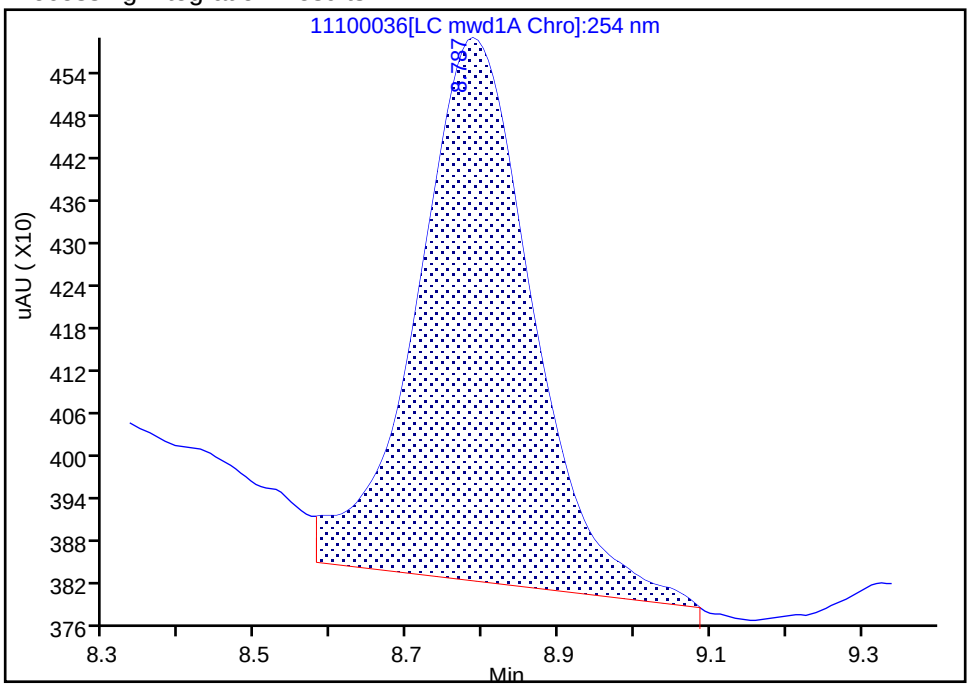
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100036.D				
Injection Date:	11-Nov-2021 08:30:59	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-5-A	Lab Sample ID:	280-155225-5		
Client ID:	G0091-7				
Operator ID:	JZ	ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

8 RDX, CAS: 121-82-4

Signal: 1

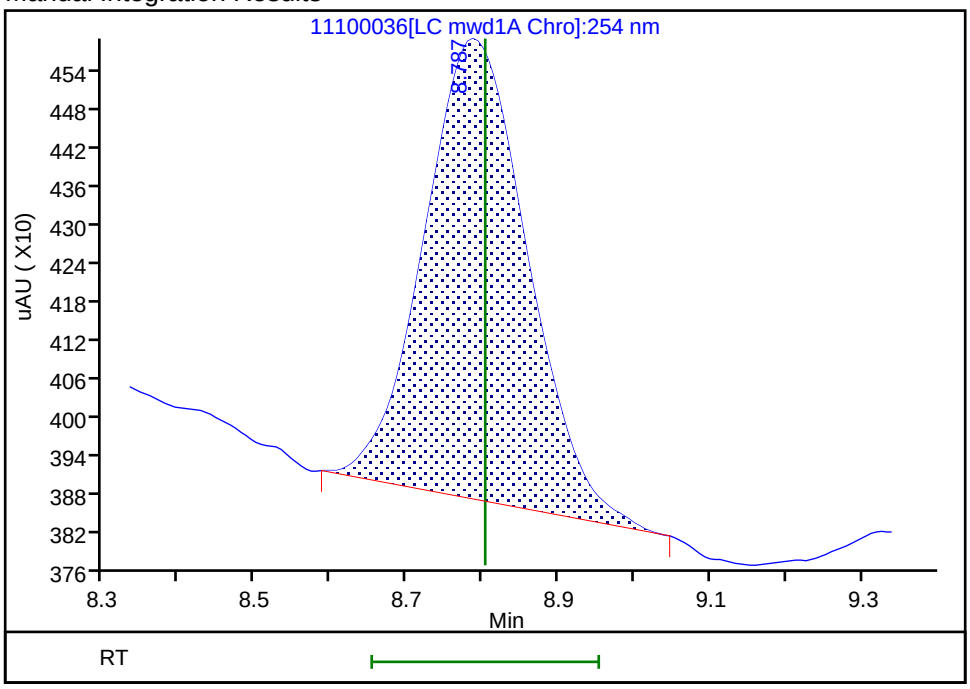
Processing Integration Results

RT: 8.79
Area: 8162
Amount: 0.039957
Amount Units: ug/ml



Manual Integration Results

RT: 8.79
Area: 6865
Amount: 0.033608
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:06:39

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: G0086-7 Lab Sample ID: 280-155225-6

Matrix: Water Lab File ID: 11090063.D

Analysis Method: 8330A Date Collected: 11/03/2021 15:05

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 504.3(mL) Date Analyzed: 11/10/2021 12:00

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 556781 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	17	Q	0.21	0.20	0.083
99-65-0	1,3-Dinitrobenzene	0.099	U Q M	0.11	0.099	0.037
118-96-7	2,4,6-Trinitrotoluene	5.5	Q	0.11	0.099	0.045
121-14-2	2,4-Dinitrotoluene	0.073	J Q M	0.099	0.079	0.027
606-20-2	2,6-Dinitrotoluene	0.079	U Q	0.099	0.079	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	1.8	Q	0.11	0.099	0.050
88-72-2	2-Nitrotoluene	0.20	U Q	0.21	0.20	0.085
99-08-1	3-Nitrotoluene	0.40	U Q	0.40	0.40	0.19
19406-51-0	4-Amino-2,6-dinitrotoluene	1.5	Q	0.15	0.12	0.057
2691-41-0	HMX	0.56	Q J1 M	0.21	0.20	0.087
5755-27-1	MNX	0.40	U M	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U Q	0.21	0.20	0.090
121-82-4	RDX	0.95	Q J1	0.21	0.20	0.051
479-45-8	Tetryl	0.099	U Q M	0.11	0.099	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	81	Q	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090063.D
Lims ID: 280-155225-A-6-A
Client ID: G0086-7
Sample Type: Client
Inject. Date: 10-Nov-2021 12:00:22 ALS Bottle#: 63 Worklist Smp#: 63
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155225-A-6-A
Misc. Info.: 280-0106333-063
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 12:58:47 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 12:57:53

Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/mL	Flags
4 HMX	1	6.591	6.592	-0.001	4805	0.0569	M
7 MNX	1		7.223			ND	U
8 RDX	1	7.598	7.598	0.000	10225	0.0962	
$ 10 1,2-Dinitrobenzene	1	8.565	8.572	-0.007	20871	0.1628	
11 1,3,5-Trinitrobenzene	1	8.685	8.685	0.000	382549	1.74	
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	10.958	10.971	-0.013	114067	0.5536	
18 4-Amino-2,6-dinitrotoluene	1	11.158	11.185	-0.027	23085	0.1511	
19 2-Amino-4,6-dinitrotoluene	1	11.411	11.438	-0.027	38006	0.1837	
20 2,6-Dinitrotoluene	1		11.605			ND	
21 2,4-Dinitrotoluene	1	11.758	11.771	-0.013	2106	0.007338	M
22 o-Nitrotoluene	1		12.645			ND	
23 p-Nitrotoluene	1	13.078	13.078	0.000	3677	0.0329	
24 m-Nitrotoluene	1		13.658			ND	

QC Flag Legend

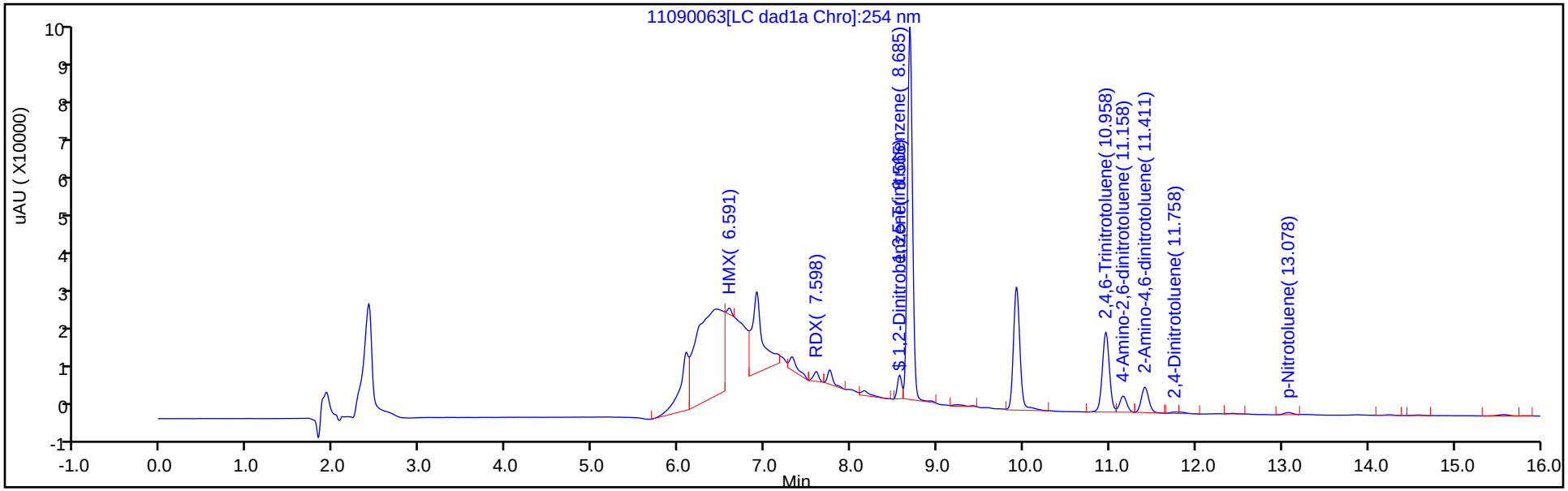
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 10-Nov-2021 12:58:53 Chrom Revision: 2.3 22-Sep-2021 15:38:46

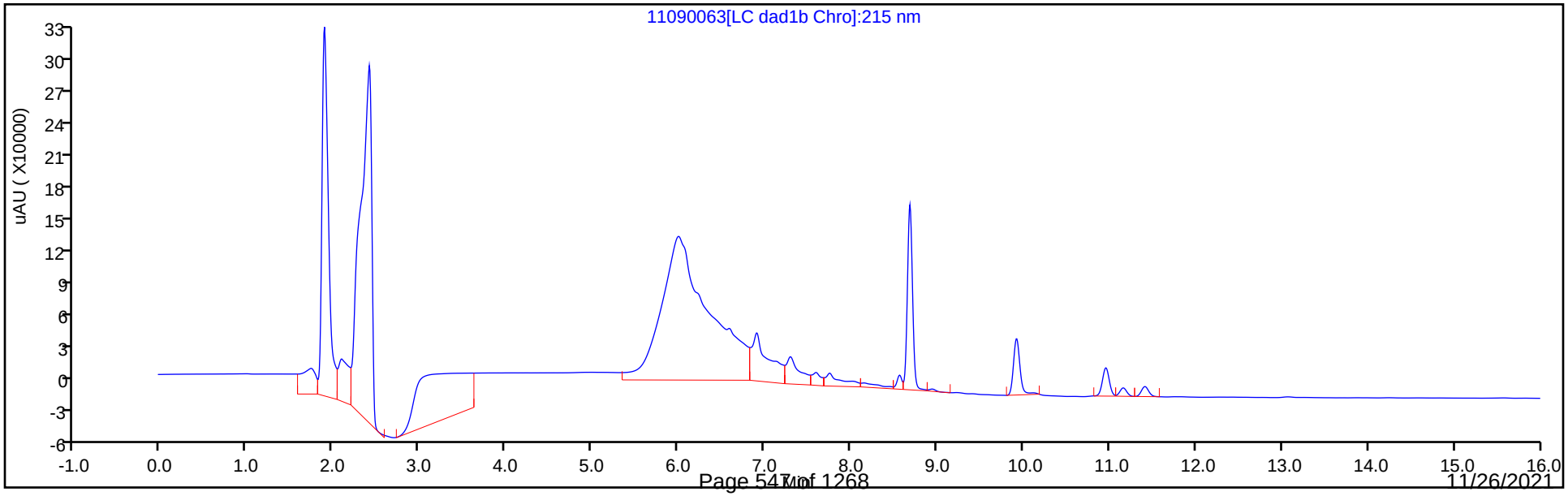
Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090063.d				
Injection Date:	10-Nov-2021 12:00:22	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155225-A-6-A	Lab Sample ID:	280-155225-6	Worklist Smp#:	63
Client ID:	G0086-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	63
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\11090063.D				
Lims ID:	280-155225-A-6-A				
Client ID:	G0086-7				
Sample Type:	Client				
Inject. Date:	10-Nov-2021 12:00:22	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155225-A-6-A				
Misc. Info.:	280-0106333-063				
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 12:58:47	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 12:57:53		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1628	81.39

User Disabled Compound Report

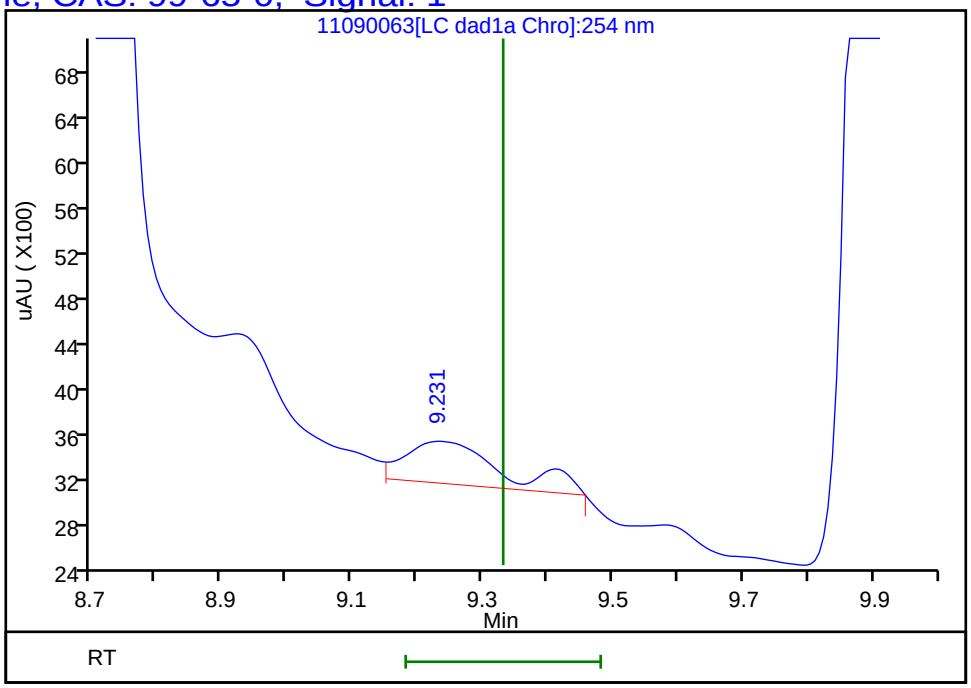
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090063.d
Injection Date: 10-Nov-2021 12:00:22 Instrument ID: CHHPLC_X3
Lims ID: 280-155225-A-6-A Lab Sample ID: 280-155225-6
Client ID: G0086-7
Operator ID: JZ ALS Bottle#: 63 Worklist Smp#: 63
Injection Vol: 100.0 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: 3859
Amount: 0.013023



Reviewer: zhangji, 10-Nov-2021 12:57:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

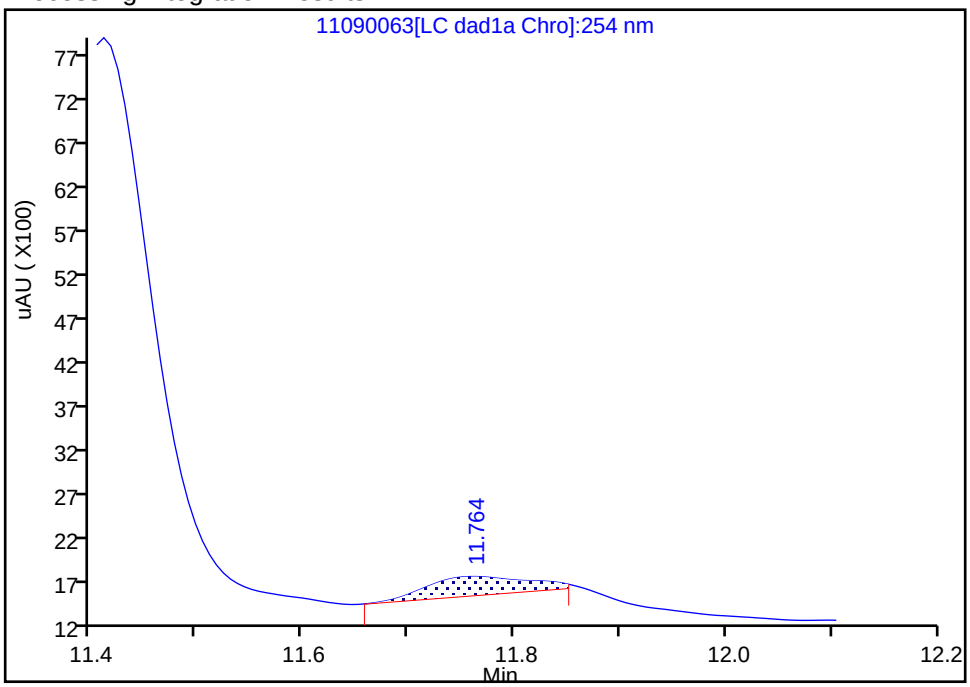
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090063.d				
Injection Date:	10-Nov-2021 12:00:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-6-A	Lab Sample ID:	280-155225-6		
Client ID:	G0086-7				
Operator ID:	JZ	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. 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

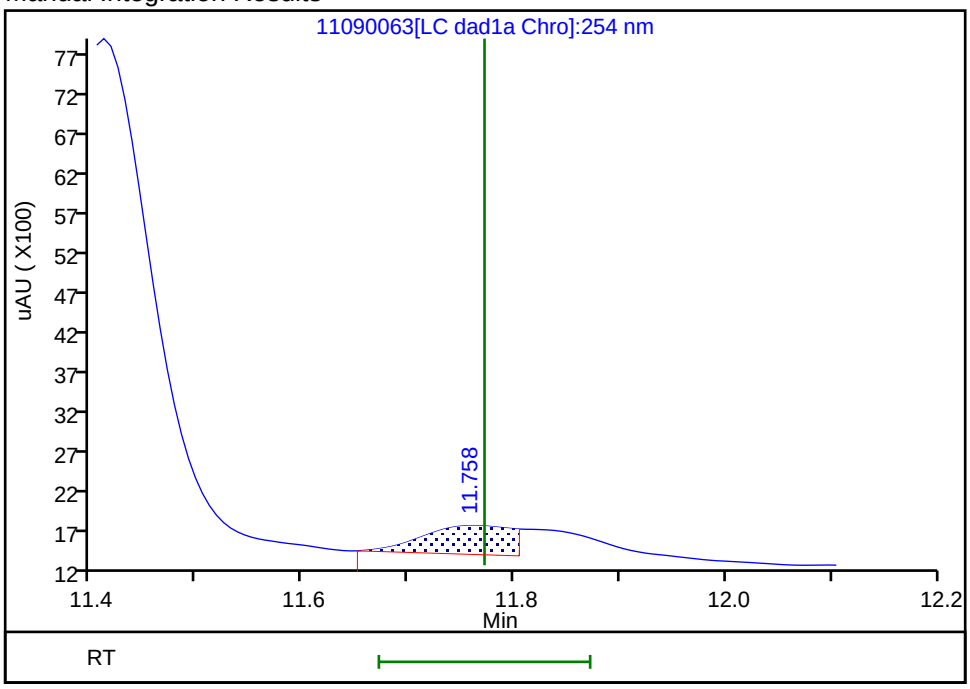
Processing Integration Results

RT: 11.76
Area: 1476
Amount: 0.005143
Amount Units: ug/mL



Manual Integration Results

RT: 11.76
Area: 2106
Amount: 0.007338
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:57:50

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

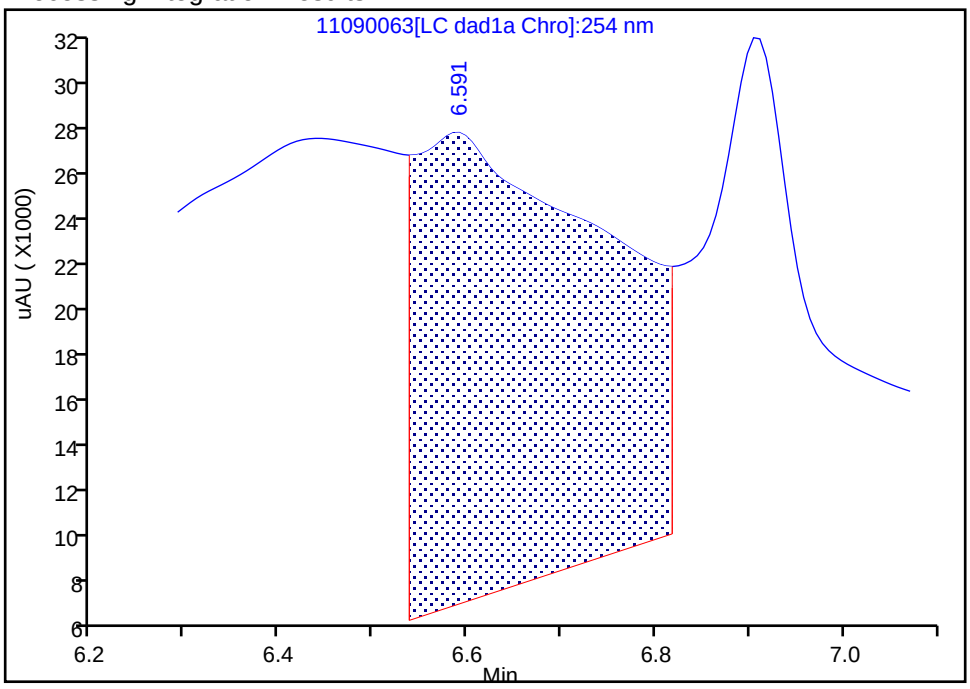
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090063.d				
Injection Date:	10-Nov-2021 12:00:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-6-A	Lab Sample ID:	280-155225-6		
Client ID:	G0086-7				
Operator ID:	JZ	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 ul	Dil. 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

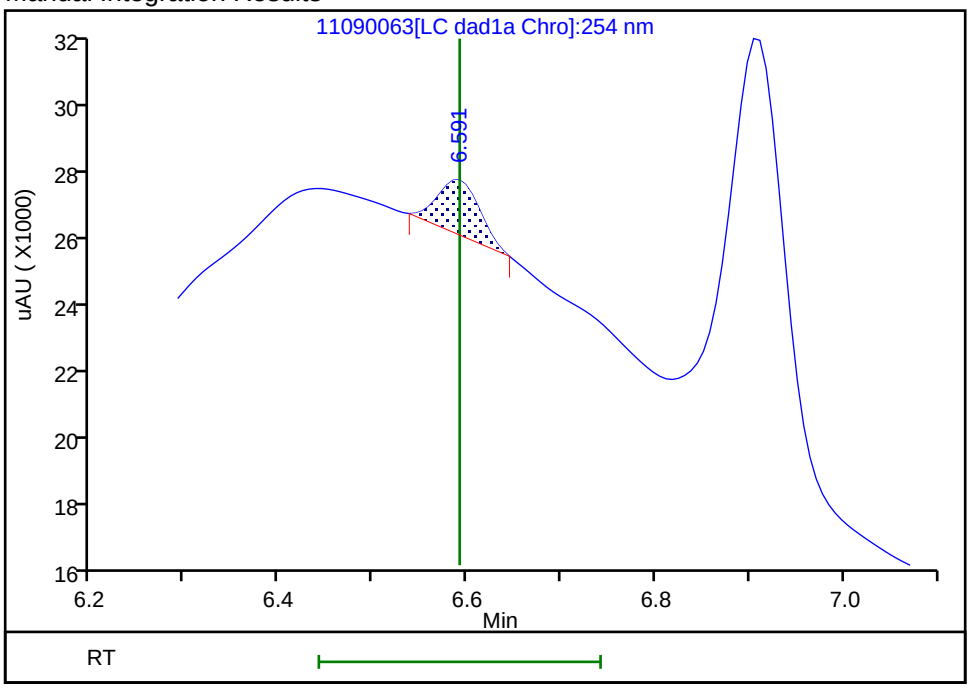
Processing Integration Results

RT: 6.59
Area: 269312
Amount: 3.190090
Amount Units: ug/mL



Manual Integration Results

RT: 6.59
Area: 4805
Amount: 0.056917
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:57:22

Audit Action: Manually Integrated Audit Reason: Baseline

User Disabled Compound Report

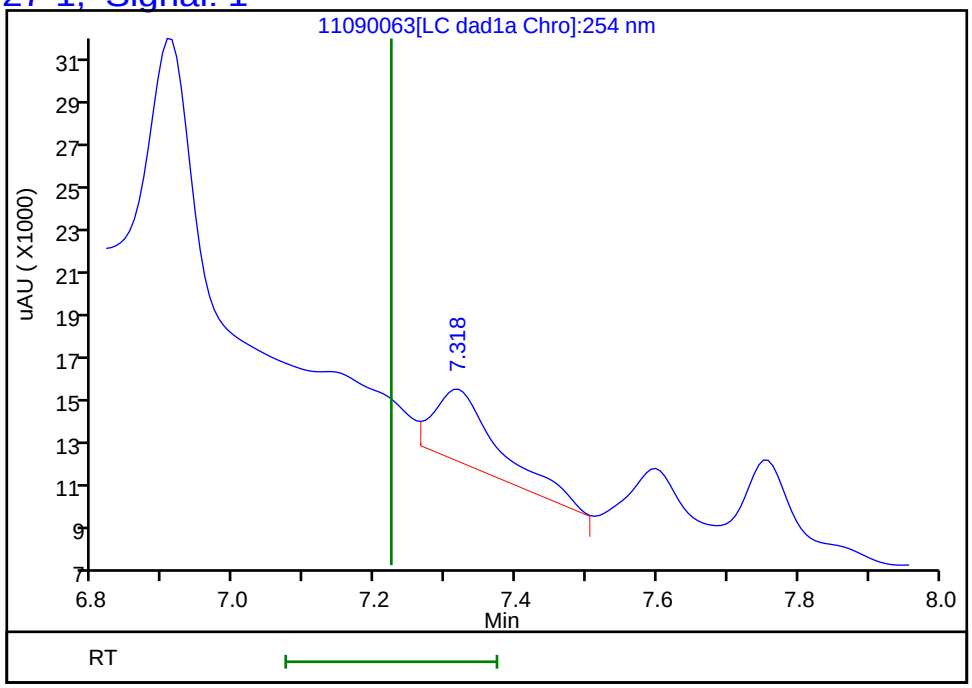
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090063.d

Injection Date:	10-Nov-2021 12:00:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-6-A	Lab Sample ID:	280-155225-6		
Client ID:	G0086-7				
Operator ID:	JZ	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 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: 7.32
Response: 21476
Amount: 0.164769



Reviewer: zhangji, 10-Nov-2021 12:57:53
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

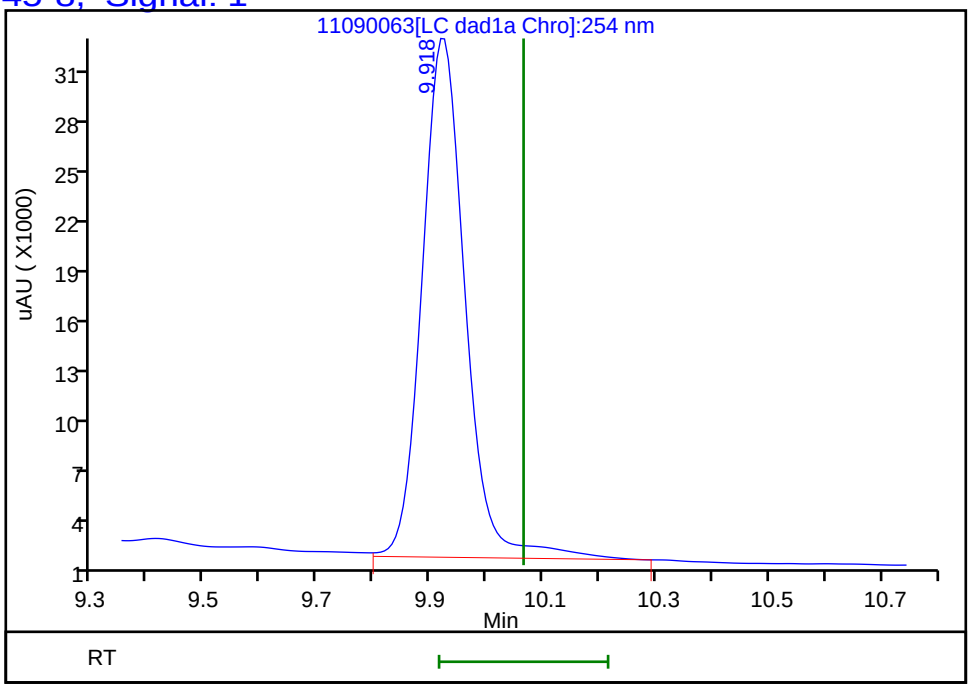
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090063.d				
Injection Date:	10-Nov-2021 12:00:22	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-6-A	Lab Sample ID:	280-155225-6		
Client ID:	G0086-7				
Operator ID:	JZ	ALS Bottle#:	63	Worklist Smp#:	63
Injection Vol:	100.0 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: 9.92
Response: 162963
Amount: 0.945151



Reviewer: zhangji, 10-Nov-2021 12:57:53
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.: 280-155225-1

SDG No.:

Client Sample ID: G0086-7 Lab Sample ID: 280-155225-6

Matrix: Water Lab File ID: 11100037.D

Analysis Method: 8330A Date Collected: 11/03/2021 15:05

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 504.3(mL) Date Analyzed: 11/11/2021 09:06

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.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-99-0	4-Nitrotoluene	0.40	U M	0.41	0.40	0.099
2691-41-0	*HMX*	*0.27*	*J1 M*	*0.21*	0.20	*0.087*
121-82-4	*RDX*	*0.63*	*J1*	*0.21*	0.20	*0.051*

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_X5\20211110-106378.b\11100037.D
Lims ID: 280-155225-A-6-A
Client ID: G0086-7
Sample Type: Client
Inject. Date: 11-Nov-2021 09:06:00 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155225-A-6-A
Misc. Info.: 280-0106378-037
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 19:12:38 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 19:10:52

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	5272	0.0270	M
6 MNX	1	7.377	7.367	0.010	8158	0.0308	
8 RDX	1	8.791	8.803	-0.012	12890	0.0631	
9 Nitrobenzene	1		11.856			ND	
$ 10 1,2-Dinitrobenzene	1	12.944	12.949	-0.005	51129	0.1925	M
12 1,3-Dinitrobenzene	1		15.376			ND	7
14 o-Nitrotoluene	1		16.603			ND	U
16 p-Nitrotoluene	1		16.889			ND	U
17 4-Amino-2,6-dinitrotoluene	1	17.344	17.343	0.001	51070	0.1721	
18 m-Nitrotoluene	1		17.856			ND	
19 2-Amino-4,6-dinitrotoluene	1	18.237	18.236	0.001	86986	0.2199	
20 1,3,5-Trinitrobenzene	1	18.771	18.776	-0.005	754652	1.84	
21 2,6-Dinitrotoluene	1		20.009			ND	
22 2,4-Dinitrotoluene	1	20.444	20.476	-0.032	5415	0.009572	
23 Tetryl	1		24.070			ND	
24 2,4,6-Trinitrotoluene	1	25.044	25.063	-0.019	204594	0.5463	

QC Flag Legend

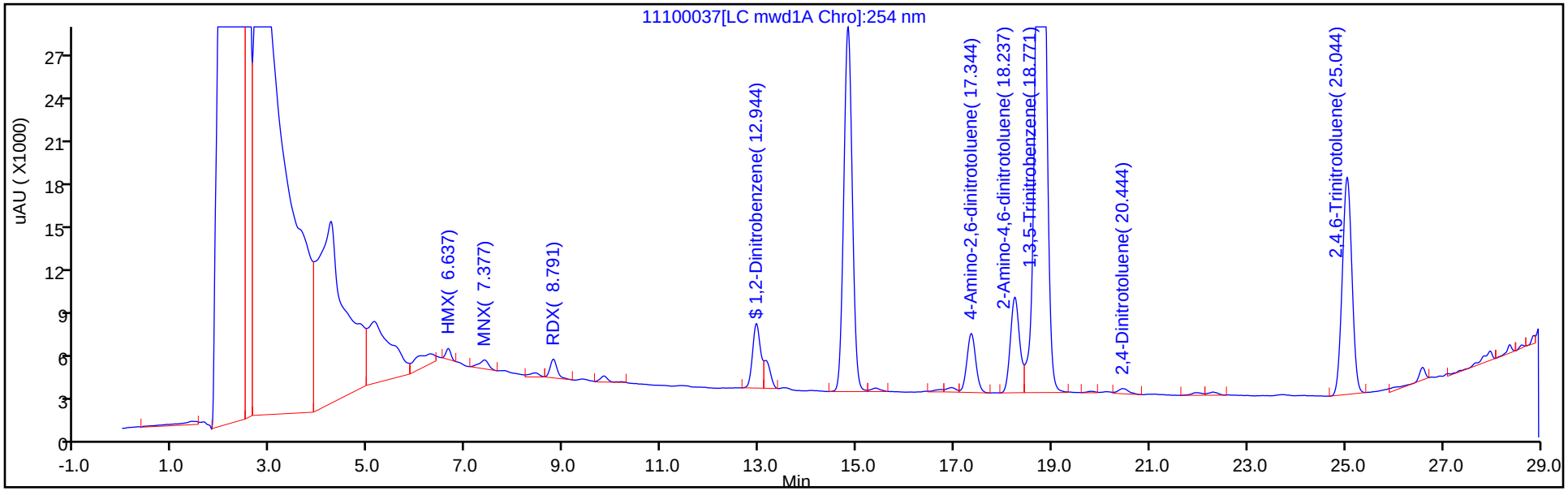
Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 11-Nov-2021 19:12:40 Chrom Revision: 2.3 22-Sep-2021 15:38:46

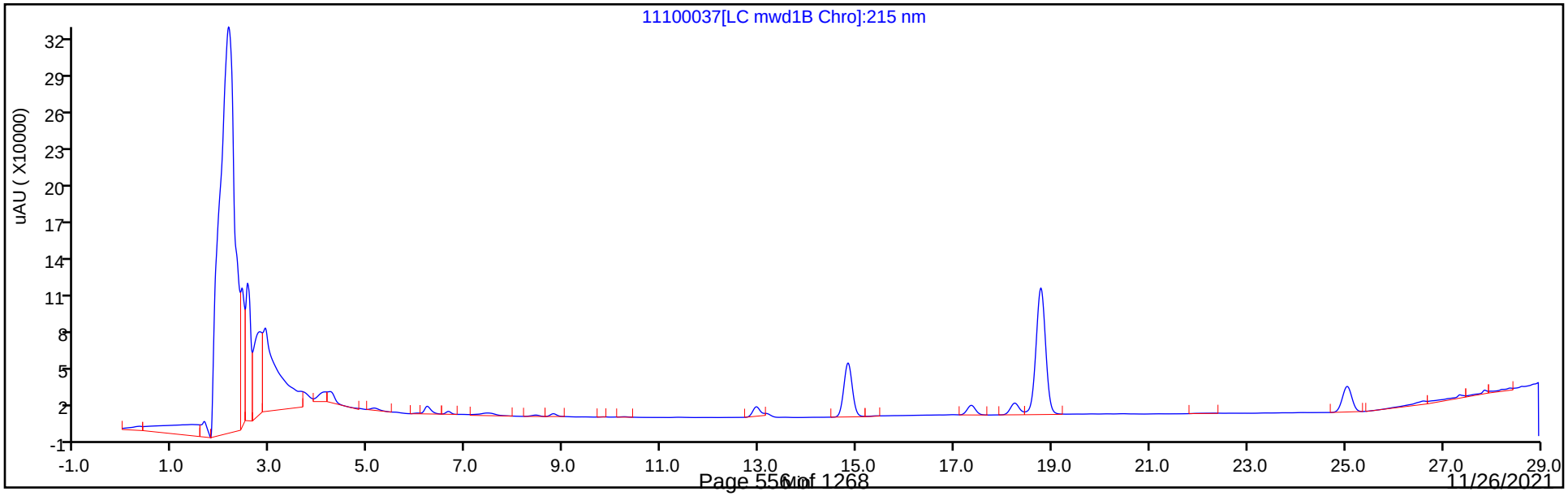
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100037.D				
Injection Date:	11-Nov-2021 09:06:00	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155225-A-6-A	Lab Sample ID:	280-155225-6	Worklist Smp#:	37
Client ID:	G0086-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
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\11100037.D				
Lims ID:	280-155225-A-6-A				
Client ID:	G0086-7				
Sample Type:	Client				
Inject. Date:	11-Nov-2021 09:06:00	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155225-A-6-A				
Misc. Info.:	280-0106378-037				
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 19:12:38	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 19:10:52		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1925	96.23

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

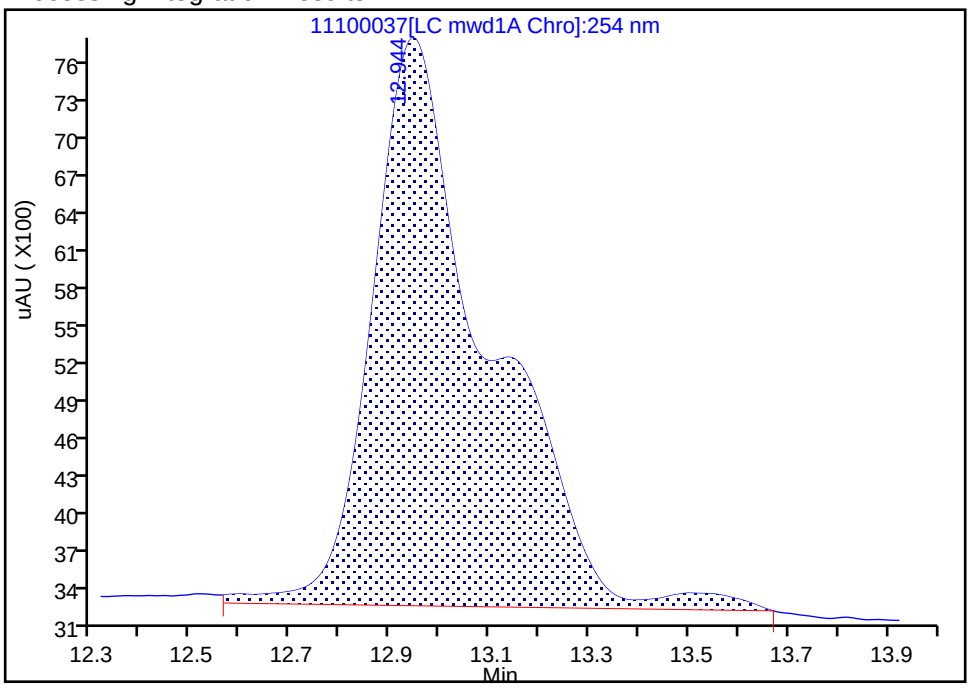
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100037.D				
Injection Date:	11-Nov-2021 09:06:00	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-6-A	Lab Sample ID:	280-155225-6		
Client ID:	G0086-7				
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

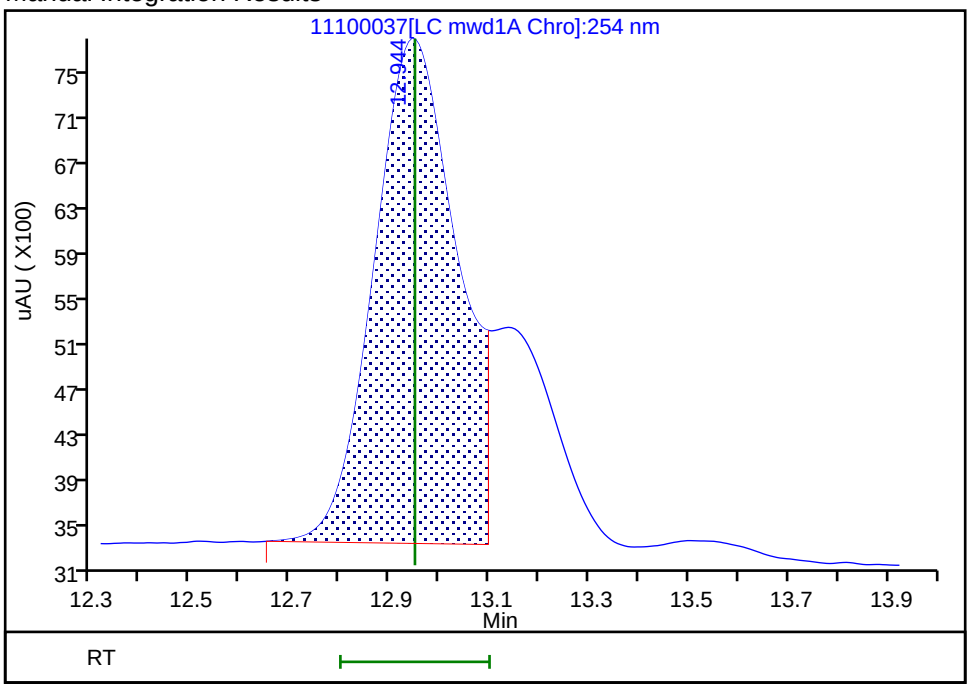
Processing Integration Results

RT: 12.94
Area: 73159
Amount: 0.275387
Amount Units: ug/ml



Manual Integration Results

RT: 12.94
Area: 51129
Amount: 0.192461
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:10:26

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

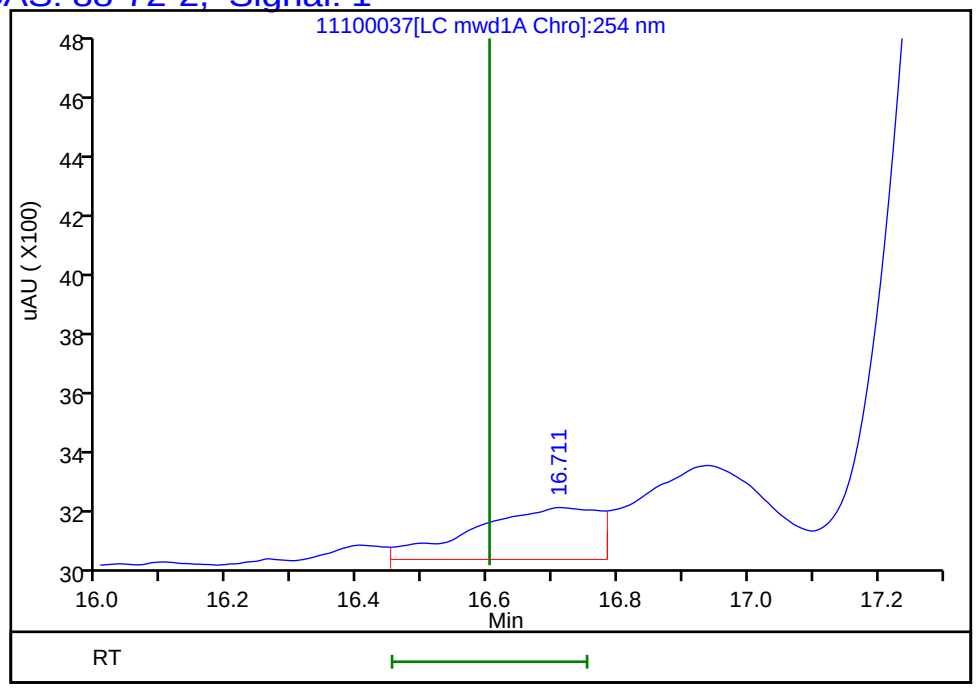
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100037.D				
Injection Date:	11-Nov-2021 09:06:00	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-6-A	Lab Sample ID:	280-155225-6		
Client ID:	G0086-7				
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.71
Response: 2186
Amount: 0.008780



Reviewer: zhangji, 11-Nov-2021 19:10:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

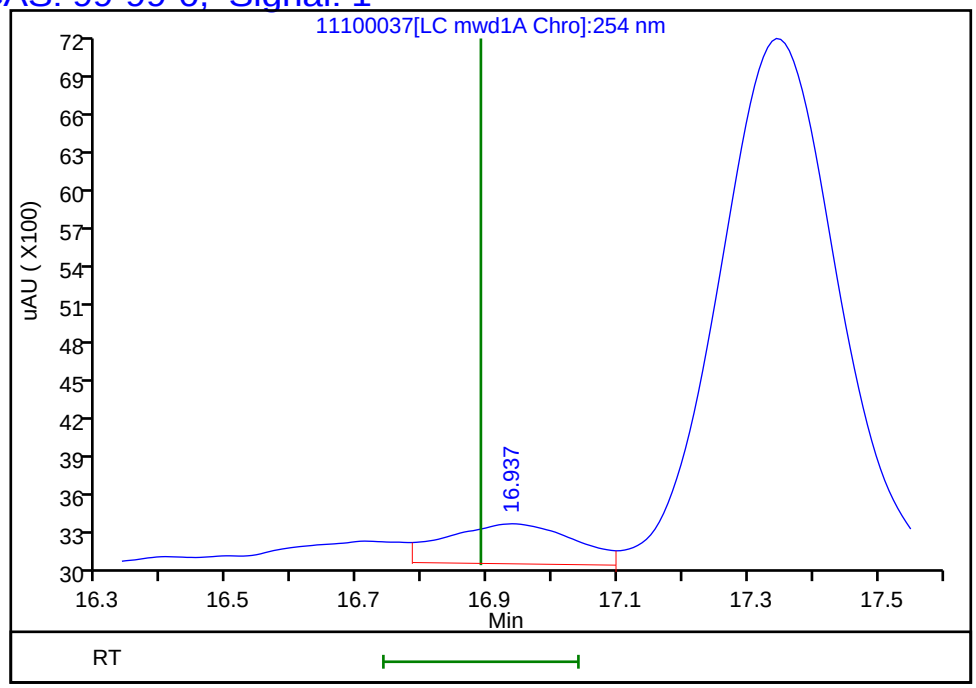
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100037.D				
Injection Date:	11-Nov-2021 09:06:00	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-6-A	Lab Sample ID:	280-155225-6		
Client ID:	G0086-7				
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

16 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 16.94
Response: 4147
Amount: 0.019094



Reviewer: zhangji, 11-Nov-2021 19:10:52
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

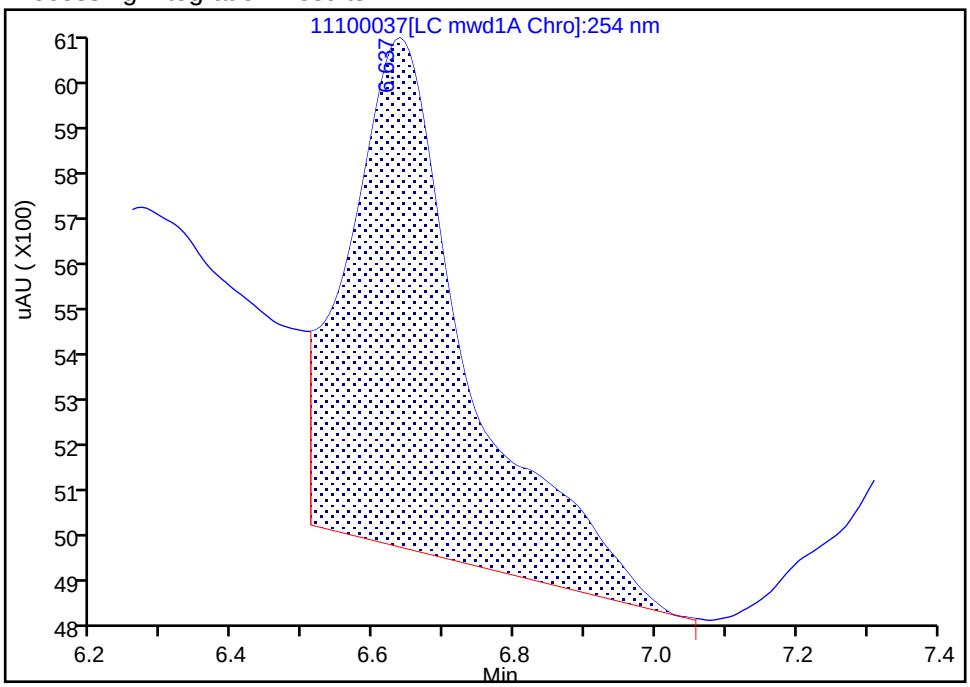
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100037.D				
Injection Date:	11-Nov-2021 09:06:00	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-6-A	Lab Sample ID:	280-155225-6		
Client ID:	G0086-7				
Operator ID:	JZ	ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

5 HMX, CAS: 2691-41-0

Signal: 1

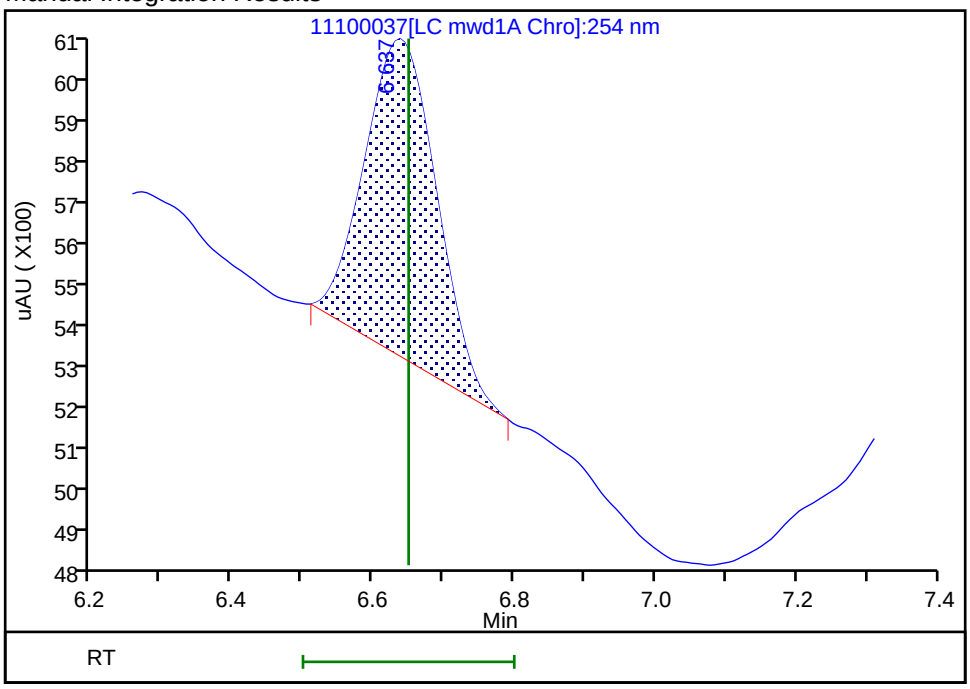
Processing Integration Results

RT: 6.64
Area: 12664
Amount: 0.073585
Amount Units: ug/ml



Manual Integration Results

RT: 6.64
Area: 5272
Amount: 0.027028
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:10:33

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Client Sample ID: PZ017R-7 Lab Sample ID: 280-155225-7

Matrix: Water Lab File ID: 11090064.D

Analysis Method: 8330A Date Collected: 11/04/2021 09:30

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 509.2(mL) Date Analyzed: 11/10/2021 12:23

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 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	0.083
99-65-0	1,3-Dinitrobenzene	0.098	U	0.11	0.098	0.036
118-96-7	2,4,6-Trinitrotoluene	0.37	J1 M	0.11	0.098	0.044
121-14-2	2,4-Dinitrotoluene	0.079	U	0.098	0.079	0.027
606-20-2	2,6-Dinitrotoluene	0.079	U	0.098	0.079	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.098	U M	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	0.47	J1 M	0.15	0.12	0.057
99-99-0	4-Nitrotoluene	0.39	U M	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 M	2.0	0.39	0.15
98-95-3	Nitrobenzene	0.20	U M	0.21	0.20	0.089
121-82-4	RDX	0.20	U M	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	105	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090064.D
Lims ID: 280-155225-A-7-A
Client ID: PZ017R-7
Sample Type: Client
Inject. Date: 10-Nov-2021 12:23:19 ALS Bottle#: 64 Worklist Smp#: 64
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155225-A-7-A
Misc. Info.: 280-0106333-064
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 14:21:06 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 13:13:24

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	U
$ 10 1,2-Dinitrobenzene	1	8.568	8.572	-0.004	26972	0.2104	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	U
17 2,4,6-Trinitrotoluene	1	10.948	10.971	-0.023	7699	0.0374	M
18 4-Amino-2,6-dinitrotoluene	1	11.161	11.185	-0.024	7274	0.0476	M
19 2-Amino-4,6-dinitrotoluene	1		11.438			ND	MU
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	U
24 m-Nitrotoluene	1		13.658			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

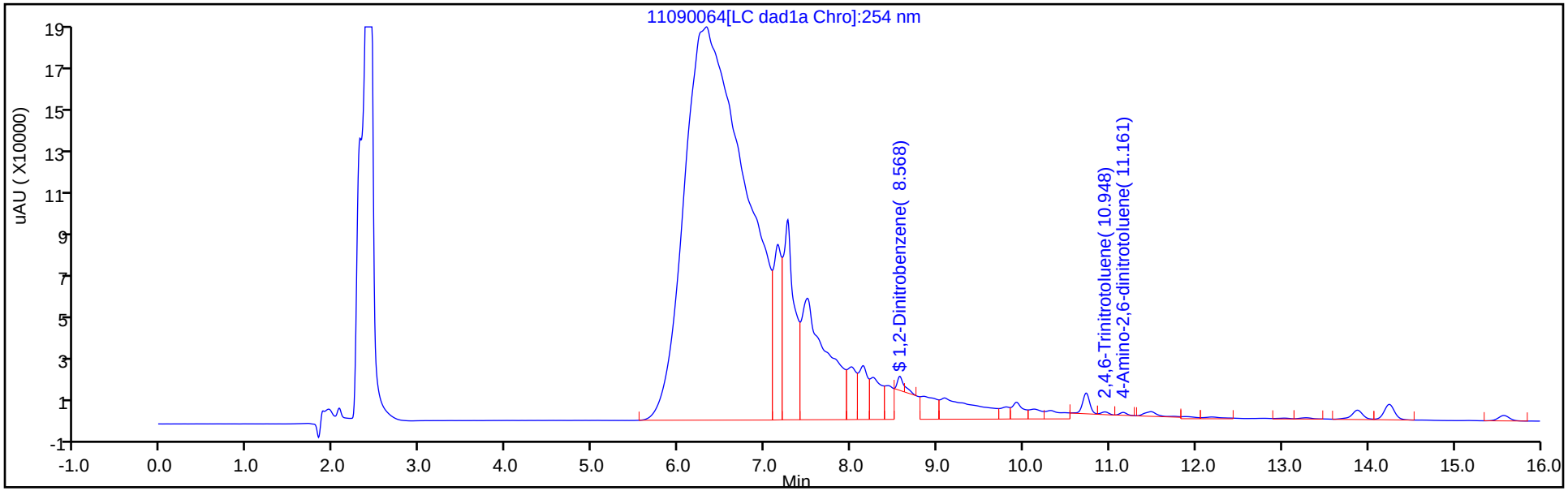
Report Date: 10-Nov-2021 14:21:10 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

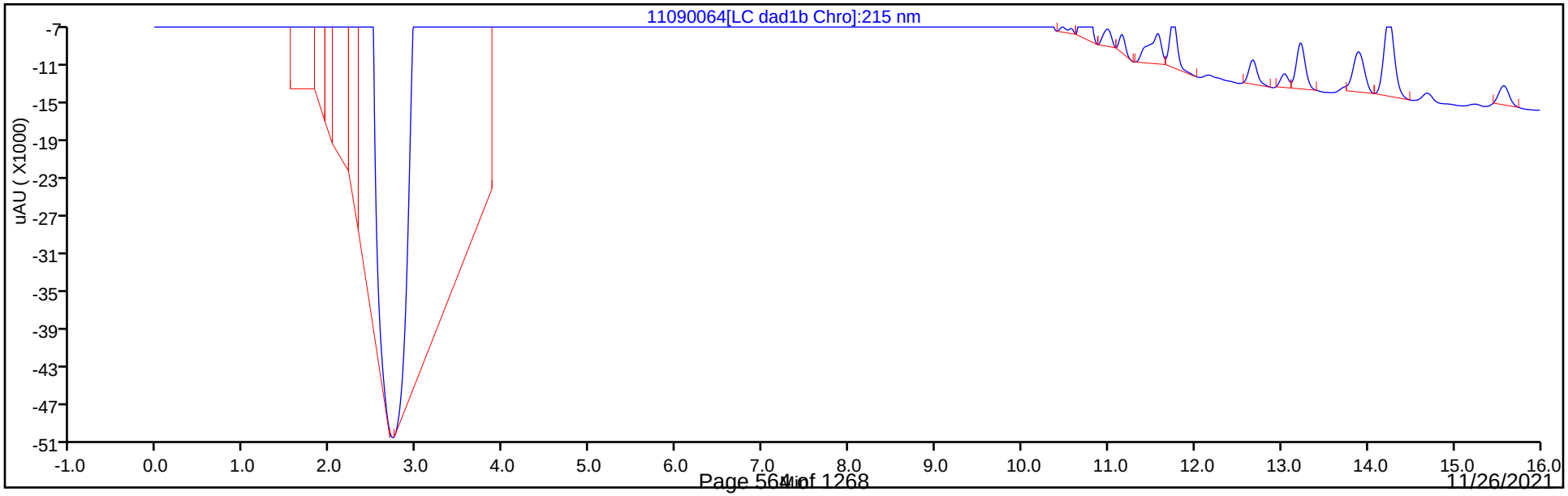
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090064.d

Injection Date:	10-Nov-2021 12:23:19	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155225-A-7-A	Lab Sample ID:	280-155225-7	Worklist Smp#:	64
Client ID:	PZ017R-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	64
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\11090064.D				
Lims ID:	280-155225-A-7-A				
Client ID:	PZ017R-7				
Sample Type:	Client				
Inject. Date:	10-Nov-2021 12:23:19	ALS Bottle#:	64	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155225-A-7-A				
Misc. Info.:	280-0106333-064				
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 14:21:06	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 13:13:24		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2104	105.18

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

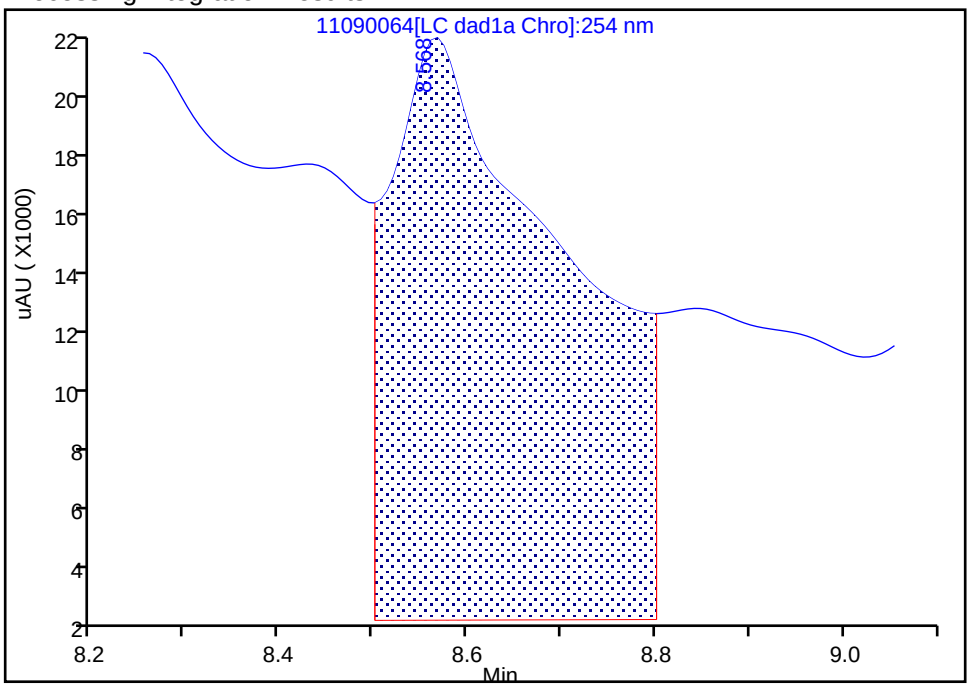
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090064.d				
Injection Date:	10-Nov-2021 12:23:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-7-A	Lab Sample ID:	280-155225-7		
Client ID:	PZ017R-7				
Operator ID:	JZ	ALS Bottle#:	64	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. 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

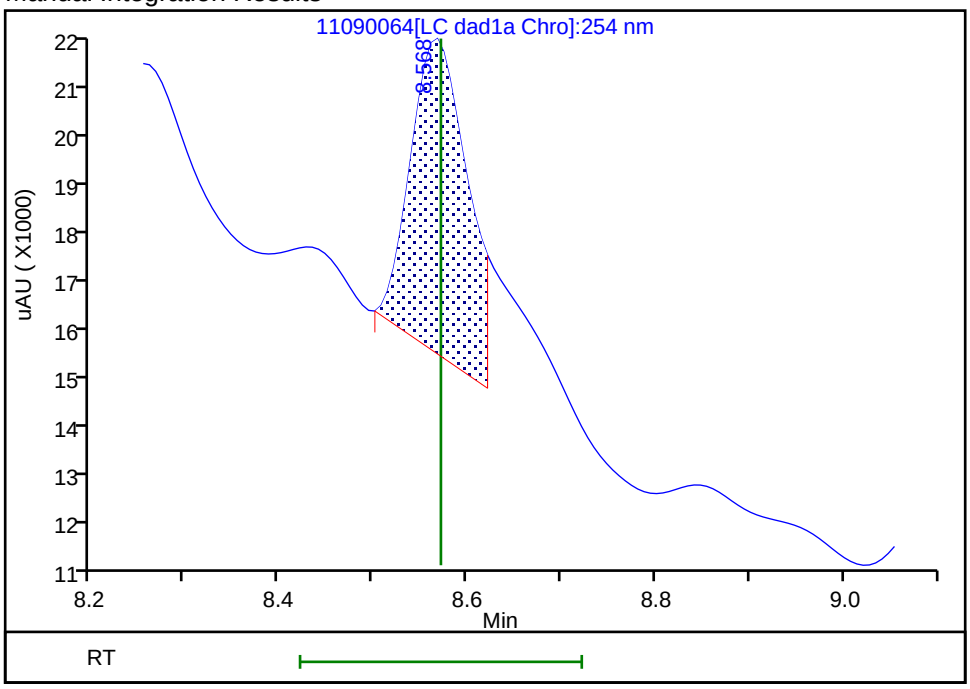
Processing Integration Results

RT: 8.57
Area: 255595
Amount: 1.993453
Amount Units: ug/mL



Manual Integration Results

RT: 8.57
Area: 26972
Amount: 0.210362
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:58:18

Audit Action: Split an Integrated Peak Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

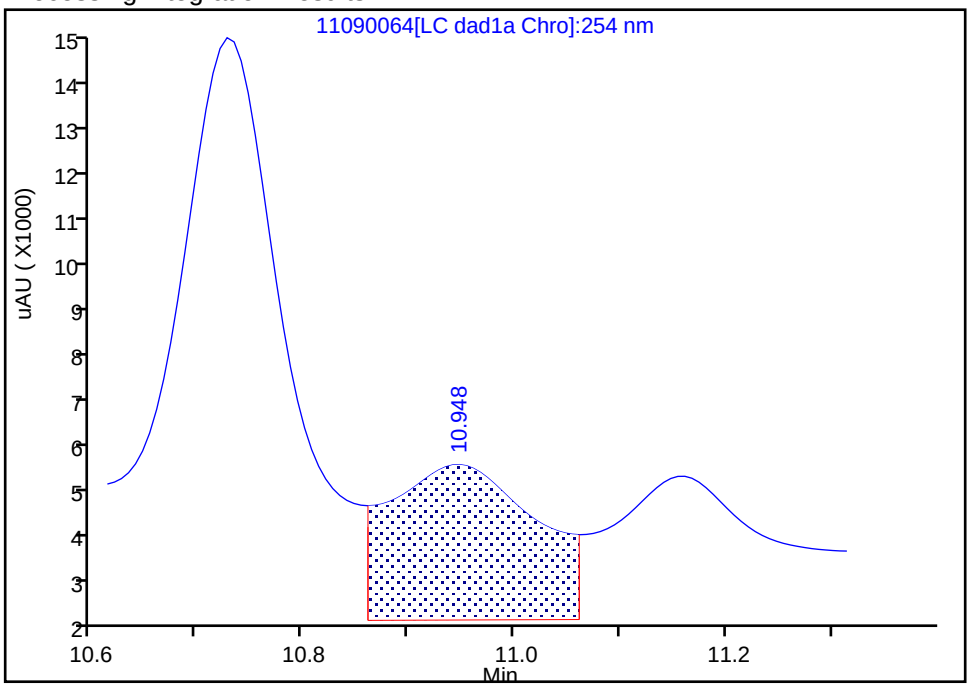
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090064.d				
Injection Date:	10-Nov-2021 12:23:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-7-A	Lab Sample ID:	280-155225-7		
Client ID:	PZ017R-7				
Operator ID:	JZ	ALS Bottle#:	64	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

17 2,4,6-Trinitrotoluene, CAS: 118-96-7

Signal: 1

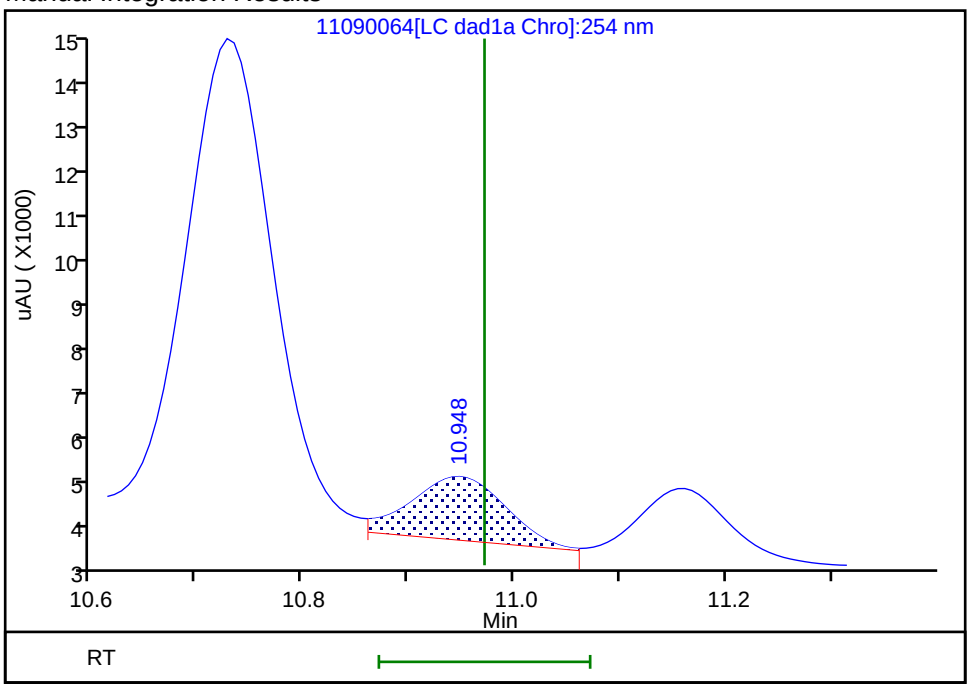
Processing Integration Results

RT: 10.95
Area: 29941
Amount: 0.145318
Amount Units: ug/mL



Manual Integration Results

RT: 10.95
Area: 7699
Amount: 0.037367
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:58:29

Audit Action: Assigned New Baseline Audit Reason: Baseline

User Disabled Compound Report

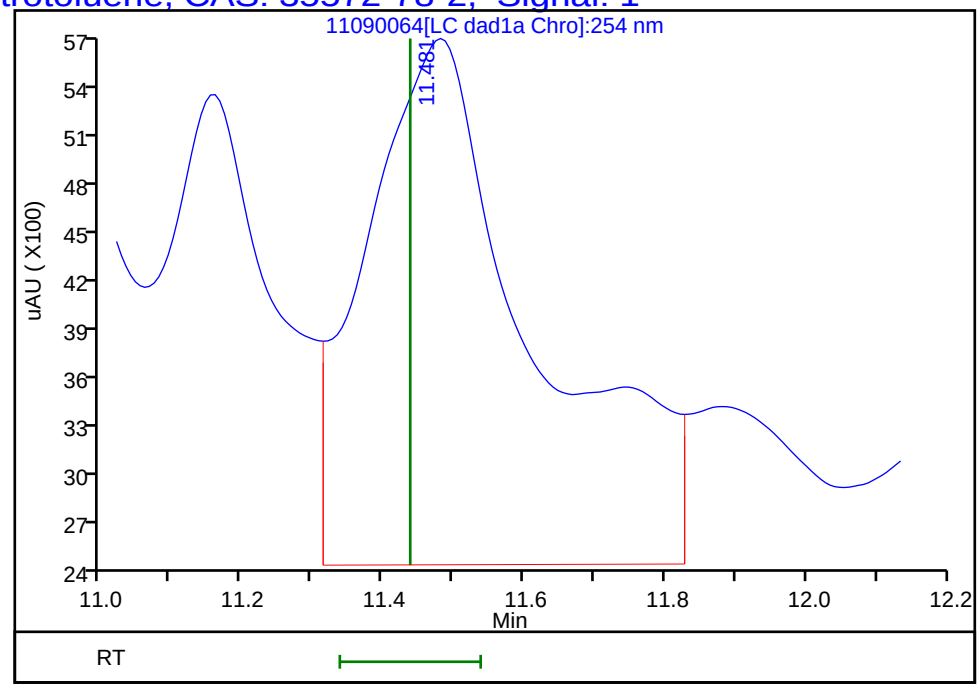
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090064.d
Injection Date: 10-Nov-2021 12:23:19 Instrument ID: CHHPLC_X3
Lims ID: 280-155225-A-7-A Lab Sample ID: 280-155225-7
Client ID: PZ017R-7
Operator ID: JZ ALS Bottle#: 64 Worklist Smp#: 64
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.48
Response: 53428
Amount: 0.258198



Reviewer: zhangji, 10-Nov-2021 13:13:24
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

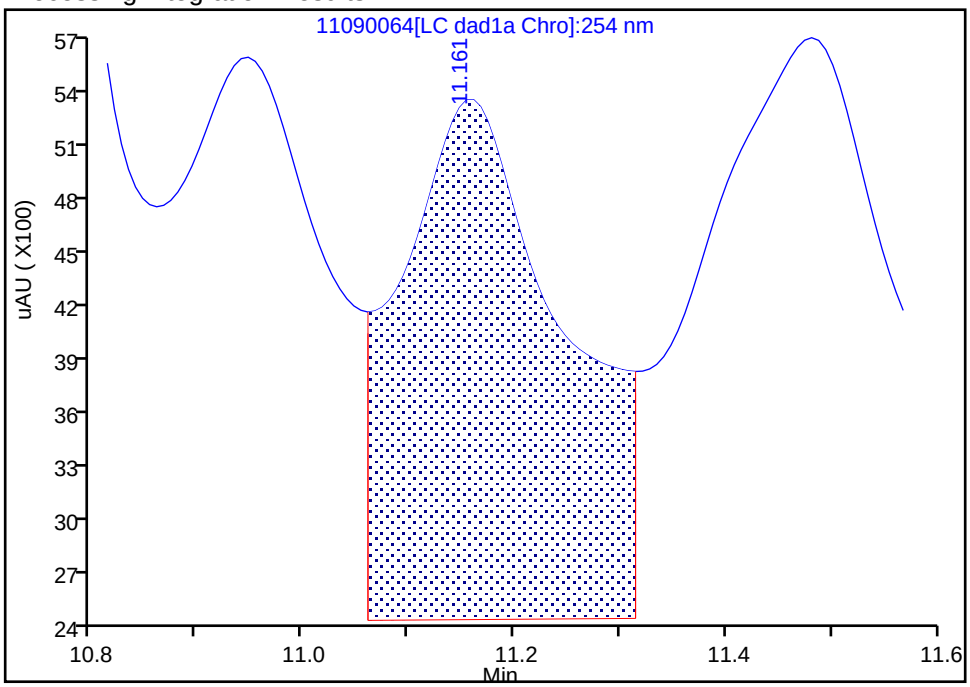
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090064.d				
Injection Date:	10-Nov-2021 12:23:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-7-A	Lab Sample ID:	280-155225-7		
Client ID:	PZ017R-7				
Operator ID:	JZ	ALS Bottle#:	64	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

18 4-Amino-2,6-dinitrotoluene, CAS: 19406-51-0

Signal: 1

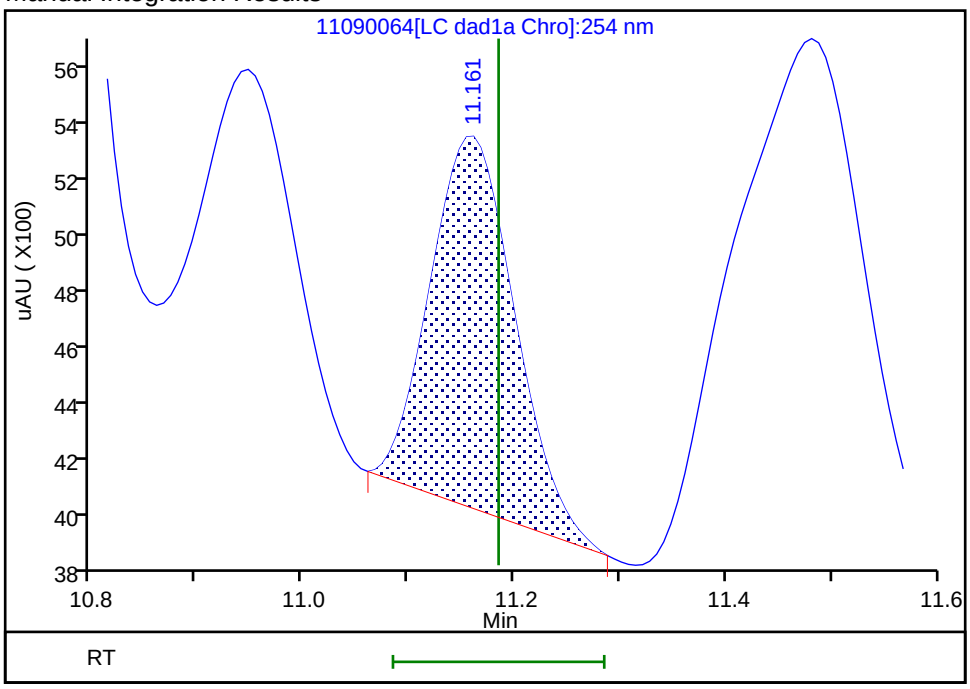
Processing Integration Results

RT: 11.16
Area: 30625
Amount: 0.200467
Amount Units: ug/mL



Manual Integration Results

RT: 11.16
Area: 7274
Amount: 0.047615
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 12:58:37

Audit Action: Manually Integrated Audit Reason: Baseline

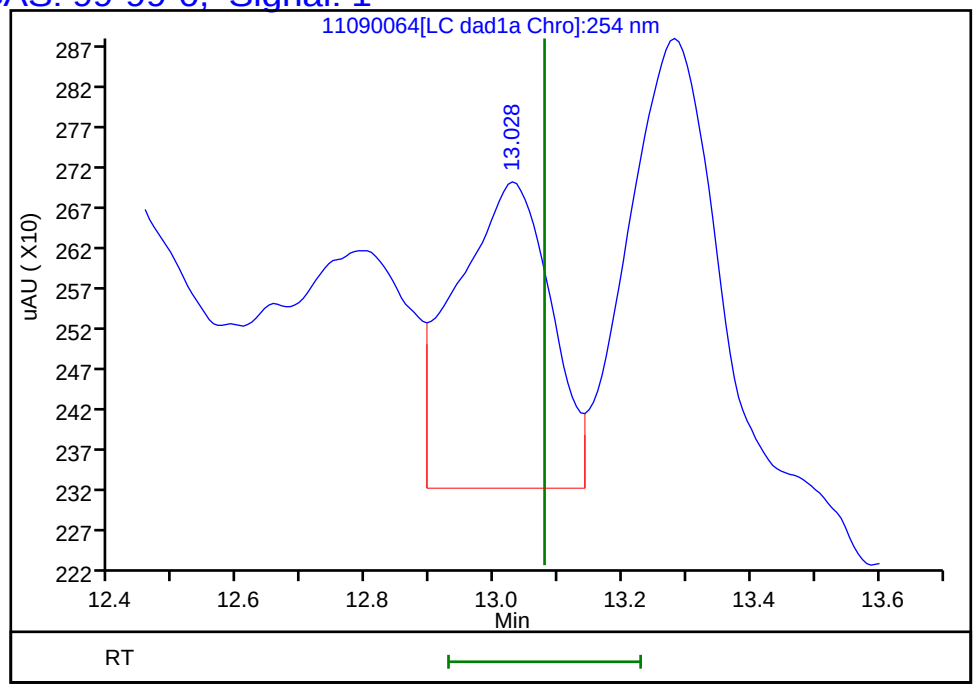
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090064.d				
Injection Date:	10-Nov-2021 12:23:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-7-A	Lab Sample ID:	280-155225-7		
Client ID:	PZ017R-7				
Operator ID:	JZ	ALS Bottle#:	64	Worklist Smp#:	64
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.03
Response: 3876
Amount: 0.034634



Reviewer: zhangji, 10-Nov-2021 13:13:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

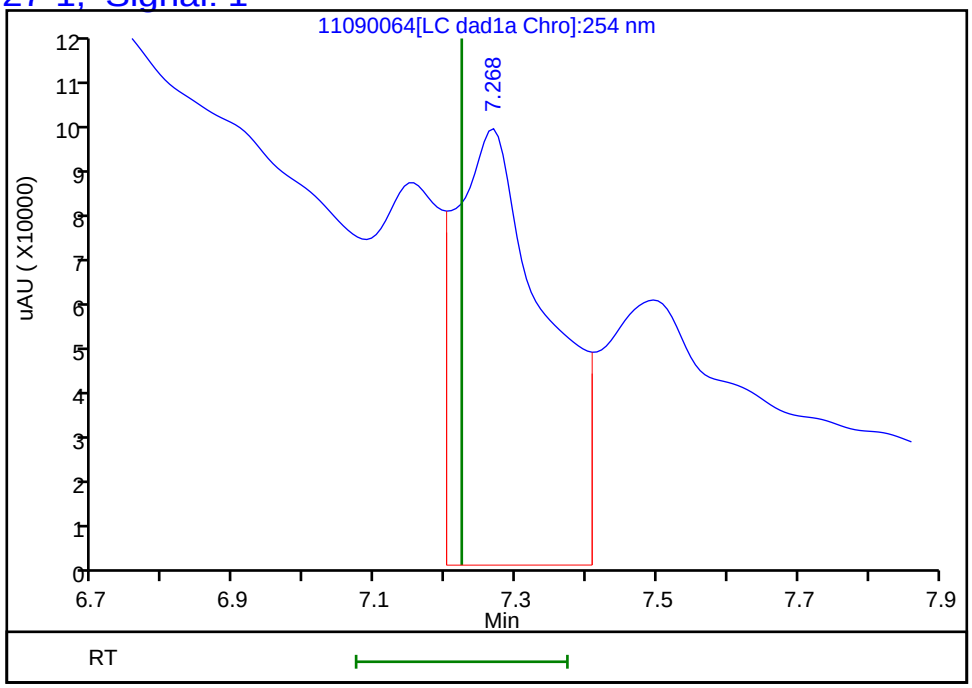
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090064.d
Injection Date: 10-Nov-2021 12:23:19 Instrument ID: CHHPLC_X3
Lims ID: 280-155225-A-7-A Lab Sample ID: 280-155225-7
Client ID: PZ017R-7
Operator ID: JZ ALS Bottle#: 64 Worklist Smp#: 64
Injection Vol: 100.0 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: 7.27
Response: 817887
Amount: 6.275011



Reviewer: zhangji, 10-Nov-2021 13:13:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

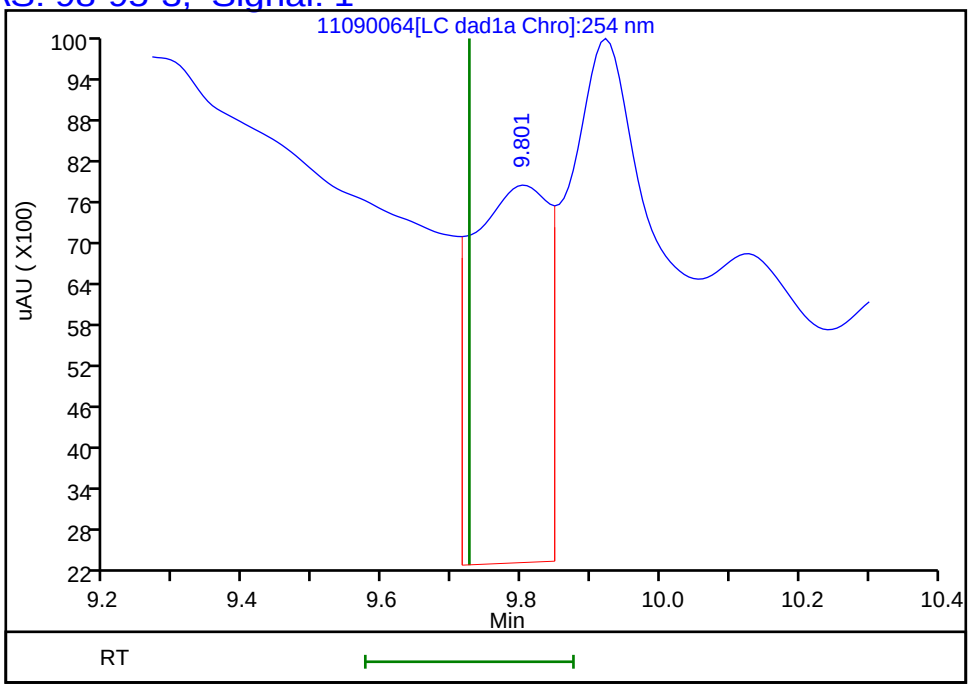
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090064.d
Injection Date: 10-Nov-2021 12:23:19 Instrument ID: CHHPLC_X3
Lims ID: 280-155225-A-7-A Lab Sample ID: 280-155225-7
Client ID: PZ017R-7
Operator ID: JZ ALS Bottle#: 64 Worklist Smp#: 64
Injection Vol: 100.0 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: 9.80
Response: 41612
Amount: 0.213082



Reviewer: zhangji, 10-Nov-2021 13:13:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

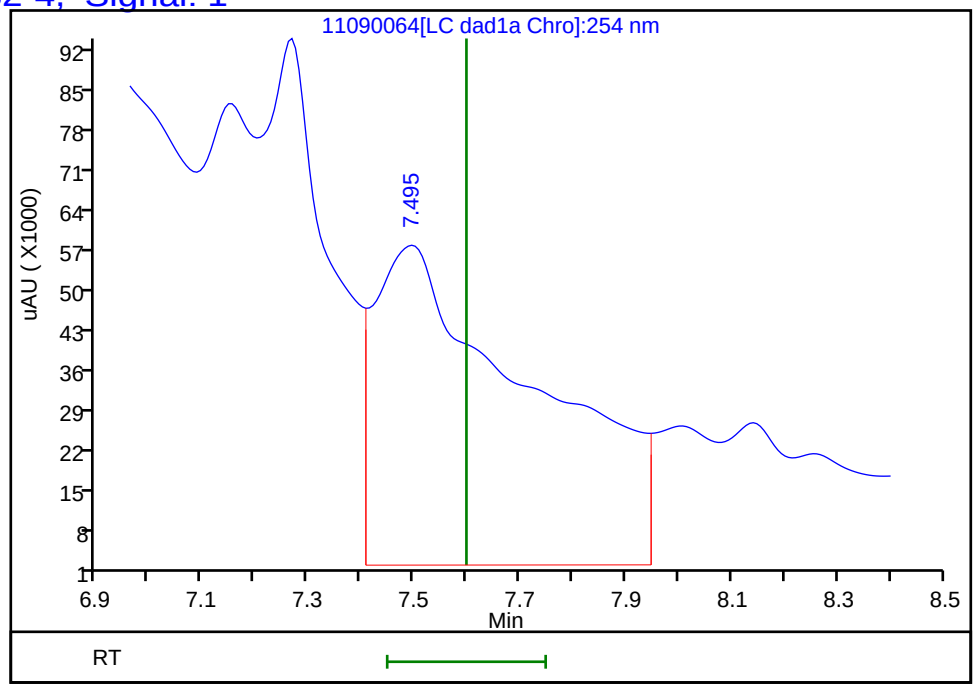
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090064.d
Injection Date: 10-Nov-2021 12:23:19 Instrument ID: CHHPLC_X3
Lims ID: 280-155225-A-7-A Lab Sample ID: 280-155225-7
Client ID: PZ017R-7
Operator ID: JZ ALS Bottle#: 64 Worklist Smp#: 64
Injection Vol: 100.0 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: 7.49
Response: 1156454
Amount: 10.883098



Reviewer: zhangji, 10-Nov-2021 13:13:24
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

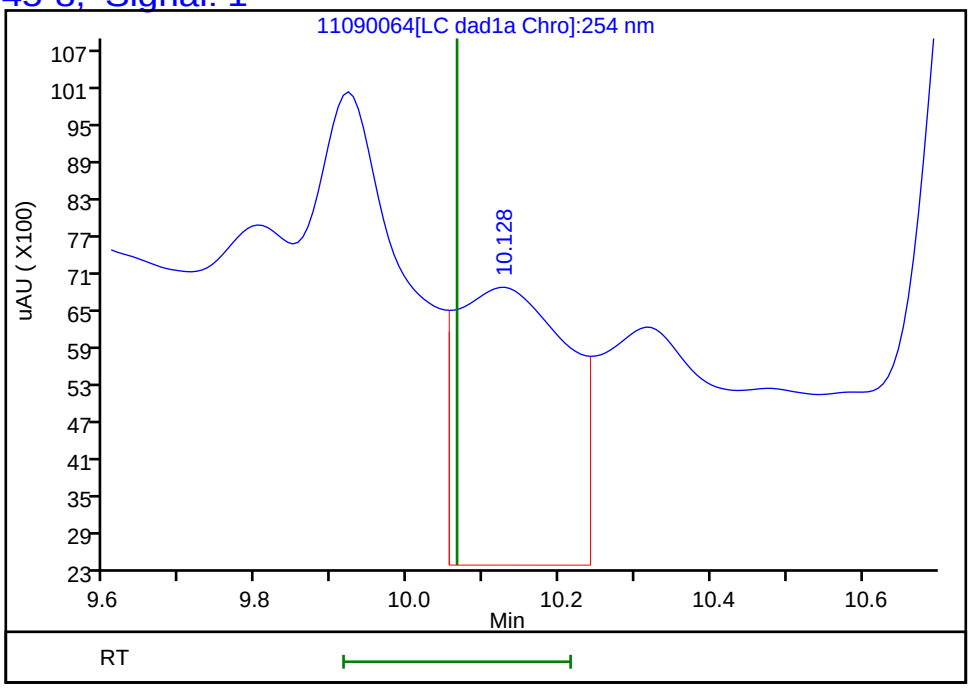
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090064.d				
Injection Date:	10-Nov-2021 12:23:19	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-7-A	Lab Sample ID:	280-155225-7		
Client ID:	PZ017R-7				
Operator ID:	JZ	ALS Bottle#:	64	Worklist Smp#:	64
Injection Vol:	100.0 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: 45239
Amount: 0.262377



Reviewer: zhangji, 10-Nov-2021 13:13:24
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.: 280-155225-1

SDG No.:

Client Sample ID: PZ017R-7 Lab Sample ID: 280-155225-7

Matrix: Water Lab File ID: 11100038.D

Analysis Method: 8330A Date Collected: 11/04/2021 09:30

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 509.2(mL) Date Analyzed: 11/11/2021 09:41

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: Luna-phenylhex ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 556958 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
118-96-7	*2,4,6-Trinitrotoluene*	*0.20*	*J1*	*0.11*	0.098	*0.044*
19406-51-0	*4-Amino-2,6-dinitrotoluene*	*4.1*	*J1 B*	*0.15*	0.12	*0.057*

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	90	*M*	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100038.D
Lims ID: 280-155225-A-7-A
Client ID: PZ017R-7
Sample Type: Client
Inject. Date: 11-Nov-2021 09:41:00 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155225-A-7-A
Misc. Info.: 280-0106378-038
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 19:12:38 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 19:11:21

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.622	6.650	-0.028	16886	0.1002	
	6 MNX	1		7.367			ND	
	8 RDX	1		8.803			ND	U
	9 Nitrobenzene	1		11.856			ND	U
$	10 1,2-Dinitrobenzene	1	12.915	12.949	-0.034	47555	0.1790	M
	12 1,3-Dinitrobenzene	1		15.376			ND	
	14 o-Nitrotoluene	1		16.603			ND	U
	16 p-Nitrotoluene	1		16.889			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.262	17.343	-0.081	124439	0.4194	
	18 m-Nitrotoluene	1	17.795	17.856	-0.061	2426	0.008714	
	19 2-Amino-4,6-dinitrotoluene	1	18.255	18.236	0.019	39155	0.0972	
	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	25.035	25.063	-0.028	9273	0.0207	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

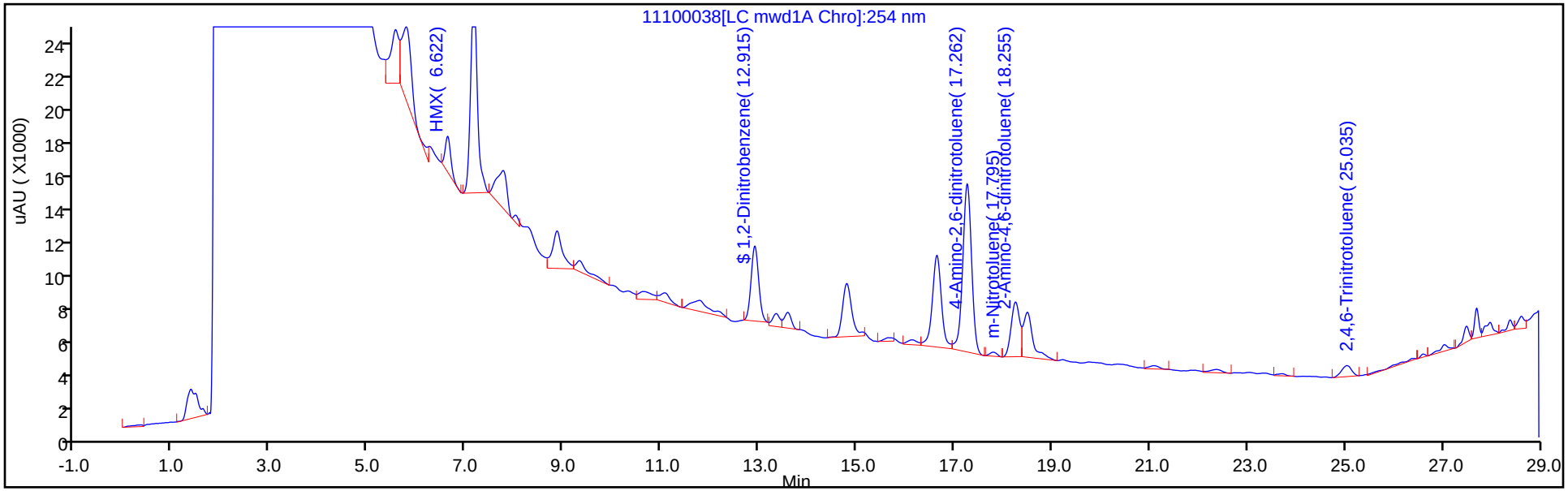
Report Date: 11-Nov-2021 19:12:40 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

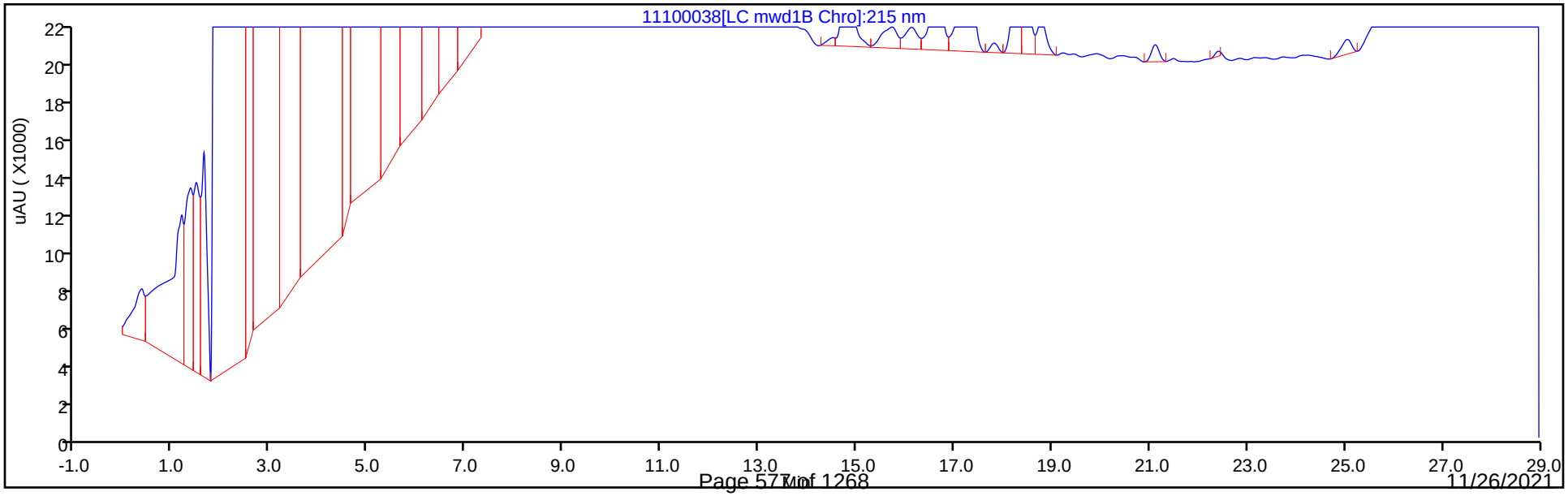
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100038.D

Injection Date:	11-Nov-2021 09:41:00	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155225-A-7-A	Lab Sample ID:	280-155225-7	Worklist Smp#:	38
Client ID:	PZ017R-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
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\11100038.D				
Lims ID:	280-155225-A-7-A				
Client ID:	PZ017R-7				
Sample Type:	Client				
Inject. Date:	11-Nov-2021 09:41:00	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155225-A-7-A				
Misc. Info.:	280-0106378-038				
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 19:12:38	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 19:11:21		

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

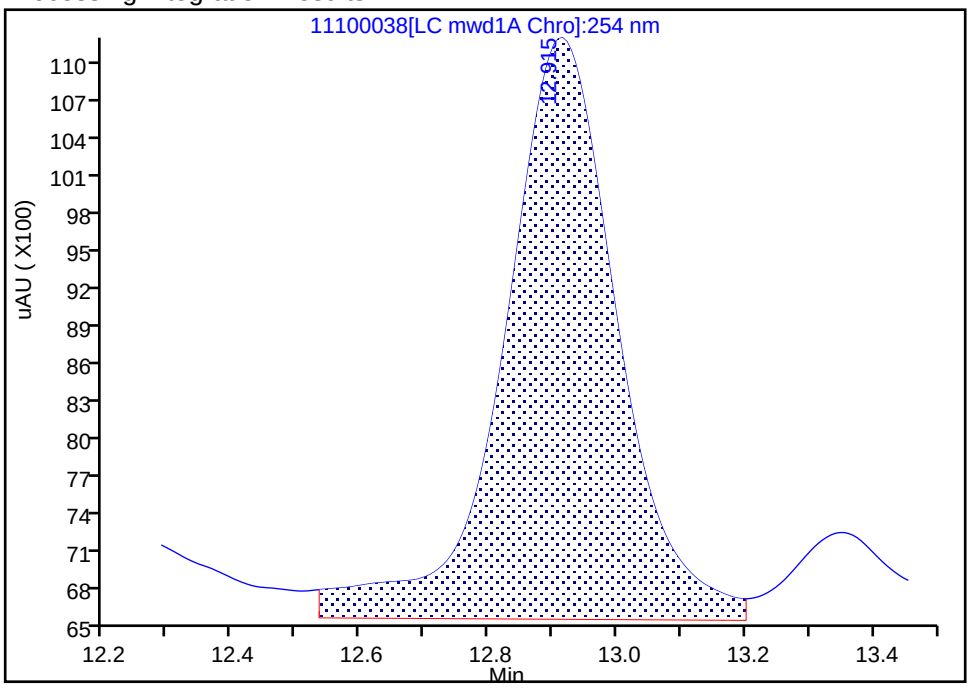
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100038.D				
Injection Date:	11-Nov-2021 09:41:00	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-7-A	Lab Sample ID:	280-155225-7		
Client ID:	PZ017R-7				
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. 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

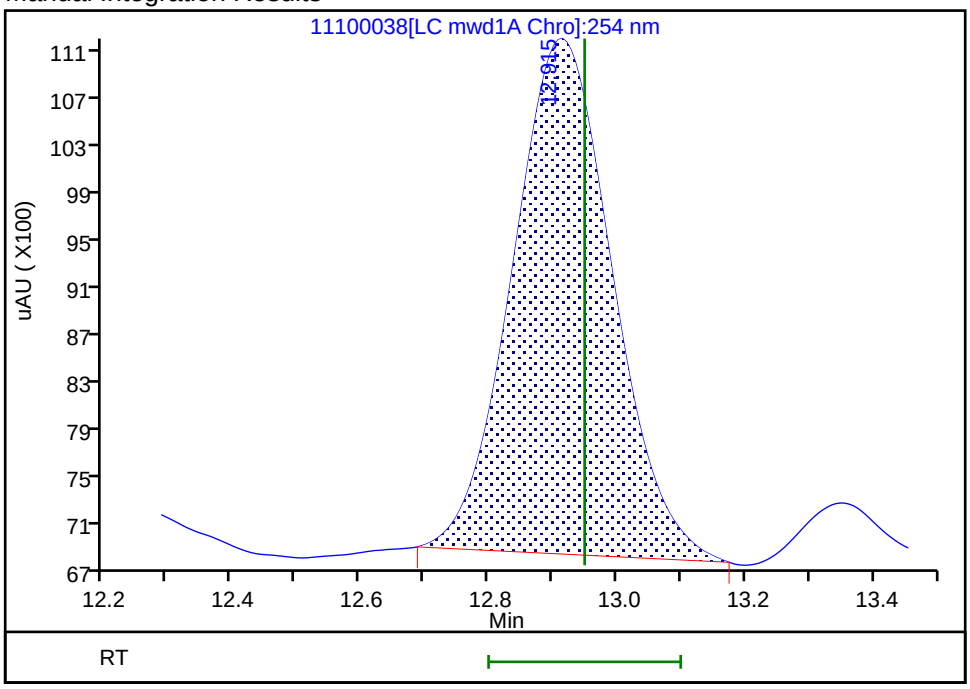
Processing Integration Results

RT: 12.91
Area: 57738
Amount: 0.217339
Amount Units: ug/ml



Manual Integration Results

RT: 12.91
Area: 47555
Amount: 0.179008
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:11:09

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

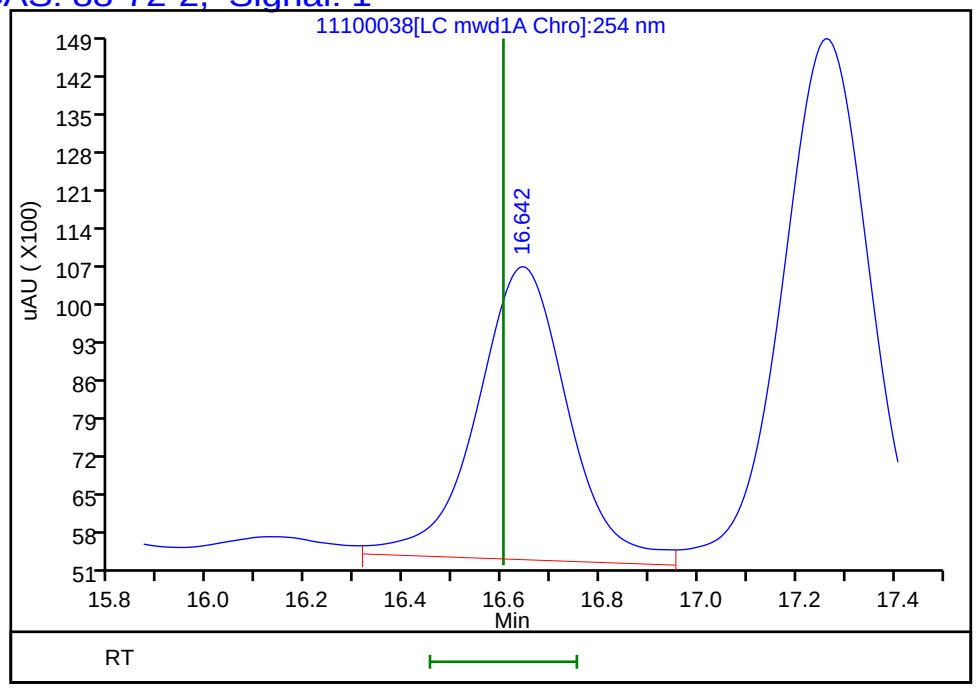
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100038.D				
Injection Date:	11-Nov-2021 09:41:00	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-7-A	Lab Sample ID:	280-155225-7		
Client ID:	PZ017R-7				
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.64
Response: 69632
Amount: 0.279684



Reviewer: zhangji, 11-Nov-2021 19:11:21
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

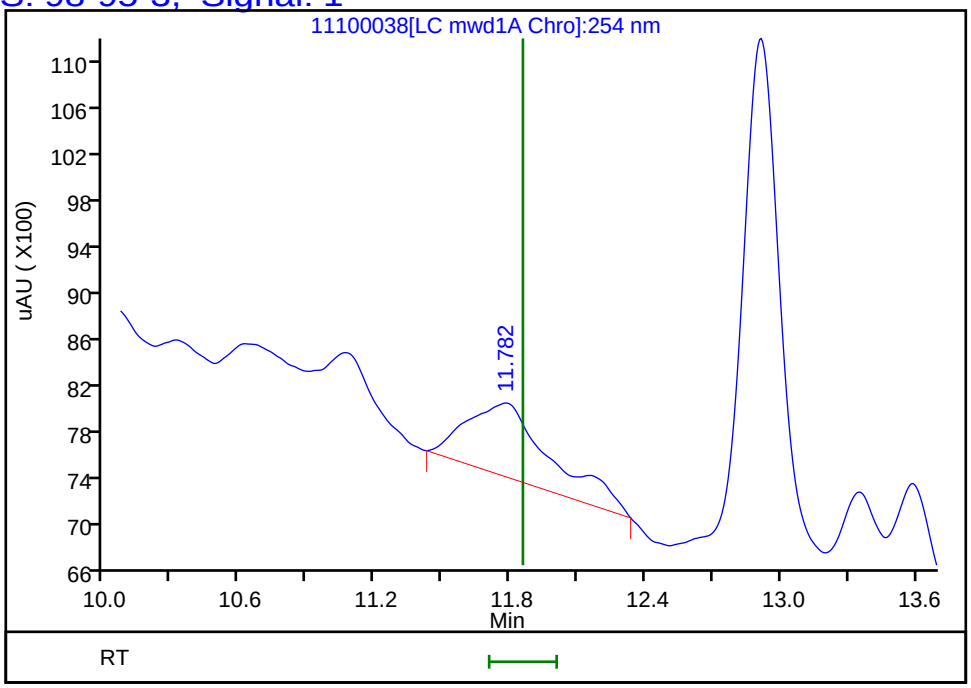
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100038.D				
Injection Date:	11-Nov-2021 09:41:00	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-7-A	Lab Sample ID:	280-155225-7		
Client ID:	PZ017R-7				
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

9 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 11.78
Response: 16771
Amount: 0.044764



Reviewer: zhangji, 11-Nov-2021 19:11:21
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

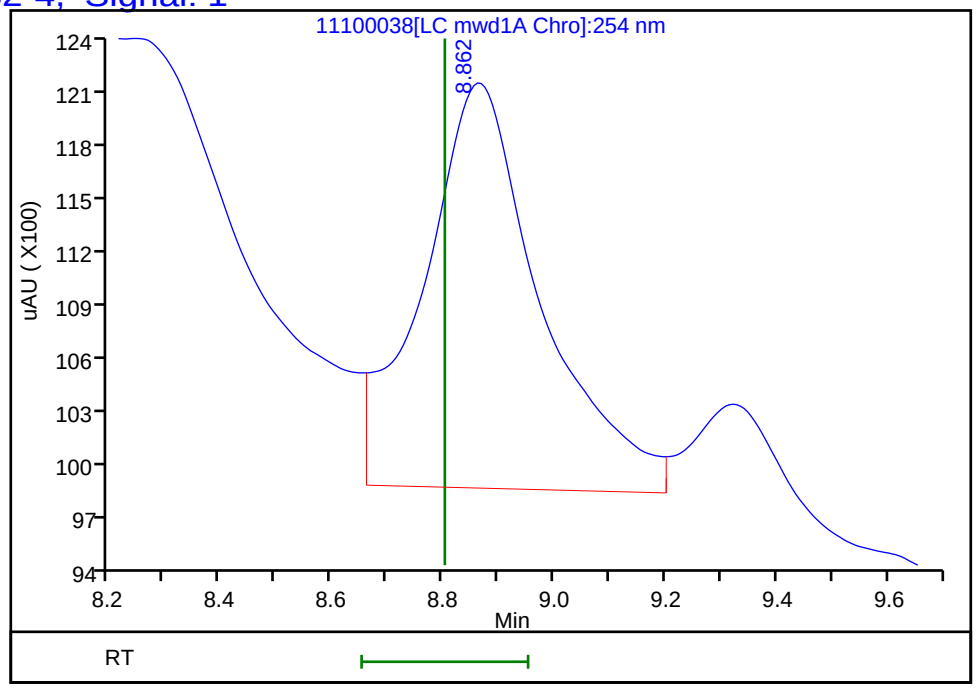
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100038.D				
Injection Date:	11-Nov-2021 09:41:00	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-7-A	Lab Sample ID:	280-155225-7		
Client ID:	PZ017R-7				
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
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

RT: 8.86
Response: 32209
Amount: 0.157679



Reviewer: zhangji, 11-Nov-2021 19:11:21
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.: 280-155225-1

SDG No.:

Client Sample ID: PZ018-7 Lab Sample ID: 280-155225-8

Matrix: Water Lab File ID: 11090065.D

Analysis Method: 8330A Date Collected: 11/04/2021 11:05

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 498(mL) Date Analyzed: 11/10/2021 12:46

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 556781 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
99-35-4	1,3,5-Trinitrobenzene	0.94	M	0.21	0.20	0.084
118-96-7	2,4,6-Trinitrotoluene	4.0		0.11	0.10	0.045
121-14-2	2,4-Dinitrotoluene	0.080	U	0.10	0.080	0.028
606-20-2	2,6-Dinitrotoluene	0.080	U	0.10	0.080	0.040
35572-78-2	2-Amino-4,6-dinitrotoluene	2.7		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 M	0.40	0.40	0.20
19406-51-0	4-Amino-2,6-dinitrotoluene	4.3		0.15	0.12	0.058
2691-41-0	HMX	0.20	U	0.21	0.20	0.088
5755-27-1	MNX	0.40	U M	2.0	0.40	0.15
98-95-3	Nitrobenzene	0.20	U	0.21	0.20	0.091
121-82-4	RDX	0.20	U M	0.21	0.20	0.052
479-45-8	Tetryl	0.10	U M	0.11	0.10	0.032

CAS NO.	SURROGATE	%REC	Q	LIMITS
528-29-0	1,2-Dinitrobenzene	118	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090065.D
Lims ID: 280-155225-A-8-A
Client ID: PZ018-7
Sample Type: Client
Inject. Date: 10-Nov-2021 12:46:20 ALS Bottle#: 65 Worklist Smp#: 65
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155225-A-8-A
Misc. Info.: 280-0106333-065
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 14:21:06 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 13:14:25

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	U
$ 10 1,2-Dinitrobenzene	1	8.561	8.572	-0.011	30155	0.2352	M
11 1,3,5-Trinitrobenzene	1	8.674	8.685	-0.011	20541	0.0932	M
12 1,3-Dinitrobenzene	1	9.301	9.331	-0.030	5084	0.0172	M
13 Nitrobenzene	1		9.725			ND	
15 Tetryl	1		10.065			ND	U
17 2,4,6-Trinitrotoluene	1	10.954	10.971	-0.017	82760	0.4017	
18 4-Amino-2,6-dinitrotoluene	1	11.161	11.185	-0.024	66026	0.4322	
19 2-Amino-4,6-dinitrotoluene	1	11.414	11.438	-0.024	56241	0.2718	
20 2,6-Dinitrotoluene	1		11.605			ND	
21 2,4-Dinitrotoluene	1		11.771			ND	
22 o-Nitrotoluene	1		12.645			ND	7
23 p-Nitrotoluene	1	13.074	13.078	-0.004	2142	0.0191	M
24 m-Nitrotoluene	1		13.658			ND	U

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

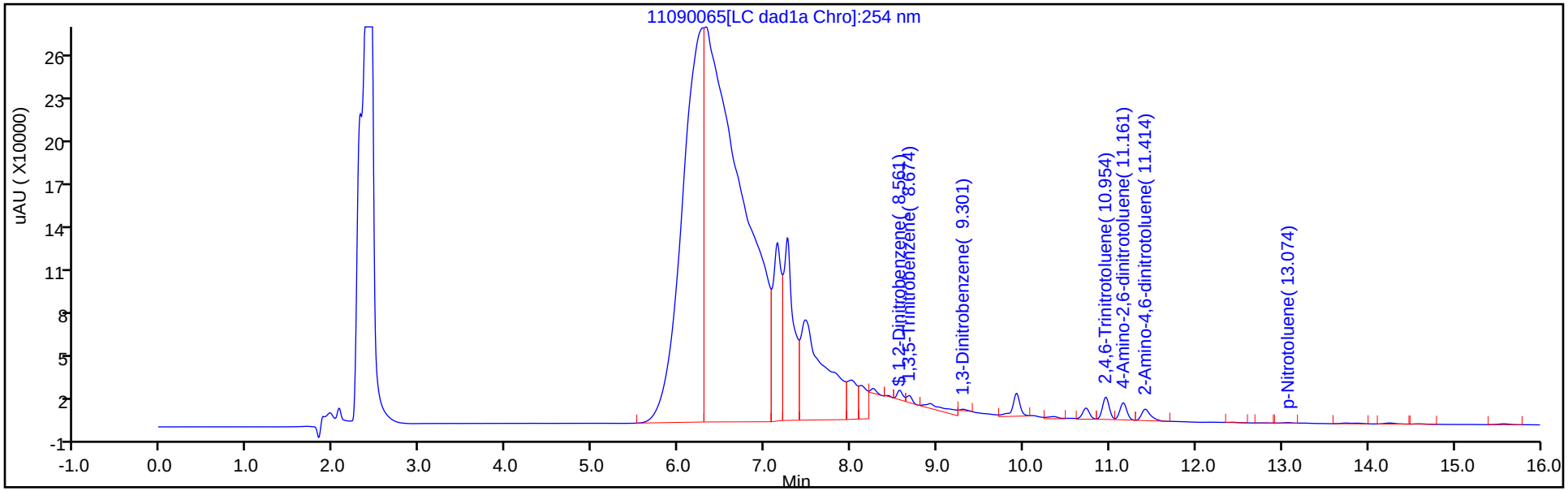
Report Date: 10-Nov-2021 14:21:11 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

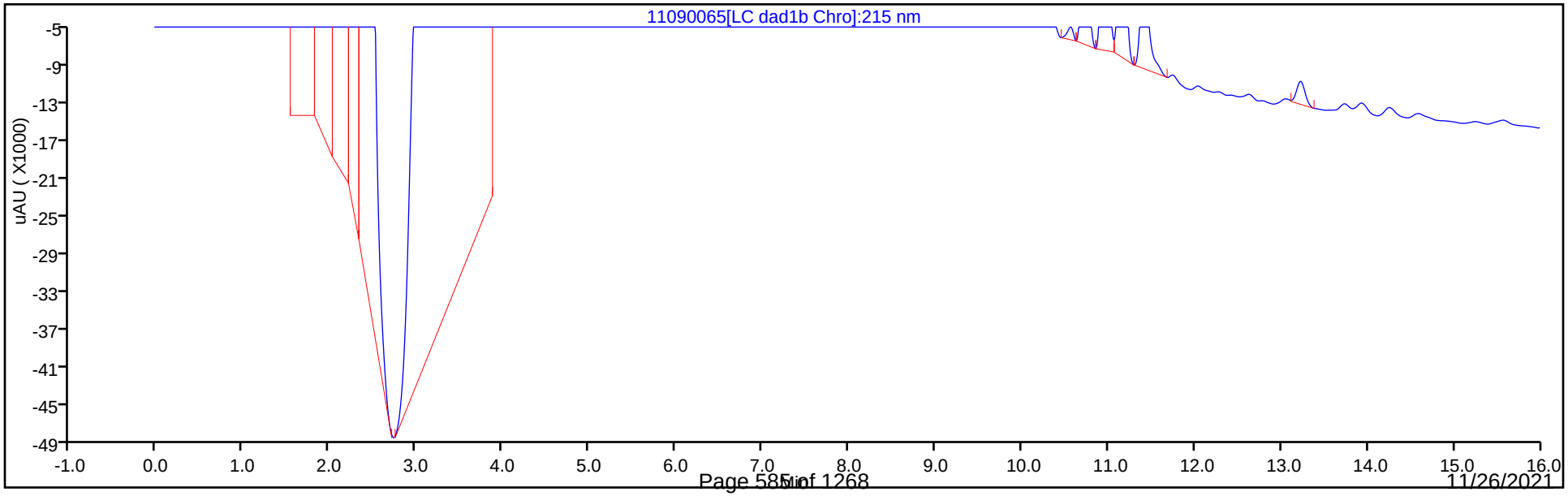
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090065.d

Injection Date:	10-Nov-2021 12:46:20	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155225-A-8-A	Lab Sample ID:	280-155225-8	Worklist Smp#:	65
Client ID:	PZ018-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	65
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\11090065.D				
Lims ID:	280-155225-A-8-A				
Client ID:	PZ018-7				
Sample Type:	Client				
Inject. Date:	10-Nov-2021 12:46:20	ALS Bottle#:	65	Worklist Smp#:	65
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155225-A-8-A				
Misc. Info.:	280-0106333-065				
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 14:21:06	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 13:14:25		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2352	117.59

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

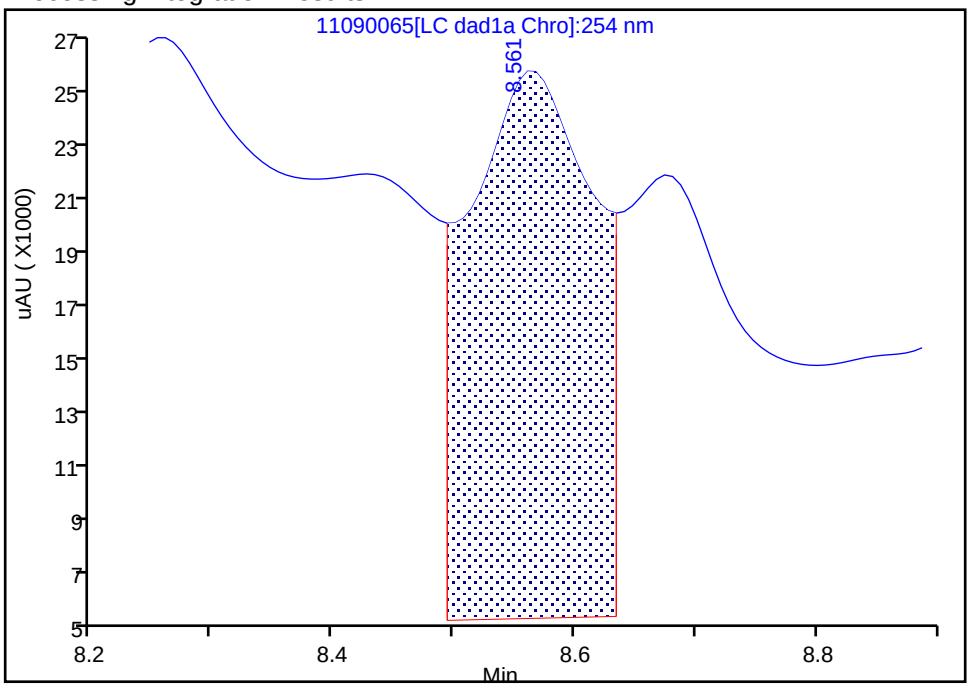
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090065.d				
Injection Date:	10-Nov-2021 12:46:20	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-8-A	Lab Sample ID:	280-155225-8		
Client ID:	PZ018-7				
Operator ID:	JZ	ALS Bottle#:	65	Worklist Smp#:	65
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

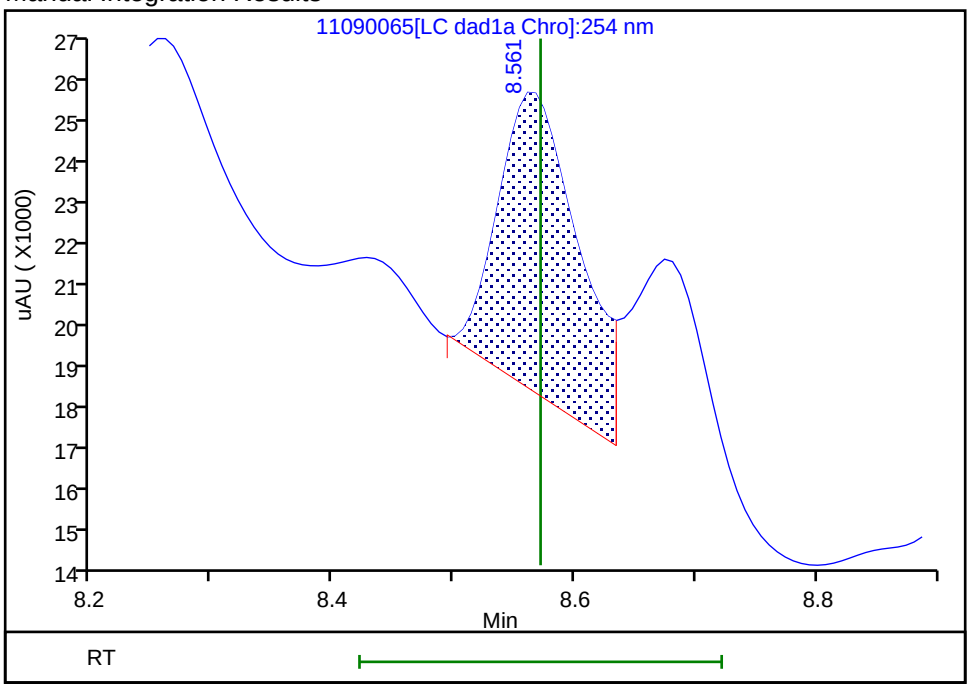
Processing Integration Results

RT: 8.56
Area: 135655
Amount: 1.058009
Amount Units: ug/mL



Manual Integration Results

RT: 8.56
Area: 30155
Amount: 0.235187
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 13:13:45
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

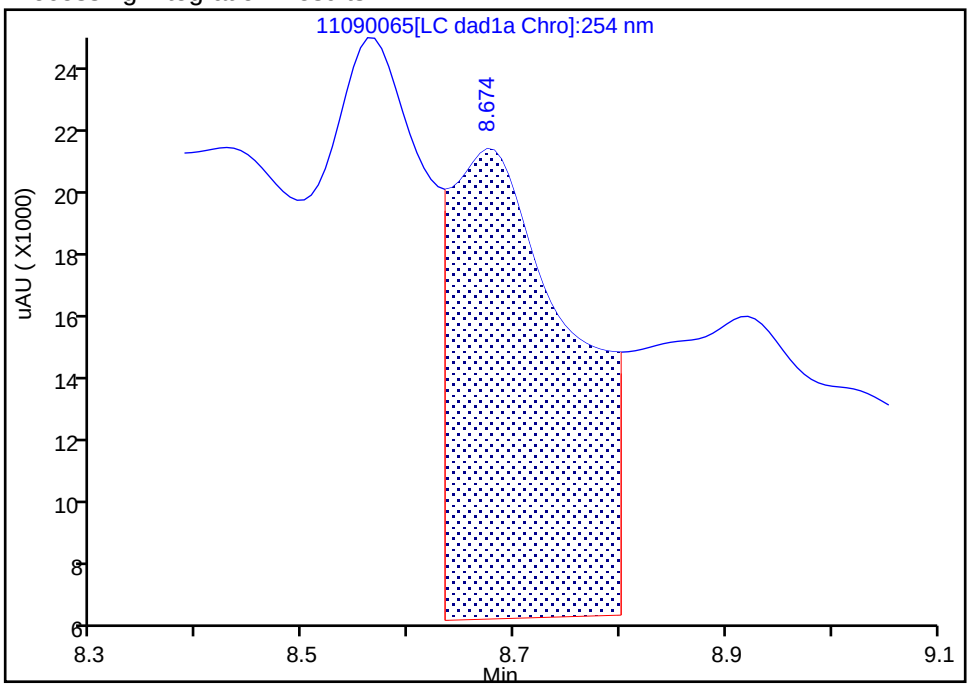
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090065.d				
Injection Date:	10-Nov-2021 12:46:20	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-8-A	Lab Sample ID:	280-155225-8		
Client ID:	PZ018-7				
Operator ID:	JZ	ALS Bottle#:	65	Worklist Smp#:	65
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

11 1,3,5-Trinitrobenzene, CAS: 99-35-4

Signal: 1

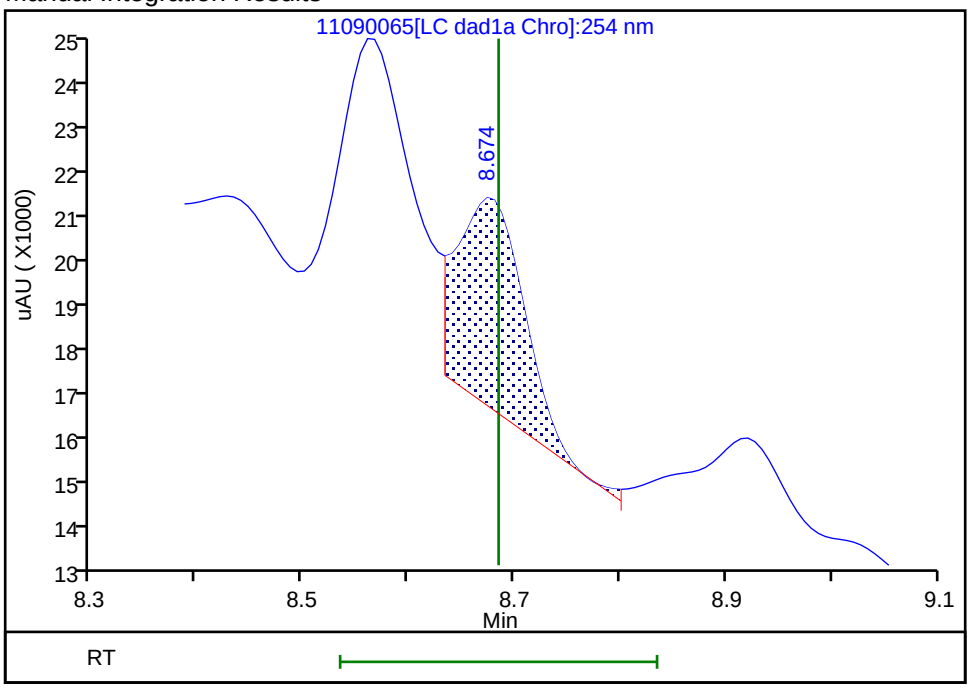
Processing Integration Results

RT: 8.67
Area: 118386
Amount: 0.537343
Amount Units: ug/mL



Manual Integration Results

RT: 8.67
Area: 20541
Amount: 0.093234
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 13:13:45

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

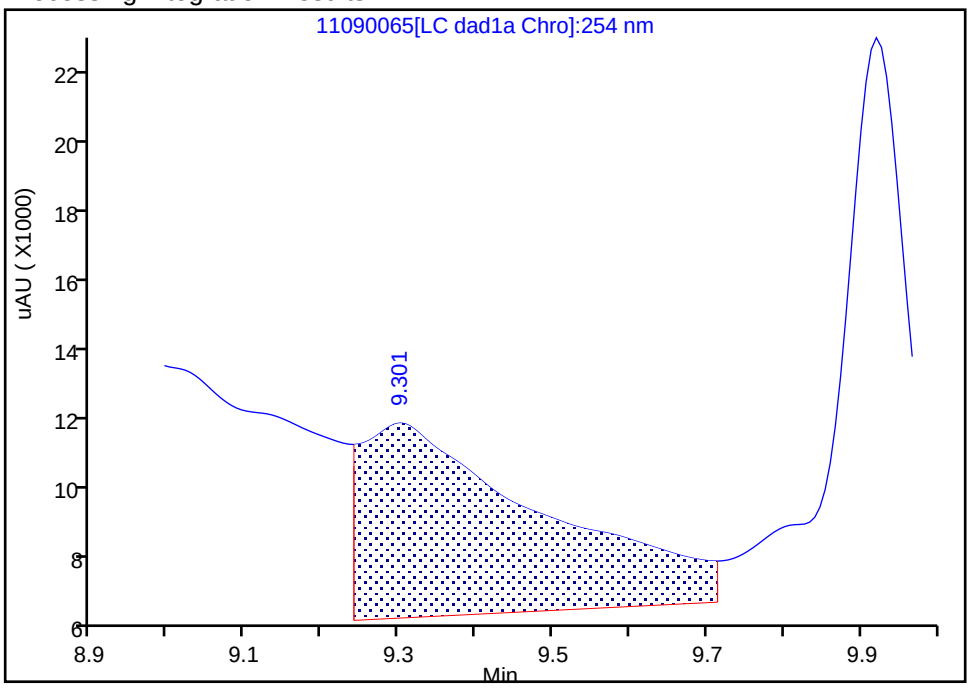
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090065.d				
Injection Date:	10-Nov-2021 12:46:20	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-8-A	Lab Sample ID:	280-155225-8		
Client ID:	PZ018-7				
Operator ID:	JZ	ALS Bottle#:	65	Worklist Smp#:	65
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

12 1,3-Dinitrobenzene, CAS: 99-65-0

Signal: 1

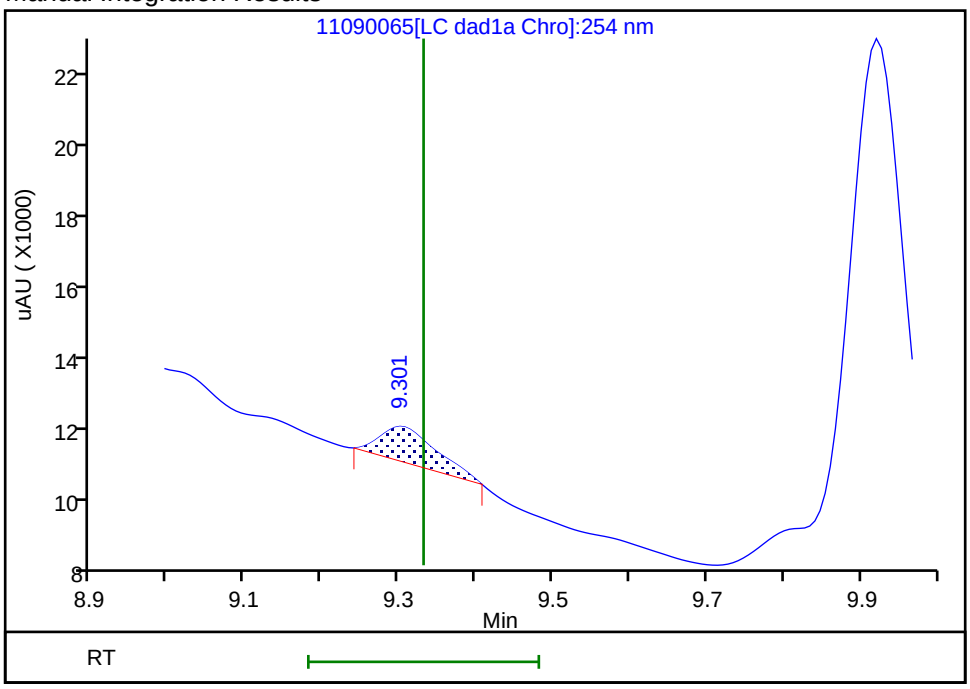
Processing Integration Results

RT: 9.30
Area: 88675
Amount: 0.299245
Amount Units: ug/mL



Manual Integration Results

RT: 9.30
Area: 5084
Amount: 0.017157
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 13:13:58

Audit Action: Manually Integrated Audit Reason: Baseline

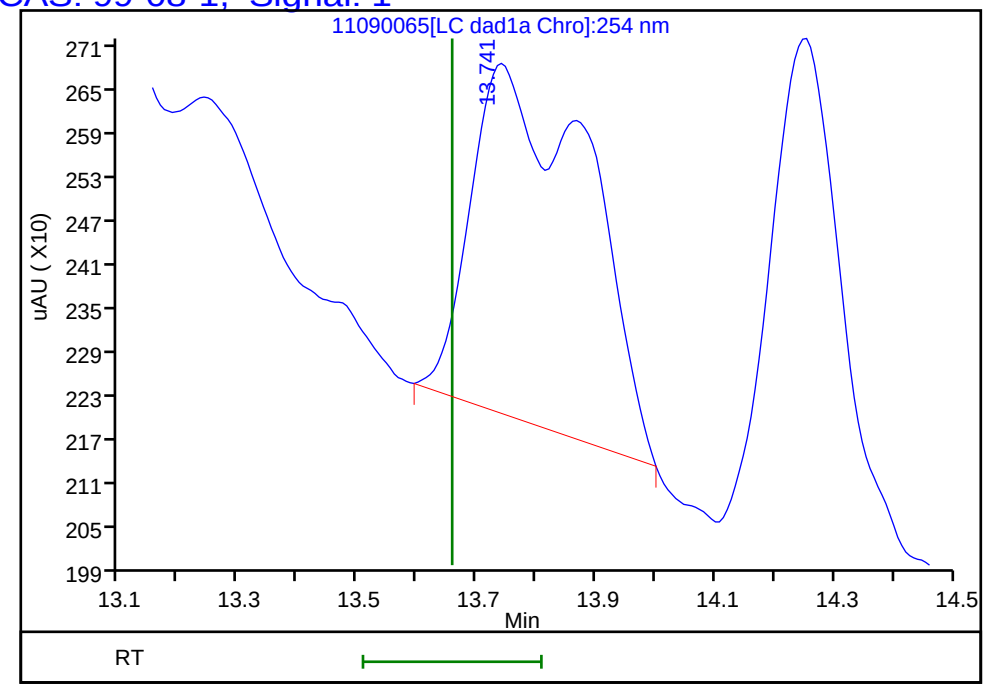
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090065.d				
Injection Date:	10-Nov-2021 12:46:20	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-8-A	Lab Sample ID:	280-155225-8		
Client ID:	PZ018-7				
Operator ID:	JZ	ALS Bottle#:	65	Worklist Smp#:	65
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 13.74
Response: 6716
Amount: 0.047214



Reviewer: zhangji, 10-Nov-2021 13:14:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Denver

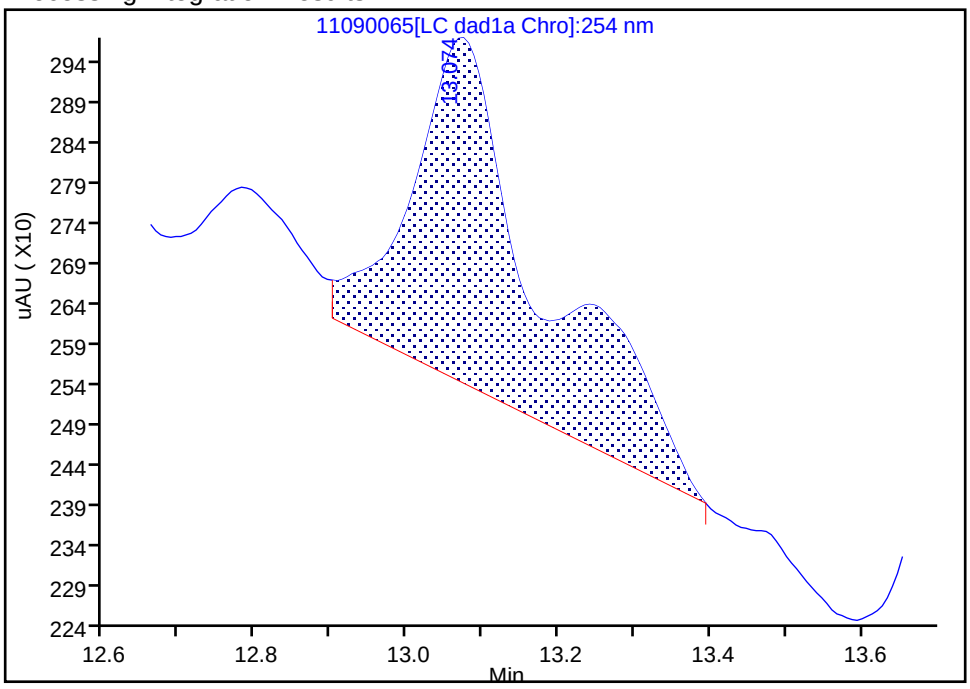
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090065.d				
Injection Date:	10-Nov-2021 12:46:20	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-8-A	Lab Sample ID:	280-155225-8		
Client ID:	PZ018-7				
Operator ID:	JZ	ALS Bottle#:	65	Worklist Smp#:	65
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

23 p-Nitrotoluene, CAS: 99-99-0

Signal: 1

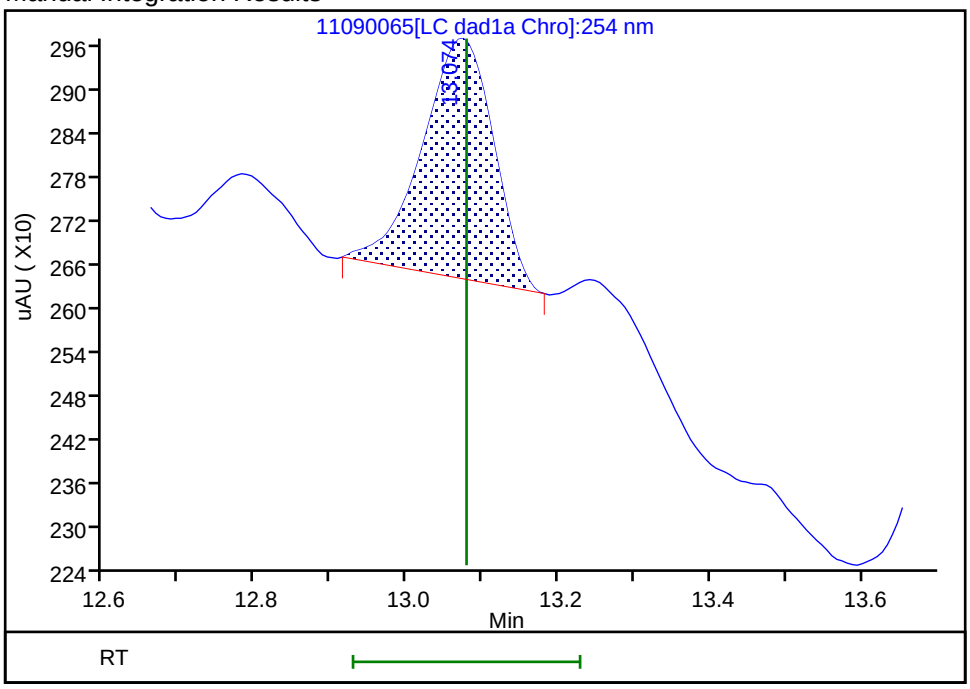
Processing Integration Results

RT: 13.07
Area: 5127
Amount: 0.045812
Amount Units: ug/mL



Manual Integration Results

RT: 13.07
Area: 2142
Amount: 0.019140
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 13:14:13
Audit Action: Manually Integrated Audit Reason: Baseline

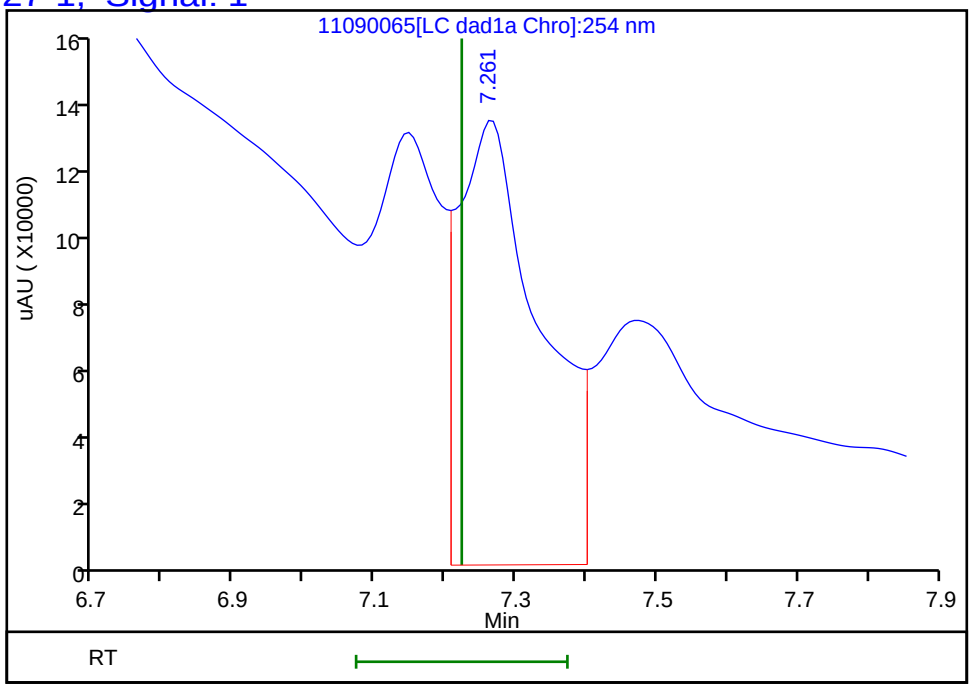
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090065.d				
Injection Date:	10-Nov-2021 12:46:20	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-8-A	Lab Sample ID:	280-155225-8		
Client ID:	PZ018-7				
Operator ID:	JZ	ALS Bottle#:	65	Worklist Smp#:	65
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.26
Response: 992626
Amount: 7.615647



Reviewer: zhangji, 10-Nov-2021 13:14:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

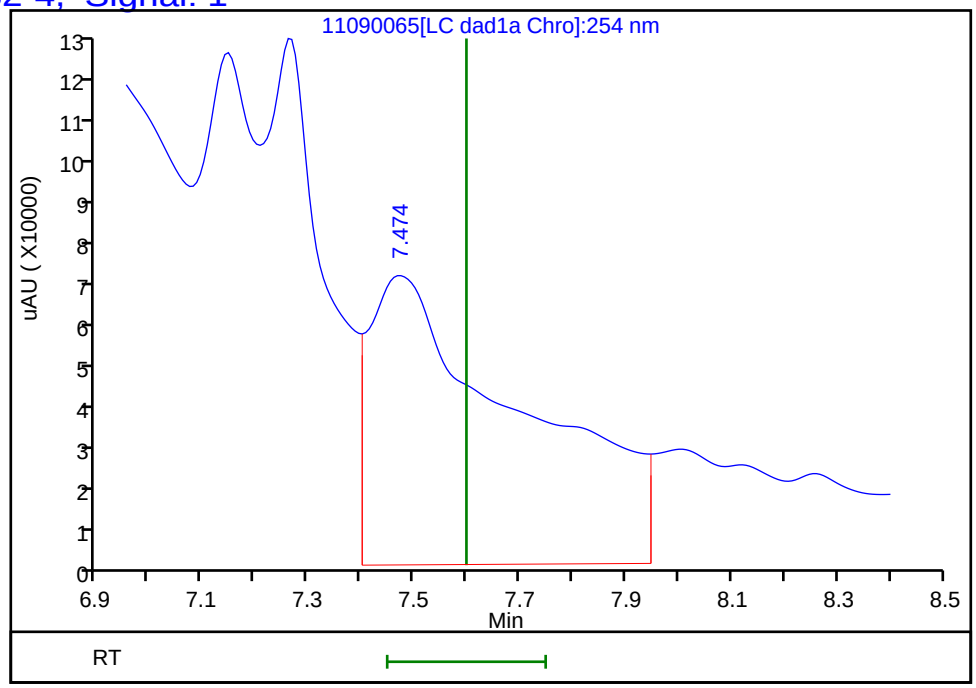
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090065.d
Injection Date: 10-Nov-2021 12:46:20 Instrument ID: CHHPLC_X3
Lims ID: 280-155225-A-8-A Lab Sample ID: 280-155225-8
Client ID: PZ018-7
Operator ID: JZ ALS Bottle#: 65 Worklist Smp#: 65
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

8 RDX, CAS: 121-82-4, Signal: 1

RT: 7.47
Response: 1367199
Amount: 12.866367



Reviewer: zhangji, 10-Nov-2021 13:14:25
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

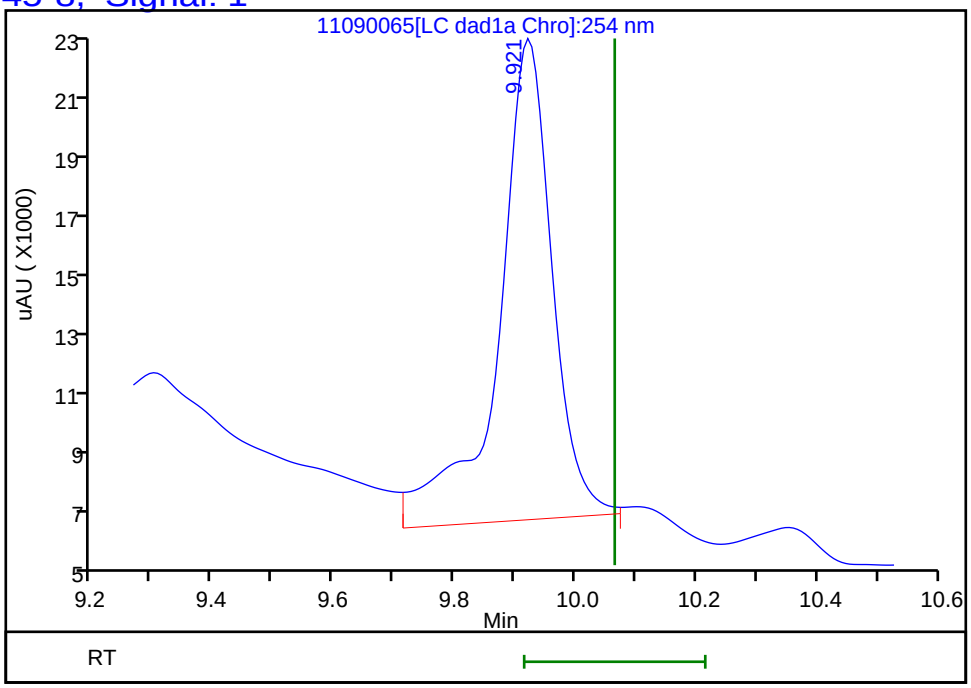
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090065.d

Injection Date:	10-Nov-2021 12:46:20	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-8-A	Lab Sample ID:	280-155225-8		
Client ID:	PZ018-7				
Operator ID:	JZ	ALS Bottle#:	65	Worklist Smp#:	65
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 9.92
Response: 96326
Amount: 0.558671



Reviewer: zhangji, 10-Nov-2021 13:14:25
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.: 280-155225-1

SDG No.:

Client Sample ID: PZ018-7 Lab Sample ID: 280-155225-8

Matrix: Water Lab File ID: 11100039.D

Analysis Method: 8330A Date Collected: 11/04/2021 11:05

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 498(mL) Date Analyzed: 11/11/2021 10:15

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
99-65-0	1,3-Dinitrobenzene	0.10	U	0.11	0.10	0.037
99-99-0	4-Nitrotoluene	0.40	U	0.41	0.40	0.10

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_X5\20211110-106378.b\11100039.D
Lims ID: 280-155225-A-8-A
Client ID: PZ018-7
Sample Type: Client
Inject. Date: 11-Nov-2021 10:15:58 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155225-A-8-A
Misc. Info.: 280-0106378-039
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 19:12:38 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 19:11:51

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.643	6.650	-0.007	11567	0.0667	M
	6 MNX	1		7.367			ND	
	8 RDX	1		8.803			ND	U
	9 Nitrobenzene	1		11.856			ND	
$	10 1,2-Dinitrobenzene	1	12.950	12.949	0.001	47251	0.1779	M
	12 1,3-Dinitrobenzene	1		15.376			ND	
	14 o-Nitrotoluene	1		16.603			ND	U
	16 p-Nitrotoluene	1		16.889			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.336	17.343	-0.007	149023	0.5023	
	18 m-Nitrotoluene	1		17.856			ND	
	19 2-Amino-4,6-dinitrotoluene	1	18.236	18.236	0.000	100638	0.2549	M
	20 1,3,5-Trinitrobenzene	1	18.770	18.776	-0.006	33312	0.0743	
	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	25.070	25.063	0.007	162831	0.4339	

QC Flag Legend

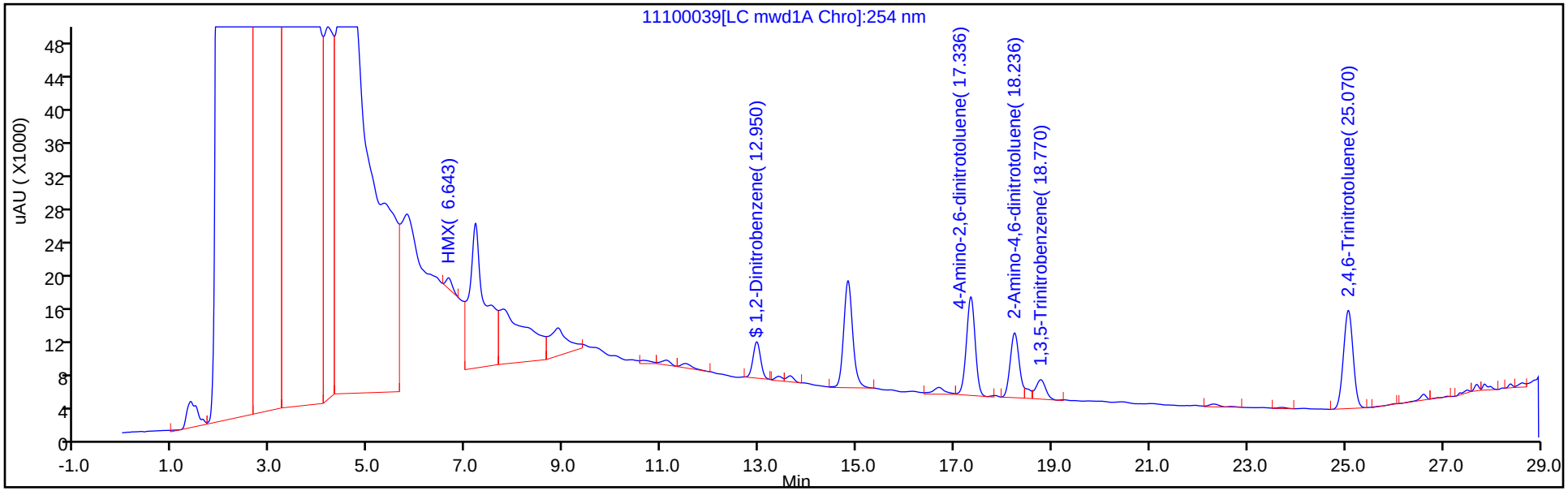
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 11-Nov-2021 19:12:41 Chrom Revision: 2.3 22-Sep-2021 15:38:46

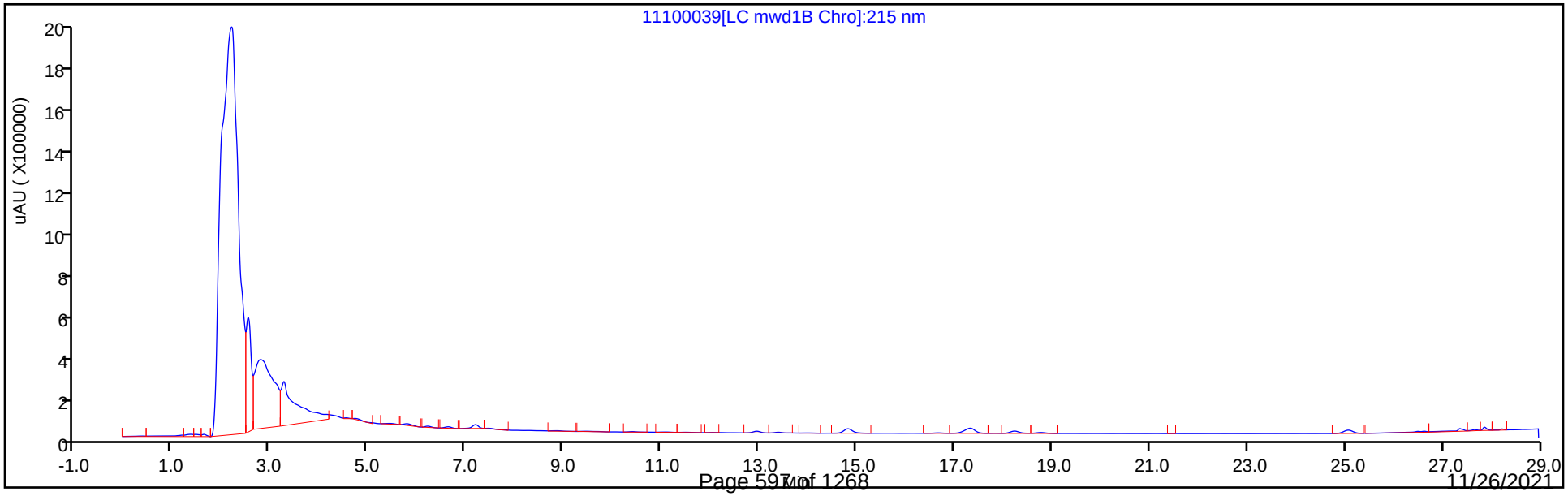
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100039.D				
Injection Date:	11-Nov-2021 10:15:58	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155225-A-8-A	Lab Sample ID:	280-155225-8	Worklist Smp#:	39
Client ID:	PZ018-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
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\11100039.D				
Lims ID:	280-155225-A-8-A				
Client ID:	PZ018-7				
Sample Type:	Client				
Inject. Date:	11-Nov-2021 10:15:58	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155225-A-8-A				
Misc. Info.:	280-0106378-039				
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 19:12:38	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 19:11:51		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1779	88.93

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

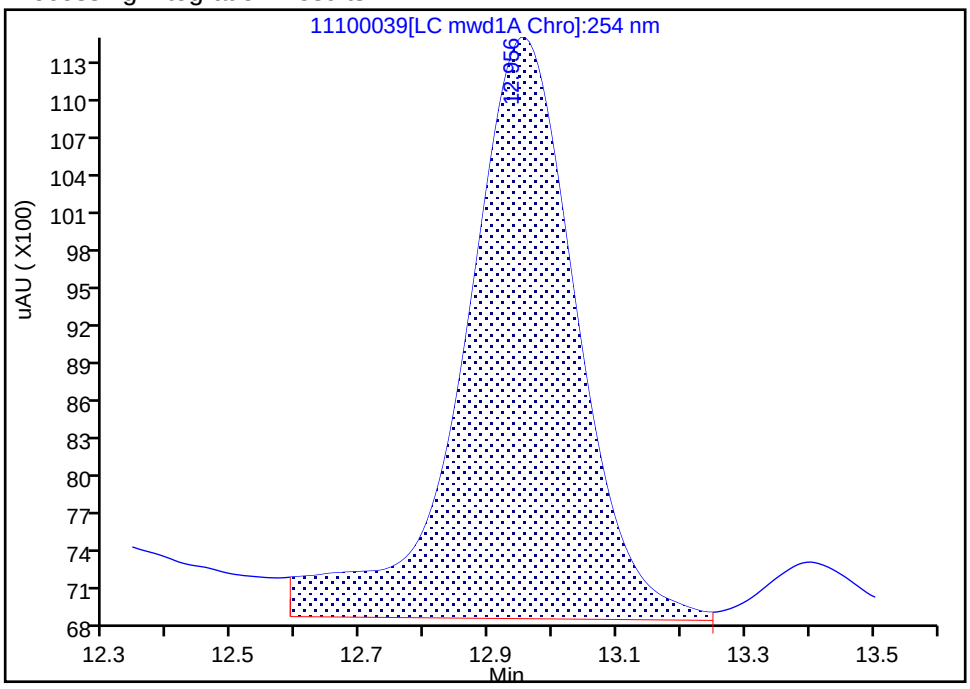
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100039.D				
Injection Date:	11-Nov-2021 10:15:58	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-8-A	Lab Sample ID:	280-155225-8		
Client ID:	PZ018-7				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. 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

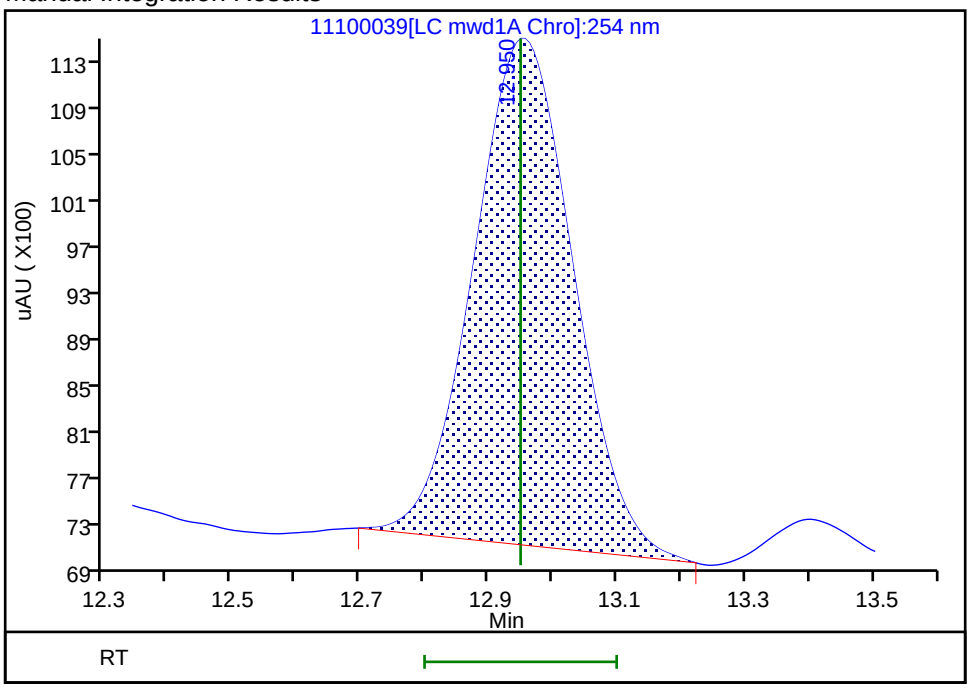
Processing Integration Results

RT: 12.96
Area: 56507
Amount: 0.212705
Amount Units: ug/ml



Manual Integration Results

RT: 12.95
Area: 47251
Amount: 0.177863
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:11:30
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

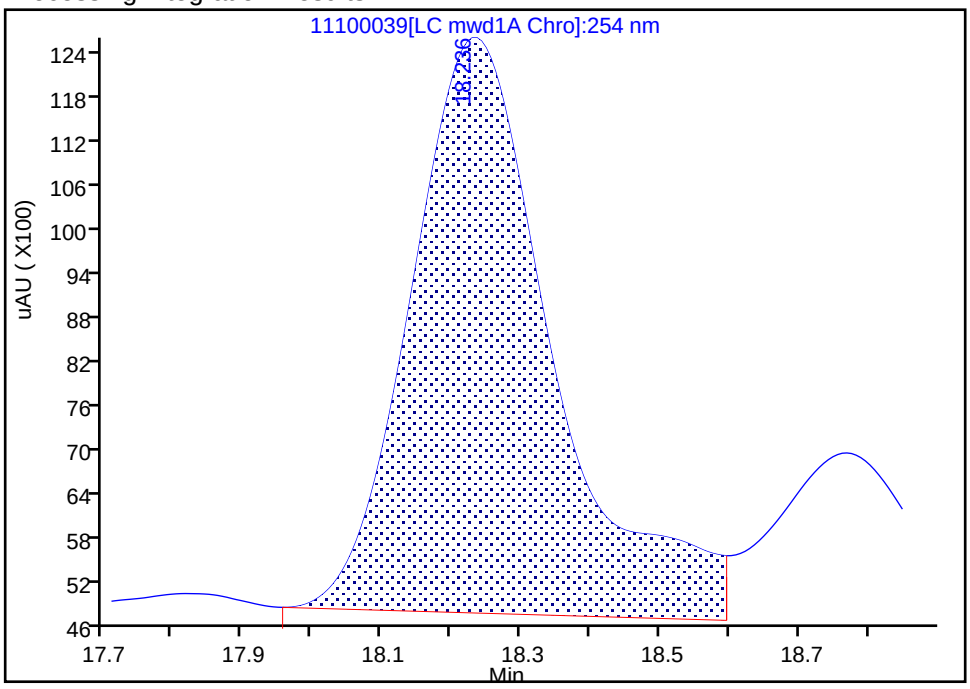
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100039.D				
Injection Date:	11-Nov-2021 10:15:58	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-8-A	Lab Sample ID:	280-155225-8		
Client ID:	PZ018-7				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. 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

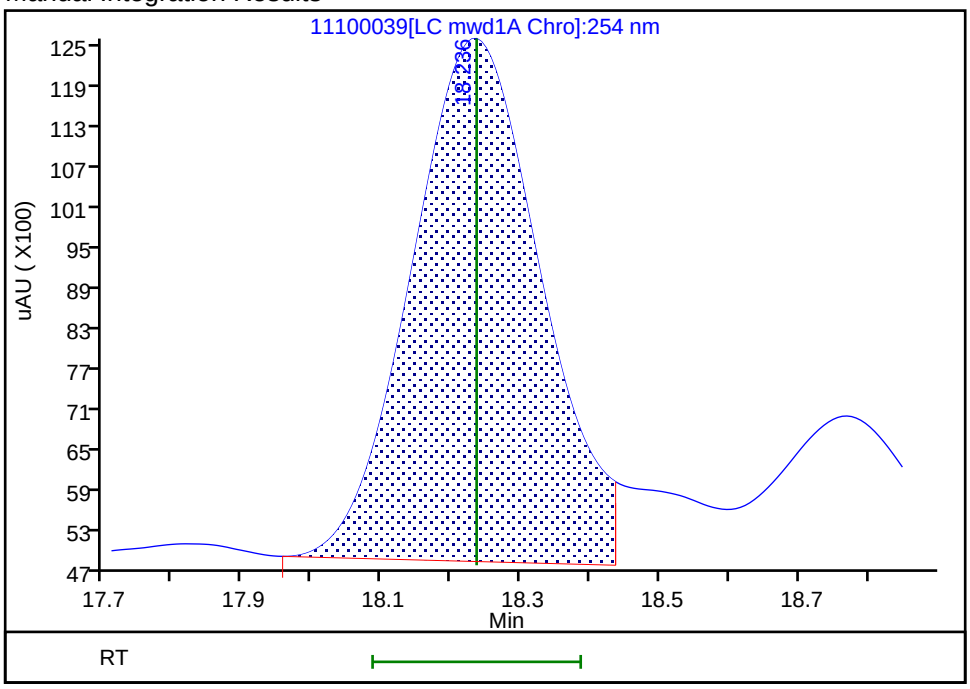
Processing Integration Results

RT: 18.24
Area: 110810
Amount: 0.281021
Amount Units: ug/ml



Manual Integration Results

RT: 18.24
Area: 100638
Amount: 0.254929
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:11:47

Audit Action: Split an Integrated Peak Audit Reason: Baseline Smoothing

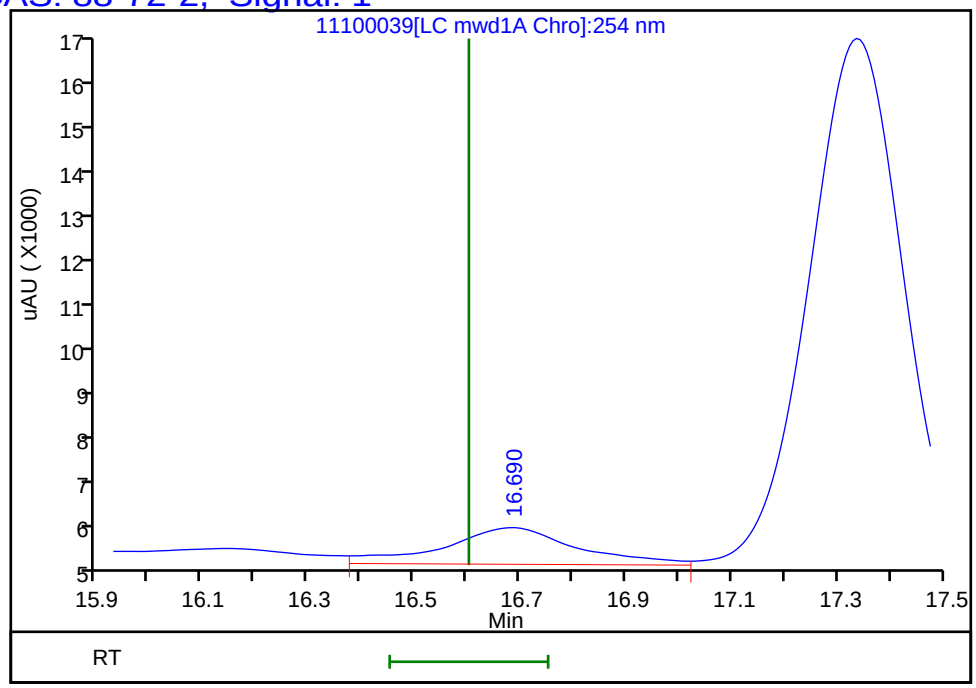
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100039.D				
Injection Date:	11-Nov-2021 10:15:58	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-8-A	Lab Sample ID:	280-155225-8		
Client ID:	PZ018-7				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

14 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 16.69
Response: 14303
Amount: 0.057449



Reviewer: zhangji, 11-Nov-2021 19:11:51
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

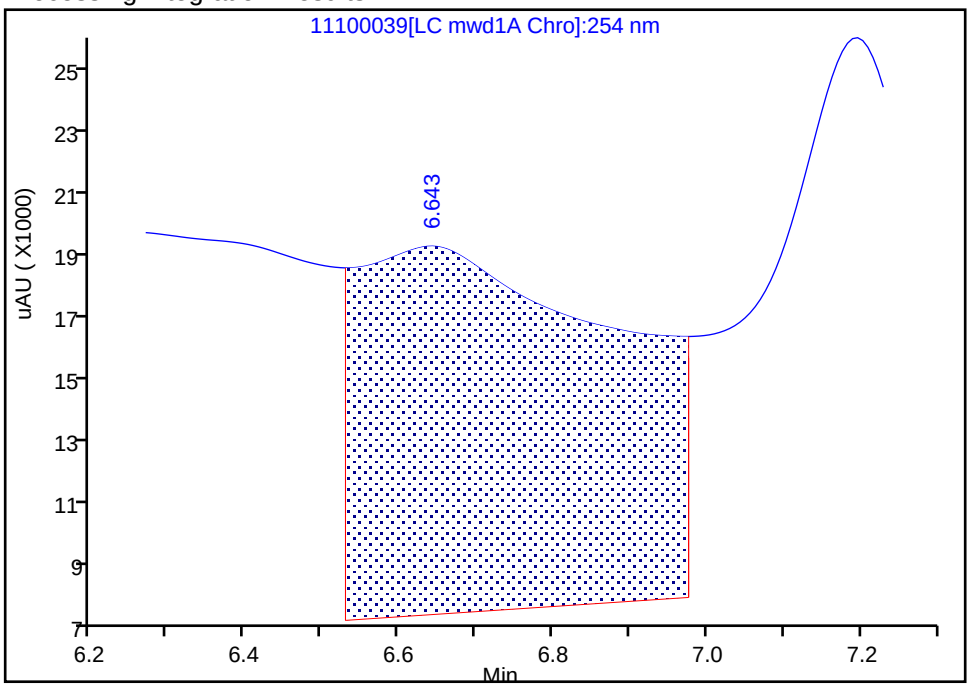
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100039.D				
Injection Date:	11-Nov-2021 10:15:58	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-8-A	Lab Sample ID:	280-155225-8		
Client ID:	PZ018-7				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. 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

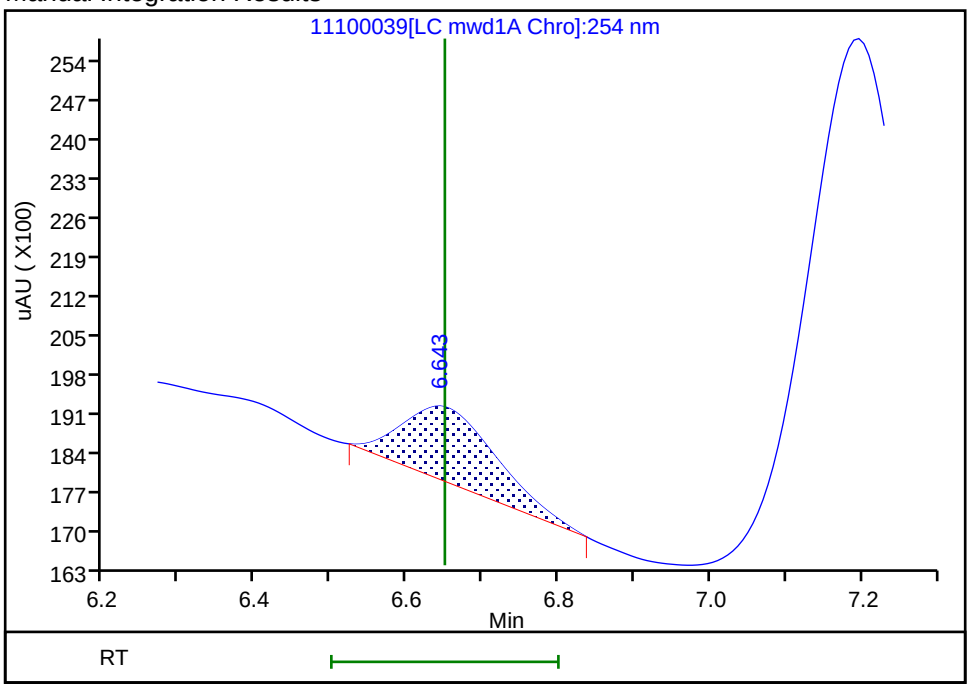
Processing Integration Results

RT: 6.64
Area: 266776
Amount: 1.674051
Amount Units: ug/ml



Manual Integration Results

RT: 6.64
Area: 11567
Amount: 0.066676
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:11:37
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

User Disabled Compound Report

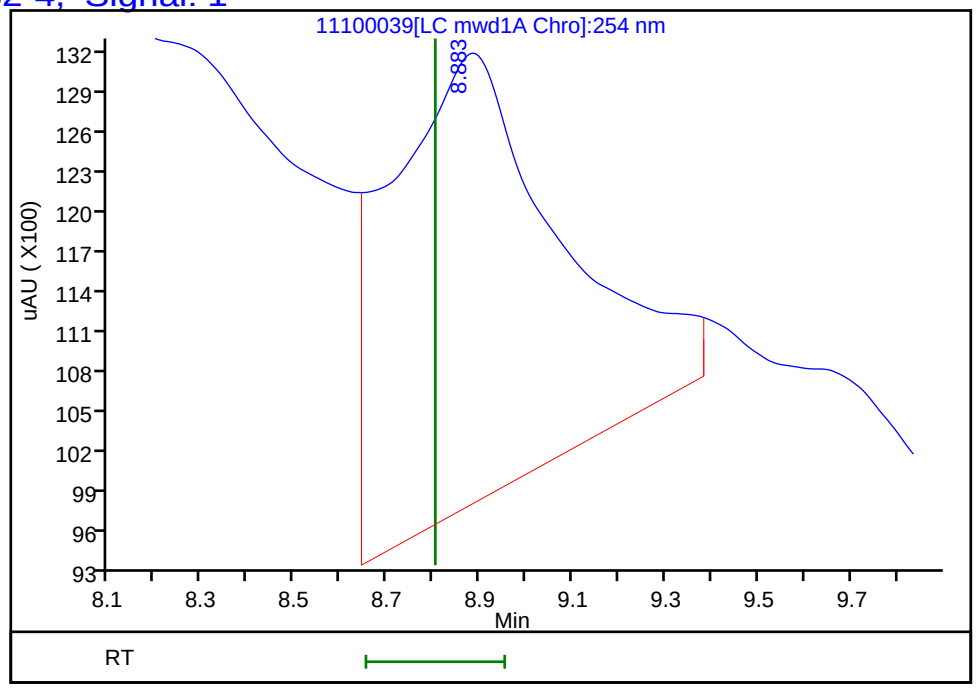
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100039.D

Injection Date:	11-Nov-2021 10:15:58	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-8-A	Lab Sample ID:	280-155225-8		
Client ID:	PZ018-7				
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
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

RT: 8.88
Response: 86718
Amount: 0.424527



Reviewer: zhangji, 11-Nov-2021 19:11:51
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.: 280-155225-1

SDG No.:

Client Sample ID: PZ021-7 Lab Sample ID: 280-155225-9

Matrix: Water Lab File ID: 11090066.D

Analysis Method: 8330A Date Collected: 11/04/2021 08:00

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 508.5(mL) Date Analyzed: 11/10/2021 13:09

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 100(uL) GC Column: UltraCarb5uODS ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 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	0.083
99-65-0	1,3-Dinitrobenzene	0.098	U	0.11	0.098	0.036
118-96-7	2,4,6-Trinitrotoluene	0.30		0.11	0.098	0.044
121-14-2	2,4-Dinitrotoluene	0.079	U	0.098	0.079	0.027
606-20-2	2,6-Dinitrotoluene	0.079	U	0.098	0.079	0.039
35572-78-2	2-Amino-4,6-dinitrotoluene	0.098	U M	0.11	0.098	0.050
88-72-2	2-Nitrotoluene	0.20	U M	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	0.47	J1	0.15	0.12	0.057
99-99-0	4-Nitrotoluene	0.39	U M	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 M	2.0	0.39	0.15
98-95-3	Nitrobenzene	0.20	U M	0.21	0.20	0.089
121-82-4	RDX	0.20	U M	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	102	M	83-119

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090066.D
Lims ID: 280-155225-A-9-A
Client ID: PZ021-7
Sample Type: Client
Inject. Date: 10-Nov-2021 13:09:15 ALS Bottle#: 66 Worklist Smp#: 66
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155225-A-9-A
Misc. Info.: 280-0106333-066
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 14:21:06 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 14:04:12

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	U
$ 10 1,2-Dinitrobenzene	1	8.564	8.572	-0.008	26174	0.2041	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	U
17 2,4,6-Trinitrotoluene	1	10.944	10.971	-0.027	6183	0.0300	
18 4-Amino-2,6-dinitrotoluene	1	11.157	11.185	-0.028	7370	0.0482	
19 2-Amino-4,6-dinitrotoluene	1		11.438			ND	U
20 2,6-Dinitrotoluene	1		11.605			ND	
21 2,4-Dinitrotoluene	1		11.771			ND	
22 o-Nitrotoluene	1		12.645			ND	U
23 p-Nitrotoluene	1		13.078			ND	U
24 m-Nitrotoluene	1		13.658			ND	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

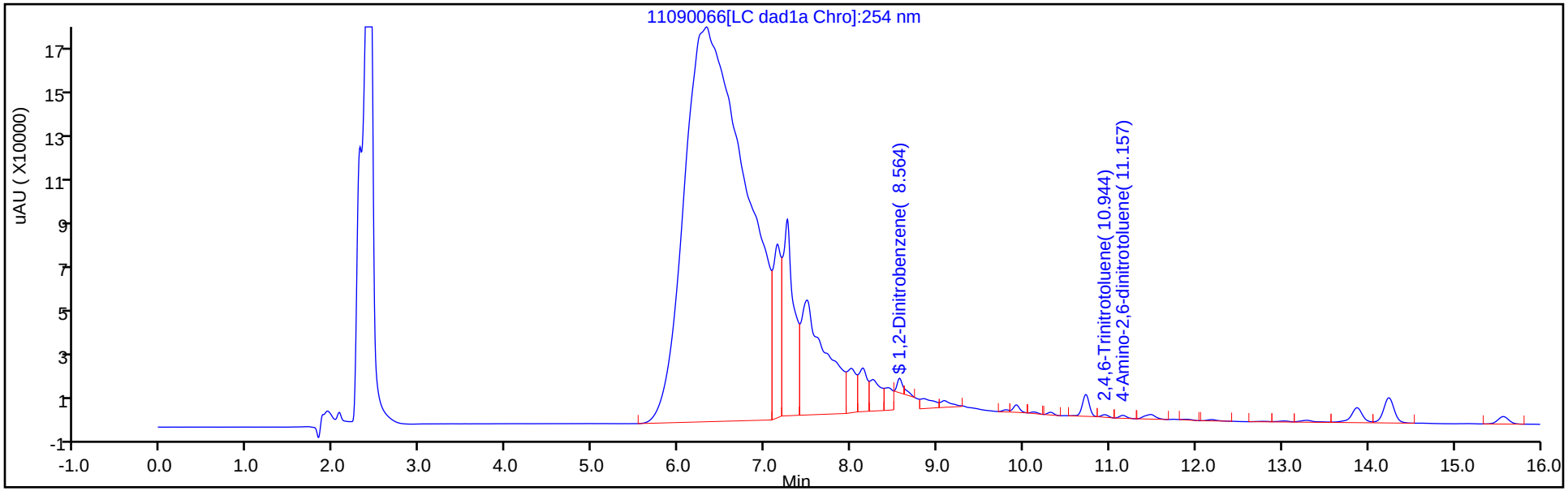
Report Date: 10-Nov-2021 14:21:12 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

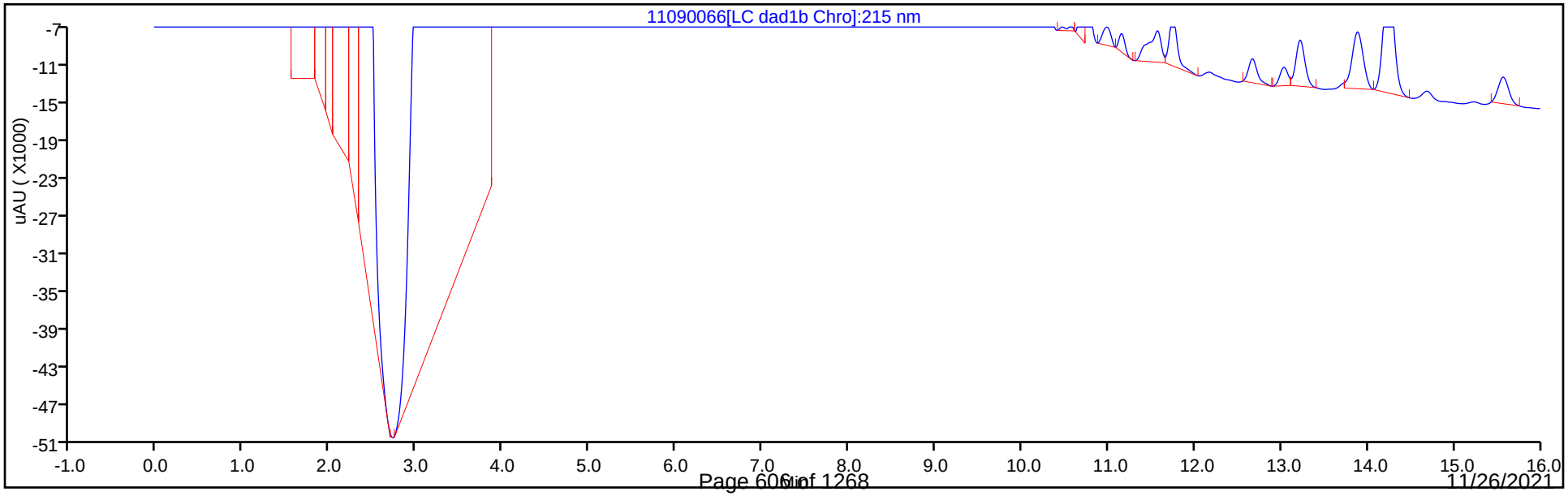
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090066.d

Injection Date:	10-Nov-2021 13:09:15	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	280-155225-A-9-A	Lab Sample ID:	280-155225-9	Worklist Smp#:	66
Client ID:	PZ021-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	66
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\11090066.D				
Lims ID:	280-155225-A-9-A				
Client ID:	PZ021-7				
Sample Type:	Client				
Inject. Date:	10-Nov-2021 13:09:15	ALS Bottle#:	66	Worklist Smp#:	66
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155225-A-9-A				
Misc. Info.:	280-0106333-066				
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 14:21:06	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 14:04:12		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.2041	102.07

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

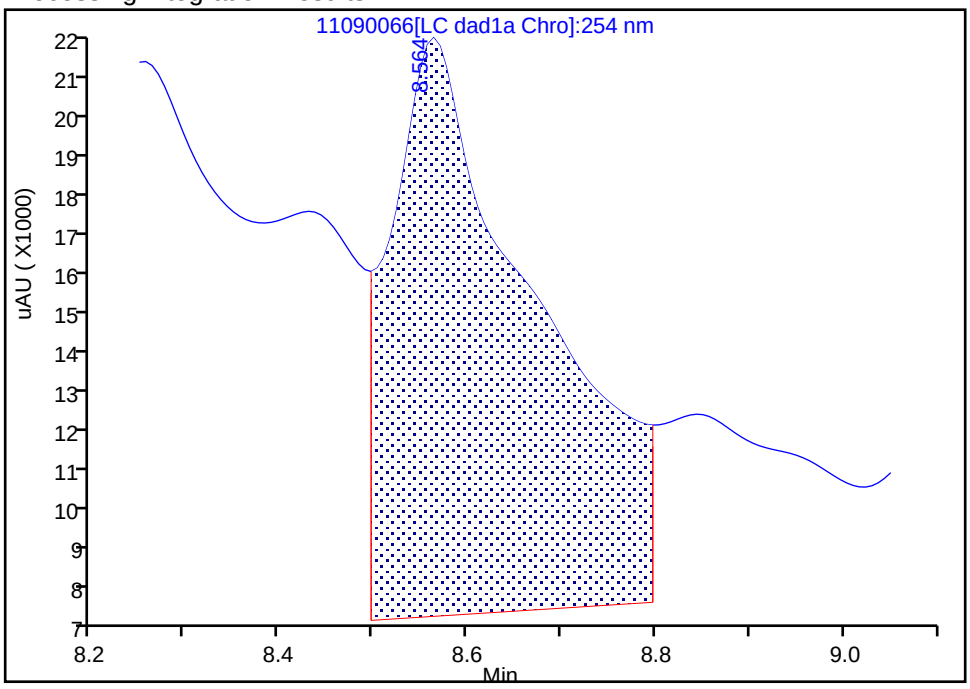
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090066.d				
Injection Date:	10-Nov-2021 13:09:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-9-A	Lab Sample ID:	280-155225-9		
Client ID:	PZ021-7				
Operator ID:	JZ	ALS Bottle#:	66	Worklist Smp#:	66
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

$ 10 1,2-Dinitrobenzene, CAS: 528-29-0

Signal: 1

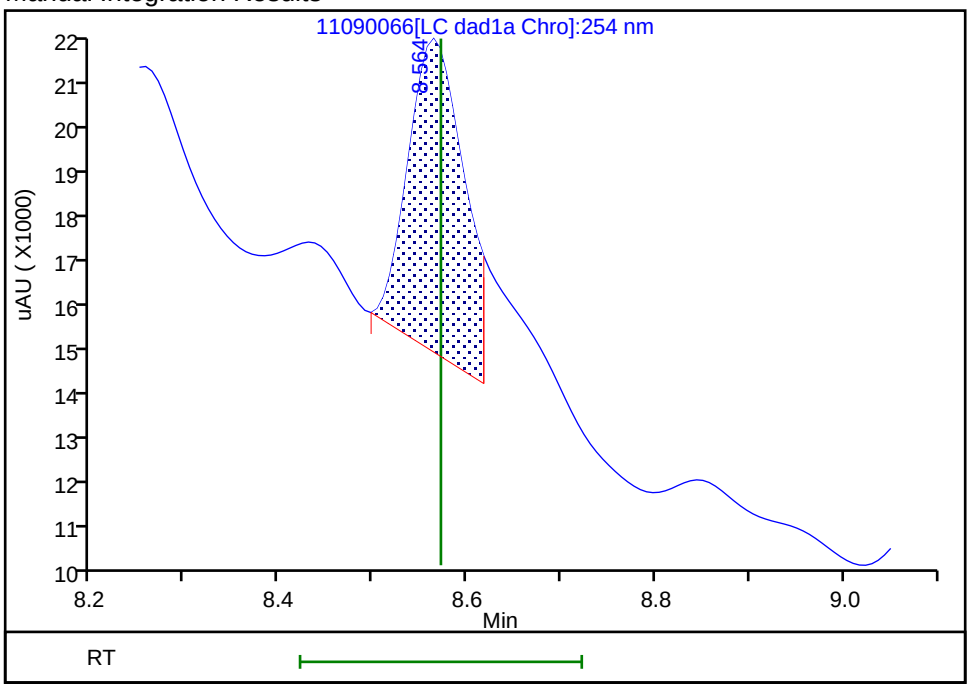
Processing Integration Results

RT: 8.56
Area: 148169
Amount: 1.155609
Amount Units: ug/mL



Manual Integration Results

RT: 8.56
Area: 26174
Amount: 0.204138
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 14:04:07

Audit Action: Split an Integrated Peak Audit Reason: Baseline

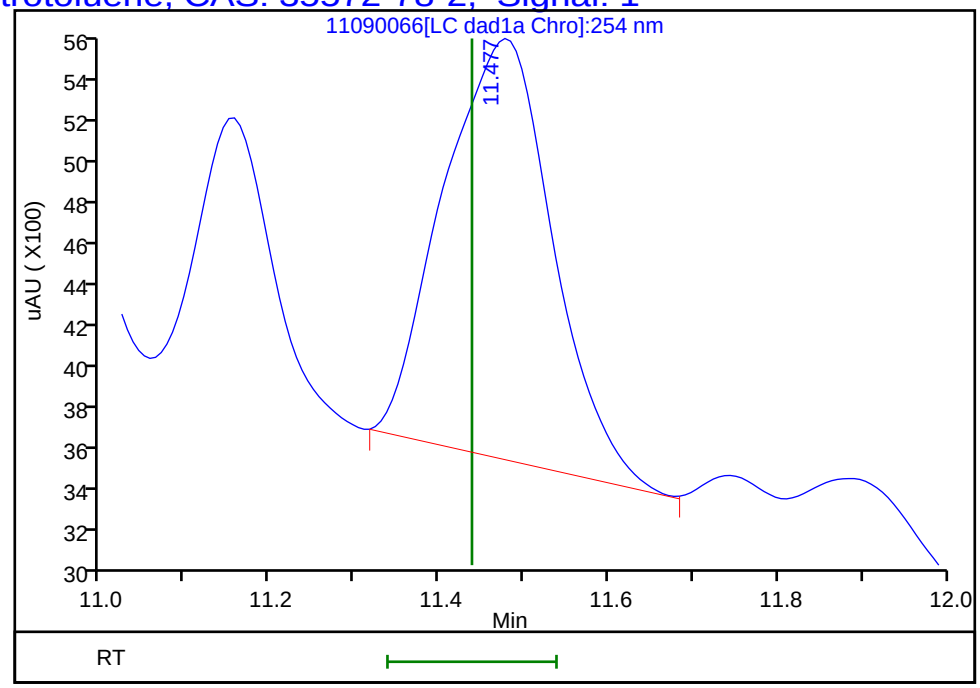
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090066.d				
Injection Date:	10-Nov-2021 13:09:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-9-A	Lab Sample ID:	280-155225-9		
Client ID:	PZ021-7				
Operator ID:	JZ	ALS Bottle#:	66	Worklist Smp#:	66
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

19 2-Amino-4,6-dinitrotoluene, CAS: 35572-78-2, Signal: 1

RT: 11.48
Response: 18196
Amount: 0.087935



Reviewer: zhangji, 10-Nov-2021 14:04:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

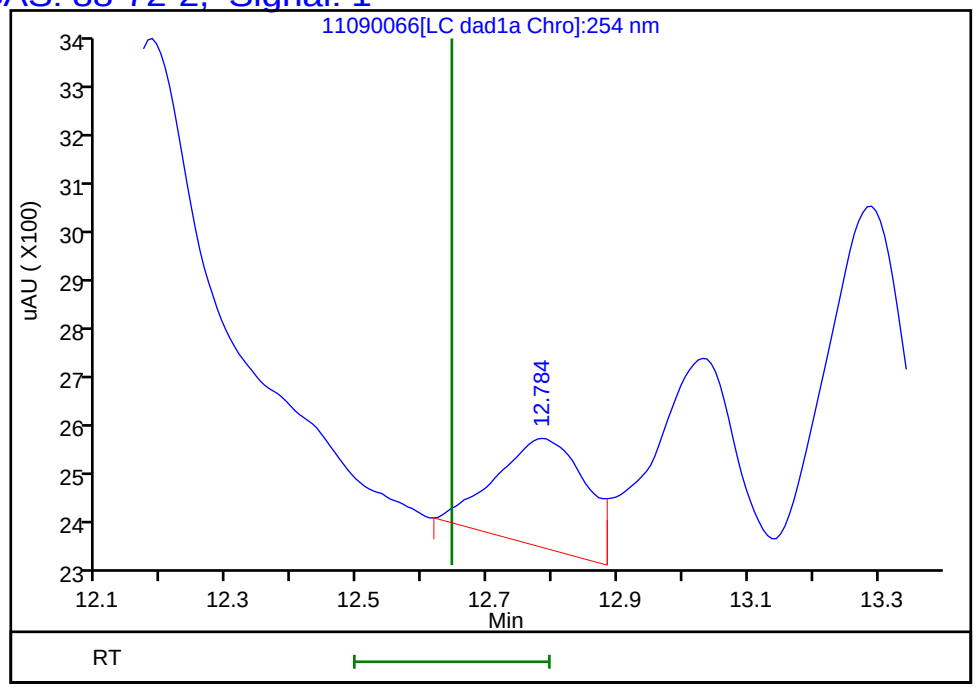
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090066.d				
Injection Date:	10-Nov-2021 13:09:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-9-A	Lab Sample ID:	280-155225-9		
Client ID:	PZ021-7				
Operator ID:	JZ	ALS Bottle#:	66	Worklist Smp#:	66
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

22 o-Nitrotoluene, CAS: 88-72-2, Signal: 1

RT: 12.78
Response: 2020
Amount: 0.015733



Reviewer: zhangji, 10-Nov-2021 14:04:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

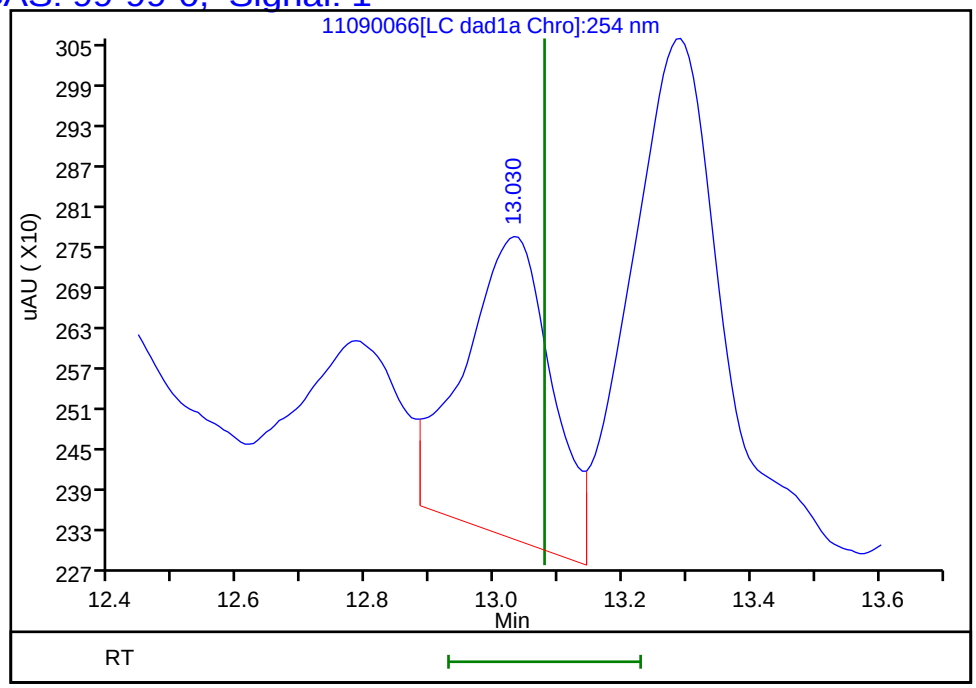
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090066.d
Injection Date: 10-Nov-2021 13:09:15 Instrument ID: CHHPLC_X3
Lims ID: 280-155225-A-9-A Lab Sample ID: 280-155225-9
Client ID: PZ021-7
Operator ID: JZ ALS Bottle#: 66 Worklist Smp#: 66
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330

Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

23 p-Nitrotoluene, CAS: 99-99-0, Signal: 1

RT: 13.03
Response: 4236
Amount: 0.037851



Reviewer: zhangji, 10-Nov-2021 14:04:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

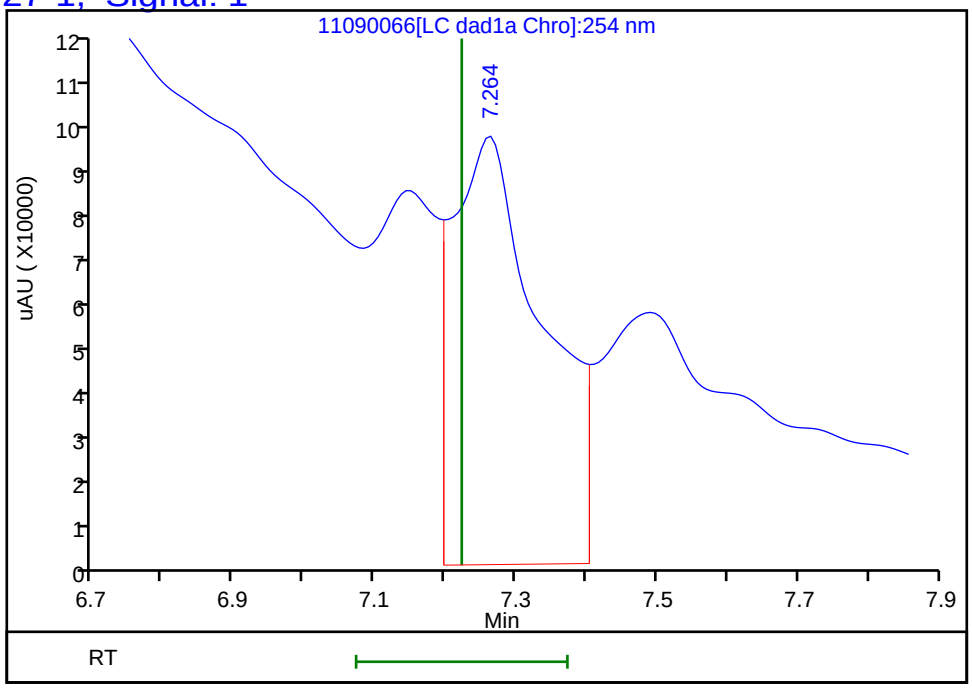
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090066.d				
Injection Date:	10-Nov-2021 13:09:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-9-A	Lab Sample ID:	280-155225-9		
Client ID:	PZ021-7				
Operator ID:	JZ	ALS Bottle#:	66	Worklist Smp#:	66
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1, Signal: 1

RT: 7.26
Response: 759187
Amount: 5.824651



Reviewer: zhangji, 10-Nov-2021 14:04:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

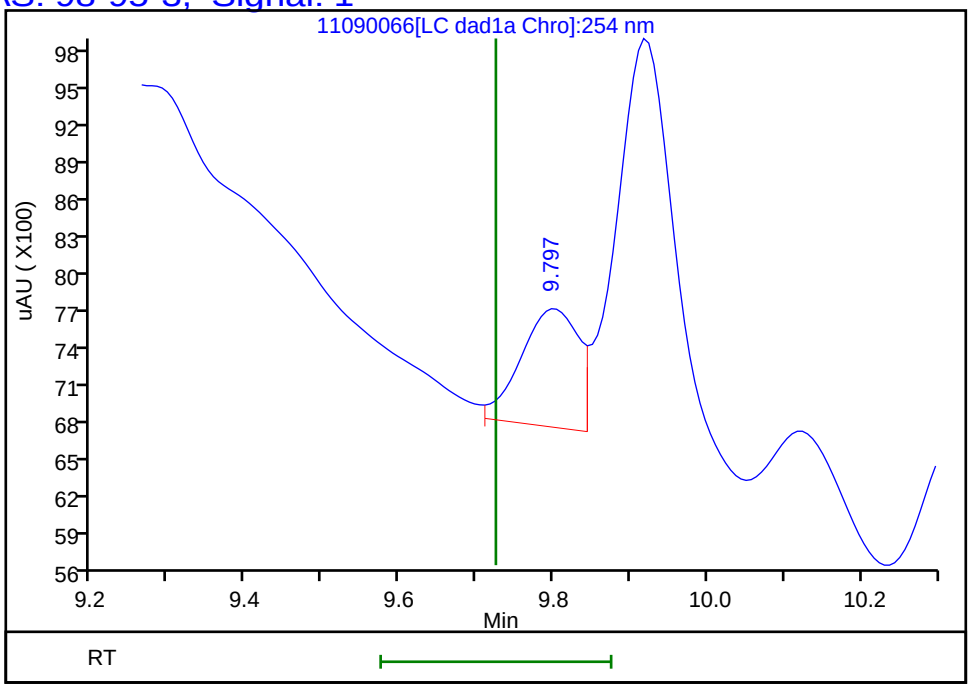
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090066.d				
Injection Date:	10-Nov-2021 13:09:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-9-A	Lab Sample ID:	280-155225-9		
Client ID:	PZ021-7				
Operator ID:	JZ	ALS Bottle#:	66	Worklist Smp#:	66
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

13 Nitrobenzene, CAS: 98-95-3, Signal: 1

RT: 9.80
Response: 4877
Amount: 0.024974



Reviewer: zhangji, 10-Nov-2021 14:04:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

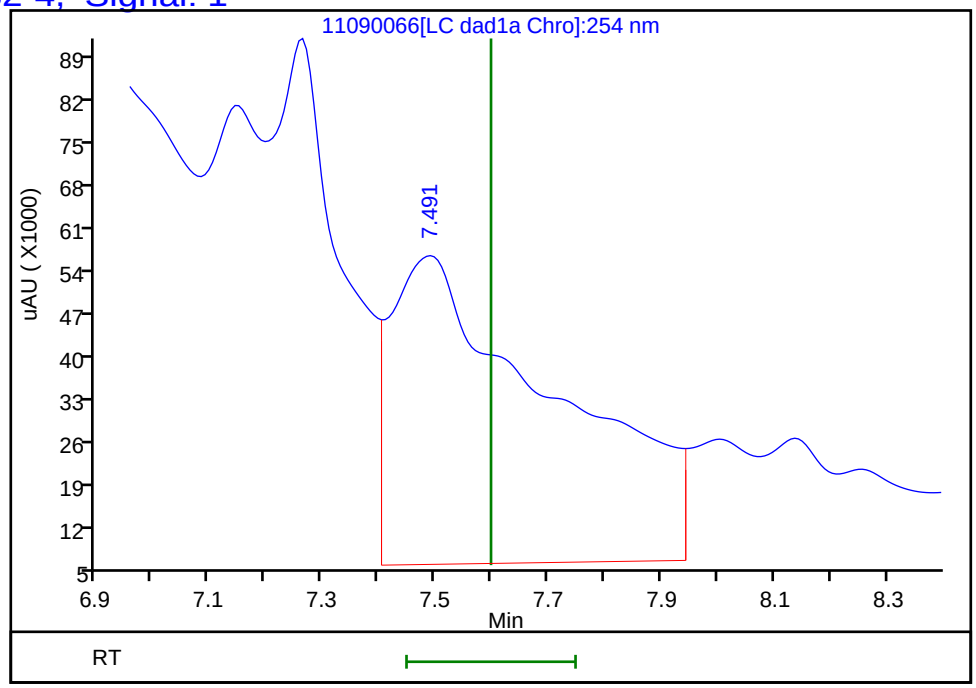
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090066.d

Injection Date:	10-Nov-2021 13:09:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-9-A	Lab Sample ID:	280-155225-9		
Client ID:	PZ021-7				
Operator ID:	JZ	ALS Bottle#:	66	Worklist Smp#:	66
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

8 RDX, CAS: 121-82-4, Signal: 1

RT: 7.49
Response: 1015267
Amount: 9.554423



Reviewer: zhangji, 10-Nov-2021 14:04:12
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

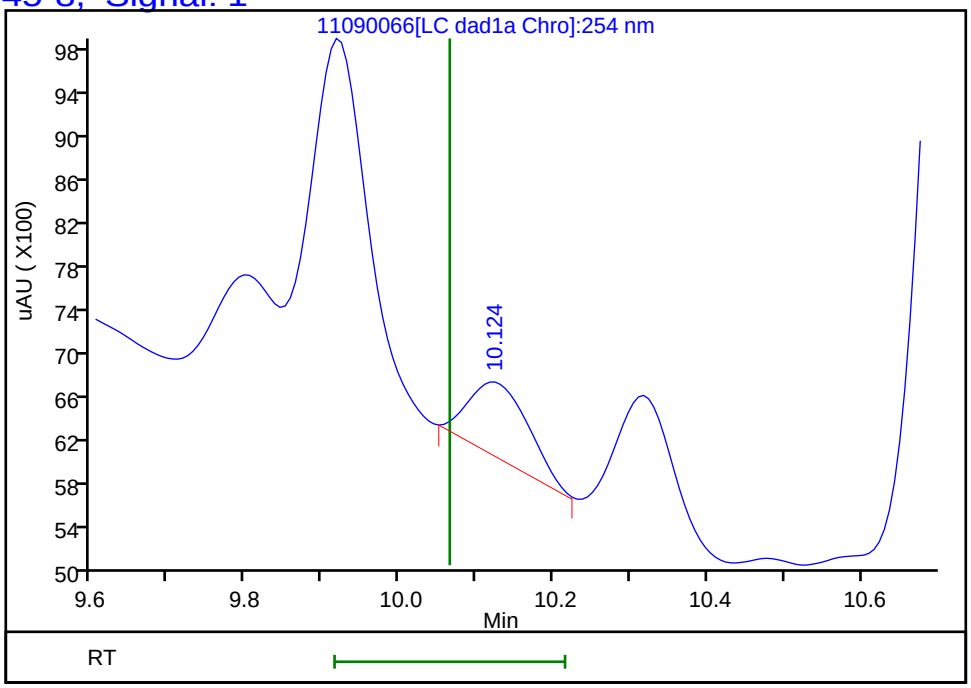
Eurofins TestAmerica, Denver

Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090066.d

Injection Date:	10-Nov-2021 13:09:15	Instrument ID:	CHHPLC_X3		
Lims ID:	280-155225-A-9-A	Lab Sample ID:	280-155225-9		
Client ID:	PZ021-7				
Operator ID:	JZ	ALS Bottle#:	66	Worklist Smp#:	66
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

15 Tetryl, CAS: 479-45-8, Signal: 1

RT: 10.12
Response: 3684
Amount: 0.021366



Reviewer: zhangji, 10-Nov-2021 14:04:12

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.: 280-155225-1

SDG No.:

Client Sample ID: PZ021-7 Lab Sample ID: 280-155225-9

Matrix: Water Lab File ID: 11100040.D

Analysis Method: 8330A Date Collected: 11/04/2021 08:00

Extraction Method: 3535 Date Extracted: 11/08/2021 14:30

Sample wt/vol: 508.5(mL) Date Analyzed: 11/11/2021 10:50

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
19406-51-0	*4-Amino-2,6-dinitrotoluene*	*6.3*	*J1 B*	*0.15*	0.12	*0.057*

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_X5\20211110-106378.b\11100040.D
Lims ID: 280-155225-A-9-A
Client ID: PZ021-7
Sample Type: Client
Inject. Date: 11-Nov-2021 10:50:57 ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: 280-155225-A-9-A
Misc. Info.: 280-0106378-040
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 19:12:38 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 19:12:23

	Compound	Det	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
	5 HMX	1	6.617	6.650	-0.033	15873	0.0938	
	6 MNX	1		7.367			ND	
	8 RDX	1		8.803			ND	U
	9 Nitrobenzene	1	11.777	11.856	-0.079	15973	0.0426	
$	10 1,2-Dinitrobenzene	1	12.903	12.949	-0.046	47403	0.1784	M
	12 1,3-Dinitrobenzene	1		15.376			ND	
	14 o-Nitrotoluene	1	16.617	16.603	0.014	113334	0.4552	
	16 p-Nitrotoluene	1		16.889			ND	
	17 4-Amino-2,6-dinitrotoluene	1	17.230	17.343	-0.113	190280	0.6413	
	18 m-Nitrotoluene	1		17.856			ND	U
	19 2-Amino-4,6-dinitrotoluene	1	18.223	18.236	-0.013	47145	0.1177	
	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	24.997	25.063	-0.066	9861	0.0223	

QC Flag Legend

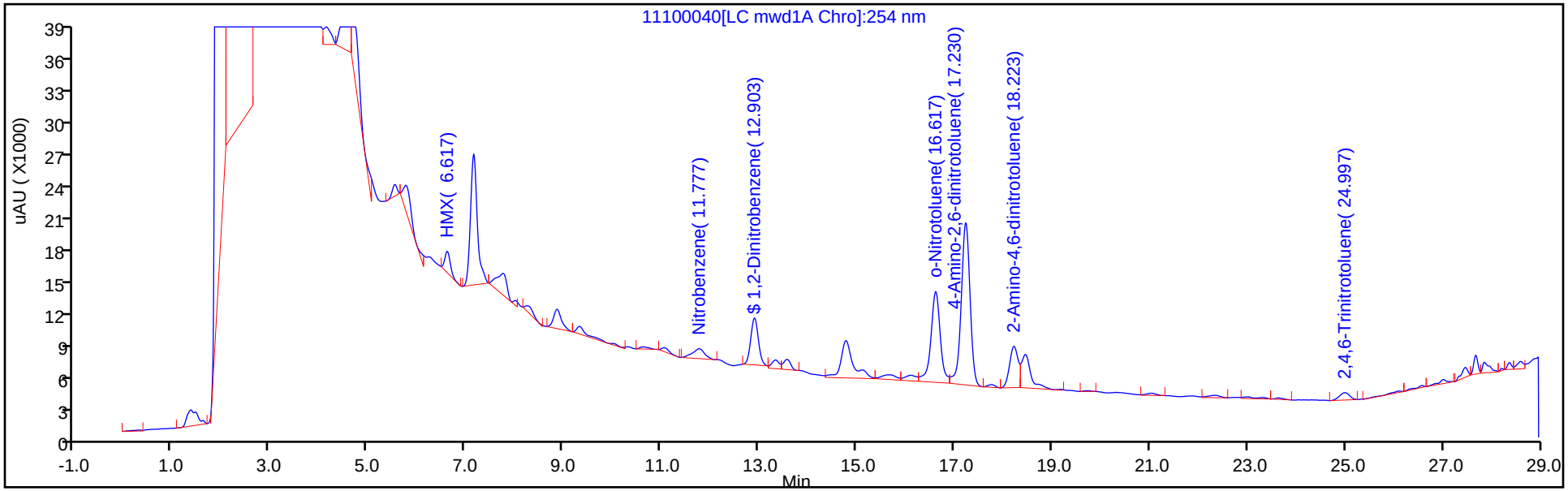
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 11-Nov-2021 19:12:41 Chrom Revision: 2.3 22-Sep-2021 15:38:46

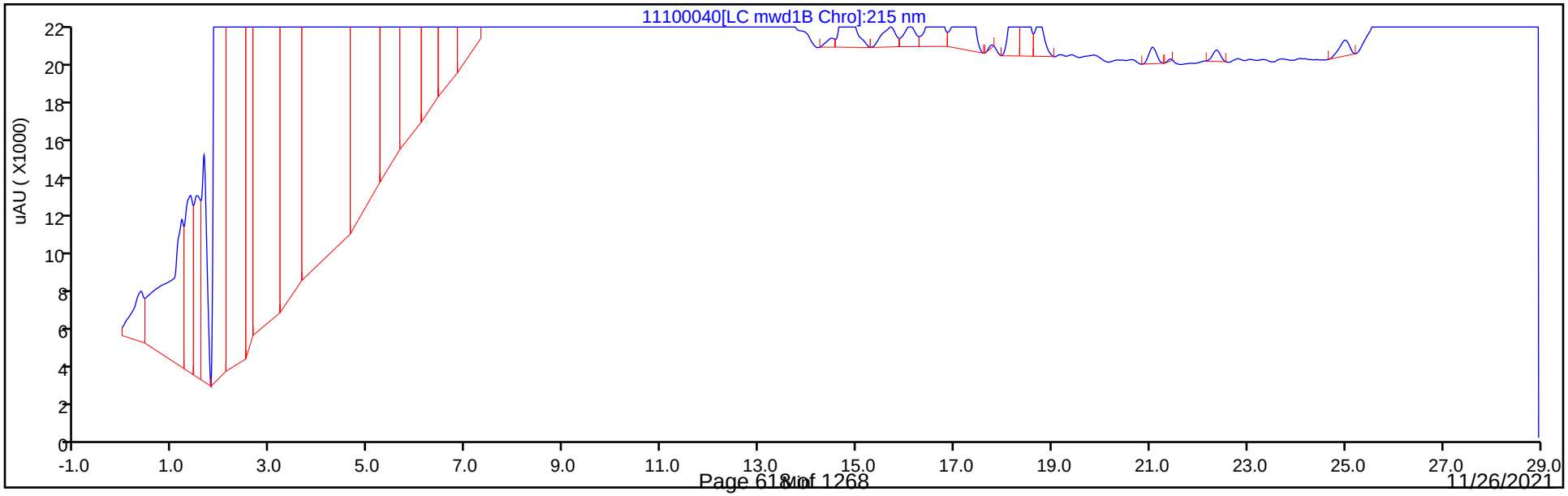
Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100040.D				
Injection Date:	11-Nov-2021 10:50:57	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	280-155225-A-9-A	Lab Sample ID:	280-155225-9	Worklist Smp#:	40
Client ID:	PZ021-7				
Injection Vol:	100.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
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\11100040.D				
Lims ID:	280-155225-A-9-A				
Client ID:	PZ021-7				
Sample Type:	Client				
Inject. Date:	11-Nov-2021 10:50:57	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-155225-A-9-A				
Misc. Info.:	280-0106378-040				
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 19:12:38	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 19:12:23		

Compound	Amount Added	Amount Recovered	% Rec.
$ 10 1,2-Dinitrobenzene	0.2000	0.1784	89.22

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

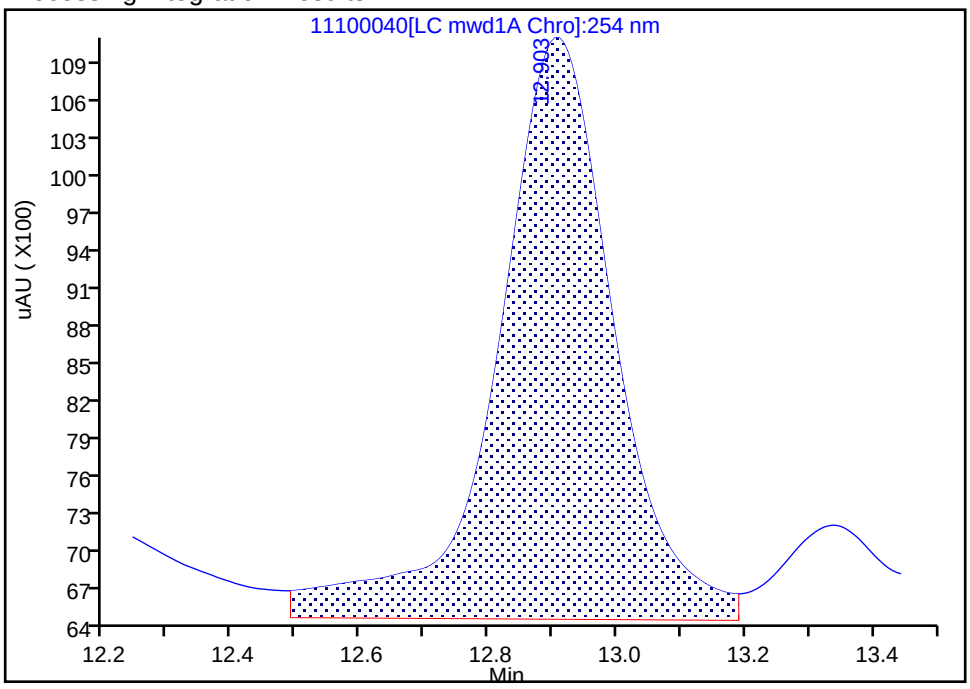
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100040.D				
Injection Date:	11-Nov-2021 10:50:57	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-9-A	Lab Sample ID:	280-155225-9		
Client ID:	PZ021-7				
Operator ID:	JZ	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. 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

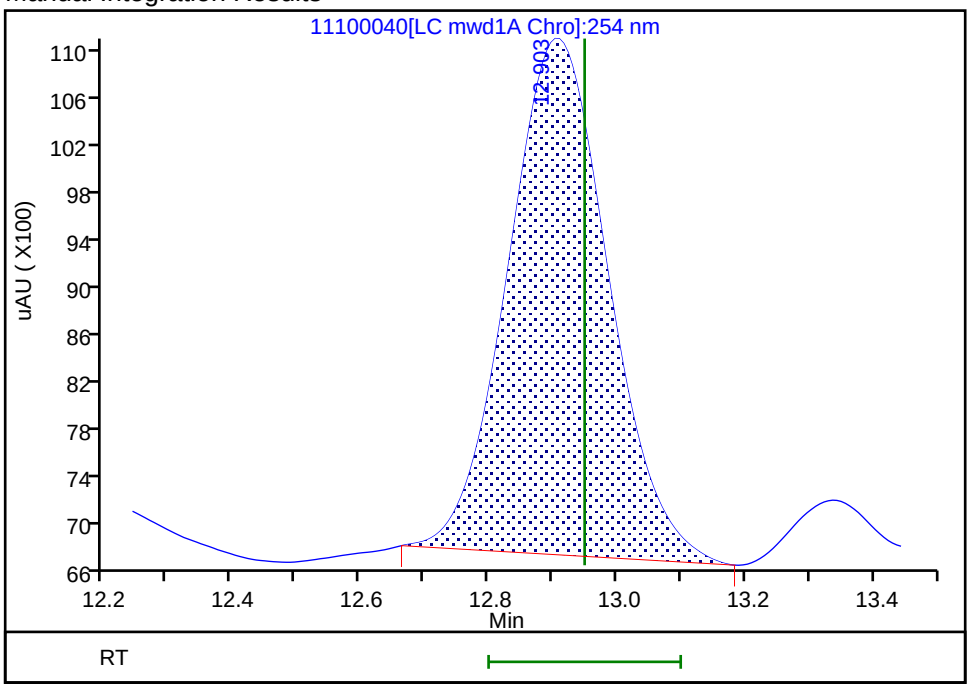
Processing Integration Results

RT: 12.90
Area: 59291
Amount: 0.223184
Amount Units: ug/ml



Manual Integration Results

RT: 12.90
Area: 47403
Amount: 0.178435
Amount Units: ug/ml



Reviewer: zhangji, 11-Nov-2021 19:12:02

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

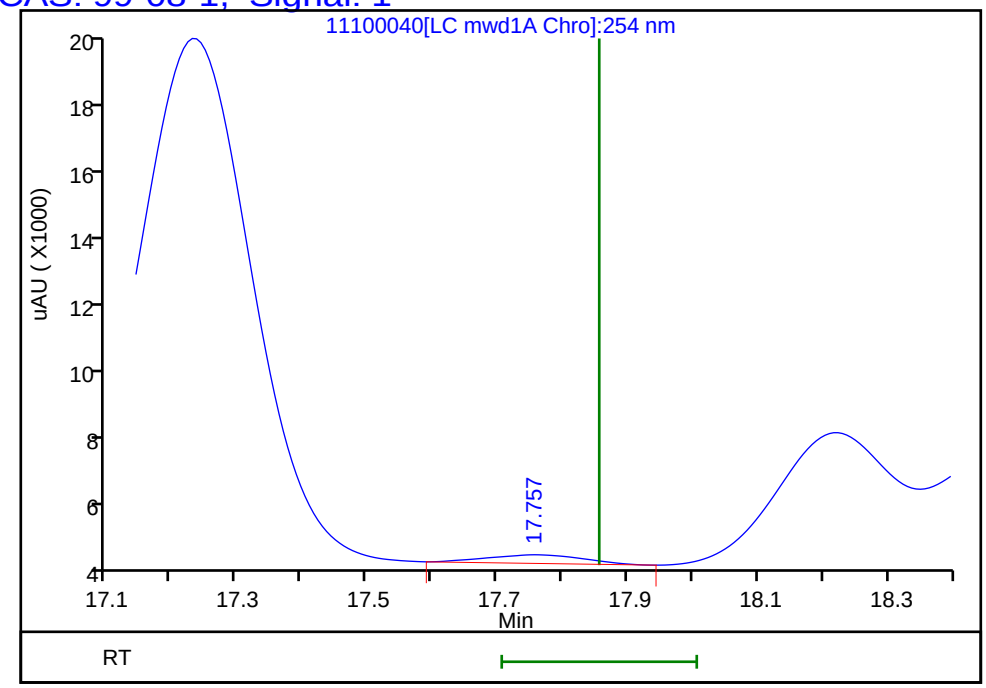
User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100040.D				
Injection Date:	11-Nov-2021 10:50:57	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-9-A	Lab Sample ID:	280-155225-9		
Client ID:	PZ021-7				
Operator ID:	JZ	ALS Bottle#:	40	Worklist Smp#:	40
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:	Luna-Phenyl hexyl (4.60 mm)	Detector	LC mwd1A, 254 nm		

18 m-Nitrotoluene, CAS: 99-08-1, Signal: 1

RT: 17.76
Response: 2540
Amount: 0.009124



Reviewer: zhangji, 11-Nov-2021 19:12:23
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

User Disabled Compound Report

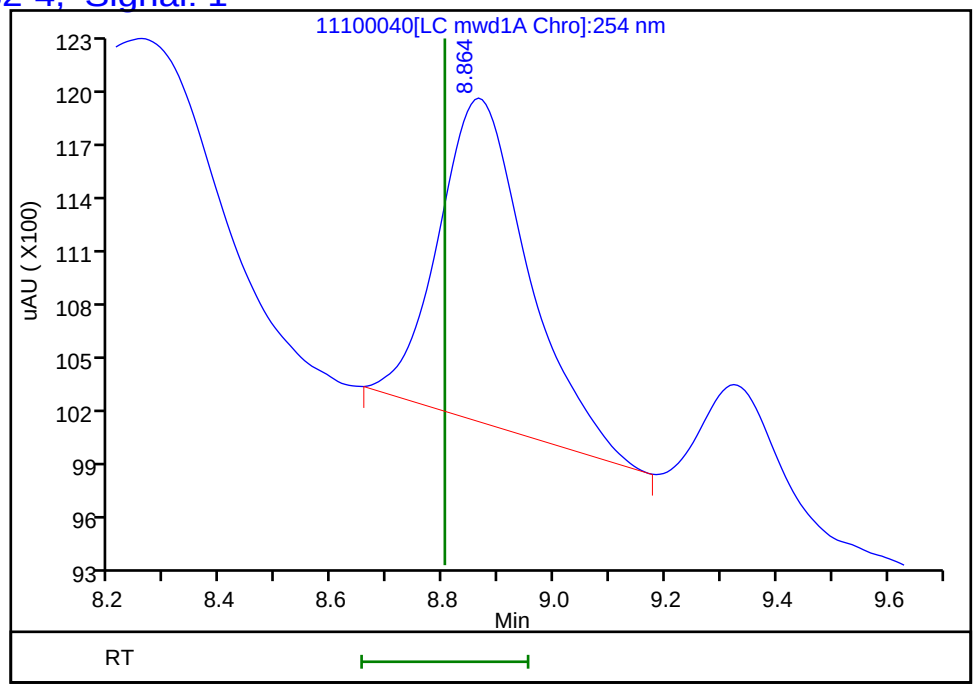
Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100040.D

Injection Date:	11-Nov-2021 10:50:57	Instrument ID:	CHHPLC_X5		
Lims ID:	280-155225-A-9-A	Lab Sample ID:	280-155225-9		
Client ID:	PZ021-7				
Operator ID:	JZ	ALS Bottle#:	40	Worklist Smp#:	40
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

RT: 8.86
Response: 20291
Amount: 0.099334



Reviewer: zhangji, 11-Nov-2021 19:12:23

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.: 280-155225-1 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.: 280-155225-1 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.: 280-155225-1 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

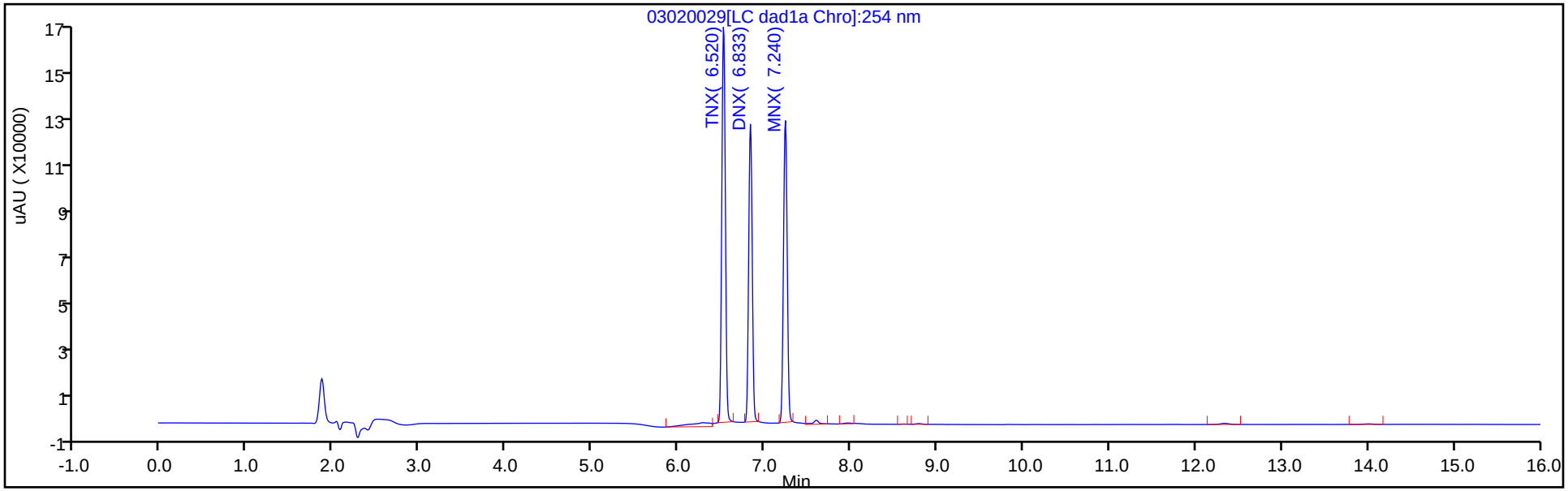
Report Date: 03-Mar-2021 13:32:24 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

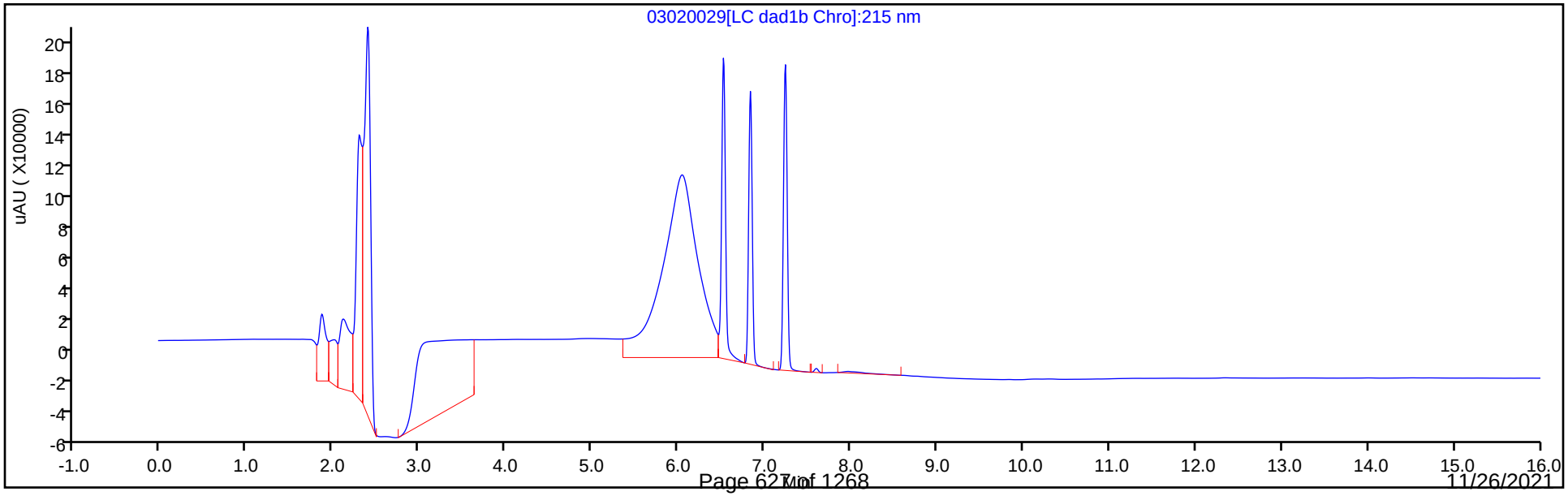
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020029.d

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

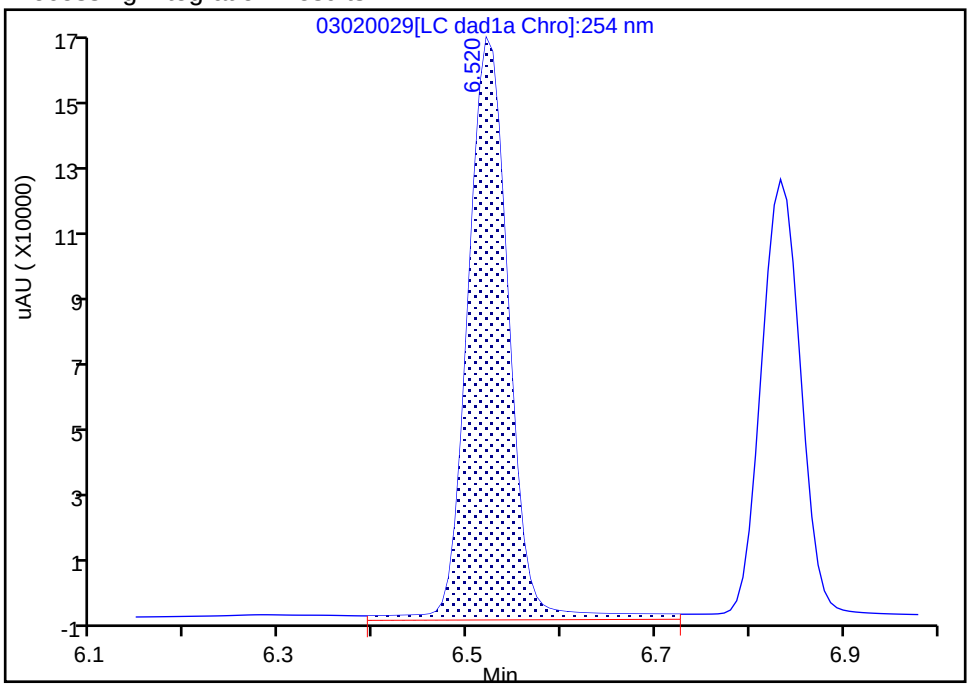
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020029.d				
Injection Date:	02-Mar-2021 23:49:27	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:		ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

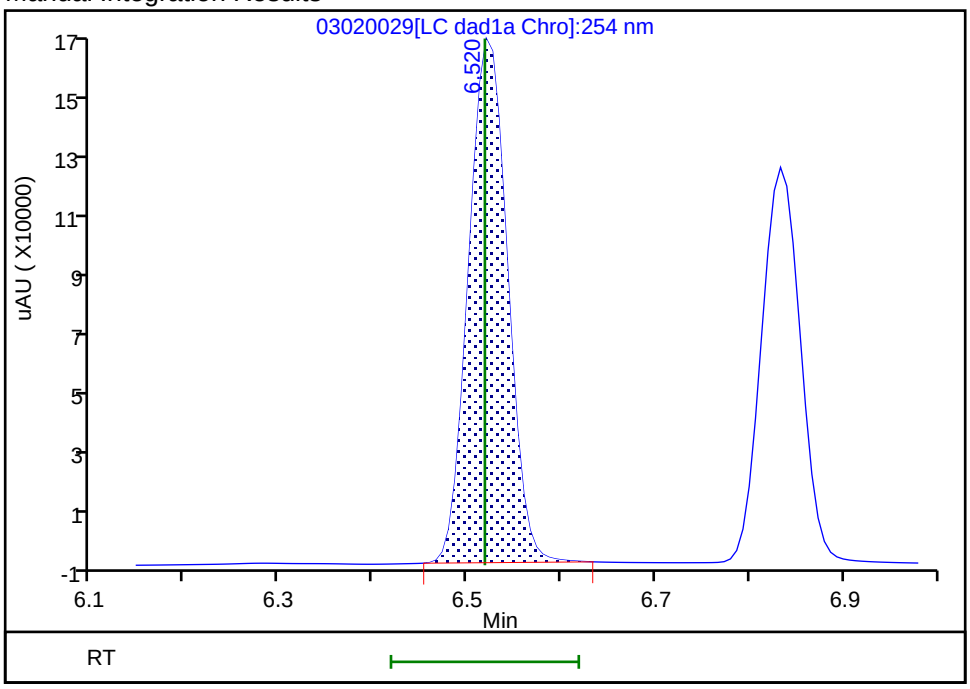
Processing Integration Results

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

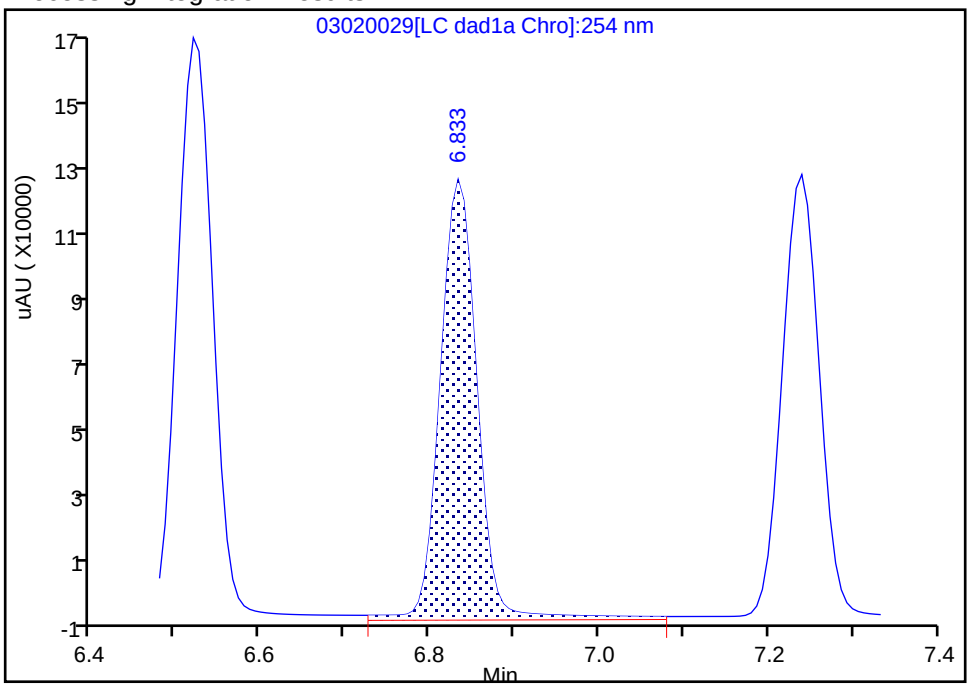
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020029.d				
Injection Date:	02-Mar-2021 23:49:27	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:		ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

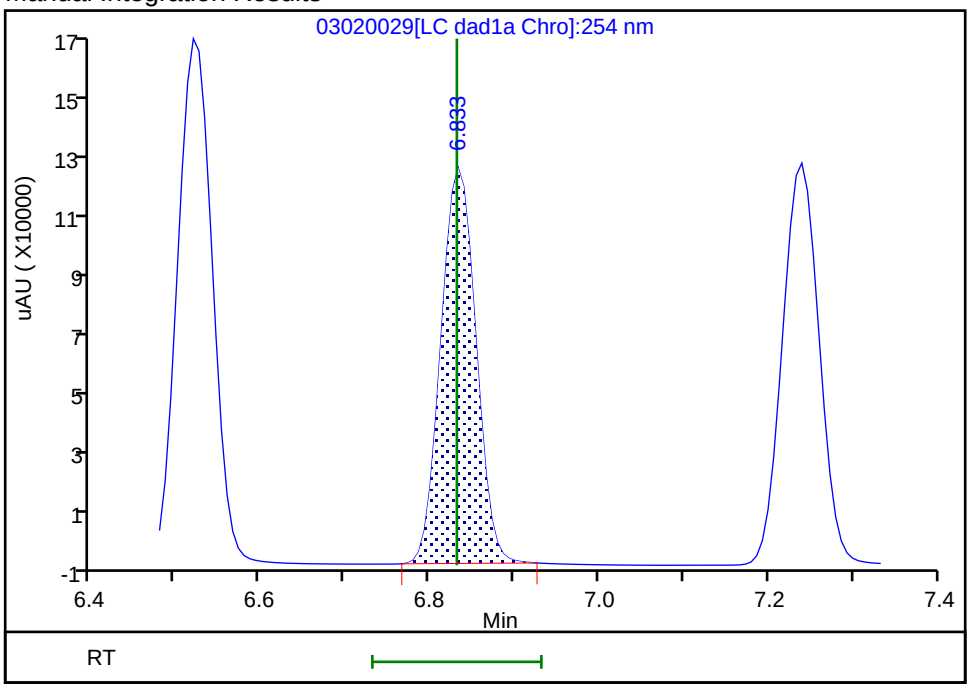
Processing Integration Results

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

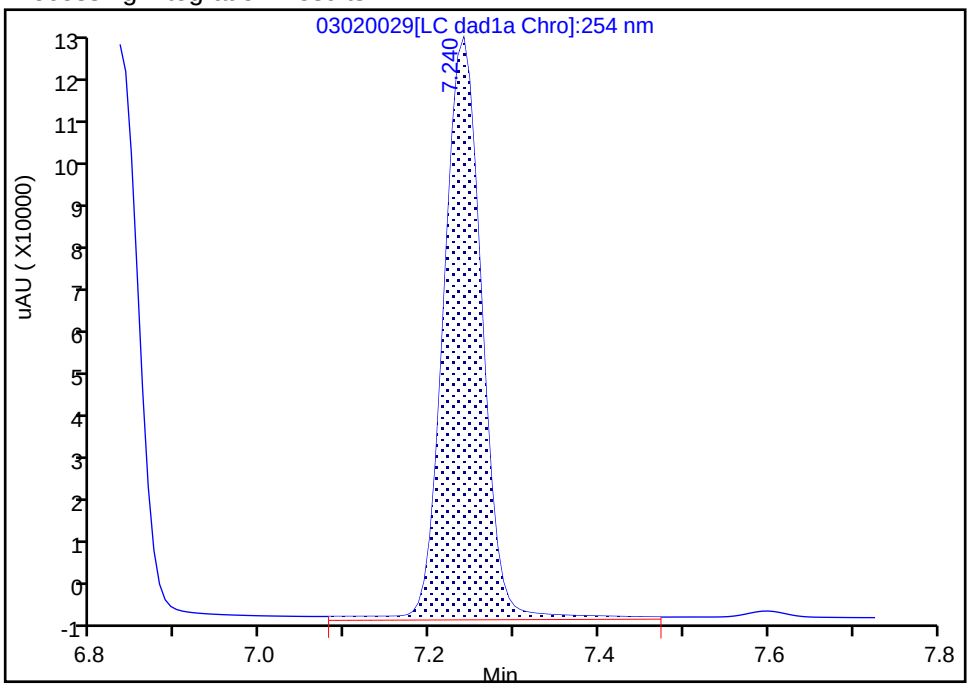
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020029.d				
Injection Date:	02-Mar-2021 23:49:27	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 8				
Client ID:					
Operator ID:		ALS Bottle#:	29	Worklist Smp#:	29
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

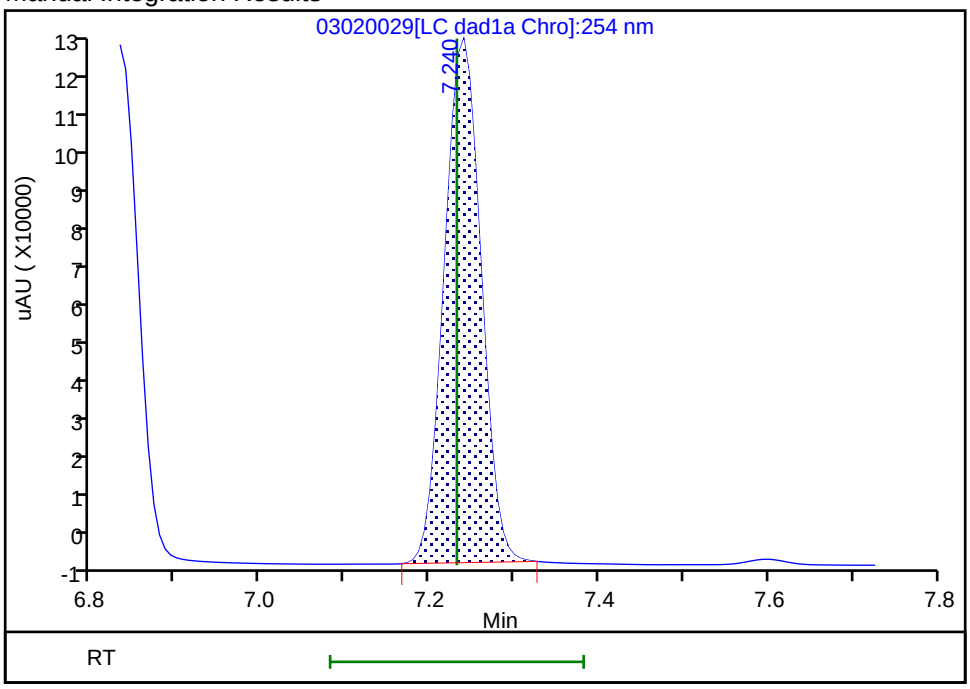
Processing Integration Results

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

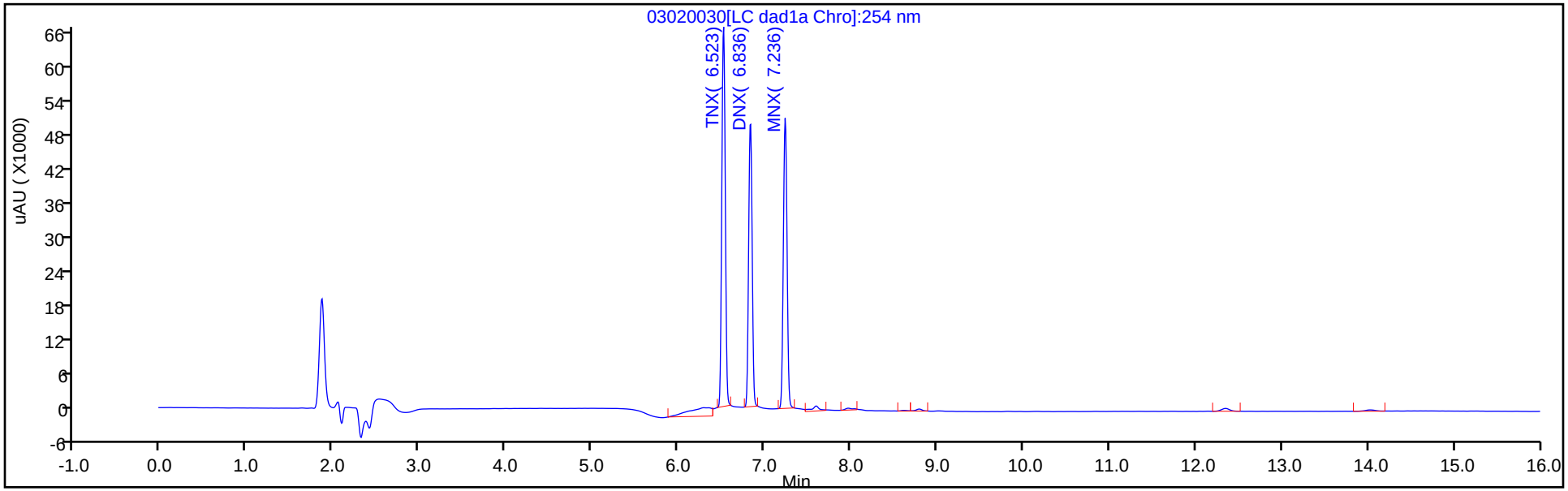
Report Date: 03-Mar-2021 13:32:25 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

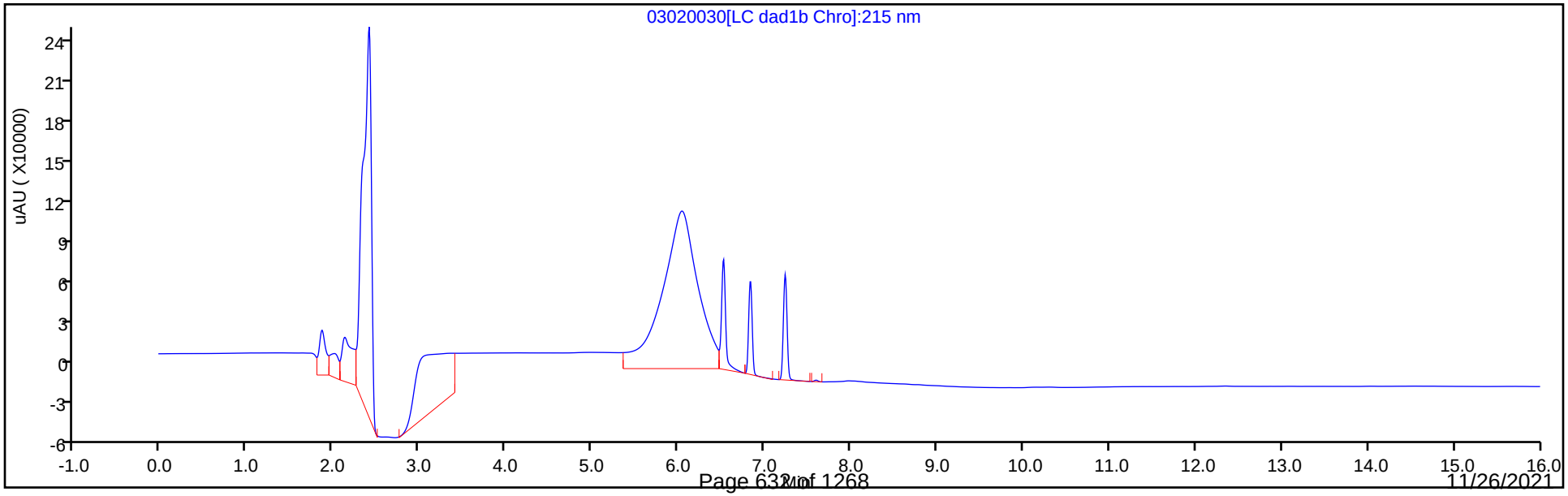
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020030.d

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

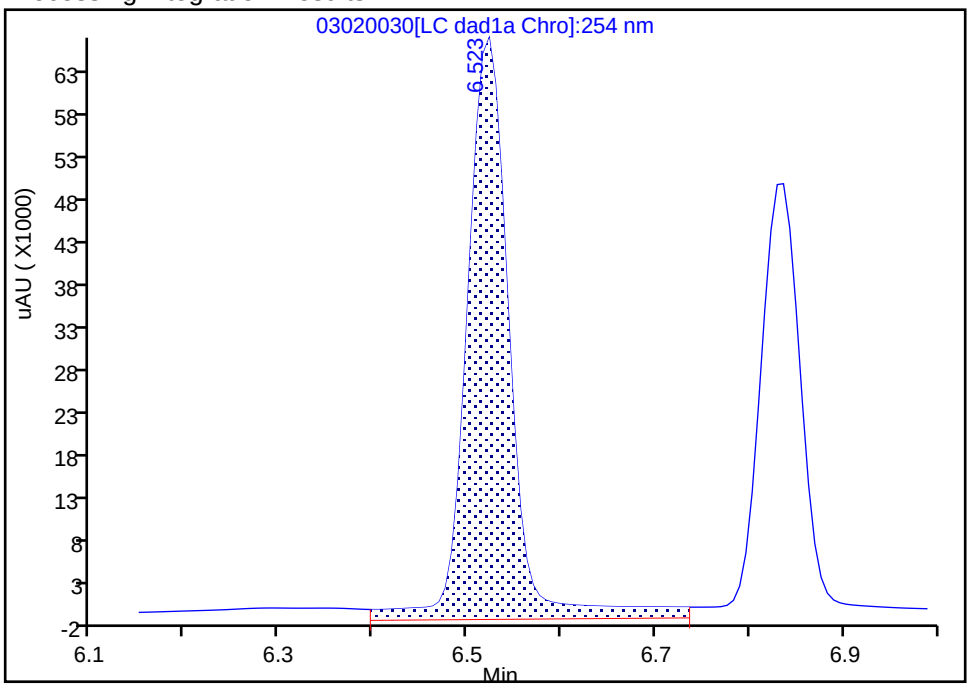
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020030.d				
Injection Date:	03-Mar-2021 00:12:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:		ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

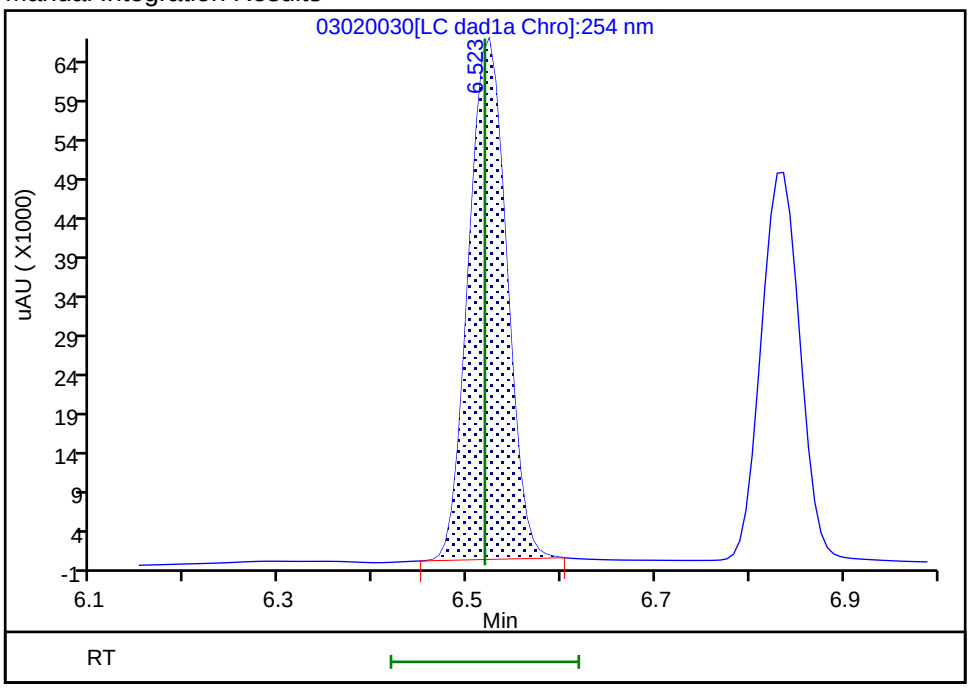
Processing Integration Results

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

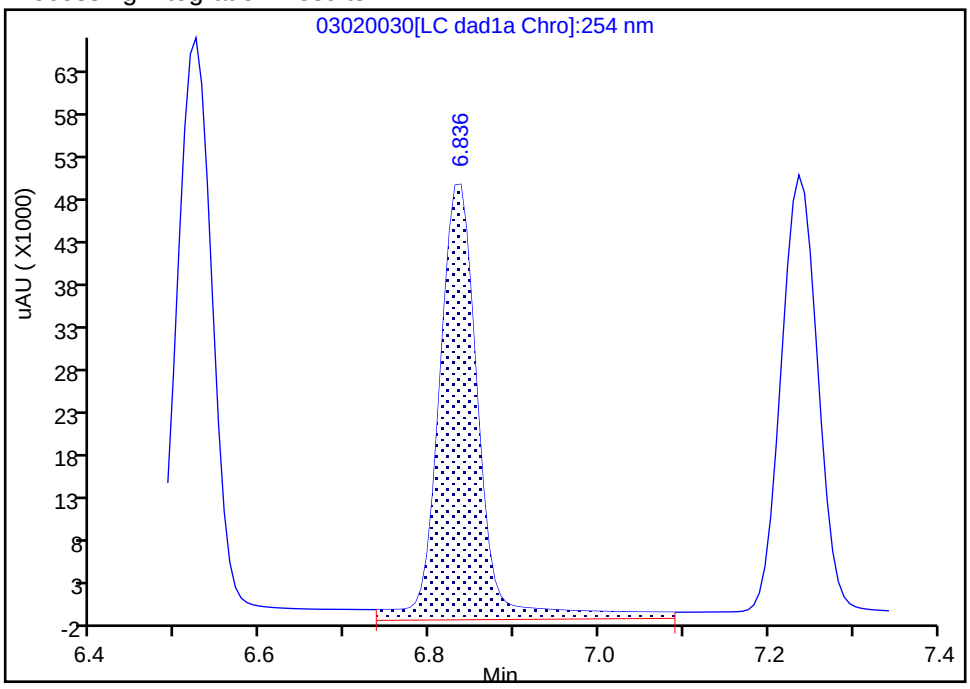
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020030.d				
Injection Date:	03-Mar-2021 00:12:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:		ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

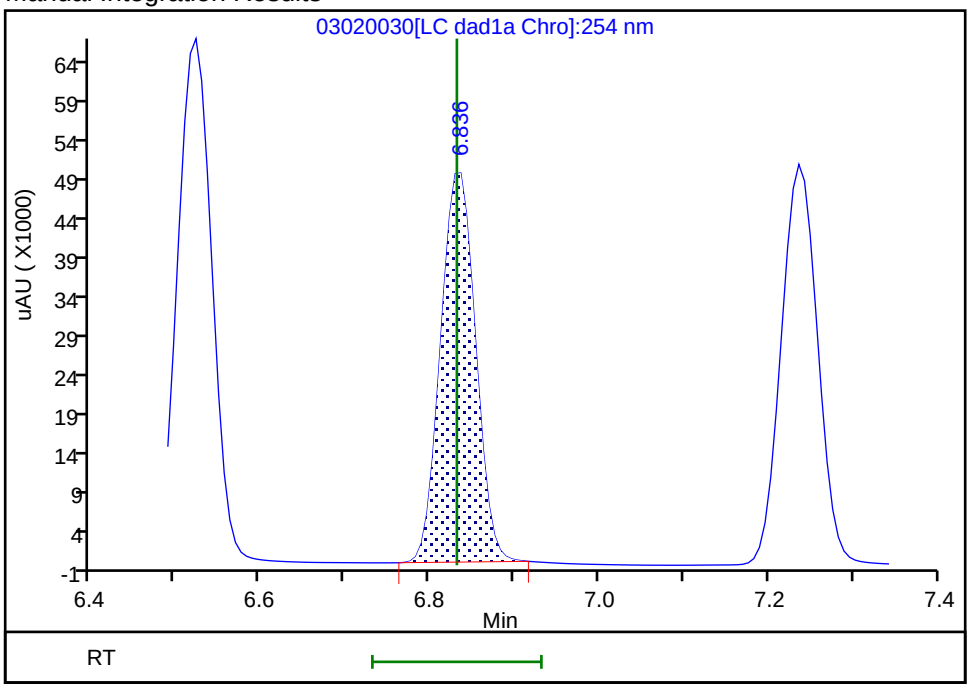
Processing Integration Results

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

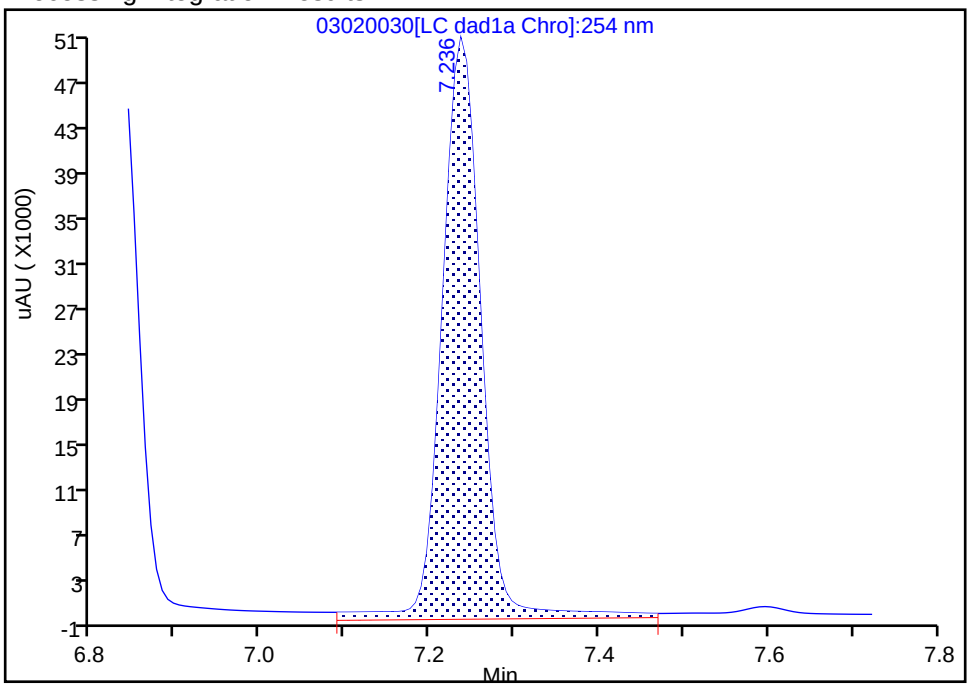
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020030.d				
Injection Date:	03-Mar-2021 00:12:24	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 7				
Client ID:					
Operator ID:		ALS Bottle#:	30	Worklist Smp#:	30
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

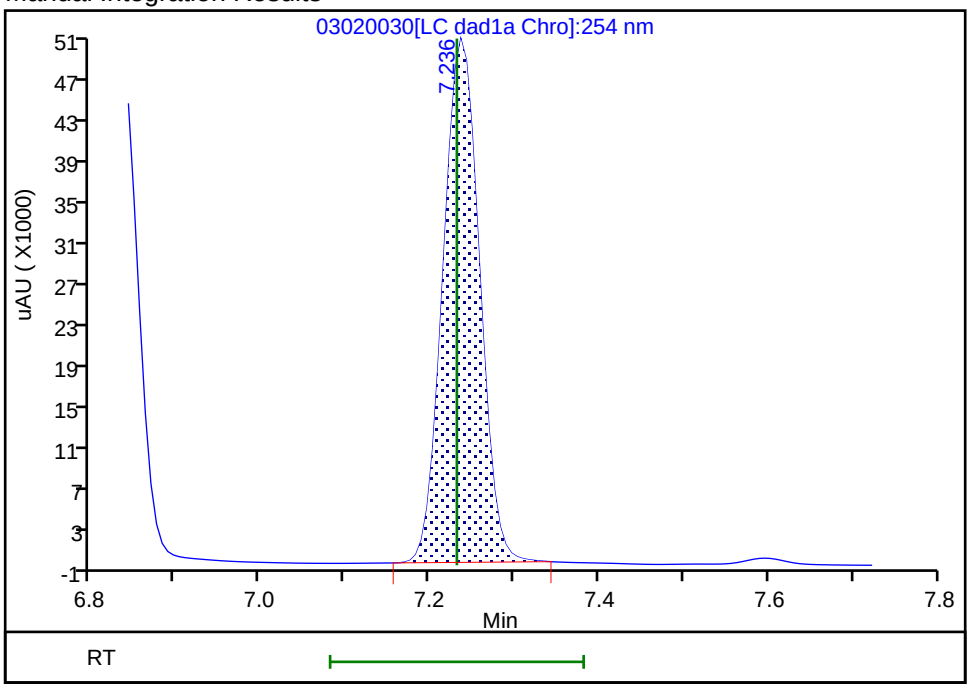
Processing Integration Results

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

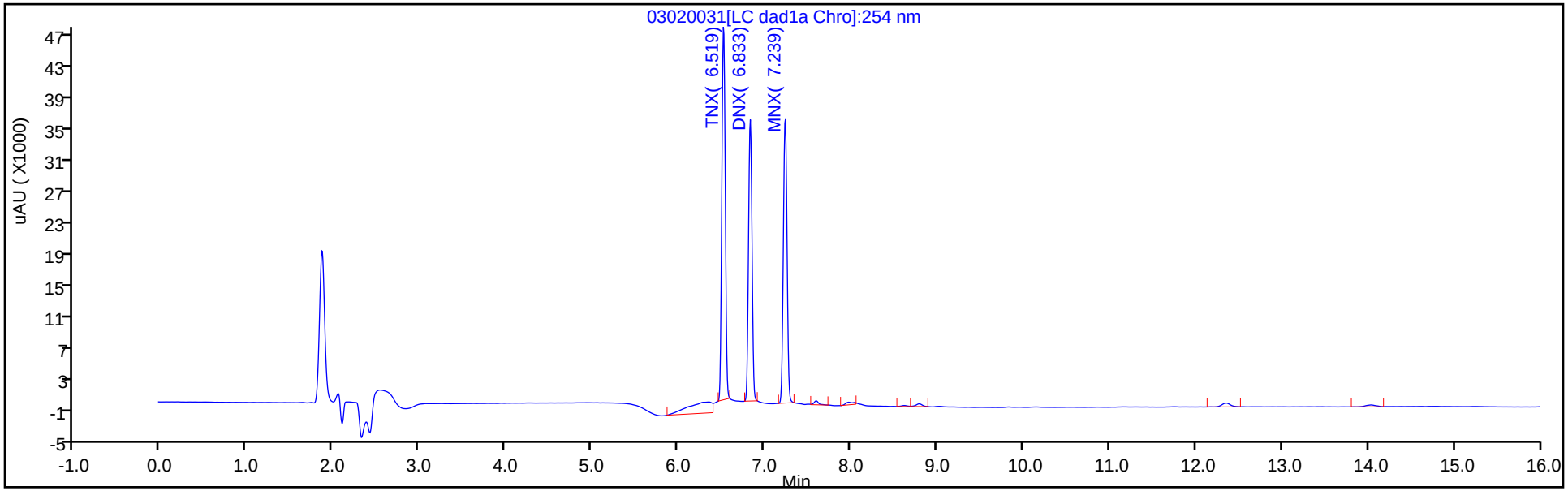
Report Date: 03-Mar-2021 13:32:26 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

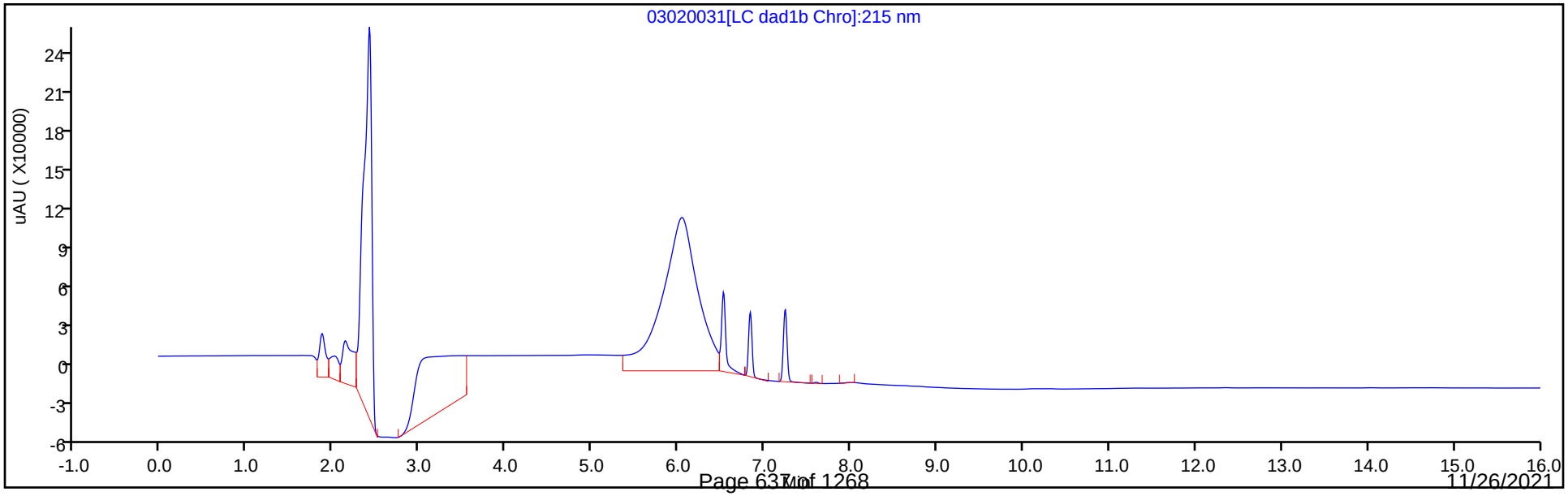
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020031.d

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

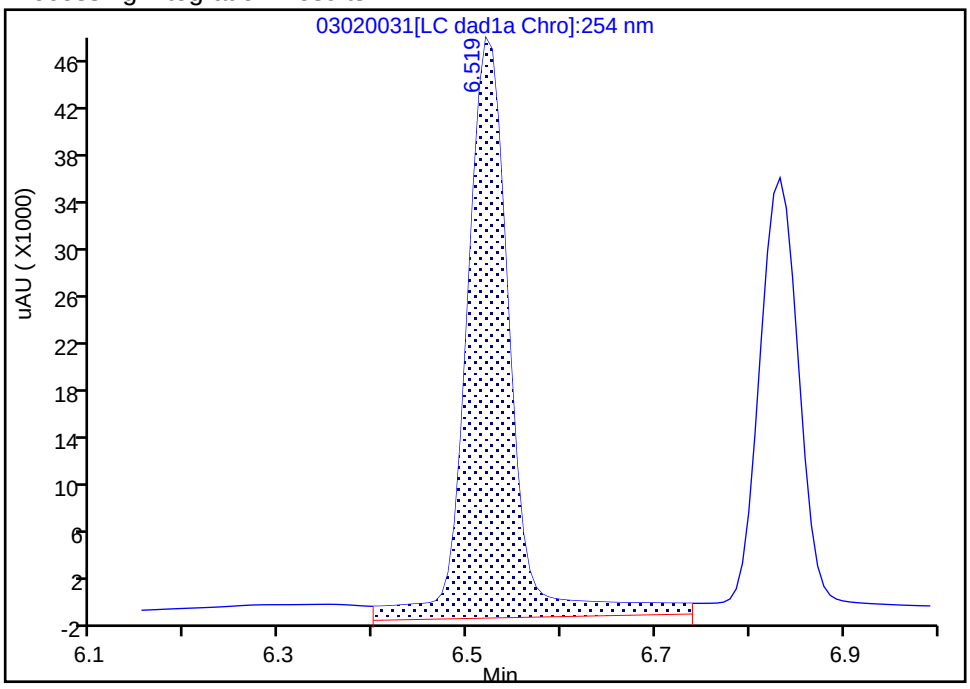
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020031.d				
Injection Date:	03-Mar-2021 00:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:		ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

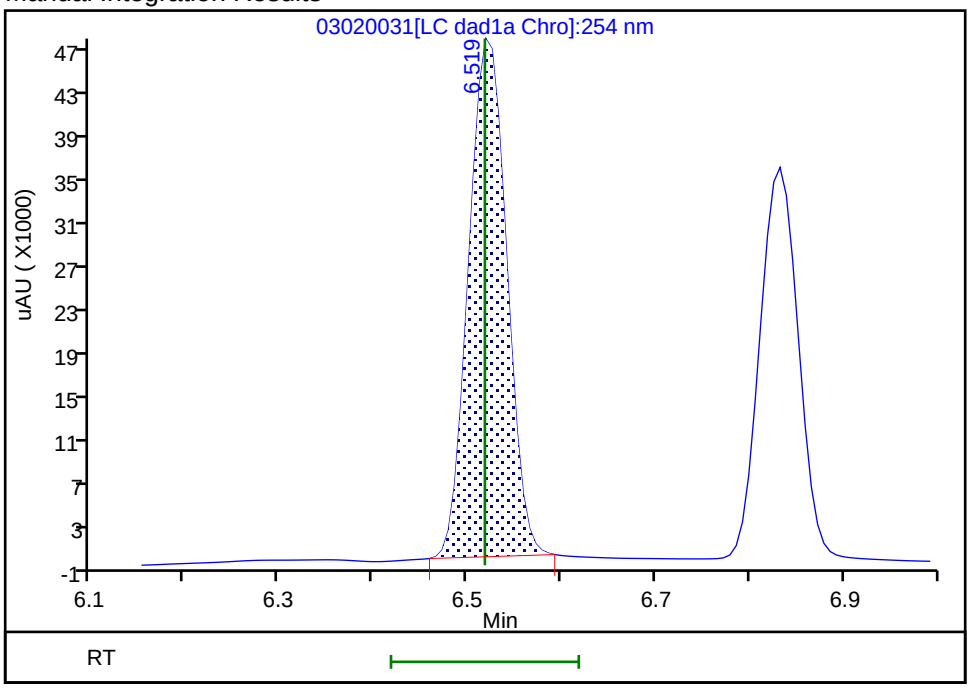
Processing Integration Results

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

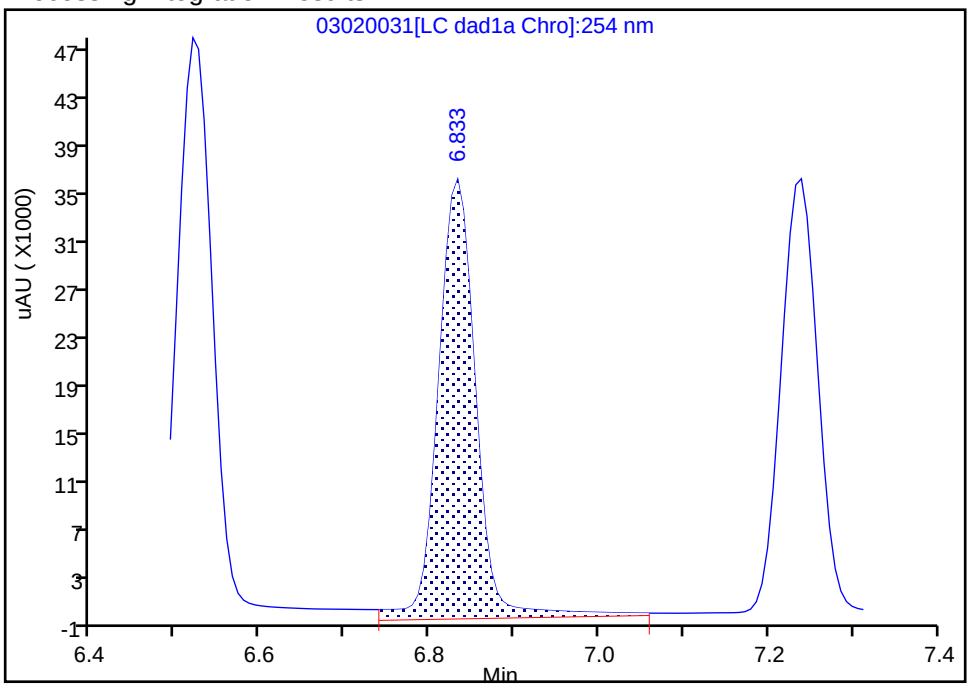
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020031.d				
Injection Date:	03-Mar-2021 00:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:		ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

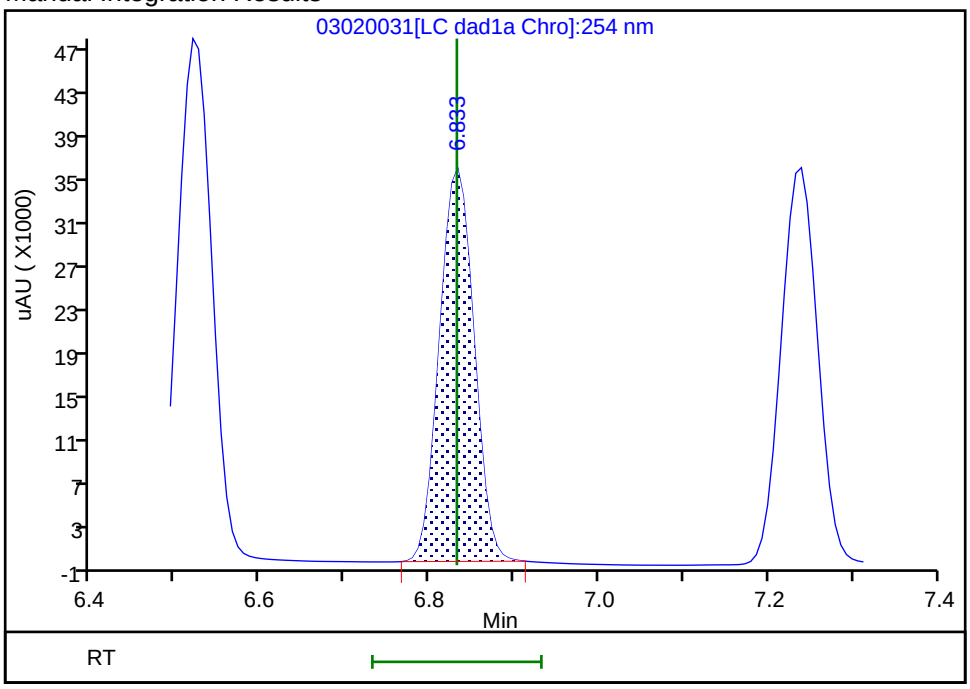
Processing Integration Results

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

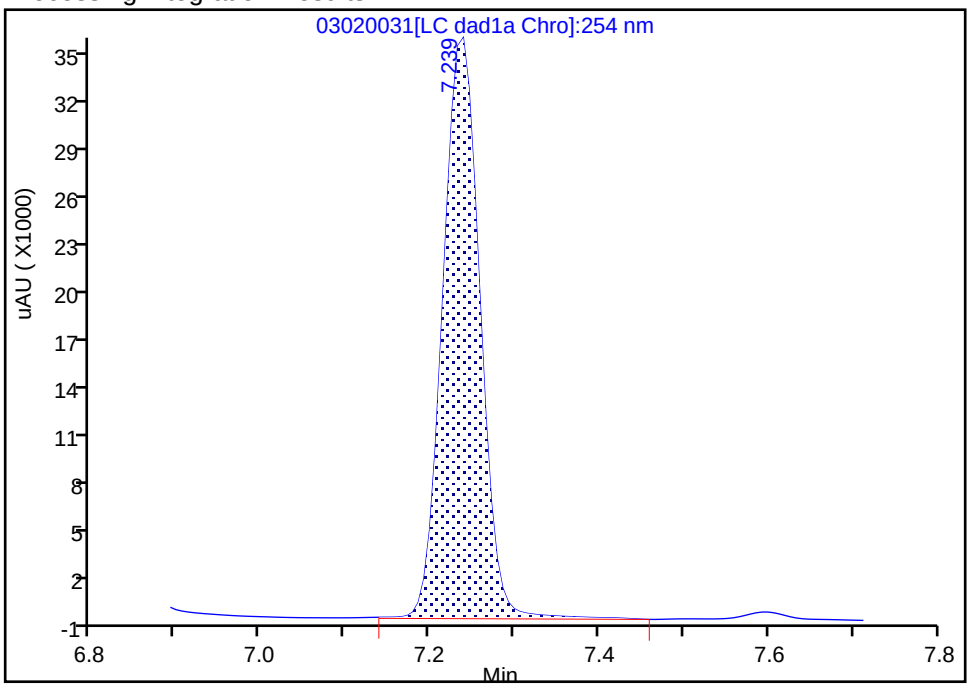
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020031.d				
Injection Date:	03-Mar-2021 00:35:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 6				
Client ID:					
Operator ID:		ALS Bottle#:	31	Worklist Smp#:	31
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

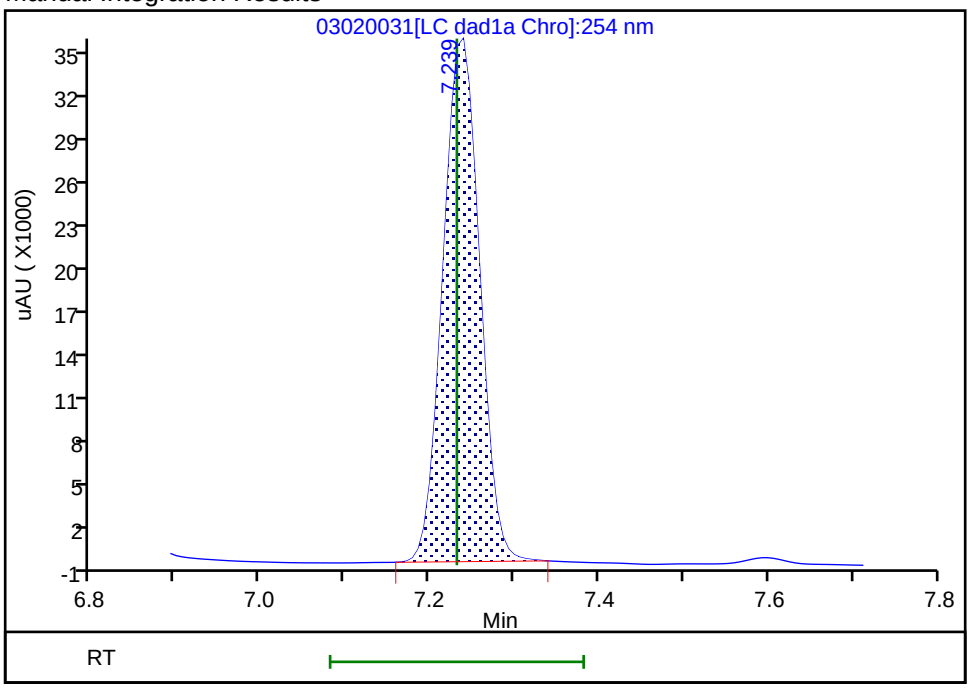
Processing Integration Results

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

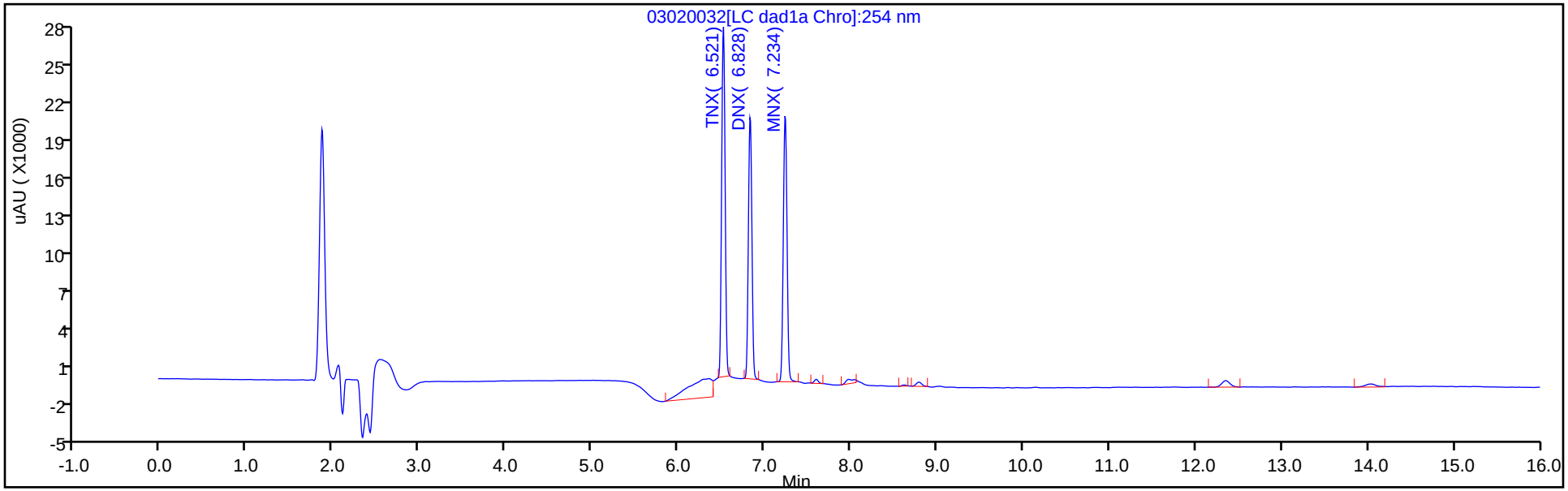
Report Date: 03-Mar-2021 13:32:27 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

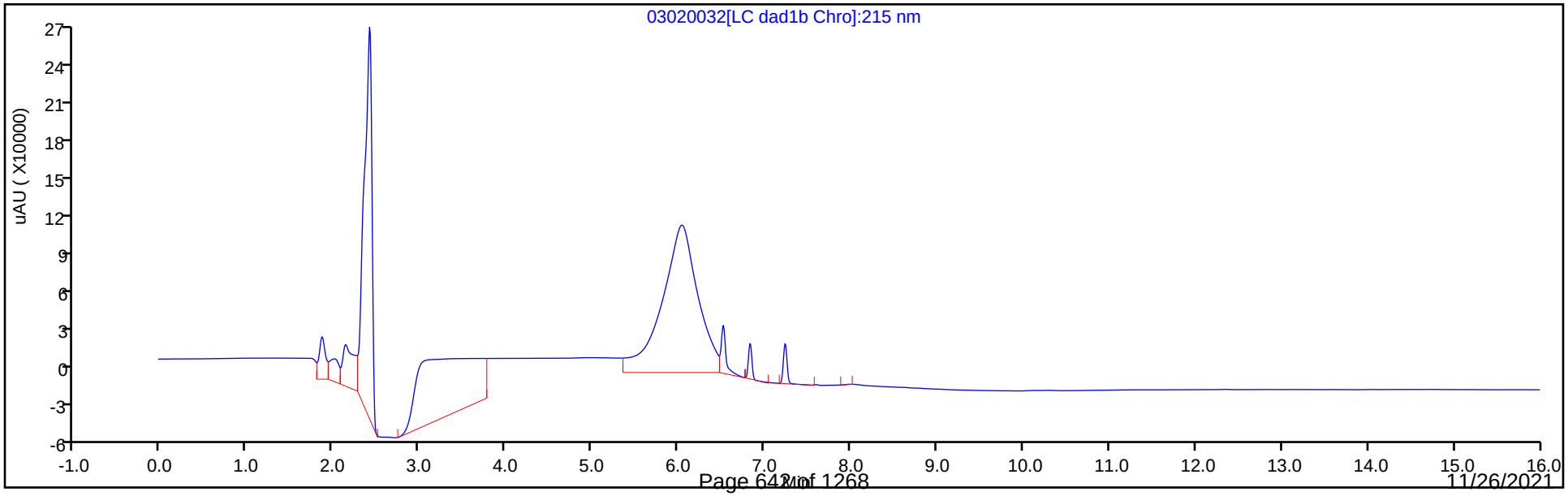
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020032.d

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

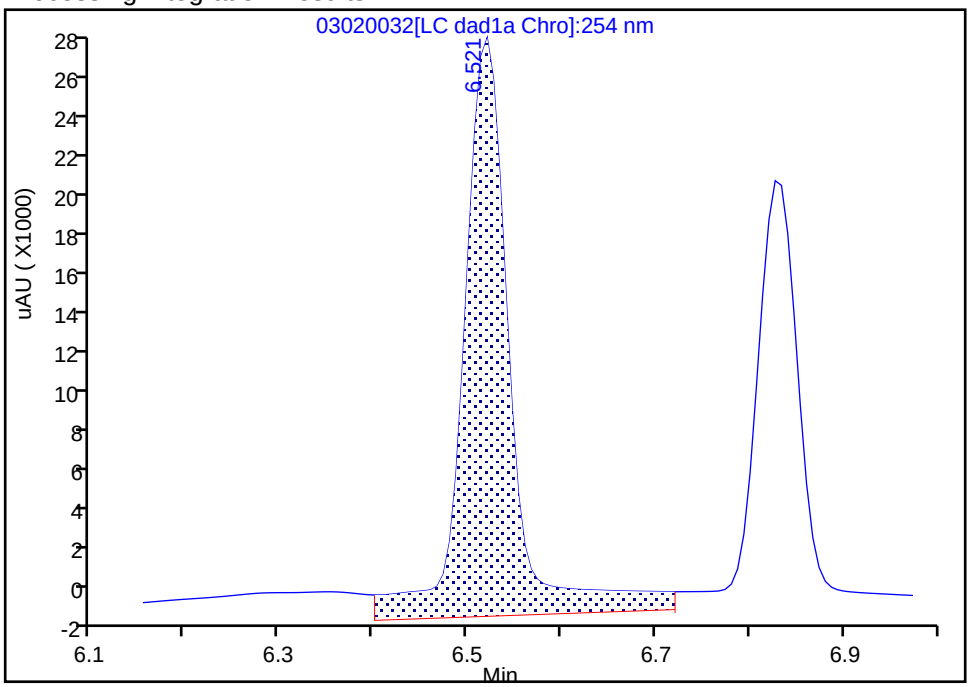
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020032.d				
Injection Date:	03-Mar-2021 00:58:19	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 5				
Client ID:					
Operator ID:		ALS Bottle#:	32	Worklist Smp#:	32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

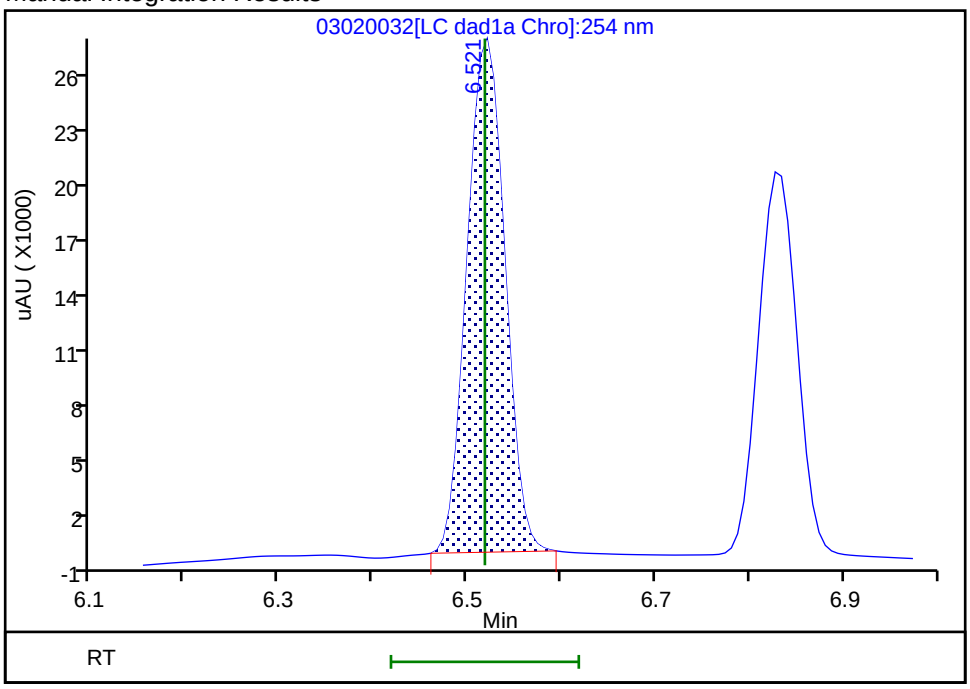
Processing Integration Results

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

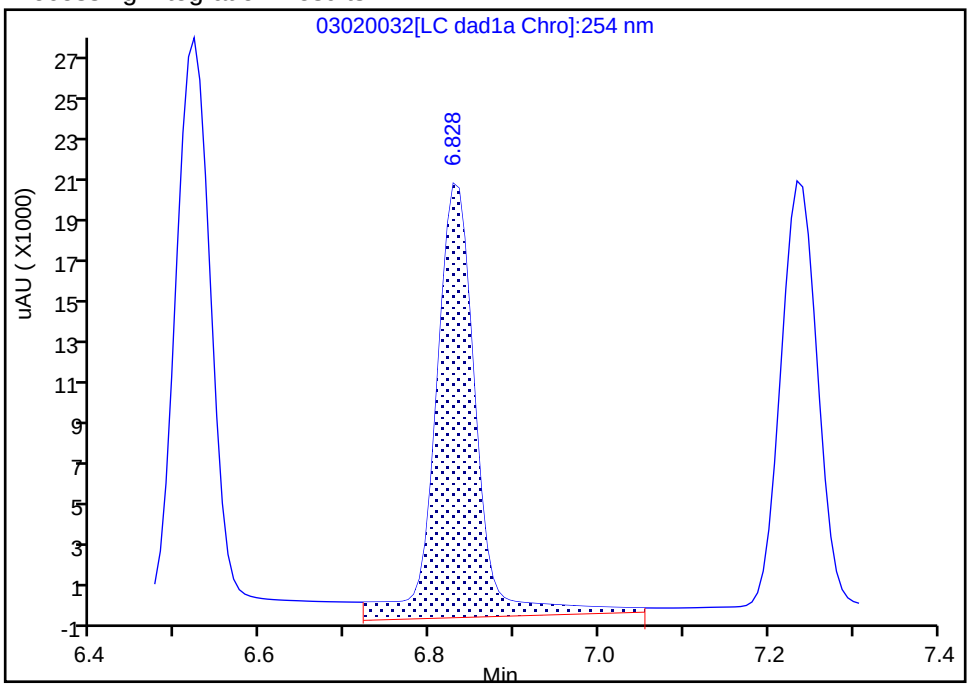
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020032.d		
Injection Date:	03-Mar-2021 00:58:19	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 5		
Client ID:			
Operator ID:		ALS Bottle#:	32 Worklist Smp#: 32
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

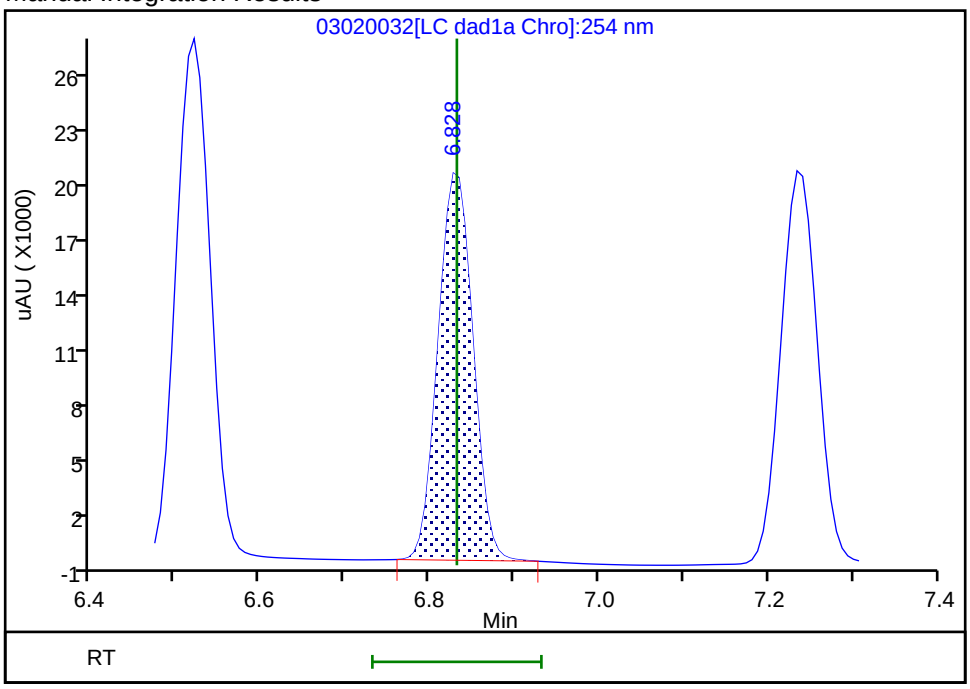
Processing Integration Results

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

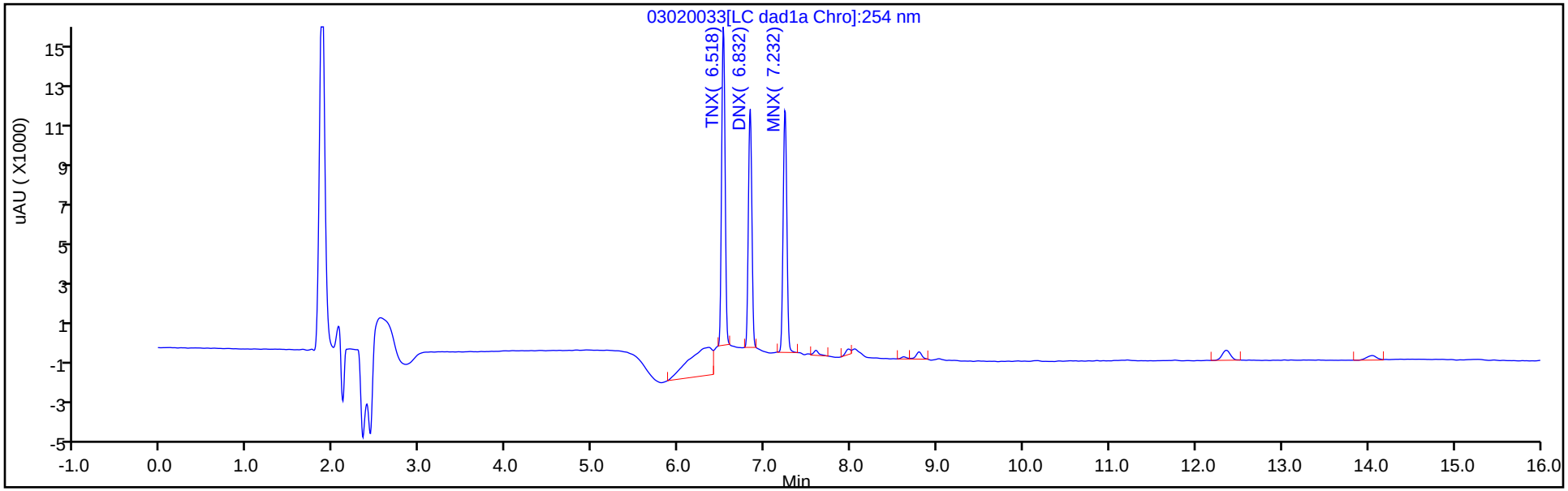
Report Date: 03-Mar-2021 13:32:28 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

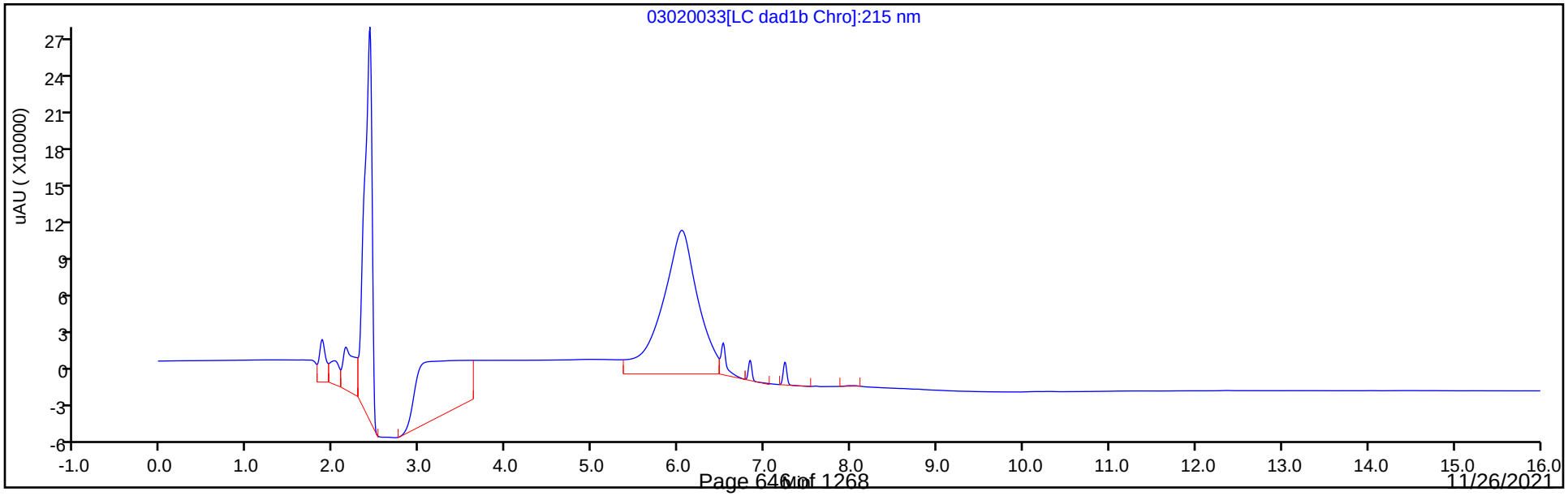
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020033.d

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

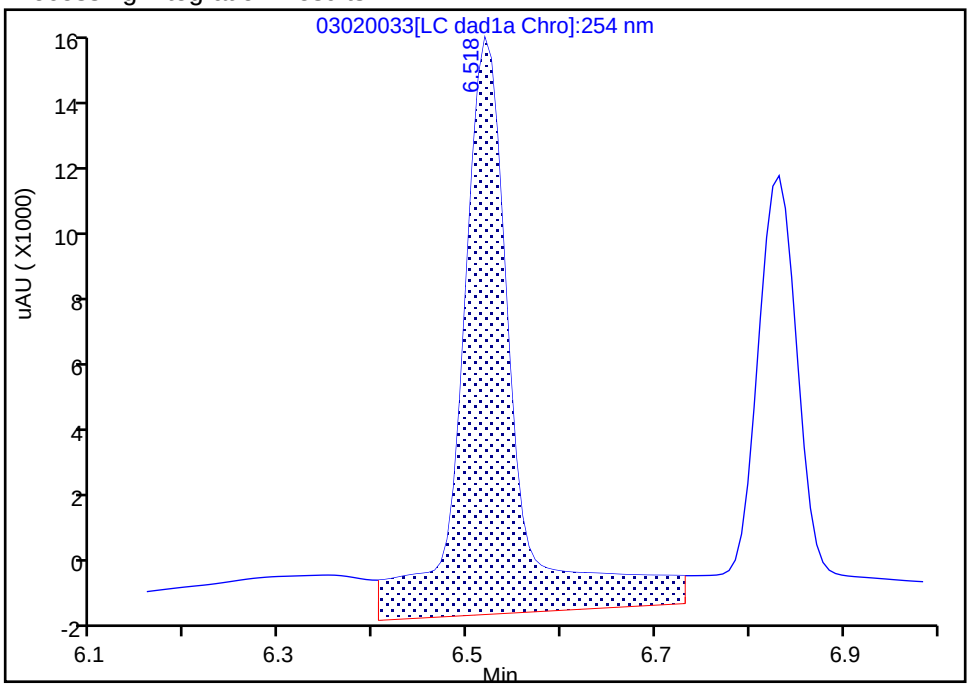
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020033.d				
Injection Date:	03-Mar-2021 01:21:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:		ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

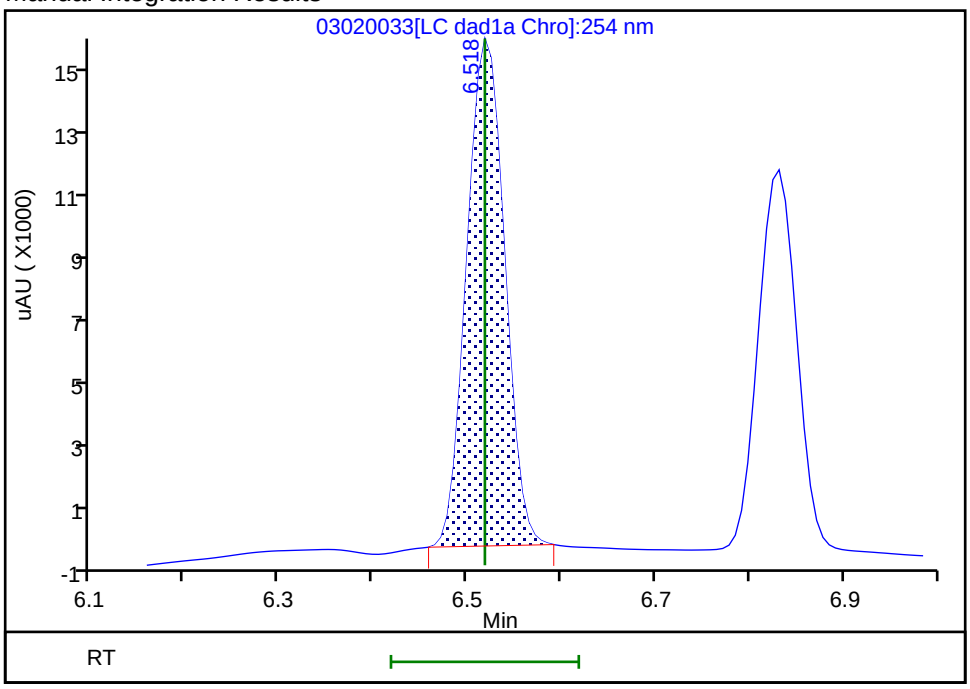
Processing Integration Results

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

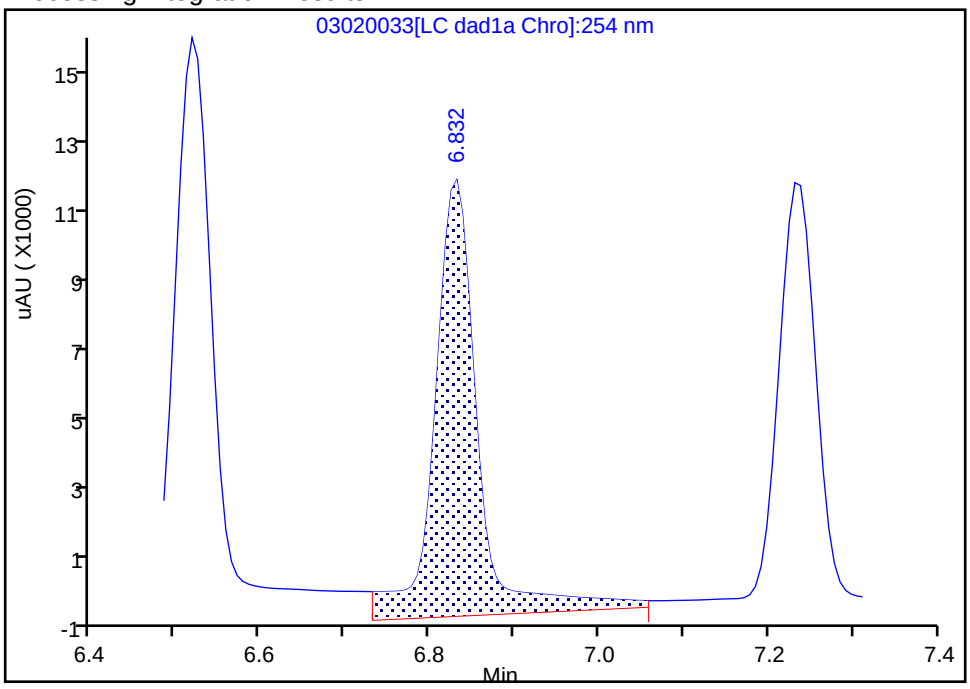
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020033.d				
Injection Date:	03-Mar-2021 01:21:15	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 4				
Client ID:					
Operator ID:		ALS Bottle#:	33	Worklist Smp#:	33
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

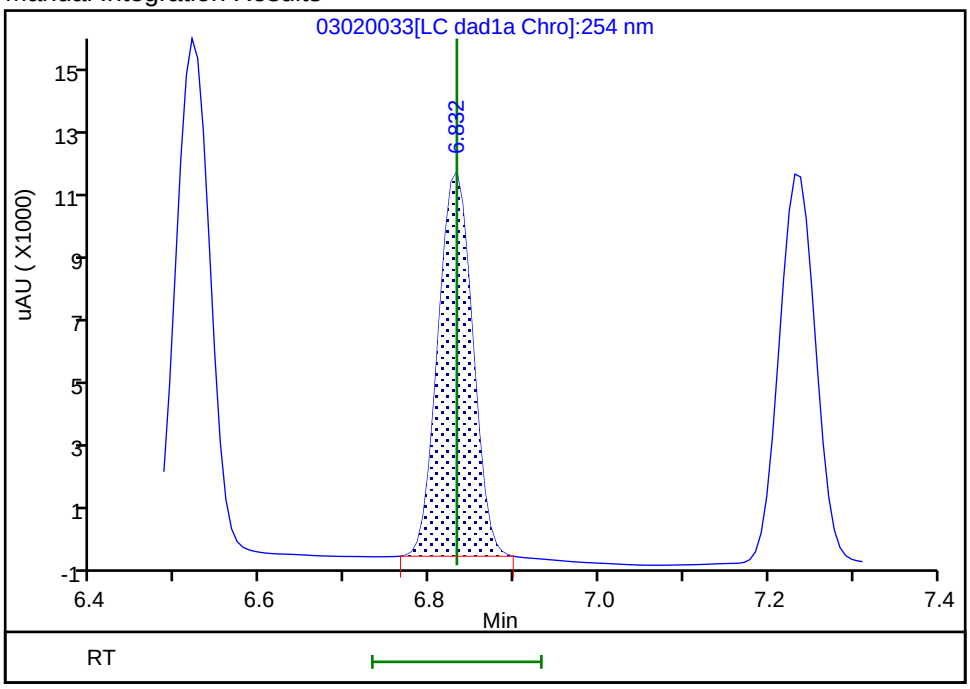
Processing Integration Results

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

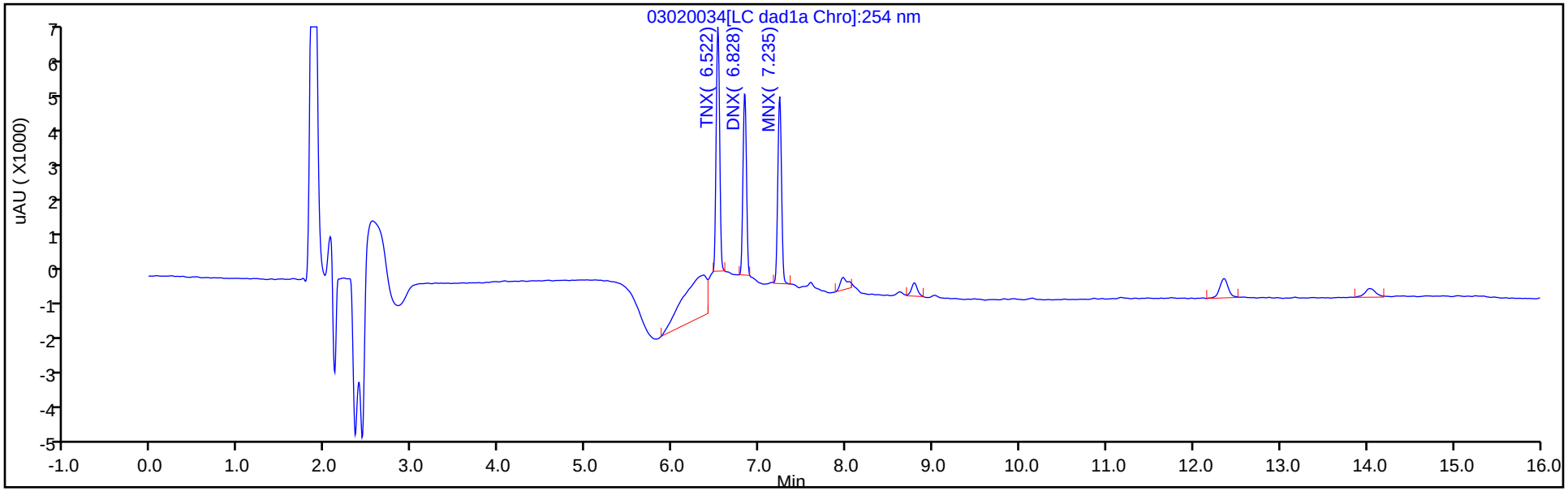
Report Date: 03-Mar-2021 13:32:29 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

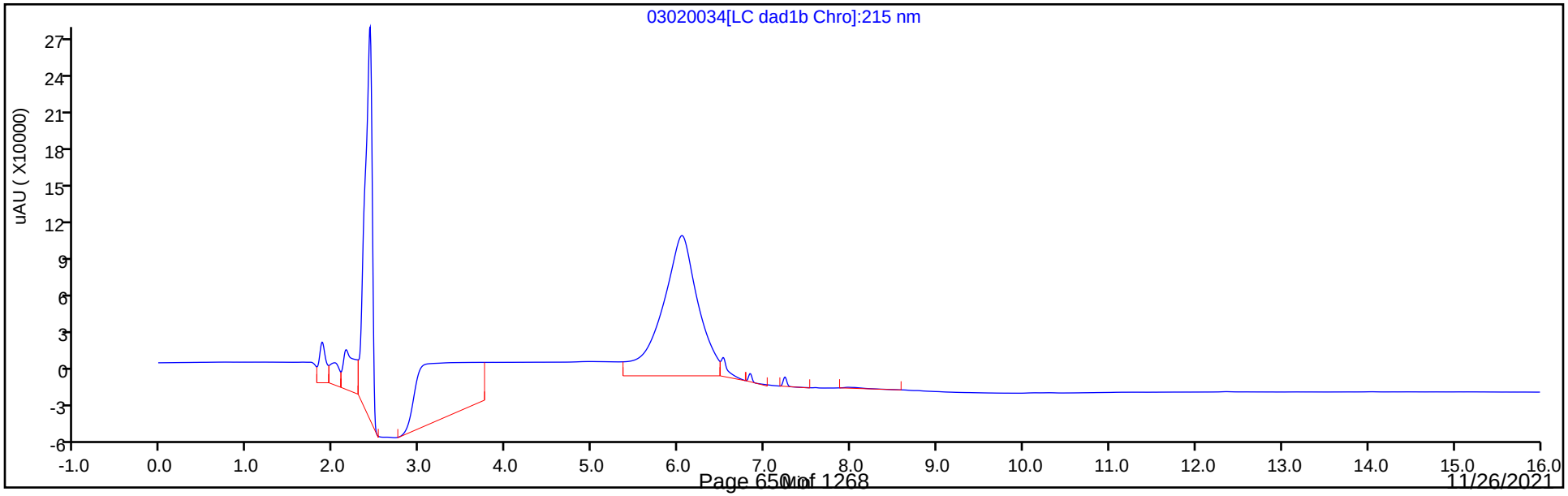
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020034.d

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

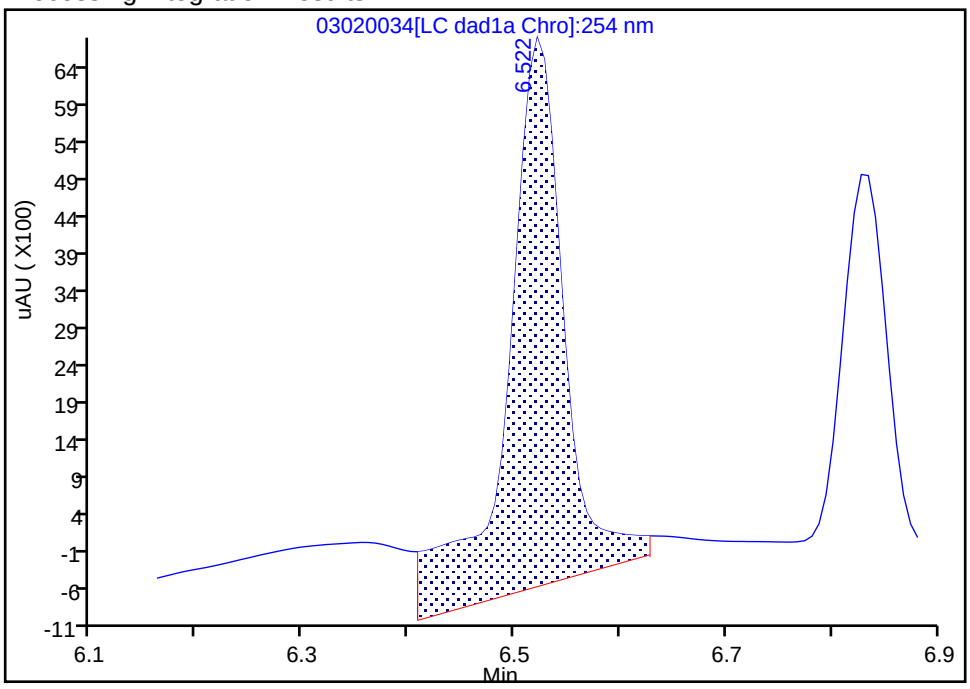
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020034.d				
Injection Date:	03-Mar-2021 01:44:28	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 3				
Client ID:					
Operator ID:		ALS Bottle#:	34	Worklist Smp#:	34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

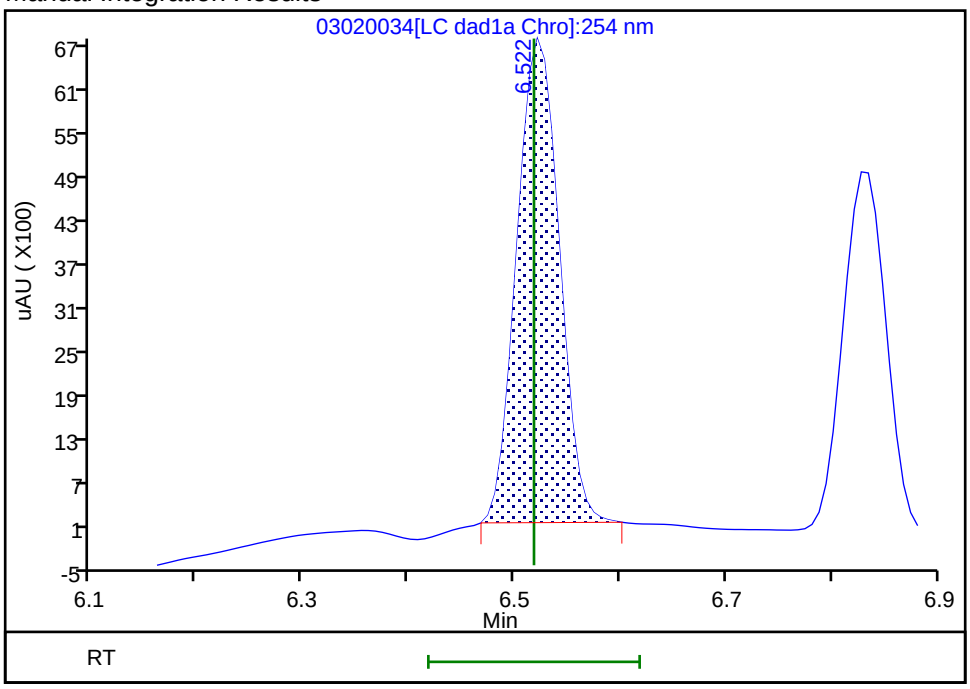
Processing Integration Results

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

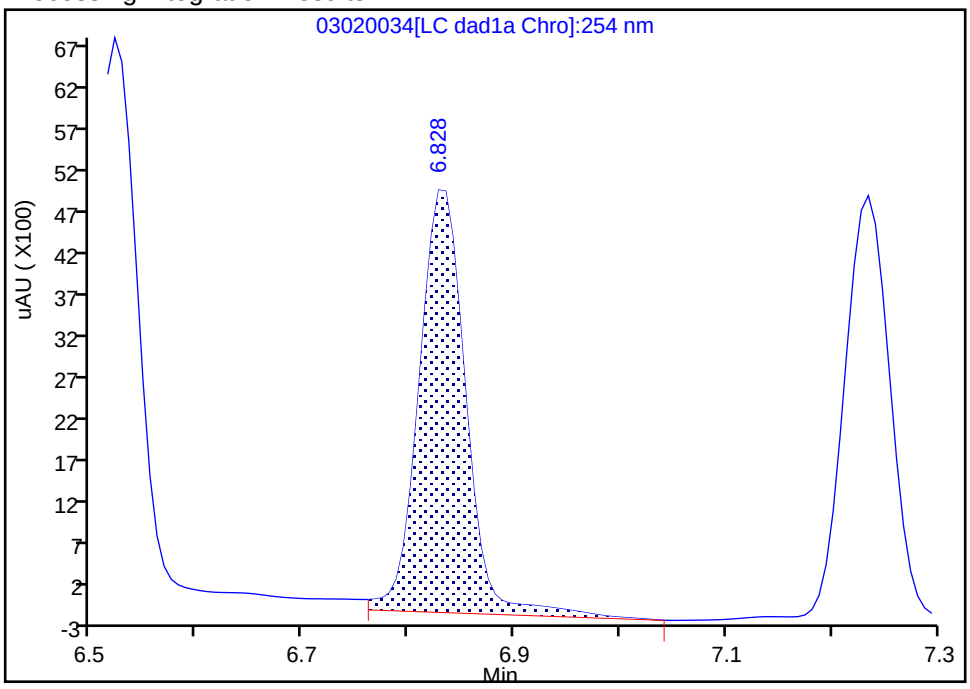
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020034.d		
Injection Date:	03-Mar-2021 01:44:28	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 3		
Client ID:			
Operator ID:		ALS Bottle#:	34 Worklist Smp#: 34
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

5 DNX, CAS: 80251-29-2

Signal: 1

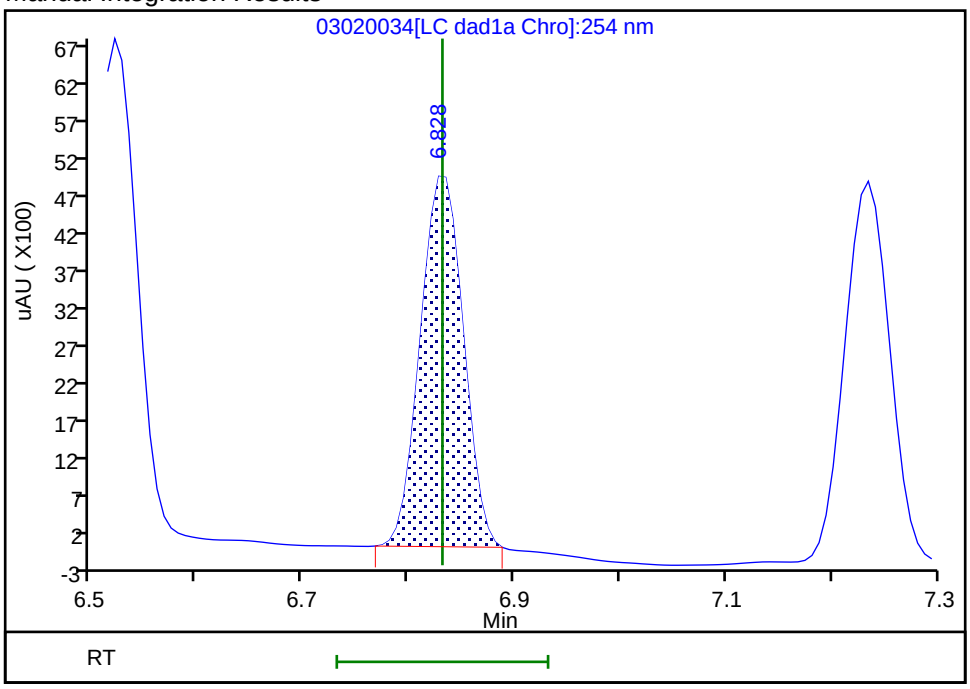
Processing Integration Results

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

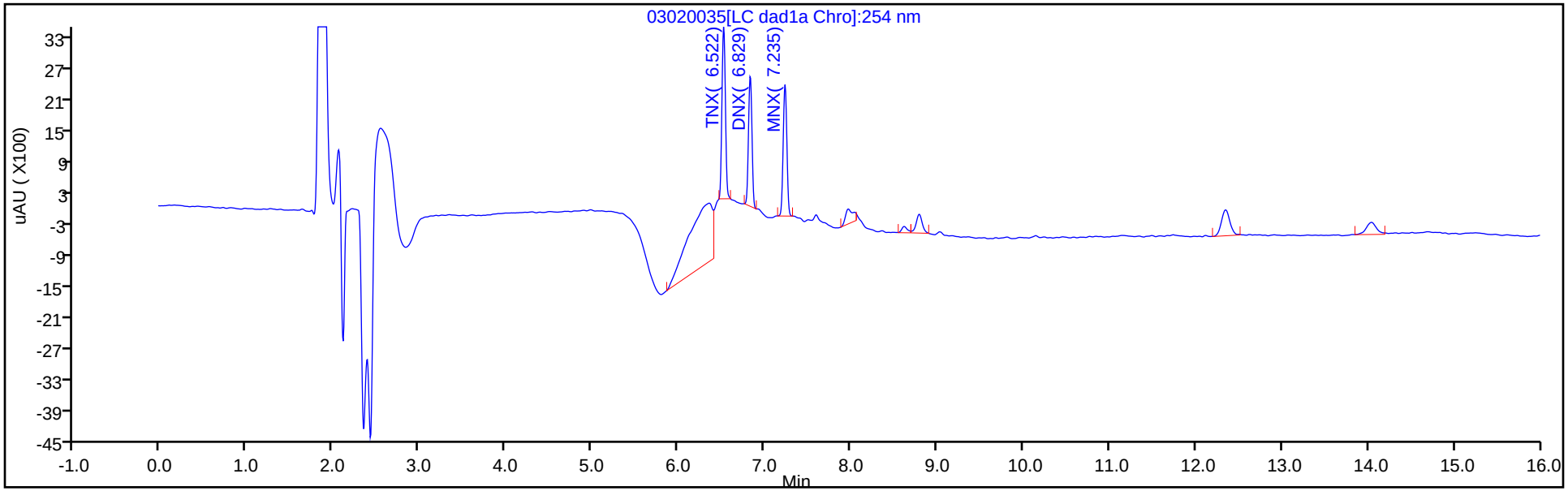
Report Date: 03-Mar-2021 13:32:30 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

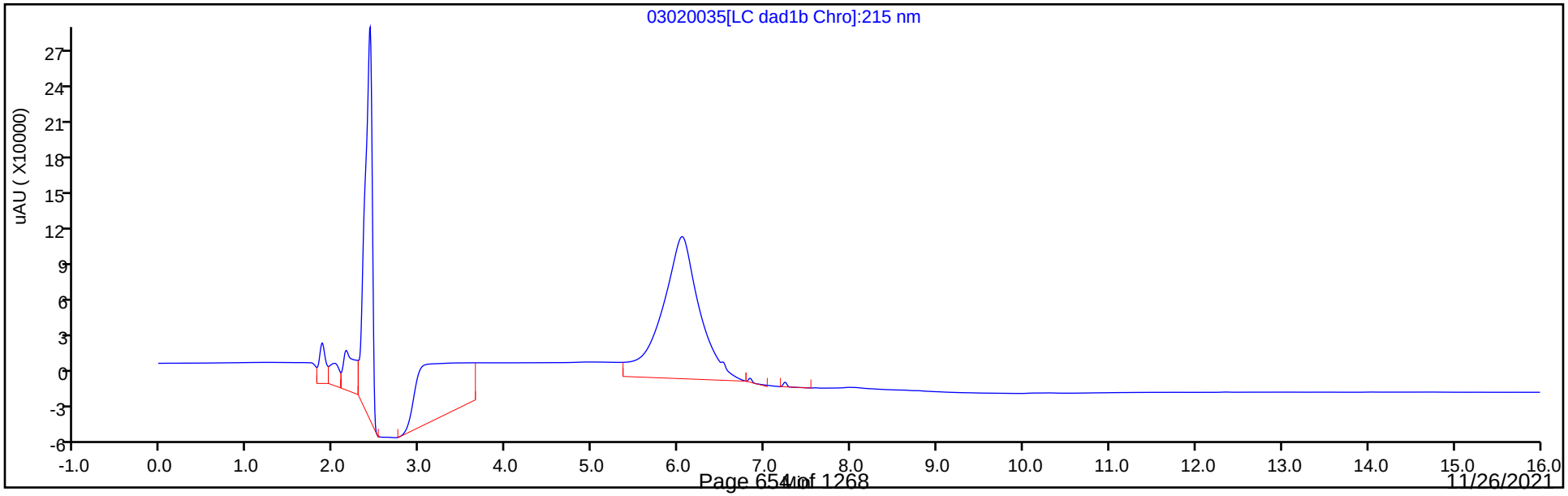
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020035.d

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

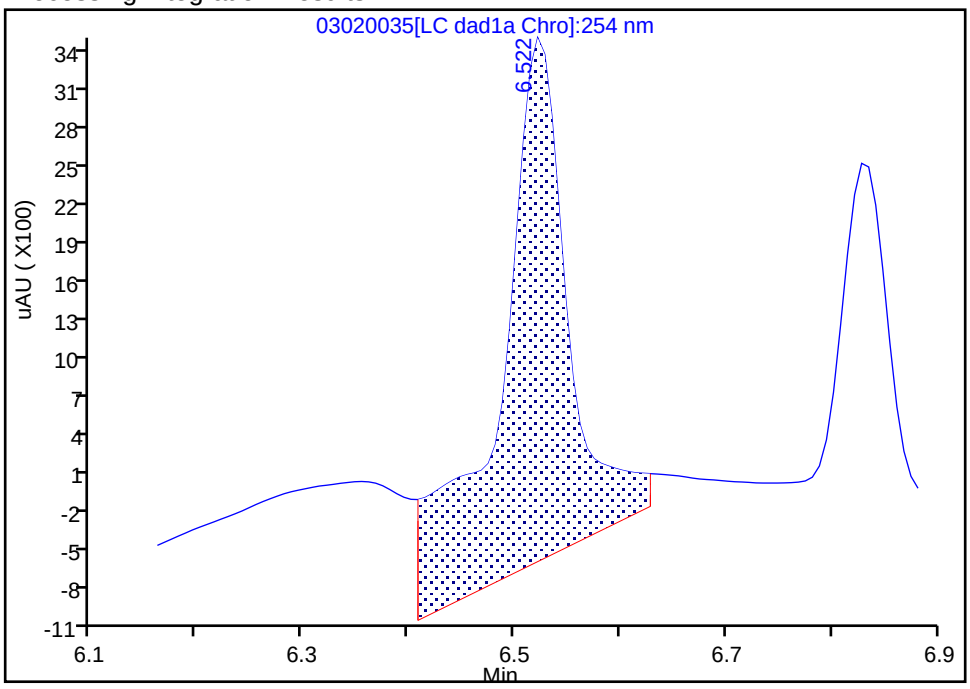
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020035.d		
Injection Date:	03-Mar-2021 02:07:25	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 2		
Client ID:			
Operator ID:		ALS Bottle#:	35 Worklist Smp#: 35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

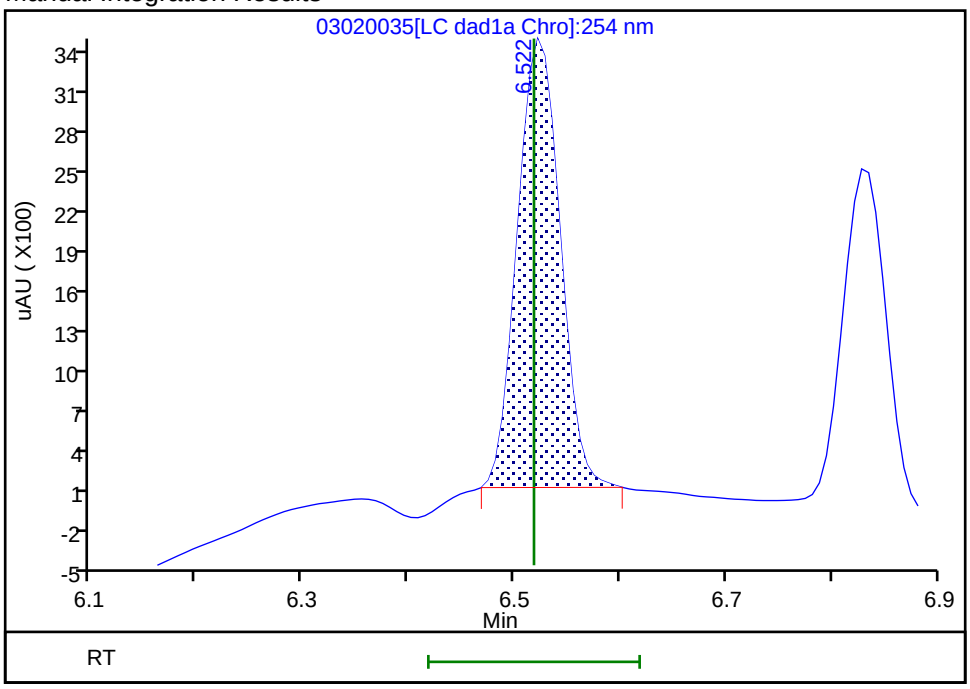
Processing Integration Results

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

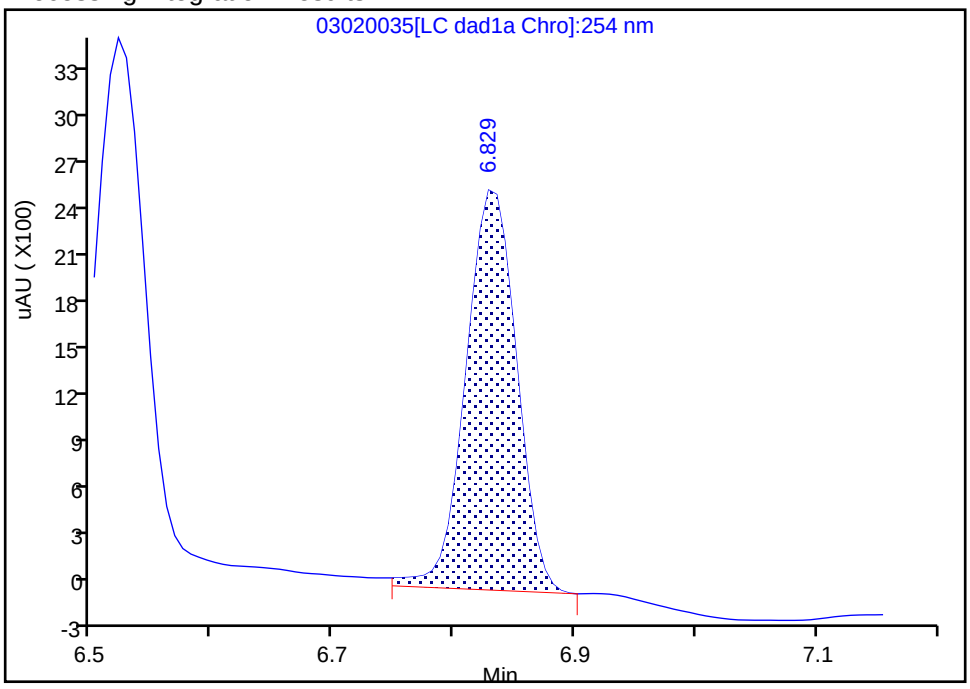
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020035.d				
Injection Date:	03-Mar-2021 02:07:25	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 2				
Client ID:					
Operator ID:		ALS Bottle#:	35	Worklist Smp#:	35
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

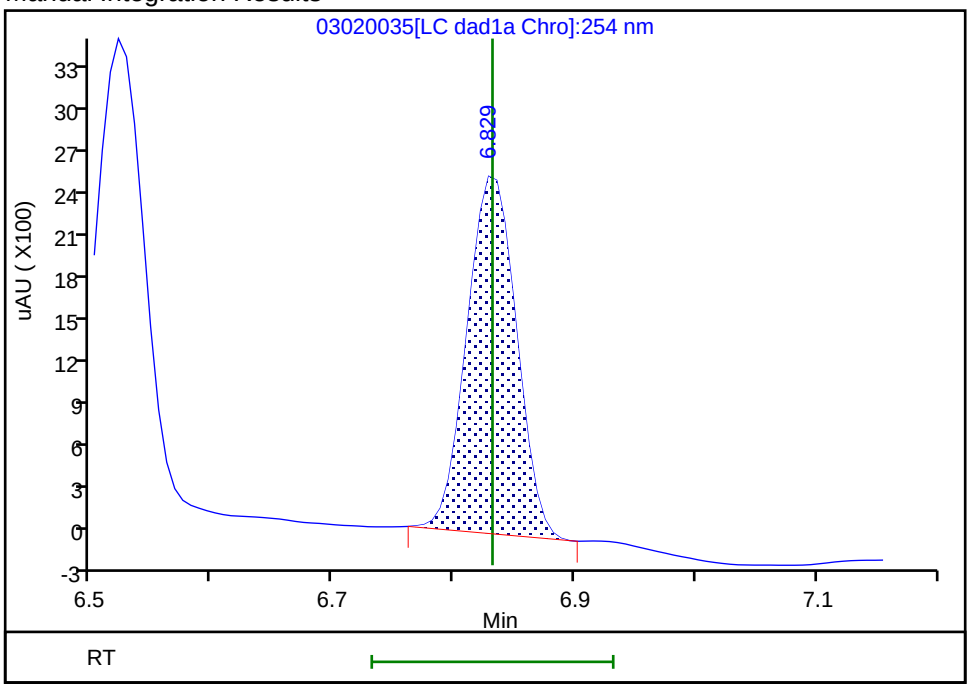
Processing Integration Results

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

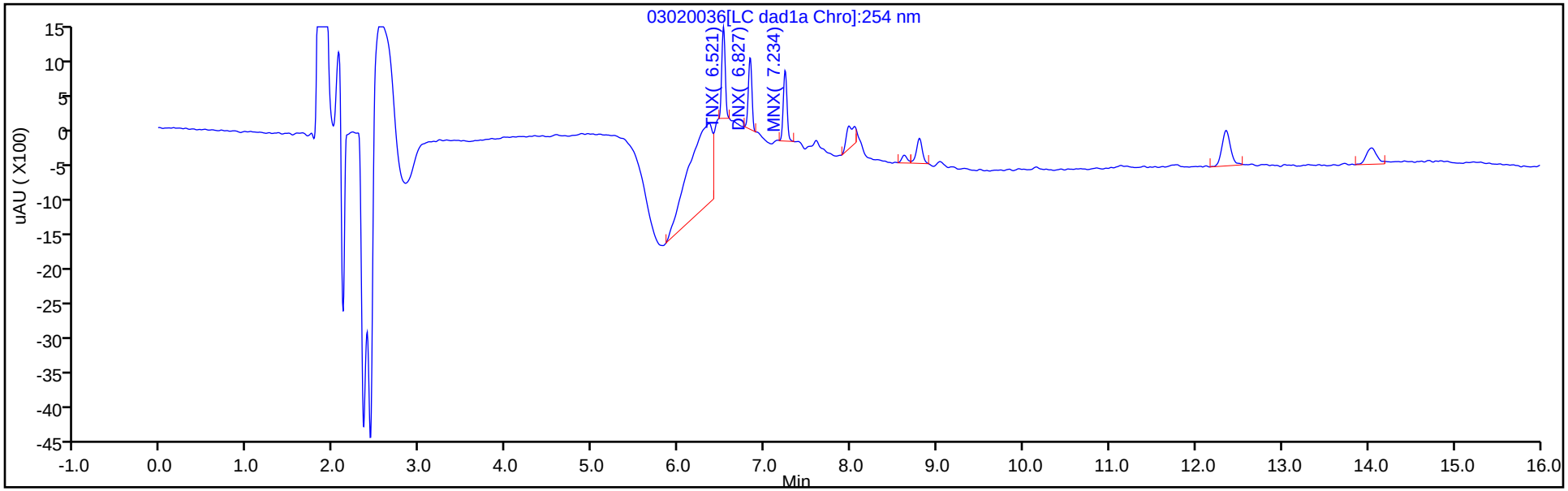
Report Date: 03-Mar-2021 13:32:31 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

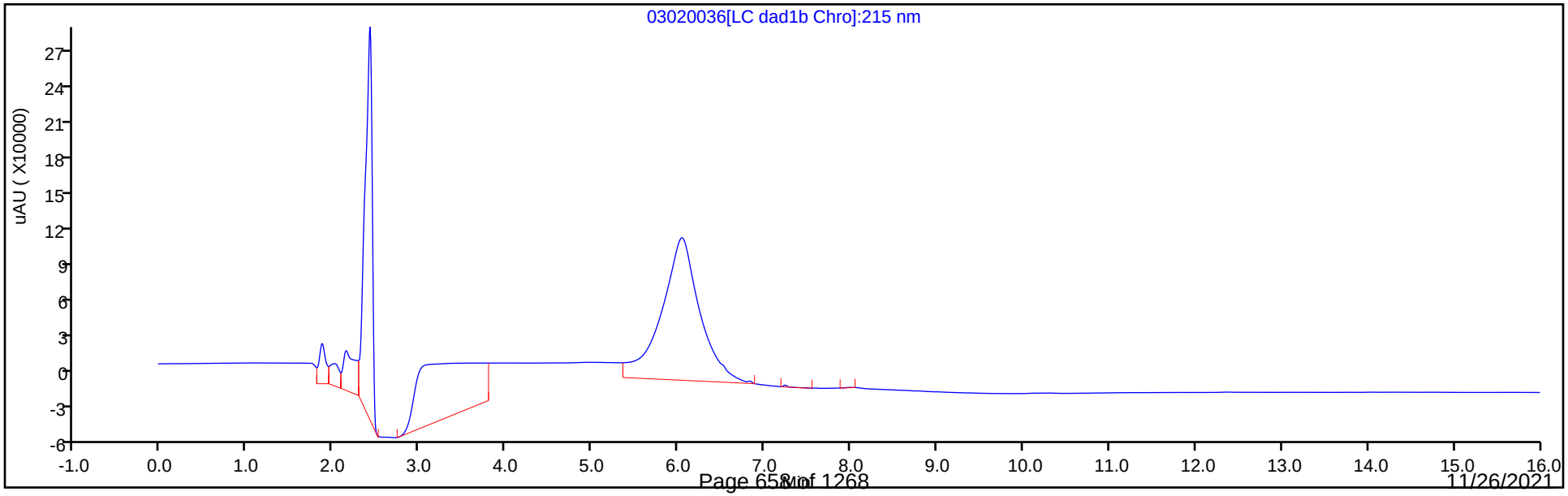
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020036.d

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

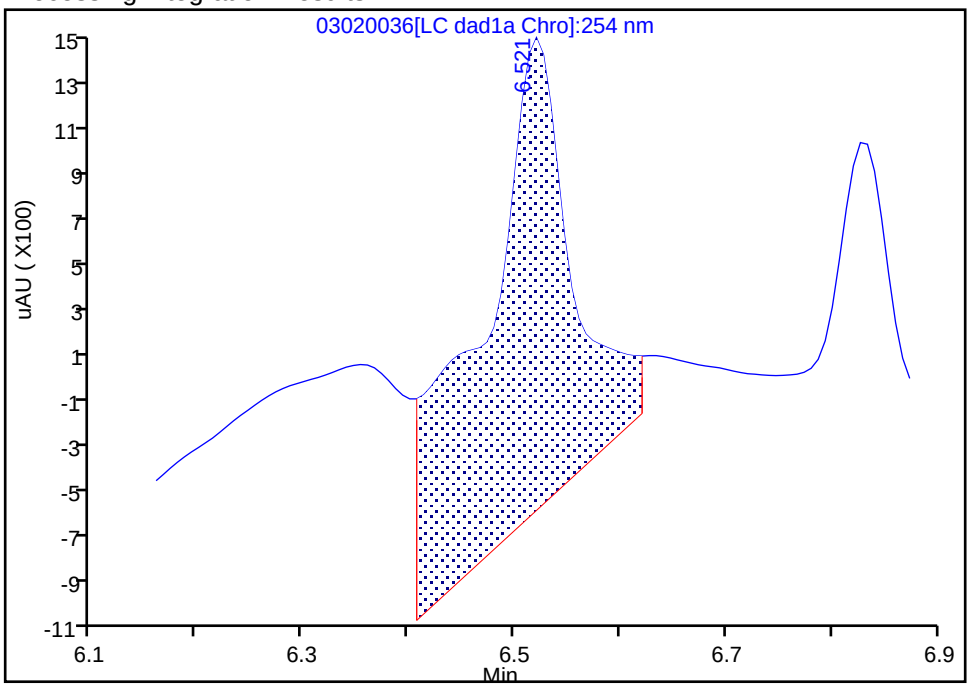
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020036.d		
Injection Date:	03-Mar-2021 02:30:22	Instrument ID:	CHHPLC_X3
Lims ID:	IC DMT 1		
Client ID:			
Operator ID:		ALS Bottle#:	36 Worklist Smp#: 36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000
Method:	8330_X3	Limit Group:	GCSV - 8330
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm

2 TNX, CAS: 13980-04-6

Signal: 1

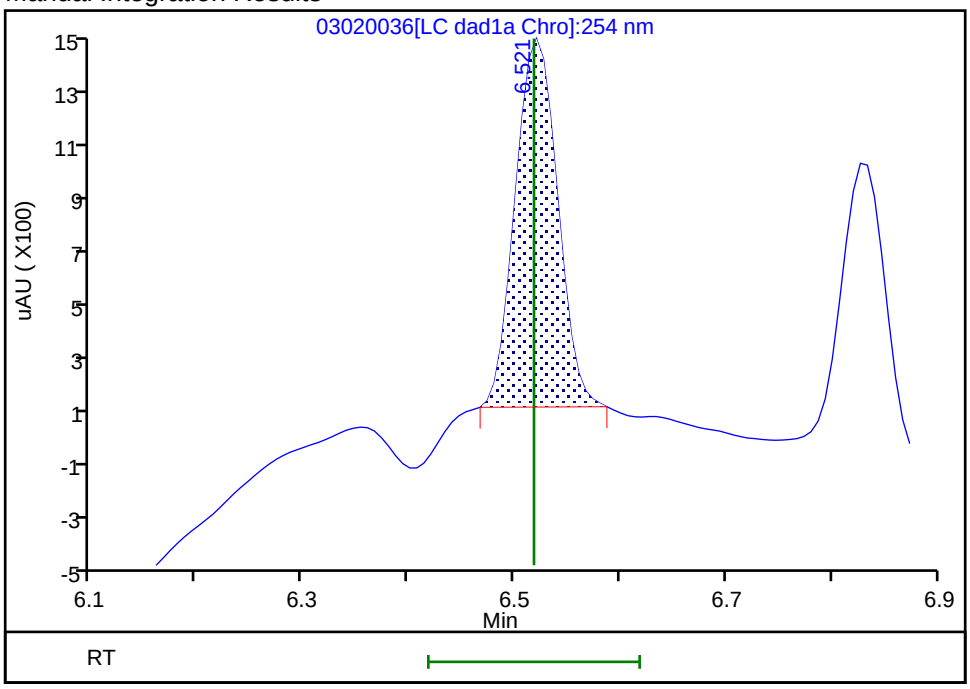
Processing Integration Results

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

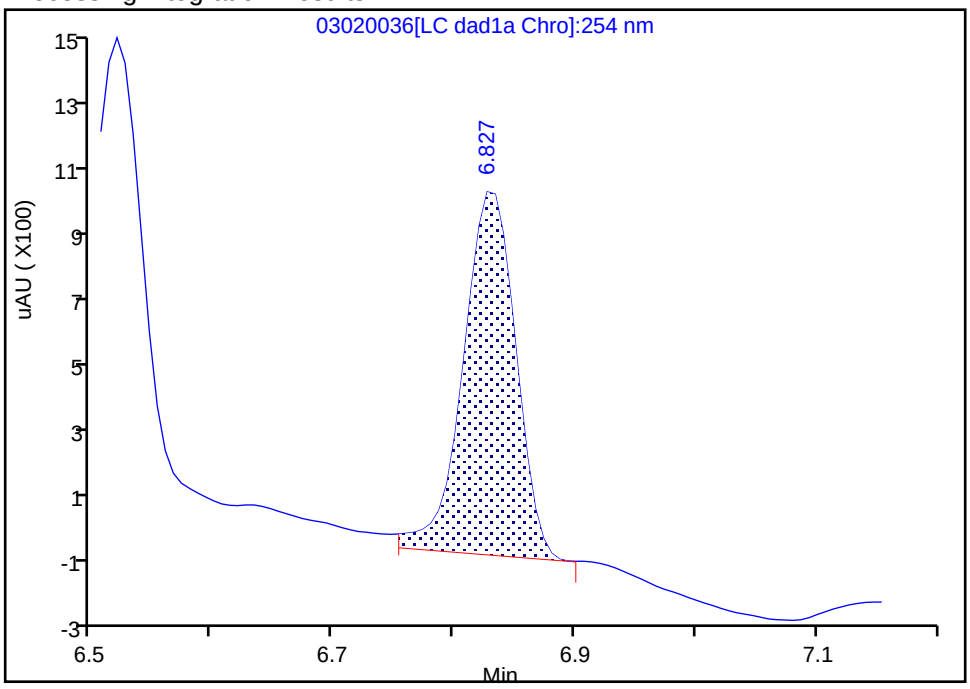
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020036.d				
Injection Date:	03-Mar-2021 02:30:22	Instrument ID:	CHHPLC_X3		
Lims ID:	IC DMT 1				
Client ID:					
Operator ID:		ALS Bottle#:	36	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

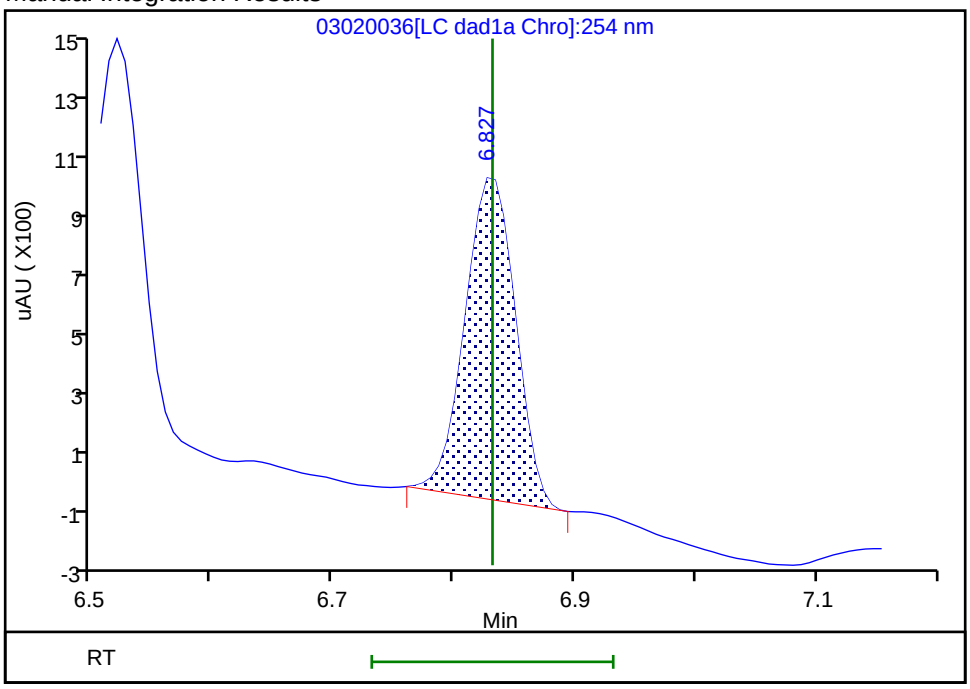
Processing Integration Results

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

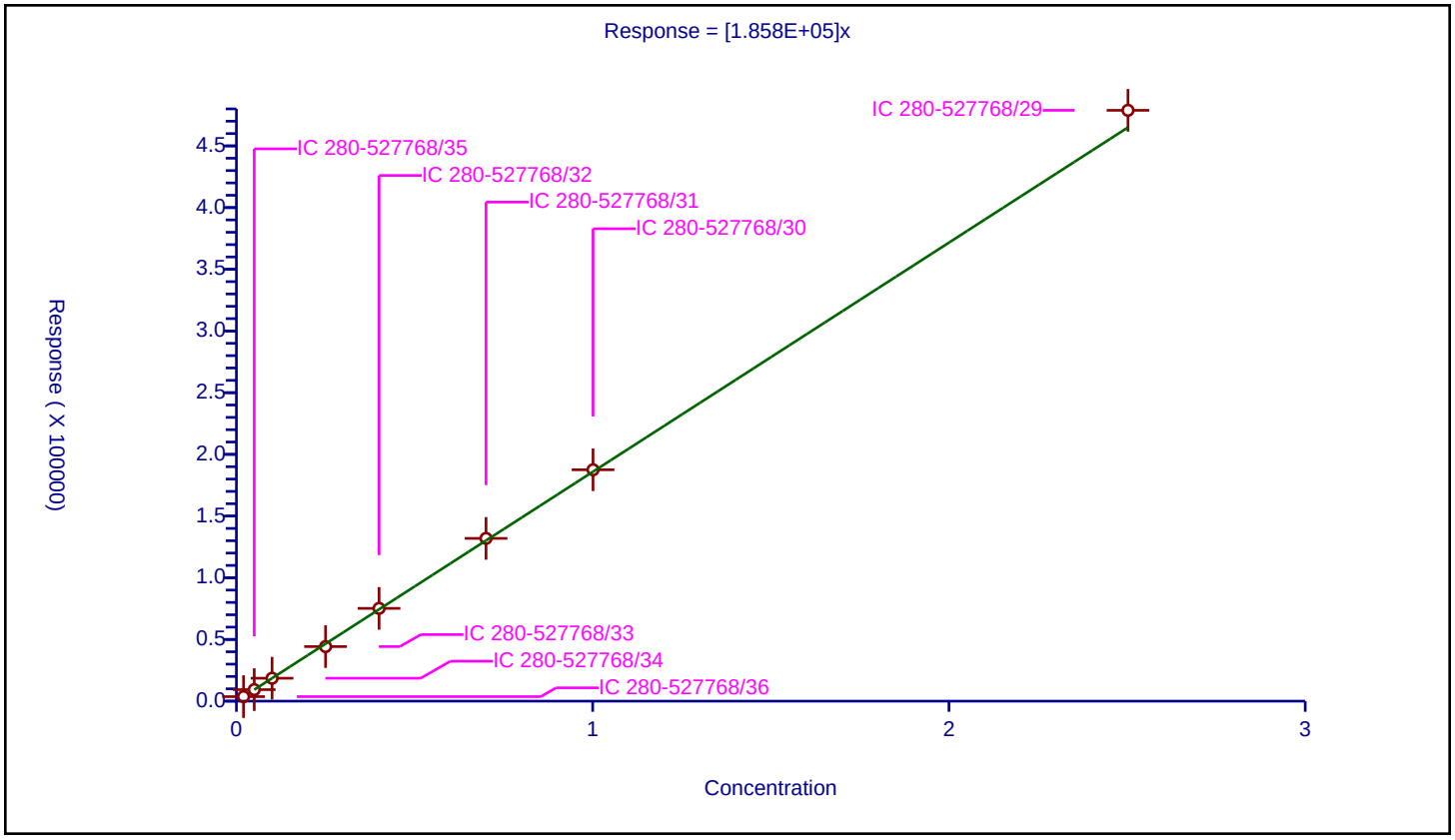
Curve Coefficients

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

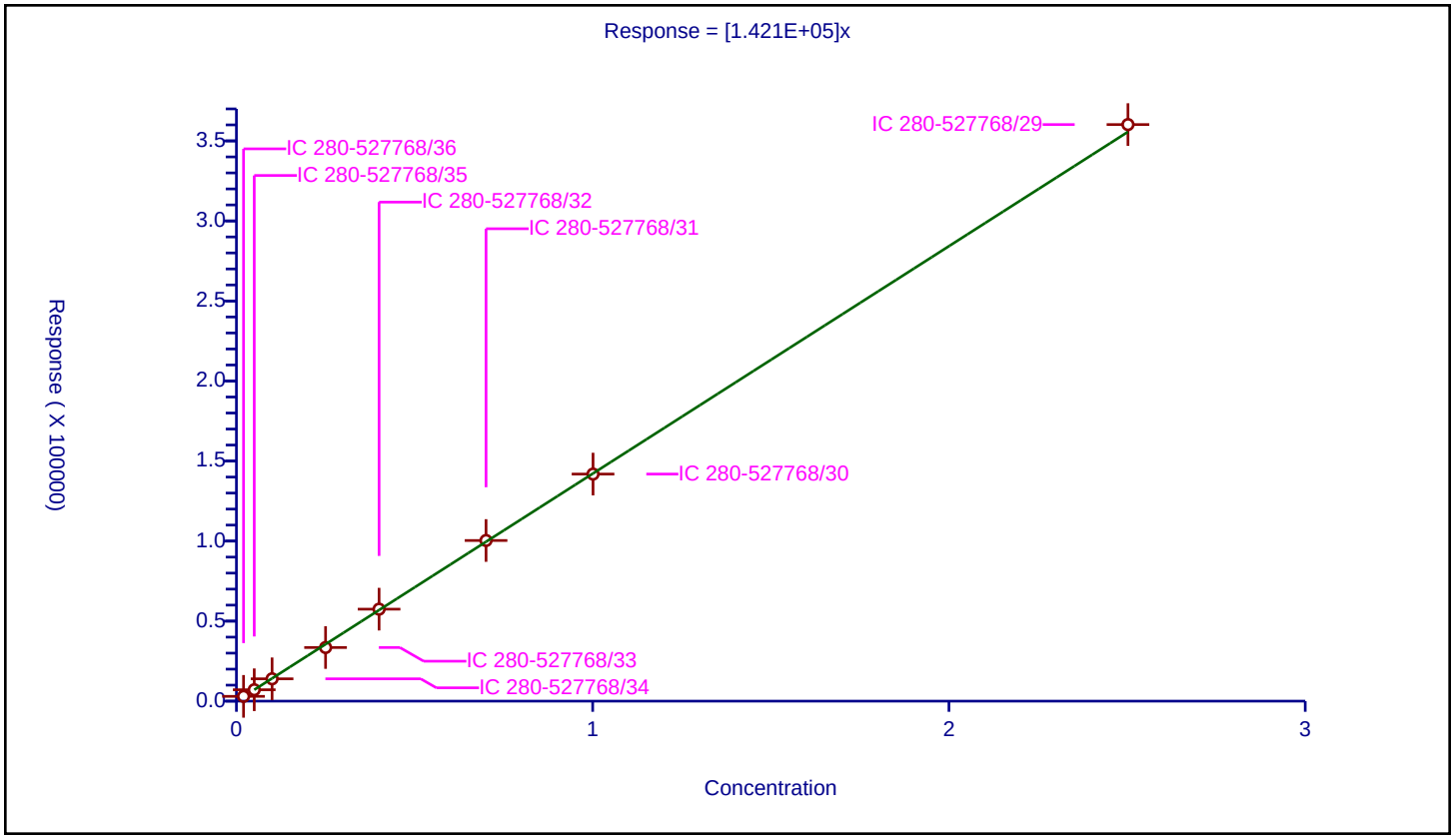
Curve Coefficients

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

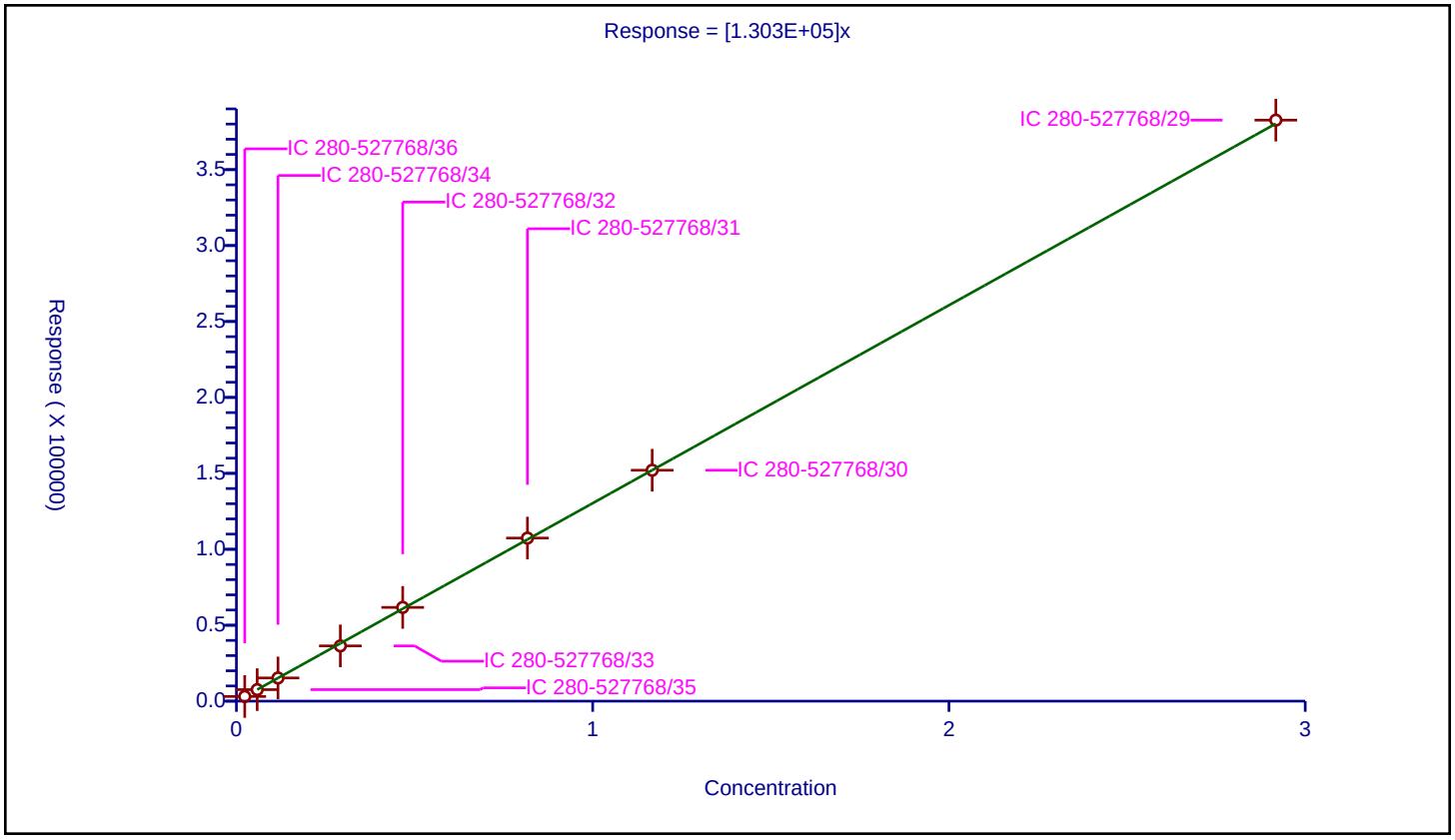
Curve Coefficients

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.: 280-155225-1 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.: 280-155225-1 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.: 280-155225-1 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.: 280-155225-1 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 33261	1680 58367	4242 83899	8561 208165	20261	0.0100 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
RDX	Ave	+++++ 40790	2207 71020	6054 101616	11245 250979	25193	+++++ 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
Picric acid	Ave	+++++ 31820	1840 55582	4575 79230	8317 197040	19525	+++++ 0.400	0.0200 0.700	0.0500 1.00	0.100 2.50	0.250
1,3,5-Trinitrobenzene	Ave	2481 87233	4038 154539	11361 220037	22114 543111	53082	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
1,3-Dinitrobenzene	Ave	3052 117621	6019 206721	14927 296509	30099 738121	71373	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
Nitrobenzene	Ave	1995 77656	3972 136648	9892 194820	20078 488061	47122	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
Tetryl	Ave	1712 69168	3331 121126	8870 173586	17920 431686	42079	0.0100 0.401	0.0200 0.701	0.0501 1.00	0.100 2.51	0.251
Nitroglycerin	Lin2	10778 262320	16162 434747	36983 652752	71053 1616536	163334	0.100 4.00	0.200 7.00	0.500 10.0	1.00 25.0	2.50
2,4,6-Trinitrotoluene	Ave	2128 81630	4156 143142	10514 205715	21286 512679	49667	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
4-Amino-2,6-dinitrotoluene	Ave	1596 58412	3532 102258	7868 146728	15505 363710	35838	0.0100 0.400	0.0200 0.701	0.0501 1.00	0.100 2.50	0.250
2-Amino-4,6-dinitrotoluene	Ave	2126 81166	4433 141712	10789 204025	21203 503909	49194	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
2,6-Dinitrotoluene	Ave	1404 56504	2947 100565	7360 144143	14557 358451	34973	0.0100 0.402	0.0201 0.703	0.0502 1.00	0.100 2.51	0.251
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.: 280-155225-1 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

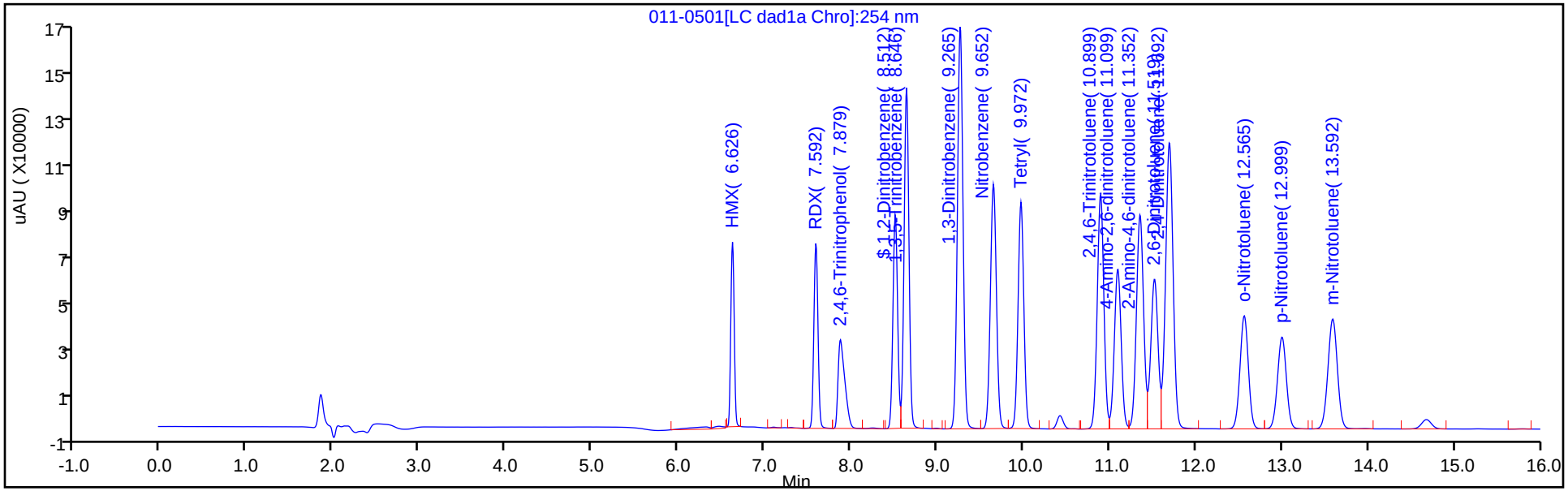
Report Date: 04-May-2021 13:25:06 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

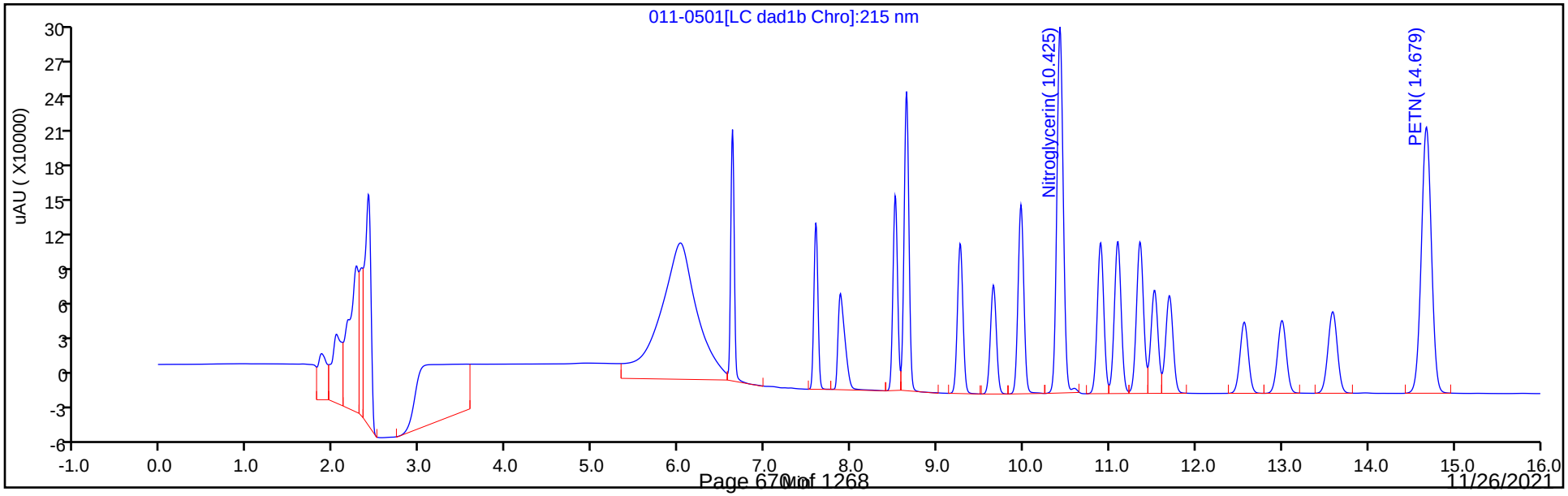
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\011-0501.d

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

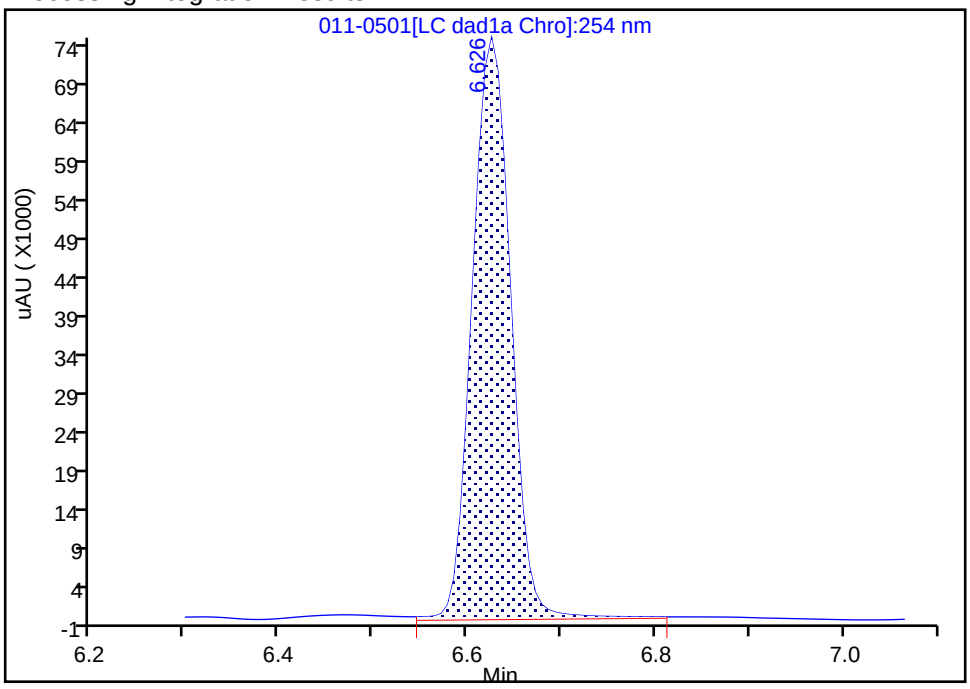
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\011-0501.d				
Injection Date:	01-May-2021 18:01:04	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 9				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

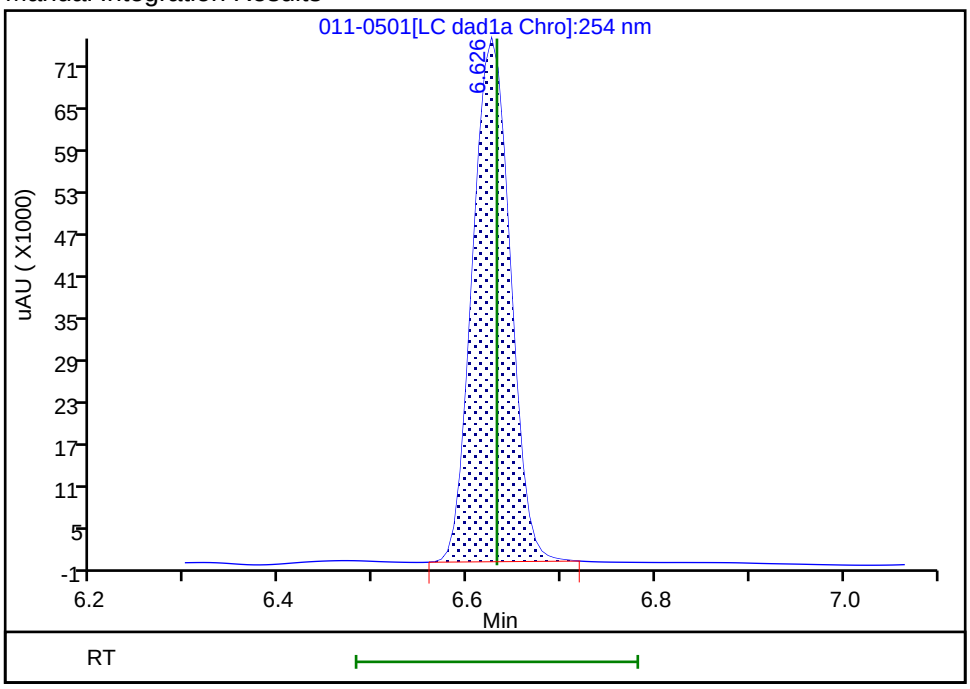
Processing Integration Results

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

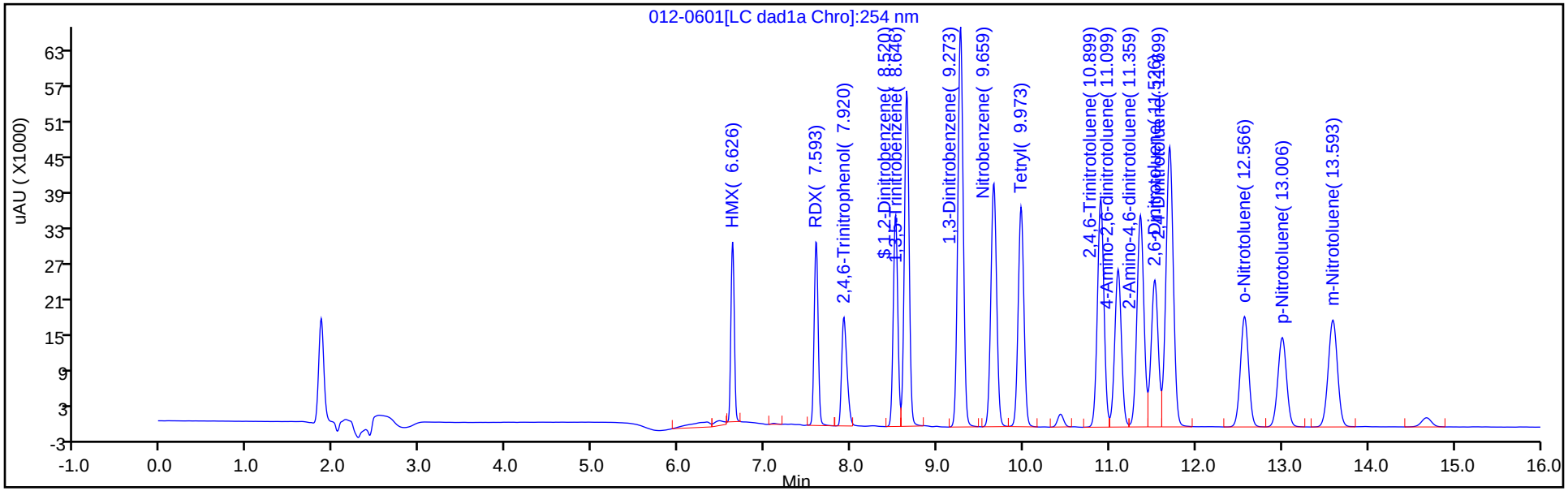
Report Date: 04-May-2021 13:25:07 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

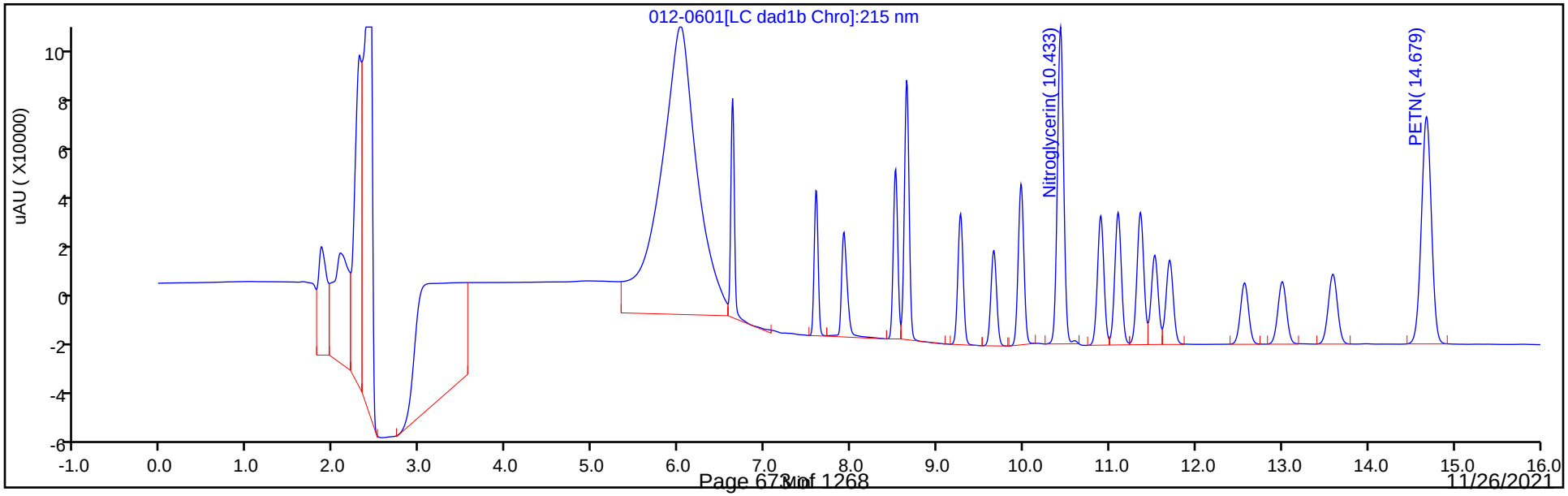
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\012-0601.d

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

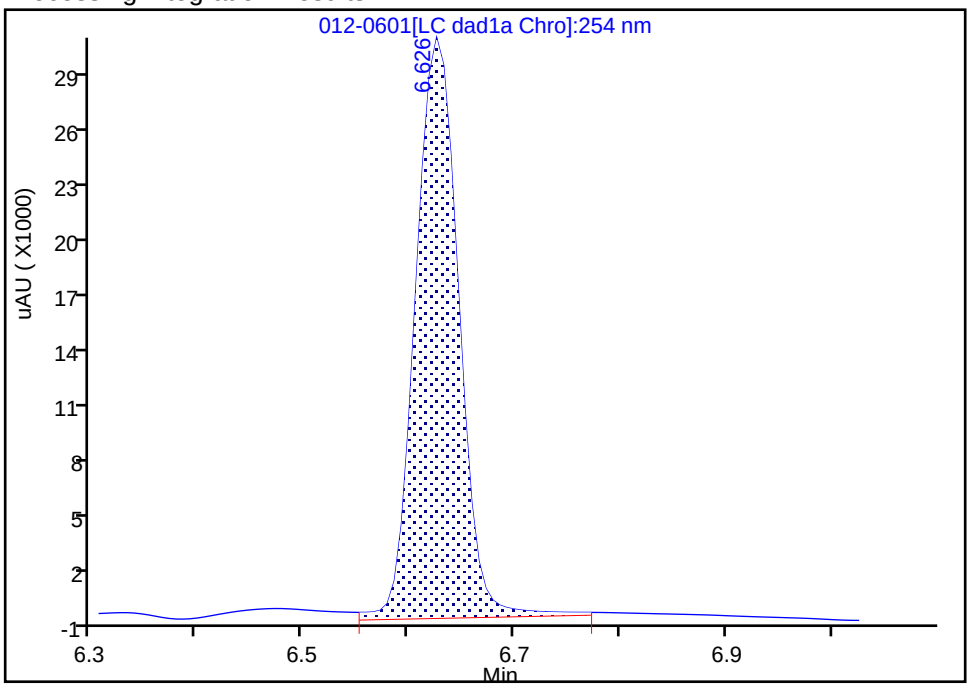
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\012-0601.d				
Injection Date:	01-May-2021 18:23:59	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 8				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

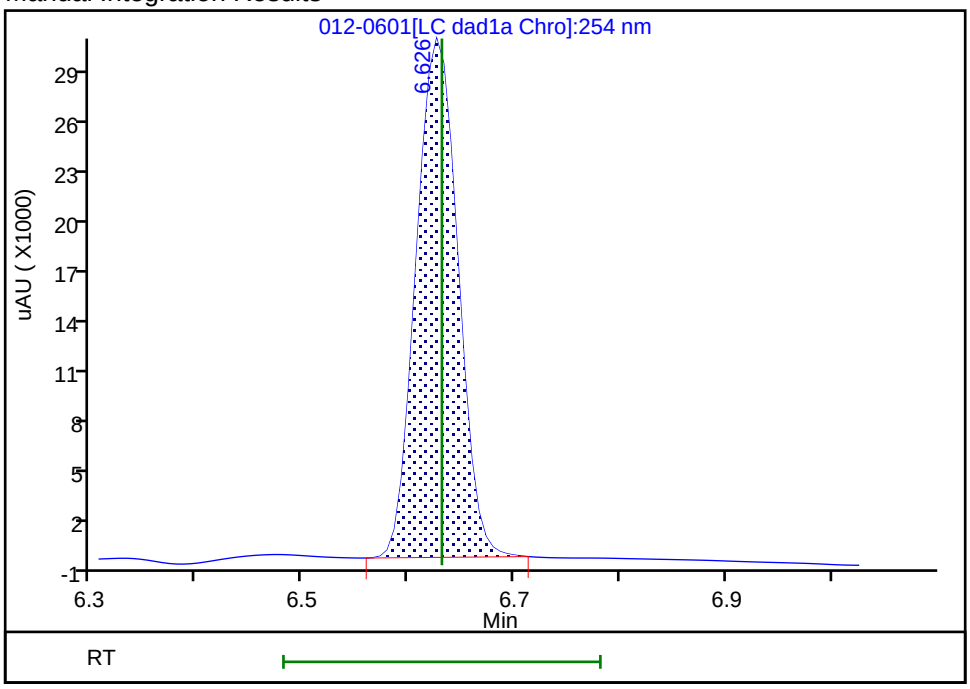
Processing Integration Results

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

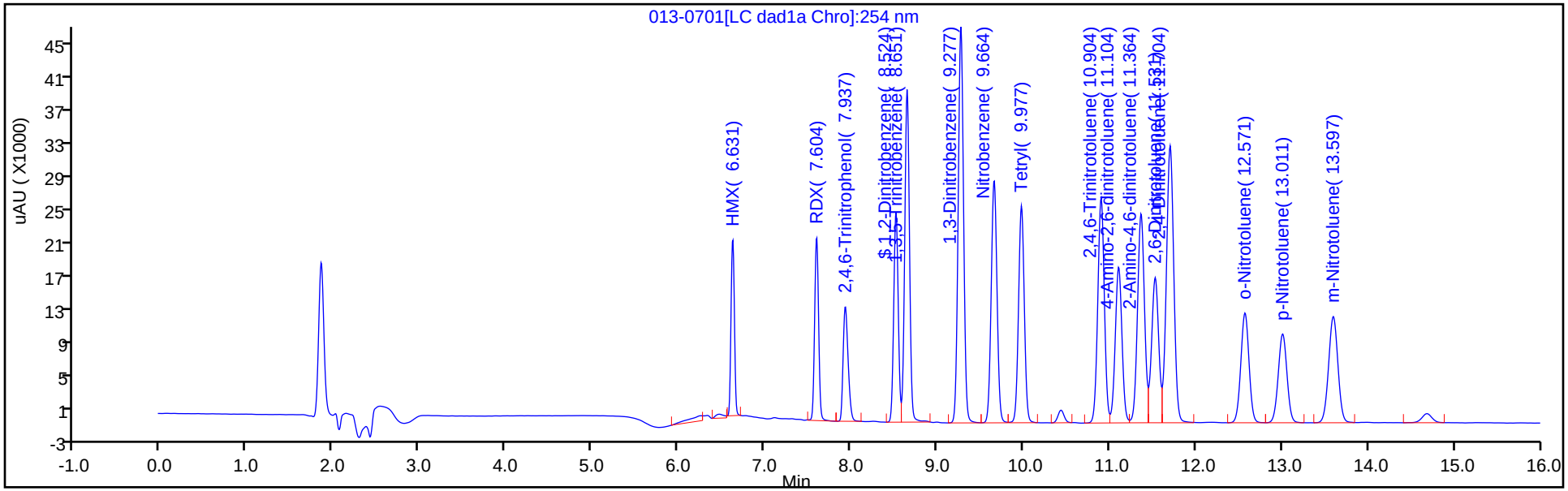
Report Date: 04-May-2021 13:25:07 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

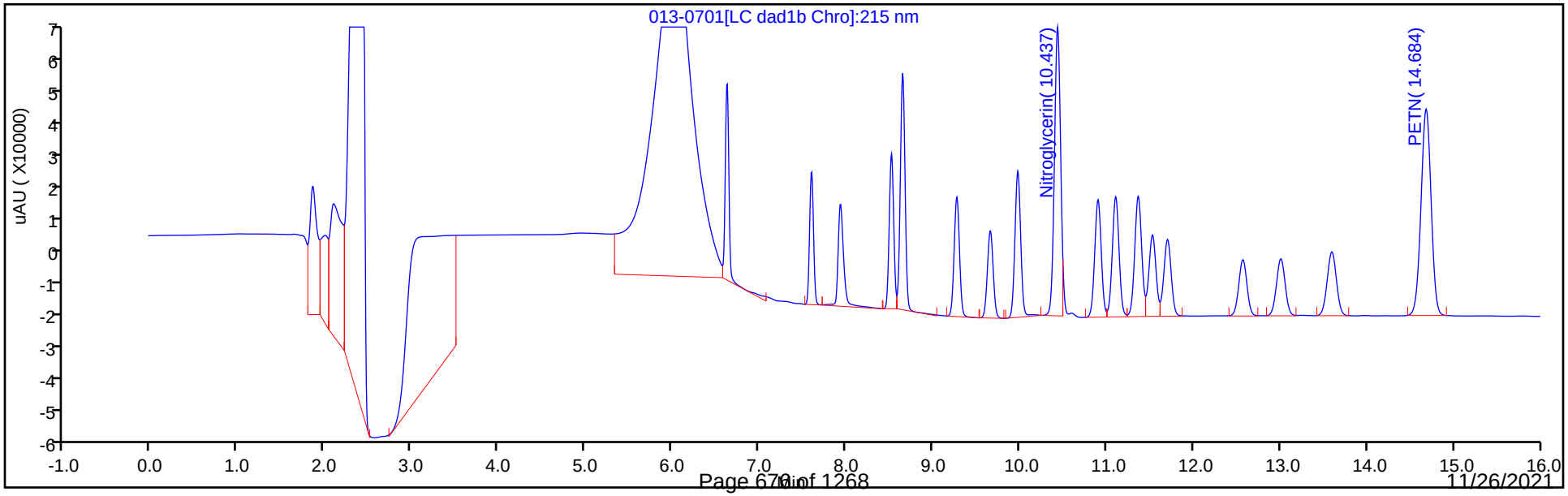
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\013-0701.d

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

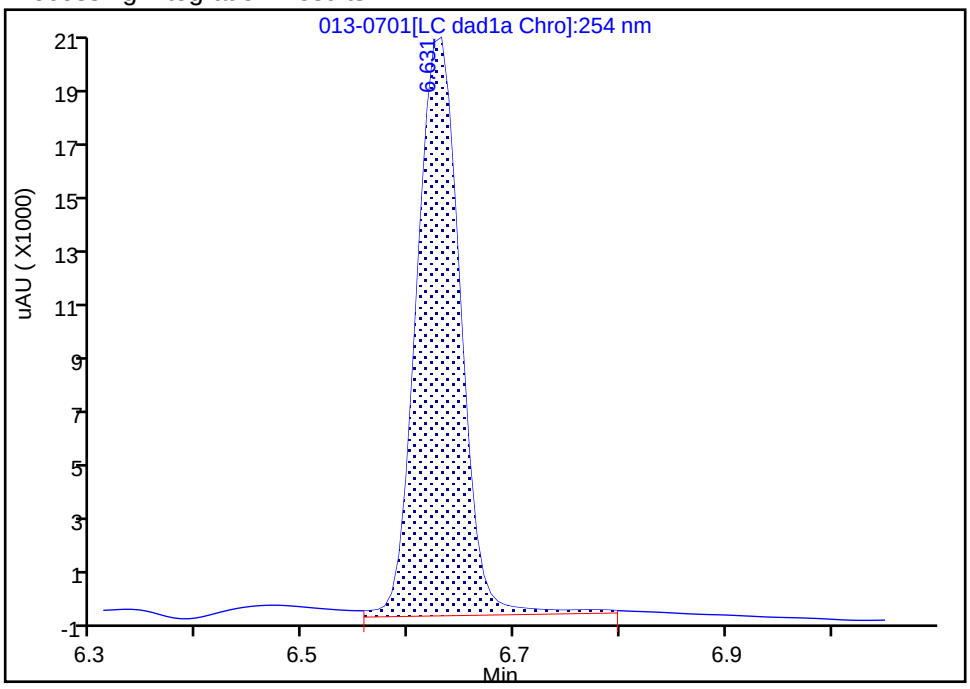
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\013-0701.d				
Injection Date:	01-May-2021 18:46:55	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

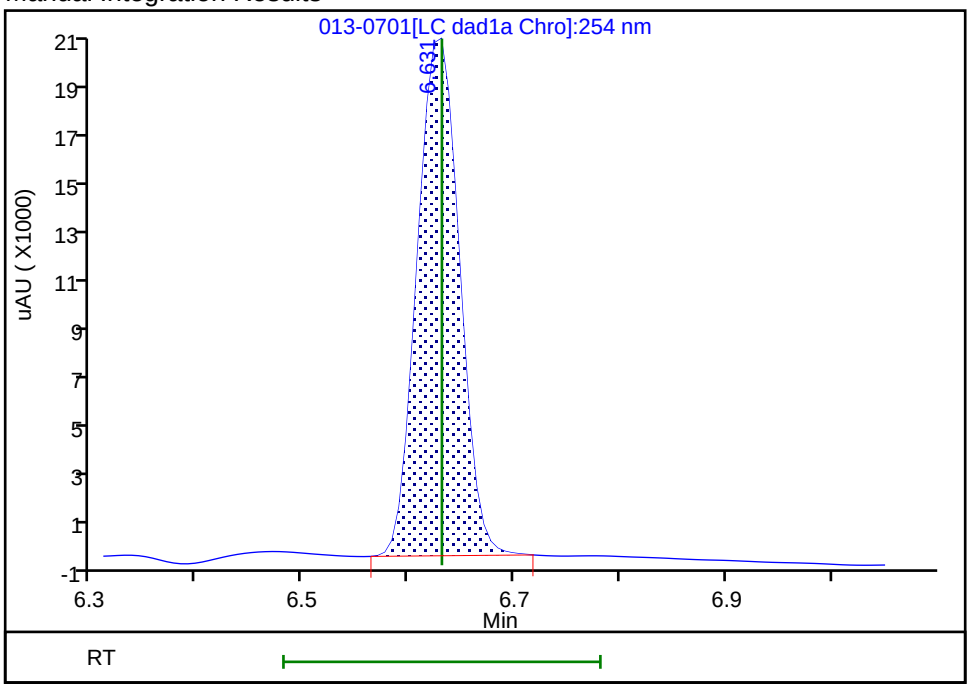
Processing Integration Results

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

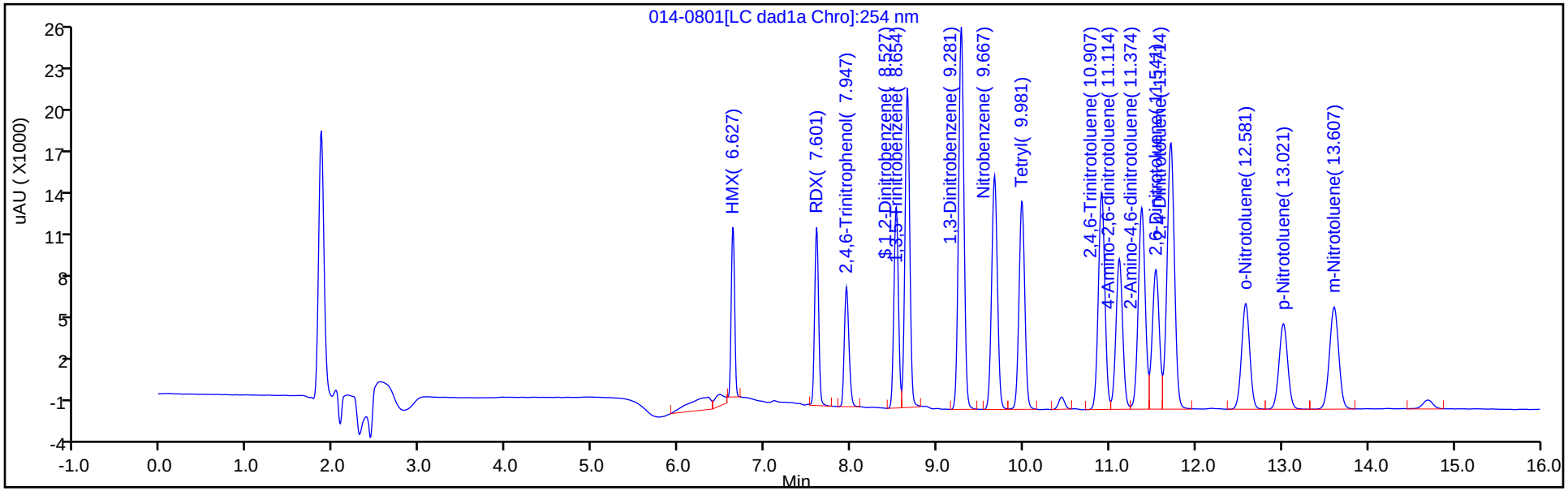
Report Date: 04-May-2021 13:25:08 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

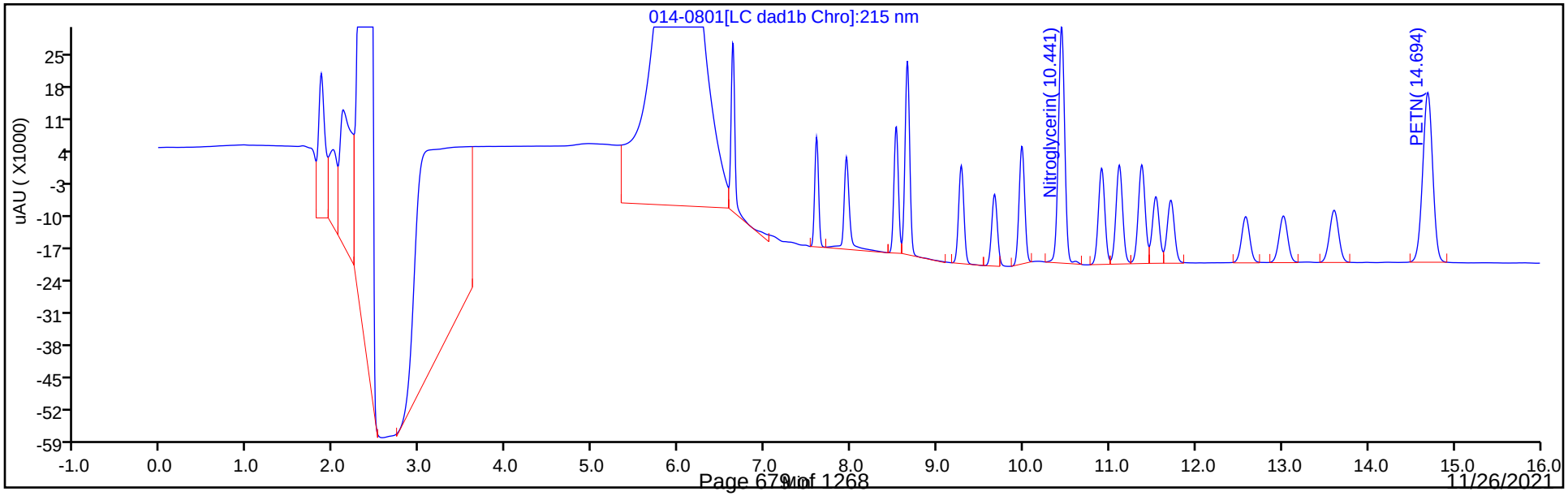
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\014-0801.d

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

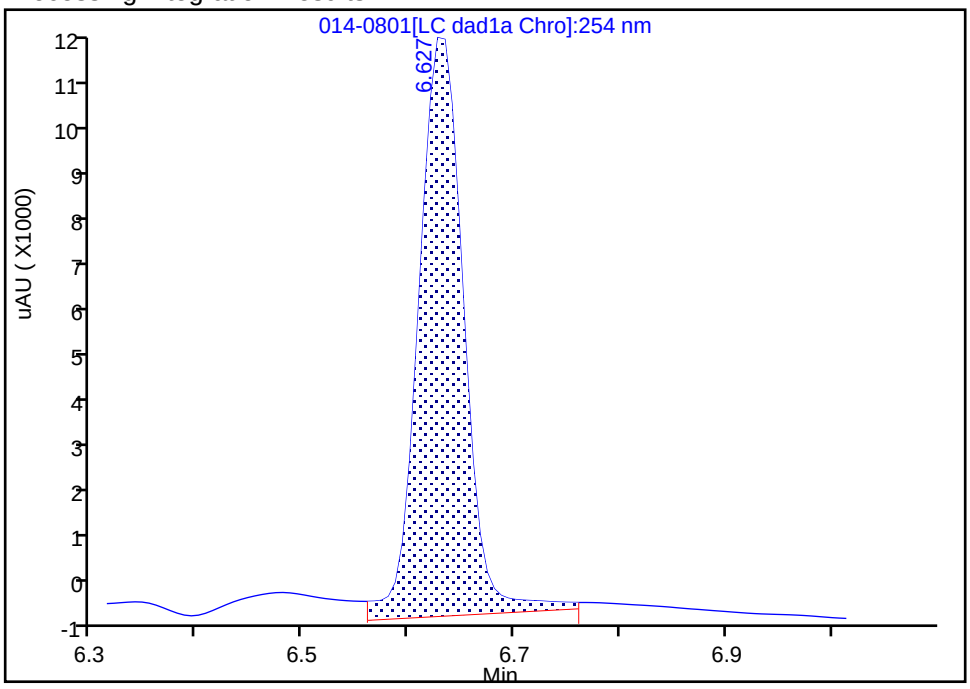
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\014-0801.d				
Injection Date:	01-May-2021 19:09:54	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

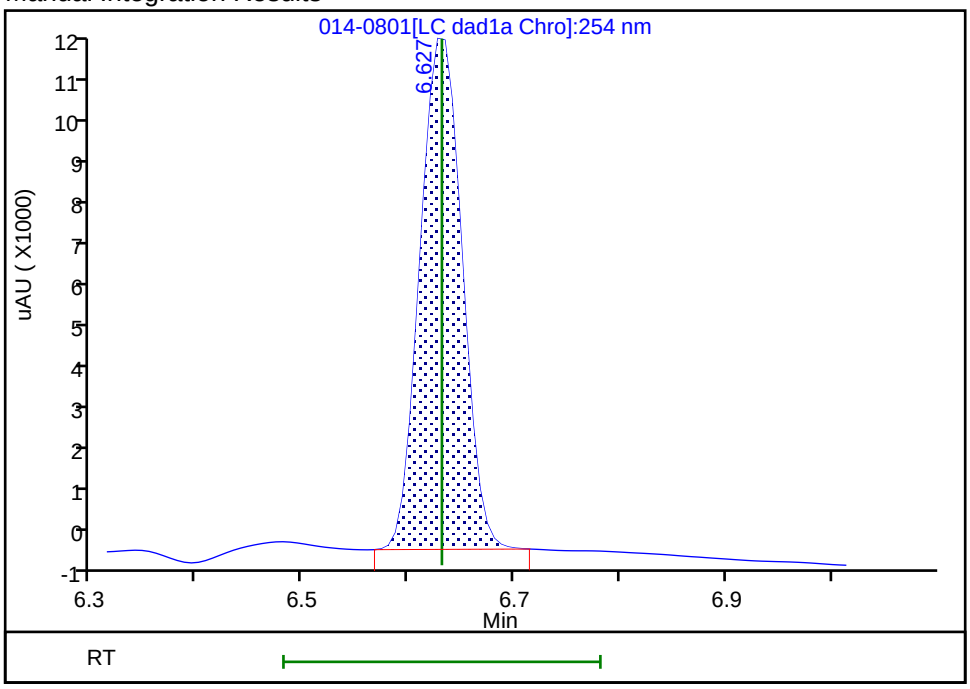
Processing Integration Results

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

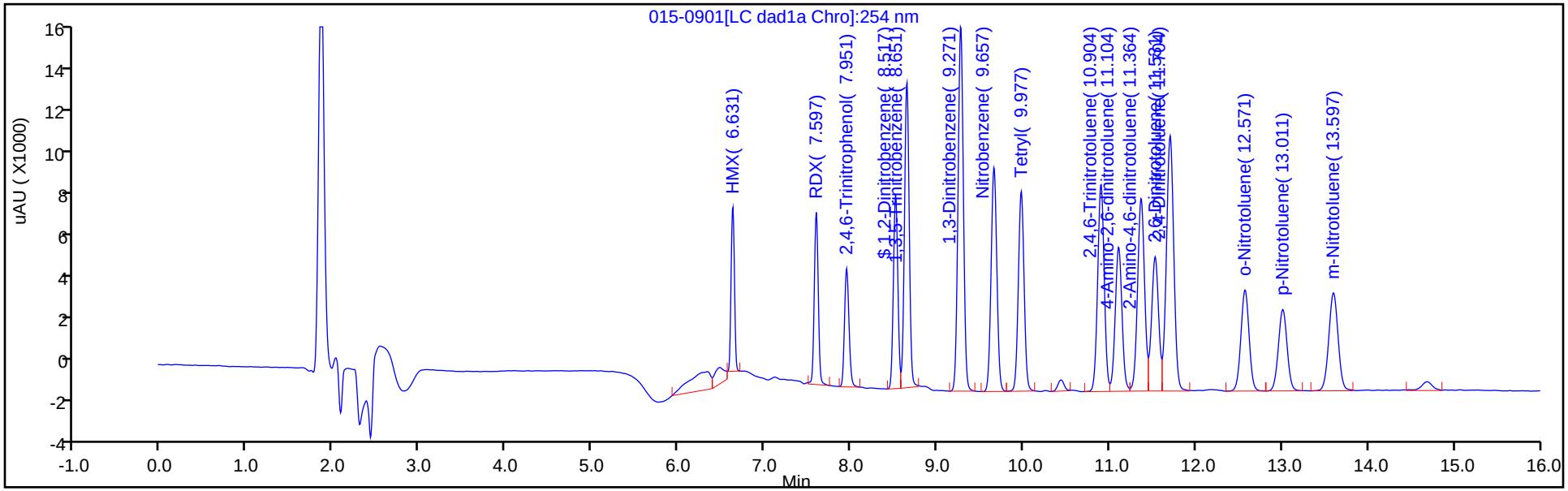
Report Date: 04-May-2021 13:25:08 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

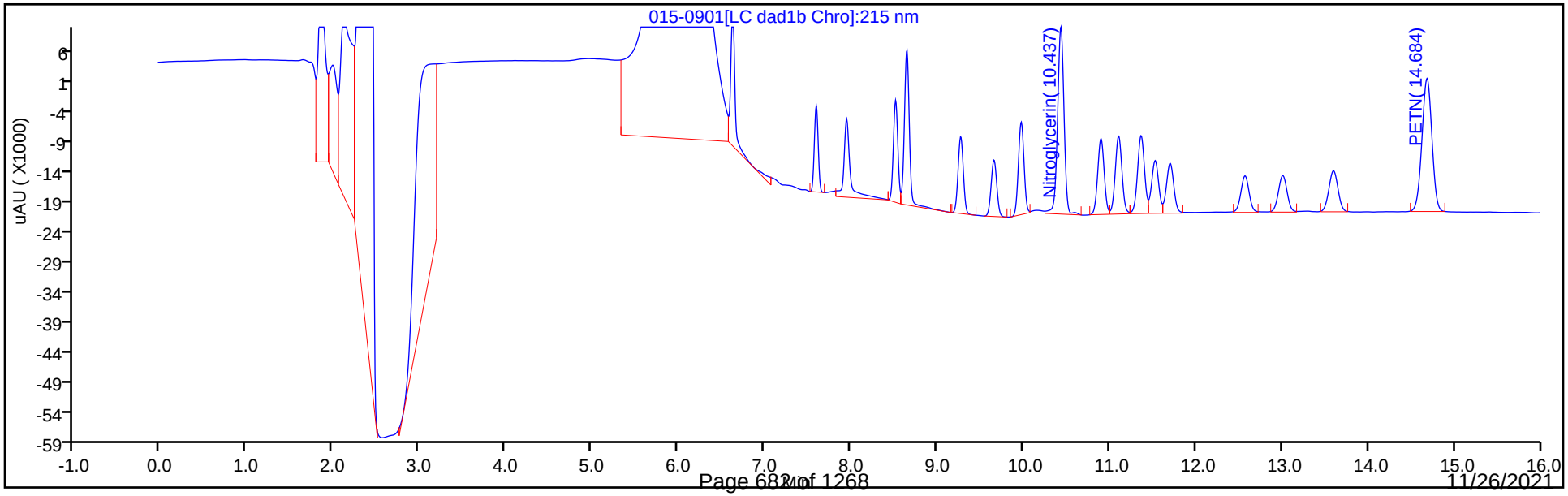
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\015-0901.d

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

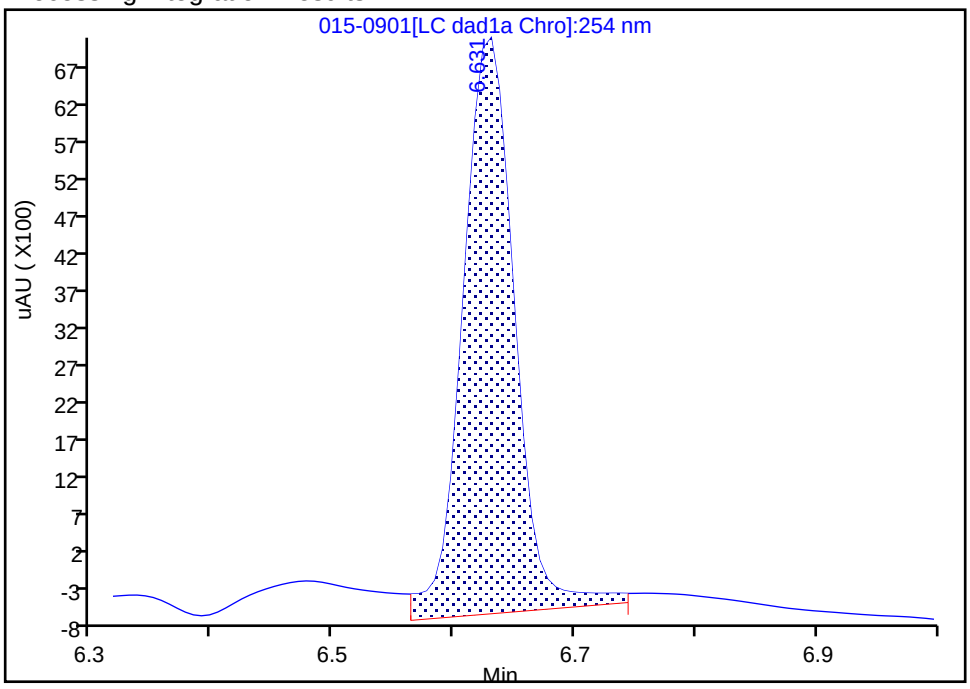
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\015-0901.d				
Injection Date:	01-May-2021 19:32:52	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 5				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

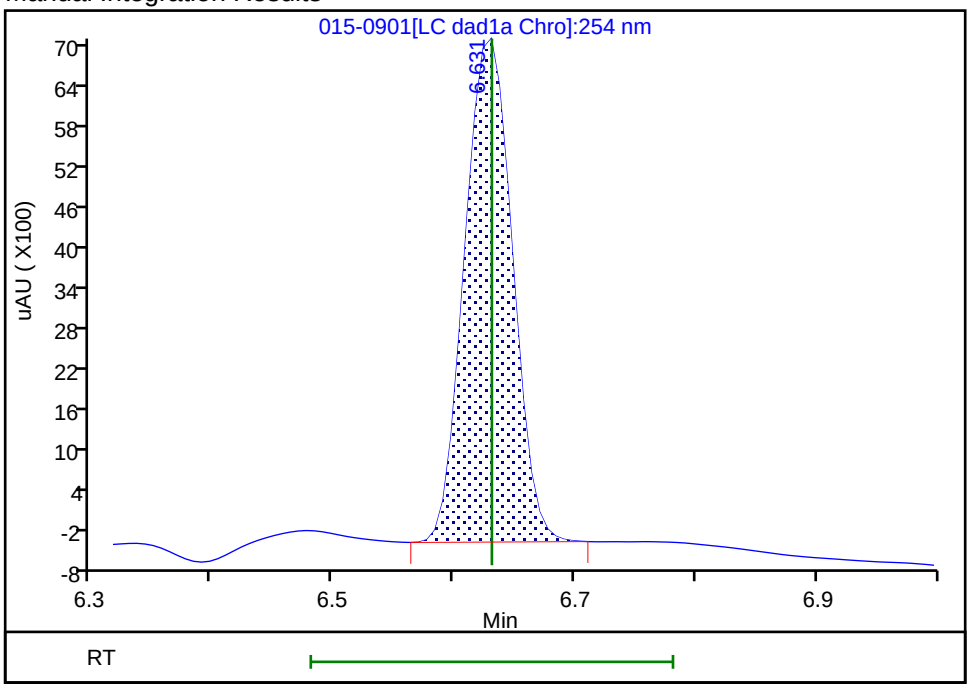
Processing Integration Results

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

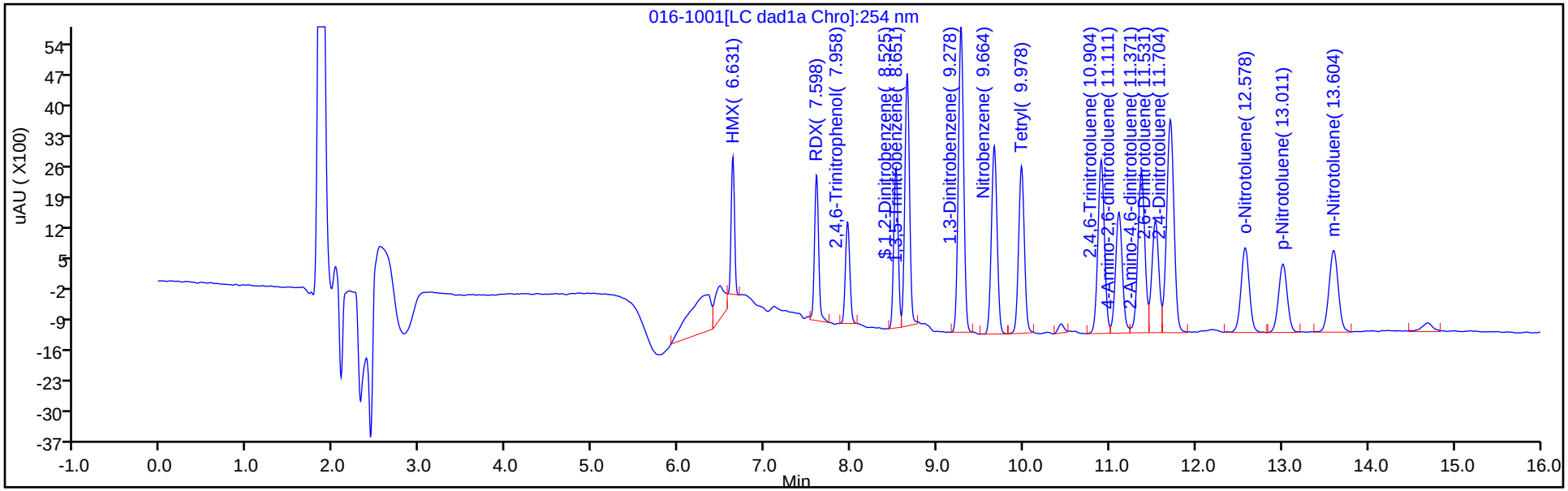
Report Date: 04-May-2021 13:25:09 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

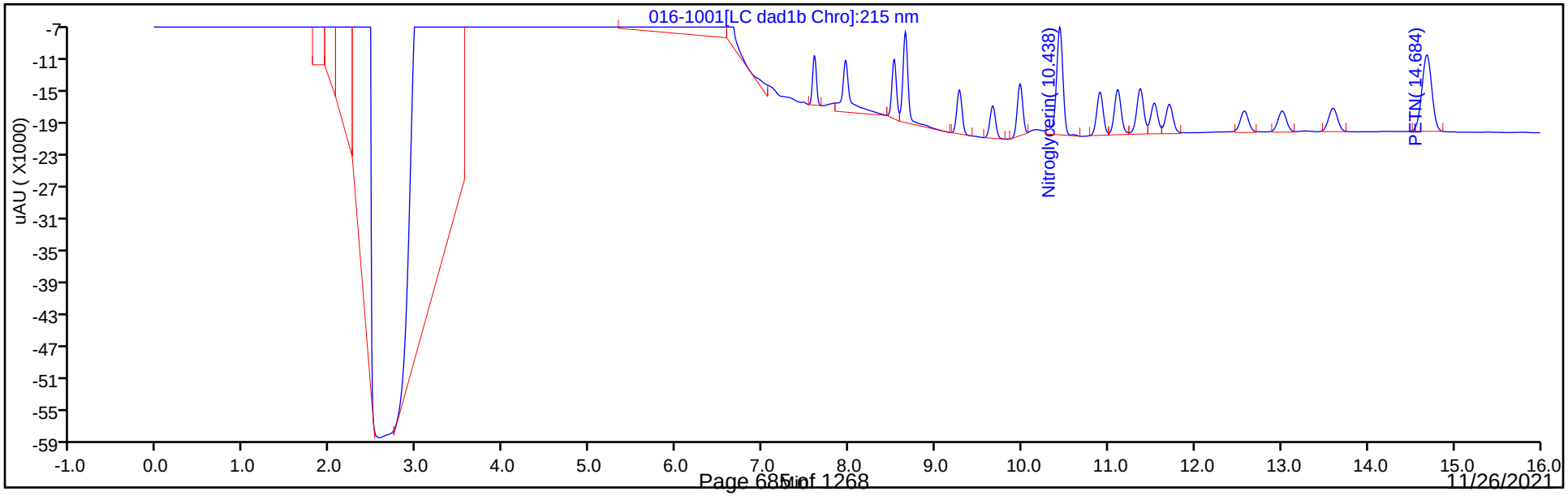
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\016-1001.d

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

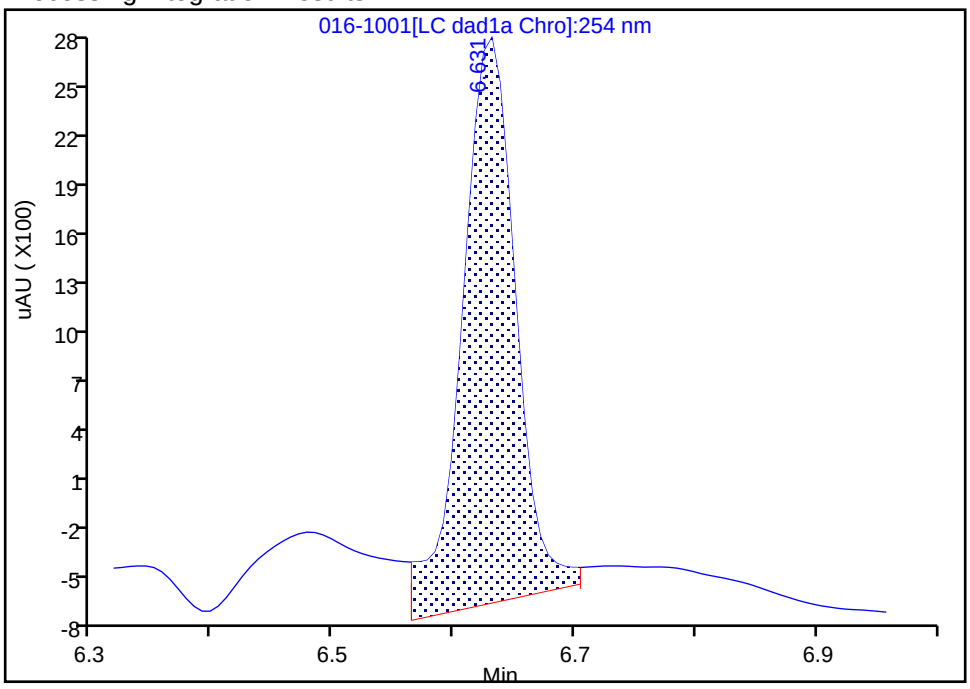
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\016-1001.d				
Injection Date:	01-May-2021 19:55:49	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 4				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

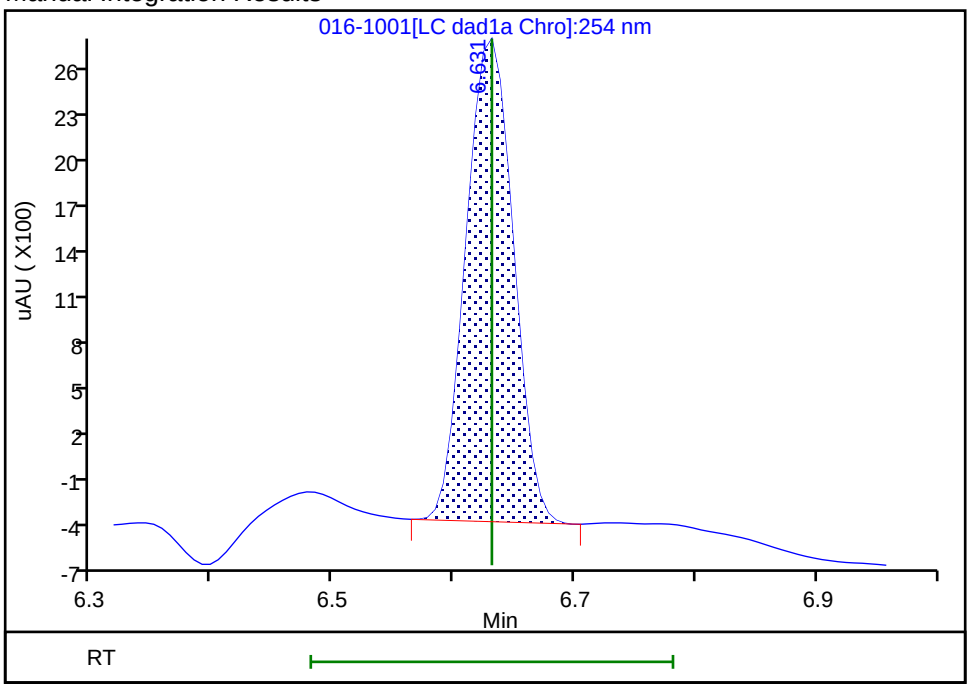
Processing Integration Results

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

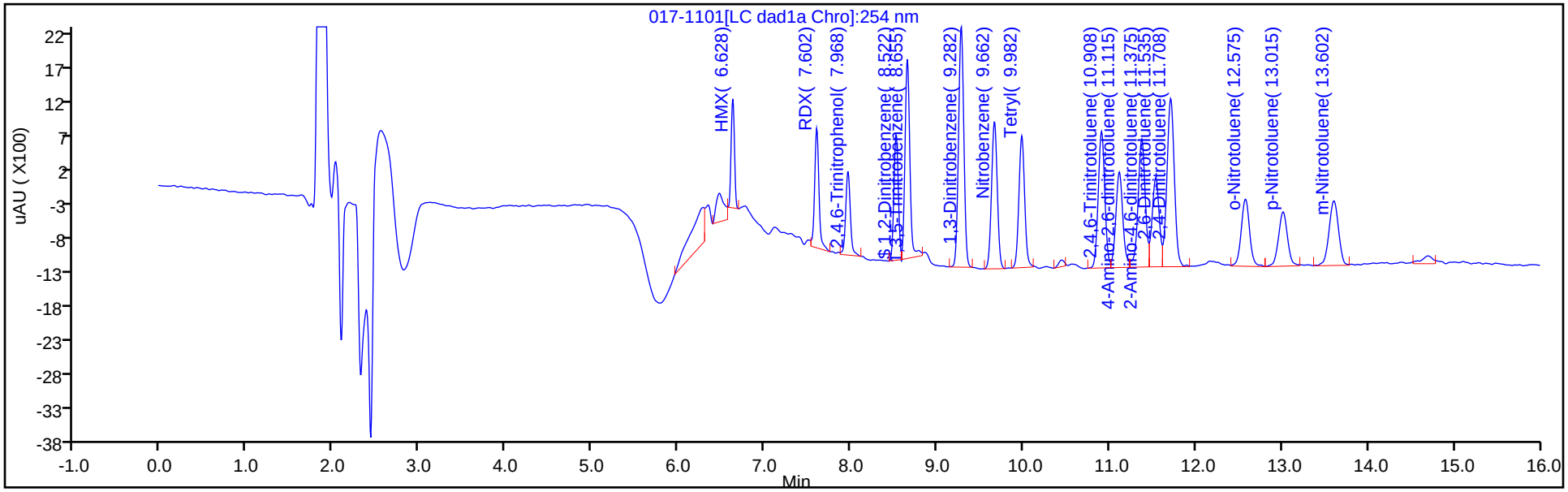
Report Date: 04-May-2021 13:25:10 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

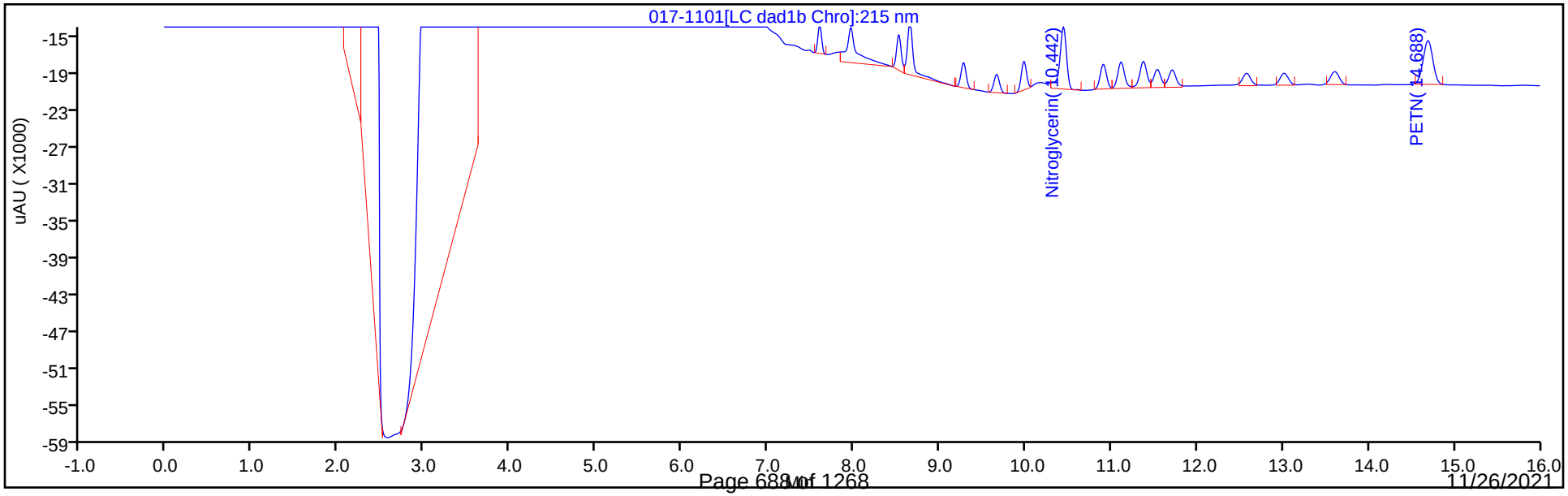
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\017-1101.d

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

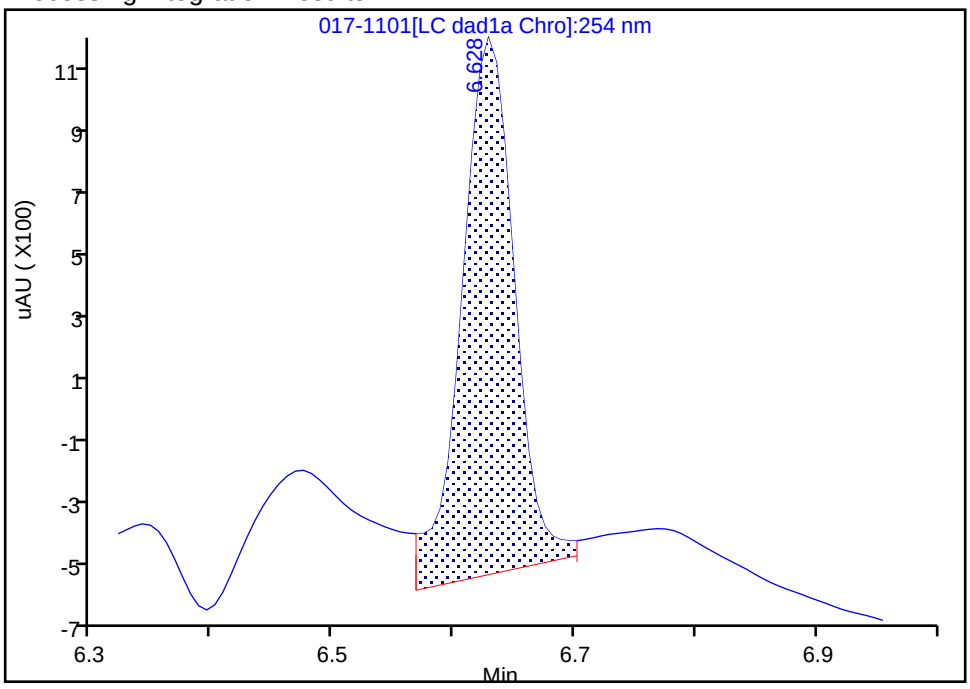
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\017-1101.d				
Injection Date:	01-May-2021 20:18:45	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 3				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

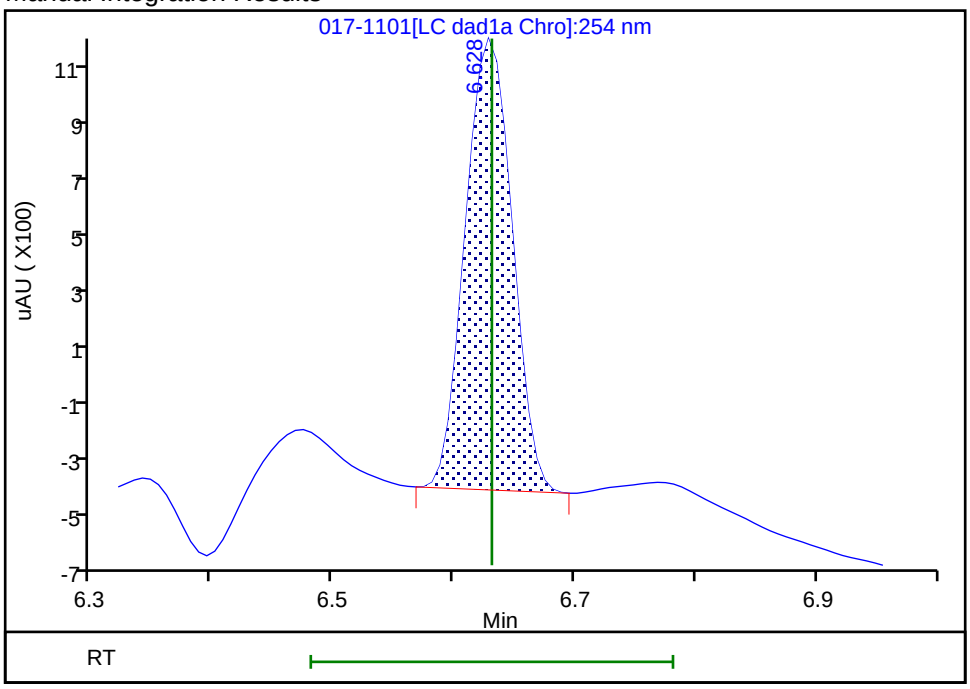
Processing Integration Results

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

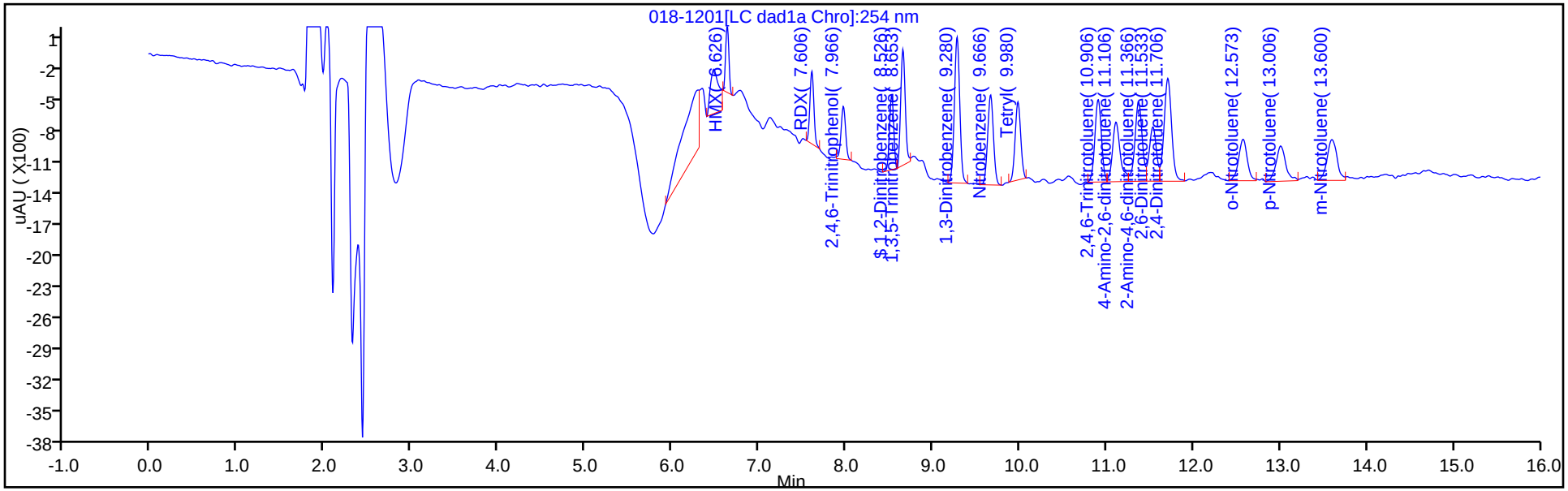
Report Date: 04-May-2021 13:25:11 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

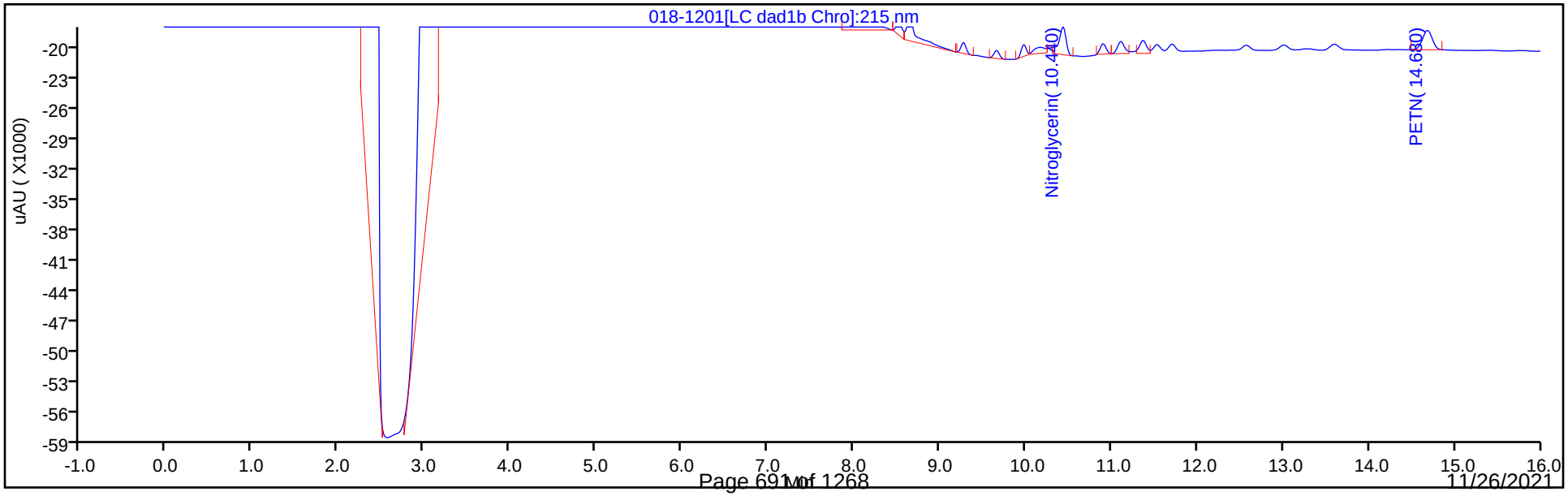
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d

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

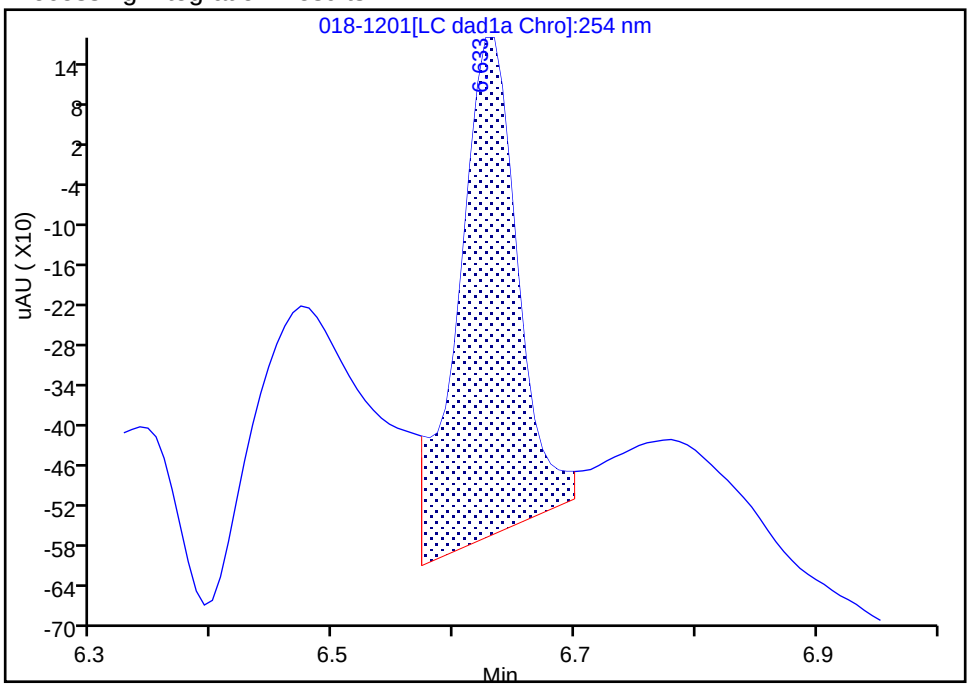
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d				
Injection Date:	01-May-2021 20:41:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

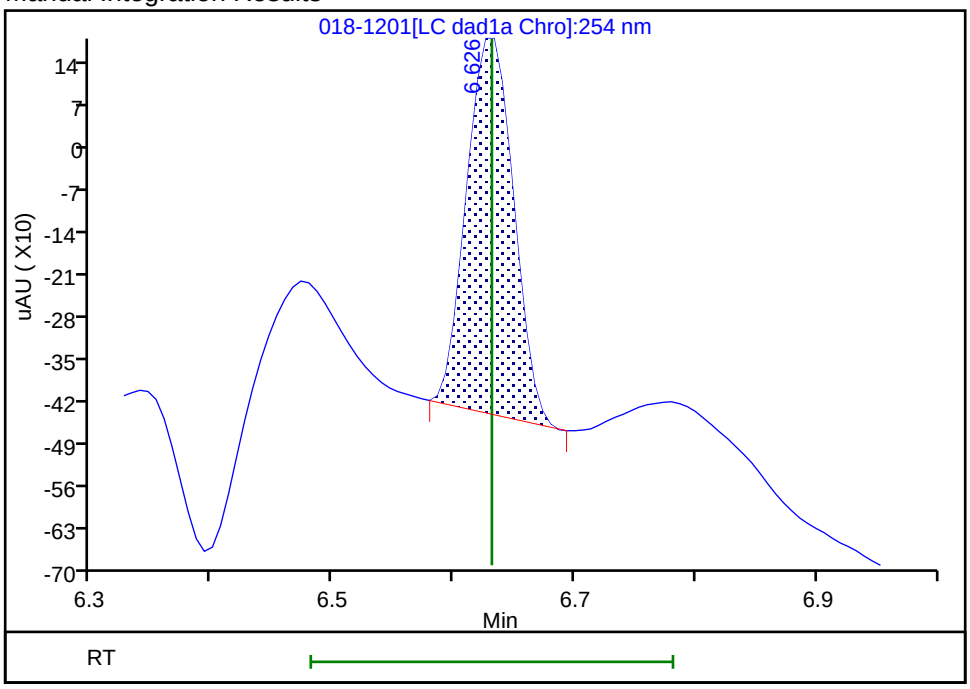
Processing Integration Results

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

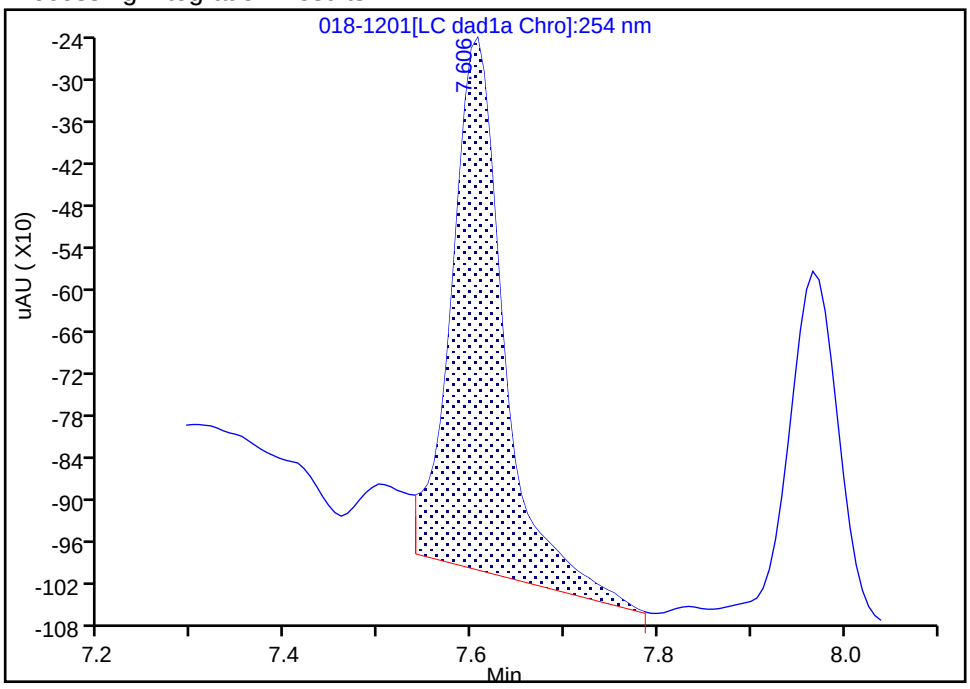
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d				
Injection Date:	01-May-2021 20:41:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 RDX, CAS: 121-82-4

Signal: 1

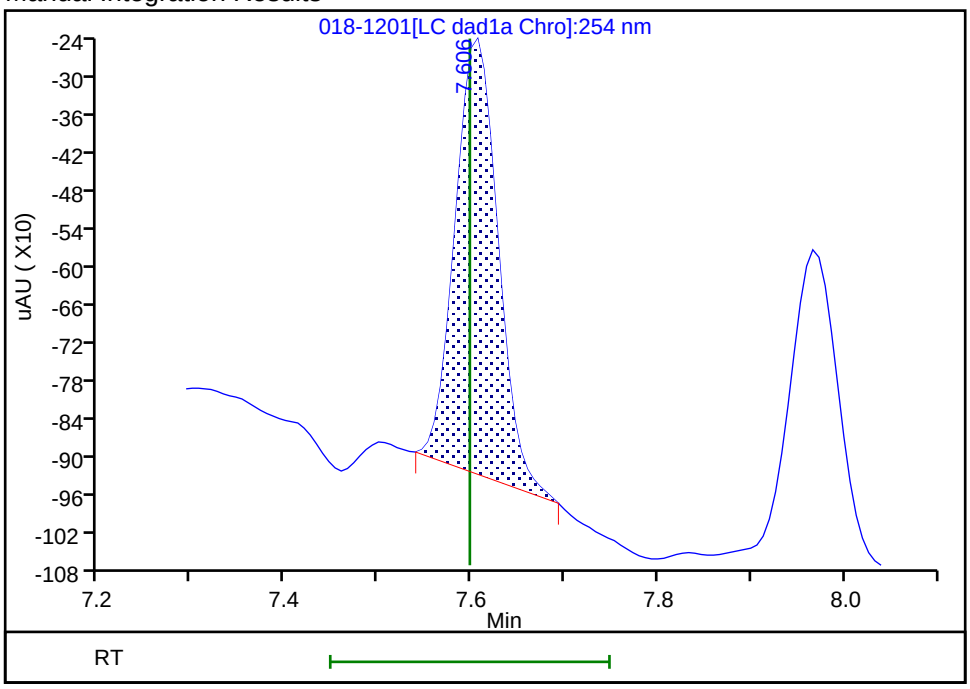
Processing Integration Results

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

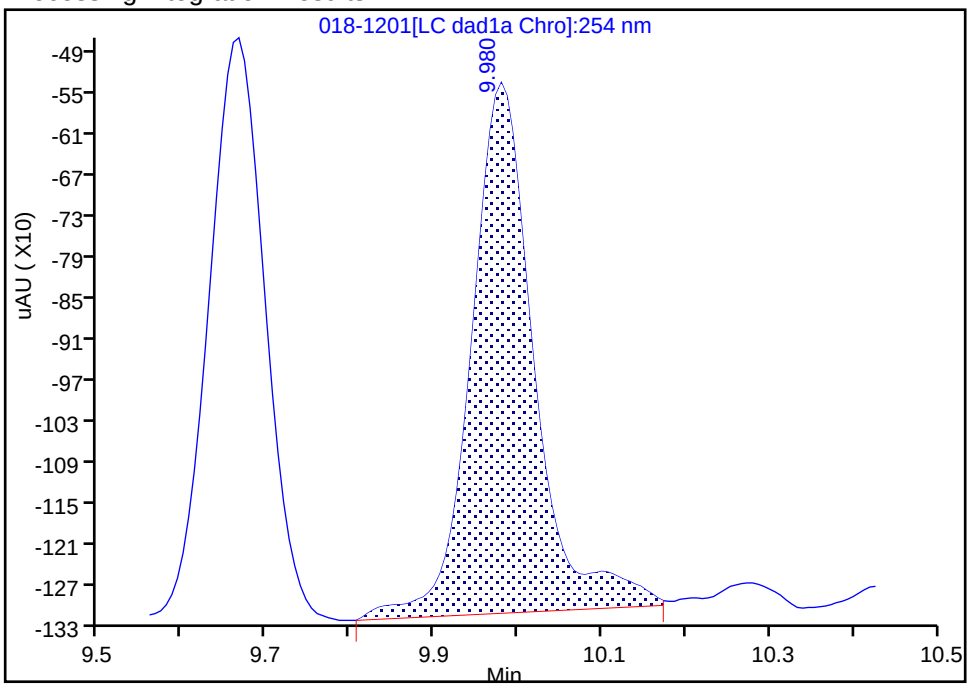
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d				
Injection Date:	01-May-2021 20:41:41	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 2				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

14 Tetryl, CAS: 479-45-8

Signal: 1

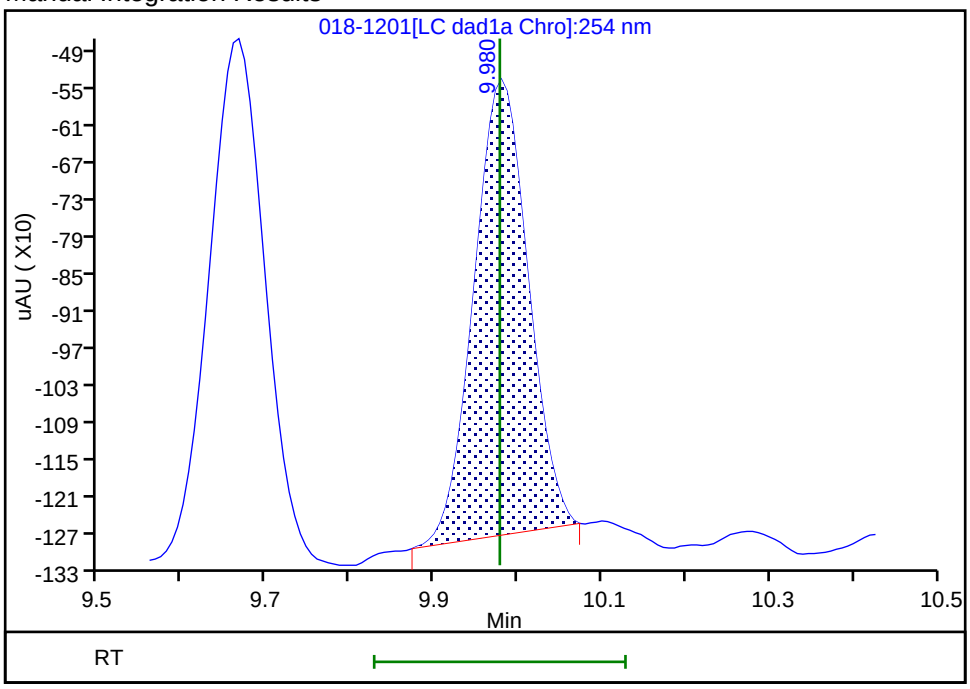
Processing Integration Results

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

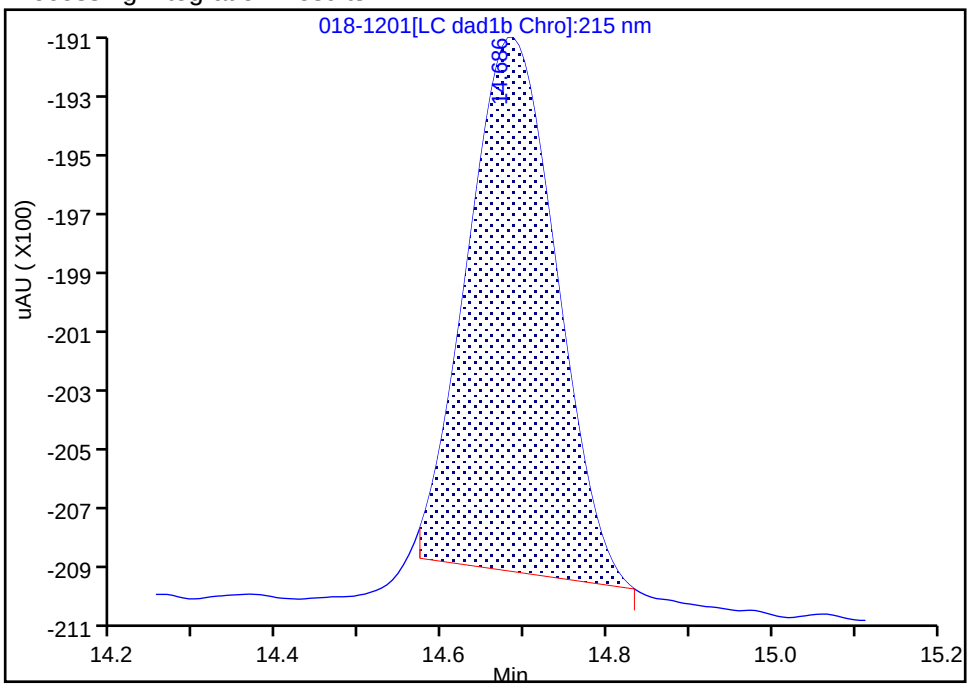
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\018-1201.d
Injection Date: 01-May-2021 20:41:41 Instrument ID: CHHPLC_X3
Lims ID: IC INT 2
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

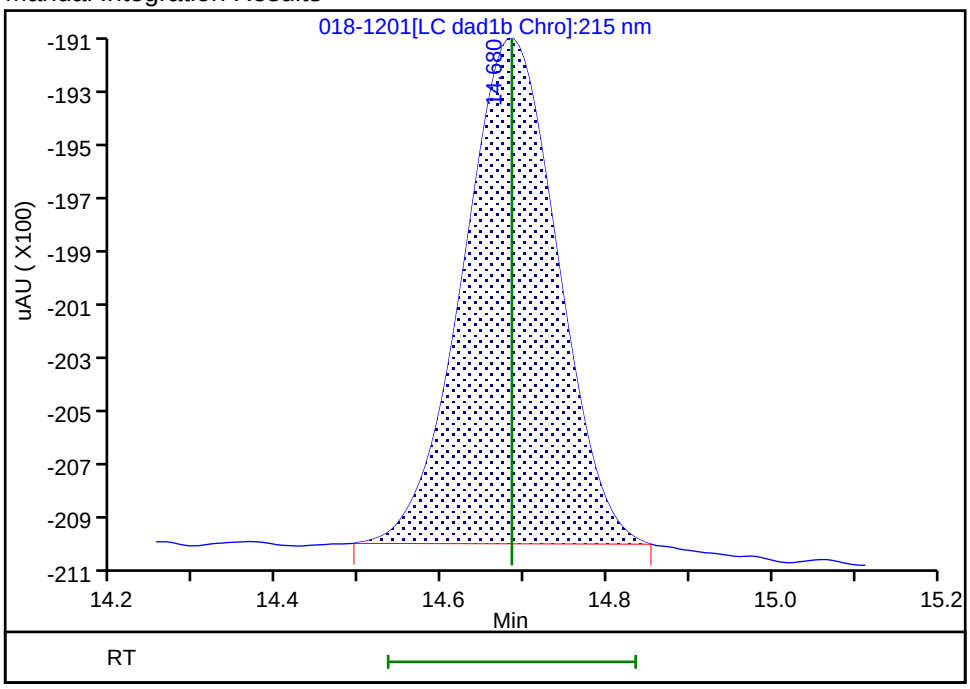
Processing Integration Results

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

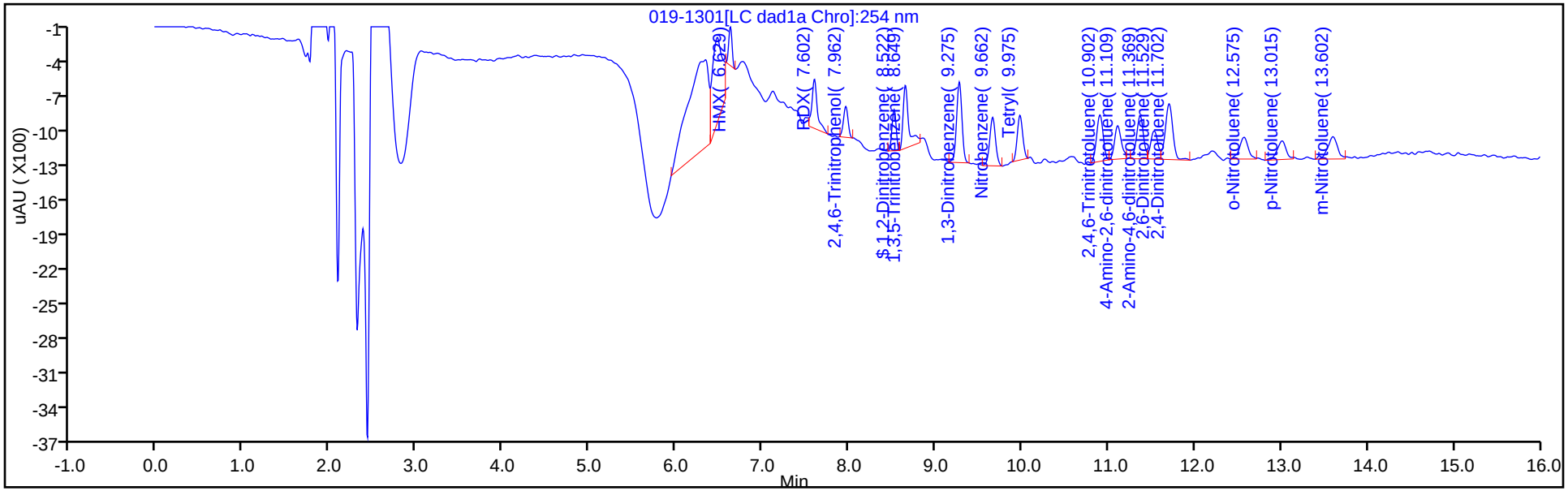
Report Date: 04-May-2021 13:25:11 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

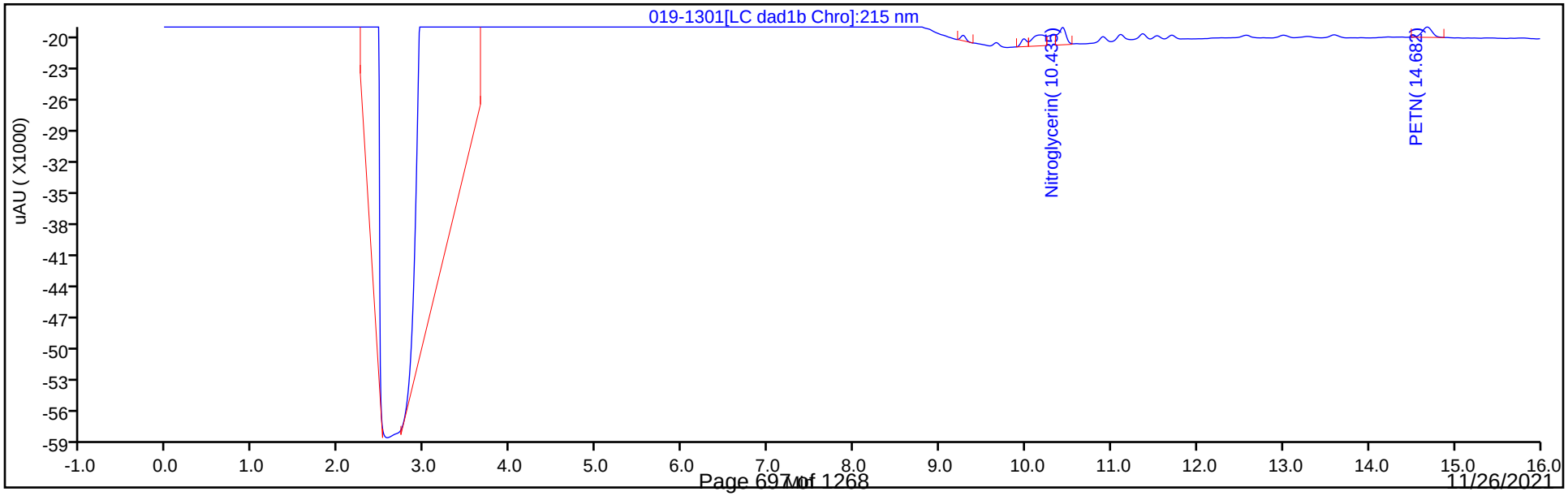
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d

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



Eurofins TestAmerica, Denver

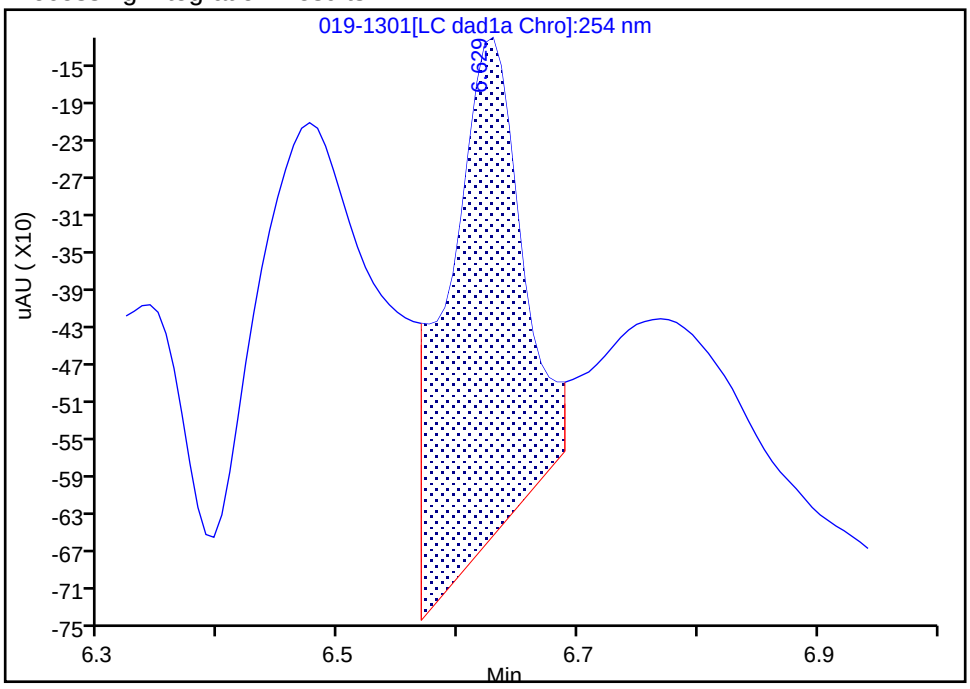
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d				
Injection Date:	01-May-2021 21:04:39	Instrument ID:	CHHPLC_X3		
Lims ID:	IC INT 1				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

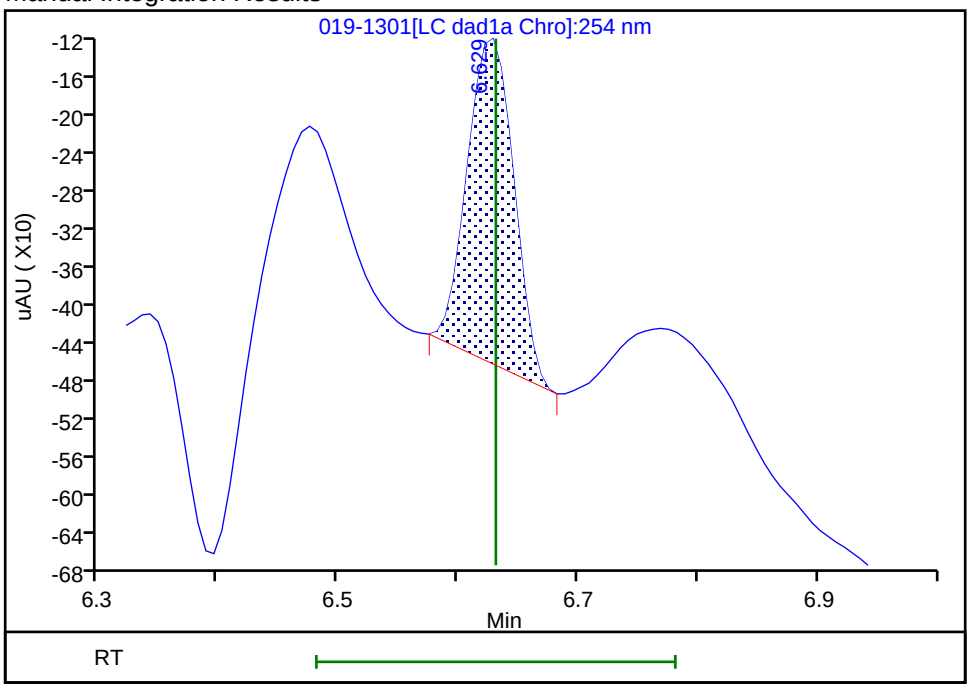
Processing Integration Results

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

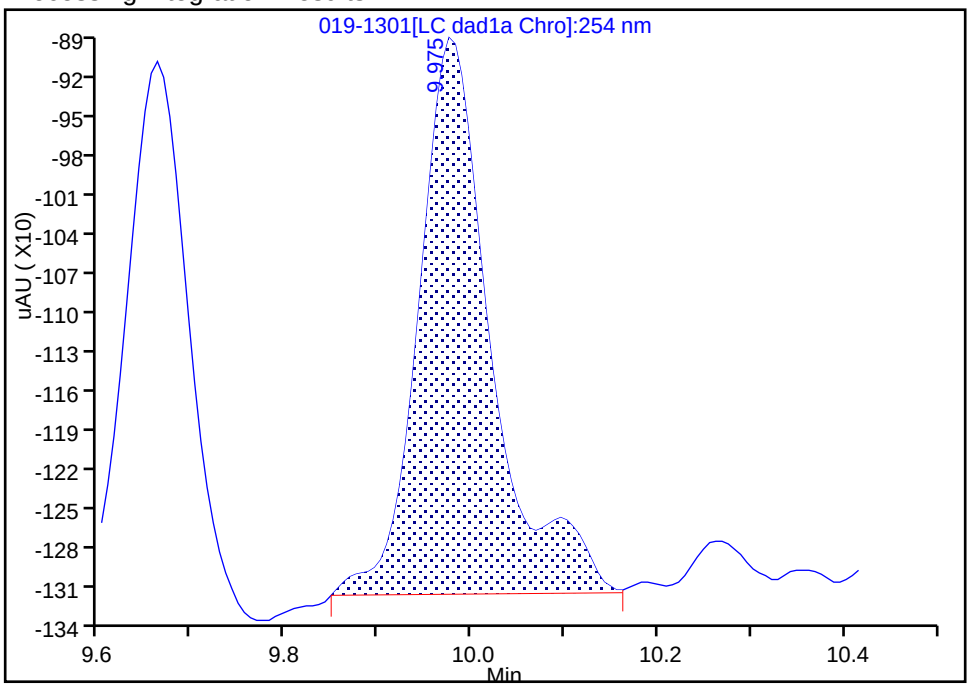
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d
Injection Date: 01-May-2021 21:04:39 Instrument ID: CHHPLC_X3
Lims ID: IC INT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: UltraCarb5uODS (20) (4.60 mm) Detector LC DAD1B, 254 nm

14 Tetryl, CAS: 479-45-8

Signal: 1

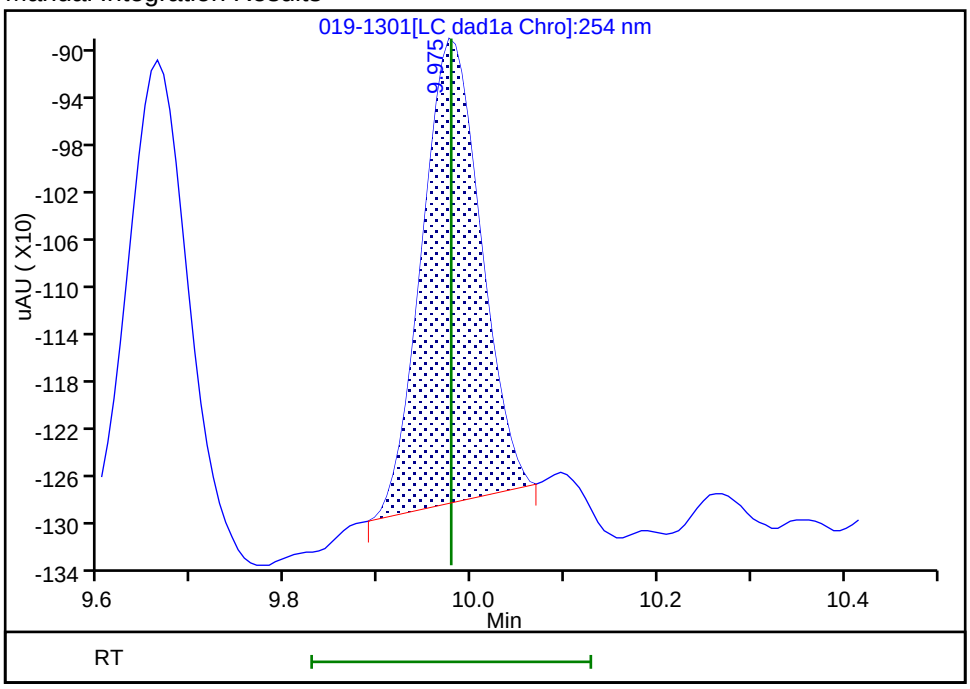
Processing Integration Results

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

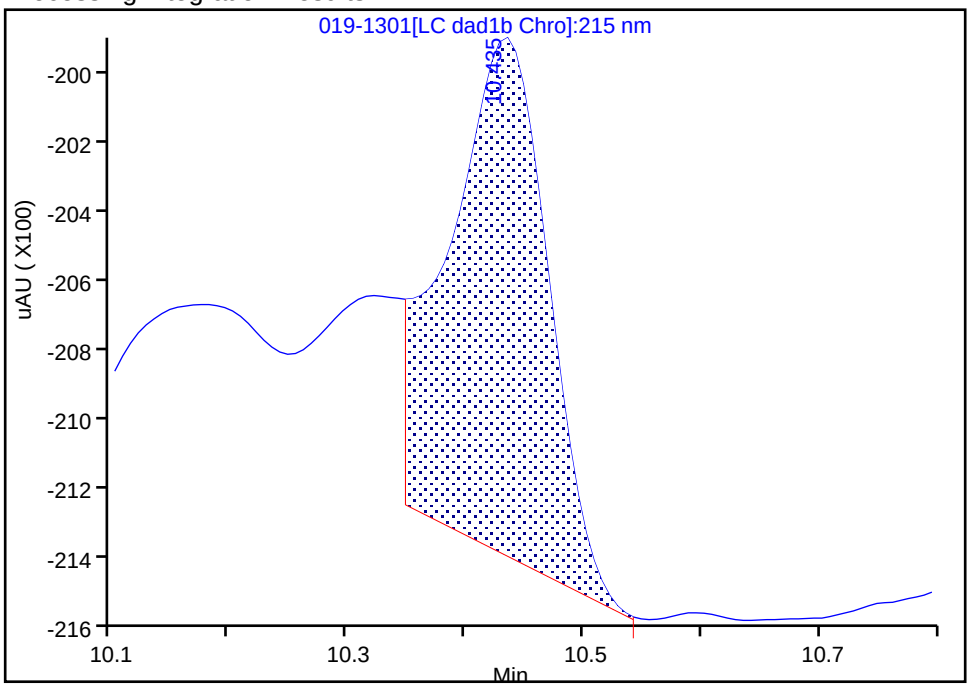
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d
Injection Date: 01-May-2021 21:04:39 Instrument ID: CHHPLC_X3
Lims ID: IC INT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

15 Nitroglycerin, CAS: 55-63-0

Signal: 1

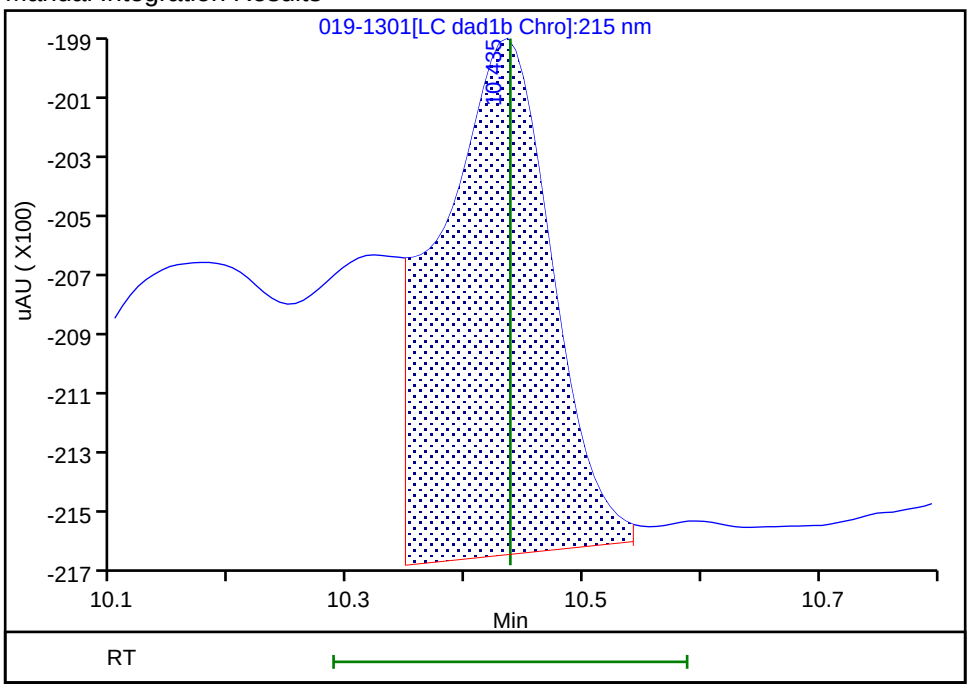
Processing Integration Results

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

Eurofins TestAmerica, Denver

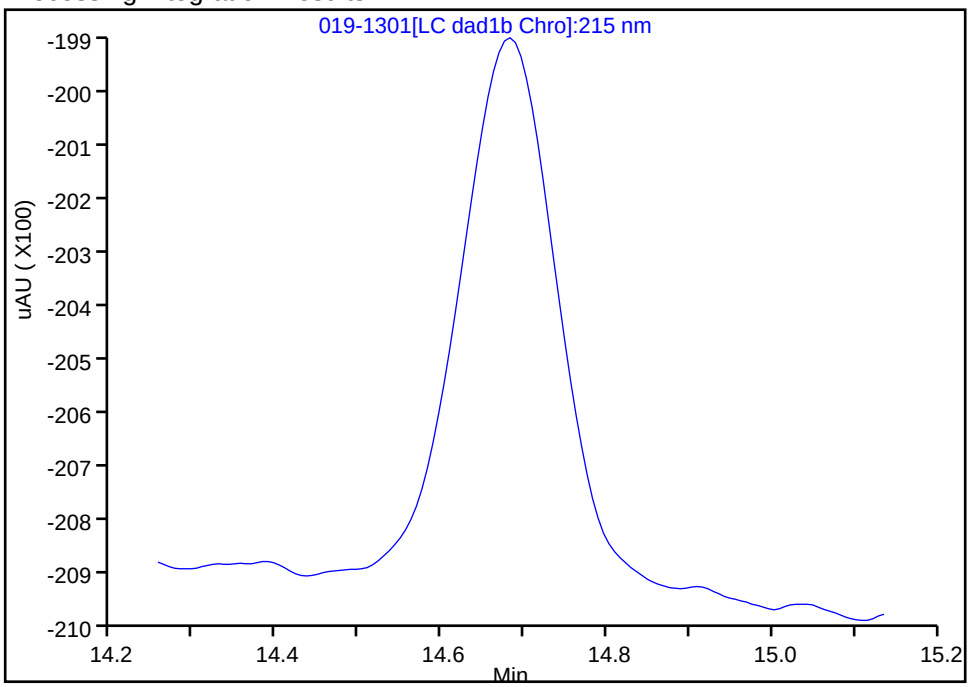
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\019-1301.d
Injection Date: 01-May-2021 21:04:39 Instrument ID: CHHPLC_X3
Lims ID: IC INT 1
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X3 Limit Group: GCSV - 8330
Column: Detector LC DAD1C, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

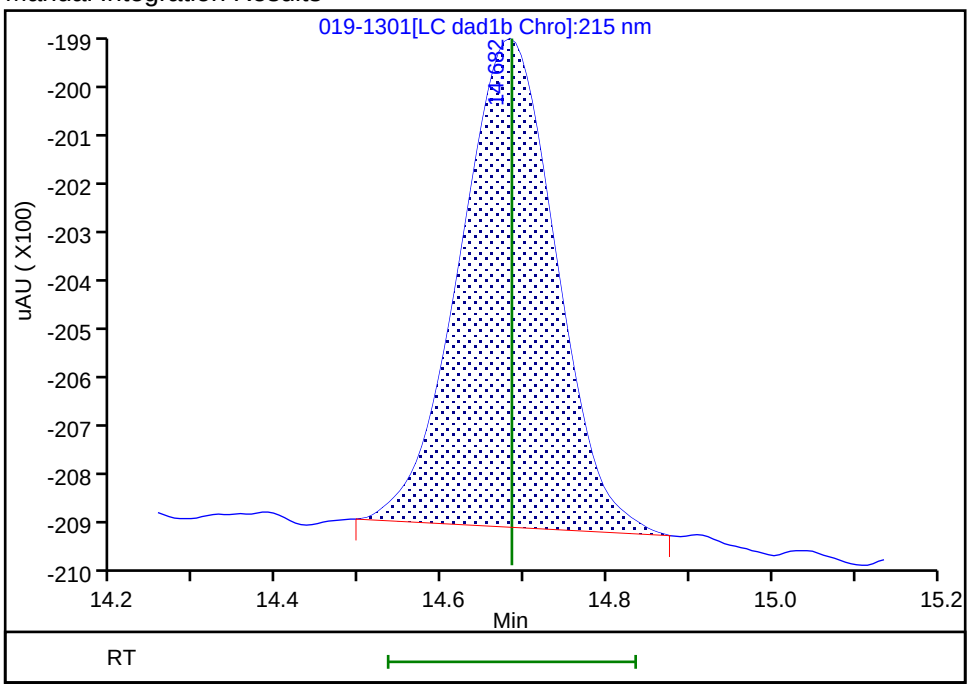
Not Detected
Expected RT: 14.68

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

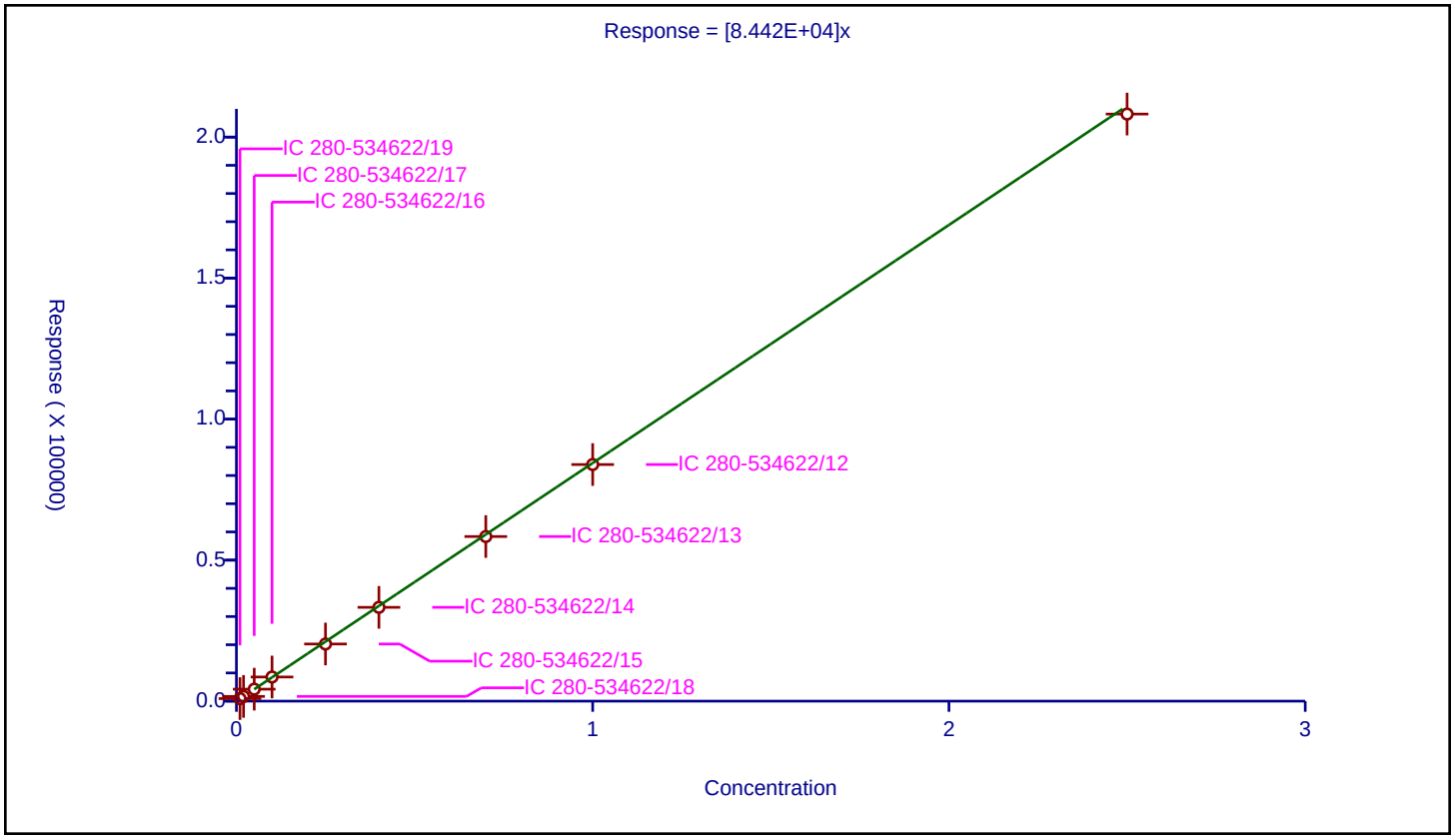
Curve Coefficients

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

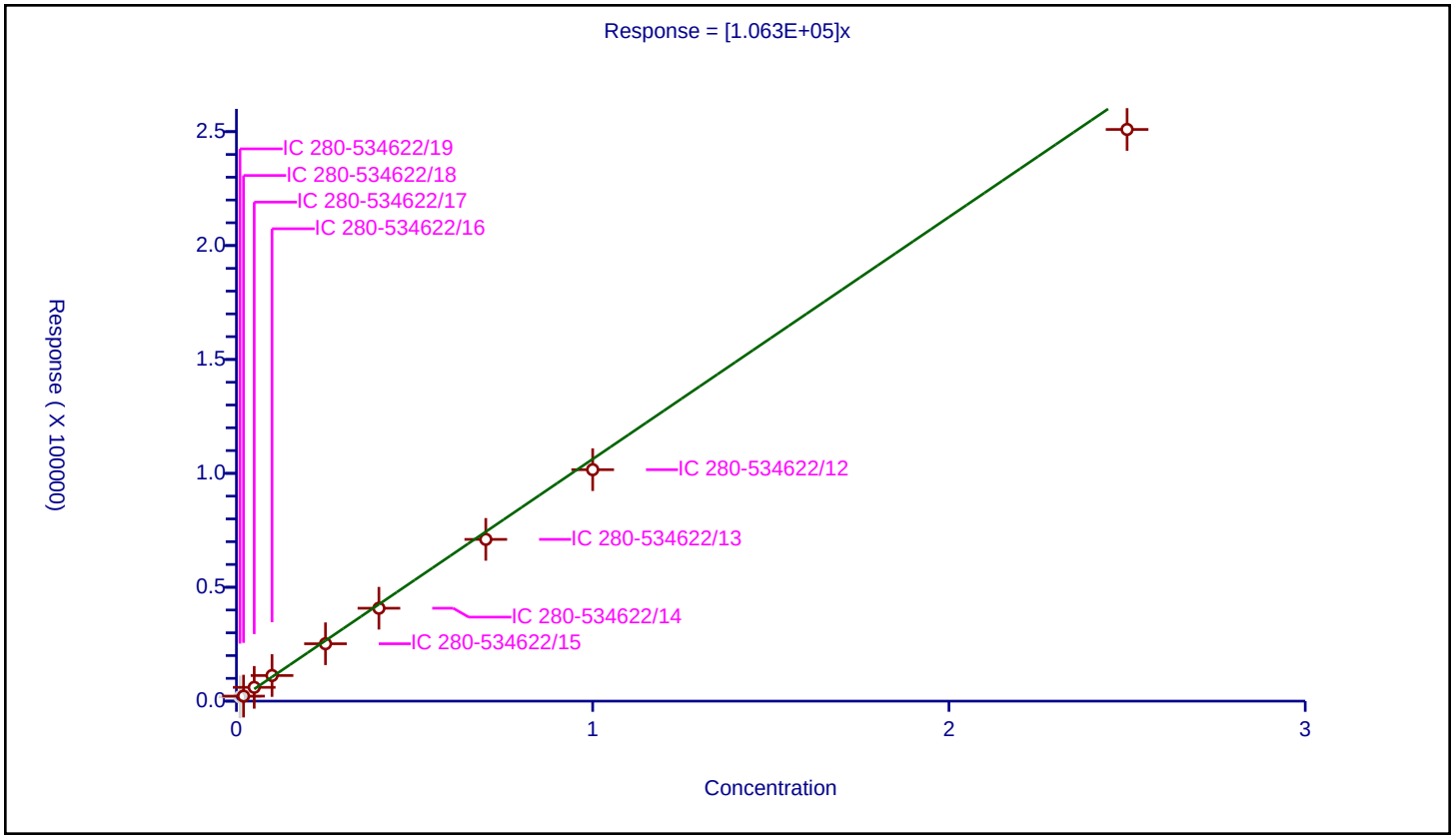
Curve Coefficients

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

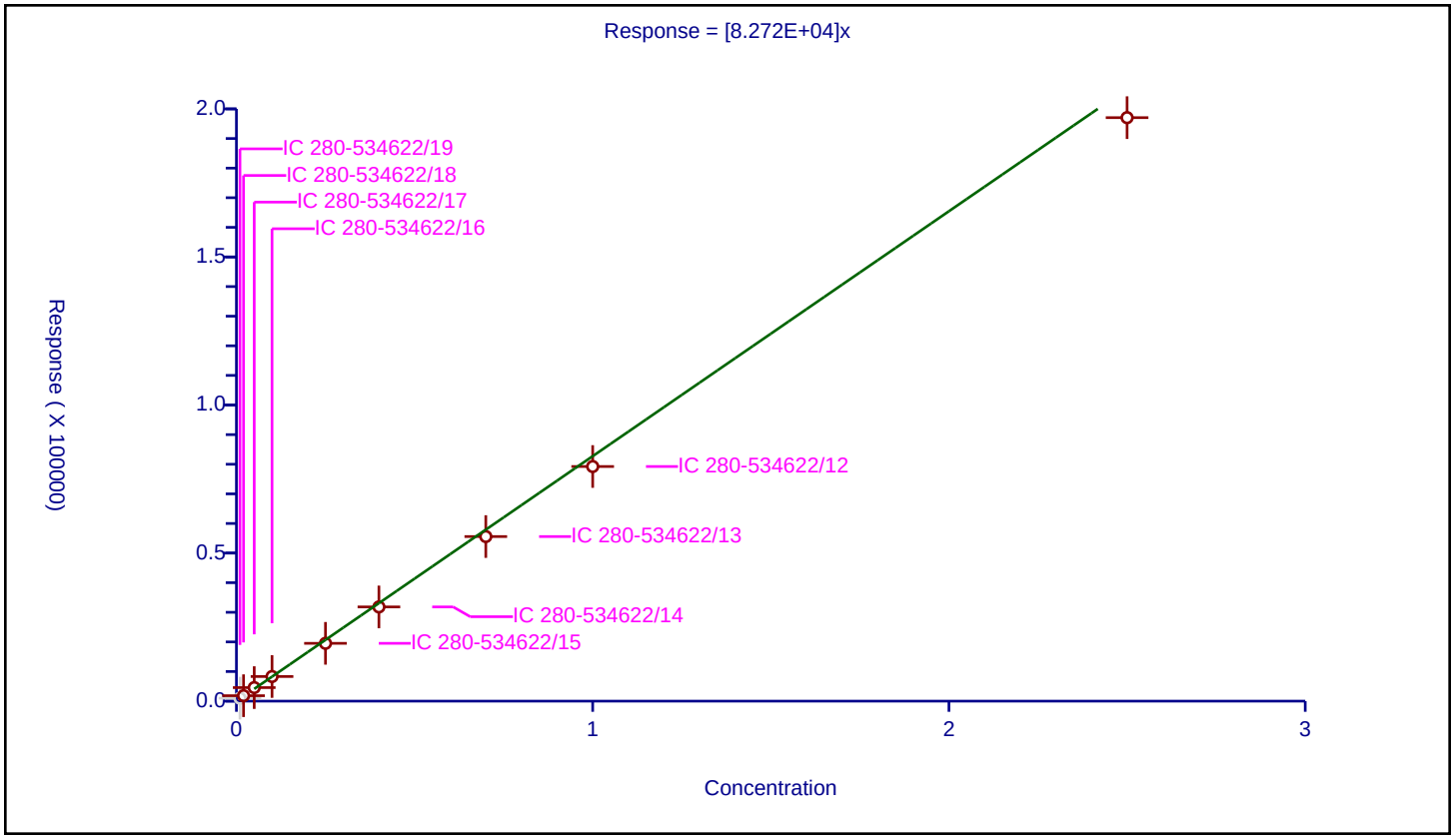
Curve Coefficients

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



Calibration / 1,2-Dinitrobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

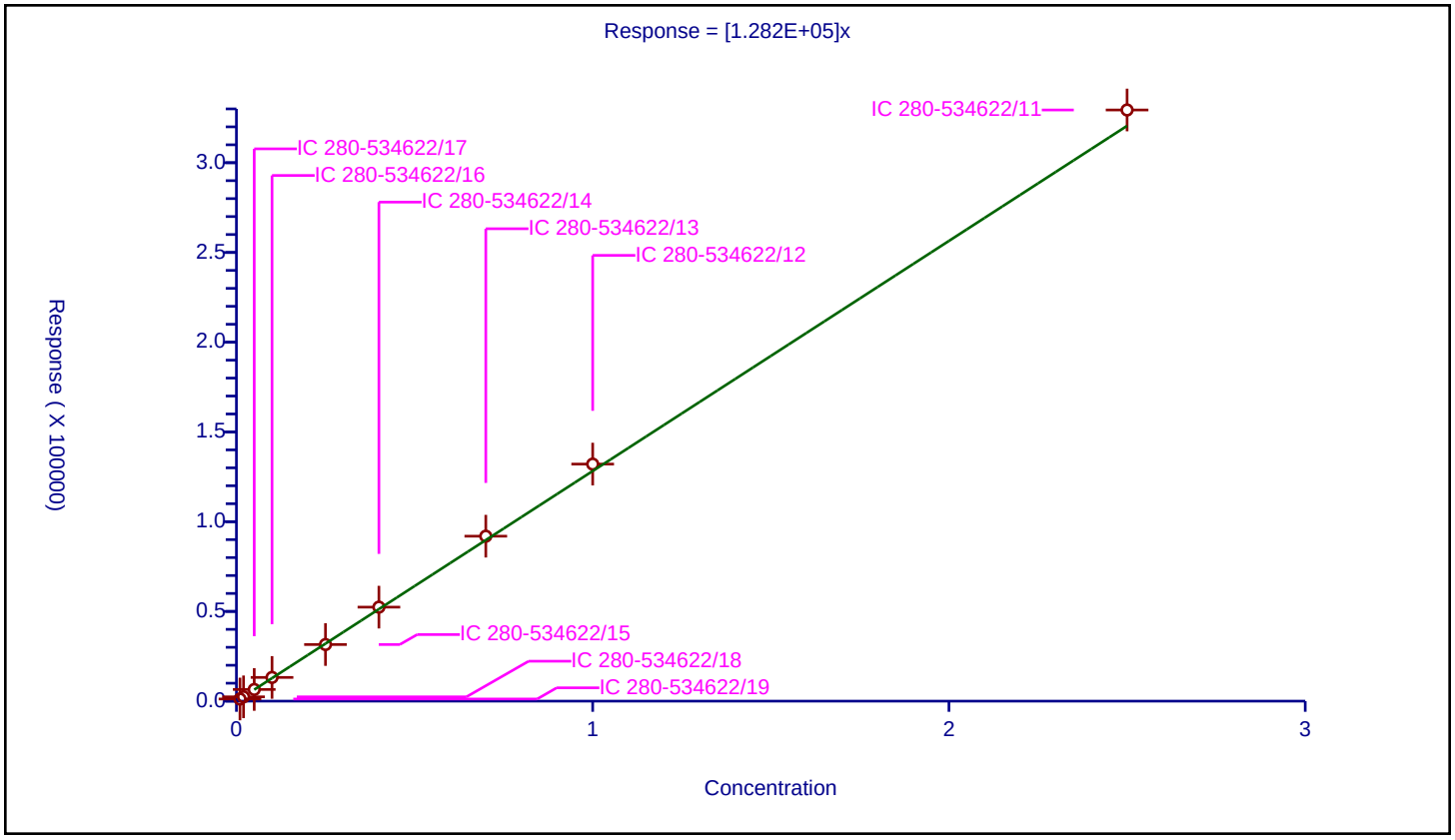
Curve Coefficients

Intercept:	0
Slope:	1.282E+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

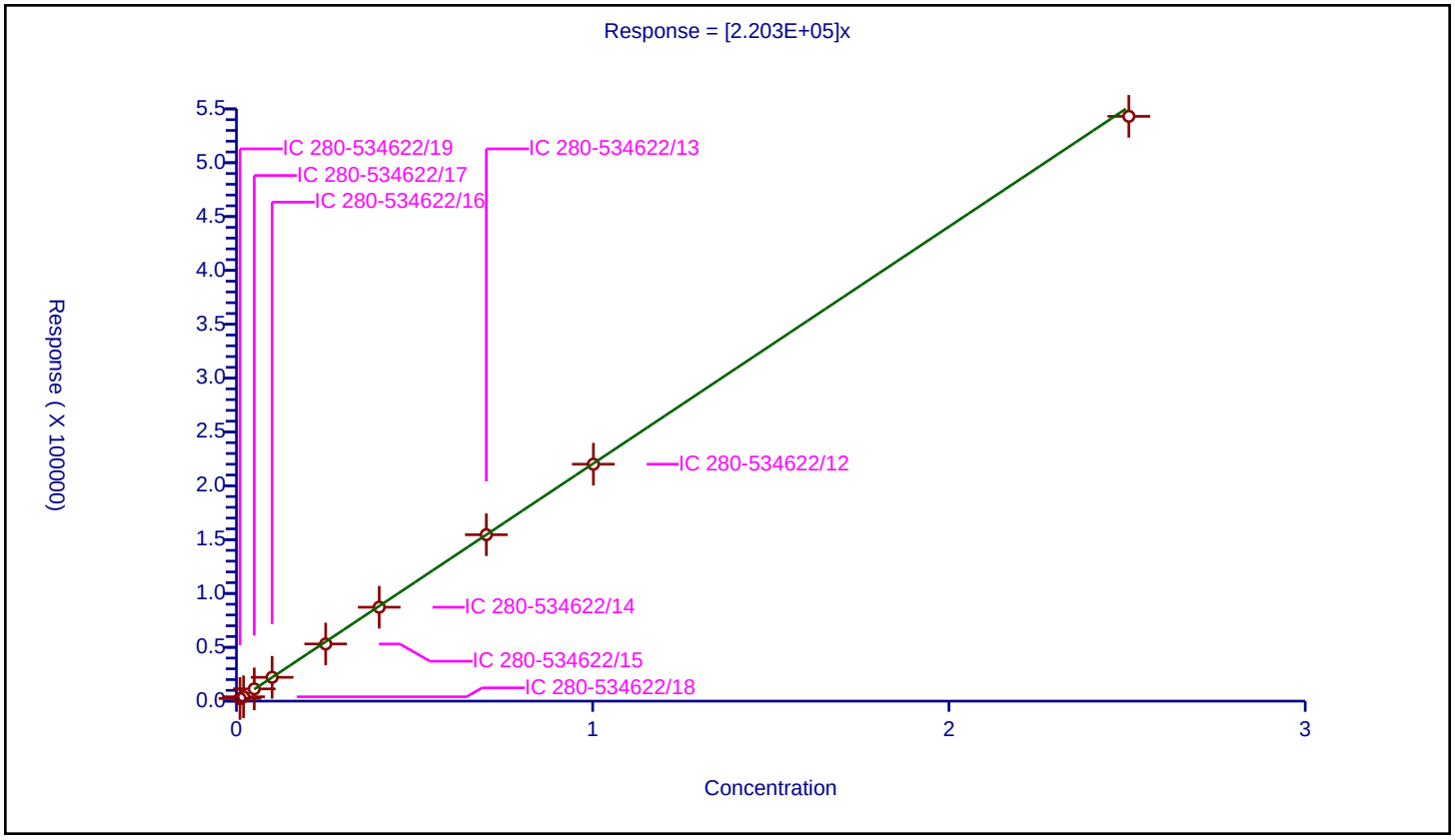
Curve Coefficients

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

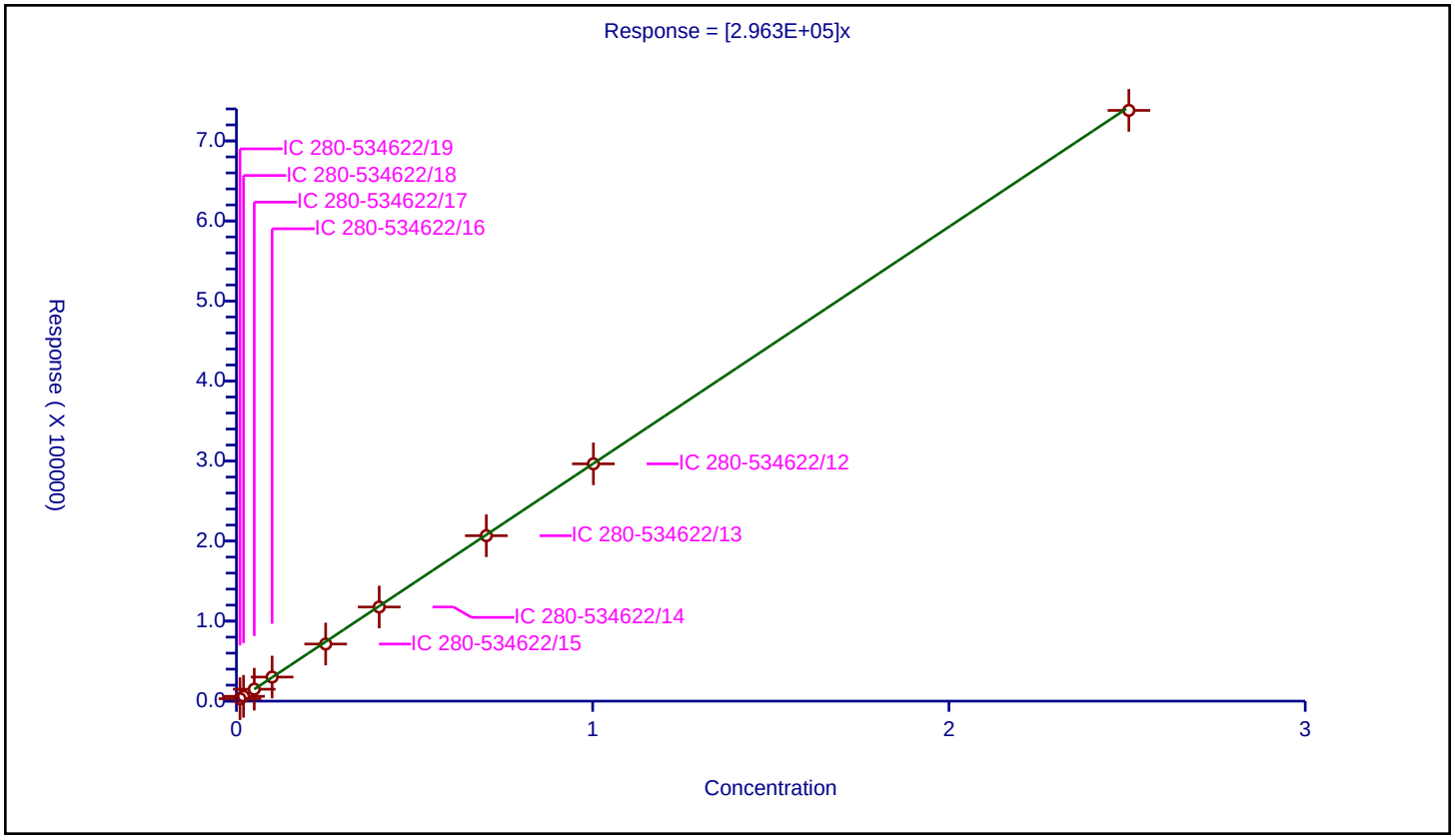
Curve Coefficients

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

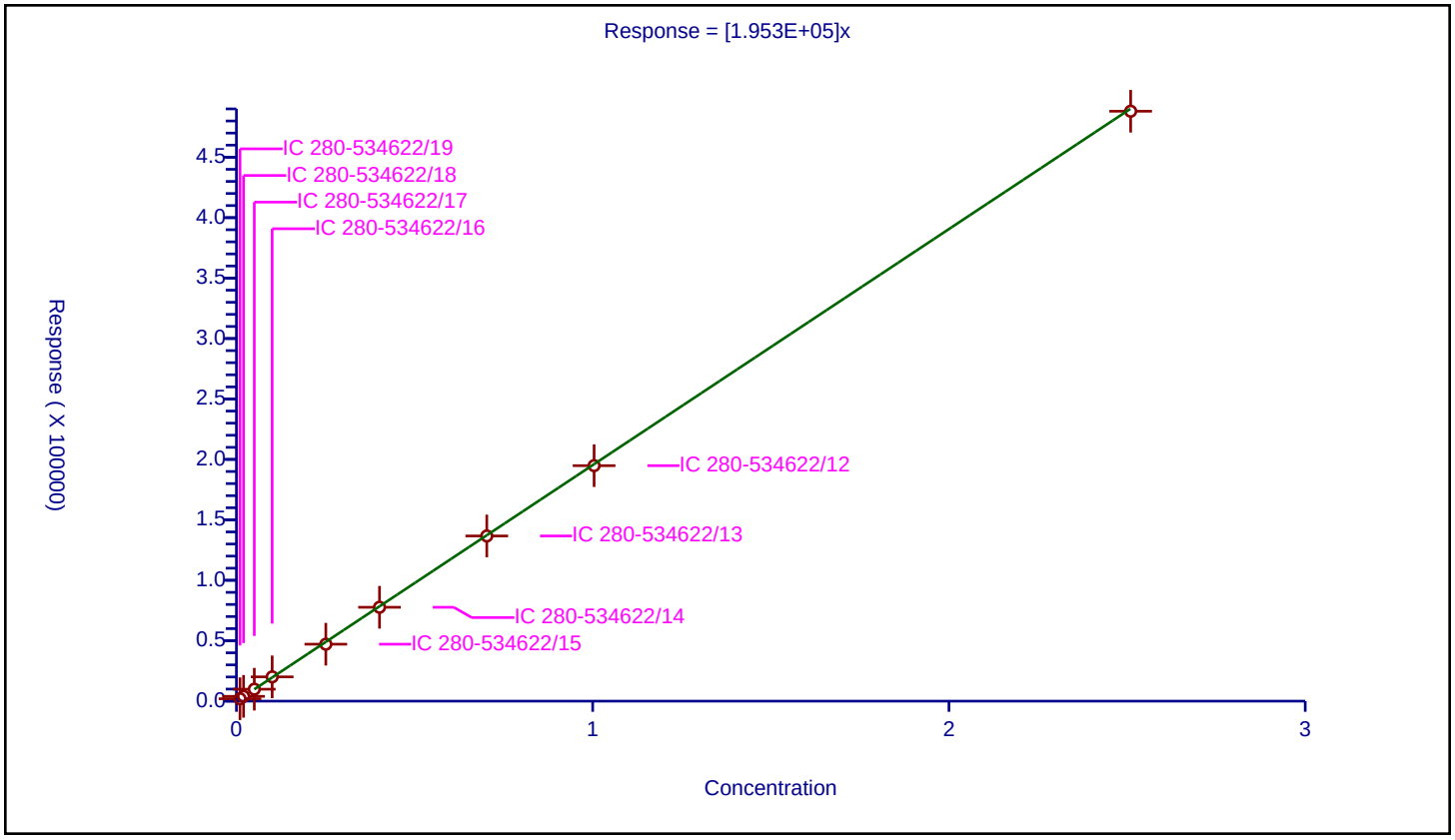
Curve Coefficients

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

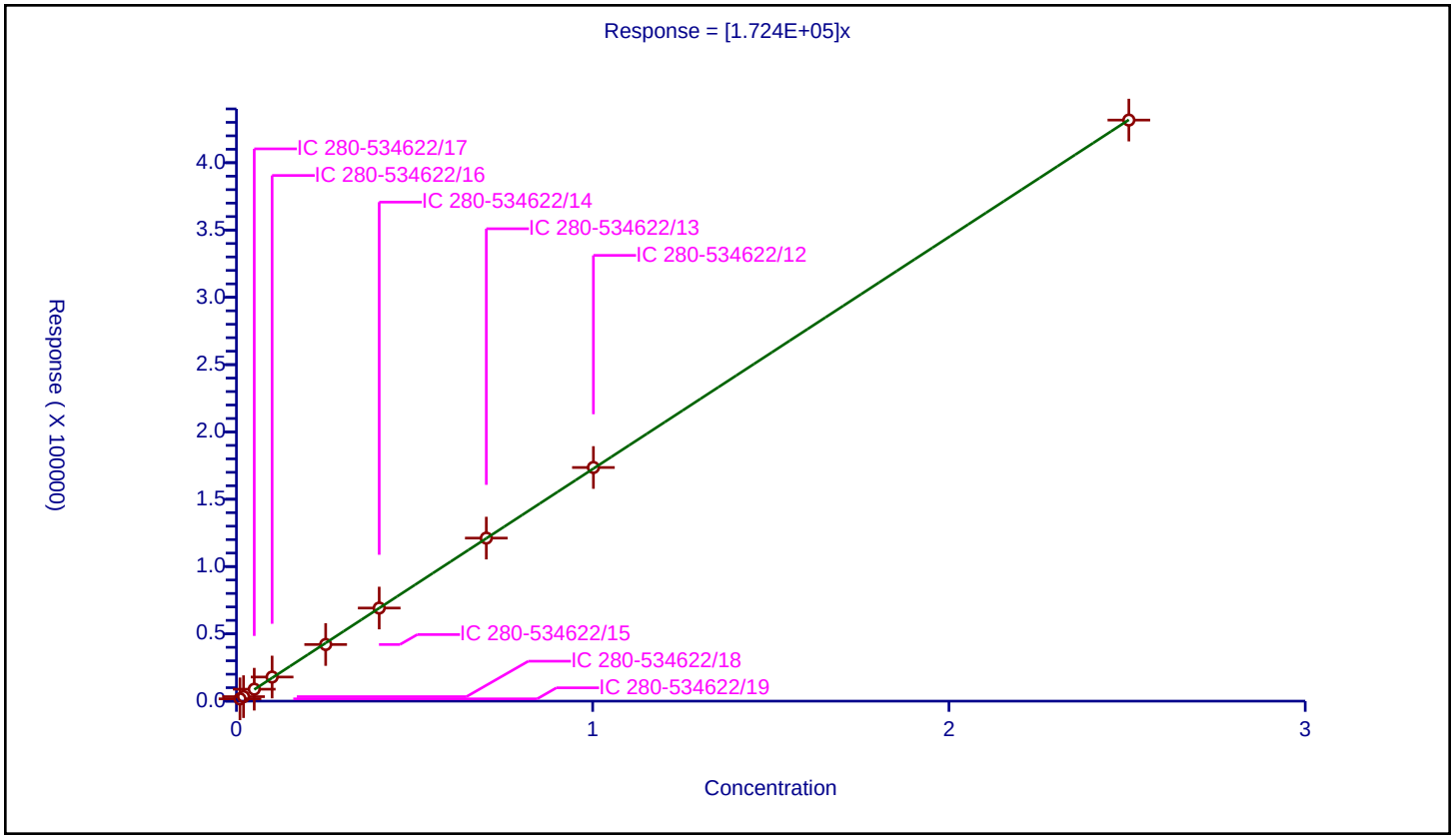
Curve Coefficients

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

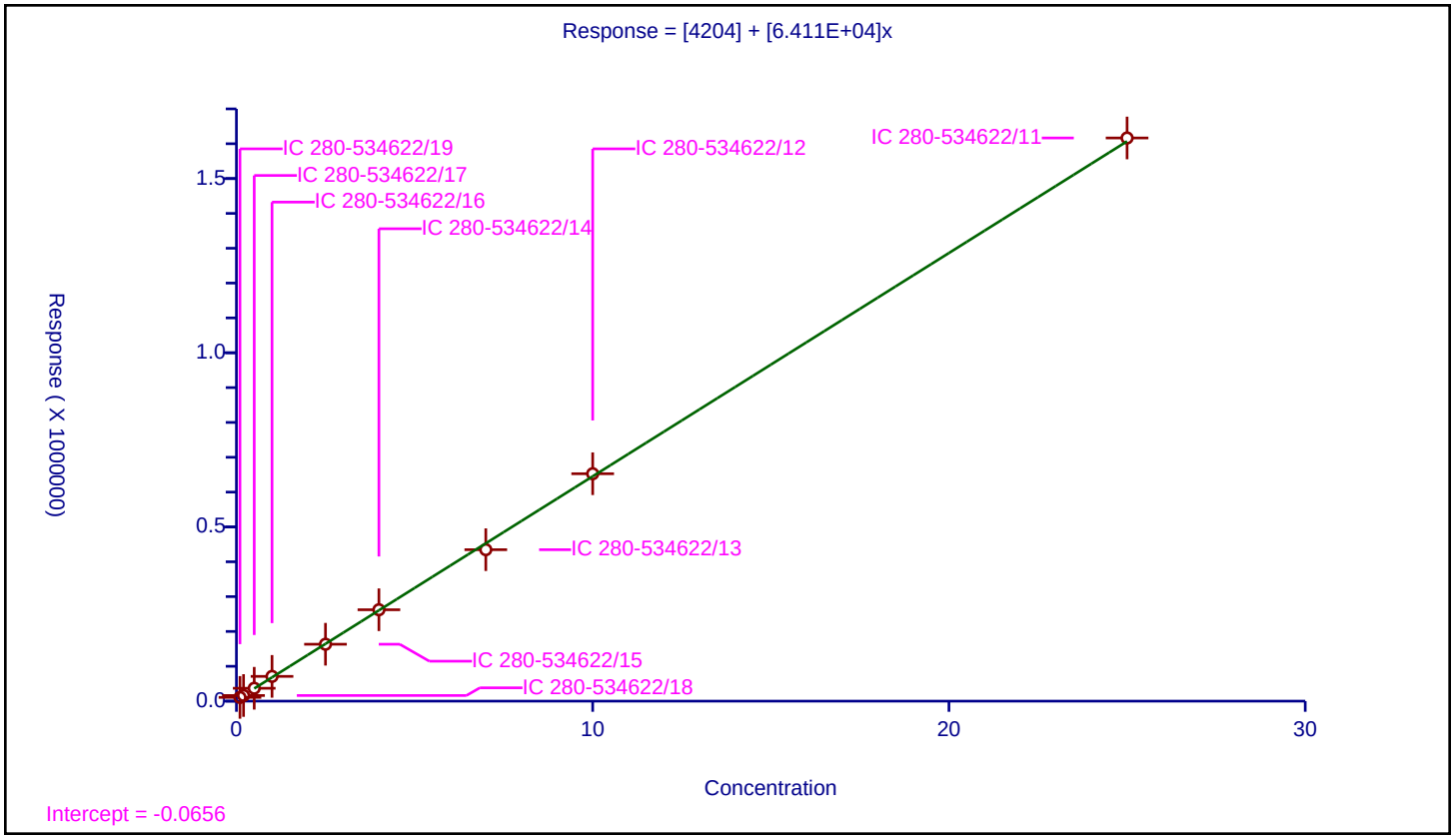
Curve Coefficients

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

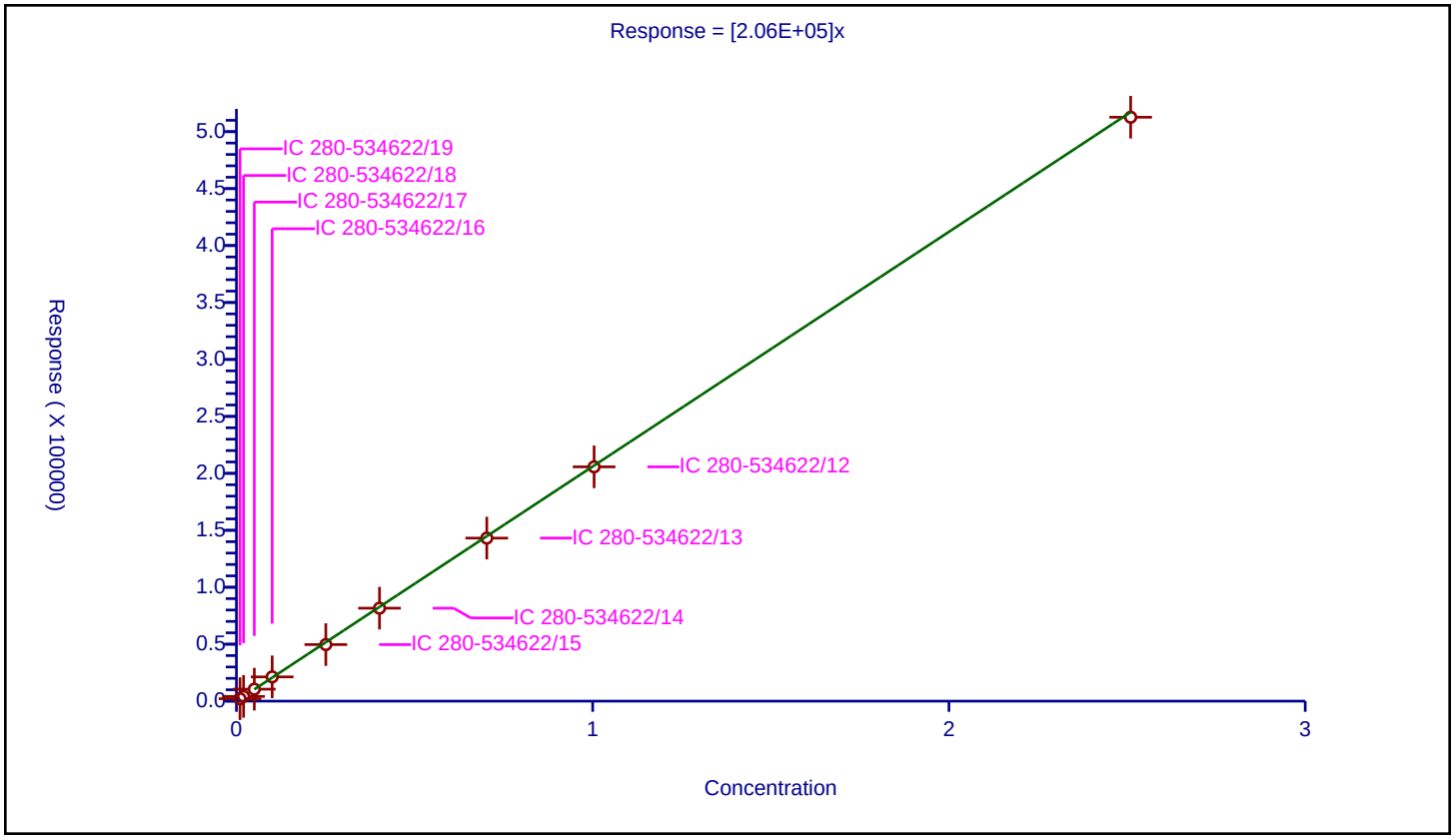
Curve Coefficients

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

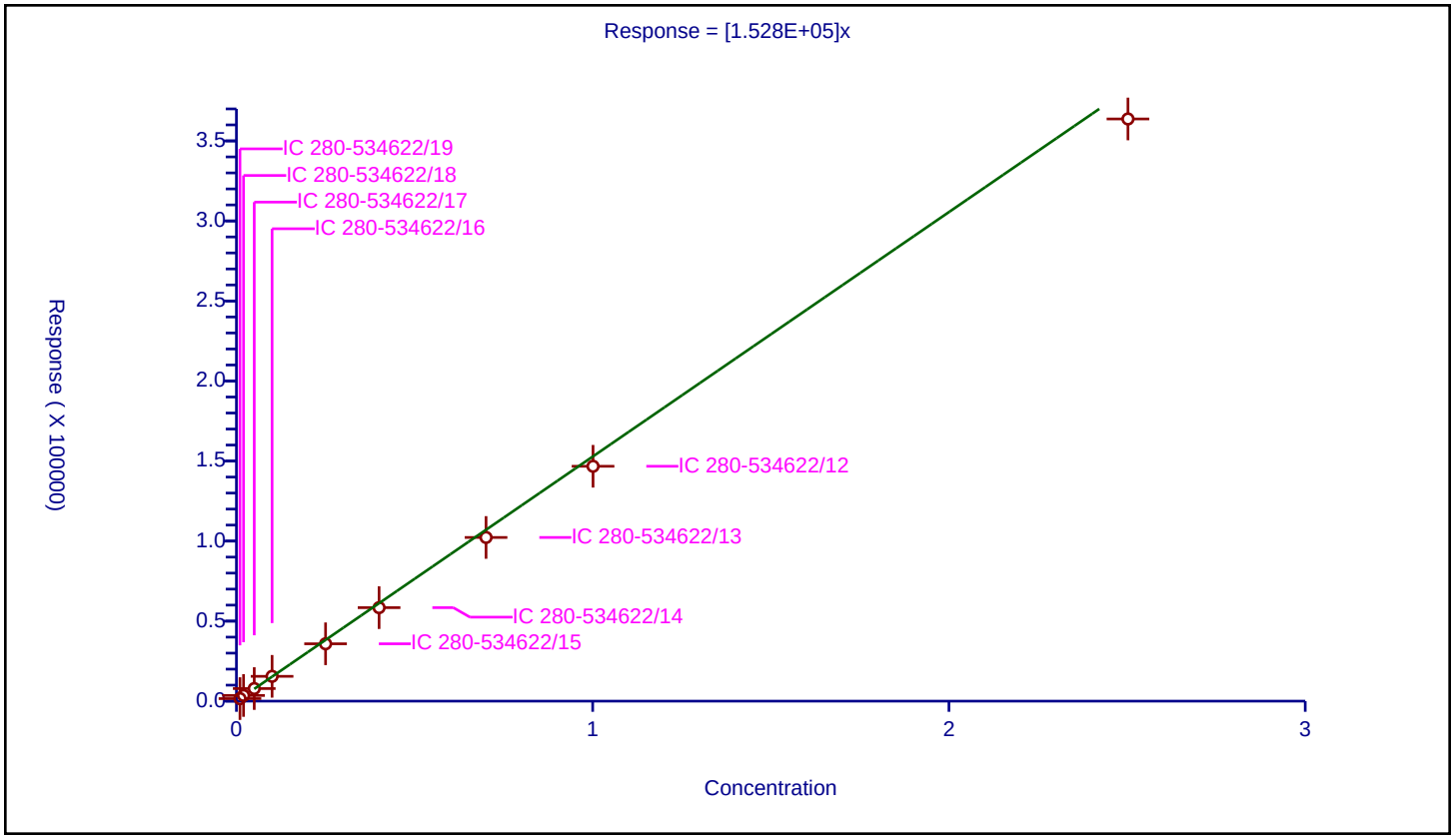
Curve Coefficients

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

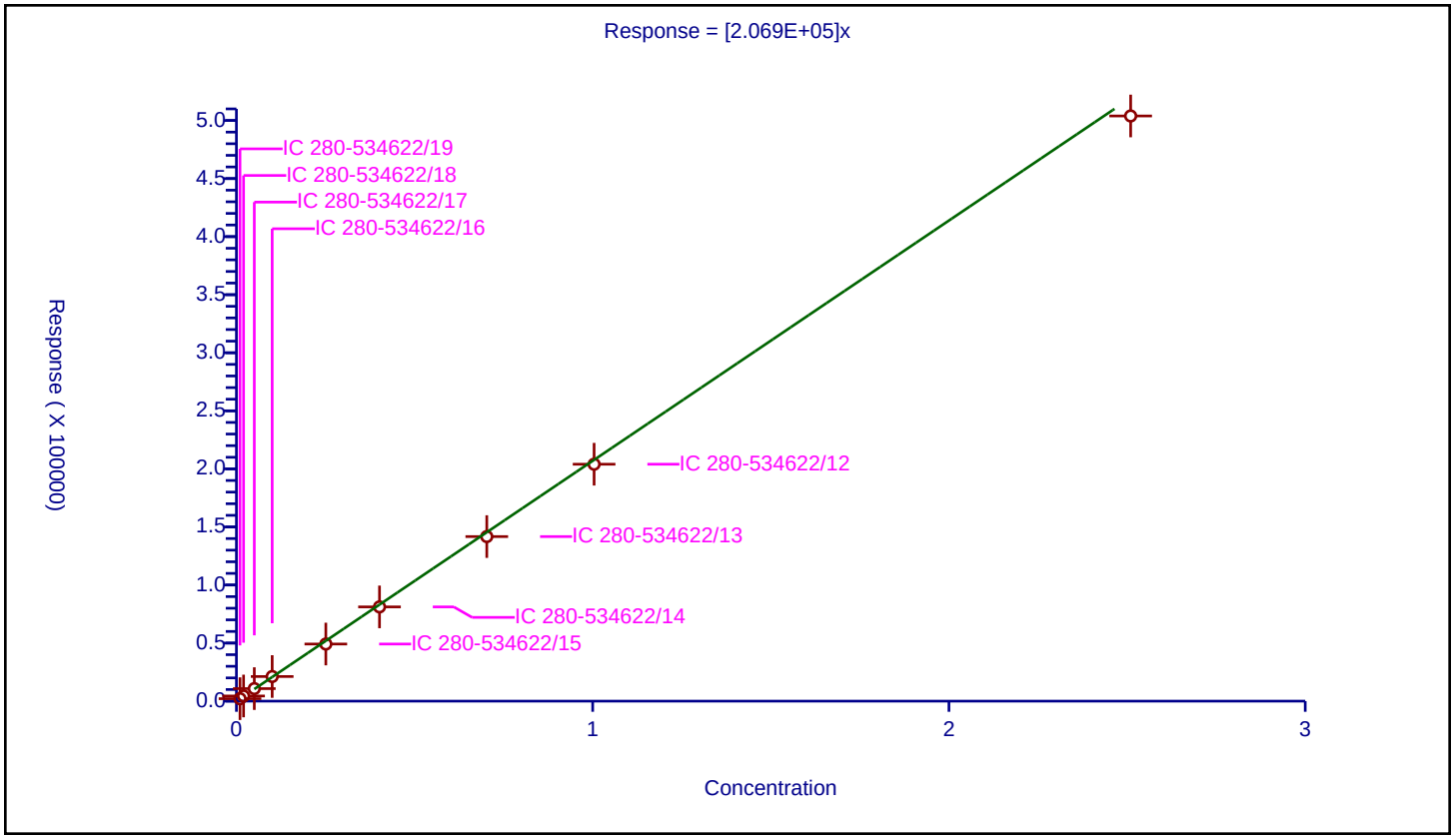
Curve Coefficients

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

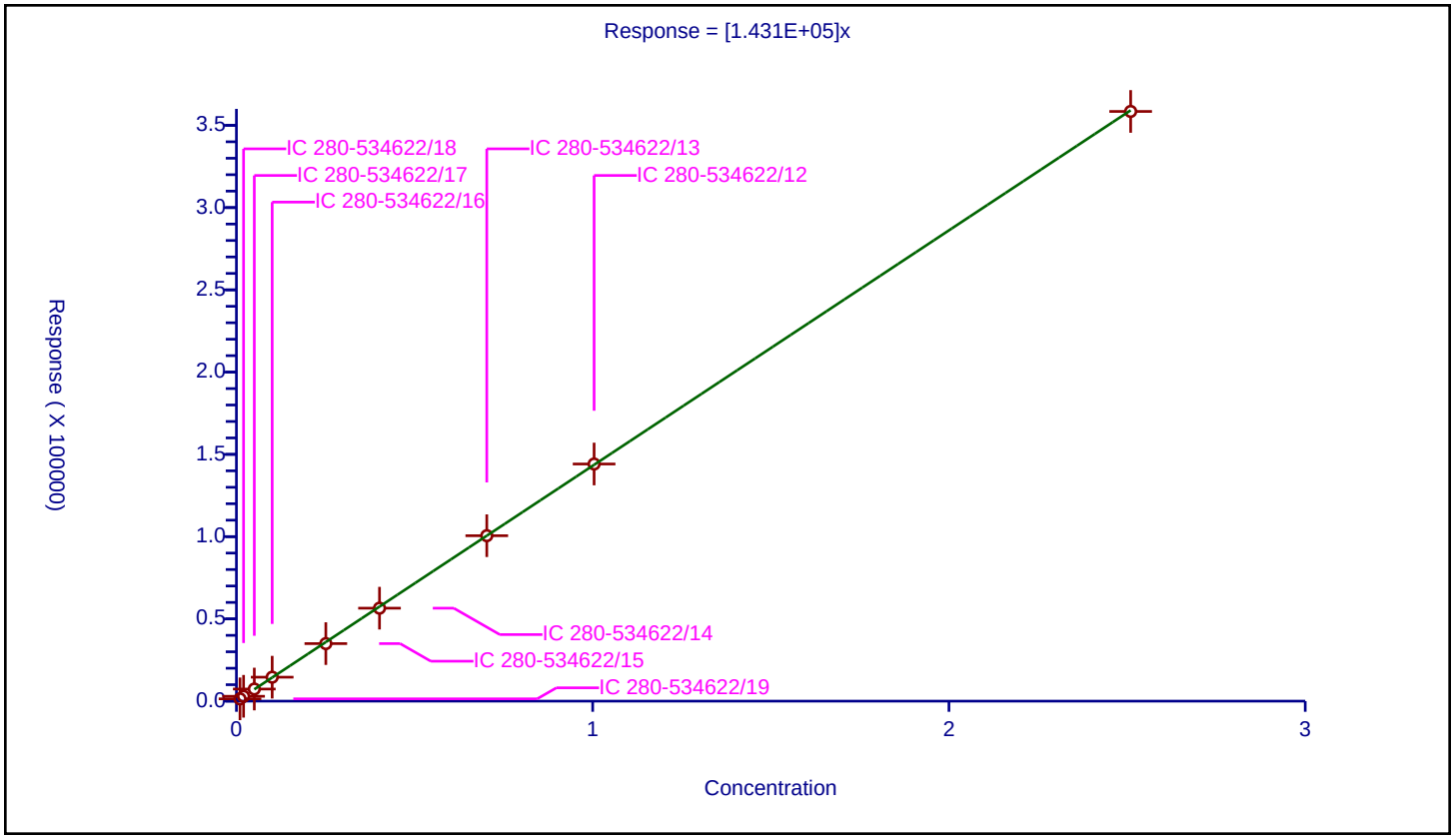
Curve Coefficients

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



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

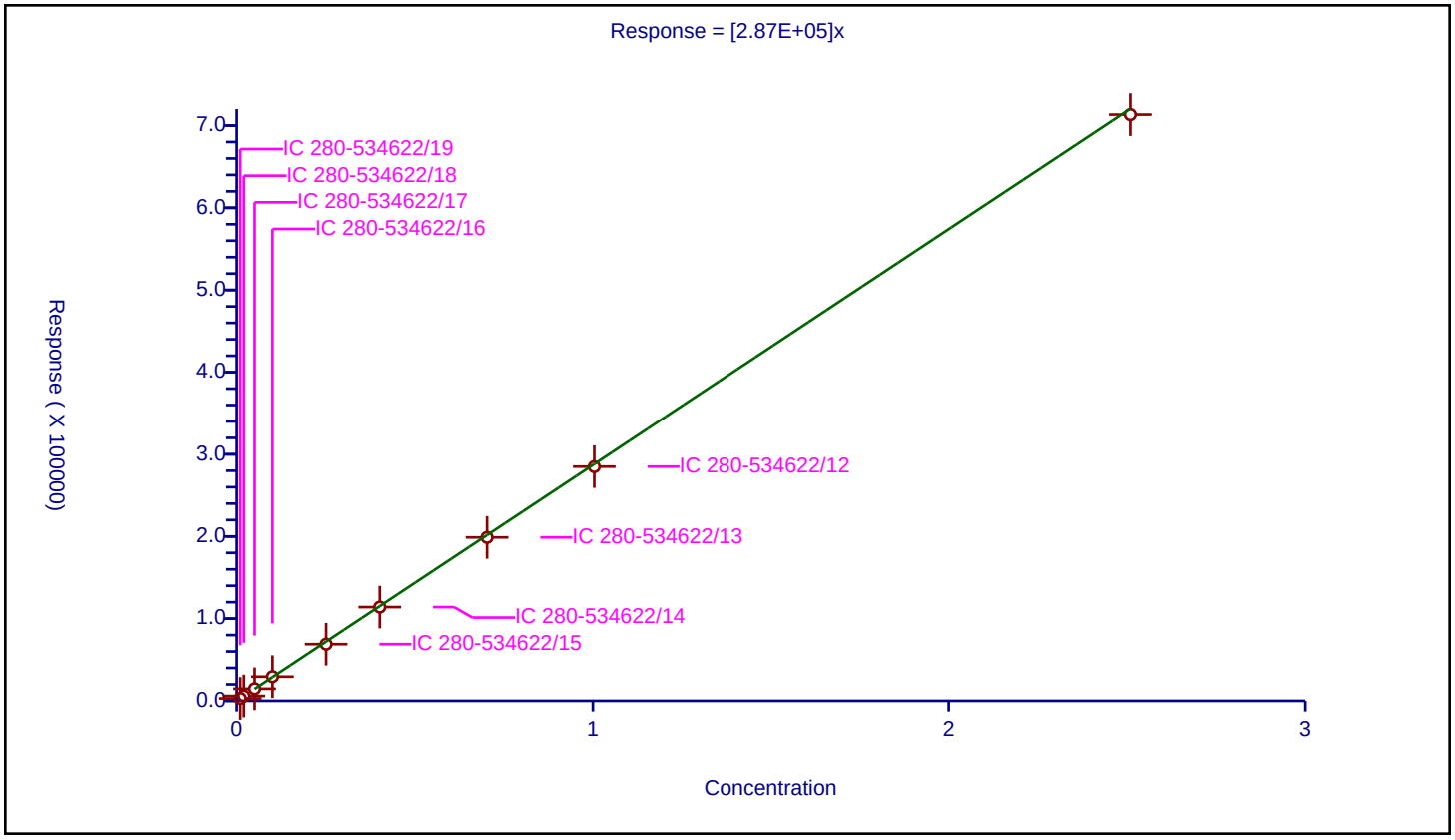
Curve Coefficients

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

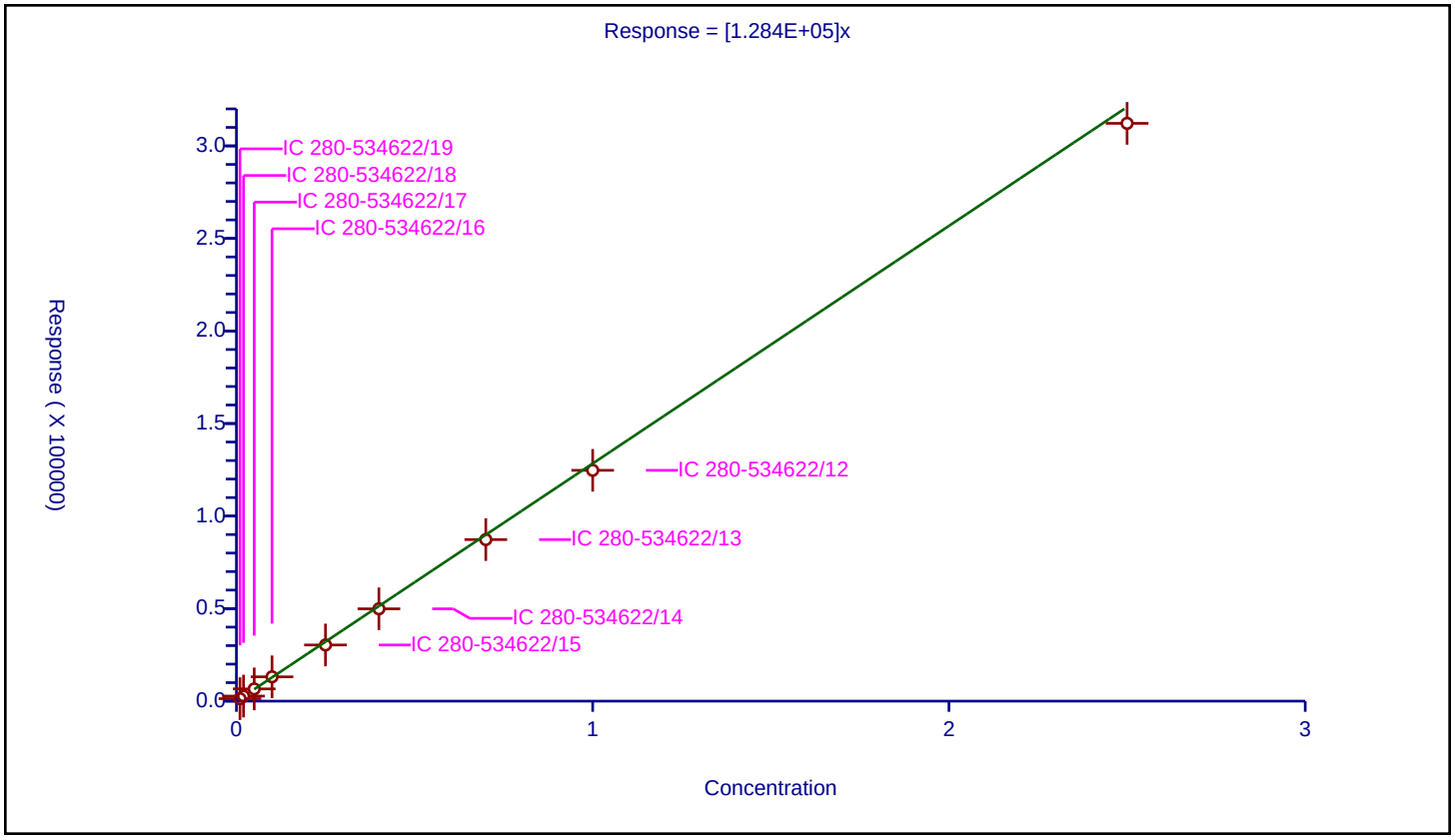
Curve Coefficients

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

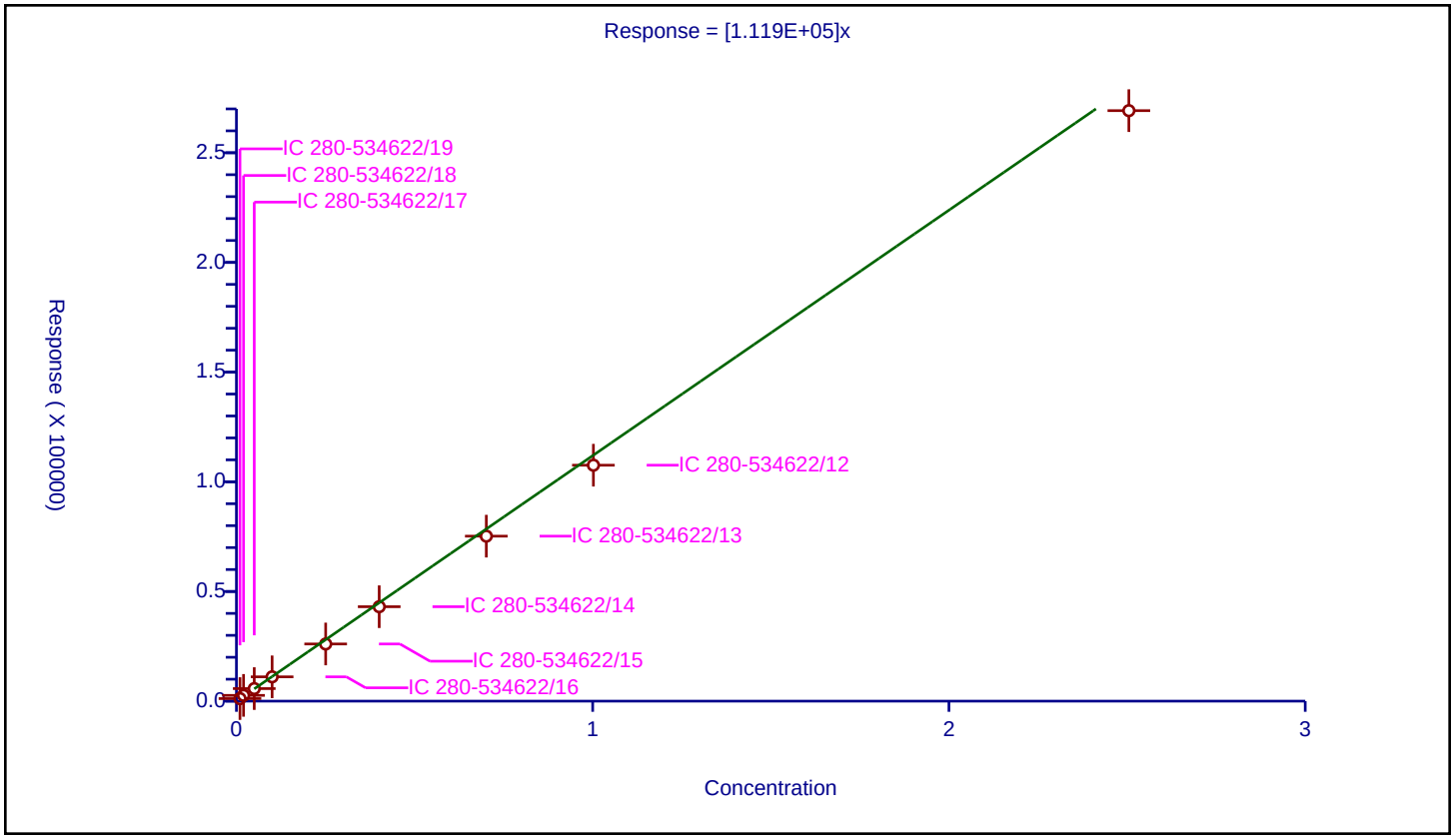
Curve Coefficients

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

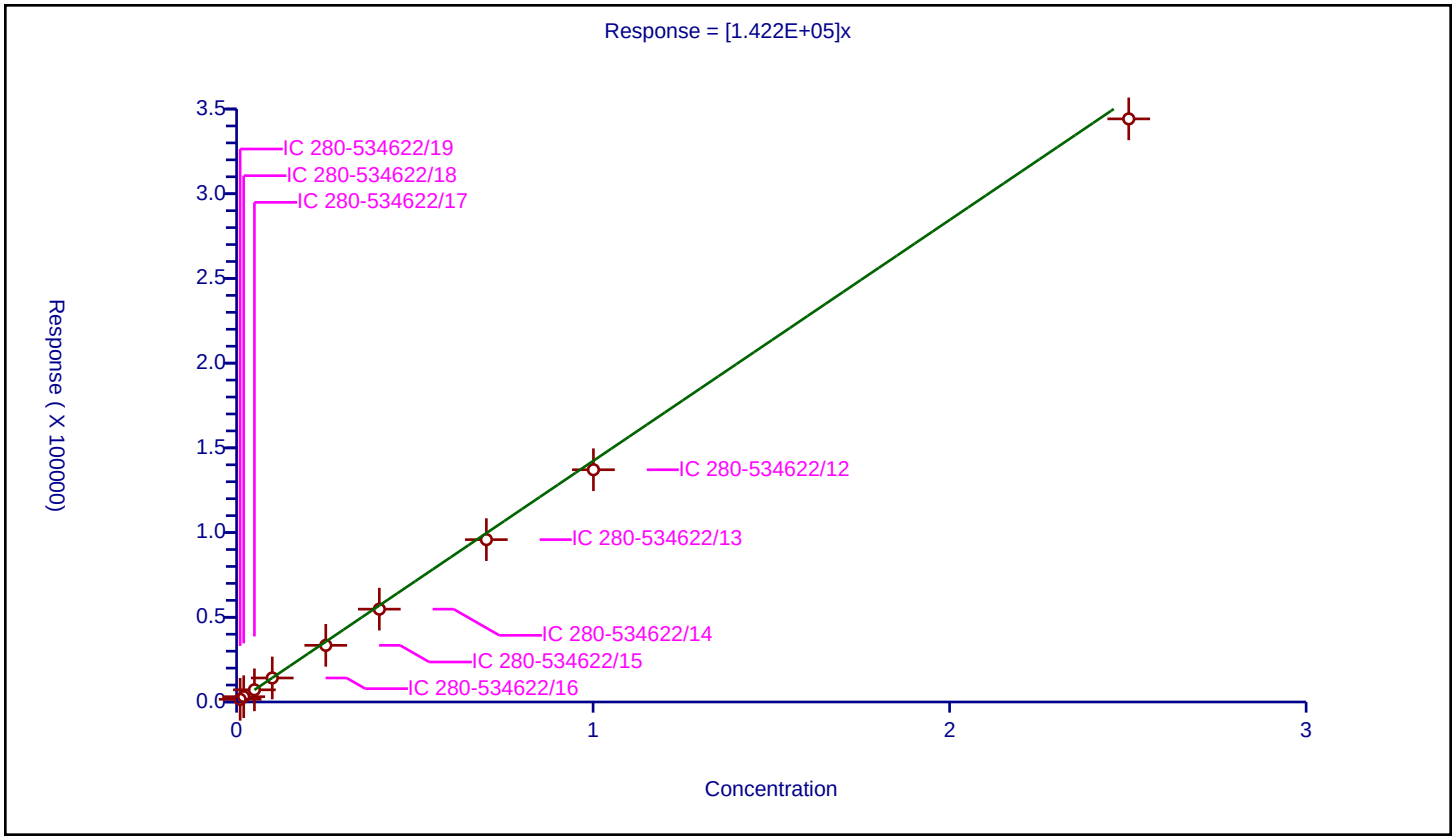
Curve Coefficients

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

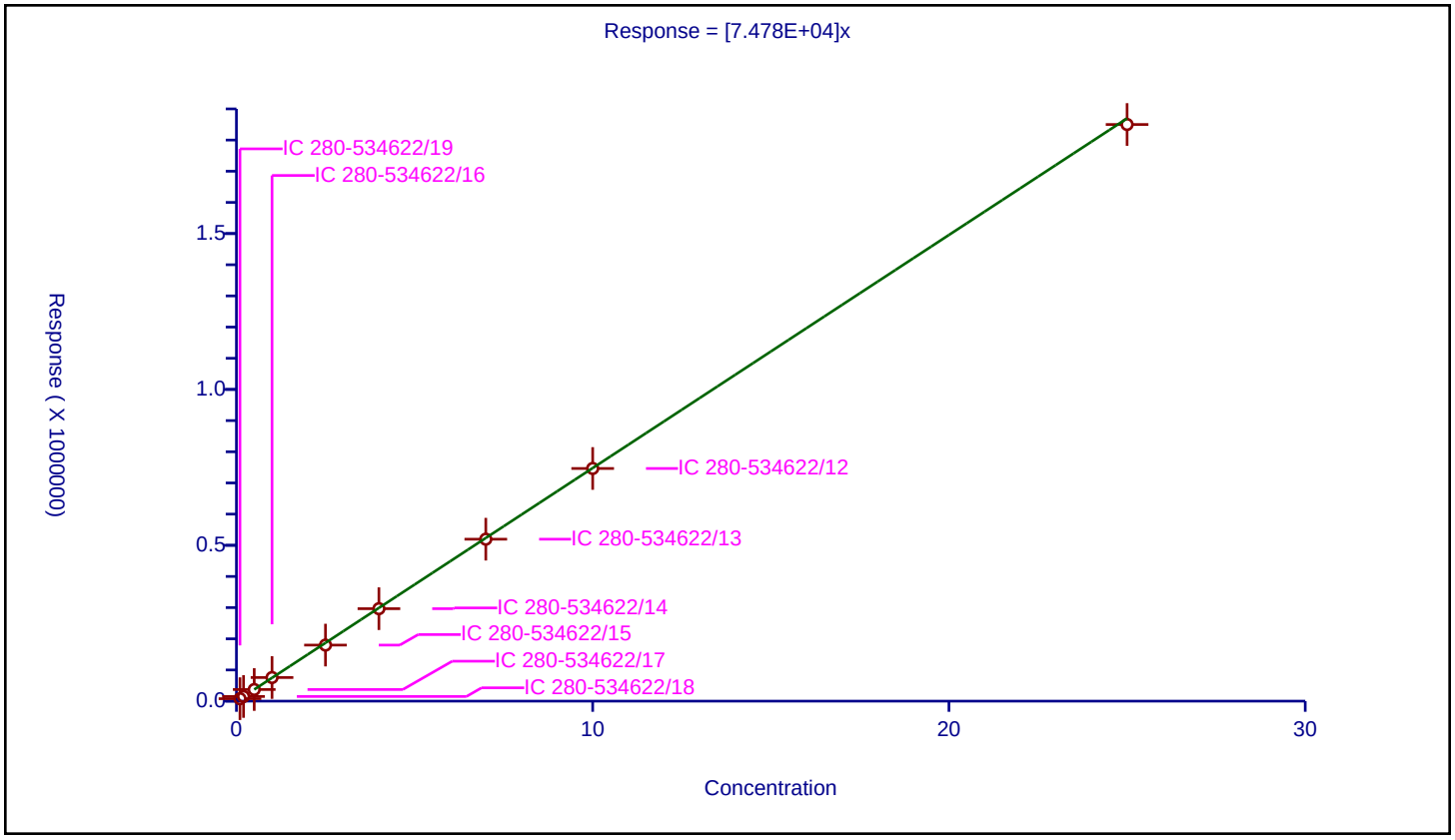
Curve Coefficients

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.: 280-155225-1 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.: 280-155225-1 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.: 280-155225-1 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.: 280-155225-1 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.: 280-155225-1 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

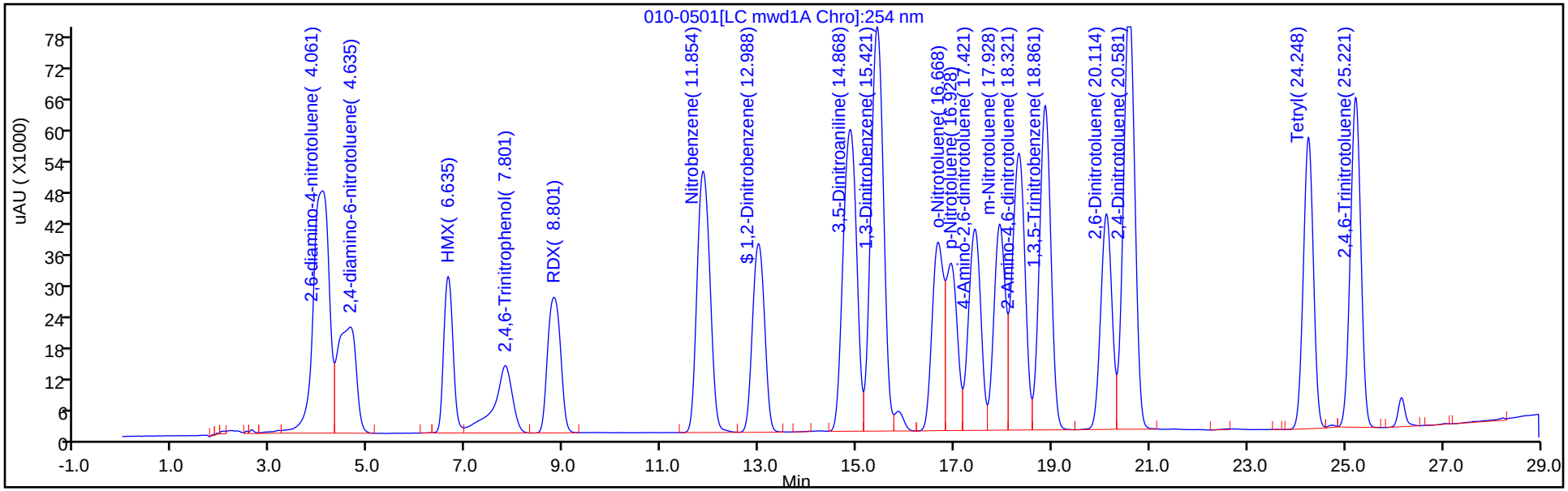
Report Date: 04-May-2021 13:43:11 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

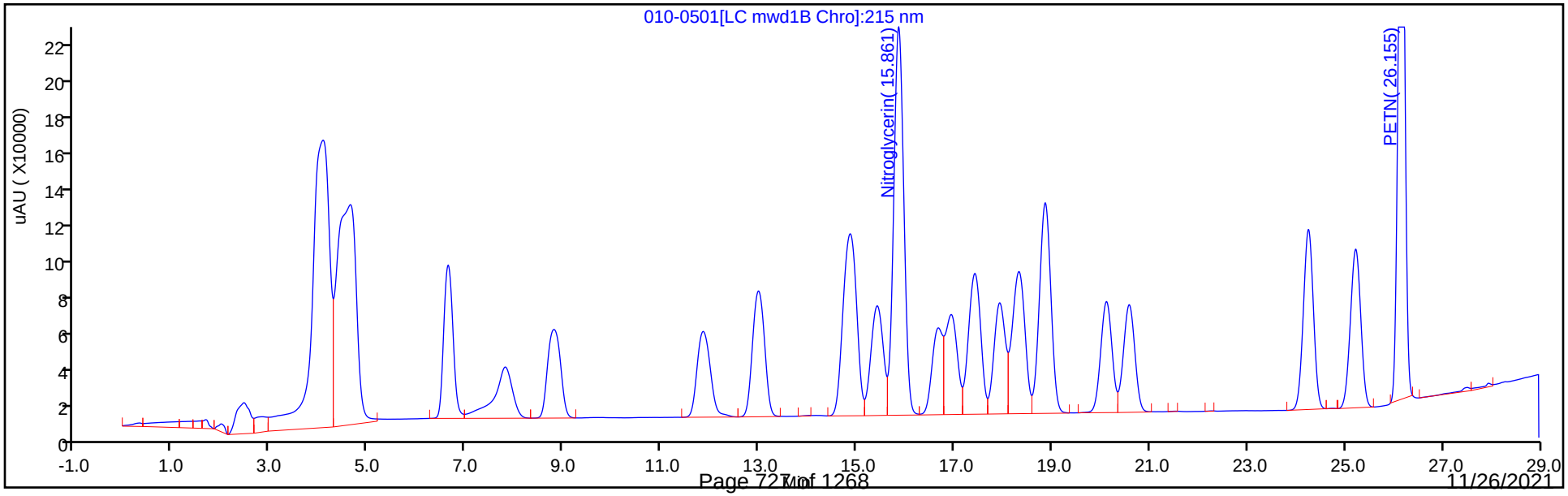
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\010-0501.D

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

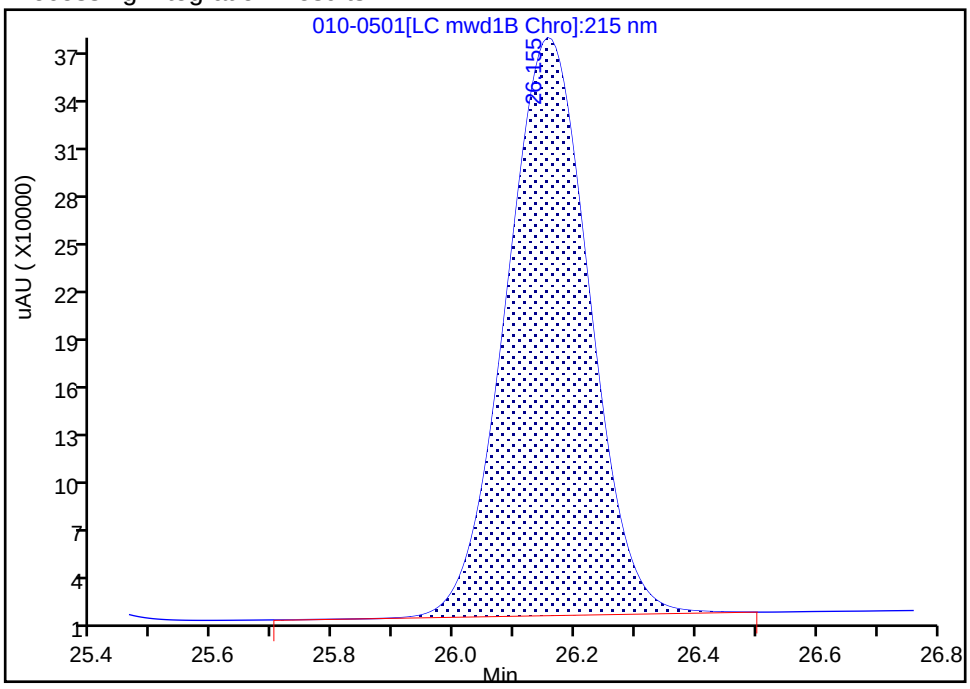
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\010-0501.D
Injection Date: 01-May-2021 18:54:50 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 9
Client ID:
Operator ID: JZ ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

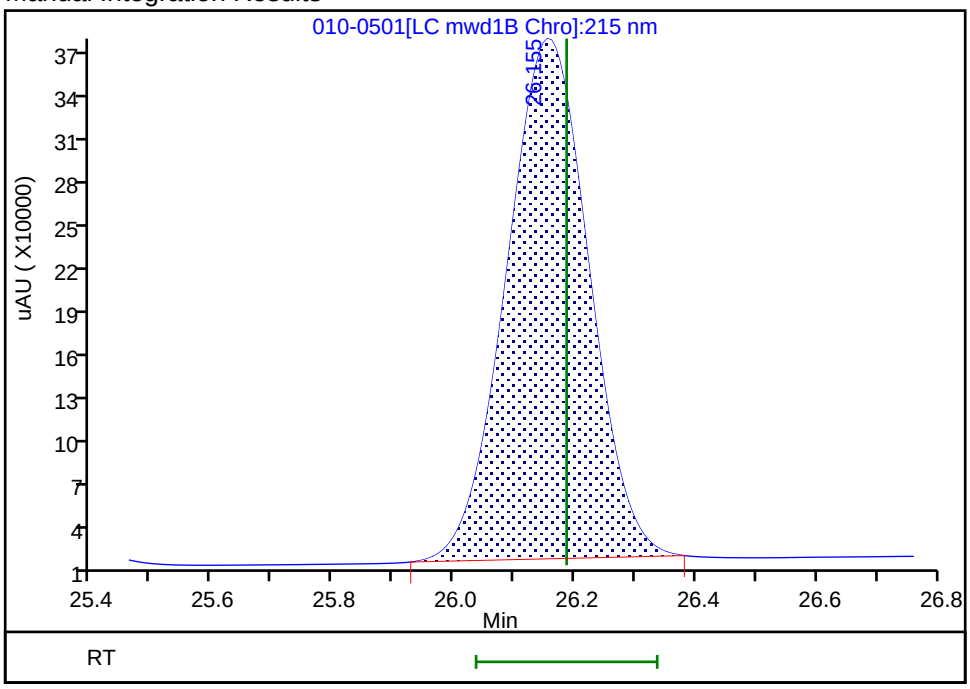
Processing Integration Results

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

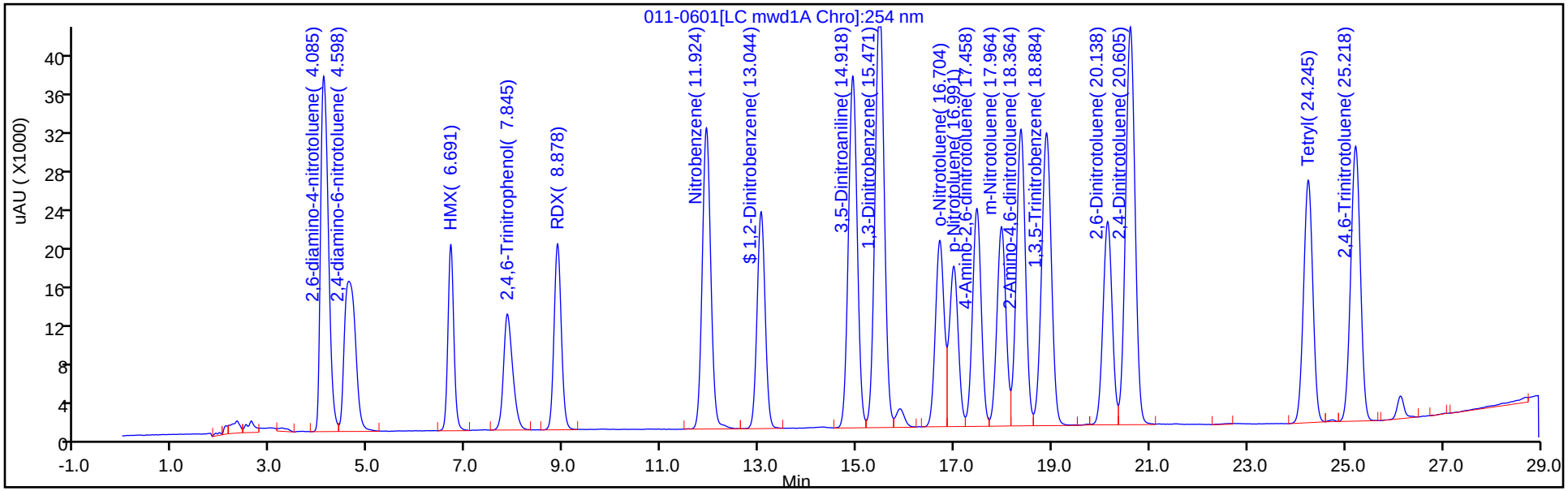
Report Date: 04-May-2021 13:43:12 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

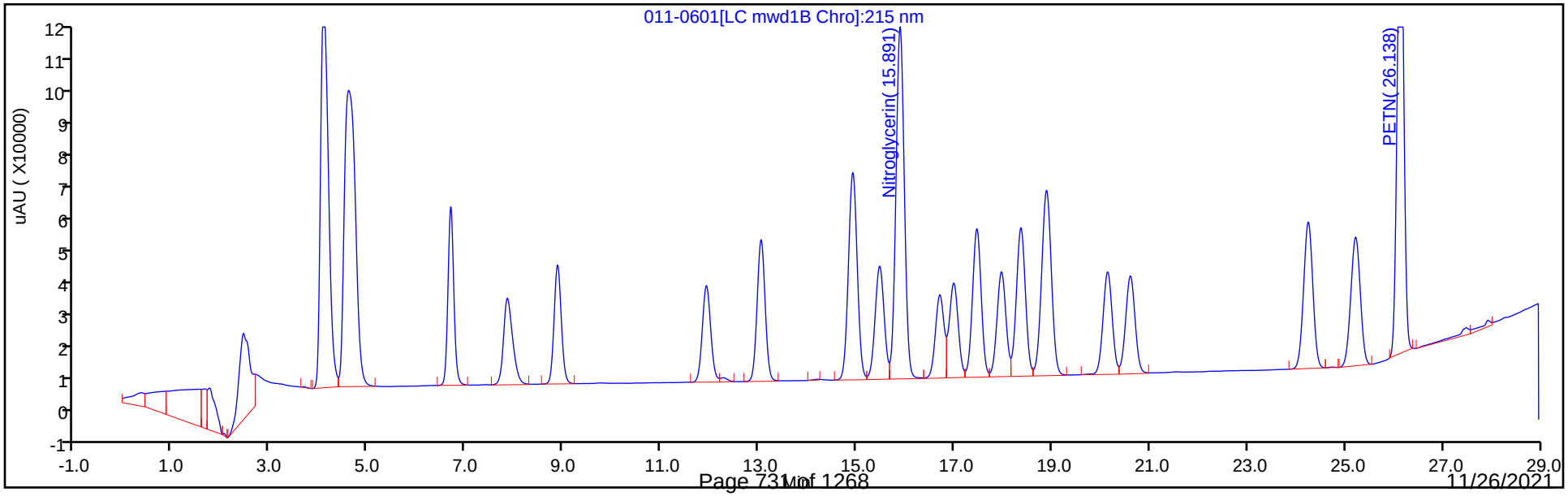
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\011-0601.D

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

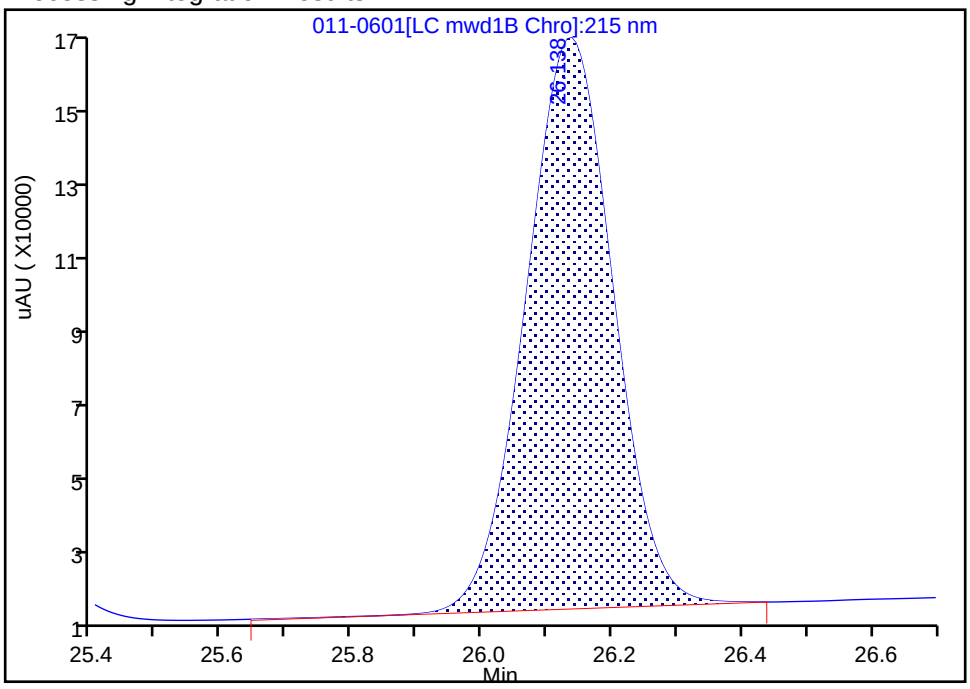
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\011-0601.D
Injection Date: 01-May-2021 19:29:53 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 8
Client ID:
Operator ID: JZ ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

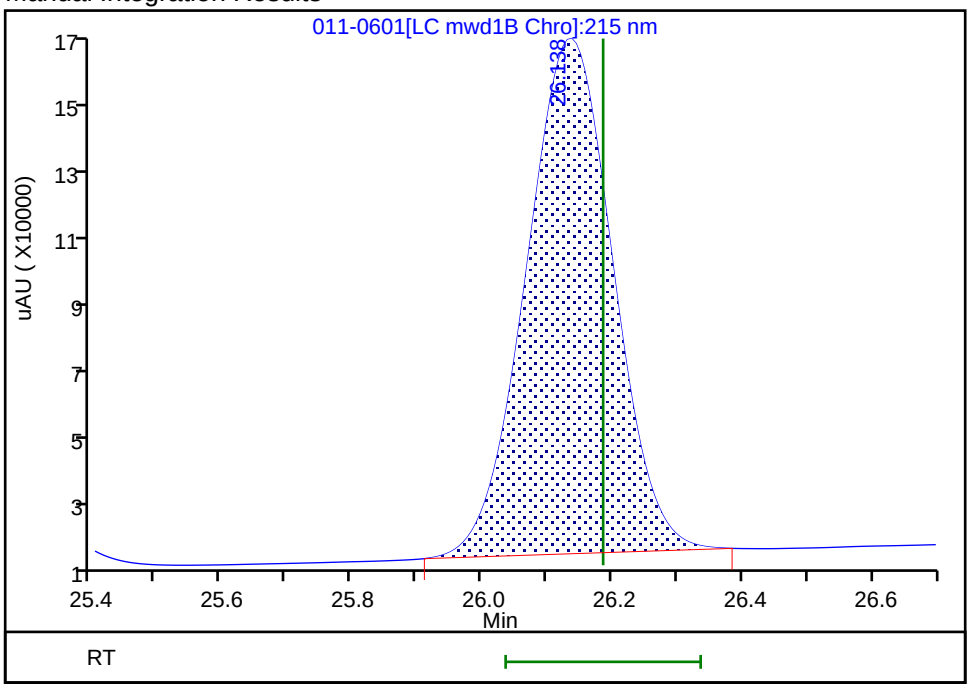
Processing Integration Results

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

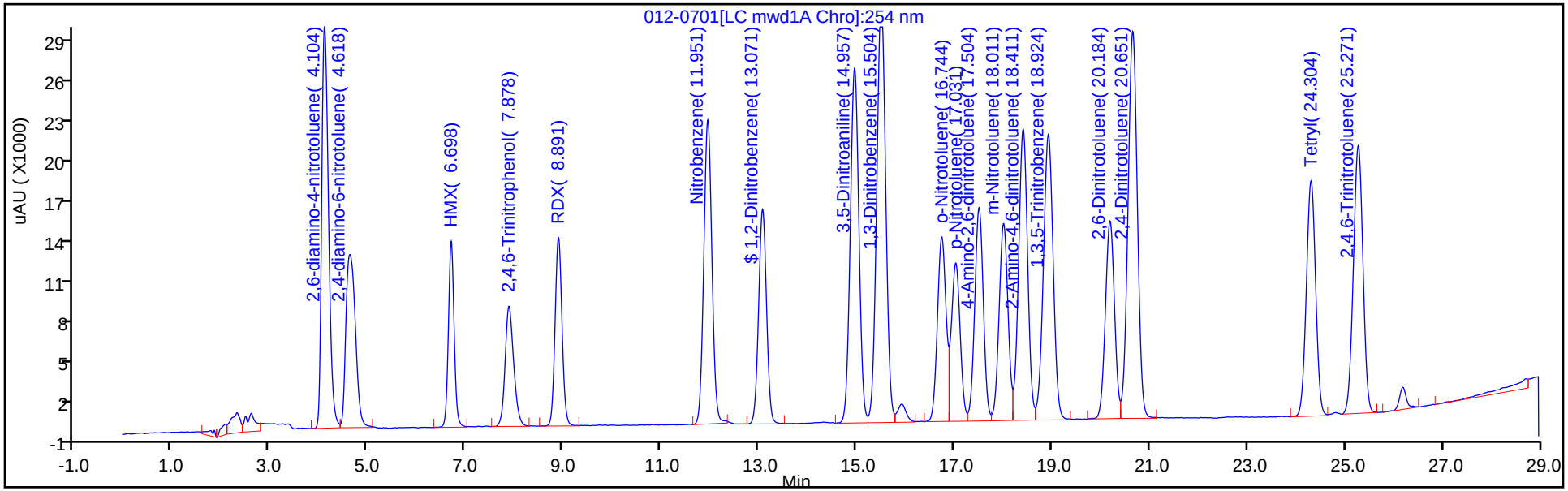
Report Date: 04-May-2021 13:43:12 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

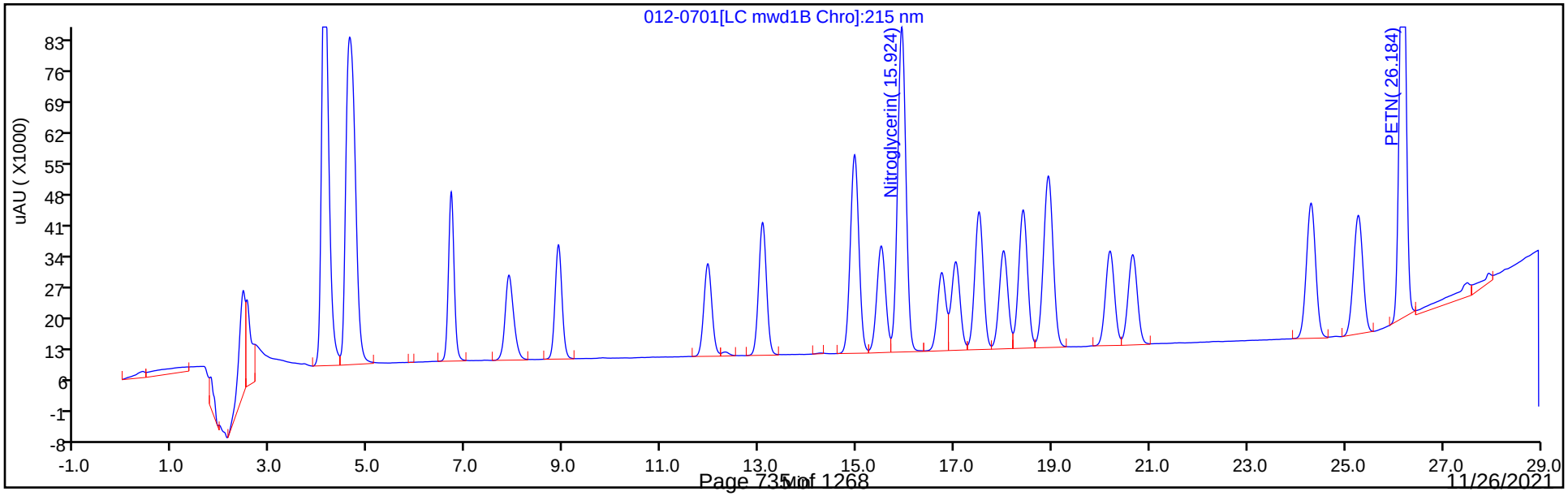
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\012-0701.D

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

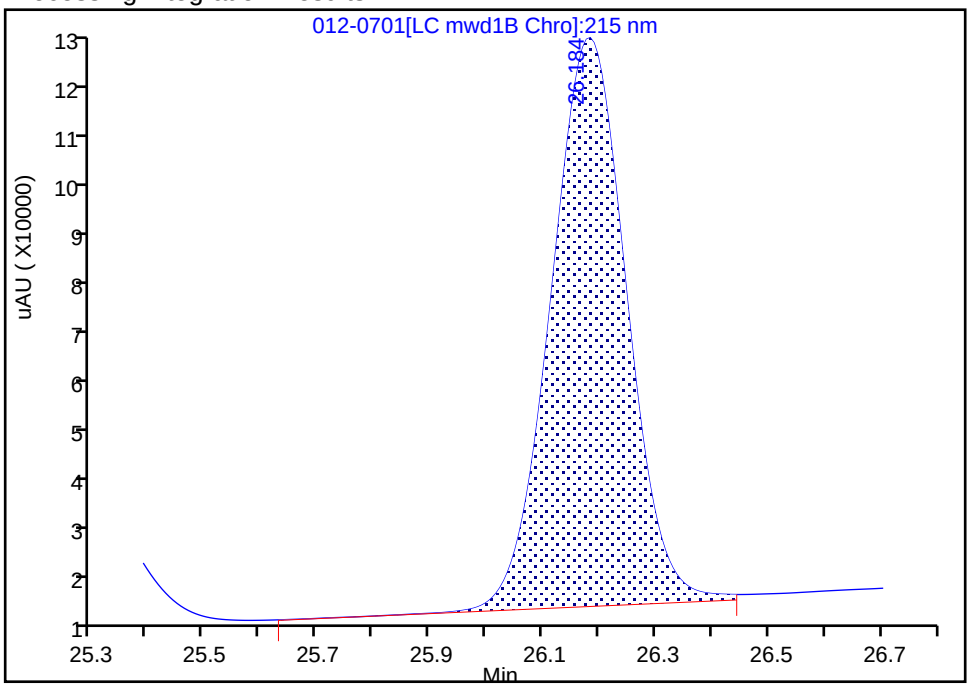
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\012-0701.D				
Injection Date:	01-May-2021 20:04:53	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 7				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC mwd1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

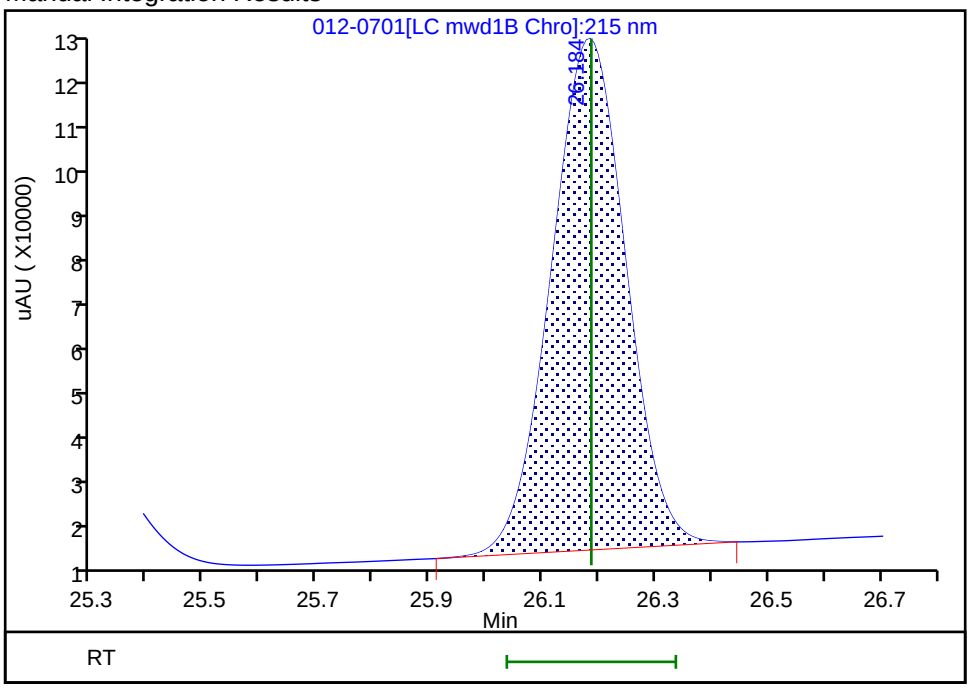
Processing Integration Results

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

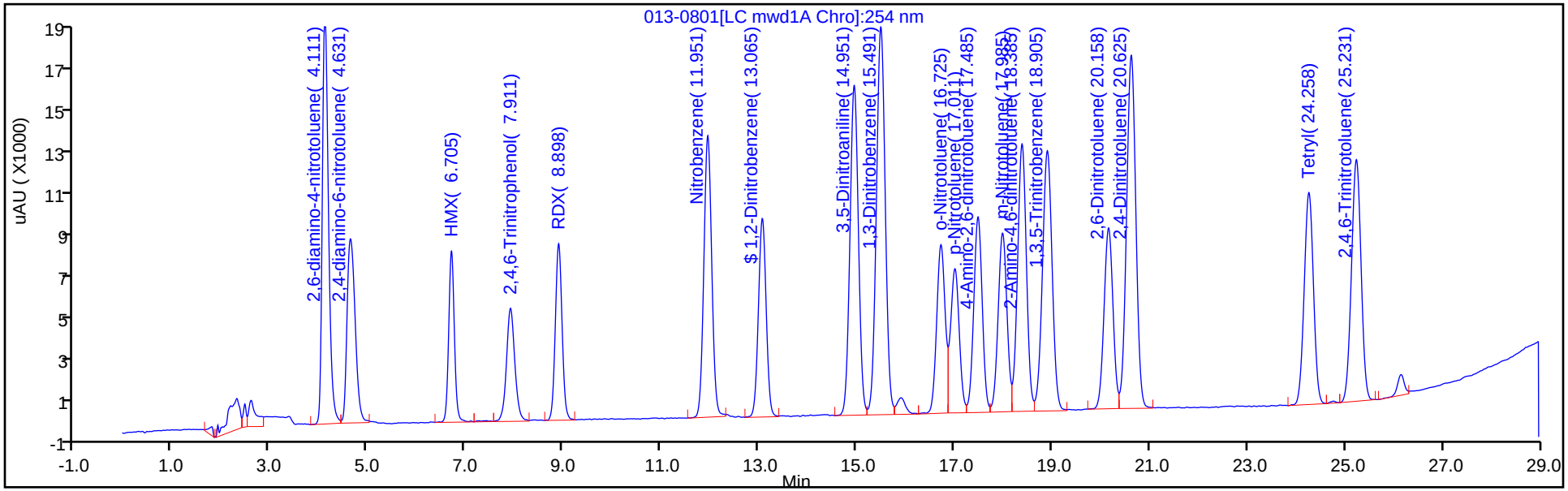
Report Date: 04-May-2021 13:43:13 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

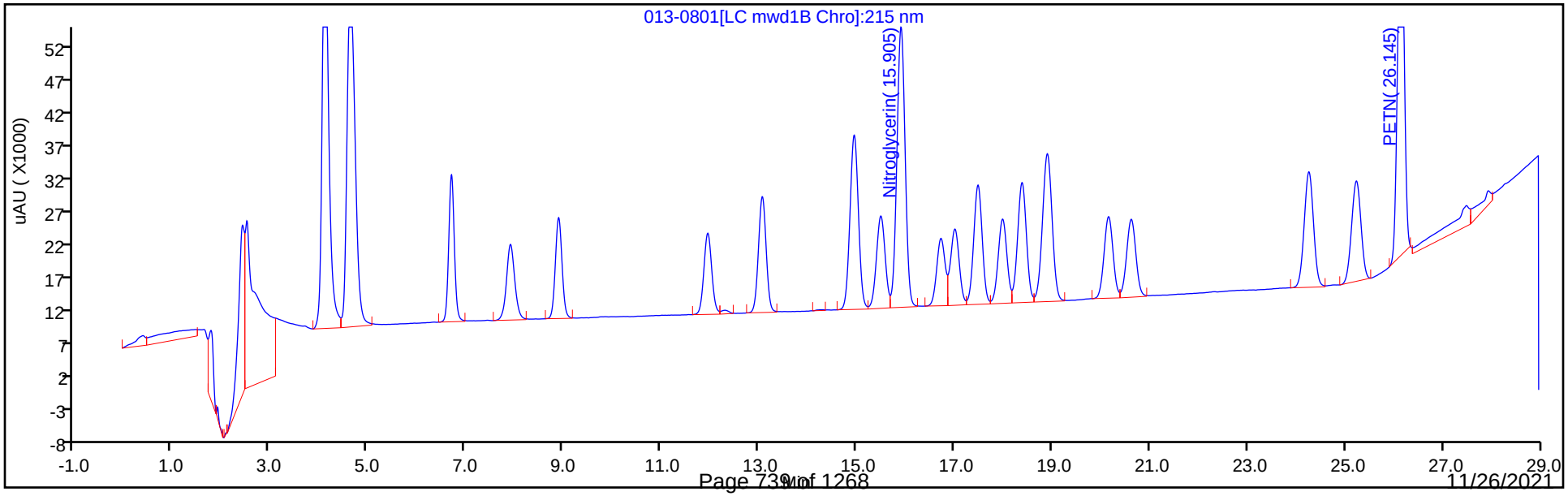
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\013-0801.D

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

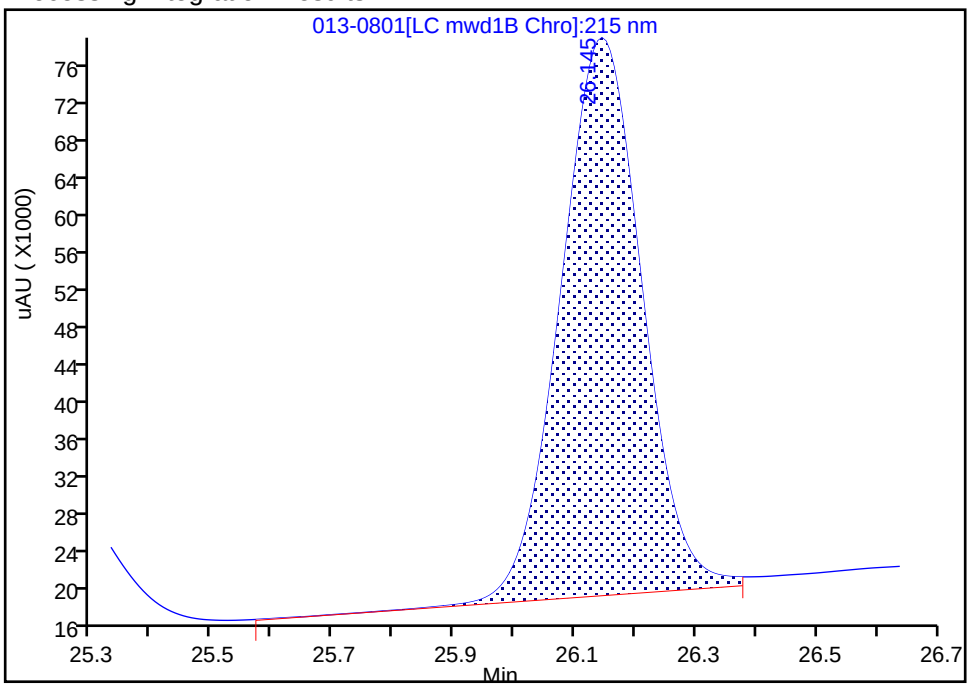
Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\013-0801.D				
Injection Date:	01-May-2021 20:39:55	Instrument ID:	CHHPLC_X5		
Lims ID:	IC INT/ADD 6				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X5_Luna	Limit Group:	GCSV - 8330		
Column:		Detector	LC mwd1B, 215 nm		

24 PETN, CAS: 78-11-5

Signal: 1

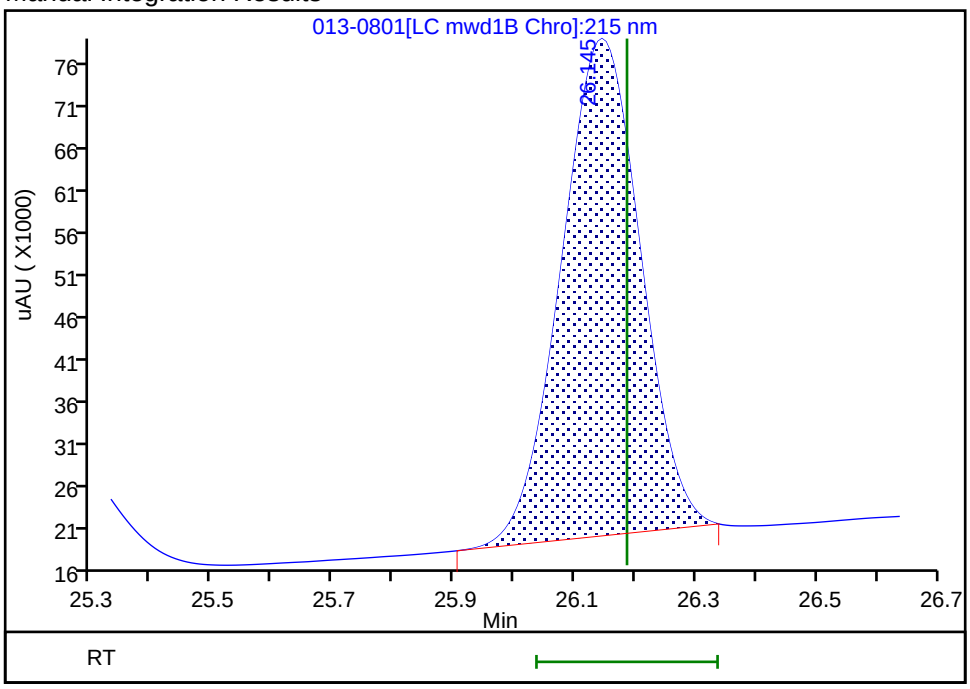
Processing Integration Results

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

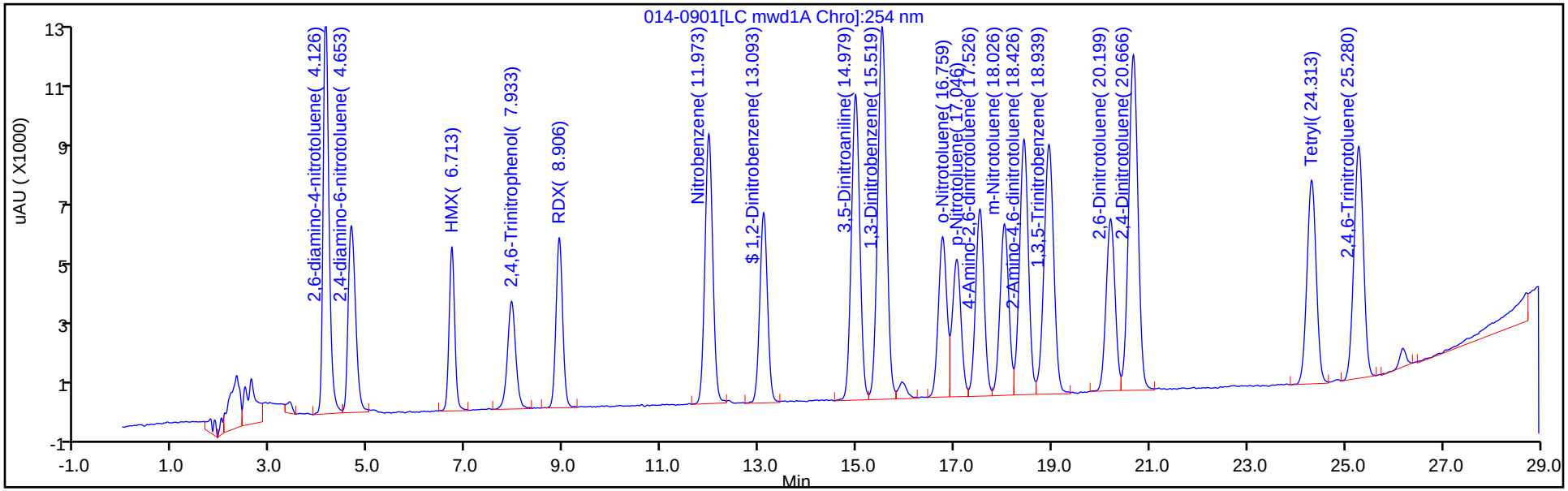
Report Date: 04-May-2021 13:43:13 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

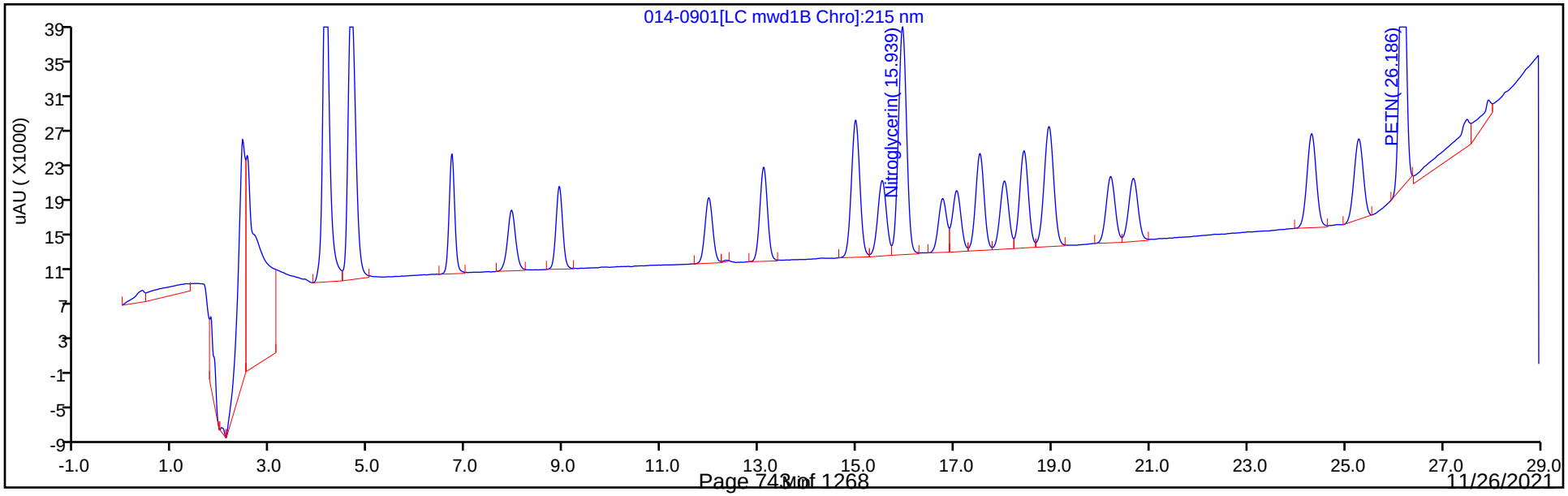
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\014-0901.D

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

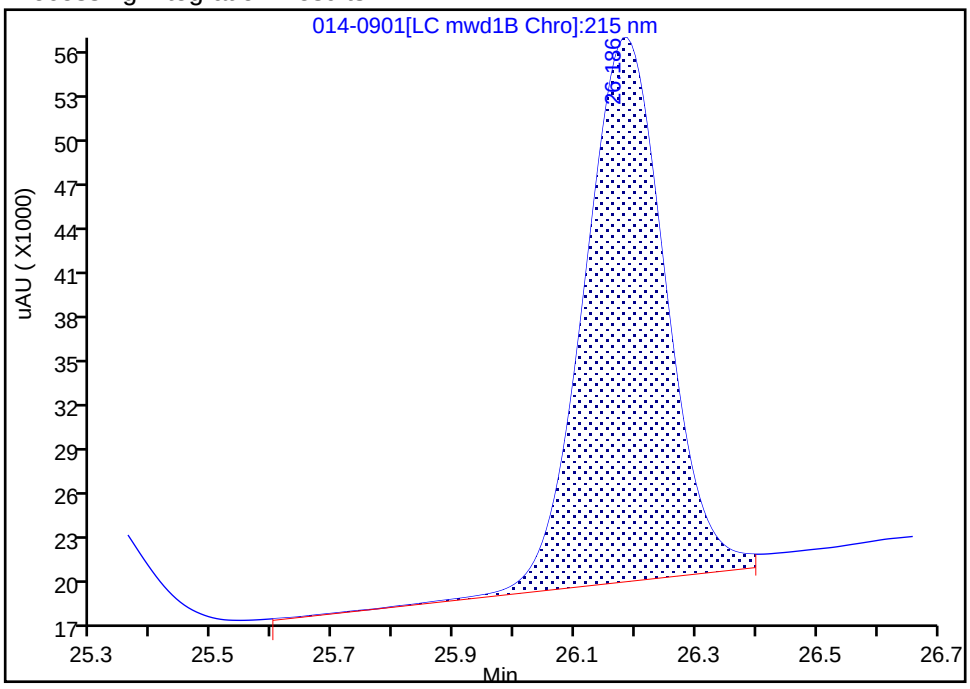
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\014-0901.D
Injection Date: 01-May-2021 21:15:02 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 5
Client ID:
Operator ID: JZ ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

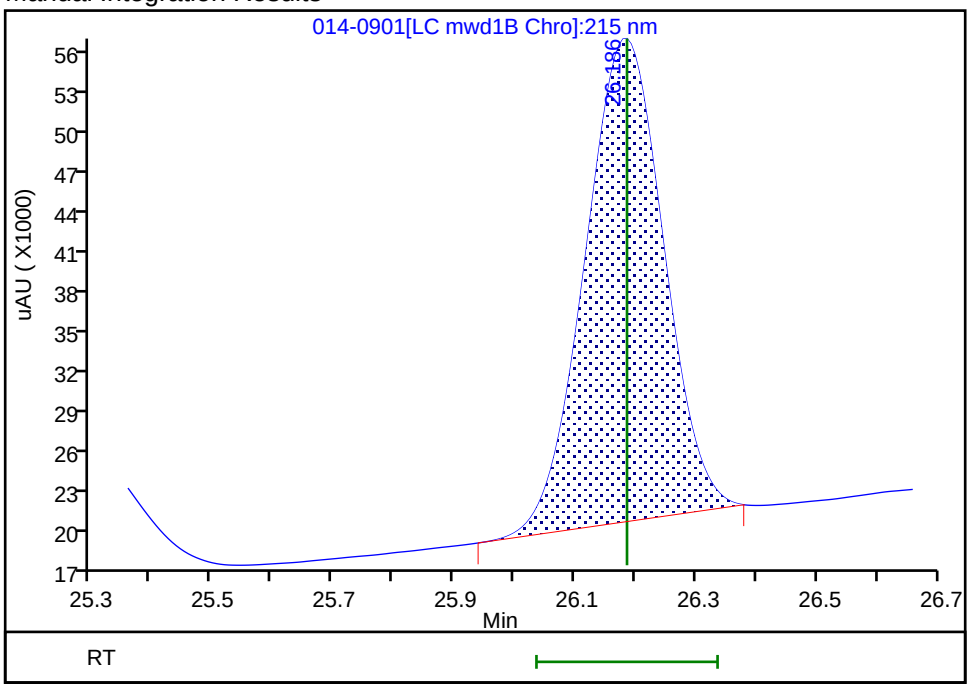
Processing Integration Results

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

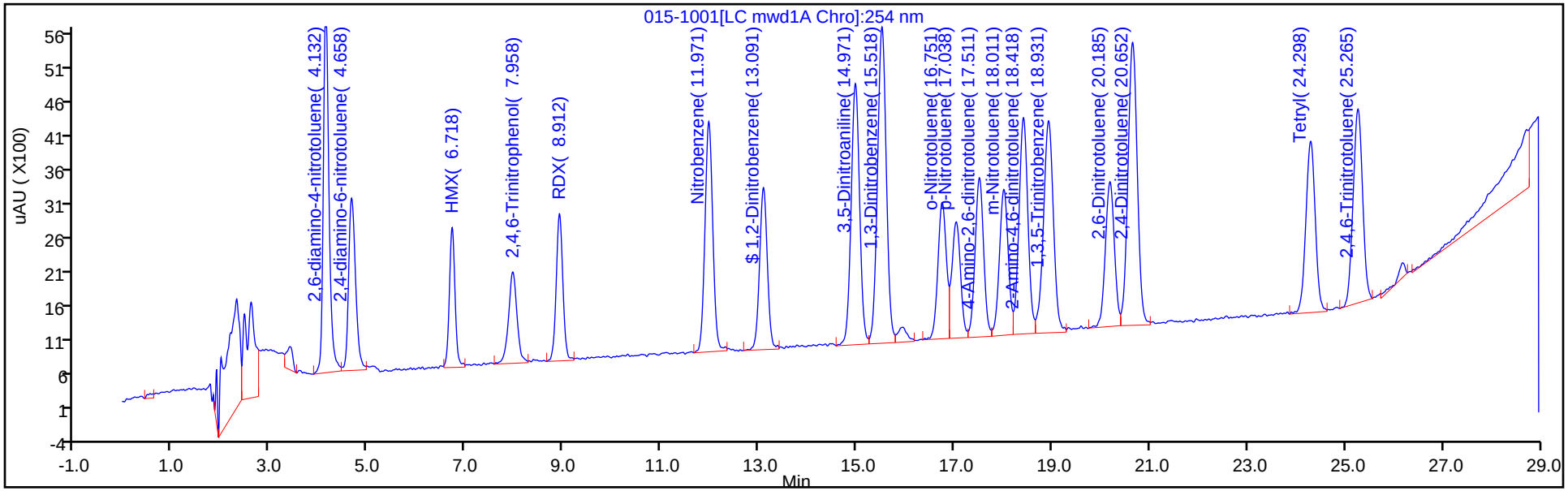
Report Date: 04-May-2021 13:43:14 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

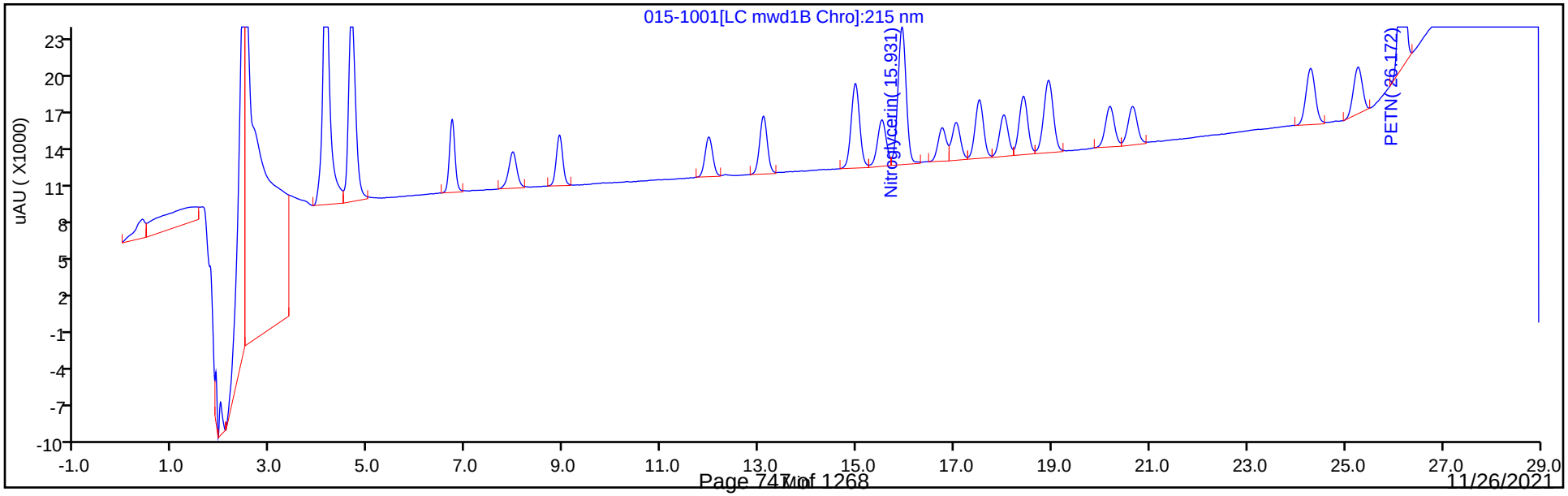
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\015-1001.D

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

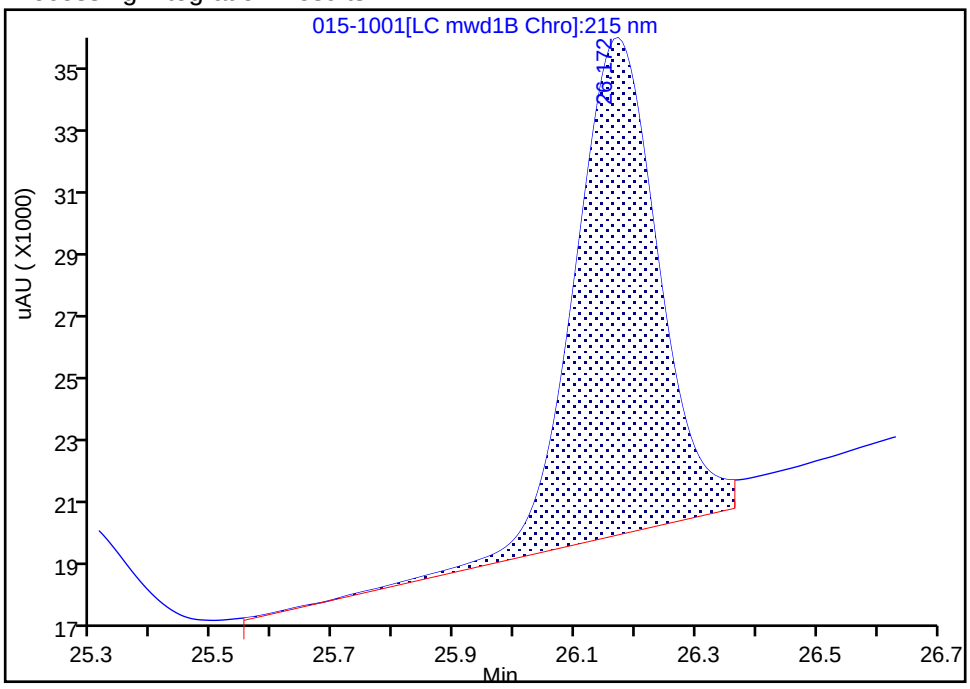
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\015-1001.D
Injection Date: 01-May-2021 21:50:04 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 4
Client ID:
Operator ID: JZ ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

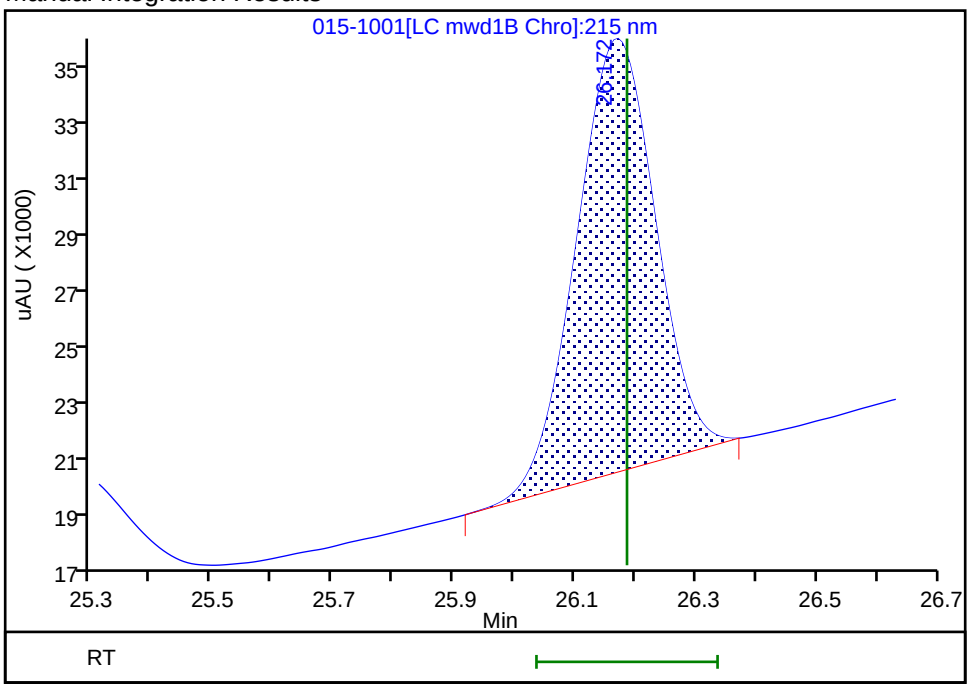
Processing Integration Results

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

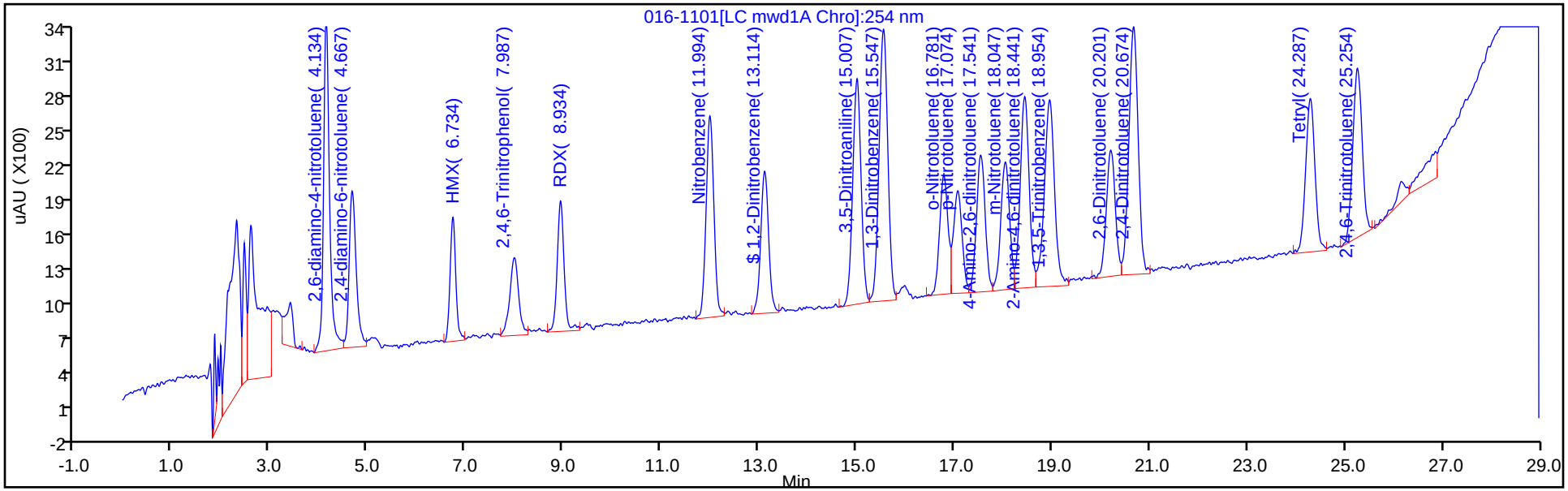
Report Date: 04-May-2021 13:43:14 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

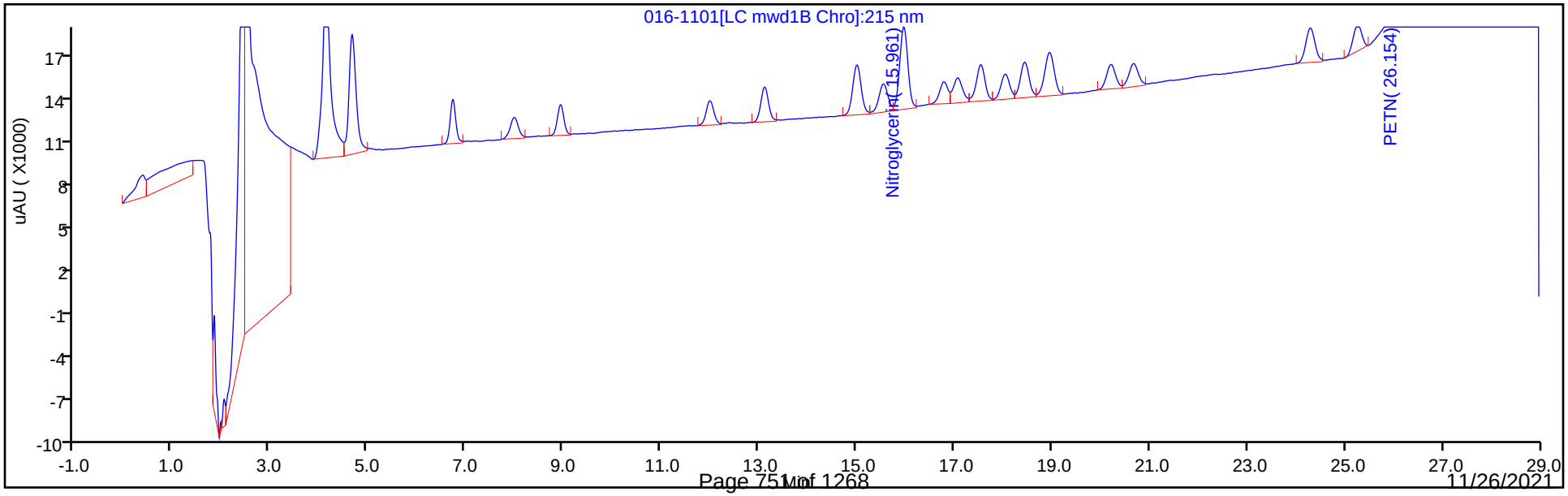
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\016-1101.D

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

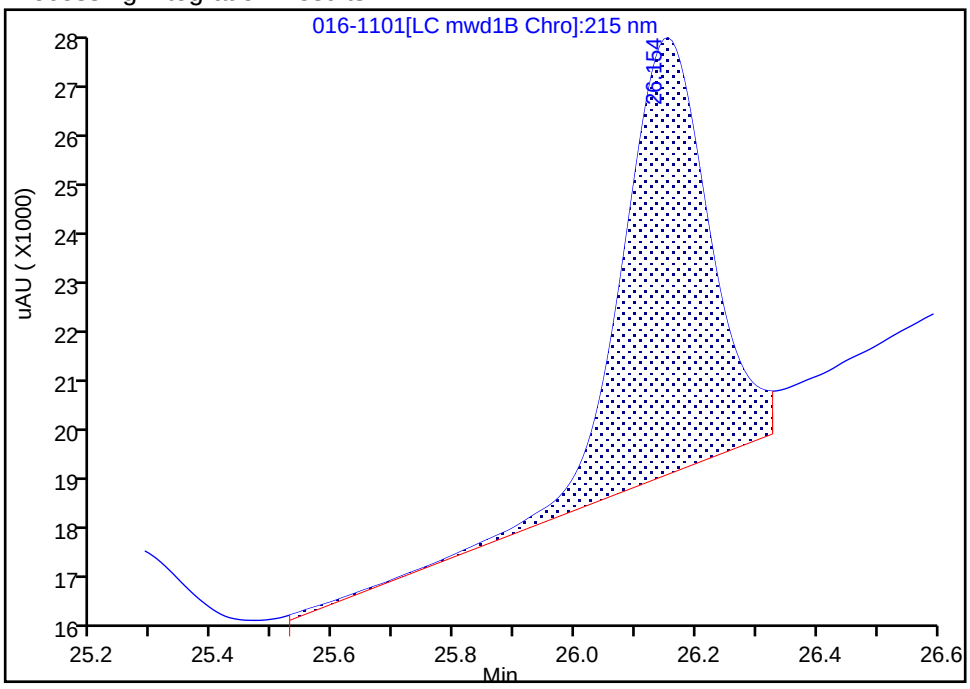
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\016-1101.D
Injection Date: 01-May-2021 22:25:05 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 3
Client ID:
Operator ID: JZ ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

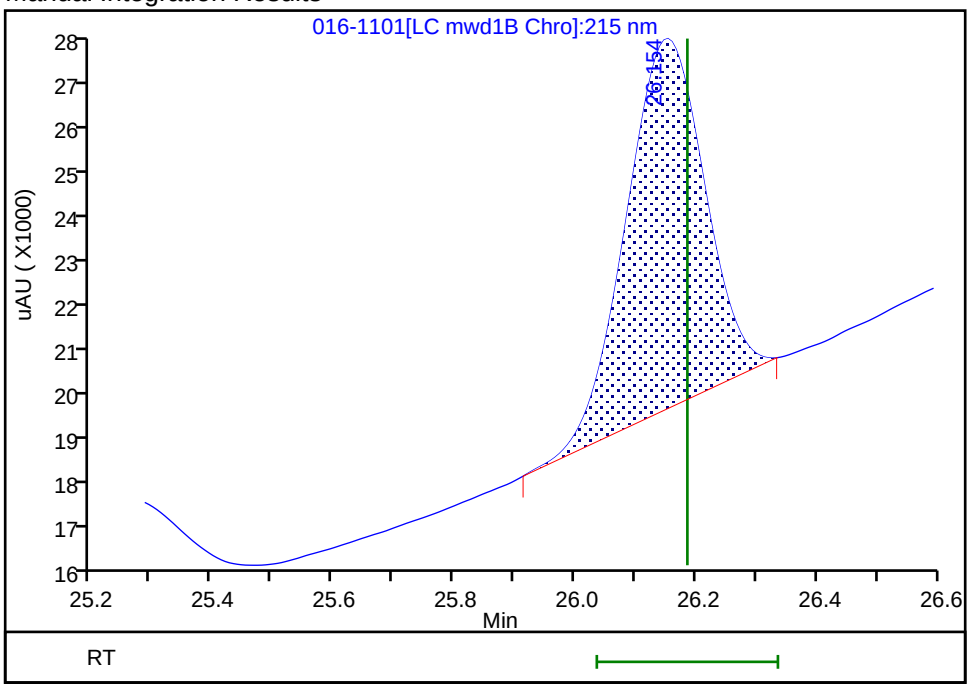
Processing Integration Results

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

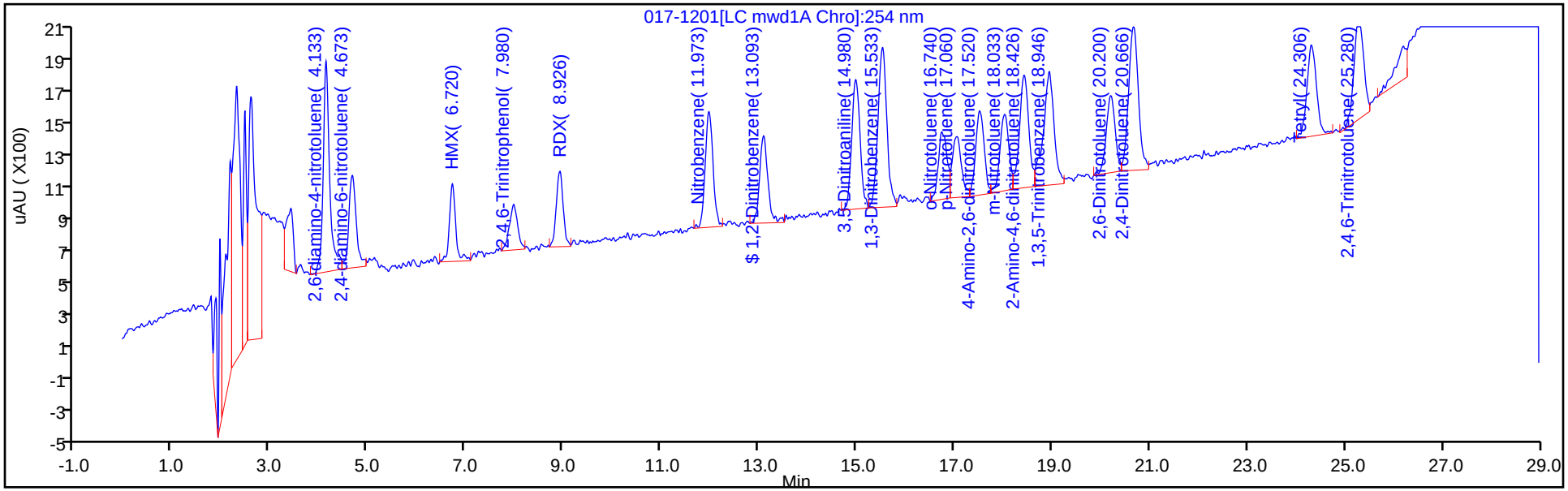
Report Date: 04-May-2021 13:43:15 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

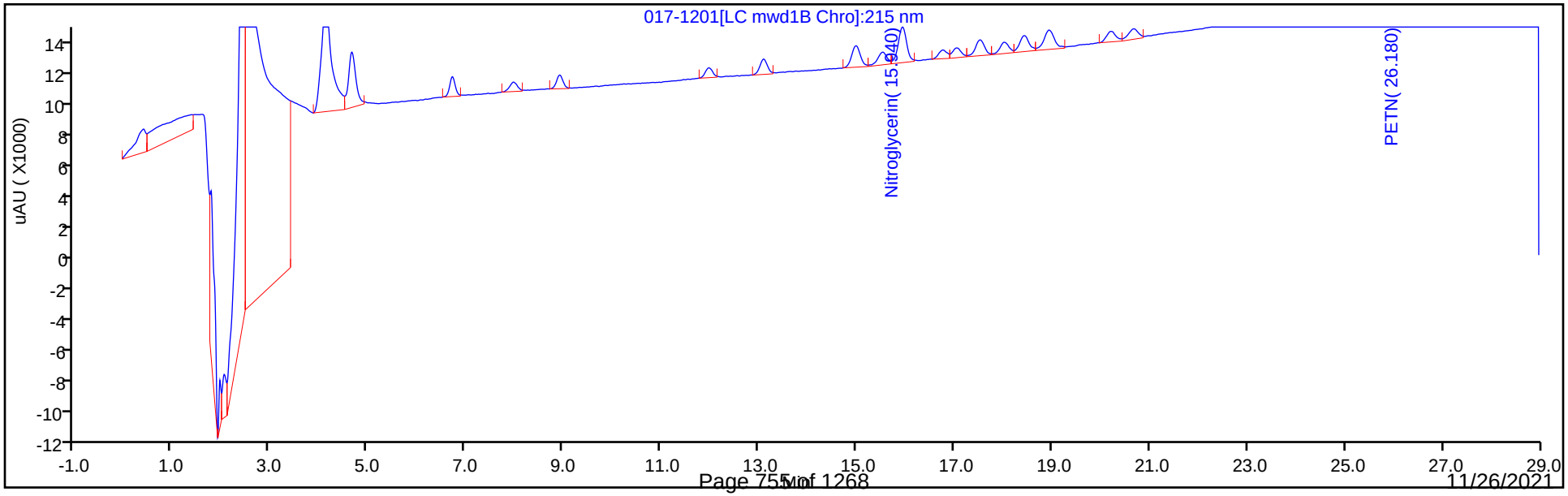
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\017-1201.D

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

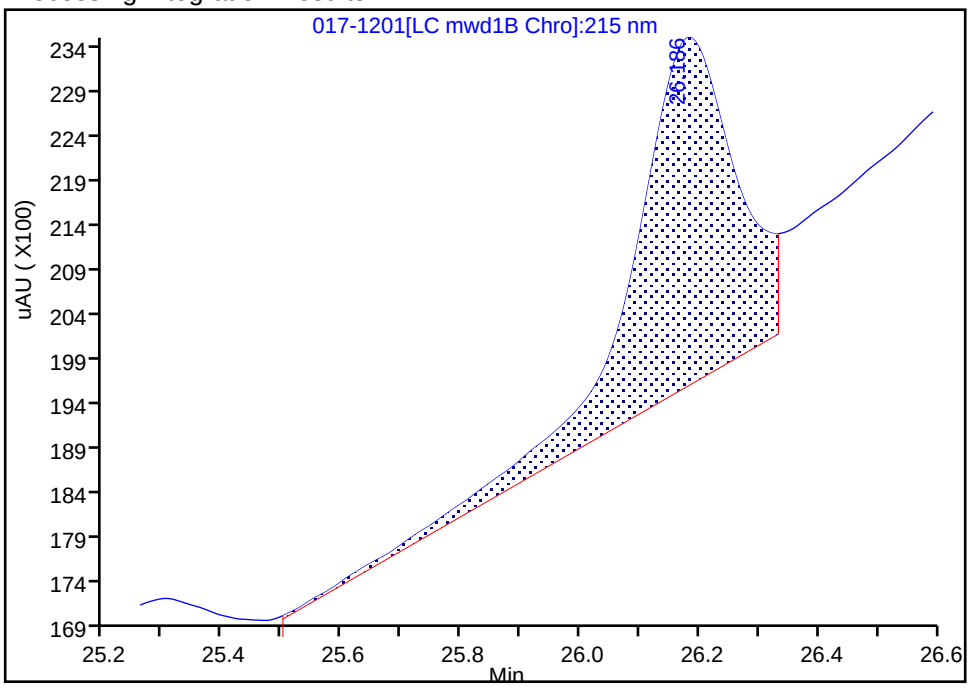
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\017-1201.D
Injection Date: 01-May-2021 23:00:06 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 2
Client ID:
Operator ID: JZ ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

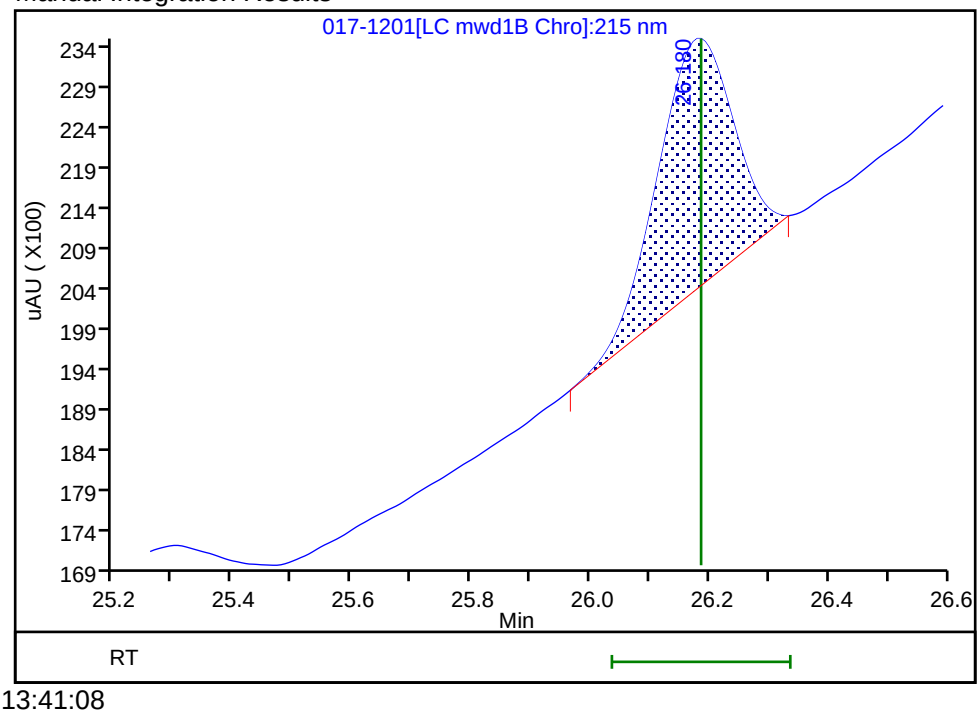
Processing Integration Results

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

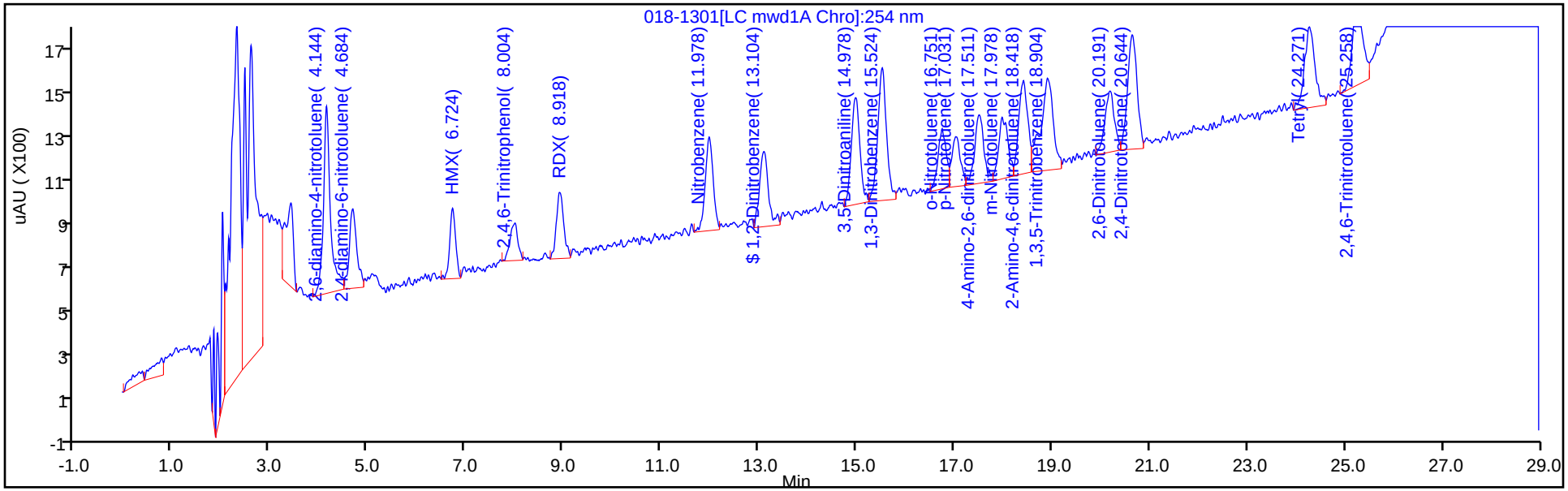
Report Date: 04-May-2021 13:43:16 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

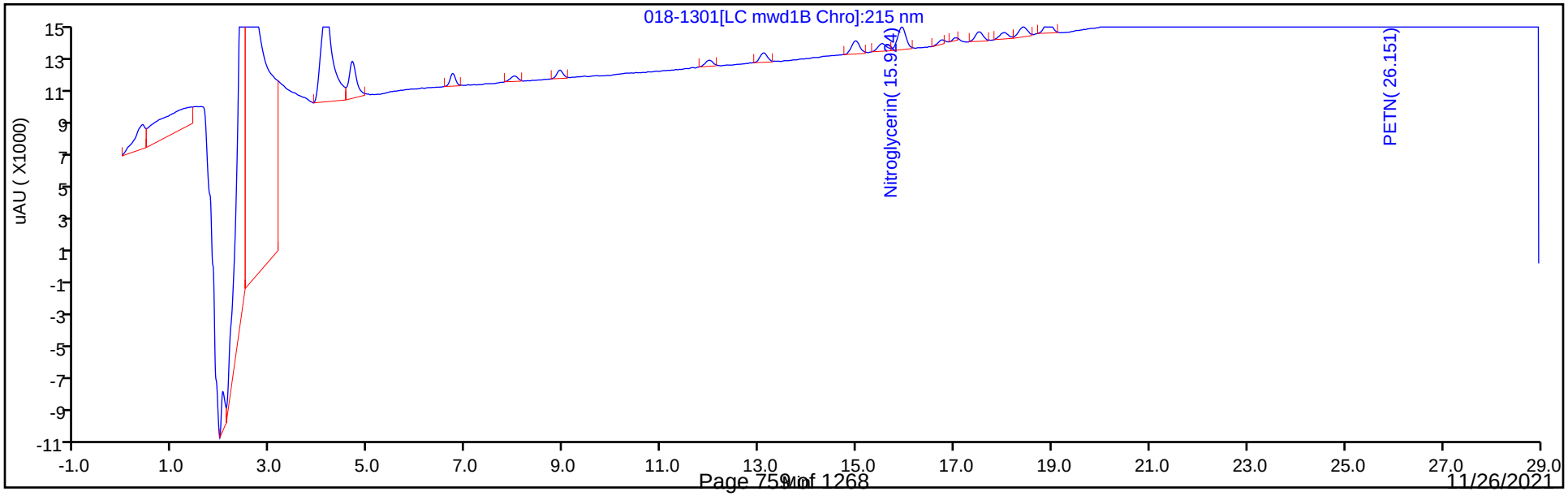
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\018-1301.D

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

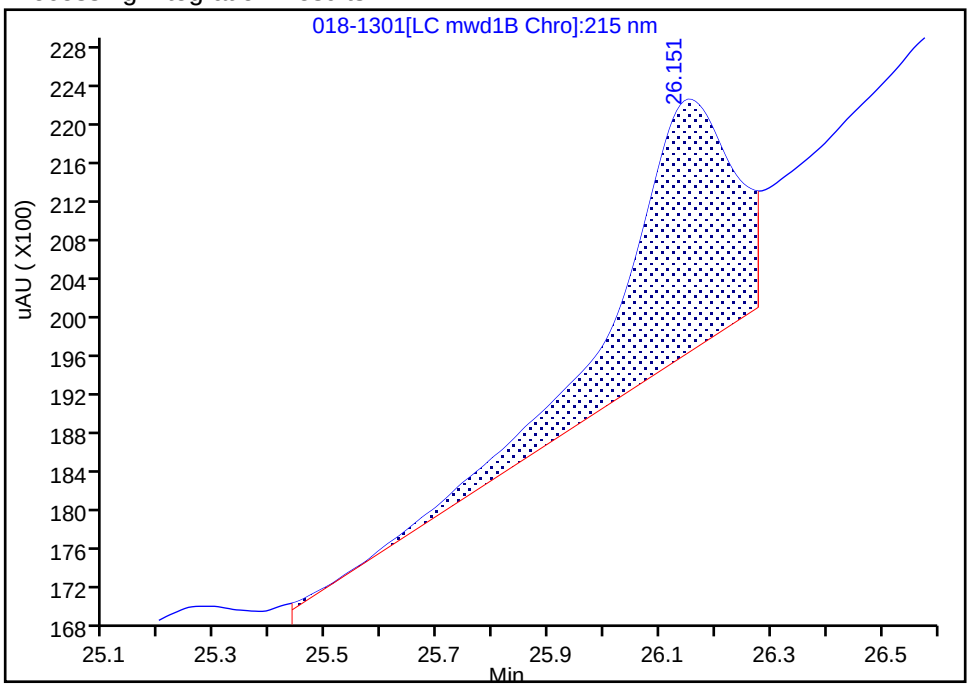
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\018-1301.D
Injection Date: 01-May-2021 23:35:08 Instrument ID: CHHPLC_X5
Lims ID: IC INT/ADD 1
Client ID:
Operator ID: JZ ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

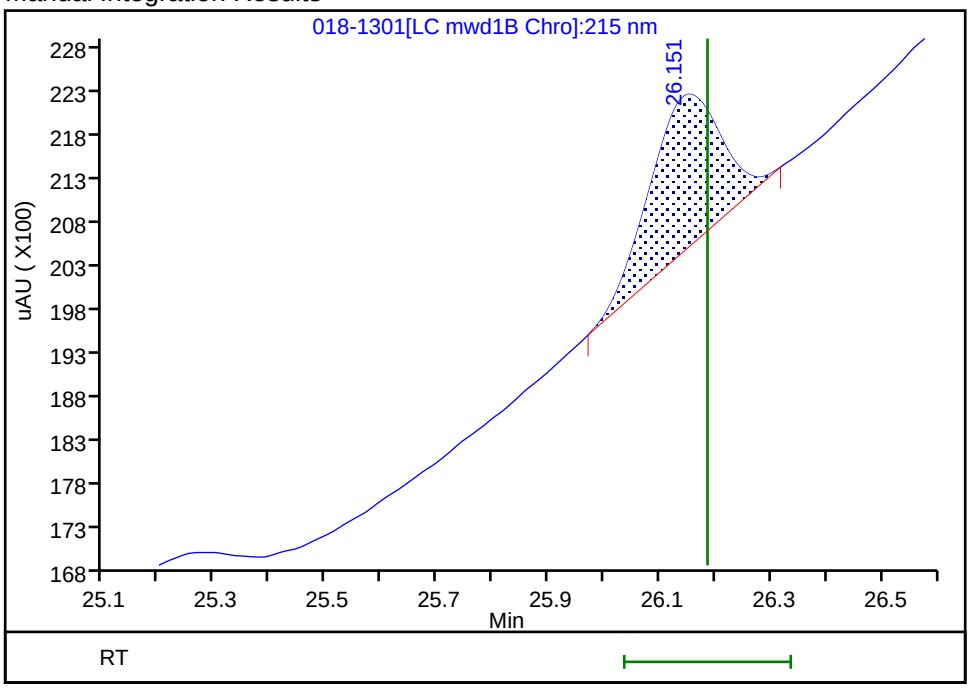
Processing Integration Results

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

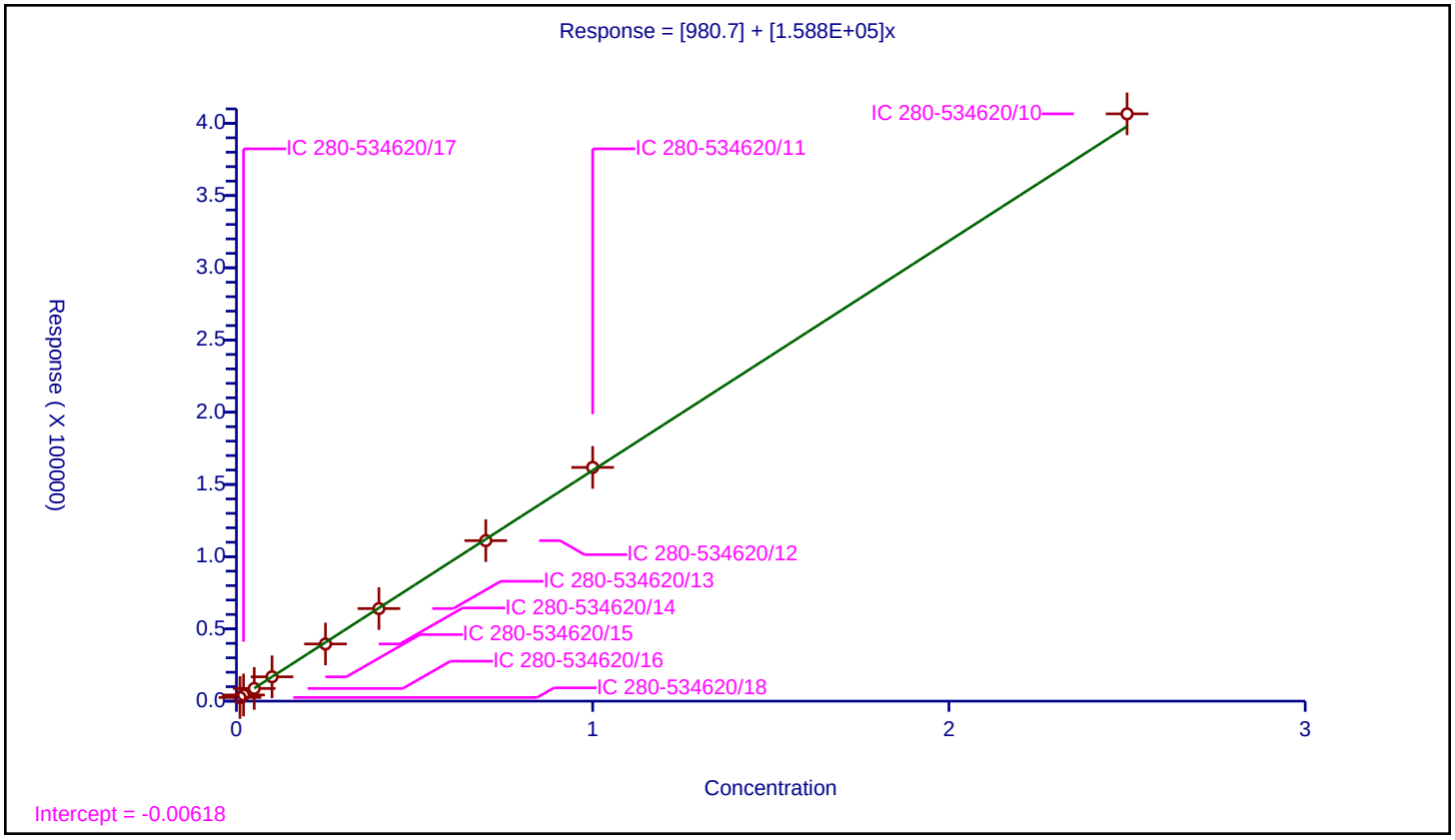
Curve Coefficients

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



Calibration / 2,4,6-Trinitrophenol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	AREA
RF Rounding:	0

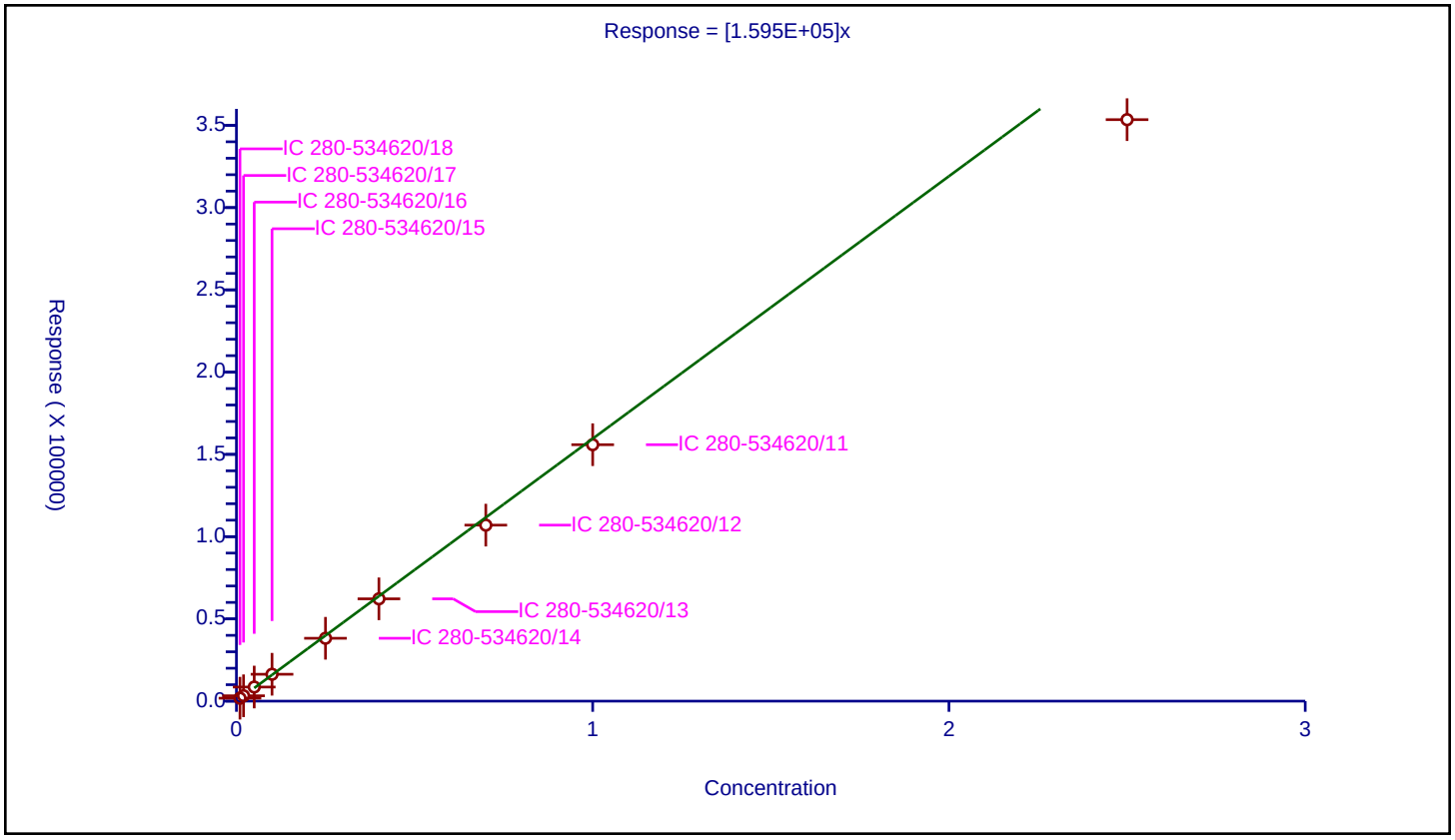
Curve Coefficients

Intercept:	0
Slope:	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

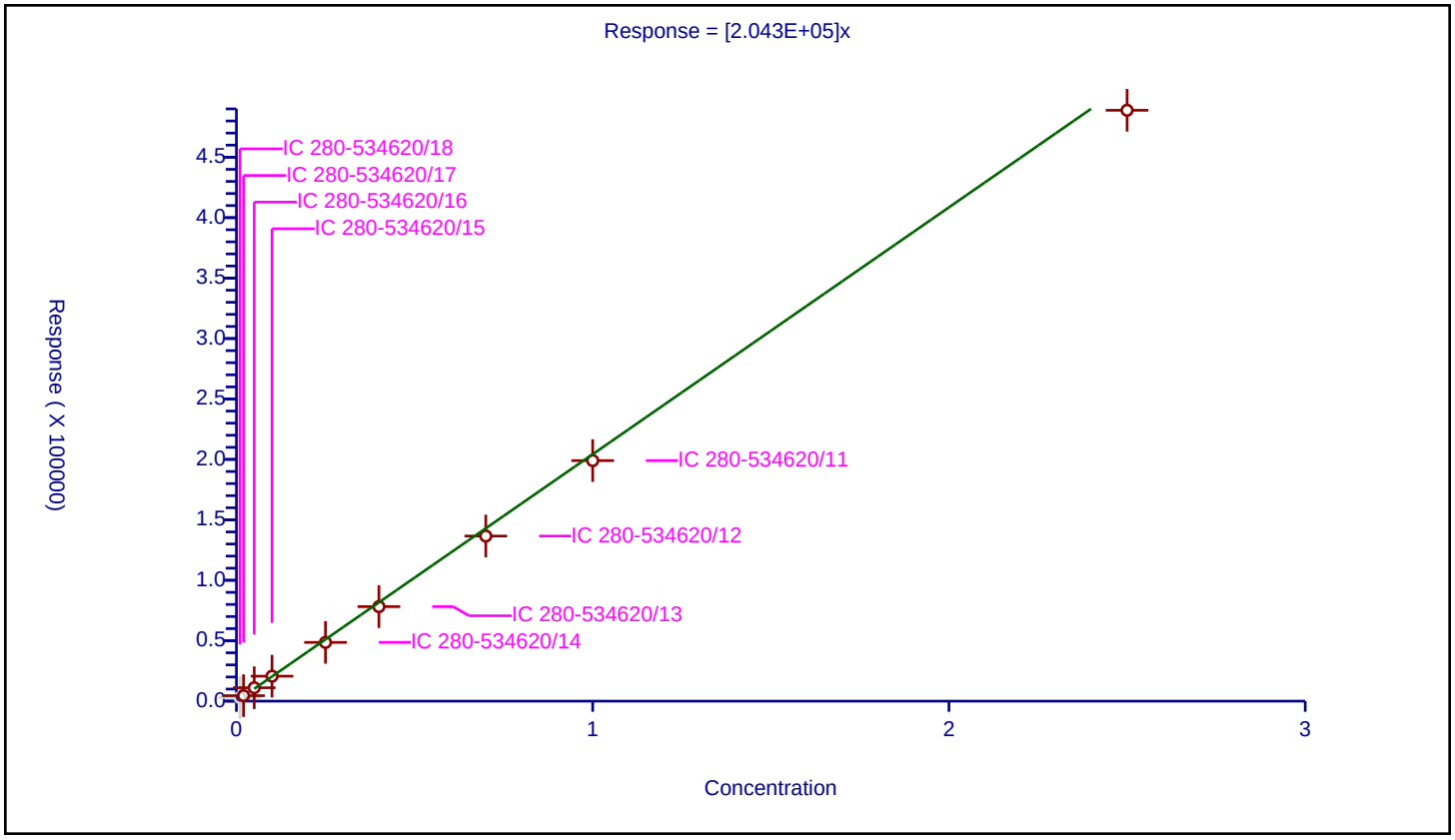
Curve Coefficients

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

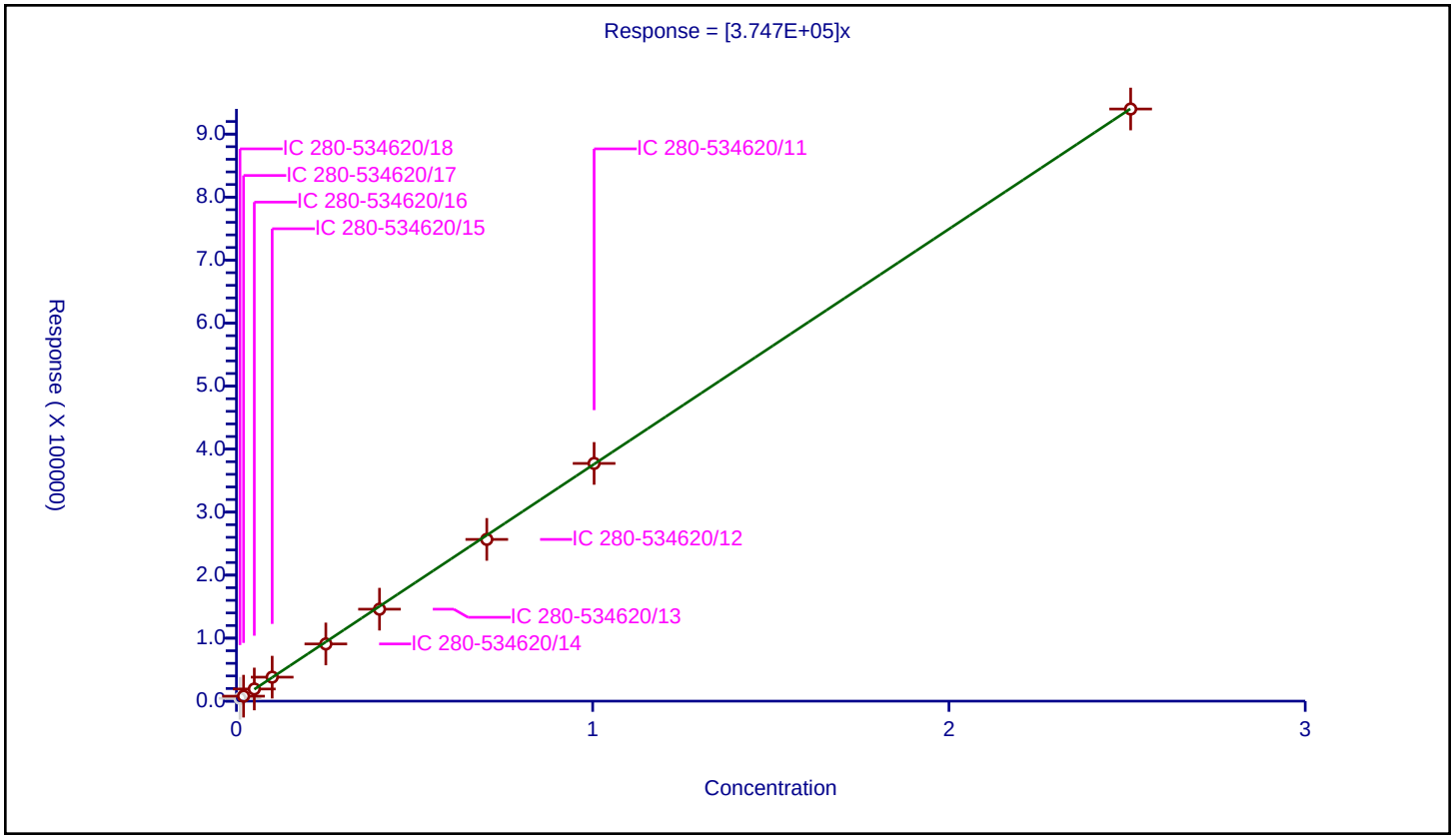
Curve Coefficients

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

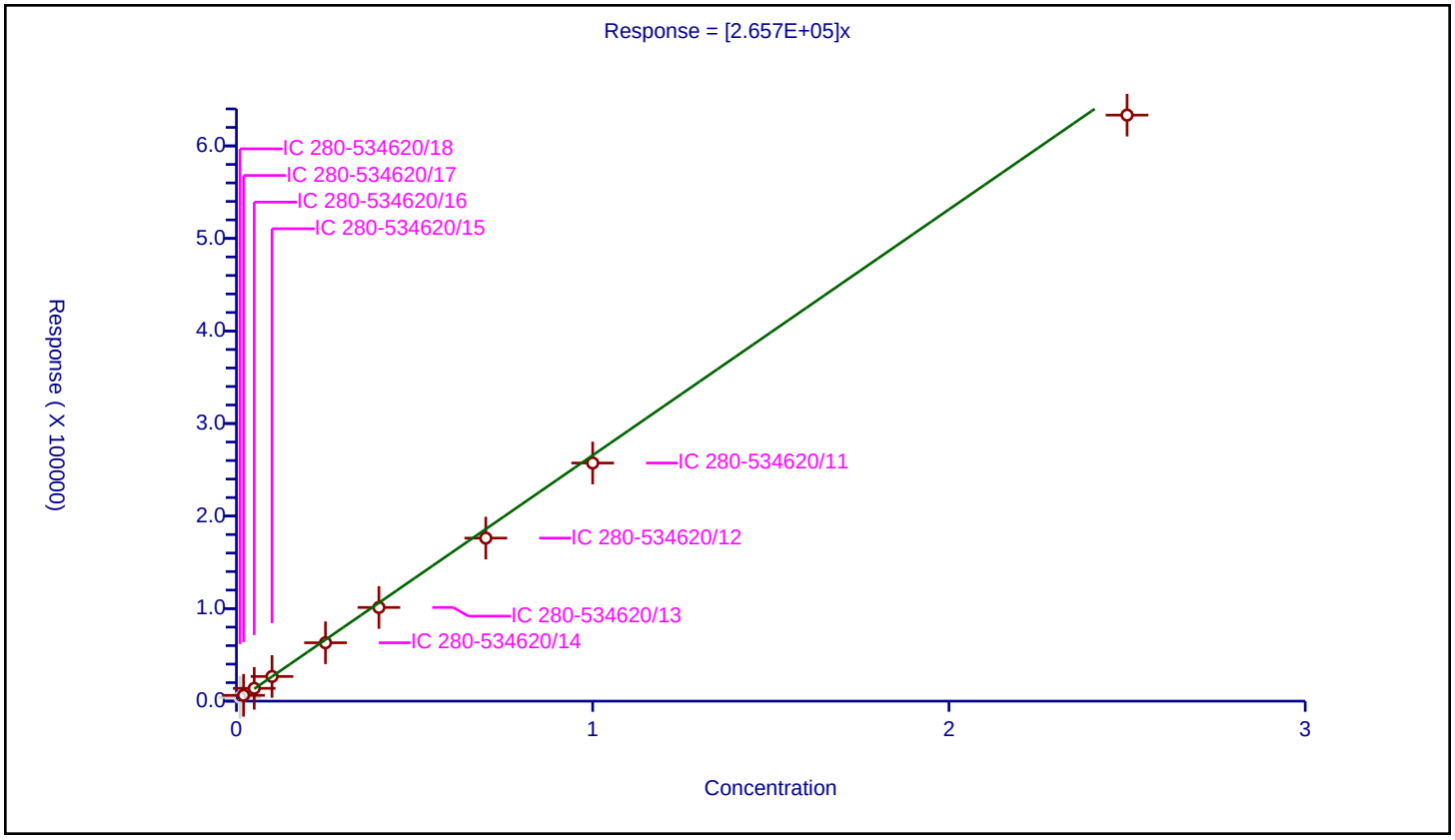
Curve Coefficients

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

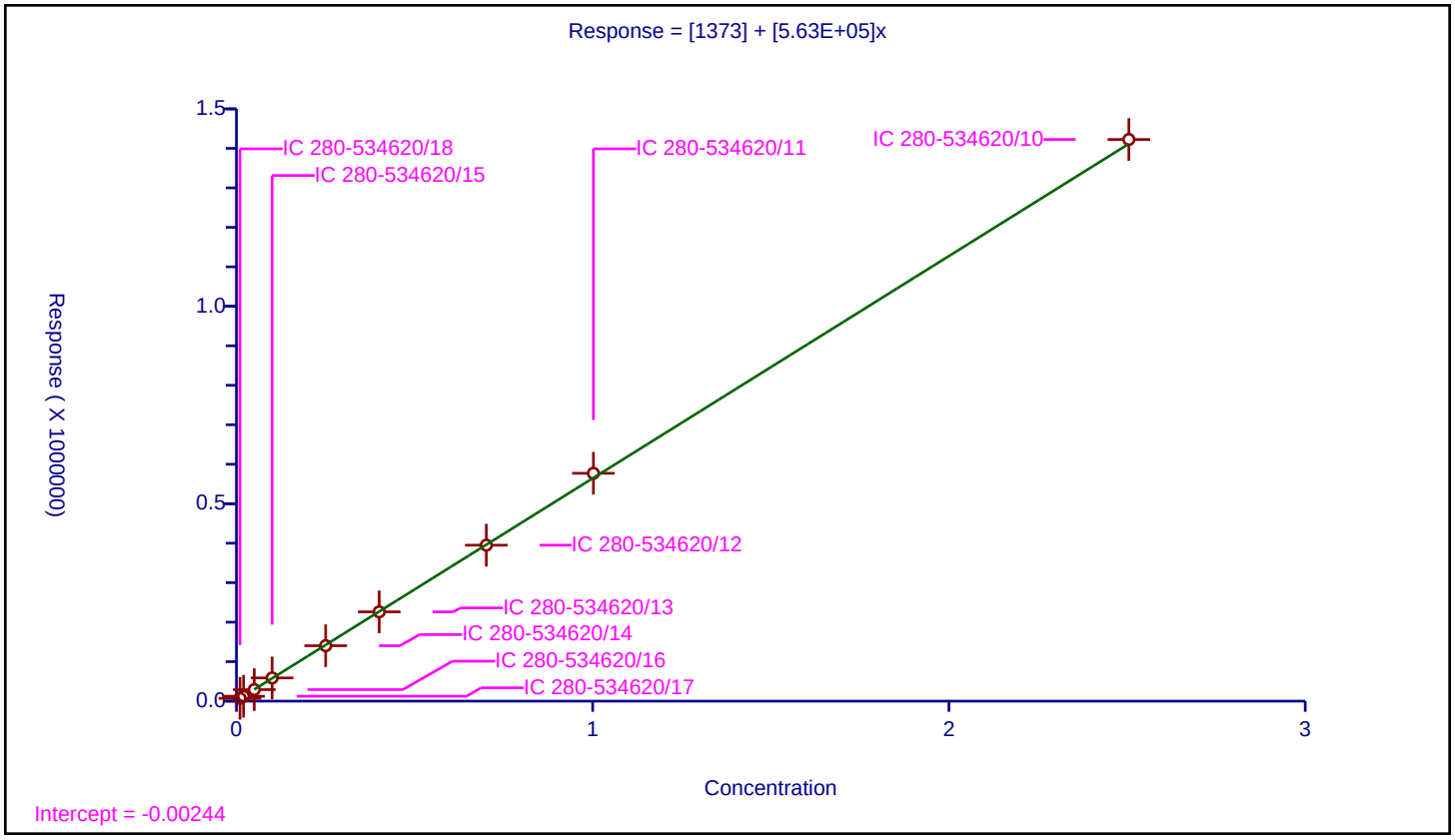
Curve Coefficients

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

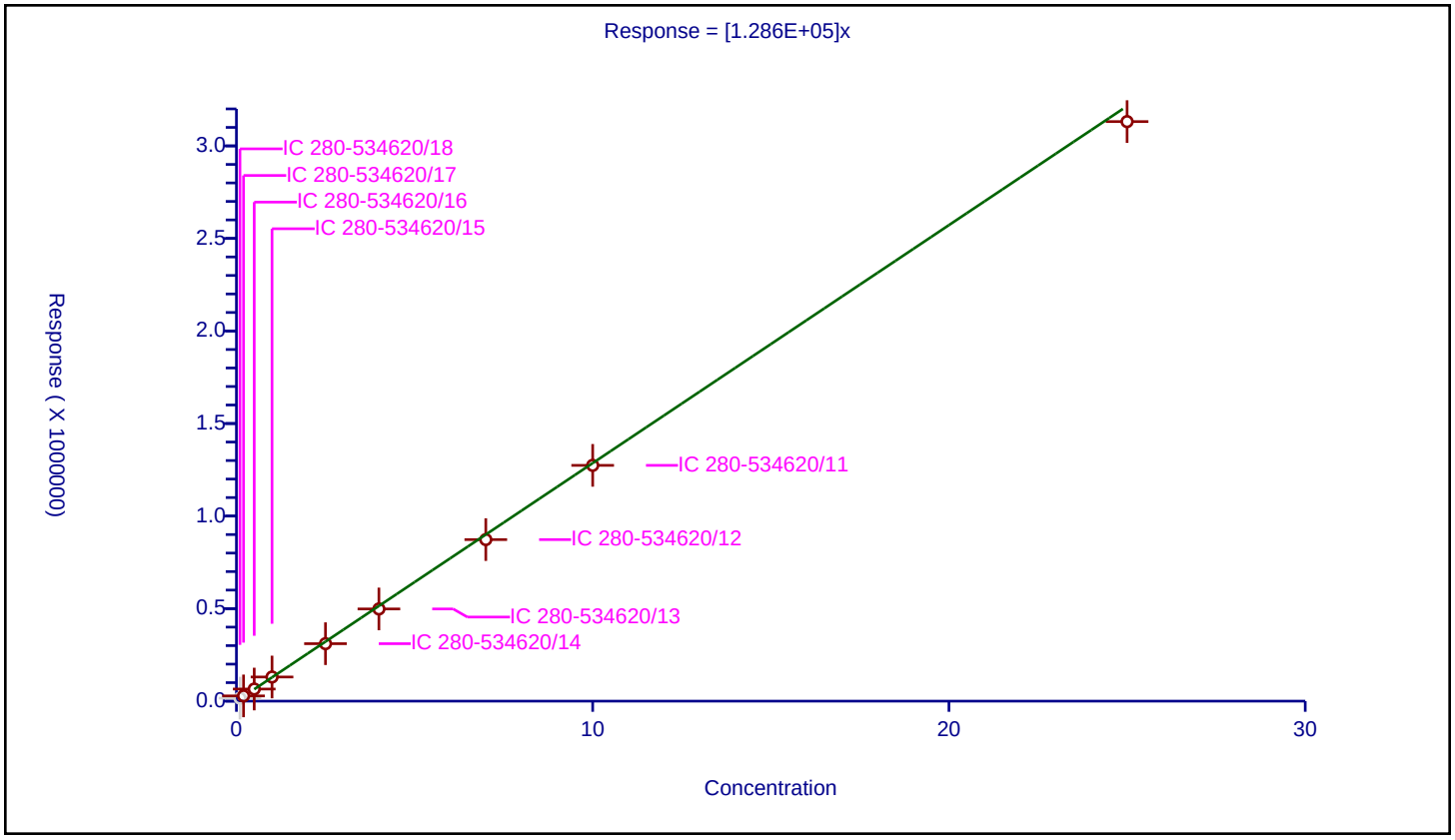
Curve Coefficients

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

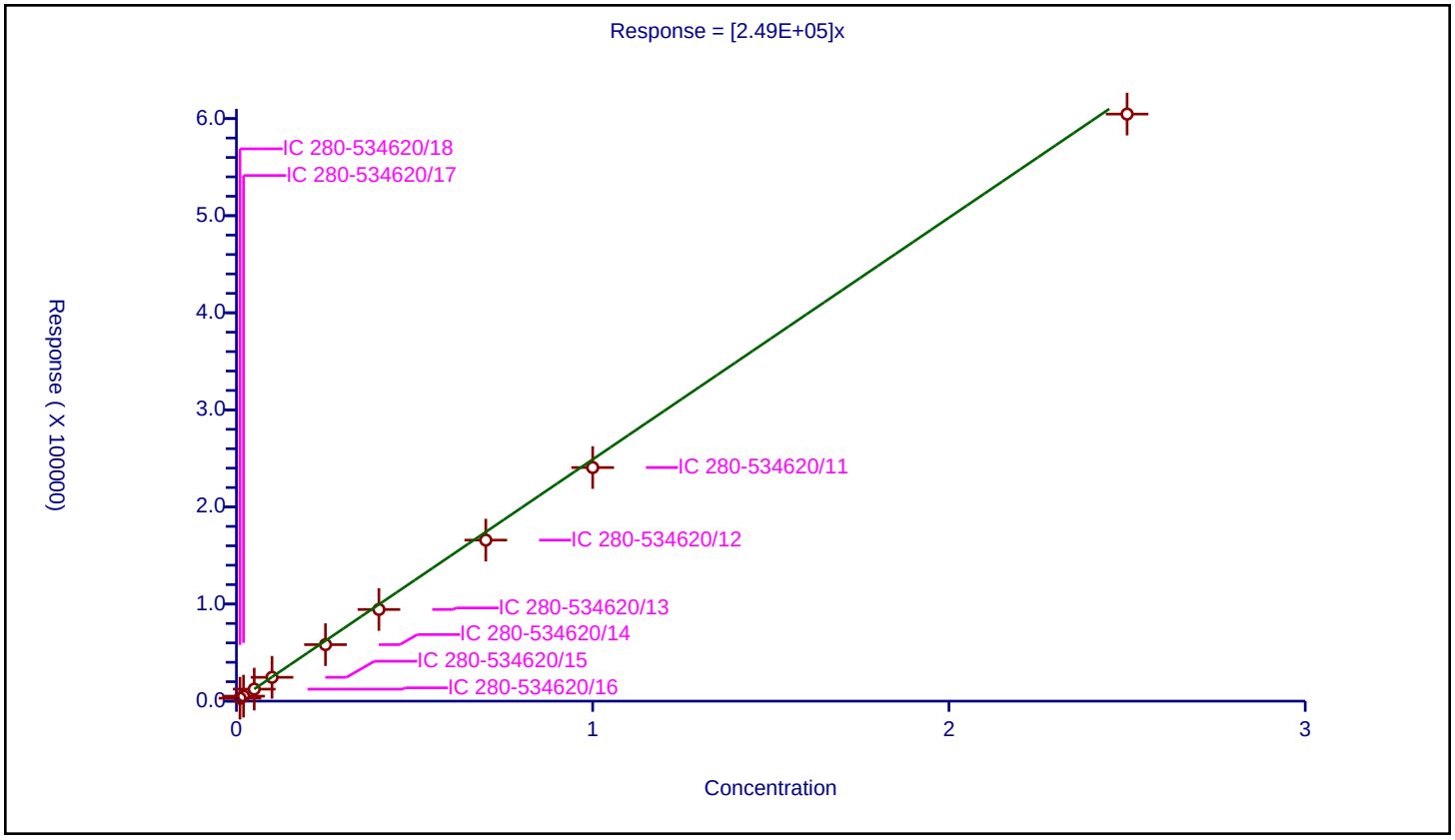
Curve Coefficients

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

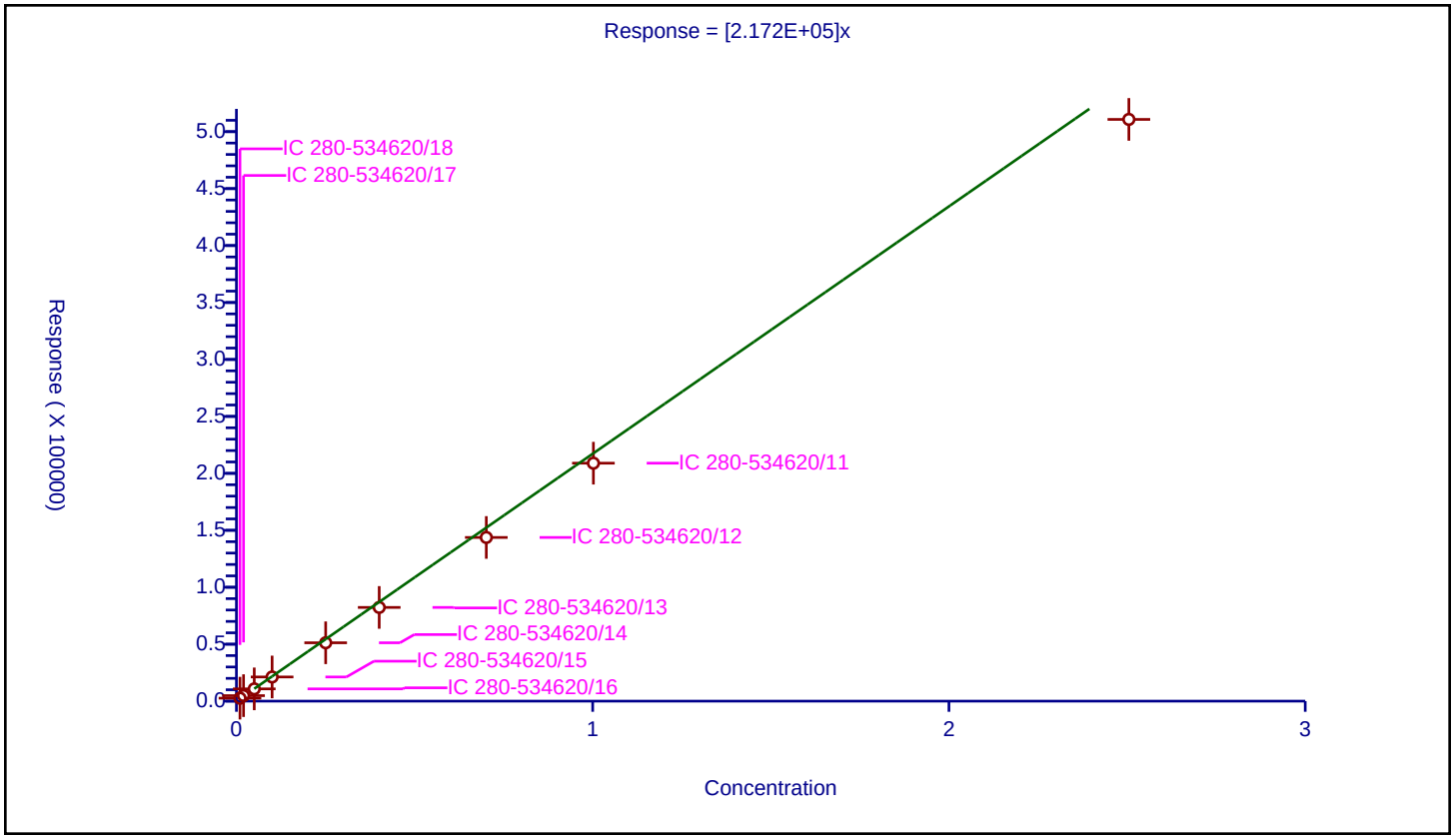
Curve Coefficients

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

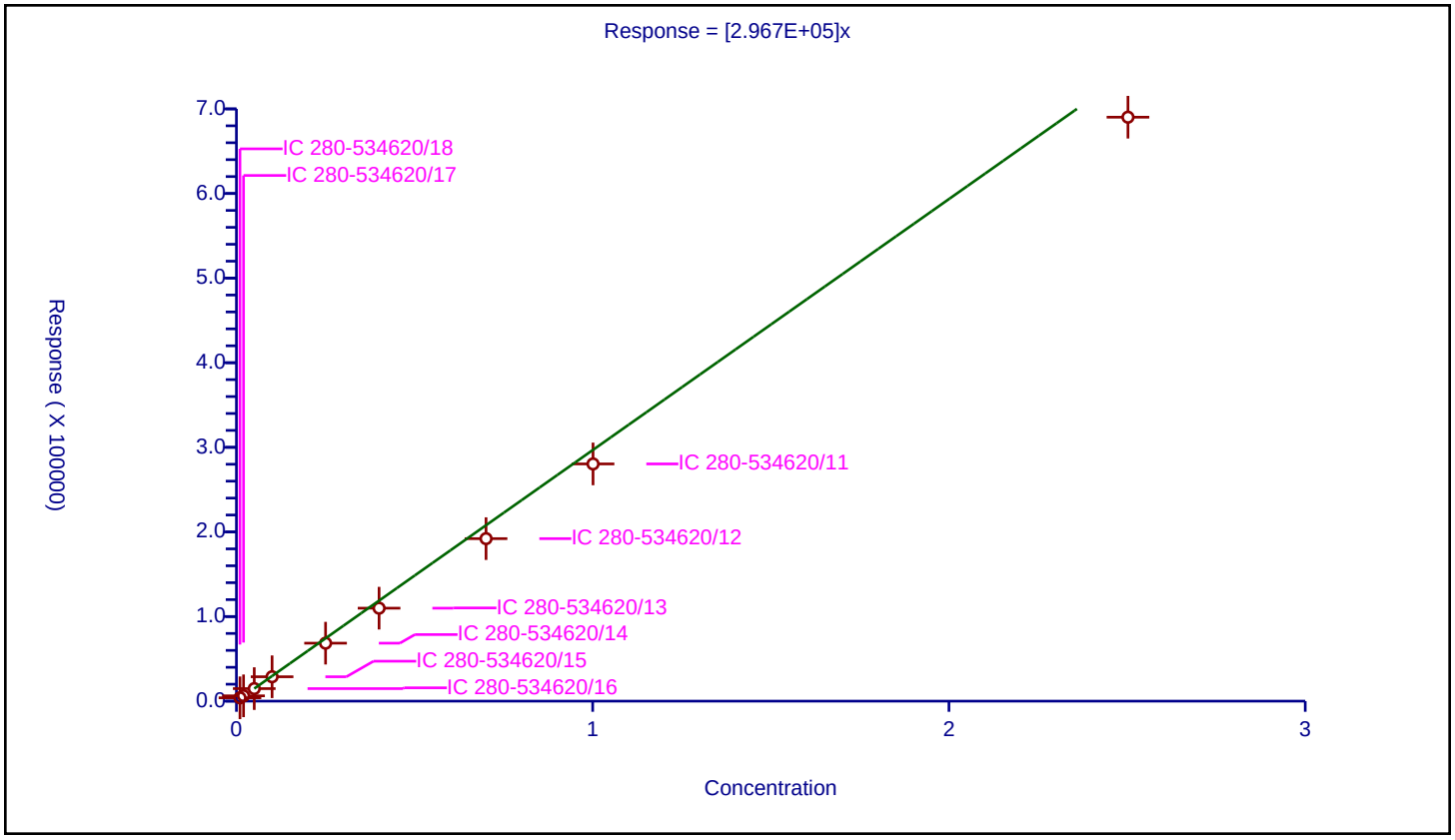
Curve Coefficients

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

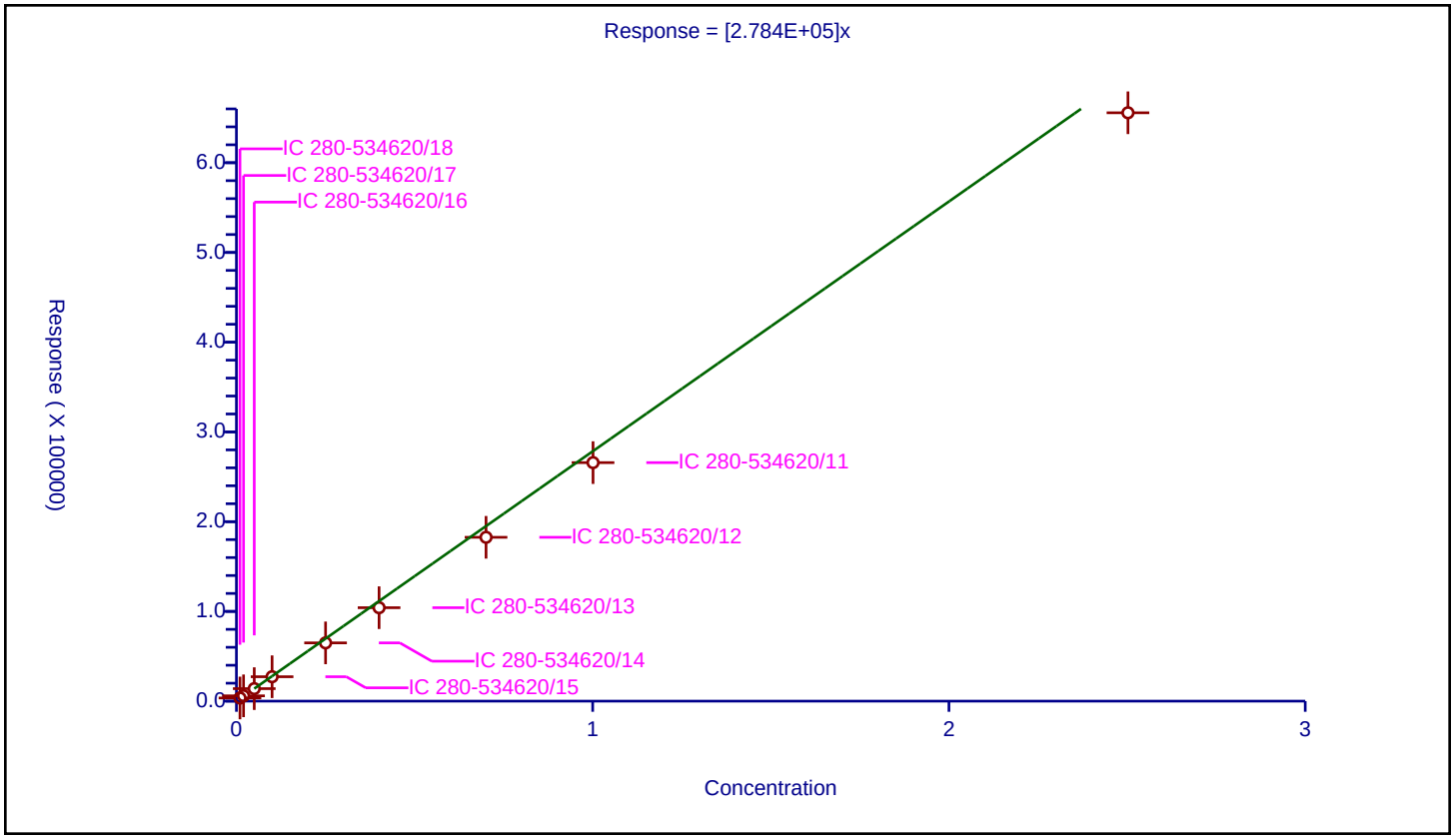
Curve Coefficients

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

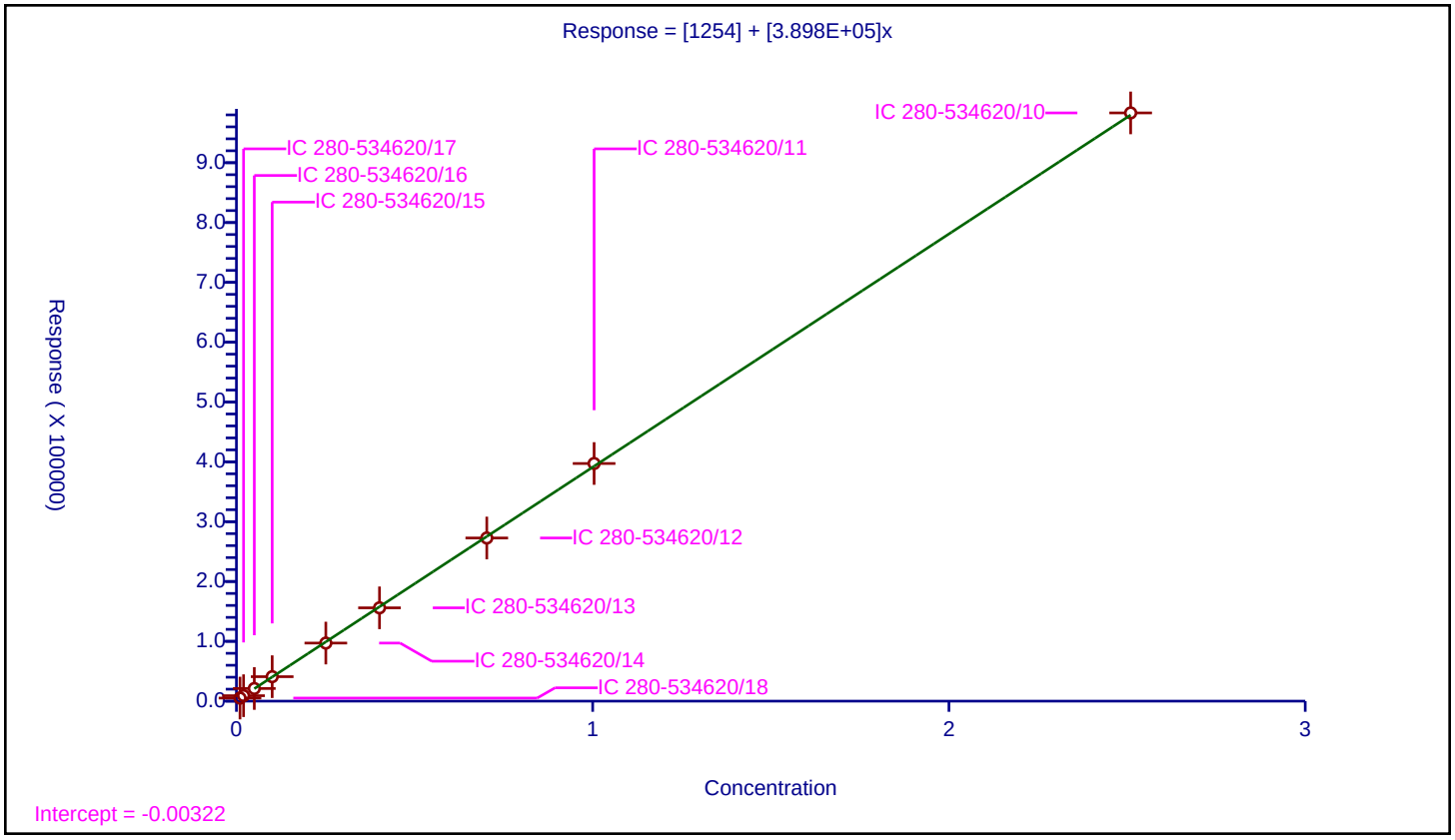
Curve Coefficients

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

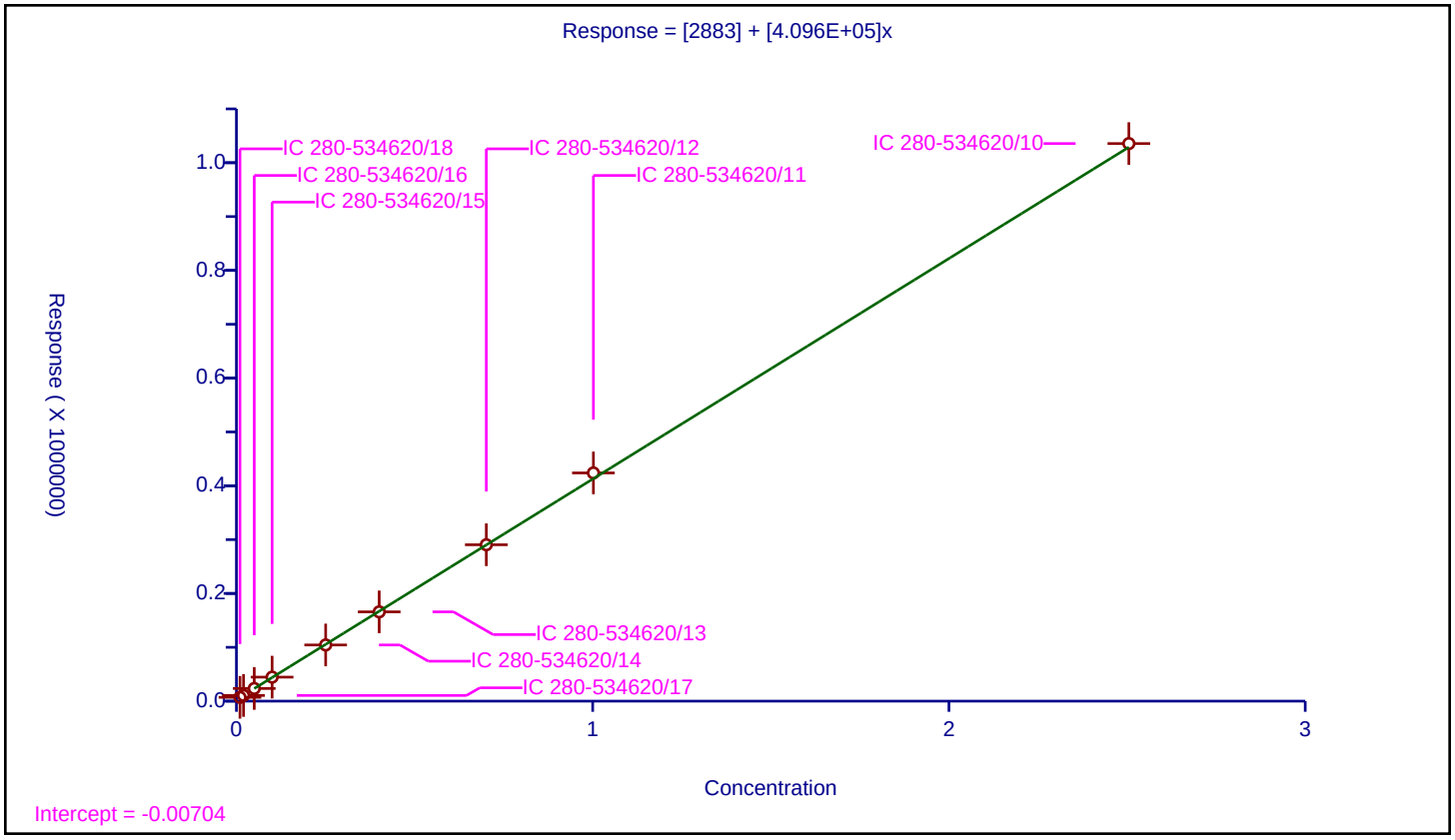
Curve Coefficients

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

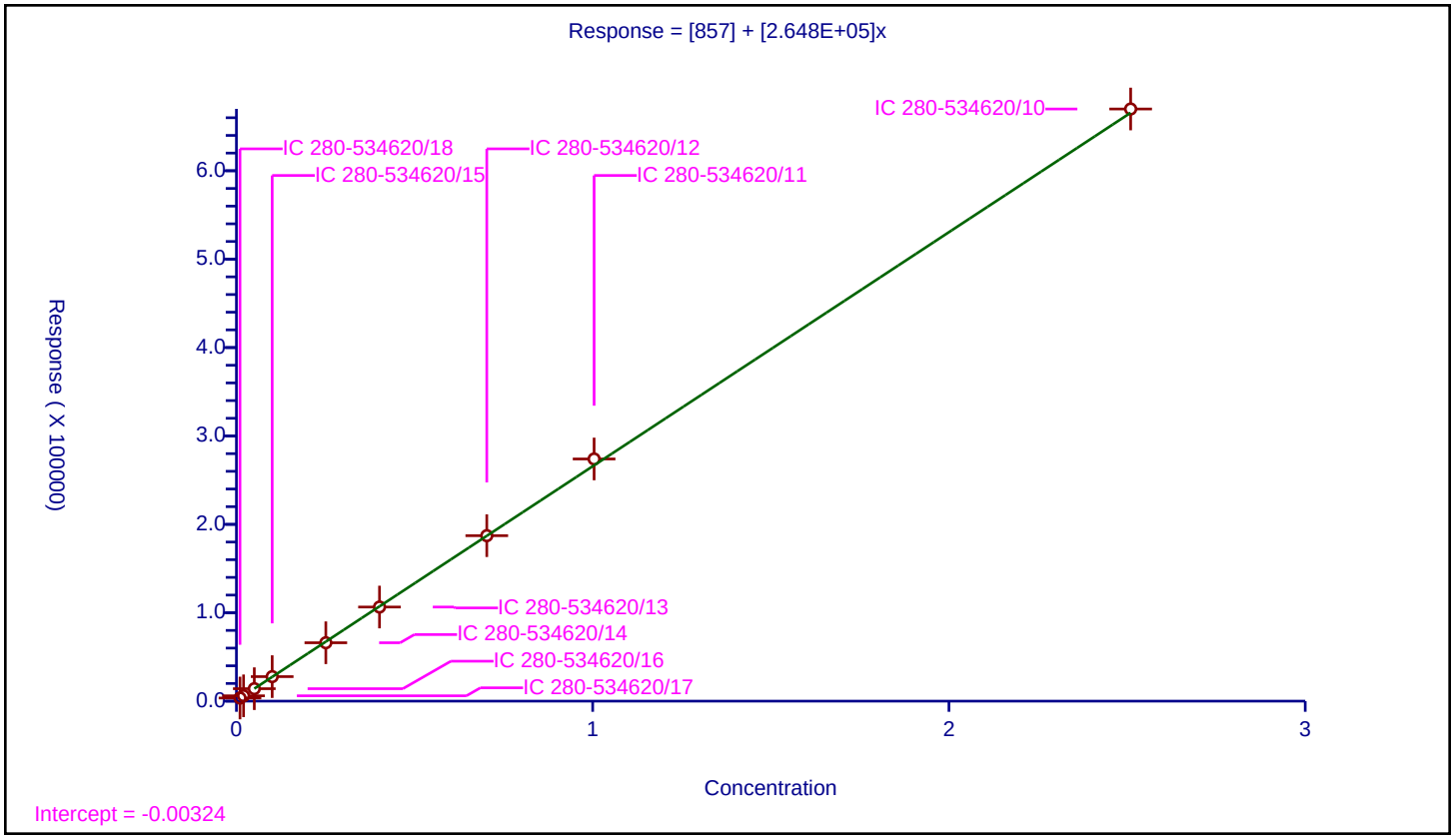
Curve Coefficients

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

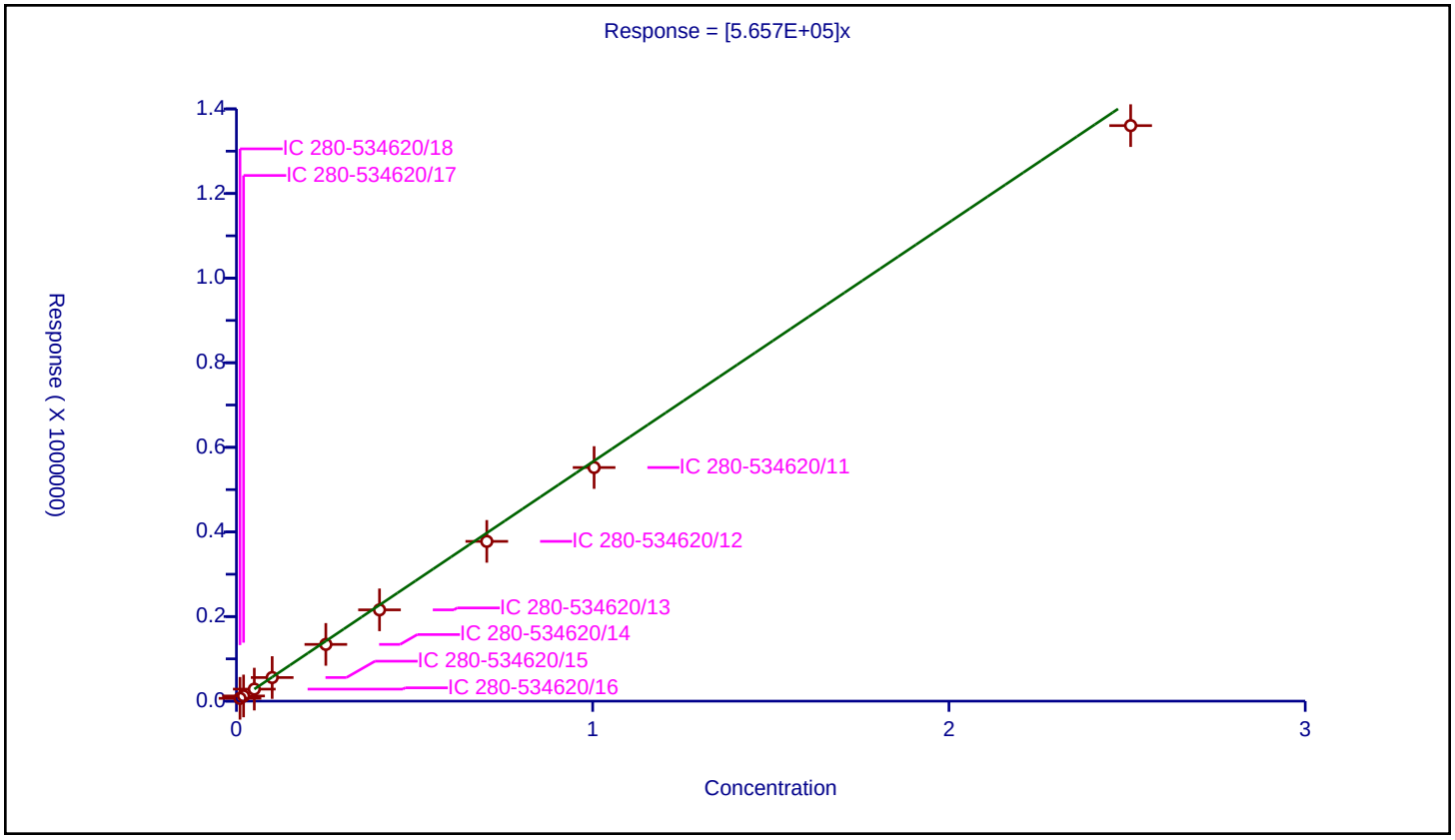
Curve Coefficients

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

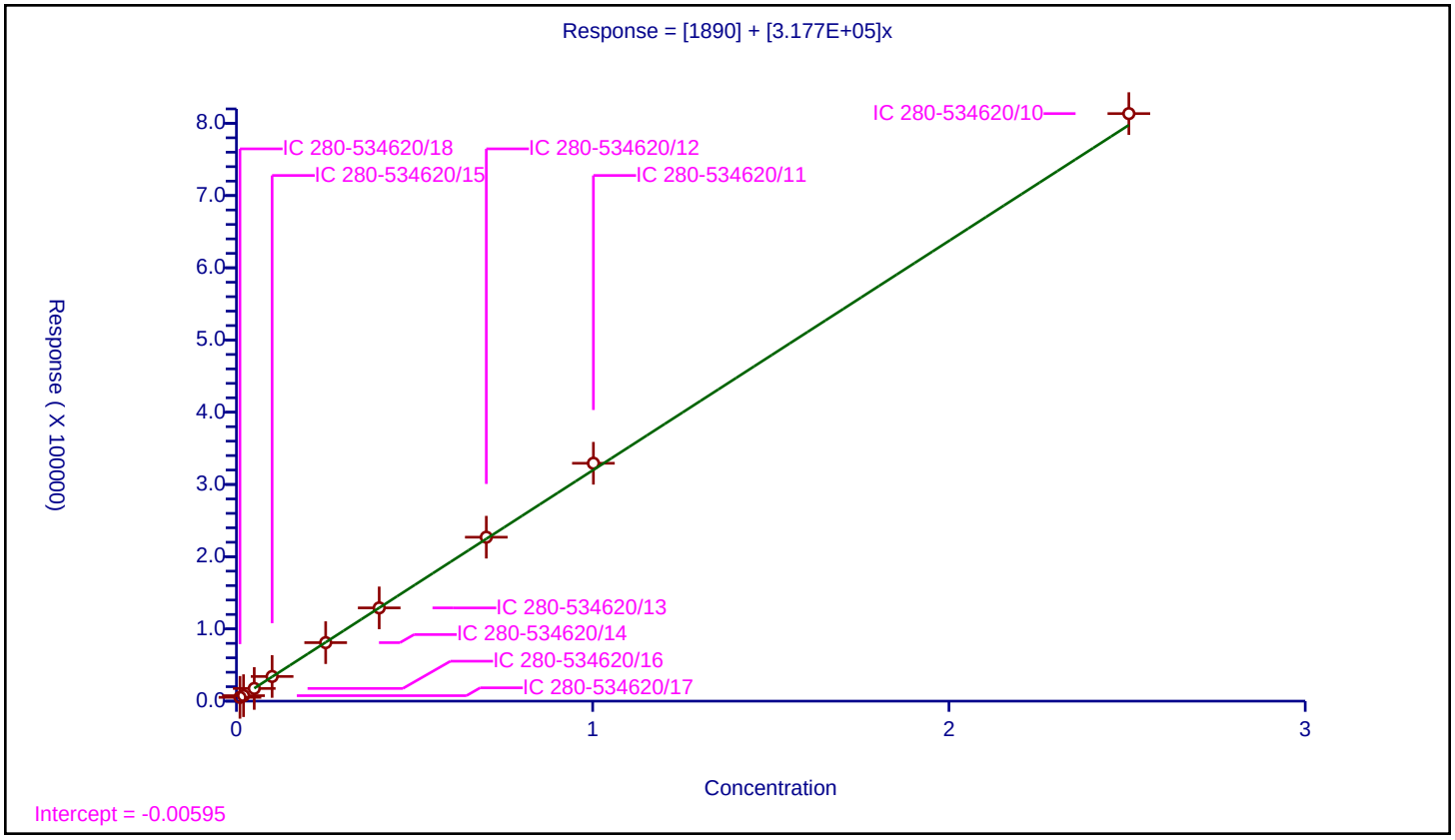
Curve Coefficients

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

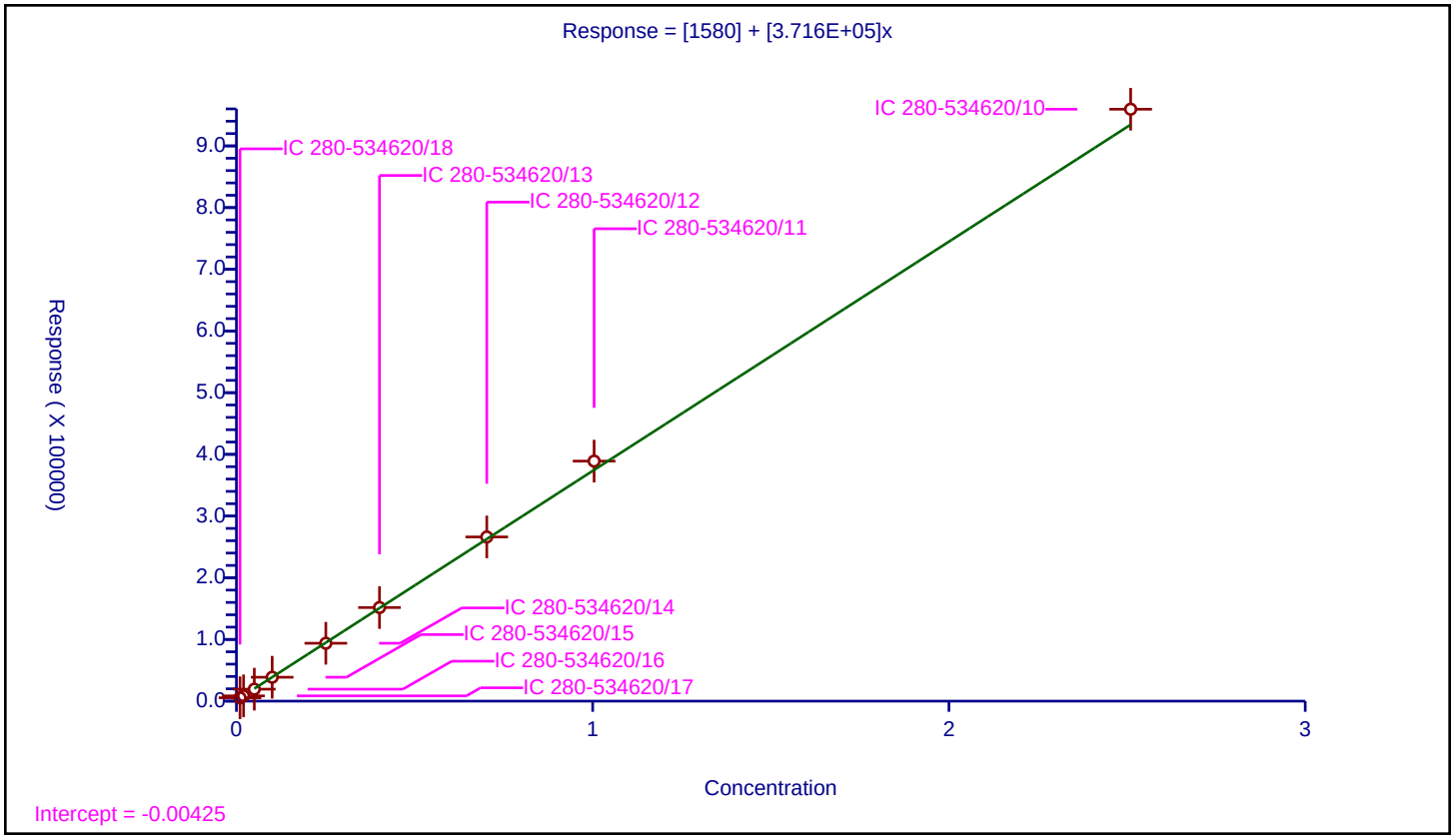
Curve Coefficients

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

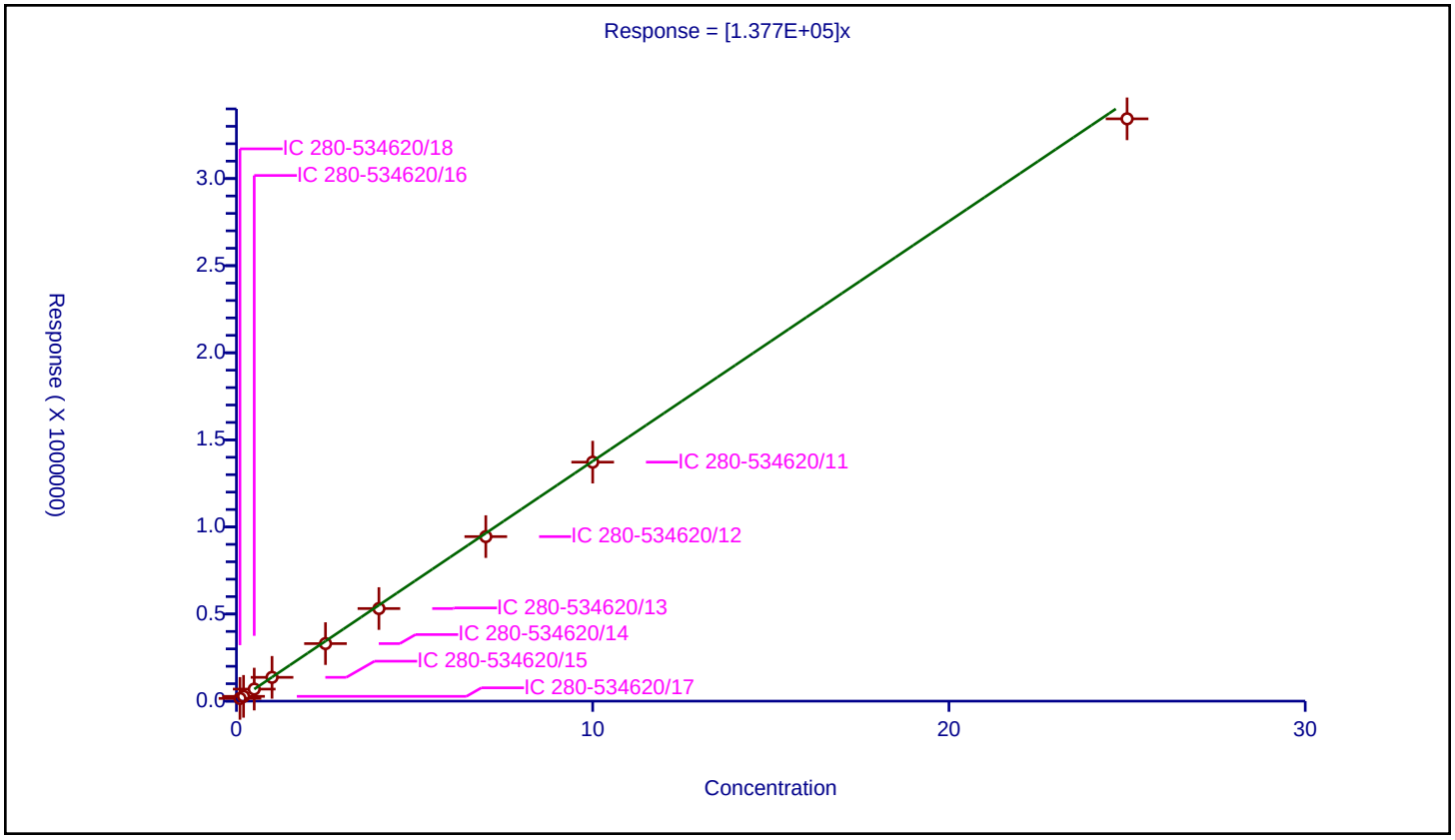
Curve Coefficients

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.: 280-155225-1 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.: 280-155225-1 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.: 280-155225-1 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

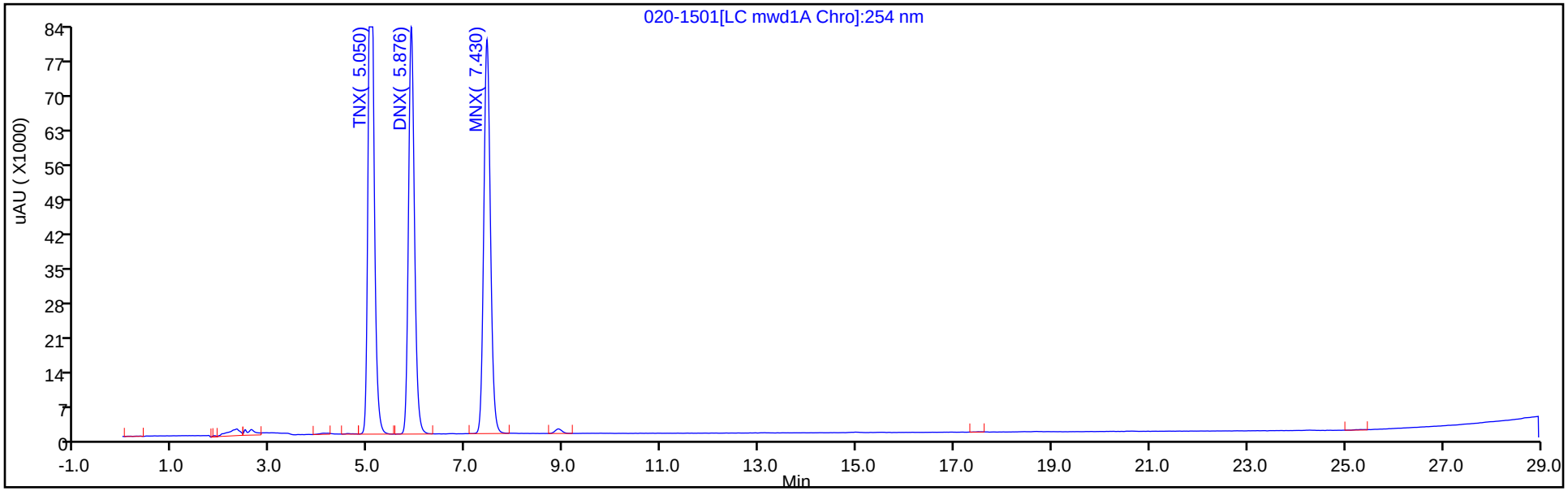
Report Date: 04-May-2021 13:43:16 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

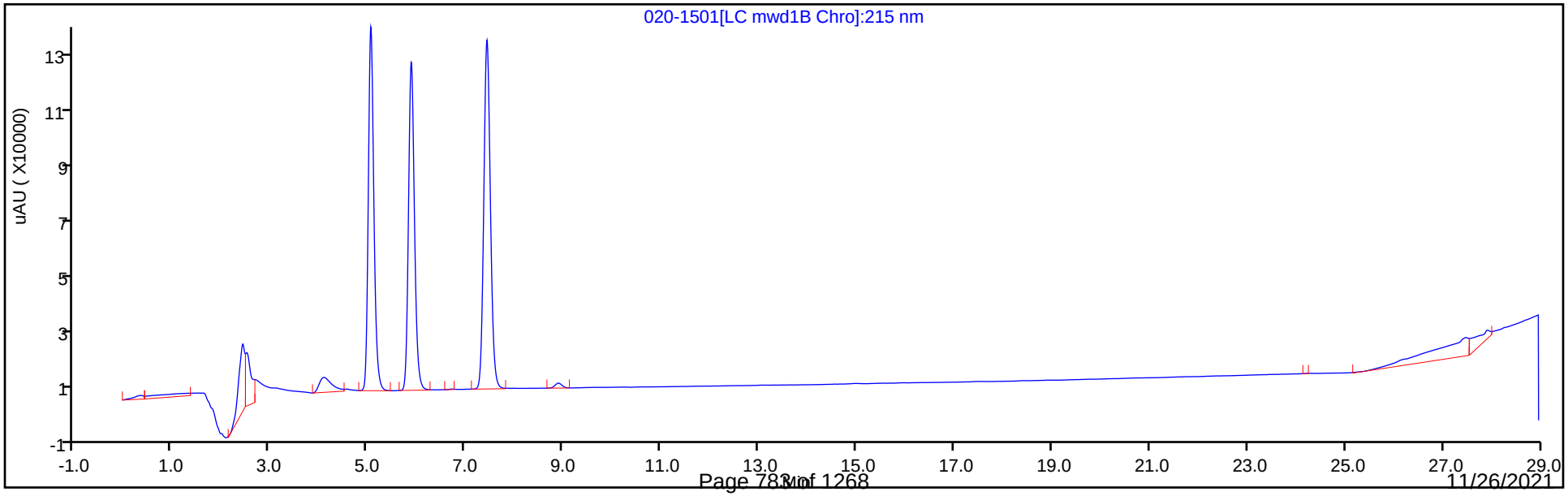
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\020-1501.D

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

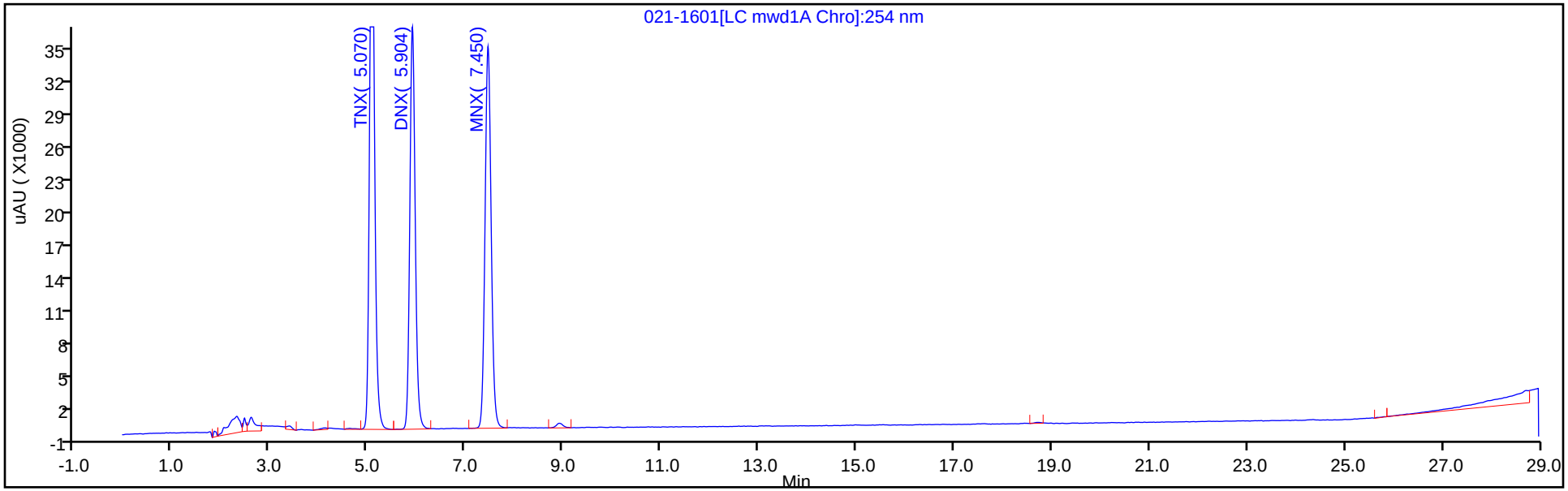
Report Date: 04-May-2021 13:43:17 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

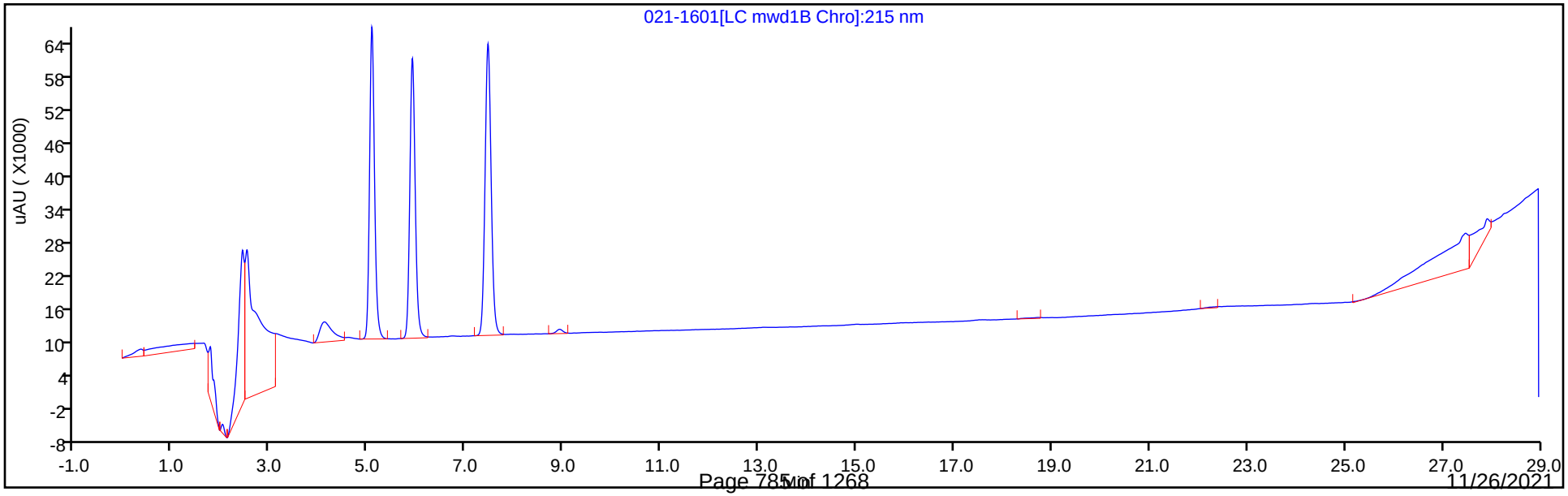
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\021-1601.D

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

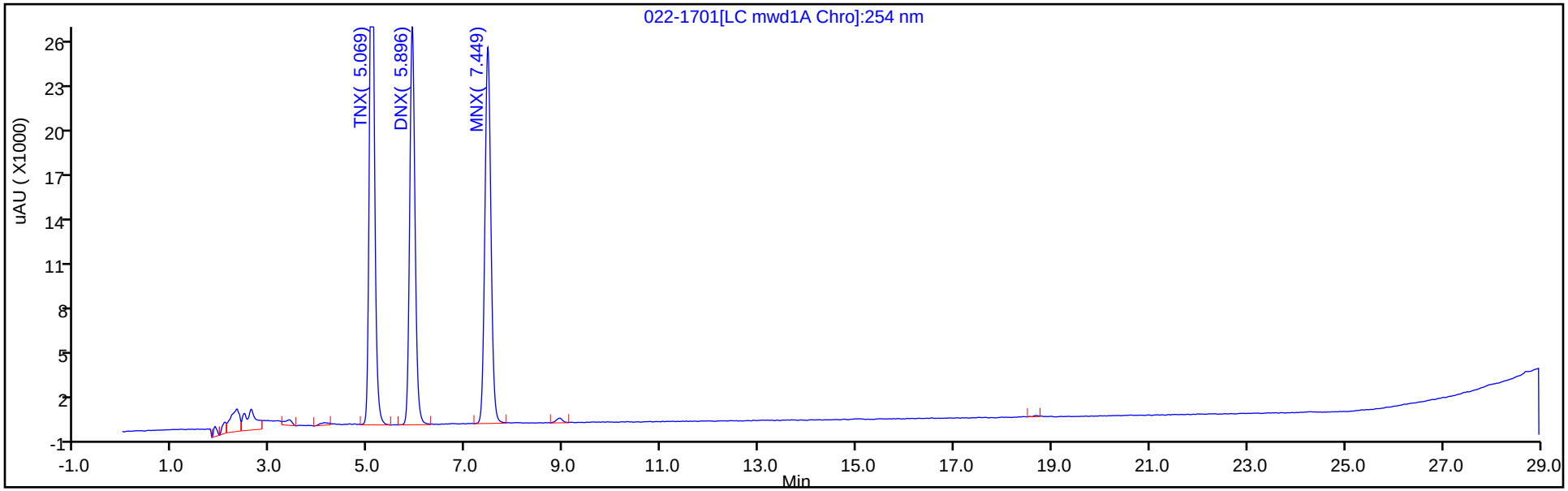
Report Date: 04-May-2021 13:43:17 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

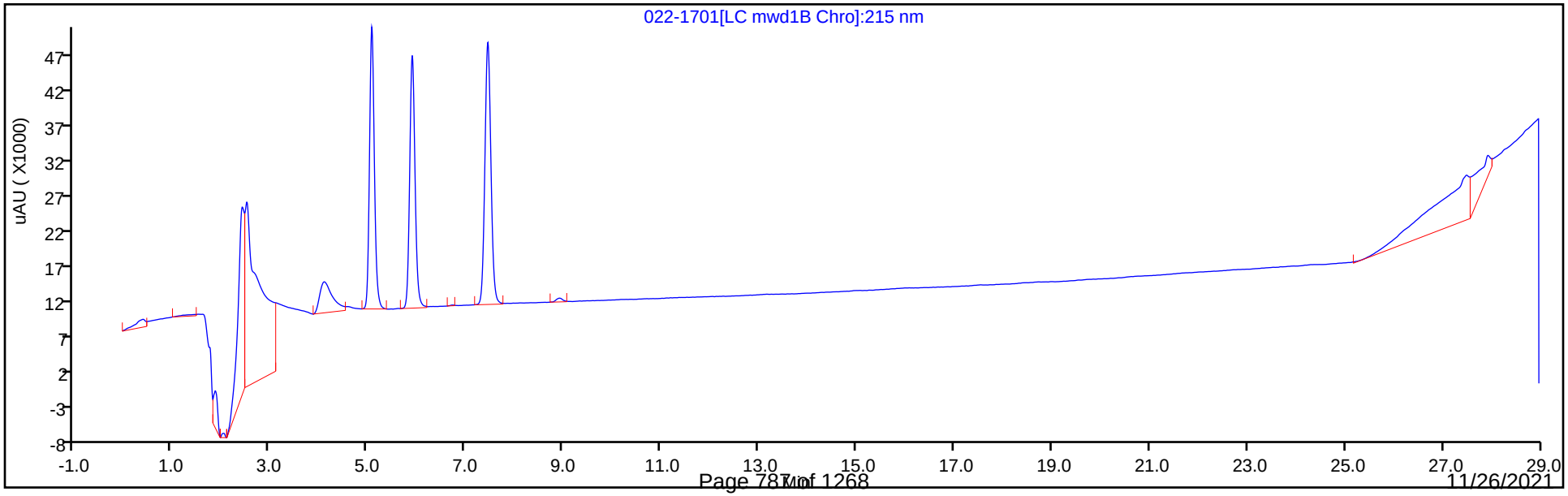
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\022-1701.D

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

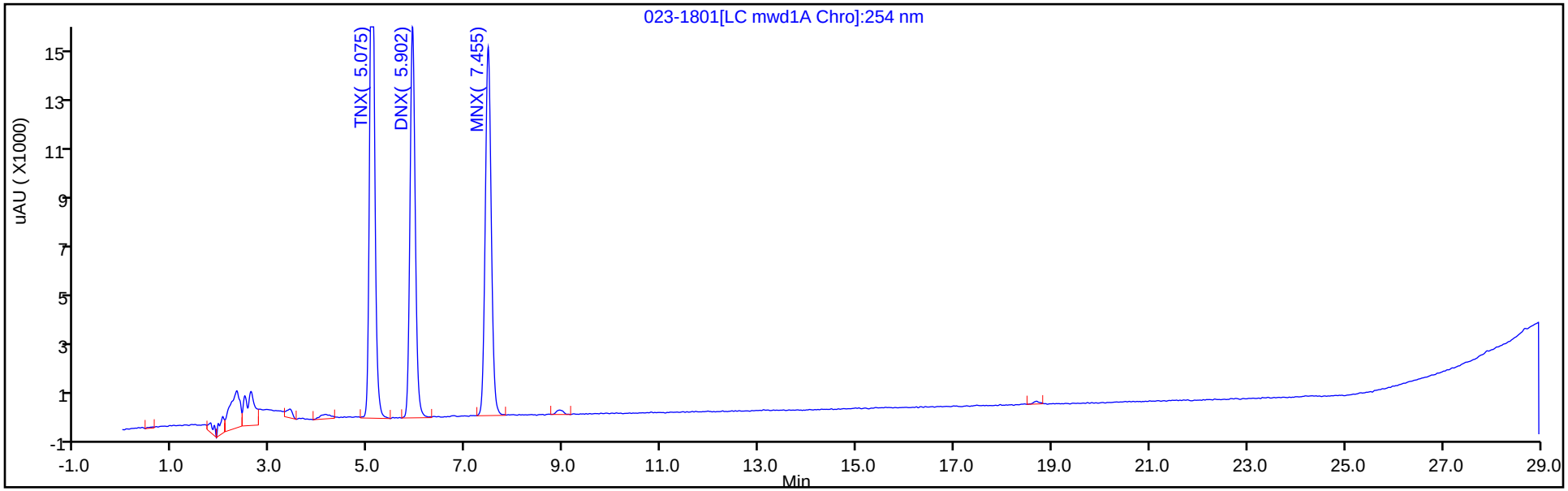
Report Date: 04-May-2021 13:43:18 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

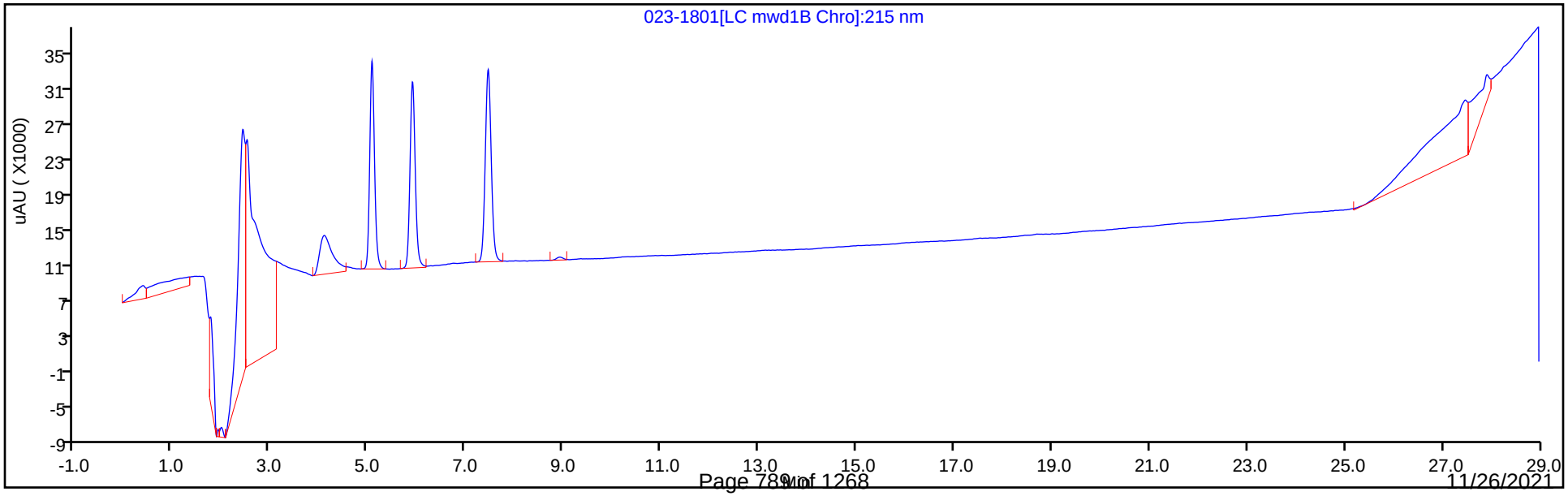
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\023-1801.D

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

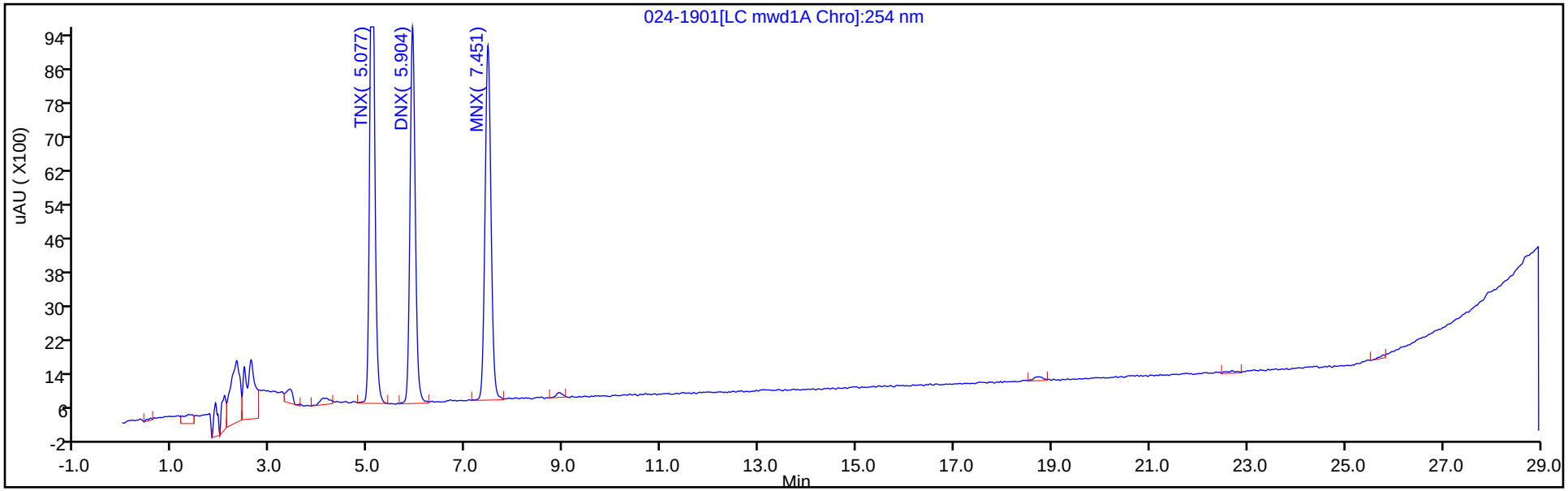
Report Date: 04-May-2021 13:43:18 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

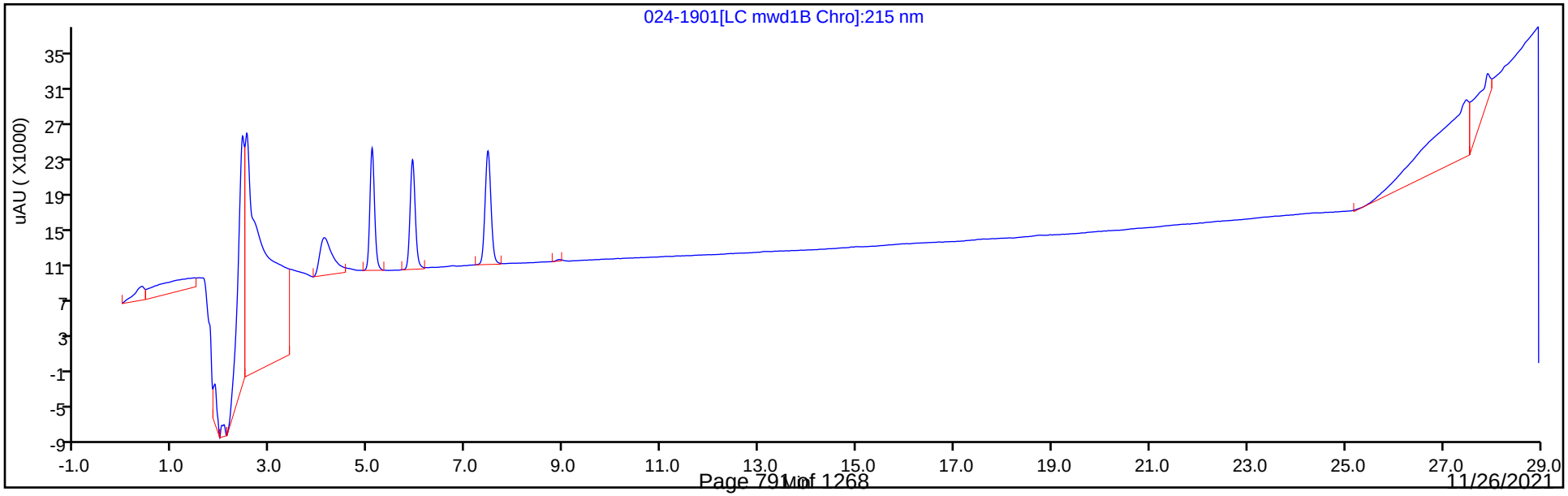
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\024-1901.D

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

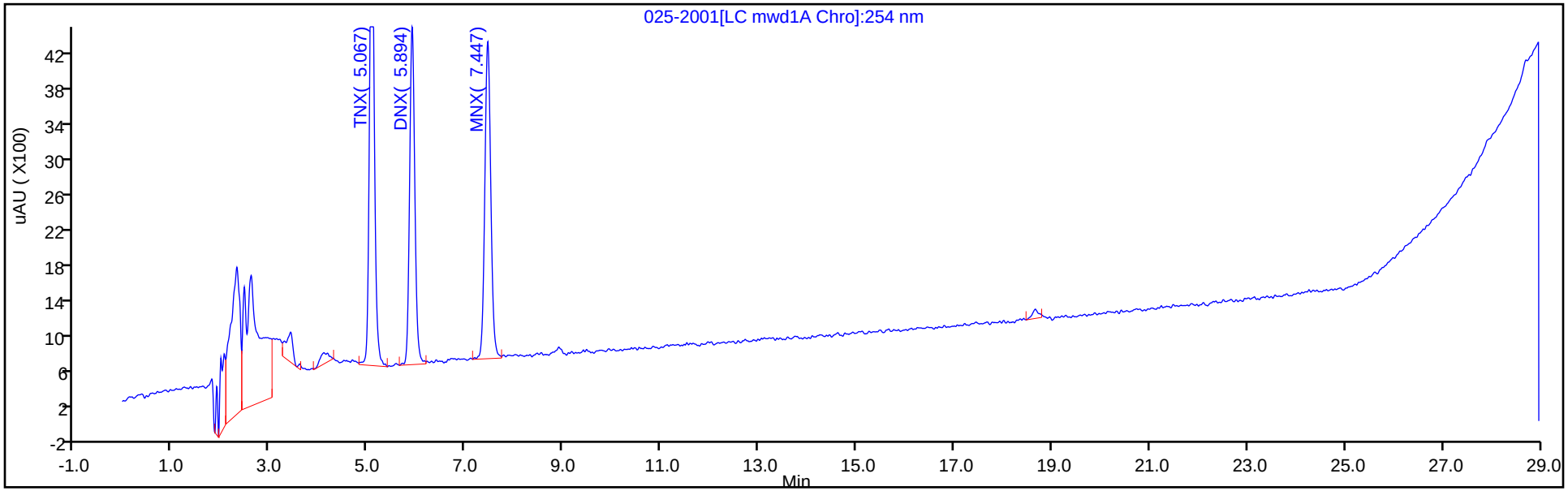
Report Date: 04-May-2021 13:43:19 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

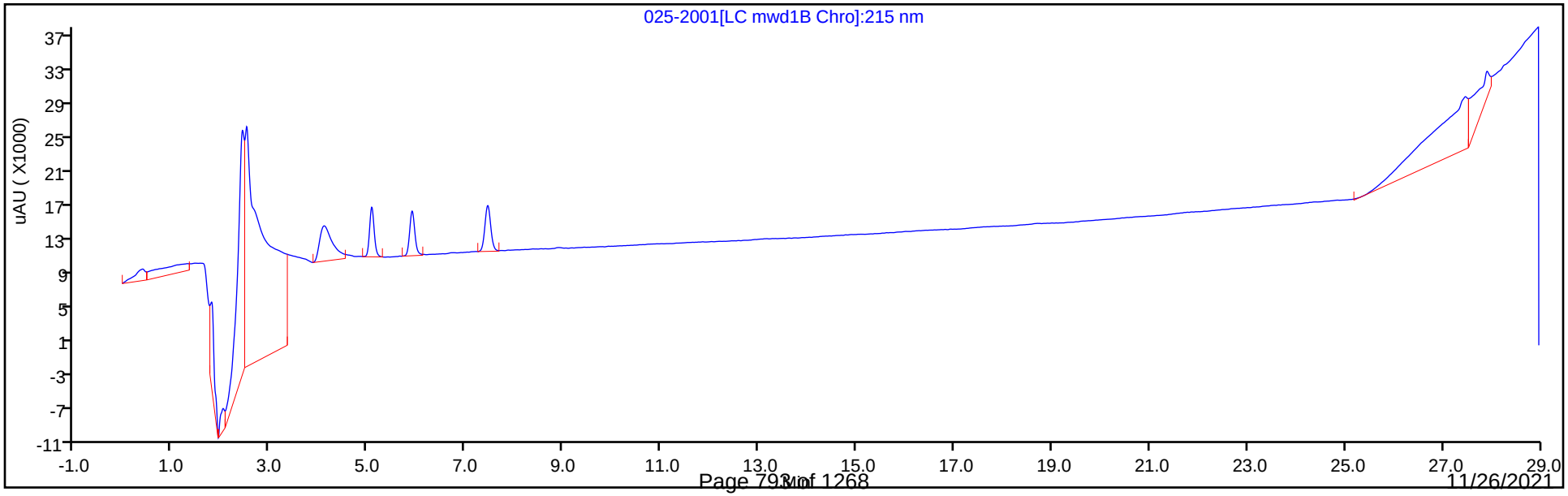
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\025-2001.D

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

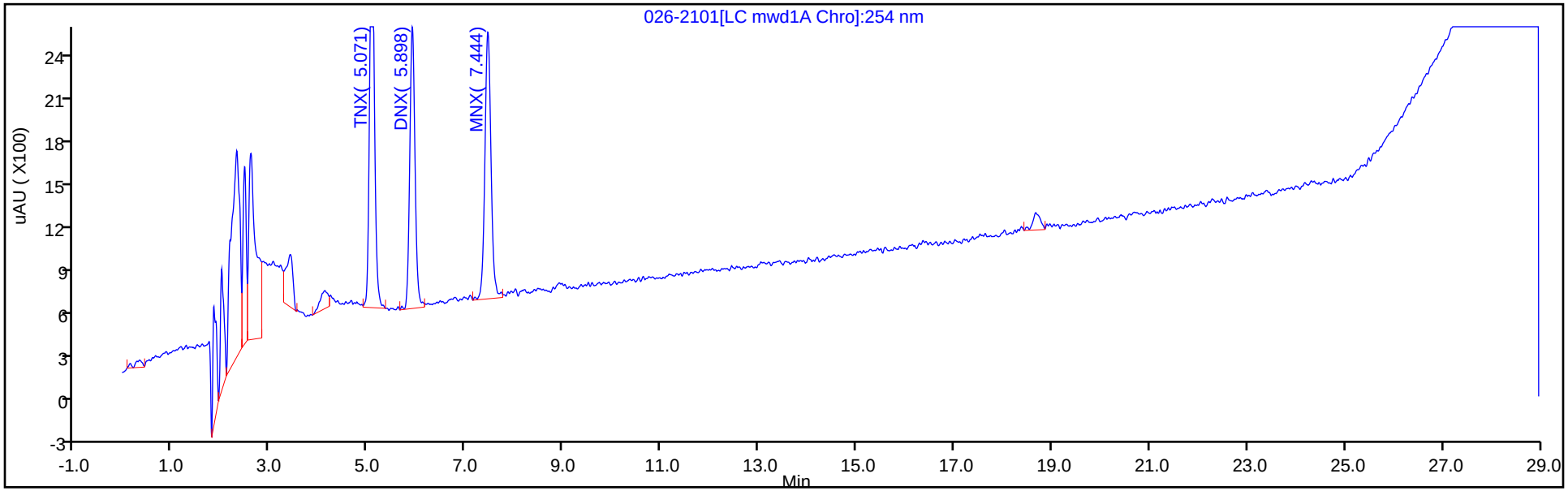
Report Date: 04-May-2021 13:43:19 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

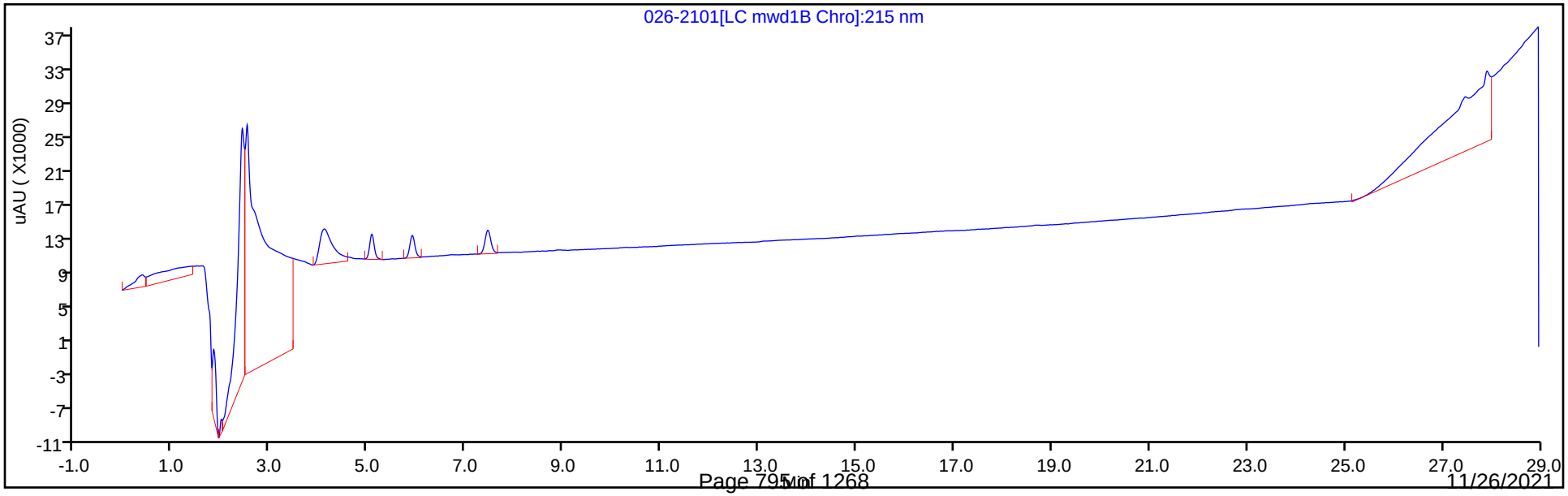
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\026-2101.D

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

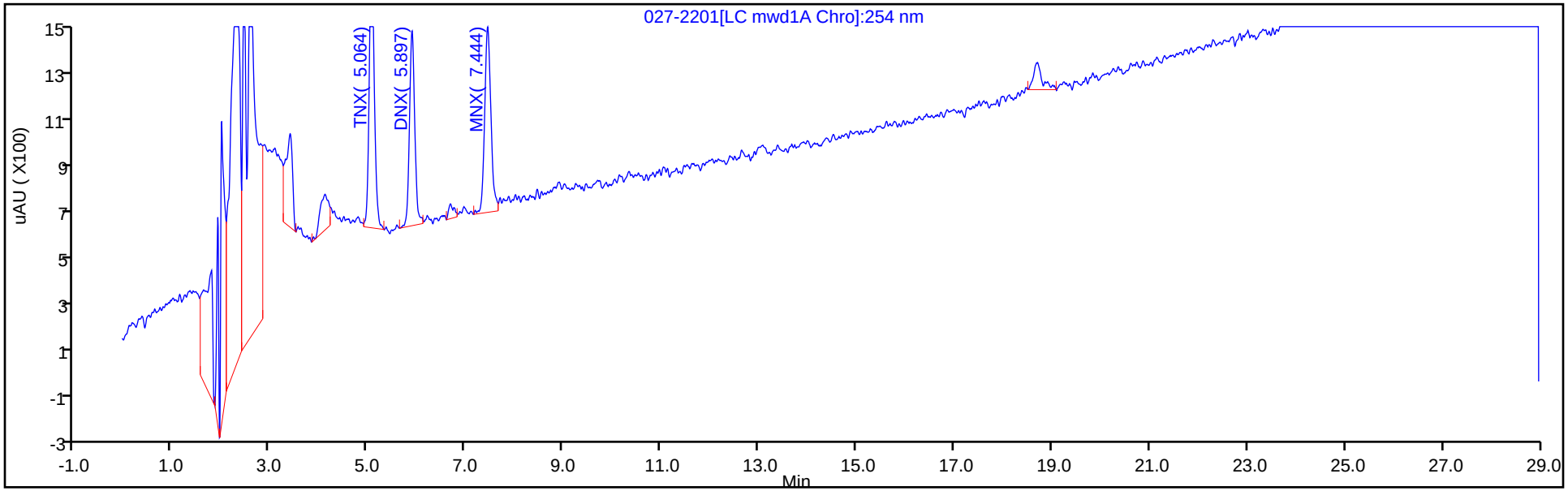
Report Date: 04-May-2021 13:43:20 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

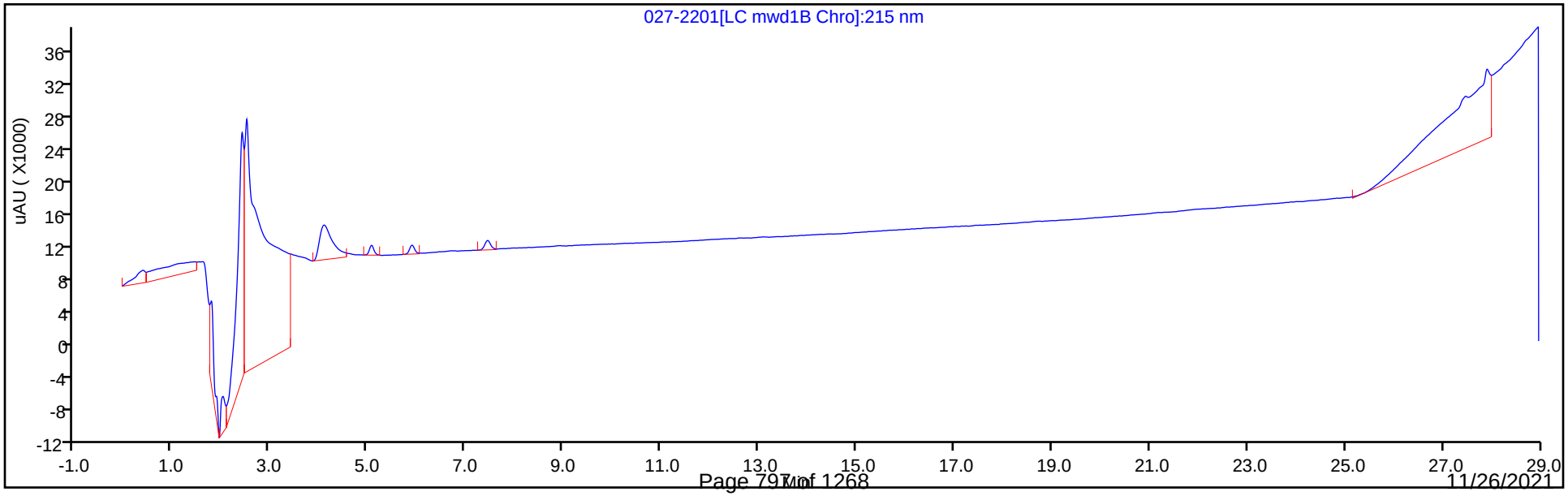
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\027-2201.D

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

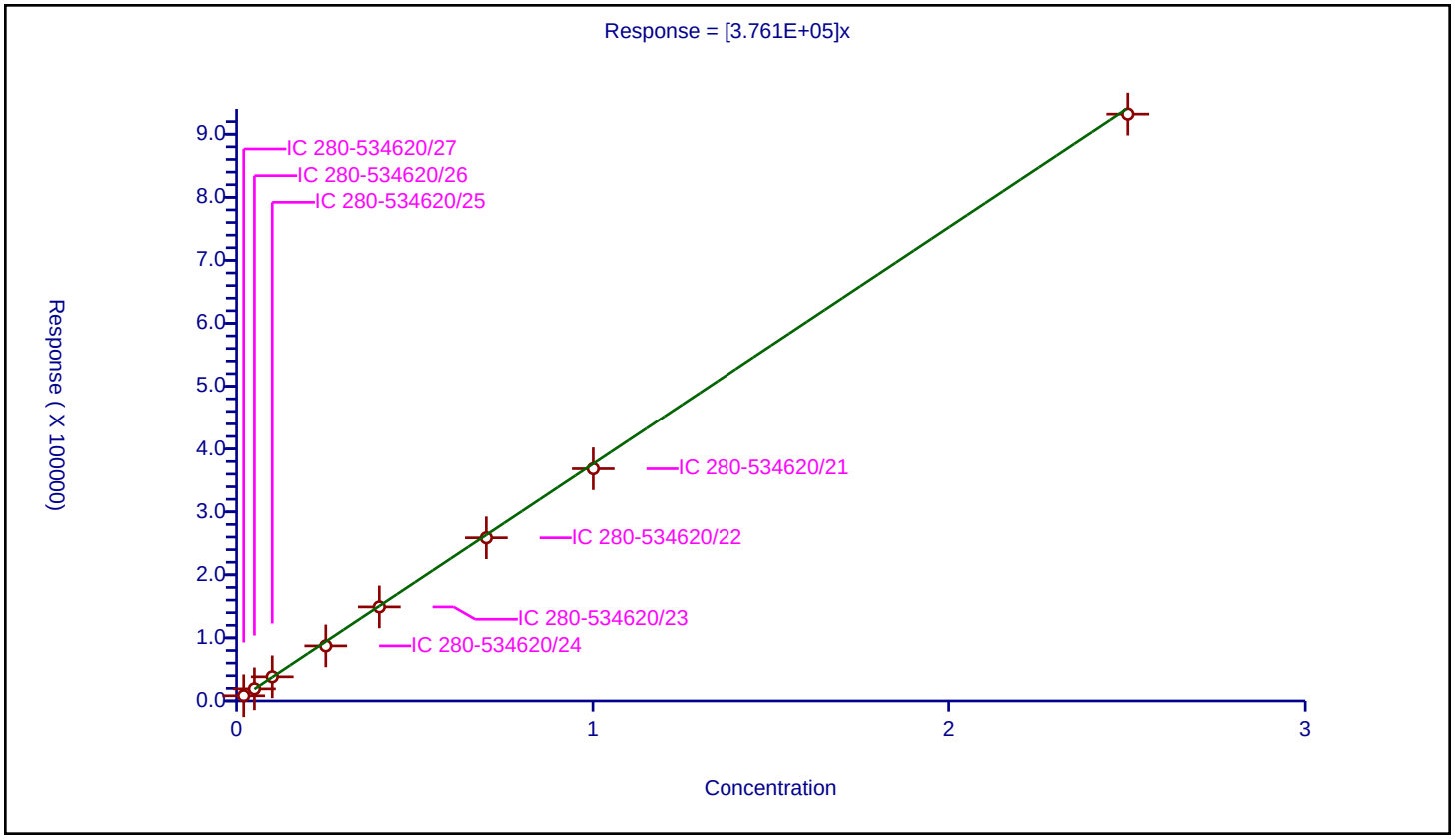
Curve Coefficients

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

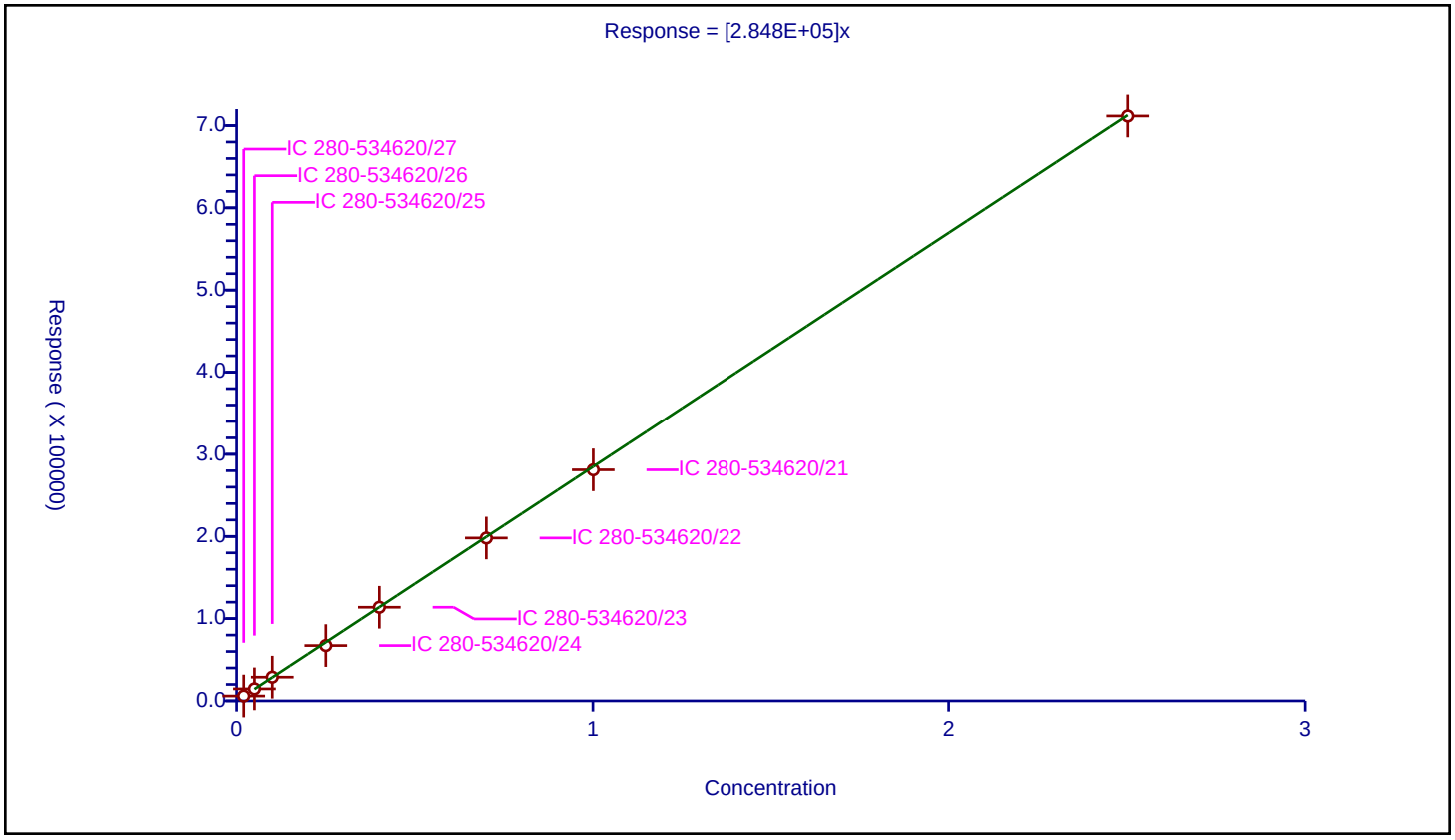
Curve Coefficients

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

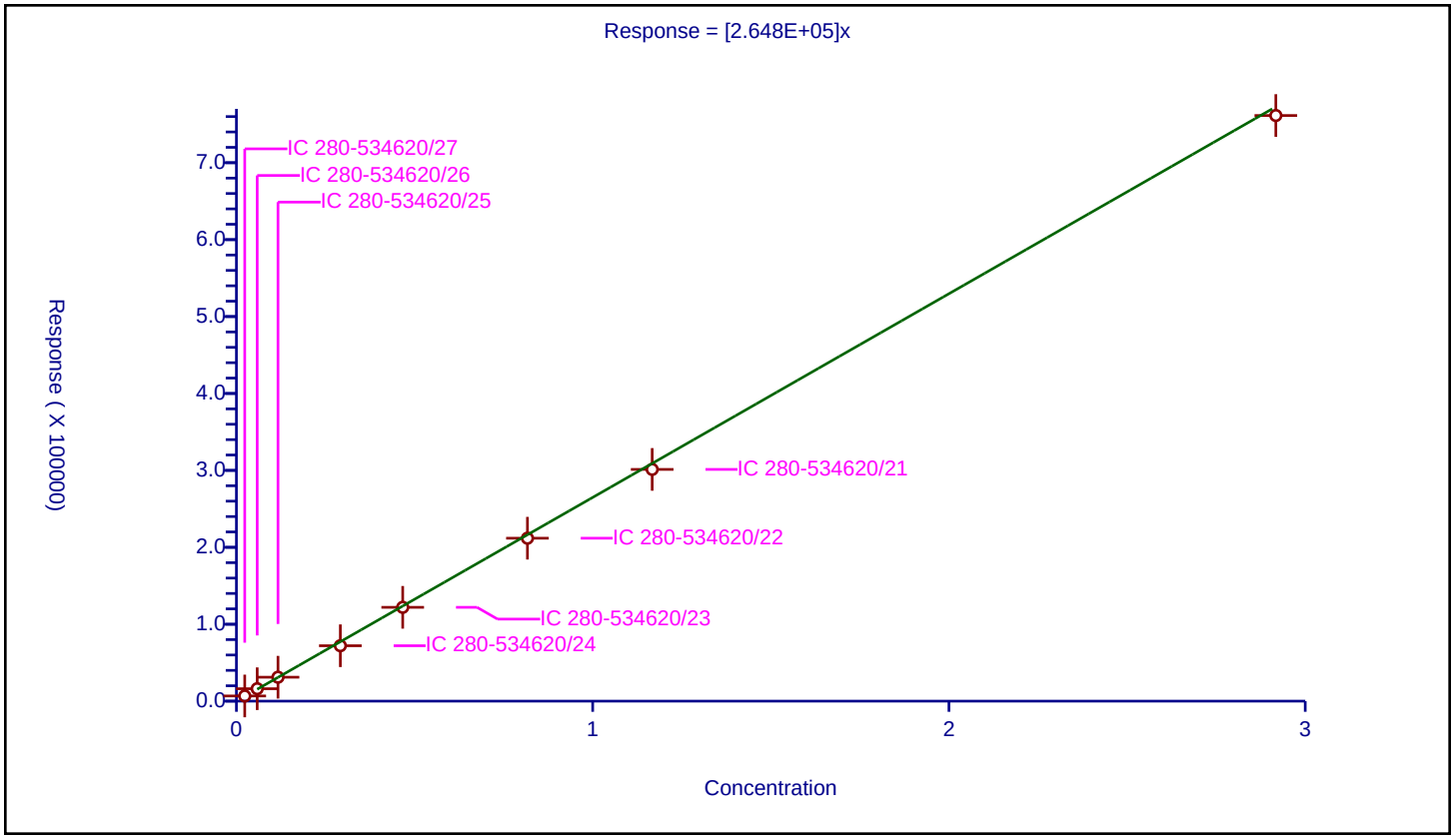
Curve Coefficients

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.: 280-155225-1

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.: 280-155225-1

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

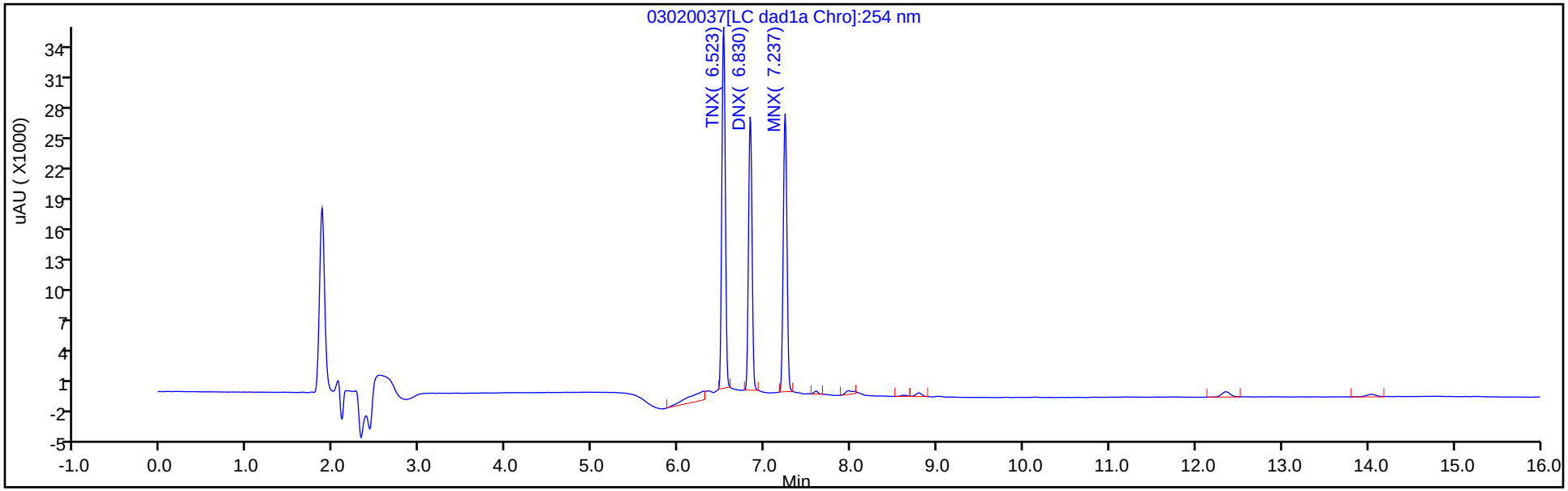
Report Date: 03-Mar-2021 13:36:35 Chrom Revision: 2.3 05-Feb-2021 00:13:28

Eurofins TestAmerica, Denver

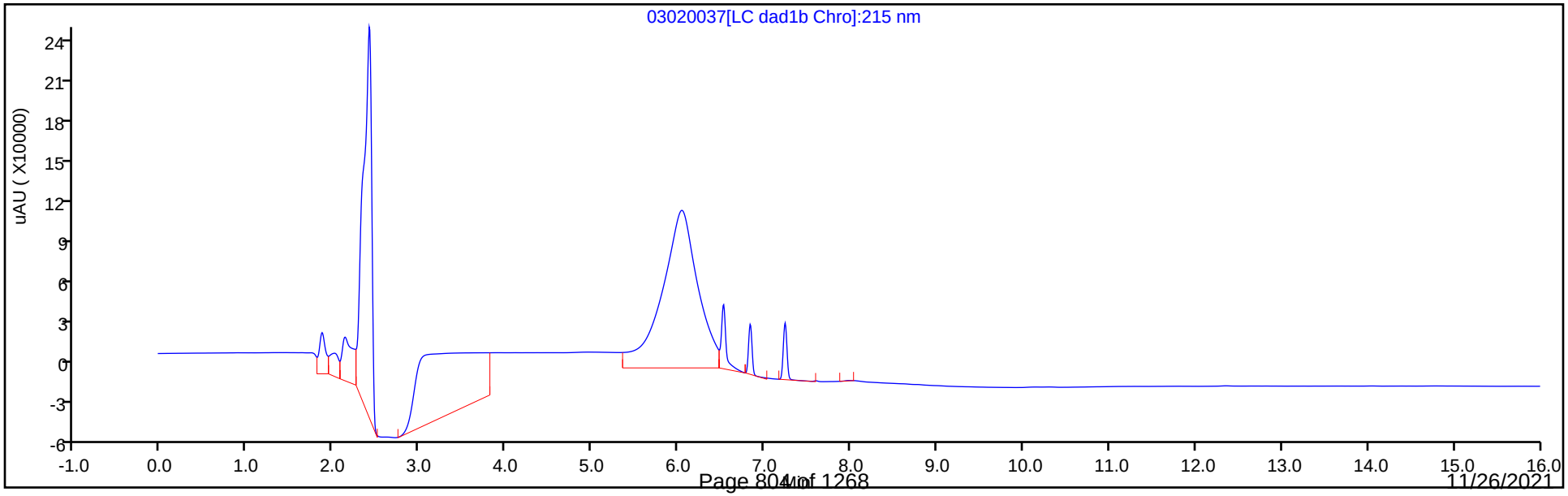
Data File: \\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020037.d

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

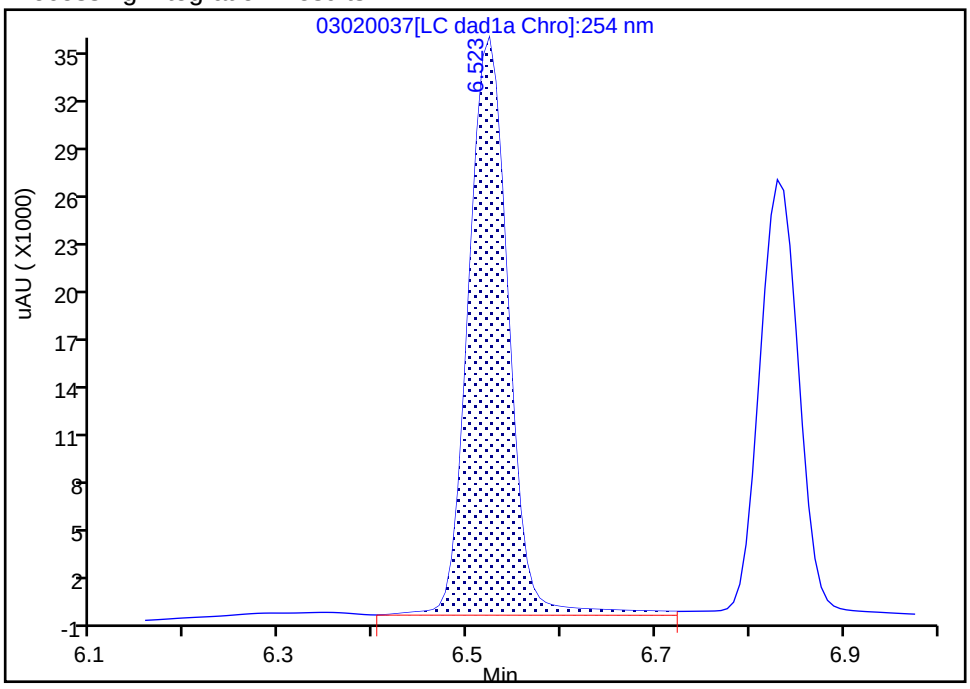
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020037.d				
Injection Date:	03-Mar-2021 02:53:28	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:		ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

2 TNX, CAS: 13980-04-6

Signal: 1

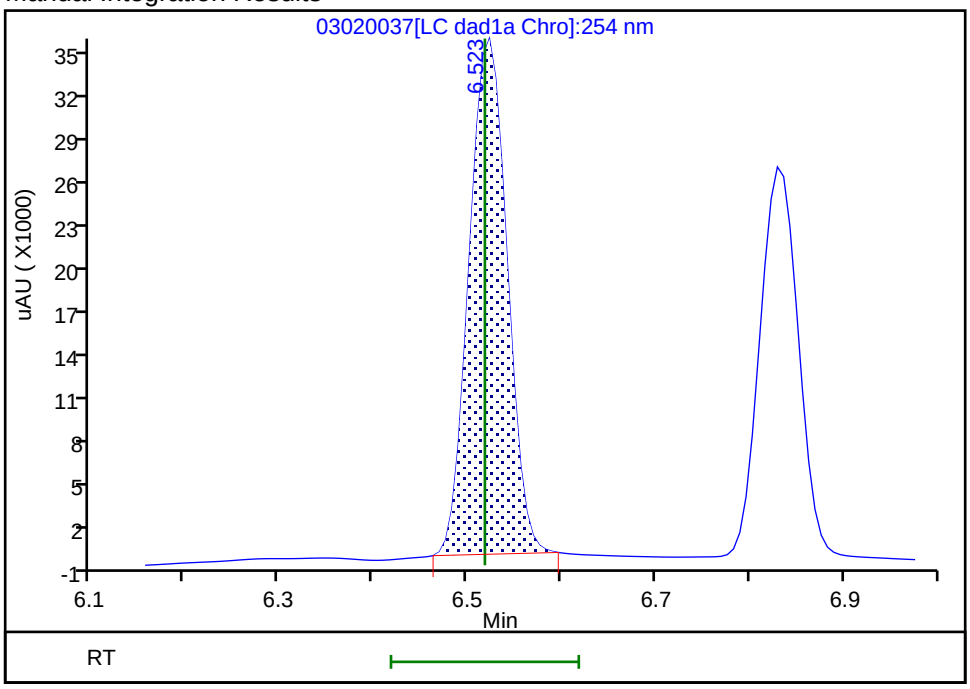
Processing Integration Results

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

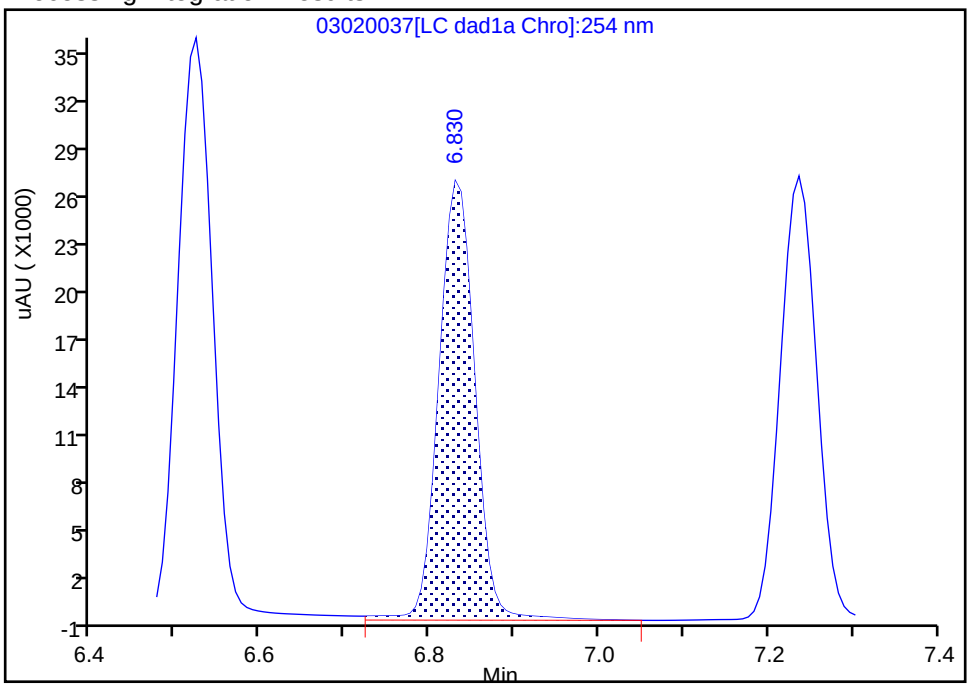
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020037.d				
Injection Date:	03-Mar-2021 02:53:28	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:		ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

5 DNX, CAS: 80251-29-2

Signal: 1

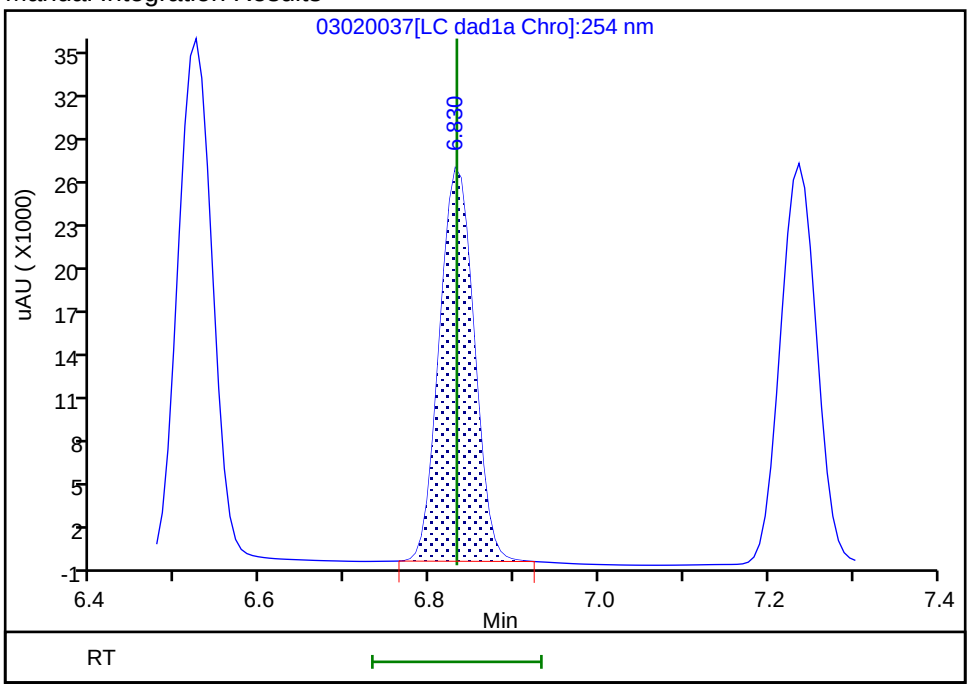
Processing Integration Results

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

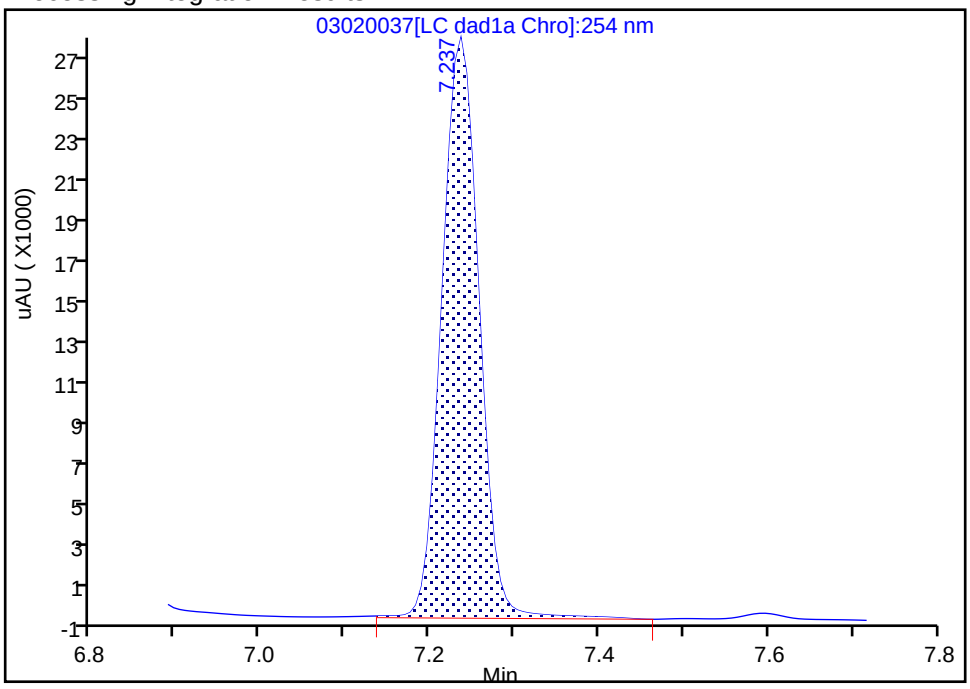
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210302-99486.b\03020037.d				
Injection Date:	03-Mar-2021 02:53:28	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV DMT				
Client ID:					
Operator ID:		ALS Bottle#:	37	Worklist Smp#:	37
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 MNX, CAS: 5755-27-1

Signal: 1

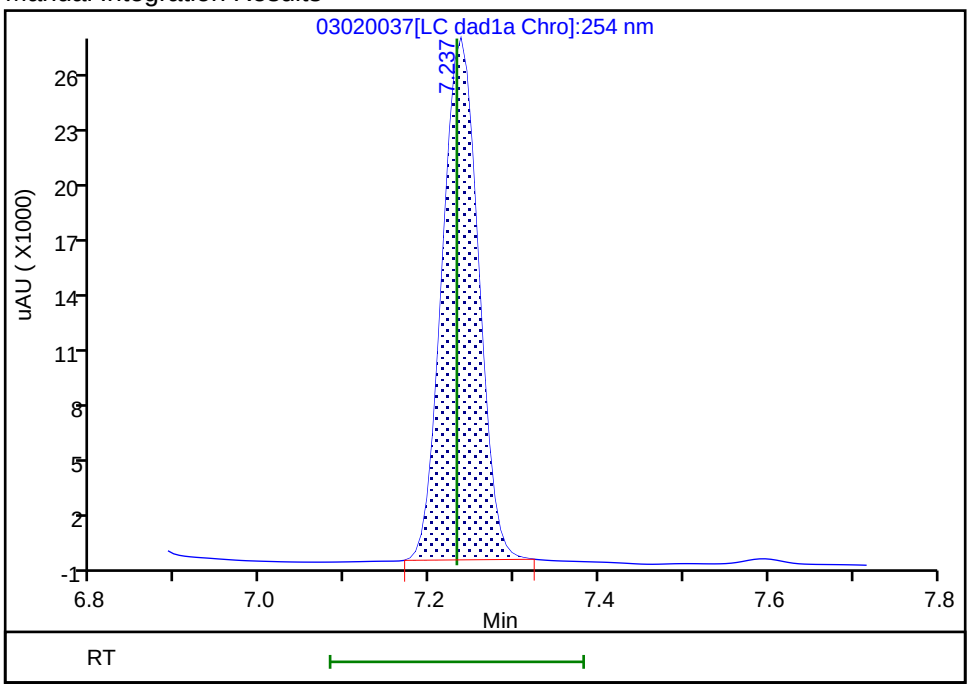
Processing Integration Results

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.: 280-155225-1

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.: 280-155225-1

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

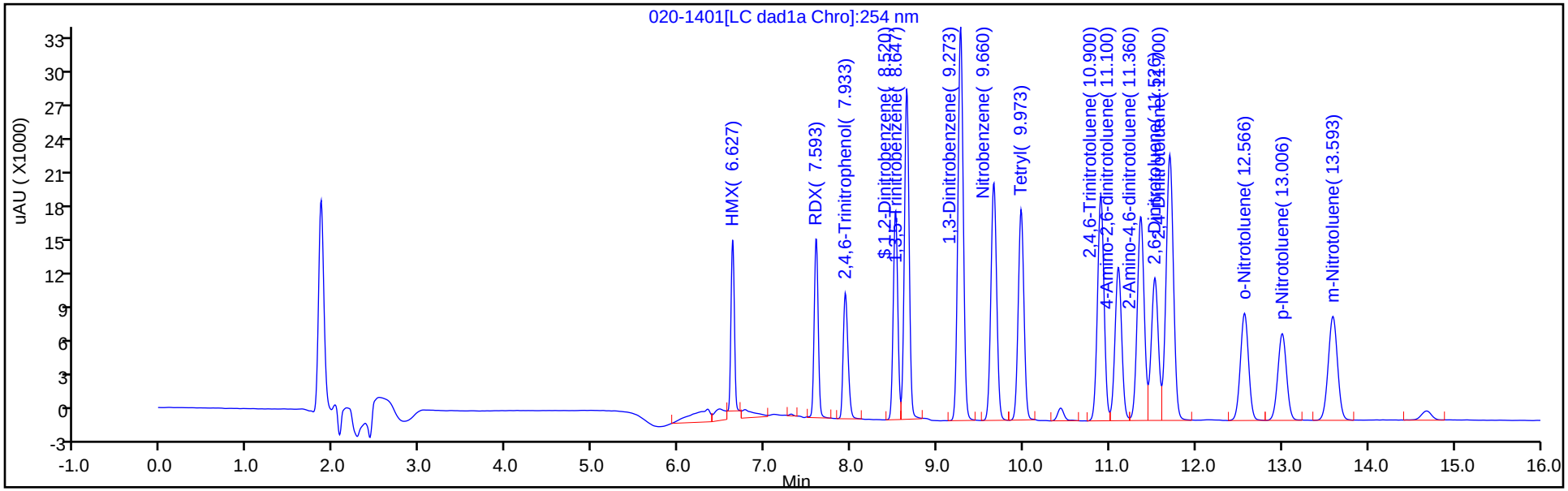
Report Date: 04-May-2021 13:29:19 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

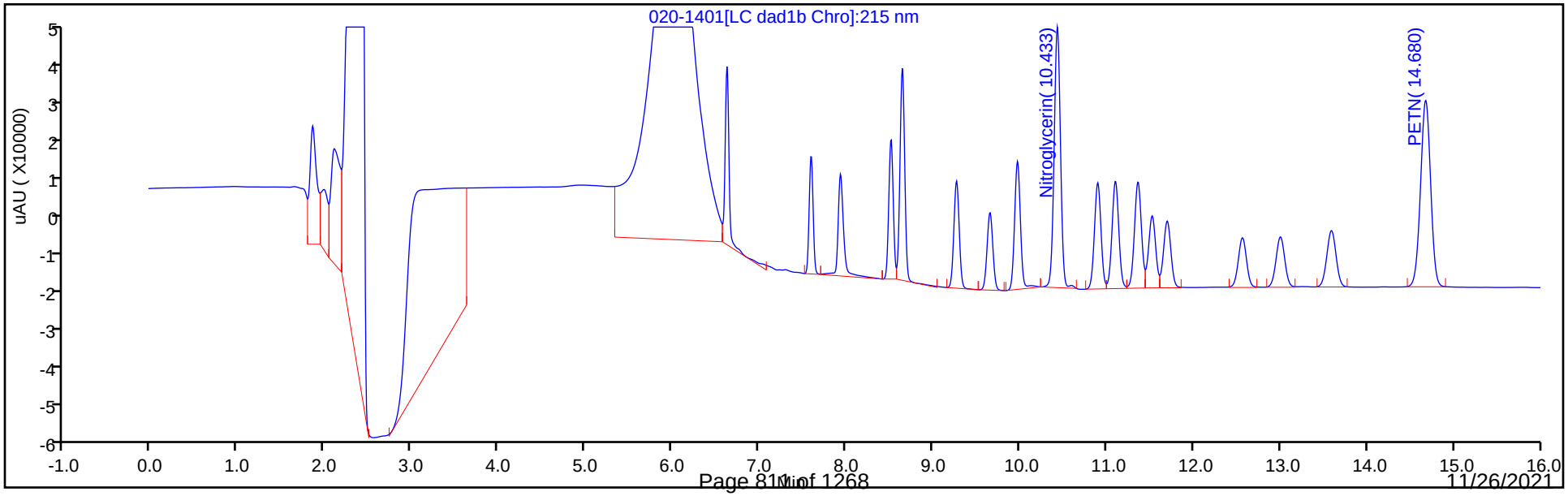
Data File: \\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\020-1401.d

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

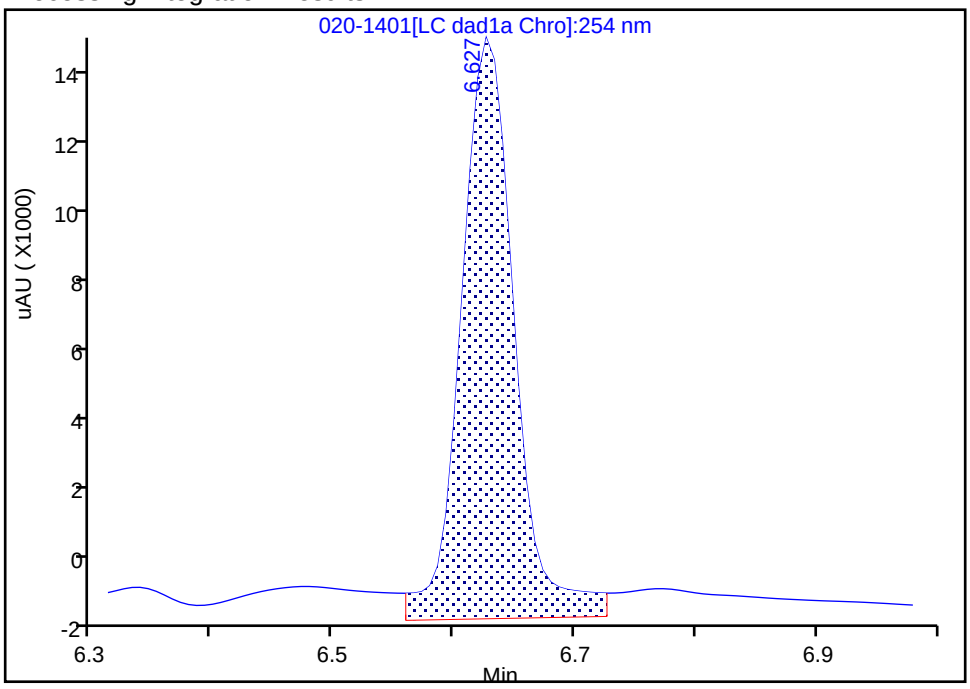
Data File:	\\chromfs\denver\chromdata\chhplc_x\20210501-101094.b\020-1401.d				
Injection Date:	01-May-2021 21:27:37	Instrument ID:	CHHPLC_X3		
Lims ID:	ICV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 HMX, CAS: 2691-41-0

Signal: 1

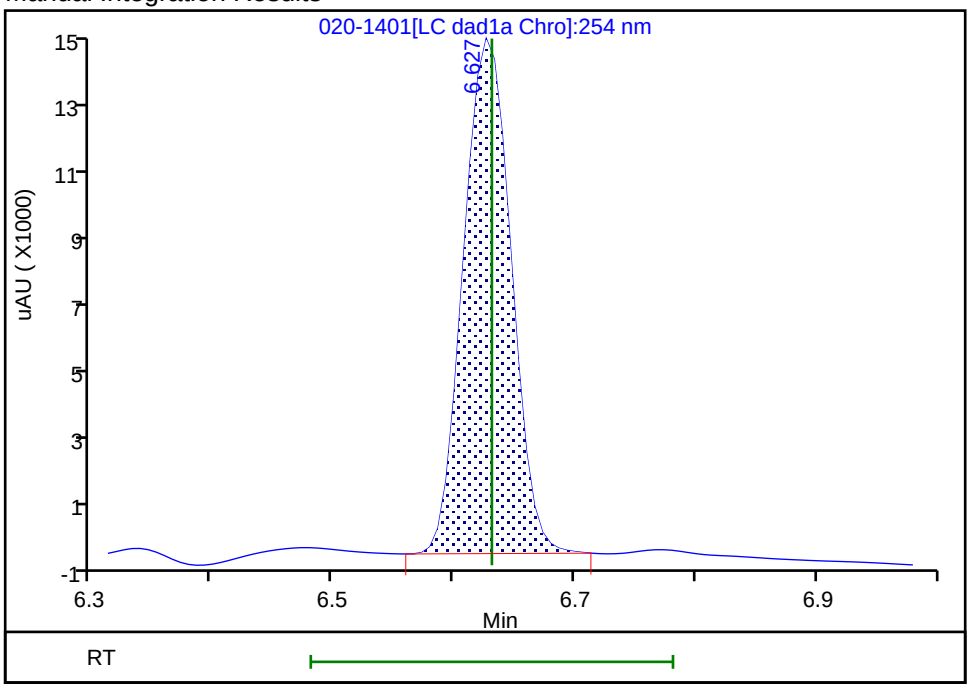
Processing Integration Results

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.: 280-155225-1

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.: 280-155225-1

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

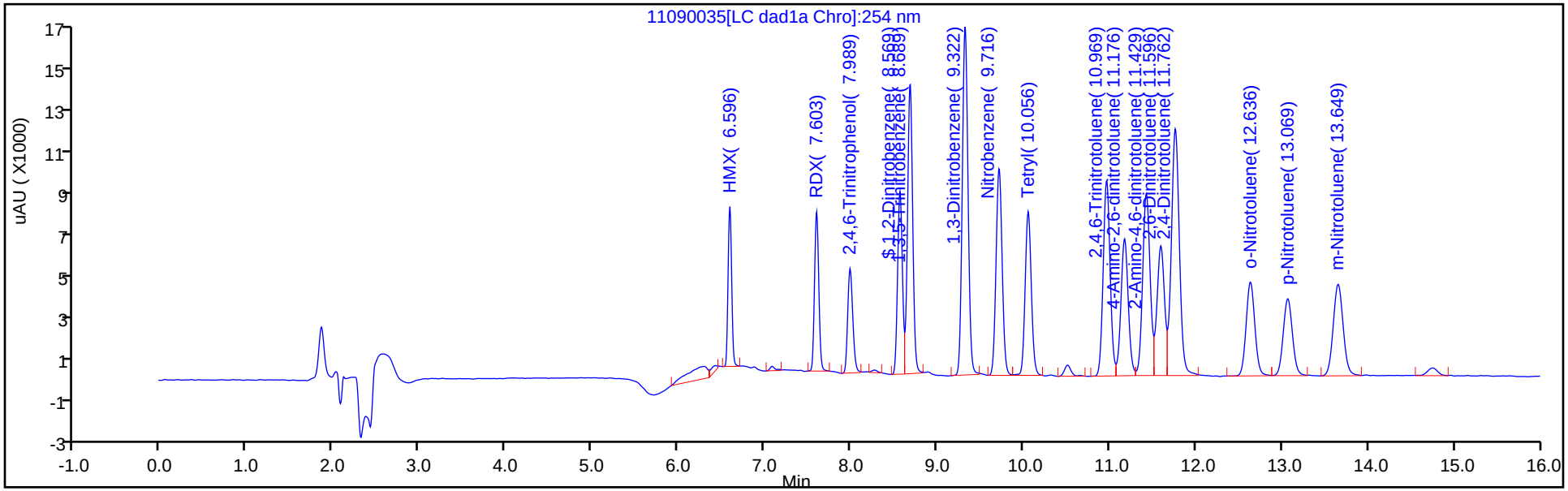
Report Date: 10-Nov-2021 12:59:09 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

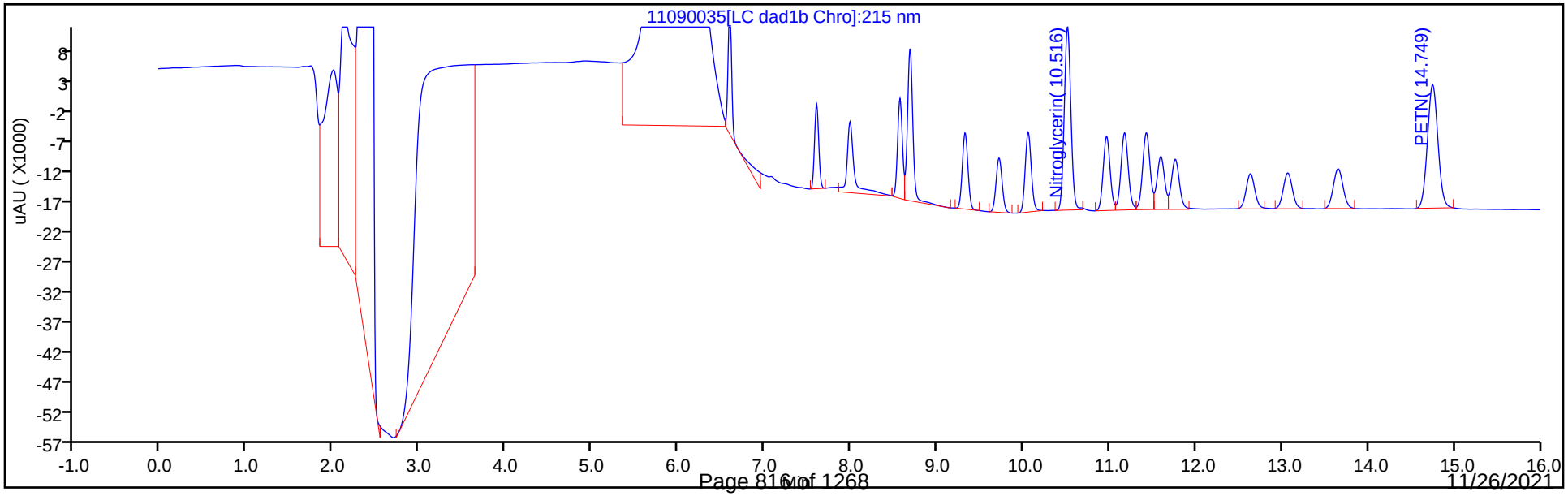
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090035.d

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.: 280-155225-1

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.: 280-155225-1

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

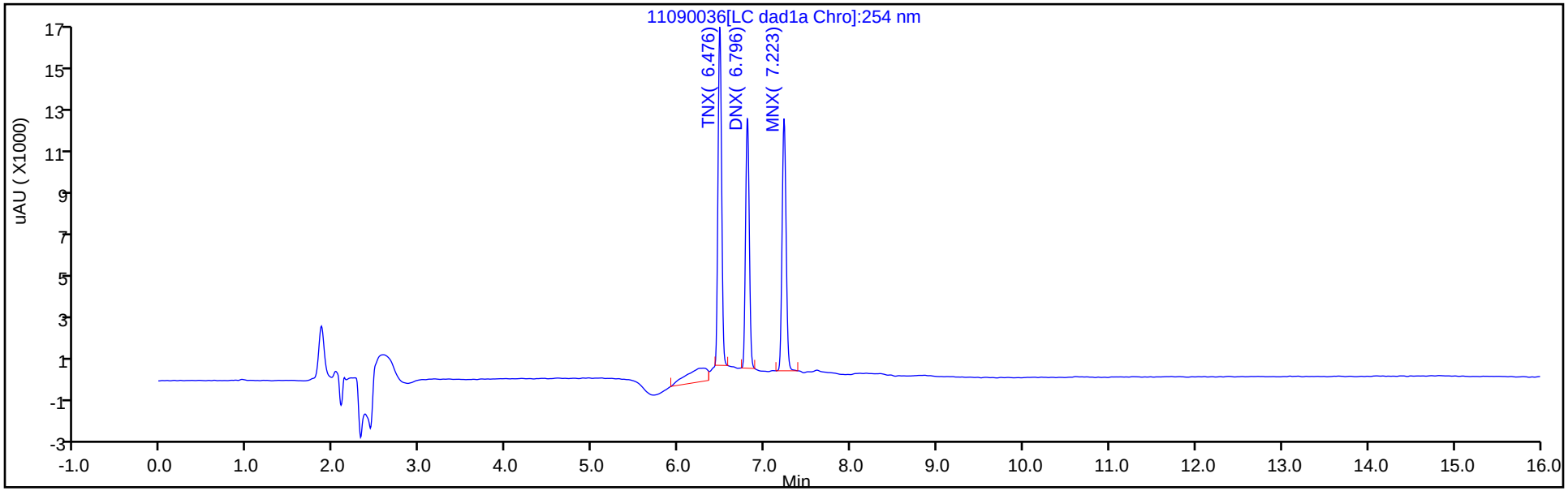
Report Date: 10-Nov-2021 12:59:08 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

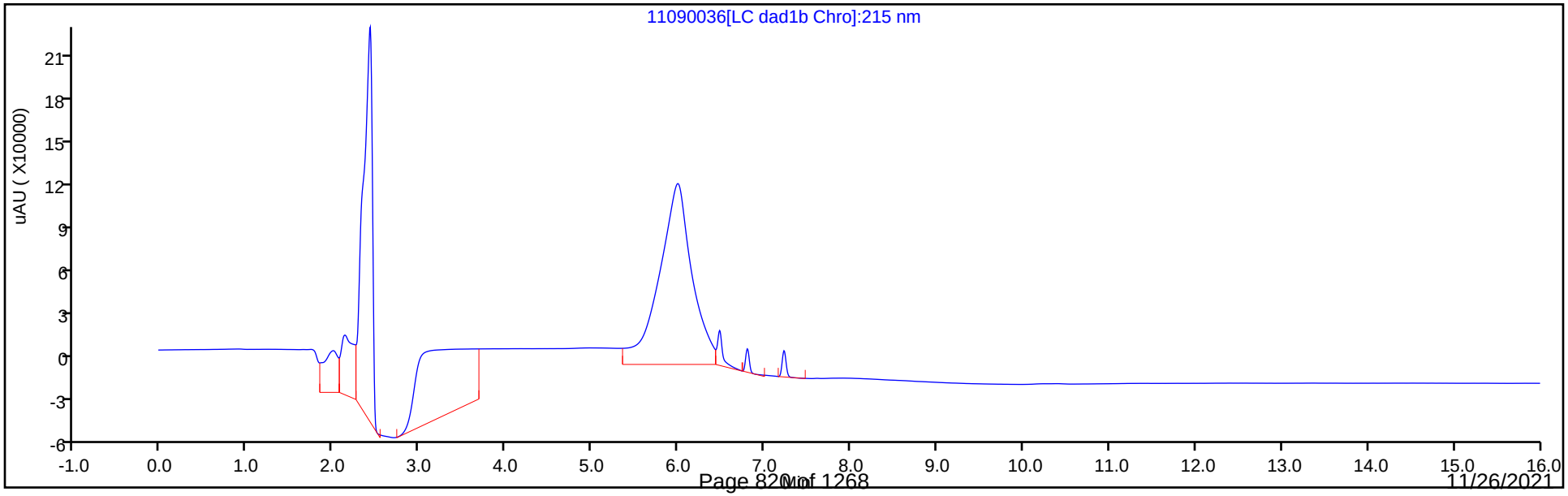
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090036.d

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

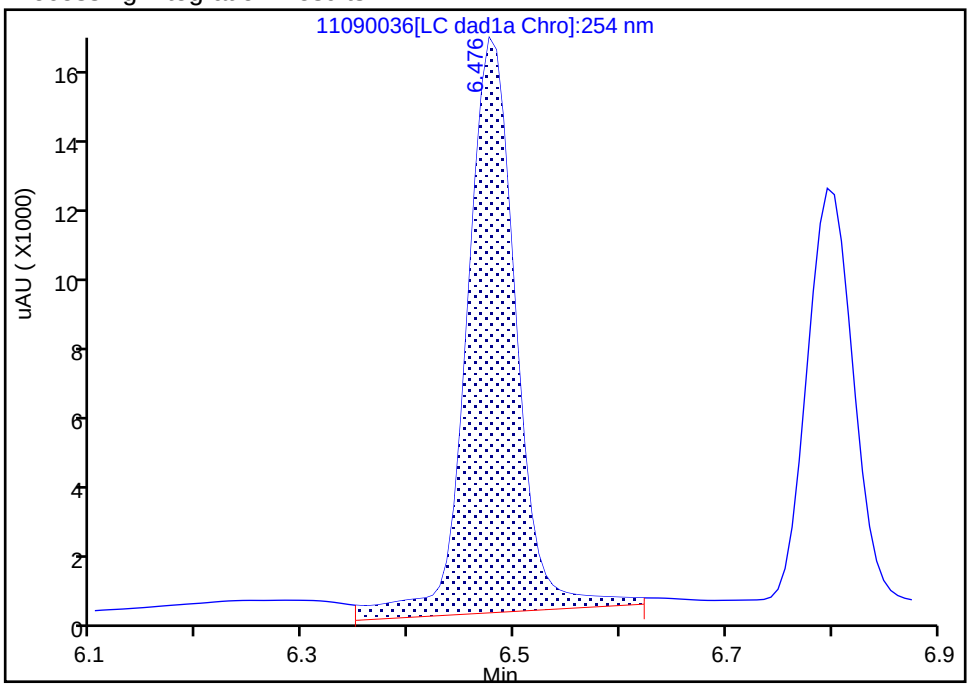
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090036.d				
Injection Date:	10-Nov-2021 01:41:18	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

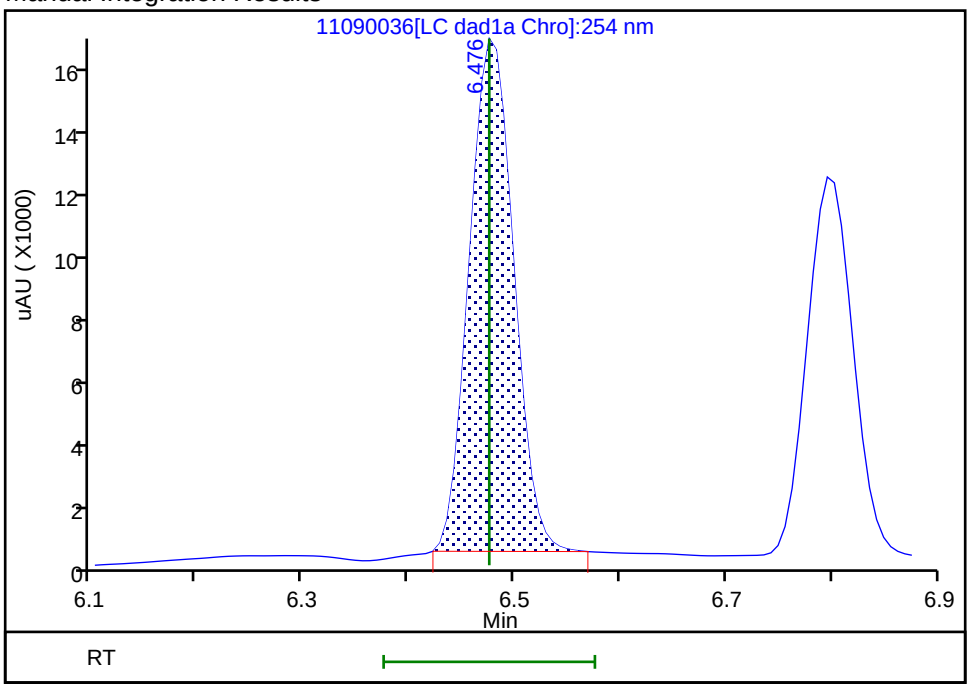
Processing Integration Results

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

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

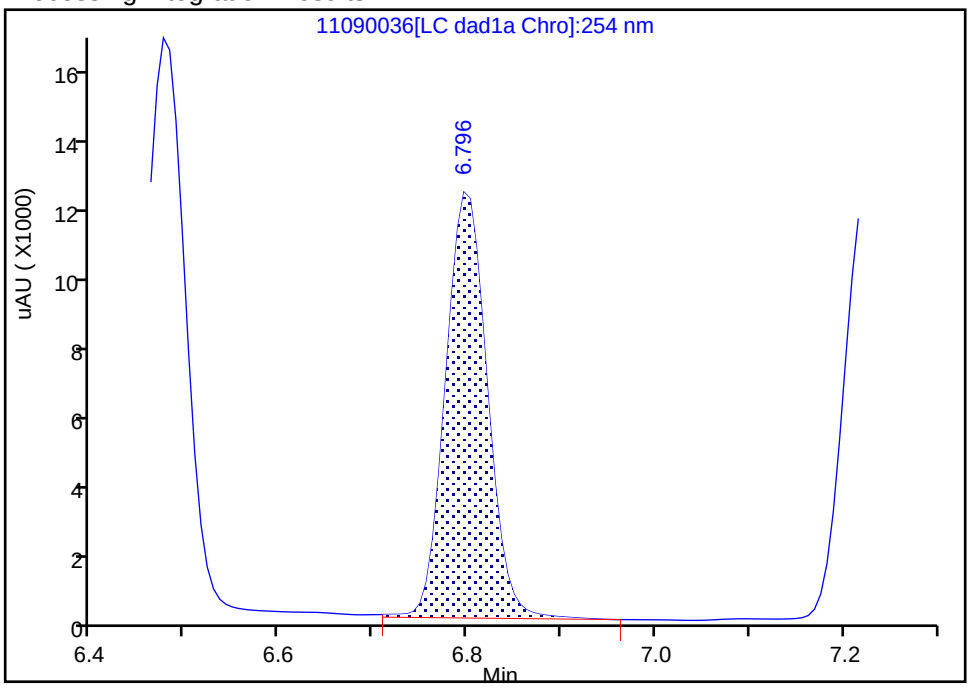
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090036.d				
Injection Date:	10-Nov-2021 01:41:18	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	36
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

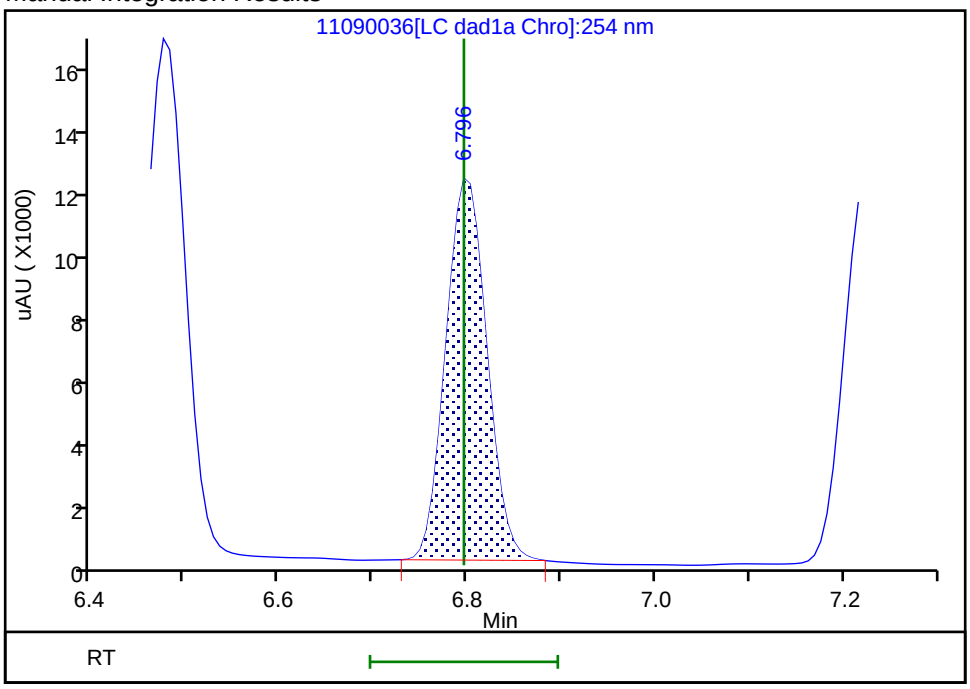
Processing Integration Results

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.: 280-155225-1

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.: 280-155225-1

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

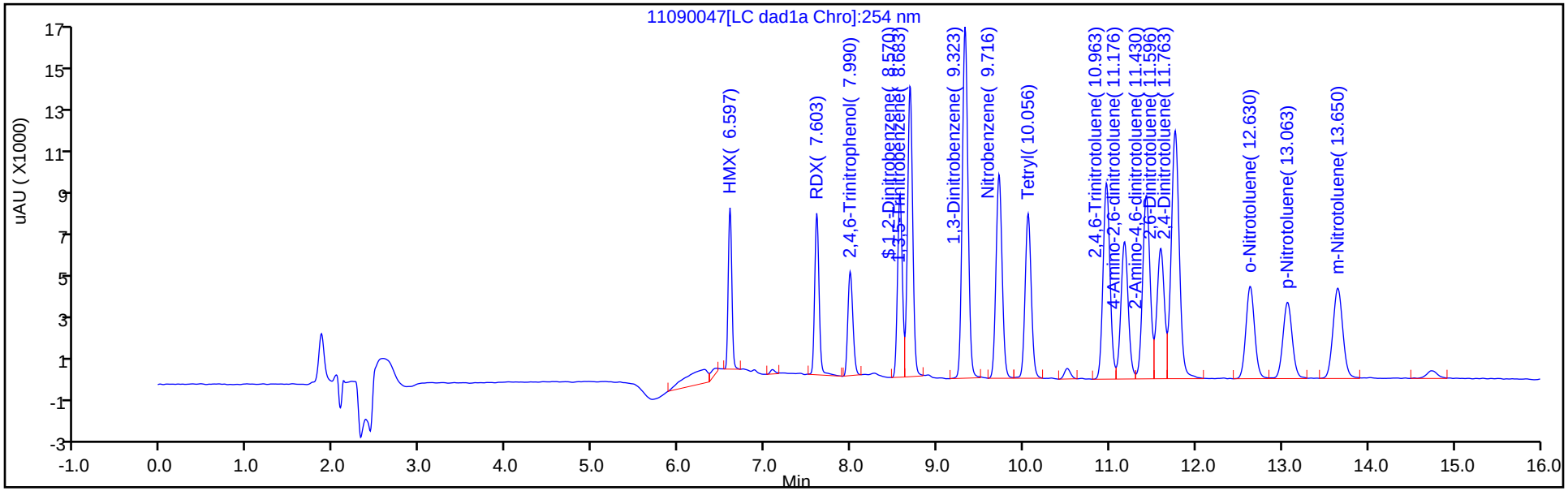
Report Date: 10-Nov-2021 12:59:02 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

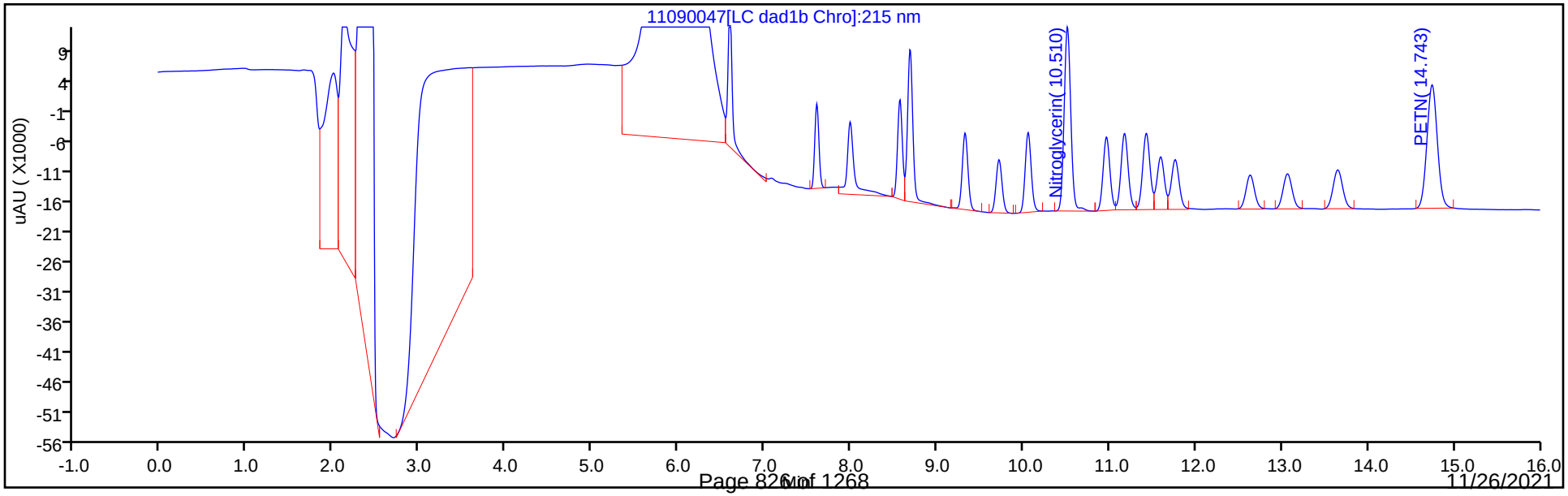
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090047.d

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.: 280-155225-1

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.: 280-155225-1

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

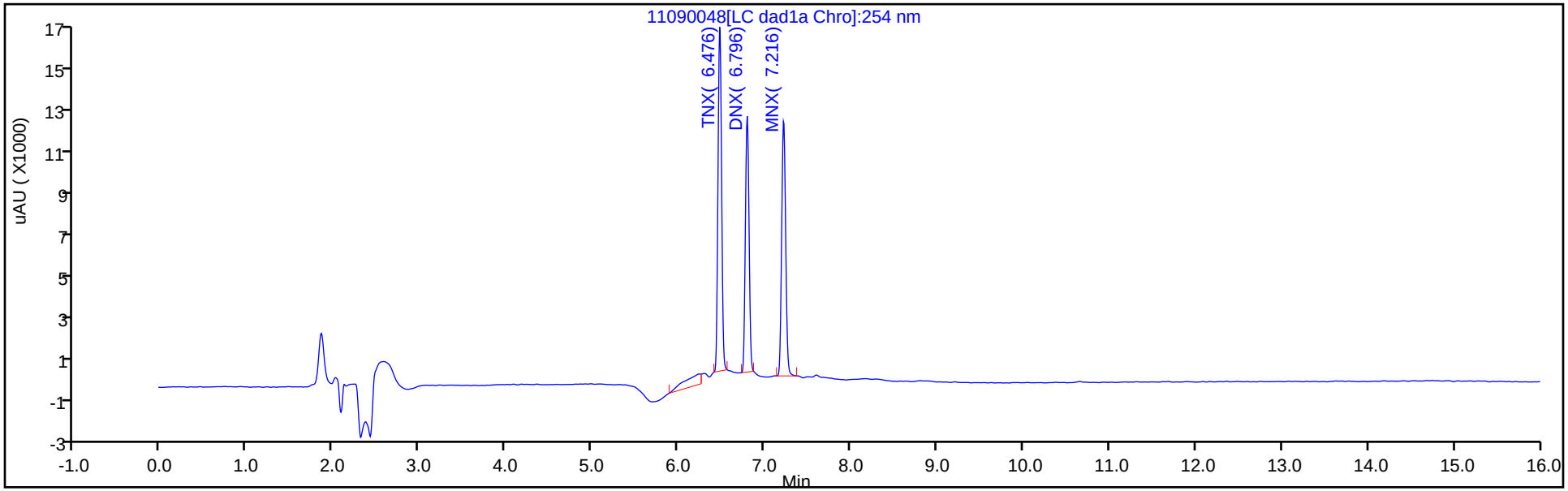
Report Date: 10-Nov-2021 12:59:02 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

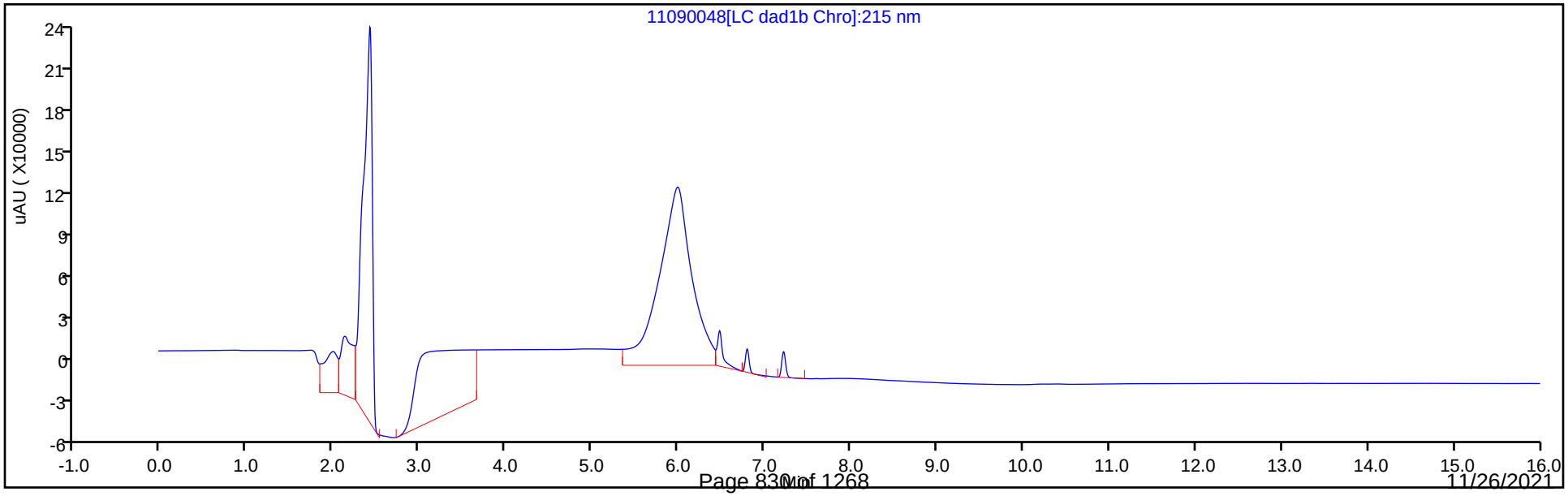
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090048.d

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

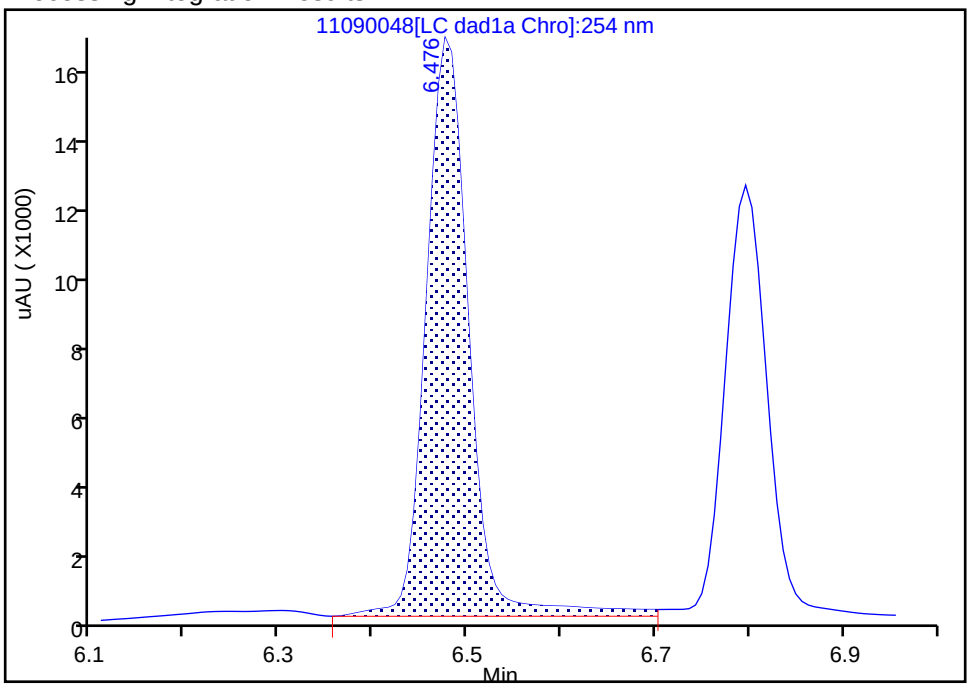
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090048.d				
Injection Date:	10-Nov-2021 06:16:27	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

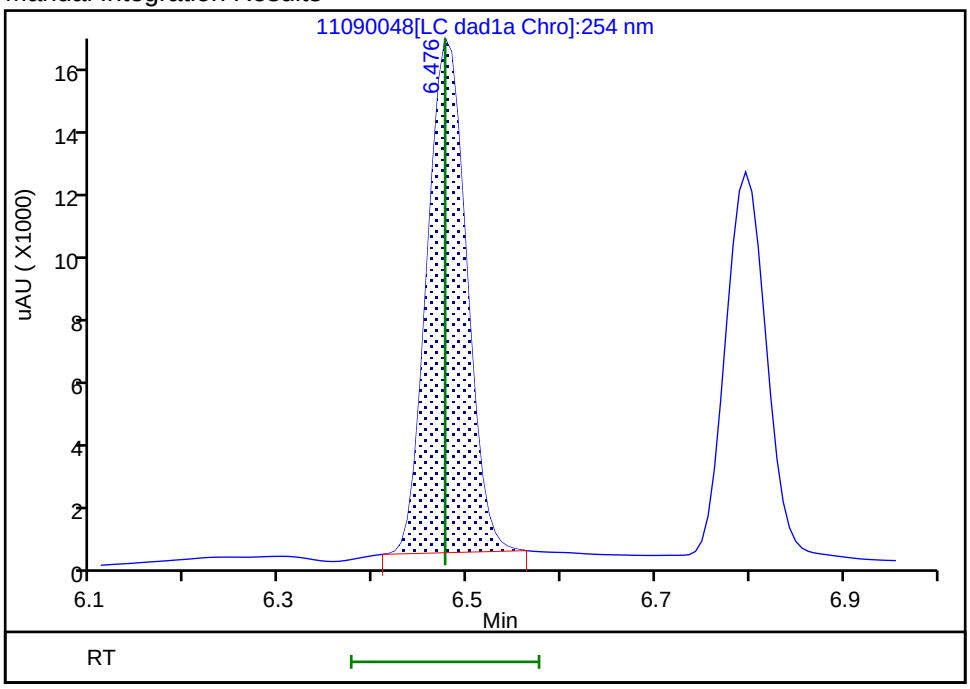
Processing Integration Results

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

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

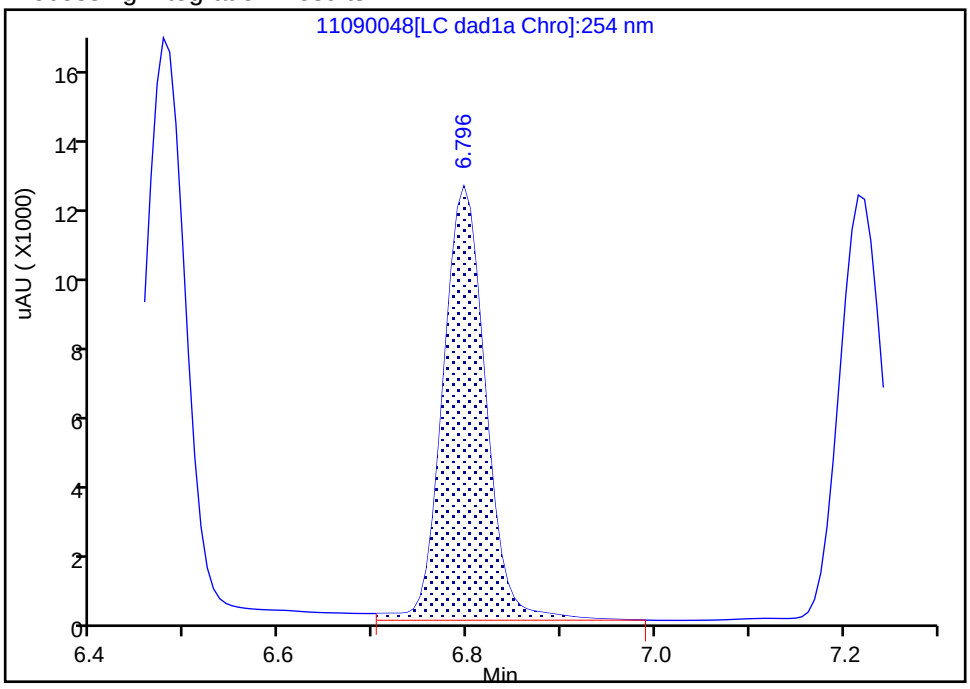
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090048.d				
Injection Date:	10-Nov-2021 06:16:27	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	48
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

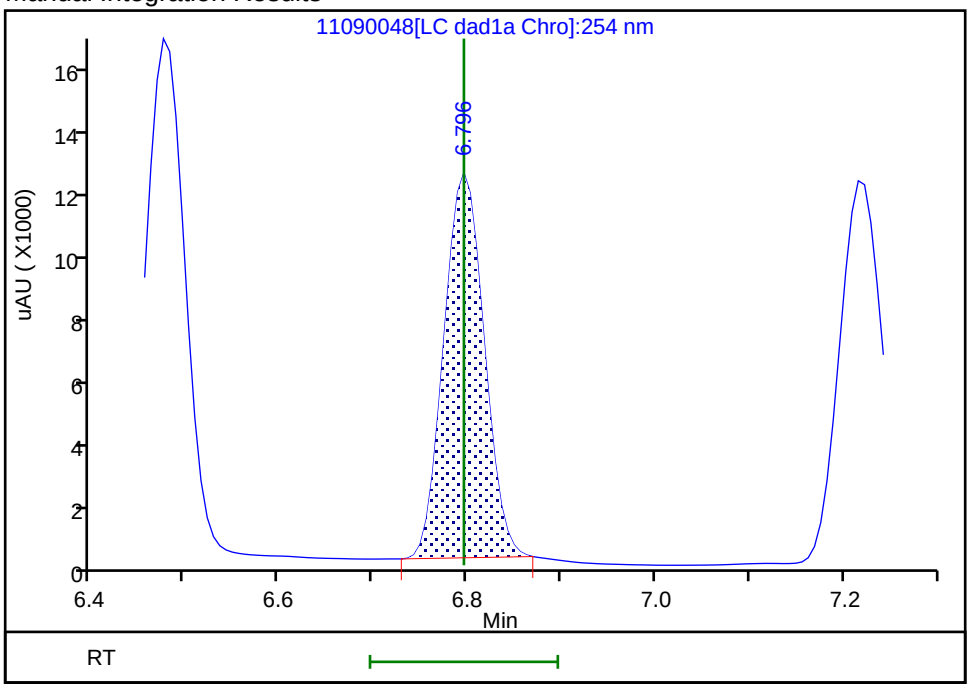
Processing Integration Results

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.: 280-155225-1

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.: 280-155225-1

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

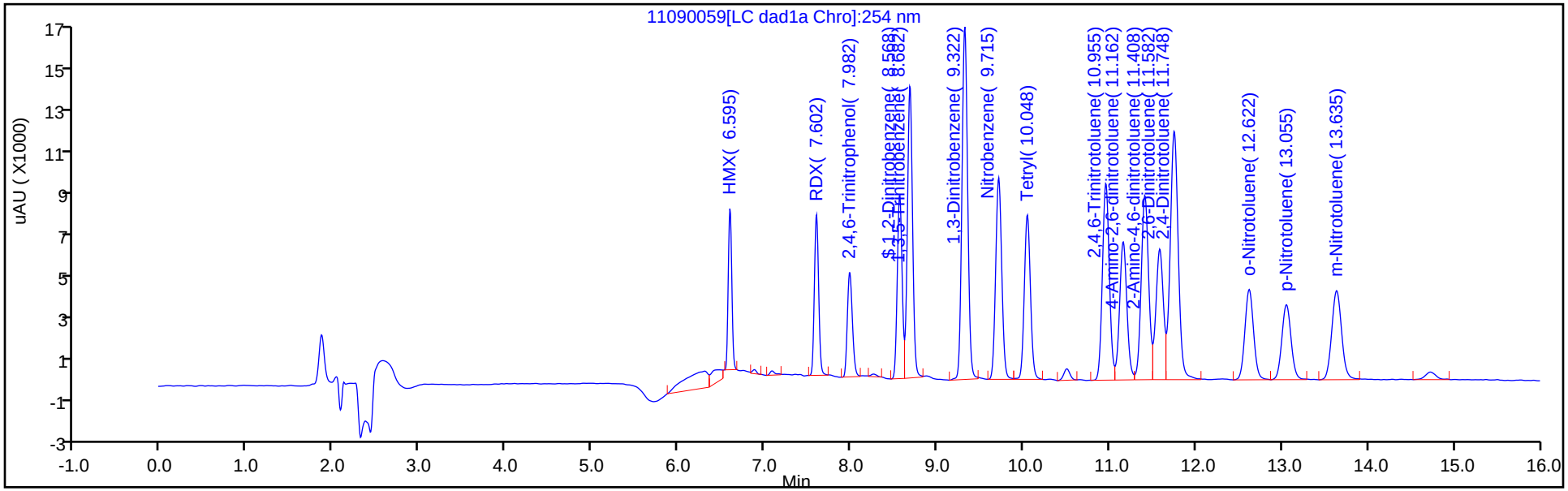
Report Date: 10-Nov-2021 12:58:55 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

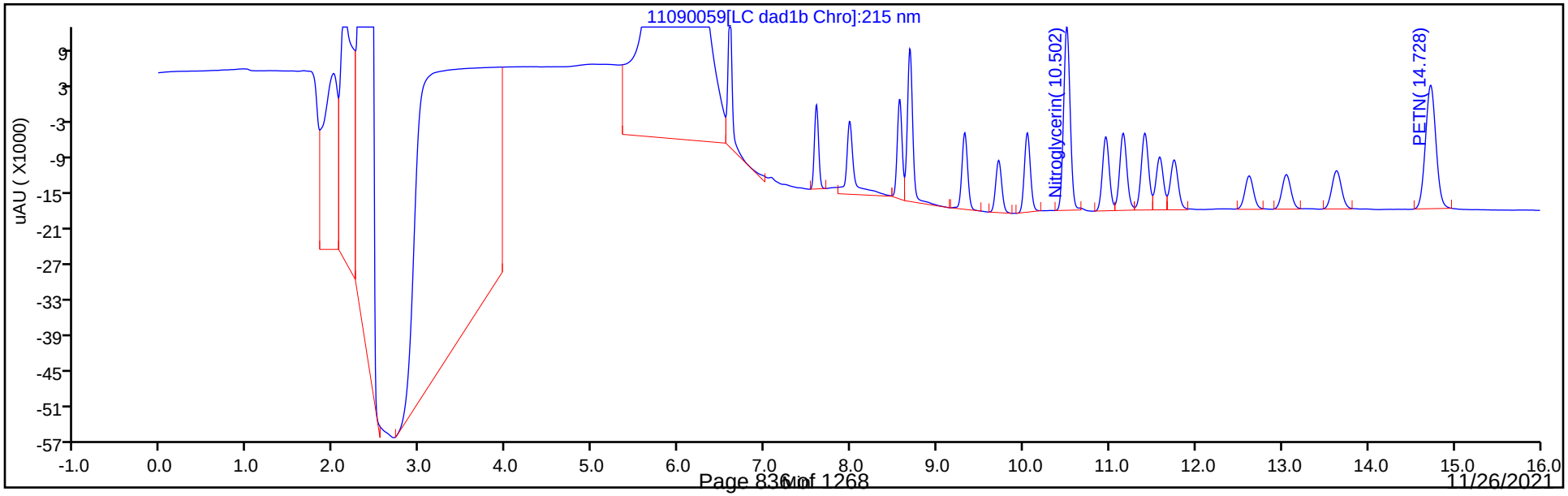
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090059.d

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

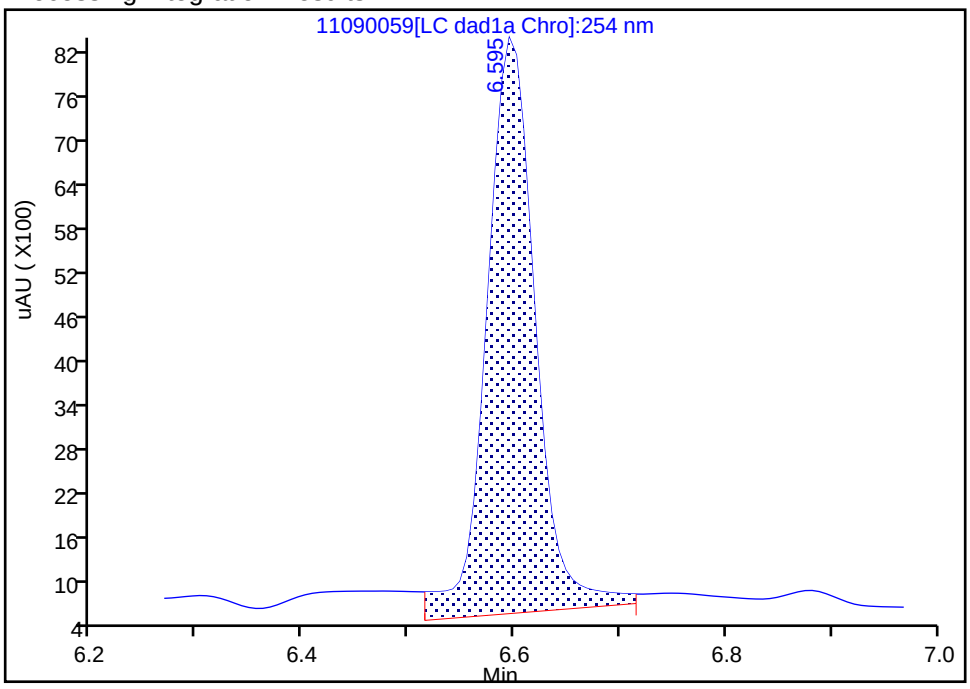
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090059.d				
Injection Date:	10-Nov-2021 10:28:42	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV INT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	7	Worklist Smp#:	59
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

4 HMX, CAS: 2691-41-0

Signal: 1

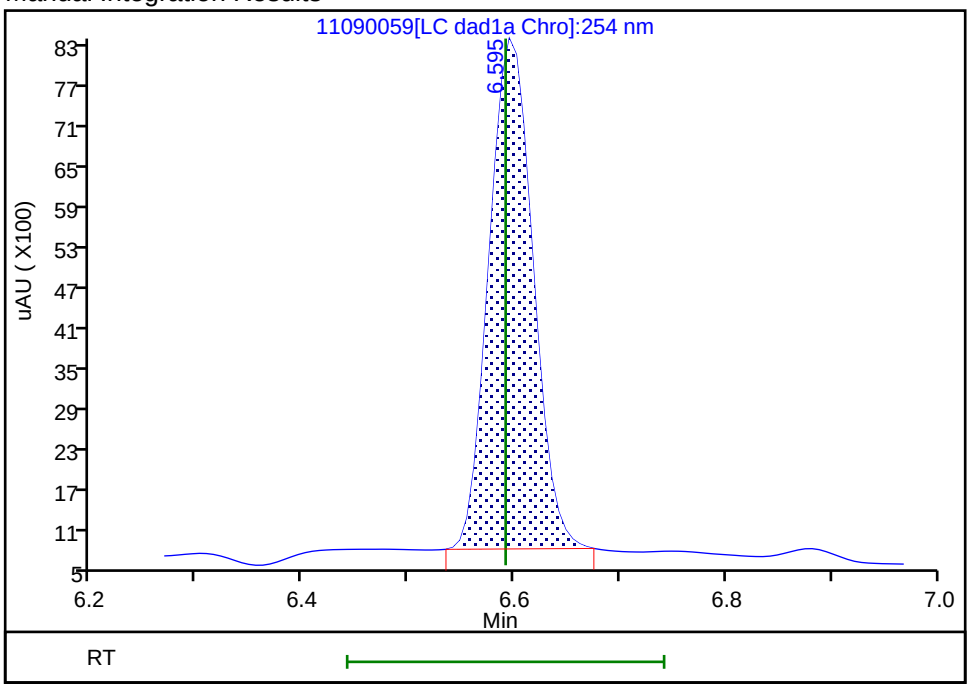
Processing Integration Results

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.: 280-155225-1

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.: 280-155225-1

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

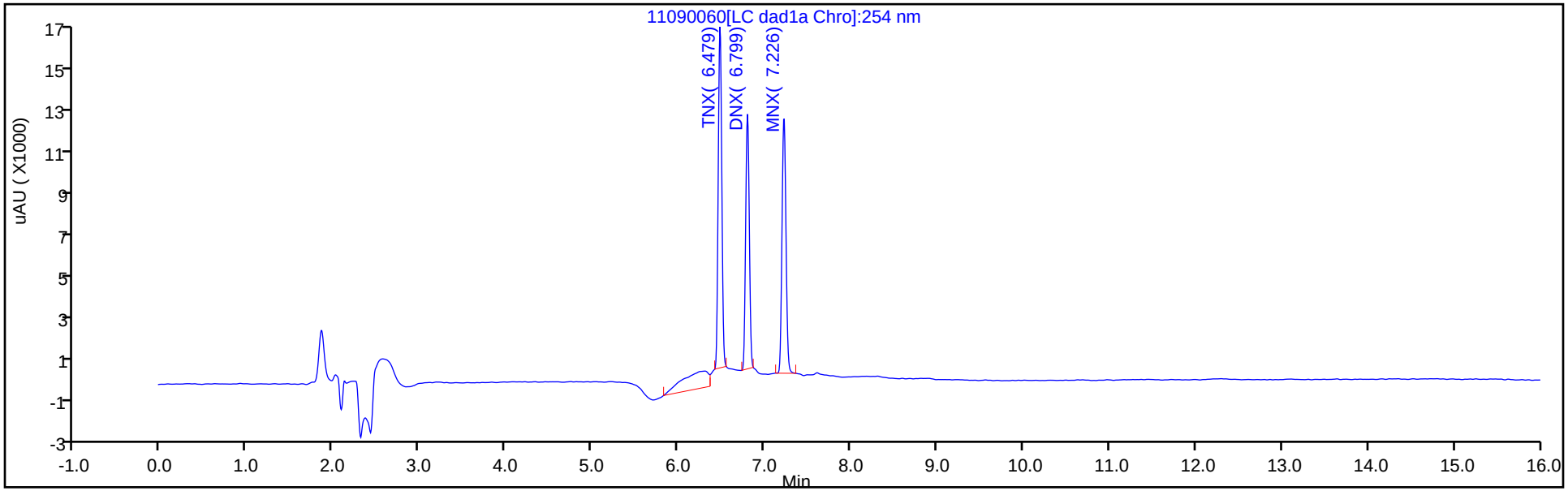
Report Date: 10-Nov-2021 12:58:55 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

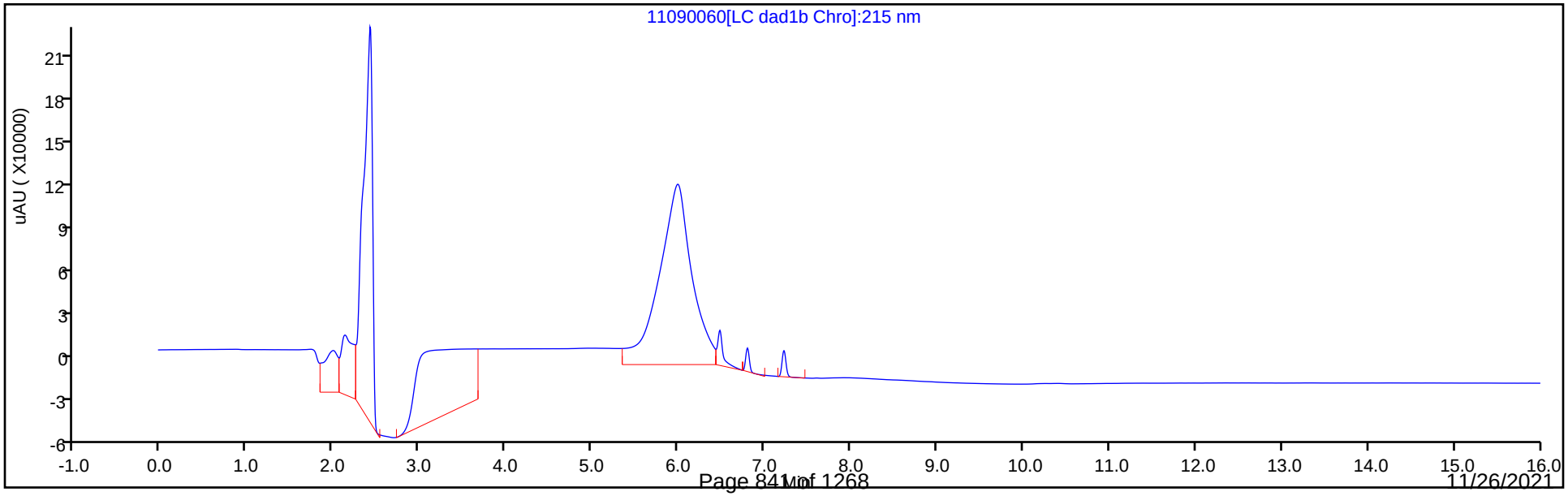
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090060.d

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

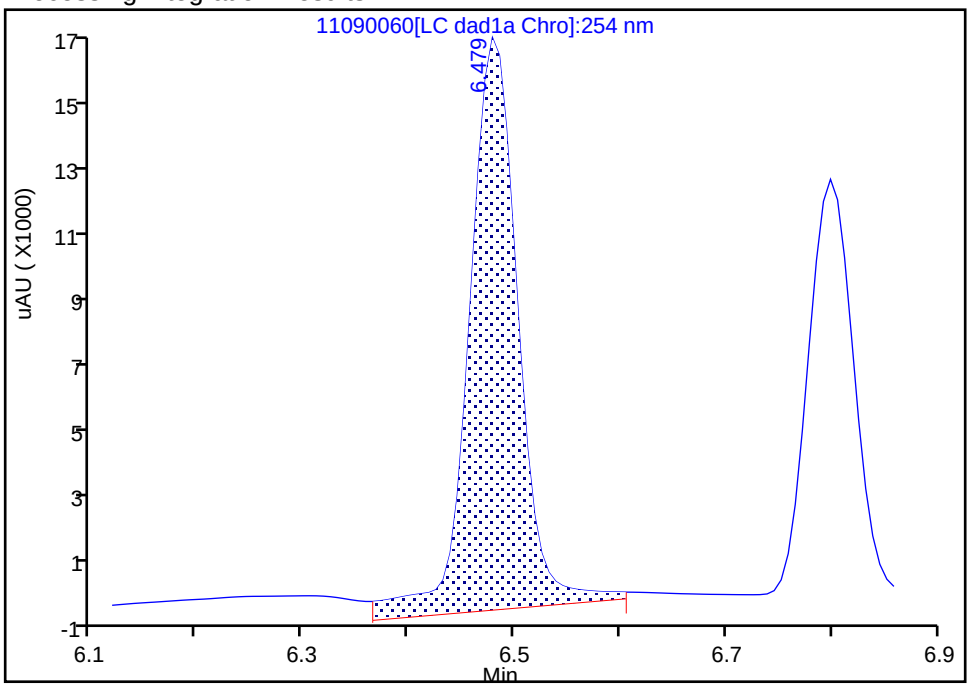
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090060.d				
Injection Date:	10-Nov-2021 10:51:41	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

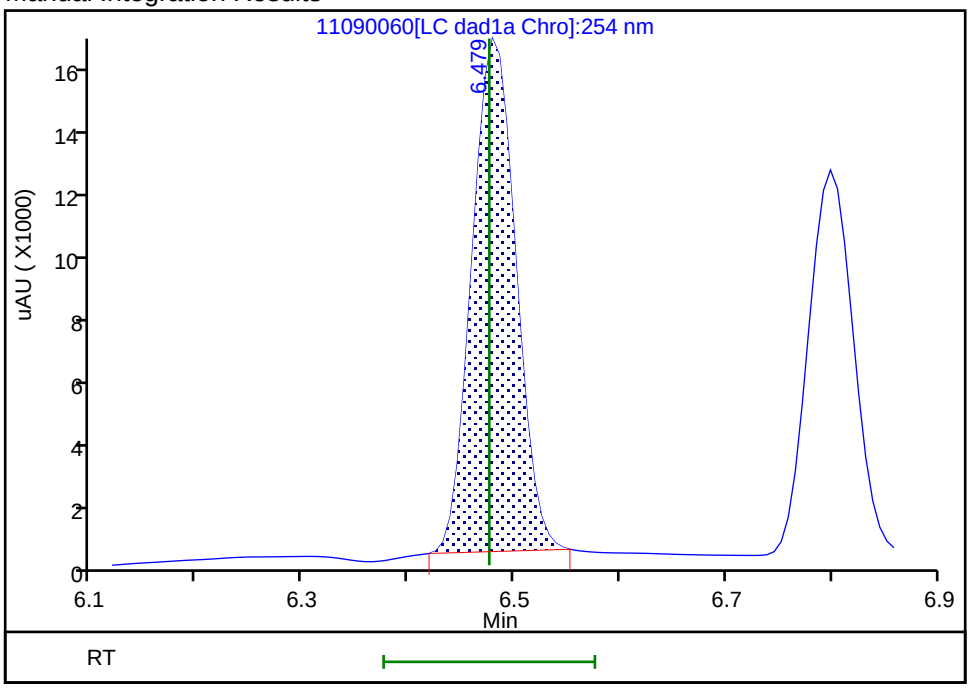
Processing Integration Results

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

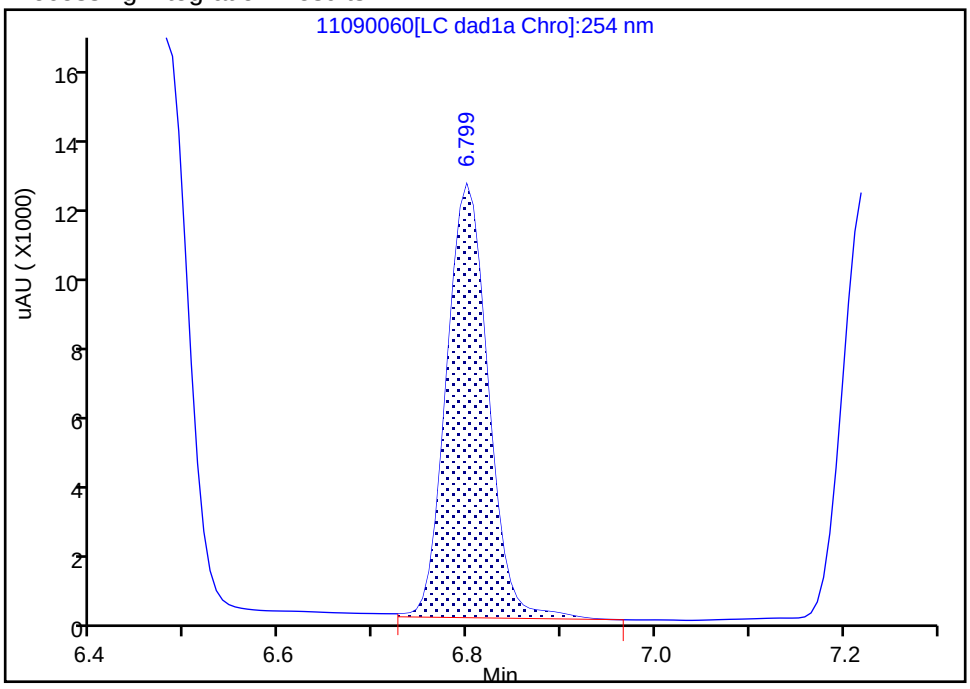
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090060.d				
Injection Date:	10-Nov-2021 10:51:41	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	60
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

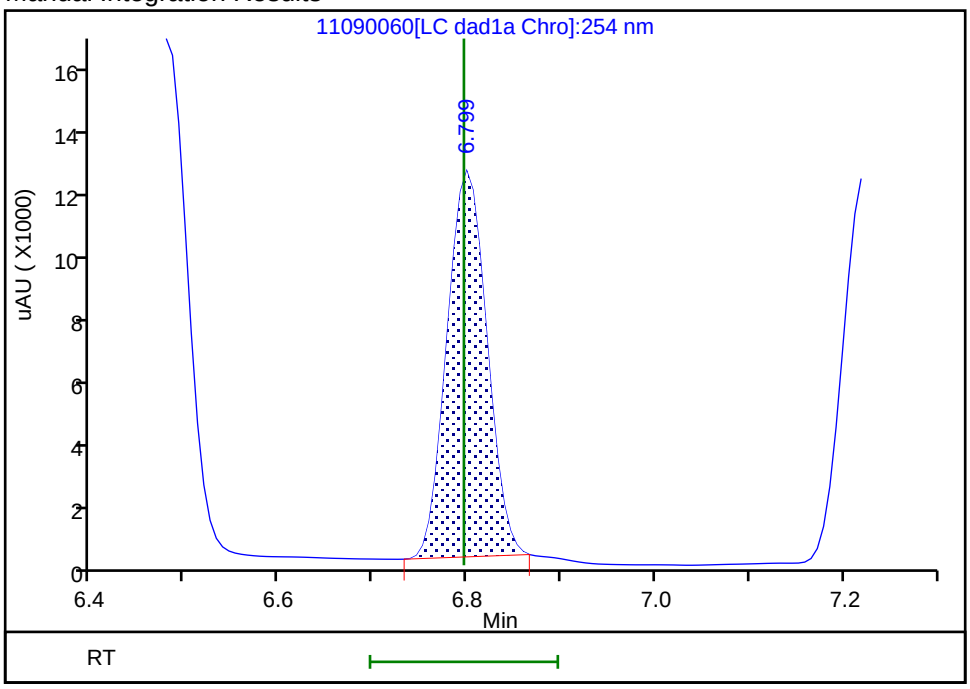
Processing Integration Results

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.: 280-155225-1

SDG No.:

Lab Sample ID: CCV 280-556781/67 Calibration Date: 11/10/2021 13:32

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: 11090067.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Ave	84421	88044		261	250	4.3	15.0
RDX	Ave	106261	103728		244	250	-2.4	15.0
Picric acid	Ave	82721	81356		246	250	-1.7	15.0
1,3,5-Trinitrobenzene	Ave	220317	226970		258	251	3.0	15.0
1,3-Dinitrobenzene	Ave	296329	304699		258	251	2.8	15.0
Nitrobenzene	Ave	195286	181769		234	251	-6.9	15.0
Tetryl	Ave	172420	152611		222	251	-11.5	15.0
Nitroglycerin	Lin2		65298		2480	2500	-0.8	15.0
2,4,6-Trinitrotoluene	Ave	206038	206036		251	251	0.0	15.0
4-Amino-2,6-dinitrotoluene	Ave	152768	153730		252	250	0.6	15.0
2-Amino-4,6-dinitrotoluene	Ave	206926	207291		251	251	0.2	15.0
2,6-Dinitrotoluene	Ave	143079	146865		258	251	2.6	15.0
2,4-Dinitrotoluene	Ave	287012	303904		266	251	5.9	15.0
2-Nitrotoluene	Ave	128392	117064		228	250	-8.8	15.0
4-Nitrotoluene	Ave	111913	104140		233	251	-6.9	15.0
3-Nitrotoluene	Ave	142246	130585		230	250	-8.2	15.0
PETN	Ave	74779	69633		2330	2500	-6.9	15.0
1,2-Dinitrobenzene	Ave	128217	132232		258	250	3.1	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Lab Sample ID: CCV 280-556781/67 Calibration Date: 11/10/2021 13:32

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: 11090067.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	9.71	9.58	9.88
Tetryl	10.04	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	11.42	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	8.56	8.42	8.72

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X\20211109-106333.b\11090067.D
Lims ID: CCV INT
Client ID:
Sample Type: CCV
Inject. Date: 10-Nov-2021 13:32:16 ALS Bottle#: 7 Worklist Smp#: 67
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV INT
Misc. Info.: 280-0106333-067
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 14:21:12 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 14:04:18

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	22011	0.2500	0.2607	
8 RDX	1	7.596	7.598	-0.002	25932	0.2500	0.2440	
9 2,4,6-Trinitrophenol	1	7.983	7.985	-0.002	20339	0.2500	0.2459	
$ 10 1,2-Dinitrobenzene	1	8.563	8.572	-0.009	33058	0.2500	0.2578	
11 1,3,5-Trinitrobenzene	1	8.683	8.685	-0.002	56856	0.2505	0.2581	
12 1,3-Dinitrobenzene	1	9.316	9.331	-0.015	76327	0.2505	0.2576	
13 Nitrobenzene	1	9.710	9.725	-0.015	45624	0.2510	0.2336	
15 Tetryl	1	10.043	10.065	-0.022	38229	0.2505	0.2217	
16 Nitroglycerin	2	10.503	10.518	-0.015	163244	2.50	2.48	
17 2,4,6-Trinitrotoluene	1	10.956	10.971	-0.015	51715	0.2510	0.2510	
18 4-Amino-2,6-dinitrotoluene	1	11.163	11.185	-0.022	38471	0.2503	0.2518	
19 2-Amino-4,6-dinitrotoluene	1	11.416	11.438	-0.022	52030	0.2510	0.2514	
20 2,6-Dinitrotoluene	1	11.583	11.605	-0.022	36863	0.2510	0.2576	
21 2,4-Dinitrotoluene	1	11.750	11.771	-0.021	76280	0.2510	0.2658	
22 o-Nitrotoluene	1	12.623	12.645	-0.022	29266	0.2500	0.2279	
23 p-Nitrotoluene	1	13.056	13.078	-0.022	26087	0.2505	0.2331	
24 m-Nitrotoluene	1	13.636	13.658	-0.022	32679	0.2503	0.2297	
25 PETN	2	14.730	14.758	-0.028	174083	2.50	2.33	

QC Flag Legend
Processing Flags

Reagents:
8330IntermStk_00069 Amount Added: 25.00 Units: uL

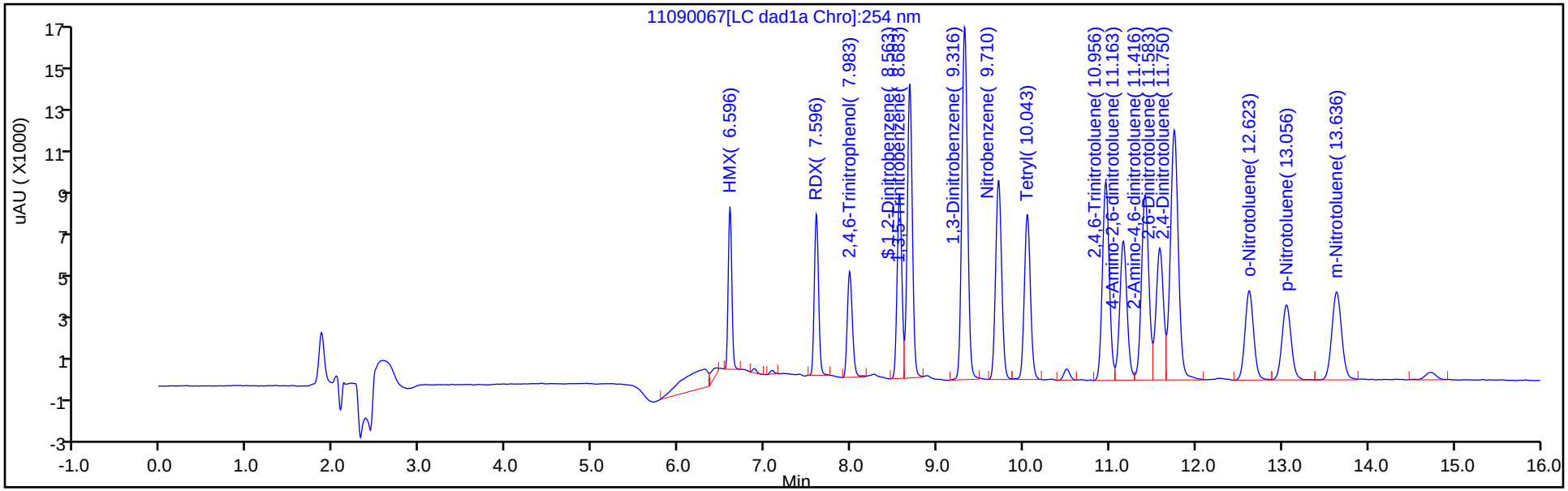
Report Date: 10-Nov-2021 14:21:12 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

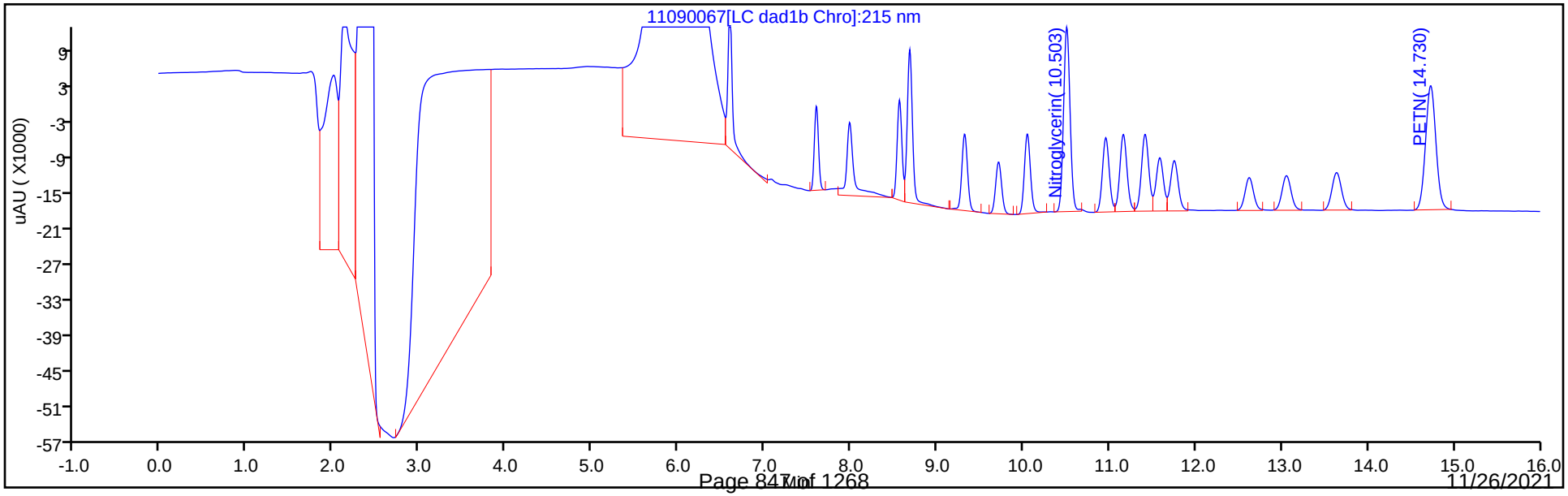
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090067.d

Injection Date:	10-Nov-2021 13:32:16	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV INT			Worklist Smp#:	67
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.: 280-155225-1

SDG No.:

Lab Sample ID: CCV 280-556781/68 Calibration Date: 11/10/2021 13:55

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: 11090068.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	185806	184064		248	250	-0.9	15.0
DNX	Ave	142119	140827		248	250	-0.9	15.0
MNX	Ave	130340	133796		299	292	2.7	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Lab Sample ID: CCV 280-556781/68 Calibration Date: 11/10/2021 13:55

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: 11090068.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	6.48	6.38	6.58
DNX	6.79	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\11090068.D
Lims ID: CCV DMT
Client ID:
Sample Type: CCV
Inject. Date: 10-Nov-2021 13:55:14 ALS Bottle#: 9 Worklist Smp#: 68
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV DMT
Misc. Info.: 280-0106333-068
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 14:21:12 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 14:21:06

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	46062	0.2503	0.2479	M
6 DNX	1	6.793	6.796	-0.003	35242	0.2503	0.2480	M
7 MNX	1	7.219	7.223	-0.004	39035	0.2918	0.2995	

QC Flag Legend

Processing Flags
Review Flags
M - Manually Integrated

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

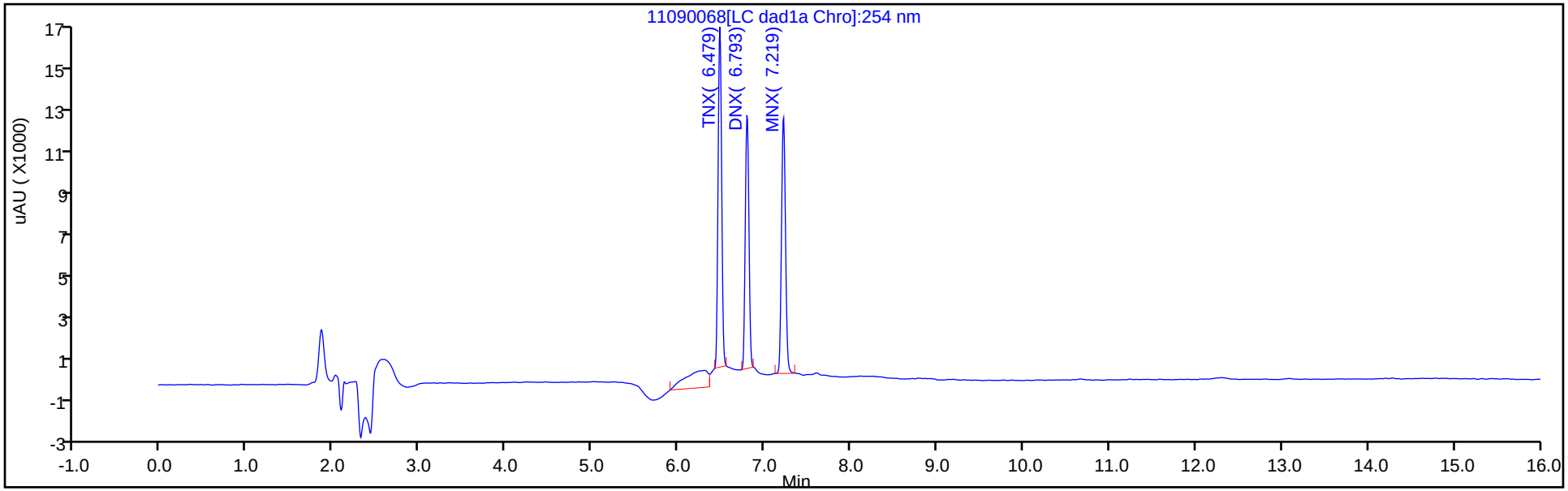
Report Date: 10-Nov-2021 14:21:13 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

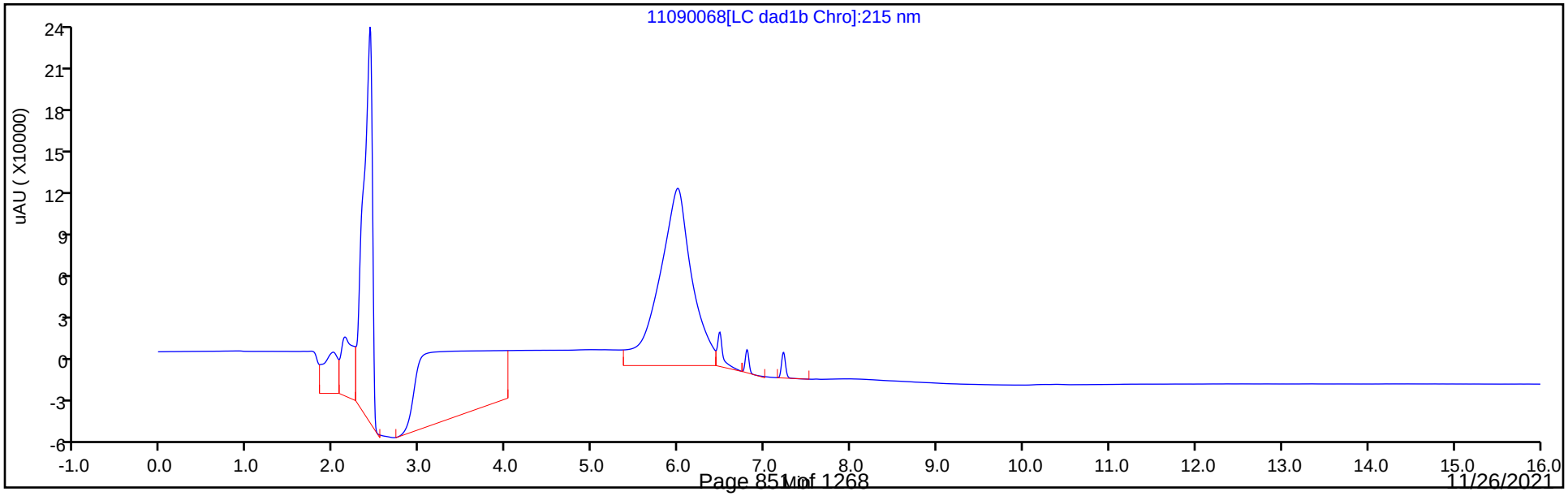
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090068.d

Injection Date:	10-Nov-2021 13:55:14	Instrument ID:	CHHPLC_X3	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	68
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

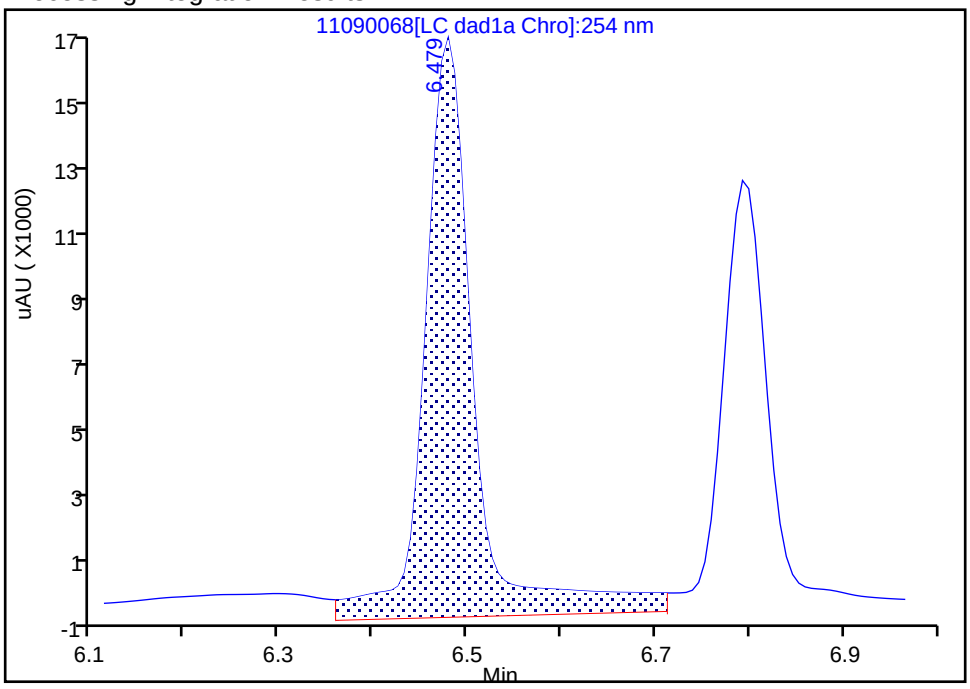
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090068.d				
Injection Date:	10-Nov-2021 13:55:14	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	68
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

3 TNX, CAS: 13980-04-6

Signal: 1

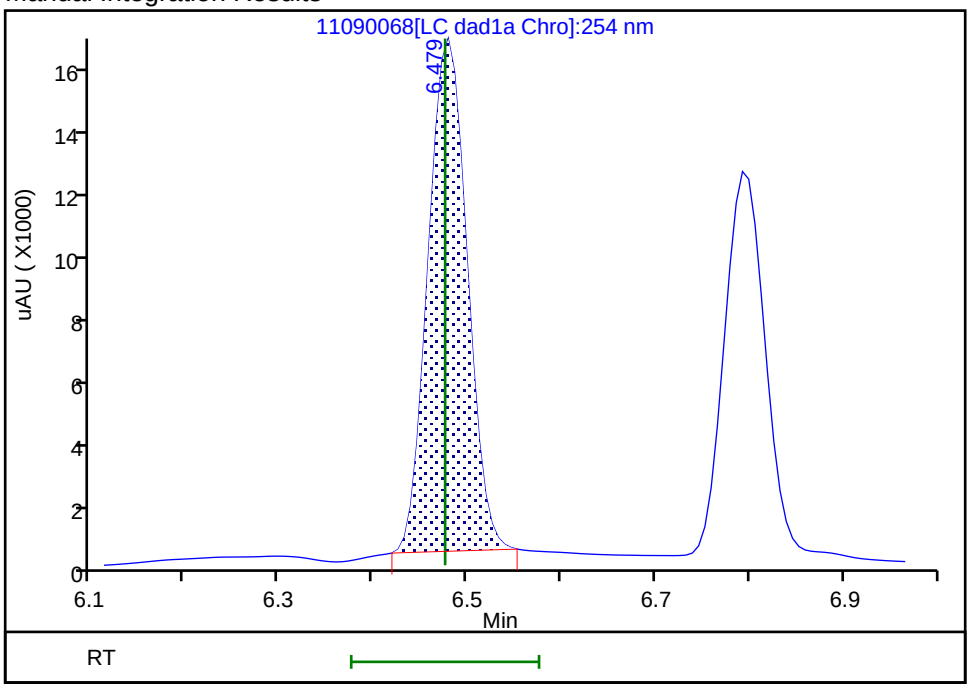
Processing Integration Results

RT: 6.48
Area: 61640
Amount: 0.331744
Amount Units: ug/mL



Manual Integration Results

RT: 6.48
Area: 46062
Amount: 0.247904
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 14:20:53
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

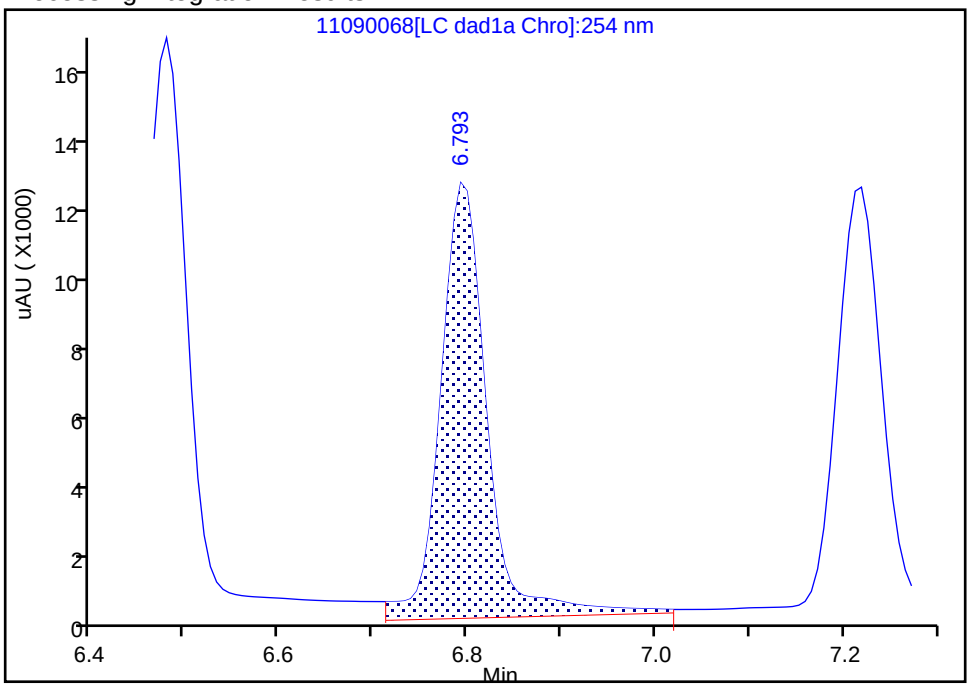
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090068.d				
Injection Date:	10-Nov-2021 13:55:14	Instrument ID:	CHHPLC_X3		
Lims ID:	CCV DMT				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	9	Worklist Smp#:	68
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

6 DNX, CAS: 80251-29-2

Signal: 1

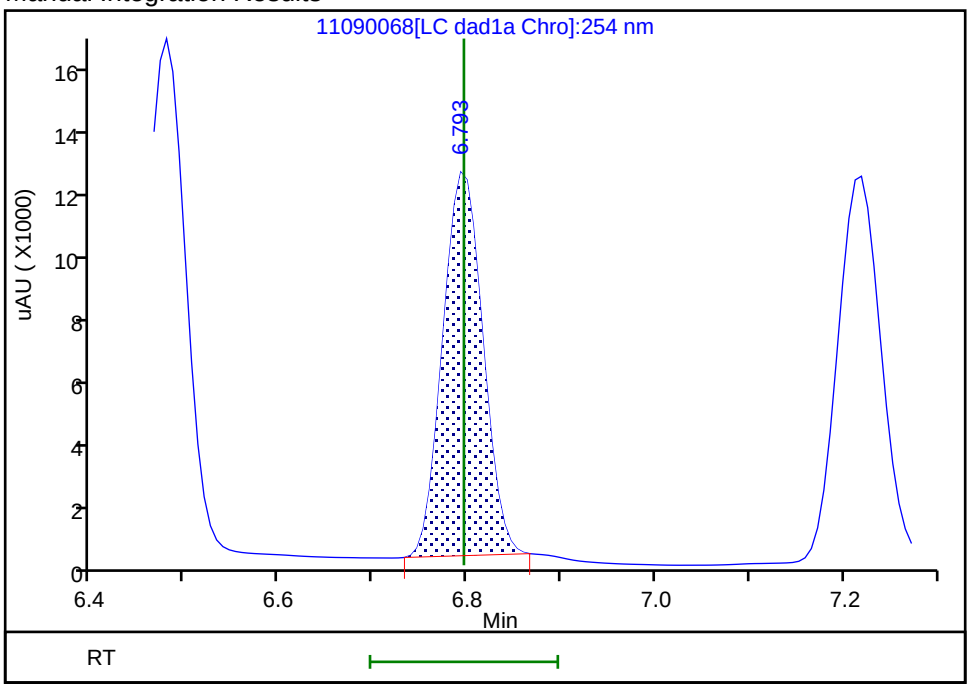
Processing Integration Results

RT: 6.79
Area: 42787
Amount: 0.301064
Amount Units: ug/mL



Manual Integration Results

RT: 6.79
Area: 35242
Amount: 0.247975
Amount Units: ug/mL



Reviewer: zhangji, 10-Nov-2021 14:20:56

Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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.: 280-155225-1

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

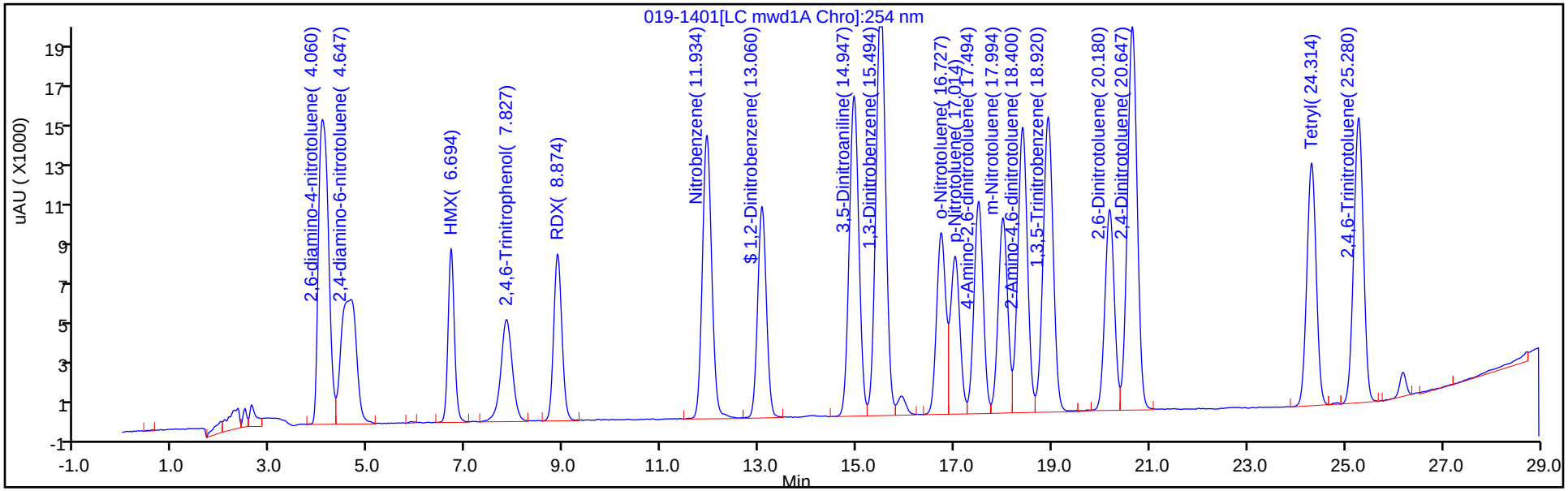
Report Date: 04-May-2021 13:45:44 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

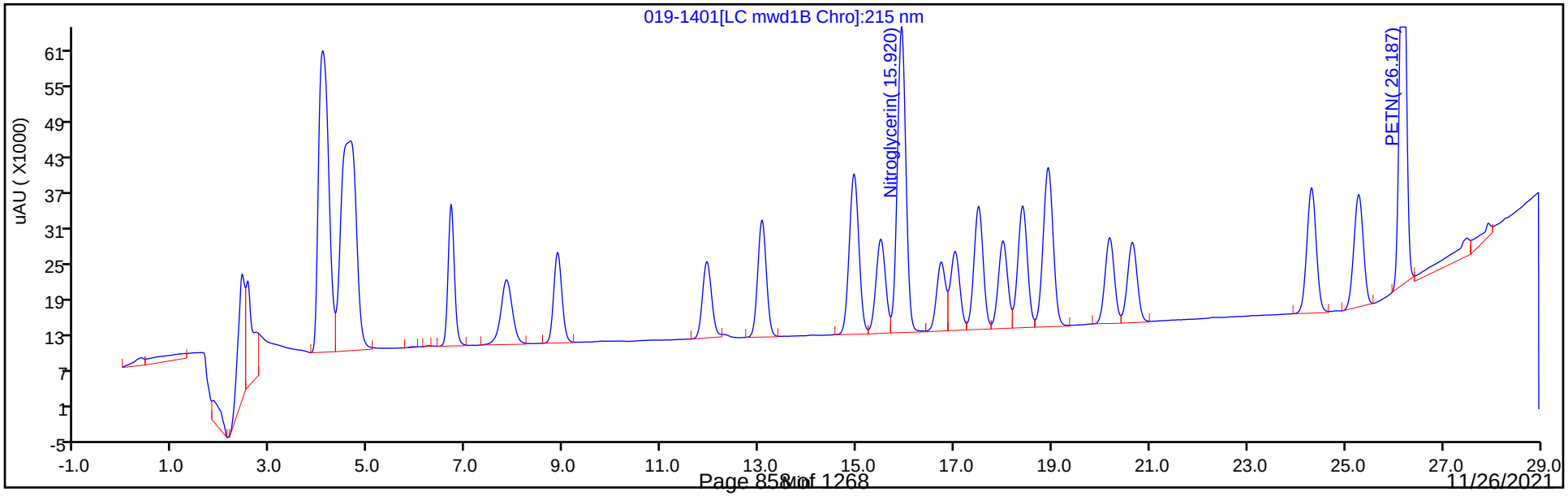
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\019-1401.D

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

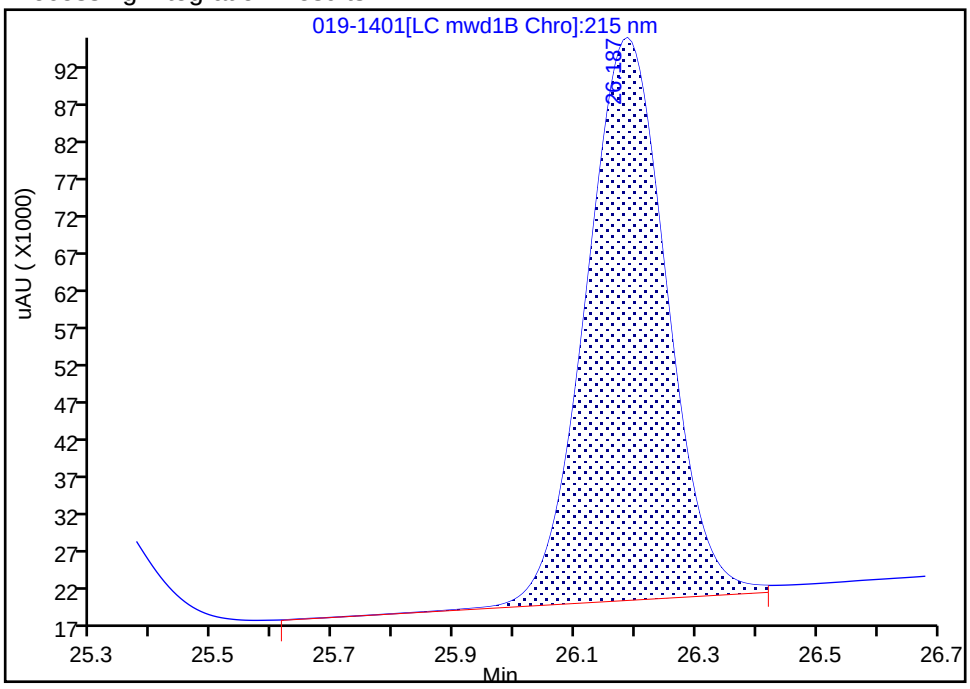
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\019-1401.D
Injection Date: 02-May-2021 00:10:18 Instrument ID: CHHPLC_X5
Lims ID: ICV INT/ADD
Client ID:
Operator ID: JZ ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Method: 8330_X5_Luna Limit Group: GCSV - 8330
Column: Detector LC mwd1B, 215 nm

24 PETN, CAS: 78-11-5

Signal: 1

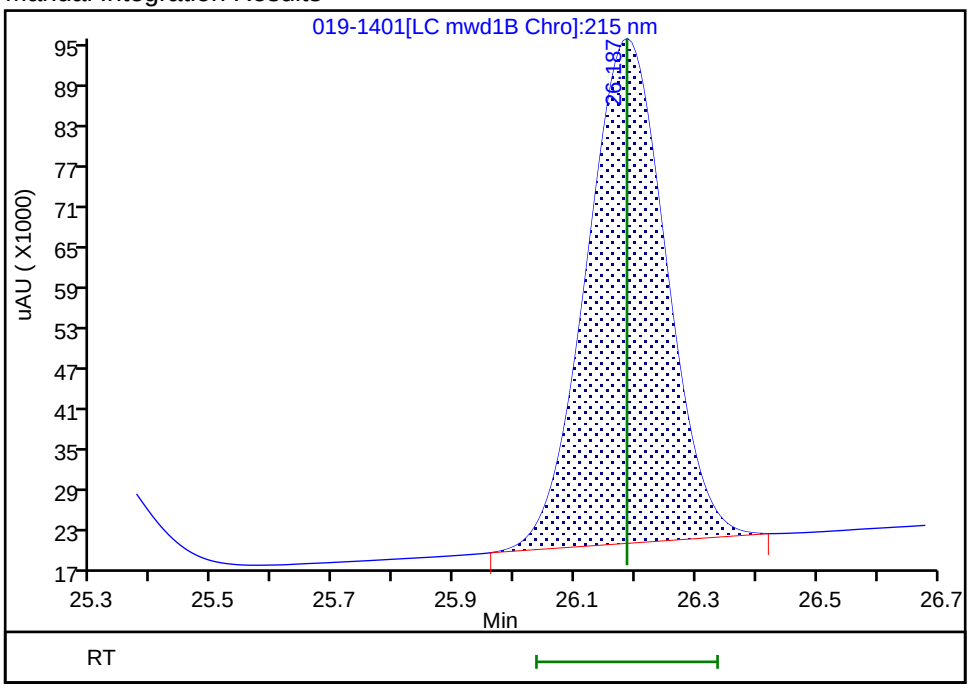
Processing Integration Results

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.: 280-155225-1

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.: 280-155225-1

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

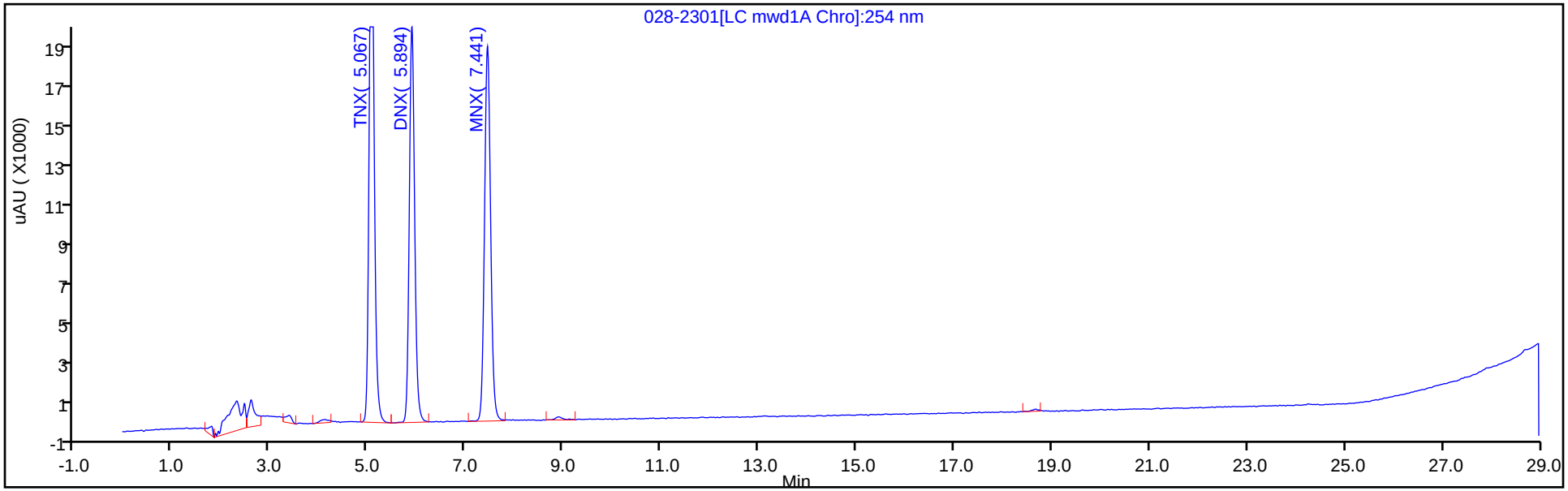
Report Date: 04-May-2021 13:45:44 Chrom Revision: 2.3 08-Apr-2021 17:17:48

Eurofins TestAmerica, Denver

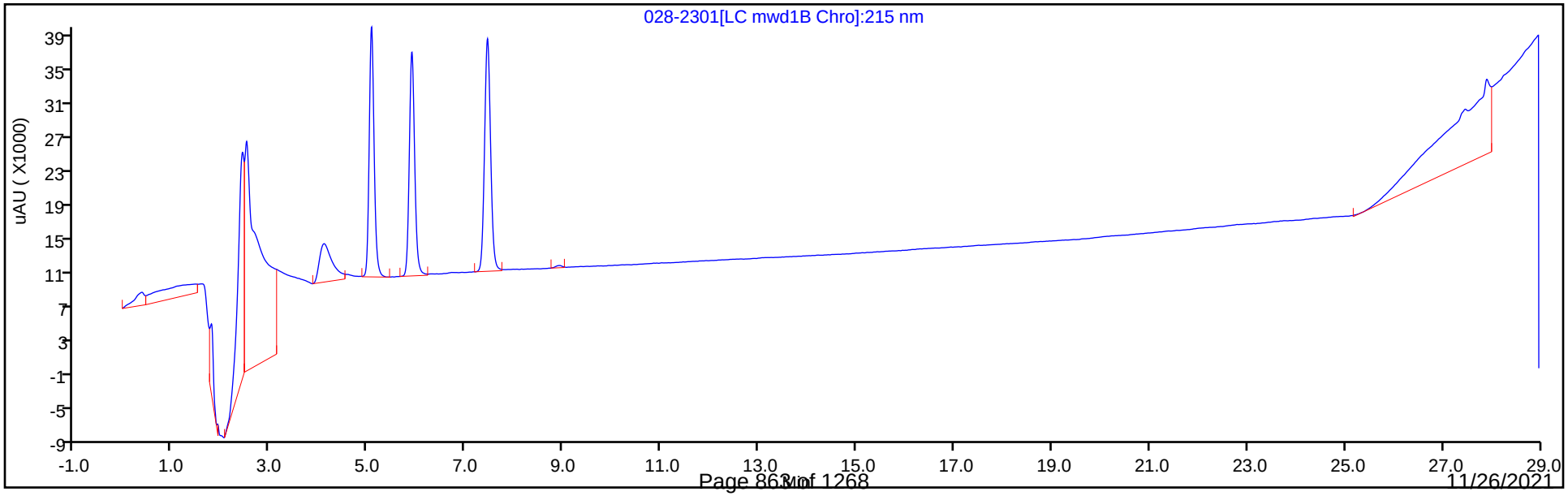
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20210501-101093.b\028-2301.D

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.: 280-155225-1

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.: 280-155225-1

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

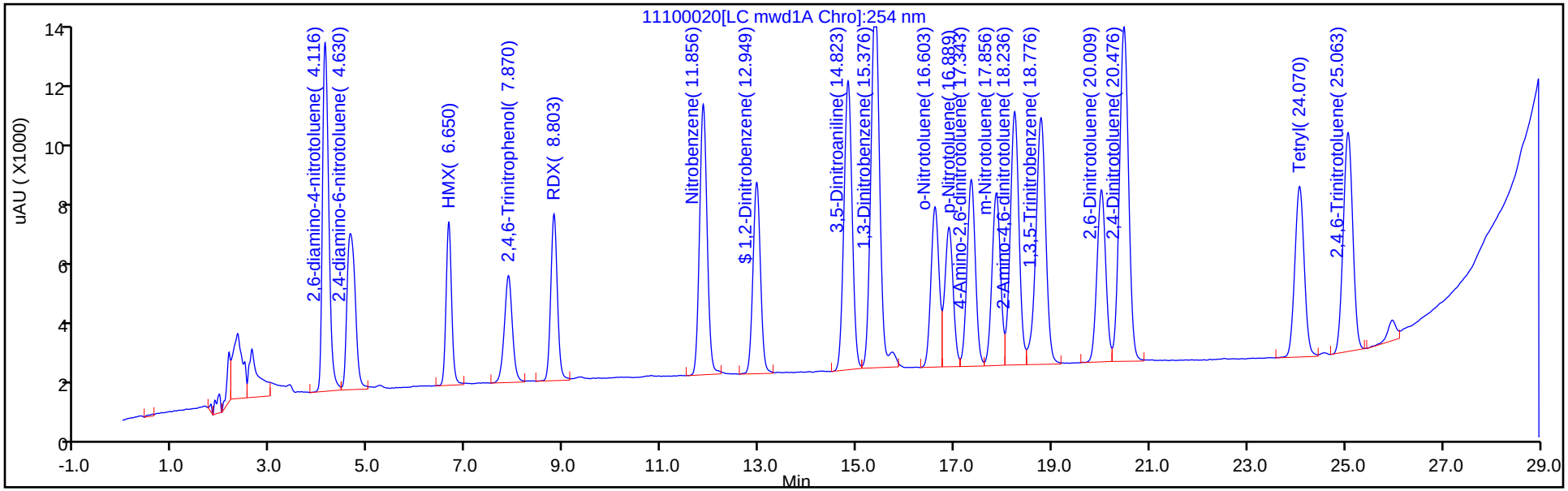
Report Date: 11-Nov-2021 19:12:33 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

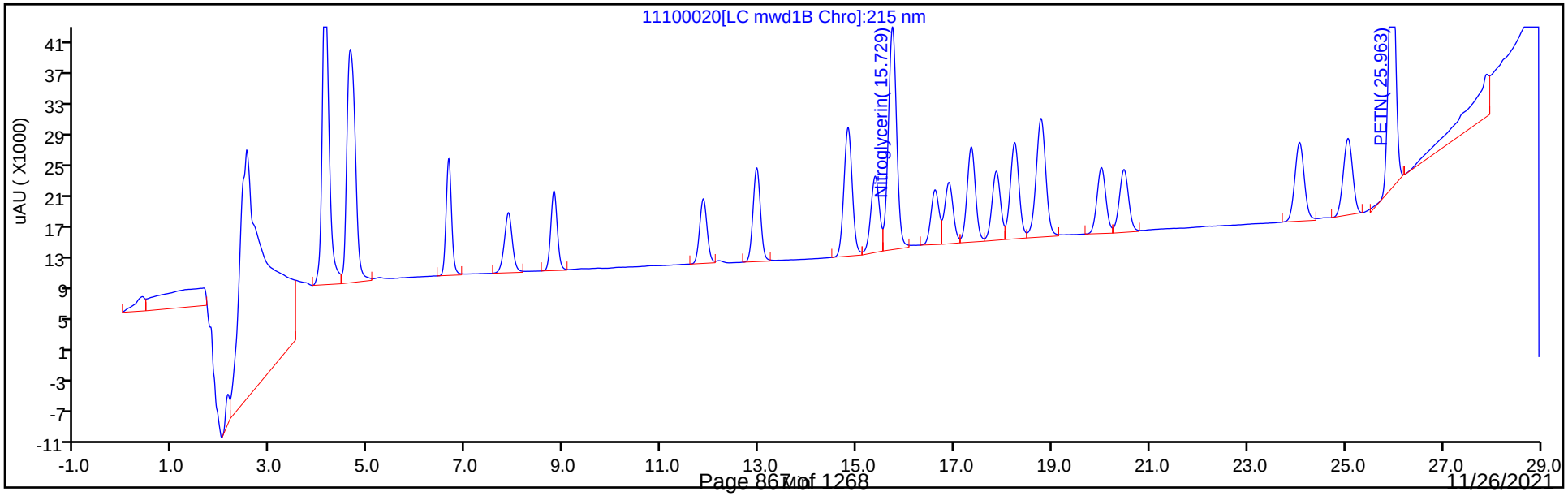
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100020.D

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.: 280-155225-1

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.: 280-155225-1

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

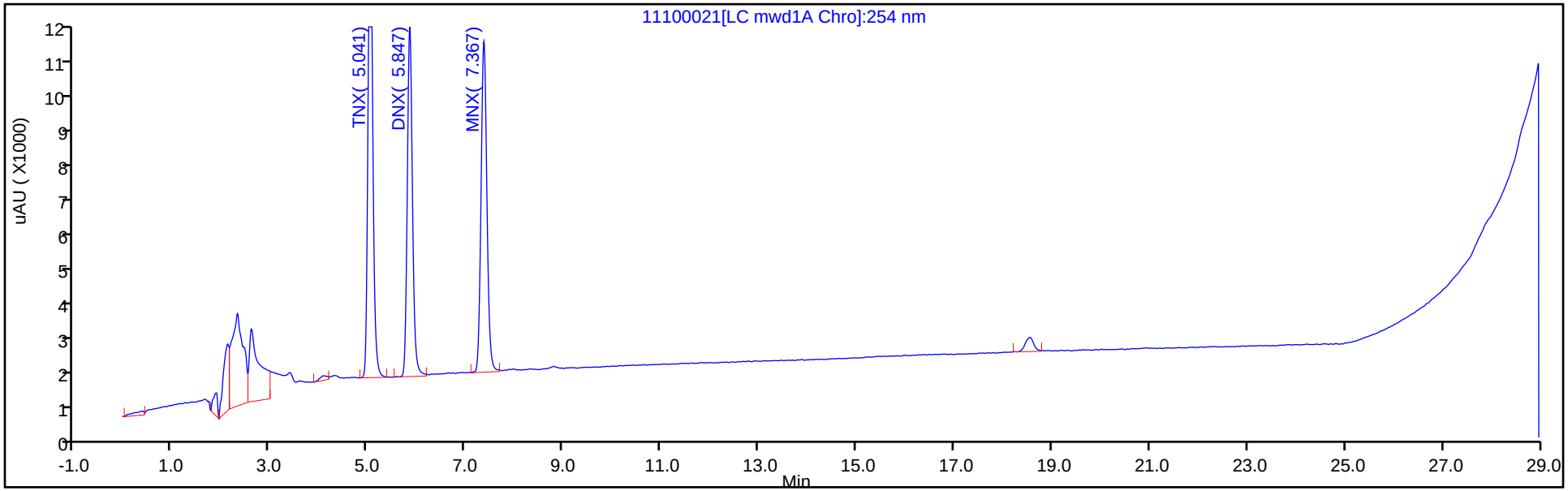
Report Date: 11-Nov-2021 19:12:33 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

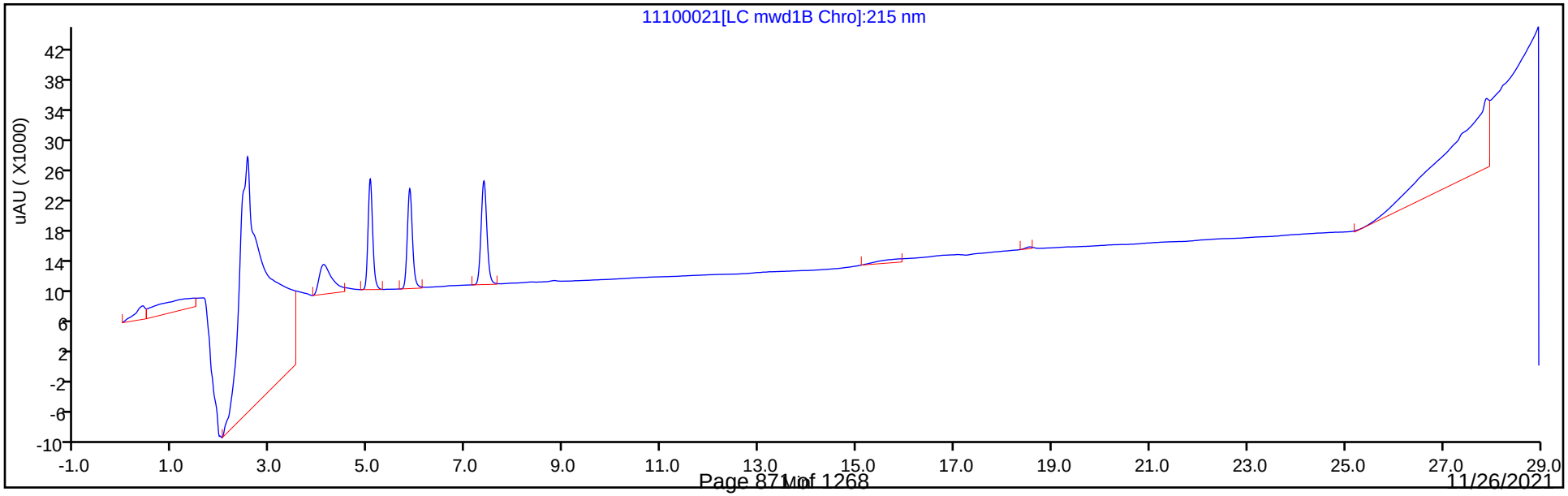
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100021.D

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.: 280-155225-1

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.: 280-155225-1

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

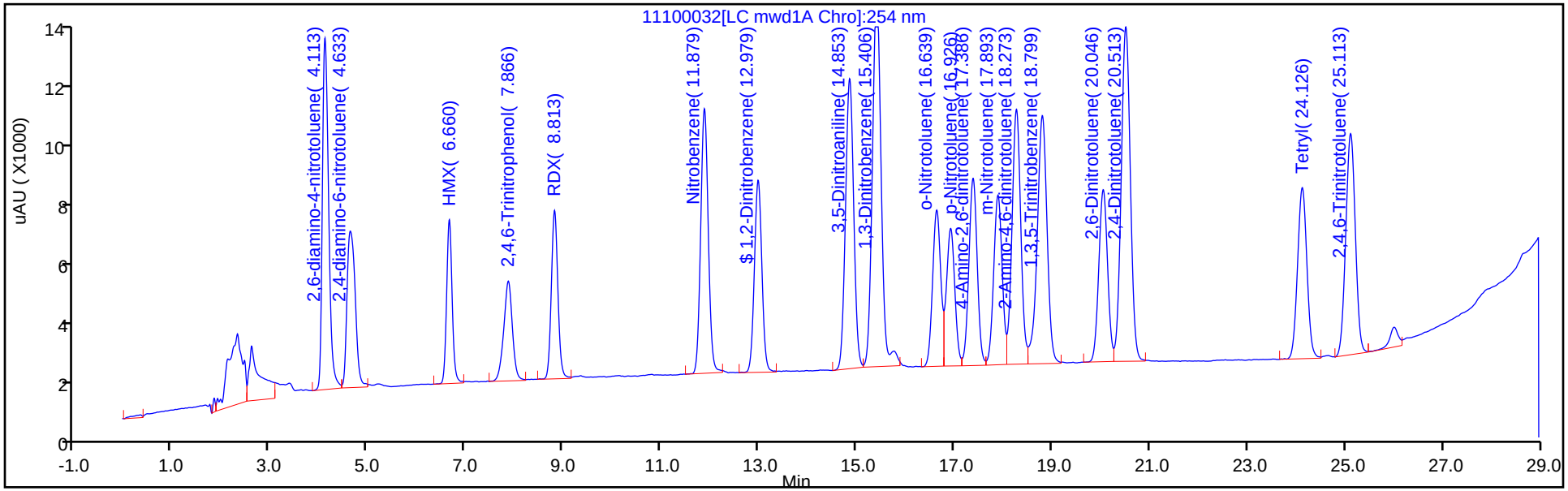
Report Date: 11-Nov-2021 19:12:38 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

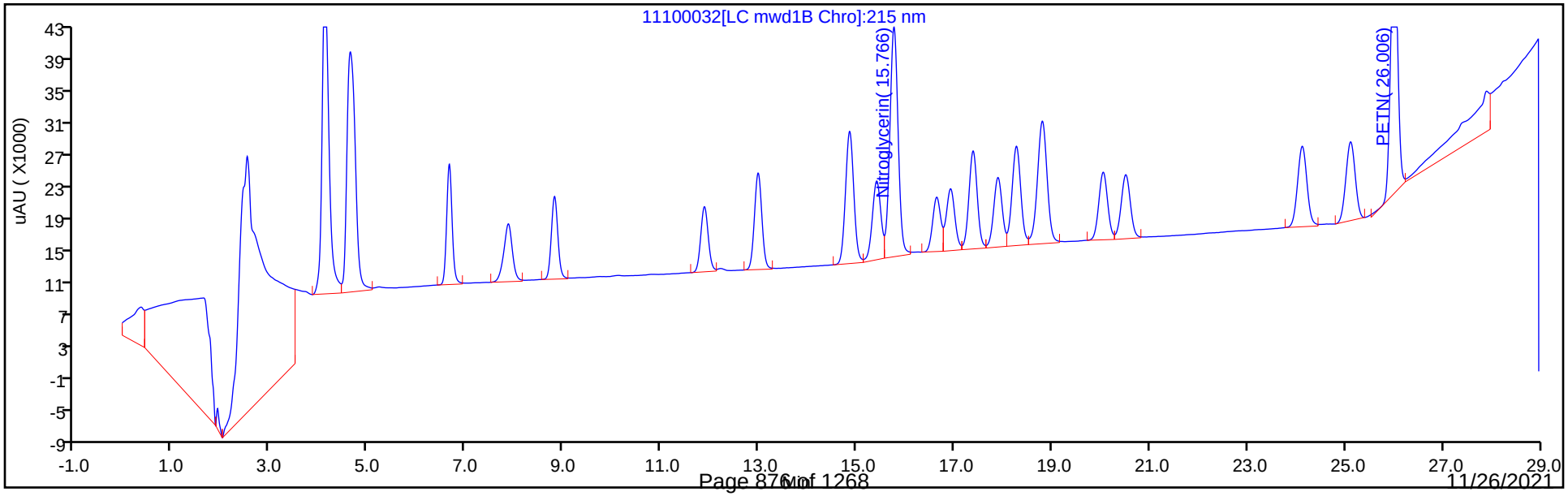
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100032.D

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.: 280-155225-1

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.: 280-155225-1

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

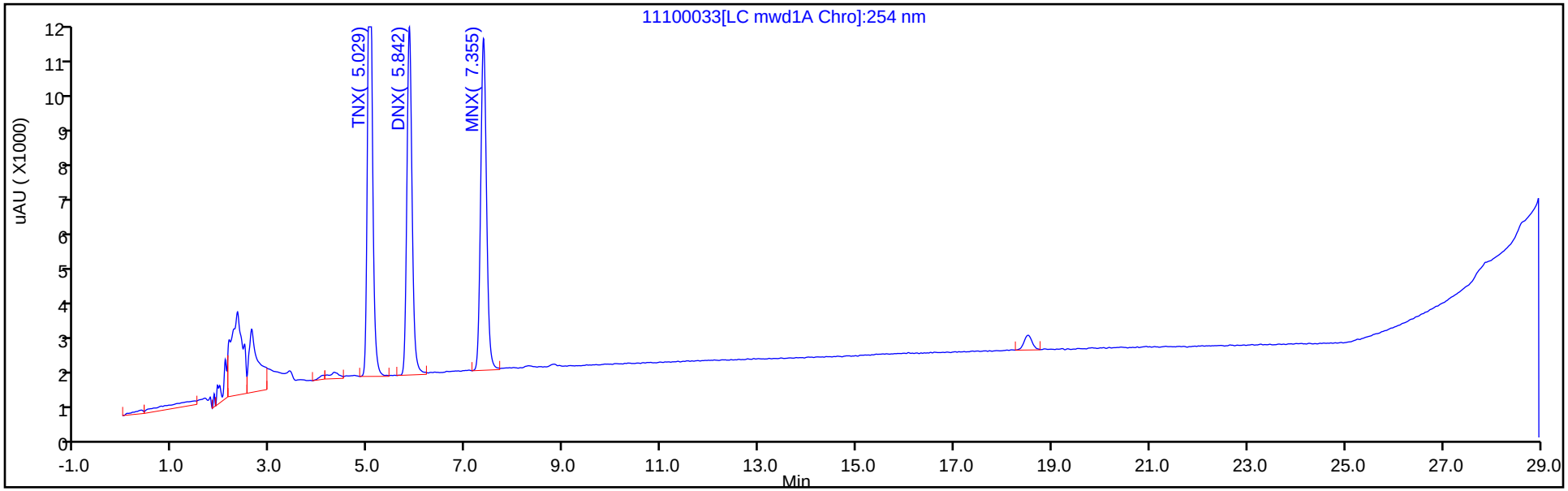
Report Date: 11-Nov-2021 19:12:38 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

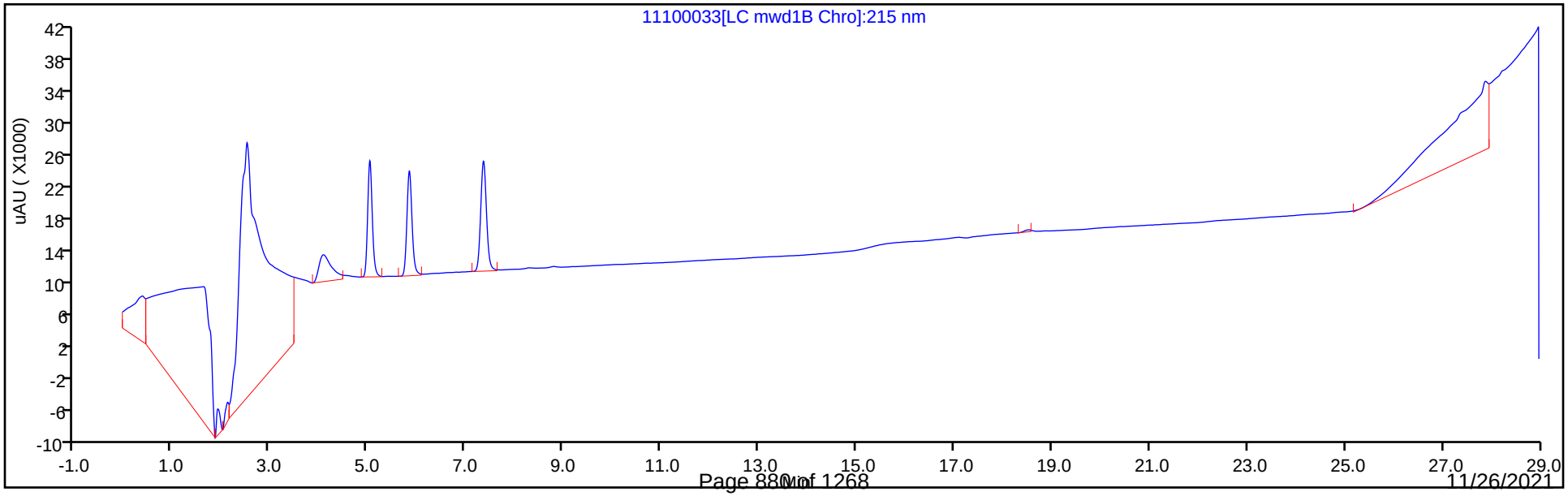
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100033.D

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 VII
HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Lab Sample ID: CCV 280-556958/41 Calibration Date: 11/11/2021 11:25

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: 11100041.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
HMX	Lin2		170404		262	250	4.9	15.0
Picric acid	Ave	159537	161372		253	250	1.2	15.0
RDX	Ave	204270	205784		252	250	0.7	15.0
Nitrobenzene	Ave	374651	363271		243	251	-3.0	15.0
1,3-Dinitrobenzene	Lin2		615293		271	251	8.3	15.0
Nitroglycerin	Ave	128605	135731		2640	2500	5.5	15.0
2-Nitrotoluene	Ave	248967	231912		233	250	-6.9	15.0
4-Nitrotoluene	Ave	217187	210739		243	251	-3.0	15.0
4-Amino-2,6-dinitrotoluene	Ave	296705	291205		246	250	-1.9	15.0
3-Nitrotoluene	Ave	278393	263161		237	250	-5.5	15.0
2-Amino-4,6-dinitrotoluene	Lin2		417175		265	251	5.7	15.0
1,3,5-Trinitrobenzene	Lin2		453581		270	251	7.9	15.0
2,6-Dinitrotoluene	Lin2		281020		263	251	4.8	15.0
2,4-Dinitrotoluene	Ave	565713	569474		253	251	0.7	15.0
Tetryl	Lin2		297768		229	251	-8.6	15.0
2,4,6-Trinitrotoluene	Lin2		391669		260	251	3.7	15.0
PETN	Ave	137740	132914		2410	2500	-3.5	15.0
1,2-Dinitrobenzene	Ave	265659	268884		253	250	1.2	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Lab Sample ID: CCV 280-556958/41 Calibration Date: 11/11/2021 11:25

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: 11100041.D

Analyte	RT	RT WINDOW	
		FROM	TO
HMX	6.64	6.50	6.80
Picric acid	7.80	7.72	8.02
RDX	8.79	8.65	8.95
Nitrobenzene	11.85	11.71	12.01
1,3-Dinitrobenzene	15.37	15.23	15.53
Nitroglycerin	15.72	15.58	15.88
2-Nitrotoluene	16.59	16.45	16.75
4-Nitrotoluene	16.88	16.74	17.04
4-Amino-2,6-dinitrotoluene	17.33	17.19	17.49
3-Nitrotoluene	17.85	17.71	18.01
2-Amino-4,6-dinitrotoluene	18.23	18.09	18.39
1,3,5-Trinitrobenzene	18.76	18.63	18.93
2,6-Dinitrotoluene	20.00	19.86	20.16
2,4-Dinitrotoluene	20.46	20.33	20.63
Tetryl	24.05	23.92	24.22
2,4,6-Trinitrotoluene	25.05	24.91	25.21
PETN	25.96	25.81	26.11
1,2-Dinitrobenzene	12.94	12.80	13.10

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100041.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 11-Nov-2021 11:25:56 ALS Bottle#: 7 Worklist Smp#: 41
Injection Vol: 100.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0106378-041
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 19:12:41 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
1 2,6-diamino-4-nitrotoluene	1	4.105	4.116	-0.011	102388	0.2500	0.2417	
2 2,4-diamino-6-nitrotoluene	1	4.625	4.630	-0.005	60776	0.2500	0.2490	
5 HMX	1	6.639	6.650	-0.011	42601	0.2500	0.2621	
7 2,4,6-Trinitrophenol	1	7.799	7.870	-0.071	40343	0.2500	0.2529	
8 RDX	1	8.785	8.803	-0.018	51446	0.2500	0.2519	
9 Nitrobenzene	1	11.845	11.856	-0.011	91181	0.2510	0.2434	
$ 10 1,2-Dinitrobenzene	1	12.939	12.949	-0.010	67221	0.2500	0.2530	
11 3,5-Dinitroaniline	1	14.805	14.823	-0.018	111340	0.2500	0.2453	
12 1,3-Dinitrobenzene	1	15.365	15.376	-0.011	154131	0.2505	0.2714	
13 Nitroglycerin	2	15.719	15.729	-0.010	339327	2.50	2.64	
14 o-Nitrotoluene	1	16.592	16.603	-0.011	57978	0.2500	0.2329	
16 p-Nitrotoluene	1	16.879	16.889	-0.010	52790	0.2505	0.2431	
17 4-Amino-2,6-dinitrotoluene	1	17.332	17.343	-0.011	72874	0.2503	0.2456	
18 m-Nitrotoluene	1	17.852	17.856	-0.004	65856	0.2503	0.2366	
19 2-Amino-4,6-dinitrotoluene	1	18.225	18.236	-0.011	104711	0.2510	0.2654	
20 1,3,5-Trinitrobenzene	1	18.759	18.776	-0.017	113622	0.2505	0.2704	
21 2,6-Dinitrotoluene	1	19.999	20.009	-0.010	70536	0.2510	0.2631	
22 2,4-Dinitrotoluene	1	20.459	20.476	-0.017	142938	0.2510	0.2527	
23 Tetryl	1	24.052	24.070	-0.018	74591	0.2505	0.2289	
24 2,4,6-Trinitrotoluene	1	25.052	25.063	-0.011	98309	0.2510	0.2603	
25 PETN	2	25.959	25.963	-0.004	332284	2.50	2.41	

Reagents:

8330IntermStk_00069 Amount Added: 25.00 Units: uL
8330_ADDs_00029 Amount Added: 12.50 Units: uL

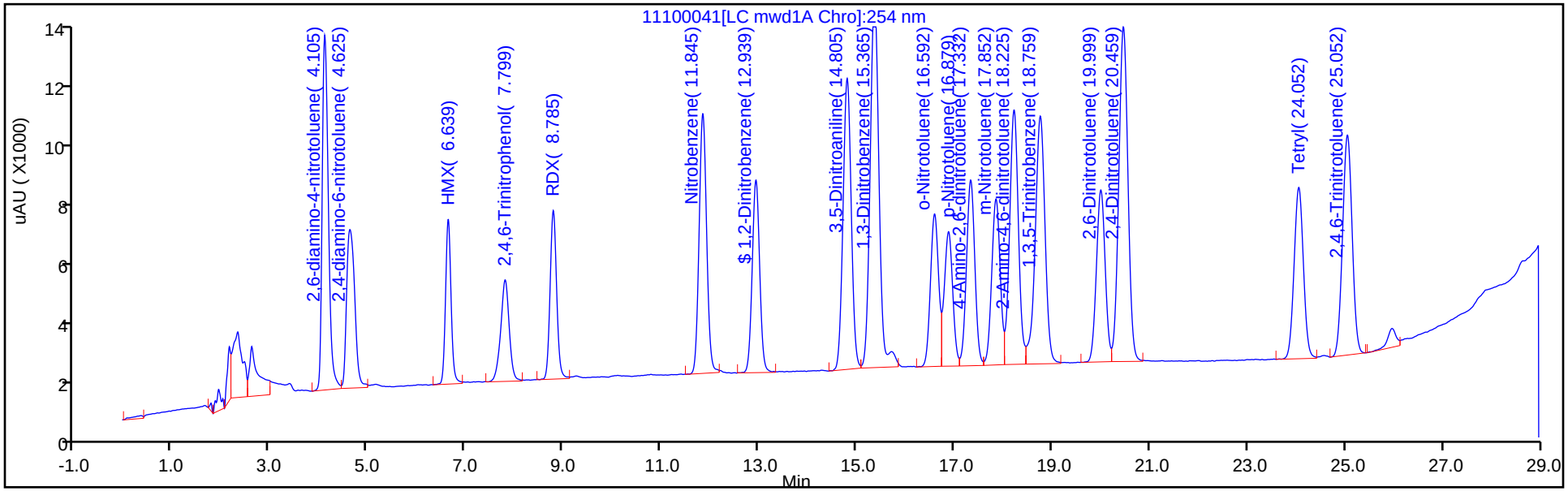
Report Date: 11-Nov-2021 19:12:42 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

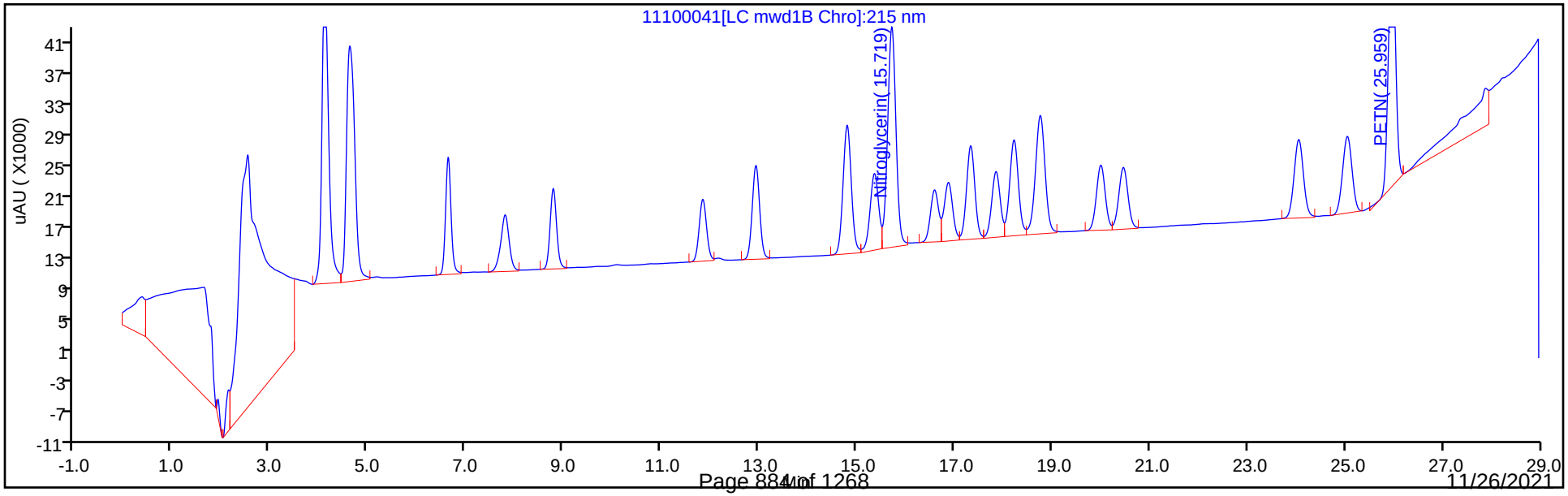
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100041.D

Injection Date:	11-Nov-2021 11:25:56	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV			Worklist Smp#:	41
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.: 280-155225-1

SDG No.:

Lab Sample ID: CCV 280-556958/42 Calibration Date: 11/11/2021 12:00

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: 11100042.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
TNX	Ave	376144	359421		239	250	-4.4	15.0
DNX	Ave	284791	283680		249	250	-0.4	15.0
MNX	Ave	264843	259698		286	292	-1.9	15.0

FORM VII
HPLC/IC CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Lab Sample ID: CCV 280-556958/42 Calibration Date: 11/11/2021 12:00

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: 11100042.D

Analyte	RT	RT WINDOW	
		FROM	TO
TNX	5.03	4.89	5.19
DNX	5.83	5.70	6.00
MNX	7.35	7.22	7.52

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File:	\\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100042.D				
Lims ID:	CCV DMT				
Client ID:					
Sample Type:	CCV				
Inject. Date:	11-Nov-2021 12:00:53	ALS Bottle#:	8	Worklist Smp#:	42
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCV DMT				
Misc. Info.:	280-0106378-042				
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 19:12:42	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	5.027	5.041	-0.014	89945	0.2503	0.2391	
4 DNX	1	5.834	5.847	-0.013	70991	0.2503	0.2493	
6 MNX	1	7.347	7.367	-0.020	75767	0.2918	0.2861	

Reagents:

8330 DMT_00009 Amount Added: 12.50 Units: uL

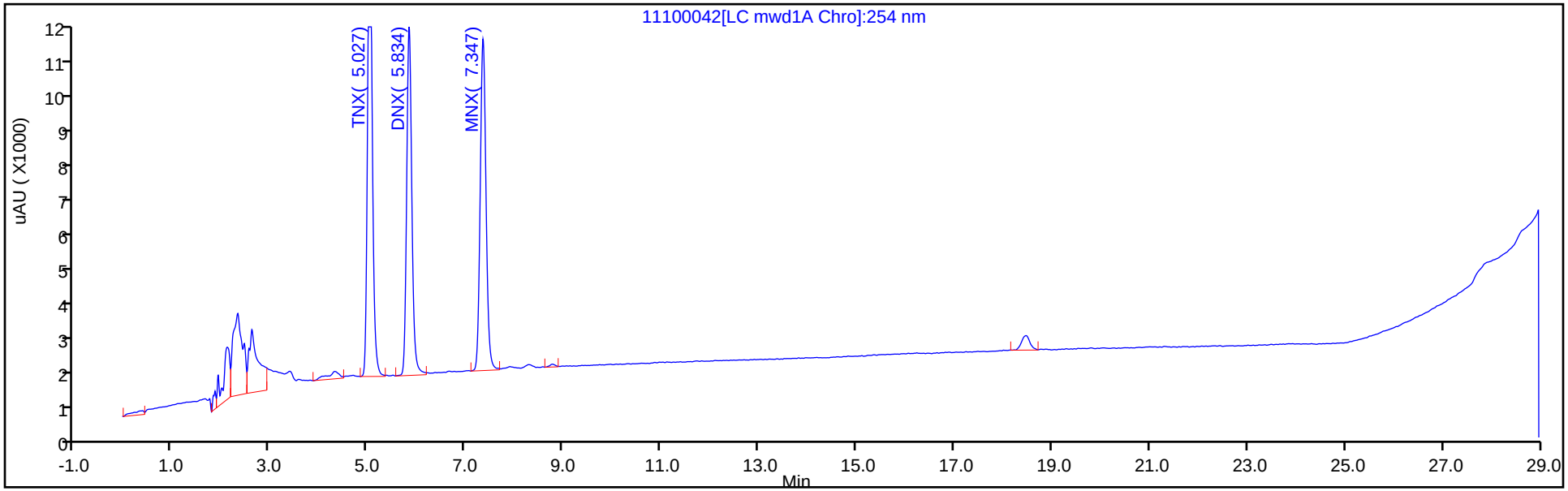
Report Date: 11-Nov-2021 19:12:42 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

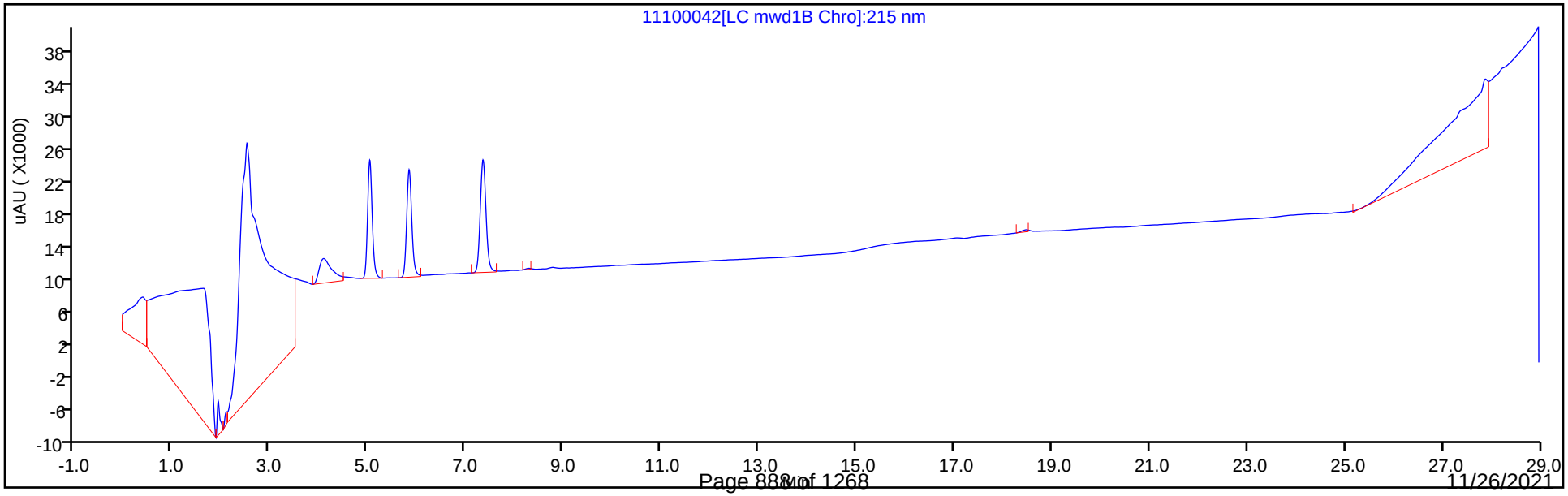
Data File: \\chromfs\Denver\ChromData\CHHPLC_X5\20211110-106378.b\11100042.D

Injection Date:	11-Nov-2021 12:00:53	Instrument ID:	CHHPLC_X5	Operator ID:	JZ
Lims ID:	CCV DMT			Worklist Smp#:	42
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.: 280-155225-1

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

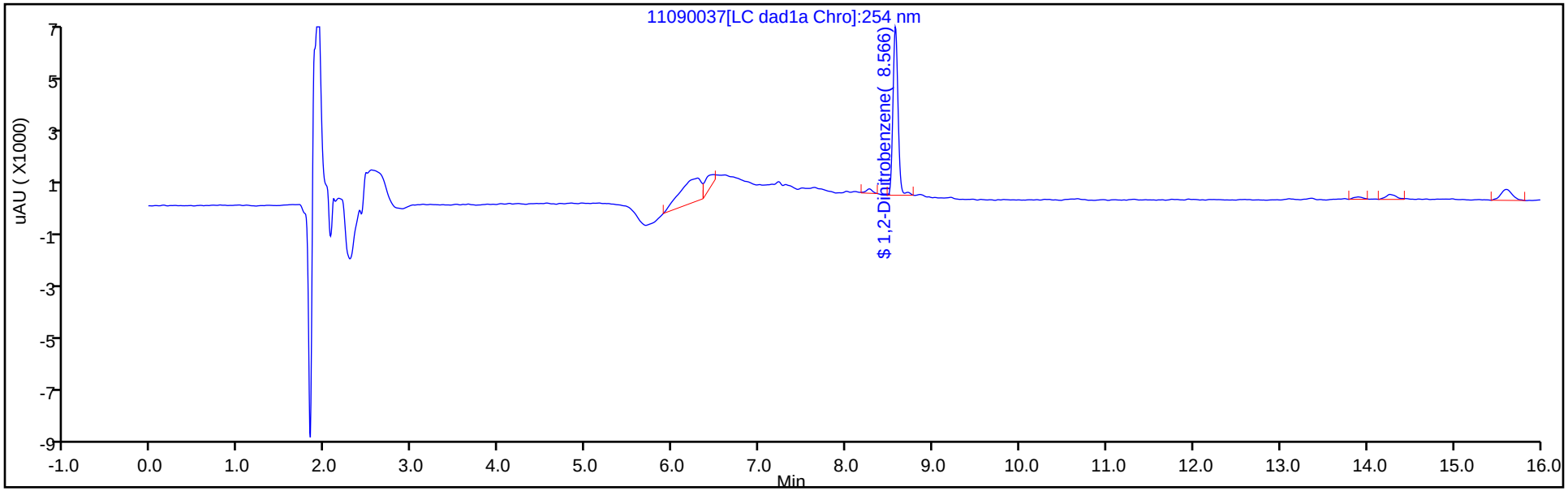
Report Date: 10-Nov-2021 12:59:08 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

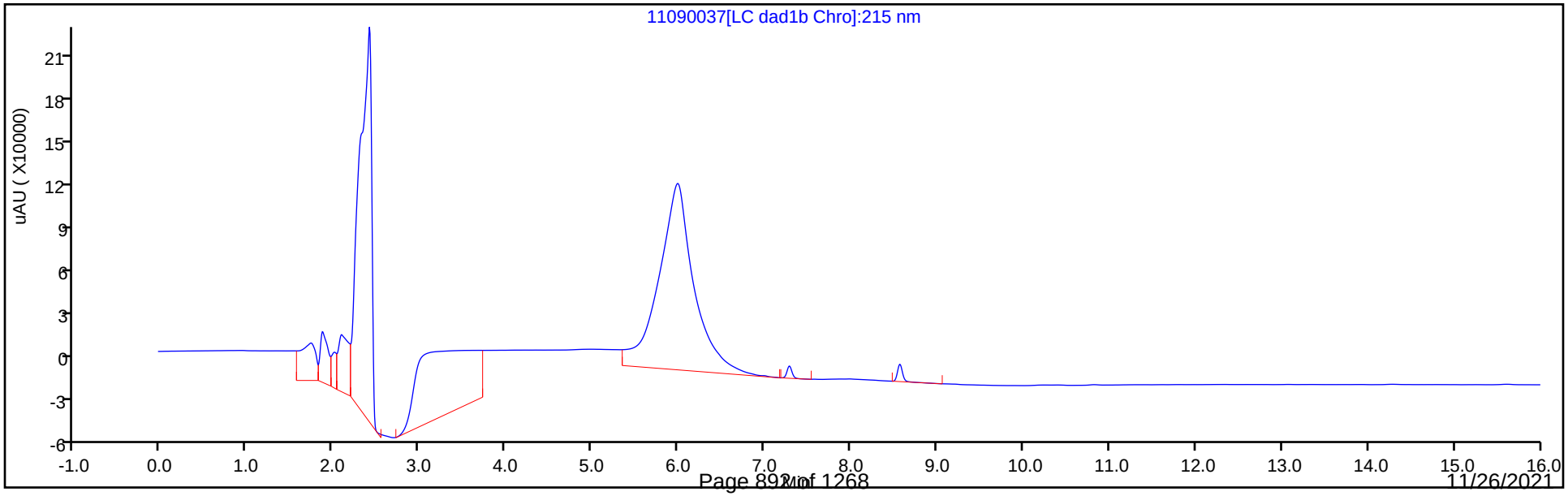
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090037.d

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.: 280-155225-1

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

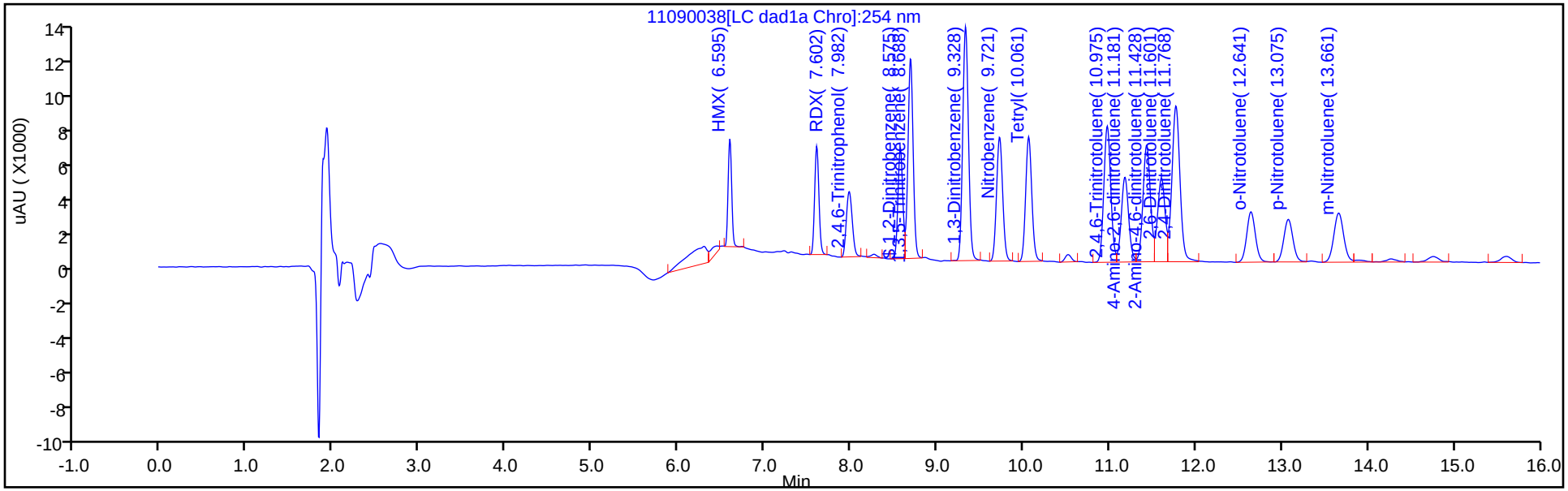
Report Date: 10-Nov-2021 12:59:07 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

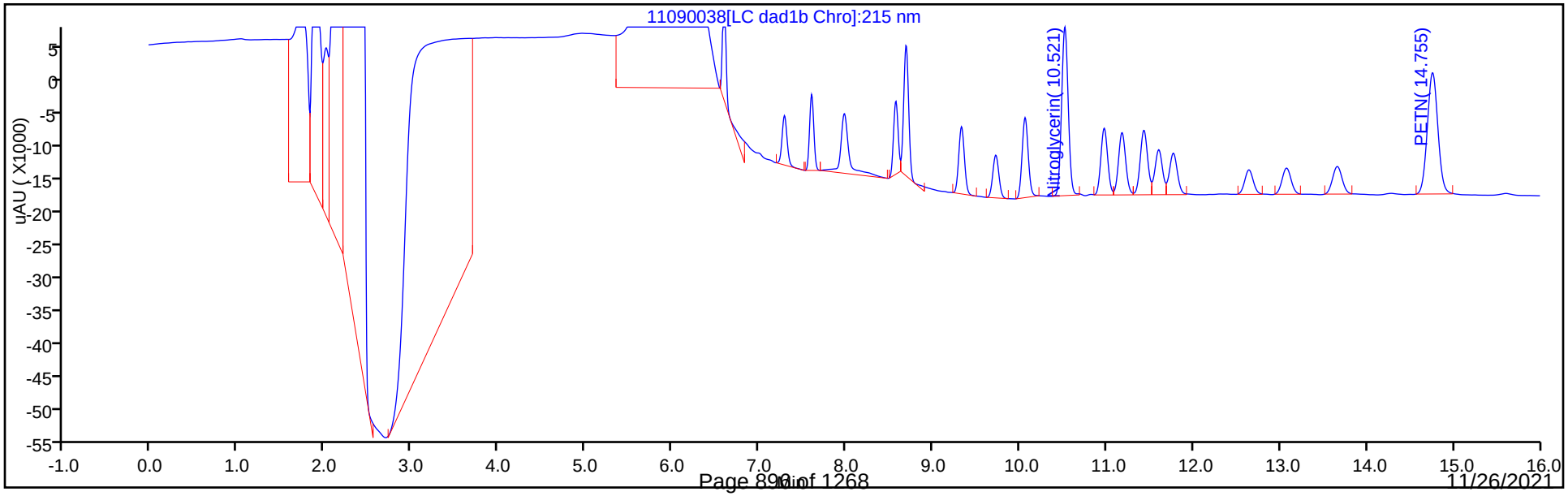
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090038.d

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

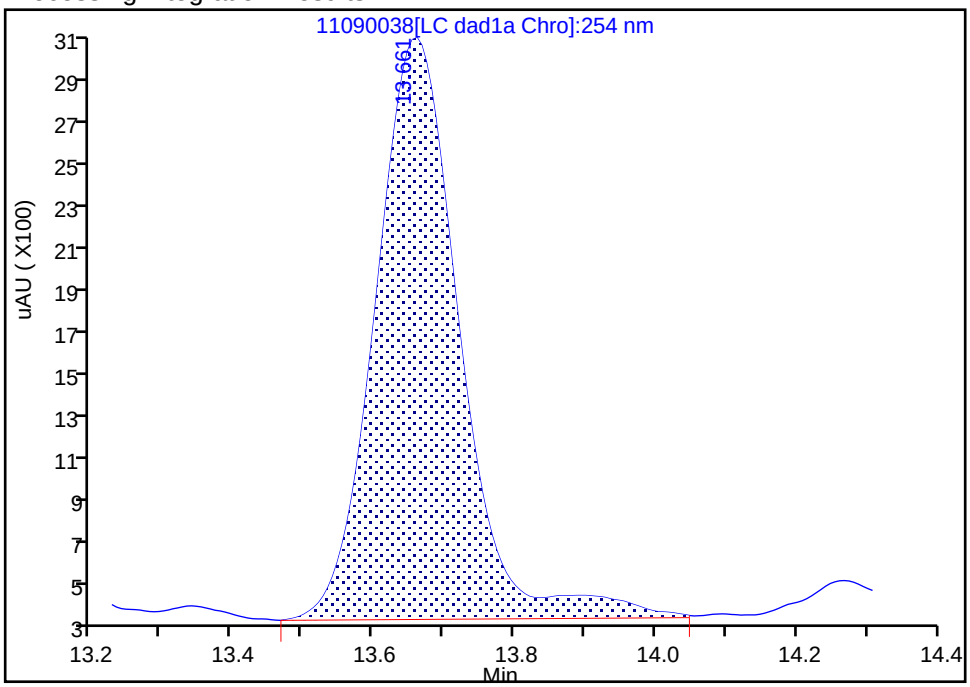
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090038.d				
Injection Date:	10-Nov-2021 02:27:05	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-556591/2-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	38	Worklist Smp#:	38
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

24 m-Nitrotoluene, CAS: 99-08-1

Signal: 1

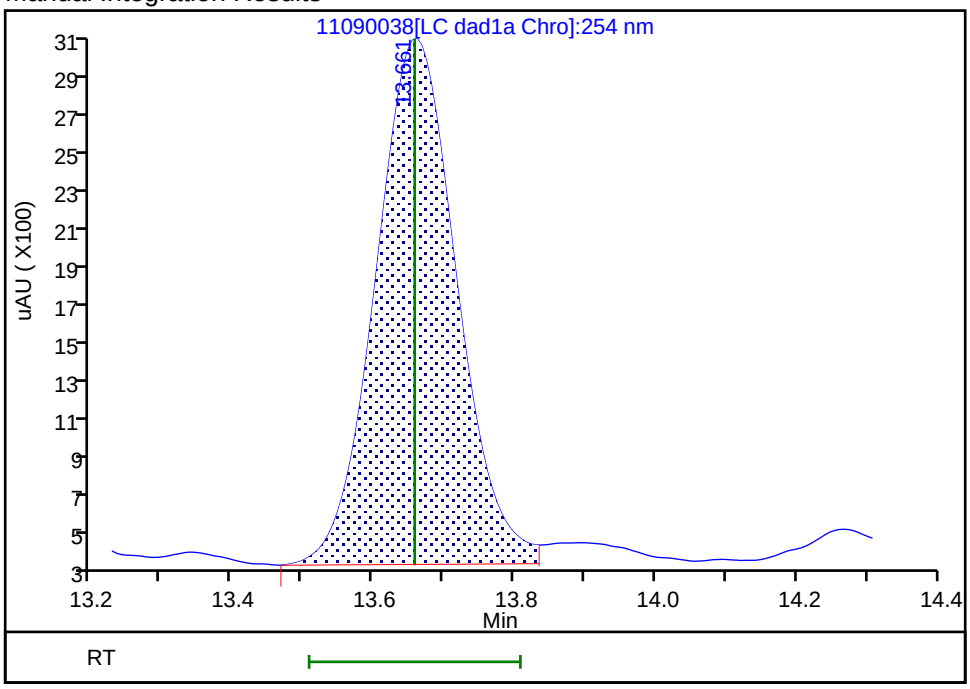
Processing Integration Results

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.: 280-155225-1

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

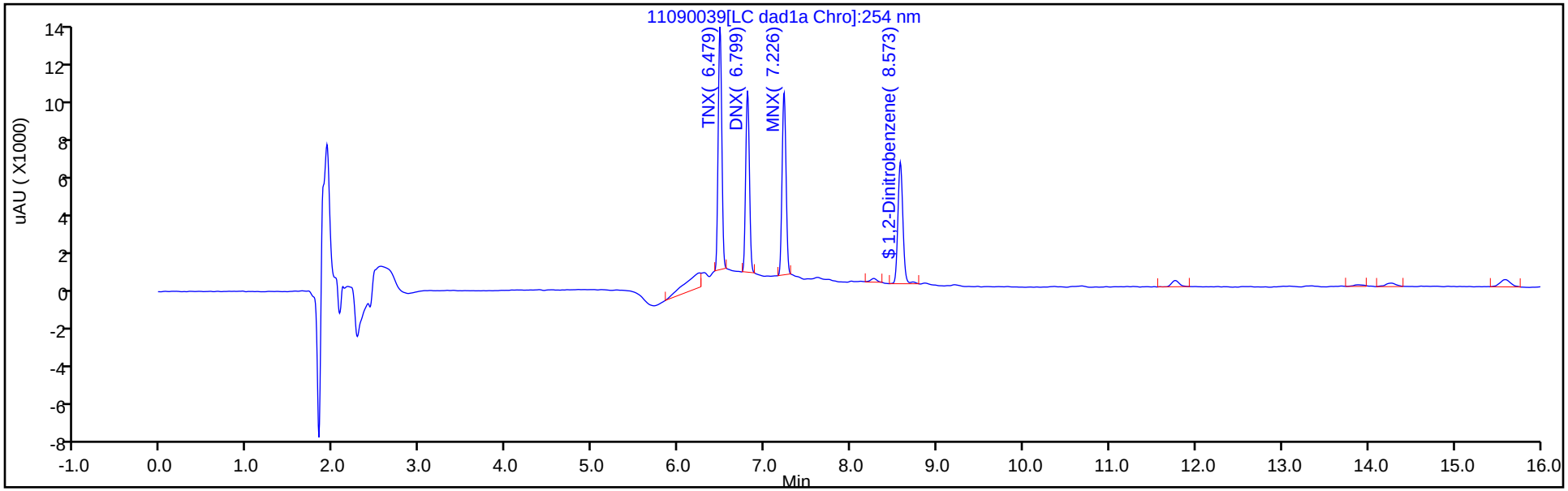
Report Date: 10-Nov-2021 12:59:07 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins TestAmerica, Denver

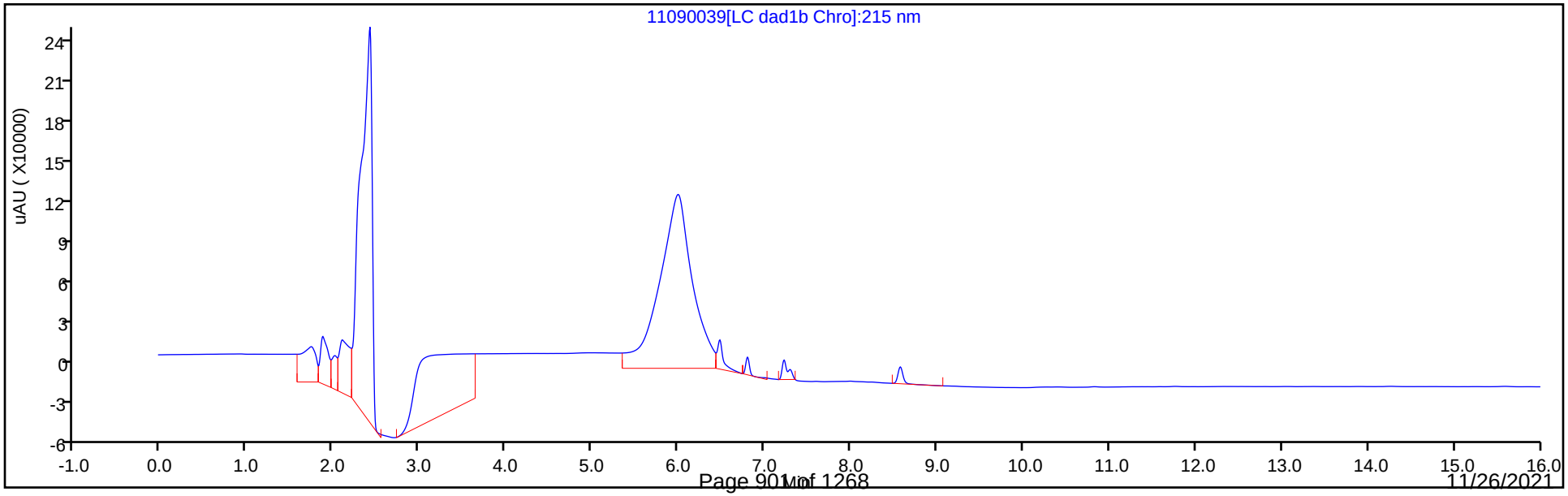
Data File: \\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090039.d

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

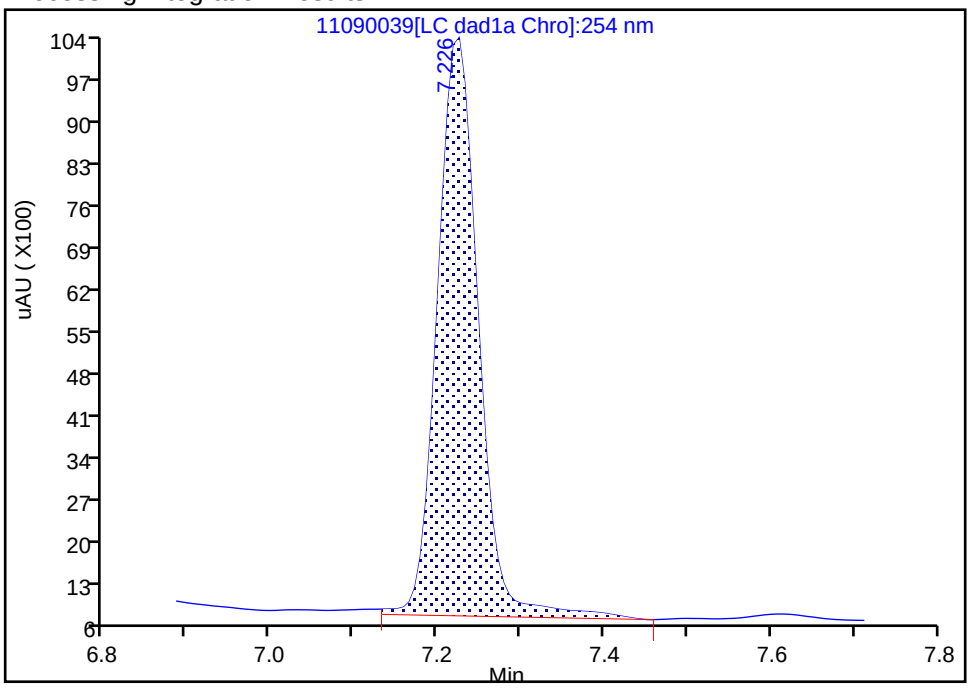
Data File:	\\chromfs\denver\chromdata\chhplc_x\20211109-106333.b\11090039.d				
Injection Date:	10-Nov-2021 02:50:02	Instrument ID:	CHHPLC_X3		
Lims ID:	LCS 280-556591/3-A				
Client ID:					
Operator ID:	JZ	ALS Bottle#:	39	Worklist Smp#:	39
Injection Vol:	100.0 ul	Dil. Factor:	1.0000		
Method:	8330_X3	Limit Group:	GCSV - 8330		
Column:	UltraCarb5uODS (20) (4.60 mm)	Detector	LC DAD1B, 254 nm		

7 MNX, CAS: 5755-27-1

Signal: 1

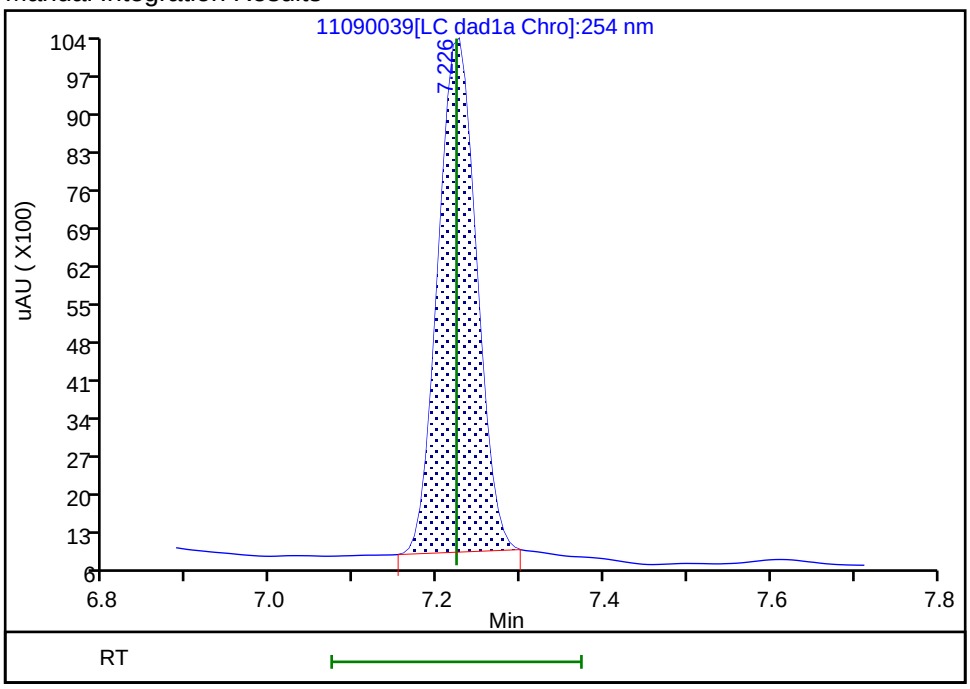
Processing Integration Results

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

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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.: 280-155225-1

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.: 280-155225-1

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.: 280-155225-1

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)
ZZZZZ		11/10/2021 03:12	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 03:35	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 03:58	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 04:21	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 04:44	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 05:07	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 05:30	1		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)
ZZZZZ		11/10/2021 06:39	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 07:02	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 07:25	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 07:48	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 08:11	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 08:34	1		UltraCarb5uODS 4.6(mm)
ZZZZZ		11/10/2021 08:57	1		UltraCarb5uODS 4.6(mm)
280-155225-1	G0024-7	11/10/2021 09:19	1	11090056.D	UltraCarb5uODS 4.6(mm)
280-155225-2	G0077-7	11/10/2021 09:42	1	11090057.D	UltraCarb5uODS 4.6(mm)
280-155225-3	G0078-7	11/10/2021 10:05	1	11090058.D	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)
280-155225-4	G0092-7	11/10/2021 11:14	1	11090061.D	UltraCarb5uODS 4.6(mm)
280-155225-5	G0091-7	11/10/2021 11:37	1	11090062.D	UltraCarb5uODS 4.6(mm)
280-155225-6	G0086-7	11/10/2021 12:00	1	11090063.D	UltraCarb5uODS 4.6(mm)
280-155225-7	PZ017R-7	11/10/2021 12:23	1	11090064.D	UltraCarb5uODS 4.6(mm)
280-155225-8	PZ018-7	11/10/2021 12:46	1	11090065.D	UltraCarb5uODS 4.6(mm)
280-155225-9	PZ021-7	11/10/2021 13:09	1	11090066.D	UltraCarb5uODS 4.6(mm)
CCV 280-556781/67		11/10/2021 13:32	1	11090067.D	UltraCarb5uODS 4.6(mm)
CCV 280-556781/68		11/10/2021 13:55	1	11090068.D	UltraCarb5uODS 4.6(mm)

HPLC/IC ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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)
ZZZZZ		11/11/2021 02:06	1		Luna-phenylhex 4.6(mm)
ZZZZZ		11/11/2021 02:40	1		Luna-phenylhex 4.6(mm)
ZZZZZ		11/11/2021 03:15	1		Luna-phenylhex 4.6(mm)
ZZZZZ		11/11/2021 03:50	1		Luna-phenylhex 4.6(mm)
ZZZZZ		11/11/2021 04:25	1		Luna-phenylhex 4.6(mm)
ZZZZZ		11/11/2021 05:00	1		Luna-phenylhex 4.6(mm)
280-155225-1	G0024-7	11/11/2021 05:35	1	11100031.D	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)
280-155225-2	G0077-7	11/11/2021 07:20	1	11100034.D	Luna-phenylhex 4.6(mm)
280-155225-3	G0078-7	11/11/2021 07:55	1	11100035.D	Luna-phenylhex 4.6(mm)
280-155225-5	G0091-7	11/11/2021 08:30	1	11100036.D	Luna-phenylhex 4.6(mm)
280-155225-6	G0086-7	11/11/2021 09:06	1	11100037.D	Luna-phenylhex 4.6(mm)
280-155225-7	PZ017R-7	11/11/2021 09:41	1	11100038.D	Luna-phenylhex 4.6(mm)
280-155225-8	PZ018-7	11/11/2021 10:15	1	11100039.D	Luna-phenylhex 4.6(mm)
280-155225-9	PZ021-7	11/11/2021 10:50	1	11100040.D	Luna-phenylhex 4.6(mm)
CCV 280-556958/41		11/11/2021 11:25	1	11100041.D	Luna-phenylhex 4.6(mm)
CCV 280-556958/42		11/11/2021 12:00	1	11100042.D	Luna-phenylhex 4.6(mm)

HPLC/IC BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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
280-155225-A-1	G0024-7	3535, 8330A	T	777.9 g	288.9 g	489 mL	5 mL		
280-155225-A-2	G0077-7	3535, 8330A	T	788.8 g	286.8 g	502 mL	5 mL		
280-155225-A-3	G0078-7	3535, 8330A	T	773.9 g	287.8 g	486.1 mL	5 mL		
280-155225-A-4	G0092-7	3535, 8330A	T	781.2 g	287.3 g	493.9 mL	5 mL		
280-155225-A-5	G0091-7	3535, 8330A	T	794.1 g	286.6 g	507.5 mL	5 mL		
280-155225-A-6	G0086-7	3535, 8330A	T	792.9 g	288.6 g	504.3 mL	5 mL		
280-155225-A-7	PZ017R-7	3535, 8330A	T	796.1 g	286.9 g	509.2 mL	5 mL		
280-155225-A-8	PZ018-7	3535, 8330A	T	785.9 g	287.9 g	498 mL	5 mL		
280-155225-A-9	PZ021-7	3535, 8330A	T	793.6 g	285.1 g	508.5 mL	5 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				
280-155225-A-1	G0024-7	3535, 8330A	T	0.1 mL					
280-155225-A-2	G0077-7	3535, 8330A	T	0.1 mL					
280-155225-A-3	G0078-7	3535, 8330A	T	0.1 mL					
280-155225-A-4	G0092-7	3535, 8330A	T	0.1 mL					
280-155225-A-5	G0091-7	3535, 8330A	T	0.1 mL					
280-155225-A-6	G0086-7	3535, 8330A	T	0.1 mL					
280-155225-A-7	PZ017R-7	3535, 8330A	T	0.1 mL					
280-155225-A-8	PZ018-7	3535, 8330A	T	0.1 mL					
280-155225-A-9	PZ021-7	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.: 280-155225-1

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

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

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: 280-155225-1

SDG No.:

Project: Cornhusker (CHAAP)

Client Sample ID	Lab Sample ID
G0024-7	280-155225-1
G0077-7	280-155225-2
G0078-7	280-155225-3
G0092-7	280-155225-4
G0091-7	280-155225-5
G0086-7	280-155225-6
PZ017R-7	280-155225-7
PZ018-7	280-155225-8
PZ021-7	280-155225-9

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0024-7 | Lab Sample ID: 280-155225-1

Lab Name: Eurofins TestAmerica, Denver | Job No.: 280-155225-1

SDG ID.:

Matrix: Water | Date Sampled: 11/04/2021 09:25

Reporting Basis: WET | Date Received: 11/05/2021 10:30

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	5.5	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	3.6	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	61	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	210	10	6.4	3.1	mg/L		B	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0024-7 Lab Sample ID: 280-155225-1

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG ID.:

Matrix: Water Date Sampled: 11/04/2021 09:25

Reporting Basis: WET Date Received: 11/05/2021 10:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.9	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0077-7 | Lab Sample ID: 280-155225-2

Lab Name: Eurofins TestAmerica, Denver | Job No.: 280-155225-1

SDG ID.:

Matrix: Water | Date Sampled: 11/04/2021 10:35

Reporting Basis: WET | Date Received: 11/05/2021 10:30

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	17	0.50	0.25	0.095	mg/L			5	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	130	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	360	10	6.4	3.1	mg/L		B	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0077-7 Lab Sample ID: 280-155225-2

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG ID.:

Matrix: Water Date Sampled: 11/04/2021 10:35

Reporting Basis: WET Date Received: 11/05/2021 10:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	4.6	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0078-7 | Lab Sample ID: 280-155225-3

Lab Name: Eurofins TestAmerica, Denver | Job No.: 280-155225-1

SDG ID.:

Matrix: Water | Date Sampled: 11/04/2021 11:45

Reporting Basis: WET | Date Received: 11/05/2021 10:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.21	0.20	0.10	0.044	mg/L			2	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	0.030	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	250	25	13	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	340	10	6.4	3.1	mg/L		B	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0078-7 Lab Sample ID: 280-155225-3

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG ID.:

Matrix: Water Date Sampled: 11/04/2021 11:45

Reporting Basis: WET Date Received: 11/05/2021 10:30

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: G0092-7 | Lab Sample ID: 280-155225-4

Lab Name: Eurofins TestAmerica, Denver | Job No.: 280-155225-1

SDG ID.:

Matrix: Water | Date Sampled: 11/03/2021 14:55

Reporting Basis: WET | Date Received: 11/05/2021 10:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.050	0.10	0.050	0.022	mg/L	U		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U		1	351.2
Nitrate Nitrite as N	0.037	0.10	0.050	0.019	mg/L	J		1	353.2
Sulfide	0.80	4.0	1.9	0.79	mg/L	J		1	9034
Sulfate	360	25	13	5.2	mg/L		D	5	9056A
Total Alkalinity as CaCO3	420	10	6.4	3.1	mg/L		Q	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0092-7 Lab Sample ID: 280-155225-4

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG ID.:

Matrix: Water Date Sampled: 11/03/2021 14:55

Reporting Basis: WET Date Received: 11/05/2021 10:30

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: G0091-7 | Lab Sample ID: 280-155225-5

Lab Name: Eurofins TestAmerica, Denver | Job No.: 280-155225-1

SDG ID.:

Matrix: Water | Date Sampled: 11/03/2021 13:40

Reporting Basis: WET | Date Received: 11/05/2021 10:30

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	40	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	170	25	13	5.2	mg/L		D M	5	9056A
Total Alkalinity as CaCO3	280	10	6.4	3.1	mg/L		Q	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0091-7 Lab Sample ID: 280-155225-5

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG ID.:

Matrix: Water Date Sampled: 11/03/2021 13:40

Reporting Basis: WET Date Received: 11/05/2021 10:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	3.3	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: G0086-7 | Lab Sample ID: 280-155225-6

Lab Name: Eurofins TestAmerica, Denver | Job No.: 280-155225-1

SDG ID.:

Matrix: Water | Date Sampled: 11/03/2021 15:05

Reporting Basis: WET | Date Received: 11/05/2021 10:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.028	0.10	0.050	0.022	mg/L	J		1	350.1
Nitrogen, Total Kjeldahl	1.0	1.0	1.0	0.69	mg/L	U	J1	1	351.2
Nitrate Nitrite as N	6.6	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	170	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	340	10	6.4	3.1	mg/L		Q	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: G0086-7 Lab Sample ID: 280-155225-6

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG ID.:

Matrix: Water Date Sampled: 11/03/2021 15:05

Reporting Basis: WET Date Received: 11/05/2021 10:30

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: PZ017R-7 | Lab Sample ID: 280-155225-7

Lab Name: Eurofins TestAmerica, Denver | Job No.: 280-155225-1

SDG ID.:

Matrix: Water | Date Sampled: 11/04/2021 09:30

Reporting Basis: WET | Date Received: 11/05/2021 10:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.47	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	2.0	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.11	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	34	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	580	10	6.4	3.1	mg/L		B	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ017R-7 Lab Sample ID: 280-155225-7

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG ID.:

Matrix: Water Date Sampled: 11/04/2021 09:30

Reporting Basis: WET Date Received: 11/05/2021 10:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	9.1	1.0	0.80	0.35	mg/L		J1	1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ018-7 | Lab Sample ID: 280-155225-8

Lab Name: Eurofins TestAmerica, Denver | Job No.: 280-155225-1

SDG ID.:

Matrix: Water | Date Sampled: 11/04/2021 11:05

Reporting Basis: WET | Date Received: 11/05/2021 10:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.65	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	2.8	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	3.2	0.10	0.050	0.019	mg/L			1	353.2
Sulfide	1.9	4.0	1.9	0.79	mg/L	U		1	9034
Sulfate	36	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	470	10	6.4	3.1	mg/L		Q	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ018-7 Lab Sample ID: 280-155225-8

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG ID.:

Matrix: Water Date Sampled: 11/04/2021 11:05

Reporting Basis: WET Date Received: 11/05/2021 10:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	13	1.0	0.80	0.35	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ021-7 | Lab Sample ID: 280-155225-9

Lab Name: Eurofins TestAmerica, Denver | Job No.: 280-155225-1

SDG ID.:

Matrix: Water | Date Sampled: 11/04/2021 08:00

Reporting Basis: WET | Date Received: 11/05/2021 10:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Ammonia	0.45	0.10	0.050	0.022	mg/L			1	350.1
Nitrogen, Total Kjeldahl	1.9	1.0	1.0	0.69	mg/L			1	351.2
Nitrate Nitrite as N	0.11	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	34	5.0	2.5	1.0	mg/L			1	9056A
Total Alkalinity as CaCO3	580	10	6.4	3.1	mg/L		B	1	SM 2320B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY - DISSOLVED

Client Sample ID: PZ021-7 Lab Sample ID: 280-155225-9

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG ID.:

Matrix: Water Date Sampled: 11/04/2021 08:00

Reporting Basis: WET Date Received: 11/05/2021 10:30

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Dissolved Organic Carbon - Quad	9.3	1.0	0.80	0.35	mg/L			1	9060A

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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	
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	
69	CCVL	12:24	Ammonia	0.513	0.500	103	90-110		350.1 cal_00509
70	CCV	12:26	Ammonia	2.52	2.50	101	90-110		350.1 cal_00509
71	CCB	12:28	Ammonia	0.0313				J	
85	CCVL	13:05	Ammonia	0.477	0.500	95	90-110		350.1 cal_00509
86	CCV	13:07	Ammonia	2.35	2.50	94	90-110		350.1 cal_00509
87	CCB	13:09	Ammonia	0.0323				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.: 280-155225-1

SDG No.:

Analyst: RKD Batch Start Date: 11/22/2021

Reporting Units: mg/L Analytical Batch No.: 558417

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
14	ICVL	15:52	Ammonia	0.490	0.501	98	90-110		350.1 ICV_00494
15	ICV	15:54	Ammonia	2.47	2.51	98	90-110		350.1 ICV_00494
16	ICB	15:56	Ammonia	0.050				U	
33	CCVL	16:30	Ammonia	0.476	0.500	95	90-110		350.1 cal_00509
34	CCV	16:32	Ammonia	2.34	2.50	94	90-110		350.1 cal_00509
35	CCB	16:34	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.: 280-155225-1

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	
44	CCV	19:51	Nitrogen, Total Kjeldahl	5.01	5.00	100	90-110		TKN 25ppm_00826
45	CCB	19:51	Nitrogen, Total Kjeldahl	1.0				U	
57	CCV	20:46	Nitrogen, Total Kjeldahl	5.09	5.00	102	90-110		TKN 25ppm_00826
58	CCB	20:46	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.: 280-155225-1

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	
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	
67	CCV	18:07	Nitrate Nitrite as N	5.20	5.00	104	90-110		NXN CAL INT_00601
68	CCVL	18:09	Nitrate Nitrite as N	1.06	1.00	106	90-110		NXN CAL INT_00601
69	CCB	18:11	Nitrate Nitrite as N	0.0237				J	
83	CCV	18:39	Nitrate Nitrite as N	5.25	5.00	105	90-110		NXN CAL INT_00601
84	CCVL	18:41	Nitrate Nitrite as N	1.06	1.00	106	90-110		NXN CAL INT_00601
85	CCB	18:43	Nitrate Nitrite as N	0.0224				J	
99	CCV	19:12	Nitrate Nitrite as N	5.20	5.00	104	90-110		NXN CAL INT_00601
100	CCVL	19:14	Nitrate Nitrite as N	1.08	1.00	108	90-110		NXN CAL INT_00601
101	CCB	19:16	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.: 280-155225-1

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.: 280-155225-1

SDG No.:

Analyst: CJ Batch Start Date: 11/22/2021

Reporting Units: mg/L Analytical Batch No.: 558325

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	09:49	Sulfate	95.1	100	95	90-110		IC LCS_01845
2	CCB	10:05	Sulfate	2.5				U	
17	CCV	15:35	Sulfate	97.2	100	97	90-110		IC LCS_01845
18	CCB	15:51	Sulfate	2.5				U	
29	CCV	18:52	Sulfate	97.0	100	97	90-110		IC LCS_01845
30	CCB	19:08	Sulfate	2.5				U	
41	CCV	22:09	Sulfate	97.6	100	98	90-110		IC LCS_01845
42	CCB	22:25	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.: 280-155225-1

SDG No.:

Analyst: CJ Batch Start Date: 11/23/2021

Reporting Units: mg/L Analytical Batch No.: 558471

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	10:27	Sulfate	96.6	100	97	90-110		IC LCS_01845
2	CCB	10:43	Sulfate	2.5				U	
15	CCV	14:24	Sulfate	98.6	100	99	90-110		IC LCS_01845
16	CCB	14:40	Sulfate	2.5				U	
27	CCV	17:41	Sulfate	96.8	100	97	90-110		IC LCS_01845
28	CCB	17:57	Sulfate	2.5				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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	
87	CCV	17:10	Dissolved Organic Carbon - Quad	25.3	25.0	101	90-110		TOC LCS Std_00052
88	CCB	17:24	Dissolved Organic Carbon - Quad	0.80				U	
92	CCV	18:24	Dissolved Organic Carbon - Quad	25.3	25.0	101	90-110		TOC LCS Std_00052
93	CCB	18:38	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.: 280-155225-1

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
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	
121	CCV	09:04	Total Alkalinity as CaCO3	224	200	112	90-110		Alk daily lcs 01006
122	CCB	09:10	Total Alkalinity as CaCO3	3.49				J	
133	CCV	10:37	Total Alkalinity as CaCO3	222	200	111	90-110		Alk daily lcs 01006
134	CCB	10:42	Total Alkalinity as CaCO3	3.65				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.: 280-155225-1

SDG No.:

Analyst: ECC Batch Start Date: 11/18/2021

Reporting Units: mg/L Analytical Batch No.: 558096

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
16	CCV	18:05	Total Alkalinity as CaCO3	209	200	104	90-110		Alk daily lcs 01007
17	CCB	18:11	Total Alkalinity as CaCO3	4.78				J	
28	CCV	19:38	Total Alkalinity as CaCO3	211	200	106	90-110		Alk daily lcs 01007
29	CCB	19:44	Total Alkalinity as CaCO3	4.66				J	
42	CCV	21:02	Total Alkalinity as CaCO3	210	200	105	90-110		Alk daily lcs 01007
43	CCB	21:08	Total Alkalinity as CaCO3	4.88				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.: 280-155225-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	LOQ	Dil
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: 558390 Date: 11/22/2021 11:56							
350.1	MB 280-558390/55	Ammonia	0.0268	J	mg/L	0.10	1
Batch ID: 558417 Date: 11/22/2021 16:04							
350.1	MB 280-558417/20	Ammonia	0.050	U	mg/L	0.10	1
Batch ID: 557899 Date: 11/17/2021 19:47 Prep Batch: 557730 Date: 11/16/2021 18:07							
351.2	MB 280-557730/2-A	Nitrogen, Total Kjeldahl	1.0	U	mg/L	1.0	1
Batch ID: 558049 Date: 11/18/2021 17:53							
353.2	MB 280-558049/60	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: 556959 Date: 11/10/2021 13:25 Prep Batch: 556892 Date: 11/10/2021 09:52							
9034	MB 280-556892/1-A	Sulfide	1.9	U	mg/L	4.0	1
Batch ID: 558325 Date: 11/22/2021 11:10							
9056A	MB 280-558325/6	Sulfate	2.5	U M	mg/L	5.0	1
Batch ID: 558471 Date: 11/23/2021 11:48							
9056A	MB 280-558471/6	Sulfate	2.5	U M	mg/L	5.0	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 07:38							
SM 2320B	MB 280-557846/110	Total Alkalinity as CaCO3	3.84	J Q	mg/L	10	1
Batch ID: 558096 Date: 11/18/2021 16:49							
SM 2320B	MB 280-558096/5	Total Alkalinity as CaCO3	5.84	J	mg/L	10	1
Batch ID: 558096 Date: 11/18/2021 19:56							
SM 2320B	MB 280-558096/31	Total Alkalinity as CaCO3	5.22	J	mg/L	10	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 557899	Date: 11/17/2021 19:55		Prep Batch: 557730		Date: 11/16/2021 18:07						
351.2	280-155225-6	Nitrogen, Total Kjeldahl	1.0	U	mg/L						J1
351.2	280-155225-6 MS	Nitrogen, Total Kjeldahl	2.63		mg/L	3.00	88	90-110			J1
Batch ID: 556959	Date: 11/10/2021 13:25		Prep Batch: 556892		Date: 11/10/2021 09:52						
9034	280-155225-1	Sulfide	3.6	J	mg/L						
9034	280-155225-1 MS	Sulfide	15.2		mg/L	18.6	62	44-110			
Batch ID: 557476	Date: 11/13/2021 16:55										
9060A	280-155225-7	Dissolved Organic Carbon - Quad	9.1		mg/L						J1
9060A	280-155225-7 MS	Dissolved Organic Carbon - Quad	30.0		mg/L	25.0	84	88-112			J1

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.: 280-155225-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 557899	Date: 11/17/2021 19:55		Prep Batch: 557730		Date: 11/16/2021 18:07						
351.2	280-155225-6 MSD	Nitrogen, Total Kjeldahl	2.62		mg/L	3.00	87	90-110	0	25	J1
Batch ID: 556959	Date: 11/10/2021 13:25		Prep Batch: 556892		Date: 11/10/2021 09:52						
9034	280-155225-1 MSD	Sulfide	14.4		mg/L	18.6	58	44-110	5	20	
Batch ID: 557476	Date: 11/13/2021 17:39										
9060A	280-155225-7 MSD	Dissolved Organic Carbon - Quad	30.0		mg/L	25.0	83	88-112	0	15	J1

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.: 280-155225-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 558096 Date: 11/18/2021 20:09								
SM 2320B	G0024-7	280-155225-1	Total Alkalinity as CaCO3	210	mg/L			
SM 2320B	G0024-7	280-155225-1 DU	Total Alkalinity as CaCO3	208	mg/L	0.3	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.: 280-155225-1

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 11:52										
						LCS Source: 350.1 cal_00509					
350.1	LCS 280-558390/53	Ammonia	2.52		mg/L	2.50	101	90-110	1	10	
Batch ID: 558417	Date: 11/22/2021 16:00										
						LCS Source: 350.1 cal_00509					
350.1	LCS 280-558417/18	Ammonia	2.43		mg/L	2.50	97	90-110	2	10	
Batch ID: 557899	Date: 11/17/2021 19:47	Prep Batch: 557730	Date: 11/16/2021 18:07								
						LCS Source: TKN 25ppm_00826					
351.2	LCS 280-557730/1-A	Nitrogen, Total Kjeldahl	5.71		mg/L	6.00	95	90-110			
Batch ID: 558049	Date: 11/18/2021 17:51										
						LCS Source: NXN CAL INT_00601					
353.2	LCS 280-558049/59	Nitrate Nitrite as N	5.26		mg/L	5.00	105	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: 556959	Date: 11/10/2021 13:25	Prep Batch: 556892	Date: 11/10/2021 09:52								
						LCS Source: SFD ICV INT_02024					
9034	LCS 280-556892/2-A	Sulfide	12.0		mg/L	18.6	65	44-110			
Batch ID: 558325	Date: 11/22/2021 10:38										
						LCS Source: IC LCS_01845					
9056A	LCS 280-558325/4	Sulfate	95.1		mg/L	100	95	87-112	0	10	
Batch ID: 558471	Date: 11/23/2021 11:16										
						LCS Source: IC LCS_01845					
9056A	LCS 280-558471/4	Sulfate	96.4		mg/L	100	96	87-112	0	10	
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 07:32										
						LCS Source: Alk daily lcs_01006					
SM 2320B	LCS 280-557846/109	Total Alkalinity as CaCO3	219		mg/L	200	110	89-109			Q
Batch ID: 558096	Date: 11/18/2021 16:43										
						LCS Source: Alk daily lcs_01007					
SM 2320B	LCS 280-558096/4	Total Alkalinity as CaCO3	207		mg/L	200	104	89-109			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 558096 Date: 11/18/2021 19:51											
						LCS Source: Alk daily lcs_01007					
SM 2320B	LCS 280-558096/30	Total Alkalinity as CaCO3	212		mg/L	200	106	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.: 280-155225-1

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 11:54										
						LCSD Source: 350.1 cal_00509					
350.1	LCSD 280-558390/54	Ammonia	2.53		mg/L	2.50	101	90-110	1	10	
Batch ID: 558417	Date: 11/22/2021 16:02										
						LCSD Source: 350.1 cal_00509					
350.1	LCSD 280-558417/19	Ammonia	2.39		mg/L	2.50	96	90-110	2	10	
Batch ID: 558325	Date: 11/22/2021 10:54										
						LCSD Source: IC LCS_01845					
9056A	LCSD 280-558325/5	Sulfate	95.1		mg/L	100	95	87-112	0	10	
Batch ID: 558471	Date: 11/23/2021 11:32										
						LCSD Source: IC LCS_01845					
9056A	LCSD 280-558471/5	Sulfate	96.6		mg/L	100	97	87-112	0	10	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

7A-IN
METHOD REPORTING LIMIT CHECK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 558325	Date: 11/22/2021 10:21										
						LCS Source: IC CAL cl/so4_00394					
9056A	MRL 280-558325/3	Sulfate	4.11	J	mg/L	5.00	82	50-150			
Batch ID: 558471	Date: 11/23/2021 10:59										
						LCS Source: IC CAL cl/so4_00394					
9056A	MRL 280-558471/3	Sulfate	4.08	J	mg/L	5.00	82	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: 280-155225-1

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: 280-155225-1

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: 280-155225-1

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: 280-155225-1

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: 280-155225-1

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: 280-155225-1

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: 280-155225-1

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: 280-155225-1

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: 280-155225-1

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: 280-155225-1

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: 280-155225-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI3

Method: 9060A DL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	LOQ (mg/L)	DL (mg/L)
Dissolved Organic Carbon - Quad		1	0.345

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY - DISSOLVED

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-155225-1

SDG Number:

Matrix: Water Instrument ID: WC_SHI3

Method: 9060A XMDL Date: 06/21/2019 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Dissolved Organic Carbon - Quad		1	0.345

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job Number: 280-155225-1

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: 280-155225-1

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.: 280-155225-1

SDG No.:

Prep Method: 351.2

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
LCS 280-557730/1-A	11/16/2021 18:07	557730		25	25
MB 280-557730/2-A	11/16/2021 18:07	557730		25	25
280-155225-1	11/16/2021 18:07	557730		25	25
280-155225-2	11/16/2021 18:07	557730		25	25
280-155225-3	11/16/2021 18:07	557730		25	25
280-155225-4	11/16/2021 18:07	557730		25	25
280-155225-5	11/16/2021 18:07	557730		25	25
280-155225-7	11/16/2021 18:07	557730		25	25
280-155225-8	11/16/2021 18:07	557730		25	25
280-155225-9	11/16/2021 18:07	557730		25	25
280-155225-6	11/16/2021 18:07	557730		25	25
280-155225-6 MS	11/16/2021 18:07	557730		25	25
280-155225-6 MSD	11/16/2021 18:07	557730		25	25

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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
280-155225-4	11/09/2021 12:07	556749		50	50

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Prep Method: 9030B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 280-556892/1-A	11/10/2021 09:52	556892		50	50
LCS 280-556892/2-A	11/10/2021 09:52	556892		50	50
280-155225-1	11/10/2021 09:52	556892		50	50
280-155225-1 MS	11/10/2021 09:52	556892		50	50
280-155225-1 MSD	11/10/2021 09:52	556892		50	50
280-155225-2	11/10/2021 09:52	556892		50	50
280-155225-3	11/10/2021 09:52	556892		50	50
280-155225-5	11/10/2021 09:52	556892		50	50
280-155225-6	11/10/2021 09:52	556892		50	50
280-155225-7	11/10/2021 09:52	556892		50	50
280-155225-8	11/10/2021 09:52	556892		50	50
280-155225-9	11/10/2021 09:52	556892		50	50

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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																									
ZZZZZZ			10:42																									
ZZZZZZ			10:44																									
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			11:12																									
CCV 280-558390/34	1		11:14	X																								
CCB 280-558390/35	1		11:16	X																								
ZZZZZZ			11:18																									
ZZZZZZ			11:20																									
ZZZZZZ			11:22																									
ZZZZZZ			11:24																									
ZZZZZZ			11:26																									
ZZZZZZ			11:28																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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			11:30																									
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																									
LCS 280-558390/53	1	T	11:52	X																								
LCSD 280-558390/54	1	T	11:54	X																								
MB 280-558390/55	1	T	11:56	X																								
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	1		12:24	X																								
CCV 280-558390/70	1		12:26	X																								
CCB 280-558390/71	1		12:28	X																								
ZZZZZZ			12:30																									
280-155225-3	2	T	12:32	X																								
ZZZZZZ			12:34																									
280-155225-5	1	T	12:36	X																								
280-155225-6	1	T	12:38	X																								
280-155225-7	1	T	12:40	X																								
280-155225-8	1	T	12:42	X																								
ZZZZZZ			12:53																									
ZZZZZZ			12:55																									
ZZZZZZ			12:57																									
ZZZZZZ			12:59																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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	1		13:05	X																								
CCV 280-558390/86	1		13:07	X																								
CCB 280-558390/87	1		13:09	X																								
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

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 11/22/2021 15:26 End Date: 11/22/2021 17:52

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			15:26																									
ZZZZZZ			15:28																									
ZZZZZZ			15:30																									
IC 280-558417/4			15:32	X																								
IC 280-558417/5			15:34	X																								
IC 280-558417/6			15:36	X																								
IC 280-558417/7			15:38	X																								
IC 280-558417/8			15:40	X																								
IC 280-558417/9			15:42	X																								
IC 280-558417/10			15:44	X																								
IC 280-558417/11			15:46	X																								
ZZZZZZ			15:48																									
ZZZZZZ			15:50																									
ICVL 280-558417/14	1		15:52	X																								
ICV 280-558417/15	1		15:54	X																								
ICB 280-558417/16	1		15:56	X																								
ZZZZZZ			15:58																									
LCS 280-558417/18	1	T	16:00	X																								
LCSD 280-558417/19	1	T	16:02	X																								
MB 280-558417/20	1	T	16:04	X																								
ZZZZZZ			16:06																									
ZZZZZZ			16:08																									
ZZZZZZ			16:10																									
ZZZZZZ			16:12																									
ZZZZZZ			16:14																									
ZZZZZZ			16:16																									
280-155225-1	1	T	16:18	X																								
280-155225-2	1	T	16:20	X																								
280-155225-4	1	T	16:22	X																								
280-155225-9	1	T	16:24	X																								
ZZZZZZ			16:26																									
ZZZZZZ			16:28																									
CCVL 280-558417/33	1		16:30	X																								
CCV 280-558417/34	1		16:32	X																								
CCB 280-558417/35	1		16:34	X																								
ZZZZZZ			16:36																									
ZZZZZZ			16:38																									
ZZZZZZ			16:40																									
ZZZZZZ			16:42																									
ZZZZZZ			16:44																									
ZZZZZZ			16:46																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Instrument ID: WC_Alp 4 Analysis Method: 350.1

Start Date: 11/22/2021 15:26 End Date: 11/22/2021 17:52

Lab Sample Id	D/F	Type	Time	Analytes																								
				NH3																								
ZZZZZZ			16:48																									
ZZZZZZ			16:50																									
ZZZZZZ			16:52																									
ZZZZZZ			16:54																									
ZZZZZZ			16:56																									
ZZZZZZ			16:58																									
ZZZZZZ			17:00																									
ZZZZZZ			17:02																									
ZZZZZZ			17:04																									
ZZZZZZ			17:06																									
ZZZZZZ			17:08																									
ZZZZZZ			17:17																									
CCVL 280-558417/54			17:19																									
CCV 280-558417/55			17:21																									
CCB 280-558417/56			17:23																									
ZZZZZZ			17:25																									
ZZZZZZ			17:48																									
ZZZZZZ			17:50																									
ZZZZZZ			17:52																									

Prep Types:
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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																								
ZZZZZZ			19:34																									
ZZZZZZ			19:34																									
ZZZZZZ			19:35																									
ZZZZZZ			19:35																									
ZZZZZZ			19:35																									
ZZZZZZ			19:35																									
ZZZZZZ			19:36																									
ZZZZZZ			19:37																									
ZZZZZZ			19:38																									
ZZZZZZ			19:38																									
ZZZZZZ			19:39																									
ZZZZZZ			19:39																									
CCV 280-557418/9-A			19:39																									
CCB 280-557418/10-A			19:39																									
ZZZZZZ			19:40																									
ZZZZZZ			19:40																									
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			19:45																									
CCB 280-557418/10-A			19:45																									
ZZZZZZ			19:46																									
ZZZZZZ			19:46																									
ZZZZZZ			19:47																									
ZZZZZZ			19:47																									
LCS 280-557730/1-A	1	T	19:47	X																								
MB 280-557730/2-A	1	T	19:47	X																								
ZZZZZZ			19:48																									
ZZZZZZ			19:48																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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																									
280-155225-1	1	T	19:49	X																								
CCV 280-557418/9-A	1		19:51	X																								
CCB 280-557418/10-A	1		19:51	X																								
280-155225-2	1	T	19:51	X																								
280-155225-3	1	T	19:51	X																								
280-155225-4	1	T	19:52	X																								
280-155225-5	1	T	19:52	X																								
280-155225-7	1	T	19:52	X																								
280-155225-8	1	T	19:52	X																								
280-155225-9	1	T	19:54	X																								
280-155225-6	1	T	19:54	X																								
280-155225-6 MS	1	T	19:55	X																								
280-155225-6 MSD	1	T	19:55	X																								
ZZZZZZ			20:46																									
CCV 280-557418/9-A	1		20:46	X																								
CCB 280-557418/10-A	1		20:46	X																								
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.: 280-155225-1

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																									
ZZZZZZ			16:35																									
ZZZZZZ			16:37																									
ZZZZZZ			16:39																									
ZZZZZZ			16:41																									
ZZZZZZ			16:43																									
ZZZZZZ			16:45																									
ZZZZZZ			16:47																									
ZZZZZZ			16:49																									
ZZZZZZ			16:51																									
ZZZZZZ			16:53																									
ZZZZZZ			16:55																									
ZZZZZZ			16:57																									
RINSE 280-558049/33			16:59																									
ZZZZZZ			17:01																									
CCV 280-558049/35			17:03																									
CCVL 280-558049/36			17:05																									
CCB 280-558049/37			17:07																									
ZZZZZZ			17:09																									
ZZZZZZ			17:11																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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			17:13																									
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																									
LCS 280-558049/59	1	T	17:51	X																								
MB 280-558049/60	1	T	17:53	X																								
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	1		18:07	X																								
CCVL 280-558049/68	1		18:09	X																								
CCB 280-558049/69	1		18:11	X																								
ZZZZZZ			18:13																									
280-155225-1	1	T	18:15	X																								
280-155225-2	5	T	18:17	X																								
280-155225-3	1	T	18:19	X																								
280-155225-4	1	T	18:21	X																								
280-155225-5	10	T	18:23	X																								
280-155225-6	2	T	18:25	X																								
280-155225-7	1	T	18:27	X																								
280-155225-8	1	T	18:29	X																								

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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	1		18:39	X
CCVL 280-558049/84	1		18:41	X
CCB 280-558049/85	1		18:43	X
ZZZZZZ			18:45	
ZZZZZZ			18:48	
280-155225-9	1	T	18:50	X
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	1		19:12	X
CCVL 280-558049/100	1		19:14	X
CCB 280-558049/101	1		19:16	X
ZZZZZZ			19:18	

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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																								
ZZZZZZ			12:10																									
ZZZZZZ			12:10																									
ZZZZZZ			12:10																									
ZZZZZZ			12:10																									
ZZZZZZ			12:10																									
ZZZZZZ			12:10																									
ZZZZZZ			12:10																									
ZZZZZZ			12:10																									
ZZZZZZ			12:10																									
ZZZZZZ			12:10																									
ZZZZZZ			12:10																									
ZZZZZZ			12:10																									
ZZZZZZ			12:10																									
ZZZZZZ			12:10																									
ZZZZZZ			12:10																									
280-155225-4	1	T	12:10	X																								

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: 9034

Start Date: 11/10/2021 13:25 End Date: 11/10/2021 13:25

Lab Sample Id	D/F	Type	Time	Analytes																								
				S2																								
MB 280-556892/1-A	1	T	13:25	X																								
LCS 280-556892/2-A	1	T	13:25	X																								
280-155225-1	1	T	13:25	X																								
280-155225-1 MS	1	T	13:25	X																								
280-155225-1 MSD	1	T	13:25	X																								
280-155225-2	1	T	13:25	X																								
280-155225-3	1	T	13:25	X																								
ZZZZZZ			13:25																									
280-155225-5	1	T	13:25	X																								
280-155225-6	1	T	13:25	X																								
280-155225-7	1	T	13:25	X																								
280-155225-8	1	T	13:25	X																								
280-155225-9	1	T	13:25	X																								
ZZZZZZ			13:25																									
ZZZZZZ			13:25																									
ZZZZZZ			13:25																									
ZZZZZZ			13:25																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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																									

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Method: 9056A

Start Date: 11/22/2021 09:49 End Date: 11/23/2021 00:04

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCV 280-558325/1	1		09:49	X																								
CCB 280-558325/2	1		10:05	X																								
MRL 280-558325/3	1	T	10:21	X																								
LCS 280-558325/4	1	T	10:38	X																								
LCSD 280-558325/5	1	T	10:54	X																								
MB 280-558325/6	1	T	11:10	X																								
ZZZZZZ			12:51																									
ZZZZZZ			13:07																									
ZZZZZZ			13:24																									
ZZZZZZ			13:40																									
ZZZZZZ			13:57																									
ZZZZZZ			14:13																									
ZZZZZZ			14:29																									
ZZZZZZ			14:46																									
ZZZZZZ			15:02																									
ZZZZZZ			15:19																									
CCV 280-558325/17	1		15:35	X																								
CCB 280-558325/18	1		15:51	X																								
ZZZZZZ			16:08																									
ZZZZZZ			16:24																									
280-155225-1	1	T	16:41	X																								
280-155225-2	1	T	16:57	X																								
ZZZZZZ			17:14																									
ZZZZZZ			17:30																									
ZZZZZZ			17:46																									
ZZZZZZ			18:03																									
ZZZZZZ			18:19																									
ZZZZZZ			18:36																									
CCV 280-558325/29	1		18:52	X																								
CCB 280-558325/30	1		19:08	X																								
ZZZZZZ			19:25																									
280-155225-6	1	T	19:41	X																								
280-155225-7	1	T	19:58	X																								
280-155225-8	1	T	20:14	X																								
280-155225-9	1	T	20:30	X																								
ZZZZZZ			20:47																									
ZZZZZZ			21:03																									
ZZZZZZ			21:20																									
ZZZZZZ			21:36																									
ZZZZZZ			21:53																									
CCV 280-558325/41	1		22:09	X																								

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Instrument ID: WC_IonChrom11 Analysis Method: 9056A

Start Date: 11/22/2021 09:49 End Date: 11/23/2021 00:04

Lab Sample Id	D/F	Type	Time	Analytes																								
				SO4																								
CCB 280-558325/42	1		22:25	X																								
ZZZZZZ			22:42																									
ZZZZZZ			22:58																									
ZZZZZZ			23:15																									
ZZZZZZ			23:31																									
CCV 280-558325/46			23:48																									
CCB 280-558325/47			00:04																									

Prep Types:
T = Total/NA

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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	1		10:27	X																								
CCB 280-558471/2	1		10:43	X																								
MRL 280-558471/3	1	T	10:59	X																								
LCS 280-558471/4	1	T	11:16	X																								
LCSD 280-558471/5	1	T	11:32	X																								
MB 280-558471/6	1	T	11:48	X																								
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	1		14:24	X																								
CCB 280-558471/16	1		14:40	X																								
ZZZZZZ			14:57																									
ZZZZZZ			15:13																									
ZZZZZZ			15:29																									
280-155225-3	5	T	15:46	X																								
280-155225-4	5	T	16:02	X																								
280-155225-5	5	T	16:19	X																								
ZZZZZZ			16:35																									
ZZZZZZ			16:51																									
ZZZZZZ			17:08																									
ZZZZZZ			17:24																									
CCV 280-558471/27	1		17:41	X																								
CCB 280-558471/28	1		17:57	X																								
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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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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.: 280-155225-1

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																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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																											
ZZZZZZ			13:01																											
ZZZZZZ			13:16																											
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																											
280-155225-1	1	D	15:08	X																										
280-155225-2	1	D	15:22	X																										

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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																								
280-155225-3	1	D	15:39	X																								
280-155225-4	1	D	15:56	X																								
280-155225-5	1	D	16:11	X																								
280-155225-6	1	D	16:25	X																								
280-155225-7	1	D	16:40	X																								
280-155225-7 MS	1	D	16:55	X																								
CCV 280-557476/87	1		17:10	X																								
CCB 280-557476/88	1		17:24	X																								
280-155225-7 MSD	1	D	17:39	X																								
280-155225-8	1	D	17:54	X																								
280-155225-9	1	D	18:09	X																								
CCV 280-557476/92	1		18:24	X																								
CCB 280-557476/93	1		18:38	X																								

Prep Types:
D = Dissolved

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ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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.: 280-155225-1

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.: 280-155225-1

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			04:09																									
ZZZZZZ			04:14																									
ZZZZZZ			04:22																									
ZZZZZZ			04:29																									
ZZZZZZ			04:35																									
ZZZZZZ			04:41																									
ZZZZZZ			04:49																									
ZZZZZZ			04:55																									
ZZZZZZ			05:03																									
ZZZZZZ			05:11																									
ZZZZZZ			05:19																									
ZZZZZZ			05:27																									
CCV 280-557846/95			05:34																									
CCB 280-557846/96			05:40																									
ZZZZZZ			05:45																									
ZZZZZZ			05:53																									
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																								
LCS 280-557846/109	1	T	07:32	X																								
MB 280-557846/110	1	T	07:38	X																								
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	1		09:04	X																								
CCB 280-557846/122	1		09:10	X																								
ZZZZZZ			09:16																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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																									
280-155225-4	1	T	09:33	X																								
280-155225-5	1	T	09:40	X																								
280-155225-6	1	T	09:48	X																								
ZZZZZZ			09:57																									
280-155225-8	1	T	10:06	X																								
ZZZZZZ			10:16																									
ZZZZZZ			10:23																									
ZZZZZZ			10:29																									
CCV 280-557846/133	1		10:37	X																								
CCB 280-557846/134	1		10:42	X																								
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.: 280-155225-1

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

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 11/18/2021 16:27 End Date: 11/18/2021 21:57

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
RINSE 280-558096/1			16:27																									
ZZZZZZ			16:33																									
ZZZZZZ			16:36																									
LCS 280-558096/4	1	T	16:43	X																								
MB 280-558096/5	1	T	16:49	X																								
ZZZZZZ			16:56																									
ZZZZZZ			17:02																									
ZZZZZZ			17:08																									
ZZZZZZ			17:14																									
ZZZZZZ			17:20																									
ZZZZZZ			17:27																									
ZZZZZZ			17:36																									
ZZZZZZ			17:45																									
ZZZZZZ			17:51																									
ZZZZZZ			17:59																									
CCV 280-558096/16	1		18:05	X																								
CCB 280-558096/17	1		18:11	X																								
ZZZZZZ			18:20																									
ZZZZZZ			18:28																									
ZZZZZZ			18:35																									
ZZZZZZ			18:41																									
ZZZZZZ			18:49																									
280-155225-7	1	T	18:58	X																								
280-155225-9	1	T	19:08	X																								
ZZZZZZ			19:16																									
ZZZZZZ			19:23																									
280-155225-3	1	T	19:31	X																								
CCV 280-558096/28	1		19:38	X																								
CCB 280-558096/29	1		19:44	X																								
LCS 280-558096/30	1	T	19:51	X																								
MB 280-558096/31	1	T	19:56	X																								
280-155225-1	1	T	20:03	X																								
280-155225-1 DU	1	T	20:09	X																								
280-155225-2	1	T	20:17	X																								
ZZZZZZ			20:23																									
ZZZZZZ			20:28																									
ZZZZZZ			20:33																									
ZZZZZZ			20:38																									
ZZZZZZ			20:44																									
ZZZZZZ			20:50																									
ZZZZZZ			20:55																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Instrument ID: WC_AT4 Analysis Method: SM 2320B

Start Date: 11/18/2021 16:27 End Date: 11/18/2021 21:57

Lab Sample Id	D/F	Type	Time	Analytes																								
				Alk																								
CCV 280-558096/42	1		21:02	X																								
CCB 280-558096/43	1		21:08	X																								
ZZZZZZ			21:15																									
ZZZZZZ			21:22																									
ZZZZZZ			21:28																									
ZZZZZZ			21:34																									
ZZZZZZ			21:39																									
ZZZZZZ			21:44																									
CCV 280-558096/50			21:51																									
CCB 280-558096/51			21:57																									

Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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			
MB 280-558390/20		350.1			10 mL	10 mL			
CCV 280-558390/34		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558390/35		350.1			10 mL	10 mL			
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			
LCS 280-558390/53		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-558390/54		350.1			100 mL	100 mL		2.5 mL	
MB 280-558390/55		350.1			10 mL	10 mL			
CCVL 280-558390/69		350.1			100 mL	100 mL		0.5 mL	
CCV 280-558390/70		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558390/71		350.1			10 mL	10 mL			
280-155225-C-3	G0078-7	350.1	T	No	10 mL	10 mL	<2 SU		
280-155225-C-5	G0091-7	350.1	T	No	10 mL	10 mL	<2 SU		
280-155225-C-6	G0086-7	350.1	T	No	10 mL	10 mL	<2 SU		
280-155225-C-7	PZ017R-7	350.1	T	No	10 mL	10 mL	<2 SU		
280-155225-C-8	PZ018-7	350.1	T	No	10 mL	10 mL	<2 SU		
CCVL 280-558390/85		350.1			100 mL	100 mL		0.5 mL	
CCV 280-558390/86		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558390/87		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.: 280-155225-1

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.: 280-155225-1

SDG No.:

Batch Number: 558417 Batch Start Date: 11/22/21 15:26 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 280-558417/14		350.1			100 mL	100 mL			0.5 mL
ICV 280-558417/15		350.1			100 mL	100 mL			2.5 mL
ICB 280-558417/16		350.1			10 mL	10 mL			
LCS 280-558417/18		350.1			100 mL	100 mL		2.5 mL	
LCSD 280-558417/19		350.1			100 mL	100 mL		2.5 mL	
MB 280-558417/20		350.1			10 mL	10 mL			
280-155225-C-1	G0024-7	350.1	T	No	10 mL	10 mL	<2 SU		
280-155225-C-2	G0077-7	350.1	T	No	10 mL	10 mL	<2 SU		
280-155225-C-4	G0092-7	350.1	T	No	10 mL	10 mL	<2 SU		
280-155225-C-9	PZ021-7	350.1	T	No	10 mL	10 mL	<2 SU		
CCVL 280-558417/33		350.1			100 mL	100 mL		0.5 mL	
CCV 280-558417/34		350.1			100 mL	100 mL		2.5 mL	
CCB 280-558417/35		350.1			10 mL	10 mL			

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.: 280-155225-1

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.: 280-155225-1

SDG No.:

Batch Number: 557730 Batch Start Date: 11/16/21 18:07 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 280-557730/1		351.2, 351.2			25 mL	25 mL	6 mL		
MB 280-557730/2		351.2, 351.2			25 mL	25 mL			
280-155225-C-1	G0024-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155225-C-2	G0077-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155225-C-3	G0078-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155225-C-4	G0092-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155225-C-5	G0091-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155225-C-7	PZ017R-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155225-C-8	PZ018-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155225-C-9	PZ021-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155225-C-6	G0086-7	351.2, 351.2	T	<2	25 mL	25 mL			
280-155225-C-6 MS	G0086-7	351.2, 351.2	T	<2	25 mL	25 mL	3 mL		
280-155225-C-6 MSD	G0086-7	351.2, 351.2	T	<2	25 mL	25 mL	3 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.: 280-155225-1

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 280-557730/1-A		351.2		2 mL					
MB 280-557730/2-A		351.2		2 mL					
280-155225-C-1-A	G0024-7	351.2	T	2 mL					
CCV 280-557418/9-A		351.2		2 mL					
CCB 280-557418/10-A		351.2		2 mL					
280-155225-C-2-A	G0077-7	351.2	T	2 mL					
280-155225-C-3-A	G0078-7	351.2	T	2 mL					
280-155225-C-4-A	G0092-7	351.2	T	2 mL					
280-155225-C-5-A	G0091-7	351.2	T	2 mL					
280-155225-C-7-A	PZ017R-7	351.2	T	2 mL					
280-155225-C-8-A	PZ018-7	351.2	T	2 mL					
280-155225-C-9-A	PZ021-7	351.2	T	2 mL					
280-155225-C-6-A	G0086-7	351.2	T	2 mL					
280-155225-C-6-B MS	G0086-7	351.2	T	2 mL					
280-155225-C-6-C MSD	G0086-7	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.: 280-155225-1

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.: 280-155225-1

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				
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				
LCS 280-558049/59		353.2		100 mL	100 mL	5 mL			
MB 280-558049/60		353.2		100 mL	100 mL				
CCV 280-558049/67		353.2		100 mL	100 mL	5 mL			
CCVL 280-558049/68		353.2		100 mL	100 mL	1 mL			
CCB 280-558049/69		353.2		100 mL	100 mL				
280-155225-C-1	G0024-7	353.2	T	100 mL	100 mL				
280-155225-C-2	G0077-7	353.2	T	100 mL	100 mL				
280-155225-C-3	G0078-7	353.2	T	100 mL	100 mL				
280-155225-C-4	G0092-7	353.2	T	100 mL	100 mL				
280-155225-C-5	G0091-7	353.2	T	100 mL	100 mL				
280-155225-C-6	G0086-7	353.2	T	100 mL	100 mL				
280-155225-C-7	PZ017R-7	353.2	T	100 mL	100 mL				
280-155225-C-8	PZ018-7	353.2	T	100 mL	100 mL				
CCV 280-558049/83		353.2		100 mL	100 mL	5 mL			
CCVL 280-558049/84		353.2		100 mL	100 mL	1 mL			
CCB 280-558049/85		353.2		100 mL	100 mL				
280-155225-C-9	PZ021-7	353.2	T	100 mL	100 mL				
CCV 280-558049/99		353.2		100 mL	100 mL	5 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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		
CCVL 280-558049/100		353.2		100 mL	100 mL	1 mL			
CCB 280-558049/101		353.2		100 mL	100 mL				

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.: 280-155225-1

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
280-155225-E-4	G0092-7	9030B, 9034	T	50 mL	50 mL	17	>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							
280-155225-E-4	G0092-7	9030B, 9034	T						

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.: 280-155225-1

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	
280-155225-E-4-A	G0092-7	9034	T	21.5 mL	22.4 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.: 280-155225-1

SDG No.:

Batch Number: 556892 Batch Start Date: 11/10/21 09:52 Batch Analyst: Brock, Lucynda R

Batch Method: 9030B Batch End Date: 11/10/21 13:31

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillUnitPort	Initial pH	Final pH	AcidVolAdded
MB 280-556892/1		9030B, 9034		50 mL	50 mL	1	>9 SU	<2 SU	5 mL
LCS 280-556892/2		9030B, 9034		50 mL	50 mL	2	>9 SU	<2 SU	5 mL
280-155225-E-1	G0024-7	9030B, 9034	T	50 mL	50 mL	3	>9 SU	<2 SU	5 mL
280-155225-E-1 MS	G0024-7	9030B, 9034	T	50 mL	50 mL	4	>9 SU	<2 SU	5 mL
280-155225-E-1 MSD	G0024-7	9030B, 9034	T	50 mL	50 mL	5	>9 SU	<2 SU	5 mL
280-155225-E-2	G0077-7	9030B, 9034	T	50 mL	50 mL	6	>9 SU	<2 SU	5 mL
280-155225-E-3	G0078-7	9030B, 9034	T	50 mL	50 mL	7	>9 SU	<2 SU	5 mL
280-155225-E-5	G0091-7	9030B, 9034	T	50 mL	50 mL	9	>9 SU	<2 SU	5 mL
280-155225-E-6	G0086-7	9030B, 9034	T	50 mL	50 mL	10	>9 SU	<2 SU	5 mL
280-155225-E-7	PZ017R-7	9030B, 9034	T	50 mL	50 mL	11	>9 SU	<2 SU	5 mL
280-155225-E-8	PZ018-7	9030B, 9034	T	50 mL	50 mL	12	>9 SU	<2 SU	5 mL
280-155225-E-9	PZ021-7	9030B, 9034	T	50 mL	50 mL	13	>9 SU	<2 SU	5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	SFD ICV INT 02024					
MB 280-556892/1		9030B, 9034							
LCS 280-556892/2		9030B, 9034		1 mL					
280-155225-E-1	G0024-7	9030B, 9034	T						
280-155225-E-1 MS	G0024-7	9030B, 9034	T	1 mL					
280-155225-E-1 MSD	G0024-7	9030B, 9034	T	1 mL					
280-155225-E-2	G0077-7	9030B, 9034	T						
280-155225-E-3	G0078-7	9030B, 9034	T						
280-155225-E-5	G0091-7	9030B, 9034	T						
280-155225-E-6	G0086-7	9030B, 9034	T						
280-155225-E-7	PZ017R-7	9030B, 9034	T						
280-155225-E-8	PZ018-7	9030B, 9034	T						
280-155225-E-9	PZ021-7	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.: 280-155225-1

SDG No.:

Batch Number: 556892 Batch Start Date: 11/10/21 09:52 Batch Analyst: Brock, Lucynda R

Batch Method: 9030B Batch End Date: 11/10/21 13:31

Batch Notes	
Formaldehyde ID	form_00120
Zinc Acetate Buffer ID	znac_00121
Pipette/Syringe/Dispenser ID	5Hz4, ARM 1000
Sulfuric Acid Reagent ID Number	SulfuricAcid_00260
pH Indicator ID	HC157843
Distillation Start Time	11/10/2021 12:01
Uncorrected Temperature 2	80 Degrees C
Oven, Bath or Block Temperature 2	80 Degrees C
Distillation End Time	11/10/2021 13:31
Lead Acetate Paper Lot #	3

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.: 280-155225-1

SDG No.:

Batch Number: 556959 Batch Start Date: 11/10/21 13:25 Batch Analyst: Brock, Lucynda R

Batch Method: 9034 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStart1	BuretStop1	IodineAmount	TitrantVolume1	FinalAmount	
MB 280-556892/1-A		9034		0 mL	1.0 mL	1 mL	1 mL	50 mL	
LCS 280-556892/2-A		9034		1.0 mL	4.5 mL	5 mL	3.5 mL	50 mL	
280-155225-E-1-A	G0024-7	9034	T	4.5 mL	5.05 mL	1 mL	0.55 mL	50 mL	
280-155225-E-1-B MS	G0024-7	9034	T	5.0 mL	8.1 mL	5 mL	3.1 mL	50 mL	
280-155225-E-1-C MSD	G0024-7	9034	T	8.1 mL	11.3 mL	5 mL	3.2 mL	50 mL	
280-155225-E-2-A	G0077-7	9034	T	11.3 mL	12.3 mL	1 mL	1 mL	50 mL	
280-155225-E-3-A	G0078-7	9034	T	12.3 mL	13.4 mL	1 mL	1.1 mL	50 mL	
280-155225-E-5-A	G0091-7	9034	T	14.3 mL	15.35 mL	1 mL	1.05 mL	50 mL	
280-155225-E-6-A	G0086-7	9034	T	15.3 mL	16.3 mL	1 mL	1 mL	50 mL	
280-155225-E-7-A	PZ017R-7	9034	T	16.3 mL	17.3 mL	1 mL	1 mL	50 mL	
280-155225-E-8-A	PZ018-7	9034	T	17.3 mL	18.3 mL	1 mL	1 mL	50 mL	
280-155225-E-9-A	PZ021-7	9034	T	18.3 mL	19.2 mL	1 mL	0.899999999999999 mL	50 mL	

Batch Notes	
Normality of First Titrant	0.025 N
Normality of Iodine Solution	0.025 N
Zinc Acetate Buffer ID	znac_00121
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

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.: 280-155225-1

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.: 280-155225-1

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.: 280-155225-1

SDG No.:

Batch Number: 558325 Batch Start Date: 11/22/21 09:49 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	
CCV 280-558325/1		9056A		5 mL	5 mL			5 mL	
CCB 280-558325/2		9056A		5 mL	5 mL				
MRL 280-558325/3		9056A		5 mL	5 mL	0.1 mL	0.05 mL		
LCS 280-558325/4		9056A		5 mL	5 mL			5 mL	
LCSD 280-558325/5		9056A		5 mL	5 mL			5 mL	
MB 280-558325/6		9056A		5 mL	5 mL				
CCV 280-558325/17		9056A		5 mL	5 mL			5 mL	
CCB 280-558325/18		9056A		5 mL	5 mL				
280-155225-F-1	G0024-7	9056A	T	5 mL	5 mL				
280-155225-F-2	G0077-7	9056A	T	5 mL	5 mL				
280-155225-F-3	G0078-7	9056A	T	5 mL	5 mL				
280-155225-F-4	G0092-7	9056A	T	5 mL	5 mL				
CCV 280-558325/29		9056A		5 mL	5 mL			5 mL	
CCB 280-558325/30		9056A		5 mL	5 mL				
280-155225-F-5	G0091-7	9056A	T	5 mL	5 mL				
280-155225-F-6	G0086-7	9056A	T	5 mL	5 mL				
280-155225-F-7	PZ017R-7	9056A	T	5 mL	5 mL				
280-155225-F-8	PZ018-7	9056A	T	5 mL	5 mL				
280-155225-F-9	PZ021-7	9056A	T	5 mL	5 mL				
CCV 280-558325/41		9056A		5 mL	5 mL			5 mL	
CCB 280-558325/42		9056A		5 mL	5 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Batch Number: 558325 Batch Start Date: 11/22/21 09:49 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
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.: 280-155225-1

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	IC CAL cl/so4 00394	IC Cal low 00608	IC LCS 01845	
CCV 280-558471/1		9056A		5 mL	5 mL			5 mL	
CCB 280-558471/2		9056A		5 mL	5 mL				
MRL 280-558471/3		9056A		5 mL	5 mL	0.1 mL	0.05 mL		
LCS 280-558471/4		9056A		5 mL	5 mL			5 mL	
LCSD 280-558471/5		9056A		5 mL	5 mL			5 mL	
MB 280-558471/6		9056A		5 mL	5 mL				
CCV 280-558471/15		9056A		5 mL	5 mL			5 mL	
CCB 280-558471/16		9056A		5 mL	5 mL				
280-155225-F-3	G0078-7	9056A	T	5 mL	5 mL				
280-155225-F-4	G0092-7	9056A	T	5 mL	5 mL				
280-155225-F-5	G0091-7	9056A	T	5 mL	5 mL				
CCV 280-558471/27		9056A		5 mL	5 mL			5 mL	
CCB 280-558471/28		9056A		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.: 280-155225-1

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.
280-155225-D-1-A	G0024-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155225-D-2-A	G0077-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155225-D-3-A	G0078-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155225-D-4-A	G0092-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155225-D-5-A	G0091-7	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.: 280-155225-1

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
280-155225-D-6-A	G0086-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155225-D-7-A	PZ017R-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.
280-155225-D-7-B MS	PZ017R-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.
280-155225-D-7-C MSD	PZ017R-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.
280-155225-D-8-A	PZ018-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.
280-155225-D-9-A	PZ021-7	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.: 280-155225-1

SDG No.:

Batch Number: 557475 Batch Start Date: 11/12/21 18:16 Batch Analyst: Fox, Regan A

Batch Method: 9060A Batch End Date:

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.: 280-155225-1

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		
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		
280-155225-D-1-A	G0024-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155225-D-2-A	G0077-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155225-D-3-A	G0078-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155225-D-4-A	G0092-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155225-D-5-A	G0091-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155225-D-6-A	G0086-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155225-D-7-A	PZ017R-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155225-D-7-B MS	PZ017R-7	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL
CCV 280-557476/87		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-557476/88		9060A		20 mL	20 mL	<2 SU	<2 SU		
280-155225-D-7-C MSD	PZ017R-7	9060A	D	50 mL	50 mL	>2 SU	<2 SU		1.25 mL
280-155225-D-8-A	PZ018-7	9060A	D	20 mL	20 mL	>2 SU	<2 SU		
280-155225-D-9-A	PZ021-7	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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

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
CCV 280-557476/92		9060A		200 mL	200 mL	<2 SU	<2 SU		5 mL
CCB 280-557476/93		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.					
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.					

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.: 280-155225-1

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					
MB 280-557282/2-A		9060A		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.					
280-155225-D-1-A	G0024-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155225-D-2-A	G0077-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155225-D-3-A	G0078-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155225-D-4-A	G0092-7	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.: 280-155225-1

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					
280-155225-D-5-A	G0091-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155225-D-6-A	G0086-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155225-D-7-A	PZ017R-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155225-D-7-B MS	PZ017R-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-557476/87		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-557476/88		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155225-D-7-C MSD	PZ017R-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.: 280-155225-1

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					
280-155225-D-8-A	PZ018-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
280-155225-D-9-A	PZ021-7	9060A	D	The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCV 280-557476/92		9060A		The final volume of these samples was fixed at 50 by the TOCControlV preprocessor.					
CCB 280-557476/93		9060A		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, 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.: 280-155225-1

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				
CCV 280-557846/107		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-557846/108		SM 2320B		InitialAmount is blank					
LCS 280-557846/109		SM 2320B		InitialAmount is blank	10 mL				
MB 280-557846/110		SM 2320B		InitialAmount is blank					
280-155225-F-3	G0078-7	SM 2320B	T	InitialAmount is blank					
CCV 280-557846/121		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-557846/122		SM 2320B		InitialAmount is blank					
280-155225-D-1	G0024-7	SM 2320B	T	InitialAmount is blank					
280-155225-D-2	G0077-7	SM 2320B	T	InitialAmount is blank					
280-155225-F-4	G0092-7	SM 2320B	T	InitialAmount is blank					
280-155225-F-5	G0091-7	SM 2320B	T	InitialAmount is blank					
280-155225-F-6	G0086-7	SM 2320B	T	InitialAmount is blank					
280-155225-F-7	PZ017R-7	SM 2320B	T	InitialAmount is blank					
280-155225-F-8	PZ018-7	SM 2320B	T	InitialAmount is blank					
280-155225-F-9	PZ021-7	SM 2320B	T	InitialAmount is blank					
CCV 280-557846/133		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-557846/134		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.: 280-155225-1

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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Denver Job No.: 280-155225-1

SDG No.:

Batch Number: 558096 Batch Start Date: 11/18/21 16:27 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 01007				
LCS 280-558096/4		SM 2320B		InitialAmount is blank	10 mL				
MB 280-558096/5		SM 2320B		InitialAmount is blank					
CCV 280-558096/16		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-558096/17		SM 2320B		InitialAmount is blank					
280-155225-F-7	PZ017R-7	SM 2320B	T	InitialAmount is blank					
280-155225-F-9	PZ021-7	SM 2320B	T	InitialAmount is blank					
280-155225-F-3	G0078-7	SM 2320B	T	InitialAmount is blank					
CCV 280-558096/28		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-558096/29		SM 2320B		InitialAmount is blank					
LCS 280-558096/30		SM 2320B		InitialAmount is blank	10 mL				
MB 280-558096/31		SM 2320B		InitialAmount is blank					
280-155225-D-1	G0024-7	SM 2320B	T	InitialAmount is blank					
280-155225-D-1 DU	G0024-7	SM 2320B	T	InitialAmount is blank					
280-155225-D-2	G0077-7	SM 2320B	T	InitialAmount is blank					
CCV 280-558096/42		SM 2320B		InitialAmount is blank	10 mL				
CCB 280-558096/43		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.: 280-155225-1

SDG No.:

Batch Number: 558096 Batch Start Date: 11/18/21 16:27 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_00303
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: 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

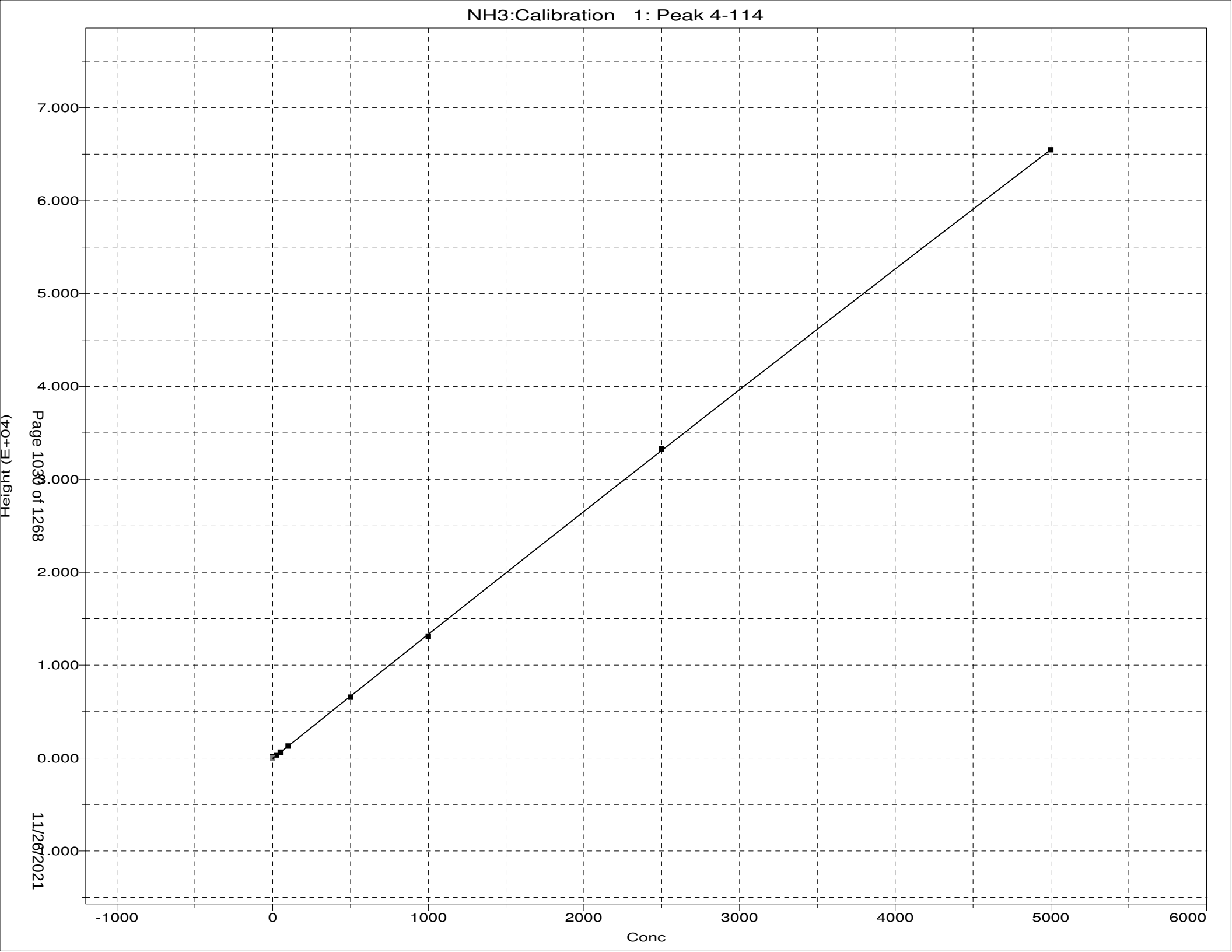
*	Name	Conc	Height
*	Cal 0 ppb	0.000000	125.282837
*	Cal 25 ppb	25.000000	329.676575
*	Cal 50 ppb	50.000000	619.657349
*	Cal 100 ppb	100.000000	1288.338623
*	Cal 500 ppb	500.000000	6549.645508
*	Cal 1000 ppb	1000.000000	13117.789062
*	Cal 2500 ppb	2500.000000	33282.195312
*	Cal 5000 ppb	5000.000000	65468.359375

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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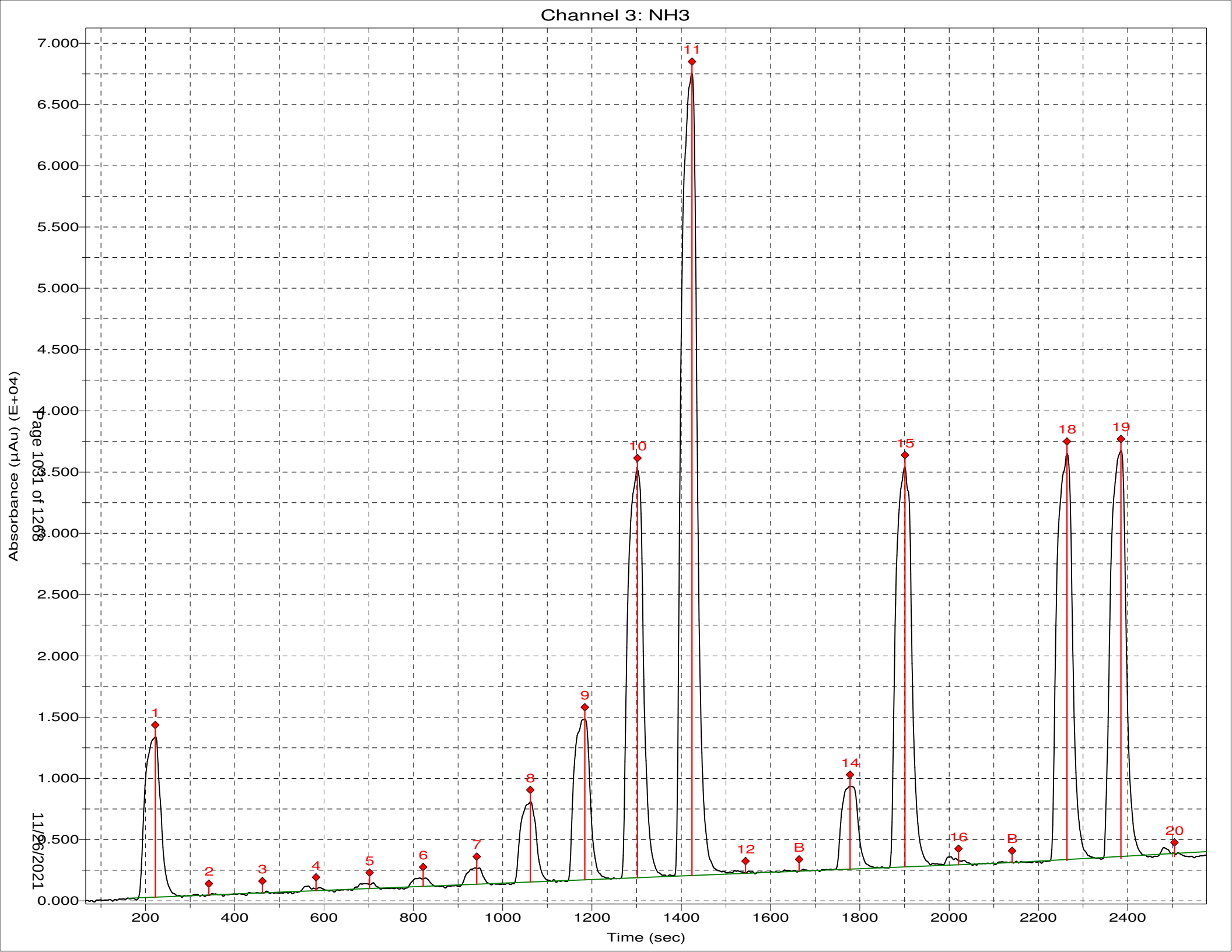
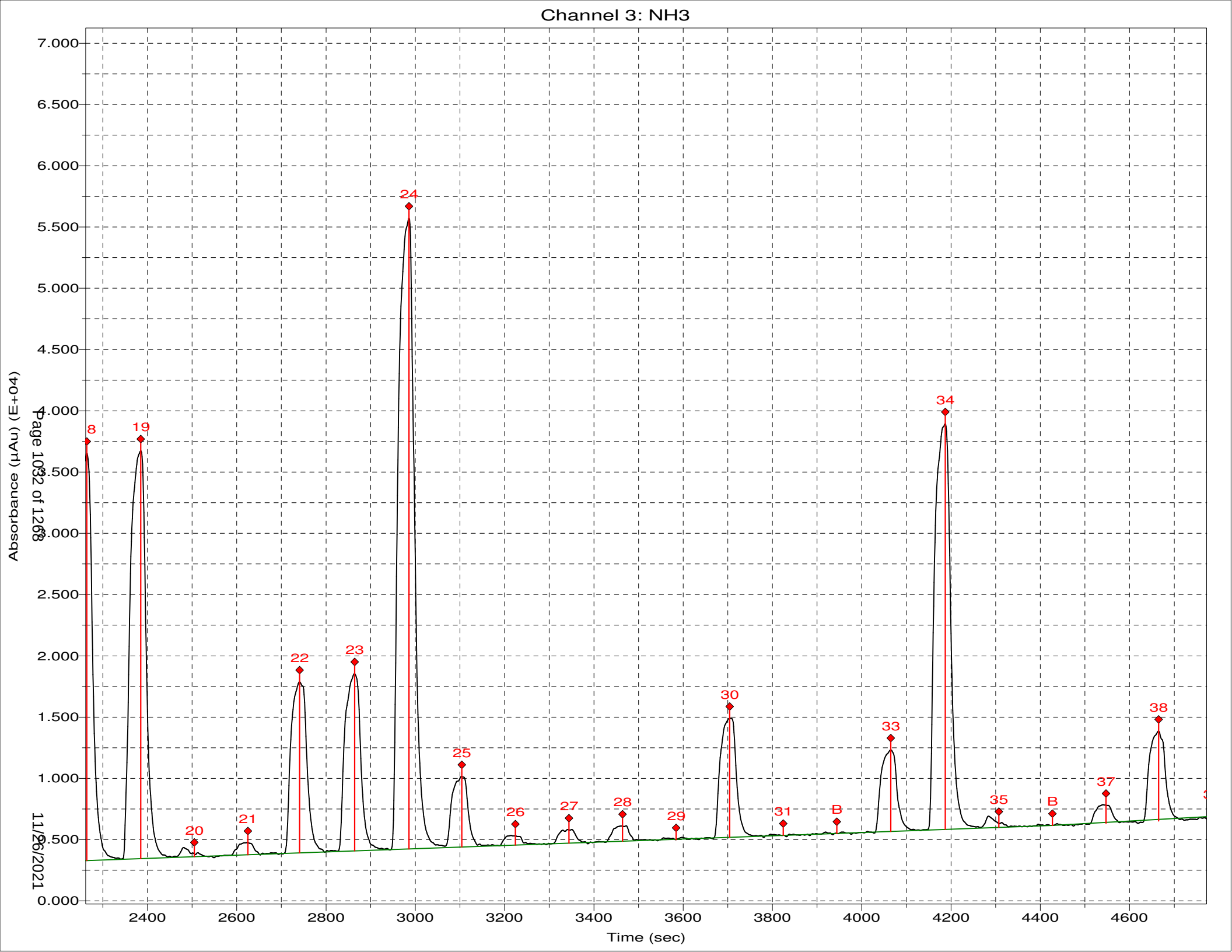
6.000
5.000
4.000
3.000
2.000
1.000
0.000
-1.000
Height (E+04)
-1000
0
1000
2000
3000
4000
5000
6000
Conc


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec)
Page 1031 of 1268
11/26/2021
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
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


Channel 3: NH3
Absorbance (µAu) (E+04)
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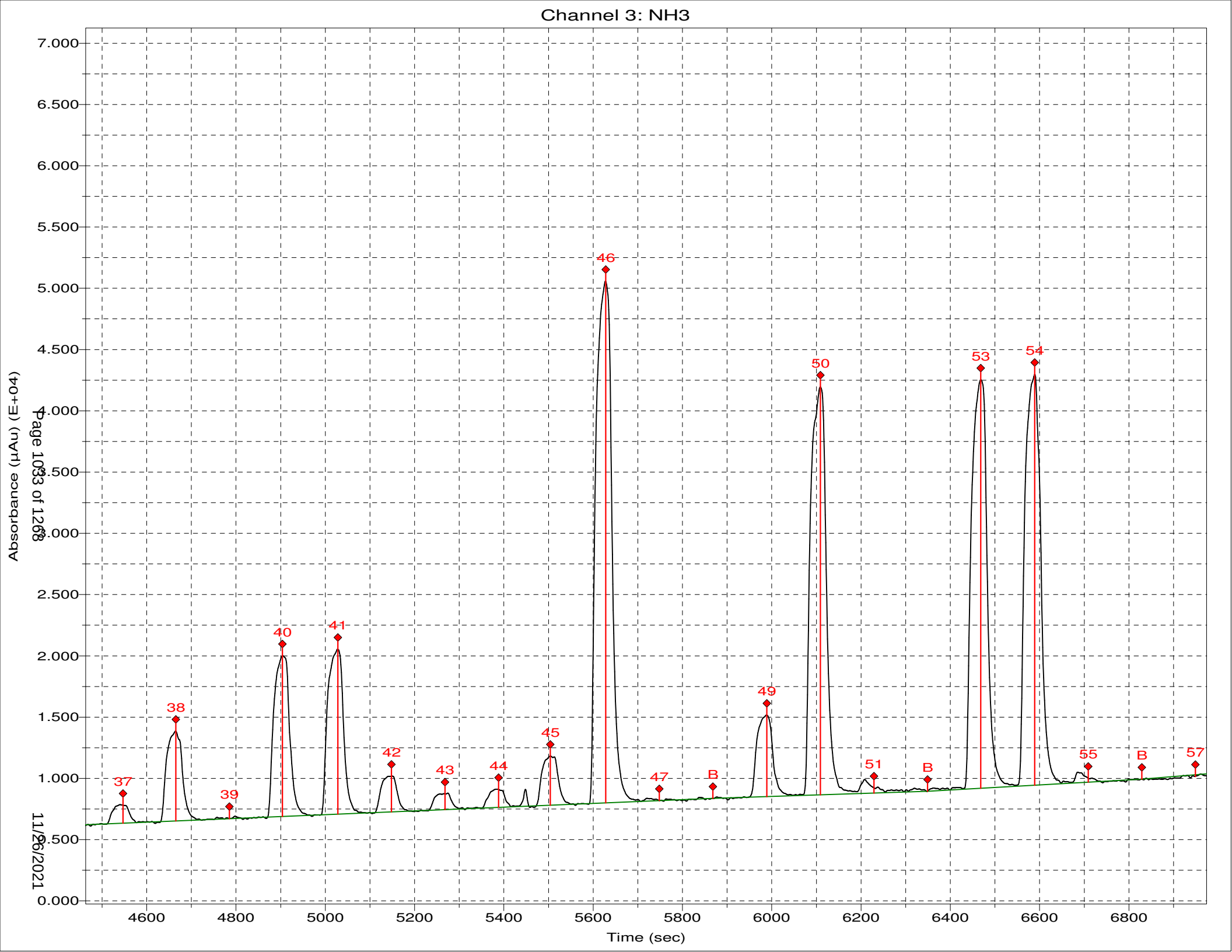
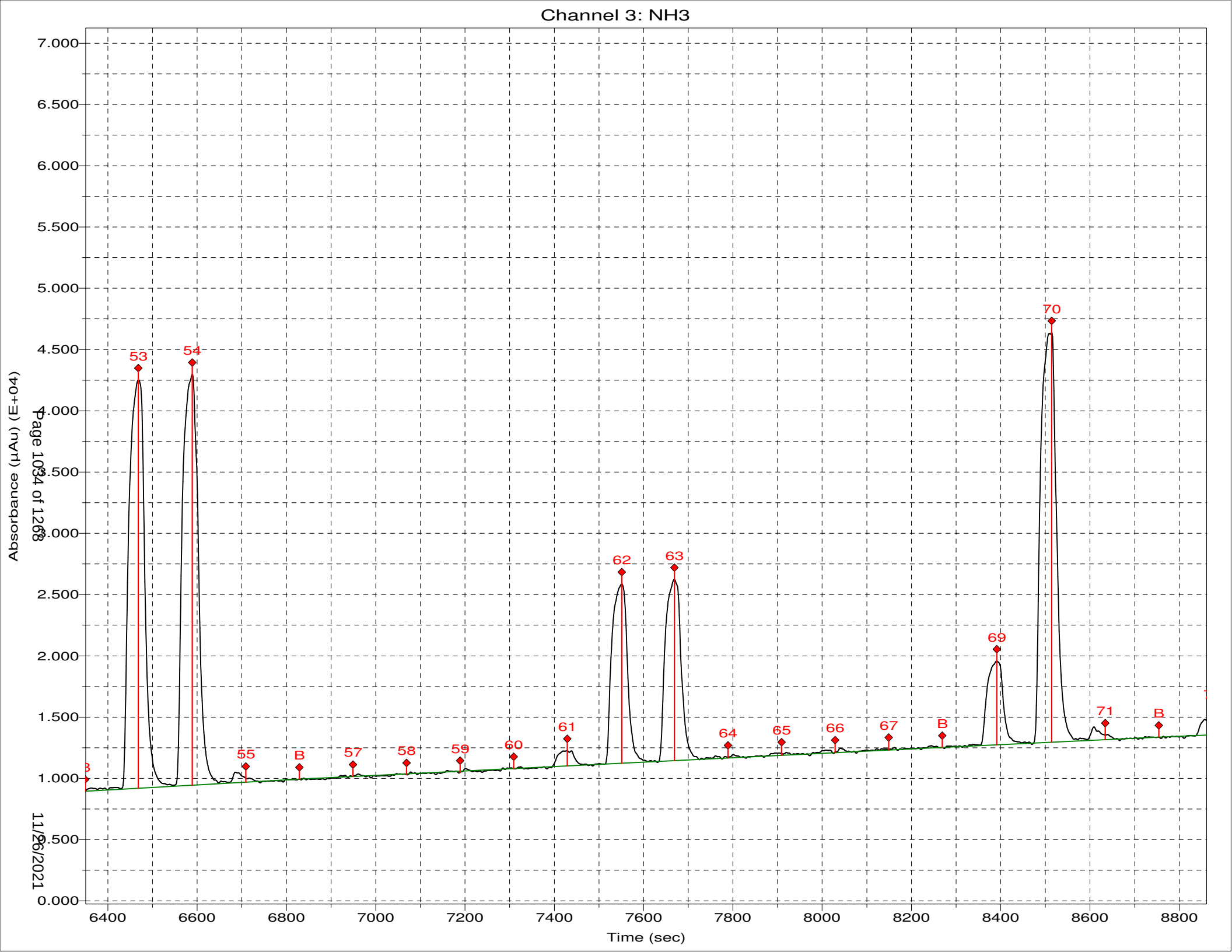
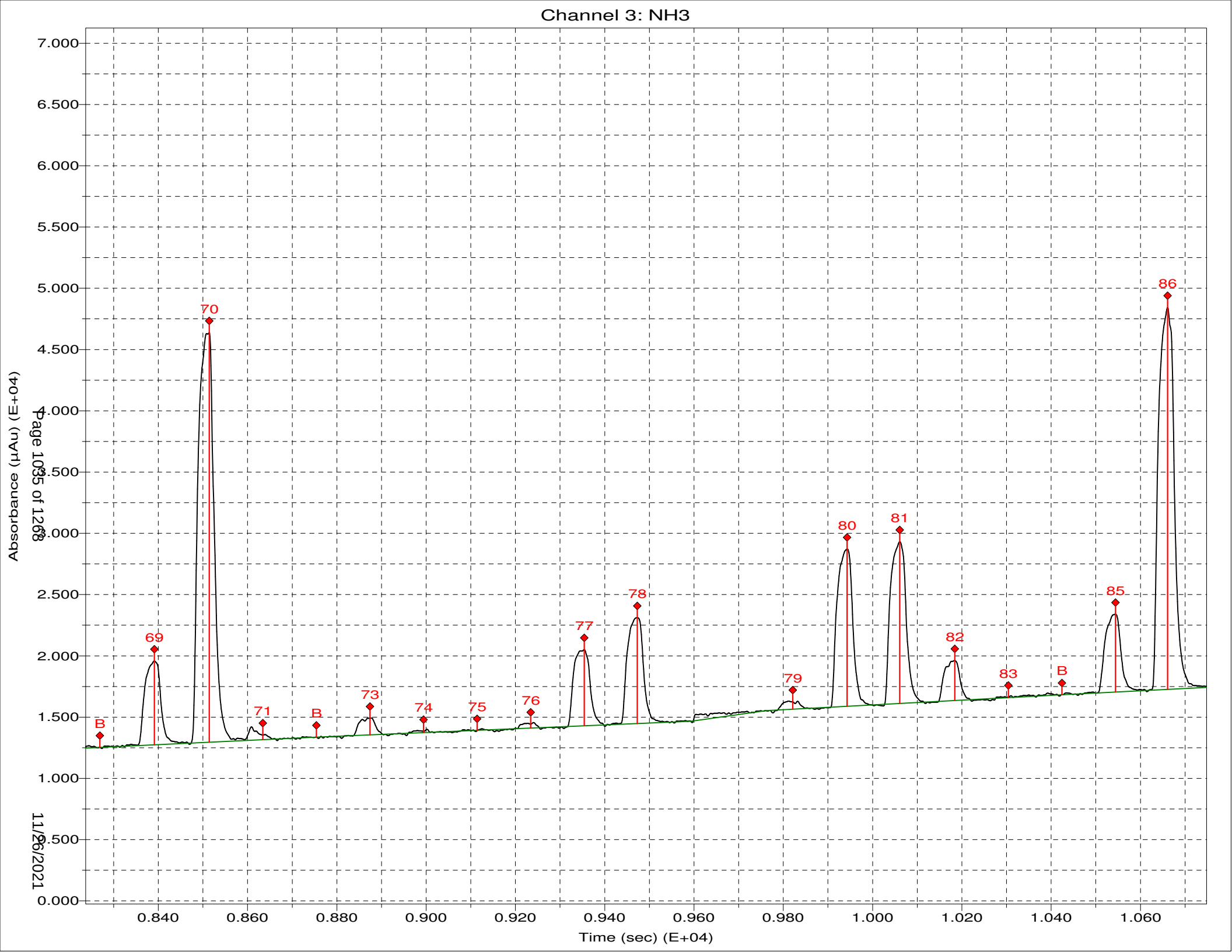
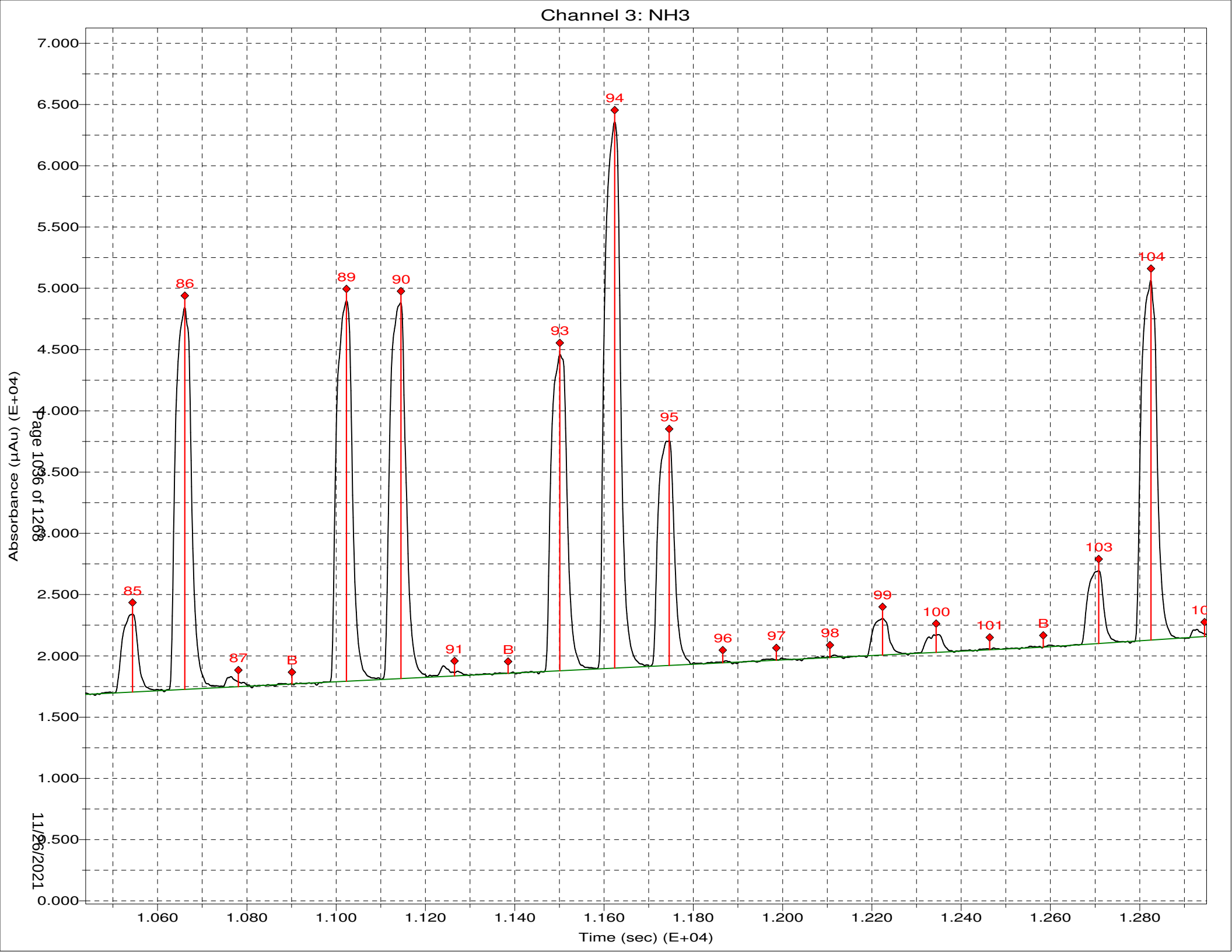
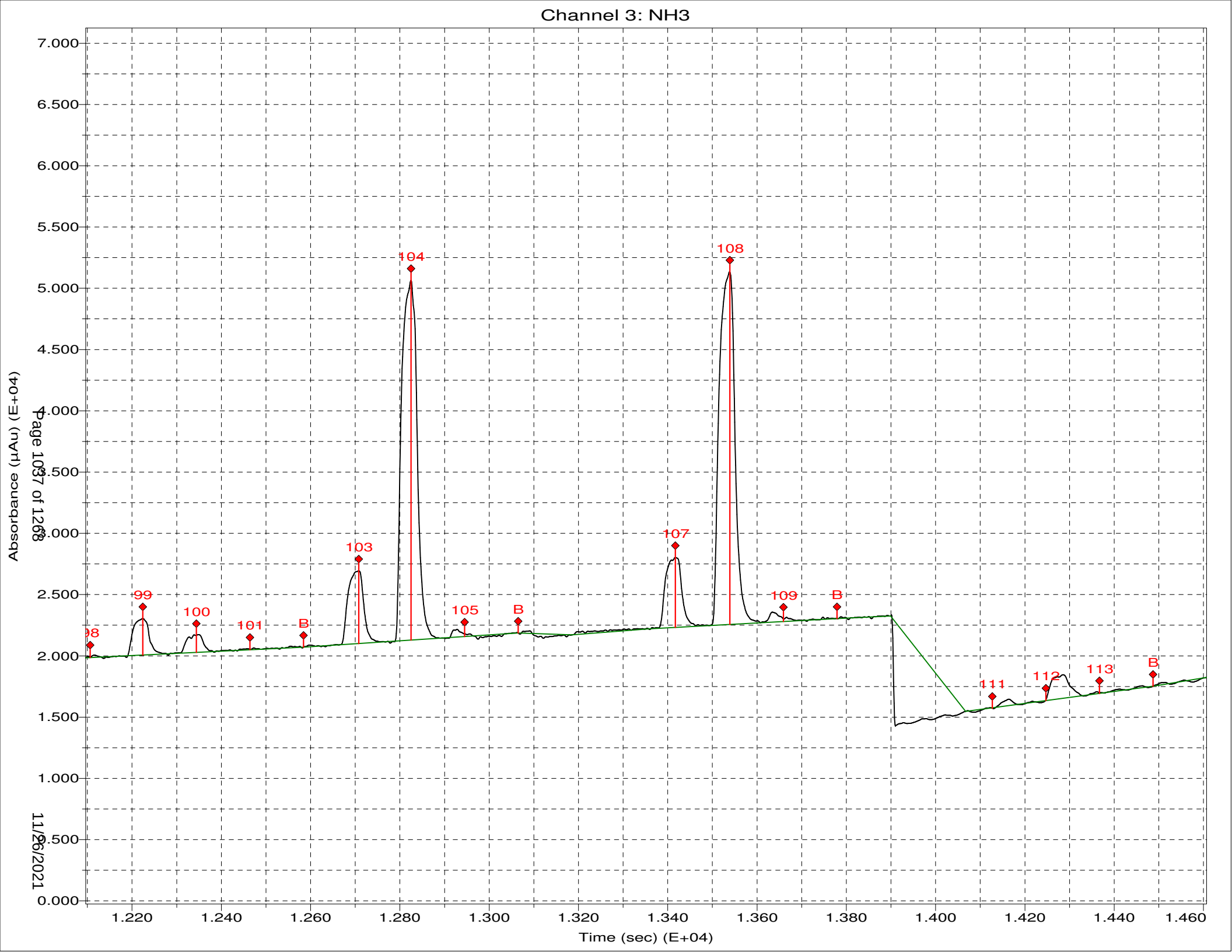
6.500
6.000
5.500
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
8
19
20
21
22
23
24
25
26
27
28
29
30
31
B
33
34
35
B
37
38
2400
2600
2800
3000
3200
3400
3600
3800
4000
4200
4400
4600
Time (sec)
Page 1032 of 1268
11/26/2021


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
4600
4800
5000
5200
5400
5600
5800
6000
6200
6400
6600
6800
37
38
39
40
41
42
43
44
45
46
47
B
49
50
51
B
53
54
55
B
57


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
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
Time (sec)
53
54
55
B
57
58
59
60
61
62
63
64
65
66
67
B
69
70
71
B
Page 1034 of 1268
11/26/2021


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
0.840
0.860
0.880
0.900
0.920
0.940
0.960
0.980
1.000
1.020
1.040
1.060
Time (sec) (E+04)
B
69
70
71
B
73
74
75
76
77
78
79
80
81
82
83
B
85
86
Page 1035 of 1268
11/26/2021


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
85
86
87
B
89
90
91
B
93
94
95
96
97
98
99
100
101
B
103
104
1.060
1.080
1.100
1.120
1.140
1.160
1.180
1.200
1.220
1.240
1.260
1.280
Time (sec) (E+04)
Page 1036 of 1268
11/26/2021


Channel 3: NH3
Absorbance (µAu) (E+04)
Time (sec) (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
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

11/26/2021

*** 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

*** 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	280-155275-b-3	U	1	1	1		
202	MS 280-155275-b-3	U	1	1	1		
203	MSD 280-155275-b-3	U	1	1	1		
204	280-155070-f-3	U	1	20	1		
205	280-155130-f-1	U	1	20	1		
206	280-154777-r-1	U	1	20	1		
207	280-155225-c-1	U	1	1	1		
208	280-155225-c-2	U	1	1	1		
209	280-155225-c-4	U	1	1	1		
210	280-155225-c-9	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	280-155275-b-2	U	1	1	1		
212	280-155275-b-4	U	1	1	1		
213	280-155275-b-5	U	1	1	1		
214	MS 280-155275-b-5	U	1	1	1		
215	MSD 280-155275-b-5	U	1	1	1		
216	Void 280-155481-f-1	U	1	500	1		
217	Void 280-155481-f-2	U	1	500	1		
218	280-155529-a-1	U	1	2	1		
219	280-155524-a-1	U	1	1	1		
220	280-155530-a-1	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	Void read baseline	RB	1	1	1		
111	Void CCB	U	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		

Peak Table:NH3

File name: C:\FLOW_4\112221A.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	11828	1056.727905	
2	0	Carry Over	1	CO	1	1	58	-0.157662	LO
3	0	Blank	1	BLNK	1	1	-74	-11.948886	LO
4	101	Cal 0 ppb	1	C	1	1	138	6.901701	
5	102	Cal 25 ppb	1	C	1	1	267	18.383837	
6	103	Cal 50 ppb	1	C	1	1	601	48.111069	
7	104	Cal 100 ppb	1	C	1	1	1151	97.182884	
8	105	Cal 500 ppb	1	C	1	1	5615	496.339630	
9	106	Cal 1000 ppb	1	C	1	1	11363	1014.573242	
10	107	Cal 2500 ppb	1	C	1	1	27477	2492.052734	
11	108	Cal 5000 ppb	1	C	1	1	53980	5001.452637	HI
12	0	Blank	1	BLNK	1	1	-289	-31.022505	LO
B	0	Read Baseline	1	RB	1	1	0	-5.343673	BL
14	109	ICVL 500.0 ppb	1	U	1	1	5544	489.991913	
15	110	ICV 2500.0 ppb	1	U	1	1	27187	2465.113281	
16	111	ICB	1	U	1	1	49	-0.945688	LO
B	0	read baseline	1	RB	1	1	0	-5.343673	BL
18	107	LCS 2500.00	1	U	1	1	26789	2428.238525	
19	107	LCSD 2500.00	1	U	1	1	26399	2392.012207	
20	111	MB	1	U	1	1	62	0.171692	
21	201	280-155275-b-3	1	U	1	1	633	51.025551	
22	202	MS 280-155275-b-3	1	U	1	1	11299	1008.766052	
23	203	MSD 280-155275-b-3	1	U	1	1	11238	1003.275024	
24	204	280-155070-f-3	1	U	20	1	22212	40104.671875	
25	205	280-155130-f-1	1	U	20	1	37638	68848.656250	
26	206	280-154777-r-1	1	U	20	1	16426	29497.498047	
27	207	280-155225-c-1	1	U	1	1	-23	-7.375012	LO
28	208	280-155225-c-2	1	U	1	1	75	1.284840	
29	209	280-155225-c-4	1	U	1	1	75	1.324498	
30	210	280-155225-c-9	1	U	1	1	5100	450.142883	
31	0	Blank	1	BLNK	1	1	7	-4.679375	LO
B	0	Read Baseline	1	RB	1	1	0	-5.343673	BL
33	105	CCVL 500.0 ppb	1	U	1	1	5388	475.985260	
34	107	CCV 2500.0 ppb	1	U	1	1	25879	2343.872803	
35	111	CCB	1	U	1	1	139	7.054910	
B	0	read baseline	1	RB	1	1	0	-5.343673	BL
37	211	280-155275-b-2	1	U	1	1	1554	133.093292	
38	212	280-155275-b-4	1	U	1	1	3240	283.588837	
39	213	280-155275-b-5	1	U	1	1	456	35.261120	
40	214	MS 280-155275-b-5	1	U	1	1	11020	983.516663	
41	215	MSD 280-155275-b-5	1	U	1	1	10730	957.244568	
42	216	Void 280-155481-f-1	1	U	500	1	25409	1150186.125000	
43	217	Void 280-155481-f-2	1	U	500	1	15798	708769.500000	
44	218	280-155529-a-1	1	U	2	1	5270	930.818604	
45	219	280-155524-a-1	1	U	1	1	118332	11505.833984	HI
46	220	280-155530-a-1	1	U	1	1	86	2.269142	FL
47	0	Blank	1	BLNK	1	1	-81	-12.511039	LO
B	0	Read Baseline	1	RB	1	1	0	-5.343673	BL
49	105	Void CCVL 500.0 ppb	1	U	1	1	4933	435.207367	
50	107	Void CCV 2500.0 ppb	1	U	1	1	25225	2283.345459	
51	111	Void CCB	1	U	1	1	59	-0.105315	LO
B	0	Void read baseline	1	RB	1	1	0	-5.343673	BL
53	111	Void CCB	1	U	1	1	188	11.342853	
54	105	CCVL 500.0 ppb	1	U	1	1	5180	457.373840	
55	107	CCV 2500.0 ppb	1	U	1	1	25625	2320.320801	
56	111	CCB	1	U	1	1	76	1.394546	
B	0	read baseline	1	RB	1	1	0	-5.343673	BL
58	107	LCS 2500.00	1	U	1	1	25976	2352.852783	
59	107	LCSD 2500.00	1	U	1	1	25648	2322.449707	
60	111	MB	1	U	1	1	167	9.532311	

NH3:Calibration 1: Peak 4-60

File name: C:\FLOW_4\112221A.RST
Date: 22-Nov-21
Operator: RKD

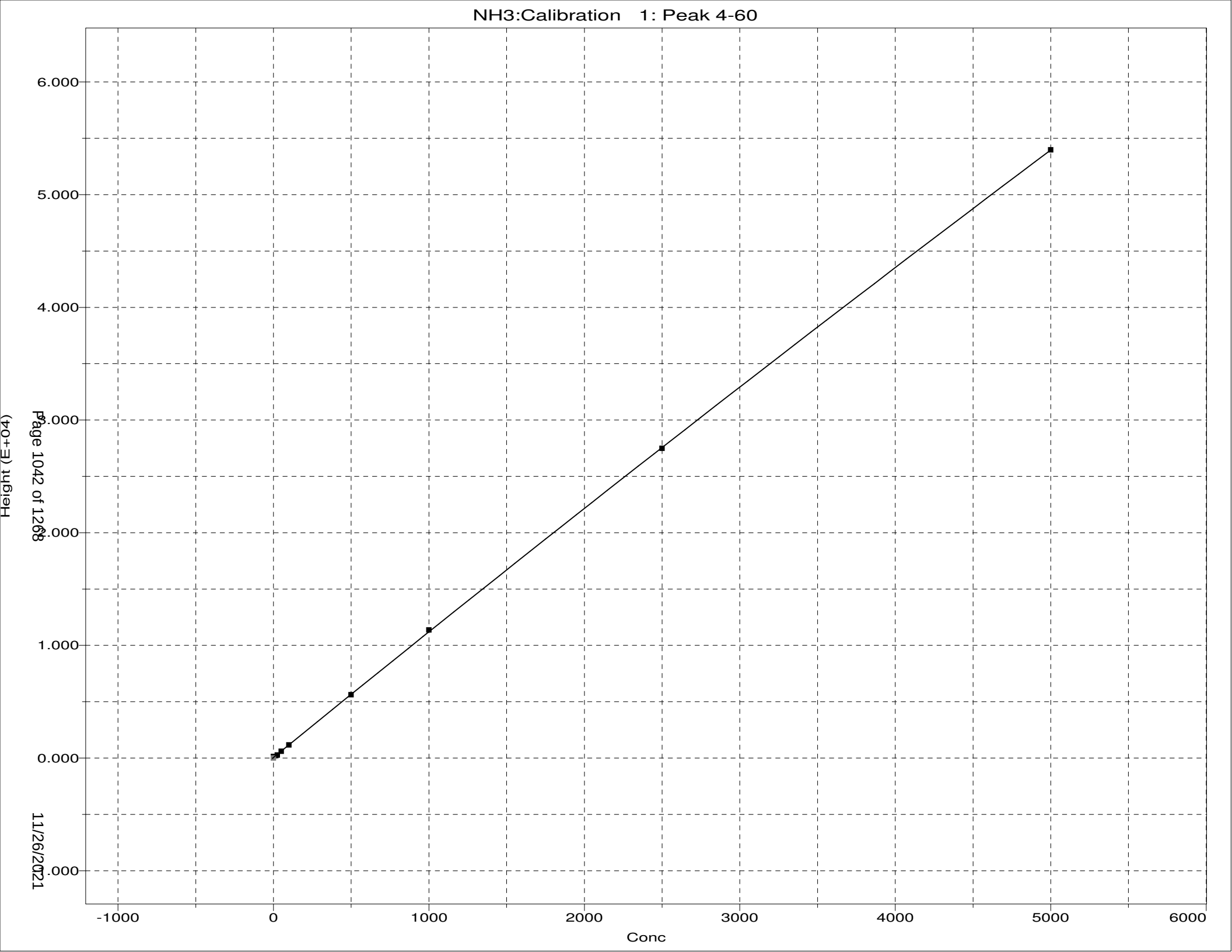
*	Name	Conc	Height
*	Cal 0 ppb	0.000000	137.639206
*	Cal 25 ppb	25.000000	266.672333
*	Cal 50 ppb	50.000000	600.616760
*	Cal 100 ppb	100.000000	1151.485840
*	Cal 500 ppb	500.000000	5614.664062
*	Cal 1000 ppb	1000.000000	11363.146484
*	Cal 2500 ppb	2500.000000	27477.228516
*	Cal 5000 ppb	5000.000000	53979.718750

Calib Coef:
x=cyy+by+a
a: (intercept) -5.3437e+00
b: 8.8958e-02
c: 7.0319e-08

Corr Coef: 0.999991

Carryover: 0.493%

No Drift Peaks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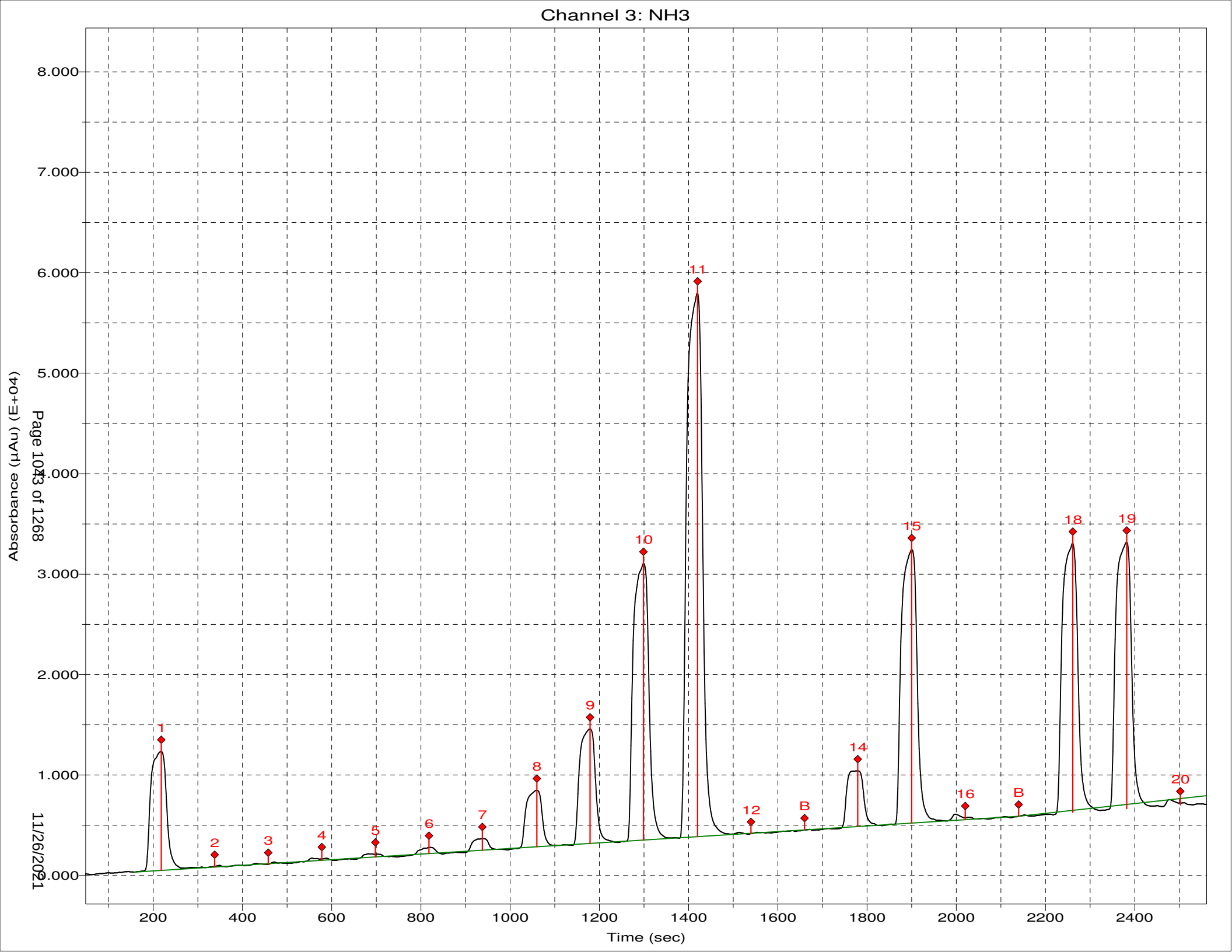
5.000
4.000
3.000
2.000
1.000
0.000
-1.000
-1000
0
1000
2000
3000
4000
5000
6000
Height (E+04)
Conc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Absorbance (µAu) (E+04)
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7.000
6.000
5.000
4.000
3.000
2.000
1.000
.000
Time (sec)
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
1
2
3
4
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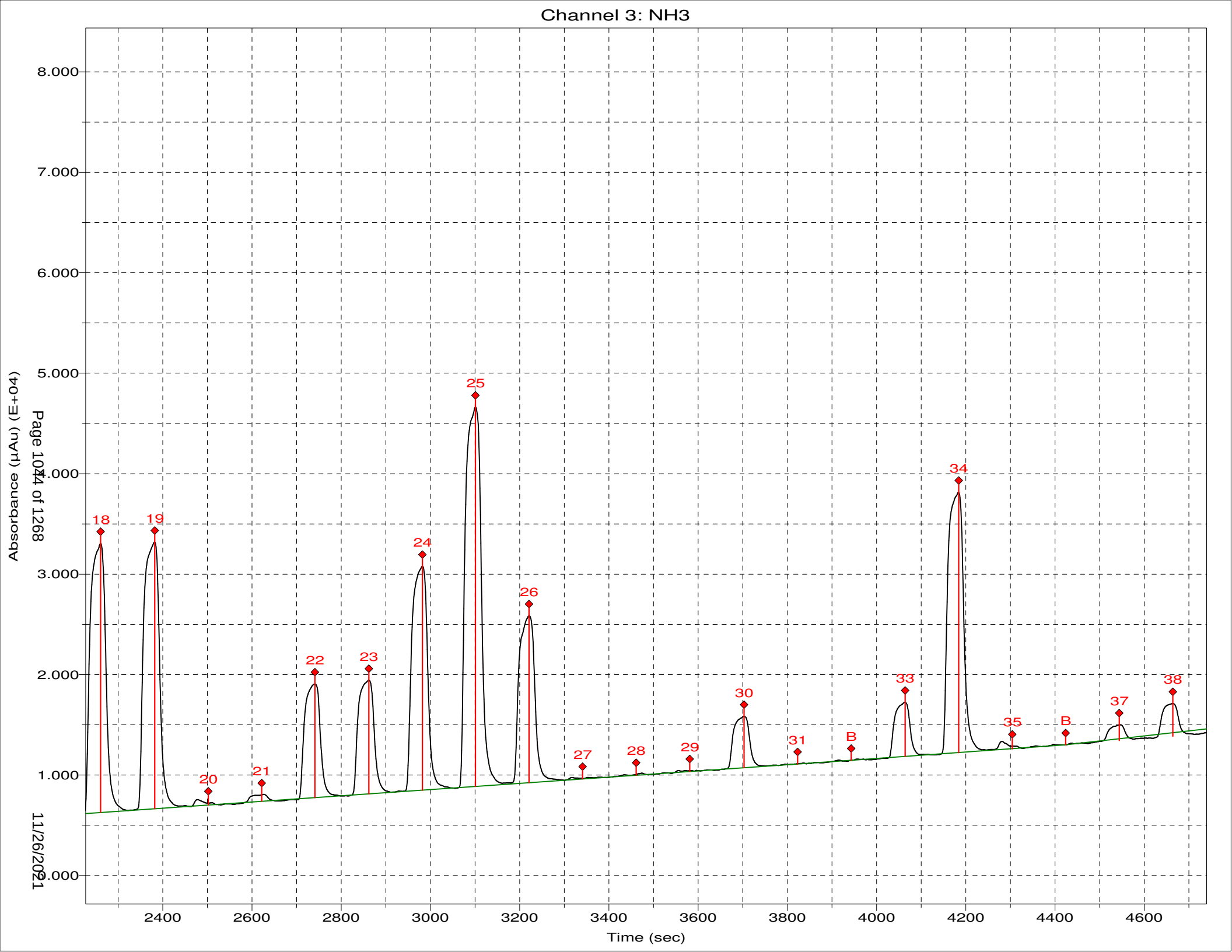
6
7
8
9
10
11
12
B
14
15
16
B
18
19
20


Channel 3: NH3
Absorbance (µAu) (E+04)
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7.000
6.000
5.000
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3.000
2.000
1.000
0.000
Page 1044 of 1268
11/26/2021
18
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23
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27
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29
30
31
B
33
34
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37
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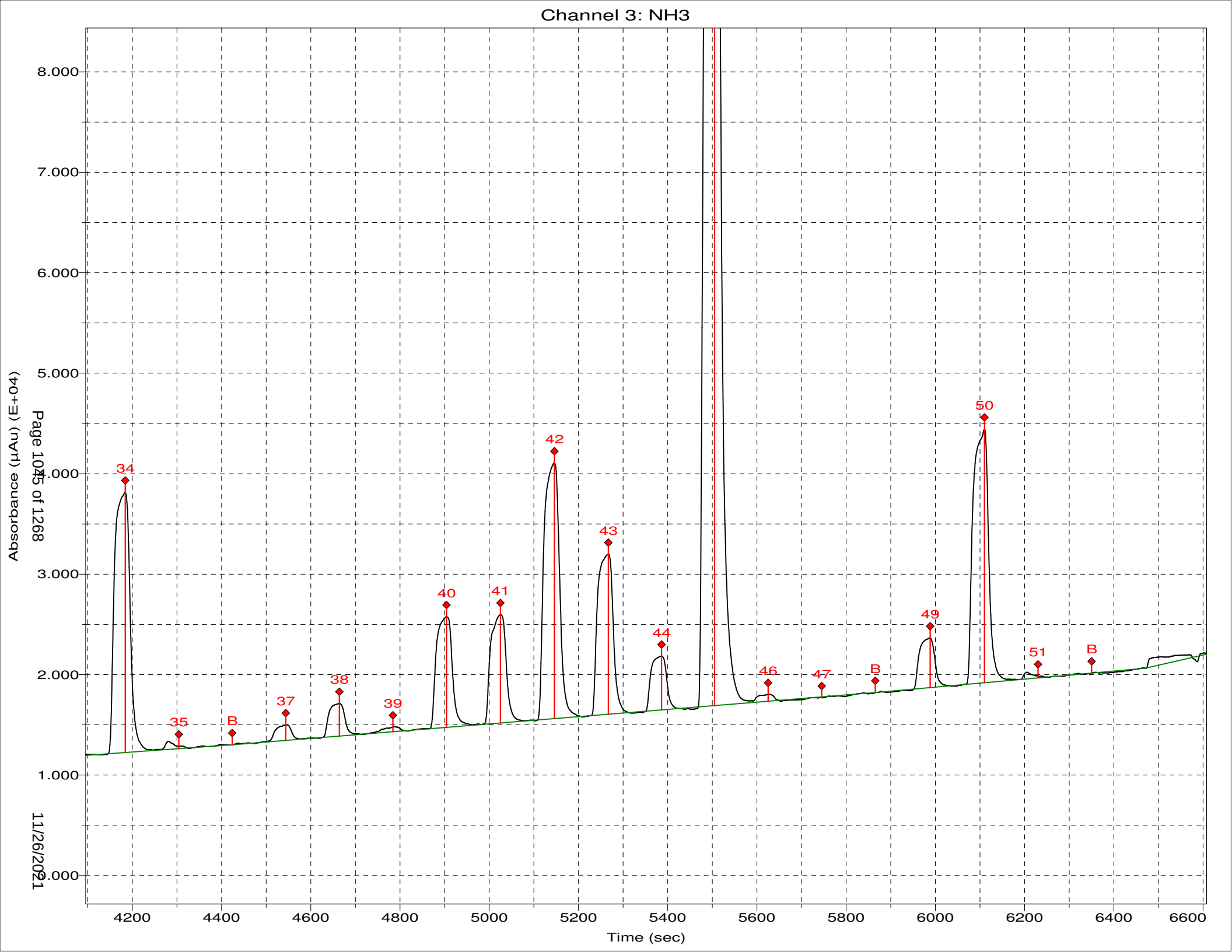
Time (sec)


Channel 3: NH3
Absorbance (µAu) (E+04)
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6.000
5.000
4.000
3.000
2.000
1.000
0.000
Time (sec)
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
6200
6400
6600
34
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B
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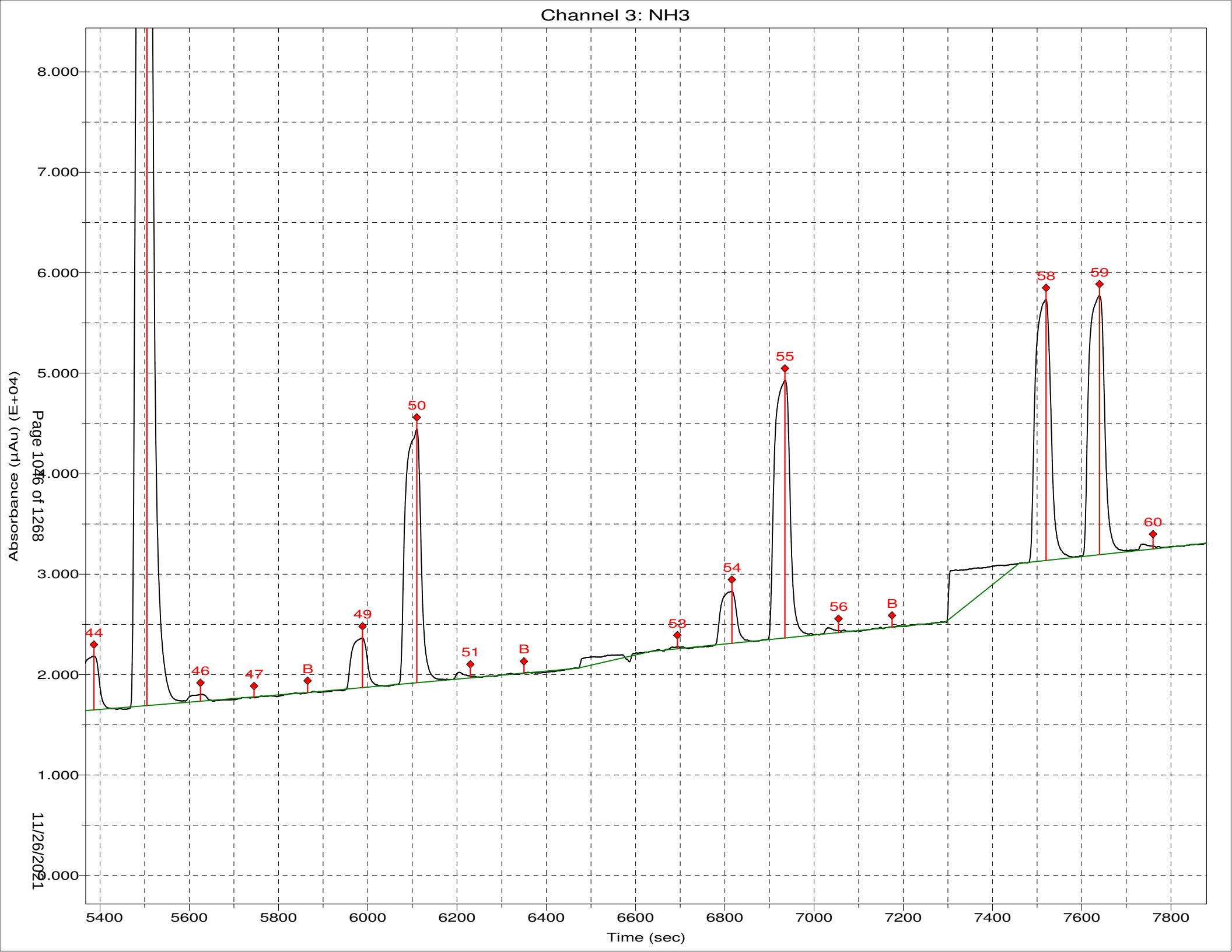
B
49
50
51
B
Page 1045 of 1268
11/26/2021


Channel 3: NH3
Absorbance (µAu) (E+04)
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
Time (sec)
5400
5600
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
44
46
47
B
49
50
51
B
53
54
55
56
B
58
59
60
Page 1046 of 1268
11/26/2021

*** 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	280-155275-b-3	U	1	1	1		
202	MS 280-155275-b-3	U	1	1	1		
203	MSD 280-155275-b-3	U	1	1	1		
204	280-155070-f-3	U	1	20	1		
205	280-155130-f-1	U	1	20	1		
206	280-154777-r-1	U	1	20	1		
207	280-155225-c-1	U	1	1	1		
208	280-155225-c-2	U	1	1	1		
209	280-155225-c-4	U	1	1	1		
210	280-155225-c-9	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	280-155275-b-2	U	1	1	1		
212	280-155275-b-4	U	1	1	1		
213	280-155275-b-5	U	1	1	1		
214	MS 280-155275-b-5	U	1	1	1		
215	MSD 280-155275-b-5	U	1	1	1		
216	Void 280-155481-f-1	U	1	500	1		
217	Void 280-155481-f-2	U	1	500	1		
218	280-155529-a-1	U	1	2	1		
219	280-155524-a-1	U	1	1	1		
220	280-155530-a-1	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	Void read baseline	RB	1	1	1		
111	Void CCB	U	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		

350.1 Color - 00268
350.1 Bleach - 01525
350.1 Complex - 00584

pH

<2

NO

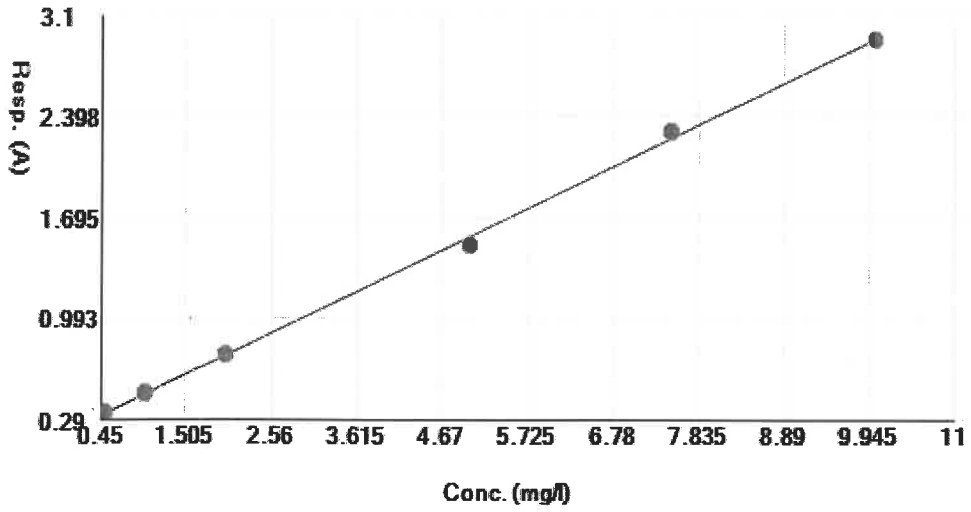
Calibration results

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

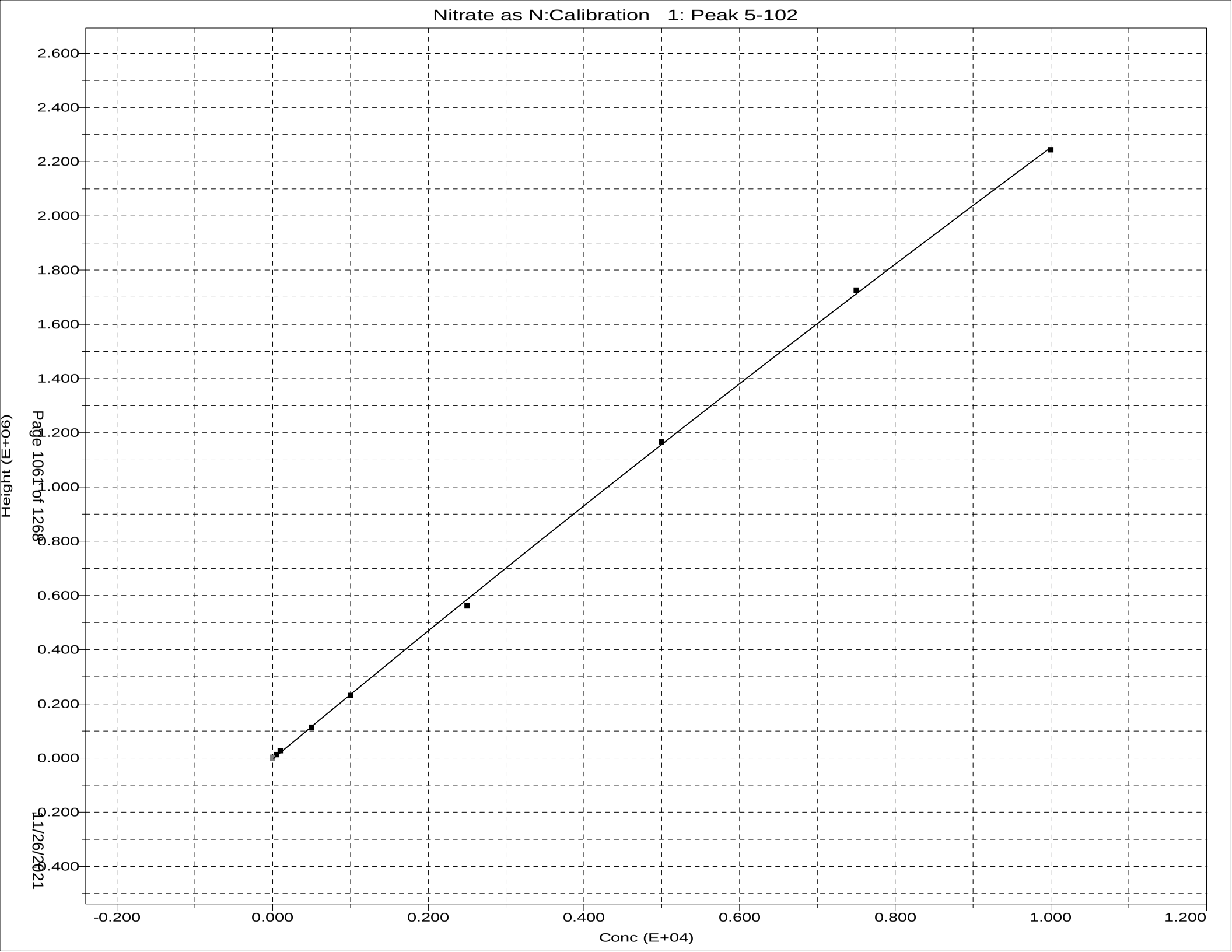
*	Name	Conc	Height
*	Cal 0.00 ppb	0.000000	2137.747559
*	Cal 50.0 ppb	50.000000	12475.126953
*	Cal 100 ppb	100.000000	26818.367188
*	Cal 500 ppb	500.000000	113808.468750
*	Cal 1000 ppb	1000.000000	230425.859375
*	Cal 2500 ppb	2500.000000	561046.875000
*	Cal 5000 ppb	5000.000000	1166481.125000
*	Cal 7500 ppb	7500.000000	1726090.500000
*	Cal 10000 ppb	10000.000000	2243897.000000

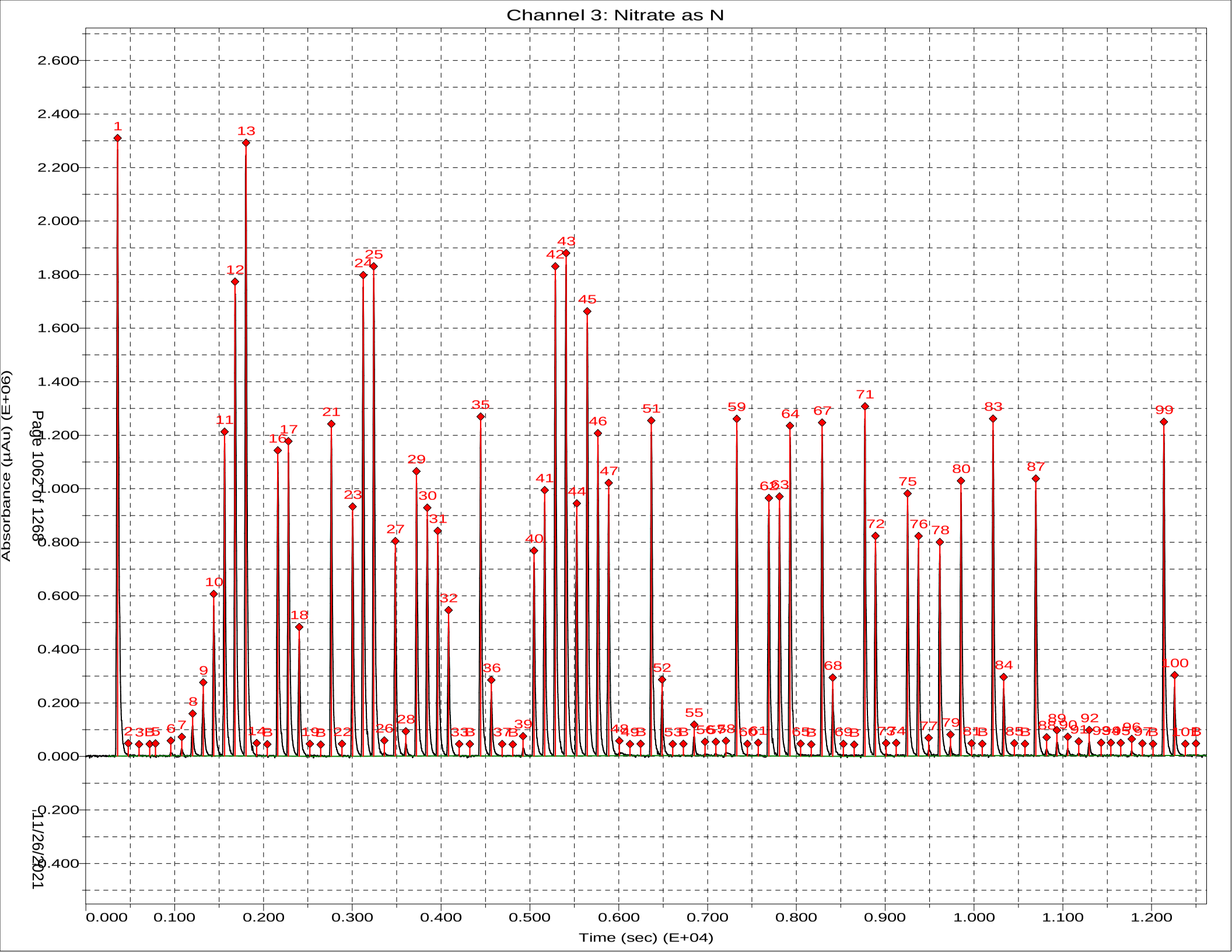
Calib Coef:
x=cyy+by+a
a: (intercept) 1.5100e+01
b: 4.1761e-03
c: 1.1378e-10

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)
Page 1062 of 1268
11/26/2021

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 ~~10~~	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: 280-155225-1

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: 280-155225-E-4-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: 280-155225-1

Batch: 556959 **Analyst Initials: LRB**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: MB 280-556892/1-A **Analysis Date: Nov 10, 2021 13:25**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: LCS 280-556892/2-A **Analysis Date: Nov 10, 2021 13:25**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	12	mg/L	50 mL	50 mL

Lab Sample ID: 280-155225-E-1-A **Analysis Date: Nov 10, 2021 13:25**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	3.6	mg/L	50 mL	50 mL

Lab Sample ID: 280-155225-E-1-B MS **Analysis Date: Nov 10, 2021 13:25**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	15.2	mg/L	50 mL	50 mL

Lab Sample ID: 280-155225-E-1-C MSD **Analysis Date: Nov 10, 2021 13:25**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	14.4	mg/L	50 mL	50 mL

Lab Sample ID: 280-155225-E-2-A **Analysis Date: Nov 10, 2021 13:25**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155225-E-3-A **Analysis Date: Nov 10, 2021 13:25**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	-0.8	mg/L	50 mL	50 mL

Lab Sample ID: 280-155225-E-5-A **Analysis Date: Nov 10, 2021 13:25**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	-0.4	mg/L	50 mL	50 mL

Lab Sample ID: 280-155225-E-6-A **Analysis Date: Nov 10, 2021 13:25**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155225-E-7-A **Analysis Date: Nov 10, 2021 13:25**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Lab Sample ID: 280-155225-E-8-A **Analysis Date: Nov 10, 2021 13:25**

Analyte	Detector	Dilution	Raw Result	Unit	Initial Amount	Final Amount
Sulfide	None	1	0	mg/L	50 mL	50 mL

Batch: 556959 (Continued) **Analyst Initials: LRB**

Method: 9034 **Instrument: No Equipment Used for this Test**

Lab Sample ID: 280-155225-E-9-A **Analysis Date: Nov 10, 2021 13:25**

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:	########
Normality:	0.025	Made By:	JM
Solution 2:	sodium thiosulfate	Concentration:	876
TALS ID	Na Thio_00174	Expiration Date:	1/10/2022
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	8.80	20	8.80	896.000
CAL	5	8.80	18.10	20	9.30	856.000

ICV Information	
Source/Ver-Lot#:	INT_0190
Prep Date:	########
Made By:	JM
Concentration:	928
Expiration Date:	1/10/2022

	CAL Volume	Buret Start	Buret End	mL Iodine	Final mL	Conc mg/L
ICV	5	0.00	8.00	20	8.00	960.000
ICV	5	8.00	16.80	20	8.80	896.000

TALS Raw Data Report

Job Number: 280-155221-1
LIMS Batch: 556959
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **MB 280-556892/1-A** Inj Date: 11/10/2021 1:25:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	ug/L				
Sulfide as H2S		0 mg/L	ug/L				

RS# 2 Lab ID: **LCS 280-556892/2-A** Inj Date: 11/10/2021 1:25:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12 mg/L	ug/L	65	44 110		
Sulfide as H2S		12.75 mg/L	ug/L				

RS# 3 Lab ID: **280-155225-E-1-A** Inj Date: 11/10/2021 1:25:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		3.6 mg/L	3600 J ug/L				
Sulfide as H2S		3.825 mg/L	3800 J ug/L				

RS# 4 Lab ID: **280-155225-E-1-B MS** Inj Date: 11/10/2021 1:25:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	ug/L	62	44 110		
Sulfide as H2S		16.15 mg/L	ug/L				

RS# 5 Lab ID: **280-155225-E-1-C MSD** Inj Date: 11/10/2021 1:25:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		14.4 mg/L	ug/L	58	44 110	5	20
Sulfide as H2S		15.3 mg/L	ug/L				

RS# 14 Lab ID: **280-155221-N-1-A** Inj Date: 11/10/2021 1:25:00PM 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	ug/L				
Sulfide as H2S		-0.85 mg/L	ug/L				

RS# 15 Lab ID: **280-155221-L-2-B** Inj Date: 11/10/2021 1:25:00PM 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	ug/L				
Sulfide as H2S		-0.85 mg/L	ug/L				

TALS Raw Data Report

Job Number: 280-155225-1
LIMS Batch: 556959
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **MB 280-556892/1-A** Inj Date: 11/10/2021 1:25:00PM 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# 2 Lab ID: **LCS 280-556892/2-A** Inj Date: 11/10/2021 1:25:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12 mg/L	mg/L	65	44 110		
Sulfide as H2S		12.75 mg/L	mg/L				

RS# 3 Lab ID: **280-155225-E-1-A** Inj Date: 11/10/2021 1:25:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		3.6 mg/L	3.6 J mg/L				
Sulfide as H2S		3.825 mg/L	3.8 J mg/L				

RS# 4 Lab ID: **280-155225-E-1-B MS** Inj Date: 11/10/2021 1:25:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	62	44 110		
Sulfide as H2S		16.15 mg/L	mg/L				

RS# 5 Lab ID: **280-155225-E-1-C MSD** Inj Date: 11/10/2021 1:25:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		14.4 mg/L	mg/L	58	44 110	5	20
Sulfide as H2S		15.3 mg/L	mg/L				

RS# 6 Lab ID: **280-155225-E-2-A** Inj Date: 11/10/2021 1:25:00PM 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# 7 Lab ID: **280-155225-E-3-A** Inj Date: 11/10/2021 1:25:00PM 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	1.9 U mg/L				
Sulfide as H2S		-0.85 mg/L	2.0 U mg/L				

RS# 8 Lab ID: **280-155225-E-4-B** Inj Date: 11/10/2021 1:25:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0.8 mg/L	0.80 J mg/L				
Sulfide as H2S		0.85 mg/L	0.85 J mg/L				

RS# 9 Lab ID: **280-155225-E-5-A** Inj Date: 11/10/2021 1:25:00PM 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# 10 Lab ID: **280-155225-E-6-A** Inj Date: 11/10/2021 1:25:00PM 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: **280-155225-E-7-A** Inj Date: 11/10/2021 1:25:00PM 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: **280-155225-E-8-A** Inj Date: 11/10/2021 1:25:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

RS# 13 Lab ID: **280-155225-E-9-A** Inj Date: 11/10/2021 1:25:00PM 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: 280-155233-1
LIMS Batch: 556959
Equipment: NOEQUIP

Laboratory: Eurofins TestAmerica, Denver

RS# 1 Lab ID: **MB 280-556892/1-A** Inj Date: 11/10/2021 1:25:00PM 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# 2 Lab ID: **LCS 280-556892/2-A** Inj Date: 11/10/2021 1:25:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		12 mg/L	mg/L	65	44 110		
Sulfide as H2S		12.75 mg/L	mg/L				

RS# 3 Lab ID: **280-155225-E-1-A** Inj Date: 11/10/2021 1:25:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		3.6 mg/L	3.6 J mg/L				
Sulfide as H2S		3.825 mg/L	3.8 J mg/L				

RS# 4 Lab ID: **280-155225-E-1-B MS** Inj Date: 11/10/2021 1:25:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		15.2 mg/L	mg/L	62	44 110		
Sulfide as H2S		16.15 mg/L	mg/L				

RS# 5 Lab ID: **280-155225-E-1-C MSD** Inj Date: 11/10/2021 1:25:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		14.4 mg/L	mg/L	58	44 110	5	20
Sulfide as H2S		15.3 mg/L	mg/L				

RS# 16 Lab ID: **280-155233-C-7-A** Inj Date: 11/10/2021 1:25:00PM 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# 17 Lab ID: **280-155233-C-8-A** Inj Date: 11/10/2021 1:25:00PM Dil: 1.0 Meth: 9034

Analyte	Rspnse	Raw Res/Units	Final Res/Qual/Units	% Rec	Rec Lmt	% RPD	RPD Lmt
Sulfide		0 mg/L	1.9 U mg/L				
Sulfide as H2S		0 mg/L	2.0 U mg/L				

Titration Data Review Checklist

LIMS Batch Number: 556959	**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.	✓		✓	□ 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: IRB ~~perfoor~~ performed 11/10/21
IRB 11/11/21

2nd Reviewer: [signature] **Review Date:** 11·11·21

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

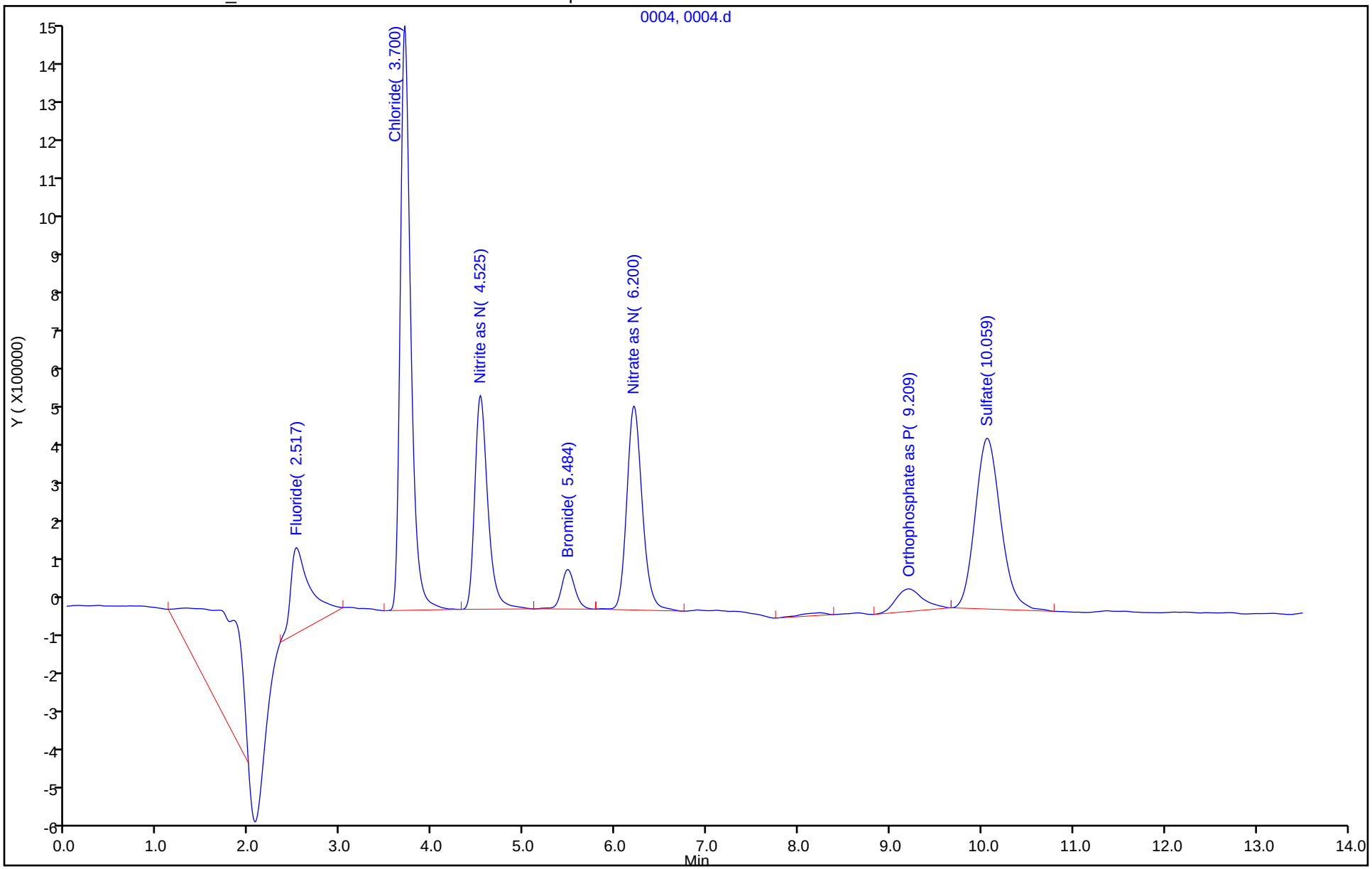
Reagents:

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

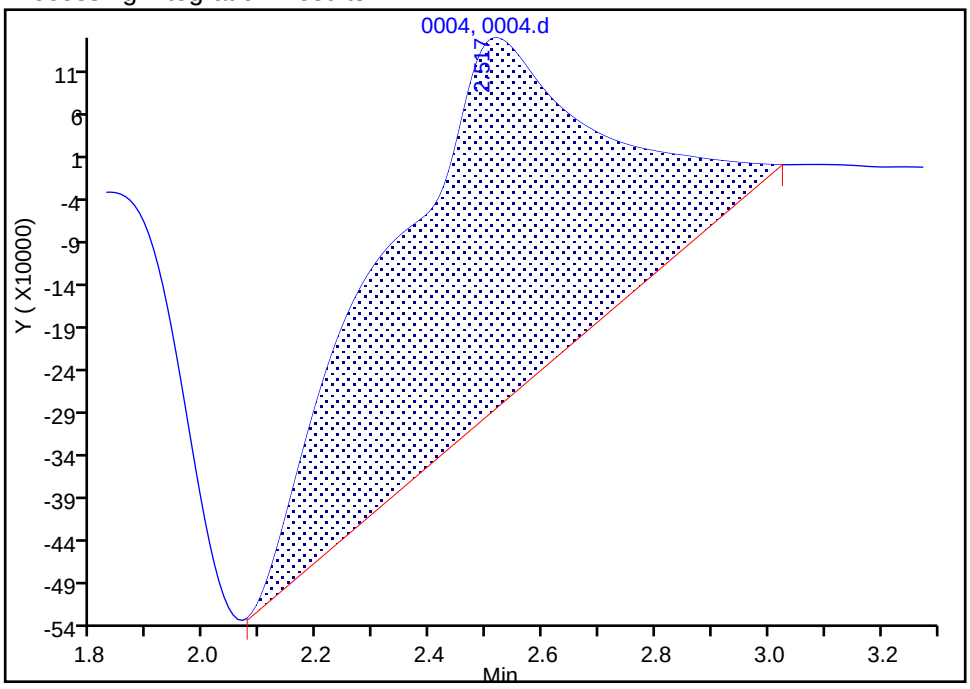
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0004.d
Injection Date: 14-Nov-2021 17:29:00 Instrument ID: WC_IonChrom11
Lims ID: std L1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

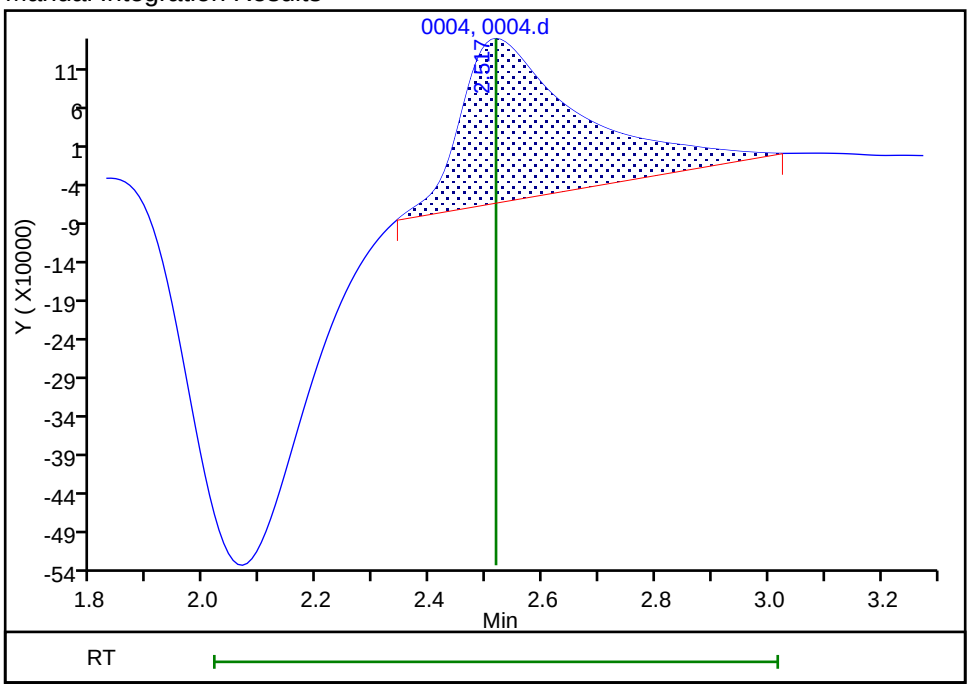
Processing Integration Results

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

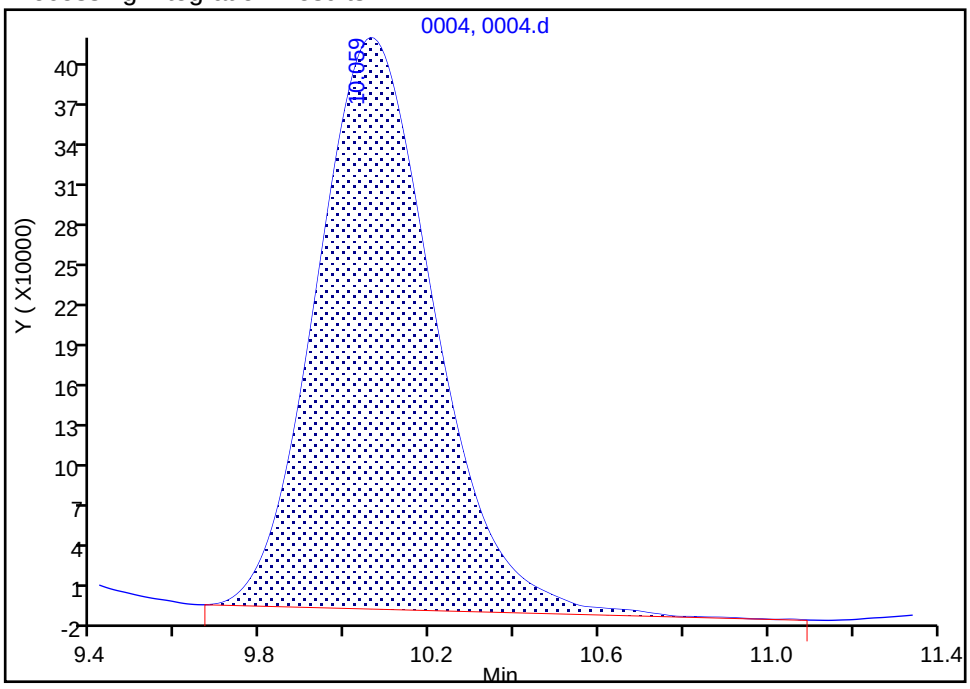
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0004.d
Injection Date: 14-Nov-2021 17:29:00 Instrument ID: WC_IonChrom11
Lims ID: std L1
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

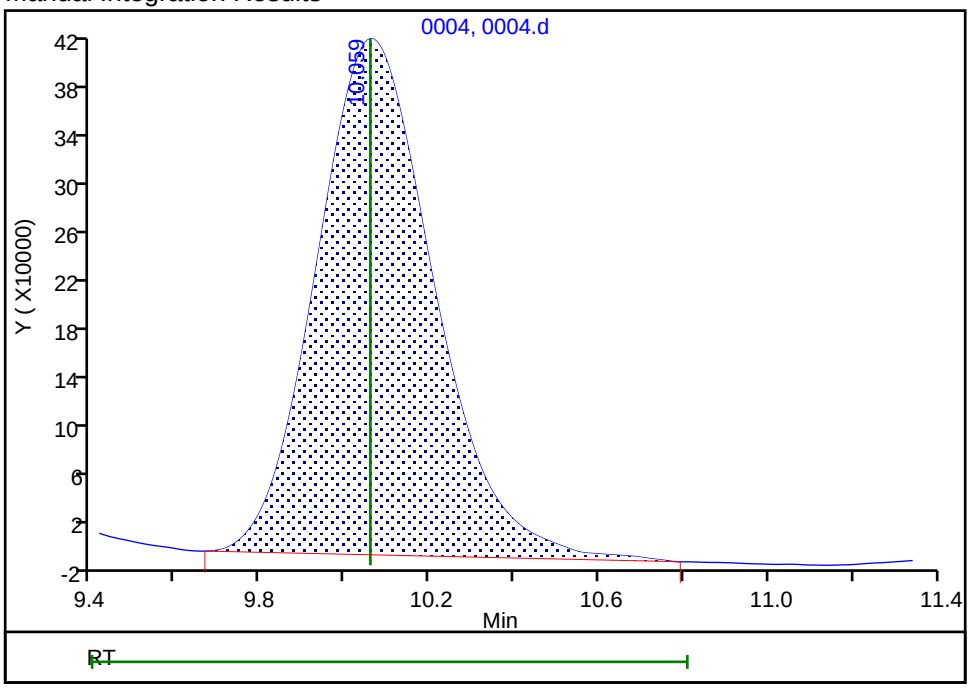
Processing Integration Results

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:

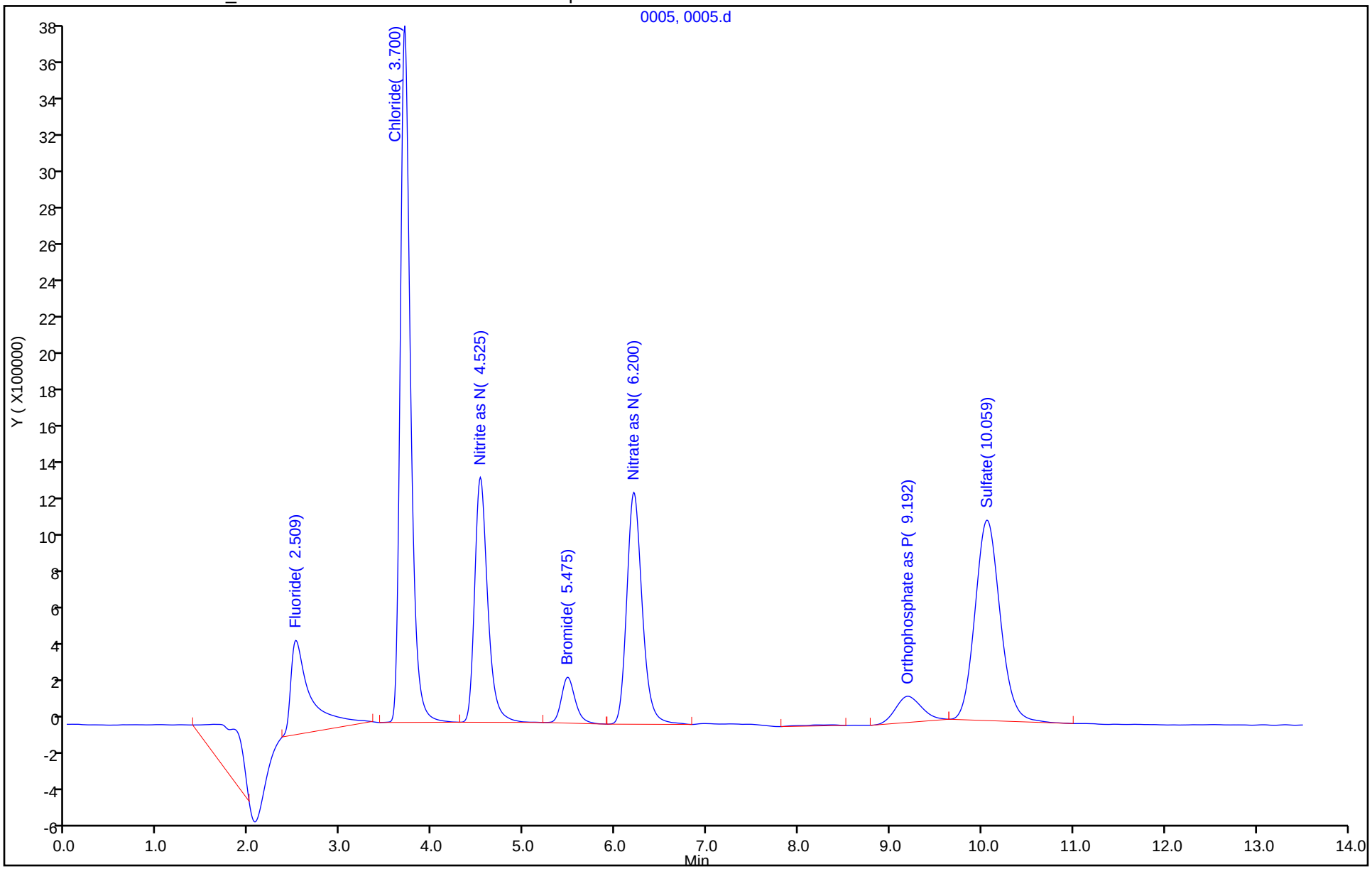
IC Cal low_00607 Amount Added: 0.05 Units: mL
IC CAL cl/so4_00393 Amount Added: 0.05 Units: mL

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

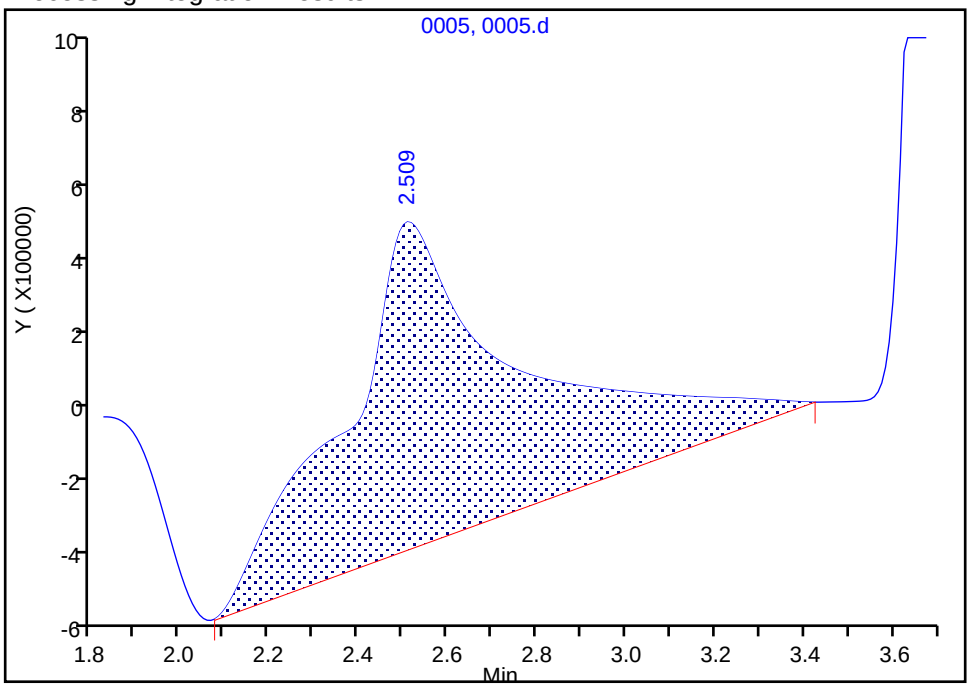
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0005.d				
Injection Date:	14-Nov-2021 17:45:00	Instrument ID:	WC_IonChrom11		
Lims ID:	std L2				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	3
Injection Vol:	10.0 ul	Dil. Factor:	1.0000		
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		
Column:		Detector	0005		

1 Fluoride, CAS: 16984-48-8

Signal: 1

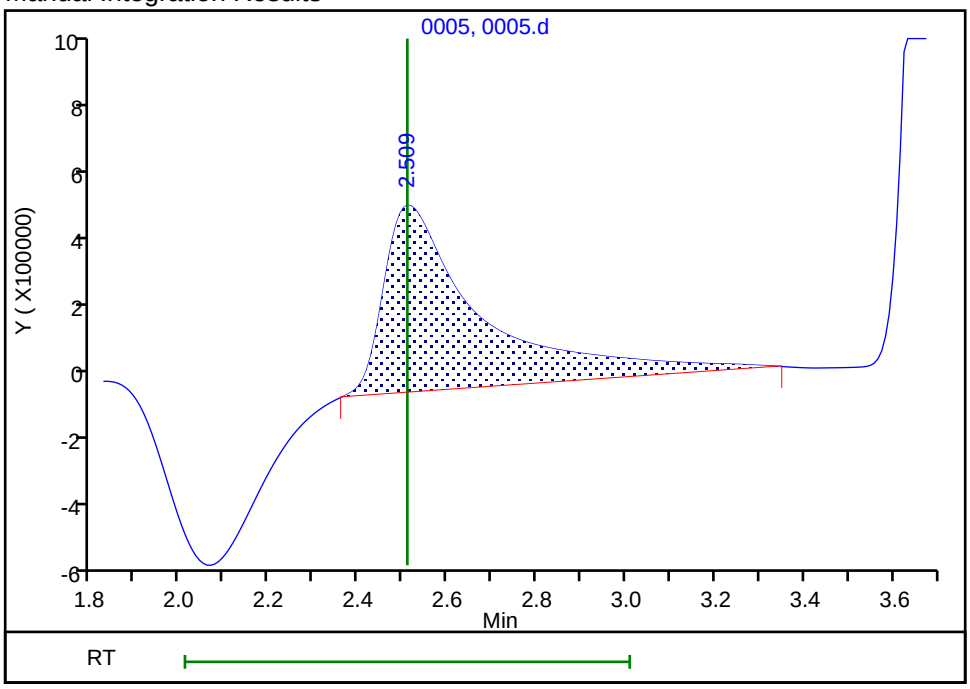
Processing Integration Results

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

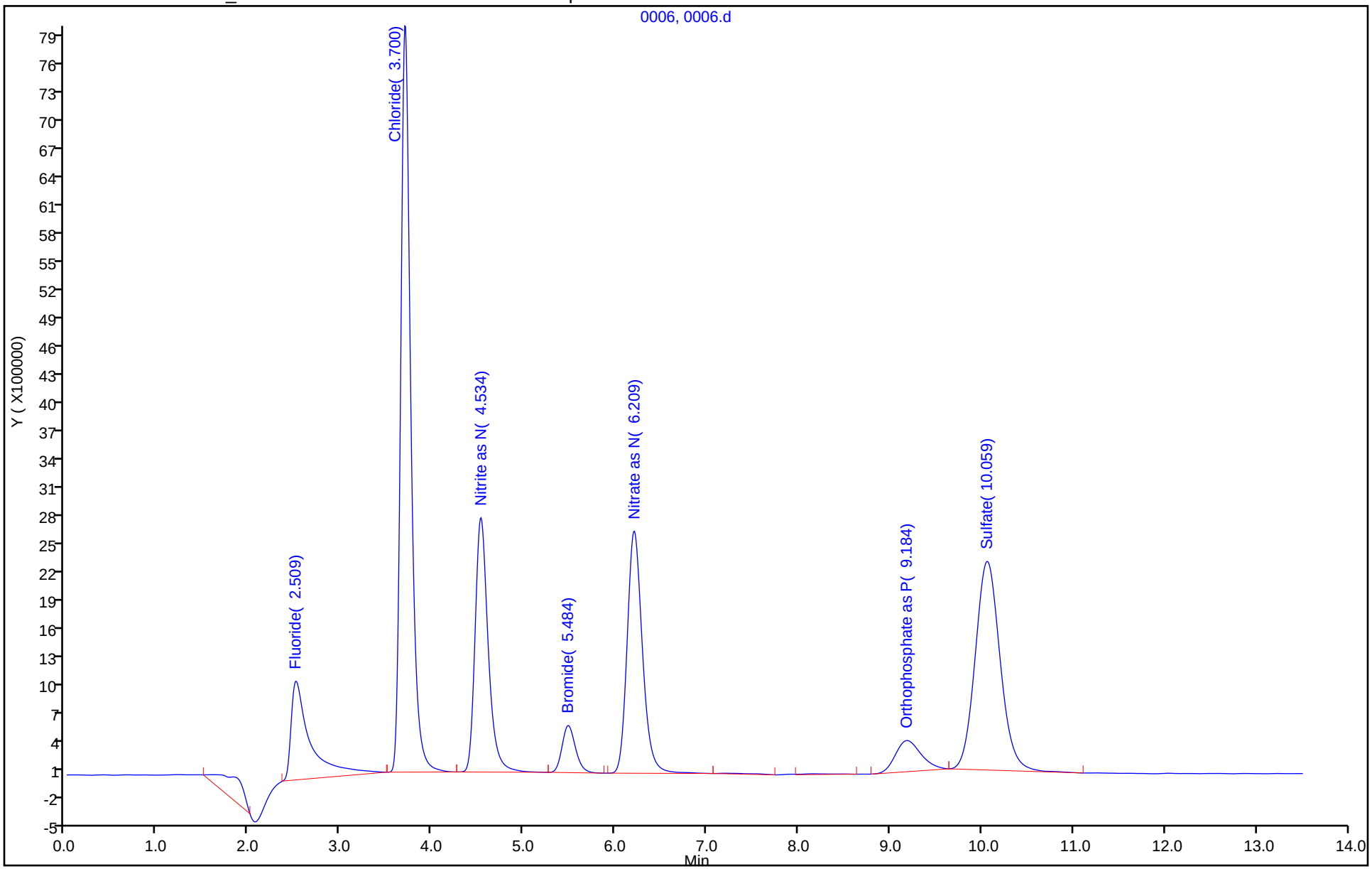
Reagents:

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

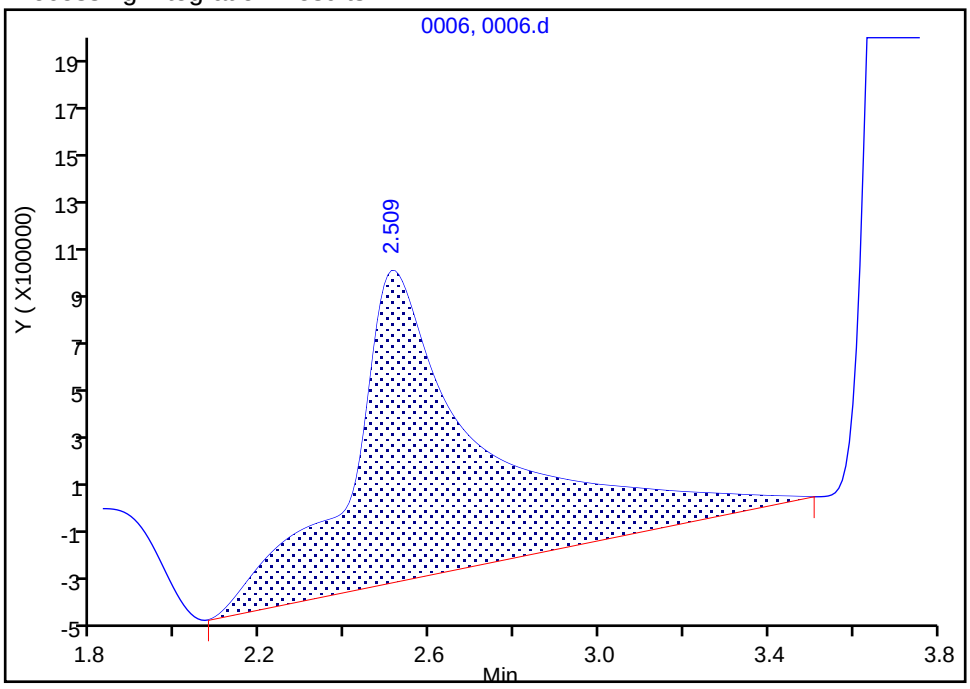
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0006.d
Injection Date: 14-Nov-2021 18:02:00 Instrument ID: WC_IonChrom11
Lims ID: std L3
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

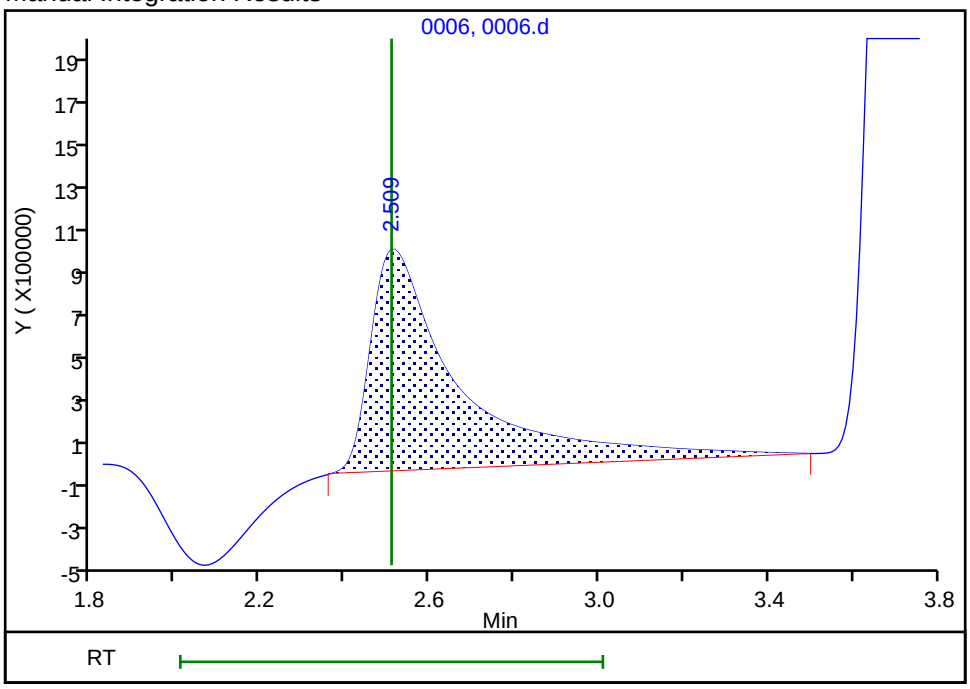
Processing Integration Results

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

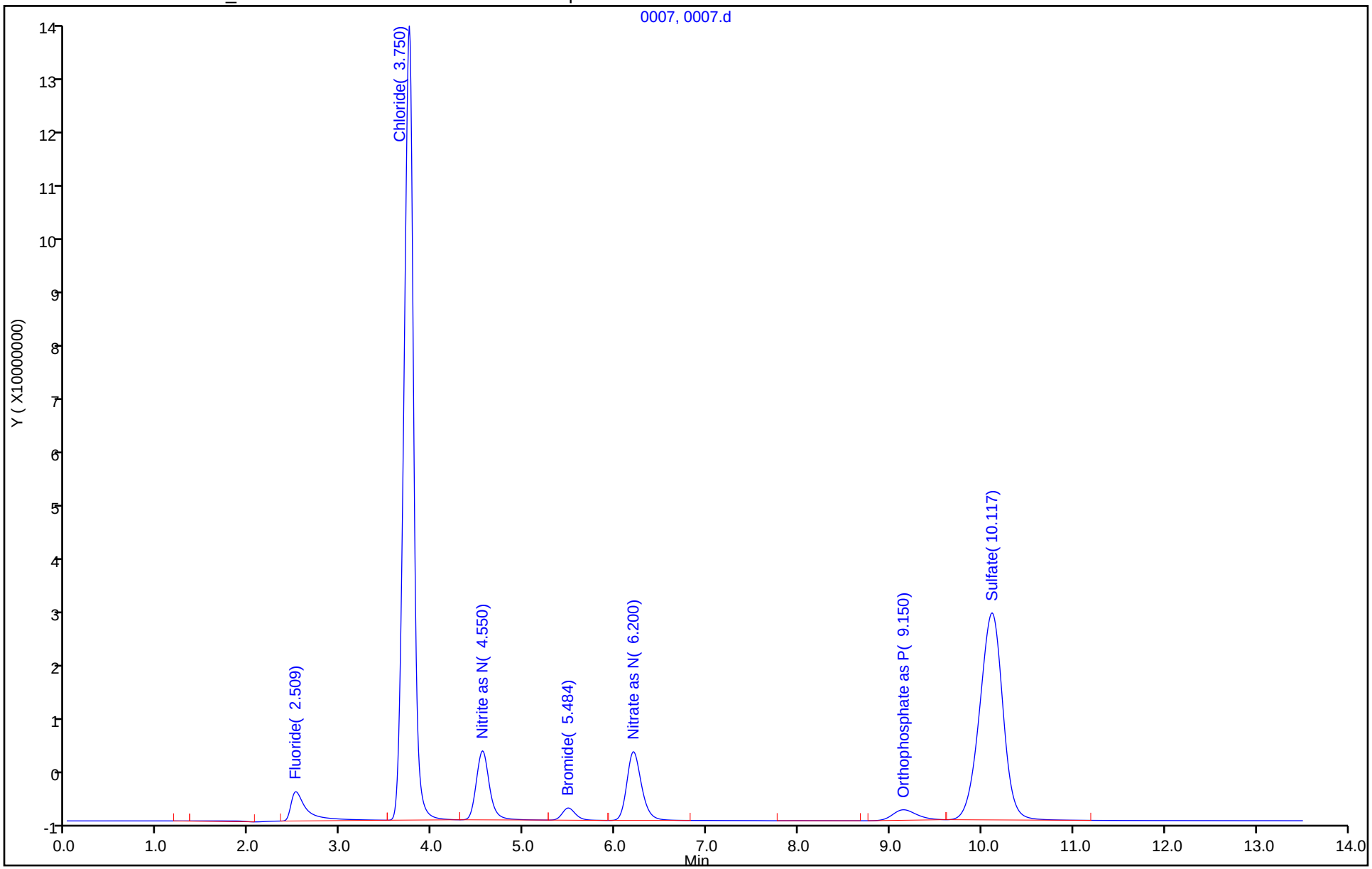
Reagents:

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

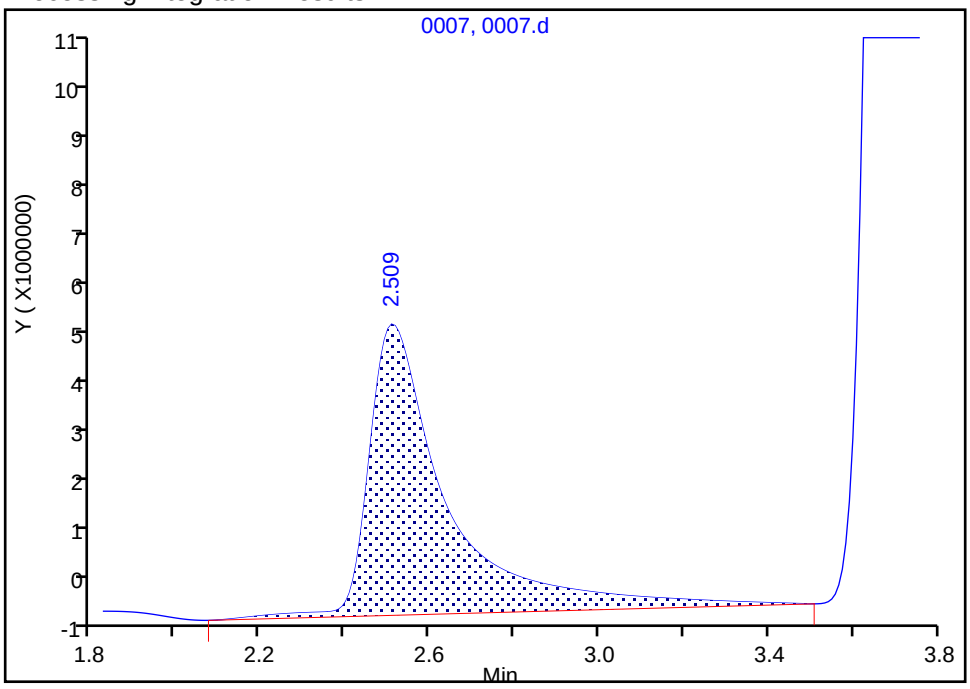
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d
Injection Date: 14-Nov-2021 18:18:00 Instrument ID: WC_IonChrom11
Lims ID: std L4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

1 Fluoride, CAS: 16984-48-8

Signal: 1

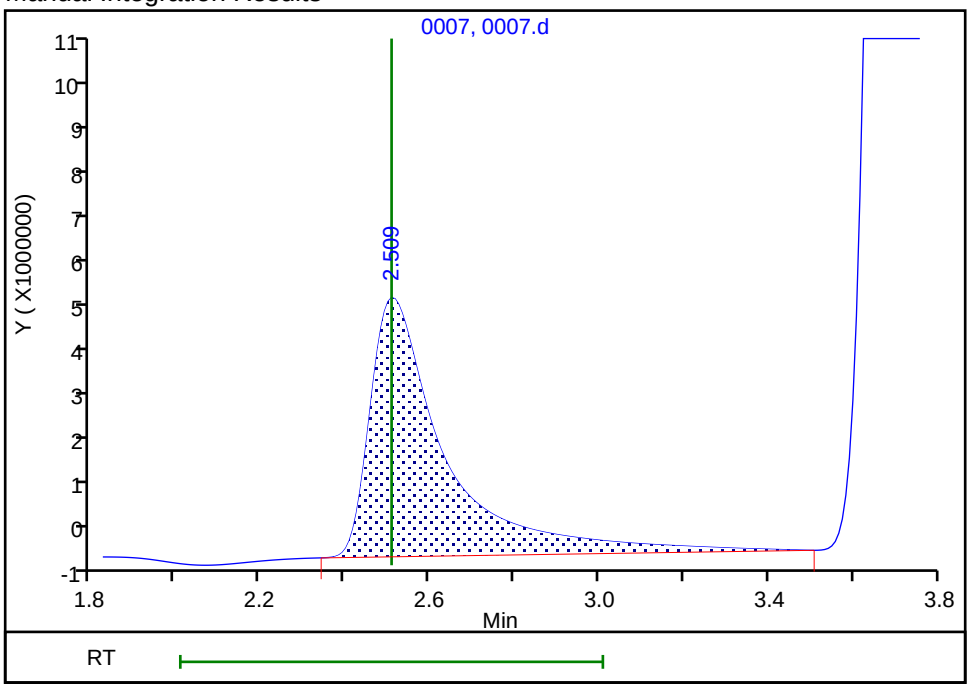
Processing Integration Results

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

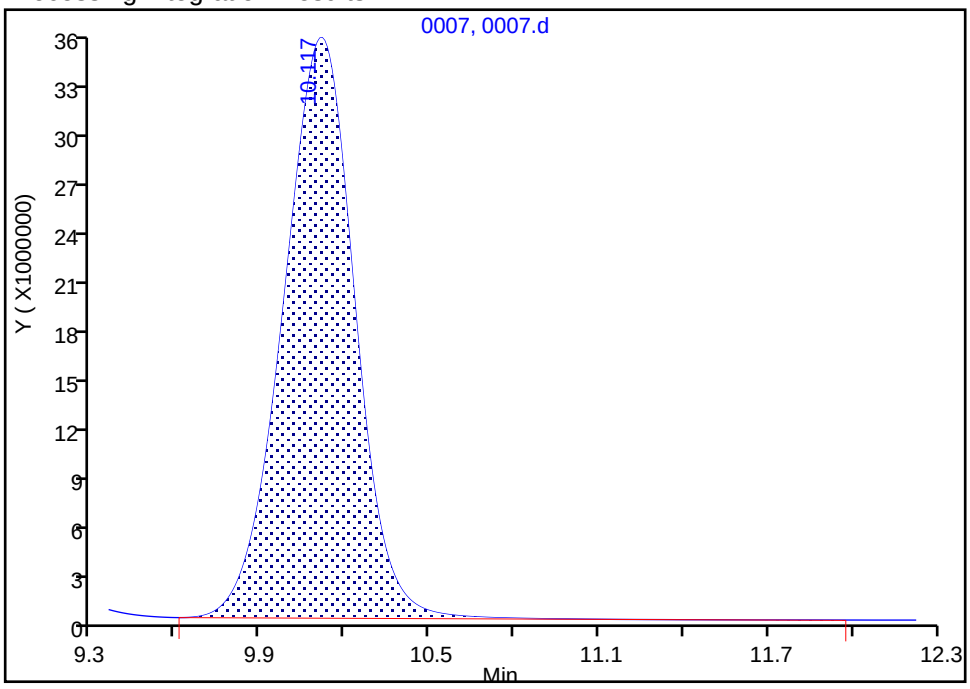
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0007.d
Injection Date: 14-Nov-2021 18:18:00 Instrument ID: WC_IonChrom11
Lims ID: std L4
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

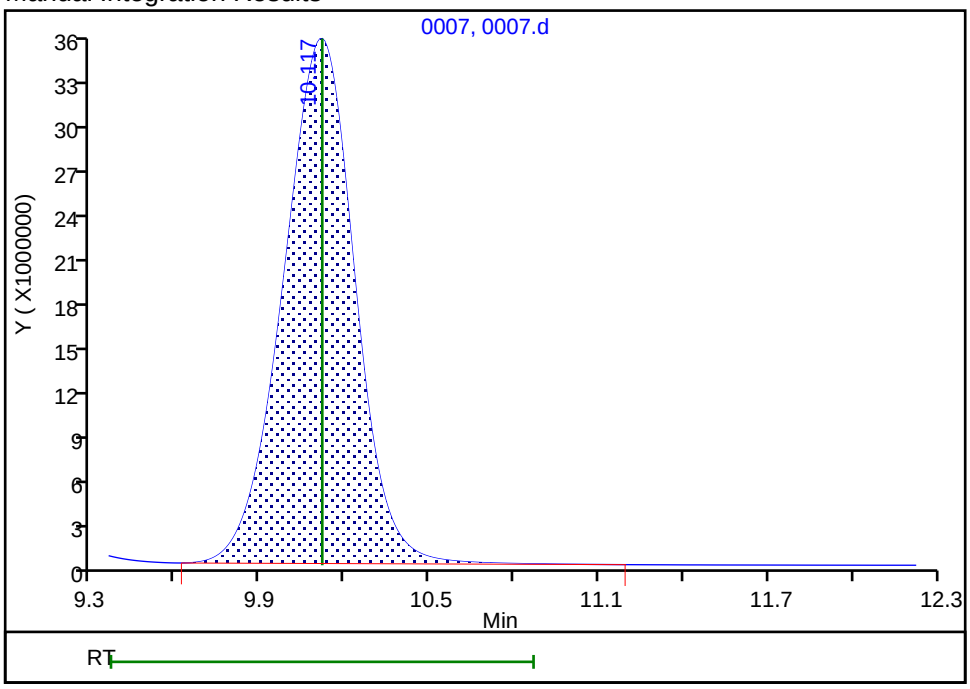
Processing Integration Results

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:

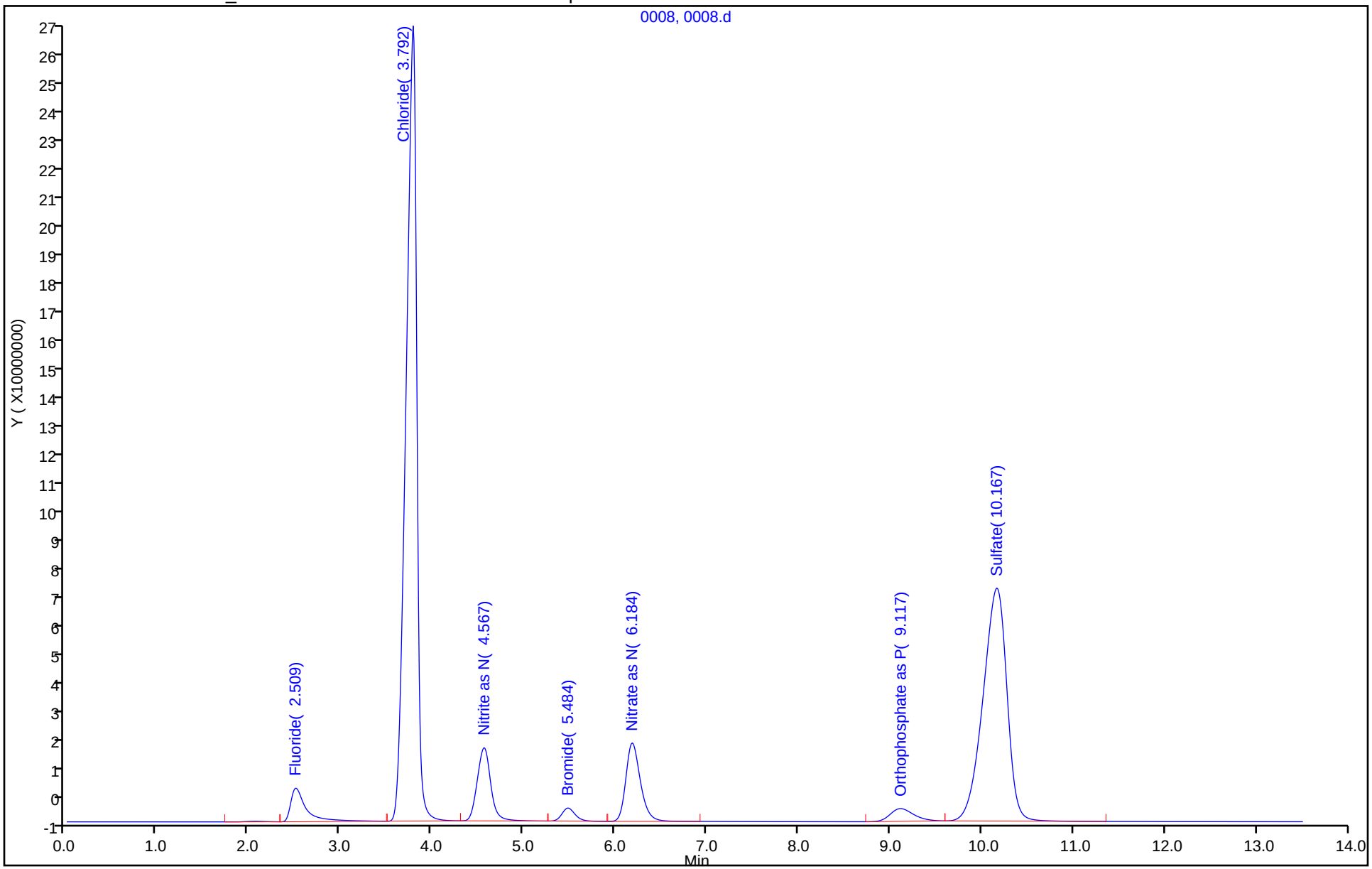
IC Cal low_00607 Amount Added: 0.80 Units: mL
IC CAL cl/so4_00393 Amount Added: 2.40 Units: mL

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

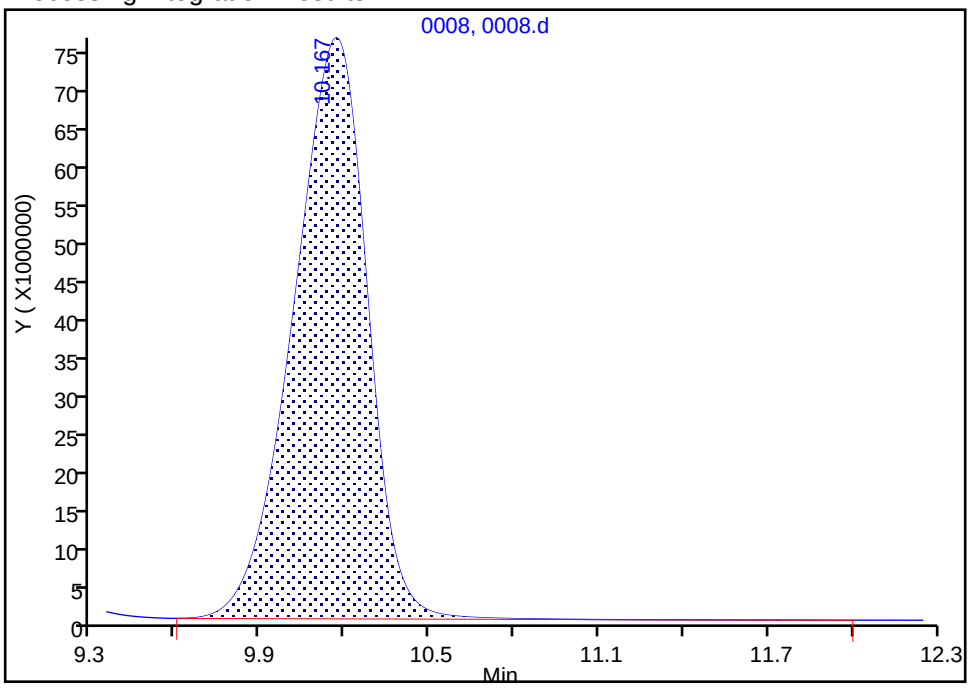
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0008.d		
Injection Date:	14-Nov-2021 18:35:00	Instrument ID:	WC_IonChrom11
Lims ID:	std L5		
Client ID:			
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 6
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D
Column:		Detector	0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

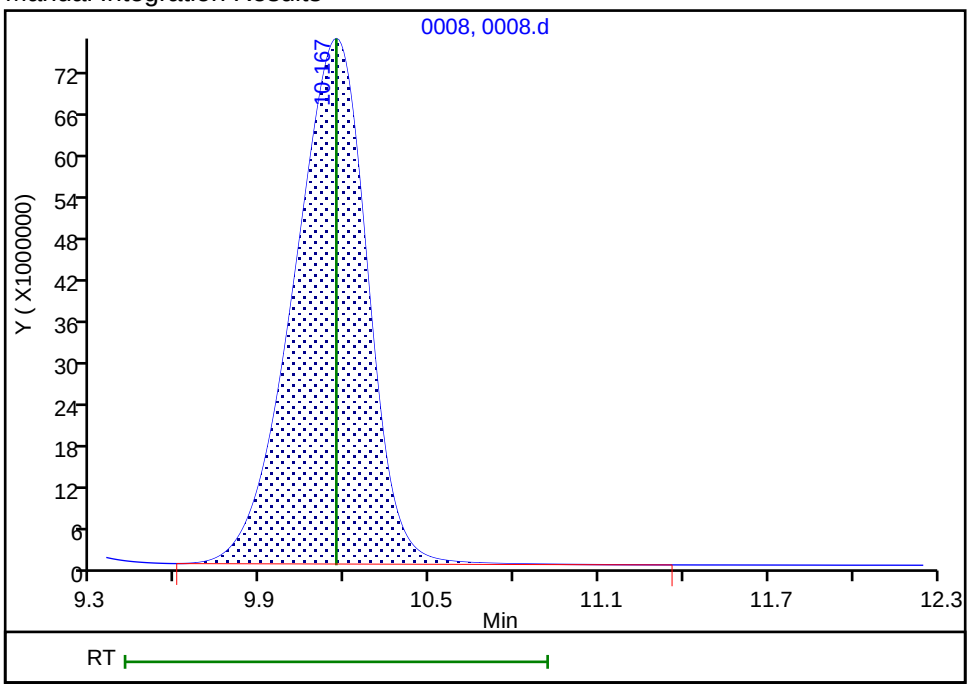
Processing Integration Results

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:

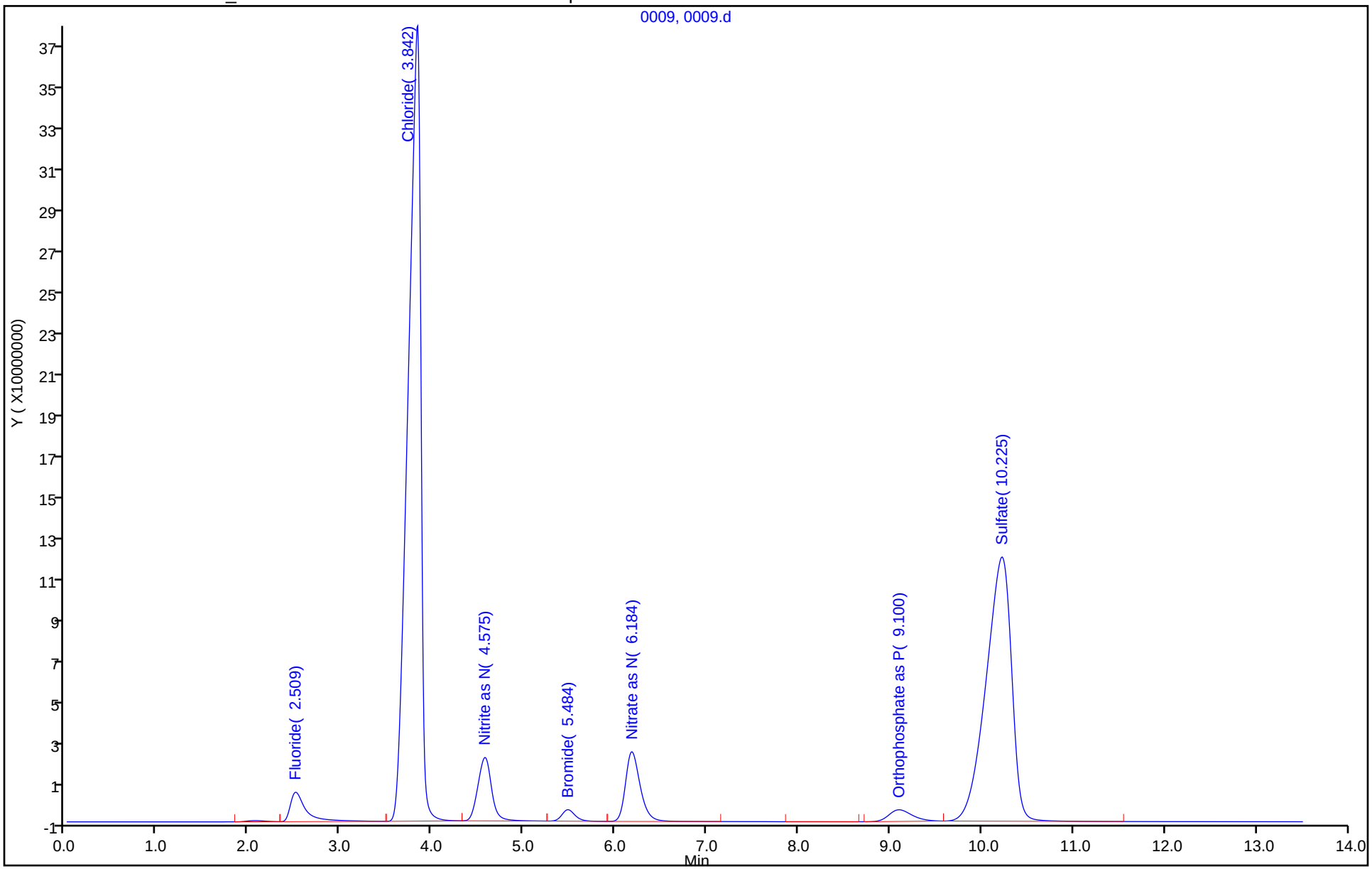
IC Cal low_00607 Amount Added: 1.00 Units: mL
IC CAL cl/so4_00393 Amount Added: 4.00 Units: mL

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

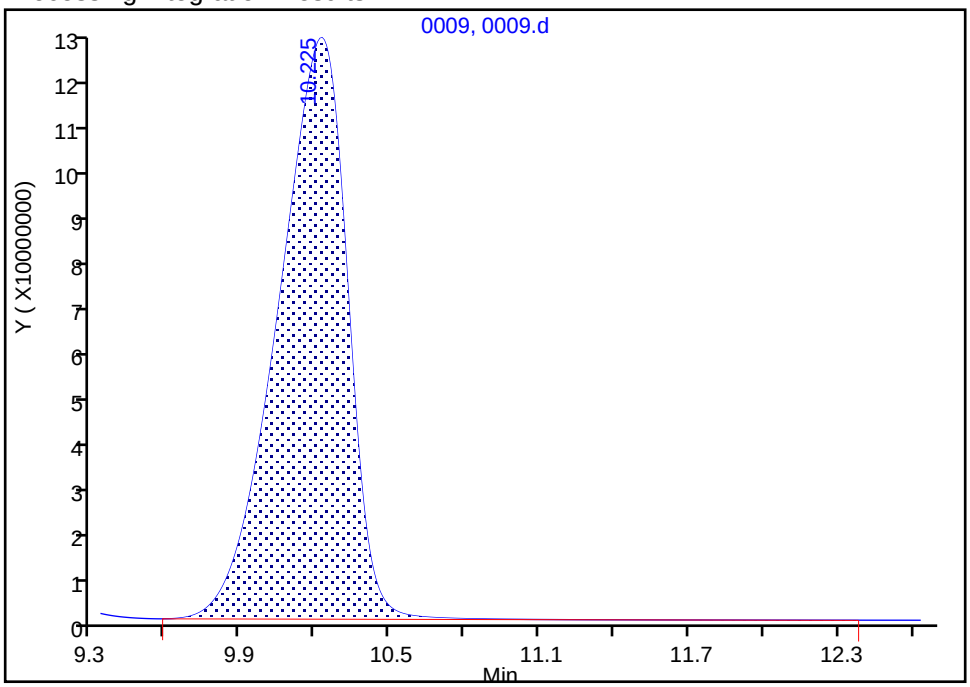
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0009.d		
Injection Date:	14-Nov-2021 18:51:00	Instrument ID:	WC_IonChrom11
Lims ID:	std L6		
Client ID:			
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 7
Injection Vol:	10.0 ul	Dil. Factor:	1.0000
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D
Column:		Detector	0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

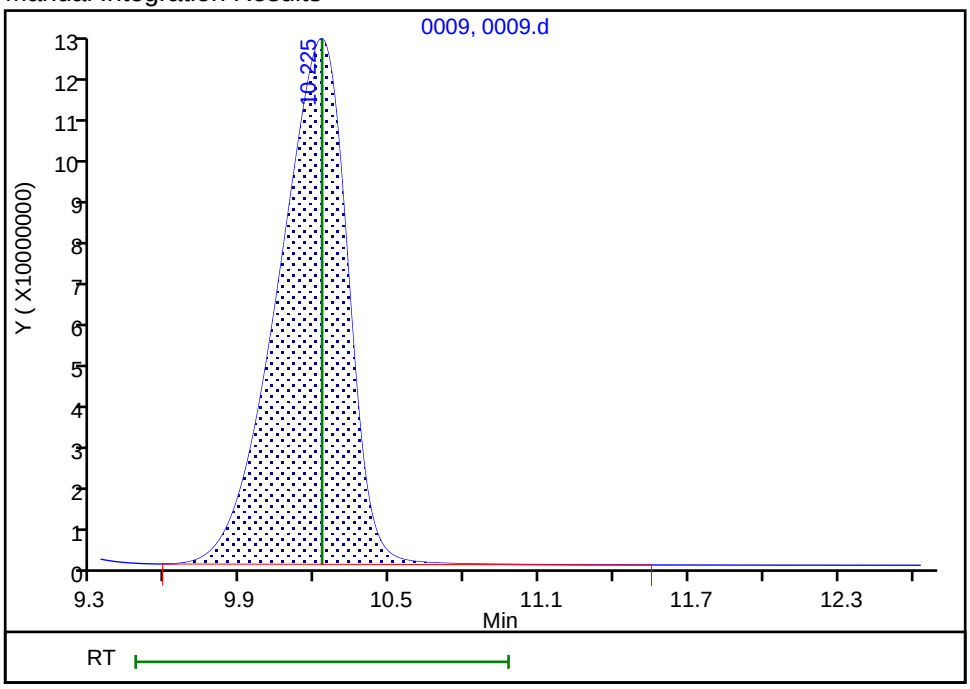
Processing Integration Results

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:

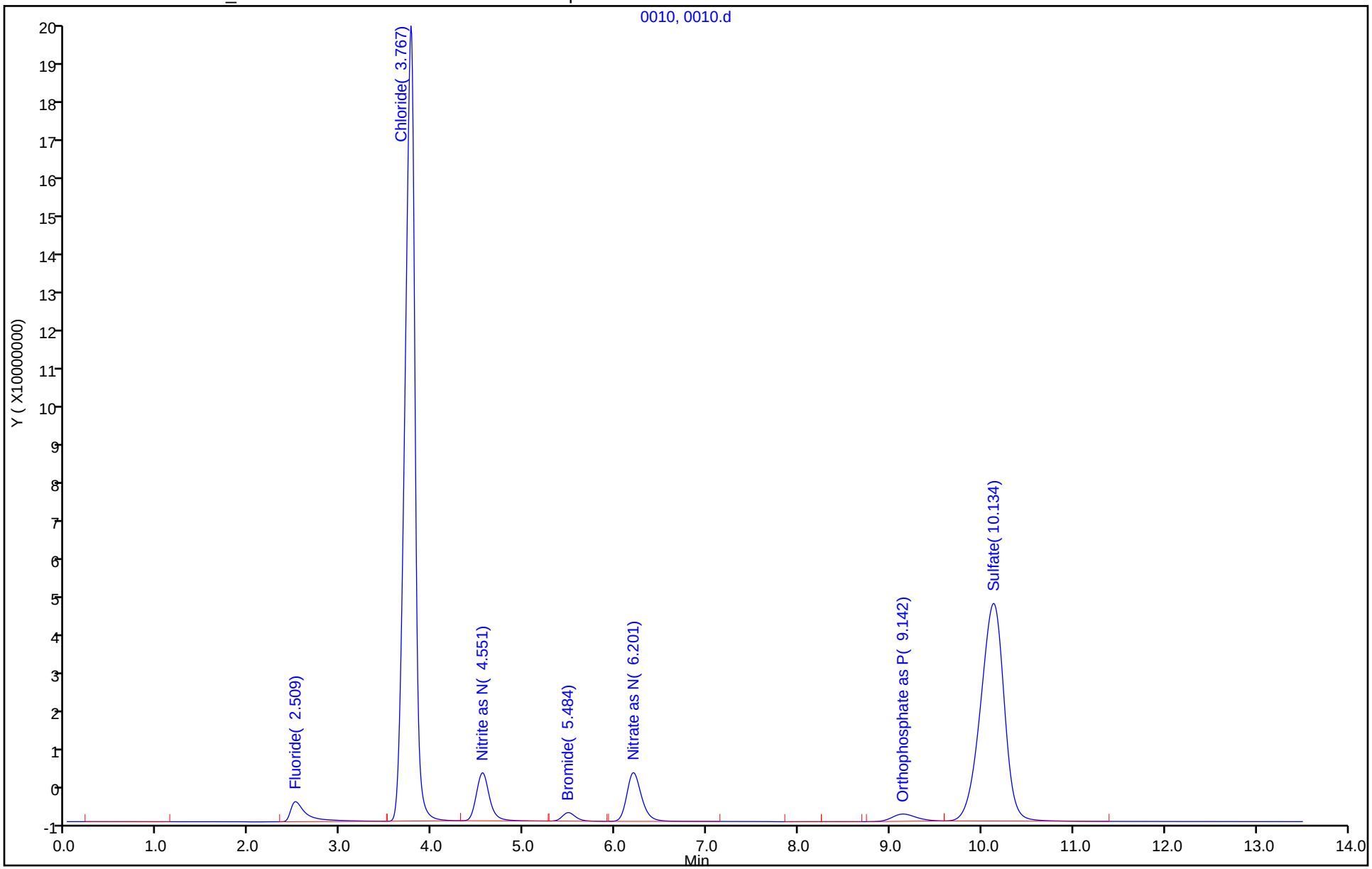
IC SO4 ICV_00022	Amount Added:	0.40	Units: mL
Cl ICV Std_00002	Amount Added:	0.40	Units: mL
IC ICV 5_00341	Amount Added:	0.40	Units: mL

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

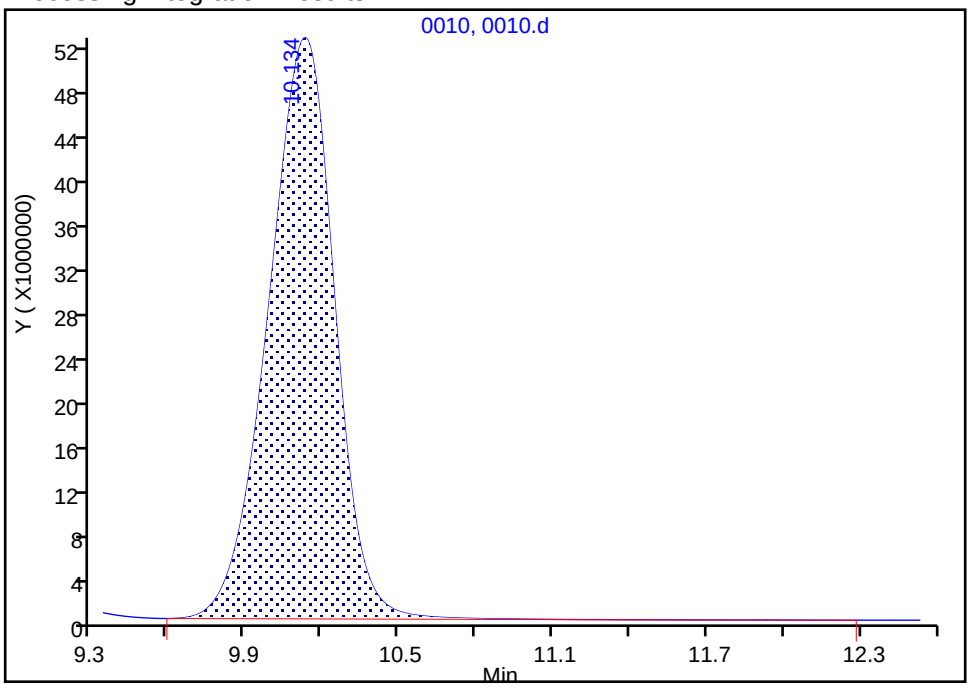
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211114-106493.b\0010.d
Injection Date: 14-Nov-2021 19:07:00 Instrument ID: WC_IonChrom11
Lims ID: ICV
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 8
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

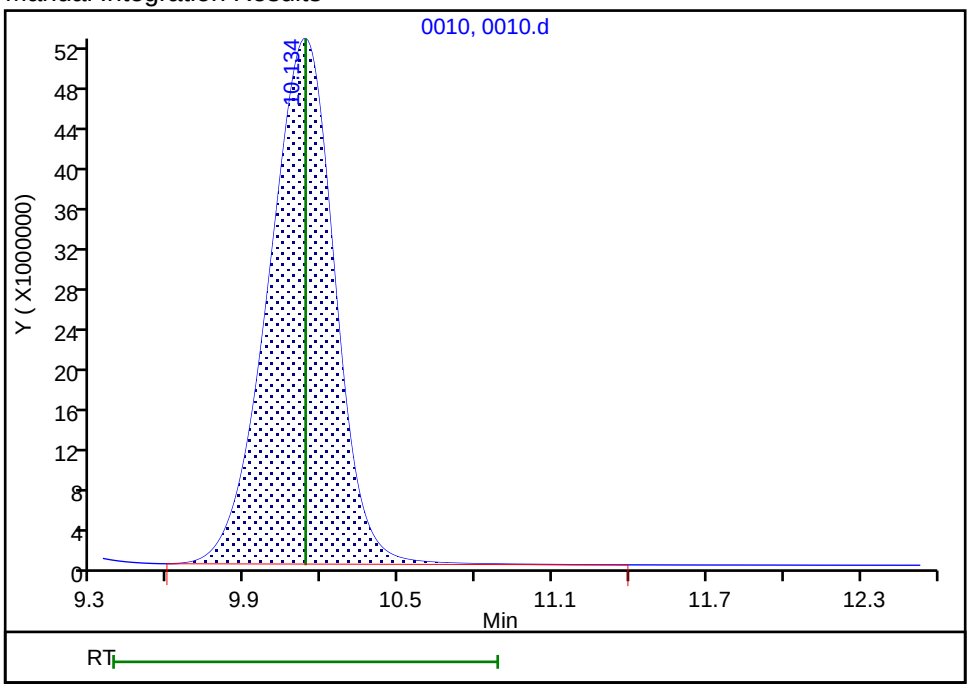
Processing Integration Results

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

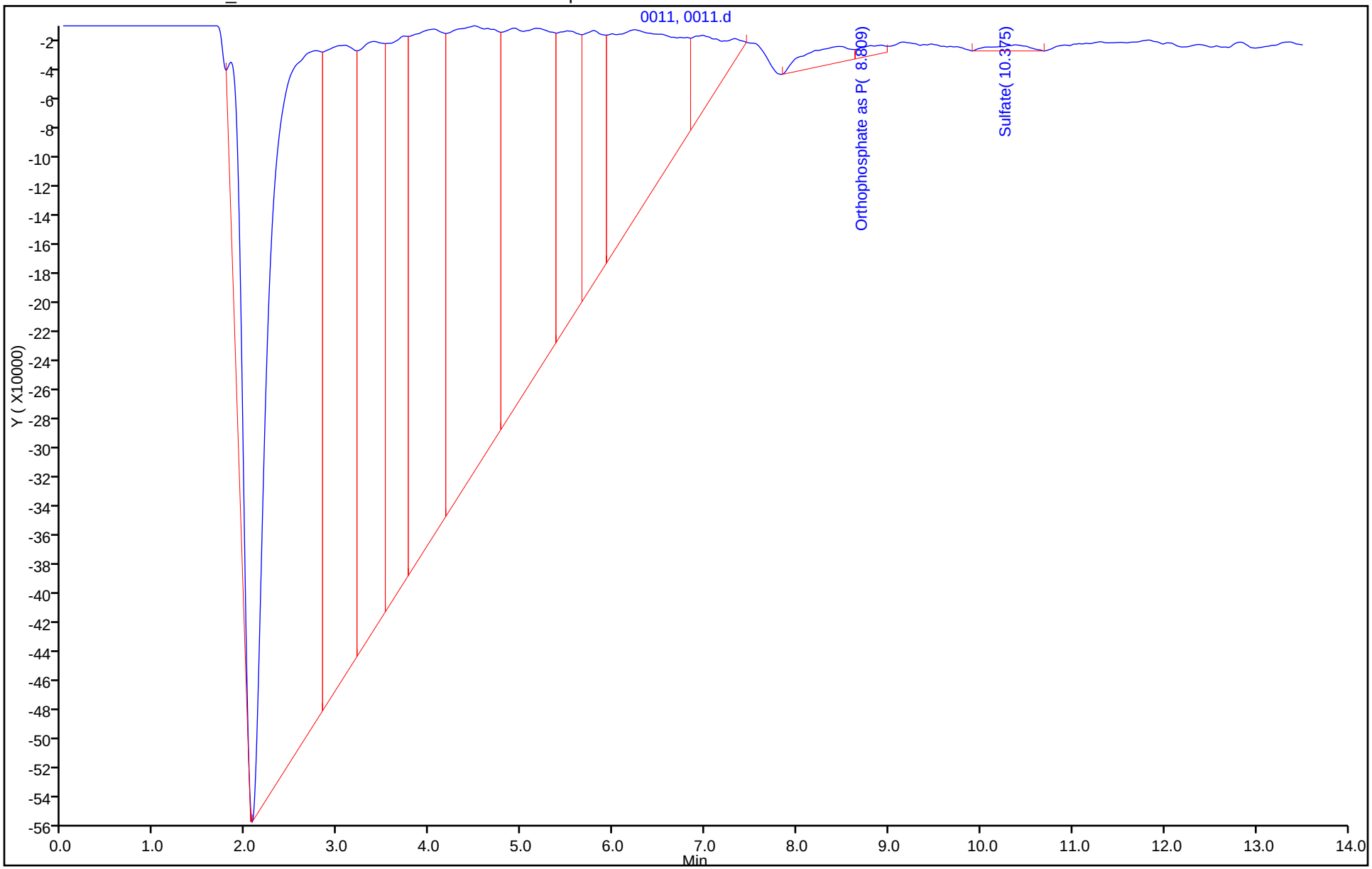
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

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: 106710 **Inst ID:** IC11 **Analysis Date:** 11/22/21 **Analyst:** JF

Rush	Job No.	Samples	Anions	QC Req	HT Exp
☐	155632	1	(F) Cl NO2 Br NO3 PO4 SO4	(MS/D)	
☐	155078	1	F (Cl) NO2 Br NO3 PO4 (SO4)	(MS/D)	
☐	155081	5	F (Cl) NO2 Br NO3 PO4 (SO4)	(MS/D)	
☐	155225	9	F Cl NO2 Br NO3 PO4 (SO4)	MS/D	
☐	155301	1	(F) Cl NO2 Br NO3 PO4 SO4	(MS/D)	
☐	155313	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	

Dilutions

Job No.	Samples	Anions	Dilution	Reason
313	1	(F) Cl NO2 Br NO3 PO4 SO4	100/1000	Test
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		F Cl NO2 Br NO3 PO4 SO4		
		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\20211112-106453.b\Anions_IC11.m
Instrument: WC_IonChrom11 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 14-Nov-2021 21:29:32
No.Compounds:7

Initial Calibration Batches

Ical Batch: \\chromfs\Denver\ChromData\WC_IonChrom11\20211112-106453.b
Inj Date : 12-Nov-2021 16:45:00, Sublist: chrom-Anions_IC11*sub1

Detector 1: 0005

	Wet - Anions 28D				Wet - Anions			
Compound	b	M1	M2	Err	b	M1	M2	Err
1 Fluoride	-51705	1782528		0.999				
2 Chloride	-123510	1896727		1.000				
3 Nitrite as N					-120275.	2520014		0.999
4 Bromide	-98102	5498577		1.000				
5 Nitrate as N					-275371	3918411		0.999
7 Orthophosphate as P					-136602	1034546		0.995
6 Sulfate	-750546.	1248181		0.997				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211112-106453.b\Anions_IC11.m
Instrument: WC_IonChrom11 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 14-Nov-2021 21:29:32
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\20211112-106453.b\0006.d
Inj Date: 12-Nov-2021 16:45:00 Worklist: 106453 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom11\20211112-106453.b\0007.d
Inj Date: 12-Nov-2021 17:02:00 Worklist: 106453 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom11\20211112-106453.b\0008.d
Inj Date: 12-Nov-2021 17:18:00 Worklist: 106453 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom11\20211112-106453.b\0009.d
Inj Date: 12-Nov-2021 17:35:00 Worklist: 106453 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom11\20211112-106453.b\0010.d
Inj Date: 12-Nov-2021 17:51:00 Worklist: 106453 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom11\20211112-106453.b\0011.d
Inj Date: 12-Nov-2021 18:07:00 Worklist: 106453 Sample#: 7

Start Cal Date: 12-Nov-2021 16:29:00 End Cal Date: 12-Nov-2021 18:07:00

Individual Compound Calibration Parameters

Quant Method: ESTD RF Calibration: Replace
Rule Name: Linear1 Curve: Linear Weighting: Conc
Origin: None Error: CorrCoef Error Limit: 1.00
RF %Dif: 0.0 SPCC Limit: 0.0 CCC Limit: 0.0
Dependent Variable: Resp

Number of Compounds: 4

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error

RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	RF/Amt(Lvl) Response WL(Smp)	b	m1	m2	Error
1 Fluoride				Signal: 1					
Error: raw_COD									
17382675	19486326	16801646	16795785	17763045	18284010	-51705			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		17825282		
M3476535	M9743163	M16801646	M67183141	142104357	182840098				
106453(2)	106453(3)	106453(4)	106453(5)	106453(6)	106453(7)				
2 Chloride				Signal: 1					
12430989	12319069	12821909	18036092	18843914	19219532	-12351005			1.000
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		18967274		
M12430989	30797672	64109543	1082165524	2261269632	3843906392				
106453(2)	106453(3)	106453(4)	106453(5)	106453(6)	106453(7)				
4 Bromide				Signal: 1					
5349525	5206584	5203098	5365434	5482225	5553183	-98102			1.000
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		5498577		
1069905	2603292	5203098	21461735	43857799	55531827				
106453(2)	106453(3)	106453(4)	106453(5)	106453(6)	106453(7)				
6 Sulfate				Signal: 1					
Error: raw_COD									
8794272	8645188	8768814	11264997	12284307	12899428	-7505462			0.997
1.0000 (1)	2.5000 (2)	5.0000 (3)	60.0 (4)	120.0 (5)	200.0 (6)		12481818		
8794272	M21612971	M43844069	M675899823	M1474116854	M2579885648				
106453(2)	106453(3)	106453(4)	106453(5)	106453(6)	106453(7)				

Eurofins Environment Testing America
Initial Calibration Report

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211112-106453.b\Anions_IC11.m
Instrument: WC_IonChrom11 Lims Location: 280
Lock State: Initial Calib Locked Cpnd Order: Retention Time
Integrator: Falcon Last Modified: 14-Nov-2021 21:29:32
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\20211112-106453.b\0006.d
Inj Date: 12-Nov-2021 16:45:00 Worklist: 106453 Sample#: 2
Level: 2 \\chromfs\Denver\ChromData\WC_IonChrom11\20211112-106453.b\0007.d
Inj Date: 12-Nov-2021 17:02:00 Worklist: 106453 Sample#: 3
Level: 3 \\chromfs\Denver\ChromData\WC_IonChrom11\20211112-106453.b\0008.d
Inj Date: 12-Nov-2021 17:18:00 Worklist: 106453 Sample#: 4
Level: 4 \\chromfs\Denver\ChromData\WC_IonChrom11\20211112-106453.b\0009.d
Inj Date: 12-Nov-2021 17:35:00 Worklist: 106453 Sample#: 5
Level: 5 \\chromfs\Denver\ChromData\WC_IonChrom11\20211112-106453.b\0010.d
Inj Date: 12-Nov-2021 17:51:00 Worklist: 106453 Sample#: 6
Level: 6 \\chromfs\Denver\ChromData\WC_IonChrom11\20211112-106453.b\0011.d
Inj Date: 12-Nov-2021 18:07:00 Worklist: 106453 Sample#: 7

Start Cal Date: 12-Nov-2021 16:29:00 End Cal Date: 12-Nov-2021 18:07:00

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					
22026230	22140074	22148124	24054733	25099656	25538739	-1202752			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		25200147		
4405246	11070037	22148124	96218933	200797246	255387385				
106453(2)	106453(3)	106453(4)	106453(5)	106453(6)	106453(7)				
5 Nitrate as N				Signal: 1					
Error: CorrCoef									
32862530	31851508	31989076	35812918	39053683	40197282	-2753711			0.999
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		39184116		
M6572506	M15925754	M31989076	M143251673	312429462	M401972815				
106453(2)	106453(3)	106453(4)	106453(5)	106453(6)	106453(7)				
7 Orthophosphate as P				Signal: 1					
6480200	6668072	7341696	9080023	10279067	10646692	-1366020			0.995
0.200000(1)	0.500000(2)	1.0000 (3)	4.0000 (4)	8.0000 (5)	10.0 (6)		10345462		
1296040	3334036	7341696	36320090	82232537	106466922				
106453(2)	106453(3)	106453(4)	106453(5)	106453(6)	106453(7)				

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0001.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 22-Nov-2021 09:49:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106710-001
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 12:20:17 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

First Level Reviewer: foleyj Date: 22-Nov-2021 11:26:36

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.484	2.484	0.000	76744132	5.00	4.70	
2 Chloride	3.709	3.709	0.000	1707804566	100.0	95.8	
3 Nitrite as N	4.450	4.450	0.000	141369248	NC	NC	
4 Bromide	5.325	5.325	0.000	24832479	5.00	4.59	
5 Nitrate as N	6.017	6.017	0.000	160491497	NC	NC	
7 Orthophosphate as P	8.792	8.792	0.000	27861990	NC	NC	
6 Sulfate	9.834	9.834	0.000	1112328559	100.0	95.1	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

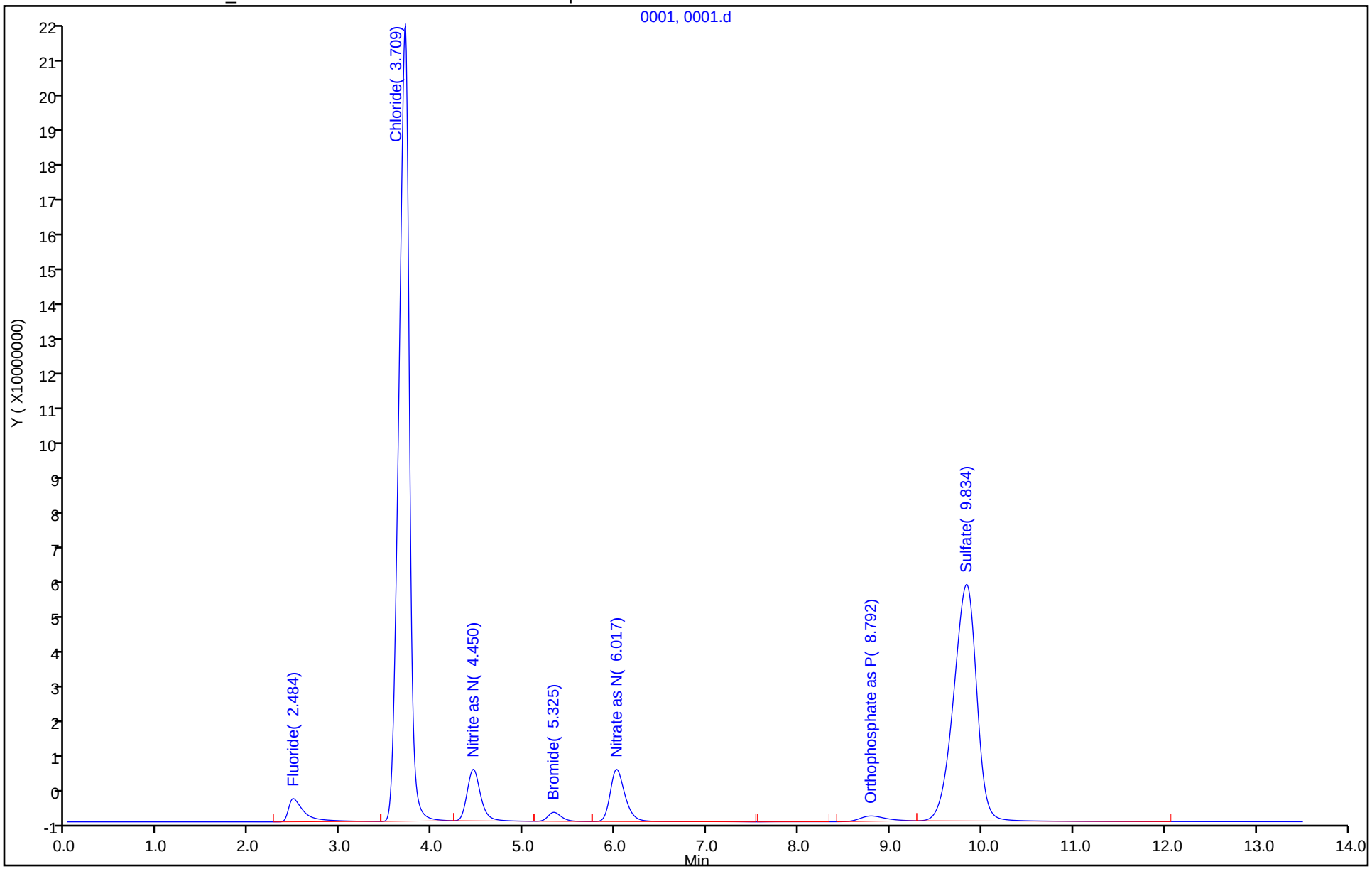
IC LCS_01845 Amount Added: 5.00 Units: mL

Report Date: 23-Nov-2021 12:20:17 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0001.d

Injection Date:	22-Nov-2021 09:49:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	CCV			Worklist Smp#:	1
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0002.d
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 22-Nov-2021 10:05:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106710-002
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 12:20:17 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

First Level Reviewer: jindaratc Date: 23-Nov-2021 12:05:34

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.484				ND	U
2 Chloride		3.709				ND	U
3 Nitrite as N		4.450				ND	U
4 Bromide		5.325				ND	U
5 Nitrate as N		6.017				ND	U
7 Orthophosphate as P		8.792				ND	U
6 Sulfate		9.834				ND	U

QC Flag Legend

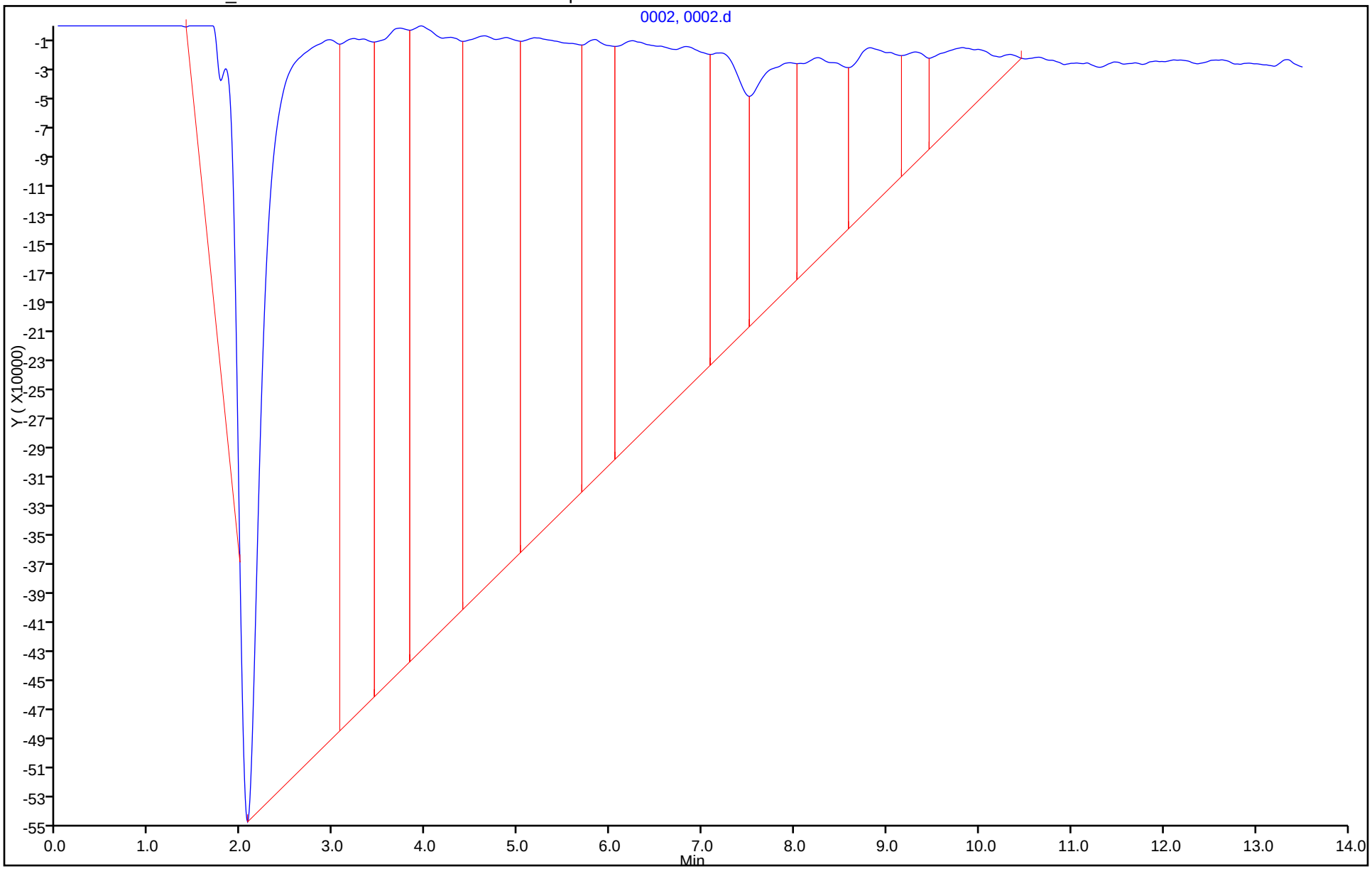
Processing Flags
Review Flags
U - Marked Undetected

Report Date: 23-Nov-2021 12:20:18 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0002.d

Injection Date:	22-Nov-2021 10:05:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	CCB			Worklist Smp#:	2
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



User Disabled Compound Report

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0002.d

Injection Date: 22-Nov-2021 10:05:00 Instrument ID: WC_IonChrom11

Lims ID: CCB

Client ID:

Operator ID: ALS Bottle#: 0 Worklist Smp#: 2

Injection Vol: 10.0 ul Dil. Factor: 1.0000

Method: Anions_IC11 Limit Group: Wet - Anions 28D

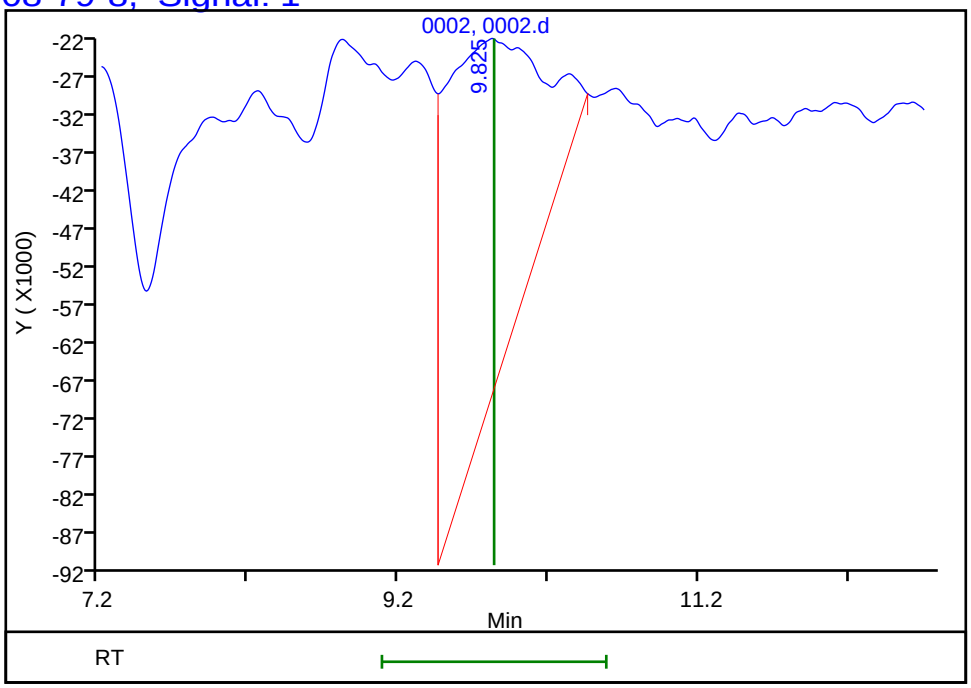
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8, Signal: 1

RT: 9.83

Response: 2060618

Amount: 0.776110



Reviewer: jindaratc, 23-Nov-2021 12:05:34

Audit Action: Manually Integrated Audit Reason:

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0003.d
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 22-Nov-2021 10:21:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106710-003
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 12:20:18 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

First Level Reviewer: jindaratc Date: 23-Nov-2021 12:05:47

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.484	2.484	0.000	9885431	0.5000	0.6280	M
2 Chloride	3.625	3.625	0.000	58586180	5.00	3.93	
3 Nitrite as N	4.417	4.417	0.000	12679121	NC	NC	
4 Bromide	5.317	5.317	0.000	2406014	0.5000	0.4659	
5 Nitrate as N	6.009	6.009	0.000	13993618	NC	NC	
7 Orthophosphate as P	8.850	8.850	0.000	2104544	NC	NC	
6 Sulfate	9.759	9.759	0.000	41328400	5.00	4.11	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

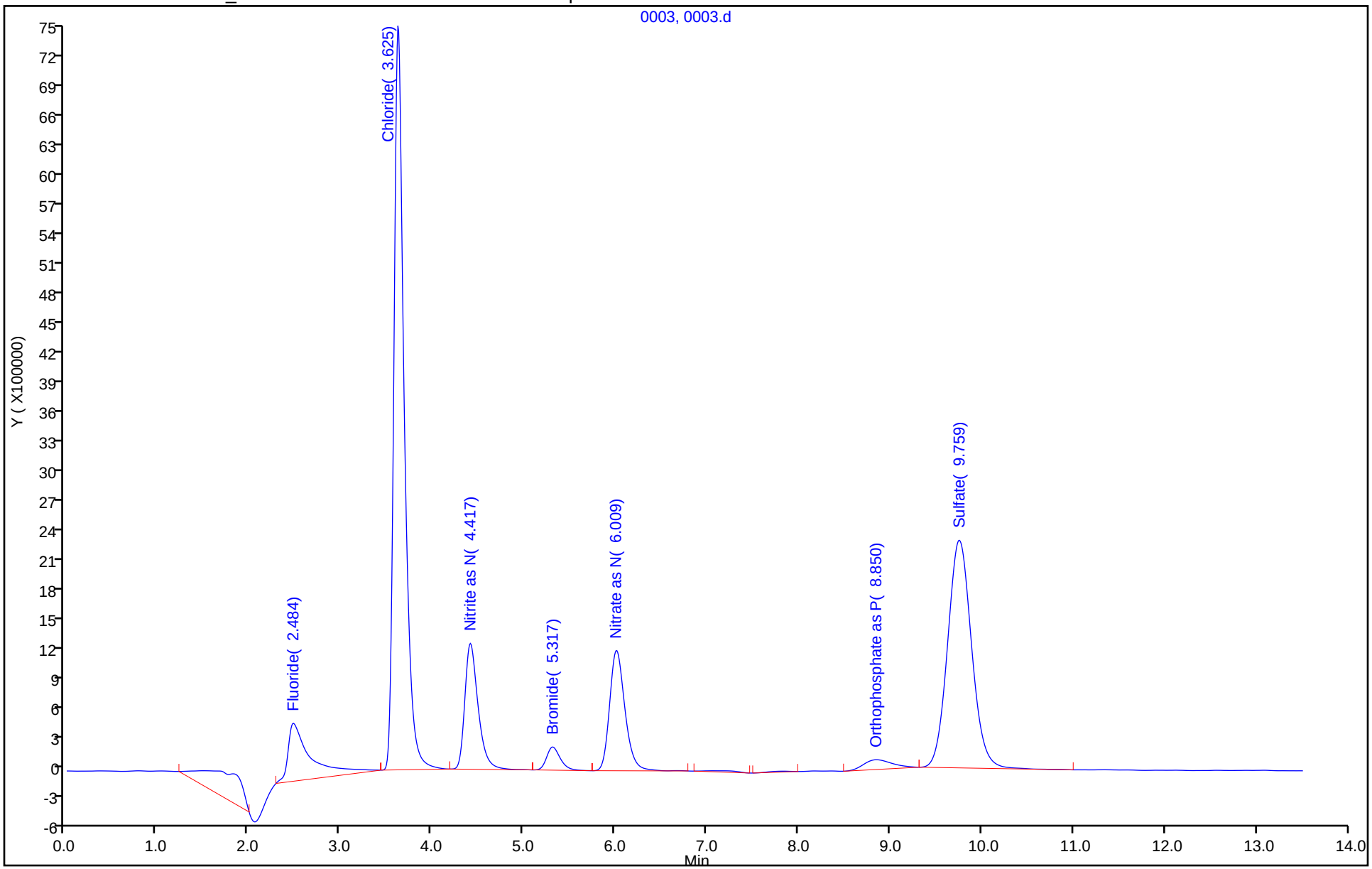
IC Cal low_00608 Amount Added: 0.05 Units: mL
IC CAL cl/so4_00394 Amount Added: 0.10 Units: mL

Report Date: 23-Nov-2021 12:20:18 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0003.d

Injection Date:	22-Nov-2021 10:21:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	MRL			Worklist Smp#:	3
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0004.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 22-Nov-2021 10:38:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106710-004
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 12:20:19 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	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.475	2.475	0.000	76658025	5.00	4.69	
2 Chloride	3.692	3.692	0.000	1703398703	100.0	95.6	
3 Nitrite as N	4.434	4.434	0.000	141525576	NC	NC	
4 Bromide	5.309	5.309	0.000	24882210	5.00	4.60	
5 Nitrate as N	5.992	5.992	0.000	160296269	NC	NC	
7 Orthophosphate as P	8.792	8.792	0.000	29289719	NC	NC	
6 Sulfate	9.842	9.842	0.000	1111849314	100.0	95.1	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

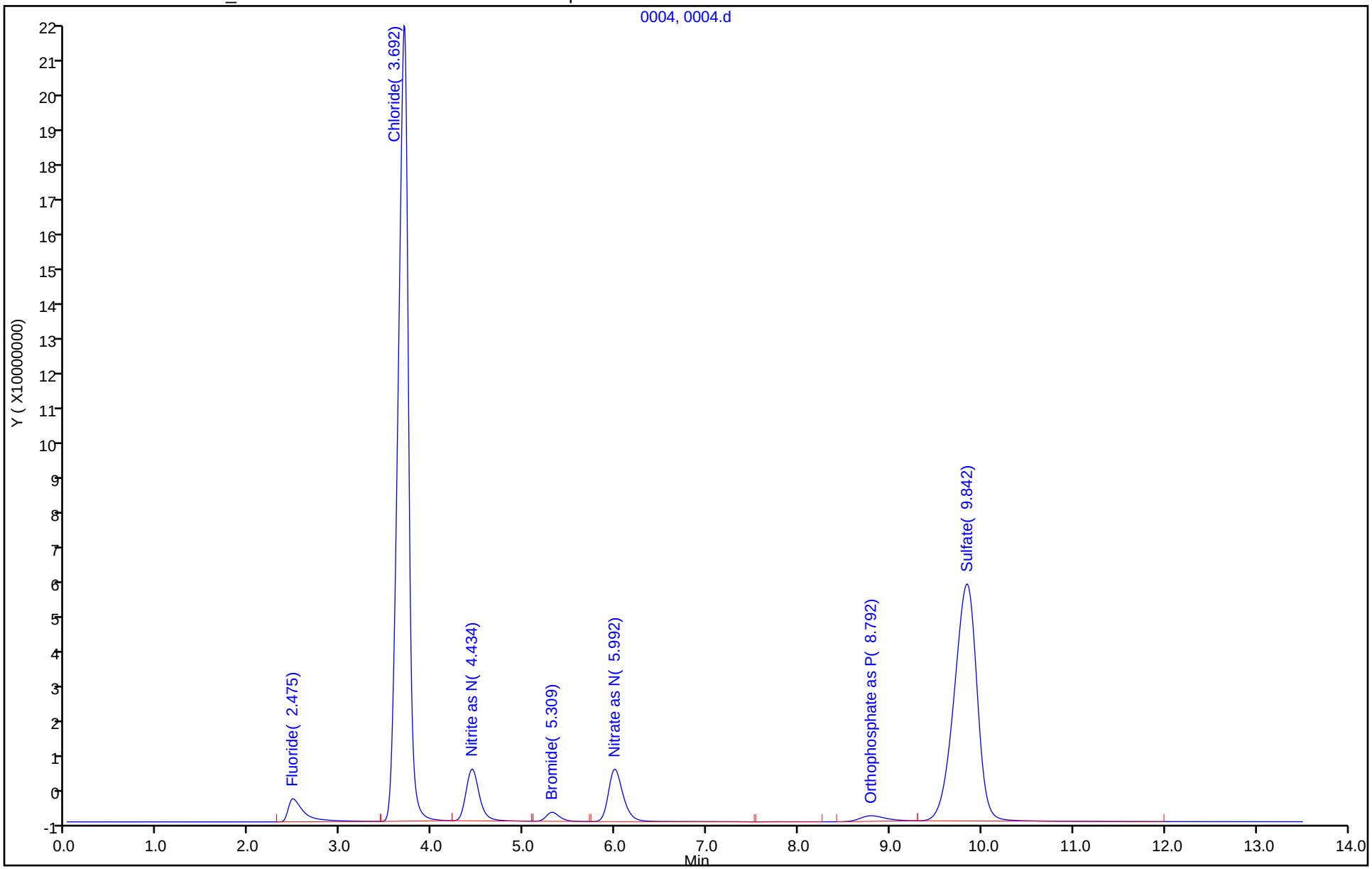
IC LCS_01845 Amount Added: 5.00 Units: mL

Report Date: 23-Nov-2021 12:20:19 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0004.d

Injection Date:	22-Nov-2021 10:38:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0005.d
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 22-Nov-2021 10:54:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106710-005
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 12:20:19 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	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.484	2.484	0.000	77171575	5.00	4.72	
2 Chloride	3.700	3.700	0.000	1707590746	100.0	95.8	
3 Nitrite as N	4.442	4.442	0.000	141873172	NC	NC	
4 Bromide	5.317	5.317	0.000	24853846	5.00	4.59	
5 Nitrate as N	6.000	6.000	0.000	160277740	NC	NC	
7 Orthophosphate as P	8.800	8.800	0.000	30159836	NC	NC	
6 Sulfate	9.842	9.842	0.000	1112319179	100.0	95.1	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

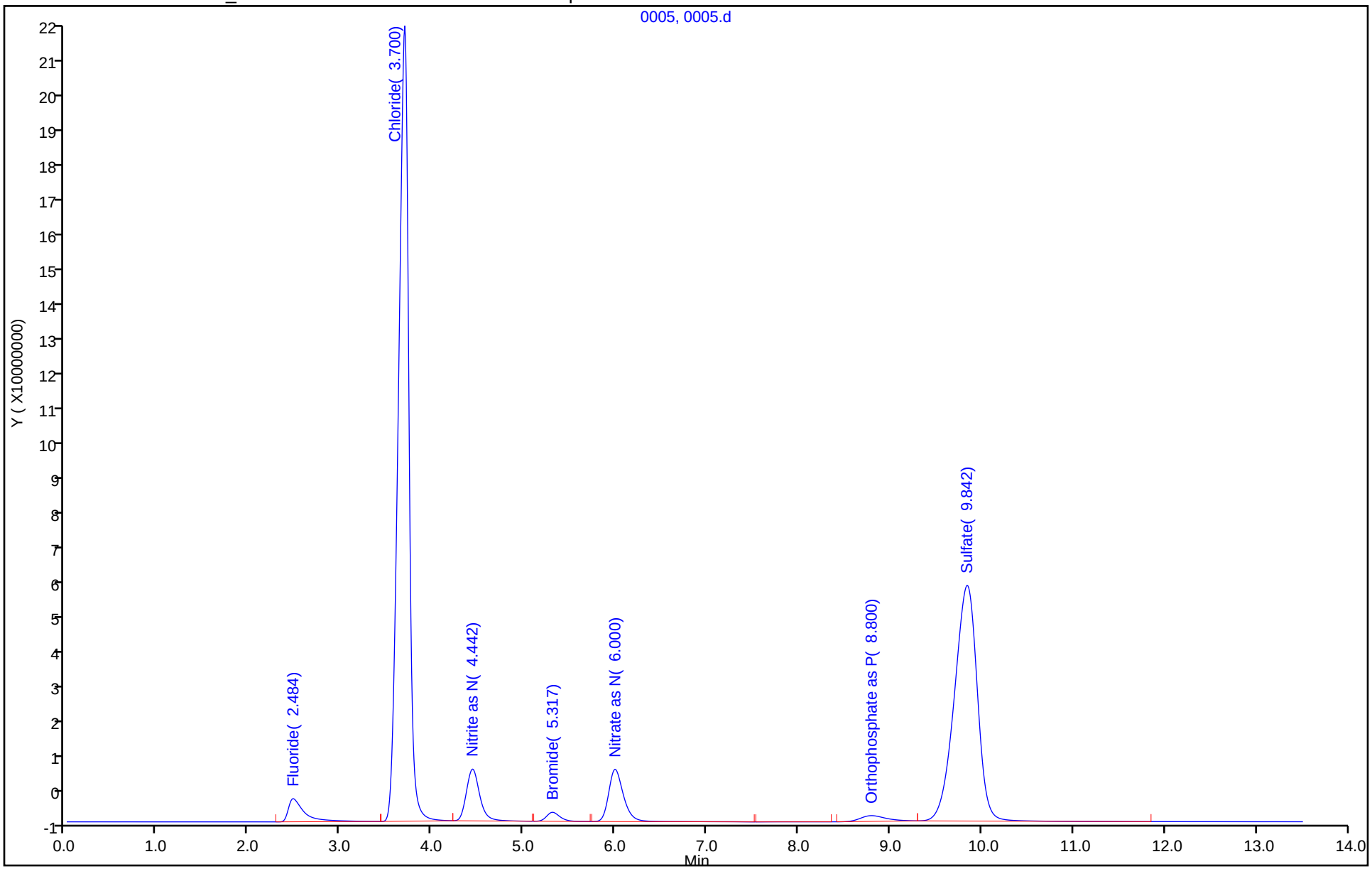
IC LCS_01845 Amount Added: 5.00 Units: mL

Report Date: 23-Nov-2021 12:20:19 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0005.d

Injection Date:	22-Nov-2021 10:54:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0006.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 22-Nov-2021 11:10:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106710-006
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 12:20:20 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

First Level Reviewer: jindaratc Date: 23-Nov-2021 12:11:35

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.484				ND	U
2 Chloride		3.700				ND	U
3 Nitrite as N		4.442				ND	U
4 Bromide		5.317				ND	U
5 Nitrate as N		6.000				ND	U
7 Orthophosphate as P	8.925	8.925	0.000	194202		NC	M
6 Sulfate	9.725	9.725	0.000	102740		0.6098	Ma

QC Flag Legend

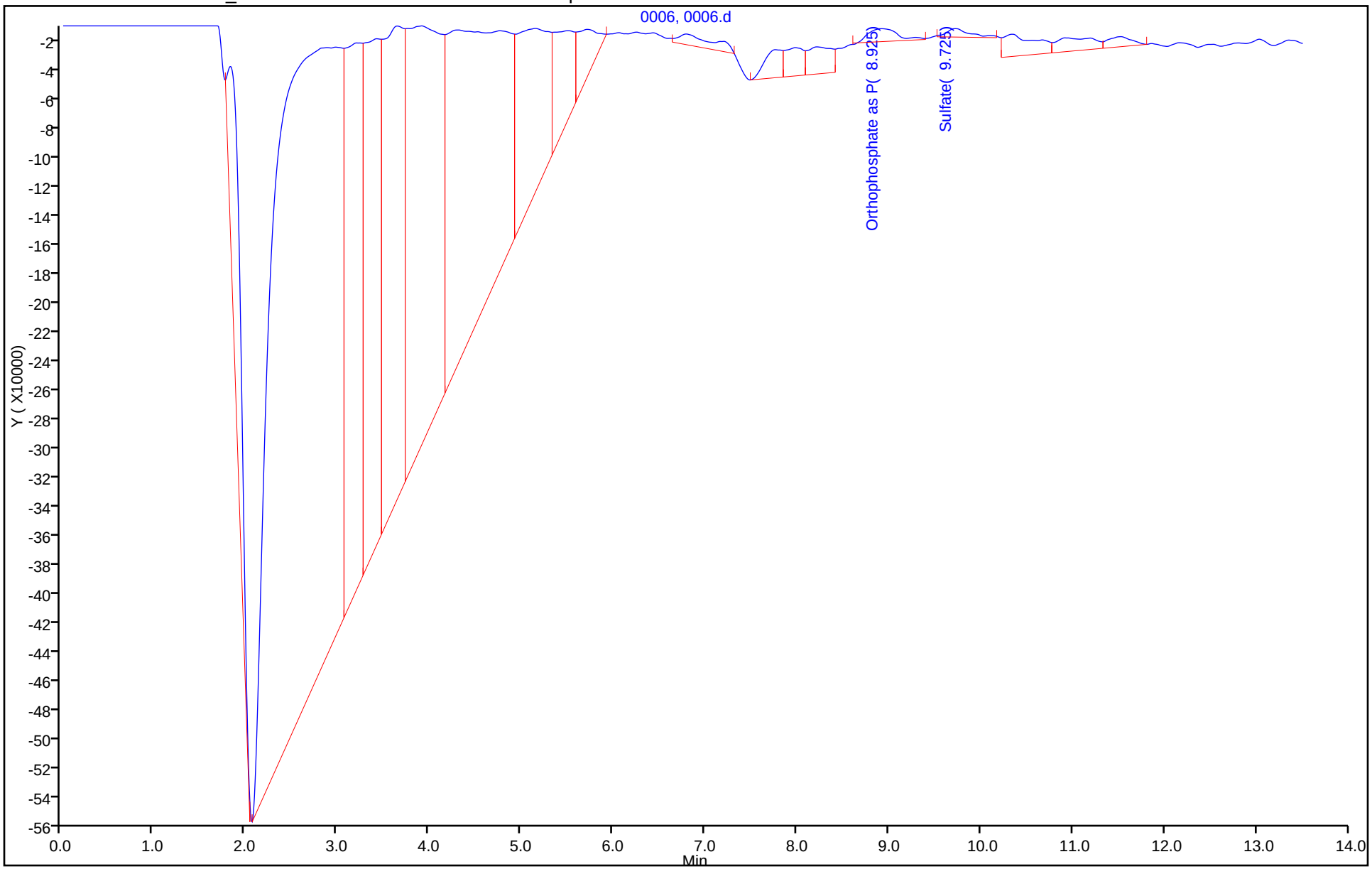
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected
a - User Assigned ID

Report Date: 23-Nov-2021 12:20:20 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0006.d

Injection Date:	22-Nov-2021 11:10:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

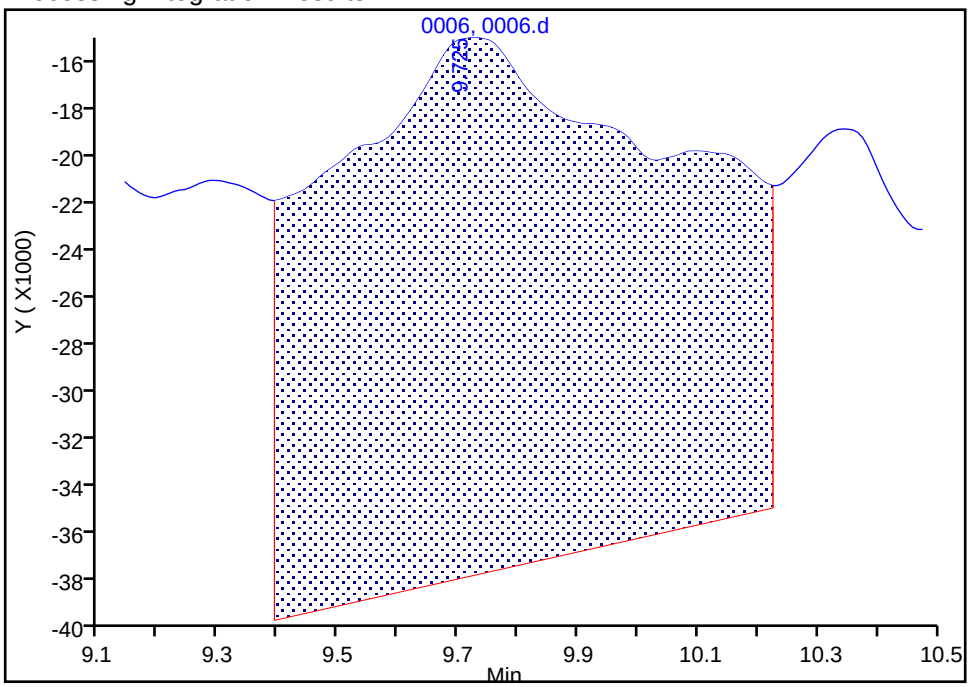
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0006.d
Injection Date: 22-Nov-2021 11:10:00 Instrument ID: WC_IonChrom11
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

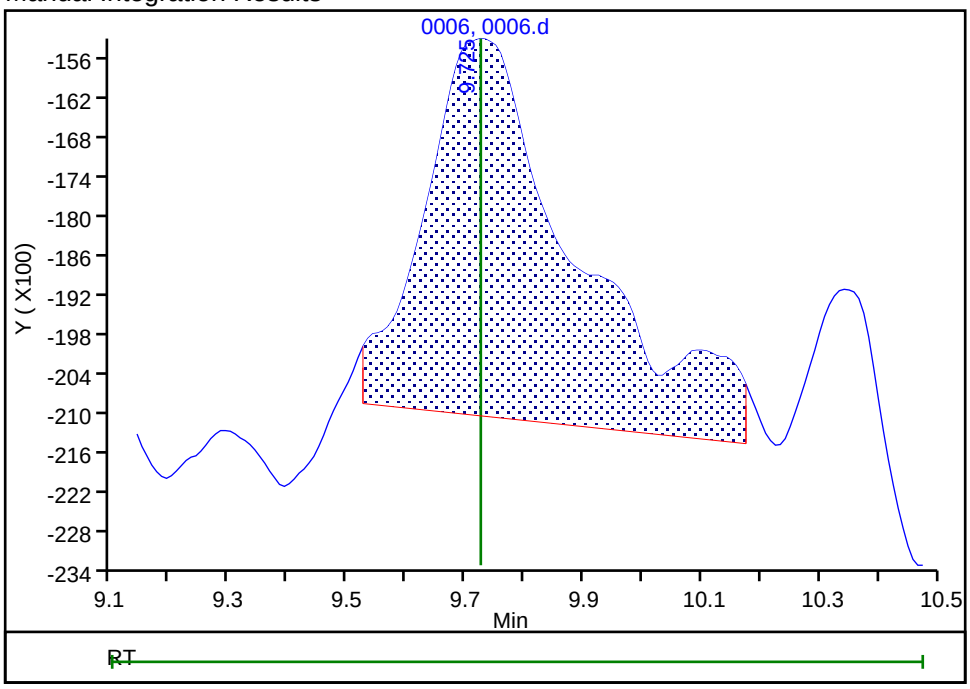
Processing Integration Results

RT: 9.73
Area: 902606
Amount: 0.677733
Amount Units: ug/ml



Manual Integration Results

RT: 9.73
Area: 102740
Amount: 0.609781
Amount Units: ug/ml



Reviewer: jindaratc, 23-Nov-2021 12:11:33
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0017.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 22-Nov-2021 15:35:00 ALS Bottle#: 0 Worklist Smp#: 17
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106710-017
Misc. Info.: 18142
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 12:20:25 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

First Level Reviewer: jindaratc Date: 23-Nov-2021 12:04:52

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.484	2.484	0.000	78312733	5.00	4.79	
2 Chloride	3.709	3.700	0.009	1742114004	100.0	97.7	
3 Nitrite as N	4.459	4.442	0.017	144794340	NC	NC	
4 Bromide	5.351	5.317	0.034	25294047	5.00	4.67	
5 Nitrate as N	6.042	6.000	0.042	163650076	NC	NC	
7 Orthophosphate as P	8.801	8.925	-0.124	32084158	NC	NC	
6 Sulfate	9.842	9.725	0.117	1137650470	100.0	97.2	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

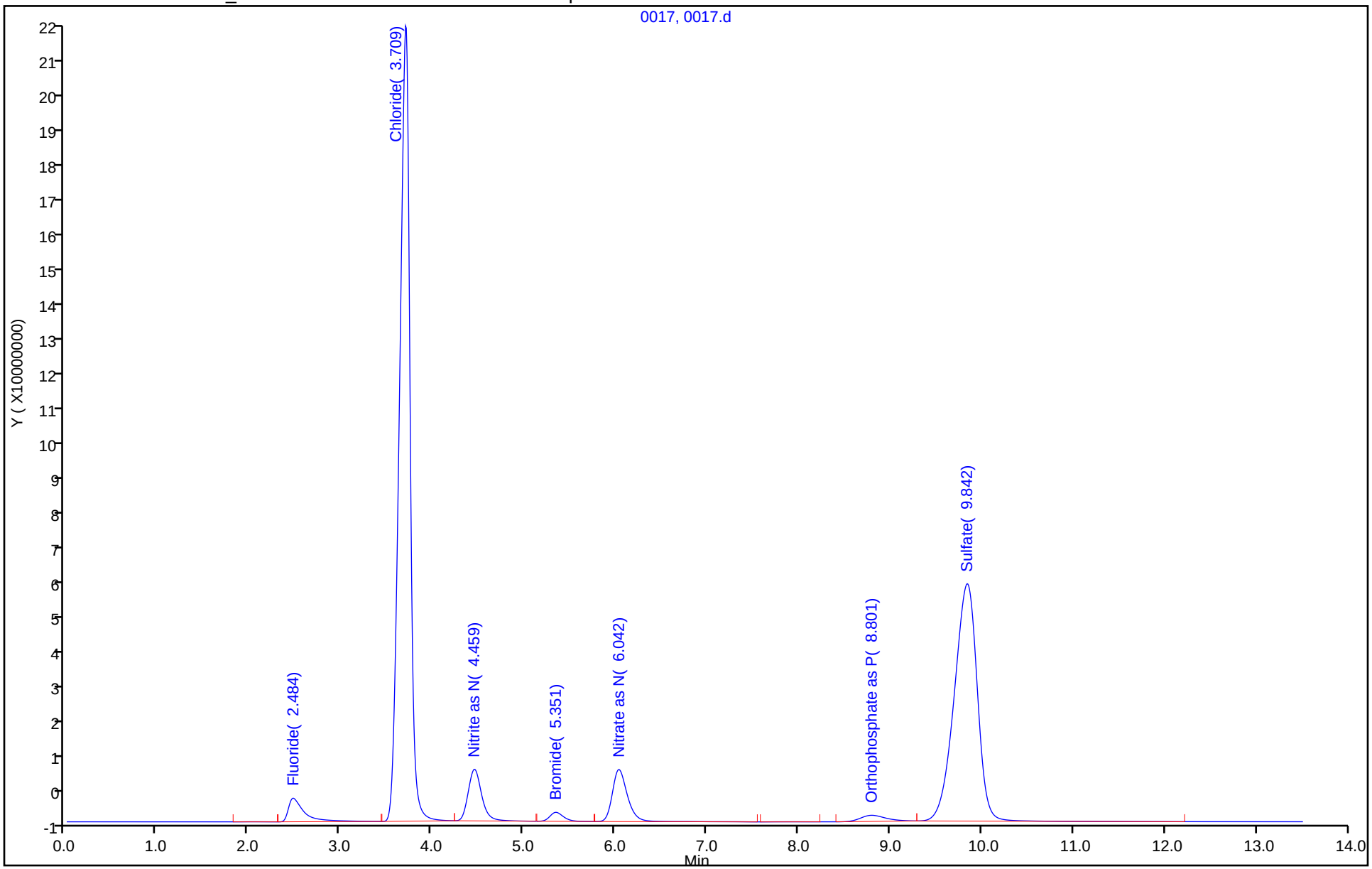
IC LCS_01845 Amount Added: 5.00 Units: mL

Report Date: 23-Nov-2021 12:20:25 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0017.d

Injection Date:	22-Nov-2021 15:35:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	17
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0018.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 22-Nov-2021 15:51:00 ALS Bottle#: 0 Worklist Smp#: 18
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106710-018
Misc. Info.: 15969
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 12:20:25 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

First Level Reviewer: jindaratc Date: 23-Nov-2021 12:13:22

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.484				ND	U
2 Chloride	3.642	3.700	-0.058	454970		0.6876	M
3 Nitrite as N		4.442				ND	
4 Bromide		5.317				ND	
5 Nitrate as N		6.000				ND	
7 Orthophosphate as P		8.925				ND	
6 Sulfate		9.725				ND	

QC Flag Legend

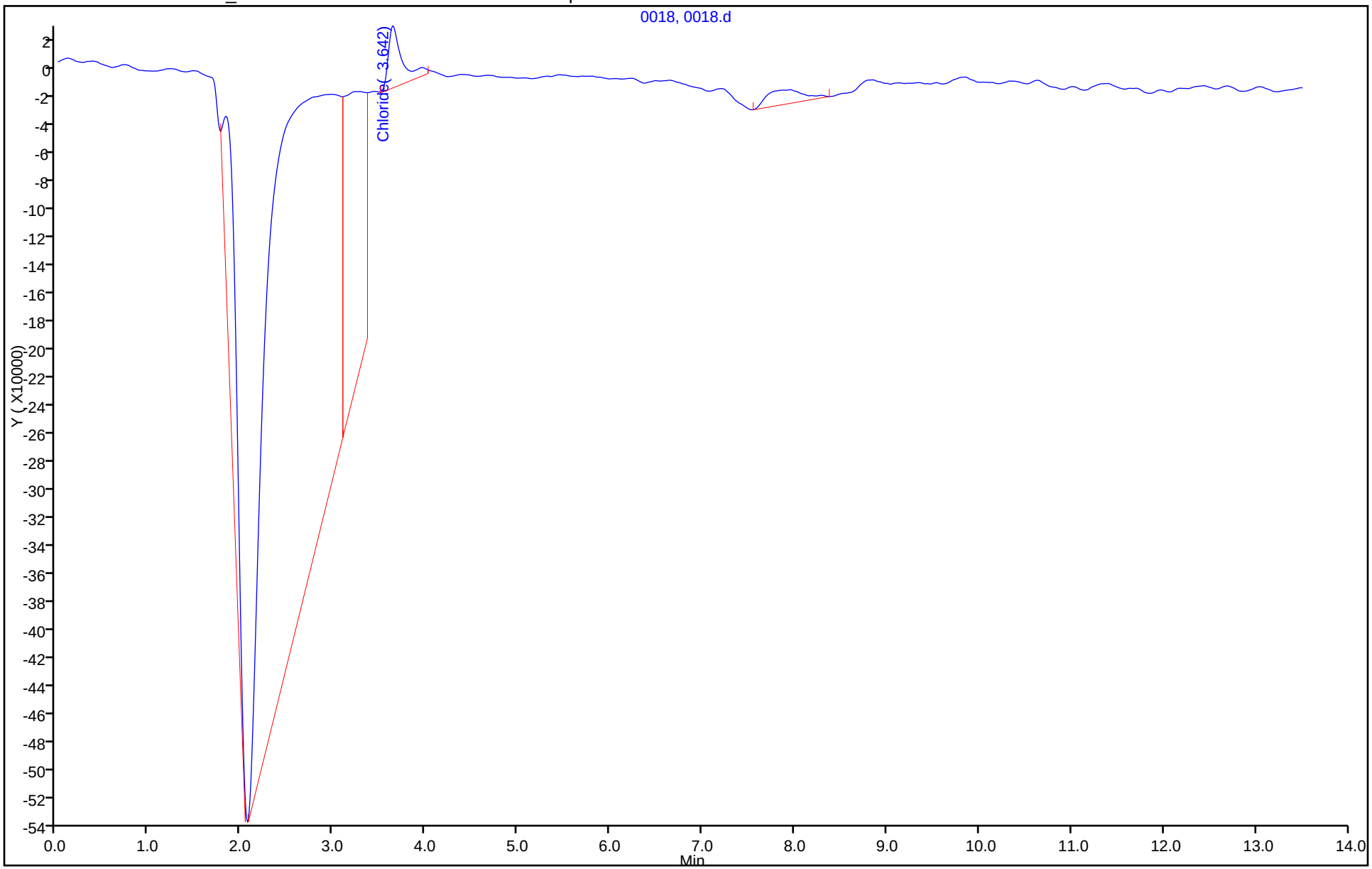
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 23-Nov-2021 12:20:25 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0018.d

Injection Date:	22-Nov-2021 15:51:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	18
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0021.d
Lims ID: 280-155225-F-1
Client ID: G0024-7
Sample Type: Client
Inject. Date: 22-Nov-2021 16:41:00 ALS Bottle#: 0 Worklist Smp#: 21
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106710-021
Misc. Info.: 25171
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 12:20:25 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	2.484	2.484	0.000	5308803	0.3494	
2 Chloride	3.659	3.700	-0.041	189262856	11.2	
3 Nitrite as N	4.417	4.442	-0.025	1306245	NC	
4 Bromide	5.400	5.317	0.083	229036	0.0658	
5 Nitrate as N	6.159	6.000	0.159	161964895	NC	
7 Orthophosphate as P	8.942	8.925	0.017	5608776	NC	
6 Sulfate	9.867	9.725	0.142	709902272	60.9	

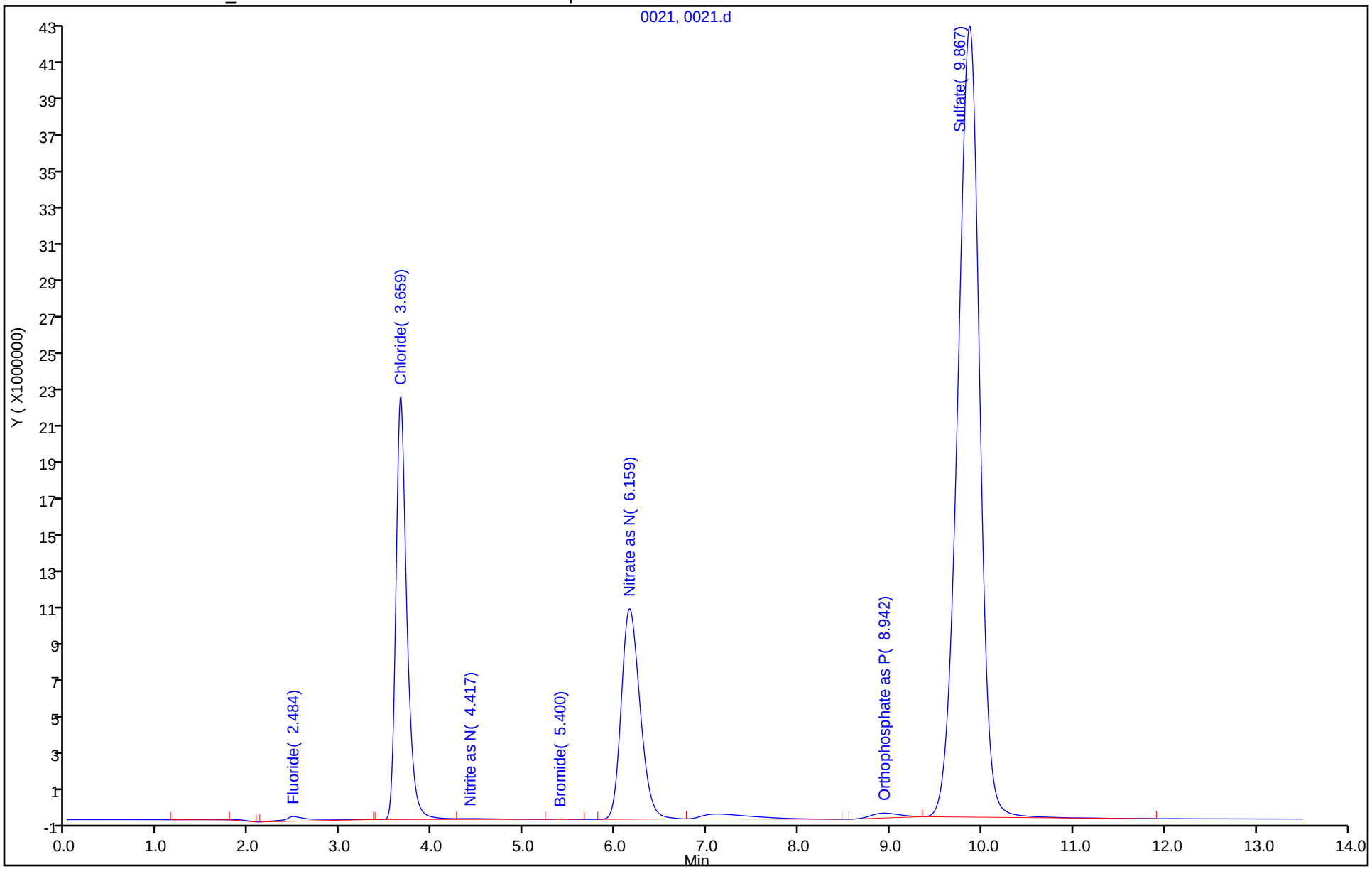
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 23-Nov-2021 12:20:27 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0021.d				
Injection Date:	22-Nov-2021 16:41:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-155225-F-1	Lab Sample ID:	280-155225-1	Worklist Smp#:	21
Client ID:	G0024-7				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0022.d
Lims ID: 280-155225-F-2
Client ID: G0077-7
Sample Type: Client
Inject. Date: 22-Nov-2021 16:57:00 ALS Bottle#: 0 Worklist Smp#: 22
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106710-022
Misc. Info.: 20661
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 12:20:25 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	2.909	2.484	0.425	397426	0.0503	
2 Chloride	3.667	3.700	-0.033	454216058	26.0	
3 Nitrite as N	4.442	4.442	0.000	2229493	NC	
4 Bromide		5.317			ND	
5 Nitrate as N	5.434	6.000	-0.566	1046118	NC	
7 Orthophosphate as P	8.984	8.925	0.059	2436660	NC	
6 Sulfate	9.942	9.725	0.217	1521105835	129.8	

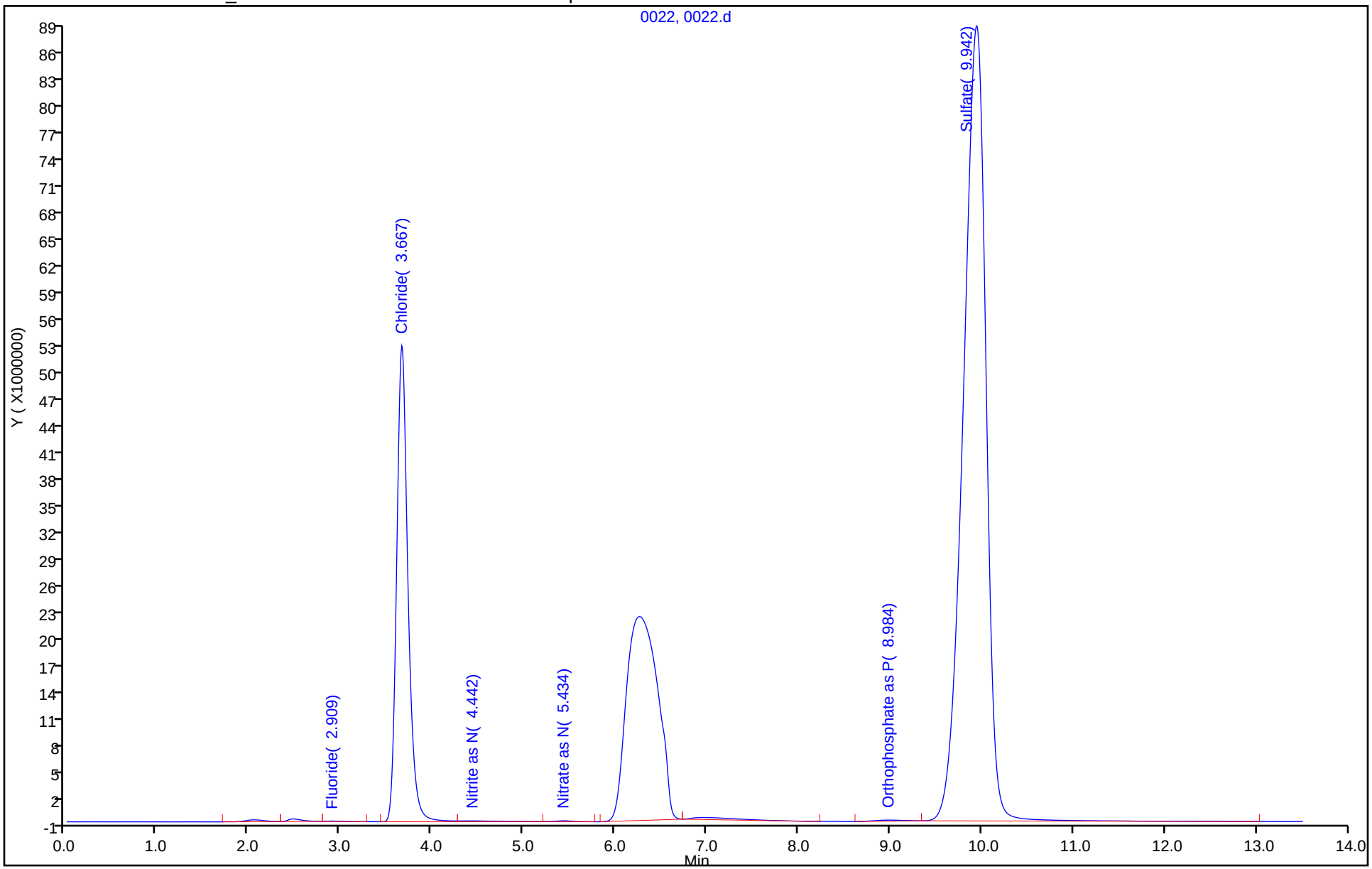
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 23-Nov-2021 12:20:27 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0022.d				
Injection Date:	22-Nov-2021 16:57:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-155225-F-2	Lab Sample ID:	280-155225-2	Worklist Smp#:	22
Client ID:	G0077-7				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0029.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 22-Nov-2021 18:52:00 ALS Bottle#: 0 Worklist Smp#: 29
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106710-029
Misc. Info.: 5533
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 12:20:30 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	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.467	2.484	-0.017	80437613	5.00	4.92	
2 Chloride	3.692	3.700	-0.008	1740535207	100.0	97.7	
3 Nitrite as N	4.434	4.442	-0.008	145678237	NC	NC	
4 Bromide	5.317	5.317	0.000	25266201	5.00	4.67	
5 Nitrate as N	6.000	6.000	0.000	161039905	NC	NC	
7 Orthophosphate as P	8.625	8.925	-0.300	32995875	NC	NC	
6 Sulfate	9.609	9.725	-0.116	1134507689	100.0	97.0	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

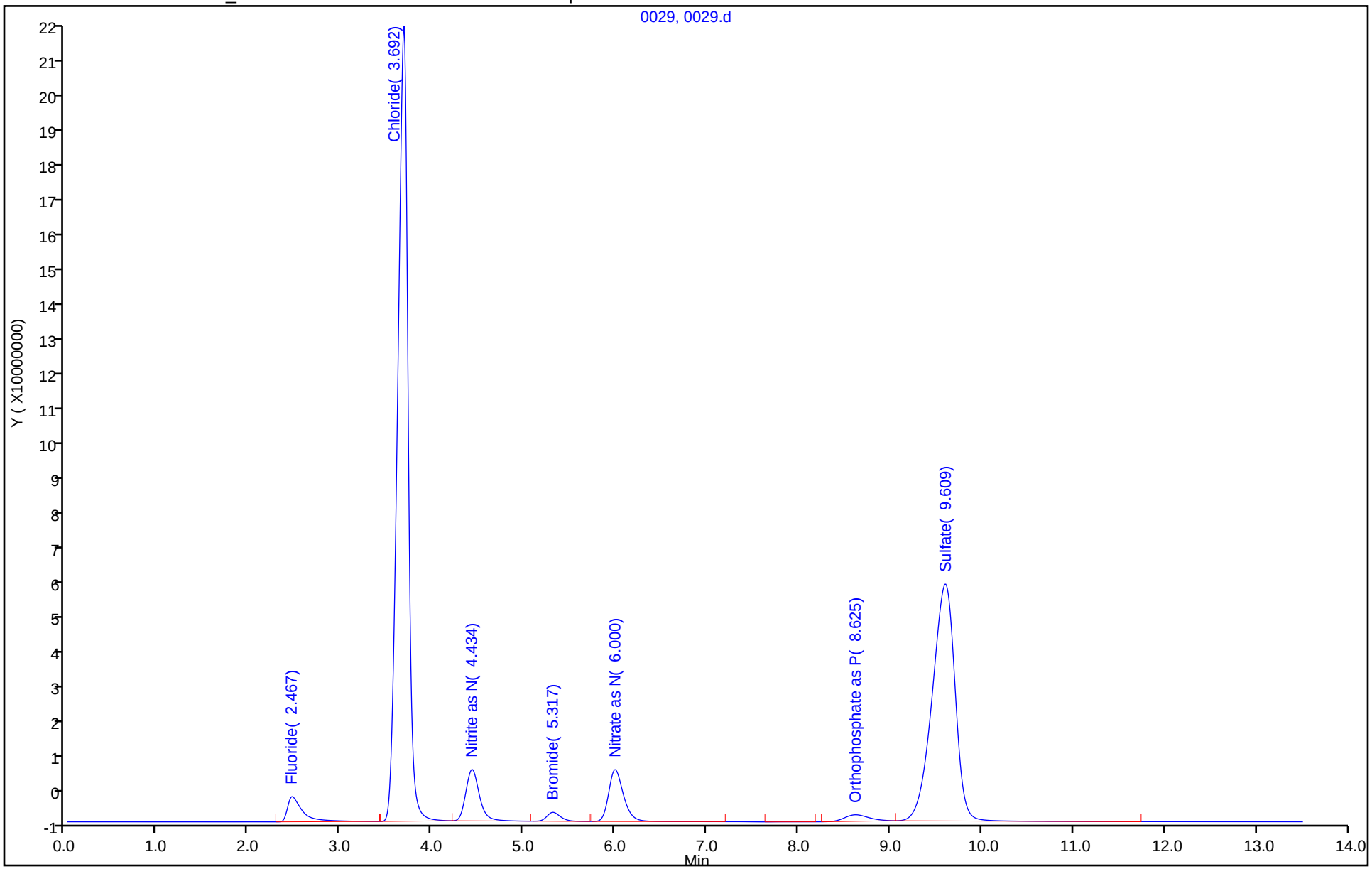
IC LCS_01845 Amount Added: 5.00 Units: mL

Report Date: 23-Nov-2021 12:20:30 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0029.d

Injection Date:	22-Nov-2021 18:52:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	29
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0030.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 22-Nov-2021 19:08:00 ALS Bottle#: 0 Worklist Smp#: 30
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106710-030
Misc. Info.: 13228
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 12:20:30 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

First Level Reviewer: jindaratc Date: 23-Nov-2021 12:15:43

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.484				ND	U
2 Chloride		3.700				ND	U
3 Nitrite as N	3.934	4.442	-0.508	817042		NC	
4 Bromide		5.317				ND	
5 Nitrate as N		6.000				ND	
7 Orthophosphate as P	8.650	8.925	-0.275	283452		NC	
6 Sulfate	9.625	9.725	-0.100	431217		0.6377	

QC Flag Legend

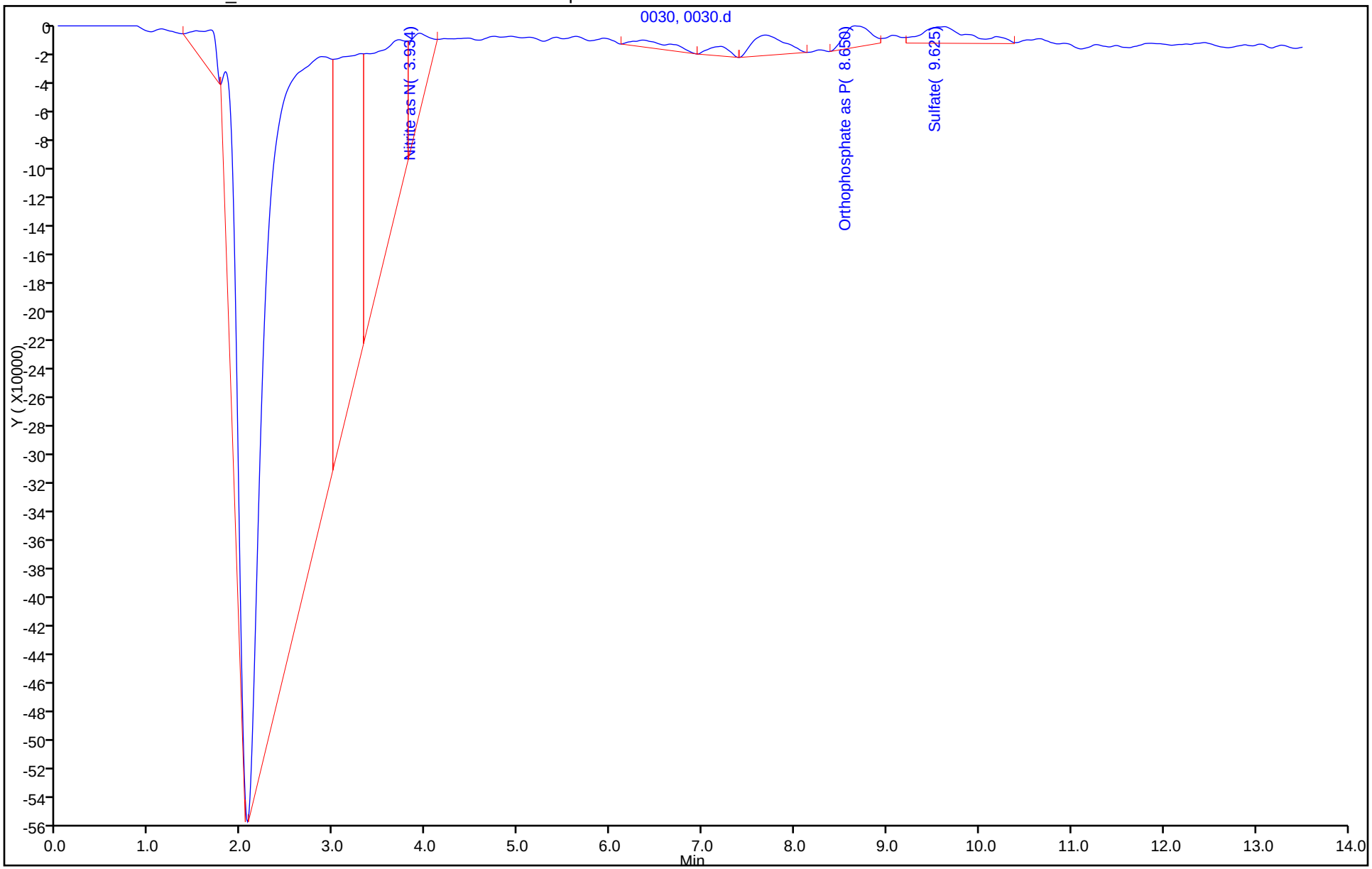
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 23-Nov-2021 12:20:30 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0030.d

Injection Date:	22-Nov-2021 19:08:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	30
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0032.d
Lims ID: 280-155225-F-6
Client ID: G0086-7
Sample Type: Client
Inject. Date: 22-Nov-2021 19:41:00 ALS Bottle#: 0 Worklist Smp#: 32
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106710-032
Misc. Info.: 7873
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 12:20:30 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	2.467	2.484	-0.017	3345491	0.2298	
2 Chloride	3.625	3.700	-0.075	464289389	26.5	
3 Nitrite as N	4.325	4.442	-0.117	2273984	NC	
4 Bromide	5.325	5.317	0.008	897221	0.1886	
5 Nitrate as N	6.075	6.000	0.075	201239313	NC	
7 Orthophosphate as P	8.834	8.925	-0.091	348175	NC	
6 Sulfate	9.734	9.725	0.009	1956397107	166.8	

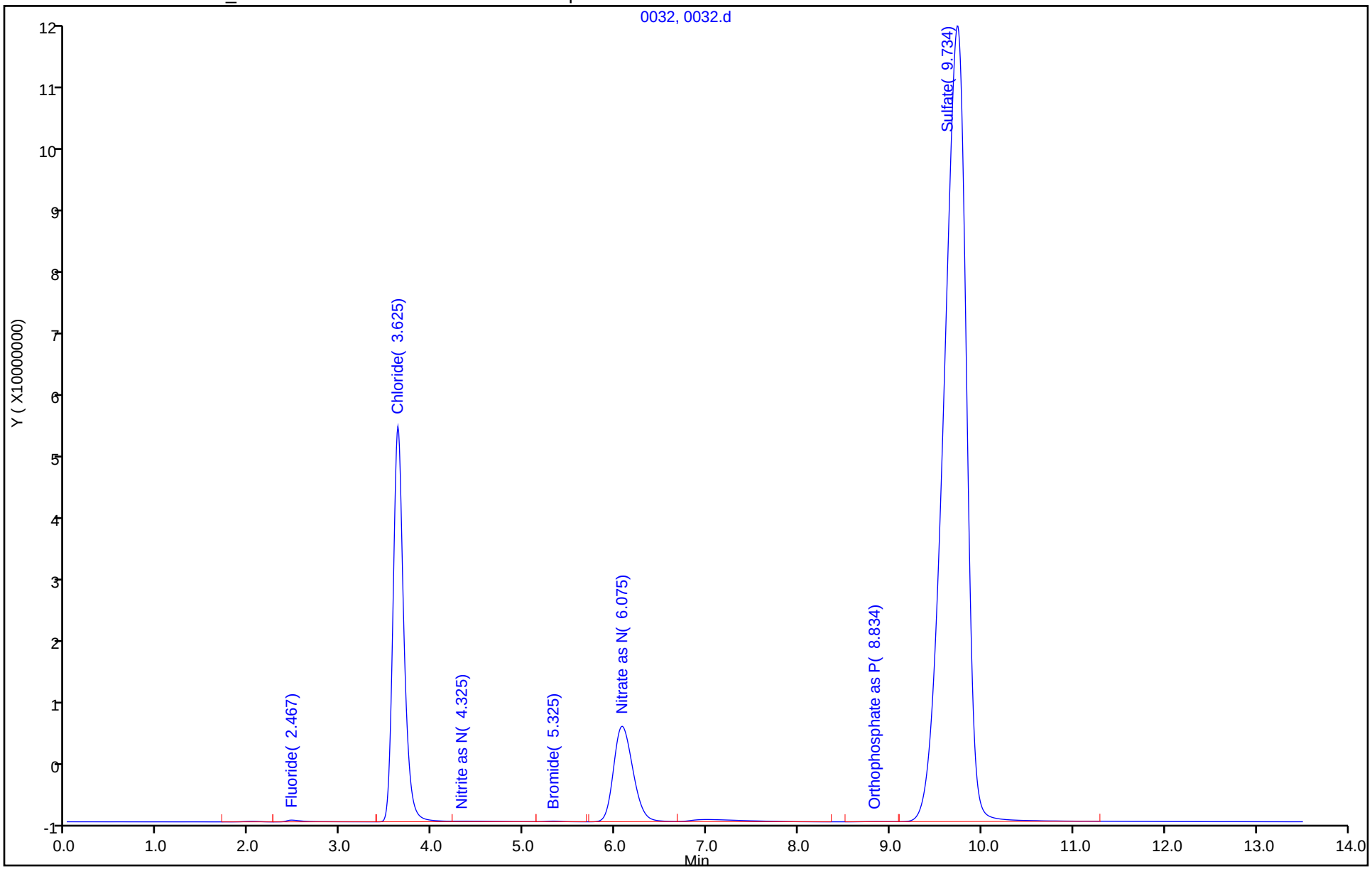
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 23-Nov-2021 12:20:31 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0032.d				
Injection Date:	22-Nov-2021 19:41:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-155225-F-6	Lab Sample ID:	280-155225-6	Worklist Smp#:	32
Client ID:	G0086-7				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0033.d
Lims ID: 280-155225-F-7
Client ID: PZ017R-7
Sample Type: Client
Inject. Date: 22-Nov-2021 19:58:00 ALS Bottle#: 0 Worklist Smp#: 33
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106710-033
Misc. Info.: 30661
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 12:20:30 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	2.934	2.484	0.450	118293	0.0334	
2 Chloride	3.651	3.700	-0.049	530645574	30.2	
3 Nitrite as N	4.426	4.442	-0.016	1030389	NC	
4 Bromide		5.317			ND	
5 Nitrate as N	5.542	6.000	-0.458	918434	NC	
7 Orthophosphate as P	8.784	8.925	-0.141	112581	NC	
6 Sulfate	9.667	9.725	-0.058	394847368	34.1	

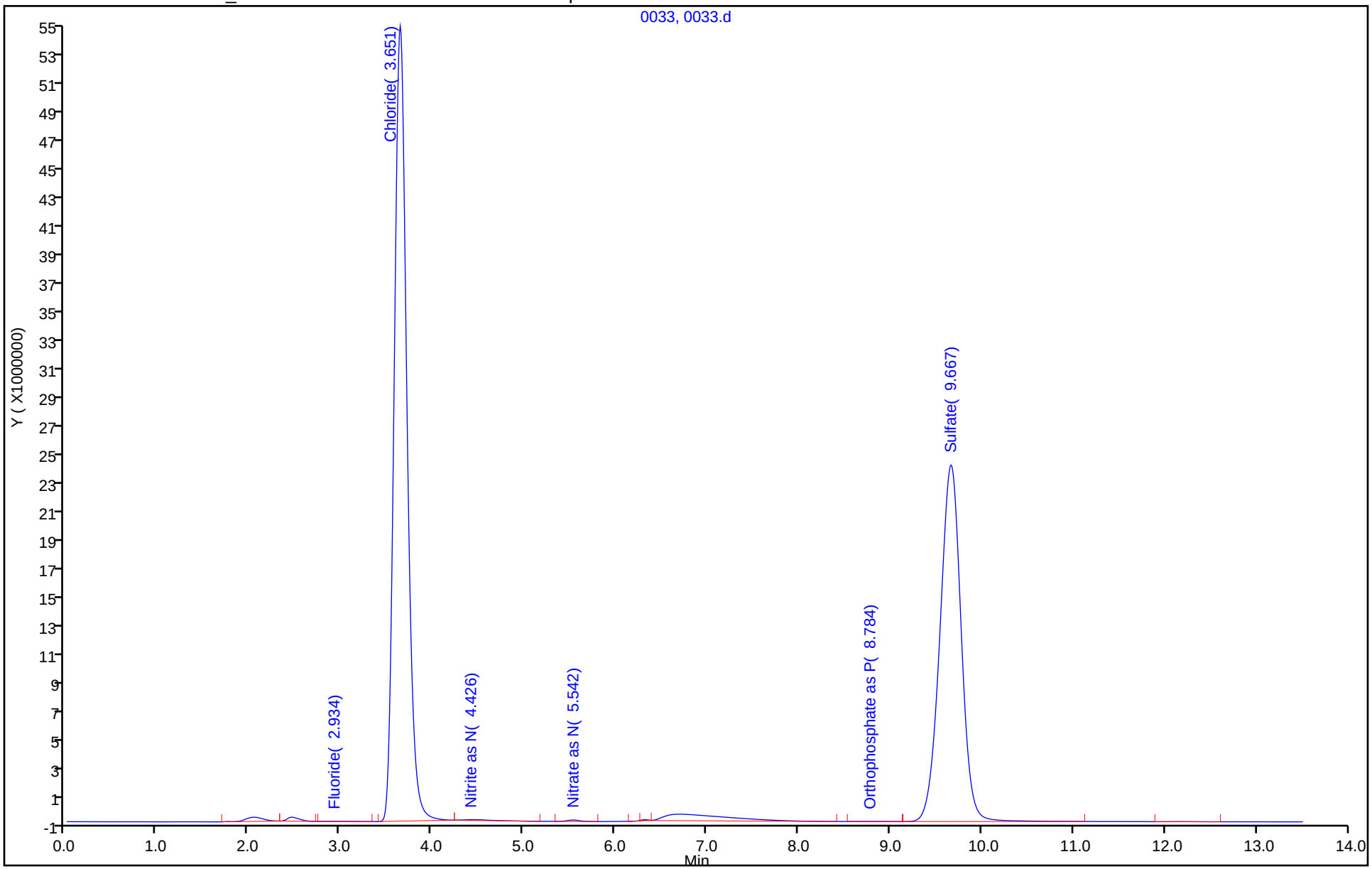
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 23-Nov-2021 12:20:31 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0033.d				
Injection Date:	22-Nov-2021 19:58:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-155225-F-7	Lab Sample ID:	280-155225-7	Worklist Smp#:	33
Client ID:	PZ017R-7				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0034.d
Lims ID: 280-155225-F-8
Client ID: PZ018-7
Sample Type: Client
Inject. Date: 22-Nov-2021 20:14:00 ALS Bottle#: 0 Worklist Smp#: 34
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106710-034
Misc. Info.: 19318
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 12:20:30 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	2.850	2.484	0.366	159384	0.0359	
2 Chloride	3.650	3.700	-0.050	659740307	37.4	
3 Nitrite as N	4.459	4.442	0.017	2027908	NC	
4 Bromide		5.317			ND	
5 Nitrate as N	5.475	6.000	-0.525	830944	NC	
7 Orthophosphate as P		8.925			ND	
6 Sulfate	9.659	9.725	-0.066	411759684	35.6	

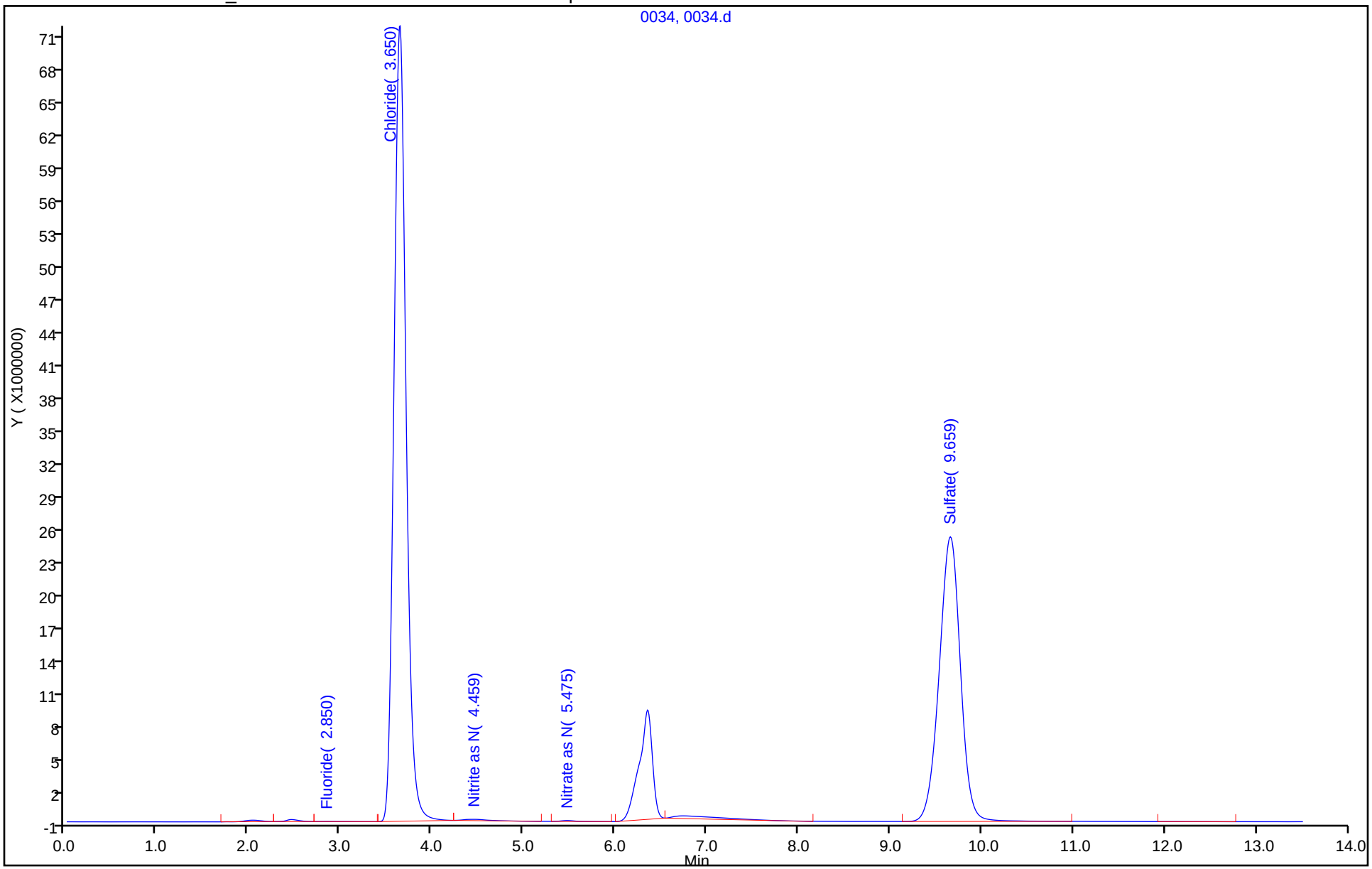
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 23-Nov-2021 12:20:32 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0034.d				
Injection Date:	22-Nov-2021 20:14:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-155225-F-8	Lab Sample ID:	280-155225-8	Worklist Smp#:	34
Client ID:	PZ018-7				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0035.d
Lims ID: 280-155225-F-9
Client ID: PZ021-7
Sample Type: Client
Inject. Date: 22-Nov-2021 20:30:00 ALS Bottle#: 0 Worklist Smp#: 35
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106710-035
Misc. Info.: 7960
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 12:20:30 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	2.467	2.484	-0.017	2445461	0.1750	
2 Chloride	3.642	3.700	-0.058	528213955	30.1	
3 Nitrite as N	4.459	4.442	0.017	870688	NC	
4 Bromide		5.317			ND	
5 Nitrate as N	5.517	6.000	-0.483	917178	NC	
7 Orthophosphate as P		8.925			ND	
6 Sulfate	9.650	9.725	-0.075	396509990	34.3	

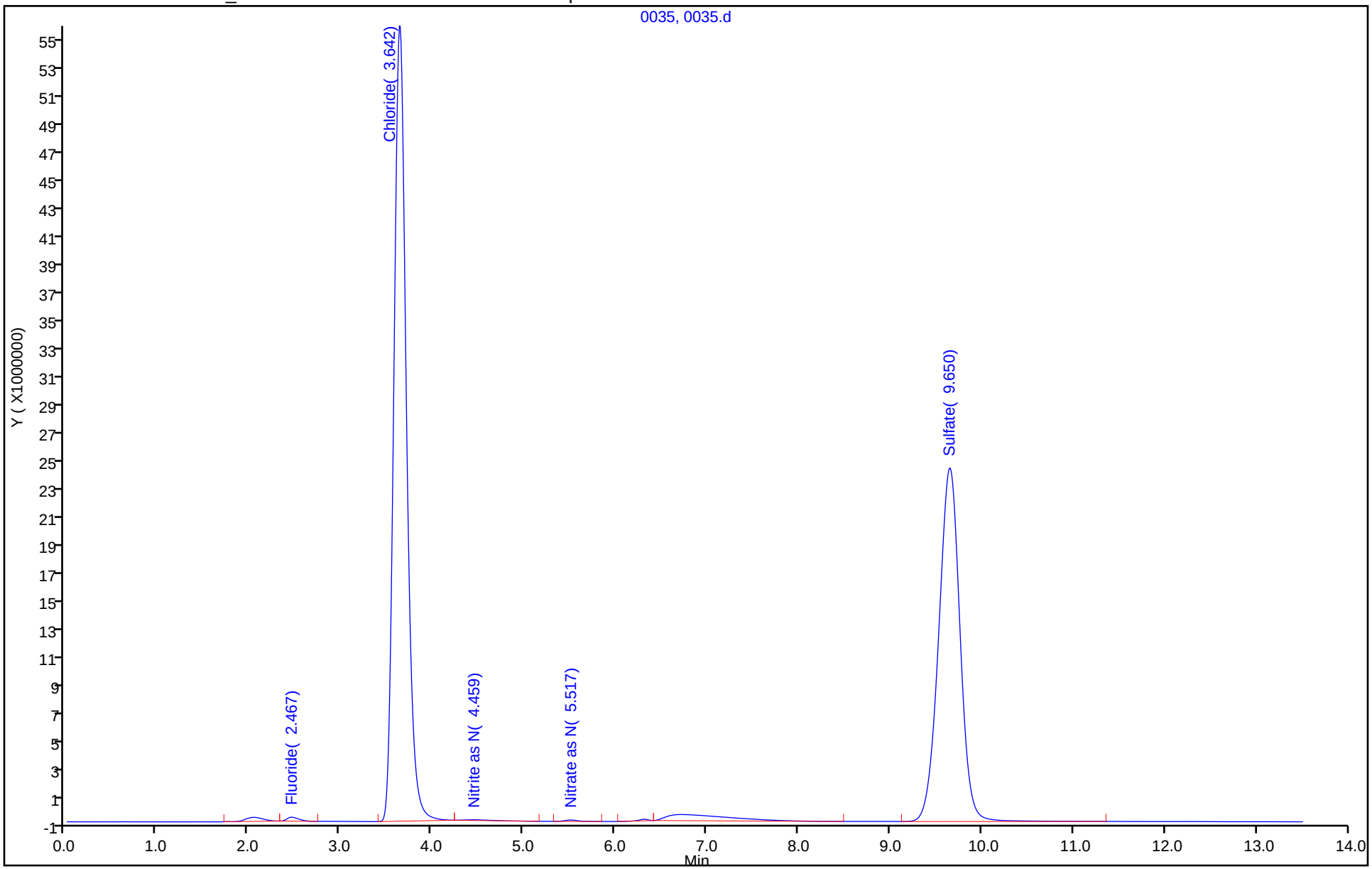
QC Flag Legend

Processing Flags
NC - Not Calibrated

Report Date: 23-Nov-2021 12:20:32 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0035.d				
Injection Date:	22-Nov-2021 20:30:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-155225-F-9	Lab Sample ID:	280-155225-9	Worklist Smp#:	35
Client ID:	PZ021-7				
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0041.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 22-Nov-2021 22:09:00 ALS Bottle#: 0 Worklist Smp#: 41
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106710-041
Misc. Info.: 10289
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 12:20:34 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	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.467	2.484	-0.017	82487749	5.00	5.05	
2 Chloride	3.684	3.700	-0.016	1746881678	100.0	98.0	
3 Nitrite as N	4.426	4.442	-0.016	145866039	NC	NC	
4 Bromide	5.292	5.317	-0.025	25385748	5.00	4.69	
5 Nitrate as N	5.976	6.000	-0.024	162504278	NC	NC	
7 Orthophosphate as P	8.626	8.925	-0.299	32848667	NC	NC	
6 Sulfate	9.626	9.725	-0.099	1142252424	100.0	97.6	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

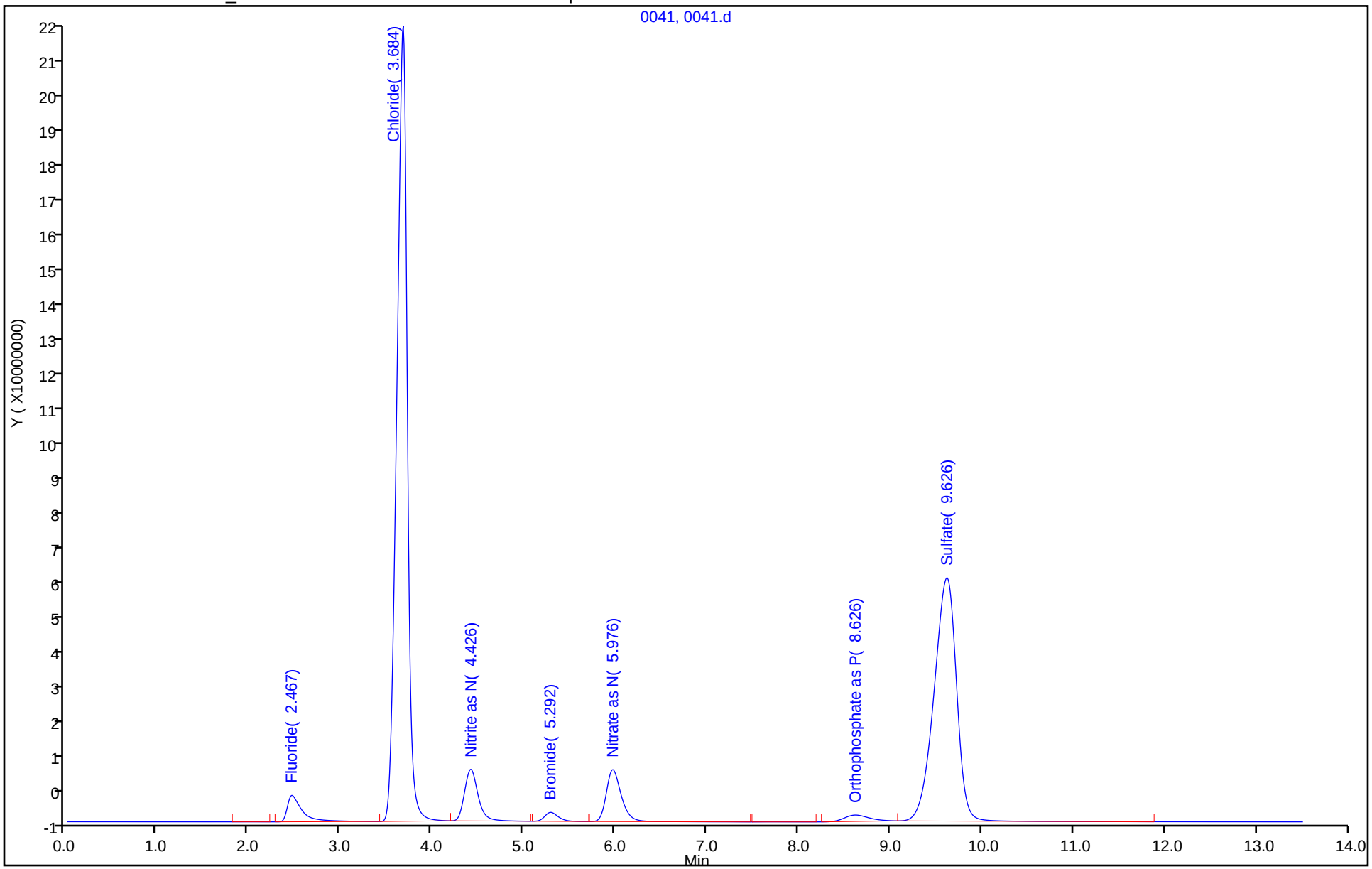
IC LCS_01845 Amount Added: 5.00 Units: mL

Report Date: 23-Nov-2021 12:20:34 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0041.d

Injection Date:	22-Nov-2021 22:09:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	41
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0042.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 22-Nov-2021 22:25:00 ALS Bottle#: 0 Worklist Smp#: 42
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106710-042
Misc. Info.: 26421
Operator ID: Instrument ID: WC_IonChrom11

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 12:20:34 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

First Level Reviewer: jindaratc Date: 23-Nov-2021 12:18:27

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.484				ND	U
2 Chloride		3.700				ND	U
3 Nitrite as N		4.442				ND	U
4 Bromide		5.317				ND	
5 Nitrate as N		6.000				ND	
7 Orthophosphate as P	9.125	8.925	0.200	214179		NC	
6 Sulfate	9.634	9.725	-0.091	488422		0.6425	

QC Flag Legend

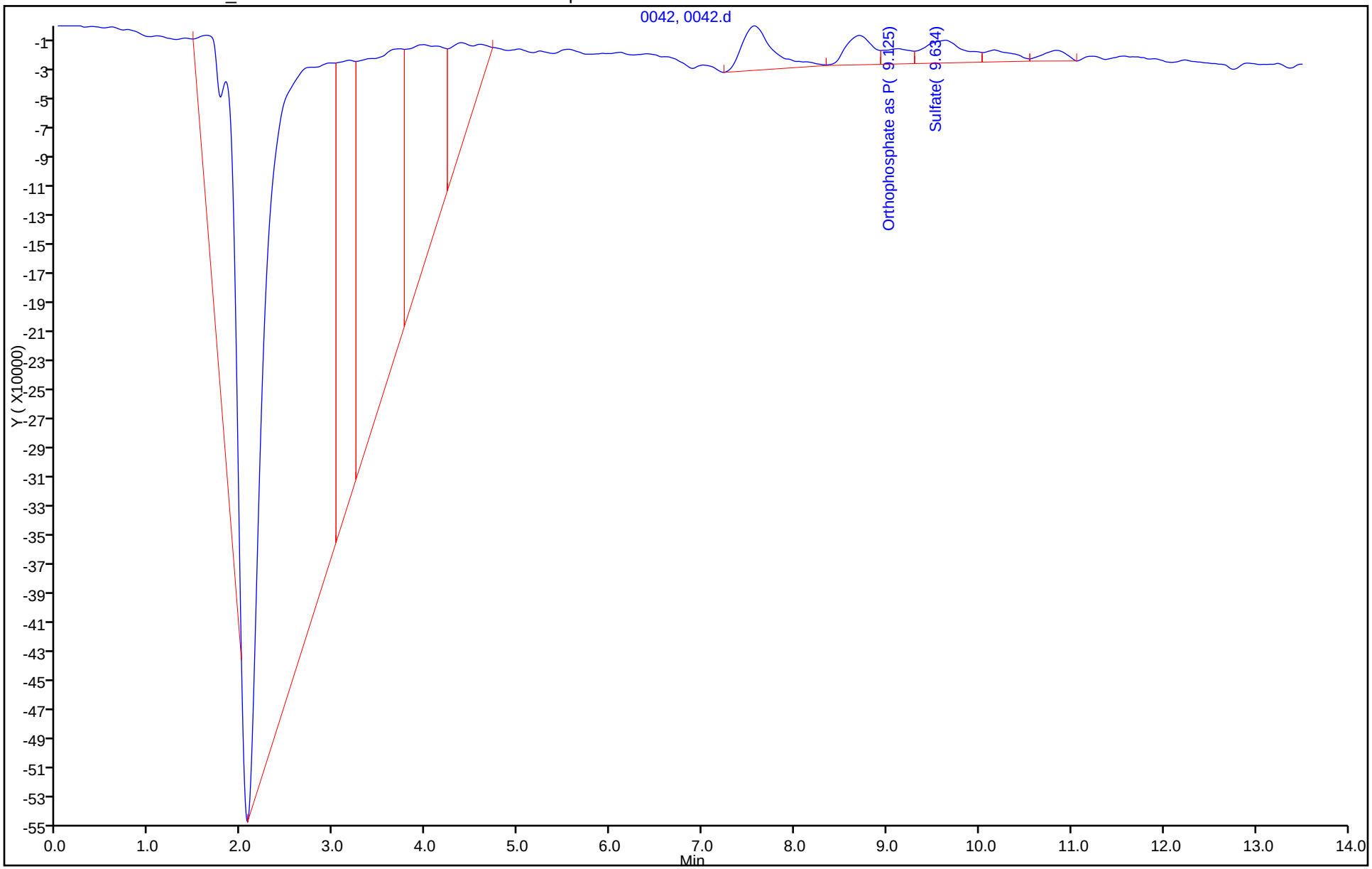
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 23-Nov-2021 12:20:35 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211122-106710.b\0042.d

Injection Date:	22-Nov-2021 22:25:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	42
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



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\0001.d
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 23-Nov-2021 10:27:00 ALS Bottle#: 0 Worklist Smp#: 1
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106740-001
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 15:23:21 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: CTX1646

First Level Reviewer: jindaratc Date: 23-Nov-2021 11:39:49

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.475	2.475	0.000	78833251	5.00	4.83	
2 Chloride	3.684	3.684	0.000	1734483668	100.0	97.3	
3 Nitrite as N	4.417	4.417	0.000	143844195	NC	NC	
4 Bromide	5.292	5.292	0.000	25291560	5.00	4.67	
5 Nitrate as N	5.967	5.967	0.000	163421125	NC	NC	
7 Orthophosphate as P	8.642	8.642	0.000	27592814	NC	NC	
6 Sulfate	9.642	9.642	0.000	1129817623	100.0	96.6	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

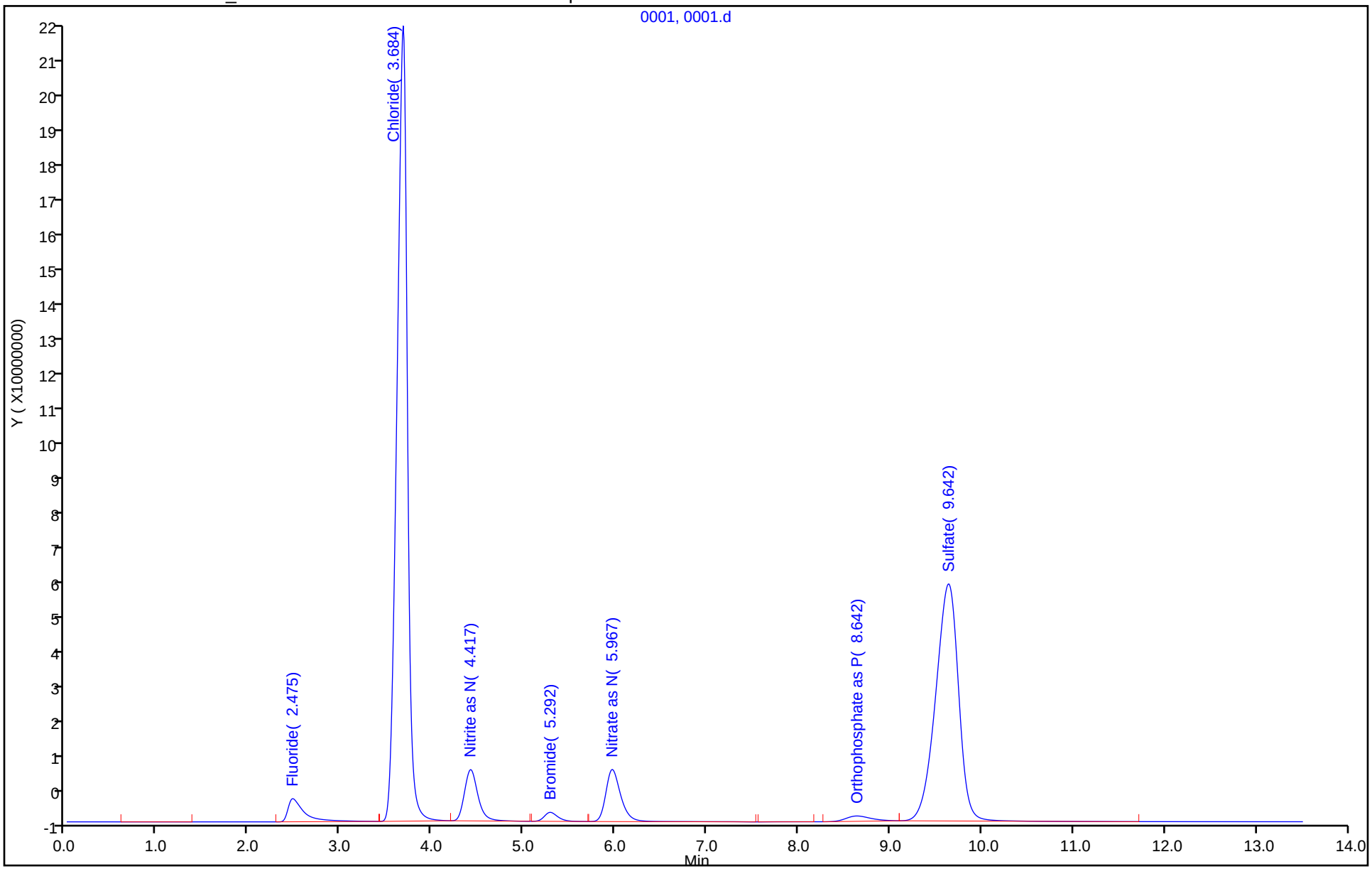
IC LCS_01845 Amount Added: 5.00 Units: mL

Report Date: 23-Nov-2021 15:23:22 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0001.d

Injection Date:	23-Nov-2021 10:27:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	CCV			Worklist Smp#:	1
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0002.d
Lims ID: CCB
Client ID:
Sample Type: CCB
Inject. Date: 23-Nov-2021 10:43:00 ALS Bottle#: 0 Worklist Smp#: 2
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106740-002
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 15:23:22 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: CTX1646

First Level Reviewer: jindaratc Date: 23-Nov-2021 15:20:04

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.475				ND	
2 Chloride		3.684				ND	U
3 Nitrite as N		4.417				ND	U
4 Bromide		5.292				ND	U
5 Nitrate as N	6.392	6.392	0.000	122795		NC	
7 Orthophosphate as P	8.650	8.650	0.000	385149		NC	
6 Sulfate		9.642				ND	

QC Flag Legend

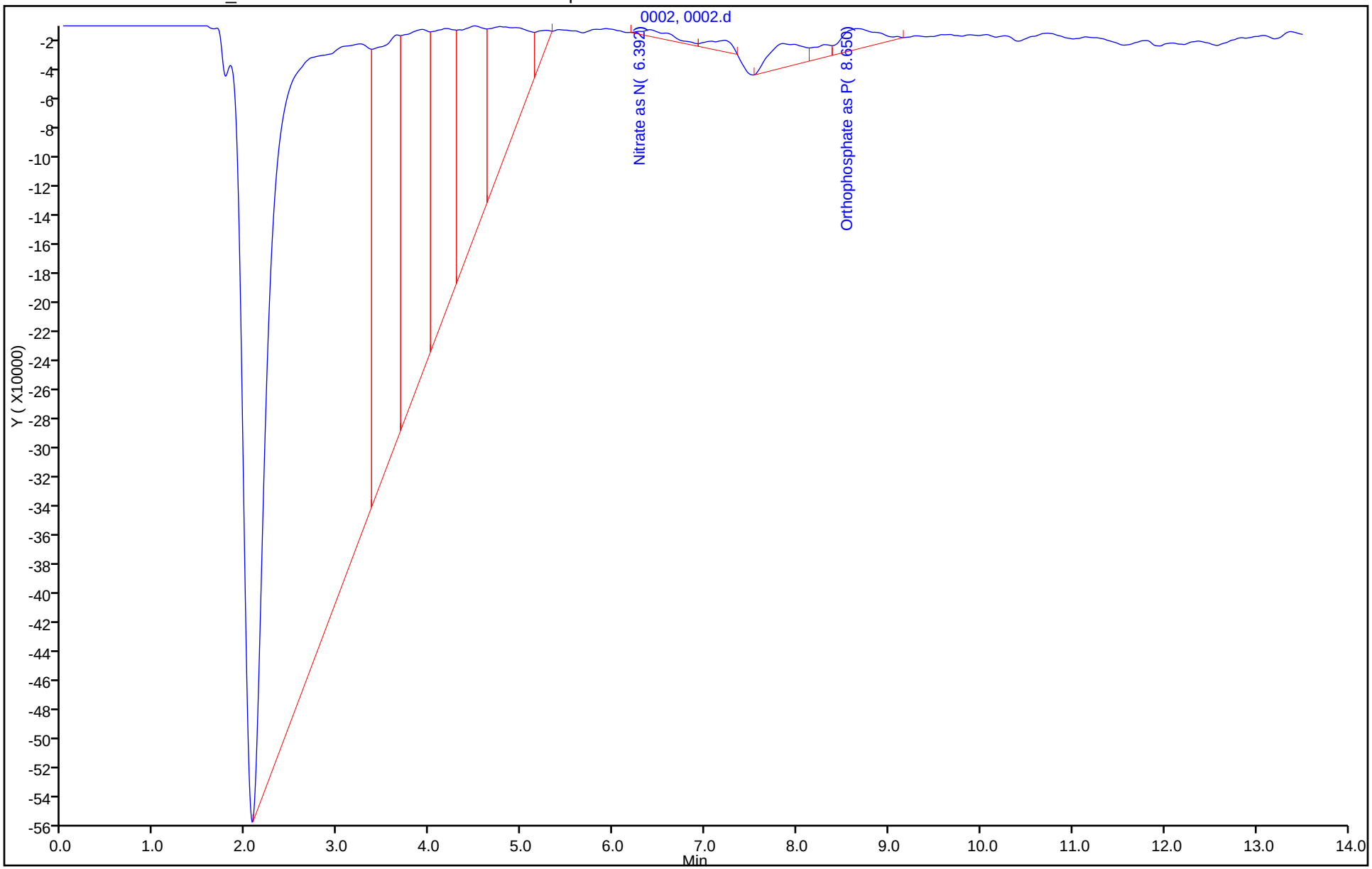
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 23-Nov-2021 15:23:22 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0002.d

Injection Date:	23-Nov-2021 10:43:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	CCB			Worklist Smp#:	2
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0003.d
Lims ID: MRL
Client ID:
Sample Type: MRL
Inject. Date: 23-Nov-2021 10:59:00 ALS Bottle#: 0 Worklist Smp#: 3
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106740-003
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 15:23:23 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: CTX1646

First Level Reviewer: jindaratc Date: 23-Nov-2021 15:20:25

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.476	2.476	0.000	9599942	0.5000	0.6106	M
2 Chloride	3.609	3.609	0.000	58088946	5.00	3.90	
3 Nitrite as N	4.392	4.392	0.000	12947069	NC	NC	
4 Bromide	5.284	5.284	0.000	2427933	0.5000	0.4699	
5 Nitrate as N	5.976	5.976	0.000	14231182	NC	NC	
7 Orthophosphate as P	8.676	8.676	0.000	2032015	NC	NC	
6 Sulfate	9.551	9.551	0.000	40944320	5.00	4.08	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

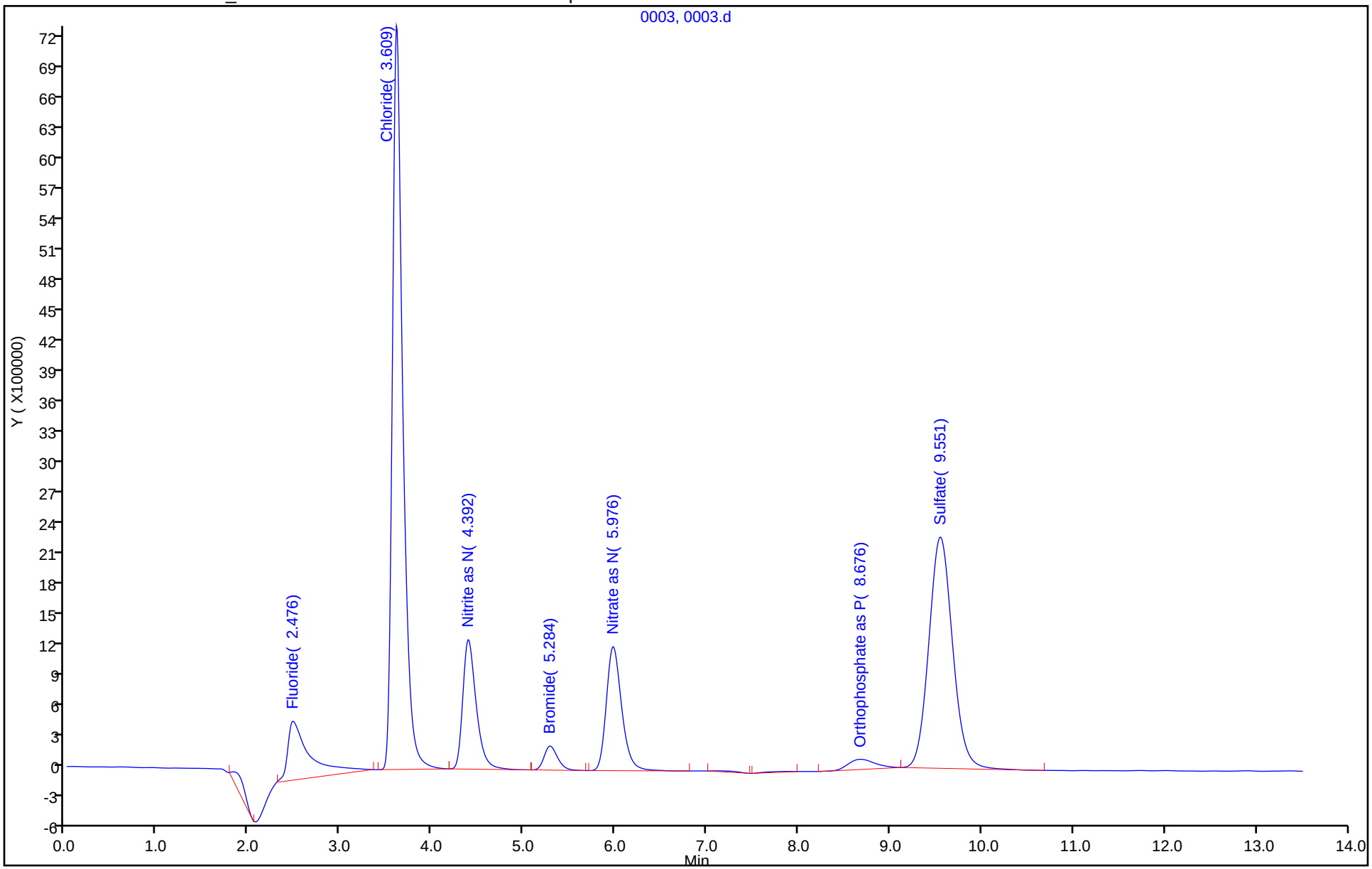
IC Cal low_00608 Amount Added: 0.05 Units: mL
IC CAL cl/so4_00394 Amount Added: 0.10 Units: mL

Report Date: 23-Nov-2021 15:23:23 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0003.d

Injection Date:	23-Nov-2021 10:59:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	MRL			Worklist Smp#:	3
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0004.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 23-Nov-2021 11:16:00 ALS Bottle#: 0 Worklist Smp#: 4
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106740-004
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 15:23:23 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: CTX1646

First Level Reviewer: jindaratc Date: 23-Nov-2021 12:19:08

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.475	2.475	0.000	79641130	5.00	4.87	
2 Chloride	3.684	3.684	0.000	1731463106	100.0	97.2	
3 Nitrite as N	4.417	4.417	0.000	144241996	NC	NC	
4 Bromide	5.284	5.284	0.000	25332296	5.00	4.68	
5 Nitrate as N	5.959	5.959	0.000	162817810	NC	NC	
7 Orthophosphate as P	8.634	8.634	0.000	29298192	NC	NC	
6 Sulfate	9.634	9.634	0.000	1127889164	100.0	96.4	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

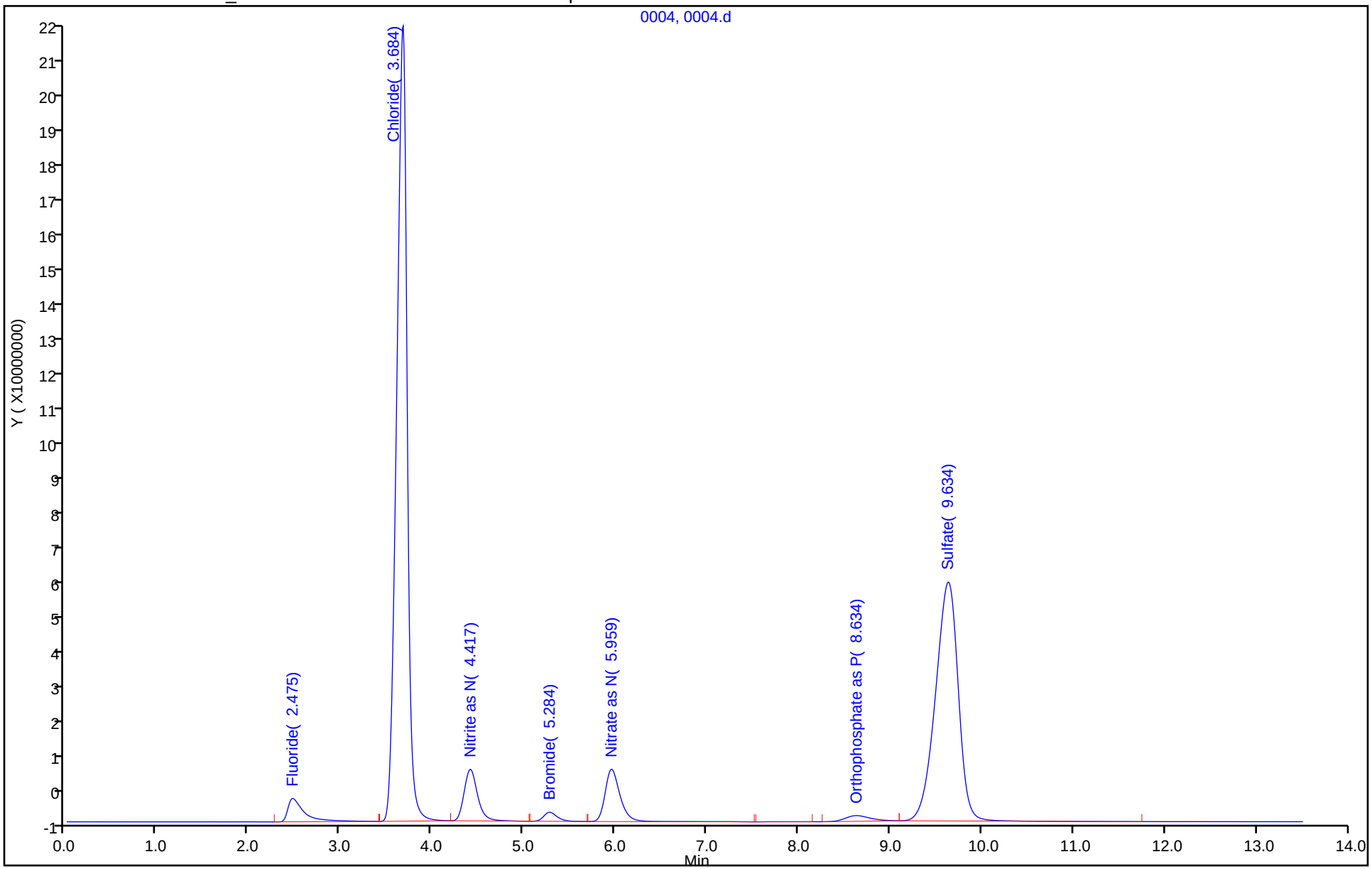
IC LCS_01845 Amount Added: 5.00 Units: mL

Report Date: 23-Nov-2021 15:23:23 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0004.d

Injection Date:	23-Nov-2021 11:16:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0005.d
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 23-Nov-2021 11:32:00 ALS Bottle#: 0 Worklist Smp#: 5
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106740-005
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 15:23:24 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: CTX1646

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.476	2.476	0.000	80361384	5.00	4.92	
2 Chloride	3.676	3.676	0.000	1736312181	100.0	97.4	
3 Nitrite as N	4.409	4.409	0.000	144674479	NC	NC	
4 Bromide	5.276	5.276	0.000	25420295	5.00	4.70	
5 Nitrate as N	5.951	5.951	0.000	163451807	NC	NC	
7 Orthophosphate as P	8.626	8.626	0.000	30368590	NC	NC	
6 Sulfate	9.634	9.634	0.000	1130143541	100.0	96.6	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

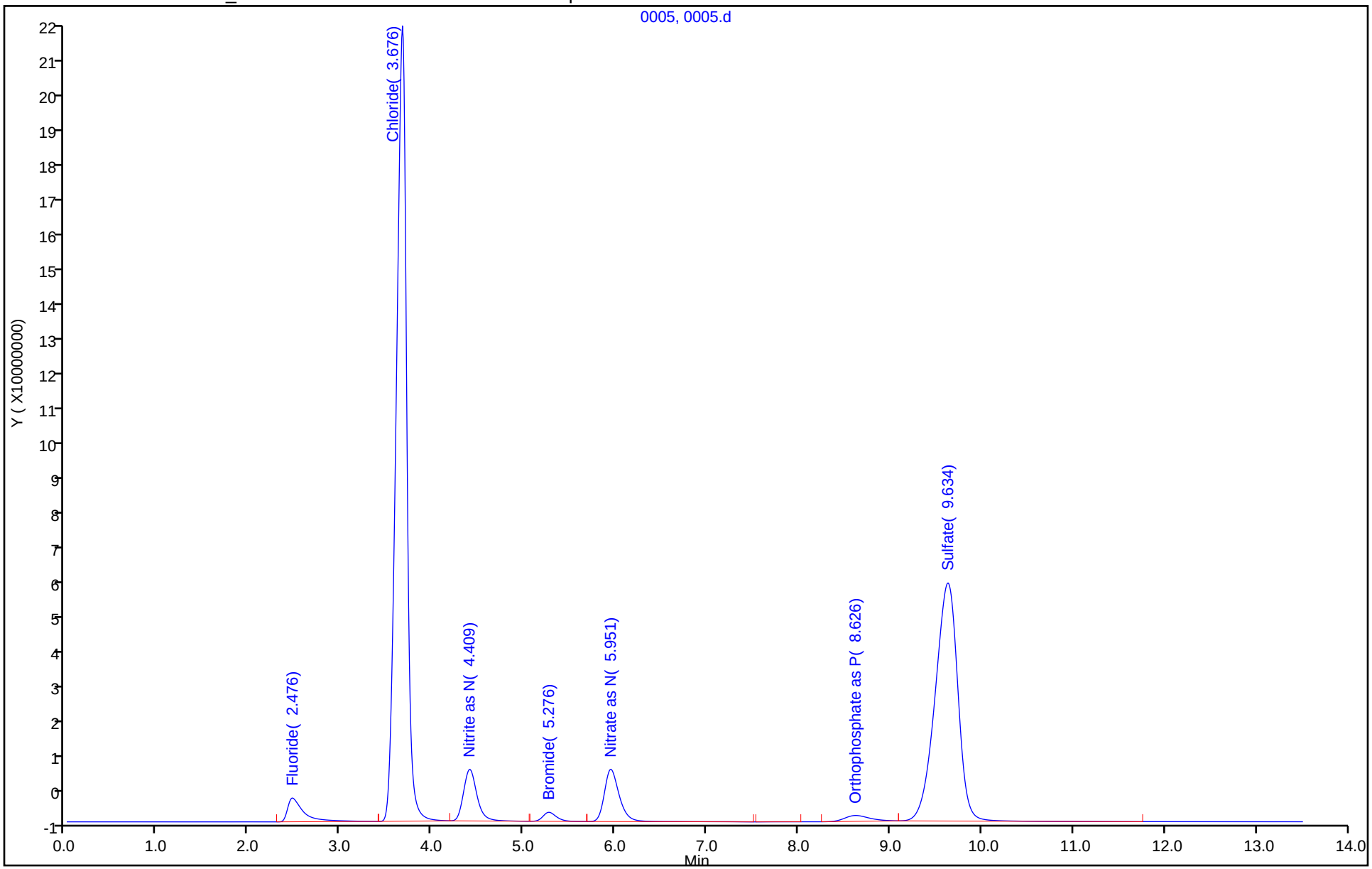
IC LCS_01845 Amount Added: 5.00 Units: mL

Report Date: 23-Nov-2021 15:23:24 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0005.d

Injection Date:	23-Nov-2021 11:32:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0006.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 23-Nov-2021 11:48:00 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106740-006
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 15:23:24 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: CTX1646

First Level Reviewer: jindaratc Date: 23-Nov-2021 15:21:00

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.476				ND	
2 Chloride	3.617	3.617	0.000	82059		0.6668	M
3 Nitrite as N		4.409				ND	U
4 Bromide		5.276				ND	U
5 Nitrate as N		5.951				ND	U
7 Orthophosphate as P		8.626				ND	U
6 Sulfate	9.517	9.517	0.000	369815		0.6325	M

QC Flag Legend

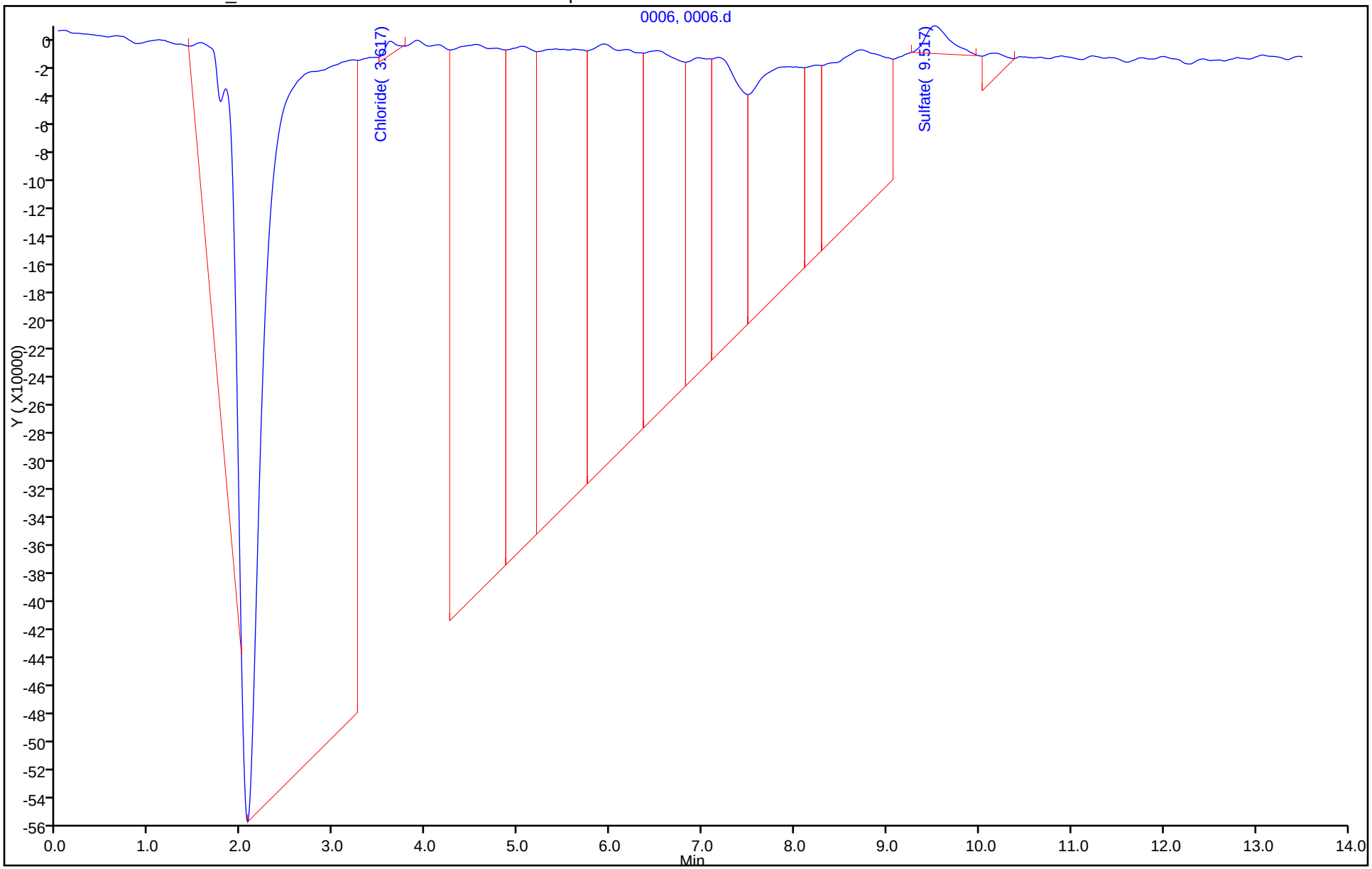
Processing Flags
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 23-Nov-2021 15:23:24 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0006.d

Injection Date:	23-Nov-2021 11:48:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

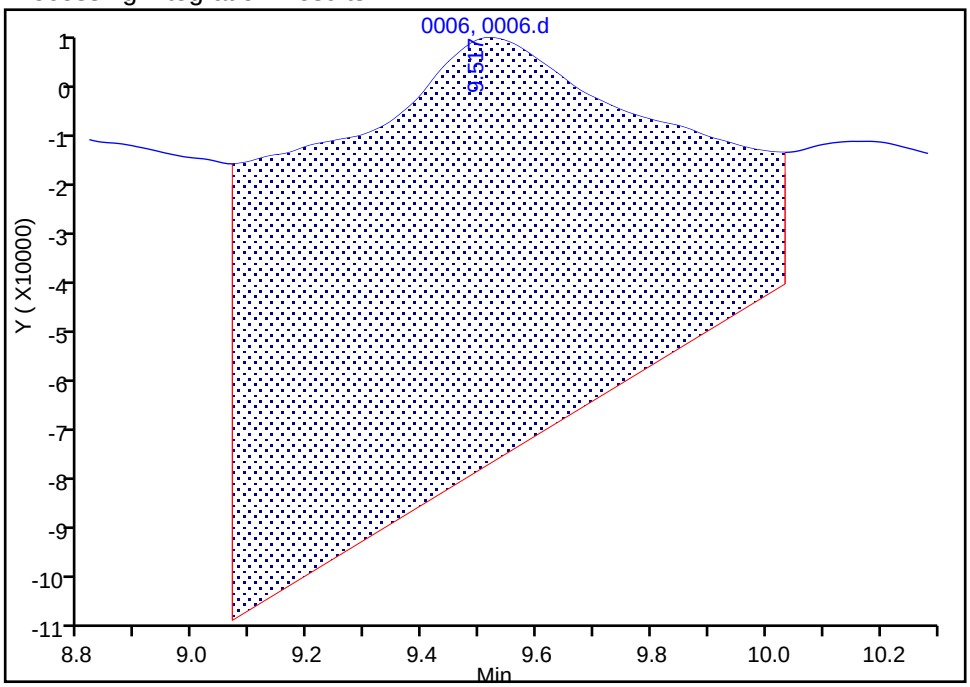
Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0006.d
Injection Date: 23-Nov-2021 11:48:00 Instrument ID: WC_IonChrom11
Lims ID: MB
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Method: Anions_IC11 Limit Group: Wet - Anions 28D
Column: Detector 0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

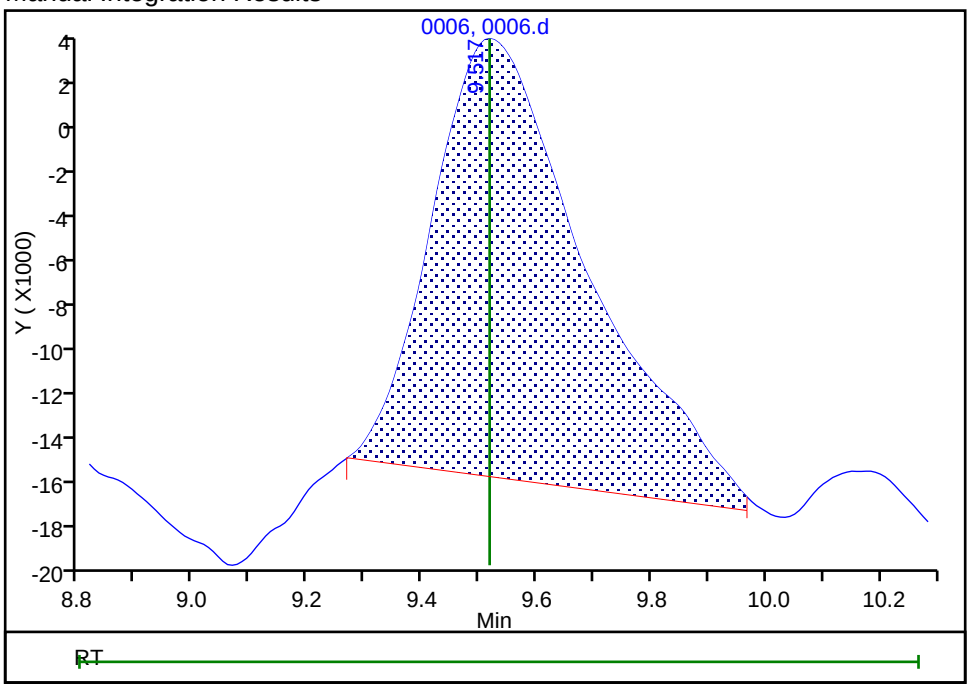
Processing Integration Results

RT: 9.52
Area: 3661438
Amount: 0.912105
Amount Units: ug/ml



Manual Integration Results

RT: 9.52
Area: 369815
Amount: 0.632470
Amount Units: ug/ml



Reviewer: jindaratc, 23-Nov-2021 15:20:57
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0014.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 23-Nov-2021 14:24:00 ALS Bottle#: 0 Worklist Smp#: 15
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106740-015
Misc. Info.: 21879
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 15:23:28 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: CTX1646

First Level Reviewer: jindaratc Date: 23-Nov-2021 15:22:56

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.475	2.476	-0.001	83643265	5.00	5.12	
2 Chloride	3.692	3.617	0.075	1766936446	100.0	99.1	
3 Nitrite as N	4.425	4.409	0.016	146800892	NC	NC	
4 Bromide	5.300	5.276	0.024	25825998	5.00	4.77	
5 Nitrate as N	5.984	5.951	0.033	166412734	NC	NC	
7 Orthophosphate as P	8.625	8.626	-0.001	31830882	NC	NC	
6 Sulfate	9.625	9.517	0.108	1153151253	100.0	98.6	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

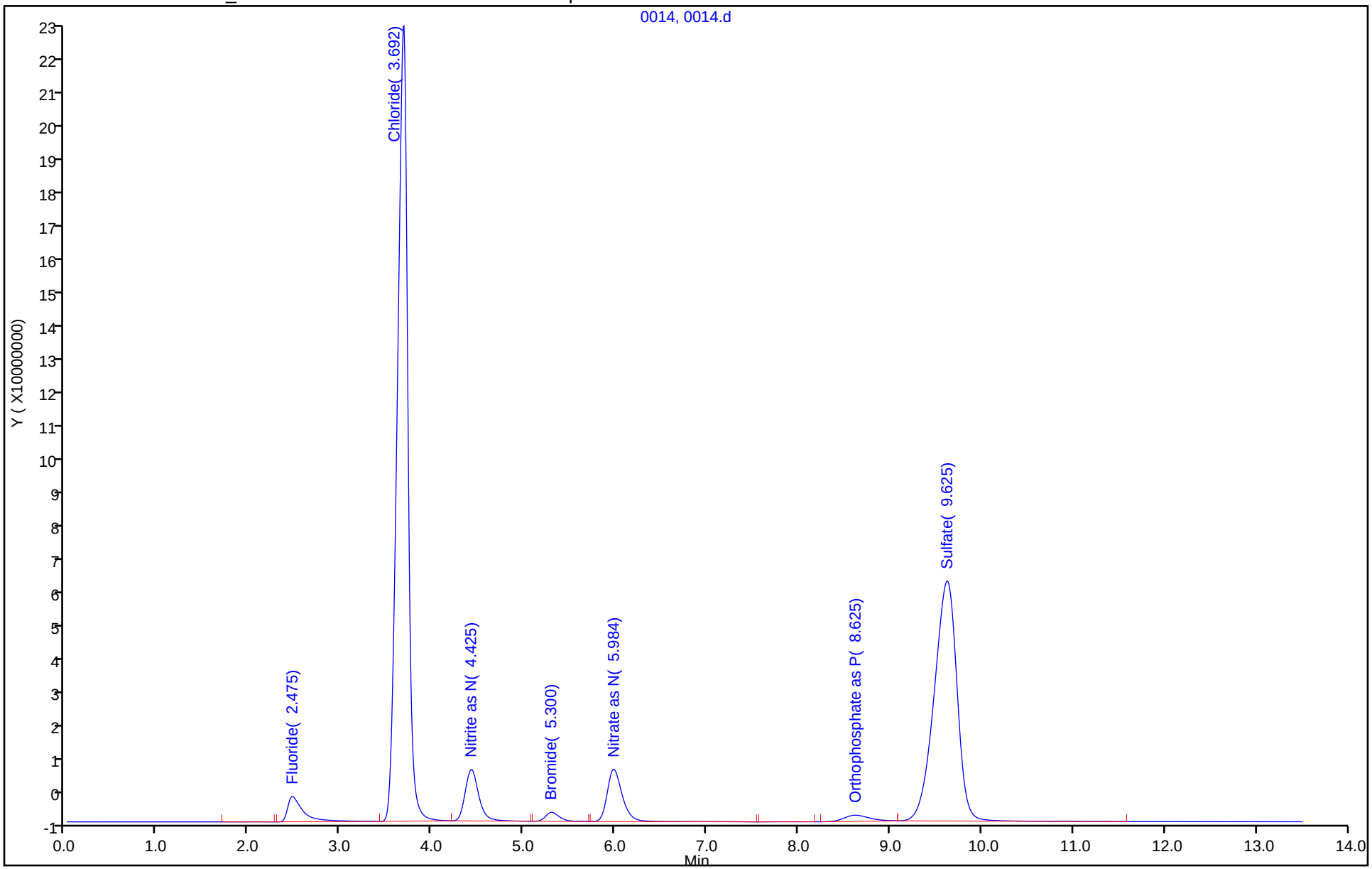
IC LCS_01845 Amount Added: 5.00 Units: mL

Report Date: 23-Nov-2021 15:23:28 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0014.d

Injection Date:	23-Nov-2021 14:24:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	15
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0015.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 23-Nov-2021 14:40:00 ALS Bottle#: 0 Worklist Smp#: 16
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106740-016
Misc. Info.: 17154
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 15:23:28 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: CTX1646

First Level Reviewer: jindaratc Date: 23-Nov-2021 15:23:11

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.476				ND	
2 Chloride	3.625	3.617	0.008	143779		0.6702	M
3 Nitrite as N		4.409				ND	U
4 Bromide		5.276				ND	U
5 Nitrate as N		5.951				ND	
7 Orthophosphate as P	8.667	8.626	0.041	250623		NC	
6 Sulfate	9.625	9.517	0.108	132667		0.6123	

QC Flag Legend

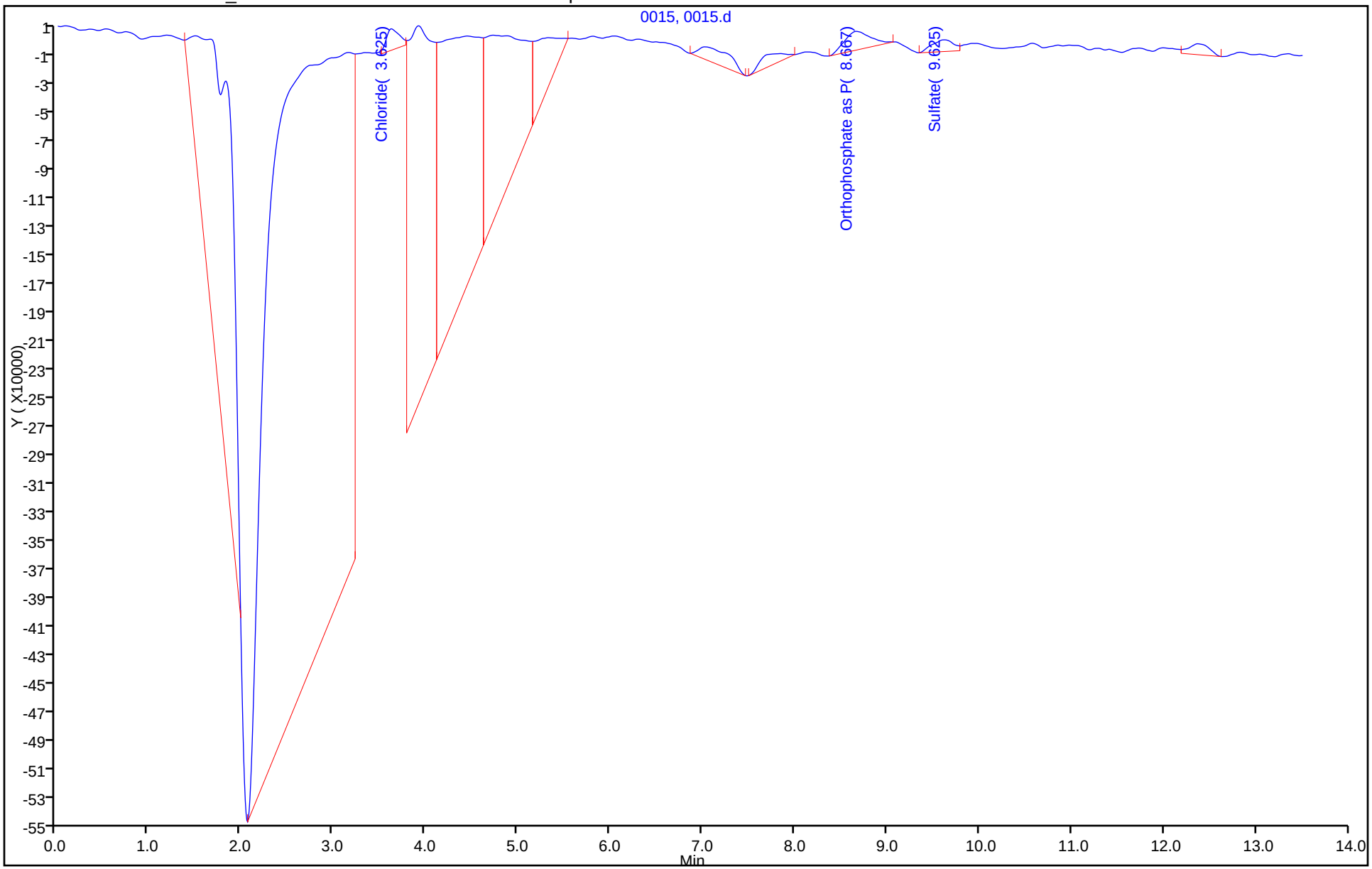
Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 23-Nov-2021 15:23:29 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0015.d

Injection Date:	23-Nov-2021 14:40:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	16
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0019.d
Lims ID: 280-155225-F-3
Client ID: G0078-7
Sample Type: Client
Inject. Date: 23-Nov-2021 15:46:00 ALS Bottle#: 0 Worklist Smp#: 20
Injection Vol: 10.0 ul Dil. Factor: 5.0000
Sample Info: 280-0106740-020
Misc. Info.: 19013
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

First Level Reviewer: jindaratc Date: 23-Nov-2021 19:31:06

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride		2.476			ND	U
2 Chloride	3.626	3.617	0.009	133219785	8.09	M
3 Nitrite as N		4.409			ND	U
4 Bromide		5.276			ND	U
5 Nitrate as N	6.351	5.951	0.400	1295036	NC	
7 Orthophosphate as P	8.776	8.626	0.150	102143	NC	
6 Sulfate	9.617	9.517	0.100	589386003	50.7	

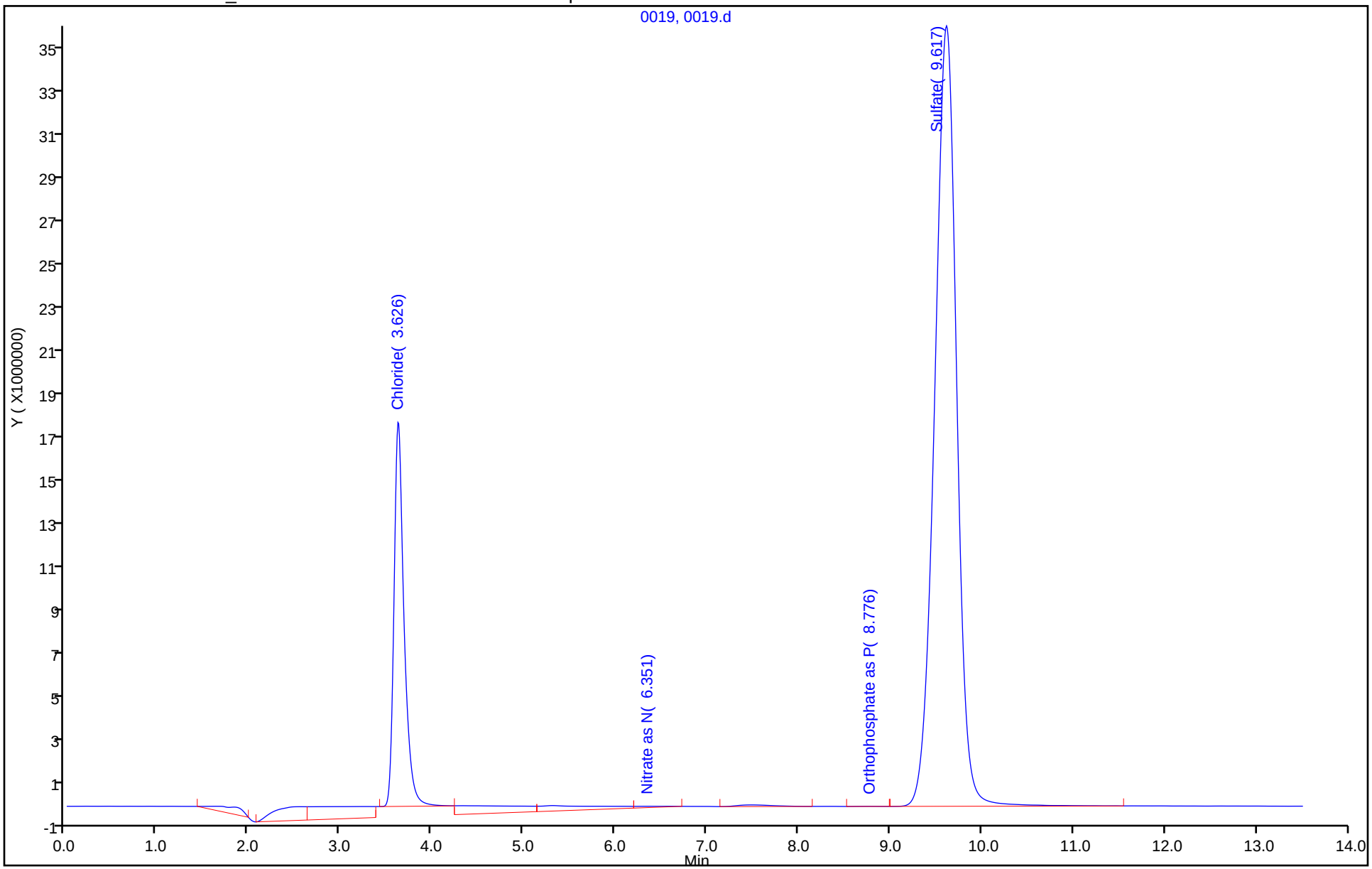
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated
U - Marked Undetected

Report Date: 23-Nov-2021 19:33:01 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0019.d				
Injection Date:	23-Nov-2021 15:46:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-155225-F-3	Lab Sample ID:	280-155225-3	Worklist Smp#:	20
Client ID:	G0078-7				
Injection Vol:	10.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0020.d
Lims ID: 280-155225-F-4
Client ID: G0092-7
Sample Type: Client
Inject. Date: 23-Nov-2021 16:02:00 ALS Bottle#: 0 Worklist Smp#: 21
Injection Vol: 10.0 ul Dil. Factor: 5.0000
Sample Info: 280-0106740-021
Misc. Info.: 28634
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

First Level Reviewer: jindaratc Date: 23-Nov-2021 19:31:20

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.534	2.476	0.058	15351362	0.9608	
2 Chloride	3.626	3.617	0.009	133317956	8.09	M
3 Nitrite as N	4.417	4.409	0.008	15138982	NC	
4 Bromide	5.317	5.276	0.041	5903720	1.11	
5 Nitrate as N	6.009	5.951	0.058	1115113	NC	
7 Orthophosphate as P		8.626			ND	
6 Sulfate	9.642	9.517	0.125	844230533	72.3	

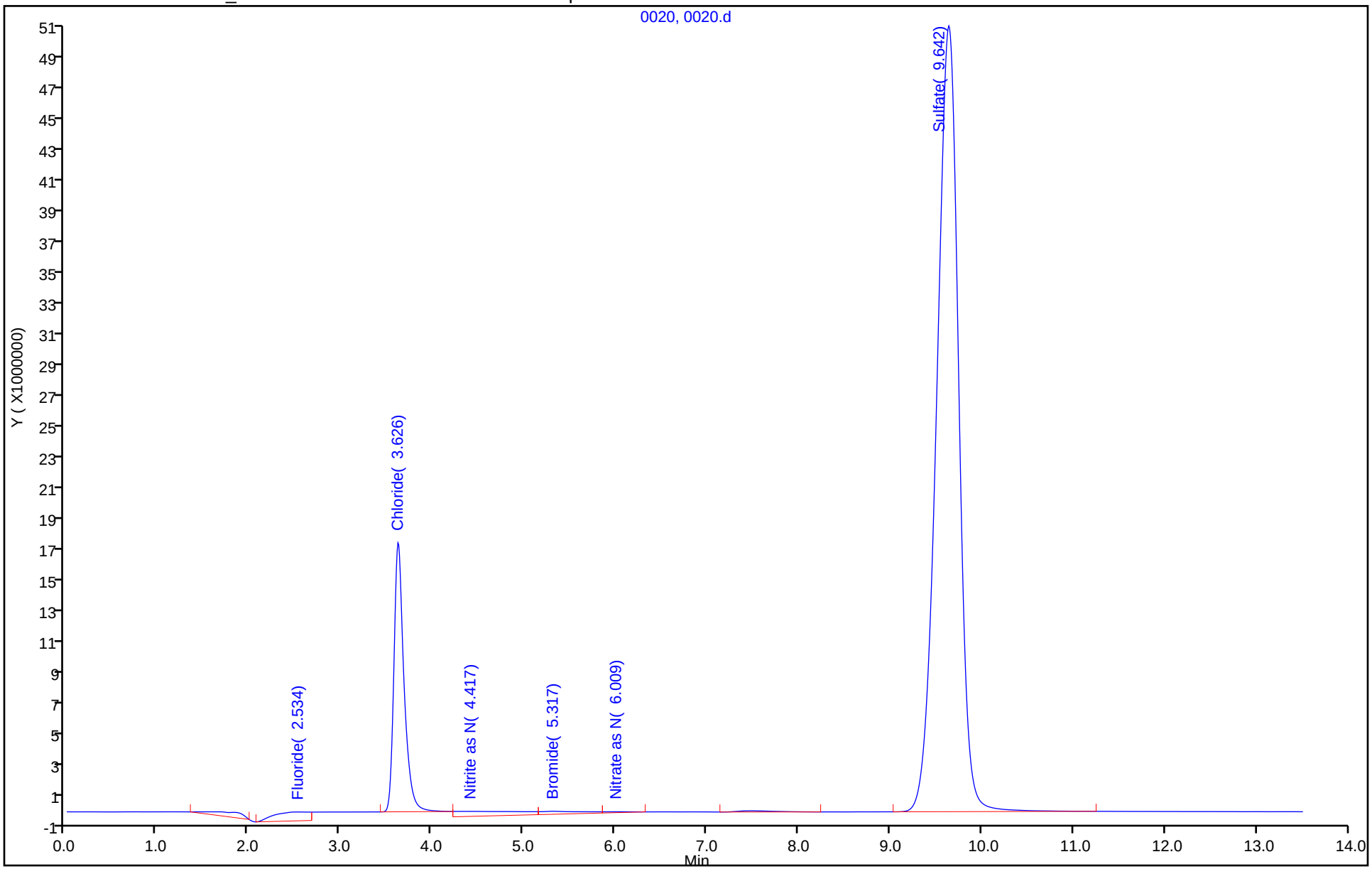
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 23-Nov-2021 19:33:01 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0020.d				
Injection Date:	23-Nov-2021 16:02:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-155225-F-4	Lab Sample ID:	280-155225-4	Worklist Smp#:	21
Client ID:	G0092-7				
Injection Vol:	10.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0021.d
Lims ID: 280-155225-F-5
Client ID: G0091-7
Sample Type: Client
Inject. Date: 23-Nov-2021 16:19:00 ALS Bottle#: 0 Worklist Smp#: 22
Injection Vol: 10.0 ul Dil. Factor: 5.0000
Sample Info: 280-0106740-022
Misc. Info.: 25539
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

First Level Reviewer: jindaratc Date: 23-Nov-2021 19:31:49

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Flags
1 Fluoride	2.484	2.476	0.008	11202309	0.7082	
2 Chloride	3.625	3.617	0.008	103733891	6.44	M
3 Nitrite as N	4.392	4.409	-0.017	15944760	NC	
4 Bromide	5.317	5.276	0.041	8896683	1.66	
5 Nitrate as N	5.992	5.951	0.041	279640472	NC	
7 Orthophosphate as P	8.817	8.626	0.191	5200722	NC	
6 Sulfate	9.592	9.517	0.075	404898484	35.0	M

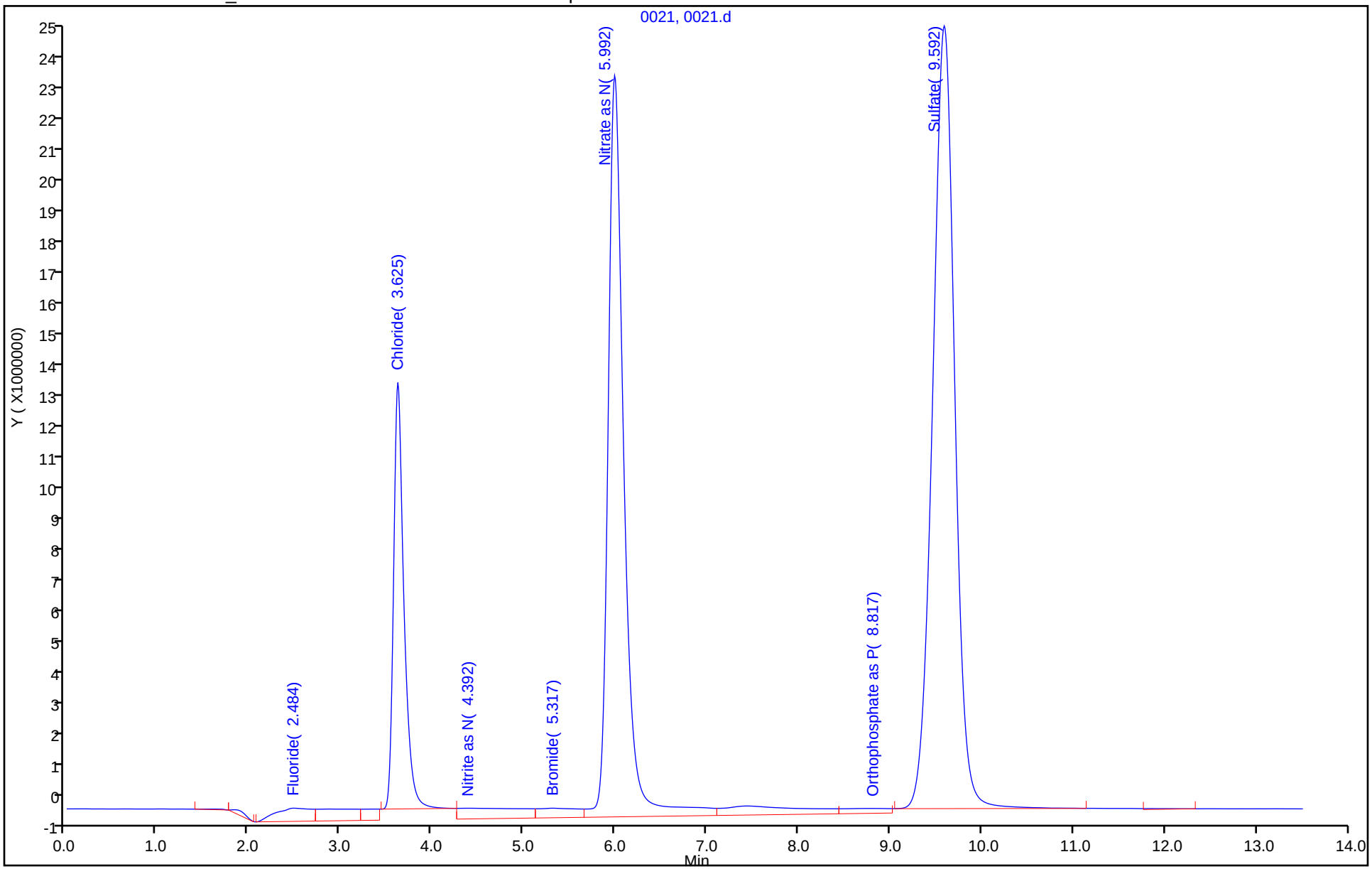
QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Report Date: 23-Nov-2021 19:33:01 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0021.d				
Injection Date:	23-Nov-2021 16:19:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	280-155225-F-5	Lab Sample ID:	280-155225-5	Worklist Smp#:	22
Client ID:	G0091-7				
Injection Vol:	10.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Denver

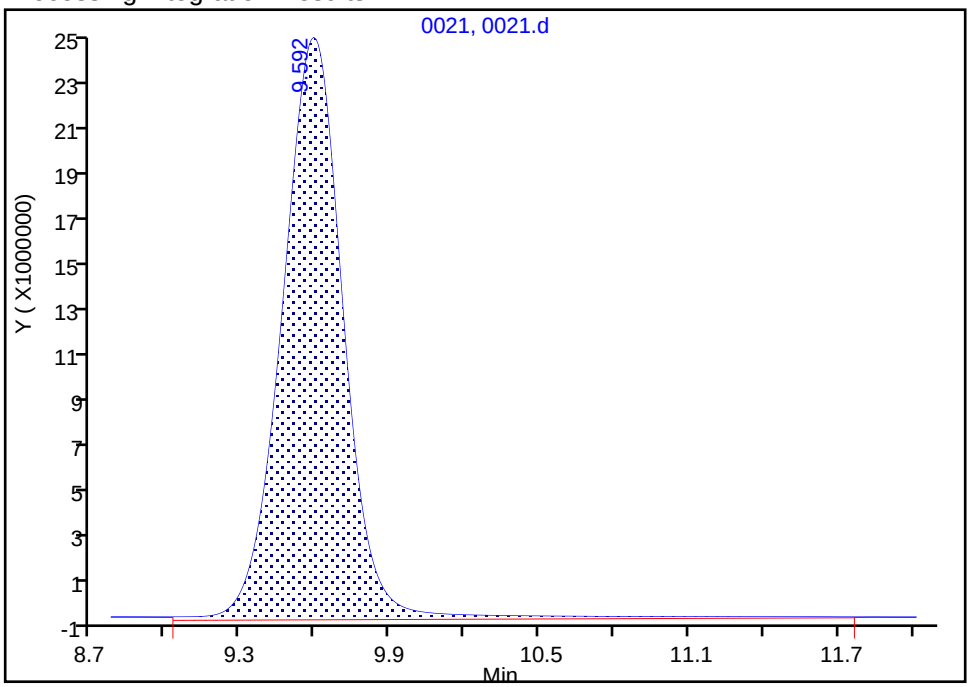
Data File:	\\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0021.d		
Injection Date:	23-Nov-2021 16:19:00	Instrument ID:	WC_IonChrom11
Lims ID:	280-155225-F-5	Lab Sample ID:	280-155225-5
Client ID:	G0091-7		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 22
Injection Vol:	10.0 ul	Dil. Factor:	5.0000
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D
Column:		Detector	0005

6 Sulfate, CAS: 14808-79-8

Signal: 1

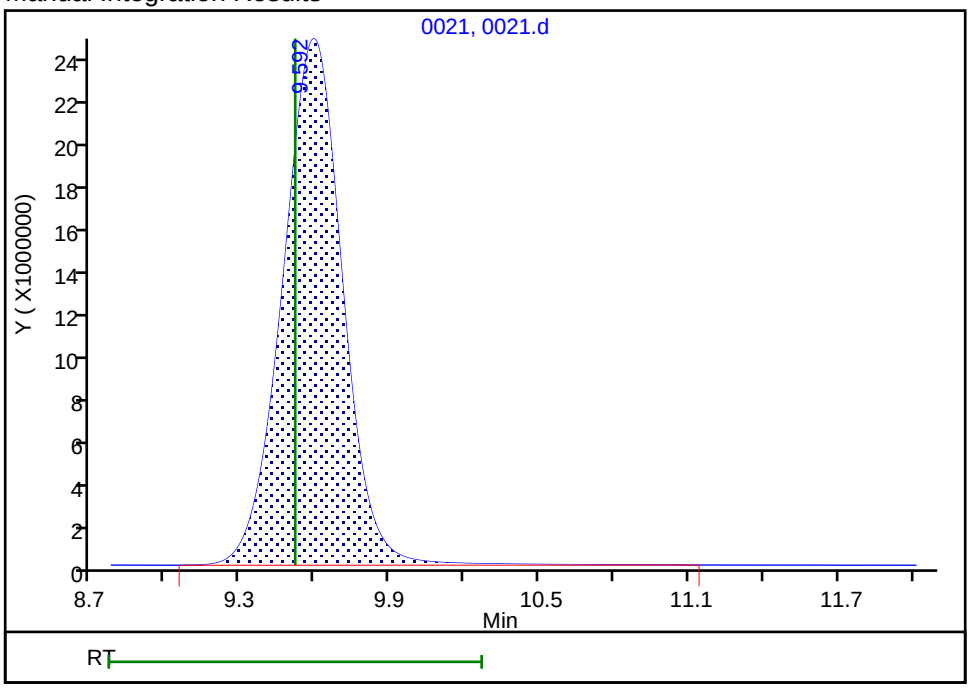
Processing Integration Results

RT: 9.59
Area: 418791977
Amount: 36.178828
Amount Units: ug/ml



Manual Integration Results

RT: 9.59
Area: 404898484
Amount: 34.998530
Amount Units: ug/ml



Reviewer: jindaratc, 23-Nov-2021 19:31:46
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0026.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 23-Nov-2021 17:41:00 ALS Bottle#: 0 Worklist Smp#: 27
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106740-027
Misc. Info.: 11970
Operator ID: Instrument ID: WC_IonChrom11
Sublist: chrom-Anions_IC11*sub1

Method: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\Anions_IC11.m
Limit Group: Wet - Anions 28D
Last Update: 23-Nov-2021 19:33:03 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	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride	2.475	2.476	-0.001	83304415	5.00	5.10	
2 Chloride	3.692	3.617	0.075	1738307702	100.0	97.5	
3 Nitrite as N	4.434	4.409	0.025	144214087	NC	NC	
4 Bromide	5.317	5.276	0.041	25412963	5.00	4.69	
5 Nitrate as N	5.992	5.951	0.041	164063907	NC	NC	
7 Orthophosphate as P	8.625	8.626	-0.001	31747198	NC	NC	
6 Sulfate	9.625	9.517	0.108	1132406144	100.0	96.8	

QC Flag Legend

Processing Flags
NC - Not Calibrated

Reagents:

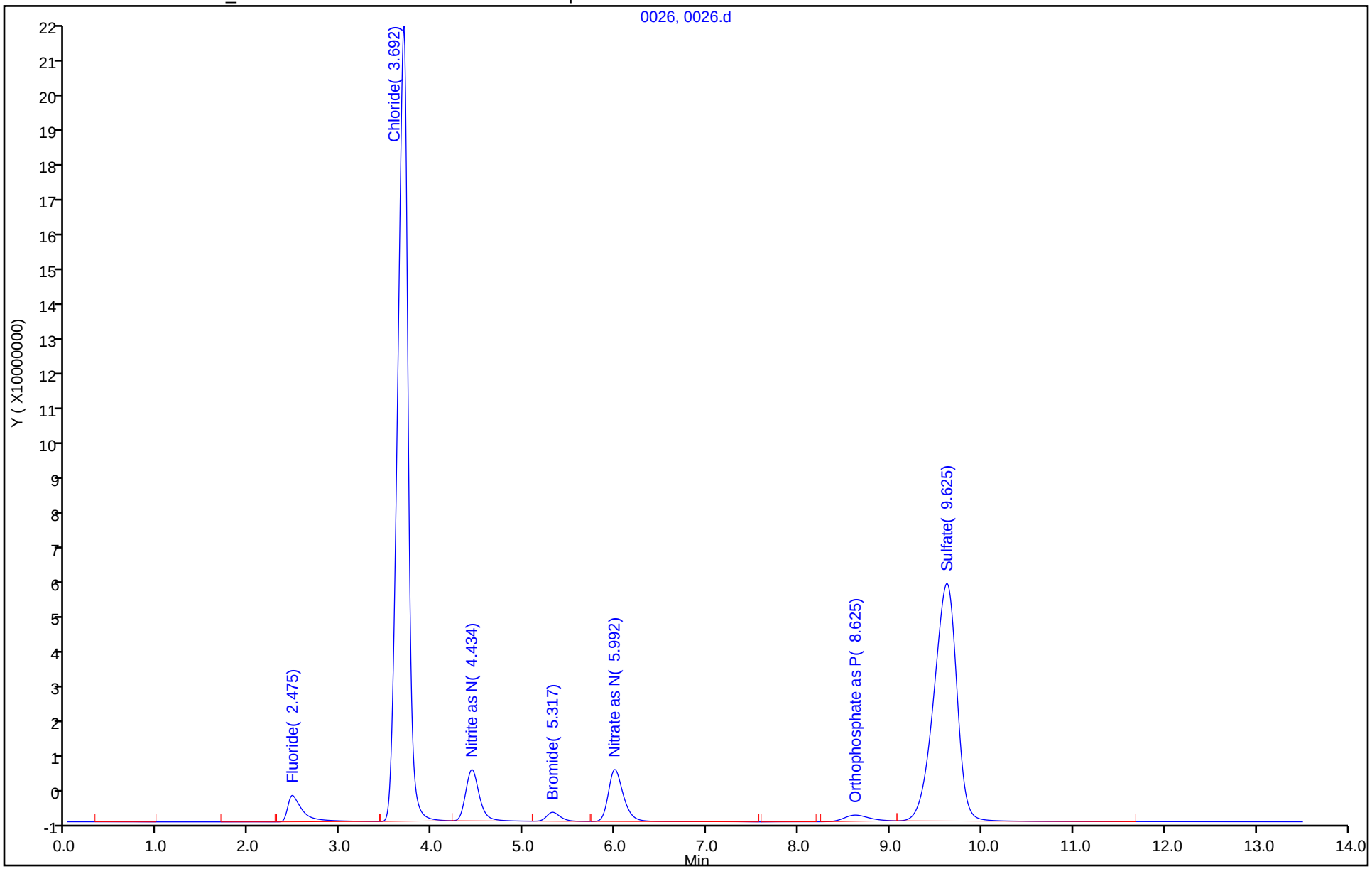
IC LCS_01845 Amount Added: 5.00 Units: mL

Report Date: 23-Nov-2021 19:33:03 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0026.d

Injection Date:	23-Nov-2021 17:41:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	27
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	Anions_IC11	Limit Group:	Wet - Anions 28D		



Eurofins TestAmerica, Denver
Target Compound Quantitation Report

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0027.d
Lims ID: ccb
Client ID:
Sample Type: CCB
Inject. Date: 23-Nov-2021 17:57:00 ALS Bottle#: 0 Worklist Smp#: 28
Injection Vol: 10.0 ul Dil. Factor: 1.0000
Sample Info: 280-0106740-028
Misc. Info.: 5622
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 19:33:03 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

First Level Reviewer: jindaratc Date: 23-Nov-2021 19:32:44

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Flags
1 Fluoride		2.476				ND	U
2 Chloride		3.617				ND	U
3 Nitrite as N		4.409				ND	U
4 Bromide		5.276				ND	U
5 Nitrate as N	6.400	5.951	0.449	125102		NC	
7 Orthophosphate as P	8.667	8.626	0.041	135105		NC	
6 Sulfate	9.609	9.517	0.092	170372		0.6155	

QC Flag Legend

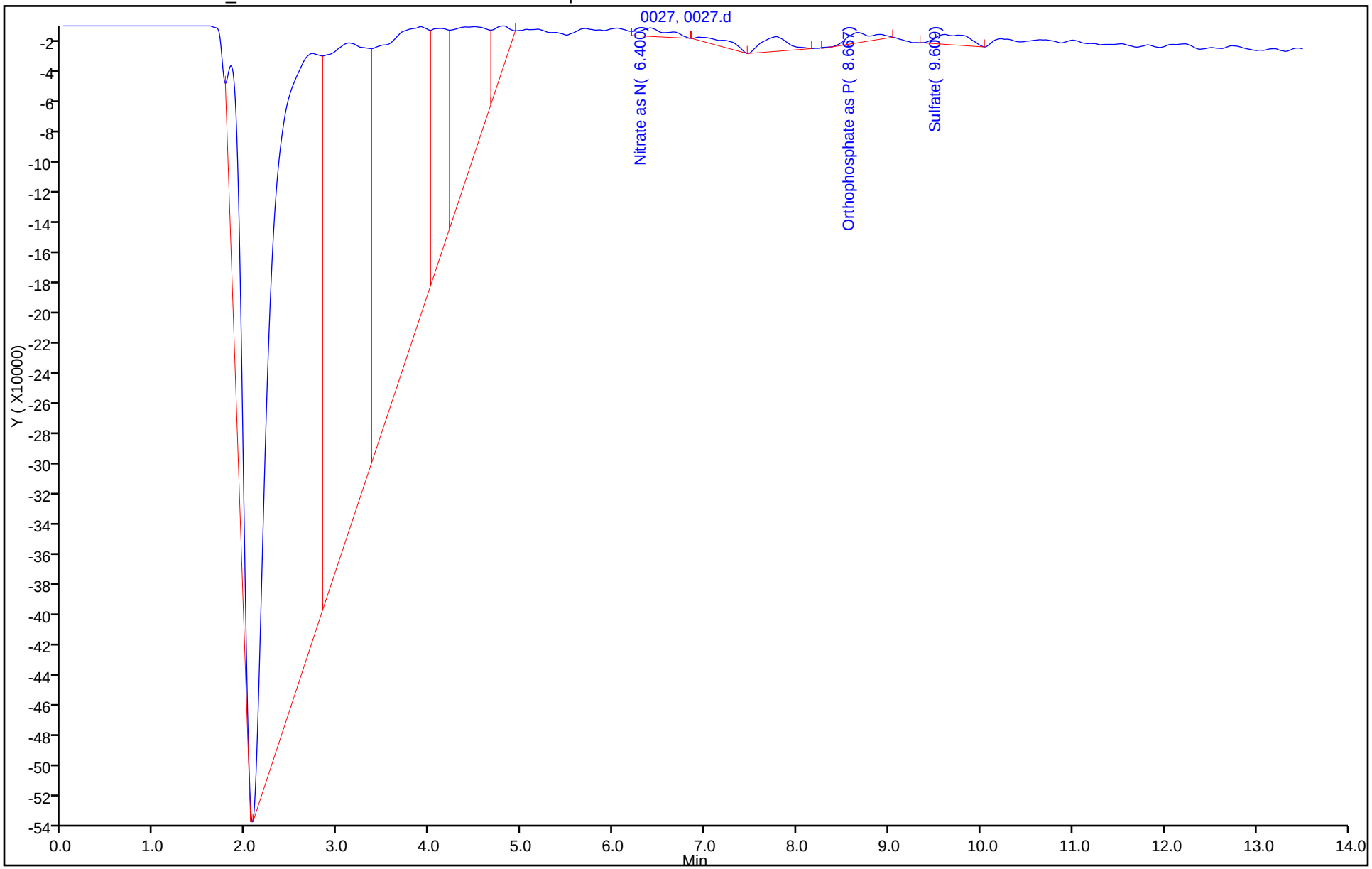
Processing Flags
NC - Not Calibrated
Review Flags
U - Marked Undetected

Report Date: 23-Nov-2021 19:33:03 Chrom Revision: 2.3 15-Nov-2021 20:34:30

Eurofins TestAmerica, Denver

Data File: \\chromfs\Denver\ChromData\WC_IonChrom11\20211123-106740.b\0027.d

Injection Date:	23-Nov-2021 17:57:00	Instrument ID:	WC_IonChrom11	Operator ID:	
Lims ID:	ccb			Worklist Smp#:	28
Client ID:					
Injection Vol:	10.0 ul	Dil. Factor:	1.0000	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

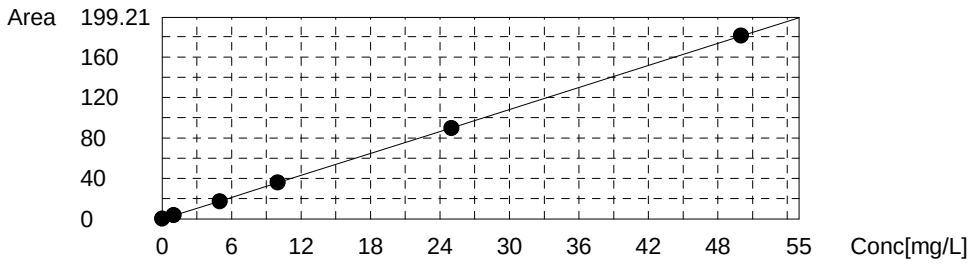
Acid Add. 0.000%
Sp. Time 90.00sec
Mean Area 89.79
SD Area 0.01414
CV Area 0.02%
Vial 92

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	

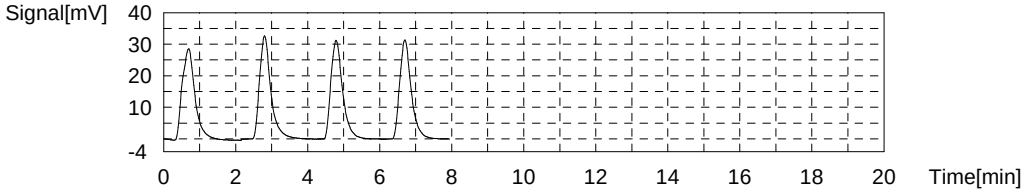
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.87mg/L

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	

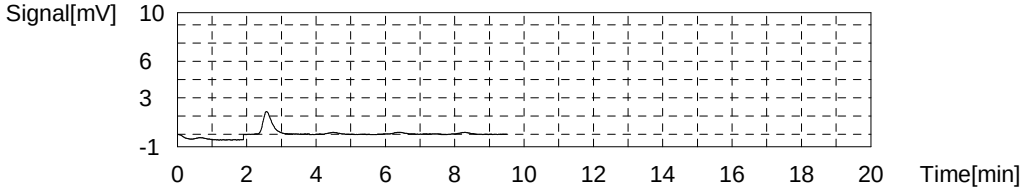
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1482mg/L

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

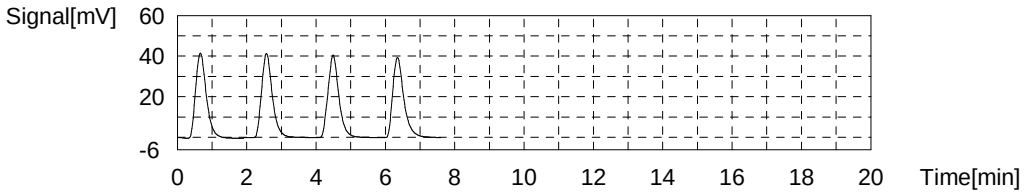
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.81mg/L

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

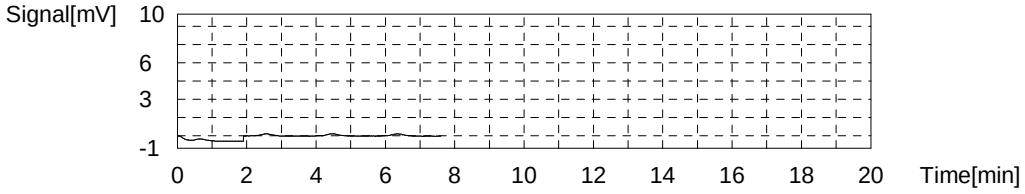
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1577mg/L

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

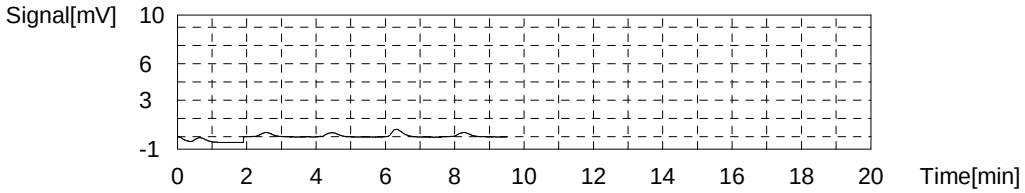
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2738mg/L

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

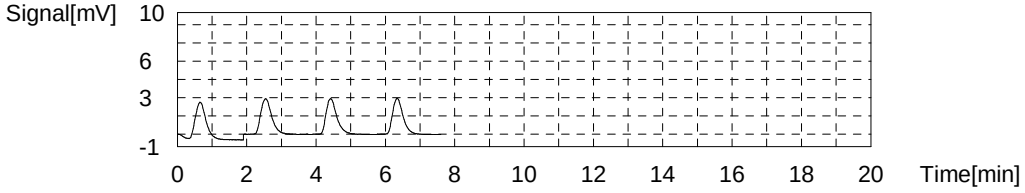
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.809mg/L

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

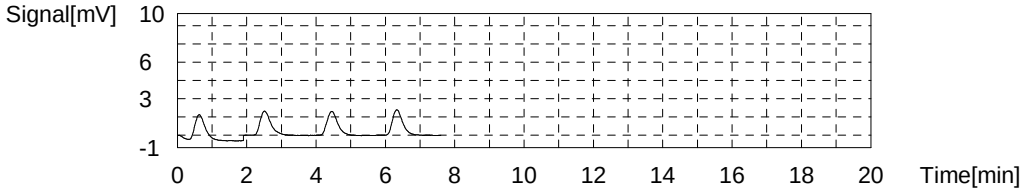
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.240mg/L

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

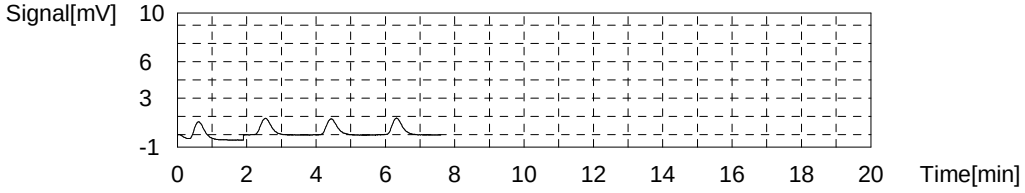
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8461mg/L

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

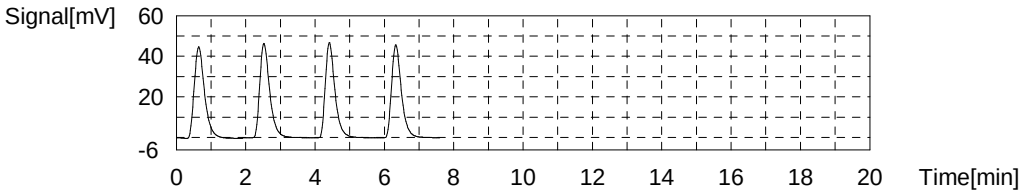
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.54mg/L

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

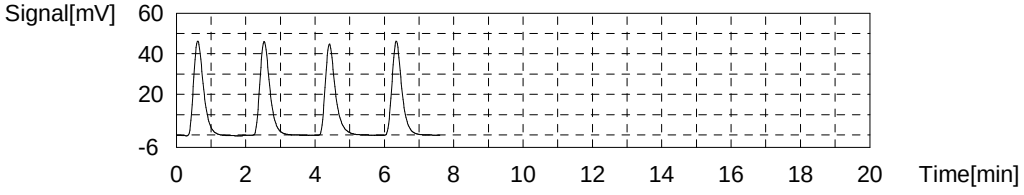
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.65mg/L

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

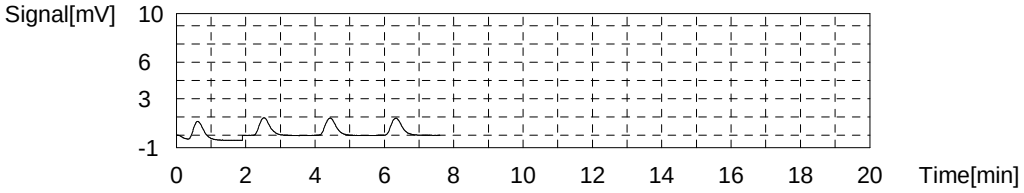
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.9117mg/L

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

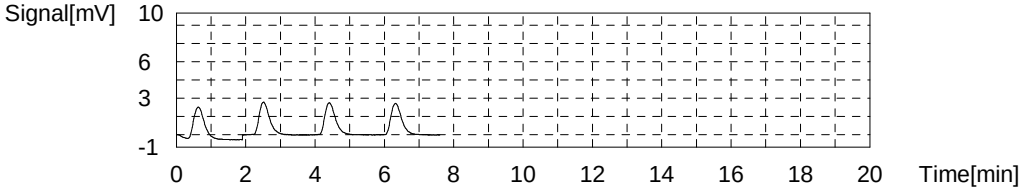
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.592mg/L

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

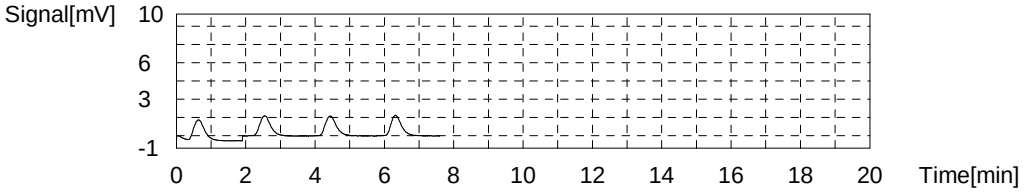
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.037mg/L

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

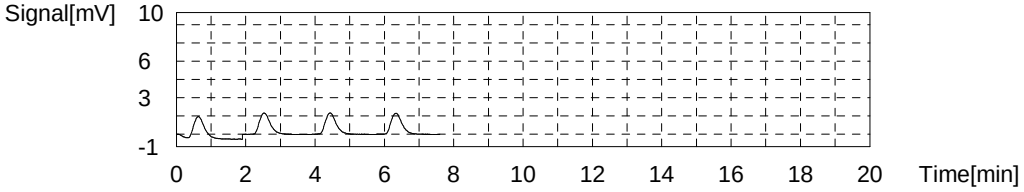
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.105mg/L

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

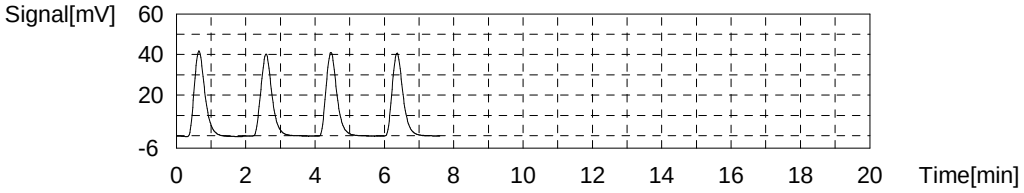
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.98mg/L

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

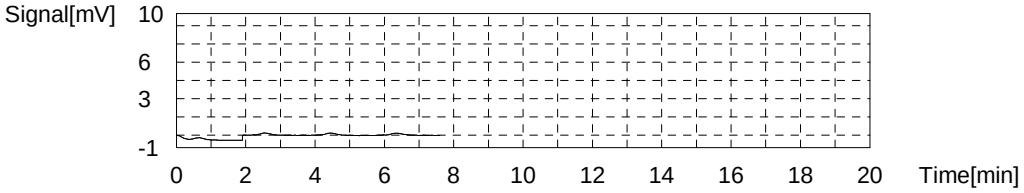
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1636mg/L

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

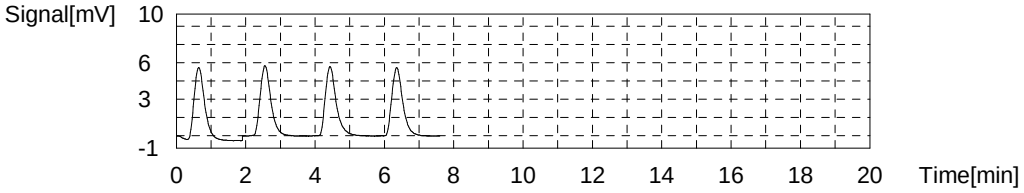
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.499mg/L

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

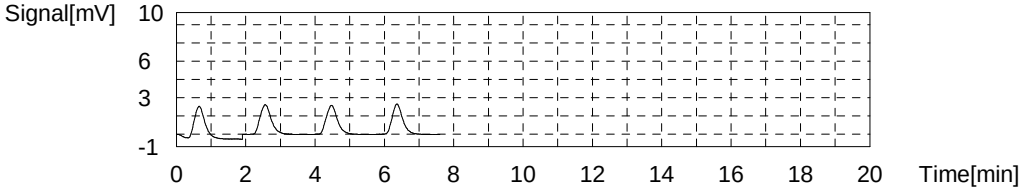
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.554mg/L

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

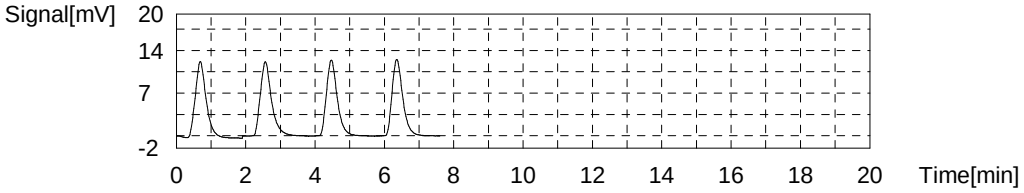
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.592mg/L

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

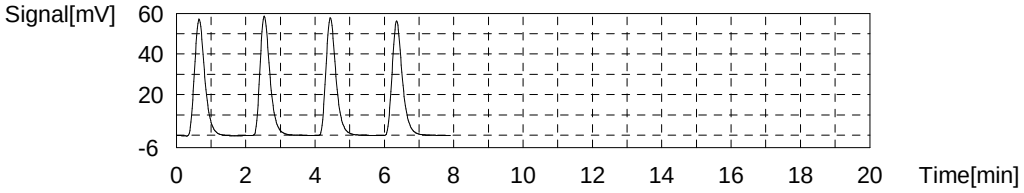
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:32.78mg/L

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

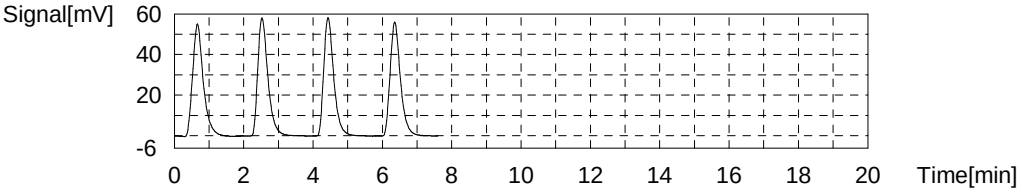
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:32.82mg/L

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

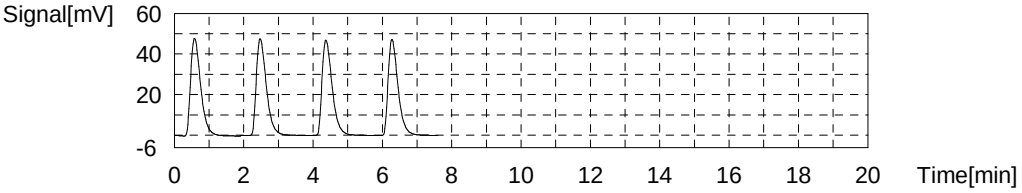
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:133.6mg/L

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

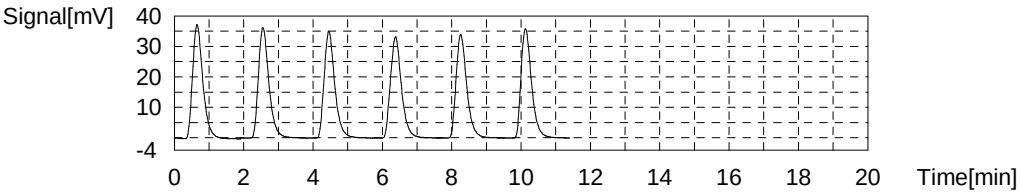
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.91mg/L

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

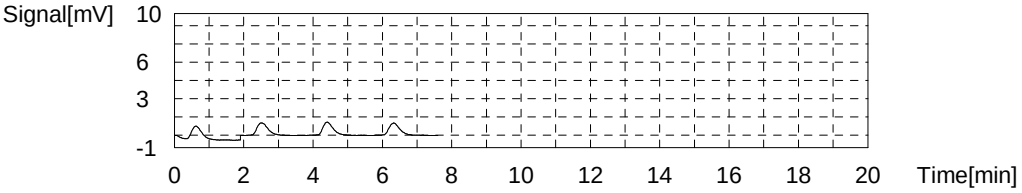
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6701mg/L

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

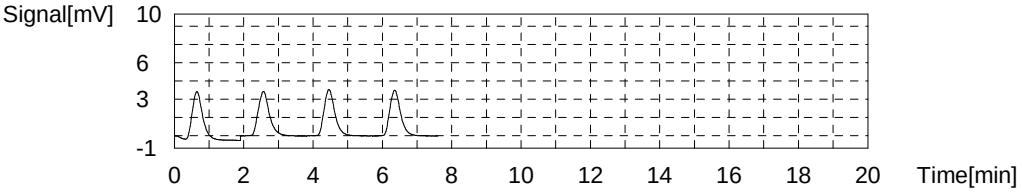
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.290mg/L

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

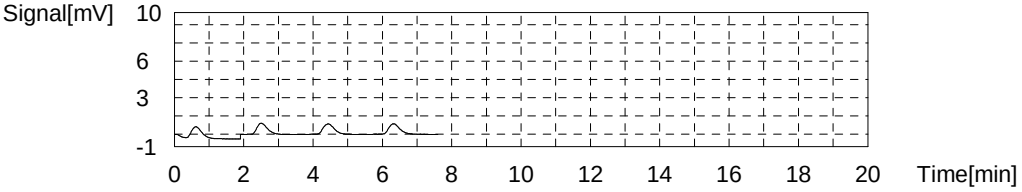
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5906mg/L

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

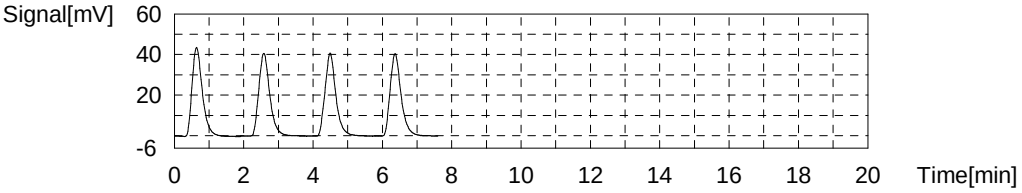
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.91mg/L

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

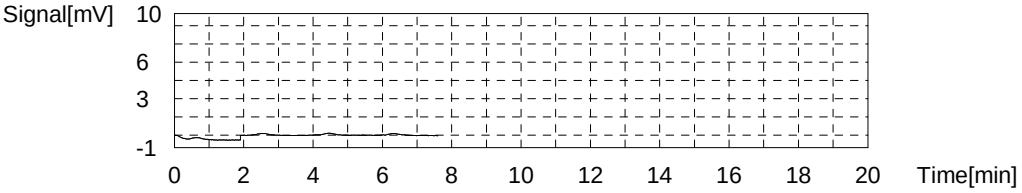
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1474mg/L

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

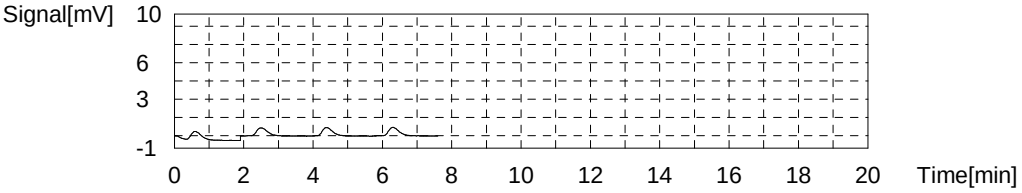
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4468mg/L

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

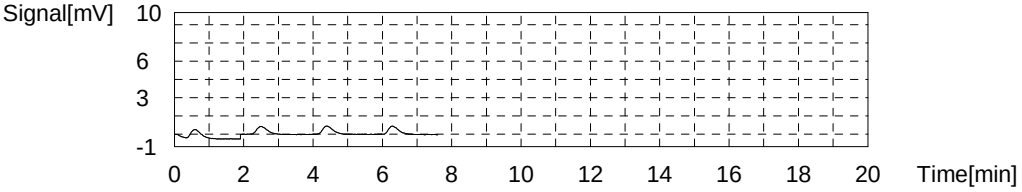
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4410mg/L

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

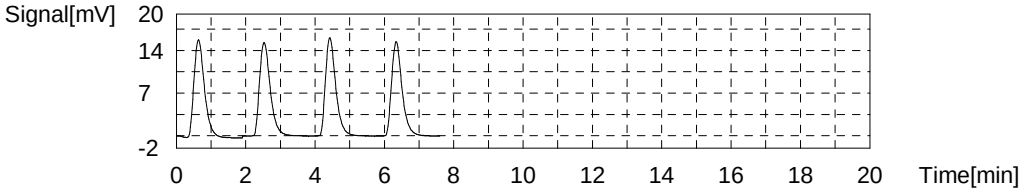
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.293mg/L

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

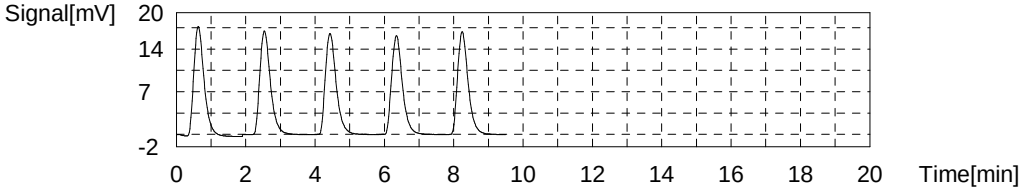
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.03mg/L

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

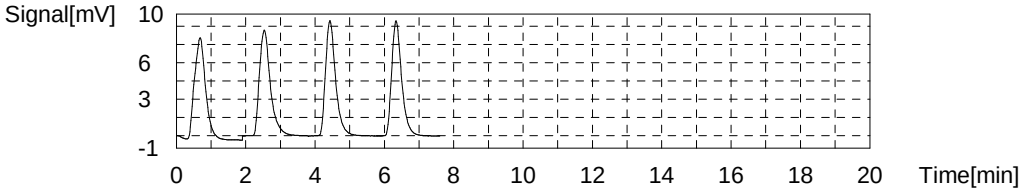
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.319mg/L

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

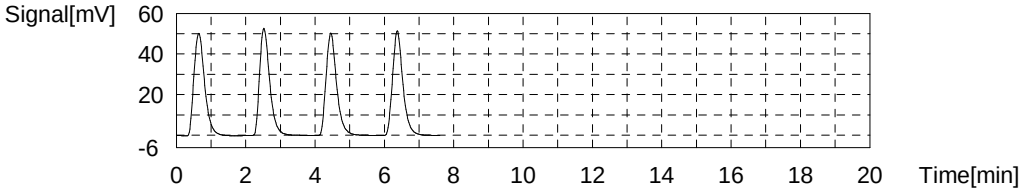
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.93mg/L

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

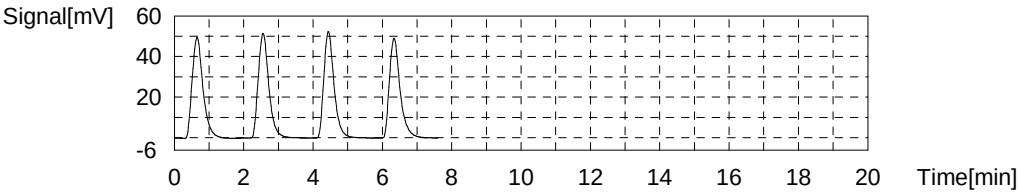
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.04mg/L

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

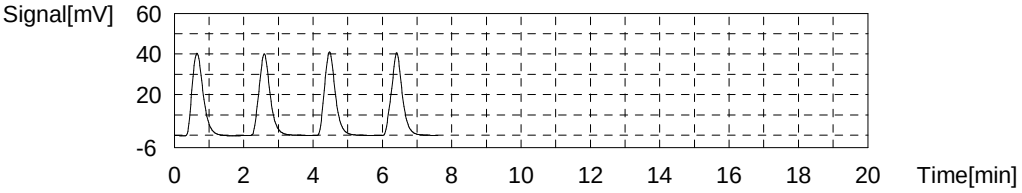
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.03mg/L

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

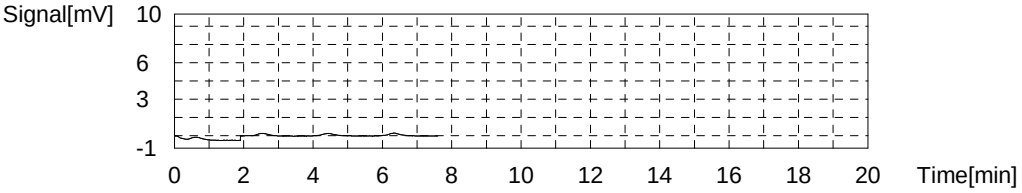
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1851mg/L

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

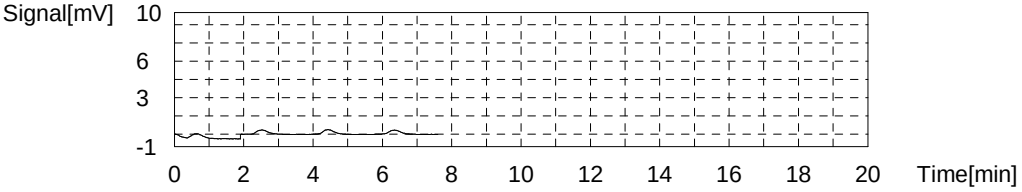
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2824mg/L

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

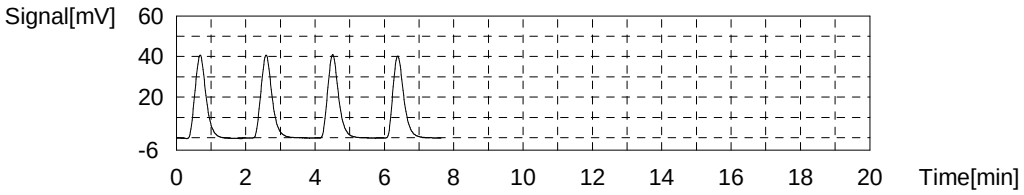
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.06mg/L

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

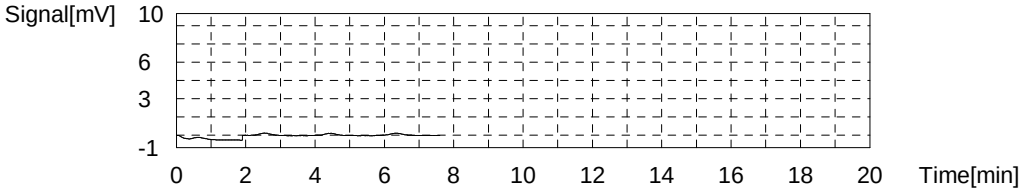
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1647mg/L

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

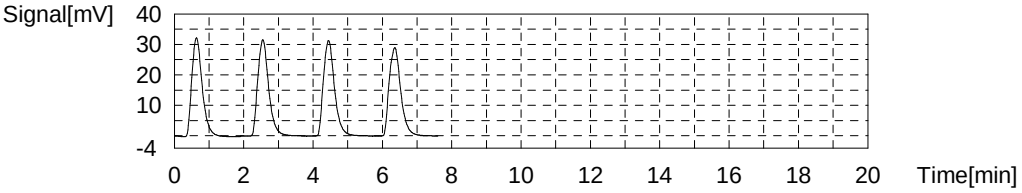
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:95.69mg/L

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

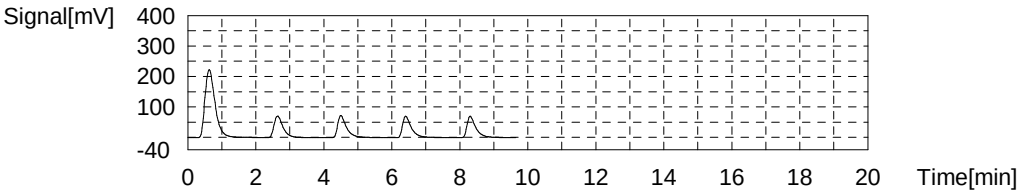
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:1194mg/L

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

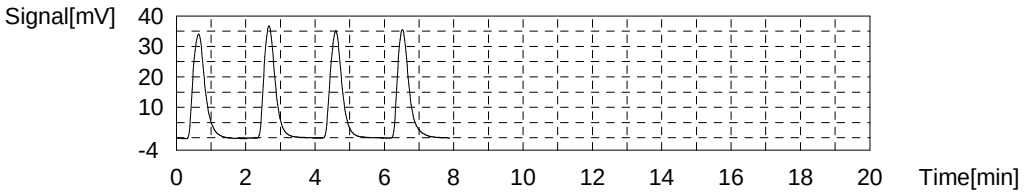
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:229.4mg/L

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

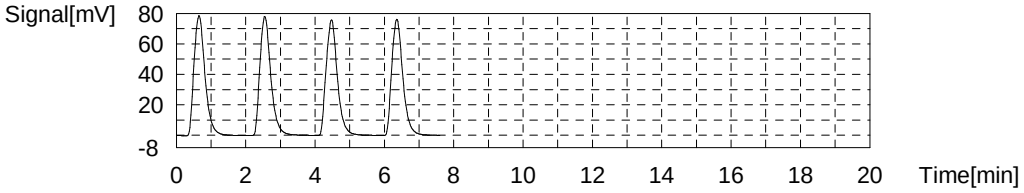
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:479.0mg/L

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

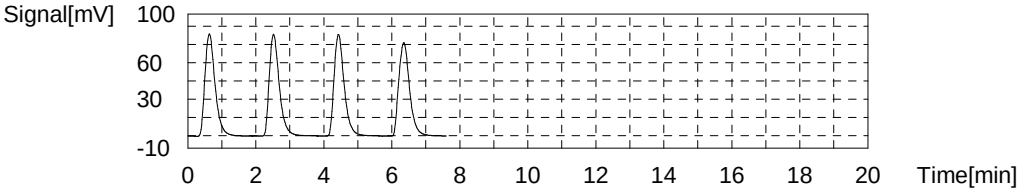
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:479.5mg/L

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

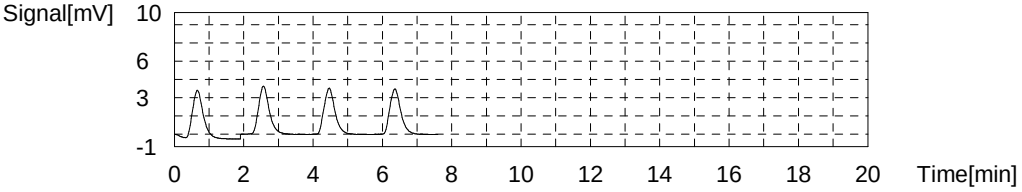
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:23.67mg/L

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

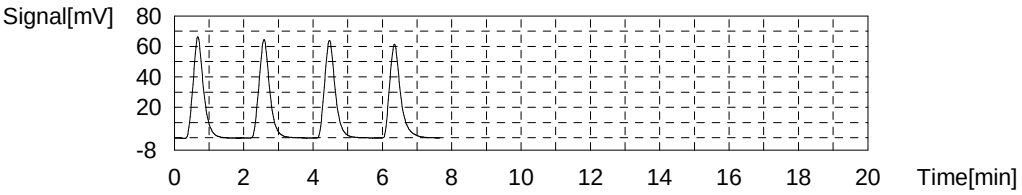
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:191.2mg/L

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

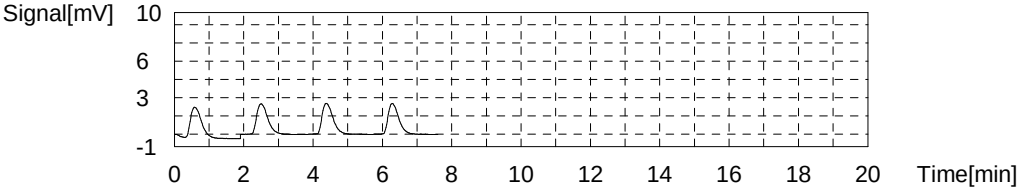
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:158.6mg/L

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

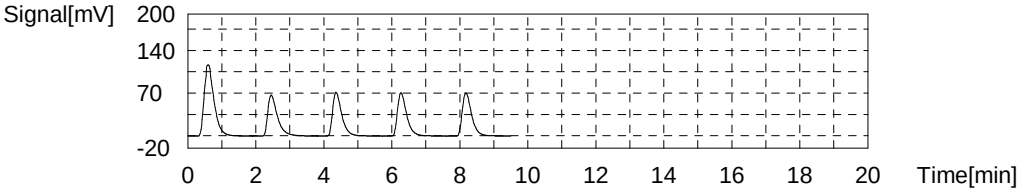
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:6215mg/L

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

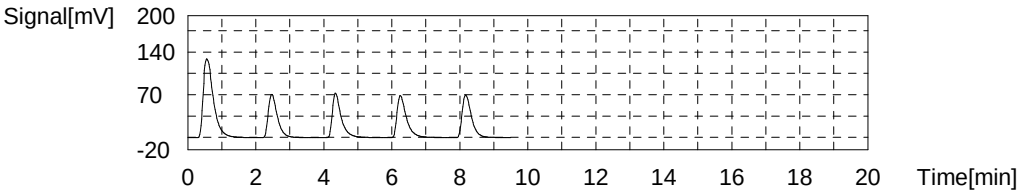
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:7082mg/L

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

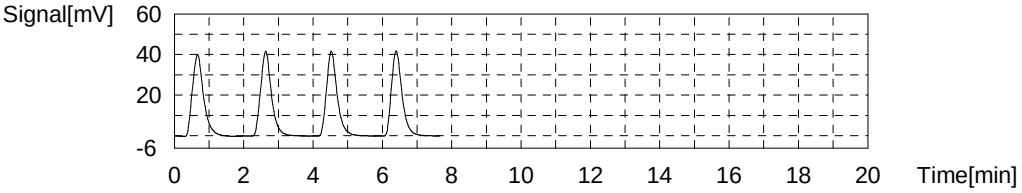
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.05mg/L

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

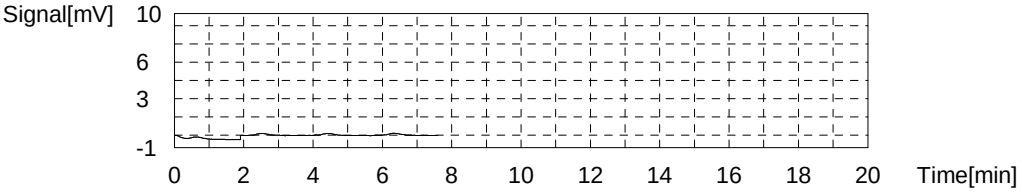
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1584mg/L

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

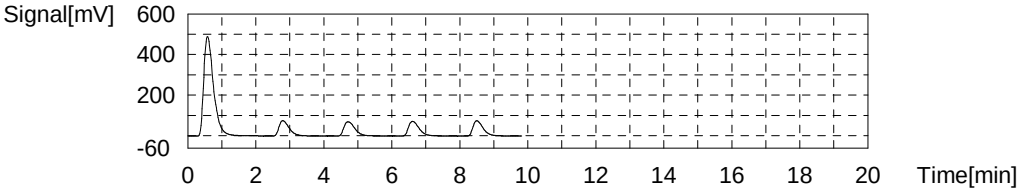
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	25.00	NPOC:6593mg/L

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

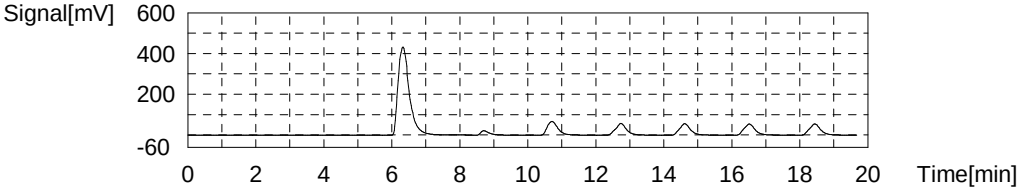
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:2107mg/L

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

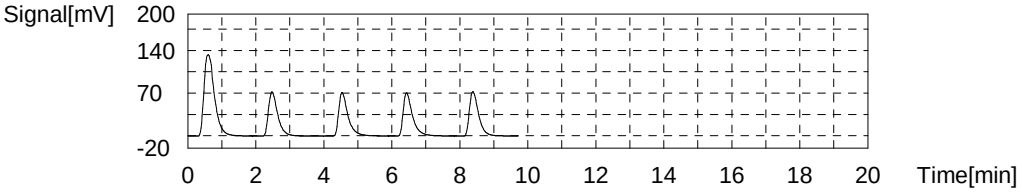
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:7585mg/L

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

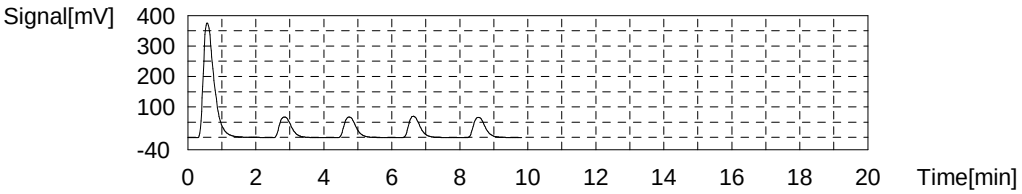
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	2.000	NPOC:453.5mg/L

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

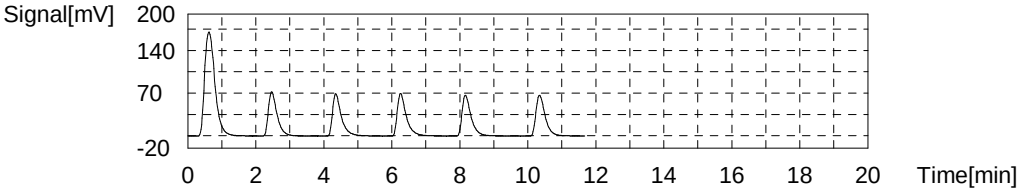
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:467.7mg/L

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

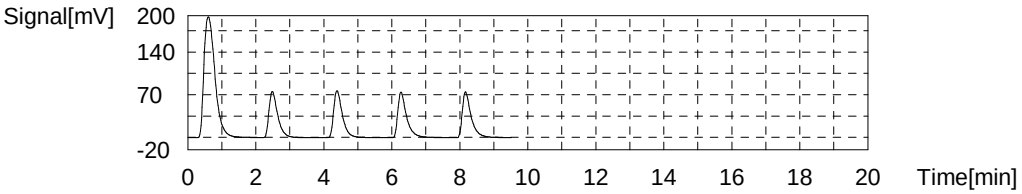
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:587.9mg/L

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

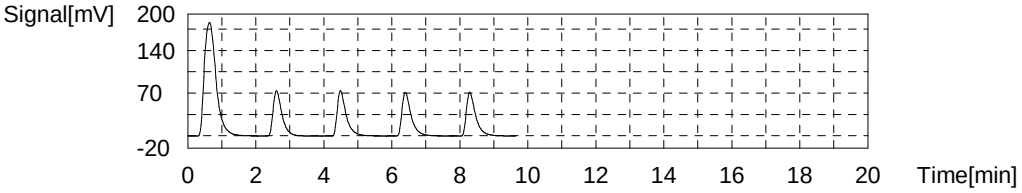
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:588.0mg/L

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

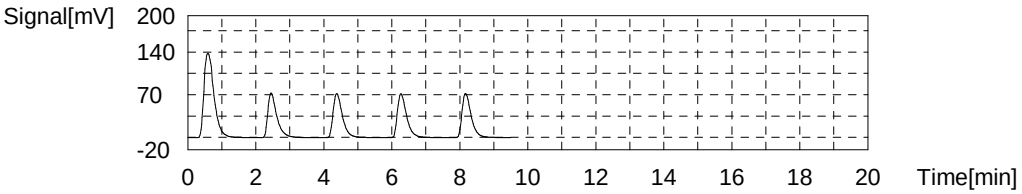
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:7564mg/L

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

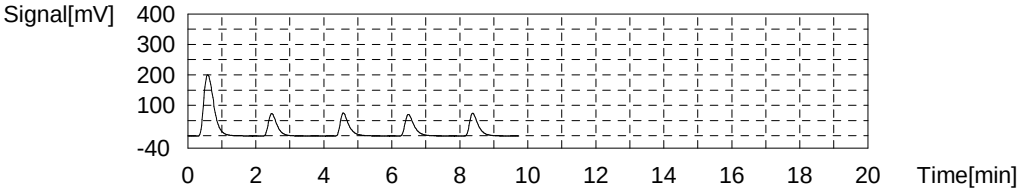
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	50.00	NPOC:5419mg/L

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

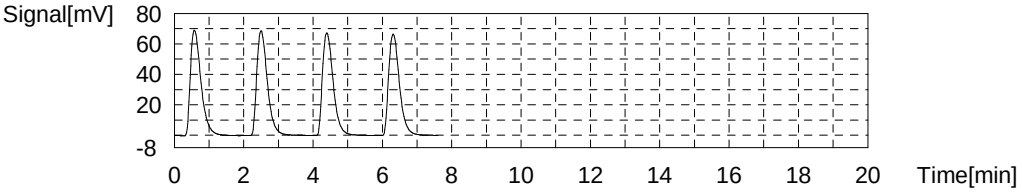
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:203.5mg/L

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

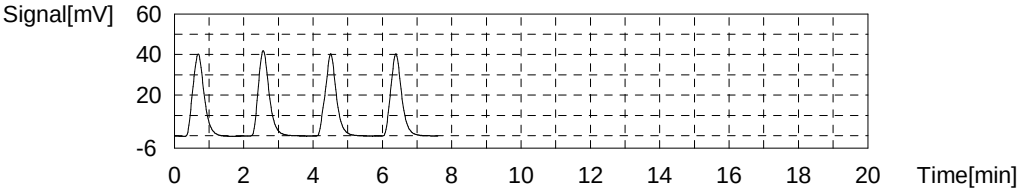
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.26mg/L

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

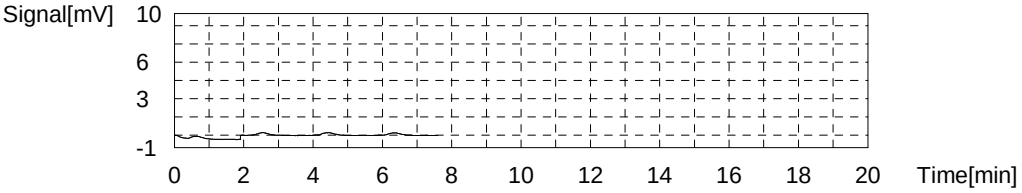
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1916mg/L

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

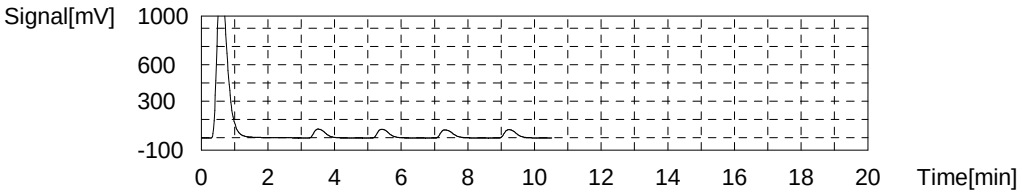
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:7623mg/L

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

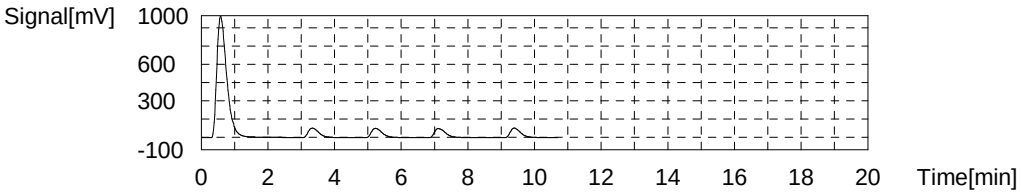
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:5672mg/L

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

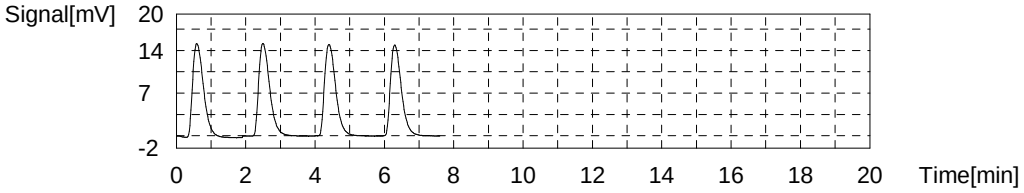
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	250.0	NPOC:2340mg/L

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

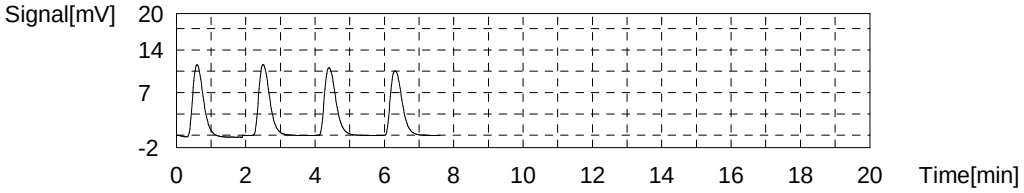
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	250.0	NPOC:1775mg/L

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

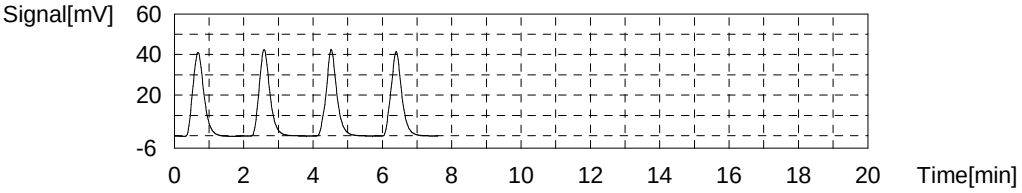
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.39mg/L

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

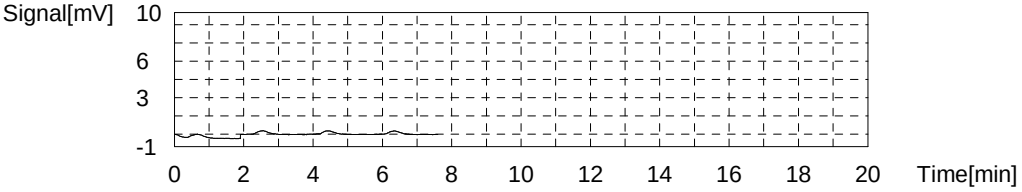
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2356mg/L

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

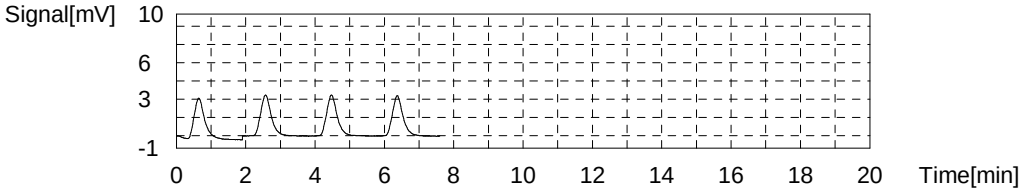
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.005mg/L

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

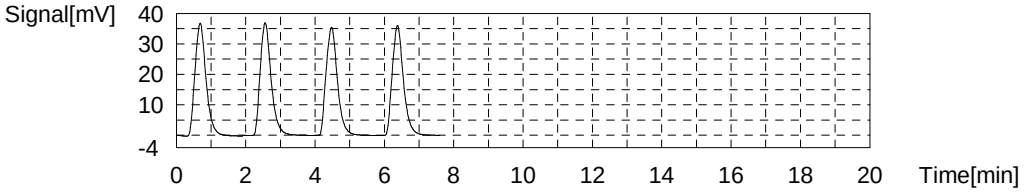
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:22.66mg/L

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

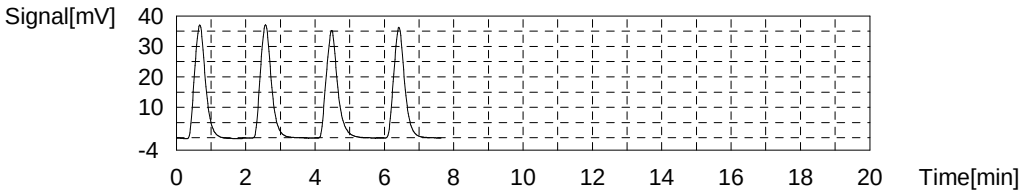
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:22.53mg/L

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

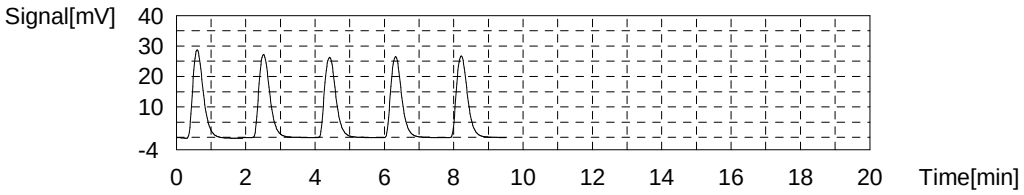
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	50.00	NPOC:827.4mg/L

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

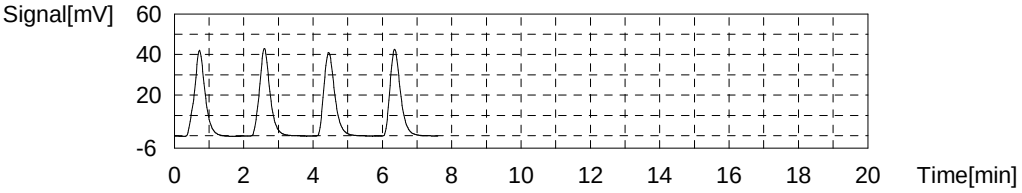
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.26mg/L

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

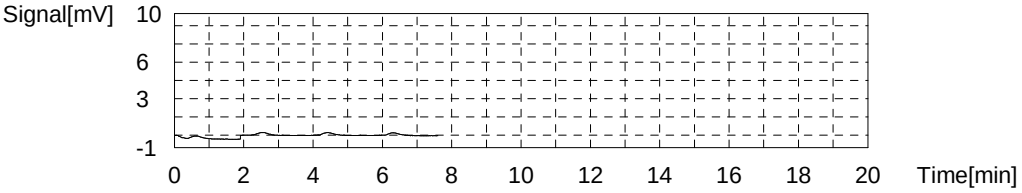
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1917mg/L

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

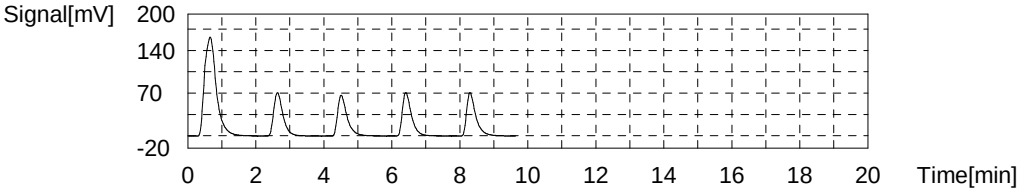
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:102.5mg/L

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

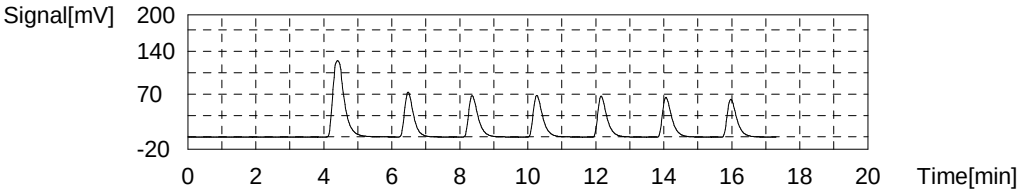
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	10.00	NPOC:746.6mg/L

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

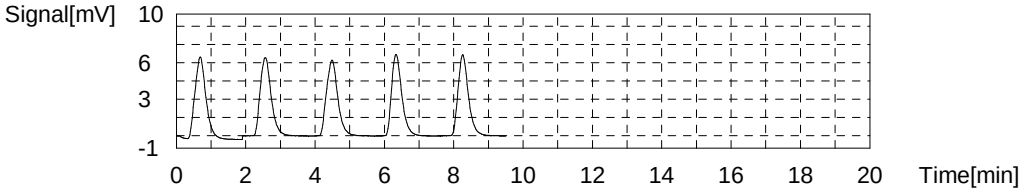
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.935mg/L

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

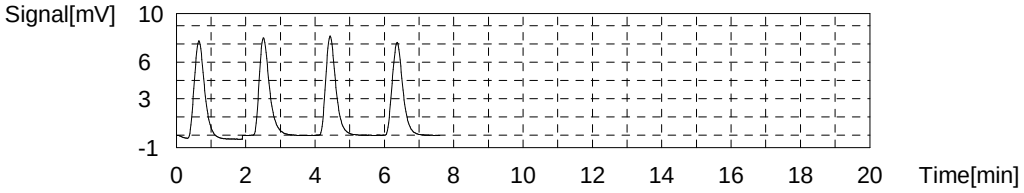
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.633mg/L

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

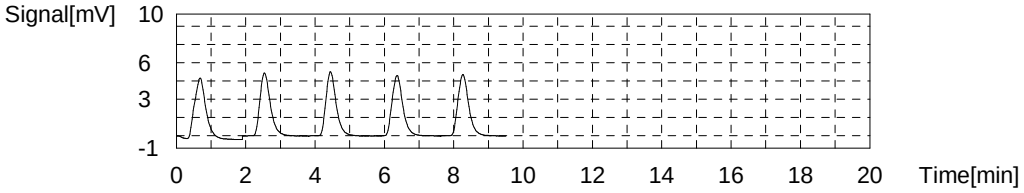
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.038mg/L

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

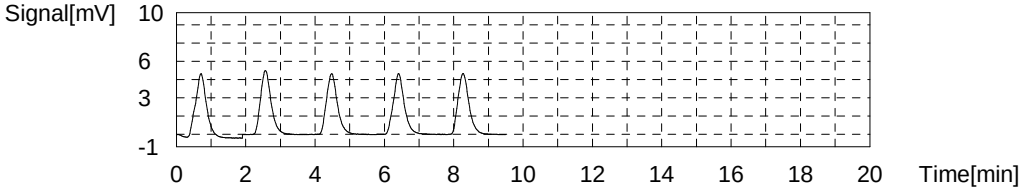
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.107mg/L

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

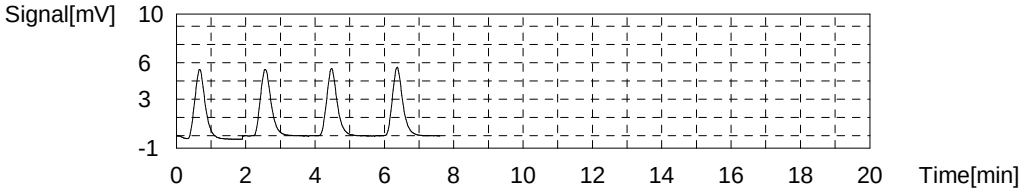
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.300mg/L

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

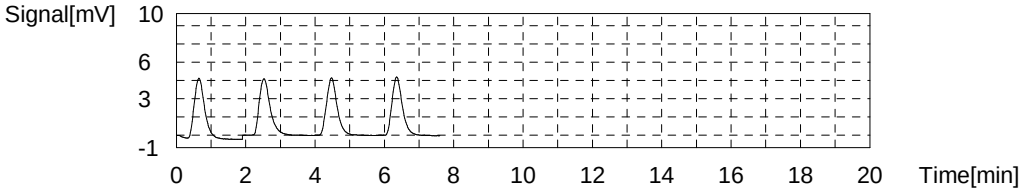
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.857mg/L

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

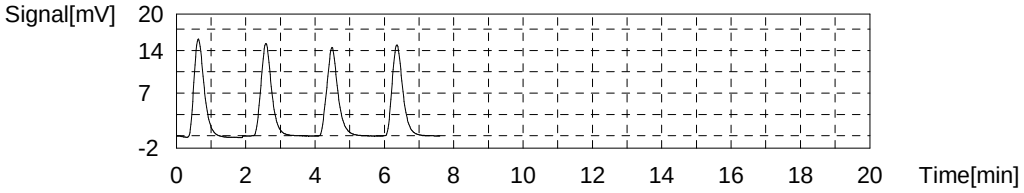
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.104mg/L

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

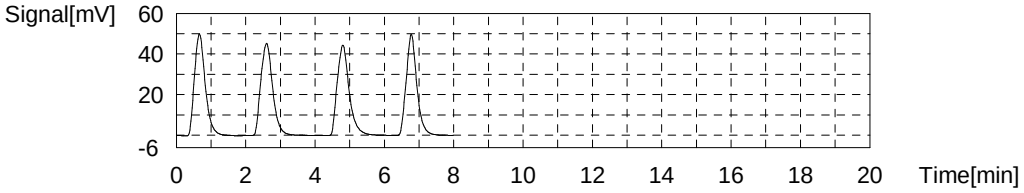
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:30.04mg/L

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

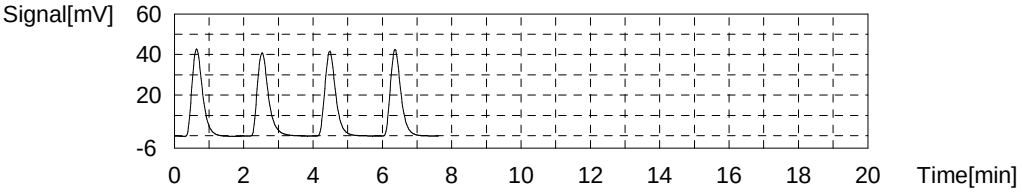
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.33mg/L

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

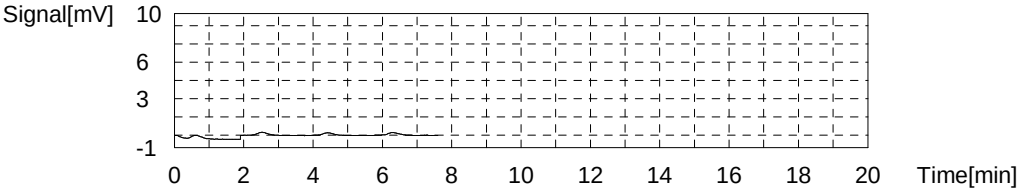
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1936mg/L

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

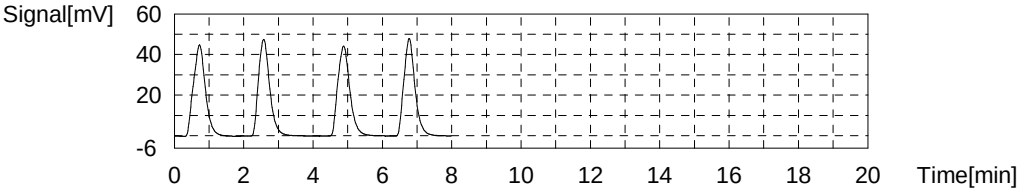
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:29.96mg/L

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

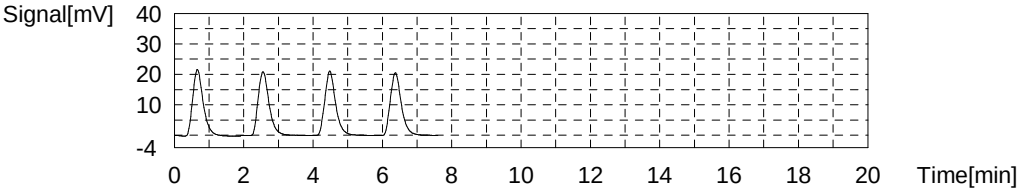
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:12.79mg/L

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

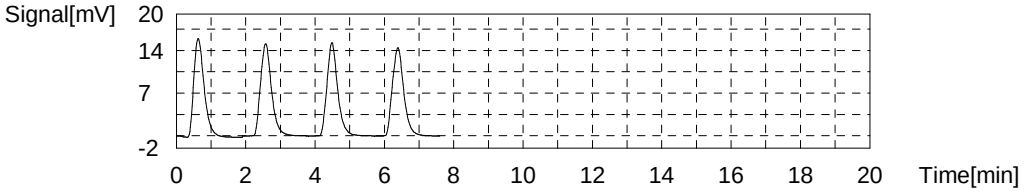
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.316mg/L

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

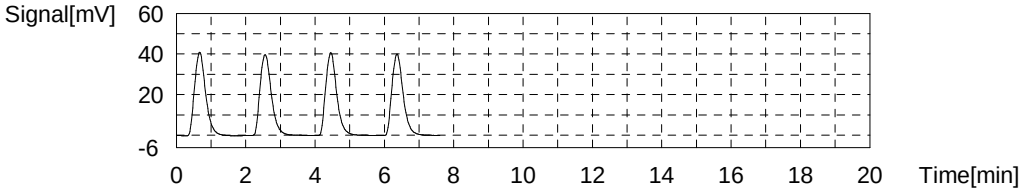
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.28mg/L

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

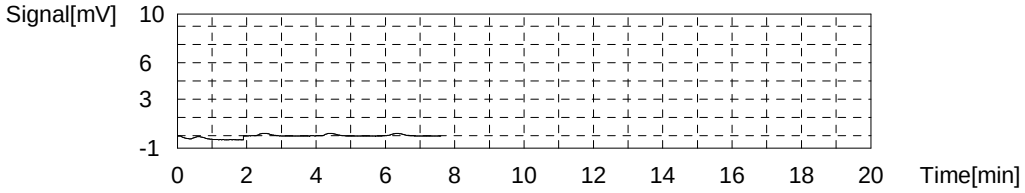
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1879mg/L

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)

11/26/2021

Batch Number: 280-557282

Analyst: Fox, Regan A

Batch Open: 11/12/2021 12:38:00PM

Batch End:

Sample Filtration

	Input Sample Lab ID (Analytical Method)	SDG (Job #)	Matrix	Initial Amount	Final Amount	Due Date	Analytical TAT	Dlv Rank	Comments	Output Sample Lab ID
1	LCS~280-557282/1 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		

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FILTRATION Analysis Sheet

(To Accompany Samples to Instruments)

11/26/2021

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:

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:

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)

11/26/2021

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#:

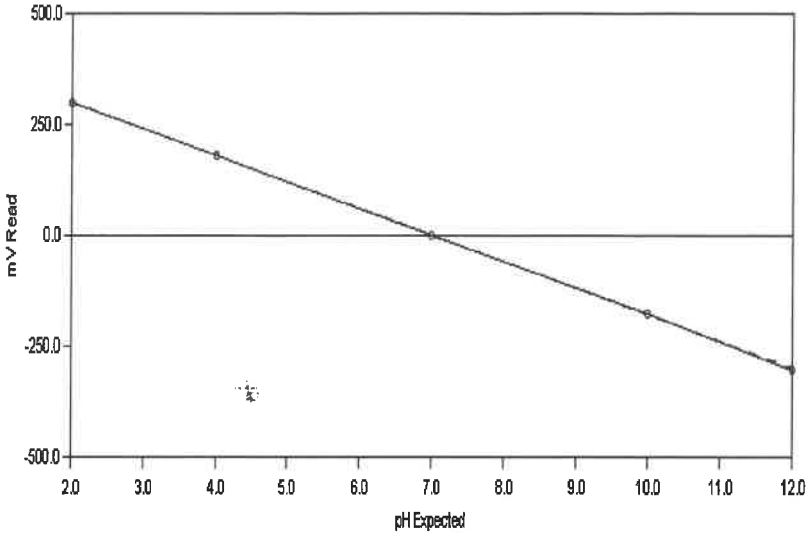
MANTECH

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

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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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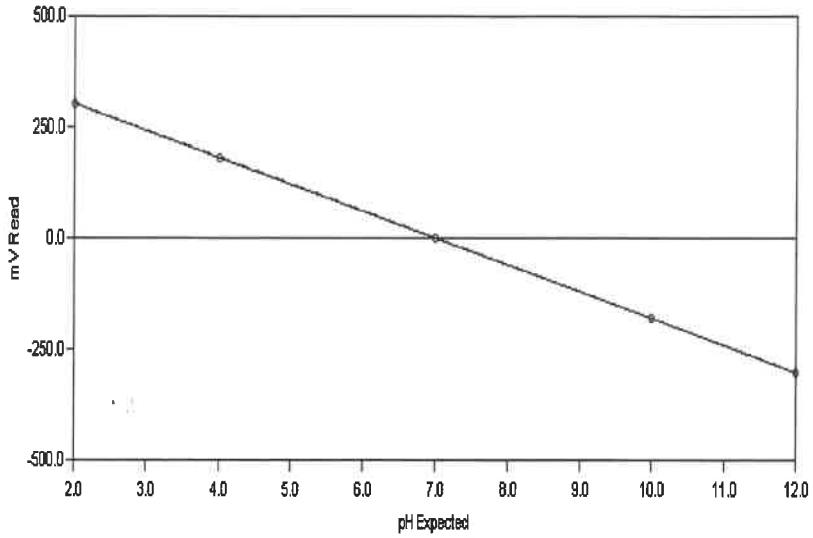
MANTECH INC.

Calibration Report

Calibration Record # 409



Calibration Settings

Calibration ID	PH	Date	11/18/2021	
Channel	1	Time	11:58 AM	
Probe Type	pH	Temperature	296.34 K	23.19 C
Probe ID	PH ELECTRODE	Analysis Type	Single Line Fit	

Calibration Results

Slope	-60.349	CorrCoeff	1.0000
Intercept	0.438	Equation:	Y = (-60.349) X + (0.438)

Calibration Validity **True** Operator

	Result	Minimum	Maximum
Slope	-60.349	-65.00	-53.00
Intercept	0.438	-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	302.00
	4.00	181.39
	7.00	0.24
	10.00	-178.83
	12.00	-302.61

60303
0/007

Test America

Water Analysis Report

AT4 Analyst:_____

Run Number 1212 **Order Number** 20211118-2

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	11/18/2021	4:27 PM	22.98	-1.00	5.26	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
INITIAL CHECK	11/18/2021	4:33 PM	22.70	-1.00	10.60	119.50	202.19	.00	165.38	36.81	1.20	2.02	-1.00	.02
BUFFER 7	11/18/2021	4:36 PM	22.43	-1.00	7.01	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00
LCS	11/18/2021	4:43 PM	22.52	-1.00	10.61	113.34	207.46	.00	188.24	19.22	1.13	2.07	-1.00	.02
MB	11/18/2021	4:49 PM	22.70	-1.00	9.24	3.40	5.84	.00	4.89	.95	.03	.07	.07	.02
280-155289-e-1	11/18/2021	4:56 PM	22.29	-1.00	6.90	.00	141.02	141.02	.00	.00	.00	1.41	-1.00	.02
DU 280-155289-e-1	11/18/2021	5:02 PM	22.14	-1.00	6.98	.00	141.63	141.63	.00	.00	.00	1.42	-1.00	.02
280-155291-e-1	11/18/2021	5:08 PM	22.19	-1.00	6.26	.00	128.11	128.11	.00	.00	.00	1.28	-1.00	.02
280-155293-e-1	11/18/2021	5:14 PM	22.23	-1.00	6.75	.00	120.44	120.44	.00	.00	.00	1.20	-1.00	.02
280-155290-e-1	11/18/2021	5:20 PM	22.39	-1.00	6.81	.00	120.25	120.25	.00	.00	.00	1.20	-1.00	.02
280-155141-f-1	11/18/2021	5:27 PM	22.80	-1.00	6.91	.00	218.81	218.81	.00	.00	.00	2.19	-1.00	.02
280-155141-f-2	11/18/2021	5:36 PM	22.66	-1.00	7.41	.00	548.69	548.69	.00	.00	.00	5.49	-1.00	.02
280-155141-d-3	11/18/2021	5:45 PM	22.58	-1.00	7.27	.00	432.39	432.39	.00	.00	.00	4.32	-1.00	.02
280-155141-f-4	11/18/2021	5:51 PM	22.57	-1.00	7.13	.00	170.05	170.05	.00	.00	.00	1.70	-1.00	.02
280-155141-e-5	11/18/2021	5:59 PM	22.51	-1.00	7.33	.00	310.19	310.19	.00	.00	.00	3.10	-1.00	.02
CCV	11/18/2021	6:05 PM	22.39	-1.00	10.61	124.06	208.90	.00	169.69	39.21	1.24	2.09	-1.00	.02
CCB	11/18/2021	6:11 PM	22.57	-1.00	8.75	2.13	4.78	.53	4.26	.00	.02	.06	.07	.02
280-155141-e-6	11/18/2021	6:20 PM	22.57	-1.00	7.46	.00	550.12	550.12	.00	.00	.00	5.50	-1.00	.02
280-155150-d-2	11/18/2021	6:28 PM	22.61	-1.00	7.85	.00	360.68	360.68	.00	.00	.00	3.61	-1.00	.02
280-155150-d-3	11/18/2021	6:35 PM	22.64	-1.00	7.31	.00	168.11	168.11	.00	.00	.00	1.68	-1.00	.02
280-155327-a-7	11/18/2021	6:41 PM	22.69	-1.00	7.41	.00	183.01	183.01	.00	.00	.00	1.83	-1.00	.02
280-155225-f-6	11/18/2021	6:49 PM	22.86	-1.00	7.30	.00	328.25	328.25	.00	.00	.00	3.28	-1.00	.02
280-155225-f-7	11/18/2021	6:58 PM	23.04	-1.00	7.04	.00	582.40	582.40	.00	.00	.00	5.82	-1.00	.02
280-155225-f-9	11/18/2021	7:08 PM	22.84	-1.00	7.03	.00	584.48	584.48	.00	.00	.00	5.84	-1.00	.02
280-155225-f-4	11/18/2021	7:16 PM	22.75	-1.00	7.57	.00	410.13	410.13	.00	.00	.00	4.10	-1.00	.02
280-155225-f-5	11/18/2021	7:23 PM	22.66	-1.00	7.22	.00	267.92	267.92	.00	.00	.00	2.68	-1.00	.02
280-155225-f-3	11/18/2021	7:31 PM	22.58	-1.00	7.33	.00	340.43	340.43	.00	.00	.00	3.40	-1.00	.02

GENERAL RESULTS REPORT.SRW

PC-TitratION PLUS by Man-Tech Associates, Inc.

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Run Number 1212 **Order Number** 20211118-2

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)
CCV	11/18/2021	7:38 PM	22.54	-1.00	10.57	121.64	211.30	.00	179.31	31.99	1.22	2.11	-1.00	.02
CCB	11/18/2021	7:44 PM	22.66	-1.00	8.54	1.27	4.66	2.11	2.55	.00	.01	.06	.06	.02
LCS	11/18/2021	7:51 PM	22.69	-1.00	10.59	123.43	212.35	.00	177.83	34.51	1.23	2.12	-1.00	.02
MB	11/18/2021	7:56 PM	22.89	-1.00	8.59	1.37	5.22	2.49	2.73	.00	.01	.06	.07	.02
280-155225-d-1	11/18/2021	8:03 PM	22.86	-1.00	6.97	.00	207.74	207.74	.00	.00	.00	2.08	-1.00	.02
DU 280-155225-d-1	11/18/2021	8:09 PM	22.89	-1.00	7.03	.00	208.30	208.30	.00	.00	.00	2.08	-1.00	.02
280-155225-d-2	11/18/2021	8:17 PM	23.09	-1.00	7.40	.00	357.12	357.12	.00	.00	.00	3.57	-1.00	.02
680-207141-b-13	11/18/2021	8:23 PM	23.17	-1.00	6.21	.00	184.73	184.73	.00	.00	.00	1.85	-1.00	.02
680-207141-b-9	11/18/2021	8:28 PM	23.06	-1.00	6.57	.00	59.67	59.67	.00	.00	.00	.60	-1.00	.02
680-207141-b-10	11/18/2021	8:33 PM	22.96	-1.00	6.58	.00	58.95	58.95	.00	.00	.00	.59	-1.00	.02
680-207141-b-5	11/18/2021	8:38 PM	22.92	-1.00	6.30	.00	38.14	38.14	.00	.00	.00	.38	-1.00	.02
680-207141-b-6	11/18/2021	8:44 PM	22.89	-1.00	6.94	.00	140.66	140.66	.00	.00	.00	1.41	-1.00	.02
680-207141-b-11	11/18/2021	8:50 PM	22.95	-1.00	6.70	.00	61.92	61.92	.00	.00	.00	.62	-1.00	.02
680-207141-b-12	11/18/2021	8:55 PM	22.98	-1.00	6.77	.00	132.16	132.16	.00	.00	.00	1.32	-1.00	.02
CCV	11/18/2021	9:02 PM	23.04	-1.00	10.53	119.63	209.67	.00	180.07	29.60	1.20	2.10	-1.00	.02
CCB	11/18/2021	9:08 PM	23.19	-1.00	8.68	2.16	4.88	.56	4.32	.00	.02	.06	.07	.02
680-207141-b-7	11/18/2021	9:15 PM	23.12	-1.00	7.28	.00	317.14	317.14	.00	.00	.00	3.17	-1.00	.02
680-207141-b-8	11/18/2021	9:22 PM	23.25	-1.00	7.23	.00	317.57	317.57	.00	.00	.00	3.18	-1.00	.02
680-207141-b-1	11/18/2021	9:28 PM	23.39	-1.00	6.52	.00	96.30	96.30	.00	.00	.00	.96	-1.00	.02
680-207141-b-2	11/18/2021	9:34 PM	23.27	-1.00	6.69	.00	163.56	163.56	.00	.00	.00	1.64	-1.00	.02
680-207141-b-3	11/18/2021	9:39 PM	23.33	-1.00	6.66	.00	62.11	62.11	.00	.00	.00	.62	-1.00	.02
680-207141-b-4	11/18/2021	9:44 PM	23.25	-1.00	6.33	.00	38.95	38.95	.00	.00	.00	.39	-1.00	.02
CCV	11/18/2021	9:51 PM	23.20	-1.00	10.51	117.71	210.26	.00	185.08	25.17	1.18	2.10	-1.00	.02
CCB	11/18/2021	9:57 PM	23.35	-1.00	8.75	2.34	4.84	.16	4.68	.00	.02	.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 PM GC KD	

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
11-4-21	0925		X	G0024-7	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
11-4-21	1035		X	G0077-7	AQ	9	ABCDEF	X	X	X	X	X	X		
11-4-21	1145		X	G0078-7	AQ	9	ABCDEF	X	X	X	X	X	X		

Bill to: Brice Engineering

standard TAT

Page 1262 of 1268

280-155225 Chain of Custody

Signatures	Date	Time
Relinquished by:	11-4-21	1700
Received by: ETADEN	11/05/2021	1030
Relinquished by:		
Received for Laboratory by:		

Shipping Details

Method of Shipment: Federal Express

Airbill Number: 533553978558 1

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

11/26/2021

1.8, 3.5, 1.8 CF +1.0
IR11

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

2020589

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 GC KD	

Bill to: Brice Engineering

Remarks: standard TAT

Sample Date	Sample Time	Type Comp.	Type Grab	Sample Identification	Matrix	Containers No.	Containers Type	Explosives+MNX (8330A)	TKN (351.2), NH_3 (350.1), NO_2/NO_3 (353.2)	SO_4 (9056A), Alkalinity (2320B)	Sulfide (9034)	DOC (9060A)*	Methane (RSK 175)		Remarks
11-3-21	1455		X	GW092-7	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
11-3-21	1340		X	GW091-7	AQ	9	ABCDEF	X	X	X	X	X	X		↓
11-3-21	1505		X	GW086-7	AQ	9	ABCDEF	X	X	X	X	X	X		↓

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	11-4-21	1700	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	11/05/2021	1030	Airbill Number: 535539785592	(A) (2) 500mL Ambers (Explosives) (B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3) (C) (1) 250mL HDPE (SO_4, Alkalinity) (D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide) (E) (1) 250mL Amber (DOC)* (F) (3) 40 mL VOA w/ HCl (Methane)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
Received for Laboratory by:				TAL/Brice Project #: 28017805

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

2020590

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11/26/2021

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 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)		Bill to: Brice Engineering Remarks standard TAT
11-4-21	0930		X	PZ017R-7	AQ	9	ABCDEF	X	X	X	X	X	X		6°C
11-4-21	1105		X	PZ018-7	↓	9	ABCDEF	X	X	X	X	X	X		↓
11-4-21	0800		X	PZ021-7	↓	9	ABCDEF	X	X	X	X	X	X		↓

Signatures	Date	Time	Shipping Details	Special Instructions
Relinquished by:	11-4-21	1700	Method of Shipment: Federal Express	* Filter groundwater sample before analyzing for DOC
Received by:	11/05/21	1030	Airbill Number: 535539785570	(A) (2) 500mL Ambers (Explosives) (B) (1) 500mL HDPE w/ H_2SO_4 (TKN, NH_3, NO_2/NO_3) (C) (1) 250mL HDPE (SO_4, Alkalinity) (D) (1) 250mL HDPE w/ ZnOAc/NaOH (Sulfide) (E) (1) 250mL Amber (DOC)* (F) (3) 40 mL VOA w/ HCl (Methane)
Relinquished by:			**Lab Address:** TestAmerica Lab, Inc. Attn: Patrick McEntee 4955 Yarrow St. Arvada, CO 80002 (303) 736-0107	
Received for Laboratory by:				TAL/Brice Project #: 28017805

White copy - Laboratory Yellow copy - Laboratory Pink copy - Sampler

2020587



Wgt: 10.00 LBS
DV: 0.00
SPECIAL:
HANDLING: 0.
TOTAL: 0.0

Svcs: PRIORITY OVERNIGHT Master 5355 3978 5478
TRCK: 5355 3978 5581

eu

RT 650 4 11:30 E nt Testing
5581
FZ 11.05 a

Part # 159470-434 RIT2 EXP 07/22

ORIGIN ID:PHDA (308) 379-7542
GARY CARSON
BRICE ENGINEERING (WATER TREATMENT
7502 WEST 13TH STREET

GRAND ISLAND, NE 68803
UNITED STATES US

SHIP DATE: 19OCT21
ACTWGT: 10.00 LB MAN
CAD: 0562071/CAFE3507

TO

EUROFINS TESTAMERICA DENVER
4955 YARROW STREET

ARVADA CO 800024517
(303) 736-0100
REF: S280-113339

RMA:

FedEx Express

E

J21102012-101uv

FedEx
TRK# 0221 5355 3978 5581

FRI - 05 NOV 11:30A
PRIORITY OVERNIGHT

XA LAAA

80002
CO-US DEN

Part # 156297-435 RRDB2 EXP 04/22

280-155225 Waybill

SIGNATURE
DATE 11-4-21

Custody Seal

eurofins | Environment Testing TestAmerica

1801496

#5046225 11/04 56DJ2/9A7E/FE4A


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Part # 159470-434 REV2 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: 190CT21
ACTWGT: 10.00 LB MAN
CAD: 0562071/CAFE3507
TO
EUROFINS TESTAMERICA DENVER
4955 YARROW STREET
ARVADA CO 800024517
(303) 736-0100
FIEF: S280-113339
RMA:
570C3/14BA/6F4D
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ORIGIN ID:PHDA (308) 379-7542
GARY CARSON
BRICE ENGINEERING (WATER TREATMENT
7502 WEST 13TH STREET
GRAND ISLAND, NE 68803
UNITED STATES US
TO
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4955 YARROW STREET
ARVADA CO 800024517
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FRI - 05 NOV 11:30A
PRIORITY OVERNIGH
XA LAAA
80002
CO-US DEN
#5046225 11/04 56DJ2/9A7E/FE4A

Login Sample Receipt Checklist

Client: Brice Environmental Services, Corp

Job Number: 280-155225-1

Login Number: 155225
List Number: 1
Creator: Burke, Sophie G

List Source: Eurofins TestAmerica, Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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	